bover
barcelona lights

Luminaire		Measurem.		Lamp	
Code	0233003U+P744	Code	0233003+P744	Code	41457
Name	AMPHORA-02 2x29W CFL beige	Name	AMPHORA-02 2x30W CFL beige	Number	2
Line	- BOVER	Date	12-01-2016	Position	Universal

Luminaire Flux	635.51 lm	Luminaire Power	58.00 W	Efficacy	10.96 lm/W	Efficiency	18.16%
Lamps Flux	3500.00 lm	Maximum value	66.34 cd/klm	Position	C=0.00 G=180.00	CG	Asymmetrical

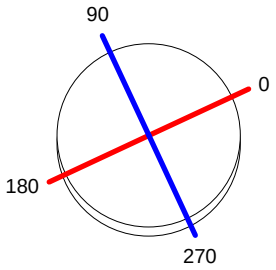
Round Luminaire	Diam. 800 mm		Height	1230 mm	
Round Luminous Area	Diam. 800 mm		Height	1130 mm	
Horizontal Luminous Area	0.502655 m2		Emitting area on Plane 180°	0.904000 m2	
Emitting area on Plane 0°	0.904000 m2		Emitting area on Plane 270°	0.904000 m2	
Emitting area on Plane 90°	0.904000 m2		Glare area at 76°	0.998751 m2	
Coordinate system	CG		Symmetry Type	Asymmetrical	
Date	12-01-2016		Maximum Gamma Angle	180	
Measurement Distance	6.44		Measurement Flux	3763.00 lm	
Operator	Asselum T2		Source voltage	230.00 V	
Temperature	25.00 °C		Source current		
Humidity	51.00 %		Photocell	Prc	
Notes					

Luminaire Lamps

Line	Code	Name	Flux [lm]	Pow. [W]	Q.ty
- BOVER	41457	FLE29QBX/DV/827	1750.00	29.00	2

C.I.E.	49 78 91 65 18	D DIN 5040	B31
F UTE	0.12 E + 0.06 T	B NBN	BZ 4 / 1.25 / BZ 5

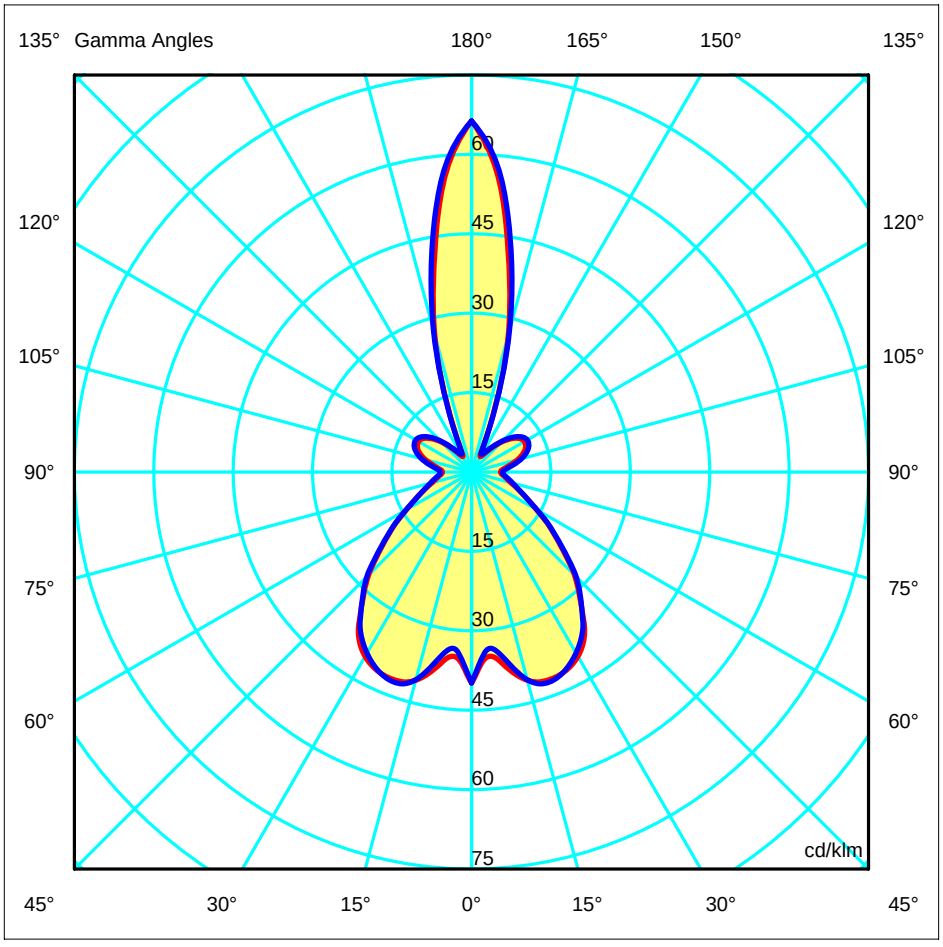
Diam=800mm



C Halfplanes

180.0 — 0.0

270.0 — 90.0



ULOR	6.27 %
DLOR	11.88 %
RN	34.55 %

bover
barcelona lights

Luminaire		Measurem.		Lamp	
Code	0233003U+P744	Code	0233003+P744	Code	41457
Name	AMPHORA-02 2x29W CFL beige	Name	AMPHORA-02 2x30W CFL beige	Number	2
Line	- BOVER	Date	12-01-2016	Position	Universal

Luminaire Flux	635.51 lm	Luminaire Power	58.00 W	Efficacy	10.96 lm/W	Efficiency	18.16%
Lamps Flux	3500.00 lm	Maximum value	66.34 cd/klm	Position	C=0.00 G=180.00	CG	Asymmetrical

Luminous Intensity Table cd/klm **Table 1/1**

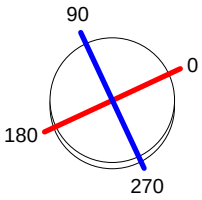
	C 0.00	C 15.00	C 30.00	C 45.00	C 60.00	C 75.00	C 90.00	C 105.00	C 120.00	C 135.00	C 150.00	C 165.00
G 0.0	39.84	39.84	39.84	39.84	39.84	39.84	39.84	39.84	39.84	39.84	39.84	39.84
G 5.0	35.00	35.23	33.28	34.32	34.91	34.39	33.71	34.39	34.91	34.32	33.28	35.23
G 10.0	37.34	35.04	34.14	34.60	35.94	35.39	35.80	35.39	35.94	34.60	34.14	35.04
G 15.0	40.74	39.09	38.21	38.21	39.06	39.56	40.60	39.56	39.06	38.21	38.21	39.09
G 20.0	41.89	40.91	40.27	40.34	41.25	41.63	42.34	41.63	41.25	40.34	40.27	40.91
G 25.0	41.56	40.75	39.86	40.23	41.20	41.21	41.48	41.21	41.20	40.23	39.86	40.75
G 30.0	40.24	39.13	38.57	38.21	38.26	38.52	39.50	38.52	38.26	38.21	38.57	39.13
G 35.0	37.17	36.53	36.61	35.01	34.24	35.08	36.55	35.08	34.24	35.01	36.61	36.53
G 40.0	32.09	32.50	33.46	31.50	29.30	30.79	32.22	30.79	29.30	31.50	33.46	32.50
G 45.0	27.51	27.64	28.71	27.45	24.84	26.22	27.95	26.22	24.84	27.45	28.71	27.64
G 50.0	22.20	22.62	23.60	22.67	21.03	21.05	22.54	21.05	21.03	22.67	23.60	22.62
G 55.0	18.07	18.15	18.95	18.05	17.19	16.44	18.24	16.44	17.19	18.05	18.95	18.15
G 60.0	14.20	14.18	15.12	14.40	13.88	13.20	14.29	13.20	13.88	14.40	15.12	14.18
G 65.0	11.37	11.32	11.92	11.49	11.30	10.93	11.37	10.93	11.30	11.49	11.92	11.32
G 70.0	9.37	9.25	9.70	9.46	9.44	9.35	9.39	9.35	9.44	9.46	9.70	9.25
G 75.0	7.64	7.69	7.85	7.83	7.92	7.80	8.01	7.80	7.92	7.83	7.85	7.69
G 80.0	6.67	6.65	6.80	6.84	6.88	6.94	7.01	6.94	6.88	6.84	6.80	6.65
G 85.0	5.83	5.89	6.06	6.10	6.11	6.14	6.12	6.14	6.11	6.10	6.06	5.89
G 90.0	5.48	5.57	5.70	5.80	5.84	5.81	5.85	5.81	5.84	5.80	5.70	5.57
G 95.0	5.94	6.03	6.18	6.37	6.44	6.42	6.52	6.42	6.44	6.37	6.18	6.03
G100.0	7.29	7.33	7.63	7.85	7.99	7.99	8.14	7.99	7.99	7.85	7.63	7.33
G105.0	8.99	8.88	9.18	9.39	9.67	9.58	9.79	9.58	9.67	9.39	9.18	8.88
G110.0	10.41	10.23	10.56	10.70	11.08	11.04	11.14	11.04	11.08	10.70	10.56	10.23
G115.0	11.30	11.15	11.47	11.51	11.96	11.95	11.96	11.95	11.96	11.51	11.47	11.15
G120.0	11.54	11.39	11.62	11.65	12.11	12.12	12.16	12.12	12.11	11.65	11.62	11.39
G125.0	11.09	10.85	10.99	10.95	11.40	11.46	11.59	11.46	11.40	10.95	10.99	10.85
G130.0	9.75	9.56	9.66	9.58	9.94	10.05	10.23	10.05	9.94	9.58	9.66	9.56
G135.0	8.04	7.82	7.81	7.78	8.13	8.13	8.35	8.13	8.13	7.78	7.81	7.82
G140.0	5.94	5.90	5.99	5.97	6.16	6.28	6.34	6.28	6.16	5.97	5.99	5.90
G145.0	4.22	4.33	4.33	4.42	4.60	4.64	4.71	4.64	4.60	4.42	4.33	4.33
G150.0	3.38	3.41	3.44	3.58	3.73	3.76	3.83	3.76	3.73	3.58	3.44	3.41
G155.0	4.83	4.83	4.70	4.58	5.08	4.66	5.18	4.66	5.08	4.58	4.70	4.83
G160.0	13.20	13.49	13.81	13.72	14.04	13.78	13.46	13.78	14.04	13.72	13.81	13.49
G165.0	26.85	26.71	26.85	26.85	27.49	26.94	27.75	26.94	27.49	26.85	26.85	26.71
G170.0	40.51	41.01	42.16	42.10	42.49	42.36	42.88	42.36	42.49	42.10	42.16	41.01
G175.0	56.41	56.35	56.68	56.91	57.87	57.10	57.74	57.10	57.87	56.91	56.68	56.35
G180.0	66.34	66.34	66.34	66.34	66.34	66.34	66.34	66.34	66.34	66.34	66.34	66.34

	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	39.84	39.84	39.84	39.84	39.84	39.84	39.84	39.84	39.84	39.84	39.84	39.84
G 5.0	35.00	35.23	33.28	34.32	34.91	34.39	33.71	34.39	34.91	34.32	33.28	35.23
G 10.0	37.34	35.04	34.14	34.60	35.94	35.39	35.80	35.39	35.94	34.60	34.14	35.04
G 15.0	40.74	39.09	38.21	38.21	39.06	39.56	40.60	39.56	39.06	38.21	38.21	39.09
G 20.0	41.89	40.91	40.27	40.34	41.25	41.63	42.34	41.63	41.25	40.34	40.27	40.91
G 25.0	41.56	40.75	39.86	40.23	41.20	41.21	41.48	41.21	41.20	40.23	39.86	40.75
G 30.0	40.24	39.13	38.57	38.21	38.26	38.52	39.50	38.52	38.26	38.21	38.57	39.13
G 35.0	37.17	36.53	36.61	35.01	34.24	35.08	36.55	35.08	34.24	35.01	36.61	36.53
G 40.0	32.09	32.50	33.46	31.50	29.30	30.79	32.22	30.79	29.30	31.50	33.46	32.50
G 45.0	27.51	27.64	28.71	27.45	24.84	26.22	27.95	26.22	24.84	27.45	28.71	27.64
G 50.0	22.20	22.62	23.60	22.67	21.03	21.05	22.54	21.05	21.03	22.67	23.60	22.62
G 55.0	18.07	18.15	18.95	18.05	17.19	16.44	18.24	16.44	17.19	18.05	18.95	18.15
G 60.0	14.20	14.18	15.12	14.40	13.88	13.20	14.29	13.20	13.88	14.40	15.12	14.18
G 65.0	11.37	11.32	11.92	11.49	11.30	10.93	11.37	10.93	11.30	11.49	11.92	11.32
G 70.0	9.37	9.25	9.70	9.46	9.44	9.35	9.39	9.35	9.44	9.46	9.70	9.25
G 75.0	7.64	7.69	7.85	7.83	7.92	7.80	8.01	7.80	7.92	7.83	7.85	7.69
G 80.0	6.67	6.65	6.80	6.84	6.88	6.94	7.01	6.94	6.88	6.84	6.80	6.65
G 85.0	5.83	5.89	6.06	6.10	6.11	6.14	6.12	6.14	6.11	6.10	6.06	5.89
G 90.0	5.48	5.57	5.70	5.80	5.84	5.81	5.85	5.81	5.84	5.80	5.70	5.57
G 95.0	5.94	6.03	6.18	6.37	6.44	6.42	6.52	6.42	6.44	6.37	6.18	6.03
G100.0	7.29	7.33	7.63	7.85	7.99	7.99	8.14	7.99	7.99	7.85	7.63	7.33
G105.0	8.99	8.88	9.18	9.39	9.67	9.58	9.79	9.58	9.67	9.39	9.18	8.88
G110.0	10.41	10.23	10.56	10.70	11.08	11.04	11.14	11.04	11.08	10.70	10.56	10.23
G115.0	11.30	11.15	11.47	11.51	11.96	11.95	11.96	11.95	11.96	11.51	11.47	11.15
G120.0	11.54	11.39	11.62	11.65	12.11	12.12	12.16	12.12	12.11	11.65	11.62	11.39
G125.0	11.09	10.85	10.99	10.95	11.40	11.46	11.59	11.46	11.40	10.95	10.99	10.85
G130.0	9.75	9.56	9.66	9.58	9.94	10.05	10.23	10.05	9.94	9.58	9.66	9.56
G135.0	8.04	7.82	7.81	7.78	8.13	8.13	8.35	8.13	8.13	7.78	7.81	7.82
G140.0	5.94	5.90	5.99	5.97	6.16	6.28	6.34	6.28	6.16	5.97	5.99	5.90
G145.0	4.22	4.33	4.33	4.42	4.60	4.64	4.71	4.64	4.60	4.42	4.33	4.33
G150.0	3.38	3.41	3.44	3.58	3.73	3.76	3.83	3.76	3.73	3.58	3.44	3.41
G155.0	4.83	4.83	4.70	4.58	5.08	4.66	5.18	4.66	5.08	4.58	4.70	4.83
G160.0	13.20	13.49	13.81	13.72	14.04	13.78	13.46	13.78	14.04	13.72	13.81	13.49
G165.0	26.85	26.71	26.85	26.85	27.49	26.94	27.75	26.94	27.49	26.85	26.85	26.71
G170.0	40.51	41.01	42.16	42.10	42.49	42.36	42.88	42.36	42.49	42.10	42.16	41.01
G175.0	56.41	56.35	56.68	56.91	57.87	57.10	57.74	57.10	57.87	56.91	56.68	56.35
G180.0	66.34	66.34	66.34	66.34	66.34	66.34	66.34	66.34	66.34	66.34	66.34	66.34

Luminaire		Measurem.		Lamp	
Code	0233003U+P744	Code	0233003+P744	Code	41457
Name	AMPHORA-02 2x29W CFL beige	Name	AMPHORA-02 2x30W CFL beige	Number	2
Line	- BOVER	Date	12-01-2016	Position	Universal

Luminaire Flux	635.51 lm	Luminaire Power	58.00 W	Efficacy	10.96 lm/W	Efficiency	18.16%
Lamps Flux	3500.00 lm	Maximum value	66.34 cd/klm	Position	C=0.00 G=180.00	CG	Asymmetrical

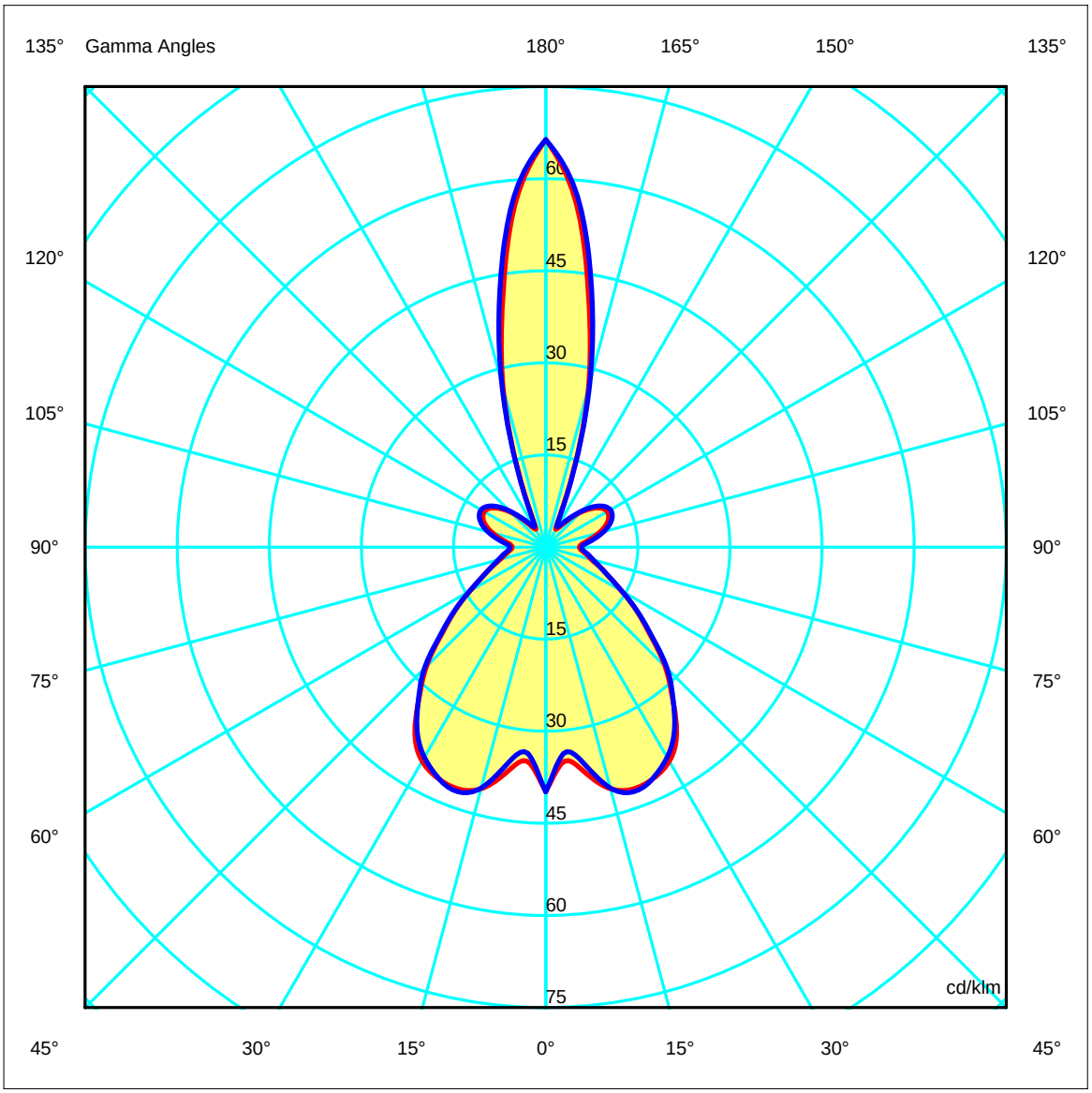
Diam=800mm



C Halfplanes

180.0 — 0.0

270.0 — 90.0

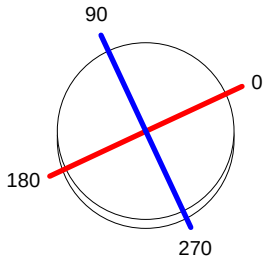


bover
barcelona lights

Luminaire		Measurem.		Lamp	
Code	0233003U+P744	Code	0233003+P744	Code	41457
Name	AMPHORA-02 2x29W CFL beige	Name	AMPHORA-02 2x30W CFL beige	Number	2
Line	- BOVER	Date	12-01-2016	Position	Universal

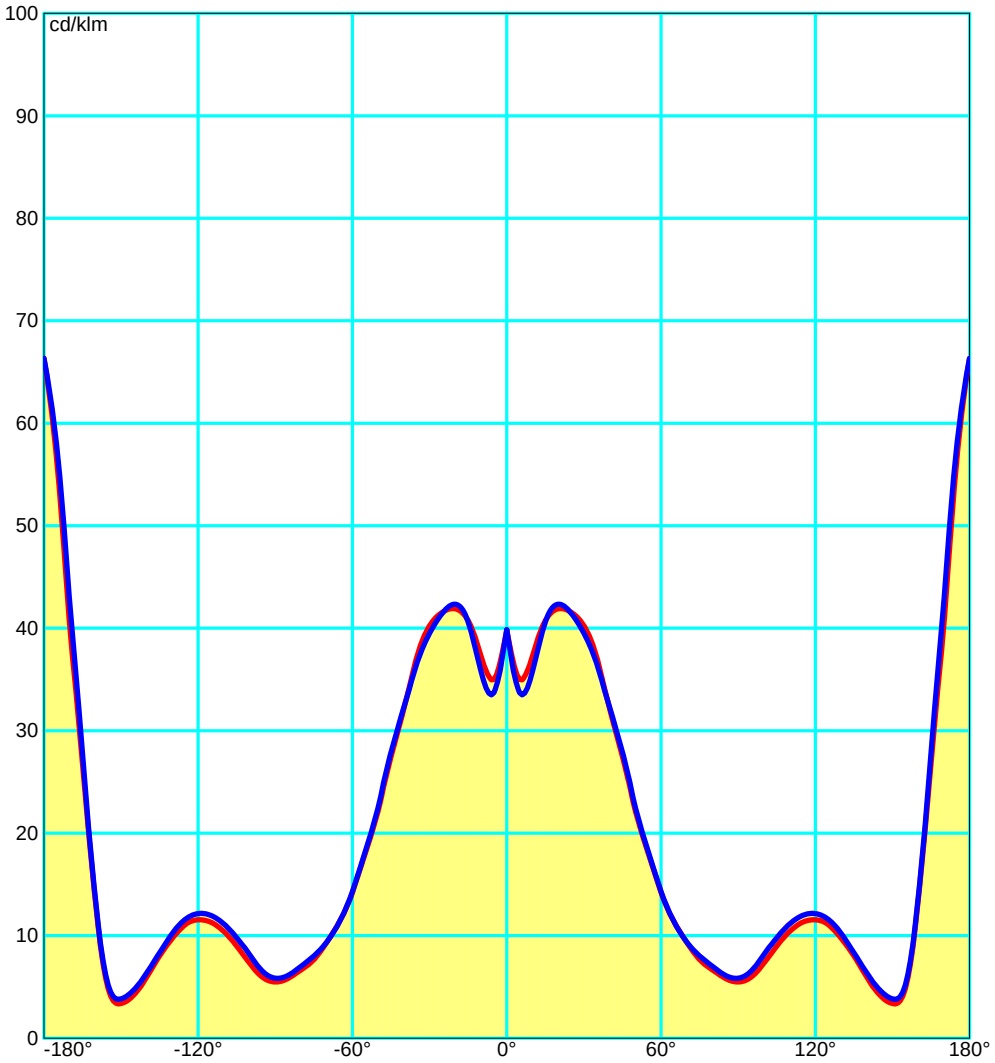
Luminaire Flux	635.51 lm	Luminaire Power	58.00 W	Efficacy	10.96 lm/W	Efficiency	18.16%
Lamps Flux	3500.00 lm	Maximum value	66.34 cd/klm	Position	C=0.00 G=180.00	CG	Asymmetrical

Diam=800mm



C Halfplanes





bover
barcelona lights

Luminaire		Measurem.		Lamp	
Code	0233003U+P744	Code	0233003+P744	Code	41457
Name	AMPHORA-02 2x29W CFL beige	Name	AMPHORA-02 2x30W CFL beige	Number	2
Line	- BOVER	Date	12-01-2016	Position	Universal

Luminaire Flux	635.51 lm	Luminaire Power	58.00 W	Efficacy	10.96 lm/W	Efficiency	18.16%
Lamps Flux	3500.00 lm	Maximum value	66.34 cd/klm	Position	C=0.00 G=180.00	CG	Asymmetrical

Total Flux=3500.00 Luminaire Flux=635.51

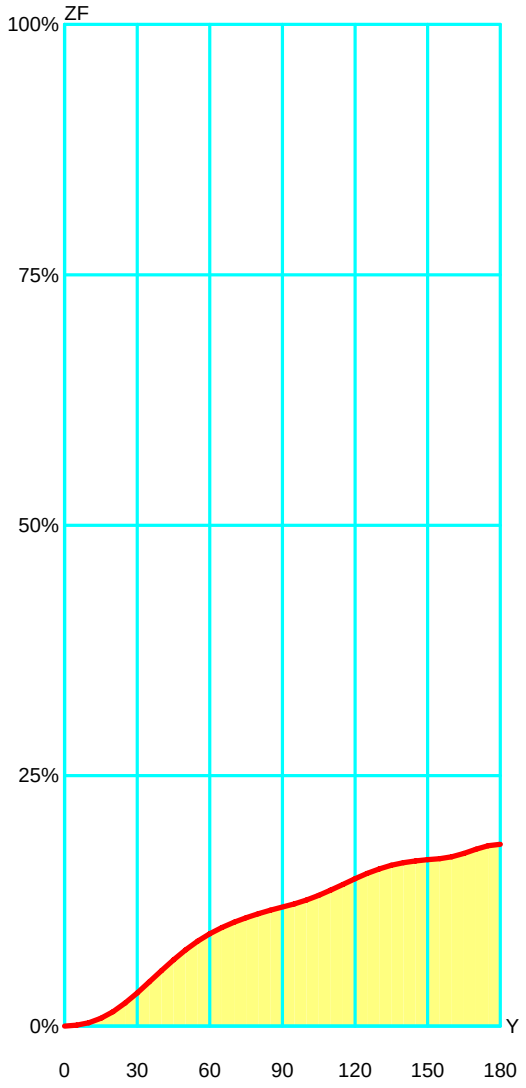
RI	0.60	0.80	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00	10.00	20.00
DRR	0.32	0.40	0.47	0.54	0.59	0.67	0.72	0.76	0.81	0.83	0.90	0.94
RC	5	5	5	5	5	5	5	5	6	6	6	6

Zonal Flux per 1000 Lumen

Y°	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
ZF(Y)	3	14	33	55	76	92	104	112	119	126	136	147	157	163	166	169	177	182

CIE Flux Codes
49 78 91 65 18

C.I.E.	5/5/5/5/5/5/5/6/6/6/6	LOR	18.15735 %
D DIN 5040	B31	ULOR	6.27363 %
F UTE	0.12 E + 0.06 T	DLOR	11.88371 %
B NBN	BZ 4 / 1.25 / BZ 5	UFF	34.55149 %
RN	34.55149 %	DFF	65.44851 %
BLF	1.0	FFR	52.79187 %



Zonal Flux				
Gamma °	Flux	Sum lm	Flux [%]	Sum [%]
0°	0.00	0.00	0.00%	0.00 %
5°	0.89	0.89	0.49 %	0.49 %
10°	2.49	3.38	1.37 %	1.86 %
15°	4.41	7.79	2.43 %	4.29 %
20°	6.61	14.41	3.64 %	7.93 %
25°	8.59	22.99	4.73 %	12.66 %
30°	10.07	33.06	5.54 %	18.21 %
35°	10.97	44.03	6.04 %	24.25 %
40°	11.24	55.26	6.19 %	30.44 %
45°	10.87	66.14	5.99 %	36.42 %
50°	9.97	76.10	5.49 %	41.91 %
55°	8.71	84.81	4.80 %	46.71 %
60°	7.39	92.21	4.07 %	50.78 %
65°	6.21	98.42	3.42 %	54.20 %
70°	5.27	103.69	2.90 %	57.11 %
75°	4.51	108.20	2.48 %	59.59 %
80°	3.92	112.12	2.16 %	61.75 %
85°	3.50	115.61	1.93 %	63.67 %
90°	3.22	118.84	1.78 %	65.45 %
95°	3.29	122.12	1.81 %	67.26 %
100°	3.81	125.94	2.10 %	69.36 %
105°	4.58	130.51	2.52 %	71.88 %
110°	5.25	135.76	2.89 %	74.77 %
115°	5.66	141.42	3.12 %	77.88 %
120°	5.69	147.11	3.13 %	81.02 %
125°	5.31	152.41	2.92 %	83.94 %
130°	4.56	156.97	2.51 %	86.45 %
135°	3.59	160.56	1.98 %	88.43 %
140°	2.60	163.16	1.43 %	89.86 %
145°	1.76	164.92	0.97 %	90.83 %
150°	1.19	166.11	0.65 %	91.48 %
155°	1.06	167.17	0.59 %	92.07 %
160°	1.94	169.11	1.07 %	93.14 %
165°	3.36	172.47	1.85 %	94.98 %
170°	4.09	176.56	2.25 %	97.24 %
175°	3.54	180.10	1.95 %	99.19 %
180°	1.47	181.57	0.81 %	100.00 %

bover
barcelona lights

Luminaire		Measurem.		Lamp	
Code	0233003U+P744	Code	0233003+P744	Code	41457
Name	AMPHORA-02 2x29W CFL beige	Name	AMPHORA-02 2x30W CFL beige	Number	2
Line	- BOVER	Date	12-01-2016	Position	Universal

Luminaire Flux	635.51 lm	Luminaire Power	58.00 W	Efficacy	10.96 lm/W	Efficiency	18.16%
Lamps Flux	3500.00 lm	Maximum value	66.34 cd/klm	Position	C=0.00 G=180.00	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	0.4	1.4	1.1	2.1	2.6	0.0	1.0	0.8	1.7	2.6
x=2H y=3H	1.2	2.0	2.0	2.8	3.4	0.9	1.8	1.7	2.5	3.4
x=2H y=4H	1.6	2.4	2.4	3.1	3.9	1.3	2.1	2.1	2.9	3.9
x=2H y=6H	2.0	2.7	2.8	3.5	4.3	1.8	2.5	2.6	3.3	4.3
x=2H y=8H	2.2	2.9	3.0	3.6	4.5	2.1	2.8	2.9	3.5	4.5
x=2H y=12H	2.4	3.0	3.2	3.8	4.7	2.3	2.9	3.1	3.7	4.7
x=4H y=2H	0.7	1.5	1.5	2.2	2.9	0.4	1.2	1.2	1.9	2.9
x=4H y=3H	1.7	2.4	2.5	3.2	3.9	1.5	2.1	2.3	2.9	3.9
x=4H y=4H	2.2	2.8	3.1	3.7	4.5	2.1	2.7	3.0	3.5	4.5
x=4H y=6H	2.7	3.2	3.6	4.1	5.0	2.6	3.1	3.5	4.0	5.0
x=4H y=8H	3.0	3.5	3.9	4.4	5.3	3.0	3.4	3.8	4.3	5.3
x=4H y=12H	3.3	3.7	4.2	4.6	5.7	3.3	3.7	4.2	4.6	5.7
x=8H y=4H	2.4	2.9	3.3	3.8	4.6	2.3	2.7	3.1	3.6	4.6
x=8H y=6H	3.1	3.5	4.0	4.4	5.5	3.1	3.5	4.0	4.3	5.5
x=8H y=8H	3.5	3.9	4.4	4.8	5.8	3.5	3.8	4.4	4.8	5.8
x=8H y=12H	4.0	4.3	4.9	5.2	6.3	4.0	4.3	4.9	5.2	6.3
x=12H y=4H	2.4	2.9	3.3	3.7	4.7	2.3	2.7	3.2	3.6	4.7
x=12H y=6H	3.2	3.5	4.1	4.5	5.5	3.2	3.5	4.0	4.4	5.5
x=12H y=8H	3.7	4.0	4.6	4.9	6.0	3.7	4.0	4.6	4.9	6.0

bover
barcelona lights

Luminaire		Measurem.		Lamp	
Code	0233003U+P744	Code	0233003+P744	Code	41457
Name	AMPHORA-02 2x29W CFL beige	Name	AMPHORA-02 2x30W CFL beige	Number	2
Line	- BOVER	Date	12-01-2016	Position	Universal

Luminaire Flux	635.51 lm	Luminaire Power	58.00 W	Efficacy	10.96 lm/W	Efficiency	18.16%
Lamps Flux	3500.00 lm	Maximum value	66.34 cd/klm	Position	C=0.00 G=180.00	CG	Asymmetrical

Utilizations CIE

Mounting Direct Normalization Normalised Suspension Ratio 0.3 Standard CIE Settings

Ceiling

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	81	73	74	67	69	64	58	50	55	47	49	37	44	30	44	39	35	36	29	33	30	26	24
0.80	90	83	79	73	79	70	67	58	61	53	54	43	49	36	50	45	41	41	34	39	36	31	28
1.00	97	90	82	77	85	74	73	65	65	58	58	48	53	40	54	49	45	45	39	43	40	35	31
1.25	102	96	84	80	92	76	79	72	68	62	61	52	56	45	58	53	50	49	43	47	44	40	35
1.50	106	101	85	81	96	78	84	78	70	65	64	56	59	48	61	56	53	52	46	51	47	43	38
2.00	111	107	85	83	102	80	91	86	73	69	67	60	63	54	65	61	58	57	52	55	52	48	42
2.50	115	111	85	83	106	81	96	91	75	71	70	64	65	58	68	64	61	60	56	59	56	52	45
3.00	117	114	85	83	109	81	100	95	76	73	71	66	67	60	69	66	63	62	58	61	58	55	47
4.00	120	118	85	84	112	81	105	101	77	75	73	69	70	64	72	69	67	66	62	64	62	59	50
5.00	122	120	85	83	115	82	108	105	78	76	75	71	72	67	73	70	69	68	65	67	64	61	52
10.00	126	125	84	83	120	82	116	114	79	79	77	76	75	73	76	74	74	73	71	72	70	68	57
20.00	128	127	83	82	122	81	120	119	80	80	79	78	78	76	77	76	76	75	75	74	73	71	60

Wall

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	73	69	64	61	66	59	52	48	47	44	40	35	34	29	42	36	34	31	29	33	29	27	24
0.80	84	80	72	68	76	66	62	58	55	51	47	42	41	36	48	42	40	37	34	38	34	32	28
1.00	92	87	76	73	83	70	69	65	60	56	52	47	46	40	53	47	45	42	39	42	38	36	31
1.25	99	95	80	77	90	74	76	72	64	61	57	52	51	45	57	51	49	46	43	46	42	39	34
1.50	104	100	83	80	95	77	82	78	68	65	61	56	56	50	60	55	53	50	47	49	46	42	37
2.00	111	107	86	84	101	80	90	86	72	69	66	62	61	56	64	59	57	55	52	53	50	45	39
2.50	115	112	87	86	105	82	95	91	75	73	70	66	65	60	67	62	61	59	56	56	53	48	41
3.00	119	116	89	87	108	83	100	96	77	75	73	69	68	63	69	65	63	61	59	58	55	50	43
4.00	124	122	92	91	114	86	106	103	82	80	77	74	74	69	73	69	68	66	64	62	60	54	46
5.00	129	127	94	93	118	89	112	109	85	83	81	79	78	74	76	73	72	70	68	65	63	57	49
10.00	141	140	103	102	131	98	126	125	95	94	93	91	91	88	86	84	83	82	81	76	74	67	58
20.00	151	151	111	110	141	106	138	137	104	104	103	102	101	100	95	94	93	93	92	85	84	76	67

Working Pl.

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	93	88	87	83	85	80	68	64	66	62	56	51	49	44	59	51	49	45	43	48	43	41	38
0.80	111	106	102	98	102	95	84	79	80	76	70	64	62	56	72	64	62	57	54	59	54	51	48
1.00	126	120	114	110	115	106	98	92	92	88	82	76	74	67	83	74	72	68	64	69	63	60	56
1.25	139	134	125	122	127	117	111	105	104	99	94	87	86	78	93	85	82	78	74	78	73	68	64
1.50	149	145	133	130	137	124	121	115	112	108	103	96	95	87	100	93	90	87	82	85	80	74	70
2.00	164	160	145	142	151	135	136	131	125	121	117	110	109	101	112	105	103	99	95	96	91	84	80
2.50	174	170	152	149	160	142	147	142	133	130	126	120	119	112	119	113	111	108	104	103	99	91	86
3.00	181	177	157	155	166	147	155	150	139	136	133	127	126	119	125	119	117	115	111	108	104	96	90
4.00	190	187	163	161	175	153	165	161	147	144	141	136	136	129	132	127	125	123	120	115	112	102	96
5.00	196	193	167	165	180	157	172	168	152	149	147	142	142	136	136	132	130	128	125	119	116	105	99
10.00	208	206	174	174	192	165	187	184	162	161	159	156	156	153	146	143	142	141	139	129	127	114	107
20.00	215	214	179	178	198	170	195	194	168	167	166	165	164	162	151	150	149	148	147	135	133	119	112

LM53 SHR C0-C180: 1.413 SHR C90-C270: 1.400 SHR Square: 1.402

bover
barcelona lights

Luminaire		Measurem.		Lamp	
Code	0233003U+P744	Code	0233003+P744	Code	41457
Name	AMPHORA-02 2x29W CFL beige	Name	AMPHORA-02 2x30W CFL beige	Number	2
Line	- BOVER	Date	12-01-2016	Position	Universal

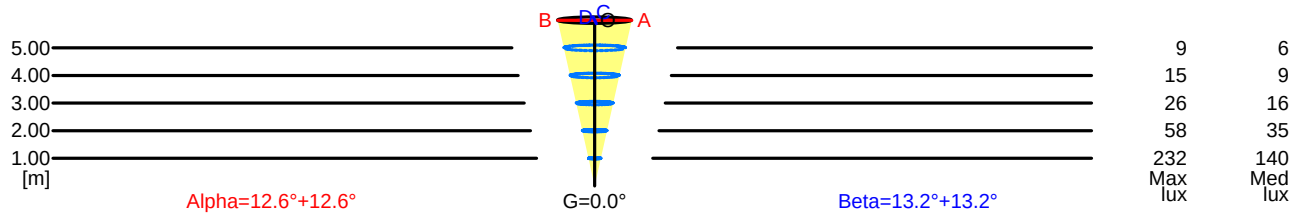
Luminaire Flux	635.51 lm	Luminaire Power	58.00 W	Efficacy	10.96 lm/W	Efficiency	18.16%
Lamps Flux	3500.00 lm	Maximum value	66.34 cd/klm	Position	C=0.00 G=180.00	CG	Asymmetrical

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	0.22	0.45	0.67	0.90	1.12	OC	0.23	0.47	0.70	0.94	1.17
OB	0.22	0.45	0.67	0.90	1.12	OD	0.23	0.47	0.70	0.94	1.17

Luminous Intensities [cd/klm]

	0	5	15	25	35	45	55	65	75	85
OA	232.18	197.42	93.99	16.89	14.77	28.14	38.81	39.55	31.45	20.80
OB	232.18	197.42	93.99	16.89	14.77	28.14	38.81	39.55	31.45	20.80
OC	232.18	202.09	97.12	18.13	16.49	29.22	40.58	41.87	34.28	22.83
OD	232.18	202.09	97.12	18.13	16.49	29.22	40.58	41.87	34.28	22.83



5.00	2.24	9	6	
4.00	1.79	15	9	
3.00	1.34	26	16	
2.00	0.90	58	35	
1.00	0.45	232	140	
H[m]	D[m]	Max lux	Med lux	Alpha=12.6°+12.6° G=0.0

5.00	2.34	9	6	
4.00	1.88	15	9	
3.00	1.41	26	16	
2.00	0.94	58	35	
1.00	0.47	232	140	
H[m]	D[m]	Max lux	Med lux	Beta=13.2°+13.2° G=0.0

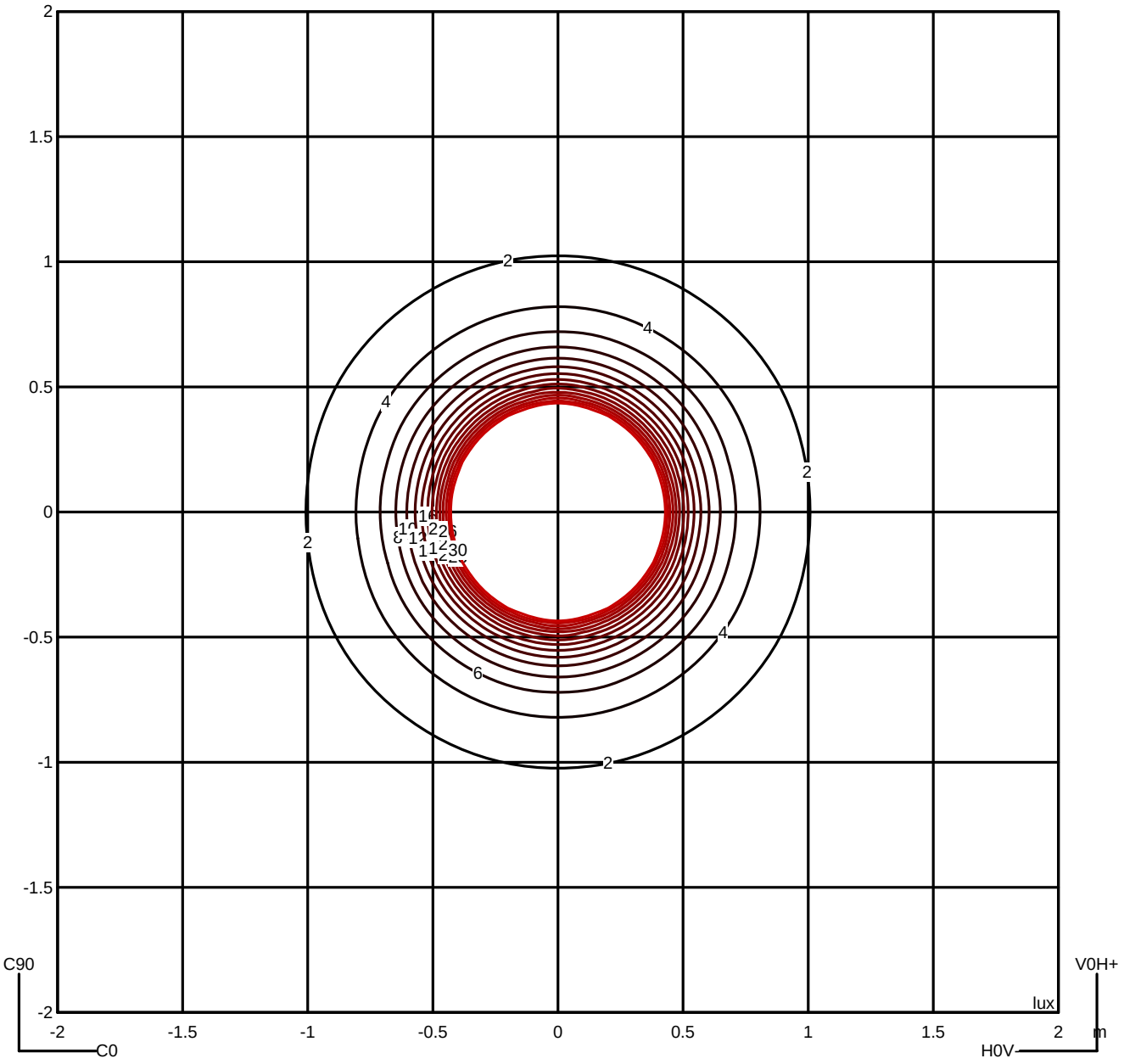
bover
barcelona lights

Luminaire		Measurem.		Lamp	
Code	0233003U+P744	Code	0233003+P744	Code	41457
Name	AMPHORA-02 2x29W CFL beige	Name	AMPHORA-02 2x30W CFL beige	Number	2
Line	- BOVER	Date	12-01-2016	Position	Universal

Luminaire Flux	635.51 lm	Luminaire Power	58.00 W	Efficacy	10.96 lm/W	Efficiency	18.16%
Lamps Flux	3500.00 lm	Maximum value	66.34 cd/klm	Position	C=0.00 G=180.00	CG	Asymmetrical

Isolux (Floor)

Luminaire position X=0.00m Y=0.00m Z=0.10m



bover
barcelona lights

Luminaire		Measurem.		Lamp	
Code	0233003U+P744	Code	0233003+P744	Code	41457
Name	AMPHORA-02 2x29W CFL beige	Name	AMPHORA-02 2x30W CFL beige	Number	2
Line	- BOVER	Date	12-01-2016	Position	Universal

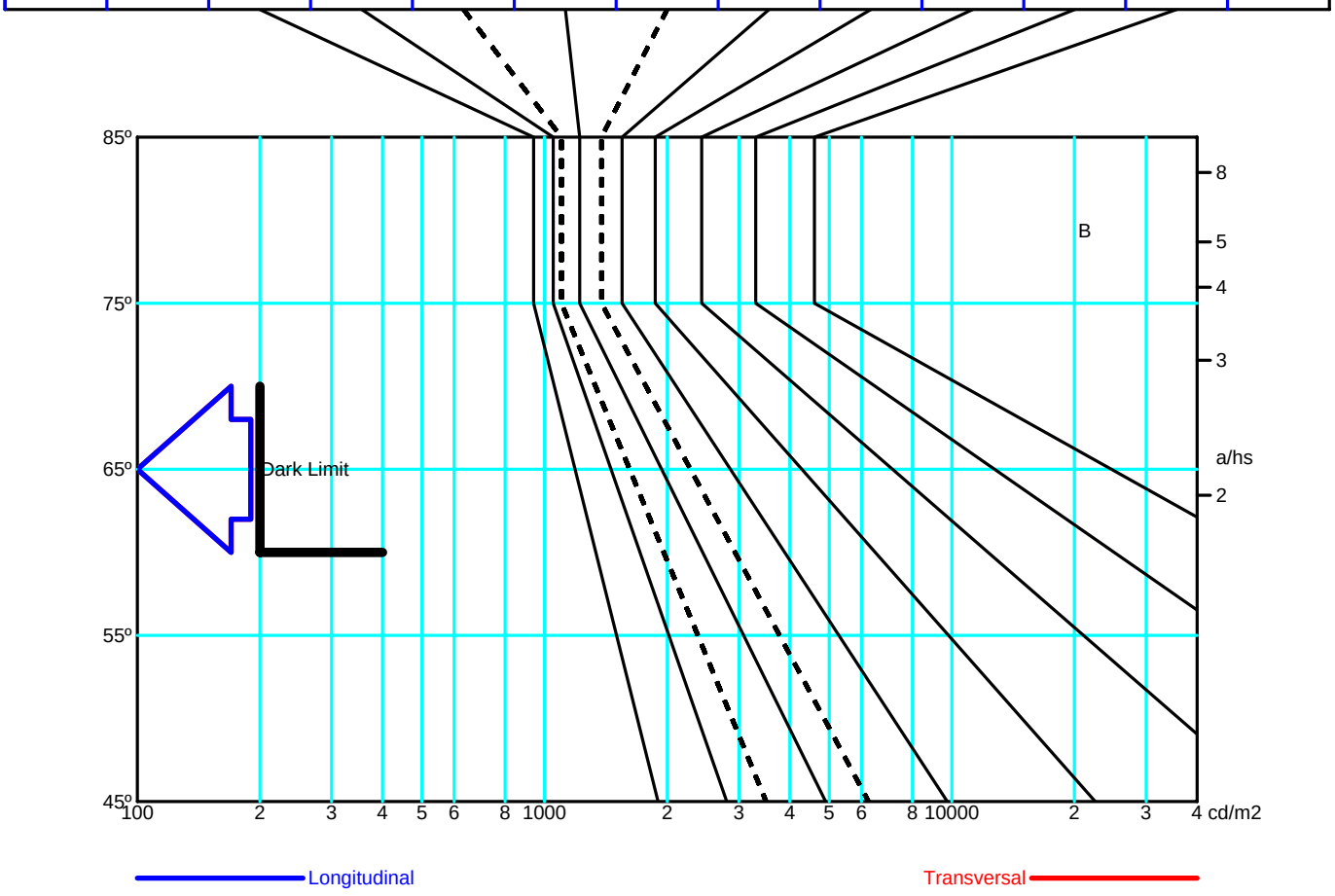
Luminaire Flux	635.51 lm	Luminaire Power	58.00 W	Efficacy	10.96 lm/W	Efficiency	18.16%
Lamps Flux	3500.00 lm	Maximum value	66.34 cd/klm	Position	C=0.00 G=180.00	CG	Asymmetrical

Average Luminance [cd/m²]

	45°	50°	55°	60°	65°	70°	75°	80°	85°	
0.0°	97	76	61	48	39	32	27	24	22	---
90.0°	98	78	62	48	39	32	28	25	23	---

Flush mounted or transveral view

		Illumination(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

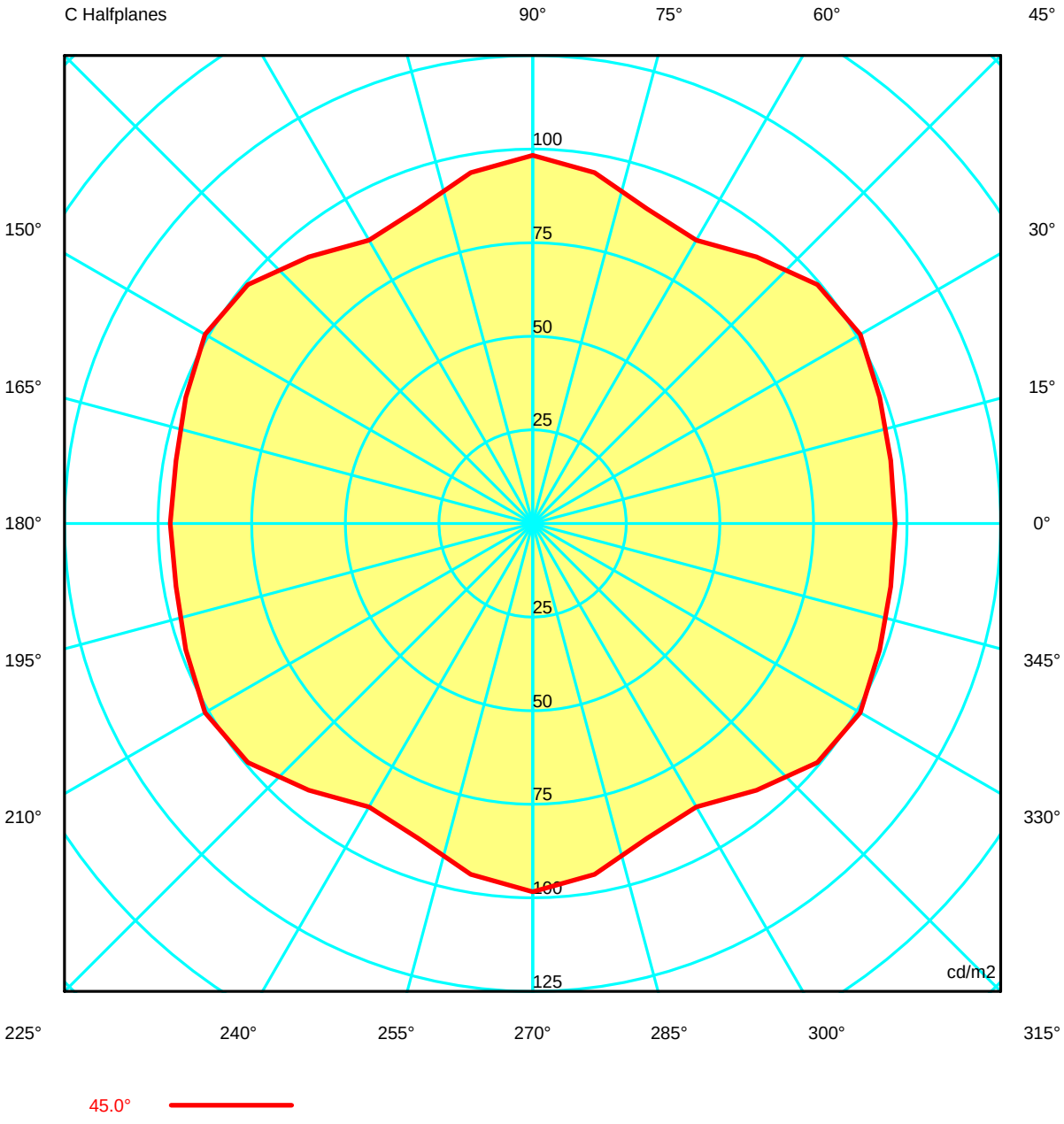


bover
barcelona lights

Luminaire		Measurem.		Lamp	
Code	0233003U+P744	Code	0233003+P744	Code	41457
Name	AMPHORA-02 2x29W CFL beige	Name	AMPHORA-02 2x30W CFL beige	Number	2
Line	- BOVER	Date	12-01-2016	Position	Universal

Luminaire Flux	635.51 lm	Luminaire Power	58.00 W	Efficacy	10.96 lm/W	Efficiency	18.16%
Lamps Flux	3500.00 lm	Maximum value	66.34 cd/klm	Position	C=0.00 G=180.00	CG	Asymmetrical

Luminance



bover
barcelona lights

Luminaire		Measurem.		Lamp	
Code	0233003U+P744	Code	0233003+P744	Code	41457
Name	AMPHORA-02 2x29W CFL beige	Name	AMPHORA-02 2x30W CFL beige	Number	2
Line	- BOVER	Date	12-01-2016	Position	Universal

Luminaire Flux	635.51 lm	Luminaire Power	58.00 W	Efficacy	10.96 lm/W	Efficiency	18.16%
Lamps Flux	3500.00 lm	Maximum value	66.34 cd/klm	Position	C=0.00 G=180.00	CG	Asymmetrical

Luminance cd/m2 **Table 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	277.40	277.40	277.40	277.40	277.40	277.40	277.40	277.40	277.40	277.40	277.40	277.40	277.40
G 5.0	211.40	214.08	208.77	200.98	204.07	209.51	210.85	209.27	205.84	203.58	205.84	209.26	210.85
G 10.0	200.44	191.59	185.60	183.28	183.93	188.53	192.95	191.02	190.41	192.18	190.40	191.03	192.95
G 15.0	198.17	192.52	188.24	185.86	185.27	187.17	190.00	191.29	194.48	197.51	194.47	191.30	190.00
G 20.0	187.60	184.59	182.04	180.35	180.00	181.94	184.73	185.79	187.71	189.62	187.71	185.79	184.73
G 25.0	173.67	171.57	168.83	166.57	166.97	169.61	172.15	172.17	172.53	173.32	172.53	172.17	172.15
G 30.0	158.74	155.61	153.42	152.12	151.02	150.67	150.91	151.16	153.49	155.81	153.49	151.16	150.91
G 35.0	139.87	137.78	137.72	137.76	133.97	130.08	128.84	130.21	134.37	137.51	134.37	130.22	128.84
G 40.0	116.26	116.78	119.29	121.23	117.47	110.55	106.16	108.83	114.10	116.71	114.10	108.83	106.16
G 45.0	96.81	97.10	98.60	101.03	99.27	92.99	87.41	89.45	95.17	98.36	95.17	89.45	87.41
G 50.0	76.49	77.13	79.27	81.34	79.90	76.10	72.47	71.50	74.59	77.68	74.59	71.50	72.47
G 55.0	61.48	61.65	62.81	64.46	62.71	60.45	58.48	55.72	58.06	62.04	58.06	55.72	58.48
G 60.0	48.06	47.55	49.15	51.15	49.78	48.10	46.97	44.79	45.89	48.37	45.89	44.79	46.97
G 65.0	38.57	38.13	39.13	40.44	39.59	38.68	38.32	37.25	37.55	38.59	37.55	37.25	38.32
G 70.0	32.12	31.58	32.20	33.23	32.79	32.40	32.34	32.12	32.05	32.17	32.05	32.12	32.34
G 75.0	26.66	26.76	27.02	27.39	27.33	27.43	27.62	27.27	27.45	27.93	27.45	27.27	27.62
G 80.0	23.86	23.77	23.98	24.36	24.49	24.53	24.63	24.75	24.96	25.10	24.96	24.75	24.63
G 85.0	21.60	21.69	22.02	22.44	22.59	22.60	22.64	22.73	22.74	22.69	22.74	22.73	22.64
G 90.0	21.22	21.43	21.73	22.07	22.34	22.53	22.59	22.49	22.54	22.66	22.54	22.49	22.59

bover
barcelona lights

Luminaire		Measurem.		Lamp	
Code	0233003U+P744	Code	0233003+P744	Code	41457
Name	AMPHORA-02 2x29W CFL beige	Name	AMPHORA-02 2x30W CFL beige	Number	2
Line	- BOVER	Date	12-01-2016	Position	Universal

Luminaire Flux	635.51 lm	Luminaire Power	58.00 W	Efficacy	10.96 lm/W	Efficiency	18.16%
Lamps Flux	3500.00 lm	Maximum value	66.34 cd/klm	Position	C=0.00 G=180.00	CG	Asymmetrical

Luminance cd/m2 **Table 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	277.40	277.40	277.40	277.40	277.40	277.40	277.40	277.40	277.40	277.40	277.40	277.40	277.40
G 5.0	209.53	204.02	200.98	209.05	212.29	211.40	212.29	209.05	200.98	204.02	209.53	210.85	209.26
G 10.0	188.49	184.04	183.28	184.97	193.18	200.44	193.18	184.97	183.28	184.04	188.49	192.95	191.03
G 15.0	187.14	185.35	185.86	187.85	193.52	198.17	193.52	187.85	185.86	185.35	187.14	190.00	191.30
G 20.0	181.93	180.04	180.35	181.83	185.11	187.60	185.11	181.83	180.35	180.04	181.93	184.73	185.79
G 25.0	169.60	166.99	166.57	168.70	171.91	173.67	171.91	168.70	166.57	166.99	169.60	172.15	172.17
G 30.0	150.66	151.06	152.12	153.20	156.18	158.74	156.18	153.20	152.12	151.06	150.66	150.91	151.16
G 35.0	130.07	134.00	137.76	137.55	138.20	139.87	138.20	137.55	137.76	134.00	130.07	128.84	130.22
G 40.0	110.55	117.46	121.23	119.30	116.76	116.26	116.76	119.30	121.23	117.46	110.55	106.16	108.83
G 45.0	92.99	99.27	101.03	98.56	96.71	96.81	96.71	98.56	101.03	99.27	92.99	87.41	89.45
G 50.0	76.10	79.89	81.34	79.29	77.07	76.49	77.07	79.29	81.34	79.89	76.10	72.47	71.50
G 55.0	60.44	62.72	64.46	62.77	61.65	61.48	61.34	62.77	64.46	62.72	60.44	58.48	55.72
G 60.0	48.09	49.79	51.15	49.09	48.02	48.06	48.02	49.09	51.15	49.79	48.09	46.97	44.79
G 65.0	38.68	39.59	40.44	39.08	38.46	38.57	38.46	39.08	40.44	39.59	38.68	38.32	37.25
G 70.0	32.40	32.80	33.23	32.15	31.70	32.12	31.70	32.15	33.23	32.80	32.40	32.34	32.12
G 75.0	27.43	27.33	27.39	27.02	26.70	26.66	26.70	27.02	27.39	27.33	27.43	27.62	27.27
G 80.0	24.53	24.49	24.36	23.97	23.83	23.86	23.83	23.97	24.36	24.49	24.53	24.63	24.75
G 85.0	22.60	22.59	22.44	22.02	21.68	21.60	21.68	22.02	22.44	22.59	22.60	22.64	22.73
G 90.0	22.54	22.34	22.07	21.74	21.40	21.22	21.40	21.74	22.07	22.34	22.54	22.59	22.49

bover
barcelona lights

Luminaire		Measurem.		Lamp	
Code	0233003U+P744	Code	0233003+P744	Code	41457
Name	AMPHORA-02 2x29W CFL beige	Name	AMPHORA-02 2x30W CFL beige	Number	2
Line	- BOVER	Date	12-01-2016	Position	Universal

Luminaire Flux	635.51 lm	Luminaire Power	58.00 W	Efficacy	10.96 lm/W	Efficiency	18.16%
Lamps Flux	3500.00 lm	Maximum value	66.34 cd/klm	Position	C=0.00 G=180.00	CG	Asymmetrical

Luminance cd/m2 **Table 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	277.40	277.40	277.40	277.40	277.40	277.40	277.40	277.40	277.40	277.40
G 5.0	205.84	203.58	205.84	209.27	210.85	209.51	204.07	200.98	208.77	214.08
G 10.0	190.40	192.18	190.41	191.02	192.95	188.53	183.93	183.28	185.60	191.59
G 15.0	194.47	197.51	194.48	191.29	190.00	187.17	185.27	185.86	188.24	192.52
G 20.0	187.71	189.62	187.71	185.79	184.73	181.94	180.00	180.35	182.04	184.59
G 25.0	172.53	173.32	172.53	172.17	172.15	169.61	166.97	166.57	168.83	171.57
G 30.0	153.49	155.81	153.49	151.16	150.91	150.67	151.02	152.12	153.42	155.61
G 35.0	134.37	137.51	134.37	130.21	128.84	130.08	133.97	137.76	137.72	137.78
G 40.0	114.10	116.71	114.10	108.83	106.16	110.55	117.47	121.23	119.29	116.78
G 45.0	95.17	98.36	95.17	89.45	87.41	92.99	99.27	101.03	98.60	97.10
G 50.0	74.59	77.68	74.59	71.50	72.47	76.10	79.90	81.34	79.27	77.13
G 55.0	58.06	62.04	58.06	55.72	58.48	60.45	62.71	64.46	62.81	61.65
G 60.0	45.89	48.37	45.89	44.79	46.97	48.10	49.78	51.15	49.15	47.55
G 65.0	37.55	38.59	37.55	37.25	38.32	38.68	39.59	40.44	39.13	38.13
G 70.0	32.05	32.17	32.05	32.12	32.34	32.40	32.79	33.23	32.20	31.58
G 75.0	27.45	27.93	27.45	27.27	27.62	27.43	27.33	27.39	27.02	26.76
G 80.0	24.96	25.10	24.96	24.75	24.63	24.53	24.49	24.36	23.98	23.77
G 85.0	22.74	22.69	22.74	22.73	22.64	22.60	22.59	22.44	22.02	21.69
G 90.0	22.54	22.66	22.54	22.49	22.59	22.53	22.34	22.07	21.73	21.43