



CEA GROUP INTERNATIONAL CO.,LTD
http://www.ceaworld.com
Email:anlen@ceaworld.com
Tel:0558 2623358 2603767 Fax:0558 2623358
Address:No.55,DingDa Road YingQuan District FuYang City AnHui Province

LumCAT: ASD-SFL7540

Luminaire:

Report No: HH201512017

Test No:

LampCAT: LED

Lamp flux(lm): -1.0

Number of Lamps: 0

Length(mm): 0

Phm Type: C

Voltage(V): 119.2000

Current(A): 0.6370

Power (W): 75.2700

PF: 0.9910

Ballast type:

Width(mm): 0

Height(mm): 0

Photometric Results

Lumens(lm): 6083.81

Efficiency(%): 0.00%

Lumens(lm)/Power(W): 80.83

Central intensity(cd): 2765.936

Maximum intensity(cd): 2783.165

Angle of maximum intensity: C=15.0 γ =1.0

Beam Angle(50% I_{max}): [C0/180]Left=52.1 Right=47.3

[C90/270]Left=51.4 Right=45.9

Field angle(10% I_{max}): [C0/180]Left=72.8 Right=68.0

[C90/270]Left=69.8 Right=65.1



Equipment: GMS-1800
Temperature(°C): 26.0

Date: 2015/12/7
Humidity(%): 45.0%

Operator: CYF
Distance(m): 14.41

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2761.888	.000	.000	.000%	.000%
1.0	2761.014	2.643	2.643	.000%	.000%
2.0	2759.275	7.923	10.566	.000%	.000%
3.0	2758.229	13.196	23.762	.000%	.000%
4.0	2754.259	18.452	42.214	.000%	.000%
5.0	2749.311	23.676	65.890	.000%	.000%
6.0	2743.654	28.867	94.757	.000%	.000%
7.0	2736.570	34.016	128.773	.000%	.000%
8.0	2727.851	39.108	167.881	.000%	.000%
9.0	2716.685	44.125	212.006	.000%	.000%
10.0	2705.829	49.072	261.077	.000%	.000%
11.0	2692.284	53.938	315.016	.000%	.000%
12.0	2676.204	58.685	373.701	.000%	.000%
13.0	2659.554	63.322	437.023	.000%	.000%
14.0	2642.116	67.861	504.884	.000%	.000%
15.0	2622.516	72.275	577.159	.000%	.000%
16.0	2600.235	76.528	653.687	.000%	.000%
17.0	2578.092	80.640	734.327	.000%	.000%
18.0	2554.341	84.623	818.950	.000%	.000%
19.0	2528.478	88.431	907.381	.000%	.000%
20.0	2501.915	92.070	999.451	.000%	.000%
21.0	2473.276	95.534	1094.984	.000%	.000%
22.0	2444.395	98.823	1193.807	.000%	.000%
23.0	2414.813	101.959	1295.766	.000%	.000%
24.0	2382.740	104.892	1400.658	.000%	.000%
25.0	2349.993	107.612	1508.270	.000%	.000%
26.0	2317.549	110.178	1618.448	.000%	.000%
27.0	2283.789	112.573	1731.021	.000%	.000%
28.0	2249.122	114.764	1845.785	.000%	.000%
29.0	2211.695	116.708	1962.492	.000%	.000%
30.0	2178.005	118.521	2081.013	.000%	.000%
31.0	2139.626	120.153	2201.167	.000%	.000%
32.0	2103.358	121.557	2322.723	.000%	.000%
33.0	2063.761	122.765	2445.488	.000%	.000%
34.0	2026.308	123.778	2569.266	.000%	.000%
35.0	1989.608	124.720	2693.985	.000%	.000%
36.0	1951.324	125.480	2819.465	.000%	.000%
37.0	1912.678	126.022	2945.487	.000%	.000%

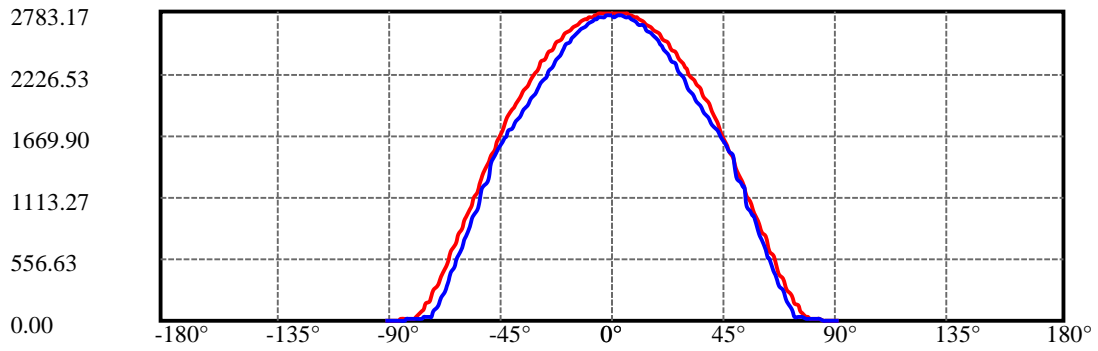
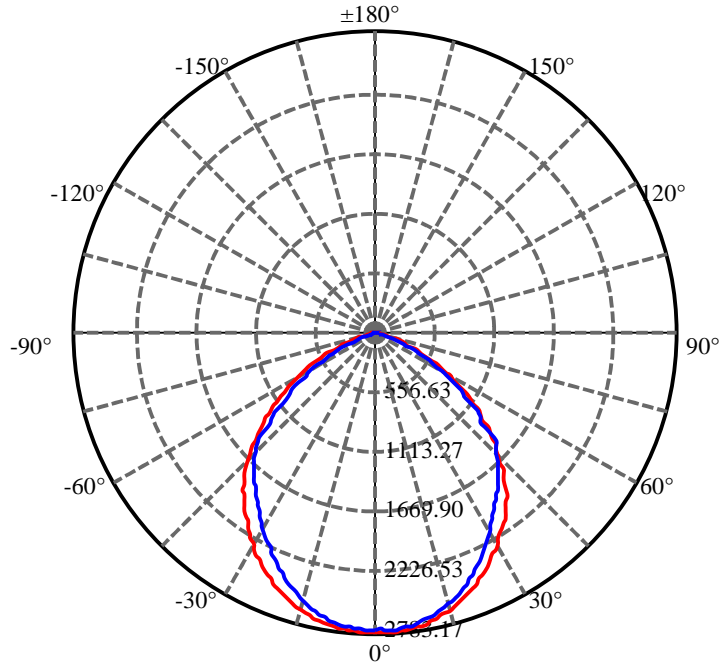
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	1872.994	126.361	3071.848	.000%	.000%
39.0	1837.392	126.646	3198.493	.000%	.000%
40.0	1797.708	126.779	3325.273	.000%	.000%
41.0	1755.203	126.518	3451.790	.000%	.000%
42.0	1714.957	126.077	3577.867	.000%	.000%
43.0	1677.167	125.654	3703.521	.000%	.000%
44.0	1635.095	125.014	3828.535	.000%	.000%
45.0	1587.695	123.856	3952.390	.000%	.000%
46.0	1546.030	122.553	4074.944	.000%	.000%
47.0	1504.114	121.312	4196.256	.000%	.000%
48.0	1458.107	119.749	4316.004	.000%	.000%
49.0	1398.130	117.293	4433.297	.000%	.000%
50.0	1342.349	114.260	4547.557	.000%	.000%
51.0	1292.121	111.461	4659.018	.000%	.000%
52.0	1239.341	108.627	4767.645	.000%	.000%
53.0	1183.222	105.381	4873.026	.000%	.000%
54.0	1117.555	101.409	4974.435	.000%	.000%
55.0	1063.322	97.351	5071.785	.000%	.000%
56.0	1014.944	93.911	5165.696	.000%	.000%
57.0	957.001	90.162	5255.858	.000%	.000%
58.0	884.396	85.153	5341.011	.000%	.000%
59.0	831.158	80.203	5421.214	.000%	.000%
60.0	778.897	76.065	5497.279	.000%	.000%
61.0	715.409	71.311	5568.590	.000%	.000%
62.0	659.636	66.258	5634.848	.000%	.000%
63.0	604.088	61.461	5696.309	.000%	.000%
64.0	545.747	56.422	5752.731	.000%	.000%
65.0	491.436	51.329	5804.060	.000%	.000%
66.0	434.833	46.215	5850.275	.000%	.000%
67.0	385.599	41.254	5891.528	.000%	.000%
68.0	330.873	36.294	5927.822	.000%	.000%
69.0	281.977	31.265	5959.087	.000%	.000%
70.0	235.607	26.582	5985.669	.000%	.000%
71.0	194.997	22.256	6007.925	.000%	.000%
72.0	152.994	18.094	6026.019	.000%	.000%
73.0	116.623	14.099	6040.118	.000%	.000%
74.0	89.368	10.829	6050.948	.000%	.000%
75.0	67.251	8.275	6059.223	.000%	.000%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	48.420	6.140	6065.363	.000%	.000%
77.0	33.846	4.386	6069.749	.000%	.000%
78.0	24.703	3.134	6072.883	.000%	.000%
79.0	19.444	2.372	6075.255	.000%	.000%
80.0	16.244	1.924	6077.179	.000%	.000%
81.0	13.718	1.620	6078.799	.000%	.000%
82.0	11.366	1.360	6080.160	.000%	.000%
83.0	8.866	1.100	6081.259	.000%	.000%
84.0	6.574	.841	6082.101	.000%	.000%
85.0	4.541	.607	6082.707	.000%	.000%
86.0	2.889	.406	6083.113	.000%	.000%
87.0	1.938	.264	6083.377	.000%	.000%
88.0	1.323	.179	6083.556	.000%	.000%
89.0	1.133	.135	6083.691	.000%	.000%
90.0	1.047	.120	6083.811	.000%	.000%

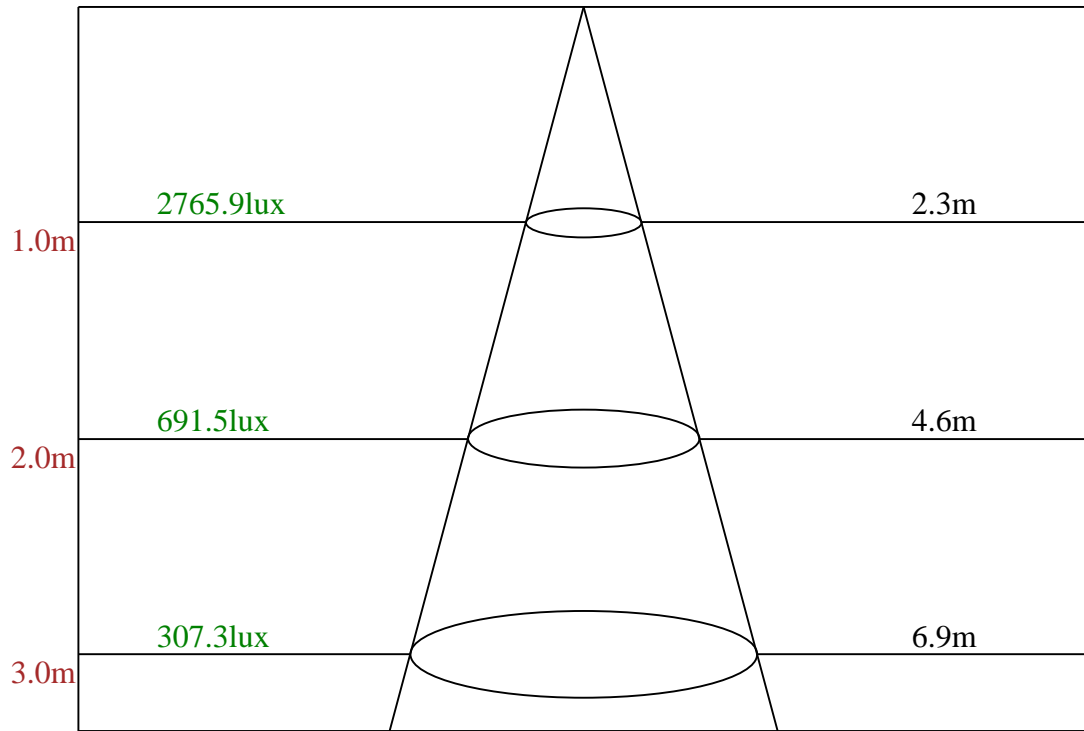
ZONAL LUMEN SUMMARY			
Zone	Lumens	%Lamp	%Fixt
0-30	2081.01	N.A.	34.21%
0-40	3325.27	N.A.	54.66%
0-60	5497.28	N.A.	90.36%
0-90	6083.69	N.A.	100.00%
0-120	6083.69	N.A.	100.00%
0-180	6083.81	N.A.	100.00%
60-90	662.48	N.A.	10.89%
90-120	0.00	N.A.	0.00%
90-130	0.00	N.A.	0.00%
90-150	0.00	N.A.	0.00%
90-180	0.00	N.A.	0.00%
0-52.94	4867.05	N.A.	80.00%

ZONAL LUMEN SUMMARY

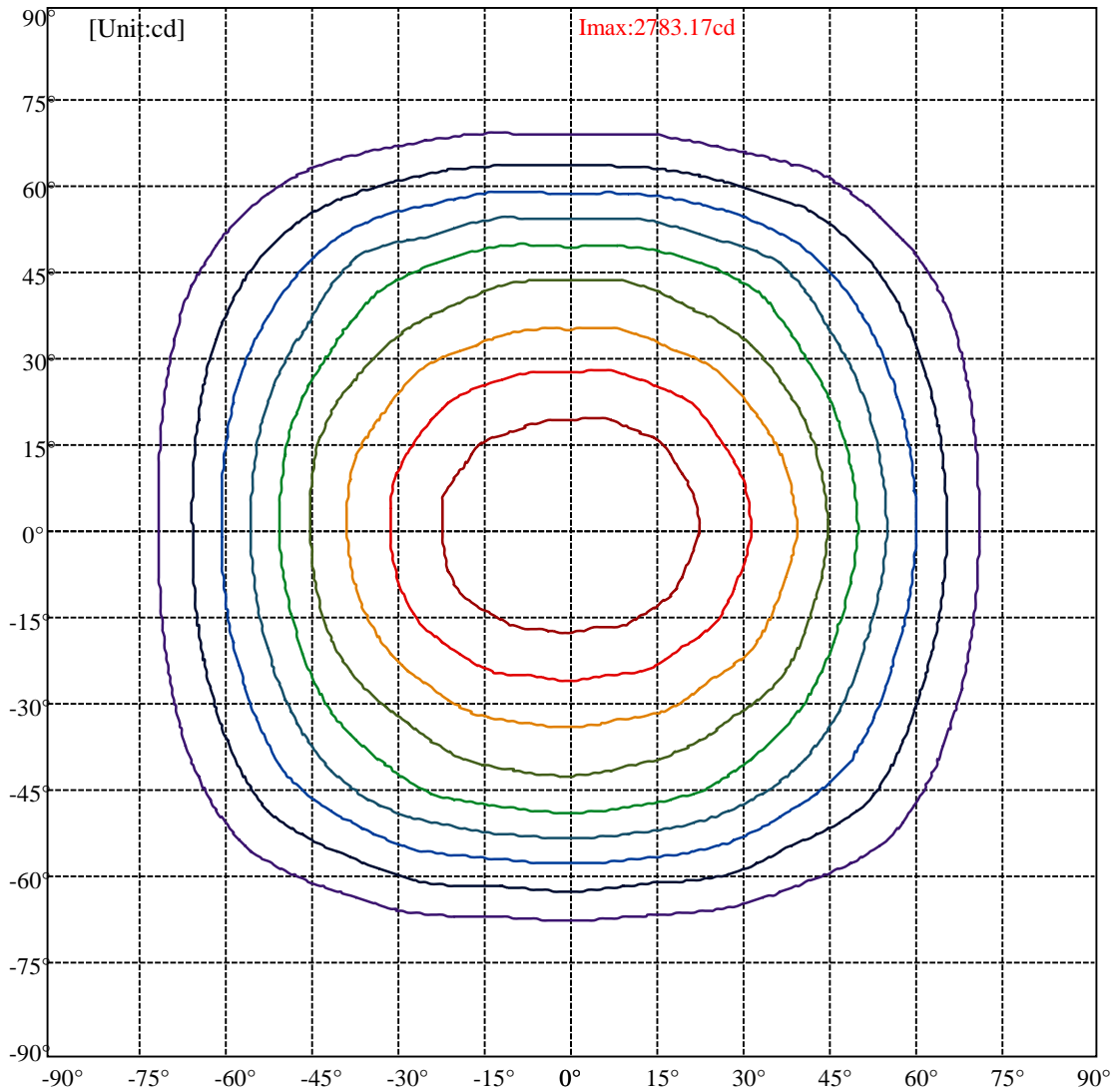
0-10	261.08
10-20	738.37
20-30	1081.56
30-40	1244.26
40-50	1222.29
50-60	949.72
60-70	488.39
70-80	91.51
80-90	6.51
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00



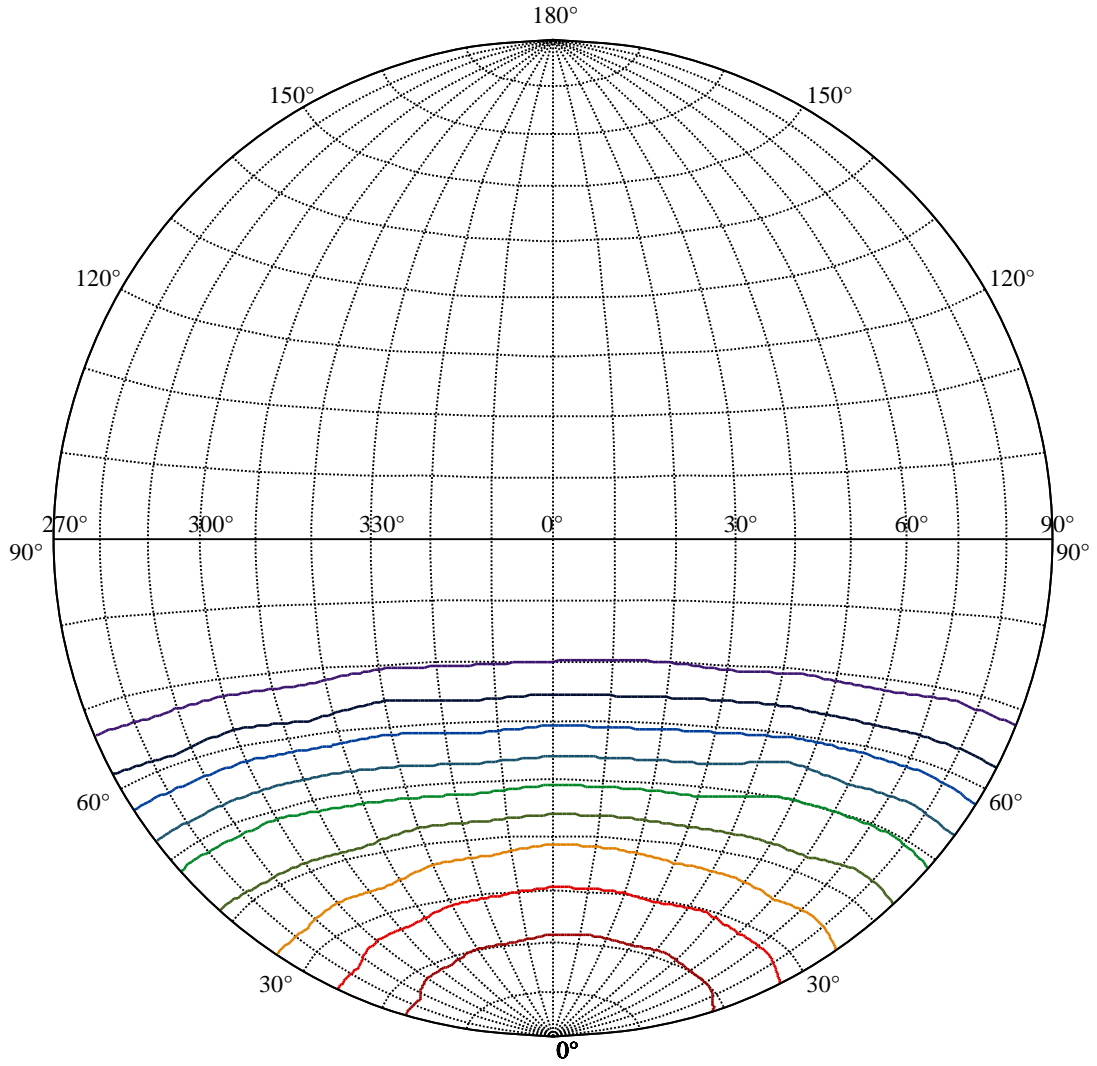
C0/C180: ——— (red line)
C90/C270: ——— (blue line)



Beam angle of C15plane98.30



(10%Imax) 277.702	—
(20%Imax) 555.404	—
(30%Imax) 833.105	—
(40%Imax) 1110.81	—
(50%Imax) 1388.51	—
(60%Imax) 1666.21	—
(70%Imax) 1943.91	—
(80%Imax) 2221.61	—
(90%Imax) 2499.32	—



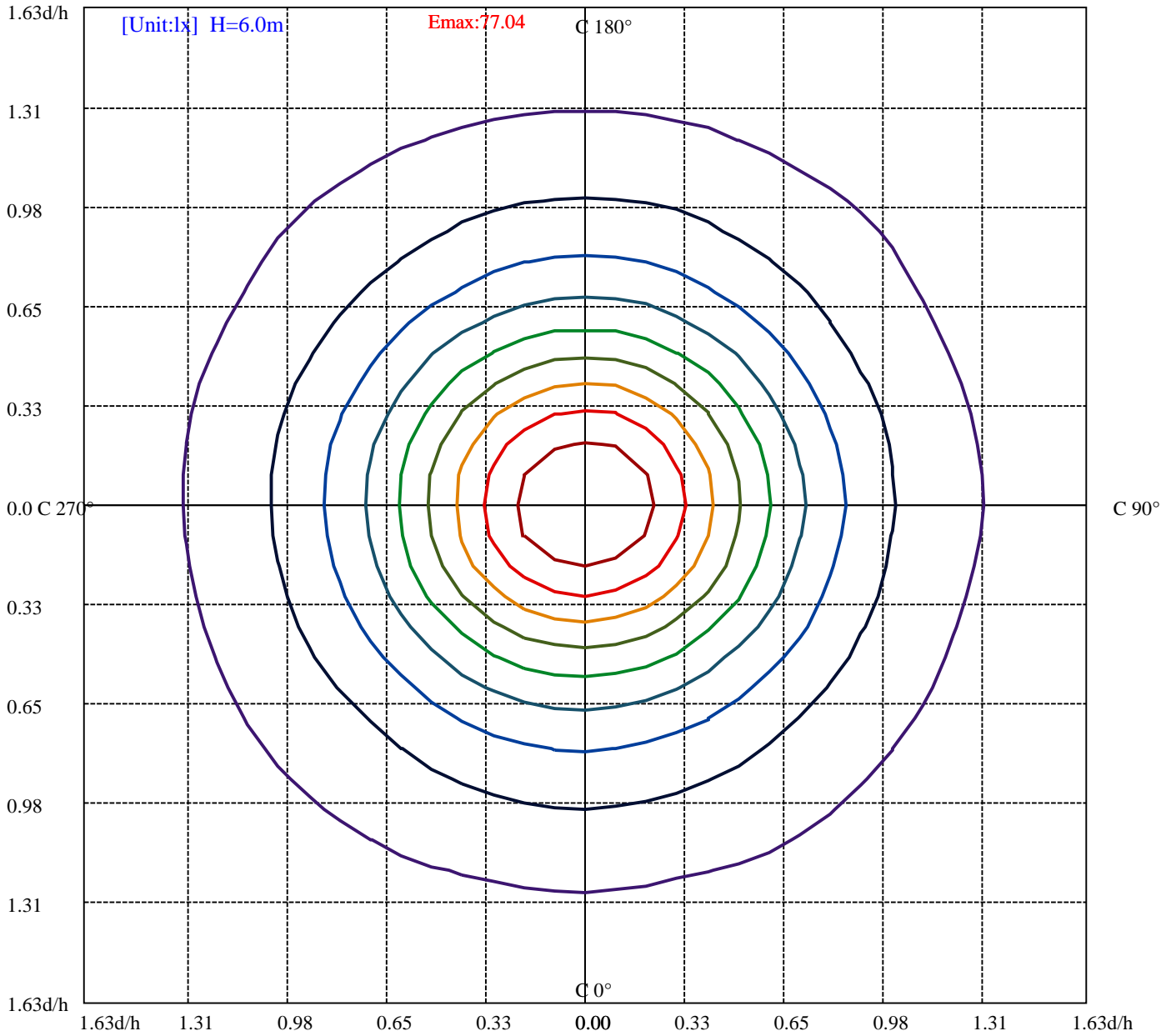
House

[Unit:cd]

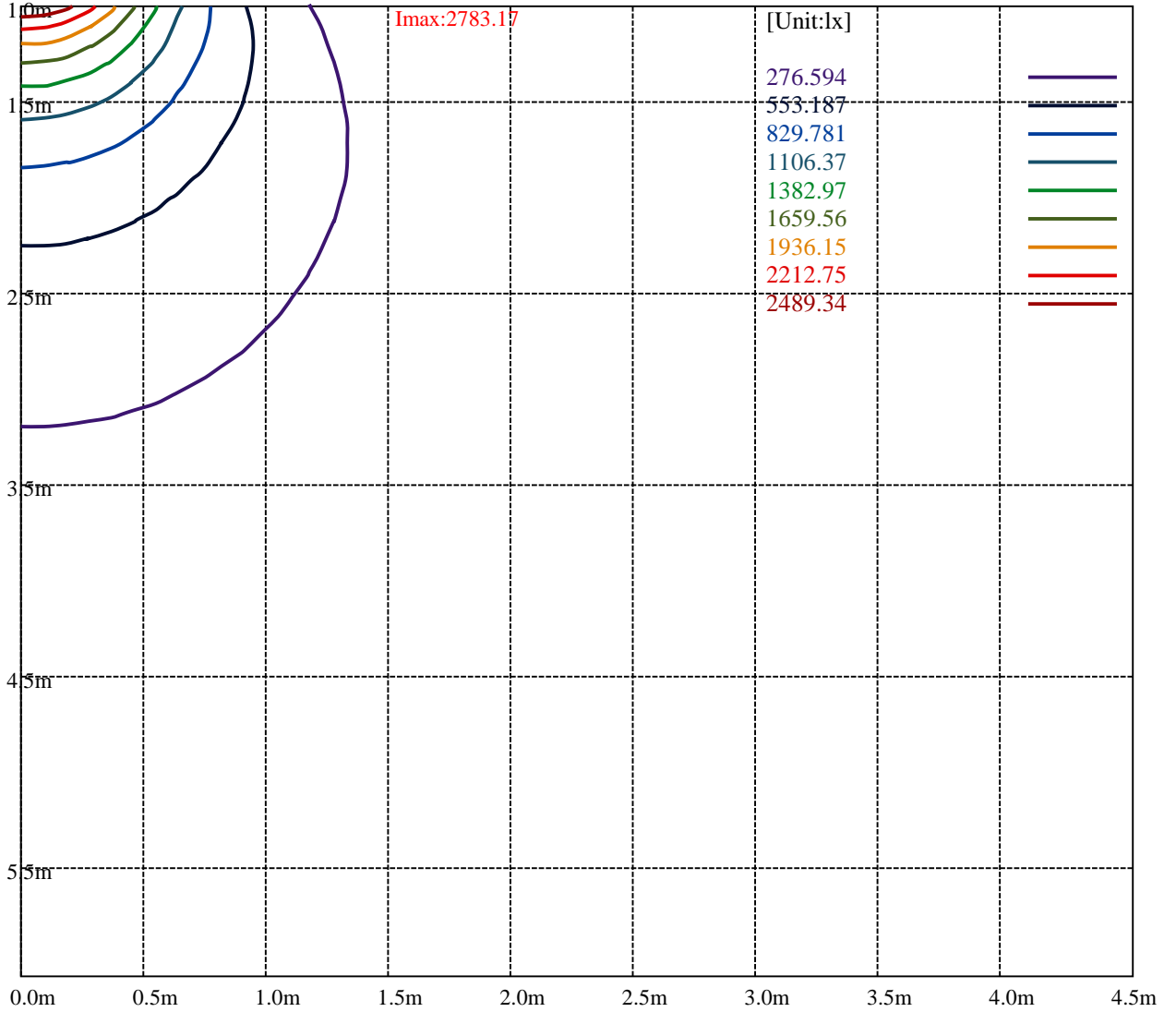
Road

- Imax:2783.17
- (10% Imax) 278.317
- (20% Imax) 556.633
- (30% Imax) 834.95
- (40% Imax) 1113.27
- (50% Imax) 1391.58
- (60% Imax) 1669.9
- (70% Imax) 1948.22
- (80% Imax) 2226.53
- (90% Imax) 2504.85





- (10%Emax) 7.703917
- (20%Emax) 15.40783
- (30%Emax) 23.11175
- (40%Emax) 30.81556
- (50%Emax) 38.51944
- (60%Emax) 46.22361
- (70%Emax) 53.9275
- (80%Emax) 61.63139
- (90%Emax) 69.33528



Intensity data(cd)

C/ γ (°)	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0
0.0	2765.94	2772.16	2772.58	2768.01	2767.39	2765.52	2760.95	2753.69	2746.42
15.0	2779.43	2783.17	2782.96	2780.88	2771.33	2766.14	2761.58	2757.22	2749.54
30.0	2776.52	2779.22	2777.35	2769.05	2765.52	2762.61	2764.28	2755.14	2747.67
45.0	2773.41	2775.69	2771.75	2767.60	2769.88	2769.88	2767.18	2758.25	2749.95
60.0	2771.96	2766.14	2760.33	2771.54	2771.13	2763.86	2753.48	2744.76	2737.08
75.0	2759.29	2758.25	2752.44	2759.09	2763.44	2754.31	2743.72	2739.78	2732.72
90.0	2747.05	2738.95	2743.93	2749.12	2745.80	2736.25	2728.57	2724.42	2713.21
105.0	2740.61	2735.21	2734.17	2738.95	2737.50	2734.17	2728.15	2720.89	2712.17
120.0	2742.06	2737.50	2736.46	2743.31	2743.10	2734.80	2725.87	2719.44	2712.59
135.0	2754.10	2753.07	2748.08	2747.05	2748.08	2752.03	2747.25	2739.78	2727.95
150.0	2764.69	2755.35	2752.24	2755.56	2756.80	2754.52	2749.95	2743.72	2736.87
165.0	2767.60	2763.86	2764.90	2764.28	2758.88	2753.69	2749.12	2745.18	2738.95
180.0	2765.94	2765.52	2765.52	2768.84	2760.95	2758.88	2753.90	2747.46	2737.29
195.0	2779.43	2777.98	2779.01	2775.90	2768.84	2764.07	2760.95	2756.59	2751.82
210.0	2776.52	2775.69	2776.73	2774.24	2765.73	2759.50	2753.69	2749.95	2744.35
225.0	2773.41	2770.50	2770.92	2766.35	2753.90	2748.71	2743.52	2738.33	2732.78
240.0	2771.96	2771.75	2763.24	2760.33	2756.18	2748.29	2742.06	2732.72	2722.13
255.0	2759.29	2755.97	2752.65	2753.27	2747.05	2735.42	2724.42	2717.57	2707.40
270.0	2747.05	2748.29	2743.72	2739.78	2734.38	2728.36	2719.85	2708.85	2699.92
285.0	2740.61	2738.95	2738.12	2727.32	2721.93	2716.32	2710.72	2700.96	2687.47
300.0	2742.06	2749.33	2743.31	2738.33	2734.38	2730.23	2725.25	2714.04	2703.87
315.0	2754.10	2753.27	2755.56	2749.95	2741.65	2735.21	2730.85	2724.42	2715.28
330.0	2764.69	2766.35	2764.90	2762.61	2756.59	2751.61	2748.50	2741.44	2730.02
345.0	2767.60	2772.16	2771.75	2766.14	2761.78	2759.09	2753.90	2743.10	2735.00
360.0	2765.94	2772.16	2772.58	2768.01	2767.39	2765.52	2760.95	2753.69	2746.42

C/ γ (°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	2738.74	2728.15	2717.36	2696.39	2683.11	2669.82	2651.97	2632.25	2612.32
15.0	2741.65	2734.80	2722.13	2708.43	2694.94	2680.20	2662.14	2646.16	2624.15
30.0	2739.36	2730.65	2716.32	2701.38	2684.15	2670.65	2651.76	2625.19	2609.21
45.0	2741.65	2733.55	2717.36	2703.24	2691.00	2673.56	2651.55	2629.55	2610.24
60.0	2726.49	2715.70	2698.26	2679.99	2666.08	2649.89	2629.34	2604.85	2586.58
75.0	2723.80	2705.11	2695.56	2680.20	2667.54	2646.78	2625.81	2606.92	2584.71
90.0	2700.34	2682.90	2668.78	2655.71	2637.23	2616.89	2594.88	2575.99	2552.95
105.0	2700.96	2691.62	2673.97	2656.54	2640.76	2628.51	2610.87	2586.99	2562.50
120.0	2700.75	2691.83	2678.33	2664.22	2647.82	2626.44	2607.75	2589.48	2568.52
135.0	2721.10	2714.25	2704.49	2689.13	2673.35	2658.82	2639.10	2623.94	2598.62
150.0	2726.49	2716.11	2703.45	2689.33	2673.97	2658.20	2640.55	2621.66	2606.30
165.0	2728.36	2721.51	2717.36	2705.11	2691.41	2676.88	2663.59	2641.80	2624.77
180.0	2731.68	2721.51	2709.89	2696.60	2679.37	2666.50	2646.99	2629.34	2608.17
195.0	2735.84	2726.91	2717.15	2702.41	2685.60	2672.10	2657.57	2637.65	2614.60
210.0	2732.93	2723.17	2712.59	2698.26	2681.45	2666.71	2650.10	2629.34	2606.51
225.0	2715.70	2704.07	2693.49	2673.77	2650.10	2631.21	2615.23	2592.39	2562.91
240.0	2712.59	2703.66	2679.99	2661.52	2643.04	2627.27	2604.02	2578.48	2548.17
255.0	2686.64	2672.31	2654.67	2642.63	2610.66	2590.73	2563.74	2539.87	2512.26
270.0	2686.84	2666.29	2652.80	2632.04	2614.81	2586.16	2565.61	2536.13	2509.15
285.0	2674.39	2660.90	2642.63	2618.13	2601.94	2576.20	2555.85	2519.73	2497.73
300.0	2693.90	2682.69	2663.80	2645.33	2630.79	2610.66	2587.20	2561.46	2540.91
315.0	2699.30	2689.13	2678.75	2661.52	2641.59	2621.04	2599.03	2575.78	2551.91
330.0	2718.19	2707.19	2697.43	2681.24	2668.37	2651.14	2633.49	2613.15	2590.31
345.0	2722.76	2715.91	2698.26	2685.81	2670.24	2654.46	2632.25	2607.54	2590.73
360.0	2738.74	2728.15	2717.36	2696.39	2683.11	2669.82	2651.97	2632.25	2612.32

Intensity data(cd)

C/ γ (°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2594.88	2568.93	2544.23	2520.77	2500.01	2468.25	2436.91	2412.82	2381.27
15.0	2597.79	2574.33	2553.16	2526.38	2498.77	2469.91	2440.02	2410.54	2378.57
30.0	2584.50	2558.55	2528.66	2506.45	2477.18	2447.08	2416.35	2383.97	2349.30
45.0	2585.95	2561.25	2537.17	2509.98	2486.52	2450.81	2418.01	2385.21	2357.40
60.0	2560.21	2537.59	2508.94	2472.20	2442.51	2416.98	2383.97	2343.07	2314.84
75.0	2554.61	2527.41	2503.75	2475.52	2440.23	2406.60	2378.36	2343.70	2316.29
90.0	2526.38	2497.73	2468.46	2438.77	2406.18	2371.51	2336.43	2308.41	2269.38
105.0	2539.04	2511.85	2482.78	2453.93	2425.28	2402.24	2360.93	2333.94	2293.88
120.0	2541.12	2517.66	2490.46	2461.19	2431.72	2407.01	2376.91	2345.36	2306.75
135.0	2580.77	2555.85	2534.89	2507.69	2481.95	2454.55	2423.62	2398.50	2358.44
150.0	2585.33	2564.37	2532.81	2511.22	2483.61	2461.61	2433.38	2396.84	2373.17
165.0	2603.81	2586.58	2565.82	2541.53	2514.54	2493.58	2460.57	2431.09	2407.01
180.0	2592.81	2569.97	2548.80	2523.26	2498.56	2472.61	2444.17	2415.32	2385.42
195.0	2594.05	2572.88	2556.48	2529.28	2504.99	2470.33	2446.87	2416.56	2392.27
210.0	2583.67	2564.99	2541.32	2512.68	2490.26	2461.19	2425.90	2394.35	2364.66
225.0	2541.32	2514.13	2486.93	2457.66	2424.86	2394.76	2365.91	2330.41	2292.84
240.0	2524.51	2495.03	2466.80	2436.70	2404.11	2375.87	2333.11	2297.82	2263.57
255.0	2483.82	2449.15	2415.32	2383.55	2348.06	2320.24	2284.12	2241.98	2205.86
270.0	2482.57	2451.23	2421.34	2378.78	2345.36	2311.11	2282.87	2245.71	2203.37
285.0	2471.99	2441.26	2405.35	2371.72	2338.30	2305.08	2269.79	2230.15	2200.46
300.0	2513.92	2485.48	2456.00	2425.49	2393.52	2356.98	2321.48	2287.23	2261.28
315.0	2527.41	2495.45	2470.12	2437.11	2406.80	2366.53	2338.30	2302.59	2270.21
330.0	2567.69	2541.12	2512.47	2483.41	2455.38	2432.13	2399.12	2366.74	2329.37
345.0	2566.03	2540.70	2513.92	2493.37	2466.80	2438.57	2408.67	2377.53	2345.57
360.0	2594.88	2568.93	2544.23	2520.77	2500.01	2468.25	2436.91	2412.82	2381.27

C/ γ (°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	2345.36	2314.43	2289.10	2256.09	2217.27	2183.64	2155.20	2119.08	2088.98
15.0	2346.19	2313.80	2285.16	2252.15	2210.22	2180.32	2143.58	2105.38	2068.64
30.0	2313.60	2277.27	2239.49	2209.18	2166.00	2135.07	2087.32	2056.81	2017.57
45.0	2317.75	2281.63	2253.40	2216.86	2171.81	2130.92	2096.66	2053.90	2019.23
60.0	2278.72	2249.04	2195.68	2162.47	2118.88	2084.21	2042.28	1992.45	1950.52
75.0	2267.93	2235.54	2193.40	2161.43	2114.93	2075.07	2040.41	2003.46	1975.43
90.0	2231.18	2188.63	2157.70	2114.52	2075.91	2036.67	1998.27	1963.81	1931.21
105.0	2266.89	2226.41	2185.31	2147.52	2108.91	2064.90	2024.84	1990.38	1954.46
120.0	2278.51	2242.39	2206.89	2167.24	2123.86	2090.23	2041.45	1999.51	1957.37
135.0	2325.43	2291.80	2263.15	2227.86	2183.44	2146.07	2114.72	2073.83	2032.73
150.0	2341.41	2306.95	2263.98	2235.54	2197.76	2167.66	2112.65	2080.26	2039.37
165.0	2377.33	2351.38	2301.35	2273.32	2238.24	2210.22	2167.04	2129.46	2098.12
180.0	2353.87	2326.67	2286.61	2250.90	2222.46	2185.51	2149.18	2105.80	2076.74
195.0	2358.44	2318.99	2283.29	2252.56	2213.95	2169.32	2138.60	2099.57	2066.36
210.0	2329.79	2287.65	2252.56	2223.09	2186.34	2155.20	2098.32	2064.07	2019.86
225.0	2263.98	2227.03	2184.68	2143.79	2112.03	2071.75	2034.59	1997.44	1958.20
240.0	2234.50	2197.14	2161.64	2127.18	2093.97	2059.51	2022.55	1984.15	1944.92
255.0	2180.95	2150.64	2117.22	2081.51	2042.90	2006.57	1970.45	1933.29	1897.79
270.0	2170.57	2147.32	2109.74	2076.53	2040.41	2004.49	1966.50	1930.80	1898.00
285.0	2165.17	2134.24	2092.30	2063.66	2027.74	1991.62	1954.67	1915.02	1885.54
300.0	2217.27	2181.15	2141.92	2112.86	2074.04	2037.71	1993.49	1961.73	1917.10
315.0	2231.18	2187.38	2148.77	2115.14	2075.91	2030.65	1999.10	1957.79	1915.44
330.0	2301.14	2262.11	2223.50	2189.04	2150.85	2120.95	2073.41	2038.12	1999.10
345.0	2313.80	2279.34	2243.85	2211.67	2183.23	2142.33	2104.97	2075.28	2037.92
360.0	2345.36	2314.43	2289.10	2256.09	2217.27	2183.64	2155.20	2119.08	2088.98

Intensity data(cd)

C/ γ ($^{\circ}$)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	2045.60	2009.48	1971.90	1939.73	1882.22	1816.83	1773.65	1729.23	1669.86
15.0	2034.18	1994.74	1955.09	1913.98	1869.15	1813.30	1759.33	1705.77	1661.97
30.0	1979.58	1938.69	1897.17	1855.24	1814.34	1771.16	1725.28	1677.75	1630.21
45.0	1967.13	1921.87	1875.17	1841.12	1791.30	1748.74	1714.07	1674.43	1643.29
60.0	1916.06	1876.41	1833.23	1803.75	1765.14	1726.95	1683.97	1654.70	1616.72
75.0	1928.52	1897.38	1860.84	1833.23	1795.45	1760.99	1723.00	1695.39	1658.03
90.0	1896.34	1861.05	1833.65	1803.34	1766.39	1730.27	1704.53	1670.48	1639.13
105.0	1926.02	1885.34	1847.76	1814.55	1787.35	1752.06	1718.02	1686.88	1654.50
120.0	1924.99	1885.13	1848.59	1802.92	1772.41	1734.83	1698.71	1661.35	1622.32
135.0	1992.45	1948.44	1901.74	1859.80	1816.21	1770.95	1737.12	1693.32	1647.65
150.0	2005.12	1962.35	1912.74	1880.98	1838.63	1797.73	1748.74	1716.77	1674.43
165.0	2060.34	2015.91	1977.92	1945.12	1904.02	1858.35	1817.46	1784.24	1741.27
180.0	2037.50	1999.93	1961.32	1923.12	1893.43	1848.80	1809.57	1758.50	1703.28
195.0	2012.17	1980.41	1939.31	1905.47	1864.99	1818.08	1775.73	1743.35	1699.54
210.0	1985.81	1937.65	1896.13	1861.05	1818.49	1783.83	1729.02	1693.94	1653.87
225.0	1918.55	1881.19	1840.71	1793.79	1759.75	1711.38	1676.92	1625.43	1593.26
240.0	1906.93	1868.94	1832.82	1795.66	1764.52	1726.95	1688.54	1651.18	1612.77
255.0	1869.77	1836.35	1803.55	1761.82	1733.80	1698.09	1664.67	1629.59	1593.05
270.0	1865.82	1840.08	1795.66	1769.29	1730.68	1703.70	1667.57	1633.74	1599.07
285.0	1843.61	1809.98	1772.62	1744.18	1709.30	1675.88	1640.80	1605.09	1566.69
300.0	1878.07	1840.50	1799.19	1767.63	1717.81	1683.97	1645.36	1614.43	1572.29
315.0	1872.05	1842.37	1802.92	1765.97	1725.08	1678.16	1638.10	1603.84	1562.33
330.0	1966.09	1920.63	1873.92	1839.25	1797.73	1753.10	1711.38	1669.86	1604.88
345.0	1999.10	1949.48	1917.93	1876.41	1826.80	1760.78	1707.43	1672.76	1621.90
360.0	2045.60	2009.48	1971.90	1939.73	1882.22	1816.83	1773.65	1729.23	1669.86

C/ γ ($^{\circ}$)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	1604.05	1564.61	1519.15	1465.80	1399.37	1353.91	1285.19	1242.64	1188.46
15.0	1599.28	1544.89	1490.71	1443.58	1381.52	1323.39	1286.23	1205.27	1157.73
30.0	1556.31	1504.82	1469.74	1416.18	1356.19	1298.06	1260.49	1196.14	1152.34
45.0	1591.60	1556.93	1518.94	1489.25	1447.53	1399.78	1358.68	1300.76	1249.49
60.0	1583.29	1547.59	1505.03	1466.00	1430.09	1390.65	1348.09	1276.89	1162.09
75.0	1622.11	1587.44	1548.83	1518.11	1469.33	1358.89	1265.68	1234.96	1195.10
90.0	1591.39	1562.33	1526.83	1491.12	1358.68	1282.49	1251.36	1214.82	1185.76
105.0	1615.47	1578.93	1547.17	1507.94	1478.46	1400.41	1285.19	1229.77	1199.25
120.0	1583.71	1549.46	1511.05	1468.50	1437.15	1395.84	1361.59	1310.73	1246.17
135.0	1607.58	1575.40	1534.09	1494.86	1460.81	1423.66	1382.14	1343.94	1304.08
150.0	1637.27	1593.88	1540.11	1475.76	1425.94	1380.68	1325.88	1261.32	1223.12
165.0	1699.34	1623.15	1574.78	1527.24	1476.59	1409.12	1362.83	1308.24	1246.17
180.0	1648.06	1605.09	1539.28	1489.46	1440.89	1392.93	1324.43	1272.74	1230.80
195.0	1636.85	1573.74	1528.90	1483.44	1412.24	1357.23	1320.07	1246.58	1190.12
210.0	1622.74	1579.76	1537.21	1491.54	1440.89	1375.49	1331.49	1289.76	1226.86
225.0	1553.82	1517.69	1478.04	1437.98	1400.82	1364.49	1326.30	1286.65	1252.39
240.0	1572.50	1534.30	1497.56	1457.91	1424.69	1379.85	1333.15	1260.49	1163.34
255.0	1554.02	1517.28	1478.25	1426.56	1319.03	1242.22	1205.27	1156.28	1114.14
270.0	1562.53	1522.26	1480.95	1421.16	1294.74	1253.02	1210.67	1172.06	1076.15
285.0	1529.53	1489.67	1447.11	1406.22	1307.41	1211.50	1169.36	1137.39	1096.29
300.0	1533.26	1503.58	1466.00	1423.45	1381.52	1347.68	1307.20	1245.13	1126.39
315.0	1517.90	1487.39	1447.11	1409.33	1328.16	1290.18	1248.86	1210.67	1149.64
330.0	1539.91	1495.69	1458.53	1395.42	1351.41	1300.35	1245.96	1179.74	1145.48
345.0	1542.19	1488.84	1453.34	1387.74	1331.69	1284.57	1214.82	1161.26	1116.01
360.0	1604.05	1564.61	1519.15	1465.80	1399.37	1353.91	1285.19	1242.64	1188.46

Intensity data(cd)

C/ γ (°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	1120.37	1079.68	1018.23	973.81	895.75	851.74	791.96	753.97	685.88
15.0	1106.46	1050.62	1002.04	932.50	887.03	835.97	784.48	725.74	686.09
30.0	1107.70	1042.73	1006.19	949.52	903.43	842.40	795.69	749.19	693.35
45.0	1203.40	1155.24	1101.48	1045.63	927.10	856.93	816.25	774.52	700.00
60.0	1124.52	1073.04	1039.61	934.36	873.54	837.84	787.18	667.40	628.79
75.0	1154.62	1053.94	972.98	932.50	899.07	801.30	737.78	703.73	620.49
90.0	1031.52	993.74	957.82	930.01	813.75	755.63	726.36	647.47	578.76
105.0	1157.32	1101.48	987.09	940.80	900.32	852.16	746.70	708.92	685.88
120.0	1133.86	1090.47	1053.52	1014.29	918.80	847.59	806.07	767.67	690.03
135.0	1251.98	1207.14	1157.94	1113.31	1040.24	999.96	890.98	814.38	773.48
150.0	1174.55	1103.14	1067.85	1019.48	964.88	904.68	853.40	811.47	755.84
165.0	1208.38	1125.56	1078.23	1025.91	973.18	922.74	858.80	820.61	757.50
180.0	1159.19	1111.65	1040.03	1000.59	940.59	893.05	833.68	778.67	715.36
195.0	1154.41	1089.02	1044.18	970.28	931.04	879.15	827.87	776.39	721.17
210.0	1173.30	1123.90	1070.96	1024.46	981.90	909.04	866.69	808.36	770.58
225.0	1196.76	1125.56	1078.85	1005.98	898.04	851.12	802.54	738.61	640.83
240.0	1107.08	1068.68	1034.42	944.74	861.92	824.96	793.20	686.50	645.61
255.0	987.92	945.78	910.28	849.05	754.80	714.11	680.90	571.08	545.96
270.0	996.43	955.54	919.42	839.29	758.74	722.21	650.80	582.08	551.36
285.0	977.13	912.78	884.75	835.14	728.44	693.97	657.23	561.74	525.83
300.0	1077.81	1038.78	1006.40	921.49	820.61	772.86	740.27	632.32	578.14
315.0	1090.27	1043.35	991.87	938.72	821.64	768.29	728.44	675.50	569.21
330.0	1077.40	1026.54	983.98	931.46	883.51	824.34	781.58	722.21	676.12
345.0	1048.96	1001.42	950.56	894.71	847.18	785.73	734.66	691.28	635.02
360.0	1120.37	1079.68	1018.23	973.81	895.75	851.74	791.96	753.97	685.88

C/ γ (°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	629.83	589.35	529.56	471.44	420.58	377.81	328.20	278.38	241.43
15.0	627.34	570.04	524.58	480.36	426.81	386.33	335.05	292.08	254.71
30.0	647.47	588.73	505.07	451.51	405.01	351.04	285.23	252.01	206.97
45.0	615.30	561.12	534.13	433.86	395.04	357.68	288.76	263.43	199.70
60.0	592.88	486.80	457.11	424.73	337.54	298.10	239.35	214.03	157.56
75.0	559.66	531.85	465.42	405.63	365.98	298.72	273.60	209.04	145.31
90.0	549.49	449.85	420.79	368.47	310.97	278.38	218.18	167.11	120.40
105.0	564.65	537.04	501.54	417.26	387.16	310.97	287.72	218.18	201.16
120.0	616.96	575.44	483.06	437.19	405.84	329.03	297.27	227.31	199.29
135.0	726.98	663.46	563.61	526.86	472.68	406.25	359.13	296.85	257.00
150.0	710.37	648.72	612.39	550.11	496.35	410.20	373.04	330.69	281.70
165.0	703.73	653.29	599.52	553.44	513.16	449.43	402.31	353.53	317.20
180.0	671.35	614.26	553.64	496.97	462.51	404.39	349.17	314.29	268.41
195.0	675.50	620.07	567.55	510.05	468.12	422.45	379.89	330.48	278.79
210.0	709.34	655.99	606.37	533.92	457.11	416.22	372.21	302.46	269.45
225.0	595.16	554.27	460.85	426.18	384.04	315.75	271.11	218.59	189.11
240.0	598.28	500.50	460.02	427.64	344.19	307.65	242.47	197.00	157.15
255.0	489.50	423.28	363.28	307.65	270.91	212.37	150.71	120.61	83.24
270.0	483.48	426.60	356.02	309.52	267.17	215.48	148.01	121.03	86.15
285.0	458.15	403.35	376.78	296.44	265.51	200.12	139.09	100.47	77.02
300.0	546.59	454.83	422.03	348.54	306.40	253.47	214.23	157.35	133.48
315.0	521.26	481.19	421.41	362.25	320.93	261.77	224.20	175.21	144.07
330.0	617.17	571.70	525.62	462.10	385.50	340.86	295.19	257.20	202.61
345.0	587.69	536.21	484.10	433.86	384.87	336.50	293.33	257.20	208.01
360.0	629.83	589.35	529.56	471.44	420.58	377.81	328.20	278.38	241.43

Intensity data(cd)

C/ γ (°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	200.32	164.00	132.44	90.92	66.22	33.21	26.78	22.63	19.31
15.0	210.29	168.77	130.16	97.98	67.05	36.74	23.25	20.34	17.23
30.0	159.64	135.76	102.55	76.60	53.35	33.63	20.55	15.15	12.66
45.0	171.68	128.08	101.10	75.56	50.65	30.31	20.34	17.65	14.95
60.0	110.44	81.38	55.84	30.10	26.99	23.67	21.17	18.68	15.98
75.0	133.69	77.02	37.57	32.38	29.89	26.57	24.08	21.38	18.48
90.0	83.24	38.40	35.29	31.76	28.02	25.33	22.42	20.14	17.23
105.0	132.86	84.28	53.97	34.25	30.72	27.19	24.08	22.00	19.10
120.0	148.01	107.74	76.39	53.56	28.44	25.74	22.21	19.72	17.23
135.0	224.41	170.43	133.27	107.32	75.36	48.99	29.89	19.10	16.81
150.0	227.52	188.70	144.90	118.33	84.49	57.09	37.78	23.87	15.78
165.0	271.74	224.61	189.95	151.13	111.06	76.19	50.03	24.91	22.21
180.0	228.76	177.70	148.01	108.99	78.05	46.71	27.19	24.50	20.34
195.0	238.31	202.40	161.71	120.82	85.32	54.39	29.27	21.59	18.89
210.0	225.24	171.88	141.99	109.19	79.92	56.26	37.99	22.83	14.95
225.0	144.28	115.01	82.62	57.09	34.46	22.21	19.51	17.02	14.53
240.0	105.46	66.64	37.16	30.52	26.36	23.67	20.76	18.48	15.57
255.0	37.99	34.25	30.72	28.23	25.33	22.83	19.51	17.23	14.95
270.0	37.78	34.25	31.35	28.02	25.74	22.00	19.93	17.23	15.36
285.0	36.33	32.38	29.69	25.95	23.25	20.14	17.85	15.57	13.29
300.0	95.08	57.71	31.35	27.82	25.12	22.21	19.72	16.81	14.32
315.0	111.06	79.30	51.90	32.38	22.00	19.10	16.40	14.12	11.42
330.0	169.60	123.31	103.38	70.79	47.12	32.59	19.93	16.81	13.29
345.0	168.15	134.93	101.51	74.32	37.16	25.53	22.21	18.89	15.98
360.0	200.32	164.00	132.44	90.92	66.22	33.21	26.78	22.63	19.31

C/ γ (°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	15.98	13.91	9.96	6.85	4.57	2.70	1.25	0.83	0.83
15.0	14.95	12.04	9.34	6.23	4.15	2.49	1.45	1.04	1.04
30.0	10.17	8.30	6.23	4.77	3.32	2.08	1.25	0.83	0.83
45.0	13.29	11.00	8.30	6.02	4.36	3.11	2.08	1.25	1.04
60.0	13.49	11.42	9.55	7.06	4.98	2.91	1.87	0.83	1.04
75.0	16.19	14.12	11.83	9.55	6.64	4.15	2.91	1.87	1.04
90.0	15.36	13.08	11.00	8.51	5.81	3.74	2.28	1.45	1.04
105.0	16.40	14.32	12.04	10.38	7.27	4.98	3.53	1.87	1.25
120.0	15.15	12.87	11.00	8.51	6.64	4.36	3.11	1.87	1.45
135.0	14.95	12.25	9.96	7.68	5.81	4.57	3.53	2.49	1.87
150.0	13.29	11.42	8.72	7.27	5.19	3.74	2.91	2.28	1.87
165.0	18.06	15.78	12.66	10.17	7.47	4.98	3.11	2.08	1.45
180.0	17.44	14.53	11.83	8.93	6.02	3.94	2.70	1.66	1.04
195.0	15.98	12.87	10.79	7.89	6.02	3.74	2.08	1.25	0.62
210.0	12.87	10.38	8.10	6.23	4.77	3.11	2.28	1.25	0.62
225.0	11.63	9.34	7.27	5.19	3.32	2.08	1.25	0.83	1.04
240.0	12.87	10.79	8.30	6.23	3.53	2.08	1.25	0.62	0.62
255.0	12.87	9.96	7.06	4.57	2.70	1.66	1.25	1.45	1.66
270.0	12.66	9.96	7.06	3.94	2.08	1.25	0.83	0.62	0.83
285.0	10.59	8.10	5.60	3.32	1.87	0.83	0.83	0.83	0.83
300.0	11.83	9.55	7.06	4.57	3.32	1.66	1.25	1.04	1.45
315.0	9.13	7.06	5.19	3.74	2.49	1.45	1.25	1.25	1.45
330.0	11.00	8.93	6.44	4.77	3.11	2.08	1.25	1.25	1.04
345.0	13.08	10.79	7.47	5.40	3.53	1.66	1.04	1.04	1.25
360.0	15.98	13.91	9.96	6.85	4.57	2.70	1.25	0.83	0.83

Intensity data(cd)

C/ γ (°)	90.0
0.0	0.62
15.0	0.83
30.0	0.83
45.0	0.83
60.0	0.83
75.0	1.04
90.0	1.04
105.0	1.25
120.0	1.25
135.0	1.25
150.0	1.66
165.0	1.25
180.0	1.04
195.0	0.83
210.0	0.62
225.0	1.04
240.0	0.42
255.0	1.45
270.0	1.04
285.0	0.83
300.0	1.25
315.0	1.66
330.0	1.04
345.0	1.25
360.0	0.62