

Luminaire Property

Luminaire: RH-MRD20 20W 3000K

Report NO.:

Test NO.: HLB210908

Lamp:

Sum Lumens: 1750.98 lm

Number of Lamps: 1

Diameter: 240mm

Length: mm

Photometric Type: Type C

Voltage: 230.8 V

Current: 0.087 A

Power: 19.4 W

Power Factor: 0.966

Ballast Type: DL-20H-C500-LAC 500mA

Width: 240mm

Height: 38 mm

Remark: 0.5w SMD2835

Photometric Results

Lumens: 1750.98 lm

Efficiency: 90.2567 lm/W

Central Intensity: 645.865cd

Maximum Intensity: 645.984cd

Angle of maximum intensity: C:45.0 G:1.0

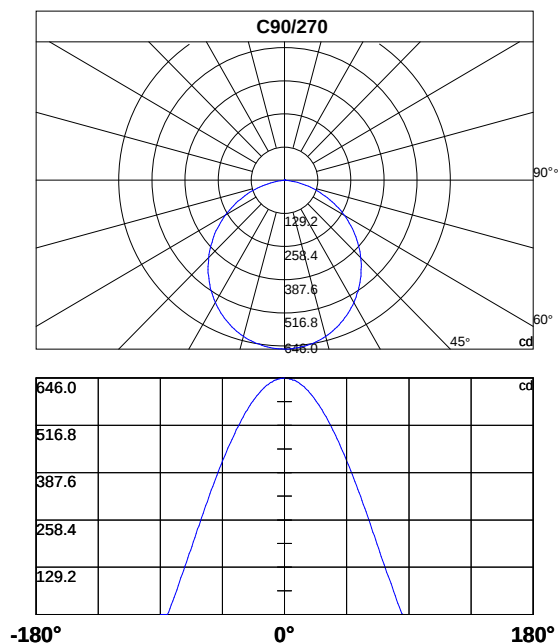
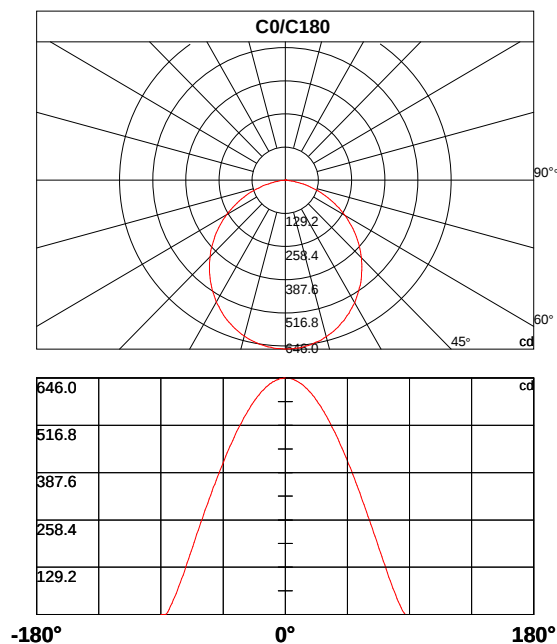
Half Peak Side Angle(50%): Left: -55.6 Right:53.9

Light Out Rate(LOR) : 100.00%

Up Flux Rate: 0.0%

Down Flux Rate: 100.0%

Beam Angle(10%): Left: -79.2 Right:77.8



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	645.9	645.2	645.6	645.1	644.3	643.4	642.0	640.4	638.5	636.4
45.0	645.9	646.0	645.0	644.5	643.2	642.8	640.5	639.6	637.9	636.0
90.0	645.9	646.0	645.0	644.5	643.2	642.8	640.5	639.6	637.9	636.0
135.0	645.9	645.9	644.7	644.8	644.0	641.7	640.9	639.3	637.0	635.5
180.0	645.9	645.9	644.7	644.8	644.0	641.7	640.9	639.3	637.0	635.5
225.0	645.9	645.3	645.3	645.0	643.6	642.8	641.2	639.8	637.9	635.1
270.0	645.9	645.3	645.3	645.0	643.6	642.8	641.2	639.8	637.9	635.1
315.0	645.9	645.2	645.6	645.1	644.3	643.4	642.0	640.4	638.5	636.4
360.0	645.9	645.2	645.6	645.1	644.3	643.4	642.0	640.4	638.5	636.4

C\G	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	634.4	631.2	629.6	626.3	622.2	619.0	615.5	611.4	608.1	603.5
45.0	633.5	630.7	628.1	625.3	622.3	618.2	614.7	611.1	606.4	602.3
90.0	633.5	630.7	628.1	625.3	622.3	618.2	614.7	611.1	606.4	602.3
135.0	632.3	630.3	626.9	623.9	620.5	616.8	613.3	609.4	604.7	600.1
180.0	632.3	630.3	626.9	623.9	620.5	616.8	613.3	609.4	604.7	600.1
225.0	634.3	631.3	627.9	625.9	622.2	618.8	614.9	611.2	606.9	601.9
270.0	634.3	631.3	627.9	625.9	622.2	618.8	614.9	611.2	606.9	601.9
315.0	634.4	631.2	629.6	626.3	622.2	619.0	615.5	611.4	608.1	603.5
360.0	634.4	631.2	629.6	626.3	622.2	619.0	615.5	611.4	608.1	603.5

C\G	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	598.4	593.6	588.2	583.4	577.3	571.7	566.5	559.7	553.5	546.9
45.0	597.7	593.2	587.5	582.5	576.0	571.7	565.4	559.7	552.4	546.7
90.0	597.7	593.2	587.5	582.5	576.0	571.7	565.4	559.7	552.4	546.7
135.0	595.7	590.5	585.8	580.5	574.5	569.1	562.0	556.2	549.5	543.5
180.0	595.7	590.5	585.8	580.5	574.5	569.1	562.0	556.2	549.5	543.5
225.0	597.8	592.2	587.6	582.6	577.3	571.2	565.5	559.0	553.2	547.1
270.0	597.8	592.2	587.6	582.6	577.3	571.2	565.5	559.0	553.2	547.1
315.0	598.4	593.6	588.2	583.4	577.3	571.7	566.5	559.7	553.5	546.9
360.0	598.4	593.6	588.2	583.4	577.3	571.7	566.5	559.7	553.5	546.9

C\G	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0
0.0	541.2	534.2	526.7	519.6	511.6	503.5	497.2	489.2	480.8	472.3
45.0	540.6	533.3	526.2	518.3	511.8	503.5	496.3	488.8	479.9	472.5
90.0	540.6	533.3	526.2	518.3	511.8	503.5	496.3	488.8	479.9	472.5
135.0	536.9	529.3	522.2	514.8	508.3	500.2	492.4	484.0	475.6	466.4
180.0	536.9	529.3	522.2	514.8	508.3	500.2	492.4	484.0	475.6	466.4
225.0	539.8	532.6	525.1	517.5	511.2	504.4	494.9	487.5	478.8	470.4
270.0	539.8	532.6	525.1	517.5	511.2	504.4	494.9	487.5	478.8	470.4
315.0	541.2	534.2	526.7	519.6	511.6	503.5	497.2	489.2	480.8	472.3
360.0	541.2	534.2	526.7	519.6	511.6	503.5	497.2	489.2	480.8	472.3

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	463.4	455.1	446.8	438.3	428.8	420.1	410.3	401.4	392.4	382.2
45.0	463.4	454.8	446.7	438.0	429.0	419.5	410.3	401.9	392.6	382.3
90.0	463.4	454.8	446.7	438.0	429.0	419.5	410.3	401.9	392.6	382.3
135.0	459.8	451.1	441.2	433.2	423.0	414.6	404.3	396.4	386.6	376.0
180.0	459.8	451.1	441.2	433.2	423.0	414.6	404.3	396.4	386.6	376.0
225.0	463.2	454.3	445.3	436.0	426.7	418.6	409.3	399.3	389.7	379.8
270.0	463.2	454.3	445.3	436.0	426.7	418.6	409.3	399.3	389.7	379.8
315.0	463.4	455.1	446.8	438.3	428.8	420.1	410.3	401.4	392.4	382.2
360.0	463.4	455.1	446.8	438.3	428.8	420.1	410.3	401.4	392.4	382.2

C\G	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	371.9	361.5	352.1	342.6	331.8	321.4	310.4	300.0	289.2	279.3
45.0	372.4	362.5	352.1	341.8	332.9	322.3	311.4	300.5	290.3	280.3
90.0	372.4	362.5	352.1	341.8	332.9	322.3	311.4	300.5	290.3	280.3
135.0	366.6	355.9	347.9	336.3	326.5	315.8	304.6	295.9	284.8	273.4
180.0	366.6	355.9	347.9	336.3	326.5	315.8	304.6	295.9	284.8	273.4
225.0	369.1	359.3	350.2	340.1	329.6	318.6	307.9	298.1	287.5	276.6
270.0	369.1	359.3	350.2	340.1	329.6	318.6	307.9	298.1	287.5	276.6
315.0	371.9	361.5	352.1	342.6	331.8	321.4	310.4	300.0	289.2	279.3
360.0	371.9	361.5	352.1	342.6	331.8	321.4	310.4	300.0	289.2	279.3

C\G	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0
0.0	268.3	257.6	246.3	234.9	222.9	213.7	201.6	190.5	179.0	167.6
45.0	269.8	258.2	247.6	235.7	225.0	214.7	203.5	192.6	180.7	169.5
90.0	269.8	258.2	247.6	235.7	225.0	214.7	203.5	192.6	180.7	169.5
135.0	262.7	251.7	240.3	230.0	219.3	207.4	196.4	185.0	173.0	163.7
180.0	262.7	251.7	240.3	230.0	219.3	207.4	196.4	185.0	173.0	163.7
225.0	265.0	253.9	242.7	233.0	221.2	209.8	199.0	186.5	175.6	165.9
270.0	265.0	253.9	242.7	233.0	221.2	209.8	199.0	186.5	175.6	165.9
315.0	268.3	257.6	246.3	234.9	222.9	213.7	201.6	190.5	179.0	167.6
360.0	268.3	257.6	246.3	234.9	222.9	213.7	201.6	190.5	179.0	167.6

C\G	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	157.6	146.0	135.0	123.8	113.0	102.0	92.2	82.4	71.2	61.8
45.0	158.2	148.9	137.1	126.3	115.1	104.7	95.7	84.3	73.8	62.4
90.0	158.2	148.9	137.1	126.3	115.1	104.7	95.7	84.3	73.8	62.4
135.0	151.8	140.7	129.2	118.1	107.7	98.2	87.8	76.7	66.6	57.1
180.0	151.8	140.7	129.2	118.1	107.7	98.2	87.8	76.7	66.6	57.1
225.0	154.3	143.4	131.8	120.7	110.8	100.8	89.5	78.3	67.2	56.1
270.0	154.3	143.4	131.8	120.7	110.8	100.8	89.5	78.3	67.2	56.1
315.0	157.6	146.0	135.0	123.8	113.0	102.0	92.2	82.4	71.2	61.8
360.0	157.6	146.0	135.0	123.8	113.0	102.0	92.2	82.4	71.2	61.8

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	53.3	42.8	35.3	25.8	18.1	10.9	3.9	0.0	0.0	0.0
45.0	51.3	40.2	30.6	20.2	10.1	1.5	0.0	0.0	0.0	0.0
90.0	51.3	40.2	30.6	20.2	10.1	1.5	0.0	0.0	0.0	0.0
135.0	46.9	39.8	30.6	22.4	14.0	6.8	1.0	0.0	0.0	0.0
180.0	46.9	39.8	30.6	22.4	14.0	6.8	1.0	0.0	0.0	0.0
225.0	46.0	36.2	26.3	15.6	6.3	0.0	0.0	0.0	0.0	0.0
270.0	46.0	36.2	26.3	15.6	6.3	0.0	0.0	0.0	0.0	0.0
315.0	53.3	42.8	35.3	25.8	18.1	10.9	3.9	0.0	0.0	0.0
360.0	53.3	42.8	35.3	25.8	18.1	10.9	3.9	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

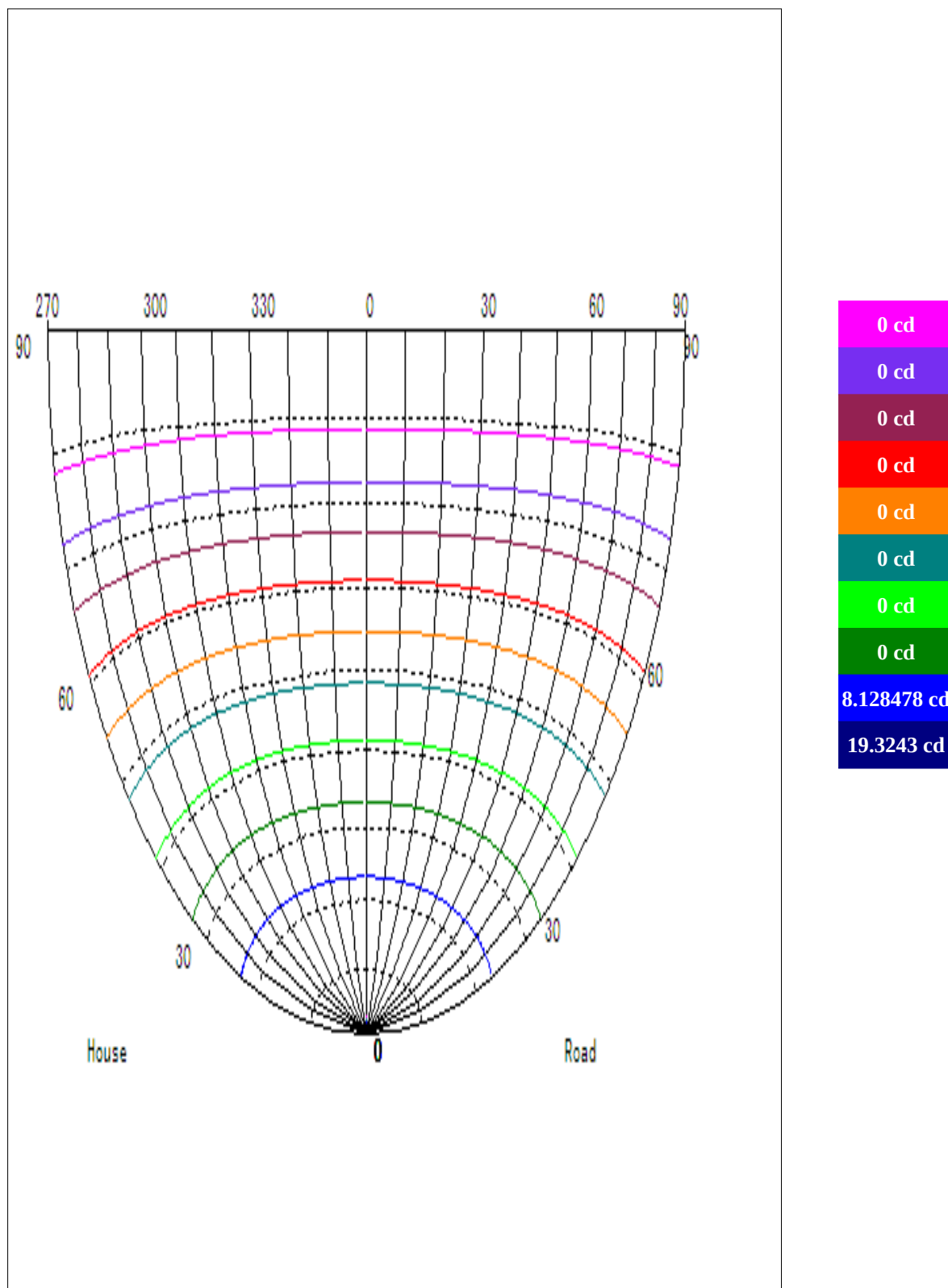
Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Flux [lm]	Zonal Flux [%]	Sum Flux [%]
0	645.86	0.00	0.00	0.00	0.00
1	645.58	0.62	0.62	0.04	0.04
2	645.15	1.85	2.47	0.11	0.14
3	644.85	3.09	5.56	0.18	0.32
4	643.80	4.31	9.87	0.25	0.56
5	642.67	5.53	15.40	0.32	0.88
6	641.15	6.75	22.15	0.39	1.27
7	639.77	7.95	30.10	0.45	1.72
8	637.83	9.14	39.24	0.52	2.24
9	635.73	10.32	49.57	0.59	2.83
10	633.61	11.49	61.05	0.66	3.49
11	630.86	12.63	73.69	0.72	4.21
12	628.14	13.76	87.45	0.79	4.99
13	625.36	14.88	102.33	0.85	5.84
14	621.80	15.96	118.29	0.91	6.76
15	618.21	17.02	135.31	0.97	7.73
16	614.61	18.06	153.38	1.03	8.76
17	610.76	19.08	172.46	1.09	9.85
18	606.53	20.07	192.53	1.15	11.00
19	601.92	21.02	213.56	1.20	12.20
20	597.40	21.95	235.51	1.25	13.45
21	592.36	22.85	258.35	1.30	14.75
22	587.27	23.71	282.06	1.35	16.11
23	582.26	24.54	306.60	1.40	17.51
24	576.28	25.33	331.93	1.45	18.96
25	570.92	26.08	358.01	1.49	20.45
26	564.85	26.81	384.82	1.53	21.98
27	558.67	27.49	412.31	1.57	23.55
28	552.16	28.12	440.43	1.61	25.15
29	546.03	28.73	469.16	1.64	26.79
30	539.64	29.31	498.48	1.67	28.47
31	532.35	29.83	528.31	1.70	30.17
32	525.04	30.29	558.60	1.73	31.90
33	517.53	30.71	589.32	1.75	33.66
34	510.73	31.12	620.43	1.78	35.43
35	502.92	31.48	651.91	1.80	37.23
36	495.19	31.78	683.69	1.81	39.05
37	487.39	32.05	715.74	1.83	40.88
38	478.79	32.25	747.99	1.84	42.72
39	470.40	32.40	780.39	1.85	44.57
40	462.44	32.53	812.92	1.86	46.43

Zonal Flux Distribution

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Flux [lm]	Zonal Flux [%]	Sum Flux [%]
41	453.81	32.63	845.55	1.86	48.29
42	445.00	32.66	878.21	1.86	50.16
43	436.38	32.65	910.85	1.86	52.02
44	426.87	32.58	943.44	1.86	53.88
45	418.19	32.48	975.91	1.85	55.74
46	408.56	32.33	1008.25	1.85	57.58
47	399.74	32.15	1040.39	1.84	59.42
48	390.33	31.94	1072.33	1.82	61.24
49	380.10	31.64	1103.97	1.81	63.05
50	370.00	31.27	1135.25	1.79	64.83
51	359.79	30.88	1166.12	1.76	66.60
52	350.59	30.48	1196.60	1.74	68.34
53	340.19	30.05	1226.65	1.72	70.06
54	330.19	29.55	1256.20	1.69	71.74
55	319.54	29.00	1285.20	1.66	73.40
56	308.55	28.38	1313.58	1.62	75.02
57	298.63	27.76	1341.35	1.59	76.61
58	287.93	27.12	1368.47	1.55	78.15
59	277.42	26.43	1394.90	1.51	79.66
60	266.45	25.69	1420.60	1.47	81.13
61	255.32	24.90	1445.50	1.42	82.55
62	244.21	24.07	1469.57	1.37	83.93
63	233.40	23.23	1492.80	1.33	85.25
64	222.10	22.35	1515.15	1.28	86.53
65	211.42	21.45	1536.60	1.23	87.76
66	200.12	20.53	1557.13	1.17	88.93
67	188.65	19.55	1576.68	1.12	90.05
68	177.08	18.53	1595.21	1.06	91.10
69	166.70	17.54	1612.75	1.00	92.11
70	155.49	16.55	1629.29	0.95	93.05
71	144.74	15.52	1644.81	0.89	93.94
72	133.29	14.46	1659.27	0.83	94.76
73	122.23	13.36	1672.63	0.76	95.53
74	111.66	12.30	1684.93	0.70	96.23
75	101.40	11.26	1696.18	0.64	96.87
76	91.28	10.23	1706.41	0.58	97.45
77	80.43	9.15	1715.57	0.52	97.98
78	69.68	8.04	1723.60	0.46	98.44
79	59.35	6.93	1730.54	0.40	98.83
80	49.37	5.86	1736.40	0.33	99.17
81	39.79	4.82	1741.22	0.28	99.44

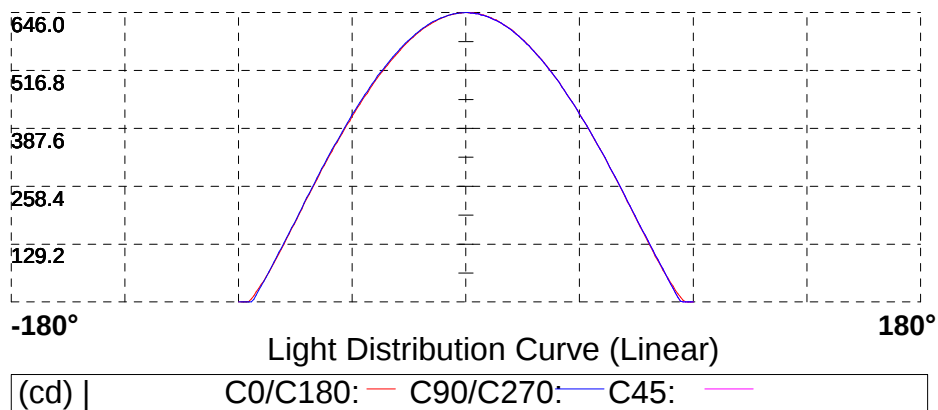
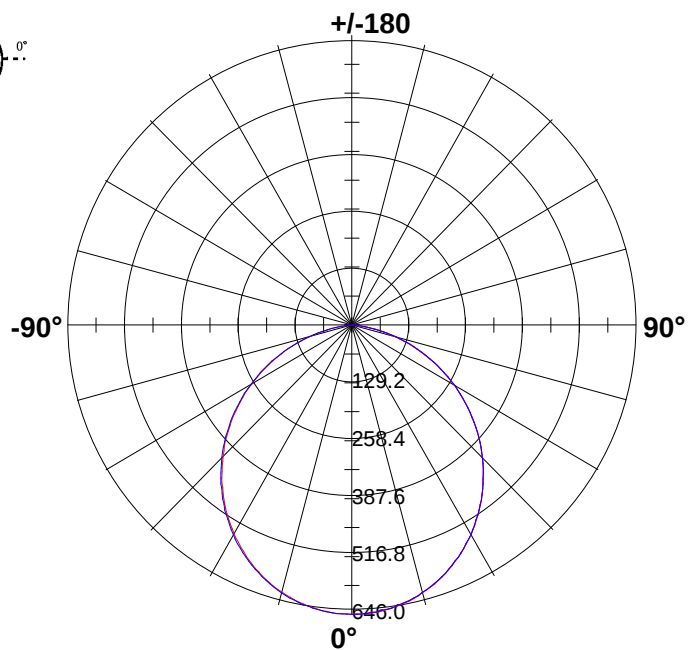
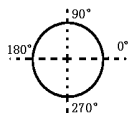
Zonal Flux Distribution

[illegible]

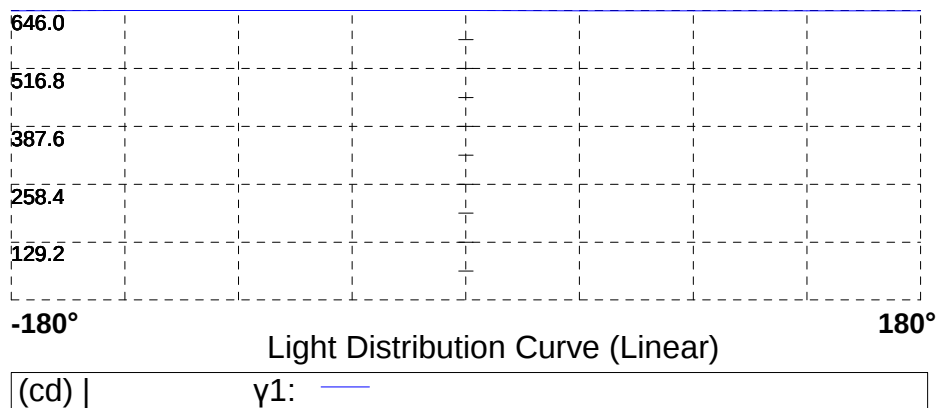
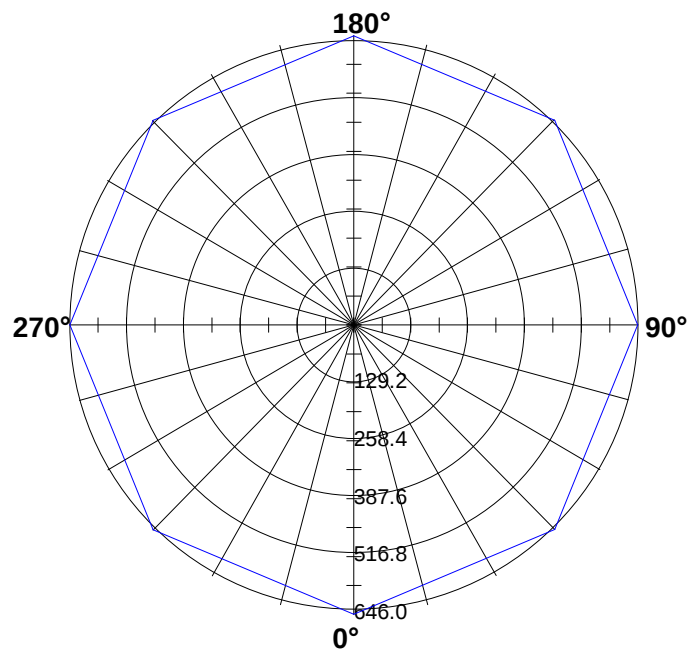


Light Distribution Curve [Unit: cd]

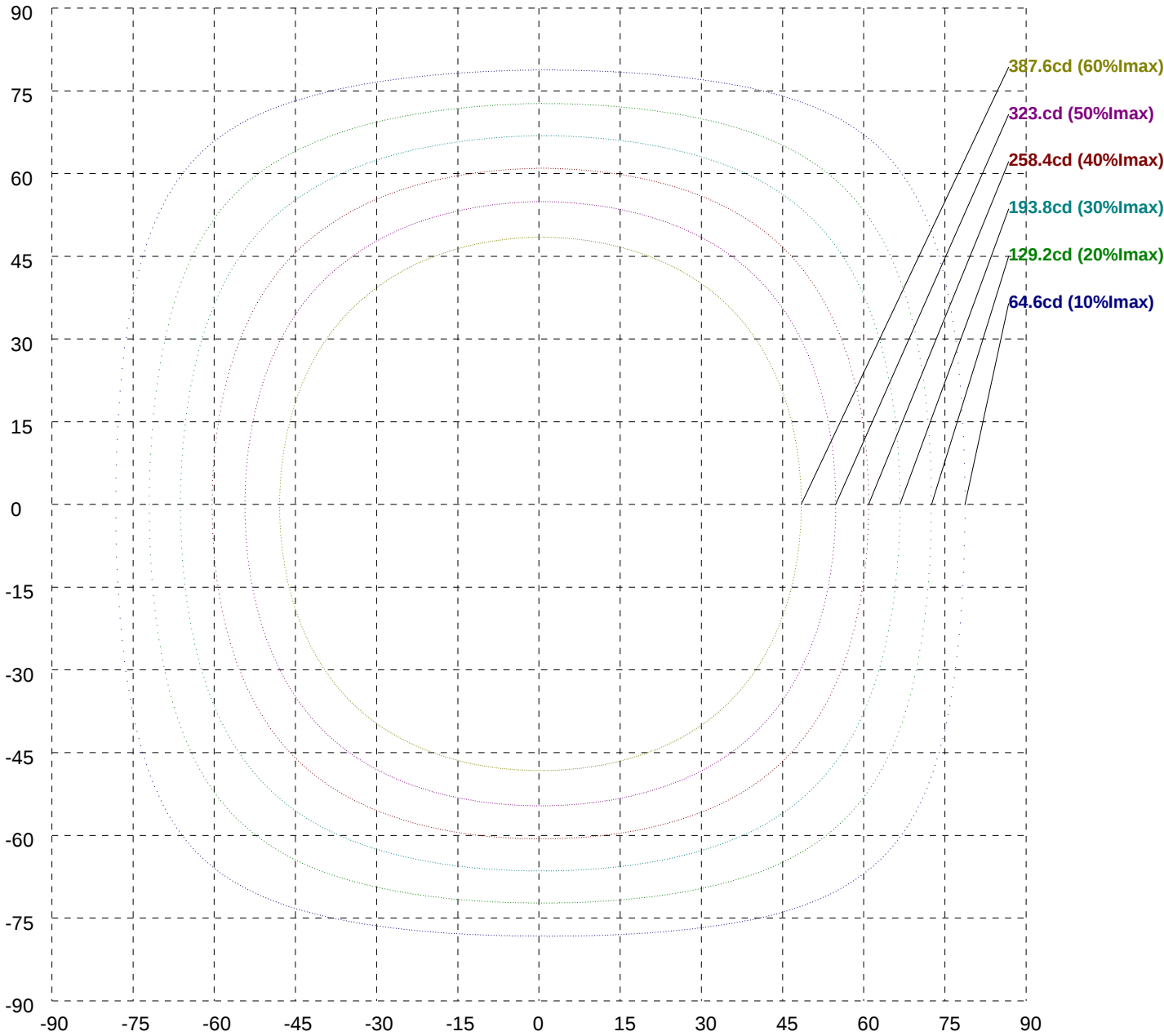
Luminaire



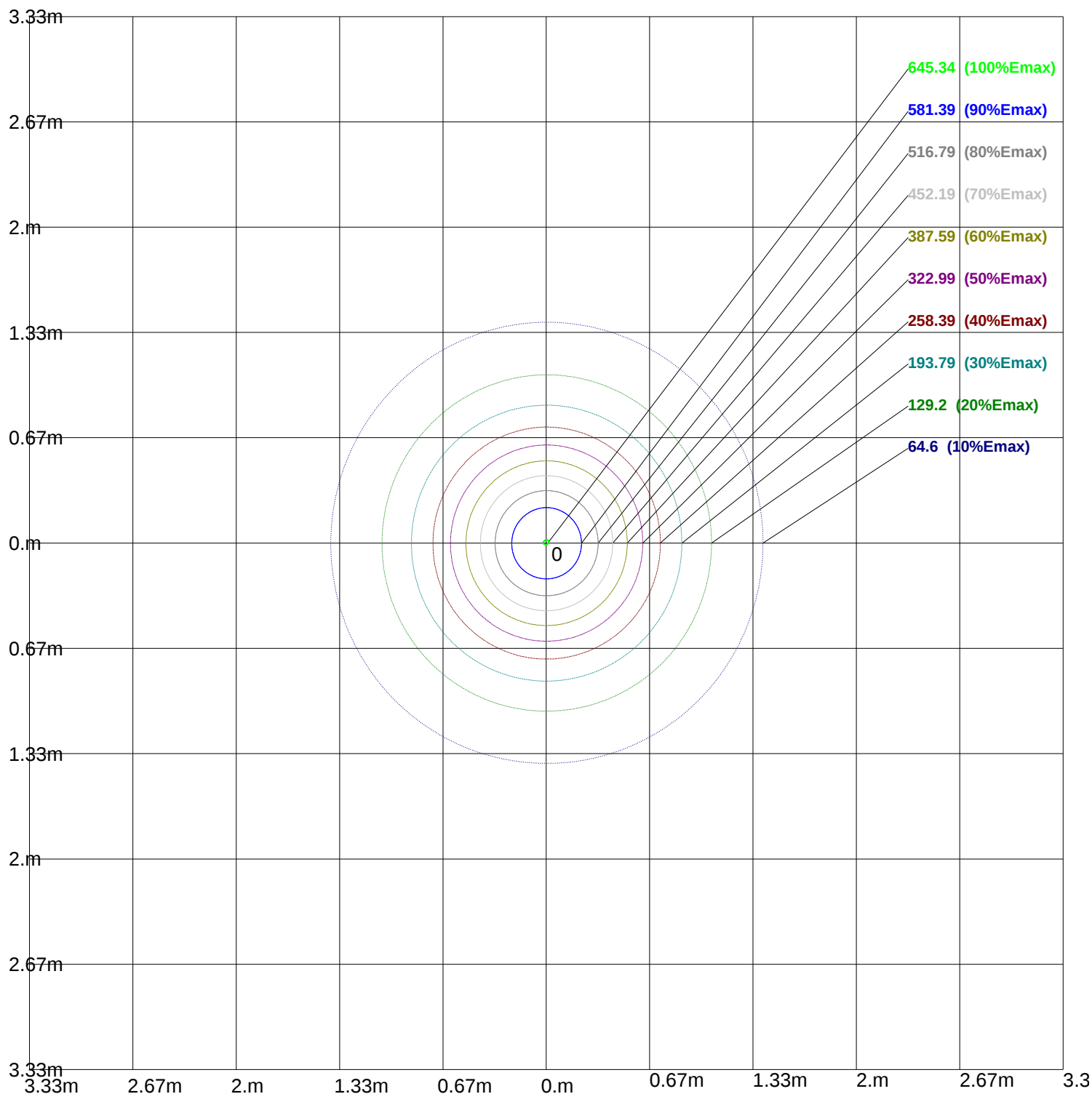
Max Plane Light Distribution Curve [Unit: cd]



等光强曲线 V-H [cd]



Iso-Lux[lx]



Height: 1 m
Max Illuminance : 645.98lx

Luminance Limiting Curve

Diameter: 240mm

Length: mm

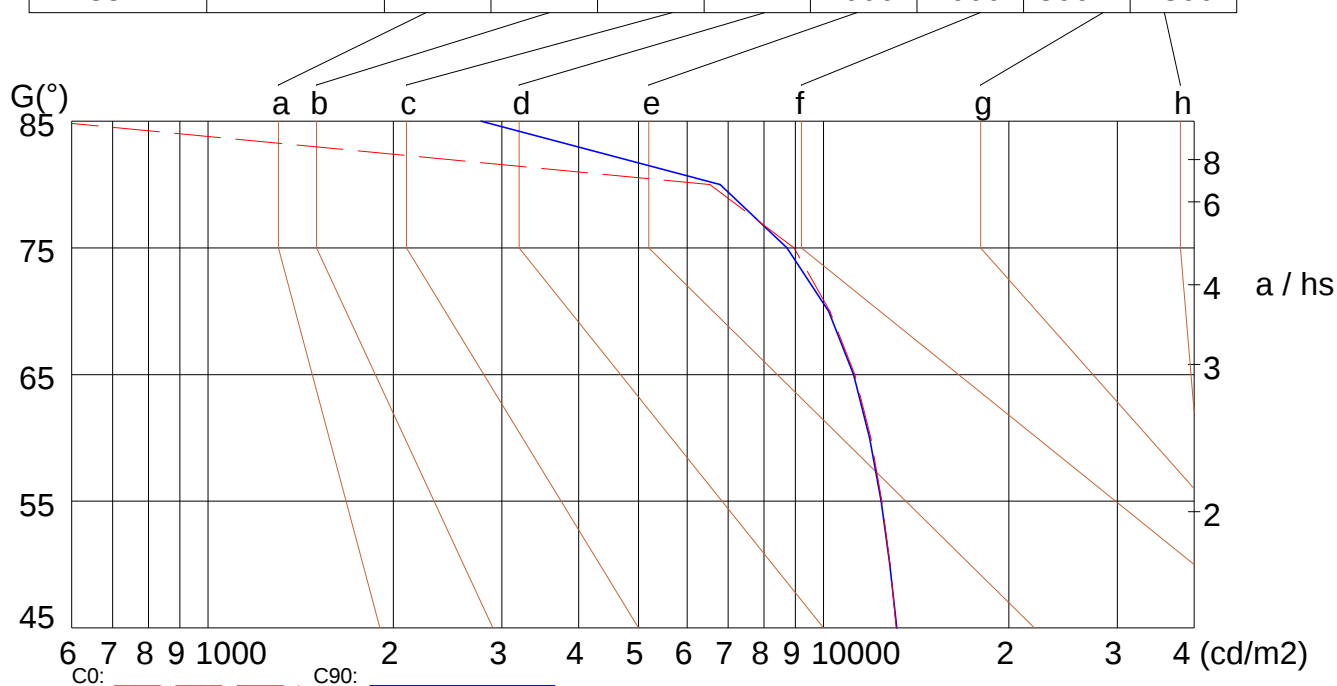
Width: 240mm

Height: 38 mm

(cd/m²)

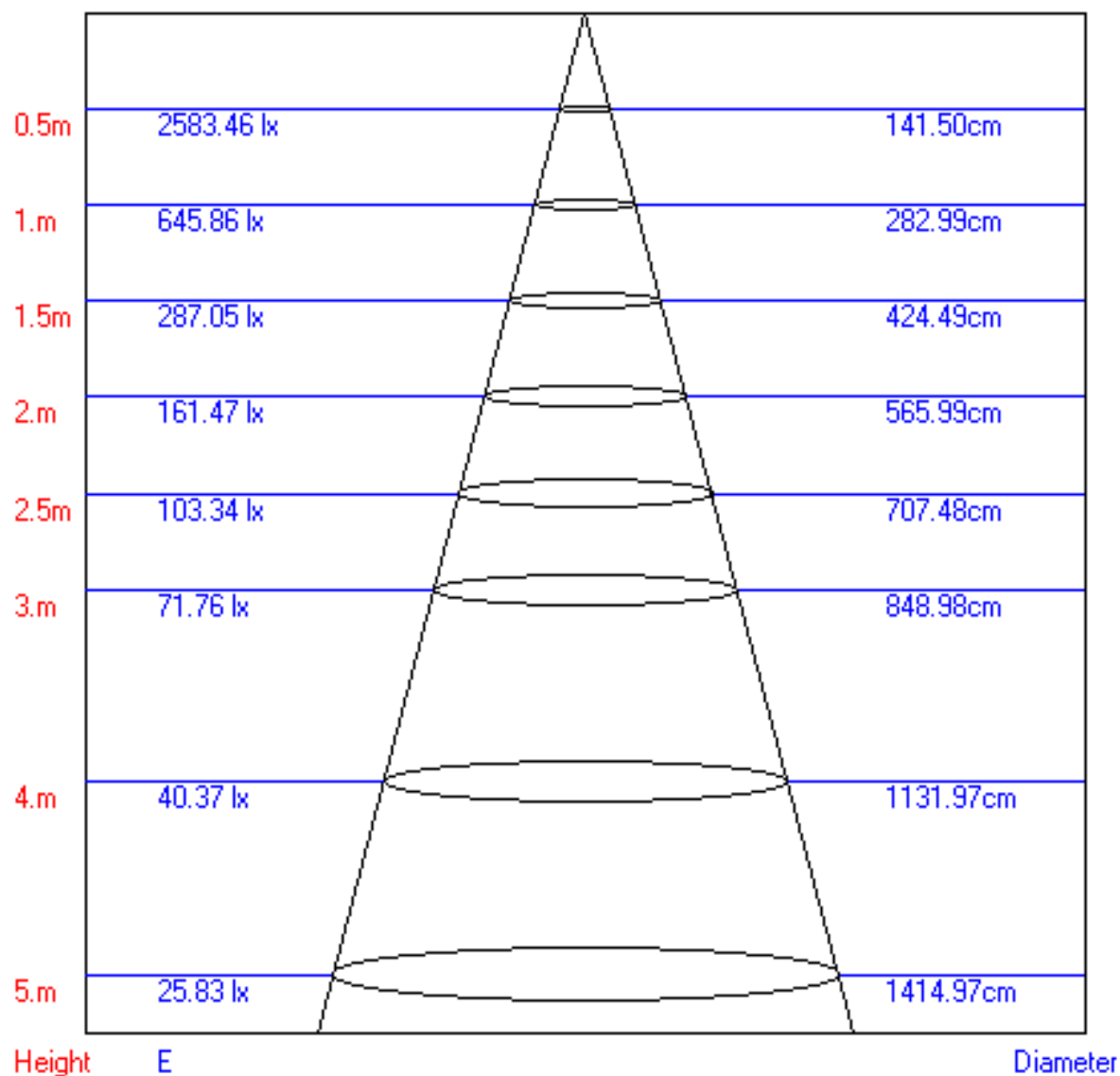
γ	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	13124	12818	12433	11937	11240	10235	8950	6533	376
C90	13145	12799	12397	11874	11189	10192	8718	6787	2777

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:109.50°

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	COEFFCIENTS 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	1.05	1.04	1.02	1.04	1.02	1.01	1.00	0.98	0.96	0.96	0.93	0.91	0.89	0.87	0.85	0.80
2	0.90	0.87	0.86	0.89	0.86	0.84	0.87	0.83	0.81	0.83	0.80	0.76	0.79	0.75	0.71	0.67
3	0.77	0.74	0.72	0.77	0.73	0.71	0.76	0.71	0.68	0.73	0.69	0.65	0.70	0.65	0.61	0.56
4	0.67	0.64	0.62	0.67	0.63	0.61	0.67	0.62	0.58	0.65	0.60	0.55	0.63	0.57	0.52	0.48
5	0.58	0.55	0.54	0.59	0.55	0.53	0.59	0.54	0.50	0.58	0.53	0.48	0.57	0.51	0.46	0.42
6	0.51	0.49	0.47	0.52	0.48	0.46	0.53	0.48	0.44	0.53	0.47	0.42	0.52	0.45	0.40	0.37
7	0.46	0.43	0.42	0.47	0.43	0.41	0.48	0.43	0.39	0.48	0.42	0.37	0.48	0.41	0.36	0.32
8	0.41	0.39	0.37	0.42	0.39	0.36	0.43	0.38	0.35	0.44	0.38	0.34	0.44	0.37	0.32	0.29
9	0.37	0.35	0.33	0.38	0.35	0.33	0.39	0.35	0.32	0.40	0.34	0.30	0.40	0.34	0.29	0.26
10	0.34	0.32	0.30	0.35	0.32	0.30	0.36	0.32	0.29	0.37	0.31	0.27	0.38	0.31	0.26	0.23

