



NATA LIGHTING CO.,LTD  
www.nata.cn  
Email:info@nata.cn  
Tel:+86 0750-377 0000(10 lines) Fax:+86 0750-377 1111  
Address:380JinOu Road,Gaoxin Zone,Jiang Men City,Guangdong,China

---

## Nata

---

Client: NT

LumCAT: 3-3013-LM

Luminaire: BJB 47.360.2050

Report No: 20251107-B004

Ballast type: DC

Test No: 20251117-C004

Voltage(V): 35.510

LampCAT: Bridgelux V18 LES18

Current(A): 0.898

Lamp flux(lm): 5130.8

Power (W): 31.880

Number of Lamps: 1

PF: 0.000

Length(mm): 85

Width(mm): 85

Phm Type: C

Height(mm): 51

---

## Photometric Results

---

Lumens(lm): 4934.89, Efficiency(%): 96.18% , Luminous Efficacy(lm/W): 154.80

Central intensity(cd): 15437.450, Maximum intensity(cd): 15437.450

Angle of maximum intensity: C=0.0  $\gamma$ =0.0

Beam Angle(50%Imax): [C0/180]Total=29.4

[C90/270]Total=29.4

Field angle(10%Imax): [C0/180]Total=59.6

[C90/270]Total=59.6

Maximum s/h(1/2): C0\_180=0.49 C90\_270=0.49

Maximum s/h(1/4): C0\_180=0.48 C90\_270=0.48

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 96.18%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 99.321%

---

Equipment: GMS1980  
Temperature(°C): 25.0

Date: 2025/11/17  
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	15437.455	0.000	0	0.00%	0.00%
1.0	15397.303	14.754	14.754	0.29%	0.30%
2.0	15287.717	44.042	58.796	0.86%	1.19%
3.0	15112.789	72.708	131.504	1.42%	2.66%
4.0	14869.720	100.361	231.865	1.96%	4.70%
5.0	14550.436	126.564	358.429	2.47%	7.26%
6.0	14149.985	150.828	509.257	2.94%	10.32%
7.0	13654.912	172.585	681.842	3.36%	13.82%
8.0	13075.658	191.306	873.147	3.73%	17.69%
9.0	12425.895	206.676	1079.824	4.03%	21.88%
10.0	11693.781	218.274	1298.098	4.25%	26.30%
11.0	10908.381	225.842	1523.94	4.40%	30.88%
12.0	10040.846	229.005	1752.945	4.46%	35.52%
13.0	9167.820	227.958	1980.903	4.44%	40.14%
14.0	8265.407	223.144	2204.047	4.35%	44.66%
15.0	7427.045	215.433	2419.48	4.20%	49.03%
16.0	6529.368	204.500	2623.98	3.99%	53.17%
17.0	5802.959	192.047	2816.028	3.74%	57.06%
18.0	5074.613	179.348	2995.375	3.50%	60.70%
19.0	4474.906	166.142	3161.518	3.24%	64.06%
20.0	3934.943	153.924	3315.441	3.00%	67.18%
21.0	3488.958	142.554	3457.995	2.78%	70.07%
22.0	3114.558	132.700	3590.695	2.59%	72.76%
23.0	2798.396	124.070	3714.765	2.42%	75.28%
24.0	2538.641	116.687	3831.452	2.27%	77.64%
25.0	2321.408	110.507	3941.959	2.15%	79.88%
26.0	2091.364	104.164	4046.123	2.03%	81.99%
27.0	1956.319	99.027	4145.15	1.93%	84.00%
28.0	1795.612	94.991	4240.141	1.85%	85.92%
29.0	1672.570	90.737	4330.879	1.77%	87.76%
30.0	1518.580	86.160	4417.039	1.68%	89.51%
31.0	1356.096	79.998	4497.037	1.56%	91.13%
32.0	1184.053	72.772	4569.809	1.42%	92.60%
33.0	1020.837	64.957	4634.766	1.27%	93.92%
34.0	868.741	57.184	4691.95	1.11%	95.08%
35.0	695.815	48.589	4740.54	0.95%	96.06%
36.0	550.953	39.697	4780.237	0.77%	96.87%
37.0	421.991	31.732	4811.969	0.62%	97.51%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	305.074	24.268	4836.237	0.47%	98.00%
39.0	225.157	18.098	4854.336	0.35%	98.37%
40.0	111.459	11.740	4866.076	0.23%	98.61%
41.0	55.417	5.942	4872.018	0.12%	98.73%
42.0	38.420	3.409	4875.427	0.07%	98.80%
43.0	31.455	2.588	4878.016	0.05%	98.85%
44.0	26.707	2.195	4880.211	0.04%	98.89%
45.0	22.994	1.910	4882.121	0.04%	98.93%
46.0	20.668	1.708	4883.828	0.03%	98.97%
47.0	19.054	1.580	4885.408	0.03%	99.00%
48.0	17.730	1.487	4886.895	0.03%	99.03%
49.0	16.470	1.404	4888.3	0.03%	99.06%
50.0	15.523	1.334	4889.634	0.03%	99.08%
51.0	14.780	1.282	4890.916	0.02%	99.11%
52.0	14.134	1.241	4892.156	0.02%	99.13%
53.0	13.661	1.209	4893.365	0.02%	99.16%
54.0	13.262	1.187	4894.552	0.02%	99.18%
55.0	12.907	1.168	4895.72	0.02%	99.21%
56.0	12.606	1.153	4896.873	0.02%	99.23%
57.0	12.347	1.141	4898.014	0.02%	99.25%
58.0	12.121	1.132	4899.145	0.02%	99.28%
59.0	11.938	1.125	4900.27	0.02%	99.30%
60.0	11.766	1.120	4901.39	0.02%	99.32%
61.0	11.626	1.116	4902.506	0.02%	99.34%
62.0	11.475	1.113	4903.62	0.02%	99.37%
63.0	11.357	1.110	4904.73	0.02%	99.39%
64.0	11.271	1.110	4905.84	0.02%	99.41%
65.0	11.174	1.111	4906.951	0.02%	99.43%
66.0	11.066	1.110	4908.061	0.02%	99.46%
67.0	11.023	1.111	4909.171	0.02%	99.48%
68.0	10.926	1.112	4910.283	0.02%	99.50%
69.0	10.883	1.113	4911.396	0.02%	99.52%
70.0	10.797	1.113	4912.509	0.02%	99.55%
71.0	10.722	1.112	4913.622	0.02%	99.57%
72.0	10.679	1.113	4914.734	0.02%	99.59%
73.0	10.614	1.113	4915.848	0.02%	99.61%
74.0	10.571	1.114	4916.962	0.02%	99.64%
75.0	10.528	1.115	4918.076	0.02%	99.66%

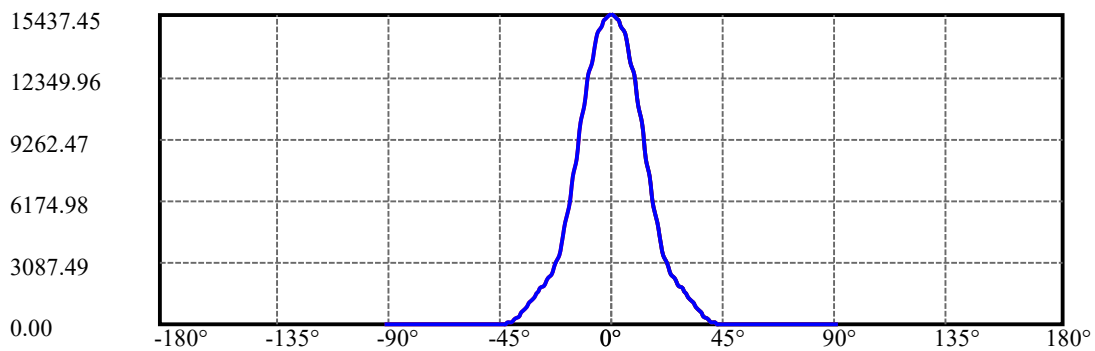
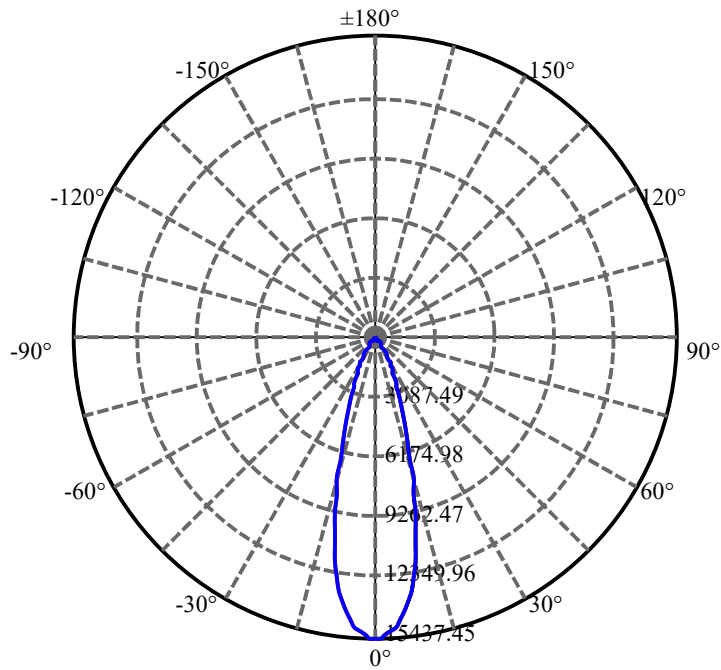
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	10.496	1.116	4919.192	0.02%	99.68%
77.0	10.463	1.117	4920.31	0.02%	99.70%
78.0	10.431	1.118	4921.428	0.02%	99.73%
79.0	10.388	1.119	4922.547	0.02%	99.75%
80.0	10.377	1.120	4923.666	0.02%	99.77%
81.0	10.367	1.122	4924.788	0.02%	99.80%
82.0	10.334	1.123	4925.911	0.02%	99.82%
83.0	10.313	1.122	4927.033	0.02%	99.84%
84.0	10.313	1.124	4928.157	0.02%	99.86%
85.0	10.291	1.125	4929.281	0.02%	99.89%
86.0	10.291	1.125	4930.406	0.02%	99.91%
87.0	10.248	1.124	4931.531	0.02%	99.93%
88.0	10.237	1.122	4932.653	0.02%	99.95%
89.0	10.184	1.119	4933.772	0.02%	99.98%
90.0	10.194	1.117	4934.889	0.02%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	4417.04	86.09%	89.51%
0-40	4866.08	94.84%	98.61%
0-60	4901.39	95.53%	99.32%
0-90	4933.77	96.16%	99.98%
0-120	4933.77	96.16%	99.98%
0-180	4934.89	96.18%	100.00%
60-90	32.38	0.63%	0.66%
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%
0-25.06	3947.91	76.95%	80.00%

ZONAL LUMEN SUMMARY

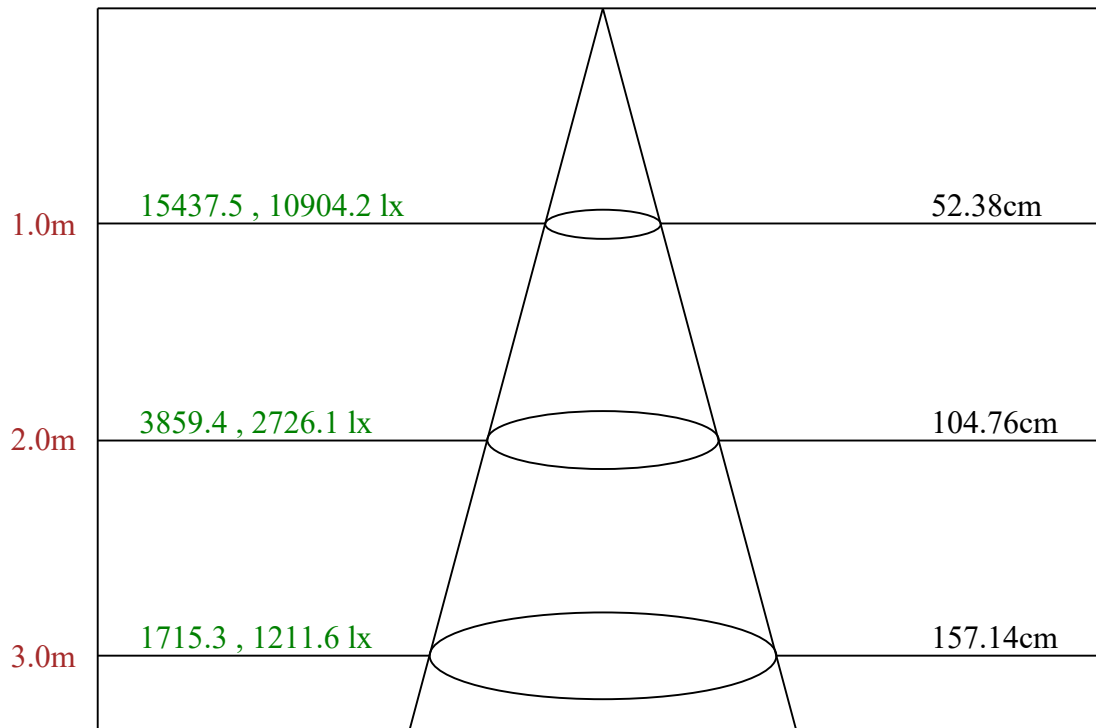
0-10	1298.10
10-20	2017.34
20-30	1101.60
30-40	449.04
40-50	23.56
50-60	11.76
60-70	11.12
70-80	11.16
80-90	10.11
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00



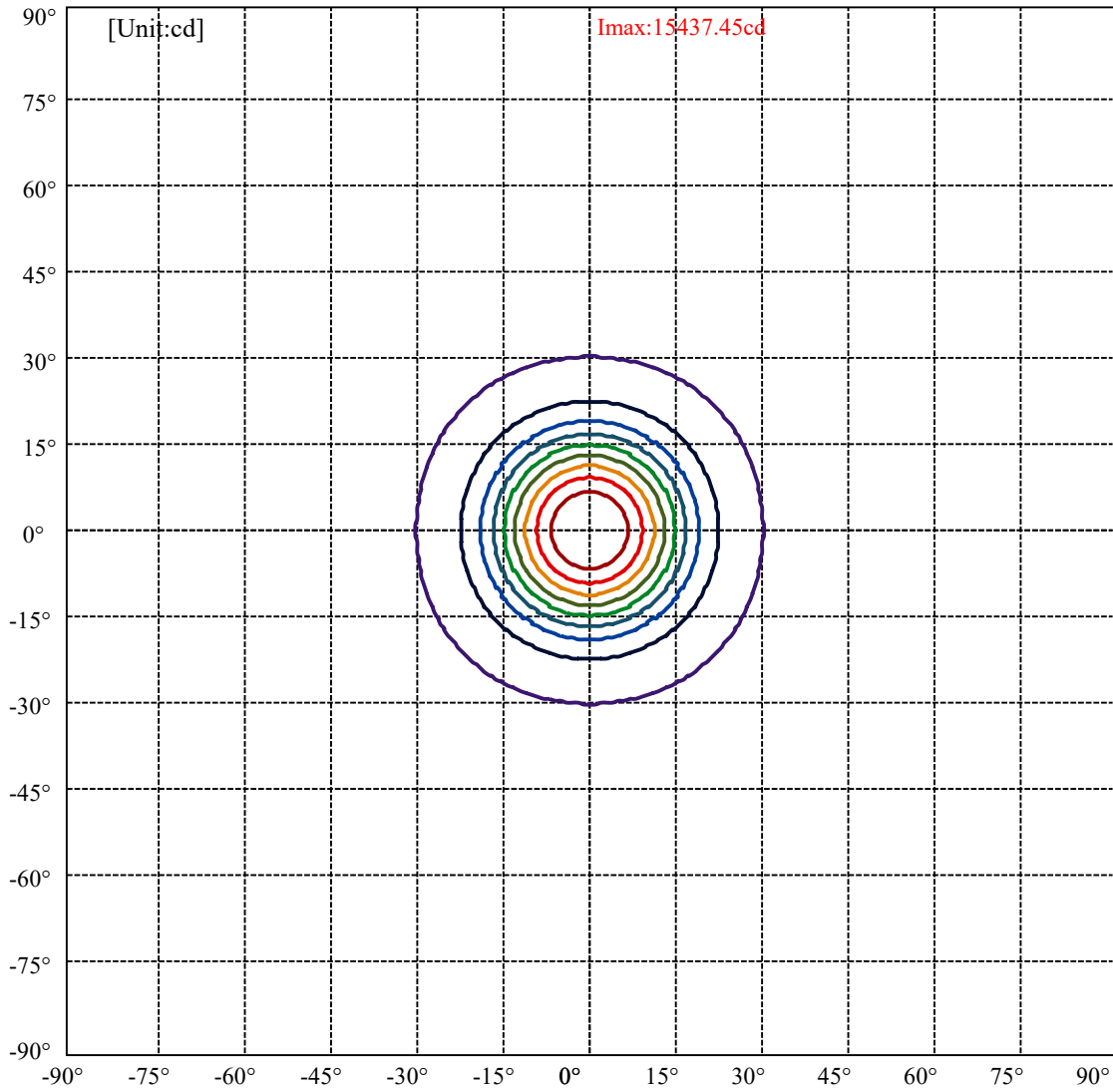
C0(Max): ———  
C0/C180: ———  
C90/C270: ———

Field angle(10%Imax):C0/180Left:29.8 Right:29.8  
:C90/270Left:29.8 Right:29.8

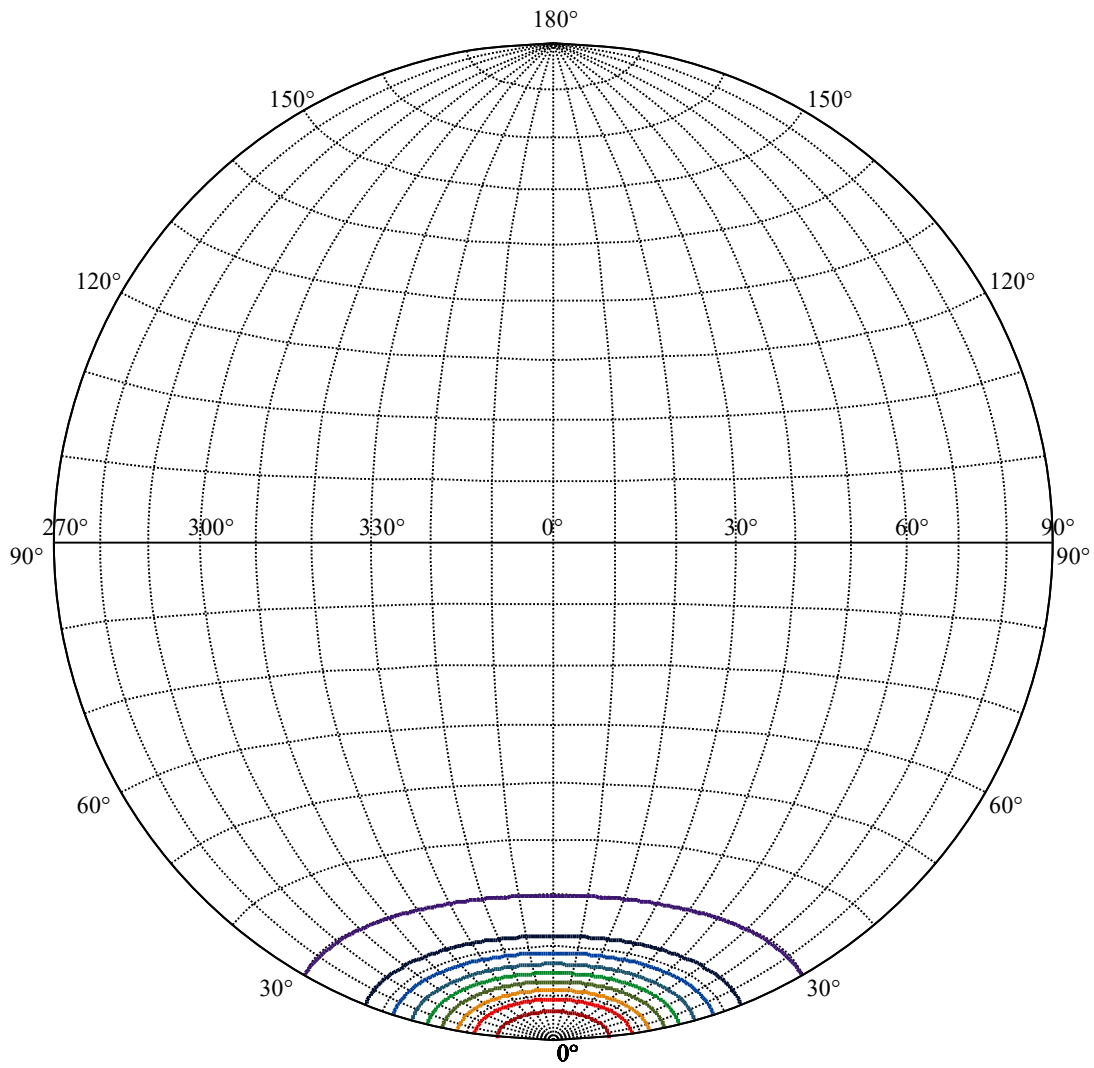
Beam Angle(50%Imax):C0/180Left:14.7 Right:14.7  
:C90/270Left:14.7 Right:14.7



Max , Ave      Beam angle of C0 plane 29.35



(10%Imax) 1543.75	—
(20%Imax) 3087.49	—
(30%Imax) 4631.24	—
(40%Imax) 6174.98	—
(50%Imax) 7718.73	—
(60%Imax) 9262.47	—
(70%Imax) 10806.2	—
(80%Imax) 12350	—
(90%Imax) 13893.7	—



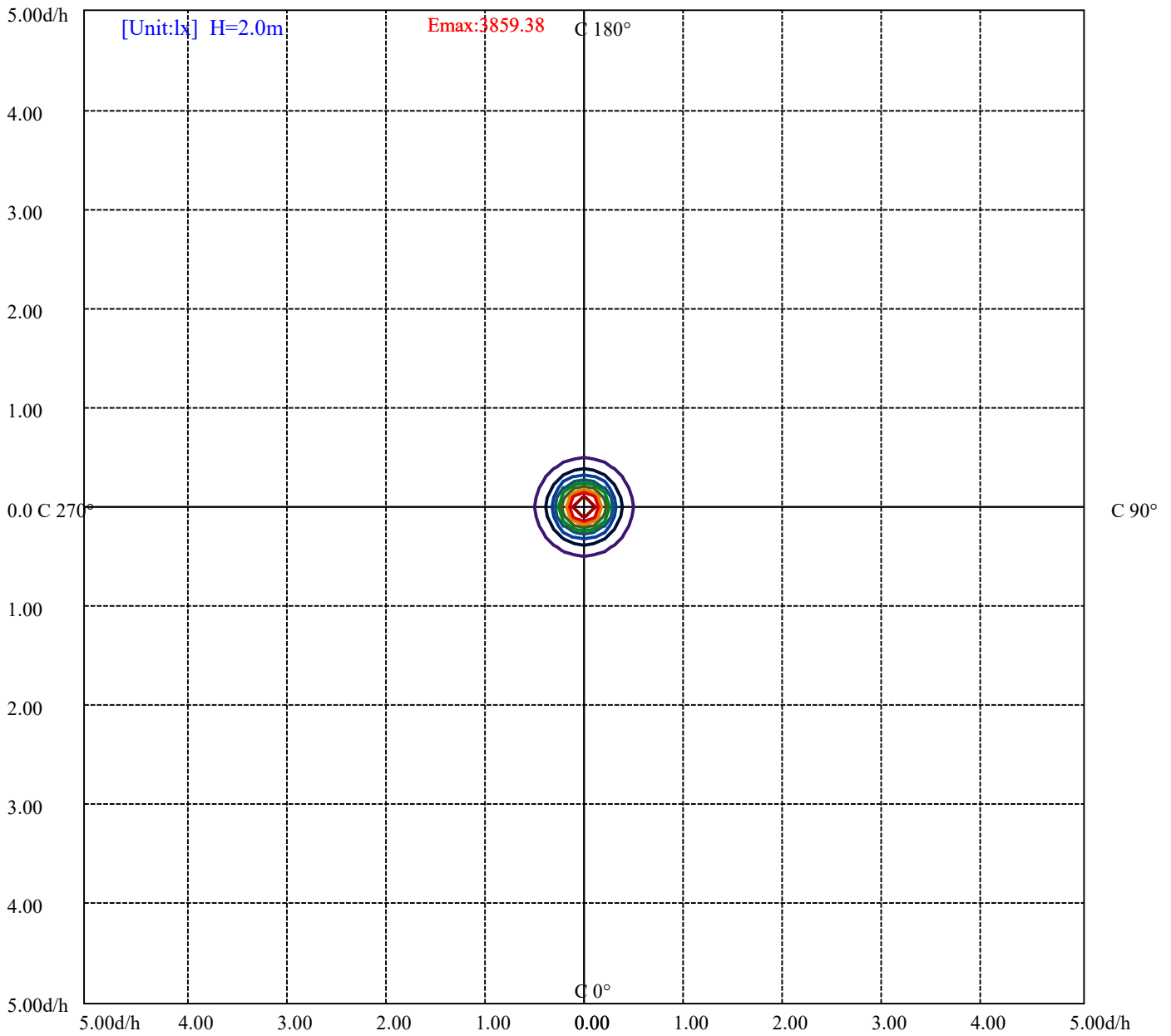
House

[Unit:cd]

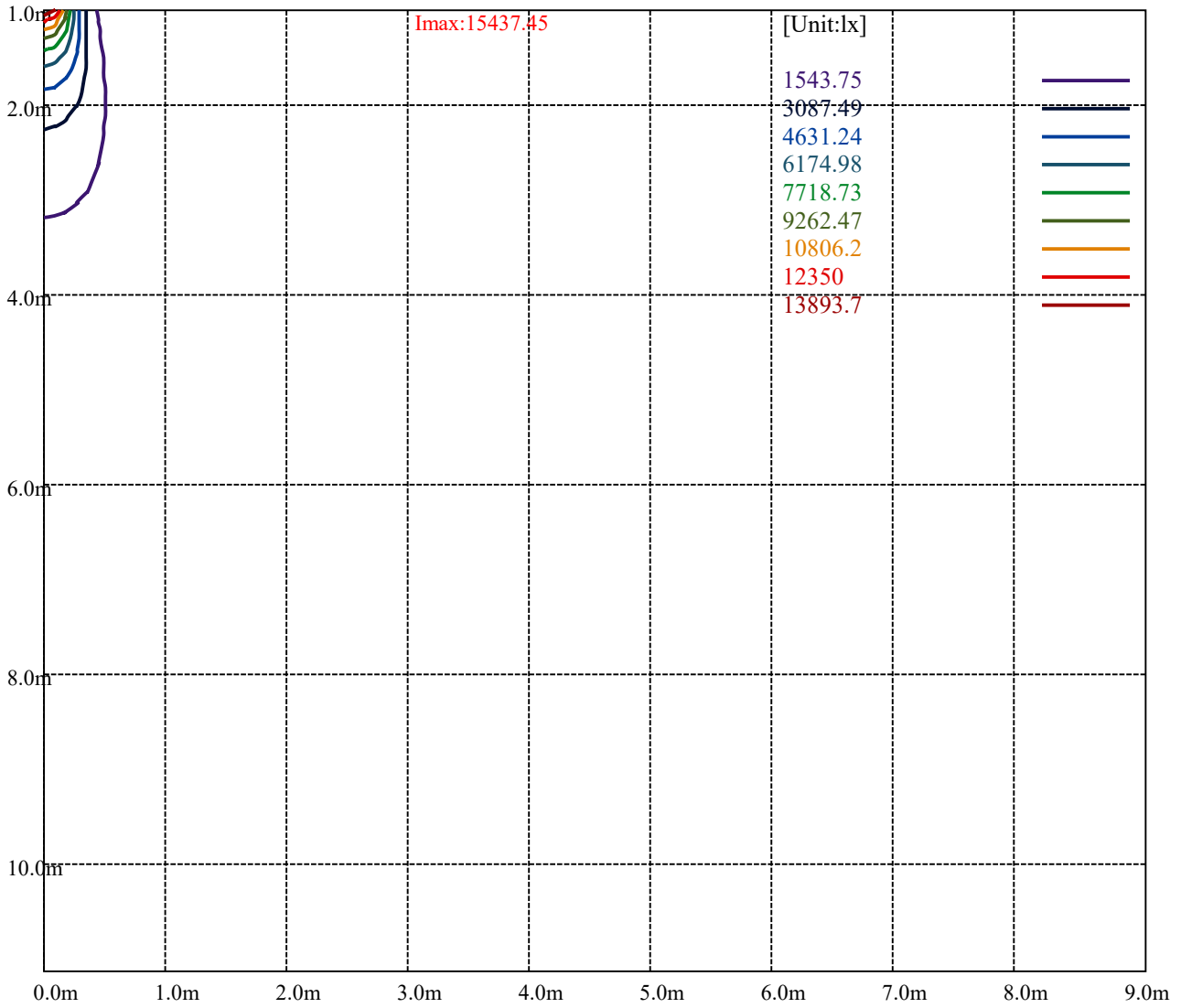
Road

**I<sub>max</sub>:15437.45**

(10%I <sub>max</sub> ) 1543.75	—
(20%I <sub>max</sub> ) 3087.49	—
(30%I <sub>max</sub> ) 4631.24	—
(40%I <sub>max</sub> ) 6174.98	—
(50%I <sub>max</sub> ) 7718.73	—
(60%I <sub>max</sub> ) 9262.47	—
(70%I <sub>max</sub> ) 10806.2	—
(80%I <sub>max</sub> ) 12350	—
(90%I <sub>max</sub> ) 13893.7	—



(10%Emax) 385.935	—
(20%Emax) 771.8725	—
(30%Emax) 1157.807	—
(40%Emax) 1543.745	—
(50%Emax) 1929.68	—
(60%Emax) 2315.617	—
(70%Emax) 2701.55	—
(80%Emax) 3087.5	—
(90%Emax) 3473.425	—



Luminance Table

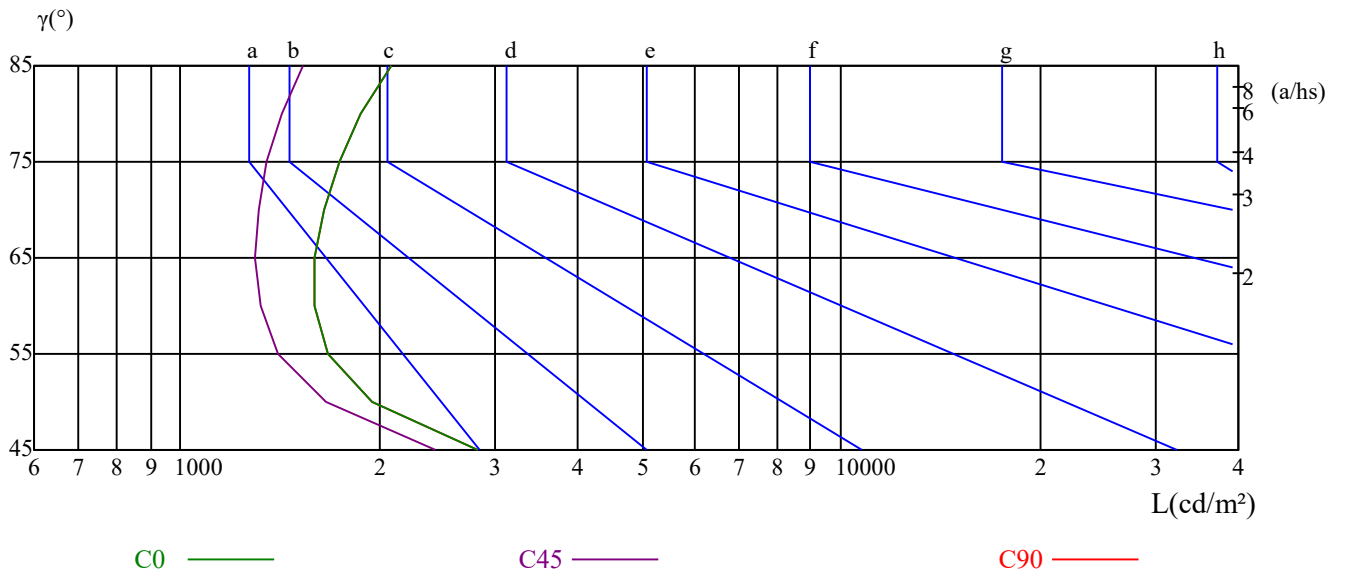
$\gamma$	45	50	55	60	65	70	75	80	85
C0	2813	1949	1677	1597	1600	1650	1738	1879	2080
C45	2435	1662	1408	1319	1298	1312	1351	1423	1528
C90	2813	1949	1677	1597	1600	1650	1738	1879	2080

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3659	3659	3659	5630	5630	5630	16343	16343	16343

Glare Table

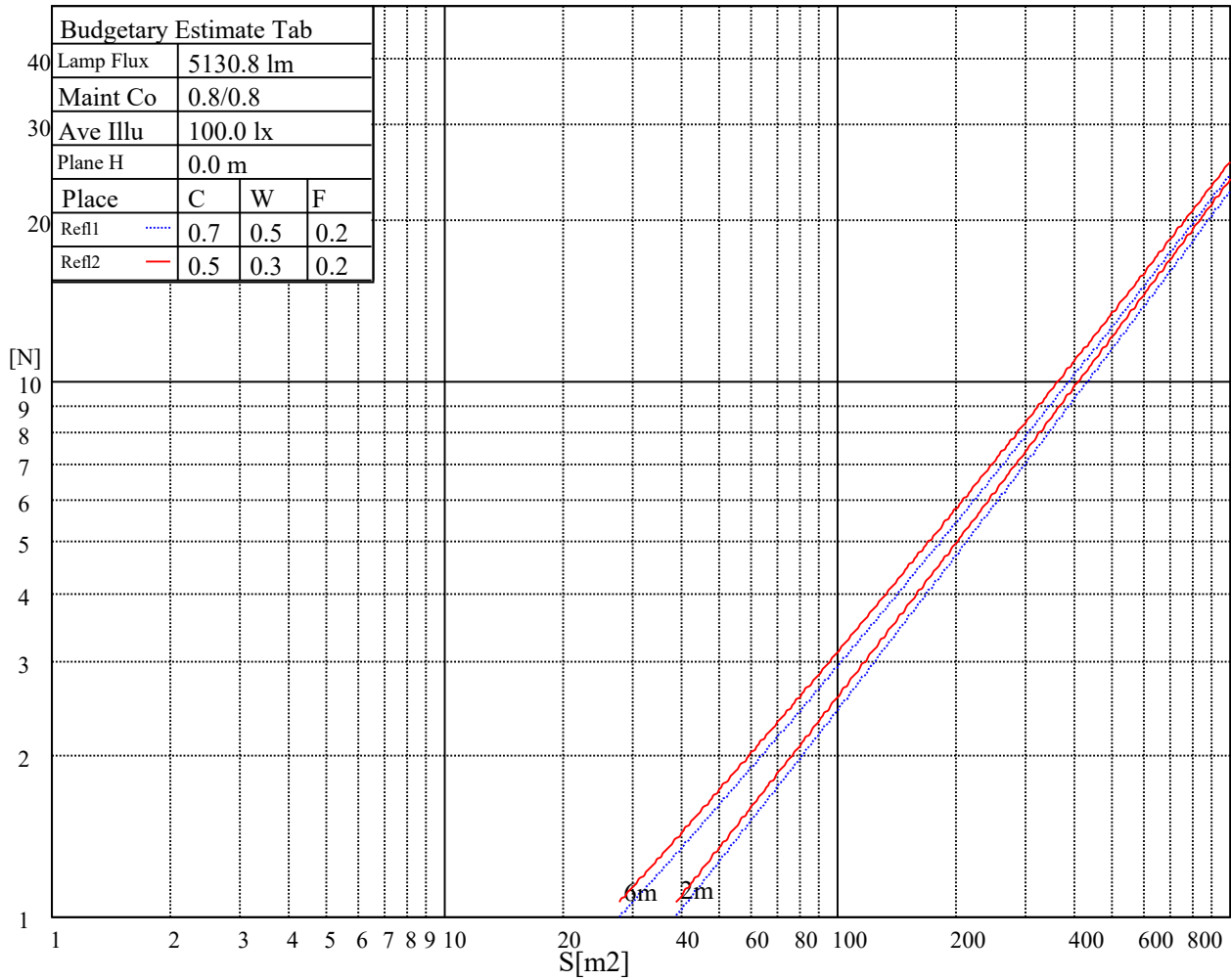
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	15.52	16.41	15.88	16.72	17.04	15.61	16.51	15.98	16.82	17.14
	3H	15.34	16.14	15.73	16.47	16.82	15.43	16.23	15.82	16.57	16.91
	4H	15.27	16.01	15.67	16.36	16.73	15.36	16.10	15.76	16.45	16.82
	6H	15.24	15.91	15.66	16.29	16.69	15.33	16.00	15.75	16.38	16.78
	8H	15.21	15.85	15.63	16.24	16.65	15.29	15.93	15.72	16.32	16.73
	12H	15.20	15.80	15.63	16.20	16.62	15.28	15.88	15.70	16.28	16.70
4H	2H	15.19	15.93	15.60	16.29	16.66	15.29	16.03	15.69	16.38	16.75
	3H	15.00	15.62	15.42	16.01	16.43	15.09	15.71	15.52	16.10	16.52
	4H	14.98	15.51	15.42	15.94	16.39	15.07	15.60	15.51	16.03	16.48
	6H	14.95	15.42	15.42	15.87	16.32	15.03	15.50	15.50	15.95	16.41
	8H	14.97	15.40	15.46	15.86	16.34	15.05	15.48	15.53	15.94	16.42
	12H	15.02	15.42	15.52	15.88	16.40	15.09	15.49	15.59	15.95	16.47
8H	4H	14.81	15.24	15.29	15.70	16.18	14.89	15.33	15.38	15.79	16.26
	6H	14.81	15.16	15.32	15.64	16.16	14.89	15.24	15.39	15.72	16.23
	8H	14.92	15.21	15.46	15.74	16.23	14.99	15.28	15.53	15.81	16.31
	12H	15.04	15.26	15.58	15.78	16.30	15.10	15.32	15.65	15.84	16.36
12H	4H	14.76	15.16	15.25	15.61	16.14	14.85	15.25	15.34	15.70	16.22
	6H	14.82	15.11	15.35	15.63	16.13	14.89	15.19	15.43	15.71	16.21
	8H	14.91	15.13	15.46	15.65	16.17	14.98	15.20	15.53	15.72	16.24
Variation with the observer position at spacings:											
S = 1.0H	6.2/-10.2					6.2/-10.2					
S = 1.5H	8.8/-8.3					8.8/-8.3					
S = 2.0H	10.6/-7.0					10.6/-7.0					
Standard tables:	BK1					BK1					
Uncorrected UGR	-3.7					-3.7					

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	1.08	1.06	1.04	1.06	1.04	1.02	1.02	1.01	0.99	0.98	0.97	0.96	0.95	0.94	0.94	0.92
2	1.02	0.99	0.96	1.01	0.98	0.95	0.97	0.95	0.93	0.95	0.93	0.91	0.92	0.91	0.89	0.88
3	0.97	0.93	0.90	0.96	0.92	0.89	0.93	0.90	0.88	0.91	0.89	0.87	0.89	0.87	0.85	0.84
4	0.93	0.88	0.85	0.92	0.88	0.85	0.90	0.86	0.84	0.88	0.85	0.83	0.86	0.84	0.82	0.81
5	0.89	0.84	0.81	0.88	0.84	0.80	0.86	0.83	0.80	0.85	0.82	0.79	0.83	0.81	0.78	0.77
6	0.85	0.80	0.77	0.84	0.80	0.77	0.83	0.79	0.76	0.82	0.78	0.76	0.80	0.78	0.75	0.74
7	0.81	0.77	0.74	0.81	0.77	0.74	0.80	0.76	0.73	0.79	0.75	0.73	0.78	0.75	0.73	0.71
8	0.78	0.74	0.71	0.78	0.74	0.71	0.77	0.73	0.70	0.76	0.73	0.70	0.75	0.72	0.70	0.69
9	0.76	0.71	0.68	0.75	0.71	0.68	0.74	0.70	0.68	0.74	0.70	0.68	0.73	0.70	0.67	0.66
10	0.73	0.69	0.66	0.73	0.68	0.66	0.72	0.68	0.65	0.71	0.68	0.65	0.71	0.67	0.65	0.64

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	15458.34	15444.56	15369.64	15231.85	15031.19	14690.16	14345.69	13934.04	13428.53
45.0	15434.23	15469.53	15451.45	15347.25	15198.26	14973.49	14697.05	14243.21	13816.06
90.0	15479.01	15443.70	15323.13	15154.34	14944.21	14668.63	14233.74	13812.62	13190.84
135.0	15378.25	15444.56	15447.14	15377.39	15199.12	14995.88	14726.33	14401.67	13892.71
180.0	15458.34	15393.75	15234.43	15022.58	14767.67	14345.69	13923.71	13415.61	12674.13
225.0	15434.23	15284.38	15105.25	14860.68	14461.09	14070.97	13588.71	12877.37	12220.29
270.0	15479.01	15443.70	15355.86	15155.20	14942.49	14652.27	14299.19	13760.95	13249.40
315.0	15378.25	15254.24	15014.83	14753.03	14413.72	14006.38	13385.47	12793.84	12133.31
360.0	15458.34	15444.56	15369.64	15231.85	15031.19	14690.16	14345.69	13934.04	13428.53
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	12685.33	11973.99	11198.06	10338.60	9216.48	8294.15	7154.80	6295.34	5492.72
45.0	13306.24	12727.52	11903.37	11173.09	10385.97	9340.49	8492.22	7426.08	6609.67
90.0	12616.43	11983.46	11111.08	10360.13	9596.26	8625.71	7863.56	7122.94	6418.49
135.0	13407.86	12857.56	12241.82	11377.19	10625.37	9828.78	9014.10	7980.68	7172.03
180.0	11975.71	11200.65	10363.57	9252.65	8341.51	7441.58	6580.39	5584.86	4863.19
225.0	11499.48	10535.81	9712.52	8870.28	8028.04	7007.54	6232.47	5513.39	4864.91
270.0	12513.95	11844.81	11131.75	10186.17	9407.66	8638.62	7883.36	6976.54	6278.12
315.0	11402.16	10426.44	9604.87	8768.66	7741.27	6946.40	6195.44	5335.12	4724.54
360.0	12685.33	11973.99	11198.06	10338.60	9216.48	8294.15	7154.80	6295.34	5492.72
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	4636.70	4052.82	3557.64	3154.60	2748.12	2498.38	2297.73	2128.07	1966.17
45.0	5857.00	5174.94	4435.18	3927.95	3488.74	3111.54	2743.82	2502.69	2296.86
90.0	5763.99	5026.82	4492.02	4014.93	3500.80	3161.49	2865.25	2557.80	2360.59
135.0	6223.00	5534.92	4912.28	4237.11	3764.32	3355.26	2941.89	2677.51	2444.13
180.0	4111.38	3613.61	3201.11	2778.27	2521.63	2319.25	2141.85	1972.20	1867.99
225.0	4170.80	3698.87	3206.27	2891.94	2637.03	2369.20	2195.24	2053.15	1692.83
270.0	5644.29	5076.77	4435.18	3979.62	3583.47	3171.83	2897.97	2600.00	2406.23
315.0	4189.75	3620.50	3239.86	2927.25	2672.34	2400.21	2225.39	2079.85	1696.10
360.0	4636.70	4052.82	3557.64	3154.60	2748.12	2498.38	2297.73	2128.07	1966.17
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1707.38	1707.38	1651.49	1499.49	1370.49	1194.63	1052.45	904.16	716.33
45.0	2134.10	1966.17	1841.30	1666.48	1515.77	1365.92	1174.74	1021.45	874.19
90.0	2150.46	1706.69	1706.69	1617.82	1405.71	1236.23	1072.60	907.69	711.68
135.0	2254.67	2061.76	1925.69	1775.85	1619.97	1417.59	1259.14	1106.71	919.83
180.0	1774.13	1662.17	1491.66	1355.59	1218.66	1042.12	894.00	747.59	576.22
225.0	1692.83	1617.48	1462.29	1310.64	1119.11	974.86	830.27	690.76	518.17
270.0	2240.89	2027.31	1847.33	1669.92	1498.55	1325.45	1111.01	937.92	781.18
315.0	1696.10	1615.93	1454.11	1252.85	1100.51	915.61	772.48	633.66	468.91
360.0	1707.38	1707.38	1651.49	1499.49	1370.49	1194.63	1052.45	904.16	716.33
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	569.24	434.55	314.76	185.76	100.93	50.38	34.36	28.33	24.29
45.0	727.79	546.94	445.32	445.32	150.36	73.37	40.91	33.24	28.07
90.0	560.72	425.94	308.56	176.80	96.97	54.51	42.71	36.00	29.54
135.0	771.71	591.72	454.79	454.79	301.84	95.85	50.72	36.69	31.09
180.0	447.04	447.04	180.85	102.39	50.98	33.67	27.39	23.77	20.75
225.0	389.26	243.46	144.42	72.34	39.36	33.24	28.25	24.11	20.24
270.0	602.05	461.68	461.68	307.01	110.75	68.03	54.08	45.73	38.75
315.0	339.82	224.60	130.21	56.84	40.48	34.28	28.94	23.77	20.93
360.0	569.24	434.55	314.76	185.76	100.93	50.38	34.36	28.33	24.29

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	21.10	18.60	17.57	16.71	15.76	15.07	14.30	13.95	13.61
45.0	23.17	20.50	18.43	17.31	16.36	15.24	14.55	13.95	13.43
90.0	25.84	23.25	21.19	19.12	17.65	16.28	15.33	14.47	13.95
135.0	25.49	22.13	19.98	18.60	17.05	16.10	15.24	14.30	13.87
180.0	18.60	17.31	16.53	15.85	14.98	14.38	14.04	13.61	13.26
225.0	18.69	17.48	16.53	15.42	14.64	14.12	13.61	13.18	12.83
270.0	31.69	28.16	25.40	22.99	20.50	18.77	17.40	16.36	15.33
315.0	19.38	17.91	16.79	15.85	14.81	14.21	13.78	13.26	13.00
360.0	21.10	18.60	17.57	16.71	15.76	15.07	14.30	13.95	13.61
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	13.26	12.92	12.66	12.40	12.31	12.06	11.88	11.80	11.63
45.0	13.09	12.75	12.49	12.31	12.06	11.88	11.71	11.63	11.54
90.0	13.52	13.09	12.66	12.40	12.06	11.88	11.71	11.54	11.37
135.0	13.35	13.00	12.75	12.40	12.14	12.06	11.88	11.71	11.54
180.0	12.92	12.66	12.49	12.31	12.06	11.88	11.80	11.63	11.54
225.0	12.57	12.31	12.14	11.97	11.80	11.63	11.45	11.37	11.28
270.0	14.64	14.04	13.43	13.00	12.66	12.40	12.14	11.88	11.63
315.0	12.75	12.49	12.23	11.97	11.88	11.71	11.54	11.45	11.28
360.0	13.26	12.92	12.66	12.40	12.31	12.06	11.88	11.80	11.63
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	11.54	11.45	11.28	11.20	11.20	11.11	11.02	10.94	10.85
45.0	11.28	11.28	11.20	11.11	11.02	10.94	10.85	10.76	10.76
90.0	11.28	11.20	11.11	11.02	10.94	10.85	10.76	10.68	10.68
135.0	11.45	11.28	11.28	11.11	11.11	11.02	10.94	10.85	10.76
180.0	11.45	11.37	11.20	11.11	11.11	10.94	11.02	10.94	10.76
225.0	11.20	11.11	11.02	10.94	10.94	10.85	10.76	10.76	10.68
270.0	11.45	11.37	11.28	11.11	11.02	10.94	10.94	10.76	10.68
315.0	11.20	11.11	11.02	10.94	10.85	10.76	10.76	10.68	10.59
360.0	11.54	11.45	11.28	11.20	11.20	11.11	11.02	10.94	10.85
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	10.85	10.76	10.76	10.68	10.68	10.59	10.59	10.51	10.51
45.0	10.68	10.59	10.59	10.51	10.51	10.42	10.42	10.33	10.33
90.0	10.59	10.51	10.51	10.42	10.42	10.42	10.33	10.33	10.33
135.0	10.76	10.68	10.59	10.59	10.51	10.51	10.42	10.42	10.42
180.0	10.68	10.68	10.68	10.59	10.59	10.59	10.51	10.51	10.42
225.0	10.59	10.59	10.51	10.51	10.42	10.42	10.42	10.33	10.33
270.0	10.68	10.59	10.51	10.51	10.42	10.42	10.42	10.33	10.33
315.0	10.59	10.51	10.42	10.42	10.42	10.33	10.33	10.33	10.33
360.0	10.85	10.76	10.76	10.68	10.68	10.59	10.59	10.51	10.51
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	10.51	10.51	10.51	10.42	10.42	10.42	10.42	10.42	10.33
45.0	10.33	10.25	10.33	10.33	10.25	10.25	10.25	10.25	10.16
90.0	10.25	10.25	10.25	10.25	10.25	10.25	10.16	10.25	10.08
135.0	10.42	10.33	10.33	10.33	10.33	10.33	10.25	10.25	10.25
180.0	10.42	10.42	10.33	10.42	10.33	10.42	10.33	10.33	10.25
225.0	10.33	10.33	10.25	10.25	10.25	10.25	10.25	10.16	10.16
270.0	10.33	10.25	10.25	10.25	10.25	10.16	10.16	10.08	10.08
315.0	10.33	10.33	10.25	10.25	10.25	10.25	10.16	10.16	10.16
360.0	10.51	10.51	10.51	10.42	10.42	10.42	10.42	10.42	10.33

Intensity data(cd)

C/ $\gamma$ (°)	90.0
0.0	10.42
45.0	10.16
90.0	10.08
135.0	10.16
180.0	10.25
225.0	10.16
270.0	10.16
315.0	10.16
360.0	10.42