Luminaire Property

Luminaire: RH-MRD18-18W-4000

Report NO.:
Test NO.: HLB221123
Lamp:
Sum Lumens: 2171.29 lm
Number of Lamps: 1
Diameter: 225mm
Length: mm
Photometric Type: Type C

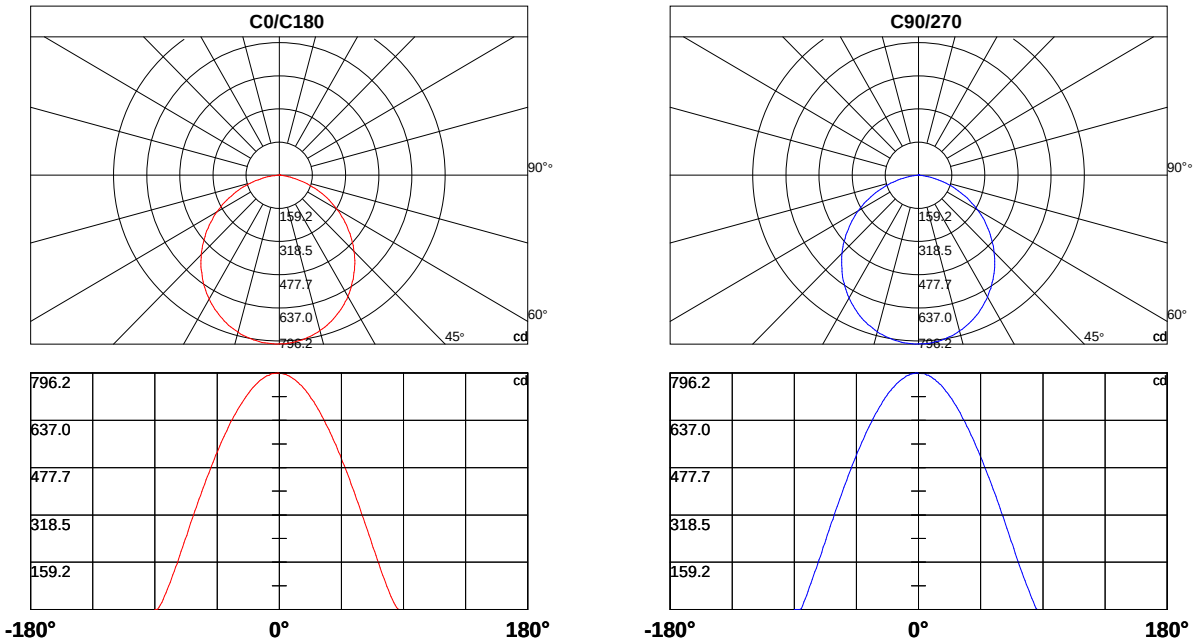
Voltage: 221.2 V
Current: 0.092 A
Power: 19.7 W
Power Factor: 0.971
Ballast Type: DL-20H-C500 500mA
Width: 225mm
Height: 38mm
Remark: 0.5W SMD2835 8B12C

Photometric Results

Lumens: 2171.29 lm
Efficiency: 110.2178 lm/W
Central Intensity: 795.495cd
Maximum Intensity: 796.233cd

Beam Angle(10%): Left: -77.7 Right:79.5

Angle of maximum intensity: C:225.0 G:1.0
Half Peak Side Angle(50%): Left: -54.1 Right:55.5
Light Out Rate(LOR) : 100.00%
Up Flux Rate: 0.0%
Down Flux Rate: 100.0%



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	795.5	796.0	795.0	793.3	792.4	791.0	788.3	786.7	783.8	781.9
45.0	795.5	795.9	794.8	794.2	793.9	792.2	789.3	788.5	785.7	783.7
90.0	795.5	795.9	794.8	794.2	793.9	792.2	789.3	788.5	785.7	783.7
135.0	795.5	796.2	795.4	795.1	794.1	793.9	792.9	789.4	788.1	786.1
180.0	795.5	796.2	795.4	795.1	794.1	793.9	792.9	789.4	788.1	786.1
225.0	795.5	796.2	795.9	794.6	794.0	792.8	791.7	788.5	787.5	785.4
270.0	795.5	796.2	795.9	794.6	794.0	792.8	791.7	788.5	787.5	785.4
315.0	795.5	796.0	795.0	793.3	792.4	791.0	788.3	786.7	783.8	781.9
360.0	795.5	796.0	795.0	793.3	792.4	791.0	788.3	786.7	783.8	781.9

C\G	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	777.2	774.5	771.7	766.5	763.5	757.9	753.9	748.3	743.6	737.9
45.0	779.0	776.2	773.8	768.7	764.9	759.6	757.3	750.9	745.6	740.2
90.0	779.0	776.2	773.8	768.7	764.9	759.6	757.3	750.9	745.6	740.2
135.0	783.4	780.3	777.1	773.8	770.8	766.0	762.0	757.1	752.2	747.9
180.0	783.4	780.3	777.1	773.8	770.8	766.0	762.0	757.1	752.2	747.9
225.0	781.5	778.6	775.6	771.3	768.7	763.9	759.3	754.0	749.3	744.9
270.0	781.5	778.6	775.6	771.3	768.7	763.9	759.3	754.0	749.3	744.9
315.0	777.2	774.5	771.7	766.5	763.5	757.9	753.9	748.3	743.6	737.9
360.0	777.2	774.5	771.7	766.5	763.5	757.9	753.9	748.3	743.6	737.9

C\G	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	731.5	725.3	719.5	711.3	706.2	699.1	691.1	683.9	674.5	668.7
45.0	734.2	728.3	722.0	715.4	709.1	701.2	694.2	686.0	678.8	671.4
90.0	734.2	728.3	722.0	715.4	709.1	701.2	694.2	686.0	678.8	671.4
135.0	741.4	736.6	729.5	724.1	716.3	710.1	704.2	695.3	688.9	682.3
180.0	741.4	736.6	729.5	724.1	716.3	710.1	704.2	695.3	688.9	682.3
225.0	738.3	733.0	727.7	720.4	713.1	706.2	699.9	691.1	683.6	675.7
270.0	738.3	733.0	727.7	720.4	713.1	706.2	699.9	691.1	683.6	675.7
315.0	731.5	725.3	719.5	711.3	706.2	699.1	691.1	683.9	674.5	668.7
360.0	731.5	725.3	719.5	711.3	706.2	699.1	691.1	683.9	674.5	668.7

C\G	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0
0.0	659.3	650.8	641.4	632.4	623.3	612.9	605.2	594.5	583.8	573.7
45.0	662.2	653.5	643.7	636.2	627.0	616.9	608.0	598.0	587.7	578.1
90.0	662.2	653.5	643.7	636.2	627.0	616.9	608.0	598.0	587.7	578.1
135.0	673.7	665.3	657.1	648.2	638.9	631.7	621.5	612.0	601.9	591.6
180.0	673.7	665.3	657.1	648.2	638.9	631.7	621.5	612.0	601.9	591.6
225.0	667.1	660.2	651.2	641.9	632.8	622.9	614.6	605.2	594.5	584.4
270.0	667.1	660.2	651.2	641.9	632.8	622.9	614.6	605.2	594.5	584.4
315.0	659.3	650.8	641.4	632.4	623.3	612.9	605.2	594.5	583.8	573.7
360.0	659.3	650.8	641.4	632.4	623.3	612.9	605.2	594.5	583.8	573.7

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	563.3	553.7	542.5	530.4	520.3	507.4	496.0	485.6	472.6	461.8
45.0	567.8	557.6	545.8	535.3	524.7	514.1	502.1	490.4	478.2	466.0
90.0	567.8	557.6	545.8	535.3	524.7	514.1	502.1	490.4	478.2	466.0
135.0	582.5	572.7	561.6	550.9	539.5	529.0	518.9	506.1	495.6	482.9
180.0	582.5	572.7	561.6	550.9	539.5	529.0	518.9	506.1	495.6	482.9
225.0	573.4	563.4	551.5	542.4	531.5	519.9	508.1	496.0	486.3	473.4
270.0	573.4	563.4	551.5	542.4	531.5	519.9	508.1	496.0	486.3	473.4
315.0	563.3	553.7	542.5	530.4	520.3	507.4	496.0	485.6	472.6	461.8
360.0	563.3	553.7	542.5	530.4	520.3	507.4	496.0	485.6	472.6	461.8

C\G	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	448.5	438.0	422.8	411.5	399.1	385.6	372.1	358.5	346.9	333.3
45.0	453.5	443.4	430.2	418.0	404.8	391.8	381.1	367.3	354.0	340.3
90.0	453.5	443.4	430.2	418.0	404.8	391.8	381.1	367.3	354.0	340.3
135.0	471.3	458.8	447.6	436.2	422.3	410.1	397.3	383.6	372.1	359.2
180.0	471.3	458.8	447.6	436.2	422.3	410.1	397.3	383.6	372.1	359.2
225.0	460.8	448.9	435.3	422.8	411.5	398.9	385.9	371.9	359.0	347.3
270.0	460.8	448.9	435.3	422.8	411.5	398.9	385.9	371.9	359.0	347.3
315.0	448.5	438.0	422.8	411.5	399.1	385.6	372.1	358.5	346.9	333.3
360.0	448.5	438.0	422.8	411.5	399.1	385.6	372.1	358.5	346.9	333.3

C\G	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0
0.0	318.7	305.6	291.6	276.7	265.0	251.1	236.7	222.0	208.3	194.6
45.0	326.8	313.4	300.7	286.7	273.1	258.4	245.1	230.3	218.7	204.3
90.0	326.8	313.4	300.7	286.7	273.1	258.4	245.1	230.3	218.7	204.3
135.0	345.1	332.1	317.3	306.0	291.7	278.1	264.0	249.3	236.7	224.0
180.0	345.1	332.1	317.3	306.0	291.7	278.1	264.0	249.3	236.7	224.0
225.0	333.0	319.8	304.5	293.4	278.9	264.8	250.9	235.5	222.0	210.0
270.0	333.0	319.8	304.5	293.4	278.9	264.8	250.9	235.5	222.0	210.0
315.0	318.7	305.6	291.6	276.7	265.0	251.1	236.7	222.0	208.3	194.6
360.0	318.7	305.6	291.6	276.7	265.0	251.1	236.7	222.0	208.3	194.6

C\G	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	181.6	168.3	153.9	140.3	127.3	115.6	102.6	90.4	77.3	66.0
45.0	189.8	176.4	162.1	149.1	137.0	122.8	110.4	97.0	84.4	74.1
90.0	189.8	176.4	162.1	149.1	137.0	122.8	110.4	97.0	84.4	74.1
135.0	209.7	196.0	181.6	168.6	154.2	142.9	129.1	116.1	103.2	90.2
180.0	209.7	196.0	181.6	168.6	154.2	142.9	129.1	116.1	103.2	90.2
225.0	193.0	179.4	166.6	153.6	139.0	127.0	114.4	100.9	88.6	75.0
270.0	193.0	179.4	166.6	153.6	139.0	127.0	114.4	100.9	88.6	75.0
315.0	181.6	168.3	153.9	140.3	127.3	115.6	102.6	90.4	77.3	66.0
360.0	181.6	168.3	153.9	140.3	127.3	115.6	102.6	90.4	77.3	66.0

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	53.9	43.5	33.9	23.0	14.9	7.0	0.6	0.0	0.0	0.0
45.0	61.2	48.4	37.1	25.3	14.2	4.4	0.0	0.0	0.0	0.0
90.0	61.2	48.4	37.1	25.3	14.2	4.4	0.0	0.0	0.0	0.0
135.0	78.4	67.7	56.3	44.8	33.6	24.2	15.2	7.4	1.3	0.0
180.0	78.4	67.7	56.3	44.8	33.6	24.2	15.2	7.4	1.3	0.0
225.0	61.8	48.9	35.4	25.3	12.9	3.6	0.0	0.0	0.0	0.0
270.0	61.8	48.9	35.4	25.3	12.9	3.6	0.0	0.0	0.0	0.0
315.0	53.9	43.5	33.9	23.0	14.9	7.0	0.6	0.0	0.0	0.0
360.0	53.9	43.5	33.9	23.0	14.9	7.0	0.6	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

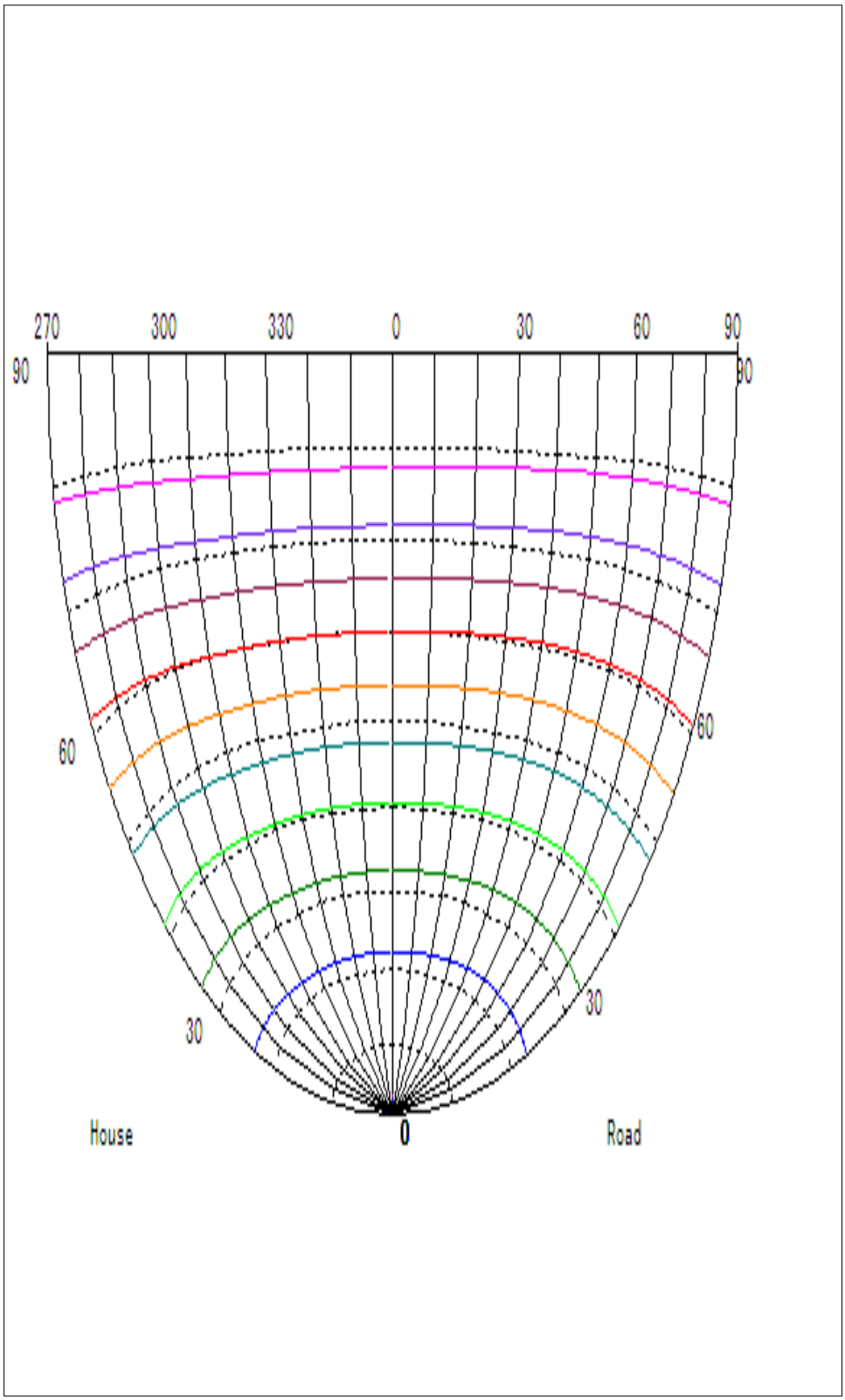
Gamma [°]	Imean [cd]	Zonal Flux [lm]	Sum Flux [lm]	Zonal Flux [%]	Sum Flux [%]
0	795.49	0.00	0.00	0.00	0.00
1	796.09	0.76	0.76	0.04	0.04
2	795.26	2.28	3.05	0.11	0.14
3	794.30	3.80	6.85	0.18	0.32
4	793.61	5.32	12.16	0.24	0.56
5	792.48	6.82	18.99	0.31	0.87
6	790.55	8.32	27.31	0.38	1.26
7	788.25	9.80	37.10	0.45	1.71
8	786.25	11.27	48.37	0.52	2.23
9	784.24	12.73	61.10	0.59	2.81
10	780.26	14.16	75.26	0.65	3.47
11	777.42	15.56	90.82	0.72	4.18
12	774.54	16.97	107.79	0.78	4.96
13	770.07	18.33	126.12	0.84	5.81
14	766.97	19.67	145.79	0.91	6.71
15	761.85	20.99	166.78	0.97	7.68
16	758.12	22.27	189.05	1.03	8.71
17	752.57	23.53	212.58	1.08	9.79
18	747.67	24.74	237.31	1.14	10.93
19	742.72	25.93	263.24	1.19	12.12
20	736.34	27.07	290.32	1.25	13.37
21	730.80	28.17	318.49	1.30	14.67
22	724.66	29.25	347.74	1.35	16.02
23	717.80	30.27	378.00	1.39	17.41
24	711.15	31.24	409.24	1.44	18.85
25	704.16	32.18	441.43	1.48	20.33
26	697.35	33.08	474.51	1.52	21.85
27	689.04	33.92	508.43	1.56	23.42
28	681.41	34.70	543.12	1.60	25.01
29	674.52	35.48	578.60	1.63	26.65
30	665.60	36.18	614.78	1.67	28.31
31	657.47	36.82	651.60	1.70	30.01
32	648.35	37.41	689.01	1.72	31.73
33	639.67	37.95	726.96	1.75	33.48
34	630.51	38.44	765.40	1.77	35.25
35	621.11	38.87	804.27	1.79	37.04
36	612.33	39.27	843.54	1.81	38.85
37	602.43	39.62	883.16	1.82	40.67
38	591.96	39.87	923.03	1.84	42.51
39	581.97	40.07	963.10	1.85	44.36
40	571.75	40.24	1003.33	1.85	46.21

Zonal Flux Distribution

Gamma [°]	Imean [cd]	Zonal Flux [lm]	Sum Flux [lm]	Zonal Flux [%]	Sum Flux [%]
41	561.85	40.37	1043.70	1.86	48.07
42	550.33	40.41	1084.11	1.86	49.93
43	539.75	40.38	1124.49	1.86	51.79
44	528.99	40.34	1164.83	1.86	53.65
45	517.59	40.22	1205.05	1.85	55.50
46	506.30	40.04	1245.09	1.84	57.34
47	494.51	39.80	1284.89	1.83	59.18
48	483.18	39.52	1324.42	1.82	61.00
49	471.00	39.18	1363.60	1.80	62.80
50	458.52	38.75	1402.36	1.78	64.59
51	447.26	38.32	1440.68	1.76	66.35
52	433.99	37.82	1478.49	1.74	68.09
53	422.14	37.24	1515.74	1.72	69.81
54	409.41	36.65	1552.39	1.69	71.50
55	396.58	35.98	1588.37	1.66	73.15
56	384.10	35.28	1623.64	1.62	74.78
57	370.34	34.49	1658.14	1.59	76.37
58	357.99	33.68	1691.82	1.55	77.92
59	345.01	32.87	1724.68	1.51	79.43
60	330.89	31.93	1756.62	1.47	80.90
61	317.73	30.95	1787.57	1.43	82.33
62	303.53	29.94	1817.50	1.38	83.71
63	290.68	28.90	1846.40	1.33	85.04
64	277.19	27.87	1874.27	1.28	86.32
65	263.11	26.74	1901.01	1.23	87.55
66	249.18	25.56	1926.57	1.18	88.73
67	234.26	24.31	1950.88	1.12	89.85
68	221.42	23.08	1973.96	1.06	90.91
69	208.23	21.92	1995.88	1.01	91.92
70	193.52	20.63	2016.51	0.95	92.87
71	180.02	19.31	2035.82	0.89	93.76
72	166.03	17.99	2053.81	0.83	94.59
73	152.88	16.68	2070.49	0.77	95.36
74	139.36	15.36	2085.85	0.71	96.07
75	127.09	14.08	2099.93	0.65	96.71
76	114.12	12.80	2112.74	0.59	97.30
77	101.12	11.48	2124.21	0.53	97.83
78	88.39	10.14	2134.36	0.47	98.30
79	76.33	8.85	2143.21	0.41	98.71
80	63.84	7.56	2150.76	0.35	99.05
81	52.13	6.27	2157.04	0.29	99.34

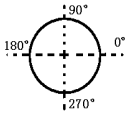
Zonal Flux Distribution

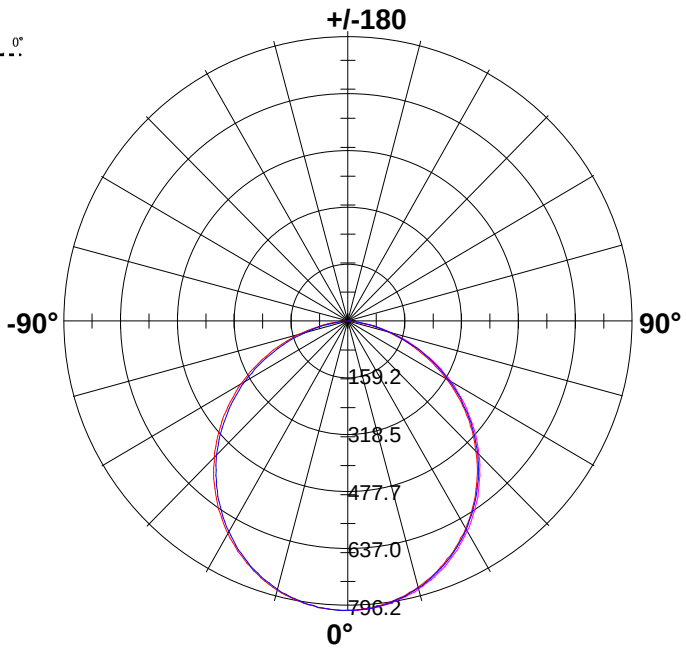
Gamma [°]	Imean [cd]	Zonal Flux [lm]	Sum Flux [lm]	Zonal Flux [%]	Sum Flux [%]
82	40.66	5.03	2162.07	0.23	99.58
83	29.59	3.82	2165.89	0.18	99.75
84	18.90	2.64	2168.53	0.12	99.87
85	9.79	1.57	2170.09	0.07	99.94
86	3.94	0.75	2170.84	0.03	99.98
87	1.84	0.32	2171.16	0.01	99.99
88	0.32	0.12	2171.28	0.01	100.00
89	0.00	0.02	2171.30	0.00	100.00
90	0.00	0.00	2171.30	0.00	100.00

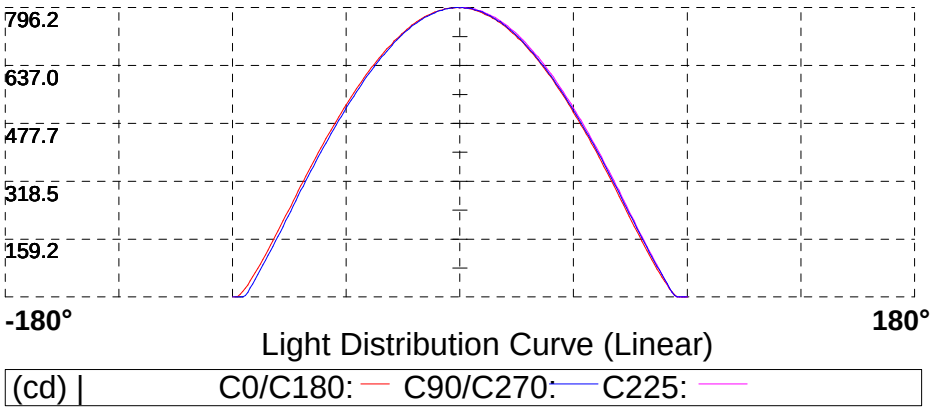

270
300
330
0
30
60
90
90
90
60
60
30
30
House
0
Road
79.6233 cd
159.2466 cd
238.8699 cd
318.4932 cd
398.1165 cd
477.7398 cd
557.3631 cd
636.9864 cd
716.6097 cd
796.233 cd

Light Distribution Curve [Unit: cd]

Luminaire



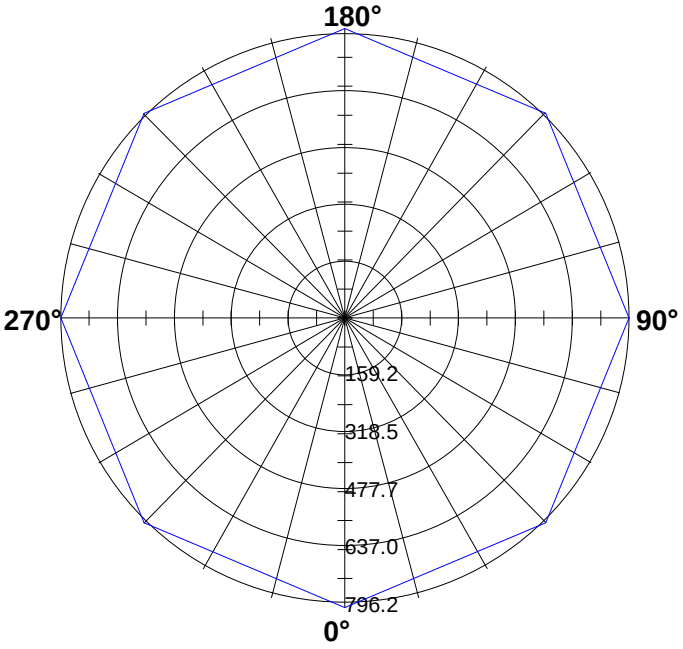


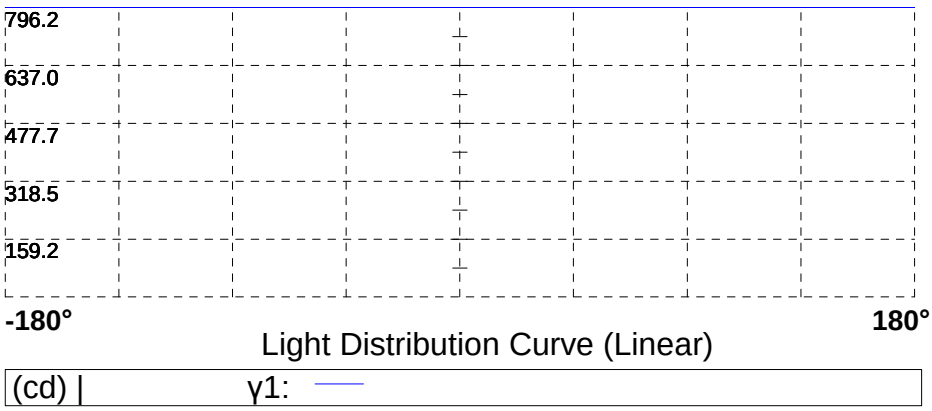


Light Distribution Curve (Linear)

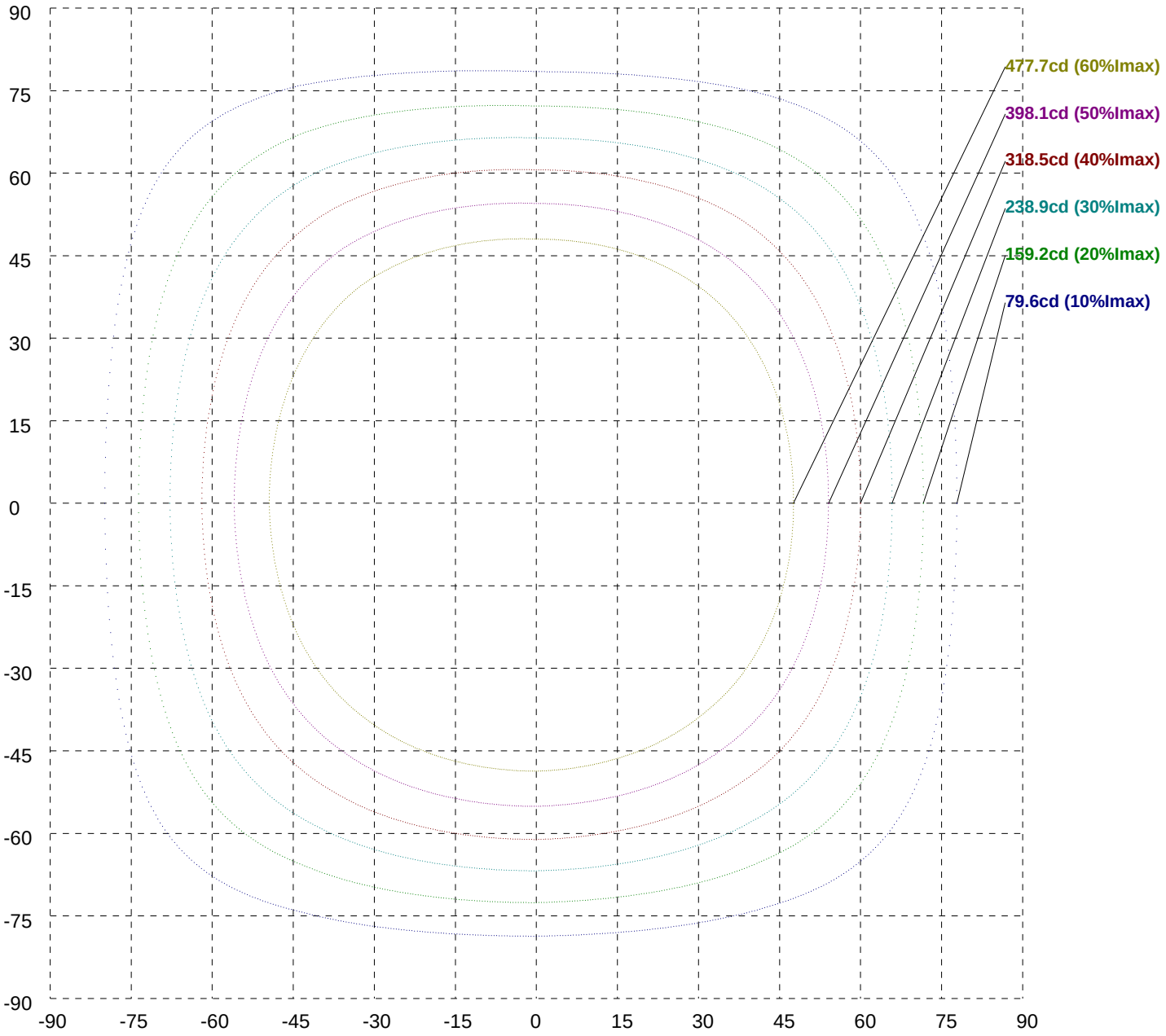
(cd) | C0/C180: C90/C270: C225:

Max Plane Light Distribution Curve [Unit: cd]



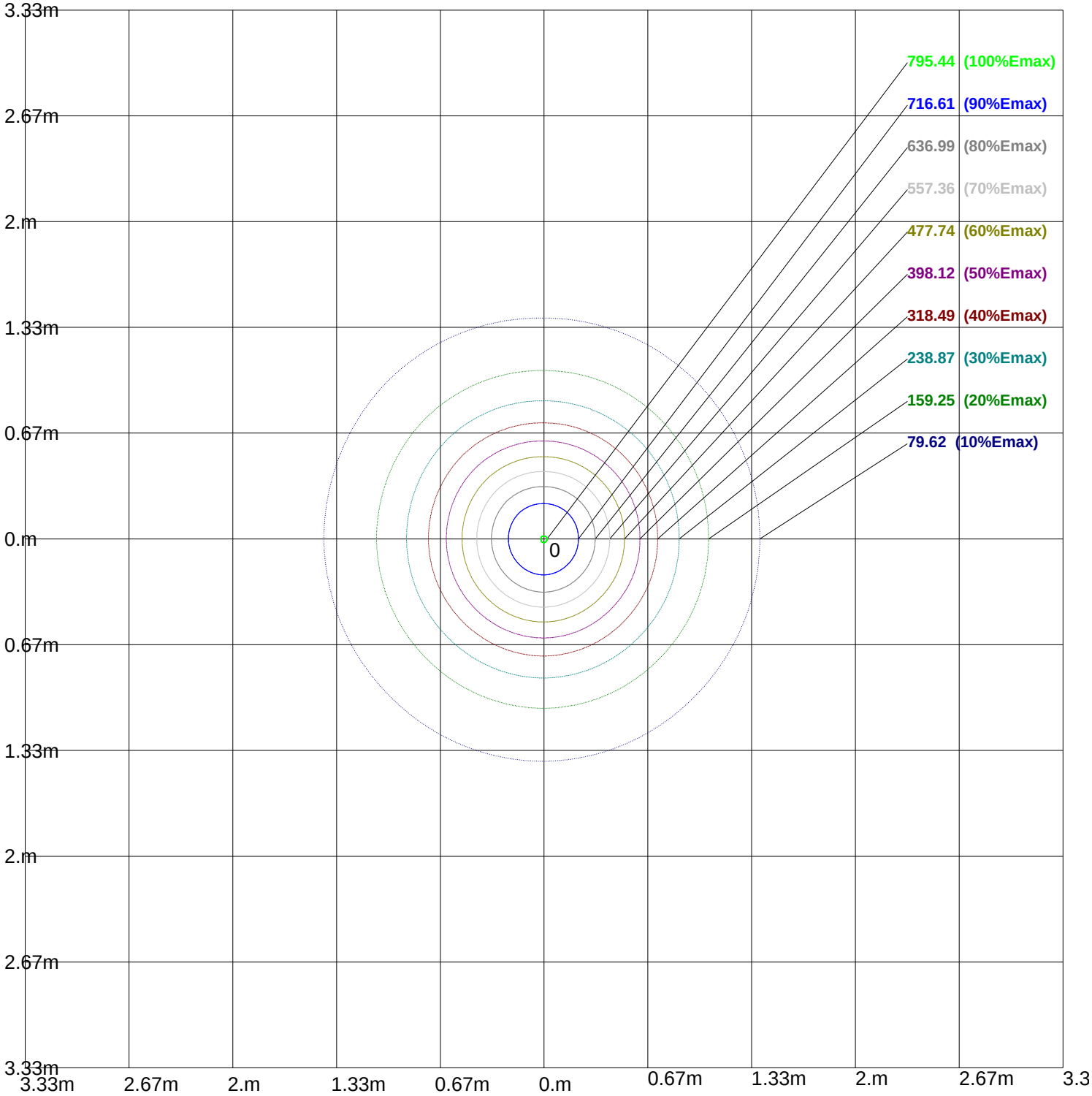


等光强曲线 V-H [cd]



测试设备:LINKCOLOR LCG-GONIO　　测试日期:2022-12-26　　测试人员:xiong
环境温度:25℃　　环境湿度:60%　　报告编号:

Iso-Lux[lx]



Height: 1 m
Max Illuminance : 796.23lx

Luminance Limitting Curve

Diameter: 225mm

Length: mm

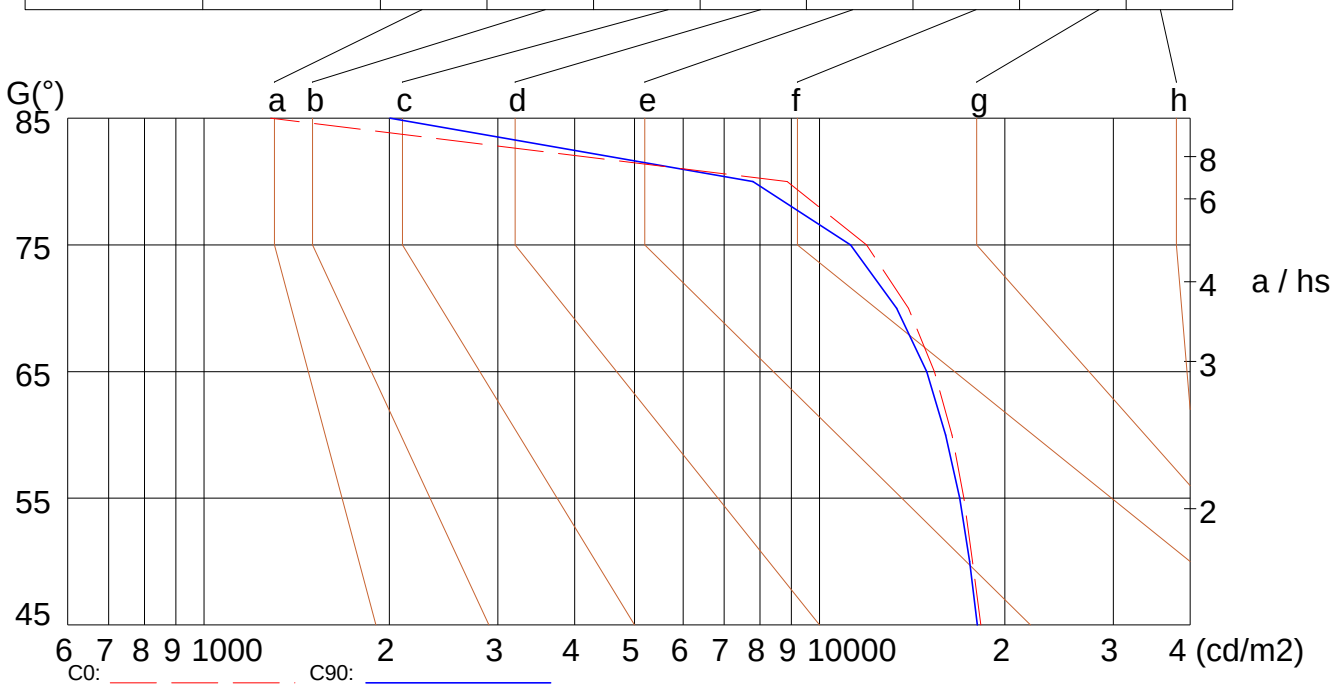
Width: 225mm

Height: 38mm

(cd/m2)

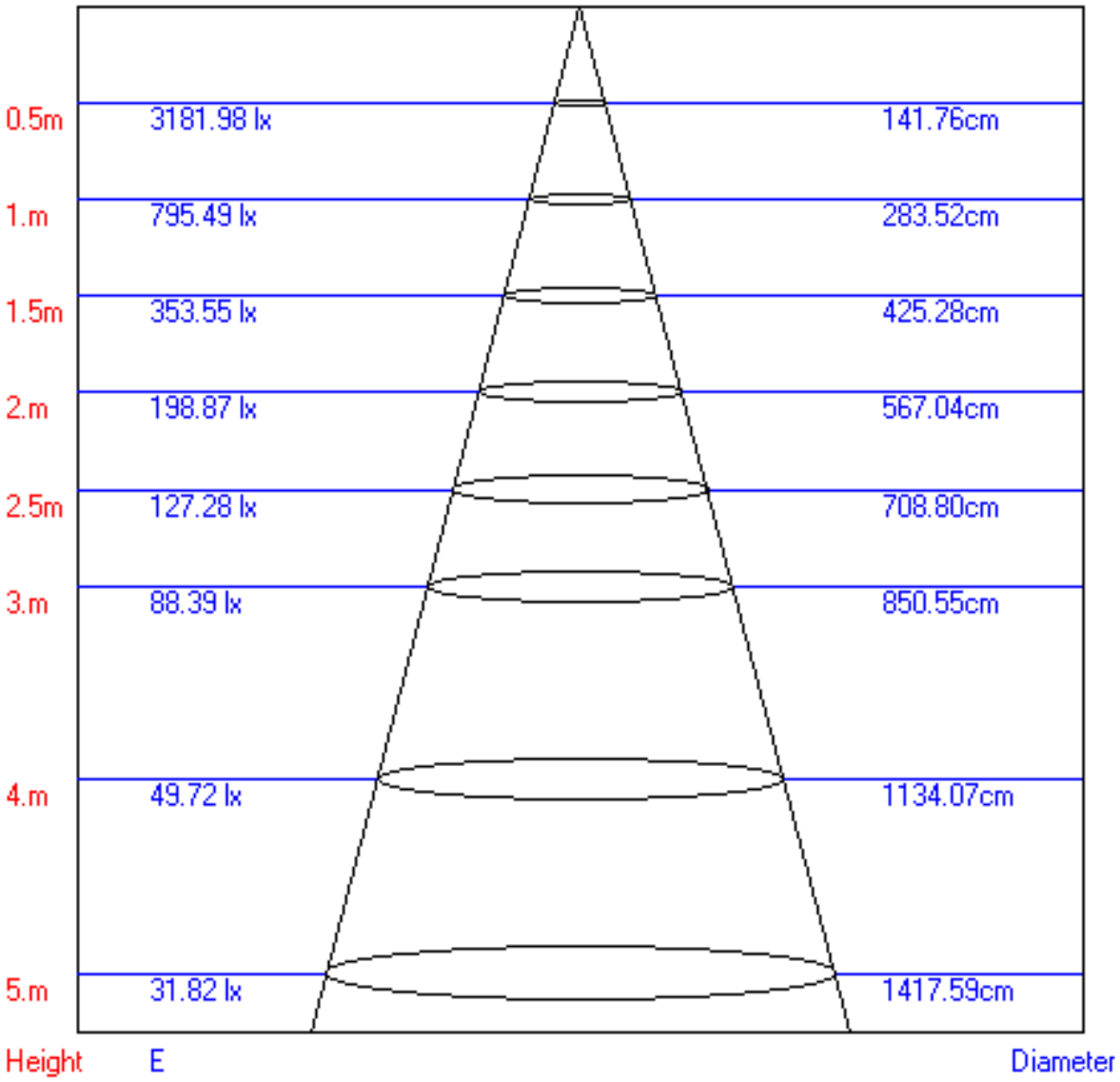
γ	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	18267	17725	17161	16421	15364	13944	11926	8862	1282
C90	18031	17531	16890	16015	14929	13340	11221	7796	2004

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. Limitting Curve (C0/C90)

Lux-Distance Curve



Beam Angle:109.60°

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	1.00	1.00	0.98	0.96	0.95	0.93	0.91	0.89	0.87	0.85	0.79
2	0.90	0.87	0.85	0.89	0.86	0.84	0.87	0.83	0.80	0.83	0.80	0.76	0.79	0.75	0.71	0.66
3	0.77	0.74	0.72	0.77	0.73	0.71	0.76	0.71	0.68	0.73	0.68	0.64	0.70	0.65	0.61	0.56
4	0.66	0.64	0.62	0.67	0.63	0.60	0.66	0.62	0.58	0.65	0.60	0.55	0.63	0.57	0.52	0.48
5	0.58	0.55	0.53	0.59	0.55	0.52	0.59	0.54	0.50	0.58	0.52	0.48	0.57	0.50	0.45	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	0.36
7	0.46	0.43	0.41	0.46	0.43	0.41	0.47	0.42	0.39	0.48	0.42	0.37	0.47	0.41	0.35	0.32
8	0.41	0.38	0.37	0.42	0.38	0.36	0.43	0.38	0.35	0.44	0.38	0.33	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	0.31	0.40	0.34	0.30	0.40	0.34	0.29	0.26
10	0.34	0.31	0.30	0.35	0.32	0.30	0.36	0.32	0.28	0.37	0.31	0.27	0.38	0.31	0.26	0.23

Budgetary Estimate Chart			
Light Flux	2171.29 lmlm		
Maintenance	0.8/0.8		
Aver E	200lx		
Work Plane H	0		
Place Name	Cel	Wall	Floor
Reflect1	0.7	0.5	0.2
Reflect2	0.5	0.3	0.2