



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: 3-2996-LM2

Luminaire: 99.02.73.207

Report No: 20260512-B015

Ballast type: DC

Test No: 20260512-C015

Voltage(V): 51.140

LampCAT: Bridgelux V22 Gen8

Current(A): 0.947

Lamp flux(lm): 8019.5

Power (W): 48.420

Number of Lamps: 1

PF: 0.000

Length(mm): 92

Width(mm): 92

Phm Type: C

Height(mm): 49

Photometric Results

Lumens(lm): 7787.09, Efficiency(%): 97.10% , Luminous Efficacy(lm/W): 160.82

Central intensity(cd): 22747.640, Maximum intensity(cd): 22747.640

Angle of maximum intensity: C=0.0 γ =0.0

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

[C90/270]Total=29.4

Field angle(10%Imax): [C0/180]Total=65.8

[C90/270]Total=65.8

Maximum s/h(1/2): C0_180=0.50 C90_270=0.50

Maximum s/h(1/4): C0_180=0.46 C90_270=0.46

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 97.10%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 99.365%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	22747.646	0.000	0	0.00%	0.00%
1.0	22710.939	21.751	21.751	0.27%	0.28%
2.0	22586.129	65.015	86.766	0.81%	1.11%
3.0	22382.658	107.551	194.316	1.34%	2.50%
4.0	22103.672	148.910	343.226	1.86%	4.41%
5.0	21756.512	188.684	531.91	2.35%	6.83%
6.0	21259.371	226.060	757.97	2.82%	9.73%
7.0	20620.641	259.948	1017.919	3.24%	13.07%
8.0	19884.369	289.887	1307.805	3.61%	16.79%
9.0	18618.777	312.047	1619.852	3.89%	20.80%
10.0	17726.871	328.915	1948.767	4.10%	25.03%
11.0	16572.236	342.719	2291.486	4.27%	29.43%
12.0	15367.038	349.142	2640.628	4.35%	33.91%
13.0	13998.433	348.494	2989.122	4.35%	38.39%
14.0	12432.649	338.316	3327.437	4.22%	42.73%
15.0	10867.915	319.881	3647.318	3.99%	46.84%
16.0	9358.034	296.367	3943.685	3.70%	50.64%
17.0	8035.681	270.867	4214.551	3.38%	54.12%
18.0	6822.197	244.974	4459.526	3.05%	57.27%
19.0	5806.100	219.707	4679.232	2.74%	60.09%
20.0	4936.943	196.627	4875.86	2.45%	62.61%
21.0	4386.102	179.021	5054.881	2.23%	64.91%
22.0	3914.668	166.807	5221.688	2.08%	67.06%
23.0	3689.392	159.554	5381.242	1.99%	69.10%
24.0	3318.131	153.210	5534.452	1.91%	71.07%
25.0	3149.585	147.062	5681.513	1.83%	72.96%
26.0	3015.546	145.529	5827.042	1.81%	74.83%
27.0	2902.798	144.794	5971.836	1.81%	76.69%
28.0	2805.573	144.524	6116.359	1.80%	78.54%
29.0	2723.555	144.658	6261.017	1.80%	80.40%
30.0	2641.852	144.865	6405.882	1.81%	82.26%
31.0	2540.536	144.218	6550.1	1.80%	84.11%
32.0	2417.929	142.054	6692.154	1.77%	85.94%
33.0	2267.213	138.026	6830.18	1.72%	87.71%
34.0	2031.942	130.105	6960.285	1.62%	89.38%
35.0	1857.355	120.787	7081.073	1.51%	90.93%
36.0	1660.219	112.000	7193.073	1.40%	92.37%
37.0	1482.088	102.484	7295.557	1.28%	93.69%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	1285.109	92.365	7387.922	1.15%	94.87%
39.0	1071.821	80.448	7468.371	1.00%	95.91%
40.0	866.965	67.618	7535.989	0.84%	96.78%
41.0	661.438	54.426	7590.415	0.68%	97.47%
42.0	501.850	42.264	7632.679	0.53%	98.02%
43.0	354.491	31.721	7664.4	0.40%	98.42%
44.0	257.727	23.107	7687.507	0.29%	98.72%
45.0	125.754	14.738	7702.245	0.18%	98.91%
46.0	56.227	7.117	7709.361	0.09%	99.00%
47.0	37.579	3.731	7713.092	0.05%	99.05%
48.0	31.087	2.776	7715.868	0.03%	99.09%
49.0	26.535	2.366	7718.235	0.03%	99.12%
50.0	23.399	2.082	7720.316	0.03%	99.14%
51.0	21.889	1.916	7722.233	0.02%	99.17%
52.0	20.945	1.838	7724.071	0.02%	99.19%
53.0	20.158	1.788	7725.859	0.02%	99.21%
54.0	19.529	1.749	7727.608	0.02%	99.24%
55.0	18.973	1.719	7729.326	0.02%	99.26%
56.0	18.480	1.692	7731.019	0.02%	99.28%
57.0	18.061	1.671	7732.69	0.02%	99.30%
58.0	17.746	1.656	7734.345	0.02%	99.32%
59.0	17.473	1.647	7735.992	0.02%	99.34%
60.0	17.243	1.640	7737.632	0.02%	99.36%
61.0	17.054	1.637	7739.269	0.02%	99.39%
62.0	16.886	1.635	7740.904	0.02%	99.41%
63.0	16.750	1.636	7742.54	0.02%	99.43%
64.0	16.603	1.637	7744.177	0.02%	99.45%
65.0	16.477	1.637	7745.814	0.02%	99.47%
66.0	16.362	1.638	7747.452	0.02%	99.49%
67.0	16.204	1.638	7749.09	0.02%	99.51%
68.0	16.089	1.636	7750.726	0.02%	99.53%
69.0	15.974	1.636	7752.361	0.02%	99.55%
70.0	15.869	1.635	7753.997	0.02%	99.58%
71.0	15.795	1.637	7755.633	0.02%	99.60%
72.0	15.743	1.640	7757.273	0.02%	99.62%
73.0	15.659	1.642	7758.915	0.02%	99.64%
74.0	15.596	1.643	7760.558	0.02%	99.66%
75.0	15.554	1.646	7762.204	0.02%	99.68%

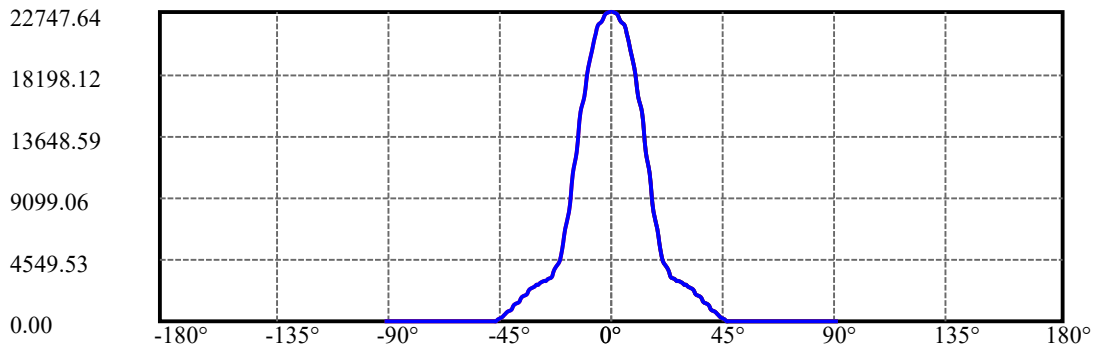
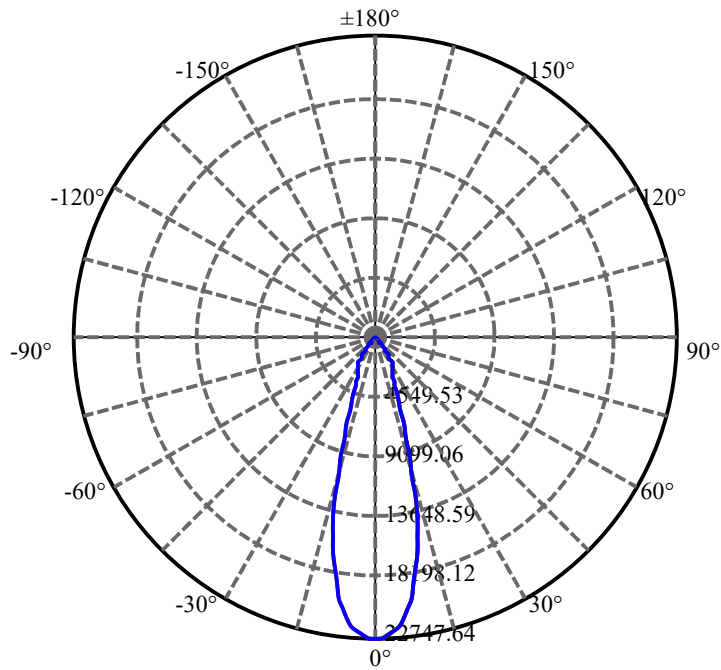
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	15.502	1.649	7763.853	0.02%	99.70%
77.0	15.470	1.651	7765.504	0.02%	99.72%
78.0	15.428	1.654	7767.158	0.02%	99.74%
79.0	15.407	1.657	7768.815	0.02%	99.77%
80.0	15.376	1.660	7770.474	0.02%	99.79%
81.0	15.355	1.662	7772.136	0.02%	99.81%
82.0	15.313	1.663	7773.799	0.02%	99.83%
83.0	15.302	1.664	7775.463	0.02%	99.85%
84.0	15.260	1.665	7777.128	0.02%	99.87%
85.0	15.250	1.665	7778.794	0.02%	99.89%
86.0	15.208	1.665	7780.458	0.02%	99.91%
87.0	15.187	1.663	7782.122	0.02%	99.94%
88.0	15.124	1.660	7783.782	0.02%	99.96%
89.0	15.082	1.656	7785.438	0.02%	99.98%
90.0	15.061	1.653	7787.091	0.02%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	6405.88	79.88%	82.26%
0-40	7535.99	93.97%	96.78%
0-60	7737.63	96.49%	99.36%
0-90	7785.44	97.08%	99.98%
0-120	7785.44	97.08%	99.98%
0-180	7787.09	97.10%	100.00%
60-90	47.81	0.60%	0.61%
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%
0-28.78	6229.67	77.68%	80.00%

ZONAL LUMEN SUMMARY

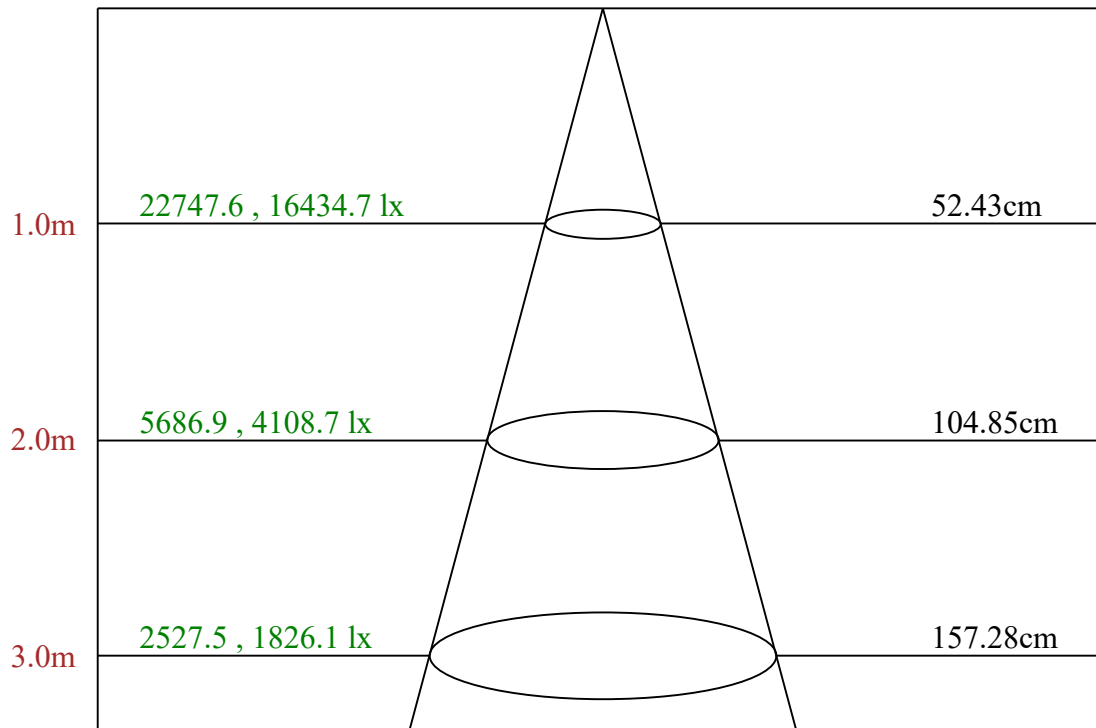
0-10	1948.77
10-20	2927.09
20-30	1530.02
30-40	1130.11
40-50	184.33
50-60	17.32
60-70	16.36
70-80	16.48
80-90	14.96
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00



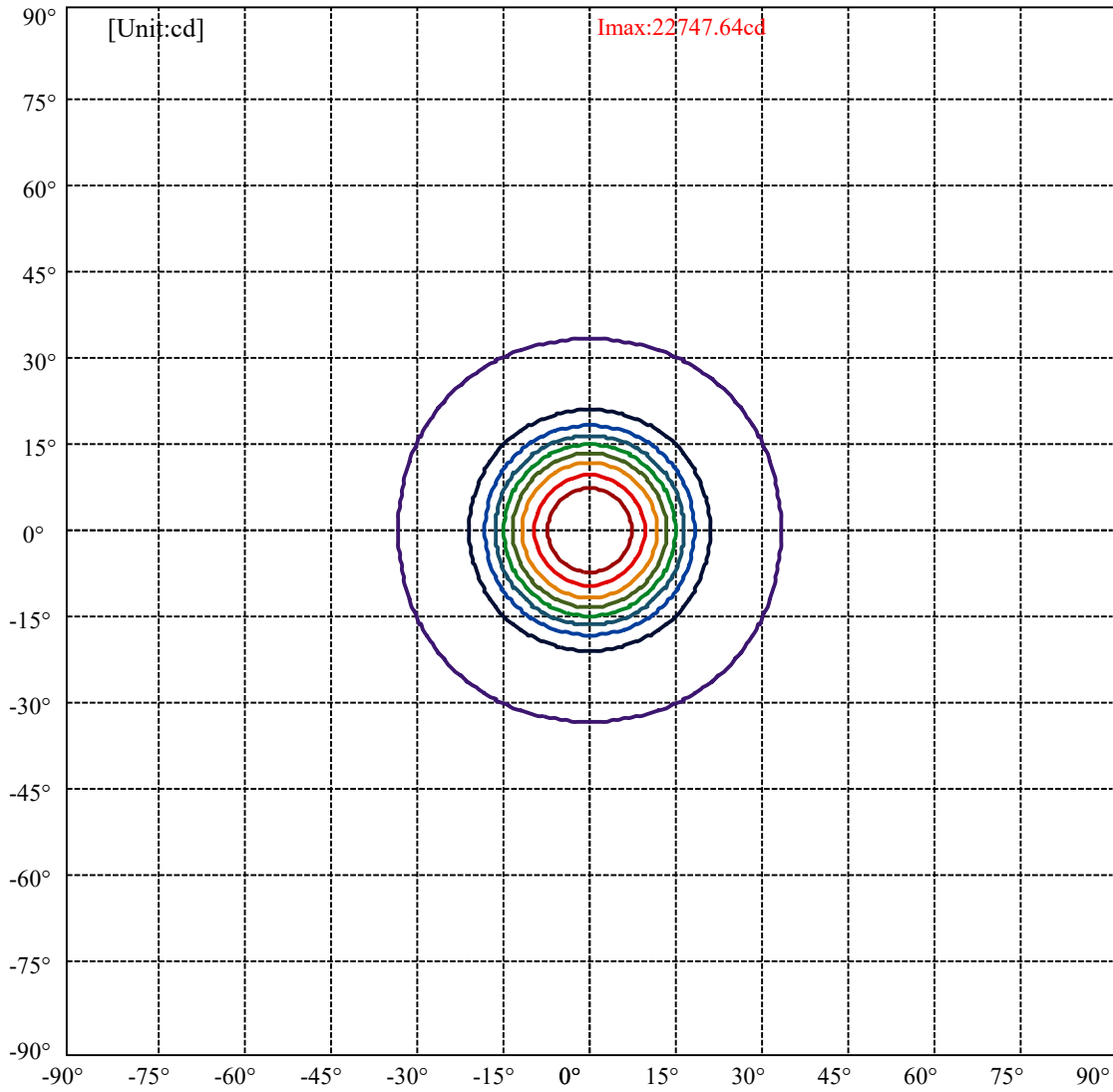
C0(Max): ———
C0/C180: ———
C90/C270: ———

Field angle(10%Imax):C0/180Left:32.9 Right:32.9
:C90/270Left:32.9 Right:32.9

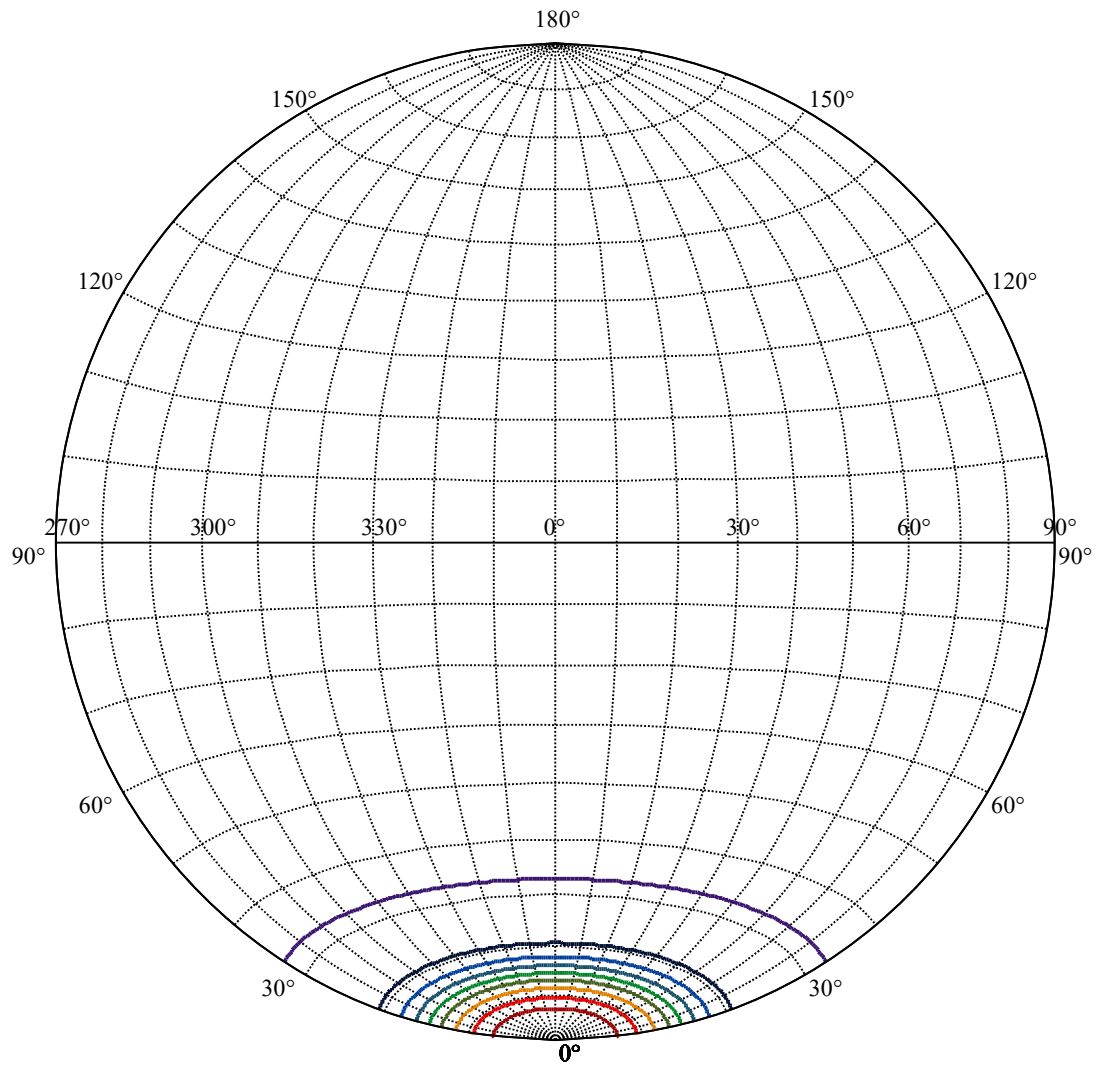
Beam Angle(50%Imax):C0/180Left:14.7 Right:14.7
:C90/270Left:14.7 Right:14.7



Max , Ave Beam angle of C0 plane 29.38



(10%Imax) 2274.76	—
(20%Imax) 4549.53	—
(30%Imax) 6824.29	—
(40%Imax) 9099.06	—
(50%Imax) 11373.8	—
(60%Imax) 13648.6	—
(70%Imax) 15923.4	—
(80%Imax) 18198.1	—
(90%Imax) 20472.9	—



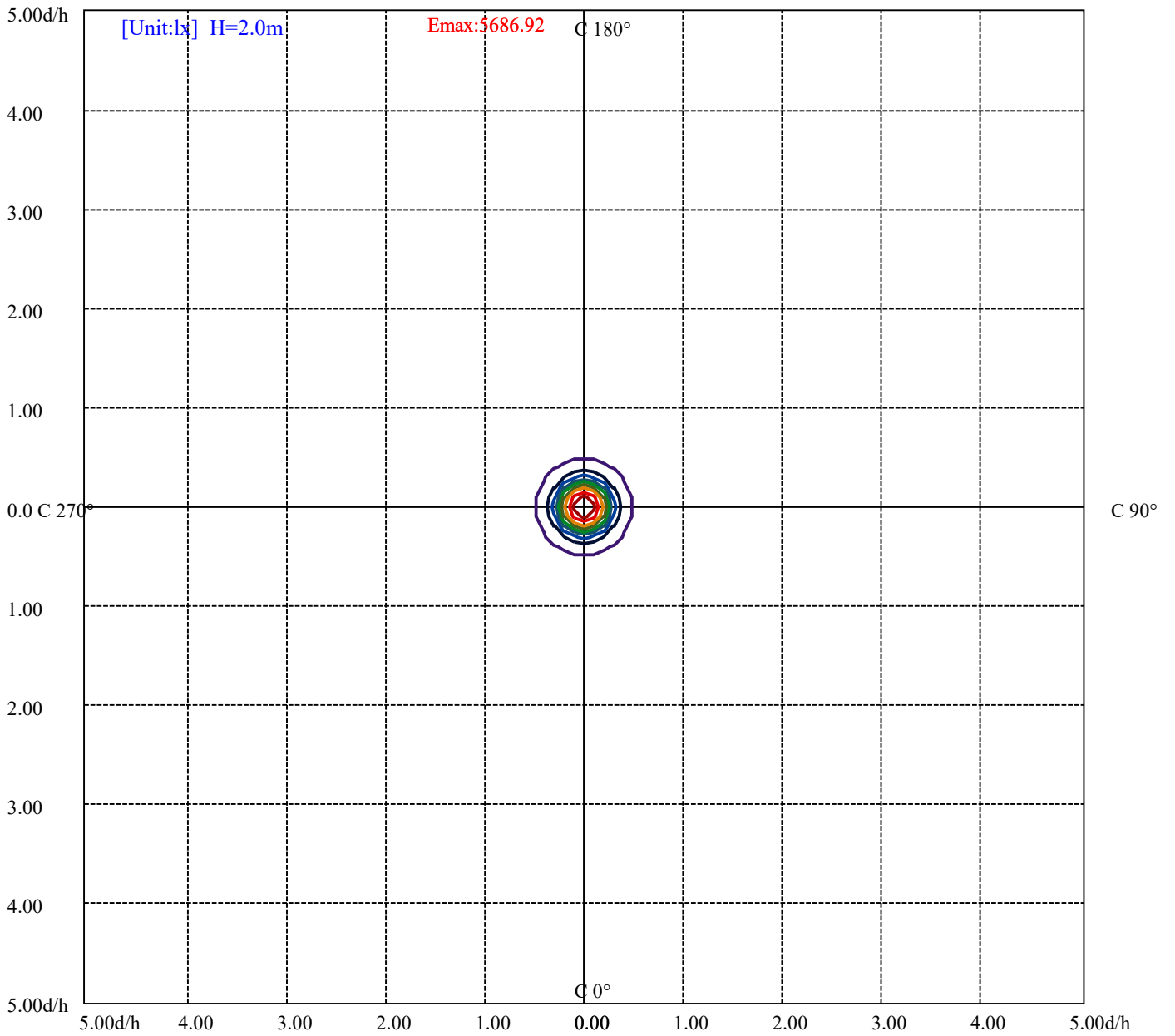
House

[Unit:cd]

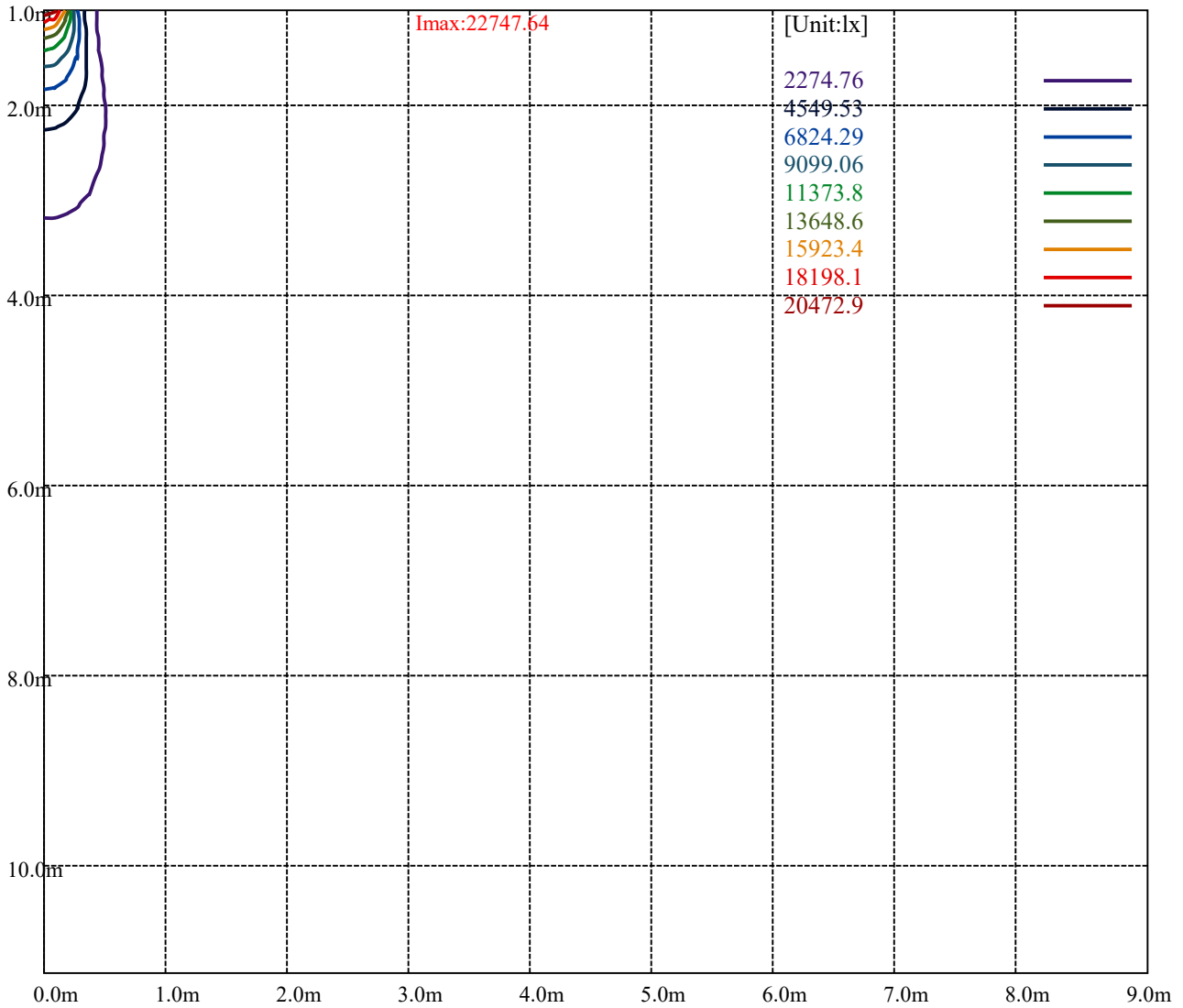
Road

Imax:22747.64

(10%Imax) 2274.76	—
(20%Imax) 4549.53	—
(30%Imax) 6824.29	—
(40%Imax) 9099.06	—
(50%Imax) 11373.8	—
(60%Imax) 13648.6	—
(70%Imax) 15923.4	—
(80%Imax) 18198.1	—
(90%Imax) 20472.9	—



- (10%Emax) 568.69
- (20%Emax) 1137.382
- (30%Emax) 1706.073
- (40%Emax) 2274.765
- (50%Emax) 2843.45
- (60%Emax) 3412.15
- (70%Emax) 3980.825
- (80%Emax) 4549.525
- (90%Emax) 5118.225



Luminance Table

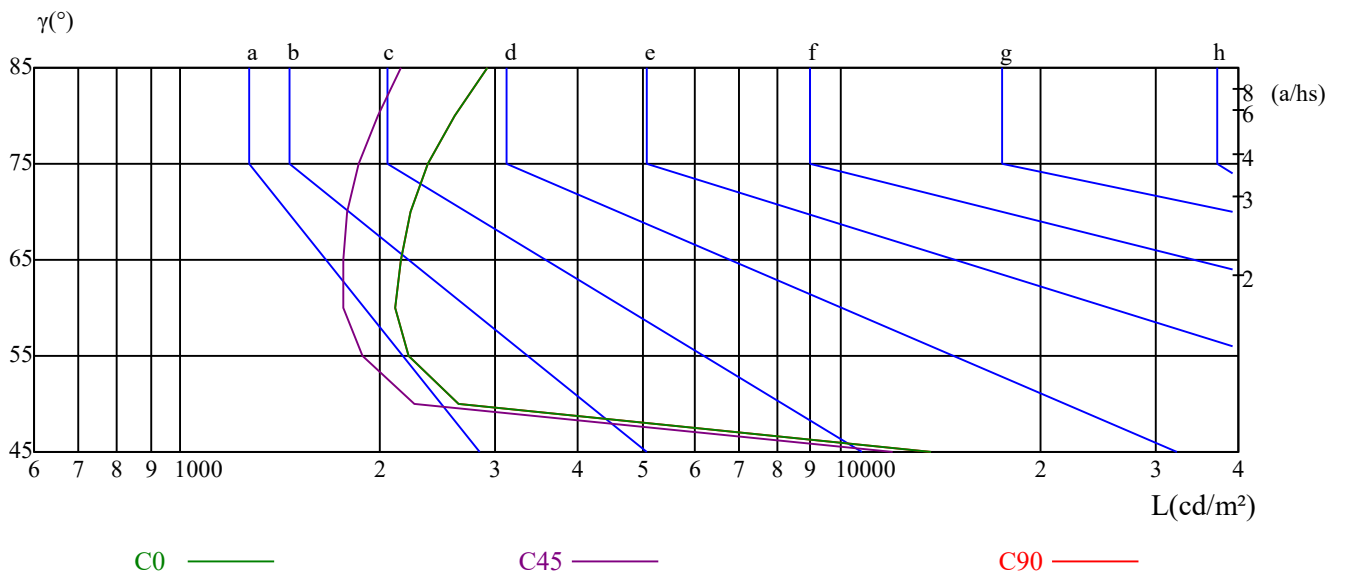
γ	45	50	55	60	65	70	75	80	85
C0	13710	2631	2220	2119	2150	2225	2376	2602	2917
C45	11985	2266	1883	1768	1761	1786	1863	1984	2151
C90	13710	2631	2220	2119	2150	2225	2376	2602	2917

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
4606	4606	4606	7100	7100	7100	20673	20673	20673

Glare Table

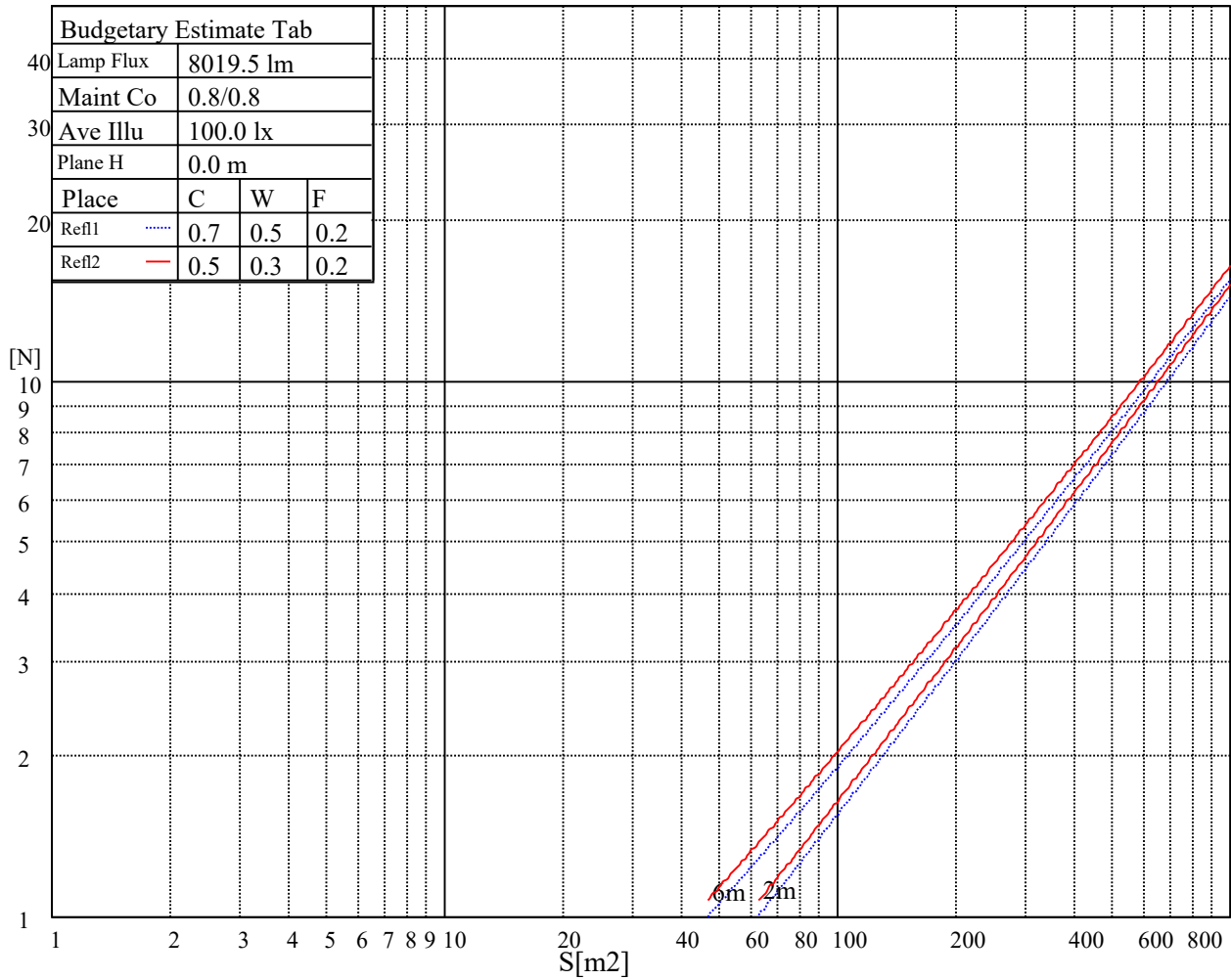
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	20.05	20.97	20.41	21.28	21.60	19.28	20.20	19.64	20.51	20.83
	3H	19.85	20.67	20.23	21.00	21.35	19.08	19.89	19.46	20.23	20.58
	4H	19.75	20.51	20.15	20.86	21.23	18.98	19.74	19.39	20.09	20.46
	6H	19.68	20.37	20.10	20.75	21.15	18.92	19.61	19.34	19.99	20.39
	8H	19.62	20.28	20.04	20.66	21.07	18.86	19.52	19.28	19.91	20.31
	12H	19.57	20.19	20.00	20.59	21.01	18.81	19.44	19.24	19.83	20.25
4H	2H	19.73	20.48	20.13	20.84	21.21	18.95	19.71	19.36	20.06	20.43
	3H	19.49	20.12	19.92	20.52	20.94	18.72	19.35	19.15	19.75	20.17
	4H	19.43	19.97	19.87	20.40	20.85	18.67	19.21	19.11	19.64	20.09
	6H	19.32	19.80	19.80	20.26	20.71	18.57	19.05	19.04	19.50	19.96
	8H	19.29	19.73	19.78	20.19	20.67	18.54	18.99	19.03	19.45	19.92
	12H	19.28	19.69	19.77	20.14	20.66	18.54	18.95	19.03	19.40	19.92
8H	4H	19.23	19.67	19.72	20.13	20.61	18.47	18.92	18.96	19.38	19.85
	6H	19.13	19.49	19.63	19.97	20.48	18.38	18.74	18.89	19.22	19.74
	8H	19.16	19.46	19.69	19.98	20.48	18.42	18.72	18.96	19.25	19.75
	12H	19.17	19.40	19.71	19.91	20.44	18.45	18.67	18.99	19.19	19.72
12H	4H	19.18	19.59	19.67	20.04	20.56	18.42	18.83	18.91	19.28	19.81
	6H	19.12	19.42	19.65	19.94	20.44	18.37	18.68	18.91	19.20	19.70
	8H	19.12	19.35	19.66	19.86	20.39	18.39	18.62	18.93	19.13	19.66
Variation with the observer position at spacings:											
S = 1.0H	5.1/-13.6					5.1/-13.6					
S = 1.5H	7.9/-11.6					7.9/-11.6					
S = 2.0H	9.8/-10.3					9.8/-10.3					
Standard tables:	BK0					BK0					
Uncorrected UGR	0.3					0.3					

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	1.16	1.16	1.16	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	1.09	1.06	1.05	1.07	1.05	1.03	1.03	1.01	1.00	0.99	0.98	0.97	0.96	0.95	0.94	0.92
2	1.02	0.99	0.96	1.01	0.98	0.95	0.98	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	0.88	0.86	0.89	0.87	0.85	0.84
4	0.92	0.88	0.84	0.91	0.87	0.84	0.89	0.86	0.83	0.87	0.84	0.82	0.86	0.83	0.81	0.80
5	0.88	0.83	0.80	0.87	0.83	0.79	0.85	0.81	0.79	0.84	0.80	0.78	0.82	0.79	0.77	0.76
6	0.84	0.79	0.76	0.83	0.79	0.75	0.82	0.78	0.75	0.80	0.77	0.74	0.79	0.76	0.74	0.73
7	0.80	0.75	0.72	0.80	0.75	0.72	0.78	0.74	0.71	0.77	0.74	0.71	0.76	0.73	0.71	0.70
8	0.77	0.72	0.69	0.76	0.72	0.69	0.75	0.71	0.68	0.74	0.71	0.68	0.74	0.70	0.68	0.67
9	0.74	0.69	0.66	0.73	0.69	0.66	0.73	0.69	0.66	0.72	0.68	0.65	0.71	0.68	0.65	0.64
10	0.71	0.66	0.63	0.71	0.66	0.63	0.70	0.66	0.63	0.69	0.66	0.63	0.69	0.65	0.63	0.62

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	22701.50	22735.06	22659.55	22542.08	22357.49	22097.38	21644.29	21191.20	20637.42
45.0	22709.89	22726.67	22676.33	22516.91	22315.53	22030.25	21677.85	21090.51	20503.17
90.0	22768.62	22651.16	22433.00	22156.11	21728.19	21275.10	20696.16	19823.54	19001.26
135.0	22810.58	22777.01	22667.94	22466.56	22206.46	21879.22	21459.70	20746.50	20075.25
180.0	22701.50	22592.42	22399.44	22147.72	21736.58	21291.89	20712.94	20024.91	19009.65
225.0	22709.89	22600.81	22441.39	22139.33	21812.10	21384.18	20687.76	19999.74	19177.46
270.0	22768.62	22827.36	22777.01	22634.37	22466.56	22231.63	21912.79	21359.01	20830.40
315.0	22810.58	22777.01	22634.37	22458.17	22206.46	21862.44	21283.49	20729.72	19840.32
360.0	22701.50	22735.06	22659.55	22542.08	22357.49	22097.38	21644.29	21191.20	20637.42
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	19781.58	18950.92	16590.74	16590.74	15646.80	13921.70	12492.79	10692.17	9294.31
45.0	19806.76	18992.87	17767.85	16635.12	15359.76	13631.30	12171.35	10719.78	8982.93
90.0	16588.22	16588.22	15265.03	13855.42	12398.81	10927.11	9195.30	7941.75	6815.74
135.0	19076.78	18145.43	17046.26	15477.23	14101.18	12666.39	11198.04	9410.85	8118.71
180.0	18044.74	16912.01	15636.65	13891.41	12439.84	10963.11	9201.09	7950.89	6818.17
225.0	16500.12	16500.12	15527.65	14135.66	12675.70	10856.63	9470.51	8172.49	7005.36
270.0	20167.55	19127.12	18145.43	17029.48	15426.88	14008.88	12540.53	10728.17	9318.56
315.0	18984.48	16598.29	16598.29	15321.25	13938.48	12486.08	10673.72	9248.16	7931.68
360.0	19781.58	18950.92	16590.74	16590.74	15646.80	13921.70	12492.79	10692.17	9294.31
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	8041.60	6657.15	5717.41	4931.22	4204.59	3806.04	3525.80	3321.07	3132.28
45.0	7757.91	6667.14	5534.41	4804.43	4225.49	4225.49	3468.74	3263.17	3108.79
90.0	5649.45	4895.14	4307.80	3792.62	3502.30	3292.54	3098.72	2980.41	2881.40
135.0	6969.20	5987.50	4989.03	4384.91	4259.05	3840.44	3367.22	3203.60	3044.18
180.0	5609.93	4854.78	4292.61	4292.61	3524.12	3324.42	3171.72	3019.85	2920.00
225.0	5757.69	4949.68	4202.08	3791.78	3512.37	3267.37	3116.34	2995.51	2893.99
270.0	8018.02	6876.90	5668.66	4871.56	4267.44	4267.44	3490.56	3287.51	3132.28
315.0	6773.78	5560.51	4783.54	4219.70	3821.98	3491.40	3305.96	3125.57	3011.46
360.0	8041.60	6657.15	5717.41	4931.22	4204.59	3806.04	3525.80	3321.07	3132.28
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	3011.46	2910.77	2824.35	2722.82	2650.66	2574.31	2428.31	2278.12	2063.32
45.0	2980.41	2853.71	2769.81	2689.26	2605.35	2528.16	2376.29	2226.94	2065.00
90.0	2778.20	2698.49	2629.69	2556.69	2405.66	2260.50	2095.21	1630.20	1630.20
135.0	2942.65	2833.58	2747.99	2675.83	2602.00	2461.04	2317.56	2151.42	1973.54
180.0	2832.74	2750.51	2658.21	2577.66	2470.26	2299.10	2135.48	1947.53	1718.47
225.0	2789.95	2707.72	2637.24	2563.40	2415.73	2270.57	2109.47	1668.13	1668.13
270.0	2972.02	2881.40	2794.14	2693.45	2627.17	2530.68	2405.66	2246.24	2092.69
315.0	2914.96	2808.40	2727.02	2655.70	2547.46	2419.08	2269.73	2106.95	1647.49
360.0	3011.46	2910.77	2824.35	2722.82	2650.66	2574.31	2428.31	2278.12	2063.32
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	1632.64	1632.64	1483.28	1230.39	1031.70	839.73	655.47	448.48	304.16
45.0	1841.81	1652.19	1449.97	1248.60	1055.62	819.84	647.84	481.70	442.27
90.0	1486.98	1293.74	1054.95	864.98	686.10	477.59	329.50	200.11	82.40
135.0	1740.29	1544.79	1339.22	1130.29	878.58	693.98	485.06	446.46	446.46
180.0	1528.00	1257.83	1059.81	864.31	673.85	453.17	453.17	275.55	81.72
225.0	1527.50	1284.01	1088.59	893.76	657.06	483.13	329.25	199.70	81.30
270.0	1877.05	1692.46	1508.71	1300.62	1110.99	871.86	676.36	492.61	452.34
315.0	1647.49	1499.06	1296.34	1041.60	841.82	652.20	438.16	291.32	171.17
360.0	1632.64	1632.64	1483.28	1230.39	1031.70	839.73	655.47	448.48	304.16

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	180.82	87.35	44.22	37.09	31.63	25.42	22.91	21.56	20.72
45.0	266.82	76.35	41.62	32.97	28.44	23.33	21.56	20.64	19.80
90.0	42.54	34.74	29.87	24.58	22.07	20.89	20.14	19.30	18.79
135.0	82.14	48.75	40.36	34.15	27.94	25.26	23.83	22.74	21.56
180.0	43.13	36.83	31.38	26.60	23.07	21.65	20.72	20.14	19.55
225.0	42.54	35.58	30.63	25.17	22.23	20.98	20.14	19.63	19.05
270.0	275.21	81.89	41.78	34.90	29.03	24.42	21.98	20.89	20.05
315.0	72.83	48.33	40.78	33.23	27.86	25.26	23.83	22.65	21.73
360.0	180.82	87.35	44.22	37.09	31.63	25.42	22.91	21.56	20.72
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	20.05	19.30	18.71	18.29	17.96	17.62	17.37	17.20	17.03
45.0	19.21	18.71	18.21	17.79	17.45	17.20	17.03	16.87	16.70
90.0	18.29	17.79	17.45	17.12	16.95	16.78	16.61	16.45	16.36
135.0	20.81	20.14	19.55	18.96	18.54	18.12	17.87	17.62	17.37
180.0	18.88	18.46	18.12	17.87	17.54	17.37	17.12	17.03	16.87
225.0	18.46	18.04	17.70	17.37	17.20	17.03	16.78	16.61	16.53
270.0	19.55	19.05	18.54	18.04	17.70	17.45	17.20	17.03	16.78
315.0	20.98	20.31	19.55	19.05	18.63	18.21	17.96	17.62	17.45
360.0	20.05	19.30	18.71	18.29	17.96	17.62	17.37	17.20	17.03
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	16.87	16.70	16.61	16.53	16.36	16.19	16.11	15.94	15.94
45.0	16.61	16.45	16.36	16.28	16.11	16.03	15.94	15.86	15.77
90.0	16.28	16.19	16.11	15.94	15.86	15.77	15.69	15.61	15.52
135.0	17.20	17.03	16.87	16.70	16.45	16.36	16.19	16.11	15.94
180.0	16.70	16.61	16.45	16.28	16.19	16.03	15.94	15.86	15.77
225.0	16.45	16.36	16.19	16.11	15.94	15.86	15.77	15.69	15.61
270.0	16.70	16.45	16.36	16.28	16.19	16.11	15.94	15.77	15.77
315.0	17.20	17.03	16.87	16.78	16.53	16.36	16.19	16.11	16.03
360.0	16.87	16.70	16.61	16.53	16.36	16.19	16.11	15.94	15.94
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	15.86	15.77	15.77	15.69	15.61	15.61	15.52	15.52	15.52
45.0	15.77	15.69	15.61	15.52	15.52	15.44	15.44	15.44	15.35
90.0	15.52	15.44	15.35	15.35	15.35	15.35	15.27	15.27	15.27
135.0	15.86	15.77	15.69	15.69	15.61	15.52	15.44	15.44	15.44
180.0	15.77	15.69	15.69	15.61	15.52	15.52	15.52	15.44	15.44
225.0	15.61	15.52	15.44	15.44	15.35	15.35	15.35	15.35	15.27
270.0	15.69	15.61	15.52	15.52	15.44	15.44	15.44	15.35	15.35
315.0	15.86	15.77	15.69	15.61	15.61	15.52	15.44	15.44	15.35
360.0	15.86	15.77	15.77	15.69	15.61	15.61	15.52	15.52	15.52
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	15.44	15.44	15.44	15.44	15.35	15.27	15.27	15.27	15.27
45.0	15.35	15.35	15.35	15.27	15.27	15.27	15.19	15.10	15.10
90.0	15.27	15.19	15.19	15.19	15.19	15.10	15.10	14.94	15.02
135.0	15.44	15.35	15.35	15.27	15.27	15.19	15.19	15.19	15.02
180.0	15.44	15.35	15.35	15.35	15.27	15.27	15.27	15.19	15.19
225.0	15.27	15.27	15.27	15.19	15.19	15.19	15.19	15.10	15.02
270.0	15.27	15.27	15.19	15.19	15.19	15.19	15.10	15.10	15.02
315.0	15.35	15.27	15.27	15.19	15.27	15.19	15.19	15.10	15.02
360.0	15.44	15.44	15.44	15.44	15.35	15.27	15.27	15.27	15.27

Intensity data(cd)

C/ γ (°)	90.0
0.0	15.19
45.0	15.02
90.0	15.02
135.0	15.02
180.0	15.19
225.0	15.02
270.0	15.02
315.0	15.02
360.0	15.19