



Ringo Ø110mm

PX-0123-INO

Empotrable de suelo IP65-IP67 Ringo Ø110mm LED 3.5 Blanco neutro - 4000K ON-OFF acero inoxidable 420.00

CARACTERÍSTICAS TÉCNICAS

IP65-IP67 IK10



Potencia total luminaria : 3.5W

Lúmenes reales : 229

Lúmenes nominales : 420

Lm / W reales : 65

Ángulo Ópticas / Reflector : SPOT 20°

UGR : <=16

Material de la estructura : Acero inoxidable AISI 304,
Aluminio

Acabado estructura : acero inoxidable

Material del difusor : Cristal

Acabado difusor : Transparente

Voltaje / Frecuencia : 100-240V/50-60Hz

Protocolo de regulación : ON-OFF

Vida útil : 36.000h L70B30

Garantía : 5 Años

Luminaria fácilmente reciclable



CARACTERÍSTICAS LUMINOTÉCNICAS

CRI: 80

MacAdam steps: 3

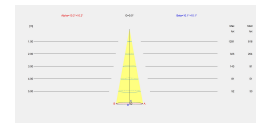
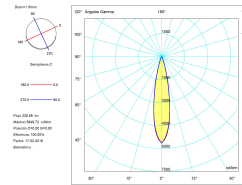
Riesgo fotobiológico: RG2

UGR

UGR Transversal: 8.8

UGR Longitudinal: 8.7

Portalámparas	Cantidad	Potencia fuente de luz (W)	Temperatura de color correlacionada (CCT)
LED	1	2.7W	Blanco neutro - 4000K

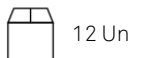


LOGÍSTICA

Peso neto (Kg): 0.6

Peso embalado (Kg): 0.74

Embalaje: 115mm x 115mm x 155mm



Luminaire

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

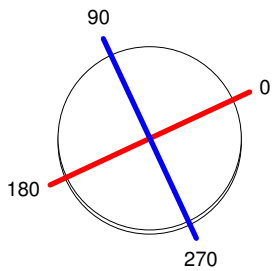
Measurment

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

Luminaire Flux	228.57 lm	Luminaire Power	3.00 W	Efficacy	76.19 lm/W	Efficiency	100.00%
Lamps Flux	228.58 lm	Maximum value	1291.41 cd	Position	C=0.00 G=0.00	CG	Double Symmetrical
Round Luminaire	Diam.	110 mm	Height	5 mm			
Round Luminous Area	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	17-02-2016	Maximum Gamma Angle		90			
Measurement Distance	0.00	Measurement Flux		228.58 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-0123-INO	Name PX-0123-INO		228.58	3.00	1
C.I.E.	96 99 100 100 100		D DIN 5040		A60		
F UTE	1.00 A		B NBN		BZ 1		

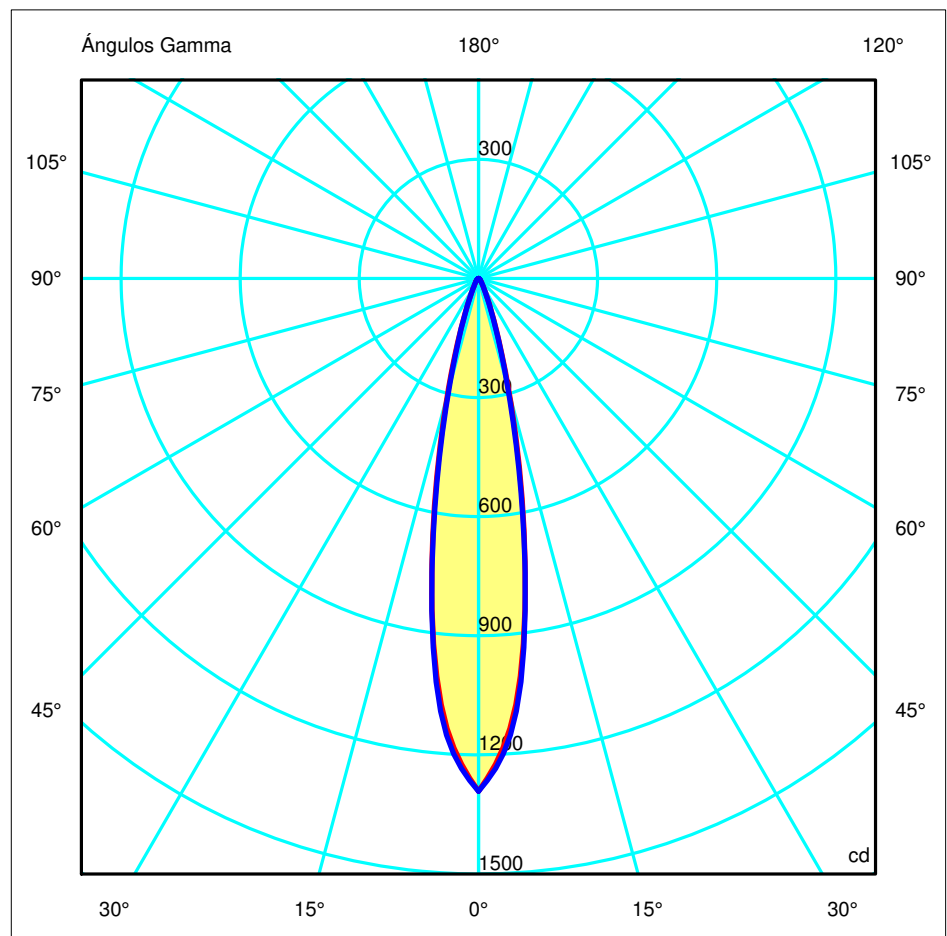
Diam=110mm



Semiplanos C

180.0 — 0.0
270.0 — 90.0

ULOR 0.00 %
DLOR 100.00 %
RN 0.00 %



Luminaire

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

Measur.

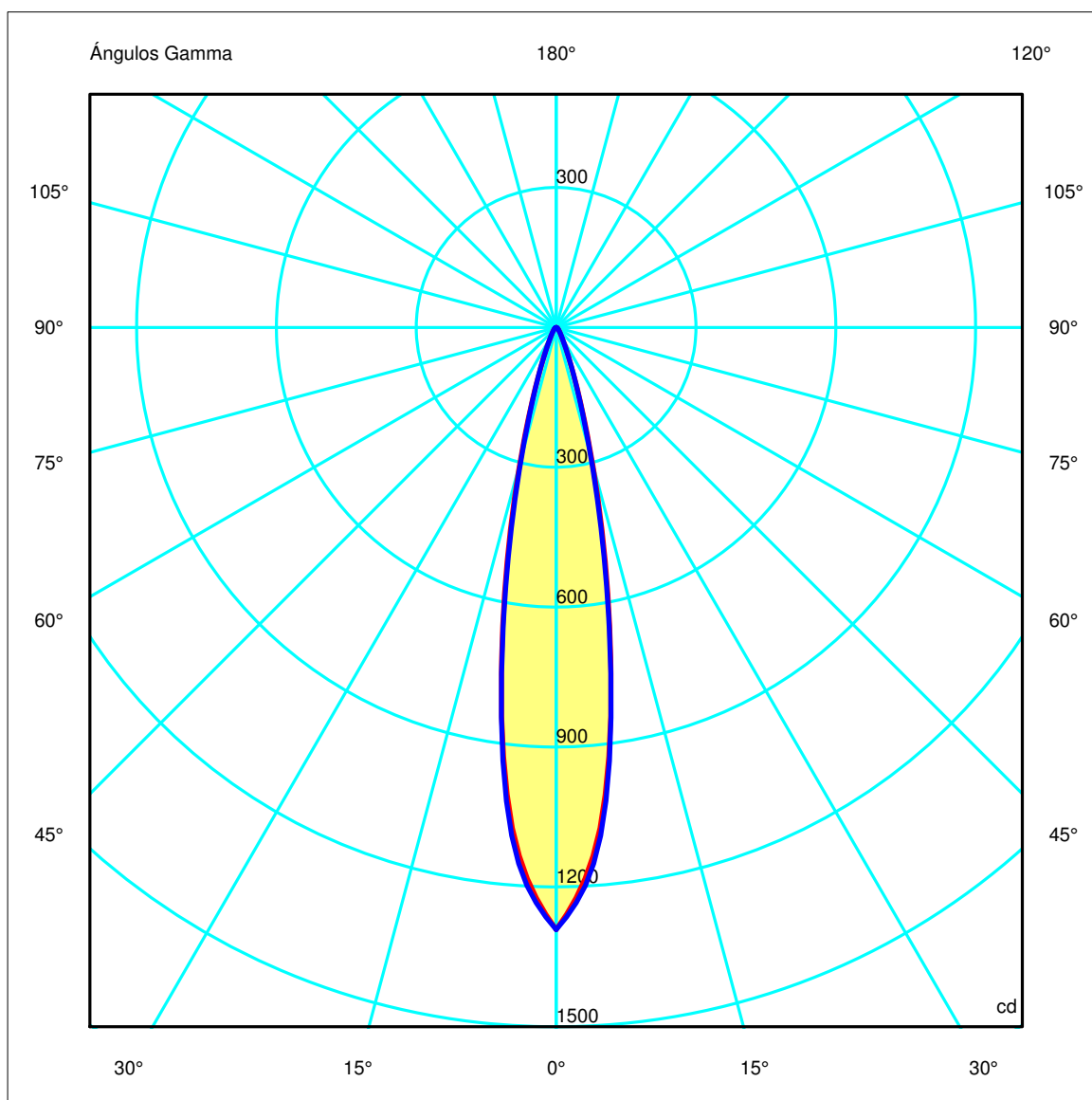
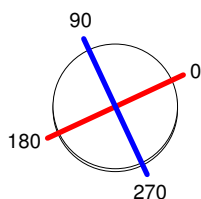
Code PX-0123-INO
Name Empotrable suelo 3 leds 3W

Luminaire Flux	228.57 lm	Luminaire Power	3.00 W	Efficacy	76.19 lm/W	Efficiency	100.00%
Lamps Flux	228.58 lm	Maximum value	1291.41 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-0123-INO
Name Empotrable suelo 3 leds 3W

Measur.

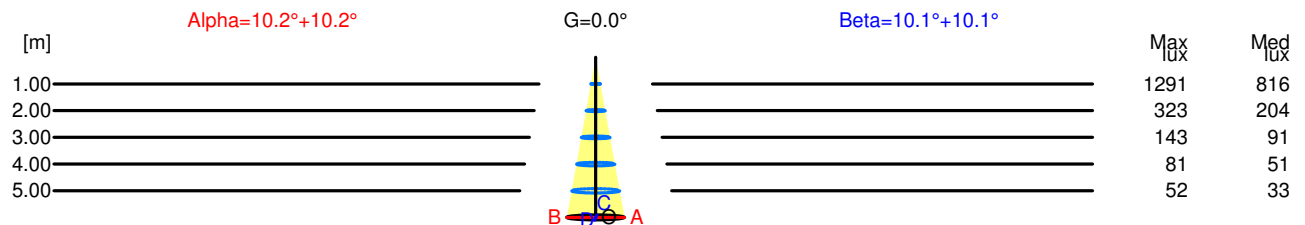
Code PX-0123-INO
Name Empotrable suelo 3 leds 3W

Luminaire Flux	228.57 lm	Luminaire Power	3.00 W	Efficacy	76.19 lm/W	Efficiency	100.00%
Lamps Flux	228.58 lm	Maximum value	1291.41 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	1291.41	1077.62	300.52	48.44	14.59	7.60	3.01	1.21	0.43	0.36
OB	1291.41	1077.62	300.52	48.44	14.59	7.60	3.01	1.21	0.43	0.36
OC	1291.41	1094.14	286.16	46.42	15.15	6.85	3.04	1.26	0.47	0.38
OD	1291.41	1094.14	286.16	46.42	15.15	6.85	3.04	1.26	0.47	0.38



H[m]	D[m]	Max lux	Med lux	Alpha=10.2°+10.2°	G=0.0
1.00	0.36	1291	816		
2.00	0.72	323	204		
3.00	1.08	143	91		
4.00	1.44	81	51		
5.00	1.80	52	33		

H[m]	D[m]	Max lux	Med lux	Beta=10.1°+10.1°	G=0.0
1.00	0.36	1291	816		
2.00	0.71	323	204		
3.00	1.07	143	91		
4.00	1.43	81	51		
5.00	1.79	52	33		

Luminaire

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

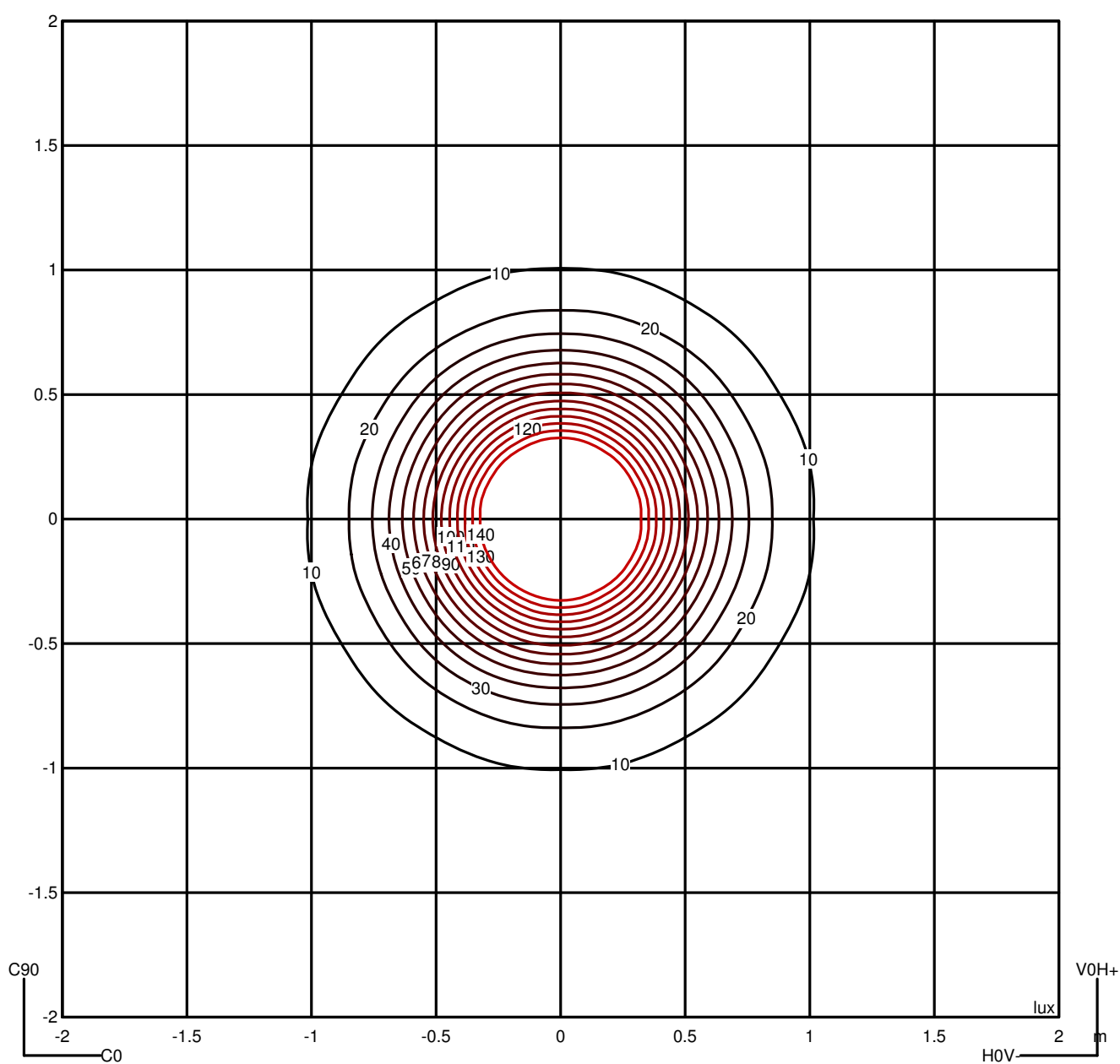
Measurem.

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

Luminaire Flux	228.57 lm	Luminaire Power	3.00 W	Efficacy	76.19 lm/W	Efficiency	100.00%
Lamps Flux	228.58 lm	Maximum value	1291.41 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-0123-INO
Name Empotrable suelo 3 leds 3W

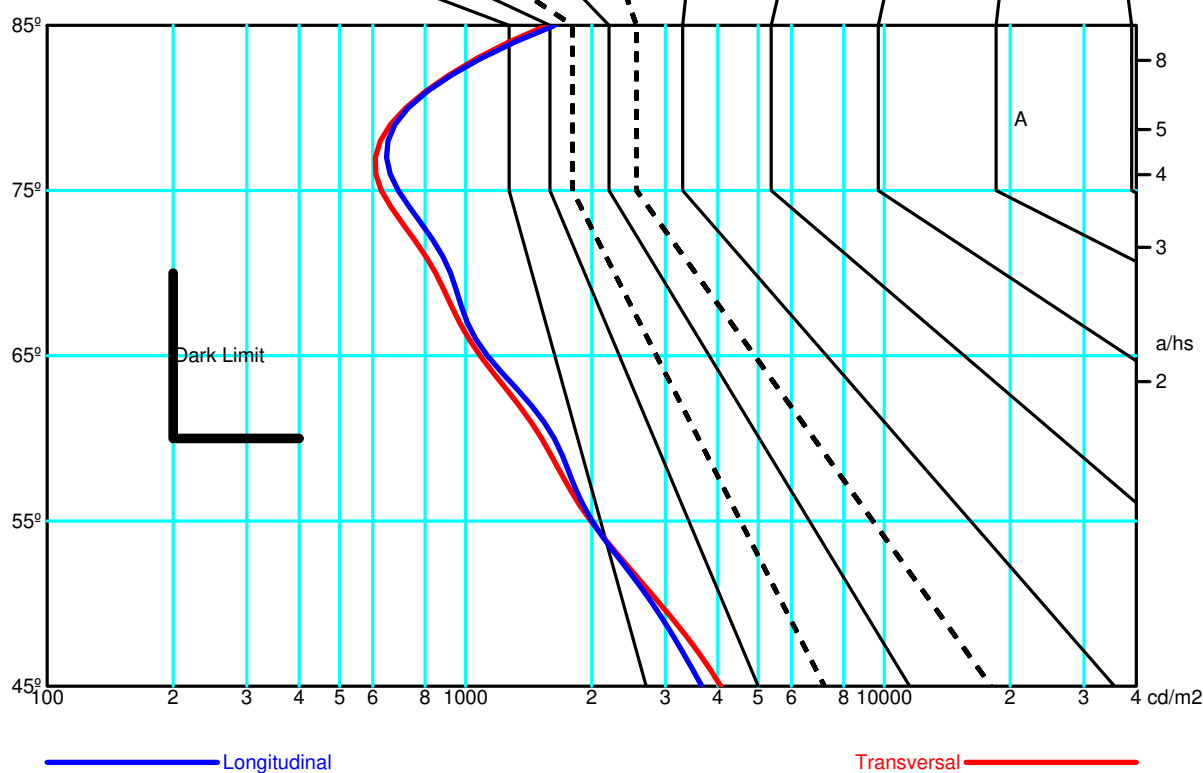
Measurem.

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

Luminaire Flux	228.57 lm	Luminaire Power	3.00 W	Efficacy	76.19 lm/W	Efficiency	100.00%
Lamps Flux	228.58 lm	Maximum value	1291.41 cd	Position	C=0.00 G=0.00	CG	Double Symmetrical

Average Luminance [cd/m²]										
0.0°	45°	50°	55°	60°	65°	70°	75°	80°	85°	
4070	2909	1989	1519	1083	848	629	719	1563	---	
3667	2794	2005	1628	1127	920	690	729	1632	---	

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

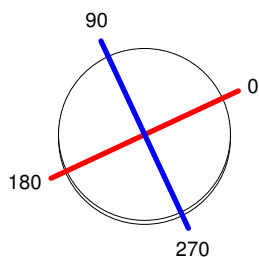
Code PX-0123-INO
Name Empotrable suelo 3 leds 3W

Measurem.

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

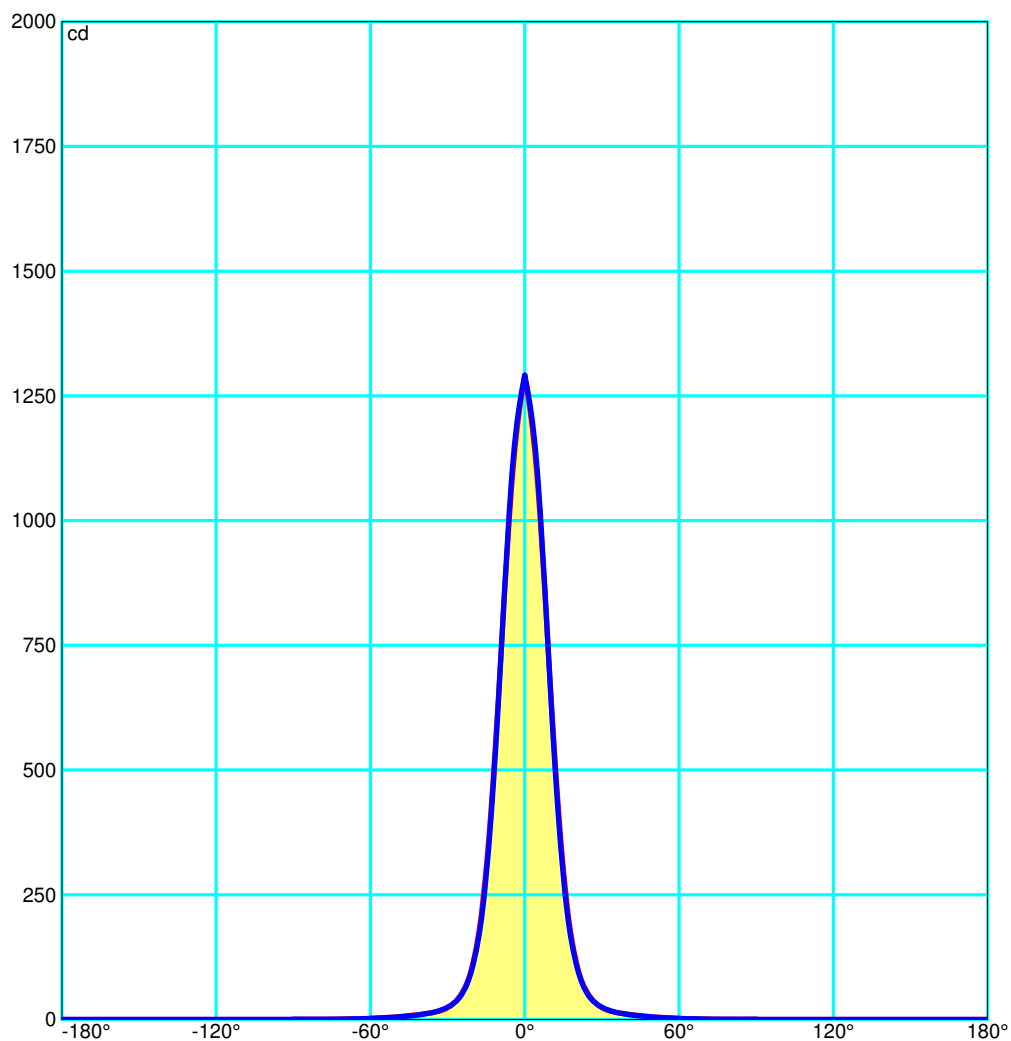
Luminaire Flux	228.57 lm	Luminaire Power	3.00 W	Efficacy	76.19 lm/W	Efficiency	100.00%
Lamps Flux	228.58 lm	Maximum value	1291.41 cd	Position	C=0.00 G=0.00	CG	Double Symmetrical

Diam=110mm



Semiplanos C

180.0 ——— 0.0
270.0 ——— 90.0



Luminaire

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

Measurement

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

Luminaire Flux	228.57 lm	Luminaire Power	3.00 W	Efficacy	76.19 lm/W	Efficiency	100.00%
Lamps Flux	228.58 lm	Maximum value	1291.41 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										
RoomDimensions	ViewedCrosswise					ViewedEndwise				
x=2H y=2H	8.0	8.7	8.3	8.9	8.9	7.9	8.6	8.1	8.8	8.9
x=2H y=3H	8.3	8.9	8.5	9.1	9.2	8.1	8.7	8.4	8.9	9.2
x=2H y=4H	8.3	8.9	8.6	9.1	9.2	8.1	8.7	8.4	9.0	9.2
x=2H y=6H	8.3	8.9	8.7	9.2	9.3	8.2	8.7	8.5	9.0	9.3
x=2H y=8H	8.4	8.9	8.7	9.2	9.3	8.2	8.8	8.6	9.1	9.3
x=2H y=12H	8.5	9.0	8.9	9.3	9.5	8.4	8.9	8.8	9.2	9.5
x=4H y=2H	8.2	8.8	8.5	9.0	9.1	8.0	8.6	8.3	8.9	9.1
x=4H y=3H	8.5	9.0	8.8	9.3	9.4	8.3	8.8	8.7	9.1	9.4
x=4H y=4H	8.6	9.0	9.0	9.4	9.5	8.4	8.8	8.8	9.2	9.5
x=4H y=6H	8.7	9.0	9.1	9.4	9.6	8.5	8.9	8.9	9.2	9.6
x=4H y=8H	8.8	9.1	9.2	9.5	9.8	8.7	9.0	9.1	9.3	9.8
x=4H y=12H	9.0	9.3	9.5	9.7	10.0	8.9	9.2	9.4	9.6	10.0
x=8H y=4H	8.6	8.9	9.0	9.3	9.5	8.4	8.7	8.8	9.1	9.5
x=8H y=6H	8.8	9.0	9.2	9.4	9.7	8.6	8.9	9.1	9.3	9.7
x=8H y=8H	9.0	9.2	9.4	9.6	9.9	8.8	9.0	9.3	9.5	9.9
x=8H y=12H	9.4	9.5	9.8	10.0	10.4	9.3	9.4	9.8	9.9	10.4
x=12H y=4H	8.6	8.8	9.0	9.2	9.5	8.4	8.7	8.8	9.1	9.5
x=12H y=6H	8.8	9.0	9.2	9.4	9.7	8.6	8.8	9.1	9.3	9.7
x=12H y=8H	9.0	9.2	9.5	9.7	10.0	8.9	9.1	9.4	9.5	10.0

Luminaire

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

Measurment

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

Luminaire Flux	228.57 lm	Luminaire Power	3.00 W	Efficacy	76.19 lm/W	Efficiency	100.00%
Lamps Flux	228.58 lm	Maximum value	1291.41 cd	Position	C=0.00 G=0.00	CG	Double Symmetrical

Flujo Total=228.58 Flujo Luminaria=228.57

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

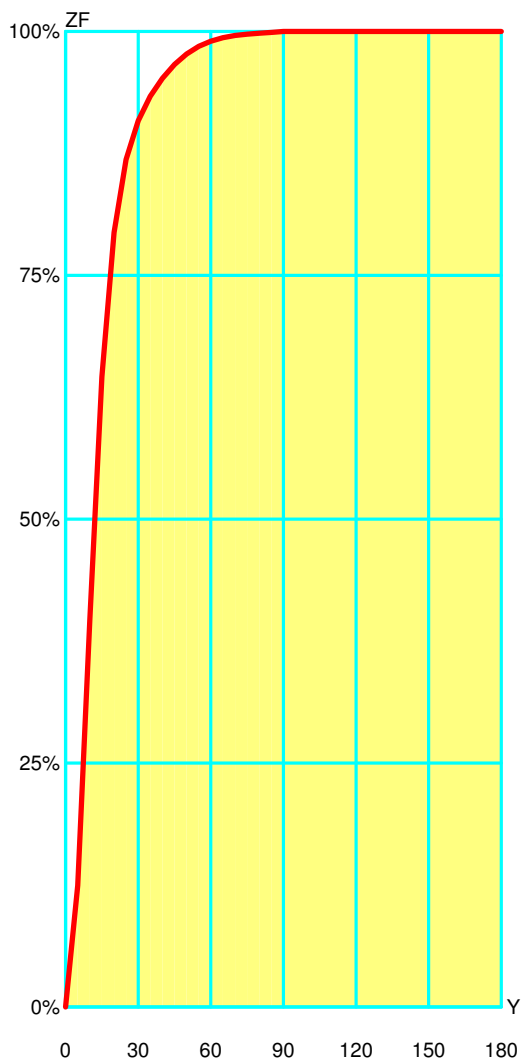
Códigos de Flujo C.I.E.

96 99 100 100 100

C.I.E.
D DIN 5040
F UTE
B NBN
RN
BLF

-/-/-/-/-/-/-/-/-/-
A60
1.00 A
BZ 1
0.00000 %
1.0

LOR 99.99738 %
ULOR 0.00000 %
DLOR 99.99738 %
UFF 0.00000 %
DFF 100.00000 %
FFR 0.00000 %



Flujo Zonal				
Gamma °	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-0123-INO
Name Empotrable suelo 3 leds 3W

Measurement

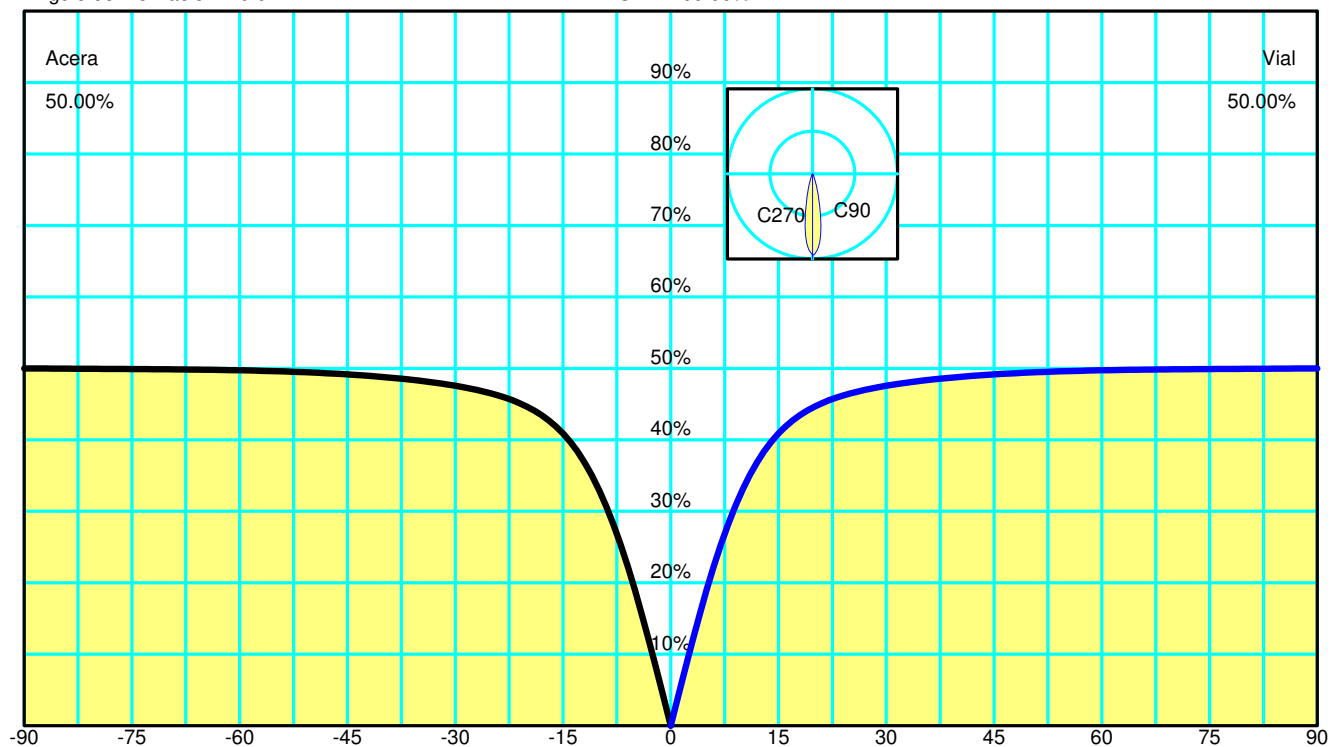
Code PX-0123-INO
Name Empotrable suelo 3 leds 3W

Luminaire Flux	228.57 lm	Luminaire Power	3.00 W	Efficacy	76.19 lm/W	Efficiency	100.00%
Lamps Flux	228.58 lm	Maximum value	1291.41 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 Iesna 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

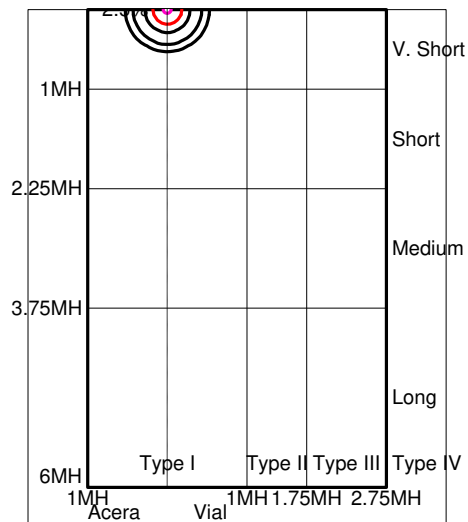
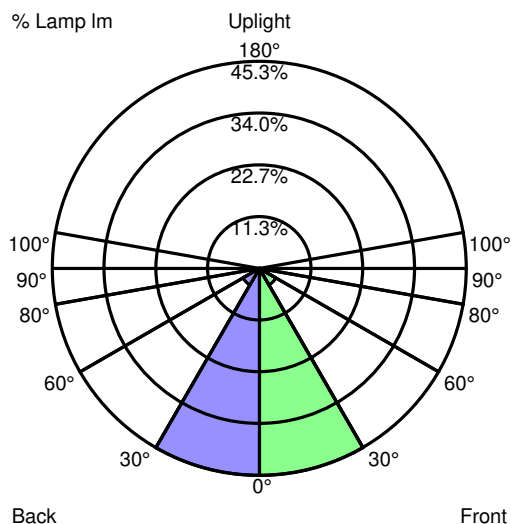
Luminaire

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

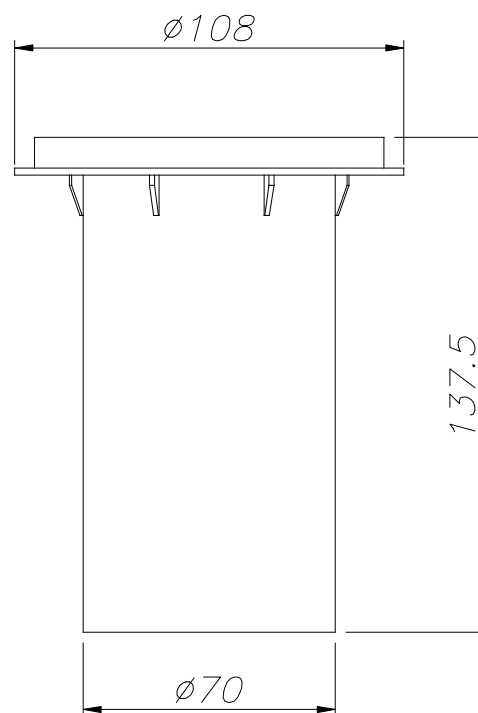
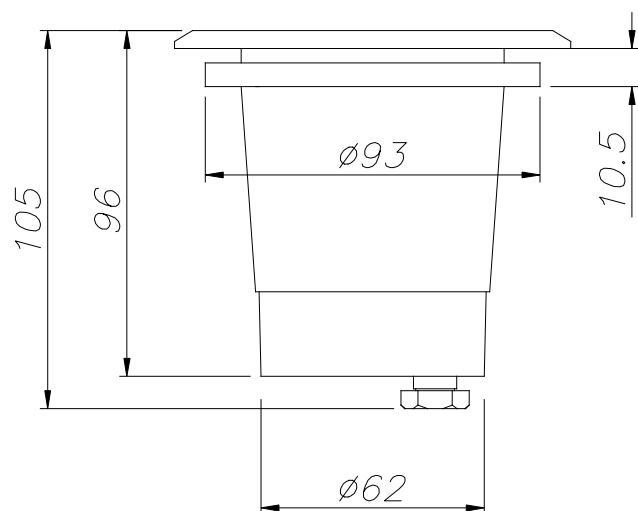
Measurement

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

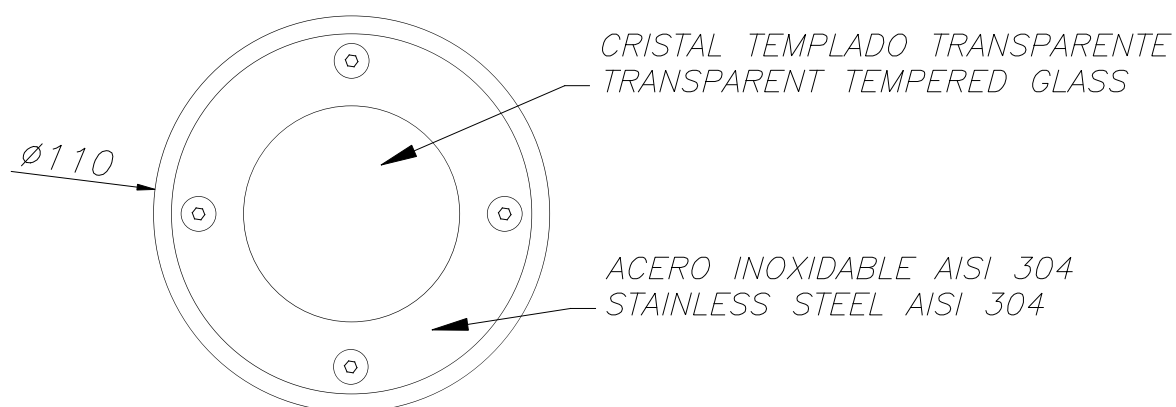
Luminaire Flux	228.57 lm	Luminaire Power	3.00 W	Efficacy	76.19 lm/W	Efficiency	100.00%
Lamps Flux	228.58 lm	Maximum value	1291.41 cd	Position	C=0.00 G=0.00	CG	Double Symmetrical

US ROAD STANDARDS


Luminaire Classification System (LCS)				
LCS Zone		Lumens	%Lamp	%Lum
FL	0° -- 30°	103.6 lm	45.3 %	45.3 %
FM	30° -- 60°	9.5 lm	4.2 %	4.2 %
FH	60° -- 80°	1.0 lm	0.4 %	0.4 %
FVH	80° -- 90°	0.2 lm	0.1 %	0.1 %
BL	0° -- 30°	103.6 lm	45.3 %	45.3 %
BM	30° -- 60°	9.5 lm	4.2 %	4.2 %
BH	60° -- 80°	1.0 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		228.6 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

