ADUR & WORTHING
PLANNING SERVICES
PLAN AWDM/ 1041/13
DATE VALID 22 AUG 2013

HamsonJPA

SHOREHAM COMMUNITY CENTRE

EXTERNAL LIGHTING REPORT FOR PLANNING APPLICATION

JULY 2013

Rev P1

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BUILDING SERVICES ENGINEERS AND BUILDING SURVEYORS

HJPA

Shoreham Community Centre External Lighting For Planning

Partner for Contact:
Order No.:
Company: HamsonJPA
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Date: 31.07.2013
Operator:

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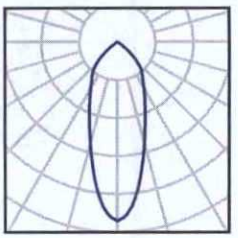
Shoreham Community Centre External Lighting For Planning / Luminaire parts list

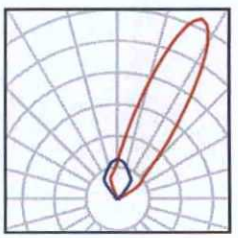
2 Pieces BEGA 6873 LED 10,9W
Article No.: 6873
Luminous flux (Luminaire): 809 lm
Luminous flux (Lamps): 809 lm
Luminaire Wattage: 14.0 W
Luminaire classification according to CIE: 100
CIE flux code: 83 100 100 100 101
Fitting: 1 x LED 10,9W (Correction Factor 1.000).





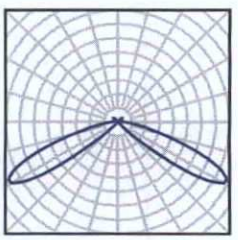
4 Pieces BEGA 7106 LED 10,5W
Article No.: 7106
Luminous flux (Luminaire): 800 lm
Luminous flux (Lamps): 800 lm
Luminaire Wattage: 13.0 W
Luminaire classification according to CIE: 0
CIE flux code: 00 00 12 00 101
Fitting: 1 x LED 10,5W (Correction Factor 1.000).





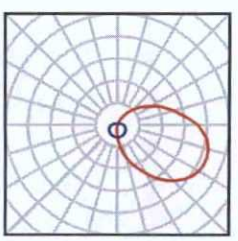
4 Pieces BEGA 8554 LED 18,2W
Article No.: 8554
Luminous flux (Luminaire): 559 lm
Luminous flux (Lamps): 1420 lm
Luminaire Wattage: 24.0 W
Luminaire classification according to CIE: 93
CIE flux code: 00 32 88 93 40
Fitting: 1 x LED 18,2W (Correction Factor 1.000).





10 Pieces THORLUX CT14441 Cobalt LED - Satin Hood - 18W
Article No.: CT14441
Luminous flux (Luminaire): 717 lm
Luminous flux (Lamps): 720 lm
Luminaire Wattage: 28.0 W
Luminaire classification according to CIE: 69
CIE flux code: 20 47 75 69 100
Fitting: 1 x LED 18W (Correction Factor 1.000).





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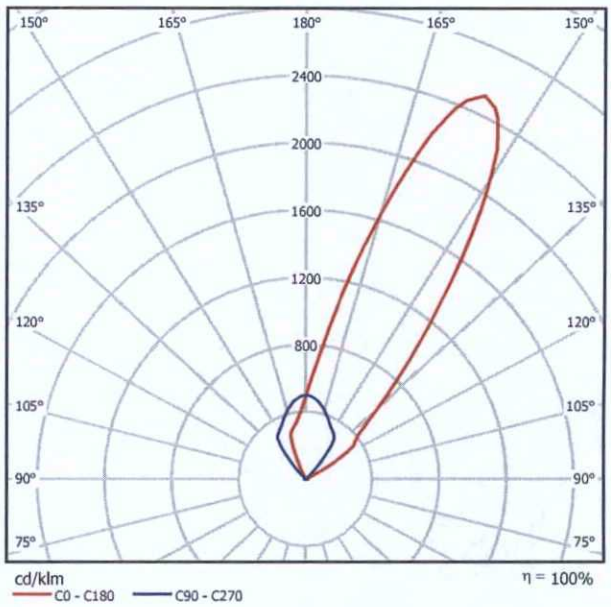
BEGA 7106 LED 10,5W / Luminaire Data Sheet



Luminous emittance 1:



Luminaire classification according to CIE: 0
CIE flux code: 00 00 12 00 101

Due to missing symmetry properties, no UGR table can be displayed for this luminaire.

BEGA-Einbauscheinwerfer Nr. 7106 - überrollbar für Druckbelastung bis 2.000 kg - mit asymmetrischer Lichtstärkeverteilung. Mit LED 10,5 Watt, 1.200 Lumen, Farbtemperatur 4.000 K. Farbwiedergabeindex (Ra) 80.
Mit austauschbarem BEGA-LED-Modul mit Übertemperaturschutz und einer Lebenserwartung von mindestens 50.000 Betriebsstunden. 20-jährige Nachliefergarantie auf das LED-Modul und die Verschleißteile.
Mit LED-Netzteil 220-240 Volt, 50-60 Hz, Schutzart IP 68, 10 m.
Die Leuchte besteht aus Edelstahl. Mit klarem Sicherheitsglas und Reflektor aus eloxiertem Reinstaluminium. Mit 1,8 m wasserbeständige Anschlussleitung H07RN8-F 3G 1,5 qmm mit eingebautem Wasserstopper und 1,2 m PVC-Installationsrohr.
Im Zentrum der Glasoberfläche wird eine Betriebstemperatur von 25° C erreicht, gemessen nach EN 60598, bei einer Umgebungstemperatur von 15° C.

Operator
Telephone
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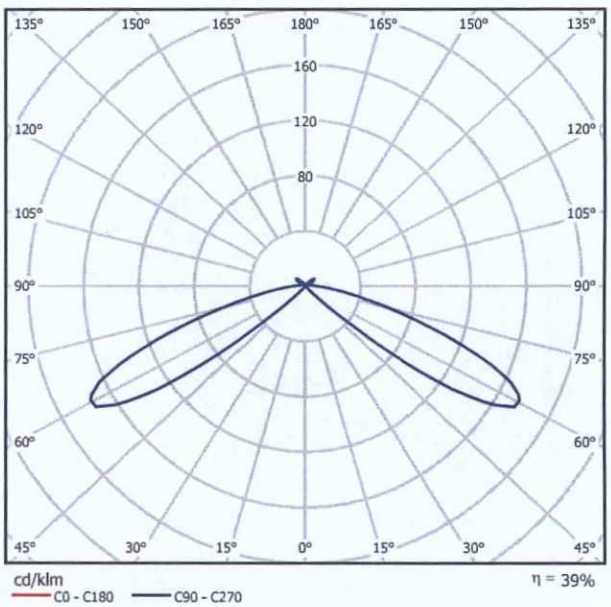
BEGA 8554 LED 18,2W / Luminaire Data Sheet



Luminous emittance 1:



Luminaire classification according to CIE: 93
CIE flux code: 00 32 88 93 40

BEGA-Pollerleuchte Nr. 8554 - rotationssymmetrischer Lichtaustritt - mit LED 18,2 Watt, 1.420 Lumen, Farbtemperatur 3.000 K. Farbwiedergabeindex (Ra) 75. Mit austauschbarem BEGA-LED-Modul mit Übertemperaturschutz und einer Lebenserwartung von mindestens 50.000 Betriebsstunden. 20-jährige Nachliefergarantie auf das LED-Modul und die Verschleißteile. Mit LED-Netzteil 220-240 Volt, 50-60 Hz, Schutzart IP 65.
Die Leuchte besteht aus Aluminiumguss, Aluminium und Edelstahl, Farbe Grafit. Mit Borosilikatglas und Reflektor aus eloxiertem Reinst-Aluminium. Leuchte mit Anschlusskasten Nr. 632 und mit Montageplatte zum Aufschrauben auf ein Fundament oder auf das Erdstück Nr. 895.
Höhe der Leuchte über Flur 1.000 mm.

Luminous emittance 1:

Glare Evaluation According to UGR

ρ Ceiling		70	70	50	50	30	70	70	50	50	30
ρ Walls		50	30	50	30	30	50	30	50	30	30
ρ Floor		20	20	20	20	20	20	20	20	20	20
Room Size X	Y	Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	25.5	27.4	25.9	27.8	28.2	25.5	27.4	25.9	27.8	28.2
	3H	28.1	29.8	28.5	30.3	30.7	28.1	29.8	28.5	30.3	30.7
	4H	28.6	30.3	29.1	30.7	31.2	28.6	30.3	29.1	30.7	31.2
	6H	28.9	30.4	29.3	30.9	31.4	28.9	30.4	29.3	30.9	31.4
	8H	28.9	30.4	29.4	30.9	31.4	28.9	30.4	29.4	30.9	31.4
	12H	29.0	30.4	29.5	30.9	31.4	29.0	30.4	29.5	30.9	31.4
4H	2H	26.5	28.2	27.0	28.6	29.1	26.5	28.2	27.0	28.6	29.1
	3H	29.0	30.4	29.5	30.9	31.5	29.0	30.4	29.5	30.9	31.5
	4H	29.6	30.9	30.1	31.4	31.9	29.6	30.9	30.1	31.4	31.9
	6H	30.0	31.1	30.5	31.6	32.2	30.0	31.1	30.5	31.6	32.2
	8H	30.1	31.1	30.6	31.6	32.2	30.1	31.1	30.6	31.6	32.2
	12H	30.2	31.1	30.7	31.7	32.3	30.2	31.1	30.7	31.7	32.3
8H	4H	29.8	30.9	30.4	31.4	32.0	29.8	30.9	30.4	31.4	32.0
	6H	30.3	31.1	30.9	31.7	32.3	30.3	31.1	30.9	31.7	32.3
	8H	30.5	31.2	31.1	31.8	32.4	30.5	31.2	31.1	31.8	32.4
	12H	30.7	31.3	31.3	31.9	32.5	30.7	31.3	31.3	31.9	32.5
12H	4H	29.8	30.8	30.4	31.3	31.9	29.8	30.8	30.4	31.3	31.9
	6H	30.4	31.1	30.9	31.6	32.3	30.4	31.1	30.9	31.6	32.3
	8H	30.6	31.2	31.2	31.8	32.4	30.6	31.2	31.2	31.8	32.4

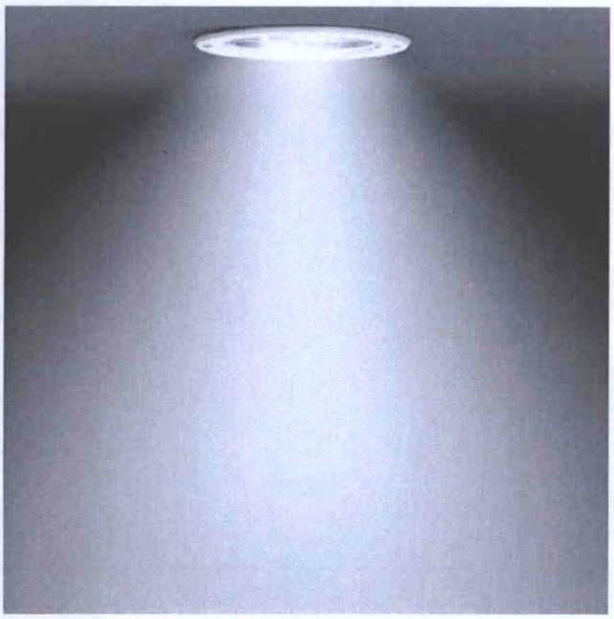
Variation of the observer position for the luminaire distances S

S = 1.0H	+0.1 / -0.1	+0.1 / -0.1
S = 1.5H	+0.4 / -0.5	+0.4 / -0.5
S = 2.0H	+0.9 / -1.2	+0.9 / -1.2
Standard table	BK06	BK06
Correction Summand	9.1	9.1

Corrected Glare Indices referring to 1420lm Total Luminous Flux

Operator
Telephone
Fax
e-Mail

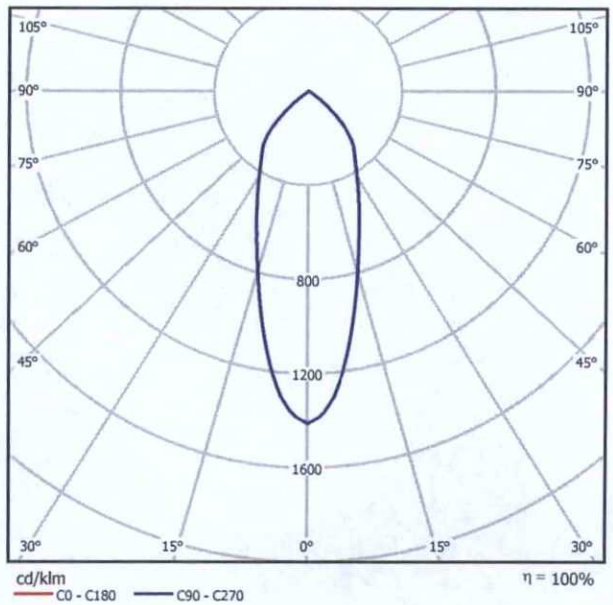
BEGA 6873 LED 10,9W / Luminaire Data Sheet



Luminaire classification according to CIE: 100
CIE flux code: 83 100 100 100 101

BEGA-Deckeneinbau-Tiefstrahler Nr. 6873 - mit symmetrischer Lichtstärkeverteilung - mit LED 10,5 Watt, 1.120 Lumen, Farbtemperatur 3.000 K, Farbwiedergabeindex (Ra) 85.
Mit austauschbarem BEGA-LED-Modul mit Übertemperaturschutz und einer Lebenserwartung von mindestens 50.000 Betriebsstunden. 20-jährige Nachliefergarantie auf das LED-Modul und die Verschleißteile.
MIT LED-Netzteil 220-240 Volt, 50-60 Hz, dimmbar 1-10 Volt SELV, Schutzart IP 65.
Die Leuchte besteht aus Aluminiumguss, Aluminium und Edelstahl, Farbe Weiß. Mit klarem Sicherheitsglas und Reflektor aus eloxiertem Reinstaluminium.
2 Leitungseinführungen zur Durchverdrahtung der Netzanschlussleitung bis ø 10,5 mm max. 3 x 1,5 qmm.
Für den Einbau in Zwischendecken von 5-30 mm Stärke.
Abmessungen: 190 x 100 mm. Einbauöffnung-ø: 175 mm.

Luminous emittance 1:



Luminous emittance 1:

Glare Evaluation According to UGR

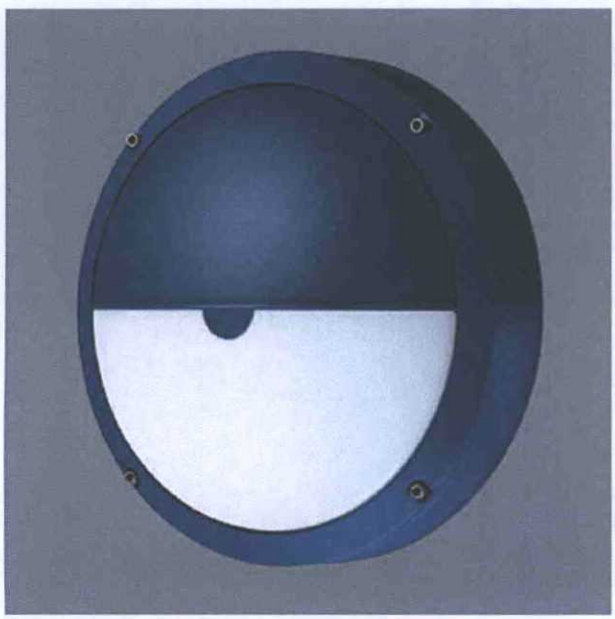
ρ Ceiling		70	70	50	50	30	70	70	50	50	30
ρ Walls		50	30	50	30	30	50	30	50	30	30
ρ Floor		20	20	20	20	20	20	20	20	20	20
Room Size X	Y	Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	-2.2	-1.3	-1.9	-1.1	-0.9	-2.2	-1.3	-1.9	-1.1	-0.9
	3H	-2.3	-1.5	-2.0	-1.3	-1.1	-2.3	-1.5	-2.0	-1.3	-1.1
	4H	-2.3	-1.7	-2.0	-1.4	-1.1	-2.3	-1.7	-2.0	-1.4	-1.1
	6H	-2.4	-1.8	-2.1	-1.5	-1.2	-2.4	-1.8	-2.1	-1.5	-1.2
	8H	-2.4	-1.8	-2.1	-1.5	-1.2	-2.4	-1.8	-2.1	-1.5	-1.2
	12H	-2.5	-1.9	-2.1	-1.6	-1.3	-2.5	-1.9	-2.1	-1.6	-1.3
4H	2H	-2.4	-1.7	-2.1	-1.4	-1.2	-2.4	-1.7	-2.1	-1.4	-1.2
	3H	-2.5	-1.9	-2.1	-1.6	-1.3	-2.5	-1.9	-2.1	-1.6	-1.3
	4H	-2.5	-2.0	-2.2	-1.7	-1.4	-2.5	-2.0	-2.2	-1.7	-1.4
	6H	-2.6	-2.2	-2.2	-1.8	-1.4	-2.6	-2.2	-2.2	-1.8	-1.4
	8H	-2.6	-2.3	-2.2	-1.9	-1.5	-2.6	-2.3	-2.2	-1.9	-1.5
	12H	-2.7	-2.3	-2.2	-1.9	-1.5	-2.7	-2.3	-2.2	-1.9	-1.5
8H	4H	-2.6	-2.3	-2.2	-1.9	-1.5	-2.6	-2.3	-2.2	-1.9	-1.5
	6H	-2.7	-2.4	-2.3	-2.0	-1.5	-2.7	-2.4	-2.3	-2.0	-1.5
	8H	-2.7	-2.5	-2.3	-2.0	-1.6	-2.7	-2.5	-2.3	-2.0	-1.6
	12H	-2.8	-2.6	-2.3	-2.1	-1.6	-2.8	-2.6	-2.3	-2.1	-1.6
12H	4H	-2.7	-2.3	-2.2	-1.9	-1.5	-2.7	-2.3	-2.2	-1.9	-1.5
	6H	-2.7	-2.5	-2.3	-2.0	-1.6	-2.7	-2.5	-2.3	-2.0	-1.6
	8H	-2.8	-2.6	-2.3	-2.1	-1.6	-2.8	-2.6	-2.3	-2.1	-1.6

Variation of the observer position for the luminaire distances S		
S = 1.0H	+2.2 / -10.2	+2.2 / -10.2
S = 1.5H	+4.2 / -30.9	+4.2 / -30.9
S = 2.0H	+6.2 / -31.2	+6.2 / -31.2
Standard table	BK00	BK00
Correction Summand	-0.7	-0.7

Corrected Glare Indices referring to 809lm Total Luminous Flux

Operator
Telephone
Fax
e-Mail

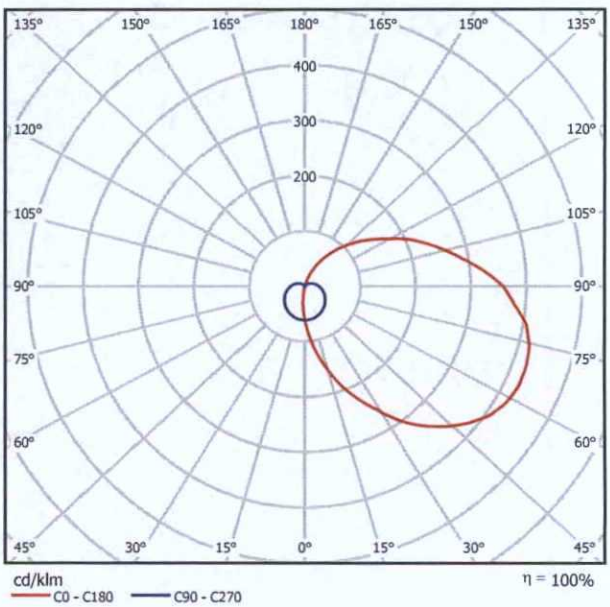
THORLUX CT14441 Cobalt LED - Satin Hood - 18W / Luminaire Data Sheet



Luminaire classification according to CIE: 69
CIE flux code: 20 47 75 69 100

LED circular compact fluorescent luminaire IP66

Luminous emittance 1:



Due to missing symmetry properties, no UGR table can be displayed for this luminaire.

Operator
Telephone
Fax
e-Mail

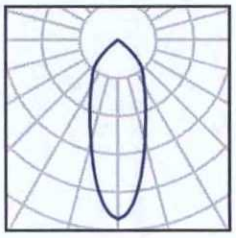
Shoreham External lighting / Planning data

Operator
Telephone
Fax
e-Mail

Shoreham External lighting / Luminaire parts list

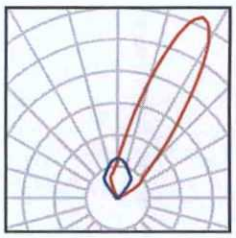
2 Pieces BEGA 6873 LED 10,9W
Article No.: 6873
Luminous flux (Luminaire): 809 lm
Luminous flux (Lamps): 809 lm
Luminaire Wattage: 14.0 W
Luminaire classification according to CIE: 100
CIE flux code: 83 100 100 100 101
Fitting: 1 x LED 10,9W (Correction Factor 1.000).





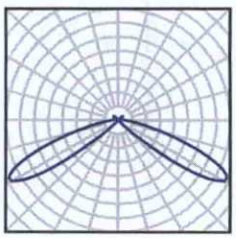
4 Pieces BEGA 7106 LED 10,5W
Article No.: 7106
Luminous flux (Luminaire): 800 lm
Luminous flux (Lamps): 800 lm
Luminaire Wattage: 13.0 W
Luminaire classification according to CIE: 0
CIE flux code: 00 00 12 00 101
Fitting: 1 x LED 10,5W (Correction Factor 1.000).





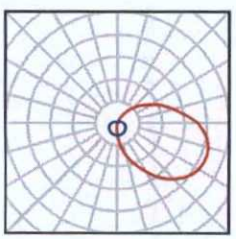
4 Pieces BEGA 8554 LED 18,2W
Article No.: 8554
Luminous flux (Luminaire): 559 lm
Luminous flux (Lamps): 1420 lm
Luminaire Wattage: 24.0 W
Luminaire classification according to CIE: 93
CIE flux code: 00 32 88 93 40
Fitting: 1 x LED 18,2W (Correction Factor 1.000).





10 Pieces THORLUX CT14441 Cobalt LED - Satin Hood - 18W
Article No.: CT14441
Luminous flux (Luminaire): 717 lm
Luminous flux (Lamps): 720 lm
Luminaire Wattage: 28.0 W
Luminaire classification according to CIE: 69
CIE flux code: 20 47 75 69 100
Fitting: 1 x LED 18W (Correction Factor 1.000).





Operator
Telephone
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e-Mail

Shoreham External lighting / Luminaires (layout plan)

Operator
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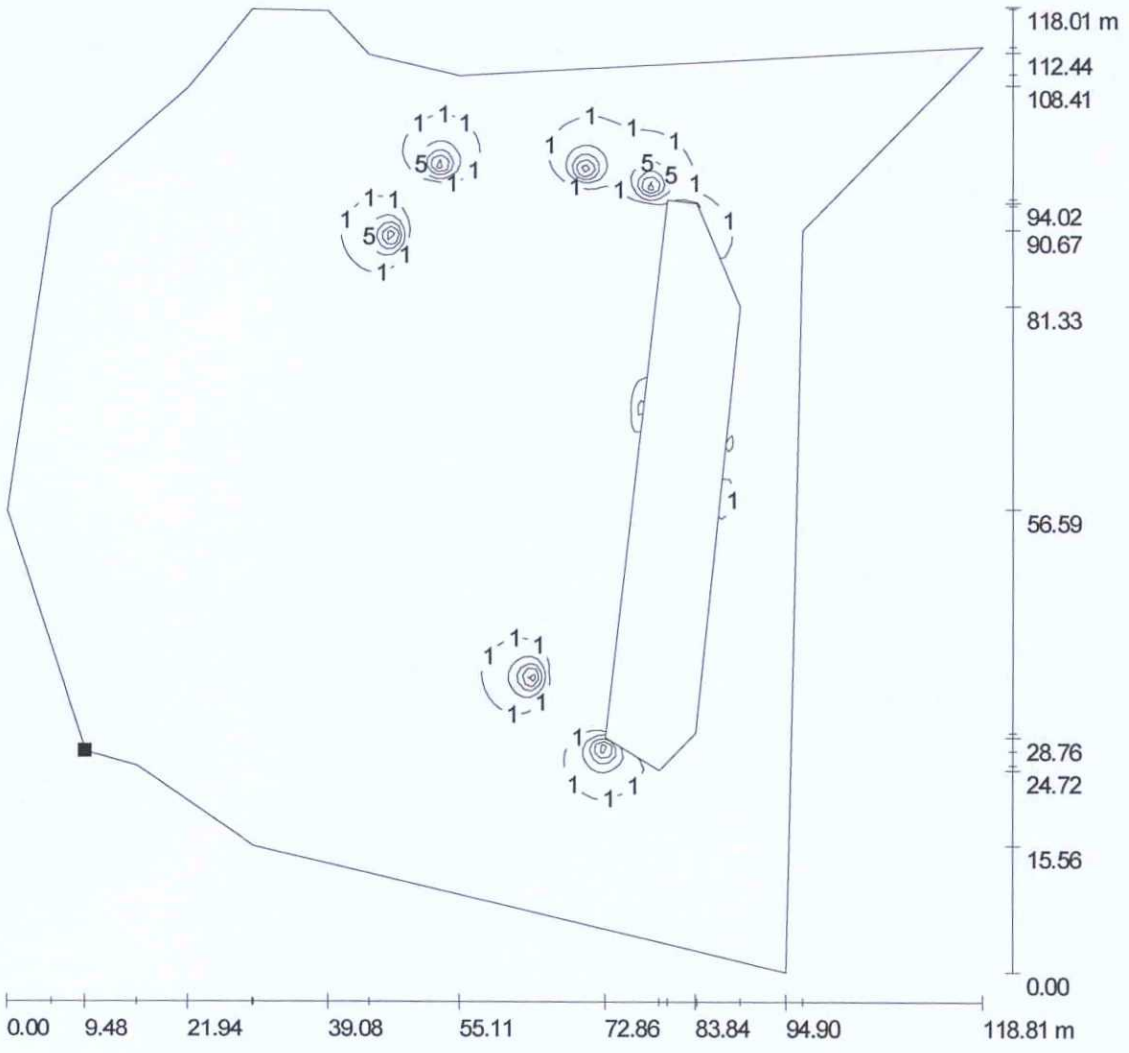
Fax
e-Mail

Shoreham External lighting / Site Boundary / Surface 1 / Isolines (E)



Values in Lux, Scale 1 : 923

Position of surface in external scene:
Marked point:
(53.971 m, 34.196 m, 0.000 m)

Operator
Telephone
Fax
e-Mail

Shoreham External lighting / Main Entrance Lighitng POND ROAD / Surface 1 / Isolines (E)