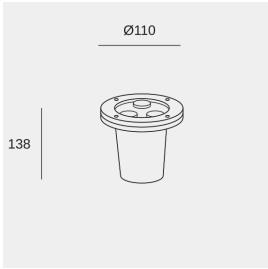




Ringo Ø110mm

PX-0128-INO

Recessed uplighting IP65-IP67 Ringo Ø110mm LED 3.5W 3000K ON-OFF Stainless steel 370.00



TECHNICAL FEATURES

IP65-IP67 IK10



Luminaire total power : 3.5W

Real lumens : 218

Nominal lumens : 370

Real lm/W : 62

Lens / reflector angle : SPOT 20°

UGR : <=16

Structure material : Stainless steel AISI304,
Aluminium

Structure finish : Stainless steel

Diffuser material : Glass

Diffuser finish : Transparent

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

Dimming protocol : ON-OFF

Power Factor : 0.40

Useful life : 36.000h L70B30

Warranty : 5 Years

Easily recyclable luminaire

LUMINOTECHNIC FEATURES

CRI: 80

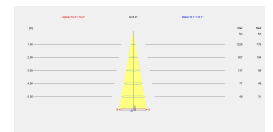
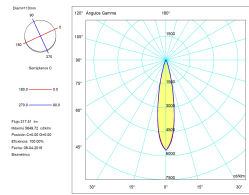
MacAdam steps: 3

Photobiological risk: RG2

UGR

UGR crosswise: 8.7

UGR lengthwise: 8.5



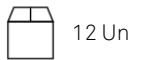
Lampholder	Quantity	Light source power (W)	Correlated Colour Temperature (CCT)
LED	1	2.7W	3000K

LOGISTICS

Net weight (kg): 0.63

Packaged weight (kg): 0.77

Packaging: 115mm x 115mm x 155mm



Luminaire

Code PX-0128-INO
 Name Empotrable suelo 3 leds 3W

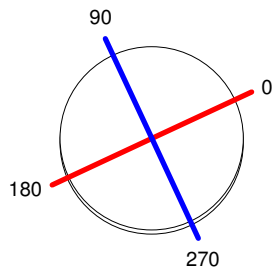
Measurement

Code PX-0123-INO
 Name Empotrable suelo 3 leds 3W

Luminaire Flux	217.50 lm	Luminaire Power	3.00 W	Efficacy	72.50 lm/W	Efficiency	100.00%
Lamps Flux	217.51 lm	Maximum value	1228.87 cd	Position	C=0.00 G=0.00	CG	Double Symmetrical
Round Luminaire Round Luminous Area		Diam.	110 mm	Height	5 mm		
		Diam.	58 mm	Height	0 mm		
Horizontal Luminous Area	0.002642 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°		0.000639 m2	
Coordinate system	CG			Symmetry Type		Double Symmetrical	
Date	08-04-2016			Maximum Gamma Angle		90	
Measurement Distance	0.00			Measurement Flux		217.51 lm	
Operator	Asselum T3			Source Voltage [V]			
Temperature	25.00 °C			Source current [A]			
Humidity	60.00 %			Photocell			
Notes							

Line	Code	Luminaire Lamps	Flux [lm]	Pow. [W]	Q.ty
	PX-0128-INO	Name PX-0128-INO - 3.00 W	217.51	3.00	1
C.I.E.	96 99 100 100 100	D DIN 5040	A60		
F UTE	1.00 A	B NBN	BZ 1		

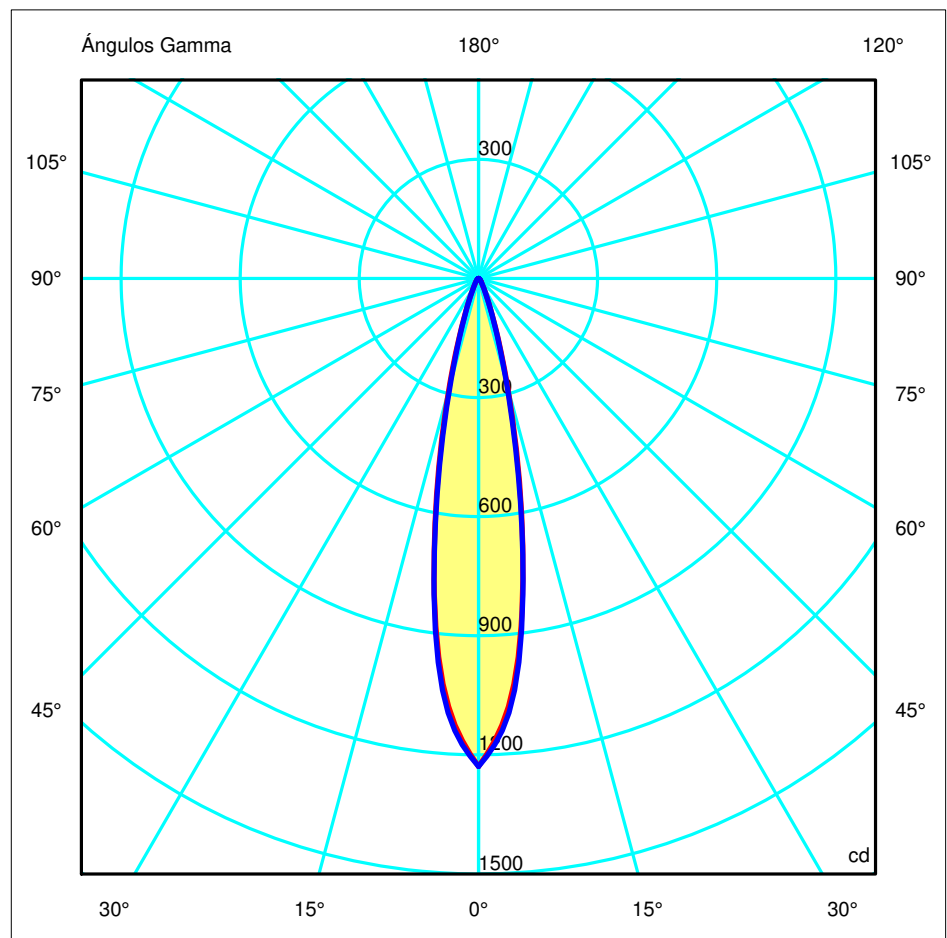
Diam=110mm



Semiplanos C



ULOR 0.00 %
 DLOR 100.00 %
 RN 0.00 %



Luminaire

Code PX-0128-INO
 Name Empotrable suelo 3 leds 3W

Measur.

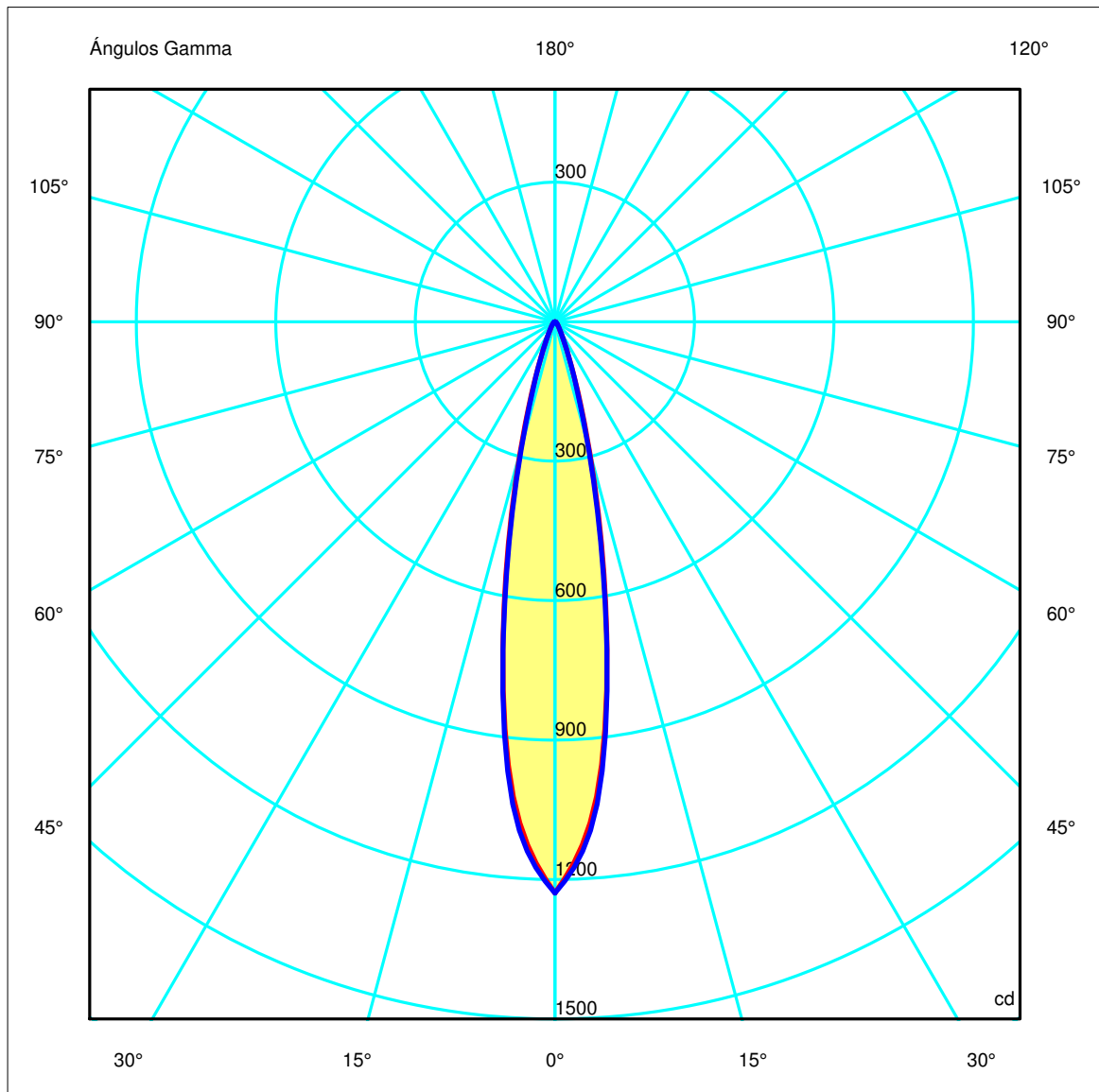
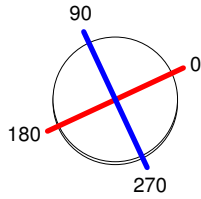
Code PX-0123-INO
 Name Empotrable suelo 3 leds 3W

Luminaire Flux	217.50 lm	Luminaire Power	3.00 W	Efficacy	72.50 lm/W	Efficiency	100.00%
Lamps Flux	217.51 lm	Maximum value	1228.87 cd	Position	C=0.00 G=0.00	CG	Double Symmetrical

Diam=110mm

Semiplanos C

180.0 ——— 0.0
 270.0 ——— 90.0



Luminaire

Code PX-0128-INO
 Name Empotrable suelo 3 leds 3W

Measurement

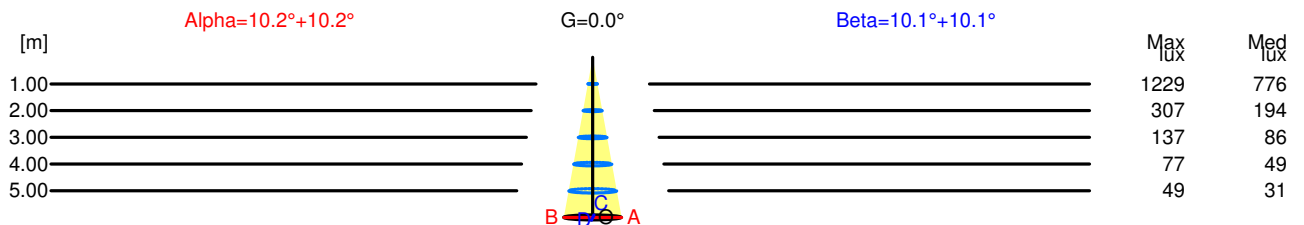
Code PX-0123-INO
 Name Empotrable suelo 3 leds 3W

Luminaire Flux	217.50 lm	Luminaire Power	3.00 W	Efficacy	72.50 lm/W	Efficiency	100.00%
Lamps Flux	217.51 lm	Maximum value	1228.87 cd	Position	C=0.00 G=0.00	CG	Double Symmetrical

Width at 50.00 % of Max Intensity

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	0.18	0.36	0.54	0.72	0.90	OC	0.18	0.36	0.54	0.71	0.89
OB	0.18	0.36	0.54	0.72	0.90	OD	0.18	0.36	0.54	0.71	0.89

	Luminous Intensities [cd]									
	0	5	15	25	35	45	55	65	75	85
OA	1228.87	1025.43	285.96	46.10	13.88	7.23	2.87	1.15	0.41	0.34
OB	1228.87	1025.43	285.96	46.10	13.88	7.23	2.87	1.15	0.41	0.34
OC	1228.87	1041.15	272.31	44.17	14.42	6.52	2.89	1.20	0.45	0.36
OD	1228.87	1041.15	272.31	44.17	14.42	6.52	2.89	1.20	0.45	0.36



H[m]	D[m]	Max lux	Med lux	Alpha=10.2°+10.2°	G=0.0	
1.00	0.36	1229	776			
2.00	0.72	307	194			
3.00	1.08	137	86			
4.00	1.44	77	49			
5.00	1.80	49	31			

H[m]	D[m]	Max lux	Med lux	Beta=10.1°+10.1°	G=0.0	
1.00	0.36	1229	776			
2.00	0.71	307	194			
3.00	1.07	137	86			
4.00	1.43	77	49			
5.00	1.79	49	31			

Luminaire

Code PX-0128-INO
 Name Empotrable suelo 3 leds 3W

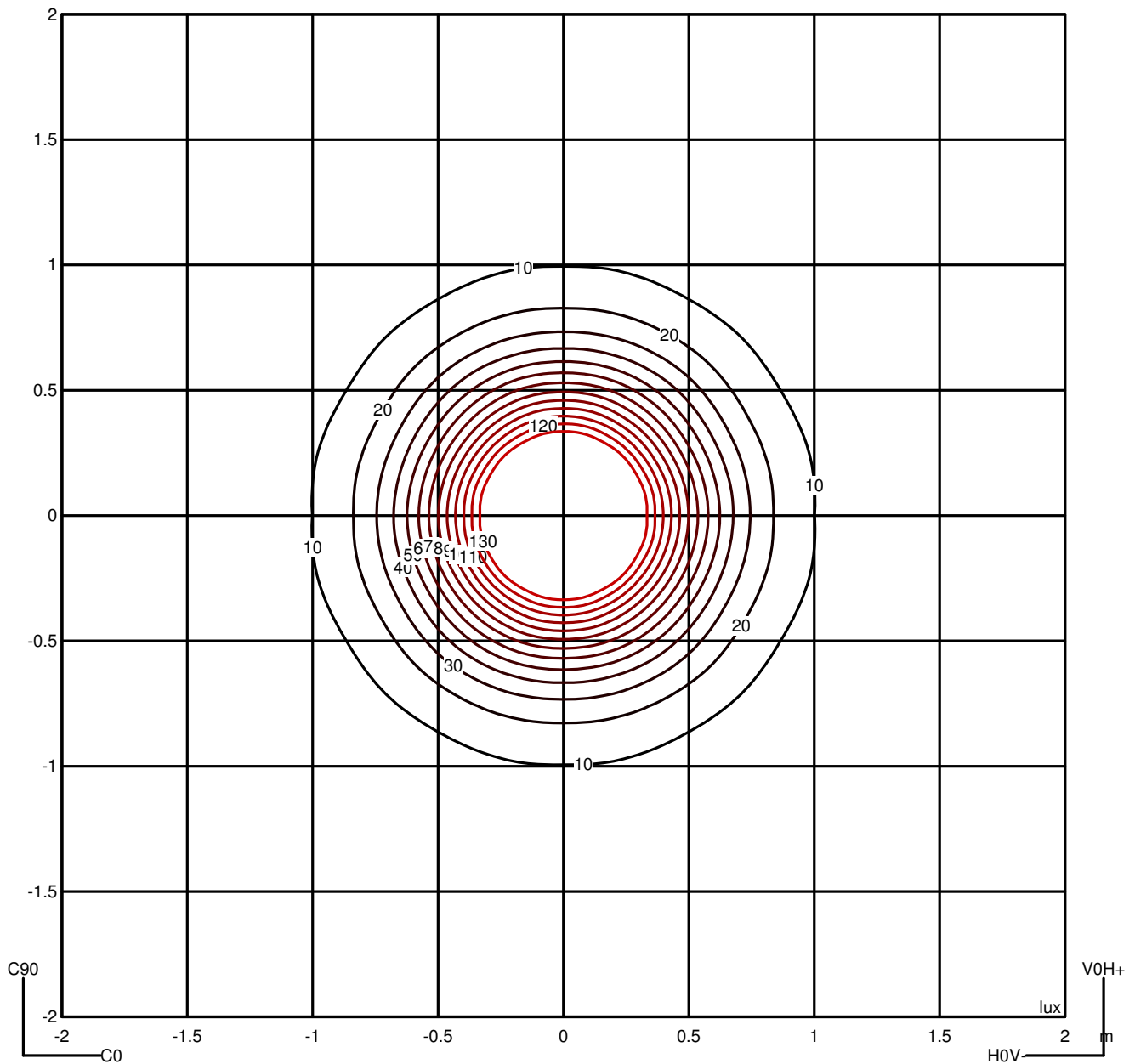
Measurem.

Code PX-0123-INO
 Name Empotrable suelo 3 leds 3W

Luminaire Flux	217.50 lm	Luminaire Power	3.00 W	Efficacy	72.50 lm/W	Efficiency	100.00%
Lamps Flux	217.51 lm	Maximum value	1228.87 cd	Position	C=0.00 G=0.00	CG	Double Symmetrical

Isolux (Floor)

Luminaire position X=0.00m Y=0.00m Z=2.50m



Luminaire

Code PX-0128-INO
 Name Empotrable suelo 3 leds 3W

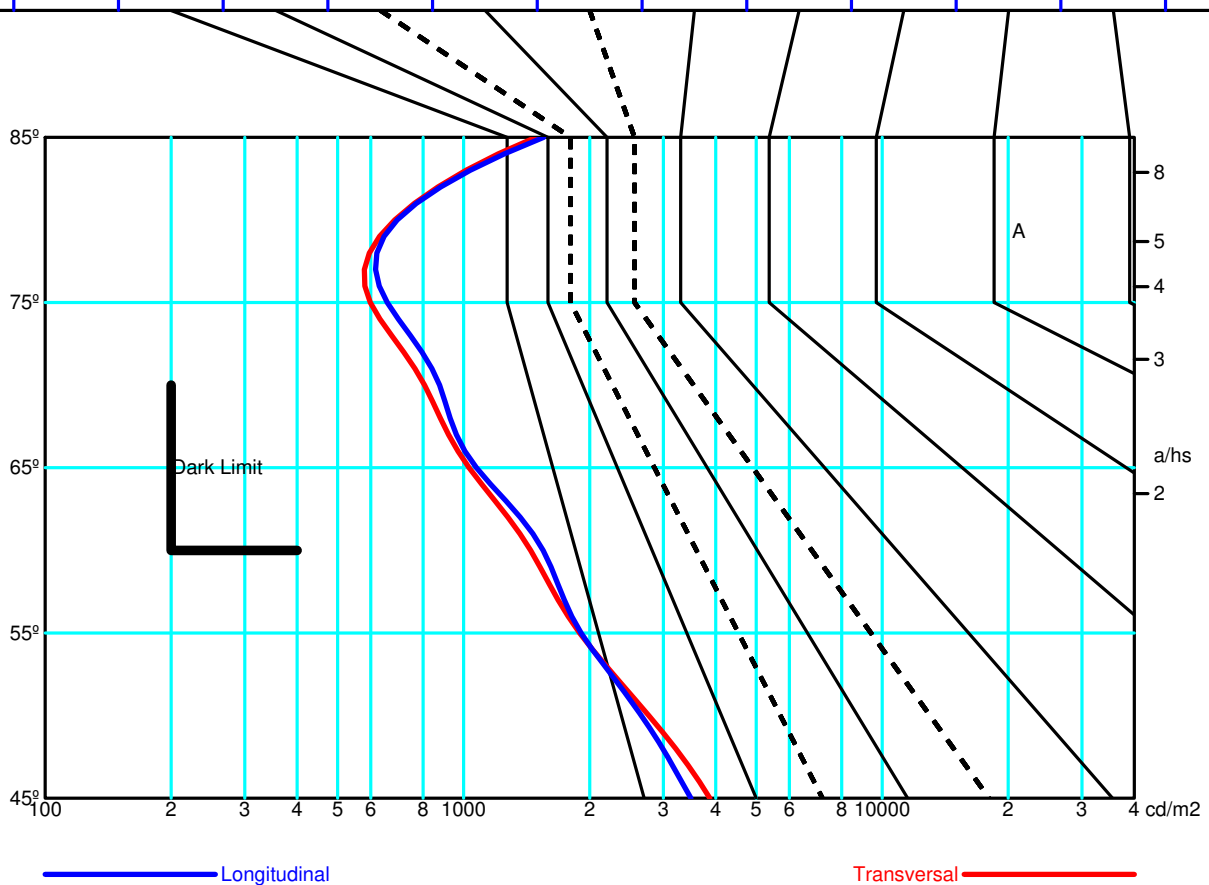
Measurement

Code PX-0123-INO
 Name Empotrable suelo 3 leds 3W

Luminaire Flux	217.50 lm	Luminaire Power	3.00 W	Efficacy	72.50 lm/W	Efficiency	100.00%
Lamps Flux	217.51 lm	Maximum value	1228.87 cd	Position	C=0.00 G=0.00	CG	Double Symmetrical

		Average Luminance [cd/m ²]									
		45°	50°	55°	60°	65°	70°	75°	80°	85°	
0.0°		3872	2768	1893	1445	1030	807	598	685	1488	---
90.0°		3490	2658	1908	1549	1072	876	657	694	1553	---

Flujo montado o vista longitudinal												
		Iluminancia (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

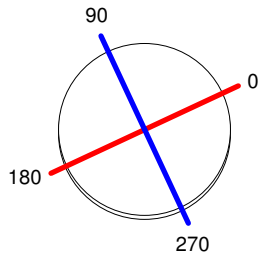
Code PX-0128-INO
 Name Empotrable suelo 3 leds 3W

Measurement

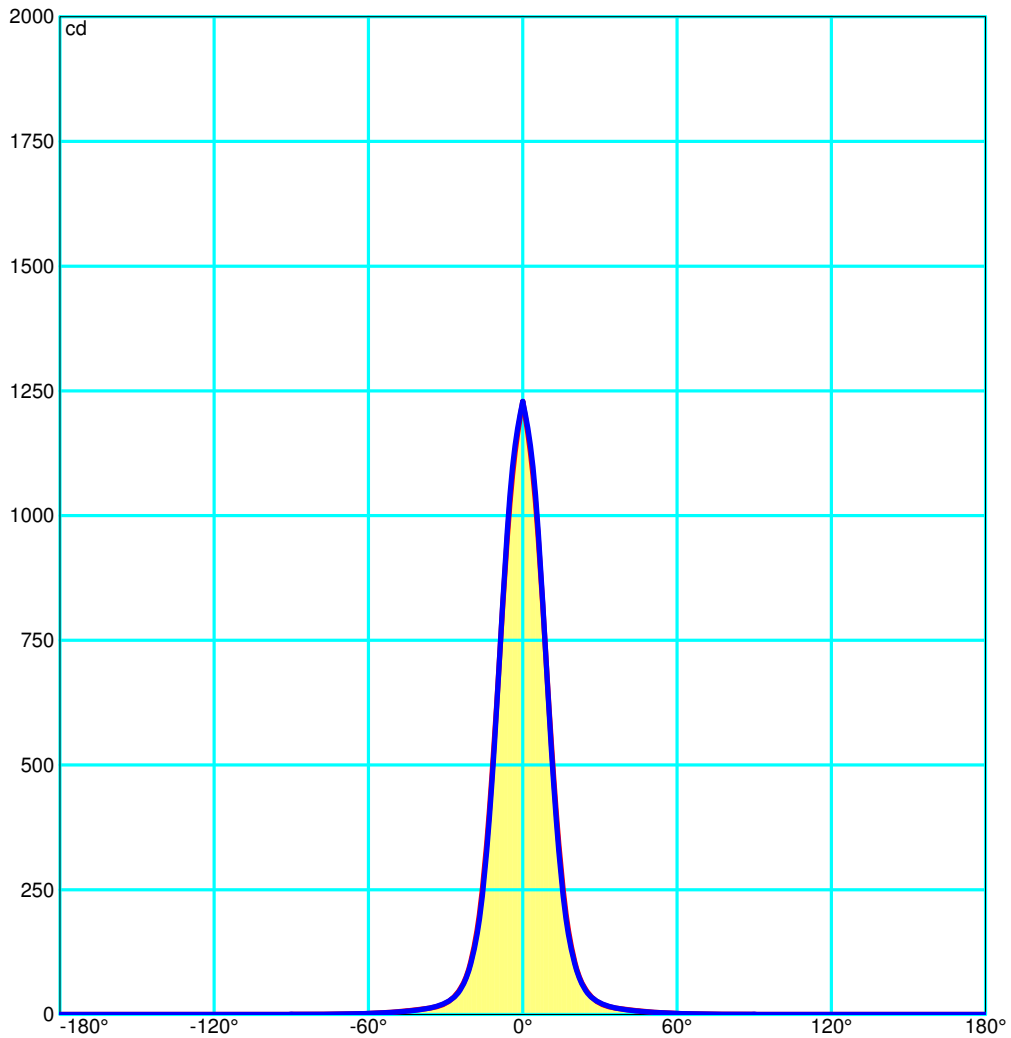
Code PX-0123-INO
 Name Empotrable suelo 3 leds 3W

Luminaire Flux	217.50 lm	Luminaire Power	3.00 W	Efficacy	72.50 lm/W	Efficiency	100.00%
Lamps Flux	217.51 lm	Maximum value	1228.87 cd	Position	C=0.00 G=0.00	CG	Double Symmetrical

Diam=110mm



Semiplanos C





Luminaire

Code PX-0128-INO
 Name Empotrable suelo 3 leds 3W

Measurement

Code PX-0123-INO
 Name Empotrable suelo 3 leds 3W

Luminaire Flux	217.50 lm	Luminaire Power	3.00 W	Efficacy	72.50 lm/W	Efficiency	100.00%
Lamps Flux	217.51 lm	Maximum value	1228.87 cd	Position	C=0.00 G=0.00	CG	Double Symmetrical

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	7.9	8.5	8.1	8.7	8.8	7.7	8.4	7.9	8.6	8.8
x=2H y=3H	8.1	8.7	8.4	8.9	9.0	7.9	8.5	8.2	8.8	9.0
x=2H y=4H	8.1	8.7	8.4	9.0	9.0	8.0	8.5	8.3	8.8	9.0
x=2H y=6H	8.2	8.7	8.5	9.0	9.1	8.0	8.5	8.3	8.8	9.1
x=2H y=8H	8.2	8.7	8.5	9.0	9.2	8.1	8.6	8.4	8.9	9.2
x=2H y=12H	8.3	8.8	8.7	9.1	9.3	8.2	8.7	8.6	9.0	9.3
x=4H y=2H	8.0	8.6	8.3	8.9	8.9	7.9	8.5	8.2	8.7	8.9
x=4H y=3H	8.3	8.8	8.7	9.1	9.2	8.1	8.6	8.5	8.9	9.2
x=4H y=4H	8.4	8.8	8.8	9.2	9.3	8.2	8.7	8.6	9.0	9.3
x=4H y=6H	8.5	8.9	8.9	9.2	9.5	8.4	8.7	8.8	9.1	9.5
x=4H y=8H	8.6	8.9	9.0	9.3	9.6	8.5	8.8	8.9	9.2	9.6
x=4H y=12H	8.9	9.1	9.3	9.5	9.8	8.7	9.0	9.2	9.4	9.8
x=8H y=4H	8.4	8.7	8.8	9.1	9.4	8.3	8.6	8.7	8.9	9.4
x=8H y=6H	8.6	8.8	9.0	9.3	9.5	8.5	8.7	8.9	9.1	9.5
x=8H y=8H	8.8	9.0	9.3	9.4	9.8	8.7	8.9	9.1	9.3	9.8
x=8H y=12H	9.2	9.3	9.7	9.8	10.2	9.1	9.3	9.6	9.7	10.2
x=12H y=4H	8.4	8.7	8.8	9.1	9.3	8.2	8.5	8.7	8.9	9.3
x=12H y=6H	8.6	8.8	9.1	9.3	9.6	8.5	8.7	8.9	9.1	9.6
x=12H y=8H	8.9	9.0	9.3	9.5	9.9	8.7	8.9	9.2	9.4	9.9

Luminaire

Code PX-0128-INO
Name Empotrable suelo 3 leds 3W

Measurerm.

Code PX-0123-INO
Name Empotrable suelo 3 leds 3W

Luminaire Flux	217.50 lm	Luminaire Power	3.00 W	Efficacy	72.50 lm/W	Efficiency	100.00%
Lamps Flux	217.51 lm	Maximum value	1228.87 cd	Position	C=0.00 G=0.00	CG	Double Symmetrical

Flujo Total=217.51 Flujo Luminaria=217.50

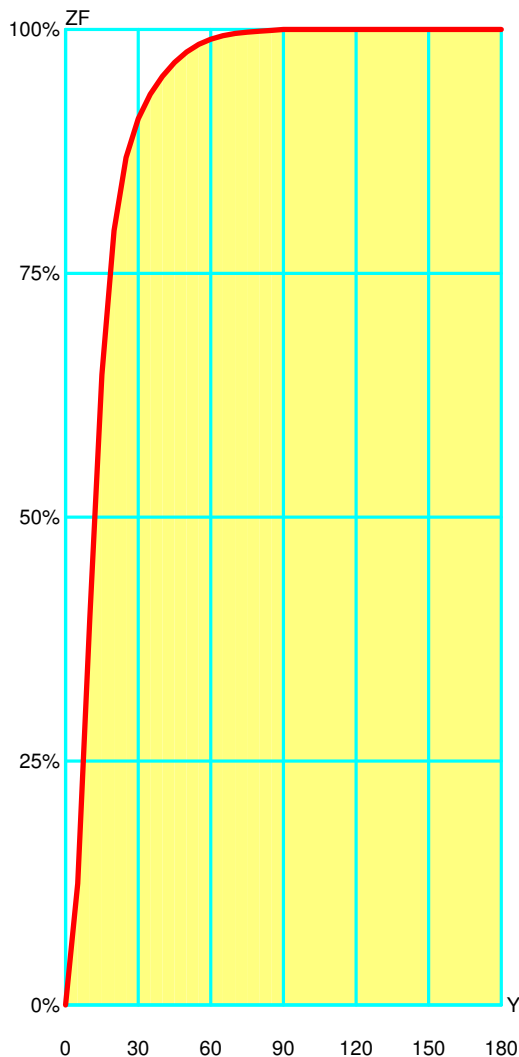
RI	0.60	0.80	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00	10.00	20.00
DRR	0.70	0.75	0.80	0.84	0.87	0.91	0.94	0.96	0.98	0.99	1.01	1.02
RC	-	-	-	-	-	-	-	-	-	-	-	-

Flujo Zonal por 1000 Lúmenes

Y°	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
ZF(Y)	398	794	908	952	977	990	996	998	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000

Códigos de Flujo C.I.E.
96 99 100 100 100

C.I.E.	-/-/-/-/-/-/-/-/-/-	LOR	99.99738 %
D DIN 5040	A60	ULOR	0.00000 %
F UTE	1.00 A	DLOR	99.99738 %
B NBN	BZ 1	UFF	0.00000 %
RN	0.00000 %	DFF	100.00000 %
BLF	1.0	FFR	0.00000 %



Gamma °	Flujo Zonal			
	Flujo	Suma lm	Flujo [%]	Suma [%]
0°	0.00	0.00	0.00%	0.00 %
5°	124.51	124.51	12.45 %	12.45 %
10°	273.78	398.29	27.38 %	39.83 %
15°	247.80	646.09	24.78 %	64.61 %
20°	147.84	793.93	14.78 %	79.40 %
25°	74.75	868.68	7.47 %	86.87 %
30°	39.67	908.35	3.97 %	90.84 %
35°	25.10	933.45	2.51 %	93.35 %
40°	18.37	951.82	1.84 %	95.18 %
45°	14.26	966.08	1.43 %	96.61 %
50°	10.82	976.91	1.08 %	97.69 %
55°	7.73	984.63	0.77 %	98.47 %
60°	5.33	989.96	0.53 %	99.00 %
65°	3.59	993.55	0.36 %	99.36 %
70°	2.29	995.84	0.23 %	99.59 %
75°	1.41	997.25	0.14 %	99.73 %
80°	0.93	998.18	0.09 %	99.82 %
85°	0.85	999.03	0.08 %	99.91 %
90°	0.95	999.97	0.09 %	100.00 %
95°	0.00	999.97	0.00 %	100.00 %
100°	0.00	999.97	0.00 %	100.00 %
105°	0.00	999.97	0.00 %	100.00 %
110°	0.00	999.97	0.00 %	100.00 %
115°	0.00	999.97	0.00 %	100.00 %
120°	0.00	999.97	0.00 %	100.00 %
125°	0.00	999.97	0.00 %	100.00 %
130°	0.00	999.97	0.00 %	100.00 %
135°	0.00	999.97	0.00 %	100.00 %
140°	0.00	999.97	0.00 %	100.00 %
145°	0.00	999.97	0.00 %	100.00 %
150°	0.00	999.97	0.00 %	100.00 %
155°	0.00	999.97	0.00 %	100.00 %
160°	0.00	999.97	0.00 %	100.00 %
165°	0.00	999.97	0.00 %	100.00 %
170°	0.00	999.97	0.00 %	100.00 %
175°	0.00	999.97	0.00 %	100.00 %
180°	0.00	999.97	0.00 %	100.00 %

Luminaire

Code PX-0128-INO
 Name Empotrable suelo 3 leds 3W

Measurment

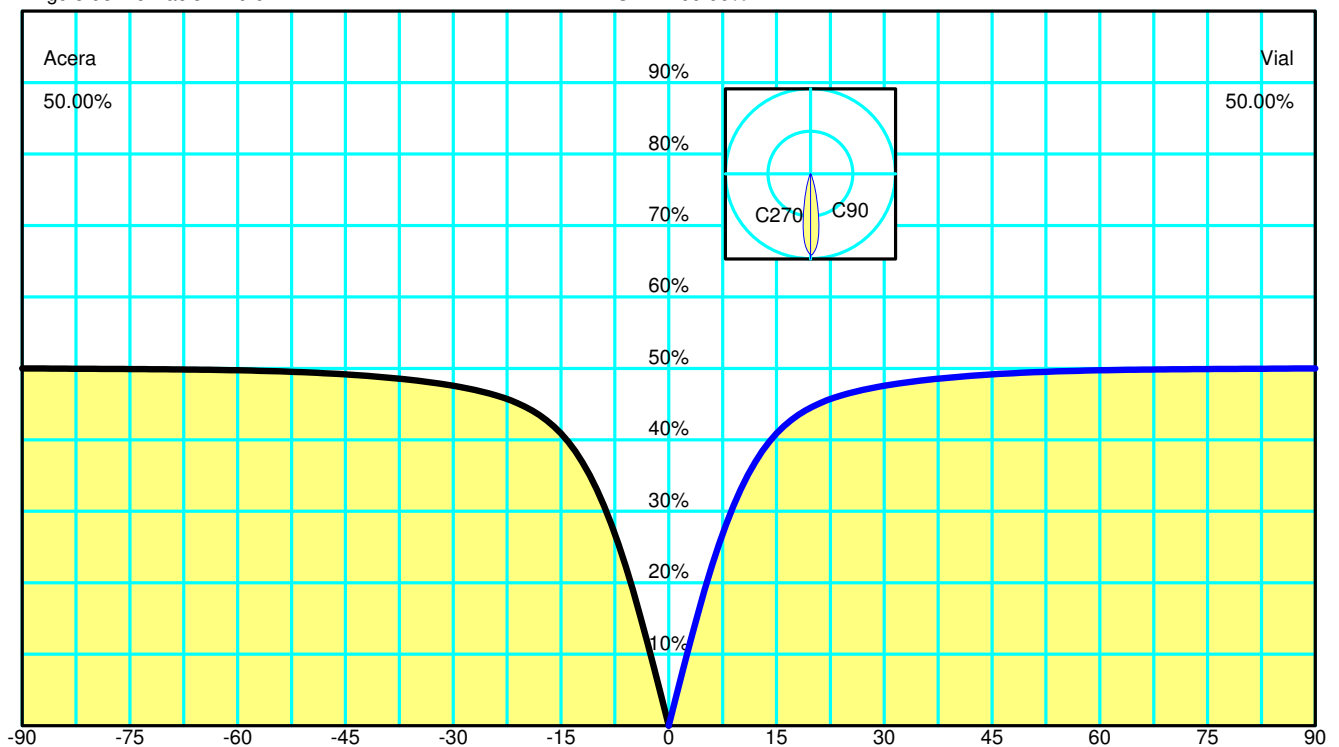
Code PX-0123-INO
 Name Empotrable suelo 3 leds 3W

Luminaire Flux	217.50 lm	Luminaire Power	3.00 W	Efficacy	72.50 lm/W	Efficiency	100.00%
Lamps Flux	217.51 lm	Maximum value	1228.87 cd	Position	C=0.00 G=0.00	CG	Double Symmetrical

Pavement			Road		
Piano	0	0.00%	Piano	0	0.00%
Piano	-5	19.01%	Piano	5	19.01%
Piano	-10	33.04%	Piano	10	33.04%
Piano	-15	40.90%	Piano	15	40.90%
Piano	-20	44.64%	Piano	20	44.64%
Piano	-25	46.49%	Piano	25	46.49%
Piano	-30	47.57%	Piano	30	47.57%
Piano	-35	48.28%	Piano	35	48.28%
Piano	-40	48.79%	Piano	40	48.79%
Piano	-45	49.16%	Piano	45	49.16%
Piano	-50	49.42%	Piano	50	49.42%
Piano	-55	49.61%	Piano	55	49.61%
Piano	-60	49.73%	Piano	60	49.73%
Piano	-65	49.82%	Piano	65	49.82%
Piano	-70	49.87%	Piano	70	49.87%
Piano	-75	49.91%	Piano	75	49.91%
Piano	-80	49.94%	Piano	80	49.94%
Piano	-85	49.97%	Piano	85	49.97%
Piano	-90	50.00%	Piano	90	50.00%

Ángulo de Inclinación = 0.0

DLOR = 100.00%



Spread 3.8° Estrecho
 Throw 1.8° Corto

Cutoff CIE Cutoff - Max: C=0.0° Gamma=0.0°
 Cutoff lesna Cutoff
 DIN5044 KB1

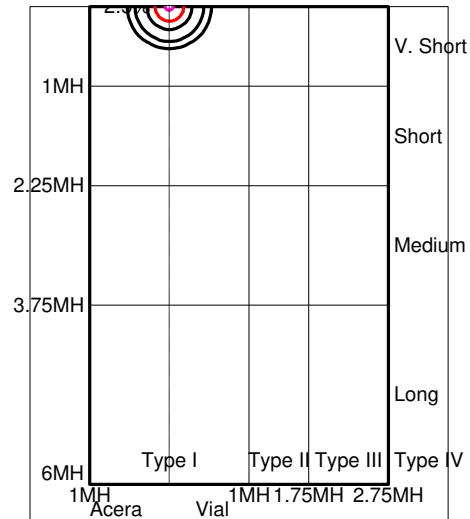
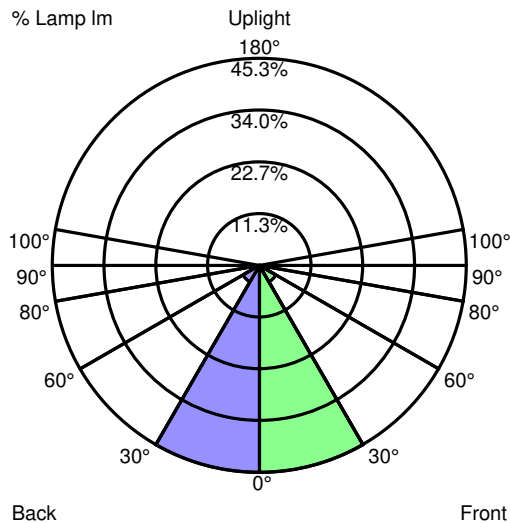
IESNA Type V Very Short Quadrilateral Symmetry

DLOR 99.99738 %
 ULOR 0.00000 %
 Rendimiento 99.99738 %
 RN 0.00000 %
 Clase de Intensidad Luminosa G5
 Índice de Deslumbramiento D6

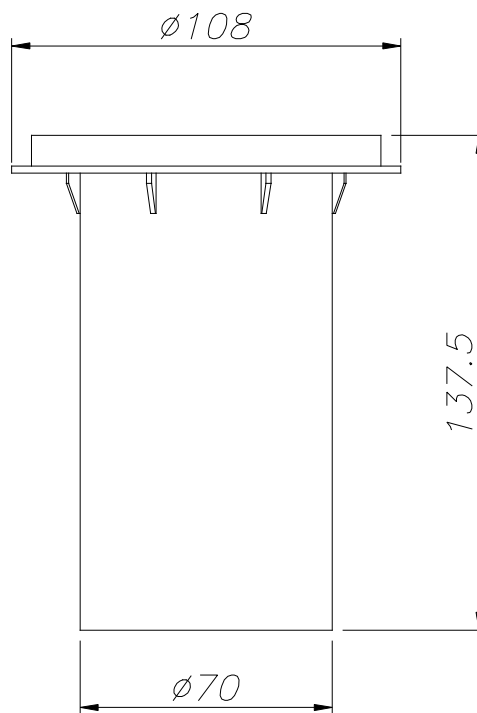
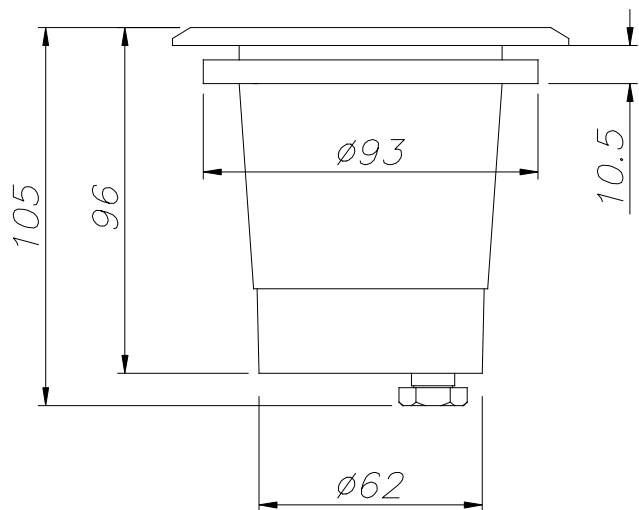
Luminaire
 Code PX-0128-INO
 Name Empotrable suelo 3 leds 3W
Measuram.
 Code PX-0123-INO
 Name Empotrable suelo 3 leds 3W

Luminaire Flux	217.50 lm	Luminaire Power	3.00 W	Efficacy	72.50 lm/W	Efficiency	100.00%
Lamps Flux	217.51 lm	Maximum value	1228.87 cd	Position	C=0.00 G=0.00	CG	Double Symmetrical

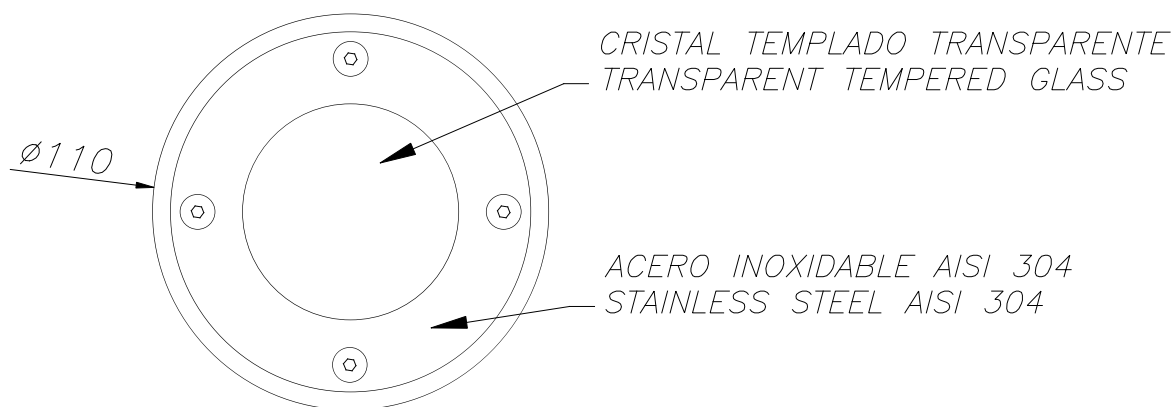
US ROAD STANDARDS

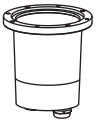


Luminaire Classification System (LCS)				
LCS Zone		Lumens	%Lamp	%Lum
FL	0° -- 30°	98.6 lm	45.3 %	45.3 %
FM	30° -- 60°	9.1 lm	4.2 %	4.2 %
FH	60° -- 80°	0.9 lm	0.4 %	0.4 %
FVH	80° -- 90°	0.2 lm	0.1 %	0.1 %
BL	0° -- 30°	98.6 lm	45.3 %	45.3 %
BM	30° -- 60°	9.1 lm	4.2 %	4.2 %
BH	60° -- 80°	0.9 lm	0.4 %	0.4 %
BVH	80° -- 90°	0.2 lm	0.1 %	0.1 %
UL	90° -- 100°	0.0 lm	0.0 %	0.0 %
UH	100° -- 180°	0.0 lm	0.0 %	0.0 %
TOTALS		217.5 lm	100.0 %	100.0 %
BUG B0 U0 G0 Type V Very Short Quadrilateral Symmetry				



CAJA DE EMPOTRAR
FLUSH FITTING BOX





Ringo

PX-0123 PX-0128

FOR
LIGHT

