bover
barcelona lights

Luminaire		**Measurem.**		**Lamp**	
Code	0333003U+P747	Code	0233003+P745	Code	41457
Name	AMPHORA-03 2x29W CFL beige	Name	AMPHORA-02 2x30W CFL brown	Number	2
Line	- BOVER	Date	12-01-2016	Position	Universal

Luminaire Flux	587.56 lm	Luminaire Power	58.00 W	Efficacy	10.13 lm/W	Efficiency	16.79%
Lamps Flux	3500.00 lm	Maximum value	61.33 cd/klm	Position	C=0.00 G=180.00	CG	Asymmetrical

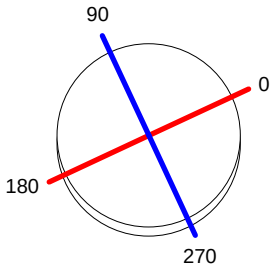
Round Luminaire	Diam. 890 mm		Height	1370 mm	
Round Luminous Area	Diam. 890 mm		Height	1270 mm	
Horizontal Luminous Area	0.622114 m2		Emitting area on Plane 180°	1.130300 m2	
Emitting area on Plane 0°	1.130300 m2		Emitting area on Plane 270°	1.130300 m2	
Emitting area on Plane 90°	1.130300 m2		Glare area at 76°	1.247228 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		
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 17	D DIN 5040	B31
F UTE	0.11 E + 0.06 T	B NBN	BZ 4 / 1.25 / BZ 5

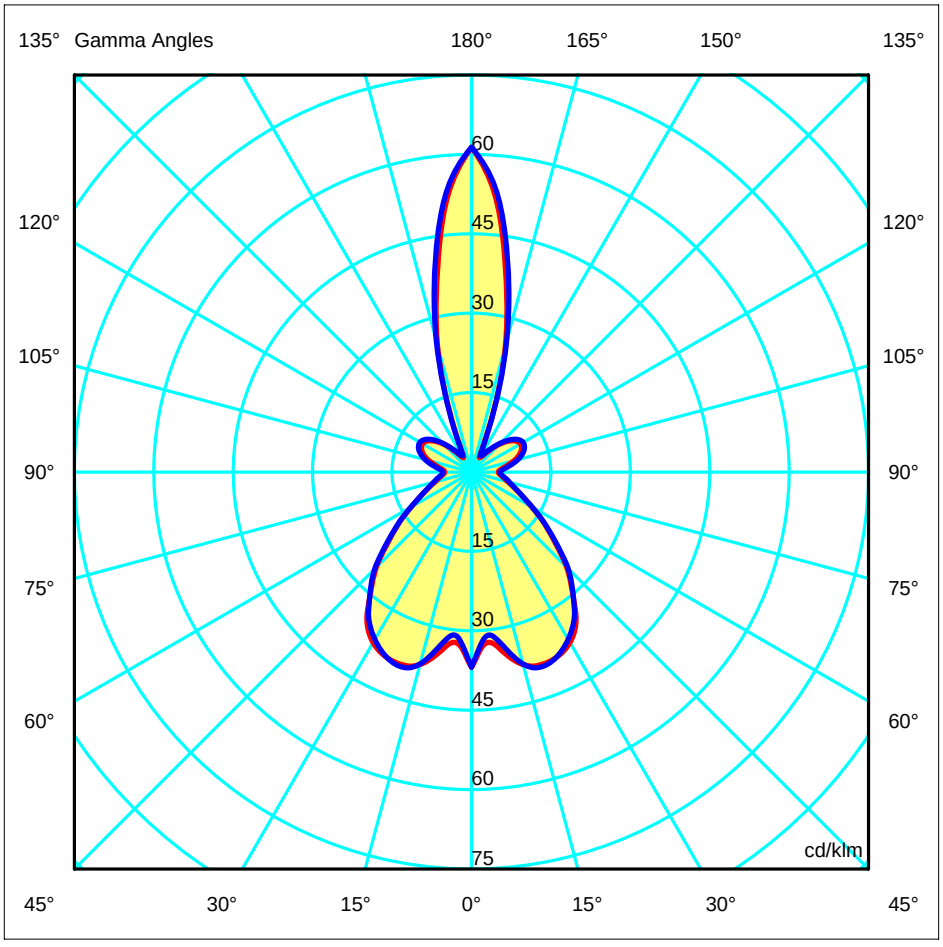
Diam=890mm



C Halfplanes

180.0 — 0.0

270.0 — 90.0



ULOR	5.80 %
DLOR	10.99 %
RN	34.55 %

bover
barcelona lights

Luminaire		Measurem.		Lamp	
Code	0333003U+P747	Code	0233003+P745	Code	41457
Name	AMPHORA-03 2x29W CFL beige	Name	AMPHORA-02 2x30W CFL brown	Number	2
Line	- BOVER	Date	12-01-2016	Position	Universal

Luminaire Flux	587.56 lm	Luminaire Power	58.00 W	Efficacy	10.13 lm/W	Efficiency	16.79%
Lamps Flux	3500.00 lm	Maximum value	61.33 cd/klm	Position	C=0.00 G=180.00	CG	Asymmetrical

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

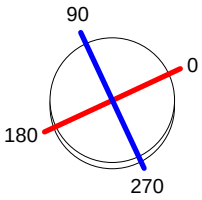
	C 0.00	C 15.00	C 30.00	C 45.00	C 60.00	C 75.00	C 90.00	C 105.00	C 120.00	C 135.00	C 150.00	C 165.00
G 0.0	36.83	36.83	36.83	36.83	36.83	36.83	36.83	36.83	36.83	36.83	36.83	36.83
G 5.0	32.36	32.57	30.77	31.73	32.28	31.80	31.17	31.80	32.28	31.73	30.77	32.57
G 10.0	34.52	32.39	31.57	31.99	33.23	32.72	33.10	32.72	33.23	31.99	31.57	32.39
G 15.0	37.66	36.14	35.33	35.33	36.11	36.57	37.54	36.57	36.11	35.33	35.33	36.14
G 20.0	38.73	37.83	37.23	37.30	38.14	38.49	39.15	38.49	38.14	37.30	37.23	37.83
G 25.0	38.43	37.68	36.86	37.19	38.09	38.10	38.35	38.10	38.09	37.19	36.86	37.68
G 30.0	37.21	36.18	35.66	35.32	35.37	35.62	36.52	35.62	35.37	35.32	35.66	36.18
G 35.0	34.37	33.77	33.85	32.37	31.66	32.43	33.79	32.43	31.66	32.37	33.85	33.77
G 40.0	29.67	30.05	30.94	29.12	27.09	28.47	29.79	28.47	27.09	29.12	30.94	30.05
G 45.0	25.44	25.55	26.54	25.38	22.97	24.24	25.84	24.24	22.97	25.38	26.54	25.55
G 50.0	20.52	20.91	21.82	20.96	19.44	19.46	20.84	19.46	19.44	20.96	21.82	20.91
G 55.0	16.71	16.78	17.52	16.69	15.89	15.20	16.86	15.20	15.89	16.69	17.52	16.78
G 60.0	13.13	13.11	13.98	13.31	12.83	12.20	13.22	12.20	12.83	13.31	13.98	13.11
G 65.0	10.51	10.46	11.02	10.62	10.44	10.11	10.52	10.11	10.44	10.62	11.02	10.46
G 70.0	8.67	8.55	8.97	8.75	8.73	8.64	8.68	8.64	8.73	8.75	8.97	8.55
G 75.0	7.07	7.11	7.26	7.24	7.32	7.22	7.40	7.22	7.32	7.24	7.26	7.11
G 80.0	6.16	6.15	6.29	6.33	6.36	6.42	6.48	6.42	6.36	6.33	6.29	6.15
G 85.0	5.39	5.44	5.60	5.64	5.65	5.68	5.66	5.68	5.65	5.64	5.60	5.44
G 90.0	5.07	5.15	5.27	5.36	5.39	5.37	5.41	5.37	5.39	5.36	5.27	5.15
G 95.0	5.49	5.57	5.72	5.89	5.96	5.93	6.03	5.93	5.96	5.89	5.72	5.57
G100.0	6.74	6.78	7.05	7.26	7.39	7.39	7.53	7.39	7.39	7.26	7.05	6.78
G105.0	8.31	8.21	8.48	8.68	8.94	8.86	9.05	8.86	8.94	8.68	8.48	8.21
G110.0	9.62	9.46	9.76	9.89	10.24	10.20	10.30	10.20	10.24	9.89	9.76	9.46
G115.0	10.45	10.31	10.60	10.64	11.06	11.05	11.06	11.05	11.06	10.64	10.60	10.31
G120.0	10.67	10.53	10.74	10.77	11.20	11.21	11.24	11.21	11.20	10.77	10.74	10.53
G125.0	10.25	10.03	10.16	10.13	10.54	10.60	10.72	10.60	10.54	10.13	10.16	10.03
G130.0	9.01	8.84	8.93	8.86	9.19	9.30	9.46	9.30	9.19	8.86	8.93	8.84
G135.0	7.43	7.23	7.22	7.19	7.52	7.52	7.72	7.52	7.52	7.19	7.22	7.23
G140.0	5.49	5.45	5.53	5.52	5.70	5.80	5.87	5.80	5.70	5.52	5.53	5.45
G145.0	3.90	4.00	4.00	4.09	4.26	4.29	4.36	4.29	4.26	4.09	4.00	4.00
G150.0	3.12	3.15	3.18	3.31	3.45	3.47	3.54	3.47	3.45	3.31	3.18	3.15
G155.0	4.46	4.47	4.35	4.23	4.69	4.31	4.79	4.31	4.69	4.23	4.35	4.47
G160.0	12.20	12.47	12.77	12.69	12.98	12.74	12.45	12.74	12.98	12.69	12.77	12.47
G165.0	24.83	24.69	24.82	24.83	25.42	24.91	25.66	24.91	25.42	24.83	24.82	24.69
G170.0	37.46	37.92	38.98	38.92	39.28	39.17	39.65	39.17	39.28	38.92	38.98	37.92
G175.0	52.15	52.10	52.40	52.61	53.51	52.79	53.38	52.79	53.51	52.61	52.40	52.10
G180.0	61.33	61.33	61.33	61.33	61.33	61.33	61.33	61.33	61.33	61.33	61.33	61.33

	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	36.83	36.83	36.83	36.83	36.83	36.83	36.83	36.83	36.83	36.83	36.83	36.83
G 5.0	32.36	32.57	30.77	31.73	32.28	31.80	31.17	31.80	32.28	31.73	30.77	32.57
G 10.0	34.52	32.39	31.57	31.99	33.23	32.72	33.10	32.72	33.23	31.99	31.57	32.39
G 15.0	37.66	36.14	35.33	35.33	36.11	36.57	37.54	36.57	36.11	35.33	35.33	36.14
G 20.0	38.73	37.83	37.23	37.30	38.14	38.49	39.15	38.49	38.14	37.30	37.23	37.83
G 25.0	38.43	37.68	36.86	37.19	38.09	38.10	38.35	38.10	38.09	37.19	36.86	37.68
G 30.0	37.21	36.18	35.66	35.32	35.37	35.62	36.52	35.62	35.37	35.32	35.66	36.18
G 35.0	34.37	33.77	33.85	32.37	31.66	32.43	33.79	32.43	31.66	32.37	33.85	33.77
G 40.0	29.67	30.05	30.94	29.12	27.09	28.47	29.79	28.47	27.09	29.12	30.94	30.05
G 45.0	25.44	25.55	26.54	25.38	22.97	24.24	25.84	24.24	22.97	25.38	26.54	25.55
G 50.0	20.52	20.91	21.82	20.96	19.44	19.46	20.84	19.46	19.44	20.96	21.82	20.91
G 55.0	16.71	16.78	17.52	16.69	15.89	15.20	16.86	15.20	15.89	16.69	17.52	16.78
G 60.0	13.13	13.11	13.98	13.31	12.83	12.20	13.22	12.20	12.83	13.31	13.98	13.11
G 65.0	10.51	10.46	11.02	10.62	10.44	10.11	10.52	10.11	10.44	10.62	11.02	10.46
G 70.0	8.67	8.55	8.97	8.75	8.73	8.64	8.68	8.64	8.73	8.75	8.97	8.55
G 75.0	7.07	7.11	7.26	7.24	7.32	7.22	7.40	7.22	7.32	7.24	7.26	7.11
G 80.0	6.16	6.15	6.29	6.33	6.36	6.42	6.48	6.42	6.36	6.33	6.29	6.15
G 85.0	5.39	5.44	5.60	5.64	5.65	5.68	5.66	5.68	5.65	5.64	5.60	5.44
G 90.0	5.07	5.15	5.27	5.36	5.39	5.37	5.41	5.37	5.39	5.36	5.27	5.15
G 95.0	5.49	5.57	5.72	5.89	5.96	5.93	6.03	5.93	5.96	5.89	5.72	5.57
G100.0	6.74	6.78	7.05	7.26	7.39	7.39	7.53	7.39	7.39	7.26	7.05	6.78
G105.0	8.31	8.21	8.48	8.68	8.94	8.86	9.05	8.86	8.94	8.68	8.48	8.21
G110.0	9.62	9.46	9.76	9.89	10.24	10.20	10.30	10.20	10.24	9.89	9.76	9.46
G115.0	10.45	10.31	10.60	10.64	11.06	11.05	11.06	11.05	11.06	10.64	10.60	10.31
G120.0	10.67	10.53	10.74	10.77	11.20	11.21	11.24	11.21	11.20	10.77	10.74	10.53
G125.0	10.25	10.03	10.16	10.13	10.54	10.60	10.72	10.60	10.54	10.13	10.16	10.03
G130.0	9.01	8.84	8.93	8.86	9.19	9.30	9.46	9.30	9.19	8.86	8.93	8.84
G135.0	7.43	7.23	7.22	7.19	7.52	7.52	7.72	7.52	7.52	7.19	7.22	7.23
G140.0	5.49	5.45	5.53	5.52	5.70	5.80	5.87	5.80	5.70	5.52	5.53	5.45
G145.0	3.90	4.00	4.00	4.09	4.26	4.29	4.36	4.29	4.26	4.09	4.00	4.00
G150.0	3.12	3.15	3.18	3.31	3.45	3.47	3.54	3.47	3.45	3.31	3.18	3.15
G155.0	4.46	4.47	4.35	4.23	4.69	4.31	4.79	4.31	4.69	4.23	4.35	4.47
G160.0	12.20	12.47	12.77	12.69	12.98	12.74	12.45	12.74	12.98	12.69	12.77	12.47
G165.0	24.83	24.69	24.82	24.83	25.42	24.91	25.66	24.91	25.42	24.83	24.82	24.69
G170.0	37.46	37.92	38.98	38.92	39.28	39.17	39.65	39.17	39.28	38.92	38.98	37.92
G175.0	52.15	52.10	52.40	52.61	53.51	52.79	53.38	52.79	53.51	52.61	52.40	52.10
G180.0	61.33	61.33	61.33	61.33	61.33	61.33	61.33	61.33	61.33	61.33	61.33	61.33

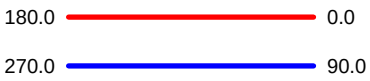
Luminaire		Measurem.		Lamp	
Code	0333003U+P747	Code	0233003+P745	Code	41457
Name	AMPHORA-03 2x29W CFL beige	Name	AMPHORA-02 2x30W CFL brown	Number	2
Line	- BOVER	Date	12-01-2016	Position	Universal

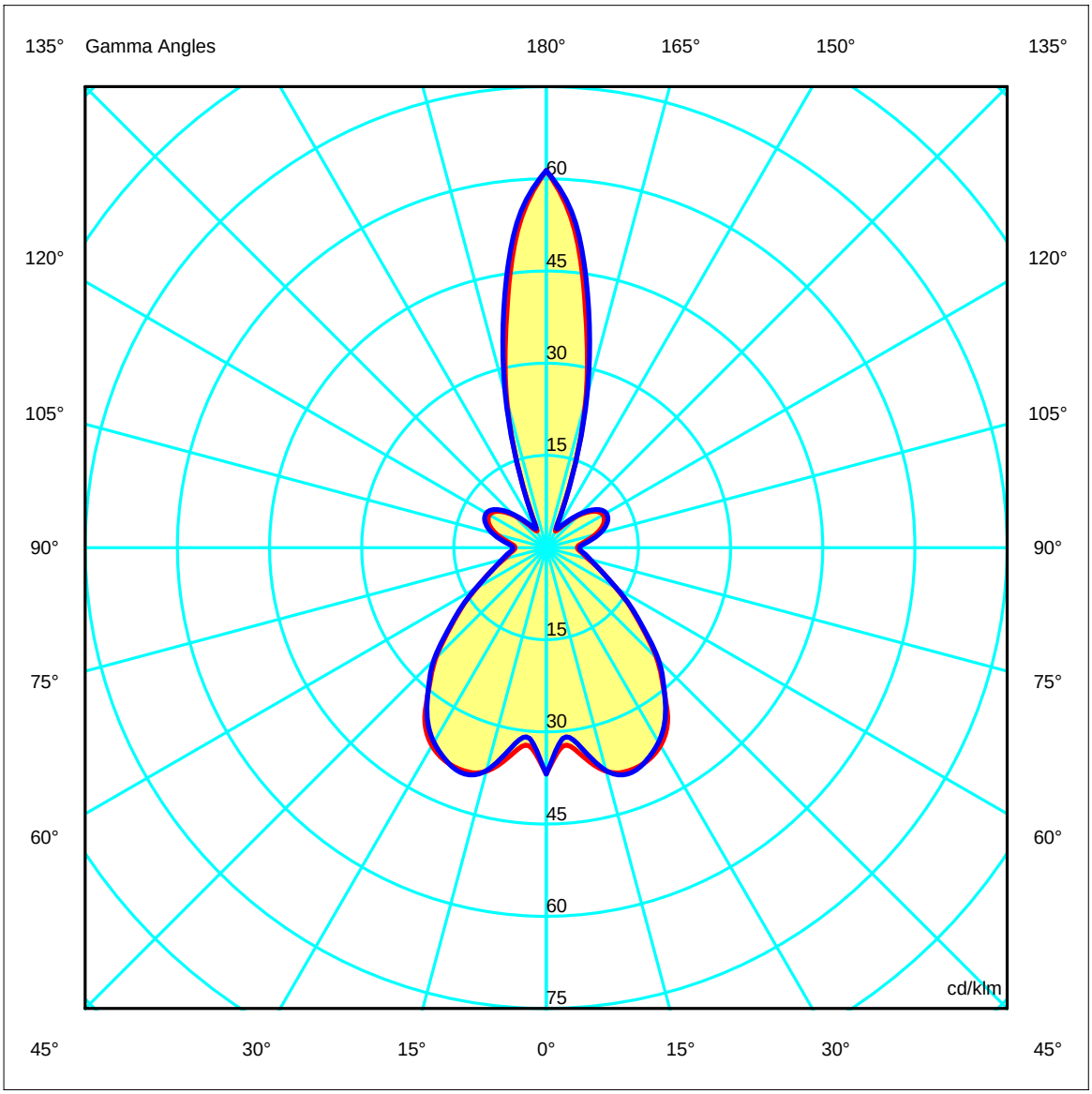
Luminaire Flux	587.56 lm	Luminaire Power	58.00 W	Efficacy	10.13 lm/W	Efficiency	16.79%
Lamps Flux	3500.00 lm	Maximum value	61.33 cd/klm	Position	C=0.00 G=180.00	CG	Asymmetrical

Diam=890mm



C Halfplanes



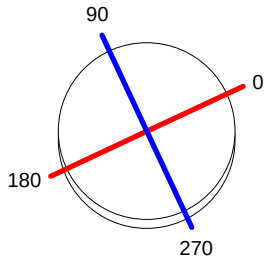


bover
barcelona lights

Luminaire		Measurem.		Lamp	
Code	0333003U+P747	Code	0233003+P745	Code	41457
Name	AMPHORA-03 2x29W CFL beige	Name	AMPHORA-02 2x30W CFL brown	Number	2
Line	- BOVER	Date	12-01-2016	Position	Universal

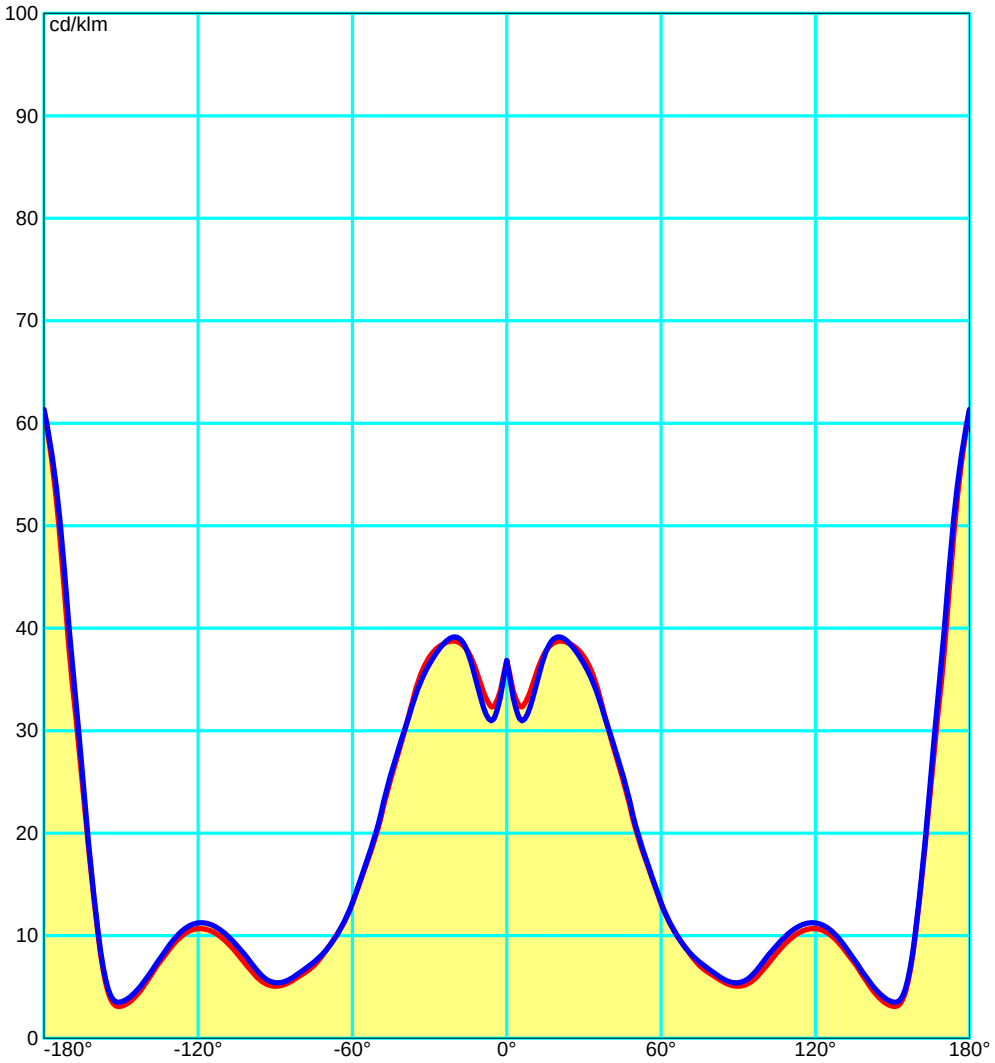
Luminaire Flux	587.56 lm	Luminaire Power	58.00 W	Efficacy	10.13 lm/W	Efficiency	16.79%
Lamps Flux	3500.00 lm	Maximum value	61.33 cd/klm	Position	C=0.00 G=180.00	CG	Asymmetrical

Diam=890mm



C Halfplanes





bover
barcelona lights

Luminaire		Measurem.		Lamp	
Code	0333003U+P747	Code	0233003+P745	Code	41457
Name	AMPHORA-03 2x29W CFL beige	Name	AMPHORA-02 2x30W CFL brown	Number	2
Line	- BOVER	Date	12-01-2016	Position	Universal

Luminaire Flux	587.56 lm	Luminaire Power	58.00 W	Efficacy	10.13 lm/W	Efficiency	16.79%
Lamps Flux	3500.00 lm	Maximum value	61.33 cd/klm	Position	C=0.00 G=180.00	CG	Asymmetrical

Total Flux=3500.00 Luminaire Flux=587.56

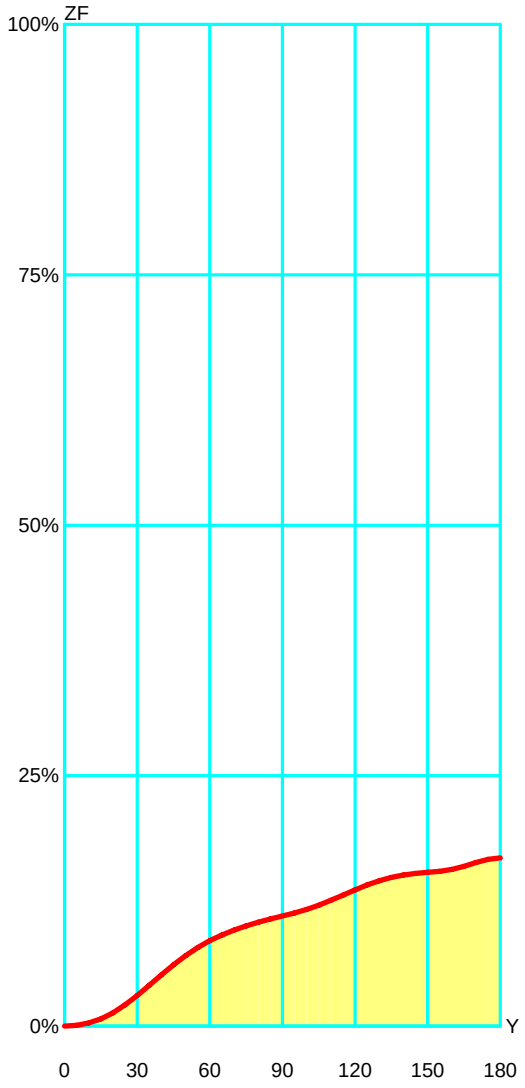
RI	0.60	0.80	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00	10.00	20.00
DRR	0.32	0.40	0.47	0.54	0.59	0.67	0.72	0.76	0.81	0.83	0.90	0.94
RC	5	5	5	5	5	5	5	5	6	6	6	6

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	13	31	51	70	85	96	104	110	116	126	136	145	151	154	156	163	168

CIE Flux Codes
49 78 91 65 17

C.I.E.	5/5/5/5/5/5/5/6/6/6/6	LOR	16.78755 %
D DIN 5040	B31	ULOR	5.80035 %
F UTE	0.11 E + 0.06 T	DLOR	10.98720 %
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°	0.82	0.82	0.49 %	0.49 %
10°	2.31	3.13	1.37 %	1.86 %
15°	4.08	7.21	2.43 %	4.29 %
20°	6.11	13.32	3.64 %	7.93 %
25°	7.94	21.26	4.73 %	12.66 %
30°	9.31	30.57	5.54 %	18.21 %
35°	10.14	40.71	6.04 %	24.25 %
40°	10.39	51.10	6.19 %	30.44 %
45°	10.05	61.15	5.99 %	36.42 %
50°	9.21	70.36	5.49 %	41.91 %
55°	8.05	78.41	4.80 %	46.71 %
60°	6.84	85.25	4.07 %	50.78 %
65°	5.74	90.99	3.42 %	54.20 %
70°	4.87	95.87	2.90 %	57.11 %
75°	4.17	100.04	2.48 %	59.59 %
80°	3.62	103.66	2.16 %	61.75 %
85°	3.23	106.89	1.93 %	63.67 %
90°	2.98	109.87	1.78 %	65.45 %
95°	3.04	112.91	1.81 %	67.26 %
100°	3.52	116.44	2.10 %	69.36 %
105°	4.23	120.67	2.52 %	71.88 %
110°	4.85	125.52	2.89 %	74.77 %
115°	5.23	130.75	3.12 %	77.88 %
120°	5.26	136.01	3.13 %	81.02 %
125°	4.91	140.91	2.92 %	83.94 %
130°	4.21	145.13	2.51 %	86.45 %
135°	3.32	148.45	1.98 %	88.43 %
140°	2.40	150.85	1.43 %	89.86 %
145°	1.63	152.48	0.97 %	90.83 %
150°	1.10	153.58	0.65 %	91.48 %
155°	0.98	154.56	0.59 %	92.07 %
160°	1.79	156.35	1.07 %	93.14 %
165°	3.10	159.46	1.85 %	94.98 %
170°	3.78	163.24	2.25 %	97.24 %
175°	3.27	166.51	1.95 %	99.19 %
180°	1.36	167.88	0.81 %	100.00 %

bover
barcelona lights

Luminaire		Measurem.		Lamp	
Code	0333003U+P747	Code	0233003+P745	Code	41457
Name	AMPHORA-03 2x29W CFL beige	Name	AMPHORA-02 2x30W CFL brown	Number	2
Line	- BOVER	Date	12-01-2016	Position	Universal

Luminaire Flux	587.56 lm	Luminaire Power	58.00 W	Efficacy	10.13 lm/W	Efficiency	16.79%
Lamps Flux	3500.00 lm	Maximum value	61.33 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	0.4	0.1	1.0	1.5	< 0	< 0	< 0	0.7	1.5
x=2H y=3H	0.2	1.0	0.9	1.8	2.4	< 0	0.7	0.6	1.5	2.4
x=2H y=4H	0.5	1.3	1.3	2.1	2.8	0.3	1.1	1.1	1.8	2.8
x=2H y=6H	0.9	1.6	1.7	2.4	3.3	0.8	1.5	1.6	2.3	3.3
x=2H y=8H	1.1	1.8	1.9	2.6	3.5	1.0	1.7	1.8	2.5	3.5
x=2H y=12H	1.3	2.0	2.2	2.8	3.7	1.2	1.9	2.1	2.7	3.7
x=4H y=2H	< 0	0.4	0.4	1.2	1.8	< 0	0.1	0.1	0.9	1.8
x=4H y=3H	0.7	1.3	1.6	2.2	2.9	0.5	1.1	1.3	1.9	2.9
x=4H y=4H	1.2	1.8	2.1	2.7	3.5	1.1	1.6	1.9	2.5	3.5
x=4H y=6H	1.7	2.2	2.5	3.0	4.1	1.6	2.2	2.5	3.0	4.1
x=4H y=8H	2.0	2.5	2.9	3.3	4.4	2.0	2.5	2.8	3.3	4.4
x=4H y=12H	2.2	2.6	3.1	3.5	4.6	2.2	2.6	3.1	3.5	4.6
x=8H y=4H	1.4	1.9	2.2	2.7	3.7	1.3	1.7	2.1	2.6	3.7
x=8H y=6H	2.1	2.5	3.0	3.4	4.4	2.1	2.5	2.9	3.3	4.4
x=8H y=8H	2.5	2.8	3.4	3.7	4.8	2.5	2.8	3.4	3.7	4.8
x=8H y=12H	2.9	3.2	3.8	4.1	5.2	2.9	3.2	3.8	4.1	5.2
x=12H y=4H	1.4	1.8	2.2	2.6	3.5	1.2	1.6	2.1	2.5	3.5
x=12H y=6H	2.2	2.5	3.1	3.4	4.4	2.1	2.5	3.0	3.4	4.4
x=12H y=8H	2.6	2.9	3.5	3.8	4.9	2.6	2.9	3.5	3.8	4.9

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Luminaire		Measurem.		Lamp	
Code	0333003U+P747	Code	0233003+P745	Code	41457
Name	AMPHORA-03 2x29W CFL beige	Name	AMPHORA-02 2x30W CFL brown	Number	2
Line	- BOVER	Date	12-01-2016	Position	Universal

Luminaire Flux	587.56 lm	Luminaire Power	58.00 W	Efficacy	10.13 lm/W	Efficiency	16.79%
Lamps Flux	3500.00 lm	Maximum value	61.33 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	75	67	68	62	64	59	54	46	51	43	45	34	41	28	40	36	32	33	27	30	28	24	22
0.80	83	77	73	68	73	65	62	54	56	49	50	40	45	33	46	42	38	38	32	36	33	29	26
1.00	89	83	76	71	79	68	68	60	60	54	54	44	49	37	50	46	42	42	36	40	37	33	29
1.25	94	89	78	74	85	71	73	67	63	57	57	48	52	42	54	49	46	46	40	44	41	37	32
1.50	98	93	79	75	89	72	78	72	65	60	59	51	54	45	57	52	49	48	43	47	44	40	35
2.00	103	99	79	76	94	74	85	79	67	64	62	56	58	50	60	56	53	53	48	51	48	44	39
2.50	106	103	79	77	98	75	89	84	69	66	64	59	60	53	63	59	56	55	51	54	51	48	41
3.00	108	105	79	77	101	75	93	88	70	67	66	61	62	56	64	61	59	58	54	56	54	51	44
4.00	111	109	78	77	104	75	97	94	71	69	68	64	65	59	66	63	62	61	58	60	57	54	46
5.00	113	111	78	77	106	75	100	97	72	70	69	66	66	62	68	65	64	63	60	62	60	57	48
10.00	116	115	77	77	111	75	107	106	73	73	72	70	70	67	70	69	68	67	66	66	65	63	53
20.00	118	118	76	76	113	75	111	110	74	74	73	72	72	71	72	71	70	70	69	69	68	66	55

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	68	64	59	56	61	54	48	45	44	41	37	32	32	27	39	33	31	29	26	30	27	25	22
0.80	78	74	66	63	70	61	57	53	51	47	43	39	38	33	45	39	37	34	32	36	32	30	26
1.00	85	81	70	67	77	65	64	60	55	52	48	43	43	37	49	43	41	39	36	39	35	33	29
1.25	91	87	74	71	83	68	71	66	60	56	53	48	48	42	53	47	45	43	40	43	39	36	32
1.50	96	93	77	74	87	71	76	72	63	60	57	52	51	46	56	50	49	46	43	46	42	39	34
2.00	102	99	79	77	93	74	83	79	67	64	61	57	56	51	59	55	53	51	48	49	46	42	36
2.50	107	104	81	79	97	75	88	85	70	67	65	61	60	55	62	58	56	54	51	52	49	44	38
3.00	110	107	82	81	100	77	92	89	72	70	67	64	63	59	63	60	58	57	54	54	51	46	40
4.00	115	113	85	84	105	80	98	96	75	74	72	69	68	64	67	64	63	61	59	57	55	50	43
5.00	119	117	87	86	109	82	103	101	78	77	75	73	72	69	70	67	66	65	63	61	59	53	45
10.00	130	130	95	94	121	90	117	115	88	87	86	84	84	82	79	78	77	76	75	70	69	62	54
20.00	140	139	102	102	130	98	128	127	96	96	95	94	94	92	88	87	86	86	85	79	78	71	62

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	86	82	80	76	79	74	63	59	61	57	51	47	45	41	55	47	46	42	40	44	39	38	35
0.80	103	98	95	91	94	88	78	73	74	70	65	59	58	52	67	59	57	53	50	55	50	47	44
1.00	116	111	106	102	106	98	90	85	85	81	76	70	68	62	76	69	67	63	59	64	58	55	52
1.25	129	124	116	112	118	108	102	97	96	92	87	80	79	72	86	78	76	72	69	72	67	63	59
1.50	138	134	123	120	126	115	112	107	104	100	95	89	88	80	93	86	83	80	76	79	74	69	65
2.00	152	148	134	131	139	125	126	121	116	112	108	102	101	94	103	97	95	92	88	89	84	78	74
2.50	161	157	140	138	148	132	136	131	123	120	116	111	110	103	110	105	103	100	96	95	91	84	79
3.00	167	164	145	143	154	136	143	139	129	126	123	117	117	110	115	110	108	106	102	100	97	88	83
4.00	176	173	151	149	162	142	153	149	136	133	130	126	126	120	122	118	116	114	111	106	103	94	89
5.00	181	179	154	153	166	145	159	155	140	138	136	132	131	126	126	122	121	119	116	110	108	97	92
10.00	192	191	161	161	177	153	173	171	150	149	147	145	144	141	135	132	132	130	129	119	117	105	99
20.00	198	198	165	165	183	157	181	180	155	155	154	152	152	150	140	139	138	137	136	124	123	110	104

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

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Luminaire		Measurem.		Lamp	
Code	0333003U+P747	Code	0233003+P745	Code	41457
Name	AMPHORA-03 2x29W CFL beige	Name	AMPHORA-02 2x30W CFL brown	Number	2
Line	- BOVER	Date	12-01-2016	Position	Universal

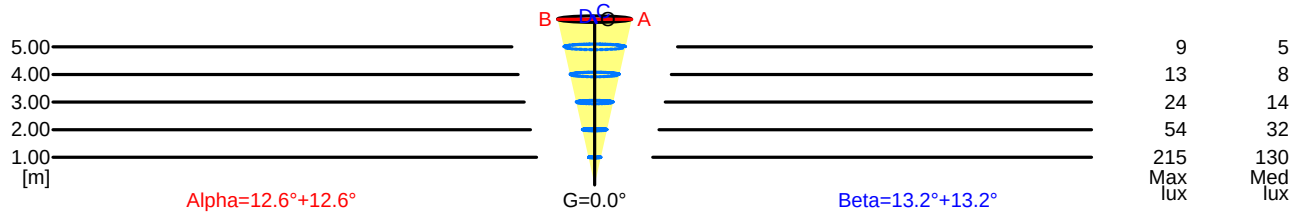
Luminaire Flux	587.56 lm	Luminaire Power	58.00 W	Efficacy	10.13 lm/W	Efficiency	16.79%
Lamps Flux	3500.00 lm	Maximum value	61.33 cd/klm	Position	C=0.00 G=180.00	CG	Asymmetrical

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	214.66	182.53	86.90	15.61	13.66	26.02	35.88	36.57	29.08	19.23
OB	214.66	182.53	86.90	15.61	13.66	26.02	35.88	36.57	29.08	19.23
OC	214.66	186.84	89.79	16.77	15.25	27.02	37.52	38.71	31.69	21.11
OD	214.66	186.84	89.79	16.77	15.25	27.02	37.52	38.71	31.69	21.11



5.00	2.24	9	5	
4.00	1.79	13	8	
3.00	1.34	24	14	
2.00	0.90	54	32	
1.00	0.45	215	130	
H[m]	D[m]	Max lux	Med lux	Alpha=12.6°+12.6° G=0.0

5.00	2.34	9	5	
4.00	1.88	13	8	
3.00	1.41	24	14	
2.00	0.94	54	32	
1.00	0.47	215	130	
H[m]	D[m]	Max lux	Med lux	Beta=13.2°+13.2° G=0.0

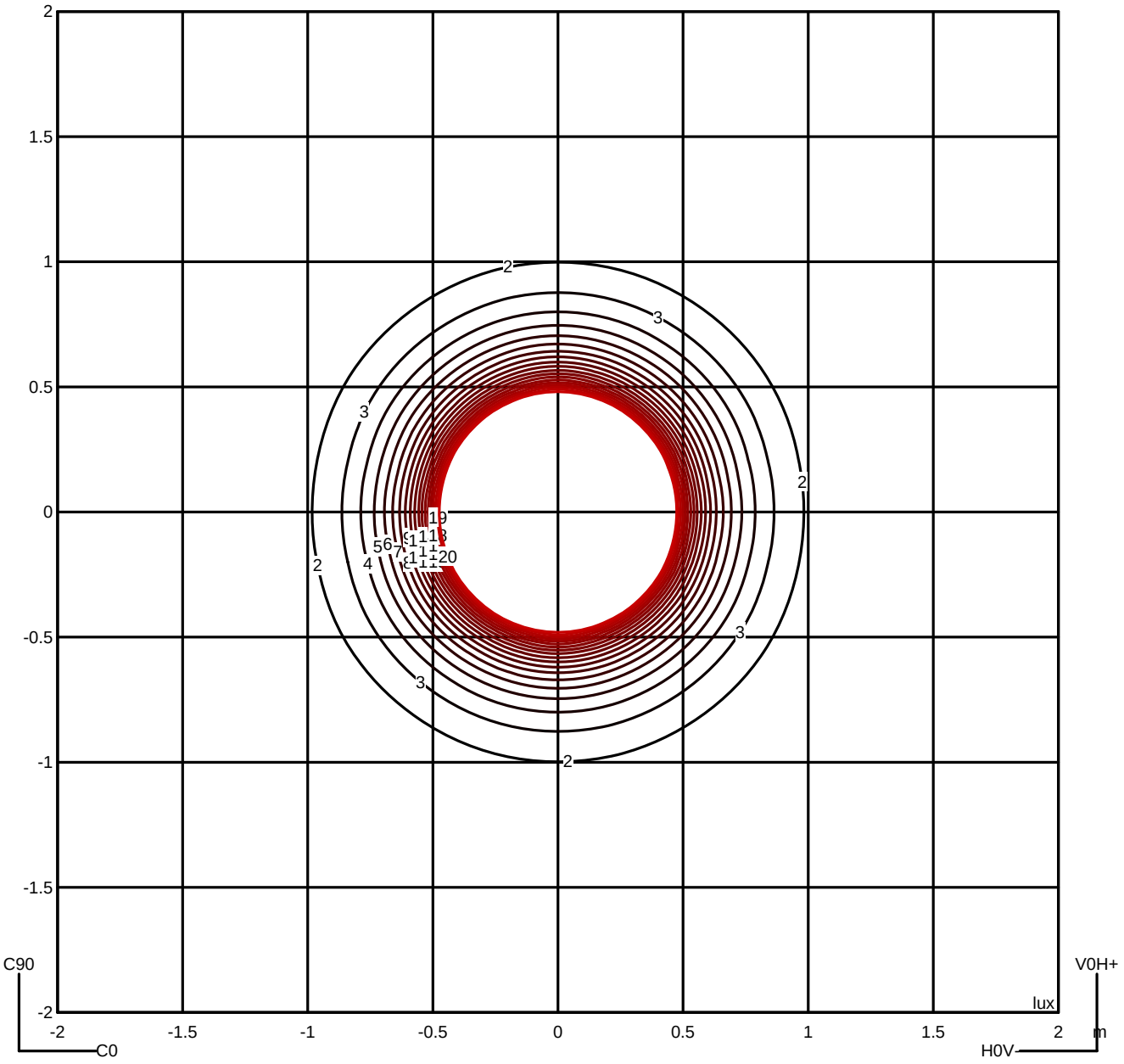
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Luminaire		Measurem.		Lamp	
Code	0333003U+P747	Code	0233003+P745	Code	41457
Name	AMPHORA-03 2x29W CFL beige	Name	AMPHORA-02 2x30W CFL brown	Number	2
Line	- BOVER	Date	12-01-2016	Position	Universal

Luminaire Flux	587.56 lm	Luminaire Power	58.00 W	Efficacy	10.13 lm/W	Efficiency	16.79%
Lamps Flux	3500.00 lm	Maximum value	61.33 cd/klm	Position	C=0.00 G=180.00	CG	Asymmetrical

Isolux (Floor)

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



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Luminaire		Measurem.		Lamp	
Code	0333003U+P747	Code	0233003+P745	Code	41457
Name	AMPHORA-03 2x29W CFL beige	Name	AMPHORA-02 2x30W CFL brown	Number	2
Line	- BOVER	Date	12-01-2016	Position	Universal

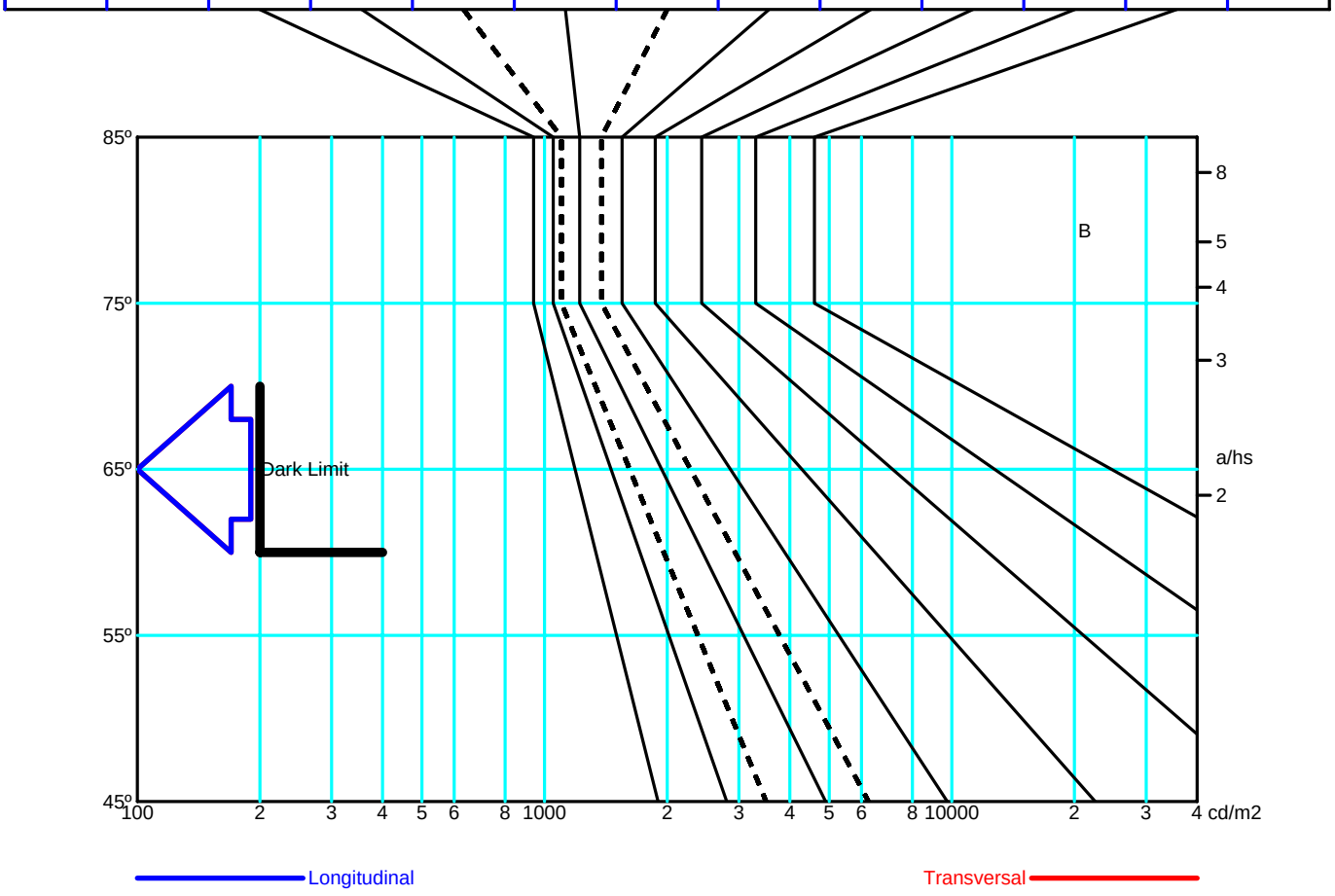
Luminaire Flux	587.56 lm	Luminaire Power	58.00 W	Efficacy	10.13 lm/W	Efficiency	16.79%
Lamps Flux	3500.00 lm	Maximum value	61.33 cd/klm	Position	C=0.00 G=180.00	CG	Asymmetrical

Average Luminance [cd/m²]

	45°	50°	55°	60°	65°	70°	75°	80°	85°	
0.0°	72	57	46	36	29	24	20	18	16	---
90.0°	73	58	46	36	29	24	21	19	17	---

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

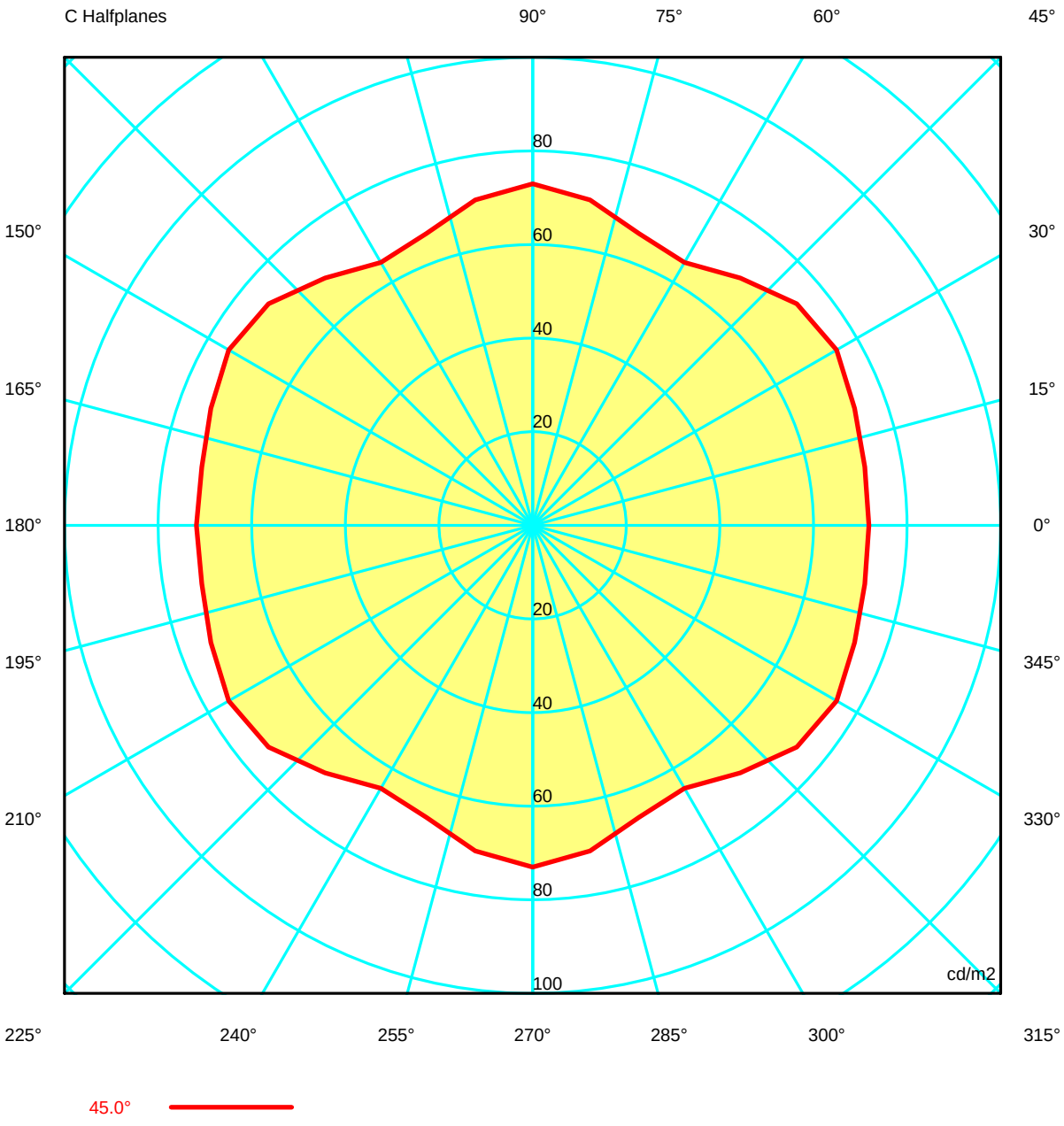


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Luminaire		Measurem.		Lamp	
Code	0333003U+P747	Code	0233003+P745	Code	41457
Name	AMPHORA-03 2x29W CFL beige	Name	AMPHORA-02 2x30W CFL brown	Number	2
Line	- BOVER	Date	12-01-2016	Position	Universal

Luminaire Flux	587.56 lm	Luminaire Power	58.00 W	Efficacy	10.13 lm/W	Efficiency	16.79%
Lamps Flux	3500.00 lm	Maximum value	61.33 cd/klm	Position	C=0.00 G=180.00	CG	Asymmetrical

Luminance



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Luminaire		**Measurem.**		**Lamp**	
Code	0333003U+P747	Code	0233003+P745	Code	41457
Name	AMPHORA-03 2x29W CFL beige	Name	AMPHORA-02 2x30W CFL brown	Number	2
Line	- BOVER	Date	12-01-2016	Position	Universal

Luminaire Flux	587.56 lm	Luminaire Power	58.00 W	Efficacy	10.13 lm/W	Efficiency	16.79%
Lamps Flux	3500.00 lm	Maximum value	61.33 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	207.22	207.22	207.22	207.22	207.22	207.22	207.22	207.22	207.22	207.22	207.22	207.22	207.22
G 5.0	157.70	159.70	155.74	149.93	152.23	156.29	157.29	156.11	153.55	151.87	153.55	156.11	157.29
G 10.0	149.36	142.77	138.30	136.57	137.06	140.49	143.79	142.35	141.89	143.21	141.89	142.35	143.79
G 15.0	147.54	143.34	140.16	138.38	137.94	139.36	141.46	142.43	144.80	147.06	144.79	142.43	141.46
G 20.0	139.57	137.33	135.44	134.18	133.92	135.37	137.44	138.23	139.66	141.08	139.66	138.23	137.44
G 25.0	129.14	127.57	125.53	123.85	124.15	126.11	128.00	128.02	128.29	128.87	128.29	128.02	128.00
G 30.0	117.97	115.64	114.02	113.05	112.23	111.97	112.15	112.33	114.07	115.79	114.07	112.33	112.15
G 35.0	103.89	102.34	102.30	102.32	99.51	96.62	95.70	96.72	99.81	102.14	99.81	96.72	95.70
G 40.0	86.32	86.71	88.57	90.01	87.21	82.08	78.82	80.80	84.71	86.65	84.71	80.80	78.82
G 45.0	71.85	72.06	73.18	74.98	73.67	69.01	64.87	66.38	70.63	73.00	70.63	66.38	64.87
G 50.0	56.75	57.22	58.80	60.34	59.27	56.45	53.77	53.04	55.34	57.63	55.34	53.04	53.77
G 55.0	45.59	45.72	46.57	47.80	46.50	44.82	43.36	41.32	43.05	46.01	43.05	41.32	43.36
G 60.0	35.62	35.24	36.44	37.92	36.90	35.65	34.81	33.20	34.02	35.86	34.02	33.20	34.81
G 65.0	28.58	28.26	28.99	29.97	29.33	28.67	28.40	27.60	27.82	28.59	27.82	27.60	28.40
G 70.0	23.79	23.39	23.85	24.61	24.29	24.00	23.95	23.79	23.74	23.83	23.74	23.79	23.95
G 75.0	19.74	19.82	20.01	20.28	20.24	20.31	20.45	20.19	20.32	20.68	20.32	20.19	20.45
G 80.0	17.66	17.59	17.75	18.03	18.12	18.16	18.23	18.32	18.47	18.58	18.47	18.32	18.23
G 85.0	15.98	16.05	16.29	16.60	16.71	16.72	16.75	16.82	16.82	16.79	16.82	16.82	16.75
G 90.0	15.69	15.85	16.07	16.32	16.52	16.66	16.71	16.63	16.66	16.76	16.66	16.63	16.71

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Luminaire		**Measurem.**		**Lamp**	
Code	0333003U+P747	Code	0233003+P745	Code	41457
Name	AMPHORA-03 2x29W CFL beige	Name	AMPHORA-02 2x30W CFL brown	Number	2
Line	- BOVER	Date	12-01-2016	Position	Universal

Luminaire Flux	587.56 lm	Luminaire Power	58.00 W	Efficacy	10.13 lm/W	Efficiency	16.79%
Lamps Flux	3500.00 lm	Maximum value	61.33 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	207.22	207.22	207.22	207.22	207.22	207.22	207.22	207.22	207.22	207.22	207.22	207.22	207.22
G 5.0	156.31	152.20	149.93	155.95	158.37	157.70	158.37	155.95	149.93	152.20	156.31	157.29	156.11
G 10.0	140.46	137.14	136.57	137.83	143.96	149.36	143.96	137.83	136.57	137.14	140.46	143.79	142.35
G 15.0	139.34	138.00	138.38	139.86	144.09	147.54	144.09	139.86	138.38	138.00	139.34	141.46	142.43
G 20.0	135.36	133.95	134.18	135.28	137.73	139.57	137.73	135.28	134.18	133.95	135.36	137.44	138.23
G 25.0	126.11	124.17	123.85	125.43	127.82	129.14	127.82	125.43	123.85	124.17	126.11	128.00	128.02
G 30.0	111.96	112.26	113.05	113.85	116.06	117.97	116.06	113.85	113.05	112.26	111.96	112.15	112.33
G 35.0	96.61	99.53	102.32	102.17	102.65	103.89	102.65	102.17	102.32	99.53	96.61	95.70	96.72
G 40.0	82.08	87.21	90.01	88.58	86.69	86.32	86.69	88.58	90.01	87.21	82.08	78.82	80.80
G 45.0	69.01	73.67	74.98	73.15	71.78	71.85	71.78	73.15	74.98	73.67	69.01	64.87	66.38
G 50.0	56.46	59.27	60.34	58.82	57.17	56.75	57.17	58.82	60.34	59.27	56.46	53.77	53.04
G 55.0	44.82	46.51	47.80	46.55	45.72	45.59	45.49	46.55	47.80	46.51	44.82	43.36	41.32
G 60.0	35.65	36.91	37.92	36.39	35.60	35.62	35.60	36.39	37.92	36.91	35.65	34.81	33.20
G 65.0	28.66	29.34	29.97	28.96	28.50	28.58	28.50	28.96	29.97	29.34	28.66	28.40	27.60
G 70.0	24.00	24.29	24.61	23.82	23.48	23.79	23.48	23.82	24.61	24.29	24.00	23.95	23.79
G 75.0	20.31	20.24	20.28	20.01	19.77	19.74	19.77	20.01	20.28	20.24	20.31	20.45	20.19
G 80.0	18.16	18.13	18.03	17.74	17.64	17.66	17.64	17.74	18.03	18.13	18.16	18.23	18.32
G 85.0	16.72	16.71	16.60	16.29	16.04	15.98	16.04	16.29	16.60	16.71	16.72	16.75	16.82
G 90.0	16.66	16.52	16.32	16.08	15.82	15.69	15.82	16.08	16.32	16.52	16.66	16.71	16.63

bover
barcelona lights

Luminaire		Measurem.		Lamp	
Code	0333003U+P747	Code	0233003+P745	Code	41457
Name	AMPHORA-03 2x29W CFL beige	Name	AMPHORA-02 2x30W CFL brown	Number	2
Line	- BOVER	Date	12-01-2016	Position	Universal

Luminaire Flux	587.56 lm	Luminaire Power	58.00 W	Efficacy	10.13 lm/W	Efficiency	16.79%
Lamps Flux	3500.00 lm	Maximum value	61.33 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	207.22	207.22	207.22	207.22	207.22	207.22	207.22	207.22	207.22	207.22
G 5.0	153.55	151.87	153.55	156.11	157.29	156.29	152.23	149.93	155.74	159.70
G 10.0	141.89	143.21	141.89	142.35	143.79	140.49	137.06	136.57	138.30	142.77
G 15.0	144.79	147.06	144.80	142.43	141.46	139.36	137.94	138.38	140.16	143.34
G 20.0	139.66	141.08	139.66	138.23	137.44	135.37	133.92	134.18	135.44	137.33
G 25.0	128.29	128.87	128.29	128.02	128.00	126.11	124.15	123.85	125.53	127.57
G 30.0	114.07	115.79	114.07	112.33	112.15	111.97	112.23	113.05	114.02	115.64
G 35.0	99.81	102.14	99.81	96.72	95.70	96.62	99.51	102.32	102.30	102.34
G 40.0	84.71	86.65	84.71	80.80	78.82	82.08	87.21	90.01	88.57	86.71
G 45.0	70.63	73.00	70.63	66.38	64.87	69.01	73.67	74.98	73.18	72.06
G 50.0	55.34	57.63	55.34	53.04	53.77	56.45	59.27	60.34	58.80	57.22
G 55.0	43.05	46.01	43.05	41.32	43.36	44.82	46.50	47.80	46.57	45.72
G 60.0	34.02	35.86	34.02	33.20	34.81	35.65	36.90	37.92	36.44	35.24
G 65.0	27.82	28.59	27.82	27.60	28.40	28.67	29.33	29.97	28.99	28.26
G 70.0	23.74	23.83	23.74	23.79	23.95	24.00	24.29	24.61	23.85	23.39
G 75.0	20.32	20.68	20.32	20.19	20.45	20.31	20.24	20.28	20.01	19.82
G 80.0	18.47	18.58	18.47	18.32	18.23	18.16	18.12	18.03	17.75	17.59
G 85.0	16.82	16.79	16.82	16.82	16.75	16.72	16.71	16.60	16.29	16.05
G 90.0	16.66	16.76	16.66	16.63	16.71	16.66	16.52	16.32	16.07	15.85