

Luminaire Property

Luminaire: RH-MSD29-20W-4000

Report NO.:

Test NO.: HLB230728

Lamp:

Sum Lumens: 2344.13 lm

Number of Lamps: 1

Diameter: mm

Length: 240mm

Photometric Type: Type C

Voltage: 230.0 V

Current: 0.149 A

Power: 19.5 W

Power Factor: 0.567

Ballast Type: 68-72V 250mA

Width: 240mm

Height: 35mm

Remark: 120PCS 0.5W SMD2835 5B24C

Photometric Results

Lumens: 2344.13 lm

Efficiency: 120.2118 lm/W

Central Intensity: 853.598cd

Maximum Intensity: 854.717cd

Angle of maximum intensity: C:45.0 G:1.0

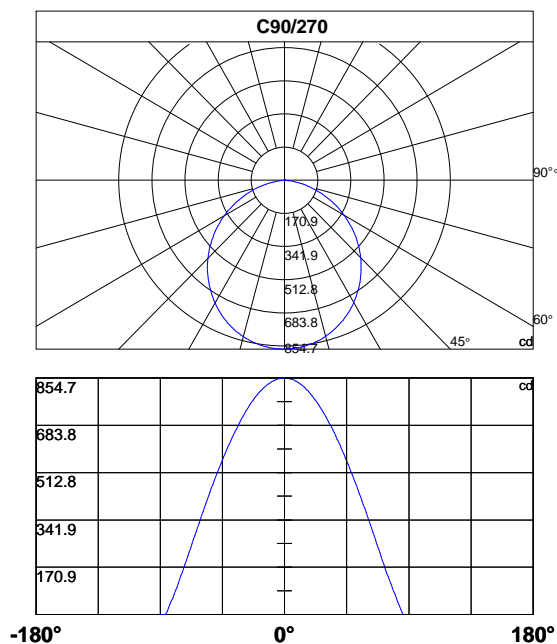
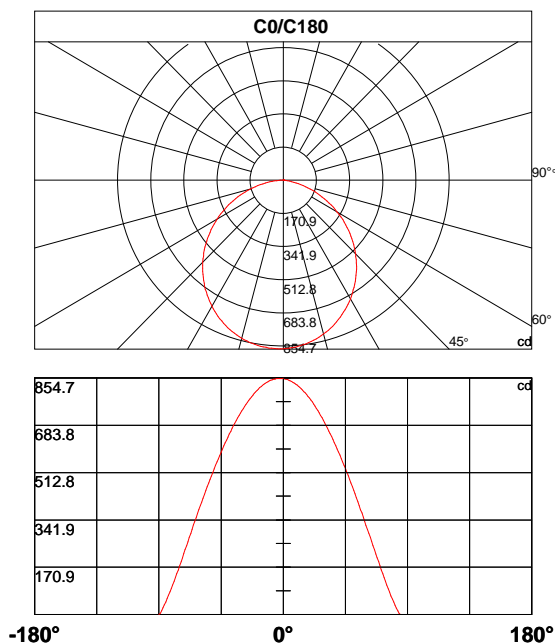
Half Peak Side Angle(50%): Left: -56.1 Right:53.8

Light Out Rate(LOR) : 100.00%

Up Flux Rate: 0.0%

Down Flux Rate: 100.0%

Beam Angle(10%): Left: -80.0 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	853.6	851.4	850.3	848.7	846.6	844.5	842.4	838.9	836.4	832.5
45.0	853.6	854.7	854.2	853.3	851.6	850.6	848.7	846.4	843.6	841.3
90.0	853.6	854.7	854.2	853.3	851.6	850.6	848.7	846.4	843.6	841.3
135.0	853.6	853.4	853.4	853.1	852.9	852.5	851.0	849.8	848.4	846.2
180.0	853.6	853.4	853.4	853.1	852.9	852.5	851.0	849.8	848.4	846.2
225.0	853.6	854.7	854.5	853.7	852.2	851.1	849.0	847.4	845.1	842.2
270.0	853.6	854.7	854.5	853.7	852.2	851.1	849.0	847.4	845.1	842.2
315.0	853.6	851.4	850.3	848.7	846.6	844.5	842.4	838.9	836.4	832.5
360.0	853.6	851.4	850.3	848.7	846.6	844.5	842.4	838.9	836.4	832.5

C\G	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	829.0	825.2	820.8	815.7	810.6	805.3	800.2	794.5	788.1	782.0
45.0	837.7	834.3	831.1	827.3	822.5	817.5	812.8	808.2	802.2	796.2
90.0	837.7	834.3	831.1	827.3	822.5	817.5	812.8	808.2	802.2	796.2
135.0	844.1	841.5	838.5	835.3	832.1	828.4	824.0	819.7	814.7	810.2
180.0	844.1	841.5	838.5	835.3	832.1	828.4	824.0	819.7	814.7	810.2
225.0	839.2	835.9	832.9	828.5	824.2	820.1	814.8	809.5	804.9	799.4
270.0	839.2	835.9	832.9	828.5	824.2	820.1	814.8	809.5	804.9	799.4
315.0	829.0	825.2	820.8	815.7	810.6	805.3	800.2	794.5	788.1	782.0
360.0	829.0	825.2	820.8	815.7	810.6	805.3	800.2	794.5	788.1	782.0

C\G	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	774.6	768.1	760.3	753.5	745.4	737.2	729.0	720.0	712.0	702.6
45.0	789.9	783.8	776.6	770.6	763.2	755.5	747.7	739.0	730.9	723.6
90.0	789.9	783.8	776.6	770.6	763.2	755.5	747.7	739.0	730.9	723.6
135.0	804.6	799.1	792.8	786.8	780.0	774.0	767.1	759.2	751.6	743.9
180.0	804.6	799.1	792.8	786.8	780.0	774.0	767.1	759.2	751.6	743.9
225.0	793.0	786.3	779.8	772.7	766.5	758.8	751.0	742.7	734.0	725.8
270.0	793.0	786.3	779.8	772.7	766.5	758.8	751.0	742.7	734.0	725.8
315.0	774.6	768.1	760.3	753.5	745.4	737.2	729.0	720.0	712.0	702.6
360.0	774.6	768.1	760.3	753.5	745.4	737.2	729.0	720.0	712.0	702.6

C\G	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0
0.0	693.4	683.6	673.8	662.8	654.0	643.0	632.5	621.6	610.0	598.0
45.0	713.9	704.8	695.4	685.5	676.8	667.0	656.6	645.3	634.5	623.1
90.0	713.9	704.8	695.4	685.5	676.8	667.0	656.6	645.3	634.5	623.1
135.0	735.5	728.0	719.2	709.9	700.6	691.1	683.1	673.0	662.4	652.3
180.0	735.5	728.0	719.2	709.9	700.6	691.1	683.1	673.0	662.4	652.3
225.0	717.9	708.8	698.7	689.2	679.2	668.9	659.9	649.6	638.7	627.2
270.0	717.9	708.8	698.7	689.2	679.2	668.9	659.9	649.6	638.7	627.2
315.0	693.4	683.6	673.8	662.8	654.0	643.0	632.5	621.6	610.0	598.0
360.0	693.4	683.6	673.8	662.8	654.0	643.0	632.5	621.6	610.0	598.0

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	588.2	576.5	563.6	551.4	538.6	528.0	515.1	502.1	488.8	475.3
45.0	614.0	602.0	590.2	578.1	566.0	553.9	542.8	530.8	517.8	504.5
90.0	614.0	602.0	590.2	578.1	566.0	553.9	542.8	530.8	517.8	504.5
135.0	641.2	630.5	620.5	609.8	598.3	586.6	574.1	562.2	551.7	539.1
180.0	641.2	630.5	620.5	609.8	598.3	586.6	574.1	562.2	551.7	539.1
225.0	616.4	606.4	594.9	582.6	570.1	558.1	545.6	532.8	521.8	509.1
270.0	616.4	606.4	594.9	582.6	570.1	558.1	545.6	532.8	521.8	509.1
315.0	588.2	576.5	563.6	551.4	538.6	528.0	515.1	502.1	488.8	475.3
360.0	588.2	576.5	563.6	551.4	538.6	528.0	515.1	502.1	488.8	475.3

C\G	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	461.4	449.3	436.0	421.9	407.4	393.1	378.4	366.3	351.4	336.2
45.0	491.2	479.4	466.7	452.5	438.6	424.4	410.7	396.1	383.5	369.7
90.0	491.2	479.4	466.7	452.5	438.6	424.4	410.7	396.1	383.5	369.7
135.0	526.6	513.3	500.3	488.7	475.5	461.8	448.5	434.7	420.1	406.2
180.0	526.6	513.3	500.3	488.7	475.5	461.8	448.5	434.7	420.1	406.2
225.0	495.0	482.2	468.2	457.0	442.7	428.7	414.8	400.2	387.9	373.0
270.0	495.0	482.2	468.2	457.0	442.7	428.7	414.8	400.2	387.9	373.0
315.0	461.4	449.3	436.0	421.9	407.4	393.1	378.4	366.3	351.4	336.2
360.0	461.4	449.3	436.0	421.9	407.4	393.1	378.4	366.3	351.4	336.2

C\G	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0
0.0	321.4	306.6	293.4	278.5	263.4	248.4	233.1	218.1	205.5	190.1
45.0	354.8	340.1	324.8	312.2	297.1	282.0	267.1	251.8	236.9	224.2
90.0	354.8	340.1	324.8	312.2	297.1	282.0	267.1	251.8	236.9	224.2
135.0	394.1	379.8	365.1	350.3	335.6	323.5	307.8	292.8	278.5	263.0
180.0	394.1	379.8	365.1	350.3	335.6	323.5	307.8	292.8	278.5	263.0
225.0	358.3	344.1	328.7	313.8	298.9	285.9	270.6	255.2	240.4	225.3
270.0	358.3	344.1	328.7	313.8	298.9	285.9	270.6	255.2	240.4	225.3
315.0	321.4	306.6	293.4	278.5	263.4	248.4	233.1	218.1	205.5	190.1
360.0	321.4	306.6	293.4	278.5	263.4	248.4	233.1	218.1	205.5	190.1

C\G	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	175.5	160.8	146.3	132.3	120.1	106.4	92.6	80.2	67.3	55.2
45.0	208.8	194.1	179.3	164.4	149.4	137.4	123.4	109.8	95.6	82.6
90.0	208.8	194.1	179.3	164.4	149.4	137.4	123.4	109.8	95.6	82.6
135.0	247.9	235.0	220.5	204.9	190.5	175.1	160.7	148.6	134.3	120.1
180.0	247.9	235.0	220.5	204.9	190.5	175.1	160.7	148.6	134.3	120.1
225.0	212.0	197.0	182.3	167.3	152.7	139.7	125.6	111.7	98.0	85.0
270.0	212.0	197.0	182.3	167.3	152.7	139.7	125.6	111.7	98.0	85.0
315.0	175.5	160.8	146.3	132.3	120.1	106.4	92.6	80.2	67.3	55.2
360.0	175.5	160.8	146.3	132.3	120.1	106.4	92.6	80.2	67.3	55.2

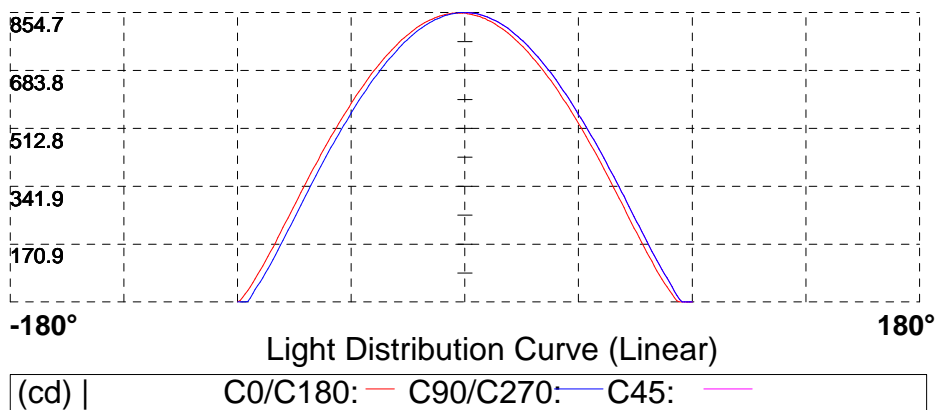
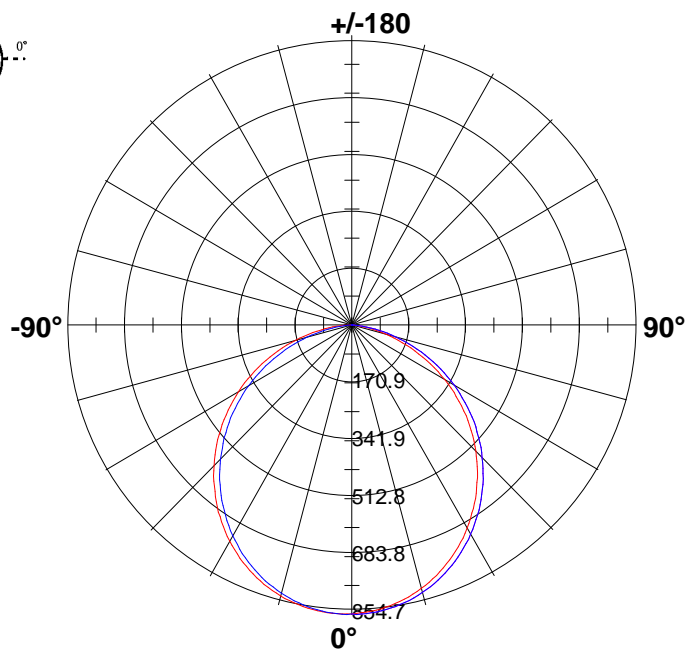
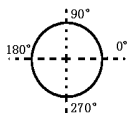
Photometric Data Table [cd]

C\G	80.0	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	44.6	33.1	23.2	12.6	3.4	0.0	0.0	0.0	0.0	0.0
45.0	71.3	58.4	44.9	31.7	19.4	8.3	0.0	0.0	0.0	0.0
90.0	71.3	58.4	44.9	31.7	19.4	8.3	0.0	0.0	0.0	0.0
135.0	106.5	93.6	81.9	69.2	57.3	45.0	34.0	24.2	13.7	4.5
180.0	106.5	93.6	81.9	69.2	57.3	45.0	34.0	24.2	13.7	4.5
225.0	71.5	59.2	48.9	37.3	25.2	12.0	1.5	0.0	0.0	0.0
270.0	71.5	59.2	48.9	37.3	25.2	12.0	1.5	0.0	0.0	0.0
315.0	44.6	33.1	23.2	12.6	3.4	0.0	0.0	0.0	0.0	0.0
360.0	44.6	33.1	23.2	12.6	3.4	0.0	0.0	0.0	0.0	0.0

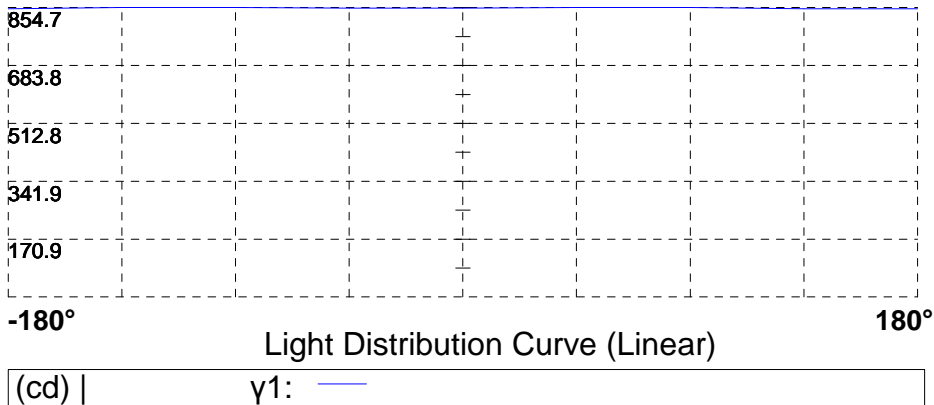
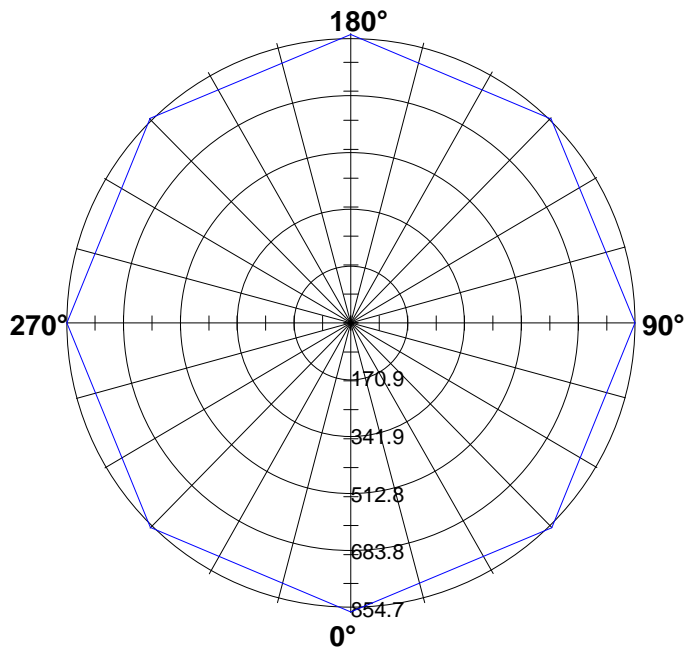
C\G	90.0
0.0	0.0
45.0	0.0
90.0	0.0
135.0	0.0
180.0	0.0
225.0	0.0
270.0	0.0
315.0	0.0
360.0	0.0

Light Distribution Curve [Unit: cd]

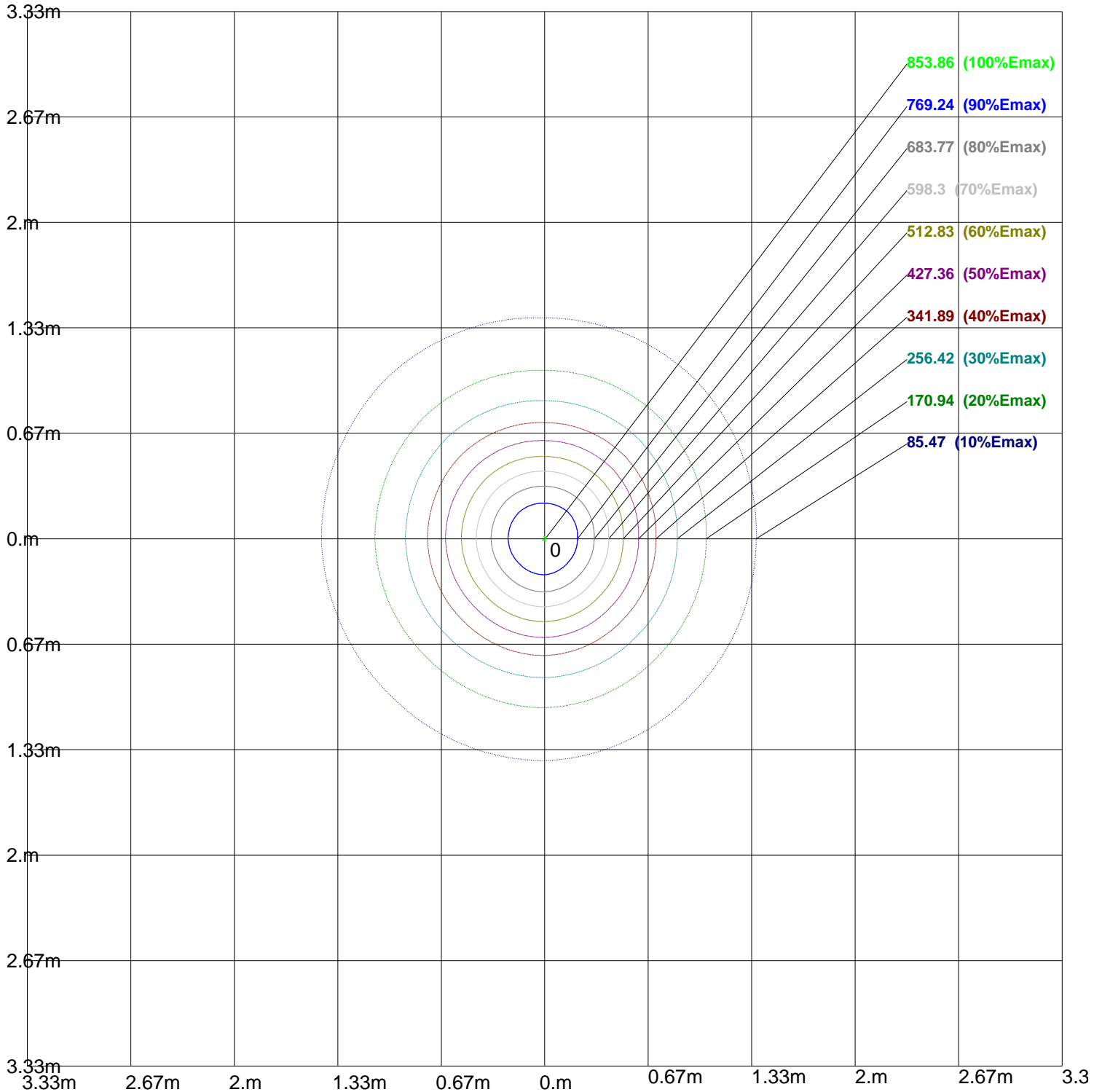
Luminaire



Max Plane Light Distribution Curve [Unit: cd]



Iso-Lux[lx]



Height: 1 m
Max Illuminance : 854.72lx

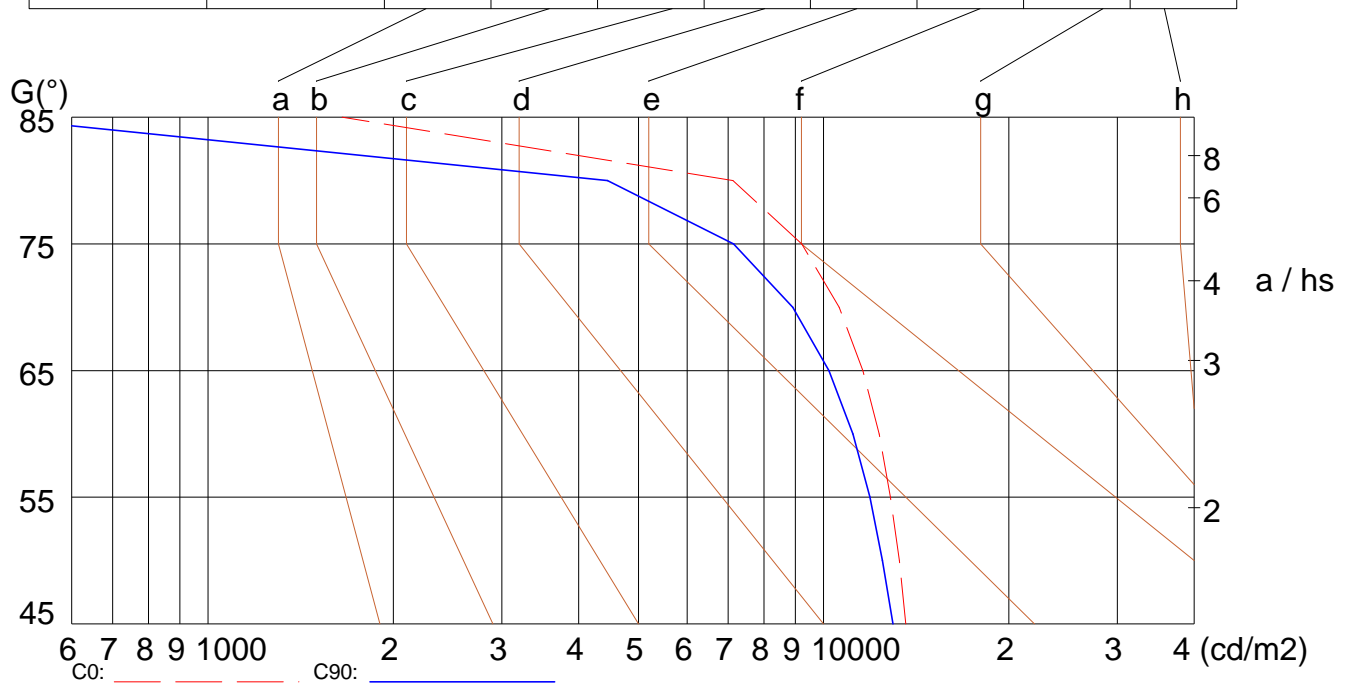
Luminance Limiting Curve

Diameter: mm
Length: 240mm
Width: 240mm
Height: 35mm

(cd/m²)

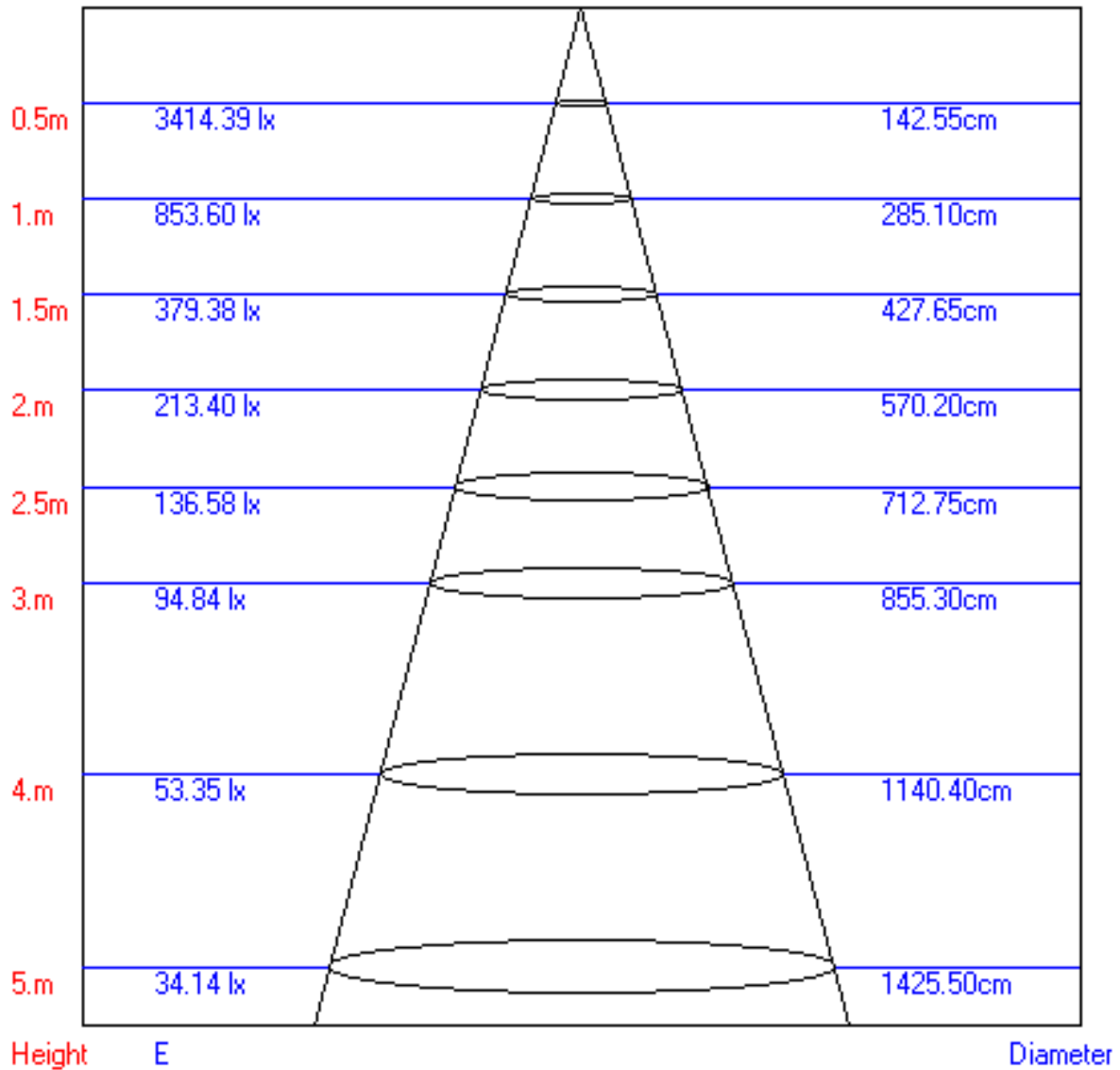
γ	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	13599	13268	12845	12321	11586	10598	9214	7125	
C90	12965	12463	11898	11160	10204	8909	7140	4457	

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:109.90°

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
RRCR	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	1.05	1.03	1.02	1.04	1.02	1.00	1.00	0.98	0.96	0.95	0.93	0.91	0.89	0.87	0.84	0.79
2	0.89	0.87	0.85	0.89	0.86	0.84	0.87	0.83	0.80	0.83	0.79	0.76	0.79	0.75	0.71	0.66
3	0.77	0.74	0.72	0.77	0.73	0.70	0.75	0.71	0.68	0.73	0.68	0.64	0.70	0.65	0.60	0.56
4	0.66	0.63	0.61	0.67	0.63	0.60	0.66	0.61	0.58	0.65	0.59	0.55	0.63	0.57	0.52	0.48
5	0.58	0.55	0.53	0.58	0.55	0.52	0.59	0.54	0.50	0.58	0.52	0.48	0.57	0.50	0.45	0.41
6	0.51	0.48	0.47	0.52	0.48	0.46	0.52	0.47	0.44	0.52	0.46	0.42	0.52	0.45	0.40	0.36
7	0.45	0.43	0.41	0.46	0.43	0.40	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	0.43	0.38	0.33	0.44	0.37	0.32	0.29
9	0.37	0.35	0.33	0.38	0.35	0.32	0.39	0.34	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	0.31	0.29	0.36	0.31	0.28	0.37	0.31	0.27	0.37	0.31	0.26	0.23

