



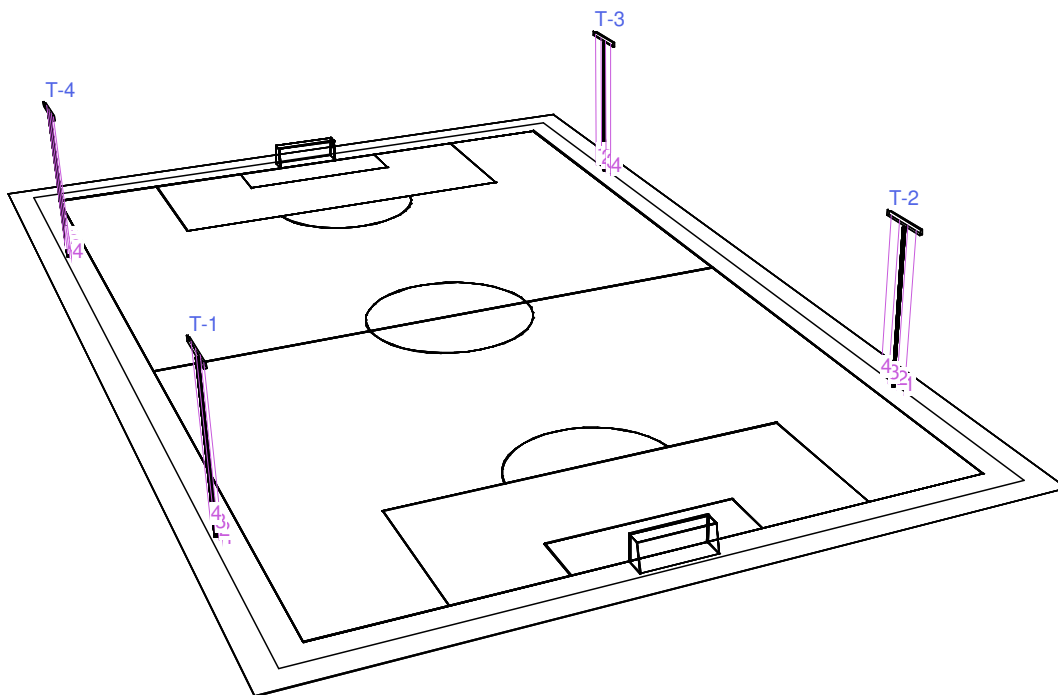
via cremona 145 25124 brescia
tel. +39 030 2451210
lavori@gapprogetti.eu
www.gapprogetti.eu



legale rappresentante	ALESSANDRO GASPARINI ingegnere		
direttore tecnico	ALESSANDRO GASPARINI ingegnere		
progettista architettonico / strutture	ALESSANDRO GASPARINI ingegnere		
progetto	VARIANTE AL PROGETTO ESECUTIVO CAMPO DA CALCIO IN ERBA SINTETICA PRESSO IL CENTRO SPORTIVO L.RE CECCONI A NERVIANO (MI)	prima emissione 28 novembre 2022	
localizzazione	NERVIANO (MI) via Sant Anna	aggiornamenti 22 settembre 2023 10 ottobre 2023 25 ottobre 2023	
committente	COMUNE DI NERVIANO (MI) Piazza Manzoni n° 14		
fase progetto	VARIANTE AL PROGETTO ESECUTIVO		
oggetto tavola	CALCOLI ESECUTIVI IMPIANTI DI VARIANTE		
scala	/	numero tavola	
disegnatore	IB	D.IE.01	
verificato	IB		
numero commessa	19.015		
nome file	19.015 VARIANTE cartiglio.dwg		revisione studio 04 - 2023/10/25

Centro Sportivo 'Re Cecconi'

Note Installazione: Comune di Nerviano



Avvertenze:

The lux levels provided by Technical Staff Fael Luce, are considered upon customer data. By changing type products installation, area dimension, the presence within the lighting area of obstacles, all of them produce some changing size of lighting. The lux levels can be changed by also tolerance of products' photometric values, lighting dazzling by light sources, reflecting properties of the planes and by alternating of power supply. The lighting project is done following the customer technics data.

1.1 Informazioni Area

Superficie	Dimensioni [m]	Angolo°	Colore	Coefficiente Riflessione	Illum.Medio [lux]	Luminanza Media [cd/m ²]
Suolo	60.00x100.00	Piano	RGB=128,128,64	25%	239	19

Dimensioni del Parallelepipedo Contenente l'Area [m]: 60.00x100.00x0.00
Reticolo Punti di Calcolo del Parallelepipedo [m]: direzione X 5.00 - Y 5.00

1.2 Calcolo Energetico (Suolo)

Area	6000.00 m ²
Illuminamento Medio	238.81 lx
Potenza Specifica	2.75 W/m ²
Potenza Specifica Illuminotecnica	1.15 W/(m ² * 100lx)
Efficienza Energetica	86.94 (m ² *lx)/W
Potenza Totale Utilizzata	16480.00 W

1.3 Parametri di Qualità dell'Impianto

Superficie	Risultati	Medio	Minimo	Massimo	Min/Medio	Min/Max	Medio/Max
Piano di Lavoro (h=0.00 m)	Illuminamento Orizzontale (E)	239 lux	145 lux	456 lux	0.61	0.32	0.52
Suolo	Illuminamento Orizzontale (E)	239 lux	145 lux	456 lux	0.61	0.32	0.52
Suolo	Luminanza (L)	19 cd/m ²	12 cd/m ²	36 cd/m ²	0.61	0.32	0.52

Tipo Calcolo Solo Dir.

Inquinamento Luminoso

Rapporto Medio - Rn -

0.00 %

Indici di Abbagliamento

Osservatore	GR	TI
(x=0.00;y=-50.00;z=1.50)m ---> (x=0.00;y=50.00)m	22.14	2.80

Indici di Abbagliamento

Osservatore	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
-------------	---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----

Direzione Di Osservazione

Strut.(x=-32.00 y=-32.50 z=hOss)	31	34	38	39	39	39	40	40	40	39	38	38	37	30	34	35	36	38	40	41
Strut.(x=32.00 y=-32.50 z=hOss)	37	38	38	39	40	40	40	39	39	39	38	34	31	38	39	40	40	41	41	41
Strut.(x=32.00 y=32.50 z=hOss)	32	32	33	33	34	35	35	36	36	37	37	37	34	32	33	33	34	34	35	36
Strut.(x=-32.00 y=32.50 z=hOss)	34	37	37	37	36	36	35	35	34	33	33	32	32	35	36	36	36	36	36	36

Osservatore	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
-------------	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Direzione Di Osservazione

Strut.(x=-32.00 y=-32.50 z=hOss)	41	41	40	40	39	38	11	31	34	38	40	42	42	42	41	40	39	38	0	
Strut.(x=32.00 y=-32.50 z=hOss)	40	38	36	35	34	30	38	39	40	41	41	42	42	42	40	38	34	31	11	36
Strut.(x=32.00 y=32.50 z=hOss)	36	36	36	36	36	35	33	33	34	34	35	35	36	34	34	34	33	32	31	33
Strut.(x=-32.00 y=32.50 z=hOss)	35	34	34	33	33	32	31	32	33	34	34	34	36	35	35	34	34	33	33	32

Osservatore	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
-------------	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Direzione Di Osservazione

Strut.(x=-32.00 y=-32.50 z=hOss)	26	35	38	40	40	40	40	40	39	38	37	36	0	28	31	33	35	37	38	38
Strut.(x=32.00 y=-32.50 z=hOss)	37	38	39	40	40	40	40	38	35	26	0	35	36	37	37	38	38	38	37	37
Strut.(x=32.00 y=32.50 z=hOss)	34	34	35	35	34	34	35	36	35	34	33	32	33	34	35	35	35	35	35	36
Strut.(x=-32.00 y=32.50 z=hOss)	33	34	35	36	35	34	34	35	35	34	34	33	33	34	35	37	37	36	35	35

Osservatore	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
-------------	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Direzione Di Osservazione

Strut.(x=-32.00 y=-32.50 z=hOss)	38	37	37	36	35	0	32	36	36	36	37	37	38	37	37	37	36	35	30	33
Strut.(x=32.00 y=-32.50 z=hOss)	35	33	31	28	0	35	36	36	37	37	38	37	37	36	36	36	32	0	35	36
Strut.(x=32.00 y=32.50 z=hOss)	37	37	36	34	33	33	34	35	35	36	36	36	37	38	38	37	35	34	34	35
Strut.(x=-32.00 y=32.50 z=hOss)	35	35	35	34	33	34	35	37	38	38	37	36	35	36	35	35	34	33	35	37

Osservatore	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
-------------	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----

Direzione Di Osservazione

Strut.(x=-32.00 y=-32.50 z=hOss)	37	40	40	39	38	38	37	37	36	36	35	35	36	36	40	41	41	40	39	38
Strut.(x=32.00 y=-32.50 z=hOss)	36	37	37	38	38	39	40	40	37	33	30	35	36	36	37	38	39	41	41	41
Strut.(x=32.00 y=32.50 z=hOss)	34	35	36	37	37	37	38	39	38	37	35	35	35	35	36	37	38	38	38	39
Strut.(x=-32.00 y=32.50 z=hOss)	38	39	38	37	37	37	36	35	34	35	34	35	38	40	40	39	38	38	38	37

Osservatore	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
-------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Direzione Di Osservazione

Strut.(x=-32.00 y=-32.50 z=hOss)	37	36	36	35	37	39	38	38	40	41	41	41	40	38	37	35	35	37	41	40
Strut.(x=32.00 y=-32.50 z=hOss)	40	36	36	35	35	35	37	38	40	41	41	41	40	38	38	39	37	35	36	38
Strut.(x=32.00 y=32.50 z=hOss)	40	40	38	35	35	35	36	36	37	38	39	39	39	40	41	39	36	36	36	37
Strut.(x=-32.00 y=32.50 z=hOss)	36	35	34	35	36	39	41	41	39	39	39	38	37	36	36	35	35	36	40	41

Osservatore	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140
-------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Direzione Di Osservazione

Strut.(x=-32.00 y=-32.50 z=hOss)	39	39	40	41	41	40	39	38	36	35	37	41	41	40	39	40	39	39	39	39
Strut.(x=32.00 y=-32.50 z=hOss)	39	40	41	40	40	39	39	40	41	37	35	37	38	39	39	39	39	40	39	40
Strut.(x=32.00 y=32.50 z=hOss)	37	38	38	39	39	40	40	41	40	36	35	37	38	39	39	39	39	40	39	40
Strut.(x=-32.00 y=32.50 z=hOss)	41	40	39	39	38	38	37	37	36	36	37	41	41	40	39	40	39	39	39	39

Osservatore	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160
-------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Direzione Di Osservazione

Osservatore	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160
-------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Direzione Di Osservazione

Strut.(x=-32.00 y=-32.50 z=hOss)	38	37	35	36	40	41	40	40	39	39	38	38	37	37	36	36	36	39	41	40
Strut.(x=32.00 y=-32.50 z=hOss)	41	41	37	36	36	37	37	38	38	39	39	40	41	41	40	36	35	35	36	36
Strut.(x=32.00 y=32.50 z=hOss)	41	41	37	35	36	38	39	40	41	41	40	39	39	40	41	37	35	35	37	38
Strut.(x=-32.00 y=32.50 z=hOss)	38	37	35	37	41	40	39	39	40	40	41	40	39	38	36	35	37	39	38	38

Osservatore	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180
-------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Direzione Di Osservazione

Strut.(x=-32.00 y=-32.50 z=hOss)	39	39	39	38	37	36	36	35	35	35	38	40	40	39	38	38	38	37	36	35
Strut.(x=32.00 y=-32.50 z=hOss)	37	38	39	39	39	41	41	39	36	35	34	35	36	37	38	38	38	39	40	40
Strut.(x=32.00 y=32.50 z=hOss)	40	41	41	41	40	38	38	39	37	35	36	36	37	38	39	40	41	41	40	36
Strut.(x=-32.00 y=32.50 z=hOss)	40	41	41	41	40	38	37	35	35	35	36	36	40	41	41	41	39	38	37	36

Osservatore	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200
-------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Direzione Di Osservazione

Strut.(x=-32.00 y=-32.50 z=hOss)	35	35	35	37	38	39	38	37	37	37	36	35	34	35	34	34	35	37	38	38
Strut.(x=32.00 y=-32.50 z=hOss)	38	35	34	35	34	35	36	37	37	37	38	39	38	37	35	33	34	35	35	36
Strut.(x=32.00 y=32.50 z=hOss)	36	35	35	36	36	37	37	38	38	39	40	40	37	33	30	35	36	37	37	37
Strut.(x=-32.00 y=32.50 z=hOss)	36	35	30	33	37	40	40	39	38	38	37	37	36	36	35	0	32	36	36	36

Osservatore	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220
-------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Direzione Di Osservazione

Strut.(x=-32.00 y=-32.50 z=hOss)	37	36	36	36	35	35	34	33	33	34	36	37	37	36	35	35	35	35	35	34
Strut.(x=32.00 y=-32.50 z=hOss)	35	36	37	38	38	37	35	34	33	34	35	35	35	35	35	36	37	37	35	34
Strut.(x=32.00 y=32.50 z=hOss)	38	37	37	36	36	36	32	0	35	36	37	37	38	38	38	37	35	33	31	28
Strut.(x=-32.00 y=32.50 z=hOss)	37	37	38	37	37	36	36	35	0	28	31	33	35	37	38	38	38	37	37	36

Osservatore	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240
-------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Direzione Di Osservazione

Strut.(x=-32.00 y=-32.50 z=hOss)	33	32	33	34	35	36	35	34	34	35	35	34	34	33	31	32	33	34	34	34
Strut.(x=32.00 y=-32.50 z=hOss)	33	33	34	34	35	35	34	34	35	36	35	34	33	32	33	33	34	34	35	35
Strut.(x=32.00 y=32.50 z=hOss)	0	36	37	38	39	40	40	40	40	40	38	35	26	0	38	39	40	41	41	42
Strut.(x=-32.00 y=32.50 z=hOss)	35	0	26	35	38	40	40	40	40	40	39	38	37	36	11	31	34	38	40	42

Osservatore	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260
-------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Direzione Di Osservazione

Strut.(x=-32.00 y=-32.50 z=hOss)	36	35	35	34	34	33	33	35	36	36	36	36	36	36	35	34	34	33	33	32
Strut.(x=32.00 y=-32.50 z=hOss)	36	34	34	34	33	32	31	32	33	33	34	34	35	36	36	36	36	36	36	35
Strut.(x=32.00 y=32.50 z=hOss)	42	42	40	38	34	31	11	38	39	40	40	41	41	41	40	38	36	35	34	30
Strut.(x=-32.00 y=32.50 z=hOss)	42	42	41	41	40	39	38	30	34	35	36	38	40	41	41	41	40	40	39	38

Osservatore	261	262	263	264	265	266	267	268	269	270	271	272	273
-------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Direzione Di Osservazione

Strut.(x=-32.00 y=-32.50 z=hOss)	34	37	37	37	36	36	35	35	34	33	33	32	32
Strut.(x=32.00 y=-32.50 z=hOss)	32	32	33	33	34	35	35	36	36	37	37	37	34
Strut.(x=32.00 y=32.50 z=hOss)	37	38	38	39	40	40	40	39	39	38	38	34	31
Strut.(x=-32.00 y=32.50 z=hOss)	31	34	38	39	39	39	40	40	40	39	38	38	37

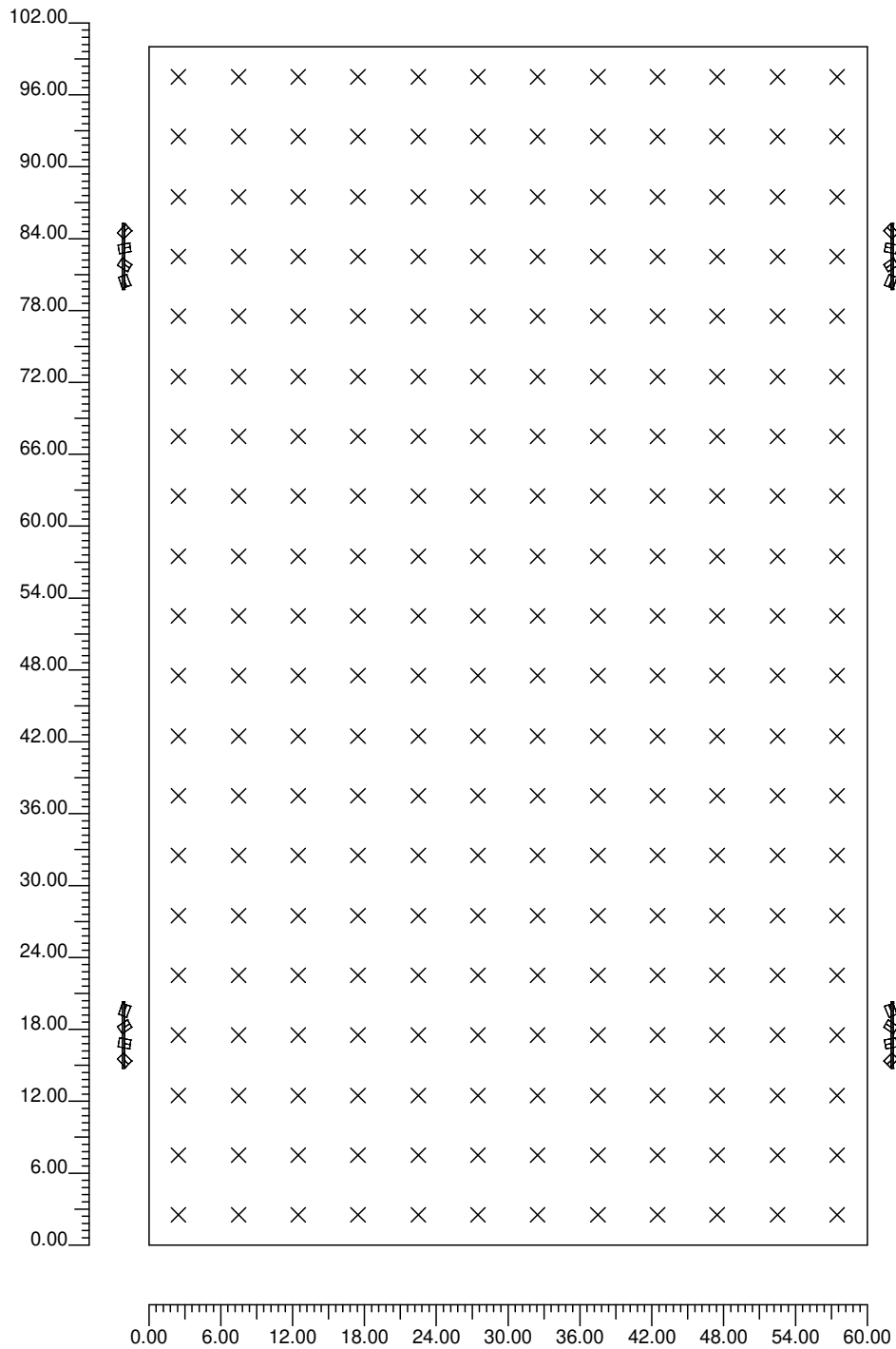
Osservatore	Posizione Osservatore	Osservatore	Posizione Osservatore	Osservatore	Posizione Osservatore
1	(x=-27.00;y=-50.00;z=1.50)m	2	(x=-22.50;y=-50.00;z=1.50)m	3	(x=-18.00;y=-50.00;z=1.50)m
4	(x=-13.50;y=-50.00;z=1.50)m	5	(x=-9.00;y=-50.00;z=1.50)m	6	(x=-4.50;y=-50.00;z=1.50)m
7	(x=0.00;y=-50.00;z=1.50)m	8	(x=4.50;y=-50.00;z=1.50)m	9	(x=9.00;y=-50.00;z=1.50)m
10	(x=13.50;y=-50.00;z=1.50)m	11	(x=18.00;y=-50.00;z=1.50)m	12	(x=22.50;y=-50.00;z=1.50)m
13	(x=27.00;y=-50.00;z=1.50)m	14	(x=-27.00;y=-45.00;z=1.50)m	15	(x=-22.50;y=-45.00;z=1.50)m

Osservatore	Posizione Osservatore	Osservatore	Posizione Osservatore	Osservatore	Posizione Osservatore
16	(x=-18.00;y=-45.00;z=1.50)m	17	(x=-13.50;y=-45.00;z=1.50)m	18	(x=-9.00;y=-45.00;z=1.50)m
19	(x=-4.50;y=-45.00;z=1.50)m	20	(x=0.00;y=-45.00;z=1.50)m	21	(x=4.50;y=-45.00;z=1.50)m
22	(x=9.00;y=-45.00;z=1.50)m	23	(x=13.50;y=-45.00;z=1.50)m	24	(x=18.00;y=-45.00;z=1.50)m
25	(x=22.50;y=-45.00;z=1.50)m	26	(x=27.00;y=-45.00;z=1.50)m	27	(x=-27.00;y=-40.00;z=1.50)m
28	(x=-22.50;y=-40.00;z=1.50)m	29	(x=-18.00;y=-40.00;z=1.50)m	30	(x=-13.50;y=-40.00;z=1.50)m
31	(x=-9.00;y=-40.00;z=1.50)m	32	(x=-4.50;y=-40.00;z=1.50)m	33	(x=0.00;y=-40.00;z=1.50)m
34	(x=4.50;y=-40.00;z=1.50)m	35	(x=9.00;y=-40.00;z=1.50)m	36	(x=13.50;y=-40.00;z=1.50)m
37	(x=18.00;y=-40.00;z=1.50)m	38	(x=22.50;y=-40.00;z=1.50)m	39	(x=27.00;y=-40.00;z=1.50)m
40	(x=-27.00;y=-35.00;z=1.50)m	41	(x=-22.50;y=-35.00;z=1.50)m	42	(x=-18.00;y=-35.00;z=1.50)m
43	(x=-13.50;y=-35.00;z=1.50)m	44	(x=-9.00;y=-35.00;z=1.50)m	45	(x=-4.50;y=-35.00;z=1.50)m
46	(x=0.00;y=-35.00;z=1.50)m	47	(x=4.50;y=-35.00;z=1.50)m	48	(x=9.00;y=-35.00;z=1.50)m
49	(x=13.50;y=-35.00;z=1.50)m	50	(x=18.00;y=-35.00;z=1.50)m	51	(x=22.50;y=-35.00;z=1.50)m
52	(x=27.00;y=-35.00;z=1.50)m	53	(x=-27.00;y=-30.00;z=1.50)m	54	(x=-22.50;y=-30.00;z=1.50)m
55	(x=-18.00;y=-30.00;z=1.50)m	56	(x=-13.50;y=-30.00;z=1.50)m	57	(x=-9.00;y=-30.00;z=1.50)m
58	(x=-4.50;y=-30.00;z=1.50)m	59	(x=0.00;y=-30.00;z=1.50)m	60	(x=4.50;y=-30.00;z=1.50)m
61	(x=9.00;y=-30.00;z=1.50)m	62	(x=13.50;y=-30.00;z=1.50)m	63	(x=18.00;y=-30.00;z=1.50)m
64	(x=22.50;y=-30.00;z=1.50)m	65	(x=27.00;y=-30.00;z=1.50)m	66	(x=-27.00;y=-25.00;z=1.50)m
67	(x=-22.50;y=-25.00;z=1.50)m	68	(x=-18.00;y=-25.00;z=1.50)m	69	(x=-13.50;y=-25.00;z=1.50)m
70	(x=-9.00;y=-25.00;z=1.50)m	71	(x=-4.50;y=-25.00;z=1.50)m	72	(x=0.00;y=-25.00;z=1.50)m
73	(x=4.50;y=-25.00;z=1.50)m	74	(x=9.00;y=-25.00;z=1.50)m	75	(x=13.50;y=-25.00;z=1.50)m
76	(x=18.00;y=-25.00;z=1.50)m	77	(x=22.50;y=-25.00;z=1.50)m	78	(x=27.00;y=-25.00;z=1.50)m
79	(x=-27.00;y=-20.00;z=1.50)m	80	(x=-22.50;y=-20.00;z=1.50)m	81	(x=-18.00;y=-20.00;z=1.50)m
82	(x=-13.50;y=-20.00;z=1.50)m	83	(x=-9.00;y=-20.00;z=1.50)m	84	(x=-4.50;y=-20.00;z=1.50)m
85	(x=0.00;y=-20.00;z=1.50)m	86	(x=4.50;y=-20.00;z=1.50)m	87	(x=9.00;y=-20.00;z=1.50)m
88	(x=13.50;y=-20.00;z=1.50)m	89	(x=18.00;y=-20.00;z=1.50)m	90	(x=22.50;y=-20.00;z=1.50)m
91	(x=27.00;y=-20.00;z=1.50)m	92	(x=-27.00;y=-15.00;z=1.50)m	93	(x=-22.50;y=-15.00;z=1.50)m
94	(x=-18.00;y=-15.00;z=1.50)m	95	(x=-13.50;y=-15.00;z=1.50)m	96	(x=-9.00;y=-15.00;z=1.50)m
97	(x=-4.50;y=-15.00;z=1.50)m	98	(x=0.00;y=-15.00;z=1.50)m	99	(x=4.50;y=-15.00;z=1.50)m
100	(x=9.00;y=-15.00;z=1.50)m	101	(x=13.50;y=-15.00;z=1.50)m	102	(x=18.00;y=-15.00;z=1.50)m
103	(x=22.50;y=-15.00;z=1.50)m	104	(x=27.00;y=-15.00;z=1.50)m	105	(x=-27.00;y=-10.00;z=1.50)m
106	(x=-22.50;y=-10.00;z=1.50)m	107	(x=-18.00;y=-10.00;z=1.50)m	108	(x=-13.50;y=-10.00;z=1.50)m
109	(x=-9.00;y=-10.00;z=1.50)m	110	(x=-4.50;y=-10.00;z=1.50)m	111	(x=0.00;y=-10.00;z=1.50)m
112	(x=4.50;y=-10.00;z=1.50)m	113	(x=9.00;y=-10.00;z=1.50)m	114	(x=13.50;y=-10.00;z=1.50)m
115	(x=18.00;y=-10.00;z=1.50)m	116	(x=22.50;y=-10.00;z=1.50)m	117	(x=27.00;y=-10.00;z=1.50)m
118	(x=-27.00;y=-5.00;z=1.50)m	119	(x=-22.50;y=-5.00;z=1.50)m	120	(x=-18.00;y=-5.00;z=1.50)m
121	(x=-13.50;y=-5.00;z=1.50)m	122	(x=-9.00;y=-5.00;z=1.50)m	123	(x=-4.50;y=-5.00;z=1.50)m
124	(x=0.00;y=-5.00;z=1.50)m	125	(x=4.50;y=-5.00;z=1.50)m	126	(x=9.00;y=-5.00;z=1.50)m
127	(x=13.50;y=-5.00;z=1.50)m	128	(x=18.00;y=-5.00;z=1.50)m	129	(x=22.50;y=-5.00;z=1.50)m
130	(x=27.00;y=-5.00;z=1.50)m	131	(x=-27.00;y=0.00;z=1.50)m	132	(x=-22.50;y=0.00;z=1.50)m
133	(x=-18.00;y=0.00;z=1.50)m	134	(x=-13.50;y=0.00;z=1.50)m	135	(x=-9.00;y=0.00;z=1.50)m
136	(x=-4.50;y=0.00;z=1.50)m	137	(x=0.00;y=0.00;z=1.50)m	138	(x=4.50;y=0.00;z=1.50)m
139	(x=9.00;y=0.00;z=1.50)m	140	(x=13.50;y=0.00;z=1.50)m	141	(x=18.00;y=0.00;z=1.50)m
142	(x=22.50;y=0.00;z=1.50)m	143	(x=27.00;y=0.00;z=1.50)m	144	(x=-27.00;y=5.00;z=1.50)m
145	(x=-22.50;y=5.00;z=1.50)m	146	(x=-18.00;y=5.00;z=1.50)m	147	(x=-13.50;y=5.00;z=1.50)m
148	(x=-9.00;y=5.00;z=1.50)m	149	(x=-4.50;y=5.00;z=1.50)m	150	(x=0.00;y=5.00;z=1.50)m
151	(x=4.50;y=5.00;z=1.50)m	152	(x=9.00;y=5.00;z=1.50)m	153	(x=13.50;y=5.00;z=1.50)m
154	(x=18.00;y=5.00;z=1.50)m	155	(x=22.50;y=5.00;z=1.50)m	156	(x=27.00;y=5.00;z=1.50)m
157	(x=-27.00;y=10.00;z=1.50)m	158	(x=-22.50;y=10.00;z=1.50)m	159	(x=-18.00;y=10.00;z=1.50)m
160	(x=-13.50;y=10.00;z=1.50)m	161	(x=-9.00;y=10.00;z=1.50)m	162	(x=-4.50;y=10.00;z=1.50)m
163	(x=0.00;y=10.00;z=1.50)m	164	(x=4.50;y=10.00;z=1.50)m	165	(x=9.00;y=10.00;z=1.50)m
166	(x=13.50;y=10.00;z=1.50)m	167	(x=18.00;y=10.00;z=1.50)m	168	(x=22.50;y=10.00;z=1.50)m
169	(x=27.00;y=10.00;z=1.50)m	170	(x=-27.00;y=15.00;z=1.50)m	171	(x=-22.50;y=15.00;z=1.50)m
172	(x=-18.00;y=15.00;z=1.50)m	173	(x=-13.50;y=15.00;z=1.50)m	174	(x=-9.00;y=15.00;z=1.50)m
175	(x=-4.50;y=15.00;z=1.50)m	176	(x=0.00;y=15.00;z=1.50)m	177	(x=4.50;y=15.00;z=1.50)m
178	(x=9.00;y=15.00;z=1.50)m	179	(x=13.50;y=15.00;z=1.50)m	180	(x=18.00;y=15.00;z=1.50)m
181	(x=22.50;y=15.00;z=1.50)m	182	(x=27.00;y=15.00;z=1.50)m	183	(x=-27.00;y=20.00;z=1.50)m
184	(x=-22.50;y=20.00;z=1.50)m	185	(x=-18.00;y=20.00;z=1.50)m	186	(x=-13.50;y=20.00;z=1.50)m
187	(x=-9.00;y=20.00;z=1.50)m	188	(x=-4.50;y=20.00;z=1.50)m	189	(x=0.00;y=20.00;z=1.50)m
190	(x=4.50;y=20.00;z=1.50)m	191	(x=9.00;y=20.00;z=1.50)m	192	(x=13.50;y=20.00;z=1.50)m
193	(x=18.00;y=20.00;z=1.50)m	194	(x=22.50;y=20.00;z=1.50)m	195	(x=27.00;y=20.00;z=1.50)m
196	(x=-27.00;y=25.00;z=1.50)m	197	(x=-22.50;y=25.00;z=1.50)m	198	(x=-18.00;y=25.00;z=1.50)m
199	(x=-13.50;y=25.00;z=1.50)m	200	(x=-9.00;y=25.00;z=1.50)m	201	(x=-4.50;y=25.00;z=1.50)m
202	(x=0.00;y=25.00;z=1.50)m	203	(x=4.50;y=25.00;z=1.50)m	204	(x=9.00;y=25.00;z=1.50)m
205	(x=13.50;y=25.00;z=1.50)m	206	(x=18.00;y=25.00;z=1.50)m	207	(x=22.50;y=25.00;z=1.50)m
208	(x=27.00;y=25.00;z=1.50)m	209	(x=-27.00;y=30.00;z=1.50)m	210	(x=-22.50;y=30.00;z=1.50)m
211	(x=-18.00;y=30.00;z=1.50)m	212	(x=-13.50;y=30.00;z=1.50)m	213	(x=-9.00;y=30.00;z=1.50)m
214	(x=-4.50;y=30.00;z=1.50)m	215	(x=0.00;y=30.00;z=1.50)m	216	(x=4.50;y=30.00;z=1.50)m
217	(x=9.00;y=30.00;z=1.50)m	218	(x=13.50;y=30.00;z=1.50)m	219	(x=18.00;y=30.00;z=1.50)m
220	(x=22.50;y=30.00;z=1.50)m	221	(x=27.00;y=30.00;z=1.50)m	222	(x=-27.00;y=35.00;z=1.50)m
223	(x=-22.50;y=35.00;z=1.50)m	224	(x=-18.00;y=35.00;z=1.50)m	225	(x=-13.50;y=35.00;z=1.50)m
226	(x=-9.00;y=35.00;z=1.50)m	227	(x=-4.50;y=35.00;z=1.50)m	228	(x=0.00;y=35.00;z=1.50)m
229	(x=4.50;y=35.00;z=1.50)m	230	(x=9.00;y=35.00;z=1.50)m	231	(x=13.50;y=35.00;z=1.50)m
232	(x=18.00;y=35.00;z=1.50)m	233	(x=22.50;y=35.00;z=1.50)m	234	(x=27.00;y=35.00;z=1.50)m

Osservatore	Posizione Osservatore	Osservatore	Posizione Osservatore	Osservatore	Posizione Osservatore
235	(x=-27.00;y=40.00;z=1.50)m	236	(x=-22.50;y=40.00;z=1.50)m	237	(x=-18.00;y=40.00;z=1.50)m
238	(x=-13.50;y=40.00;z=1.50)m	239	(x=-9.00;y=40.00;z=1.50)m	240	(x=-4.50;y=40.00;z=1.50)m
241	(x=0.00;y=40.00;z=1.50)m	242	(x=4.50;y=40.00;z=1.50)m	243	(x=9.00;y=40.00;z=1.50)m
244	(x=13.50;y=40.00;z=1.50)m	245	(x=18.00;y=40.00;z=1.50)m	246	(x=22.50;y=40.00;z=1.50)m
247	(x=27.00;y=40.00;z=1.50)m	248	(x=-27.00;y=45.00;z=1.50)m	249	(x=-22.50;y=45.00;z=1.50)m
250	(x=-18.00;y=45.00;z=1.50)m	251	(x=-13.50;y=45.00;z=1.50)m	252	(x=-9.00;y=45.00;z=1.50)m
253	(x=-4.50;y=45.00;z=1.50)m	254	(x=0.00;y=45.00;z=1.50)m	255	(x=4.50;y=45.00;z=1.50)m
256	(x=9.00;y=45.00;z=1.50)m	257	(x=13.50;y=45.00;z=1.50)m	258	(x=18.00;y=45.00;z=1.50)m
259	(x=22.50;y=45.00;z=1.50)m	260	(x=27.00;y=45.00;z=1.50)m	261	(x=-27.00;y=50.00;z=1.50)m
262	(x=-22.50;y=50.00;z=1.50)m	263	(x=-18.00;y=50.00;z=1.50)m	264	(x=-13.50;y=50.00;z=1.50)m
265	(x=-9.00;y=50.00;z=1.50)m	266	(x=-4.50;y=50.00;z=1.50)m	267	(x=0.00;y=50.00;z=1.50)m
268	(x=4.50;y=50.00;z=1.50)m	269	(x=9.00;y=50.00;z=1.50)m	270	(x=13.50;y=50.00;z=1.50)m
271	(x=18.00;y=50.00;z=1.50)m	272	(x=22.50;y=50.00;z=1.50)m	273	(x=27.00;y=50.00;z=1.50)m

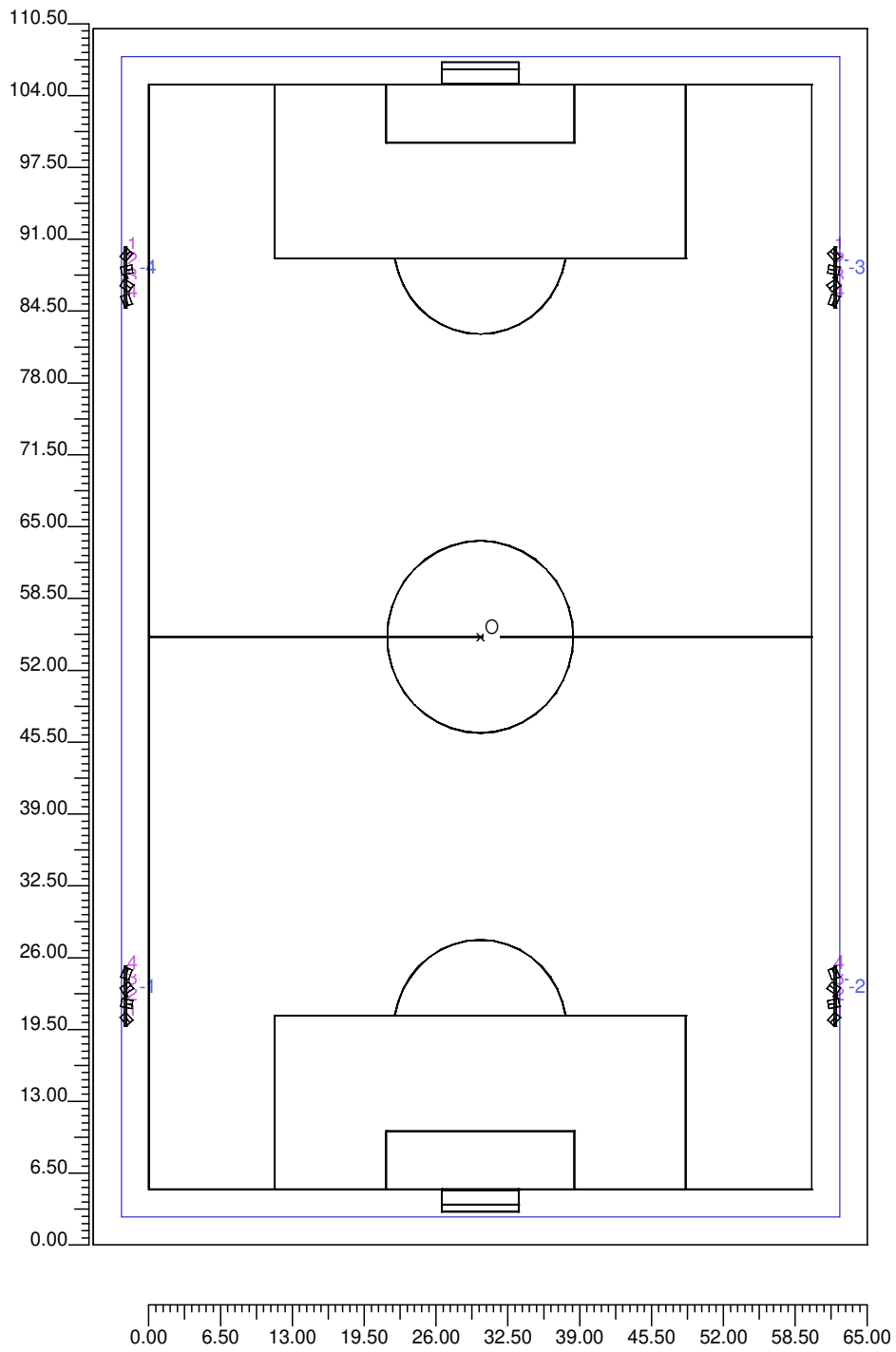
2.1 Vista 2D Piano Lavoro e Griglia di Calcolo

Scala 1/600



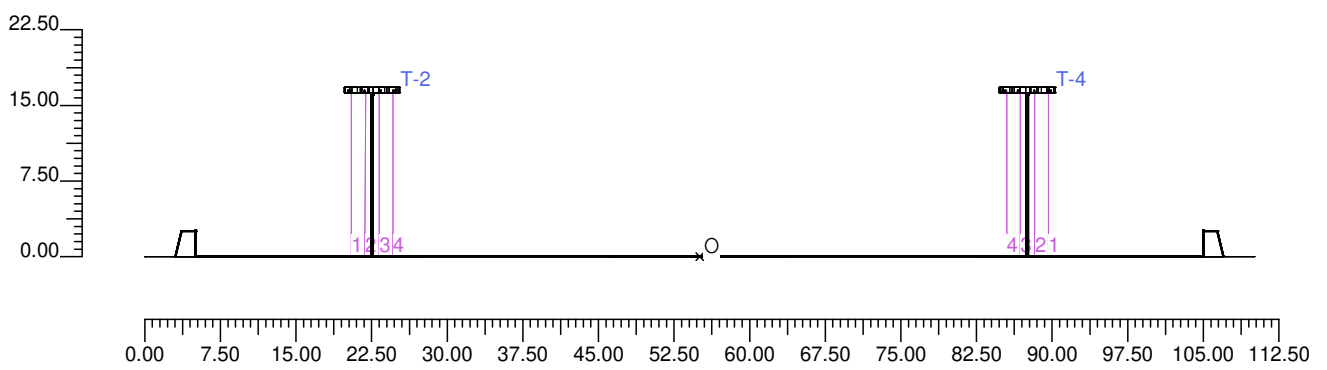
2.2 Vista 2D in Pianta

Scala 1/650



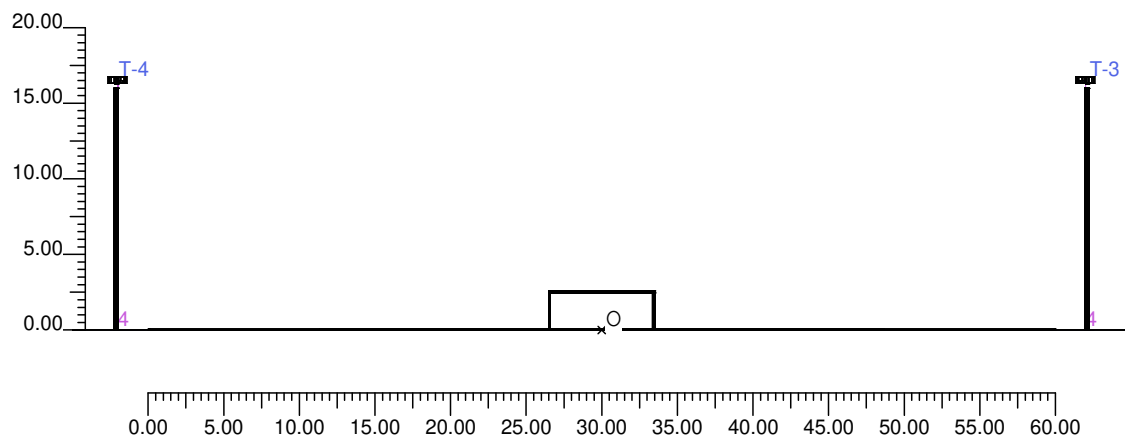
2.3 Vista Laterale

Scala 1/750



2.4 Vista Frontale

Scala 1/500



3.1 Informazioni Apparecchi/Rilievi

Rif.	Linea	Nome Apparecchio (Nome Rilievo)	Codice Apparecchio (Codice rilievo)	Apparecchi n.	Rif.Lamp.	Lampade n.
A	LDONE JUST -- 4K CRI70 ASIM	L1J--A20-AC2VK4070 (LedMaster ONE JUST AC2+V)	L1J--A20-AC2VK4070 (LEDAS215+V_simH0)	4	LMP-A	1
B	LDONE JUST -- 4K CRI70 ASIM	L1J--A20-AC1VK4070 (LEDMASTER ONE 20COB CITIZEN 90)	L1J--A20-AC1VK4070 (LEDAS204+V_simH0)	12	LMP-B	1

3.2 Informazioni Lampade

Rif.Lamp.	Tipo	Codice	Flusso lm	Potenza W	Colore K	n.
LMP-A	LED	LDONECOB024	138300	1030	4000	4
LMP-B	LED	LDONECOB022	143800	1030	4000	12

3.3 Tabella Riepilogativa Apparecchi

Rif.	App.	On	Posizione Apparecchi X[m] Y[m] Z[m]	Rotazione Apparecchi X° Y° Z°	Codice Apparecchio	Coeff. Mant.	Codice Lampada	Flusso lm
A	1	X	-32.00;-34.56;16.50	-0.0;0.0;-47.0	L1J--A20-AC2VK4070	0.90	LDONECOB024	1*138300
	2	X	32.00;-34.56;16.50	0.0;-0.0;-133.0		0.90		
	3	X	32.00;34.56;16.50	-0.0;0.0;133.0		0.90		
	4	X	-32.00;34.56;16.50	0.0;-0.0;47.0		0.90		
B	1	X	-32.00;-33.19;16.50	-0.0;0.0;-10.0	L1J--A20-AC1VK4070	0.90	LDONECOB022	1*143800
	2	X	-32.00;-31.81;16.50	0.0;0.0;33.0		0.90		
	3	X	-32.00;-30.44;16.50	0.0;0.0;70.0		0.90		
	4	X	32.00;-33.19;16.50	0.0;0.0;-170.0		0.90		
	5	X	32.00;-31.81;16.50	-0.0;0.0;147.0		0.90		
	6	X	32.00;-30.44;16.50	-0.0;-0.0;110.0		0.90		
	7	X	32.00;33.19;16.50	-0.0;0.0;170.0		0.90		
	8	X	32.00;31.81;16.50	0.0;0.0;-147.0		0.90		
	9	X	32.00;30.44;16.50	0.0;0.0;-110.0		0.90		
	10	X	-32.00;33.19;16.50	0.0;0.0;10.0		0.90		
	11	X	-32.00;31.81;16.50	-0.0;0.0;-33.0		0.90		
	12	X	-32.00;30.44;16.50	-0.0;-0.0;-70.0		0.90		

3.4 Tabella Riepilogativa Puntamenti

Struttura	Fila	Colonna	Rif. 2D	On	Posizione Apparecchi X[m] Y[m] Z[m]	Rotazione Apparecchi X° Y° Z°	Puntamenti X[m] Y[m] Z[m]	R.Asse °	Coeff. Mant.	Rif.
T-1	(1)	(4)	T-1		(-32.00;-32.50;16.50)	(0;-90;0)				
	1	1	1	X	-32.00;-34.56;16.50	-0.0;0.0;-47.0	-32.00;-34.56;0.00	-47	0.90	A
	1	2	2	X	-32.00;-33.19;16.50	-0.0;0.0;-10.0	-32.00;-33.19;0.00	-100	0.90	B
	1	3	3	X	-32.00;-31.81;16.50	0.0;0.0;33.0	-32.00;-31.81;0.00	33	0.90	B
	1	4	4	X	-32.00;-30.44;16.50	0.0;0.0;70.0	-32.00;-30.44;0.00	-20	0.90	B
T-2	(1)	(4)	T-2		(32.00;-32.50;16.50)	(0;-90;180)				
	1	4	1	X	32.00;-34.56;16.50	0.0;-0.0;-133.0	32.00;-34.56;0.00	-133	0.90	A
	1	3	2	X	32.00;-33.19;16.50	0.0;0.0;-170.0	32.00;-33.19;0.00	100	0.90	B
	1	2	3	X	32.00;-31.81;16.50	-0.0;0.0;147.0	32.00;-31.81;0.00	147	0.90	B
	1	1	4	X	32.00;-30.44;16.50	-0.0;-0.0;110.0	32.00;-30.44;0.00	20	0.90	B
T-3	(1)	(4)	T-3		(32.00;32.50;16.50)	(0;-90;-180)				

Struttura	Fila	Colonna	Rif. 2D	On	Posizione Apparecchi X[m] Y[m] Z[m]	Rotazione Apparecchi X° Y° Z°	Puntamenti X[m] Y[m] Z[m]	R.Asse °	Coeff. Mant.	Rif.
T-3	1	1	1	X	32.00;34.56;16.50	-0.0;0.0;133.0	32.00;34.56;0.00	133	0.90	A
	1	2	2	X	32.00;33.19;16.50	-0.0;0.0;170.0	32.00;33.19;0.00	-100	0.90	B
	1	3	3	X	32.00;31.81;16.50	0.0;0.0;-147.0	32.00;31.81;0.00	-147	0.90	B
	1	4	4	X	32.00;30.44;16.50	0.0;0.0;-110.0	32.00;30.44;0.00	-20	0.90	B
T-4	(1)	(4)	T-4		(-32.00;32.50;16.50)	(0;-90;0)				
	1	4	1	X	-32.00;34.56;16.50	0.0;-0.0;47.0	-32.00;34.56;0.00	47	0.90	A
	1	3	2	X	-32.00;33.19;16.50	0.0;0.0;10.0	-32.00;33.19;0.00	100	0.90	B
	1	2	3	X	-32.00;31.81;16.50	-0.0;0.0;-33.0	-32.00;31.81;0.00	-33	0.90	B
	1	1	4	X	-32.00;30.44;16.50	-0.0;-0.0;-70.0	-32.00;30.44;0.00	20	0.90	B

4.1 Valori di Illuminamento su: PA

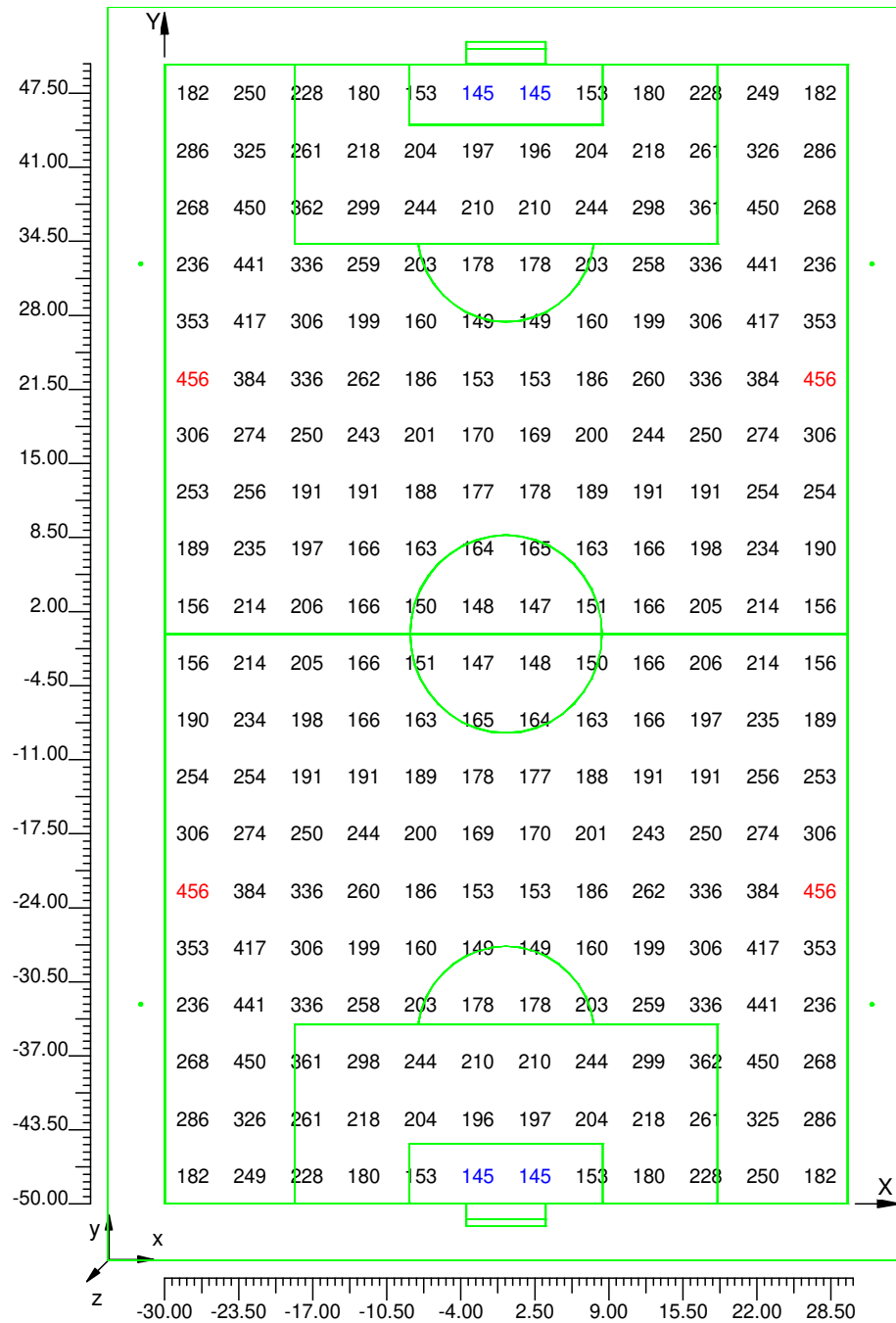
O (x:-30.00 y:-50.00 z:0.00)	Risultati	Medio	Minimo	Massimo	Min/Medio	Min/Max	Medio/Max
DX:5.00 DY:5.00	Illuminamento Orizzontale (E)	239 lux	145 lux	456 lux	0.61	0.32	0.52

Tipo Calcolo

Solo Dir.

Scala 1/650

CV= 0.335



4.2 Valori di Illuminamento su: TA

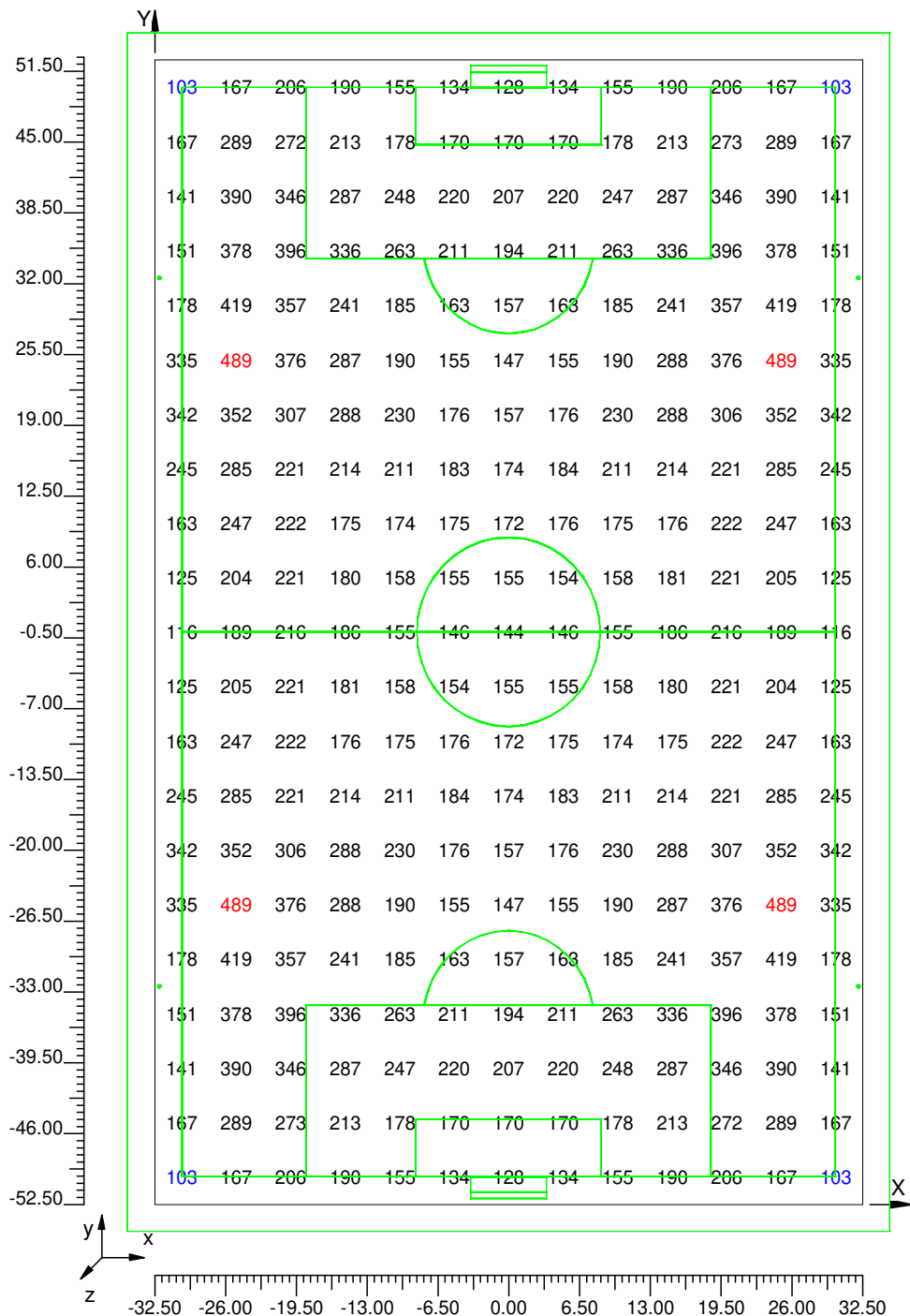
O (x:-32.50 y:-52.50 z:0.00)	Risultati	Medio	Minimo	Massimo	Min/Medio	Min/Max	Medio/Max
DX:5.00 DY:5.00	Illuminamento Orizzontale (E)	229 lux	103 lux	489 lux	0.45	0.21	0.47

Tipo Calcolo

Solo Dir.

Scala 1/650

CV= 0.362



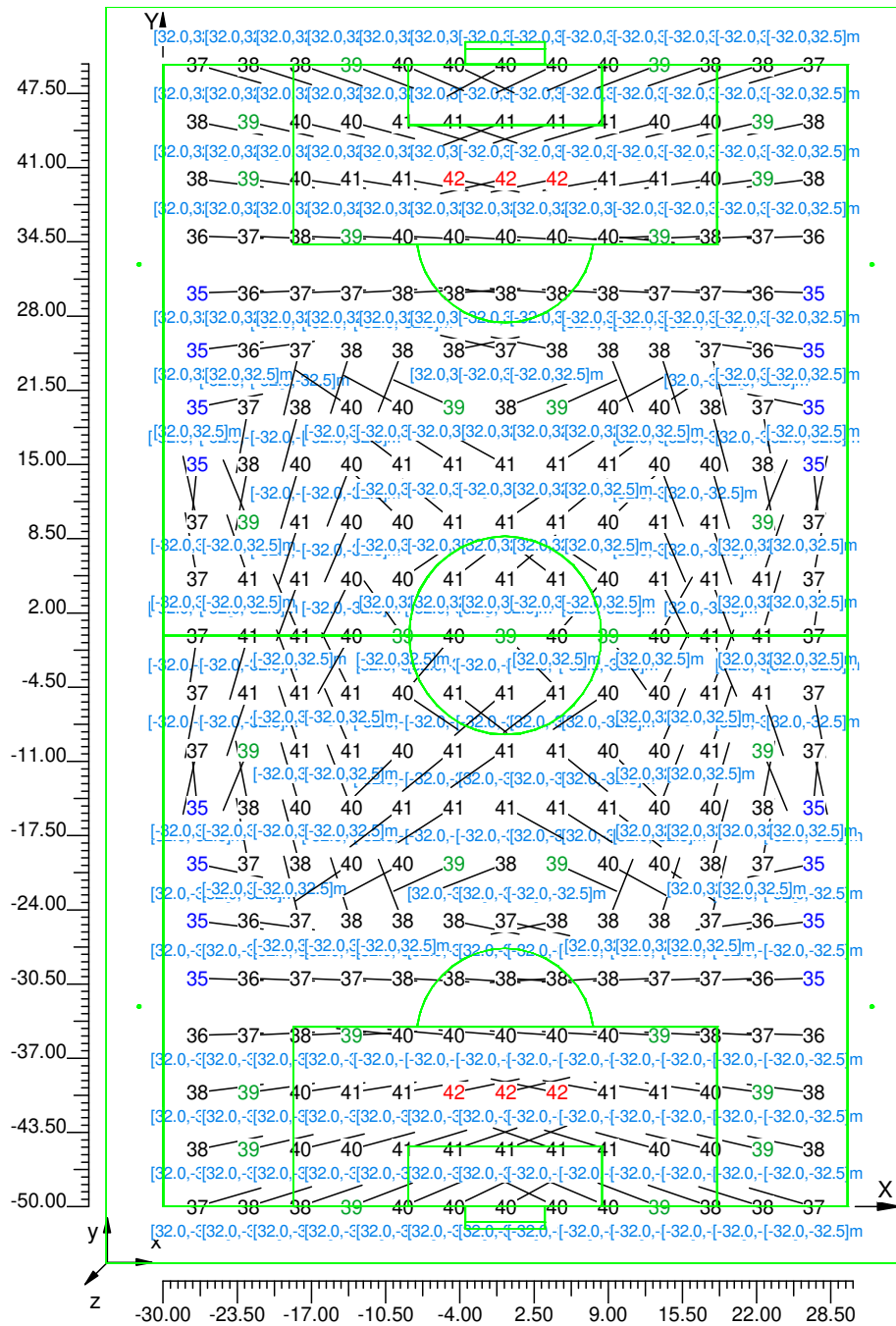
4.3 Indici di Abbagliamento

O (x:-30.00 y:-50.00 z:0.00)	Risultati	Medio	Minimo	Massimo	Min/Medio	Min/Max	Medio/Max
DX:5.00 DY:5.00	GR	39	35	42	0.89	0.83	0.93

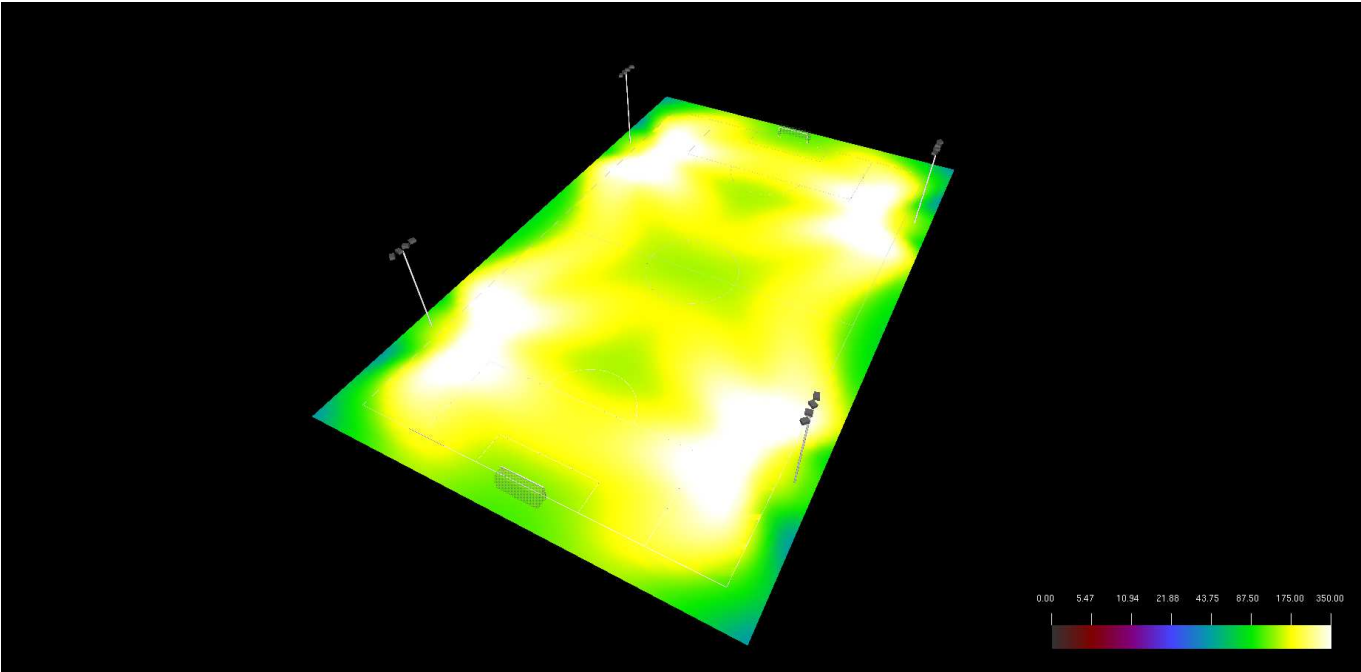
Tipo Calcolo

Solo Dir.

Scala 1/650



5.1 Immagine: Spot Lux



Informazioni Generali	1
1. Dati Riepilogativi Progetto	
1.1 Informazioni Area	2
1.2 Calcolo Energetico	2
1.3 Parametri di Qualità dell'Impianto	2
2. Viste Progetto	
2.1 Vista 2D Piano Lavoro e Griglia di Calcolo	7
2.2 Vista 2D in Pianta	8
2.3 Vista Laterale	9
2.4 Vista Frontale	10
3. Dati Riepilogativi Apparecchi	
3.1 Informazioni Apparecchi/Rilievi	11
3.2 Informazioni Lampade	11
3.3 Tabella Riepilogativa Apparecchi	11
3.4 Tabella Riepilogativa Puntamenti	11
4. Tabella Risultati	
4.1 Valori di Illuminamento su: PA	13
4.2 Valori di Illuminamento su: TA	14
4.3 Indici di Abbagliamento	15
5. Immagini	
5.1 Immagine: Spot Lux	16