Luminaire Property

Luminaire: RH-LP1104 40W 4000K 40°

Report NO.:
Test NO.: HLH190301
Lamp:
Sum Lumens: 4164.37 lm
Number of Lamps: 1
Diameter: 110mm
Length: 165mm
Photometric Type: Type C

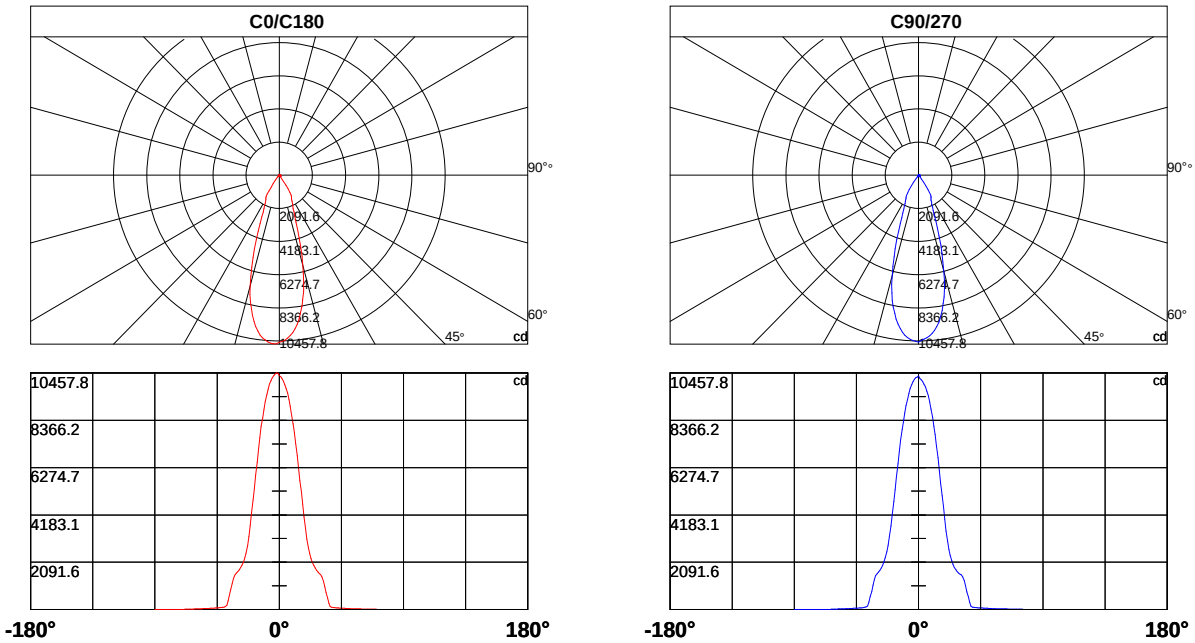
Voltage: 221.0 V
Current: 0.181 A
Power: 39.1 W
Power Factor: 0.976
Ballast Type: OSRAM OT FIT 40 950mA
Width: 110mm
Height: mm
Remark: CREE CXA1820N

Photometric Results

Lumens: 4164.37 lm
Efficiency: 106.5056 lm/W
Central Intensity: 10337.56cd
Maximum Intensity: 10457.772cd

Beam Angle(10%): Left: -34.8 Right:32.4

Angle of maximum intensity: C:135.0 G:2.0
Half Peak Side Angle(50%): Left: -18.0 Right:16.2
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	10337.6	10306.5	10229.8	10097.7	9945.1	9785.9	9564.2	9294.8	8984.9	8618.5
45.0	10337.6	10226.0	10156.1	10084.8	9966.7	9830.8	9659.5	9440.9	9177.0	8861.1
90.0	10337.6	10226.0	10156.1	10084.8	9966.7	9830.8	9659.5	9440.9	9177.0	8861.1
135.0	10337.6	10447.4	10457.8	10417.0	10350.6	10247.6	10127.9	9969.8	9745.3	9494.6
180.0	10337.6	10447.4	10457.8	10417.0	10350.6	10247.6	10127.9	9969.8	9745.3	9494.6
225.0	10337.6	10277.2	10243.8	10178.3	10075.0	9950.6	9778.5	9557.9	9298.7	9016.4
270.0	10337.6	10277.2	10243.8	10178.3	10075.0	9950.6	9778.5	9557.9	9298.7	9016.4
315.0	10337.6	10306.5	10229.8	10097.7	9945.1	9785.9	9564.2	9294.8	8984.9	8618.5
360.0	10337.6	10306.5	10229.8	10097.7	9945.1	9785.9	9564.2	9294.8	8984.9	8618.5

C\G	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	8215.2	7825.3	7347.1	6813.6	6255.9	5701.8	5215.5	4654.8	4097.5	3566.1
45.0	8507.0	8093.3	7724.2	7237.5	6716.6	6155.4	5592.2	5032.7	4553.2	3991.4
90.0	8507.0	8093.3	7724.2	7237.5	6716.6	6155.4	5592.2	5032.7	4553.2	3991.4
135.0	9195.9	8849.6	8463.4	8090.5	7610.4	7075.3	6516.5	5936.7	5349.5	4834.6
180.0	9195.9	8849.6	8463.4	8090.5	7610.4	7075.3	6516.5	5936.7	5349.5	4834.6
225.0	8686.5	8314.9	7952.4	7486.0	6974.9	6445.5	5871.5	5287.8	4779.5	4212.3
270.0	8686.5	8314.9	7952.4	7486.0	6974.9	6445.5	5871.5	5287.8	4779.5	4212.3
315.0	8215.2	7825.3	7347.1	6813.6	6255.9	5701.8	5215.5	4654.8	4097.5	3566.1
360.0	8215.2	7825.3	7347.1	6813.6	6255.9	5701.8	5215.5	4654.8	4097.5	3566.1

C\G	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	3103.9	2722.4	2466.2	2246.4	2082.3	1941.7	1834.6	1738.1	1661.4	1585.0
45.0	3470.8	3018.9	2647.6	2387.8	2153.0	1979.3	1853.5	1751.3	1667.7	1610.4
90.0	3470.8	3018.9	2647.6	2387.8	2153.0	1979.3	1853.5	1751.3	1667.7	1610.4
135.0	4256.9	3713.8	3231.2	2824.4	2492.0	2276.8	2090.2	1956.5	1849.9	1752.1
180.0	4256.9	3713.8	3231.2	2824.4	2492.0	2276.8	2090.2	1956.5	1849.9	1752.1
225.0	3690.3	3228.8	2832.0	2544.6	2294.1	2102.8	1953.8	1833.8	1732.4	1653.2
270.0	3690.3	3228.8	2832.0	2544.6	2294.1	2102.8	1953.8	1833.8	1732.4	1653.2
315.0	3103.9	2722.4	2466.2	2246.4	2082.3	1941.7	1834.6	1738.1	1661.4	1585.0
360.0	3103.9	2722.4	2466.2	2246.4	2082.3	1941.7	1834.6	1738.1	1661.4	1585.0

C\G	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0
0.0	1546.3	1446.0	1249.0	999.9	755.2	489.7	264.1	129.3	101.1	88.0
45.0	1563.8	1524.9	1441.9	1269.3	1044.3	776.3	543.9	304.2	148.5	105.8
90.0	1563.8	1524.9	1441.9	1269.3	1044.3	776.3	543.9	304.2	148.5	105.8
135.0	1675.9	1615.4	1543.8	1390.4	1161.0	883.4	636.8	381.2	187.2	126.1
180.0	1675.9	1615.4	1543.8	1390.4	1161.0	883.4	636.8	381.2	187.2	126.1
225.0	1583.6	1494.5	1312.0	1071.2	794.6	558.2	321.2	154.5	113.4	96.7
270.0	1583.6	1494.5	1312.0	1071.2	794.6	558.2	321.2	154.5	113.4	96.7
315.0	1546.3	1446.0	1249.0	999.9	755.2	489.7	264.1	129.3	101.1	88.0
360.0	1546.3	1446.0	1249.0	999.9	755.2	489.7	264.1	129.3	101.1	88.0

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	80.3	73.2	68.5	61.1	56.7	57.0	53.2	50.7	47.4	45.2
45.0	94.8	87.7	80.6	71.5	70.1	65.7	61.7	58.9	55.6	49.0
90.0	94.8	87.7	80.6	71.5	70.1	65.7	61.7	58.9	55.6	49.0
135.0	107.2	97.0	86.6	81.9	73.5	67.9	63.0	59.2	59.2	52.0
180.0	107.2	97.0	86.6	81.9	73.5	67.9	63.0	59.2	59.2	52.0
225.0	86.0	75.9	66.9	62.5	58.1	53.7	50.2	50.4	47.7	44.7
270.0	86.0	75.9	66.9	62.5	58.1	53.7	50.2	50.4	47.7	44.7
315.0	80.3	73.2	68.5	61.1	56.7	57.0	53.2	50.7	47.4	45.2
360.0	80.3	73.2	68.5	61.1	56.7	57.0	53.2	50.7	47.4	45.2

C\G	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	38.9	40.3	34.5	32.3	29.3	30.2	28.5	23.0	21.1	19.2
45.0	49.6	47.1	40.8	38.9	35.9	36.7	34.5	31.8	30.7	25.5
90.0	49.6	47.1	40.8	38.9	35.9	36.7	34.5	31.8	30.7	25.5
135.0	48.5	46.0	45.8	43.6	40.0	37.3	34.8	32.3	29.6	26.8
180.0	48.5	46.0	45.8	43.6	40.0	37.3	34.8	32.3	29.6	26.8
225.0	41.9	35.9	36.7	34.3	28.5	25.8	26.3	23.8	19.2	16.5
270.0	41.9	35.9	36.7	34.3	28.5	25.8	26.3	23.8	19.2	16.5
315.0	38.9	40.3	34.5	32.3	29.3	30.2	28.5	23.0	21.1	19.2
360.0	38.9	40.3	34.5	32.3	29.3	30.2	28.5	23.0	21.1	19.2

C\G	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0
0.0	16.7	15.1	16.7	15.9	14.0	12.6	11.5	7.9	8.4	8.8
45.0	26.0	24.4	22.7	20.6	19.2	15.3	14.0	15.9	12.3	10.7
90.0	26.0	24.4	22.7	20.6	19.2	15.3	14.0	15.9	12.3	10.7
135.0	24.5	22.2	17.5	14.8	13.1	14.3	12.9	11.5	9.9	5.5
180.0	24.5	22.2	17.5	14.8	13.1	14.3	12.9	11.5	9.9	5.5
225.0	14.3	15.1	13.4	8.5	6.7	4.9	3.6	2.8	1.6	0.8
270.0	14.3	15.1	13.4	8.5	6.7	4.9	3.6	2.8	1.6	0.8
315.0	16.7	15.1	16.7	15.9	14.0	12.6	11.5	7.9	8.4	8.8
360.0	16.7	15.1	16.7	15.9	14.0	12.6	11.5	7.9	8.4	8.8

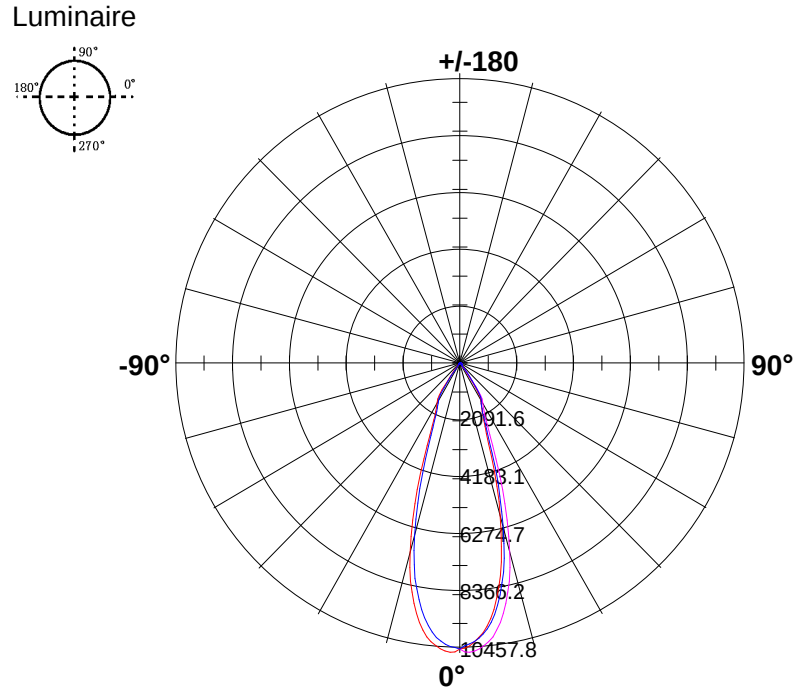
C\G	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	7.7	3.6	3.0	2.3	1.5	1.9	0.0	0.0	0.0	0.0
45.0	10.7	12.3	7.9	7.4	7.9	8.5	3.8	1.6	0.0	0.0
90.0	10.7	12.3	7.9	7.4	7.9	8.5	3.8	1.6	0.0	0.0
135.0	4.4	3.6	2.8	3.2	3.6	2.5	1.4	0.3	0.0	0.0
180.0	4.4	3.6	2.8	3.2	3.6	2.5	1.4	0.3	0.0	0.0
225.0	0.0	0.0	0.0	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	7.7	3.6	3.0	2.3	1.5	1.9	0.0	0.0	0.0	0.0
360.0	7.7	3.6	3.0	2.3	1.5	1.9	0.0	0.0	0.0	0.0

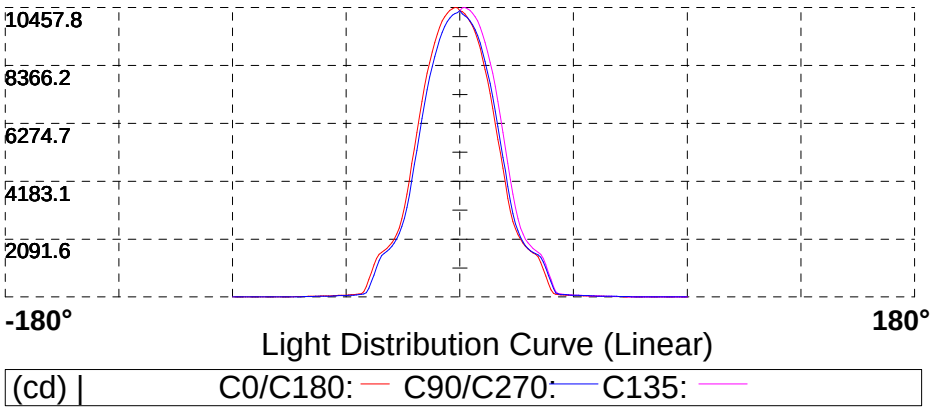
Photometric Data Table [cd]

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]

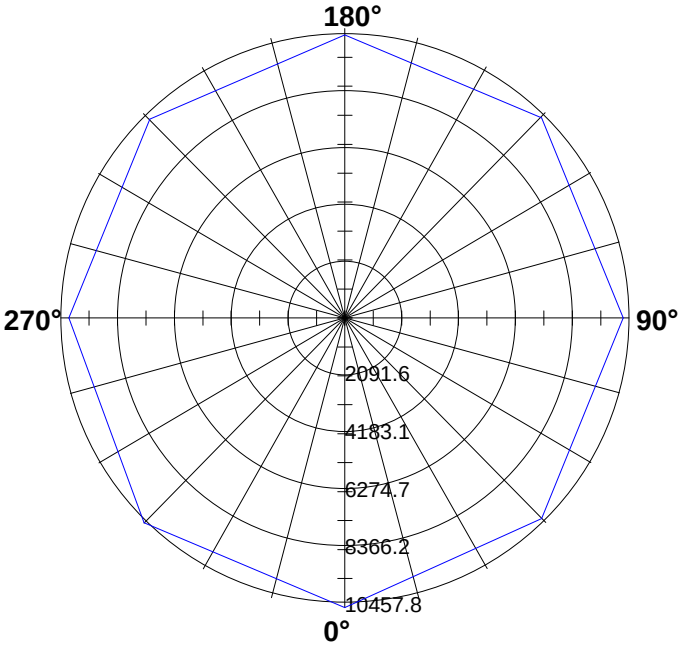


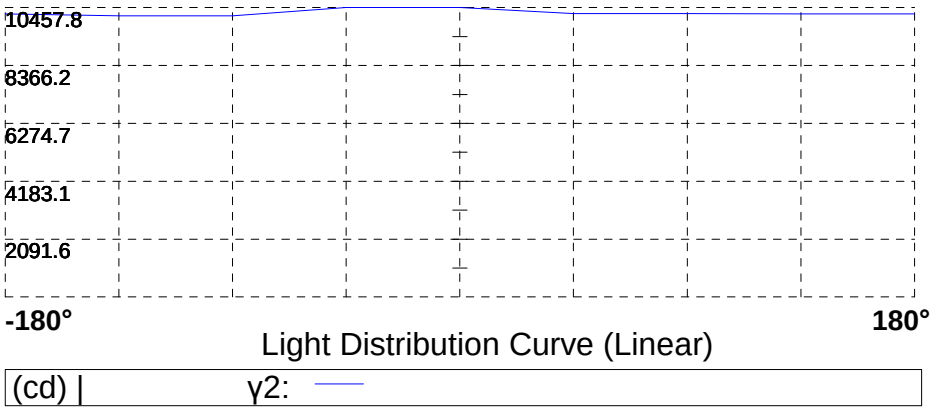


Light Distribution Curve (Linear)

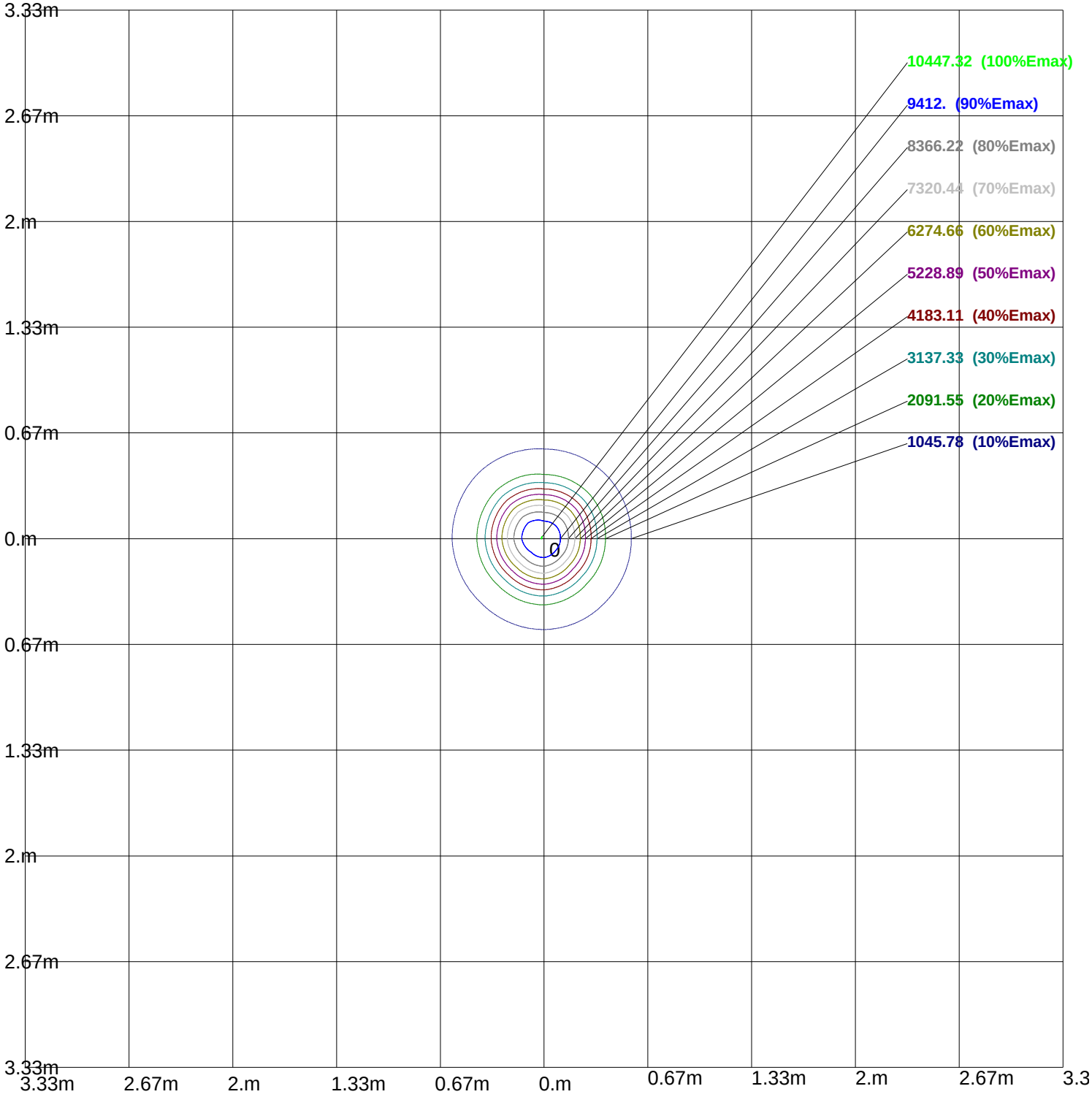
(cd) | C0/C180: C90/C270: C135:

Max Plane Light Distribution Curve [Unit: cd]





Iso-Lux[lx]



Height: 1 m
Max Illuminance : 10457.77lx

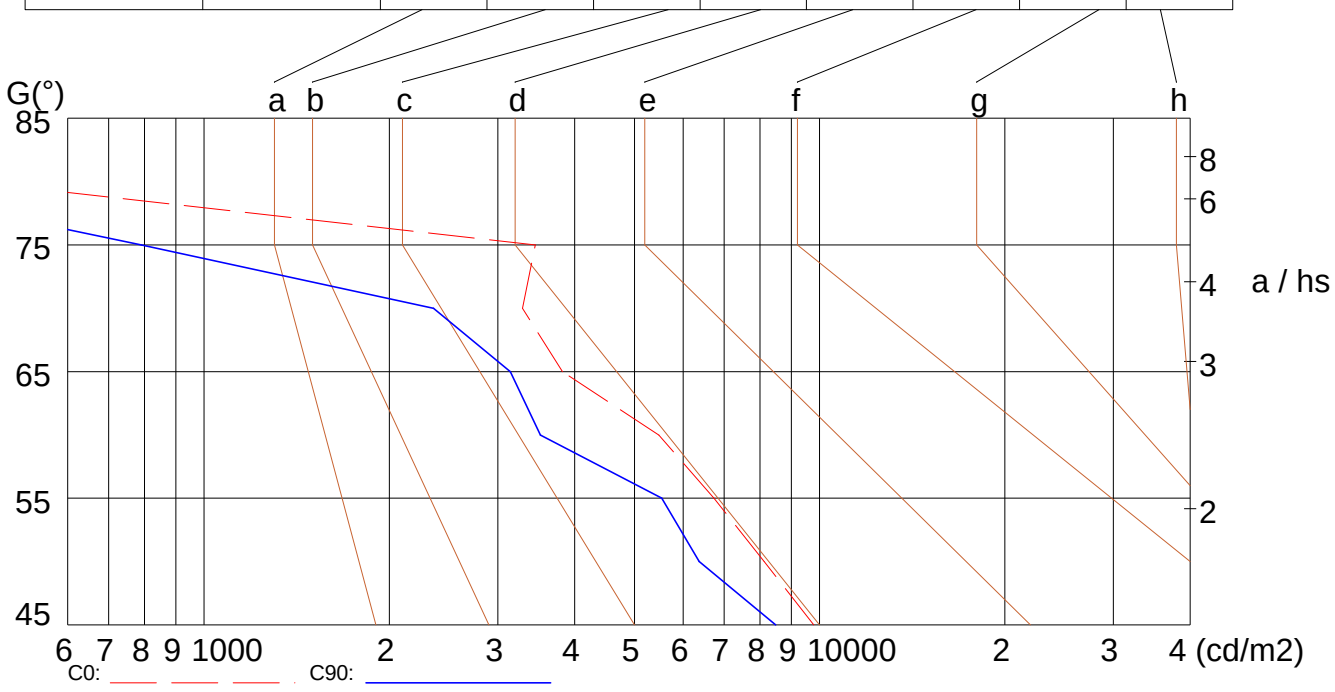
Luminance Limitting Curve

Diameter: 110mm
Length: 165mm
Width: 110mm
Height: mm

(cd/m2)

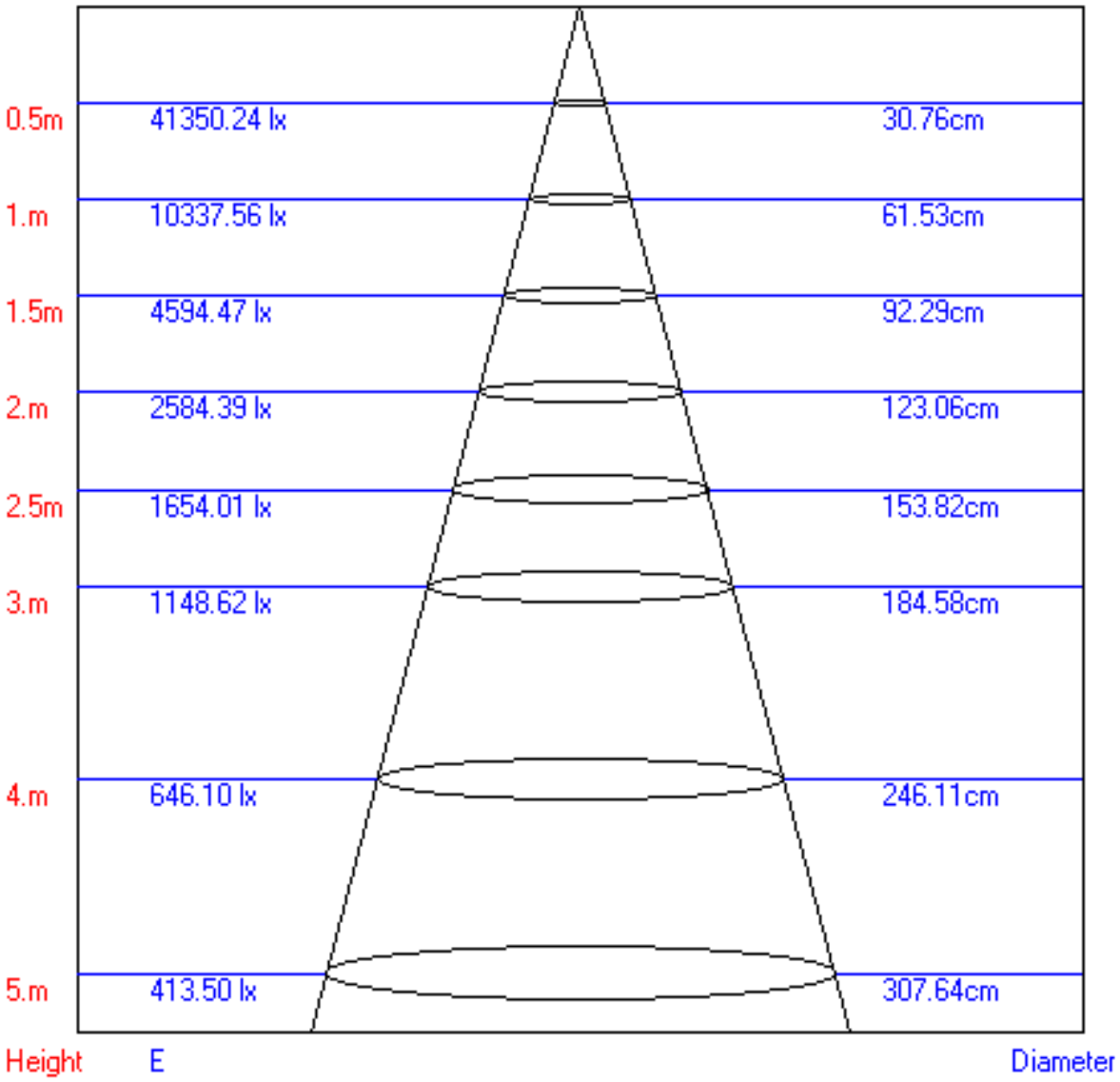
γ	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	9787	8121	6736	5478	3820	3288	3451		
C90	8486	6371	5535	3519	3145	2360	790		

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)

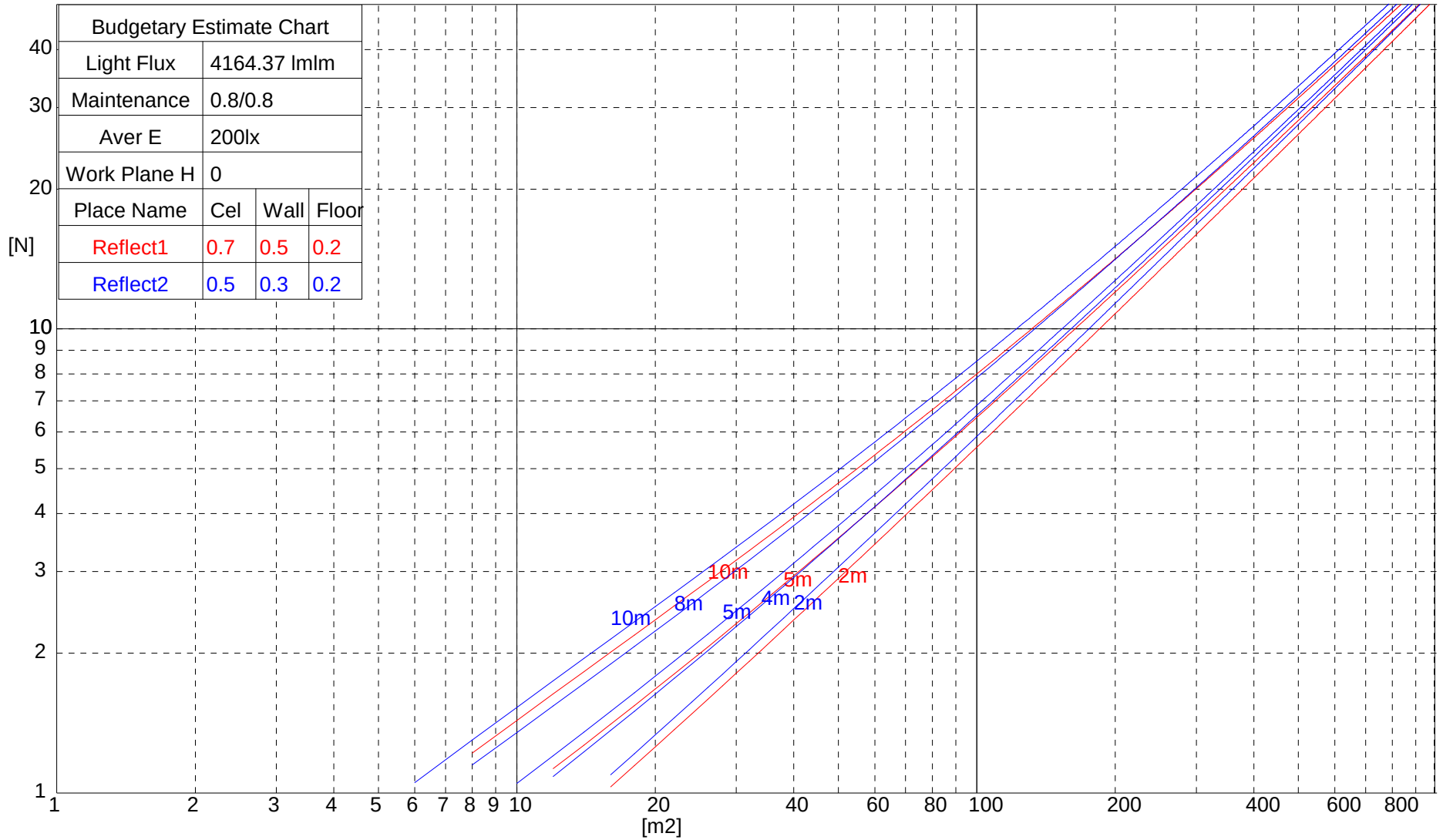
Lux-Distance Curve



Beam Angle:34.20°

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	1.16	1.15	1.15	1.14	1.13	1.12	1.09	1.09	1.08	1.04	1.03	1.02	0.97	0.95	0.94	0.89
2	1.10	1.09	1.09	1.09	1.07	1.06	1.05	1.03	1.02	1.00	0.98	0.96	0.93	0.91	0.90	0.85
3	1.05	1.04	1.03	1.03	1.02	1.01	1.00	0.98	0.96	0.95	0.93	0.91	0.90	0.87	0.85	0.81
4	1.00	0.99	0.98	0.99	0.97	0.96	0.95	0.93	0.92	0.91	0.89	0.87	0.87	0.84	0.81	0.77
5	0.96	0.95	0.94	0.94	0.93	0.92	0.91	0.89	0.87	0.88	0.85	0.83	0.84	0.80	0.78	0.74
6	0.92	0.90	0.90	0.90	0.89	0.87	0.87	0.85	0.83	0.84	0.81	0.79	0.81	0.77	0.74	0.70
7	0.88	0.86	0.86	0.87	0.85	0.84	0.84	0.81	0.80	0.81	0.78	0.75	0.78	0.74	0.71	0.67
8	0.84	0.83	0.82	0.83	0.81	0.80	0.81	0.78	0.76	0.78	0.75	0.72	0.75	0.71	0.68	0.65
9	0.81	0.80	0.79	0.80	0.78	0.77	0.78	0.75	0.73	0.75	0.72	0.69	0.72	0.68	0.65	0.62
10	0.78	0.77	0.76	0.77	0.75	0.74	0.75	0.72	0.70	0.72	0.69	0.67	0.70	0.66	0.63	0.60


Budgetary Estimate Chart
Light Flux 4164.37 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
[N]
[m2]
10m
8m
5m
4m
2m
10m
5m
2m