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NATA

Client:

LumCAT: 2-2641-L Luminaire:

92.70.411.00 Report No: 2023829-B004

Ballast type: AC

Test No: 2023830-C004

LampCAT: LUXEON CoB 1208 LES15

Voltage(V): 33.890

Lamp flux(lm): 2357.0 Number of Lamps: 1

Current(A): 0.502

Length(mm): 0

Power (W): 17.012

Phm Type: C

PF: 0.000

Width(mm): 0

Height(mm): 0

Photometric Results

Lumens(lm): 2187.23, Efficiency(%): 92.80% , Luminous Efficacy(lm/W): 128.57

Central intensity(cd): 3436.711, Maximum intensity(cd): 3436.711

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=48.4

[C90/270]Total=48.4

Field angle(10%Imax): [C0/180]Total=71.6

[C90/270]Total=71.6

Maximum s/h(1/2): C0_180=0.76 C90_270=0.76

Maximum s/h(1/4): C0_180=0.75 C90_270=0.75

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 92.80%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 97.860%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3436.711	0.000	0	0.00%	0.00%
1.0	3436.642	3.289	3.289	0.14%	0.15%
2.0	3429.169	9.854	13.143	0.42%	0.60%
3.0	3419.621	16.380	29.523	0.69%	1.35%
4.0	3401.423	22.832	52.356	0.97%	2.39%
5.0	3376.514	29.158	81.514	1.24%	3.73%
6.0	3340.534	35.300	116.814	1.50%	5.34%
7.0	3293.138	41.175	157.989	1.75%	7.22%
8.0	3238.822	46.748	204.737	1.98%	9.36%
9.0	3175.788	51.987	256.724	2.21%	11.74%
10.0	3102.998	56.821	313.544	2.41%	14.34%
11.0	3015.540	61.137	374.681	2.59%	17.13%
12.0	2935.554	65.054	439.735	2.76%	20.10%
13.0	2853.976	68.707	508.442	2.91%	23.25%
14.0	2764.926	71.921	580.364	3.05%	26.53%
15.0	2674.838	74.680	655.043	3.17%	29.95%
16.0	2582.744	77.038	732.082	3.27%	33.47%
17.0	2490.649	79.006	811.088	3.35%	37.08%
18.0	2392.189	80.507	891.595	3.42%	40.76%
19.0	2290.407	81.468	973.063	3.46%	44.49%
20.0	2180.600	81.832	1054.895	3.47%	48.23%
21.0	2077.850	81.771	1136.666	3.47%	51.97%
22.0	1966.450	81.272	1217.938	3.45%	55.68%
23.0	1850.415	80.088	1298.026	3.40%	59.35%
24.0	1741.092	78.523	1376.549	3.33%	62.94%
25.0	1627.825	76.602	1453.151	3.25%	66.44%
26.0	1491.710	73.637	1526.788	3.12%	69.80%
27.0	1333.178	69.112	1595.899	2.93%	72.96%
28.0	1217.911	64.588	1660.487	2.74%	75.92%
29.0	1118.855	61.136	1721.624	2.59%	78.71%
30.0	1007.726	57.417	1779.041	2.44%	81.34%
31.0	875.632	52.411	1831.452	2.22%	83.73%
32.0	745.149	46.433	1877.886	1.97%	85.86%
33.0	622.659	40.296	1918.182	1.71%	87.70%
34.0	516.359	34.470	1952.652	1.46%	89.27%
35.0	412.502	28.847	1981.499	1.22%	90.59%
36.0	322.172	23.392	2004.891	0.99%	91.66%
37.0	256.550	18.875	2023.766	0.80%	92.53%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	211.409	15.620	2039.385	0.66%	93.24%
39.0	160.671	12.700	2052.086	0.54%	93.82%
40.0	129.334	10.114	2062.2	0.43%	94.28%
41.0	96.903	8.056	2070.256	0.34%	94.65%
42.0	84.746	6.600	2076.856	0.28%	94.95%
43.0	75.620	5.940	2082.796	0.25%	95.23%
44.0	67.663	5.408	2088.204	0.23%	95.47%
45.0	61.103	4.949	2093.153	0.21%	95.70%
46.0	55.734	4.569	2097.722	0.19%	95.91%
47.0	50.815	4.238	2101.96	0.18%	96.10%
48.0	46.469	3.933	2105.892	0.17%	96.28%
49.0	42.892	3.670	2109.562	0.16%	96.45%
50.0	39.855	3.450	2113.012	0.15%	96.61%
51.0	37.322	3.265	2116.277	0.14%	96.76%
52.0	35.205	3.112	2119.39	0.13%	96.90%
53.0	33.191	2.975	2122.365	0.13%	97.03%
54.0	31.565	2.854	2125.219	0.12%	97.16%
55.0	30.036	2.750	2127.969	0.12%	97.29%
56.0	28.680	2.653	2130.622	0.11%	97.41%
57.0	27.435	2.566	2133.188	0.11%	97.53%
58.0	26.286	2.484	2135.672	0.11%	97.64%
59.0	25.276	2.411	2138.082	0.10%	97.75%
60.0	24.335	2.344	2140.426	0.10%	97.86%
61.0	23.373	2.277	2142.703	0.10%	97.96%
62.0	22.515	2.211	2144.914	0.09%	98.07%
63.0	21.775	2.154	2147.068	0.09%	98.16%
64.0	21.027	2.100	2149.168	0.09%	98.26%
65.0	20.266	2.044	2151.212	0.09%	98.35%
66.0	19.595	1.989	2153.201	0.08%	98.44%
67.0	18.979	1.940	2155.14	0.08%	98.53%
68.0	18.329	1.890	2157.03	0.08%	98.62%
69.0	17.706	1.838	2158.869	0.08%	98.70%
70.0	17.146	1.790	2160.659	0.08%	98.78%
71.0	16.599	1.744	2162.403	0.07%	98.86%
72.0	16.039	1.697	2164.1	0.07%	98.94%
73.0	15.506	1.650	2165.749	0.07%	99.02%
74.0	14.932	1.600	2167.35	0.07%	99.09%
75.0	14.447	1.552	2168.902	0.07%	99.16%

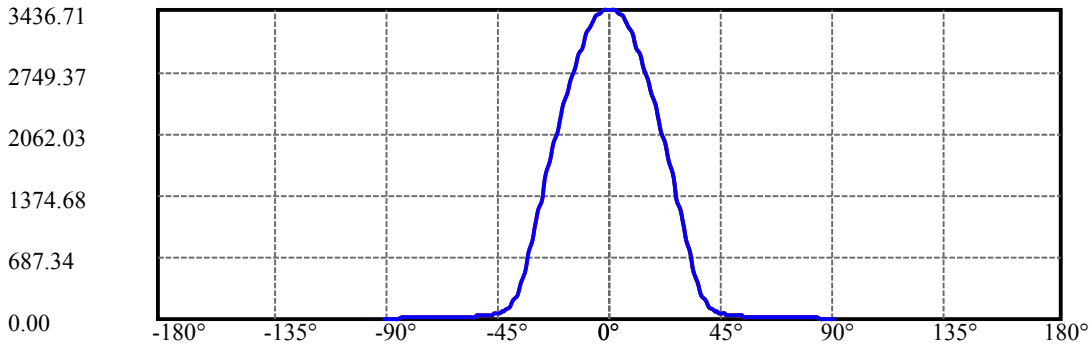
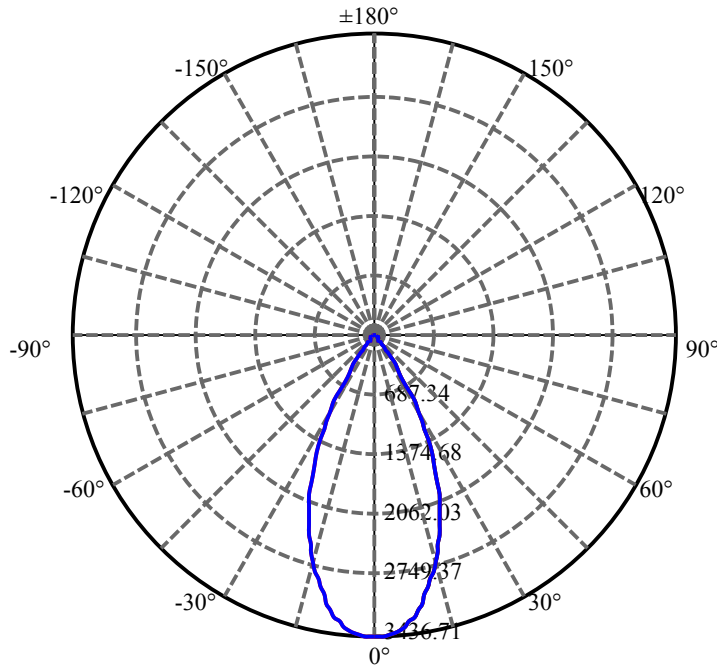
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	13.963	1.508	2170.41	0.06%	99.23%
77.0	13.486	1.463	2171.873	0.06%	99.30%
78.0	12.967	1.416	2173.289	0.06%	99.36%
79.0	12.496	1.368	2174.658	0.06%	99.42%
80.0	12.074	1.325	2175.982	0.06%	99.49%
81.0	11.617	1.281	2177.263	0.05%	99.54%
82.0	11.188	1.237	2178.5	0.05%	99.60%
83.0	10.794	1.195	2179.695	0.05%	99.66%
84.0	10.490	1.159	2180.855	0.05%	99.71%
85.0	10.185	1.128	2181.983	0.05%	99.76%
86.0	9.915	1.099	2183.082	0.05%	99.81%
87.0	9.666	1.072	2184.153	0.05%	99.86%
88.0	9.438	1.046	2185.2	0.04%	99.91%
89.0	9.258	1.025	2186.225	0.04%	99.95%
90.0	9.168	1.010	2187.235	0.04%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1779.04	75.48%	81.34%
0-40	2062.20	87.49%	94.28%
0-60	2140.43	90.81%	97.86%
0-90	2186.22	92.75%	99.95%
0-120	2186.22	92.75%	99.95%
0-180	2187.23	92.80%	100.00%
60-90	45.80	1.94%	2.09%
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%
0-29.49	1749.79	74.24%	80.00%

ZONAL LUMEN SUMMARY

0-10	313.54
10-20	741.35
20-30	724.15
30-40	283.16
40-50	50.81
50-60	27.41
60-70	20.23
70-80	15.32
80-90	10.24
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(Max): —————

C0/C180: —————

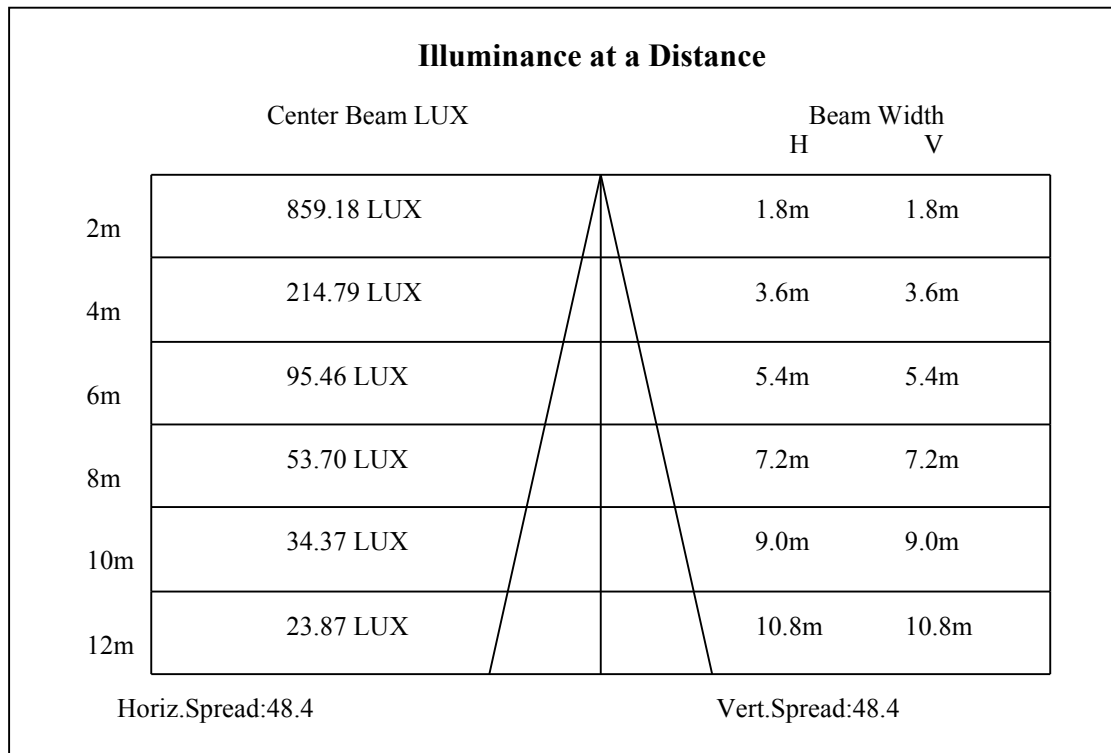
C90/C270: —————

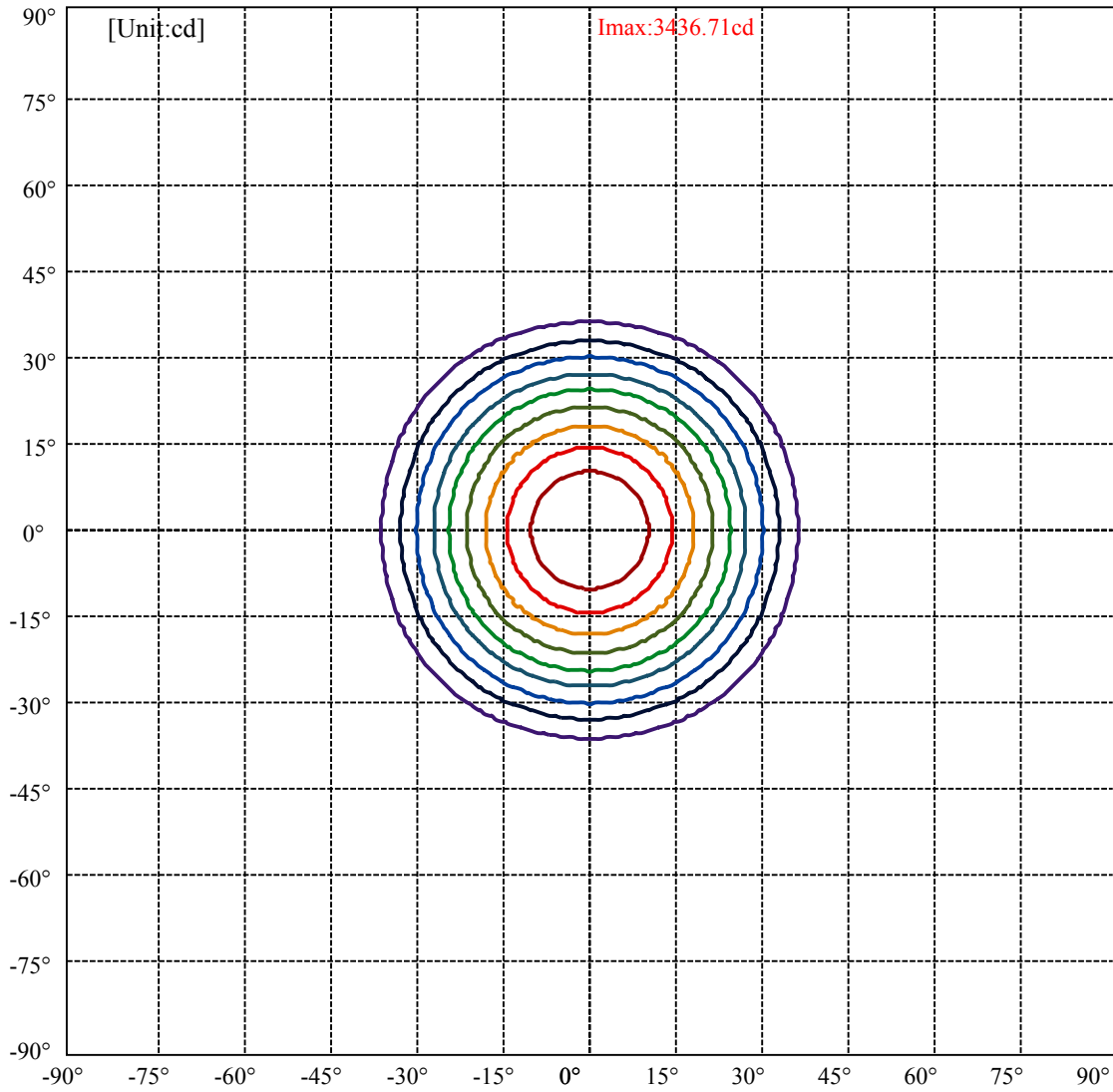
Field angle(10%Imax):C0/180Left:35.8 Right:35.8

:C90/270Left:35.8 Right:35.8

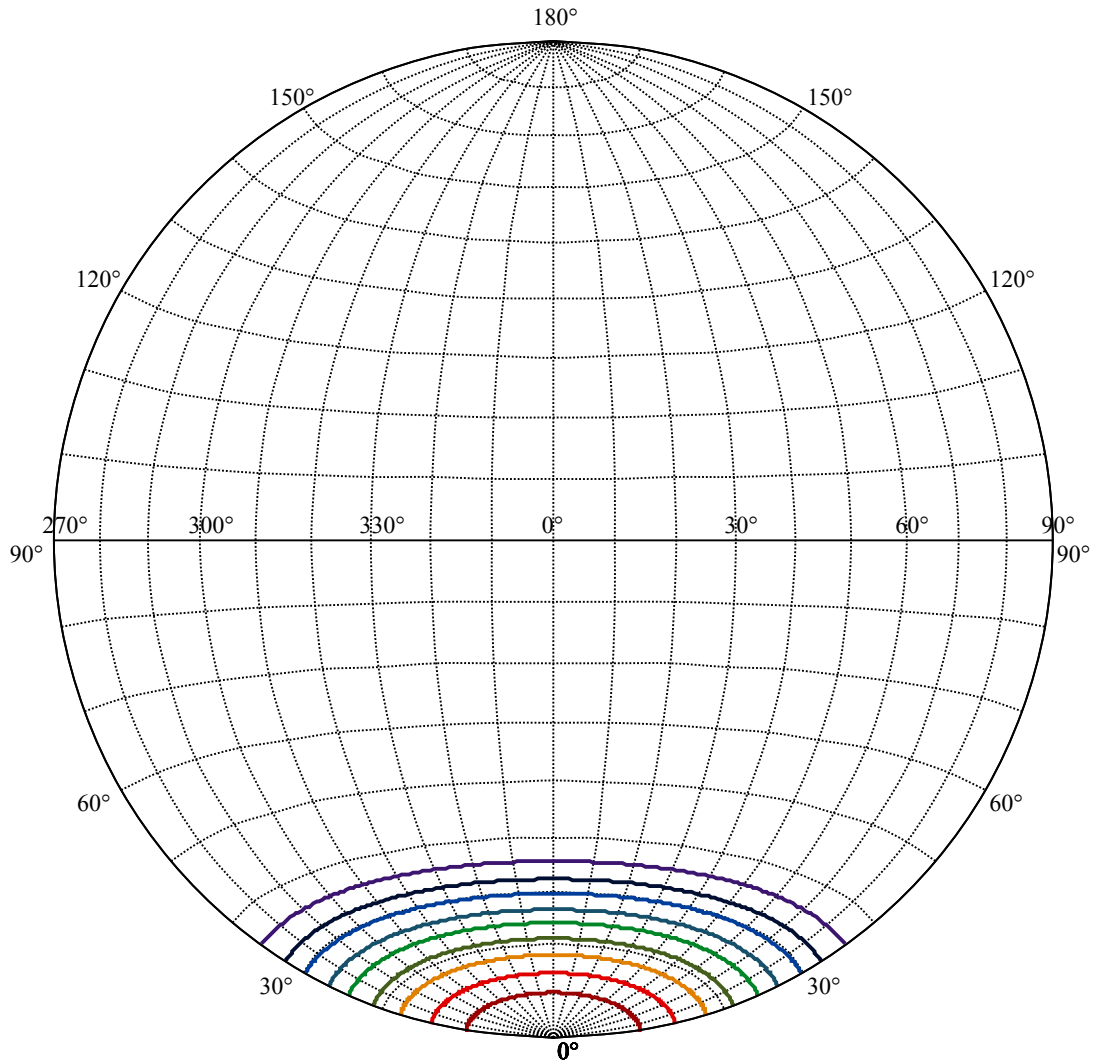
Beam Angle(50%Imax):C0/180Left:24.2 Right:24.2

:C90/270Left:24.2 Right:24.2





(10%I _{max}) 343.671	—
(20%I _{max}) 687.342	—
(30%I _{max}) 1031.01	—
(40%I _{max}) 1374.68	—
(50%I _{max}) 1718.36	—
(60%I _{max}) 2062.03	—
(70%I _{max}) 2405.7	—
(80%I _{max}) 2749.37	—
(90%I _{max}) 3093.04	—



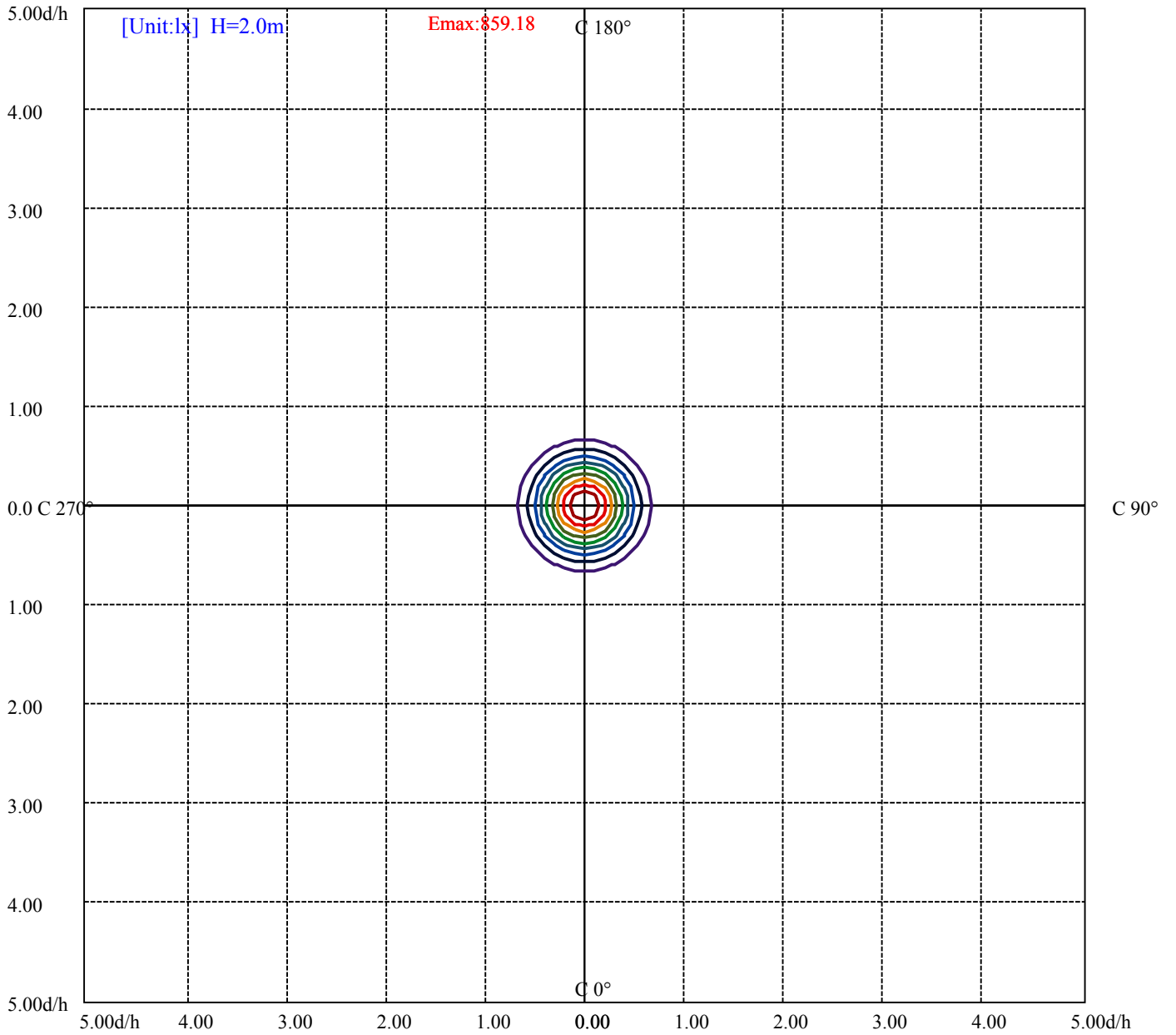
House

[Unit:cd]

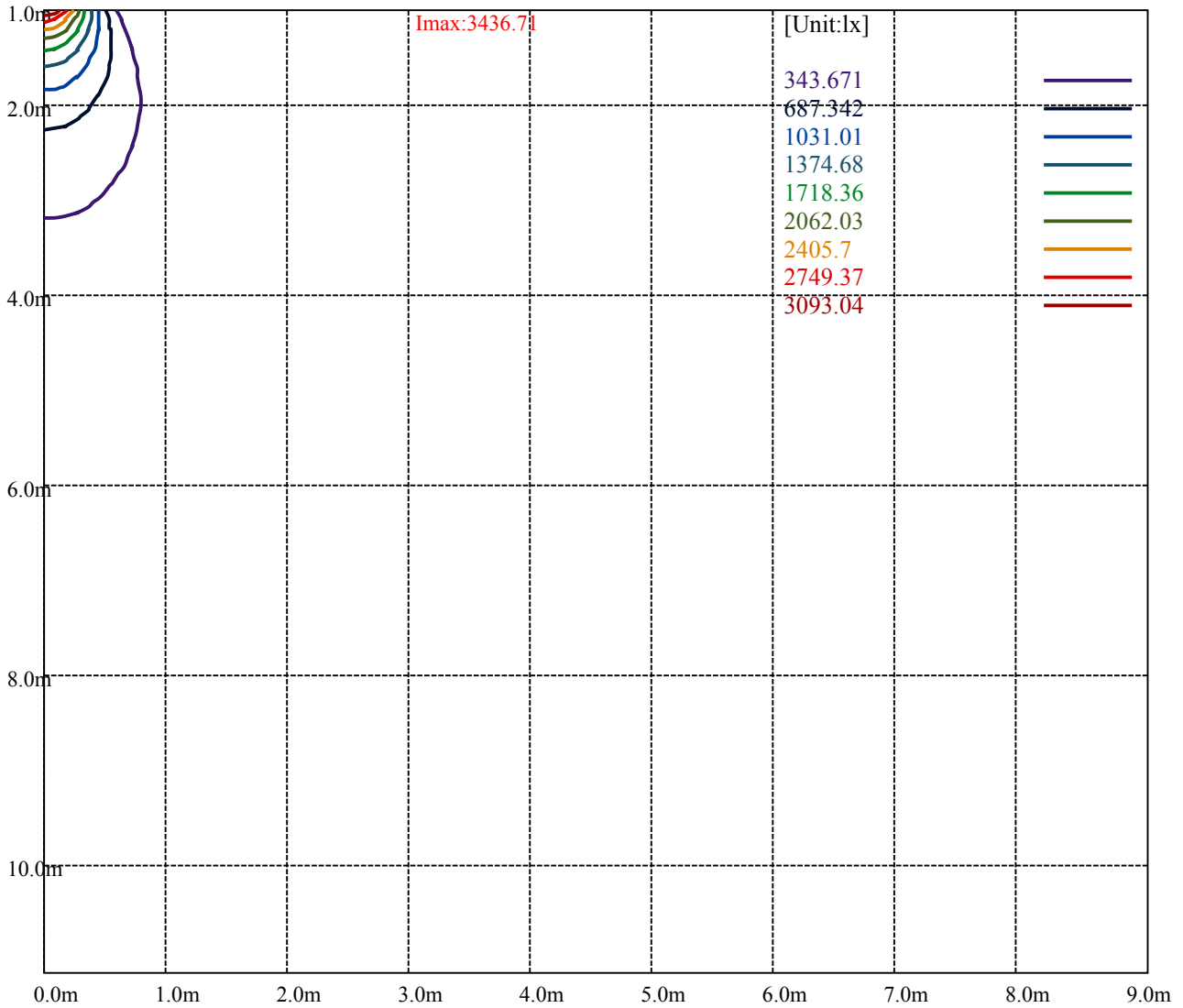
Road

Imax:3436.71

(10%Imax)	343.671	—
(20%Imax)	687.342	—
(30%Imax)	1031.01	—
(40%Imax)	1374.68	—
(50%Imax)	1718.36	—
(60%Imax)	2062.03	—
(70%Imax)	2405.7	—
(80%Imax)	2749.37	—
(90%Imax)	3093.04	—



(10%Emax) 85.91775	—
(20%Emax) 171.8355	—
(30%Emax) 257.7525	—
(40%Emax) 343.67	—
(50%Emax) 429.59	—
(60%Emax) 515.5075	—
(70%Emax) 601.425	—
(80%Emax) 687.3425	—
(90%Emax) 773.26	—



Luminance Table

γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

Glare Table

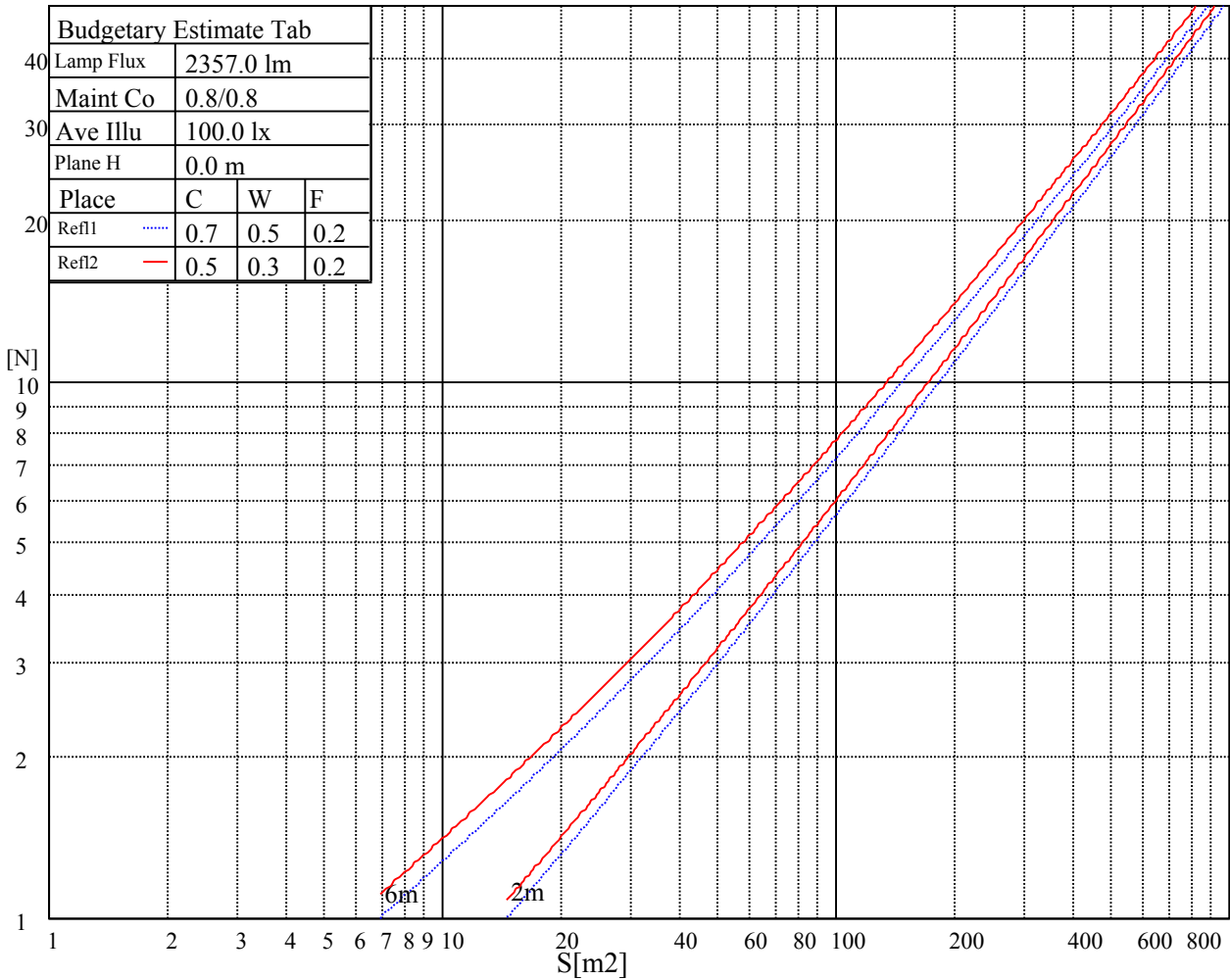
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

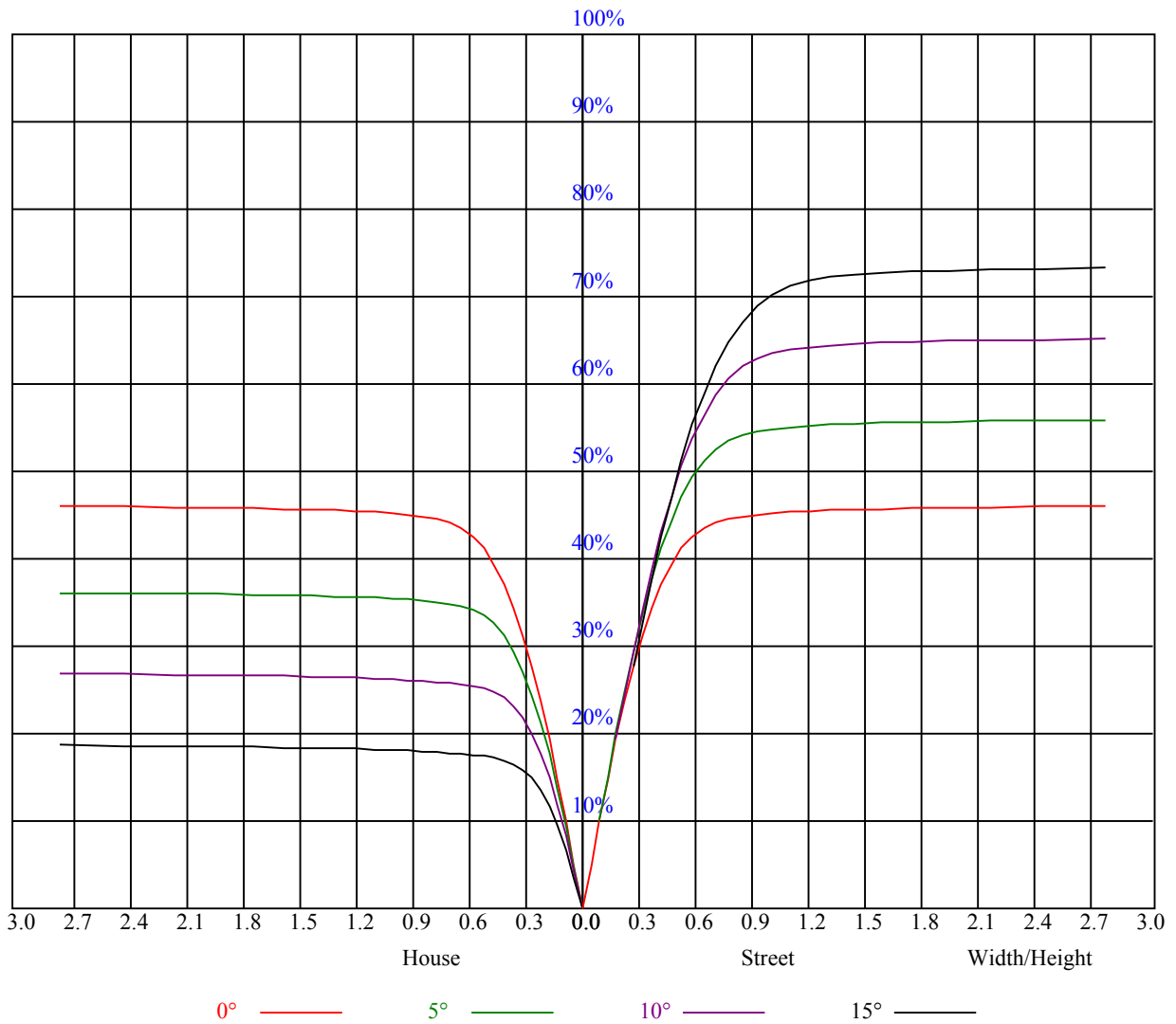


Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	3H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	4H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	6H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	8H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
4H	12H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	2H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	3H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	4H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	6H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
8H	8H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	12H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	4H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	6H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	8H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
12H	12H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	4H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	6H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	8H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
Variation with the observer position at spacings:											
S = 1.0H		非数字/非数字					非数字/非数字				
S = 1.5H		非数字/非数字					非数字/非数字				
S = 2.0H		非数字/非数字					非数字/非数字				
Standard tables:		BK0					BK0				
Uncorrected UGR		负无穷大					负无穷大				

UGR calculation is based on CIE Publ. 117 ,S/H = 0.25



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	1.10	1.10	1.10	1.08	1.08	1.08	1.03	1.03	1.03	0.99	0.99	0.99	0.95	0.95	0.95	0.93
1	1.03	1.01	0.99	1.01	0.99	0.97	0.97	0.95	0.94	0.94	0.92	0.91	0.90	0.89	0.89	0.87
2	0.96	0.93	0.89	0.95	0.91	0.88	0.92	0.89	0.87	0.89	0.87	0.85	0.86	0.85	0.83	0.81
3	0.90	0.86	0.82	0.89	0.85	0.82	0.87	0.83	0.80	0.84	0.81	0.79	0.82	0.80	0.78	0.77
4	0.85	0.80	0.76	0.84	0.79	0.76	0.82	0.78	0.75	0.80	0.77	0.74	0.78	0.76	0.73	0.72
5	0.80	0.75	0.71	0.79	0.75	0.71	0.78	0.74	0.70	0.76	0.73	0.70	0.75	0.72	0.69	0.68
6	0.76	0.71	0.67	0.75	0.70	0.67	0.74	0.70	0.66	0.73	0.69	0.66	0.71	0.68	0.65	0.64
7	0.72	0.67	0.63	0.71	0.66	0.63	0.70	0.66	0.63	0.69	0.65	0.62	0.68	0.65	0.62	0.61
8	0.68	0.63	0.60	0.68	0.63	0.60	0.67	0.62	0.59	0.66	0.62	0.59	0.65	0.62	0.59	0.58
9	0.65	0.60	0.57	0.65	0.60	0.56	0.64	0.59	0.56	0.63	0.59	0.56	0.62	0.59	0.56	0.55
10	0.62	0.57	0.54	0.62	0.57	0.54	0.61	0.57	0.54	0.60	0.56	0.53	0.60	0.56	0.53	0.52



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	3428.55	3412.49	3386.48	3347.18	3287.95	3232.59	3157.87	3093.10	3006.20
45.0	3442.39	3435.74	3413.60	3393.12	3372.64	3339.43	3292.93	3225.95	3171.71
90.0	3439.06	3436.30	3431.87	3422.46	3399.21	3361.57	3318.95	3256.95	3206.03
135.0	3436.85	3438.51	3442.94	3444.60	3452.35	3447.92	3437.40	3400.32	3366.00
180.0	3428.55	3441.28	3452.35	3466.19	3468.95	3473.38	3470.62	3456.22	3434.08
225.0	3442.39	3454.01	3457.88	3457.88	3450.69	3432.97	3405.30	3374.85	3308.98
270.0	3439.06	3445.15	3435.74	3437.96	3422.46	3404.74	3385.37	3336.66	3286.84
315.0	3436.85	3429.65	3412.49	3387.58	3357.14	3319.50	3255.84	3201.04	3130.74
360.0	3428.55	3412.49	3386.48	3347.18	3287.95	3232.59	3157.87	3093.10	3006.20

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	2934.24	2857.85	2789.77	2701.20	2628.13	2544.00	2460.41	2348.04	2264.46
45.0	3110.82	3018.38	2944.76	2850.66	2783.68	2712.27	2638.65	2533.48	2451.00
90.0	3125.21	3067.64	2963.02	2888.30	2787.55	2712.82	2610.42	2526.84	2434.40
135.0	3305.66	3245.88	3153.44	3078.16	2994.57	2882.21	2795.85	2707.29	2598.24
180.0	3394.23	3336.11	3252.52	3179.46	3096.98	2989.59	2897.15	2809.14	2711.72
225.0	3249.20	3176.69	3079.82	2993.47	2903.79	2794.75	2706.18	2615.96	2526.84
270.0	3224.85	3160.08	3063.21	2986.27	2904.35	2820.76	2722.23	2637.54	2544.55
315.0	3062.11	2961.36	2877.78	2806.93	2732.75	2663.01	2567.80	2483.66	2393.99
360.0	2934.24	2857.85	2789.77	2701.20	2628.13	2544.00	2460.41	2348.04	2264.46

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2175.89	2086.22	1958.36	1857.06	1734.17	1633.98	1528.26	1383.23	1097.50
45.0	2366.31	2274.42	2158.18	2060.76	1957.25	1826.61	1719.23	1615.16	1476.23
90.0	2341.96	2223.50	2129.40	2030.87	1921.27	1783.44	1678.82	1577.52	1467.92
135.0	2504.14	2407.83	2288.26	2191.95	2093.42	1962.78	1853.18	1738.60	1633.43
180.0	2596.03	2500.27	2399.52	2293.80	2176.45	2079.58	1966.10	1862.04	1720.89
225.0	2415.02	2312.06	2210.21	2109.47	1976.07	1869.24	1761.85	1633.43	1534.35
270.0	2460.41	2338.08	2239.55	2120.54	2021.46	1919.61	1792.29	1682.14	1581.40
315.0	2277.75	2180.88	2061.31	1958.36	1851.52	1728.08	1629.00	1530.47	1421.98
360.0	2175.89	2086.22	1958.36	1857.06	1734.17	1633.98	1528.26	1383.23	1097.50

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1097.50	1008.60	858.87	744.89	636.07	530.56	414.16	331.40	258.00
45.0	1357.21	1233.78	1080.45	960.88	839.11	720.09	581.16	480.41	388.53
90.0	1095.78	1095.78	1031.57	906.36	782.09	634.13	523.09	423.73	334.11
135.0	1519.40	1374.37	1247.61	1124.18	966.97	840.21	692.97	581.71	478.20
180.0	1619.59	1488.40	1376.59	1261.45	1107.02	975.83	853.50	733.93	594.44
225.0	1397.62	1100.76	1100.76	1040.48	887.82	766.26	649.57	540.53	419.36
270.0	1481.21	1344.48	1218.28	1104.80	985.79	834.12	709.58	601.64	474.32
315.0	1097.11	1097.11	1036.72	918.76	800.19	659.98	557.24	437.51	353.05
360.0	1097.50	1008.60	858.87	744.89	636.07	530.56	414.16	331.40	258.00

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	183.50	142.76	118.01	100.19	88.68	79.65	69.97	63.60	58.18
45.0	306.05	287.23	205.64	128.36	105.28	93.66	84.03	74.17	67.20
90.0	241.40	183.17	139.05	112.87	96.20	85.58	77.55	68.75	62.60
135.0	362.51	281.14	281.14	200.32	122.66	100.63	89.29	79.99	72.29
180.0	492.59	398.49	317.12	280.59	280.59	128.59	103.35	91.44	81.37
225.0	334.94	261.05	197.50	138.27	112.26	94.54	83.64	75.11	66.31
270.0	379.67	300.51	281.69	201.60	126.04	102.63	90.06	80.10	69.97
315.0	276.71	198.06	151.12	123.16	102.96	89.95	80.10	71.79	63.38
360.0	183.50	142.76	118.01	100.19	88.68	79.65	69.97	63.60	58.18

Intensity data(cd)

C/γ(°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	53.47	48.10	44.45	41.29	38.19	36.04	34.21	32.49	30.61
45.0	60.11	55.24	50.76	46.61	42.29	39.41	37.20	35.20	33.10
90.0	57.29	51.59	47.49	43.07	40.13	37.81	35.81	34.04	32.05
135.0	64.21	58.79	52.92	48.60	44.67	40.74	38.19	36.09	33.82
180.0	71.74	65.32	58.56	53.97	49.82	45.94	41.96	39.25	37.09
225.0	60.56	55.52	49.93	45.89	42.40	39.47	36.48	34.43	32.66
270.0	63.60	58.07	53.36	47.94	44.23	41.13	38.47	35.70	33.82
315.0	57.84	53.25	49.04	44.39	41.40	38.30	36.26	34.43	32.38
360.0	53.47	48.10	44.45	41.29	38.19	36.04	34.21	32.49	30.61
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	29.28	27.79	26.68	25.68	24.52	23.64	22.86	22.09	21.20
45.0	31.50	30.11	28.51	27.40	26.35	25.19	24.19	23.36	22.36
90.0	30.61	29.34	28.17	26.79	25.79	24.69	23.86	23.03	22.09
135.0	32.22	30.83	29.50	28.01	26.96	25.96	25.02	23.86	23.08
180.0	35.15	33.05	31.50	30.11	28.62	27.51	26.46	25.24	24.36
225.0	31.11	29.34	28.06	26.96	25.68	24.74	23.91	22.86	22.09
270.0	31.72	30.22	28.89	27.46	26.35	25.41	24.41	23.41	22.58
315.0	30.94	29.61	28.12	27.07	26.02	25.08	23.97	23.14	22.36
360.0	29.28	27.79	26.68	25.68	24.52	23.64	22.86	22.09	21.20
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	20.48	19.87	19.21	18.49	17.88	17.33	16.66	16.16	15.61
45.0	21.64	20.98	20.26	19.54	18.93	18.32	17.77	17.05	16.50
90.0	21.37	20.70	19.87	19.26	18.65	18.05	17.33	16.83	16.27
135.0	22.36	21.42	20.76	19.98	19.37	18.76	18.21	17.55	16.99
180.0	23.53	22.92	21.75	21.09	20.43	19.60	18.99	18.43	17.88
225.0	21.37	20.54	19.93	19.32	18.76	18.10	17.55	17.05	16.55
270.0	21.86	21.09	20.31	19.65	19.10	18.38	17.77	17.27	16.66
315.0	21.59	20.70	20.04	19.43	18.71	18.10	17.38	16.83	16.33
360.0	20.48	19.87	19.21	18.49	17.88	17.33	16.66	16.16	15.61
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	15.06	14.56	14.06	13.56	13.06	12.68	12.23	11.73	11.35
45.0	16.00	15.39	14.83	14.28	13.84	13.40	12.95	12.40	11.96
90.0	15.78	15.17	14.72	14.23	13.67	13.23	12.62	12.23	11.79
135.0	16.44	15.94	15.33	14.89	14.45	13.95	13.40	12.95	12.40
180.0	17.16	16.66	16.00	15.50	15.00	14.50	13.95	13.45	13.01
225.0	15.94	15.50	14.83	14.39	13.95	13.40	12.90	12.45	12.07
270.0	16.16	15.67	15.00	14.56	14.06	13.62	13.06	12.57	12.23
315.0	15.78	15.17	14.67	14.17	13.67	13.12	12.62	12.18	11.79
360.0	15.06	14.56	14.06	13.56	13.06	12.68	12.23	11.73	11.35
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	10.96	10.57	10.35	10.07	9.85	9.58	9.35	9.19	9.19
45.0	11.57	11.13	10.68	10.41	10.13	9.85	9.58	9.35	9.13
90.0	11.35	10.96	10.63	10.30	10.02	9.80	9.58	9.30	9.13
135.0	11.96	11.57	11.02	10.68	10.35	10.07	9.80	9.63	9.41
180.0	12.45	11.90	11.46	11.13	10.68	10.41	10.13	9.80	9.63
225.0	11.57	11.13	10.79	10.46	10.19	9.91	9.69	9.47	9.24
270.0	11.73	11.35	10.85	10.57	10.24	9.96	9.69	9.47	9.19
315.0	11.35	10.90	10.57	10.30	10.02	9.74	9.52	9.30	9.13
360.0	10.96	10.57	10.35	10.07	9.85	9.58	9.35	9.19	9.19

Intensity data(cd)

<i>C/γ(°)</i>	90.0
0.0	9.19
45.0	9.08
90.0	9.13
135.0	9.19
180.0	9.35
225.0	9.13
270.0	9.08
315.0	9.19
360.0	9.19