



NATA LIGHTING CO.,LTD.
www.nata.cn
Email:info@nata.com
Tel:+86-750-3770000 Fax:+86 750 3771111
Address:Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

Nata

Client:

LumCAT: 2-2569-L

Luminaire: 92.70.411.00

Report No: 2024912-B009

Ballast type: AC

Test No: 2024912-C009

Voltage(V): 36.800

LampCAT: NICHIA NFCWJ130B-V3

Current(A): 0.580

Lamp flux(lm): 2826.0

Power (W): 21.340

Number of Lamps: 1

PF: 0.000

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 2544.26, Efficiency(%): 90.03% , Luminous Efficacy(lm/W): 119.22

Central intensity(cd): 4070.506, Maximum intensity(cd): 4070.506

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=47.6

[C90/270]Total=47.6

Field angle(10%Imax): [C0/180]Total=73.0

[C90/270]Total=73.0

Maximum s/h(1/2): C0_180=0.74 C90_270=0.74

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(%): 90.03%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 99.061%

Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2024/9/12
Humidity(%): 60.0%

Operator: NT
Distance(m): 7.25

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	4070.506	0.000	0	0.00%	0.00%
1.0	4070.499	3.895	3.895	0.14%	0.15%
2.0	4064.934	11.677	15.572	0.41%	0.61%
3.0	4047.588	19.402	34.975	0.69%	1.37%
4.0	4018.489	27.000	61.974	0.96%	2.44%
5.0	3977.542	34.399	96.373	1.22%	3.79%
6.0	3921.603	41.512	137.885	1.47%	5.42%
7.0	3856.767	48.280	186.165	1.71%	7.32%
8.0	3787.325	54.707	240.872	1.94%	9.47%
9.0	3699.585	60.677	301.55	2.15%	11.85%
10.0	3608.140	66.132	367.682	2.34%	14.45%
11.0	3513.475	71.160	438.842	2.52%	17.25%
12.0	3417.167	75.762	514.603	2.68%	20.23%
13.0	3305.386	79.780	594.383	2.82%	23.36%
14.0	3194.079	83.193	677.576	2.94%	26.63%
15.0	3097.712	86.377	763.952	3.06%	30.03%
16.0	2973.172	88.955	852.908	3.15%	33.52%
17.0	2873.789	91.053	943.961	3.22%	37.10%
18.0	2757.908	92.854	1036.815	3.29%	40.75%
19.0	2643.480	93.973	1130.788	3.33%	44.44%
20.0	2525.293	94.603	1225.391	3.35%	48.16%
21.0	2399.991	94.575	1319.966	3.35%	51.88%
22.0	2274.340	93.933	1413.899	3.32%	55.57%
23.0	2144.675	92.723	1506.622	3.28%	59.22%
24.0	2014.655	90.938	1597.56	3.22%	62.79%
25.0	1882.316	88.609	1686.168	3.14%	66.27%
26.0	1747.762	85.688	1771.857	3.03%	69.64%
27.0	1616.612	82.310	1854.167	2.91%	72.88%
28.0	1449.792	77.635	1931.802	2.75%	75.93%
29.0	1319.752	72.459	2004.261	2.56%	78.78%
30.0	1153.977	66.790	2071.051	2.36%	81.40%
31.0	1060.928	61.638	2132.689	2.18%	83.82%
32.0	944.101	57.442	2190.13	2.03%	86.08%
33.0	795.704	51.255	2241.386	1.81%	88.10%
34.0	681.006	44.690	2286.075	1.58%	89.85%
35.0	556.729	38.439	2324.515	1.36%	91.36%
36.0	455.493	32.229	2356.744	1.14%	92.63%
37.0	363.778	26.720	2383.464	0.95%	93.68%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	295.355	22.001	2405.465	0.78%	94.54%
39.0	239.869	18.269	2423.734	0.65%	95.26%
40.0	190.217	15.000	2438.734	0.53%	95.85%
41.0	146.380	11.986	2450.72	0.42%	96.32%
42.0	108.791	9.271	2459.991	0.33%	96.69%
43.0	89.225	7.335	2467.326	0.26%	96.98%
44.0	75.867	6.231	2473.557	0.22%	97.22%
45.0	64.724	5.403	2478.96	0.19%	97.43%
46.0	56.531	4.742	2483.702	0.17%	97.62%
47.0	49.869	4.232	2487.934	0.15%	97.79%
48.0	44.336	3.808	2491.742	0.13%	97.94%
49.0	39.698	3.451	2495.193	0.12%	98.07%
50.0	35.861	3.150	2498.343	0.11%	98.20%
51.0	32.641	2.898	2501.241	0.10%	98.31%
52.0	29.829	2.681	2503.922	0.09%	98.41%
53.0	27.681	2.502	2506.424	0.09%	98.51%
54.0	25.565	2.347	2508.771	0.08%	98.61%
55.0	23.785	2.203	2510.973	0.08%	98.69%
56.0	22.188	2.077	2513.051	0.07%	98.77%
57.0	20.808	1.966	2515.017	0.07%	98.85%
58.0	19.573	1.867	2516.884	0.07%	98.92%
59.0	18.430	1.777	2518.661	0.06%	98.99%
60.0	17.424	1.694	2520.355	0.06%	99.06%
61.0	16.505	1.619	2521.974	0.06%	99.12%
62.0	15.657	1.550	2523.524	0.05%	99.19%
63.0	14.842	1.483	2525.007	0.05%	99.24%
64.0	14.080	1.419	2526.426	0.05%	99.30%
65.0	13.410	1.360	2527.787	0.05%	99.35%
66.0	12.707	1.303	2529.09	0.05%	99.40%
67.0	12.070	1.246	2530.335	0.04%	99.45%
68.0	11.472	1.193	2531.528	0.04%	99.50%
69.0	10.795	1.136	2532.664	0.04%	99.54%
70.0	10.230	1.080	2533.744	0.04%	99.59%
71.0	9.573	1.024	2534.767	0.04%	99.63%
72.0	9.008	0.966	2535.733	0.03%	99.66%
73.0	8.423	0.912	2536.645	0.03%	99.70%
74.0	7.898	0.858	2537.503	0.03%	99.73%
75.0	7.300	0.803	2538.306	0.03%	99.77%

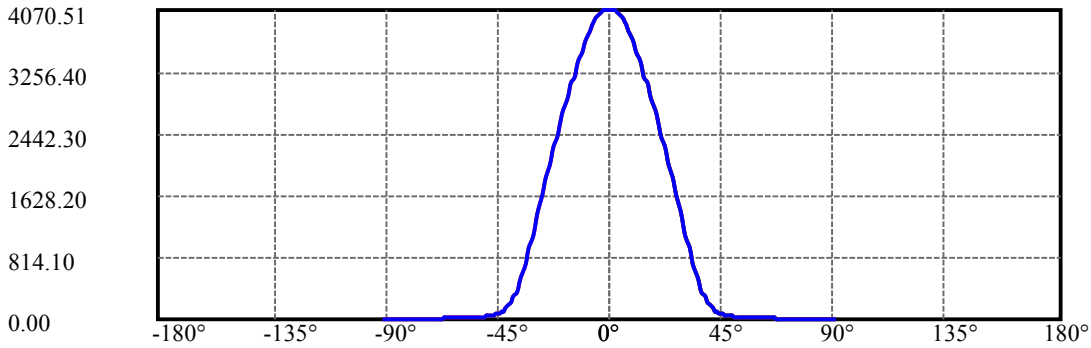
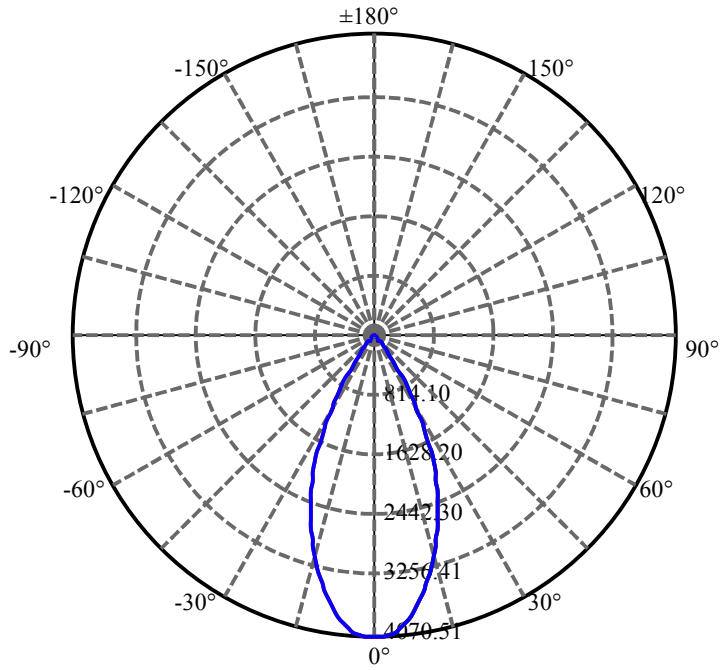
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	6.761	0.746	2539.052	0.03%	99.80%
77.0	6.235	0.693	2539.745	0.02%	99.82%
78.0	5.703	0.639	2540.384	0.02%	99.85%
79.0	5.151	0.583	2540.967	0.02%	99.87%
80.0	4.665	0.529	2541.497	0.02%	99.89%
81.0	4.172	0.478	2541.975	0.02%	99.91%
82.0	3.686	0.426	2542.401	0.02%	99.93%
83.0	3.213	0.375	2542.776	0.01%	99.94%
84.0	2.779	0.326	2543.102	0.01%	99.95%
85.0	2.398	0.283	2543.385	0.01%	99.97%
86.0	2.037	0.242	2543.627	0.01%	99.98%
87.0	1.728	0.206	2543.833	0.01%	99.98%
88.0	1.406	0.172	2544.005	0.01%	99.99%
89.0	1.117	0.138	2544.143	0.00%	100.00%
90.0	0.972	0.115	2544.258	0.00%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2071.05	73.29%	81.40%
0-40	2438.73	86.30%	95.85%
0-60	2520.35	89.18%	99.06%
0-90	2544.14	90.03%	100.00%
0-120	2544.14	90.03%	100.00%
0-180	2544.26	90.03%	100.00%
60-90	23.79	0.84%	0.93%
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%
0-29.47	2035.41	72.02%	80.00%

ZONAL LUMEN SUMMARY

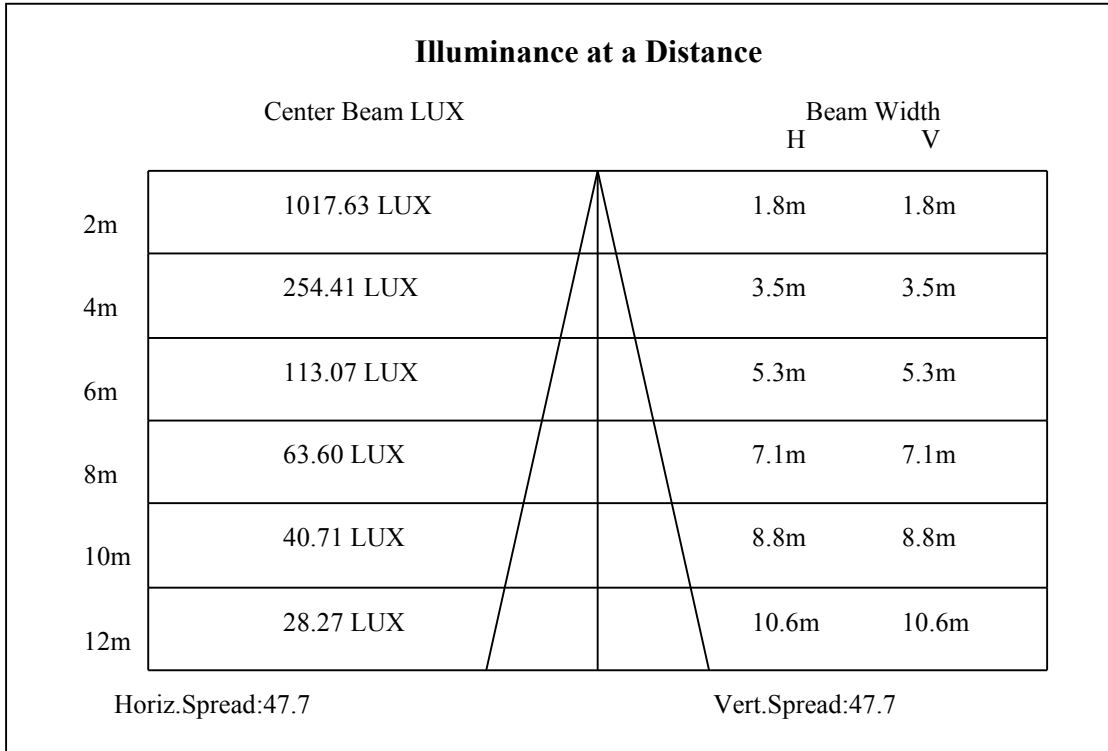
0-10	367.68
10-20	857.71
20-30	845.66
30-40	367.68
40-50	59.61
50-60	22.01
60-70	13.39
70-80	7.75
80-90	2.65
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

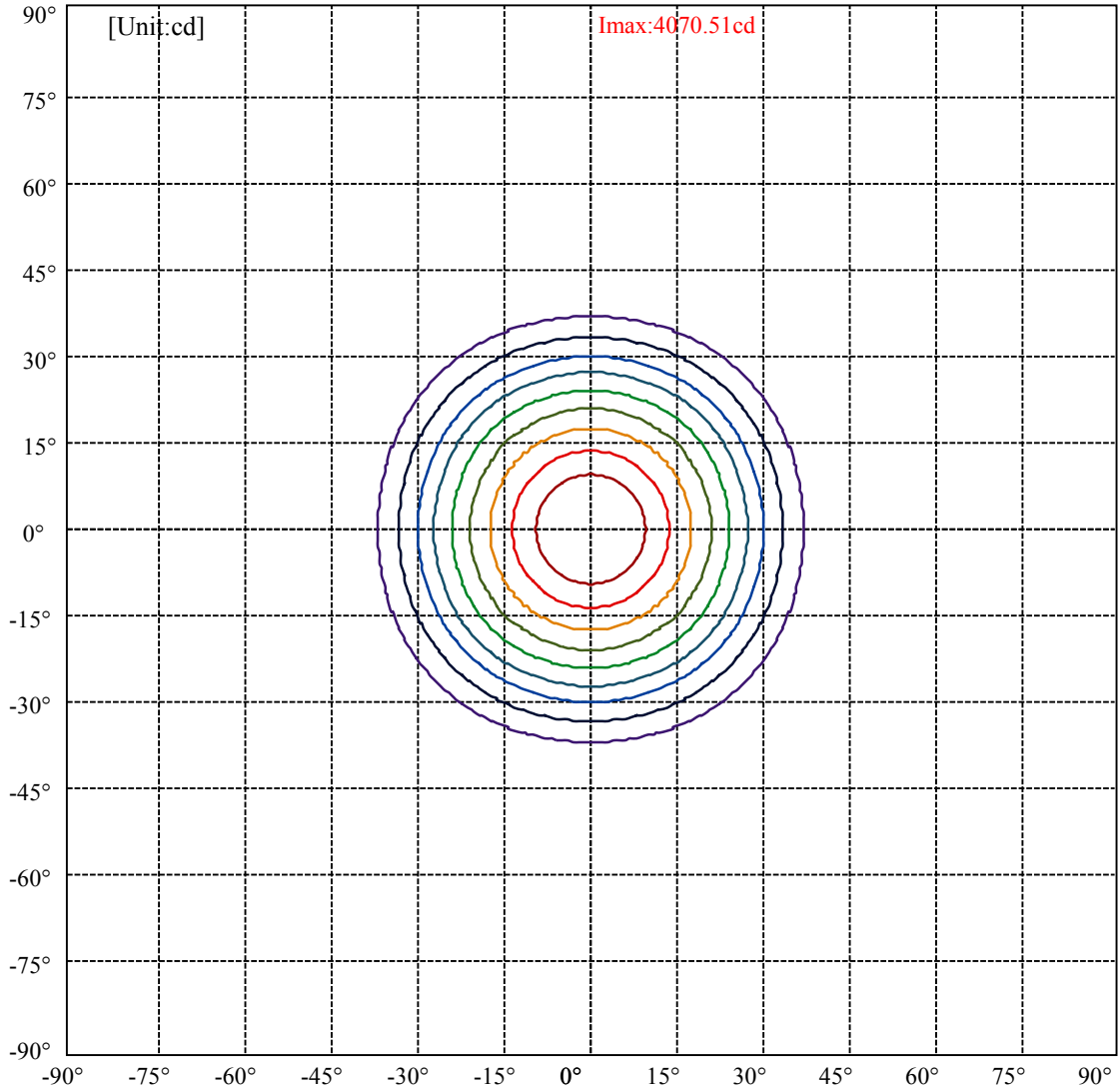


C0(Max): ———
C0/C180: ———
C90/C270: ———

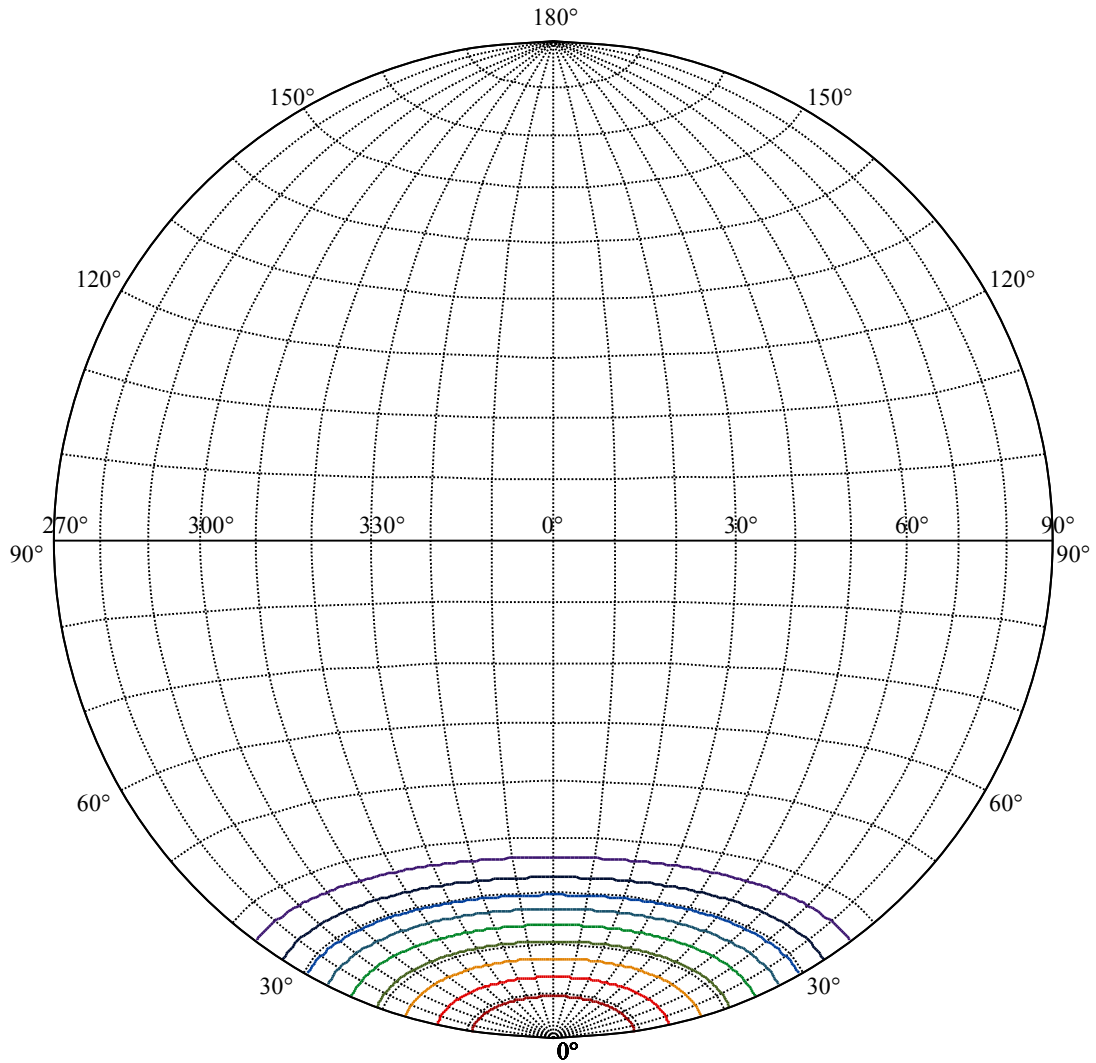
Field angle(10%Imax):C0/180Left:36.5 Right:36.5
:C90/270Left:36.5 Right:36.5

Beam Angle(50%Imax):C0/180Left:23.8 Right:23.8
:C90/270Left:23.8 Right:23.8





(10%Imax) 407.051	—
(20%Imax) 814.101	—
(30%Imax) 1221.15	—
(40%Imax) 1628.2	—
(50%Imax) 2035.25	—
(60%Imax) 2442.3	—
(70%Imax) 2849.35	—
(80%Imax) 3256.4	—
(90%Imax) 3663.46	—



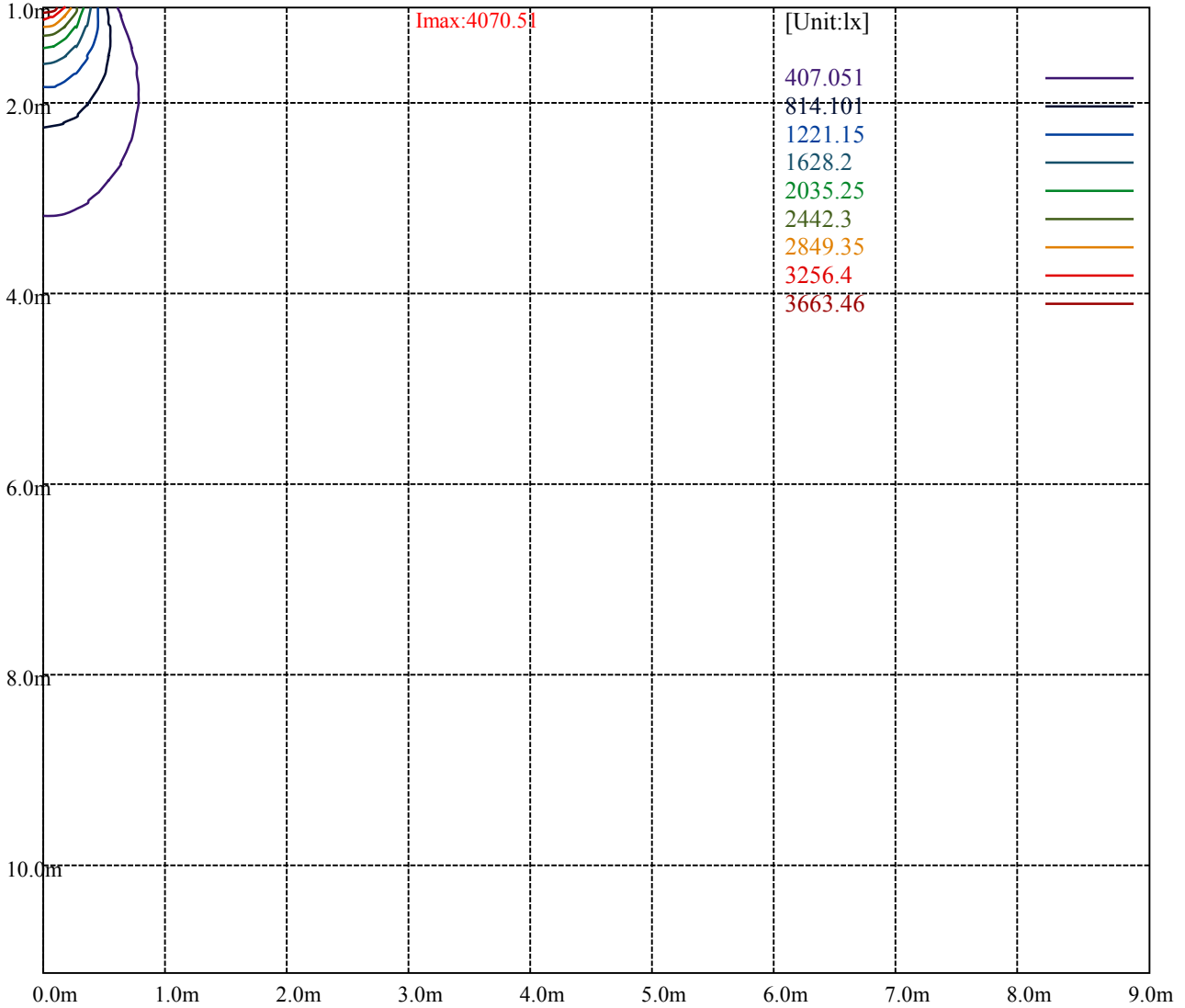
House

[Unit:cd]

Road

Imax:4070.51

(10%Imax)	407.051	—
(20%Imax)	814.101	—
(30%Imax)	1221.15	—
(40%Imax)	1628.2	—
(50%Imax)	2035.25	—
(60%Imax)	2442.3	—
(70%Imax)	2849.35	—
(80%Imax)	3256.4	—
(90%Imax)	3663.46	—



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

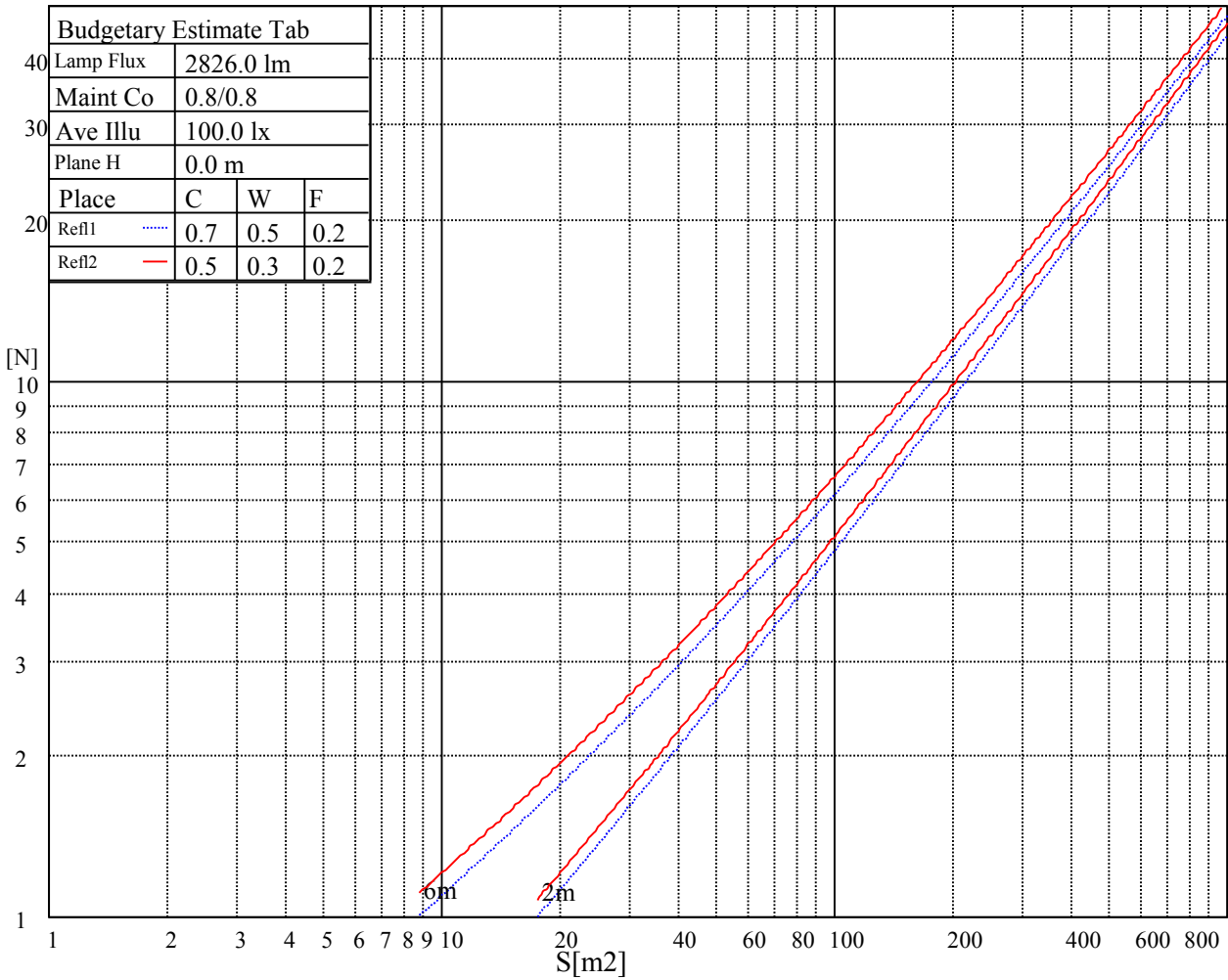
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

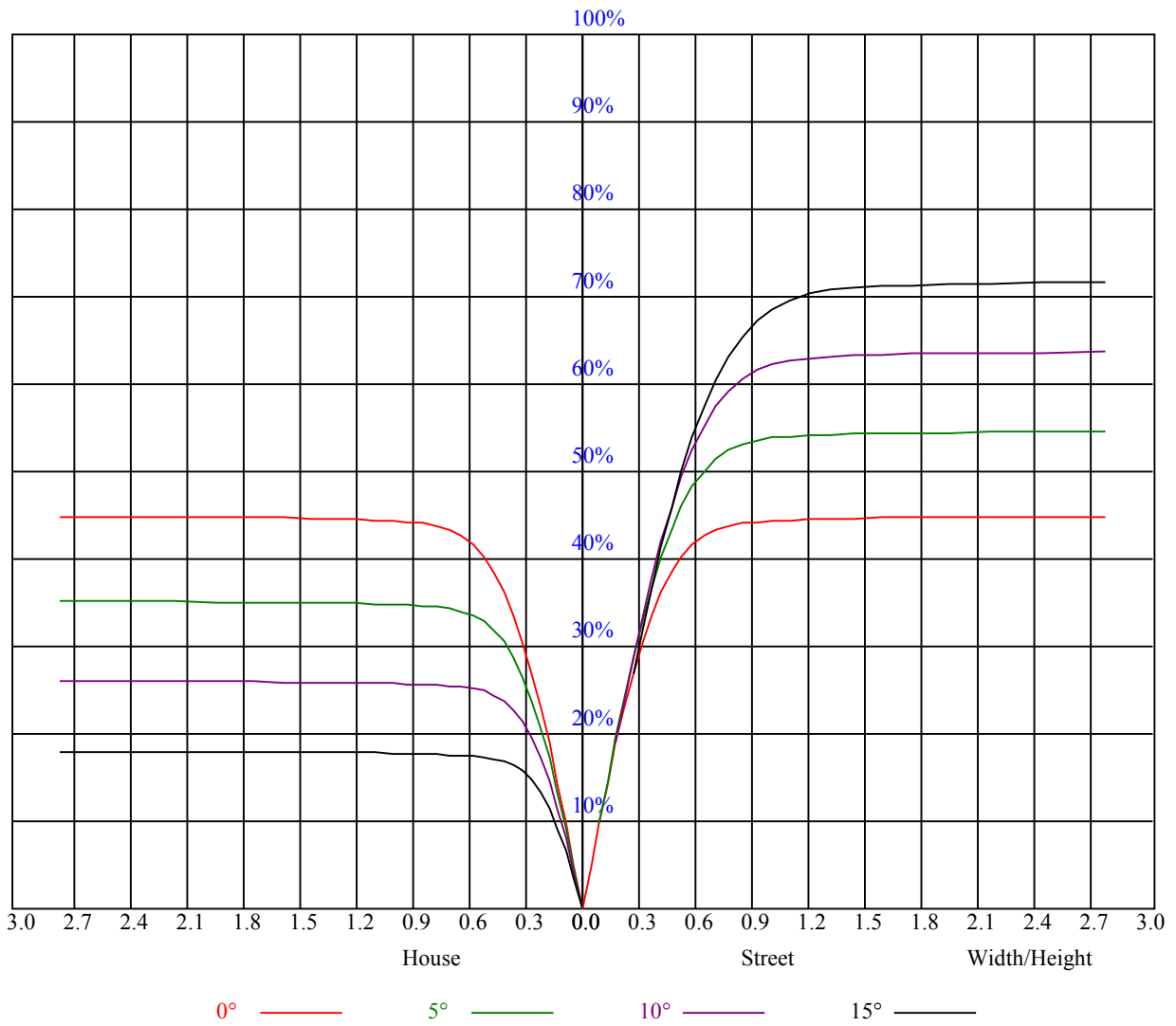


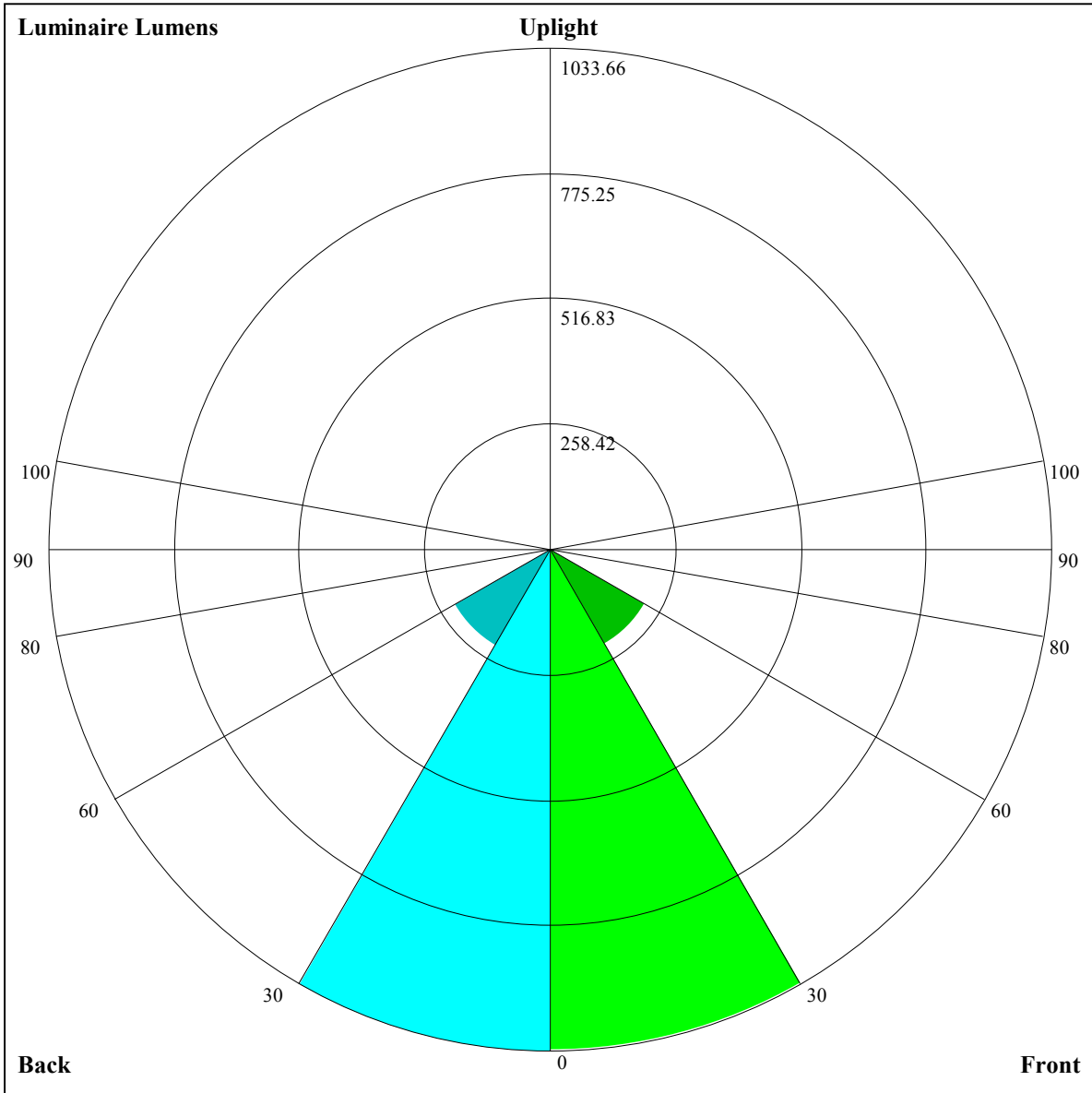
Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	3H	非数字	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	
	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	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	
	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	
8H	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	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	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	1.07	1.07	1.07	1.05	1.05	1.05	1.00	1.00	1.00	0.96	0.96	0.96	0.92	0.92	0.92	0.90
1	1.00	0.98	0.96	0.98	0.96	0.95	0.95	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85
2	0.94	0.90	0.88	0.92	0.89	0.87	0.89	0.87	0.85	0.87	0.85	0.83	0.84	0.83	0.81	0.80
3	0.88	0.84	0.81	0.87	0.83	0.80	0.85	0.81	0.79	0.82	0.80	0.77	0.80	0.78	0.76	0.75
4	0.83	0.78	0.75	0.82	0.78	0.74	0.80	0.76	0.74	0.78	0.75	0.73	0.77	0.74	0.72	0.71
5	0.78	0.73	0.70	0.78	0.73	0.70	0.76	0.72	0.69	0.74	0.71	0.68	0.73	0.70	0.68	0.67
6	0.74	0.69	0.66	0.73	0.69	0.65	0.72	0.68	0.65	0.71	0.67	0.65	0.70	0.67	0.64	0.63
7	0.70	0.65	0.62	0.70	0.65	0.62	0.69	0.64	0.61	0.68	0.64	0.61	0.67	0.63	0.61	0.60
8	0.67	0.62	0.58	0.66	0.62	0.58	0.65	0.61	0.58	0.64	0.61	0.58	0.64	0.60	0.58	0.56
9	0.64	0.59	0.55	0.63	0.58	0.55	0.62	0.58	0.55	0.62	0.58	0.55	0.61	0.57	0.55	0.54
10	0.61	0.56	0.53	0.60	0.56	0.52	0.59	0.55	0.52	0.59	0.55	0.52	0.58	0.55	0.52	0.51





Luminaire Lumens:

FL=1031.36,FM=223.81,FH=10.43,FVH=1.39

BL=1033.66,BM=229.15,BH=10.63,BVH=1.39

UL=0,UH=0

BUG Rating:B3-U0-G0

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	4073.17	4074.80	4070.91	4043.63	4012.99	3969.52	3907.65	3843.05	3756.12
45.0	4070.91	4065.34	4058.67	4041.37	4003.53	3967.84	3921.58	3851.41	3789.02
90.0	4057.56	4045.84	4003.53	3967.84	3919.95	3850.31	3778.98	3701.50	3602.90
135.0	4080.37	4062.03	4052.52	4015.78	3981.77	3933.88	3864.24	3802.95	3721.00
180.0	4073.17	4068.13	4069.81	4066.45	4040.85	4003.53	3959.48	3890.94	3844.16
225.0	4070.91	4082.63	4084.84	4072.02	4046.42	4000.74	3932.20	3853.09	3780.66
270.0	4057.56	4074.80	4092.10	4095.46	4087.63	4078.74	4027.44	3975.09	3938.30
315.0	4080.37	4090.41	4087.10	4078.17	4054.78	4015.78	3981.24	3936.09	3866.44
360.0	4073.17	4074.80	4070.91	4043.63	4012.99	3969.52	3907.65	3843.05	3756.12
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	3666.44	3568.94	3464.71	3361.11	3252.46	3171.10	3042.42	2930.99	2839.58
45.0	3703.76	3598.43	3507.08	3395.64	3287.57	3180.03	3074.17	2967.73	2860.19
90.0	3499.30	3396.22	3288.10	3224.60	3080.85	2977.19	2909.81	2743.18	2673.54
135.0	3633.01	3552.23	3455.25	3391.75	3283.63	3133.78	3065.23	2955.48	2844.63
180.0	3778.40	3661.98	3598.43	3491.46	3385.08	3275.27	3170.57	3062.45	2948.81
225.0	3686.47	3587.86	3484.21	3371.15	3260.82	3148.81	3083.63	2919.85	2847.94
270.0	3839.17	3787.34	3702.66	3601.21	3503.71	3397.85	3276.43	3151.59	3035.17
315.0	3790.12	3712.12	3607.36	3500.40	3388.97	3268.60	3159.43	3054.09	2940.45
360.0	3666.44	3568.94	3464.71	3361.11	3252.46	3171.10	3042.42	2930.99	2839.58
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2722.05	2606.15	2480.79	2348.18	2222.24	2092.46	1961.53	1828.33	1691.83
45.0	2742.08	2618.98	2499.19	2372.15	2245.68	2114.75	1983.81	1847.83	1714.12
90.0	2554.91	2435.12	2311.96	2183.24	2056.77	1928.10	1798.79	1659.50	1520.79
135.0	2740.98	2630.12	2508.65	2379.40	2241.74	2109.70	1973.77	1837.80	1696.88
180.0	2830.70	2727.05	2614.51	2496.93	2372.67	2239.53	2111.38	1982.66	1853.41
225.0	2723.16	2606.68	2493.04	2369.89	2246.21	2114.17	1983.81	1852.88	1719.69
270.0	2923.16	2807.84	2692.51	2574.41	2456.25	2333.67	2206.10	2081.32	1950.91
315.0	2826.23	2715.90	2601.69	2475.75	2353.17	2225.02	2098.03	1968.20	1834.48
360.0	2722.05	2606.15	2480.79	2348.18	2222.24	2092.46	1961.53	1828.33	1691.83
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1546.97	1397.11	1045.99	1045.99	1016.24	868.17	673.06	599.48	484.36
45.0	1631.65	1434.43	1350.28	1206.57	1064.50	921.26	780.87	649.41	531.83
90.0	1378.14	1068.70	1068.70	922.16	783.55	704.86	582.97	472.33	375.09
135.0	1554.22	1411.57	1261.13	1111.28	1023.81	823.76	688.41	613.19	463.86
180.0	1718.01	1580.40	1500.19	1362.58	1157.53	1071.17	926.31	785.91	653.82
225.0	1585.97	1452.83	1263.39	1074.11	1045.78	934.25	771.78	669.17	551.64
270.0	1817.77	1689.62	1588.23	1427.76	1314.64	1177.56	1036.64	893.98	755.80
315.0	1700.19	1563.68	1480.11	1081.37	1081.37	1051.78	905.60	764.57	637.43
360.0	1546.97	1397.11	1045.99	1045.99	1016.24	868.17	673.06	599.48	484.36
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	385.70	304.07	237.16	184.91	145.07	115.95	94.19	78.37	66.49
45.0	425.97	336.24	290.04	290.04	158.11	125.52	101.60	83.84	73.06
90.0	295.77	231.17	181.39	143.76	115.16	94.35	78.48	66.70	57.77
135.0	407.04	322.89	293.35	222.87	147.23	118.06	96.61	80.32	68.17
180.0	537.40	434.90	345.76	284.47	284.47	155.22	123.99	101.13	90.30
225.0	442.00	347.75	271.96	211.41	164.78	130.30	105.86	87.78	74.38
270.0	628.75	515.69	414.25	326.26	310.64	280.00	150.43	119.47	97.03
315.0	521.31	417.50	328.94	255.24	196.27	151.64	119.16	96.19	79.74
360.0	385.70	304.07	237.16	184.91	145.07	115.95	94.19	78.37	66.49

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	57.29	50.30	44.63	39.79	35.74	33.01	29.70	27.33	25.65
45.0	62.71	54.77	48.36	43.05	38.63	34.85	31.70	29.17	26.91
90.0	50.78	45.15	40.42	36.48	33.06	30.22	27.75	25.55	24.28
135.0	58.92	51.88	45.99	42.89	36.85	33.43	31.59	29.01	26.75
180.0	76.06	61.55	56.77	47.99	44.89	40.26	36.37	33.06	30.33
225.0	64.18	56.03	49.51	44.05	39.47	35.64	32.48	29.75	28.33
270.0	80.11	72.38	61.97	53.88	47.41	42.10	37.74	33.96	30.91
315.0	67.75	60.18	51.30	46.57	41.52	37.37	33.80	30.80	28.28
360.0	57.29	50.30	44.63	39.79	35.74	33.01	29.70	27.33	25.65
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	23.55	22.34	20.97	19.71	18.61	17.66	16.71	15.87	15.09
45.0	25.02	23.29	21.81	20.55	19.40	18.24	17.29	16.40	15.61
90.0	22.55	20.87	19.50	18.29	17.29	16.35	15.45	14.61	13.93
135.0	24.70	23.13	21.71	20.55	19.45	18.40	17.40	16.61	15.72
180.0	28.02	25.97	24.13	22.55	21.08	19.76	18.66	17.66	16.66
225.0	26.18	24.34	22.65	21.24	19.92	18.71	17.71	16.77	15.87
270.0	28.38	26.12	24.18	22.55	21.08	19.76	18.61	17.50	16.61
315.0	26.12	24.23	22.55	21.03	19.76	18.55	17.56	16.61	15.77
360.0	23.55	22.34	20.97	19.71	18.61	17.66	16.71	15.87	15.09
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	14.35	13.61	12.98	12.30	11.67	11.09	10.41	9.78	9.25
45.0	14.72	13.93	13.51	12.83	12.14	11.51	10.83	10.20	9.57
90.0	13.19	12.56	11.83	11.25	10.67	10.14	9.51	8.88	8.30
135.0	14.93	14.24	13.56	12.88	12.19	11.51	11.04	10.25	9.25
180.0	15.82	15.03	14.45	13.51	12.83	12.40	11.51	11.09	10.46
225.0	15.03	14.19	13.46	12.72	12.04	11.35	10.72	10.14	9.46
270.0	15.72	14.88	14.03	13.35	12.83	12.25	11.46	10.99	10.35
315.0	14.98	14.19	13.46	12.83	12.19	11.51	10.88	10.51	9.93
360.0	14.35	13.61	12.98	12.30	11.67	11.09	10.41	9.78	9.25
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	8.67	7.99	7.73	6.94	6.41	6.04	5.57	4.94	4.47
45.0	8.94	8.36	7.73	7.15	6.68	6.10	5.52	4.99	4.52
90.0	7.78	7.25	6.78	6.20	5.57	5.10	4.68	4.10	3.63
135.0	8.88	8.25	7.67	7.10	6.57	5.99	5.47	4.89	4.47
180.0	9.72	9.15	8.52	7.94	7.36	6.78	6.20	5.68	5.10
225.0	8.88	8.30	7.88	7.41	6.83	6.20	5.68	5.15	4.68
270.0	9.78	9.25	8.62	7.99	7.52	6.99	6.47	5.89	5.41
315.0	9.41	8.83	8.25	7.67	7.15	6.68	6.04	5.57	5.05
360.0	8.67	7.99	7.73	6.94	6.41	6.04	5.57	4.94	4.47
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	3.99	3.36	3.05	2.63	2.26	2.00	1.68	1.37	1.05
45.0	3.94	3.47	3.00	2.63	2.16	1.84	1.52	1.21	1.00
90.0	3.21	2.84	2.47	2.16	1.89	1.52	1.21	0.95	0.79
135.0	3.94	3.47	2.94	2.63	2.21	1.89	1.58	1.31	0.89
180.0	4.57	4.15	3.57	3.00	2.68	2.21	1.89	1.58	1.26
225.0	4.15	3.63	3.15	2.73	2.31	2.00	1.68	1.31	1.05
270.0	4.94	4.47	3.89	3.36	2.94	2.47	2.21	1.79	1.47
315.0	4.63	4.10	3.63	3.10	2.73	2.37	2.05	1.73	1.42
360.0	3.99	3.36	3.05	2.63	2.26	2.00	1.68	1.37	1.05

Intensity data(cd)

C/γ(°)	90.0
0.0	0.89
45.0	0.84
90.0	0.84
135.0	0.79
180.0	0.95
225.0	0.95
270.0	1.26
315.0	1.26
360.0	0.89