bover
barcelona lights

Luminaire		Measurem.		Lamp	
Code	33502300xxU+P802	Code	33502300xx+P802	Code	49885
Name	GAROTA P/02 2x20W CFL brown	Name	GAROTA P/02 2x20W CFL brown	Number	2
Line	- BOVER	Date	11-01-2016	Position	Universal

Luminaire Flux	393.15 lm	Luminaire Power	40.00 W	Efficacy	9.83 lm/W	Efficiency	16.38%
Lamps Flux	2400.00 lm	Maximum value	43.02 cd/klm	Position	C=0.00 G=180.00	CG	Asymmetrical

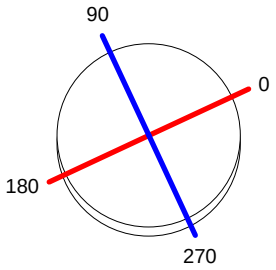
Round Luminaire	Diam. 720 mm		Height 460 mm		
Round Luminous Area	Diam. 720 mm		Height 460 mm		
Horizontal Luminous Area	0.407150 m2		Emitting area on Plane 180°	0.331200 m2	
Emitting area on Plane 0°	0.331200 m2		Emitting area on Plane 270°	0.331200 m2	
Emitting area on Plane 90°	0.331200 m2		Glare area at 76°	0.419861 m2	
Coordinate system	CG		Symmetry Type	Asymmetrical	
Date	11-01-2016		Maximum Gamma Angle	180	
Measurement Distance	6.44		Measurement Flux	2488.00 lm	
Operator	Asselum T2		Source voltage		
Temperature	25.00 °C		Source current		
Humidity	59.00 %		Photocell	Prc	
Notes					

Luminaire Lamps

Line	Code	Name	Flux [lm]	Pow. [W]	Q.ty
- BOVER	49885	FLE20TBX/2/SW/CD	1200.00	20.00	2

C.I.E.	52 75 88 53 16	D DIN 5040	C41
F UTE	0.09 D + 0.08 T	B NBN	BZ 4 / 1.25 / BZ 5

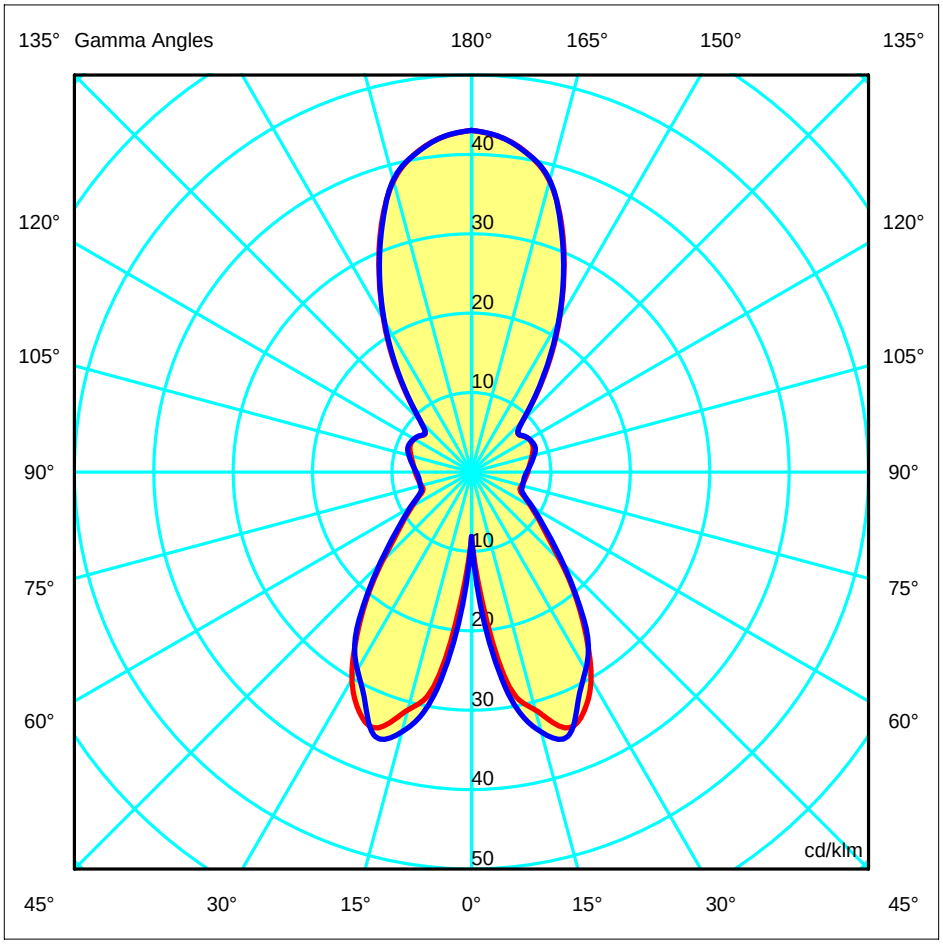
Diam=720mm



C Halfplanes

180.0 — 0.0

270.0 — 90.0



ULOR	7.71 %
DLOR	8.67 %
RN	47.05 %

bover
barcelona lights

Luminaire		Measurem.		Lamp	
Code	33502300xxU+P802	Code	33502300xx+P802	Code	49885
Name	GAROTA P/02 2x20W CFL brown	Name	GAROTA P/02 2x20W CFL brown	Number	2
Line	- BOVER	Date	11-01-2016	Position	Universal

Luminaire Flux	393.15 lm	Luminaire Power	40.00 W	Efficacy	9.83 lm/W	Efficiency	16.38%
Lamps Flux	2400.00 lm	Maximum value	43.02 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	8.12	8.12	8.12	8.12	8.12	8.12	8.12	8.12	8.12	8.12	8.12	8.12
G 5.0	16.95	20.55	19.08	19.14	17.02	18.86	19.33	18.86	17.02	19.14	19.08	20.55
G 10.0	27.47	31.49	30.11	30.05	29.92	30.31	29.20	30.31	29.92	30.05	30.11	31.49
G 15.0	31.01	35.43	33.29	36.00	35.45	33.81	33.88	33.81	35.45	36.00	33.29	35.43
G 20.0	34.29	36.24	36.56	38.04	35.27	35.92	35.45	35.92	35.27	38.04	36.56	36.24
G 25.0	33.38	34.20	35.47	34.70	33.32	32.57	31.79	32.57	33.32	34.70	35.47	34.20
G 30.0	30.11	30.37	30.80	30.44	29.80	28.17	28.75	28.17	29.80	30.44	30.80	30.37
G 35.0	25.17	25.35	25.72	25.35	25.08	23.42	25.52	23.42	25.08	25.35	25.72	25.35
G 40.0	20.35	20.44	20.86	20.45	20.22	19.01	20.61	19.01	20.22	20.45	20.86	20.44
G 45.0	15.87	16.09	16.62	16.08	15.89	15.88	16.36	15.88	15.89	16.08	16.62	16.09
G 50.0	12.43	12.59	13.05	12.71	12.41	12.60	12.95	12.60	12.41	12.71	13.05	12.59
G 55.0	10.36	10.45	10.76	10.56	10.36	10.42	10.66	10.42	10.36	10.56	10.76	10.45
G 60.0	8.64	8.66	8.85	8.74	8.68	8.76	8.90	8.76	8.68	8.74	8.85	8.66
G 65.0	7.26	7.23	7.35	7.33	7.38	7.49	7.51	7.49	7.38	7.33	7.35	7.23
G 70.0	6.50	6.47	6.53	6.57	6.59	6.71	6.70	6.71	6.59	6.57	6.53	6.47
G 75.0	6.53	6.54	6.60	6.67	6.62	6.64	6.64	6.64	6.62	6.67	6.60	6.54
G 80.0	6.71	6.67	6.80	6.84	6.74	6.68	6.65	6.68	6.74	6.84	6.80	6.67
G 85.0	6.89	6.78	6.91	6.95	6.93	6.77	6.71	6.77	6.93	6.95	6.91	6.78
G 90.0	7.09	6.97	7.05	7.11	7.15	6.96	6.94	6.96	7.15	7.11	7.05	6.97
G 95.0	7.29	7.23	7.33	7.41	7.43	7.31	7.31	7.31	7.43	7.41	7.33	7.23
G100.0	7.54	7.54	7.65	7.71	7.68	7.66	7.73	7.66	7.68	7.71	7.65	7.54
G105.0	7.90	7.91	8.03	8.01	7.99	8.07	8.16	8.07	7.99	8.01	8.03	7.91
G110.0	8.25	8.22	8.34	8.35	8.26	8.41	8.56	8.41	8.26	8.35	8.34	8.22
G115.0	8.46	8.33	8.41	8.42	8.39	8.51	8.58	8.51	8.39	8.42	8.41	8.33
G120.0	8.31	8.21	8.24	8.23	8.29	8.33	8.36	8.33	8.29	8.23	8.24	8.21
G125.0	7.93	7.88	7.87	7.86	7.98	8.02	7.97	8.02	7.98	7.86	7.87	7.88
G130.0	7.58	7.41	7.46	7.48	7.62	7.66	7.62	7.66	7.62	7.48	7.46	7.41
G135.0	9.10	8.96	8.96	9.01	9.07	9.11	9.11	9.11	9.07	9.01	8.96	8.96
G140.0	12.65	12.46	12.42	12.40	12.44	12.54	12.48	12.54	12.44	12.40	12.42	12.46
G145.0	17.15	16.96	16.89	16.89	16.88	16.97	16.85	16.97	16.88	16.89	16.89	16.96
G150.0	22.12	22.19	22.07	22.08	21.93	22.04	21.94	22.04	21.93	22.08	22.07	22.19
G155.0	27.59	27.68	27.58	27.67	27.51	27.52	27.42	27.52	27.51	27.67	27.58	27.68
G160.0	33.17	33.28	33.18	33.32	33.18	33.38	32.91	33.38	33.18	33.32	33.18	33.28
G165.0	37.94	38.27	38.08	38.24	38.13	38.25	38.08	38.25	38.13	38.24	38.08	38.27
G170.0	40.73	40.88	40.82	40.78	40.76	40.73	40.68	40.73	40.76	40.78	40.82	40.88
G175.0	42.34	42.41	42.50	42.41	42.42	42.36	42.35	42.36	42.42	42.41	42.50	42.41
G180.0	43.02	43.02	43.02	43.02	43.02	43.02	43.02	43.02	43.02	43.02	43.02	43.02

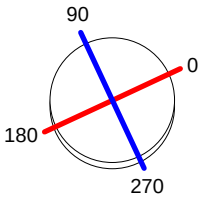
	C 180.00	C 195.00	C 210.00	C 225.00	C 240.00	C 255.00	C 270.00	C 285.00	C 300.00	C 315.00	C 330.00	C 345.00
G 0.0	8.12	8.12	8.12	8.12	8.12	8.12	8.12	8.12	8.12	8.12	8.12	8.12
G 5.0	16.95	20.55	19.08	19.14	17.02	18.86	19.33	18.86	17.02	19.14	19.08	20.55
G 10.0	27.47	31.49	30.11	30.05	29.92	30.31	29.20	30.31	29.92	30.05	30.11	31.49
G 15.0	31.01	35.43	33.29	36.00	35.45	33.81	33.88	33.81	35.45	36.00	33.29	35.43
G 20.0	34.29	36.24	36.56	38.04	35.27	35.92	35.45	35.92	35.27	38.04	36.56	36.24
G 25.0	33.38	34.20	35.47	34.70	33.32	32.57	31.79	32.57	33.32	34.70	35.47	34.20
G 30.0	30.11	30.37	30.80	30.44	29.80	28.17	28.75	28.17	29.80	30.44	30.80	30.37
G 35.0	25.17	25.35	25.72	25.35	25.08	23.42	25.52	23.42	25.08	25.35	25.72	25.35
G 40.0	20.35	20.44	20.86	20.45	20.22	19.01	20.61	19.01	20.22	20.45	20.86	20.44
G 45.0	15.87	16.09	16.62	16.08	15.89	15.88	16.36	15.88	15.89	16.08	16.62	16.09
G 50.0	12.43	12.59	13.05	12.71	12.41	12.60	12.95	12.60	12.41	12.71	13.05	12.59
G 55.0	10.36	10.45	10.76	10.56	10.36	10.42	10.66	10.42	10.36	10.56	10.76	10.45
G 60.0	8.64	8.66	8.85	8.74	8.68	8.76	8.90	8.76	8.68	8.74	8.85	8.66
G 65.0	7.26	7.23	7.35	7.33	7.38	7.49	7.51	7.49	7.38	7.33	7.35	7.23
G 70.0	6.50	6.47	6.53	6.57	6.59	6.71	6.70	6.71	6.59	6.57	6.53	6.47
G 75.0	6.53	6.54	6.60	6.67	6.62	6.64	6.64	6.64	6.62	6.67	6.60	6.54
G 80.0	6.71	6.67	6.80	6.84	6.74	6.68	6.65	6.68	6.74	6.84	6.80	6.67
G 85.0	6.89	6.78	6.91	6.95	6.93	6.77	6.71	6.77	6.93	6.95	6.91	6.78
G 90.0	7.09	6.97	7.05	7.11	7.15	6.96	6.94	6.96	7.15	7.11	7.05	6.97
G 95.0	7.29	7.23	7.33	7.41	7.43	7.31	7.31	7.31	7.43	7.41	7.33	7.23
G100.0	7.54	7.54	7.65	7.71	7.68	7.66	7.73	7.66	7.68	7.71	7.65	7.54
G105.0	7.90	7.91	8.03	8.01	7.99	8.07	8.16	8.07	7.99	8.01	8.03	7.91
G110.0	8.25	8.22	8.34	8.35	8.26	8.41	8.56	8.41	8.26	8.35	8.34	8.22
G115.0	8.46	8.33	8.41	8.42	8.39	8.51	8.58	8.51	8.39	8.42	8.41	8.33
G120.0	8.31	8.21	8.24	8.23	8.29	8.33	8.36	8.33	8.29	8.23	8.24	8.21
G125.0	7.93	7.88	7.87	7.86	7.98	8.02	7.97	8.02	7.98	7.86	7.87	7.88
G130.0	7.58	7.41	7.46	7.48	7.62	7.66	7.62	7.66	7.62	7.48	7.46	7.41
G135.0	9.10	8.96	8.96	9.01	9.07	9.11	9.11	9.11	9.07	9.01	8.96	8.96
G140.0	12.65	12.46	12.42	12.40	12.44	12.54	12.48	12.54	12.44	12.40	12.42	12.46
G145.0	17.15	16.96	16.89	16.89	16.88	16.97	16.85	16.97	16.88	16.89	16.89	16.96
G150.0	22.12	22.19	22.07	22.08	21.93	22.04	21.94	22.04	21.93	22.08	22.07	22.19
G155.0	27.59	27.68	27.58	27.67	27.51	27.52	27.42	27.52	27.51	27.67	27.58	27.68
G160.0	33.17	33.28	33.18	33.32	33.18	33.38	32.91	33.38	33.18	33.32	33.18	33.28
G165.0	37.94	38.27	38.08	38.24	38.13	38.25	38.08	38.25	38.13	38.24	38.08	38.27
G170.0	40.73	40.88	40.82	40.78	40.76	40.73	40.68	40.73	40.76	40.78	40.82	40.88
G175.0	42.34	42.41	42.50	42.41	42.42	42.36	42.35	42.36	42.42	42.41	42.50	42.41
G180.0	43.02	43.02	43.02	43.02	43.02	43.02	43.02	43.02	43.02	43.02	43.02	43.02

bover
barcelona lights

Luminaire		Measurem.		Lamp	
Code	33502300xxU+P802	Code	33502300xx+P802	Code	49885
Name	GAROTA P/02 2x20W CFL brown	Name	GAROTA P/02 2x20W CFL brown	Number	2
Line	- BOVER	Date	11-01-2016	Position	Universal

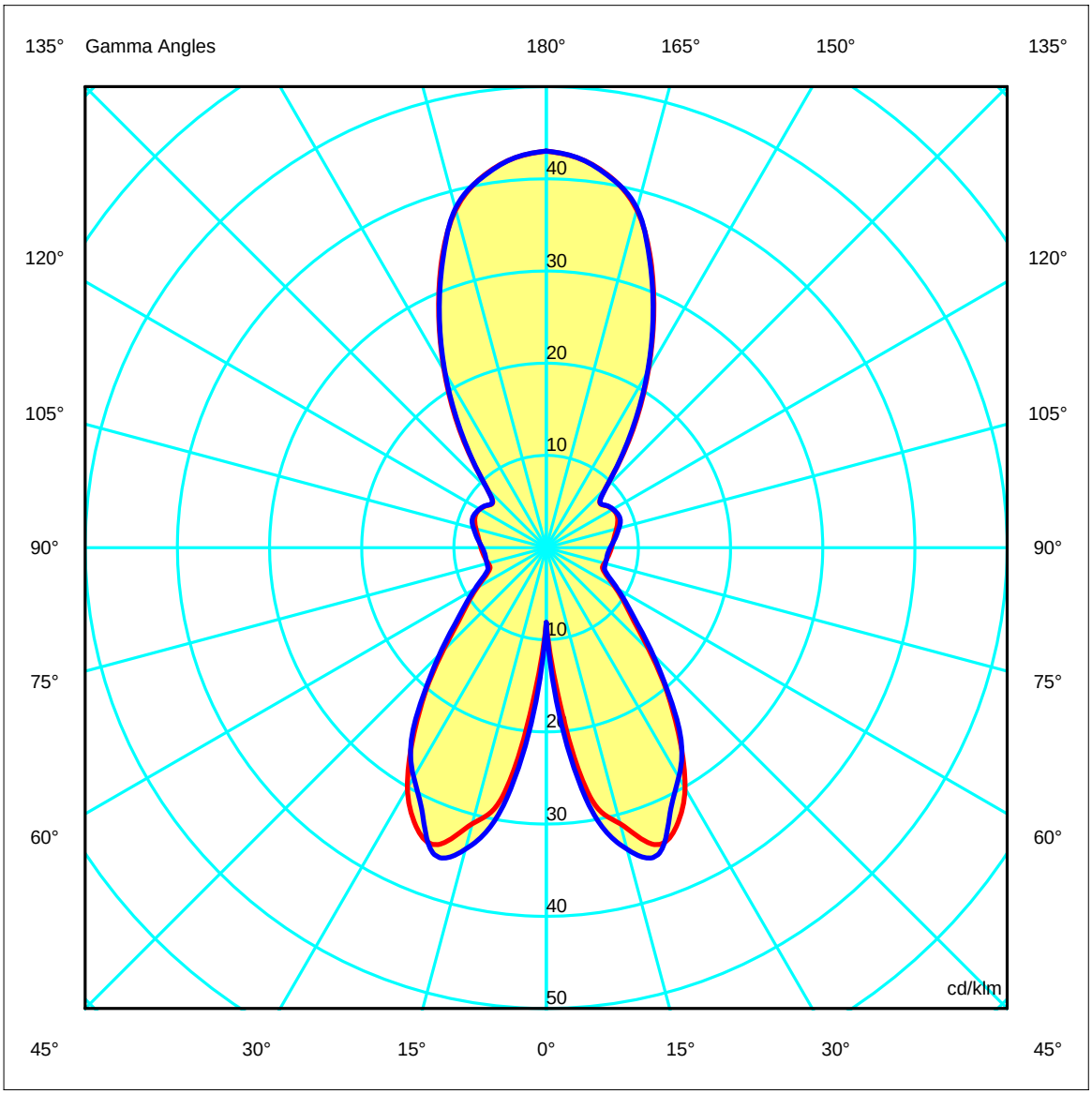
Luminaire Flux	393.15 lm	Luminaire Power	40.00 W	Efficacy	9.83 lm/W	Efficiency	16.38%
Lamps Flux	2400.00 lm	Maximum value	43.02 cd/klm	Position	C=0.00 G=180.00	CG	Asymmetrical

Diam=720mm



C Halfplanes



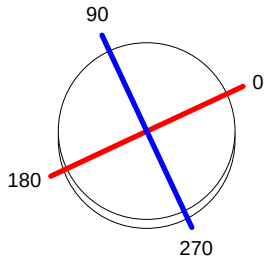


bover
barcelona lights

Luminaire		Measurem.		Lamp	
Code	33502300xxU+P802	Code	33502300xx+P802	Code	49885
Name	GAROTA P/02 2x20W CFL brown	Name	GAROTA P/02 2x20W CFL brown	Number	2
Line	- BOVER	Date	11-01-2016	Position	Universal

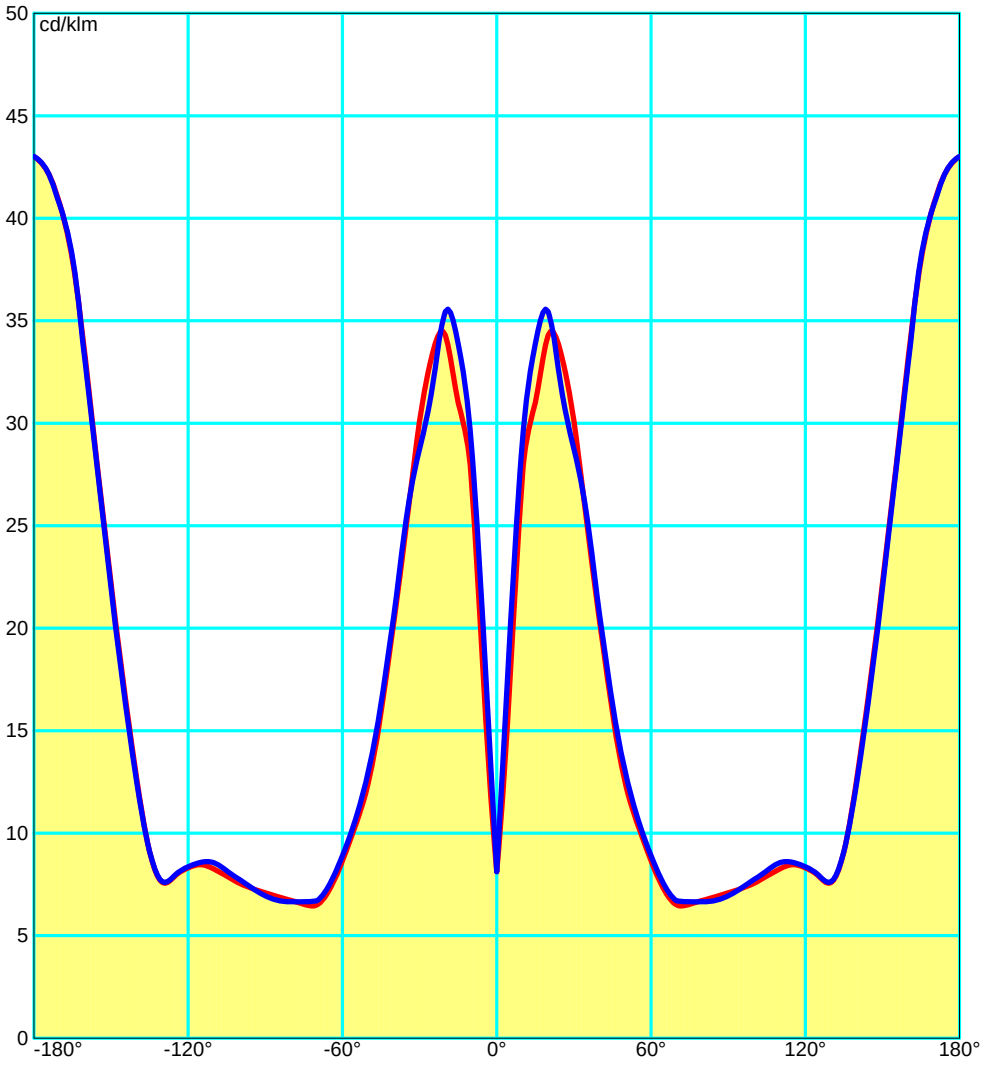
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Diam=720mm



C Halfplanes





bover
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Luminaire		Measurem.		Lamp	
Code	33502300xxU+P802	Code	33502300xx+P802	Code	49885
Name	GAROTA P/02 2x20W CFL brown	Name	GAROTA P/02 2x20W CFL brown	Number	2
Line	- BOVER	Date	11-01-2016	Position	Universal

Luminaire Flux	393.15 lm	Luminaire Power	40.00 W	Efficacy	9.83 lm/W	Efficiency	16.38%
Lamps Flux	2400.00 lm	Maximum value	43.02 cd/klm	Position	C=0.00 G=180.00	CG	Asymmetrical

Total Flux=2400.00 Luminaire Flux=393.15

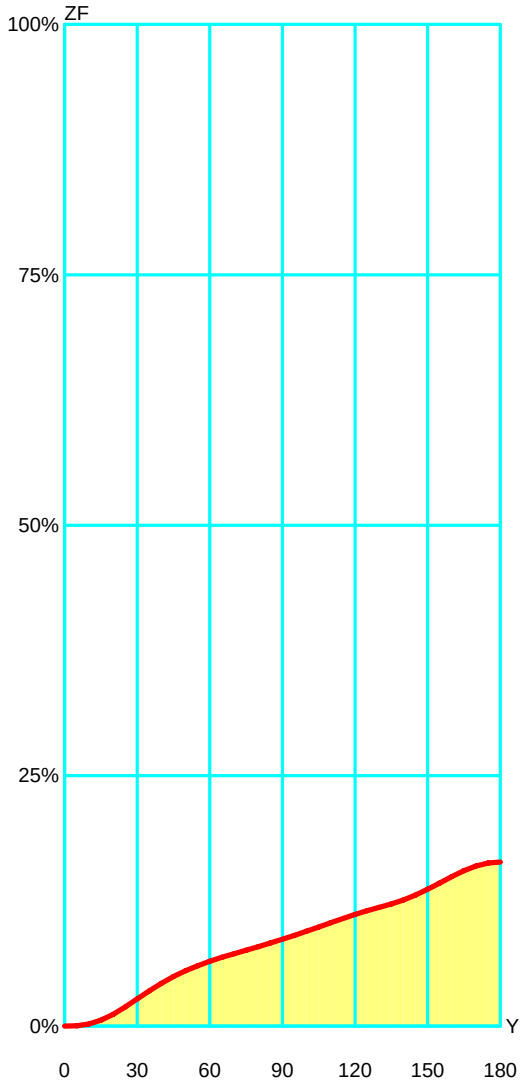
RI	0.60	0.80	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00	10.00	20.00
DRR	0.35	0.42	0.48	0.54	0.58	0.66	0.71	0.74	0.79	0.82	0.89	0.93
RC	4	5	5	5	5	5	6	6	6	6	7	7

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)	2	12	27	43	55	65	72	79	87	95	103	112	119	126	137	149	160	164

CIE Flux Codes
52 75 88 53 16

C.I.E.	4/5/5/5/5/5/6/6/6/6/7/7	LOR	16.38132 %
D DIN 5040	C41	ULOR	7.70788 %
F UTE	0.09 D + 0.08 T	DLOR	8.67344 %
B NBN	BZ 4 / 1.25 / BZ 5	UFF	47.05289 %
RN	47.05289 %	DFF	52.94711 %
BLF	1.0	FFR	88.86772 %



Zonal Flux				
Gamma °	Flux	Sum lm	Flux [%]	Sum [%]
0°	0.00	0.00	0.00%	0.00 %
5°	0.32	0.32	0.20 %	0.20 %
10°	1.75	2.07	1.07 %	1.26 %
15°	3.82	5.89	2.33 %	3.60 %
20°	5.81	11.71	3.55 %	7.15 %
25°	7.34	19.04	4.48 %	11.63 %
30°	8.05	27.10	4.92 %	16.54 %
35°	8.08	35.18	4.93 %	21.48 %
40°	7.56	42.73	4.61 %	26.09 %
45°	6.73	49.47	4.11 %	30.20 %
50°	5.82	55.28	3.55 %	33.75 %
55°	5.04	60.32	3.08 %	36.82 %
60°	4.45	64.77	2.72 %	39.54 %
65°	3.91	68.69	2.39 %	41.93 %
70°	3.53	72.22	2.15 %	44.08 %
75°	3.45	75.66	2.10 %	46.19 %
80°	3.57	79.23	2.18 %	48.37 %
85°	3.69	82.93	2.25 %	50.62 %
90°	3.81	86.73	2.32 %	52.95 %
95°	3.94	90.67	2.40 %	55.35 %
100°	4.07	94.74	2.49 %	57.84 %
105°	4.19	98.93	2.56 %	60.39 %
110°	4.27	103.20	2.61 %	63.00 %
115°	4.24	107.44	2.59 %	65.59 %
120°	4.06	111.51	2.48 %	68.07 %
125°	3.74	115.25	2.29 %	70.35 %
130°	3.36	118.61	2.05 %	72.41 %
135°	3.35	121.96	2.04 %	74.45 %
140°	3.98	125.94	2.43 %	76.88 %
145°	4.91	130.85	2.99 %	79.88 %
150°	5.74	136.59	3.50 %	83.38 %
155°	6.28	142.87	3.83 %	87.22 %
160°	6.38	149.25	3.89 %	91.11 %
165°	5.88	155.13	3.59 %	94.70 %
170°	4.68	159.82	2.86 %	97.56 %
175°	2.98	162.79	1.82 %	99.38 %
180°	1.02	163.81	0.62 %	100.00 %

bover
barcelona lights

Luminaire		Measurem.		Lamp	
Code	33502300xxU+P802	Code	33502300xx+P802	Code	49885
Name	GAROTA P/02 2x20W CFL brown	Name	GAROTA P/02 2x20W CFL brown	Number	2
Line	- BOVER	Date	11-01-2016	Position	Universal

Luminaire Flux	393.15 lm	Luminaire Power	40.00 W	Efficacy	9.83 lm/W	Efficiency	16.38%
Lamps Flux	2400.00 lm	Maximum value	43.02 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	< 0	< 0	0.9	< 0	< 0	< 0	< 0	0.9
x=2H y=3H	< 0	< 0	0.1	0.9	2.0	< 0	0.0	0.2	0.9	2.0
x=2H y=4H	< 0	0.7	0.9	1.6	2.8	0.1	0.8	1.0	1.7	2.8
x=2H y=6H	1.0	1.7	1.9	2.5	3.8	1.1	1.7	2.0	2.6	3.8
x=2H y=8H	1.6	2.2	2.5	3.1	4.3	1.6	2.2	2.5	3.1	4.3
x=2H y=12H	2.1	2.8	3.1	3.7	4.8	2.1	2.8	3.1	3.7	4.8
x=4H y=2H	< 0	< 0	< 0	0.0	1.2	< 0	< 0	< 0	0.0	1.2
x=4H y=3H	< 0	0.4	0.8	1.4	2.5	< 0	0.5	0.8	1.4	2.5
x=4H y=4H	0.9	1.4	1.8	2.3	3.6	0.9	1.5	1.9	2.4	3.6
x=4H y=6H	2.1	2.5	3.0	3.5	4.7	2.1	2.6	3.1	3.6	4.7
x=4H y=8H	2.8	3.2	3.7	4.2	5.4	2.8	3.2	3.7	4.2	5.4
x=4H y=12H	3.5	3.9	4.5	4.9	6.1	3.5	3.9	4.5	4.9	6.1
x=8H y=4H	1.3	1.7	2.3	2.7	4.0	1.4	1.8	2.3	2.8	4.0
x=8H y=6H	2.8	3.2	3.8	4.2	5.5	2.9	3.2	3.8	4.2	5.5
x=8H y=8H	3.7	4.0	4.7	5.0	6.2	3.7	4.0	4.7	5.0	6.2
x=8H y=12H	4.5	4.8	5.6	5.9	7.2	4.5	4.8	5.6	5.8	7.2
x=12H y=4H	1.4	1.8	2.4	2.8	4.0	1.5	1.8	2.5	2.8	4.0
x=12H y=6H	3.0	3.3	4.0	4.3	5.6	3.0	3.4	4.0	4.3	5.6
x=12H y=8H	3.9	4.2	5.0	5.2	6.6	3.9	4.2	5.0	5.3	6.6

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Luminaire		Measurem.		Lamp	
Code	33502300xxU+P802	Code	33502300xx+P802	Code	49885
Name	GAROTA P/02 2x20W CFL brown	Name	GAROTA P/02 2x20W CFL brown	Number	2
Line	- BOVER	Date	11-01-2016	Position	Universal

Luminaire Flux	393.15 lm	Luminaire Power	40.00 W	Efficacy	9.83 lm/W	Efficiency	16.38%
Lamps Flux	2400.00 lm	Maximum value	43.02 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	87	78	80	72	74	69	65	55	62	53	57	43	53	36	49	46	41	44	35	39	37	32	29
0.80	96	88	87	80	84	76	74	64	69	60	63	50	59	43	56	53	47	50	41	45	43	38	34
1.00	102	95	90	84	91	81	80	72	73	66	67	56	63	48	61	57	53	54	46	50	48	42	39
1.25	108	102	92	88	97	84	87	79	77	70	71	61	67	53	66	62	58	59	51	55	52	47	43
1.50	112	106	94	90	101	86	91	84	80	74	74	65	70	58	70	65	61	62	55	59	56	51	46
2.00	117	113	95	92	108	89	98	92	83	78	78	70	74	63	74	70	67	67	61	64	61	57	51
2.50	121	117	96	93	112	90	103	98	85	81	80	74	77	68	77	74	71	71	65	68	65	61	55
3.00	123	120	96	94	115	91	107	102	86	83	82	76	79	71	79	76	73	73	68	71	68	64	58
4.00	126	124	96	94	118	92	112	108	88	86	85	80	81	75	82	79	77	77	73	74	72	68	62
5.00	128	126	96	95	121	92	115	112	89	87	86	82	83	78	84	81	79	79	76	77	75	71	64
10.00	132	131	95	95	126	93	122	120	91	90	89	87	87	84	87	86	85	84	82	82	81	78	70
20.00	134	134	95	94	128	93	126	125	92	91	91	90	90	88	89	88	87	87	86	85	85	82	73

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	62	57	54	50	54	48	43	38	39	35	32	27	28	22	33	28	26	24	21	24	21	19	17
0.80	72	67	61	57	63	54	52	47	45	41	39	33	34	27	38	33	31	29	26	29	26	23	20
1.00	79	74	65	62	70	59	58	53	50	46	44	38	39	32	42	37	35	33	30	33	29	26	23
1.25	86	81	70	67	76	63	65	60	55	51	49	43	44	37	46	42	39	38	34	36	33	29	25
1.50	91	87	73	70	81	66	70	66	59	55	53	47	48	41	50	45	43	41	38	39	36	32	27
2.00	98	95	76	74	88	70	78	74	63	60	58	53	54	47	54	50	48	46	43	43	40	35	30
2.50	103	100	79	77	92	72	84	80	67	64	62	57	58	52	57	53	51	50	47	46	43	38	32
3.00	107	104	81	79	96	74	88	84	69	67	65	61	61	56	59	56	54	53	50	48	46	40	34
4.00	113	111	85	83	102	78	95	92	74	72	70	67	67	62	64	61	59	58	55	53	51	44	37
5.00	117	115	87	86	106	81	100	98	78	76	74	71	71	67	67	65	63	62	60	56	54	47	40
10.00	130	129	96	96	119	91	115	113	88	87	86	84	84	81	78	76	75	74	73	67	65	57	49
20.00	140	140	105	104	129	99	127	126	98	97	96	95	95	93	87	86	85	85	84	76	75	66	58

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	80	75	75	70	72	67	58	53	56	51	48	42	42	36	49	42	40	38	35	39	35	32	30
0.80	96	90	88	83	86	80	71	66	68	63	59	52	53	45	59	52	49	47	43	47	42	39	36
1.00	108	102	98	94	97	89	82	76	78	72	69	62	62	54	67	60	57	55	51	54	49	45	42
1.25	120	114	108	104	107	98	93	87	87	82	79	71	72	63	75	68	65	63	58	60	56	51	47
1.50	129	123	115	111	115	105	102	96	94	89	86	78	80	70	81	75	72	70	65	66	62	55	51
2.00	142	137	125	122	127	114	115	109	105	101	98	90	92	82	90	85	82	80	75	74	70	62	57
2.50	150	146	131	128	135	121	124	119	113	109	106	99	100	91	97	92	89	87	82	80	76	67	61
3.00	157	153	136	133	141	125	131	126	118	114	112	105	106	98	101	97	94	93	88	84	81	70	64
4.00	165	162	141	139	149	131	140	136	125	122	119	114	115	107	107	103	101	100	96	89	86	75	68
5.00	170	167	145	143	154	134	146	142	129	126	124	120	120	114	111	108	106	104	101	93	90	78	71
10.00	181	180	152	151	165	142	160	158	139	137	136	133	133	129	120	118	117	116	114	101	100	85	77
20.00	188	187	156	156	171	146	168	167	144	144	143	141	141	139	125	124	123	123	122	106	105	89	81

LM53 SHR C0-C180: 2.221 SHR C90-C270: 2.241 SHR Square: 1.150

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Luminaire		Measurem.		Lamp	
Code	33502300xxU+P802	Code	33502300xx+P802	Code	49885
Name	GAROTA P/02 2x20W CFL brown	Name	GAROTA P/02 2x20W CFL brown	Number	2
Line	- BOVER	Date	11-01-2016	Position	Universal

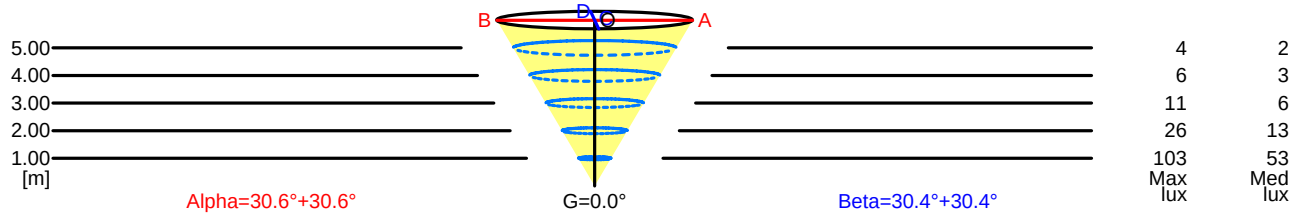
Luminaire Flux	393.15 lm	Luminaire Power	40.00 W	Efficacy	9.83 lm/W	Efficiency	16.38%
Lamps Flux	2400.00 lm	Maximum value	43.02 cd/klm	Position	C=0.00 G=180.00	CG	Asymmetrical

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	0.59	1.18	1.77	2.36	2.96	OC	0.59	1.17	1.76	2.35	2.93
OB	0.59	1.18	1.77	2.36	2.96	OD	0.59	1.17	1.76	2.35	2.93

Luminous Intensities [cd/klm]

	0	5	15	25	35	45	55	65	75	85
OA	103.24	101.62	91.06	66.21	41.15	21.85	19.02	20.31	18.97	17.50
OB	103.24	101.62	91.06	66.21	41.15	21.85	19.02	20.31	18.97	17.50
OC	103.24	101.63	91.39	65.82	40.44	21.86	19.12	20.59	19.59	17.54
OD	103.24	101.63	91.39	65.82	40.44	21.86	19.12	20.59	19.59	17.54



5.00	5.91	4	2	
4.00	4.73	6	3	
3.00	3.55	11	6	
2.00	2.36	26	13	
1.00	1.18	103	53	
H[m]	D[m]	Max lux	Med lux	Alpha=30.6°+30.6° G=0.0

5.00	5.87	4	2	
4.00	4.69	6	3	
3.00	3.52	11	6	
2.00	2.35	26	13	
1.00	1.17	103	53	
H[m]	D[m]	Max lux	Med lux	Beta=30.4°+30.4° G=0.0

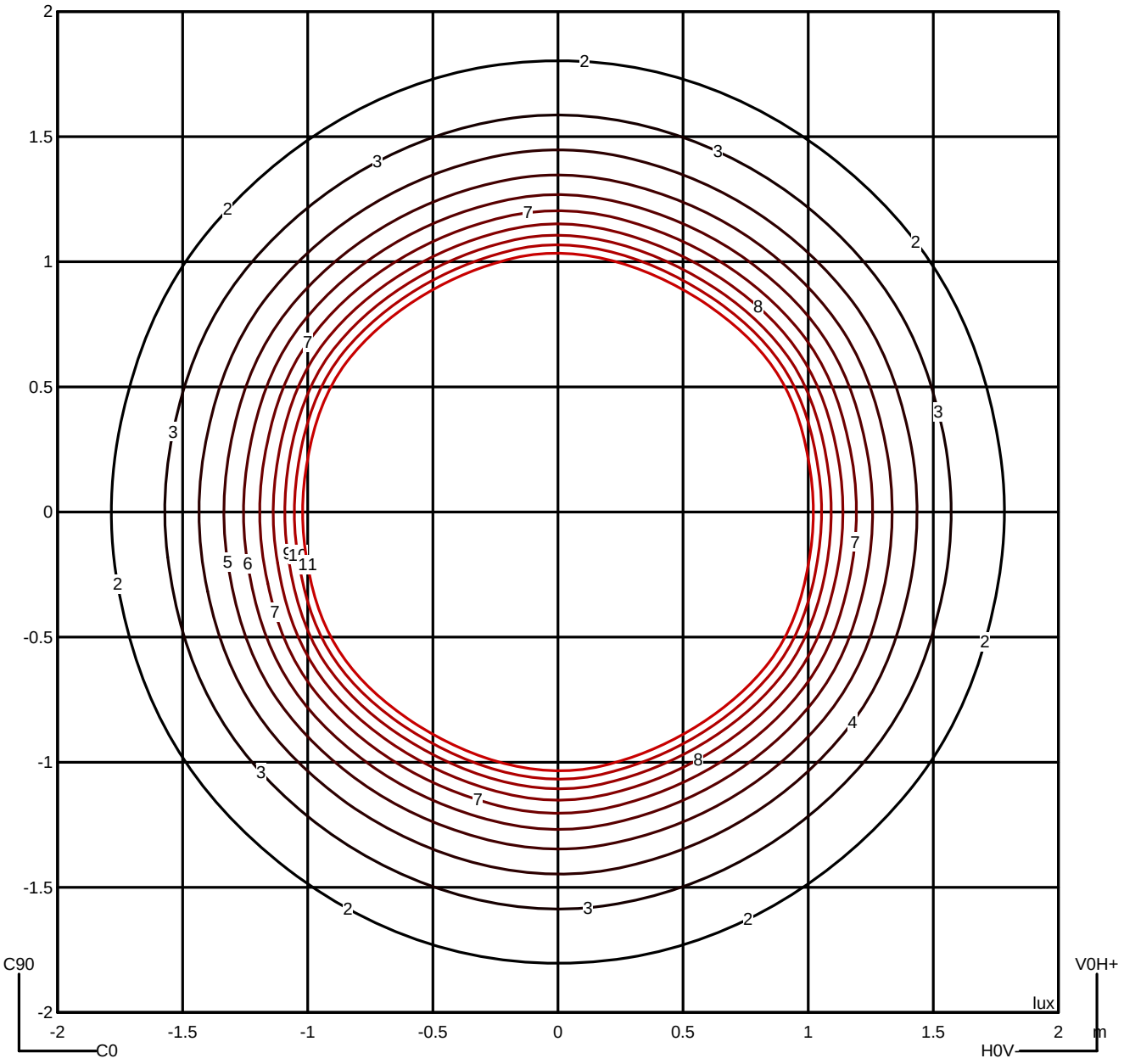
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Luminaire		Measurem.		Lamp	
Code	33502300xxU+P802	Code	33502300xx+P802	Code	49885
Name	GAROTA P/02 2x20W CFL brown	Name	GAROTA P/02 2x20W CFL brown	Number	2
Line	- BOVER	Date	11-01-2016	Position	Universal

Luminaire Flux	393.15 lm	Luminaire Power	40.00 W	Efficacy	9.83 lm/W	Efficiency	16.38%
Lamps Flux	2400.00 lm	Maximum value	43.02 cd/klm	Position	C=0.00 G=180.00	CG	Asymmetrical

Isolux (Floor)

Luminaire position X=0.00m Y=0.00m Z=0.87m



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Luminaire		Measurem.		Lamp	
Code	33502300xxU+P802	Code	33502300xx+P802	Code	49885
Name	GAROTA P/02 2x20W CFL brown	Name	GAROTA P/02 2x20W CFL brown	Number	2
Line	- BOVER	Date	11-01-2016	Position	Universal

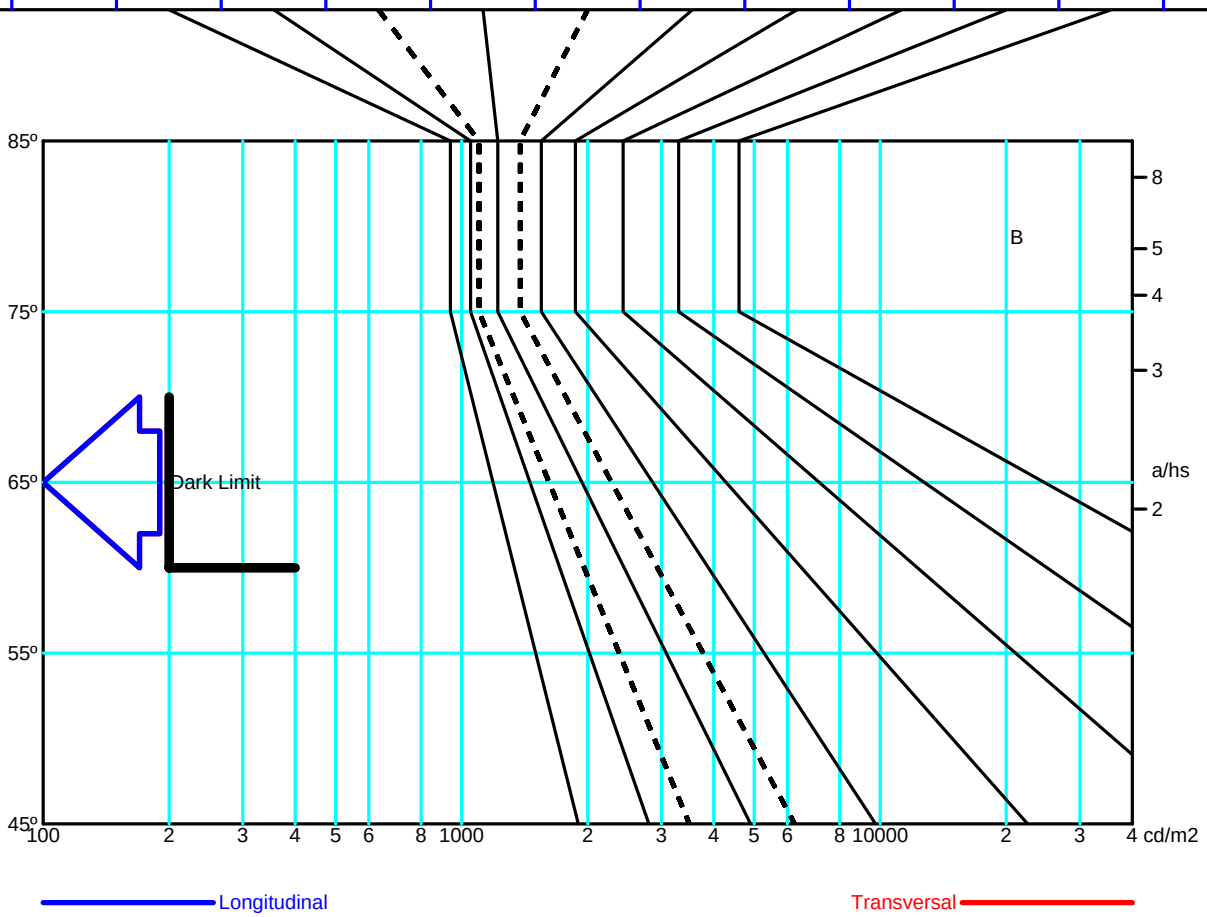
Luminaire Flux	393.15 lm	Luminaire Power	40.00 W	Efficacy	9.83 lm/W	Efficiency	16.38%
Lamps Flux	2400.00 lm	Maximum value	43.02 cd/klm	Position	C=0.00 G=180.00	CG	Asymmetrical

Average Luminance [cd/m²]

	45°	50°	55°	60°	65°	70°	75°	80°	85°	
0.0°	73	58	49	42	37	35	37	41	45	---
90.0°	75	60	51	44	38	36	37	40	44	---

Flush mounted or transveral view

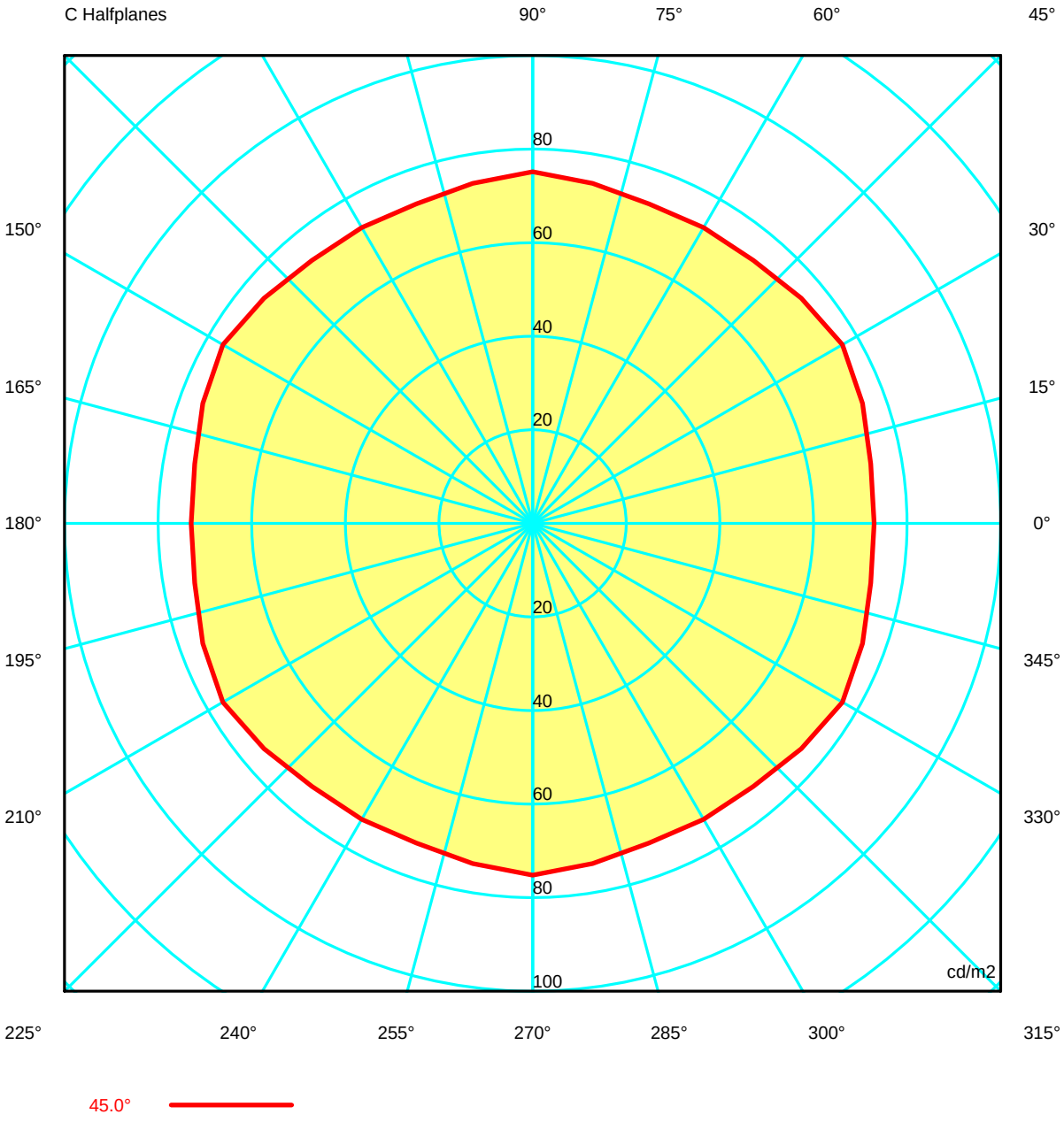
		Illumination(lx)										
A	A	2000	1000	750	500		<300					1.15
B	1		2000	1500	1000	750	500	<300				1.5
C					2000		1000	500	<300			1.85
D	2						2000	1000	500	<300		2.2
E	3							2000	1000	500	<300	2.55



Luminaire		Measurem.		Lamp	
Code	33502300xxU+P802	Code	33502300xx+P802	Code	49885
Name	GAROTA P/02 2x20W CFL brown	Name	GAROTA P/02 2x20W CFL brown	Number	2
Line	- BOVER	Date	11-01-2016	Position	Universal

Luminaire Flux	393.15 lm	Luminaire Power	40.00 W	Efficacy	9.83 lm/W	Efficiency	16.38%
Lamps Flux	2400.00 lm	Maximum value	43.02 cd/klm	Position	C=0.00 G=180.00	CG	Asymmetrical

Luminance



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Luminaire		Measurem.		Lamp	
Code	33502300xxU+P802	Code	33502300xx+P802	Code	49885
Name	GAROTA P/02 2x20W CFL brown	Name	GAROTA P/02 2x20W CFL brown	Number	2
Line	- BOVER	Date	11-01-2016	Position	Universal

Luminaire Flux	393.15 lm	Luminaire Power	40.00 W	Efficacy	9.83 lm/W	Efficiency	16.38%
Lamps Flux	2400.00 lm	Maximum value	43.02 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	47.87	47.87	47.87	47.87	47.87	47.87	47.87	47.87	47.87	47.87	47.87	47.87	47.87
G 5.0	93.65	110.02	110.81	105.41	106.29	101.82	94.04	99.94	106.35	106.77	106.36	99.92	94.04
G 10.0	143.81	160.82	162.42	157.61	157.42	157.10	156.63	157.99	156.69	152.86	156.70	157.99	156.63
G 15.0	155.35	174.13	174.85	166.78	175.19	182.01	177.63	171.31	169.53	169.75	169.53	171.29	177.63
G 20.0	165.95	173.38	175.82	176.95	183.43	180.49	170.72	172.80	173.61	171.58	173.61	172.80	170.72
G 25.0	157.42	159.55	163.59	167.24	165.74	161.27	157.09	154.78	152.01	149.89	152.01	154.78	157.09
G 30.0	139.44	140.08	141.50	142.66	141.69	140.48	138.03	132.19	130.87	133.14	130.87	132.19	138.03
G 35.0	115.39	115.74	116.98	117.92	116.65	115.79	114.96	108.30	110.38	117.01	110.38	108.30	114.96
G 40.0	93.05	93.34	94.29	95.42	94.10	93.15	92.45	87.55	89.22	94.26	89.22	87.55	92.45
G 45.0	72.94	73.33	74.98	76.42	74.92	73.38	73.03	72.69	73.81	75.19	73.81	72.69	73.03
G 50.0	57.88	58.12	59.41	60.74	59.97	58.51	57.77	58.11	59.37	60.29	59.37	58.11	57.77
G 55.0	49.27	49.53	50.22	51.17	50.68	49.77	49.27	49.25	49.99	50.67	49.99	49.25	49.27
G 60.0	42.28	42.36	42.74	43.33	43.03	42.57	42.49	42.66	43.16	43.54	43.16	42.66	42.49
G 65.0	36.92	36.70	36.92	37.34	37.30	37.25	37.50	37.92	38.15	38.15	38.15	37.92	37.50
G 70.0	34.61	34.49	34.56	34.79	34.97	35.04	35.11	35.56	35.71	35.68	35.71	35.56	35.11
G 75.0	36.85	36.88	36.98	37.27	37.57	37.56	37.36	37.45	37.49	37.47	37.49	37.45	37.36
G 80.0	40.61	40.31	40.52	41.10	41.38	41.18	40.73	40.47	40.31	40.24	40.31	40.47	40.73
G 85.0	45.25	44.61	44.74	45.40	45.65	45.70	45.54	44.82	44.23	44.10	44.23	44.82	45.54
G 90.0	51.38	50.65	50.61	51.11	51.40	51.76	51.82	50.90	50.28	50.32	50.28	50.90	51.82

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Luminaire		**Measurem.**		**Lamp**	
Code	33502300xxU+P802	Code	33502300xx+P802	Code	49885
Name	GAROTA P/02 2x20W CFL brown	Name	GAROTA P/02 2x20W CFL brown	Number	2
Line	- BOVER	Date	11-01-2016	Position	Universal

Luminaire Flux	393.15 lm	Luminaire Power	40.00 W	Efficacy	9.83 lm/W	Efficiency	16.38%
Lamps Flux	2400.00 lm	Maximum value	43.02 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	47.87	47.87	47.87	47.87	47.87	47.87	47.87	47.87	47.87	47.87	47.87	47.87	47.87
G 5.0	101.91	106.05	105.41	110.81	106.80	93.65	106.80	110.81	105.41	106.05	101.91	94.04	99.92
G 10.0	157.20	157.42	157.61	165.49	157.50	143.81	157.50	162.42	157.61	157.42	157.20	156.63	157.99
G 15.0	182.12	174.92	166.78	176.34	170.38	155.35	170.38	176.34	166.78	174.92	182.12	177.63	171.29
G 20.0	180.53	183.33	176.95	176.38	171.96	165.95	171.96	176.38	176.95	183.33	180.53	170.72	172.80
G 25.0	161.28	165.72	167.24	163.71	159.24	157.42	159.24	163.71	167.24	165.72	161.28	157.09	154.78
G 30.0	140.48	141.69	142.66	141.53	139.99	139.44	139.99	141.53	142.66	141.69	140.48	138.03	132.19
G 35.0	115.79	116.65	117.92	117.00	115.71	115.39	115.71	117.00	117.92	116.65	115.79	114.96	108.30
G 40.0	93.15	94.10	95.42	94.28	93.10	93.05	93.10	94.28	95.42	94.10	93.15	92.45	87.55
G 45.0	73.38	74.91	76.42	74.99	73.31	72.94	73.31	74.99	76.42	74.91	73.38	73.03	72.69
G 50.0	58.51	59.97	60.74	59.42	58.11	57.88	58.11	59.42	60.74	59.97	58.51	57.77	58.11
G 55.0	49.77	50.68	51.17	50.21	49.36	49.27	49.36	50.21	51.17	50.68	49.77	49.27	49.25
G 60.0	42.57	43.03	43.33	42.73	42.26	42.28	42.26	42.73	43.33	43.03	42.57	42.49	42.66
G 65.0	37.25	37.31	37.34	36.90	36.75	36.92	36.75	36.90	37.34	37.31	37.25	37.50	37.92
G 70.0	35.04	34.97	34.79	34.55	34.52	34.61	34.52	34.55	34.79	34.97	35.04	35.11	35.56
G 75.0	37.56	37.57	37.27	36.98	36.85	36.85	36.85	36.98	37.27	37.57	37.56	37.36	37.45
G 80.0	41.17	41.38	41.10	40.49	40.37	40.61	40.37	40.49	41.10	41.38	41.17	40.73	40.47
G 85.0	45.70	45.66	45.40	44.69	44.74	45.25	44.74	44.69	45.40	45.66	45.70	45.54	44.82
G 90.0	51.75	51.41	51.11	50.55	50.79	51.38	50.79	50.55	51.11	51.41	51.75	51.82	50.90

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Luminaire		**Measurem.**		**Lamp**	
Code	33502300xxU+P802	Code	33502300xx+P802	Code	49885
Name	GAROTA P/02 2x20W CFL brown	Name	GAROTA P/02 2x20W CFL brown	Number	2
Line	- BOVER	Date	11-01-2016	Position	Universal

Luminaire Flux	393.15 lm	Luminaire Power	40.00 W	Efficacy	9.83 lm/W	Efficiency	16.38%
Lamps Flux	2400.00 lm	Maximum value	43.02 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	47.87	47.87	47.87	47.87	47.87	47.87	47.87	47.87	47.87	47.87
G 5.0	106.36	106.77	106.35	99.94	94.04	101.82	106.29	105.41	110.81	110.02
G 10.0	156.70	152.86	156.69	157.99	156.63	157.10	157.42	157.61	164.18	160.82
G 15.0	169.53	169.75	169.53	171.31	177.63	182.01	175.19	166.78	174.85	174.13
G 20.0	173.61	171.58	173.61	172.80	170.72	180.49	183.43	176.95	175.82	173.38
G 25.0	152.01	149.89	152.01	154.78	157.09	161.27	165.74	167.24	163.59	159.55
G 30.0	130.87	133.14	130.87	132.19	138.03	140.48	141.69	142.66	141.50	140.08
G 35.0	110.38	117.01	110.38	108.30	114.96	115.79	116.65	117.92	116.98	115.74
G 40.0	89.22	94.26	89.22	87.55	92.45	93.15	94.10	95.42	94.29	93.34
G 45.0	73.81	75.19	73.81	72.69	73.03	73.38	74.92	76.42	74.98	73.33
G 50.0	59.37	60.29	59.37	58.11	57.77	58.51	59.97	60.74	59.41	58.12
G 55.0	49.99	50.67	49.99	49.25	49.27	49.77	50.68	51.17	50.22	49.53
G 60.0	43.16	43.54	43.16	42.66	42.49	42.57	43.03	43.33	42.74	42.36
G 65.0	38.15	38.15	38.15	37.92	37.50	37.25	37.30	37.34	36.92	36.70
G 70.0	35.71	35.68	35.71	35.56	35.11	35.04	34.97	34.79	34.56	34.49
G 75.0	37.49	37.47	37.49	37.45	37.36	37.56	37.57	37.27	36.98	36.88
G 80.0	40.31	40.24	40.31	40.47	40.73	41.18	41.38	41.10	40.52	40.31
G 85.0	44.23	44.10	44.23	44.82	45.54	45.70	45.65	45.40	44.74	44.61
G 90.0	50.28	50.32	50.28	50.90	51.82	51.76	51.40	51.11	50.61	50.65