

90-7161-14-60

V0

## BENTO Downlight recessed

### Description

Downlight

For downlighting. UGR <10. Adjustable light source. Structure material: Aluminium. Structure finish: White. Blades finishes: NA. Warranty: 5 Years.








 96\*70

 0-20

**Finish**  
White  
NA

**Material**  
Aluminium

  IP23  34°  40°  75

### TECHNICAL CHARACTERISTICS

#### Light source

Light source: LED NICHIA  
Output (W): 6.1W  
Color temperature: LED warm-white  
3000K  
CRI: 90  
Photobiological risk: RG2  
Real Lumen: 467  
Qty Leds: 3  
Lm/Real W: 78  
Life Time: 50.000h L80B20  
Bin / Grup: sm303  
MacAdam steps: 3  
UGR: 11.2

#### GEAR

This item requires gear. It is not included.

#### Luminaire

Warranty: 5 Years

#### Logistics

Energy Efficiency: LED A++  
EAN Code: 8435526869565  
Net Weight (Kg): 0.140  
Weight in Kg (packaged): 0.260  
Masterbox: 75

The photograph may not match the reference exactly. Please read the product description to identify the finish.

# LEDS C4<sup>®</sup>

## Luminaria

Código 90-7161-14-60  
Nombre BENTO

## Ensayo

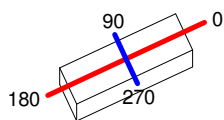
Código 90-7161-14-60  
Nombre BENTO

Flujo Luminaria	467.29 lm	Potencia luminaria	9.00 W	Eficacia	51.92 lm/W	Eficiencia	100.00%
Flujo de Lámpara	467.29 lm	Valor Máximo	1997.57 cd/klm	Posición	C=45.00 G=1.00	CG	Bisimétrico
Luminaria Rectangular		Longit.	36 mm	Anchura	115 mm	Altura	82 mm
Área Luminosa Rectangular		Longit.	30 mm	Anchura	80 mm	Altura	0 mm
Área Luminosa Horizontal			0.002400 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°			0.000581 m2
Sist. de Coorden.		CG		Tipo de Simetría		Bisimétrico	
Fecha		05-11-2018		Máximo Ángulo Gamma		90	
Distancia de Ensayo		0.00		Flujo de Ensayo		513.51 lm	
Operador		qualitat		Tensión de alimentación [V]			
Temperatura		25.00 °C		Corriente de alimentación [A]			
Humedad		60.00 %		Fotocélula			
Notas							

## Lámparas de la Luminaria

Familia	Código	Nombre	Flujo [lm]	Pot. [W]	Cant.
	15-7185-60-60	15-7185-60-60	467.29	9.00	1
C.I.E.	99 100 100 100 100	D DIN 5040	A60		
F UTE	--	B NBN	BZ 1		

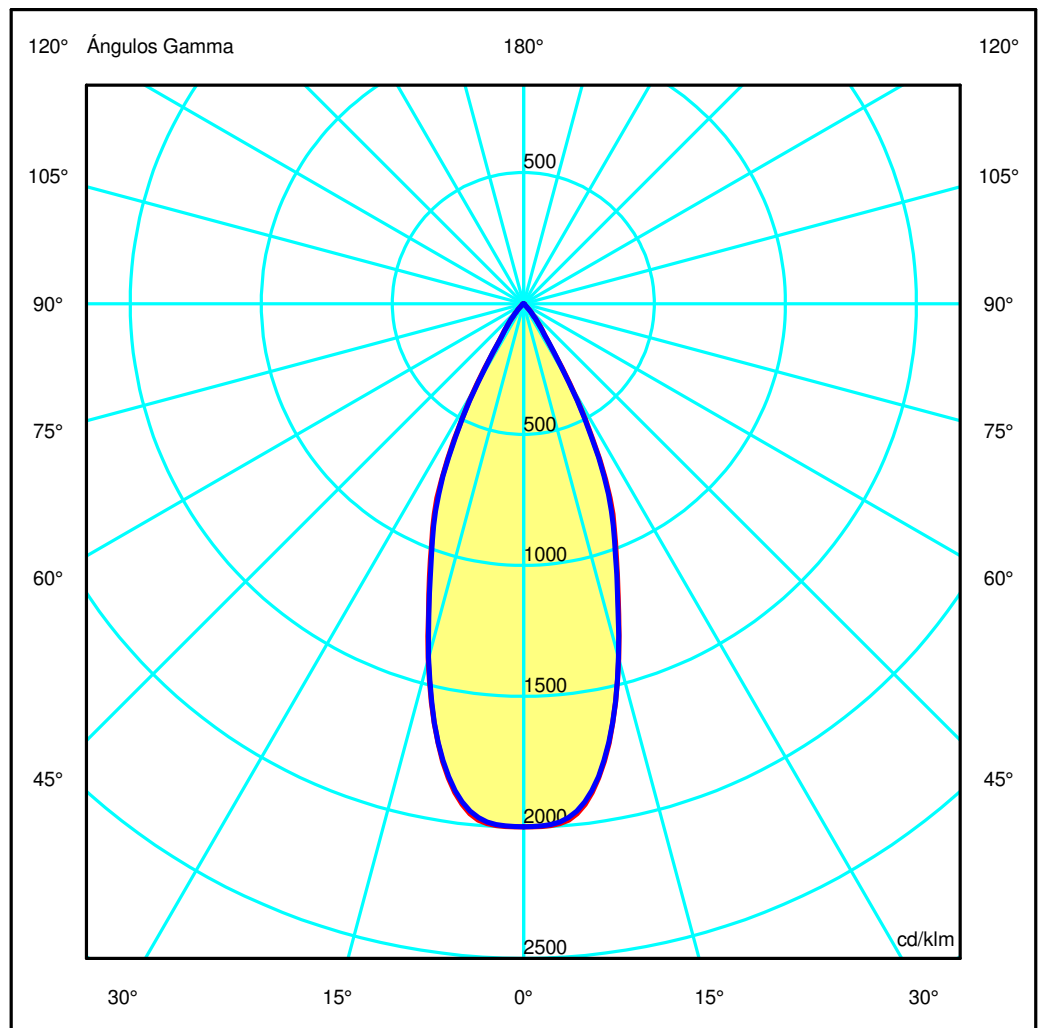
36mm x 115mm



Semiplanos C

180.0 — 0.0  
270.0 — 90.0

ULOR 0.00 %  
DLOR 100.00 %  
RN 0.00 %



**Luminaria**

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Flujo de Lámpara	467.29 lm	Valor Máximo	1997.57 cd/klm	Posición	C=45.00 G=1.00	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	1997.55	1997.55	1997.55	1997.55	1997.55	1997.55	1997.55
G 1.0	1997.55	1997.23	1997.43	1997.57	1997.16	1996.99	1996.92
G 2.0	1997.19	1996.71	1996.72	1996.59	1996.01	1995.68	1995.42
G 3.0	1995.69	1994.93	1994.20	1993.74	1992.75	1992.38	1992.15
G 4.0	1990.28	1989.14	1988.46	1987.79	1985.87	1985.31	1984.43
G 5.0	1979.41	1977.44	1976.44	1975.65	1972.54	1971.70	1970.21
G 6.0	1958.48	1956.95	1956.01	1955.47	1951.33	1950.38	1948.22
G 7.0	1926.04	1925.19	1925.23	1925.06	1920.62	1919.48	1917.06
G 8.0	1884.56	1884.24	1884.10	1884.57	1880.76	1879.08	1877.15
G 9.0	1834.39	1833.75	1833.27	1833.55	1830.58	1829.28	1828.00
G 10.0	1775.61	1774.49	1774.20	1774.24	1772.41	1771.23	1770.17
G 11.0	1710.13	1708.68	1707.68	1707.48	1706.65	1706.42	1705.78
G 12.0	1638.44	1636.67	1634.43	1634.14	1634.28	1634.94	1634.98
G 13.0	1563.17	1561.20	1558.59	1557.44	1557.91	1558.53	1559.23
G 14.0	1484.08	1481.74	1479.30	1477.49	1478.40	1479.16	1479.57
G 15.0	1403.49	1402.09	1399.92	1398.19	1398.57	1398.96	1399.33
G 16.0	1321.94	1320.63	1319.15	1316.75	1317.12	1316.79	1316.91
G 17.0	1241.94	1241.53	1240.13	1236.86	1236.92	1235.33	1236.08
G 18.0	1167.70	1167.10	1165.22	1161.76	1161.75	1159.89	1160.52
G 19.0	1100.43	1098.84	1097.13	1093.29	1093.03	1091.35	1092.51
G 20.0	1037.36	1036.53	1033.73	1029.99	1029.56	1027.78	1028.65
G 21.0	978.55	977.66	975.15	971.83	971.11	969.67	970.06
G 22.0	924.86	923.91	920.48	916.33	914.84	913.97	914.53
G 23.0	872.52	869.19	864.07	859.86	859.27	859.88	859.23
G 24.0	812.54	809.73	806.23	803.28	800.21	798.41	796.02
G 25.0	740.54	740.42	739.16	736.43	731.95	728.55	726.29
G 26.0	663.29	663.04	662.68	661.41	657.68	654.01	652.31
G 27.0	581.88	583.42	582.64	581.13	578.23	574.11	572.51
G 28.0	505.17	504.11	501.37	497.60	497.30	495.88	495.08
G 29.0	428.90	427.66	423.57	419.85	421.11	420.66	421.40
G 30.0	355.29	353.44	350.82	347.71	347.02	347.20	346.22
G 31.0	286.42	284.42	285.77	282.80	281.68	280.35	277.12
G 32.0	221.03	227.03	230.16	228.15	226.75	218.56	220.14
G 33.0	176.91	181.09	184.38	182.82	180.81	174.40	172.83
G 34.0	150.49	150.81	151.44	149.46	148.89	144.79	143.73
G 35.0	129.43	130.00	129.32	127.62	125.52	122.84	122.19
G 36.0	112.48	111.95	110.76	109.30	107.54	105.98	105.43
G 37.0	96.47	96.58	95.39	94.09	92.38	90.36	89.83
G 38.0	82.59	82.80	82.07	80.60	78.70	76.72	75.87
G 39.0	69.72	70.13	68.79	67.10	65.58	64.12	63.60
G 40.0	56.69	58.48	57.06	55.30	53.67	52.55	51.75
G 41.0	47.17	47.43	47.18	45.75	44.40	43.30	42.79
G 42.0	38.21	39.38	39.63	38.22	36.92	36.15	35.90
G 43.0	27.13	31.58	32.74	31.50	30.24	29.56	29.25
G 44.0	21.59	23.93	26.15	25.16	23.92	22.87	22.29
G 45.0	16.54	18.28	20.32	19.37	18.25	17.48	17.38
G 46.0	11.33	14.24	15.85	15.39	14.88	14.45	14.29
G 47.0	8.90	10.47	12.97	12.86	12.23	11.86	11.26
G 48.0	7.19	8.17	10.38	10.49	9.99	9.13	8.03
G 49.0	5.32	6.19	8.03	8.13	7.71	6.76	6.27
G 50.0	4.03	4.82	6.07	6.16	5.98	5.24	4.82
G 51.0	3.33	3.84	4.76	5.04	4.82	4.16	3.66
G 52.0	2.81	3.11	3.91	4.26	4.01	3.10	2.85
G 53.0	2.27	2.51	3.15	3.58	3.27	2.51	2.37
G 54.0	1.82	2.08	2.59	2.96	2.62	2.10	1.90
G 55.0	1.53	1.75	2.14	2.42	2.13	1.71	1.52
G 56.0	1.31	1.48	1.79	2.05	1.79	1.38	1.27
G 57.0	1.12	1.23	1.52	1.78	1.52	1.16	1.08
G 58.0	0.94	1.04	1.32	1.55	1.27	1.00	0.92
G 59.0	0.83	0.90	1.14	1.34	1.07	0.84	0.76
G 60.0	0.73	0.79	0.98	1.15	0.92	0.70	0.63
G 61.0	0.63	0.69	0.84	0.97	0.80	0.60	0.56
G 62.0	0.57	0.59	0.74	0.83	0.68	0.53	0.48
G 63.0	0.50	0.53	0.65	0.72	0.59	0.47	0.41
G 64.0	0.45	0.48	0.58	0.62	0.52	0.40	0.36
G 65.0	0.41	0.43	0.51	0.54	0.46	0.35	0.32
G 66.0	0.37	0.40	0.46	0.47	0.40	0.32	0.28
G 67.0	0.34	0.36	0.41	0.42	0.36	0.28	0.25
G 68.0	0.32	0.33	0.37	0.37	0.32	0.26	0.23
G 69.0	0.30	0.30	0.34	0.33	0.29	0.24	0.21
G 70.0	0.28	0.28	0.30	0.30	0.27	0.22	0.18
G 71.0	0.26	0.25	0.27	0.27	0.25	0.19	0.15
G 72.0	0.24	0.24	0.25	0.24	0.22	0.16	0.13

**Luminaria**

Código 90-7161-14-60  
Nombre BENTO

**Ensayo**

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Flujo Luminaria	467.29 lm	Potencia luminaria	9.00 W	Eficacia	51.92 lm/W	Eficiencia	100.00%
Flujo de Lámpara	467.29 lm	Valor Máximo	1997.57 cd/klm	Posición	C=45.00 G=1.00	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	0.22	0.23	0.23	0.22	0.20	0.13	0.11
G 74.0	0.20	0.22	0.21	0.20	0.17	0.12	0.10
G 75.0	0.19	0.20	0.20	0.18	0.15	0.11	0.09
G 76.0	0.19	0.19	0.19	0.17	0.13	0.11	0.09
G 77.0	0.18	0.18	0.18	0.15	0.13	0.10	0.08
G 78.0	0.18	0.17	0.17	0.14	0.12	0.10	0.08
G 79.0	0.17	0.17	0.16	0.14	0.11	0.09	0.07
G 80.0	0.16	0.16	0.15	0.13	0.10	0.08	0.07
G 81.0	0.15	0.15	0.14	0.11	0.09	0.07	0.07
G 82.0	0.14	0.14	0.13	0.10	0.08	0.07	0.06
G 83.0	0.13	0.13	0.12	0.08	0.06	0.06	0.06
G 84.0	0.11	0.11	0.10	0.06	0.06	0.05	0.05
G 85.0	0.09	0.10	0.07	0.05	0.05	0.05	0.04
G 86.0	0.08	0.08	0.05	0.04	0.04	0.04	0.04
G 87.0	0.06	0.06	0.04	0.04	0.03	0.03	0.03
G 88.0	0.04	0.04	0.03	0.03	0.02	0.02	0.02
G 89.0	0.03	0.02	0.02	0.02	0.02	0.01	0.01
G 90.0	0.01	0.01	0.01	0.01	0.01	0.01	0.01

# LEDS C4<sup>®</sup>

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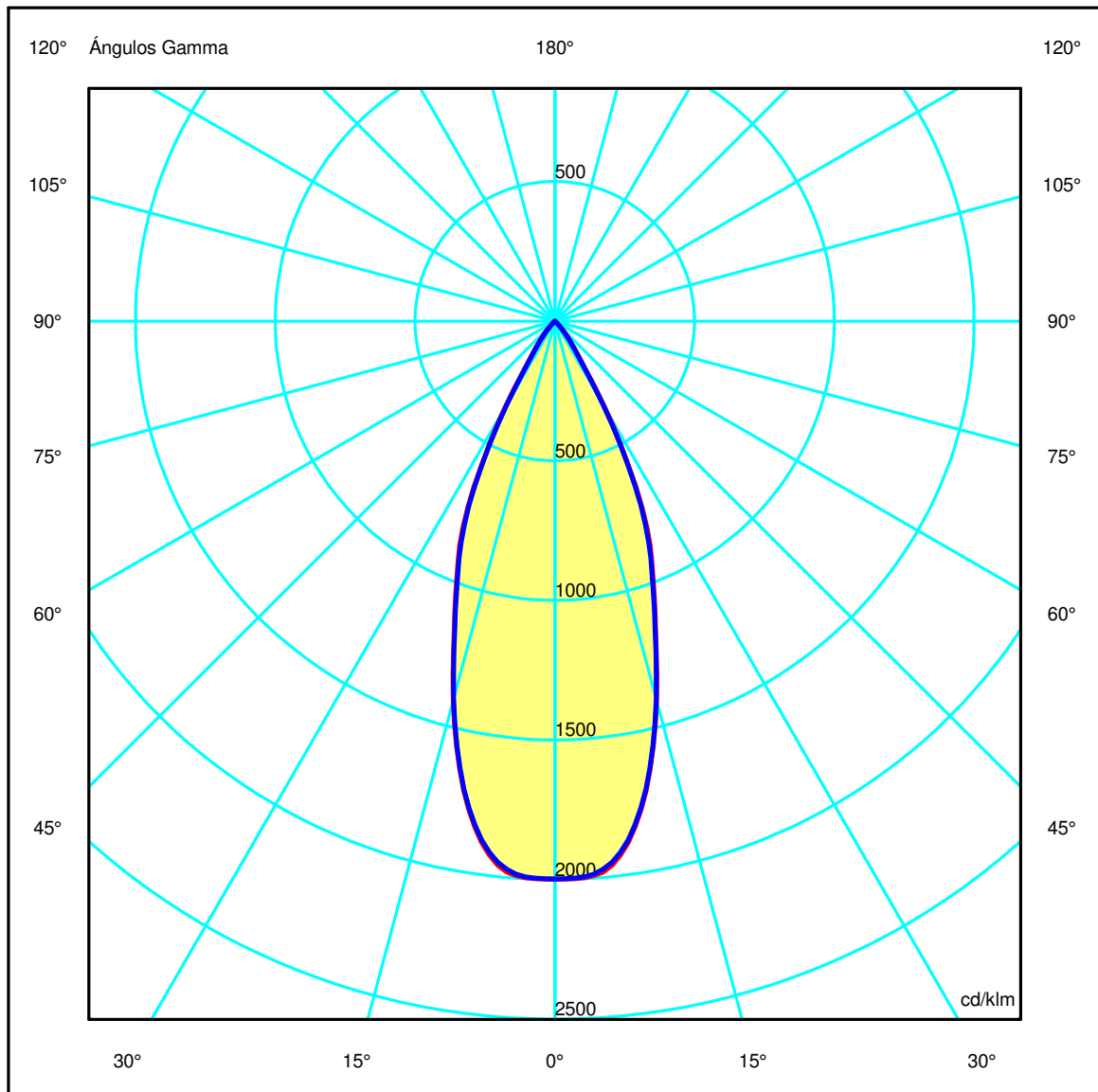
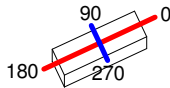
Flujo Luminaria	467.29 lm	Potencia luminaria	9.00 W	Eficacia	51.92 lm/W	Eficiencia	100.00%
Flujo de Lámpara	467.29 lm	Valor Máximo	1997.57 cd/klm	Posición	C=45.00 G=1.00	CG	Bisimétrico

36mm x 115mm

Semiplanos C

180.0 ——— 0.0

270.0 ——— 90.0



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## Luminaria

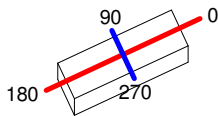
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Código 90-7161-14-60  
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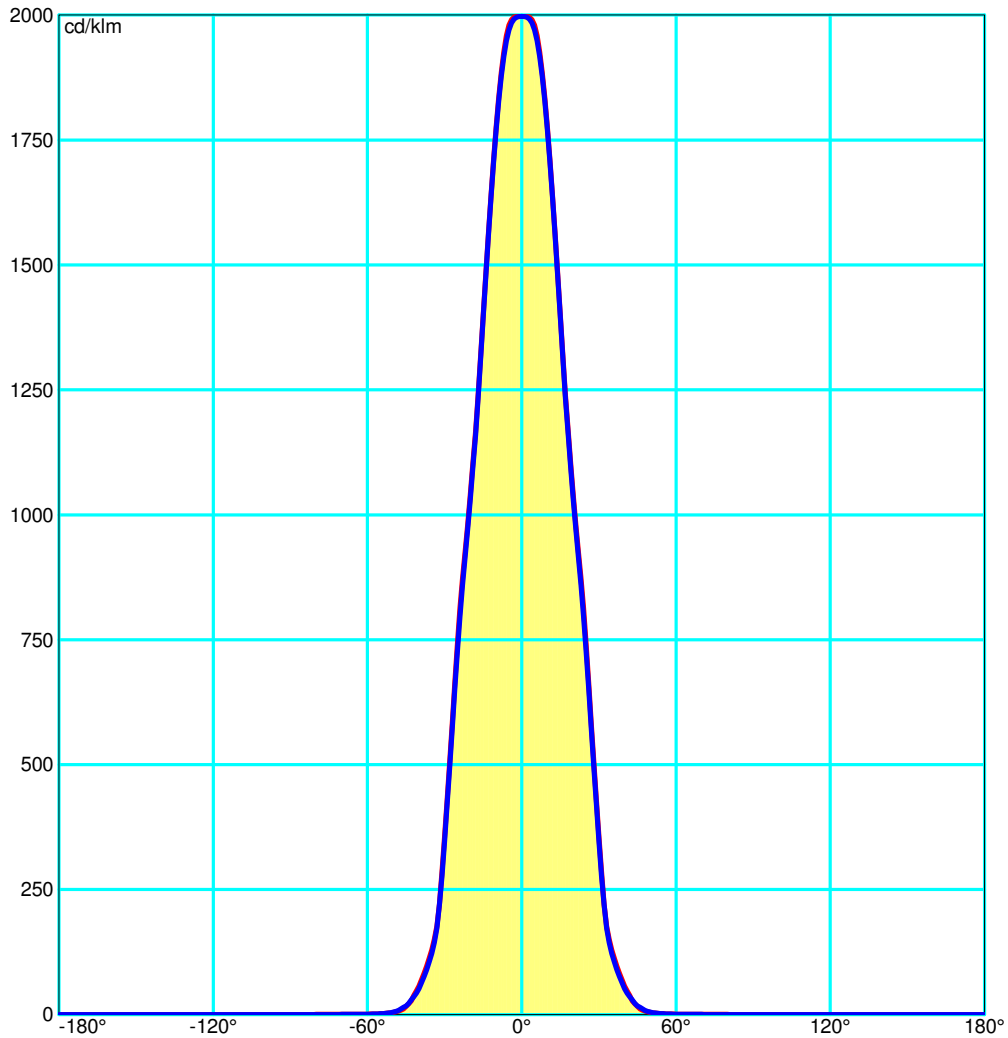
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36mm x 115mm



Semiplanos C

180.0 ————— 0.0  
270.0 ————— 90.0



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Flujo de Lámpara	467.29 lm	Valor Máximo	1997.57 cd/klm	Posición	C=45.00 G=1.00	CG	Bisimétrico

**UGR**  
S = 0.250

Reflectancias										
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	Viewed Crosswise					Viewed Endwise				
x=2H y=2H	12.2	12.9	12.5	13.1	13.3	12.0	12.6	12.2	12.8	13.0
x=2H y=3H	12.1	12.7	12.4	12.9	13.1	11.8	12.4	12.1	12.6	12.9
x=2H y=4H	12.0	12.6	12.3	12.8	13.1	11.7	12.3	12.0	12.5	12.8
x=2H y=6H	11.9	12.5	12.3	12.7	13.0	11.7	12.2	12.0	12.5	12.7
x=2H y=8H	11.9	12.4	12.2	12.7	13.0	11.6	12.1	12.0	12.4	12.7
x=2H y=12H	11.9	12.3	12.2	12.6	12.9	11.6	12.1	11.9	12.4	12.7
x=4H y=2H	12.0	12.6	12.3	12.8	13.1	11.7	12.3	12.0	12.5	12.8
x=4H y=3H	11.9	12.3	12.2	12.6	12.9	11.6	12.1	11.9	12.4	12.7
x=4H y=4H	11.8	12.2	12.2	12.5	12.9	11.5	11.9	11.9	12.3	12.6
x=4H y=6H	11.7	12.1	12.1	12.4	12.8	11.5	11.8	11.8	12.1	12.5
x=4H y=8H	11.7	12.0	12.1	12.4	12.8	11.4	11.7	11.8	12.1	12.5
x=4H y=12H	11.7	11.9	12.1	12.3	12.7	11.4	11.6	11.8	12.0	12.4
x=8H y=4H	11.7	12.0	12.1	12.4	12.8	11.4	11.7	11.8	12.1	12.5
x=8H y=6H	11.6	11.8	12.0	12.2	12.7	11.3	11.5	11.8	12.0	12.4
x=8H y=8H	11.6	11.7	12.0	12.2	12.6	11.3	11.5	11.8	11.9	12.4
x=8H y=12H	11.5	11.7	12.0	12.1	12.6	11.2	11.4	11.7	11.8	12.3
x=12H y=4H	11.6	11.9	12.1	12.3	12.7	11.4	11.6	11.8	12.0	12.4
x=12H y=6H	11.6	11.7	12.0	12.2	12.6	11.3	11.5	11.8	11.9	12.4
x=12H y=8H	11.5	11.7	12.0	12.1	12.6	11.2	11.4	11.7	11.8	12.3

## Luminaria

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## Ensayo

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Flujo Luminaria	467.29 lm	Potencia luminaria	9.00 W	Eficacia	51.92 lm/W	Eficiencia	100.00%
Flujo de Lámpara	467.29 lm	Valor Máximo	1997.57 cd/klm	Posición	C=45.00 G=1.00	CG	Bisimétrico

Flujo Total=467.29 Flujo Luminaria=467.29

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	0.73	0.78	0.82	0.86	0.88	0.93	0.95	0.97	0.99	1.00	1.02	1.02
RC	-	-	-	-	-	-	-	-	-	-	-	-

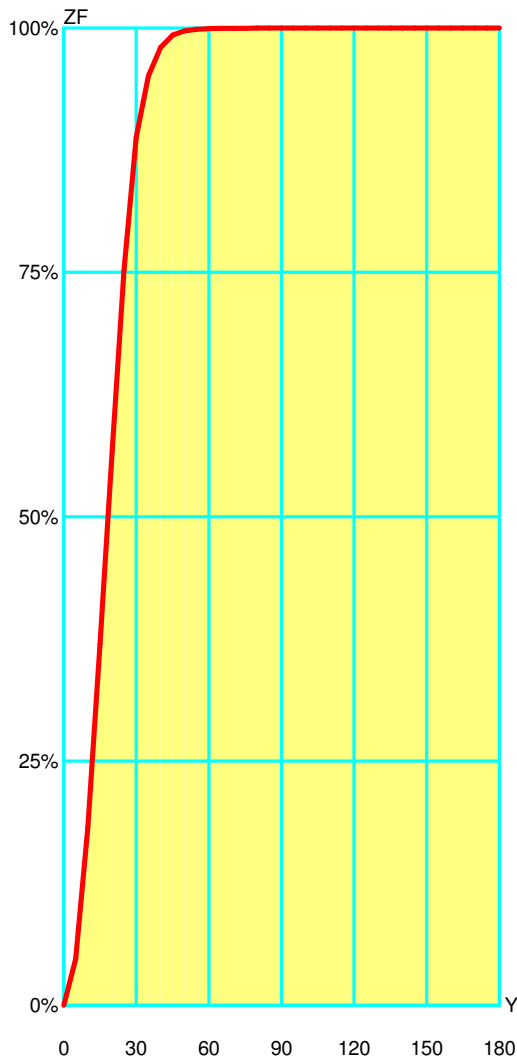
Flujo Zonal por 1000 Lúmenes

Y°	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
ZF(Y)	182	567	888	980	997	999	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000

Códigos de Flujo C.I.E.

99 100 100 100 100

C.I.E.	-/-/-/-/-/-/-/-/-/-	LOR	100.00000 %
D DIN 5040	A60	ULOR	0.00000 %
F UTE	--	DLOR	100.00000 %
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°	47.56	47.56	4.76 %	4.76 %
10°	134.67	182.23	13.47 %	18.22 %
15°	187.66	369.88	18.77 %	36.99 %
20°	197.46	567.34	19.75 %	56.73 %
25°	185.31	752.65	18.53 %	75.26 %
30°	135.53	888.18	13.55 %	88.82 %
35°	62.58	950.76	6.26 %	95.08 %
40°	29.21	979.96	2.92 %	98.00 %
45°	12.85	992.81	1.28 %	99.28 %
50°	4.39	997.20	0.44 %	99.72 %
55°	1.46	998.66	0.15 %	99.87 %
60°	0.61	999.27	0.06 %	99.93 %
65°	0.30	999.57	0.03 %	99.96 %
70°	0.17	999.74	0.02 %	99.97 %
75°	0.11	999.85	0.01 %	99.99 %
80°	0.08	999.93	0.01 %	99.99 %
85°	0.05	999.98	0.01 %	100.00 %
90°	0.02	1000.00	0.00 %	100.00 %
95°	0.00	1000.00	0.00 %	100.00 %
100°	0.00	1000.00	0.00 %	100.00 %
105°	0.00	1000.00	0.00 %	100.00 %
110°	0.00	1000.00	0.00 %	100.00 %
115°	0.00	1000.00	0.00 %	100.00 %
120°	0.00	1000.00	0.00 %	100.00 %
125°	0.00	1000.00	0.00 %	100.00 %
130°	0.00	1000.00	0.00 %	100.00 %
135°	0.00	1000.00	0.00 %	100.00 %
140°	0.00	1000.00	0.00 %	100.00 %
145°	0.00	1000.00	0.00 %	100.00 %
150°	0.00	1000.00	0.00 %	100.00 %
155°	0.00	1000.00	0.00 %	100.00 %
160°	0.00	1000.00	0.00 %	100.00 %
165°	0.00	1000.00	0.00 %	100.00 %
170°	0.00	1000.00	0.00 %	100.00 %
175°	0.00	1000.00	0.00 %	100.00 %
180°	0.00	1000.00	0.00 %	100.00 %



**Luminaria**

 Código 90-7161-14-60  
 Nombre BENTO

**Ensayo**

 Código 90-7161-14-60  
 Nombre BENTO

Flujo Luminaria	467.29 lm	Potencia luminaria	9.00 W	Eficacia	51.92 lm/W	Eficiencia	100.00%
Flujo de Lámpara	467.29 lm	Valor Máximo	1997.57 cd/klm	Posición	C=45.00 G=1.00	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	161	144	90	81	137	78	94	80	50	43	31	24	18	12	40	25	22	14	12	21	12	11	0				
0.80	194	178	98	91	169	87	123	108	60	52	40	32	25	19	49	33	30	21	18	29	18	16	0				
1.00	217	202	100	93	192	89	147	131	65	58	47	38	32	25	55	40	36	28	24	35	24	22	0				
1.25	240	226	101	96	215	92	173	157	70	64	53	45	40	32	60	46	43	35	31	41	31	28	0				
1.50	258	245	102	97	234	94	193	178	74	69	59	51	46	38	65	52	49	41	37	47	37	34	0				
2.00	281	271	99	96	258	93	224	210	78	74	67	60	57	49	70	60	57	51	47	55	47	43	0				
2.50	297	288	97	94	275	92	246	233	81	77	72	66	64	57	73	66	63	59	55	61	55	51	0				
3.00	309	300	95	93	287	90	263	251	83	79	76	70	70	63	76	70	68	65	61	65	61	57	0				
4.00	326	319	95	94	305	91	286	276	86	84	82	77	78	72	80	77	75	73	69	72	69	65	0				
5.00	337	331	96	94	317	92	302	293	89	87	86	82	83	78	84	81	79	79	75	77	75	71	0				
10.00	361	358	97	96	343	95	337	332	95	94	95	93	95	92	91	91	90	91	89	88	88	85	0				
20.00	375	373	98	98	358	97	357	354	98	98	100	99	102	100	95	97	96	99	97	94	96	93	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	278	269	189	184	265	182	208	202	147	144	123	120	106	104	142	121	119	105	104	119	104	103	81
0.80	310	301	201	196	294	193	239	231	161	158	138	135	121	118	155	135	133	119	118	132	118	116	90
1.00	324	314	197	193	305	190	255	245	162	158	142	137	126	122	155	137	135	123	121	134	121	119	89
1.25	340	330	196	193	319	189	272	262	165	161	146	142	132	127	157	141	139	128	126	137	125	123	90
1.50	351	341	194	191	328	186	285	274	166	162	149	144	135	131	157	143	141	131	128	138	127	124	89
2.00	350	342	173	171	325	166	290	279	151	148	139	134	128	123	142	131	130	122	120	126	118	114	75
2.50	342	335	152	150	316	145	287	277	134	131	124	120	116	111	125	117	115	110	107	110	104	99	58
3.00	330	323	130	128	303	123	278	269	115	112	108	104	101	96	105	99	98	94	91	92	88	82	39
4.00	321	315	108	107	293	102	274	265	96	94	91	88	87	82	86	82	81	79	76	74	71	65	19
5.00	310	305	89	88	281	82	266	258	79	77	75	72	72	68	68	66	64	63	61	57	55	48	1
10.00	239	237	0	0	209	0	203	198	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20.00	108	106	0	0	77	0	75	72	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	909	899	848	843	894	840	825	819	795	791	764	761	742	740	789	761	760	741	740	759	740	739	731
0.80	971	960	895	889	951	885	883	874	842	838	812	808	789	786	835	807	806	787	785	804	785	783	775
1.00	1000	1000	935	930	1000	925	939	928	888	883	860	855	838	834	878	854	852	835	832	849	832	829	822
1.25	1000	1000	966	961	1000	955	985	973	922	918	897	891	877	871	911	889	887	871	868	883	867	864	856
1.50	1000	1000	987	983	1000	976	1000	1000	947	942	918	905	899	895	935	915	912	898	895	908	893	889	881
2.00	1000	1000	1000	1000	1000	1000	1000	1000	988	984	970	964	955	948	974	959	956	946	942	950	939	932	925
2.50	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
3.00	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
4.00	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
5.00	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
10.00	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
20.00	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000

LM53 SHR C0-C180: 0.650    SHR C90-C270: 0.640    SHR Superficial: 0.684

# LEDS C4<sup>+</sup>

## Luminaria

Código 90-7161-14-60  
Nombre BENTO

## Ensayo

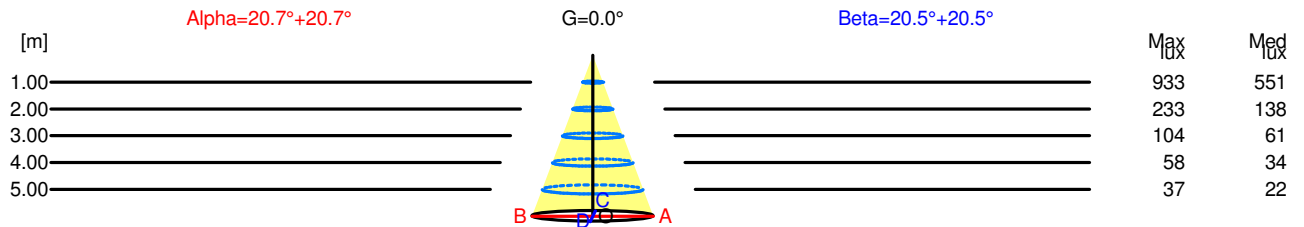
Código 90-7161-14-60  
Nombre BENTO

Flujo Luminaria	467.29 lm	Potencia luminaria	9.00 W	Eficacia	51.92 lm/W	Eficiencia	100.00%
Flujo de Lámpara	467.29 lm	Valor Máximo	1997.57 cd/klm	Posición	C=45.00 G=1.00	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	0.38	0.75	1.13	1.51	1.88	OC	0.37	0.75	1.12	1.50	1.87
OB	0.38	0.75	1.13	1.51	1.88	OD	0.37	0.75	1.12	1.50	1.87

	Intensidades Luminosas [ cd/klm ]									
	0	5	15	25	35	45	55	65	75	85
OA	933.44	924.96	655.84	346.05	60.48	7.73	0.72	0.19	0.09	0.04
OB	933.44	924.96	655.84	346.05	60.48	7.73	0.72	0.19	0.09	0.04
OC	933.44	920.66	653.89	339.39	57.10	8.12	0.71	0.15	0.04	0.02
OD	933.44	920.66	653.89	339.39	57.10	8.12	0.71	0.15	0.04	0.02



H[m]	D[m]	Max lux	Med lux	Alpha=20.7°+20.7°	G=0.0	
1.00	0.75	933	551			
2.00	1.51	233	138			
3.00	2.26	104	61			
4.00	3.02	58	34			
5.00	3.77	37	22			

H[m]	D[m]	Max lux	Med lux	Beta=20.5°+20.5°	G=0.0	
1.00	0.75	933	551			
2.00	1.50	233	138			
3.00	2.24	104	61			
4.00	2.99	58	34			
5.00	3.74	37	22			

**Luminaria**

Código 90-7161-14-60  
Nombre BENTO

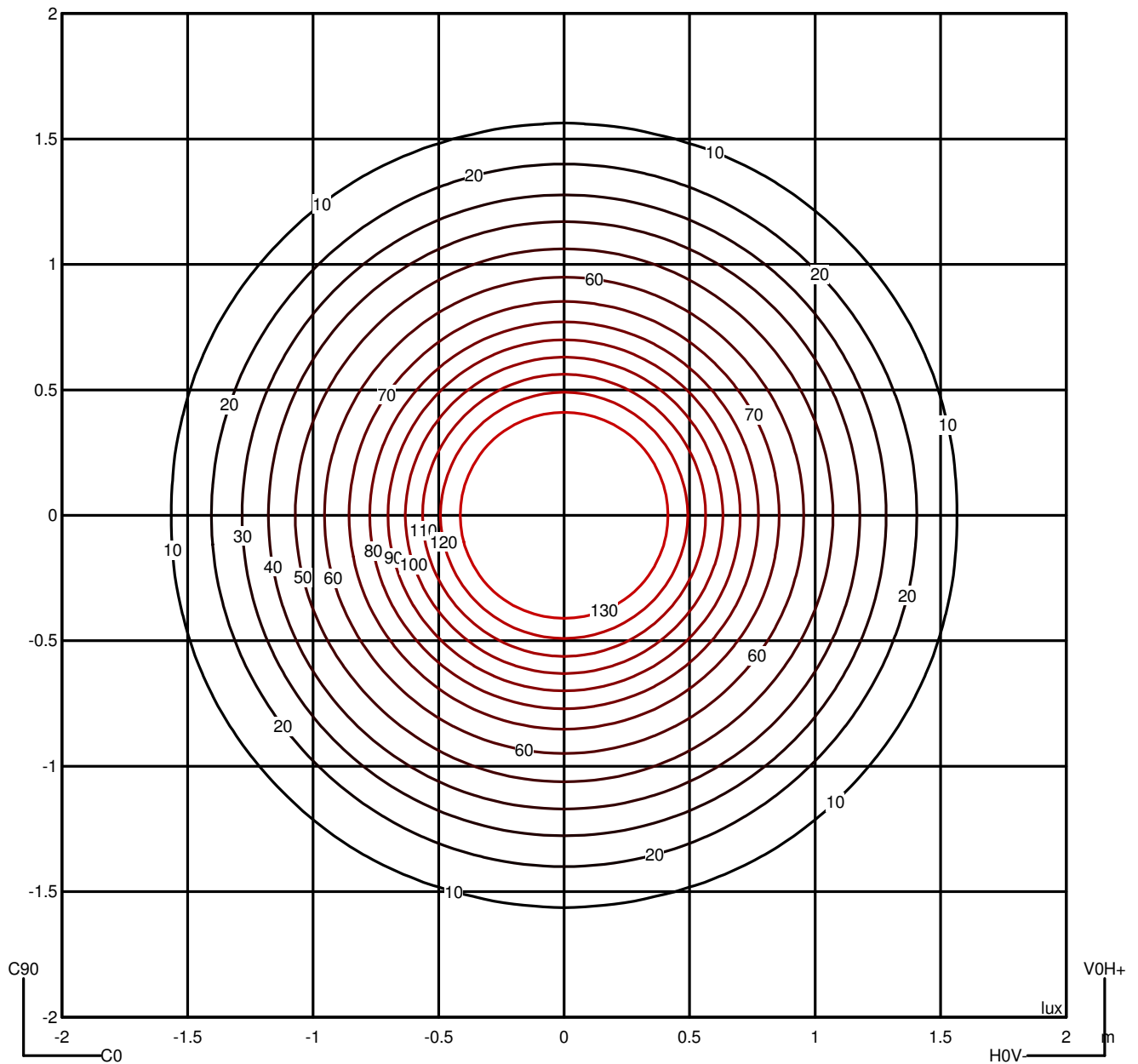
**Ensayo**

Código 90-7161-14-60  
Nombre BENTO

Flujo Luminaria	467.29 lm	Potencia luminaria	9.00 W	Eficacia	51.92 lm/W	Eficiencia	100.00%
Flujo de Lámpara	467.29 lm	Valor Máximo	1997.57 cd/klm	Posición	C=45.00 G=1.00	CG	Bisimétrico

Isolux (Suelo)

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



# LEDS C4<sup>®</sup>

## Luminaria

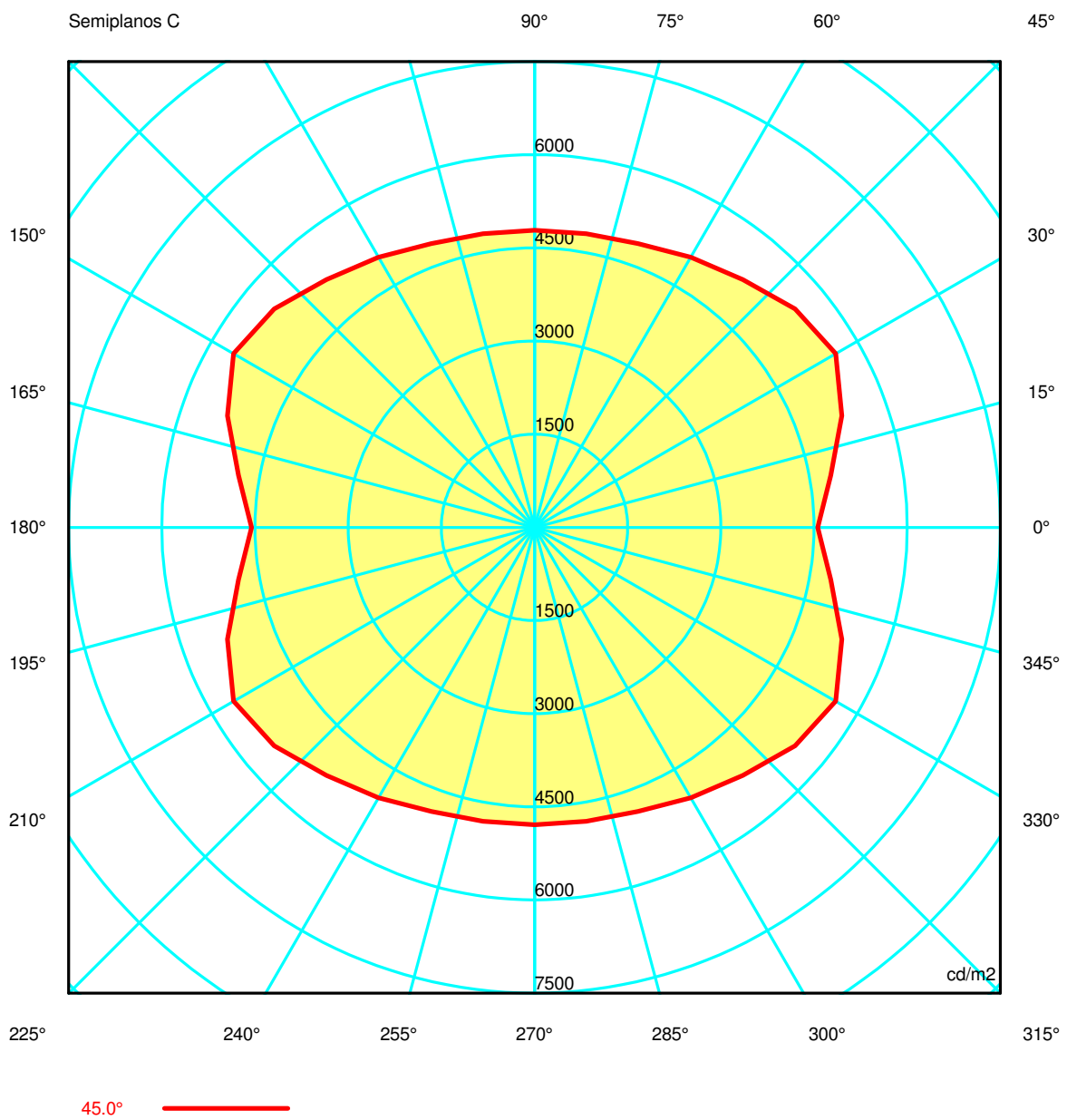
Código 90-7161-14-60  
Nombre BENTO

## Ensayo

Código 90-7161-14-60  
Nombre BENTO

Flujo Luminaria	467.29 lm	Potencia luminaria	9.00 W	Eficacia	51.92 lm/W	Eficiencia	100.00%
Flujo de Lámpara	467.29 lm	Valor Máximo	1997.57 cd/klm	Posición	C=45.00 G=1.00	CG	Bisimétrico

Luminancia



**Luminaria**

Código 90-7161-14-60

Nombre BENTO

**Ensayo**

Código 90-7161-14-60

Nombre BENTO

Flujo Luminaria	467.29 lm	Potencia luminaria	9.00 W	Eficacia	51.92 lm/W	Eficiencia	100.00%
Flujo de Lámpara	467.29 lm	Valor Máximo	1997.57 cd/klm	Posición	C=45.00 G=1.00	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	388932.17	388932.17	388932.17	388932.17	388932.17	388932.17	388932.17	388932.17	388932.17	388932.17	388932.17	388932.17	388932.17
G 5.0	386871.94	386600.48	386394.79	386291.82	386237.10	385944.56	385528.96	385396.24	385295.05	385073.68	385295.05	385396.24	385528.96
G 10.0	351052.71	350893.34	350812.13	350773.89	350778.34	350684.70	350419.17	350247.93	350119.04	349975.98	350119.04	350247.93	350419.17
G 15.0	282905.56	282731.97	282490.30	282184.52	281909.36	281828.56	281912.80	281972.65	282015.15	282065.67	282015.15	281972.65	281912.80
G 20.0	214940.41	214856.37	214631.66	214188.46	213610.09	213348.35	213325.38	213063.26	212948.43	213136.56	212948.43	213063.26	213325.38
G 25.0	159092.04	159075.39	159007.56	158795.53	158454.67	157905.05	157246.80	156721.54	156337.70	156030.83	156337.70	156721.54	157246.80
G 30.0	79877.87	79612.43	79293.69	78872.73	78370.63	78059.81	78017.88	78063.01	78012.66	77838.15	78012.66	78063.01	78017.88
G 35.0	30764.01	30878.40	30883.86	30738.90	30480.15	30185.23	29833.73	29380.09	29095.78	29042.71	29095.78	29380.09	29833.73
G 40.0	14409.53	14790.47	14811.36	14502.19	14197.69	13911.35	13641.29	13437.88	13284.38	13152.69	13284.38	13437.88	13641.29
G 45.0	4555.56	4843.58	5260.90	5595.35	5473.14	5212.61	5025.59	4866.10	4803.65	4786.38	4803.65	4866.10	5025.59
G 50.0	1220.24	1357.19	1595.84	1838.98	1880.30	1856.50	1812.69	1665.50	1530.10	1458.59	1530.10	1665.50	1812.69
G 55.0	520.40	563.74	631.78	724.79	808.14	808.07	721.79	620.92	551.13	514.95	551.13	620.92	721.79
G 60.0	283.78	295.91	327.51	382.84	439.14	429.36	357.18	294.65	260.25	246.03	260.25	294.65	357.18
G 65.0	186.67	192.90	211.27	236.86	250.09	240.85	211.79	176.92	154.23	146.04	154.23	176.92	211.79
G 70.0	161.63	155.96	161.70	173.44	173.97	165.22	150.90	132.62	116.21	103.41	116.21	132.62	150.90
G 75.0	144.17	150.79	153.86	151.85	144.68	130.39	110.82	91.84	77.93	68.80	77.93	91.84	110.82
G 80.0	182.27	181.75	179.85	170.90	151.91	130.60	112.34	97.45	86.63	78.80	86.63	97.45	112.34
G 85.0	209.03	226.09	208.54	161.56	123.60	111.15	107.77	104.85	100.44	96.95	100.44	104.85	107.77
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 90-7161-14-60

Nombre BENTO

**Ensayo**

Código 90-7161-14-60

Nombre BENTO

Flujo Luminaria	467.29 lm	Potencia luminaria	9.00 W	Eficacia	51.92 lm/W	Eficiencia	100.00%
Flujo de Lámpara	467.29 lm	Valor Máximo	1997.57 cd/klm	Posición	C=45.00 G=1.00	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	388932.17	388932.17	388932.17	388932.17	388932.17	388932.17	388932.17	388932.17	388932.17	388932.17	388932.17	388932.17	388932.17
G 5.0	385944.56	386237.10	386291.82	386394.79	386600.48	386871.94	386600.48	386394.79	386291.82	386237.10	385944.56	385528.96	385396.24
G 10.0	350684.70	350778.34	350773.89	350812.13	350893.34	351052.71	350893.34	350812.13	350773.89	350778.34	350684.70	350419.17	350247.93
G 15.0	281828.56	281909.36	282184.52	282490.30	282731.97	282905.56	282731.97	282490.30	282184.52	281909.36	281828.56	281912.80	281972.65
G 20.0	213348.35	213610.09	214188.46	214631.66	214856.37	214940.41	214856.37	214631.66	214188.46	213610.09	213348.35	213325.38	213063.26
G 25.0	157905.05	158454.67	158795.53	159007.56	159075.39	159092.04	159075.39	159007.56	158795.53	158454.67	157905.05	157246.80	156721.54
G 30.0	78059.81	78370.63	78872.73	79293.69	79612.43	79877.87	79612.43	79293.69	78872.73	78370.63	78059.81	78017.88	78063.01
G 35.0	30185.23	30480.15	30738.90	30883.86	30878.40	30764.01	30878.40	30883.86	30738.90	30480.15	30185.23	29833.73	29380.09
G 40.0	13911.35	14197.69	14502.19	14811.36	14790.47	14409.53	14790.47	14811.36	14502.19	14197.69	13911.35	13641.29	13437.88
G 45.0	5212.61	5473.14	5595.35	5260.90	4843.58	4555.56	4843.58	5260.90	5595.35	5473.14	5212.61	5025.59	4866.10
G 50.0	1856.50	1880.30	1838.98	1595.84	1357.19	1220.24	1357.19	1595.84	1838.98	1880.30	1856.50	1812.69	1665.50
G 55.0	808.07	808.14	724.79	631.78	563.74	520.40	563.74	631.78	724.79	808.14	808.07	721.79	620.92
G 60.0	429.36	439.14	382.84	327.51	295.91	283.78	295.91	327.51	382.84	439.14	429.36	357.18	294.65
G 65.0	240.85	250.09	236.86	211.27	192.90	186.67	192.90	211.27	236.86	250.09	240.85	211.79	176.92
G 70.0	165.22	173.97	173.44	161.70	155.96	161.63	155.96	161.70	173.44	173.97	165.22	150.90	132.62
G 75.0	130.39	144.68	151.85	153.86	150.79	144.17	150.79	153.86	151.85	144.68	130.39	110.82	91.84
G 80.0	130.60	151.91	170.90	179.85	181.75	182.27	181.75	179.85	170.90	151.91	130.60	112.34	97.45
G 85.0	111.15	123.60	161.56	208.54	226.09	209.03	226.09	208.54	161.56	123.60	111.15	107.77	104.85
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 90-7161-14-60

Nombre BENTO

**Ensayo**

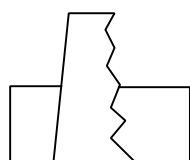
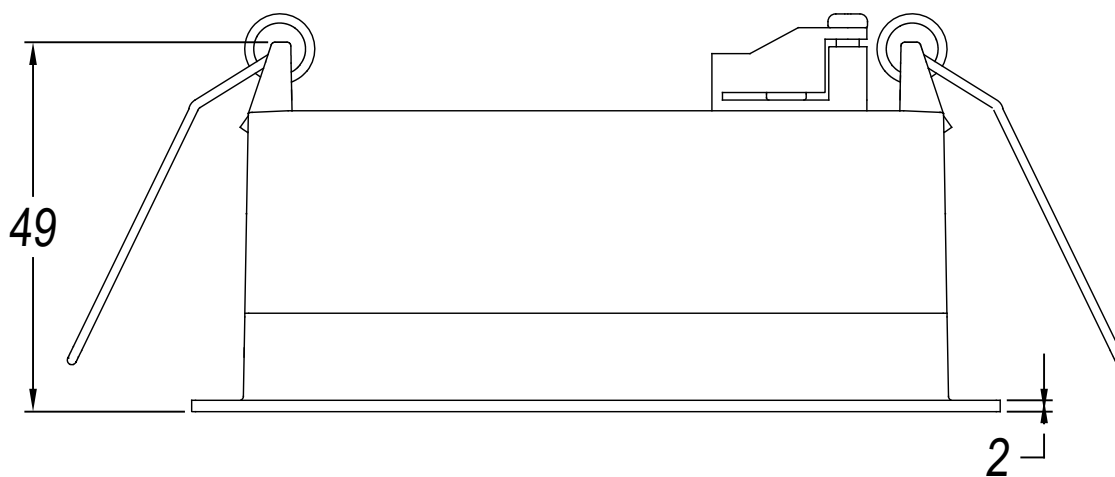
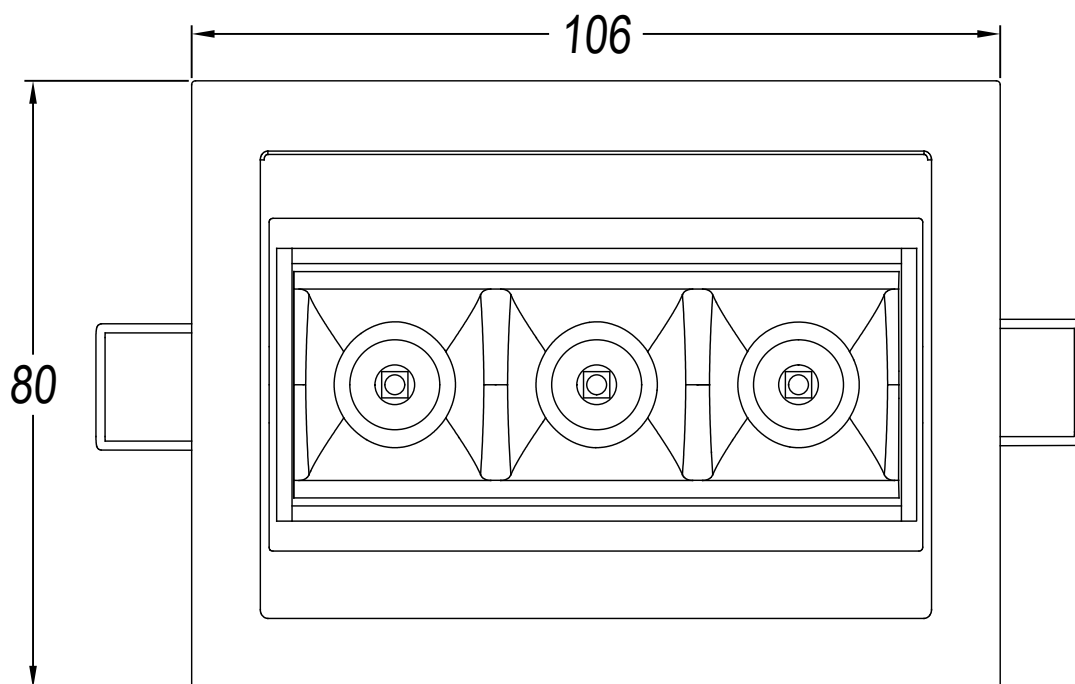
Código 90-7161-14-60

Nombre BENTO

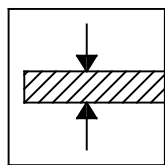
Flujo Luminaria	467.29 lm	Potencia luminaria	9.00 W	Eficacia	51.92 lm/W	Eficiencia	100.00%
Flujo de Lámpara	467.29 lm	Valor Máximo	1997.57 cd/klm	Posición	C=45.00 G=1.00	CG	Bisimétrico

**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	388932.17	388932.17	388932.17	388932.17	388932.17	388932.17	388932.17	388932.17	388932.17	388932.17
G 5.0	385295.05	385073.68	385295.05	385396.24	385528.96	385944.56	386237.10	386291.82	386394.79	386600.48
G 10.0	350119.04	349975.98	350119.04	350247.93	350419.17	350684.70	350778.34	350773.89	350812.13	350893.34
G 15.0	282015.15	282065.67	282015.15	281972.65	281912.80	281828.56	281909.36	282184.52	282490.30	282731.97
G 20.0	212948.43	213136.56	212948.43	213063.26	213325.38	213348.35	213610.09	214188.46	214631.66	214856.37
G 25.0	156337.70	156030.83	156337.70	156721.54	157246.80	157905.05	158454.67	158795.53	159007.56	159075.39
G 30.0	78012.66	77838.15	78012.66	78063.01	78017.88	78059.81	78370.63	78872.73	79293.69	79612.43
G 35.0	29095.78	29042.71	29095.78	29380.09	29833.73	30185.23	30480.15	30738.90	30883.86	30878.40
G 40.0	13284.38	13152.69	13284.38	13437.88	13641.29	13911.35	14197.69	14502.19	14811.36	14790.47
G 45.0	4803.65	4786.38	4803.65	4866.10	5025.59	5212.61	5473.14	5595.35	5260.90	4843.58
G 50.0	1530.10	1458.59	1530.10	1665.50	1812.69	1856.50	1880.30	1838.98	1595.84	1357.19
G 55.0	551.13	514.95	551.13	620.92	721.79	808.07	808.14	724.79	631.78	563.74
G 60.0	260.25	246.03	260.25	294.65	357.18	429.36	439.14	382.84	327.51	295.91
G 65.0	154.23	146.04	154.23	176.92	211.79	240.85	250.09	236.86	211.27	192.90
G 70.0	116.21	103.41	116.21	132.62	150.90	165.22	173.97	173.44	161.70	155.96
G 75.0	77.93	68.80	77.93	91.84	110.82	130.39	144.68	151.85	153.86	150.79
G 80.0	86.63	78.80	86.63	97.45	112.34	130.60	151.91	170.90	179.85	181.75
G 85.0	100.44	96.95	100.44	104.85	107.77	111.15	123.60	161.56	208.54	226.09
G 90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



70x96

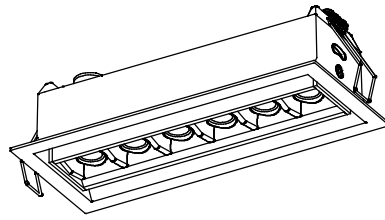
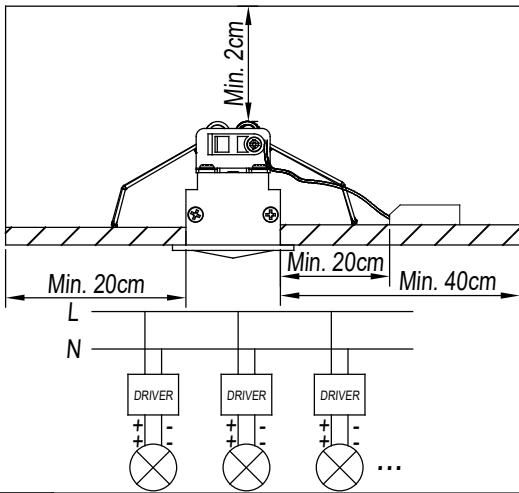


0-20mm

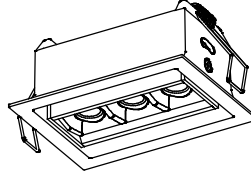
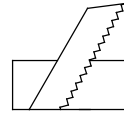


# LEDS C4<sup>+</sup>

## BENTO ADJUSTABLE

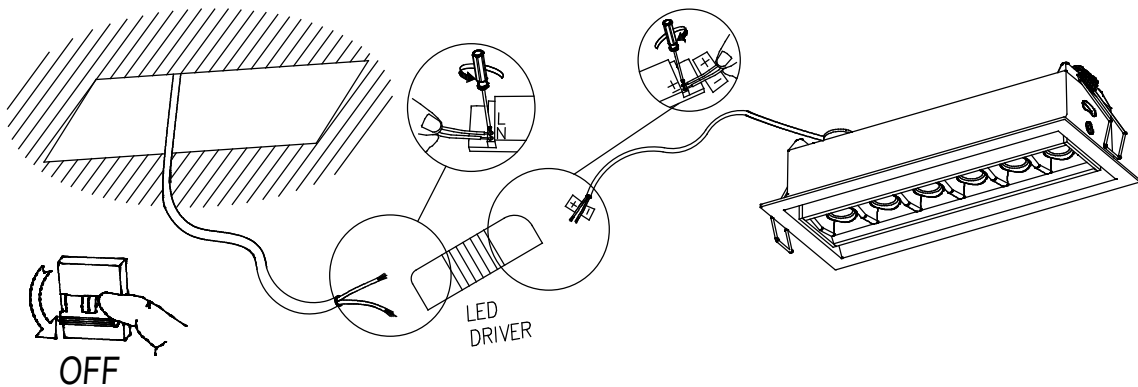


6LEDS: 70x175mm

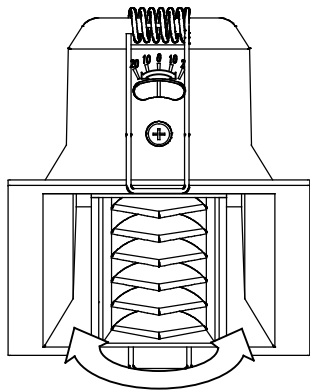


3LEDS: 70x96mm

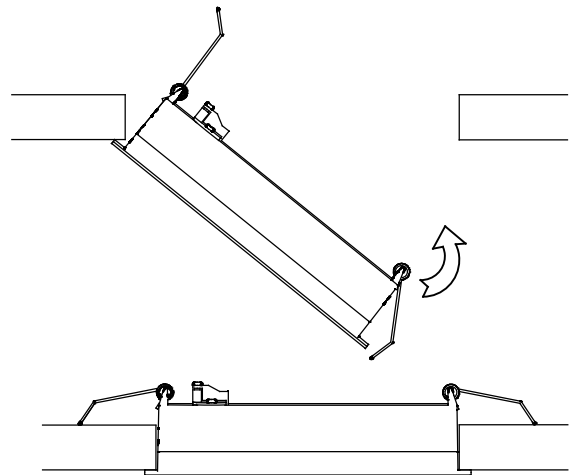
1



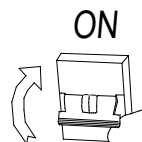
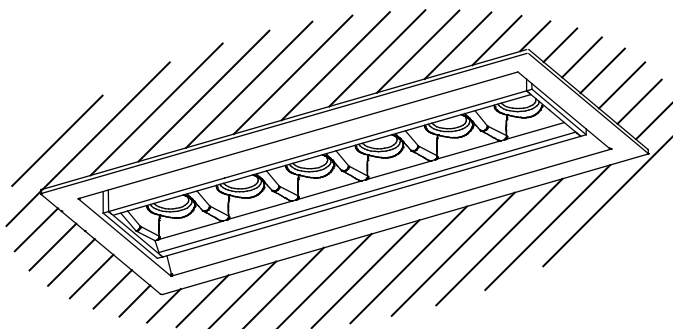
2



3



4



The light source of this luminaire is not replaceable; when the light source reaches its end of life the whole luminaire shall be replaced.