

Luminaire Property

Luminaire: RH-LP1104 40W 3000K 60°

Report NO.:

Test NO.: HLH190301

Lamp:

Sum Lumens: 4028.28 lm

Number of Lamps: 1

Diameter: 110mm

Length: 165mm

Photometric Type: Type C

Voltage: 220.6 V

Current: 0.187 A

Power: 40.4 W

Power Factor: 0.977

Ballast Type: OSRAM OT FIT 40 950mA

Width: 110mm

Height: mm

Remark: CREE CXA1820N

Photometric Results

Lumens: 4028.28 lm

Efficiency: 99.7099 lm/W

Central Intensity: 5904.989cd

Maximum Intensity: 5954.8cd

Beam Angle(10%): Left: -36.7 Right:36.4

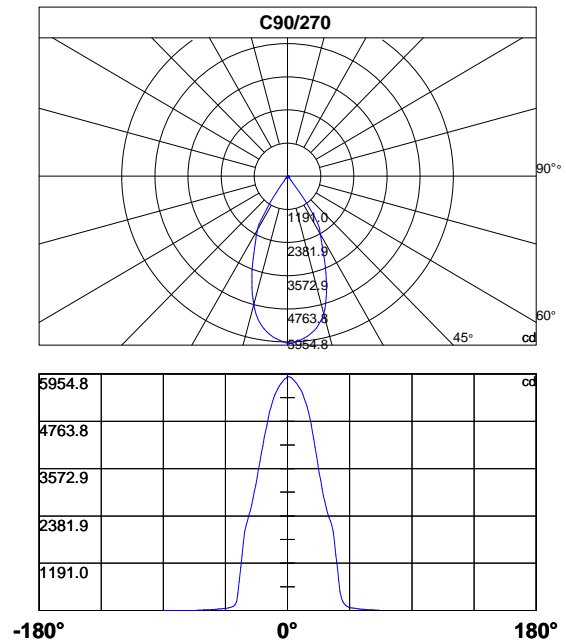
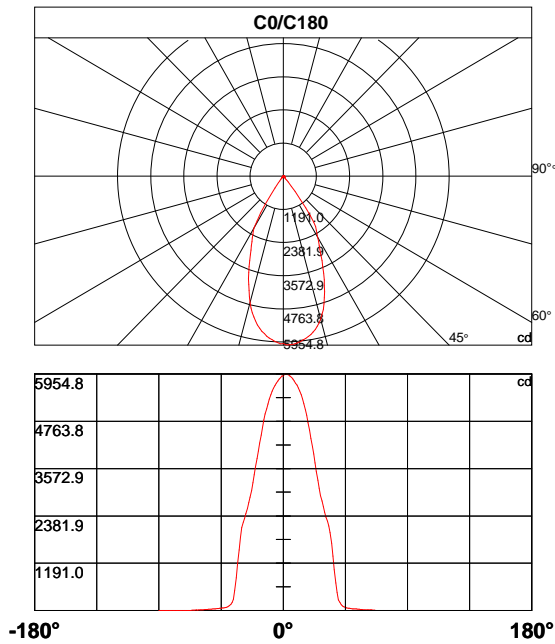
Angle of maximum intensity: C:0.0 G:2.0

Half Peak Side Angle(50%): Left: -25.2 Right:24.5

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	5905.0	5953.1	5954.8	5944.6	5929.3	5897.0	5869.8	5827.1	5780.5	5724.6
45.0	5905.0	5887.9	5878.1	5857.0	5819.9	5782.2	5736.9	5691.2	5636.9	5583.8
90.0	5905.0	5887.9	5878.1	5857.0	5819.9	5782.2	5736.9	5691.2	5636.9	5583.8
135.0	5905.0	5909.8	5863.2	5830.6	5777.8	5727.6	5665.7	5593.9	5523.7	5431.9
180.0	5905.0	5909.8	5863.2	5830.6	5777.8	5727.6	5665.7	5593.9	5523.7	5431.9
225.0	5905.0	5851.2	5827.4	5788.7	5747.9	5704.3	5651.2	5588.4	5523.7	5436.9
270.0	5905.0	5851.2	5827.4	5788.7	5747.9	5704.3	5651.2	5588.4	5523.7	5436.9
315.0	5905.0	5953.1	5954.8	5944.6	5929.3	5897.0	5869.8	5827.1	5780.5	5724.6
360.0	5905.0	5953.1	5954.8	5944.6	5929.3	5897.0	5869.8	5827.1	5780.5	5724.6

C\G	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	5672.0	5602.4	5526.8	5428.9	5325.9	5204.2	5058.5	4913.5	4735.1	4540.0
45.0	5518.5	5445.1	5348.1	5257.1	5143.1	5017.6	4871.3	4688.8	4491.5	4316.4
90.0	5518.5	5445.1	5348.1	5257.1	5143.1	5017.6	4871.3	4688.8	4491.5	4316.4
135.0	5324.0	5200.4	5076.5	4950.8	4796.0	4615.1	4419.1	4214.7	4013.9	3824.8
180.0	5324.0	5200.4	5076.5	4950.8	4796.0	4615.1	4419.1	4214.7	4013.9	3824.8
225.0	5351.1	5251.9	5133.3	5006.4	4852.1	4679.2	4498.4	4342.1	4143.5	3944.3
270.0	5351.1	5251.9	5133.3	5006.4	4852.1	4679.2	4498.4	4342.1	4143.5	3944.3
315.0	5672.0	5602.4	5526.8	5428.9	5325.9	5204.2	5058.5	4913.5	4735.1	4540.0
360.0	5672.0	5602.4	5526.8	5428.9	5325.9	5204.2	5058.5	4913.5	4735.1	4540.0

C\G	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	4336.4	4124.1	3937.7	3718.2	3497.3	3283.9	3074.3	2891.7	2757.2	2614.5
45.0	4106.8	3887.0	3675.8	3456.5	3271.8	3068.0	2887.3	2728.2	2590.1	2455.3
90.0	4106.8	3887.0	3675.8	3456.5	3271.8	3068.0	2887.3	2728.2	2590.1	2455.3
135.0	3617.9	3414.1	3212.4	3017.8	2853.1	2718.0	2572.2	2440.2	2324.2	2224.2
180.0	3617.9	3414.1	3212.4	3017.8	2853.1	2718.0	2572.2	2440.2	2324.2	2224.2
225.0	3750.8	3553.3	3334.9	3155.4	2980.3	2813.9	2656.6	2514.4	2395.8	2255.2
270.0	3750.8	3553.3	3334.9	3155.4	2980.3	2813.9	2656.6	2514.4	2395.8	2255.2
315.0	4336.4	4124.1	3937.7	3718.2	3497.3	3283.9	3074.3	2891.7	2757.2	2614.5
360.0	4336.4	4124.1	3937.7	3718.2	3497.3	3283.9	3074.3	2891.7	2757.2	2614.5

C\G	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0
0.0	2476.1	2353.0	2245.4	2126.4	1961.2	1691.8	1371.8	1026.5	690.5	454.1
45.0	2339.1	2257.9	2157.1	1976.5	1710.5	1381.6	1085.7	755.2	466.6	299.8
90.0	2339.1	2257.9	2157.1	1976.5	1710.5	1381.6	1085.7	755.2	466.6	299.8
135.0	2088.6	1836.5	1524.9	1175.3	821.0	510.8	282.0	201.4	154.8	123.1
180.0	2088.6	1836.5	1524.9	1175.3	821.0	510.8	282.0	201.4	154.8	123.1
225.0	2156.0	1978.4	1698.4	1383.5	1085.1	733.8	431.0	219.8	144.9	112.4
270.0	2156.0	1978.4	1698.4	1383.5	1085.1	733.8	431.0	219.8	144.9	112.4
315.0	2476.1	2353.0	2245.4	2126.4	1961.2	1691.8	1371.8	1026.5	690.5	454.1
360.0	2476.1	2353.0	2245.4	2126.4	1961.2	1691.8	1371.8	1026.5	690.5	454.1

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	264.7	198.7	146.9	111.5	88.8	77.3	67.7	57.3	51.2	47.1
45.0	228.3	169.1	135.4	107.7	86.0	73.2	67.7	61.1	53.2	51.2
90.0	228.3	169.1	135.4	107.7	86.0	73.2	67.7	61.1	53.2	51.2
135.0	97.3	83.0	74.0	66.1	63.0	58.4	51.2	50.2	46.0	39.5
180.0	97.3	83.0	74.0	66.1	63.0	58.4	51.2	50.2	46.0	39.5
225.0	97.0	81.9	69.6	66.3	57.6	56.4	48.5	45.5	41.4	37.8
270.0	97.0	81.9	69.6	66.3	57.6	56.4	48.5	45.5	41.4	37.8
315.0	264.7	198.7	146.9	111.5	88.8	77.3	67.7	57.3	51.2	47.1
360.0	264.7	198.7	146.9	111.5	88.8	77.3	67.7	57.3	51.2	47.1

C\G	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	42.7	38.6	38.9	36.2	32.6	29.9	24.6	22.5	20.0	17.0
45.0	47.1	43.6	40.0	34.0	30.2	28.0	24.9	21.4	19.5	20.0
90.0	47.1	43.6	40.0	34.0	30.2	28.0	24.9	21.4	19.5	20.0
135.0	36.7	36.5	30.4	28.2	28.8	23.6	24.1	22.2	20.3	18.4
180.0	36.7	36.5	30.4	28.2	28.8	23.6	24.1	22.2	20.3	18.4
225.0	34.8	32.1	29.6	27.1	24.4	21.9	19.5	18.4	15.9	14.0
270.0	34.8	32.1	29.6	27.1	24.4	21.9	19.5	18.4	15.9	14.0
315.0	42.7	38.6	38.9	36.2	32.6	29.9	24.6	22.5	20.0	17.0
360.0	42.7	38.6	38.9	36.2	32.6	29.9	24.6	22.5	20.0	17.0

C\G	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0
0.0	18.6	16.7	11.8	11.3	10.9	6.9	5.2	3.6	2.5	1.5
45.0	18.1	16.4	14.8	9.6	7.9	7.8	7.7	3.0	1.6	0.8
90.0	18.1	16.4	14.8	9.6	7.9	7.8	7.7	3.0	1.6	0.8
135.0	16.5	11.2	10.4	12.1	7.1	5.2	4.4	3.0	1.6	2.5
180.0	16.5	11.2	10.4	12.1	7.1	5.2	4.4	3.0	1.6	2.5
225.0	15.3	14.3	9.3	7.4	6.6	4.9	3.6	2.2	2.1	2.1
270.0	15.3	14.3	9.3	7.4	6.6	4.9	3.6	2.2	2.1	2.1
315.0	18.6	16.7	11.8	11.3	10.9	6.9	5.2	3.6	2.5	1.5
360.0	18.6	16.7	11.8	11.3	10.9	6.9	5.2	3.6	2.5	1.5

C\G	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	0.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135.0	1.2	1.6	1.1	0.6	0.0	0.0	0.0	0.0	0.0	0.0
180.0	1.2	1.6	1.1	0.6	0.0	0.0	0.0	0.0	0.0	0.0
225.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
270.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
315.0	0.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
360.0	0.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

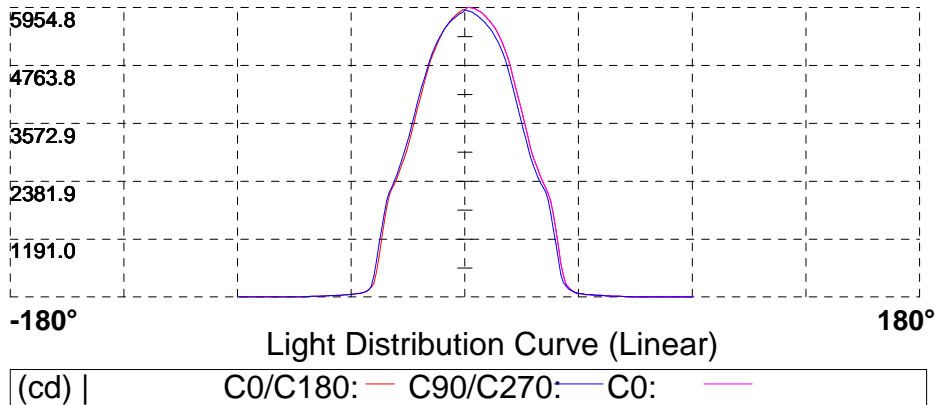
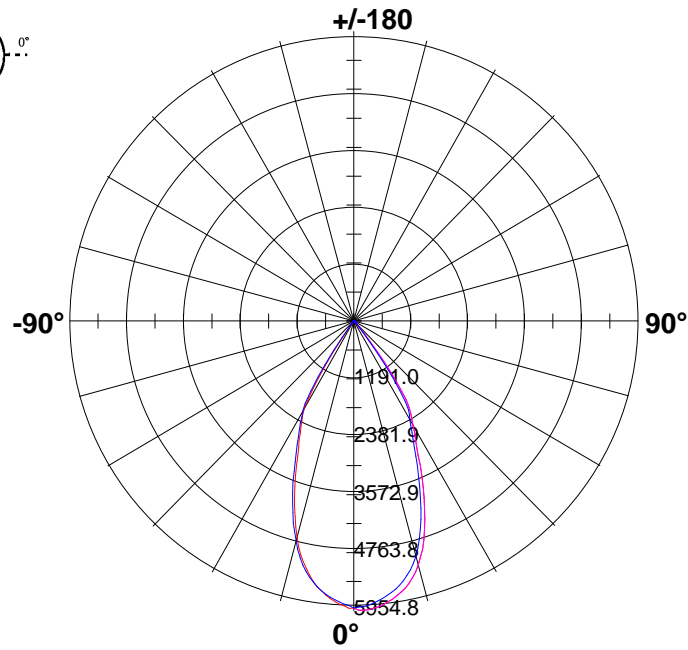
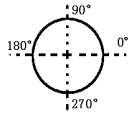
Photometric Data Table [cd]

C\G	80.0	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
225.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
270.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
315.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
360.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

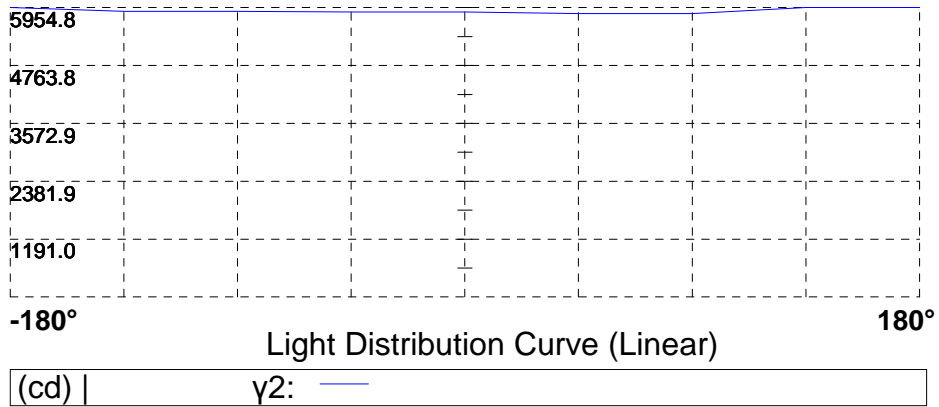
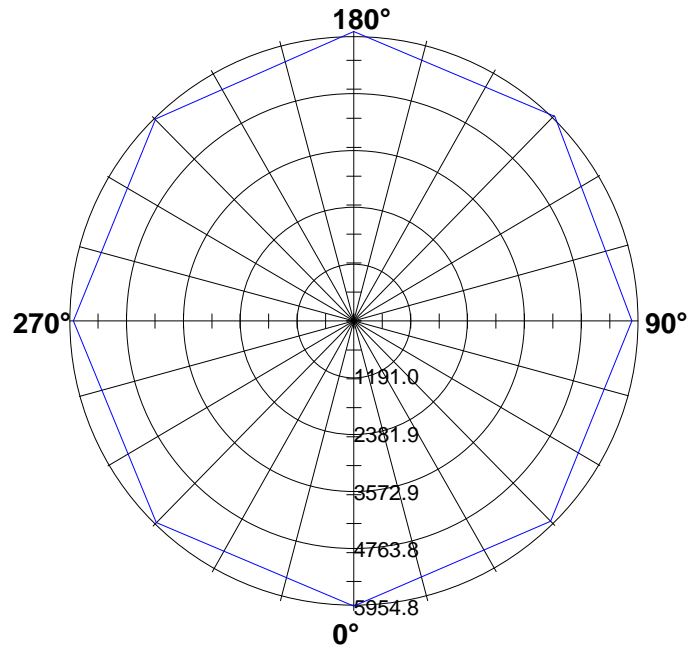
C\G	90.0
0.0	0.0
45.0	0.0
90.0	0.0
135.0	0.0
180.0	0.0
225.0	0.0
270.0	0.0
315.0	0.0
360.0	0.0

Light Distribution Curve [Unit: cd]

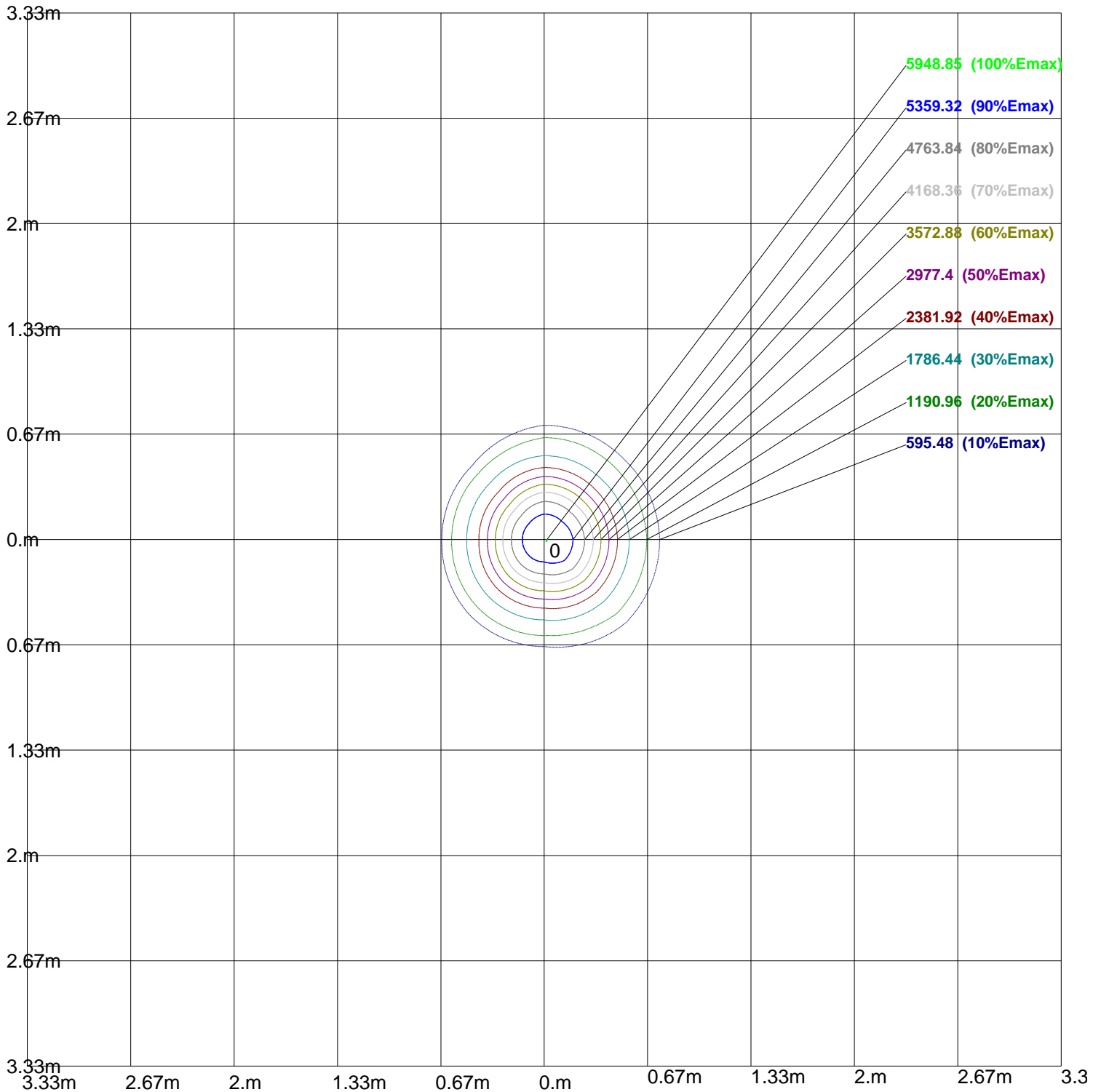
Luminaire



Max Plane Light Distribution Curve [Unit: cd]



Iso-Lux[lx]



Height: 1 m
Max Illuminance : 5954.8lx

Luminance Limiting Curve

Diameter: 110mm

Length: 165mm

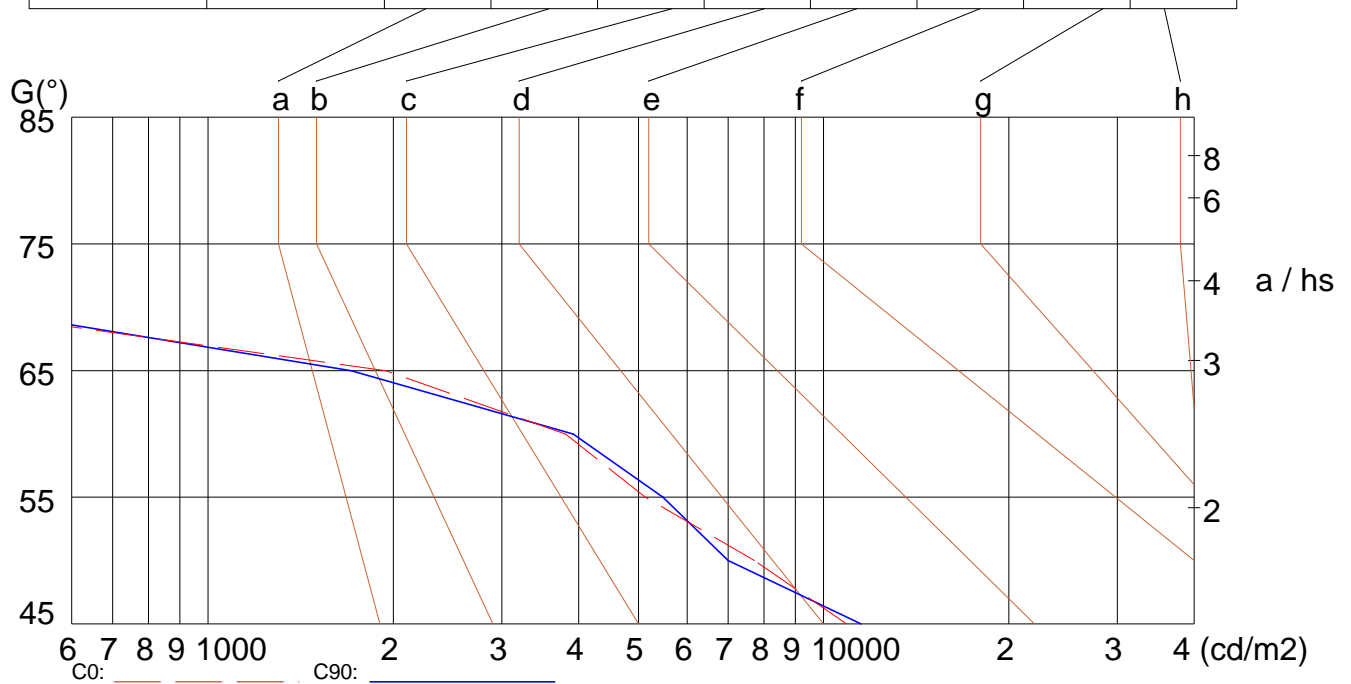
Width: 110mm

Height: mm

(cd/m²)

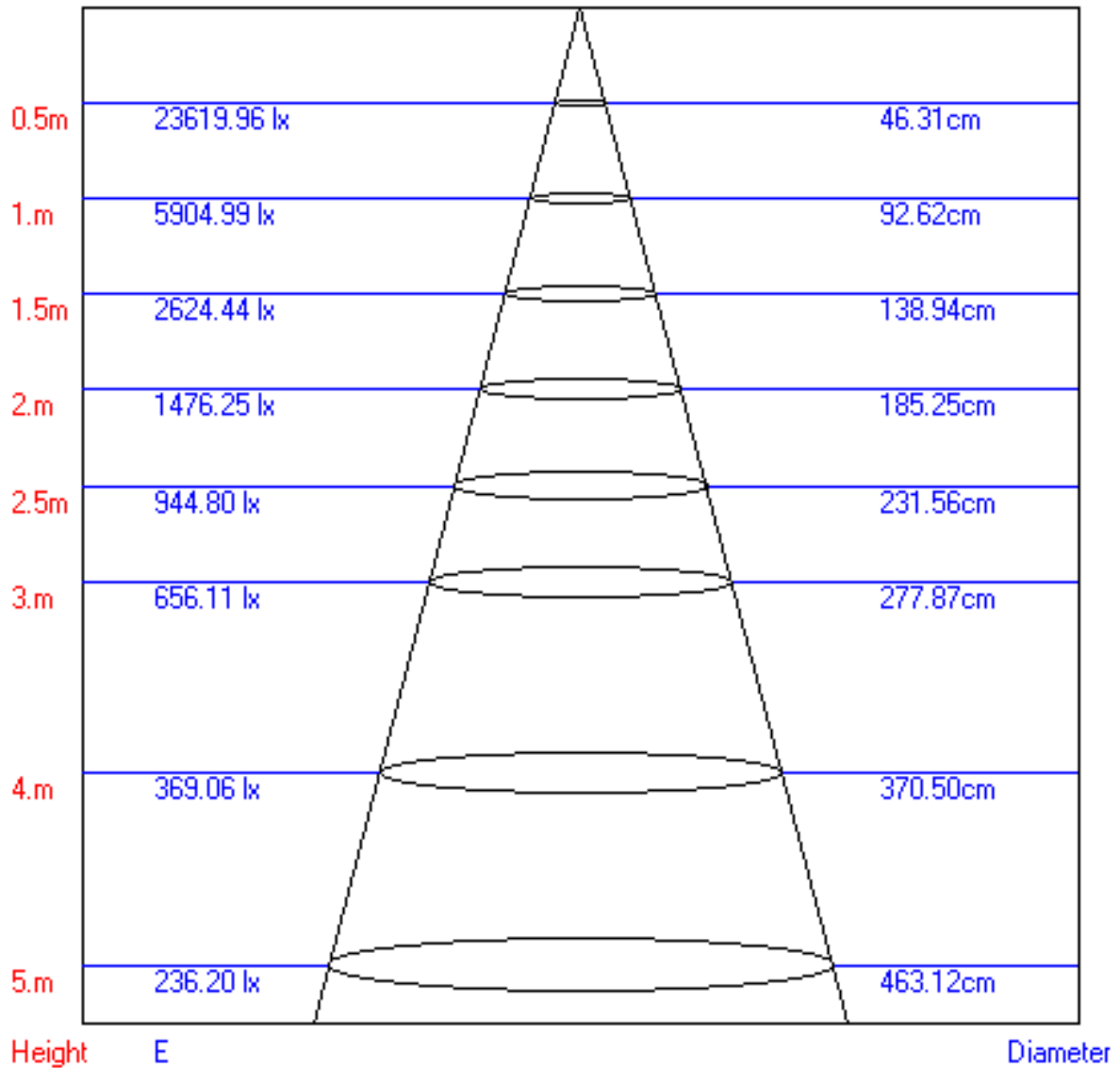
γ	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	10890	7719	5132	3810	1942	0			
C90	11507	6999	5479	3918	1706	173			

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:49.70°

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	1.15	1.14	1.14	1.13	1.12	1.11	1.09	1.08	1.07	1.03	1.02	1.01	0.96	0.95	0.94	0.89
2	1.08	1.07	1.06	1.07	1.05	1.04	1.03	1.01	1.00	0.98	0.96	0.94	0.92	0.90	0.88	0.83
3	1.02	1.01	1.00	1.01	0.99	0.98	0.97	0.95	0.93	0.93	0.91	0.88	0.88	0.85	0.83	0.78
4	0.96	0.95	0.94	0.95	0.93	0.92	0.92	0.89	0.88	0.88	0.85	0.83	0.84	0.81	0.78	0.74
5	0.91	0.89	0.88	0.90	0.88	0.86	0.87	0.84	0.82	0.84	0.81	0.78	0.80	0.76	0.73	0.69
6	0.86	0.84	0.83	0.85	0.83	0.82	0.83	0.80	0.78	0.80	0.76	0.74	0.76	0.72	0.69	0.66
7	0.81	0.80	0.79	0.80	0.78	0.77	0.78	0.75	0.73	0.76	0.72	0.69	0.73	0.69	0.66	0.62
8	0.77	0.75	0.75	0.76	0.74	0.73	0.74	0.71	0.69	0.72	0.68	0.66	0.70	0.65	0.62	0.59
9	0.73	0.72	0.71	0.72	0.70	0.69	0.71	0.68	0.66	0.69	0.65	0.62	0.67	0.62	0.59	0.56
10	0.69	0.68	0.67	0.69	0.67	0.66	0.67	0.64	0.62	0.66	0.62	0.59	0.64	0.59	0.56	0.53

