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## Nata

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LumCAT: 2-2321-M	
Luminaire: 92.70.129.00	
Report No: 210724-B006	Voltage(V): 36.6500
Test No: 210724-C006	Current(A): 0.5010
LampCAT: CREE CXA1820 LES12	Power (W): 18.3610
Lamp flux(lm): 2199.5	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 570	Width(mm): 45
Phm Type: C	Height(mm): 20

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## Photometric Results

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Lumens(lm): 2133.46  
Efficiency(%): 97.00%  
Lumens(lm)/Power(W): 116.20  
Central intensity(cd): 2767.500  
Maximum intensity(cd): 2903.625  
Angle of maximum intensity: C=157.5  $\gamma$ =13.0  
Beam Angle(50%Imax): [C0/180]Total=49.8  
                                  [C90/270]Total=49.4  
Field angle(10%Imax): [C0/180]Total=65.4  
                                  [C90/270]Total=65.6  
Maximum s/h(1/2): C0\_180=0.86 C90\_270=0.84  
Maximum s/h(1/4): C0\_180=0.73 C90\_270=0.72  
Up flux rate of lamp(%): 0.00%  
Down flux rate of lamp(%): 97.00%  
Up flux rate of LUM(%): - -  
Down flux rate of LUM(%): 100.00%  
CIE Type : Direct lighting  
Output flux ratio in  $\pi$  solid angle : 98.372%

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Equipment: GMS1980  
Temperature(°C): 25.0

Date: 2021/7/24  
Humidity(%): 65.0%

Operator: NT07  
Distance(m): 7.50

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2779.313	0.000	0	.000%	.000%
1.0	2779.734	2.660	2.66	.121%	.125%
2.0	2783.180	7.984	10.644	.363%	.499%
3.0	2788.172	13.325	23.969	.606%	1.123%
4.0	2793.480	18.684	42.653	.849%	1.999%
5.0	2802.164	24.072	66.725	1.094%	3.128%
6.0	2810.426	29.496	96.221	1.341%	4.510%
7.0	2819.355	34.944	131.165	1.589%	6.148%
8.0	2826.598	40.407	171.572	1.837%	8.042%
9.0	2829.691	45.841	217.413	2.084%	10.191%
10.0	2829.340	51.212	268.625	2.328%	12.591%
11.0	2823.820	56.487	325.112	2.568%	15.239%
12.0	2811.129	61.598	386.71	2.801%	18.126%
13.0	2790.949	66.483	453.192	3.023%	21.242%
14.0	2764.195	71.105	524.298	3.233%	24.575%
15.0	2734.418	75.487	599.785	3.432%	28.113%
16.0	2700.668	79.639	679.424	3.621%	31.846%
17.0	2654.473	83.394	762.818	3.791%	35.755%
18.0	2601.000	86.651	849.469	3.940%	39.816%
19.0	2540.250	89.447	938.917	4.067%	44.009%
20.0	2459.637	91.512	1030.428	4.161%	48.298%
21.0	2360.320	92.553	1122.981	4.208%	52.637%
22.0	2247.012	92.586	1215.568	4.209%	56.976%
23.0	2109.516	91.412	1306.979	4.156%	61.261%
24.0	1947.656	88.704	1395.684	4.033%	65.419%
25.0	1779.785	84.754	1480.438	3.853%	69.391%
26.0	1585.828	79.446	1559.883	3.612%	73.115%
27.0	1419.961	73.537	1633.421	3.343%	76.562%
28.0	1203.891	66.430	1699.851	3.020%	79.676%
29.0	1041.233	58.739	1758.59	2.671%	82.429%
30.0	880.351	51.882	1810.472	2.359%	84.861%
31.0	717.353	44.462	1854.934	2.021%	86.945%
32.0	590.164	37.459	1892.393	1.703%	88.701%
33.0	488.742	31.785	1924.178	1.445%	90.190%
34.0	392.196	26.660	1950.838	1.212%	91.440%
35.0	310.205	21.814	1972.651	.992%	92.462%
36.0	252.316	17.911	1990.562	.814%	93.302%
37.0	207.387	14.993	2005.555	.682%	94.005%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	166.138	12.468	2018.023	.567%	94.589%
39.0	136.874	10.343	2028.366	.470%	95.074%
40.0	112.683	8.704	2037.069	.396%	95.482%
41.0	95.632	7.418	2044.487	.337%	95.830%
42.0	81.243	6.426	2050.913	.292%	96.131%
43.0	69.655	5.590	2056.503	.254%	96.393%
44.0	60.328	4.906	2061.409	.223%	96.623%
45.0	52.692	4.344	2065.752	.197%	96.826%
46.0	45.738	3.849	2069.602	.175%	97.007%
47.0	40.261	3.420	2073.022	.156%	97.167%
48.0	35.873	3.078	2076.1	.140%	97.311%
49.0	32.013	2.788	2078.888	.127%	97.442%
50.0	28.477	2.522	2081.41	.115%	97.560%
51.0	25.777	2.295	2083.705	.104%	97.668%
52.0	23.523	2.115	2085.821	.096%	97.767%
53.0	21.509	1.959	2087.78	.089%	97.859%
54.0	19.825	1.822	2089.601	.083%	97.944%
55.0	18.496	1.711	2091.312	.078%	98.024%
56.0	17.339	1.619	2092.931	.074%	98.100%
57.0	16.291	1.538	2094.469	.070%	98.172%
58.0	15.462	1.468	2095.937	.067%	98.241%
59.0	14.783	1.414	2097.351	.064%	98.307%
60.0	14.154	1.367	2098.718	.062%	98.372%
61.0	13.623	1.326	2100.044	.060%	98.434%
62.0	13.201	1.293	2101.336	.059%	98.494%
63.0	12.836	1.266	2102.603	.058%	98.554%
64.0	12.505	1.243	2103.846	.057%	98.612%
65.0	12.241	1.225	2105.071	.056%	98.669%
66.0	12.020	1.210	2106.281	.055%	98.726%
67.0	11.827	1.199	2107.48	.055%	98.782%
68.0	11.651	1.189	2108.67	.054%	98.838%
69.0	11.493	1.181	2109.85	.054%	98.893%
70.0	11.359	1.174	2111.024	.053%	98.948%
71.0	11.236	1.168	2112.192	.053%	99.003%
72.0	11.123	1.163	2113.354	.053%	99.058%
73.0	11.025	1.158	2114.513	.053%	99.112%
74.0	10.941	1.155	2115.667	.053%	99.166%
75.0	10.846	1.151	2116.819	.052%	99.220%

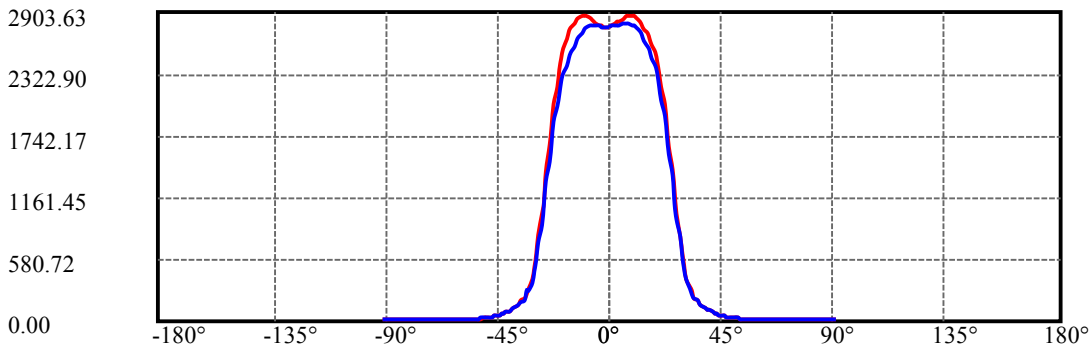
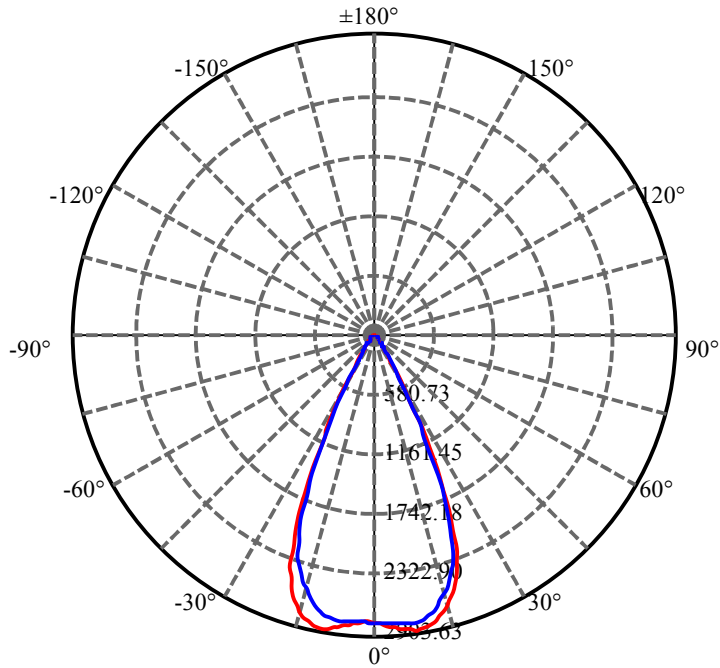
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	10.807	1.149	2117.968	.052%	99.274%
77.0	10.811	1.153	2119.121	.052%	99.328%
78.0	10.814	1.158	2120.278	.053%	99.382%
79.0	10.705	1.156	2121.434	.053%	99.436%
80.0	10.635	1.150	2122.585	.052%	99.490%
81.0	10.505	1.143	2123.728	.052%	99.544%
82.0	10.301	1.128	2124.856	.051%	99.597%
83.0	10.174	1.113	2125.969	.051%	99.649%
84.0	10.097	1.104	2127.074	.050%	99.701%
85.0	9.995	1.097	2128.17	.050%	99.752%
86.0	9.872	1.086	2129.256	.049%	99.803%
87.0	9.671	1.070	2130.326	.049%	99.853%
88.0	9.573	1.054	2131.38	.048%	99.902%
89.0	9.492	1.045	2132.425	.048%	99.951%
90.0	9.418	1.037	2133.462	.047%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1810.47	82.31%	84.86%
0-40	2037.07	92.61%	95.48%
0-60	2098.72	95.42%	98.37%
0-90	2132.42	96.95%	99.95%
0-120	2132.42	96.95%	99.95%
0-180	2133.46	97.00%	100.00%
60-90	35.07	1.59%	1.64%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-28.12	1706.77	77.60%	80.00%

ZONAL LUMEN SUMMARY

0-10	268.62
10-20	761.80
20-30	780.04
30-40	226.60
40-50	44.34
50-60	17.31
60-70	12.31
70-80	11.56
80-90	9.84
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: —

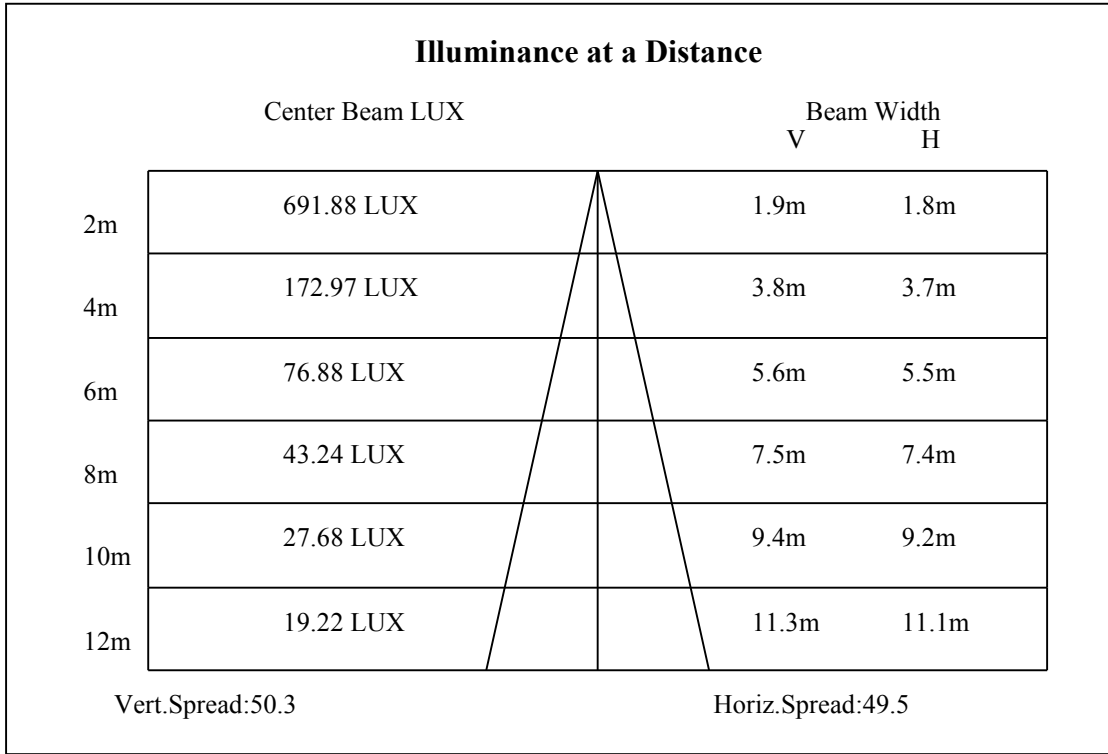
C90/C270: —

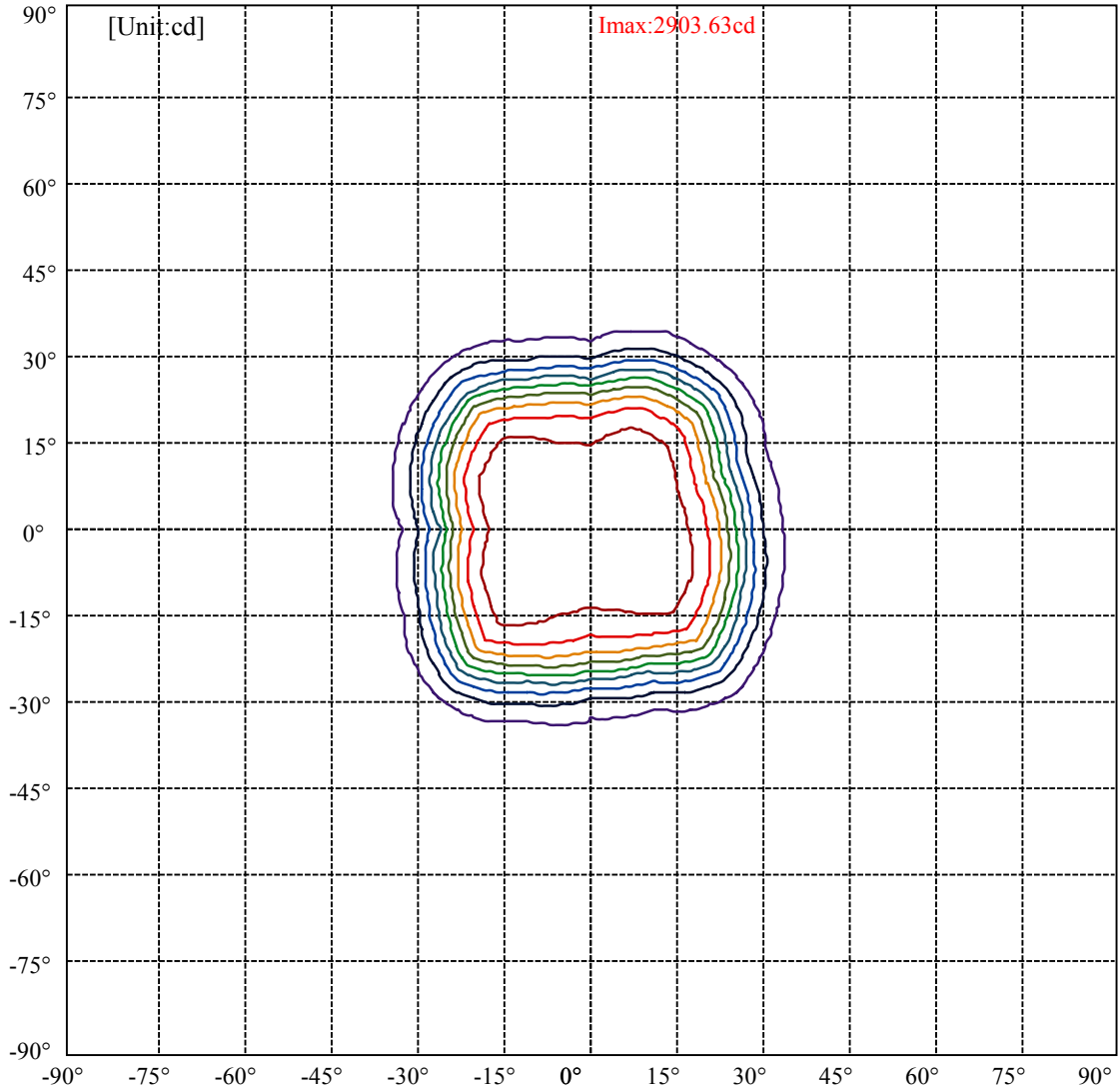
Field angle(10%Imax):C0/180Left:22.4 Right:43.0

:C90/270Left:41.1 Right:24.5

Beam Angle(50%Imax):C0/180Left:14.9 Right:34.9

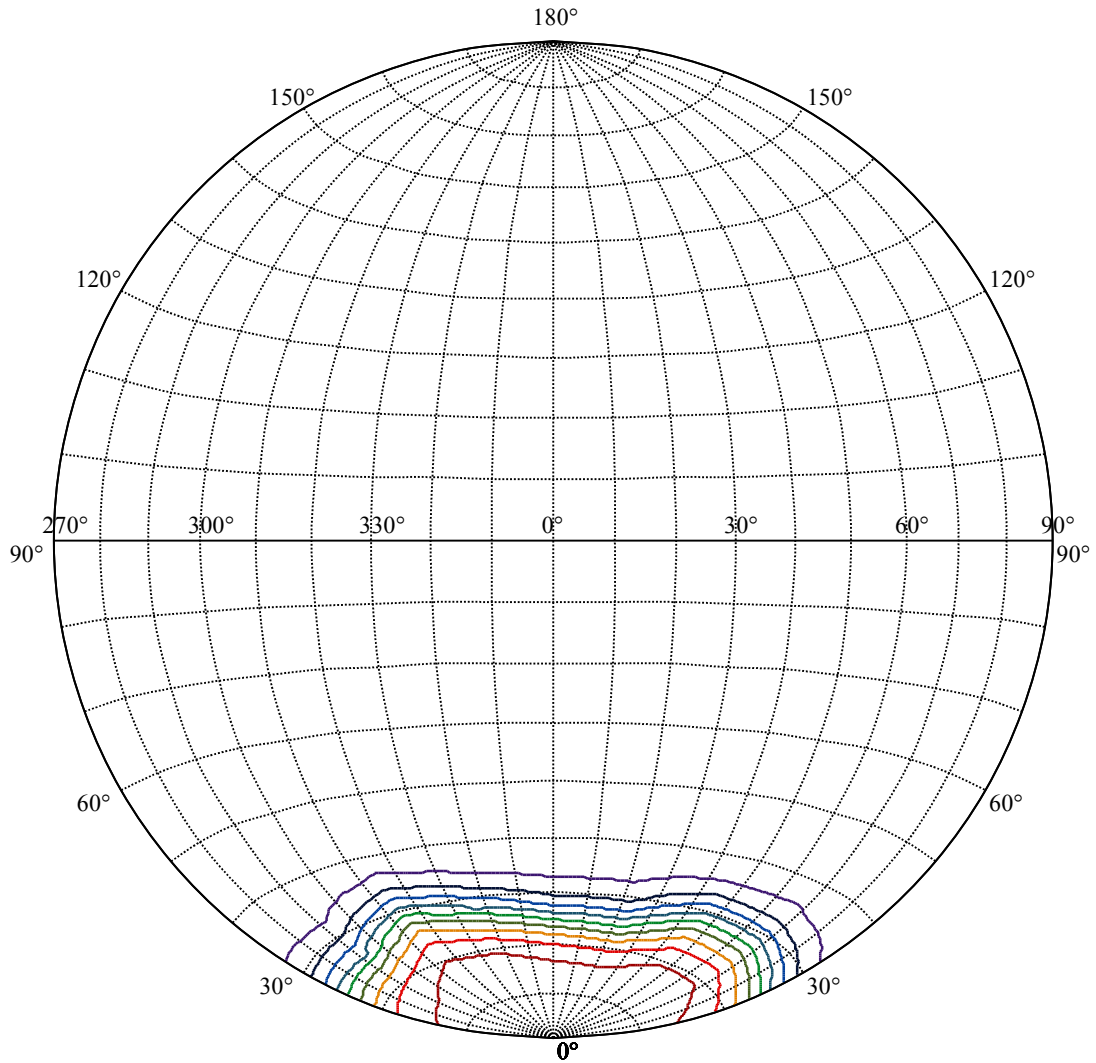
:C90/270Left:32.6 Right:16.8





(10%I <sub>max</sub> ) 290.294	—
(20%I <sub>max</sub> ) 580.589	—
(30%I <sub>max</sub> ) 870.883	—
(40%I <sub>max</sub> ) 1161.18	—
(50%I <sub>max</sub> ) 1451.47	—
(60%I <sub>max</sub> ) 1741.77	—
(70%I <sub>max</sub> ) 2032.06	—
(80%I <sub>max</sub> ) 2322.36	—
(90%I <sub>max</sub> ) 2612.65	—





House

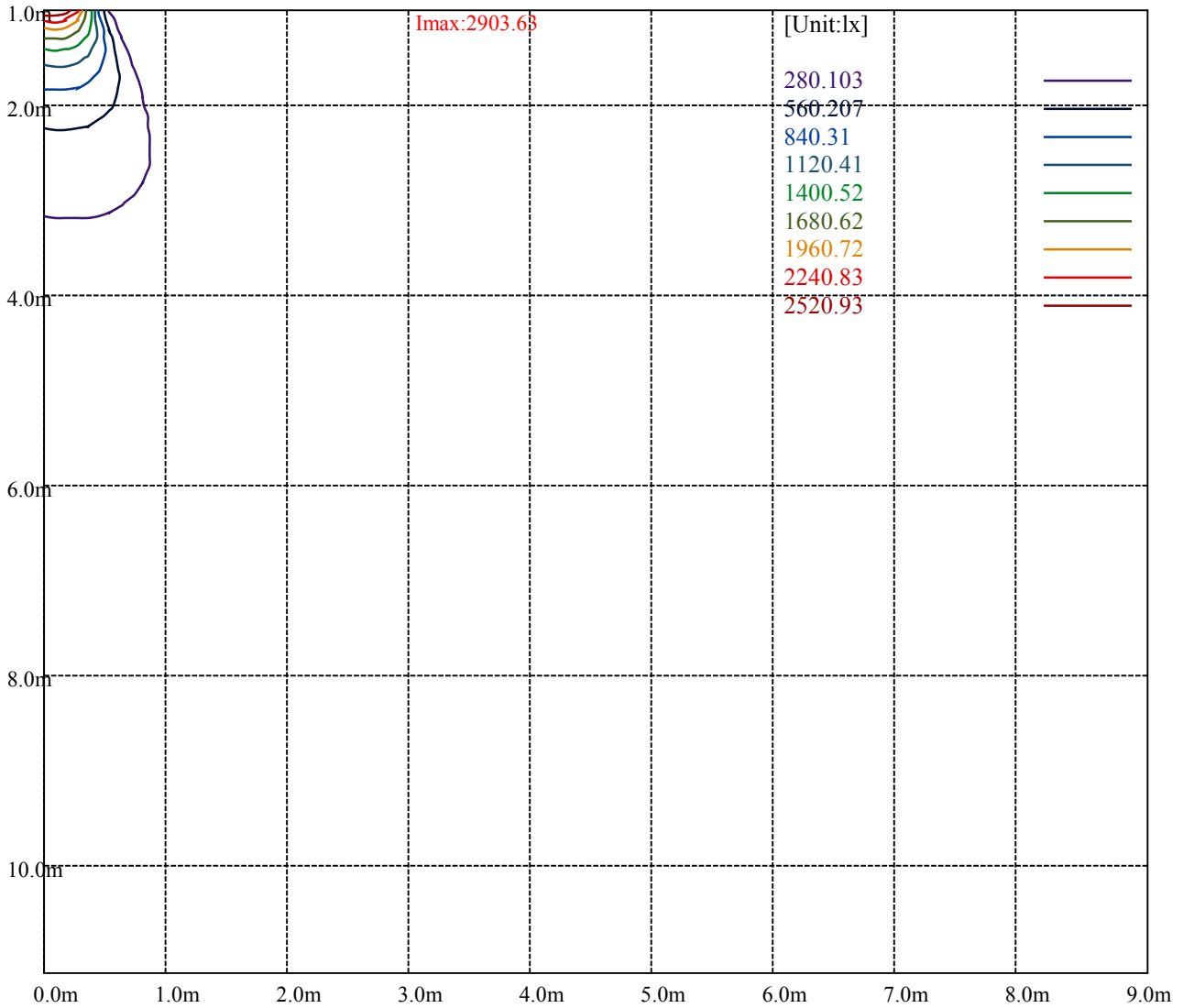
[Unit:cd]

Road

**Imax:2903.63**

(10%Imax) 290.299	—
(20%Imax) 580.598	—
(30%Imax) 870.896	—
(40%Imax) 1161.2	—
(50%Imax) 1451.49	—
(60%Imax) 1741.79	—
(70%Imax) 2032.09	—
(80%Imax) 2322.39	—
(90%Imax) 2612.69	—





Luminance Table

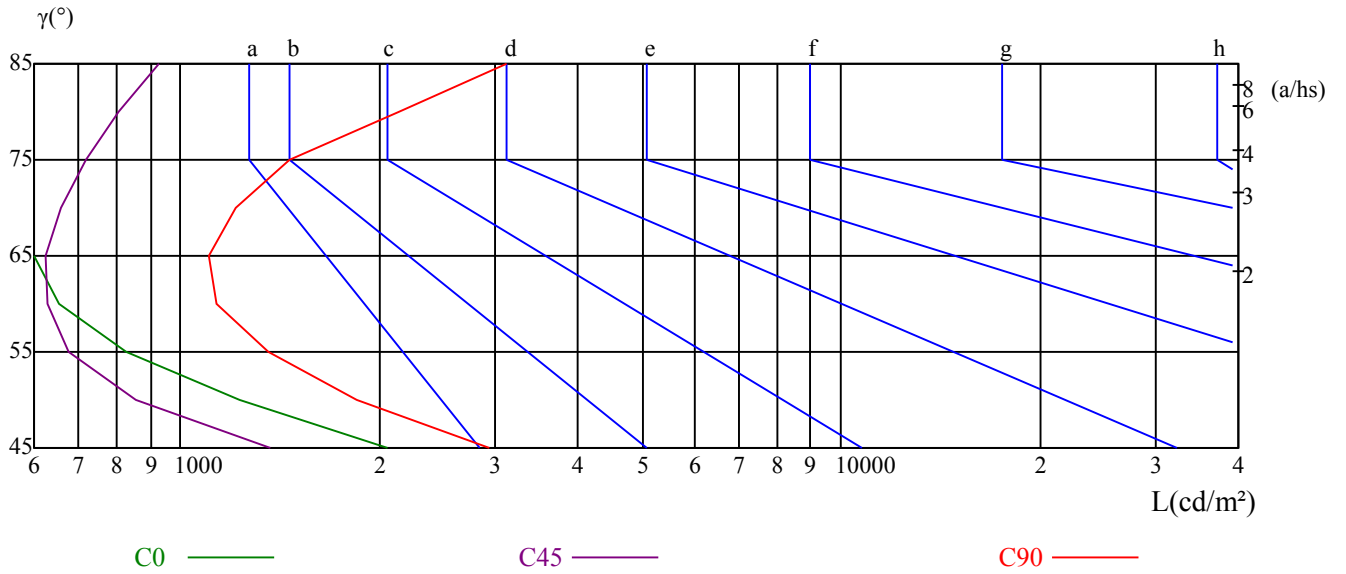
$\gamma$	45	50	55	60	65	70	75	80	85
C0	2061	1227	830	654	592	586	612	656	724
C45	1371	855	677	627	625	661	718	808	929
C90	2942	1850	1354	1137	1105	1211	1461	2149	3107

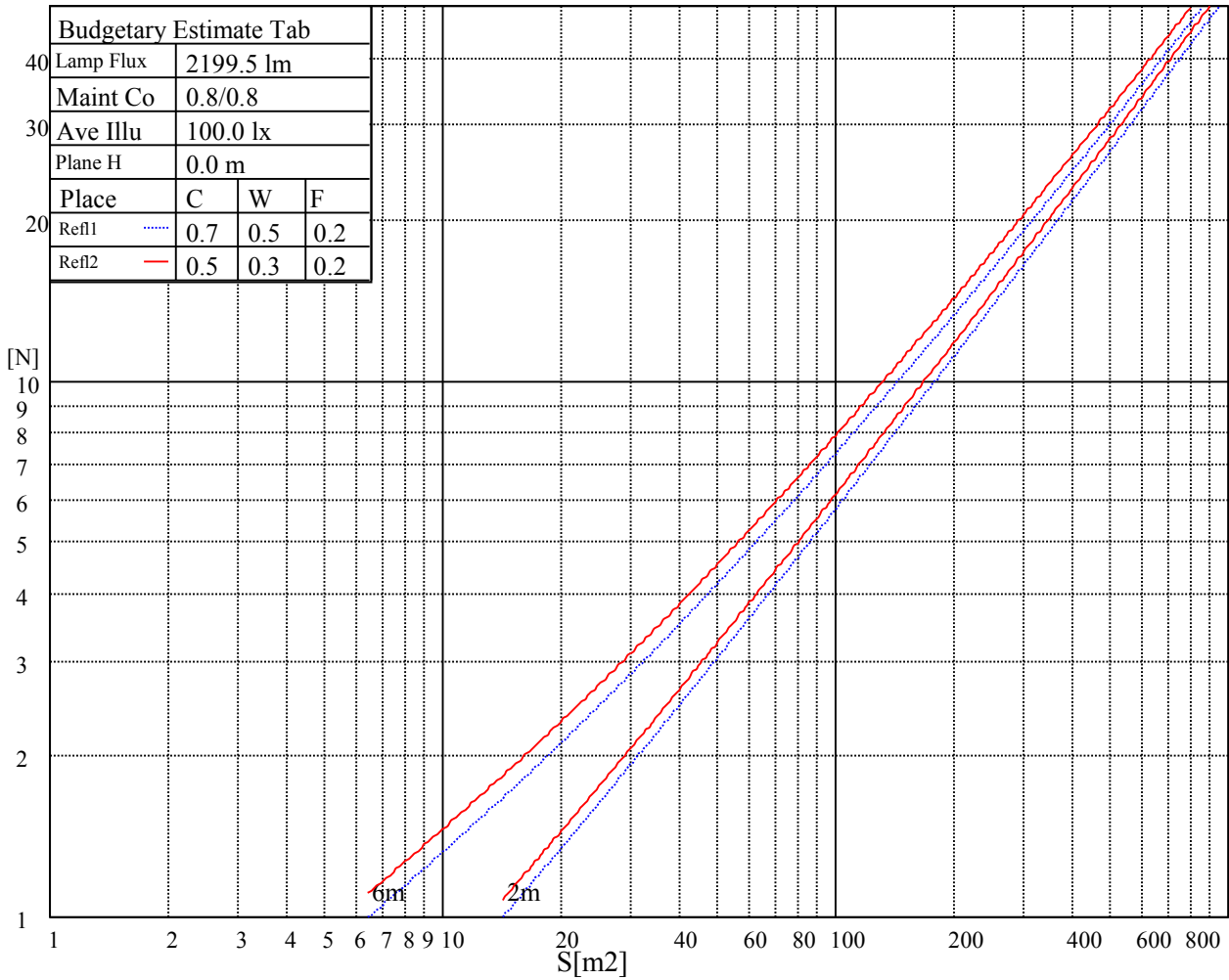
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
1155	1191	1079	1627	1656	1631	4391	4416	4504

Glare Table

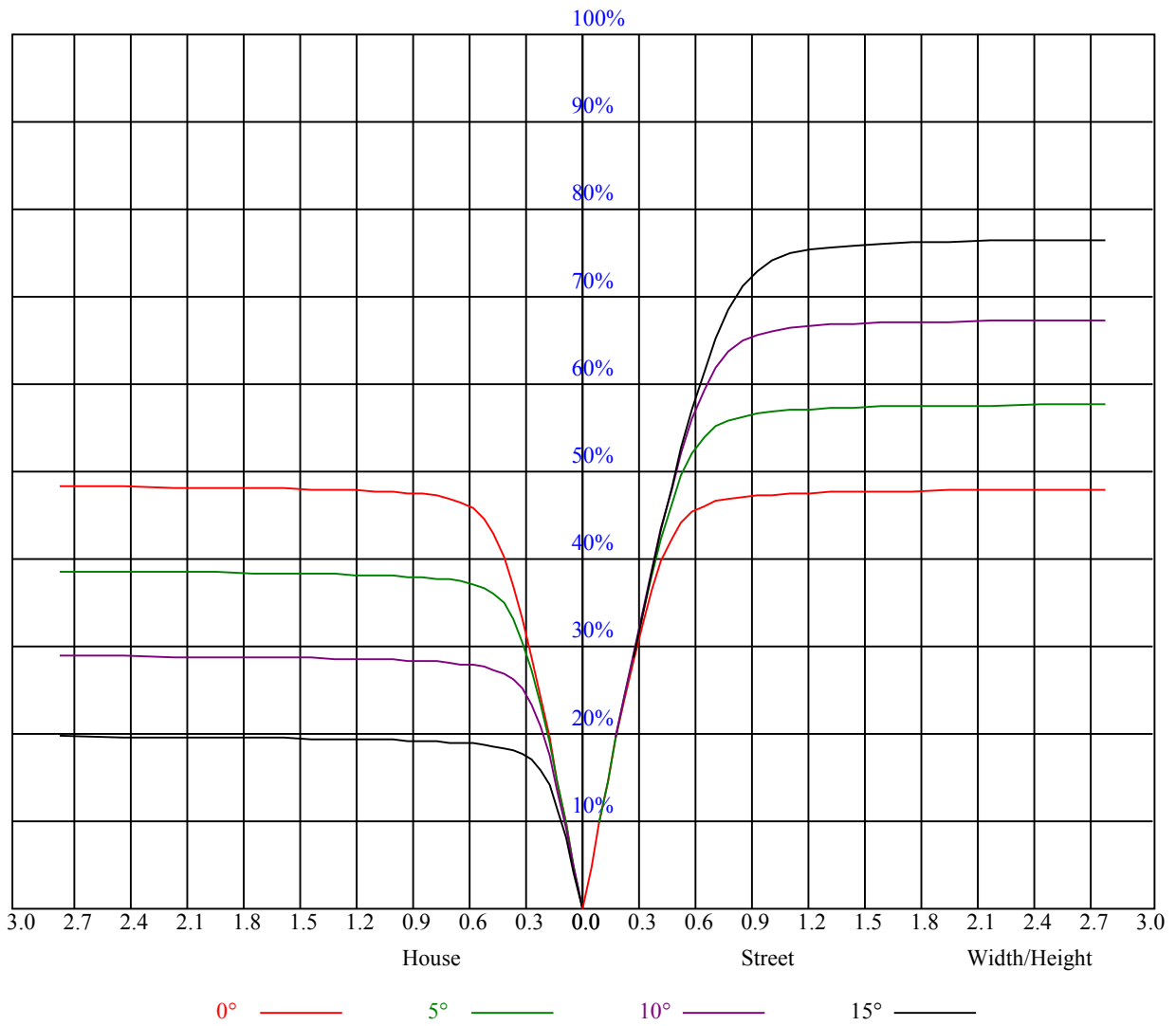
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve





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 RHOFC=20 CU															
0	1.15	1.15	1.15	1.13	1.13	1.13	1.08	1.08	1.08	1.03	1.03	1.03	0.99	0.99	0.99	0.97
1	1.08	1.05	1.03	1.06	1.03	1.02	1.02	1.00	0.98	0.98	0.97	0.95	0.95	0.94	0.93	0.91
2	1.01	0.97	0.94	0.99	0.96	0.93	0.96	0.93	0.91	0.93	0.91	0.89	0.90	0.89	0.87	0.86
3	0.95	0.90	0.87	0.93	0.89	0.86	0.91	0.87	0.85	0.89	0.86	0.83	0.86	0.84	0.82	0.80
4	0.89	0.84	0.80	0.88	0.84	0.80	0.86	0.82	0.79	0.84	0.81	0.78	0.82	0.80	0.77	0.76
5	0.84	0.79	0.75	0.83	0.79	0.75	0.82	0.77	0.74	0.80	0.76	0.74	0.79	0.75	0.73	0.72
6	0.80	0.74	0.71	0.79	0.74	0.70	0.78	0.73	0.70	0.76	0.72	0.69	0.75	0.72	0.69	0.68
7	0.76	0.70	0.67	0.75	0.70	0.66	0.74	0.69	0.66	0.73	0.69	0.66	0.72	0.68	0.65	0.64
8	0.72	0.67	0.63	0.71	0.66	0.63	0.70	0.66	0.62	0.69	0.65	0.62	0.68	0.65	0.62	0.61
9	0.68	0.63	0.60	0.68	0.63	0.59	0.67	0.62	0.59	0.66	0.62	0.59	0.65	0.62	0.59	0.58
10	0.65	0.60	0.57	0.65	0.60	0.56	0.64	0.59	0.56	0.63	0.59	0.56	0.63	0.59	0.56	0.55



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	2767.50	2779.31	2795.63	2808.56	2818.69	2835.56	2846.25	2858.63	2869.88
22.5	2799.00	2805.19	2817.00	2824.31	2832.75	2845.69	2854.13	2861.44	2862.56
45.0	2793.94	2802.94	2809.69	2814.19	2819.81	2835.00	2845.69	2858.06	2867.06
67.5	2781.00	2784.94	2790.56	2797.31	2804.06	2804.63	2811.94	2816.44	2823.75
90.0	2766.38	2769.19	2770.88	2776.50	2781.00	2787.19	2790.00	2791.69	2795.06
112.5	2778.19	2773.13	2772.00	2773.13	2772.56	2773.69	2774.81	2777.06	2777.06
135.0	2772.00	2768.06	2769.75	2773.69	2778.19	2787.75	2803.50	2818.13	2832.75
157.5	2776.50	2772.56	2772.56	2776.50	2781.56	2800.13	2815.31	2827.69	2849.06
180.0	2767.50	2760.75	2765.25	2773.13	2786.06	2799.00	2811.38	2833.31	2847.38
202.5	2799.00	2792.25	2786.06	2788.88	2793.94	2806.88	2822.06	2834.44	2845.69
225.0	2793.94	2788.31	2782.69	2781.00	2783.81	2784.94	2791.13	2804.06	2811.94
247.5	2781.00	2775.94	2770.88	2768.06	2766.38	2765.81	2766.38	2766.38	2764.13
270.0	2766.38	2765.81	2766.38	2768.06	2771.44	2771.44	2772.56	2772.56	2768.63
292.5	2778.19	2778.19	2781.00	2786.63	2789.44	2793.94	2799.56	2805.19	2801.81
315.0	2772.00	2775.38	2784.38	2793.38	2802.94	2813.63	2822.06	2832.19	2841.75
337.5	2776.50	2783.81	2796.19	2807.44	2813.06	2829.38	2840.06	2852.44	2867.06
360.0	2767.50	2779.31	2795.63	2808.56	2818.69	2835.56	2846.25	2858.63	2869.88
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	2866.50	2861.44	2845.13	2819.81	2780.44	2742.75	2703.94	2649.38	2596.50
22.5	2856.94	2841.19	2815.31	2787.19	2752.88	2715.19	2674.69	2628.00	2553.19
45.0	2874.94	2874.94	2872.13	2860.88	2844.00	2817.56	2787.75	2761.31	2719.69
67.5	2828.81	2831.06	2830.50	2823.75	2808.56	2790.00	2763.00	2734.31	2696.06
90.0	2785.50	2775.94	2751.19	2719.13	2684.81	2629.69	2581.88	2539.13	2474.44
112.5	2776.50	2770.31	2762.44	2745.56	2715.75	2685.94	2650.50	2608.31	2562.19
135.0	2840.63	2853.00	2865.38	2870.44	2874.94	2867.63	2858.63	2844.56	2810.25
157.5	2865.38	2879.44	2895.19	2901.94	2903.63	2895.19	2877.75	2858.63	2826.56
180.0	2863.69	2872.13	2868.19	2853.56	2831.06	2799.56	2762.44	2716.31	2657.81
202.5	2863.13	2876.06	2888.44	2891.81	2889.00	2873.81	2853.56	2830.50	2793.94
225.0	2818.13	2824.88	2836.13	2845.13	2849.06	2850.19	2851.88	2840.63	2823.75
247.5	2760.75	2756.25	2745.56	2729.25	2700.00	2673.56	2643.19	2610.56	2575.13
270.0	2757.38	2741.06	2713.50	2678.06	2633.63	2580.19	2530.69	2472.75	2405.25
292.5	2793.94	2781.00	2763.00	2730.38	2698.88	2662.31	2611.69	2575.69	2520.56
315.0	2851.31	2855.81	2857.50	2860.88	2846.25	2829.94	2810.81	2782.13	2742.75
337.5	2871.56	2874.94	2871.56	2860.31	2842.31	2813.63	2788.31	2758.50	2713.50
360.0	2866.50	2861.44	2845.13	2819.81	2780.44	2742.75	2703.94	2649.38	2596.50
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2529.00	2433.94	2323.69	2200.50	2029.50	1831.50	1643.63	1422.56	1222.31
22.5	2471.63	2375.44	2234.25	2093.63	1923.19	1722.38	1512.00	1321.88	1130.63
45.0	2673.00	2624.06	2567.25	2477.81	2388.94	2287.69	2149.88	2021.06	1872.00
67.5	2656.13	2613.94	2552.06	2470.50	2376.56	2268.56	2109.94	1960.31	1793.25
90.0	2398.50	2318.06	2206.13	2076.19	1935.00	1749.94	1572.19	1363.50	1101.60
112.5	2514.94	2454.19	2376.56	2294.44	2173.50	2041.88	1870.88	1680.75	1494.56
135.0	2779.88	2736.00	2696.63	2647.69	2580.19	2511.00	2419.88	2307.38	2193.19
157.5	2793.94	2753.44	2682.56	2611.13	2520.00	2396.81	2251.13	2097.56	1901.25
180.0	2562.75	2468.81	2358.00	2191.50	2029.50	1847.81	1658.25	1409.63	1110.60
202.5	2755.69	2706.19	2638.69	2540.81	2436.75	2296.13	2127.94	1950.75	1738.69
225.0	2800.13	2774.25	2734.31	2697.75	2645.44	2593.13	2514.94	2424.38	2323.13
247.5	2537.44	2484.00	2422.69	2333.25	2224.13	2107.13	1949.06	1766.25	1592.44
270.0	2331.56	2253.94	2134.69	2021.06	1879.88	1677.94	1500.75	1317.38	1104.75
292.5	2444.63	2380.50	2293.88	2144.81	2022.75	1861.31	1615.50	1449.56	1120.05
315.0	2697.19	2653.31	2599.88	2535.19	2467.69	2388.94	2276.44	2170.69	2044.69
337.5	2669.63	2613.94	2532.94	2428.88	2319.19	2170.13	1990.13	1812.94	1630.13
360.0	2529.00	2433.94	2323.69	2200.50	2029.50	1831.50	1643.63	1422.56	1222.31



Intensity data(cd)

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1002.94	800.44	647.44	522.56	398.81	318.94	288.56	219.21	193.89
22.5	930.38	749.25	606.38	478.69	380.25	297.00	288.56	218.42	193.56
45.0	1689.19	1495.13	1317.38	1098.39	951.53	772.71	593.49	483.41	361.24
67.5	1594.69	1389.38	1192.50	1015.88	831.94	669.94	540.00	422.44	322.31
90.0	964.58	793.63	608.96	494.61	398.36	306.68	255.88	224.49	195.58
112.5	1308.38	1071.56	890.44	725.06	568.13	448.31	371.81	295.31	257.57
135.0	2059.31	1860.19	1685.81	1500.19	1122.13	1076.96	898.03	731.93	552.26
157.5	1721.25	1505.81	1280.81	1091.81	909.56	725.06	600.19	470.25	351.56
180.0	1015.59	812.31	637.82	513.56	400.56	309.94	256.16	219.71	193.95
202.5	1542.94	1247.06	1096.03	913.22	749.81	579.09	466.37	372.04	282.04
225.0	2198.81	2017.69	1860.19	1689.19	1462.50	1271.25	1080.56	900.56	694.13
247.5	1415.25	1119.54	1014.58	854.21	692.78	556.03	452.14	352.46	277.31
270.0	900.56	734.63	577.69	468.56	369.00	293.06	285.75	207.11	183.15
292.5	1075.89	855.90	698.23	563.34	438.64	340.37	276.75	228.94	197.94
315.0	1878.75	1689.19	1513.69	1311.19	1106.44	928.69	741.38	595.69	448.88
337.5	1420.88	1120.56	1031.79	845.16	697.22	548.61	424.24	333.17	257.91
360.0	1002.94	800.44	647.44	522.56	398.81	318.94	288.56	219.21	193.89
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	170.94	147.94	129.26	114.58	100.24	89.04	78.13	68.68	61.26
22.5	164.31	144.84	128.76	111.38	98.89	87.98	75.94	67.73	60.41
45.0	251.72	191.76	139.73	97.71	81.90	67.22	54.28	44.78	38.70
67.5	292.50	207.45	179.33	154.86	124.82	106.93	91.41	75.66	65.08
90.0	169.82	149.29	130.44	115.71	101.19	89.83	78.86	69.53	61.37
112.5	215.16	186.92	163.24	142.43	125.33	109.52	95.12	84.32	73.91
135.0	426.32	321.69	226.80	160.09	121.95	95.46	77.63	61.88	50.40
157.5	288.00	230.68	197.44	168.75	144.73	124.71	103.44	90.45	75.94
180.0	168.30	145.29	128.81	114.24	97.88	86.34	76.33	65.53	58.16
202.5	237.38	208.35	177.02	154.69	135.45	117.96	104.23	90.28	77.01
225.0	551.25	423.00	303.75	238.33	145.07	99.34	75.15	61.99	50.51
247.5	230.68	196.26	171.28	145.41	122.91	107.21	93.32	78.24	67.89
270.0	159.02	139.84	122.29	107.04	95.40	84.99	74.03	66.43	59.85
292.5	173.87	149.57	132.02	115.37	100.74	89.49	79.54	68.85	61.43
315.0	327.38	293.06	170.55	119.36	94.73	77.18	60.24	50.29	42.86
337.5	210.43	182.25	157.50	130.05	111.71	96.92	82.24	69.86	60.47
360.0	170.94	147.94	129.26	114.58	100.24	89.04	78.13	68.68	61.26
C/γ(°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	54.00	47.70	42.86	38.64	34.14	30.94	28.24	25.48	23.29
22.5	53.27	46.97	42.19	37.69	34.03	30.66	27.56	25.09	22.84
45.0	33.30	29.08	26.10	23.46	21.54	19.80	18.28	17.21	16.31
67.5	55.80	46.91	40.95	36.11	31.28	27.45	24.64	22.11	20.03
90.0	55.24	49.56	43.43	39.26	35.66	31.78	29.08	26.78	24.75
112.5	65.76	57.88	51.08	45.84	40.50	35.94	32.40	29.42	26.21
135.0	42.81	36.17	31.22	27.73	24.92	22.05	20.25	18.73	17.38
157.5	65.25	55.63	47.81	41.57	36.73	31.84	27.96	25.09	22.22
180.0	51.86	45.73	40.56	36.68	32.79	29.53	27.00	24.53	22.67
202.5	68.85	59.79	51.24	46.13	41.06	35.78	32.12	29.08	26.16
225.0	42.75	36.39	31.56	28.18	25.37	22.50	20.70	19.18	17.72
247.5	58.95	49.73	43.48	38.14	33.69	29.03	25.99	23.51	21.21
270.0	52.48	47.19	42.69	38.19	34.37	31.39	28.46	26.27	24.13
292.5	54.84	47.59	42.53	38.19	34.03	30.49	27.68	25.09	23.12
315.0	36.28	31.33	27.79	24.64	22.33	20.19	18.56	17.33	16.26
337.5	51.64	44.16	38.70	33.53	29.76	26.27	23.51	21.49	19.86
360.0	54.00	47.70	42.86	38.64	34.14	30.94	28.24	25.48	23.29

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	21.60	19.97	18.56	17.49	16.43	15.64	14.85	14.23	13.73
22.5	20.93	19.52	18.28	16.99	16.14	15.41	14.68	14.12	13.67
45.0	15.41	14.79	14.29	13.73	13.39	13.05	12.77	12.43	12.26
67.5	18.51	17.16	16.14	15.30	14.51	13.95	13.44	12.99	12.66
90.0	22.50	20.93	19.63	18.34	17.16	16.31	15.47	14.74	14.23
112.5	24.08	22.22	20.36	18.79	17.61	16.48	15.58	14.79	14.06
135.0	16.31	15.47	14.74	14.12	13.67	13.22	12.88	12.54	12.26
157.5	20.36	18.90	17.61	16.31	15.47	14.74	14.01	13.50	13.11
180.0	20.87	19.29	18.11	17.16	16.09	15.36	14.74	14.06	13.56
202.5	23.68	21.83	20.03	18.51	17.38	16.31	15.53	14.79	14.12
225.0	16.76	15.92	15.13	14.51	13.95	13.56	13.16	12.83	12.54
247.5	19.35	17.83	16.71	15.64	14.91	14.23	13.67	13.16	12.71
270.0	22.22	20.81	19.35	18.11	17.10	16.37	15.36	14.74	14.23
292.5	21.15	19.52	18.28	16.99	15.98	15.19	14.51	13.84	13.39
315.0	15.36	14.74	14.18	13.61	13.22	12.88	12.49	12.26	12.09
337.5	18.11	17.04	16.03	15.08	14.40	13.84	13.33	12.94	12.60
360.0	21.60	19.97	18.56	17.49	16.43	15.64	14.85	14.23	13.73
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	13.28	12.83	12.54	12.26	11.98	11.81	11.59	11.42	11.31
22.5	13.22	12.88	12.60	12.38	12.15	11.98	11.81	11.64	11.53
45.0	12.04	11.87	11.70	11.59	11.48	11.36	11.25	11.19	11.14
67.5	12.38	12.04	11.87	11.70	11.53	11.36	11.25	11.14	11.03
90.0	13.67	13.28	12.88	12.54	12.26	12.09	11.81	11.64	11.48
112.5	13.56	13.11	12.66	12.32	12.04	11.81	11.64	11.48	11.19
135.0	12.04	11.81	11.64	11.53	11.36	11.25	11.14	11.03	10.91
157.5	12.71	12.38	12.15	11.87	11.76	11.53	11.36	11.25	11.14
180.0	13.16	12.77	12.49	12.21	11.98	11.76	11.59	11.36	11.25
202.5	13.67	13.28	12.88	12.60	12.38	12.15	11.93	11.76	11.64
225.0	12.32	12.09	11.93	11.81	11.70	11.53	11.42	11.36	11.25
247.5	12.49	12.21	11.93	11.76	11.59	11.42	11.31	11.19	11.08
270.0	13.67	13.22	12.94	12.60	12.32	12.09	11.87	11.70	11.53
292.5	12.99	12.60	12.32	12.09	11.87	11.64	11.53	11.36	11.25
315.0	11.87	11.70	11.53	11.42	11.36	11.25	11.19	11.14	11.08
337.5	12.32	12.04	11.81	11.64	11.48	11.36	11.19	11.08	10.97
360.0	13.28	12.83	12.54	12.26	11.98	11.81	11.59	11.42	11.31
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	11.14	11.03	10.86	10.80	10.63	10.58	10.46	10.41	10.29
22.5	11.36	11.25	11.19	11.03	10.91	10.80	10.74	10.63	10.58
45.0	11.03	10.97	10.91	10.80	10.69	10.63	10.63	10.52	10.52
67.5	10.97	10.86	10.80	10.74	10.63	10.58	10.74	10.86	10.80
90.0	11.31	11.19	11.03	10.97	11.03	11.19	11.36	11.48	11.48
112.5	11.08	10.97	10.86	10.80	10.69	10.69	10.86	10.86	10.91
135.0	10.86	10.86	10.74	10.69	10.58	10.46	10.41	10.35	10.29
157.5	11.03	10.91	10.86	10.74	10.63	10.58	10.46	10.41	10.35
180.0	11.14	11.03	10.91	10.80	10.69	10.63	10.52	10.41	10.35
202.5	11.48	11.36	11.31	11.19	11.08	10.97	10.91	10.80	10.74
225.0	11.19	11.14	11.03	10.97	10.91	10.86	10.74	10.69	10.63
247.5	10.97	10.86	10.80	10.69	10.63	10.63	10.91	10.97	10.80
270.0	11.36	11.25	11.14	11.03	11.36	11.70	12.04	11.64	11.42
292.5	11.14	10.97	10.97	10.86	11.19	11.53	11.19	10.41	10.29
315.0	11.03	10.97	10.97	10.86	10.74	10.69	10.63	10.52	10.41
337.5	10.91	10.80	10.69	10.58	10.52	10.46	10.41	10.35	10.29
360.0	11.14	11.03	10.86	10.80	10.63	10.58	10.46	10.41	10.29

Intensity data(cd)

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	10.18	10.13	10.07	9.96	9.84	9.79	9.62	9.34	9.28
22.5	10.46	10.41	10.29	10.18	10.07	9.84	9.73	9.62	9.51
45.0	10.41	10.35	10.29	10.24	10.13	9.96	9.79	9.73	9.62
67.5	10.63	10.29	10.18	10.13	10.13	9.84	9.68	9.62	9.56
90.0	11.36	10.35	10.13	10.01	9.73	9.56	9.51	9.39	9.28
112.5	10.58	10.24	10.07	9.96	9.84	9.68	9.62	9.51	9.45
135.0	10.24	10.18	10.07	10.01	9.84	9.73	9.68	9.56	9.51
157.5	10.24	10.18	10.07	10.01	9.90	9.79	9.68	9.62	9.51
180.0	10.24	10.13	10.07	9.96	9.79	9.62	9.51	9.39	9.34
202.5	10.69	10.58	10.52	10.41	10.29	10.18	10.01	9.90	9.79
225.0	10.58	10.46	10.41	10.35	10.29	10.29	10.01	9.90	9.84
247.5	10.52	10.24	10.18	10.18	10.18	10.13	9.68	9.68	9.62
270.0	11.25	10.80	10.18	10.07	10.01	9.90	9.51	9.45	9.39
292.5	10.24	10.13	10.07	10.01	9.90	9.84	9.51	9.45	9.34
315.0	10.29	10.24	10.13	10.07	10.01	9.96	9.68	9.56	9.51
337.5	10.18	10.13	10.07	10.01	9.96	9.84	9.56	9.45	9.34
360.0	10.18	10.13	10.07	9.96	9.84	9.79	9.62	9.34	9.28

C/γ(°)	90.0
0.0	9.11
22.5	9.51
45.0	9.62
67.5	9.51
90.0	9.28
112.5	9.34
135.0	9.39
157.5	9.45
180.0	9.06
202.5	9.73
225.0	9.79
247.5	9.56
270.0	9.28
292.5	9.34
315.0	9.45
337.5	9.28
360.0	9.11