COMUNE DI PADOVA

Settore Lavori Pubblici

CASTELLO CARRARESI

INTERVENTO DI RESTAURO E RIQUALIFICAZIONE FUNZIONALE STRALCI

PROGETTO ESECUTIVO

IMPORTO COMPLESSIVO: Euro 5.400.00,00

Progetto: LLPP_EDP_2018/137

Nome File: CARRARESI_IT_RT_RDC

25 Luglio 2018

ELABORATO:
IMPIANTI TERMOMECCANICI

RELAZIONE DI CALCOLO

Scala	Fase progetto		Codice elaborato	
//	ESEC.	R.00	IT	RT_RDC

Progettisti e Collaboratori

Progettista e Coordinatore alla Prog.: Arch. Domenico Lo Bosco
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RELAZIONE DI CALCOLO
FABBISOGNI ENERGETICI INVERNALI

Progetto:

COMUNE DI PADOVA - CASTELLO DEI CARRARESI - ALA SUD - VALUTAZIONI POTENZE ASSORBITE INVERNALI ED ESTIVE rev. 19-05-2018

D A T I d i P R O G E T T O

Altitudine		[m]	**12**
Latitudine			**45°24'**
Longitudine			**11°52'**
Temperatura esterna	Te	[°C]	**-5.0**
Località di riferimento per temperatura esterna			**PADOVA**
Gradi giorno		[éC ð24h]	**2383**
Zona climatica			**E**
Velocità del vento media giornaliera [media annuale]		[m/s]	**3.6**
Direzione prevalente del vento			**NE**
Zona vento			**2**
Località riferimento valori medi mensili			**Campagna Lupia - Valle Averto**

Irradiazione globale su superficie verticale (MJ/m²)

mese	N	NNE NNW	NE NW	ENE WNW	E W	ESE WSW	SE SW	SSE SSW	S	oriz	Te
ottobre	2.6	2.6	3.2	4.3	5.4	6.5	7.5	8.1	8.5	7.3	13.9
novembre	1.6	1.6	1.8	2.6	3.7	5.0	6.3	7.4	7.9	4.6	8.3
dicembre	1.3	1.3	1.4	2.3	3.9	5.8	7.8	9.6	10.3	4.4	4.8
gennaio	1.5	1.5	1.7	2.6	4.1	5.8	7.5	9.1	9.8	4.8	3.0
febbraio	2.3	2.3	3.0	4.5	6.2	8.0	9.6	11.0	11.7	7.8	3.6
marzo	3.6	3.9	5.1	6.6	8.2	9.4	10.2	10.6	10.8	11.2	8.6
aprile	5.2	6.3	8.1	10.0	11.4	12.2	12.1	11.5	10.9	16.5	12.8

Inizio riscaldamento			**15-10**
Fine riscaldamento			**15-04**
Durata periodo di riscaldamento	p	[giorno]	**183**
Ore giornaliere di riscaldamento		[ore]	**14**
Temperatura aria ambiente	Ta	[°C]	**20.0**
Umidità interna	Ui	[%]	**50.0**

Classe di permeabilità all'aria dei serramenti esterni:
(si veda singola struttura finestrata)

RIEPILOGO DISPERSIONI

GLOBALE EDIFICIO	**4865.7**	**13723.0**	**0.355**	**0.571**	**0.000**	**293820**

Appart/zona/ambiente		A	volume	S/V	Cdr	Cdl	dispers
Piano/Scala: 01	**piano TERRA**						**103891**
0101	**Piano TERRA unico**	**2186.0**	**4175.8**	**0.523**			**103891**
01	Locale 010101	97.20	180.12	0.540			3441
02	Locale 010102	21.53	91.50	0.235			748
03	Locale 010103	25.22	49.38	0.511			704
04	Locale 010104	13.63	26.31	0.518			407
05	Locale 010105	911.53	1890.74	0.482			36371
06	Locale 010106	67.24	173.78	0.387			4060
07	Locale 010107	59.13	104.97	0.563			3281
08	Locale 010108	119.43	237.28	0.503			5337
09	Locale 010109	121.35	238.21	0.509			4984
10	Locale 010110	113.72	238.30	0.477			4880
11	Locale 010111	152.31	71.64	2.126			5704
12	Locale 010112	20.09	27.60	0.728			2641
13	Locale 010123	227.95	426.91	0.534			16590
14	Locale 010124	143.43	282.63	0.507			10904
15	Locale 010125	92.23	136.40	0.676			3838
Piano/Scala: 02	**Piano PRIMO**						**73356**
0201	**Piano PRIMO unico**	**945.4**	**4520.3**	**0.209**			**73356**
01	Locale 020101	13.36	77.84	0.172			1456
02	Locale 020102	279.45	646.02	0.433			18008
03	Locale 020103	38.88	222.63	0.175			4139
04	Locale 020104	146.35	243.00	0.602			4086
05	Locale 020105	176.12	338.58	0.520			7000
06	Locale 020106	8.10	218.38	0.037			2346
07	Locale 020107	23.89	236.24	0.101			3022
08	Locale 020108	23.89	232.15	0.103			3004
09	Locale 020109	23.89	234.49	0.102			3005
10	Locale 020110	23.89	233.93	0.102			3000
11	Locale 020111	23.89	235.79	0.101			3017
12	Locale 020112	23.89	232.31	0.103			3005
13	Locale 020113	0.00	111.82	0.000			1060
14	Locale 020114	0.00	113.16	0.000			1073
15	Locale 020115	22.68	109.03	0.208			1783
16	Locale 020116	23.49	111.58	0.211			1829
17	Locale 020117	22.27	229.23	0.097			2912
18	Locale 020118	22.27	226.68	0.098			2888
19	Locale 020119	22.27	226.11	0.099			2882
20	Locale 020120	26.73	241.34	0.111			3841

Appart/zona/ambiente		A	volume	S/V	Cdr	Cdl	dispers
Piano/Scala: 03	**Piano SECONDO**						**116572**
0301	**Piano SECONDO unico**	**1734.3**	**5027.3**	**0.345**			**116572**
01	Locale 030101	35.15	85.89	0.409			1800
02	Locale 030102	447.98	691.69	0.648			20715
03	Locale 030103	748.37	2490.59	0.300			58372
04	Locale 030104	30.24	152.55	0.198			1650
05	Locale 030105	30.24	152.00	0.199			1646
06	Locale 030106	50.76	133.28	0.381			2268
07	Locale 030107	50.76	134.30	0.378			2274
08	Locale 030108	82.35	291.62	0.282			6532
09	Locale 030109	82.35	292.45	0.282			6545
10	Locale 030110	82.35	290.37	0.284			6514
11	Locale 030111	93.80	312.62	0.300			8256

CALCOLO DISPERSIONI DI CALORE PER SINGOLO AMBIENTE

AMBIENTE : 010101 Locale 010101

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	42.38	1.00	4.25	180.1	788

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	102 P.E	1	E	0.66	25.0	7.30	4.25	26.63	435.98	1.15	501
02	264 S.E	2	E	1.62	25.0	1.10	2.00	4.40	177.76	1.15	204
03	718 PTE	1	E	0.33	25.0	4.25	1.00	0.00	35.27	1.15	41
04	735 PTE	1	E	0.23	25.0	4.25	1.00	0.00	24.86	1.15	29
05	719 PTE	2	E	0.10	25.0	6.20	1.00	0.00	31.00	1.15	36
06	731 PTE	1	E	0.19	25.0	7.30	1.00	0.00	34.31	1.15	39
07	733 PTE	1	E	0.33	25.0	7.30	1.00	0.00	60.04	1.15	69
08	100 P.E	1	S	0.34	25.0	5.60	4.25	23.80	201.70	1.00	202
09	718 PTE	1	S	0.33	25.0	4.25	1.00	0.00	35.27	1.00	35
10	735 PTE	1	S	0.23	25.0	4.25	1.00	0.00	24.86	1.00	25
11	731 PTE	1	S	0.19	25.0	5.60	1.00	0.00	26.32	1.00	26
12	735 PTE	1	S	0.23	25.0	5.60	1.00	0.00	32.76	1.00	33
13	500 PAV	1	T1	1.78	5.6	1.00	42.38	42.38	419.91	1.00	420
14	600 SOF	1	TF	1.80	5.0	1.00	42.38	42.38	382.06	1.00	382
15	328 P.I	1	TF	1.64	2.0	5.60	4.25	22.12	72.64	1.00	73
16	400 S.I	1	TF	2.24	2.0	0.80	2.10	1.68	7.53	1.00	8

TOTALI:	dispvol	+	(disptraðau%)		=	A	volume	S/V		
	788		2122	25%	3441	97.20	180.1	0.54		

AMBIENTE : 010102 Locale 010102

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	21.53	1.00	4.25	91.5	400

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	500 PAV	1	T1	1.78	0.7	1.00	21.53	21.53	25.67	1.00	26
02	600 SOF	1	TF	1.80	5.0	1.00	21.53	21.53	194.09	1.00	194
03	328 P.I	1	TF	1.64	2.0	4.20	4.25	17.85	58.62	1.00	59

TOTALI:	dispvol	+	(disptraðau%)		=	A	volume	S/V		
	400		278	25%	748	21.53	91.5	0.24		

AMBIENTE : 010103 Locale 010103

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	11.62	1.00	4.25	49.4	216

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	100 P.E	1	S	0.34	25.0	3.20	4.25	13.60	115.26	1.00	115
02	735 PTE	2	S	0.23	25.0	4.25	1.00	0.00	49.73	1.00	50
03	731 PTE	1	S	0.19	25.0	3.20	1.00	0.00	15.04	1.00	15
04	735 PTE	1	S	0.23	25.0	3.20	1.00	0.00	18.72	1.00	19
05	500 PAV	1	T1	1.78	4.2	1.00	11.62	11.62	86.91	1.00	87

CALCOLO DISPERSIONI DI CALORE PER SINGOLO AMBIENTE

AMBIENTE : 010103 Locale 010103

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
06	600 SOF	1	TF	1.80	5.0	1.00	11.62	11.62	104.75	1.00	105

TOTALI:	dispvol	+	(disptraðau%)	=	A	volume	S/V		
	216		390 25%	704	25.22	49.4	0.51		

AMBIENTE : 010104 Locale 010104

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	6.19	1.00	4.25	26.3	115

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	100 P.E	1	S	0.34	25.0	1.75	4.25	7.44	63.03	1.00	63
02	735 PTE	2	S	0.23	25.0	4.25	1.00	0.00	49.73	1.00	50
03	731 PTE	1	S	0.19	25.0	1.75	1.00	0.00	8.22	1.00	8
04	735 PTE	1	S	0.23	25.0	1.75	1.00	0.00	10.24	1.00	10
05	500 PAV	1	T1	1.78	4.3	1.00	6.19	6.19	46.81	1.00	47
06	600 SOF	1	TF	1.80	5.0	1.00	6.19	6.19	55.80	1.00	56

TOTALI:	dispvol	+	(disptraðau%)	=	A	volume	S/V		
	115		234 25%	407	13.63	26.3	0.52		

AMBIENTE : 010105 Locale 010105

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	444.88	1.00	4.25	1890.7	8272

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	103 P.E	1	S	0.84	25.0	23.04	4.25	97.92	2046.53	1.00	2047
02	103 P.E	1	S	0.84	25.0	4.76	4.25	20.23	422.81	1.00	423
03	100 P.E	1	S	0.34	25.0	39.70	4.25	142.59	1208.41	1.00	1208
04	264 S.E	5	S	1.62	25.0	1.10	1.60	8.80	355.52	1.00	356
05	264 S.E	1	S	1.62	25.0	2.30	3.40	7.82	315.93	1.00	316
06	264 S.E	1	S	1.62	25.0	2.80	3.40	9.52	384.61	1.00	385
07	738 PTE	5	S	0.35	25.0	5.40	1.00	0.00	236.25	1.00	236
08	738 PTE	1	S	0.35	25.0	11.40	1.00	0.00	99.75	1.00	100
09	738 PTE	1	S	0.35	25.0	12.40	1.00	0.00	108.50	1.00	109
10	735 PTE	4	S	0.23	25.0	4.25	1.00	0.00	99.45	1.00	99
11	731 PTE	1	S	0.19	25.0	39.70	1.00	0.00	186.59	1.00	187
12	735 PTE	1	S	0.23	25.0	39.70	1.00	0.00	232.25	1.00	232
13	731 PTE	1	S	0.19	25.0	35.56	1.00	0.00	167.13	1.00	167
14	735 PTE	1	S	0.23	25.0	35.56	1.00	0.00	208.03	1.00	208
15	103 P.E	1	N	0.84	25.0	42.30	4.25	147.79	3088.92	1.20	3707
16	264 S.E	4	N	1.62	25.0	1.10	2.00	8.80	355.52	1.20	427
17	264 S.E	2	N	1.62	25.0	1.60	3.10	9.92	400.77	1.20	481
18	264 S.E	1	N	1.62	25.0	2.80	3.40	9.52	384.61	1.20	462
19	264 S.E	1	N	1.62	25.0	1.10	3.40	3.74	151.10	1.20	181
20	735 PTE	4	N	0.23	25.0	4.25	1.00	0.00	99.45	1.20	119
21	738 PTE	4	N	0.35	25.0	6.20	1.00	0.00	217.00	1.20	260
22	738 PTE	2	N	0.35	25.0	9.40	1.00	0.00	164.50	1.20	197

CALCOLO DISPERSIONI DI CALORE PER SINGOLO AMBIENTE

AMBIENTE : 010105 Locale 010105

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
23	738 PTE	1	N	0.35	25.0	12.40	1.00	0.00	108.50	1.20	130
24	738 PTE	1	N	0.35	25.0	9.00	1.00	0.00	78.75	1.20	95
25	732 PTE	1	N	0.71	25.0	42.30	1.00	0.00	747.65	1.20	897
26	733 PTE	1	N	0.33	25.0	42.30	1.00	0.00	347.92	1.20	418
27	500 PAV	1	T1	1.78	5.3	1.00	444.88	444.88	4194.66	1.00	4195
28	600 SOF	1	TF	1.80	5.0	1.00	444.88	444.88	4010.59	1.00	4011
29	328 P.I	1	TF	1.64	5.0	10.80	4.25	42.54	349.25	1.00	349
30	403 S.I	1	TF	1.06	5.0	1.40	2.40	3.36	17.80	1.00	18
31	328 P.I	1	TF	1.64	5.0	12.80	4.25	49.36	405.25	1.00	405
32	400 S.I	2	TF	2.24	5.0	1.20	2.10	5.04	56.50	1.00	57

TOTALI:	dispvol	+	(disptraðau%)		=	A	volume	S/V		
	8272		22479	25%	36371	911.53	1890.7	0.48		

AMBIENTE : 010106 Locale 010106

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	40.89	1.00	4.25	173.8	760

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	103 P.E	1	N	0.84	25.0	2.50	4.25	10.63	222.06	1.20	266
02	106 P.E	1	N	1.33	25.0	3.70	4.25	13.53	448.35	1.20	538
03	264 S.E	1	N	1.62	25.0	1.10	2.00	2.20	88.88	1.20	107
04	735 PTE	4	N	0.23	25.0	4.25	1.00	0.00	99.45	1.20	119
05	738 PTE	1	N	0.35	25.0	6.20	1.00	0.00	54.25	1.20	65
06	732 PTE	1	N	0.71	25.0	6.20	1.00	0.00	109.58	1.20	132
07	733 PTE	1	N	0.33	25.0	6.20	1.00	0.00	51.00	1.20	61
08	500 PAV	1	T1	1.78	3.9	1.00	40.89	40.89	286.94	1.00	287
09	600 SOF	1	TF	1.80	5.0	1.00	40.89	40.89	368.62	1.00	369
10	328 P.I	2	TF	1.64	5.0	7.60	4.25	57.88	475.19	1.00	475
11	403 S.I	2	TF	1.06	5.0	1.40	2.40	6.72	35.60	1.00	36
12	328 P.I	1	TF	1.64	5.0	5.30	4.25	22.52	184.93	1.00	185

TOTALI:	dispvol	+	(disptraðau%)		=	A	volume	S/V		
	760		2640	25%	4060	67.24	173.8	0.39		

AMBIENTE : 010107 Locale 010107

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	24.70	1.00	4.25	105.0	459

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	103 P.E	1	S	0.84	25.0	5.60	4.25	23.80	497.42	1.00	497
02	105 P.E	1	S	1.57	25.0	2.50	4.25	3.63	142.73	1.00	143
03	264 S.E	1	S	1.62	25.0	2.00	3.50	7.00	282.80	1.00	283
04	738 PTE	1	S	0.35	25.0	11.00	1.00	0.00	96.25	1.00	96
05	735 PTE	6	S	0.23	25.0	4.25	1.00	0.00	149.18	1.00	149
06	732 PTE	1	S	0.71	25.0	8.10	1.00	0.00	143.17	1.00	143
07	733 PTE	1	S	0.33	25.0	8.10	1.00	0.00	66.62	1.00	67

CALCOLO DISPERSIONI DI CALORE PER SINGOLO AMBIENTE

AMBIENTE : 010107 Locale 010107

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
08	500 PAV	1	T1	1.78	6.2	1.00	24.70	24.70	271.76	1.00	272
09	600 SOF	1	TF	1.80	5.0	1.00	24.70	24.70	222.67	1.00	223
10	328 P.I	2	TF	1.64	5.0	3.00	4.25	22.14	181.77	1.00	182
11	403 S.I	1	TF	1.06	5.0	1.40	2.40	3.36	17.80	1.00	18
12	328 P.I	1	TF	1.64	5.0	5.30	4.25	22.52	184.93	1.00	185

TOTALI:	dispvol	+	(disptraðau%)		=	A	volume	S/V		
	459		2257	25%	3281	59.13	105.0	0.56		

AMBIENTE : 010108 Locale 010108

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	55.83	1.00	4.25	237.3	1038

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	100 P.E	1	S	0.34	25.0	5.30	4.25	22.52	190.90	1.00	191
02	103 P.E	1	S	0.84	25.0	5.00	2.00	10.00	209.00	1.00	209
03	105 P.E	1	S	1.57	25.0	1.30	2.00	0.84	33.07	1.00	33
04	264 S.E	1	S	1.62	25.0	1.10	1.60	1.76	71.10	1.00	71
05	738 PTE	1	S	0.35	25.0	5.40	1.00	0.00	47.25	1.00	47
06	735 PTE	4	S	0.23	25.0	4.25	1.00	0.00	99.45	1.00	99
07	732 PTE	1	S	0.71	25.0	5.30	1.00	0.00	93.68	1.00	94
08	733 PTE	1	S	0.33	25.0	5.30	1.00	0.00	43.59	1.00	44
09	103 P.E	1	N	0.84	25.0	4.00	4.25	17.00	355.30	1.20	426
10	106 P.E	1	N	1.33	25.0	2.70	4.25	5.18	171.55	1.20	206
11	264 S.E	1	N	1.62	25.0	1.80	3.50	6.30	254.52	1.20	305
12	735 PTE	4	N	0.23	25.0	4.25	1.00	0.00	99.45	1.20	119
13	738 PTE	1	N	0.35	25.0	10.60	1.00	0.00	92.75	1.20	111
14	732 PTE	1	N	0.71	25.0	5.30	1.00	0.00	93.68	1.20	112
15	733 PTE	1	N	0.33	25.0	5.30	1.00	0.00	43.59	1.20	52
16	500 PAV	1	T1	1.78	4.5	1.00	55.83	55.83	448.02	1.00	448
17	600 SOF	1	TF	1.80	5.0	1.00	55.83	55.83	503.31	1.00	503
18	328 P.I	1	TF	1.64	5.0	10.80	4.25	42.54	349.25	1.00	349
19	403 S.I	1	TF	1.06	5.0	1.40	2.40	3.36	17.80	1.00	18

TOTALI:	dispvol	+	(disptraðau%)		=	A	volume	S/V		
	1038		3439	25%	5337	119.43	237.3	0.50		

AMBIENTE : 010109 Locale 010109

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	56.05	1.00	4.25	238.2	1042

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	100 P.E	1	S	0.34	25.0	5.20	4.25	22.10	187.30	1.00	187
02	103 P.E	1	S	0.84	25.0	5.00	2.00	10.00	209.00	1.00	209
03	105 P.E	1	S	1.57	25.0	1.30	2.00	0.84	33.07	1.00	33
04	264 S.E	1	S	1.62	25.0	1.10	1.60	1.76	71.10	1.00	71
05	738 PTE	1	S	0.35	25.0	5.40	1.00	0.00	47.25	1.00	47

CALCOLO DISPERSIONI DI CALORE PER SINGOLO AMBIENTE

AMBIENTE : 010109 Locale 010109

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
06	735 PTE	6	S	0.23	25.0	4.25	1.00	0.00	149.18	1.00	149
07	732 PTE	1	S	0.71	25.0	5.30	1.00	0.00	93.68	1.00	94
08	733 PTE	1	S	0.33	25.0	5.30	1.00	0.00	43.59	1.00	44
09	103 P.E	1	N	0.84	25.0	5.20	4.25	22.10	461.89	1.20	554
10	105 P.E	1	N	1.57	25.0	2.00	4.25	1.50	59.06	1.20	71
11	264 S.E	1	N	1.62	25.0	2.00	3.50	7.00	282.80	1.20	339
12	735 PTE	4	N	0.23	25.0	4.25	1.00	0.00	99.45	1.20	119
13	738 PTE	1	N	0.35	25.0	11.00	1.00	0.00	96.25	1.20	116
14	732 PTE	1	N	0.71	25.0	5.20	1.00	0.00	91.91	1.20	110
15	733 PTE	1	N	0.33	25.0	5.20	1.00	0.00	42.77	1.20	51
16	500 PAV	1	T1	1.78	4.5	1.00	56.05	56.05	452.81	1.00	453
17	600 SOF	1	TF	1.80	5.0	1.00	56.05	56.05	505.29	1.00	505

TOTALI: dispvol	+	(disptraðau%)		=	A	volume	S/V		
1042		3153	25%	4984	121.35	238.2	0.51		

AMBIENTE : 010110 Locale 010110

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	56.07	1.00	4.25	238.3	1043

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	100 P.E	1	S	0.34	25.0	5.30	4.25	22.52	190.90	1.00	191
02	103 P.E	1	S	0.84	25.0	5.00	2.00	10.00	209.00	1.00	209
03	105 P.E	1	S	1.57	25.0	1.30	2.00	-2.04	-80.33	1.00	-80
04	264 S.E	1	S	1.62	25.0	1.10	1.60	1.76	71.10	1.00	71
05	264 S.E	1	S	1.62	25.0	1.60	1.80	2.88	116.35	1.00	116
06	735 PTE	6	S	0.23	26.0	4.25	1.00	0.00	155.14	1.00	155
07	738 PTE	1	S	0.35	25.0	5.40	1.00	0.00	47.25	1.00	47
08	738 PTE	1	S	0.35	25.0	7.40	1.00	0.00	64.75	1.00	65
09	732 PTE	1	S	0.71	25.0	5.30	1.00	0.00	93.68	1.00	94
10	733 PTE	1	S	0.33	25.0	5.30	1.00	0.00	43.59	1.00	44
11	103 P.E	1	N	0.84	25.0	5.30	4.25	14.02	293.12	1.20	352
12	264 S.E	1	N	1.62	25.0	1.00	1.50	1.50	60.60	1.20	73
13	264 S.E	1	N	1.62	25.0	2.00	3.50	7.00	282.80	1.20	339
14	735 PTE	4	N	0.23	25.0	4.25	1.00	0.00	99.45	1.20	119
15	738 PTE	1	N	0.35	26.0	5.00	1.00	0.00	45.50	1.20	55
16	738 PTE	1	N	0.35	25.0	11.00	1.00	0.00	96.25	1.20	116
17	732 PTE	1	N	0.71	25.0	5.30	1.00	0.00	93.68	1.20	112
18	733 PTE	1	N	0.33	25.0	5.30	1.00	0.00	43.59	1.20	52
19	500 PAV	1	T1	1.78	4.4	1.00	56.07	56.07	435.37	1.00	435
20	600 SOF	1	TF	1.80	5.0	1.00	56.07	56.07	505.47	1.00	505

TOTALI: dispvol	+	(disptraðau%)		=	A	volume	S/V		
1043		3070	25%	4880	113.72	238.3	0.48		

CALCOLO DISPERSIONI DI CALORE PER SINGOLO AMBIENTE

AMBIENTE : 010111 Locale 010111

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	70.24	0.24	4.25	71.6	313

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	100 P.E	1	S	0.34	25.0	6.50	4.25	27.63	234.12	1.00	234
02	103 P.E	1	S	0.84	25.0	5.00	4.25	21.25	444.13	1.00	444
03	105 P.E	1	S	1.57	25.0	1.40	3.50	0.00	0.00	1.00	0
04	264 S.E	1	S	1.62	25.0	1.40	3.50	4.90	197.96	1.00	198
05	738 PTE	1	S	0.35	25.0	9.80	1.00	0.00	85.75	1.00	86
06	735 PTE	6	S	0.23	25.0	4.25	1.00	0.00	149.18	1.00	149
07	732 PTE	1	S	0.71	25.0	6.50	1.00	0.00	114.89	1.00	115
08	733 PTE	1	S	0.33	25.0	6.50	1.00	0.00	53.46	1.00	53
09	103 P.E	1	N	0.84	25.0	7.50	4.25	31.88	666.19	1.20	799
10	105 P.E	1	N	1.57	25.0	1.30	3.00	1.30	51.19	1.20	61
11	264 S.E	1	N	1.62	25.0	1.30	2.00	2.60	105.04	1.20	126
12	735 PTE	4	N	0.23	25.0	4.25	1.00	0.00	99.45	1.20	119
13	738 PTE	1	N	0.35	25.0	6.60	1.00	0.00	57.75	1.20	69
14	732 PTE	1	N	0.71	25.0	6.50	1.00	0.00	114.89	1.20	138
15	733 PTE	1	N	0.33	25.0	6.50	1.00	0.00	53.46	1.20	64
16	102 P.E	1	N	0.66	25.0	10.80	4.25	45.90	751.61	1.20	902
17	731 PTE	2	N	0.19	25.0	4.25	1.00	0.00	39.95	1.20	48
18	732 PTE	1	N	0.71	26.0	10.80	1.00	0.00	198.53	1.20	238
19	733 PTE	1	N	0.33	26.0	10.80	1.00	0.00	92.38	1.20	111
20	500 PAV	1	T1	1.78	6.8	0.24	70.24	16.86	204.11	1.00	204
21	600 SOF	1	TF	1.80	5.0	0.24	70.24	16.86	151.97	1.00	152

TOTALI: dispvol	+	(disptraðau%)		=	A	volume	S/V		
313		4312	25%	5704	152.31	71.6	2.13		

AMBIENTE : 010112 Locale 010112

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	27.06	0.24	4.25	27.6	121

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	102 P.E	1	E	0.66	25.0	3.20	4.25	10.72	175.54	1.15	202
02	264 S.E	1	E	1.62	25.0	1.20	2.40	2.88	116.35	1.15	134
03	735 PTE	4	E	0.23	25.0	4.25	1.00	0.00	99.45	1.15	114
04	738 PTE	1	E	0.35	25.0	7.20	1.00	0.00	63.00	1.15	72
05	735 PTE	6	E	0.23	25.0	4.25	1.00	0.00	149.18	1.15	172
06	732 PTE	1	E	0.71	25.0	3.20	1.00	0.00	56.56	1.15	65
07	733 PTE	1	E	0.33	25.0	3.20	1.00	0.00	26.32	1.15	30
08	500 PAV	1	T1	1.78	6.9	0.24	27.06	6.49	79.89	1.00	80
09	600 SOF	1	TF	1.80	5.0	0.24	27.06	6.49	58.55	1.00	59
10	341 P.I	1	TF	0.56	10.0	9.00	4.25	34.89	196.08	1.00	196
11	403 S.I	1	TF	1.06	10.0	1.40	2.40	3.36	35.60	1.00	36
12	328 P.I	1	TF	1.64	10.0	12.10	4.25	49.32	809.92	1.00	810
13	400 S.I	1	TF	2.24	10.0	1.00	2.10	2.10	47.09	1.00	47

TOTALI: dispvol	+	(disptraðau%)		=	A	volume	S/V		
121		2016	25%	2641	20.09	27.6	0.73		

CALCOLO DISPERSIONI DI CALORE PER SINGOLO AMBIENTE

AMBIENTE : 010113 Locale 010123

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	2.0	4.90	20.50	4.25	426.9	7471

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	101 P.E	1	E	0.28	25.0	12.50	4.25	43.52	304.68	1.15	350
02	264 S.E	2	E	1.62	25.0	2.00	2.40	9.60	387.84	1.15	446
03	735 PTE	2	E	0.23	25.0	4.25	1.00	0.00	49.73	1.15	57
04	738 PTE	2	E	0.35	25.0	8.80	1.00	0.00	154.00	1.15	177
05	732 PTE	1	E	0.71	25.0	12.50	1.00	0.00	220.94	1.15	254
06	733 PTE	1	E	0.33	25.0	12.50	1.00	0.00	102.81	1.15	118
07	106 P.E	1	E	1.33	25.0	7.50	4.25	31.88	1056.66	1.15	1215
08	735 PTE	2	E	0.23	26.0	4.25	1.00	0.00	51.71	1.15	59
09	732 PTE	1	E	0.71	26.0	7.50	1.00	0.00	137.86	1.15	159
10	732 PTE	1	E	0.71	26.0	7.50	1.00	0.00	137.86	1.15	159
11	105 P.E	1	S	1.57	25.0	5.00	4.25	21.25	836.72	1.00	837
12	735 PTE	2	S	0.23	26.0	4.25	1.00	0.00	51.71	1.00	52
13	732 PTE	1	S	0.71	26.0	5.00	1.00	0.00	91.91	1.00	92
14	732 PTE	1	S	0.71	26.0	5.00	1.00	0.00	91.91	1.00	92
15	101 P.E	1	N	0.28	25.0	5.00	4.25	21.25	148.75	1.20	179
16	735 PTE	2	N	0.23	25.0	4.25	1.00	0.00	49.73	1.20	60
17	732 PTE	1	N	0.71	25.0	5.00	1.00	0.00	88.38	1.20	106
18	733 PTE	1	N	0.33	25.0	5.00	1.00	0.00	41.13	1.20	49
19	342 P.I	1	TF	0.50	10.0	9.50	4.25	40.38	200.26	1.00	200
20	500 PAV	1	T1	1.78	7.1	20.50	4.90	100.45	1272.65	1.00	1273
21	603 SOF	1	TF	2.71	5.0	20.50	4.90	100.45	1362.10	1.00	1362

TOTALI: dispvol	+	(disptraðau%)		=	A	volume	S/V		
7471		7296	25%	16590	227.95	426.9	0.53		

AMBIENTE : 010114 Locale 010124

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	66.50	1.00	4.25	282.6	1236

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	101 P.E	1	W	0.28	25.0	12.50	4.25	0.00	0.00	1.10	0
02	269 S.E	1	W	1.15	25.0	12.50	4.25	53.13	1527.34	1.10	1680
03	738 PTE	1	W	0.35	25.0	32.90	1.00	0.00	287.87	1.10	317
04	732 PTE	1	W	0.71	25.0	12.50	1.00	0.00	220.94	1.10	243
05	733 PTE	1	W	0.33	25.0	12.50	1.00	0.00	102.81	1.10	113
06	101 P.E	1	N	0.28	25.0	5.60	4.25	0.00	0.00	1.20	0
07	269 S.E	1	N	1.15	25.0	5.60	4.25	23.80	684.25	1.20	821
08	738 PTE	1	N	0.35	25.0	19.70	1.00	0.00	172.37	1.20	207
09	732 PTE	1	N	0.71	25.0	5.60	1.00	0.00	98.98	1.20	119
10	733 PTE	1	N	0.33	25.0	5.60	1.00	0.00	46.06	1.20	55
11	328 P.I	1	TF	1.64	15.0	12.60	4.25	53.55	1318.94	1.00	1319
12	328 P.I	1	TF	1.64	10.0	15.00	4.25	63.75	1046.77	1.00	1047
13	342 P.I	1	TF	0.50	10.0	5.00	4.25	19.36	96.03	1.00	96

CALCOLO DISPERSIONI DI CALORE PER SINGOLO AMBIENTE

AMBIENTE : 010114 Locale 010124

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
14	403 S.I	1	TF	1.06	10.0	0.90	2.10	1.89	20.03	1.00	20
15	500 PAV	1	T1	1.78	6.7	1.00	66.50	66.50	795.74	1.00	796
16	603 SOF	1	TF	2.71	5.0	1.00	66.50	66.50	901.74	1.00	902

TOTALI:	dispvol	+	(disptraðau%)		=	A	volume	S/V		
	1236		7734	25%	10904	143.43	282.6	0.51		

AMBIENTE : 010115 Locale 010125

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	15.50	1.00	8.80	136.4	597

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	101 P.E	1	W	0.28	25.0	3.00	8.80	0.00	0.00	1.10	0
02	269 S.E	1	W	1.15	25.0	3.00	8.80	26.40	759.00	1.10	835
03	738 PTE	1	W	0.35	25.0	28.60	1.00	0.00	250.25	1.10	275
04	732 PTE	2	W	0.71	25.0	3.00	1.00	0.00	106.05	1.10	117
05	733 PTE	2	W	0.33	25.0	3.00	1.00	0.00	49.35	1.10	54
06	101 P.E	1	S	0.28	25.0	5.60	4.05	22.68	158.76	1.00	159
07	735 PTE	2	S	0.23	25.0	4.05	1.00	0.00	47.38	1.00	47
08	733 PTE	2	S	0.33	25.0	5.60	1.00	0.00	92.12	1.00	92
09	101 P.E	1	E	0.28	25.0	3.00	4.05	12.15	85.05	1.15	98
10	735 PTE	2	E	0.23	25.0	4.05	1.00	0.00	47.38	1.15	54
11	733 PTE	2	E	0.33	25.0	3.00	1.00	0.00	49.35	1.15	57
12	342 P.I	1	TF	0.50	15.0	8.00	4.25	34.00	252.96	1.00	253
13	342 P.I	1	TF	0.50	5.0	5.60	8.80	44.24	109.72	1.00	110
14	403 S.I	1	TF	1.06	10.0	0.90	2.40	2.16	22.89	1.00	23
15	403 S.I	1	TF	1.06	10.0	1.20	2.40	2.88	30.52	1.00	31
16	500 PAV	1	T1	1.78	11.6	1.00	15.50	15.50	318.96	1.00	319
17	605 SOF	1		0.18	25.0	1.00	15.50	15.50	69.36	1.00	69

TOTALI:	dispvol	+	(disptraðau%)		=	A	volume	S/V		
	597		2593	25%	3838	92.23	136.4	0.68		

AMBIENTE : 020101 Locale 020101

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	19.22	1.00	4.05	77.8	341

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	103 P.E	1	E	0.84	25.0	3.30	4.05	11.16	233.35	1.15	268
02	264 S.E	1	E	1.62	25.0	1.10	2.00	2.20	88.88	1.15	102
03	735 PTE	2	E	0.23	25.0	4.05	1.00	0.00	47.38	1.15	54
04	719 PTE	1	E	0.10	25.0	6.20	1.00	0.00	15.50	1.15	18
05	733 PTE	2	E	0.33	25.0	3.30	1.00	0.00	54.28	1.15	62
06	502 PAV	1	TF	1.50	5.0	1.00	19.22	19.22	144.63	1.00	145
07	600 SOF	1	TF	1.80	5.0	1.00	19.22	19.22	173.27	1.00	173
08	341 P.I	1	TF	0.56	5.0	6.10	4.05	24.70	69.42	1.00	69

TOTALI:	dispvol	+	(disptraðau%)		=	A	volume	S/V		
	341		893	25%	1456	13.36	77.8	0.17		

CALCOLO DISPERSIONI DI CALORE PER SINGOLO AMBIENTE

AMBIENTE : 020102 Locale 020102

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	159.51	1.00	4.05	646.0	2826

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	103 P.E	1	N	0.84	25.0	69.00	4.05	257.45	5380.70	1.20	6457
02	264 S.E	10	N	1.62	25.0	1.10	2.00	22.00	888.80	1.20	1067
03	735 PTE	6	E	0.23	25.0	4.05	1.00	0.00	142.16	1.15	163
04	719 PTE	10	E	0.10	25.0	6.20	1.00	0.00	155.00	1.15	178
05	733 PTE	2	E	0.33	25.0	69.00	1.00	0.00	1135.05	1.15	1305
06	502 PAV	1	TF	1.50	5.0	1.00	159.51	159.51	1200.31	1.00	1200
07	600 SOF	1	TF	1.80	5.0	1.00	159.51	159.51	1437.98	1.00	1438
08	328 P.I	1	TF	1.64	10.0	4.40	4.05	17.82	292.60	1.00	293
09	341 P.I	1	TF	0.56	5.0	3.00	4.05	8.19	23.01	1.00	23
10	403 S.I	1	TF	1.06	5.0	1.65	2.40	3.96	20.98	1.00	21

TOTALI:	dispvol	+	(disptraðau%)		=	A	volume	S/V		
	2826		12145	25%	18008	279.45	646.0	0.43		

AMBIENTE : 020103 Locale 020103

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	54.97	1.00	4.05	222.6	974

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	103 P.E	1	E	0.84	25.0	9.60	4.05	34.48	720.63	1.15	829
02	264 S.E	2	E	1.62	25.0	1.10	2.00	4.40	177.76	1.15	204
03	735 PTE	2	E	0.23	25.0	4.05	1.00	0.00	47.38	1.15	54
04	719 PTE	2	E	0.10	25.0	6.20	1.00	0.00	31.00	1.15	36
05	733 PTE	2	E	0.33	25.0	9.60	1.00	0.00	157.92	1.15	182
06	502 PAV	1	TF	1.50	5.0	1.00	54.97	54.97	413.65	1.00	414
07	600 SOF	1	TF	1.80	5.0	1.00	54.97	54.97	495.55	1.00	496
08	334 P.I	1	TF	1.12	5.0	5.70	4.05	17.69	98.68	1.00	99
09	403 S.I	1	TF	1.06	5.0	2.25	2.40	5.40	28.61	1.00	29
10	328 P.I	1	TF	1.64	5.0	5.90	4.05	22.00	180.66	1.00	181
11	403 S.I	1	TF	1.06	5.0	0.90	2.10	1.89	10.01	1.00	10

TOTALI:	dispvol	+	(disptraðau%)		=	A	volume	S/V		
	974		2532	25%	4139	38.88	222.6	0.17		

AMBIENTE : 020104 Locale 020104

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	5.00	12.00	4.05	243.0	1063

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	101 P.E	1	E	0.28	25.0	12.00	4.05	48.60	340.20	1.15	391
02	735 PTE	2	E	0.23	25.0	4.05	1.00	0.00	47.38	1.15	54
03	733 PTE	2	E	0.33	25.0	12.00	1.00	0.00	197.40	1.15	227

CALCOLO DISPERSIONI DI CALORE PER SINGOLO AMBIENTE

AMBIENTE : 020104 Locale 020104

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
04	101 P.E	1	S	0.28	25.0	5.00	4.05	20.25	141.75	1.00	142
05	735 PTE	2	S	0.23	25.0	4.05	1.00	0.00	47.38	1.00	47
06	733 PTE	2	S	0.33	25.0	5.00	1.00	0.00	82.25	1.00	82
07	334 P.I	1	TF	1.12	5.0	5.50	4.05	22.27	124.29	1.00	124
08	501 PAV	1		0.28	25.0	5.00	3.50	17.50	122.06	1.00	122
09	502 PAV	1	TF	1.50	15.0	8.50	5.00	42.50	959.44	1.00	959
10	605 SOF	1		0.18	25.0	12.00	5.00	60.00	268.50	1.00	269

TOTALI:	dispvol	+	(disptraðau%)		=	A	volume	S/V		
	1063		2418	25%	4086	146.35	243.0	0.60		

AMBIENTE : 020105 Locale 020105

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	15.20	5.50	4.05	338.6	1481

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	101 P.E	1	W	0.28	25.0	15.20	4.05	0.00	0.00	1.10	0
02	269 S.E	1	W	1.15	25.0	15.20	4.05	61.56	1769.85	1.10	1947
03	735 PTE	2	W	0.23	25.0	4.05	1.00	0.00	47.38	1.10	52
04	738 PTE	1	W	0.35	25.0	38.50	1.00	0.00	336.88	1.10	371
05	733 PTE	2	W	0.33	25.0	15.20	1.00	0.00	250.04	1.10	275
06	101 P.E	1	E	0.28	25.0	3.20	4.05	12.96	90.72	1.15	104
07	735 PTE	2	E	0.23	25.0	4.05	1.00	0.00	47.38	1.15	54
08	733 PTE	2	E	0.33	25.0	3.20	1.00	0.00	52.64	1.15	61
09	501 PAV	1		0.28	25.0	6.00	3.00	18.00	125.55	1.00	126
10	502 PAV	1	TF	1.50	10.0	5.50	12.70	69.85	1051.24	1.00	1051
11	605 SOF	1		0.18	25.0	5.50	15.20	83.60	374.11	1.00	374

TOTALI:	dispvol	+	(disptraðau%)		=	A	volume	S/V		
	1481		4415	25%	7000	176.12	338.6	0.52		

AMBIENTE : 020106 Locale 020106

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	53.92	1.00	4.05	218.4	955

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	104 P.E	1	S	0.69	25.0	2.00	4.05	8.10	140.74	1.00	141
02	735 PTE	2	S	0.23	25.0	4.05	1.00	0.00	47.38	1.00	47
03	733 PTE	2	S	0.33	25.0	2.00	1.00	0.00	32.90	1.00	33
04	502 PAV	1	TF	1.50	5.0	1.00	53.92	53.92	405.75	1.00	406
05	600 SOF	1	TF	1.80	5.0	1.00	53.92	53.92	486.09	1.00	486

TOTALI:	dispvol	+	(disptraðau%)		=	A	volume	S/V		
	955		1113	25%	2346	8.10	218.4	0.04		

CALCOLO DISPERSIONI DI CALORE PER SINGOLO AMBIENTE

AMBIENTE : 020107 Locale 020107

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	58.33	1.00	4.05	236.2	1034

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	104 P.E	1	S	0.69	25.0	5.90	4.05	21.70	376.95	1.00	377
02	264 S.E	1	S	1.62	25.0	1.10	2.00	2.20	88.88	1.00	89
03	735 PTE	2	S	0.23	25.0	4.05	1.00	0.00	47.38	1.00	47
04	719 PTE	1	S	0.10	25.0	6.20	1.00	0.00	15.50	1.00	16
05	733 PTE	2	S	0.33	25.0	5.90	1.00	0.00	97.06	1.00	97
06	502 PAV	1	TF	1.50	5.0	1.00	58.33	58.33	438.93	1.00	439
07	600 SOF	1	TF	1.80	5.0	1.00	58.33	58.33	525.84	1.00	526

TOTALI:	dispvol	+	(disptraðau%)	=	A	volume	S/V		
	1034		1591 25%	3022	23.89	236.2	0.10		

AMBIENTE : 020108 Locale 020108

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	57.32	1.00	4.05	232.1	1016

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	104 P.E	1	S	0.69	25.0	5.90	4.05	21.70	376.95	1.00	377
02	264 S.E	1	S	1.62	25.0	1.10	2.00	2.20	88.88	1.00	89
03	735 PTE	2	S	0.23	25.0	4.05	1.00	0.00	47.38	1.00	47
04	719 PTE	1	S	0.10	25.0	6.20	1.00	0.00	15.50	1.00	16
05	733 PTE	2	S	0.33	25.0	5.90	1.00	0.00	97.06	1.00	97
06	502 PAV	1	TF	1.50	5.0	1.00	58.33	58.33	438.93	1.00	439
07	600 SOF	1	TF	1.80	5.0	1.00	58.33	58.33	525.84	1.00	526

TOTALI:	dispvol	+	(disptraðau%)	=	A	volume	S/V		
	1016		1591 25%	3004	23.89	232.1	0.10		

AMBIENTE : 020109 Locale 020109

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	57.90	1.00	4.05	234.5	1026

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	104 P.E	1	S	0.69	25.0	5.90	4.05	21.70	376.95	1.00	377
02	264 S.E	1	S	1.62	25.0	1.10	2.00	2.20	88.88	1.00	89
03	735 PTE	2	S	0.23	25.0	4.05	1.00	0.00	47.38	1.00	47
04	719 PTE	1	S	0.10	25.0	6.20	1.00	0.00	15.50	1.00	16
05	733 PTE	2	S	0.33	25.0	5.90	1.00	0.00	97.06	1.00	97
06	502 PAV	1	TF	1.50	5.0	1.00	57.90	57.90	435.70	1.00	436
07	600 SOF	1	TF	1.80	5.0	1.00	57.90	57.90	521.97	1.00	522

TOTALI:	dispvol	+	(disptraðau%)	=	A	volume	S/V		
	1026		1583 25%	3005	23.89	234.5	0.10		

CALCOLO DISPERSIONI DI CALORE PER SINGOLO AMBIENTE

AMBIENTE : 020110 Locale 020110

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	57.76	1.00	4.05	233.9	1023

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	104 P.E	1	S	0.69	25.0	5.90	4.05	21.70	376.95	1.00	377
02	264 S.E	1	S	1.62	25.0	1.10	2.00	2.20	88.88	1.00	89
03	735 PTE	2	S	0.23	25.0	4.05	1.00	0.00	47.38	1.00	47
04	719 PTE	1	S	0.10	25.0	6.20	1.00	0.00	15.50	1.00	16
05	733 PTE	2	S	0.33	25.0	5.90	1.00	0.00	97.06	1.00	97
06	502 PAV	1	TF	1.50	5.0	1.00	57.76	57.76	434.64	1.00	435
07	600 SOF	1	TF	1.80	5.0	1.00	57.76	57.76	520.71	1.00	521

TOTALI:	dispvol	+	(disptraðau%)	=	A	volume	S/V		
	1023		1581 25%	3000	23.89	233.9	0.10		

AMBIENTE : 020111 Locale 020111

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	58.22	1.00	4.05	235.8	1032

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	104 P.E	1	S	0.69	25.0	5.90	4.05	21.70	376.95	1.00	377
02	264 S.E	1	S	1.62	25.0	1.10	2.00	2.20	88.88	1.00	89
03	735 PTE	2	S	0.23	25.0	4.05	1.00	0.00	47.38	1.00	47
04	719 PTE	1	S	0.10	25.0	6.20	1.00	0.00	15.50	1.00	16
05	733 PTE	2	S	0.33	25.0	5.90	1.00	0.00	97.06	1.00	97
06	502 PAV	1	TF	1.50	5.0	1.00	58.22	58.22	438.11	1.00	438
07	600 SOF	1	TF	1.80	5.0	1.00	58.22	58.22	524.85	1.00	525

TOTALI:	dispvol	+	(disptraðau%)	=	A	volume	S/V		
	1032		1589 25%	3017	23.89	235.8	0.10		

AMBIENTE : 020112 Locale 020112

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	57.36	1.00	4.05	232.3	1016

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	104 P.E	1	S	0.69	25.0	5.90	4.05	21.70	376.95	1.00	377
02	264 S.E	1	S	1.62	25.0	1.10	2.00	2.20	88.88	1.00	89
03	735 PTE	2	S	0.23	25.0	4.05	1.00	0.00	47.38	1.00	47
04	719 PTE	1	S	0.10	25.0	6.20	1.00	0.00	15.50	1.00	16
05	733 PTE	2	S	0.33	25.0	5.90	1.00	0.00	97.06	1.00	97
06	502 PAV	1	TF	1.50	5.0	1.00	58.33	58.33	438.93	1.00	439
07	600 SOF	1	TF	1.80	5.0	1.00	58.33	58.33	525.84	1.00	526

TOTALI:	dispvol	+	(disptraðau%)	=	A	volume	S/V		
	1016		1591 25%	3005	23.89	232.3	0.10		

CALCOLO DISPERSIONI DI CALORE PER SINGOLO AMBIENTE

AMBIENTE : 020113 Locale 020113

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	27.61	1.00	4.05	111.8	489

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	502 PAV	1	TF	1.50	5.0	1.00	27.61	27.61	207.77	1.00	208
02	600 SOF	1	TF	1.80	5.0	1.00	27.61	27.61	248.90	1.00	249

TOTALI: dispvol	+	(disptraðau%)	=	A	volume	S/V		
489		457 25%	1060	0.00	111.8	0.00		

AMBIENTE : 020114 Locale 020114

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	27.94	1.00	4.05	113.2	495

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	502 PAV	1	TF	1.50	5.0	1.00	27.94	27.94	210.25	1.00	210
02	600 SOF	1	TF	1.80	5.0	1.00	27.94	27.94	251.88	1.00	252

TOTALI: dispvol	+	(disptraðau%)	=	A	volume	S/V		
495		462 25%	1073	0.00	113.2	0.00		

AMBIENTE : 020115 Locale 020115

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	26.92	1.00	4.05	109.0	477

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	104 P.E	1	S	0.69	25.0	5.60	4.05	20.48	355.84	1.00	356
02	264 S.E	1	S	1.62	25.0	1.10	2.00	2.20	88.88	1.00	89
03	735 PTE	2	S	0.23	25.0	4.05	1.00	0.00	47.38	1.00	47
04	719 PTE	1	S	0.10	25.0	6.20	1.00	0.00	15.50	1.00	16
05	733 PTE	2	S	0.33	25.0	5.60	1.00	0.00	92.12	1.00	92
06	502 PAV	1	TF	1.50	5.0	1.00	26.92	26.92	202.57	1.00	203
07	600 SOF	1	TF	1.80	5.0	1.00	26.92	26.92	242.68	1.00	243

TOTALI: dispvol	+	(disptraðau%)	=	A	volume	S/V		
477		1045 25%	1783	22.68	109.0	0.21		

AMBIENTE : 020116 Locale 020116

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	27.55	1.00	4.05	111.6	488

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	104 P.E	1	S	0.69	25.0	5.80	4.05	21.29	369.91	1.00	370
02	264 S.E	1	S	1.62	25.0	1.10	2.00	2.20	88.88	1.00	89
03	735 PTE	2	S	0.23	25.0	4.05	1.00	0.00	47.38	1.00	47

CALCOLO DISPERSIONI DI CALORE PER SINGOLO AMBIENTE

AMBIENTE : 020116 Locale 020116

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
04	719 PTE	1	S	0.10	25.0	6.20	1.00	0.00	15.50	1.00	16
05	733 PTE	2	S	0.33	25.0	5.80	1.00	0.00	95.41	1.00	95
06	502 PAV	1	TF	1.50	5.0	1.00	27.55	27.55	207.31	1.00	207
07	600 SOF	1	TF	1.80	5.0	1.00	27.55	27.55	248.36	1.00	248

TOTALI:	dispvol	+	(disptraðau%)	=	A	volume	S/V
	488	1073	25%	1829	23.49	111.6	0.21

AMBIENTE : 020117 Locale 020117

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	56.60	1.00	4.05	229.2	1003

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	104 P.E	1	S	0.69	25.0	5.50	4.05	20.07	348.80	1.00	349
02	264 S.E	1	S	1.62	25.0	1.10	2.00	2.20	88.88	1.00	89
03	735 PTE	2	S	0.23	25.0	4.05	1.00	0.00	47.38	1.00	47
04	719 PTE	1	S	0.10	25.0	6.20	1.00	0.00	15.50	1.00	16
05	733 PTE	2	S	0.33	25.0	5.50	1.00	0.00	90.48	1.00	90
06	502 PAV	1	TF	1.50	5.0	1.00	56.60	56.60	425.91	1.00	426
07	600 SOF	1	TF	1.80	5.0	1.00	56.60	56.60	510.25	1.00	510

TOTALI:	dispvol	+	(disptraðau%)	=	A	volume	S/V
	1003	1527	25%	2912	22.27	229.2	0.10

AMBIENTE : 020118 Locale 020118

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	55.97	1.00	4.05	226.7	992

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	104 P.E	1	S	0.69	25.0	5.50	4.05	20.07	348.80	1.00	349
02	264 S.E	1	S	1.62	25.0	1.10	2.00	2.20	88.88	1.00	89
03	735 PTE	2	S	0.23	25.0	4.05	1.00	0.00	47.38	1.00	47
04	719 PTE	1	S	0.10	25.0	6.20	1.00	0.00	15.50	1.00	16
05	733 PTE	2	S	0.33	25.0	5.50	1.00	0.00	90.48	1.00	90
06	502 PAV	1	TF	1.50	5.0	1.00	55.97	55.97	421.17	1.00	421
07	600 SOF	1	TF	1.80	5.0	1.00	55.97	55.97	504.57	1.00	505

TOTALI:	dispvol	+	(disptraðau%)	=	A	volume	S/V
	992	1517	25%	2888	22.27	226.7	0.10

AMBIENTE : 020119 Locale 020119

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	55.83	1.00	4.05	226.1	989

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	104 P.E	1	S	0.69	25.0	5.50	4.05	20.07	348.80	1.00	349

CALCOLO DISPERSIONI DI CALORE PER SINGOLO AMBIENTE

AMBIENTE : 020119 Locale 020119

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
02	264 S.E	1	S	1.62	25.0	1.10	2.00	2.20	88.88	1.00	89
03	735 PTE	2	S	0.23	25.0	4.05	1.00	0.00	47.38	1.00	47
04	719 PTE	1	S	0.10	25.0	6.20	1.00	0.00	15.50	1.00	16
05	733 PTE	2	S	0.33	25.0	5.50	1.00	0.00	90.48	1.00	90
06	502 PAV	1	TF	1.50	5.0	1.00	55.83	55.83	420.12	1.00	420
07	600 SOF	1	TF	1.80	5.0	1.00	55.83	55.83	503.31	1.00	503

TOTALI: dispvol	+	(disptraðau%)	=	A	volume	S/V		
989	1514	25%	2882	22.27	226.1	0.10		

AMBIENTE : 020120 Locale 020120

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	59.59	1.00	4.05	241.3	1056

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	104 P.E	1	S	0.69	25.0	6.60	4.05	24.53	426.21	1.00	426
02	264 S.E	1	S	1.62	25.0	1.10	2.00	2.20	88.88	1.00	89
03	735 PTE	2	S	0.23	25.0	4.05	1.00	0.00	47.38	1.00	47
04	719 PTE	1	S	0.10	25.0	6.20	1.00	0.00	15.50	1.00	16
05	733 PTE	2	S	0.33	25.0	6.60	1.00	0.00	108.57	1.00	109
06	502 PAV	1	TF	1.50	5.0	1.00	59.59	59.59	448.41	1.00	448
07	600 SOF	1	TF	1.80	5.0	1.00	59.59	59.59	537.20	1.00	537
08	334 P.I	1	TF	1.12	10.0	12.30	4.05	49.81	555.94	1.00	556

TOTALI: dispvol	+	(disptraðau%)	=	A	volume	S/V		
1056	2228	25%	3841	26.73	241.3	0.11		

AMBIENTE : 030101 Locale 030101

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	19.30	1.00	4.45	85.9	376

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	103 P.E	1	E	0.84	25.0	3.20	4.45	12.04	251.64	1.15	289
02	264 S.E	1	E	1.62	25.0	1.10	2.00	2.20	88.88	1.15	102
03	735 PTE	2	E	0.23	25.0	4.45	1.00	0.00	52.07	1.15	60
04	719 PTE	1	E	0.10	25.0	6.20	1.00	0.00	15.50	1.15	18
05	733 PTE	2	E	0.33	25.0	3.20	1.00	0.00	52.64	1.15	61
06	502 PAV	1	TF	1.50	5.0	1.00	19.30	19.30	145.23	1.00	145
07	602 SOF	1		0.76	25.0	6.15	3.40	20.91	397.81	1.00	398
08	341 P.I	1	TF	0.56	5.0	6.10	3.90	23.79	66.85	1.00	67

TOTALI: dispvol	+	(disptraðau%)	=	A	volume	S/V		
376	1140	25%	1800	35.15	85.9	0.41		

CALCOLO DISPERSIONI DI CALORE PER SINGOLO AMBIENTE

AMBIENTE : 030102 Locale 030102

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	162.75	1.00	4.25	691.7	3026

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	103 P.E	1	N	0.84	25.0	72.00	3.90	258.80	5408.92	1.20	6491
02	264 S.E	10	N	1.62	25.0	1.10	2.00	22.00	888.80	1.20	1067
03	735 PTE	6	N	0.23	25.0	3.90	1.00	0.00	136.89	1.20	164
04	719 PTE	10	N	0.10	25.0	6.20	1.00	0.00	155.00	1.20	186
05	733 PTE	1	N	0.33	25.0	72.00	1.00	0.00	592.20	1.20	711
06	737 PTE	1	N	0.40	25.0	72.00	1.00	0.00	718.20	1.20	862
07	502 PAV	1	TF	1.50	5.0	1.00	162.75	162.75	1224.69	1.00	1225
08	602 SOF	1		0.76	25.0	2.25	74.30	167.17	3180.50	1.00	3181
09	328 P.I	1	TF	1.64	10.0	3.20	4.25	13.60	223.31	1.00	223
10	341 P.I	1	TF	0.56	5.0	3.00	3.90	7.74	21.75	1.00	22
11	403 S.I	1	TF	1.06	5.0	1.65	2.40	3.96	20.98	1.00	21

TOTALI: dispvol	+	(disptraðau%)		=	A	volume	S/V		
3026		14151	25%	20715	447.98	691.7	0.65		

AMBIENTE : 030103 Locale 030103

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	1.5	478.96	1.00	5.20	2490.6	32689

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	102 P.E	1	E	0.66	25.0	9.60	5.20	27.92	457.19	1.15	526
02	264 S.E	10	E	1.62	25.0	1.10	2.00	22.00	888.80	1.15	1022
03	735 PTE	2	E	0.23	25.0	5.20	1.00	0.00	60.84	1.15	70
04	719 PTE	10	E	0.10	25.0	6.20	1.00	0.00	155.00	1.15	178
05	733 PTE	1	E	0.33	25.0	9.60	1.00	0.00	78.96	1.15	91
06	737 PTE	1	E	0.40	25.0	10.20	1.00	0.00	101.75	1.15	117
07	104 P.E	1	S	0.69	25.0	45.80	3.90	159.53	2771.92	1.00	2772
08	264 S.E	8	S	1.62	25.0	1.10	2.00	17.60	711.04	1.00	711
09	264 S.E	1	S	1.62	25.0	1.35	1.10	1.49	59.99	1.00	60
10	735 PTE	4	S	0.23	25.0	3.90	1.00	0.00	91.26	1.00	91
11	719 PTE	8	S	0.10	25.0	6.20	1.00	0.00	124.00	1.00	124
12	719 PTE	1	S	0.10	25.0	4.90	1.00	0.00	12.25	1.00	12
13	733 PTE	1	S	0.33	25.0	45.80	1.00	0.00	376.70	1.00	377
14	737 PTE	1	S	0.40	25.0	45.80	1.00	0.00	456.86	1.00	457
15	502 PAV	1	TF	1.50	5.0	1.00	478.96	478.96	3604.17	1.00	3604
16	602 SOF	1		0.76	25.0	11.35	45.80	519.83	9889.77	1.00	9890
17	328 P.I	1	TF	1.64	5.0	10.60	5.20	52.24	428.89	1.00	429
18	403 S.I	1	TF	1.06	5.0	1.20	2.40	2.88	15.26	1.00	15

TOTALI: dispvol	+	(disptraðau%)		=	A	volume	S/V		
32689		20546	25%	58372	748.37	2490.6	0.30		

CALCOLO DISPERSIONI DI CALORE PER SINGOLO AMBIENTE

AMBIENTE : 030104 Locale 030104

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	27.99	1.00	5.45	152.5	667

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	502 PAV	1	TF	1.50	5.0	1.00	27.99	27.99	210.62	1.00	211
02	602 SOF	1		0.76	25.0	5.60	5.40	30.24	575.32	1.00	575

TOTALI:	dispvol	+	(disptraðau%)	=	A	volume	S/V		
	667		786 25%	1650	30.24	152.5	0.20		

AMBIENTE : 030105 Locale 030105

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	27.89	1.00	5.45	152.0	665

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	502 PAV	1	TF	1.50	5.0	1.00	27.89	27.89	209.87	1.00	210
02	602 SOF	1		0.76	25.0	5.60	5.40	30.24	575.32	1.00	575

TOTALI:	dispvol	+	(disptraðau%)	=	A	volume	S/V		
	665		785 25%	1646	30.24	152.0	0.20		

AMBIENTE : 030106 Locale 030106

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	27.48	1.00	4.85	133.3	583

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	104 P.E	1	S	0.69	25.0	5.40	3.90	18.86	327.69	1.00	328
02	264 S.E	1	S	1.62	25.0	1.10	2.00	2.20	88.88	1.00	89
03	735 PTE	2	S	0.23	25.0	3.90	1.00	0.00	45.63	1.00	46
04	719 PTE	1	S	0.10	25.0	6.20	1.00	0.00	15.50	1.00	16
05	733 PTE	1	S	0.33	25.0	5.40	1.00	0.00	44.42	1.00	44
06	737 PTE	1	S	0.40	25.0	5.40	1.00	0.00	53.87	1.00	54
07	502 PAV	1	TF	1.50	5.0	1.00	27.48	27.48	206.79	1.00	207
08	602 SOF	1		0.76	25.0	5.40	5.50	29.70	565.04	1.00	565

TOTALI:	dispvol	+	(disptraðau%)	=	A	volume	S/V		
	583		1348 25%	2268	50.76	133.3	0.38		

AMBIENTE : 030107 Locale 030107

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	0.5	27.69	1.00	4.85	134.3	588

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	104 P.E	1	S	0.69	25.0	5.40	3.90	18.86	327.69	1.00	328
02	264 S.E	1	S	1.62	25.0	1.10	2.00	2.20	88.88	1.00	89

CALCOLO DISPERSIONI DI CALORE PER SINGOLO AMBIENTE

AMBIENTE : 030107 Locale 030107

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
03	735 PTE	2	S	0.23	25.0	3.90	1.00	0.00	45.63	1.00	46
04	719 PTE	1	S	0.10	25.0	6.20	1.00	0.00	15.50	1.00	16
05	733 PTE	1	S	0.33	25.0	5.40	1.00	0.00	44.42	1.00	44
06	737 PTE	1	S	0.40	25.0	5.40	1.00	0.00	53.87	1.00	54
07	502 PAV	1	TF	1.50	5.0	1.00	27.69	27.69	208.37	1.00	208
08	602 SOF	1		0.76	25.0	5.40	5.50	29.70	565.04	1.00	565

TOTALI:	dispvol	+	(disptraðau%)	=	A	volume	S/V		
	588		1349 25%	2274	50.76	134.3	0.38		

AMBIENTE : 030108 Locale 030108

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	1.5	56.08	1.00	5.20	291.6	3827

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	104 P.E	1	S	0.69	25.0	5.40	3.90	18.86	327.69	1.00	328
02	264 S.E	1	S	1.62	25.0	1.10	2.00	2.20	88.88	1.00	89
03	735 PTE	2	S	0.23	25.0	3.90	1.00	0.00	45.63	1.00	46
04	719 PTE	1	S	0.10	25.0	6.20	1.00	0.00	15.50	1.00	16
05	733 PTE	1	S	0.33	25.0	5.40	1.00	0.00	44.42	1.00	44
06	737 PTE	1	S	0.40	25.0	5.40	1.00	0.00	53.87	1.00	54
07	502 PAV	1	TF	1.50	5.0	1.00	56.08	56.08	422.00	1.00	422
08	602 SOF	1		0.76	25.0	5.40	11.35	61.29	1166.04	1.00	1166

TOTALI:	dispvol	+	(disptraðau%)	=	A	volume	S/V		
	3827		2164 25%	6532	82.35	291.6	0.28		

AMBIENTE : 030109 Locale 030109

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	1.5	56.24	1.00	5.20	292.4	3838

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	104 P.E	1	S	0.69	25.0	5.40	3.90	18.86	327.69	1.00	328
02	264 S.E	1	S	1.62	25.0	1.10	2.00	2.20	88.88	1.00	89
03	735 PTE	2	S	0.23	25.0	3.90	1.00	0.00	45.63	1.00	46
04	719 PTE	1	S	0.10	25.0	6.20	1.00	0.00	15.50	1.00	16
05	733 PTE	1	S	0.33	25.0	5.40	1.00	0.00	44.42	1.00	44
06	737 PTE	1	S	0.40	25.0	5.40	1.00	0.00	53.87	1.00	54
07	502 PAV	1	TF	1.50	5.0	1.00	56.24	56.24	423.21	1.00	423
08	602 SOF	1		0.76	25.0	5.40	11.35	61.29	1166.04	1.00	1166

TOTALI:	dispvol	+	(disptraðau%)	=	A	volume	S/V		
	3838		2165 25%	6545	82.35	292.4	0.28		

CALCOLO DISPERSIONI DI CALORE PER SINGOLO AMBIENTE

AMBIENTE : 030110 Locale 030110

Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	1.5	55.84	1.00	5.20	290.4	3811

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	104 P.E	1	S	0.69	25.0	5.40	3.90	18.86	327.69	1.00	328
02	264 S.E	1	S	1.62	25.0	1.10	2.00	2.20	88.88	1.00	89
03	735 PTE	2	S	0.23	25.0	3.90	1.00	0.00	45.63	1.00	46
04	719 PTE	1	S	0.10	25.0	6.20	1.00	0.00	15.50	1.00	16
05	733 PTE	1	S	0.33	25.0	5.40	1.00	0.00	44.42	1.00	44
06	737 PTE	1	S	0.40	25.0	5.40	1.00	0.00	53.87	1.00	54
07	502 PAV	1	TF	1.50	5.0	1.00	55.84	55.84	420.20	1.00	420
08	602 SOF	1		0.76	25.0	5.40	11.35	61.29	1166.04	1.00	1166

TOTALI:	dispvol	+	(disptraðau%)		=	A	volume	S/V		
	3811		2162	25%	6514	82.35	290.4	0.28		

AMBIENTE : 030111 Locale 030111

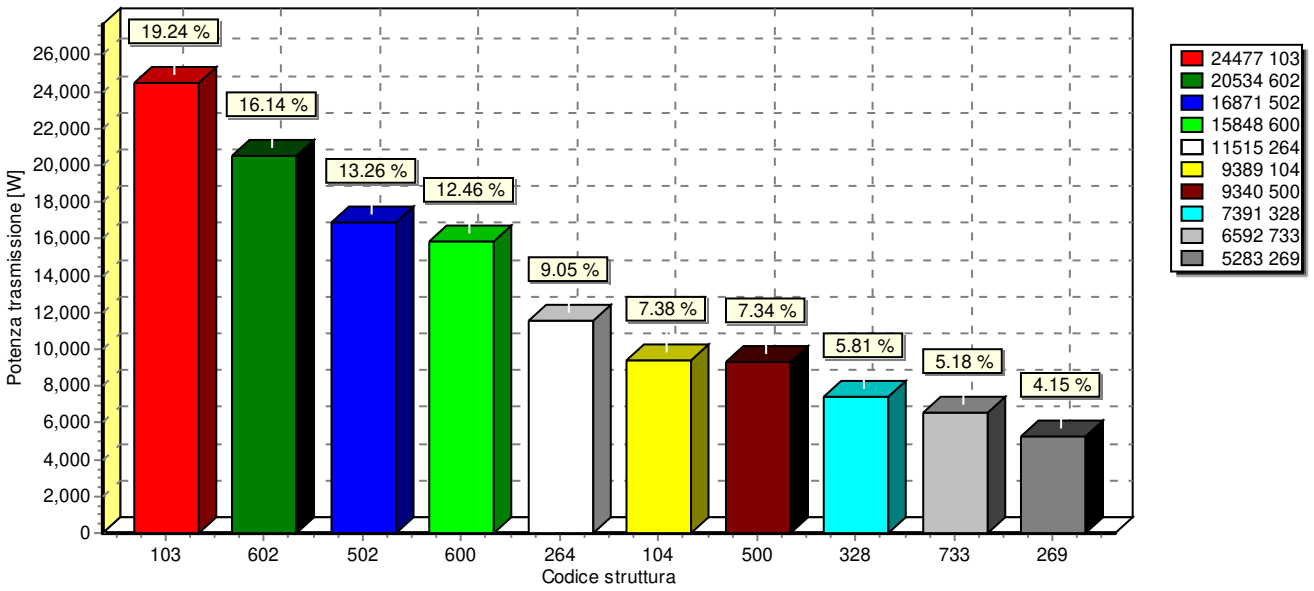
Te = **- 5.0**
Ta = **20**

q	ric	largh	lungh	altez	volume	dispvol
1	1.5	60.12	1.00	5.20	312.6	4103

nr	Co-str	q	es	U	dt	lungh	al/la	A	AðUðdt	a.es	disptra
01	104 P.E	1	S	0.69	25.0	6.70	3.90	21.73	377.56	1.00	378
02	264 S.E	2	S	1.62	25.0	1.10	2.00	4.40	177.76	1.00	178
03	735 PTE	2	S	0.23	25.0	3.90	1.00	0.00	45.63	1.00	46
04	719 PTE	2	S	0.10	25.0	6.20	1.00	0.00	31.00	1.00	31
05	733 PTE	1	S	0.33	25.0	6.70	1.00	0.00	55.11	1.00	55
06	737 PTE	1	S	0.40	25.0	6.70	1.00	0.00	66.83	1.00	67
07	502 PAV	1	TF	1.50	5.0	1.00	60.12	60.12	452.40	1.00	452
08	602 SOF	1		0.76	25.0	6.70	10.10	67.67	1287.42	1.00	1287
09	328 P.I	1	TF	1.64	10.0	9.70	5.20	50.44	828.22	1.00	828

TOTALI:	dispvol	+	(disptraðau%)		=	A	volume	S/V		
	4103		3322	25%	8256	93.80	312.6	0.30		

RIEPILOGO STRUTTURE UTILIZZATE



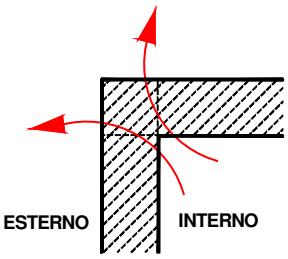
nr	CODICE	TRASMITTANZA W/m²K	RESISTENZA m²K/W	RES.VAPORE sm²Pa/kg	S m	PERMEANZA kg/sm²Pa	MASSA kg/m²	CAPACITA' kJ/m²K	TTCI ore	TTCE ore
001	100 P.E	0.339	2.952	274.397	2.530	0.004	5661.00	5792.76	3170.2	1580.7
Muratura perimetrale esterna esistente castello al piano terra lato SUD, in pietra e mattoni pieni - spessore 255 cm.										
002	101 P.E	0.280	3.569	3.03E7	0.191	3.30E-08	64.76	58.48	28.2	29.8
Muratura esterna tipo per nuovo edificio ex lavanderia										
003	102 P.E	0.655	1.526	132.532	1.230	0.008	2736.00	2797.56	759.7	426.0
Muratura perimetrale esterna esistente castello al piano terra, in pietra e mattoni pieni - spessore 120 cm.										
004	103 P.E	0.836	1.197	99.793	0.930	0.010	2061.00	2106.36	438.0	262.1
Muratura perimetrale esterna esistente castello al piano terra, in pietra e mattoni pieni - spessore 90 cm.										
005	104 P.E	0.695	1.438	21.316	0.780	0.047	1386.00	1261.26	238.0	266.0
Muratura perimetrale esterna esistente castello in mattoni pieni - spessore 75 cm.										
006	105 P.E	1.575	0.635	8.421	0.290	0.119	504.00	458.64	35.4	45.6
Muratura perimetrale esterna esistente castello in mattoni pieni - spessore 30 cm.										
007	106 P.E	1.326	0.754	14.496	0.470	0.069	826.00	756.70	69.5	89.0
Muratura esterna esistente realizzata in mattone pieno - spessore totale 47 cm.										
008	264 S.E	1.616	0.619	4.04E10	0.040	2.48E-11	80.00	96.00	7.2	9.3
Vetrate in vetrocamera a bassa emissività (<0,1) 6-16-6 mm. con telaio in legno. Ug < 1,1 W/mq°C - Ug < 1,6 W/mq°C.										
009	269 S.E	1.150	0.870	4.04E10	0.040	2.48E-11	80.00	96.00	10.5	12.7
Superfici vetrate in vetrocamera a bassa emissività (<0,1) riflettenti.										
010	328 P.I	1.642	0.609	8.158	0.280	0.123	486.00	442.26	37.4	37.4
Muratura interna esistente in mattone pieno - spessore 28 cm.										

nr	CODICE	TRASMITTANZA W/m²K	RESISTENZA m²K/W	RES.VAPORE sm²Pa/kg	S m	PERMEANZA kg/sm²Pa	MASSA kg/m²	CAPACITA' kJ/m²K	TTCI ore	TTCE ore
011	334 P.I	1.116	0.896	14.474	0.515	0.069	906.00	824.46	102.3	102.9
Muratura divisoria interna esistente in mattone pieno.										
012	341 P.I	0.562	1.779	25.789	0.940	0.039	1668.00	1517.88	374.9	374.9
Muratura divisoria interna in mattoni pieni spessore 90 cm.										
013	342 P.I	0.496	2.017	18.226	0.120	0.055	60.65	54.59	15.3	15.3
Muratura divisoria interna REI edificio ex lavanderia.										
014	400 S.I	2.242	0.446	9.585	0.030	0.104	16.50	13.86	0.9	0.9
Porta interna in legno										
015	403 S.I	1.060	0.944	20000.160	0.032	5.00E-05	16.60	8.54	1.1	1.1
Porta metallica con caratteristiche REI predefinite.										
016	500 PAV	1.777	0.563	68.035	0.210	0.015	442.00	398.26	35.3	26.9
Pavimento su terreno esistente piano terra.										
017	501 PAV	0.279	3.588	10228.000	0.566	9.78E-05	520.35	466.82	378.8	86.4
Pavimento esistente interpiano verso esterno / locali N.R.										
018	502 PAV	1.505	0.665	206.504	0.313	0.005	339.15	305.28	36.9	19.4
Pavimento esistente interpiano.										
019	600 SOF	1.803	0.555	206.504	0.313	0.005	339.15	305.28	14.0	33.1
Solaio esistente interpiano.										
020	602 SOF	0.761	1.314	3.04E7	0.096	3.29E-08	54.06	51.42	8.8	9.9
Tetto a falda esistente con struttura portante in legno										
021	603 SOF	2.712	0.369	35.!						
Soffitto stanza "24" e altre su sottotetto										
022	605 SOF	0.179	5.579	5246.!						
Nuova copertura esterna tipo per ex edificio lavande										

RIEPILOGO PONT

718 PTE 0.33 W/m·K

C4 - Angolo sporgente non isolato senza pilastro



719 PTE 0.10 W/m·K

W10 - Serramento in mezzeria su parete non isolata

731 PTE 0.19 W/m·K

Pareti interne contro parete esterna

732 PTE 0.71 W/m·K

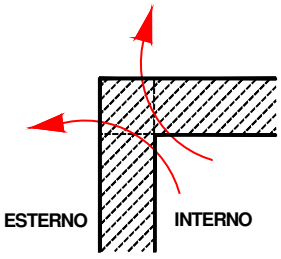
Spigolo orizzontale parete piano te

733 PTE 0.33 W/m·K

Spigolo orizzontale su solaio interpi

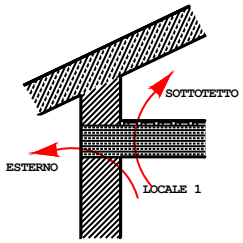
735 PTE 0.23 W/m·K

Spigoli pareti interne contro parete esterna ai vari pi



737 PTE 0.40 W/m·K

Spigolo parete esterna con copertura in legno a falda superi



738 PTE 0.35 W/m·K

W4 - Serramento a filo esterno su parete non isolata

Nelle pagine successive sono riportate le tabelle relative alle:

CARATTERISTICHE TERMICHE E IGROMETRICHE DEI COMPONENTI OPACHI
CARATTERISTICHE TERMICHE DEI COMPONENTI TRASPARENTI

LEGENDA

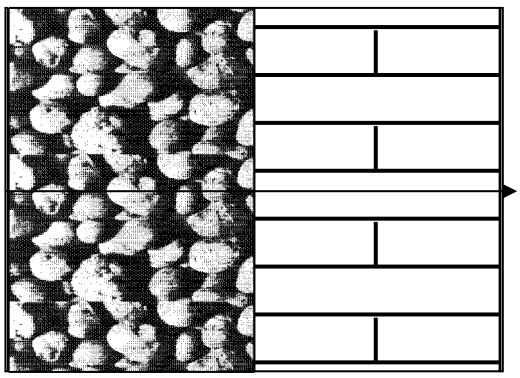
s	[m]	*Spessore dello strato*
l	[W/mK]	*Conduttività termica del materiale*
C	[W/m²K]	*Conduttanza unitaria*
r	[kg/m³]	*Massa volumica*
da 10^{12}	[kg/msPa]	*Permeabilità di vapore nell'intervallo di umidità relativa 0-50 %*
du 10^{12}	[kg/msPa]	*Permeabilità di vapore nell'intervallo di umidità relativa 50-95 %*
R	[m²K/W]	*Resistenza termica dei singoli strati*
Ag	[m²]	*Area del vetro*
Af	[m²]	*Area del telaio*
Lg	[m]	*Lunghezza perimetrale della superficie vetrata*
Ug	[W/m²K]	*Trasmittanza termica dell'elemento vetrato*
Uf	[W/m²K]	*Trasmittanza termica del telaio*
Y l	[W/mK]	*Trasmittanza lineica (nulla in caso di singolo vetro)*
Uw	[W/m²K]	*Trasmittanza termica totale del serramento*
c	[J/(kg·K)]	*Capacità termica specifica*
d	[m]	*Profondità di penetrazione periodica di un'onda termica*
x	[-]	*Rapporto tra lo spessore dello strato e la profondità di penetrazione*
c	[J/(m²K)]	*Capacità termica areica*
Y	[W/(m²K)]	*Ammettenza termica dinamica*
Z^{mn}		*Elemento della matrice di trasmissione del calore*
Z^{mn}	[-]	
Z^{11}	[m²·K/W]	
Z^{12}	[W/(m²K)]	
Z^{21}	[-]	
T^{22}	[s]	*Periodo delle variazioni*
Dt	[s]	*Variazione di tempo: anticipo (se positiva) o ritardo (se negativa)*

CARATTERISTICHE TERMICHE/IGROMETRICHE DEI COMPONENTI OPACHI DELL'INVOLUCRO EDILIZIO

TIPO DI STRUTTURA *Muratura perimetrale esterna esistente castello al piano terra lato SUD, in pietra e mattoni pieni cod 100 P.E - spessore 255 cm.*

Massa [kg/m²]	5661.0	Capacità [kJ/m²K]	5792.8	Type Ashrae	41

N	Descrizione strato (dall'interno verso l'esterno)	s (m)	l (W/mK)	C (W/m²K)	r (kg/m³)	da 10^{12} (kg/msPa)	du 10^{12} (kg/msPa)	R (m²K/W)
1	Intonaco interno di calce e gesso	0.0150	0.700	46.67	1200	19.0000	19.0000	0.021
2	Rocce naturali (dolomite)	1.2500	1.800	1.44	2700	5.2100	5.2100	0.694
3	Muratura in mattone pieno.	1.2500	0.610	0.49	1800	38.0000	38.0000	2.049
4	Intonaco interno di calce e gesso	0.0150	0.700	46.67	1200	19.0000	19.0000	0.021
SPESSORE TOTALE [m]		2.5300						

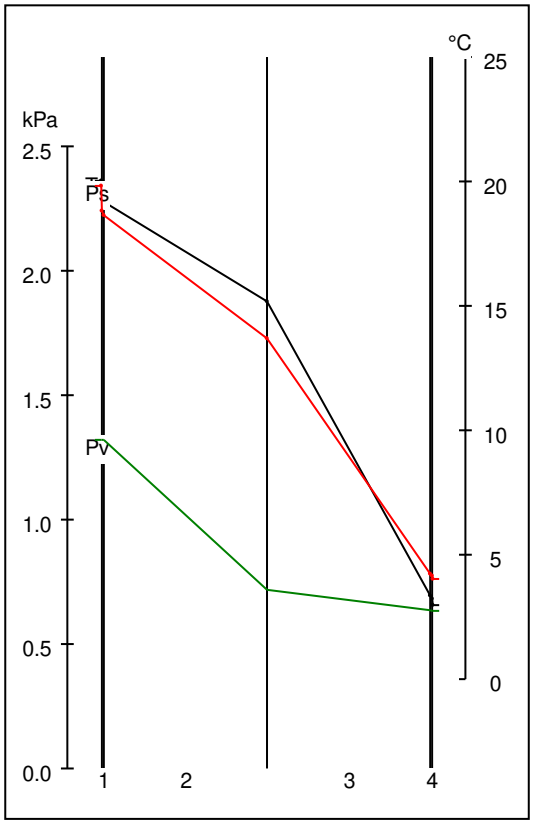


Conduttanza unitaria superficie interna	8	Resistenza unitaria superficie interna	0.123
Conduttanza unitaria superficie esterna	23	Resistenza unitaria superficie esterna	0.043
TRASMITTANZA TOTALE[W/m²K]	0.339	RESISTENZA TERMICA TOTALE[m²K/W]	2.952

VERIFICA IGROMETRICA ESEGUITA A NORMA EN ISO 13788 (UNI10350)

CONDIZIONE	Ti(ºC)	Pi(Pa)	Te(ºC)	Pe(Pa)
INVERNALE: gennaio	20.0	1320	3.0	633
ESTIVA: agosto	23.7	2211	23.7	2211

☒	La struttura non è soggetta a fenomeni di condensa interstiziale; la differenza minima di pressione tra quella di saturazione e quella reale è pari a [Pa]	101
☐	La struttura è soggetta a fenomeni di condensa; la quantità stagionale di condensato è pari a [kg/m²] (ammissibile ed evaporabile nella stagione estiva)	
☒	La struttura non è soggetta a fenomeni di condensa superficiale; la differenza minima di pressione tra quella di saturazione e quella reale è pari a [Pa]	1303

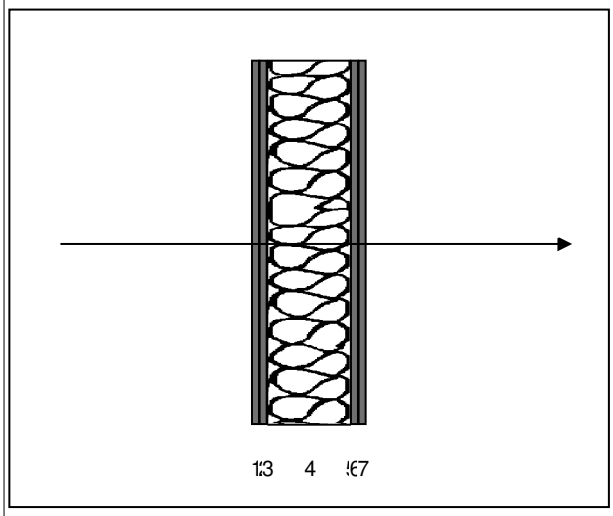


CARATTERISTICHE TERMICHE/IGROMETRICHE DEI COMPONENTI OPACHI DELL'INVOLUCRO EDILIZIO

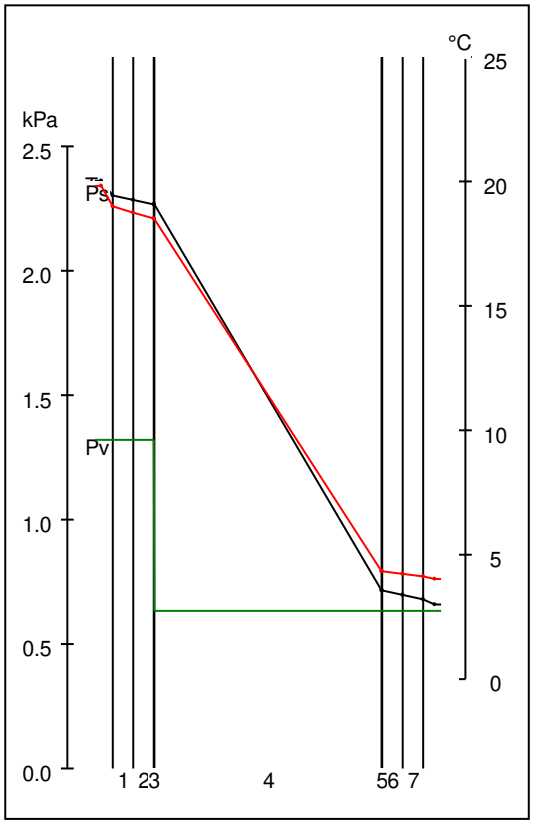
TIPO DI STRUTTURA *Muratura esterna tipo per nuovo edificio ex lavanderia cod 101 P.E*

Massa [kg/m²]	64.8	Capacità [kJ/m²K]	58.5	Type Ashrae	2

N	Descrizione strato (dall'interno verso l'esterno)	s (m)	l (W/mK)	C (W/m²K)	r (kg/m³)	da 10¹² (kg/msPa)	du 10¹² (kg/msPa)	R (m²K/W)
1	Pannello o lastra in cartongesso tipo Aquapanel, per esterni.	0.0125	0.350	28.00	1150	2.8000	2.8000	0.036
2	Pannello o lastra in cartongesso tipo Aquapanel, per esterni.	0.0125	0.350	28.00	1150	2.8000	2.8000	0.036
3	Strato impermeabile al vapore applicato nella superficie rivolta verso l'interno del fabbricato quale barriera anticondensa (alluminato)	0.0003	0.170	566.67	1200	0.0000	0.0000	0.002
4	Pannello isolante semirigido in lana minerale di roccia	0.1400	0.043	0.31	45	190.0000	190.0000	3.256
5	Manto permeabile al vapore WURTH tipo WUTOP 170 impermeabile all'acqua	0.0005	0.200	400.00	1200	0.0094	0.0001	0.003
6	Pannello o lastra in cartongesso tipo Aquapanel, per esterni.	0.0125	0.350	28.00	1150	2.8000	2.8000	0.036
7	Pannello o lastra in cartongesso tipo Aquapanel, per esterni.	0.0125	0.350	28.00	1150	2.8000	2.8000	0.036
SPESSORE TOTALE [m]		0.1908						



Conduttanza unitaria superficie interna	8	Resistenza unitaria superficie interna	0.123
Conduttanza unitaria superficie esterna	23	Resistenza unitaria superficie esterna	0.043
TRASMITTANZA TOTALE[W/m²K]	0.280	RESISTENZA TERMICA TOTALE[m²K/W]	3.569



VERIFICA IGROMETRICA ESEGUITA A NORMA EN ISO 13788 (UNI10350)

CONDIZIONE	Ti(ºC)	Pi(Pa)	Te(ºC)	Pe(Pa)
INVERNALE: gennaio	20.0	1320	3.0	633
ESTIVA: agosto	23.7	2211	23.7	2211

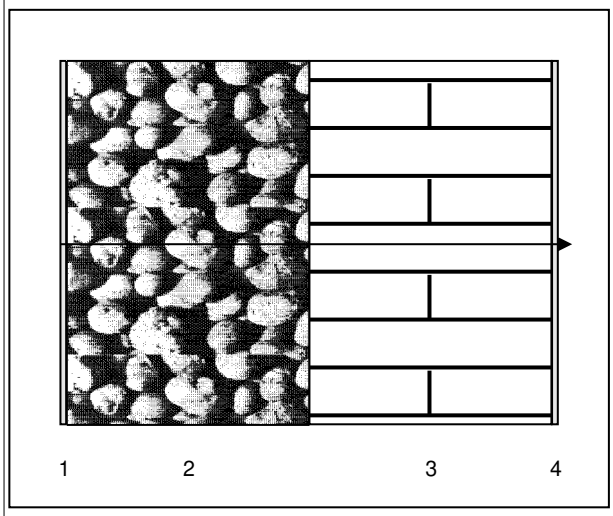
☒	La struttura non è soggetta a fenomeni di condensa interstiziale; la differenza minima di pressione tra quella di saturazione e quella reale è pari a [Pa]	103
☐	La struttura è soggetta a fenomeni di condensa; la quantità stagionale di condensato è pari a [kg/m²] (ammissibile ed evaporabile nella stagione estiva)	
☒	La struttura non è soggetta a fenomeni di condensa superficiale; la differenza minima di pressione tra quella di saturazione e quella reale è pari a [Pa]	1437

CARATTERISTICHE TERMICHE/IGROMETRICHE DEI COMPONENTI OPACHI DELL'INVOLUCRO EDILIZIO

TIPO DI STRUTTURA *Muratura perimetrale esterna esistente castello al piano terra, in pietra e mattoni pieni - cod 102 P.E* *spessore 120 cm.*

Massa [kg/m²]	2736.0	Capacità [kJ/m²K]	2797.6	Type Ashrae	41

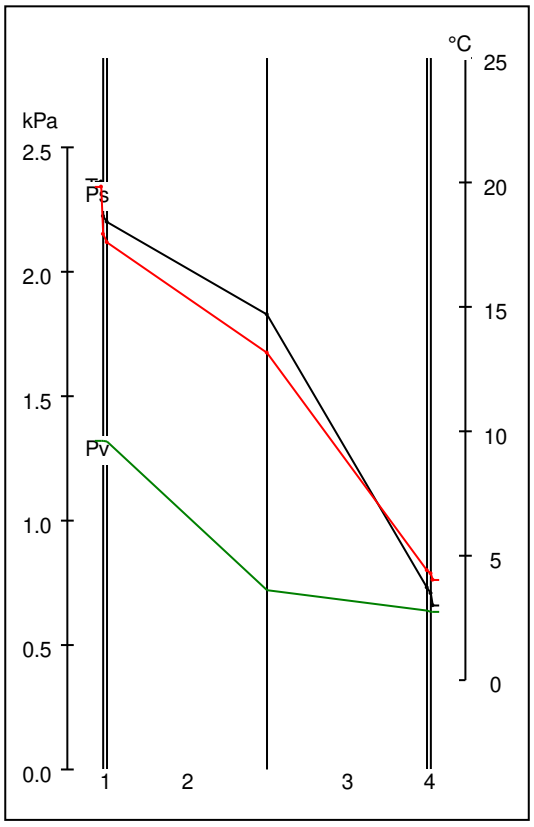
N	Descrizione strato (dall'interno verso l'esterno)	s (m)	l (W/mK)	C (W/m²K)	r (kg/m³)	da 10^{12} (kg/msPa)	du 10^{12} (kg/msPa)	R (m²K/W)
1	Intonaco interno di calce e gesso	0.0150	0.700	46.67	1200	19.0000	19.0000	0.021
2	Rocce naturali (dolomite)	0.6000	1.800	3.00	2700	5.2100	5.2100	0.333
3	Muratura in mattone pieno.	0.6000	0.610	1.02	1800	38.0000	38.0000	0.984
4	Intonaco interno di calce e gesso	0.0150	0.700	46.67	1200	19.0000	19.0000	0.021
SPESSORE TOTALE [m]		1.2300						



Conduttanza unitaria superficie interna	8	Resistenza unitaria superficie interna	0.123

Conduttanza unitaria superficie esterna	23	Resistenza unitaria superficie esterna	0.043

TRASMITTANZA TOTALE[W/m²K]	0.655	RESISTENZA TERMICA TOTALE[m²K/W]	1.526



VERIFICA IGROMETRICA ESEGUITA A NORMA EN ISO 13788 (UNI10350)

CONDIZIONE	Ti(ºC)	Pi(Pa)	Te(ºC)	Pe(Pa)
INVERNALE: gennaio	20.0	1320	3.0	633
ESTIVA: agosto	23.7	2211	23.7	2211

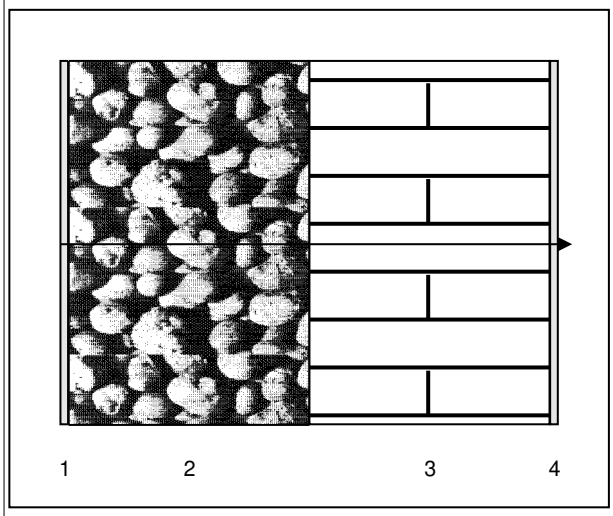
☒	La struttura non è soggetta a fenomeni di condensa interstiziale; la differenza minima di pressione tra quella di saturazione e quella reale è pari a [Pa]	118
☐	La struttura è soggetta a fenomeni di condensa; la quantità stagionale di condensato è pari a [kg/m²] (ammissibile ed evaporabile nella stagione estiva)	
☒	La struttura non è soggetta a fenomeni di condensa superficiale; la differenza minima di pressione tra quella di saturazione e quella reale è pari a [Pa]	1213

CARATTERISTICHE TERMICHE/IGROMETRICHE DEI COMPONENTI OPACHI DELL'INVOLUCRO EDILIZIO

TIPO DI STRUTTURA *Muratura perimetrale esterna esistente castello al piano terra, in pietra e mattoni pieni - cod 103 P.E* *spessore 90 cm.*

Massa [kg/m²]	2061.0	Capacità [kJ/m²K]	2106.4	Type Ashrae	41

N	Descrizione strato (dall'interno verso l'esterno)	s (m)	l (W/mK)	C (W/m²K)	r (kg/m³)	da 10^{12} (kg/msPa)	du 10^{12} (kg/msPa)	R (m²K/W)
1	Intonaco interno di calce e gesso	0.0150	0.700	46.67	1200	19.0000	19.0000	0.021
2	Rocce naturali (dolomite)	0.4500	1.800	4.00	2700	5.2100	5.2100	0.250
3	Muratura in mattone pieno.	0.4500	0.610	1.36	1800	38.0000	38.0000	0.738
4	Intonaco interno di calce e gesso	0.0150	0.700	46.67	1200	19.0000	19.0000	0.021
SPESSORE TOTALE [m]		0.9300						



Conduttanza unitaria superficie interna	8	Resistenza unitaria superficie interna	0.123

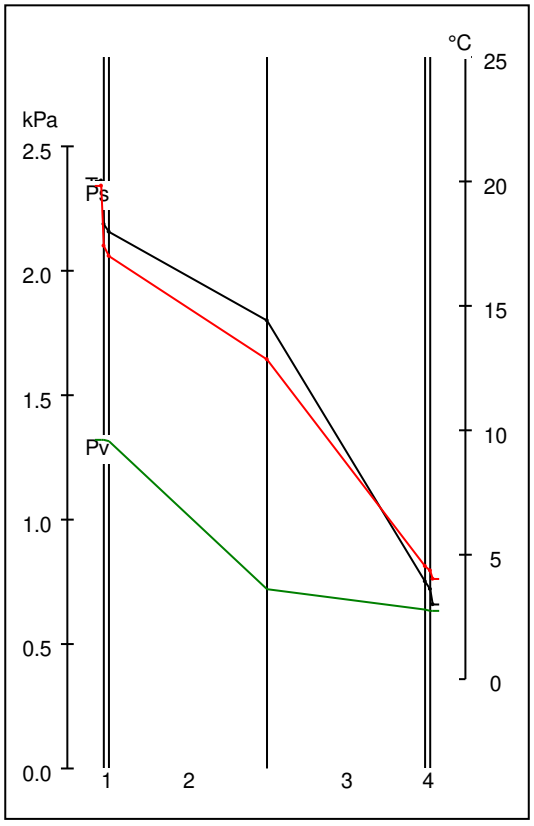
Conduttanza unitaria superficie esterna	23	Resistenza unitaria superficie esterna	0.043

TRASMITTANZA TOTALE[W/m²K]	0.836	RESISTENZA TERMICA TOTALE[m²K/W]	1.197

VERIFICA IGROMETRICA ESEGUITA A NORMA EN ISO 13788 (UNI10350)

CONDIZIONE	Ti(ºC)	Pi(Pa)	Te(ºC)	Pe(Pa)
INVERNALE: gennaio	20.0	1320	3.0	633
ESTIVA: agosto	23.7	2211	23.7	2211

☒	La struttura non è soggetta a fenomeni di condensa interstiziale; la differenza minima di pressione tra quella di saturazione e quella reale è pari a [Pa]	128
☐	La struttura è soggetta a fenomeni di condensa; la quantità stagionale di condensato è pari a [kg/m²] (ammissibile ed evaporabile nella stagione estiva)	
☒	La struttura non è soggetta a fenomeni di condensa superficiale; la differenza minima di pressione tra quella di saturazione e quella reale è pari a [Pa]	1163

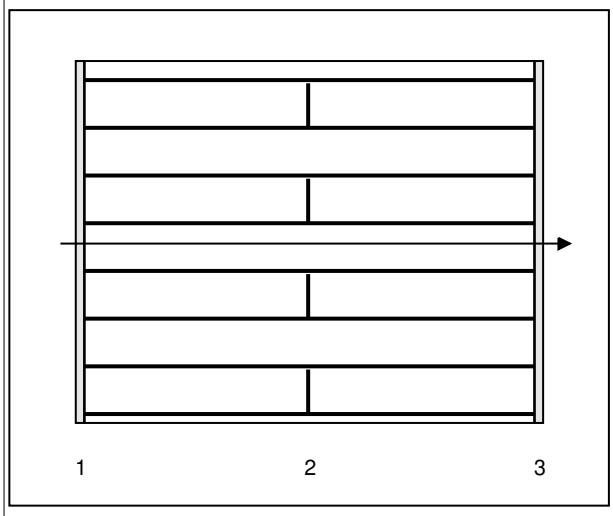


CARATTERISTICHE TERMICHE/IGROMETRICHE DEI COMPONENTI OPACHI DELL'INVOLUCRO EDILIZIO

TIPO DI STRUTTURA *Muratura perimetrale esterna esistente castello in mattoni pieni - spessore 75 cm. cod 104 P.E*

Massa [kg/m²]	1386.0	Capacità [kJ/m²K]	1261.3	Type Ashrae	41

N	Descrizione strato (dall'interno verso l'esterno)	s (m)	l (W/mK)	C (W/m²K)	r (kg/m³)	da 10^{12} (kg/msPa)	du 10^{12} (kg/msPa)	R (m²K/W)
1	Intonaco interno di calce e gesso	0.0150	0.700	46.67	1200	19.0000	19.0000	0.021
2	Muratura in mattone pieno.	0.7500	0.610	0.81	1800	38.0000	38.0000	1.230
3	Intonaco interno di calce e gesso	0.0150	0.700	46.67	1200	19.0000	19.0000	0.021
SPESSORE TOTALE [m]		0.7800						

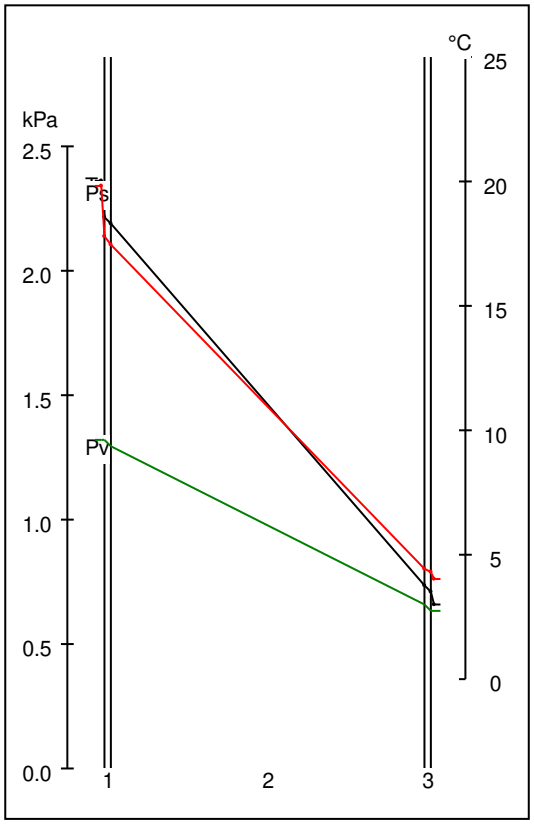


Conduttanza unitaria superficie interna	8	Resistenza unitaria superficie interna	0.123
Conduttanza unitaria superficie esterna	23	Resistenza unitaria superficie esterna	0.043
TRASMITTANZA TOTALE[W/m²K]	0.695	RESISTENZA TERMICA TOTALE[m²K/W]	1.438

VERIFICA IGROMETRICA ESEGUITA A NORMA EN ISO 13788 (UNI10350)

CONDIZIONE	Ti(ºC)	Pi(Pa)	Te(ºC)	Pe(Pa)
INVERNALE: gennaio	20.0	1320	3.0	633
ESTIVA: agosto	23.7	2211	23.7	2211

☒	La struttura non è soggetta a fenomeni di condensa interstiziale; la differenza minima di pressione tra quella di saturazione e quella reale è pari a [Pa]	106
☐	La struttura è soggetta a fenomeni di condensa; la quantità stagionale di condensato è pari a [kg/m²] (ammissibile ed evaporabile nella stagione estiva)	
☒	La struttura non è soggetta a fenomeni di condensa superficiale; la differenza minima di pressione tra quella di saturazione e quella reale è pari a [Pa]	1202

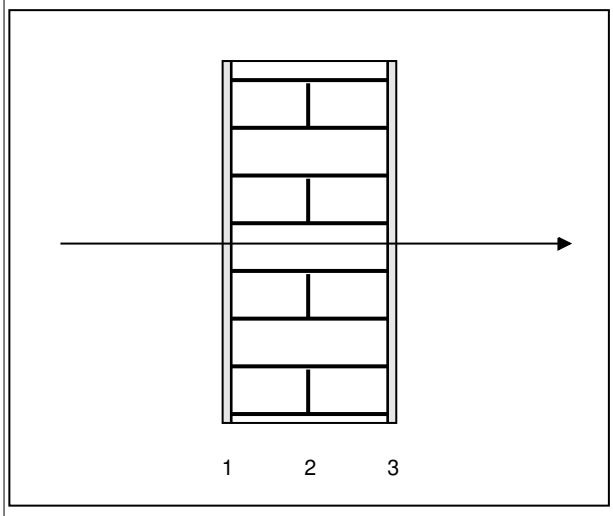


CARATTERISTICHE TERMICHE/IGROMETRICHE DEI COMPONENTI OPACHI DELL'INVOLUCRO EDILIZIO

TIPO DI STRUTTURA *Muratura perimetrale esterna esistente castello in mattoni pieni - spessore 30 cm. cod 105 P.E*

Massa [kg/m²]	504.0	Capacità [kJ/m²K]	458.6	Type Ashrae	24

N	Descrizione strato (dall'interno verso l'esterno)	s (m)	l (W/mK)	C (W/m²K)	r (kg/m³)	da 10^{12} (kg/msPa)	du 10^{12} (kg/msPa)	R (m²K/W)
1	Intonaco interno di calce e gesso	0.0150	0.700	46.67	1200	19.0000	19.0000	0.021
2	Muratura in mattone pieno.	0.2600	0.610	2.35	1800	38.0000	38.0000	0.426
3	Intonaco interno di calce e gesso	0.0150	0.700	46.67	1200	19.0000	19.0000	0.021
SPESSORE TOTALE [m]		0.2900						



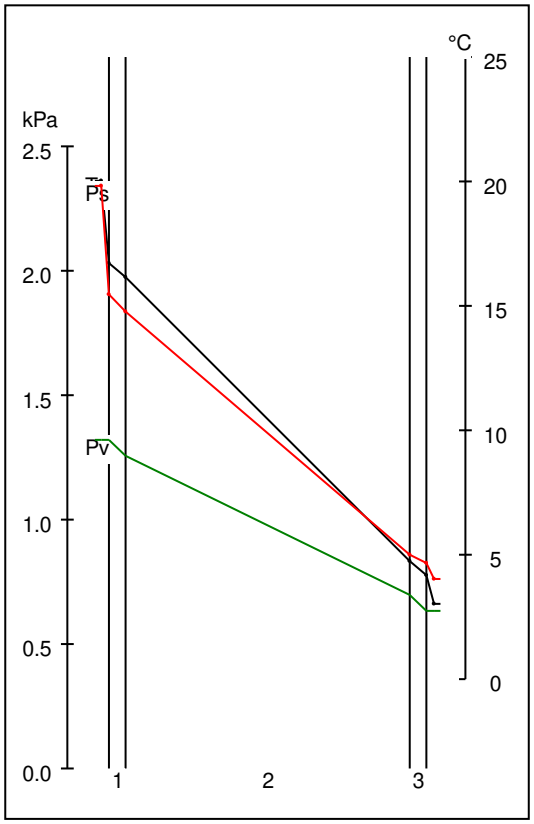
Conduttanza unitaria superficie interna	8	Resistenza unitaria superficie interna	0.123
Conduttanza unitaria superficie esterna	23	Resistenza unitaria superficie esterna	0.043
TRASMITTANZA TOTALE[W/m²K]	1.575	RESISTENZA TERMICA TOTALE[m²K/W]	0.635

VERIFICA IGROMETRICA

ESEGUITA A NORMA EN ISO 13788 (UNI10350)

CONDIZIONE	Ti(ºC)	Pi(Pa)	Te(ºC)	Pe(Pa)
INVERNALE: gennaio	20.0	1320	3.0	633
ESTIVA: agosto	23.7	2211	23.7	2211

☒	La struttura non è soggetta a fenomeni di condensa interstiziale; la differenza minima di pressione tra quella di saturazione e quella reale è pari a [Pa]	131
☐	La struttura è soggetta a fenomeni di condensa; la quantità stagionale di condensato è pari a [kg/m²] (ammissibile ed evaporabile nella stagione estiva)	
☒	La struttura non è soggetta a fenomeni di condensa superficiale; la differenza minima di pressione tra quella di saturazione e quella reale è pari a [Pa]	968

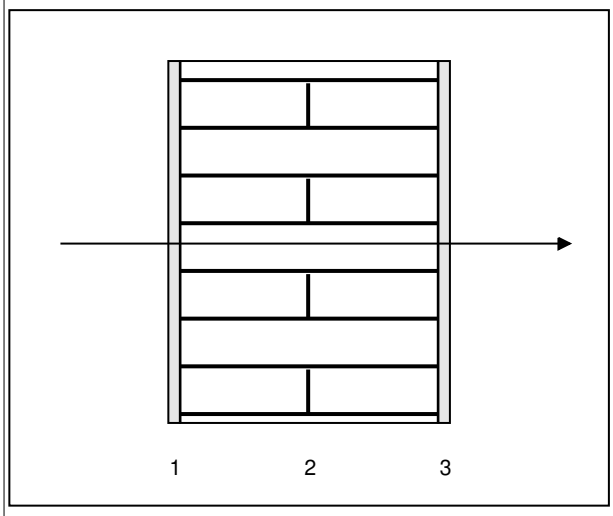


CARATTERISTICHE TERMICHE/IGROMETRICHE DEI COMPONENTI OPACHI DELL'INVOLUCRO EDILIZIO

TIPO DI STRUTTURA *Muratura esterna esistente realizzata in mattone pieno - spessore totale 47 cm. cod 106 P.E*

Massa [kg/m²]	826.0	Capacità [kJ/m²K]	756.7	Type Ashrae	29

N	Descrizione strato (dall'interno verso l'esterno)	s (m)	l (W/mK)	C (W/m²K)	r (kg/m³)	da 10^{12} (kg/msPa)	du 10^{12} (kg/msPa)	R (m²K/W)
1	Intonaco interno di calce e gesso	0.0200	0.700	35.00	1200	19.0000	19.0000	0.029
2	Muratura in mattone pieno.	0.4300	0.800	1.86	1800	38.0000	38.0000	0.537
3	Intonaco esterno in cemento, sabbia e calce	0.0200	0.900	45.00	1400	9.4000	9.4000	0.022
SPESSORE TOTALE [m]		0.4700						

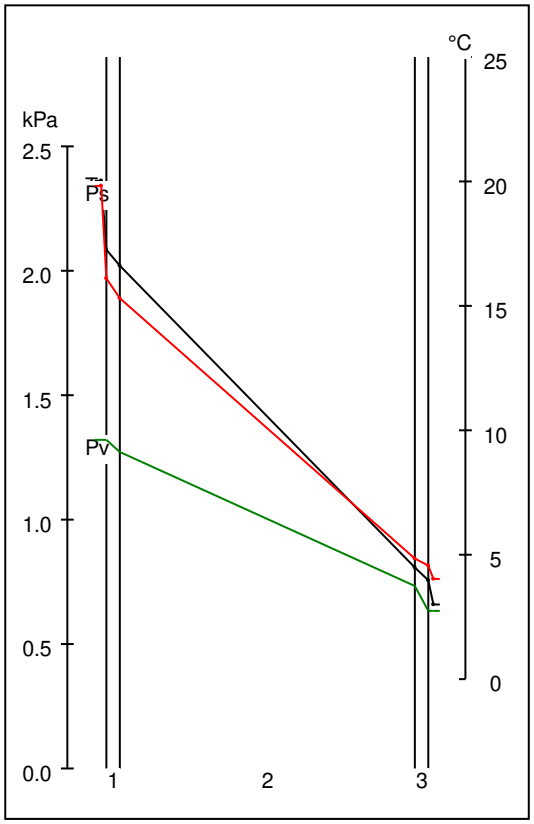


Conduttanza unitaria superficie interna	8	Resistenza unitaria superficie interna	0.123
Conduttanza unitaria superficie esterna	23	Resistenza unitaria superficie esterna	0.043
TRASMITTANZA TOTALE[W/m²K]	1.326	RESISTENZA TERMICA TOTALE[m²K/W]	0.754

VERIFICA IGROMETRICA ESEGUITA A NORMA EN ISO 13788 (UNI10350)

CONDIZIONE	Ti(ºC)	Pi(Pa)	Te(ºC)	Pe(Pa)
INVERNALE: gennaio	20.0	1320	3.0	633
ESTIVA: agosto	23.7	2211	23.7	2211

☒	La struttura non è soggetta a fenomeni di condensa interstiziale; la differenza minima di pressione tra quella di saturazione e quella reale è pari a [Pa]	92
☐	La struttura è soggetta a fenomeni di condensa; la quantità stagionale di condensato è pari a [kg/m²] (ammissibile ed evaporabile nella stagione estiva)	
☒	La struttura non è soggetta a fenomeni di condensa superficiale; la differenza minima di pressione tra quella di saturazione e quella reale è pari a [Pa]	798

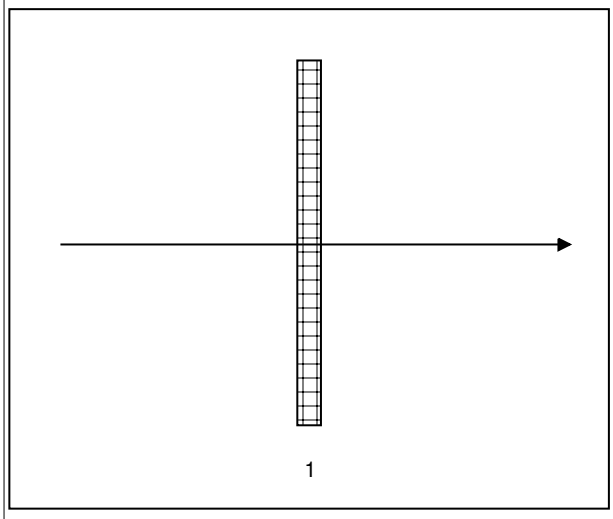


CARATTERISTICHE TERMICHE DEI COMPONENTI TRASPARENTI DELL'INVOLUCRO EDILIZIO

TIPO DI STRUTTURA *Vetrate in vetrocamera a bassa emissività (<0,1) 6-16-6 mm. con telaio in legno. Ug < 1,1 W/mq°C - Ug < 1,6 W/mq°C.*
cod 264 S.E

Massa [kg/m²]	80.0	**Capacità [kJ/m²K]**	96.0

N	**Descrizione strato**	**s**	**l**	**C**	r	**da 10^{12}**	**du 10^{12}**	**R**
	(dall'interno verso l'esterno)	**(m)**	**(W/mK)**	**(W/m²K)**	**(kg/m³)**	**(kg/msPa)**	**(kg/msPa)**	**(m²K/W)**
1	Serramenti in vetrocamera basso emissivi (0,1) sp. 10.2/16/6.1 mm. con telaio metallico a taglio - classe di permeabilità A3.	0.0400		2.208	2000	0.0000	0.0000	0.453
SPESSORE TOTALE [m]		0.0400						



Conduttanza unitaria superficie interna	8	Resistenza unitaria superficie interna	0.123

Conduttanza unitaria superficie esterna	23	Resistenza unitaria superficie esterna	0.043

TRASMITTANZA TOTALE[W/m²K]	1.616	RESISTENZA TERMICA TOTALE[m²K/W]	0.619

Descrizione	**Ag**	**Af**	**Lg**	**Ug**	**Uf**	**γ l**	**Uw**
	(m²)	**(m²)**	**(m)**	**(W/m²K)**	**(W/m²K)**	**(W/mK)**	**(W/m²K)**
Serramento singolo	0.95	0.55	4.20	1.100	1.800	0.060	1.525
Doppio serramento e/o combinato							

CARATTERISTICHE TERMICHE DEI COMPONENTI TRASPARENTI DELL'INVOLUCRO EDILIZIO

TIPO DI STRUTTURA *Superfici vetrate in vetrocamera a bassa emissività (<0,1) riflettenti.*
cod 269 S.E

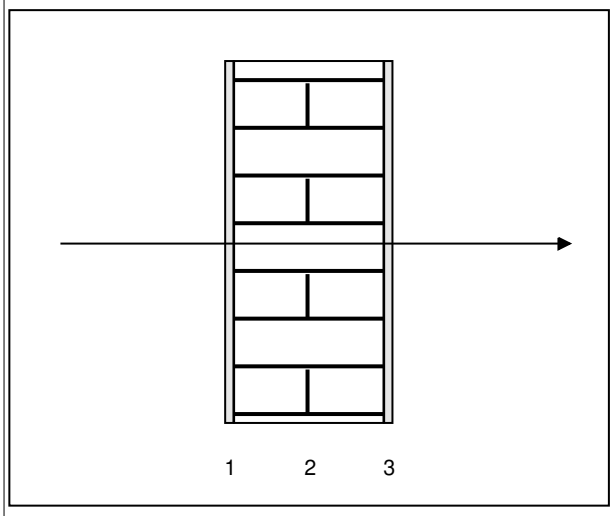
Uw input [W/m²K]	1.150

CARATTERISTICHE TERMICHE/IGROMETRICHE DEI COMPONENTI OPACHI DELL'INVOLUCRO EDILIZIO

TIPO DI STRUTTURA *Muratura interna esistente in mattone pieno - spessore 28 cm. cod 328 P.I*

Massa [kg/m²]	486.0	Capacità [kJ/m²K]	442.3	Type Ashrae	12

N	Descrizione strato (dall'interno verso l'esterno)	s (m)	l (W/mK)	C (W/m²K)	r (kg/m³)	da 10¹² (kg/msPa)	du 10¹² (kg/msPa)	R (m²K/W)
1	Intonaco interno di calce e gesso	0.0150	0.700	46.67	1200	19.0000	19.0000	0.021
2	Muratura in mattone pieno spessore 25 cm.	0.2500		3.125	1800	38.0000	38.0000	0.320
3	Intonaco interno di calce e gesso	0.0150	0.700	46.67	1200	19.0000	19.0000	0.021
SPESSORE TOTALE [m]		0.2800						



Conduttanza unitaria superficie interna	8	Resistenza unitaria superficie interna	0.123

Conduttanza unitaria superficie esterna	8	Resistenza unitaria superficie esterna	0.123

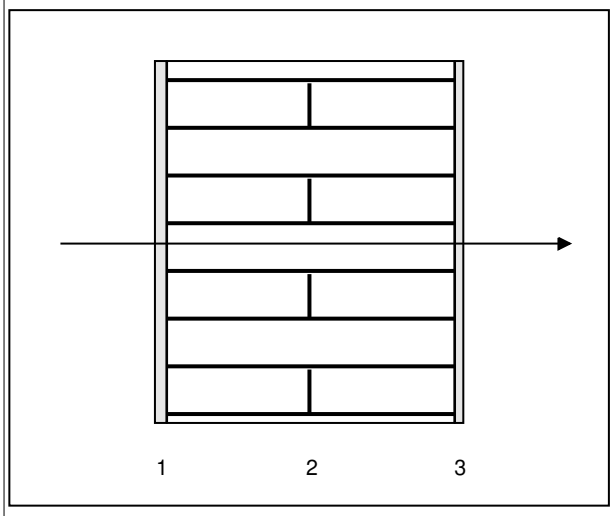
TRASMITTANZA TOTALE[W/m²K]	1.642	RESISTENZA TERMICA TOTALE[m²K/W]	0.609

CARATTERISTICHE TERMICHE/IGROMETRICHE DEI COMPONENTI OPACHI DELL'INVOLUCRO EDILIZIO

TIPO DI STRUTTURA *Muratura divisoria interna esistente in mattone pieno.*
cod 334 P.I

Massa [kg/m²]	906.0	Capacità [kJ/m²K]	824.5	Type Ashrae	29

N	Descrizione strato (dall'interno verso l'esterno)	s (m)	l (W/mK)	C (W/m²K)	r (kg/m³)	da 10¹² (kg/msPa)	du 10¹² (kg/msPa)	R (m²K/W)
1	Intonaco interno di calce e gesso	0.0200	0.700	35.00	1200	19.0000	19.0000	0.029
2	Muratura in mattone pieno.	0.4800	0.800	1.67	1800	38.0000	38.0000	0.600
3	Intonaco interno di calce e gesso	0.0150	0.700	46.67	1200	19.0000	19.0000	0.021
SPESSORE TOTALE [m]		0.5150						



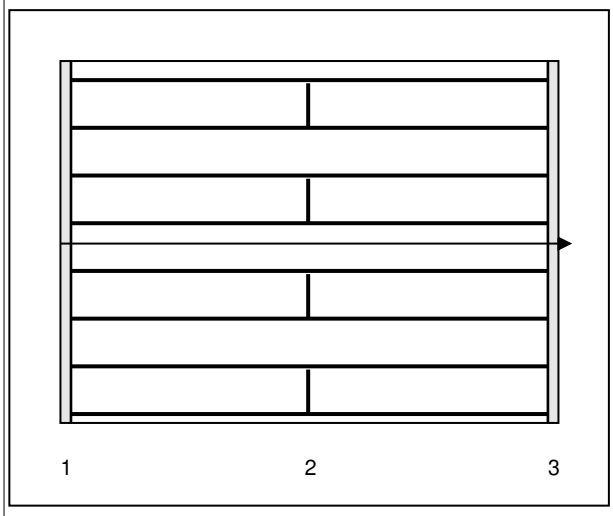
Conduttanza unitaria superficie interna	8	Resistenza unitaria superficie interna	0.123
Conduttanza unitaria superficie esterna	8	Resistenza unitaria superficie esterna	0.123
TRASMITTANZA TOTALE[W/m²K]	1.116	RESISTENZA TERMICA TOTALE[m²K/W]	0.896

CARATTERISTICHE TERMICHE/IGROMETRICHE DEI COMPONENTI OPACHI DELL'INVOLUCRO EDILIZIO

TIPO DI STRUTTURA *Muratura divisoria interna in mattoni pieni spessore 90 cm. cod 341 P.I*

Massa [kg/m²]	1668.0	**Capacità [kJ/m²K]**	1517.9	**Type Ashrae**	41

N	**Descrizione strato**	**s**	**l**	**C**	r	**da 10^{12}**	**du 10^{12}**	**R**
	(dall'interno verso l'esterno)	**(m)**	**(W/mK)**	**(W/m²K)**	**(kg/m³)**	**(kg/msPa)**	**(kg/msPa)**	**(m²K/W)**
1	Intonaco interno di calce e gesso	0.0200	0.700	35.00	1200	19.0000	19.0000	0.029
2	Muratura in mattone pieno.	0.9000	0.610	0.68	1800	38.0000	38.0000	1.475
3	Intonaco interno di calce e gesso	0.0200	0.700	35.00	1200	19.0000	19.0000	0.029
SPESSORE TOTALE [m]		0.9400						



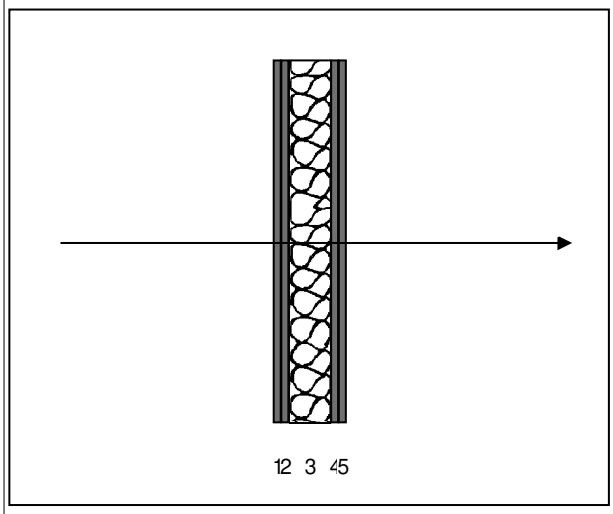
Conduttanza unitaria superficie interna	8	Resistenza unitaria superficie interna	0.123
Conduttanza unitaria superficie esterna	8	Resistenza unitaria superficie esterna	0.123
TRASMITTANZA TOTALE[W/m²K]	0.562	RESISTENZA TERMICA TOTALE[m²K/W]	1.779

CARATTERISTICHE TERMICHE/IGROMETRICHE DEI COMPONENTI OPACHI DELL'INVOLUCRO EDILIZIO

TIPO DI STRUTTURA *Muratura divisoria interna REI edificio ex lavanderia. cod 342 P.I*

Massa [kg/m²]	60.6	Capacità [kJ/m²K]	54.6	Type Ashrae	1

N	Descrizione strato (dall'interno verso l'esterno)	s (m)	l (W/mK)	C (W/m²K)	r (kg/m³)	da 10¹² (kg/msPa)	du 10¹² (kg/msPa)	R (m²K/W)
1	Pannello o lastra in cartongesso tipo Aquapanel, per esterni.	0.0125	0.350	28.00	1150	2.8000	2.8000	0.036
2	Pannello o lastra in cartongesso tipo Aquapanel, per esterni.	0.0125	0.350	28.00	1150	2.8000	2.8000	0.036
3	Pannello isolante semirigido in lana minerale di roccia	0.0700	0.043	0.61	45	190.0000	190.0000	1.628
4	Pannello o lastra in cartongesso tipo Aquapanel, per esterni.	0.0125	0.350	28.00	1150	2.8000	2.8000	0.036
5	Pannello o lastra in cartongesso tipo Aquapanel, per esterni.	0.0125	0.350	28.00	1150	2.8000	2.8000	0.036
SPESSORE TOTALE [m]		0.1200						



Conduttanza unitaria superficie interna	8	Resistenza unitaria superficie interna	0.123

Conduttanza unitaria superficie esterna	8	Resistenza unitaria superficie esterna	0.123

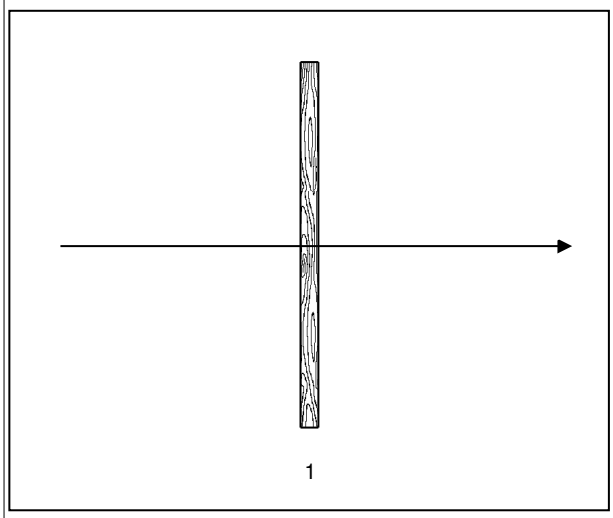
TRASMITTANZA TOTALE[W/m²K]	0.496	RESISTENZA TERMICA TOTALE[m²K/W]	2.017

CARATTERISTICHE TERMICHE/IGROMETRICHE DEI COMPONENTI OPACHI DELL'INVOLUCRO EDILIZIO

TIPO DI STRUTTURA *Porta interna in legno*
cod 400 S.I

Massa [kg/m²]	16.5	Capacità [kJ/m²K]	13.9	Type Ashrae	1

N	Descrizione strato (dall'interno verso l'esterno)	s (m)	l (W/mK)	C (W/m²K)	r (kg/m³)	da 10¹² (kg/msPa)	du 10¹² (kg/msPa)	R (m²K/W)
1	Legno di abete	0.0300	0.150	5.00	550	3.1300	3.1300	0.200
SPESSORE TOTALE [m]		0.0300						



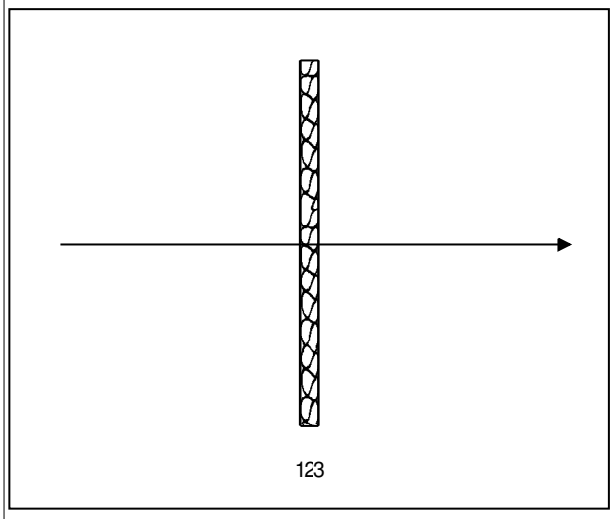
Conduttanza unitaria superficie interna	8	Resistenza unitaria superficie interna	0.123
Conduttanza unitaria superficie esterna	8	Resistenza unitaria superficie esterna	0.123
TRASMITTANZA TOTALE[W/m²K]	2.242	RESISTENZA TERMICA TOTALE[m²K/W]	0.446

CARATTERISTICHE TERMICHE/IGROMETRICHE DEI COMPONENTI OPACHI DELL'INVOLUCRO EDILIZIO

TIPO DI STRUTTURA *Porta metallica con caratteristiche REI predefinite.*
cod 403 S.I

Massa [kg/m²]	17.3	Capacità [kJ/m²K]	9.2	Type Ashrae	1

N	Descrizione strato (dall'interno verso l'esterno)	s (m)	l (W/mK)	C (W/m²K)	r (kg/m³)	da 10¹² (kg/msPa)	du 10¹² (kg/msPa)	R (m²K/W)
1	Lamiera di ferro	0.0010	54.000	54000.00	8000	0.0001	0.0001	0.000
2	Pannello isolante semirigido in lana minerale di roccia	0.0300	0.043	1.43	45	190.0000	190.0000	0.698
3	Lamiera di ferro	0.0010	54.000	54000.00	8000	0.0001	0.0001	0.000
SPESSORE TOTALE [m]		0.0320						



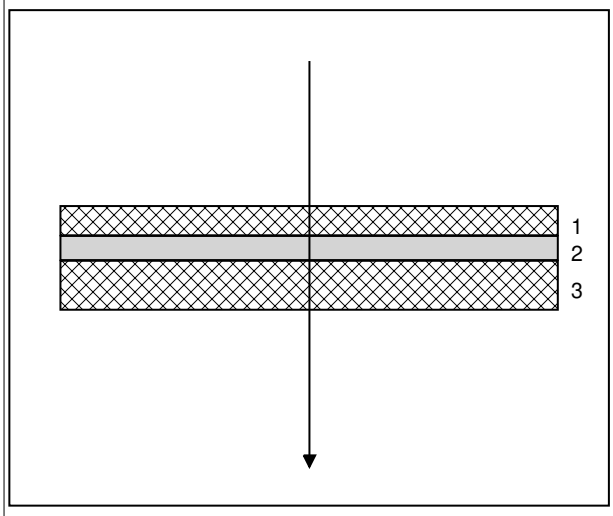
Conduttanza unitaria superficie interna	8	Resistenza unitaria superficie interna	0.123
Conduttanza unitaria superficie esterna	8	Resistenza unitaria superficie esterna	0.123
TRASMITTANZA TOTALE[W/m²K]	1.060	RESISTENZA TERMICA TOTALE[m²K/W]	0.944

CARATTERISTICHE TERMICHE/IGROMETRICHE DEI COMPONENTI OPACHI DELL'INVOLUCRO EDILIZIO

TIPO DI STRUTTURA *Pavimento su terreno esistente piano terra.*
cod 500 PAV

Massa [kg/m²]	442.0	Capacità [kJ/m²K]	398.3	Type Ashrae	13

N	Descrizione strato (dall'interno verso l'esterno)	s (m)	l (W/mK)	C (W/m²K)	r (kg/m³)	da 10¹² (kg/msPa)	du 10¹² (kg/msPa)	R (m²K/W)
1	Pavimento in calcestruzzo tirato al quarzo	0.0600	1.490	24.83	2200	2.6800	2.6800	0.040
2	Calcestruzzo magro di sottofondo per posa pavimenti	0.0500	1.500	30.00	1800	6.0000	6.0000	0.033
3	Calcestruzzo armato - 2.200 kg/mc.	0.1000	1.490	14.90	2200	2.6800	2.6800	0.067
SPESSORE TOTALE [m]		0.2100						



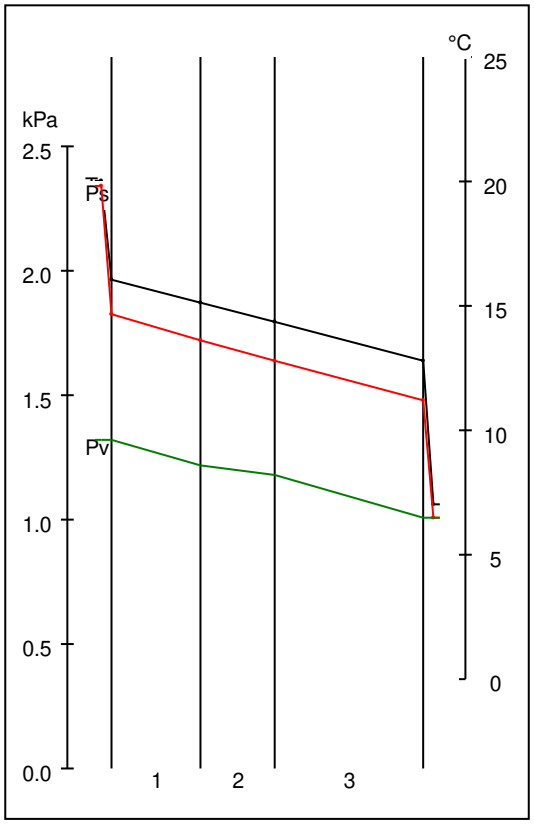
Conduttanza unitaria superficie interna	6	Resistenza unitaria superficie interna	0.172
Conduttanza unitaria superficie esterna	4	Resistenza unitaria superficie esterna	0.250
TRASMITTANZA TOTALE[W/m²K]	1.777	RESISTENZA TERMICA TOTALE[m²K/W]	0.563

VERIFICA IGROMETRICA

ESEGUITA A NORMA EN ISO 13788 (UNI10350)

CONDIZIONE	Ti(ºC)	Pi(Pa)	Te(ºC)	Pe(Pa)
INVERNALE: gennaio	20.0	1320	7.1	1006
ESTIVA: agosto	18.0	2211	18.0	1032

☒	La struttura non è soggetta a fenomeni di condensa interstiziale; la differenza minima di pressione tra quella di saturazione e quella reale è pari a [Pa]	240
☐	La struttura è soggetta a fenomeni di condensa; la quantità stagionale di condensato è pari a [kg/m²] (ammissibile ed evaporabile nella stagione estiva)	
☒	La struttura non è soggetta a fenomeni di condensa superficiale; la differenza minima di pressione tra quella di saturazione e quella reale è pari a [Pa]	654

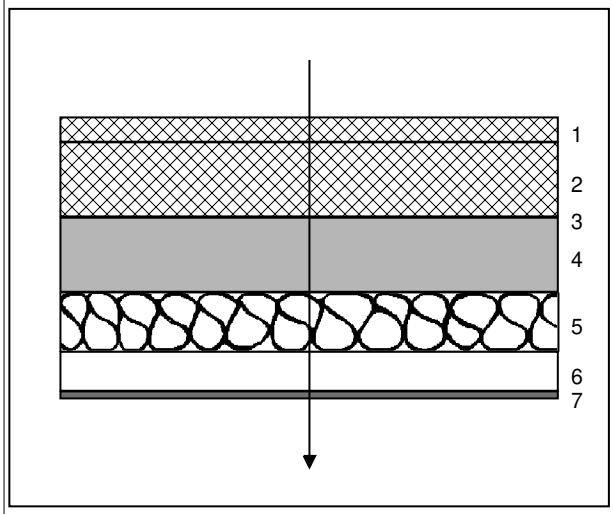


CARATTERISTICHE TERMICHE/IGROMETRICHE DEI COMPONENTI OPACHI DELL'INVOLUCRO EDILIZIO

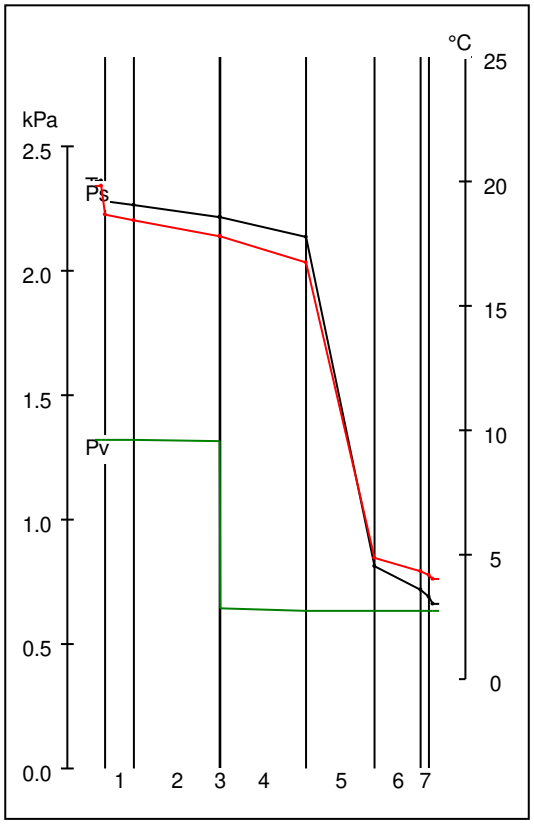
TIPO DI STRUTTURA *Pavimento esistente interpiano verso esterno / locali N.R.*
cod 501 PAV

Massa [kg/m²]	520.4	Capacità [kJ/m²K]	466.8	Type Ashrae	27

N	Descrizione strato (dall'interno verso l'esterno)	s (m)	l (W/mK)	C (W/m²K)	r (kg/m³)	da 10^{12} (kg/msPa)	du 10^{12} (kg/msPa)	R (m²K/W)
1	Pavimento in calcestruzzo tirato al quarzo	0.0500	1.490	29.80	2200	2.6800	2.6800	0.034
2	Calcestruzzo armato - 2.200 kg/mc.	0.1500	1.490	9.93	2200	2.6800	2.6800	0.101
3	Lamiera di ferro	0.0010	54.000	54000.00	8000	0.0001	0.0001	0.000
4	Intercapedine d'aria - flusso di calore discendente - spessore maggiore di 10 cm. (pavimenti)	0.1500		5.882	1.00	1.0000	1.0000	0.170
5	Pannello isolante semirigido in lana minerale di roccia	0.1200	0.043	0.36	45	190.0000	190.0000	2.791
6	Muratura in laterizio forato spessore 8 cm.	0.0800		5.000	700	38.0000	38.0000	0.200
7	Pannello o lastra in cartongesso	0.0150	0.250	16.67	720	23.4000	23.4000	0.060
SPESSORE TOTALE [m]		0.5660						



Conduttanza unitaria superficie interna	6	Resistenza unitaria superficie interna	0.172
Conduttanza unitaria superficie esterna	16	Resistenza unitaria superficie esterna	0.061
TRASMITTANZA TOTALE[W/m²K]	0.279	RESISTENZA TERMICA TOTALE[m²K/W]	3.588



VERIFICA IGROMETRICA ESEGUITA A NORMA EN ISO 13788 (UNI10350)

CONDIZIONE	Ti(ºC)	Pi(Pa)	Te(ºC)	Pe(Pa)
INVERNALE: gennaio	20.0	1320	3.0	633
ESTIVA: agosto	23.7	2211	23.7	2211

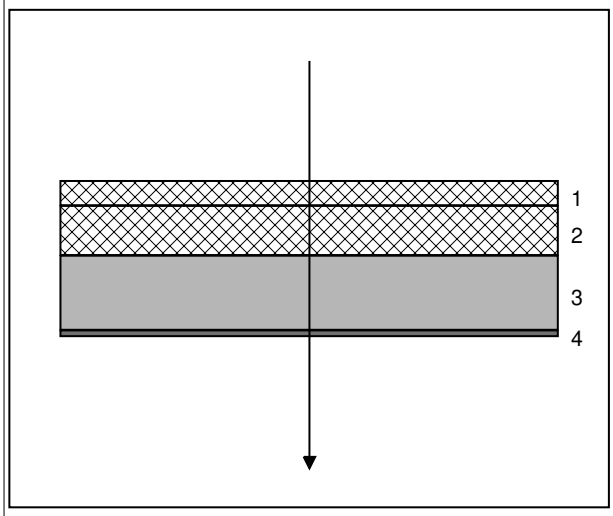
☒	La struttura non è soggetta a fenomeni di condensa interstiziale; la differenza minima di pressione tra quella di saturazione e quella reale è pari a [Pa]	113
☐	La struttura è soggetta a fenomeni di condensa; la quantità stagionale di condensato è pari a [kg/m²] (ammissibile ed evaporabile nella stagione estiva)	
☒	La struttura non è soggetta a fenomeni di condensa superficiale; la differenza minima di pressione tra quella di saturazione e quella reale è pari a [Pa]	1054

CARATTERISTICHE TERMICHE/IGROMETRICHE DEI COMPONENTI OPACHI DELL'INVOLUCRO EDILIZIO

TIPO DI STRUTTURA *Pavimento esistente interpiano.*
cod 502 PAV

Massa [kg/m²]	339.1	Capacità [kJ/m²K]	305.3	Type Ashrae	16

N	Descrizione strato (dall'interno verso l'esterno)	s (m)	l (W/mK)	C (W/m²K)	r (kg/m³)	da 10¹² (kg/msPa)	du 10¹² (kg/msPa)	R (m²K/W)
1	Pavimento in calcestruzzo tirato al quarzo	0.0500	1.490	29.80	2200	2.6800	2.6800	0.034
2	Calcestruzzo armato - 2.200 kg/mc.	0.1000	1.490	14.90	2200	2.6800	2.6800	0.067
3	Intercapedine d'aria - flusso di calore discendente - spessore maggiore di 10 cm. (pavimenti)	0.1500		5.882	1.00	1.0000	1.0000	0.170
4	Pannello o lastra in cartongesso	0.0125	0.250	20.00	720	23.4000	23.4000	0.050
SPESSORE TOTALE [m]		0.3125						



Conduttanza unitaria superficie interna	6	Resistenza unitaria superficie interna	0.172

Conduttanza unitaria superficie esterna	6	Resistenza unitaria superficie esterna	0.172

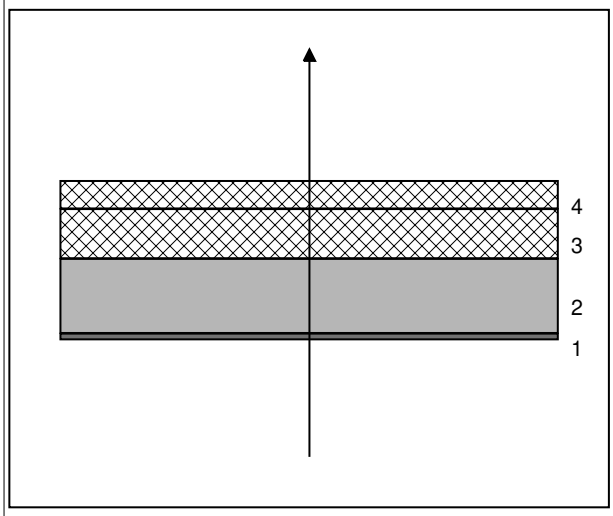
TRASMITTANZA TOTALE[W/m²K]	1.505	RESISTENZA TERMICA TOTALE[m²K/W]	0.665

CARATTERISTICHE TERMICHE/IGROMETRICHE DEI COMPONENTI OPACHI DELL'INVOLUCRO EDILIZIO

TIPO DI STRUTTURA *Solaio esistente interpiano.*
cod 600 SOF

Massa [kg/m²]	339.1	Capacità [kJ/m²K]	305.3	Type Ashrae	8

N	Descrizione strato (dall'interno verso l'esterno)	s (m)	l (W/mK)	C (W/m²K)	r (kg/m³)	da 10¹² (kg/msPa)	du 10¹² (kg/msPa)	R (m²K/W)
1	Pannello o lastra in cartongesso	0.0125	0.250	20.00	720	23.4000	23.4000	0.050
2	Intercapedine d'aria orizzontale - flusso di calore ascendente	0.1500		5.263	1.00	1.0000	1.0000	0.190
3	Calcestruzzo armato - 2.200 kg/mc.	0.1000	1.490	14.90	2200	2.6800	2.6800	0.067
4	Pavimento in calcestruzzo tirato al quarzo	0.0500	1.490	29.80	2200	2.6800	2.6800	0.034
SPESSORE TOTALE [m]		0.3125						



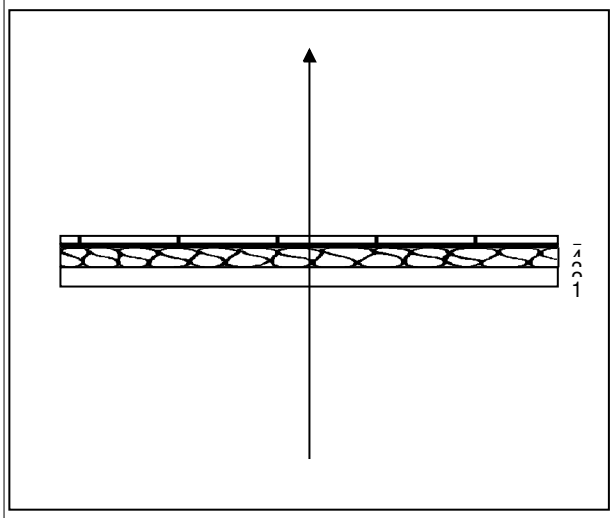
Conduttanza unitaria superficie interna	9	Resistenza unitaria superficie interna	0.107
Conduttanza unitaria superficie esterna	9	Resistenza unitaria superficie esterna	0.107
TRASMITTANZA TOTALE[W/m²K]	1.803	RESISTENZA TERMICA TOTALE[m²K/W]	0.555

CARATTERISTICHE TERMICHE/IGROMETRICHE DEI COMPONENTI OPACHI DELL'INVOLUCRO EDILIZIO

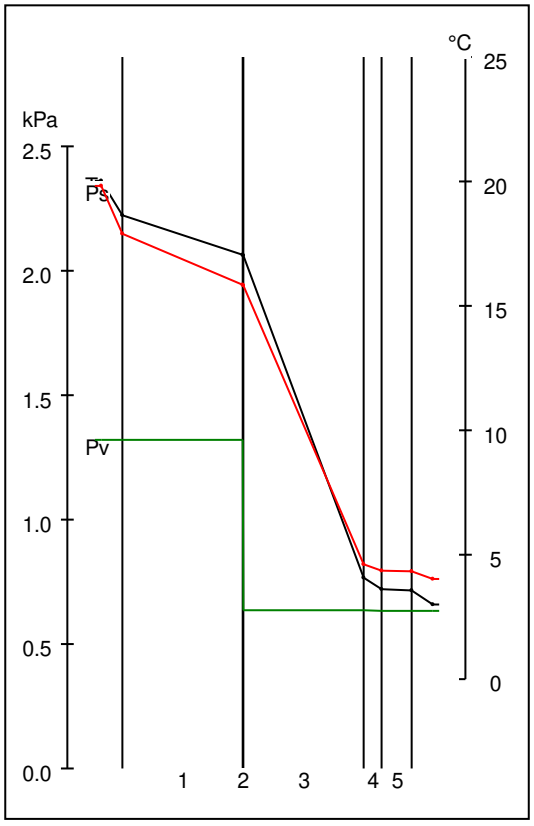
TIPO DI STRUTTURA *Tetto a falda esistente con struttura portante in legno.*
cod 602 SOF

Massa [kg/m²]	54.1	Capacità [kJ/m²K]	51.4	Type Ashrae	1

N	Descrizione strato (dall'interno verso l'esterno)	s (m)	l (W/mK)	C (W/m²K)	r (kg/m³)	da 10¹² (kg/msPa)	du 10¹² (kg/msPa)	R (m²K/W)
1	Tavella in cotto da 4 cm.	0.0400		8.197	700	38.0000	38.0000	0.122
2	Strato impermeabile al vapore applicato nella superficie rivolta verso l'interno del fabbricato quale barriera anticondensa (alluminato)	0.0003	0.170	566.67	1200	0.0000	0.0000	0.002
3	Polistirene espanso standard a cellule chiuse, densità 25 kg/mc.	0.0400	0.040	1.00	25	1.6300	1.6300	1.000
4	Guaina impermeabilizzante bituminosa	0.0060	0.170	28.33	1200	0.0001	0.0001	0.035
5	Tegole in cotto per coperture	0.0100	2.100	210.00	1750	6.5000	6.5000	0.005
SPESSORE TOTALE [m]		0.0963						



Conduttanza unitaria superficie interna	9	Resistenza unitaria superficie interna	0.107
Conduttanza unitaria superficie esterna	23	Resistenza unitaria superficie esterna	0.043
TRASMITTANZA TOTALE[W/m²K]	0.761	RESISTENZA TERMICA TOTALE[m²K/W]	1.314



VERIFICA IGROMETRICA ESEGUITA A NORMA EN ISO 13788 (UNI10350)

CONDIZIONE	Ti(ºC)	Pi(Pa)	Te(ºC)	Pe(Pa)
INVERNALE: gennaio	20.0	1320	3.0	633
ESTIVA: agosto	23.7	2211	23.7	2211

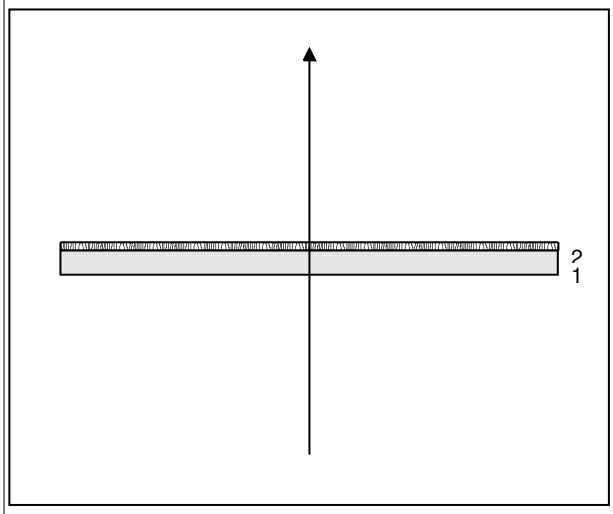
☒	La struttura non è soggetta a fenomeni di condensa interstiziale; la differenza minima di pressione tra quella di saturazione e quella reale è pari a [Pa]	116
☐	La struttura è soggetta a fenomeni di condensa; la quantità stagionale di condensato è pari a [kg/m²] (ammissibile ed evaporabile nella stagione estiva)	
☒	La struttura non è soggetta a fenomeni di condensa superficiale; la differenza minima di pressione tra quella di saturazione e quella reale è pari a [Pa]	977

CARATTERISTICHE TERMICHE/IGROMETRICHE DEI COMPONENTI OPACHI DELL'INVOLUCRO EDILIZIO

TIPO DI STRUTTURA *Soffitto stanza "24" e altre su sottotetto*
cod 603 SOF

Massa [kg/m²]	64.5	Capacità [kJ/m²K]	58.4	Type Ashrae	1

N	Descrizione strato (dall'interno verso l'esterno)	s (m)	l (W/mK)	C (W/m²K)	r (kg/m³)	da 10¹² (kg/msPa)	du 10¹² (kg/msPa)	R (m²K/W)
1	Intonaco interno di calce e gesso	0.0500	0.700	14.00	1200	19.0000	19.0000	0.071
2	Legno di abete	0.0100	0.120	12.00	450	0.3000	0.9000	0.083
SPESSORE TOTALE [m]		0.0600						



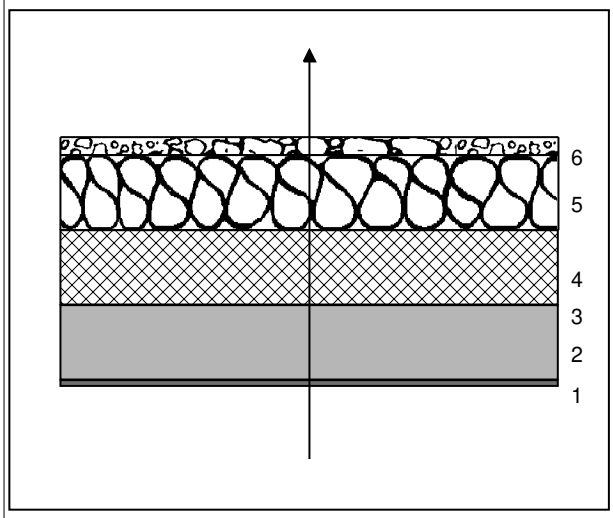
Conduttanza unitaria superficie interna	9	Resistenza unitaria superficie interna	0.107
Conduttanza unitaria superficie esterna	9	Resistenza unitaria superficie esterna	0.107
TRASMITTANZA TOTALE[W/m²K]	2.712	RESISTENZA TERMICA TOTALE[m²K/W]	0.369

CARATTERISTICHE TERMICHE/IGROMETRICHE DEI COMPONENTI OPACHI DELL'INVOLUCRO EDILIZIO

TIPO DI STRUTTURA *Nuova copertura esterna tipo per ex edificio lavanderia cod 605 SOF*

Massa [kg/m²]	400.5	Capacità [kJ/m²K]	358.5	Type Ashrae	18

N	Descrizione strato (dall'interno verso l'esterno)	s (m)	l (W/mK)	C (W/m²K)	r (kg/m³)	da 10^{12} (kg/msPa)	du 10^{12} (kg/msPa)	R (m²K/W)
1	Pannello o lastra in cartongesso	0.0130	0.250	19.23	720	23.4000	23.4000	0.052
2	Intercapedine d'aria orizzontale - flusso di calore ascendente	0.1500		5.263	1.00	1.0000	1.0000	0.190
3	Lamiera di ferro grecata	0.0005	54.000	108000.00	8000	0.0001	0.0001	0.000
4	Calcestruzzo armato - 2.200 kg/mc.	0.1500	1.490	9.93	2200	2.6800	2.6800	0.101
5	Pannello isolante tipo ECODARK 70 in polistirene espanso adittivato con grafite.	0.1500	0.030	0.20	20	3.7500	3.7500	5.000
6	Ghiaia sfusa lavata	0.0300	1.330	44.33	1800	9E0010	9E0010	0.023
SPESSORE TOTALE [m]		0.4935						

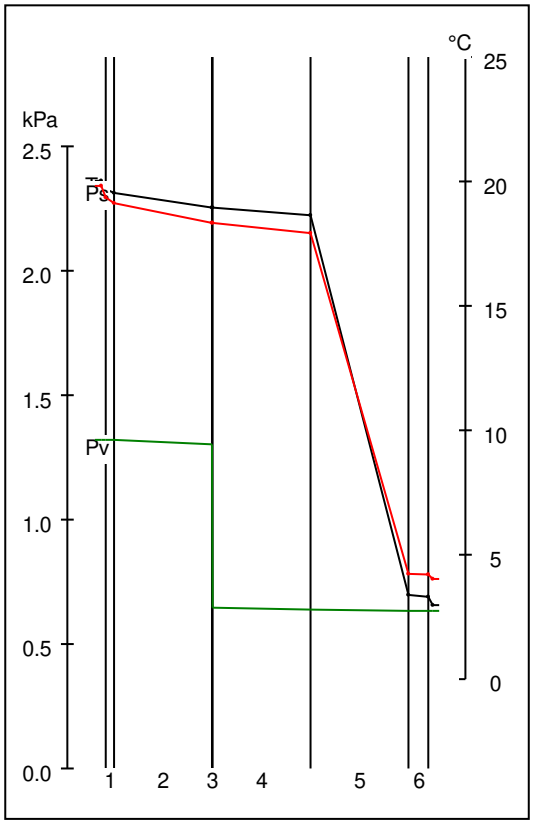


Conduttanza unitaria superficie interna	9	Resistenza unitaria superficie interna	0.107
Conduttanza unitaria superficie esterna	9	Resistenza unitaria superficie esterna	0.107
TRASMITTANZA TOTALE[W/m²K]	0.179	RESISTENZA TERMICA TOTALE[m²K/W]	5.579

VERIFICA IGROMETRICA ESEGUITA A NORMA EN ISO 13788 (UNI10350)

CONDIZIONE	Ti(ºC)	Pi(Pa)	Te(ºC)	Pe(Pa)
INVERNALE: gennaio	20.0	1320	3.0	633
ESTIVA: agosto	23.7	2211	23.7	2211

☒	La struttura non è soggetta a fenomeni di condensa interstiziale; la differenza minima di pressione tra quella di saturazione e quella reale è pari a [Pa]	104
☐	La struttura è soggetta a fenomeni di condensa; la quantità stagionale di condensato è pari a [kg/m²] (ammissibile ed evaporabile nella stagione estiva)	
☒	La struttura non è soggetta a fenomeni di condensa superficiale; la differenza minima di pressione tra quella di saturazione e quella reale è pari a [Pa]	1123



RELAZIONE DI CALCOLO
FABBISOGNI ENERGETICI ESTIVI

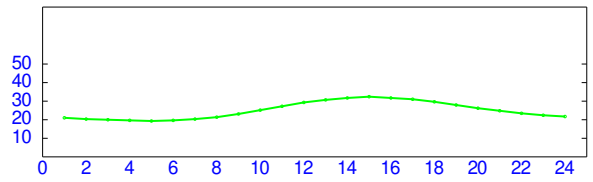
Progetto:

COMUNE DI PADOVA - CASTELLO DEI CARRARESI - ALA SUD - VALUTAZIONI POTENZE ASSORBITE INVERNALI ED ESTIVE rev. 19-05-2018

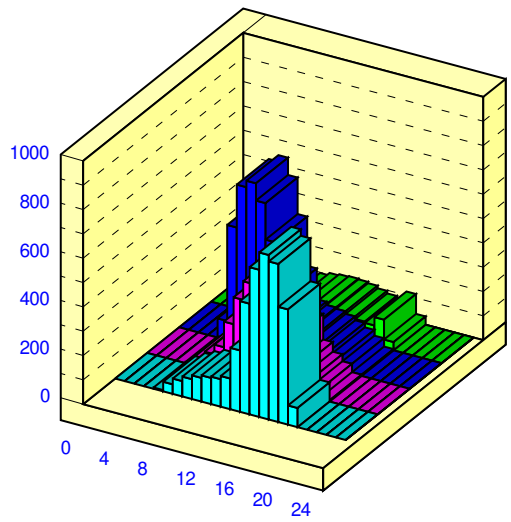
CONDIZIONI ESTERNE DI PROGETTO

Temperatura massima esterna bulbo secco	=	32.5
Escursione massima giornaliera	=	13.0
Umidità relativa esterna	=	50.0
Umidità assoluta esterna	=	15.4
Coefficiente di limpidezza atmosferico	=	1.00

TEMPERATURA ESTERNA

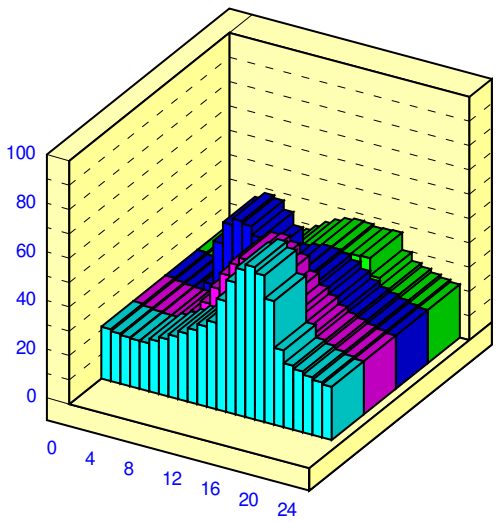


SOLAR HEAT GAIN (W/m²)



N E S W

TEMPERATURA SOLE-ARIA



PROFILO ORARIO DELLE CONDIZIONI ESTERNE DEL GIORNO 21 Luglio (ora solare)

Ora	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	temperatura esterna													
	20.4	21.6	23.3	25.2	27.4	29.5	31.1	32.1	32.5	32.1	31.2	29.8	28.1	26.4
	temperatura sole-aria in [°C]													
N	25.8	25.8	27.9	30.4	32.9	35.1	36.5	37.3	37.1	36.3	36.6	36.8	29.8	26.4
E	49.4	52.1	51.1	47.4	42.0	35.5	36.5	37.3	37.1	36.0	34.2	31.6	28.3	26.4
S	23.7	28.6	35.9	42.4	47.6	50.7	51.3	49.3	45.1	39.1	34.5	31.6	28.3	26.4
W	23.4	25.5	27.9	30.4	32.9	35.5	45.7	54.3	60.3	62.6	60.2	50.9	31.6	26.4
	apporto solare SGHF in [W/m²]													
N	83	87	97	108	114	116	114	108	97	87	83	117	35	0
E	650	678	605	456	252	126	114	108	97	82	63	39	6	0
S	68	109	212	323	399	426	399	323	212	109	68	39	6	0
W	63	82	97	108	114	126	252	456	605	678	650	475	79	0

Progetto:

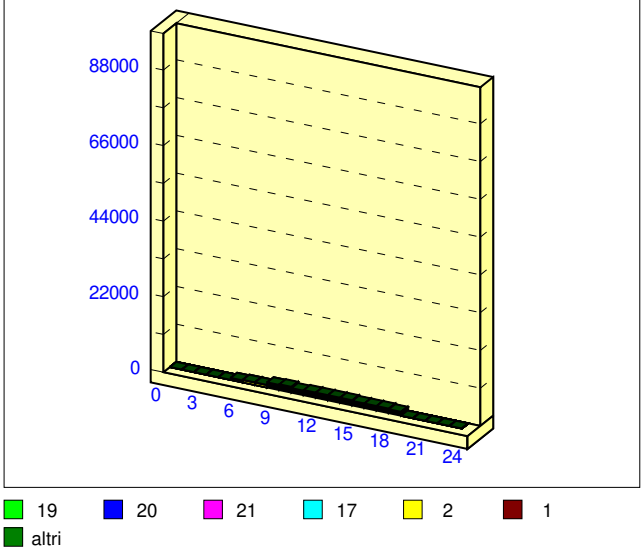
COMUNE DI PADOVA - CASTELLO DEI CARRARESI - ALA SUD - VALUTAZIONI POTENZE ASSORBITE INVERNALI ED ESTIVE rev. 19-05-2018

DESCRIZIONE DI OGNI AMBIENTE

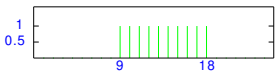
AMBIENTE :	010101	**Locale 010101**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	42.38	1.00	4.25	180.1

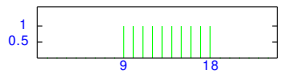
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 102	1	E	0.66		7.30	4.25	26.63	0.60
02	S.E 264	2	E	1.62		1.10	2.00	4.40	0.21
03	PTE 718	1	E	0.33		4.25	1.00	0.00	
04	PTE 735	1	E	0.23		4.25	1.00	0.00	
05	PTE 719	2	E	0.10		6.20	1.00	0.00	
06	PTE 731	1	E	0.19		7.30	1.00	0.00	
07	PTE 733	1	E	0.33		7.30	1.00	0.00	
08	P.E 100	1	S	0.34		5.60	4.25	23.80	0.60
09	PTE 718	1	S	0.33		4.25	1.00	0.00	
10	PTE 735	1	S	0.23		4.25	1.00	0.00	
11	PTE 731	1	S	0.19		5.60	1.00	0.00	
12	PTE 735	1	S	0.23		5.60	1.00	0.00	
13	PAV 500	1	T1	1.78		1.00	42.38	42.38	
14	SOF 600	1	TF	1.80		1.00	42.38	42.38	
15	P.I 328	1	TF	1.64		5.60	4.25	22.12	
16	S.I 400	1	TF	2.24		0.80	2.10	1.68	

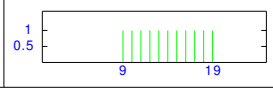
APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
17	0.50	90	25.0	
	Qop =	3.936	l/s pers.	

nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
18	0.10	18	5.0	

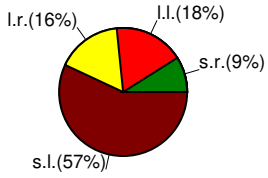
nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
19	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(6) 15	70 58	70	445 369	

..... continua

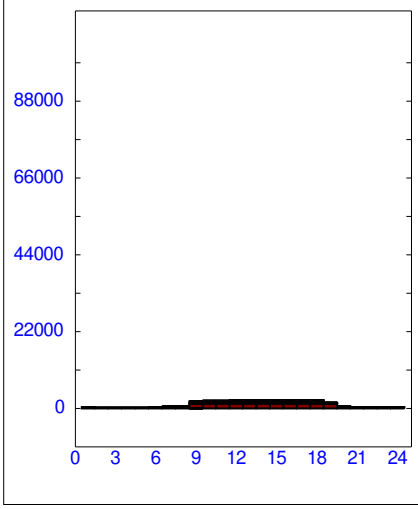
TOTALI: [W]

Carico Massimo teorico 2552 **Ora 15**

Latente		Sensibile	
rinnovo	415	rinnovo	231
locale	452	locale	1455
Totale	**867**	**Totale**	**1686**



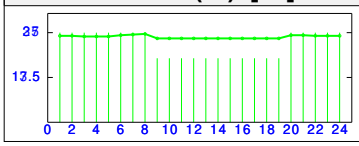
CARICO TOTALE ORARIO



SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa	=	1659 W
Differenziale termostato	=	1.0 °C
ERmax	=	1963 W
ERmin	=	0 W

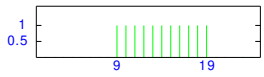
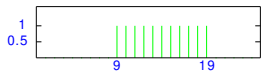
TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	25.9	26.2	26.4	26.6	25.3	25.3	25.3	25.3	25.3	25.3	25.3	25.3	25.3	25.3	25.2

Progetto:

COMUNE DI PADOVA - CASTELLO DEI CARRARESI - ALA SUD - VALUTAZIONI POTENZE ASSORBITE INVERNALI ED ESTIVE rev. 19-05-2018

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
20	Carico interno specifico per apporti illuminotecnici e varie	(13) 30	35 0	90	445 0	
21	Personal Computer (Fundamentals 1989)	(1) 2	300 0	50	254 0	

Progetto:

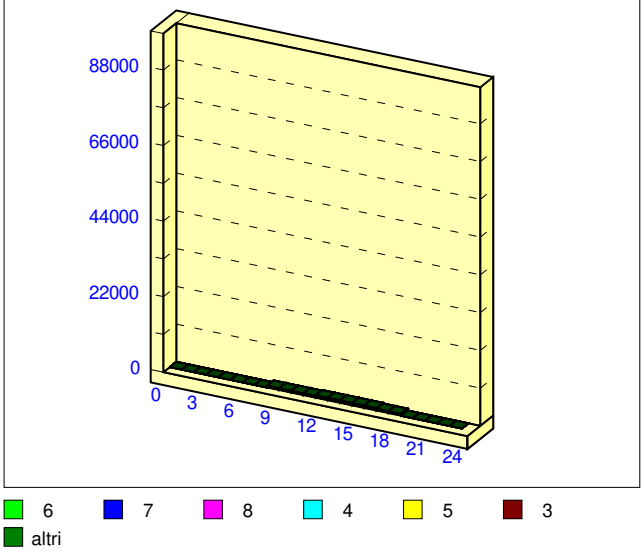
COMUNE DI PADOVA - CASTELLO DEI CARRARESI - ALA SUD - VALUTAZIONI POTENZE ASSORBITE INVERNALI ED ESTIVE rev. 19-05-2018

DESCRIZIONE DI OGNI AMBIENTE

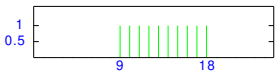
AMBIENTE :	010102	**Locale 010102**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	21.53	1.00	4.25	91.5

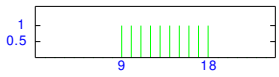
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	PAV 500	1	T1	1.78		1.00	21.53	21.53	
02	SOF 600	1	TF	1.80		1.00	21.53	21.53	
03	P.I 328	1	TF	1.64		4.20	4.25	17.85	

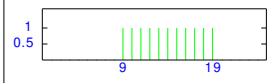
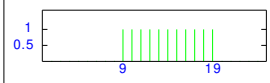
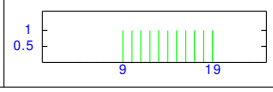
APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
04	0.50	46	12.7	
	Qop =	3.935	l/s pers.	

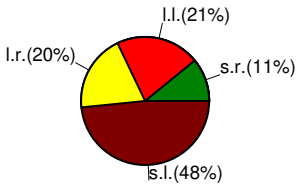
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
05	0.10	9	2.5	

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
06	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(3) 15	70 58	70	226 187	
07	Carico interno specifico per apporti illuminotecnici e varie	(6) 30	35 0	90	226 0	
08	Personal Computer (Fundamentals 1989)	(0) 2	300 0	50	129 0	

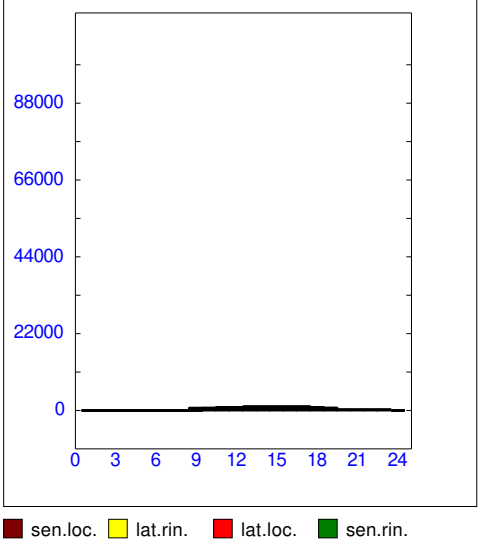
TOTALI: [W]

Carico Massimo teorico 1079 **Ora 15**

Latente		Sensibile	
rinnovo	211	rinnovo	117
locale	229	locale	521
Totale	**440**	**Totale**	**638**



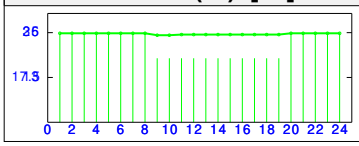
CARICO TOTALE ORARIO



SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa	=	600 W
Differenziale termostato	=	1.0 °C
ERmax	=	603 W
ERmin	=	0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	25.8	25.8	25.8	25.8	25.3	25.3	25.4	25.4	25.5	25.5	25.5	25.5	25.5	25.5	25.4

Progetto:

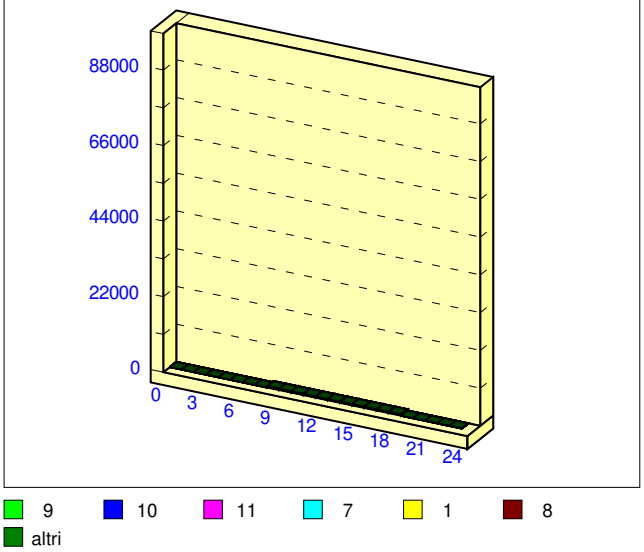
COMUNE DI PADOVA - CASTELLO DEI CARRARESI - ALA SUD - VALUTAZIONI POTENZE ASSORBITE INVERNALI ED ESTIVE rev. 19-05-2018

DESCRIZIONE DI OGNI AMBIENTE

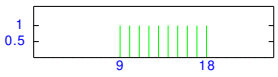
AMBIENTE :	010103	**Locale 010103**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	11.62	1.00	4.25	49.4

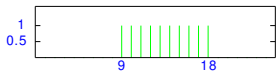
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 100	1	S	0.34		3.20	4.25	13.60	0.60
02	PTE 735	2	S	0.23		4.25	1.00	0.00	
03	PTE 731	1	S	0.19		3.20	1.00	0.00	
04	PTE 735	1	S	0.23		3.20	1.00	0.00	
05	PAV 500	1	T1	1.78		1.00	11.62	11.62	
06	SOF 600	1	TF	1.80		1.00	11.62	11.62	

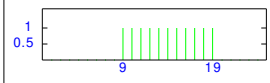
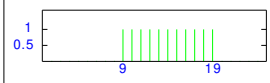
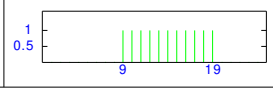
APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
07	0.50	25	6.9	
	Qop =	3.936	l/s pers.	

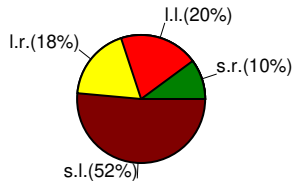
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
08	0.10	5	1.4	

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
09	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(2) 15	70 58	70	122 101	
10	Carico interno specifico per apporti illuminotecnici e varie	(3) 30	35 0	90	122 0	
11	Personal Computer (Fundamentals 1989)	(0) 2	300 0	50	70 0	

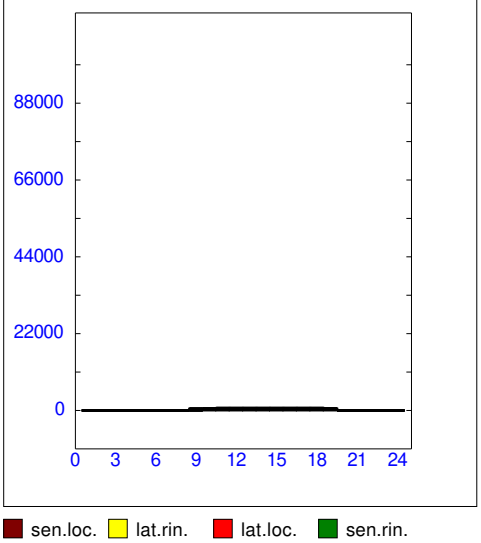
TOTALI: [W]

Carico Massimo teorico 621 **Ora 15**

Latente		Sensibile	
rinnovo	114	rinnovo	63
locale	124	locale	320
Totale	**238**	**Totale**	**383**



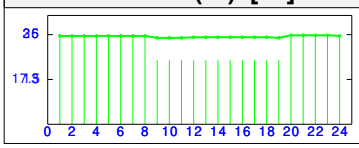
CARICO TOTALE ORARIO



SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa = 374 W
Differenziale termostato = 1.0 °C
ERmax = 489 W
ERmin = 0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	25.6	25.6	25.6	25.7	25.1	25.1	25.2	25.2	25.2	25.3	25.3	25.3	25.2	25.2	25.1

Progetto:

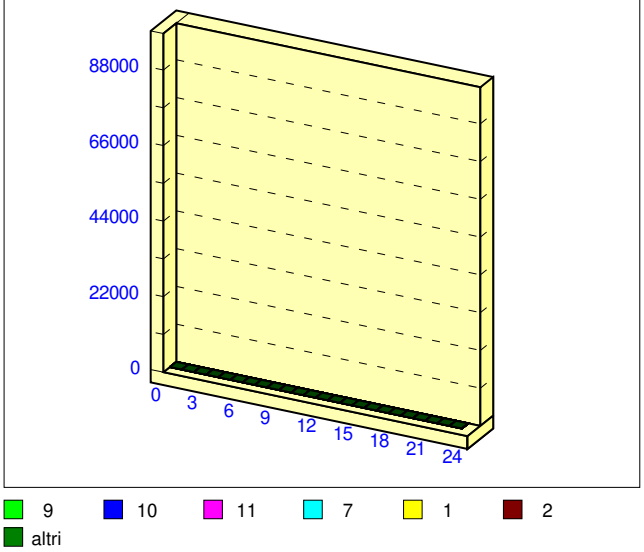
COMUNE DI PADOVA - CASTELLO DEI CARRARESI - ALA SUD - VALUTAZIONI POTENZE ASSORBITE INVERNALI ED ESTIVE rev. 19-05-2018

DESCRIZIONE DI OGNI AMBIENTE

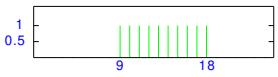
AMBIENTE :	010104	**Locale 010104**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	6.19	1.00	4.25	26.3

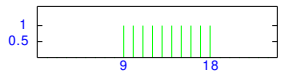
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 100	1	S	0.34		1.75	4.25	7.44	0.60
02	PTE 735	2	S	0.23		4.25	1.00	0.00	
03	PTE 731	1	S	0.19		1.75	1.00	0.00	
04	PTE 735	1	S	0.23		1.75	1.00	0.00	
05	PAV 500	1	T1	1.78		1.00	6.19	6.19	
06	SOF 600	1	TF	1.80		1.00	6.19	6.19	

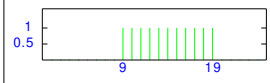
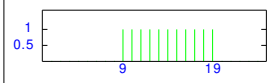
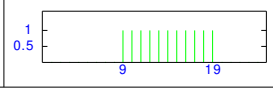
APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
07	0.50	13	3.7	
	Qop =	3.935	l/s pers.	

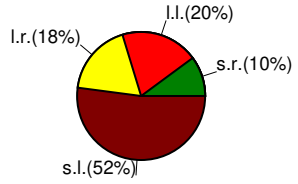
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
08	0.10	3	0.7	

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
09	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(1) 15	70 58	70	65 54	
10	Carico interno specifico per apporti illuminotecnici e varie	(2) 30	35 0	90	65 0	
11	Personal Computer (Fundamentals 1989)	(0) 2	300 0	50	37 0	

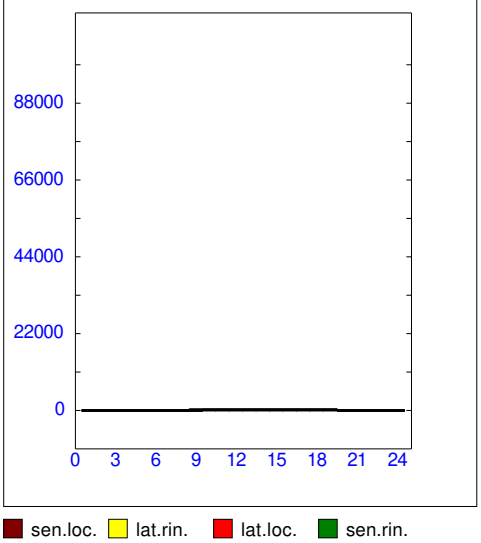
TOTALI: [W]

Carico Massimo teorico 335 **Ora 15**

Latente		Sensibile	
rinnovo	61	rinnovo	34
locale	66	locale	174
Totale	**127**	**Totale**	**208**



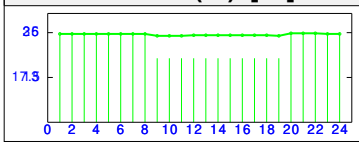
CARICO TOTALE ORARIO



SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa = 202 W
Differenziale termostato = 1.0 °C
ERmax = 263 W
ERmin = 0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	25.6	25.6	25.6	25.6	25.1	25.1	25.2	25.2	25.2	25.3	25.3	25.3	25.2	25.2	25.1

COMUNE DI PADOVA - CASTELLO DEI CARRARESI - ALA SUD - VALUTAZIONI POTENZE ASSORBITE INVERNALI ED ESTIVE rev. 19-05-2018

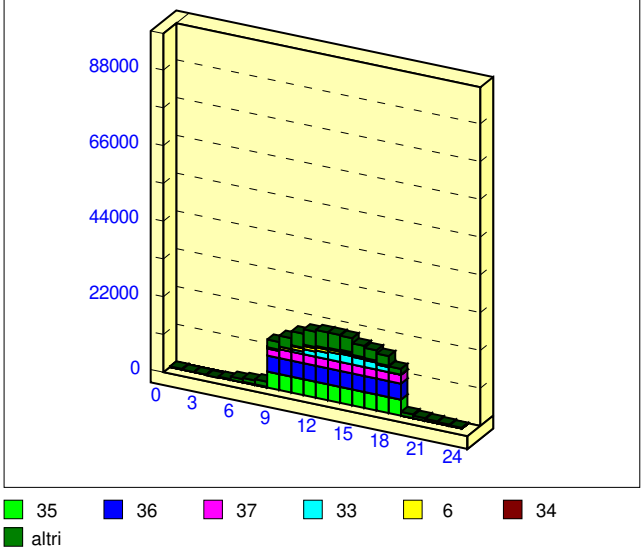
DESCRIZIONE DI OGNI AMBIENTE

AMBIENTE :	010105	**Locale 010105**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	444.88	1.00	4.25	1890.7

nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 103	1	S	0.84		23.04	4.25	97.92	0.60
02	P.E 103	1	S	0.84		4.76	4.25	20.23	0.60
03	P.E 100	1	S	0.34		39.70	4.25	142.59	0.60
04	S.E 264	5	S	1.62		1.10	1.60	8.80	0.21
05	S.E 264	1	S	1.62		2.30	3.40	7.82	0.21
06	S.E 264	1	S	1.62		2.80	3.40	9.52	0.21
07	PTE 738	5	S	0.35		5.40	1.00	0.00	
08	PTE 738	1	S	0.35		11.40	1.00	0.00	
09	PTE 738	1	S	0.35		12.40	1.00	0.00	
10	PTE 735	4	S	0.23		4.25	1.00	0.00	
11	PTE 731	1	S	0.19		39.70	1.00	0.00	
12	PTE 735	1	S	0.23		39.70	1.00	0.00	
13	PTE 731	1	S	0.19		35.56	1.00	0.00	
14	PTE 735	1	S	0.23		35.56	1.00	0.00	
15	P.E 103	1	N	0.84		42.30	4.25	147.79	0.60
16	S.E 264	4	N	1.62		1.10	2.00	8.80	0.21
17	S.E 264	2	N	1.62		1.60	3.10	9.92	0.21
18	S.E 264	1	N	1.62		2.80	3.40	9.52	0.21
19	S.E 264	1	N	1.62		1.10	3.40	3.74	0.21
20	PTE 735	4	N	0.23		4.25	1.00	0.00	
21	PTE 738	4	N	0.35		6.20	1.00	0.00	
22	PTE 738	2	N	0.35		9.40	1.00	0.00	

..... continua

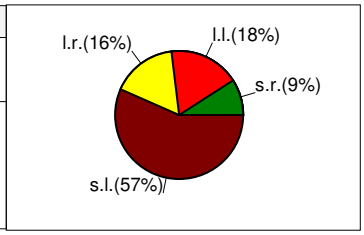
APPORTO SENSIBILE ORARIO



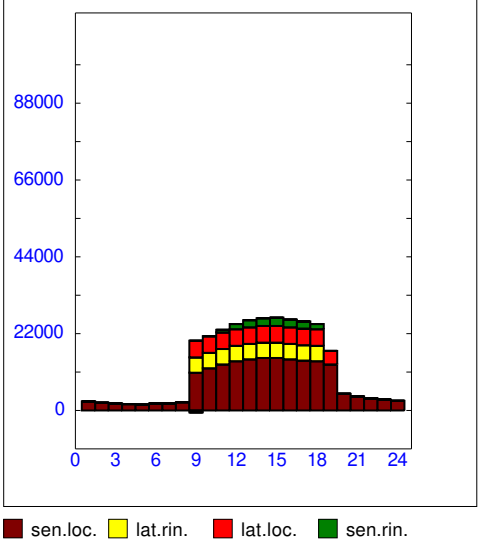
TOTALI: [W]

Carico Massimo teorico 26556 **Ora 15**

Latente		Sensibile	
rinnovo	4358	rinnovo	2423
locale	4742	locale	15033
Totale	**9100**	**Totale**	**17456**



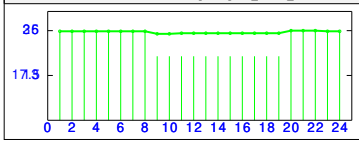
CARICO TOTALE ORARIO



SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa	=	16600 W
Differenziale termostato	=	1.0 °C
ERmax	=	19933 W
ERmin	=	0 W

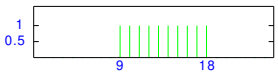
TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]

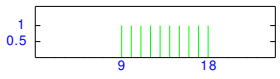


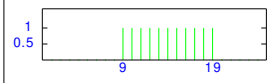
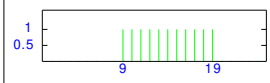
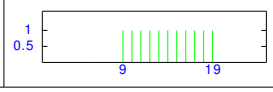
Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	25.8	25.8	25.8	25.9	25.1	25.2	25.2	25.3	25.3	25.3	25.3	25.3	25.3	25.3	25.2

nr	Co-str	q	es	U	dt	lungh	al/la	A	alfa/
				W/mK	K	m	m	m²	Ft·g·Fc
23	PTE 738	1	N	0.35		12.40	1.00	0.00	
24	PTE 738	1	N	0.35		9.00	1.00	0.00	
25	PTE 732	1	N	0.71		42.30	1.00	0.00	
26	PTE 733	1	N	0.33		42.30	1.00	0.00	
27	PAV 500	1	T1	1.78		1.00	444.88	444.88	
28	SOF 600	1	TF	1.80		1.00	444.88	444.88	
29	P.I 328	1	TF	1.64		10.80	4.25	42.54	
30	S.I 403	1	TF	1.06		1.40	2.40	3.36	
31	P.I 328	1	TF	1.64		12.80	4.25	49.36	
32	S.I 400	2	TF	2.24		1.20	2.10	5.04	

RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
33	0.50	945	262.6	
	Qop =	3.936	l/s pers.	

nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
34	0.10	189	52.5	

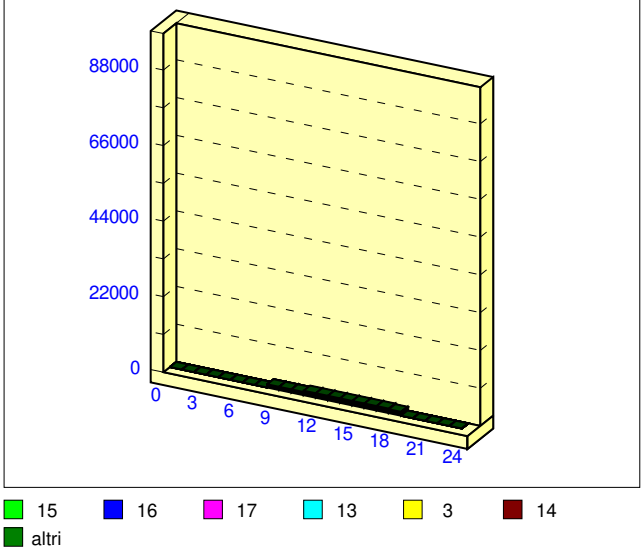
nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
35	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(67) 15	70 58	70	4671 3870	
36	Carico interno specifico per apporti illuminotecnici e varie	(133) 30	35 0	90	4671 0	
37	Personal Computer (Fundamentals 1989)	(9) 2	300 0	50	2669 0	

DESCRIZIONE DI OGNI AMBIENTE

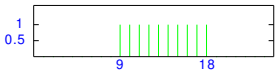
AMBIENTE :	010106	**Locale 010106**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	40.89	1.00	4.25	173.8

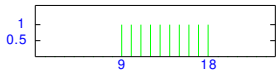
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 103	1	N	0.84		2.50	4.25	10.63	0.60
02	P.E 106	1	N	1.33		3.70	4.25	13.53	0.60
03	S.E 264	1	N	1.62		1.10	2.00	2.20	0.21
04	PTE 735	4	N	0.23		4.25	1.00	0.00	
05	PTE 738	1	N	0.35		6.20	1.00	0.00	
06	PTE 732	1	N	0.71		6.20	1.00	0.00	
07	PTE 733	1	N	0.33		6.20	1.00	0.00	
08	PAV 500	1	T1	1.78		1.00	40.89	40.89	
09	SOF 600	1	TF	1.80		1.00	40.89	40.89	
10	P.I 328	2	TF	1.64		7.60	4.25	57.88	
11	S.I 403	2	TF	1.06		1.40	2.40	6.72	
12	P.I 328	1	TF	1.64		5.30	4.25	22.52	

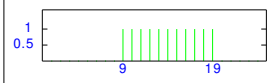
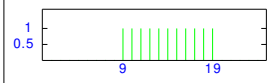
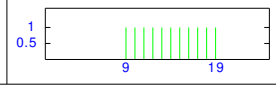
APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
13	0.50	87	24.1	
	Qop =	3.936	l/s pers.	

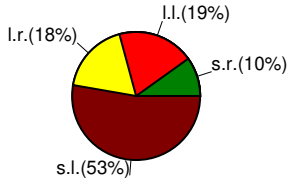
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
14	0.10	17	4.8	

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
15	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(6) 15	70 58	70	429 356	
16	Carico interno specifico per apporti illuminotecnici e varie	(12) 30	35 0	90	429 0	
17	Personal Computer (Fundamentals 1989)	(1) 2	300 0	50	245 0	

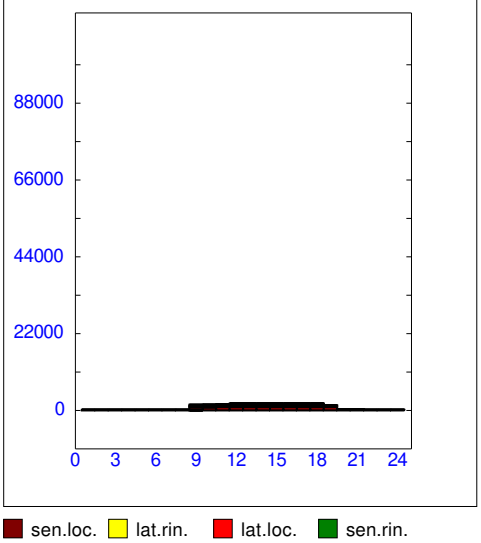
TOTALI: [W]

Carico Massimo teorico 2244 **Ora 15**

Latente		Sensibile	
rinnovo	401	rinnovo	223
locale	436	locale	1185
Totale	**837**	**Totale**	**1408**



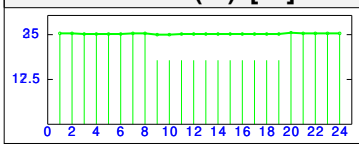
CARICO TOTALE ORARIO



SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa = 998 W
Differenziale termostato = 1.0 °C
ERmax = 1317 W
ERmin = 0 W

TERMOSTATO (T) [°C]
TEMP. REALE (Tr) [°C]



Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	25.2	25.3	25.3	25.3	25.0	25.1	25.1	25.2	25.2	25.2	25.3	25.3	25.2	25.2	25.1

Progetto:

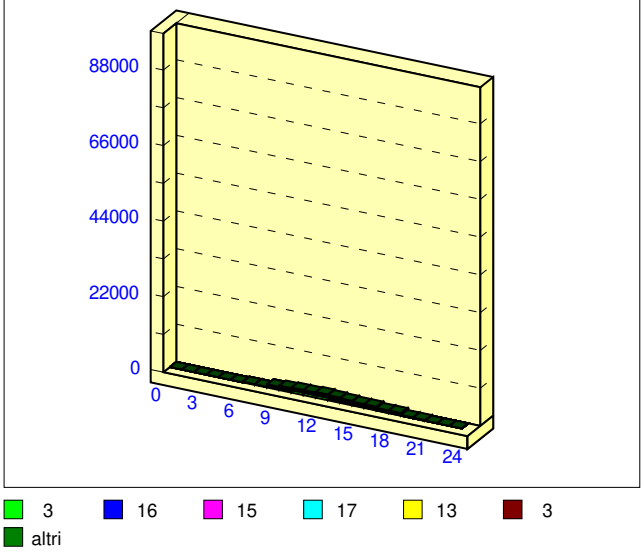
COMUNE DI PADOVA - CASTELLO DEI CARRARESI - ALA SUD - VALUTAZIONI POTENZE ASSORBITE INVERNALI ED ESTIVE rev. 19-05-2018

DESCRIZIONE DI OGNI AMBIENTE

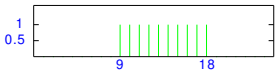
AMBIENTE :	010107	**Locale 010107**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	24.70	1.00	4.25	105.0

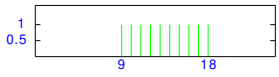
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 103	1	S	0.84		5.60	4.25	23.80	0.60
02	P.E 105	1	S	1.57		2.50	4.25	3.63	0.60
03	S.E 264	1	S	1.62		2.00	3.50	7.00	0.21
04	PTE 738	1	S	0.35		11.00	1.00	0.00	
05	PTE 735	6	S	0.23		4.25	1.00	0.00	
06	PTE 732	1	S	0.71		8.10	1.00	0.00	
07	PTE 733	1	S	0.33		8.10	1.00	0.00	
08	PAV 500	1	T1	1.78		1.00	24.70	24.70	
09	SOF 600	1	TF	1.80		1.00	24.70	24.70	
10	P.I 328	2	TF	1.64		3.00	4.25	22.14	
11	S.I 403	1	TF	1.06		1.40	2.40	3.36	
12	P.I 328	1	TF	1.64		5.30	4.25	22.52	

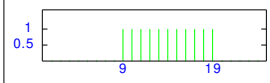
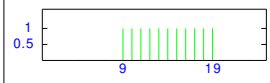
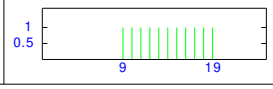
APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
13	0.50	52	14.6	
	Qop =	3.935	l/s pers.	

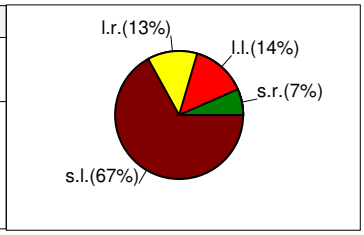
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
14	0.10	10	2.9	

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
15	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(4) 15	70 58	70	259 215	
16	Carico interno specifico per apporti illuminotecnici e varie	(7) 30	35 0	90	259 0	
17	Personal Computer (Fundamentals 1989)	(0) 2	300 0	50	148 0	

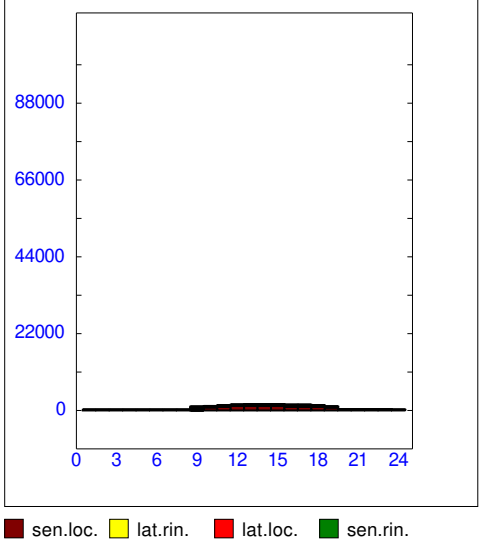
TOTALI: [W]

Carico Massimo teorico 1919 **Ora 14**

Latente		Sensibile	
rinnovo	242	rinnovo	128
locale	263	locale	1286
Totale	**505**	**Totale**	**1414**



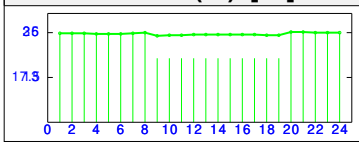
CARICO TOTALE ORARIO



SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa = 1228 W
Differenziale termostato = 1.0 °C
ERmax = 1234 W
ERmin = 0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	25.7	25.7	25.8	25.9	25.1	25.2	25.3	25.4	25.5	25.5	25.5	25.4	25.4	25.3	25.2

Progetto:

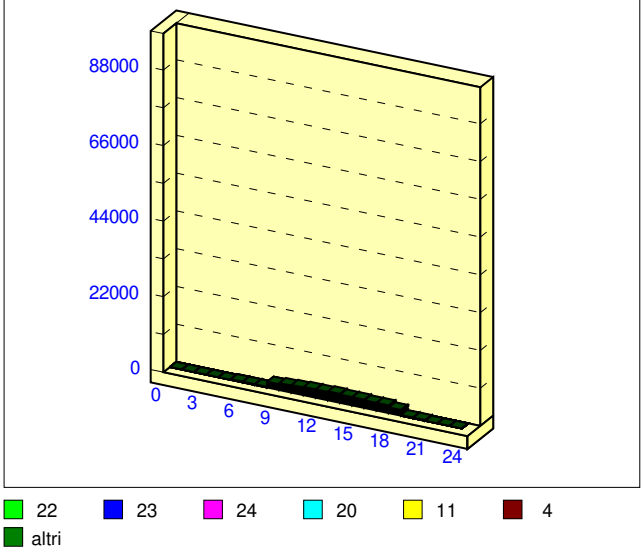
COMUNE DI PADOVA - CASTELLO DEI CARRARESI - ALA SUD - VALUTAZIONI POTENZE ASSORBITE INVERNALI ED ESTIVE rev. 19-05-2018

DESCRIZIONE DI OGNI AMBIENTE

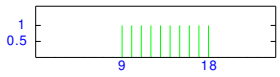
AMBIENTE :	010108	**Locale 010108**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	55.83	1.00	4.25	237.3

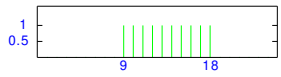
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 100	1	S	0.34		5.30	4.25	22.52	0.60
02	P.E 103	1	S	0.84		5.00	2.00	10.00	0.60
03	P.E 105	1	S	1.57		1.30	2.00	0.84	0.60
04	S.E 264	1	S	1.62		1.10	1.60	1.76	0.21
05	PTE 738	1	S	0.35		5.40	1.00	0.00	
06	PTE 735	4	S	0.23		4.25	1.00	0.00	
07	PTE 732	1	S	0.71		5.30	1.00	0.00	
08	PTE 733	1	S	0.33		5.30	1.00	0.00	
09	P.E 103	1	N	0.84		4.00	4.25	17.00	0.60
10	P.E 106	1	N	1.33		2.70	4.25	5.18	0.60
11	S.E 264	1	N	1.62		1.80	3.50	6.30	0.21
12	PTE 735	4	N	0.23		4.25	1.00	0.00	
13	PTE 738	1	N	0.35		10.60	1.00	0.00	
14	PTE 732	1	N	0.71		5.30	1.00	0.00	
15	PTE 733	1	N	0.33		5.30	1.00	0.00	
16	PAV 500	1	T1	1.78		1.00	55.83	55.83	
17	SOF 600	1	TF	1.80		1.00	55.83	55.83	
18	P.I 328	1	TF	1.64		10.80	4.25	42.54	
19	S.I 403	1	TF	1.06		1.40	2.40	3.36	

APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
20	0.50	119	33.0	
	Qop =	3.936	l/s pers.	

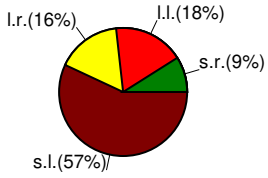
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
21	0.10	24	6.6	

..... continua

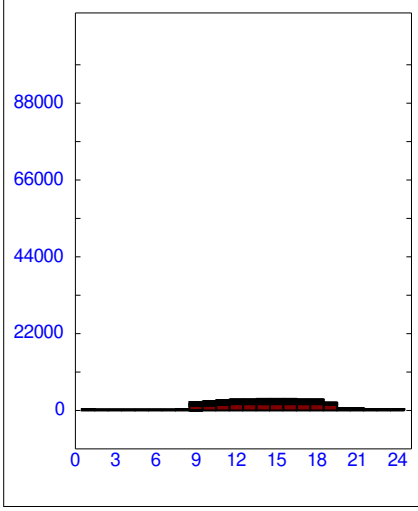
TOTALI: [W]

Carico Massimo teorico 3357 **Ora 15**

Latente		Sensibile	
rinnovo	547	rinnovo	304
locale	595	locale	1911
Totale	**1142**	**Totale**	**2215**



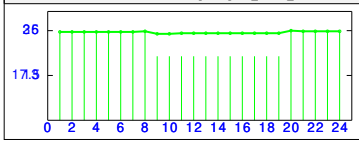
CARICO TOTALE ORARIO



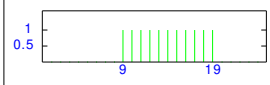
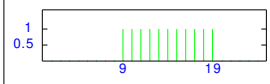
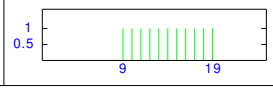
SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa	=	2043 W
Differenziale termostato	=	1.0 °C
ERmax	=	2431 W
ERmin	=	0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	25.6	25.7	25.7	25.7	25.1	25.1	25.2	25.3	25.3	25.3	25.3	25.3	25.3	25.3	25.2

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
22	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(8) 15	70 58	70	586 486	
23	Carico interno specifico per apporti illuminotecnici e varie	(17) 30	35 0	90	586 0	
24	Personal Computer (Fundamentals 1989)	(1) 2	300 0	50	335 0	

Progetto:

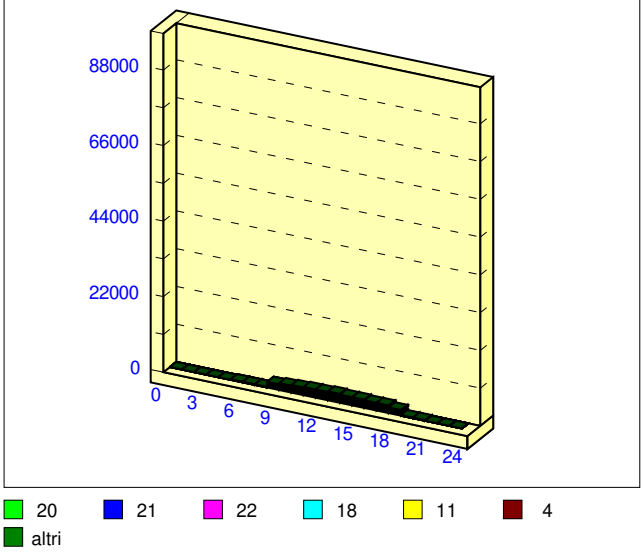
COMUNE DI PADOVA - CASTELLO DEI CARRARESI - ALA SUD - VALUTAZIONI POTENZE ASSORBITE INVERNALI ED ESTIVE rev. 19-05-2018

DESCRIZIONE DI OGNI AMBIENTE

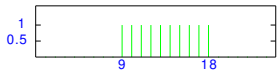
AMBIENTE :	010109	**Locale 010109**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	56.05	1.00	4.25	238.2

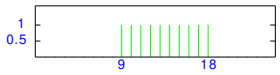
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 100	1	S	0.34		5.20	4.25	22.10	0.60
02	P.E 103	1	S	0.84		5.00	2.00	10.00	0.60
03	P.E 105	1	S	1.57		1.30	2.00	0.84	0.60
04	S.E 264	1	S	1.62		1.10	1.60	1.76	0.21
05	PTE 738	1	S	0.35		5.40	1.00	0.00	
06	PTE 735	6	S	0.23		4.25	1.00	0.00	
07	PTE 732	1	S	0.71		5.30	1.00	0.00	
08	PTE 733	1	S	0.33		5.30	1.00	0.00	
09	P.E 103	1	N	0.84		5.20	4.25	22.10	0.60
10	P.E 105	1	N	1.57		2.00	4.25	1.50	0.60
11	S.E 264	1	N	1.62		2.00	3.50	7.00	0.21
12	PTE 735	4	N	0.23		4.25	1.00	0.00	
13	PTE 738	1	N	0.35		11.00	1.00	0.00	
14	PTE 732	1	N	0.71		5.20	1.00	0.00	
15	PTE 733	1	N	0.33		5.20	1.00	0.00	
16	PAV 500	1	T1	1.78		1.00	56.05	56.05	
17	SOF 600	1	TF	1.80		1.00	56.05	56.05	

APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
18	0.50	119	33.1	
	Qop =	3.936	l/s pers.	

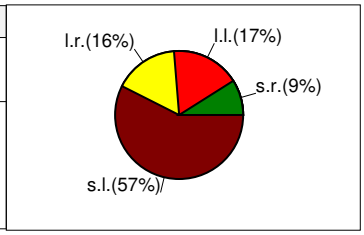
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
19	0.10	24	6.6	

..... continua

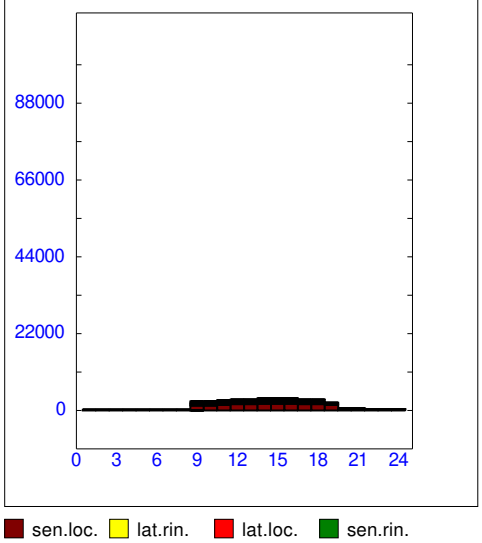
TOTALI: [W]

Carico Massimo teorico 3415 **Ora 15**

Latente		Sensibile	
rinnovo	549	rinnovo	305
locale	597	locale	1963
Totale	**1146**	**Totale**	**2268**



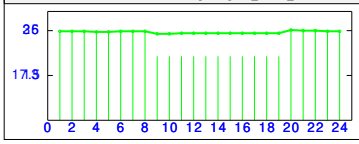
CARICO TOTALE ORARIO



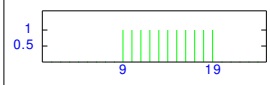
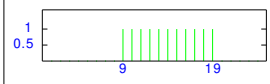
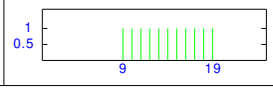
SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa	=	2205 W
Differenziale termostato	=	1.0 °C
ERmax	=	2643 W
ERmin	=	0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	25.7	25.8	25.8	25.9	25.1	25.1	25.2	25.3	25.3	25.3	25.3	25.3	25.3	25.3	25.2

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
20	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(8) 15	70 58	70	589 488	
21	Carico interno specifico per apporti illuminotecnici e varie	(17) 30	35 0	90	589 0	
22	Personal Computer (Fundamentals 1989)	(1) 2	300 0	50	336 0	

Progetto:

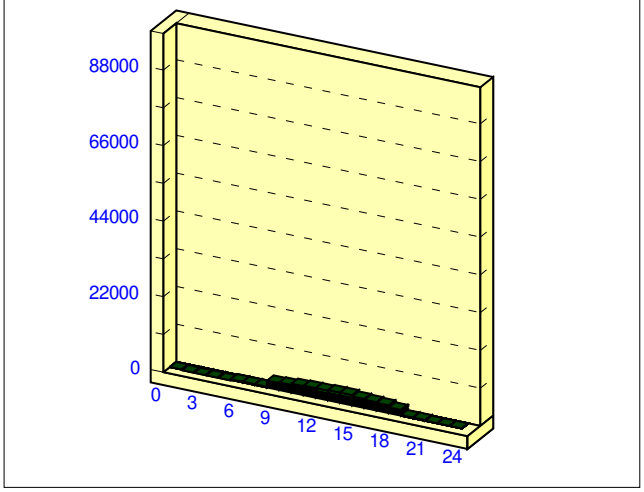
COMUNE DI PADOVA - CASTELLO DEI CARRARESI - ALA SUD - VALUTAZIONI POTENZE ASSORBITE INVERNALI ED ESTIVE rev. 19-05-2018

DESCRIZIONE DI OGNI AMBIENTE

AMBIENTE :	010110	**Locale 010110**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	56.07	1.00	4.25	238.3

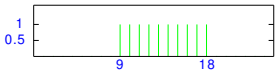
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 100	1	S	0.34		5.30	4.25	22.52	0.60
02	P.E 103	1	S	0.84		5.00	2.00	10.00	0.60
03	P.E 105	1	S	1.57		1.30	2.00	-2.04	0.60
04	S.E 264	1	S	1.62		1.10	1.60	1.76	0.21
05	S.E 264	1	S	1.62		1.60	1.80	2.88	0.21
06	PTE 735	6	S	0.23		4.25	1.00	0.00	
07	PTE 738	1	S	0.35		5.40	1.00	0.00	
08	PTE 738	1	S	0.35		7.40	1.00	0.00	
09	PTE 732	1	S	0.71		5.30	1.00	0.00	
10	PTE 733	1	S	0.33		5.30	1.00	0.00	
11	P.E 103	1	N	0.84		5.30	4.25	14.02	0.60
12	S.E 264	1	N	1.62		1.00	1.50	1.50	0.21
13	S.E 264	1	N	1.62		2.00	3.50	7.00	0.21
14	PTE 735	4	N	0.23		4.25	1.00	0.00	
15	PTE 738	1	N	0.35		5.00	1.00	0.00	
16	PTE 738	1	N	0.35		11.00	1.00	0.00	
17	PTE 732	1	N	0.71		5.30	1.00	0.00	
18	PTE 733	1	N	0.33		5.30	1.00	0.00	
19	PAV 500	1	T1	1.78		1.00	56.07	56.07	
20	SOF 600	1	TF	1.80		1.00	56.07	56.07	

APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
21	0.50	119	33.1	
	Qop =	3.935	l/s pers.	



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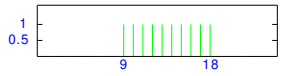
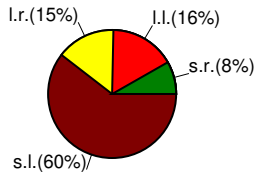
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
22	0.10	24	6.6	



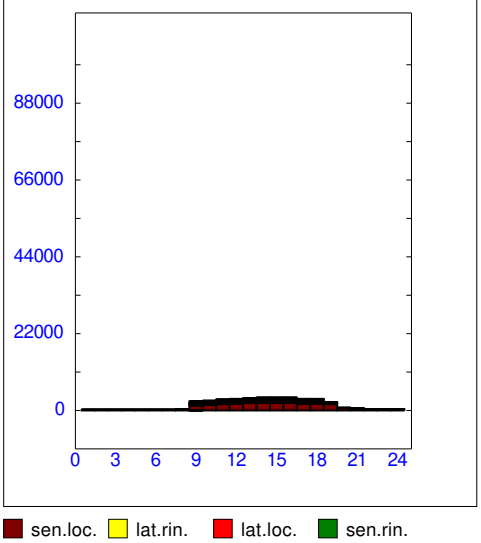
TOTALI: [W]

Carico Massimo teorico 3672 **Ora 15**

Latente		Sensibile	
rinnovo	549	rinnovo	305
locale	598	locale	2220
Totale	**1147**	**Totale**	**2525**



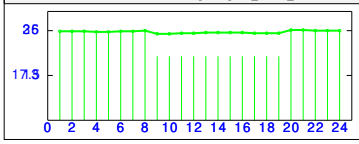
CARICO TOTALE ORARIO



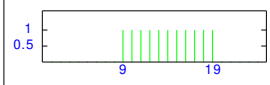
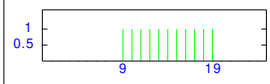
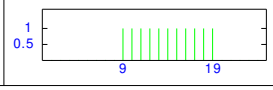
SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa	=	2445 W
Differenziale termostato	=	1.0 °C
ERmax	=	2799 W
ERmin	=	0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	25.7	25.8	25.8	25.9	25.1	25.2	25.2	25.3	25.4	25.4	25.4	25.4	25.3	25.3	25.2

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
23	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(8) 15	70 58	70	589 488	
24	Carico interno specifico per apporti illuminotecnici e varie	(17) 30	35 0	90	589 0	
25	Personal Computer (Fundamentals 1989)	(1) 2	300 0	50	336 0	

Progetto:

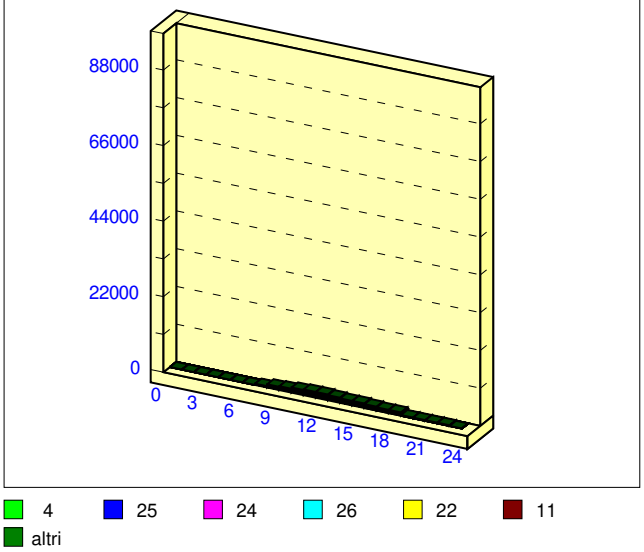
COMUNE DI PADOVA - CASTELLO DEI CARRARESI - ALA SUD - VALUTAZIONI POTENZE ASSORBITE INVERNALI ED ESTIVE rev. 19-05-2018

DESCRIZIONE DI OGNI AMBIENTE

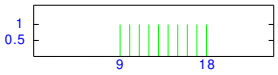
AMBIENTE :	010111	**Locale 010111**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	70.24	0.24	4.25	71.6

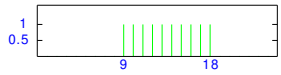
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 100	1	S	0.34		6.50	4.25	27.63	0.60
02	P.E 103	1	S	0.84		5.00	4.25	21.25	0.60
03	P.E 105	1	S	1.57		1.40	3.50	0.00	0.60
04	S.E 264	1	S	1.62		1.40	3.50	4.90	0.21
05	PTE 738	1	S	0.35		9.80	1.00	0.00	
06	PTE 735	6	S	0.23		4.25	1.00	0.00	
07	PTE 732	1	S	0.71		6.50	1.00	0.00	
08	PTE 733	1	S	0.33		6.50	1.00	0.00	
09	P.E 103	1	N	0.84		7.50	4.25	31.88	0.60
10	P.E 105	1	N	1.57		1.30	3.00	1.30	0.60
11	S.E 264	1	N	1.62		1.30	2.00	2.60	0.21
12	PTE 735	4	N	0.23		4.25	1.00	0.00	
13	PTE 738	1	N	0.35		6.60	1.00	0.00	
14	PTE 732	1	N	0.71		6.50	1.00	0.00	
15	PTE 733	1	N	0.33		6.50	1.00	0.00	
16	P.E 102	1	N	0.66		10.80	4.25	45.90	0.60
17	PTE 731	2	N	0.19		4.25	1.00	0.00	
18	PTE 732	1	N	0.71		10.80	1.00	0.00	
19	PTE 733	1	N	0.33		10.80	1.00	0.00	
20	PAV 500	1	T1	1.78		0.24	70.24	16.86	
21	SOF 600	1	TF	1.80		0.24	70.24	16.86	

APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
22	0.50	36	10.0	
	Qop =	3.935	l/s pers.	

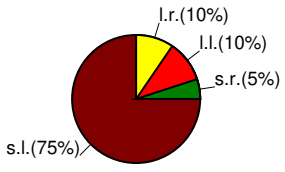
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
23	0.10	7	2.0	

..... continua

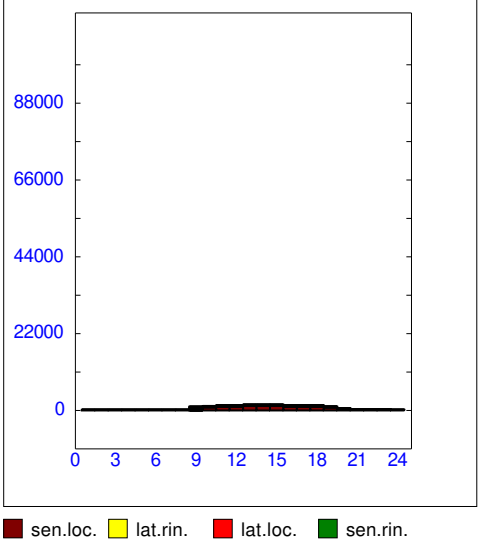
TOTALI: [W]

Carico Massimo teorico 1725 **Ora 14**

Latente		Sensibile	
rinnovo	165	rinnovo	87
locale	180	locale	1294
Totale	**345**	**Totale**	**1381**



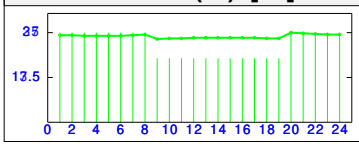
CARICO TOTALE ORARIO



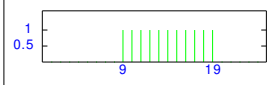
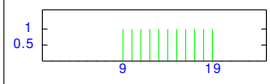
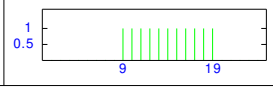
SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa	=	1338 W
Differenziale termostato	=	1.0 °C
ERmax	=	1345 W
ERmin	=	0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	26.0	26.1	26.2	26.4	25.1	25.2	25.3	25.4	25.5	25.5	25.5	25.4	25.4	25.3	25.2

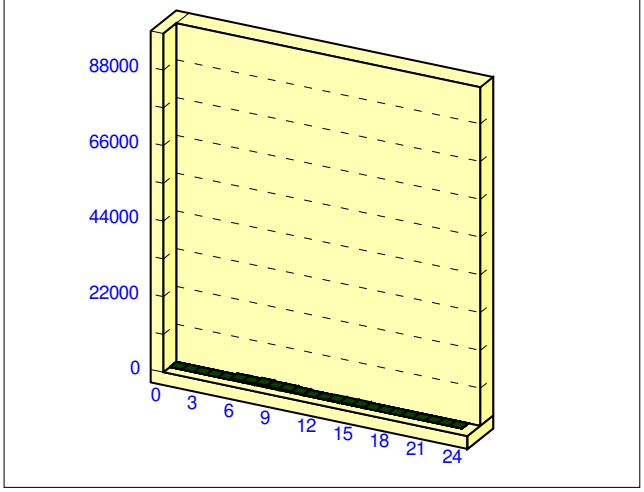
nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
24	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(3) 15	70 58	70	177 147	
25	Carico interno specifico per apporti illuminotecnici e varie	(5) 30	35 0	90	177 0	
26	Personal Computer (Fundamentals 1989)	(0) 2	300 0	50	101 0	

DESCRIZIONE DI OGNI AMBIENTE

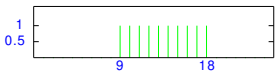
AMBIENTE :	010112	**Locale 010112**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	27.06	0.24	4.25	27.6

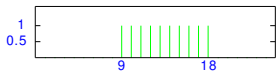
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 102	1	E	0.66		3.20	4.25	10.72	0.60
02	S.E 264	1	E	1.62		1.20	2.40	2.88	0.21
03	PTE 735	4	E	0.23		4.25	1.00	0.00	
04	PTE 738	1	E	0.35		7.20	1.00	0.00	
05	PTE 735	6	E	0.23		4.25	1.00	0.00	
06	PTE 732	1	E	0.71		3.20	1.00	0.00	
07	PTE 733	1	E	0.33		3.20	1.00	0.00	
08	PAV 500	1	T1	1.78		0.24	27.06	6.49	
09	SOF 600	1	TF	1.80		0.24	27.06	6.49	
10	P.I 341	1	TF	0.56		9.00	4.25	34.89	
11	S.I 403	1	TF	1.06		1.40	2.40	3.36	
12	P.I 328	1	TF	1.64		12.10	4.25	49.32	
13	S.I 400	1	TF	2.24		1.00	2.10	2.10	

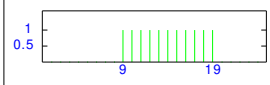
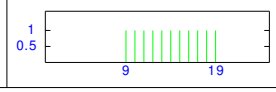
APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
14	0.50	14	3.8	
	Qop =	3.936	l/s pers.	

nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
15	0.10	3	0.8	

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
16	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(1) 15	70 58	70	68 57	
17	Carico interno specifico per apporti illuminotecnici e varie	(2) 30	35 0	90	68 0	

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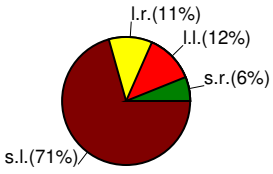
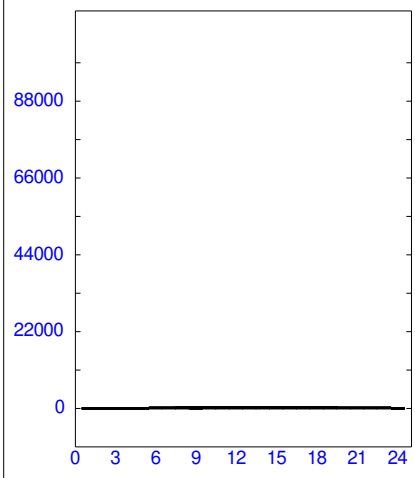
TOTALI: [W]

Carico Massimo teorico 571 **Ora 15**

Latente		Sensibile	
rinnovo	64	rinnovo	35
locale	69	locale	403
Totale	**133**	**Totale**	**438**



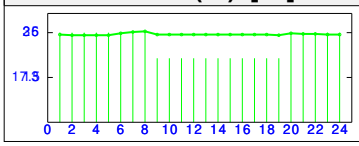
CARICO TOTALE ORARIO



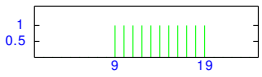
SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa	=	299 W
Differenziale termostato	=	1.0 °C
ERmax	=	301 W
ERmin	=	0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	25.3	25.8	26.2	26.4	25.5	25.5	25.5	25.4	25.5	25.5	25.5	25.5	25.4	25.4	25.2

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
18	Personal Computer (Fundamentals 1989)	(0) 2	300 0	50	39 0	

Progetto:

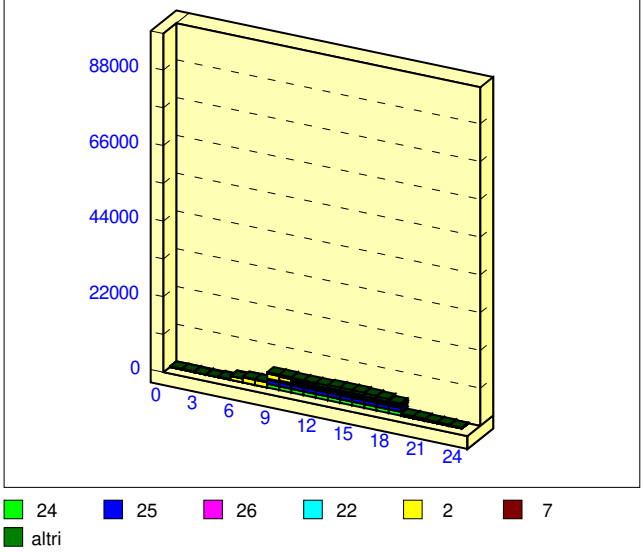
COMUNE DI PADOVA - CASTELLO DEI CARRARESI - ALA SUD - VALUTAZIONI POTENZE ASSORBITE INVERNALI ED ESTIVE rev. 19-05-2018

DESCRIZIONE DI OGNI AMBIENTE

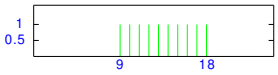
AMBIENTE :	010113	**Locale 010123**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	4.90	20.50	4.25	426.9

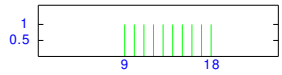
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 101	1	E	0.28		12.50	4.25	43.52	0.60
02	S.E 264	2	E	1.62		2.00	2.40	9.60	0.21
03	PTE 735	2	E	0.23		4.25	1.00	0.00	
04	PTE 738	2	E	0.35		8.80	1.00	0.00	
05	PTE 732	1	E	0.71		12.50	1.00	0.00	
06	PTE 733	1	E	0.33		12.50	1.00	0.00	
07	P.E 106	1	E	1.33		7.50	4.25	31.88	0.60
08	PTE 735	2	E	0.23		4.25	1.00	0.00	
09	PTE 732	1	E	0.71		7.50	1.00	0.00	
10	PTE 732	1	E	0.71		7.50	1.00	0.00	
11	P.E 105	1	S	1.57		5.00	4.25	21.25	0.60
12	PTE 735	2	S	0.23		4.25	1.00	0.00	
13	PTE 732	1	S	0.71		5.00	1.00	0.00	
14	PTE 732	1	S	0.71		5.00	1.00	0.00	
15	P.E 101	1	N	0.28		5.00	4.25	21.25	0.60
16	PTE 735	2	N	0.23		4.25	1.00	0.00	
17	PTE 732	1	N	0.71		5.00	1.00	0.00	
18	PTE 733	1	N	0.33		5.00	1.00	0.00	
19	P.I 342	1	TF	0.50		9.50	4.25	40.38	
20	PAV 500	1	T1	1.78		20.50	4.90	100.45	
21	SOF 603	1	TF	2.71		20.50	4.90	100.45	

APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
22	0.50	213	59.3	
	Qop =	3.936	l/s pers.	

nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
23	0.10	43	11.9	

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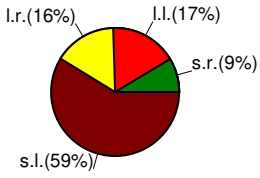
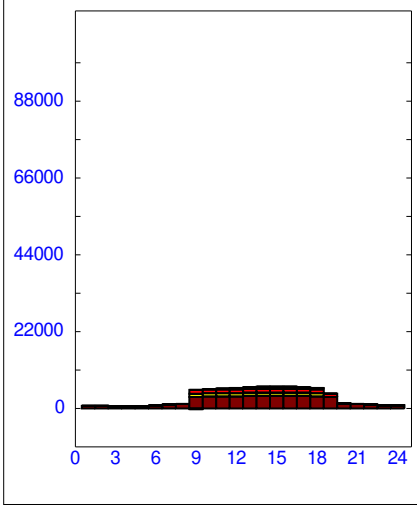
TOTALI: [W]

Carico Massimo teorico 6317 **Ora 15**

Latente		Sensibile	
rinnovo	984	rinnovo	547
locale	1071	locale	3715
Totale	**2055**	**Totale**	**4262**



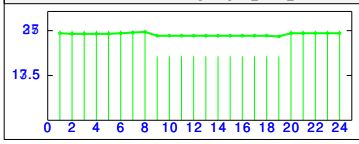
CARICO TOTALE ORARIO



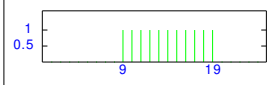
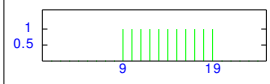
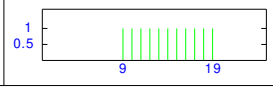
SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa	=	3939 W
Differenziale termostato	=	1.0 °C
ERmax	=	3949 W
ERmin	=	0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	26.0	26.2	26.5	26.6	25.4	25.4	25.4	25.4	25.5	25.5	25.5	25.5	25.5	25.4	25.3

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
24	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(15) 15	70 58	70	1055 874	
25	Carico interno specifico per apporti illuminotecnici e varie	(30) 30	35 0	90	1055 0	
26	Personal Computer (Fundamentals 1989)	(2) 2	300 0	50	603 0	

Progetto:

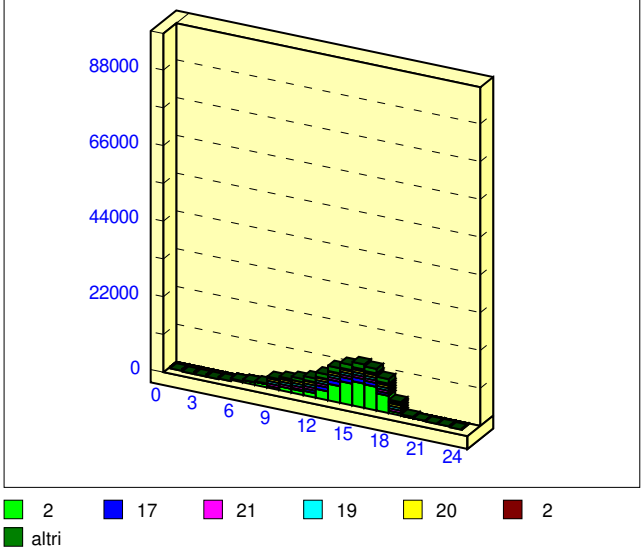
COMUNE DI PADOVA - CASTELLO DEI CARRARESI - ALA SUD - VALUTAZIONI POTENZE ASSORBITE INVERNALI ED ESTIVE rev. 19-05-2018

DESCRIZIONE DI OGNI AMBIENTE

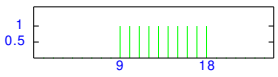
AMBIENTE :	010114	**Locale 010124**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	66.50	1.00	4.25	282.6

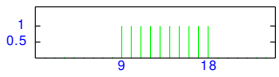
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 101	1	W	0.28		12.50	4.25	0.00	0.60
02	S.E 269	1	W	1.15		12.50	4.25	53.13	0.17
03	PTE 738	1	W	0.35		32.90	1.00	0.00	
04	PTE 732	1	W	0.71		12.50	1.00	0.00	
05	PTE 733	1	W	0.33		12.50	1.00	0.00	
06	P.E 101	1	N	0.28		5.60	4.25	0.00	0.60
07	S.E 269	1	N	1.15		5.60	4.25	23.80	0.17
08	PTE 738	1	N	0.35		19.70	1.00	0.00	
09	PTE 732	1	N	0.71		5.60	1.00	0.00	
10	PTE 733	1	N	0.33		5.60	1.00	0.00	
11	P.I 328	1	TF	1.64		12.60	4.25	53.55	
12	P.I 328	1	TF	1.64		15.00	4.25	63.75	
13	P.I 342	1	TF	0.50		5.00	4.25	19.36	
14	S.I 403	1	TF	1.06		0.90	2.10	1.89	
15	PAV 500	1	T1	1.78		1.00	66.50	66.50	
16	SOF 603	1	TF	2.71		1.00	66.50	66.50	

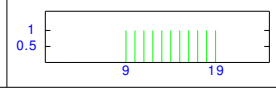
APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
17	1.80	509	141.3	
	Qop =	14.168	l/s pers.	

nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
18	0.10	28	7.9	

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
19	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(10) 15	70 58	70	698 579	

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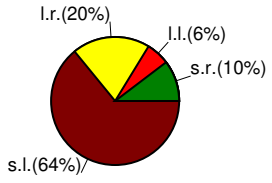
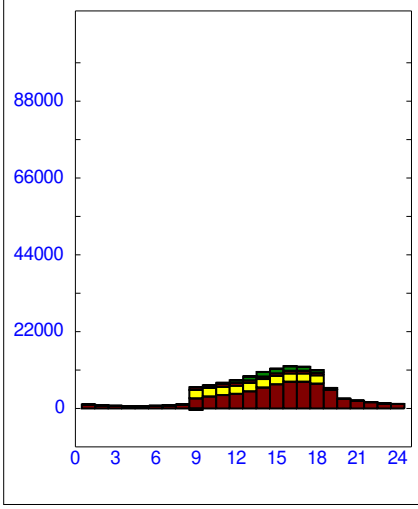
TOTALI: [W]

Carico Massimo teorico 11949 **Ora 16**

Latente		Sensibile	
rinnovo	2345	rinnovo	1236
locale	709	locale	7659
Totale	**3054**	**Totale**	**8895**



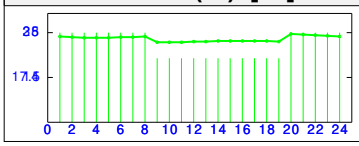
CARICO TOTALE ORARIO



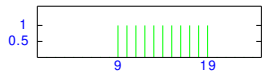
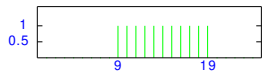
SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa	=	8024 W
Differenziale termostato	=	1.0 °C
ERmax	=	8080 W
ERmin	=	0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	26.3	26.5	26.6	26.8	24.9	25.0	25.0	25.1	25.2	25.3	25.4	25.5	25.5	25.4	25.1

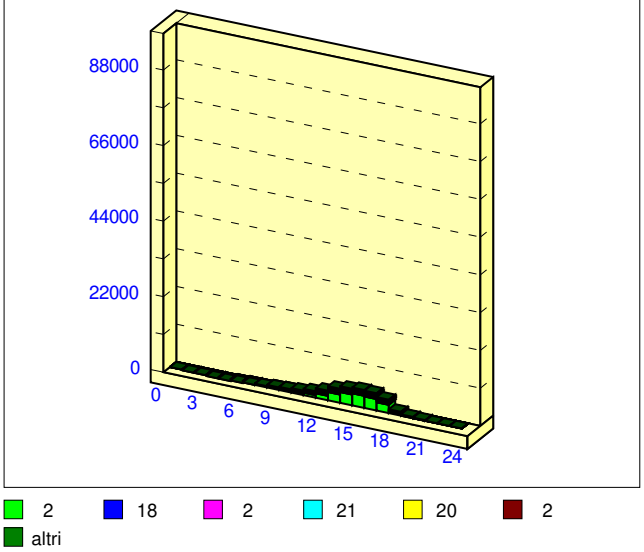
nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
20	Carico interno specifico per apporti illuminotecnici e varie	(20) 30	35 0	90	698 0	
21	Personal Computer (Fundamentals 1989)	(3) 4	300 0	50	798 0	

DESCRIZIONE DI OGNI AMBIENTE

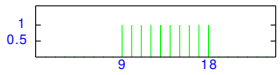
AMBIENTE :	010115	**Locale 010125**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	15.50	1.00	8.80	136.4

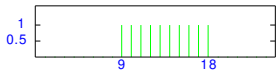
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 101	1	W	0.28		3.00	8.80	0.00	0.60
02	S.E 269	1	W	1.15		3.00	8.80	26.40	0.17
03	PTE 738	1	W	0.35		28.60	1.00	0.00	
04	PTE 732	2	W	0.71		3.00	1.00	0.00	
05	PTE 733	2	W	0.33		3.00	1.00	0.00	
06	P.E 101	1	S	0.28		5.60	4.05	22.68	0.60
07	PTE 735	2	S	0.23		4.05	1.00	0.00	
08	PTE 733	2	S	0.33		5.60	1.00	0.00	
09	P.E 101	1	E	0.28		3.00	4.05	12.15	0.60
10	PTE 735	2	E	0.23		4.05	1.00	0.00	
11	PTE 733	2	E	0.33		3.00	1.00	0.00	
12	P.I 342	1	TF	0.50		8.00	4.25	34.00	
13	P.I 342	1	TF	0.50		5.60	8.80	44.24	
14	S.I 403	1	TF	1.06		0.90	2.40	2.16	
15	S.I 403	1	TF	1.06		1.20	2.40	2.88	
16	PAV 500	1	T1	1.78		1.00	15.50	15.50	
17	SOF 605	1		0.18		1.00	15.50	15.50	0.60

APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
18	1.80	246	68.2	
	Qop =	29.336	l/s pers.	

nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
19	0.10	14	3.8	

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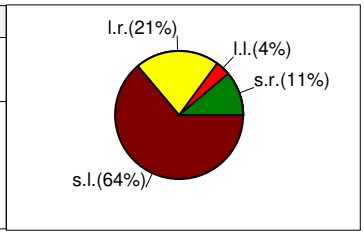
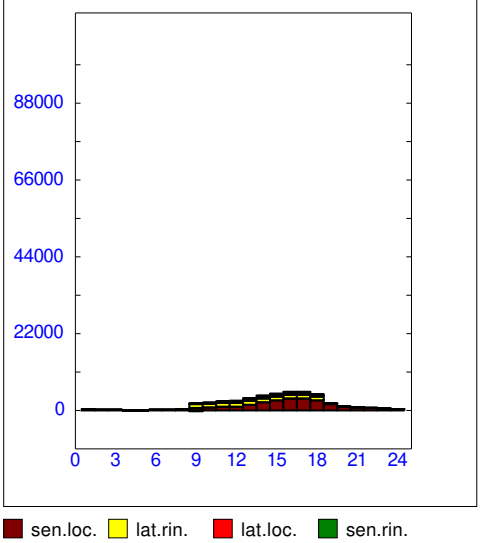
TOTALI: [W]

Carico Massimo teorico 5336 **Ora 16**

Latente		Sensibile	
rinnovo	1132	rinnovo	596
locale	198	locale	3410
Totale	**1330**	**Totale**	**4006**



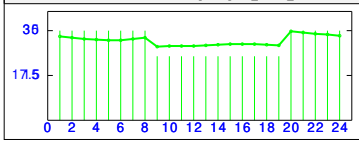
CARICO TOTALE ORARIO



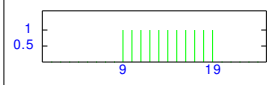
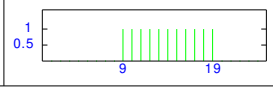
SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa	=	3884 W
Differenziale termostato	=	1.0 °C
ERmax	=	3902 W
ERmin	=	0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	26.7	26.9	27.2	27.6	24.7	24.8	24.9	24.9	25.1	25.3	25.4	25.5	25.5	25.4	25.0

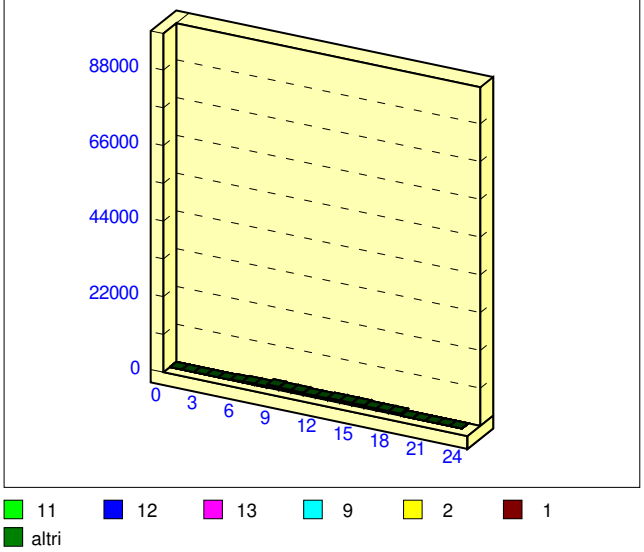
nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
20	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(2) 15	70 58	70	163 135	
21	Carico interno specifico per apporti illuminotecnici e varie	(5) 30	35 0	90	163 0	

DESCRIZIONE DI OGNI AMBIENTE

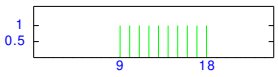
AMBIENTE :	020101	**Locale 020101**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	19.22	1.00	4.05	77.8

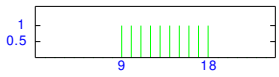
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 103	1	E	0.84		3.30	4.05	11.16	0.60
02	S.E 264	1	E	1.62		1.10	2.00	2.20	0.21
03	PTE 735	2	E	0.23		4.05	1.00	0.00	
04	PTE 719	1	E	0.10		6.20	1.00	0.00	
05	PTE 733	2	E	0.33		3.30	1.00	0.00	
06	PAV 502	1	TF	1.50		1.00	19.22	19.22	
07	SOF 600	1	TF	1.80		1.00	19.22	19.22	
08	P.I 341	1	TF	0.56		6.10	4.05	24.70	

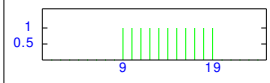
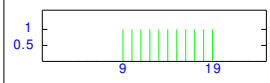
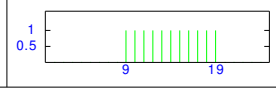
APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
09	0.50	39	10.8	
	Qop =	3.750	l/s pers.	

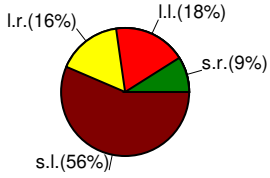
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
10	0.10	8	2.2	

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
11	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(3) 15	70 58	70	202 167	
12	Carico interno specifico per apporti illuminotecnici e varie	(6) 30	35 0	90	202 0	
13	Personal Computer (Fundamentals 1989)	(0) 2	300 0	50	115 0	

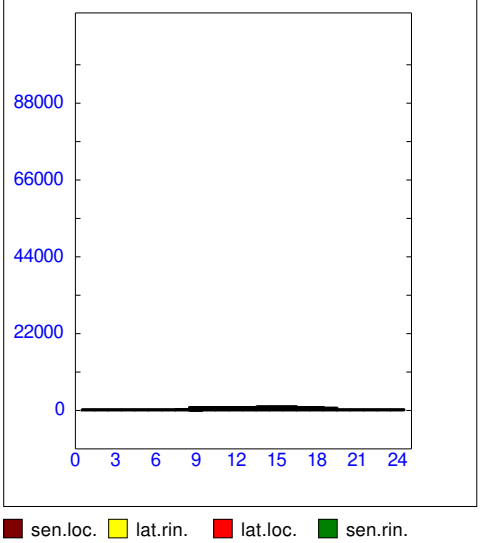
TOTALI: [W]

Carico Massimo teorico 1109 **Ora 15**

Latente		Sensibile	
rinnovo	179	rinnovo	100
locale	203	locale	626
Totale	**382**	**Totale**	**726**



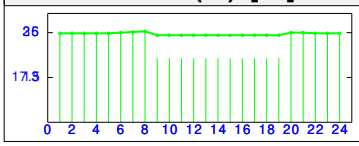
CARICO TOTALE ORARIO



SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa = 637 W
Differenziale termostato = 1.0 °C
ERmax = 773 W
ERmin = 0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



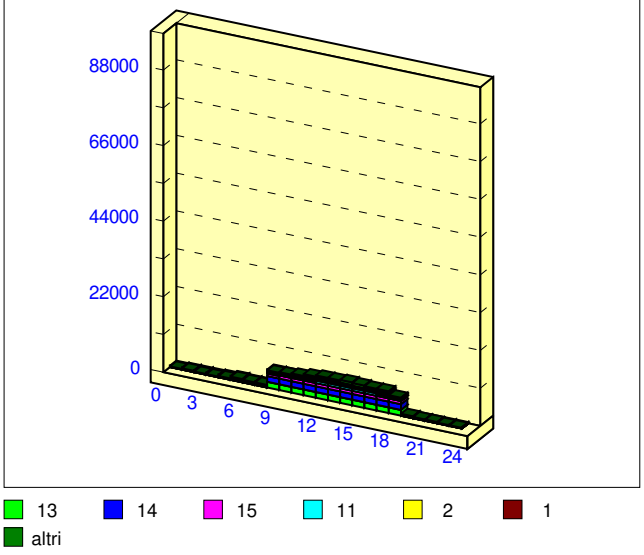
Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	25.8	26.0	26.3	26.4	25.3	25.3	25.3	25.3	25.3	25.3	25.3	25.3	25.3	25.3	25.2

DESCRIZIONE DI OGNI AMBIENTE

AMBIENTE :	020102	**Locale 020102**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	159.51	1.00	4.05	646.0

nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 103	1	N	0.84		69.00	4.05	257.45	0.60
02	S.E 264	10	N	1.62		1.10	2.00	22.00	0.21
03	PTE 735	6	E	0.23		4.05	1.00	0.00	
04	PTE 719	10	E	0.10		6.20	1.00	0.00	
05	PTE 733	2	E	0.33		69.00	1.00	0.00	
06	PAV 502	1	TF	1.50		1.00	159.51	159.51	
07	SOF 600	1	TF	1.80		1.00	159.51	159.51	
08	P.I 328	1	TF	1.64		4.40	4.05	17.82	
09	P.I 341	1	TF	0.56		3.00	4.05	8.19	
10	S.I 403	1	TF	1.06		1.65	2.40	3.96	

APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
11	0.50	323	89.7	
	Qop =	3.750	l/s pers.	

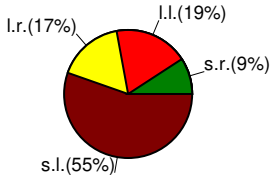
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
12	0.10	65	17.9	

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
13	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(24) 15	70 58	70	1675 1388	
14	Carico interno specifico per apporti illuminotecnici e varie	(48) 30	35 0	90	1675 0	
15	Personal Computer (Fundamentals 1989)	(3) 2	300 0	50	957 0	

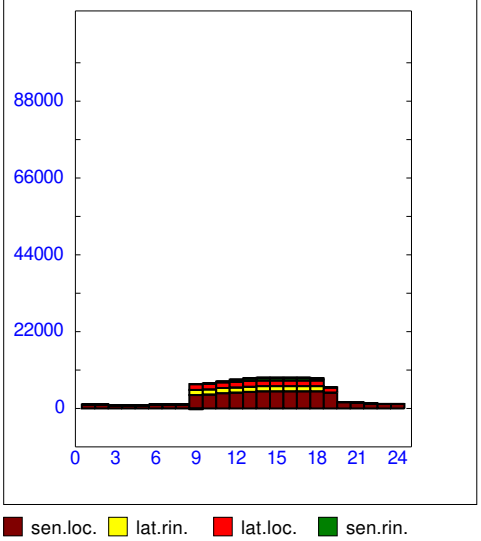
TOTALI: [W]

Carico Massimo teorico 8984 **Ora 15**

Latente		Sensibile	
rinnovo	1489	rinnovo	828
locale	1686	locale	4981
Totale	**3175**	**Totale**	**5809**



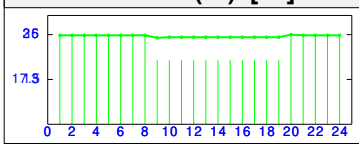
CARICO TOTALE ORARIO



SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa = 5407 W
Differenziale termostato = 1.0 °C
ERmax = 6568 W
ERmin = 0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



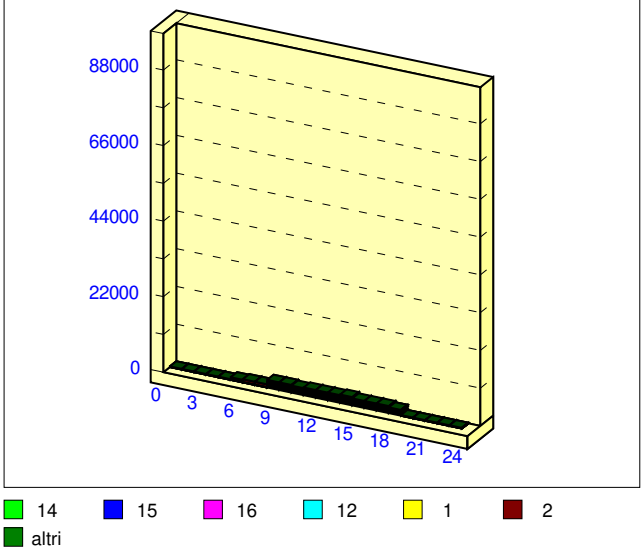
Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	25.7	25.8	25.8	25.8	25.1	25.2	25.2	25.3	25.3	25.3	25.3	25.3	25.3	25.3	25.2

DESCRIZIONE DI OGNI AMBIENTE

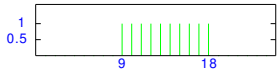
AMBIENTE :	020103	**Locale 020103**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	54.97	1.00	4.05	222.6

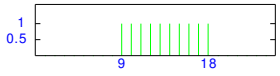
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 103	1	E	0.84		9.60	4.05	34.48	0.60
02	S.E 264	2	E	1.62		1.10	2.00	4.40	0.21
03	PTE 735	2	E	0.23		4.05	1.00	0.00	
04	PTE 719	2	E	0.10		6.20	1.00	0.00	
05	PTE 733	2	E	0.33		9.60	1.00	0.00	
06	PAV 502	1	TF	1.50		1.00	54.97	54.97	
07	SOF 600	1	TF	1.80		1.00	54.97	54.97	
08	P.I 334	1	TF	1.12		5.70	4.05	17.69	
09	S.I 403	1	TF	1.06		2.25	2.40	5.40	
10	P.I 328	1	TF	1.64		5.90	4.05	22.00	
11	S.I 403	1	TF	1.06		0.90	2.10	1.89	

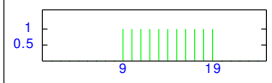
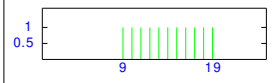
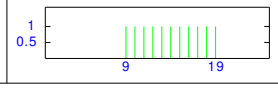
APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
12	0.50	111	30.9	
	Qop =	3.750	l/s pers.	

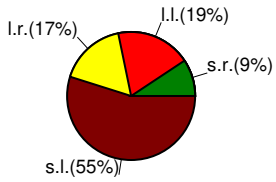
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
13	0.10	22	6.2	

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
14	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(8) 15	70 58	70	577 478	
15	Carico interno specifico per apporti illuminotecnici e varie	(16) 30	35 0	90	577 0	
16	Personal Computer (Fundamentals 1989)	(1) 2	300 0	50	330 0	

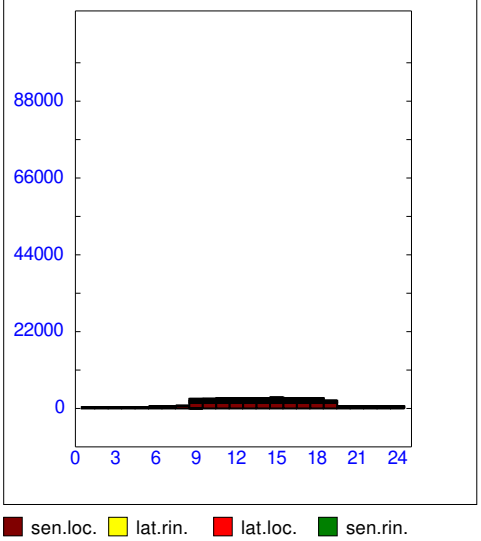
TOTALI: [W]

Carico Massimo teorico 3056 **Ora 15**

Latente		Sensibile	
rinnovo	513	rinnovo	285
locale	581	locale	1677
Totale	**1094**	**Totale**	**1962**



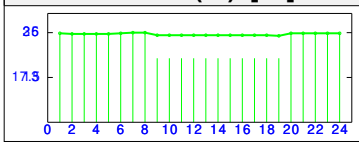
CARICO TOTALE ORARIO



SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa = 1652 W
Differenziale termostato = 1.0 °C
ERmax = 2069 W
ERmin = 0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	25.7	25.9	26.0	26.1	25.2	25.2	25.2	25.3	25.3	25.3	25.3	25.3	25.3	25.2	25.2

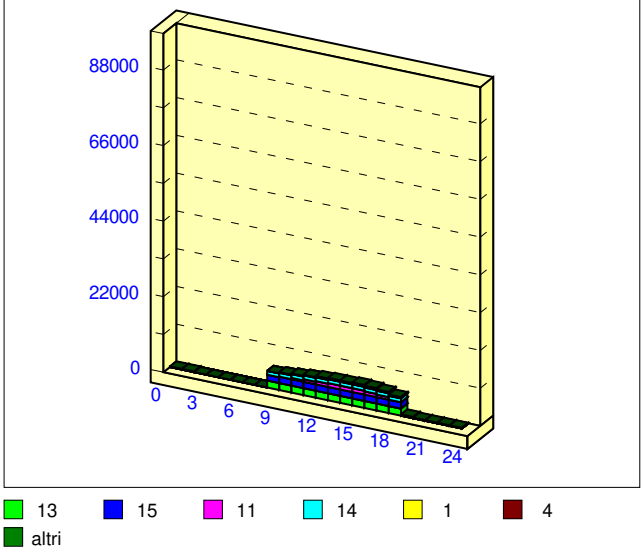
COMUNE DI PADOVA - CASTELLO DEI CARRARESI - ALA SUD - VALUTAZIONI POTENZE ASSORBITE INVERNALI ED ESTIVE rev. 19-05-2018

DESCRIZIONE DI OGNI AMBIENTE

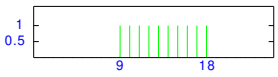
AMBIENTE :	020104	**Locale 020104**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	5.00	12.00	4.05	243.0

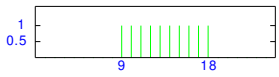
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 101	1	E	0.28		12.00	4.05	48.60	0.60
02	PTE 735	2	E	0.23		4.05	1.00	0.00	
03	PTE 733	2	E	0.33		12.00	1.00	0.00	
04	P.E 101	1	S	0.28		5.00	4.05	20.25	0.60
05	PTE 735	2	S	0.23		4.05	1.00	0.00	
06	PTE 733	2	S	0.33		5.00	1.00	0.00	
07	P.I 334	1	TF	1.12		5.50	4.05	22.27	
08	PAV 501	1		0.28		5.00	3.50	17.50	0.60
09	PAV 502	1	TF	1.50		8.50	5.00	42.50	
10	SOF 605	1		0.18		12.00	5.00	60.00	0.60

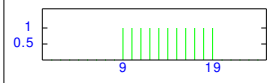
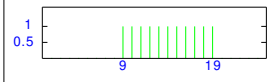
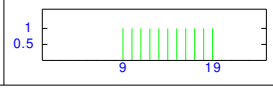
APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
11	1.80	437	121.5	
	Qop =	4.050	l/s pers.	

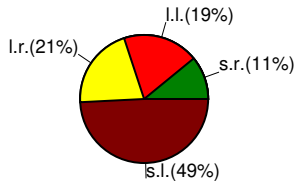
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
12	0.10	24	6.8	

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
13	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(30) 50	70 58	70	2100 1740	
14	Carico interno specifico per apporti illuminotecnici e varie	(30) 50	35 0	90	1050 0	
15	Personal Computer (Fundamentals 1989)	(6) 10	300 0	50	1800 0	

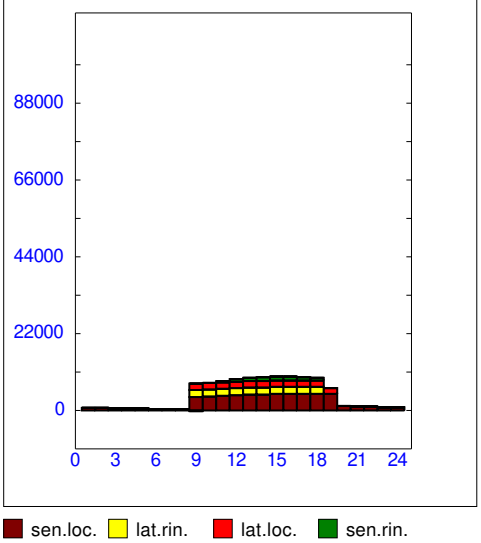
TOTALI: [W]

Carico Massimo teorico 9697 **Ora 16**

Latente		Sensibile	
rinnovo	2016	rinnovo	1063
locale	1852	locale	4766
Totale	**3868**	**Totale**	**5829**



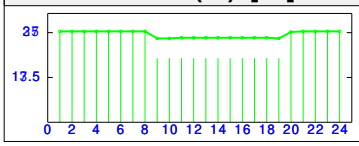
CARICO TOTALE ORARIO



SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa = 5652 W
Differenziale termostato = 1.0 °C
ERmax = 5733 W
ERmin = 0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	27.3	27.3	27.3	27.3	25.3	25.3	25.4	25.4	25.5	25.5	25.5	25.5	25.5	25.4	25.3

Progetto:

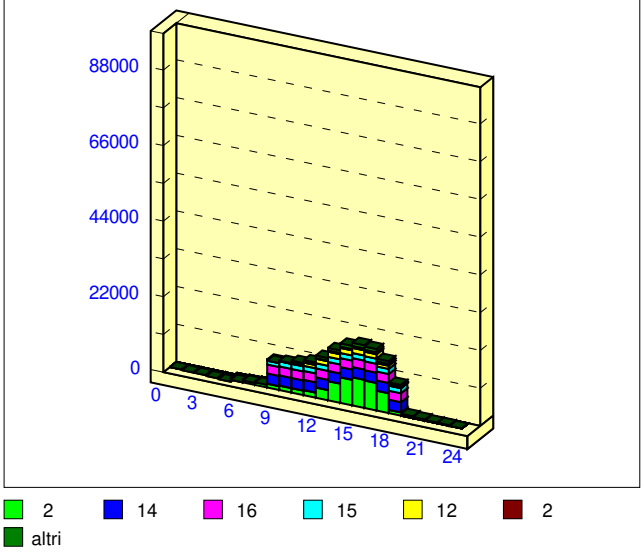
COMUNE DI PADOVA - CASTELLO DEI CARRARESI - ALA SUD - VALUTAZIONI POTENZE ASSORBITE INVERNALI ED ESTIVE rev. 19-05-2018

DESCRIZIONE DI OGNI AMBIENTE

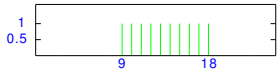
AMBIENTE :	020105	**Locale 020105**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	15.20	5.50	4.05	338.6

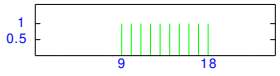
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 101	1	W	0.28		15.20	4.05	0.00	0.60
02	S.E 269	1	W	1.15		15.20	4.05	61.56	0.17
03	PTE 735	2	W	0.23		4.05	1.00	0.00	
04	PTE 738	1	W	0.35		38.50	1.00	0.00	
05	PTE 733	2	W	0.33		15.20	1.00	0.00	
06	P.E 101	1	E	0.28		3.20	4.05	12.96	0.60
07	PTE 735	2	E	0.23		4.05	1.00	0.00	
08	PTE 733	2	E	0.33		3.20	1.00	0.00	
09	PAV 501	1		0.28		6.00	3.00	18.00	0.60
10	PAV 502	1	TF	1.50		5.50	12.70	69.85	
11	SOF 605	1		0.18		5.50	15.20	83.60	0.60

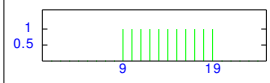
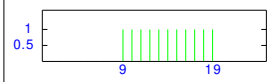
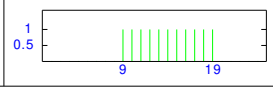
APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
12	1.80	609	169.3	
	Qop =	3.854	l/s pers.	

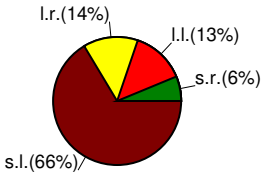
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
13	0.10	34	9.4	

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
14	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(44) 50	70 58	70	3075 2548	
15	Carico interno specifico per apporti illuminotecnici e varie	(44) 50	35 0	90	1537 0	
16	Personal Computer (Fundamentals 1989)	(9) 10	300 0	50	2636 0	

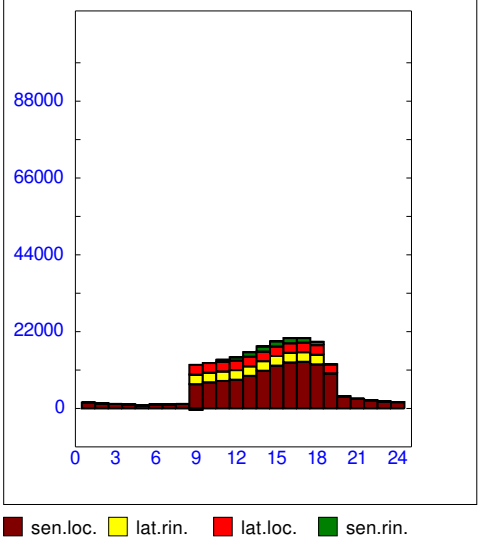
TOTALI: [W]

Carico Massimo teorico 20277 **Ora 17**

Latente		Sensibile	
rinnovo	2810	rinnovo	1291
locale	2704	locale	13472
Totale	**5514**	**Totale**	**14763**



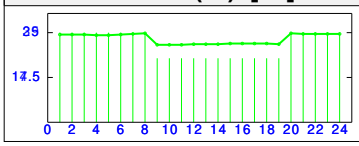
CARICO TOTALE ORARIO



SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa = 14278 W
Differenziale termostato = 1.0 °C
ERmax = 14378 W
ERmin = 0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	28.2	28.4	28.5	28.8	25.1	25.1	25.2	25.2	25.3	25.4	25.5	25.5	25.5	25.4	25.2

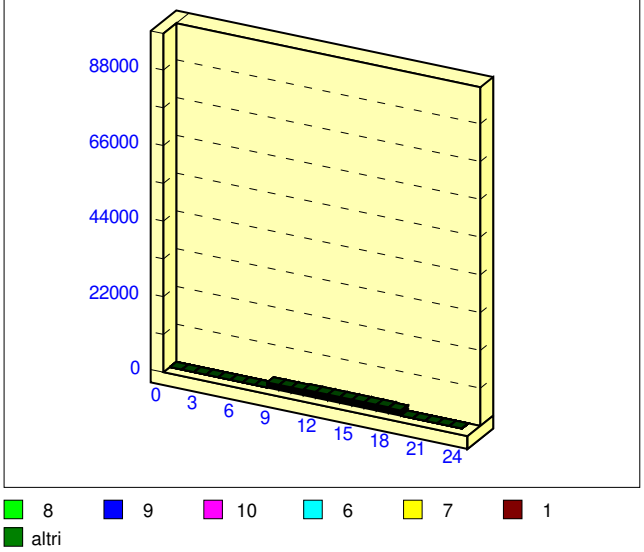
COMUNE DI PADOVA - CASTELLO DEI CARRARESI - ALA SUD - VALUTAZIONI POTENZE ASSORBITE INVERNALI ED ESTIVE rev. 19-05-2018

DESCRIZIONE DI OGNI AMBIENTE

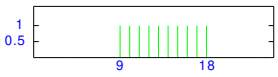
AMBIENTE :	020106	**Locale 020106**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	53.92	1.00	4.05	218.4

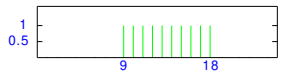
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 104	1	S	0.69		2.00	4.05	8.10	0.60
02	PTE 735	2	S	0.23		4.05	1.00	0.00	
03	PTE 733	2	S	0.33		2.00	1.00	0.00	
04	PAV 502	1	TF	1.50		1.00	53.92	53.92	
05	SOF 600	1	TF	1.80		1.00	53.92	53.92	

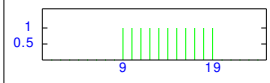
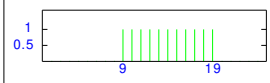
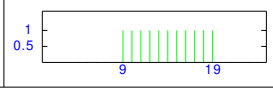
APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
06	0.50	109	30.3	
	Qop =	3.750	l/s pers.	

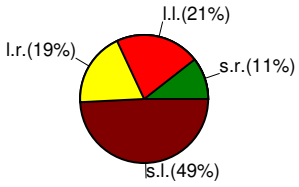
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
07	0.10	22	6.1	

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
08	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(8) 15	70 58	70	566 469	
09	Carico interno specifico per apporti illuminotecnici e varie	(16) 30	35 0	90	566 0	
10	Personal Computer (Fundamentals 1989)	(1) 2	300 0	50	324 0	

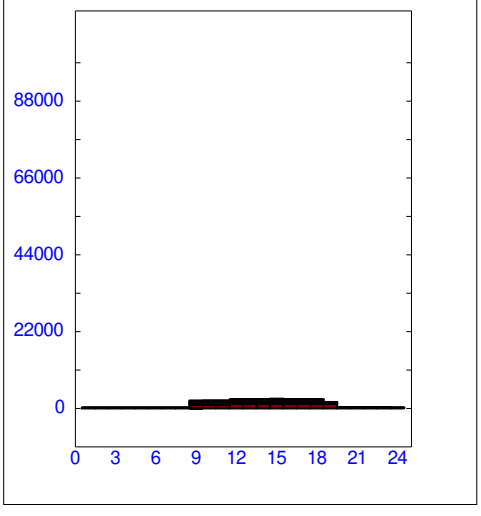
TOTALI: [W]

Carico Massimo teorico 2659 **Ora 15**

Latente		Sensibile	
rinnovo	503	rinnovo	280
locale	570	locale	1306
Totale	**1073**	**Totale**	**1586**



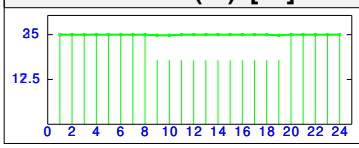
CARICO TOTALE ORARIO



SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa	=	681 W
Differenziale termostato	=	1.0 °C
ERmax	=	1241 W
ERmin	=	0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



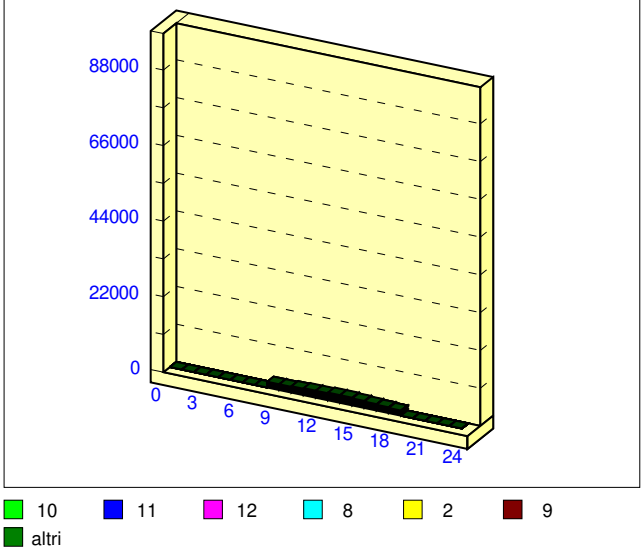
Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	25.0	25.0	25.0	25.0	24.8	24.9	24.9	25.0	25.0	25.0	25.0	25.0	25.0	25.0	24.9

DESCRIZIONE DI OGNI AMBIENTE

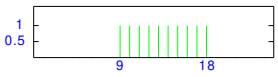
AMBIENTE :	020107	**Locale 020107**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	58.33	1.00	4.05	236.2

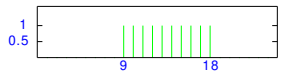
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 104	1	S	0.69		5.90	4.05	21.70	0.60
02	S.E 264	1	S	1.62		1.10	2.00	2.20	0.21
03	PTE 735	2	S	0.23		4.05	1.00	0.00	
04	PTE 719	1	S	0.10		6.20	1.00	0.00	
05	PTE 733	2	S	0.33		5.90	1.00	0.00	
06	PAV 502	1	TF	1.50		1.00	58.33	58.33	
07	SOF 600	1	TF	1.80		1.00	58.33	58.33	

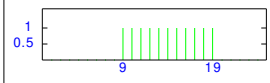
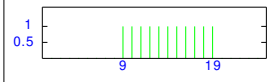
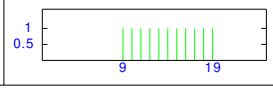
APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
08	0.50	118	32.8	
	Qop =	3.750	l/s pers.	

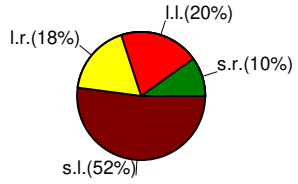
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
09	0.10	24	6.6	

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
10	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(9) 15	70 58	70	612 507	
11	Carico interno specifico per apporti illuminotecnici e varie	(17) 30	35 0	90	612 0	
12	Personal Computer (Fundamentals 1989)	(1) 2	300 0	50	350 0	

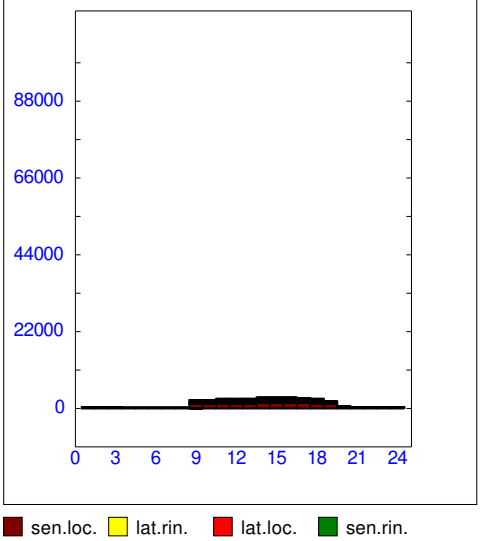
TOTALI: [W]

Carico Massimo teorico 3059 **Ora 15**

Latente		Sensibile	
rinnovo	545	rinnovo	303
locale	616	locale	1595
Totale	**1161**	**Totale**	**1898**



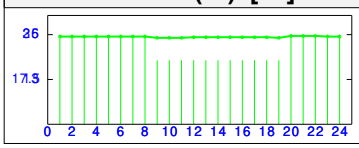
CARICO TOTALE ORARIO



SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa = 1482 W
Differenziale termostato = 1.0 °C
ERmax = 2021 W
ERmin = 0 W

TERMOSTATO (T) [°C]
TEMP. REALE (Tr) [°C]



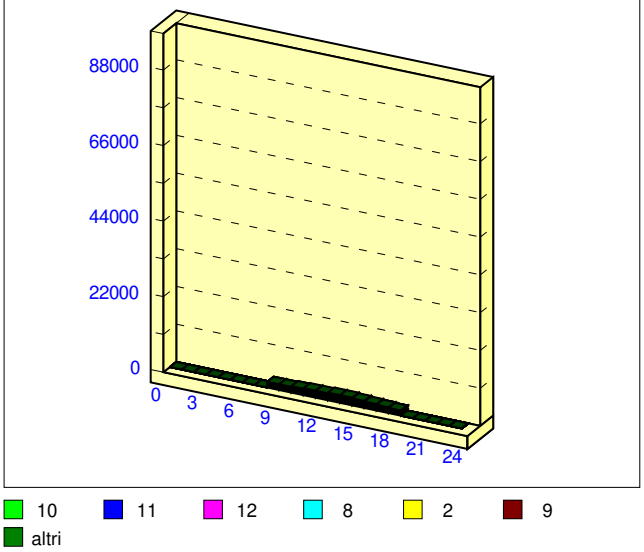
Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	25.5	25.5	25.5	25.5	25.0	25.1	25.1	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.1

DESCRIZIONE DI OGNI AMBIENTE

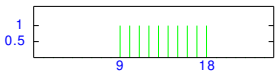
AMBIENTE :	020108	**Locale 020108**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	57.32	1.00	4.05	232.1

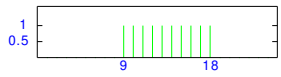
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 104	1	S	0.69		5.90	4.05	21.70	0.60
02	S.E 264	1	S	1.62		1.10	2.00	2.20	0.21
03	PTE 735	2	S	0.23		4.05	1.00	0.00	
04	PTE 719	1	S	0.10		6.20	1.00	0.00	
05	PTE 733	2	S	0.33		5.90	1.00	0.00	
06	PAV 502	1	TF	1.50		1.00	58.33	58.33	
07	SOF 600	1	TF	1.80		1.00	58.33	58.33	

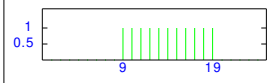
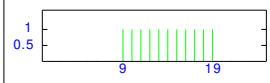
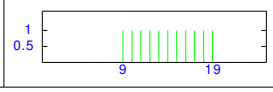
APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
08	0.50	116	32.2	
	Qop =	3.685	l/s pers.	

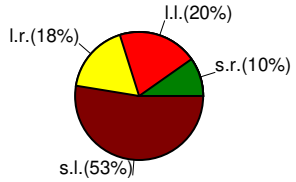
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
09	0.10	23	6.4	

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
10	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(9) 15	70 58	70	612 507	
11	Carico interno specifico per apporti illuminotecnici e varie	(17) 30	35 0	90	612 0	
12	Personal Computer (Fundamentals 1989)	(1) 2	300 0	50	350 0	

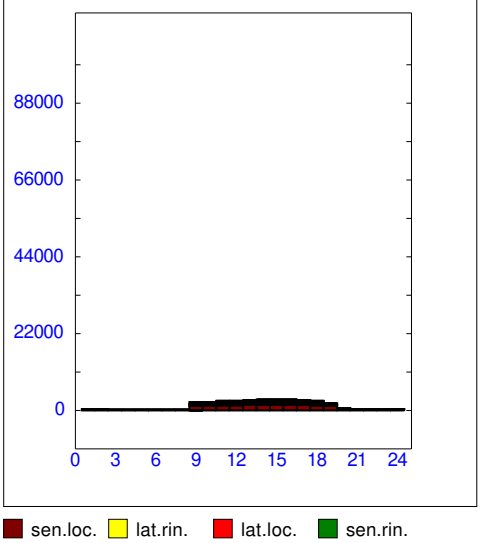
TOTALI: [W]

Carico Massimo teorico 3055 **Ora 15**

Latente		Sensibile	
rinnovo	535	rinnovo	297
locale	614	locale	1608
Totale	**1149**	**Totale**	**1905**



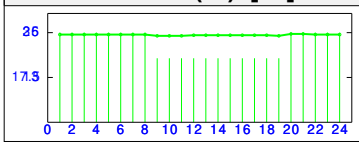
CARICO TOTALE ORARIO



SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa = 1482 W
Differenziale termostato = 1.0 °C
ERmax = 2009 W
ERmin = 0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



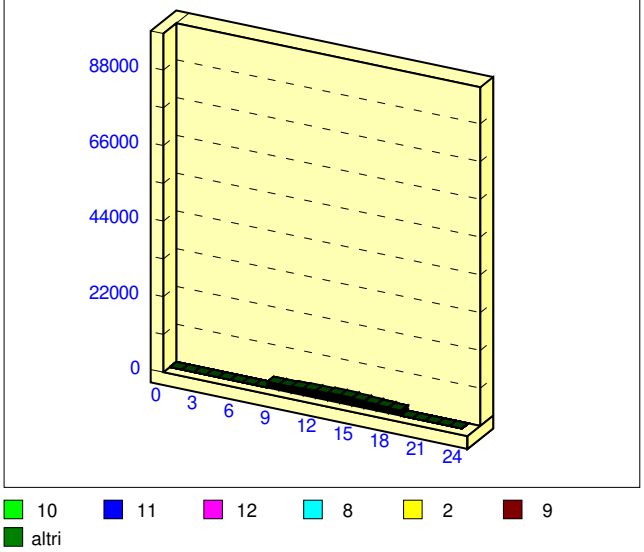
Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	25.4	25.4	25.5	25.5	25.0	25.1	25.1	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.1

DESCRIZIONE DI OGNI AMBIENTE

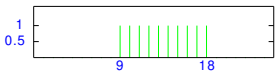
AMBIENTE :	020109	**Locale 020109**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	57.90	1.00	4.05	234.5

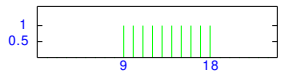
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 104	1	S	0.69		5.90	4.05	21.70	0.60
02	S.E 264	1	S	1.62		1.10	2.00	2.20	0.21
03	PTE 735	2	S	0.23		4.05	1.00	0.00	
04	PTE 719	1	S	0.10		6.20	1.00	0.00	
05	PTE 733	2	S	0.33		5.90	1.00	0.00	
06	PAV 502	1	TF	1.50		1.00	57.90	57.90	
07	SOF 600	1	TF	1.80		1.00	57.90	57.90	

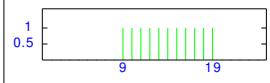
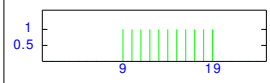
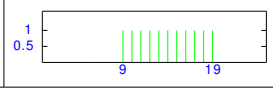
APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
08	0.50	117	32.6	
	Qop =	3.750	l/s pers.	

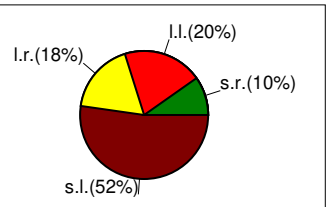
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
09	0.10	23	6.5	

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
10	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(9) 15	70 58	70	608 504	
11	Carico interno specifico per apporti illuminotecnici e varie	(17) 30	35 0	90	608 0	
12	Personal Computer (Fundamentals 1989)	(1) 2	300 0	50	347 0	

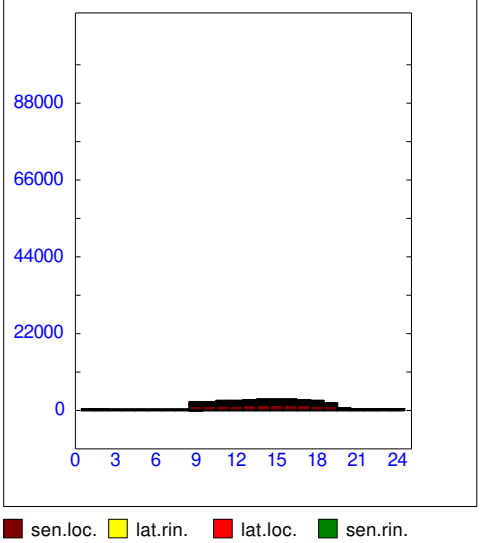
TOTALI: [W]

Carico Massimo teorico 3052 **Ora 15**

Latente		Sensibile	
rinnovo	541	rinnovo	300
locale	612	locale	1599
Totale	**1153**	**Totale**	**1899**



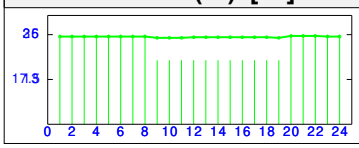
CARICO TOTALE ORARIO



SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa = 1481 W
Differenziale termostato = 1.0 °C
ERmax = 2003 W
ERmin = 0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



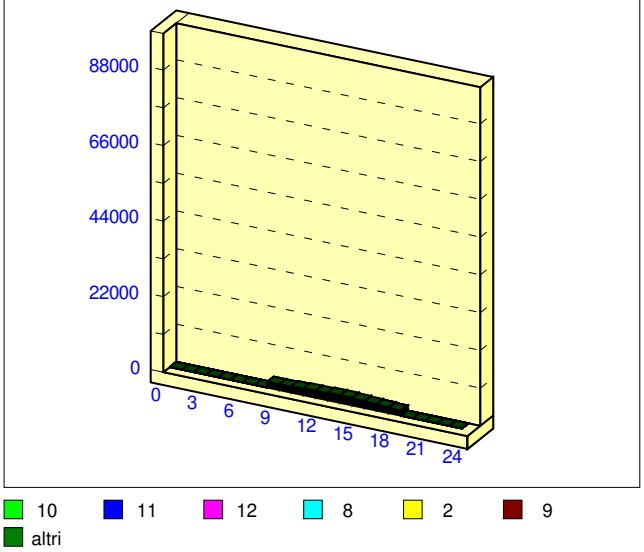
Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	25.4	25.5	25.5	25.5	25.0	25.1	25.1	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.1

DESCRIZIONE DI OGNI AMBIENTE

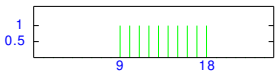
AMBIENTE :	020110	**Locale 020110**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	57.76	1.00	4.05	233.9

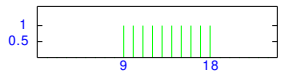
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 104	1	S	0.69		5.90	4.05	21.70	0.60
02	S.E 264	1	S	1.62		1.10	2.00	2.20	0.21
03	PTE 735	2	S	0.23		4.05	1.00	0.00	
04	PTE 719	1	S	0.10		6.20	1.00	0.00	
05	PTE 733	2	S	0.33		5.90	1.00	0.00	
06	PAV 502	1	TF	1.50		1.00	57.76	57.76	
07	SOF 600	1	TF	1.80		1.00	57.76	57.76	

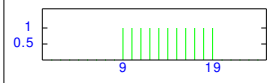
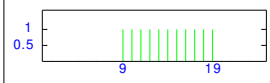
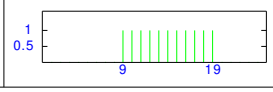
APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
08	0.50	117	32.5	
	Qop =	3.750	l/s pers.	

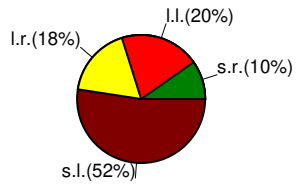
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
09	0.10	23	6.5	

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
10	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(9) 15	70 58	70	606 503	
11	Carico interno specifico per apporti illuminotecnici e varie	(17) 30	35 0	90	606 0	
12	Personal Computer (Fundamentals 1989)	(1) 2	300 0	50	347 0	

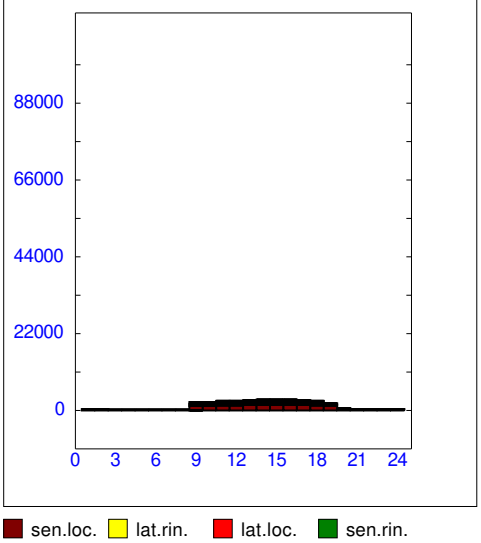
TOTALI: [W]

Carico Massimo teorico 3045 **Ora 15**

Latente		Sensibile	
rinnovo	539	rinnovo	300
locale	610	locale	1595
Totale	**1149**	**Totale**	**1895**



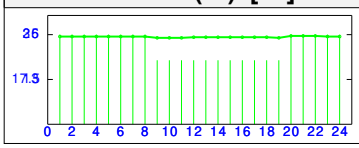
CARICO TOTALE ORARIO



SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa = 1479 W
Differenziale termostato = 1.0 °C
ERmax = 1999 W
ERmin = 0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	25.5	25.5	25.5	25.5	25.0	25.1	25.1	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.1

Progetto:

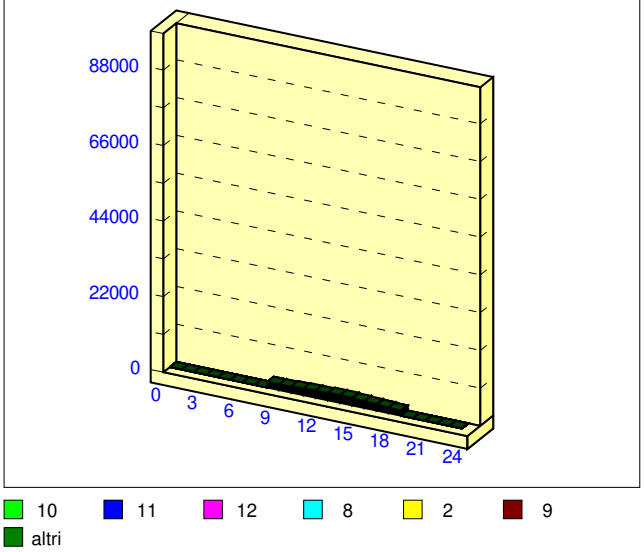
COMUNE DI PADOVA - CASTELLO DEI CARRARESI - ALA SUD - VALUTAZIONI POTENZE ASSORBITE INVERNALI ED ESTIVE rev. 19-05-2018

DESCRIZIONE DI OGNI AMBIENTE

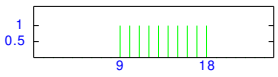
AMBIENTE :	020111	**Locale 020111**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	58.22	1.00	4.05	235.8

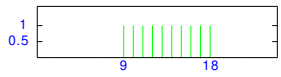
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 104	1	S	0.69		5.90	4.05	21.70	0.60
02	S.E 264	1	S	1.62		1.10	2.00	2.20	0.21
03	PTE 735	2	S	0.23		4.05	1.00	0.00	
04	PTE 719	1	S	0.10		6.20	1.00	0.00	
05	PTE 733	2	S	0.33		5.90	1.00	0.00	
06	PAV 502	1	TF	1.50		1.00	58.22	58.22	
07	SOF 600	1	TF	1.80		1.00	58.22	58.22	

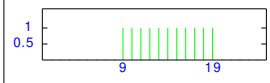
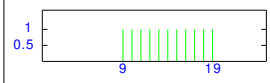
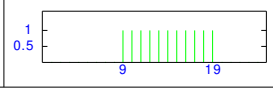
APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
08	0.50	118	32.8	
	Qop =	3.750	l/s pers.	

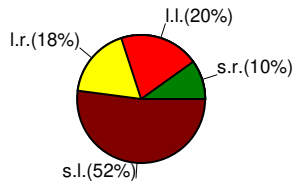
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
09	0.10	24	6.6	

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
10	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(9) 15	70 58	70	611 507	
11	Carico interno specifico per apporti illuminotecnici e varie	(17) 30	35 0	90	611 0	
12	Personal Computer (Fundamentals 1989)	(1) 2	300 0	50	349 0	

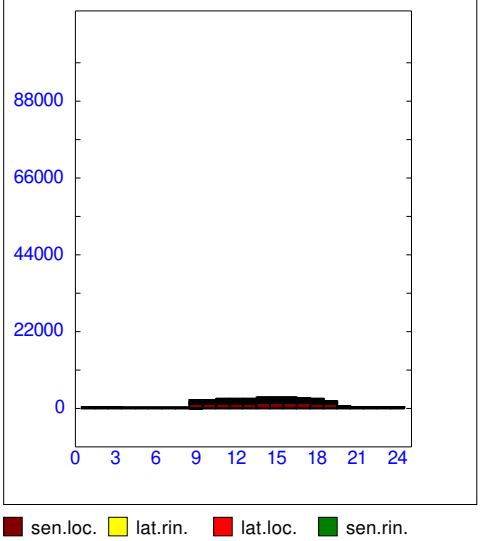
TOTALI: [W]

Carico Massimo teorico 3053 **Ora 15**

Latente		Sensibile	
rinnovo	544	rinnovo	302
locale	615	locale	1592
Totale	**1159**	**Totale**	**1894**



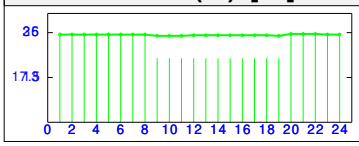
CARICO TOTALE ORARIO



SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa = 1480 W
Differenziale termostato = 1.0 °C
ERmax = 2018 W
ERmin = 0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



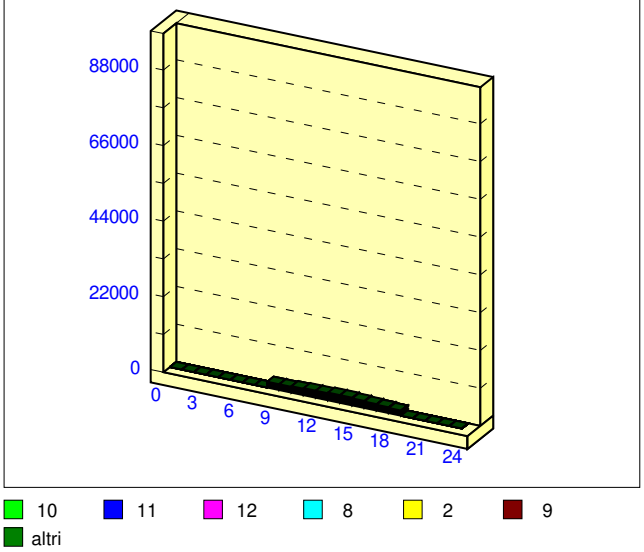
Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	25.5	25.5	25.5	25.5	25.0	25.1	25.1	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.1

DESCRIZIONE DI OGNI AMBIENTE

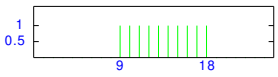
AMBIENTE :	020112	**Locale 020112**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	57.36	1.00	4.05	232.3

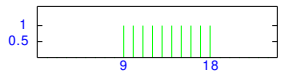
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 104	1	S	0.69		5.90	4.05	21.70	0.60
02	S.E 264	1	S	1.62		1.10	2.00	2.20	0.21
03	PTE 735	2	S	0.23		4.05	1.00	0.00	
04	PTE 719	1	S	0.10		6.20	1.00	0.00	
05	PTE 733	2	S	0.33		5.90	1.00	0.00	
06	PAV 502	1	TF	1.50		1.00	58.33	58.33	
07	SOF 600	1	TF	1.80		1.00	58.33	58.33	

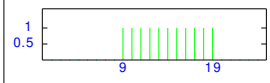
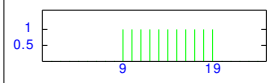
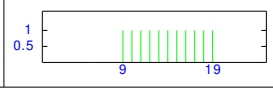
APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
08	0.50	116	32.3	
	Qop =	3.688	l/s pers.	

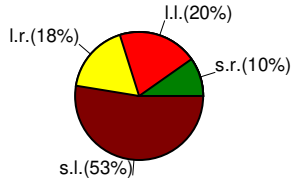
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
09	0.10	23	6.5	

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
10	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(9) 15	70 58	70	612 507	
11	Carico interno specifico per apporti illuminotecnici e varie	(17) 30	35 0	90	612 0	
12	Personal Computer (Fundamentals 1989)	(1) 2	300 0	50	350 0	

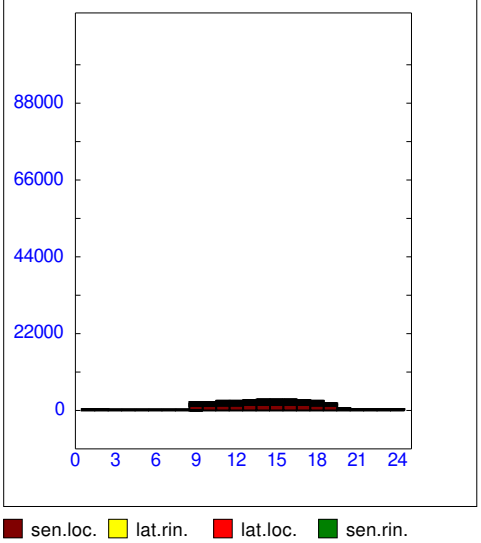
TOTALI: [W]

Carico Massimo teorico 3056 **Ora 15**

Latente		Sensibile	
rinnovo	535	rinnovo	298
locale	615	locale	1608
Totale	**1150**	**Totale**	**1906**



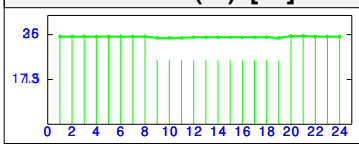
CARICO TOTALE ORARIO



SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa = 1482 W
Differenziale termostato = 1.0 °C
ERmax = 2010 W
ERmin = 0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



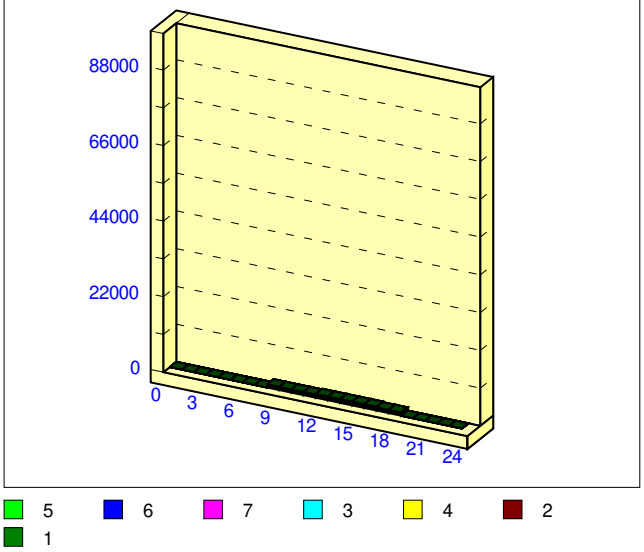
Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	25.4	25.4	25.5	25.5	25.0	25.1	25.1	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.1

DESCRIZIONE DI OGNI AMBIENTE

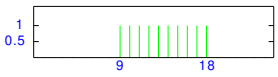
AMBIENTE :	020113	**Locale 020113**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	27.61	1.00	4.05	111.8

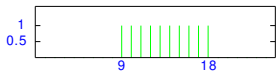
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	PAV 502	1	TF	1.50		1.00	27.61	27.61	
02	SOF 600	1	TF	1.80		1.00	27.61	27.61	

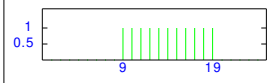
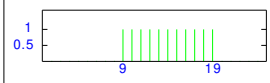
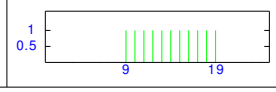
APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
03	0.50	56	15.5	
	Qop =	3.750	l/s pers.	

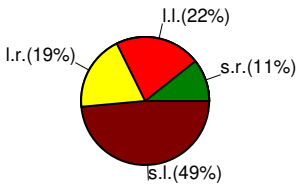
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
04	0.10	11	3.1	

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
05	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(4) 15	70 58	70	290 240	
06	Carico interno specifico per apporti illuminotecnici e varie	(8) 30	35 0	90	290 0	
07	Personal Computer (Fundamentals 1989)	(1) 2	300 0	50	166 0	

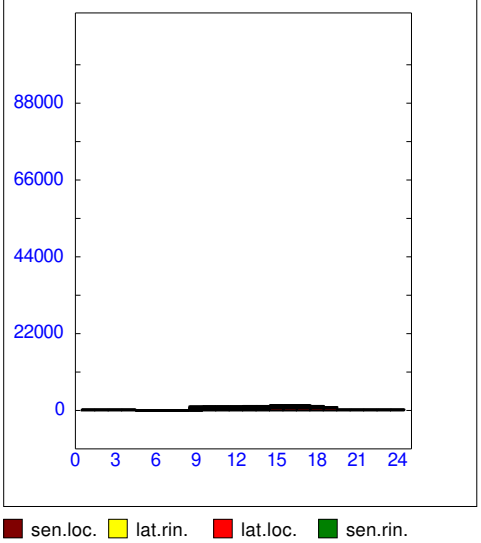
TOTALI: [W]

Carico Massimo teorico 1346 **Ora 15**

Latente		Sensibile	
rinnovo	258	rinnovo	143
locale	292	locale	653
Totale	**550**	**Totale**	**796**



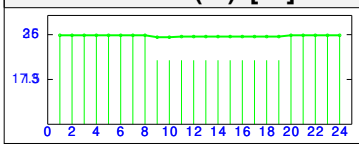
CARICO TOTALE ORARIO



SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa = 750 W
Differenziale termostato = 1.0 °C
ERmax = 753 W
ERmin = 0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



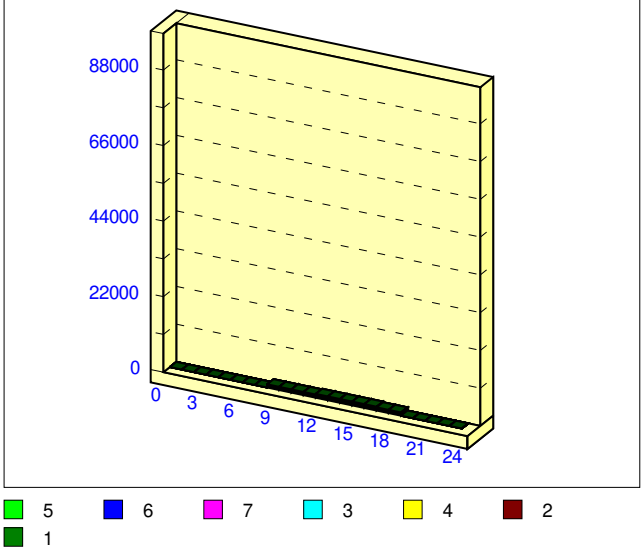
Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	25.8	25.8	25.8	25.8	25.3	25.3	25.4	25.4	25.5	25.5	25.5	25.5	25.5	25.5	25.4

DESCRIZIONE DI OGNI AMBIENTE

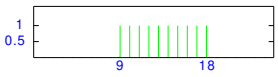
AMBIENTE :	020114	**Locale 020114**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	27.94	1.00	4.05	113.2

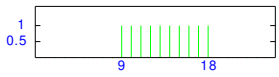
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	PAV 502	1	TF	1.50		1.00	27.94	27.94	
02	SOF 600	1	TF	1.80		1.00	27.94	27.94	

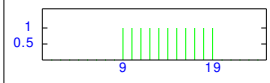
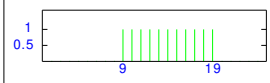
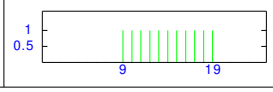
APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
03	0.50	57	15.7	
	Qop =	3.750	l/s pers.	

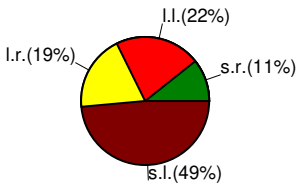
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
04	0.10	11	3.1	

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
05	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(4) 15	70 58	70	293 243	
06	Carico interno specifico per apporti illuminotecnici e varie	(8) 30	35 0	90	293 0	
07	Personal Computer (Fundamentals 1989)	(1) 2	300 0	50	168 0	

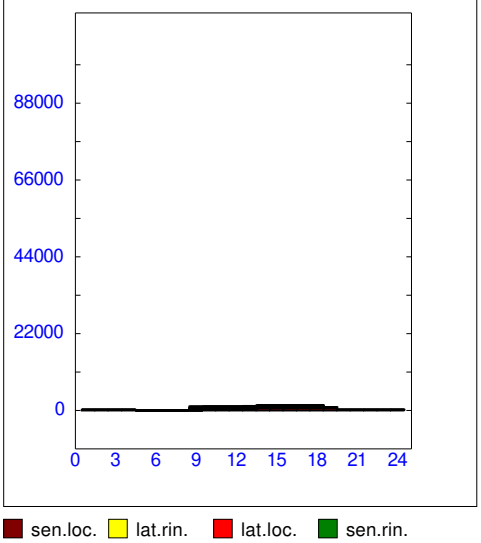
TOTALI: [W]

Carico Massimo teorico 1362 **Ora 15**

Latente		Sensibile	
rinnovo	261	rinnovo	145
locale	295	locale	661
Totale	**556**	**Totale**	**806**



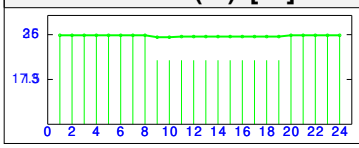
CARICO TOTALE ORARIO



SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa = 759 W
Differenziale termostato = 1.0 °C
ERmax = 762 W
ERmin = 0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	25.8	25.8	25.8	25.8	25.3	25.3	25.4	25.4	25.5	25.5	25.5	25.5	25.5	25.5	25.4

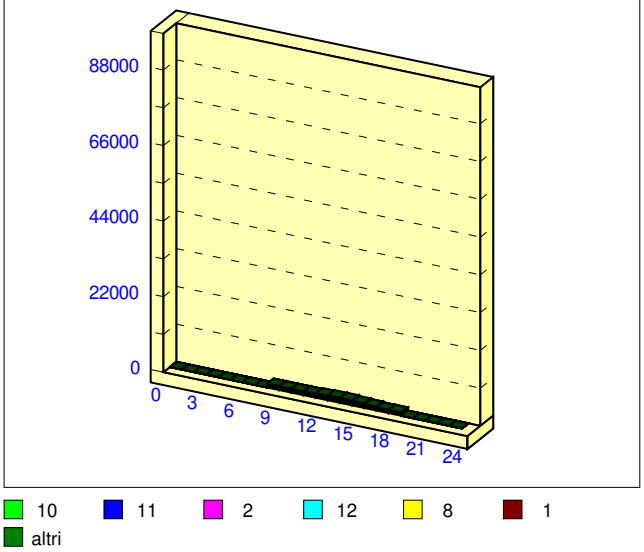
COMUNE DI PADOVA - CASTELLO DEI CARRARESI - ALA SUD - VALUTAZIONI POTENZE ASSORBITE INVERNALI ED ESTIVE rev. 19-05-2018

DESCRIZIONE DI OGNI AMBIENTE

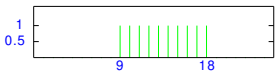
AMBIENTE :	020115	**Locale 020115**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	26.92	1.00	4.05	109.0

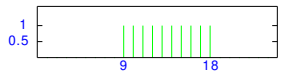
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 104	1	S	0.69		5.60	4.05	20.48	0.60
02	S.E 264	1	S	1.62		1.10	2.00	2.20	0.21
03	PTE 735	2	S	0.23		4.05	1.00	0.00	
04	PTE 719	1	S	0.10		6.20	1.00	0.00	
05	PTE 733	2	S	0.33		5.60	1.00	0.00	
06	PAV 502	1	TF	1.50		1.00	26.92	26.92	
07	SOF 600	1	TF	1.80		1.00	26.92	26.92	

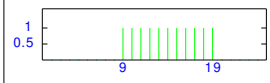
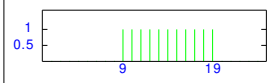
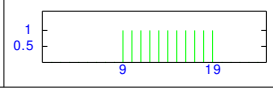
APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
08	0.50	55	15.1	
	Qop =	3.750	l/s pers.	

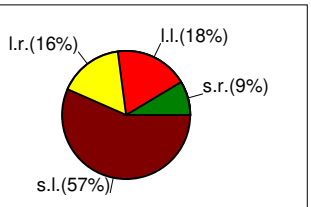
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
09	0.10	11	3.0	

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
10	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(4) 15	70 58	70	283 234	
11	Carico interno specifico per apporti illuminotecnici e varie	(8) 30	35 0	90	283 0	
12	Personal Computer (Fundamentals 1989)	(1) 2	300 0	50	162 0	

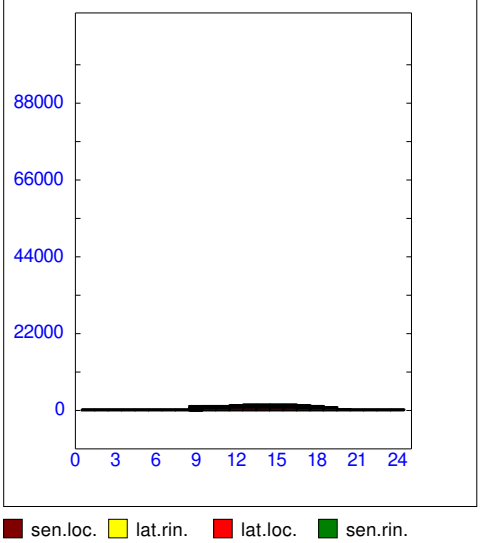
TOTALI: [W]

Carico Massimo teorico 1539 **Ora 14**

Latente		Sensibile	
rinnovo	251	rinnovo	132
locale	284	locale	871
Totale	**535**	**Totale**	**1003**



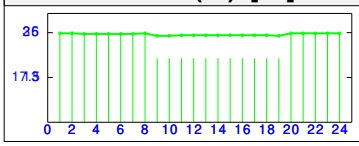
CARICO TOTALE ORARIO



SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa = 900 W
Differenziale termostato = 1.0 °C
ERmax = 1090 W
ERmin = 0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	25.7	25.7	25.7	25.8	25.1	25.2	25.2	25.3	25.3	25.3	25.3	25.3	25.3	25.2	25.2

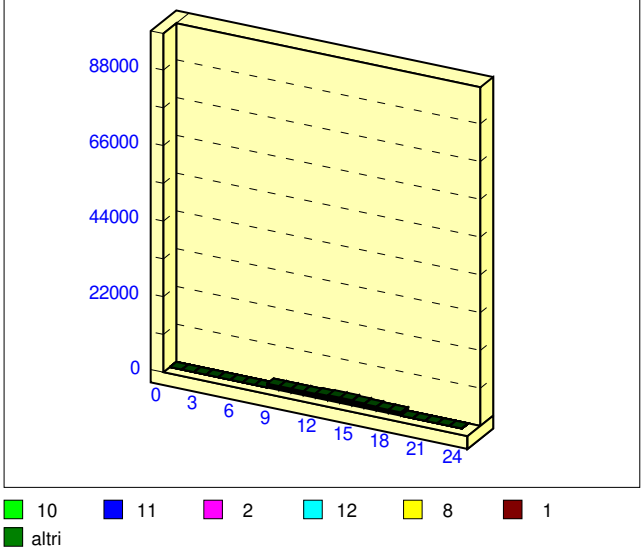
COMUNE DI PADOVA - CASTELLO DEI CARRARESI - ALA SUD - VALUTAZIONI POTENZE ASSORBITE INVERNALI ED ESTIVE rev. 19-05-2018

DESCRIZIONE DI OGNI AMBIENTE

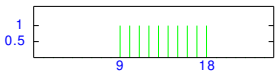
AMBIENTE :	020116	**Locale 020116**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	27.55	1.00	4.05	111.6

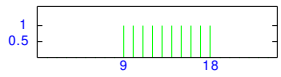
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 104	1	S	0.69		5.80	4.05	21.29	0.60
02	S.E 264	1	S	1.62		1.10	2.00	2.20	0.21
03	PTE 735	2	S	0.23		4.05	1.00	0.00	
04	PTE 719	1	S	0.10		6.20	1.00	0.00	
05	PTE 733	2	S	0.33		5.80	1.00	0.00	
06	PAV 502	1	TF	1.50		1.00	27.55	27.55	
07	SOF 600	1	TF	1.80		1.00	27.55	27.55	

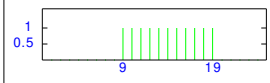
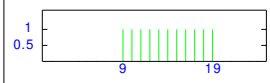
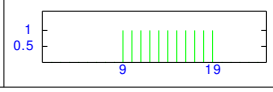
APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
08	0.50	56	15.5	
	Qop =	3.750	l/s pers.	

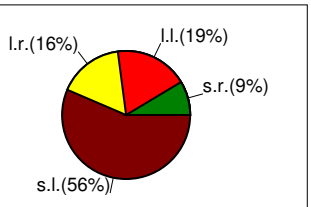
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
09	0.10	11	3.1	

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
10	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(4) 15	70 58	70	289 240	
11	Carico interno specifico per apporti illuminotecnici e varie	(8) 30	35 0	90	289 0	
12	Personal Computer (Fundamentals 1989)	(1) 2	300 0	50	165 0	

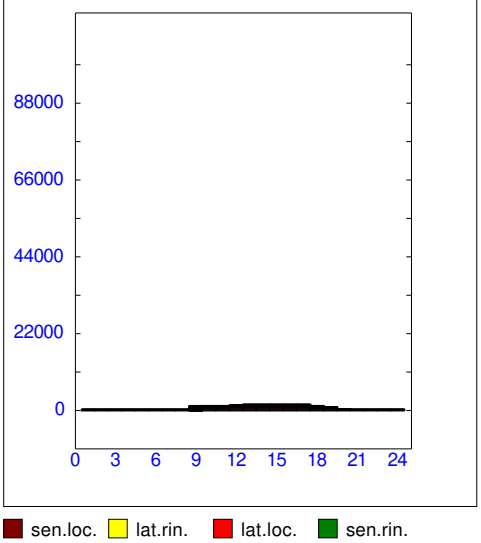
TOTALI: [W]

Carico Massimo teorico 1572 **Ora 14**

Latente		Sensibile	
rinnovo	257	rinnovo	136
locale	291	locale	888
Totale	**548**	**Totale**	**1024**



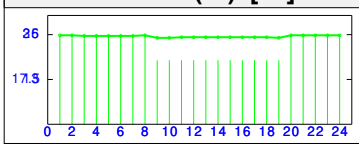
CARICO TOTALE ORARIO



SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa = 919 W
Differenziale termostato = 1.0 °C
ERmax = 1112 W
ERmin = 0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	25.7	25.7	25.7	25.8	25.1	25.2	25.2	25.3	25.3	25.3	25.3	25.3	25.3	25.2	25.2

Progetto:

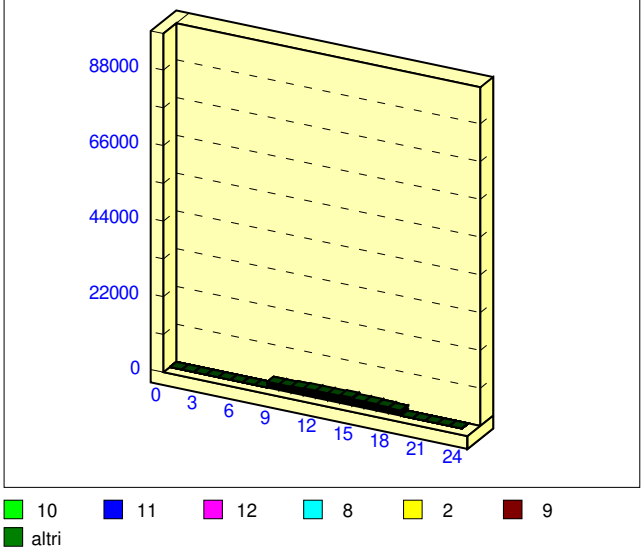
COMUNE DI PADOVA - CASTELLO DEI CARRARESI - ALA SUD - VALUTAZIONI POTENZE ASSORBITE INVERNALI ED ESTIVE rev. 19-05-2018

DESCRIZIONE DI OGNI AMBIENTE

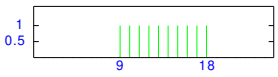
AMBIENTE :	020117	**Locale 020117**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	56.60	1.00	4.05	229.2

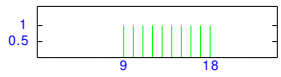
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 104	1	S	0.69		5.50	4.05	20.07	0.60
02	S.E 264	1	S	1.62		1.10	2.00	2.20	0.21
03	PTE 735	2	S	0.23		4.05	1.00	0.00	
04	PTE 719	1	S	0.10		6.20	1.00	0.00	
05	PTE 733	2	S	0.33		5.50	1.00	0.00	
06	PAV 502	1	TF	1.50		1.00	56.60	56.60	
07	SOF 600	1	TF	1.80		1.00	56.60	56.60	

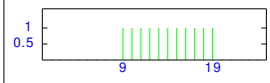
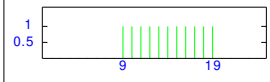
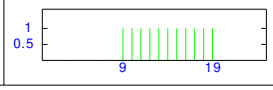
APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
08	0.50	115	31.8	
	Qop =	3.750	l/s pers.	

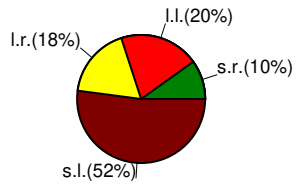
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
09	0.10	23	6.4	

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
10	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(8) 15	70 58	70	594 492	
11	Carico interno specifico per apporti illuminotecnici e varie	(17) 30	35 0	90	594 0	
12	Personal Computer (Fundamentals 1989)	(1) 2	300 0	50	340 0	

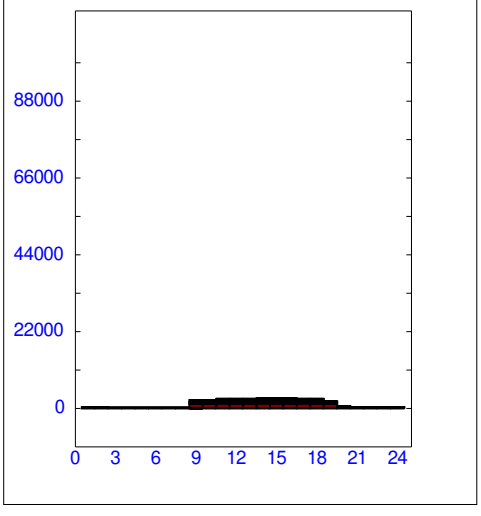
TOTALI: [W]

Carico Massimo teorico 2970 **Ora 15**

Latente		Sensibile	
rinnovo	528	rinnovo	294
locale	598	locale	1549
Totale	**1126**	**Totale**	**1843**



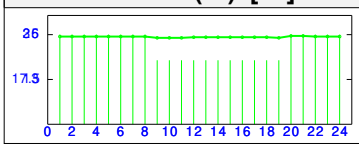
CARICO TOTALE ORARIO



SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa = 1423 W
Differenziale termostato = 1.0 °C
ERmax = 1944 W
ERmin = 0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	25.5	25.5	25.5	25.5	25.0	25.1	25.1	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.1

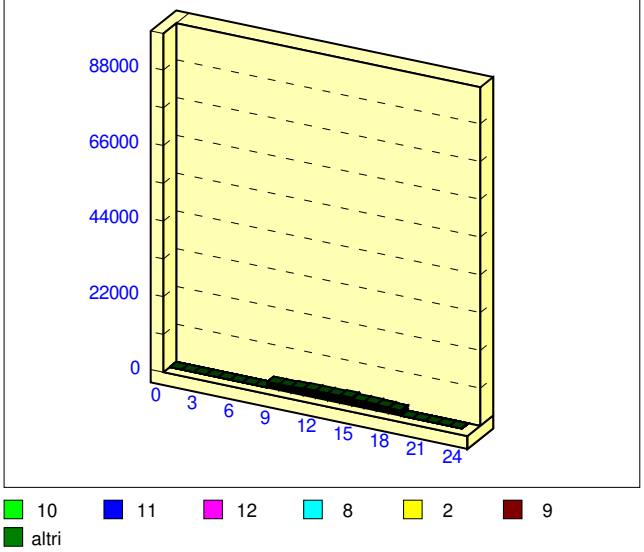
COMUNE DI PADOVA - CASTELLO DEI CARRARESI - ALA SUD - VALUTAZIONI POTENZE ASSORBITE INVERNALI ED ESTIVE rev. 19-05-2018

DESCRIZIONE DI OGNI AMBIENTE

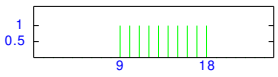
AMBIENTE :	020118	**Locale 020118**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	55.97	1.00	4.05	226.7

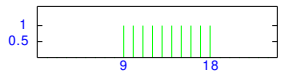
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 104	1	S	0.69		5.50	4.05	20.07	0.60
02	S.E 264	1	S	1.62		1.10	2.00	2.20	0.21
03	PTE 735	2	S	0.23		4.05	1.00	0.00	
04	PTE 719	1	S	0.10		6.20	1.00	0.00	
05	PTE 733	2	S	0.33		5.50	1.00	0.00	
06	PAV 502	1	TF	1.50		1.00	55.97	55.97	
07	SOF 600	1	TF	1.80		1.00	55.97	55.97	

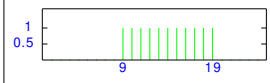
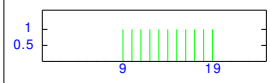
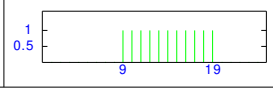
APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
08	0.50	113	31.5	
	Qop =	3.750	l/s pers.	

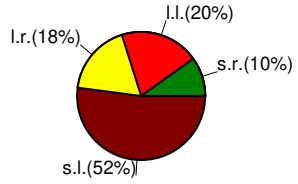
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
09	0.10	23	6.3	

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
10	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(8) 15	70 58	70	588 487	
11	Carico interno specifico per apporti illuminotecnici e varie	(17) 30	35 0	90	588 0	
12	Personal Computer (Fundamentals 1989)	(1) 2	300 0	50	336 0	

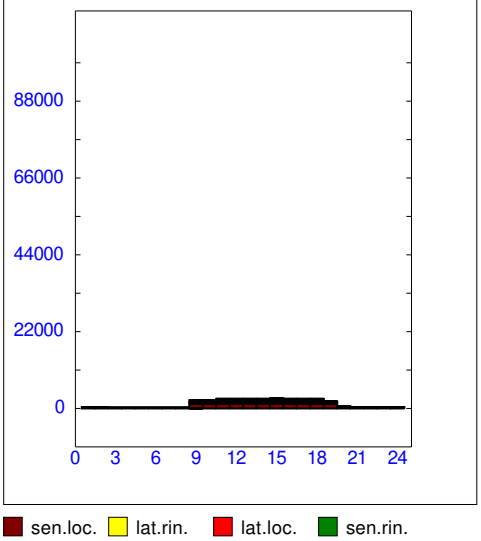
TOTALI: [W]

Carico Massimo teorico 2939 **Ora 15**

Latente		Sensibile	
rinnovo	523	rinnovo	290
locale	591	locale	1534
Totale	**1114**	**Totale**	**1824**



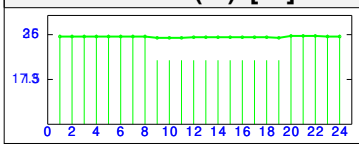
CARICO TOTALE ORARIO



SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa = 1413 W
Differenziale termostato = 1.0 °C
ERmax = 1924 W
ERmin = 0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	25.5	25.5	25.5	25.5	25.0	25.1	25.1	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.1

Progetto:

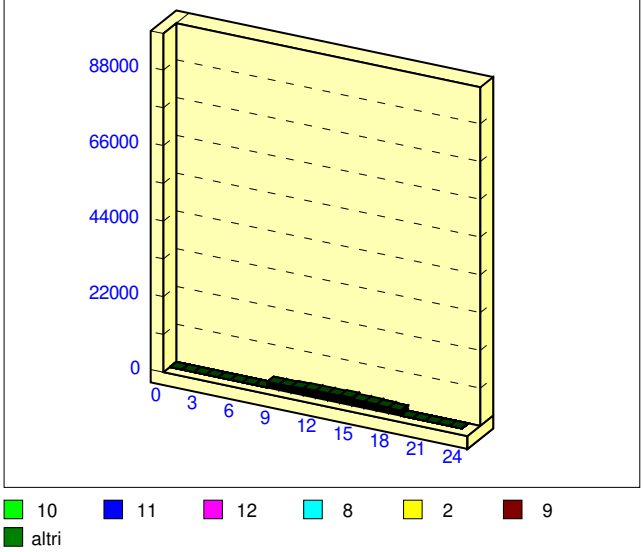
COMUNE DI PADOVA - CASTELLO DEI CARRARESI - ALA SUD - VALUTAZIONI POTENZE ASSORBITE INVERNALI ED ESTIVE rev. 19-05-2018

DESCRIZIONE DI OGNI AMBIENTE

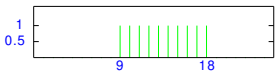
AMBIENTE :	020119	**Locale 020119**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	55.83	1.00	4.05	226.1

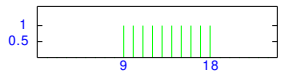
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 104	1	S	0.69		5.50	4.05	20.07	0.60
02	S.E 264	1	S	1.62		1.10	2.00	2.20	0.21
03	PTE 735	2	S	0.23		4.05	1.00	0.00	
04	PTE 719	1	S	0.10		6.20	1.00	0.00	
05	PTE 733	2	S	0.33		5.50	1.00	0.00	
06	PAV 502	1	TF	1.50		1.00	55.83	55.83	
07	SOF 600	1	TF	1.80		1.00	55.83	55.83	

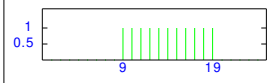
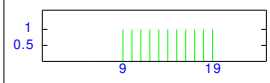
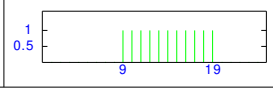
APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
08	0.50	113	31.4	
	Qop =	3.750	l/s pers.	

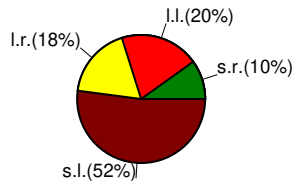
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
09	0.10	23	6.3	

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
10	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(8) 15	70 58	70	586 486	
11	Carico interno specifico per apporti illuminotecnici e varie	(17) 30	35 0	90	586 0	
12	Personal Computer (Fundamentals 1989)	(1) 2	300 0	50	335 0	

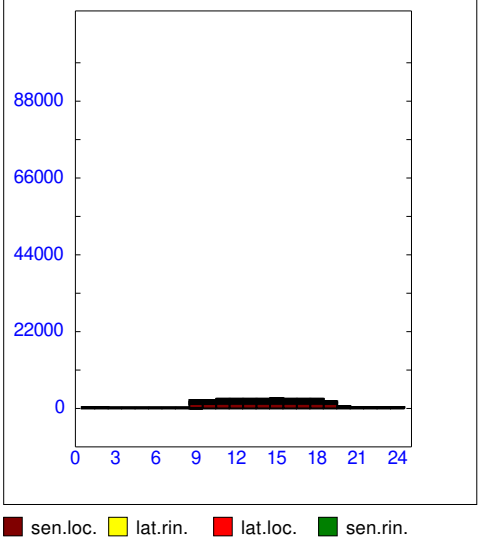
TOTALI: [W]

Carico Massimo teorico 2932 **Ora 15**

Latente		Sensibile	
rinnovo	521	rinnovo	290
locale	590	locale	1531
Totale	**1111**	**Totale**	**1821**



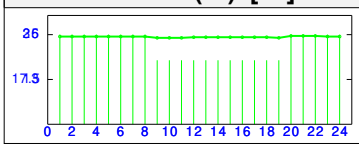
CARICO TOTALE ORARIO



SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa = 1411 W
Differenziale termostato = 1.0 °C
ERmax = 1920 W
ERmin = 0 W

TERMOSTATO (T) [°C]
TEMP. REALE (Tr) [°C]



Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	25.5	25.5	25.5	25.5	25.0	25.1	25.1	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.1

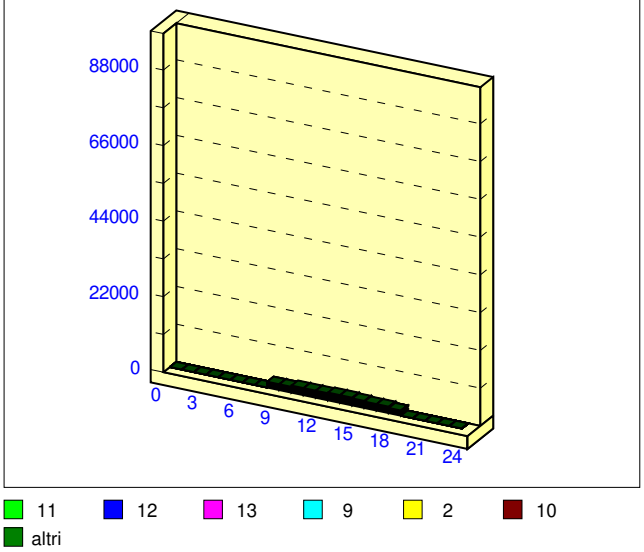
COMUNE DI PADOVA - CASTELLO DEI CARRARESI - ALA SUD - VALUTAZIONI POTENZE ASSORBITE INVERNALI ED ESTIVE rev. 19-05-2018

DESCRIZIONE DI OGNI AMBIENTE

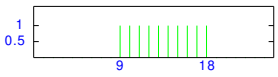
AMBIENTE :	020120	**Locale 020120**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	59.59	1.00	4.05	241.3

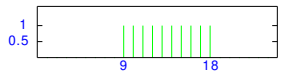
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 104	1	S	0.69		6.60	4.05	24.53	0.60
02	S.E 264	1	S	1.62		1.10	2.00	2.20	0.21
03	PTE 735	2	S	0.23		4.05	1.00	0.00	
04	PTE 719	1	S	0.10		6.20	1.00	0.00	
05	PTE 733	2	S	0.33		6.60	1.00	0.00	
06	PAV 502	1	TF	1.50		1.00	59.59	59.59	
07	SOF 600	1	TF	1.80		1.00	59.59	59.59	
08	P.I 334	1	TF	1.12		12.30	4.05	49.81	

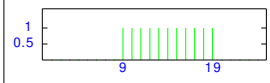
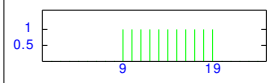
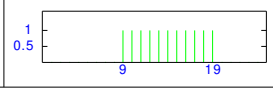
APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
09	0.50	121	33.5	
	Qop =	3.750	l/s pers.	

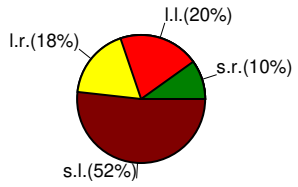
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
10	0.10	24	6.7	

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
11	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(9) 15	70 58	70	626 518	
12	Carico interno specifico per apporti illuminotecnici e varie	(18) 30	35 0	90	626 0	
13	Personal Computer (Fundamentals 1989)	(1) 2	300 0	50	358 0	

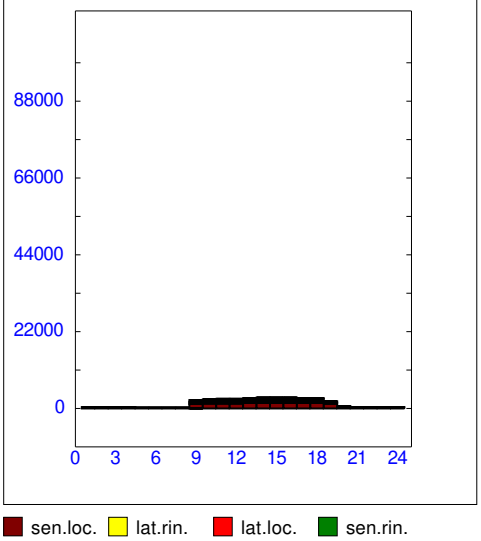
TOTALI: [W]

Carico Massimo teorico 3107 **Ora 15**

Latente		Sensibile	
rinnovo	556	rinnovo	309
locale	630	locale	1612
Totale	**1186**	**Totale**	**1921**



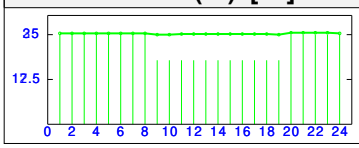
CARICO TOTALE ORARIO



SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa = 1405 W
Differenziale termostato = 1.0 °C
ERmax = 1908 W
ERmin = 0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



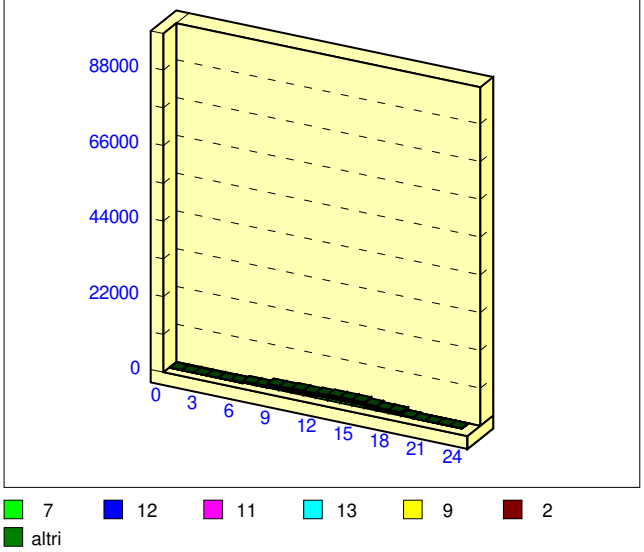
Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	25.4	25.4	25.4	25.4	25.0	25.1	25.1	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.1

DESCRIZIONE DI OGNI AMBIENTE

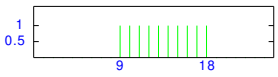
AMBIENTE :	030101	**Locale 030101**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	19.30	1.00	4.45	85.9

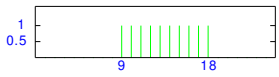
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 103	1	E	0.84		3.20	4.45	12.04	0.60
02	S.E 264	1	E	1.62		1.10	2.00	2.20	0.21
03	PTE 735	2	E	0.23		4.45	1.00	0.00	
04	PTE 719	1	E	0.10		6.20	1.00	0.00	
05	PTE 733	2	E	0.33		3.20	1.00	0.00	
06	PAV 502	1	TF	1.50		1.00	19.30	19.30	
07	SOF 602	1		0.76		6.15	3.40	20.91	0.90
08	P.I 341	1	TF	0.56		6.10	3.90	23.79	

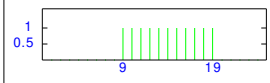
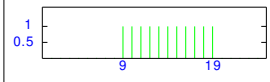
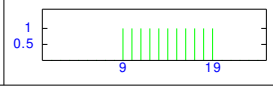
APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
09	0.50	43	11.9	
	Qop =	4.121	l/s pers.	

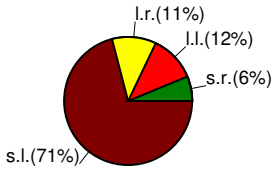
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
10	0.10	9	2.4	

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
11	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(3) 15	70 58	70	203 168	
12	Carico interno specifico per apporti illuminotecnici e varie	(6) 30	35 0	90	203 0	
13	Personal Computer (Fundamentals 1989)	(0) 2	300 0	50	116 0	

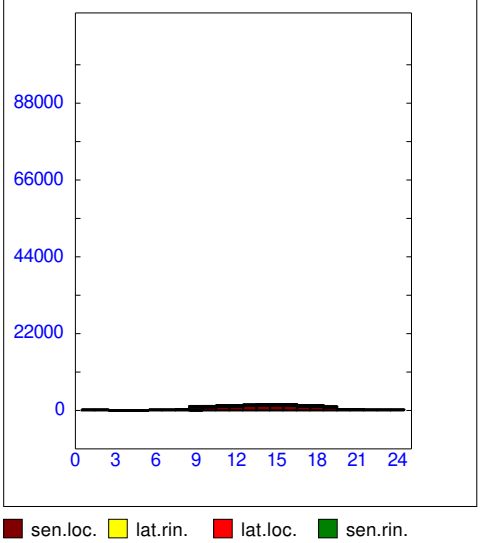
TOTALI: [W]

Carico Massimo teorico 1774 **Ora 15**

Latente		Sensibile	
rinnovo	198	rinnovo	110
locale	208	locale	1258
Totale	**406**	**Totale**	**1368**



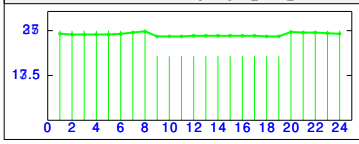
CARICO TOTALE ORARIO



SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa = 1125 W
Differenziale termostato = 1.0 °C
ERmax = 1136 W
ERmin = 0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	25.8	26.0	26.4	26.9	25.2	25.3	25.4	25.4	25.5	25.5	25.5	25.5	25.4	25.3	25.2

Progetto:

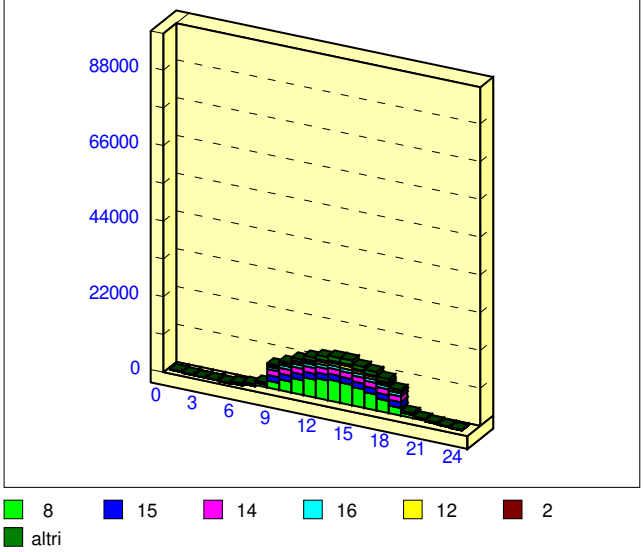
COMUNE DI PADOVA - CASTELLO DEI CARRARESI - ALA SUD - VALUTAZIONI POTENZE ASSORBITE INVERNALI ED ESTIVE rev. 19-05-2018

DESCRIZIONE DI OGNI AMBIENTE

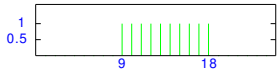
AMBIENTE :	030102	**Locale 030102**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	162.75	1.00	4.25	691.7

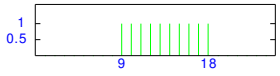
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 103	1	N	0.84		72.00	3.90	258.80	0.60
02	S.E 264	10	N	1.62		1.10	2.00	22.00	0.21
03	PTE 735	6	N	0.23		3.90	1.00	0.00	
04	PTE 719	10	N	0.10		6.20	1.00	0.00	
05	PTE 733	1	N	0.33		72.00	1.00	0.00	
06	PTE 737	1	N	0.40		72.00	1.00	0.00	
07	PAV 502	1	TF	1.50		1.00	162.75	162.75	
08	SOF 602	1		0.76		2.25	74.30	167.17	0.90
09	P.I 328	1	TF	1.64		3.20	4.25	13.60	
10	P.I 341	1	TF	0.56		3.00	3.90	7.74	
11	S.I 403	1	TF	1.06		1.65	2.40	3.96	

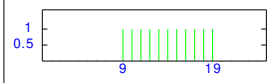
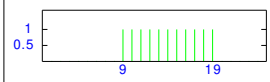
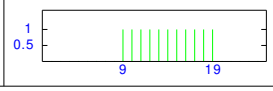
APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
12	0.50	346	96.1	
	Qop =	3.935	l/s pers.	

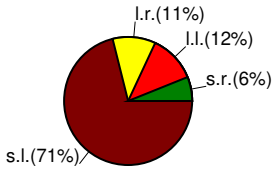
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
13	0.10	69	19.2	

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
14	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(24) 15	70 58	70	1709 1416	
15	Carico interno specifico per apporti illuminotecnici e varie	(49) 30	35 0	90	1709 0	
16	Personal Computer (Fundamentals 1989)	(3) 2	300 0	50	977 0	

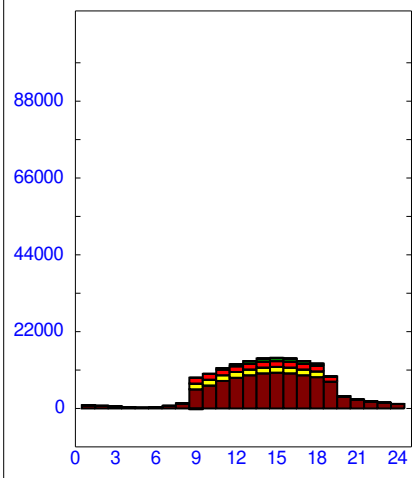
TOTALI: [W]

Carico Massimo teorico 14527 **Ora 15**

Latente		Sensibile	
rinnovo	1594	rinnovo	886
locale	1735	locale	10311
Totale	**3329**	**Totale**	**11197**



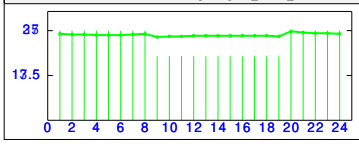
CARICO TOTALE ORARIO



SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa = 10197 W
Differenziale termostato = 1.0 °C
ERmax = 10273 W
ERmin = 0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



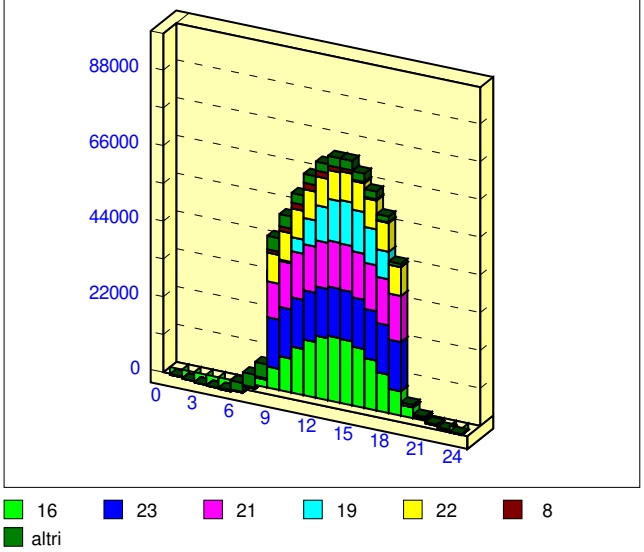
Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	25.6	25.7	25.8	26.1	25.1	25.2	25.3	25.4	25.4	25.5	25.5	25.5	25.4	25.4	25.2

DESCRIZIONE DI OGNI AMBIENTE

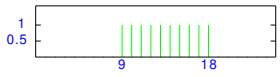
AMBIENTE :	030103	**Locale 030103**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	478.96	1.00	5.20	2490.6

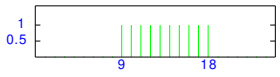
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 102	1	E	0.66		9.60	5.20	27.92	0.60
02	S.E 264	10	E	1.62		1.10	2.00	22.00	0.21
03	PTE 735	2	E	0.23		5.20	1.00	0.00	
04	PTE 719	10	E	0.10		6.20	1.00	0.00	
05	PTE 733	1	E	0.33		9.60	1.00	0.00	
06	PTE 737	1	E	0.40		10.20	1.00	0.00	
07	P.E 104	1	S	0.69		45.80	3.90	159.53	0.60
08	S.E 264	8	S	1.62		1.10	2.00	17.60	0.21
09	S.E 264	1	S	1.62		1.35	1.10	1.49	0.21
10	PTE 735	4	S	0.23		3.90	1.00	0.00	
11	PTE 719	8	S	0.10		6.20	1.00	0.00	
12	PTE 719	1	S	0.10		4.90	1.00	0.00	
13	PTE 733	1	S	0.33		45.80	1.00	0.00	
14	PTE 737	1	S	0.40		45.80	1.00	0.00	
15	PAV 502	1	TF	1.50		1.00	478.96	478.96	
16	SOF 602	1		0.76		11.35	45.80	519.83	0.90
17	P.I 328	1	TF	1.64		10.60	5.20	52.24	
18	S.I 403	1	TF	1.06		1.20	2.40	2.88	

APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
19	2.00	4981	1383.8	
	Qop =	7.223	l/s pers.	

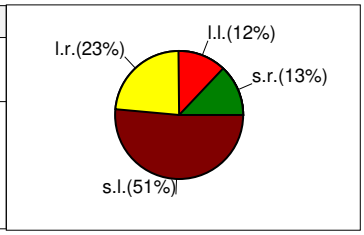
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
20	0.10	249	69.2	

..... continua

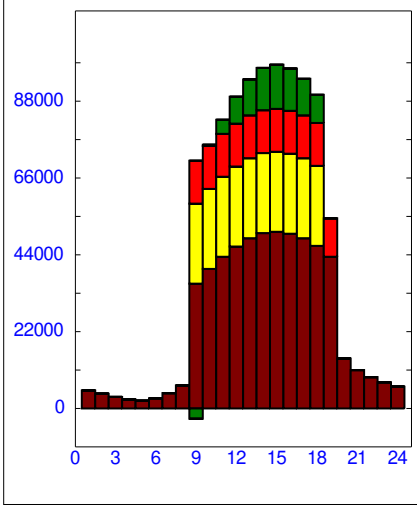
TOTALI: [W]

Carico Massimo teorico 98873 **Ora 15**

Latente		Sensibile	
rinnovo	22964	rinnovo	12765
locale	12260	locale	50884
Totale	**35224**	**Totale**	**63649**



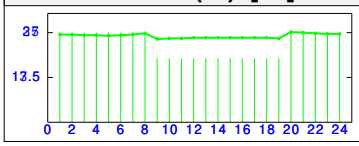
CARICO TOTALE ORARIO



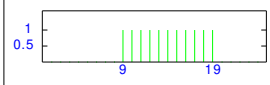
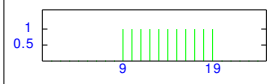
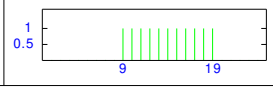
SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa = 53386 W
Differenziale termostato = 1.0 °C
ERmax = 53392 W
ERmin = 0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	26.1	26.2	26.4	26.7	25.1	25.2	25.3	25.4	25.4	25.5	25.5	25.5	25.4	25.4	25.2

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
21	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(192) 40	70 58	70	13411 11112	
22	Carico interno specifico per apporti illuminotecnici e varie	(239) 50	35 0	90	8382 0	
23	Personal Computer (Fundamentals 1989)	(48) 10	300 0	50	14369 0	

Progetto:

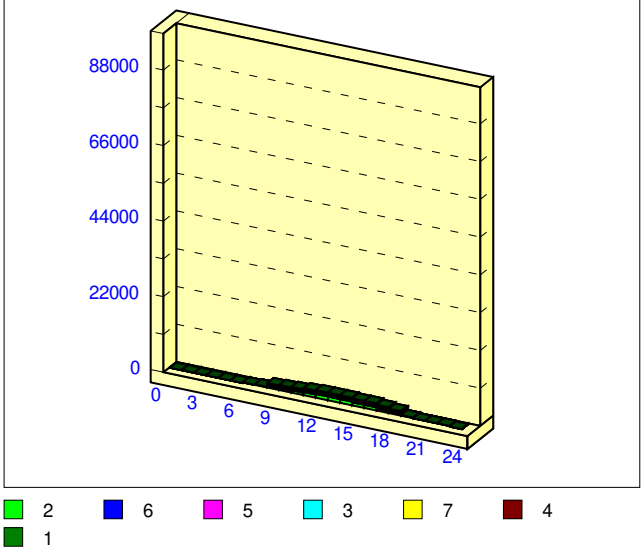
COMUNE DI PADOVA - CASTELLO DEI CARRARESI - ALA SUD - VALUTAZIONI POTENZE ASSORBITE INVERNALI ED ESTIVE rev. 19-05-2018

DESCRIZIONE DI OGNI AMBIENTE

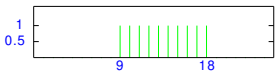
AMBIENTE :	030104	**Locale 030104**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	27.99	1.00	5.45	152.5

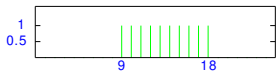
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	PAV 502	1	TF	1.50		1.00	27.99	27.99	
02	SOF 602	1		0.76		5.60	5.40	30.24	0.90

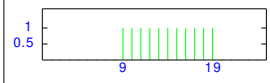
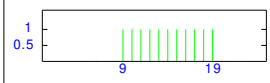
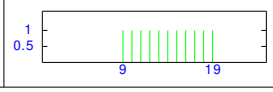
APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
03	0.50	76	21.2	
	Qop =	5.047	l/s pers.	

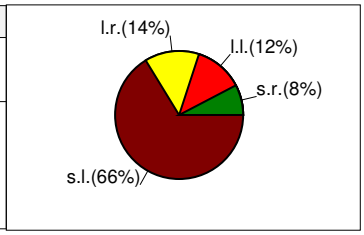
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
04	0.10	15	4.2	

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
05	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(4) 15	70 58	70	294 244	
06	Carico interno specifico per apporti illuminotecnici e varie	(8) 30	35 0	90	294 0	
07	Personal Computer (Fundamentals 1989)	(1) 2	300 0	50	168 0	

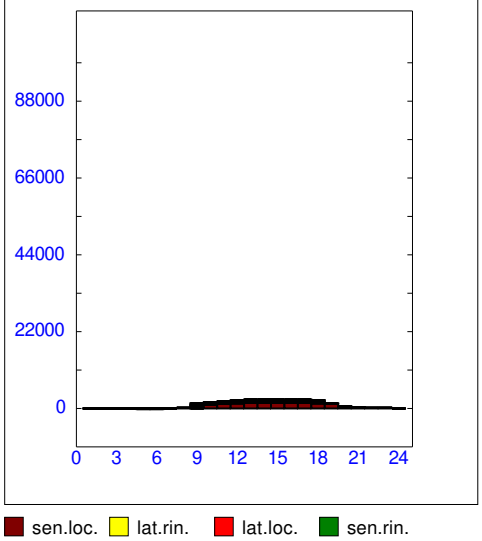
TOTALI: [W]

Carico Massimo teorico 2553 **Ora 15**

Latente		Sensibile	
rinnovo	352	rinnovo	195
locale	314	locale	1692
Totale	**666**	**Totale**	**1887**



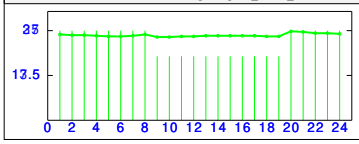
CARICO TOTALE ORARIO



SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa	=	1816 W
Differenziale termostato	=	1.0 °C
ERmax	=	1820 W
ERmin	=	0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	25.3	25.2	25.4	25.8	25.0	25.1	25.2	25.3	25.4	25.5	25.5	25.5	25.4	25.3	25.2

Progetto:

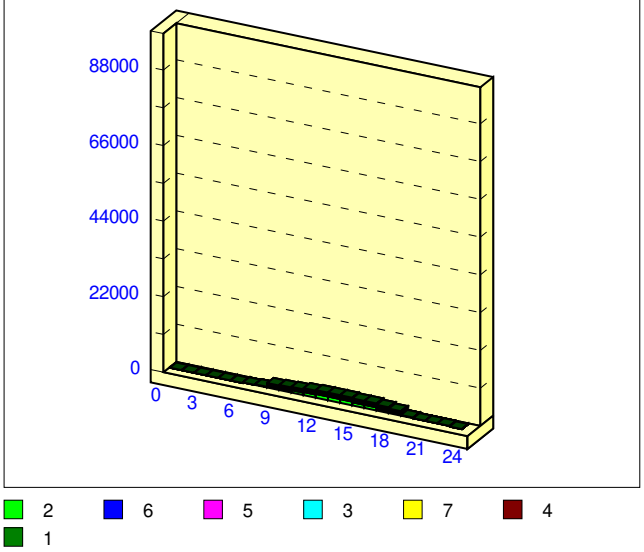
COMUNE DI PADOVA - CASTELLO DEI CARRARESI - ALA SUD - VALUTAZIONI POTENZE ASSORBITE INVERNALI ED ESTIVE rev. 19-05-2018

DESCRIZIONE DI OGNI AMBIENTE

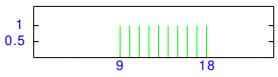
AMBIENTE :	030105	**Locale 030105**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	27.89	1.00	5.45	152.0

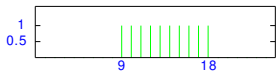
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	PAV 502	1	TF	1.50		1.00	27.89	27.89	
02	SOF 602	1		0.76		5.60	5.40	30.24	0.90

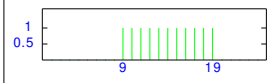
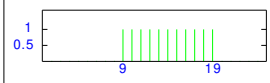
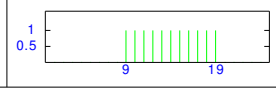
APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
03	0.50	76	21.1	
	Qop =	5.047	l/s pers.	

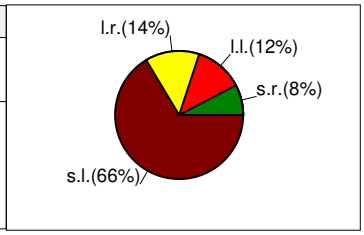
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
04	0.10	15	4.2	

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
05	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(4) 15	70 58	70	293 243	
06	Carico interno specifico per apporti illuminotecnici e varie	(8) 30	35 0	90	293 0	
07	Personal Computer (Fundamentals 1989)	(1) 2	300 0	50	167 0	

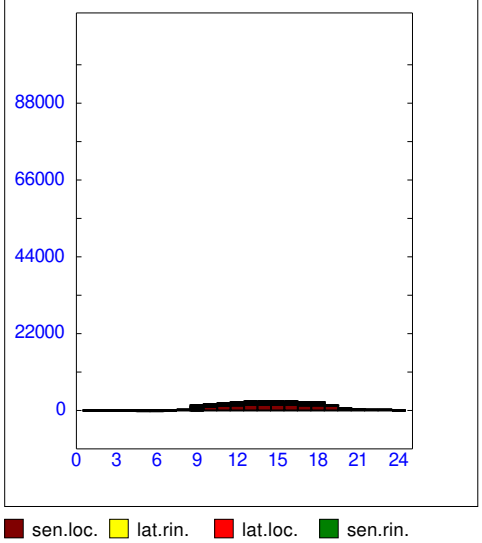
TOTALI: [W]

Carico Massimo teorico 2547 **Ora 15**

Latente		Sensibile	
rinnovo	350	rinnovo	195
locale	313	locale	1690
Totale	**663**	**Totale**	**1885**



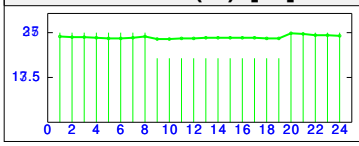
CARICO TOTALE ORARIO



SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa = 1813 W
Differenziale termostato = 1.0 °C
ERmax = 1817 W
ERmin = 0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



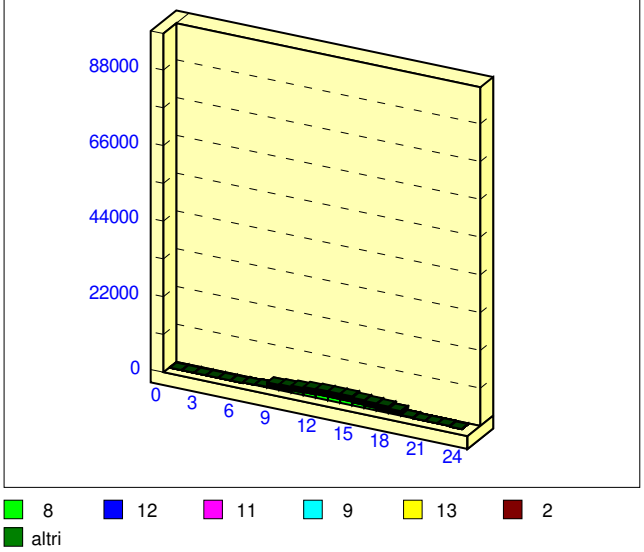
Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	25.3	25.2	25.4	25.8	25.0	25.1	25.2	25.3	25.4	25.5	25.5	25.5	25.4	25.3	25.2

DESCRIZIONE DI OGNI AMBIENTE

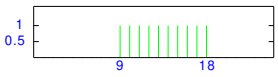
AMBIENTE :	030106	**Locale 030106**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	27.48	1.00	4.85	133.3

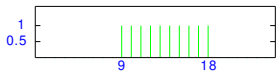
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 104	1	S	0.69		5.40	3.90	18.86	0.60
02	S.E 264	1	S	1.62		1.10	2.00	2.20	0.21
03	PTE 735	2	S	0.23		3.90	1.00	0.00	
04	PTE 719	1	S	0.10		6.20	1.00	0.00	
05	PTE 733	1	S	0.33		5.40	1.00	0.00	
06	PTE 737	1	S	0.40		5.40	1.00	0.00	
07	PAV 502	1	TF	1.50		1.00	27.48	27.48	
08	SOF 602	1		0.76		5.40	5.50	29.70	0.90

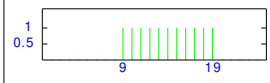
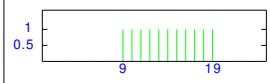
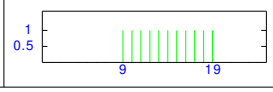
APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
09	0.50	67	18.5	
	Qop =	4.491	l/s pers.	

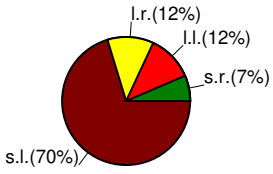
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
10	0.10	13	3.7	

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
11	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(4) 15	70 58	70	289 239	
12	Carico interno specifico per apporti illuminotecnici e varie	(8) 30	35 0	90	289 0	
13	Personal Computer (Fundamentals 1989)	(1) 2	300 0	50	165 0	

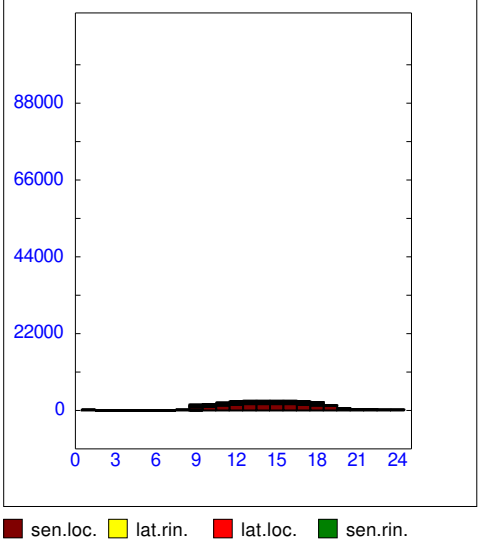
TOTALI: [W]

Carico Massimo teorico 2613 **Ora 15**

Latente		Sensibile	
rinnovo	307	rinnovo	171
locale	301	locale	1834
Totale	**608**	**Totale**	**2005**



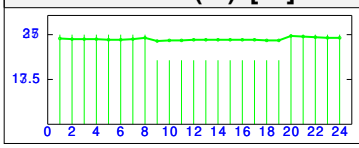
CARICO TOTALE ORARIO



SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa = 1726 W
Differenziale termostato = 1.0 °C
ERmax = 1733 W
ERmin = 0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



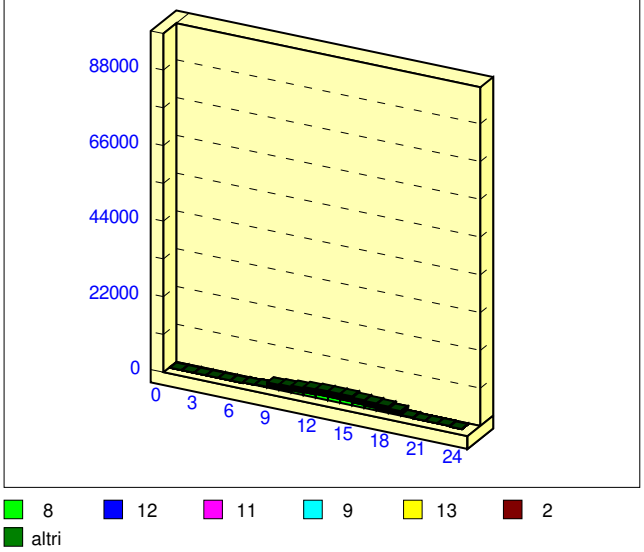
Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	25.5	25.5	25.6	26.0	25.1	25.2	25.3	25.4	25.5	25.5	25.5	25.5	25.4	25.3	25.2

DESCRIZIONE DI OGNI AMBIENTE

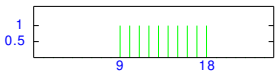
AMBIENTE :	030107	**Locale 030107**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	27.69	1.00	4.85	134.3

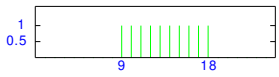
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 104	1	S	0.69		5.40	3.90	18.86	0.60
02	S.E 264	1	S	1.62		1.10	2.00	2.20	0.21
03	PTE 735	2	S	0.23		3.90	1.00	0.00	
04	PTE 719	1	S	0.10		6.20	1.00	0.00	
05	PTE 733	1	S	0.33		5.40	1.00	0.00	
06	PTE 737	1	S	0.40		5.40	1.00	0.00	
07	PAV 502	1	TF	1.50		1.00	27.69	27.69	
08	SOF 602	1		0.76		5.40	5.50	29.70	0.90

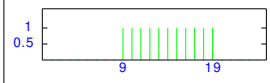
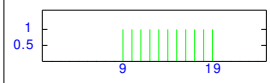
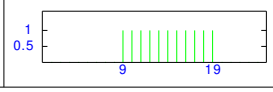
APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
09	0.50	67	18.7	
	Qop =	4.491	l/s pers.	

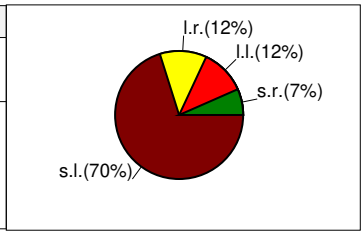
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
10	0.10	13	3.7	

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
11	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(4) 15	70 58	70	291 241	
12	Carico interno specifico per apporti illuminotecnici e varie	(8) 30	35 0	90	291 0	
13	Personal Computer (Fundamentals 1989)	(1) 2	300 0	50	166 0	

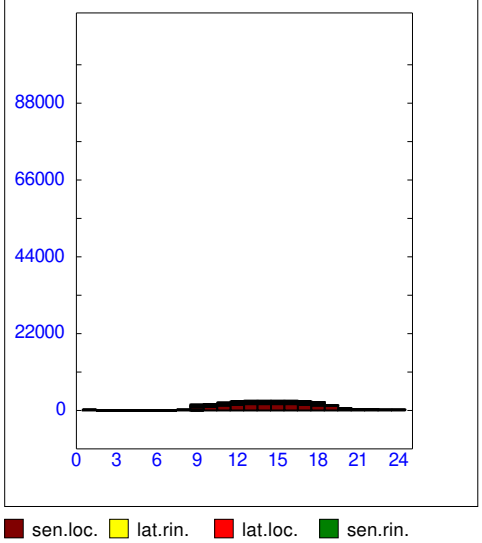
TOTALI: [W]

Carico Massimo teorico 2624 **Ora 15**

Latente		Sensibile	
rinnovo	310	rinnovo	172
locale	303	locale	1840
Totale	**613**	**Totale**	**2012**



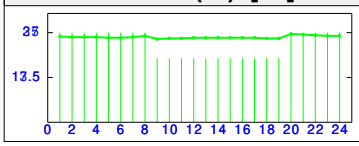
CARICO TOTALE ORARIO



SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa = 1731 W
Differenziale termostato = 1.0 °C
ERmax = 1739 W
ERmin = 0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	25.5	25.5	25.6	26.0	25.1	25.2	25.3	25.4	25.5	25.5	25.5	25.5	25.4	25.3	25.2

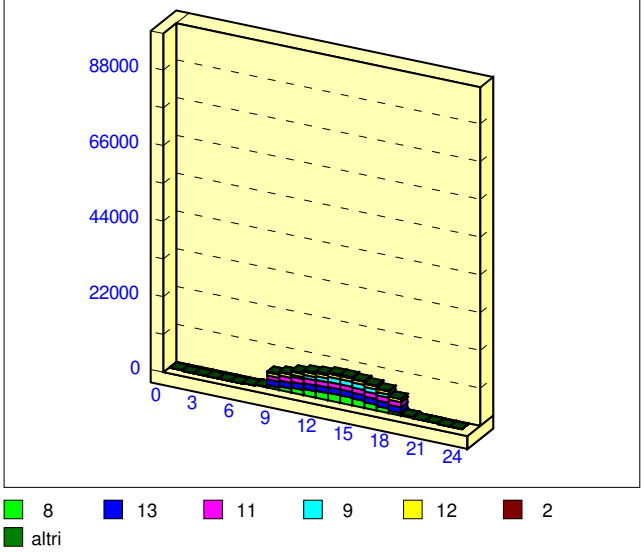
COMUNE DI PADOVA - CASTELLO DEI CARRARESI - ALA SUD - VALUTAZIONI POTENZE ASSORBITE INVERNALI ED ESTIVE rev. 19-05-2018

DESCRIZIONE DI OGNI AMBIENTE

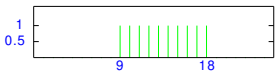
AMBIENTE :	030108	**Locale 030108**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	56.08	1.00	5.20	291.6

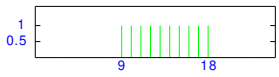
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 104	1	S	0.69		5.40	3.90	18.86	0.60
02	S.E 264	1	S	1.62		1.10	2.00	2.20	0.21
03	PTE 735	2	S	0.23		3.90	1.00	0.00	
04	PTE 719	1	S	0.10		6.20	1.00	0.00	
05	PTE 733	1	S	0.33		5.40	1.00	0.00	
06	PTE 737	1	S	0.40		5.40	1.00	0.00	
07	PAV 502	1	TF	1.50		1.00	56.08	56.08	
08	SOF 602	1		0.76		5.40	11.35	61.29	0.90

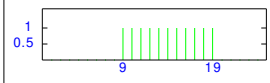
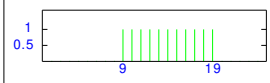
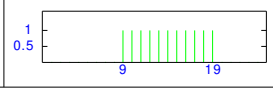
APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
09	2.00	583	162.0	
	Qop =	7.223	l/s pers.	

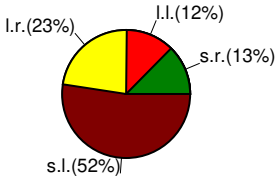
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
10	0.10	29	8.1	

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
11	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(22) 40	70 58	70	1570 1301	
12	Carico interno specifico per apporti illuminotecnici e varie	(28) 50	35 0	90	981 0	
13	Personal Computer (Fundamentals 1989)	(6) 10	300 0	50	1682 0	

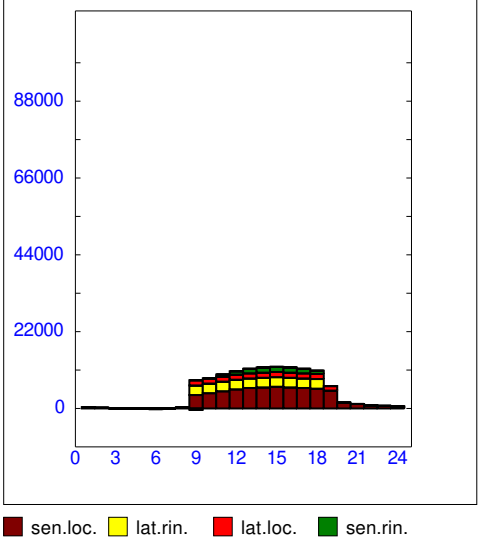
TOTALI: [W]

Carico Massimo teorico 11809 **Ora 15**

Latente		Sensibile	
rinnovo	2689	rinnovo	1495
locale	1435	locale	6190
Totale	**4124**	**Totale**	**7685**



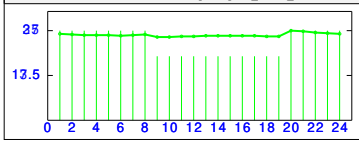
CARICO TOTALE ORARIO



SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa = 6141 W
Differenziale termostato = 1.0 °C
ERmax = 6195 W
ERmin = 0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	25.6	25.5	25.7	25.9	25.0	25.1	25.2	25.3	25.4	25.5	25.5	25.5	25.4	25.4	25.2

Progetto:

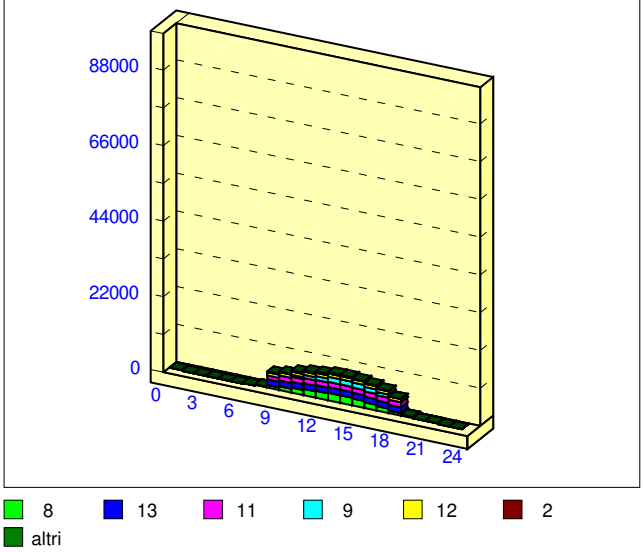
COMUNE DI PADOVA - CASTELLO DEI CARRARESI - ALA SUD - VALUTAZIONI POTENZE ASSORBITE INVERNALI ED ESTIVE rev. 19-05-2018

DESCRIZIONE DI OGNI AMBIENTE

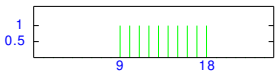
AMBIENTE :	030109	**Locale 030109**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	56.24	1.00	5.20	292.4

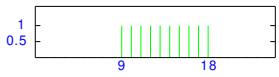
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 104	1	S	0.69		5.40	3.90	18.86	0.60
02	S.E 264	1	S	1.62		1.10	2.00	2.20	0.21
03	PTE 735	2	S	0.23		3.90	1.00	0.00	
04	PTE 719	1	S	0.10		6.20	1.00	0.00	
05	PTE 733	1	S	0.33		5.40	1.00	0.00	
06	PTE 737	1	S	0.40		5.40	1.00	0.00	
07	PAV 502	1	TF	1.50		1.00	56.24	56.24	
08	SOF 602	1		0.76		5.40	11.35	61.29	0.90

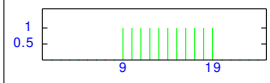
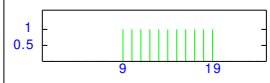
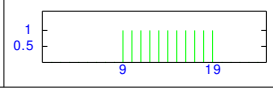
APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
09	2.00	585	162.5	
	Qop =	7.223	l/s pers.	

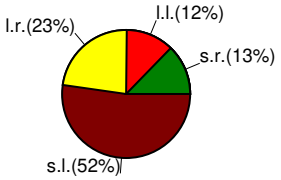
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
10	0.10	29	8.1	

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
11	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(22) 40	70 58	70	1575 1305	
12	Carico interno specifico per apporti illuminotecnici e varie	(28) 50	35 0	90	984 0	
13	Personal Computer (Fundamentals 1989)	(6) 10	300 0	50	1687 0	

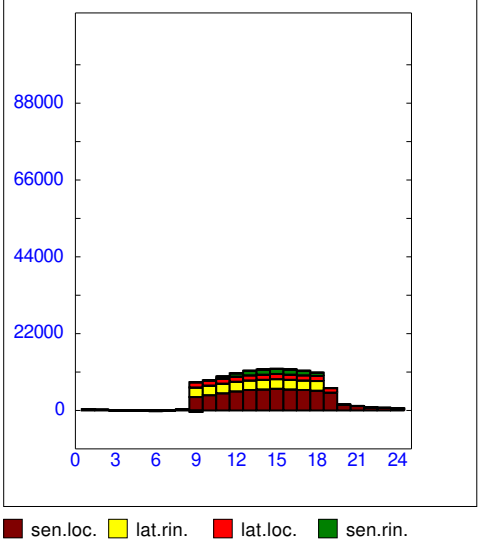
TOTALI: [W]

Carico Massimo teorico 11836 **Ora 15**

Latente		Sensibile	
rinnovo	2696	rinnovo	1499
locale	1440	locale	6201
Totale	**4136**	**Totale**	**7700**



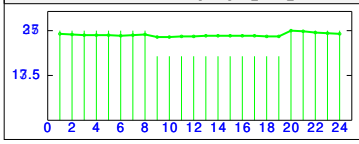
CARICO TOTALE ORARIO



SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa = 6152 W
Differenziale termostato = 1.0 °C
ERmax = 6207 W
ERmin = 0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



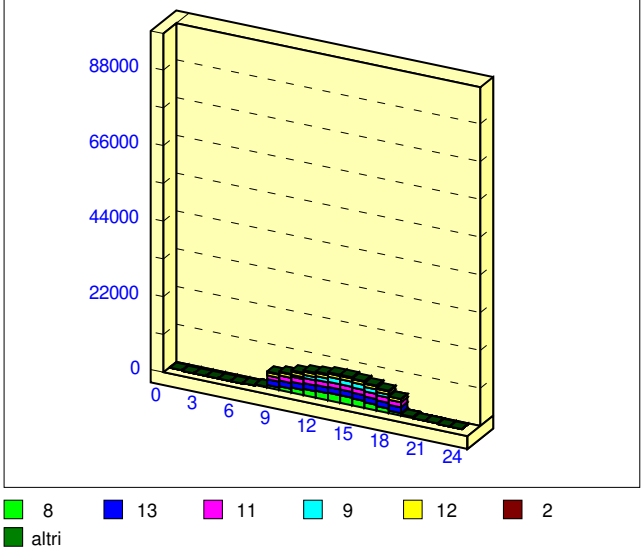
Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	25.6	25.5	25.7	25.9	25.0	25.1	25.2	25.3	25.4	25.5	25.5	25.5	25.4	25.4	25.2

DESCRIZIONE DI OGNI AMBIENTE

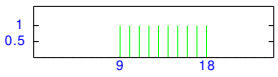
AMBIENTE :	030110	**Locale 030110**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	55.84	1.00	5.20	290.4

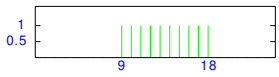
nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 104	1	S	0.69		5.40	3.90	18.86	0.60
02	S.E 264	1	S	1.62		1.10	2.00	2.20	0.21
03	PTE 735	2	S	0.23		3.90	1.00	0.00	
04	PTE 719	1	S	0.10		6.20	1.00	0.00	
05	PTE 733	1	S	0.33		5.40	1.00	0.00	
06	PTE 737	1	S	0.40		5.40	1.00	0.00	
07	PAV 502	1	TF	1.50		1.00	55.84	55.84	
08	SOF 602	1		0.76		5.40	11.35	61.29	0.90

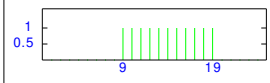
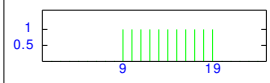
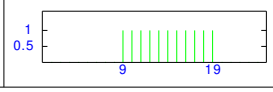
APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
09	2.00	581	161.3	
	Qop =	7.223	l/s pers.	

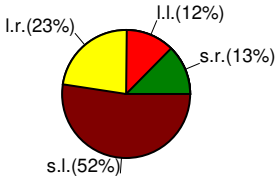
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
10	0.10	29	8.1	

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
11	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(22) 40	70 58	70	1564 1295	
12	Carico interno specifico per apporti illuminotecnici e varie	(28) 50	35 0	90	977 0	
13	Personal Computer (Fundamentals 1989)	(6) 10	300 0	50	1675 0	

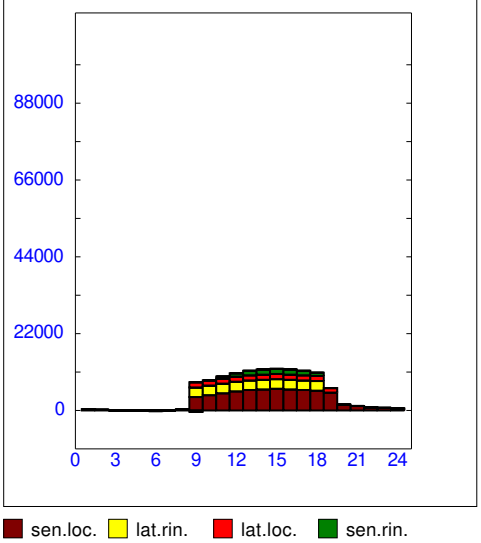
TOTALI: [W]

Carico Massimo teorico 11768 **Ora 15**

Latente		Sensibile	
rinnovo	2677	rinnovo	1488
locale	1429	locale	6173
Totale	**4106**	**Totale**	**7661**



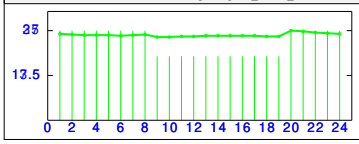
CARICO TOTALE ORARIO



SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa = 6124 W
Differenziale termostato = 1.0 °C
ERmax = 6176 W
ERmin = 0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	25.6	25.5	25.7	25.9	25.0	25.1	25.2	25.3	25.4	25.5	25.5	25.5	25.4	25.4	25.2

Progetto:

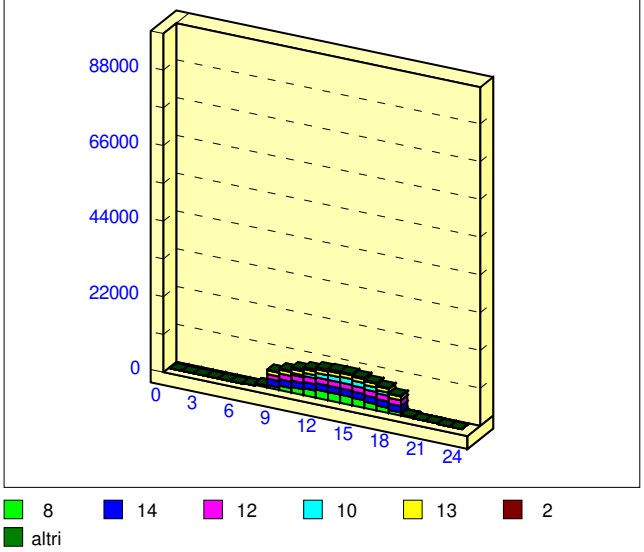
COMUNE DI PADOVA - CASTELLO DEI CARRARESI - ALA SUD - VALUTAZIONI POTENZE ASSORBITE INVERNALI ED ESTIVE rev. 19-05-2018

DESCRIZIONE DI OGNI AMBIENTE

AMBIENTE :	030111	**Locale 030111**			
Uri = 50	q	largh	lungh	altez	volume
Ta = 25	1	60.12	1.00	5.20	312.6

nr	Co-str	q	es	U W/mK	dt K	lungh m	al/la m	A m²	alfa/ Ft·g·Fc
01	P.E 104	1	S	0.69		6.70	3.90	21.73	0.60
02	S.E 264	2	S	1.62		1.10	2.00	4.40	0.21
03	PTE 735	2	S	0.23		3.90	1.00	0.00	
04	PTE 719	2	S	0.10		6.20	1.00	0.00	
05	PTE 733	1	S	0.33		6.70	1.00	0.00	
06	PTE 737	1	S	0.40		6.70	1.00	0.00	
07	PAV 502	1	TF	1.50		1.00	60.12	60.12	
08	SOF 602	1		0.76		6.70	10.10	67.67	0.90
09	P.I 328	1	TF	1.64		9.70	5.20	50.44	

APPORTO SENSIBILE ORARIO



RICAMBI APPORTI: chiave = nessuna

nr	ricambi rinnovo	portata m³/h	aria l/s	prog. oraria
10	2.00	625	173.7	
	Qop =	7.223	l/s pers.	

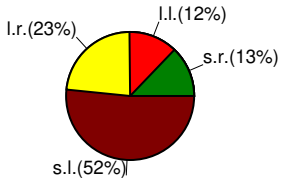
nr	ricambi infiltraz.	portata m³/h	aria l/s	prog. oraria
11	0.10	31	8.7	

nr	Descrizione apporti	N ns	sensibile latente	% rad	Tot sen[W] Tot lat[W]	Prog. oraria
12	Impiegato di ufficio attività moderata amb. 25°C (PIZZETTI)	(24) 40	70 58	70	1683 1395	
13	Carico interno specifico per apporti illuminotecnici e varie	(30) 50	35 0	90	1052 0	
14	Personal Computer (Fundamentals 1989)	(6) 10	300 0	50	1804 0	

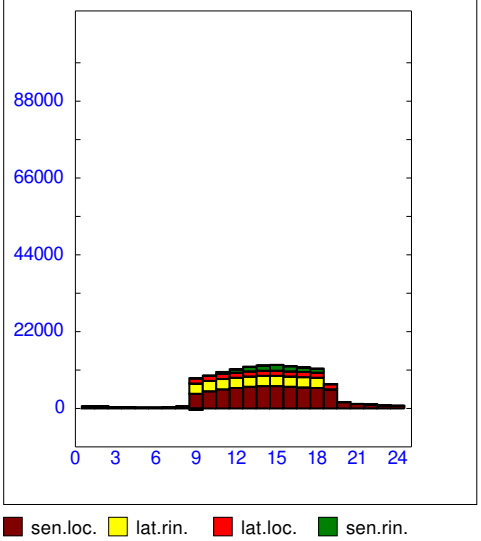
TOTALI: [W]

Carico Massimo teorico 12462 **Ora 15**

Latente		Sensibile	
rinnovo	2882	rinnovo	1602
locale	1539	locale	6438
Totale	**4421**	**Totale**	**8040**



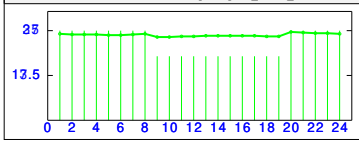
CARICO TOTALE ORARIO



SIMULAZIONE DI FUNZIONAMENTO

Potenza sensibile rimossa = 5941 W
Differenziale termostato = 1.0 °C
ERmax = 5985 W
ERmin = 0 W

TERMOSTATO (T) [°C] TEMP. REALE (Tr) [°C]



Ora	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
T	35.0	35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Tr	25.7	25.7	25.8	26.0	25.0	25.1	25.3	25.4	25.4	25.5	25.5	25.5	25.4	25.4	25.2

PROFILO ORARIO DEL CARICO TERMICO GLOBALE DEL GIORNO 21 Luglio (ora solare)

Ora	7	8	9	10	11	12	13	14
W	18621	24955	223098	246705	269295	289494	306347	319041
Ora	15	16	17	18	19	20	21	22
W	325041	323275	315569	301430	194639	55260	44034	36726

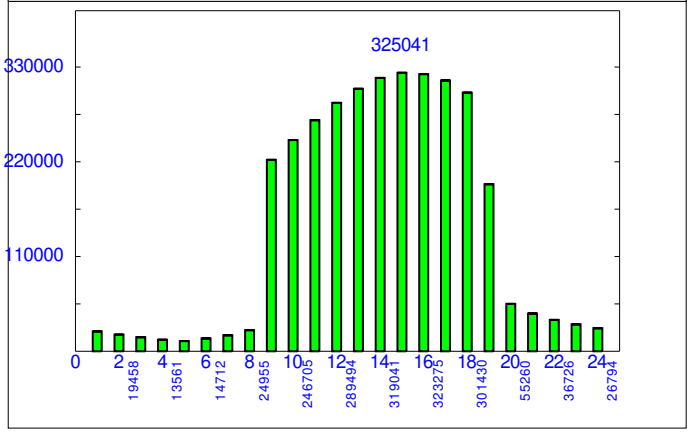
RIEPILOGO CARICO TERMICO ESTIVO MESE: Luglio

denominazione zona	dati risultati dall'analisi in regime continuo					potenze di picco unità terminali		
		portata di ventilaz in l/s ; carichi in W				pot necess	a.prim.+FC	tutta aria
	tbs °C	volume	**ora critica**	**sens. loc**	laten. loc	sensibile	tbs di imm	tbs di imm
	UR %	***port. rinn***	***carico tot***	*sens. rinn*	*laten. rinn*	*totale*	*potenza FC*	*portata l/s*
GLOBALE EDIFICIO		13723	15	180469	46454			
		3800.0	*325041*	*35055*	*63062*			
01 piano TERRA		4176	16	41929	10329			
		731.3	*70790*	*6396*	*12137*			
0101 Piano TERRA unico		**4176**	**16**	**41929**	**10329**			
		731.3	***70790***	***6396***	***12137***			
01 Locale 010101	25	180	15	1455	452	1685	20.0	
	50	*25.0*	*2552*	*231*	*415*	*2552*	*1301*	
02 Locale 010102	25	92	15	521	229	638	20.0	
	50	*12.7*	*1079*	*117*	*211*	*1079*	*443*	
03 Locale 010103	25	49	15	320	124	384	20.0	
	50	*6.9*	*621*	*63*	*114*	*621*	*278*	
04 Locale 010104	25	26	15	174	66	208	20.0	
	50	*3.7*	*335*	*34*	*61*	*335*	*152*	
05 Locale 010105	25	1891	15	15033	4742	17455	20.0	
	50	*262.6*	*26556*	*2423*	*4358*	*26556*	*13417*	
06 Locale 010106	25	174	15	1185	436	1407	20.0	
	50	*24.1*	*2244*	*223*	*401*	*2244*	*1036*	
07 Locale 010107	25	105	14	1286	263	1414	20.0	
	50	*14.6*	*1919*	*128*	*242*	*1919*	*1196*	
08 Locale 010108	25	237	15	1911	595	2215	20.0	
	50	*33.0*	*3357*	*304*	*547*	*3357*	*1709*	
09 Locale 010109	25	238	15	1963	597	2269	20.0	
	50	*33.1*	*3415*	*305*	*549*	*3415*	*1760*	
10 Locale 010110	25	238	15	2220	598	2525	20.0	
	50	*33.1*	*3672*	*305*	*549*	*3672*	*2016*	
11 Locale 010111	25	72	14	1294	180	1381	20.0	
	50	*10.0*	*1725*	*87*	*165*	*1725*	*1232*	
12 Locale 010112	25	28	15	403	69	438	20.0	
	50	*3.8*	*571*	*35*	*64*	*571*	*379*	
13 Locale 010123	25	427	15	3715	1071	4262	20.0	
	50	*59.3*	*6317*	*547*	*984*	*6317*	*3350*	
14 Locale 010124	25	283	16	7659	709	8895	20.0	
	50	*141.3*	*11949*	*1236*	*2345*	*11949*	*6790*	
15 Locale 010125	25	136	16	3410	198	4006	20.0	
	50	*68.2*	*5336*	*596*	*1132*	*5336*	*2990*	
02 Piano PRIMO		4520	16	45339	14850			
		837.9	*81421*	*7328*	*13905*			
0201 Piano PRIMO unico		**4520**	**16**	**45339**	**14850**			
		837.9	***81421***	***7328***	***13905***			
01 Locale 020101	25	78	15	626	203	726	20.0	
	50	*10.8*	*1109*	*100*	*179*	*1109*	*560*	
02 Locale 020102	25	646	15	4981	1686	5809	20.0	
	50	*89.7*	*8984*	*828*	*1489*	*8984*	*4429*	
03 Locale 020103	25	223	15	1677	581	1962	20.0	
	50	*30.9*	*3056*	*285*	*513*	*3056*	*1486*	

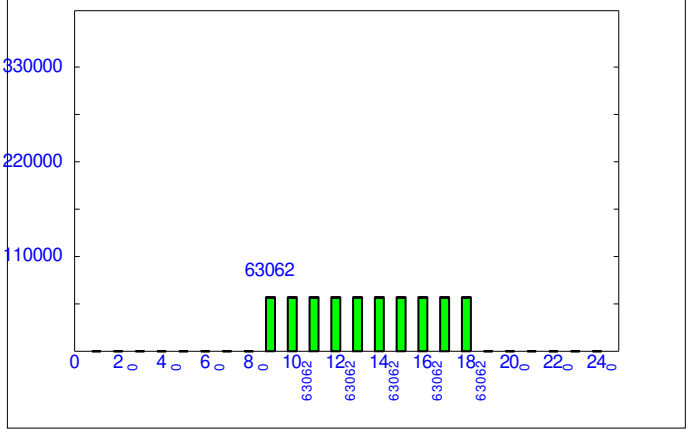
denominazione zona	dati risultati dall'analisi in regime continuo					potenze di picco unità terminali		
		portata di ventilaz in l/s ; carichi in W				pot necess	a.prim.+FC	tutta aria
	tbs °C	volume	**ora critica**	**sens. loc**	laten. loc	sensibile	tbs di imm	tbs di imm
	UR %	***port. rinn***	***carico tot***	*sens. rinn*	*laten. rinn*	*totale*	*potenza FC*	*portata l/s*
04 Locale 020104	25	243	16	4766	1852	5828	20.0	
	50	*121.5*	*9697*	*1063*	*2016*	*9697*	*4018*	
05 Locale 020105	25	339	17	13472	2704	14763	20.0	
	50	*169.3*	*20277*	*1291*	*2810*	*20277*	*12431*	
06 Locale 020106	25	218	15	1306	570	1586	20.0	
	50	*30.3*	*2659*	*280*	*503*	*2659*	*1120*	
07 Locale 020107	25	236	15	1595	616	1898	20.0	
	50	*32.8*	*3059*	*303*	*545*	*3059*	*1393*	
08 Locale 020108	25	232	15	1608	614	1905	20.0	
	50	*32.2*	*3055*	*297*	*535*	*3055*	*1410*	
09 Locale 020109	25	234	15	1599	612	1899	20.0	
	50	*32.6*	*3052*	*300*	*541*	*3052*	*1398*	
10 Locale 020110	25	234	15	1595	610	1895	20.0	
	50	*32.5*	*3045*	*300*	*539*	*3045*	*1396*	
11 Locale 020111	25	236	15	1592	615	1895	20.0	
	50	*32.8*	*3053*	*302*	*544*	*3053*	*1391*	
12 Locale 020112	25	232	15	1608	615	1906	20.0	
	50	*32.3*	*3056*	*298*	*535*	*3056*	*1409*	
13 Locale 020113	25	112	15	653	292	796	20.0	
	50	*15.5*	*1346*	*143*	*258*	*1346*	*557*	
14 Locale 020114	25	113	15	661	295	806	20.0	
	50	*15.7*	*1362*	*145*	*261*	*1362*	*564*	
15 Locale 020115	25	109	14	871	284	1003	20.0	
	50	*15.1*	*1539*	*132*	*251*	*1539*	*777*	
16 Locale 020116	25	112	14	888	291	1023	20.0	
	50	*15.5*	*1572*	*136*	*257*	*1572*	*792*	
17 Locale 020117	25	229	15	1549	598	1843	20.0	
	50	*31.8*	*2970*	*294*	*528*	*2970*	*1354*	
18 Locale 020118	25	227	15	1534	591	1825	20.0	
	50	*31.5*	*2939*	*290*	*523*	*2939*	*1341*	
19 Locale 020119	25	226	15	1531	590	1821	20.0	
	50	*31.4*	*2932*	*290*	*521*	*2932*	*1338*	
20 Locale 020120	25	241	15	1612	630	1921	20.0	
	50	*33.5*	*3107*	*309*	*556*	*3107*	*1406*	
03 Piano SECONDO		5027	15	94511	21276			
		2230.8	*173386*	*20579*	*37020*			
0301 Piano SECONDO unico		**5027**	**15**	**94511**	**21276**			
		2230.8	***173386***	***20579***	***37020***			
01 Locale 030101	25	86	15	1258	208	1368	20.0	
	50	*11.9*	*1774*	*110*	*198*	*1774*	*1185*	
02 Locale 030102	25	692	15	10311	1735	11198	20.0	
	50	*96.1*	*14527*	*886*	*1594*	*14527*	*9721*	
03 Locale 030103	25	2491	15	50884	12260	63649	20.0	
	50	*1383.8*	*98873*	*12765*	*22964*	*98873*	*42373*	
04 Locale 030104	25	153	15	1692	314	1888	20.0	
	50	*21.2*	*2553*	*195*	*352*	*2553*	*1562*	
05 Locale 030105	25	152	15	1690	313	1884	20.0	
	50	*21.1*	*2547*	*195*	*350*	*2547*	*1560*	
06 Locale 030106	25	133	15	1834	301	2005	20.0	
	50	*18.5*	*2613*	*171*	*307*	*2613*	*1721*	
07 Locale 030107	25	134	15	1840	303	2012	20.0	
	50	*18.7*	*2624*	*172*	*310*	*2624*	*1725*	
08 Locale 030108	25	292	15	6190	1435	7685	20.0	
	50	*162.0*	*11809*	*1495*	*2689*	*11809*	*5194*	
09 Locale 030109	25	292	15	6201	1440	7700	20.0	
	50	*162.5*	*11836*	*1499*	*2696*	*11836*	*5202*	
10 Locale 030110	25	290	15	6173	1429	7661	20.0	
	50	*161.3*	*11768*	*1488*	*2677*	*11768*	*5181*	
11 Locale 030111	25	313	15	6438	1539	8040	20.0	
	50	*173.7*	*12462*	*1602*	*2882*	*12462*	*5370*	

TOTALI EDIFICIO [W]

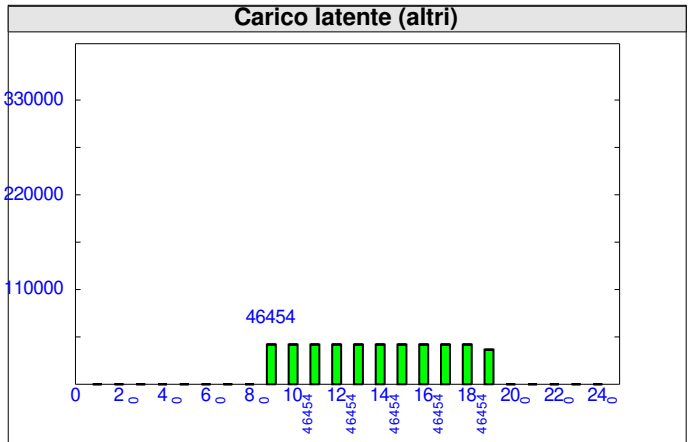
Carico totale



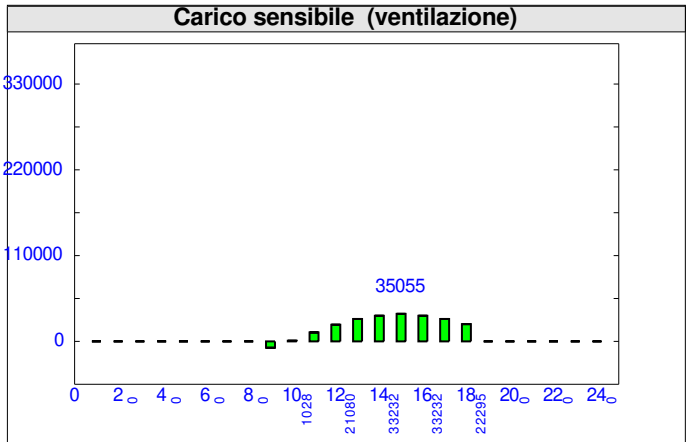
Carico latente (ventilazione)



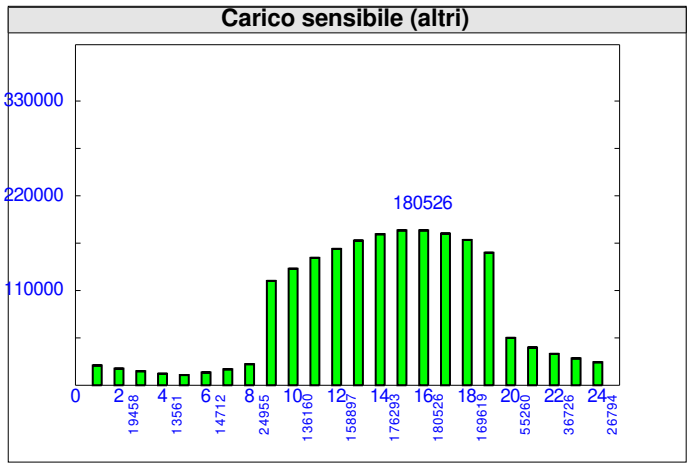
Carico latente (altri)



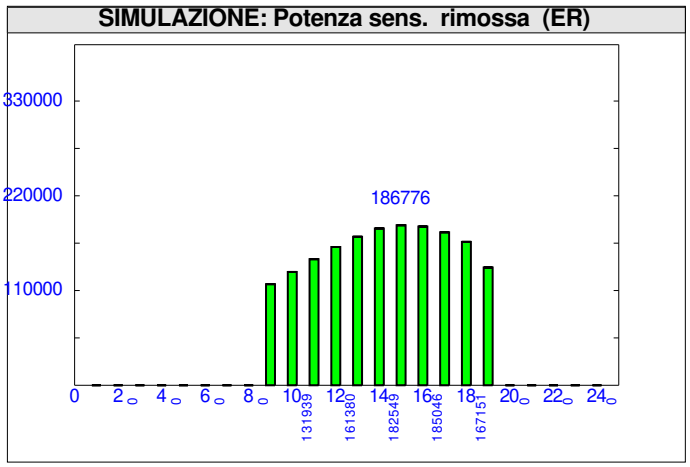
Carico sensibile (ventilazione)



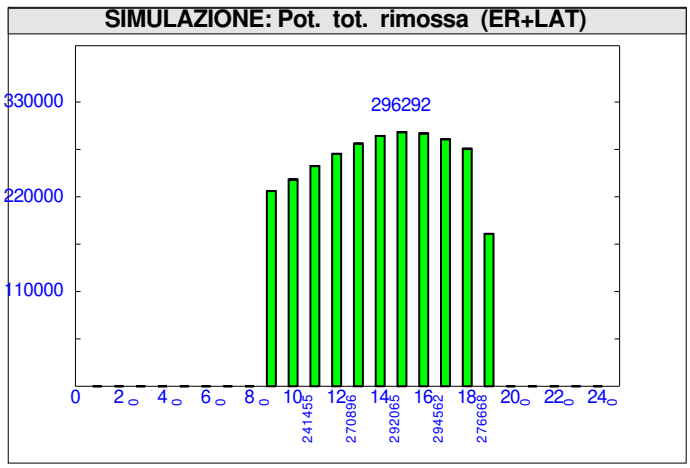
Carico sensibile (altri)



SIMULAZIONE: Potenza sens. rimossa (ER)

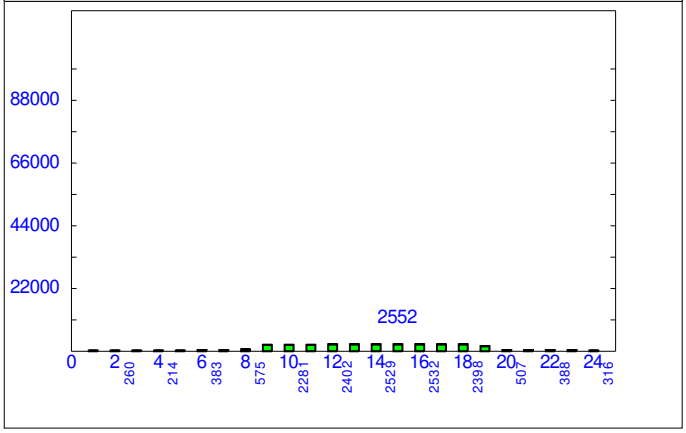


SIMULAZIONE: Pot. tot. rimossa (ER+LAT)

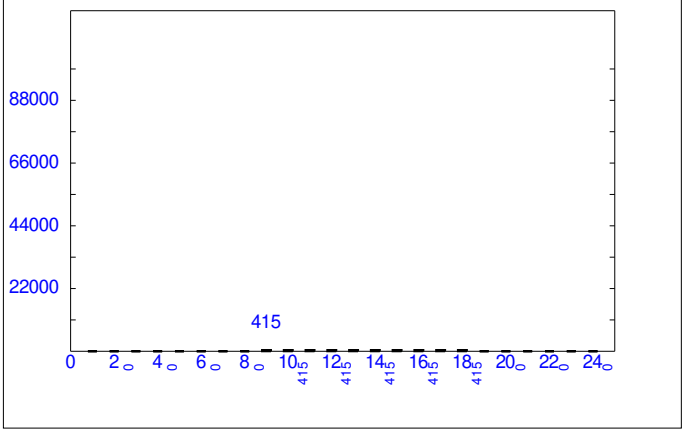


TOTALI AMBIENTE : 010101 Locale 010101

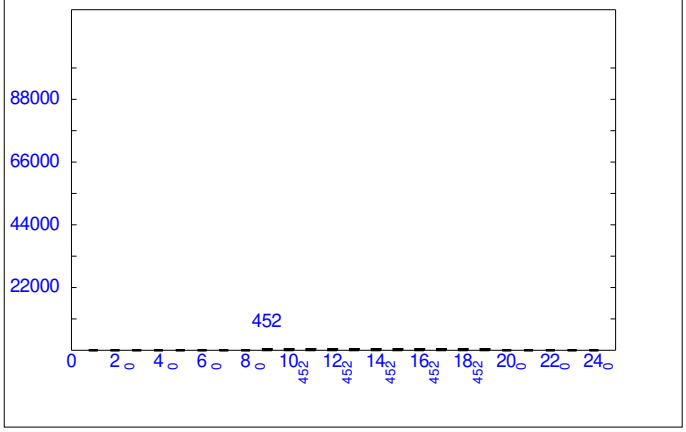
Carico totale



Carico latente (ventilazione)



Carico latente (altri)



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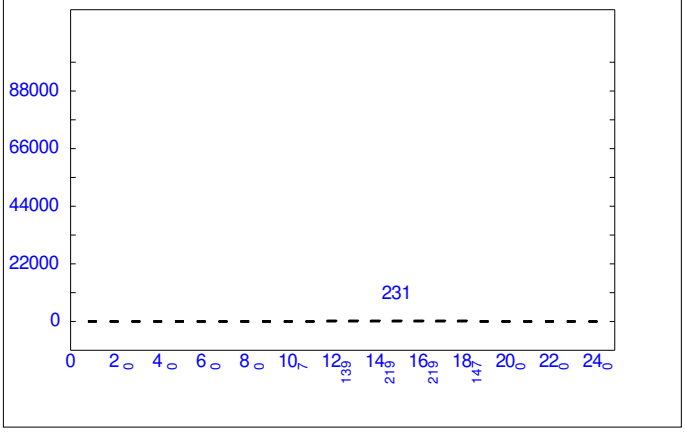
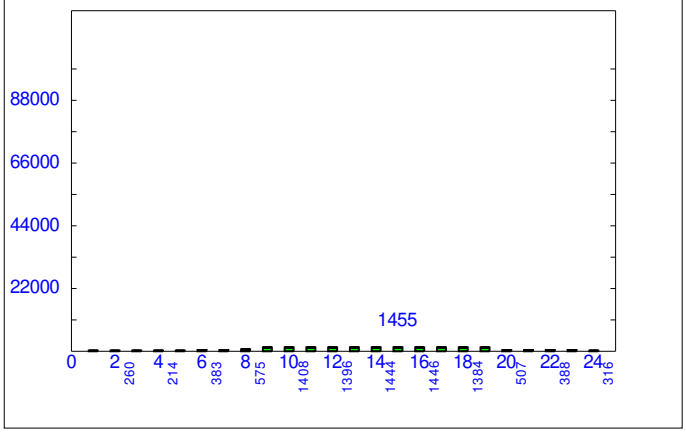
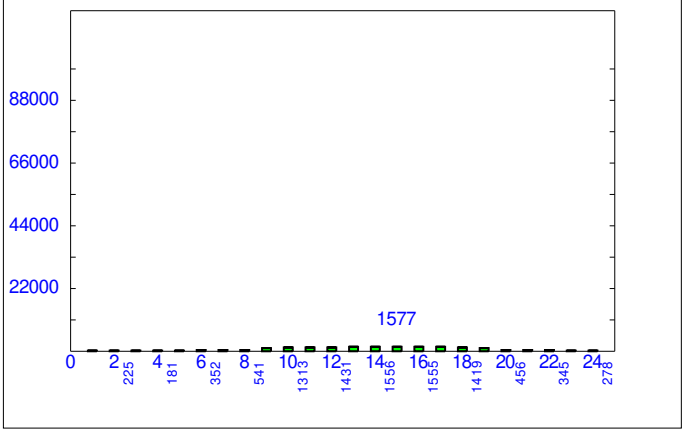


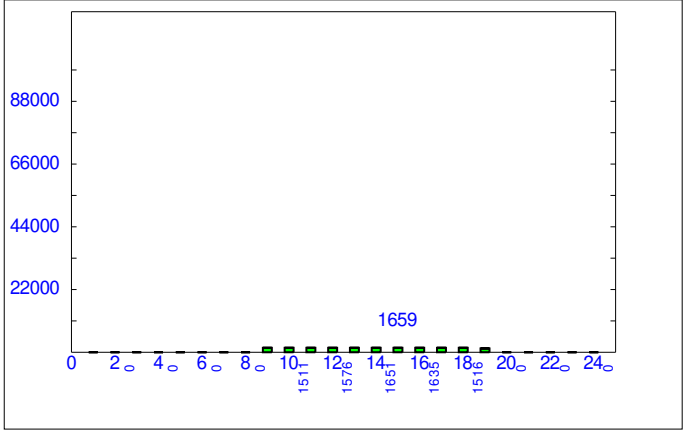
Carico sensibile (altri)



Carico sens. totale (LTS)

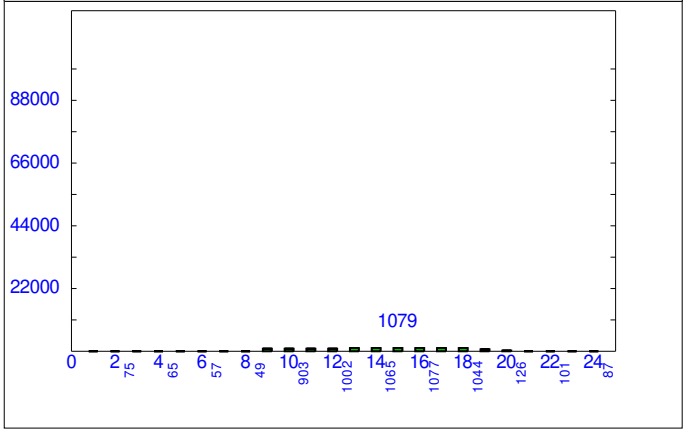


SIMULAZIONE: Potenza sens. rimossa (ER)

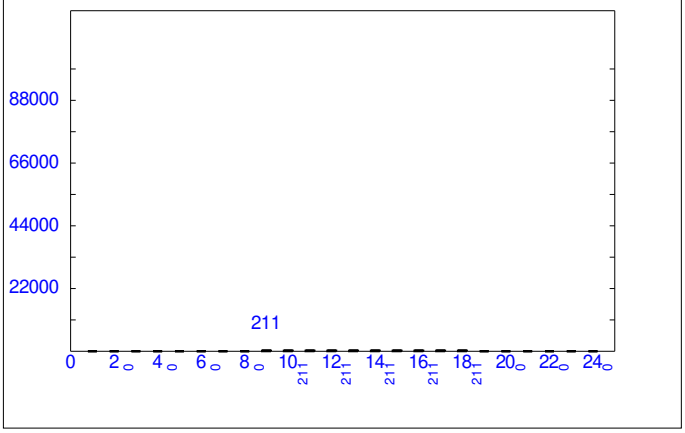


TOTALI AMBIENTE : 010102 Locale 010102

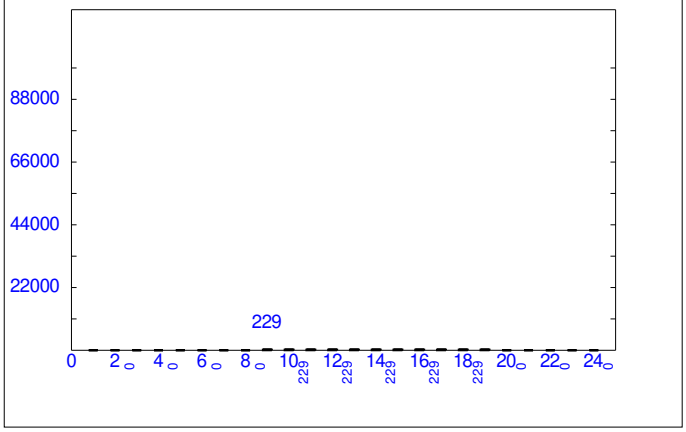
Carico totale



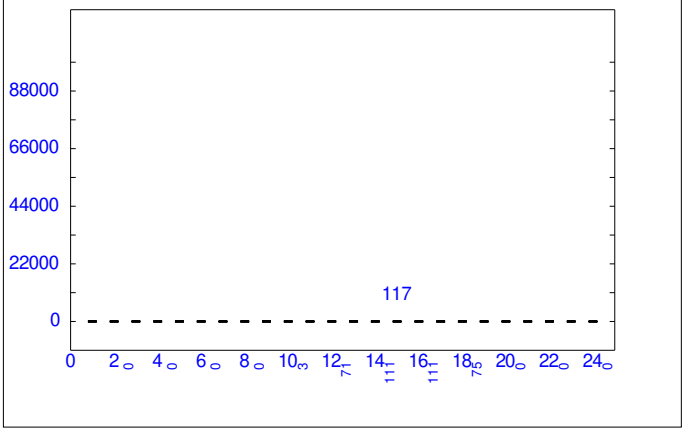
Carico latente (ventilazione)



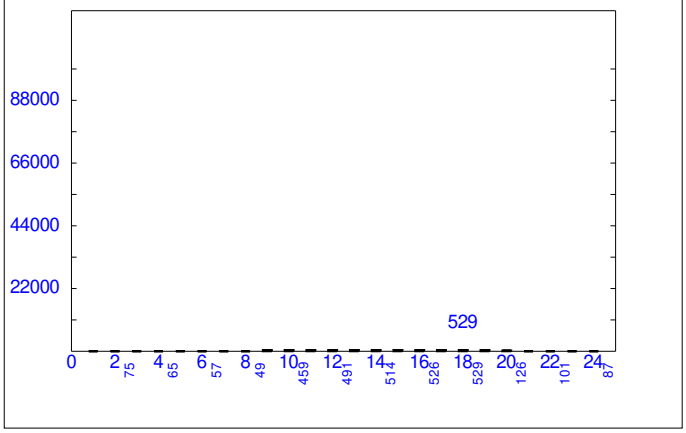
Carico latente (altri)



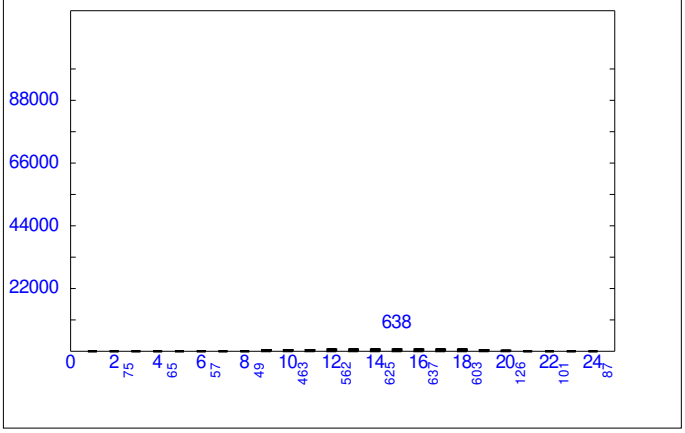
Carico sensibile (ventilazione)



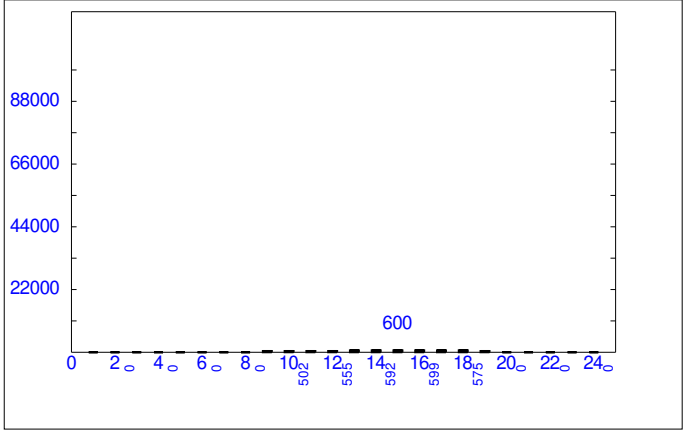
Carico sensibile (altri)



Carico sens. totale (LTS)

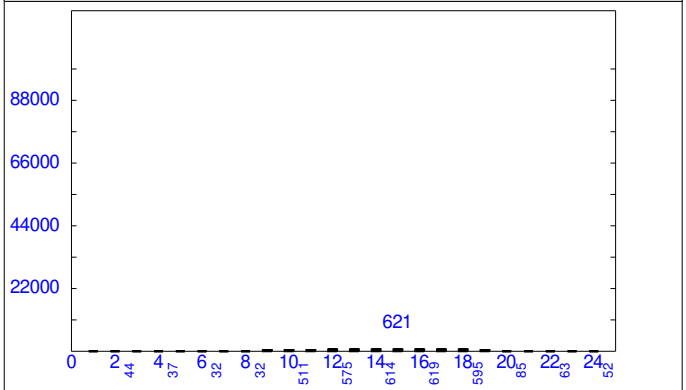


SIMULAZIONE: Potenza sens. rimossa (ER)

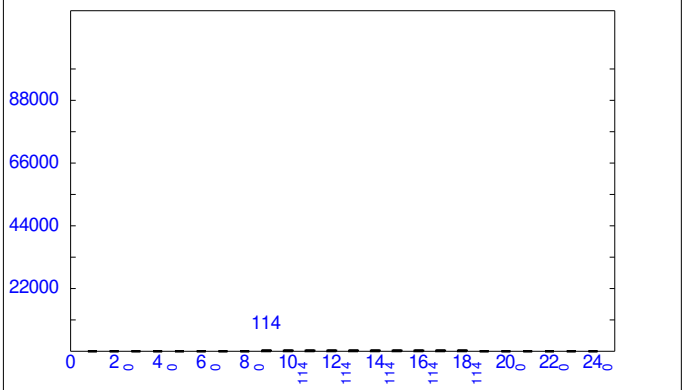


TOTALI AMBIENTE : 010103 Locale 010103

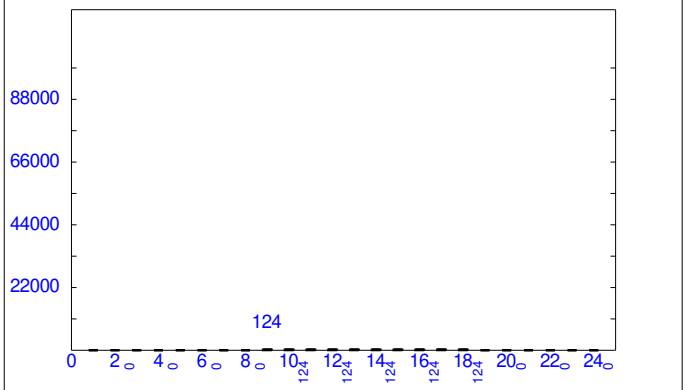
Carico totale



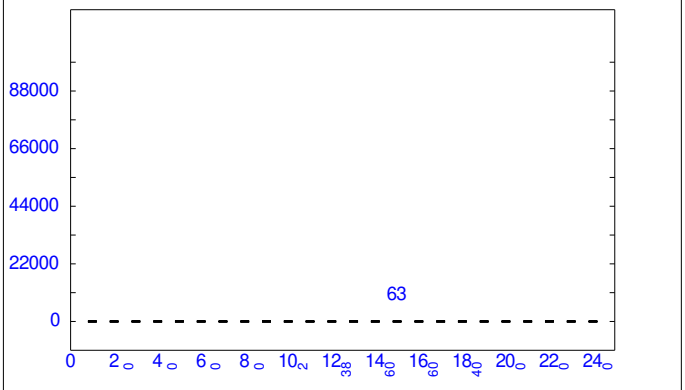
Carico latente (ventilazione)



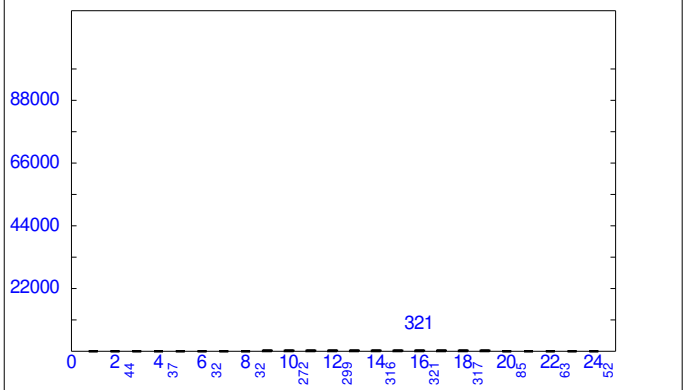
Carico latente (altri)



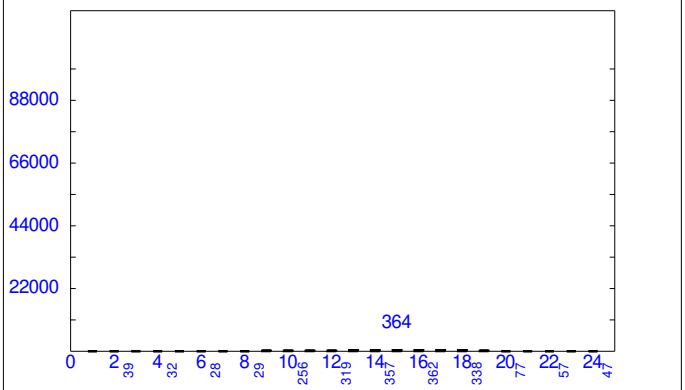
Carico sensibile (ventilazione)



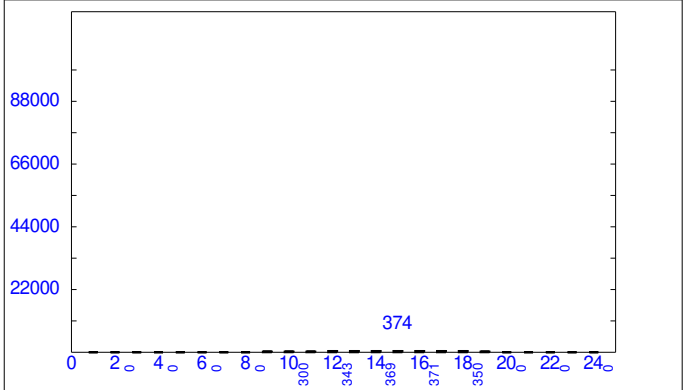
Carico sensibile (altri)



Carico sens. totale (LTS)

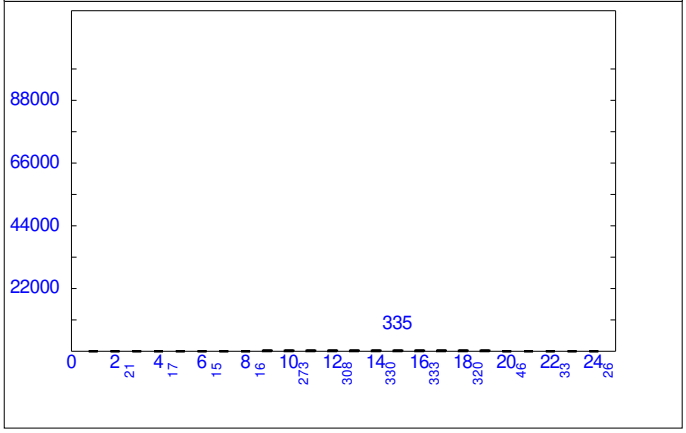


SIMULAZIONE: Potenza sens. rimossa (ER)

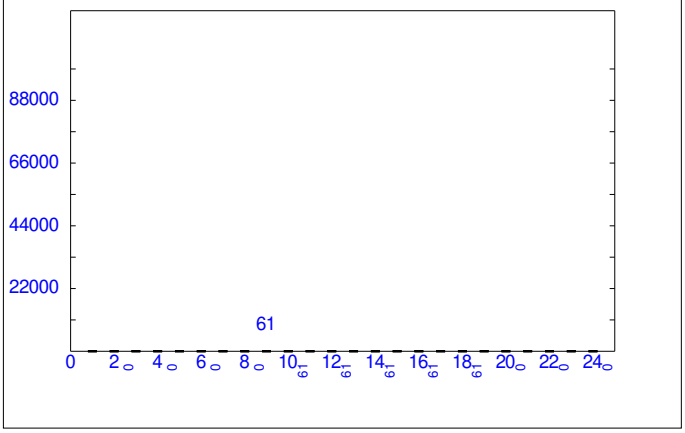


TOTALI AMBIENTE : 010104 Locale 010104

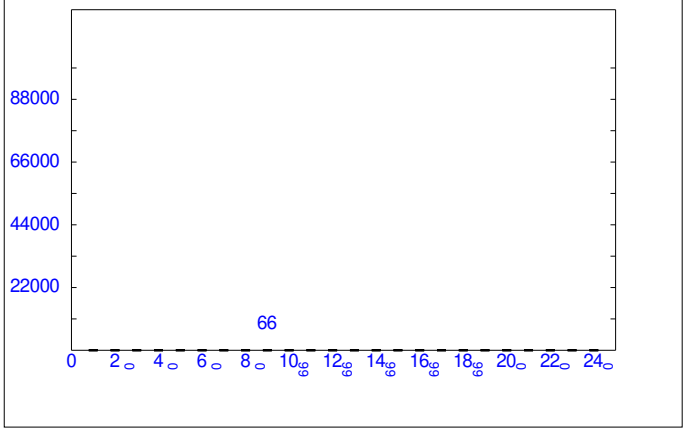
Carico totale



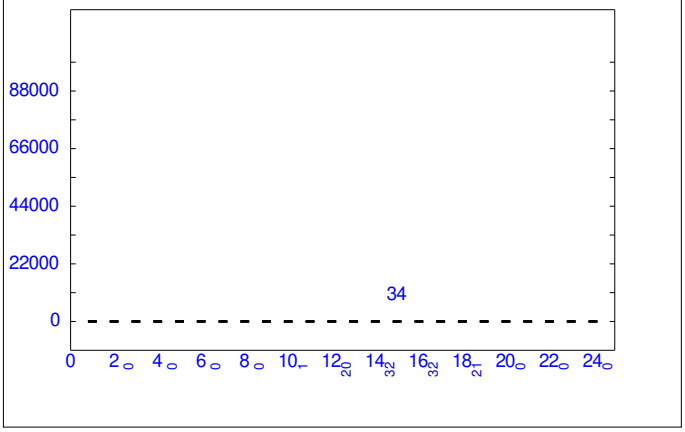
Carico latente (ventilazione)



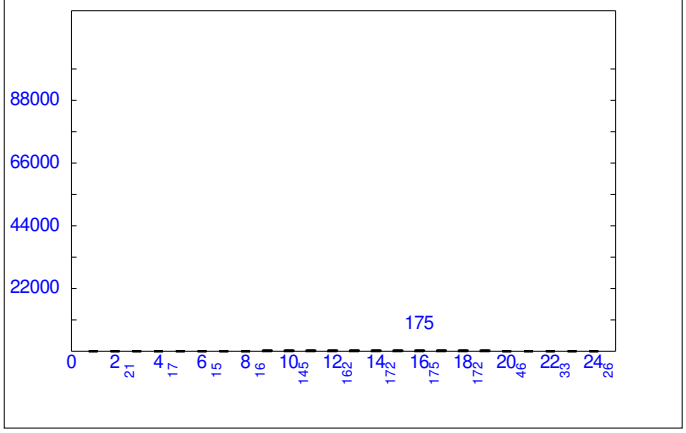
Carico latente (altri)



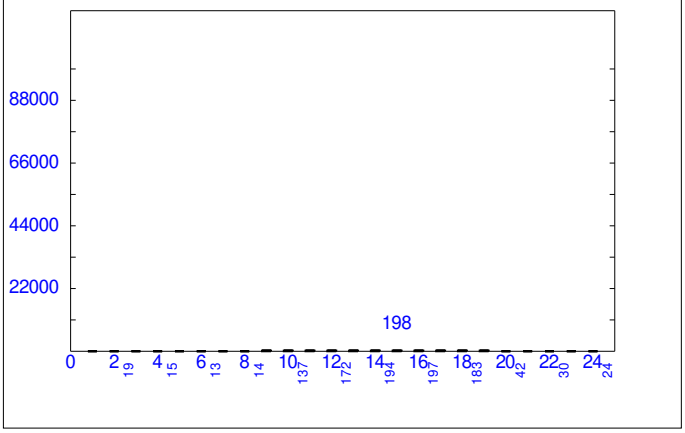
Carico sensibile (ventilazione)



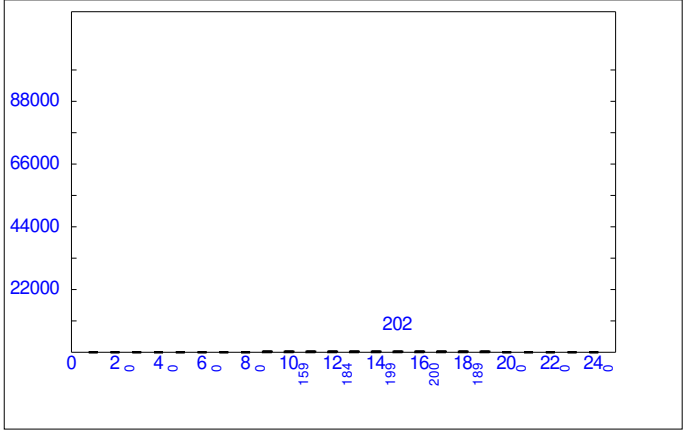
Carico sensibile (altri)



Carico sens. totale (LTS)

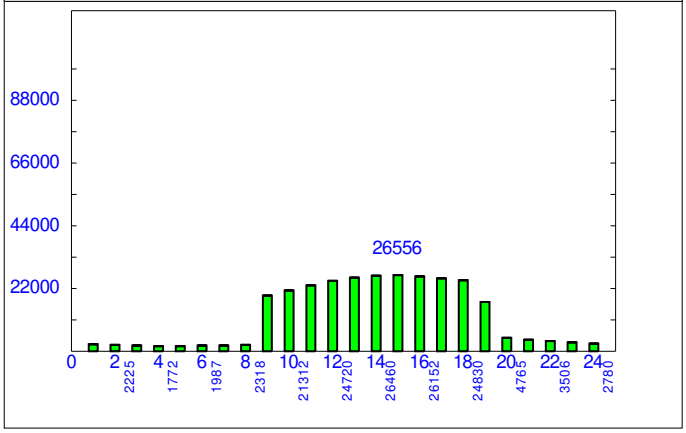


SIMULAZIONE: Potenza sens. rimossa (ER)

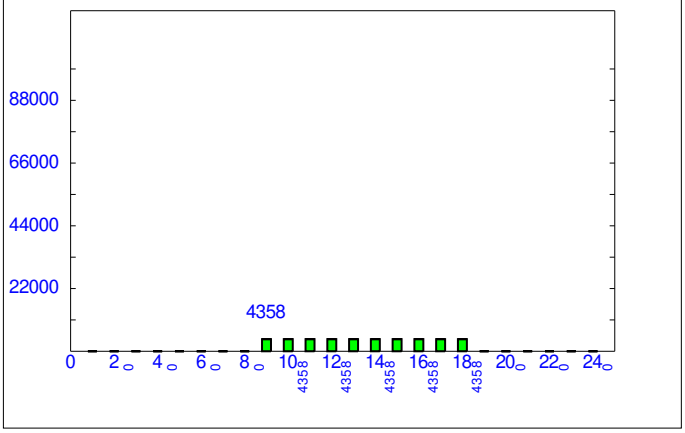


TOTALI AMBIENTE : 010105 Locale 010105

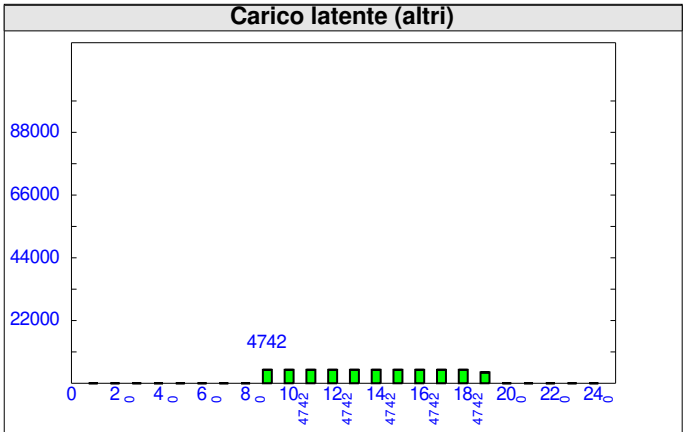
Carico totale



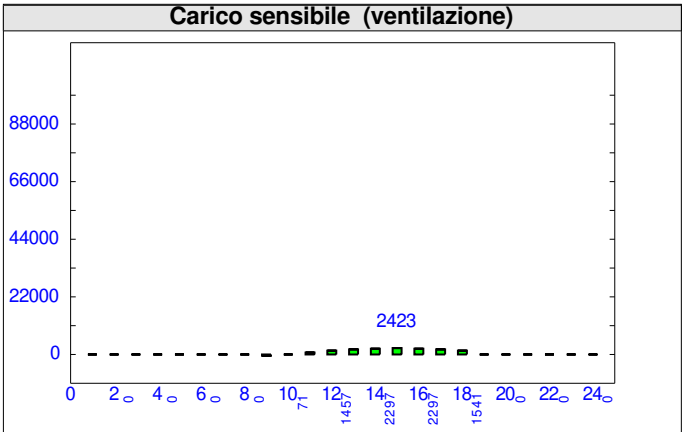
Carico latente (ventilazione)



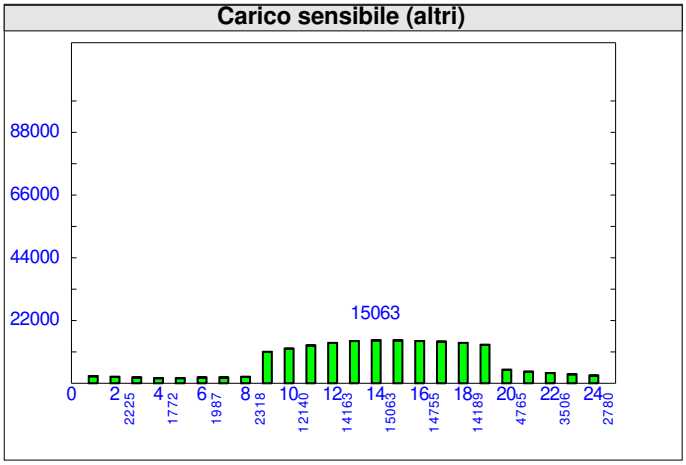
Carico latente (altri)



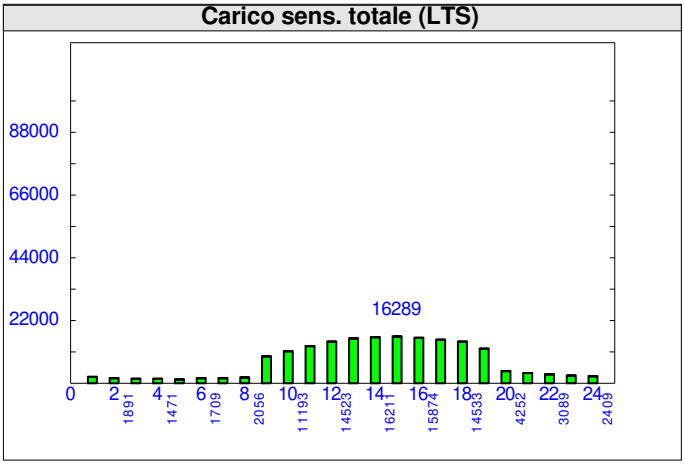
Carico sensibile (ventilazione)



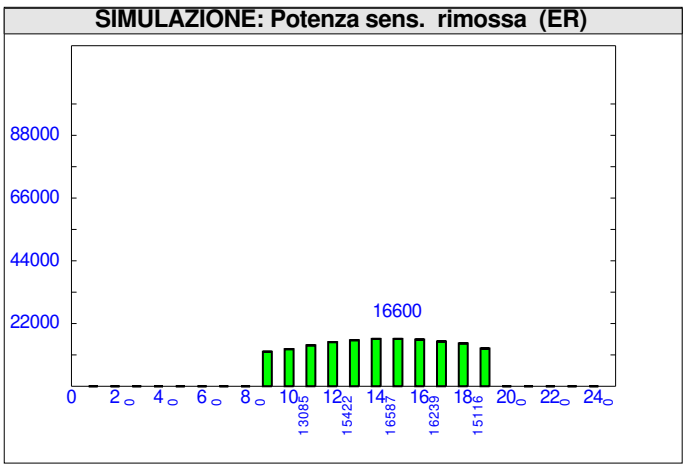
Carico sensibile (altri)



Carico sens. totale (LTS)

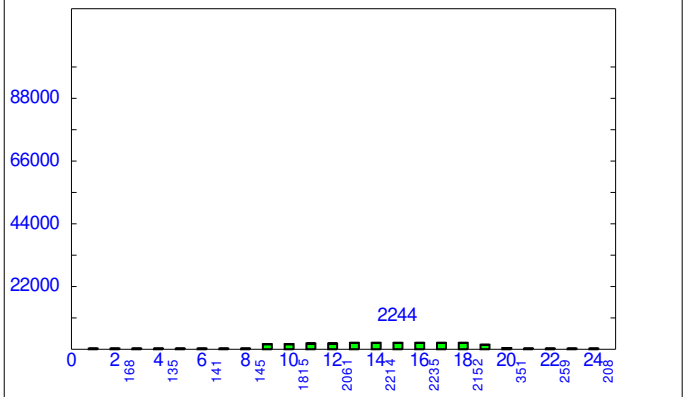


SIMULAZIONE: Potenza sens. rimossa (ER)

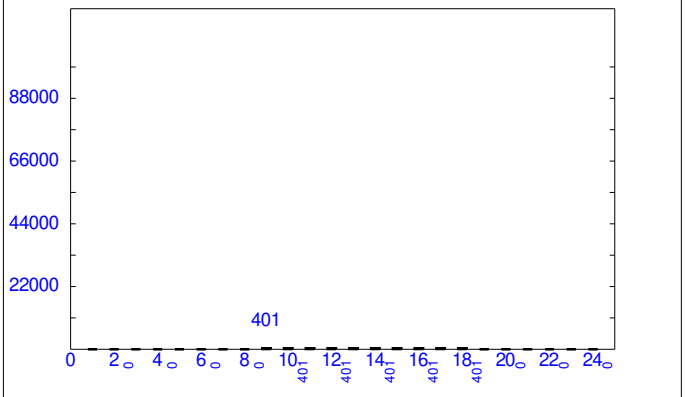


TOTALI AMBIENTE : 010106 Locale 010106

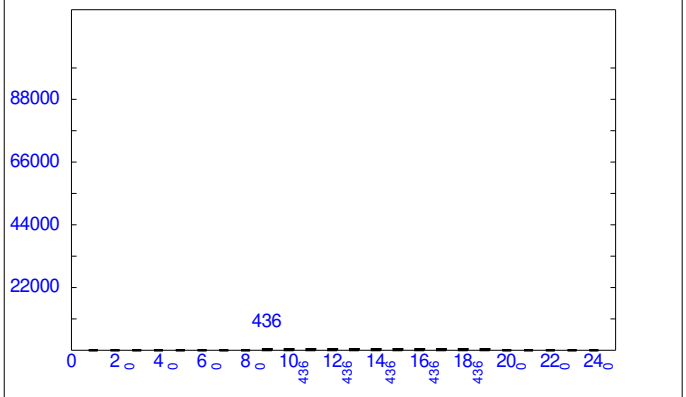
Carico totale



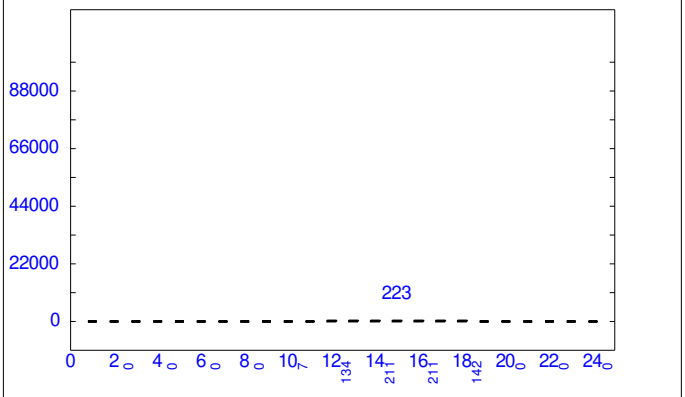
Carico latente (ventilazione)



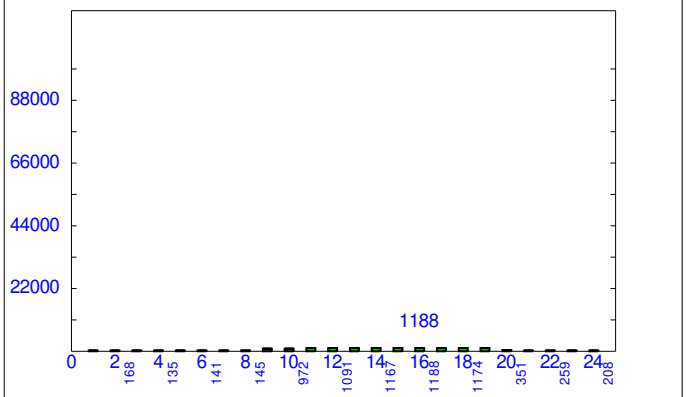
Carico latente (altri)



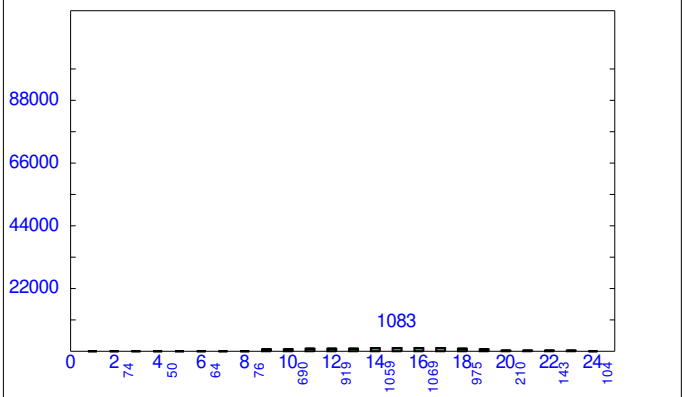
Carico sensibile (ventilazione)



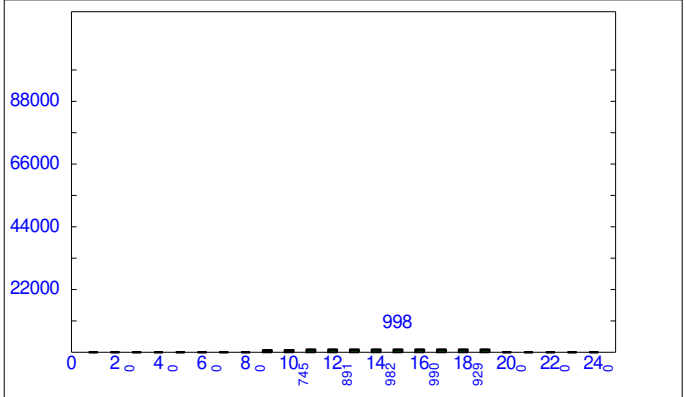
Carico sensibile (altri)



Carico sens. totale (LTS)

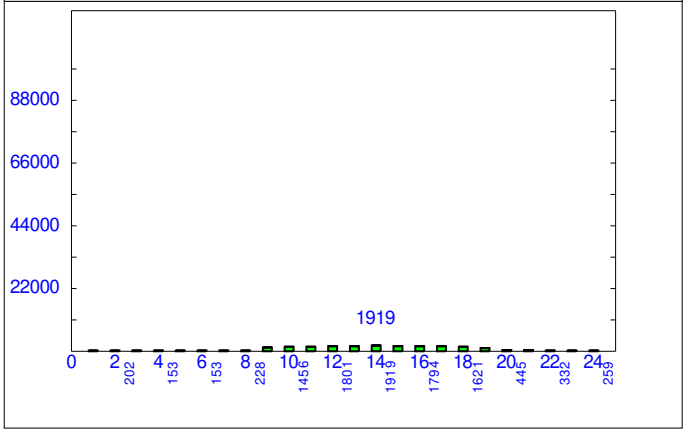


SIMULAZIONE: Potenza sens. rimossa (ER)

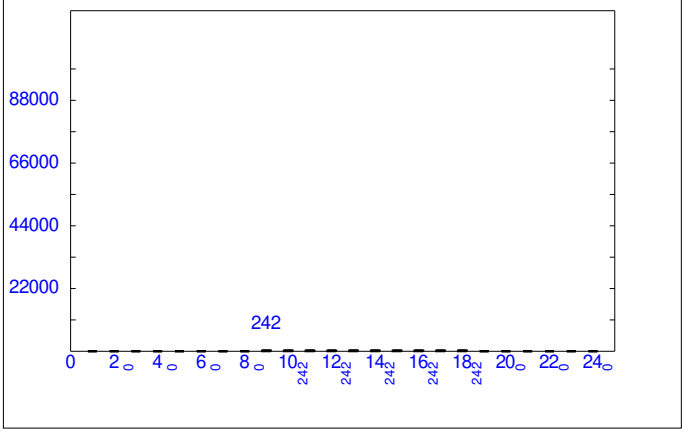


TOTALI AMBIENTE : 010107 Locale 010107

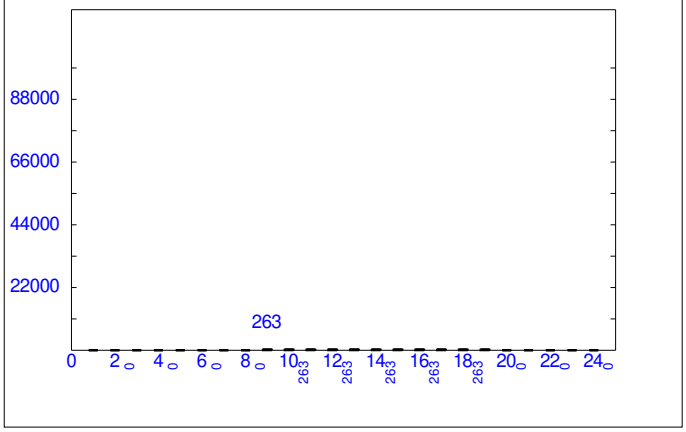
Carico totale



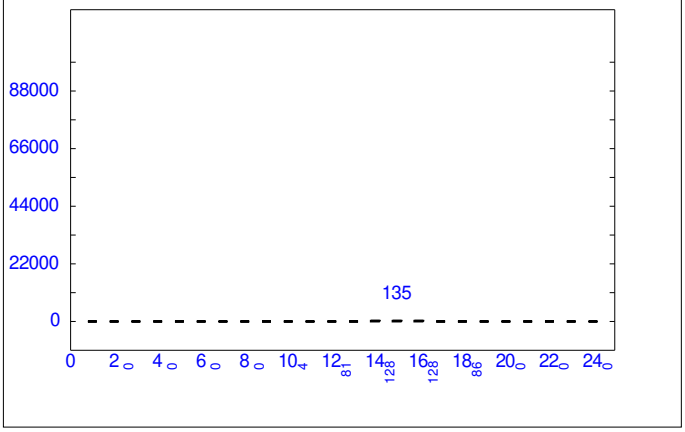
Carico latente (ventilazione)



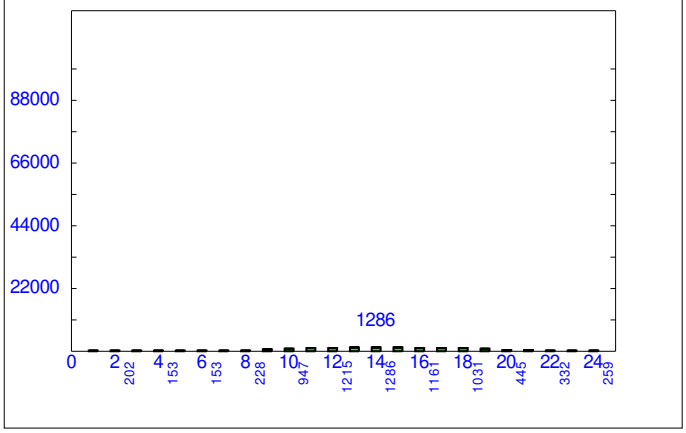
Carico latente (altri)



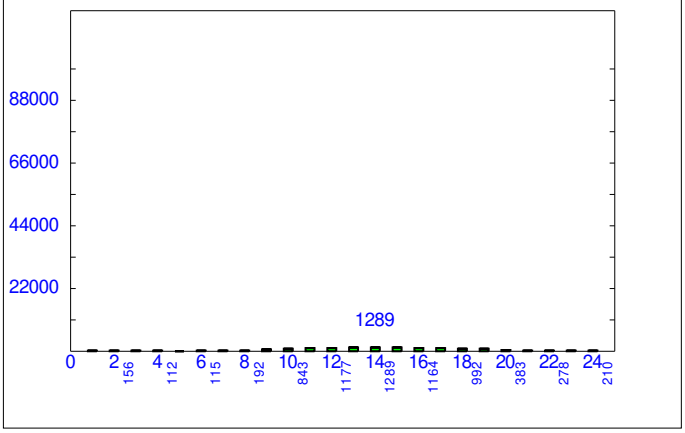
Carico sensibile (ventilazione)



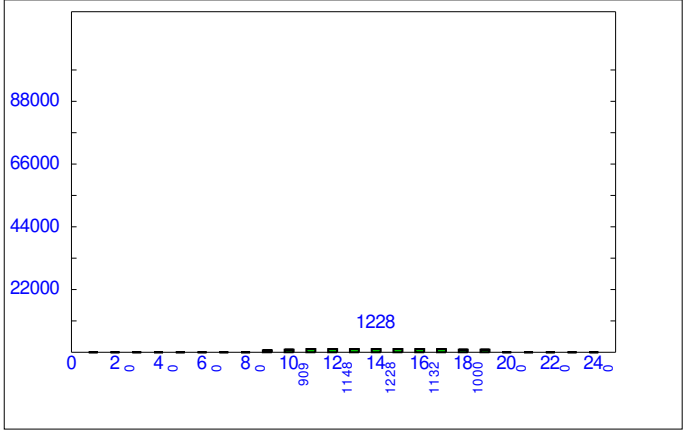
Carico sensibile (altri)



Carico sens. totale (LTS)

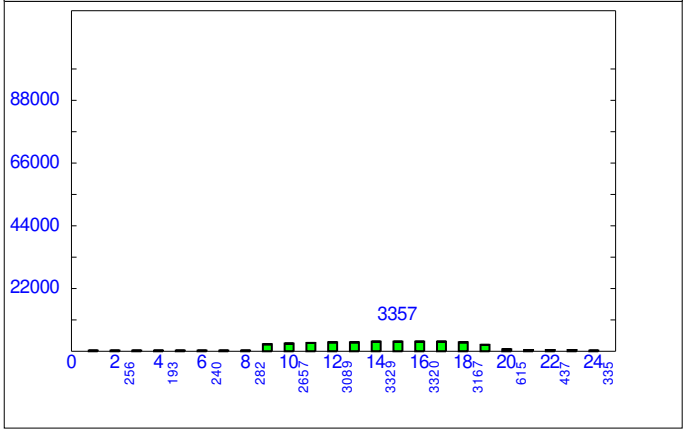


SIMULAZIONE: Potenza sens. rimossa (ER)

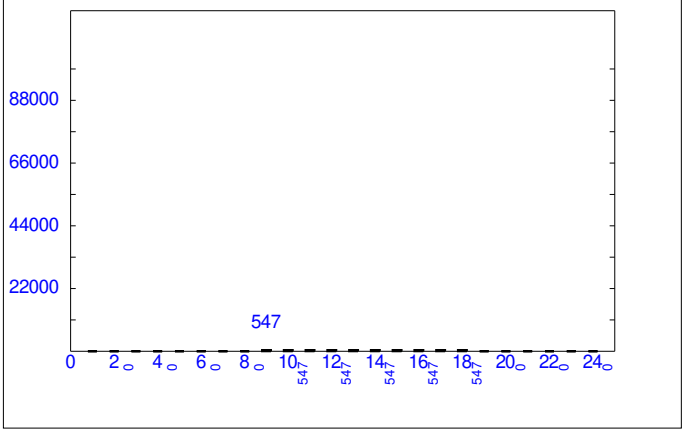


TOTALI AMBIENTE : 010108 Locale 010108

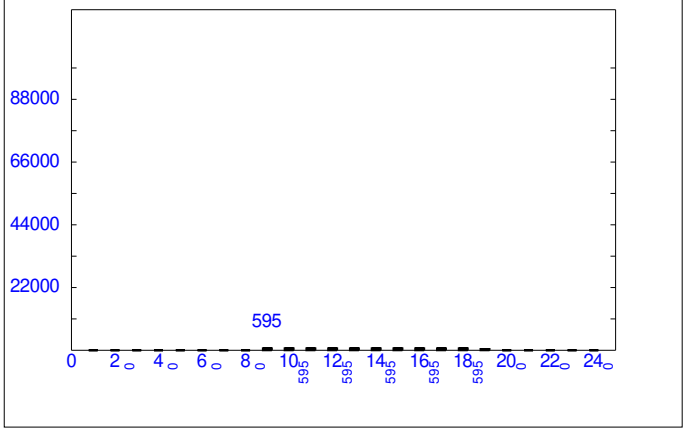
Carico totale



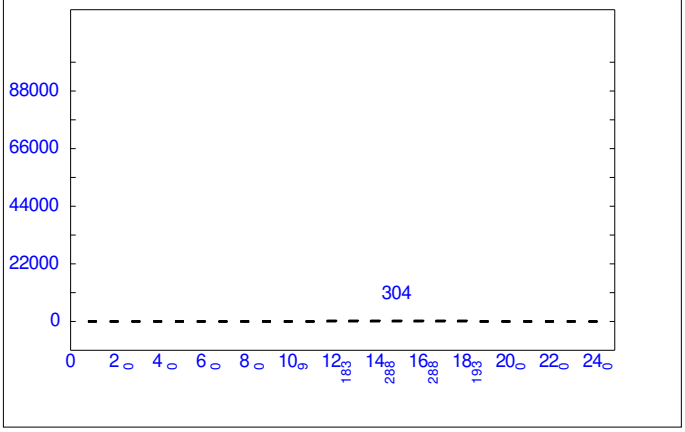
Carico latente (ventilazione)



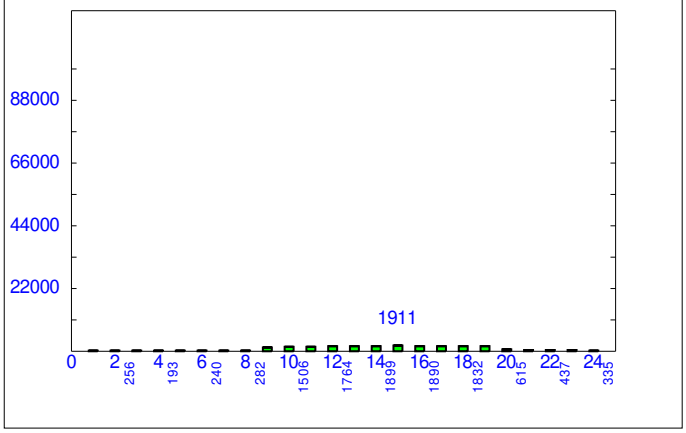
Carico latente (altri)



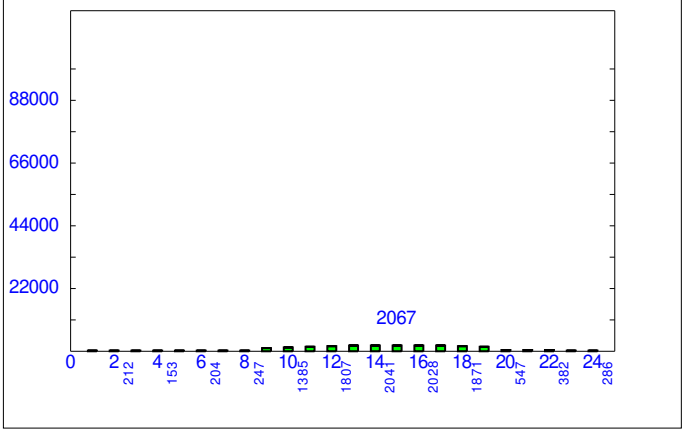
Carico sensibile (ventilazione)



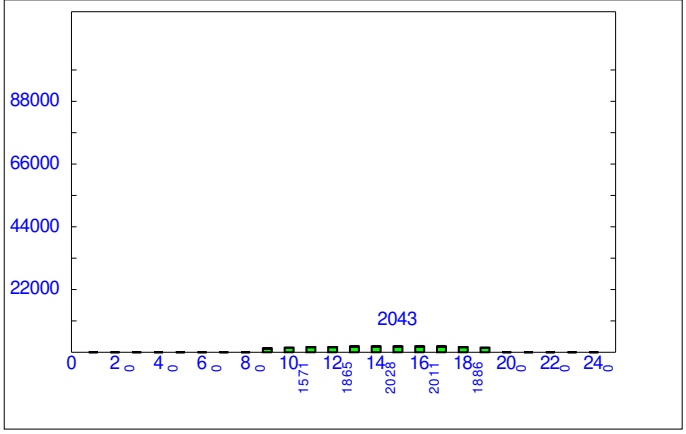
Carico sensibile (altri)



Carico sens. totale (LTS)

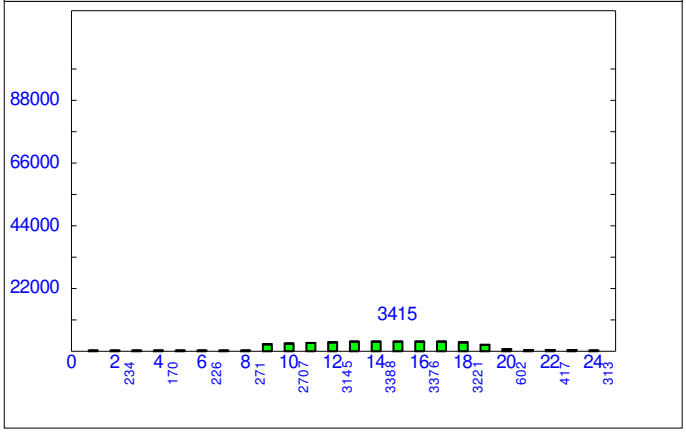


SIMULAZIONE: Potenza sens. rimossa (ER)

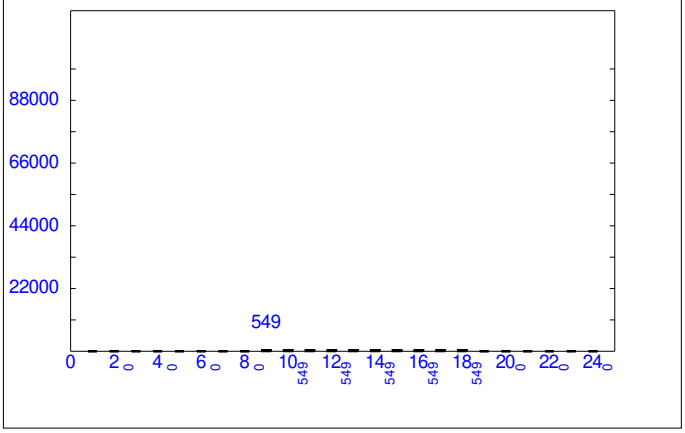


TOTALI AMBIENTE : 010109 Locale 010109

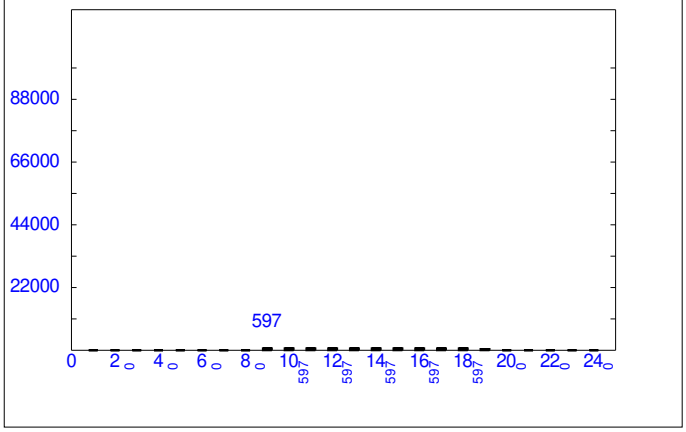
Carico totale



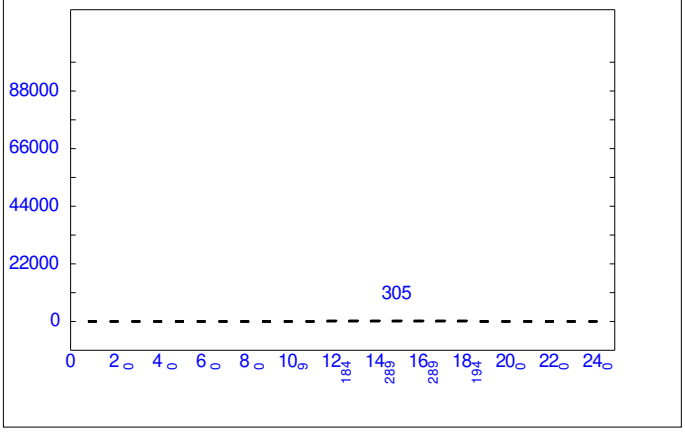
Carico latente (ventilazione)



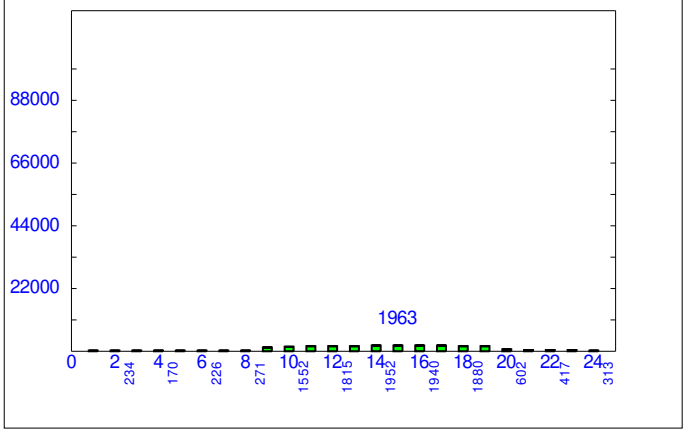
Carico latente (altri)



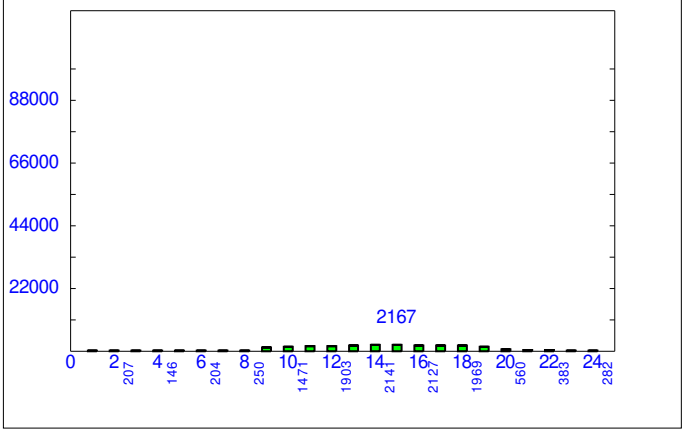
Carico sensibile (ventilazione)



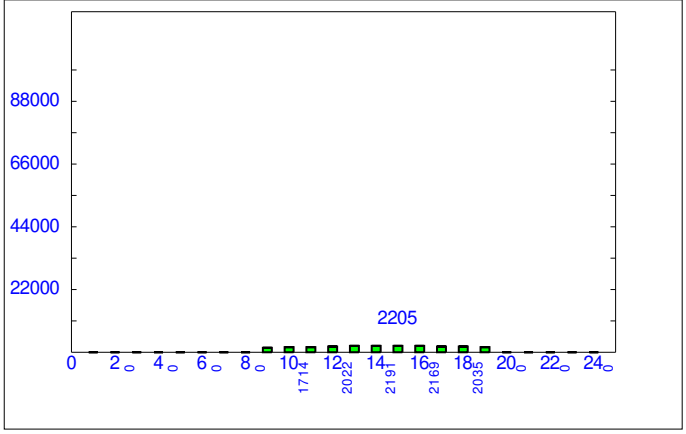
Carico sensibile (altri)



Carico sens. totale (LTS)

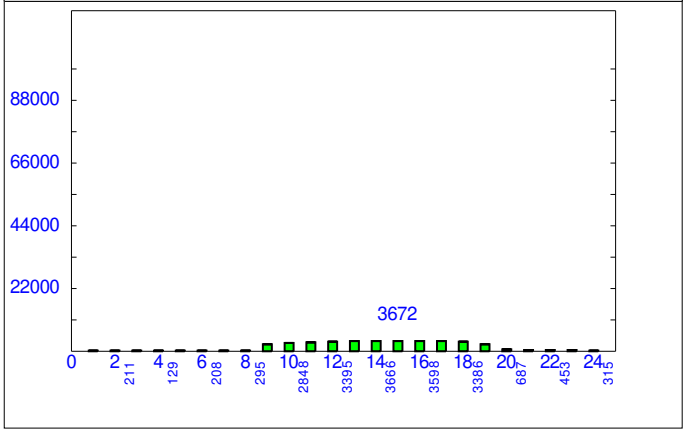


SIMULAZIONE: Potenza sens. rimossa (ER)

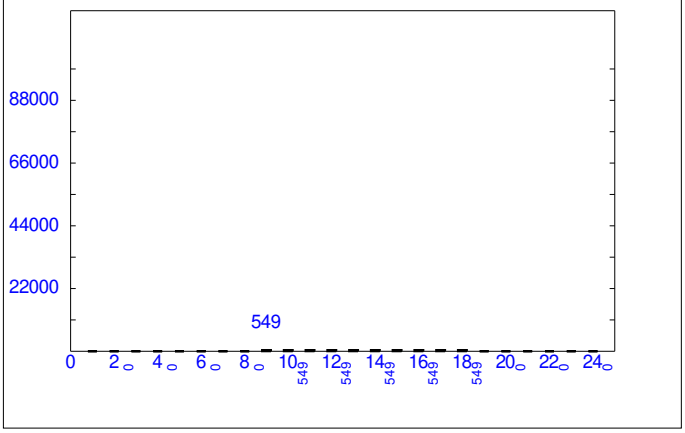


TOTALI AMBIENTE : 010110 Locale 010110

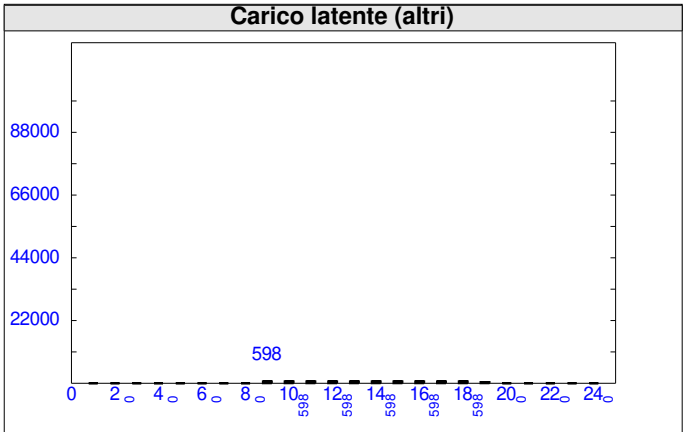
Carico totale



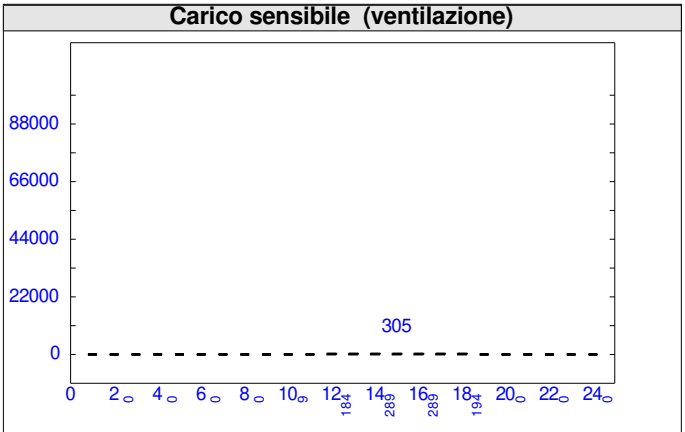
Carico latente (ventilazione)



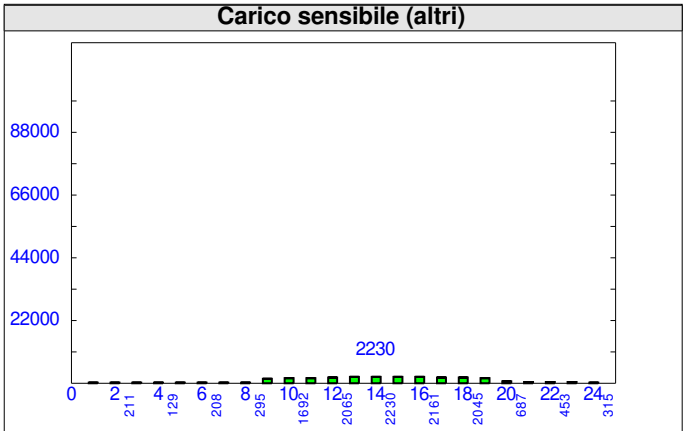
Carico latente (altri)



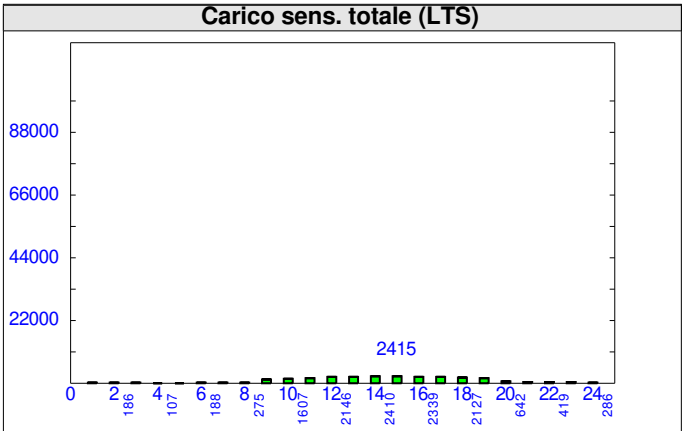
Carico sensibile (ventilazione)



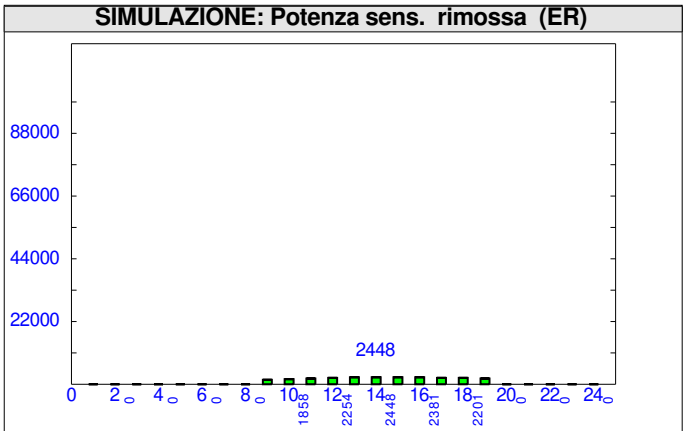
Carico sensibile (altri)



Carico sens. totale (LTS)

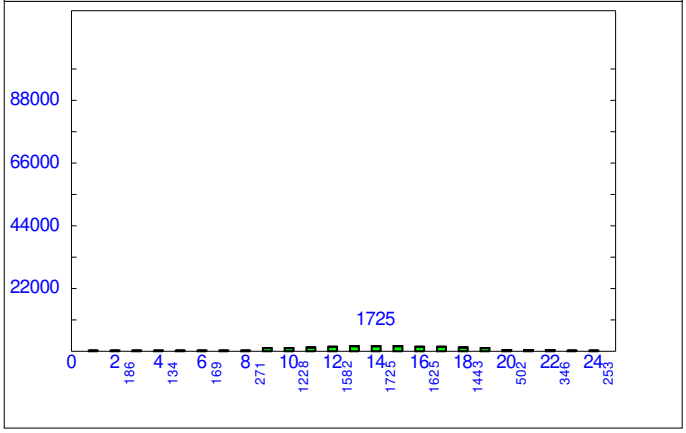


SIMULAZIONE: Potenza sens. rimossa (ER)

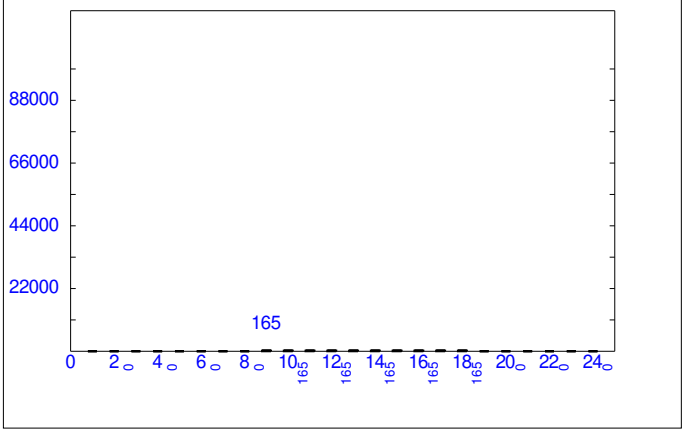


TOTALI AMBIENTE : 010111 Locale 010111

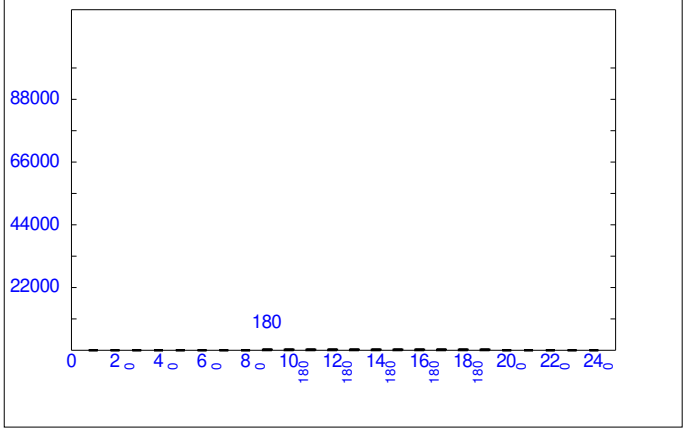
Carico totale



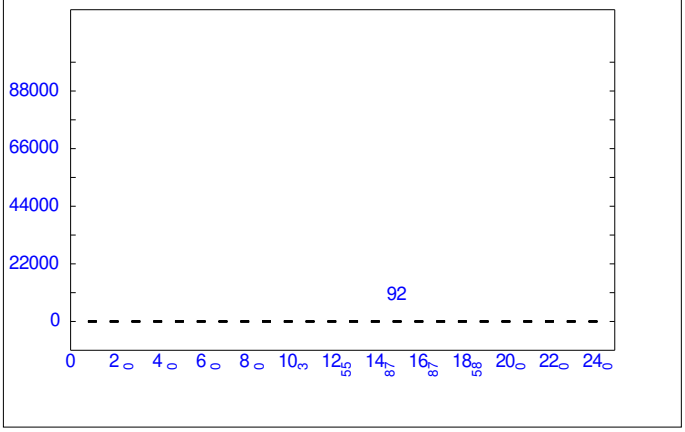
Carico latente (ventilazione)



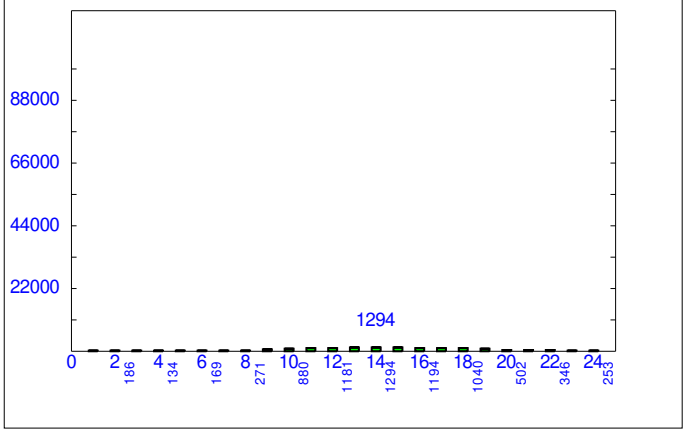
Carico latente (altri)



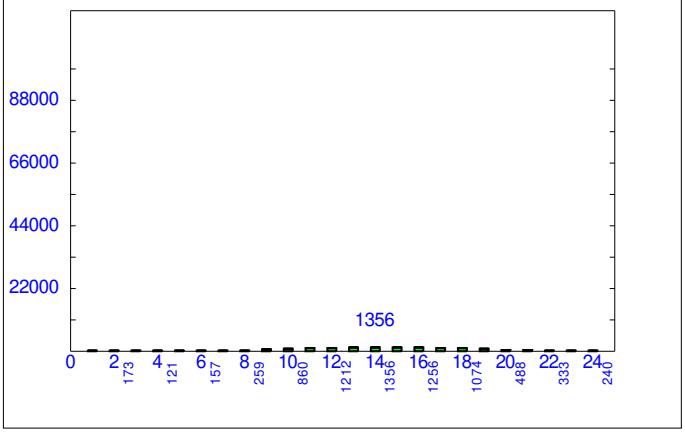
Carico sensibile (ventilazione)



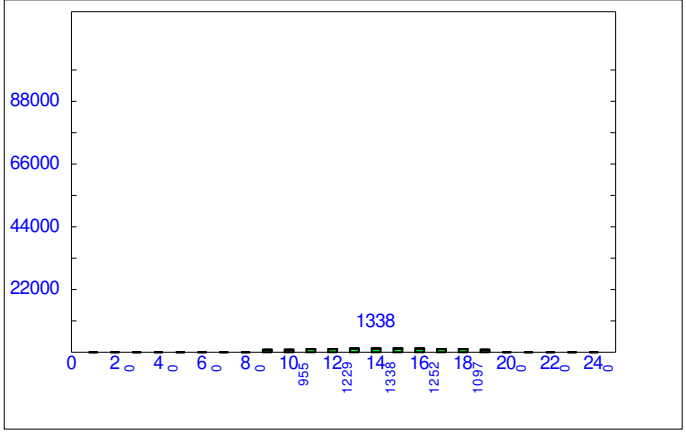
Carico sensibile (altri)



Carico sens. totale (LTS)

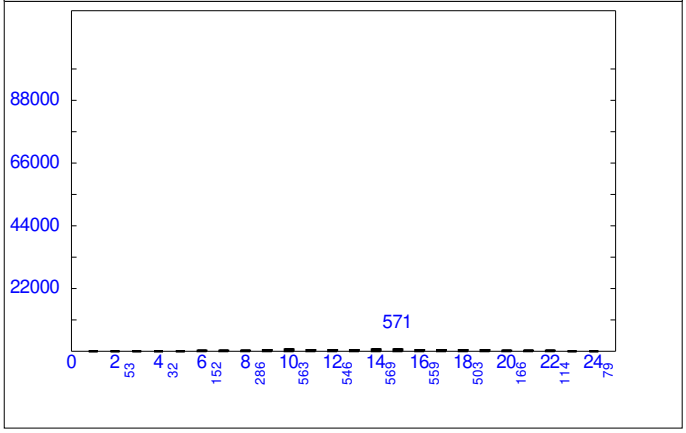


SIMULAZIONE: Potenza sens. rimossa (ER)

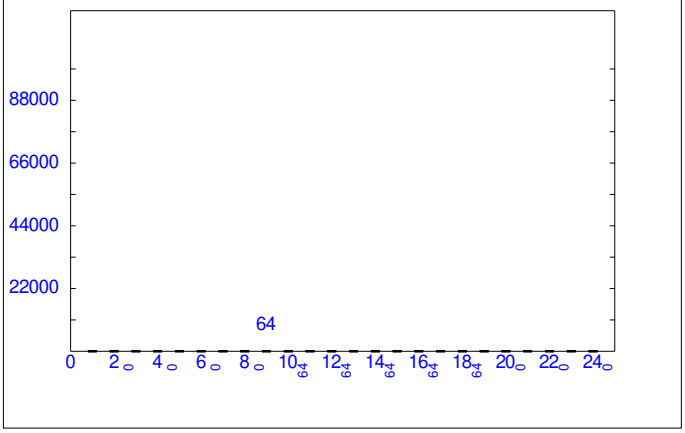


TOTALI AMBIENTE : 010112 Locale 010112

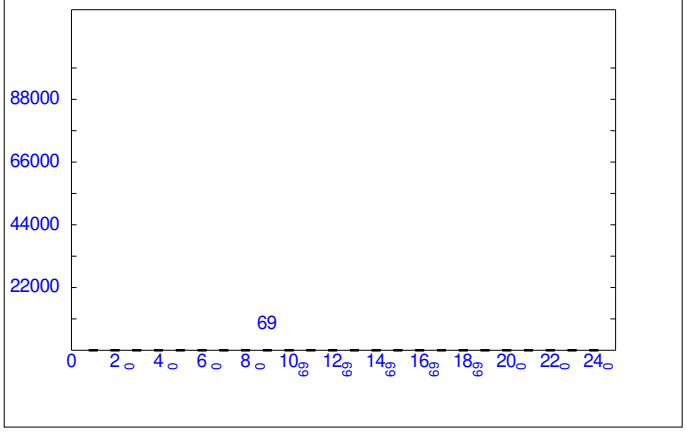
Carico totale



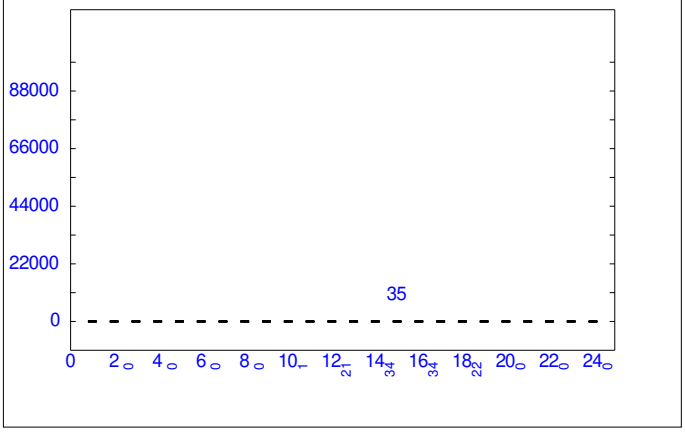
Carico latente (ventilazione)



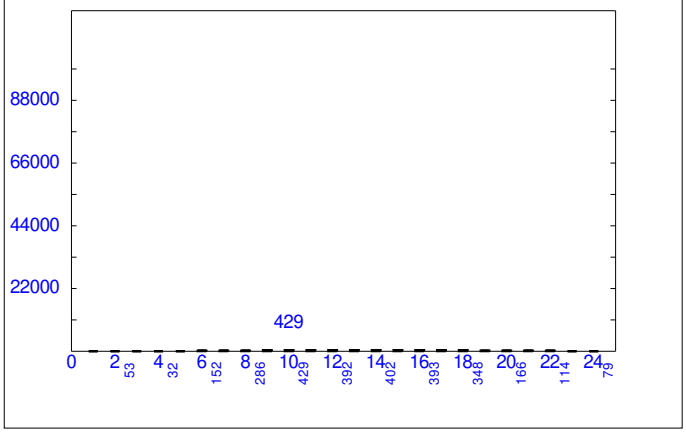
Carico latente (altri)



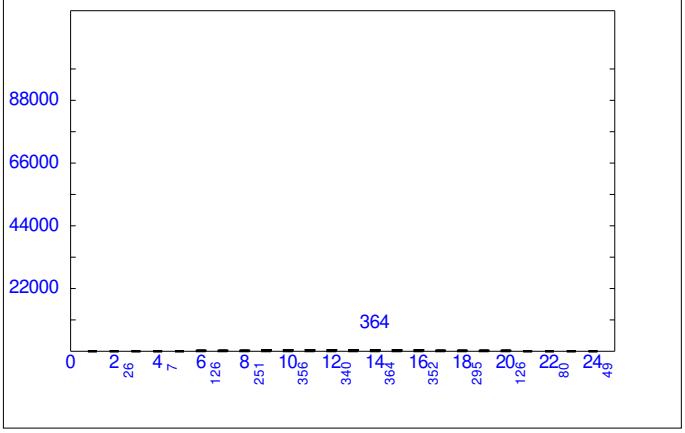
Carico sensibile (ventilazione)



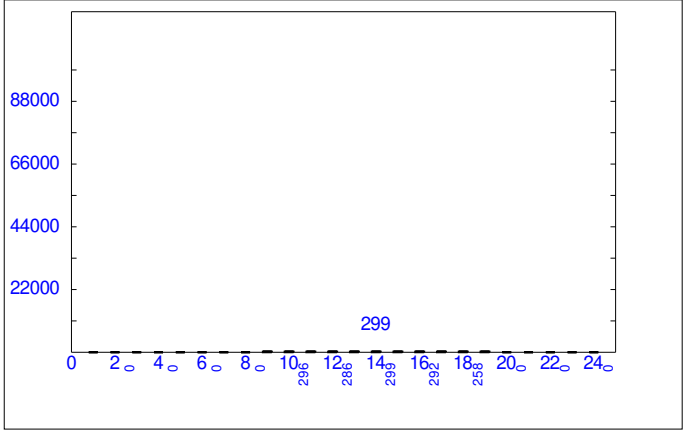
Carico sensibile (altri)



Carico sens. totale (LTS)

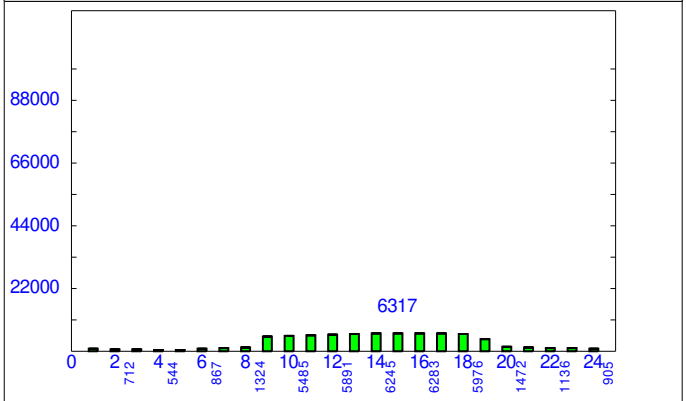


SIMULAZIONE: Potenza sens. rimossa (ER)

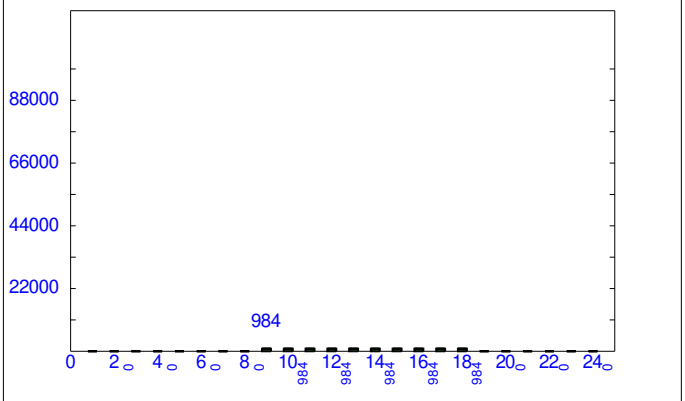


TOTALI AMBIENTE : 010113 Locale 010123

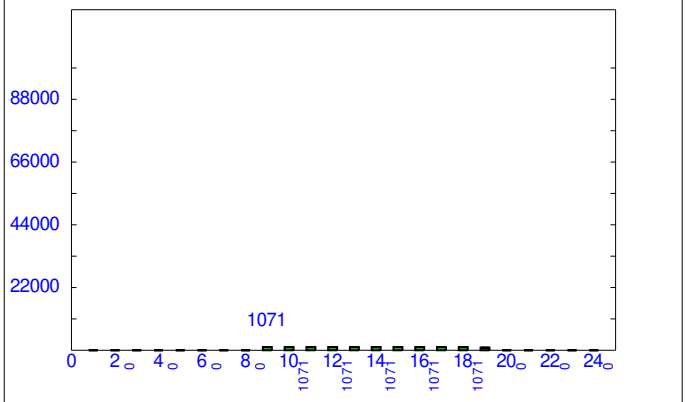
Carico totale



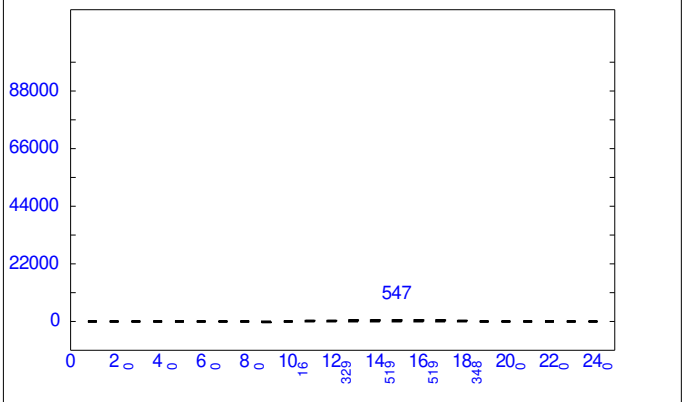
Carico latente (ventilazione)



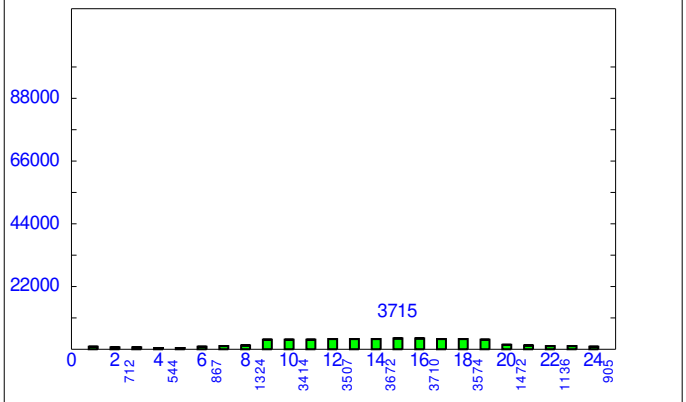
Carico latente (altri)



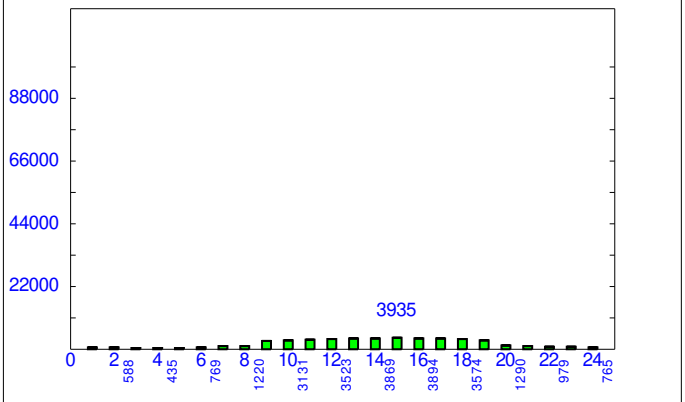
Carico sensibile (ventilazione)



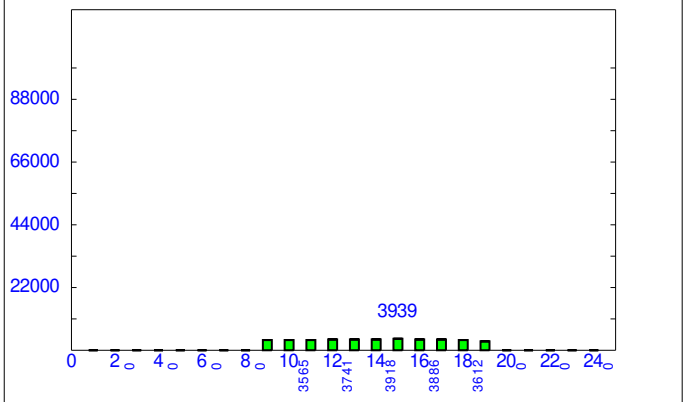
Carico sensibile (altri)



Carico sens. totale (LTS)

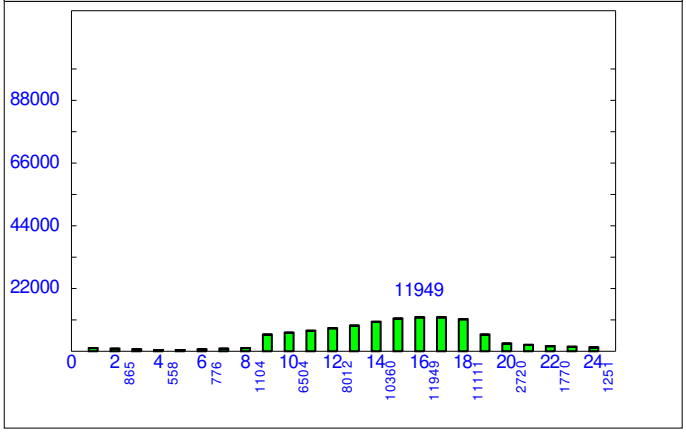


SIMULAZIONE: Potenza sens. rimossa (ER)

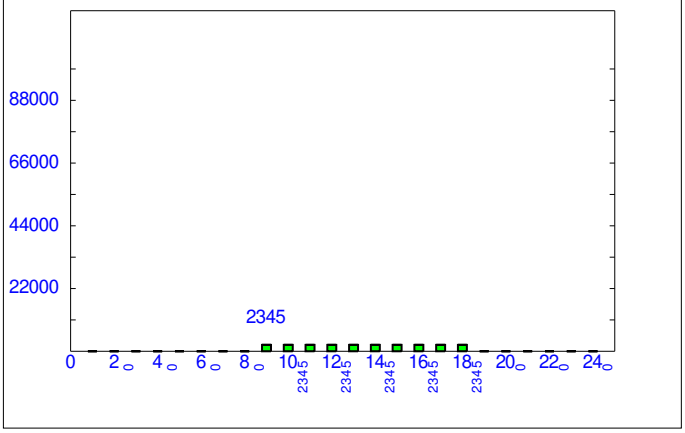


TOTALI AMBIENTE : 010114 Locale 010124

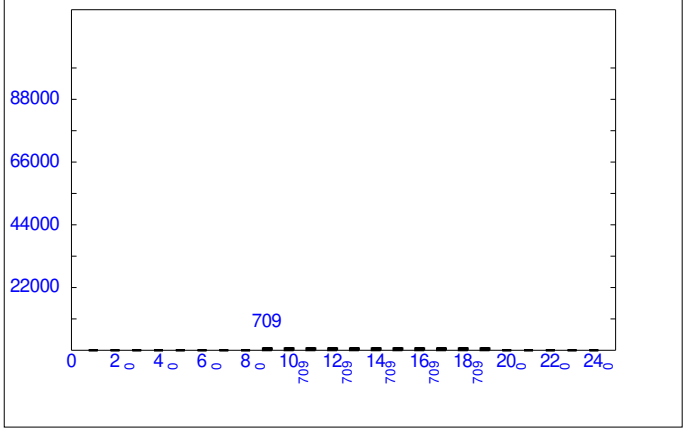
Carico totale



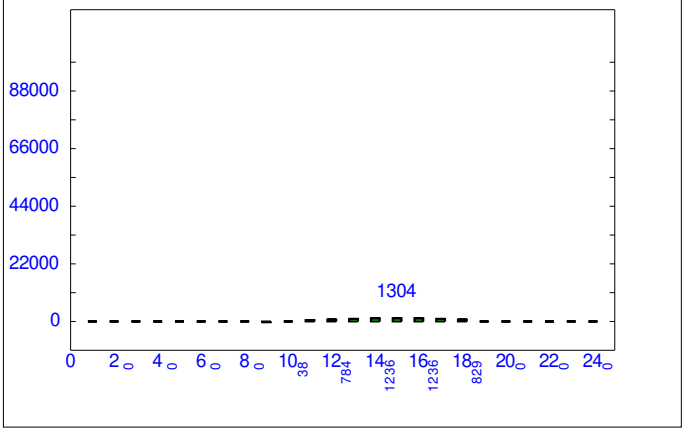
Carico latente (ventilazione)



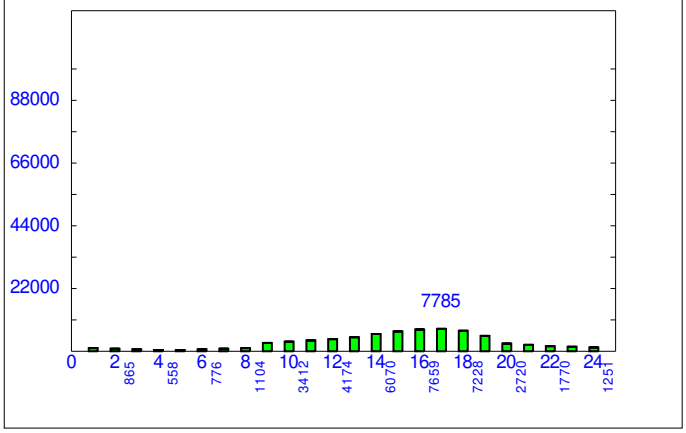
Carico latente (altri)



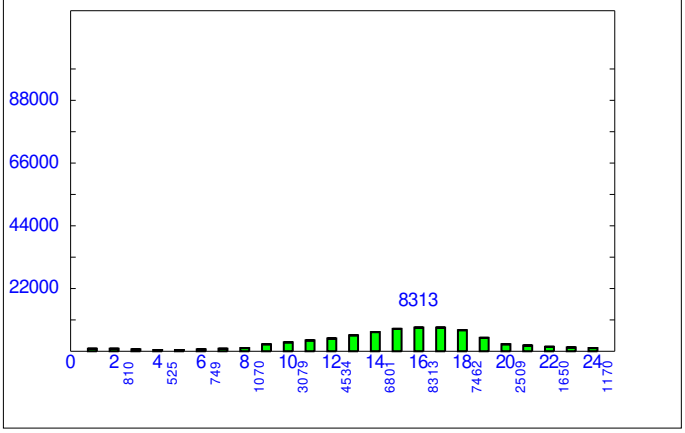
Carico sensibile (ventilazione)



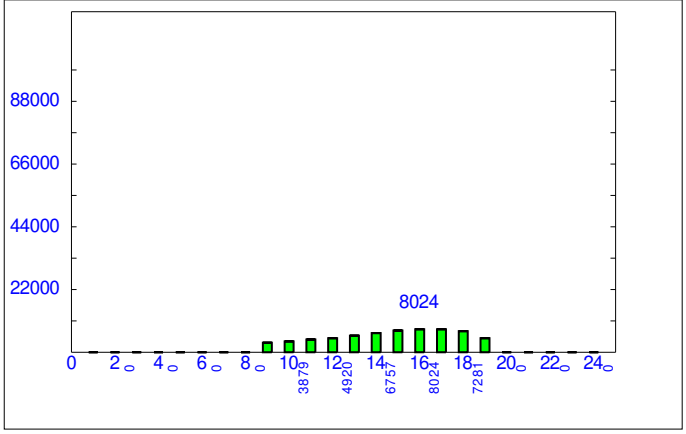
Carico sensibile (altri)



Carico sens. totale (LTS)

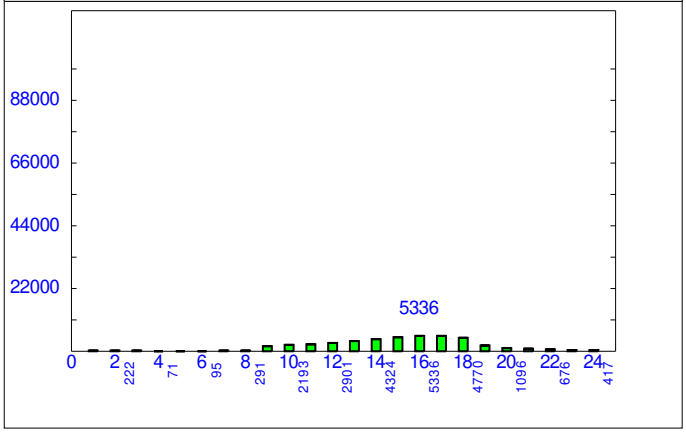


SIMULAZIONE: Potenza sens. rimossa (ER)

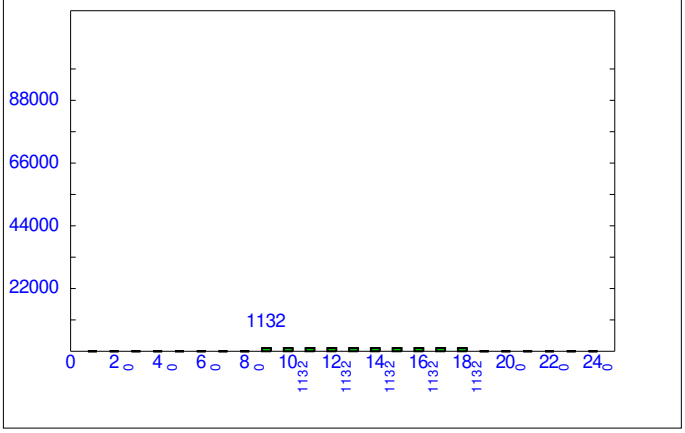


TOTALI AMBIENTE : 010115 Locale 010125

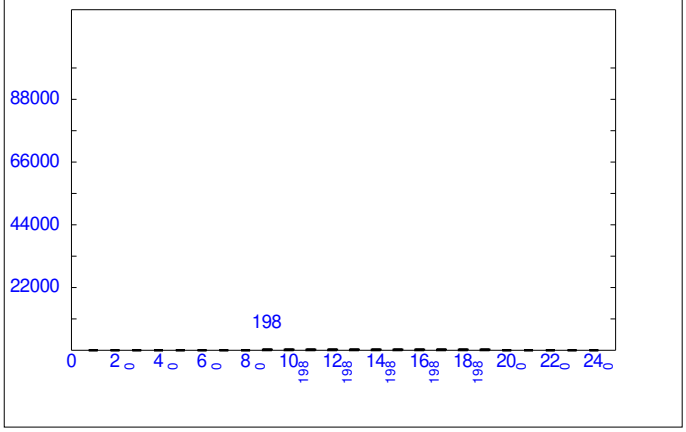
Carico totale



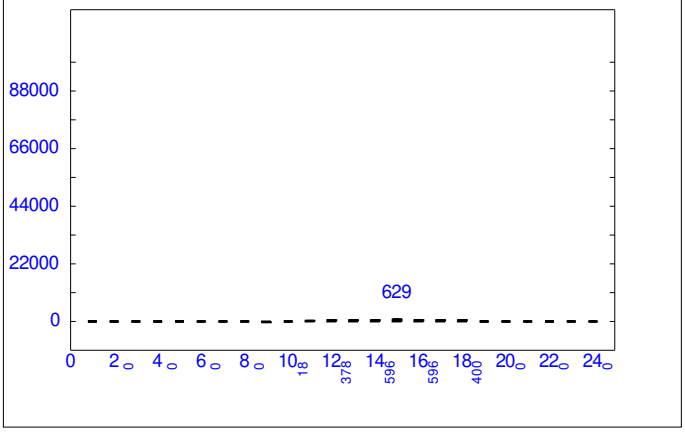
Carico latente (ventilazione)



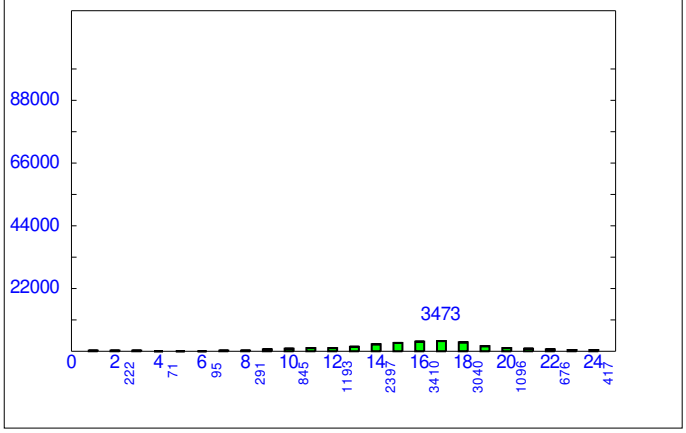
Carico latente (altri)



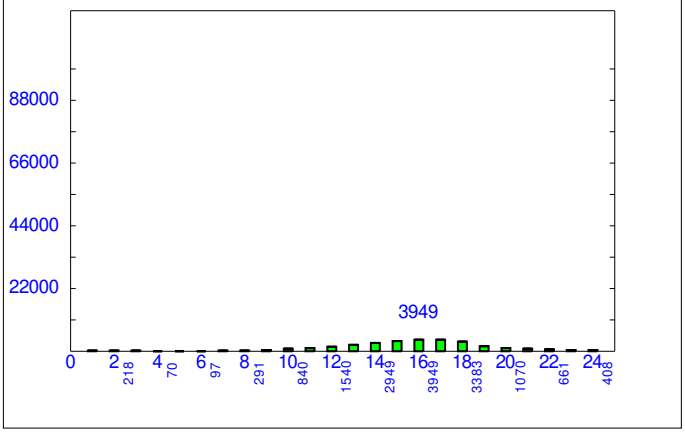
Carico sensibile (ventilazione)



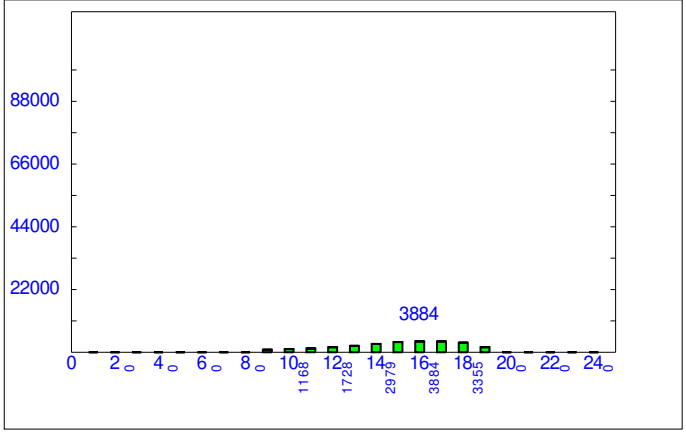
Carico sensibile (altri)



Carico sens. totale (LTS)

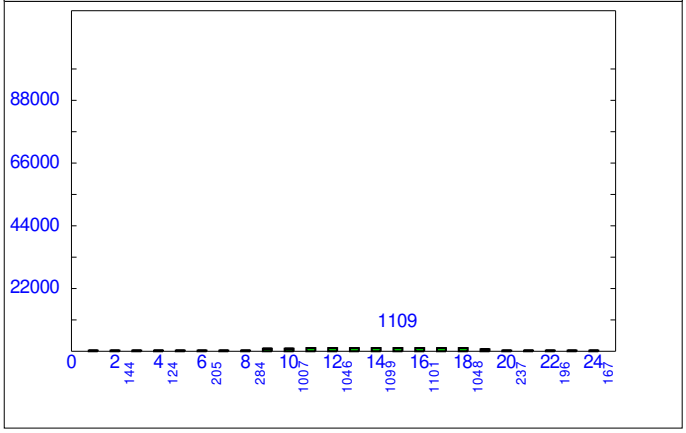


SIMULAZIONE: Potenza sens. rimossa (ER)

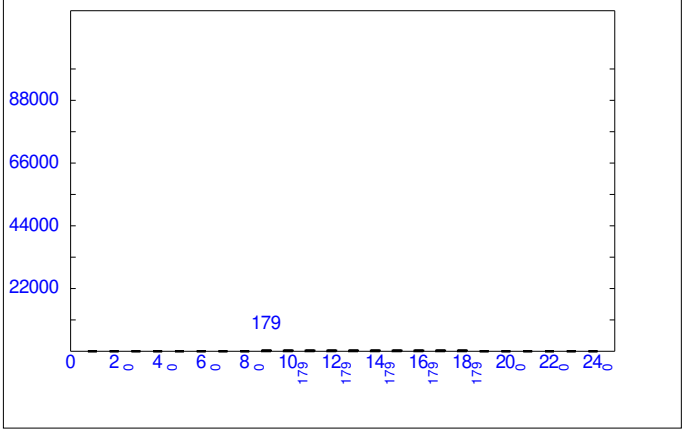


TOTALI AMBIENTE : 020101 Locale 020101

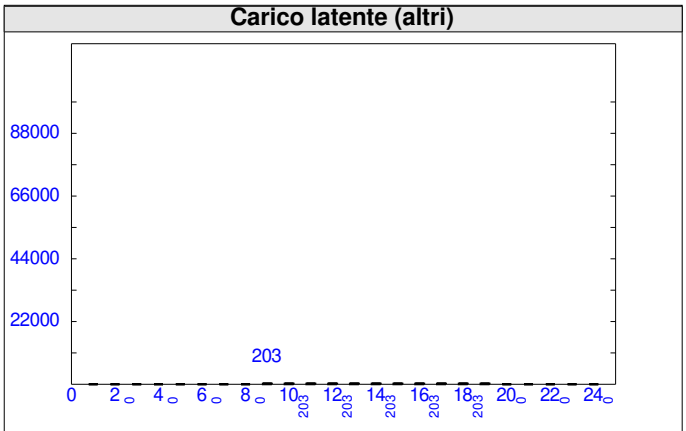
Carico totale



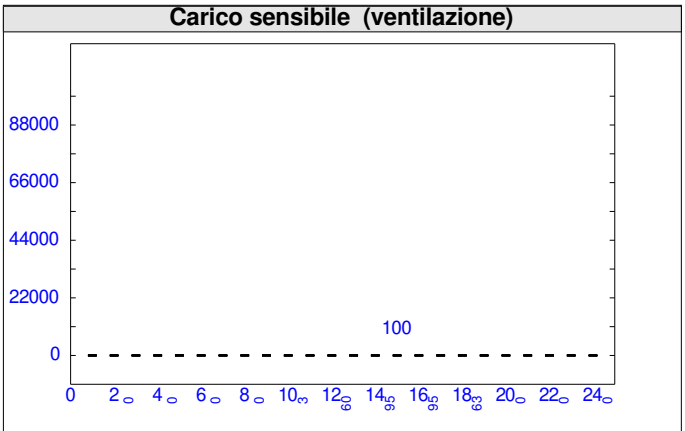
Carico latente (ventilazione)



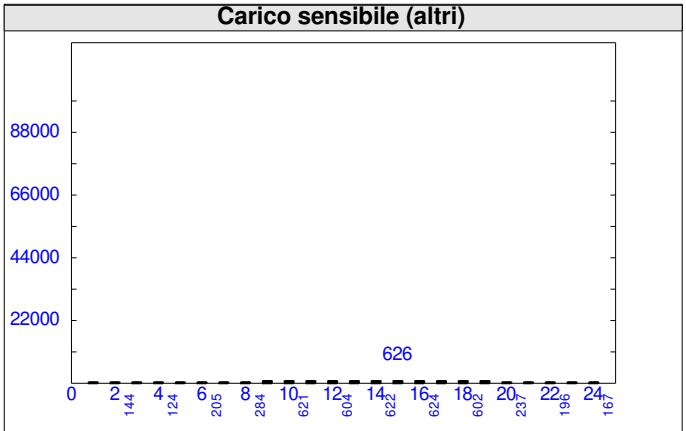
Carico latente (altri)



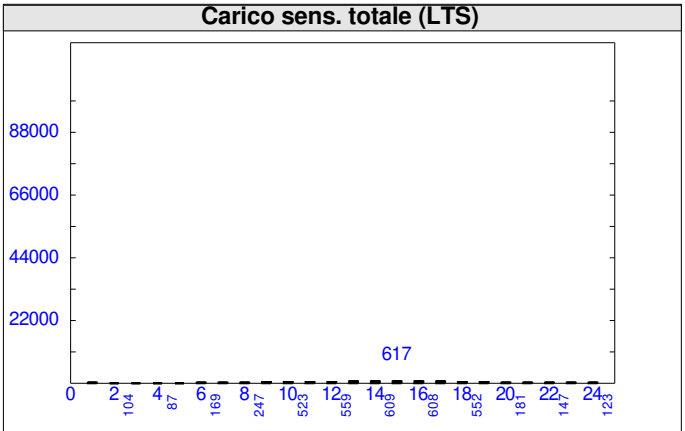
Carico sensibile (ventilazione)



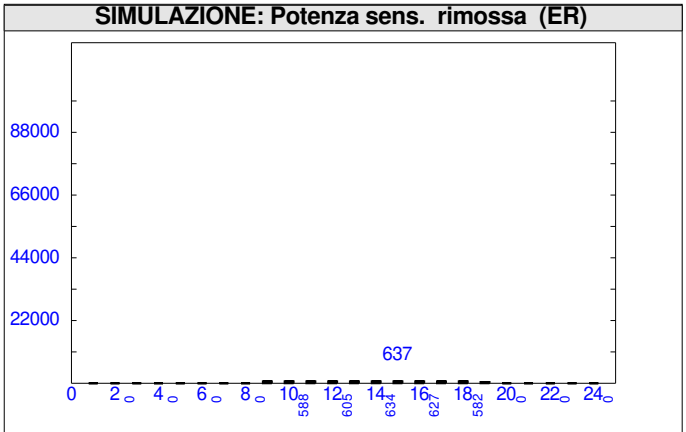
Carico sensibile (altri)



Carico sens. totale (LTS)

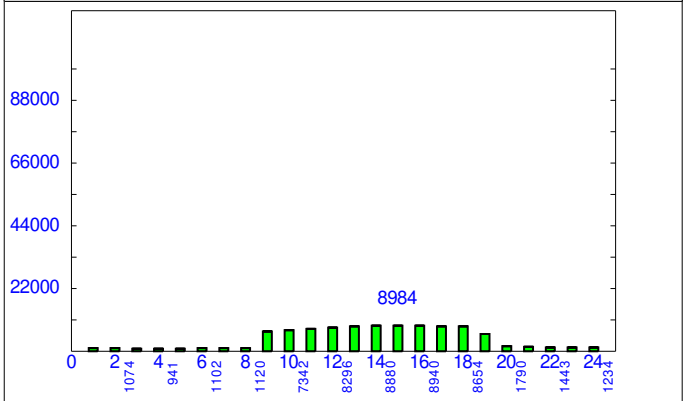


SIMULAZIONE: Potenza sens. rimossa (ER)

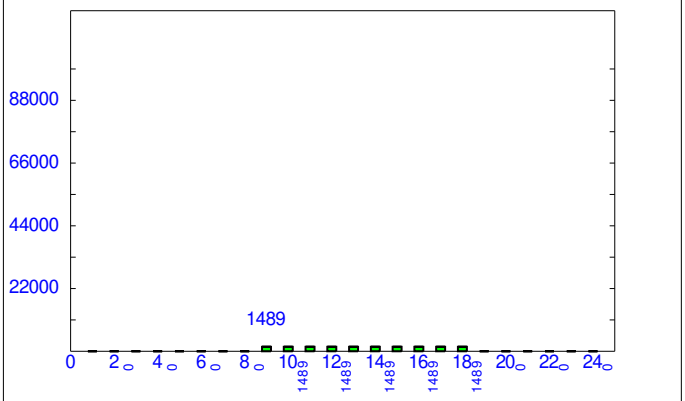


TOTALI AMBIENTE : 020102 Locale 020102

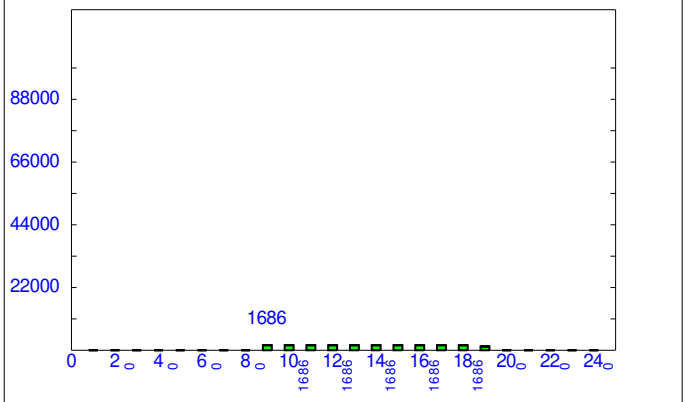
Carico totale



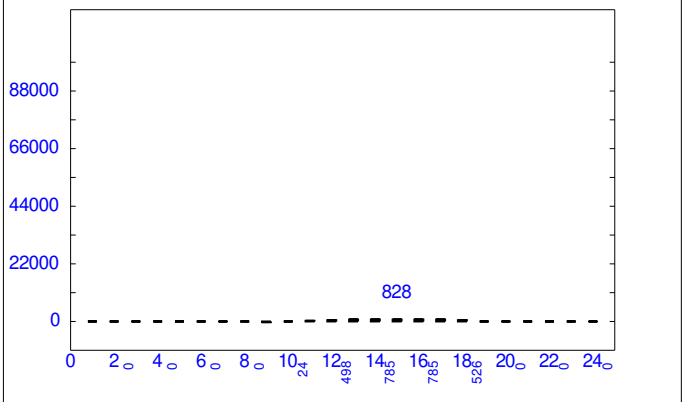
Carico latente (ventilazione)



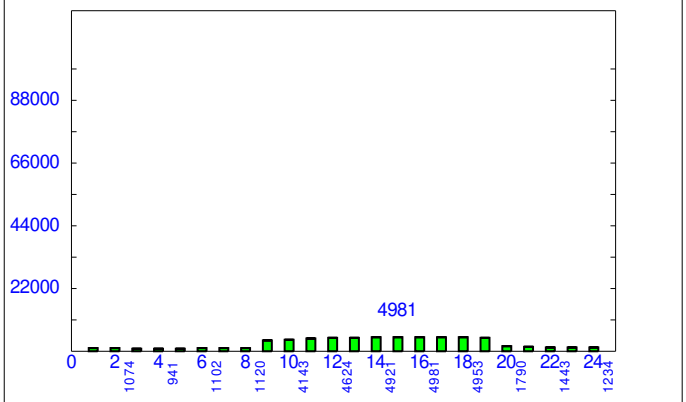
Carico latente (altri)



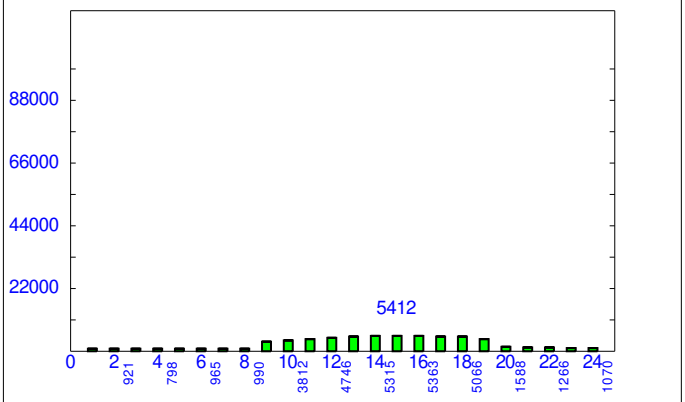
Carico sensibile (ventilazione)



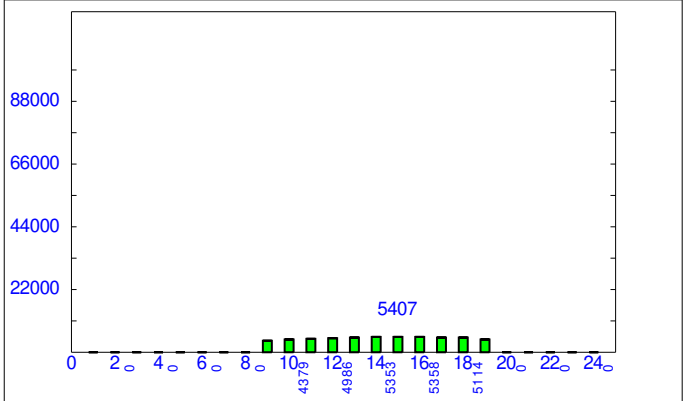
Carico sensibile (altri)



Carico sens. totale (LTS)

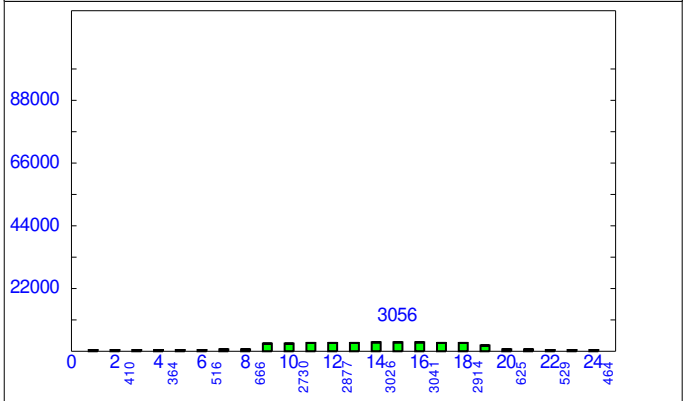


SIMULAZIONE: Potenza sens. rimossa (ER)

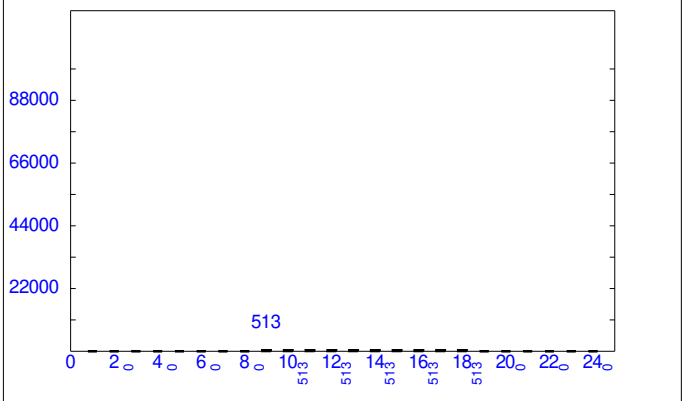


TOTALI AMBIENTE : 020103 Locale 020103

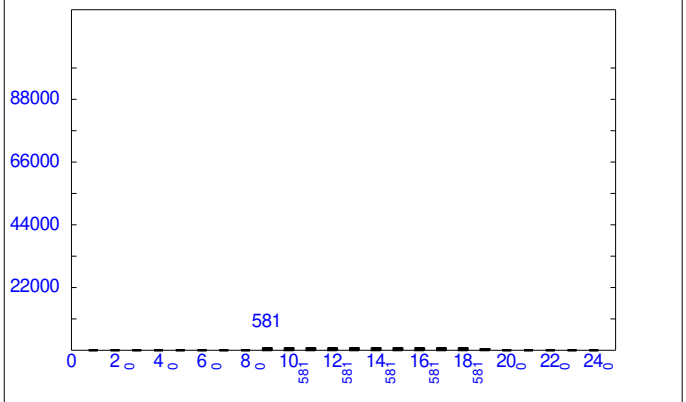
Carico totale



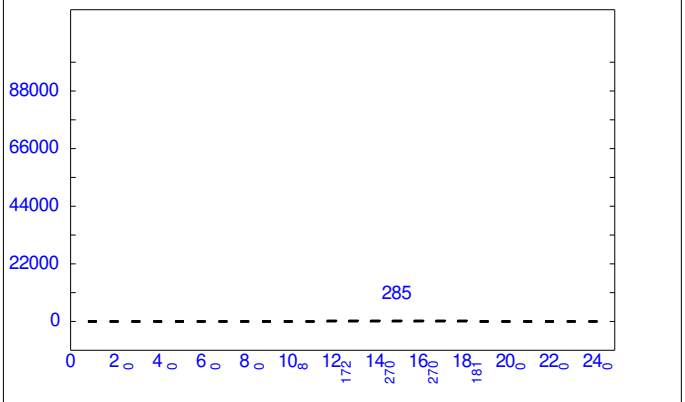
Carico latente (ventilazione)



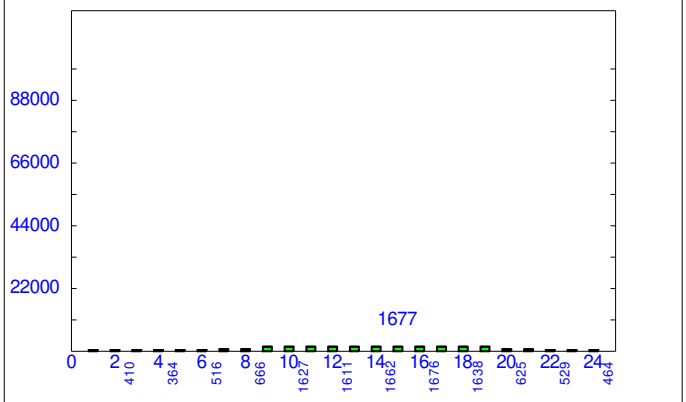
Carico latente (altri)



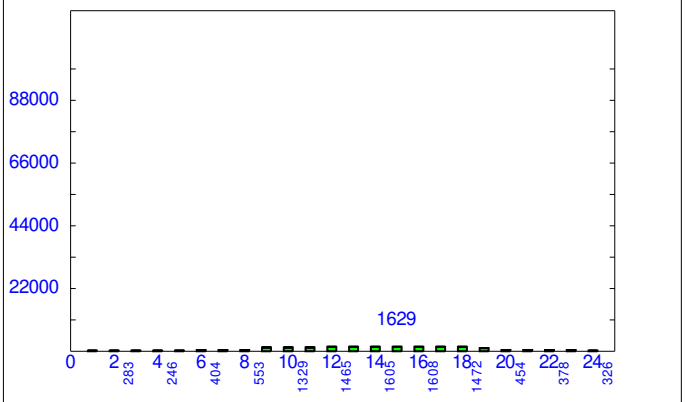
Carico sensibile (ventilazione)



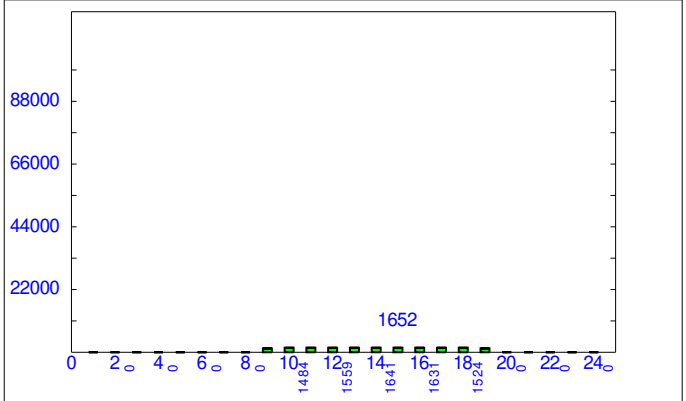
Carico sensibile (altri)



Carico sens. totale (LTS)

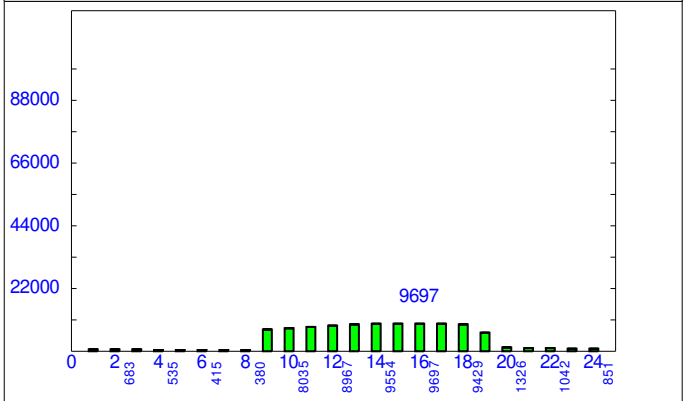


SIMULAZIONE: Potenza sens. rimossa (ER)

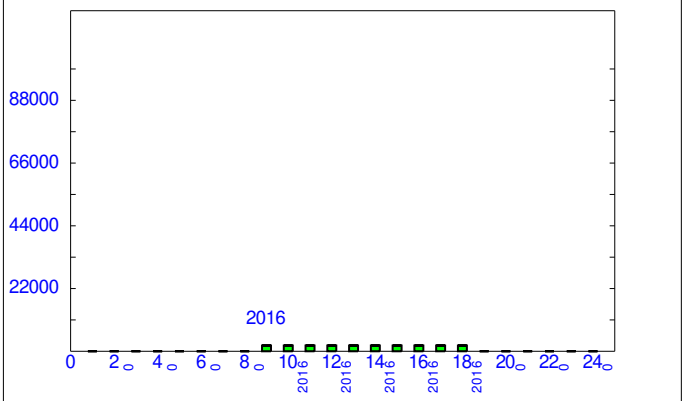


TOTALI AMBIENTE : 020104 Locale 020104

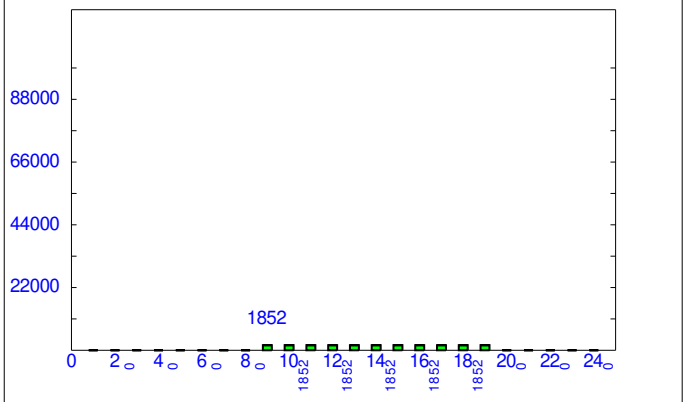
Carico totale



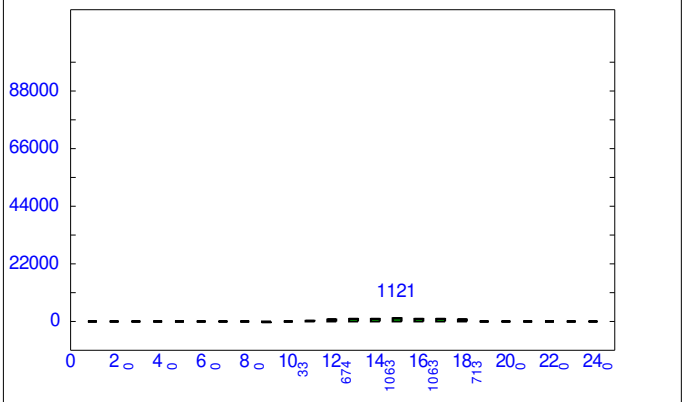
Carico latente (ventilazione)



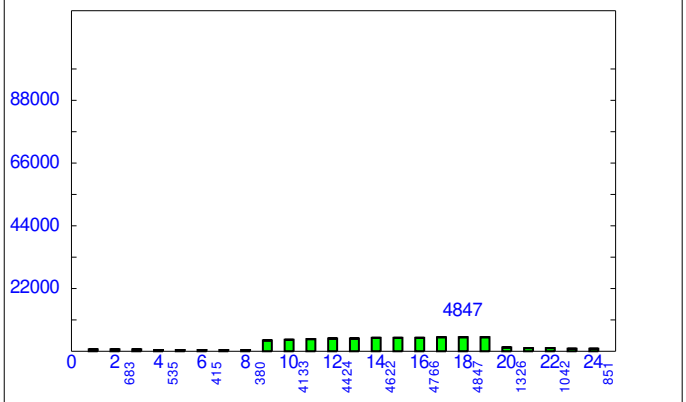
Carico latente (altri)



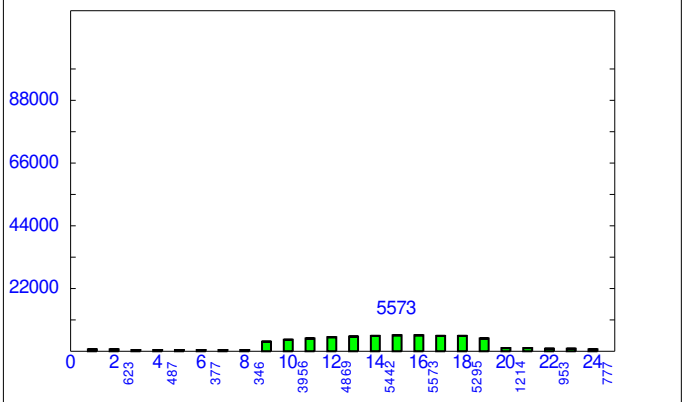
Carico sensibile (ventilazione)



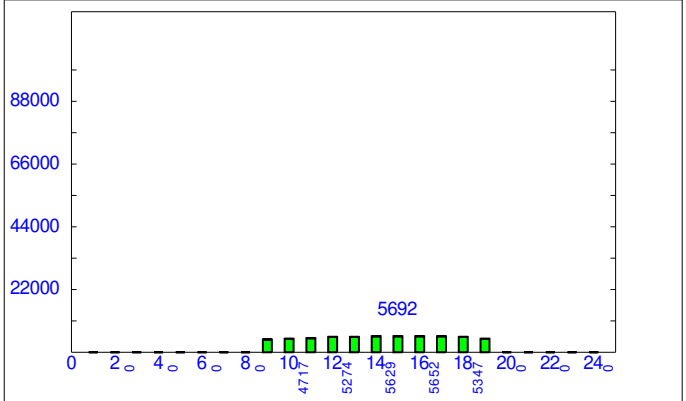
Carico sensibile (altri)



Carico sens. totale (LTS)

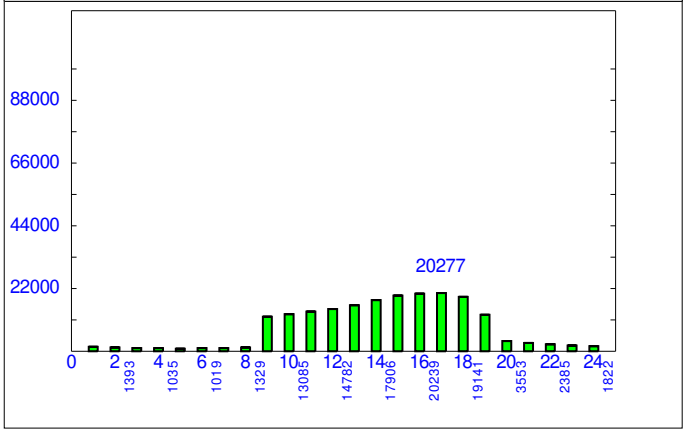


SIMULAZIONE: Potenza sens. rimossa (ER)

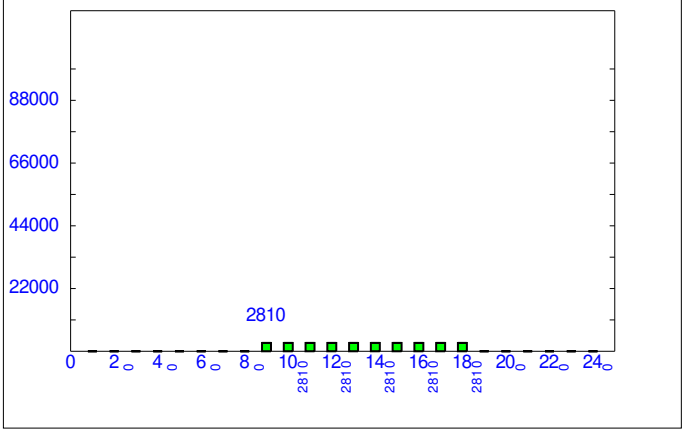


TOTALI AMBIENTE : 020105 Locale 020105

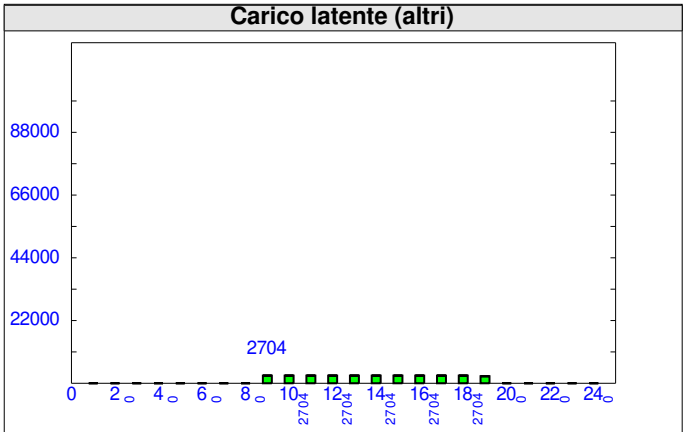
Carico totale



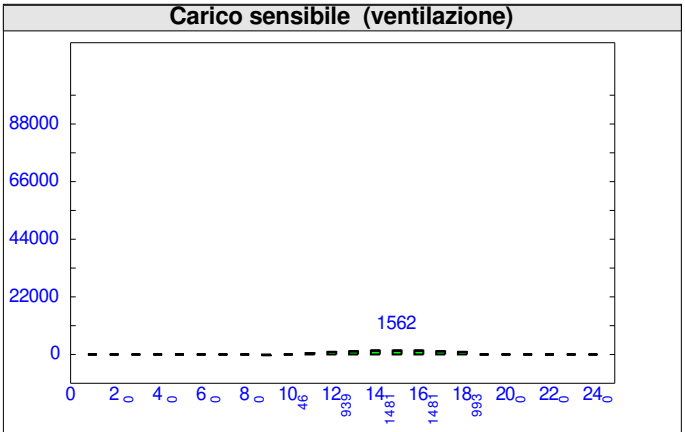
Carico latente (ventilazione)



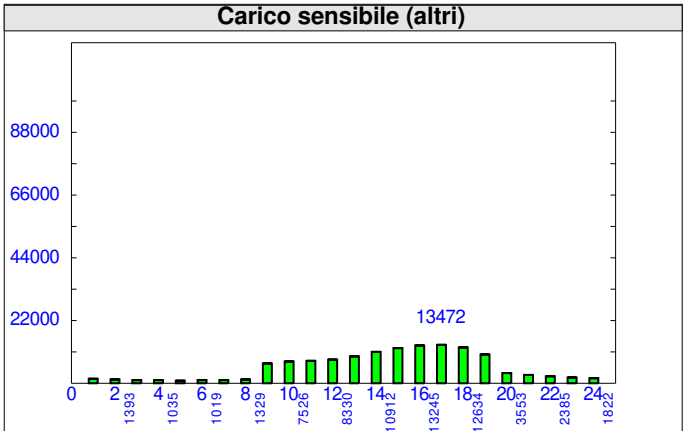
Carico latente (altri)



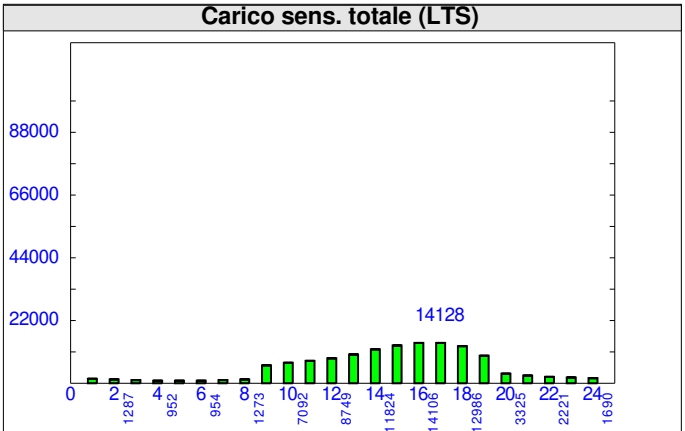
Carico sensibile (ventilazione)



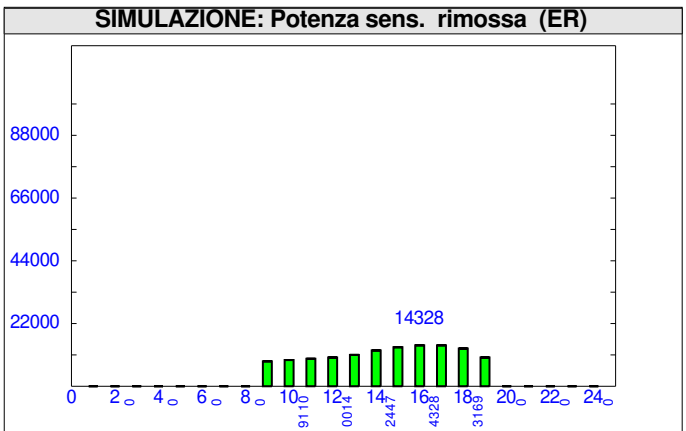
Carico sensibile (altri)



Carico sens. totale (LTS)

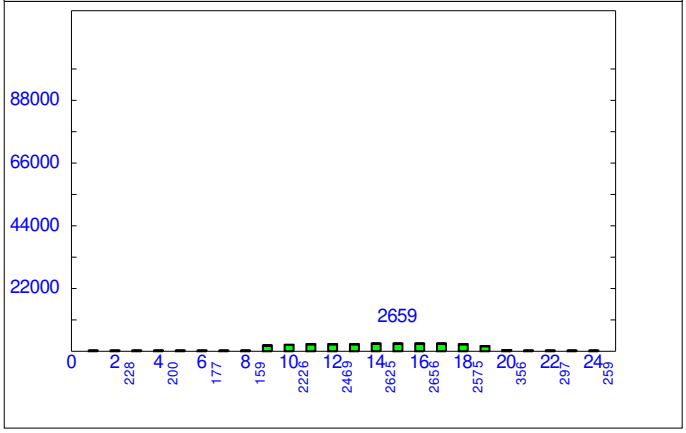


SIMULAZIONE: Potenza sens. rimossa (ER)

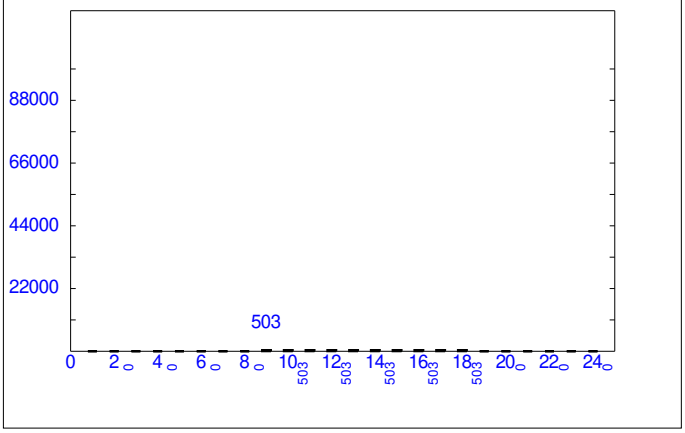


TOTALI AMBIENTE : 020106 Locale 020106

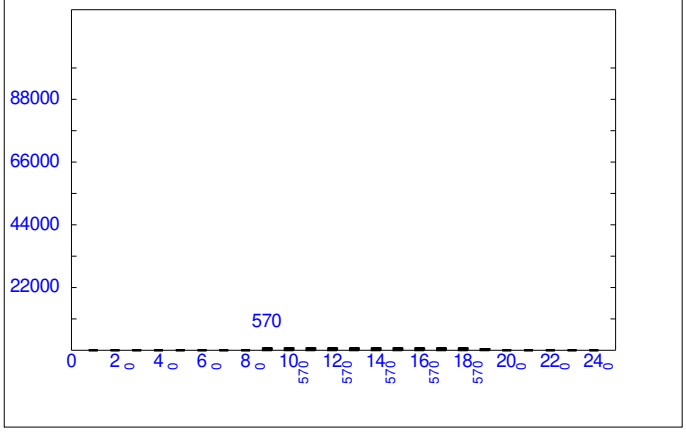
Carico totale



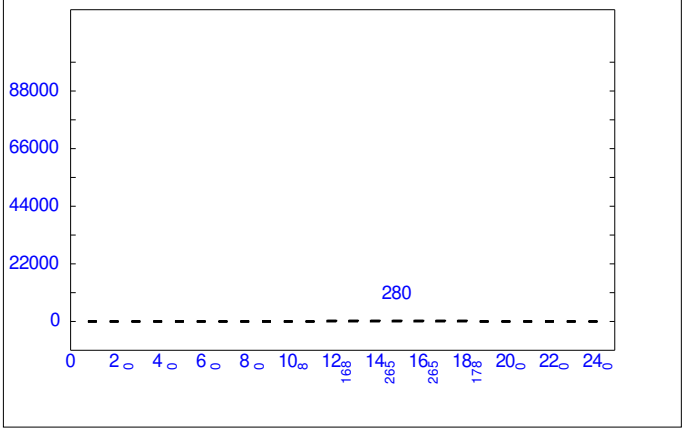
Carico latente (ventilazione)



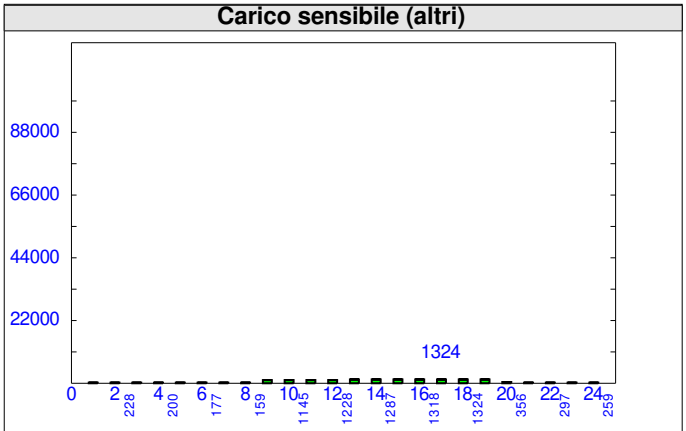
Carico latente (altri)



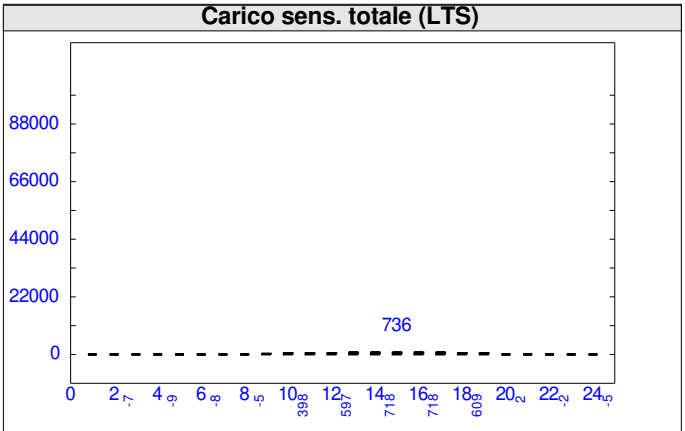
Carico sensibile (ventilazione)



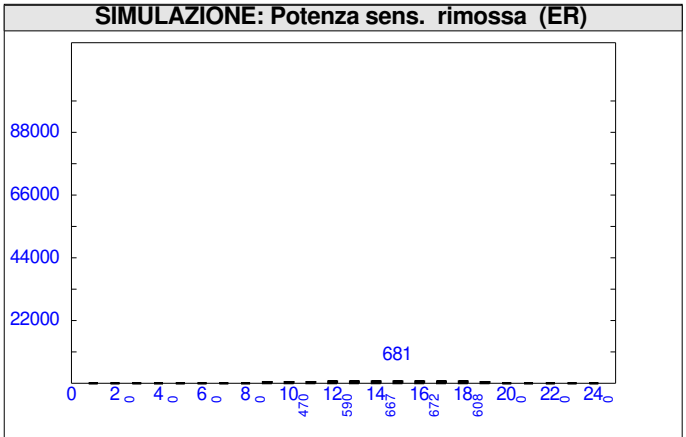
Carico sensibile (altri)



Carico sens. totale (LTS)

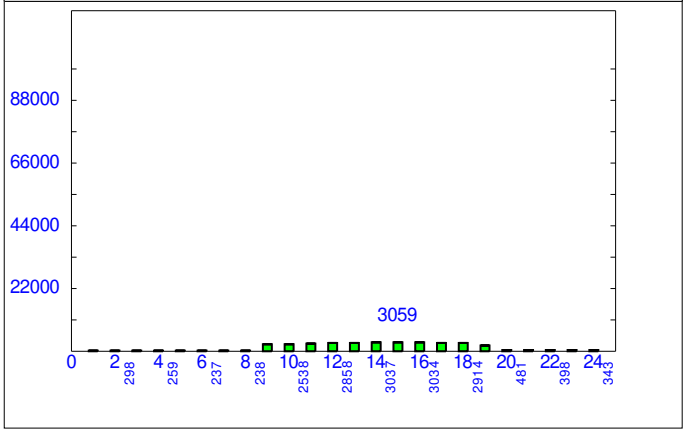


SIMULAZIONE: Potenza sens. rimossa (ER)

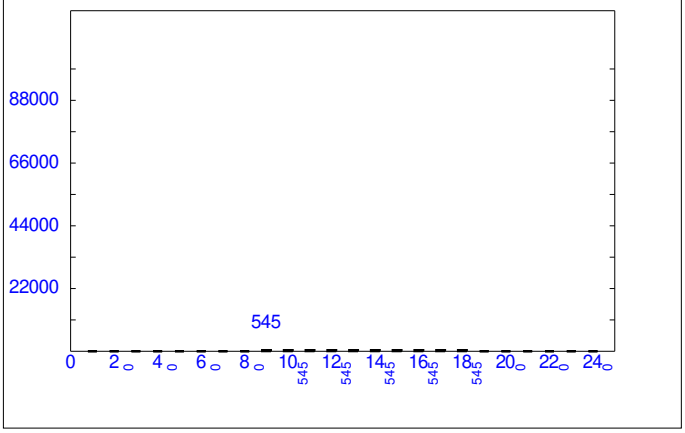


TOTALI AMBIENTE : 020107 Locale 020107

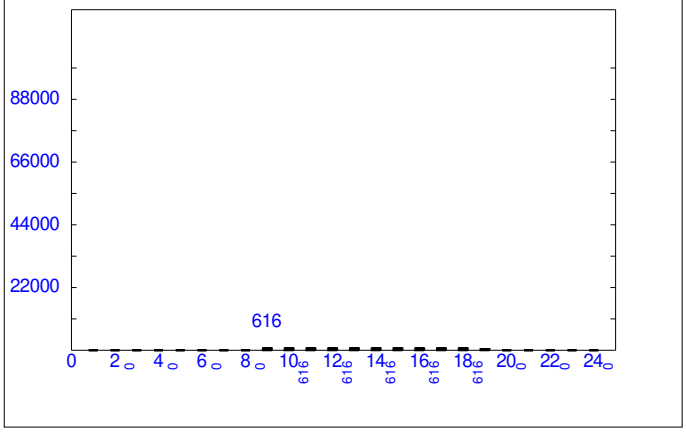
Carico totale



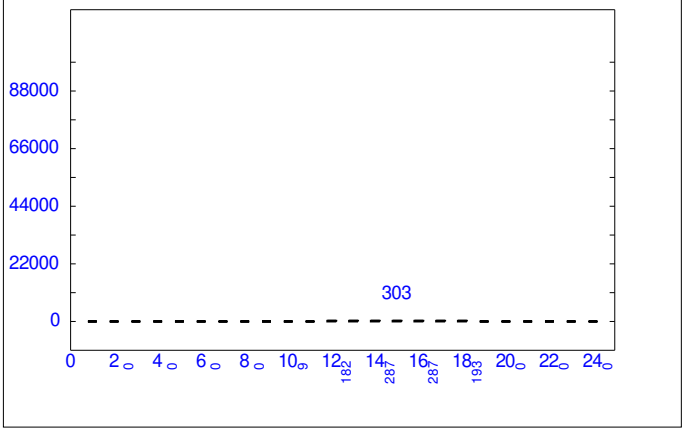
Carico latente (ventilazione)



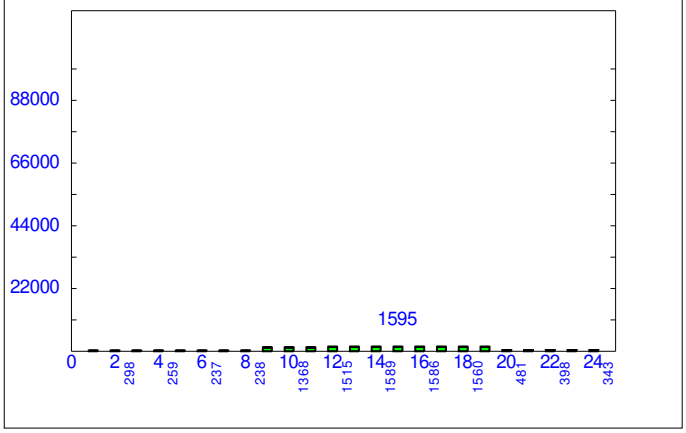
Carico latente (altri)



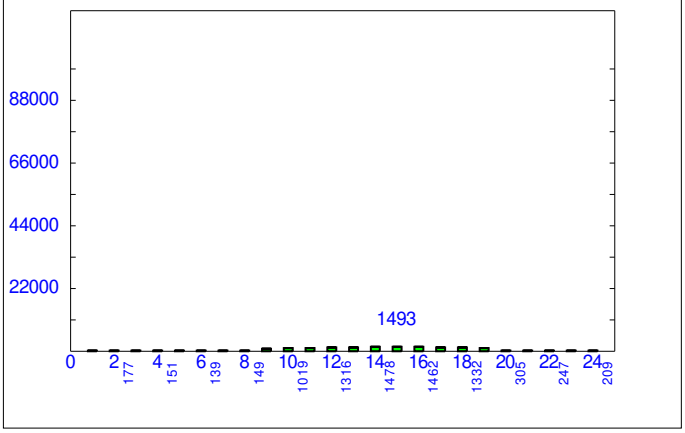
Carico sensibile (ventilazione)



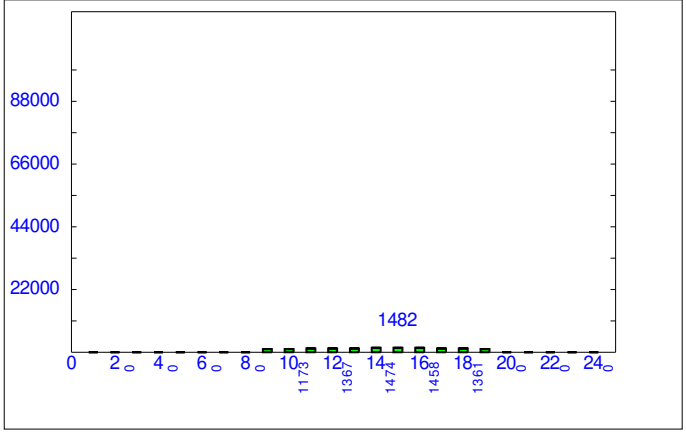
Carico sensibile (altri)



Carico sens. totale (LTS)

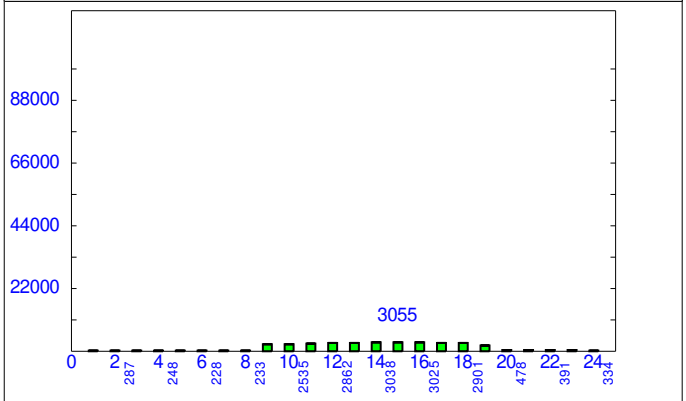


SIMULAZIONE: Potenza sens. rimossa (ER)

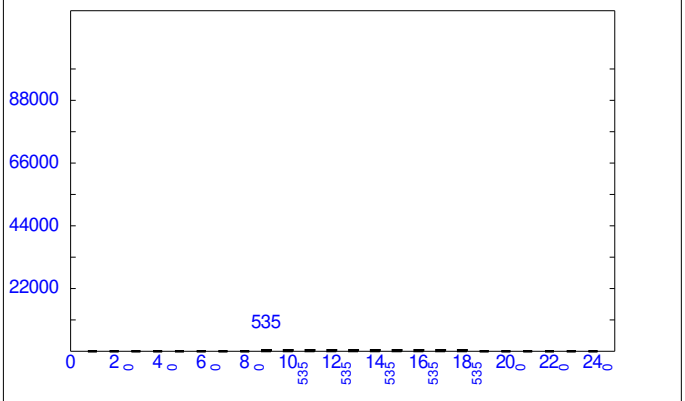


TOTALI AMBIENTE : 020108 Locale 020108

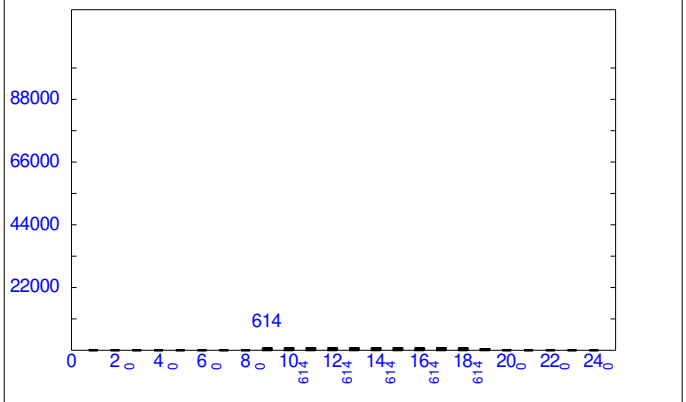
Carico totale



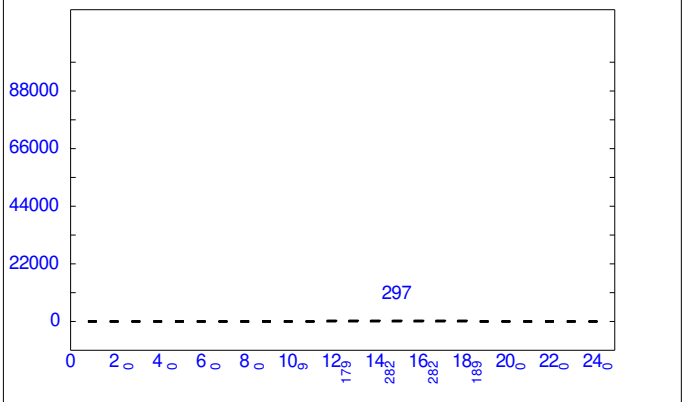
Carico latente (ventilazione)



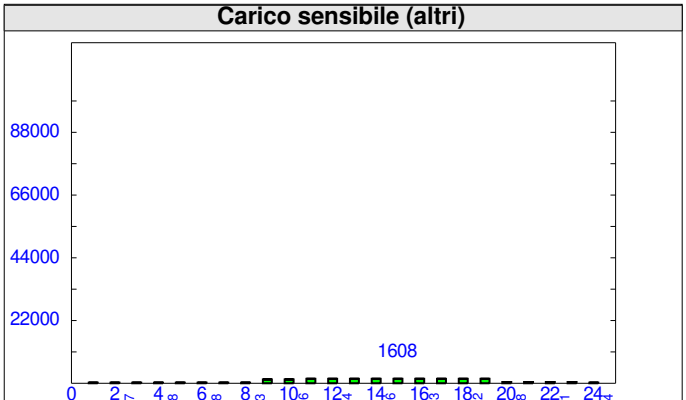
Carico latente (altri)



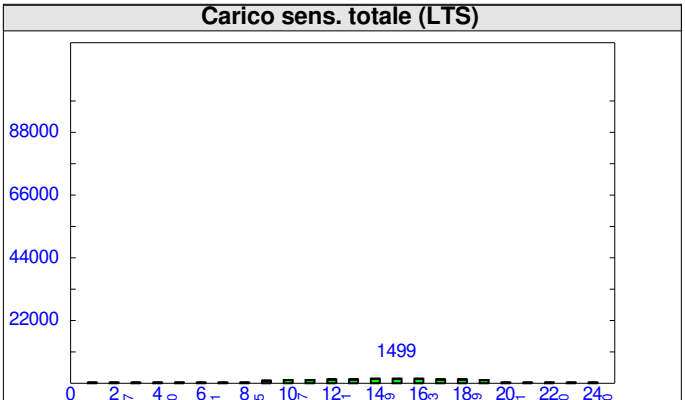
Carico sensibile (ventilazione)



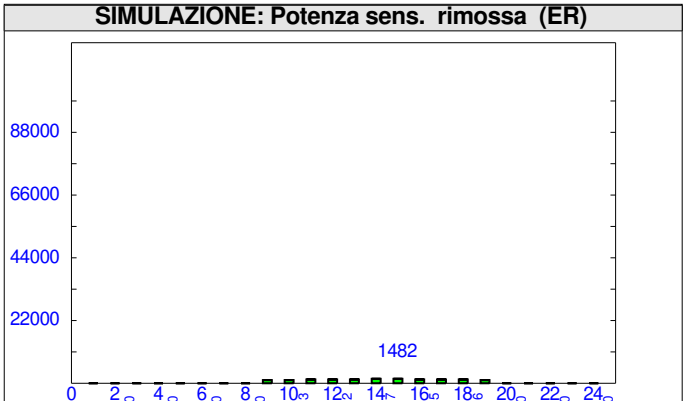
Carico sensibile (altri)



Carico sens. totale (LTS)

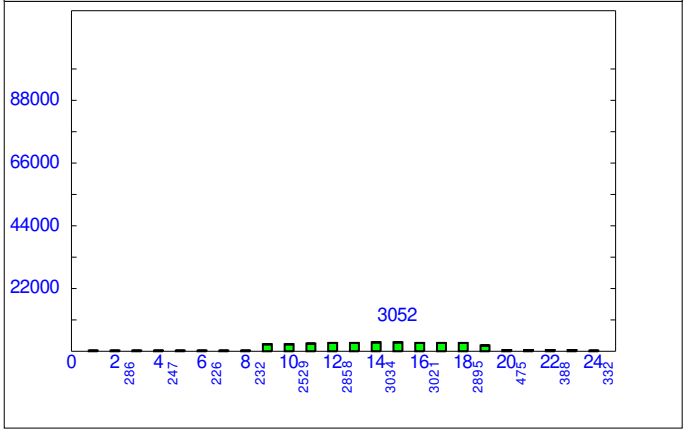


SIMULAZIONE: Potenza sens. rimossa (ER)

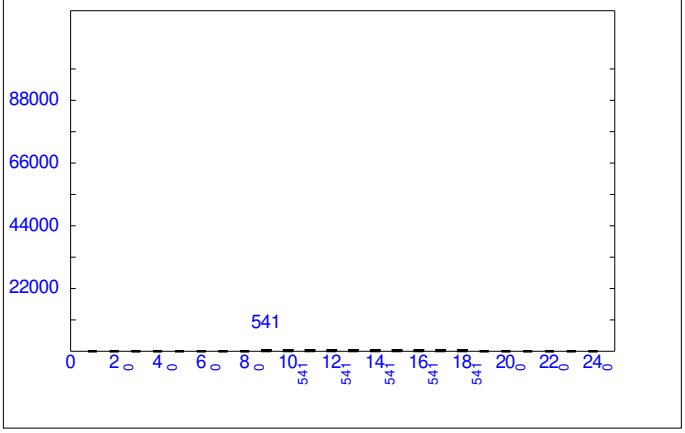


TOTALI AMBIENTE : 020109 Locale 020109

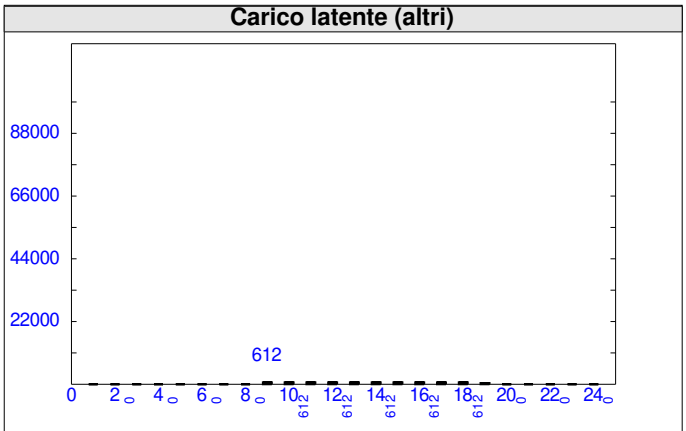
Carico totale



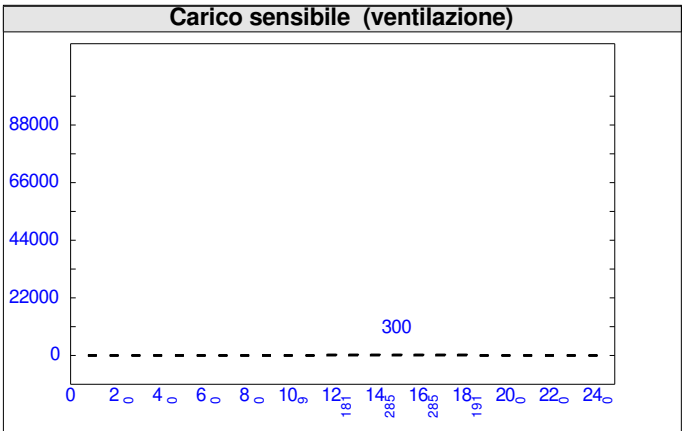
Carico latente (ventilazione)



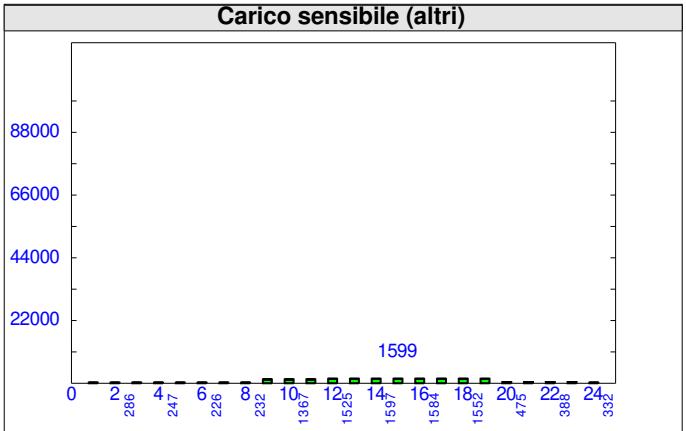
Carico latente (altri)



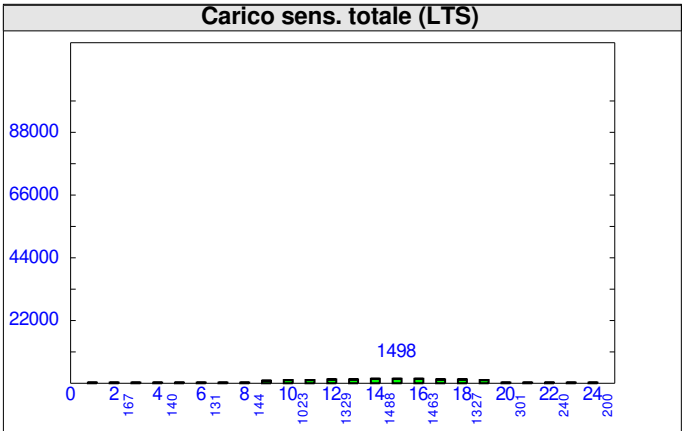
Carico sensibile (ventilazione)



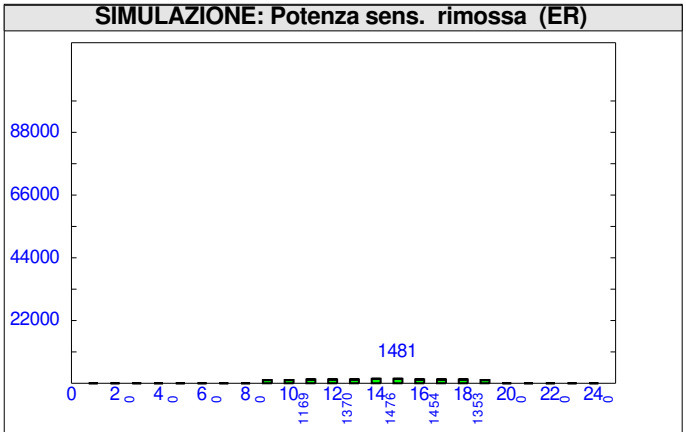
Carico sensibile (altri)



Carico sens. totale (LTS)

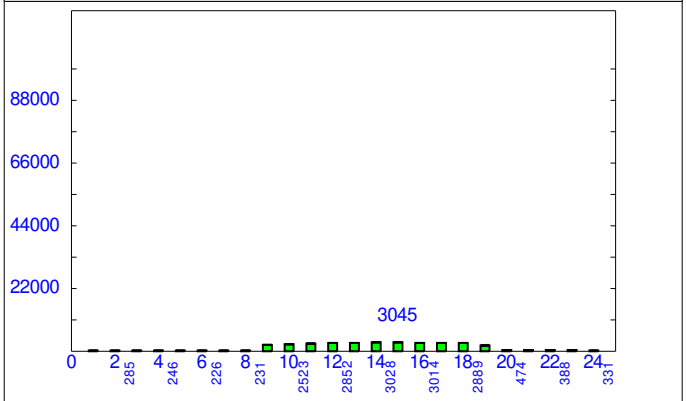


SIMULAZIONE: Potenza sens. rimossa (ER)

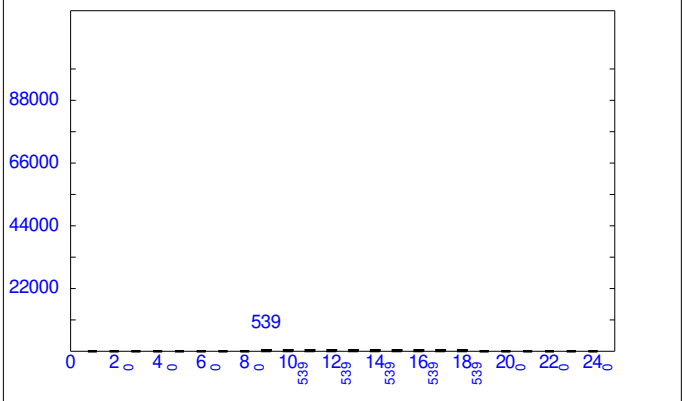


TOTALI AMBIENTE : 020110 Locale 020110

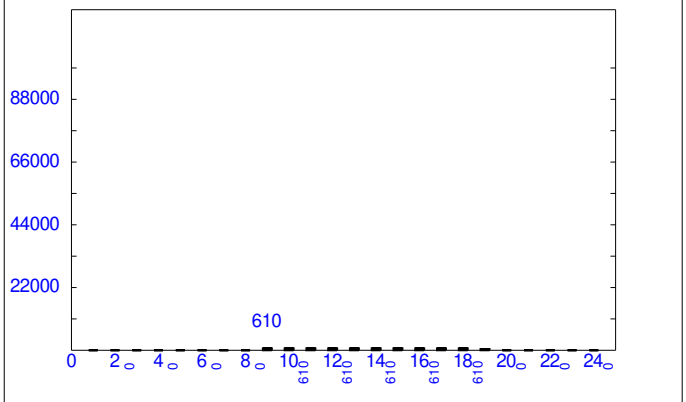
Carico totale



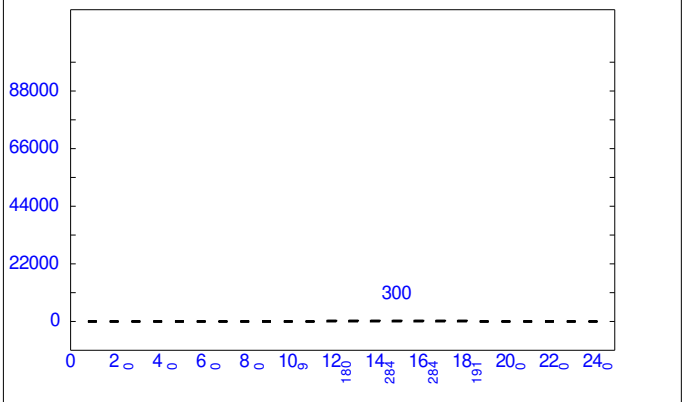
Carico latente (ventilazione)



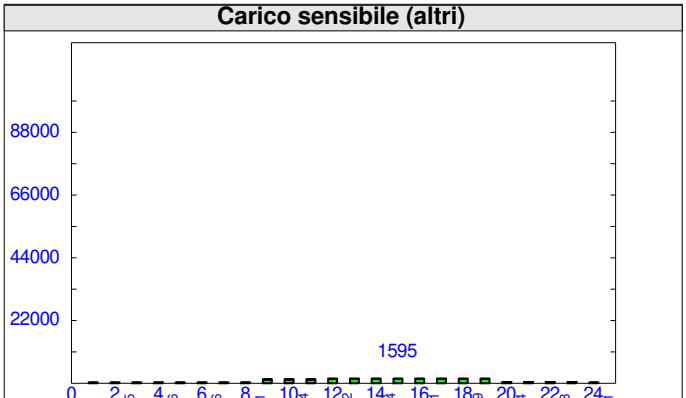
Carico latente (altri)



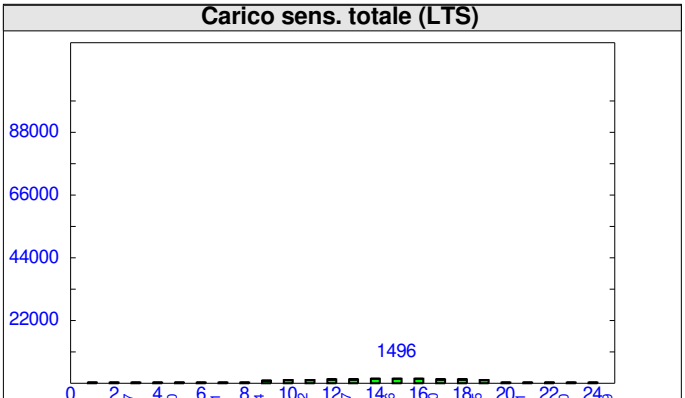
Carico sensibile (ventilazione)



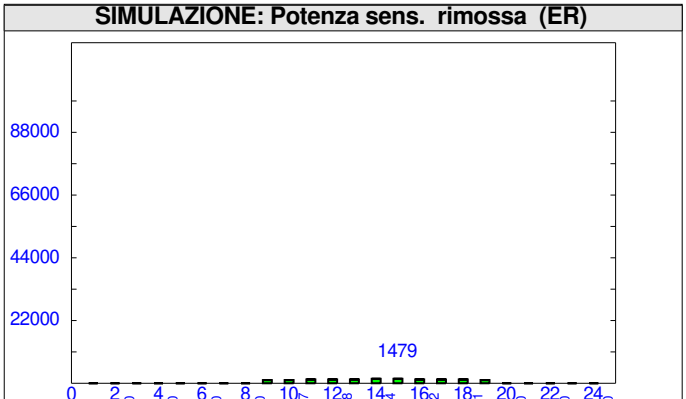
Carico sensibile (altri)



Carico sens. totale (LTS)

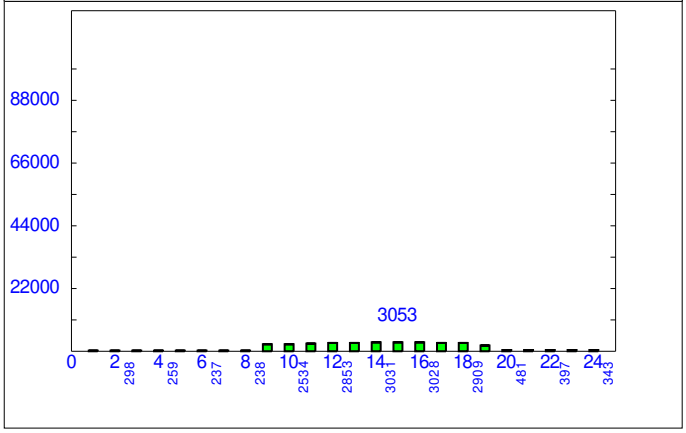


SIMULAZIONE: Potenza sens. rimossa (ER)

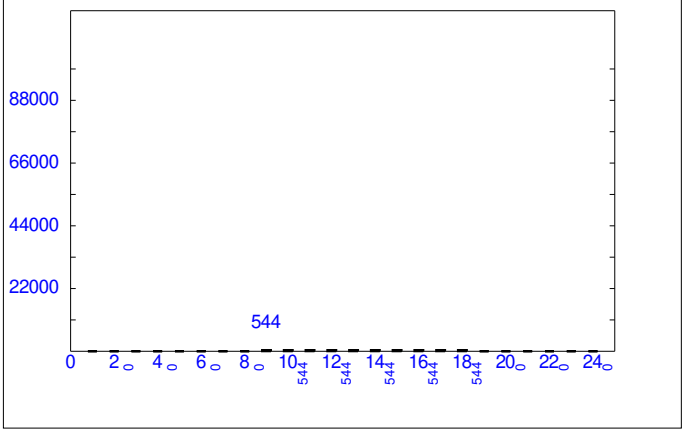


TOTALI AMBIENTE : 020111 Locale 020111

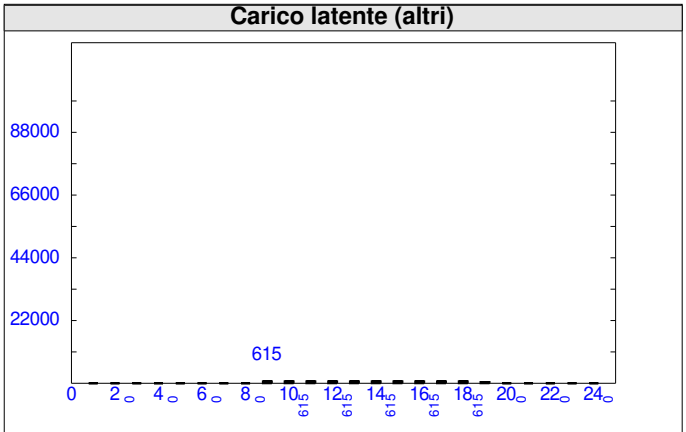
Carico totale



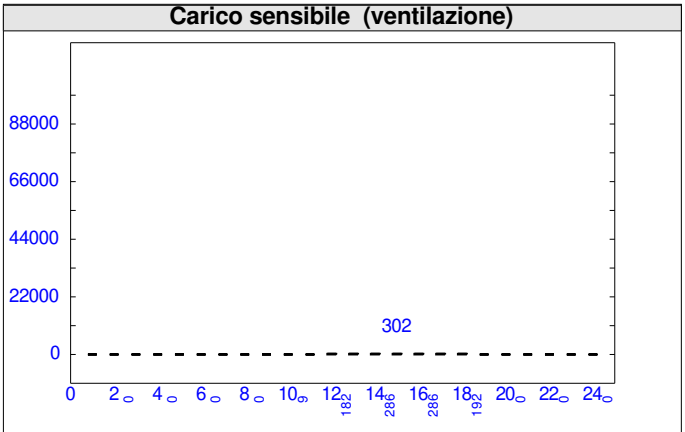
Carico latente (ventilazione)



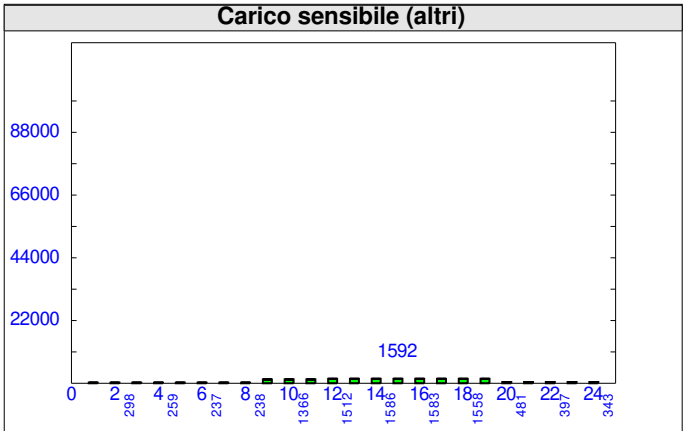
Carico latente (altri)



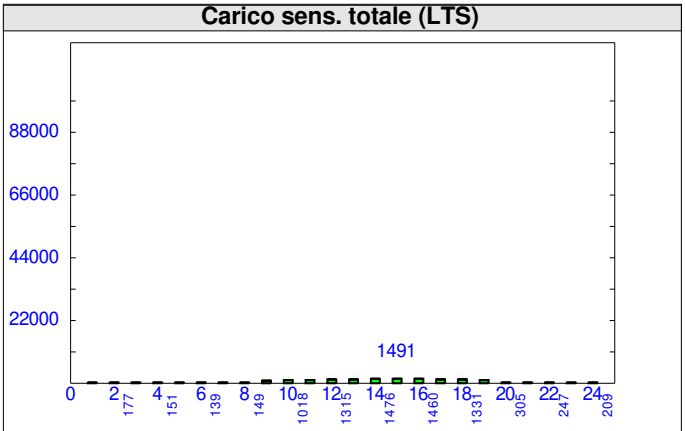
Carico sensibile (ventilazione)



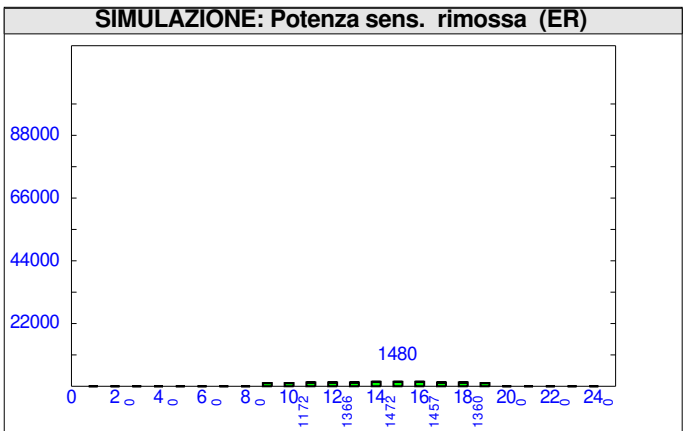
Carico sensibile (altri)



Carico sens. totale (LTS)

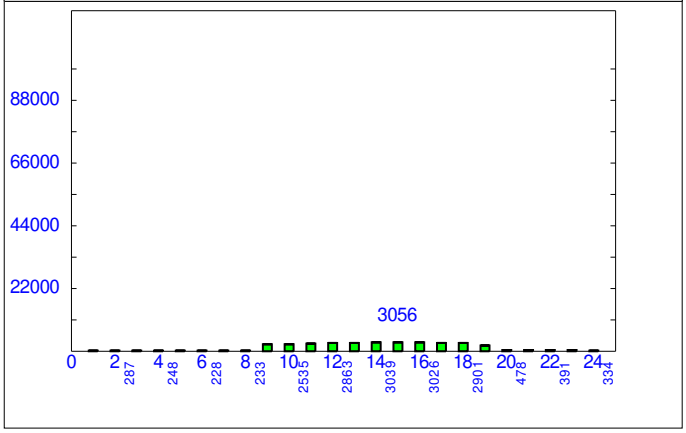


SIMULAZIONE: Potenza sens. rimossa (ER)

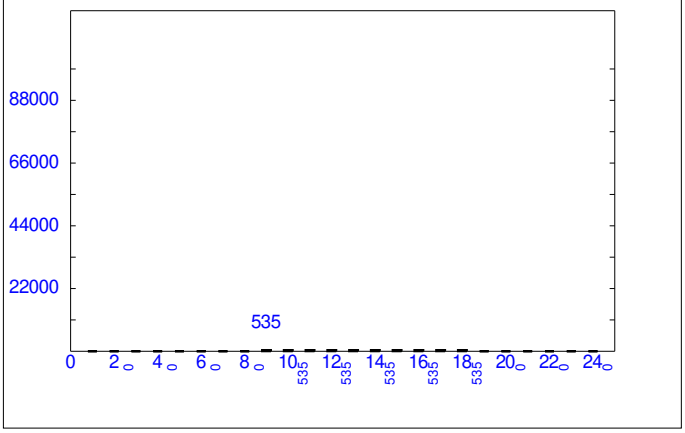


TOTALI AMBIENTE : 020112 Locale 020112

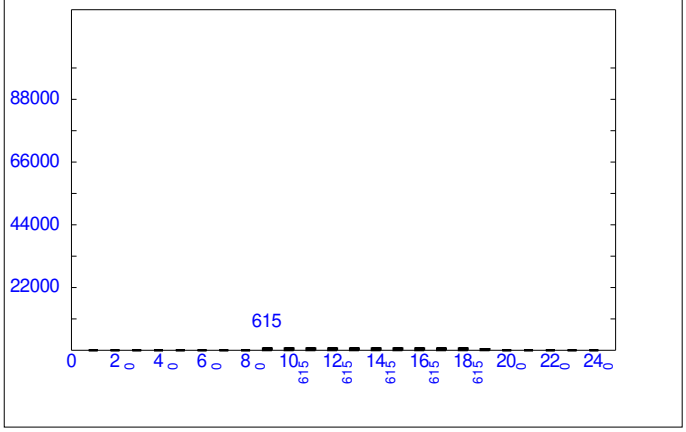
Carico totale



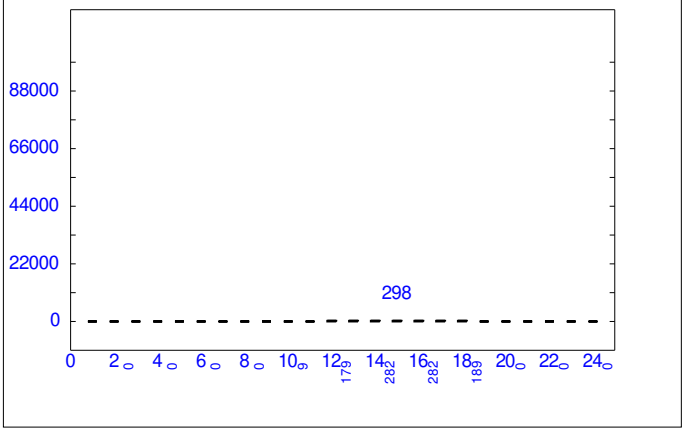
Carico latente (ventilazione)



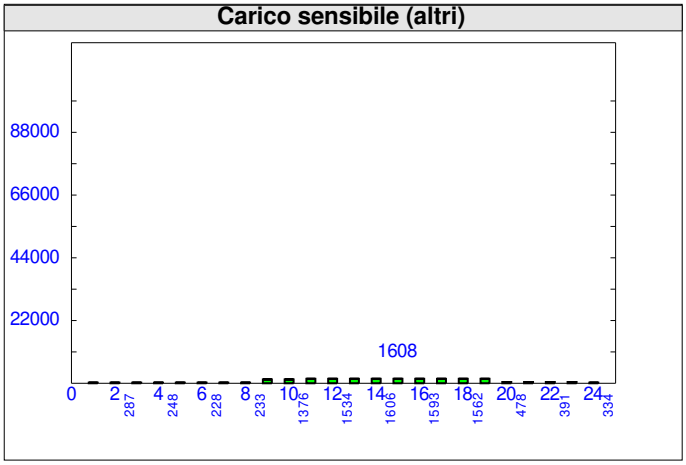
Carico latente (altri)



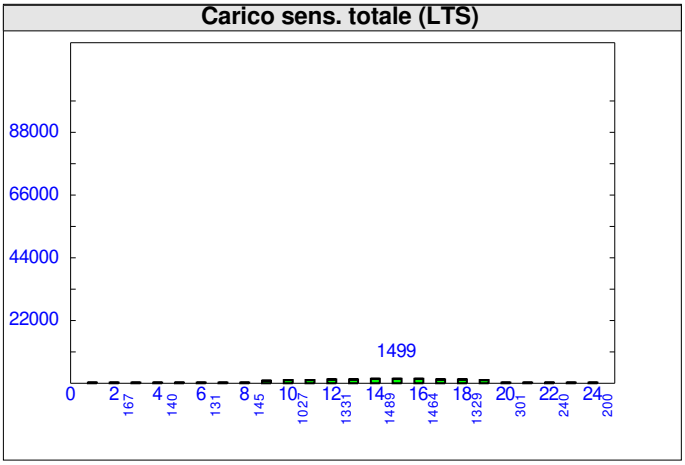
Carico sensibile (ventilazione)



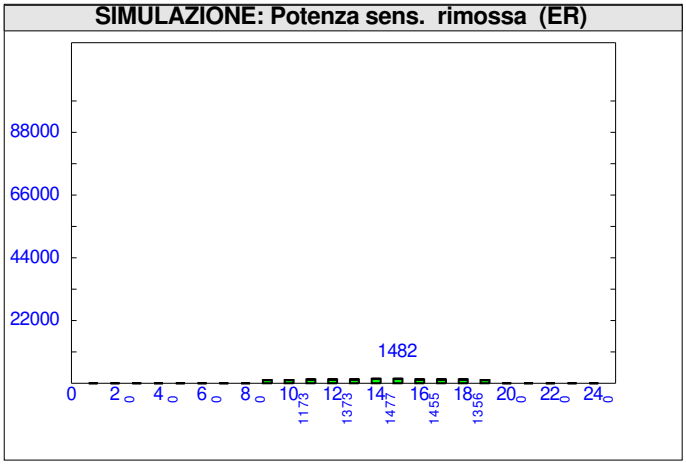
Carico sensibile (altri)



Carico sens. totale (LTS)

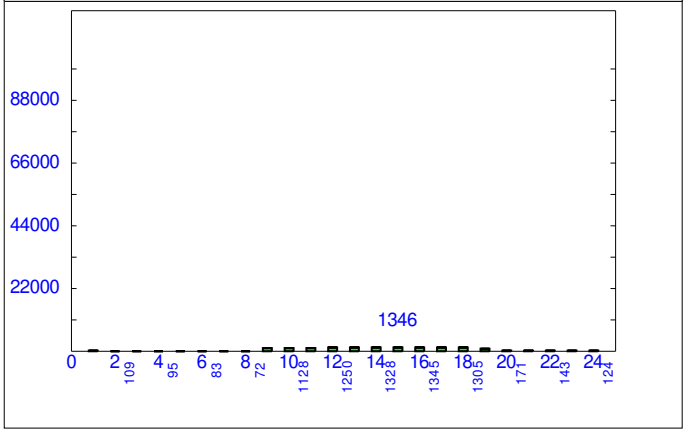


SIMULAZIONE: Potenza sens. rimossa (ER)

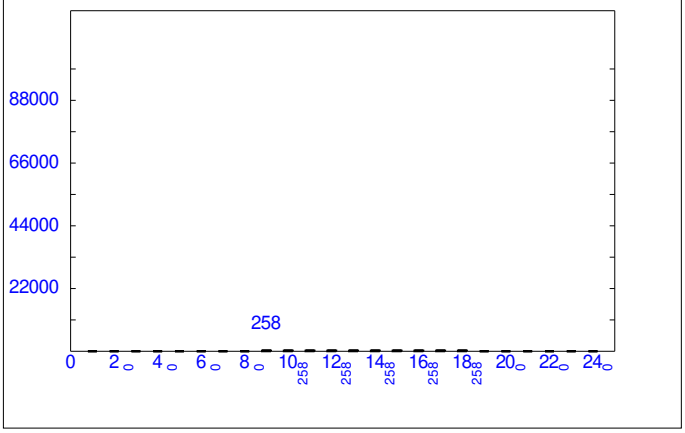


TOTALI AMBIENTE : 020113 Locale 020113

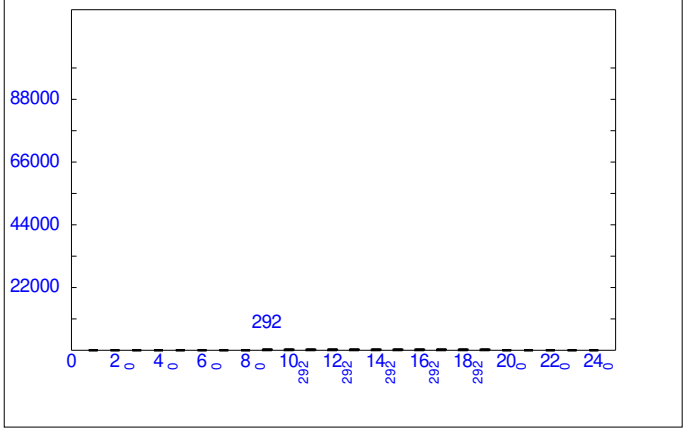
Carico totale



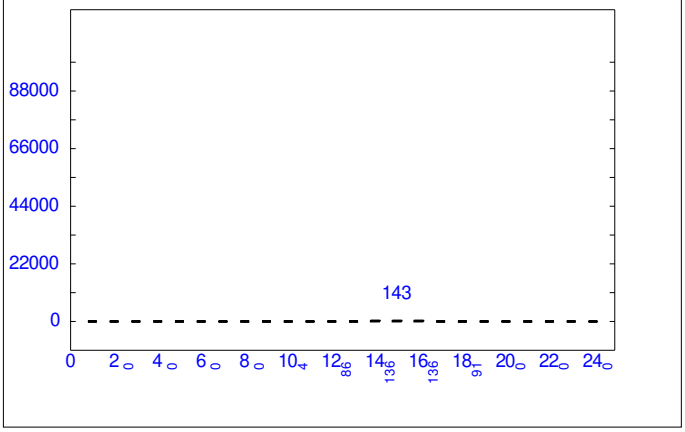
Carico latente (ventilazione)



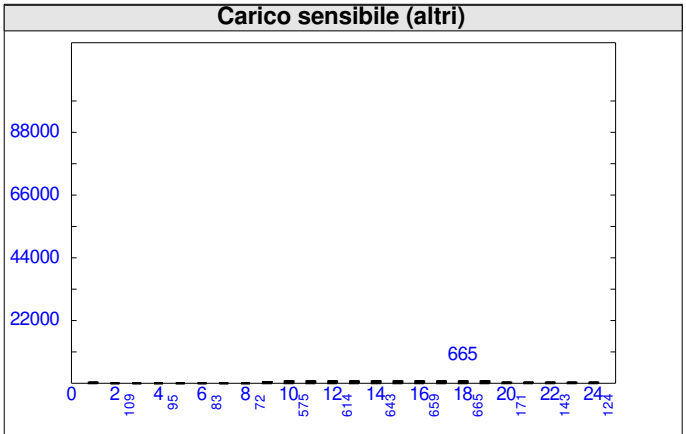
Carico latente (altri)



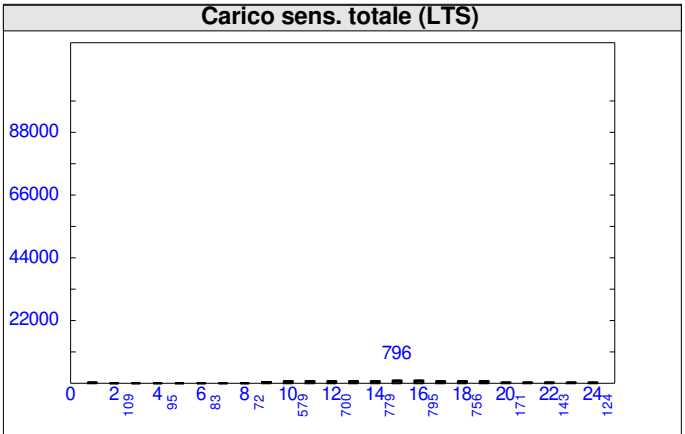
Carico sensibile (ventilazione)



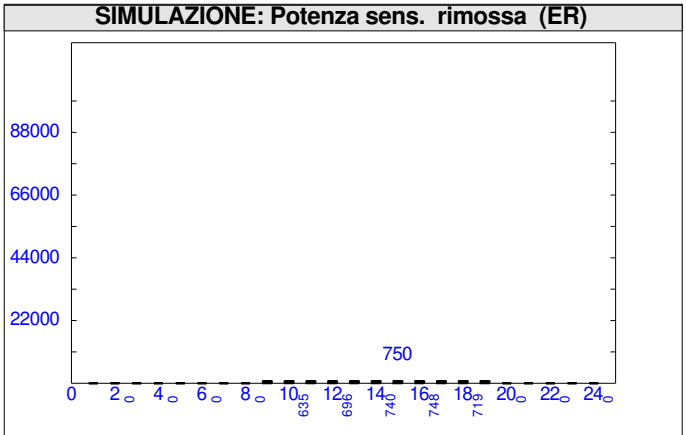
Carico sensibile (altri)



Carico sens. totale (LTS)

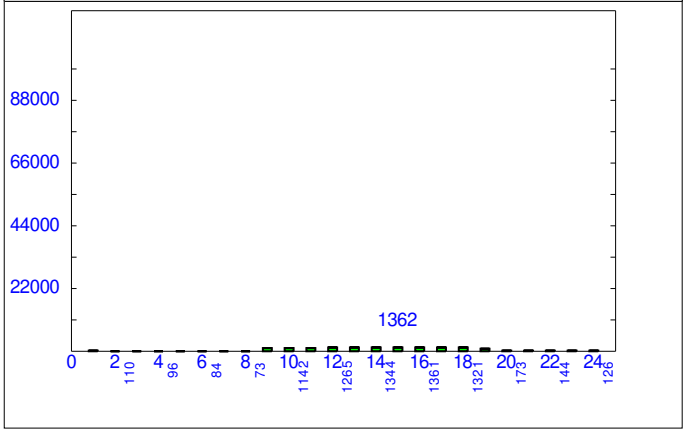


SIMULAZIONE: Potenza sens. rimossa (ER)

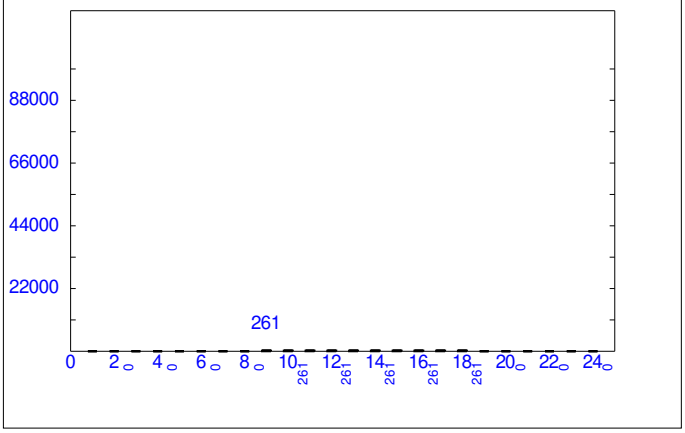


TOTALI AMBIENTE : 020114 Locale 020114

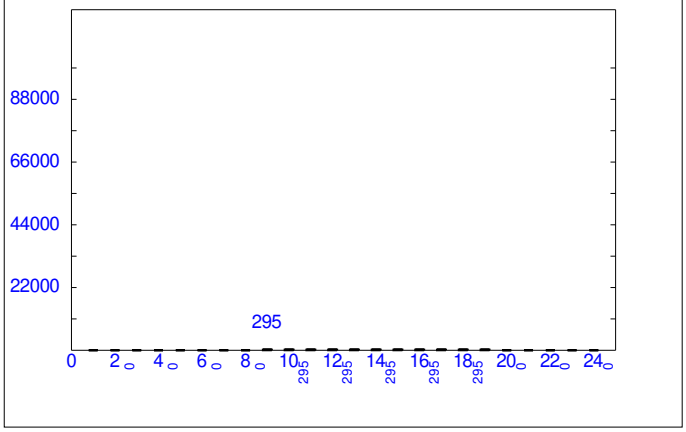
Carico totale



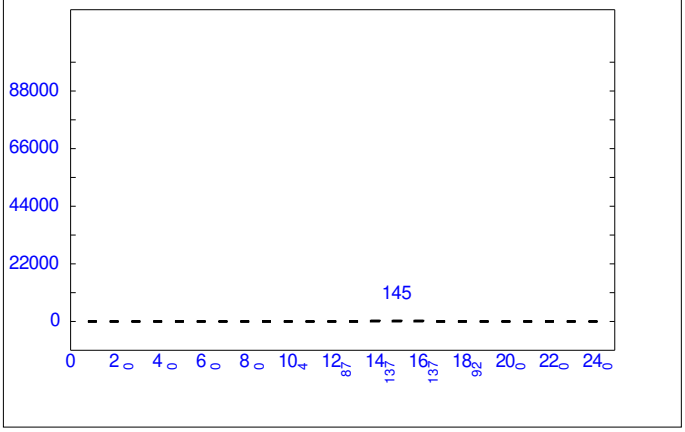
Carico latente (ventilazione)



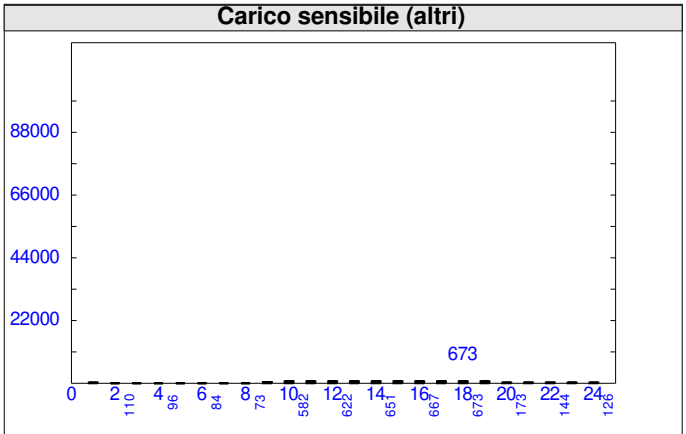
Carico latente (altri)



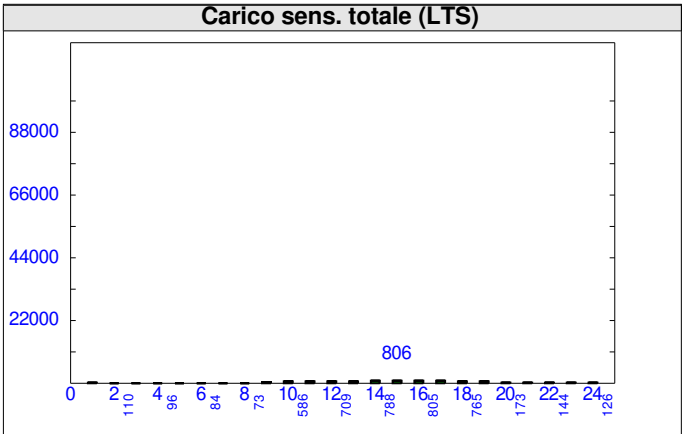
Carico sensibile (ventilazione)



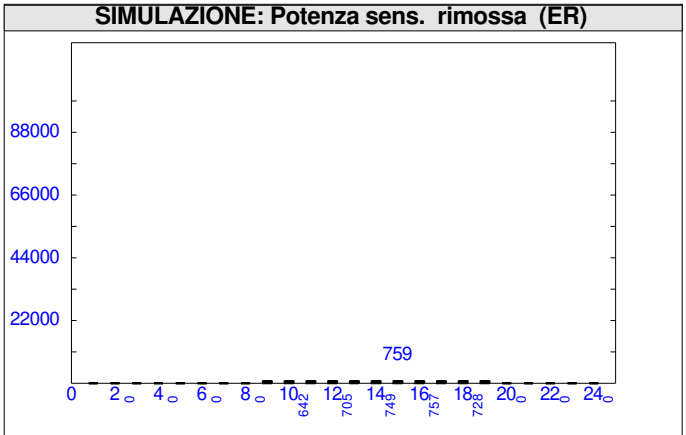
Carico sensibile (altri)



Carico sens. totale (LTS)

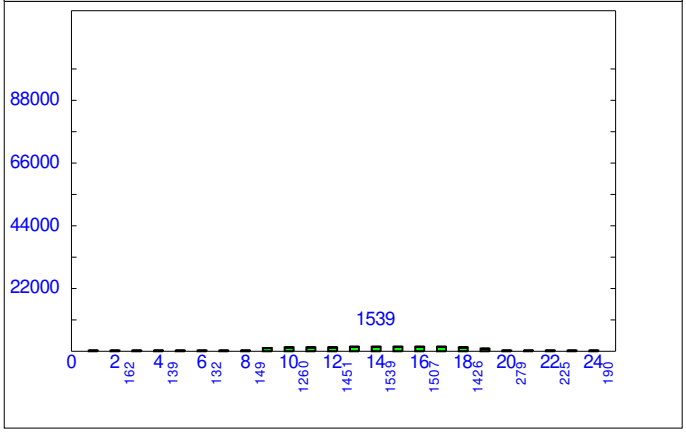


SIMULAZIONE: Potenza sens. rimossa (ER)

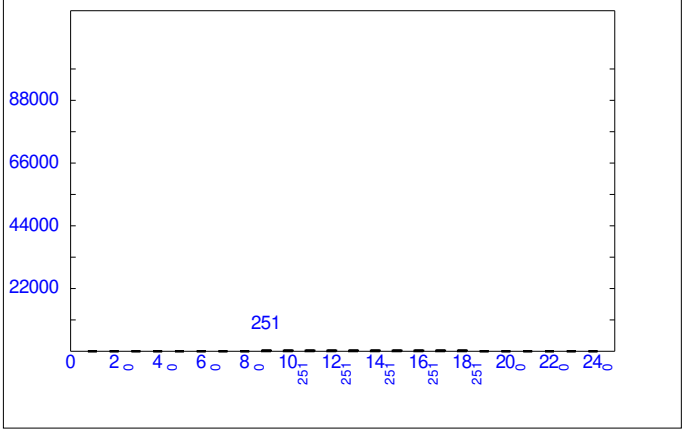


TOTALI AMBIENTE : 020115 Locale 020115

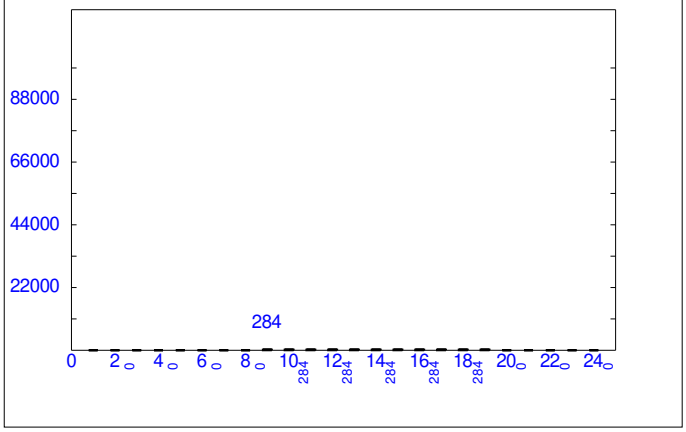
Carico totale



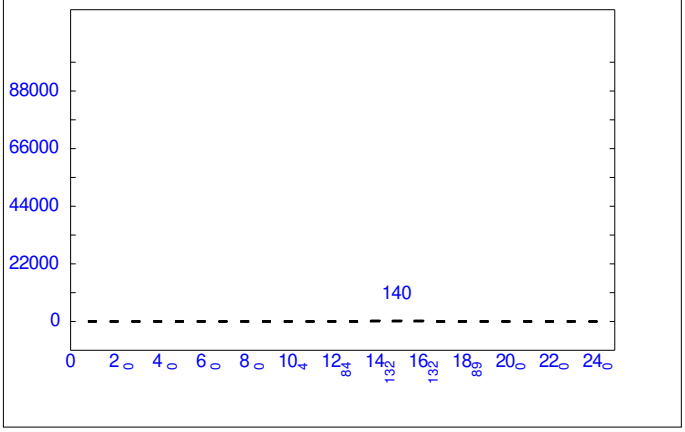
Carico latente (ventilazione)



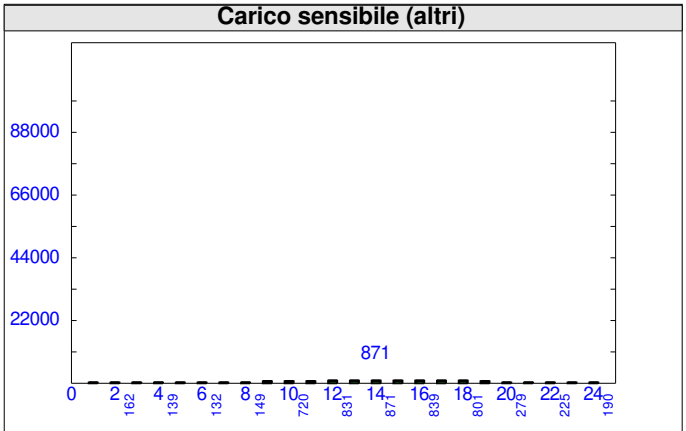
Carico latente (altri)



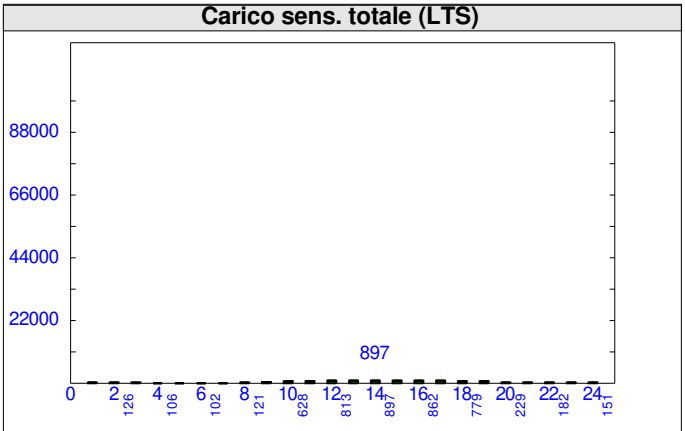
Carico sensibile (ventilazione)



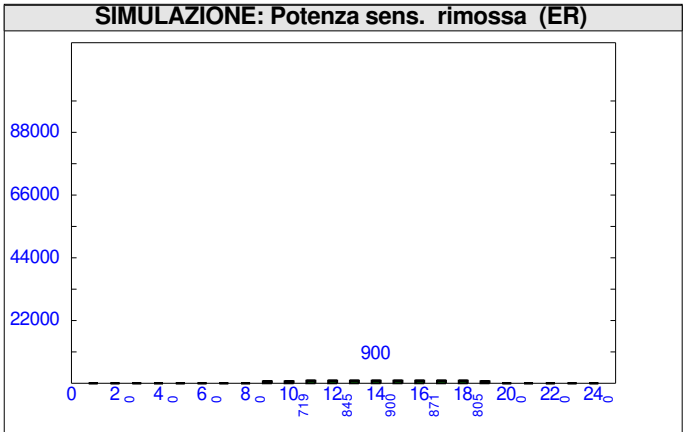
Carico sensibile (altri)



Carico sens. totale (LTS)

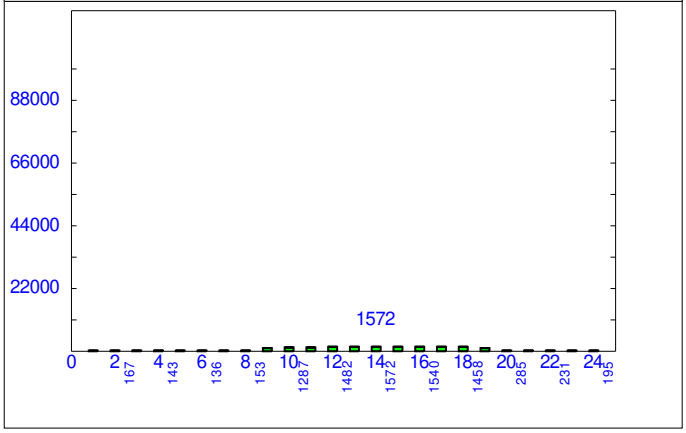


SIMULAZIONE: Potenza sens. rimossa (ER)

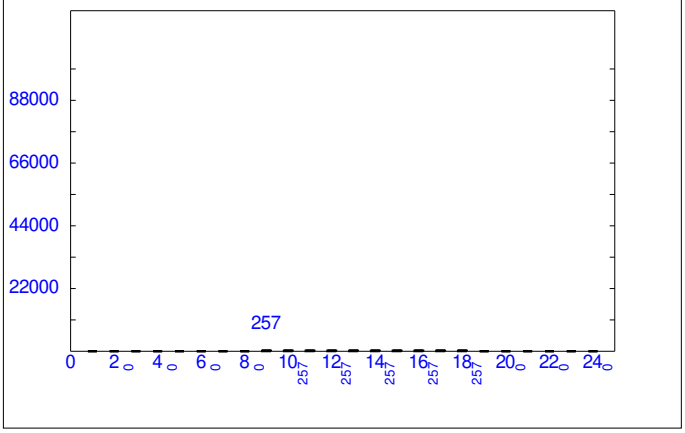


TOTALI AMBIENTE : 020116 Locale 020116

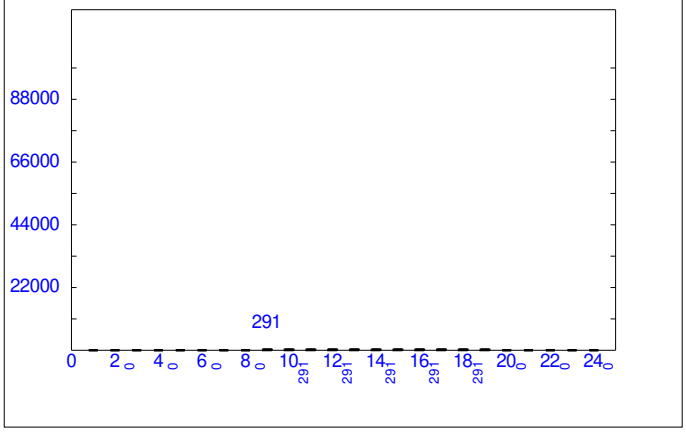
Carico totale



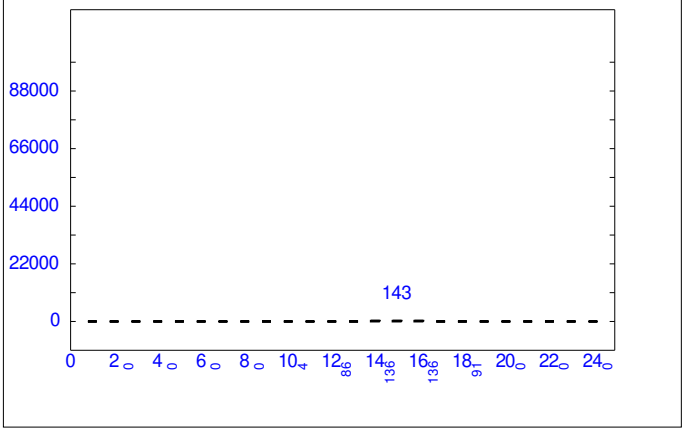
Carico latente (ventilazione)



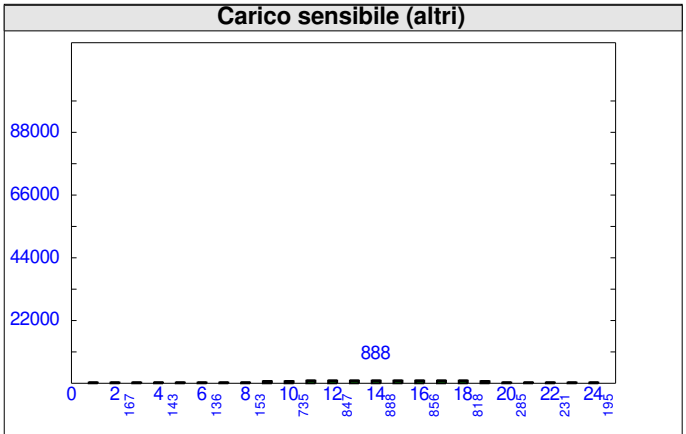
Carico latente (altri)



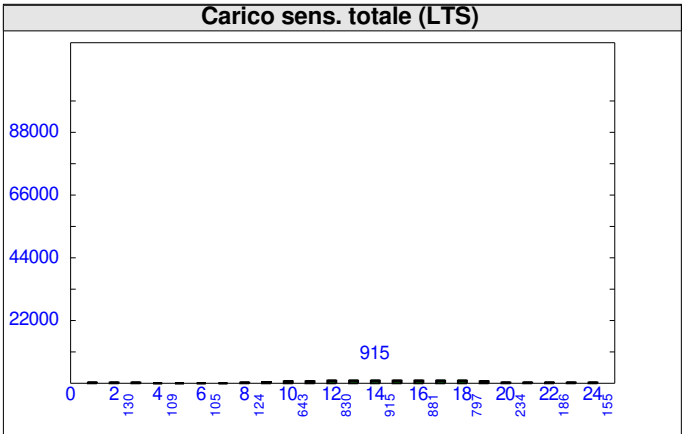
Carico sensibile (ventilazione)



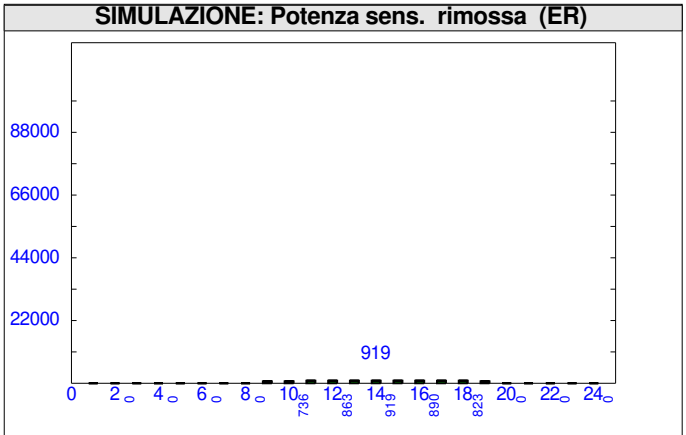
Carico sensibile (altri)



Carico sens. totale (LTS)

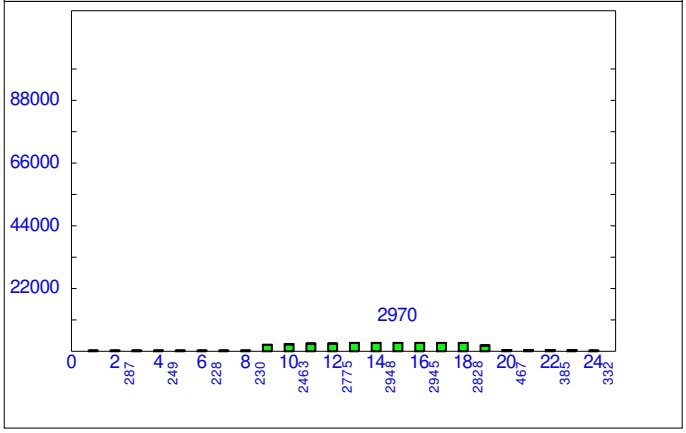


SIMULAZIONE: Potenza sens. rimossa (ER)

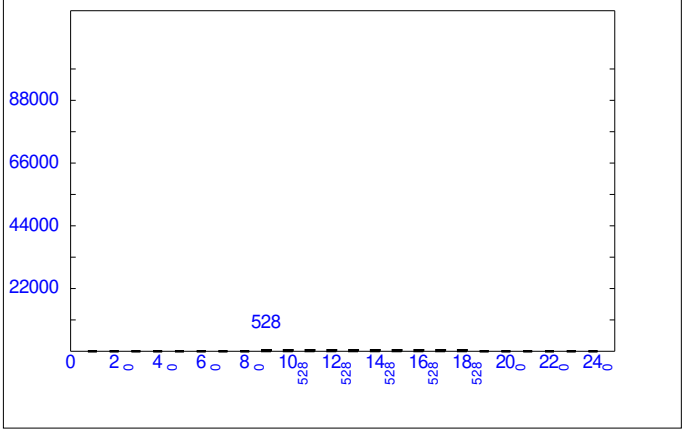


TOTALI AMBIENTE : 020117 Locale 020117

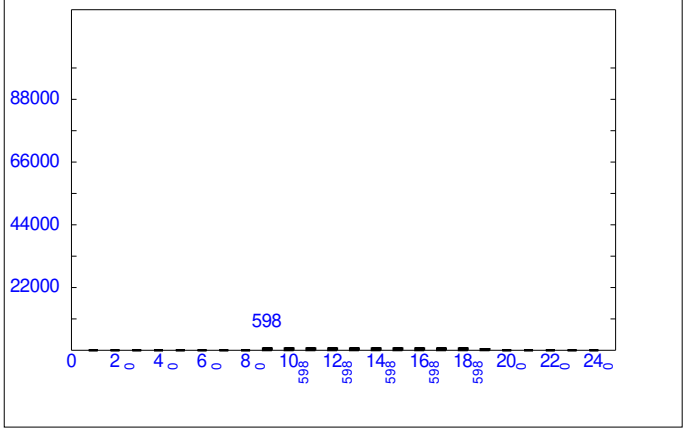
Carico totale



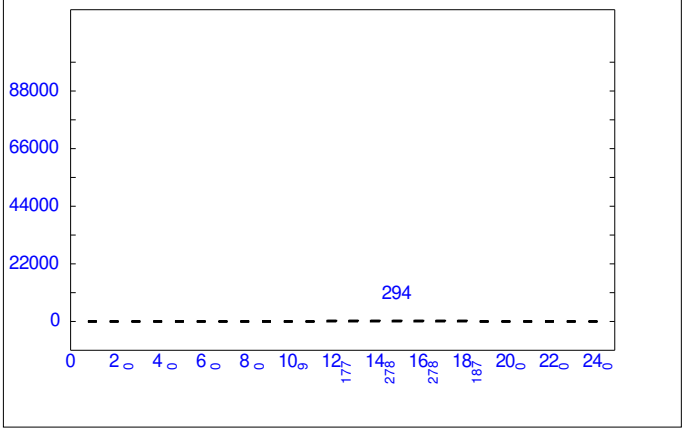
Carico latente (ventilazione)



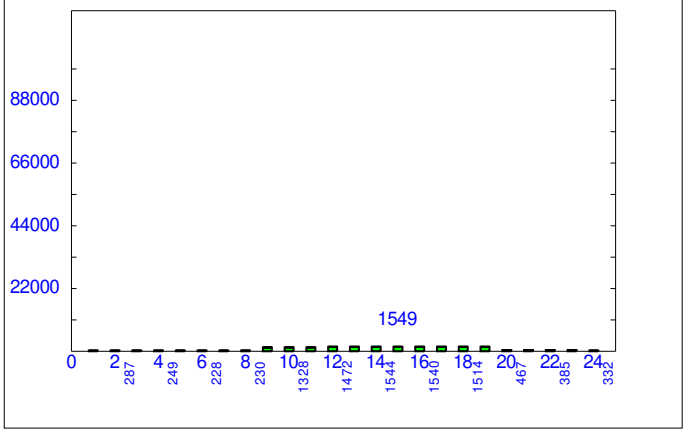
Carico latente (altri)



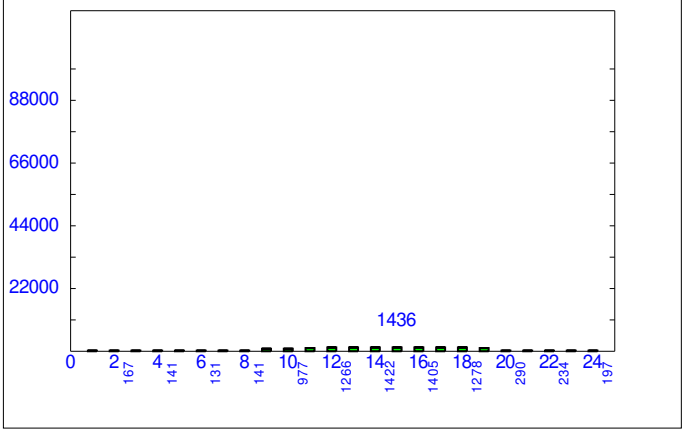
Carico sensibile (ventilazione)



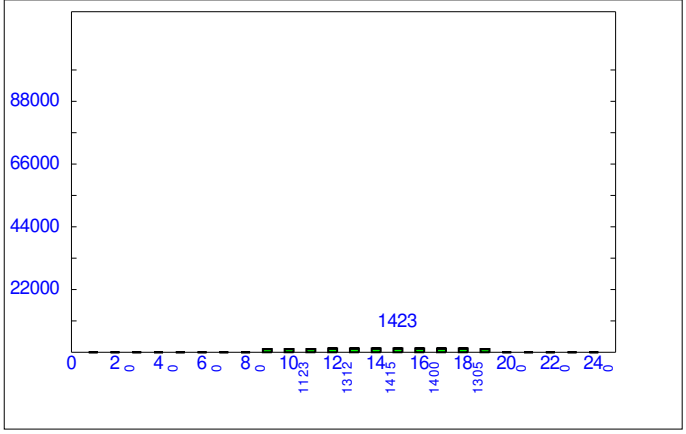
Carico sensibile (altri)



Carico sens. totale (LTS)

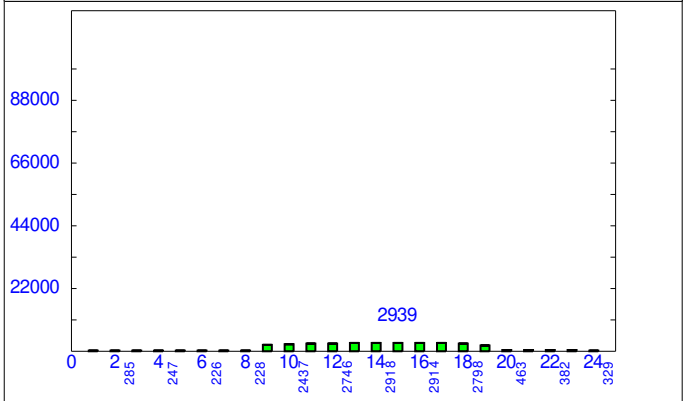


SIMULAZIONE: Potenza sens. rimossa (ER)

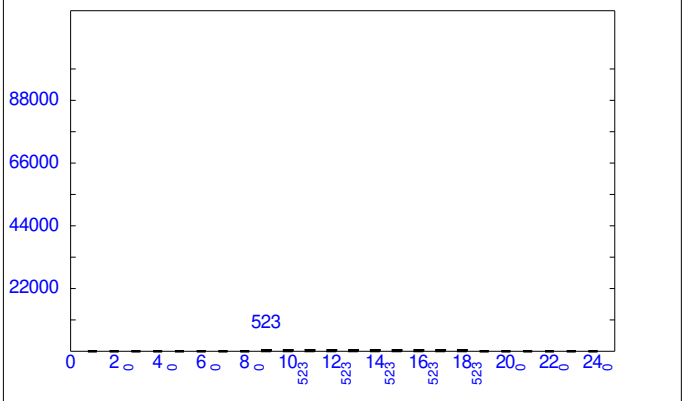


TOTALI AMBIENTE : 020118 Locale 020118

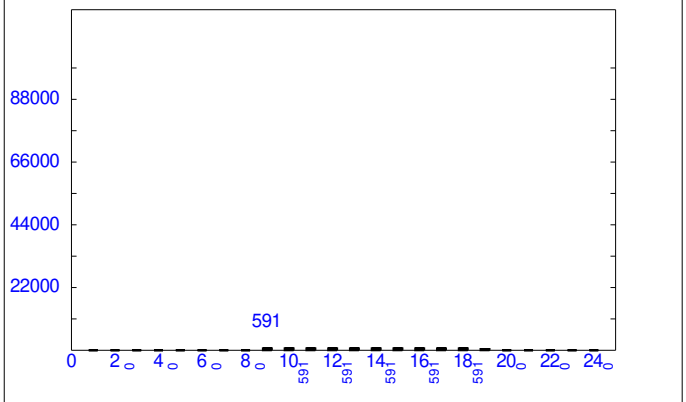
Carico totale



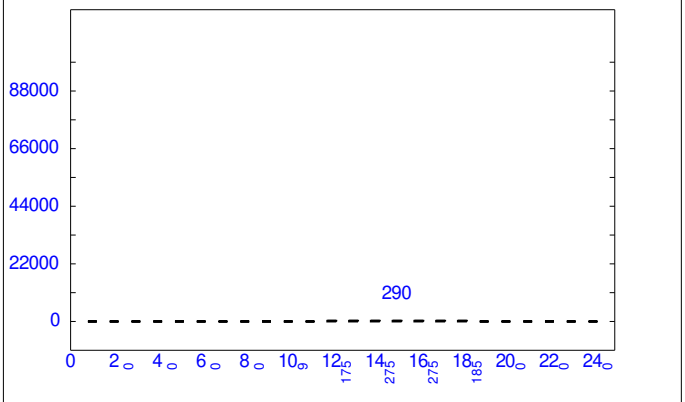
Carico latente (ventilazione)



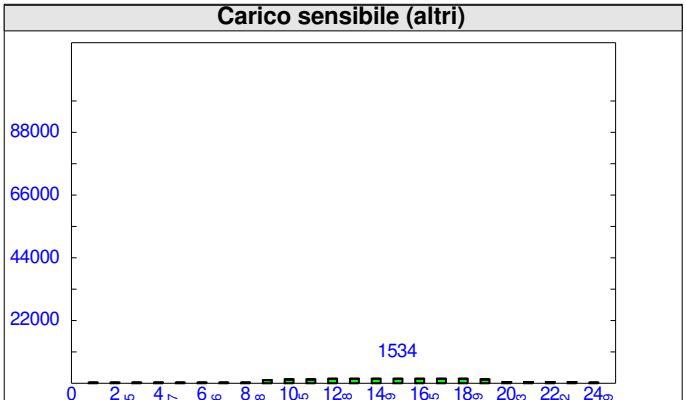
Carico latente (altri)



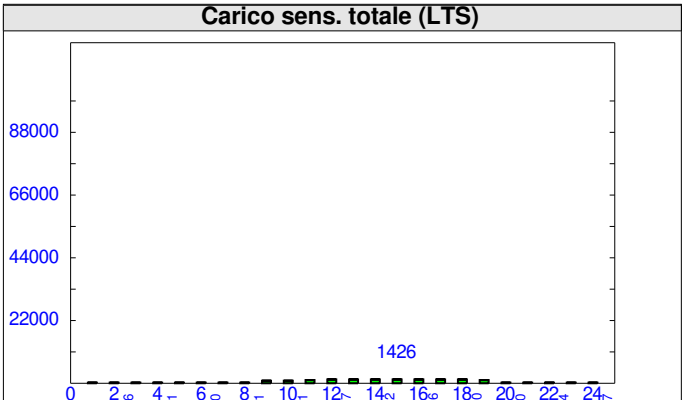
Carico sensibile (ventilazione)



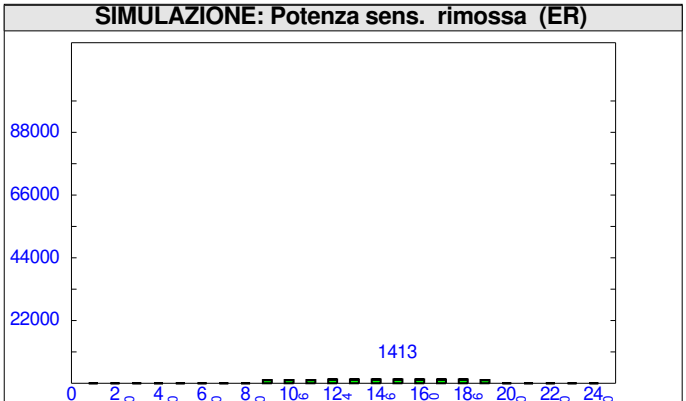
Carico sensibile (altri)



Carico sens. totale (LTS)

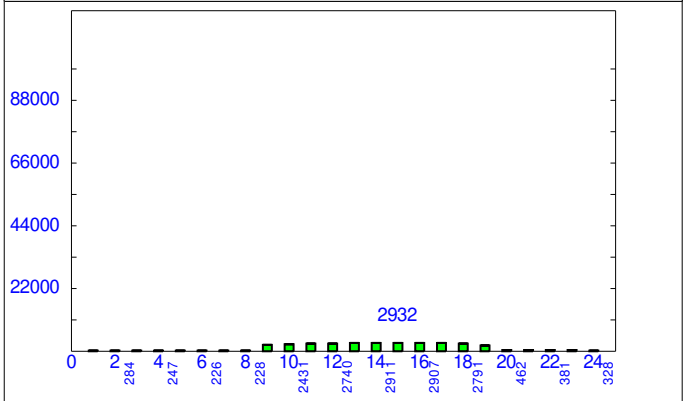


SIMULAZIONE: Potenza sens. rimossa (ER)

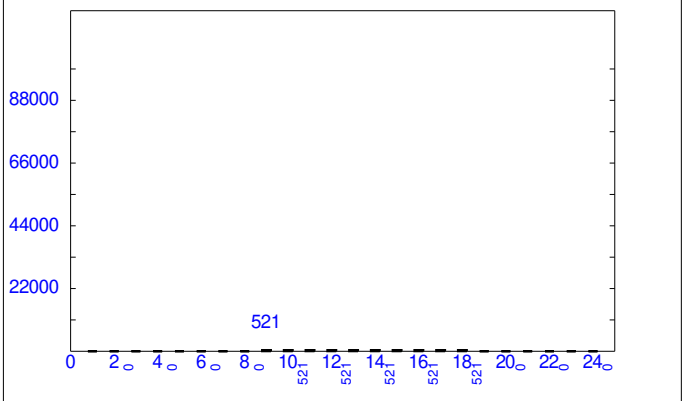


TOTALI AMBIENTE : 020119 Locale 020119

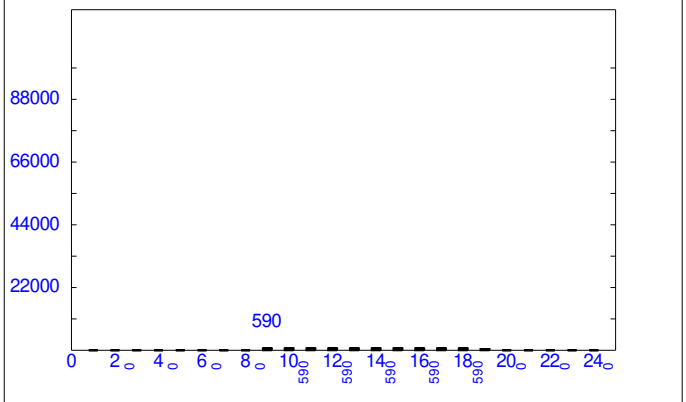
Carico totale



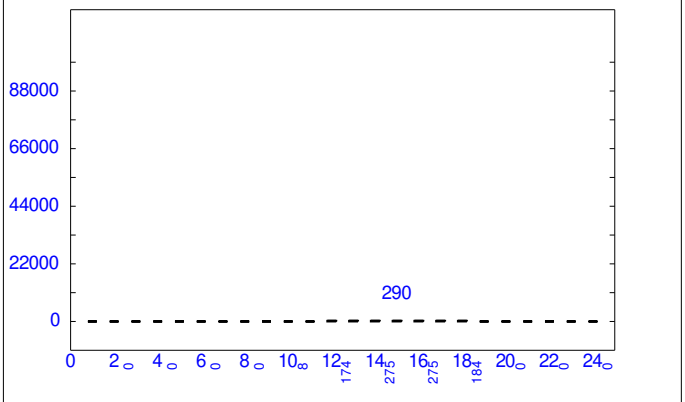
Carico latente (ventilazione)



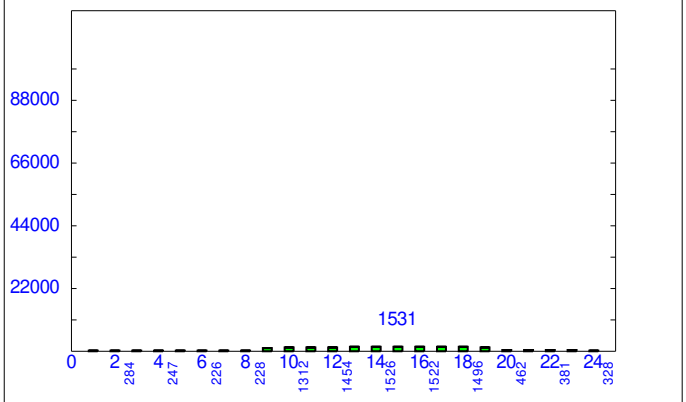
Carico latente (altri)



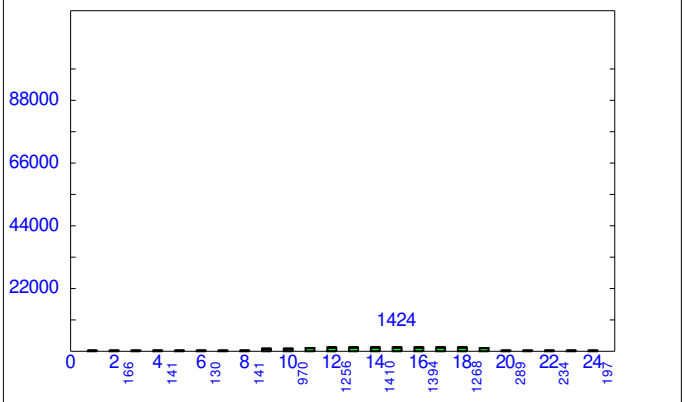
Carico sensibile (ventilazione)



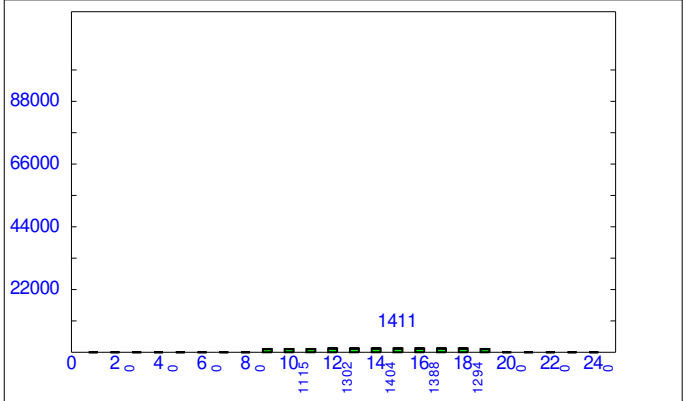
Carico sensibile (altri)



Carico sens. totale (LTS)

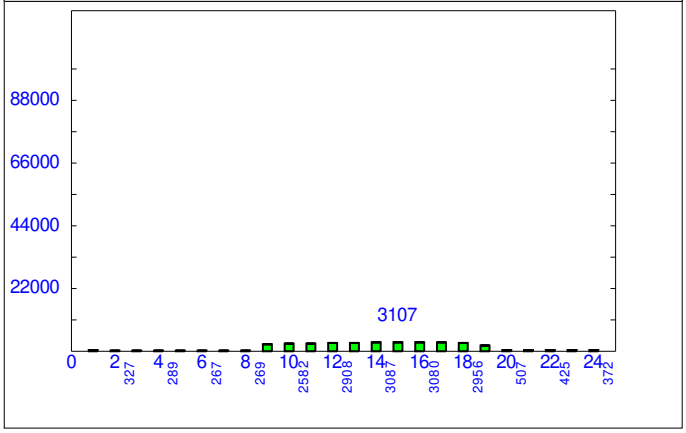


SIMULAZIONE: Potenza sens. rimossa (ER)

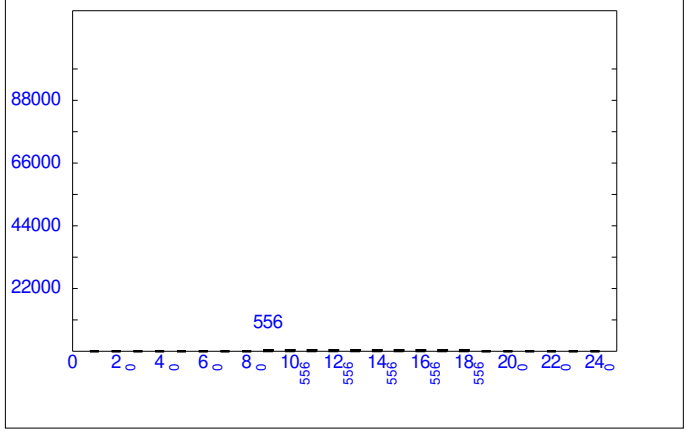


TOTALI AMBIENTE : 020120 Locale 020120

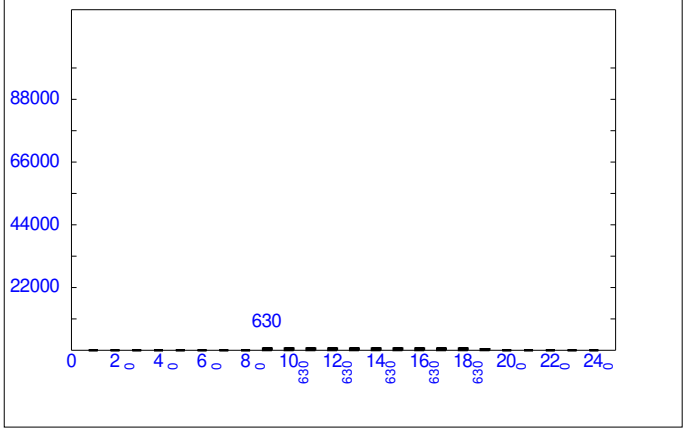
Carico totale



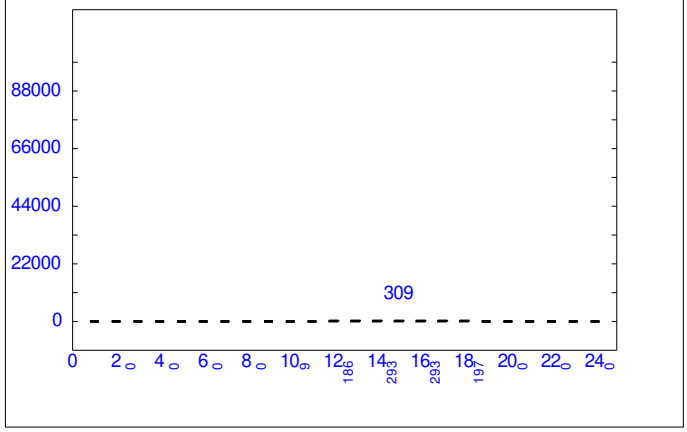
Carico latente (ventilazione)



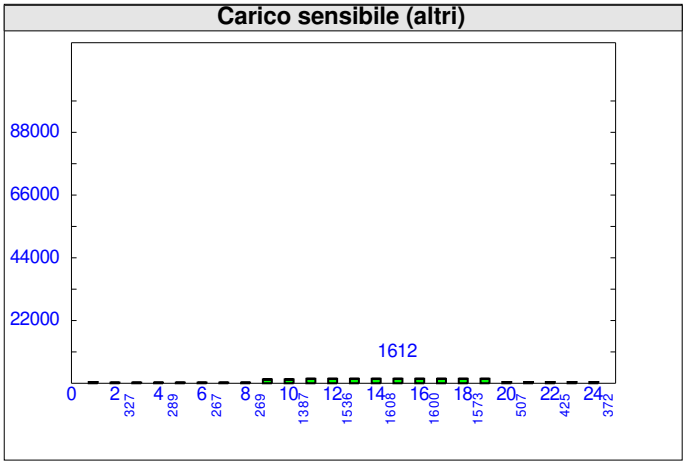
Carico latente (altri)



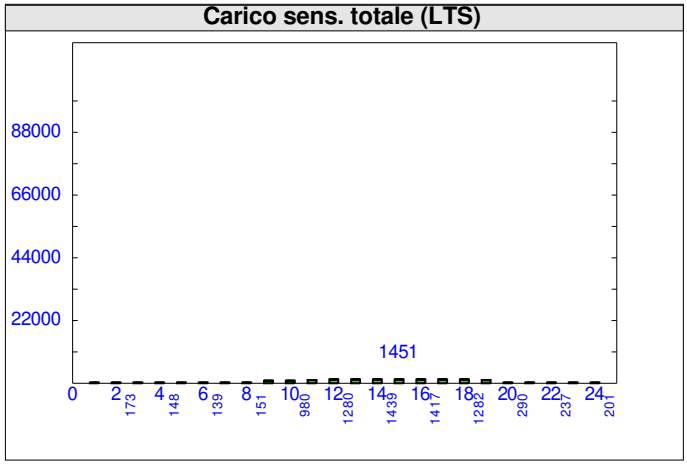
Carico sensibile (ventilazione)



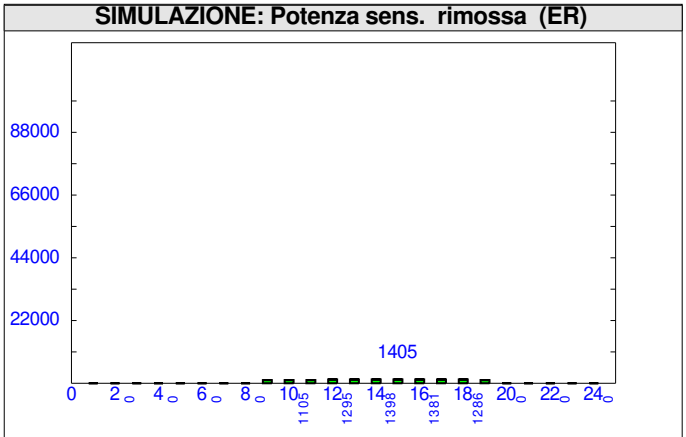
Carico sensibile (altri)



Carico sens. totale (LTS)

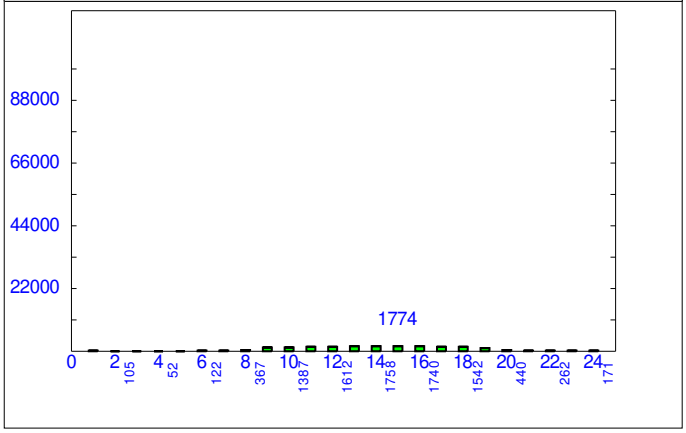


SIMULAZIONE: Potenza sens. rimossa (ER)

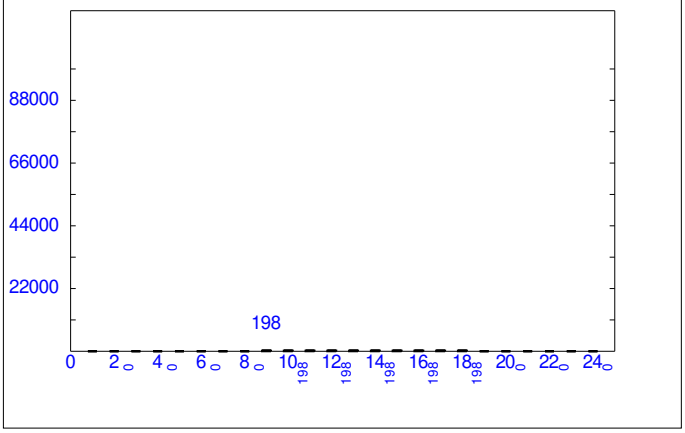


TOTALI AMBIENTE : 030101 Locale 030101

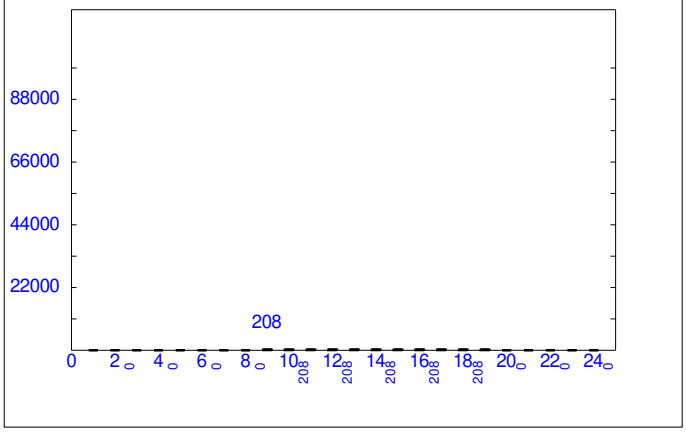
Carico totale



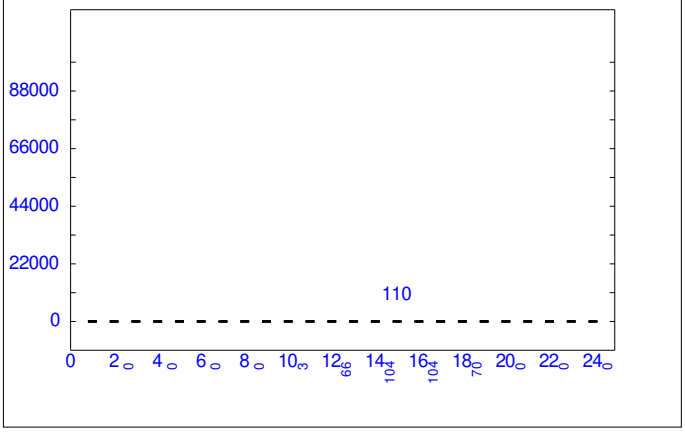
Carico latente (ventilazione)



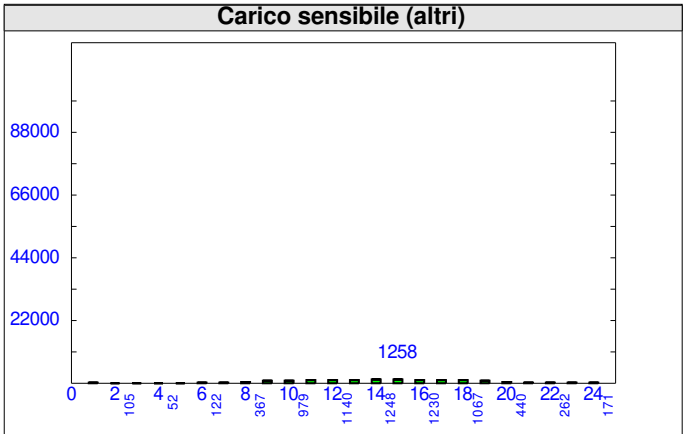
Carico latente (altri)



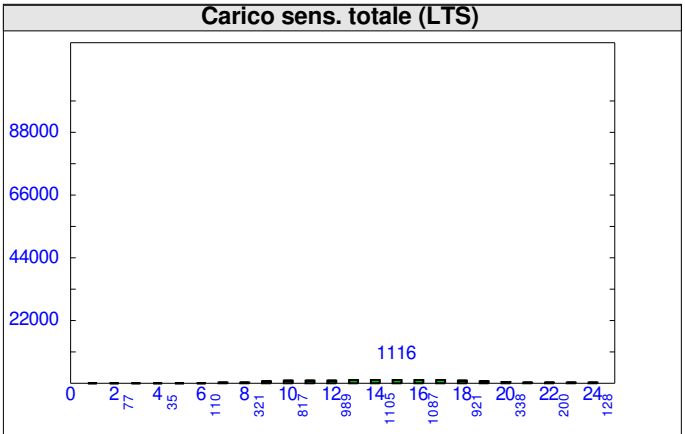
Carico sensibile (ventilazione)



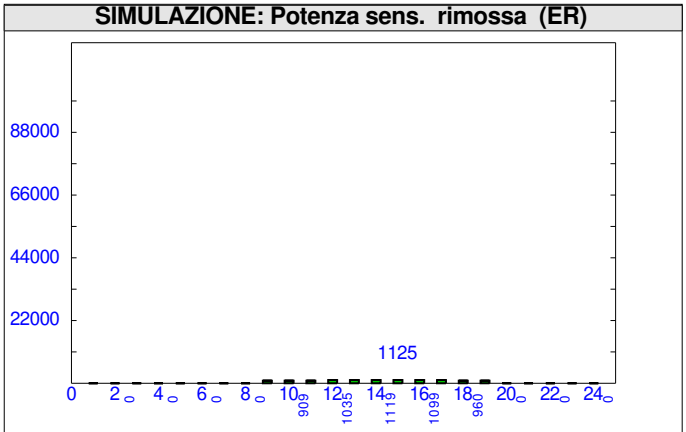
Carico sensibile (altri)



Carico sens. totale (LTS)

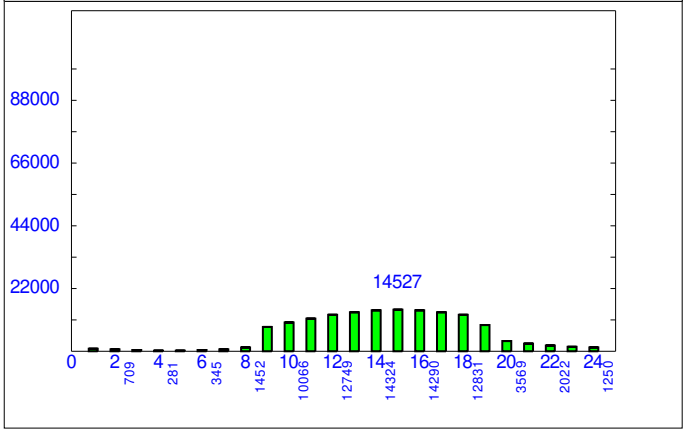


SIMULAZIONE: Potenza sens. rimossa (ER)

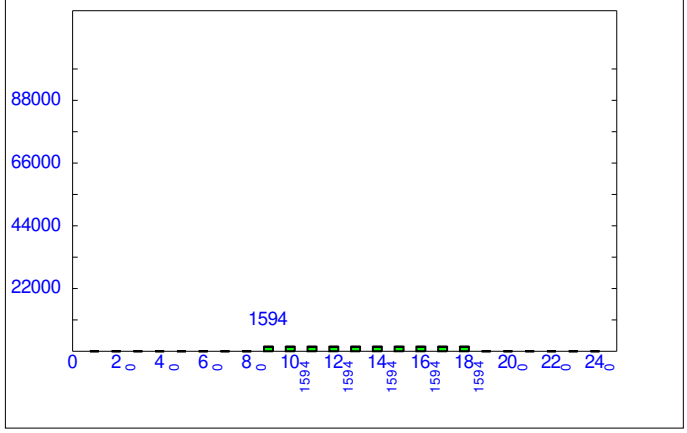


TOTALI AMBIENTE : 030102 Locale 030102

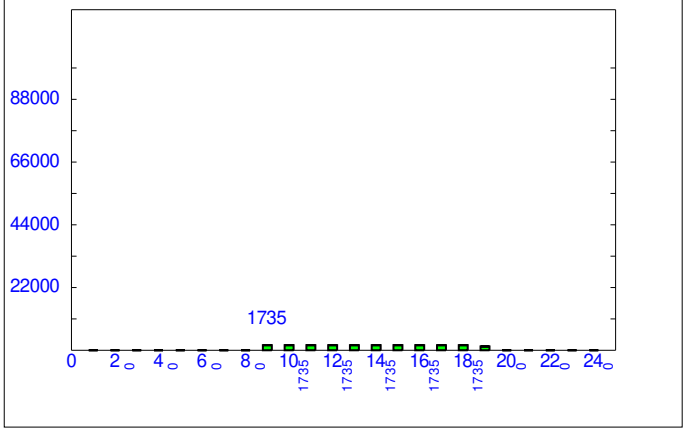
Carico totale



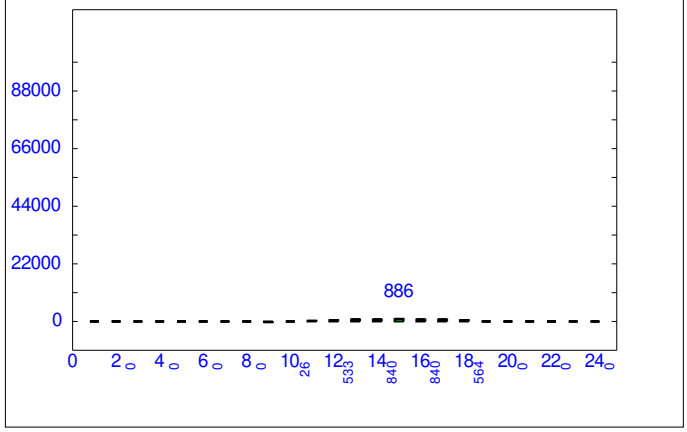
Carico latente (ventilazione)



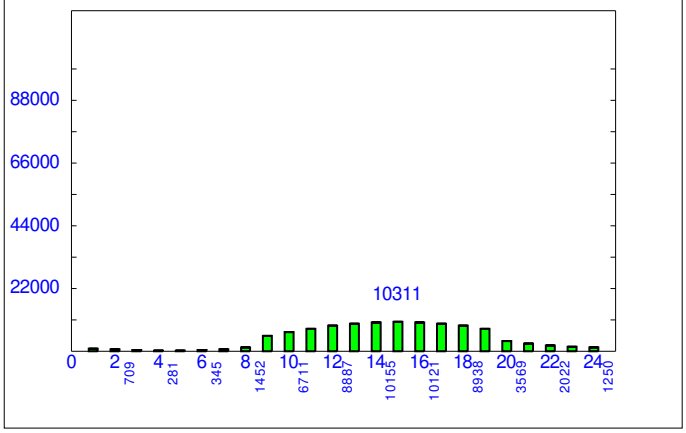
Carico latente (altri)



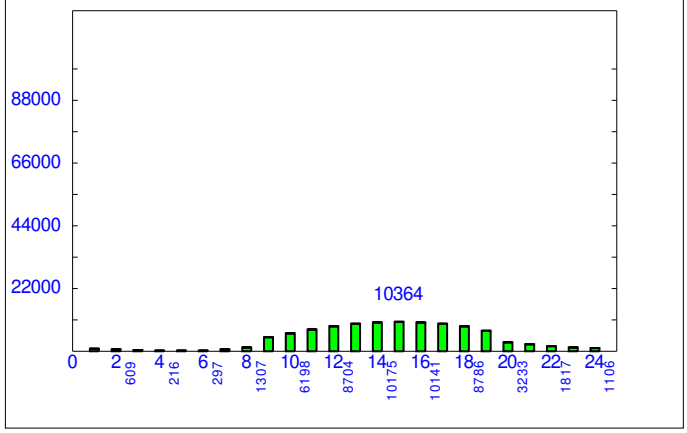
Carico sensibile (ventilazione)



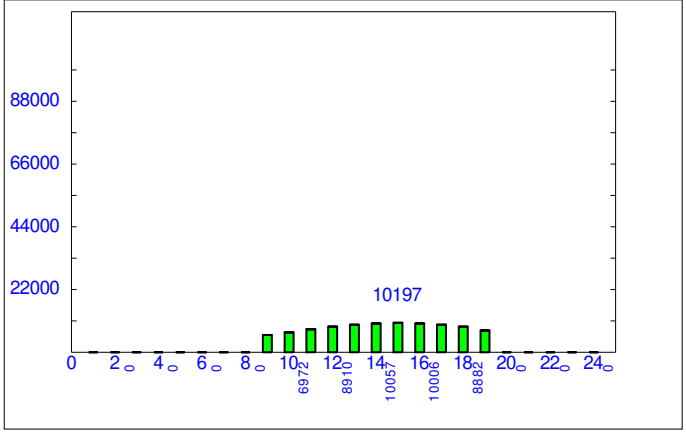
Carico sensibile (altri)



Carico sens. totale (LTS)

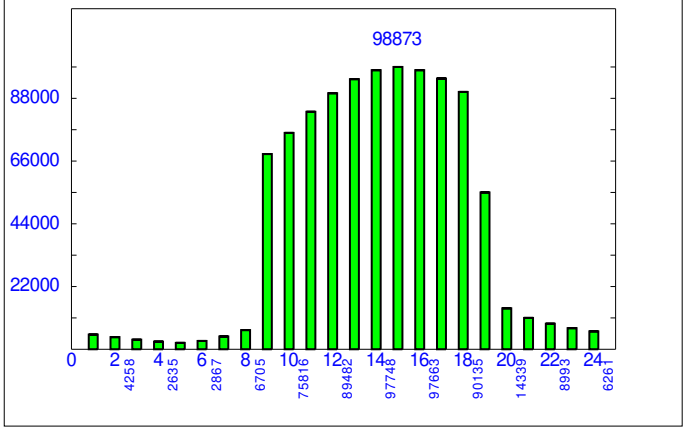


SIMULAZIONE: Potenza sens. rimossa (ER)

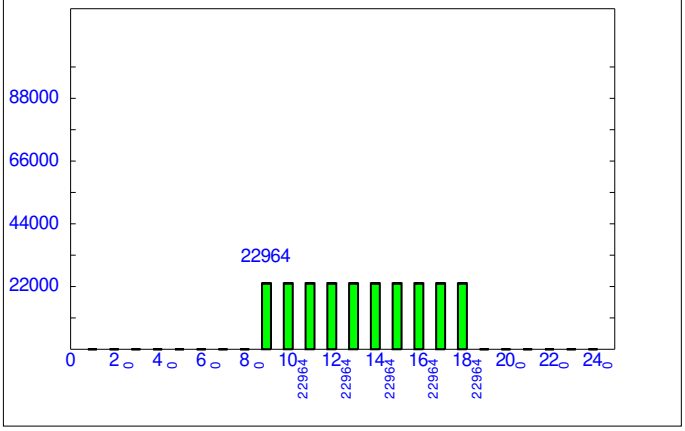


TOTALI AMBIENTE : 030103 Locale 030103

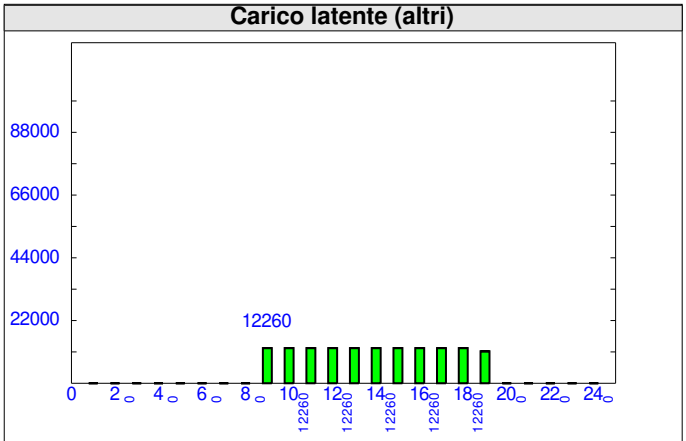
Carico totale



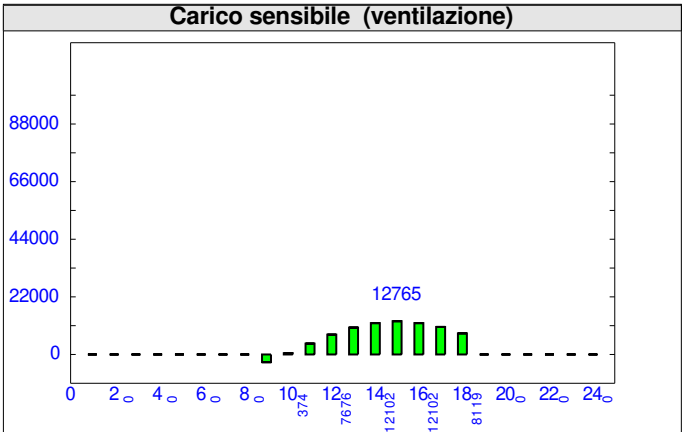
Carico latente (ventilazione)



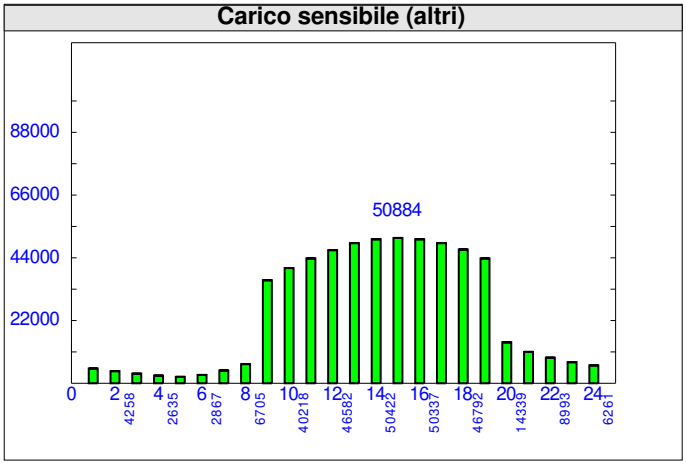
Carico latente (altri)



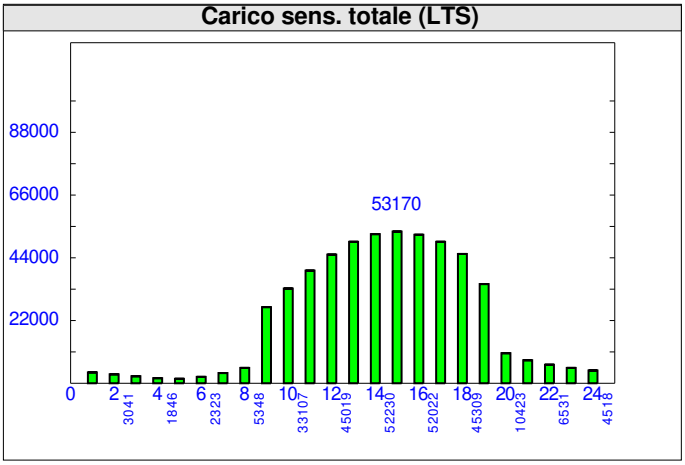
Carico sensibile (ventilazione)



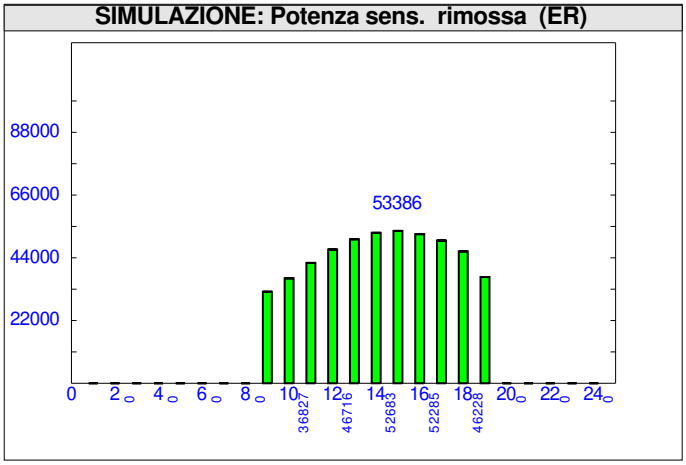
Carico sensibile (altri)



Carico sens. totale (LTS)

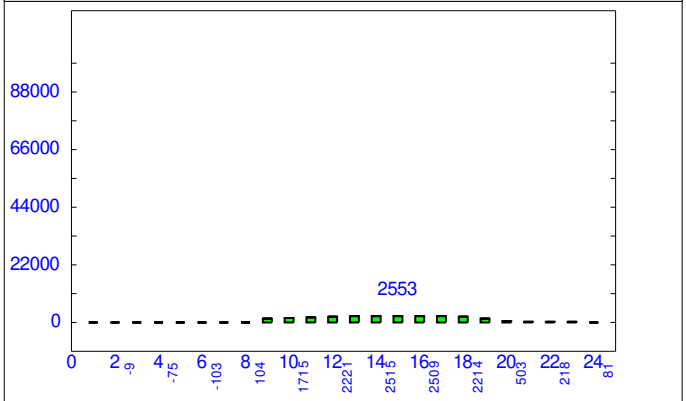


SIMULAZIONE: Potenza sens. rimossa (ER)

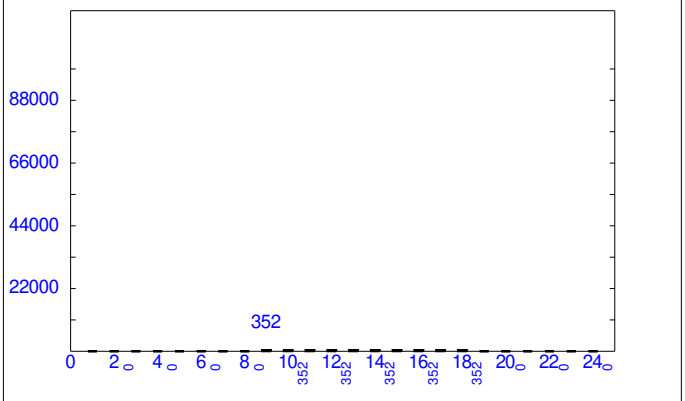


TOTALI AMBIENTE : 030104 Locale 030104

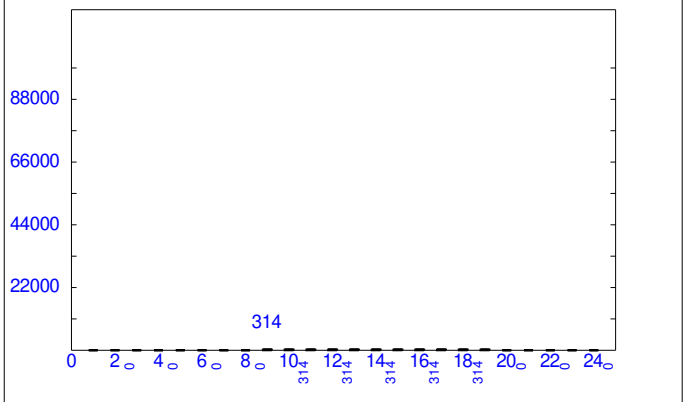
Carico totale



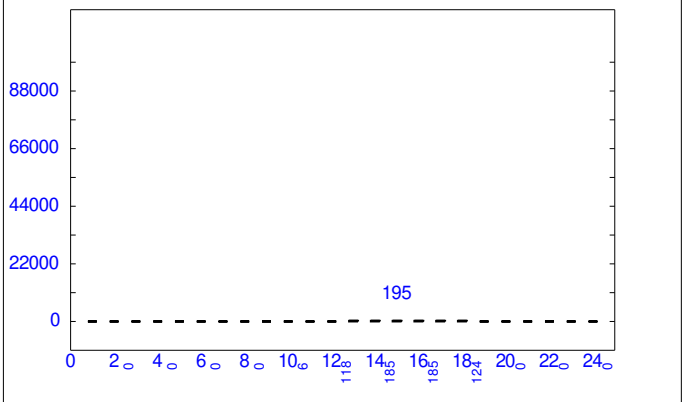
Carico latente (ventilazione)



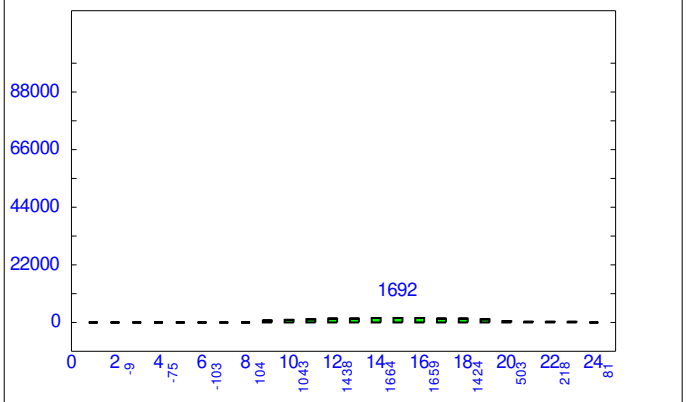
Carico latente (altri)



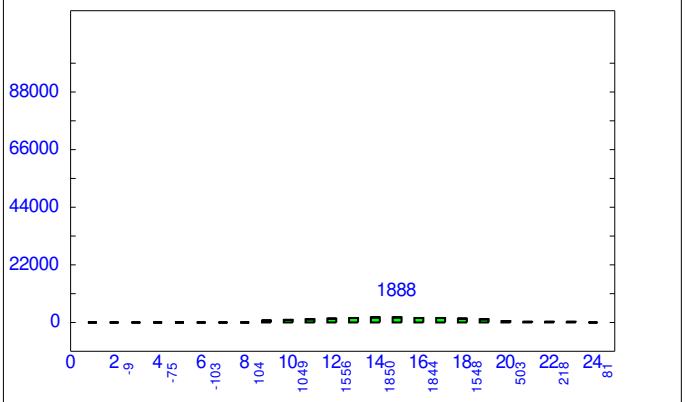
Carico sensibile (ventilazione)



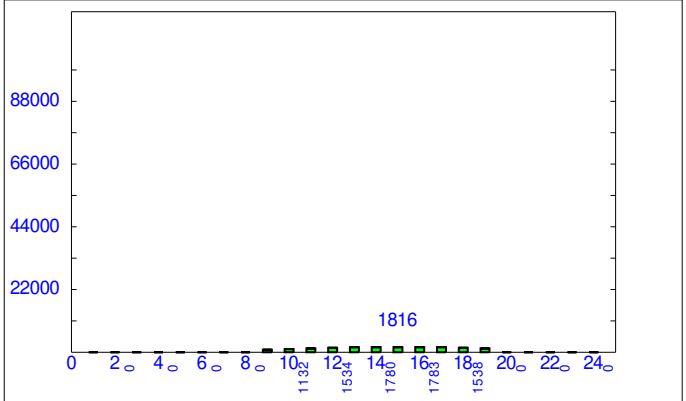
Carico sensibile (altri)



Carico sens. totale (LTS)

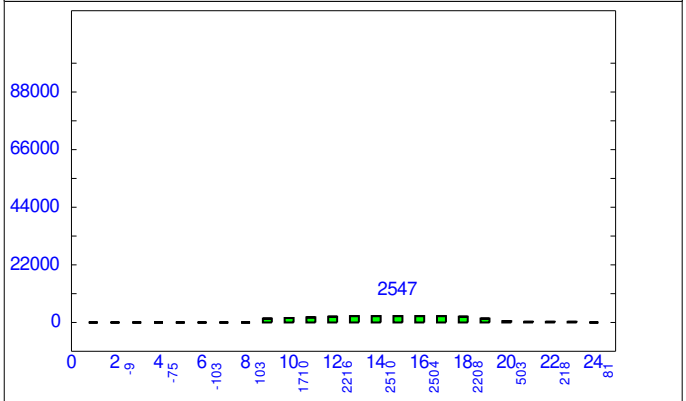


SIMULAZIONE: Potenza sens. rimossa (ER)

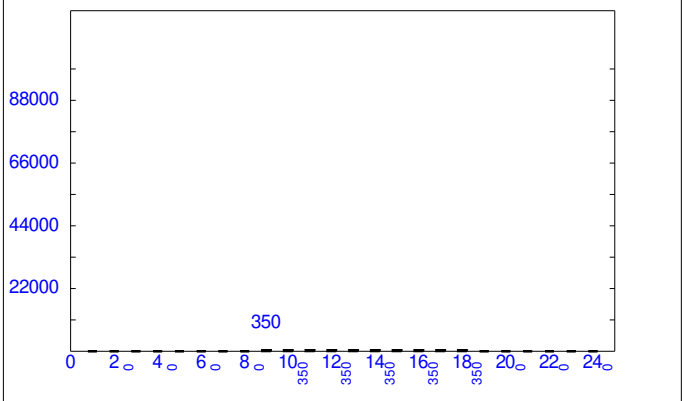


TOTALI AMBIENTE : 030105 Locale 030105

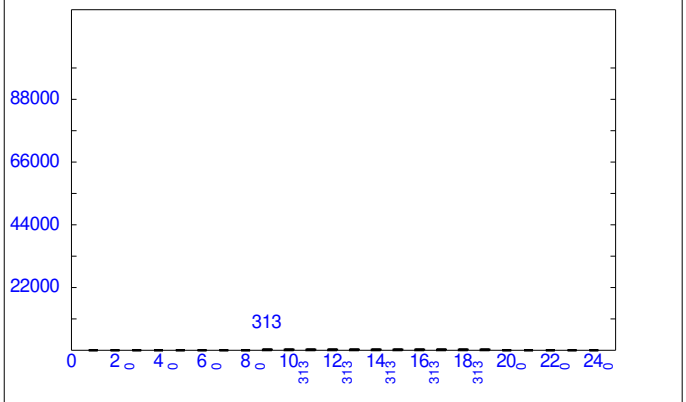
Carico totale



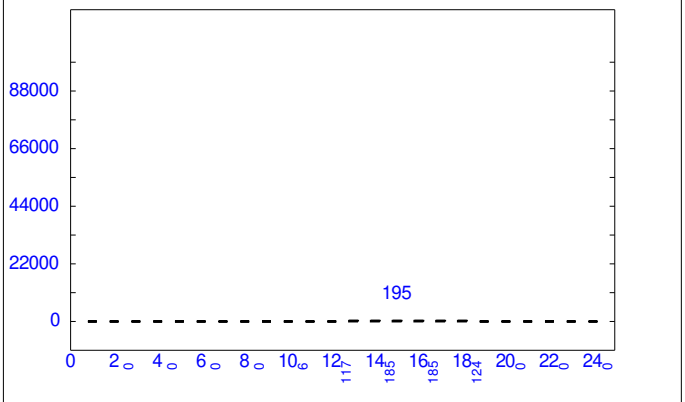
Carico latente (ventilazione)



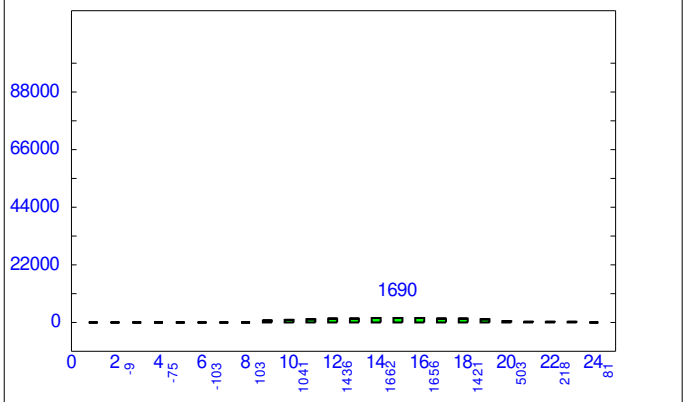
Carico latente (altri)



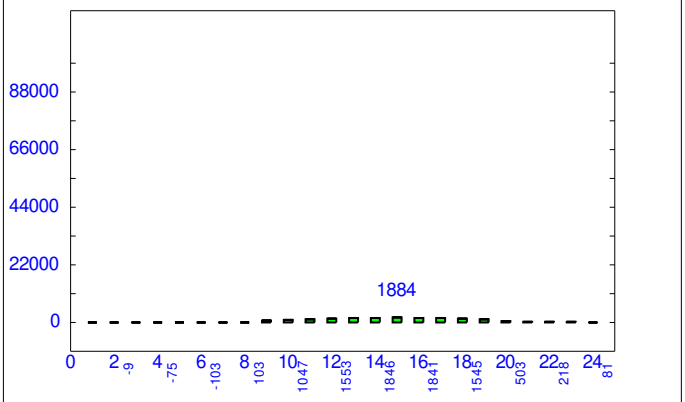
Carico sensibile (ventilazione)



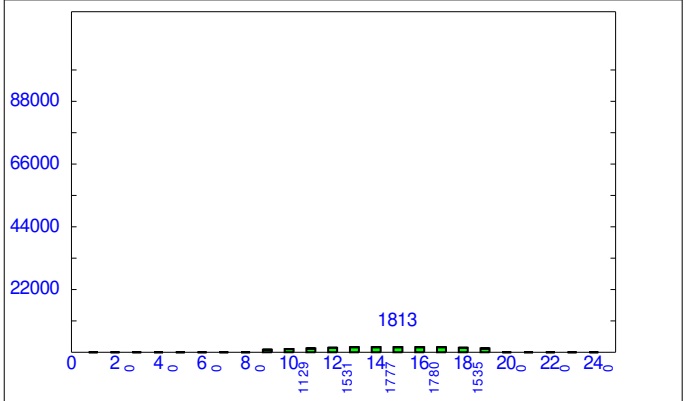
Carico sensibile (altri)



Carico sens. totale (LTS)

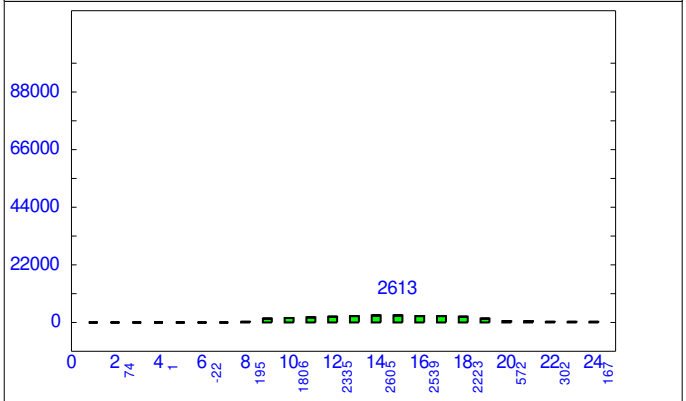


SIMULAZIONE: Potenza sens. rimossa (ER)

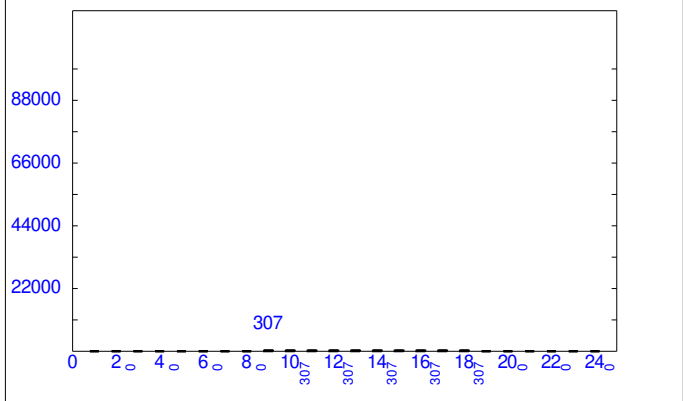


TOTALI AMBIENTE : 030106 Locale 030106

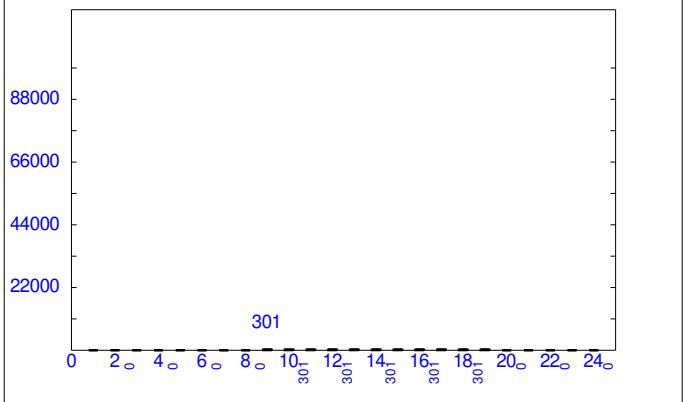
Carico totale



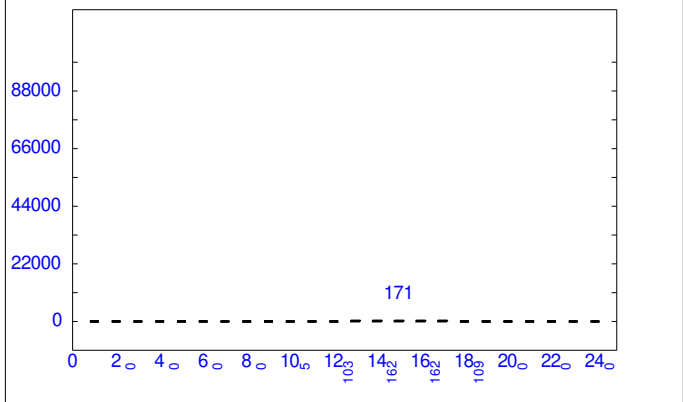
Carico latente (ventilazione)



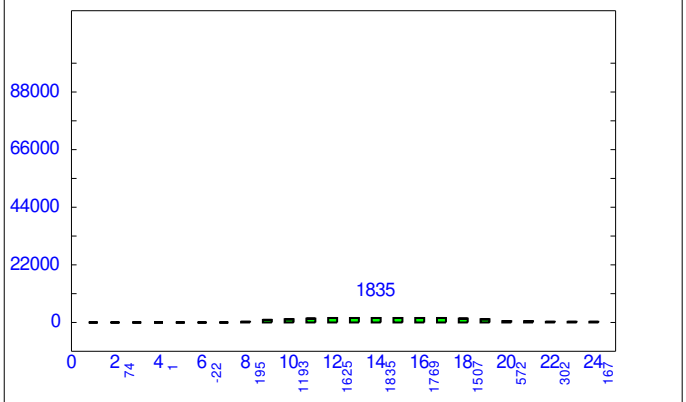
Carico latente (altri)



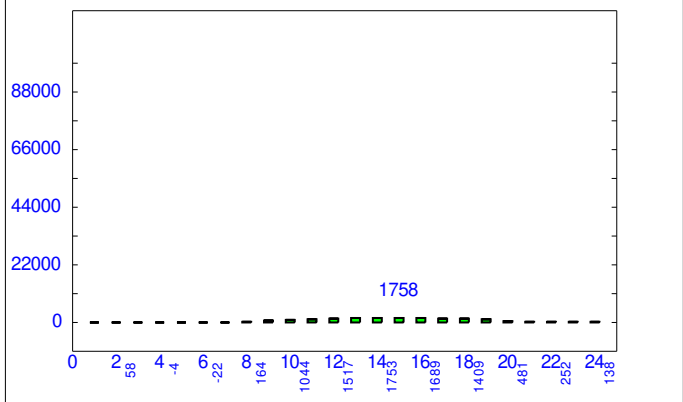
Carico sensibile (ventilazione)



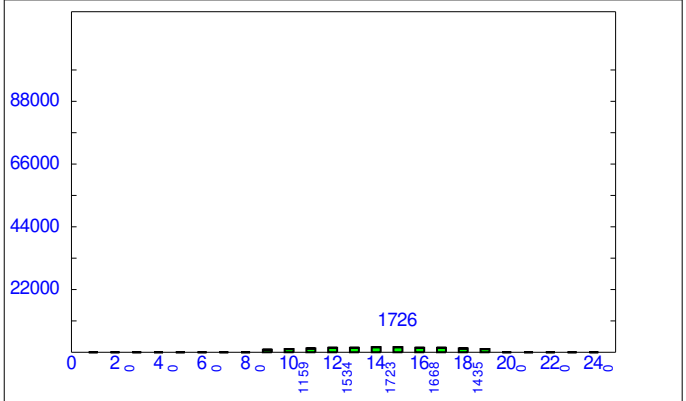
Carico sensibile (altri)



Carico sens. totale (LTS)

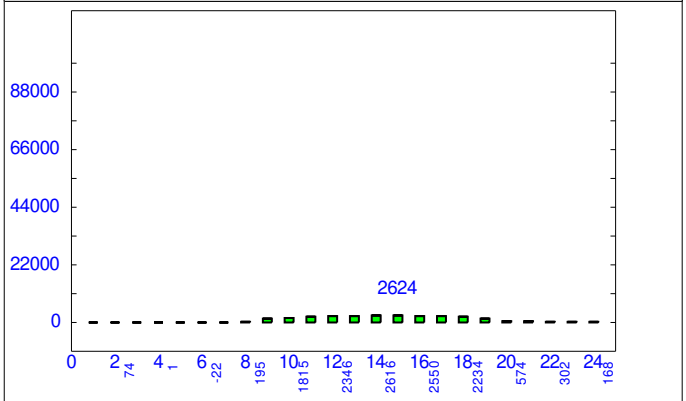


SIMULAZIONE: Potenza sens. rimossa (ER)

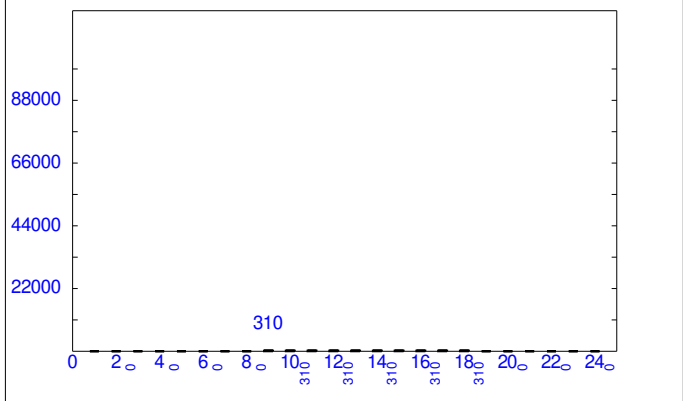


TOTALI AMBIENTE : 030107 Locale 030107

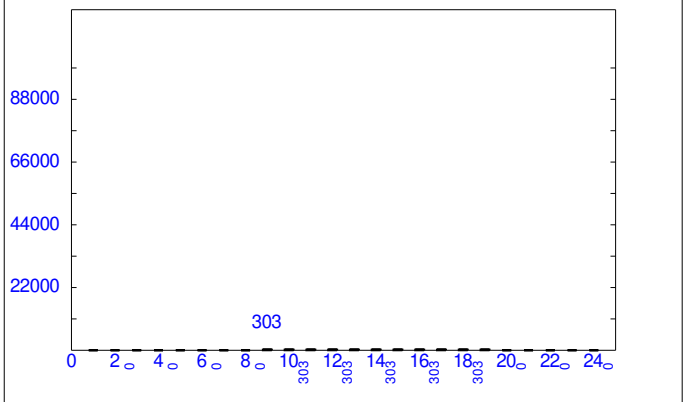
Carico totale



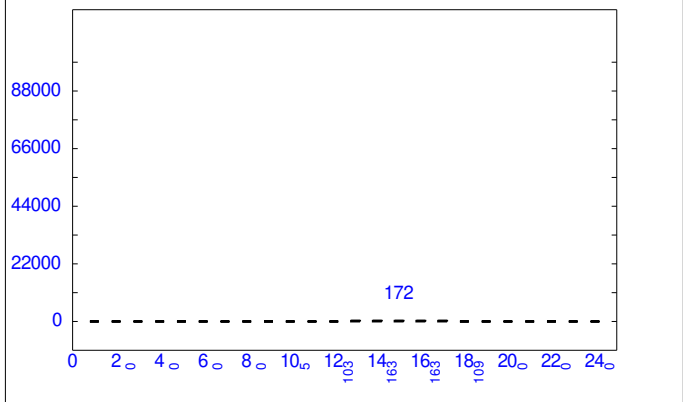
Carico latente (ventilazione)



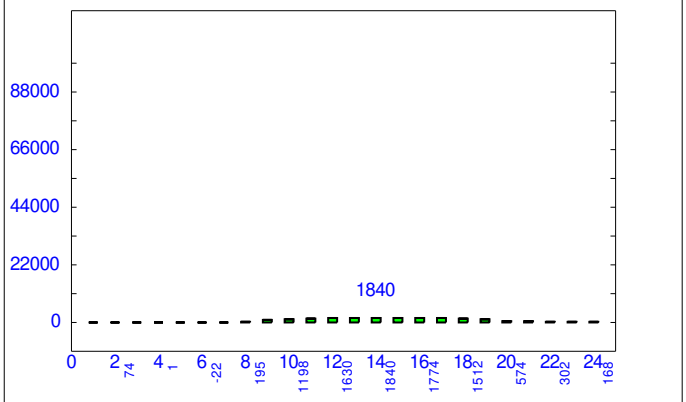
Carico latente (altri)



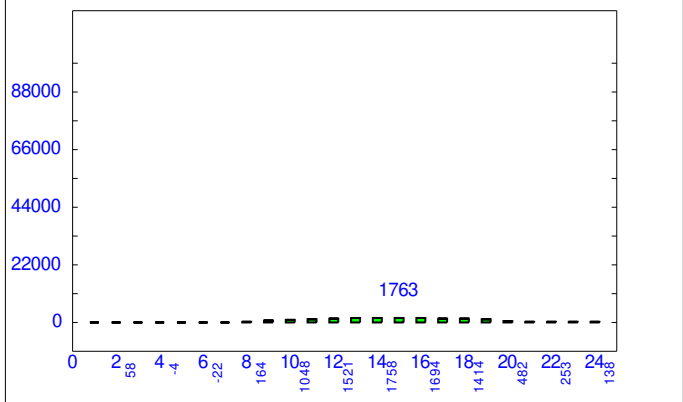
Carico sensibile (ventilazione)



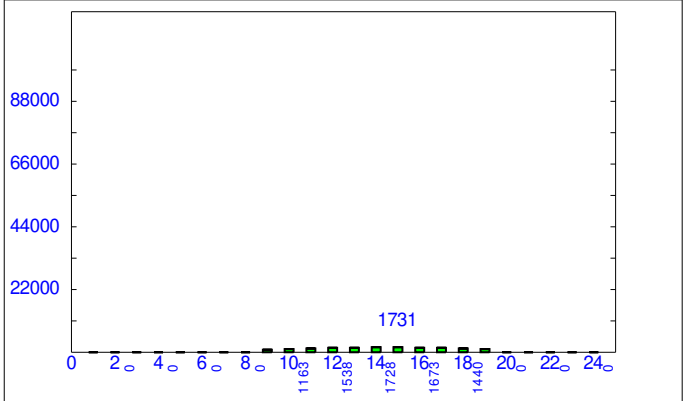
Carico sensibile (altri)



Carico sens. totale (LTS)

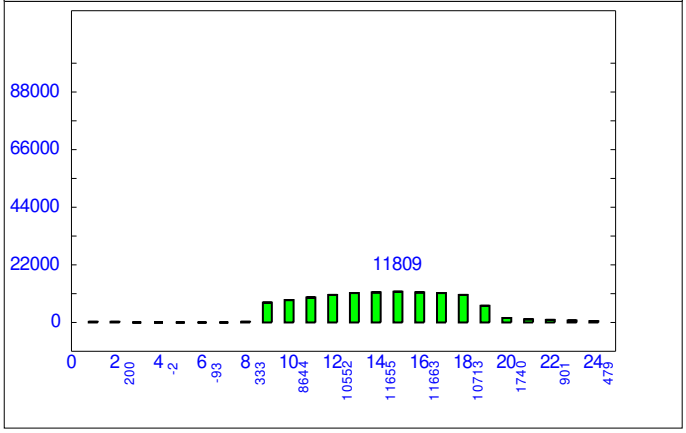


SIMULAZIONE: Potenza sens. rimossa (ER)

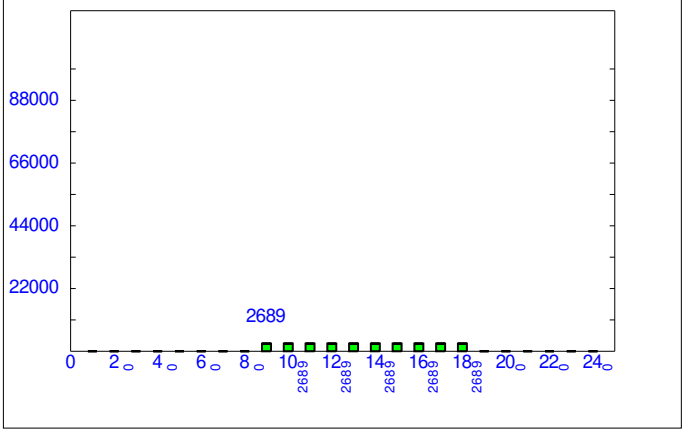


TOTALI AMBIENTE : 030108 Locale 030108

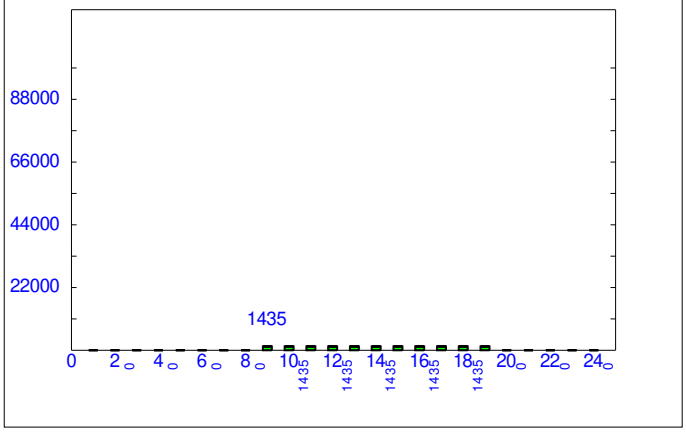
Carico totale



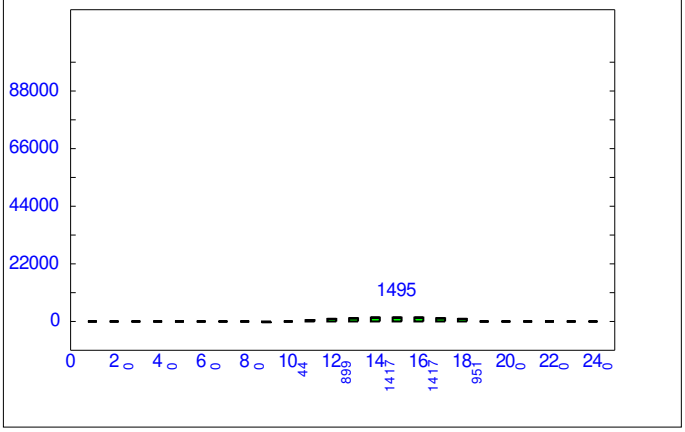
Carico latente (ventilazione)



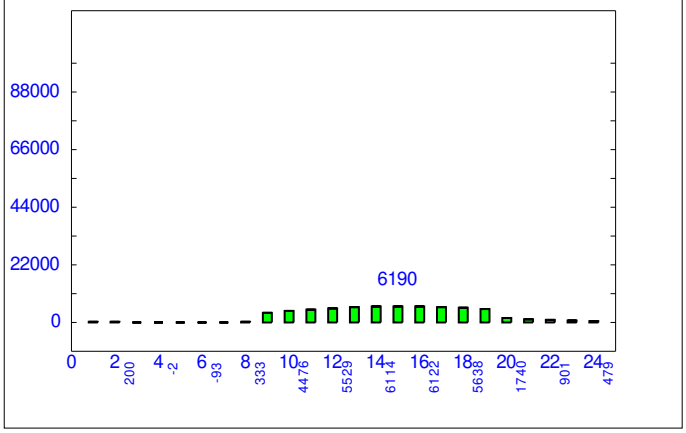
Carico latente (altri)



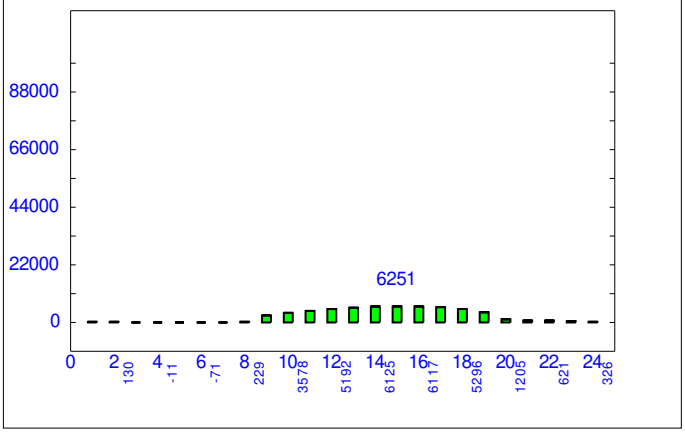
Carico sensibile (ventilazione)



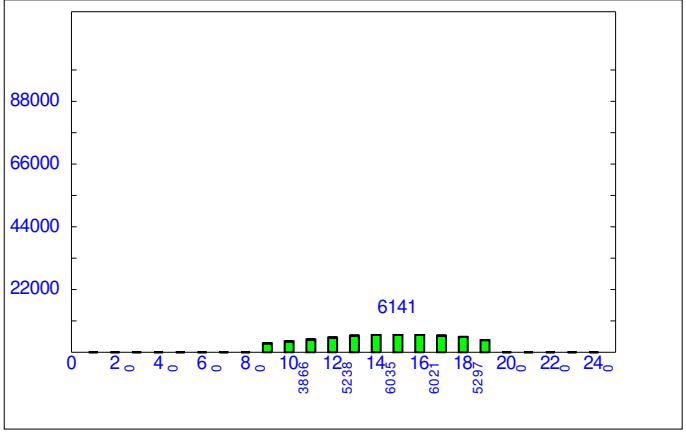
Carico sensibile (altri)



Carico sens. totale (LTS)

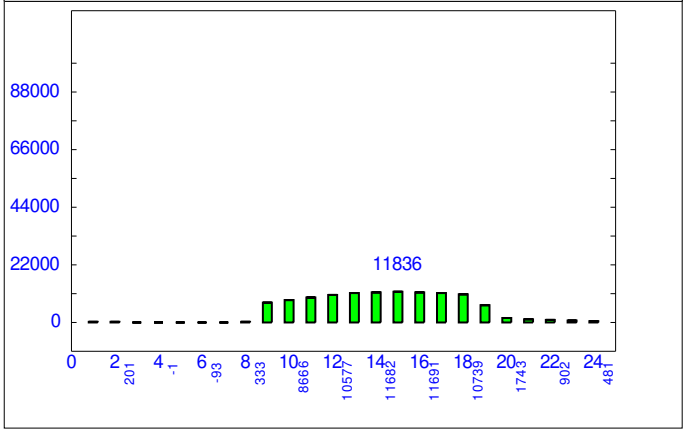


SIMULAZIONE: Potenza sens. rimossa (ER)

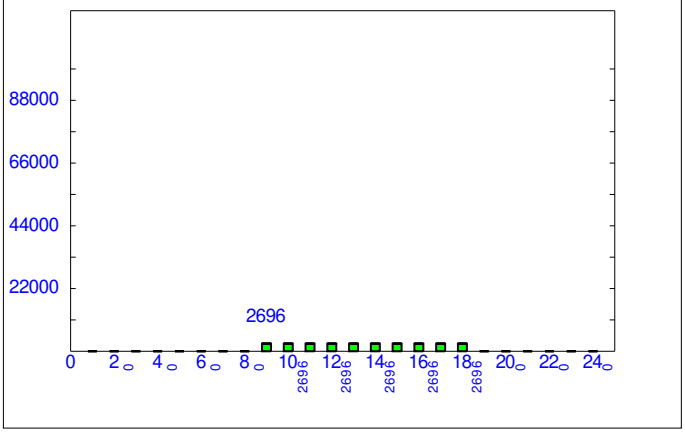


TOTALI AMBIENTE : 030109 Locale 030109

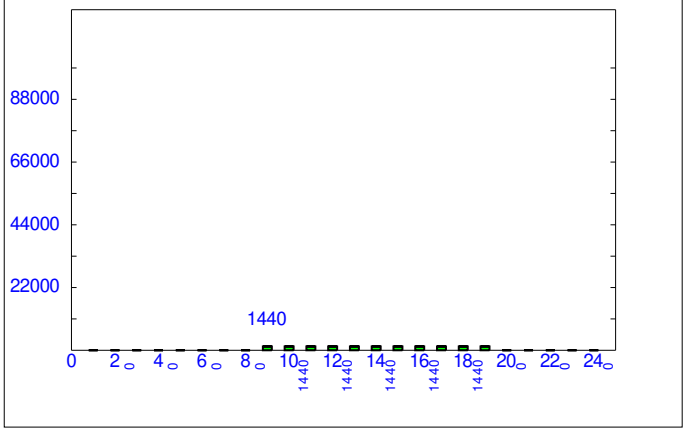
Carico totale



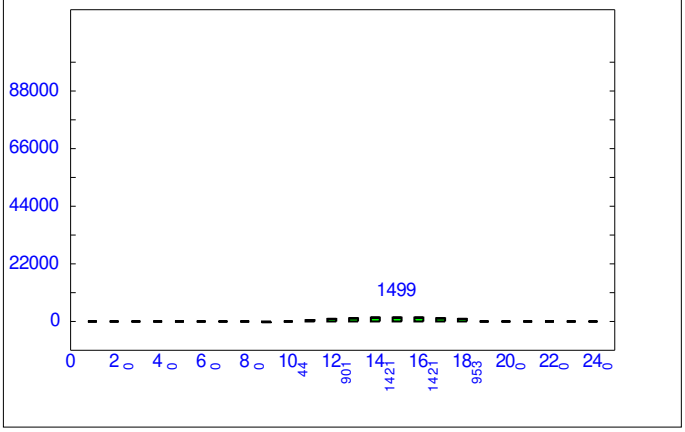
Carico latente (ventilazione)



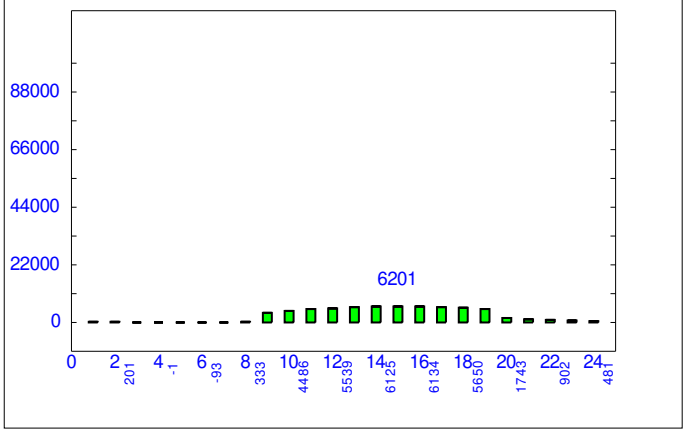
Carico latente (altri)



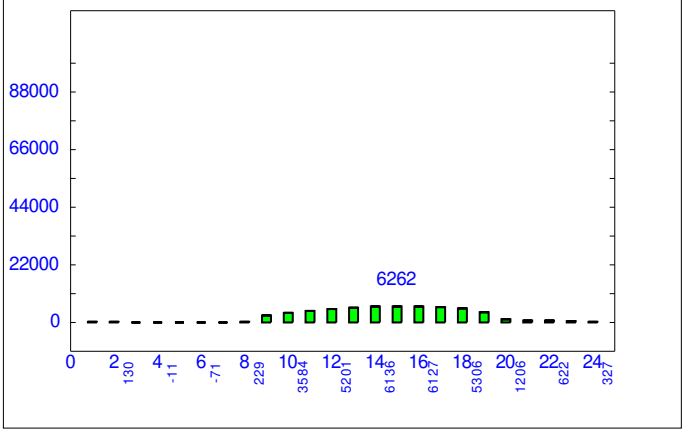
Carico sensibile (ventilazione)



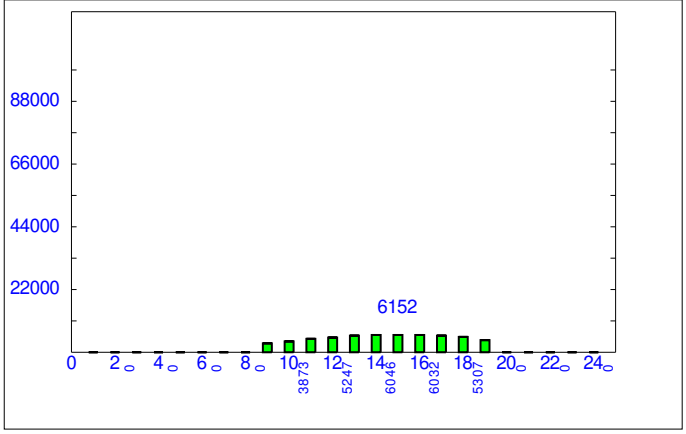
Carico sensibile (altri)



Carico sens. totale (LTS)

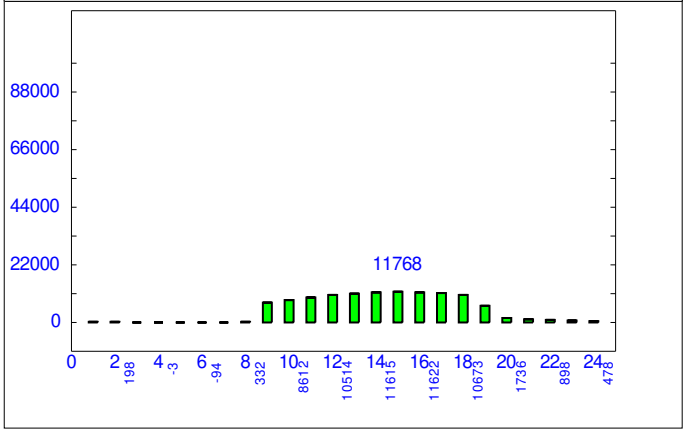


SIMULAZIONE: Potenza sens. rimossa (ER)

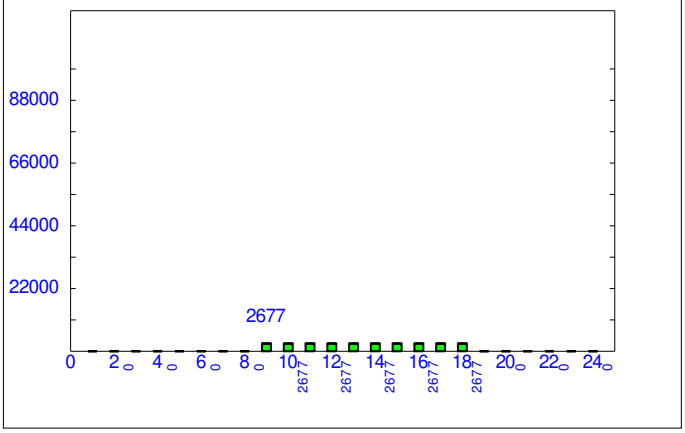


TOTALI AMBIENTE : 030110 Locale 030110

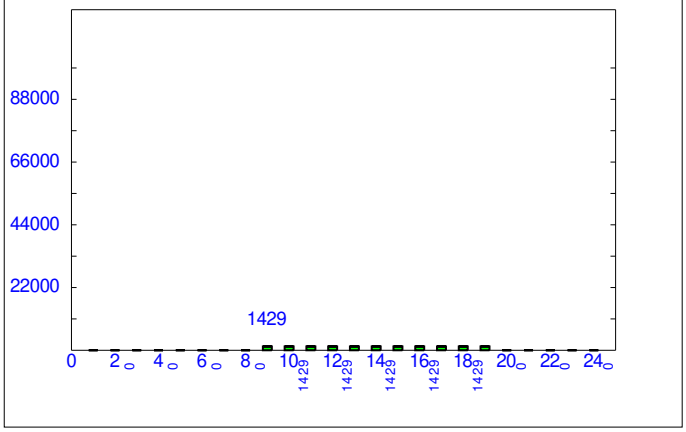
Carico totale



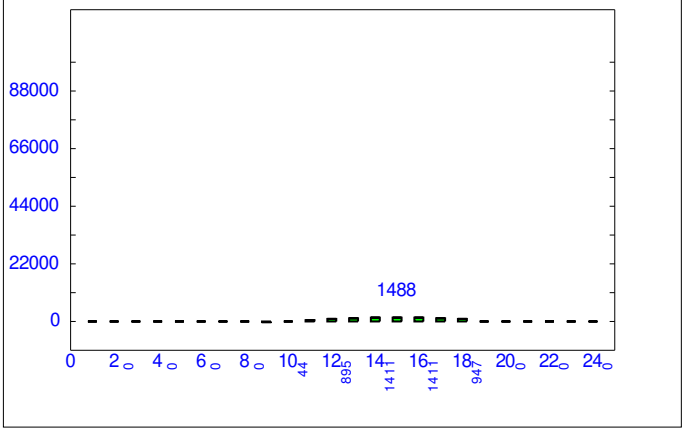
Carico latente (ventilazione)



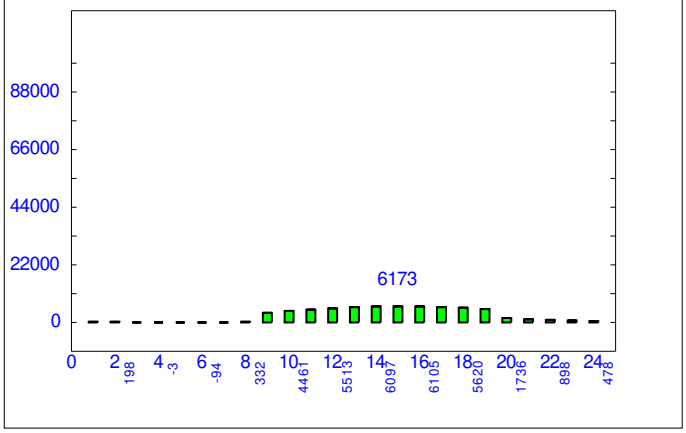
Carico latente (altri)



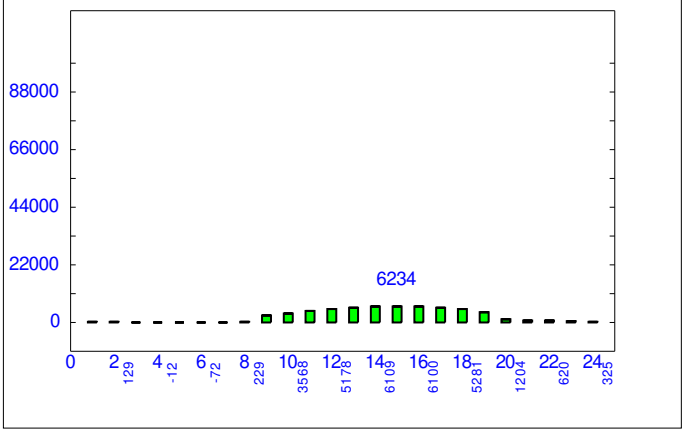
Carico sensibile (ventilazione)



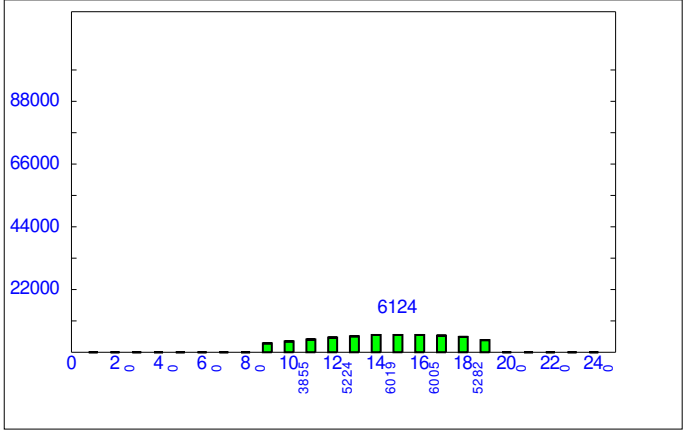
Carico sensibile (altri)



Carico sens. totale (LTS)

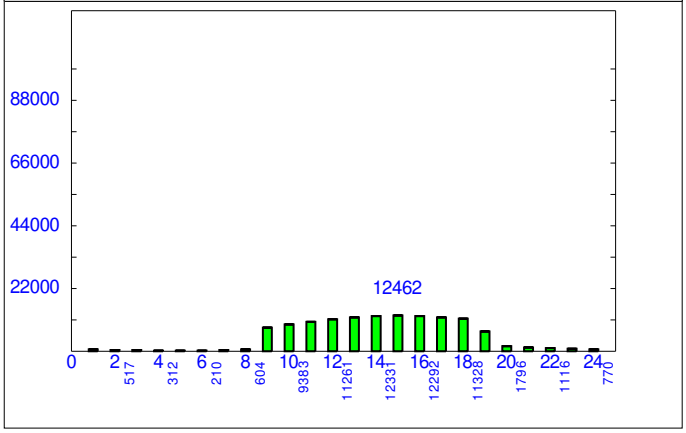


SIMULAZIONE: Potenza sens. rimossa (ER)

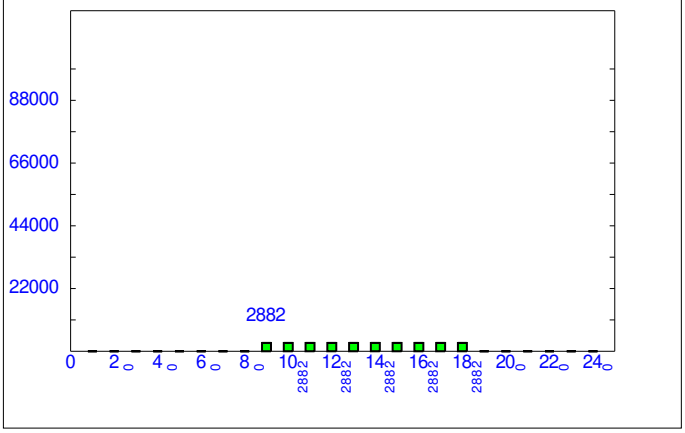


TOTALI AMBIENTE : 030111 Locale 030111

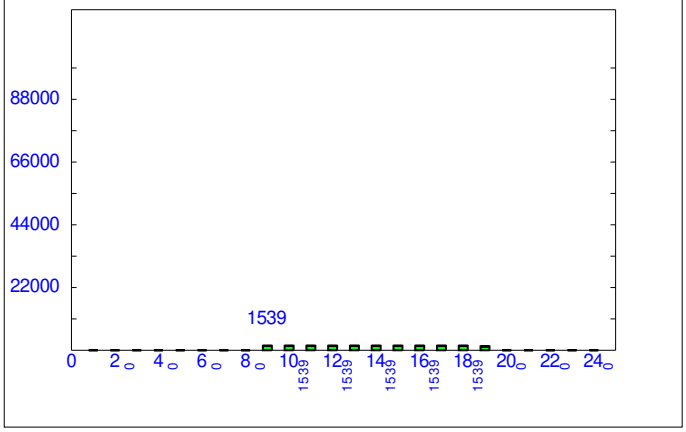
Carico totale



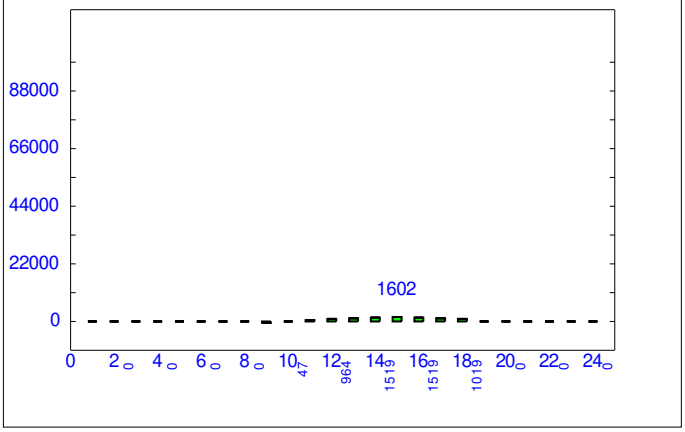
Carico latente (ventilazione)



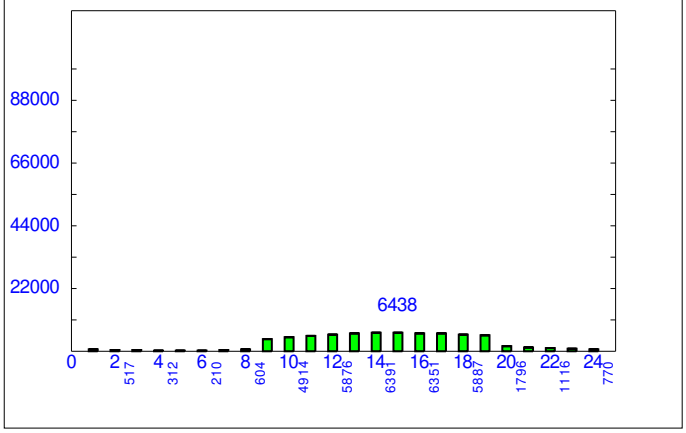
Carico latente (altri)



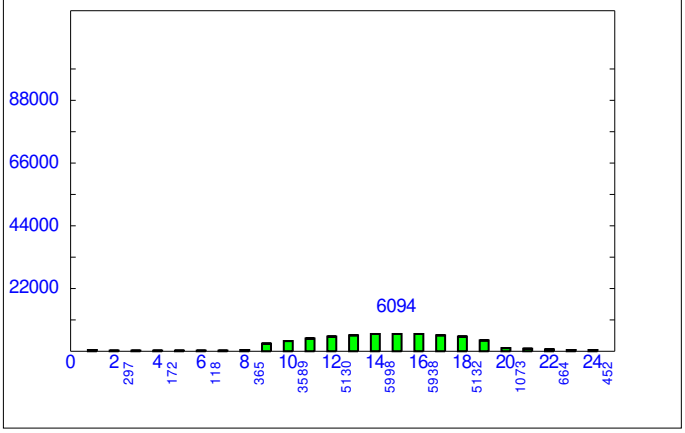
Carico sensibile (ventilazione)



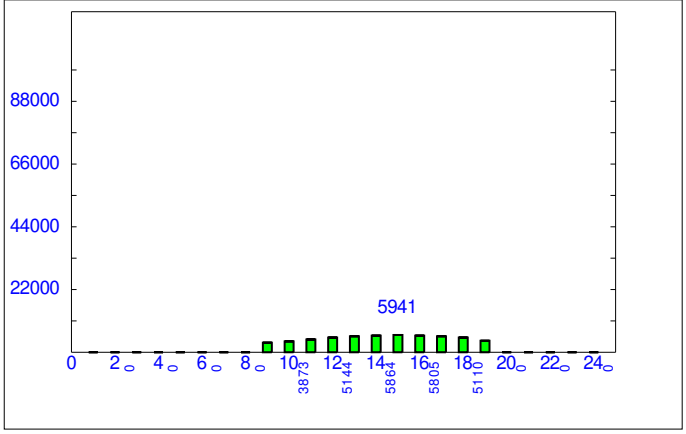
Carico sensibile (altri)



Carico sens. totale (LTS)



SIMULAZIONE: Potenza sens. rimossa (ER)



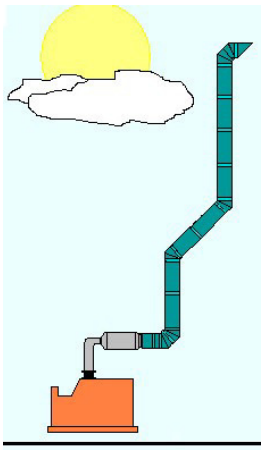
RELAZIONE DI CALCOLO
SCARICO COMBUSTIONE MOTOPOMPA ANTINCENDIO

Cliente: COMUNE DI PADOVA
Progetto: Castello dei Carraresi
Data: 16/07/2018

CALCOLO SECONDO NORMA EN 13384-1, CANNA FUMARIA IN PRESSIONE

DATI DEL GRUPPO MOTOPOMPA

Combustibile:		Gasolio
Tipo d'apparecchio:		Gruppo elettrogeno
Potenza termica utile:	kW	47,7
Tª dei fumi:	ºC	500
Contropressione massima:	Pa	100
Portata:	m³/h	*484,32*



CONDIZIONI ESTERNE

Altitudine:	m	7
Tª massima:	ºC	35
Tª ambiente nell'uscita della canna fumaria:	ºC	-5
Zona:		Interno
Pressione opposta all'uscita:		NO

DATI DEI CONDOTTI

CANALE DA FUMO	
Lunghezza totale (m):	4,5
Percorso (m):	4,5 m in sala caldaie
Altezza totale (m):	2
Gamma:	DOPPIA PARETE
Contropressione ammissibile (Pa):	5000
Elementi:	Gomito 45º: 4
Coeff. (Zeta) totale di perdita dei componenti:	1,6

CAMINO	
Lunghezza totale (m):	6
Percorso (m):	6 m all'esterno
Altezza totale (m):	6
Gamma:	DOPPIA PARETE
Contropressione ammissibile (Pa):	5000
Raccordo:	Giunto T 90º: 1
Tipo di terminale:	Conno terminale
Coeff. (Zeta) totale di perdita dei componenti:	1,2

CALCOLI E COMPROVAZIONI

REQUISITI DI PRESSIONE

	Flow safety coefficient	S_E		1,2	
			Ø125	Ø150	
+	Perdite di carico nel camino:	P_R	**68,87**	30,72	Pa
+	Pressione del vento:	P_L	**0**	0	Pa
-	Tiraggio teorico alla base della canna fumaria:	P_H	**36,05**	35,87	Pa
	Contropressione esistente alla base della canna fumaria:	P_{ZO}	**32,82**	-5,15	Pa
	Perdite di carico nel canale da fumo:	P_{FV}	**63,73**	22,31	Pa
	Contropressione ammissibile nel canale da fumo:	$P_{ZV\ excess}$	5000		Pa
	Contropressione ammissibile nella canna fumaria:	$P_{Z\ excess}$	5000		Pa

Secondo requisito di pressione:		P_{ZO}	≤	$P_{Z\ excess}$	Verifica
	Ø 125	**32,82**	**<**	**5000**	**SÌ**
	Ø 150	-5,15	<	5000	**SÌ**
Terzo requisito di pressione:		$P_{ZO} + P_{FV}$	≤	$P_{ZV\ excess}$	Verifica
	Ø 125	**96,54**	**<**	**5000**	**SÌ**
	Ø 150	17,15	<	5000	**SÌ**
Sovrappressione necessaria all'uscita del silenziatore:		$P_{ZO} + P_{FV}$	≤	P_{WO}	Verifica
	Ø 125	**96,54**	**<**	**100**	**SÌ**
	Ø 150	17,15	<	100	**SÌ**

DIMENSIONAMENTO

CANALE DA FUMO		*Ø 125*	*Ø 150*
Diametro:		**Scelto**	Seguente
Gamma:		**DOPPIA PARETE**	DOPPIA PARETE
Diametro interno:	mm	**125**	150
Diametro esterno:	mm	**185**	210
Designazione sec. norma EN 1856-1:		**---**	---
Velocità media dei fumi:	m/s	10,6	7,4
T[a] media dei fumi:	ºC	476	475
T[a] media della parete esterna:	ºC	105	102
Perdite di carico:	Pa	63,73	22,31

CAMINO		***Ø 125***	*Ø 150*
Diametro:		**Scelto**	Seguente
Gamma:		**DOPPIA PARETE**	DOPPIA PARETE
Diametro interno:	mm	**125**	150
Diametro esterno:	mm	**210**	235
Designazione sec. norma EN 1856-1:		**T600 H1 D V2 O(30)**	T600 H1 D V2 O(30)
Velocità media dei fumi:	m/s	10	6,9
T[a] media dei fumi:	ºC	430	426
T[a] media della parete esterna:	ºC	16	16
Perdite di carico:	Pa	68,87	30,72

USCITA DEL CAMINO		***Ø 125***	*Ø 150*
Diametro:		**Scelto**	Seguente
Velocità dei fumi:	m/s	9,7	6,6
T[a] dei fumi:	ºC	408	402
T[a] della parete esterna:	ºC	16	15
Perdite di carico:	Pa	0	0