

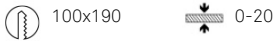
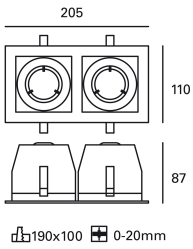


## Cardan Double

## TC-1401-BLA

Recessed ceiling lights Cardan Double GU10 16W White IN IP20 / OUT IP23

### TECHNICAL FEATURES



IN IP20 / OUT IP23



↔ 20°



Luminaire total power : 16W

Structure material : Steel

Structure finish : White

Max. size of light bulb : 55/50 mm

Recommended light bulb : GU10

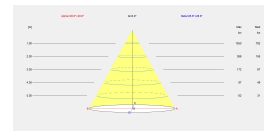
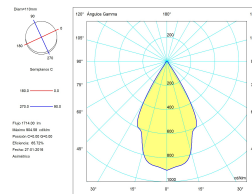
Voltage / frequency : 100-240V ~ 50/60Hz

Warranty : 5 Years

Easily recyclable luminaire

### LUMINOTECHNIC FEATURES

Lampholder	Quantity	Light source power (W)	Correlated Colour Temperature (CCT)
GU10	2	Max. power 8W	-



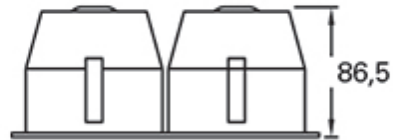
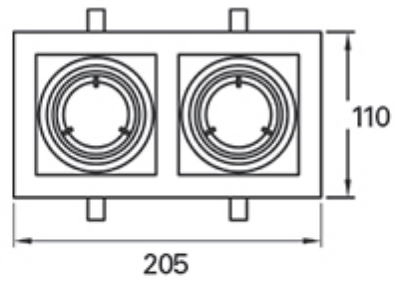
### LOGISTICS

Net weight (kg): 0.68

Packaged weight (kg): 0.84

Packaging: 220mm x 150mm x 105mm





**Luminaire**

Code TC-1401-BLA  
 Name Downlight CARDAN 2x50W GU5.3

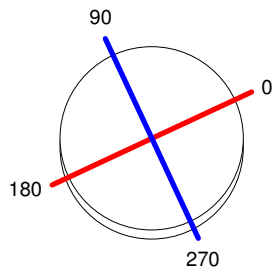
**Measur.**

Code TC-1401-BLA  
 Name Downlight CARDAN 2x50W GU5.3

Luminaire Flux	1126.41 lm	Luminaire Power	50.00 W	Efficacy	22.53 lm/W	Efficiency	65.72%
Lamps Flux	1714.00 lm	Maximum value	1550.45 cd	Position	C=0.00 G=0.00	CG	Asymmetrical
Round Luminaire Round Luminous Area	Diam. 110 mm Diam. 40 mm	Height	86 mm	Height	1 mm		
Horizontal Luminous Area Emitting area on Plane 0° Emitting area on Plane 90°	0.001257 m2 0.000040 m2 0.000040 m2	Emitting area on Plane 180° Emitting area on Plane 270° Glare area at 76°			0.000040 m2 0.000040 m2 0.000343 m2		
Coordinate system Date Measurement Distance	CG 27-01-2016 0.00	Symmetry Type Maximum Gamma Angle Measurement Flux			Asymmetrical 180 1714.00 lm		
Operator Temperature Humidity Notes	Asselum 25.00 °C 60.00 %	Source Voltage [V] Source current [A] Photocell					

Line	Code	Luminaire Lamps Name	Flux [lm]	Pow. [W]	Q.ty
	46870VWFL	46870VWFL - 25.00 W	857.00	25.00	2
C.I.E. F UTE	95 98 100 100 66 0.66 A	D DIN 5040 B NBN	A60 BZ 1		

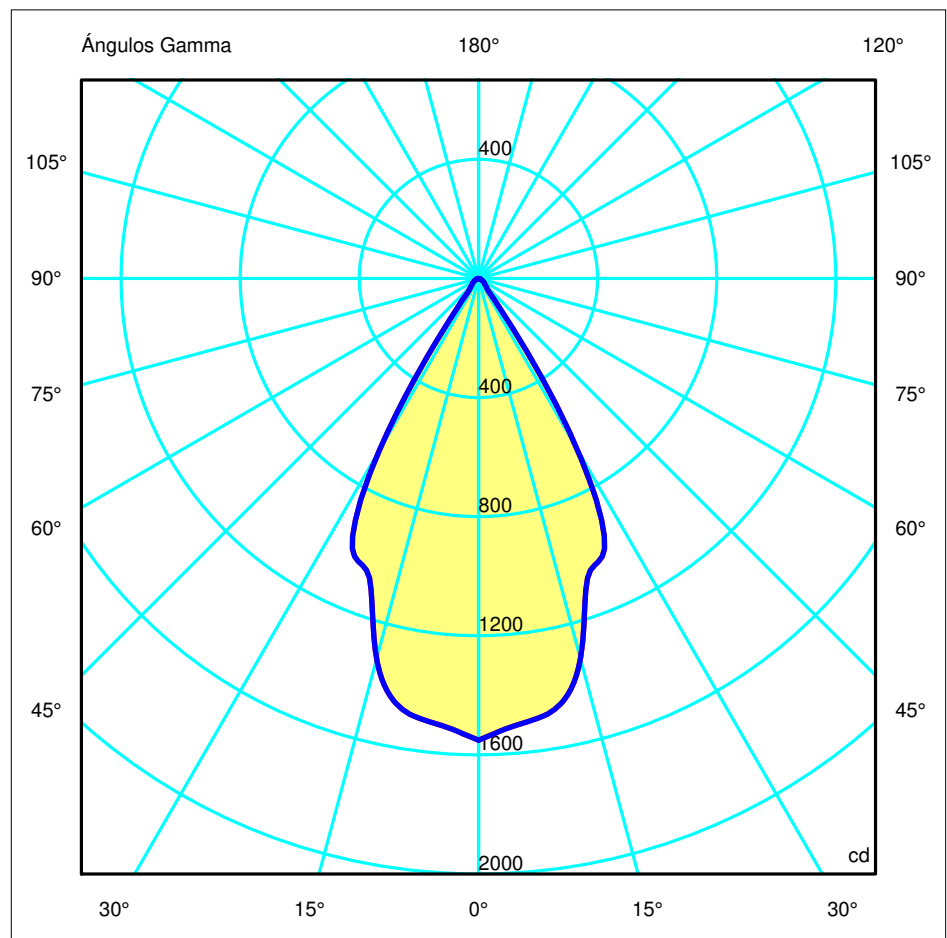
Diam=110mm



Semiplanos C

180.0 — 0.0  
 270.0 — 90.0

ULOR 0.00 %  
 DLOR 65.72 %  
 RN 0.00 %



**Luminaire**

Code TC-1401-BLA  
 Name Downlight CARDAN 2x50W GU5.3

**Measur.**

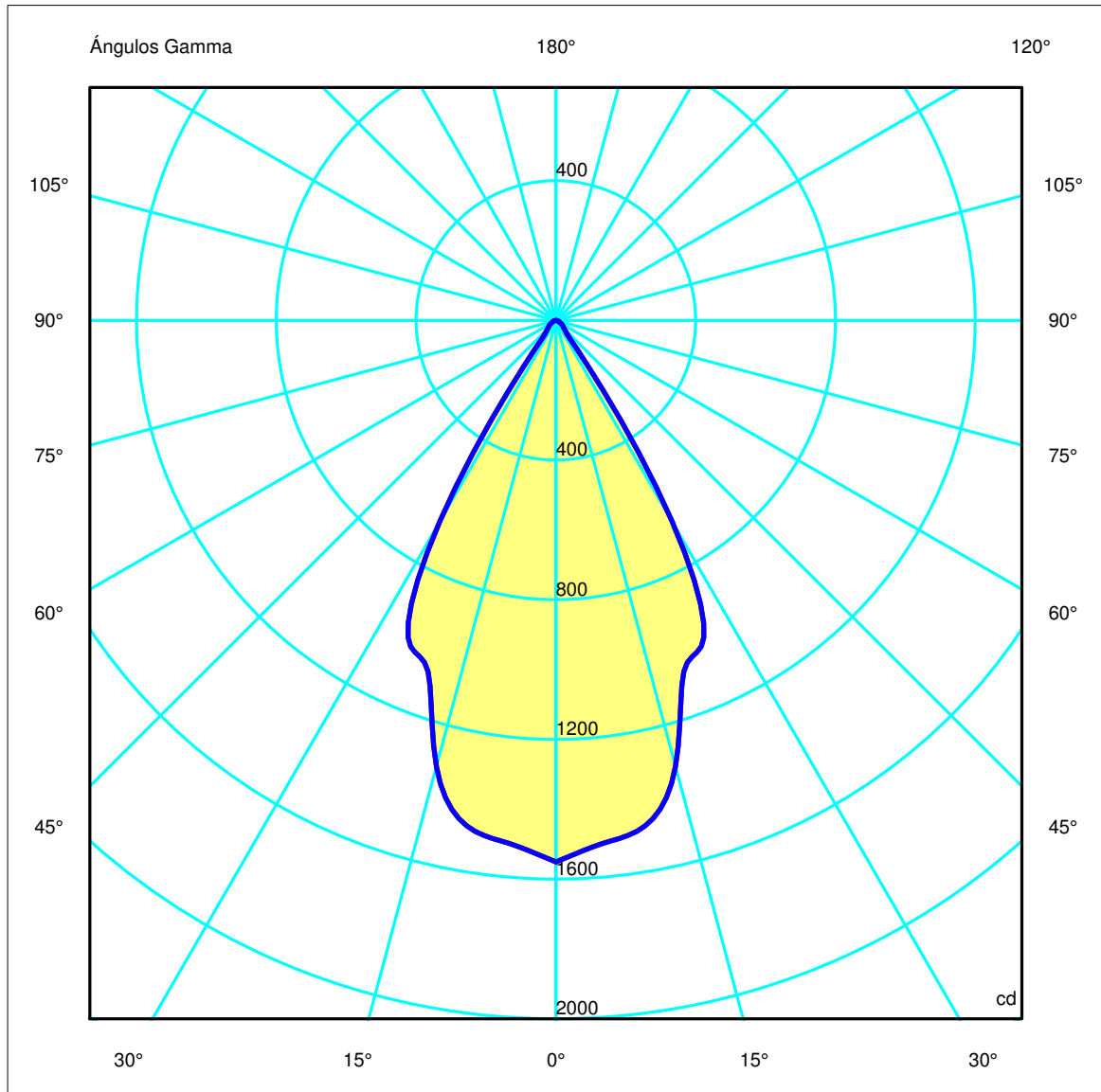
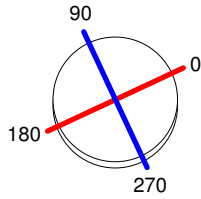
Code TC-1401-BLA  
 Name Downlight CARDAN 2x50W GU5.3

Luminaire Flux	1126.41 lm	Luminaire Power	50.00 W	Efficacy	22.53 lm/W	Efficiency	65.72%
Lamps Flux	1714.00 lm	Maximum value	1550.45 cd	Position	C=0.00 G=0.00	CG	Asymmetrical

Diam=110mm

Semiplanos C

180.0 ——— 0.0  
 270.0 ——— 90.0



**Luminaire**

Code TC-1401-BLA  
Name Downlight CARDAN 2x50W GU5.3

**Measur.**

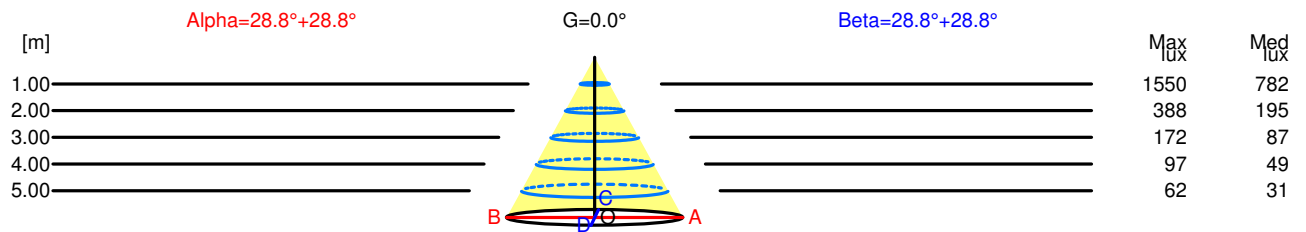
Code TC-1401-BLA  
Name Downlight CARDAN 2x50W GU5.3

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Lamps Flux	1714.00 lm	Maximum value	1550.45 cd	Position	C=0.00 G=0.00	CG	Asymmetrical

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	0.55	1.10	1.65	2.20	2.75	OC	0.55	1.10	1.65	2.20	2.75
OB	0.55	1.10	1.65	2.20	2.75	OD	0.55	1.10	1.65	2.20	2.75

	Luminous Intensities [ cd ]										
	0	5	15	25	35	45	55	65	75	85	
OA	1550.45	1504.15	1322.09	1001.25	165.97	33.21	21.66	12.33	4.90	0.70	
OB	1550.45	1504.15	1322.09	1001.25	165.97	33.21	21.66	12.33	4.90	0.70	
OC	1550.45	1504.15	1322.09	1001.25	165.97	33.21	21.66	12.33	4.90	0.70	
OD	1550.45	1504.15	1322.09	1001.25	165.97	33.21	21.66	12.33	4.90	0.70	



H[m]	D[m]	Max lux	Med lux	Alpha=28.8°+28.8°	G=0.0
1.00	1.10	1550	782		
2.00	2.20	388	195		
3.00	3.30	172	87		
4.00	4.40	97	49		
5.00	5.50	62	31		

H[m]	D[m]	Max lux	Med lux	Beta=28.8°+28.8°	G=0.0
1.00	1.10	1550	782		
2.00	2.20	388	195		
3.00	3.30	172	87		
4.00	4.40	97	49		
5.00	5.50	62	31		

**Luminaire**

Code TC-1401-BLA  
 Name Downlight CARDAN 2x50W GU5.3

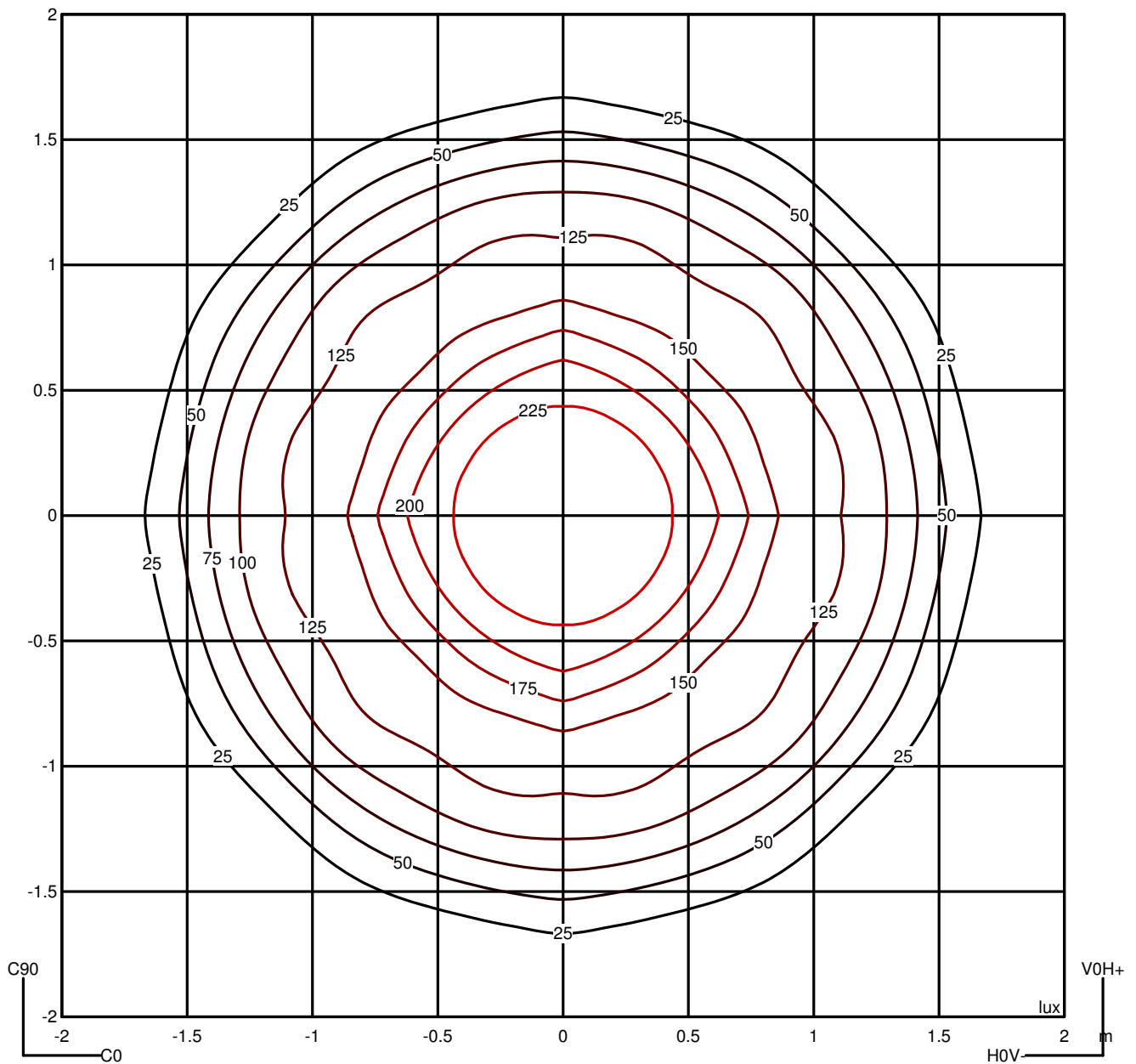
**Measur.**

Code TC-1401-BLA  
 Name Downlight CARDAN 2x50W GU5.3

Luminaire Flux	1126.41 lm	Luminaire Power	50.00 W	Efficacy	22.53 lm/W	Efficiency	65.72%
Lamps Flux	1714.00 lm	Maximum value	1550.45 cd	Position	C=0.00 G=0.00	CG	Asymmetrical

Isolux (Floor)

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



**Luminaire**

Code TC-1401-BLA  
 Name Downlight CARDAN 2x50W GU5.3

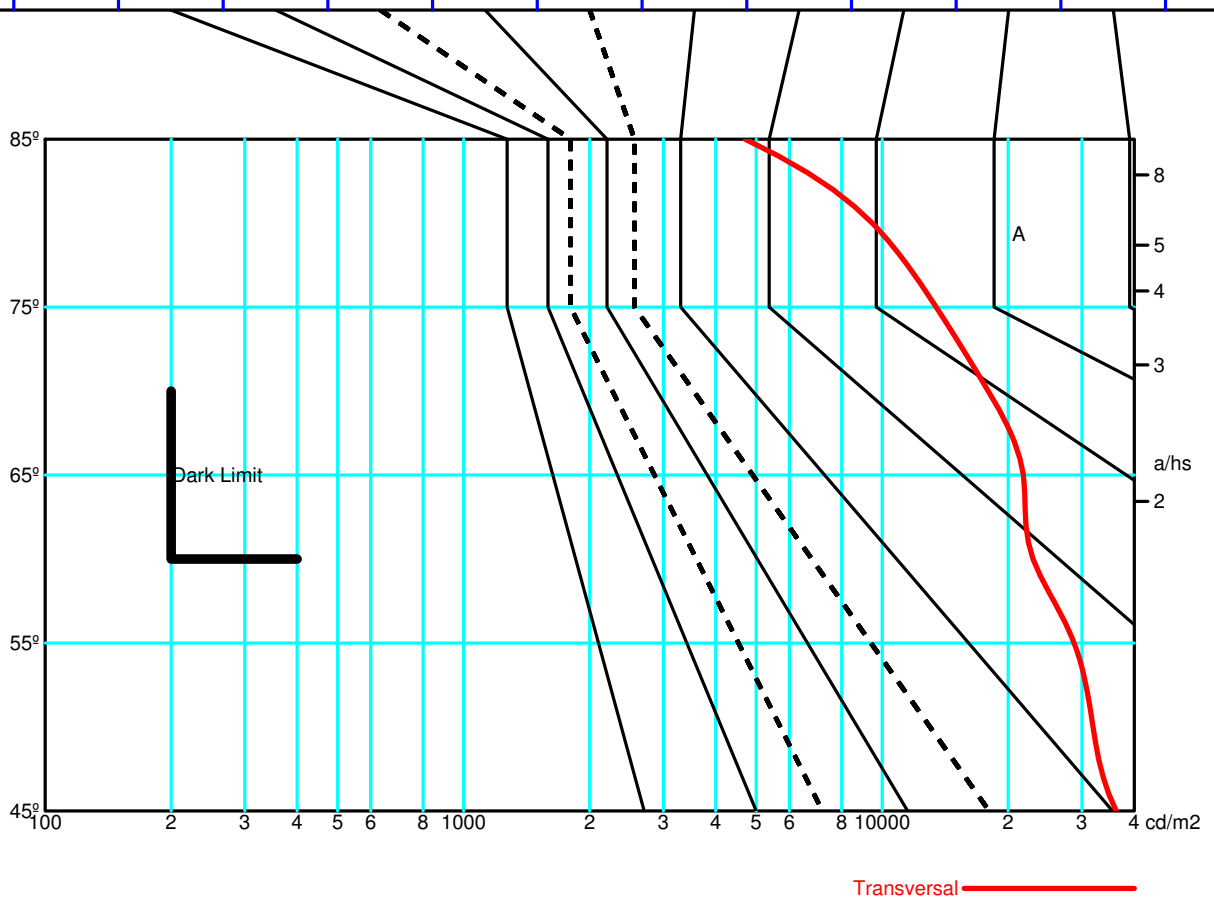
**Measur.**

Code TC-1401-BLA  
 Name Downlight CARDAN 2x50W GU5.3

Luminaire Flux	1126.41 lm	Luminaire Power	50.00 W	Efficacy	22.53 lm/W	Efficiency	65.72%
Lamps Flux	1714.00 lm	Maximum value	1550.45 cd	Position	C=0.00 G=0.00	CG	Asymmetrical

Average Luminance [cd/m <sup>2</sup> ]										
0.0°	45°	50°	55°	60°	65°	70°	75°	80°	85°	---
	36218	31895	28744	22915	21732	17928	13453	9473	4706	

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**

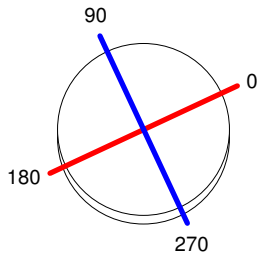
Code TC-1401-BLA  
 Name Downlight CARDAN 2x50W GU5.3

**Measurem.**

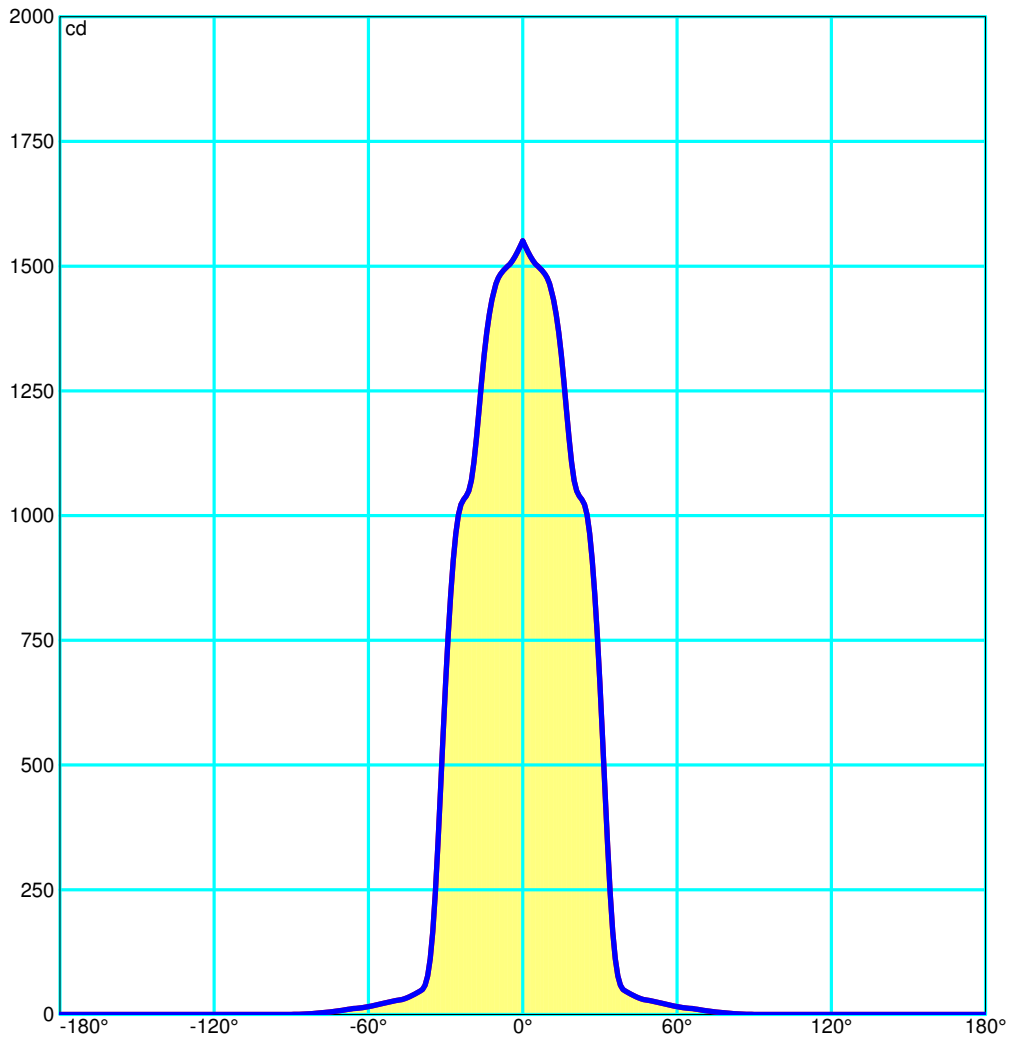
Code TC-1401-BLA  
 Name Downlight CARDAN 2x50W GU5.3

Luminaire Flux	1126.41 lm	Luminaire Power	50.00 W	Efficacy	22.53 lm/W	Efficiency	65.72%
Lamps Flux	1714.00 lm	Maximum value	1550.45 cd	Position	C=0.00 G=0.00	CG	Asymmetrical

Diam=110mm



Semiplanos C





**Luminaire**

Code TC-1401-BLA  
 Name Downlight CARDAN 2x50W GU5.3

**Measurement**

Code TC-1401-BLA  
 Name Downlight CARDAN 2x50W GU5.3

Luminaire Flux	1126.41 lm	Luminaire Power	50.00 W	Efficacy	22.53 lm/W	Efficiency	65.72%
Lamps Flux	1714.00 lm	Maximum value	1550.45 cd	Position	C=0.00 G=0.00	CG	Asymmetrical

**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	20.5	21.2	20.8	21.4	21.6	20.5	21.2	20.8	21.4	21.6
x=2H y=3H	20.8	21.4	21.1	21.7	21.9	20.8	21.4	21.1	21.7	21.9
x=2H y=4H	20.9	21.5	21.2	21.7	22.0	20.9	21.5	21.2	21.7	22.0
x=2H y=6H	20.9	21.4	21.2	21.7	22.0	20.9	21.4	21.2	21.7	22.0
x=2H y=8H	20.9	21.4	21.2	21.7	22.0	20.9	21.4	21.2	21.7	22.0
x=2H y=12H	20.9	21.4	21.2	21.6	22.0	20.9	21.4	21.2	21.6	22.0
x=4H y=2H	20.6	21.1	20.9	21.4	21.6	20.6	21.1	20.9	21.4	21.6
x=4H y=3H	20.9	21.4	21.3	21.7	22.0	20.9	21.4	21.3	21.7	22.0
x=4H y=4H	21.1	21.5	21.5	21.8	22.2	21.1	21.5	21.5	21.8	22.2
x=4H y=6H	21.1	21.5	21.5	21.9	22.2	21.1	21.5	21.5	21.9	22.2
x=4H y=8H	21.2	21.5	21.6	21.9	22.2	21.2	21.5	21.6	21.9	22.2
x=4H y=12H	21.1	21.4	21.5	21.8	22.2	21.1	21.4	21.5	21.8	22.2
x=8H y=4H	21.1	21.4	21.5	21.8	22.2	21.1	21.4	21.5	21.8	22.2
x=8H y=6H	21.2	21.4	21.6	21.8	22.3	21.2	21.4	21.6	21.8	22.3
x=8H y=8H	21.2	21.4	21.6	21.8	22.3	21.2	21.4	21.6	21.8	22.3
x=8H y=12H	21.2	21.3	21.6	21.8	22.3	21.2	21.3	21.6	21.8	22.3
x=12H y=4H	21.1	21.3	21.5	21.7	22.2	21.1	21.3	21.5	21.7	22.2
x=12H y=6H	21.2	21.3	21.6	21.8	22.2	21.2	21.3	21.6	21.8	22.2
x=12H y=8H	21.2	21.3	21.6	21.8	22.3	21.2	21.3	21.6	21.8	22.3

**Luminaire**

Code TC-1401-BLA  
Name Downlight CARDAN 2x50W GU5.3

**Measurment**

Code TC-1401-BLA  
Name Downlight CARDAN 2x50W GU5.3

Luminaire Flux	1126.41 lm	Luminaire Power	50.00 W	Efficacy	22.53 lm/W	Efficiency	65.72%
Lamps Flux	1714.00 lm	Maximum value	1550.45 cd	Position	C=0.00 G=0.00	CG	Asymmetrical

Flujo Total=1714.00 Flujo Luminaria=1126.41

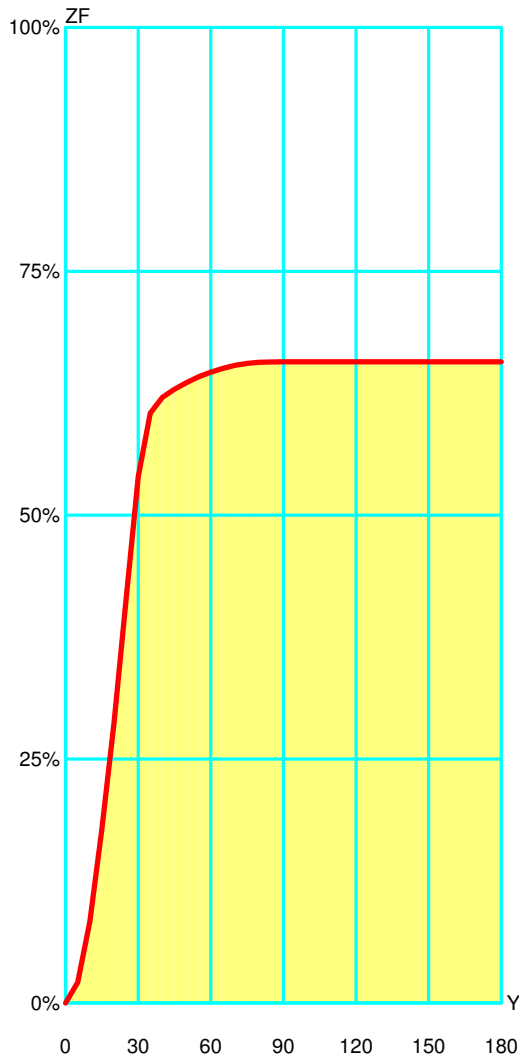
RI	0.60	0.80	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00	10.00	20.00
DRR	0.70	0.75	0.80	0.84	0.86	0.91	0.94	0.96	0.98	0.99	1.01	1.02
RC	-	-	-	-	-	-	-	-	-	-	-	-

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)	84	288	540	621	636	647	654	657	657	657	657	657	657	657	657	657	657	657

Códigos de Flujo C.I.E.  
95 98 100 100 66

C.I.E.	-/-/-/-/-/-/-/-/-/-	LOR	65.71806 %
D DIN 5040	A60	ULOR	0.00000 %
F UTE	0.66 A	DLOR	65.71806 %
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°	21.23	21.23	3.23 %	3.23 %
10°	62.38	83.61	9.49 %	12.72 %
15°	94.85	178.45	14.43 %	27.15 %
20°	109.23	287.68	16.62 %	43.77 %
25°	125.78	413.46	19.14 %	62.91 %
30°	126.06	539.51	19.18 %	82.10 %
35°	64.97	604.49	9.89 %	91.98 %
40°	16.32	620.81	2.48 %	94.47 %
45°	8.35	629.16	1.27 %	95.74 %
50°	6.82	635.99	1.04 %	96.77 %
55°	6.01	642.00	0.91 %	97.69 %
60°	4.65	646.65	0.71 %	98.40 %
65°	3.88	650.53	0.59 %	98.99 %
70°	3.08	653.61	0.47 %	99.46 %
75°	1.97	655.57	0.30 %	99.76 %
80°	1.12	656.69	0.17 %	99.92 %
85°	0.43	657.12	0.07 %	99.99 %
90°	0.06	657.18	0.01 %	100.00 %
95°	0.00	657.18	0.00 %	100.00 %
100°	0.00	657.18	0.00 %	100.00 %
105°	0.00	657.18	0.00 %	100.00 %
110°	0.00	657.18	0.00 %	100.00 %
115°	0.00	657.18	0.00 %	100.00 %
120°	0.00	657.18	0.00 %	100.00 %
125°	0.00	657.18	0.00 %	100.00 %
130°	0.00	657.18	0.00 %	100.00 %
135°	0.00	657.18	0.00 %	100.00 %
140°	0.00	657.18	0.00 %	100.00 %
145°	0.00	657.18	0.00 %	100.00 %
150°	0.00	657.18	0.00 %	100.00 %
155°	0.00	657.18	0.00 %	100.00 %
160°	0.00	657.18	0.00 %	100.00 %
165°	0.00	657.18	0.00 %	100.00 %
170°	0.00	657.18	0.00 %	100.00 %
175°	0.00	657.18	0.00 %	100.00 %
180°	0.00	657.18	0.00 %	100.00 %

**Luminaire**

Code TC-1401-BLA  
Name Downlight CARDAN 2x50W GU5.3

**Measurment.**

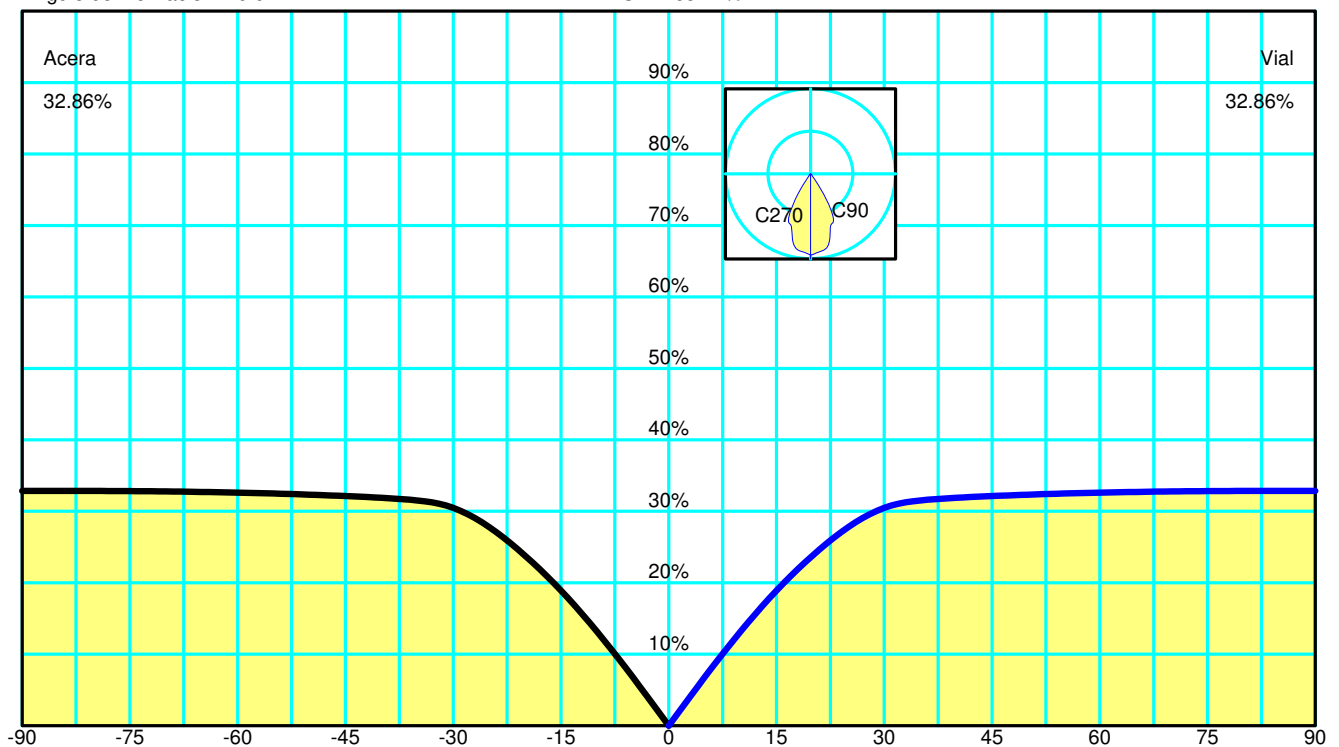
Code TC-1401-BLA  
Name Downlight CARDAN 2x50W GU5.3

Luminaire Flux	1126.41 lm	Luminaire Power	50.00 W	Efficacy	22.53 lm/W	Efficiency	65.72%
Lamps Flux	1714.00 lm	Maximum value	1550.45 cd	Position	C=0.00 G=0.00	CG	Asymmetrical

Pavement			Road		
Piano	0	0.00%	Piano	0	0.00%
Piano	-5	6.78%	Piano	5	6.78%
Piano	-10	13.18%	Piano	10	13.18%
Piano	-15	18.90%	Piano	15	18.90%
Piano	-20	23.79%	Piano	20	23.79%
Piano	-25	27.80%	Piano	25	27.80%
Piano	-30	30.48%	Piano	30	30.48%
Piano	-35	31.52%	Piano	35	31.52%
Piano	-40	31.89%	Piano	40	31.89%
Piano	-45	32.13%	Piano	45	32.13%
Piano	-50	32.33%	Piano	50	32.33%
Piano	-55	32.49%	Piano	55	32.49%
Piano	-60	32.61%	Piano	60	32.61%
Piano	-65	32.71%	Piano	65	32.71%
Piano	-70	32.78%	Piano	70	32.78%
Piano	-75	32.82%	Piano	75	32.82%
Piano	-80	32.85%	Piano	80	32.85%
Piano	-85	32.86%	Piano	85	32.86%
Piano	-90	32.86%	Piano	90	32.86%

Ángulo de Inclinación = 0.0

DLOR = 65.72%



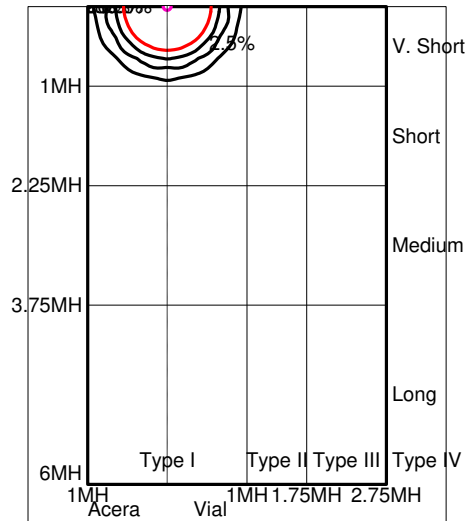
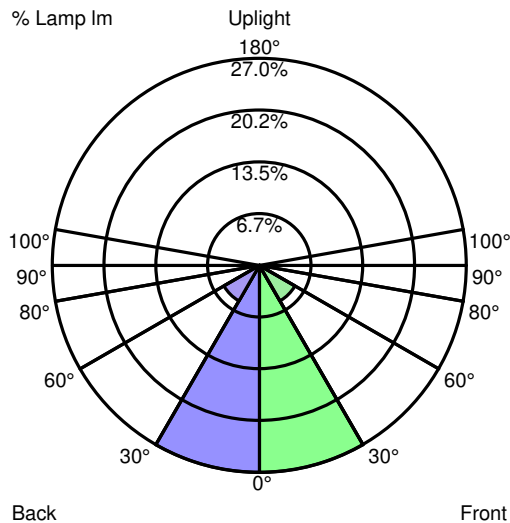
Spread	13.1° Estrecho	DLOR	65.71806 %
Throw	6.6° Corto	ULOR	0.00000 %
SLI (deslumbramiento)	Concentrado	Rendimiento	65.71806 %
Cutoff CIE	Cutoff - Max: C=0.0° Gamma=0.0°	RN	0.00000 %
Cutoff lesna	Full Cutoff	Clase de Intensidad Luminosa	G6
DIN5044	KB1	Índice de Deslumbramiento	D6

IESNA Type VS Very Short Quadrilateral Symmetry

**Luminaire**  
 Code TC-1401-BLA  
 Name Downlight CARDAN 2x50W GU5.3  
**Measurement**  
 Code TC-1401-BLA  
 Name Downlight CARDAN 2x50W GU5.3

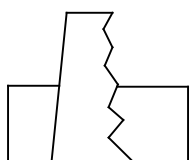
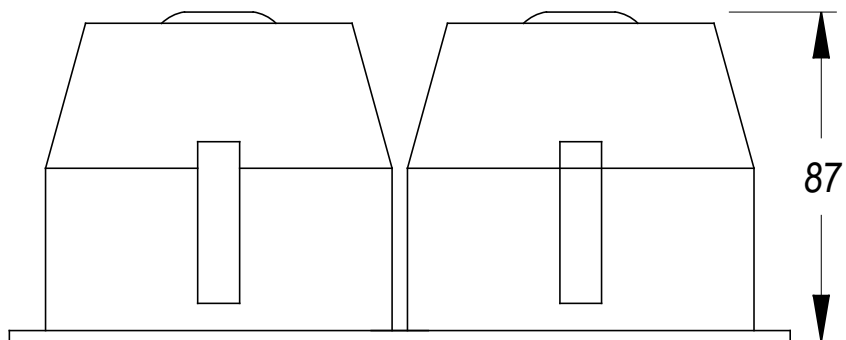
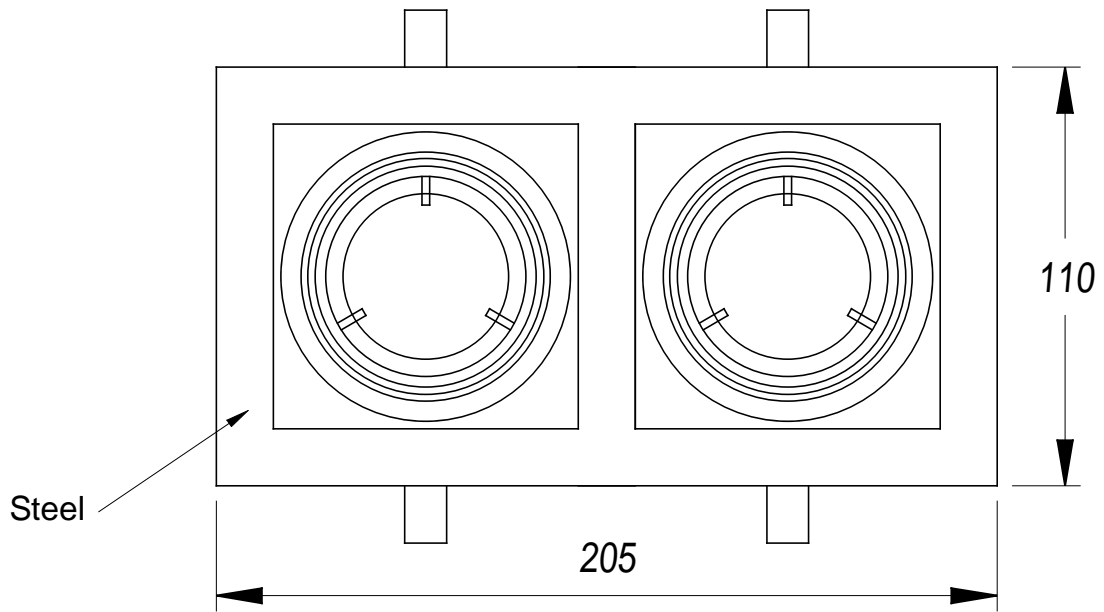
Luminaire Flux	1126.41 lm	Luminaire Power	50.00 W	Efficacy	22.53 lm/W	Efficiency	65.72%
Lamps Flux	1714.00 lm	Maximum value	1550.45 cd	Position	C=0.00 G=0.00	CG	Asymmetrical

US ROAD STANDARDS

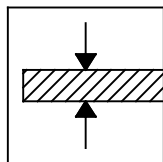


Luminaire Classification System (LCS)			
LCS Zone		Lumens	%Lamp
FL	0° -- 30°	462.5 lm	27.0 %
FM	30° -- 60°	91.7 lm	5.3 %
FH	60° -- 80°	8.6 lm	0.5 %
FVH	80° -- 90°	0.4 lm	0.0 %
BL	0° -- 30°	462.5 lm	27.0 %
BM	30° -- 60°	91.7 lm	5.3 %
BH	60° -- 80°	8.6 lm	0.5 %
BVH	80° -- 90°	0.4 lm	0.0 %
UL	90° -- 100°	0.0 lm	0.0 %
UH	100° -- 180°	0.0 lm	0.0 %
<b>TOTALS</b>		<b>1126.4 lm</b>	<b>65.7 %</b>

BUG B1 U0 G0 Type VS Very Short Quadrilateral Symmetry



190x100



0-20mm

Scale 1:2



# Cardan

TC-1400 TC-1401

FOR  
LIGHT

