

Luminaire Property

Luminaire: RH-MRD12 12W 3000K

Report NO.:

Test NO.: HLB210908

Lamp:

Sum Lumens: 1068.46 lm

Number of Lamps: 1

Diameter: 170mm

Length: mm

Photometric Type: Type C

Voltage: 230.7 V

Current: 0.091 A

Power: 11.3 W

Power Factor: 0.533

Ballast Type: EMC300.mA

Width: 170mm

Height: 38mm

Remark: 0.5W SMD2835 12C5B

Photometric Results

Lumens: 1068.46 lm

Efficiency: 94.554 lm/W

Central Intensity: 401.607cd

Maximum Intensity: 401.607cd

Angle of maximum intensity: C:0.0 G:0.0

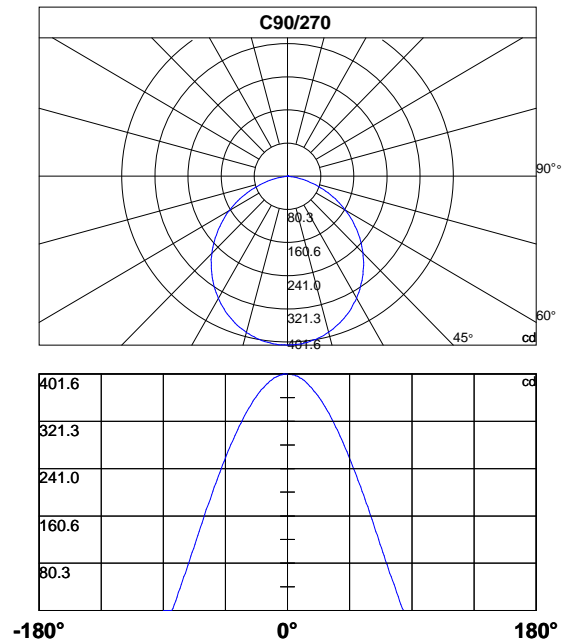
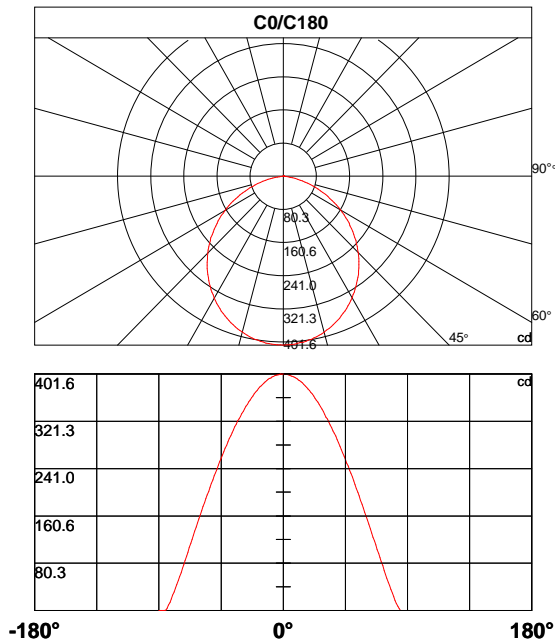
Half Peak Side Angle(50%): Left: -54.2 Right:53.9

Light Out Rate(LOR) : 100.00%

Up Flux Rate: 0.0%

Down Flux Rate: 100.0%

Beam Angle(10%): Left: -77.6 Right:77.3



Photometric Data Table [cd]

C\G	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0
0.0	401.6	400.7	401.2	400.5	400.3	399.2	397.9	397.6	396.5	394.9
45.0	401.6	401.2	401.5	400.6	400.3	399.9	398.4	397.7	396.7	394.8
90.0	401.6	401.2	401.5	400.6	400.3	399.9	398.4	397.7	396.7	394.8
135.0	401.6	401.3	401.5	400.8	400.2	399.6	399.0	397.3	396.8	394.6
180.0	401.6	401.3	401.5	400.8	400.2	399.6	399.0	397.3	396.8	394.6
225.0	401.6	401.4	401.5	401.5	400.3	399.9	398.9	398.0	396.8	395.6
270.0	401.6	401.4	401.5	401.5	400.3	399.9	398.9	398.0	396.8	395.6
315.0	401.6	400.7	401.2	400.5	400.3	399.2	397.9	397.6	396.5	394.9
360.0	401.6	400.7	401.2	400.5	400.3	399.2	397.9	397.6	396.5	394.9

C\G	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	393.6	391.5	390.4	388.2	386.4	383.9	381.0	378.8	376.2	373.3
45.0	394.2	391.9	390.7	388.7	386.0	383.9	381.1	379.2	376.5	373.0
90.0	394.2	391.9	390.7	388.7	386.0	383.9	381.1	379.2	376.5	373.0
135.0	394.0	392.2	390.2	388.2	386.2	383.6	381.4	379.5	376.8	373.3
180.0	394.0	392.2	390.2	388.2	386.2	383.6	381.4	379.5	376.8	373.3
225.0	394.5	392.6	390.8	389.1	386.6	385.1	382.0	379.3	377.2	374.8
270.0	394.5	392.6	390.8	389.1	386.6	385.1	382.0	379.3	377.2	374.8
315.0	393.6	391.5	390.4	388.2	386.4	383.9	381.0	378.8	376.2	373.3
360.0	393.6	391.5	390.4	388.2	386.4	383.9	381.0	378.8	376.2	373.3

C\G	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	370.2	367.4	364.3	360.5	356.8	353.7	350.0	346.3	341.8	337.8
45.0	371.0	367.5	364.7	361.2	358.0	354.4	350.5	346.3	342.4	338.7
90.0	371.0	367.5	364.7	361.2	358.0	354.4	350.5	346.3	342.4	338.7
135.0	371.0	367.9	364.4	361.3	357.3	354.4	350.1	346.8	342.7	338.0
180.0	371.0	367.9	364.4	361.3	357.3	354.4	350.1	346.8	342.7	338.0
225.0	371.8	368.7	365.6	362.1	358.9	355.3	351.2	347.4	343.4	339.8
270.0	371.8	368.7	365.6	362.1	358.9	355.3	351.2	347.4	343.4	339.8
315.0	370.2	367.4	364.3	360.5	356.8	353.7	350.0	346.3	341.8	337.8
360.0	370.2	367.4	364.3	360.5	356.8	353.7	350.0	346.3	341.8	337.8

C\G	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0
0.0	333.3	328.5	325.3	320.0	315.4	310.4	305.1	301.3	295.9	290.1
45.0	334.9	330.2	325.5	321.0	315.9	311.2	306.5	301.6	296.5	291.0
90.0	334.9	330.2	325.5	321.0	315.9	311.2	306.5	301.6	296.5	291.0
135.0	334.4	329.6	325.4	321.7	316.2	311.8	306.5	301.6	296.9	291.6
180.0	334.4	329.6	325.4	321.7	316.2	311.8	306.5	301.6	296.9	291.6
225.0	335.9	330.8	326.5	322.1	317.2	313.1	307.6	302.7	297.6	292.0
270.0	335.9	330.8	326.5	322.1	317.2	313.1	307.6	302.7	297.6	292.0
315.0	333.3	328.5	325.3	320.0	315.4	310.4	305.1	301.3	295.9	290.1
360.0	333.3	328.5	325.3	320.0	315.4	310.4	305.1	301.3	295.9	290.1

Photometric Data Table [cd]

C\G	40.0	41.0	42.0	43.0	44.0	45.0	46.0	47.0	48.0	49.0
0.0	285.1	278.8	273.6	268.2	262.4	256.6	250.3	244.9	238.1	233.2
45.0	285.7	280.7	275.1	269.5	263.4	258.0	251.5	245.6	240.6	233.8
90.0	285.7	280.7	275.1	269.5	263.4	258.0	251.5	245.6	240.6	233.8
135.0	286.5	280.6	275.3	269.4	264.0	258.8	252.7	246.6	240.4	234.0
180.0	286.5	280.6	275.3	269.4	264.0	258.8	252.7	246.6	240.4	234.0
225.0	287.0	281.9	276.1	271.6	264.6	258.7	253.2	247.5	240.9	234.8
270.0	287.0	281.9	276.1	271.6	264.6	258.7	253.2	247.5	240.9	234.8
315.0	285.1	278.8	273.6	268.2	262.4	256.6	250.3	244.9	238.1	233.2
360.0	285.1	278.8	273.6	268.2	262.4	256.6	250.3	244.9	238.1	233.2

C\G	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	226.6	220.1	213.6	206.9	200.3	194.8	186.9	180.6	173.8	166.9
45.0	228.3	221.2	215.0	209.9	202.4	196.0	189.4	182.2	176.3	169.1
90.0	228.3	221.2	215.0	209.9	202.4	196.0	189.4	182.2	176.3	169.1
135.0	228.9	221.7	215.5	209.6	202.1	196.1	190.3	183.4	176.7	169.3
180.0	228.9	221.7	215.5	209.6	202.1	196.1	190.3	183.4	176.7	169.3
225.0	228.4	222.0	216.0	209.7	202.8	196.1	189.4	182.2	176.7	171.6
270.0	228.4	222.0	216.0	209.7	202.8	196.1	189.4	182.2	176.7	171.6
315.0	226.6	220.1	213.6	206.9	200.3	194.8	186.9	180.6	173.8	166.9
360.0	226.6	220.1	213.6	206.9	200.3	194.8	186.9	180.6	173.8	166.9

C\G	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0
0.0	160.9	153.2	146.4	138.5	131.7	124.6	118.1	111.1	103.4	96.6
45.0	162.1	155.1	148.3	140.8	133.6	127.9	120.1	112.8	105.9	98.3
90.0	162.1	155.1	148.3	140.8	133.6	127.9	120.1	112.8	105.9	98.3
135.0	162.8	155.4	148.8	142.0	134.8	127.4	120.4	114.0	106.8	99.1
180.0	162.8	155.4	148.8	142.0	134.8	127.4	120.4	114.0	106.8	99.1
225.0	162.6	155.4	148.3	141.0	134.2	127.7	119.7	112.2	105.3	98.7
270.0	162.6	155.4	148.3	141.0	134.2	127.7	119.7	112.2	105.3	98.7
315.0	160.9	153.2	146.4	138.5	131.7	124.6	118.1	111.1	103.4	96.6
360.0	160.9	153.2	146.4	138.5	131.7	124.6	118.1	111.1	103.4	96.6

C\G	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	89.3	82.4	76.0	68.1	61.2	54.8	47.8	42.5	35.6	29.2
45.0	92.8	84.8	78.3	71.4	63.6	57.4	50.8	44.8	37.8	30.4
90.0	92.8	84.8	78.3	71.4	63.6	57.4	50.8	44.8	37.8	30.4
135.0	92.3	84.7	77.6	71.8	64.2	57.7	50.9	43.8	37.7	31.5
180.0	92.3	84.7	77.6	71.8	64.2	57.7	50.9	43.8	37.7	31.5
225.0	92.3	84.8	77.2	70.2	63.2	57.4	50.5	43.9	37.1	30.9
270.0	92.3	84.8	77.2	70.2	63.2	57.4	50.5	43.9	37.1	30.9
315.0	89.3	82.4	76.0	68.1	61.2	54.8	47.8	42.5	35.6	29.2
360.0	89.3	82.4	76.0	68.1	61.2	54.8	47.8	42.5	35.6	29.2

Photometric Data Table [cd]

C\G	80.0	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	23.4	16.9	11.6	6.9	3.4	0.0	0.0	0.0	0.0	0.0
45.0	23.6	16.1	10.2	3.2	0.0	0.0	0.0	0.0	0.0	0.0
90.0	23.6	16.1	10.2	3.2	0.0	0.0	0.0	0.0	0.0	0.0
135.0	25.9	19.4	13.6	9.1	4.1	0.6	0.0	0.0	0.0	0.0
180.0	25.9	19.4	13.6	9.1	4.1	0.6	0.0	0.0	0.0	0.0
225.0	23.0	16.3	9.7	3.4	0.0	0.0	0.0	0.0	0.0	0.0
270.0	23.0	16.3	9.7	3.4	0.0	0.0	0.0	0.0	0.0	0.0
315.0	23.4	16.9	11.6	6.9	3.4	0.0	0.0	0.0	0.0	0.0
360.0	23.4	16.9	11.6	6.9	3.4	0.0	0.0	0.0	0.0	0.0

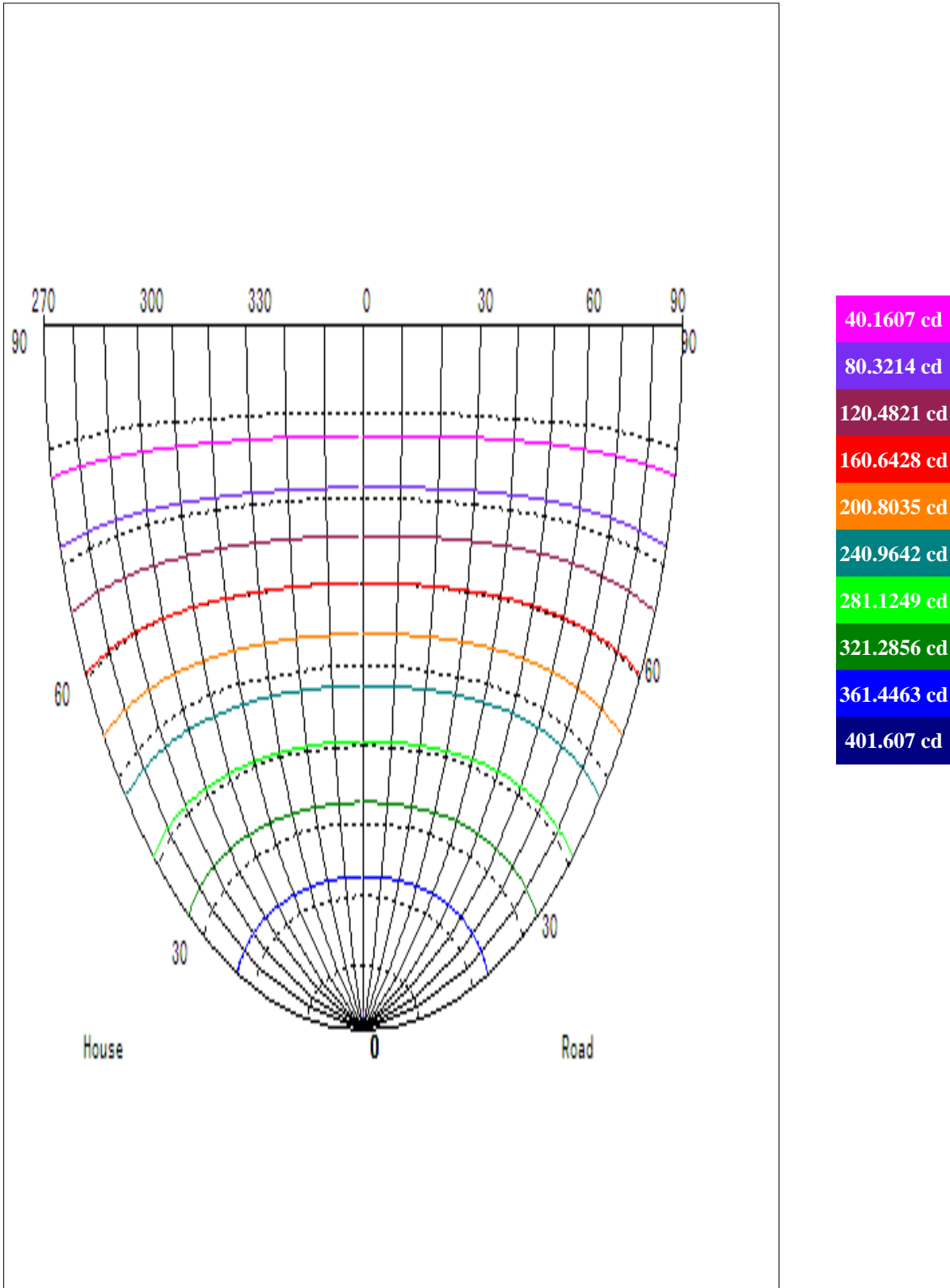
C\G	90.0
0.0	0.0
45.0	0.0
90.0	0.0
135.0	0.0
180.0	0.0
225.0	0.0
270.0	0.0
315.0	0.0
360.0	0.0

Zonal Flux Distribution

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Flux [lm]	Zonal Flux [%]	Sum Flux [%]
0	401.61	0.00	0.00	0.00	0.00
1	401.17	0.38	0.38	0.04	0.04
2	401.41	1.15	1.54	0.11	0.14
3	400.86	1.92	3.45	0.18	0.32
4	400.26	2.68	6.14	0.25	0.57
5	399.66	3.44	9.58	0.32	0.90
6	398.54	4.19	13.77	0.39	1.29
7	397.66	4.94	18.71	0.46	1.75
8	396.67	5.68	24.40	0.53	2.28
9	394.97	6.42	30.82	0.60	2.88
10	394.07	7.14	37.96	0.67	3.55
11	392.07	7.86	45.81	0.74	4.29
12	390.51	8.55	54.37	0.80	5.09
13	388.57	9.25	63.61	0.87	5.95
14	386.28	9.92	73.53	0.93	6.88
15	384.12	10.58	84.11	0.99	7.87
16	381.39	11.22	95.32	1.05	8.92
17	379.21	11.84	107.17	1.11	10.03
18	376.67	12.46	119.63	1.17	11.20
19	373.62	13.05	132.68	1.22	12.42
20	371.00	13.63	146.31	1.28	13.69
21	367.88	14.19	160.50	1.33	15.02
22	364.75	14.72	175.22	1.38	16.40
23	361.26	15.23	190.46	1.43	17.83
24	357.74	15.72	206.18	1.47	19.30
25	354.47	16.19	222.37	1.52	20.81
26	350.44	16.64	239.01	1.56	22.37
27	346.69	17.06	256.07	1.60	23.97
28	342.57	17.45	273.52	1.63	25.60
29	338.57	17.82	291.34	1.67	27.27
30	334.61	18.18	309.51	1.70	28.97
31	329.79	18.49	328.00	1.73	30.70
32	325.68	18.78	346.78	1.76	32.46
33	321.19	19.06	365.84	1.78	34.24
34	316.18	19.29	385.13	1.81	36.04
35	311.63	19.50	404.62	1.82	37.87
36	306.43	19.68	424.30	1.84	39.71
37	301.80	19.84	444.14	1.86	41.57
38	296.74	19.98	464.12	1.87	43.44
39	291.17	20.07	484.18	1.88	45.32
40	286.08	20.13	504.32	1.88	47.20

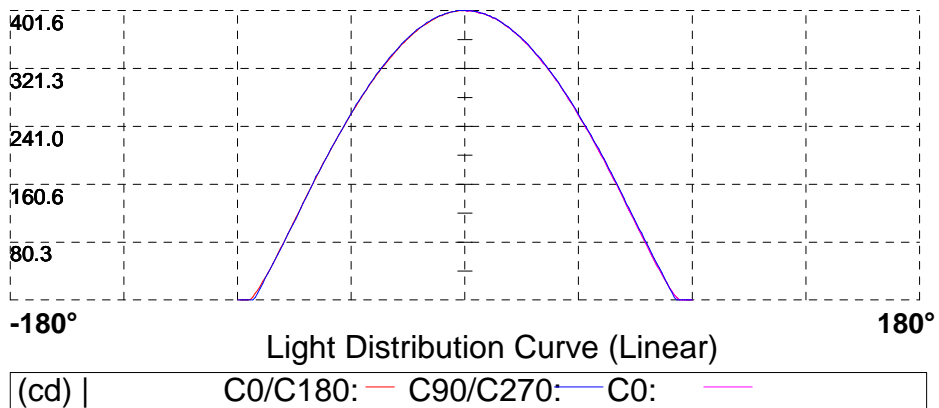
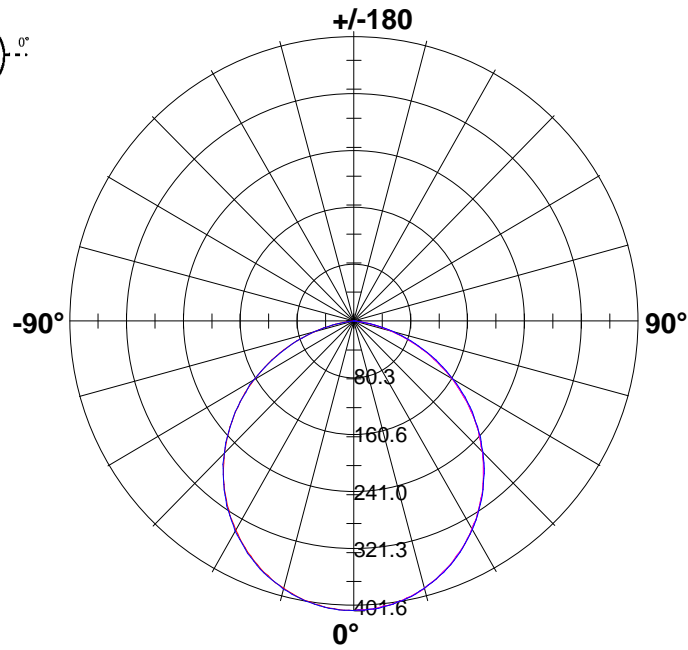
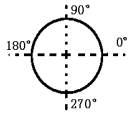
Zonal Flux Distribution

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Flux [lm]	Zonal Flux [%]	Sum Flux [%]
41	280.52	20.18	524.49	1.89	49.09
42	275.04	20.18	544.68	1.89	50.98
43	269.68	20.18	564.86	1.89	52.87
44	263.60	20.13	584.98	1.88	54.75
45	258.03	20.05	605.03	1.88	56.63
46	251.92	19.94	624.97	1.87	58.49
47	246.15	19.81	644.78	1.85	60.35
48	239.99	19.65	664.44	1.84	62.19
49	233.94	19.46	683.90	1.82	64.01
50	228.04	19.26	703.16	1.80	65.81
51	221.26	19.01	722.17	1.78	67.59
52	215.05	18.72	740.89	1.75	69.34
53	209.01	18.45	759.34	1.73	71.07
54	201.92	18.11	777.45	1.70	72.76
55	195.75	17.75	795.20	1.66	74.42
56	188.99	17.39	812.59	1.63	76.05
57	182.11	16.97	829.55	1.59	77.64
58	175.89	16.56	846.11	1.55	79.19
59	169.22	16.13	862.24	1.51	80.70
60	162.11	15.65	877.90	1.47	82.16
61	154.76	15.12	893.02	1.42	83.58
62	147.96	14.59	907.60	1.37	84.95
63	140.59	14.03	921.64	1.31	86.26
64	133.58	13.45	935.09	1.26	87.52
65	126.89	12.89	947.98	1.21	88.72
66	119.59	12.30	960.28	1.15	89.88
67	112.55	11.67	971.95	1.09	90.97
68	105.36	11.04	982.99	1.03	92.00
69	98.17	10.38	993.37	0.97	92.97
70	91.70	9.75	1003.12	0.91	93.89
71	84.16	9.09	1012.21	0.85	94.74
72	77.26	8.39	1020.61	0.79	95.52
73	70.38	7.72	1028.33	0.72	96.24
74	63.06	7.02	1035.34	0.66	96.90
75	56.81	6.33	1041.68	0.59	97.49
76	49.99	5.67	1047.35	0.53	98.02
77	43.75	5.00	1052.34	0.47	98.49
78	37.04	4.32	1056.67	0.40	98.90
79	30.52	3.63	1060.30	0.34	99.24
80	23.99	2.94	1063.24	0.28	99.51
81	17.18	2.23	1065.46	0.21	99.72

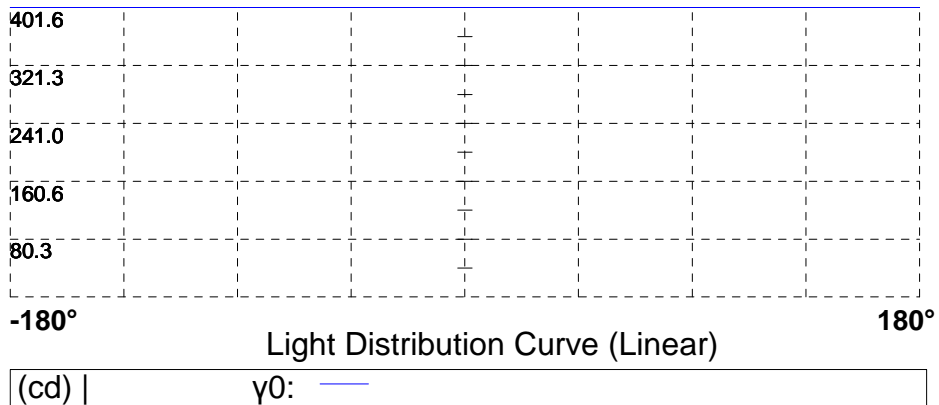
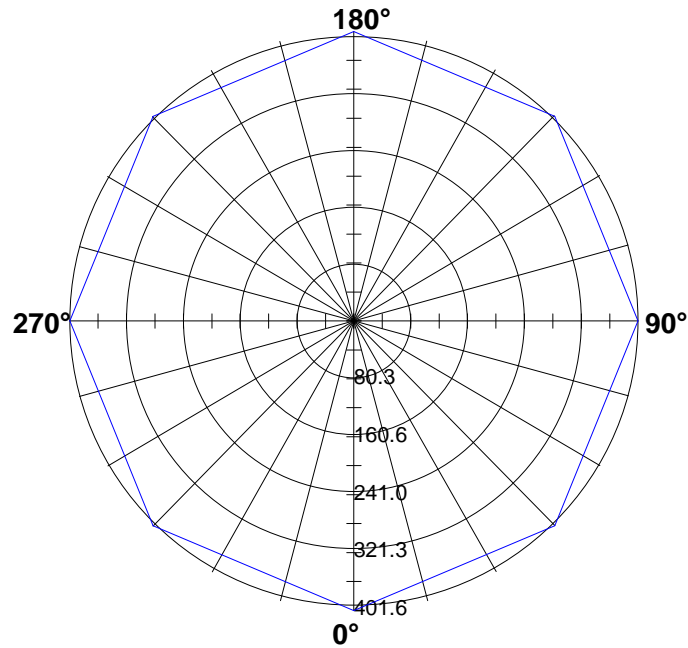


Light Distribution Curve [Unit: cd]

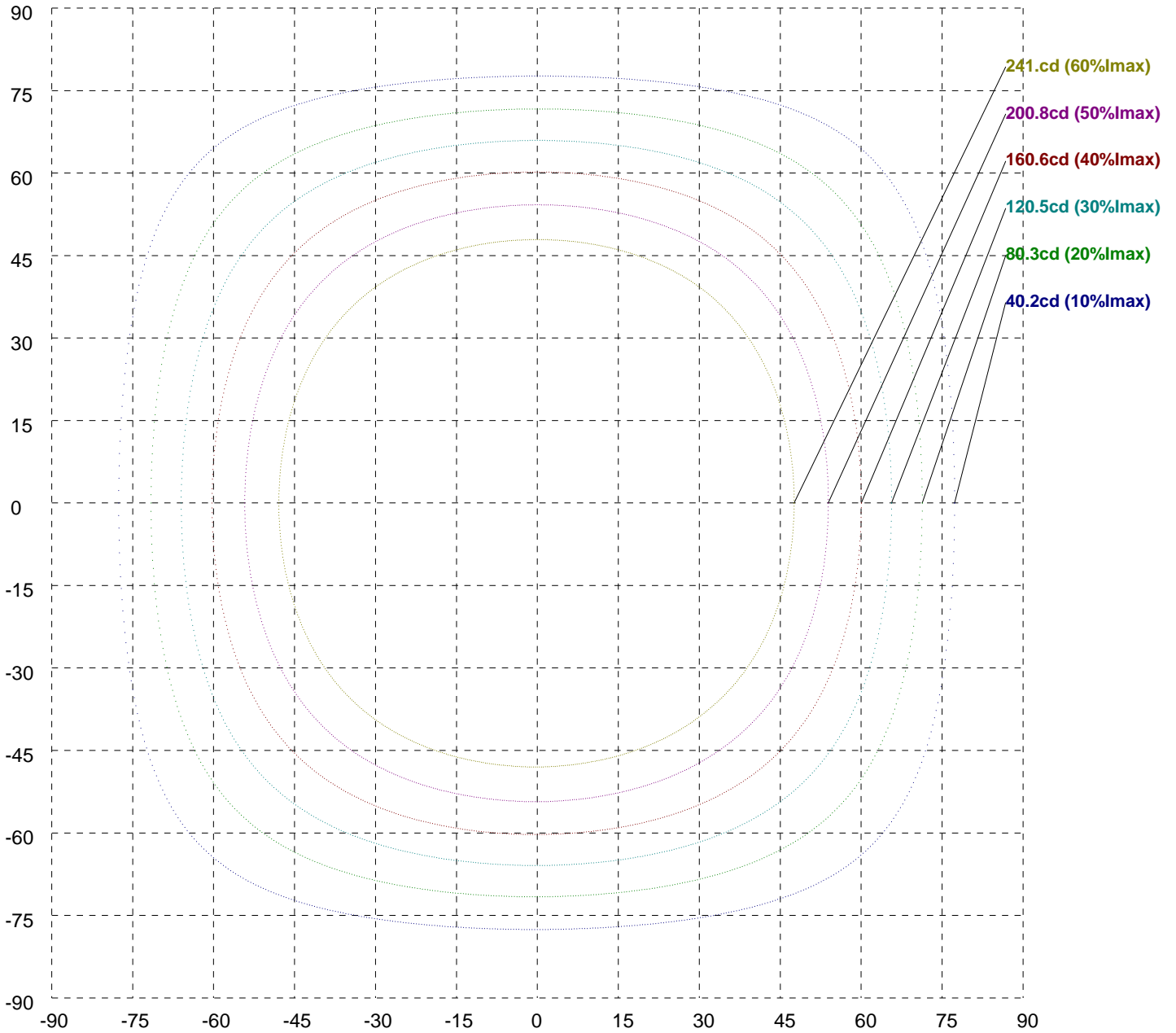
Luminaire



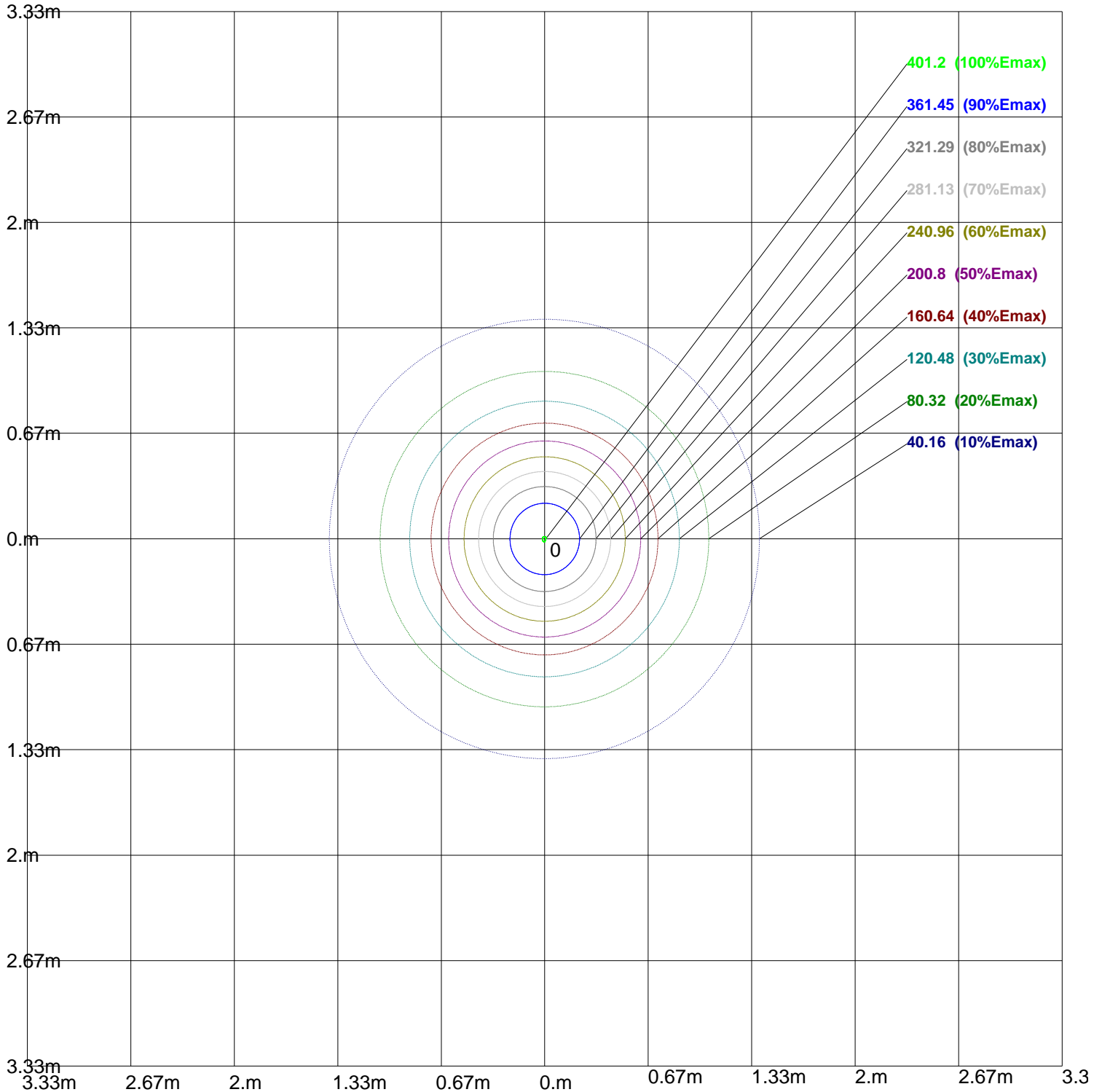
Max Plane Light Distribution Curve [Unit: cd]



等光强曲线 V-H [cd]



Iso-Lux[lx]



Height: 1 m
Max Illuminance : 401.61lx

Luminance Limiting Curve

Diameter: 170mm

Length: mm

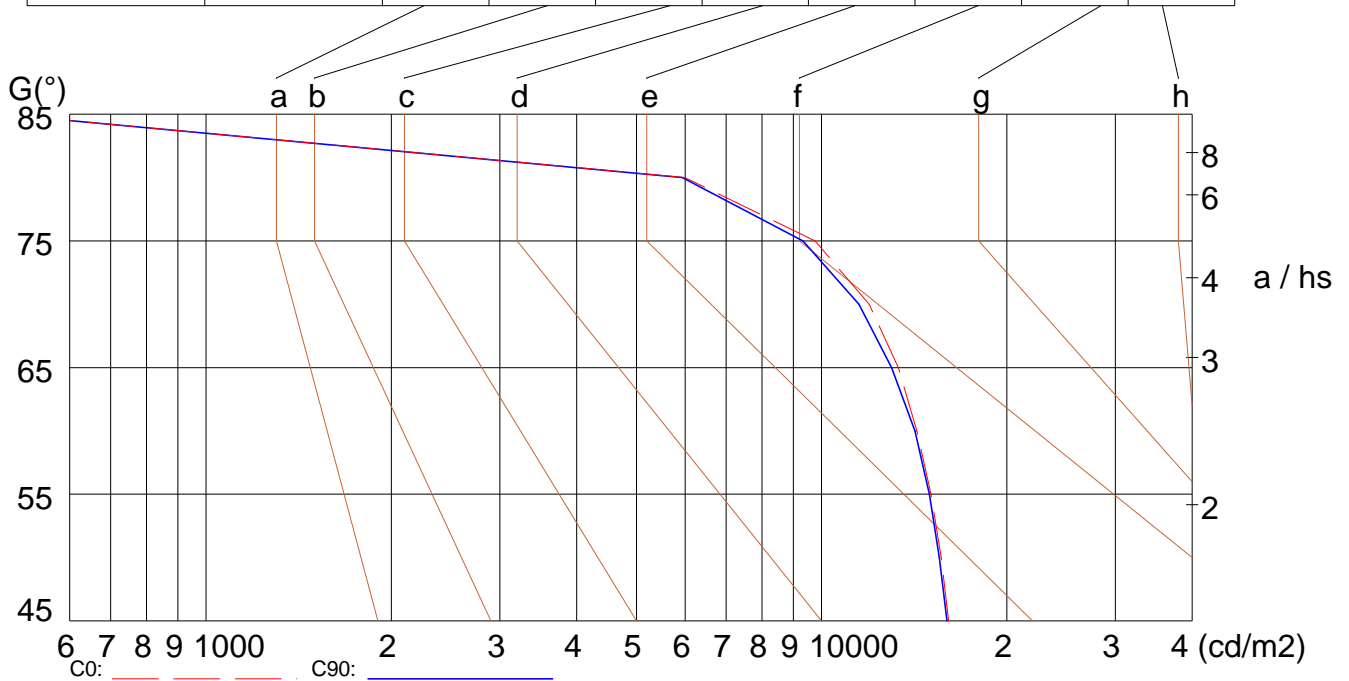
Width: 170mm

Height: 38mm

(cd/m²)

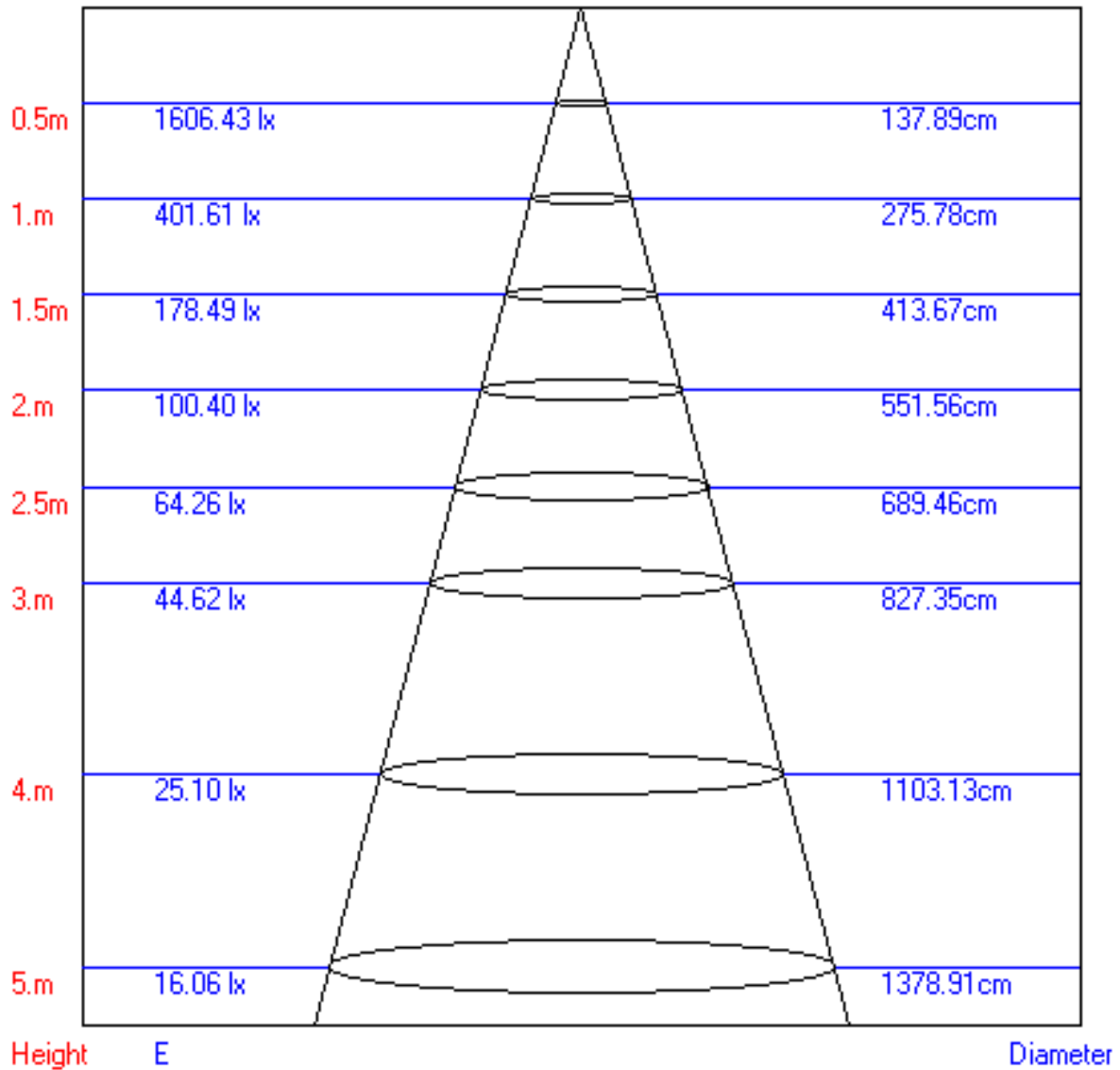
γ	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	16071	15647	15054	14278	13328	11958	9763	5992	
C90	15988	15528	14960	14179	12987	11503	9328	5940	

Glare	Quality	Service Values Illuminance (lx)							
1.15	A	2000	1000	500	≤300				
1.5	B		2000	1000	500	≤300			
1.85	C			2000	1000	500	≤300		
2.2	D				2000	1000	500	≤300	
2.55	E					2000	1000	500	≤300



Lum. Limiting Curve (C0/C90)

Lux-Distance Curve



Beam Angle:108.10°

Utilization Coefficient Table

RHOCC	80			70			50			30			10			0
RHOW	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR	COEFFICIENTS OF UTILIZATION FOR RHOFC=20															
0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1	1.06	1.04	1.03	1.05	1.03	1.01	1.01	0.99	0.97	0.96	0.94	0.92	0.89	0.87	0.85	0.80
2	0.91	0.88	0.86	0.90	0.87	0.85	0.87	0.84	0.81	0.84	0.80	0.77	0.79	0.75	0.72	0.67
3	0.78	0.75	0.73	0.78	0.74	0.72	0.76	0.72	0.69	0.74	0.69	0.65	0.71	0.66	0.61	0.57
4	0.67	0.65	0.63	0.68	0.64	0.61	0.67	0.62	0.59	0.66	0.60	0.56	0.63	0.58	0.53	0.49
5	0.59	0.56	0.54	0.59	0.56	0.53	0.60	0.55	0.51	0.59	0.53	0.49	0.57	0.51	0.46	0.42
6	0.52	0.49	0.48	0.53	0.49	0.47	0.53	0.48	0.45	0.53	0.47	0.43	0.52	0.46	0.41	0.37
7	0.46	0.44	0.42	0.47	0.44	0.41	0.48	0.43	0.40	0.48	0.42	0.38	0.48	0.41	0.36	0.33
8	0.42	0.39	0.38	0.43	0.39	0.37	0.44	0.39	0.36	0.44	0.38	0.34	0.44	0.37	0.32	0.29
9	0.38	0.35	0.34	0.39	0.35	0.33	0.40	0.35	0.32	0.41	0.35	0.31	0.41	0.34	0.29	0.26
10	0.34	0.32	0.31	0.35	0.32	0.30	0.37	0.32	0.29	0.38	0.32	0.28	0.38	0.31	0.27	0.24

