



NATA LIGHTING CO.,LTD
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Nata

Client: NT

LumCAT: 3-3015-LM

Luminaire: BJB 47.360.2050

Report No: 20251118-B007

Ballast type: DC

Test No: 20251118-C007

Voltage(V): 37.630

LampCAT: CREE CXA2540 LES19

Current(A): 1.098

Lamp flux(lm): 5903.0

Power (W): 41.300

Number of Lamps: 1

PF: 0.000

Length(mm): 85

Width(mm): 85

Phm Type: C

Height(mm): 51

Photometric Results

Lumens(lm): 5681.47, Efficiency(%): 96.25% , Luminous Efficacy(lm/W): 137.57

Central intensity(cd): 8277.355, Maximum intensity(cd): 8277.355

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=53.2

[C90/270]Total=53.2

Field angle(10%Imax): [C0/180]Total=75.2

[C90/270]Total=75.2

Maximum s/h(1/2): C0_180=0.79 C90_270=0.79

Maximum s/h(1/4): C0_180=0.82 C90_270=0.82

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 96.25%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 99.340%

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2025/11/18
Humidity(%): 60.0%

Operator: YZQ
Distance(m): 9.28

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	8277.356	0.000	0	0.00%	0.00%
1.0	8264.869	7.915	7.915	0.13%	0.14%
2.0	8228.053	23.672	31.587	0.40%	0.56%
3.0	8171.969	39.223	70.811	0.66%	1.25%
4.0	8095.216	54.451	125.262	0.92%	2.20%
5.0	7995.103	69.220	194.482	1.17%	3.42%
6.0	7873.676	83.395	277.877	1.41%	4.89%
7.0	7732.980	96.870	374.747	1.64%	6.60%
8.0	7588.947	109.656	484.403	1.86%	8.53%
9.0	7442.115	121.819	606.222	2.06%	10.67%
10.0	7267.618	133.118	739.339	2.26%	13.01%
11.0	7095.919	143.521	882.86	2.43%	15.54%
12.0	6921.314	153.228	1036.089	2.60%	18.24%
13.0	6746.494	162.202	1198.291	2.75%	21.09%
14.0	6544.223	170.120	1368.411	2.88%	24.09%
15.0	6352.395	177.050	1545.462	3.00%	27.20%
16.0	6162.073	183.372	1728.834	3.11%	30.43%
17.0	5958.403	188.748	1917.582	3.20%	33.75%
18.0	5775.294	193.463	2111.045	3.28%	37.16%
19.0	5600.150	197.909	2308.955	3.35%	40.64%
20.0	5413.919	201.588	2510.543	3.42%	44.19%
21.0	5245.773	204.688	2715.231	3.47%	47.79%
22.0	5071.922	207.338	2922.569	3.51%	51.44%
23.0	4879.878	208.816	3131.385	3.54%	55.12%
24.0	4673.516	208.871	3340.256	3.54%	58.79%
25.0	4474.152	207.998	3548.254	3.52%	62.45%
26.0	4267.468	206.347	3754.601	3.50%	66.09%
27.0	4040.869	203.265	3957.866	3.44%	69.66%
28.0	3778.746	197.976	4155.842	3.35%	73.15%
29.0	3503.167	190.515	4346.358	3.23%	76.50%
30.0	3185.929	180.604	4526.962	3.06%	79.68%
31.0	2830.475	167.428	4694.39	2.84%	82.63%
32.0	2397.095	149.764	4844.153	2.54%	85.26%
33.0	2118.416	133.029	4977.182	2.25%	87.60%
34.0	1800.230	118.590	5095.772	2.01%	89.69%
35.0	1512.541	102.882	5198.654	1.74%	91.50%
36.0	1246.435	87.846	5286.5	1.49%	93.05%
37.0	954.515	71.783	5358.283	1.22%	94.31%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	732.814	56.321	5414.604	0.95%	95.30%
39.0	548.187	43.724	5458.328	0.74%	96.07%
40.0	425.565	33.961	5492.289	0.58%	96.67%
41.0	321.469	26.602	5518.89	0.45%	97.14%
42.0	294.224	22.369	5541.259	0.38%	97.53%
43.0	193.583	18.070	5559.329	0.31%	97.85%
44.0	158.167	13.276	5572.605	0.22%	98.08%
45.0	128.263	11.008	5583.613	0.19%	98.28%
46.0	107.099	9.204	5592.818	0.16%	98.44%
47.0	88.185	7.767	5600.585	0.13%	98.58%
48.0	74.288	6.568	5607.153	0.11%	98.69%
49.0	62.673	5.624	5612.777	0.10%	98.79%
50.0	53.200	4.831	5617.608	0.08%	98.88%
51.0	45.567	4.179	5621.787	0.07%	98.95%
52.0	39.518	3.651	5625.438	0.06%	99.01%
53.0	34.189	3.206	5628.644	0.05%	99.07%
54.0	30.131	2.835	5631.479	0.05%	99.12%
55.0	27.041	2.552	5634.031	0.04%	99.17%
56.0	24.318	2.321	5636.352	0.04%	99.21%
57.0	22.175	2.126	5638.478	0.04%	99.24%
58.0	20.292	1.964	5640.441	0.03%	99.28%
59.0	18.828	1.829	5642.27	0.03%	99.31%
60.0	17.568	1.719	5643.99	0.03%	99.34%
61.0	16.535	1.627	5645.617	0.03%	99.37%
62.0	15.727	1.555	5647.172	0.03%	99.40%
63.0	15.049	1.497	5648.669	0.03%	99.42%
64.0	14.403	1.445	5650.114	0.02%	99.45%
65.0	13.930	1.402	5651.516	0.02%	99.47%
66.0	13.488	1.368	5652.884	0.02%	99.50%
67.0	13.133	1.339	5654.223	0.02%	99.52%
68.0	12.832	1.315	5655.538	0.02%	99.54%
69.0	12.563	1.295	5656.833	0.02%	99.57%
70.0	12.283	1.276	5658.109	0.02%	99.59%
71.0	12.067	1.259	5659.368	0.02%	99.61%
72.0	11.917	1.247	5660.615	0.02%	99.63%
73.0	11.744	1.237	5661.852	0.02%	99.65%
74.0	11.561	1.225	5663.077	0.02%	99.68%
75.0	11.421	1.214	5664.292	0.02%	99.70%

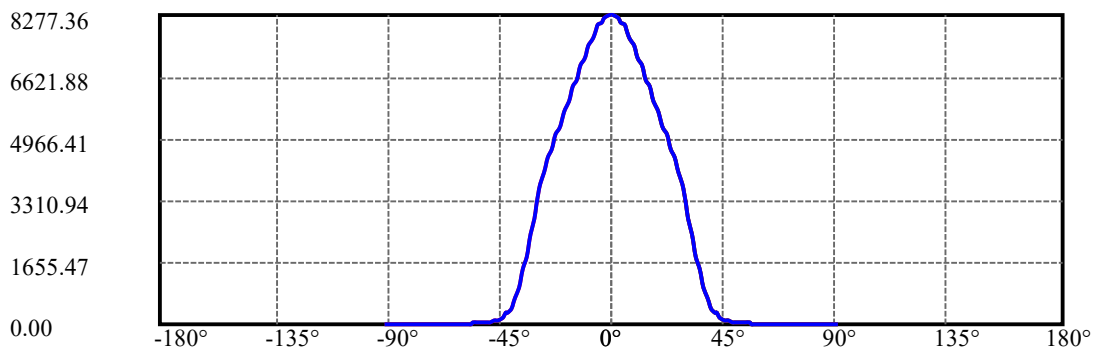
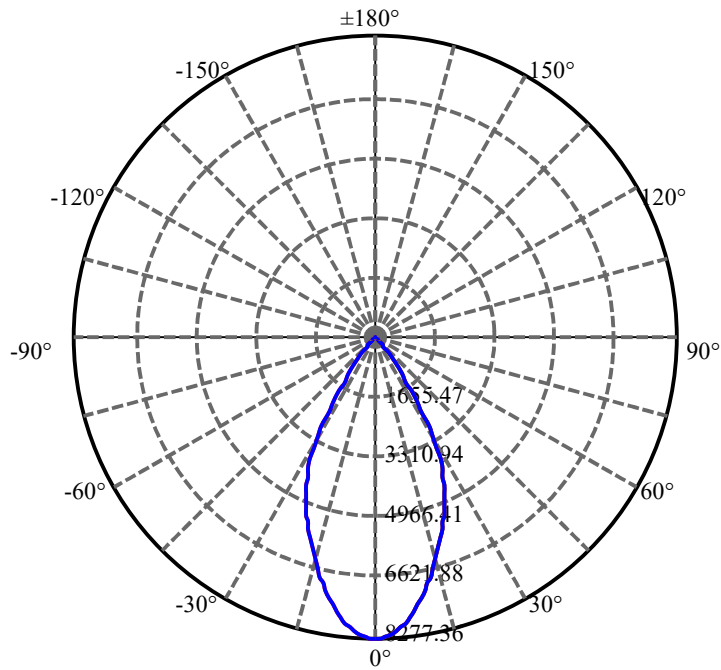
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	11.292	1.206	5665.498	0.02%	99.72%
77.0	11.120	1.195	5666.692	0.02%	99.74%
78.0	11.034	1.186	5667.878	0.02%	99.76%
79.0	10.937	1.180	5669.059	0.02%	99.78%
80.0	10.786	1.171	5670.23	0.02%	99.80%
81.0	10.668	1.160	5671.39	0.02%	99.82%
82.0	10.593	1.153	5672.543	0.02%	99.84%
83.0	10.463	1.145	5673.688	0.02%	99.86%
84.0	10.377	1.135	5674.823	0.02%	99.88%
85.0	10.280	1.127	5675.951	0.02%	99.90%
86.0	10.184	1.119	5677.069	0.02%	99.92%
87.0	10.097	1.110	5678.179	0.02%	99.94%
88.0	10.000	1.101	5679.28	0.02%	99.96%
89.0	9.957	1.094	5680.374	0.02%	99.98%
90.0	9.957	1.092	5681.466	0.02%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	4526.96	76.69%	79.68%
0-40	5492.29	93.04%	96.67%
0-60	5643.99	95.61%	99.34%
0-90	5680.37	96.23%	99.98%
0-120	5680.37	96.23%	99.98%
0-180	5681.47	96.25%	100.00%
60-90	36.38	0.62%	0.64%
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%
0-30.11	4545.17	77.00%	80.00%

ZONAL LUMEN SUMMARY

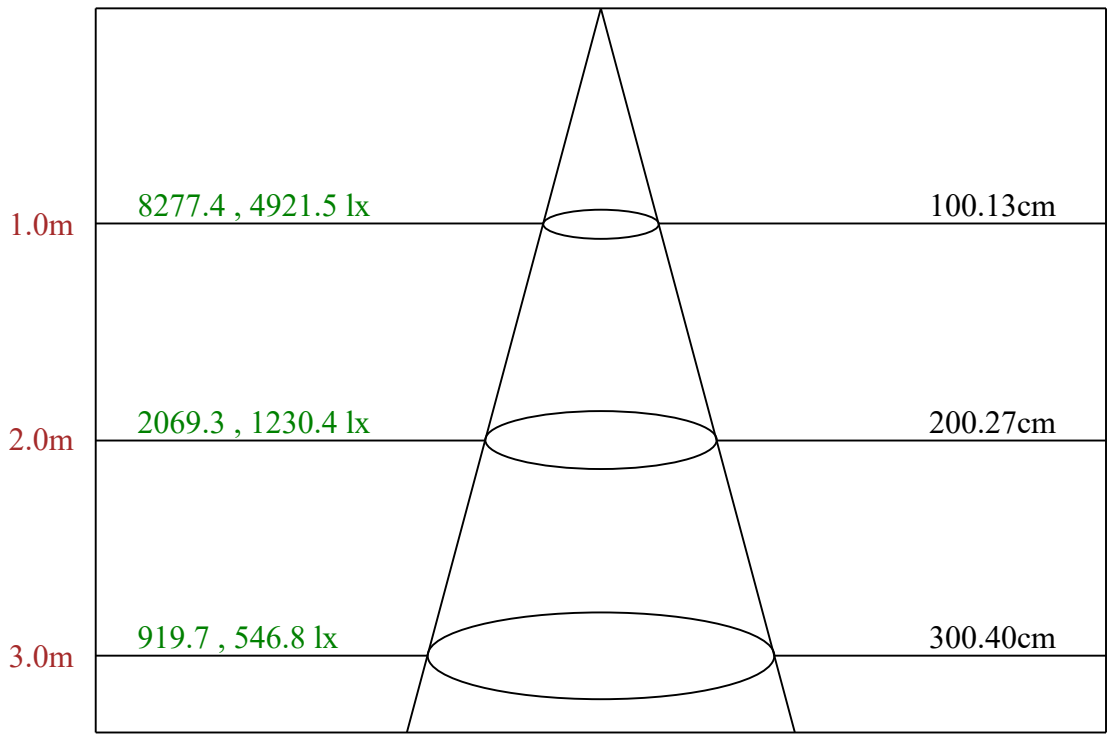
0-10	739.34
10-20	1771.20
20-30	2016.42
30-40	965.33
40-50	125.32
50-60	26.38
60-70	14.12
70-80	12.12
80-90	10.14
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00



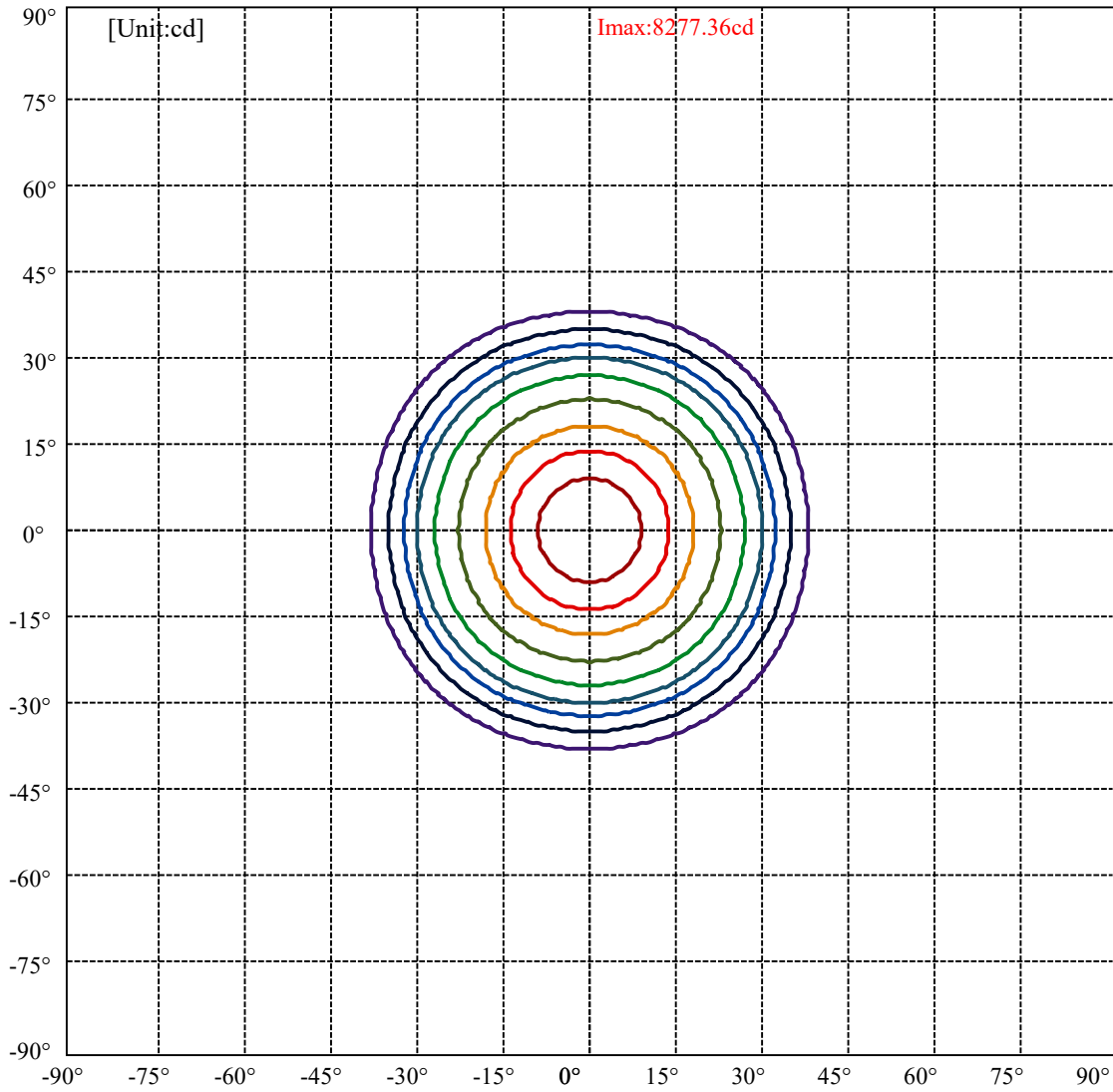
C0(Max): ———
C0/C180: ———
C90/C270: ———

Field angle(10%Imax):C0/180Left:37.6 Right:37.6
:C90/270Left:37.6 Right:37.6

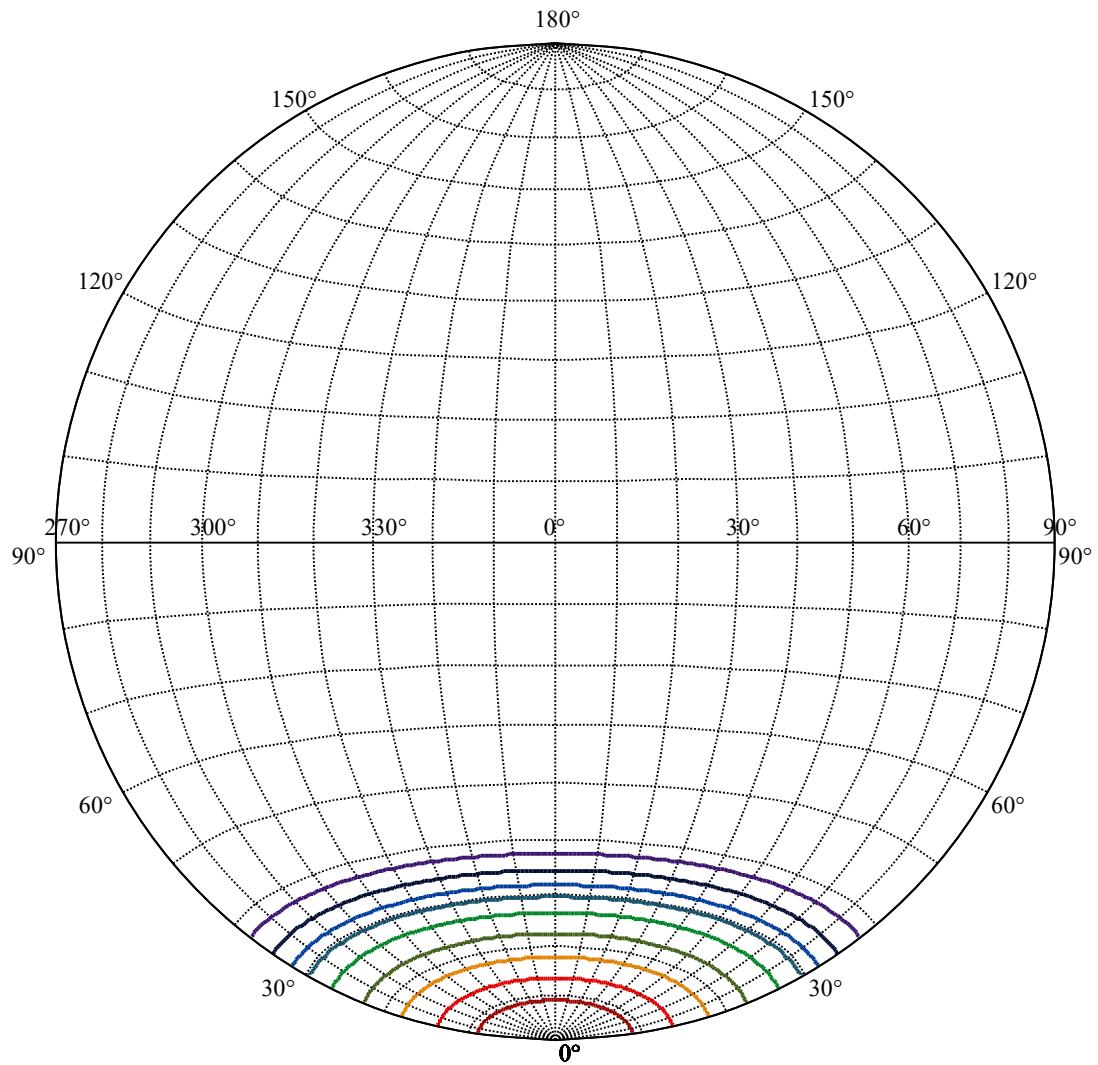
Beam Angle(50%Imax):C0/180Left:26.6 Right:26.6
:C90/270Left:26.6 Right:26.6



Max , Ave Beam angle of C0 plane 53.19



(10%Imax) 827.736	—
(20%Imax) 1655.47	—
(30%Imax) 2483.21	—
(40%Imax) 3310.94	—
(50%Imax) 4138.68	—
(60%Imax) 4966.41	—
(70%Imax) 5794.15	—
(80%Imax) 6621.88	—
(90%Imax) 7449.62	—



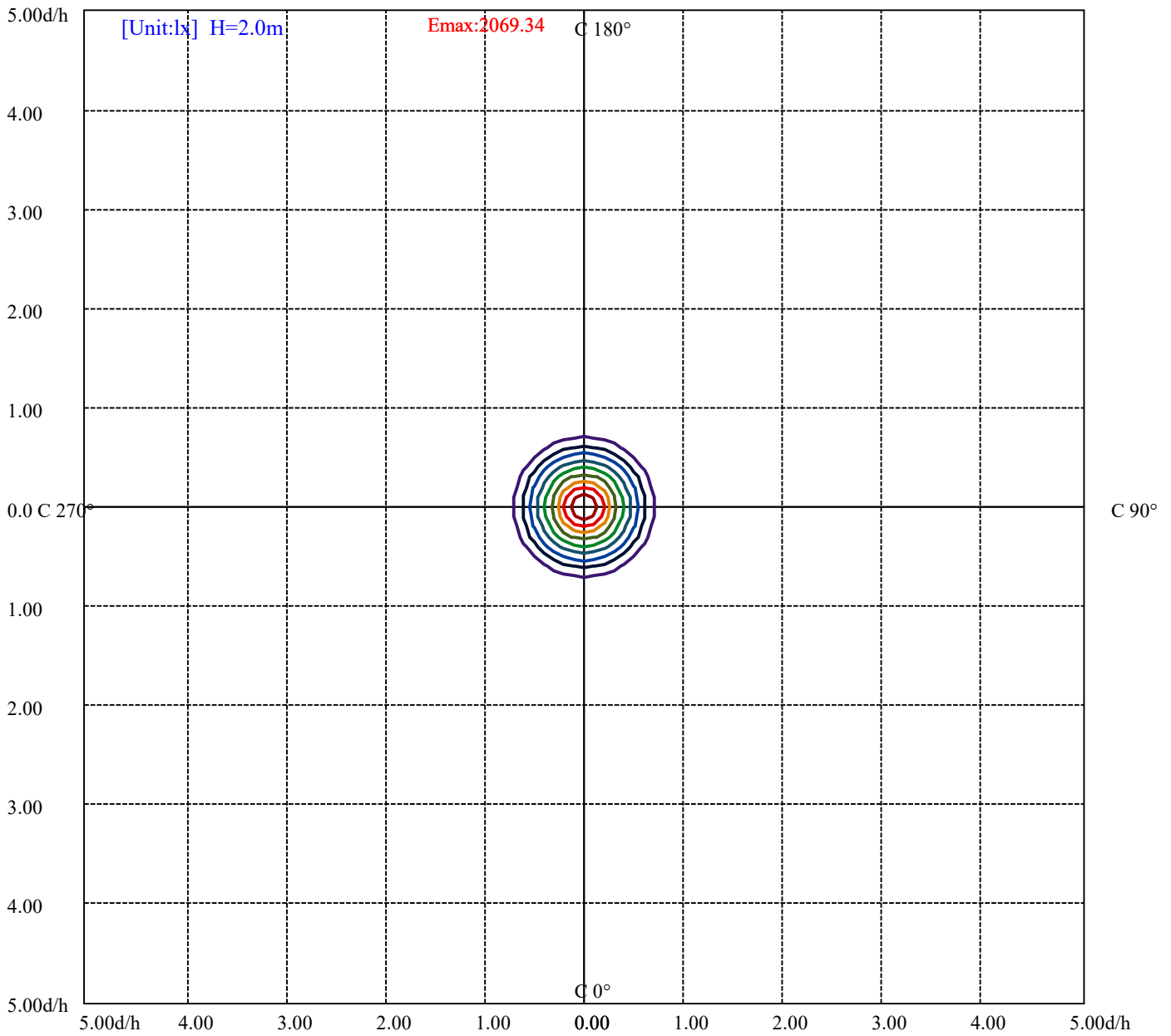
House

[Unit:cd]

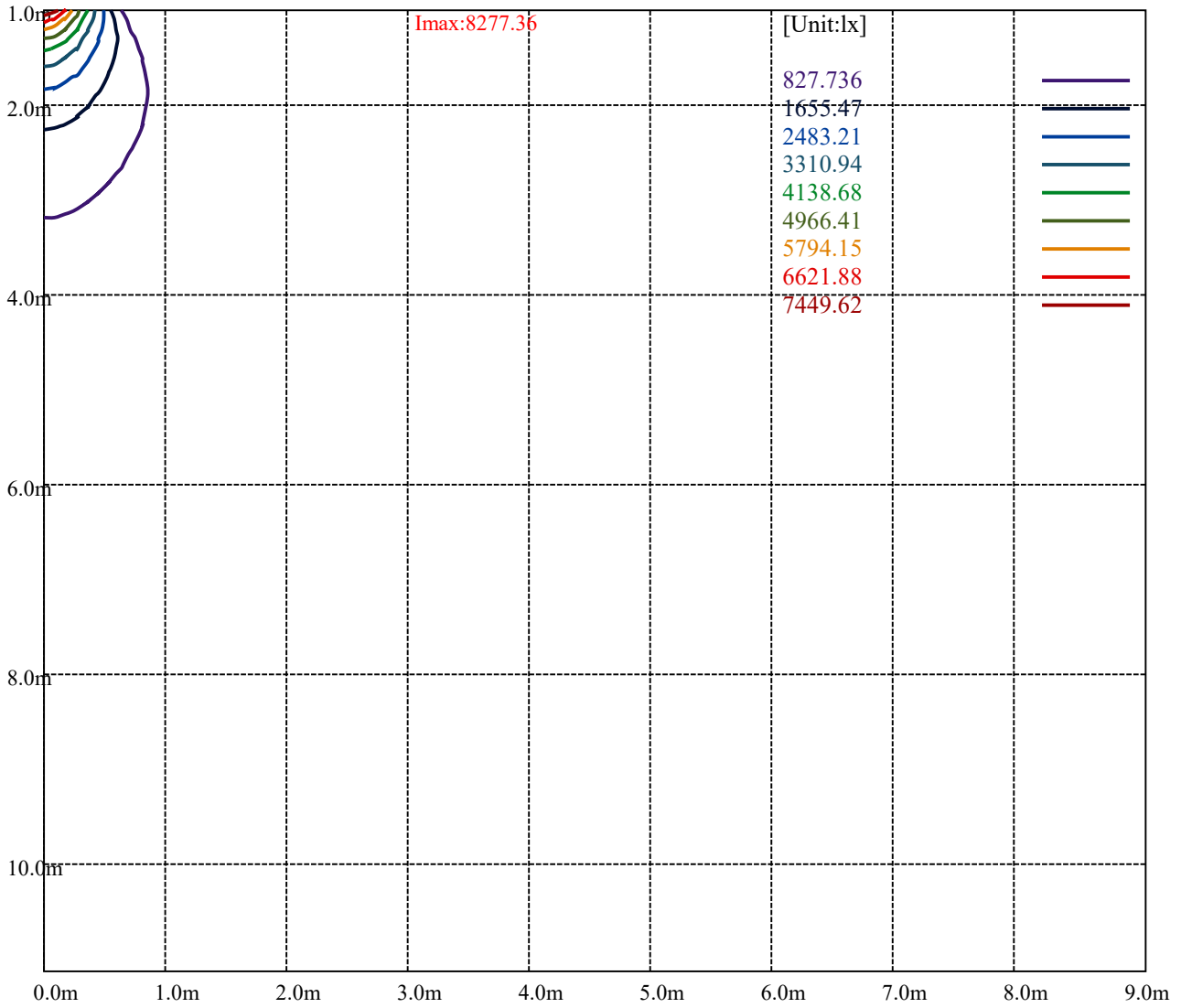
Road

Imax:8277.36

(10%Imax) 827.736	—
(20%Imax) 1655.47	—
(30%Imax) 2483.21	—
(40%Imax) 3310.94	—
(50%Imax) 4138.68	—
(60%Imax) 4966.41	—
(70%Imax) 5794.15	—
(80%Imax) 6621.88	—
(90%Imax) 7449.62	—



- (10%Emax) 206.9337 ———
- (20%Emax) 413.8675 ———
- (30%Emax) 620.8025 ———
- (40%Emax) 827.735 ———
- (50%Emax) 1034.67 ———
- (60%Emax) 1241.603 ———
- (70%Emax) 1448.537 ———
- (80%Emax) 1655.47 ———
- (90%Emax) 1862.405 ———



Luminance Table

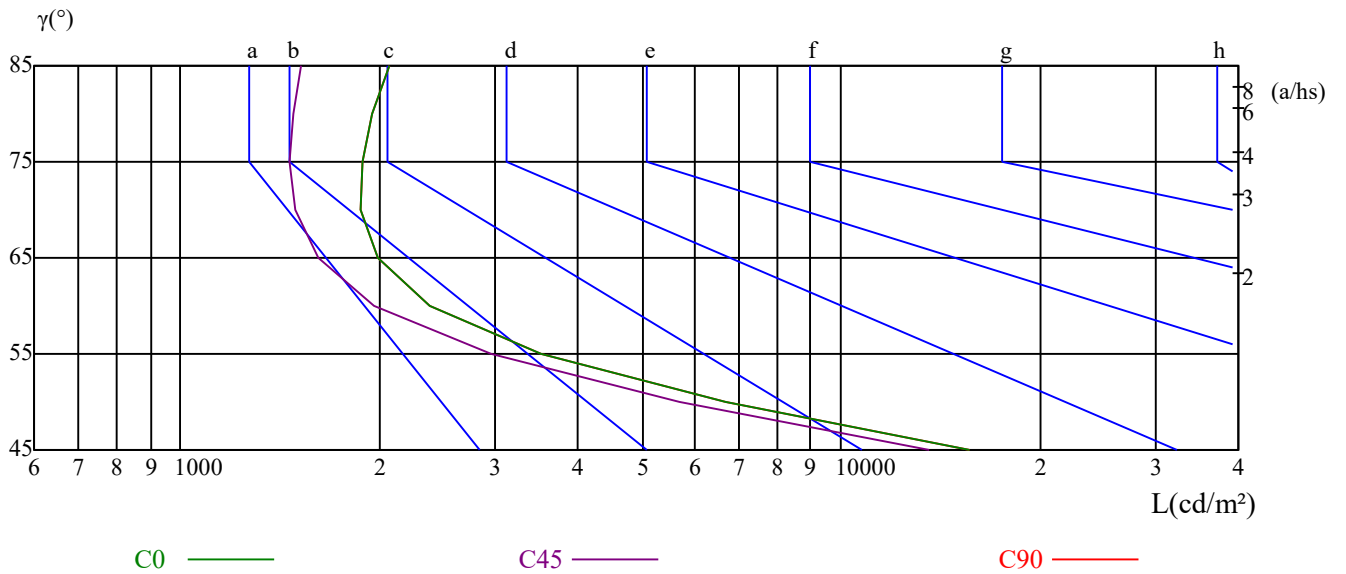
γ	45	50	55	60	65	70	75	80	85
C0	15691	6679	3514	2385	1995	1877	1886	1953	2078
C45	13582	5696	2950	1969	1618	1492	1466	1479	1526
C90	15691	6679	3514	2385	1995	1877	1886	1953	2078

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
4562	4562	4562	6108	6108	6108	16326	16326	16326

Glare Table

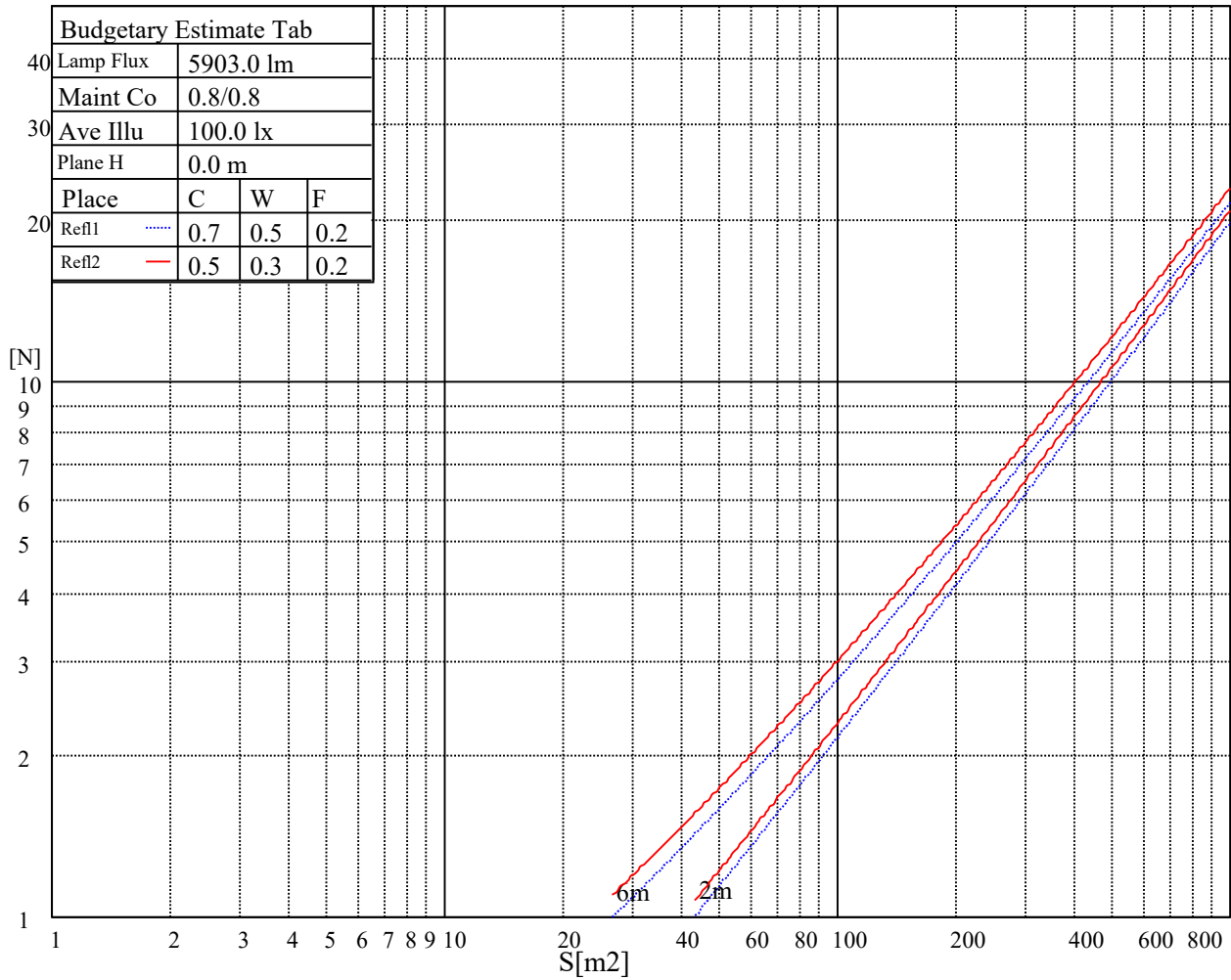
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	20.98	21.91	21.34	22.22	22.53	19.65	20.57	20.01	20.88	21.20
	3H	20.77	21.59	21.16	21.93	22.28	19.44	20.26	19.83	20.60	20.95
	4H	20.67	21.43	21.07	21.79	22.15	19.35	20.10	19.75	20.46	20.83
	6H	20.59	21.28	21.01	21.66	22.06	19.27	19.96	19.69	20.34	20.74
	8H	20.52	21.18	20.94	21.57	21.98	19.21	19.87	19.63	20.25	20.66
	12H	20.46	21.08	20.89	21.48	21.90	19.15	19.77	19.58	20.17	20.59
4H	2H	20.66	21.42	21.06	21.77	22.14	19.33	20.08	19.73	20.44	20.81
	3H	20.41	21.05	20.84	21.44	21.86	19.09	19.72	19.51	20.12	20.54
	4H	20.34	20.89	20.78	21.31	21.76	19.03	19.57	19.46	20.00	20.45
	6H	20.22	20.70	20.69	21.15	21.61	18.91	19.39	19.39	19.85	20.30
	8H	20.17	20.62	20.66	21.08	21.55	18.87	19.32	19.36	19.78	20.25
	12H	20.14	20.55	20.63	21.00	21.52	18.85	19.26	19.34	19.71	20.24
8H	4H	20.14	20.58	20.63	21.04	21.52	18.83	19.27	19.31	19.73	20.21
	6H	20.01	20.37	20.52	20.85	21.37	18.71	19.08	19.22	19.56	20.07
	8H	20.01	20.32	20.55	20.84	21.34	18.73	19.03	19.27	19.56	20.06
	12H	19.99	20.22	20.54	20.74	21.26	18.73	18.96	19.27	19.47	20.00
12H	4H	20.09	20.50	20.58	20.95	21.47	18.77	19.18	19.26	19.64	20.16
	6H	19.99	20.30	20.53	20.82	21.32	18.70	19.00	19.24	19.53	20.03
	8H	19.97	20.20	20.51	20.71	21.24	18.69	18.92	19.23	19.44	19.96
Variation with the observer position at spacings:											
S = 1.0H	6.0/-13.2					6.0/-13.2					
S = 1.5H	8.7/-12.2					8.7/-12.2					
S = 2.0H	10.7/-11.2					10.7/-11.2					
Standard tables:	BK0					BK0					
Uncorrected UGR	0.6					0.6					

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	1.15	1.15	1.15	1.12	1.12	1.12	1.07	1.07	1.07	1.02	1.02	1.02	0.98	0.98	0.98	0.96
1	1.07	1.05	1.03	1.05	1.03	1.01	1.01	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91
2	1.00	0.96	0.93	0.98	0.95	0.92	0.95	0.93	0.90	0.92	0.90	0.88	0.90	0.88	0.86	0.85
3	0.94	0.89	0.86	0.93	0.88	0.85	0.90	0.87	0.84	0.88	0.85	0.82	0.86	0.83	0.81	0.80
4	0.88	0.83	0.79	0.87	0.83	0.79	0.85	0.81	0.78	0.83	0.80	0.77	0.81	0.79	0.76	0.75
5	0.83	0.78	0.74	0.82	0.77	0.74	0.81	0.76	0.73	0.79	0.75	0.72	0.78	0.74	0.72	0.70
6	0.79	0.73	0.69	0.78	0.73	0.69	0.76	0.72	0.69	0.75	0.71	0.68	0.74	0.70	0.68	0.66
7	0.74	0.69	0.65	0.74	0.69	0.65	0.72	0.68	0.65	0.71	0.67	0.64	0.70	0.67	0.64	0.63
8	0.70	0.65	0.61	0.70	0.65	0.61	0.69	0.64	0.61	0.68	0.64	0.61	0.67	0.63	0.60	0.59
9	0.67	0.61	0.58	0.66	0.61	0.58	0.65	0.61	0.58	0.65	0.60	0.57	0.64	0.60	0.57	0.56
10	0.63	0.58	0.55	0.63	0.58	0.55	0.62	0.58	0.55	0.62	0.57	0.54	0.61	0.57	0.54	0.53

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	8284.68	8282.09	8261.42	8221.81	8148.61	8081.44	7971.21	7863.56	7751.60
45.0	8265.73	8286.40	8294.15	8269.17	8224.39	8167.56	8098.66	7960.87	7854.95
90.0	8290.70	8309.65	8276.93	8233.87	8146.03	8049.57	7903.17	7769.69	7631.90
135.0	8268.31	8302.76	8296.73	8278.65	8249.37	8182.20	8104.69	7954.84	7843.75
180.0	8284.68	8262.29	8218.37	8161.53	8071.10	7974.65	7865.28	7751.60	7581.95
225.0	8265.73	8220.95	8141.72	8058.18	7966.04	7834.28	7674.96	7529.42	7333.93
270.0	8290.70	8257.98	8210.61	8137.41	8035.79	7898.87	7764.52	7588.84	7428.66
315.0	8268.31	8196.84	8124.50	8015.13	7920.40	7772.27	7606.92	7445.02	7284.84
360.0	8284.68	8282.09	8261.42	8221.81	8148.61	8081.44	7971.21	7863.56	7751.60
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	7620.70	7443.30	7295.18	7140.16	6978.26	6763.83	6573.50	6385.77	6134.30
45.0	7697.35	7559.56	7415.74	7219.39	7061.79	6901.61	6726.79	6508.05	6303.09
90.0	7483.78	7265.90	7105.72	6945.54	6716.46	6538.20	6323.76	6150.66	5976.70
135.0	7719.74	7565.59	7379.57	7217.67	7060.93	6843.05	6671.68	6451.22	6269.51
180.0	7445.02	7294.31	7103.13	6941.23	6770.71	6551.11	6374.57	6179.94	5939.67
225.0	7177.19	7010.99	6806.88	6635.51	6464.99	6242.81	6050.76	5864.75	5683.04
270.0	7262.45	7087.63	6922.28	6703.54	6529.58	6358.21	6137.74	5976.70	5801.02
315.0	7130.69	6913.67	6738.85	6567.48	6389.21	6154.97	5960.34	5779.49	5559.89
360.0	7620.70	7443.30	7295.18	7140.16	6978.26	6763.83	6573.50	6385.77	6134.30
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	5943.98	5760.55	5534.92	5360.10	5142.22	4962.23	4751.24	4541.97	4294.81
45.0	6119.66	5931.06	5720.93	5554.72	5385.07	5174.94	4984.62	4782.24	4512.69
90.0	5801.02	5614.14	5476.36	5317.90	5171.50	4955.34	4761.57	4541.11	4337.87
135.0	6074.88	5898.34	5693.37	5524.58	5384.21	5222.31	5011.32	4828.74	4635.84
180.0	5762.27	5585.73	5366.12	5194.75	5008.73	4819.27	4614.31	4370.59	4179.41
225.0	5472.05	5316.17	5156.86	4984.62	4778.80	4590.20	4361.98	4186.30	4008.90
270.0	5618.45	5448.80	5311.87	5136.19	4990.65	4840.80	4605.70	4427.43	4244.86
315.0	5410.04	5246.42	5050.93	4893.33	4714.21	4473.94	4297.39	4114.82	3925.36
360.0	5943.98	5760.55	5534.92	5360.10	5142.22	4962.23	4751.24	4541.97	4294.81
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	4109.66	3908.14	3667.87	3331.15	3040.07	2732.62	2423.46	1672.16	1672.16
45.0	4319.79	4052.82	3825.47	3561.08	3274.31	2960.84	2562.97	2239.16	1920.53
90.0	4072.63	3827.19	3468.07	3144.27	2812.71	2102.24	1701.96	1701.96	1309.34
135.0	4430.88	4174.24	3961.53	3645.48	3363.01	3064.18	2660.28	2341.65	2023.01
180.0	3987.37	3704.90	3444.82	3079.68	2783.43	2486.32	2105.68	1795.65	1529.55
225.0	3724.71	3462.05	3160.63	2857.49	2472.55	1713.24	1713.24	1566.15	1223.74
270.0	4059.71	3769.49	3480.99	3167.52	2841.99	2427.76	2090.18	1750.01	1350.42
315.0	3622.23	3331.15	3015.95	2700.76	2055.73	1689.56	1689.56	1335.09	1071.57
360.0	4109.66	3908.14	3667.87	3331.15	3040.07	2732.62	2423.46	1672.16	1672.16
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	1459.53	1136.94	909.15	666.81	517.40	419.83	355.15	288.84	244.23
45.0	1615.67	1253.97	993.89	761.37	515.94	472.88	472.88	219.60	178.18
90.0	1026.01	777.30	565.97	348.95	229.51	160.70	127.11	100.67	75.61
135.0	1710.40	1346.12	1073.12	830.27	616.69	438.43	438.43	232.95	189.63
180.0	1283.25	969.78	768.26	605.50	486.66	442.73	442.73	285.05	244.75
225.0	975.29	756.38	571.57	405.79	327.68	259.99	215.38	178.35	141.49
270.0	1069.68	815.63	556.41	466.85	466.85	179.38	140.80	112.13	89.13
315.0	831.65	580.01	424.13	299.95	243.80	197.81	161.30	131.07	102.31
360.0	1459.53	1136.94	909.15	666.81	517.40	419.83	355.15	288.84	244.23

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	206.17	174.48	141.84	120.57	102.91	87.93	72.34	62.35	52.10
45.0	138.82	113.76	93.87	78.63	63.12	53.65	46.16	39.79	33.41
90.0	60.46	47.71	40.22	34.36	29.19	25.84	23.25	20.84	19.38
135.0	147.61	120.31	93.70	77.94	65.19	53.14	45.56	39.36	33.07
180.0	201.69	173.53	144.94	125.73	107.73	90.17	77.94	67.78	58.99
225.0	118.84	100.07	84.48	68.72	58.73	50.21	43.32	36.51	32.12
270.0	67.52	55.89	46.85	39.79	32.90	28.68	25.58	22.48	20.67
315.0	85.00	71.05	59.59	48.57	41.60	36.00	30.40	27.04	23.77
360.0	206.17	174.48	141.84	120.57	102.91	87.93	72.34	62.35	52.10
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	45.30	39.70	33.93	30.14	26.96	24.29	21.62	19.89	18.43
45.0	29.54	26.44	23.77	21.19	19.72	17.91	16.88	16.02	15.16
90.0	18.17	17.22	16.28	15.67	15.16	14.73	14.30	14.04	13.69
135.0	29.28	26.35	23.77	21.62	19.63	18.26	17.22	16.19	15.59
180.0	49.95	44.09	39.01	34.71	30.23	27.21	24.72	22.05	20.32
225.0	28.51	24.97	22.74	20.84	18.95	17.74	16.45	15.59	14.98
270.0	18.69	17.65	16.79	16.02	15.33	14.81	14.47	14.12	13.69
315.0	21.62	19.89	18.26	17.22	16.36	15.67	14.90	14.38	13.95
360.0	45.30	39.70	33.93	30.14	26.96	24.29	21.62	19.89	18.43
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	17.22	15.93	15.16	14.47	13.78	13.26	12.92	12.40	12.14
45.0	14.55	14.12	13.69	13.26	12.92	12.75	12.49	12.14	11.97
90.0	13.43	13.26	12.92	12.83	12.66	12.49	12.31	12.14	12.06
135.0	14.98	14.38	14.04	13.61	13.35	13.09	12.83	12.57	12.40
180.0	18.77	17.31	16.28	15.16	14.47	13.87	13.35	12.92	12.49
225.0	14.30	13.78	13.35	13.00	12.75	12.40	12.14	11.88	11.71
270.0	13.52	13.26	13.09	12.83	12.66	12.49	12.31	12.23	11.97
315.0	13.61	13.18	12.92	12.75	12.49	12.31	12.14	11.97	11.80
360.0	17.22	15.93	15.16	14.47	13.78	13.26	12.92	12.40	12.14
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	11.88	11.71	11.45	11.28	11.11	10.94	10.85	10.68	10.51
45.0	11.88	11.71	11.54	11.37	11.28	11.11	11.02	10.94	10.76
90.0	11.97	11.80	11.63	11.54	11.37	11.28	11.20	11.11	11.02
135.0	12.23	12.14	11.97	11.80	11.71	11.54	11.45	11.37	11.20
180.0	12.14	11.88	11.54	11.37	11.20	10.94	10.76	10.68	10.51
225.0	11.63	11.37	11.28	11.11	11.02	10.85	10.76	10.68	10.51
270.0	11.88	11.80	11.63	11.54	11.37	11.28	11.20	11.11	10.94
315.0	11.71	11.54	11.45	11.37	11.28	11.02	11.02	10.94	10.85
360.0	11.88	11.71	11.45	11.28	11.11	10.94	10.85	10.68	10.51
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	10.42	10.33	10.25	10.08	10.08	9.99	9.82	9.73	9.65
45.0	10.68	10.59	10.42	10.33	10.25	10.16	10.08	9.99	9.82
90.0	10.85	10.76	10.68	10.59	10.42	10.42	10.25	10.16	10.16
135.0	11.02	11.02	10.85	10.76	10.59	10.51	10.42	10.33	10.25
180.0	10.42	10.33	10.08	10.08	9.99	9.82	9.82	9.65	9.65
225.0	10.42	10.33	10.25	10.16	10.08	9.99	9.90	9.82	9.82
270.0	10.85	10.76	10.68	10.59	10.51	10.33	10.33	10.16	10.16
315.0	10.68	10.59	10.51	10.42	10.33	10.25	10.16	10.16	10.16
360.0	10.42	10.33	10.25	10.08	10.08	9.99	9.82	9.73	9.65

Intensity data(cd)

C/ γ (°)	90.0
0.0	9.73
45.0	9.82
90.0	10.16
135.0	10.16
180.0	9.65
225.0	9.82
270.0	10.16
315.0	10.16
360.0	9.73