

Soccer Field Lighting Simulation

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

Date: 31.08.2017
Operator:

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Soccer Field Lighting Simulation

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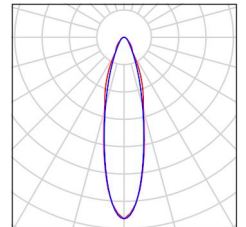
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Soccer Field Lighting Simulation / Luminaire parts list

14 Pieces FL06-900 5000K Ra80 30DEG F01604
Article No.:
Luminous flux (Luminaire): 107565 lm
Luminous flux (Lamps): 107580 lm
Luminaire Wattage: 914.5 W
Luminaire classification according to CIE: 100
CIE flux code: 83 94 99 100 100
Fitting: 1 x 5000K Ra80 (Correction Factor 1.000).

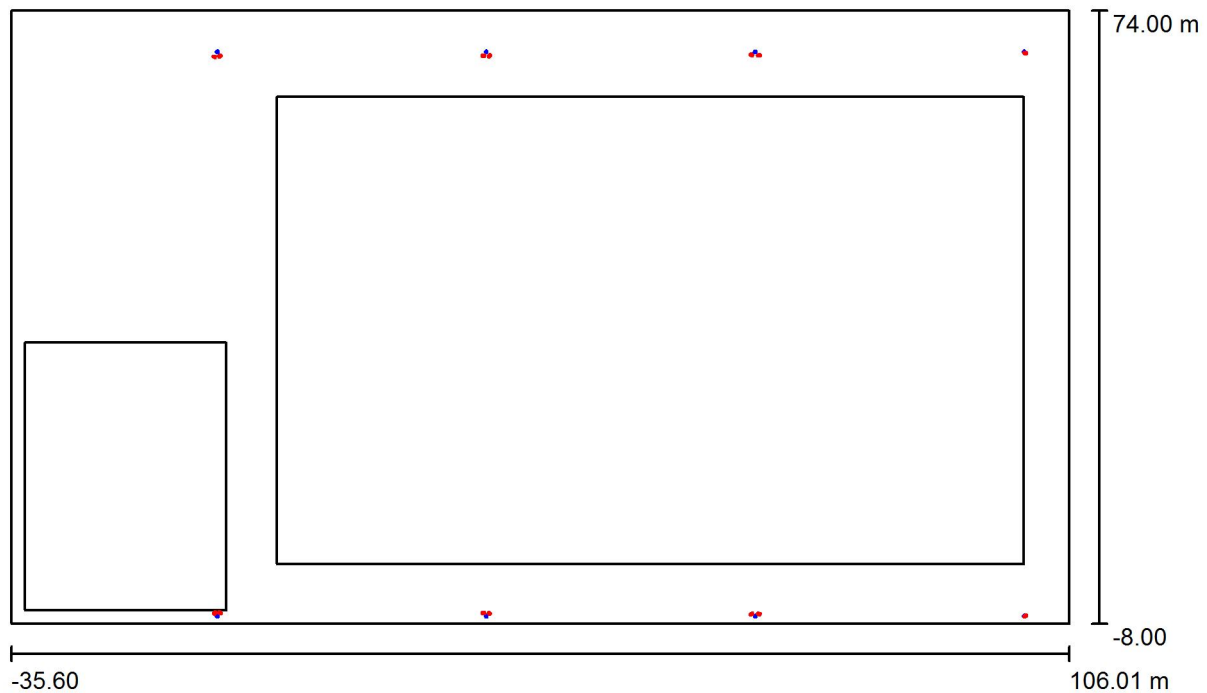
See our luminaire catalog for an image of the luminaire.



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Exterior Scene 1 / Planning data



Maintenance factor: 0.90, ULR (Upward Light Ratio): 14.0%

Scale 1:1013

Luminaire Parts List

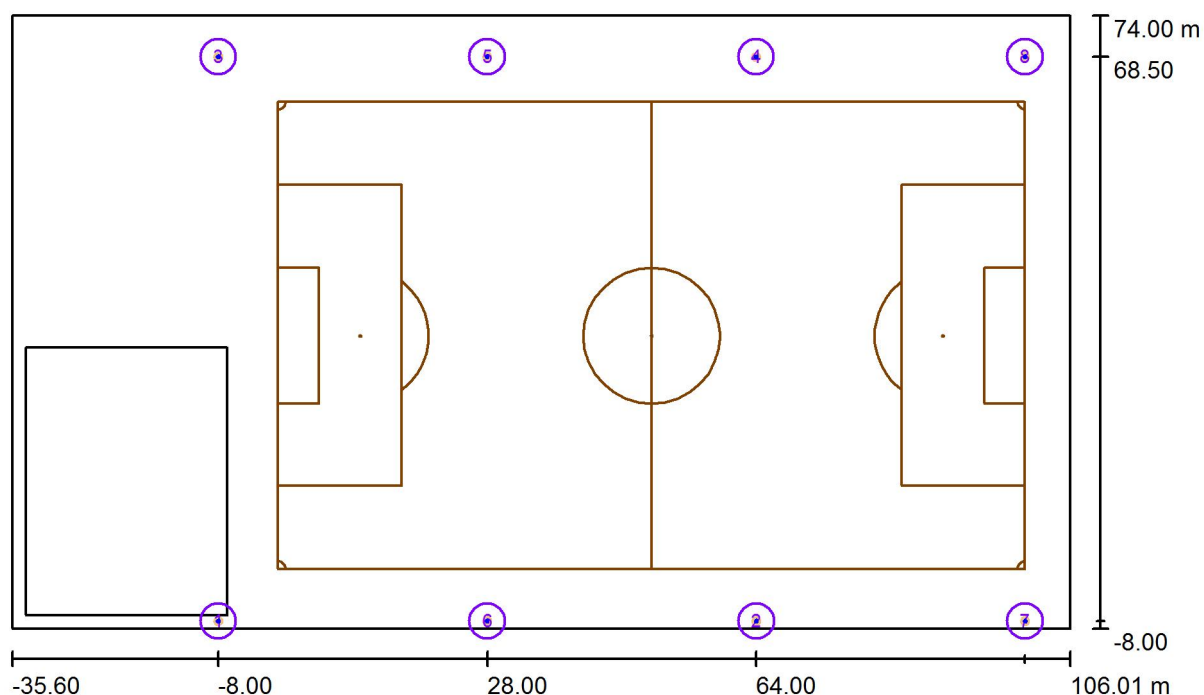
No.	Pieces	Designation (Correction Factor)	Φ (Luminaire) [lm]	Φ (Lamps) [lm]	P [W]
1	14	FL06-900 5000K Ra80 30DEG F01604 (1.000)	107565	107580	914.5
Total:			1505906	Total: 1506120	12803.0

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Exterior Scene 1 / Pole Positions (Coordinates List)



Scale 1 : 1013

List of the Pole Positions

No.	Designation	Position [m]		
		X	Y	Z
1	Pole Position 1	-8.000	-6.995	0.000
2	Pole Position 2	64.015	-6.995	0.000
3	Pole Position 3	-8.000	68.500	0.000
4	Pole Position 4	64.000	68.500	0.000

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Exterior Scene 1 / Pole Positions (Coordinates List)

List of the Pole Positions

No.	Designation	Position [m]		
		X	Y	Z
5	Pole Position 5	28.000	68.500	0.000
6	Pole Position 6	28.008	-6.995	0.000
7	Pole Position 7	100.000	-6.995	0.000
8	Pole Position 8	100.000	68.500	0.000

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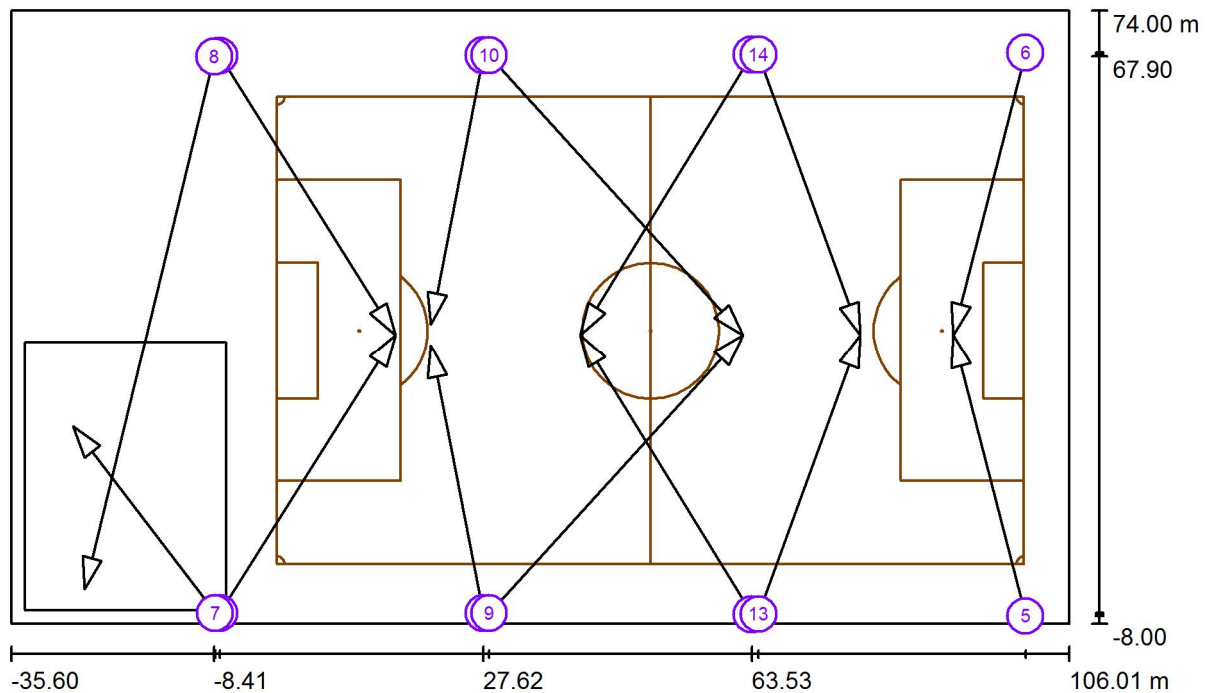
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Exterior Scene 1 / Sport Luminaires (Coordinates List)



Scale 1 : 1013

List of the Sport Luminaires

Luminaire	Index	Position [m]			Aiming Point [m]			Angle [°]	Alignment	Pole
		X	Y	Z	X	Y	Z			
FL06-900 5000K Ra80 30DEG F01604	1	-7.700	-6.600	16.000	15.830	30.700	0.000	19.9	(C 90, G IMax)	Pole Position 1
FL06-900 5000K Ra80 30DEG F01604	2	-7.700	68.000	16.000	15.830	30.700	0.000	19.9	(C 90, G IMax)	/
FL06-900 5000K Ra80 30DEG F01604	3	27.623	-6.613	16.000	20.600	29.300	0.000	23.6	(C 90, G IMax)	/
FL06-900 5000K Ra80 30DEG F01604	4	27.623	68.013	16.000	20.600	32.100	0.000	23.6	(C 90, G IMax)	/

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Exterior Scene 1 / Sport Luminaires (Coordinates List)

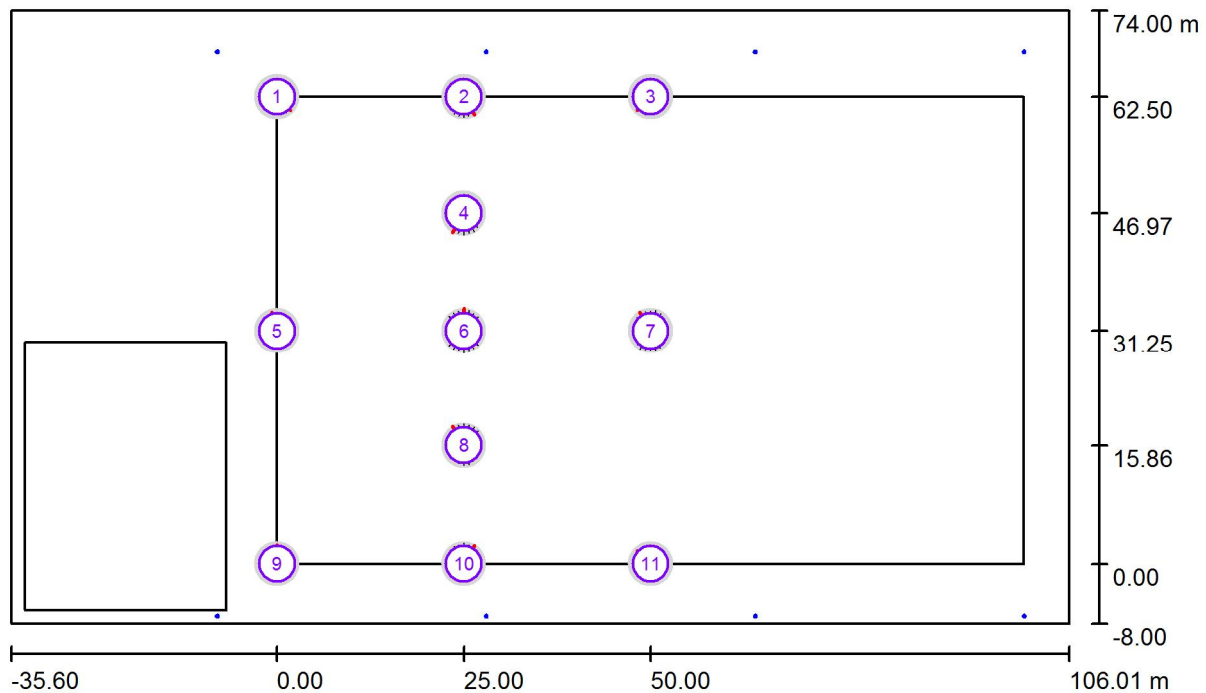
List of the Sport Luminaires

Luminaire	Index	Position [m]			Aiming Point [m]			Angle [°]	Alignment	Pole
		X	Y	Z	X	Y	Z			
FL06-900 5000K Ra80 30DEG F01604	5	100.173	-6.995	16.000	90.487	30.700	0.000	22.3	(C 90, G IMax)	Pole Position 7
FL06-900 5000K Ra80 30DEG F01604	6	100.173	68.395	16.000	90.487	30.700	0.000	22.3	(C 90, G IMax)	Pole Position 8
FL06-900 5000K Ra80 30DEG F01604	7	-8.302	-6.598	16.000	-27.300	18.400	0.000	27.0	(C 90, G IMax)	Pole Position 1
FL06-900 5000K Ra80 30DEG F01604	8	-8.410	67.899	16.000	-25.779	-3.400	0.000	12.3	(C 90, G IMax)	/
FL06-900 5000K Ra80 30DEG F01604	9	28.400	-6.635	16.000	62.348	30.700	0.000	17.6	(C 90, G IMax)	/
FL06-900 5000K Ra80 30DEG F01604	10	28.400	68.035	16.000	62.348	30.700	0.000	17.6	(C 90, G IMax)	/
FL06-900 5000K Ra80 30DEG F01604	11	63.532	-6.752	16.000	40.586	30.700	0.000	20.0	(C 90, G IMax)	/
FL06-900 5000K Ra80 30DEG F01604	12	63.532	68.152	16.000	40.586	30.700	0.000	20.0	(C 90, G IMax)	/
FL06-900 5000K Ra80 30DEG F01604	13	64.469	-6.714	16.000	78.040	30.700	0.000	21.9	(C 90, G IMax)	/
FL06-900 5000K Ra80 30DEG F01604	14	64.469	68.114	16.000	78.040	30.700	0.000	21.9	(C 90, G IMax)	/

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Exterior Scene 1 / GR Observer (Results Overview)



Scale 1 : 1013

GR Observerlist

No.	Designation	Position [m]			Viewing sector [°]				Max
		X	Y	Z	Start	End	Increment	Slope angle	
1	GR Observer 1	0.000	62.500	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
2	GR Observer 2	25.000	62.500	1.500	0.0	360.0	15.0	-2.0	47 ²⁾
3	GR Observer 3	50.000	62.500	1.500	0.0	360.0	15.0	-2.0	41 ²⁾
4	GR Observer 4	25.000	46.970	1.500	0.0	360.0	15.0	-2.0	49 ²⁾

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Exterior Scene 1 / GR Observer (Results Overview)

GR Observerlist

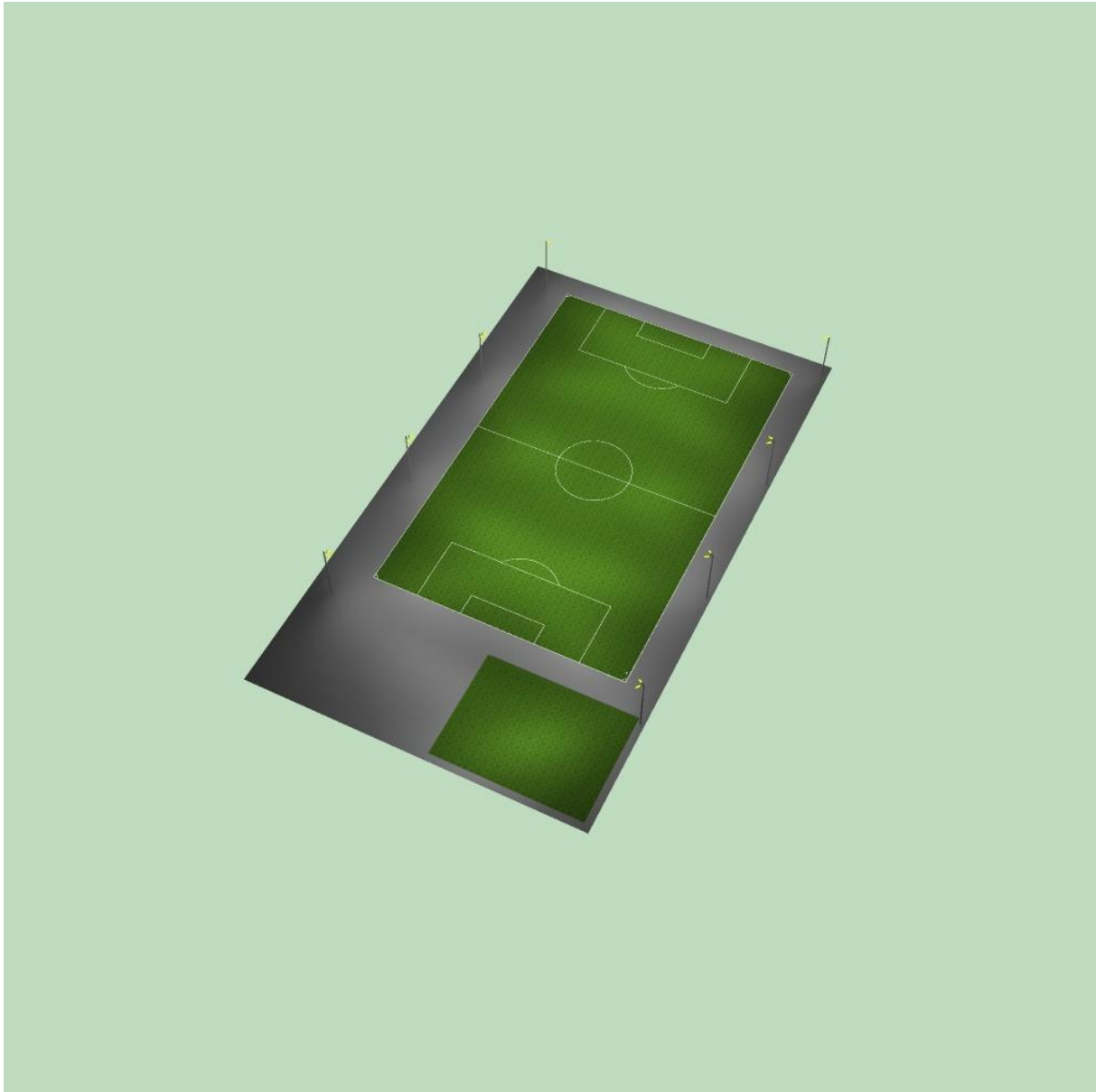
No.	Designation	Position [m]			Viewing sector [°]				Max
		X	Y	Z	Start	End	Increment	Slope angle	
5	GR Observer 5	0.000	31.250	1.500	0.0	360.0	15.0	-2.0	43 ²⁾
6	GR Observer 6	25.000	31.250	1.500	0.0	360.0	15.0	-2.0	50 ²⁾
7	GR Observer 7	50.000	31.250	1.500	0.0	360.0	15.0	-2.0	47 ²⁾
8	GR Observer 8	25.000	15.858	1.500	0.0	360.0	15.0	-2.0	50 ²⁾
9	GR Observer 9	0.000	0.000	1.500	0.0	360.0	15.0	-2.0	42 ²⁾
10	GR Observer 10	25.000	0.000	1.500	0.0	360.0	15.0	-2.0	47 ²⁾
11	GR Observer 11	50.000	0.000	1.500	0.0	360.0	15.0	-2.0	42 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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Exterior Scene 1 / 3D Rendering

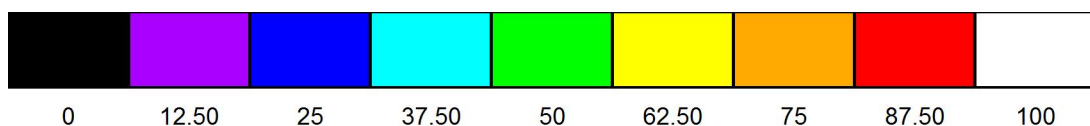
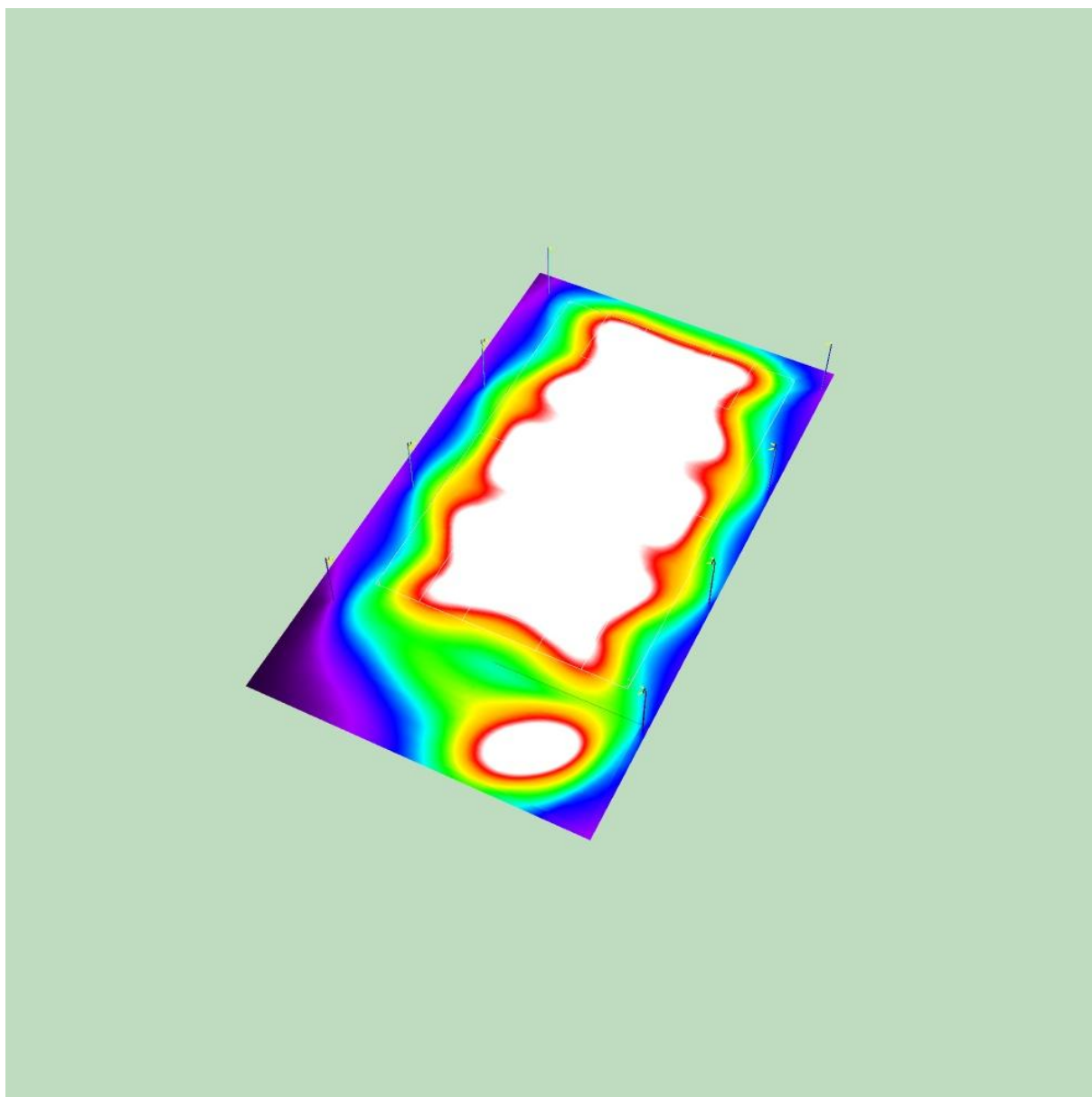


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Exterior Scene 1 / False Colour Rendering

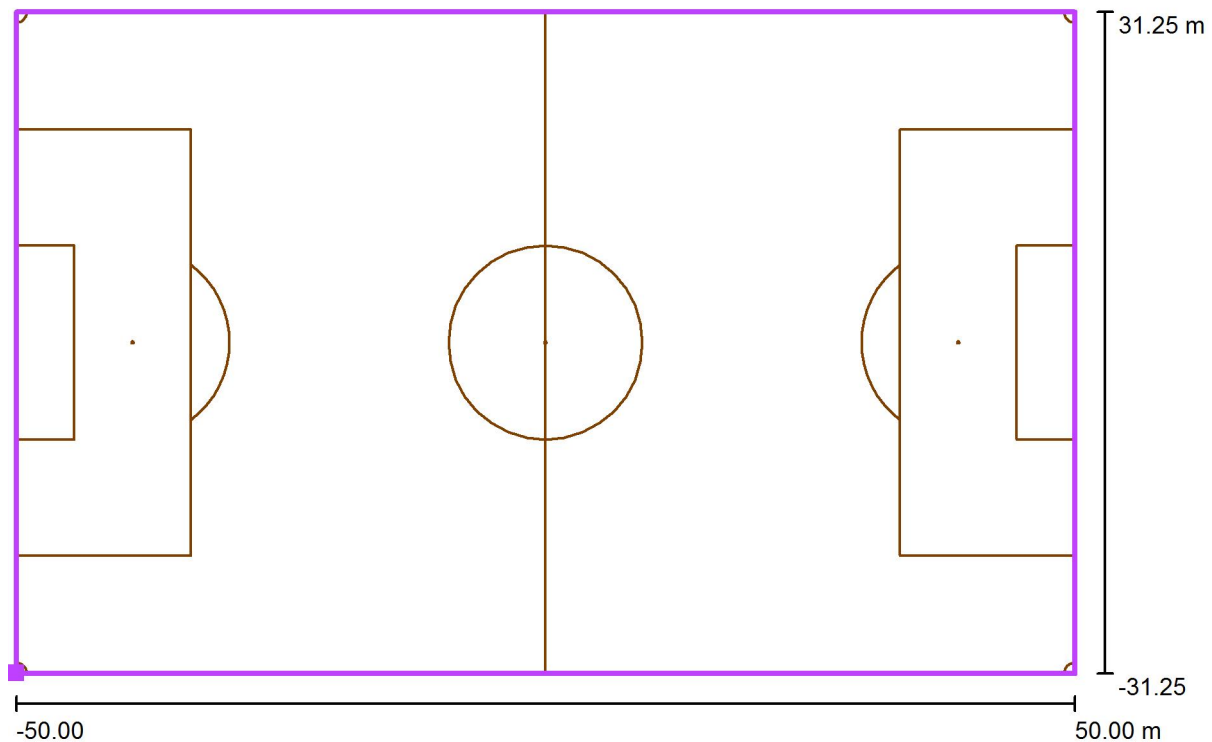


lx

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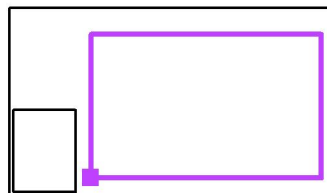
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Exterior Scene 1 / Soccer Field 1 Calculation Grid (PA) / Isolines (E, Perpendicular)



Values in Lux, Scale 1 : 715

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



Grid: 19 x 11 Points

E_{av} [lx]
110

E_{min} [lx]
42

E_{max} [lx]
195

u_0
0.38

E_{min} / E_{max}
0.22

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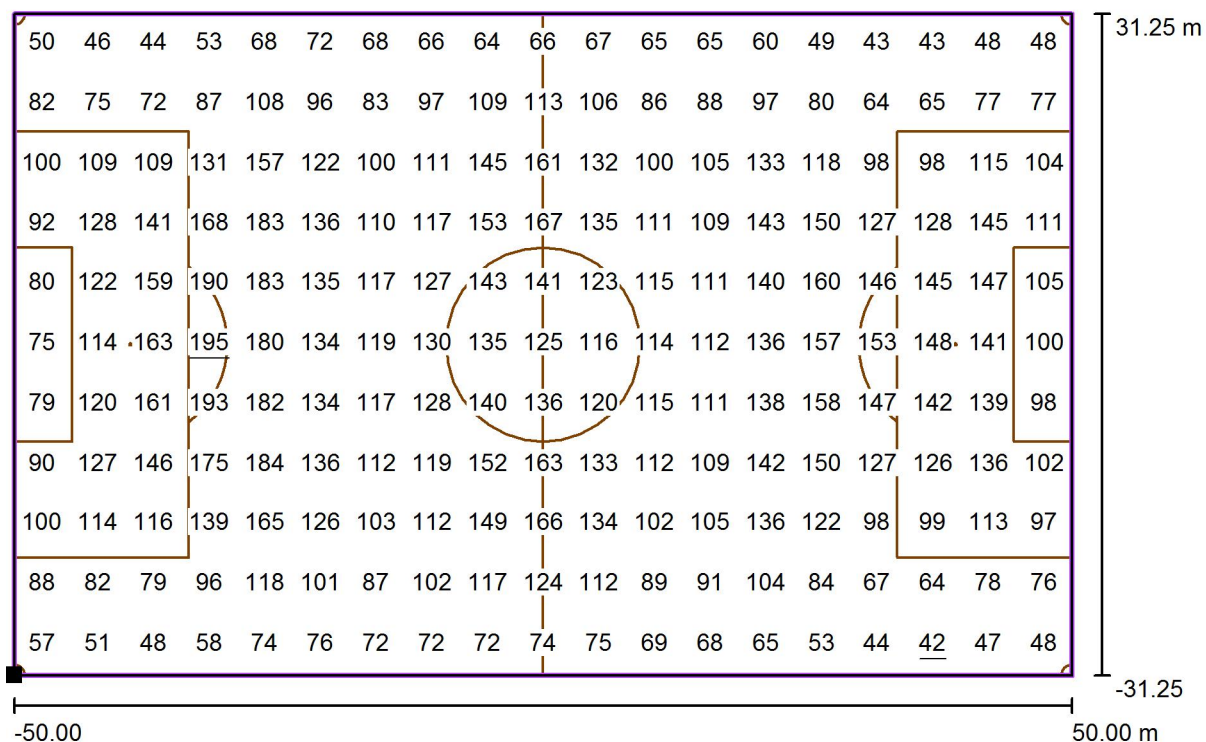
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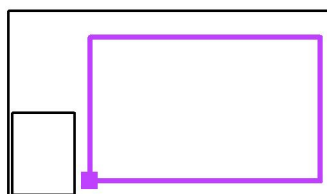
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Exterior Scene 1 / Soccer Field 1 Calculation Grid (PA) / Value Chart (E, Perpendicular)



Values in Lux, Scale 1 : 715

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



Grid: 19 x 11 Points

E_{av} [lx]
110

E_{min} [lx]
42

E_{max} [lx]
195

u_0
0.38

E_{min} / E_{max}
0.22

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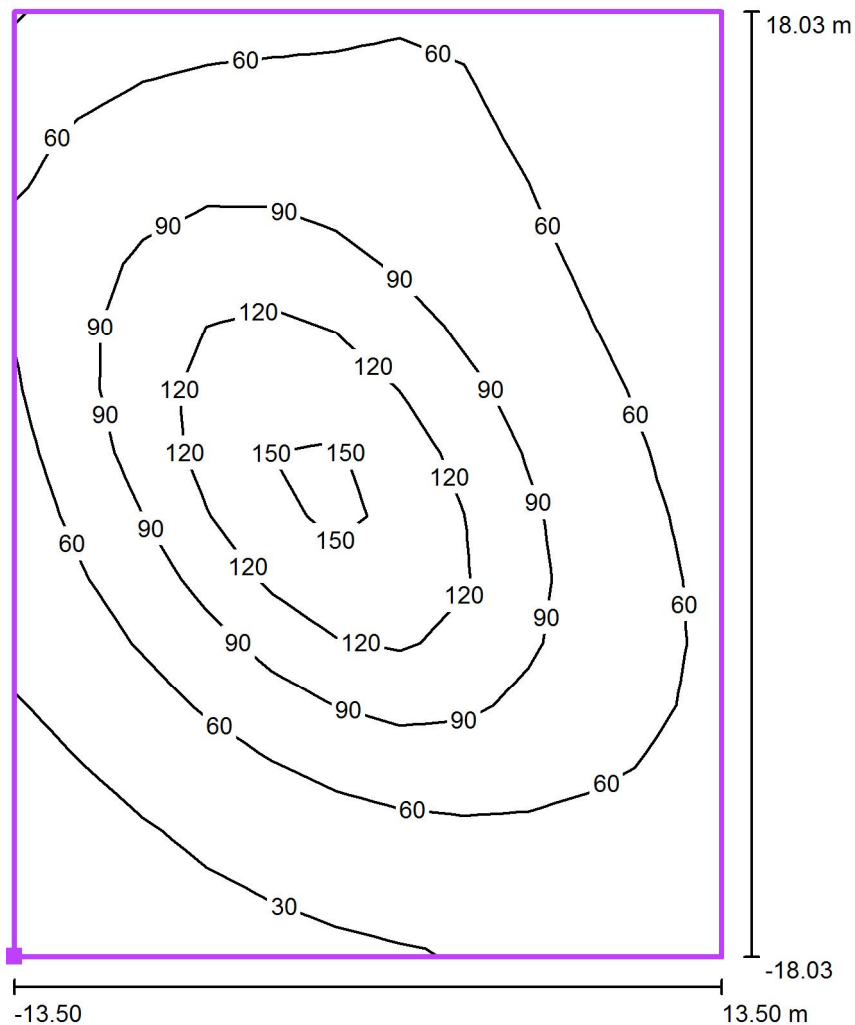
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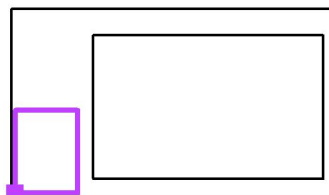
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Exterior Scene 1 / Calculation Grid 1 / Isolines (E, Perpendicular)



Values in Lux, Scale 1 : 289

Position of surface in external scene:
Marked point: (-33.783 m, -6.244 m,
0.000 m)



Grid: 11 x 15 Points

E_{av} [lx]
72

E_{min} [lx]
17

E_{max} [lx]
160

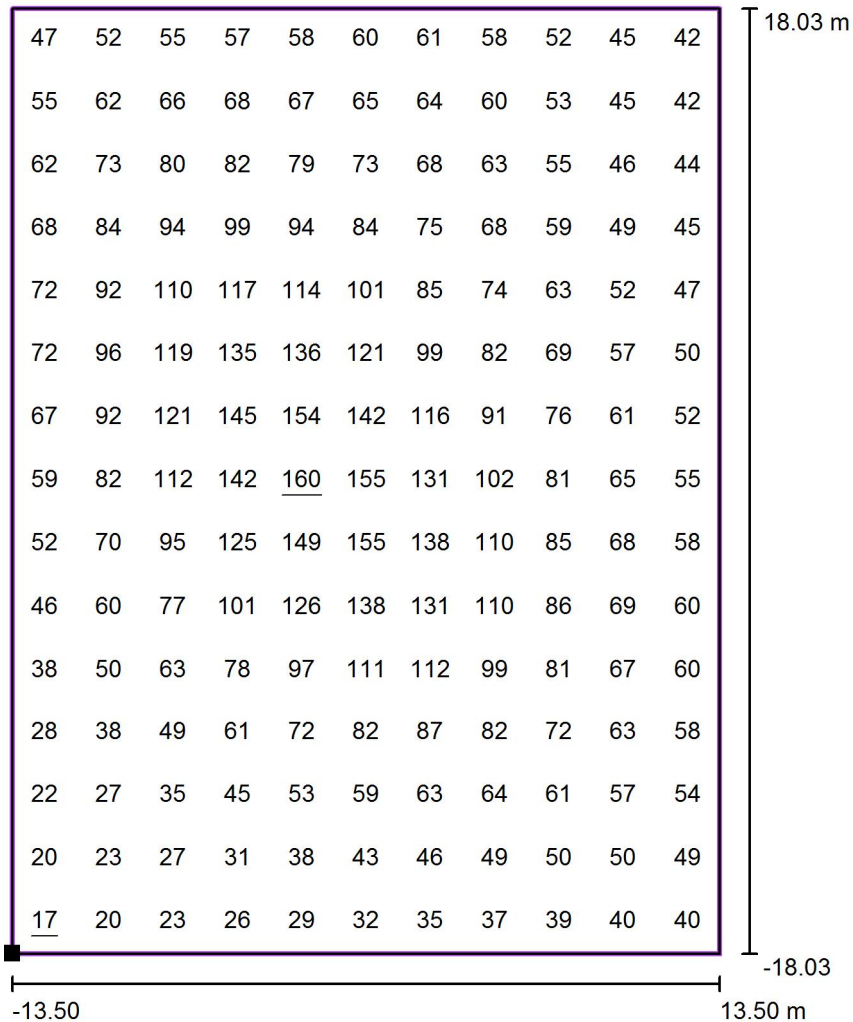
u_0
0.24

E_{min} / E_{max}
0.11

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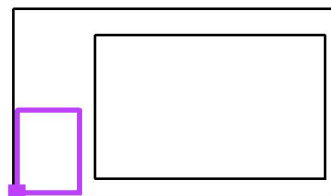
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Exterior Scene 1 / Calculation Grid 1 / Value Chart (E, Perpendicular)



Values in Lux, Scale 1 : 289

Position of surface in external scene:
Marked point: (-33.783 m, -6.244 m,
0.000 m)



Grid: 11 x 15 Points

E_{av} [lx]
72

E_{min} [lx]
17

E_{max} [lx]
160

u_0
0.24

E_{min} / E_{max}
0.11