Luminaire Property

Luminaire: RH-CL2618-40W-4000

Report NO.:
Test NO.: HLB211127
Lamp:
Sum Lumens: 5195.71 lm
Number of Lamps: 1
Diameter: 260mm
Length: mm
Photometric Type: Type C

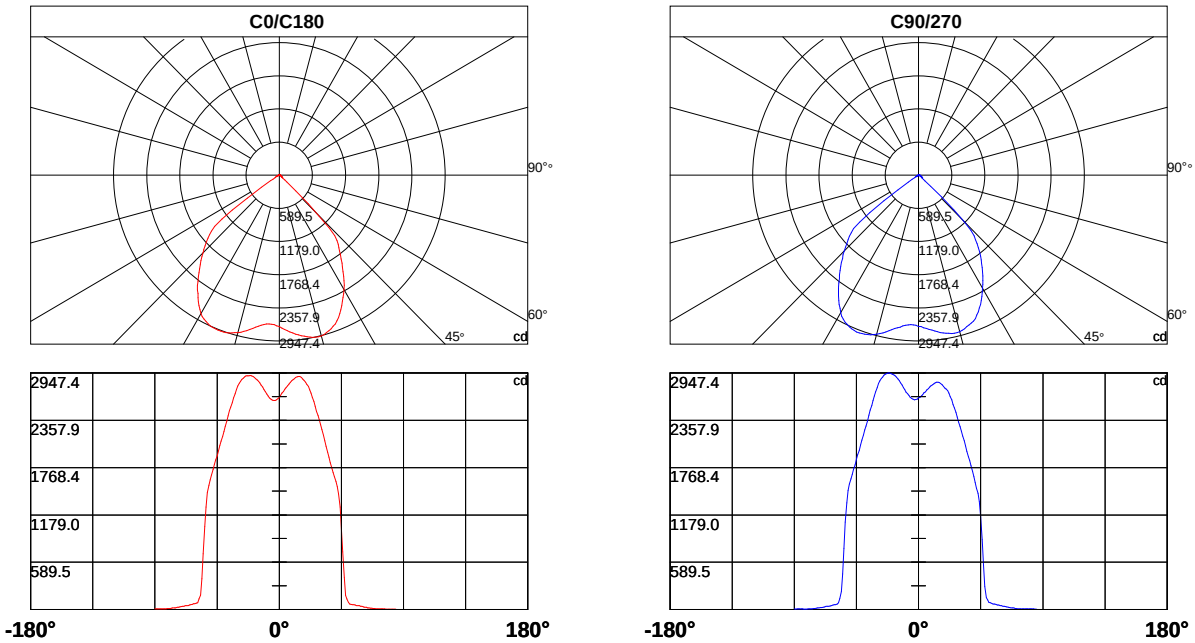
Voltage: 230.8 V
Current: 0.169 A
Power: 37.6 W
Power Factor: 0.963
Ballast Type: OT FIT40 1050mA
Width: 260mm
Height: 160mm
Remark: CREE CXA2520

Photometric Results

Lumens: 5195.71 lm
Efficiency: 138.1838 lm/W
Central Intensity: 2640.466cd
Maximum Intensity: 2947.417cd

Beam Angle(10%): Left: -34.7 Right:69.0

Angle of maximum intensity: C:225.0 G:21.0
Half Peak Side Angle(50%): Left: -30.1 Right:63.6
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	2640.5	2669.4	2696.5	2717.3	2746.0	2764.5	2787.6	2809.4	2829.5	2846.7
45.0	2640.5	2643.3	2663.1	2676.0	2698.8	2715.0	2738.1	2752.6	2774.4	2789.6
90.0	2640.5	2643.3	2663.1	2676.0	2698.8	2715.0	2738.1	2752.6	2774.4	2789.6
135.0	2640.5	2628.4	2611.6	2606.9	2605.6	2608.9	2622.8	2636.7	2660.5	2684.2
180.0	2640.5	2628.4	2611.6	2606.9	2605.6	2608.9	2622.8	2636.7	2660.5	2684.2
225.0	2640.5	2619.5	2616.9	2614.2	2622.5	2628.4	2645.6	2669.1	2689.2	2709.3
270.0	2640.5	2619.5	2616.9	2614.2	2622.5	2628.4	2645.6	2669.1	2689.2	2709.3
315.0	2640.5	2669.4	2696.5	2717.3	2746.0	2764.5	2787.6	2809.4	2829.5	2846.7
360.0	2640.5	2669.4	2696.5	2717.3	2746.0	2764.5	2787.6	2809.4	2829.5	2846.7

C\G	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
0.0	2863.9	2877.4	2894.2	2899.2	2904.5	2903.5	2891.6	2872.5	2855.0	2834.5
45.0	2802.1	2812.0	2825.2	2832.9	2830.2	2827.5	2817.3	2800.1	2780.0	2762.1
90.0	2802.1	2812.0	2825.2	2832.9	2830.2	2827.5	2817.3	2800.1	2780.0	2762.1
135.0	2715.6	2740.4	2772.7	2798.1	2823.9	2843.7	2860.9	2877.1	2893.3	2904.5
180.0	2715.6	2740.4	2772.7	2798.1	2823.9	2843.7	2860.9	2877.1	2893.3	2904.5
225.0	2741.0	2765.1	2797.5	2825.6	2851.3	2872.1	2895.3	2913.1	2924.0	2934.5
270.0	2741.0	2765.1	2797.5	2825.6	2851.3	2872.1	2895.3	2913.1	2924.0	2934.5
315.0	2863.9	2877.4	2894.2	2899.2	2904.5	2903.5	2891.6	2872.5	2855.0	2834.5
360.0	2863.9	2877.4	2894.2	2899.2	2904.5	2903.5	2891.6	2872.5	2855.0	2834.5

C\G	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0.0	2804.8	2779.0	2738.4	2698.1	2644.6	2594.1	2533.0	2468.9	2417.1	2360.9
45.0	2747.6	2729.1	2698.1	2653.8	2610.9	2553.8	2511.9	2457.7	2396.3	2339.5
90.0	2747.6	2729.1	2698.1	2653.8	2610.9	2553.8	2511.9	2457.7	2396.3	2339.5
135.0	2913.1	2916.7	2914.7	2914.7	2910.1	2901.9	2885.0	2867.5	2845.4	2820.3
180.0	2913.1	2916.7	2914.7	2914.7	2910.1	2901.9	2885.0	2867.5	2845.4	2820.3
225.0	2941.2	2947.4	2947.4	2938.8	2930.9	2918.7	2896.2	2879.4	2847.7	2815.3
270.0	2941.2	2947.4	2947.4	2938.8	2930.9	2918.7	2896.2	2879.4	2847.7	2815.3
315.0	2804.8	2779.0	2738.4	2698.1	2644.6	2594.1	2533.0	2468.9	2417.1	2360.9
360.0	2804.8	2779.0	2738.4	2698.1	2644.6	2594.1	2533.0	2468.9	2417.1	2360.9

C\G	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0
0.0	2301.1	2240.7	2170.7	2102.7	2033.0	1960.3	1899.9	1830.2	1764.5	1706.7
45.0	2278.7	2220.9	2163.5	2100.7	2037.3	1968.9	1903.5	1853.3	1792.3	1720.2
90.0	2278.7	2220.9	2163.5	2100.7	2037.3	1968.9	1903.5	1853.3	1792.3	1720.2
135.0	2785.6	2738.7	2689.2	2638.0	2578.2	2522.7	2477.5	2414.1	2350.4	2283.0
180.0	2785.6	2738.7	2689.2	2638.0	2578.2	2522.7	2477.5	2414.1	2350.4	2283.0
225.0	2766.1	2711.3	2661.4	2606.6	2543.5	2484.5	2420.3	2355.0	2287.9	2238.1
270.0	2766.1	2711.3	2661.4	2606.6	2543.5	2484.5	2420.3	2355.0	2287.9	2238.1
315.0	2301.1	2240.7	2170.7	2102.7	2033.0	1960.3	1899.9	1830.2	1764.5	1706.7
360.0	2301.1	2240.7	2170.7	2102.7	2033.0	1960.3	1899.9	1830.2	1764.5	1706.7

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	1653.6	1596.7	1532.0	1441.5	1274.4	997.7	720.0	399.3	174.7	130.8
45.0	1655.2	1581.5	1513.2	1448.8	1345.7	1159.2	870.5	558.8	288.3	149.6
90.0	1655.2	1581.5	1513.2	1448.8	1345.7	1159.2	870.5	558.8	288.3	149.6
135.0	2219.2	2156.8	2099.7	2042.5	1980.1	1914.4	1861.3	1807.1	1746.0	1677.0
180.0	2219.2	2156.8	2099.7	2042.5	1980.1	1914.4	1861.3	1807.1	1746.0	1677.0
225.0	2174.6	2111.6	2049.8	1980.8	1931.9	1869.5	1805.1	1748.3	1683.9	1627.4
270.0	2174.6	2111.6	2049.8	1980.8	1931.9	1869.5	1805.1	1748.3	1683.9	1627.4
315.0	1653.6	1596.7	1532.0	1441.5	1274.4	997.7	720.0	399.3	174.7	130.8
360.0	1653.6	1596.7	1532.0	1441.5	1274.4	997.7	720.0	399.3	174.7	130.8

C\G	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0
0.0	85.2	68.7	64.7	60.1	59.8	56.1	48.2	45.2	45.2	37.6
45.0	120.2	86.2	82.6	74.0	68.4	68.4	63.7	55.2	54.1	49.2
90.0	120.2	86.2	82.6	74.0	68.4	68.4	63.7	55.2	54.1	49.2
135.0	1616.9	1548.5	1453.4	1275.1	1031.3	695.2	381.8	178.3	133.1	83.5
180.0	1616.9	1548.5	1453.4	1275.1	1031.3	695.2	381.8	178.3	133.1	83.5
225.0	1562.7	1485.8	1327.9	1088.1	762.2	443.5	222.9	136.4	82.3	66.1
270.0	1562.7	1485.8	1327.9	1088.1	762.2	443.5	222.9	136.4	82.3	66.1
315.0	85.2	68.7	64.7	60.1	59.8	56.1	48.2	45.2	45.2	37.6
360.0	85.2	68.7	64.7	60.1	59.8	56.1	48.2	45.2	45.2	37.6

C\G	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0
0.0	38.0	33.0	28.1	27.8	21.5	18.8	16.8	15.2	13.5	10.9
45.0	45.6	41.6	38.3	35.0	31.4	25.8	23.5	21.8	21.1	18.1
90.0	45.6	41.6	38.3	35.0	31.4	25.8	23.5	21.8	21.1	18.1
135.0	81.6	73.3	71.3	63.1	58.8	53.8	49.8	45.9	45.6	39.0
180.0	81.6	73.3	71.3	63.1	58.8	53.8	49.8	45.9	45.6	39.0
225.0	60.4	57.8	53.8	49.2	44.9	41.3	41.6	39.3	31.0	28.7
270.0	60.4	57.8	53.8	49.2	44.9	41.3	41.6	39.3	31.0	28.7
315.0	38.0	33.0	28.1	27.8	21.5	18.8	16.8	15.2	13.5	10.9
360.0	38.0	33.0	28.1	27.8	21.5	18.8	16.8	15.2	13.5	10.9

C\G	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
0.0	9.9	8.9	6.6	7.3	7.1	7.0	5.9	4.0	3.7	3.3
45.0	13.5	13.5	9.9	8.6	9.9	9.6	8.9	7.0	6.3	6.3
90.0	13.5	13.5	9.9	8.6	9.9	9.6	8.9	7.0	6.3	6.3
135.0	38.6	35.3	32.1	26.1	26.1	21.1	18.1	18.8	16.8	13.5
180.0	38.6	35.3	32.1	26.1	26.1	21.1	18.1	18.8	16.8	13.5
225.0	24.7	23.1	21.5	18.1	16.5	13.5	11.7	9.9	8.2	8.9
270.0	24.7	23.1	21.5	18.1	16.5	13.5	11.7	9.9	8.2	8.9
315.0	9.9	8.9	6.6	7.3	7.1	7.0	5.9	4.0	3.7	3.3
360.0	9.9	8.9	6.6	7.3	7.1	7.0	5.9	4.0	3.7	3.3

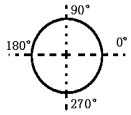
Photometric Data Table [cd]

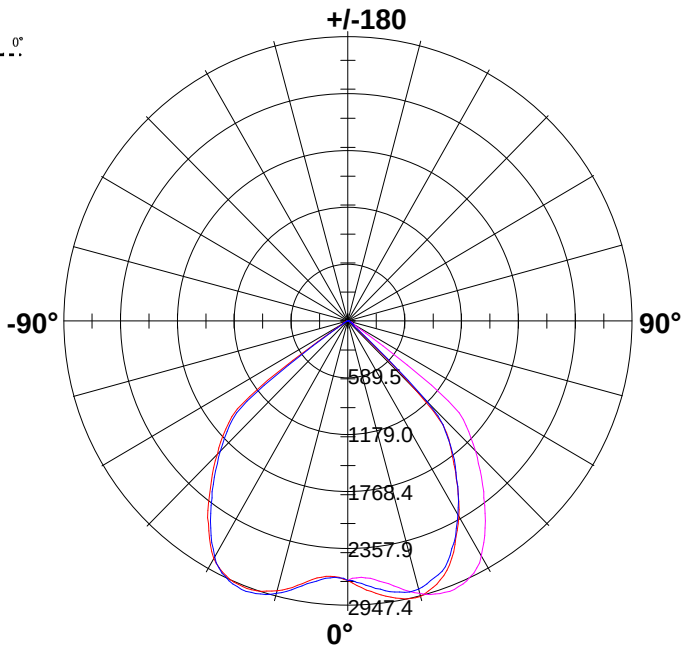
C\G	80.0	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	3.6	3.6	3.6	3.1	2.7	0.0	0.0	0.0	0.0	0.0
45.0	6.3	6.6	6.3	7.0	4.0	3.0	0.0	0.0	0.0	0.0
90.0	6.3	6.6	6.3	7.0	4.0	3.0	0.0	0.0	0.0	0.0
135.0	12.5	10.9	10.1	9.3	8.6	8.6	8.2	7.7	7.3	7.3
180.0	12.5	10.9	10.1	9.3	8.6	8.6	8.2	7.7	7.3	7.3
225.0	7.6	5.0	3.6	4.0	5.9	5.8	5.6	5.6	5.6	5.3
270.0	7.6	5.0	3.6	4.0	5.9	5.8	5.6	5.6	5.6	5.3
315.0	3.6	3.6	3.6	3.1	2.7	0.0	0.0	0.0	0.0	0.0
360.0	3.6	3.6	3.6	3.1	2.7	0.0	0.0	0.0	0.0	0.0

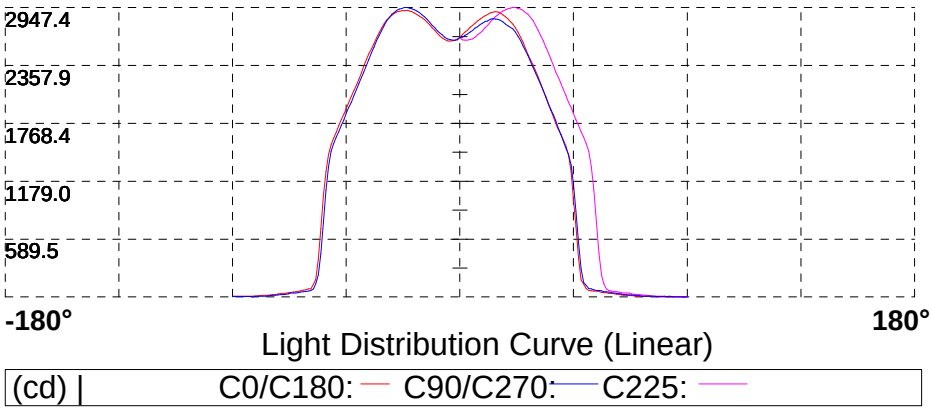
C\G	90.0
0.0	0.0
45.0	0.0
90.0	0.0
135.0	7.0
180.0	7.0
225.0	5.6
270.0	5.6
315.0	0.0
360.0	0.0

Light Distribution Curve [Unit: cd]

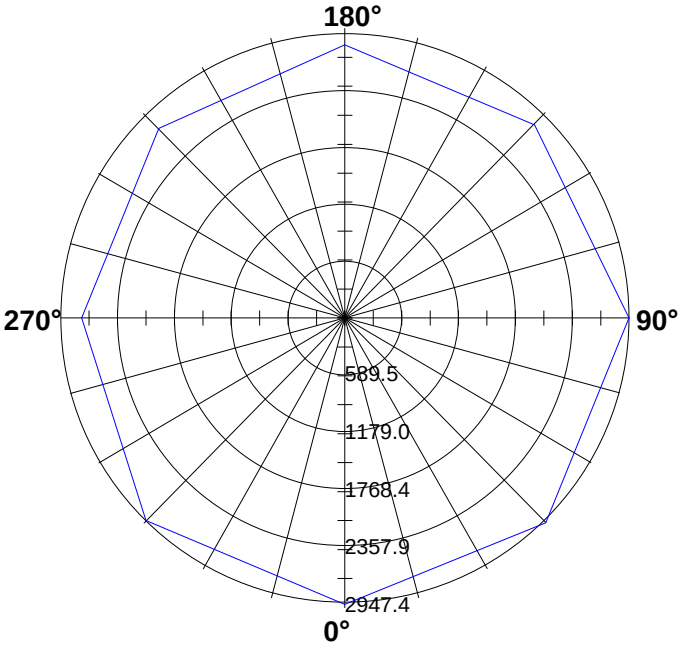
Luminaire

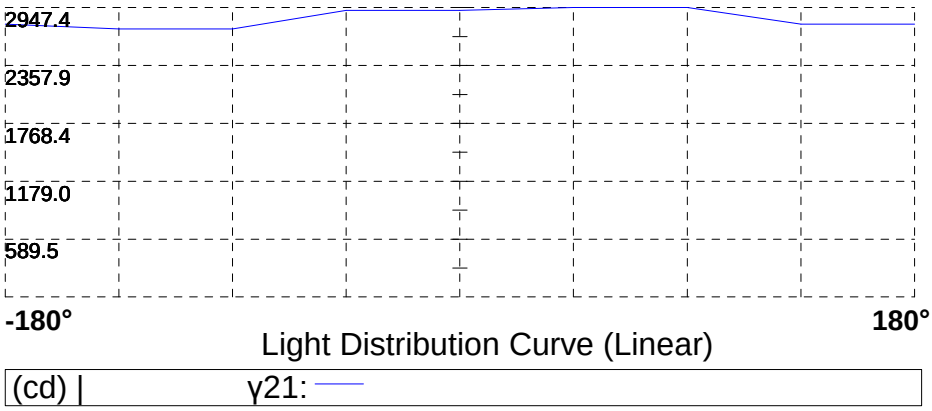




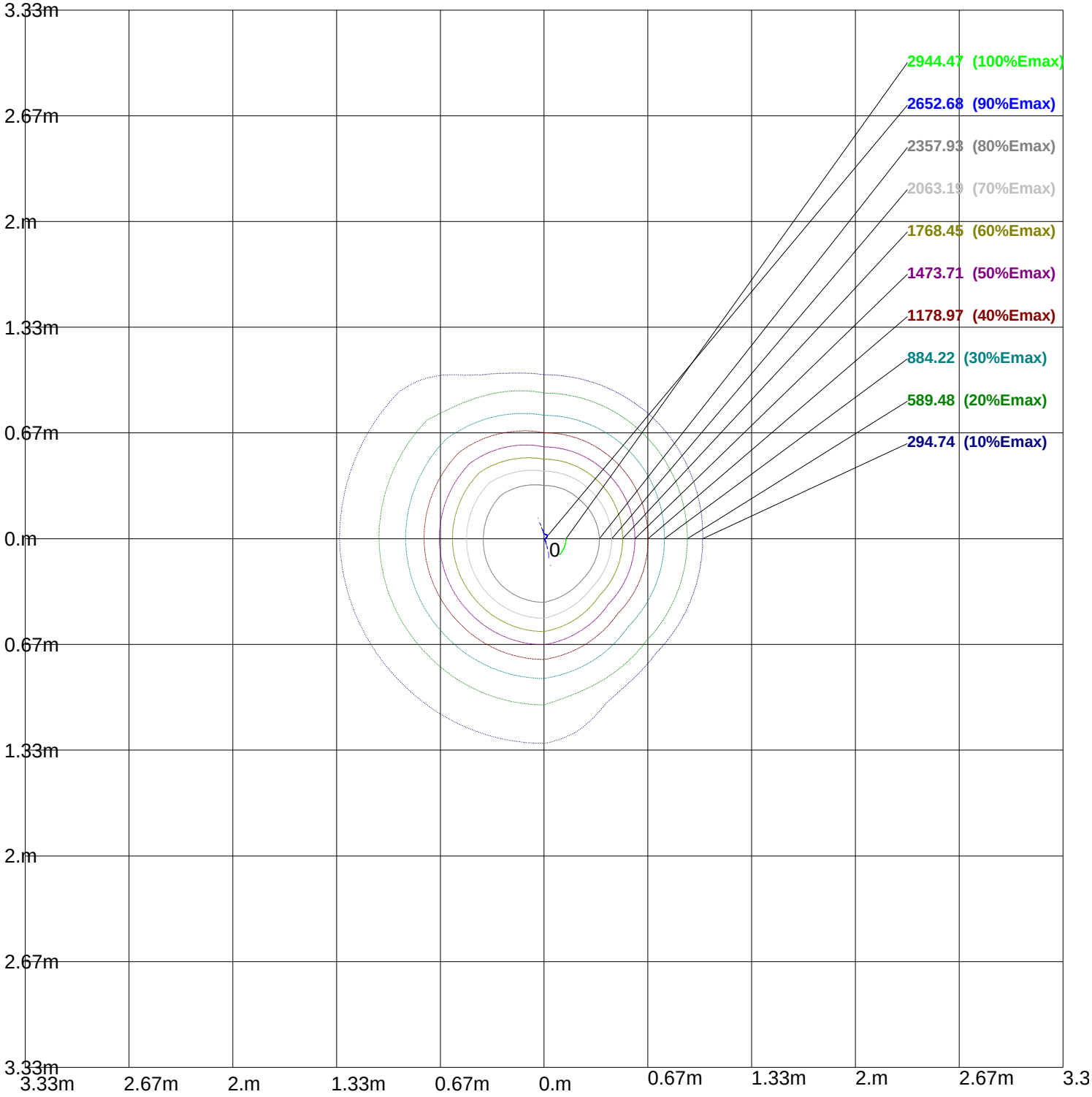


Max Plane Light Distribution Curve [Unit: cd]





Iso-Lux[lx]



Height: 1 m
Max Illuminance : 2947.42lx

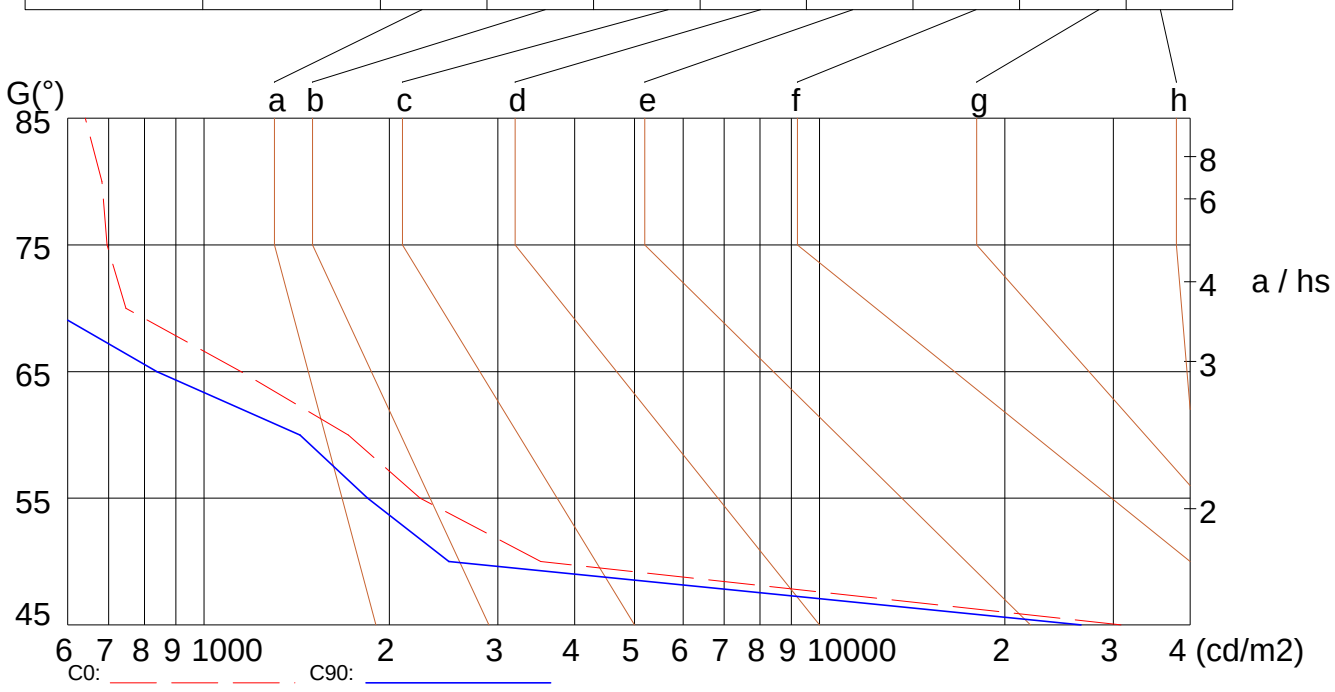
Luminance Limitting Curve

Diameter: 260mm
Length: mm
Width: 260mm
Height: 160mm

(cd/m2)

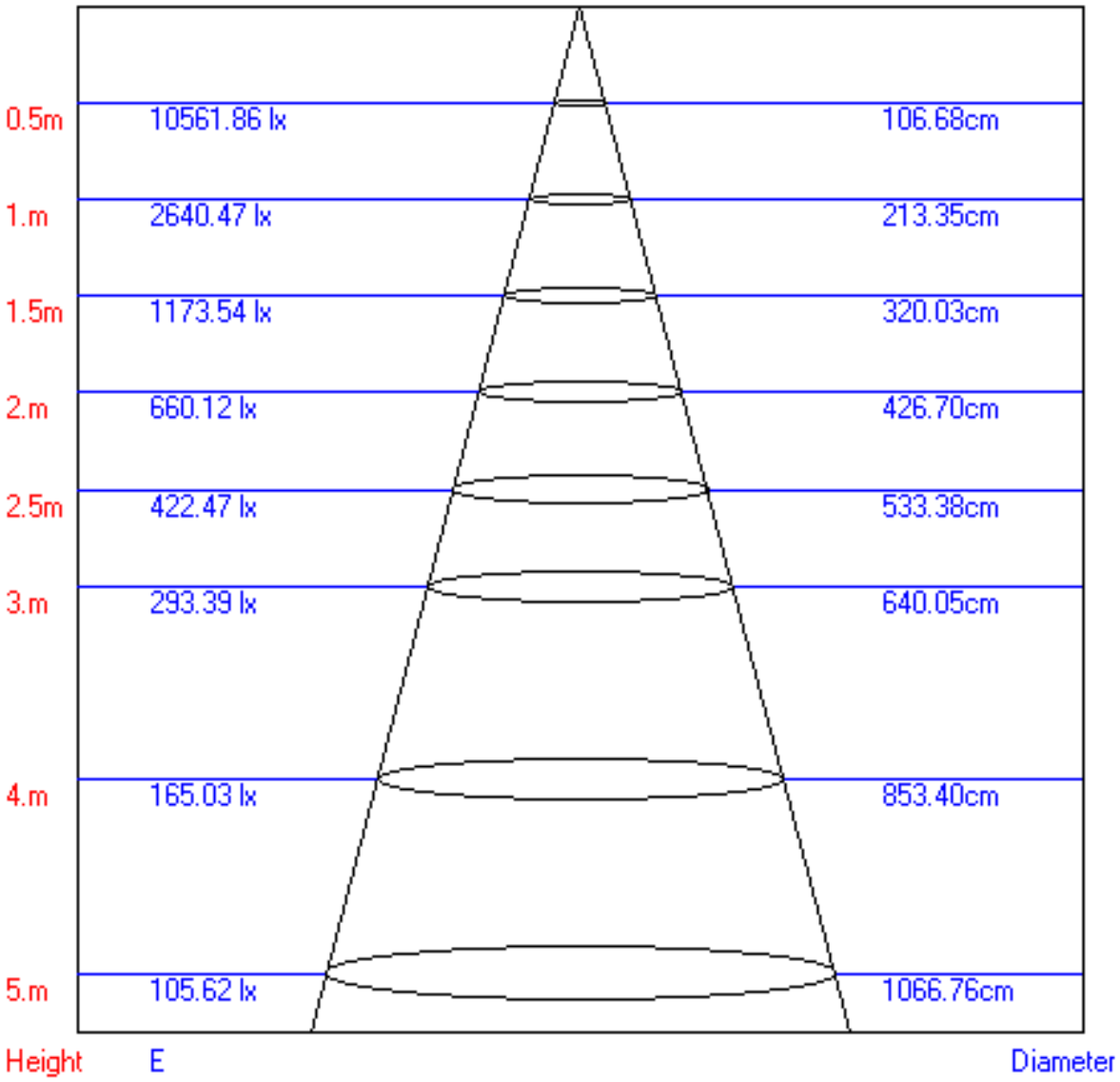
γ	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	30872	3521	2244	1716	1148	746	696	682	
C90	26571	2497	1843	1431	838	545	506	394	

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:93.70°

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	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	1.12	1.10	1.10	1.10	1.09	1.08	1.06	1.04	1.03	1.00	0.99	0.98	0.93	0.92	0.90	0.85
2	1.01	0.99	0.98	1.00	0.98	0.96	0.97	0.94	0.92	0.92	0.90	0.87	0.87	0.84	0.81	0.77
3	0.91	0.89	0.88	0.90	0.88	0.86	0.88	0.85	0.82	0.85	0.81	0.78	0.80	0.76	0.73	0.69
4	0.82	0.80	0.79	0.82	0.79	0.77	0.80	0.76	0.74	0.77	0.73	0.70	0.74	0.70	0.66	0.62
5	0.74	0.72	0.71	0.74	0.71	0.69	0.73	0.69	0.66	0.71	0.67	0.63	0.68	0.63	0.59	0.56
6	0.68	0.65	0.64	0.67	0.65	0.63	0.67	0.63	0.60	0.65	0.61	0.57	0.63	0.58	0.54	0.50
7	0.61	0.59	0.58	0.62	0.59	0.57	0.61	0.57	0.54	0.60	0.55	0.52	0.59	0.53	0.49	0.45
8	0.56	0.54	0.53	0.56	0.53	0.52	0.56	0.52	0.49	0.56	0.51	0.47	0.55	0.49	0.45	0.41
9	0.51	0.49	0.48	0.52	0.49	0.47	0.52	0.48	0.45	0.52	0.47	0.43	0.51	0.45	0.41	0.38
10	0.47	0.45	0.44	0.48	0.45	0.43	0.48	0.44	0.41	0.48	0.43	0.39	0.47	0.42	0.37	0.35

Budgetary Estimate Chart			
Light Flux	5195.71 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

