

## Luminaria

Código 05-E157-60-37

Nombre BOB GU10

## Ensayo

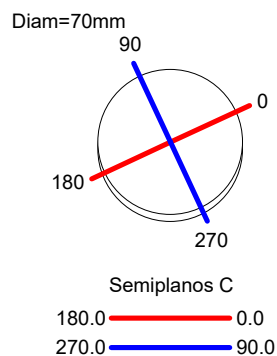
Código 05-E157-60-37

Nombre BOB GU10

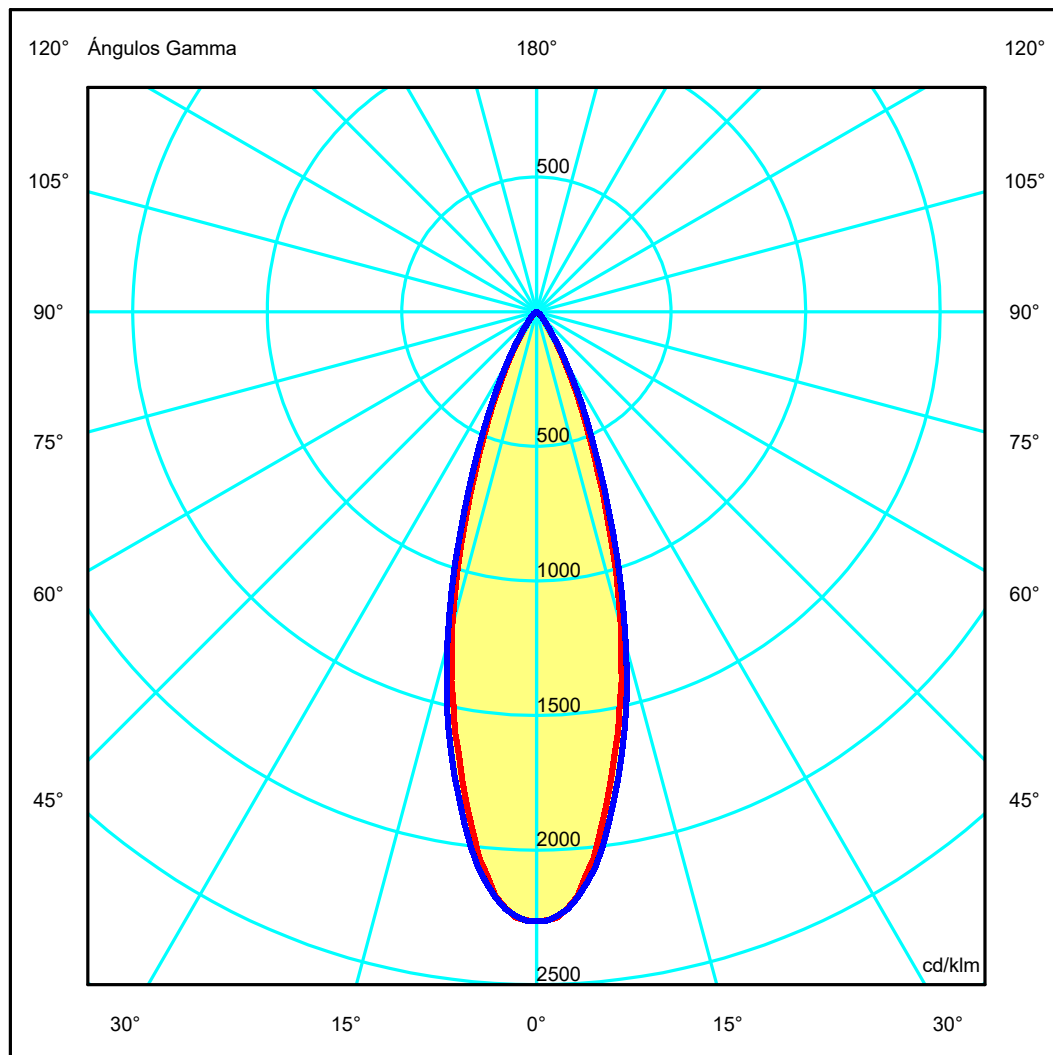
Flujo Luminaria	278 lm	Potencia Luminaria	4.2 W	Eficacia	66.126 lm/W	Eficiencia	83.91%
Flujo Fuente	331 lm	Valor Máximo	2264.04 cd/klm	Posición	C=0.00 G=0.00	CG	Bisimétrico
Luminaria Redonda		Diam.	70 mm	Altura	115 mm		
Área Luminosa Redonda		Diam.	47 mm	Altura	0 mm		
Área Luminosa Horizontal		0.001735 m2		Área Emisión sobre Pl. 180°		0.000000 m2	
Área Emisión sobre Pl. 0°		0.000000 m2		Área Emisión sobre Pl. 270°		0.000000 m2	
Área Emisión sobre Pl. 90°		0.000000 m2		Área de deslumbramiento a 76°		0.000420 m2	
Sist. de Coordn.		CG		Tipo de Simetría		Bisimétrico	
Fecha		31-08-2023		Máximo Ángulo Gamma		90	
Distancia de Ensayo		0.00		Flujo de Ensayo		331 lm	
Operador		qualitat		Tensión Nominal			
Temperatura				Corriente Nominal			
Humedad				Fotocélula			
Notas							

## Fuentes de luz de la Luminaria

Familia	Código	Nombre	Flujo [lm]	Pot. [W]	Cant.
	GU10	Osram Parathom GU10 3000K	331.00	4.20	1
C.I.E.	96 99 100 100 84	D DIN 5040	A60		
F UTE	0.84 A	B NBN	BZ 1		



ULOR 0.00 %  
DLOR 83.91 %  
RN 0.00 %



**Luminaria**

 Código 05-E157-60-37  
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**Ensayo**

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Flujo Luminaria	278 lm	Potencia Luminaria	4.2 W	Eficacia	66.126 lm/W	Eficiencia	83.91%
Flujo Fuente	331 lm	Valor Máximo	2264.04 cd/klm	Posición	C=0.00 G=0.00	CG	Bisimétrico

**Tabla de Intensidad Luminosa cd/klm Tabla 1/2**

	C 0.00	C 15.00	C 30.00	C 45.00	C 60.00	C 75.00	C 90.00
G 0.0	2264.04	2264.04	2264.04	2264.04	2264.04	2264.04	2264.04
G 1.0	2260.96	2263.47	2262.35	2262.03	2261.22	2261.96	2261.91
G 2.0	2250.92	2256.21	2251.19	2250.36	2245.45	2248.46	2245.49
G 3.0	2217.40	2225.28	2218.47	2218.99	2217.64	2221.65	2220.65
G 4.0	2176.56	2178.83	2175.51	2177.37	2178.80	2181.96	2181.75
G 5.0	2102.40	2118.49	2121.06	2129.41	2130.44	2135.02	2131.36
G 6.0	2039.10	2050.30	2056.60	2067.42	2072.62	2079.74	2076.79
G 7.0	1944.52	1963.09	1975.89	1988.75	1998.10	2005.48	2004.53
G 8.0	1856.71	1874.70	1887.27	1902.53	1915.10	1920.39	1921.24
G 9.0	1762.24	1782.56	1797.67	1816.48	1829.22	1835.43	1836.34
G 10.0	1667.95	1691.73	1706.59	1726.43	1743.73	1751.44	1752.92
G 11.0	1586.68	1600.11	1612.00	1636.40	1657.26	1666.37	1666.22
G 12.0	1485.97	1509.07	1521.71	1545.70	1569.83	1576.96	1577.11
G 13.0	1408.07	1421.40	1434.20	1460.01	1481.95	1486.16	1483.93
G 14.0	1297.17	1322.43	1342.39	1367.99	1387.10	1388.01	1383.40
G 15.0	1214.59	1230.71	1248.02	1276.41	1292.23	1292.05	1281.48
G 16.0	1103.54	1131.30	1149.91	1181.59	1195.84	1188.63	1177.75
G 17.0	1010.60	1034.41	1051.82	1082.11	1092.85	1088.56	1078.92
G 18.0	903.67	928.71	950.78	978.53	985.19	981.22	976.24
G 19.0	803.57	829.75	853.04	880.81	886.71	881.96	875.00
G 20.0	721.36	739.86	760.75	787.71	794.93	789.27	783.26
G 21.0	630.56	652.90	675.66	699.73	708.58	701.69	698.41
G 22.0	568.74	580.74	602.49	622.93	632.73	624.60	623.31
G 23.0	492.19	514.35	535.50	555.10	561.36	555.72	551.71
G 24.0	441.59	454.38	473.09	490.92	498.11	492.61	491.25
G 25.0	388.51	396.47	415.65	433.60	439.27	434.52	434.93
G 26.0	337.64	347.28	363.05	380.58	388.67	382.99	383.95
G 27.0	294.87	304.30	318.92	334.89	338.87	335.18	333.91
G 28.0	256.08	266.89	278.91	292.79	297.15	292.47	291.18
G 29.0	223.86	232.78	242.70	255.79	259.30	255.70	252.45
G 30.0	191.84	200.95	211.60	222.18	225.43	220.61	218.98
G 31.0	168.99	174.30	183.71	193.42	196.20	190.70	189.02
G 32.0	143.45	149.91	159.68	167.74	168.85	164.00	160.92
G 33.0	125.11	129.93	138.31	145.73	145.98	140.86	138.90
G 34.0	105.55	111.59	119.55	125.77	126.02	120.28	117.64
G 35.0	91.42	95.77	102.96	108.39	108.32	102.87	100.83
G 36.0	78.83	82.64	89.18	93.74	93.33	88.53	87.13
G 37.0	68.36	72.52	78.42	81.84	81.40	76.54	74.27
G 38.0	60.10	63.18	68.57	72.13	70.79	66.93	64.63
G 39.0	52.66	55.55	60.55	63.81	62.21	58.44	56.51
G 40.0	46.24	49.26	53.62	56.16	55.03	51.58	50.34
G 41.0	40.83	43.73	47.49	49.58	48.96	45.92	44.51
G 42.0	37.08	38.90	42.32	44.07	43.33	41.08	40.54
G 43.0	33.23	35.15	38.33	39.84	39.15	37.13	36.36
G 44.0	30.07	31.90	34.88	36.26	35.74	33.79	32.77
G 45.0	27.24	29.12	31.91	33.28	32.94	30.80	29.93
G 46.0	25.16	26.75	28.85	30.24	29.99	28.49	27.79
G 47.0	23.86	24.43	26.22	27.26	27.08	26.05	25.96
G 48.0	22.36	22.32	24.46	24.88	25.09	24.19	23.68
G 49.0	19.93	19.56	21.85	22.91	22.89	22.30	21.25
G 50.0	17.88	17.56	19.47	21.41	21.53	20.05	20.21
G 51.0	16.10	16.10	18.11	19.75	19.68	18.73	18.15
G 52.0	14.27	14.68	16.77	17.45	18.11	17.66	16.83
G 53.0	13.56	14.07	15.51	15.62	16.00	17.24	16.78
G 54.0	13.39	13.16	13.61	13.75	14.22	15.47	16.72
G 55.0	13.16	11.68	12.20	11.95	12.90	13.66	15.58
G 56.0	10.39	10.46	10.22	10.78	11.79	12.54	11.40
G 57.0	8.46	9.19	9.27	9.96	10.81	10.19	9.79
G 58.0	6.98	6.91	8.51	9.41	8.85	8.42	8.08
G 59.0	5.92	5.94	7.08	7.48	7.65	7.28	6.85
G 60.0	5.11	5.23	5.88	6.63	6.61	6.28	6.27
G 61.0	4.56	4.57	5.06	5.48	5.62	5.71	5.76
G 62.0	4.12	4.14	4.49	4.85	5.09	5.18	5.25
G 63.0	3.71	3.69	3.95	4.36	4.60	4.73	4.83
G 64.0	3.37	3.26	3.54	3.92	4.15	4.33	4.40
G 65.0	2.80	2.82	3.12	3.53	3.80	4.01	4.05
G 66.0	2.44	2.46	2.75	3.18	3.44	3.58	3.65
G 67.0	2.16	2.19	2.36	2.76	2.96	3.23	3.30
G 68.0	1.93	1.92	2.13	2.41	2.67	2.95	3.03
G 69.0	1.73	1.71	1.83	2.15	2.41	2.70	2.74
G 70.0	1.51	1.52	1.61	1.91	2.12	2.31	2.32
G 71.0	1.23	1.30	1.38	1.68	1.85	2.00	1.99
G 72.0	1.06	1.09	1.21	1.43	1.57	1.70	1.71

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Flujo Luminaria	278 lm	Potencia Luminaria	4.2 W	Eficacia	66.126 lm/W	Eficiencia	83.91%
Flujo Fuente	331 lm	Valor Máximo	2264.04 cd/klm	Posición	C=0.00 G=0.00	CG	Bisimétrico

**Tabla de Intensidad Luminosa cd/klm Tabla 2/2**

	C 0.00	C 15.00	C 30.00	C 45.00	C 60.00	C 75.00	C 90.00
G 73.0	0.92	0.94	1.02	1.19	1.34	1.48	1.49
G 74.0	0.82	0.83	0.91	1.03	1.16	1.28	1.29
G 75.0	0.73	0.73	0.79	0.90	1.02	1.11	1.12
G 76.0	0.65	0.65	0.70	0.79	0.90	0.96	0.97
G 77.0	0.56	0.57	0.61	0.69	0.78	0.83	0.85
G 78.0	0.49	0.49	0.53	0.61	0.68	0.71	0.73
G 79.0	0.42	0.43	0.46	0.52	0.58	0.62	0.63
G 80.0	0.37	0.37	0.40	0.45	0.50	0.54	0.54
G 81.0	0.32	0.32	0.34	0.39	0.43	0.46	0.47
G 82.0	0.27	0.27	0.29	0.33	0.37	0.40	0.40
G 83.0	0.23	0.23	0.25	0.28	0.31	0.34	0.33
G 84.0	0.20	0.20	0.21	0.24	0.26	0.28	0.28
G 85.0	0.16	0.17	0.17	0.19	0.21	0.23	0.22
G 86.0	0.13	0.13	0.14	0.16	0.17	0.18	0.18
G 87.0	0.10	0.11	0.11	0.12	0.13	0.14	0.13
G 88.0	0.08	0.08	0.08	0.09	0.09	0.10	0.09
G 89.0	0.06	0.06	0.06	0.06	0.06	0.07	0.07
G 90.0	0.04	0.04	0.04	0.04	0.04	0.04	0.04

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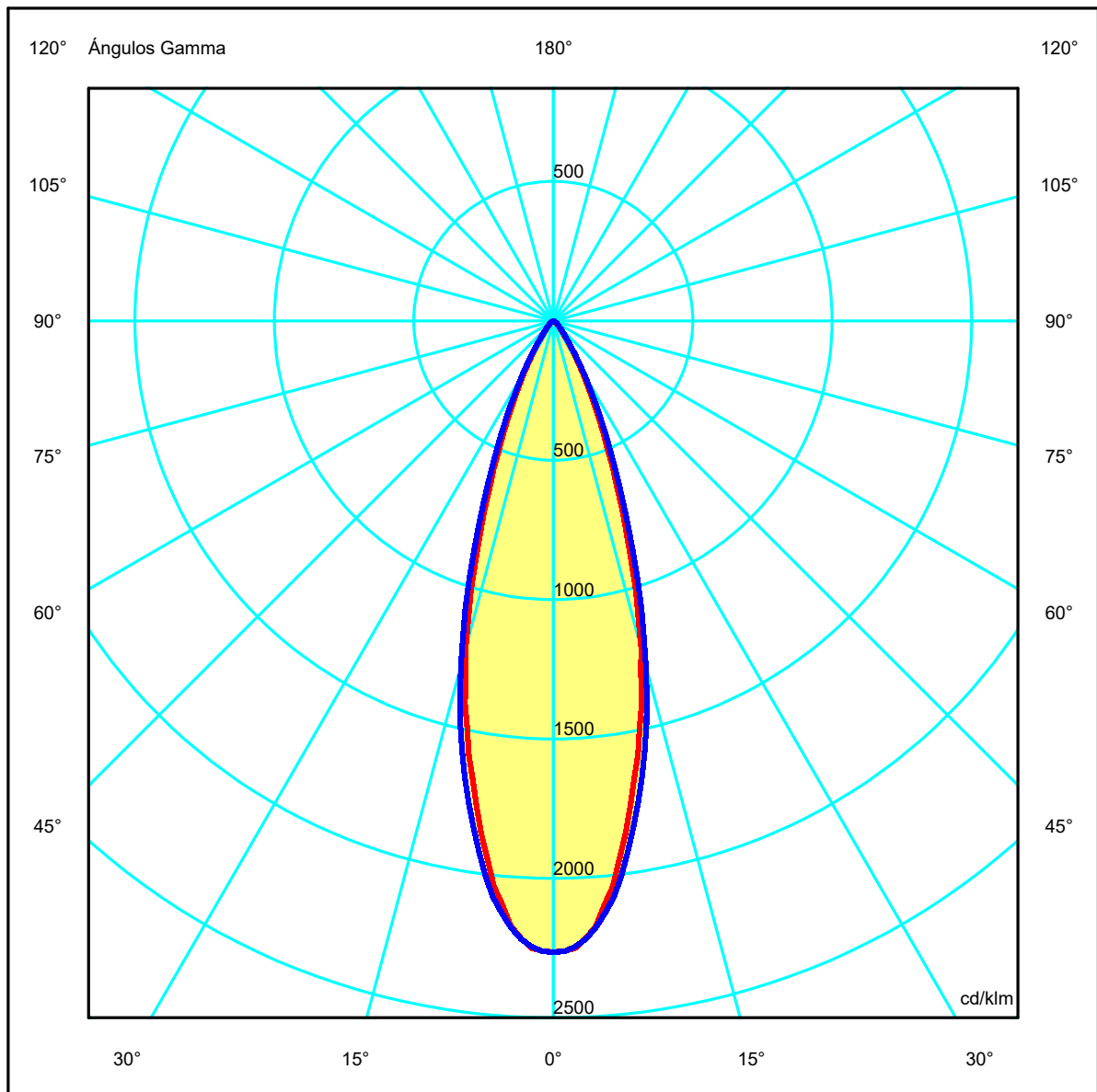
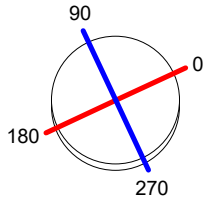
Nombre BOB GU10

Flujo Luminaria	278 lm	Potencia Luminaria	4.2 W	Eficacia	66.126 lm/W	Eficiencia	83.91%
Flujo Fuente	331 lm	Valor Máximo	2264.04 cd/klm	Posición	C=0.00 G=0.00	CG	Bisimétrico

Diam=70mm

Semiplanos C

180.0  0.0  
270.0  90.0



# LedsC4

## Luminaria

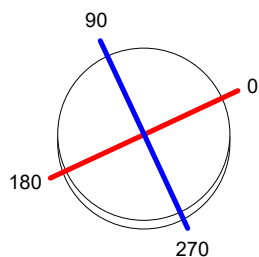
Código 05-E157-60-37  
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## Ensayo

Código 05-E157-60-37  
Nombre BOB GU10

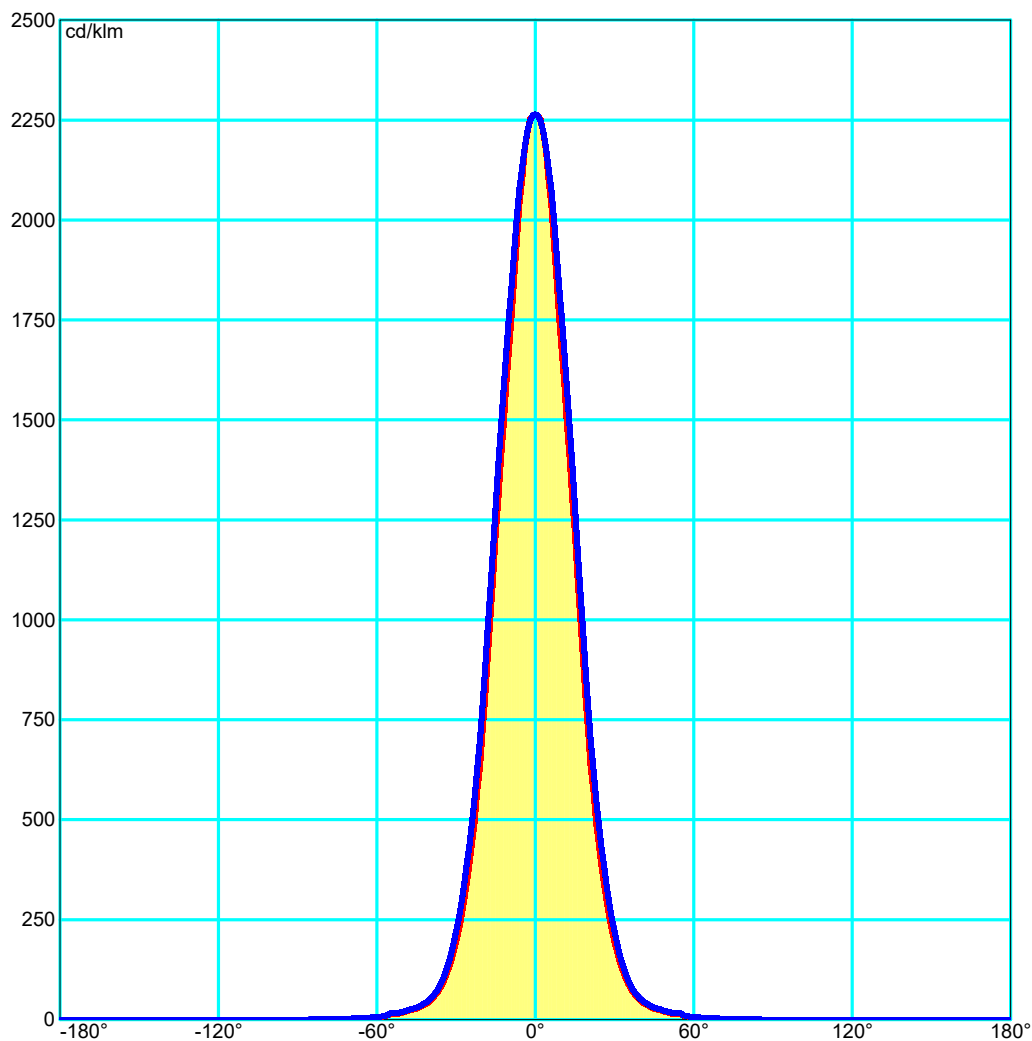
Flujo Luminaria	278 lm	Potencia Luminaria	4.2 W	Eficacia	66.126 lm/W	Eficiencia	83.91%
Flujo Fuente	331 lm	Valor Máximo	2264.04 cd/klm	Posición	C=0.00 G=0.00	CG	Bisimétrico

Diam=70mm



Semiplanos C

180.0 ——— 0.0  
270.0 ——— 90.0



**Luminaria**

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Flujo Luminaria	278 lm	Potencia Luminaria	4.2 W	Eficacia	66.126 lm/W	Eficiencia	83.91%
Flujo Fuente	331 lm	Valor Máximo	2264.04 cd/klm	Posición	C=0.00 G=0.00	CG	Bisimétrico

**UGR**  
S = 0.250

Reflectancias											
Techo/Cavidad	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3	
Paredes	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3	
PDT	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Dimensiones del Local						Vista Longitudinal					
	Mista Lateral										
x=2H y=2H	12.3	13.0	12.5	13.2	13.4	12.9	13.5	13.1	13.7	13.9	
x=2H y=3H	12.2	12.8	12.5	13.1	13.3	12.8	13.5	13.1	13.7	13.9	
x=2H y=4H	12.2	12.8	12.5	13.0	13.3	12.8	13.4	13.1	13.6	13.9	
x=2H y=6H	12.1	12.6	12.4	12.9	13.2	12.7	13.3	13.1	13.5	13.8	
x=2H y=8H	12.1	12.6	12.4	12.9	13.2	12.7	13.2	13.0	13.5	13.8	
x=2H y=12H	12.0	12.5	12.4	12.8	13.1	12.7	13.2	13.0	13.5	13.8	
x=4H y=2H	12.2	12.8	12.5	13.0	13.3	12.8	13.3	13.1	13.6	13.8	
x=4H y=3H	12.2	12.6	12.5	12.9	13.3	12.8	13.2	13.1	13.5	13.8	
x=4H y=4H	12.1	12.5	12.5	12.9	13.2	12.7	13.1	13.1	13.5	13.8	
x=4H y=6H	12.0	12.4	12.4	12.8	13.1	12.7	13.0	13.1	13.4	13.8	
x=4H y=8H	12.0	12.3	12.4	12.7	13.1	12.7	13.0	13.1	13.3	13.7	
x=4H y=12H	12.0	12.2	12.4	12.6	13.1	12.6	12.9	13.0	13.3	13.7	
x=8H y=4H	12.0	12.3	12.4	12.7	13.1	12.6	12.9	13.0	13.3	13.7	
x=8H y=6H	11.9	12.2	12.4	12.6	13.0	12.6	12.8	13.0	13.2	13.7	
x=8H y=8H	11.9	12.1	12.4	12.5	13.0	12.5	12.7	13.0	13.2	13.6	
x=8H y=12H	11.9	12.0	12.3	12.5	13.0	12.5	12.7	13.0	13.1	13.6	
x=12H y=4H	12.0	12.2	12.4	12.6	13.1	12.6	12.9	13.0	13.3	13.7	
x=12H y=6H	11.9	12.1	12.4	12.5	13.0	12.5	12.7	13.0	13.2	13.6	
x=12H y=8H	11.9	12.0	12.3	12.5	13.0	12.5	12.6	13.0	13.1	13.6	

## Luminaria

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## Ensayo

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Flujo Luminaria	278 lm	Potencia Luminaria	4.2 W	Eficacia	66.126 lm/W	Eficiencia	83.91%
Flujo Fuente	331 lm	Valor Máximo	2264.04 cd/klm	Posición	C=0.00 G=0.00	CG	Bisimétrico

Flujo Total=331.00 Flujo Luminaria=277.73

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	0.71	0.75	0.80	0.84	0.87	0.91	0.94	0.97	0.98	0.99	1.01	1.02
RC	-	-	-	-	-	-	-	-	-	-	-	-

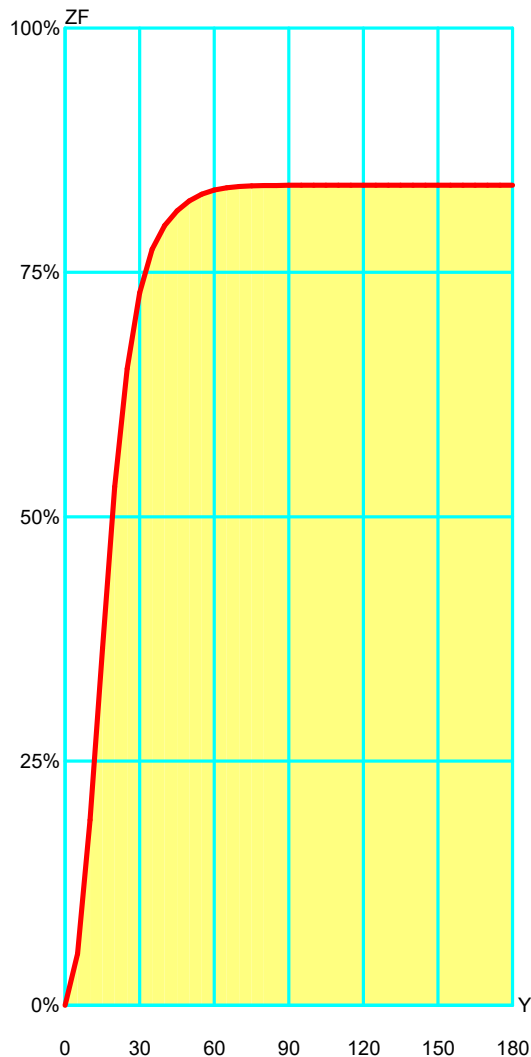
Flujo Zonal por 1000 Lúmenes

Y°	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
ZF(Y)	190	531	729	798	823	834	838	839	839	839	839	839	839	839	839	839	839	839

Códigos de Flujo C.I.E.

96 99 100 100 84

C.I.E.	-/-/-/-/-/-/-/-/-/-	LOR	83.90670 %
D DIN 5040	A60	ULOR	0.00000 %
F UTE	0.84 A	DLOR	83.90670 %
B NBN	BZ 1	UFF	0.00000 %
RN	0.00000 %	DFF	100.00000 %
BLF	1.0	FFR	0.00000 %



Flujo Zonal				
Gamma °	Flujo	Suma lm	Flujo [%]	Suma [%]
0°	0.00	0.00	0.00%	0.00 %
5°	52.57	52.57	6.27 %	6.27 %
10°	136.95	189.52	16.32 %	22.59 %
15°	175.82	365.33	20.95 %	43.54 %
20°	165.33	530.67	19.70 %	63.25 %
25°	120.86	651.53	14.40 %	77.65 %
30°	77.46	729.00	9.23 %	86.88 %
35°	44.58	773.57	5.31 %	92.19 %
40°	24.50	798.07	2.92 %	95.11 %
45°	14.82	812.89	1.77 %	96.88 %
50°	10.12	823.01	1.21 %	98.09 %
55°	7.04	830.05	0.84 %	98.93 %
60°	4.20	834.25	0.50 %	99.43 %
65°	2.22	836.47	0.26 %	99.69 %
70°	1.32	837.79	0.16 %	99.85 %
75°	0.70	838.48	0.08 %	99.93 %
80°	0.35	838.84	0.04 %	99.97 %
85°	0.17	839.01	0.02 %	99.99 %
90°	0.06	839.07	0.01 %	100.00 %
95°	0.00	839.07	0.00 %	100.00 %
100°	0.00	839.07	0.00 %	100.00 %
105°	0.00	839.07	0.00 %	100.00 %
110°	0.00	839.07	0.00 %	100.00 %
115°	0.00	839.07	0.00 %	100.00 %
120°	0.00	839.07	0.00 %	100.00 %
125°	0.00	839.07	0.00 %	100.00 %
130°	0.00	839.07	0.00 %	100.00 %
135°	0.00	839.07	0.00 %	100.00 %
140°	0.00	839.07	0.00 %	100.00 %
145°	0.00	839.07	0.00 %	100.00 %
150°	0.00	839.07	0.00 %	100.00 %
155°	0.00	839.07	0.00 %	100.00 %
160°	0.00	839.07	0.00 %	100.00 %
165°	0.00	839.07	0.00 %	100.00 %
170°	0.00	839.07	0.00 %	100.00 %
175°	0.00	839.07	0.00 %	100.00 %
180°	0.00	839.07	0.00 %	100.00 %

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## Ensayo

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Flujo Luminaria	278 lm	Potencia Luminaria	4.2 W	Eficacia	66.126 lm/W	Eficiencia	83.91%
Flujo Fuente	331 lm	Valor Máximo	2264.04 cd/klm	Posición	C=0.00 G=0.00	CG	Bisimétrico

### Utilización CIE

Montaje	Directo	Normalización										Normalizados			Raz. de Susp. 1/3			CIE Estándar					
Techo																							
K	8873	8773	8871	8771	7773	7771	7753	7553	7751	7551	7731	7331	7711	7111	5551	5531	5331	5511	5111	3331	3311	1111	0000
0.60	138	124	80	72	118	69	79	68	44	37	27	20	15	10	35	22	19	12	10	18	10	9	0
0.80	166	152	87	80	144	76	104	91	52	46	34	27	21	16	43	29	26	18	15	25	15	14	0
1.00	185	172	87	82	163	78	124	111	56	50	40	33	27	21	47	34	31	23	20	30	20	18	0
1.25	204	192	88	84	183	80	145	132	61	56	46	39	33	27	52	40	37	29	26	35	26	24	0
1.50	219	208	89	85	198	81	163	149	64	59	50	44	39	32	56	44	42	34	31	40	31	28	0
2.00	238	229	86	83	218	80	188	176	67	63	56	51	47	41	60	51	48	43	39	46	39	36	0
2.50	251	243	84	82	232	79	207	196	69	66	61	56	54	47	63	56	53	49	46	51	46	43	0
3.00	260	253	82	80	242	78	221	210	71	68	64	59	58	53	65	59	57	54	51	55	51	48	0
4.00	274	269	82	81	257	79	240	232	74	71	69	65	65	60	68	65	63	61	58	61	58	55	0
5.00	284	279	82	81	267	79	253	246	76	74	72	69	69	65	71	68	67	66	63	65	63	60	0
10.00	304	301	83	82	289	81	283	279	80	79	80	78	79	77	77	77	76	76	75	74	74	71	0
20.00	315	314	84	83	301	82	300	297	83	83	84	83	85	84	80	82	81	83	82	79	80	78	0

### Pared

K	8873	8773	8871	8771	7773	7771	7753	7553	7751	7551	7731	7331	7711	7111	5551	5531	5331	5511	5111	3331	3311	1111	0000
0.60	243	235	169	166	231	163	182	177	132	129	111	108	95	94	128	108	107	94	93	107	93	93	74
0.80	270	262	180	176	256	173	208	202	145	141	124	121	109	106	139	121	120	107	106	119	106	105	83
1.00	283	274	177	174	266	171	222	214	146	143	127	124	113	110	140	124	122	111	109	121	109	108	83
1.25	296	288	177	174	278	170	237	229	148	145	132	128	119	115	142	127	126	116	114	124	113	111	84
1.50	305	297	175	172	286	168	248	239	149	146	134	130	122	118	142	129	128	118	116	125	115	113	83
2.00	305	298	158	156	284	152	253	244	138	135	126	122	116	112	130	120	119	112	109	115	108	105	72
2.50	299	293	140	139	277	135	251	243	124	122	115	112	107	103	116	109	107	102	100	103	97	93	59
3.00	290	284	122	121	267	117	245	237	109	107	102	99	96	92	101	95	94	90	88	89	85	80	44
4.00	284	279	105	104	260	100	243	236	95	93	90	87	85	82	86	82	81	79	76	75	72	67	29
5.00	276	272	91	90	252	86	238	232	82	80	78	76	75	71	73	70	69	68	65	63	61	55	15
10.00	225	222	24	24	199	19	193	189	19	18	18	16	18	15	9	9	8	9	7	1	1	0	0
20.00	126	124	0	0	100	0	98	96	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

### P.Trab.

K	8873	8773	8871	8771	7773	7771	7753	7553	7751	7551	7731	7331	7711	7111	5551	5531	5331	5511	5111	3331	3311	1111	0000
0.60	747	739	697	692	734	690	674	669	649	646	622	619	602	600	644	619	618	601	600	617	600	599	592
0.80	802	793	739	735	785	731	726	718	693	689	665	662	645	642	686	661	660	643	641	659	641	640	633
1.00	851	841	775	771	830	766	775	766	733	729	708	703	688	684	724	702	701	685	683	699	683	681	674
1.25	891	881	803	799	867	793	815	805	764	760	741	736	723	718	754	734	732	718	716	729	715	712	705
1.50	920	910	822	818	894	812	846	835	786	782	765	760	748	743	775	758	755	743	740	751	738	735	728
2.00	966	957	851	848	937	842	897	886	822	818	806	801	792	786	810	796	794	785	782	789	779	773	767
2.50	996	987	869	866	964	860	931	920	845	841	832	827	821	815	832	821	819	812	809	812	805	798	792
3.00	1000	1000	881	879	984	872	956	945	861	858	851	846	842	836	847	839	837	832	829	829	823	816	810
4.00	1000	1000	892	890	1000	883	983	974	875	873	869	864	862	857	861	855	854	851	847	844	840	830	825
5.00	1000	1000	898	897	1000	889	1000	992	884	882	879	875	875	869	869	865	863	861	858	852	850	839	833
10.00	1000	1000	911	910	1000	901	1000	1000	901	900	900	898	900	896	884	884	883	884	882	869	869	855	849
20.00	1000	1000	916	915	1000	906	1000	1000	908	907	910	908	911	909	891	892	892	894	892	876	877	862	855

LM53 SHR C0-C180: 0.517 SHR C90-C270: 0.536 SHR Superficial: 0.551



## Luminaria

Código 05-E157-60-37

Nombre BOB GU10

## Ensayo

Código 05-E157-60-37

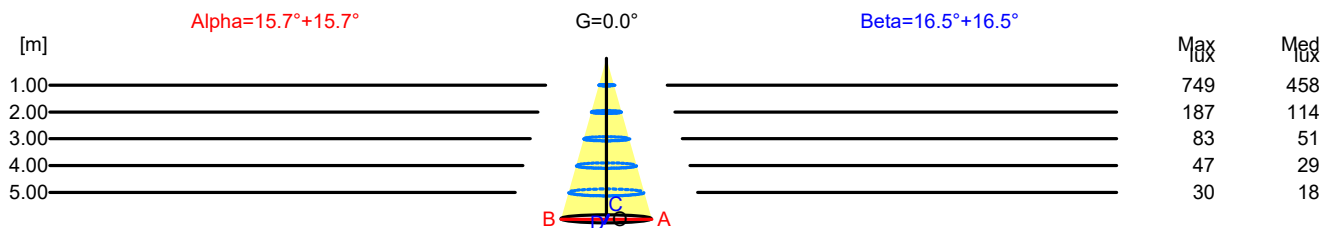
Nombre BOB GU10

Flujo Luminaria	278 lm	Potencia Luminaria	4.2 W	Eficacia	66.126 lm/W	Eficiencia	83.91%
Flujo Fuente	331 lm	Valor Máximo	2264.04 cd/klm	Posición	C=0.00 G=0.00	CG	Bisimétrico

### Apertura a 50.00 % de Max Intensidad

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	0.28	0.56	0.85	1.13	1.41	OC	0.30	0.59	0.89	1.18	1.48
OB	0.28	0.56	0.85	1.13	1.41	OD	0.30	0.59	0.89	1.18	1.48

	Intensidades Luminosas [ cd/klm]									
	0	5	15	25	35	45	55	65	75	85
OA	749.40	695.89	402.03	128.60	30.26	9.02	4.36	0.93	0.24	0.05
OB	749.40	695.89	402.03	128.60	30.26	9.02	4.36	0.93	0.24	0.05
OC	749.40	705.48	424.17	143.96	33.38	9.91	5.16	1.34	0.37	0.07
OD	749.40	705.48	424.17	143.96	33.38	9.91	5.16	1.34	0.37	0.07



H[m]	D[m]	Max lux	Med lux	Alpha=15.7°+15.7°	G=0.0
1.00	0.56	749	458		
2.00	1.13	187	114		
3.00	1.69	83	51		
4.00	2.26	47	29		
5.00	2.82	30	18		

H[m]	D[m]	Max lux	Med lux	Beta=16.5°+16.5°	G=0.0
1.00	0.59	749	458		
2.00	1.18	187	114		
3.00	1.77	83	51		
4.00	2.36	47	29		
5.00	2.96	30	18		

**Luminaria**

Código 05-E157-60-37

Nombre BOB GU10

**Ensayo**

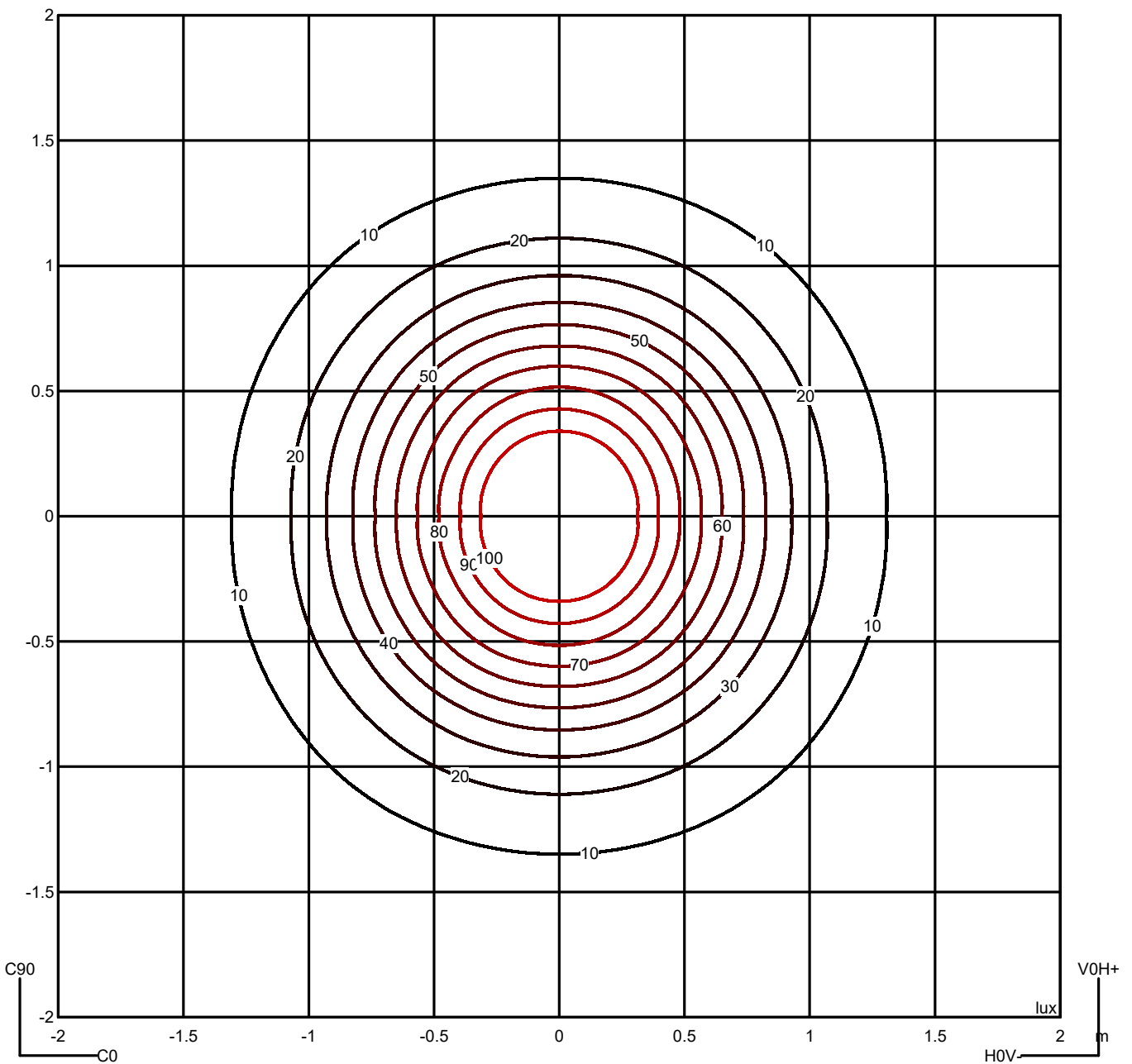
Código 05-E157-60-37

Nombre BOB GU10

Flujo Luminaria	278 lm	Potencia Luminaria	4.2 W	Eficacia	66.126 lm/W	Eficiencia	83.91%
Flujo Fuente	331 lm	Valor Máximo	2264.04 cd/klm	Posición	C=0.00 G=0.00	CG	Bisimétrico

Isolux (Suelo)

Posición Luminaria X=0.00m Y=0.00m Z=2.50m



# LedsC4

## Luminaria

Código 05-E157-60-37

Nombre BOB GU10

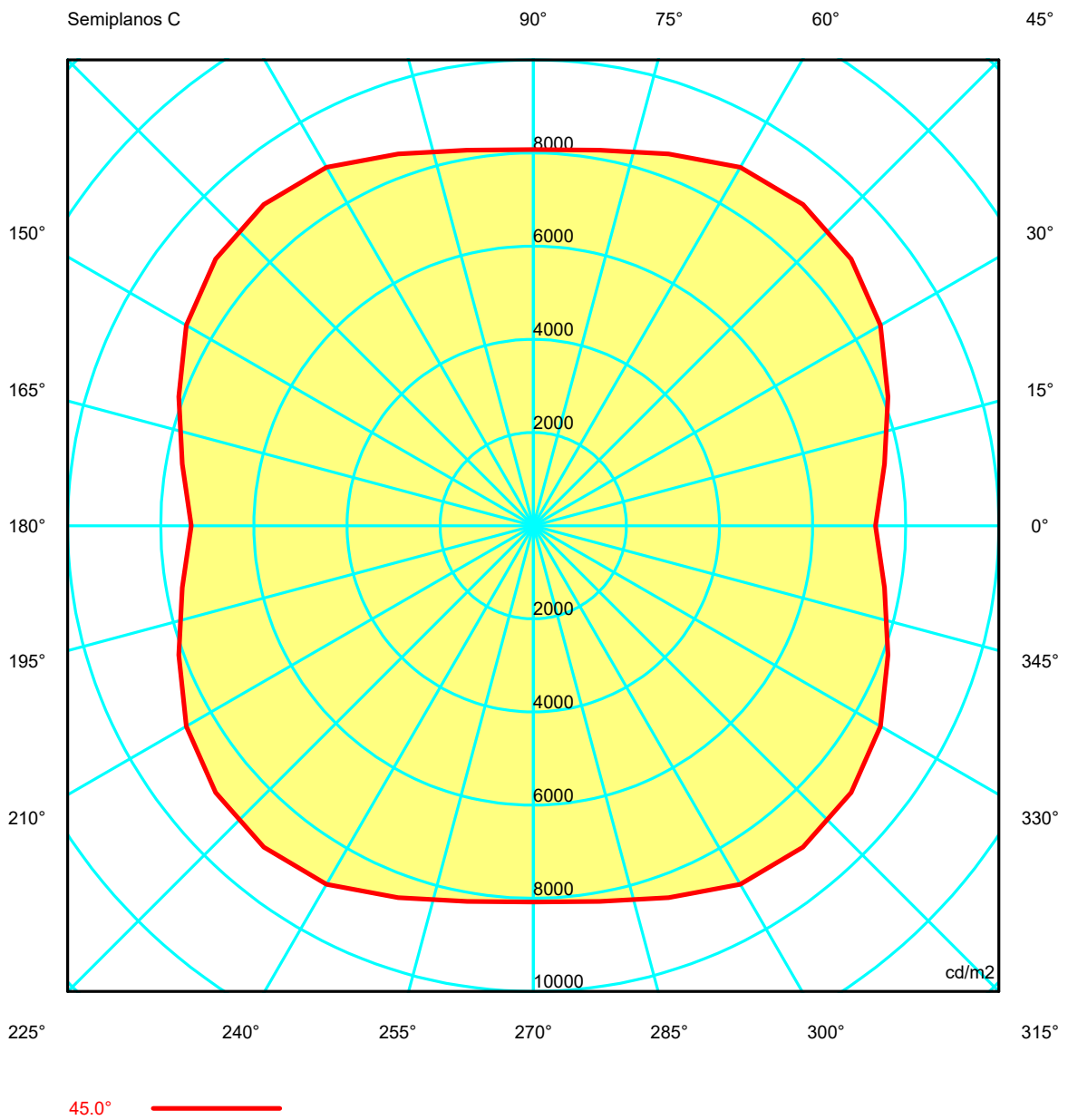
## Ensayo

Código 05-E157-60-37

Nombre BOB GU10

Flujo Luminaria	278 lm	Potencia Luminaria	4.2 W	Eficacia	66.126 lm/W	Eficiencia	83.91%
Flujo Fuente	331 lm	Valor Máximo	2264.04 cd/klm	Posición	C=0.00 G=0.00	CG	Bisimétrico

Luminancia



**Luminaria**

Código 05-E157-60-37

Nombre BOB GU10

**Ensayo**

Código 05-E157-60-37

Nombre BOB GU10

Flujo Luminaria	278 lm	Potencia Luminaria	4.2 W	Eficacia	66.126 lm/W	Eficiencia	83.91%
Flujo Fuente	331 lm	Valor Máximo	2264.04 cd/klm	Posición	C=0.00 G=0.00	CG	Bisimétrico

**Luminance cd/m2 Tabla 1/3**

	C 0.00	C 10.00	C 20.00	C 30.00	C 40.00	C 50.00	C 60.00	C 70.00	C 80.00	C 90.00	C 100.00	C 110.00	C 120.00
G 0.0	431943.08	431943.08	431943.08	431943.08	431943.08	431943.08	431943.08	431943.08	431943.08	431943.08	431943.08	431943.08	431943.08
G 5.0	402635.81	404989.41	405992.61	406209.60	407319.48	407972.14	408006.38	408645.77	408839.28	408183.89	408839.28	408645.77	408006.38
G 10.0	323128.05	326397.45	328771.44	330612.30	333101.79	335734.09	337808.43	338993.48	339474.19	339589.05	339474.19	338993.48	337808.43
G 15.0	239898.58	242068.91	244048.01	246501.49	250269.33	253557.18	255232.97	255506.56	254643.88	253111.39	254643.88	255506.56	255232.97
G 20.0	146455.83	148968.72	151464.47	154453.39	158317.85	160924.35	161393.24	160717.54	159804.88	159024.55	159804.88	160717.54	161393.24
G 25.0	81783.94	82673.13	84605.74	87496.89	90226.64	92012.06	92469.73	91808.88	91348.15	91555.83	91348.15	91808.88	92469.73
G 30.0	42262.95	43573.27	45007.62	46614.84	48266.07	49427.77	49661.24	48978.31	48375.08	48241.43	48375.08	48978.31	49661.24
G 35.0	21292.70	21898.41	22822.85	23980.47	24931.16	25416.19	25227.72	24374.77	23695.86	23484.37	23695.86	24374.77	25227.72
G 40.0	11516.24	11977.99	12619.76	13354.20	13867.11	13998.10	13705.17	13112.16	12679.70	12537.11	12679.70	13112.16	13705.17
G 45.0	7350.59	7655.12	8105.22	8608.95	8907.56	9009.83	8886.43	8498.82	8187.91	8074.95	8187.91	8498.82	8886.43
G 50.0	5306.78	5182.33	5343.50	5777.98	6204.14	6443.75	6391.20	6080.08	5910.09	5999.15	5910.09	6080.08	6391.20
G 55.0	4376.98	3973.41	3912.75	4057.09	3987.79	4044.76	4289.79	4439.78	4712.22	5183.23	4712.22	4439.78	4289.79
G 60.0	1949.58	1964.08	2057.50	2244.61	2458.08	2561.04	2521.88	2431.92	2395.74	2391.96	2395.74	2431.92	2521.88
G 65.0	1265.07	1271.27	1306.10	1409.99	1535.46	1638.94	1714.87	1784.84	1816.00	1828.17	1816.00	1784.84	1714.87
G 70.0	841.36	845.07	854.83	900.14	1008.42	1109.23	1181.54	1258.91	1289.21	1293.91	1289.21	1258.91	1181.54
G 75.0	540.83	534.73	547.42	584.12	636.15	693.01	749.24	800.50	821.13	827.63	821.13	800.50	749.24
G 80.0	406.16	404.07	411.54	435.35	475.48	516.33	551.10	581.86	592.80	594.54	592.80	581.86	551.10
G 85.0	358.47	359.96	366.50	382.11	407.93	437.66	466.78	491.73	499.04	489.22	499.04	491.73	466.78
G 90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**Luminaria**

Código 05-E157-60-37

Nombre BOB GU10

**Ensayo**

Código 05-E157-60-37

Nombre BOB GU10

Flujo Luminaria	278 lm	Potencia Luminaria	4.2 W	Eficacia	66.126 lm/W	Eficiencia	83.91%
Flujo Fuente	331 lm	Valor Máximo	2264.04 cd/klm	Posición	C=0.00 G=0.00	CG	Bisimétrico

**Luminance cd/m2 Tabla 2/3**

	C 130.00	C 140.00	C 150.00	C 160.00	C 170.00	C 180.00	C 190.00	C 200.00	C 210.00	C 220.00	C 230.00	C 240.00	C 250.00
G 0.0	431943.08	431943.08	431943.08	431943.08	431943.08	431943.08	431943.08	431943.08	431943.08	431943.08	431943.08	431943.08	431943.08
G 5.0	407972.14	407319.48	406209.60	405992.61	404989.41	402635.81	404989.41	405992.61	406209.60	407319.48	407972.14	408006.38	408645.77
G 10.0	335734.09	333101.79	330612.30	328771.44	326397.45	323128.05	326397.45	328771.44	330612.30	333101.79	335734.09	337808.43	338993.48
G 15.0	253557.18	250269.33	246501.49	244048.01	242068.91	239898.58	242068.91	244048.01	246501.49	250269.33	253557.18	255232.97	255506.56
G 20.0	160924.35	158317.85	154453.39	151464.47	148968.72	146455.83	148968.72	151464.47	154453.39	158317.85	160924.35	161393.24	160717.54
G 25.0	92012.06	90226.64	87496.89	84605.74	82673.13	81783.94	82673.13	84605.74	87496.89	90226.64	92012.06	92469.73	91808.88
G 30.0	49427.77	48266.07	46614.84	45007.62	43573.27	42262.95	43573.27	45007.62	46614.84	48266.07	49427.77	49661.24	48978.31
G 35.0	25416.19	24931.16	23980.47	22822.85	21898.41	21292.70	21898.41	22822.85	23980.47	24931.16	25416.19	25227.72	24374.77
G 40.0	13998.10	13867.11	13354.20	12619.76	11977.99	11516.24	11977.99	12619.76	13354.20	13867.11	13998.10	13705.17	13112.16
G 45.0	9009.83	8907.56	8608.95	8105.22	7655.12	7350.59	7655.12	8105.22	8608.95	8907.56	9009.83	8886.43	8498.82
G 50.0	6443.75	6204.14	5777.98	5343.50	5182.33	5306.78	5182.33	5343.50	5777.98	6204.14	6443.75	6391.20	6080.08
G 55.0	4044.76	3987.79	4057.09	3912.75	3973.41	4376.98	3973.41	3912.75	4057.09	3987.79	4044.76	4289.79	4439.78
G 60.0	2561.04	2458.08	2244.61	2057.50	1964.08	1949.58	1964.08	2057.50	2244.61	2458.08	2561.04	2521.88	2431.92
G 65.0	1638.94	1535.46	1409.99	1306.10	1271.27	1265.07	1271.27	1306.10	1409.99	1535.46	1638.94	1714.87	1784.84
G 70.0	1109.23	1008.42	900.14	854.83	845.07	841.36	845.07	854.83	900.14	1008.42	1109.23	1181.54	1258.91
G 75.0	693.01	636.15	584.12	547.42	534.73	540.83	534.73	547.42	584.12	636.15	693.01	749.24	800.50
G 80.0	516.33	475.48	435.35	411.54	404.07	406.16	404.07	411.54	435.35	475.48	516.33	551.10	581.86
G 85.0	437.66	407.93	382.11	366.50	359.96	358.47	359.96	366.50	382.11	407.93	437.66	466.78	491.73
G 90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**Luminaria**

Código 05-E157-60-37

Nombre BOB GU10

**Ensayo**

Código 05-E157-60-37

Nombre BOB GU10

Flujo Luminaria	278 lm	Potencia Luminaria	4.2 W	Eficacia	66.126 lm/W	Eficiencia	83.91%
Flujo Fuente	331 lm	Valor Máximo	2264.04 cd/klm	Posición	C=0.00 G=0.00	CG	Bisimétrico

**Luminance cd/m2 Tabla 3/3**

	C 260.00	C 270.00	C 280.00	C 290.00	C 300.00	C 310.00	C 320.00	C 330.00	C 340.00	C 350.00
G 0.0	431943.08	431943.08	431943.08	431943.08	431943.08	431943.08	431943.08	431943.08	431943.08	431943.08
G 5.0	408839.28	408183.89	408839.28	408645.77	408006.38	407972.14	407319.48	406209.60	405992.61	404989.41
G 10.0	339474.19	339589.05	339474.19	338993.48	337808.43	335734.09	333101.79	330612.30	328771.44	326397.45
G 15.0	254643.88	253111.39	254643.88	255506.56	255232.97	253557.18	250269.33	246501.49	244048.01	242068.91
G 20.0	159804.88	159024.55	159804.88	160717.54	161393.24	160924.35	158317.85	154453.39	151464.47	148968.72
G 25.0	91348.15	91555.83	91348.15	91808.88	92469.73	92012.06	90226.64	87496.89	84605.74	82673.13
G 30.0	48375.08	48241.43	48375.08	48978.31	49661.24	49427.77	48266.07	46614.84	45007.62	43573.27
G 35.0	23695.86	23484.37	23695.86	24374.77	25227.72	25416.19	24931.16	23980.47	22822.85	21898.41
G 40.0	12679.91	12537.11	12679.91	13112.16	13705.17	13998.10	13867.11	13354.20	12619.76	11977.99
G 45.0	8187.91	8074.95	8187.91	8498.82	8886.43	9009.83	8907.56	8608.95	8105.22	7655.12
G 50.0	5910.09	5999.15	5910.09	6080.08	6391.20	6443.75	6204.14	5777.98	5343.50	5182.33
G 55.0	4712.22	5183.23	4712.22	4439.78	4289.79	4044.76	3987.79	4057.09	3912.75	3973.41
G 60.0	2395.74	2391.96	2395.74	2431.92	2521.88	2561.04	2458.08	2244.61	2057.50	1964.08
G 65.0	1816.00	1828.17	1816.00	1784.84	1714.87	1638.94	1535.46	1409.99	1306.10	1271.27
G 70.0	1289.21	1293.91	1289.21	1258.91	1181.54	1109.23	1008.42	900.14	854.83	845.07
G 75.0	821.13	827.63	821.13	800.50	749.24	693.01	636.15	584.12	547.42	534.73
G 80.0	592.80	594.54	592.80	581.86	551.10	516.33	475.48	435.35	411.54	404.07
G 85.0	499.04	489.22	499.04	491.73	466.78	437.66	407.93	382.11	366.50	359.96
G 90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## Luminaria

Código 05-E157-60-37

Nombre BOB GU10

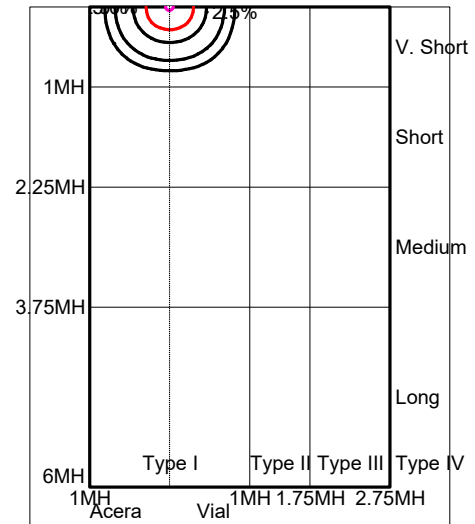
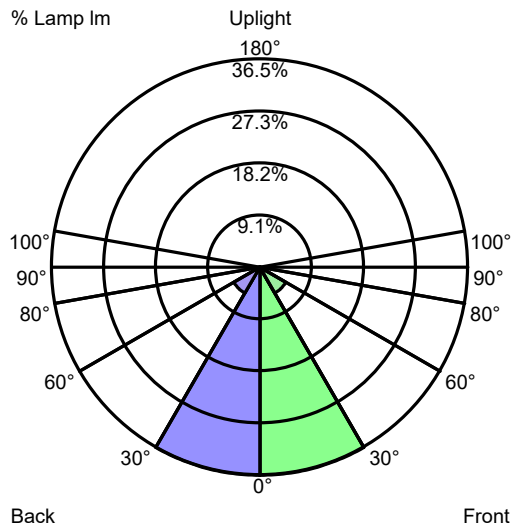
## Ensayo

Código 05-E157-60-37

Nombre BOB GU10

Flujo Luminaria	278 lm	Potencia Luminaria	4.2 W	Eficacia	66.126 lm/W	Eficiencia	83.91%
Flujo Fuente	331 lm	Valor Máximo	2264.04 cd/klm	Posición	C=0.00 G=0.00	CG	Bisimétrico

## US ROAD STANDARDS



Luminaire Classification System (LCS)				
LCS Zone		Lumens	%Lamp	%Lum
FL	0° -- 30°	120.7 lm	36.5 %	43.4 %
FM	30° -- 60°	17.4 lm	5.3 %	6.3 %
FH	60° -- 80°	0.8 lm	0.2 %	0.3 %
FVH	80° -- 90°	0.0 lm	0.0 %	0.0 %
BL	0° -- 30°	120.7 lm	36.5 %	43.4 %
BM	30° -- 60°	17.4 lm	5.3 %	6.3 %
BH	60° -- 80°	0.8 lm	0.2 %	0.3 %
BVH	80° -- 90°	0.0 lm	0.0 %	0.0 %
UL	90° -- 100°	0.0 lm	0.0 %	0.0 %
UH	100° -- 180°	0.0 lm	0.0 %	0.0 %
TOTALS		277.7 lm	83.9 %	100.0 %
BUG B1 U0 G0 Type V Very Short Quadrilateral Symmetry				