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NATA

Client:

LumCAT: 2-2644-L

Luminaire: 92.70.412.00

Report No: 20231008-B005

Ballast type: AC

Test No: 20231008-C005

Voltage(V): 35.940

LampCAT: CITIZEN CLU038 LES14.5

Current(A): 0.540

Lamp flux(lm): 2889.2

Power (W): 19.407

Number of Lamps: 1

PF: 0.000

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 2630.16, Efficiency(%): 91.03% , Luminous Efficacy(lm/W): 135.53

Central intensity(cd): 9164.286, Maximum intensity(cd): 9164.286

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=25.4

[C90/270]Total=25.4

Field angle(10%Imax): [C0/180]Total=56.0

[C90/270]Total=56.0

Maximum s/h(1/2): C0_180=0.42 C90_270=0.42

Maximum s/h(1/4): C0_180=0.47 C90_270=0.47

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 91.03%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.122%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	9164.287	0.000	0	0.00%	0.00%
1.0	9122.979	8.750	8.75	0.30%	0.33%
2.0	8981.551	25.985	34.735	0.90%	1.32%
3.0	8771.968	42.461	77.196	1.47%	2.94%
4.0	8477.072	57.738	134.934	2.00%	5.13%
5.0	8120.387	71.401	206.335	2.47%	7.84%
6.0	7739.831	83.350	289.685	2.88%	11.01%
7.0	7317.414	93.460	383.145	3.23%	14.57%
8.0	6831.755	101.263	484.408	3.50%	18.42%
9.0	6349.694	106.828	591.237	3.70%	22.48%
10.0	5835.252	110.269	701.506	3.82%	26.67%
11.0	5373.534	111.999	813.505	3.88%	30.93%
12.0	4884.831	112.139	925.643	3.88%	35.19%
13.0	4421.313	110.440	1036.084	3.82%	39.39%
14.0	4020.830	108.059	1144.142	3.74%	43.50%
15.0	3658.956	105.432	1249.574	3.65%	47.51%
16.0	3318.531	102.240	1351.814	3.54%	51.40%
17.0	2984.749	98.159	1449.973	3.40%	55.13%
18.0	2721.820	94.089	1544.062	3.26%	58.71%
19.0	2476.603	90.442	1634.504	3.13%	62.14%
20.0	2251.591	86.539	1721.043	3.00%	65.43%
21.0	2027.755	82.172	1803.215	2.84%	68.56%
22.0	1824.123	77.405	1880.62	2.68%	71.50%
23.0	1657.854	73.061	1953.681	2.53%	74.28%
24.0	1432.198	67.560	2021.241	2.34%	76.85%
25.0	1304.677	62.231	2083.471	2.15%	79.21%
26.0	1156.738	58.102	2141.573	2.01%	81.42%
27.0	1041.423	53.778	2195.352	1.86%	83.47%
28.0	912.892	49.479	2244.831	1.71%	85.35%
29.0	786.775	44.468	2289.299	1.54%	87.04%
30.0	667.613	39.268	2328.567	1.36%	88.53%
31.0	567.963	34.384	2362.951	1.19%	89.84%
32.0	478.546	29.981	2392.933	1.04%	90.98%
33.0	395.501	25.750	2418.682	0.89%	91.96%
34.0	319.978	21.653	2440.335	0.75%	92.78%
35.0	269.745	18.315	2458.649	0.63%	93.48%
36.0	238.076	16.169	2474.819	0.56%	94.09%
37.0	188.659	13.918	2488.736	0.48%	94.62%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	135.367	10.816	2499.552	0.37%	95.03%
39.0	110.430	8.390	2507.942	0.29%	95.35%
40.0	92.544	7.079	2515.021	0.25%	95.62%
41.0	77.488	6.055	2521.075	0.21%	95.85%
42.0	67.497	5.268	2526.343	0.18%	96.05%
43.0	58.827	4.679	2531.022	0.16%	96.23%
44.0	53.084	4.224	2535.246	0.15%	96.39%
45.0	48.213	3.893	2539.139	0.13%	96.54%
46.0	44.228	3.615	2542.754	0.13%	96.68%
47.0	40.678	3.377	2546.131	0.12%	96.81%
48.0	37.862	3.175	2549.306	0.11%	96.93%
49.0	35.613	3.017	2552.324	0.10%	97.04%
50.0	33.662	2.888	2555.212	0.10%	97.15%
51.0	31.953	2.776	2557.988	0.10%	97.26%
52.0	30.784	2.692	2560.68	0.09%	97.36%
53.0	29.836	2.637	2563.317	0.09%	97.46%
54.0	29.026	2.594	2565.911	0.09%	97.56%
55.0	28.327	2.560	2568.471	0.09%	97.65%
56.0	27.670	2.530	2571.002	0.09%	97.75%
57.0	27.019	2.501	2573.502	0.09%	97.85%
58.0	26.334	2.467	2575.97	0.09%	97.94%
59.0	25.615	2.429	2578.398	0.08%	98.03%
60.0	24.750	2.379	2580.778	0.08%	98.12%
61.0	23.934	2.323	2583.101	0.08%	98.21%
62.0	23.055	2.264	2585.365	0.08%	98.30%
63.0	22.266	2.204	2587.569	0.08%	98.38%
64.0	21.512	2.148	2589.717	0.07%	98.46%
65.0	20.820	2.095	2591.812	0.07%	98.54%
66.0	20.169	2.045	2593.857	0.07%	98.62%
67.0	19.429	1.991	2595.849	0.07%	98.70%
68.0	18.730	1.933	2597.782	0.07%	98.77%
69.0	18.059	1.877	2599.658	0.06%	98.84%
70.0	17.443	1.823	2601.482	0.06%	98.91%
71.0	16.744	1.767	2603.249	0.06%	98.98%
72.0	16.122	1.709	2604.958	0.06%	99.04%
73.0	15.610	1.659	2606.617	0.06%	99.10%
74.0	15.146	1.617	2608.234	0.06%	99.17%
75.0	14.752	1.580	2609.814	0.05%	99.23%

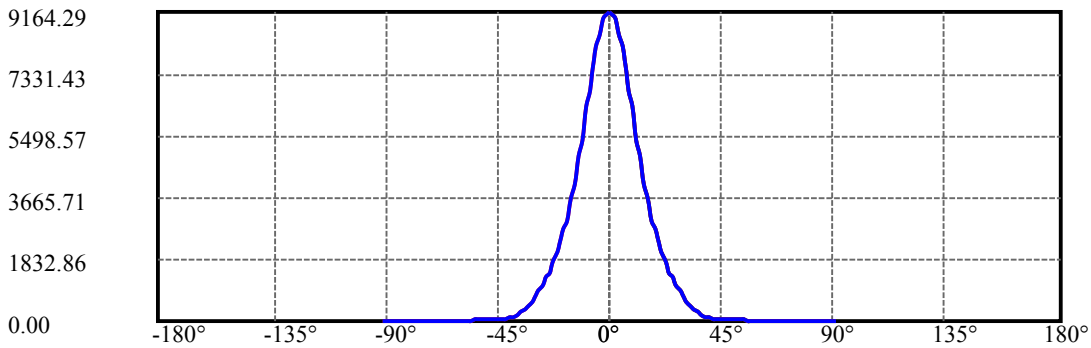
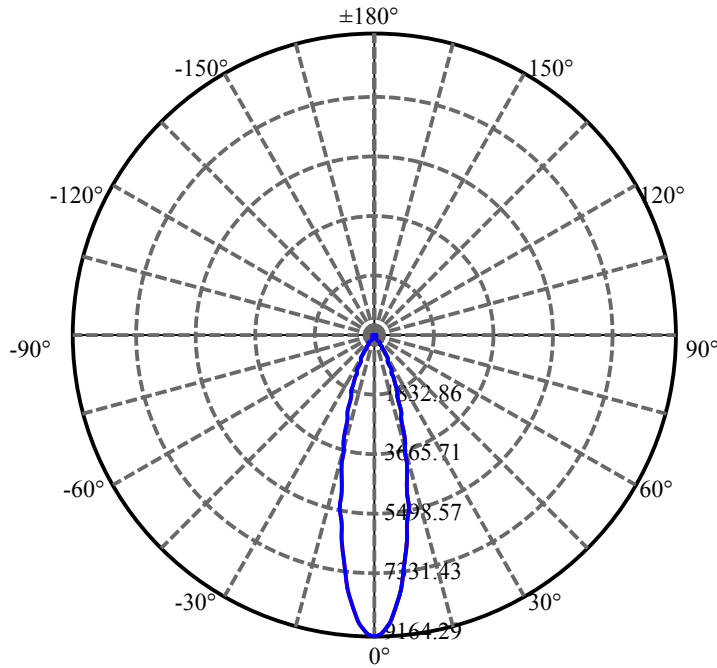
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	14.371	1.546	2611.36	0.05%	99.29%
77.0	14.074	1.517	2612.876	0.05%	99.34%
78.0	13.762	1.490	2614.366	0.05%	99.40%
79.0	13.465	1.463	2615.829	0.05%	99.46%
80.0	13.153	1.435	2617.264	0.05%	99.51%
81.0	12.911	1.410	2618.674	0.05%	99.56%
82.0	12.628	1.385	2620.059	0.05%	99.62%
83.0	12.365	1.359	2621.417	0.05%	99.67%
84.0	12.116	1.334	2622.751	0.05%	99.72%
85.0	11.763	1.303	2624.054	0.05%	99.77%
86.0	11.437	1.268	2625.322	0.04%	99.82%
87.0	11.181	1.238	2626.56	0.04%	99.86%
88.0	10.995	1.215	2627.775	0.04%	99.91%
89.0	10.863	1.198	2628.973	0.04%	99.95%
90.0	10.794	1.187	2630.16	0.04%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2328.57	80.60%	88.53%
0-40	2515.02	87.05%	95.62%
0-60	2580.78	89.32%	98.12%
0-90	2628.97	90.99%	99.95%
0-120	2628.97	90.99%	99.95%
0-180	2630.16	91.03%	100.00%
60-90	48.20	1.67%	1.83%
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%
0-25.36	2104.13	72.83%	80.00%

ZONAL LUMEN SUMMARY

0-10	701.51
10-20	1019.54
20-30	607.52
30-40	186.45
40-50	40.19
50-60	25.57
60-70	20.70
70-80	15.78
80-90	11.71
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: —————

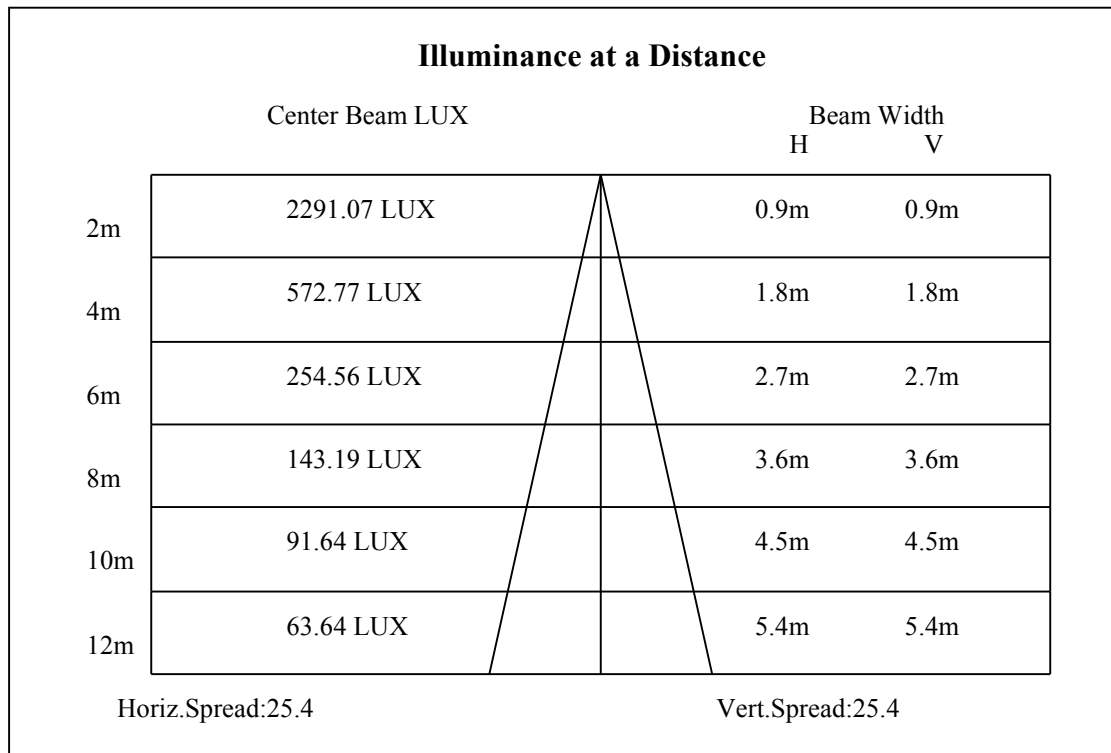
C90/C270: —————

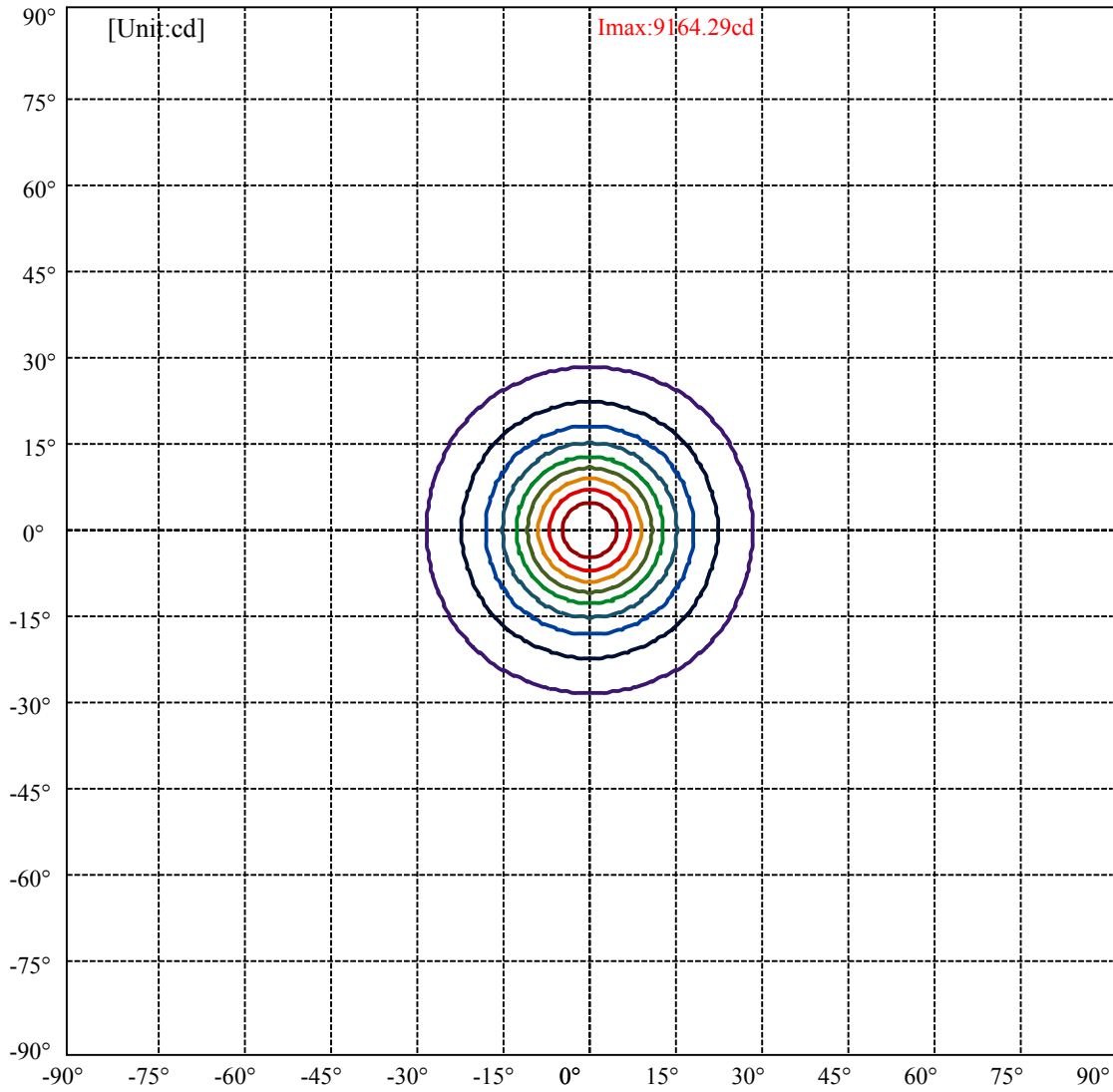
Field angle(10%Imax):C0/180Left:28.0 Right:28.0

:C90/270Left:28.0 Right:28.0

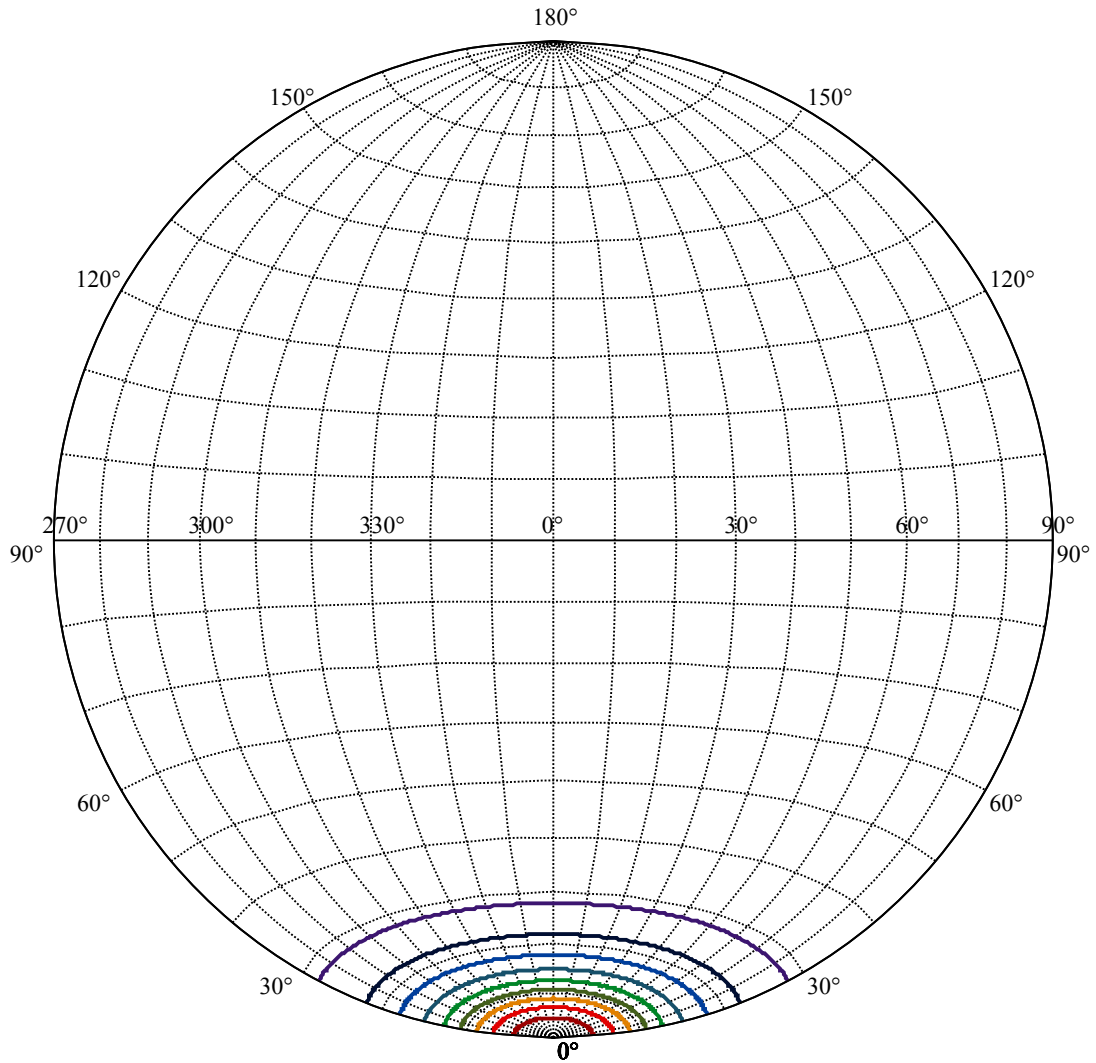
Beam Angle(50%Imax):C0/180Left:12.7 Right:12.7

:C90/270Left:12.7 Right:12.7





(10%Imax) 916.429	—
(20%Imax) 1832.86	—
(30%Imax) 2749.29	—
(40%Imax) 3665.71	—
(50%Imax) 4582.14	—
(60%Imax) 5498.57	—
(70%Imax) 6415	—
(80%Imax) 7331.43	—
(90%Imax) 8247.86	—



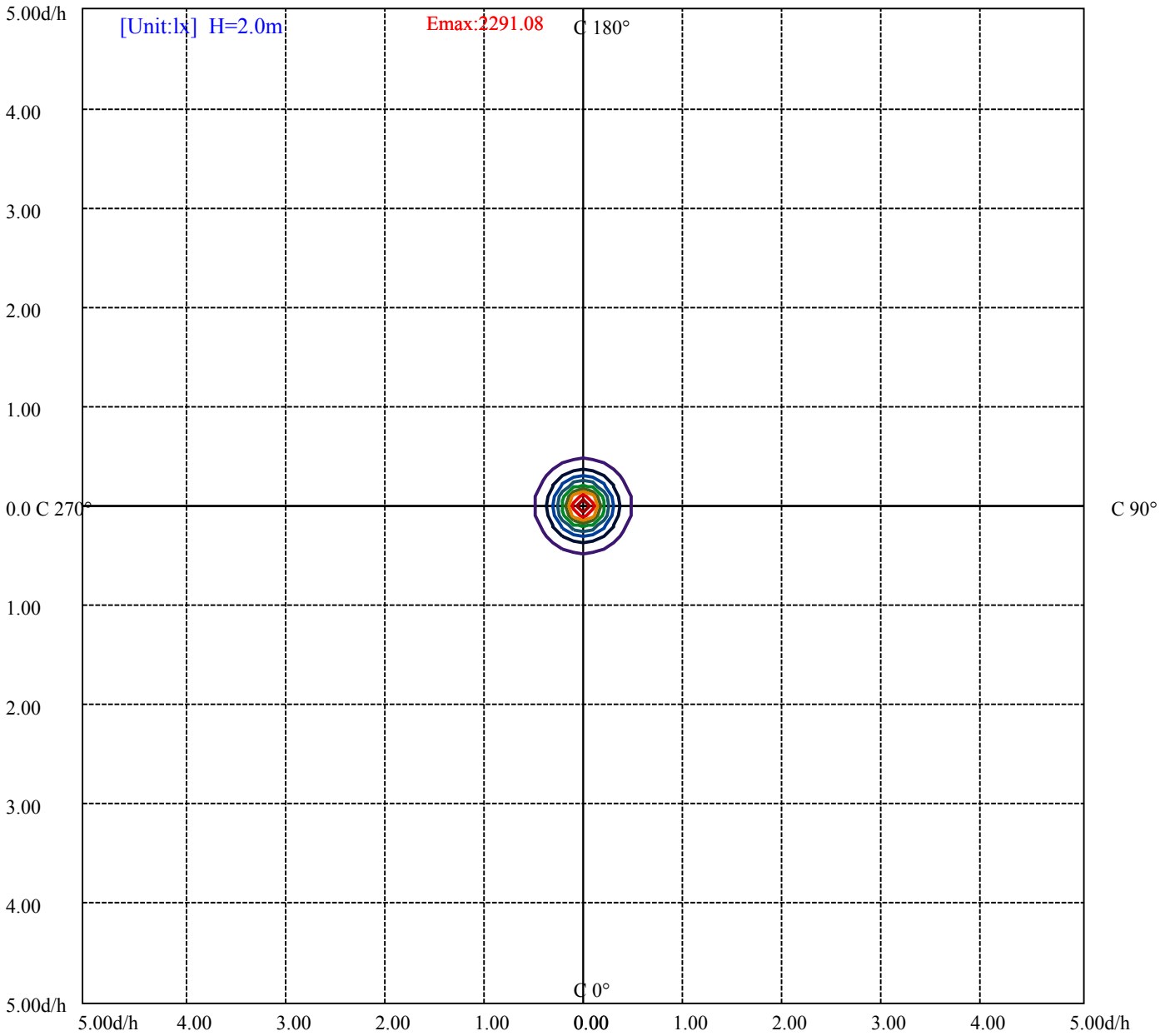
House

[Unit:cd]

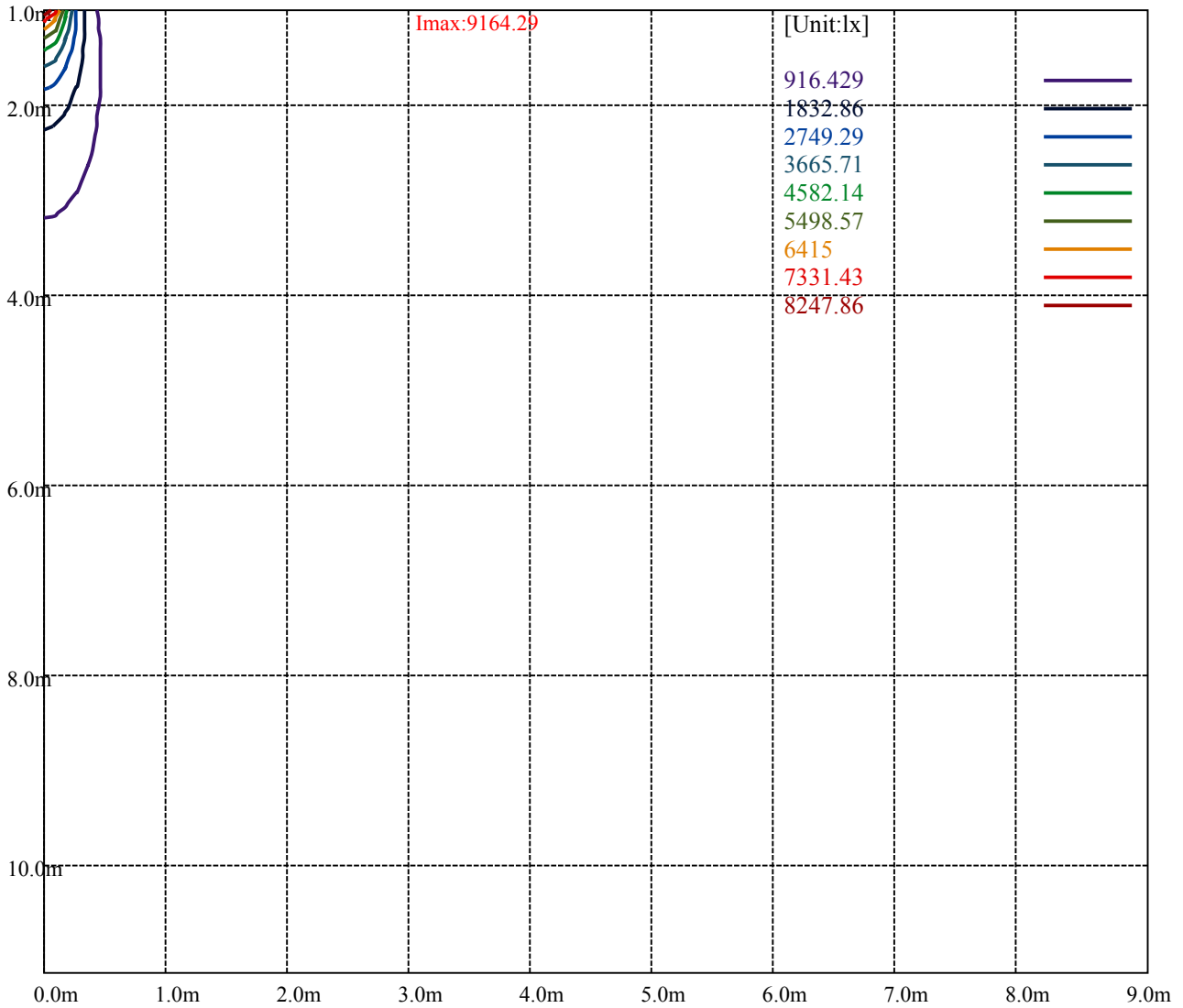
Road

Imax:9164.29

(10%Imax)	916.429	—
(20%Imax)	1832.86	—
(30%Imax)	2749.29	—
(40%Imax)	3665.71	—
(50%Imax)	4582.14	—
(60%Imax)	5498.57	—
(70%Imax)	6415	—
(80%Imax)	7331.43	—
(90%Imax)	8247.86	—



- (10%Emax) 229.107
- (20%Emax) 458.215
- (30%Emax) 687.32
- (40%Emax) 916.4275
- (50%Emax) 1145.535
- (60%Emax) 1374.642
- (70%Emax) 1603.75
- (80%Emax) 1832.855
- (90%Emax) 2061.962



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

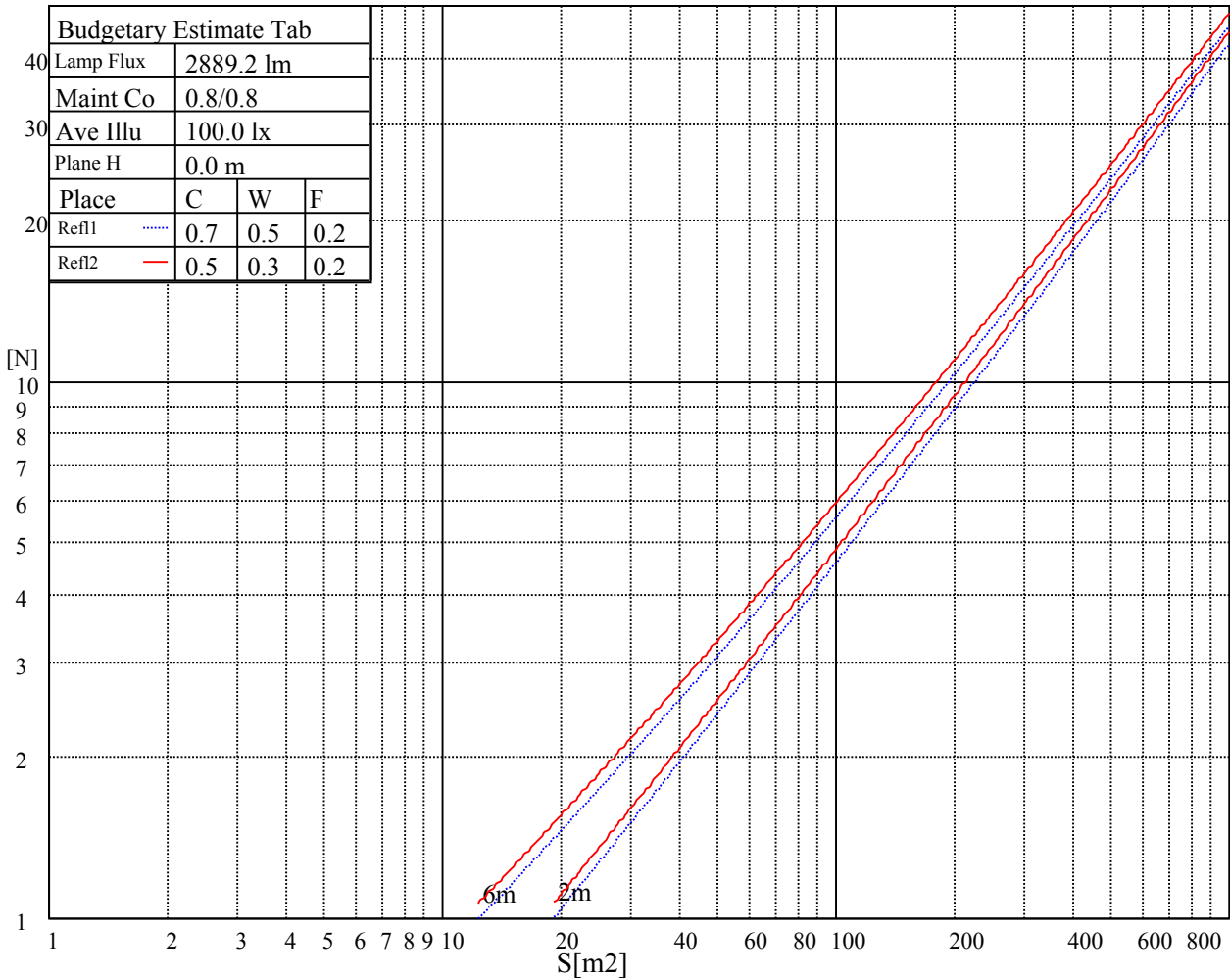
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

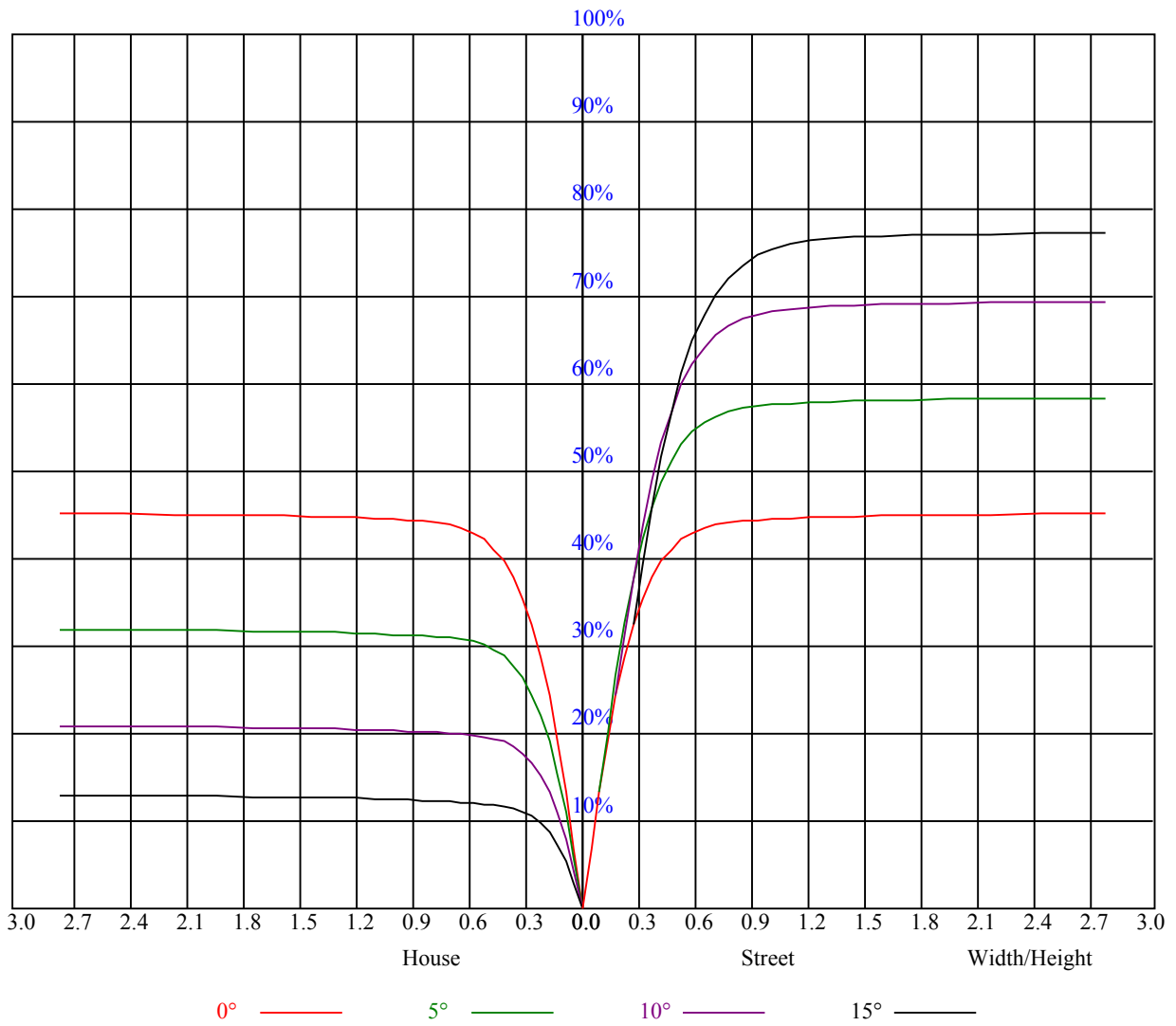


Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	3H	非数字	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	1.08	1.08	1.08	1.06	1.06	1.06	1.01	1.01	1.01	0.97	0.97	0.97	0.93	0.93	0.93	0.91
1	1.02	1.00	0.98	1.00	0.98	0.96	0.96	0.95	0.93	0.93	0.92	0.91	0.90	0.89	0.88	0.86
2	0.96	0.93	0.90	0.94	0.92	0.89	0.92	0.89	0.87	0.89	0.87	0.85	0.87	0.85	0.84	0.82
3	0.91	0.87	0.84	0.90	0.86	0.84	0.88	0.85	0.82	0.85	0.83	0.81	0.83	0.81	0.80	0.79
4	0.87	0.83	0.79	0.86	0.82	0.79	0.84	0.81	0.78	0.82	0.79	0.77	0.81	0.78	0.76	0.75
5	0.83	0.79	0.75	0.82	0.78	0.75	0.81	0.77	0.74	0.79	0.76	0.74	0.78	0.75	0.73	0.72
6	0.79	0.75	0.72	0.79	0.75	0.72	0.77	0.74	0.71	0.76	0.73	0.71	0.75	0.72	0.70	0.69
7	0.76	0.72	0.69	0.76	0.71	0.69	0.75	0.71	0.68	0.74	0.70	0.68	0.73	0.70	0.68	0.66
8	0.73	0.69	0.66	0.73	0.69	0.66	0.72	0.68	0.66	0.71	0.68	0.65	0.70	0.67	0.65	0.64
9	0.71	0.66	0.63	0.70	0.66	0.63	0.69	0.66	0.63	0.69	0.65	0.63	0.68	0.65	0.63	0.62
10	0.68	0.64	0.61	0.68	0.64	0.61	0.67	0.63	0.61	0.67	0.63	0.61	0.66	0.63	0.61	0.60



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	9137.72	9027.56	8796.19	8509.45	8094.30	7728.97	7332.64	6784.08	6321.88
45.0	9200.82	9124.99	8975.53	8709.83	8435.28	8110.35	7661.99	7263.44	6717.10
90.0	9101.18	8910.21	8612.96	8350.04	8021.23	7652.58	7143.33	6704.93	6232.21
135.0	9217.43	9091.22	8922.94	8695.44	8420.89	8005.18	7633.21	7233.55	6690.53
180.0	9137.72	9205.80	9149.34	9014.83	8774.60	8460.19	8161.83	7814.77	7316.58
225.0	9200.82	9167.61	9002.10	8779.03	8506.69	8132.50	7769.38	7366.96	6928.00
270.0	9101.18	9224.62	9229.60	9134.40	8858.73	8580.31	8270.33	7932.67	7439.47
315.0	9217.43	9231.82	9163.73	8982.73	8704.85	8293.02	7945.95	7438.91	7008.26
360.0	9137.72	9027.56	8796.19	8509.45	8094.30	7728.97	7332.64	6784.08	6321.88
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	5853.59	5283.45	4832.87	4406.09	3937.80	3600.70	3281.86	2986.82	2671.31
45.0	6251.03	5781.07	5312.78	4758.14	4346.86	3976.55	3630.03	3227.06	2936.45
90.0	5629.41	5165.54	4713.86	4316.97	3958.83	3541.47	3230.38	2882.21	2637.54
135.0	6237.74	5649.89	5193.77	4743.75	4247.23	3893.52	3554.20	3240.34	2899.37
180.0	6893.13	6320.22	5834.21	5357.07	4797.44	4385.06	4017.51	3666.57	3250.31
225.0	6366.16	5911.16	5443.97	4877.15	4456.46	3986.51	3643.32	3321.16	3032.21
270.0	7008.26	6587.58	6134.78	5550.25	5090.26	4633.04	4135.41	3776.17	3367.10
315.0	6558.24	5983.12	5522.02	5069.23	4535.62	4149.80	3778.93	3447.92	3083.69
360.0	5853.59	5283.45	4832.87	4406.09	3937.80	3600.70	3281.86	2986.82	2671.31
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2441.04	2228.48	2029.21	1798.94	1634.54	1480.65	1096.44	1096.44	1031.90
45.0	2685.70	2456.54	2189.18	1993.23	1770.71	1609.63	1457.96	1282.49	1146.32
90.0	2405.61	2143.79	1951.71	1773.47	1575.31	1426.96	1086.43	1086.43	990.94
135.0	2653.04	2423.88	2210.21	1967.21	1792.29	1631.22	1443.57	1300.75	1164.03
180.0	2980.74	2719.47	2483.66	2271.66	2023.12	1837.13	1622.91	1484.53	1346.14
225.0	2700.09	2461.52	2237.34	2042.49	1813.88	1653.91	1502.79	1259.79	1096.72
270.0	3094.21	2813.57	2573.33	2297.12	2093.42	1903.55	1721.44	1538.77	1390.98
315.0	2814.12	2565.58	2338.08	2077.92	1889.72	1719.78	1526.04	1388.21	1086.87
360.0	2441.04	2228.48	2029.21	1798.94	1634.54	1480.65	1096.44	1096.44	1031.90
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	875.86	760.12	655.77	541.58	458.38	383.49	302.45	247.38	200.71
45.0	1016.79	893.35	749.43	645.37	552.93	468.24	374.69	309.92	281.14
90.0	865.90	750.71	646.42	530.23	446.65	371.04	306.22	238.24	193.52
135.0	995.76	871.21	727.29	625.44	537.43	454.40	364.17	301.62	287.78
180.0	1174.55	1040.04	919.37	773.79	666.40	569.53	483.18	385.76	319.33
225.0	1066.39	941.84	797.15	690.09	592.01	481.63	402.64	334.00	260.60
270.0	1249.28	1082.66	956.45	834.12	691.31	591.12	503.11	403.47	335.94
315.0	1086.87	963.21	842.32	700.28	598.59	508.92	427.55	339.43	278.93
360.0	875.86	760.12	655.77	541.58	458.38	383.49	302.45	247.38	200.71
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	163.51	126.93	104.90	88.34	73.45	64.93	58.34	52.03	47.77
45.0	281.14	154.66	125.76	99.08	83.86	72.40	62.16	55.96	50.81
90.0	150.73	124.10	103.29	84.47	73.40	64.93	58.23	51.59	47.16
135.0	287.78	163.46	129.31	108.22	91.83	76.17	66.42	57.18	51.87
180.0	289.44	289.44	160.80	131.69	108.88	87.51	75.06	63.60	56.57
225.0	212.39	172.09	140.21	108.99	90.56	76.66	66.54	57.35	51.92
270.0	291.10	291.10	171.82	140.93	116.13	93.22	79.76	69.75	61.94
315.0	228.50	187.48	146.85	121.72	102.24	84.08	73.45	63.16	56.63
360.0	163.51	126.93	104.90	88.34	73.45	64.93	58.34	52.03	47.77

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	44.12	40.30	37.81	35.65	33.77	32.16	30.94	30.11	29.45
45.0	46.55	42.12	39.13	36.64	34.49	32.33	31.11	29.95	29.01
90.0	43.56	40.52	37.31	35.20	33.43	31.83	30.67	29.84	29.12
135.0	47.55	43.95	40.19	37.64	35.48	33.71	32.11	30.94	30.17
180.0	51.20	46.83	42.40	39.52	37.03	34.93	32.82	31.50	30.39
225.0	46.44	42.84	39.74	36.64	34.43	32.66	30.94	29.84	28.95
270.0	54.80	50.04	46.05	41.74	38.91	36.53	33.99	32.44	31.11
315.0	51.48	47.22	42.79	39.85	37.36	35.15	33.05	31.66	30.50
360.0	44.12	40.30	37.81	35.65	33.77	32.16	30.94	30.11	29.45
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	28.78	28.17	27.51	26.85	26.24	25.19	24.24	23.47	22.81
45.0	28.34	27.90	27.23	26.74	26.13	25.52	24.63	23.80	22.86
90.0	28.45	27.84	26.96	26.35	25.63	24.74	23.58	22.86	22.14
135.0	29.39	28.67	27.95	27.01	26.40	25.74	24.41	23.53	22.64
180.0	29.56	28.73	28.06	27.57	26.74	26.07	25.52	24.63	23.75
225.0	28.29	27.51	27.07	26.51	25.91	25.24	24.58	23.69	22.81
270.0	29.84	29.12	28.45	27.84	27.07	26.46	25.91	25.30	24.08
315.0	29.56	28.67	28.12	27.29	26.57	25.96	25.13	24.19	23.36
360.0	28.78	28.17	27.51	26.85	26.24	25.19	24.24	23.47	22.81
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	21.86	21.20	20.59	19.93	19.10	18.38	17.77	17.10	16.33
45.0	22.14	21.42	20.81	20.26	19.48	18.82	18.10	17.49	16.83
90.0	21.37	20.59	19.93	19.10	18.38	17.77	16.99	16.38	15.78
135.0	21.92	21.15	20.54	19.93	19.10	18.38	17.71	17.10	16.38
180.0	22.92	22.14	21.42	20.76	19.98	19.37	18.71	18.10	17.33
225.0	22.14	21.20	20.54	19.98	19.37	18.54	17.99	17.44	16.88
270.0	23.30	22.58	21.70	20.98	20.20	19.60	18.88	18.21	17.49
315.0	22.47	21.81	21.03	20.43	19.82	18.99	18.32	17.71	16.94
360.0	21.86	21.20	20.59	19.93	19.10	18.38	17.77	17.10	16.33
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	15.78	15.28	14.89	14.56	14.17	13.84	13.56	13.23	12.95
45.0	16.05	15.61	15.28	14.89	14.61	14.34	14.06	13.73	13.40
90.0	15.22	14.83	14.50	14.17	13.78	13.51	13.23	12.95	12.62
135.0	15.78	15.33	14.89	14.56	14.12	13.84	13.51	13.23	12.90
180.0	16.77	16.16	15.55	15.11	14.67	14.39	14.12	13.78	13.45
225.0	16.16	15.67	15.28	14.78	14.56	14.28	13.95	13.73	13.45
270.0	16.88	16.27	15.61	15.17	14.78	14.45	14.00	13.73	13.45
315.0	16.33	15.72	15.17	14.78	14.28	13.95	13.67	13.34	13.01
360.0	15.78	15.28	14.89	14.56	14.17	13.84	13.56	13.23	12.95
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	12.73	12.45	12.18	11.96	11.46	11.29	11.13	11.07	10.90
45.0	13.17	12.84	12.51	12.18	11.62	11.35	11.18	10.90	10.79
90.0	12.40	12.18	11.96	11.79	11.29	11.13	10.96	10.79	10.74
135.0	12.68	12.40	12.12	11.96	11.73	11.24	11.07	10.90	10.79
180.0	13.23	12.90	12.73	12.45	12.18	11.96	11.46	11.13	10.96
225.0	13.17	12.95	12.68	12.40	12.07	11.46	11.18	11.02	10.90
270.0	13.12	12.84	12.51	12.29	12.01	11.73	11.29	11.13	10.96
315.0	12.79	12.45	12.23	11.90	11.73	11.35	11.18	11.02	10.85
360.0	12.73	12.45	12.18	11.96	11.46	11.29	11.13	11.07	10.90

Intensity data(cd)

C/γ(°)	90.0
0.0	10.90
45.0	10.79
90.0	10.74
135.0	10.74
180.0	10.85
225.0	10.79
270.0	10.79
315.0	10.74
360.0	10.90