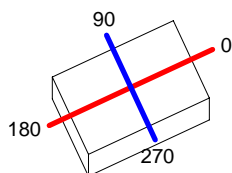


Luminaria		Ensayo			Lámpara	
Código	LAB 2	Código	LAB 2		Código	LAB 2
Nombre	Aplique LAB 2 led 2x3W 700mA	Nombre	Aplique LAB 2 led 2x3W 700mA		Número	1
Familia	- MARSET	Fecha	17-09-2013		Posición	Universal
Rendimiento	100.00%	Sist. de Coordin.	CG		Flujo Total	169.84 lm
Valor Máximo	4692.73 cd/klm	Posición	C=90.00 G=5.00		Asimétrico	
Luminaria Rectangular	Longit.	80 mm	Anchura	125 mm	Altura	125 mm
Área Luminosa Redonda	Diam.	25 mm	Altura	0 mm		
Área Luminosa Horizontal	0.000491 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°		0.000119 m2	
Tipo de Simetría	Asimétrico		Máximo Ángulo Gamma		180	
Distancia de Ensayo	6.44		Flujo de Ensayo		169.84 lm	
Operador	Asselum T2		Tensión de alimentación		230.00 V	
Temperatura	23.00 °C		Corriente de alimentación			
Humedad	53.00 %		Fotocélula		PRC	
Notas						

Familia		Código		Lámparas de la Luminaria		Flujo [lm]	Pot. [W]	Cant.
- MARSET		LAB 2		Nombre Lámpara led blanco 6W		169.84	6.00	1
C.I.E.	91 97 99 50 100			D DIN 5040	C61			
F UTE	0.50 A + 0.50 T			B NBN	BZ 1			

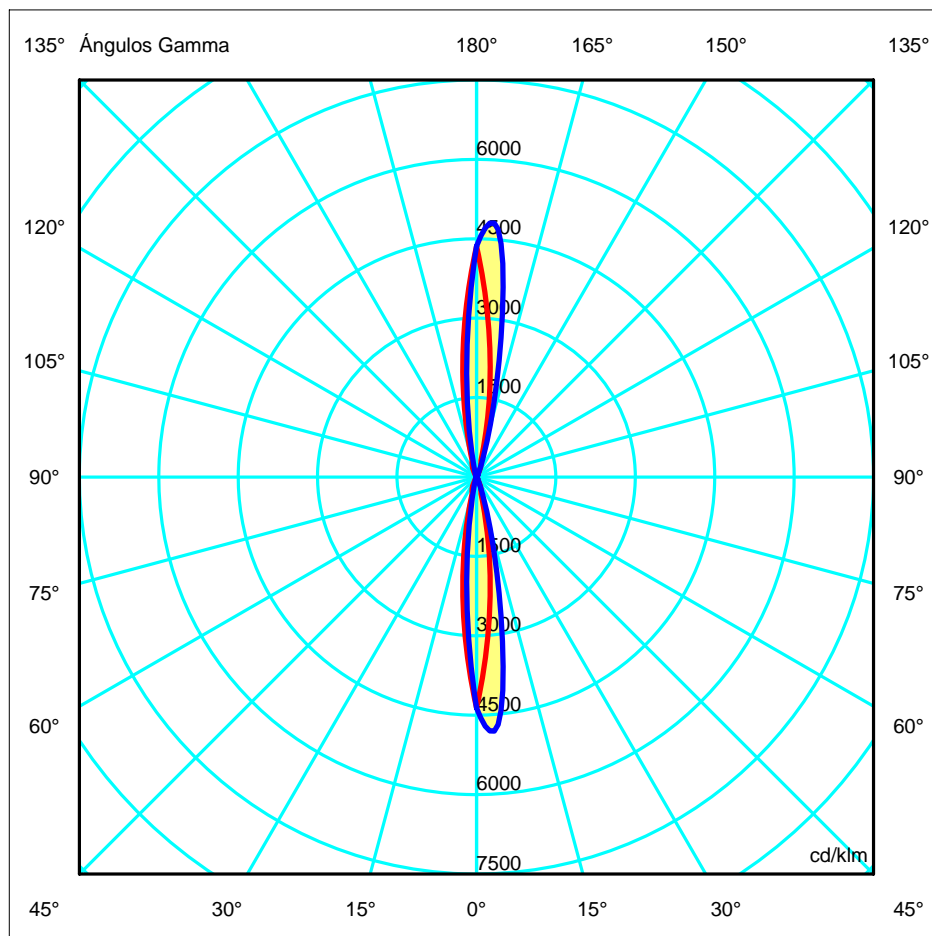
80mm x 125mm



Semiplanos C

180.0 — 0.0
 270.0 — 90.0

ULOR 50.00 %
 DLOR 50.00 %
 RN 50.00 %



Luminaria		Ensayo								Lámpara			
Código	LAB 2	Código LAB 2								Código	LAB 2		
Nombre	Aplique LAB 2 led 2x3W 700mA	NombreAplique LAB 2 led 2x3W 700mA								Número	1		
Familia	- MARSET	Fecha 17-09-2013								Posición	Universal		
Rendimiento		100.00%		Sist. de Coordin.				CG		Flujo Total		169.84 lm	
Tabla de Intensidad Luminosa cd/klm										Tabla 1/1			
	C 0.00	C 15.00	C 30.00	C 45.00	C 60.00	C 75.00	C 90.00	C 105.00	C 120.00	C 135.00	C 150.00	C 165.00	
G 0.0	4359.88	4359.88	4359.88	4359.88	4359.88	4359.88	4359.88	4359.88	4359.88	4359.88	4359.88	4359.88	
G 5.0	2723.93	2830.13	3043.21	3357.24	3756.67	4214.38	4692.73	4214.38	3756.67	3357.24	3043.21	2830.13	
G 10.0	1306.64	1438.69	1760.89	1858.00	2017.86	2262.19	2670.18	2262.19	2017.86	1858.00	1760.89	1438.69	
G 15.0	326.68	409.59	562.65	694.29	785.55	829.78	968.08	829.78	785.55	694.29	562.65	409.59	
G 20.0	230.44	249.39	86.04	193.07	249.26	264.31	287.49	264.31	249.26	193.07	86.04	249.39	
G 25.0	134.21	144.54	127.04	69.47	94.07	98.23	100.93	98.23	94.07	69.47	127.04	144.54	
G 30.0	37.97	52.34	63.04	46.88	51.55	53.99	56.72	53.99	51.55	46.88	63.04	52.34	
G 35.0	32.11	33.02	32.64	34.21	37.58	37.27	38.18	37.27	37.58	34.21	32.64	33.02	
G 40.0	26.24	27.77	27.95	27.77	29.94	29.55	30.34	29.55	29.94	27.77	27.95	27.77	
G 45.0	20.38	25.76	24.34	24.16	25.34	25.08	25.29	25.08	25.34	24.16	24.34	25.76	
G 50.0	17.05	12.66	20.65	20.63	21.52	21.68	22.51	21.68	21.52	20.63	20.65	12.66	
G 55.0	13.73	14.34	16.51	16.84	17.75	18.06	18.93	18.06	17.75	16.84	16.51	14.34	
G 60.0	10.40	11.25	12.56	13.13	13.47	13.74	14.15	13.74	13.47	13.13	12.56	11.25	
G 65.0	8.79	9.29	9.48	10.20	10.28	9.83	10.41	9.83	10.28	10.20	9.48	9.29	
G 70.0	9.59	7.77	7.55	8.02	8.13	7.39	7.77	7.39	8.13	8.02	7.55	7.77	
G 75.0	5.56	6.02	6.28	6.40	6.38	5.88	5.67	5.88	6.38	6.40	6.28	6.02	
G 80.0	3.28	4.77	5.18	5.06	4.95	4.64	3.86	4.64	4.95	5.06	5.18	4.77	
G 85.0	3.81	3.80	4.06	3.89	3.83	4.05	2.47	4.05	3.83	3.89	4.06	3.80	
G 90.0	2.93	2.93	2.92	2.81	2.93	3.49	0.59	3.49	2.93	2.81	2.92	2.93	
G 95.0	3.81	3.80	4.06	3.89	3.83	4.05	2.47	4.05	3.83	3.89	4.06	3.80	
G100.0	3.28	4.77	5.18	5.06	4.95	4.64	3.86	4.64	4.95	5.06	5.18	4.77	
G105.0	5.56	6.02	6.28	6.40	6.38	5.88	5.67	5.88	6.38	6.40	6.28	6.02	
G110.0	9.59	7.77	7.55	8.02	8.13	7.39	7.77	7.39	8.13	8.02	7.55	7.77	
G115.0	8.79	9.29	9.48	10.20	10.28	9.83	10.41	9.83	10.28	10.20	9.48	9.29	
G120.0	10.40	11.25	12.56	13.13	13.47	13.74	14.15	13.74	13.47	13.13	12.56	11.25	
G125.0	13.73	14.34	16.51	16.84	17.75	18.06	18.93	18.06	17.75	16.84	16.51	14.34	
G130.0	17.05	12.66	20.65	20.63	21.52	21.68	22.51	21.68	21.52	20.63	20.65	12.66	
G135.0	20.38	25.76	24.34	24.16	25.34	25.08	25.29	25.08	25.34	24.16	24.34	25.76	
G140.0	26.24	27.77	27.95	27.77	29.94	29.55	30.34	29.55	29.94	27.77	27.95	27.77	
G145.0	32.11	33.02	32.64	34.21	37.58	37.27	38.18	37.27	37.58	34.21	32.64	33.02	
G150.0	37.97	52.34	63.04	46.88	51.55	53.99	56.72	53.99	51.55	46.88	63.04	52.34	
G155.0	134.21	144.54	127.04	69.47	94.07	98.23	100.93	98.23	94.07	69.47	127.04	144.54	
G160.0	230.44	249.39	86.04	193.07	249.26	264.31	287.49	264.31	249.26	193.07	86.04	249.39	
G165.0	326.68	409.59	562.65	694.29	785.55	829.78	968.08	829.78	785.55	694.29	562.65	409.59	
G170.0	1306.64	1438.69	1760.89	1858.00	2017.86	2262.19	2670.18	2262.19	2017.86	1858.00	1760.89	1438.69	
G175.0	2723.93	2830.13	3043.21	3357.24	3756.67	4214.38	4692.73	4214.38	3756.67	3357.24	3043.21	2830.13	
G180.0	4359.88	4359.88	4359.88	4359.88	4359.88	4359.88	4359.88	4359.88	4359.88	4359.88	4359.88	4359.88	
	C 180.00	C 195.00	C 210.00	C 225.00	C 240.00	C 255.00	C 270.00	C 285.00	C 300.00	C 315.00	C 330.00	C 345.00	
G 0.0	4359.88	4359.88	4359.88	4359.88	4359.88	4359.88	4359.88	4359.88	4359.88	4359.88	4359.88	4359.88	
G 5.0	2723.93	2411.75	2186.28	2033.96	1954.74	1965.38	2096.39	1965.38	1954.74	2033.96	2186.28	2411.75	
G 10.0	1306.64	1044.68	842.21	762.15	676.39	606.79	629.98	606.79	676.39	762.15	842.21	1044.68	
G 15.0	326.68	285.88	274.27	223.86	208.08	176.18	168.81	176.18	208.08	223.86	274.27	285.88	
G 20.0	230.44	163.90	91.13	91.04	81.99	76.64	76.54	76.64	81.99	91.04	91.13	163.90	
G 25.0	134.21	89.14	48.16	52.62	49.07	46.45	47.39	46.45	49.07	52.62	48.16	89.14	
G 30.0	37.97	40.00	34.55	35.76	33.61	31.50	30.51	31.50	33.61	35.76	34.55	40.00	
G 35.0	32.11	30.26	25.45	26.16	25.29	24.53	24.03	24.53	25.29	26.16	25.45	30.26	
G 40.0	26.24	24.80	20.30	20.64	20.93	20.15	19.73	20.15	20.93	20.64	20.30	24.80	
G 45.0	20.38	19.25	17.25	16.70	16.74	16.26	15.62	16.26	16.74	16.70	17.25	19.25	
G 50.0	17.05	15.23	14.48	13.18	12.70	12.14	11.13	12.14	12.70	13.18	14.48	15.23	
G 55.0	13.73	12.20	11.53	10.03	9.41	8.77	7.95	8.77	9.41	10.03	11.53	12.20	
G 60.0	10.40	9.60	8.94	7.76	7.14	6.47	5.85	6.47	7.14	7.76	8.94	9.60	
G 65.0	8.79	7.50	6.95	6.13	5.53	4.68	4.23	4.68	5.53	6.13	6.95	7.50	
G 70.0	9.59	6.02	5.50	4.84	4.13	3.39	2.98	3.39	4.13	4.84	5.50	6.02	
G 75.0	5.56	5.00	4.42	3.81	3.08	2.48	1.60	2.48	3.08	3.81	4.42	5.00	
G 80.0	3.28	4.22	3.64	3.15	2.63	1.74	0.73	1.74	2.63	3.15	3.64	4.22	
G 85.0	3.81	3.55	3.11	2.88	2.63	2.38	0.73	2.38	2.63	2.88	3.11	3.55	
G 90.0	2.93	2.93	2.71	2.81	2.81	2.78	0.73	2.78	2.81	2.81	2.71	2.93	
G 95.0	3.81	3.55	3.11	2.88	2.63	2.38	0.73	2.38	2.63	2.88	3.11	3.55	
G100.0	3.28	4.22	3.64	3.15	2.63	1.74	0.73	1.74	2.63	3.15	3.64	4.22	
G105.0	5.56	5.00	4.42	3.81	3.08	2.48	1.60	2.48	3.08	3.81	4.42	5.00	
G110.0	9.59	6.02	5.50	4.84	4.13	3.39	2.98	3.39	4.13	4.84	5.50	6.02	
G115.0	8.79	7.50	6.95	6.13	5.53	4.68	4.23	4.68	5.53	6.13	6.95	7.50	
G120.0	10.40	9.60	8.94	7.76	7.14	6.47	5.85	6.47	7.14	7.76	8.94	9.60	
G125.0	13.73	12.20	11.53	10.03	9.41	8.77	7.95	8.77	9.41	10.03	11.53	12.20	
G130.0	17.05	15.23	14.48	13.18	12.70	12.14	11.13	12.14	12.70	13.18	14.48	15.23	
G135.0	20.38	19.25	17.25	16.70	16.74	16.26	15.62	16.26	16.74	16.70	17.25	19.25	
G140.0	26.24	24.80	20.30	20.64	20.93	20.15	19.73	20.15	20.93	20.64	20.30	24.80	
G145.0	32.11	30.26	25.45	26.16	25.29	24.53	24.03	24.53	25.29	26.16	25.45	30.26	
G150.0	37.97	40.00	34.55	35.76	33.61	31.50	30.51	31.50	33.61	35.76	34.55	40.00	
G155.0	134.21	89.14	48.16	52.62	49.07	46.45	47.39	46.45	49.07	52.62	48.16	89.14	
G160.0	230.44	163.90	91.13	91.04	81.99	76.64	76.54	76.64	81.99	91.04	91.13	163.90	
G165.0	326.68	285.88	274.27	223.86	208.08	176.18	168.81	176.18	208.08	223.86	274.27	285.88	
G170.0	1306.64	1044.68	842.21	762.15	676.39	606.79	629.98	606.79	676.39	762.15	842.21	1044.68	
G175.0	2723.93	2411.75	2186.28	2033.96	1954.74	1965.38	2096.39	1965.38	1954.74	2033.96	2186.28	2411.75	
G180.0	4359.88	4359.88	4359.88	4359.88	4359.88	4359.88	4359.88	4359.88	4359.88	4359.88	4359.88	4359.88	

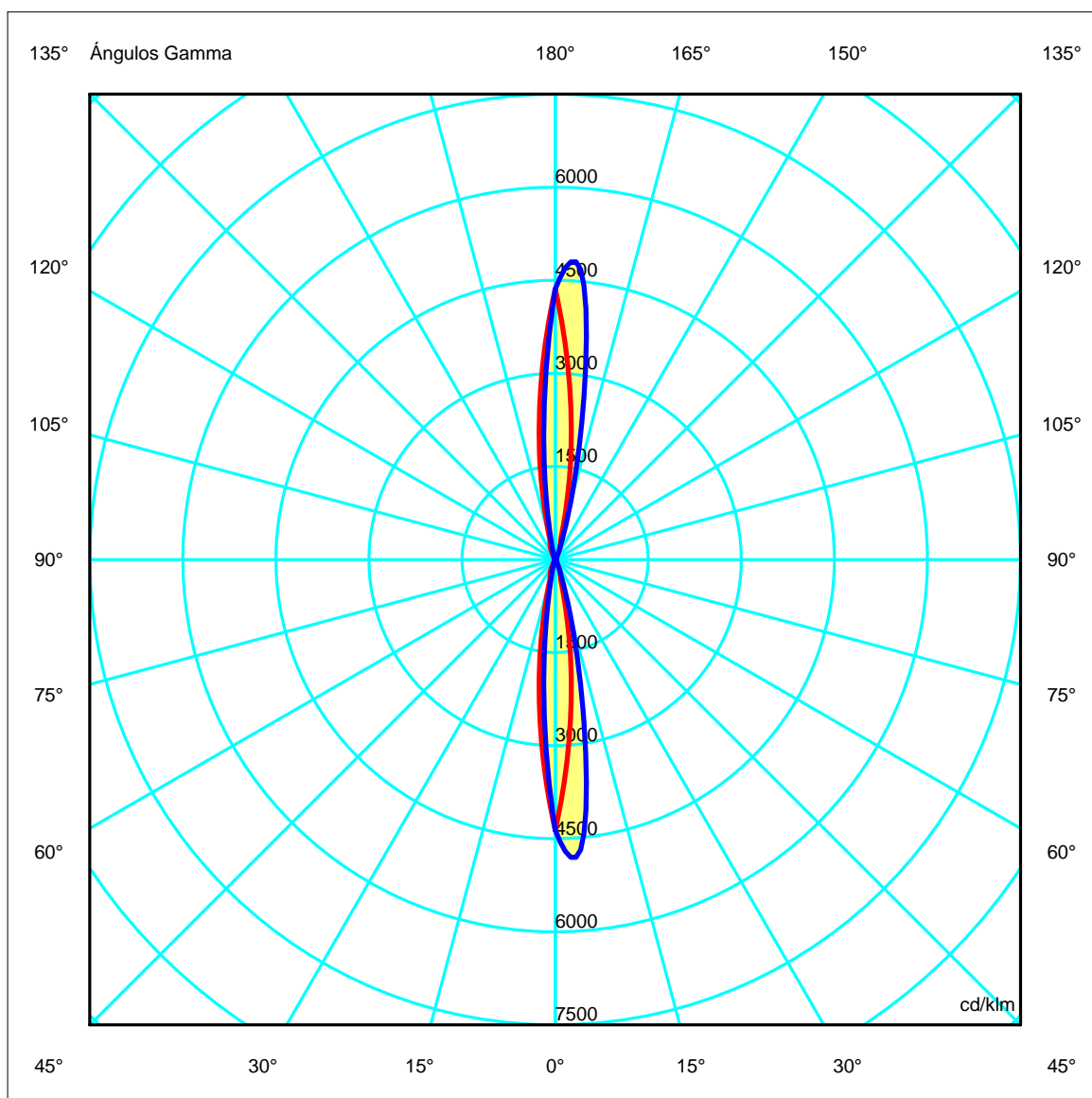
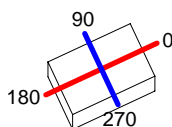
Luminaria		Ensayo		Lámpara	
Código	LAB 2	Código	LAB 2	Código	LAB 2
Nombre	Aplicado LAB 2 led 2x3W 700mA	Nombre	Aplicado LAB 2 led 2x3W 700mA	Número	1
Familia	- MARSET	Fecha	17-09-2013	Posición	Universal
Rendimiento	100.00%	Sist. de Coord.	CG	Flujo Total	169.84 lm

80mm x 125mm

Semiplanos C

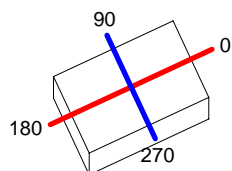
180.0 ————— 0.0

270.0 ————— 90.0



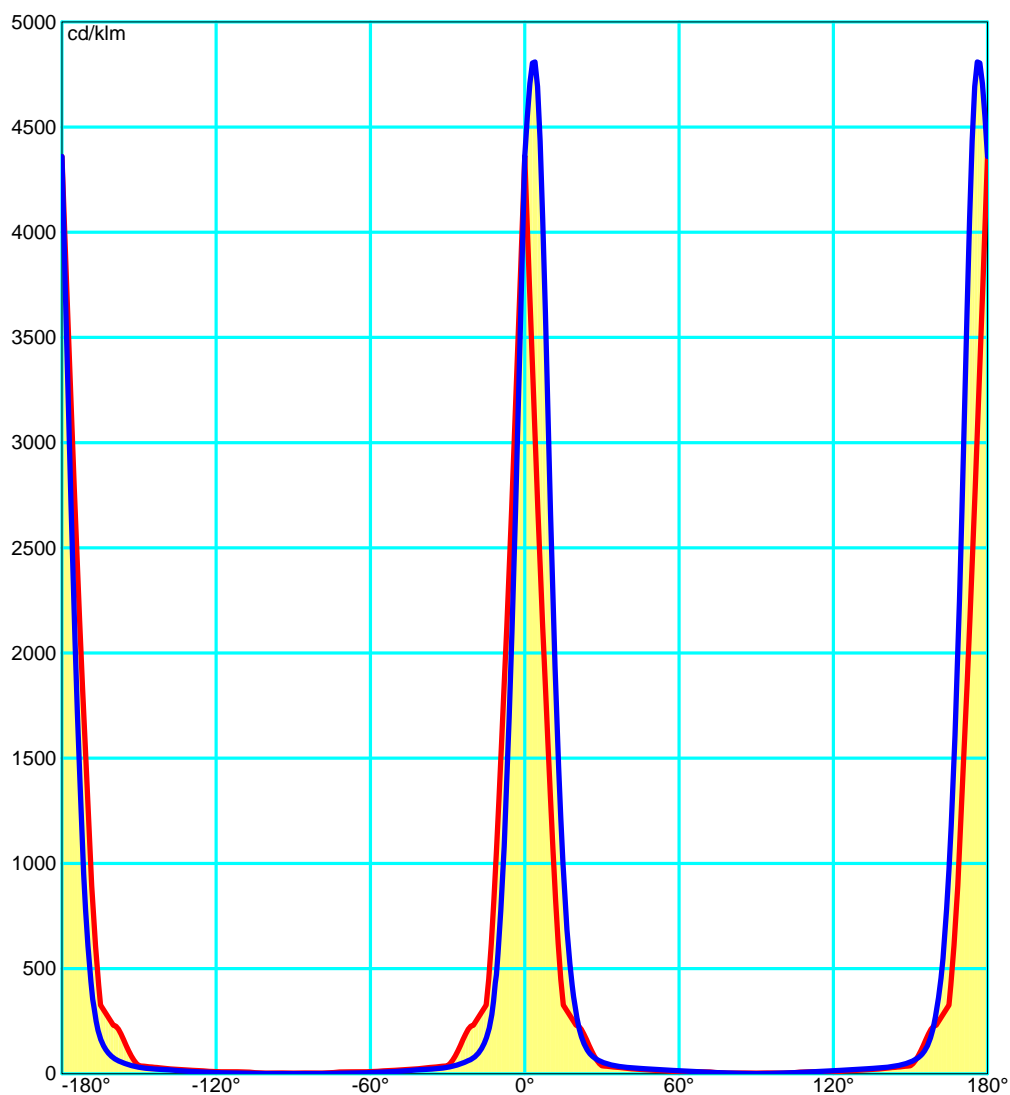
Luminaria		Ensayo		Lámpara	
Código	LAB 2	Código	LAB 2	Código	LAB 2
Nombre	Apliche LAB 2 led 2x3W 700mA	Nombre	Apliche LAB 2 led 2x3W 700mA	Número	1
Familia	- MARSET	Fecha	17-09-2013	Posición	Universal
Rendimiento	100.00%	Sist. de Coorden.	CG	Flujo Total	169.84 lm

80mm x 125mm



Semiplanos C

180.0 — 0.0
 270.0 — 90.0



Luminaria		Ensayo		Lámpara	
Código	LAB 2	Código	LAB 2	Código	LAB 2
Nombre	Aplicado LAB 2 led 2x3W 700mA	Nombre	Aplicado LAB 2 led 2x3W 700mA	Número	1
Familia	- MARSET	Fecha	17-09-2013	Posición	Universal
Rendimiento	100.00%	Sist. de Coorden.	CG	Flujo Total	169.84 lm

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	ViewedCrosswise					ViewedEndwise				
x=2H y=2H	10.1	10.7	10.9	11.5	10.0	7.5	8.1	8.4	9.0	10.0
x=2H y=3H	11.6	12.1	12.5	13.0	10.6	8.1	8.7	9.0	9.5	10.6
x=2H y=4H	12.3	12.9	13.3	13.7	10.8	8.3	8.8	9.2	9.7	10.8
x=2H y=6H	12.8	13.3	13.8	14.2	10.9	8.4	8.8	9.3	9.7	10.9
x=2H y=8H	13.1	13.6	14.1	14.5	10.9	8.4	8.8	9.3	9.7	10.9
x=2H y=12H	13.7	14.1	14.7	15.1	11.0	8.5	8.9	9.4	9.8	11.0
x=4H y=2H	10.5	11.0	11.4	11.9	10.6	8.0	8.5	9.0	9.4	10.6
x=4H y=3H	12.2	12.6	13.2	13.5	11.5	8.9	9.3	9.9	10.3	11.5
x=4H y=4H	13.1	13.4	14.0	14.4	11.8	9.3	9.6	10.3	10.6	11.8
x=4H y=6H	13.8	14.1	14.8	15.1	12.1	9.5	9.8	10.5	10.8	12.1
x=4H y=8H	14.3	14.6	15.3	15.6	12.2	9.7	10.0	10.7	10.9	12.2
x=4H y=12H	15.0	15.3	16.0	16.2	12.4	9.9	10.2	10.9	11.2	12.4
x=8H y=4H	13.3	13.6	14.3	14.6	12.3	9.8	10.1	10.8	11.1	12.3
x=8H y=6H	14.4	14.6	15.4	15.6	12.9	10.4	10.6	11.4	11.6	12.9
x=8H y=8H	15.1	15.3	16.1	16.3	13.4	10.9	11.0	11.9	12.1	13.4
x=8H y=12H	16.0	16.1	17.0	17.2	14.1	11.5	11.7	12.6	12.7	14.1
x=12H y=4H	13.4	13.6	14.4	14.6	12.5	9.9	10.2	11.0	11.2	12.5
x=12H y=6H	14.5	14.7	15.6	15.7	13.3	10.7	10.9	11.8	11.9	13.3
x=12H y=8H	15.3	15.5	16.3	16.5	13.9	11.3	11.5	12.4	12.5	13.9

Luminaria				Ensayo				Lámpara			
Código	LAB 2			Código	LAB 2			Código	LAB 2		
Nombre	Aplique LAB 2 led 2x3W 700mA			Nombre	Aplique LAB 2 led 2x3W 700mA			Número	1		
Familia	- MARSET			Fecha	17-09-2013			Posición	Universal		
Rendimiento	100.00%			Sist. de Coord.	CG			Flujo Total	169.84 lm		

Flujo Total=169.84 Flujo Luminaria=169.84

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	0.67	0.72	0.77	0.81	0.84	0.89	0.92	0.94	0.96	0.98	1.00	1.01
RC	-	-	-	-	-	-	-	-	-	-	-	-

Flujo Zonal por 1000 Lúmenes

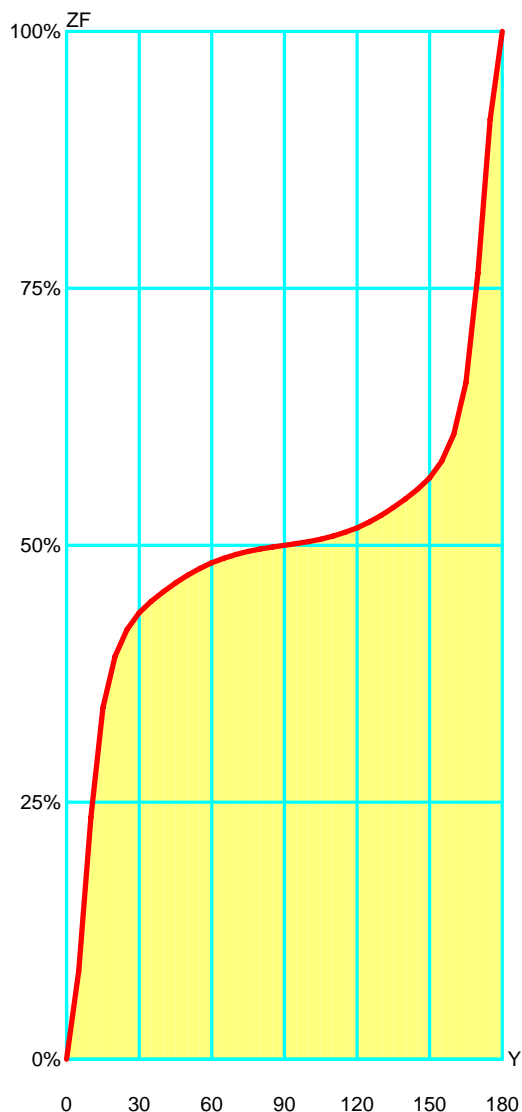
Y°	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
ZF(Y)	235	392	434	455	471	483	491	496	500	504	509	517	529	545	565	608	765	1000

Códigos de Flujo C.I.E.

91 97 99 50 100

C.I.E. -/-/-/-/-/-/-/-/-/-
D DIN 5040 C61
F UTE 0.50 A + 0.50 T
B NBN BZ 1
RN 50.00000 %
BLF 1.0

LOR 99.99823 %
ULOR 49.99911 %
DLOR 49.99911 %
UFF 50.00000 %
DFF 50.00000 %
FFR 100.00000 %



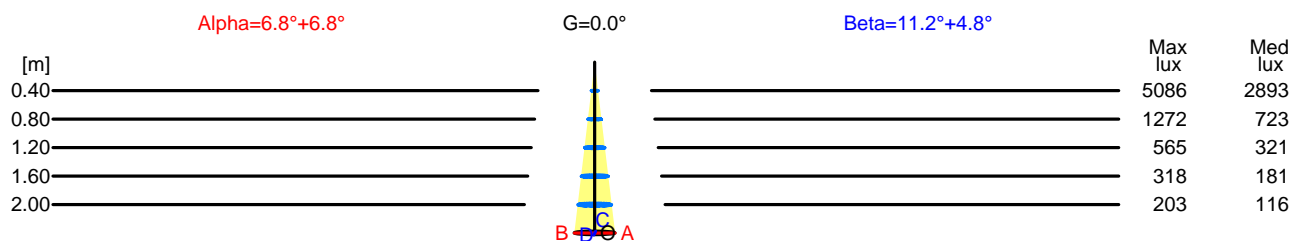
Flujo Zonal				
Gamma °	Flujo	Suma lm	Flujo [%]	Suma [%]
0°	0.00	0.00	0.00 %	0.00 %
5°	85.87	85.87	8.59 %	8.59 %
10°	149.35	235.21	14.94 %	23.52 %
15°	106.64	341.85	10.66 %	34.19 %
20°	50.17	392.02	5.02 %	39.20 %
25°	26.10	418.12	2.61 %	41.81 %
30°	16.37	434.48	1.64 %	43.45 %
35°	10.98	445.46	1.10 %	44.55 %
40°	9.33	454.79	0.93 %	45.48 %
45°	8.53	463.32	0.85 %	46.33 %
50°	7.59	470.90	0.76 %	47.09 %
55°	6.55	477.45	0.65 %	47.75 %
60°	5.53	482.98	0.55 %	48.30 %
65°	4.47	487.44	0.45 %	48.75 %
70°	3.66	491.11	0.37 %	49.11 %
75°	2.98	494.08	0.30 %	49.41 %
80°	2.33	496.41	0.23 %	49.64 %
85°	1.93	498.34	0.19 %	49.84 %
90°	1.65	499.99	0.16 %	50.00 %
95°	1.65	501.64	0.16 %	50.16 %
100°	1.93	503.57	0.19 %	50.36 %
105°	2.33	505.90	0.23 %	50.59 %
110°	2.98	508.88	0.30 %	50.89 %
115°	3.66	512.54	0.37 %	51.25 %
120°	4.47	517.01	0.45 %	51.70 %
125°	5.53	522.53	0.55 %	52.25 %
130°	6.55	529.08	0.65 %	52.91 %
135°	7.59	536.67	0.76 %	53.67 %
140°	8.53	545.20	0.85 %	54.52 %
145°	9.33	554.52	0.93 %	55.45 %
150°	10.98	565.50	1.10 %	56.55 %
155°	16.37	581.86	1.64 %	58.19 %
160°	26.10	607.97	2.61 %	60.80 %
165°	50.17	658.13	5.02 %	65.81 %
170°	106.64	764.77	10.66 %	76.48 %
175°	149.35	914.12	14.94 %	91.41 %
180°	85.87	999.98	8.59 %	100.00 %

Luminaria		Ensayo		Lámpara	
Código	LAB 2	Código	LAB 2	Código	LAB 2
Nombre	Aplique LAB 2 led 2x3W 700mA	Nombre	Aplique LAB 2 led 2x3W 700mA	Número	1
Familia	- MARSET	Fecha	17-09-2013	Posición	Universal
Rendimiento	100.00%	Sist. de Coord.	CG	Flujo Total	169.84 lm

Apertura a 50.00 % de MaxLux

H[m]	0.40	0.80	1.20	1.60	2.00	H[m]	0.40	0.80	1.20	1.60	2.00
OA	0.05	0.10	0.14	0.19	0.24	OC	0.08	0.16	0.24	0.32	0.39
OB	0.05	0.10	0.14	0.19	0.24	OD	0.03	0.07	0.10	0.13	0.17

	Intensidades Luminosas [cd/klm]									
	0	5	15	25	35	45	55	65	75	85
OA	740.48	462.63	55.48	22.79	5.45	3.46	2.33	1.49	0.94	0.65
OB	740.48	462.63	55.48	22.79	5.45	3.46	2.33	1.49	0.94	0.65
OC	740.48	797.01	164.42	17.14	6.48	4.30	3.22	1.77	0.96	0.42
OD	740.48	356.05	28.67	8.05	4.08	2.65	1.35	0.72	0.27	0.12



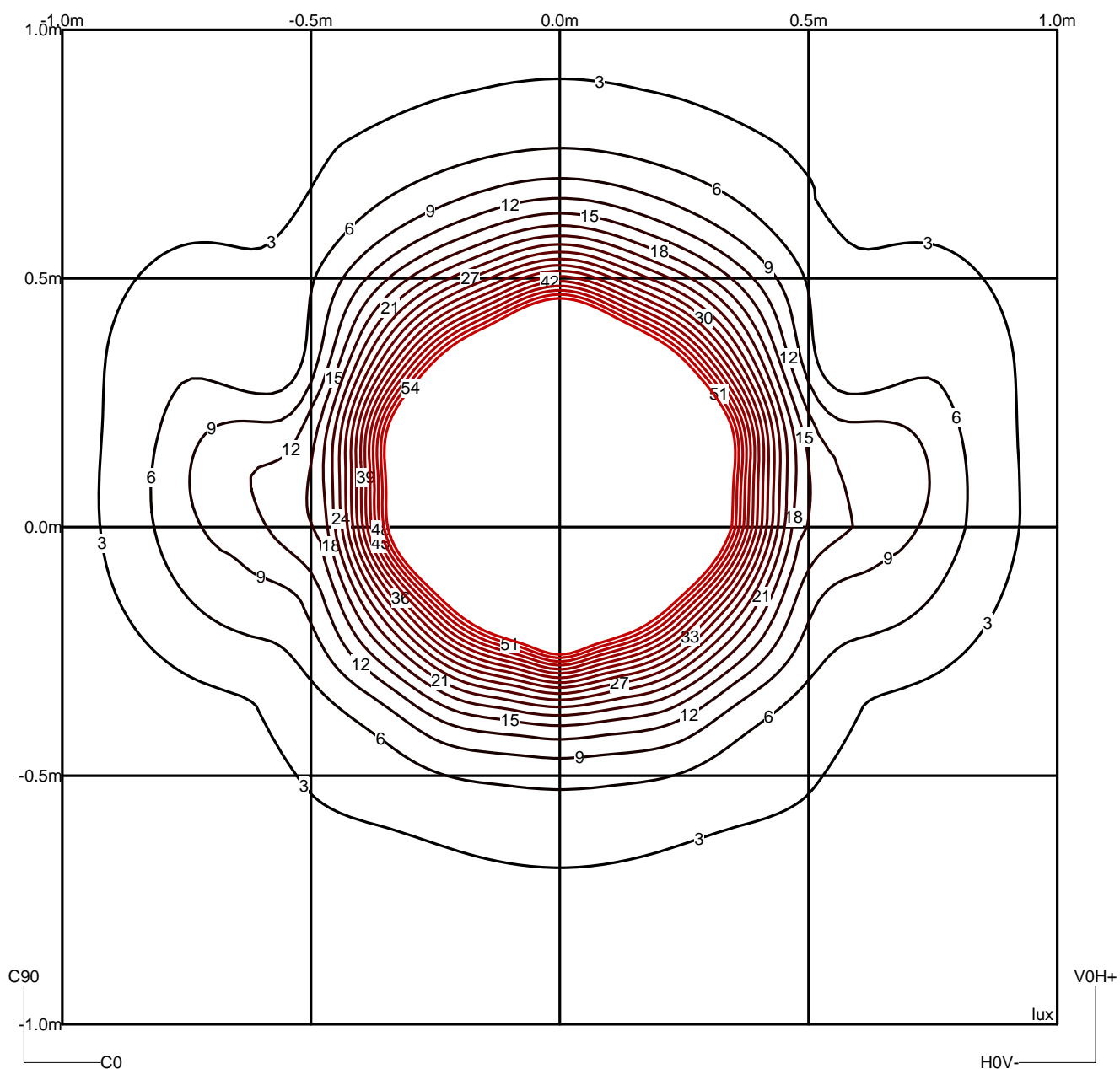
H[m]	D[m]	Max lux	Med lux	Alpha=6.8°+6.8°	G=0.0	
0.40	0.10	5086	2893			
0.80	0.19	1272	723			
1.20	0.29	565	321			
1.60	0.38	318	181			
2.00	0.48	203	116			

H[m]	D[m]	Max lux	Med lux	Beta=4.8°+11.2°	G=0.0	
0.40	0.11	5086	2893			
0.80	0.22	1272	723			
1.20	0.34	565	321			
1.60	0.45	318	181			
2.00	0.56	203	116			

Luminaria		Ensayo		Lámpara	
Código	LAB 2	Código	LAB 2	Código	LAB 2
Nombre	Aplique LAB 2 led 2x3W 700mA	Nombre	Aplique LAB 2 led 2x3W 700mA	Número	1
Familia	- MARSET	Fecha	17-09-2013	Posición	Universal
Rendimiento	100.00%	Sist. de Coord.	CG	Flujo Total	169.84 lm

Isolux (Suelo)

Posición Luminaria X=0.00m Y=0.00m Z=1.80m



Luminaria										Ensayo										Lámpara									
Código	LAB 2									Código	LAB 2									Código	LAB 2								
Nombre	Aplicque LAB 2 led 2x3W 700mA									Nombre	Aplicque LAB 2 led 2x3W 700mA									Número	1								
Familia	- MARSET									Fecha	17-09-2013									Posición	Universal								
Rendimiento	100.00%									Sist. de Coord.	CG									Flujo Total	169.84 lm								

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	527	473	480	433	450	413	408	347	382	326	361	273	346	236	305	292	258	282	225	244	238	205	187							
0.80	584	536	517	477	509	456	463	405	423	372	400	318	382	279	348	333	301	321	266	285	277	244	222							
1.00	623	580	538	503	552	482	504	450	404	427	352	408	313	379	363	333	351	299	317	308	274	250								
1.25	659	621	554	525	591	504	544	494	475	434	451	384	433	347	408	393	365	380	332	347	339	305	278							
1.50	686	651	565	540	620	520	575	529	492	456	470	409	451	373	430	415	389	402	357	371	363	330	300							
2.00	720	692	575	556	660	537	619	580	514	485	494	444	478	411	459	446	424	434	395	406	398	368	333							
2.50	743	719	580	564	687	547	650	615	528	503	511	468	496	438	479	467	448	457	422	430	423	394	357							
3.00	759	738	582	570	705	554	673	642	537	516	522	485	509	458	493	482	466	473	443	448	442	415	375							
4.00	780	764	586	577	731	563	704	679	549	533	537	508	527	486	511	503	490	495	470	473	468	443	400							
5.00	794	780	589	581	747	568	725	703	557	544	547	523	538	504	523	516	505	510	489	489	485	462	417							
10.00	822	815	592	588	782	578	770	758	573	566	568	555	563	544	549	545	539	542	530	525	523	505	455							
20.00	837	834	593	591	801	583	795	789	581	578	579	572	577	567	563	561	558	560	554	545	544	529	476							

	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	300	271	241	217	255	205	201	173	165	141	139	104	119	81	128	109	96	95	75	89	78	65	49	
0.80	348	319	271	248	297	232	242	211	193	168	166	129	145	102	149	130	116	115	92	104	92	76	56	
1.00	379	351	286	265	324	246	270	239	210	185	183	145	163	117	161	142	128	128	104	112	101	80	57	
1.25	409	382	300	282	350	259	299	268	226	202	201	163	181	135	173	156	141	141	117	121	111	86	59	
1.50	431	406	309	292	370	268	321	291	238	216	214	178	195	149	182	166	151	152	128	128	118	90	60	
2.00	454	433	313	299	391	272	348	320	247	228	227	193	209	167	188	174	161	162	139	131	122	89	56	
2.50	467	448	311	300	402	271	364	338	250	233	232	202	217	177	189	177	165	166	145	130	123	86	50	
3.00	472	456	307	297	406	267	373	349	249	234	234	206	220	183	187	176	165	167	147	127	121	81	42	
4.00	484	470	304	297	417	266	389	369	252	239	239	216	227	196	188	179	169	171	154	127	122	77	36	
5.00	489	478	301	294	421	263	398	380	251	240	240	220	230	202	186	179	171	172	157	124	120	73	29	
10.00	482	475	273	269	413	236	400	389	230	224	225	213	219	202	164	160	155	157	147	101	99	45	0	
20.00	439	435	219	217	369	183	363	357	180	177	178	171	175	165	113	112	109	110	104	49	49	0	0	

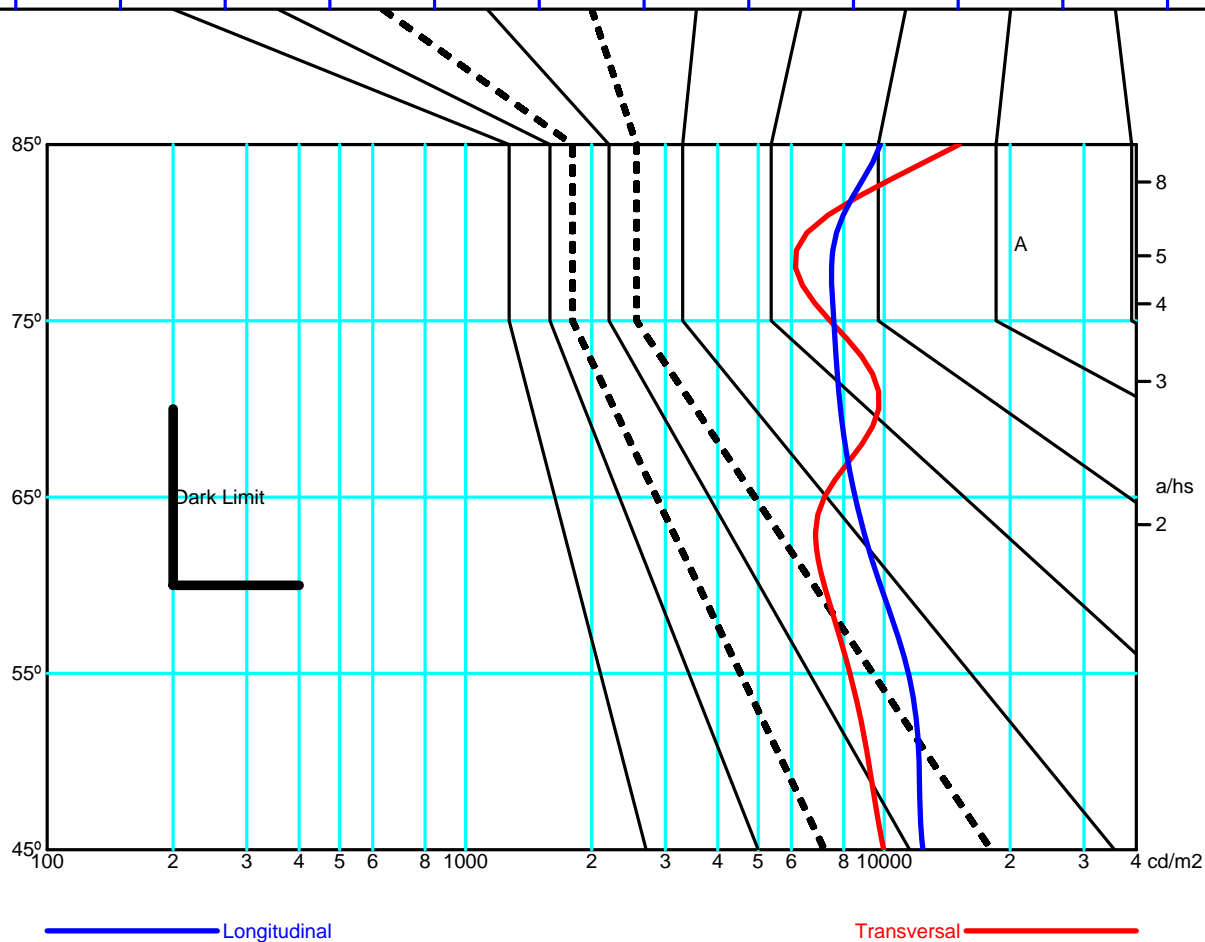
P.Trab.																							
K	8873	8773	8871	8771	7773	7771	7753	7553	7751	7551	7731	7331	7711	7111	5551	5531	5331	5511	5111	3331	3311	1111	0000
0.60	599	568	559	533	549	516	483	455	465	439	431	396	406	369	422	397	385	379	361	374	360	346	336
0.80	680	647	627	599	619	576	551	517	525	496	489	446	461	414	469	443	427	423	399	410	395	374	360
1.00	748	714	681	655	678	626	611	574	578	546	541	495	514	459	511	486	468	466	438	444	430	401	385
1.25	809	776	729	704	732	670	667	629	625	594	590	541	562	503	549	525	506	505	474	474	460	424	405
1.50	856	824	764	741	774	703	712	674	662	631	628	579	601	539	578	555	536	536	504	498	484	441	419
2.00	925	897	815	795	837	752	782	745	717	688	688	640	663	602	624	604	585	587	555	536	524	471	444
2.50	971	946	848	830	879	783	831	796	754	728	728	684	706	648	655	638	620	623	592	561	552	490	460
3.00	1000	982	870	855	909	806	866	834	780	757	758	717	738	684	677	662	646	649	620	580	572	504	472
4.00	1000	1000	897	885	948	832	912	885	812	793	794	759	778	730	704	692	678	681	655	602	596	519	482
5.00	1000	1000	914	904	972	849	942	918	832	816	817	787	804	761	721	711	699	702	679	616	611	528	488
10.00	1000	1000	948	943	1000	883	1000	994	875	866	868	850	861	835	757	753	745	748	734	646	644	547	501
20.00	1000	1000	965	963	1000	901	1000	1000	898	893	895	885	892	877	777	775	771	773	765	662	662	556	506

LM53 SHR C0-C180: 0.228 SHR C90-C270: 0.380 SHR Superficial: 0.321

Luminaria		Ensayo		Lámpara	
Código	LAB 2	Código	LAB 2	Código	LAB 2
Nombre	Aplicado LAB 2 led 2x3W 700mA	Nombre	Aplicado LAB 2 led 2x3W 700mA	Número	1
Familia	- MARSET	Fecha	17-09-2013	Posición	Universal
Rendimiento	100.00%	Sist. de Coord.	CG	Flujo Total	169.84 lm

	Luminancia Media [cd/m²]										
	45°	50°	55°	60°	65°	70°	75°	80°	85°		
0.0°	9969	9176	8278	7195	7190	9704	7425	6532	15103	---	
90.0°	12372	12113	11418	9790	8523	7862	7578	7689	9793	---	

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



Luminaria		Ensayo		Lámpara	
Código	LAB 2	Código	LAB 2	Código	LAB 2
Nombre	Aplicue LAB 2 led 2x3W 700mA	Nombre	Aplicue LAB 2 led 2x3W 700mA	Número	1
Familia	- MARSET	Fecha	17-09-2013	Posición	Universal
Rendimiento	100.00%	Sist. de Coord.	CG	Flujo Total	169.84 lm

Luminancia



Luminaria				Ensayo							Lámpara				
Código	LAB 2			Código	LAB 2							Código	LAB 2		
Nombre	Aplique LAB 2 led 2x3W 700mA			Nombre	Aplique LAB 2 led 2x3W 700mA							Número	1		
Familia	- MARSET			Fecha	17-09-2013							Posición	Universal		
Rendimiento		100.00%			Sist. de Coordin.		CG			Flujo Total		169.84 lm			
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	1508110.82	1508110.82	1508110.82	1508110.82	1508110.82	1508110.82	1508110.82	1508110.82	1508110.82	1508110.82	1508110.82	1508110.82	1508110.82		
G 5.0	945823.11	967433.57	1002905.52	1056687.23	1125302.71	1210363.54	1304418.62	1401467.36	1537380.99	1629447.16	1537369.18	1401493.36	1304418.62		
G 10.0	458947.09	480967.30	542846.46	618498.73	644640.60	667749.24	708759.34	753409.13	855010.07	937881.47	855000.18	753430.89	708759.34		
G 15.0	116986.41	134123.84	163354.53	201489.60	234163.84	262345.04	281312.57	287380.00	316720.14	346677.73	316720.67	287378.85	281312.57		
G 20.0	84827.24	98883.92	70947.47	31672.42	52542.08	83122.49	91754.48	94895.25	100870.66	105828.31	100872.10	94892.09	91754.48		
G 25.0	51221.96	54259.60	55186.35	48486.29	31738.85	27175.90	35903.89	36961.23	37674.30	38521.43	37672.76	36961.23	35903.89		
G 30.0	15166.05	18791.39	23207.86	25179.92	20736.88	18477.29	20591.07	21394.13	21972.82	22655.22	21973.78	21392.01	20591.07		
G 35.0	13557.69	13883.16	13904.99	13784.07	14068.20	14980.35	15870.84	15811.24	15842.99	16123.18	15843.03	15811.15	15870.84		
G 40.0	11849.76	12354.50	12564.93	12618.63	12564.98	12853.29	13518.50	13418.45	13439.69	13698.20	13439.79	13418.23	13518.50		
G 45.0	9968.89	12062.40	12368.73	11906.88	11693.28	12031.99	12395.71	12312.68	12286.25	12371.68	12286.68	12312.68	12395.71		
G 50.0	9176.45	6818.19	7986.76	11112.56	11106.75	11120.47	11582.00	11640.55	11825.88	12113.01	11825.10	11642.25	11582.00		
G 55.0	8277.79	8397.86	9083.34	9956.57	10122.69	10307.51	10702.25	10803.85	11092.74	11417.70	11092.59	10804.18	10702.25		
G 60.0	7194.77	7540.98	8086.81	8689.43	8997.03	9168.83	9317.85	9423.11	9624.32	9789.64	9624.30	9423.15	9317.85		
G 65.0	7190.42	7508.19	7646.71	7757.43	8149.93	8467.86	8413.87	8085.64	8196.79	8523.04	8196.70	8085.85	8413.87		
G 70.0	9703.88	8329.84	7613.90	7633.28	7937.36	8255.69	8221.50	7642.84	7554.47	7861.56	7553.56	7644.86	8221.50		
G 75.0	7424.63	7858.91	8192.62	8392.04	8500.42	8594.52	8531.91	8099.95	7698.96	7577.60	7698.96	8099.97	8531.91		
G 80.0	6532.36	8696.82	10004.67	10324.24	10198.65	9994.33	9858.21	9622.02	8601.60	7689.27	8602.45	9620.16	9858.21		
G 85.0	15102.67	14951.28	15438.19	16113.86	15840.63	15058.31	15198.87	15776.96	13768.25	9792.73	13768.09	15776.96	15198.87		
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				Ensayo				Lámpara					
Código	LAB 2			Código	LAB 2			Código	LAB 2				
Nombre	Aplique LAB 2 led 2x3W 700mA			Nombre	Aplique LAB 2 led 2x3W 700mA			Número	1				
Familia	- MARSET			Fecha	17-09-2013			Posición	Universal				
Rendimiento	100.00%			Sist. de Coordin.	CG			Flujo Total	169.84 lm				
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	1508110.82	1508110.82	1508110.82	1508110.82	1508110.82	1508110.82	1508110.82	1508110.82	1508110.82	1508110.82	1508110.82	1508110.82	1508110.82
G 5.0	1210224.09	1125654.89	1056687.23	1000965.01	972338.02	945823.11	875993.09	805899.20	759136.81	721372.21	694479.68	678739.59	673996.85
G 10.0	667632.52	644935.37	618498.73	541222.30	485072.20	458947.09	400785.65	337450.82	295820.23	275289.78	258829.48	237577.93	217506.89
G 15.0	262351.23	234148.21	201489.60	163440.66	133906.17	116986.41	105517.25	101301.98	98219.90	85881.13	77331.01	74514.56	66794.83
G 20.0	83139.44	52499.28	31672.42	71183.31	98287.84	84827.24	68864.02	50196.56	33545.32	33522.94	32401.29	30180.38	28460.84
G 25.0	27157.68	31784.87	48486.29	54932.76	54900.52	51221.96	40724.42	27372.05	18382.54	19515.33	20252.54	18728.33	17795.02
G 30.0	18488.65	20708.20	25179.92	23365.93	18391.89	15166.05	15683.20	15466.37	13801.86	14012.74	14200.78	13426.36	12804.09
G 35.0	14980.84	14066.96	13784.07	13911.82	13865.91	13557.69	13210.49	12056.84	10746.41	10947.85	11038.85	10679.62	10442.02
G 40.0	12854.45	12564.98	12618.63	12660.63	12316.08	11848.43	11569.47	10518.38	9167.92	9268.23	9449.48	9448.74	9227.17
G 45.0	12037.09	11680.38	11906.88	12677.27	11882.79	9968.89	9481.57	9159.65	8436.98	8169.36	8184.80	8190.08	8070.33
G 50.0	11263.23	11106.75	11112.56	7859.76	7139.17	9176.45	8773.44	7910.60	7791.42	7340.11	6944.45	6832.04	6692.21
G 55.0	10305.76	10127.11	9956.57	9059.03	8459.29	8277.79	7655.21	7193.18	6953.60	6350.47	5860.73	5674.30	5460.32
G 60.0	9168.58	8997.65	8689.43	8083.41	7549.57	7194.77	6810.01	6501.78	6182.78	5631.78	5183.42	4937.15	4656.29
G 65.0	8466.72	8152.81	7757.43	7630.88	7548.22	7190.42	6464.55	5944.36	5687.18	5242.47	4841.94	4525.56	4065.48
G 70.0	8244.87	7964.69	7633.28	7463.29	8710.49	9703.88	7360.22	5909.24	5560.18	5197.61	4633.38	4179.86	3671.60
G 75.0	8594.43	8500.66	8392.04	8191.30	7862.25	7424.63	6934.14	6418.33	5903.99	5391.13	4756.96	4116.13	3653.14
G 80.0	10004.29	10173.51	10324.24	10143.18	8346.76	6532.36	7730.10	8382.81	7256.93	6526.07	5991.91	5241.58	4207.21
G 85.0	15056.44	15845.34	16113.86	15412.20	15016.96	15102.67	14586.42	13477.47	12349.71	11737.77	11096.05	10449.17	9771.82
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				Ensayo						Lámpara			
Código	LAB 2			Código	LAB 2					Código	LAB 2		
Nombre	Aplique LAB 2 led 2x3W 700mA			Nombre	Aplique LAB 2 led 2x3W 700mA					Número	1		
Familia	- MARSET			Fecha	17-09-2013					Posición	Universal		
Rendimiento		100.00%			Sist. de Coorden.		CG		Flujo Total		169.84 lm		
Luminance cd/m2										Tabla 3/3			
	C 180.00	C 190.00	C 200.00	C 210.00	C 220.00	C 230.00	C 240.00	C 250.00	C 260.00	C 270.00	C 280.00	C 290.00	C 300.00
G 0.0	1508110.82	1508110.82	1508110.82	1508110.82	1508110.82	1508110.82	1508110.82	1508110.82	1508110.82	1508110.82	1508110.82	1508110.82	1508110.82
G 5.0	945823.11	875993.09	805899.20	759136.81	721372.21	694479.68	678739.59	673996.85	700362.26	727926.17	700374.08	673970.85	678739.59
G 10.0	458947.09	400785.65	337450.82	295820.23	275289.78	258829.48	237577.93	217506.89	214686.08	221274.91	214695.97	217485.13	237577.93
G 15.0	116986.41	105517.25	101301.98	98219.90	85881.13	77331.01	74514.56	66794.83	61120.32	60453.64	61119.80	66795.98	74514.56
G 20.0	84827.24	68864.02	50196.56	33545.32	33522.94	32401.29	30180.38	28460.84	28198.96	28173.36	28138.99	28464.00	30180.38
G 25.0	51221.96	40724.42	27372.05	18382.54	19515.33	20252.54	18728.33	17795.02	17838.70	18088.46	17840.24	17791.63	18728.33
G 30.0	15166.05	15683.20	15466.37	13801.86	14012.74	14200.78	13426.36	12804.09	12385.16	12185.22	12384.19	12806.21	13426.36
G 35.0	13557.69	13210.49	12056.84	10746.41	10947.85	11038.85	10679.62	10442.02	10263.21	10145.29	10263.17	10442.11	10679.62
G 40.0	11848.43	11569.47	10518.38	9167.92	9268.23	9449.48	9448.74	9227.17	8999.12	8909.50	8999.03	9227.38	9448.74
G 45.0	9968.89	9481.57	9159.65	8436.98	8169.36	8184.80	8190.08	8070.33	7816.07	7640.26	7815.64	8071.28	8190.08
G 50.0	9176.45	8773.44	7910.60	7791.42	7340.11	6944.45	6832.04	6692.21	6304.46	5991.07	6305.23	6690.51	6832.04
G 55.0	8277.79	7655.21	7193.18	6953.60	6350.47	5860.73	5674.30	5460.32	5072.69	4796.83	5072.84	5459.99	5674.30
G 60.0	7194.77	6810.01	6501.78	6182.78	5631.78	5183.42	4937.15	4656.29	4279.21	4044.90	4279.23	4656.24	4937.15
G 65.0	7190.42	6464.55	5944.36	5687.18	5242.47	4841.94	4525.56	4065.48	3638.92	3462.94	3639.01	4065.27	4525.56
G 70.0	9703.88	7360.22	5909.24	5560.18	5197.61	4633.38	4179.86	3671.60	3217.42	3018.14	3218.34	3669.58	4179.86
G 75.0	7424.63	6934.14	6418.33	5903.99	5391.13	4756.96	4116.13	3653.14	2815.15	2136.84	2815.16	3653.13	4116.13
G 80.0	6532.36	7730.10	8382.81	7256.93	6526.07	5991.91	5241.58	4207.21	2576.67	1459.29	2575.83	4209.07	5241.58
G 85.0	15102.67	14586.42	13477.47	12349.71	11737.77	11096.05	10449.17	9771.82	6894.83	2907.47	6894.98	9771.82	10449.17
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