LEDS C4

Installation Instructions
3D File
Dialux | ULD
Revit

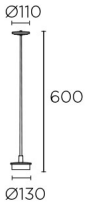
Invisible 600mm

Francesc Vilaró

55-9733-05-M1

Bollard IP54 Invisible 600mm LED 9W 3000K Black 469lm





TECHNICAL FEATURES

IP54 IK04 355º

Power (W) : 9W

Total power consumption of light (W) : 12.2W

Real lumens : 469

Real lm/W : 38

Correlated Colour Temperature (CCT) : LED warm-white 3000K

Lens / reflector angle : HORIZONTAL 111º

Structure material : Aluminium, Fibreglass

Structure finish : Black

Diffuser material : Polycarbonate

Diffuser finish : Opal

Useful life : 50.000h L80B20

Equipment included : Yes, electronic

Voltage / frequency : 100-240V/50-60Hz

Warranty : 5 Years

Max. temperature : 25ºC

Seaside : Yes

Energy efficiency : LED A++

LUMINOTECHNIC FEATURES

Light source: LED

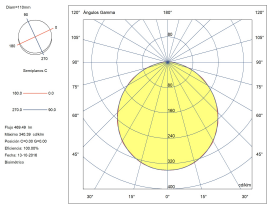
Luminance C0º65º: 12402.6

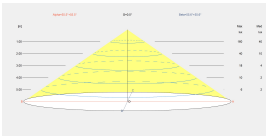
Luminance 90º65º: 12082.4

CRI: 80

MacAdam steps: 3

Photobiological risk: RG0





LOGISTICS

Net weight (kg): 0.49

Packaged weight (kg): 0.94

Packaging: 135mm x 135mm x 610mm

2 Un

LIGHT APPLICATION



Luminaire		Measurem.		Lamp	
Code	55-9733	Code	55-9733	Code	
Name	CHILLOUT	Name	CHILLOUT	Number	27
Line	INVISIBLE	Date	25-02-2014	Position	

Efficiency	1199.63%	Coordinate system	CG	Total Flux	27.00 lm
Maximum value	146.88 cd	Position	C=0.00 G=10.00	Asymmetrical	

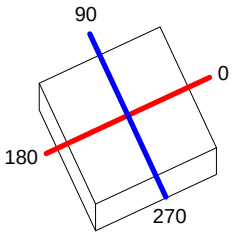
Rectangular Luminaire	Length 1 mm	Width 1 mm	Height 1 mm		
Rectangular Luminous Area	Length 1 mm	Width 1 mm	Height 0 mm		
Horizontal Luminous Area	0.000001 m2	Emitting area on Plane 180°	0.000000 m2		
Emitting area on Plane 0°	0.000000 m2	Emitting area on Plane 270°	0.000000 m2		
Emitting area on Plane 90°	0.000000 m2	Glare area at 76°	0.000000 m2		
Symmetry Type	Asymmetrical	Maximum Gamma Angle	90		
Measurement Distance	0.00	Measurement Flux	27.00 lm		
Operator		Source voltage			
Temperature	25.00 °C	Source current			
Humidity	60.00 %	Photocell			
Notes					

Luminaire Lamps

Line	Code	Name	Flux [lm]	Pow. [W]	Q.ty
IESNA-2002			1.00	0.00	27

C.I.E.	55 86 98 100 1200	D DIN 5040	A40
F UTE	12.00 D	B NBN	BZ 3

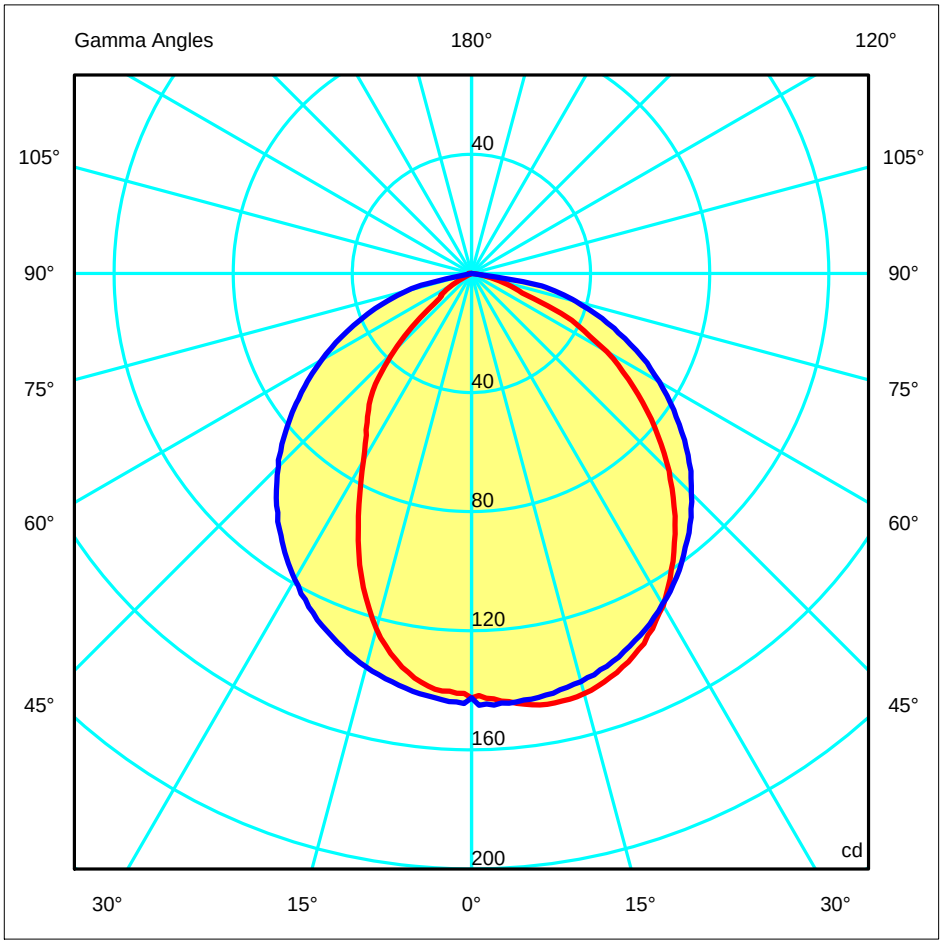
1mm x 1mm



C Halfplanes

180.0 — 0.0

270.0 — 90.0



ULOR	0.00 %
DLOR	1199.63 %
RN	0.00 %

Luminaire		Measurem.		Lamp	
Code	55-9733	Code	55-9733	Code	
Name	CHILLOUT	Name	CHILLOUT	Number	27
Line	INVISIBLE	Date	25-02-2014	Position	

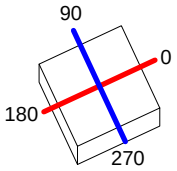
Efficiency	1199.63%	Coordinate system	CG	Total Flux	27.00 lm

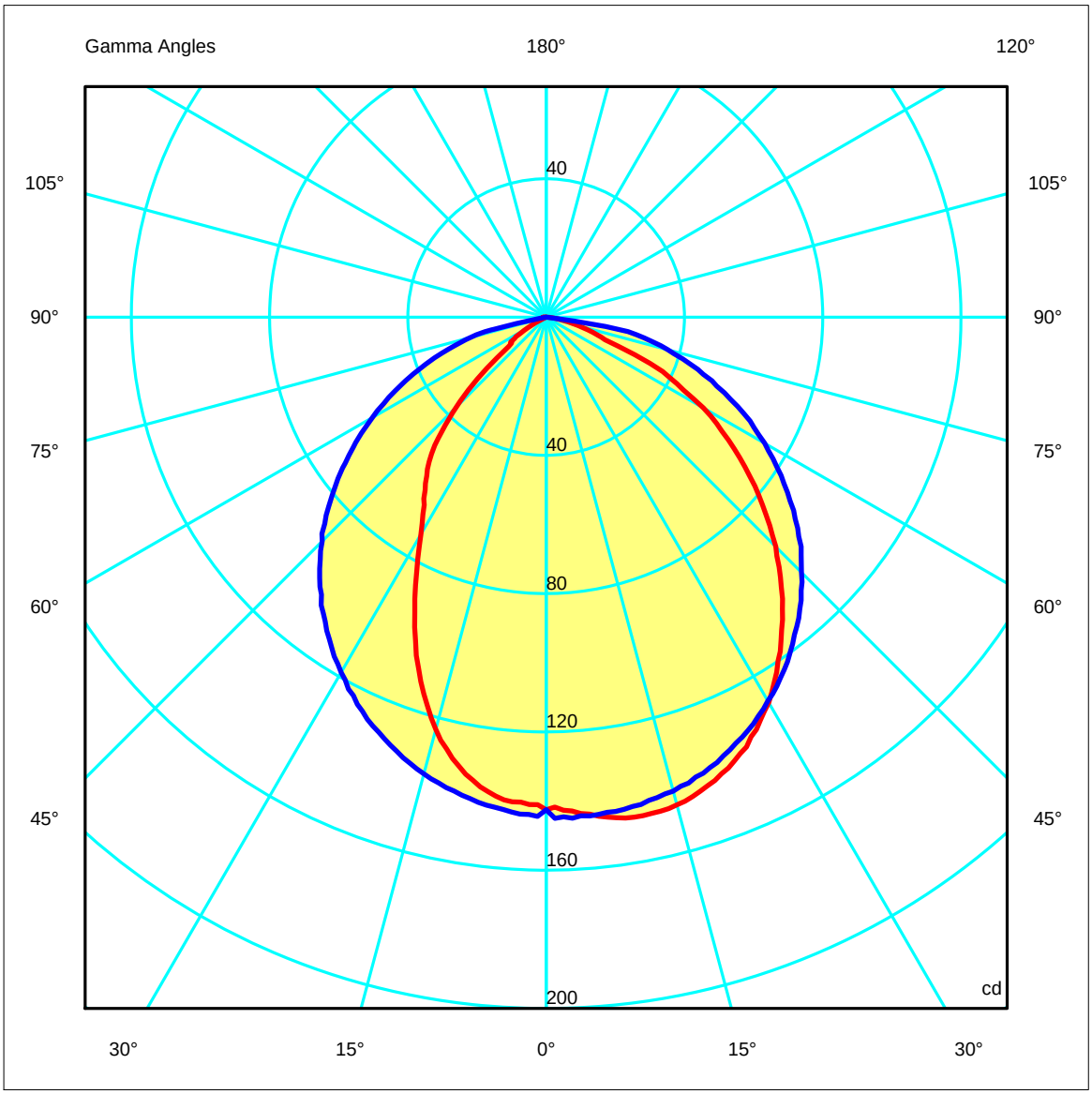
1mm x 1mm

C Halfplanes

180.0 — 0.0

270.0 — 90.0





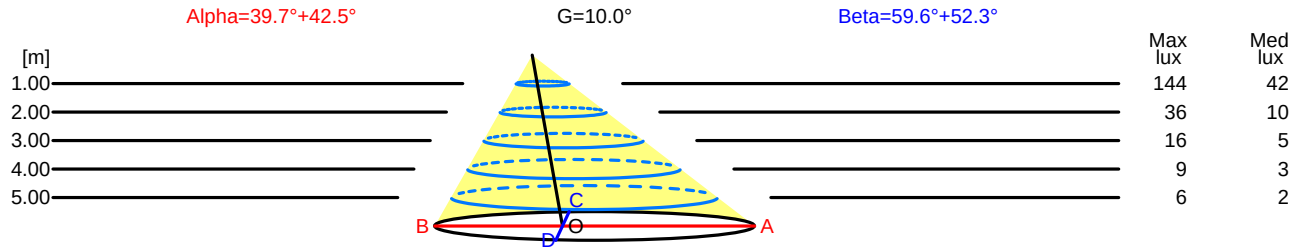
Luminaire		Measurem.		Lamp	
Code	55-9733	Code	55-9733	Code	
Name	CHILLOUT	Name	CHILLOUT	Number	27
Line	INVISIBLE	Date	25-02-2014	Position	
Efficiency	1199.63%	Coordinate system	CG	Total Flux	27.00 lm

Width at 50.00 % of MaxLux

H[m]	1.00	2.00	3.00	4.00	5.00	H[m]	1.00	2.00	3.00	4.00	5.00
OA	1.12	2.25	3.37	4.50	5.62	OC	1.73	3.46	5.19	6.92	8.64
OB	0.75	1.49	2.24	2.99	3.74	OD	1.32	2.63	3.95	5.26	6.58

Luminous Intensities [cd]

	0	5	15	25	35	45	55	65	75	85
OA	142.51	144.32	146.05	137.15	118.02	93.89	66.37	37.18	9.73	1.09
OB	142.51	140.16	123.46	89.92	61.06	36.74	12.54	0.00	0.00	0.00
OC	142.51	144.83	141.95	134.08	121.66	104.38	83.90	61.06	36.35	0.00
OD	142.51	142.98	136.77	125.76	110.72	91.65	69.70	46.21	22.91	0.00



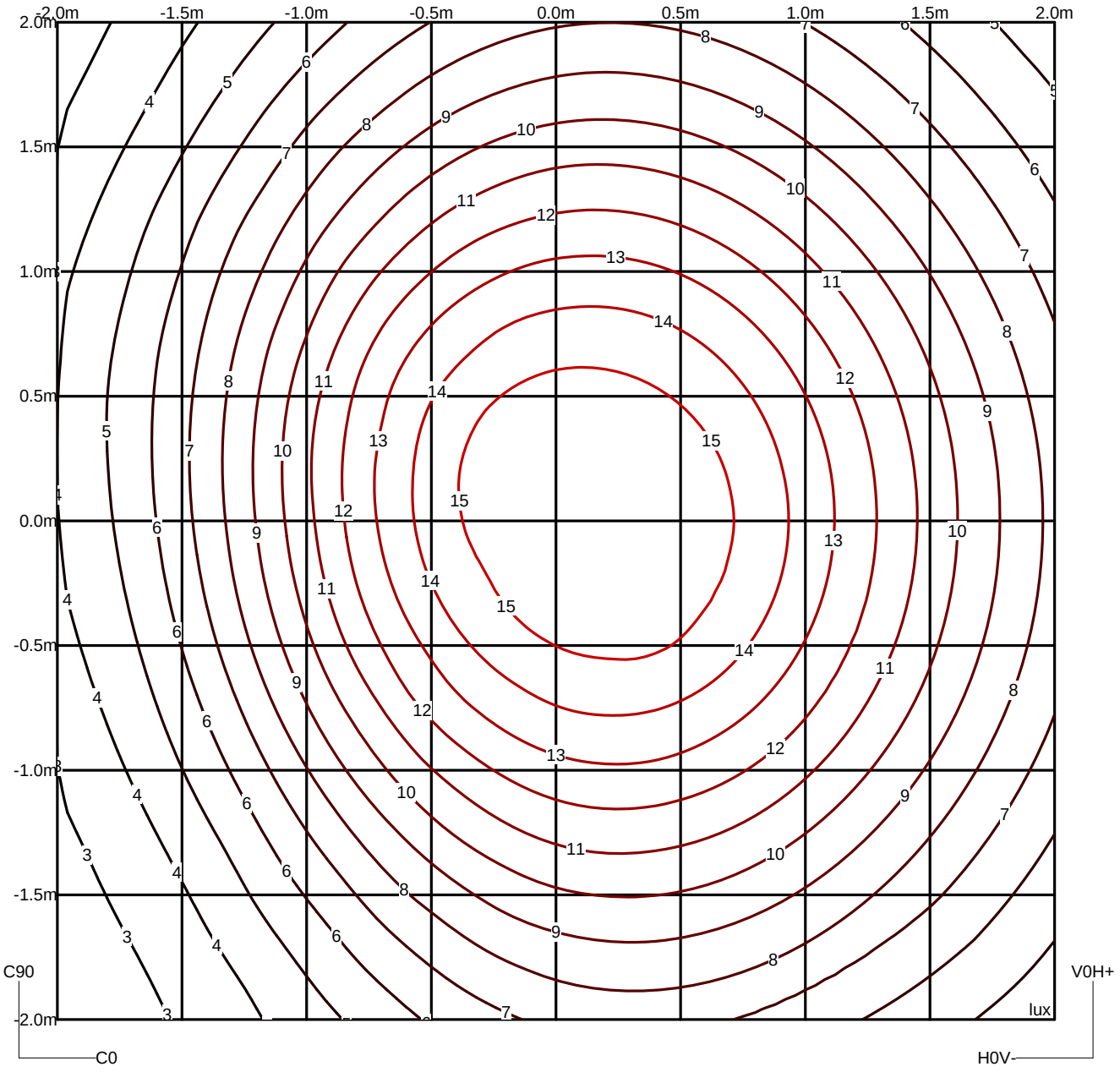
H[m]	D[m]	Max lux	Med lux	Alpha=39.7°+42.5° G=10.0
1.00	1.87	144	42	
2.00	3.74	36	10	
3.00	5.62	16	5	
4.00	7.49	9	3	
5.00	9.36	6	2	

H[m]	D[m]	Max lux	Med lux	Beta=52.3°+59.6° G=0.0
1.00	3.04	144	42	
2.00	6.09	36	10	
3.00	9.13	16	5	
4.00	12.18	9	3	
5.00	15.22	6	2	

Luminaire		Measurem.		Lamp	
Code	55-9733	Code	55-9733	Code	
Name	CHILLOUT	Name	CHILLOUT	Number	27
Line	INVISIBLE	Date	25-02-2014	Position	
Efficiency	1199.63%	Coordinate system	CG	Total Flux	27.00 lm

Isolux (Floor)

Luminaire position X=0.00m Y=0.00m Z=3.00m



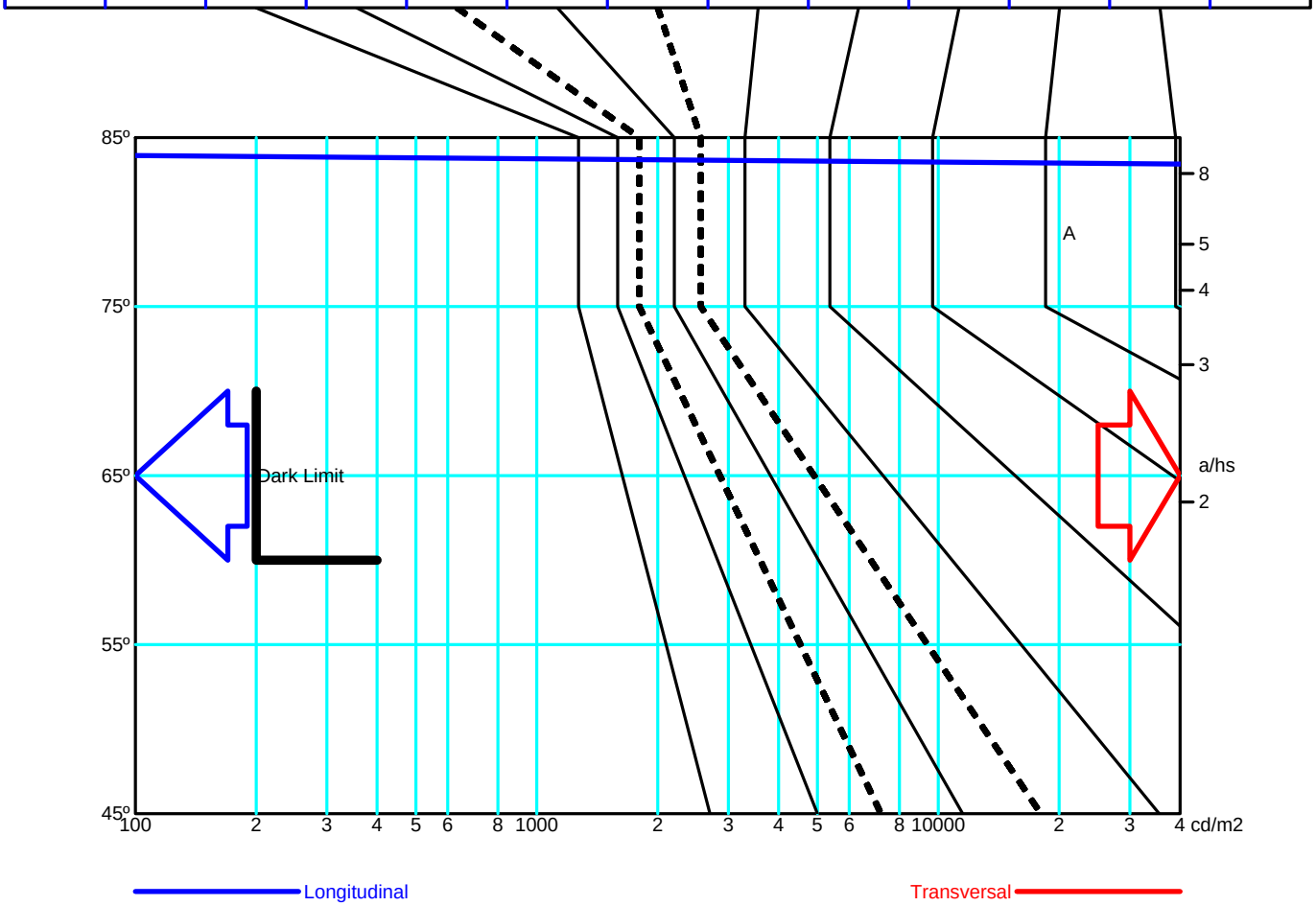
Luminaire		Measurem.		Lamp	
Code	55-9733	Code	55-9733	Code	
Name	CHILLOUT	Name	CHILLOUT	Number	27
Line	INVISIBLE	Date	25-02-2014	Position	
Efficiency	1199.63%	Coordinate system	CG	Total Flux	27.00 lm

Average Luminance [cd/m²]

	45°	50°	55°	60°	65°	70°	75°	80°	85°	
0.0°	132780511	124862394	115712564	105080000	87975375	49587723	37593833	25799292	12506347	---
90.0°	147615612	147762649	146275186	145920000	144480269	141453657	140445615	138210492	0	---

Flush mounted or longitudinal view

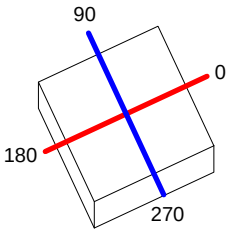
		Illumination(lx)										
A	A	2000	1000	750	500		<300					1.15
B	1		2000	1500	1000	750	500	<300				1.5
C					2000		1000	500	<300			1.85
D	2						2000	1000	500	<300		2.2
E	3							2000	1000	500	<300	2.55



Luminaire		Measurem.		Lamp	
Code	55-9733	Code	55-9733	Code	
Name	CHILLOUT	Name	CHILLOUT	Number	27
Line	INVISIBLE	Date	25-02-2014	Position	

Efficiency	1199.63%	Coordinate system	CG	Total Flux	27.00 lm

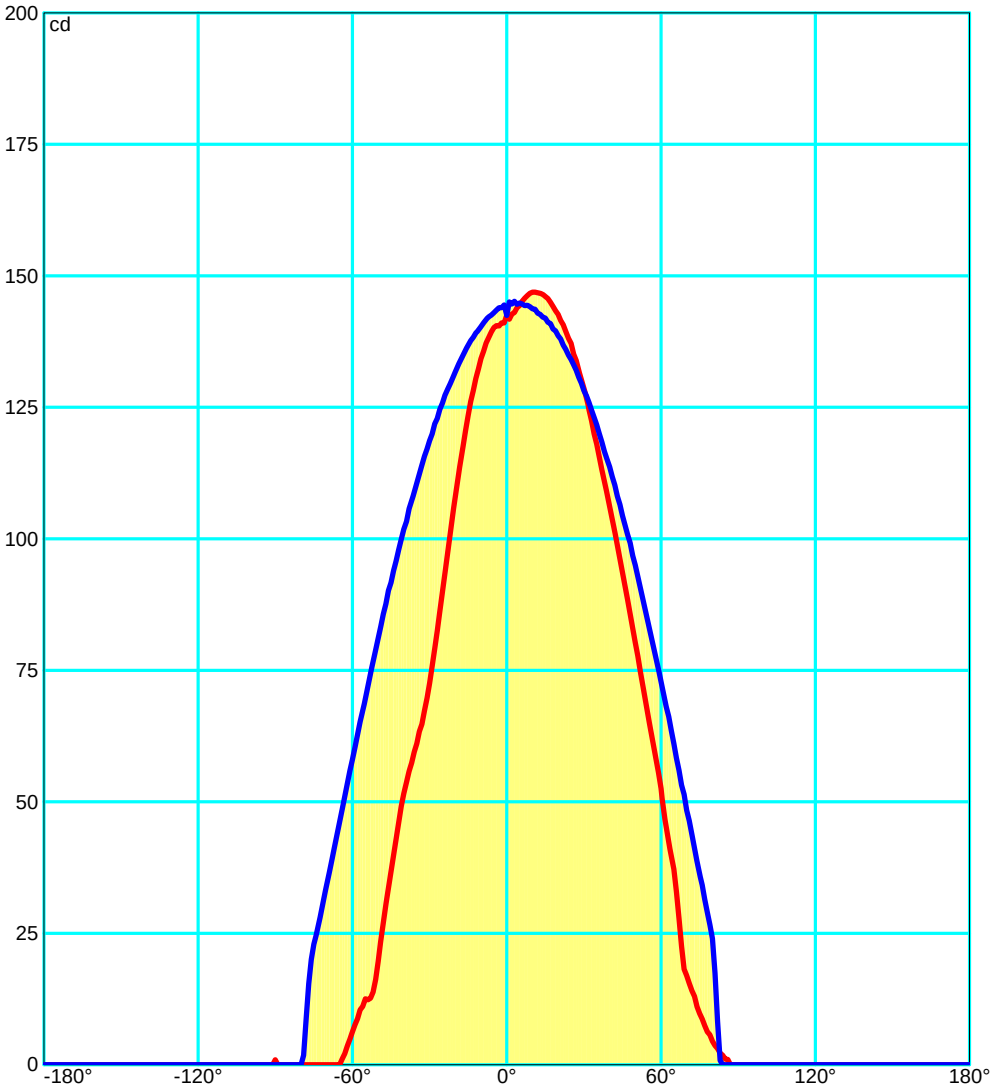
1mm x 1mm



C Halfplanes

180.0 0.0

270.0 90.0



Luminaire		Measurem.		Lamp	
Code	55-9733	Code	55-9733	Code	
Name	CHILLOUT	Name	CHILLOUT	Number	27
Line	INVISIBLE	Date	25-02-2014	Position	
Efficiency	1199.63%	Coordinate system	CG	Total Flux	27.00 lm

UGR

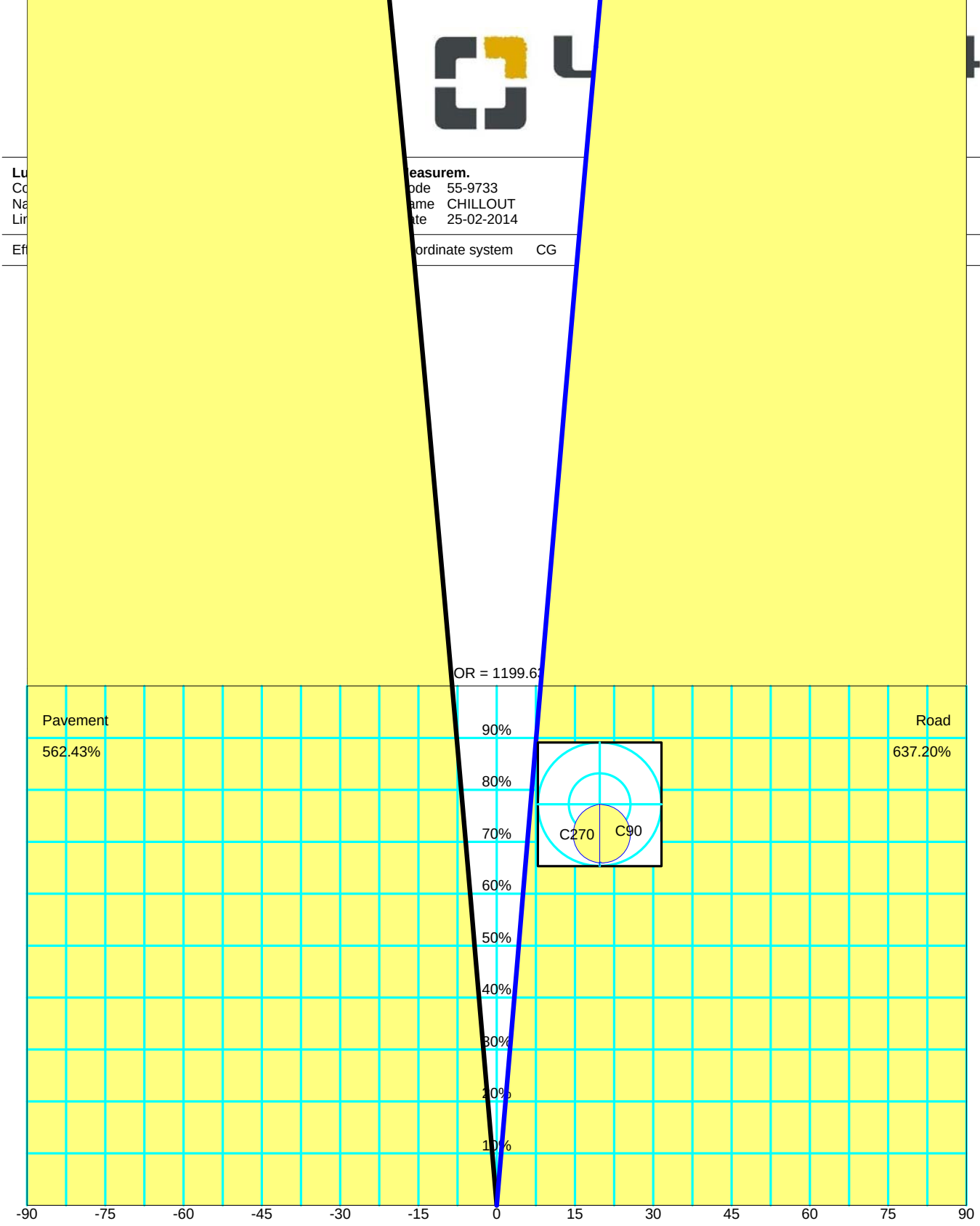
S = 0.250

Reflectancies										
Ceiling/Cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
WorkingPlane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
RoomDimensions	ViewedCrosswise					ViewedEndwise				
x=2H y=2H	44.7	46.0	45.0	46.2	54.5	52.8	54.0	53.1	54.2	54.5
x=2H y=3H	44.6	45.7	44.9	45.9	56.0	54.4	55.5	54.8	55.8	56.0
x=2H y=4H	44.5	45.5	44.8	45.8	56.7	55.1	56.1	55.4	56.4	56.7
x=2H y=6H	44.4	45.4	44.8	45.7	56.7	55.2	56.1	55.5	56.4	56.7
x=2H y=8H	44.4	45.3	44.8	45.6	56.7	55.2	56.1	55.5	56.4	56.7
x=2H y=12H	44.4	45.2	44.7	45.5	56.6	55.1	56.0	55.5	56.3	56.6
x=4H y=2H	45.7	46.8	46.1	47.0	54.7	53.1	54.1	53.4	54.4	54.7
x=4H y=3H	45.6	46.5	46.0	46.8	56.4	54.9	55.8	55.3	56.1	56.4
x=4H y=4H	45.5	46.3	45.9	46.6	57.1	55.7	56.4	56.1	56.8	57.1
x=4H y=6H	45.5	46.1	45.9	46.5	57.2	55.8	56.5	56.2	56.8	57.2
x=4H y=8H	45.4	46.0	45.9	46.4	57.2	55.8	56.4	56.2	56.8	57.2
x=4H y=12H	45.4	46.0	45.9	46.4	57.1	55.7	56.3	56.2	56.7	57.1
x=8H y=4H	46.5	47.1	47.0	47.5	57.1	55.7	56.3	56.2	56.7	57.1
x=8H y=6H	46.5	47.0	47.0	47.5	57.3	55.9	56.4	56.3	56.8	57.3
x=8H y=8H	46.6	47.0	47.1	47.5	57.2	55.9	56.3	56.3	56.7	57.2
x=8H y=12H	46.6	47.0	47.1	47.4	57.2	55.8	56.2	56.3	56.7	57.2
x=12H y=4H	46.9	47.4	47.3	47.9	57.1	55.7	56.2	56.2	56.7	57.1
x=12H y=6H	47.0	47.4	47.5	47.9	57.2	55.9	56.3	56.4	56.8	57.2
x=12H y=8H	47.1	47.5	47.6	48.0	57.2	55.8	56.2	56.3	56.7	57.2

Lu
Co
Na
Lir

easurem.
ode 55-9733
ame CHILLOUT
ate 25-02-2014

Ef
ordinate system CG



Spread	28.7°	Narrow		DLOR	1199.62895 %
Throw	13.9°	Short		ULOR	0.00000 %
				Efficiency	1199.62895 %
CIE Cutoff	Non Cutoff - Max: C=0.0° Gamma=10.0°			RN	0.00000 %
IESNA Cutoff	Non Cutoff			Luminous Intensity Class	GU
DIN5044	--			Glare Index	D0

IESNA Type II Very Short Asymmetrical

Luminaire		**easurem.**		**Lamp**	
Code	55-9733	ode	55-9733	Code	
Name	CHILLO	ame	CHILLOUT	Number	27
Line	INVISIB	ate	25-02-2014	Position	
Efficiency		oordinate system	CG	Total Flux	27.00 lm

Flux= 27.00 Luminaire Flux=323.90

RI	0.6	1.50	2.00	2.50	3.00	4.00	5.00	10.00	20.00
DRR	0.3	0.65	0.73	0.79	0.82	0.86	0.89	0.94	0.97
RC	4	4	3	3	3	3	3	3	3

Zonal Flux per 1000 Lumen

Y°	1	)	80	90	100	110	120	130	140	150	160	170	180
ZF(Y)	5(	63	11914	11996	11996	11996	11996	11996	11996	11996	11996	11996	11996

CIE Flux Codes

55 86 98 100 1200

C. /3/3

D

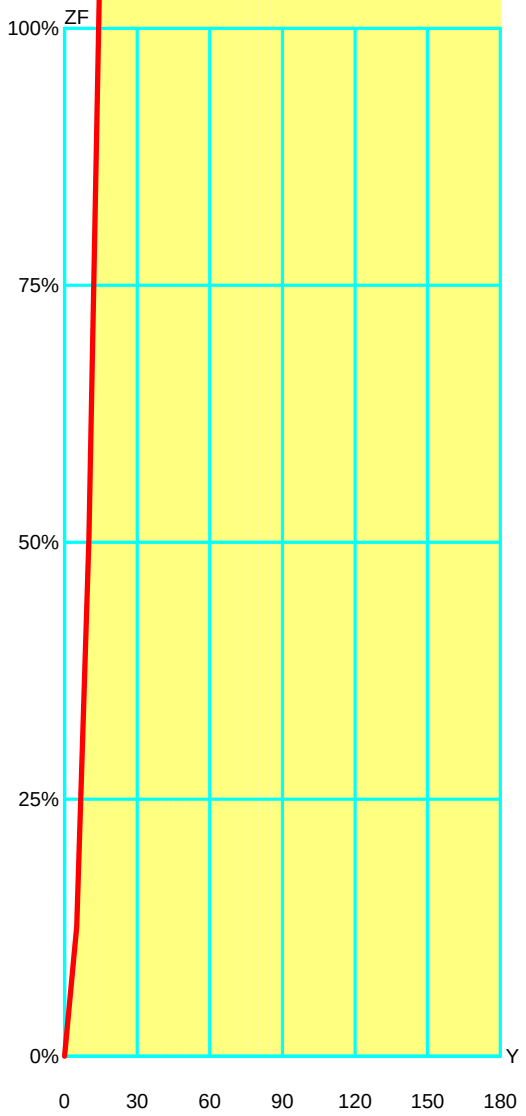
F

B

RN

BL

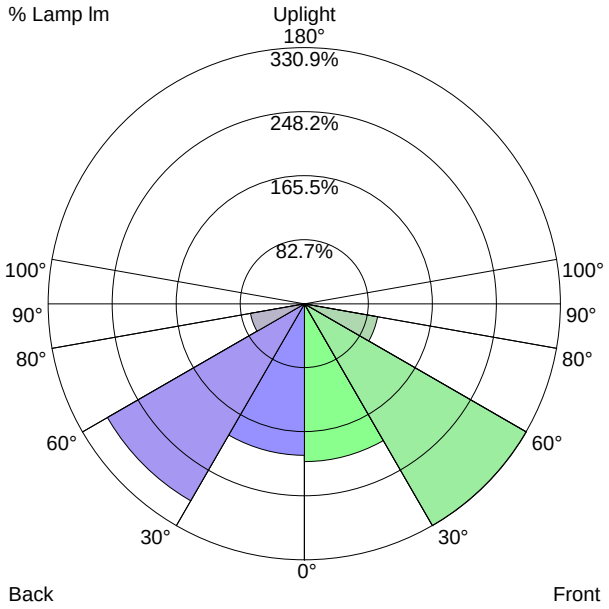
LOR	1199.62895 %
ULOR	0.00000 %
DLOR	1199.62895 %
UFF	0.00000 %
DFF	100.00000 %
FFR	0.00000 %

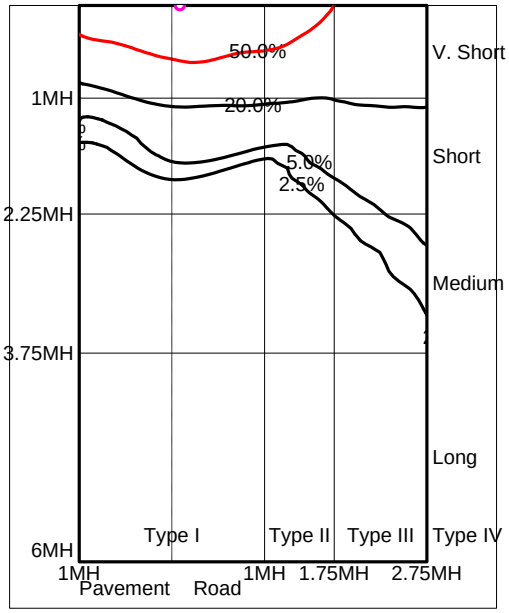


Zonal Flux				
Gamma °	Flux	Sum lm	Flux [%]	Sum [%]
0°	0.00	0.00	0.00%	0.00 %
5°	126.28	126.28	1.05 %	1.05 %
10°	376.65	502.93	3.14 %	4.19 %
15°	612.20	1115.13	5.10 %	9.30 %
20°	817.30	1932.42	6.81 %	16.11 %
25°	977.78	2910.20	8.15 %	24.26 %
30°	1086.83	3997.04	9.06 %	33.32 %
35°	1148.28	5145.32	9.57 %	42.89 %
40°	1167.19	6312.51	9.73 %	52.62 %
45°	1142.54	7455.05	9.52 %	62.14 %
50°	1066.76	8521.80	8.89 %	71.04 %
55°	941.06	9462.87	7.84 %	78.88 %
60°	796.65	10259.52	6.64 %	85.52 %
65°	632.15	10891.67	5.27 %	90.79 %
70°	471.39	11363.07	3.93 %	94.72 %
75°	342.24	11705.31	2.85 %	97.57 %
80°	209.14	11914.44	1.74 %	99.32 %
85°	70.22	11984.66	0.59 %	99.90 %
90°	11.63	11996.29	0.10 %	100.00 %
95°	0.00	11996.29	0.00 %	100.00 %
100°	0.00	11996.29	0.00 %	100.00 %
105°	0.00	11996.29	0.00 %	100.00 %
110°	0.00	11996.29	0.00 %	100.00 %
115°	0.00	11996.29	0.00 %	100.00 %
120°	0.00	11996.29	0.00 %	100.00 %
125°	0.00	11996.29	0.00 %	100.00 %
130°	0.00	11996.29	0.00 %	100.00 %
135°	0.00	11996.29	0.00 %	100.00 %
140°	0.00	11996.29	0.00 %	100.00 %
145°	0.00	11996.29	0.00 %	100.00 %
150°	0.00	11996.29	0.00 %	100.00 %
155°	0.00	11996.29	0.00 %	100.00 %
160°	0.00	11996.29	0.00 %	100.00 %
165°	0.00	11996.29	0.00 %	100.00 %
170°	0.00	11996.29	0.00 %	100.00 %
175°	0.00	11996.29	0.00 %	100.00 %
180°	0.00	11996.29	0.00 %	100.00 %

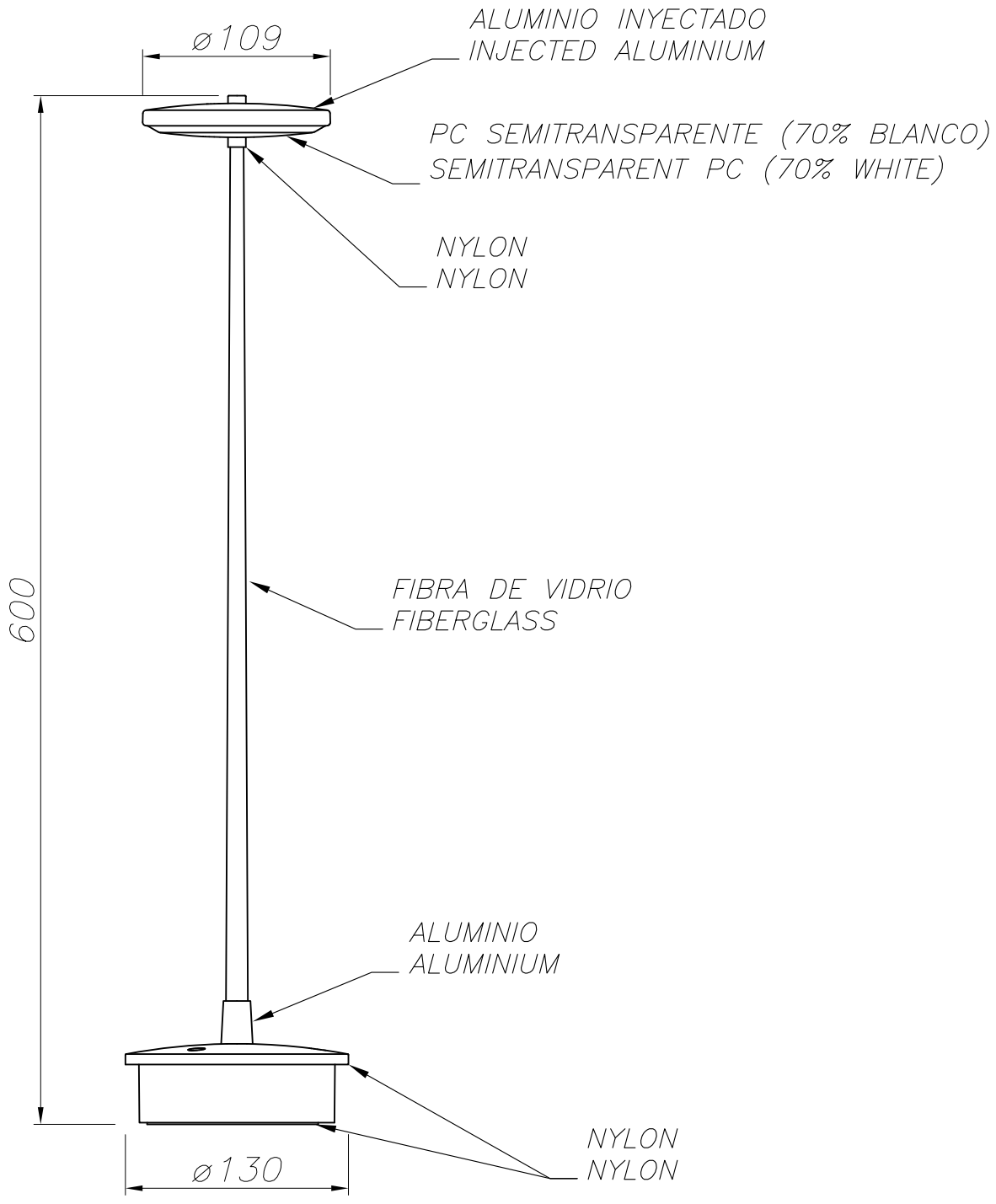
Luminaire		Measurem.		Lamp	
Code	55-9733	Code	55-9733	Code	
Name	CHILLOUT	Name	CHILLOUT	Number	27
Line	INVISIBLE	Date	25-02-2014	Position	
Efficiency	1199.63%	Coordinate system	CG	Total Flux	27.00 lm

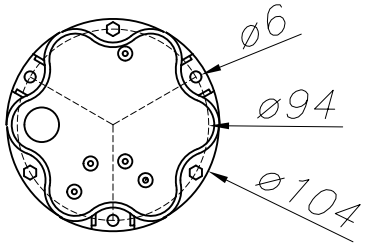
US ROAD STANDARDS





Luminaire Classification System (LCS)				
LCS Zone		Lumens	%Lamp	%Lum
FL	0° -- 30°	55.0 lm	203.9 %	17.0 %
FM	30° -- 60°	89.4 lm	330.9 %	27.6 %
FH	60° -- 80°	25.9 lm	95.9 %	8.0 %
FVH	80° -- 90°	1.7 lm	6.5 %	0.5 %
BL	0° -- 30°	52.8 lm	195.7 %	16.3 %
BM	30° -- 60°	79.3 lm	293.9 %	24.5 %
BH	60° -- 80°	19.1 lm	70.7 %	5.9 %
BVH	80° -- 90°	0.6 lm	2.1 %	0.2 %
UL	90° -- 100°	0.0 lm	0.0 %	0.0 %
UH	100° -- 180°	0.0 lm	0.0 %	0.0 %
TOTALS		323.9 lm	1199.6 %	100.0 %
BUG B0 U0 G0 Type II Very Short Asymmetrical				



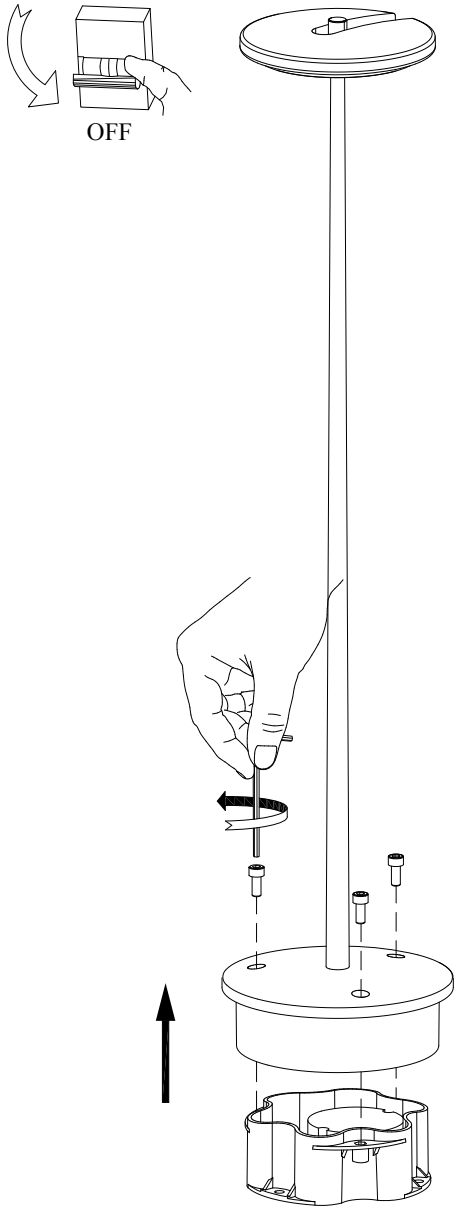


PLANTILLA DE INSTALACION
INSTALLATION TEMPLATE

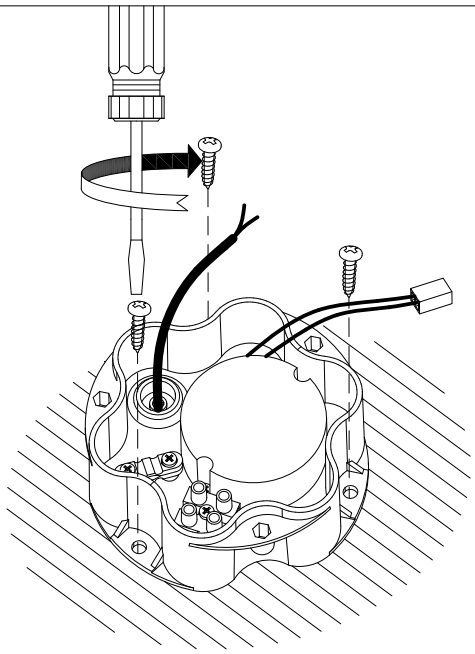
OUTDOOR

55-9733

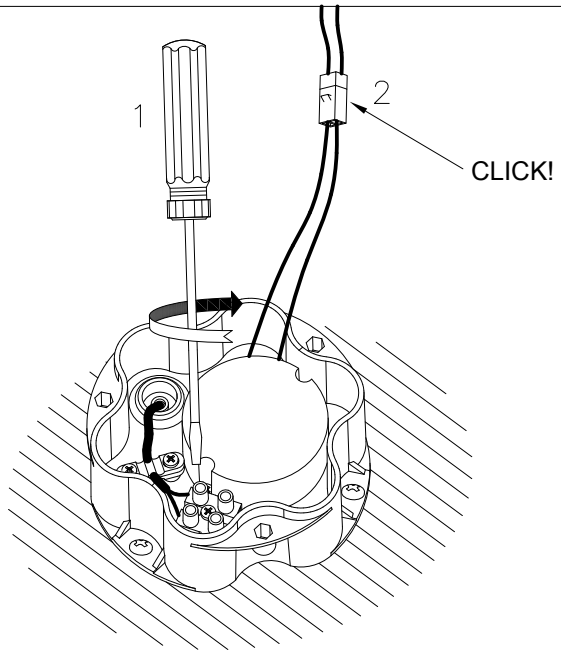
①



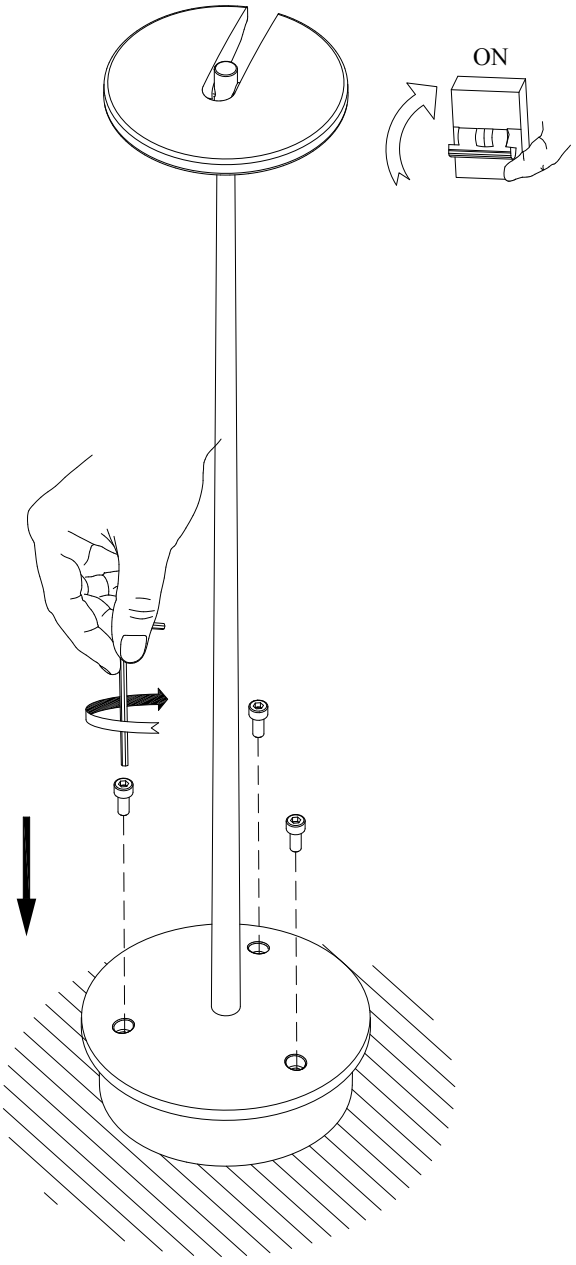
②



③



④



15-11-13