Luminaire Property

Luminaire: RH-CL2609-20W-3000

Report NO.:
Test NO.: HLB211127
Lamp:
Sum Lumens: 2173.15 lm
Number of Lamps: 1
Diameter: 96mm
Length: mm
Photometric Type: Type C

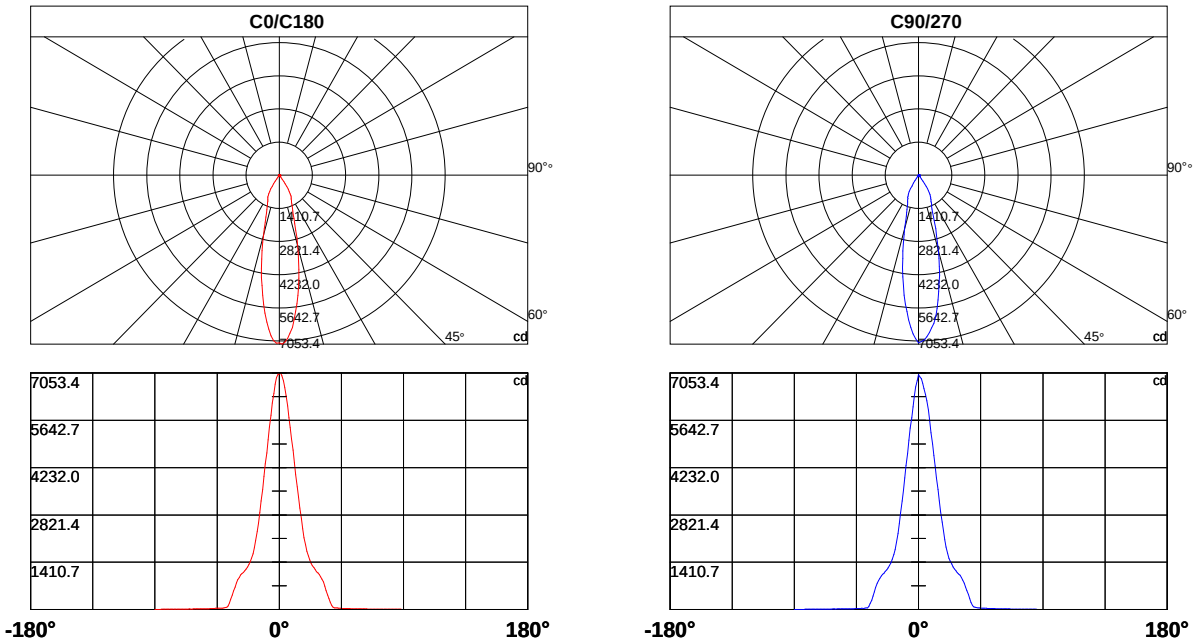
Voltage: 230.2 V
Current: 0.096 A
Power: 21.7 W
Power Factor: 0.976
Ballast Type: OT FIT 20/500CS 500mA
Width: 96mm
Height: 110mm
Remark: CREE CXA1512 3000K 24°

Photometric Results

Lumens: 2173.15 lm
Efficiency: 100.1452 lm/W
Central Intensity: 7005.106cd
Maximum Intensity: 7053.372cd

Beam Angle(10%): Left: -32.7 Right:31.9

Angle of maximum intensity: C:0.0 G:1.0
Half Peak Side Angle(50%): Left: -13.2 Right:12.4
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	7005.1	7053.4	6965.8	6817.9	6616.8	6383.6	6068.9	5716.2	5421.6	5090.4
45.0	7005.1	6942.4	6881.7	6756.5	6584.7	6403.8	6220.8	5952.3	5621.4	5268.4
90.0	7005.1	6942.4	6881.7	6756.5	6584.7	6403.8	6220.8	5952.3	5621.4	5268.4
135.0	7005.1	7013.4	6909.4	6723.4	6443.1	6152.4	5793.5	5440.1	5064.0	4664.4
180.0	7005.1	7013.4	6909.4	6723.4	6443.1	6152.4	5793.5	5440.1	5064.0	4664.4
225.0	7005.1	6825.8	6636.0	6366.1	6048.1	5718.5	5416.0	5046.8	4662.1	4301.1
270.0	7005.1	6825.8	6636.0	6366.1	6048.1	5718.5	5416.0	5046.8	4662.1	4301.1
315.0	7005.1	7053.4	6965.8	6817.9	6616.8	6383.6	6068.9	5716.2	5421.6	5090.4
360.0	7005.1	7053.4	6965.8	6817.9	6616.8	6383.6	6068.9	5716.2	5421.6	5090.4

C\G	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	4752.6	4378.4	4017.1	3660.4	3350.7	3023.4	2711.3	2403.8	2135.3	1924.7
45.0	4933.5	4594.0	4277.7	3925.0	3582.5	3236.1	2910.8	2607.3	2351.7	2085.5
90.0	4933.5	4594.0	4277.7	3925.0	3582.5	3236.1	2910.8	2607.3	2351.7	2085.5
135.0	4343.1	3967.6	3579.9	3235.7	2892.6	2571.3	2324.6	2061.4	1841.4	1663.4
180.0	4343.1	3967.6	3579.9	3235.7	2892.6	2571.3	2324.6	2061.4	1841.4	1663.4
225.0	3922.3	3546.2	3232.1	2886.3	2562.7	2258.8	1998.0	1786.0	1640.7	1503.3
270.0	3922.3	3546.2	3232.1	2886.3	2562.7	2258.8	1998.0	1786.0	1640.7	1503.3
315.0	4752.6	4378.4	4017.1	3660.4	3350.7	3023.4	2711.3	2403.8	2135.3	1924.7
360.0	4752.6	4378.4	4017.1	3660.4	3350.7	3023.4	2711.3	2403.8	2135.3	1924.7

C\G	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	1741.4	1599.7	1480.1	1387.4	1312.4	1252.6	1188.2	1126.8	1083.8	1039.3
45.0	1858.3	1674.0	1529.7	1437.2	1350.7	1271.8	1210.0	1153.5	1100.7	1055.8
90.0	1858.3	1674.0	1529.7	1437.2	1350.7	1271.8	1210.0	1153.5	1100.7	1055.8
135.0	1532.0	1419.4	1342.1	1267.8	1204.8	1153.9	1107.0	1068.7	1032.7	954.1
180.0	1532.0	1419.4	1342.1	1267.8	1204.8	1153.9	1107.0	1068.7	1032.7	954.1
225.0	1394.0	1304.1	1236.4	1184.6	1131.1	1078.9	1044.6	1006.2	928.6	861.3
270.0	1394.0	1304.1	1236.4	1184.6	1131.1	1078.9	1044.6	1006.2	928.6	861.3
315.0	1741.4	1599.7	1480.1	1387.4	1312.4	1252.6	1188.2	1126.8	1083.8	1039.3
360.0	1741.4	1599.7	1480.1	1387.4	1312.4	1252.6	1188.2	1126.8	1083.8	1039.3

C\G	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0
0.0	978.5	909.8	816.4	696.5	564.4	433.0	326.0	217.0	119.9	68.4
45.0	1015.5	950.8	877.1	781.0	671.7	563.7	442.9	320.3	206.1	117.6
90.0	1015.5	950.8	877.1	781.0	671.7	563.7	442.9	320.3	206.1	117.6
135.0	889.7	791.6	672.7	557.4	430.0	301.2	186.6	105.7	63.7	55.2
180.0	889.7	791.6	672.7	557.4	430.0	301.2	186.6	105.7	63.7	55.2
225.0	778.4	659.2	528.4	401.6	275.8	179.3	93.1	51.5	41.6	39.0
270.0	778.4	659.2	528.4	401.6	275.8	179.3	93.1	51.5	41.6	39.0
315.0	978.5	909.8	816.4	696.5	564.4	433.0	326.0	217.0	119.9	68.4
360.0	978.5	909.8	816.4	696.5	564.4	433.0	326.0	217.0	119.9	68.4

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	52.2	45.9	40.6	37.6	34.7	31.0	29.0	31.0	26.7	27.8
45.0	78.6	66.7	54.1	47.2	43.2	40.3	34.7	37.0	34.7	33.0
90.0	78.6	66.7	54.1	47.2	43.2	40.3	34.7	37.0	34.7	33.0
135.0	46.9	39.0	36.7	34.7	32.7	34.7	33.0	32.1	27.1	28.7
180.0	46.9	39.0	36.7	34.7	32.7	34.7	33.0	32.1	27.1	28.7
225.0	31.4	32.7	30.4	29.4	25.4	27.8	26.7	23.1	21.8	23.8
270.0	31.4	32.7	30.4	29.4	25.4	27.8	26.7	23.1	21.8	23.8
315.0	52.2	45.9	40.6	37.6	34.7	31.0	29.0	31.0	26.7	27.8
360.0	52.2	45.9	40.6	37.6	34.7	31.0	29.0	31.0	26.7	27.8

C\G	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	24.7	25.1	24.4	20.5	22.1	18.8	17.2	16.2	15.2	17.2
45.0	31.7	31.4	30.7	30.1	25.4	26.1	22.8	20.8	19.5	20.8
90.0	31.7	31.4	30.7	30.1	25.4	26.1	22.8	20.8	19.5	20.8
135.0	25.4	23.1	22.4	20.1	23.5	18.5	17.8	19.5	15.8	15.5
180.0	25.4	23.1	22.4	20.1	23.5	18.5	17.8	19.5	15.8	15.5
225.0	19.8	19.5	18.8	17.5	16.5	15.8	15.8	16.8	16.5	13.5
270.0	19.8	19.5	18.8	17.5	16.5	15.8	15.8	16.8	16.5	13.5
315.0	24.7	25.1	24.4	20.5	22.1	18.8	17.2	16.2	15.2	17.2
360.0	24.7	25.1	24.4	20.5	22.1	18.8	17.2	16.2	15.2	17.2

C\G	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0
0.0	16.8	15.2	12.9	14.2	11.9	10.2	10.6	9.7	8.9	9.6
45.0	19.8	16.2	17.5	13.9	13.5	15.2	14.5	11.2	10.2	9.9
90.0	19.8	16.2	17.5	13.9	13.5	15.2	14.5	11.2	10.2	9.9
135.0	16.8	16.2	12.9	12.2	11.6	12.9	12.5	12.2	11.9	11.2
180.0	16.8	16.2	12.9	12.2	11.6	12.9	12.5	12.2	11.9	11.2
225.0	12.5	14.5	14.2	10.9	10.6	10.3	9.9	8.9	8.6	8.6
270.0	12.5	14.5	14.2	10.9	10.6	10.3	9.9	8.9	8.6	8.6
315.0	16.8	15.2	12.9	14.2	11.9	10.2	10.6	9.7	8.9	9.6
360.0	16.8	15.2	12.9	14.2	11.9	10.2	10.6	9.7	8.9	9.6

C\G	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	10.9	10.2	8.9	7.6	7.3	8.6	7.3	6.8	6.3	6.1
45.0	9.9	11.6	10.9	10.6	10.1	9.6	8.9	7.3	6.9	6.6
90.0	9.9	11.6	10.9	10.6	10.1	9.6	8.9	7.3	6.9	6.6
135.0	10.6	9.9	9.9	7.3	6.6	6.6	7.9	8.2	5.9	5.6
180.0	10.6	9.9	9.9	7.3	6.6	6.6	7.9	8.2	5.9	5.6
225.0	8.3	7.9	8.6	8.2	8.2	5.6	5.9	6.3	7.0	6.4
270.0	8.3	7.9	8.6	8.2	8.2	5.6	5.9	6.3	7.0	6.4
315.0	10.9	10.2	8.9	7.6	7.3	8.6	7.3	6.8	6.3	6.1
360.0	10.9	10.2	8.9	7.6	7.3	8.6	7.3	6.8	6.3	6.1

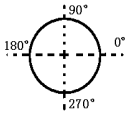
Photometric Data Table [cd]

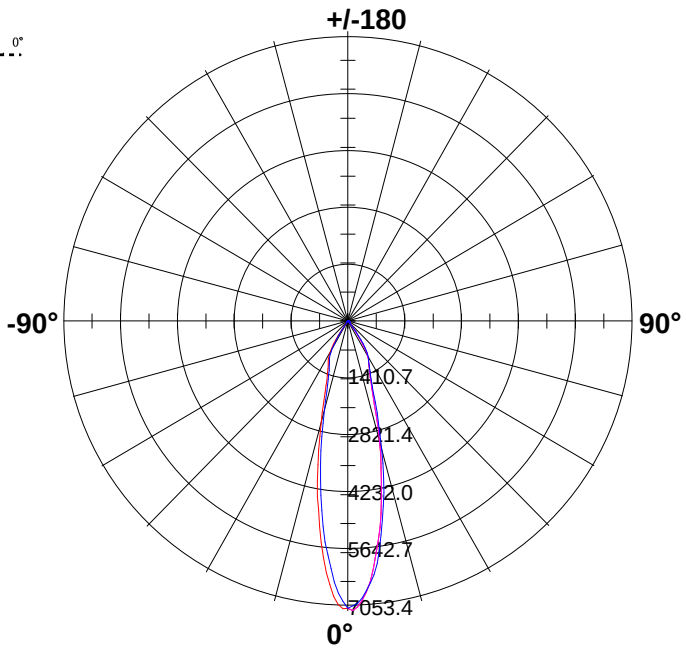
C\G	80.0	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	5.9	5.9	5.9	5.9	5.8	5.6	5.9	5.4	5.0	3.6
45.0	6.6	6.4	6.3	7.6	7.6	7.3	4.0	1.6	1.0	0.3
90.0	6.6	6.4	6.3	7.6	7.6	7.3	4.0	1.6	1.0	0.3
135.0	5.6	7.3	7.6	6.6	5.6	5.0	4.5	4.0	3.3	0.7
180.0	5.6	7.3	7.6	6.6	5.6	5.0	4.5	4.0	3.3	0.7
225.0	5.9	5.9	5.6	4.0	2.7	1.6	0.0	0.0	0.0	0.0
270.0	5.9	5.9	5.6	4.0	2.7	1.6	0.0	0.0	0.0	0.0
315.0	5.9	5.9	5.9	5.9	5.8	5.6	5.9	5.4	5.0	3.6
360.0	5.9	5.9	5.9	5.9	5.8	5.6	5.9	5.4	5.0	3.6

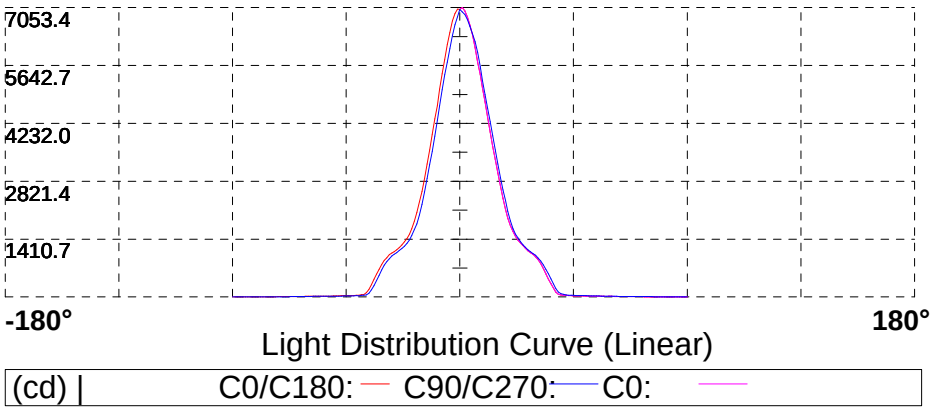
C\G	90.0
0.0	2.3
45.0	0.3
90.0	0.3
135.0	0.0
180.0	0.0
225.0	0.0
270.0	0.0
315.0	2.3
360.0	2.3

Light Distribution Curve [Unit: cd]

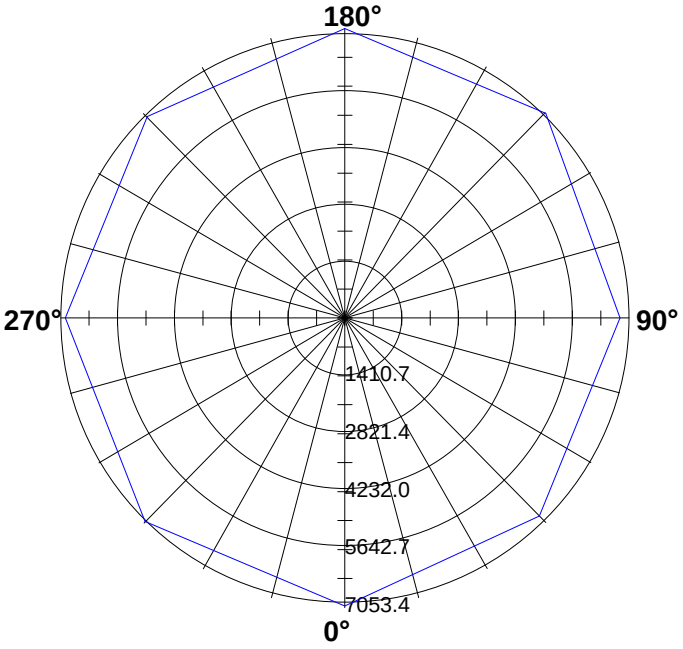
Luminaire

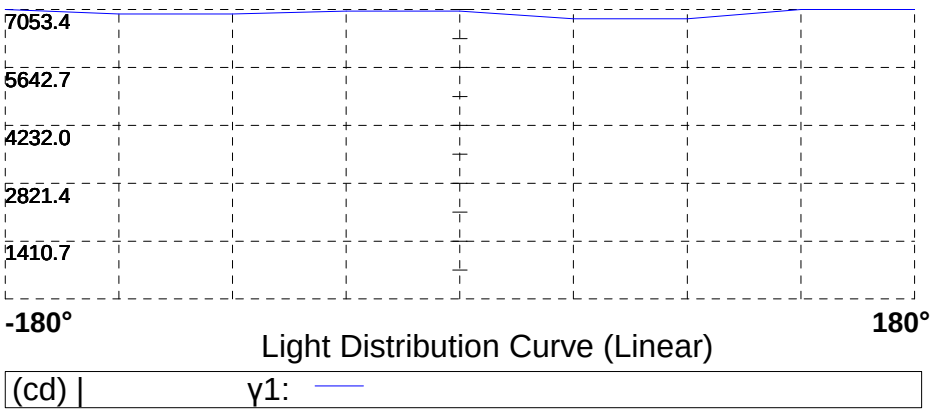




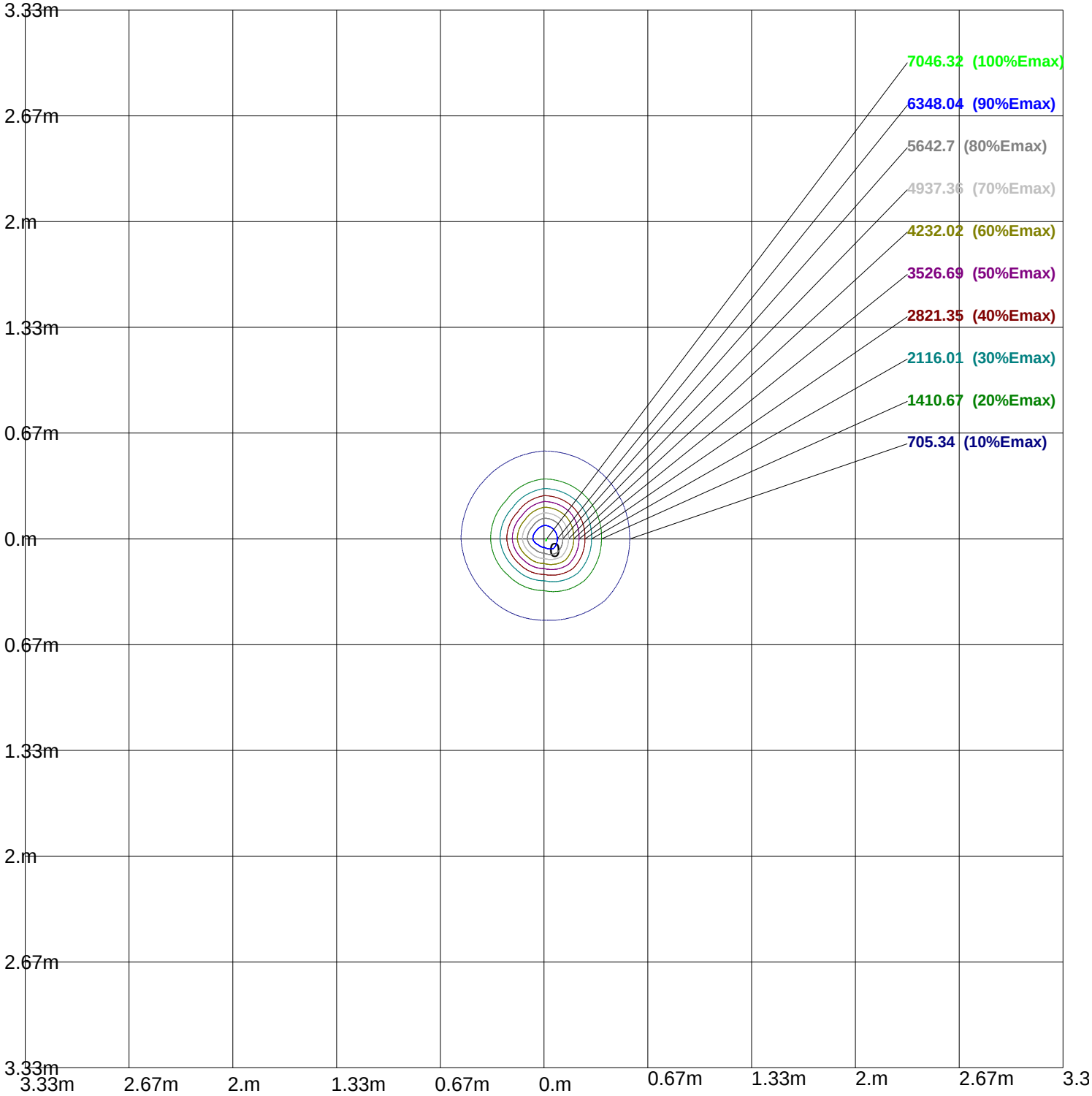


Max Plane Light Distribution Curve [Unit: cd]





Iso-Lux[lx]



Height: 1 m
Max Illuminance : 7053.37lx

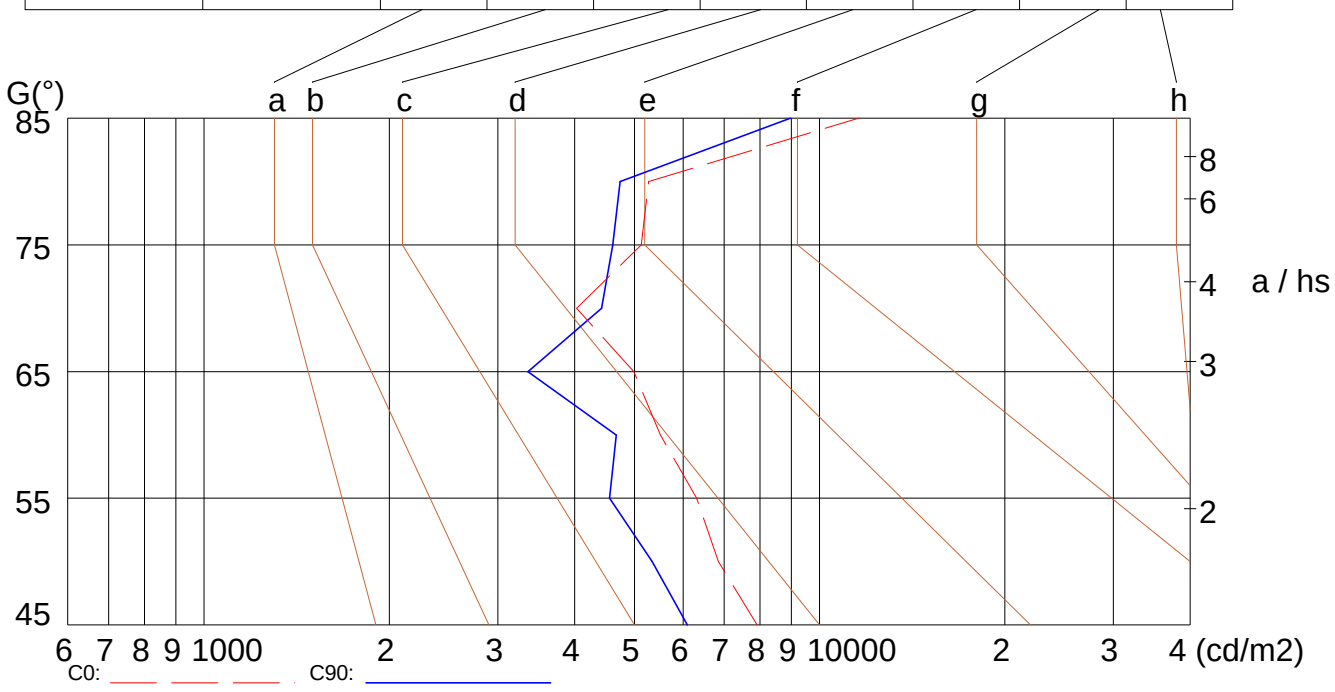
Luminance Limitting Curve

Diameter: 96mm
Length: mm
Width: 96mm
Height: 110mm

(cd/m2)

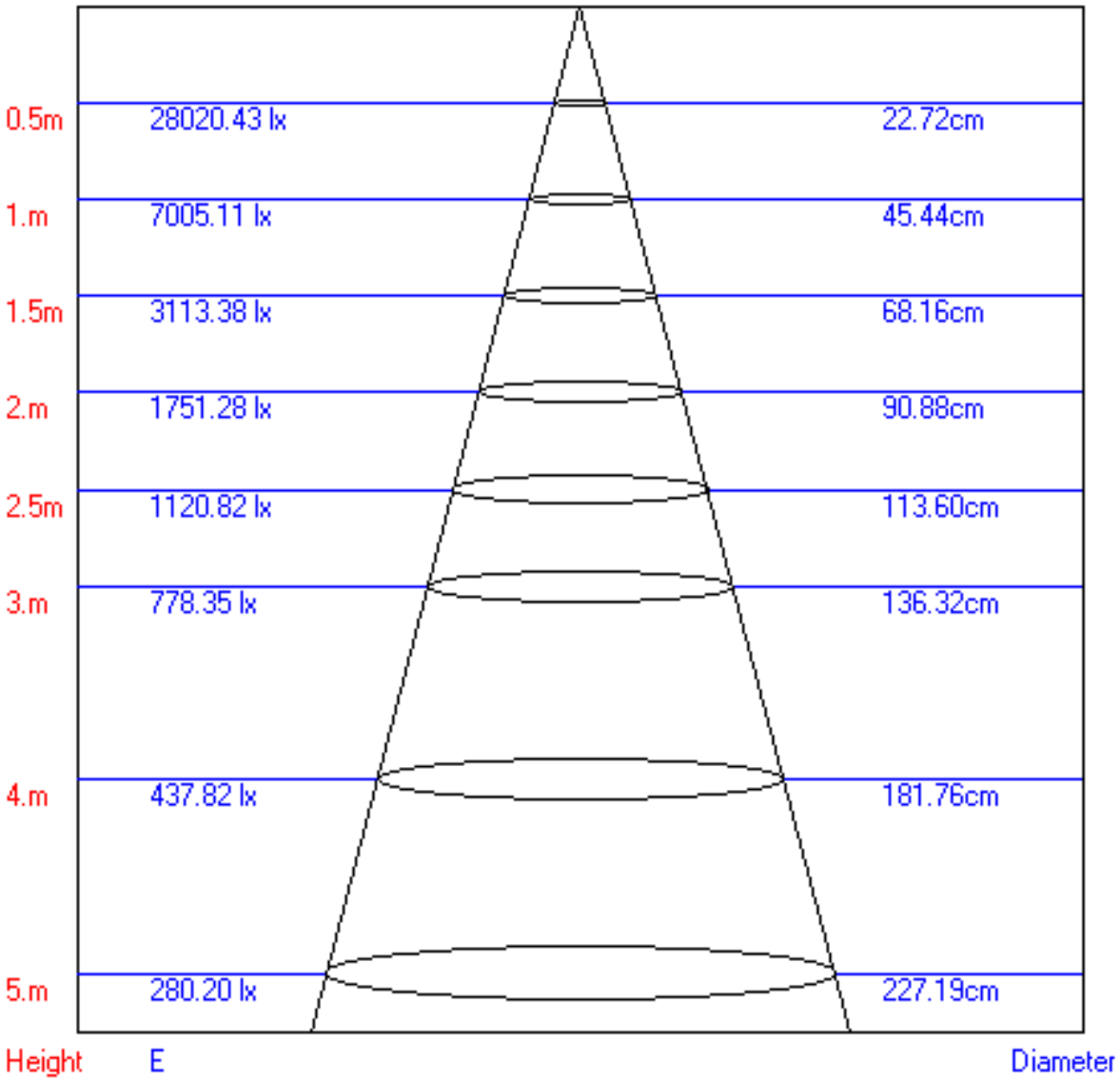
γ	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	7913	6849	6313	5510	4990	4027	5130	5275	11568
C90	6095	5346	4556	4672	3360	4422	4609	4743	8961

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:25.60°

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	1.15	1.15	1.14	1.14	1.13	1.12	1.09	1.08	1.07	1.04	1.03	1.02	0.96	0.95	0.94	0.89
2	1.10	1.09	1.08	1.08	1.07	1.06	1.04	1.02	1.01	0.99	0.97	0.96	0.93	0.91	0.89	0.85
3	1.04	1.03	1.03	1.03	1.01	1.00	0.99	0.97	0.96	0.95	0.93	0.91	0.90	0.87	0.85	0.80
4	1.00	0.98	0.98	0.98	0.97	0.95	0.95	0.93	0.91	0.91	0.88	0.86	0.86	0.83	0.81	0.77
5	0.95	0.94	0.93	0.94	0.92	0.91	0.91	0.88	0.87	0.87	0.84	0.82	0.83	0.80	0.77	0.73
6	0.91	0.90	0.89	0.90	0.88	0.87	0.87	0.84	0.83	0.84	0.81	0.78	0.80	0.77	0.74	0.70
7	0.87	0.86	0.85	0.86	0.84	0.83	0.83	0.81	0.79	0.81	0.77	0.75	0.77	0.73	0.71	0.67
8	0.84	0.82	0.82	0.83	0.81	0.80	0.80	0.78	0.76	0.78	0.74	0.72	0.75	0.71	0.68	0.64
9	0.80	0.79	0.78	0.79	0.78	0.77	0.77	0.75	0.73	0.75	0.71	0.69	0.72	0.68	0.65	0.62
10	0.77	0.76	0.76	0.76	0.75	0.74	0.74	0.72	0.70	0.72	0.69	0.66	0.70	0.66	0.63	0.59

Budgetary Estimate Chart			
Light Flux	2173.15 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