

Franciele Souza

De: Danilo Carvalho <danilo.carvalho@sdplan.com.br>
Enviado: Qui 05/08/2021 10:51
Para: Franciele Souza <franciele.souza@joinville.sc.gov.br>
CC: romulo.reis@cbf.com.br <romulo.reis@cbf.com.br>
Assunto: Re: Arena Joinville - Refletores
Modificado: Qui 05/08/2021 10:51
Anexos: Série A.pdf; Série B v2.pdf; Ficha técnica_Projetor - Coliseo Pro 960W[5].pdf

Franciele

Bom dia,

Conforme solicitado, segue o estudo luminotécnico para a Arena Joinville

Envio em anexo 2 arquivos, sendo um para atendimento às demandas do programa gramados da Série A e outro para a Série B, considerando todos os parâmetros das tabelas abaixo.

Envio também a ficha técnica do produto utilizado nos estudos.

Abaixo explico a diferença entre cada um dos projetos, e em seguida apresento uma tabela comparativa entre eles:

1. CBF - Programa gramados Série A

Exigência mínima de 2500 lux, na horizontal, com uniformidade de 0,6 - **Atendido**

2. CBF - Programa gramados Série B

Exigência mínima de 1600 lux, na horizontal, com uniformidade de 0,6 - **Atendido**

Parâmetros atingidos								
Quantitativo - Projetores led 960W - 158 mil lúmens						Nível de iluminação (lux)	Uniformidade (u0)	Uniformidade (min/máx)
Opções: Padrões de iluminação de acordo com as entidades		Fotometrias (Ângulos de lente)				Horizontal	Horizontal	Horizontal
		10°	25°	40°	total	Campo	Campo	Campo
1	CBF - Série A	-	308	-	308	2514	0,88	0,78
2	CBF - Série B	-	188	-	188	1601	0,82	0,7

- **Glare máximo: 47**
- **Fator de manutenção: 0,9**
- **IRC: 70**
- **Temperatura de cor: 5000K**

Os estudos foram realizados com base nas premissas e exigências mínimas do programa gramados. Todos os parâmetros foram atingidos, sem exceção.

Qualquer dúvida, estou a disposição

Atenciosamente;



Danilo Carvalho .S. Sócio Diretor
M +55 11 98551-8551 • T +55 11 3067-3400
Rua Estados Unidos, 182 - CEP: 01427-000

Jardim América - São Paulo, SP
danilo.carvalho@sdplan.com.br • www.sdplan.com.br

De: Franciele Souza <franciele.souza@joinville.sc.gov.br>
Data: terça-feira, 6 de julho de 2021 12:18
Para: Danilo Carvalho <danilo.carvalho@sdplan.com.br>
Cc: Romulo Reis <romulo.reis@cbf.com.br>
Assunto: RES: Arena Joinville - Refletores

Bom dia Danilo,

Seguem vistas com cotas das torres de iluminação e planta baixa dos níveis 0 e 1 da Arena Joinville.

Qualquer dúvida permaneço a disposição.

Atenciosamente,

Franciele Souza

Engenheira Civil - mat. 46485

Coordenadora de Instalações

Secretaria de Esporte

(47) 3433-1160

-----Mensagem original-----

De: Danilo Carvalho <danilo.carvalho@sdplan.com.br>

Enviado: Sex 25/06/2021 13:04

Assunto: Re: Arena Joinville - Refletores

Para: Romulo Meira Reis <romulo.reis@cbf.com.br>; Franciele Souza <franciele.souza@joinville.sc.gov.br>;

Boa tarde Franciele,

Seguem meus contatos abaixo, estarei a sua disposição para auxiliar no que for necessário.

Se possível me passe por favor as plantas e informações para nossa análise

Att,

Danilo Carvalho ./. Sócio Diretor
M +55 11 98551-8551 · **T** +55 11 3067-3400
Rua Estados Unidos, 182 - CEP: 01427-000

Jardim América · São Paulo, SP
danilo.carvalho@sdplan.com.br · www.sdplan.com.br



De: Romulo Reis <romulo.reis@cbf.com.br>

Data: quinta-feira, 24 de junho de 2021 17:38

Para: Franciele Souza <franciele.souza@joinville.sc.gov.br>

Cc: Danilo Carvalho <danilo.carvalho@sdplan.com.br>

Assunto: Re: Arena Joinville - Refletores

Franciele boa tarde,

Me chamo Rômulo Reis, sou coordenador de estádios e segurança, repsonsável por esta parte.

Em cópia, apresento o Danilo Carvalho, nosso consultar para estes assuntos, que fará o atendimento a vocês.

Qualquer coisa, por favor, nos avise.

Atenciosamente,

Rômulo Reis
Coordenador de Estádios e Segurança

De: Franciele Souza <franciele.souza@joinville.sc.gov.br>

Enviado: quinta-feira, 24 de junho de 2021 10:42

Para: Romulo Meira Reis

Assunto: Arena Joinville - Refletores

Bom dia Romulo,

Meu nome é Franciele e trabalho na Secretaria de Esportes de Joinville/SC.

Estou entrando em contato pois estamos avaliando possibilidade de realizar licitação de troca dos refletores da Arena Joinville para LED.

Solicitamos, se possível, o auxílio com avaliação e projeto da luminosidade ideal para o estádio.

Tentei contato pelo número 021 35721900 porém não tive sucesso. Se precisar de mais informações pode me ligar no 47 34331160 ou 47 996139266.

Aguardo retorno.

Atenciosamente,

Franciele Souza

Engenheira Civil - mat. 46485

Coordenadora de Instalações

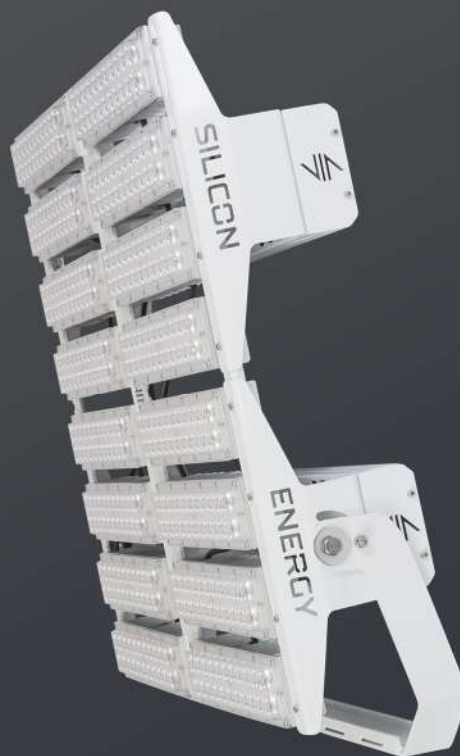
Secretaria de Esporte

(47) 3433-1160



PROJETOR ESPORTIVO COLISEO PRO

SE-COL-960-5050



AUDACE PRO

Você acaba de chegar ao futuro da iluminação esportiva.

O projetor Coliseo Pro foi desenvolvido para atender áreas esportivas, estádios, arenas e locais que exigem alto nível de iluminação e baixo nível de poluição luminosa. Com mais de 5 opções de distribuição óptica, projeta a luz até o ponto ao qual ela deve chegar. **A possibilidade de Automação chegou para mudar tudo, o público irá chegar mais cedo para ver o show de luzes.**

- Eficiência de 172,9 (LM 79)
- 115 mil horas de vida útil (LM 80)
- Garantia de 5 anos para a luminária e de 7 anos para o driver



LM 79

LM 80



PROJETOR ESPORTIVO COLISEO PRO

SE-COL-960-5050

DADOS GERAIS

• Potência (Watts):	960 Watts de potência nominal
• Fluxo luminoso efetivo (lm):	153.600 lúmens
• Peso (Kg):	23 quilos
• Dimensão L x C x H (mm):	695 x 743 x 193

DADOS DO PRODUTO:

• Eficiência (lm/W):	172,9 lúmens por Watt
• Tolerância do fluxo luminoso:	+/- 7%
• Vida útil calculada a 85°C:	115.000 horas (L70)
• Vida útil calculada (TM 21):	72.000 horas (L70)
• Temperatura de operação:	-40° C à 50° C
• Código NCM:	9405.10.93
• Garantia da luminária:	5 anos
• Garantia do driver:	7 anos

CARACTERÍSTICAS ELÉTRICAS:

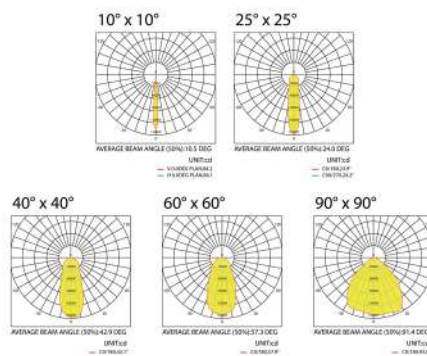
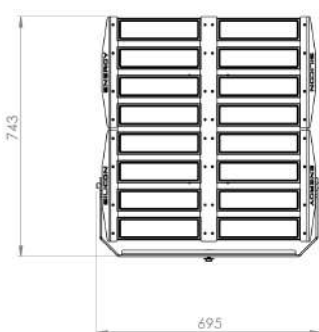
• Tensão de alimentação:	127/220V
• Frequência de entrada:	50/60 Hz
• Fator de potência:	>0,98
• Distorção harmônica (THD):	<10%
• Proteção avançada contra surtos:	10kV/5kV
• Dimerização/Automação:	0/10v, DALI 2 ou DMX

CARACTERÍSTICAS CONSTRUTIVAS:

• Materiais da estrutura:	Alumínio naval (5052-H34) e parafusos em aço inox
• Acabamento:	Pintura eletrostática
• Cor:	Branca
• Proteção IP:	IP66
• Fixação:	Haste com parafusos + Cabo de aço

CARACTERÍSTICAS ÓTICAS:

• Temperatura de cor:	5.000 K
• Fator de cintilação (FF):	< 3% (Flicker Free)
• Índice de reprodução de cor (IRC):	>75
• Índice de reprodução de cor (TLCI):	>80
• Opções de ângulo do fecho luminoso:	10°x10°, 25°x25°, 40°x40°, 60°x60° ou 90°x90°



Arena Joinville

Partner for Contact:
Order No.:
Company:
Customer No.:

Date: 29.07.2021
Operator:



Operator
Telephone
Fax
e-Mail

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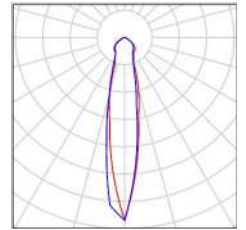


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Arena Joinville / Luminaire parts list

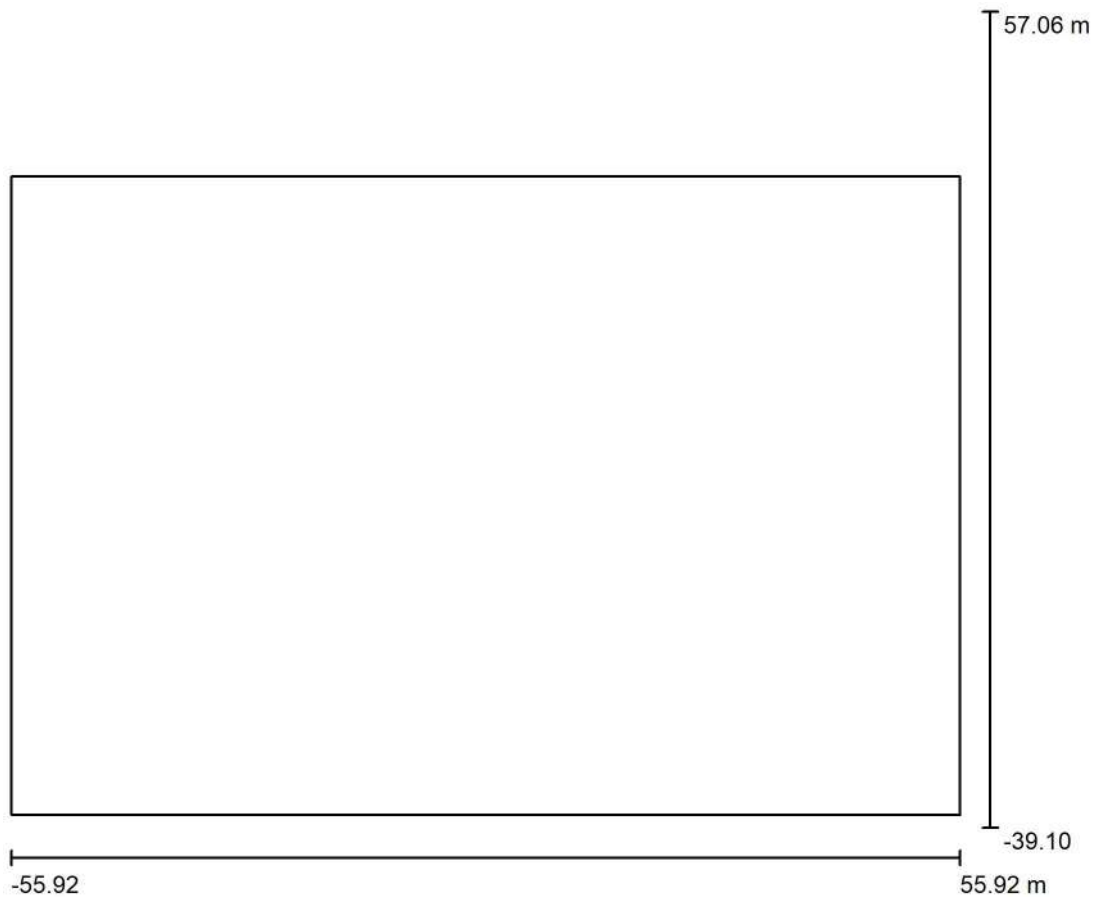
308 Pieces Projector - 960 W - 25x25 - IRC70
Article No.:
Luminous flux (Luminaire): 158398 lm
Luminous flux (Lamps): 158400 lm
Luminaire Wattage: 960.5 W
Luminaire classification according to CIE: 100
CIE flux code: 68 92 99 100 101
Fitting: 1 x User defined (Correction Factor
1.000).

See our luminaire
catalog for an image of
the luminaire.





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Estádio / Planning data

Maintenance factor: 0.90, ULR (Upward Light Ratio): 14.5%

Scale 1:892

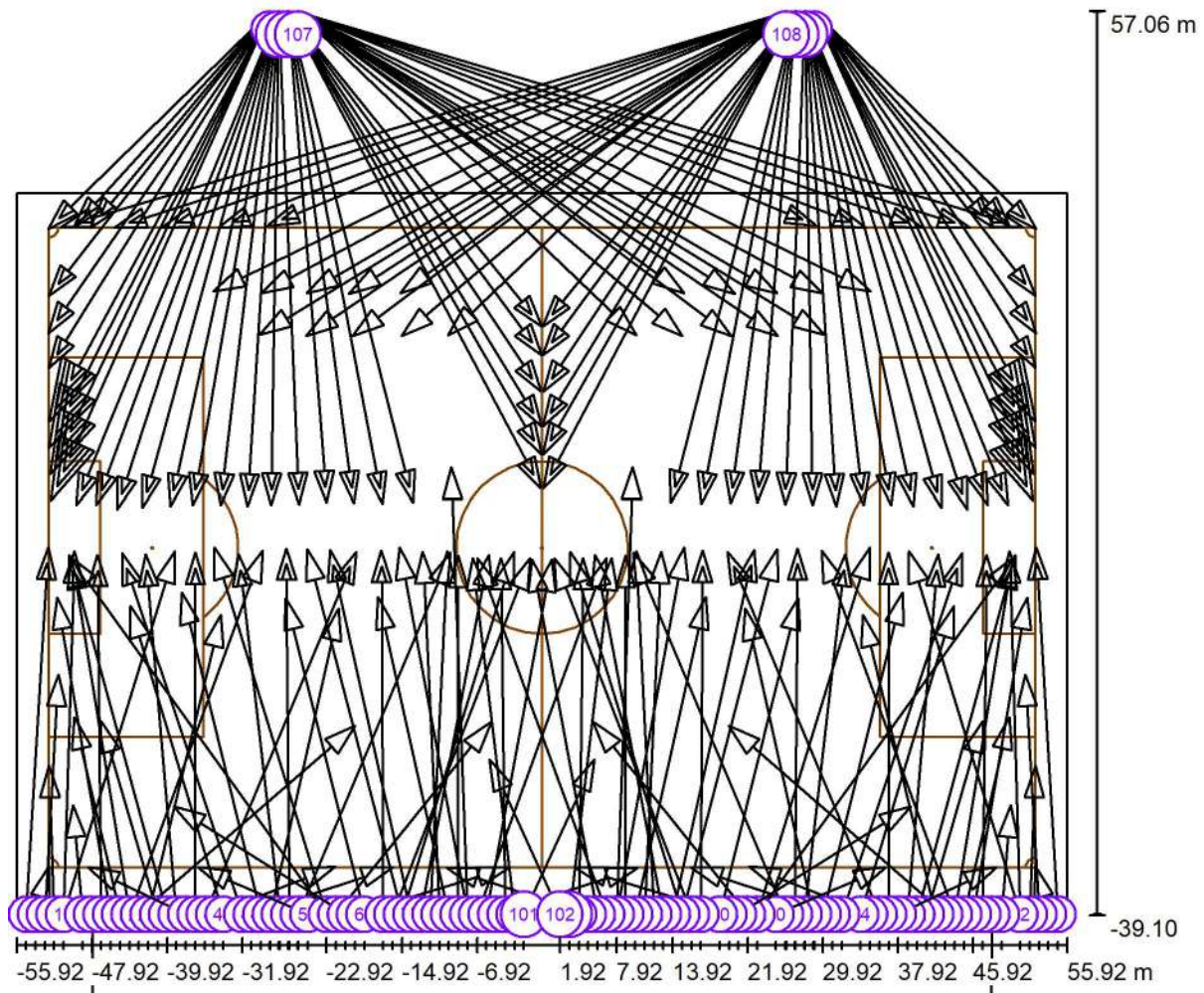
Luminaire Parts List

No.	Pieces	Designation (Correction Factor)	Φ (Luminaire) [lm]	Φ (Lamps) [lm]	P [W]
1	308	Projektor - 960 W - 25x25 - IRC70 (1.000)	158398	158400	960.5
Total:			48786549	Total: 48787200	295846.3



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Estádio / Sport Luminaires (Coordinates List)



Scale 1 : 800

List of the Sport Luminaires

Luminaire	Index	Position [m]			Aiming Point [m]			Angle [°]	Alignment	Pole
		X	Y	Z	X	Y	Z			
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-52.587	33.865	0.000	37.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-52.587	33.865	0.000	37.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	52.587	33.865	0.000	37.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	52.587	33.865	0.000	37.3	(C 90, G IMax)	/

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Estádio / Sport Luminares (Coordinates List)

List of the Sport Luminares

Luminaire	Index	Position [m]			Aiming Point [m]			Angle [°]	Alignment	Pole
		X	Y	Z	X	Y	Z			
Projektor - 960 W - 25x25 - IRC70	3	-54.916	-39.000	22.230	-52.574	0.025	0.000	29.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	3	-54.916	-39.000	22.230	-52.574	0.025	0.000	29.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	4	54.916	-39.000	22.230	52.574	0.025	0.000	29.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	4	54.916	-39.000	22.230	52.574	0.025	0.000	29.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	5	-53.916	-39.000	22.230	-52.501	-33.875	0.000	76.5	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	6	53.916	-39.000	22.230	52.501	-33.875	0.000	76.5	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	7	-52.916	-39.000	22.230	-51.473	-13.476	0.000	41.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	8	52.916	-39.000	22.230	51.473	-13.476	0.000	41.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	9	-51.916	-39.000	22.230	-52.501	-23.162	0.000	54.5	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	10	51.916	-39.000	22.230	52.501	-23.162	0.000	54.5	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	11	-50.916	-39.000	22.230	-49.773	-0.357	0.000	29.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	11	-50.916	-39.000	22.230	-39.072	-0.341	0.000	28.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	12	50.916	-39.000	22.230	49.773	-0.357	0.000	29.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	12	50.916	-39.000	22.230	39.072	-0.341	0.000	28.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	13	-48.916	-39.000	22.230	-49.912	-27.402	0.000	62.4	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	14	48.916	-39.000	22.230	49.912	-27.402	0.000	62.4	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	15	-47.916	-39.000	22.230	-47.786	-54.666	0.000	54.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	16	47.916	-39.000	22.230	47.786	-54.666	0.000	54.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	17	-46.916	-39.000	22.230	-47.327	-0.746	0.000	30.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	17	-46.916	-39.000	22.230	-47.327	-0.746	0.000	30.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	18	46.916	-39.000	22.230	47.327	-0.746	0.000	30.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	18	46.916	-39.000	22.230	47.327	-0.746	0.000	30.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	19	-45.916	-39.000	22.230	-51.625	-5.268	0.000	33.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	20	45.916	-39.000	22.230	51.625	-5.268	0.000	33.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	21	-44.916	-39.000	22.230	-49.773	-18.058	0.000	46.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	22	44.916	-39.000	22.230	49.773	-18.058	0.000	46.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	23	-43.916	-39.000	22.230	-50.060	-1.002	0.000	30.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	23	-43.916	-39.000	22.230	-29.753	-0.268	0.000	28.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	24	43.916	-39.000	22.230	50.060	-1.002	0.000	30.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	24	43.916	-39.000	22.230	29.753	-0.268	0.000	28.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	25	-42.916	-39.000	22.230	-19.889	-18.918	0.000	36.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	26	42.916	-39.000	22.230	19.889	-18.918	0.000	36.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	27	-41.916	-39.000	22.230	-34.162	-7.129	0.000	34.1	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	28	41.916	-39.000	22.230	34.162	-7.129	0.000	34.1	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	29	-40.916	-39.000	22.230	-46.906	-18.416	0.000	46.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	30	40.916	-39.000	22.230	46.906	-18.416	0.000	46.0	(C 90, G IMax)	/

Operator
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Estádio / Sport Luminares (Coordinates List)

List of the Sport Luminares

Luminaire	Index	Position [m]			Aiming Point [m]			Angle [°]	Alignment	Pole
		X	Y	Z	X	Y	Z			
Projektor - 960 W - 25x25 - IRC70	31	-39.916	-39.000	22.230	-50.337	-0.759	0.000	29.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	31	-39.916	-39.000	22.230	-50.337	-0.759	0.000	29.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	32	39.916	-39.000	22.230	50.337	-0.759	0.000	29.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	32	39.916	-39.000	22.230	50.337	-0.759	0.000	29.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	33	-38.916	-39.000	22.230	-42.178	-0.688	0.000	30.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	33	-38.916	-39.000	22.230	-42.178	-0.688	0.000	30.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	34	38.916	-39.000	22.230	42.178	-0.688	0.000	30.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	34	38.916	-39.000	22.230	42.178	-0.688	0.000	30.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	35	-37.916	-39.000	22.230	-48.372	-33.971	0.000	62.4	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	36	37.916	-39.000	22.230	48.372	-33.971	0.000	62.4	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	37	-36.916	-39.000	22.230	-36.883	-0.512	0.000	30.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	37	-36.916	-39.000	22.230	-36.883	-0.512	0.000	30.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	38	36.916	-39.000	22.230	36.883	-0.512	0.000	30.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	38	36.916	-39.000	22.230	36.883	-0.512	0.000	30.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	39	-35.916	-39.000	22.230	-19.774	-0.415	0.000	28.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	39	-35.916	-39.000	22.230	-19.774	-0.415	0.000	28.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	40	35.916	-39.000	22.230	19.774	-0.415	0.000	28.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	40	35.916	-39.000	22.230	19.774	-0.415	0.000	28.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	41	-34.916	-39.000	22.230	-22.012	-33.911	0.000	58.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	42	34.916	-39.000	22.230	22.012	-33.911	0.000	58.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	43	-33.916	-39.000	22.230	-43.824	-6.198	0.000	33.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	44	33.916	-39.000	22.230	43.824	-6.198	0.000	33.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	45	-31.916	-39.000	22.230	-44.723	-0.562	0.000	28.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	45	-31.916	-39.000	22.230	-44.723	-0.562	0.000	28.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	46	31.916	-39.000	22.230	44.723	-0.562	0.000	28.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	46	31.916	-39.000	22.230	44.723	-0.562	0.000	28.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	47	-30.916	-39.000	22.230	-15.827	-33.971	0.000	54.4	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	48	30.916	-39.000	22.230	15.827	-33.971	0.000	54.4	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	49	-29.916	-39.000	22.230	-38.339	-4.744	0.000	32.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	50	29.916	-39.000	22.230	38.339	-4.744	0.000	32.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	51	-28.916	-39.000	22.230	-21.637	-6.485	0.000	33.7	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	52	28.916	-39.000	22.230	21.637	-6.485	0.000	33.7	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	53	-27.916	-39.000	22.230	-32.301	-0.688	0.000	30.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	53	-27.916	-39.000	22.230	-32.301	-0.688	0.000	30.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	54	27.916	-39.000	22.230	32.301	-0.688	0.000	30.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	54	27.916	-39.000	22.230	32.301	-0.688	0.000	30.0	(C 90, G IMax)	/

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Estádio / Sport Luminares (Coordinates List)

List of the Sport Luminares

Luminaire	Index	Position [m]			Aiming Point [m]			Angle [°]	Alignment	Pole
		X	Y	Z	X	Y	Z			
Projektor - 960 W - 25x25 - IRC70	55	-26.916	-39.000	22.230	-27.219	-0.044	0.000	29.7	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	55	-26.916	-39.000	22.230	-27.219	-0.044	0.000	29.7	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	56	26.916	-39.000	22.230	27.219	-0.044	0.000	29.7	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	56	26.916	-39.000	22.230	27.219	-0.044	0.000	29.7	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	57	-25.916	-39.000	22.230	-9.721	-0.488	0.000	28.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	58	25.916	-39.000	22.230	9.721	-0.488	0.000	28.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	59	-24.916	-39.000	22.230	-36.603	-33.971	0.000	60.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	60	24.916	-39.000	22.230	36.603	-33.971	0.000	60.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	61	-22.916	-39.000	22.230	-50.346	-0.858	0.000	25.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	61	-22.916	-39.000	22.230	-34.890	0.025	0.000	28.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	62	22.916	-39.000	22.230	50.346	-0.858	0.000	25.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	62	22.916	-39.000	22.230	34.890	0.025	0.000	28.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	63	-21.916	-39.000	22.230	-5.412	-18.488	0.000	40.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	64	21.916	-39.000	22.230	5.412	-18.488	0.000	40.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	65	-20.916	-39.000	22.230	-39.230	-27.524	0.000	45.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	66	20.916	-39.000	22.230	39.230	-27.524	0.000	45.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	67	-19.916	-39.000	22.230	-3.521	-33.994	0.000	52.4	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	68	19.916	-39.000	22.230	3.521	-33.994	0.000	52.4	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	69	-18.916	-39.000	22.230	-27.259	-5.331	0.000	32.7	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	70	18.916	-39.000	22.230	27.259	-5.331	0.000	32.7	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	71	-16.916	-39.000	22.230	-17.087	-0.278	0.000	29.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	71	-16.916	-39.000	22.230	-17.087	-0.278	0.000	29.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	72	16.916	-39.000	22.230	17.087	-0.278	0.000	29.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	72	16.916	-39.000	22.230	17.087	-0.278	0.000	29.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	73	-15.916	-39.000	22.230	-1.283	-1.075	0.000	28.7	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	74	15.916	-39.000	22.230	1.283	-1.075	0.000	28.7	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	75	-14.916	-39.000	22.230	-2.976	-0.428	0.000	28.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	75	-14.916	-39.000	22.230	-24.984	-0.121	0.000	29.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	76	14.916	-39.000	22.230	2.976	-0.428	0.000	28.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	76	14.916	-39.000	22.230	24.984	-0.121	0.000	29.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	77	-13.916	-39.000	22.230	-22.568	-0.187	0.000	29.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	77	-13.916	-39.000	22.230	-22.568	-0.187	0.000	29.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	78	13.916	-39.000	22.230	22.568	-0.187	0.000	29.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	78	13.916	-39.000	22.230	22.568	-0.187	0.000	29.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	79	-12.916	-39.000	22.230	-5.658	-0.727	0.000	29.7	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	80	12.916	-39.000	22.230	5.658	-0.727	0.000	29.7	(C 90, G IMax)	/

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Estádio / Sport Luminares (Coordinates List)

List of the Sport Luminares

Luminaire	Index	Position [m]			Aiming Point [m]			Angle [°]	Alignment	Pole
		X	Y	Z	X	Y	Z			
Projektor - 960 W - 25x25 - IRC70	81	-11.916	-39.000	22.230	-10.053	-0.361	0.000	29.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	82	11.916	-39.000	22.230	10.053	-0.361	0.000	29.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	83	-10.916	-39.000	22.230	-12.691	-0.401	0.000	29.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	84	10.916	-39.000	22.230	12.691	-0.401	0.000	29.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	85	-9.916	-39.000	22.230	-17.426	-5.258	0.000	32.7	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	86	9.916	-39.000	22.230	17.426	-5.258	0.000	32.7	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	87	-8.916	-39.000	22.230	-8.903	-0.824	0.000	30.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	88	8.916	-39.000	22.230	8.903	-0.824	0.000	30.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	89	-7.916	-39.000	22.230	-9.670	8.530	0.000	25.1	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	89	-7.916	-39.000	22.230	-15.151	0.025	0.000	29.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	90	7.916	-39.000	22.230	9.670	8.530	0.000	25.1	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	90	7.916	-39.000	22.230	15.151	0.025	0.000	29.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	91	-6.916	-39.000	22.230	6.862	-1.075	0.000	28.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	92	6.916	-39.000	22.230	-6.862	-1.075	0.000	28.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	93	-5.916	-39.000	22.230	1.050	-1.260	0.000	30.1	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	94	5.916	-39.000	22.230	-1.050	-1.260	0.000	30.1	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	95	-4.916	-39.000	22.230	10.152	-34.055	0.000	54.5	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	96	4.916	-39.000	22.230	-10.152	-34.055	0.000	54.5	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	97	-3.916	-39.000	22.230	-4.383	-1.058	0.000	30.4	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	98	3.916	-39.000	22.230	4.383	-1.058	0.000	30.4	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	99	-2.916	-39.000	22.230	-7.395	-1.117	0.000	30.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	100	2.916	-39.000	22.230	7.395	-1.117	0.000	30.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	101	-1.916	-39.000	22.230	5.574	-22.519	0.000	50.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	102	1.916	-39.000	22.230	-5.574	-22.519	0.000	50.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	103	-28.000	57.000	25.130	-49.607	4.522	0.000	23.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	103	-28.000	57.000	25.130	-49.607	4.522	0.000	23.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	104	28.000	57.000	25.130	49.607	4.522	0.000	23.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	104	28.000	57.000	25.130	49.607	4.522	0.000	23.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	105	-27.000	57.000	25.130	-0.050	9.905	0.000	24.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	105	-27.000	57.000	25.130	-0.050	9.905	0.000	24.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	106	27.000	57.000	25.130	0.050	9.905	0.000	24.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	106	27.000	57.000	25.130	0.050	9.905	0.000	24.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	107	-26.000	57.000	25.130	51.183	34.094	0.000	17.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	107	-26.000	57.000	25.130	51.183	34.094	0.000	17.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	108	26.000	57.000	25.130	-51.183	34.094	0.000	17.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	108	26.000	57.000	25.130	-51.183	34.094	0.000	17.3	(C 90, G IMax)	/

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Estádio / Sport Luminares (Coordinates List)

List of the Sport Luminares

Luminaire	Index	Position [m]			Aiming Point [m]			Angle [°]	Alignment	Pole
		X	Y	Z	X	Y	Z			
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-48.079	34.017	0.000	40.1	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-48.079	34.017	0.000	40.1	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	48.079	34.017	0.000	40.1	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	48.079	34.017	0.000	40.1	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-49.836	34.094	0.000	39.1	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-49.836	34.094	0.000	39.1	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	49.836	34.094	0.000	39.1	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	49.836	34.094	0.000	39.1	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-52.511	26.758	0.000	33.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-52.511	26.758	0.000	33.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	52.511	26.758	0.000	33.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	52.511	26.758	0.000	33.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-52.587	22.785	0.000	31.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-52.587	22.785	0.000	31.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	52.587	22.785	0.000	31.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	52.587	22.785	0.000	31.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-52.511	19.117	0.000	29.4	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-52.511	19.117	0.000	29.4	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	52.511	19.117	0.000	29.4	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	52.511	19.117	0.000	29.4	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-52.511	13.386	0.000	26.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-52.511	13.386	0.000	26.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-52.511	13.386	0.000	26.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	52.511	13.386	0.000	26.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	52.511	13.386	0.000	26.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	52.511	13.386	0.000	26.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	52.511	13.386	0.000	26.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-52.511	10.558	0.000	25.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-52.511	10.558	0.000	25.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-52.511	10.558	0.000	25.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-52.511	10.558	0.000	25.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	52.511	10.558	0.000	25.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	52.511	10.558	0.000	25.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	52.511	10.558	0.000	25.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	52.511	10.558	0.000	25.8	(C 90, G IMax)	/

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Estádio / Sport Luminares (Coordinates List)

List of the Sport Luminares

Luminaire	Index	Position [m]			Aiming Point [m]			Angle [°]	Alignment	Pole
		X	Y	Z	X	Y	Z			
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-52.358	7.807	0.000	24.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-52.358	7.807	0.000	24.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-52.358	7.807	0.000	24.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-52.358	7.807	0.000	24.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	52.358	7.807	0.000	24.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	52.358	7.807	0.000	24.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	52.358	7.807	0.000	24.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	52.358	7.807	0.000	24.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-52.281	4.980	0.000	23.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-52.281	4.980	0.000	23.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-52.281	4.980	0.000	23.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-52.281	4.980	0.000	23.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	52.281	4.980	0.000	23.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	52.281	4.980	0.000	23.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	52.281	4.980	0.000	23.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	52.281	4.980	0.000	23.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	103	-28.000	57.000	25.130	-47.467	4.522	0.000	24.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	103	-28.000	57.000	25.130	-47.467	4.522	0.000	24.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	104	28.000	57.000	25.130	47.467	4.522	0.000	24.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	104	28.000	57.000	25.130	47.467	4.522	0.000	24.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	103	-28.000	57.000	25.130	-45.251	4.063	0.000	24.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	103	-28.000	57.000	25.130	-45.251	4.063	0.000	24.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	104	28.000	57.000	25.130	45.251	4.063	0.000	24.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	104	28.000	57.000	25.130	45.251	4.063	0.000	24.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	103	-28.000	57.000	25.130	-42.500	4.292	0.000	24.7	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	103	-28.000	57.000	25.130	-42.500	4.292	0.000	24.7	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	104	28.000	57.000	25.130	42.500	4.292	0.000	24.7	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	104	28.000	57.000	25.130	42.500	4.292	0.000	24.7	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	103	-28.000	57.000	25.130	-39.555	4.432	0.000	25.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	103	-28.000	57.000	25.130	-39.555	4.432	0.000	25.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	104	28.000	57.000	25.130	39.555	4.432	0.000	25.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	104	28.000	57.000	25.130	39.555	4.432	0.000	25.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	103	-28.000	57.000	25.130	-37.170	4.502	0.000	25.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	103	-28.000	57.000	25.130	-37.170	4.502	0.000	25.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	104	28.000	57.000	25.130	37.170	4.502	0.000	25.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	104	28.000	57.000	25.130	37.170	4.502	0.000	25.2	(C 90, G IMax)	/

Operator
Telephone
Fax
e-Mail

Estádio / Sport Luminaires (Coordinates List)

List of the Sport Luminaires

Luminaire	Index	Position [m]			Aiming Point [m]			Angle [°]	Alignment	Pole
		X	Y	Z	X	Y	Z			
Projektor - 960 W - 25x25 - IRC70	103	-28.000	57.000	25.130	-34.223	4.502	0.000	25.4	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	103	-28.000	57.000	25.130	-34.223	4.502	0.000	25.4	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	104	28.000	57.000	25.130	34.223	4.502	0.000	25.4	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	104	28.000	57.000	25.130	34.223	4.502	0.000	25.4	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	103	-28.000	57.000	25.130	-25.872	4.572	0.000	25.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	103	-28.000	57.000	25.130	-25.872	4.572	0.000	25.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	104	28.000	57.000	25.130	25.872	4.572	0.000	25.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	104	28.000	57.000	25.130	25.872	4.572	0.000	25.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	103	-28.000	57.000	25.130	-31.346	4.432	0.000	25.5	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	103	-28.000	57.000	25.130	-31.346	4.432	0.000	25.5	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	104	28.000	57.000	25.130	31.346	4.432	0.000	25.5	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	104	28.000	57.000	25.130	31.346	4.432	0.000	25.5	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	103	-28.000	57.000	25.130	-28.820	4.502	0.000	25.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	103	-28.000	57.000	25.130	-28.820	4.502	0.000	25.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	104	28.000	57.000	25.130	28.820	4.502	0.000	25.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	104	28.000	57.000	25.130	28.820	4.502	0.000	25.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	105	-27.000	57.000	25.130	-0.050	23.518	0.000	30.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	105	-27.000	57.000	25.130	-0.050	23.518	0.000	30.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	106	27.000	57.000	25.130	0.050	23.518	0.000	30.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	106	27.000	57.000	25.130	0.050	23.518	0.000	30.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	105	-27.000	57.000	25.130	-0.050	20.430	0.000	29.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	105	-27.000	57.000	25.130	-0.050	20.430	0.000	29.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	106	27.000	57.000	25.130	0.050	20.430	0.000	29.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	106	27.000	57.000	25.130	0.050	20.430	0.000	29.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	105	-27.000	57.000	25.130	-0.121	16.571	0.000	27.4	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	105	-27.000	57.000	25.130	-0.121	16.571	0.000	27.4	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	106	27.000	57.000	25.130	0.121	16.571	0.000	27.4	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	106	27.000	57.000	25.130	0.121	16.571	0.000	27.4	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	105	-27.000	57.000	25.130	-0.050	12.852	0.000	25.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	105	-27.000	57.000	25.130	-0.050	12.852	0.000	25.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	106	27.000	57.000	25.130	0.050	12.852	0.000	25.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	106	27.000	57.000	25.130	0.050	12.852	0.000	25.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	105	-27.000	57.000	25.130	-0.121	6.256	0.000	23.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	105	-27.000	57.000	25.130	-0.121	6.256	0.000	23.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	106	27.000	57.000	25.130	0.121	6.256	0.000	23.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	106	27.000	57.000	25.130	0.121	6.256	0.000	23.6	(C 90, G IMax)	/

Operator
Telephone
Fax
e-Mail

Estádio / Sport Luminaires (Coordinates List)

List of the Sport Luminaires

Luminaire	Index	Position [m]			Aiming Point [m]			Angle [°]	Alignment	Pole
		X	Y	Z	X	Y	Z			
Projektor - 960 W - 25x25 - IRC70	105	-27.000	57.000	25.130	-22.925	4.783	0.000	25.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	105	-27.000	57.000	25.130	-22.925	4.783	0.000	25.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	106	27.000	57.000	25.130	22.925	4.783	0.000	25.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	106	27.000	57.000	25.130	22.925	4.783	0.000	25.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	105	-27.000	57.000	25.130	-20.048	4.713	0.000	25.5	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	105	-27.000	57.000	25.130	-20.048	4.713	0.000	25.5	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	106	27.000	57.000	25.130	20.048	4.713	0.000	25.5	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	106	27.000	57.000	25.130	20.048	4.713	0.000	25.5	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	105	-27.000	57.000	25.130	-13.733	4.783	0.000	25.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	105	-27.000	57.000	25.130	-13.733	4.783	0.000	25.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	106	27.000	57.000	25.130	13.733	4.783	0.000	25.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	106	27.000	57.000	25.130	13.733	4.783	0.000	25.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	105	-27.000	57.000	25.130	-16.961	4.642	0.000	25.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	105	-27.000	57.000	25.130	-16.961	4.642	0.000	25.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	106	27.000	57.000	25.130	16.961	4.642	0.000	25.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	106	27.000	57.000	25.130	16.961	4.642	0.000	25.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	107	-26.000	57.000	25.130	45.528	34.017	0.000	18.5	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	107	-26.000	57.000	25.130	45.528	34.017	0.000	18.5	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	108	26.000	57.000	25.130	-45.528	34.017	0.000	18.5	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	108	26.000	57.000	25.130	-45.528	34.017	0.000	18.5	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	107	-26.000	57.000	25.130	40.485	34.017	0.000	19.7	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	107	-26.000	57.000	25.130	40.485	34.017	0.000	19.7	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	108	26.000	57.000	25.130	-40.485	34.017	0.000	19.7	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	108	26.000	57.000	25.130	-40.485	34.017	0.000	19.7	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	107	-26.000	57.000	25.130	34.448	34.017	0.000	21.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	107	-26.000	57.000	25.130	34.448	34.017	0.000	21.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	108	26.000	57.000	25.130	-34.448	34.017	0.000	21.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	108	26.000	57.000	25.130	-34.448	34.017	0.000	21.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	107	-26.000	57.000	25.130	29.252	34.247	0.000	22.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	107	-26.000	57.000	25.130	29.252	34.247	0.000	22.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	108	26.000	57.000	25.130	-29.252	34.247	0.000	22.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	108	26.000	57.000	25.130	-29.252	34.247	0.000	22.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	107	-26.000	57.000	25.130	30.055	22.602	0.000	20.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	107	-26.000	57.000	25.130	34.997	27.211	0.000	20.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	108	26.000	57.000	25.130	-30.055	22.602	0.000	20.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	108	26.000	57.000	25.130	-34.997	27.211	0.000	20.3	(C 90, G IMax)	/



Operator
Telephone
Fax
e-Mail

Estádio / Sport Luminares (Coordinates List)

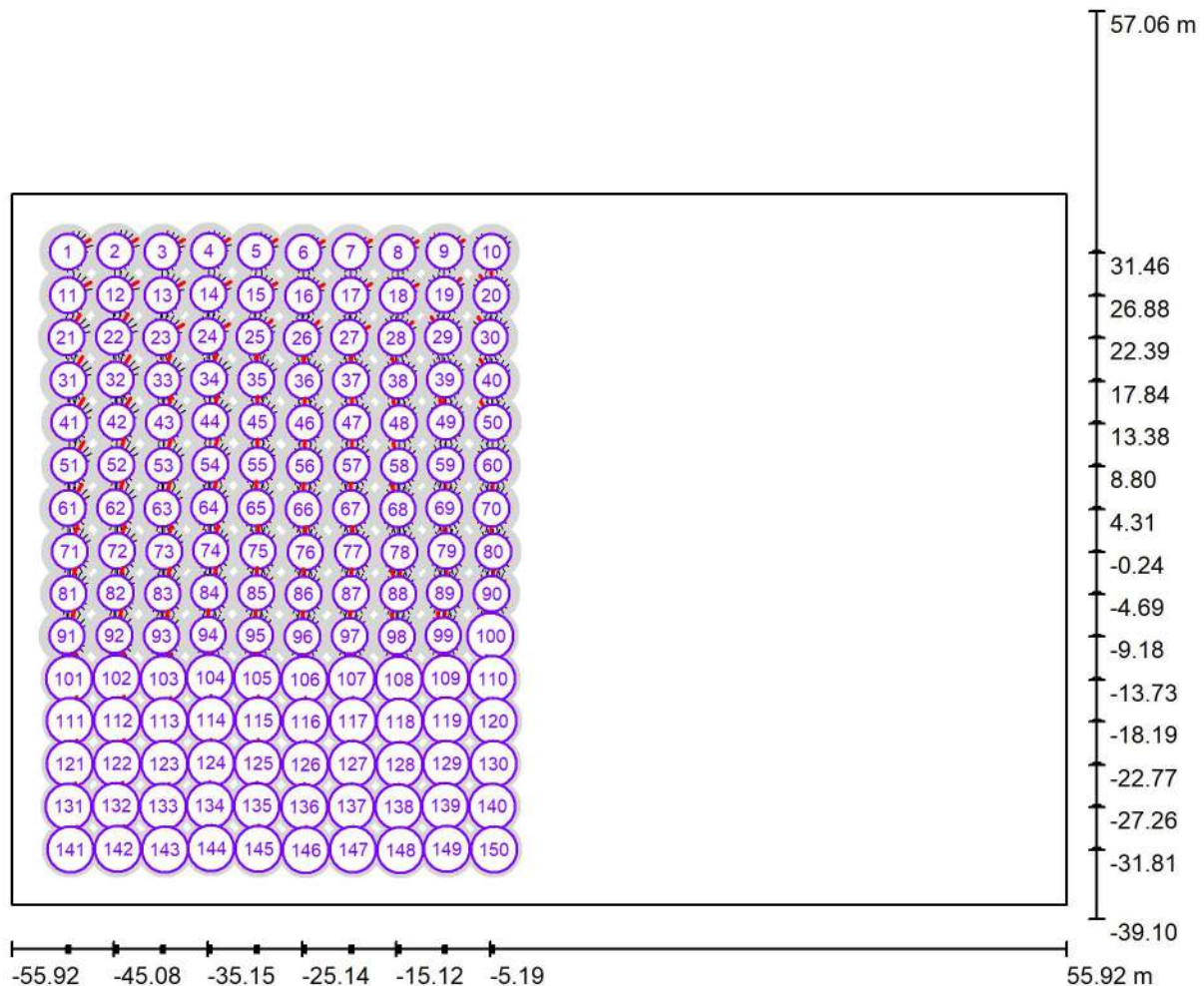
List of the Sport Luminares

Luminaire	Index	Position [m]			Aiming Point [m]			Angle [°]	Alignment	Pole
		X	Y	Z	X	Y	Z			
Projektor - 960 W - 25x25 - IRC70	107	-26.000	57.000	25.130	10.016	22.535	0.000	26.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	107	-26.000	57.000	25.130	15.092	27.011	0.000	26.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	108	26.000	57.000	25.130	-10.016	22.535	0.000	26.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	108	26.000	57.000	25.130	-15.092	27.011	0.000	26.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	107	-26.000	57.000	25.130	14.958	22.469	0.000	25.1	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	107	-26.000	57.000	25.130	20.569	26.944	0.000	24.4	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	108	26.000	57.000	25.130	-14.958	22.469	0.000	25.1	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	108	26.000	57.000	25.130	-20.569	26.944	0.000	24.4	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	107	-26.000	57.000	25.130	20.169	22.469	0.000	23.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	107	-26.000	57.000	25.130	25.045	27.011	0.000	23.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	108	26.000	57.000	25.130	-20.169	22.469	0.000	23.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	108	26.000	57.000	25.130	-25.045	27.011	0.000	23.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	107	-26.000	57.000	25.130	25.112	22.469	0.000	22.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	107	-26.000	57.000	25.130	29.921	27.011	0.000	21.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	108	26.000	57.000	25.130	-25.112	22.469	0.000	22.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	108	26.000	57.000	25.130	-29.921	27.011	0.000	21.6	(C 90, G IMax)	/



Operator
Telephone
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Estádio / GR Observer (Results Overview)



Scale 1 : 800

GR Observerlist

No.	Designation	Position [m]			Viewing sector [°]			Slope angle	Max
		X	Y	Z	Start	End	Increment		
1	GR Observer 2	-49.957	31.525	1.500	0.0	360.0	15.0	-2.0	43 ²⁾
2	GR Observer 2	-44.941	31.585	1.500	0.0	360.0	15.0	-2.0	42 ²⁾
3	GR Observer 2	-39.945	31.521	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
4	GR Observer 2	-35.012	31.649	1.500	0.0	360.0	15.0	-2.0	40 ²⁾



Operator
Telephone
Fax
e-Mail

Estádio / GR Observer (Results Overview)

GR Observerlist

No.	Designation	Position [m]			Viewing sector [°]				Max
		X	Y	Z	Start	End	Increment	Slope angle	
5	GR Observer 2	-30.016	31.585	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
6	GR Observer 2	-24.996	31.461	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
7	GR Observer 2	-19.981	31.521	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
8	GR Observer 2	-14.984	31.457	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
9	GR Observer 2	-10.051	31.585	1.500	0.0	360.0	15.0	-2.0	38 ²⁾
10	GR Observer 2	-5.056	31.521	1.500	0.0	360.0	15.0	-2.0	37 ²⁾
11	GR Observer 2	-49.968	26.945	1.500	0.0	360.0	15.0	-2.0	44 ²⁾
12	GR Observer 2	-44.952	27.005	1.500	0.0	360.0	15.0	-2.0	43 ²⁾
13	GR Observer 2	-39.956	26.941	1.500	0.0	360.0	15.0	-2.0	42 ²⁾
14	GR Observer 2	-35.023	27.069	1.500	0.0	360.0	15.0	-2.0	42 ²⁾
15	GR Observer 2	-30.027	27.005	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
16	GR Observer 2	-25.007	26.881	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
17	GR Observer 2	-19.991	26.941	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
18	GR Observer 2	-14.995	26.877	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
19	GR Observer 2	-10.062	27.005	1.500	0.0	360.0	15.0	-2.0	38 ²⁾
20	GR Observer 2	-5.066	26.941	1.500	0.0	360.0	15.0	-2.0	38 ²⁾
21	GR Observer 2	-50.096	22.461	1.500	0.0	360.0	15.0	-2.0	45 ²⁾
22	GR Observer 2	-45.080	22.521	1.500	0.0	360.0	15.0	-2.0	45 ²⁾
23	GR Observer 2	-40.084	22.457	1.500	0.0	360.0	15.0	-2.0	42 ²⁾
24	GR Observer 2	-35.151	22.585	1.500	0.0	360.0	15.0	-2.0	42 ²⁾
25	GR Observer 2	-30.155	22.521	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
26	GR Observer 2	-25.135	22.397	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
27	GR Observer 2	-20.119	22.457	1.500	0.0	360.0	15.0	-2.0	38 ²⁾
28	GR Observer 2	-15.123	22.393	1.500	0.0	360.0	15.0	-2.0	38 ²⁾
29	GR Observer 2	-10.190	22.521	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
30	GR Observer 2	-5.194	22.457	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
31	GR Observer 2	-49.904	17.912	1.500	0.0	360.0	15.0	-2.0	46 ²⁾
32	GR Observer 2	-44.888	17.972	1.500	0.0	360.0	15.0	-2.0	46 ²⁾
33	GR Observer 2	-39.892	17.908	1.500	0.0	360.0	15.0	-2.0	44 ²⁾
34	GR Observer 2	-34.959	18.036	1.500	0.0	360.0	15.0	-2.0	43 ²⁾
35	GR Observer 2	-29.963	17.972	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
36	GR Observer 2	-24.943	17.848	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
37	GR Observer 2	-19.927	17.908	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
38	GR Observer 2	-14.931	17.844	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
39	GR Observer 2	-9.998	17.972	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
40	GR Observer 2	-5.002	17.908	1.500	0.0	360.0	15.0	-2.0	41 ²⁾



Operator
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Estádio / GR Observer (Results Overview)

GR Observerlist

No.	Designation	Position [m]			Viewing sector [°]				Max
		X	Y	Z	Start	End	Increment	Slope angle	
41	GR Observer 2	-49.797	13.445	1.500	0.0	360.0	15.0	-2.0	47 ²⁾
42	GR Observer 2	-44.781	13.505	1.500	0.0	360.0	15.0	-2.0	46 ²⁾
43	GR Observer 2	-39.785	13.441	1.500	0.0	360.0	15.0	-2.0	45 ²⁾
44	GR Observer 2	-34.852	13.569	1.500	0.0	360.0	15.0	-2.0	44 ²⁾
45	GR Observer 2	-29.856	13.505	1.500	0.0	360.0	15.0	-2.0	43 ²⁾
46	GR Observer 2	-24.836	13.381	1.500	0.0	360.0	15.0	-2.0	42 ²⁾
47	GR Observer 2	-19.821	13.441	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
48	GR Observer 2	-14.824	13.377	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
49	GR Observer 2	-9.891	13.505	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
50	GR Observer 2	-4.896	13.441	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
51	GR Observer 2	-49.808	8.865	1.500	0.0	360.0	15.0	-2.0	47 ²⁾
52	GR Observer 2	-44.792	8.925	1.500	0.0	360.0	15.0	-2.0	46 ²⁾
53	GR Observer 2	-39.796	8.861	1.500	0.0	360.0	15.0	-2.0	45 ²⁾
54	GR Observer 2	-34.863	8.989	1.500	0.0	360.0	15.0	-2.0	44 ²⁾
55	GR Observer 2	-29.867	8.925	1.500	0.0	360.0	15.0	-2.0	43 ²⁾
56	GR Observer 2	-24.847	8.801	1.500	0.0	360.0	15.0	-2.0	43 ²⁾
57	GR Observer 2	-19.831	8.861	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
58	GR Observer 2	-14.835	8.797	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
59	GR Observer 2	-9.902	8.925	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
60	GR Observer 2	-4.906	8.861	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
61	GR Observer 2	-49.936	4.381	1.500	0.0	360.0	15.0	-2.0	46 ²⁾
62	GR Observer 2	-44.920	4.441	1.500	0.0	360.0	15.0	-2.0	46 ²⁾
63	GR Observer 2	-39.924	4.377	1.500	0.0	360.0	15.0	-2.0	45 ²⁾
64	GR Observer 2	-34.991	4.505	1.500	0.0	360.0	15.0	-2.0	44 ²⁾
65	GR Observer 2	-29.995	4.441	1.500	0.0	360.0	15.0	-2.0	43 ²⁾
66	GR Observer 2	-24.975	4.317	1.500	0.0	360.0	15.0	-2.0	43 ²⁾
67	GR Observer 2	-19.959	4.377	1.500	0.0	360.0	15.0	-2.0	42 ²⁾
68	GR Observer 2	-14.963	4.313	1.500	0.0	360.0	15.0	-2.0	42 ²⁾
69	GR Observer 2	-10.030	4.441	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
70	GR Observer 2	-5.034	4.377	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
71	GR Observer 2	-49.744	-0.168	1.500	0.0	360.0	15.0	-2.0	45 ²⁾
72	GR Observer 2	-44.728	-0.108	1.500	0.0	360.0	15.0	-2.0	45 ²⁾
73	GR Observer 2	-39.732	-0.172	1.500	0.0	360.0	15.0	-2.0	44 ²⁾
74	GR Observer 2	-34.799	-0.044	1.500	0.0	360.0	15.0	-2.0	43 ²⁾
75	GR Observer 2	-29.803	-0.108	1.500	0.0	360.0	15.0	-2.0	43 ²⁾
76	GR Observer 2	-24.783	-0.232	1.500	0.0	360.0	15.0	-2.0	43 ²⁾



Operator
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Estádio / GR Observer (Results Overview)

GR Observerlist

No.	Designation	Position [m]			Viewing sector [°]				Max
		X	Y	Z	Start	End	Increment	Slope angle	
77	GR Observer 2	-19.767	-0.172	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
78	GR Observer 2	-14.771	-0.236	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
79	GR Observer 2	-9.838	-0.108	1.500	0.0	360.0	15.0	-2.0	42 ²⁾
80	GR Observer 2	-4.842	-0.172	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
81	GR Observer 2	-49.907	-4.626	1.500	0.0	360.0	15.0	-2.0	44 ²⁾
82	GR Observer 2	-44.891	-4.566	1.500	0.0	360.0	15.0	-2.0	44 ²⁾
83	GR Observer 2	-39.895	-4.630	1.500	0.0	360.0	15.0	-2.0	44 ²⁾
84	GR Observer 2	-34.962	-4.502	1.500	0.0	360.0	15.0	-2.0	42 ²⁾
85	GR Observer 2	-29.966	-4.566	1.500	0.0	360.0	15.0	-2.0	43 ²⁾
86	GR Observer 2	-24.946	-4.690	1.500	0.0	360.0	15.0	-2.0	42 ²⁾
87	GR Observer 2	-19.930	-4.630	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
88	GR Observer 2	-14.934	-4.694	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
89	GR Observer 2	-10.001	-4.566	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
90	GR Observer 2	-5.005	-4.630	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
91	GR Observer 2	-50.035	-9.110	1.500	0.0	360.0	15.0	-2.0	44 ²⁾
92	GR Observer 2	-45.019	-9.050	1.500	0.0	360.0	15.0	-2.0	44 ²⁾
93	GR Observer 2	-40.023	-9.114	1.500	0.0	360.0	15.0	-2.0	43 ²⁾
94	GR Observer 2	-35.090	-8.986	1.500	0.0	360.0	15.0	-2.0	42 ²⁾
95	GR Observer 2	-30.094	-9.050	1.500	0.0	360.0	15.0	-2.0	42 ²⁾
96	GR Observer 2	-25.074	-9.174	1.500	0.0	360.0	15.0	-2.0	42 ²⁾
97	GR Observer 2	-20.058	-9.114	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
98	GR Observer 2	-15.062	-9.178	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
99	GR Observer 2	-10.129	-9.050	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
100	GR Observer 2	-5.133	-9.114	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
101	GR Observer 2	-49.843	-13.659	1.500	0.0	360.0	15.0	-2.0	43 ²⁾
102	GR Observer 2	-44.827	-13.599	1.500	0.0	360.0	15.0	-2.0	43 ²⁾
103	GR Observer 2	-39.831	-13.663	1.500	0.0	360.0	15.0	-2.0	42 ²⁾
104	GR Observer 2	-34.898	-13.535	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
105	GR Observer 2	-29.902	-13.599	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
106	GR Observer 2	-24.882	-13.723	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
107	GR Observer 2	-19.866	-13.663	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
108	GR Observer 2	-14.870	-13.727	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
109	GR Observer 2	-9.937	-13.599	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
110	GR Observer 2	-4.941	-13.663	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
111	GR Observer 2	-49.736	-18.127	1.500	0.0	360.0	15.0	-2.0	42 ²⁾
112	GR Observer 2	-44.720	-18.067	1.500	0.0	360.0	15.0	-2.0	42 ²⁾



Operator
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Estádio / GR Observer (Results Overview)

GR Observerlist

No.	Designation	Position [m]			Viewing sector [°]				Max
		X	Y	Z	Start	End	Increment	Slope angle	
113	GR Observer 2	-39.724	-18.131	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
114	GR Observer 2	-34.791	-18.003	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
115	GR Observer 2	-29.795	-18.067	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
116	GR Observer 2	-24.775	-18.191	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
117	GR Observer 2	-19.760	-18.131	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
118	GR Observer 2	-14.763	-18.195	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
119	GR Observer 2	-9.830	-18.067	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
120	GR Observer 2	-4.835	-18.131	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
121	GR Observer 2	-49.747	-22.707	1.500	0.0	360.0	15.0	-2.0	42 ²⁾
122	GR Observer 2	-44.731	-22.647	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
123	GR Observer 2	-39.735	-22.711	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
124	GR Observer 2	-34.802	-22.583	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
125	GR Observer 2	-29.806	-22.647	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
126	GR Observer 2	-24.786	-22.771	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
127	GR Observer 2	-19.770	-22.711	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
128	GR Observer 2	-14.774	-22.775	1.500	0.0	360.0	15.0	-2.0	38 ²⁾
129	GR Observer 2	-9.841	-22.647	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
130	GR Observer 2	-4.845	-22.711	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
131	GR Observer 2	-49.875	-27.191	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
132	GR Observer 2	-44.859	-27.131	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
133	GR Observer 2	-39.863	-27.195	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
134	GR Observer 2	-34.930	-27.067	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
135	GR Observer 2	-29.934	-27.131	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
136	GR Observer 2	-24.914	-27.255	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
137	GR Observer 2	-19.898	-27.195	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
138	GR Observer 2	-14.902	-27.259	1.500	0.0	360.0	15.0	-2.0	38 ²⁾
139	GR Observer 2	-9.969	-27.131	1.500	0.0	360.0	15.0	-2.0	38 ²⁾
140	GR Observer 2	-4.973	-27.195	1.500	0.0	360.0	15.0	-2.0	38 ²⁾
141	GR Observer 2	-49.683	-31.740	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
142	GR Observer 2	-44.667	-31.680	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
143	GR Observer 2	-39.671	-31.744	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
144	GR Observer 2	-34.738	-31.616	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
145	GR Observer 2	-29.742	-31.680	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
146	GR Observer 2	-24.722	-31.804	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
147	GR Observer 2	-19.706	-31.744	1.500	0.0	360.0	15.0	-2.0	38 ²⁾
148	GR Observer 2	-14.710	-31.808	1.500	0.0	360.0	15.0	-2.0	37 ²⁾



Operator
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Estádio / GR Observer (Results Overview)

GR Observerlist

No.	Designation	Position [m]			Start	Viewing sector [°]			Slope angle	Max
		X	Y	Z		End	Increment			
149	GR Observer 2	-9.777	-31.680	1.500	0.0	360.0	15.0		-2.0	38 ²⁾
150	GR Observer 2	-4.781	-31.744	1.500	0.0	360.0	15.0		-2.0	38 ²⁾

2) The calculated equivalent veil luminance of the environment is based on the assumption of a complete diffuse reflection behavior of the environment (acc. EN 12464-2).



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Estádio / 3D Rendering

1111 1111111111 1111 111 1111111111 1111111111 11111111 11111111 1111111111 1111

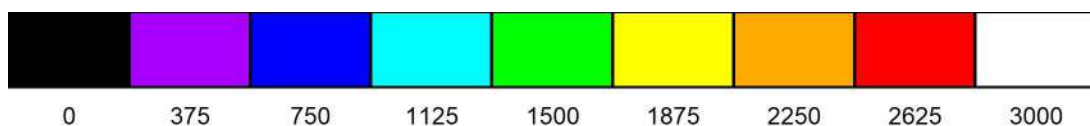
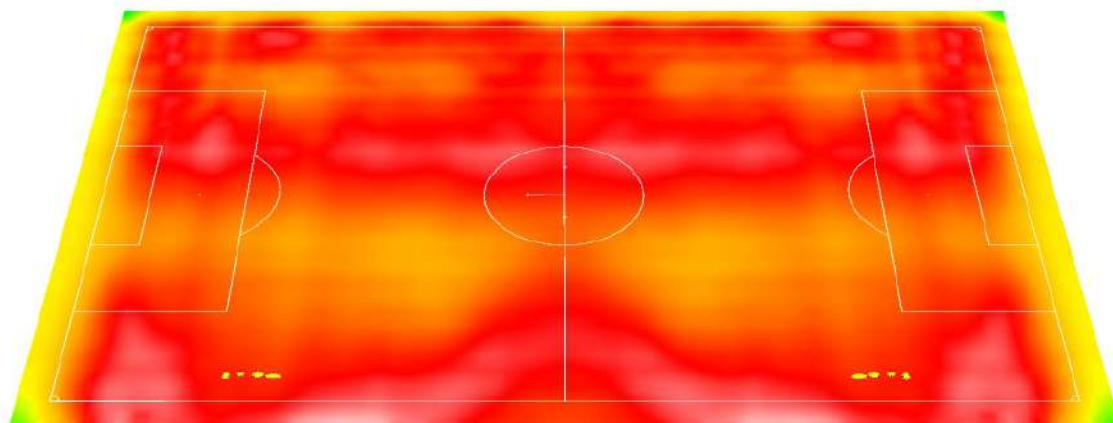




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Estádio / False Colour Rendering

01/10/2021 14:00:00

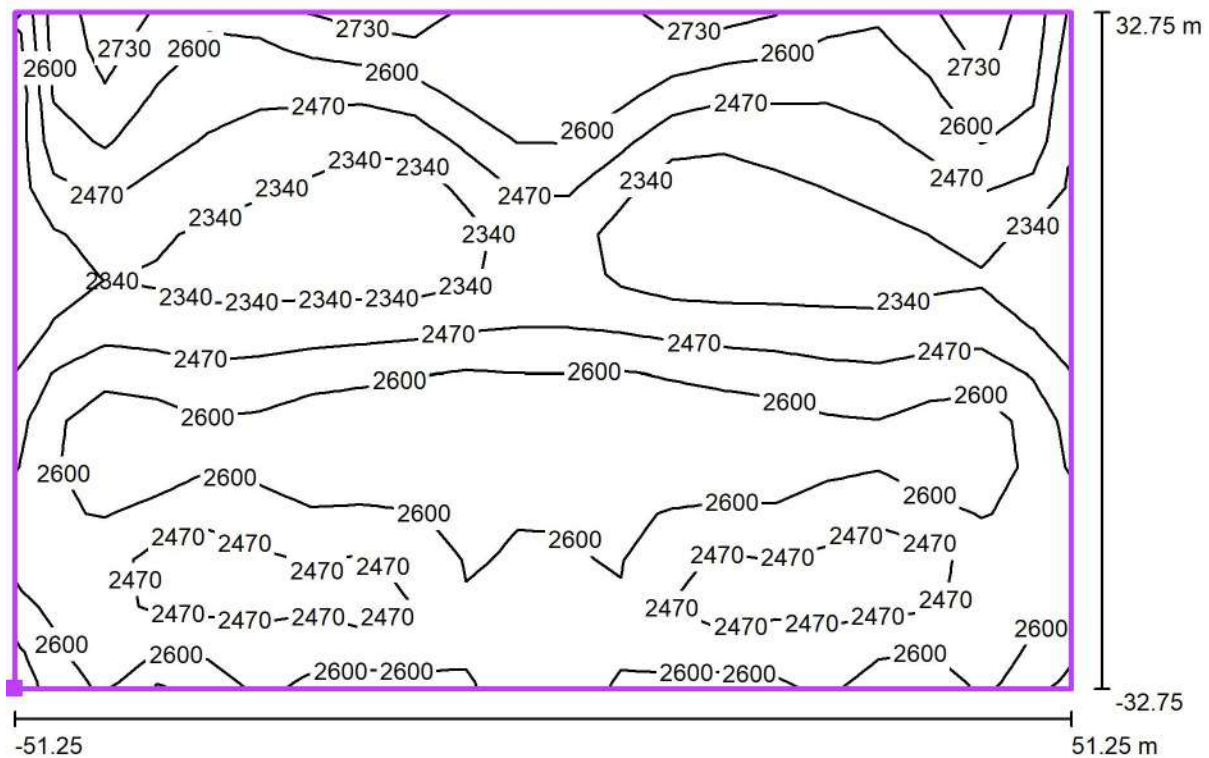


lx



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e-Mail

Estádio / Grade de calculo (Horizontal) / Isolines (E, Horizontal)



Values in Lux, Scale 1 : 733

Position of surface in external scene:
Marked point: (-51.250 m, -32.750 m,
0.000 m)



Grid: 21 x 15 Points

E_{av} [lx]
2514

E_{min} [lx]
2222

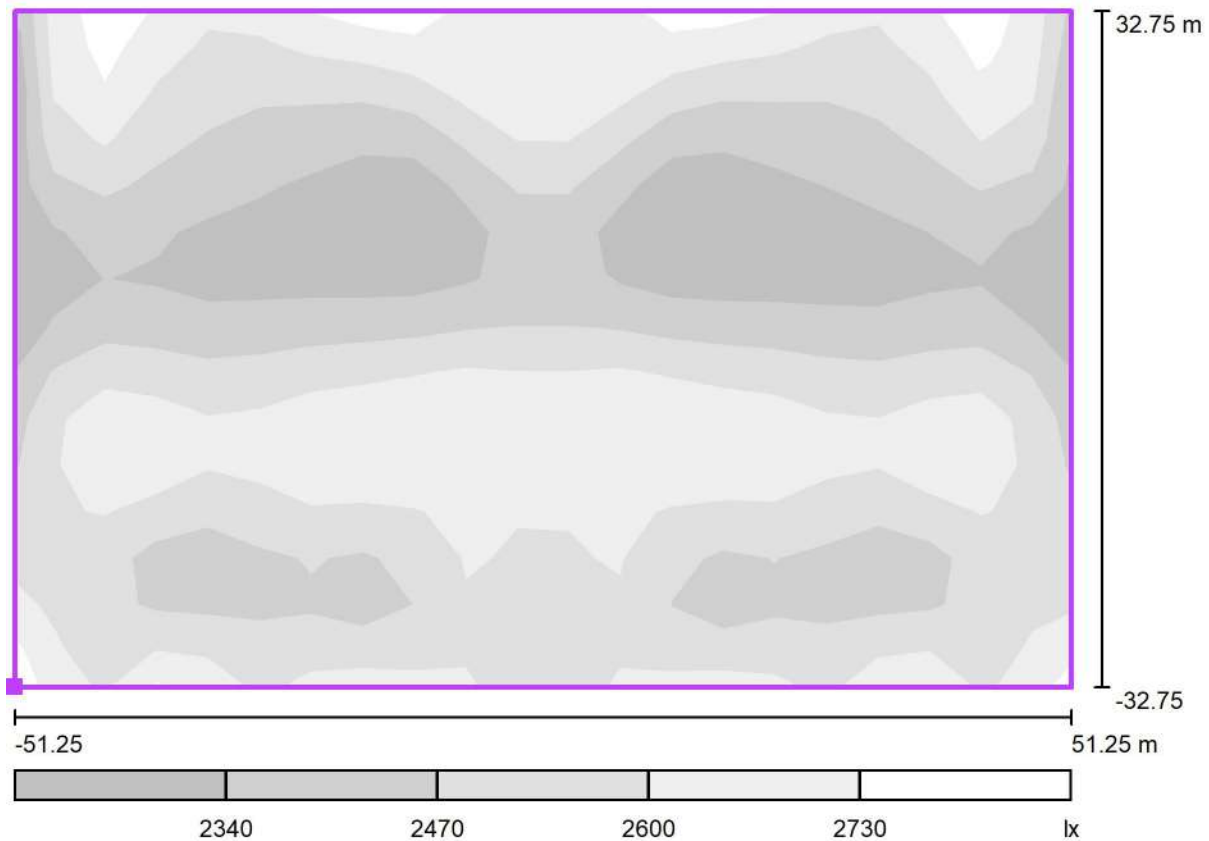
E_{max} [lx]
2840

u_0
0.88

E_{min} / E_{max}
0.78



Operator
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Estádio / Grade de calculo (Horizontal) / Greyscale (E, Horizontal)

Scale 1 : 733

Position of surface in external scene:
Marked point: (-51.250 m, -32.750 m,
0.000 m)



Grid: 21 x 15 Points

E_{av} [lx]
2514

E_{min} [lx]
2222

E_{max} [lx]
2840

$u0$
0.88

E_{min} / E_{max}
0.78



Operator
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Estádio / Grade de calculo (Horizontal) / Value Chart (E, Horizontal)

2479	2767	2594	2736	2777	2618	2767	2738	2592	2762	2514	32.75 m
2430	2669	2527	2567	2685	2664	2681	2565	2517	2659	2452	
2394	2577	2464	2434	2498	2670	2498	2428	2451	2563	2407	
2399	2512	2406	2343	2335	2575	2338	2334	2392	2495	2405	
2312	2431	2344	2275	2251	2476	2254	2264	2331	2413	2312	
2229	2337	2279	2255	2248	2402	2248	2243	2268	2323	2222	
2242	2367	2321	2335	2341	2409	2339	2325	2312	2356	2227	
2356	2484	2439	2485	2532	2525	2530	2476	2432	2477	2333	
2463	2647	2568	2649	2691	2650	2690	2642	2561	2641	2433	
2527	2739	2625	2725	2735	2689	2733	2717	2619	2733	2495	
2515	2680	2551	2643	2635	2590	2631	2636	2546	2680	2485	
2600	2512	2440	2520	2585	2551	2582	2516	2434	2517	2572	
2563	2393	2378	2417	2560	2526	2554	2414	2372	2398	2541	
2646	2511	2487	2467	2520	2528	2516	2461	2486	2513	2631	
2739	2590	2517	2628	2614	2517	2613	2617	2517	2581	2727	-32.75
											51.25 m
											-51.25

Values in Lux, Scale 1 : 733

Not all calculated values could be displayed.

Position of surface in external scene:
Marked point: (-51.250 m, -32.750 m,
0.000 m)



Grid: 21 x 15 Points

E_{av} [lx]
2514

E_{min} [lx]
2222

E_{max} [lx]
2840

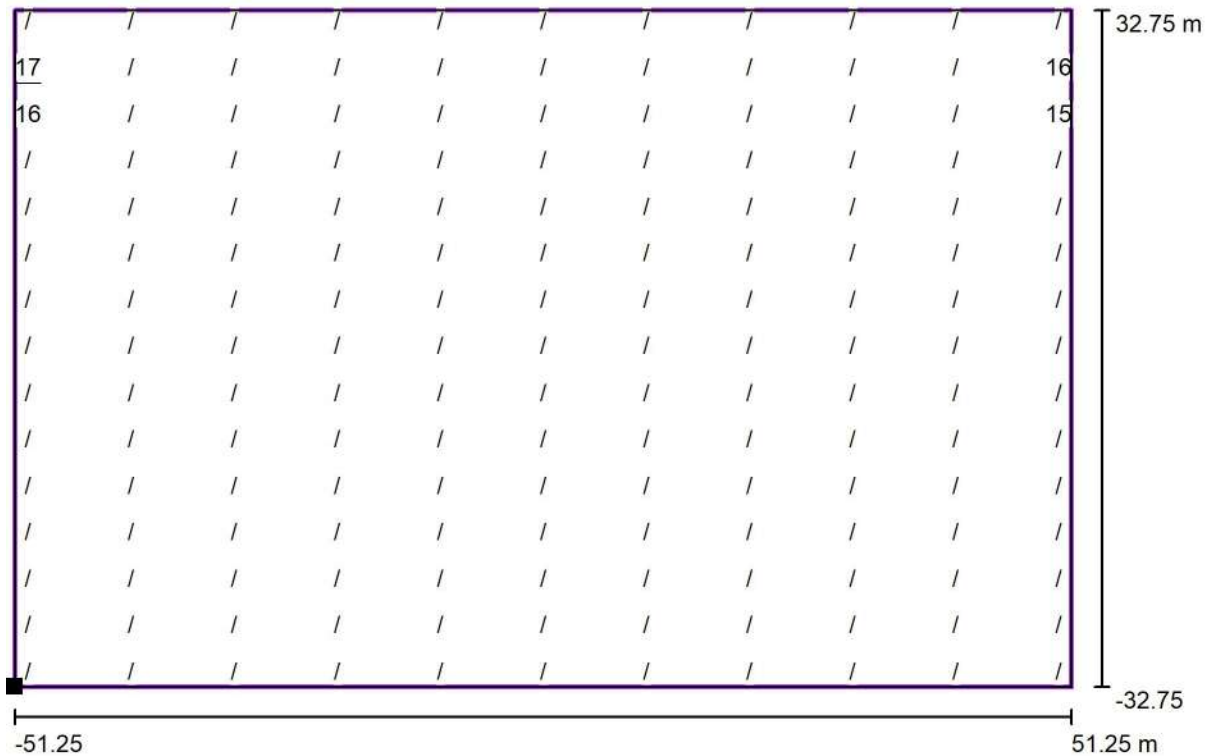
u_0
0.88

E_{min} / E_{max}
0.78



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Estádio / Grade de calculo (Horizontal) / Gradient Graphics (E, Horizontal)



Values in %, Scale 1 : 733

Not all calculated values could be displayed.

Position of surface in external scene:

Marked point: (-51.250 m, -32.750 m,
0.000 m)



Maximum Change: 17%

Selected Limit Value: 15% (Values below this limit value are not output.)

Distance for the Gradient Grid: 5.000 m

Arena Joinville

Partner for Contact:
Order No.:
Company:
Customer No.:

Date: 02.08.2021
Operator:

Operator
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e-Mail

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Exterior Surfaces

Grade de calculo (Horizontal)

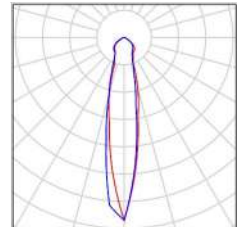
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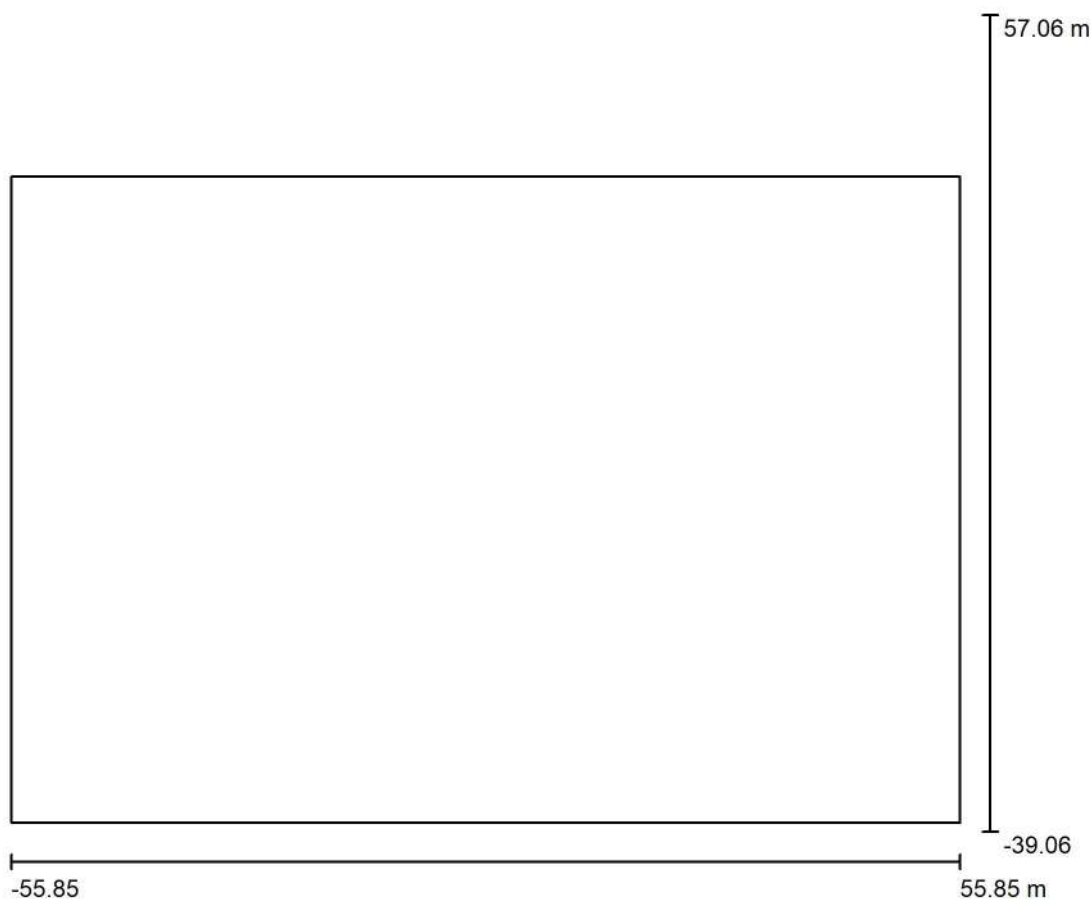
Arena Joinville / Luminaire parts list

188 Pieces Projector - 960 W - 25x25 - IRC70
Article No.:
Luminous flux (Luminaire): 158398 lm
Luminous flux (Lamps): 158400 lm
Luminaire Wattage: 960.5 W
Luminaire classification according to CIE: 100
CIE flux code: 68 92 99 100 101
Fitting: 1 x User defined (Correction Factor 1.000).

See our luminaire
catalog for an image of
the luminaire.



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Estádio / Planning data

Maintenance factor: 0.90, ULR (Upward Light Ratio): 14.5%

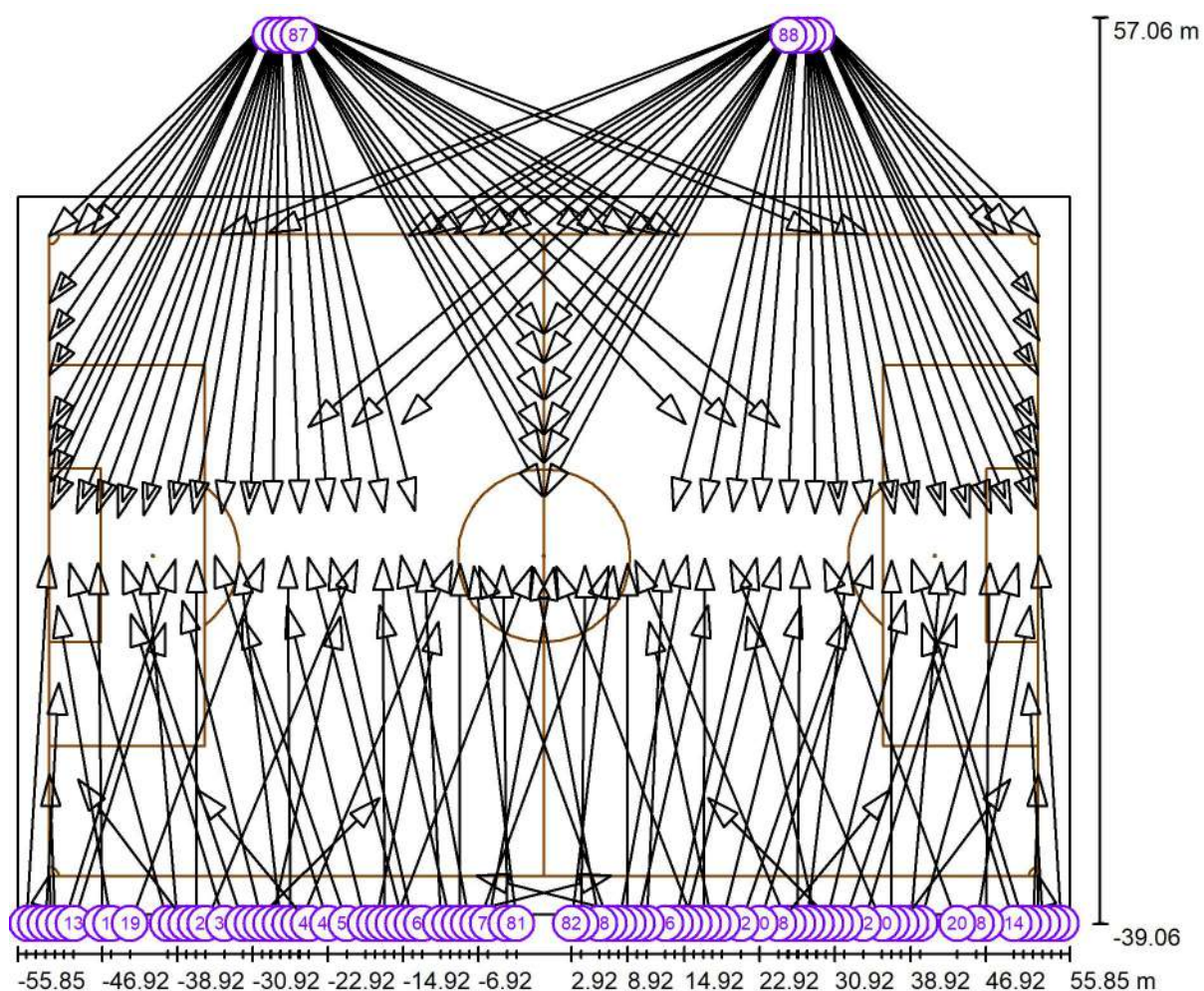
Scale 1:891

Luminaire Parts List

No.	Pieces	Designation (Correction Factor)	Φ (Luminaire) [lm]	Φ (Lamps) [lm]	P [W]
1	188	Projektor - 960 W - 25x25 - IRC70 (1.000)	158398	158400	960.5
Total:			29778802	Total: 29779200	180581.5

Operator
Telephone
Fax
e-Mail

Estádio / Sport Luminaires (Coordinates List)



Scale 1 : 799

List of the Sport Luminaires

Luminaire	Index	Position [m]			Aiming Point [m]			Angle [°]	Alignment	Pole
		X	Y	Z	X	Y	Z			
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-52.587	33.865	0.000	37.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	52.587	33.865	0.000	37.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	3	-54.916	-39.000	22.230	-52.574	0.025	0.000	29.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	4	54.916	-39.000	22.230	52.574	0.025	0.000	29.6	(C 90, G IMax)	/

Operator
Telephone
Fax
e-Mail

Estádio / Sport Luminares (Coordinates List)

List of the Sport Luminares

Luminaire	Index	Position [m]			Aiming Point [m]			Angle [°]	Alignment	Pole
		X	Y	Z	X	Y	Z			
Projektor - 960 W - 25x25 - IRC70	5	-53.916	-39.000	22.230	-52.501	-33.875	0.000	76.5	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	6	53.916	-39.000	22.230	52.501	-33.875	0.000	76.5	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	7	-52.916	-39.000	22.230	-51.473	-13.476	0.000	41.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	8	52.916	-39.000	22.230	51.473	-13.476	0.000	41.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	9	-51.916	-39.000	22.230	-52.501	-23.162	0.000	54.5	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	10	51.916	-39.000	22.230	52.501	-23.162	0.000	54.5	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	11	-50.916	-39.000	22.230	-39.072	-0.341	0.000	28.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	12	50.916	-39.000	22.230	39.072	-0.341	0.000	28.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	13	-49.916	-39.000	22.230	-40.174	-7.129	0.000	33.7	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	14	49.916	-39.000	22.230	40.174	-7.129	0.000	33.7	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	15	-46.916	-39.000	22.230	-47.327	-0.746	0.000	30.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	16	46.916	-39.000	22.230	47.327	-0.746	0.000	30.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	17	-45.916	-39.000	22.230	-51.625	-5.268	0.000	33.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	18	45.916	-39.000	22.230	51.625	-5.268	0.000	33.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	19	-43.916	-39.000	22.230	-29.753	-0.268	0.000	28.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	20	43.916	-39.000	22.230	29.753	-0.268	0.000	28.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	21	-39.916	-39.000	22.230	-50.337	-0.759	0.000	29.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	22	39.916	-39.000	22.230	50.337	-0.759	0.000	29.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	23	-38.916	-39.000	22.230	-42.178	-0.688	0.000	30.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	24	38.916	-39.000	22.230	42.178	-0.688	0.000	30.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	25	-37.916	-39.000	22.230	-49.477	-23.706	0.000	49.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	26	37.916	-39.000	22.230	49.477	-23.706	0.000	49.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	27	-36.916	-39.000	22.230	-36.883	-0.512	0.000	30.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	28	36.916	-39.000	22.230	36.883	-0.512	0.000	30.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	29	-35.916	-39.000	22.230	-19.774	-0.415	0.000	28.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	30	35.916	-39.000	22.230	19.774	-0.415	0.000	28.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	31	-33.916	-39.000	22.230	-43.824	-6.198	0.000	33.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	32	33.916	-39.000	22.230	43.824	-6.198	0.000	33.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	33	-31.916	-39.000	22.230	-44.723	-0.562	0.000	28.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	34	31.916	-39.000	22.230	44.723	-0.562	0.000	28.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	35	-30.916	-39.000	22.230	-17.434	-25.682	0.000	49.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	36	30.916	-39.000	22.230	17.434	-25.682	0.000	49.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	37	-29.916	-39.000	22.230	-38.339	-4.744	0.000	32.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	38	29.916	-39.000	22.230	38.339	-4.744	0.000	32.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	39	-28.916	-39.000	22.230	-21.637	-6.485	0.000	33.7	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	40	28.916	-39.000	22.230	21.637	-6.485	0.000	33.7	(C 90, G IMax)	/

Operator
Telephone
Fax
e-Mail

Estádio / Sport Luminaires (Coordinates List)

List of the Sport Luminaires

Luminaire	Index	Position [m]			Aiming Point [m]			Angle [°]	Alignment	Pole
		X	Y	Z	X	Y	Z			
Projektor - 960 W - 25x25 - IRC70	41	-27.916	-39.000	22.230	-32.301	-0.688	0.000	30.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	42	27.916	-39.000	22.230	32.301	-0.688	0.000	30.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	43	-26.916	-39.000	22.230	-27.219	-0.044	0.000	29.7	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	44	26.916	-39.000	22.230	27.219	-0.044	0.000	29.7	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	45	-25.916	-39.000	22.230	-9.721	-0.488	0.000	28.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	46	25.916	-39.000	22.230	9.721	-0.488	0.000	28.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	47	-24.916	-39.000	22.230	-36.773	-24.764	0.000	50.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	48	24.916	-39.000	22.230	36.773	-24.764	0.000	50.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	49	-22.916	-39.000	22.230	-34.890	0.025	0.000	28.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	50	22.916	-39.000	22.230	34.890	0.025	0.000	28.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	51	-20.916	-39.000	22.230	-32.087	-6.485	0.000	32.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	52	20.916	-39.000	22.230	32.087	-6.485	0.000	32.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	53	-18.916	-39.000	22.230	-27.259	-5.331	0.000	32.7	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	54	18.916	-39.000	22.230	27.259	-5.331	0.000	32.7	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	55	-17.916	-39.000	22.230	-11.188	-6.986	0.000	34.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	56	17.916	-39.000	22.230	11.188	-6.986	0.000	34.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	57	-16.916	-39.000	22.230	-17.087	-0.278	0.000	29.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	58	16.916	-39.000	22.230	17.087	-0.278	0.000	29.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	59	-15.916	-39.000	22.230	-1.283	-1.075	0.000	28.7	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	60	15.916	-39.000	22.230	1.283	-1.075	0.000	28.7	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	61	-14.916	-39.000	22.230	-24.984	-0.121	0.000	29.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	62	14.916	-39.000	22.230	24.984	-0.121	0.000	29.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	63	-13.916	-39.000	22.230	-22.568	-0.187	0.000	29.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	64	13.916	-39.000	22.230	22.568	-0.187	0.000	29.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	65	-12.916	-39.000	22.230	7.129	-33.940	0.000	47.1	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	66	12.916	-39.000	22.230	-7.129	-33.940	0.000	47.1	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	67	-10.916	-39.000	22.230	-12.691	-0.401	0.000	29.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	68	10.916	-39.000	22.230	12.691	-0.401	0.000	29.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	69	-9.916	-39.000	22.230	-17.426	-5.258	0.000	32.7	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	70	9.916	-39.000	22.230	17.426	-5.258	0.000	32.7	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	71	-8.916	-39.000	22.230	-8.903	-0.824	0.000	30.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	72	8.916	-39.000	22.230	8.903	-0.824	0.000	30.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	73	-7.916	-39.000	22.230	-15.151	0.025	0.000	29.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	74	7.916	-39.000	22.230	15.151	0.025	0.000	29.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	75	-6.916	-39.000	22.230	6.862	-1.075	0.000	28.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	76	6.916	-39.000	22.230	-6.862	-1.075	0.000	28.9	(C 90, G IMax)	/

Operator
Telephone
Fax
e-Mail

Estádio / Sport Luminaires (Coordinates List)

List of the Sport Luminaires

Luminaire	Index	Position [m]			Aiming Point [m]			Angle [°]	Alignment	Pole
		X	Y	Z	X	Y	Z			
Projektor - 960 W - 25x25 - IRC70	77	-5.916	-39.000	22.230	1.050	-1.260	0.000	30.1	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	78	5.916	-39.000	22.230	-1.050	-1.260	0.000	30.1	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	79	-3.916	-39.000	22.230	-4.383	-1.058	0.000	30.4	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	80	3.916	-39.000	22.230	4.383	-1.058	0.000	30.4	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	81	-2.916	-39.000	22.230	-7.395	-1.117	0.000	30.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	82	2.916	-39.000	22.230	7.395	-1.117	0.000	30.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	83	-28.000	57.000	25.130	-49.607	4.522	0.000	23.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	83	-28.000	57.000	25.130	-49.607	4.522	0.000	23.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	84	28.000	57.000	25.130	49.607	4.522	0.000	23.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	84	28.000	57.000	25.130	49.607	4.522	0.000	23.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	85	-27.000	57.000	25.130	-0.050	9.905	0.000	24.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	86	27.000	57.000	25.130	0.050	9.905	0.000	24.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	87	-26.000	57.000	25.130	24.986	13.561	0.000	20.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	88	26.000	57.000	25.130	-24.986	13.561	0.000	20.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-48.079	34.017	0.000	40.1	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	48.079	34.017	0.000	40.1	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-49.836	34.094	0.000	39.1	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	49.836	34.094	0.000	39.1	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-52.511	26.758	0.000	33.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-52.511	26.758	0.000	33.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	52.511	26.758	0.000	33.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	52.511	26.758	0.000	33.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-52.587	22.785	0.000	31.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-52.587	22.785	0.000	31.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	52.587	22.785	0.000	31.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	52.587	22.785	0.000	31.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-52.511	19.117	0.000	29.4	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-52.511	19.117	0.000	29.4	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	52.511	19.117	0.000	29.4	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	52.511	19.117	0.000	29.4	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-52.511	13.386	0.000	26.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-52.511	13.386	0.000	26.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	52.511	13.386	0.000	26.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	52.511	13.386	0.000	26.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-52.511	10.558	0.000	25.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-52.511	10.558	0.000	25.8	(C 90, G IMax)	/

Operator
Telephone
Fax
e-Mail

Estádio / Sport Luminaires (Coordinates List)

List of the Sport Luminaires

Luminaire	Index	Position [m]			Aiming Point [m]			Angle [°]	Alignment	Pole
		X	Y	Z	X	Y	Z			
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	52.511	10.558	0.000	25.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	52.511	10.558	0.000	25.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-52.358	7.807	0.000	24.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-52.358	7.807	0.000	24.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	52.358	7.807	0.000	24.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	52.358	7.807	0.000	24.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-52.281	4.980	0.000	23.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	1	-29.000	57.000	25.130	-52.281	4.980	0.000	23.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	52.281	4.980	0.000	23.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	2	29.000	57.000	25.130	52.281	4.980	0.000	23.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	83	-28.000	57.000	25.130	-47.467	4.522	0.000	24.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	83	-28.000	57.000	25.130	-47.467	4.522	0.000	24.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	84	28.000	57.000	25.130	47.467	4.522	0.000	24.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	84	28.000	57.000	25.130	47.467	4.522	0.000	24.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	83	-28.000	57.000	25.130	-45.251	4.063	0.000	24.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	83	-28.000	57.000	25.130	-45.251	4.063	0.000	24.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	84	28.000	57.000	25.130	45.251	4.063	0.000	24.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	84	28.000	57.000	25.130	45.251	4.063	0.000	24.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	83	-28.000	57.000	25.130	-42.500	4.292	0.000	24.7	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	83	-28.000	57.000	25.130	-42.500	4.292	0.000	24.7	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	84	28.000	57.000	25.130	42.500	4.292	0.000	24.7	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	84	28.000	57.000	25.130	42.500	4.292	0.000	24.7	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	83	-28.000	57.000	25.130	-39.555	4.432	0.000	25.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	83	-28.000	57.000	25.130	-39.555	4.432	0.000	25.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	84	28.000	57.000	25.130	39.555	4.432	0.000	25.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	84	28.000	57.000	25.130	39.555	4.432	0.000	25.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	83	-28.000	57.000	25.130	-37.170	4.502	0.000	25.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	83	-28.000	57.000	25.130	-37.170	4.502	0.000	25.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	84	28.000	57.000	25.130	37.170	4.502	0.000	25.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	84	28.000	57.000	25.130	37.170	4.502	0.000	25.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	83	-28.000	57.000	25.130	-34.223	4.502	0.000	25.4	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	84	28.000	57.000	25.130	34.223	4.502	0.000	25.4	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	83	-28.000	57.000	25.130	-25.872	4.572	0.000	25.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	84	28.000	57.000	25.130	25.872	4.572	0.000	25.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	83	-28.000	57.000	25.130	-31.346	4.432	0.000	25.5	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	83	-28.000	57.000	25.130	-31.346	4.432	0.000	25.5	(C 90, G IMax)	/

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Estádio / Sport Luminaires (Coordinates List)

List of the Sport Luminaires

Luminaire	Index	Position [m]			Aiming Point [m]			Angle [°]	Alignment	Pole
		X	Y	Z	X	Y	Z			
Projektor - 960 W - 25x25 - IRC70	84	28.000	57.000	25.130	31.346	4.432	0.000	25.5	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	84	28.000	57.000	25.130	31.346	4.432	0.000	25.5	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	83	-28.000	57.000	25.130	-28.820	4.502	0.000	25.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	84	28.000	57.000	25.130	28.820	4.502	0.000	25.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	85	-27.000	57.000	25.130	-0.050	23.518	0.000	30.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	86	27.000	57.000	25.130	0.050	23.518	0.000	30.3	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	85	-27.000	57.000	25.130	-0.050	20.430	0.000	29.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	86	27.000	57.000	25.130	0.050	20.430	0.000	29.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	85	-27.000	57.000	25.130	-0.121	16.571	0.000	27.4	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	86	27.000	57.000	25.130	0.121	16.571	0.000	27.4	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	85	-27.000	57.000	25.130	-0.050	12.852	0.000	25.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	86	27.000	57.000	25.130	0.050	12.852	0.000	25.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	85	-27.000	57.000	25.130	-0.121	6.256	0.000	23.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	86	27.000	57.000	25.130	0.121	6.256	0.000	23.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	85	-27.000	57.000	25.130	-22.925	4.783	0.000	25.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	86	27.000	57.000	25.130	22.925	4.783	0.000	25.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	85	-27.000	57.000	25.130	-20.048	4.713	0.000	25.5	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	86	27.000	57.000	25.130	20.048	4.713	0.000	25.5	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	85	-27.000	57.000	25.130	-13.733	4.783	0.000	25.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	86	27.000	57.000	25.130	13.733	4.783	0.000	25.0	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	85	-27.000	57.000	25.130	-16.961	4.642	0.000	25.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	86	27.000	57.000	25.130	16.961	4.642	0.000	25.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	87	-26.000	57.000	25.130	15.034	13.914	0.000	22.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	88	26.000	57.000	25.130	-15.034	13.914	0.000	22.9	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	87	-26.000	57.000	25.130	20.327	13.632	0.000	21.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	88	26.000	57.000	25.130	-20.327	13.632	0.000	21.6	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	87	-26.000	57.000	25.130	34.448	34.017	0.000	21.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	88	26.000	57.000	25.130	-34.448	34.017	0.000	21.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	87	-26.000	57.000	25.130	29.252	34.247	0.000	22.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	88	26.000	57.000	25.130	-29.252	34.247	0.000	22.8	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	87	-26.000	57.000	25.130	14.334	33.903	0.000	28.4	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	88	26.000	57.000	25.130	-14.334	33.903	0.000	28.4	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	87	-26.000	57.000	25.130	4.723	34.017	0.000	33.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	88	26.000	57.000	25.130	-4.723	34.017	0.000	33.2	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	87	-26.000	57.000	25.130	6.863	34.017	0.000	32.1	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	88	26.000	57.000	25.130	-6.863	34.017	0.000	32.1	(C 90, G IMax)	/

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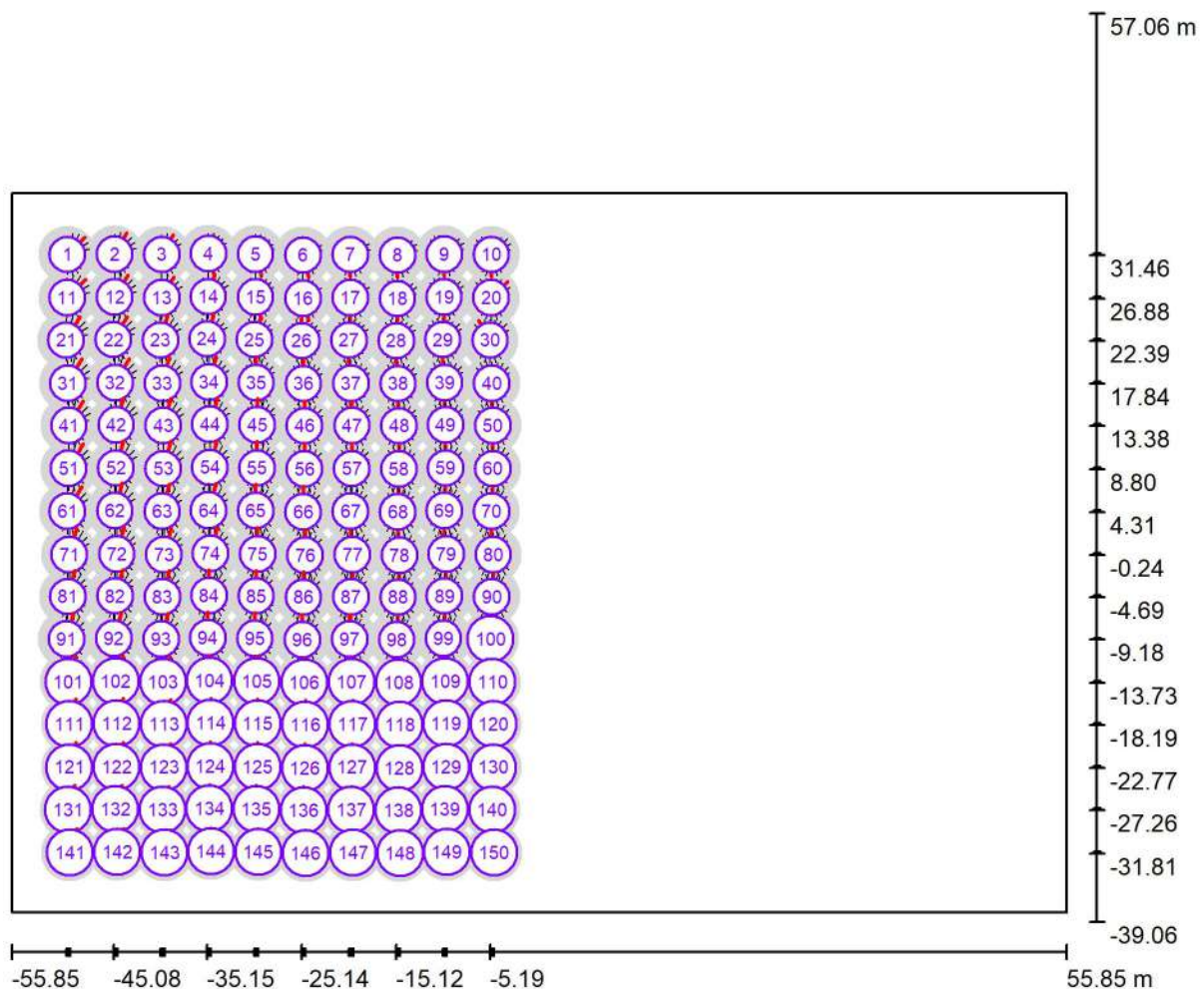
Estádio / Sport Luminaires (Coordinates List)

List of the Sport Luminaires

Luminaire	Index	Position [m]			Aiming Point [m]			Angle [°]	Alignment	Pole
		X	Y	Z	X	Y	Z			
Projektor - 960 W - 25x25 - IRC70	87	-26.000	57.000	25.130	9.537	34.094	0.000	30.7	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	88	26.000	57.000	25.130	-9.537	34.094	0.000	30.7	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	87	-26.000	57.000	25.130	12.212	34.017	0.000	29.4	(C 90, G IMax)	/
Projektor - 960 W - 25x25 - IRC70	88	26.000	57.000	25.130	-12.212	34.017	0.000	29.4	(C 90, G IMax)	/

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Estádio / GR Observer (Results Overview)



Scale 1 : 799

GR Observerlist

No.	Designation	Position [m]			Viewing sector [°]			Slope angle	Max
		X	Y	Z	Start	End	Increment		
1	GR Observer 2	-49.957	31.525	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
2	GR Observer 2	-44.941	31.585	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
3	GR Observer 2	-39.945	31.521	1.500	0.0	360.0	15.0	-2.0	37 ²⁾
4	GR Observer 2	-35.012	31.649	1.500	0.0	360.0	15.0	-2.0	36 ²⁾

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Estádio / GR Observer (Results Overview)

GR Observerlist

No.	Designation	Position [m]			Viewing sector [°]				Max
		X	Y	Z	Start	End	Increment	Slope angle	
5	GR Observer 2	-30.016	31.585	1.500	0.0	360.0	15.0	-2.0	37 ²⁾
6	GR Observer 2	-24.996	31.461	1.500	0.0	360.0	15.0	-2.0	37 ²⁾
7	GR Observer 2	-19.981	31.521	1.500	0.0	360.0	15.0	-2.0	37 ²⁾
8	GR Observer 2	-14.984	31.457	1.500	0.0	360.0	15.0	-2.0	37 ²⁾
9	GR Observer 2	-10.051	31.585	1.500	0.0	360.0	15.0	-2.0	37 ²⁾
10	GR Observer 2	-5.056	31.521	1.500	0.0	360.0	15.0	-2.0	37 ²⁾
11	GR Observer 2	-49.968	26.945	1.500	0.0	360.0	15.0	-2.0	42 ²⁾
12	GR Observer 2	-44.952	27.005	1.500	0.0	360.0	15.0	-2.0	43 ²⁾
13	GR Observer 2	-39.956	26.941	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
14	GR Observer 2	-35.023	27.069	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
15	GR Observer 2	-30.027	27.005	1.500	0.0	360.0	15.0	-2.0	37 ²⁾
16	GR Observer 2	-25.007	26.881	1.500	0.0	360.0	15.0	-2.0	37 ²⁾
17	GR Observer 2	-19.991	26.941	1.500	0.0	360.0	15.0	-2.0	37 ²⁾
18	GR Observer 2	-14.995	26.877	1.500	0.0	360.0	15.0	-2.0	38 ²⁾
19	GR Observer 2	-10.062	27.005	1.500	0.0	360.0	15.0	-2.0	38 ²⁾
20	GR Observer 2	-5.066	26.941	1.500	0.0	360.0	15.0	-2.0	38 ²⁾
21	GR Observer 2	-50.096	22.461	1.500	0.0	360.0	15.0	-2.0	45 ²⁾
22	GR Observer 2	-45.080	22.521	1.500	0.0	360.0	15.0	-2.0	45 ²⁾
23	GR Observer 2	-40.084	22.457	1.500	0.0	360.0	15.0	-2.0	43 ²⁾
24	GR Observer 2	-35.151	22.585	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
25	GR Observer 2	-30.155	22.521	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
26	GR Observer 2	-25.135	22.397	1.500	0.0	360.0	15.0	-2.0	38 ²⁾
27	GR Observer 2	-20.119	22.457	1.500	0.0	360.0	15.0	-2.0	38 ²⁾
28	GR Observer 2	-15.123	22.393	1.500	0.0	360.0	15.0	-2.0	38 ²⁾
29	GR Observer 2	-10.190	22.521	1.500	0.0	360.0	15.0	-2.0	38 ²⁾
30	GR Observer 2	-5.194	22.457	1.500	0.0	360.0	15.0	-2.0	38 ²⁾
31	GR Observer 2	-49.904	17.912	1.500	0.0	360.0	15.0	-2.0	46 ²⁾
32	GR Observer 2	-44.888	17.972	1.500	0.0	360.0	15.0	-2.0	46 ²⁾
33	GR Observer 2	-39.892	17.908	1.500	0.0	360.0	15.0	-2.0	45 ²⁾
34	GR Observer 2	-34.959	18.036	1.500	0.0	360.0	15.0	-2.0	43 ²⁾
35	GR Observer 2	-29.963	17.972	1.500	0.0	360.0	15.0	-2.0	42 ²⁾
36	GR Observer 2	-24.943	17.848	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
37	GR Observer 2	-19.927	17.908	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
38	GR Observer 2	-14.931	17.844	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
39	GR Observer 2	-9.998	17.972	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
40	GR Observer 2	-5.002	17.908	1.500	0.0	360.0	15.0	-2.0	39 ²⁾

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Estádio / GR Observer (Results Overview)

GR Observerlist

No.	Designation	Position [m]			Viewing sector [°]				Max
		X	Y	Z	Start	End	Increment	Slope angle	
41	GR Observer 2	-49.797	13.445	1.500	0.0	360.0	15.0	-2.0	47 ²⁾
42	GR Observer 2	-44.781	13.505	1.500	0.0	360.0	15.0	-2.0	46 ²⁾
43	GR Observer 2	-39.785	13.441	1.500	0.0	360.0	15.0	-2.0	46 ²⁾
44	GR Observer 2	-34.852	13.569	1.500	0.0	360.0	15.0	-2.0	44 ²⁾
45	GR Observer 2	-29.856	13.505	1.500	0.0	360.0	15.0	-2.0	43 ²⁾
46	GR Observer 2	-24.836	13.381	1.500	0.0	360.0	15.0	-2.0	42 ²⁾
47	GR Observer 2	-19.821	13.441	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
48	GR Observer 2	-14.824	13.377	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
49	GR Observer 2	-9.891	13.505	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
50	GR Observer 2	-4.896	13.441	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
51	GR Observer 2	-49.808	8.865	1.500	0.0	360.0	15.0	-2.0	47 ²⁾
52	GR Observer 2	-44.792	8.925	1.500	0.0	360.0	15.0	-2.0	47 ²⁾
53	GR Observer 2	-39.796	8.861	1.500	0.0	360.0	15.0	-2.0	46 ²⁾
54	GR Observer 2	-34.863	8.989	1.500	0.0	360.0	15.0	-2.0	45 ²⁾
55	GR Observer 2	-29.867	8.925	1.500	0.0	360.0	15.0	-2.0	44 ²⁾
56	GR Observer 2	-24.847	8.801	1.500	0.0	360.0	15.0	-2.0	42 ²⁾
57	GR Observer 2	-19.831	8.861	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
58	GR Observer 2	-14.835	8.797	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
59	GR Observer 2	-9.902	8.925	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
60	GR Observer 2	-4.906	8.861	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
61	GR Observer 2	-49.936	4.381	1.500	0.0	360.0	15.0	-2.0	46 ²⁾
62	GR Observer 2	-44.920	4.441	1.500	0.0	360.0	15.0	-2.0	47 ²⁾
63	GR Observer 2	-39.924	4.377	1.500	0.0	360.0	15.0	-2.0	46 ²⁾
64	GR Observer 2	-34.991	4.505	1.500	0.0	360.0	15.0	-2.0	45 ²⁾
65	GR Observer 2	-29.995	4.441	1.500	0.0	360.0	15.0	-2.0	44 ²⁾
66	GR Observer 2	-24.975	4.317	1.500	0.0	360.0	15.0	-2.0	43 ²⁾
67	GR Observer 2	-19.959	4.377	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
68	GR Observer 2	-14.963	4.313	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
69	GR Observer 2	-10.030	4.441	1.500	0.0	360.0	15.0	-2.0	42 ²⁾
70	GR Observer 2	-5.034	4.377	1.500	0.0	360.0	15.0	-2.0	42 ²⁾
71	GR Observer 2	-49.744	-0.168	1.500	0.0	360.0	15.0	-2.0	46 ²⁾
72	GR Observer 2	-44.728	-0.108	1.500	0.0	360.0	15.0	-2.0	46 ²⁾
73	GR Observer 2	-39.732	-0.172	1.500	0.0	360.0	15.0	-2.0	45 ²⁾
74	GR Observer 2	-34.799	-0.044	1.500	0.0	360.0	15.0	-2.0	44 ²⁾
75	GR Observer 2	-29.803	-0.108	1.500	0.0	360.0	15.0	-2.0	43 ²⁾
76	GR Observer 2	-24.783	-0.232	1.500	0.0	360.0	15.0	-2.0	42 ²⁾

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Estádio / GR Observer (Results Overview)

GR Observerlist

No.	Designation	Position [m]			Viewing sector [°]				Max
		X	Y	Z	Start	End	Increment	Slope angle	
77	GR Observer 2	-19.767	-0.172	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
78	GR Observer 2	-14.771	-0.236	1.500	0.0	360.0	15.0	-2.0	42 ²⁾
79	GR Observer 2	-9.838	-0.108	1.500	0.0	360.0	15.0	-2.0	42 ²⁾
80	GR Observer 2	-4.842	-0.172	1.500	0.0	360.0	15.0	-2.0	42 ²⁾
81	GR Observer 2	-49.907	-4.626	1.500	0.0	360.0	15.0	-2.0	45 ²⁾
82	GR Observer 2	-44.891	-4.566	1.500	0.0	360.0	15.0	-2.0	45 ²⁾
83	GR Observer 2	-39.895	-4.630	1.500	0.0	360.0	15.0	-2.0	45 ²⁾
84	GR Observer 2	-34.962	-4.502	1.500	0.0	360.0	15.0	-2.0	43 ²⁾
85	GR Observer 2	-29.966	-4.566	1.500	0.0	360.0	15.0	-2.0	43 ²⁾
86	GR Observer 2	-24.946	-4.690	1.500	0.0	360.0	15.0	-2.0	42 ²⁾
87	GR Observer 2	-19.930	-4.630	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
88	GR Observer 2	-14.934	-4.694	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
89	GR Observer 2	-10.001	-4.566	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
90	GR Observer 2	-5.005	-4.630	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
91	GR Observer 2	-50.035	-9.110	1.500	0.0	360.0	15.0	-2.0	45 ²⁾
92	GR Observer 2	-45.019	-9.050	1.500	0.0	360.0	15.0	-2.0	45 ²⁾
93	GR Observer 2	-40.023	-9.114	1.500	0.0	360.0	15.0	-2.0	44 ²⁾
94	GR Observer 2	-35.090	-8.986	1.500	0.0	360.0	15.0	-2.0	42 ²⁾
95	GR Observer 2	-30.094	-9.050	1.500	0.0	360.0	15.0	-2.0	42 ²⁾
96	GR Observer 2	-25.074	-9.174	1.500	0.0	360.0	15.0	-2.0	42 ²⁾
97	GR Observer 2	-20.058	-9.114	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
98	GR Observer 2	-15.062	-9.178	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
99	GR Observer 2	-10.129	-9.050	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
100	GR Observer 2	-5.133	-9.114	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
101	GR Observer 2	-49.843	-13.659	1.500	0.0	360.0	15.0	-2.0	44 ²⁾
102	GR Observer 2	-44.827	-13.599	1.500	0.0	360.0	15.0	-2.0	44 ²⁾
103	GR Observer 2	-39.831	-13.663	1.500	0.0	360.0	15.0	-2.0	43 ²⁾
104	GR Observer 2	-34.898	-13.535	1.500	0.0	360.0	15.0	-2.0	42 ²⁾
105	GR Observer 2	-29.902	-13.599	1.500	0.0	360.0	15.0	-2.0	42 ²⁾
106	GR Observer 2	-24.882	-13.723	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
107	GR Observer 2	-19.866	-13.663	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
108	GR Observer 2	-14.870	-13.727	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
109	GR Observer 2	-9.937	-13.599	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
110	GR Observer 2	-4.941	-13.663	1.500	0.0	360.0	15.0	-2.0	38 ²⁾
111	GR Observer 2	-49.736	-18.127	1.500	0.0	360.0	15.0	-2.0	43 ²⁾
112	GR Observer 2	-44.720	-18.067	1.500	0.0	360.0	15.0	-2.0	43 ²⁾

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Estádio / GR Observer (Results Overview)

GR Observerlist

No.	Designation	Position [m]			Viewing sector [°]				Max
		X	Y	Z	Start	End	Increment	Slope angle	
113	GR Observer 2	-39.724	-18.131	1.500	0.0	360.0	15.0	-2.0	42 ²⁾
114	GR Observer 2	-34.791	-18.003	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
115	GR Observer 2	-29.795	-18.067	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
116	GR Observer 2	-24.775	-18.191	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
117	GR Observer 2	-19.760	-18.131	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
118	GR Observer 2	-14.763	-18.195	1.500	0.0	360.0	15.0	-2.0	38 ²⁾
119	GR Observer 2	-9.830	-18.067	1.500	0.0	360.0	15.0	-2.0	38 ²⁾
120	GR Observer 2	-4.835	-18.131	1.500	0.0	360.0	15.0	-2.0	38 ²⁾
121	GR Observer 2	-49.747	-22.707	1.500	0.0	360.0	15.0	-2.0	42 ²⁾
122	GR Observer 2	-44.731	-22.647	1.500	0.0	360.0	15.0	-2.0	42 ²⁾
123	GR Observer 2	-39.735	-22.711	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
124	GR Observer 2	-34.802	-22.583	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
125	GR Observer 2	-29.806	-22.647	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
126	GR Observer 2	-24.786	-22.771	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
127	GR Observer 2	-19.770	-22.711	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
128	GR Observer 2	-14.774	-22.775	1.500	0.0	360.0	15.0	-2.0	37 ²⁾
129	GR Observer 2	-9.841	-22.647	1.500	0.0	360.0	15.0	-2.0	38 ²⁾
130	GR Observer 2	-4.845	-22.711	1.500	0.0	360.0	15.0	-2.0	38 ²⁾
131	GR Observer 2	-49.875	-27.191	1.500	0.0	360.0	15.0	-2.0	42 ²⁾
132	GR Observer 2	-44.859	-27.131	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
133	GR Observer 2	-39.863	-27.195	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
134	GR Observer 2	-34.930	-27.067	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
135	GR Observer 2	-29.934	-27.131	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
136	GR Observer 2	-24.914	-27.255	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
137	GR Observer 2	-19.898	-27.195	1.500	0.0	360.0	15.0	-2.0	38 ²⁾
138	GR Observer 2	-14.902	-27.259	1.500	0.0	360.0	15.0	-2.0	37 ²⁾
139	GR Observer 2	-9.969	-27.131	1.500	0.0	360.0	15.0	-2.0	37 ²⁾
140	GR Observer 2	-4.973	-27.195	1.500	0.0	360.0	15.0	-2.0	37 ²⁾
141	GR Observer 2	-49.683	-31.740	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
142	GR Observer 2	-44.667	-31.680	1.500	0.0	360.0	15.0	-2.0	40 ²⁾
143	GR Observer 2	-39.671	-31.744	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
144	GR Observer 2	-34.738	-31.616	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
145	GR Observer 2	-29.742	-31.680	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
146	GR Observer 2	-24.722	-31.804	1.500	0.0	360.0	15.0	-2.0	39 ²⁾
147	GR Observer 2	-19.706	-31.744	1.500	0.0	360.0	15.0	-2.0	38 ²⁾
148	GR Observer 2	-14.710	-31.808	1.500	0.0	360.0	15.0	-2.0	37 ²⁾

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Estádio / GR Observer (Results Overview)

GR Observerlist

No.	Designation	Position [m]			Viewing sector [°]				Max
		X	Y	Z	Start	End	Increment	Slope angle	
149	GR Observer 2	-9.777	-31.680	1.500	0.0	360.0	15.0	-2.0	37 ²⁾
150	GR Observer 2	-4.781	-31.744	1.500	0.0	360.0	15.0	-2.0	37 ²⁾

2) The calculated equivalent veil luminance of the environment is based on the assumption of a complete diffuse reflection behavior of the environment (acc. EN 12464-2).



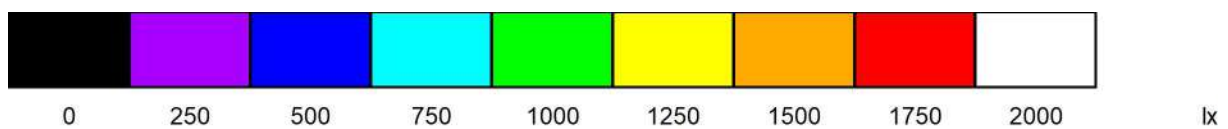
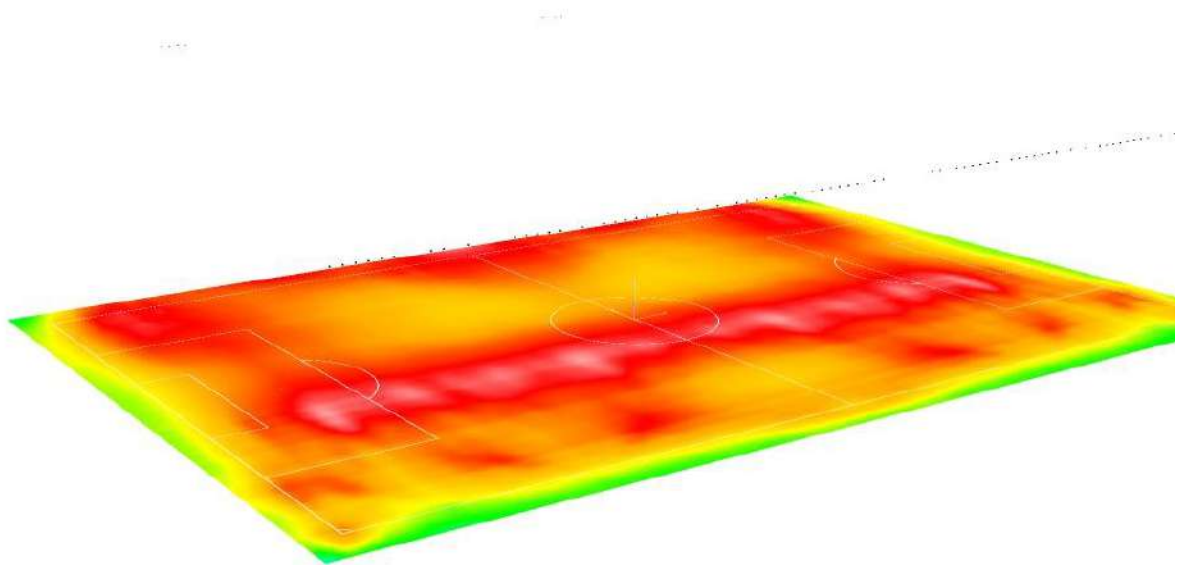
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Estádio / 3D Rendering



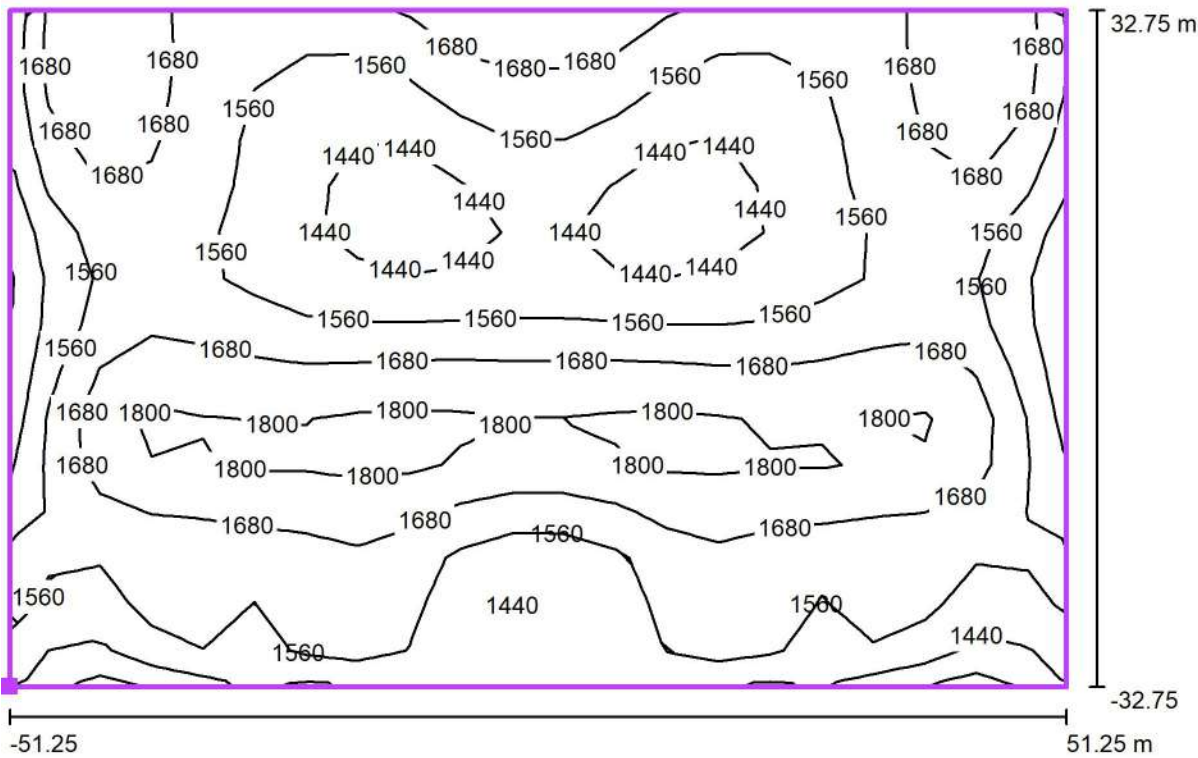
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Estádio / False Colour Rendering



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Estádio / Grade de calculo (Horizontal) / Isolines (E, Horizontal)



Values in Lux, Scale 1 : 733

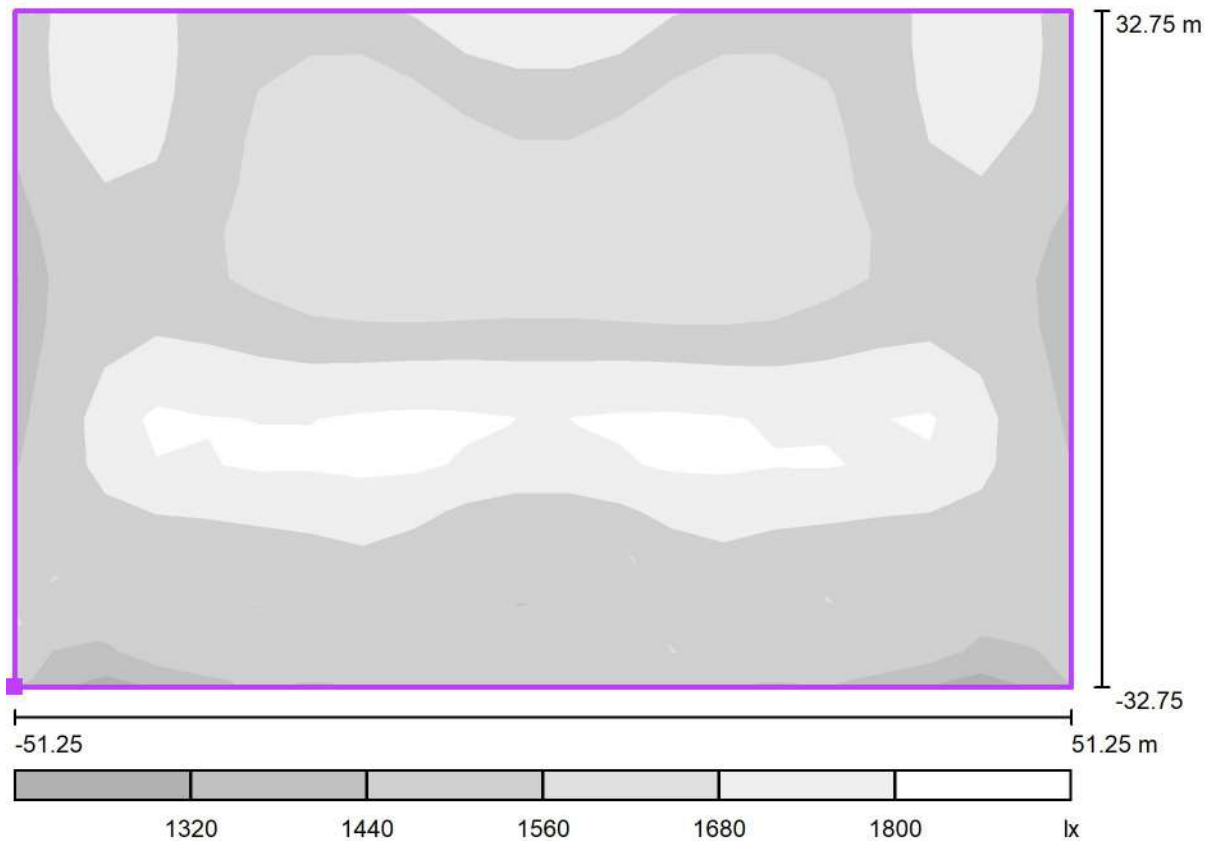
Position of surface in external scene:
Marked point: (-51.250 m, -32.750 m,
0.000 m)



Grid: 21 x 15 Points

E_{av} [lx]	E_{min} [lx]	E_{max} [lx]	u_0	E_{min} / E_{max}
1601	1309	1864	0.82	0.70

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Estádio / Grade de calculo (Horizontal) / Greyscale (E, Horizontal)

Scale 1 : 733

Position of surface in external scene:
Marked point: (-51.250 m, -32.750 m,
0.000 m)



Grid: 21 x 15 Points

E_{av} [lx]
1601

E_{min} [lx]
1309

E_{max} [lx]
1864

u_0
0.82

E_{min} / E_{max}
0.70

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Estádio / Grade de calculo (Horizontal) / Value Chart (E, Horizontal)

1580	1757	1613	1617	1706	1771	1706	1618	1610	1754	1603	32.75 m
1608	1755	1601	1520	1634	1666	1633	1518	1593	1749	1625	
1567	1729	1583	1464	1517	1608	1518	1459	1573	1721	1578	
1527	1710	1578	1444	1424	1535	1425	1437	1567	1701	1533	
1452	1672	1567	1428	1380	1486	1380	1420	1556	1661	1455	
1386	1607	1544	1434	1395	1464	1393	1425	1533	1596	1383	
1376	1628	1582	1507	1484	1503	1480	1497	1573	1617	1368	
1403	1697	1672	1627	1644	1636	1640	1618	1664	1685	1389	
1448	1806	1777	1771	1788	1769	1785	1762	1770	1794	1429	
1489	1858	1831	1837	1843	1811	1840	1829	1823	1847	1468	
1513	1762	1784	1772	1744	1677	1743	1764	1777	1755	1495	
1547	1609	1627	1662	1605	1541	1607	1653	1622	1606	1536	
1628	1543	1549	1644	1537	1414	1543	1634	1545	1540	1620	
1511	1500	1548	1745	1519	1434	1529	1742	1545	1487	1499	
1461	1378	1480	1517	1516	1508	1521	1517	1475	1364	1452	-32.75
											51.25 m
											-51.25

Values in Lux, Scale 1 : 733

Not all calculated values could be displayed.

Position of surface in external scene:

Marked point: (-51.250 m, -32.750 m,
0.000 m)



Grid: 21 x 15 Points

E_{av} [lx]
1601

E_{min} [lx]
1309

E_{max} [lx]
1864

u_0
0.82

E_{min} / E_{max}
0.70

