



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

NT

Client:

LumCAT: 2-2519-L

Luminaire: 92.70.412.00

Report No: 2024807-B008

Ballast type: AC

Test No: 2024807-C008

Voltage(V): 34.990

LampCAT: CITIZEN CLU038 LES14.5

Current(A): 0.450

Lamp flux(lm): 2561.0

Power (W): 15.745

Number of Lamps: 1

PF: 0.000

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 2354.67, Efficiency(%): 91.94% , Luminous Efficacy(lm/W): 149.55

Central intensity(cd): 7945.805, Maximum intensity(cd): 7945.805

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=26.0

[C90/270]Total=26.0

Field angle(10%Imax): [C0/180]Total=56.4

[C90/270]Total=56.4

Maximum s/h(1/2): C0_180=0.44 C90_270=0.44

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(%): 91.94%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 97.797%

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2024/8/7
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.65

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	7945.805	0.000	0	0.00%	0.00%
1.0	7919.104	7.591	7.591	0.30%	0.32%
2.0	7820.859	22.591	30.183	0.88%	1.28%
3.0	7663.873	37.034	67.217	1.45%	2.85%
4.0	7441.268	50.562	117.779	1.97%	5.00%
5.0	7187.207	62.931	180.71	2.46%	7.67%
6.0	6872.283	73.886	254.596	2.89%	10.81%
7.0	6497.885	82.988	337.584	3.24%	14.34%
8.0	6109.369	90.228	427.812	3.52%	18.17%
9.0	5706.002	95.757	523.569	3.74%	22.24%
10.0	5246.089	99.112	622.682	3.87%	26.44%
11.0	4820.118	100.582	723.264	3.93%	30.72%
12.0	4366.788	100.426	823.69	3.92%	34.98%
13.0	3971.030	98.949	922.639	3.86%	39.18%
14.0	3602.630	96.942	1019.581	3.79%	43.30%
15.0	3242.571	93.974	1113.555	3.67%	47.29%
16.0	2923.038	90.343	1203.898	3.53%	51.13%
17.0	2648.055	86.757	1290.655	3.39%	54.81%
18.0	2399.042	83.216	1373.871	3.25%	58.35%
19.0	2166.269	79.427	1453.298	3.10%	61.72%
20.0	1945.420	75.255	1528.553	2.94%	64.92%
21.0	1755.587	71.067	1599.62	2.77%	67.93%
22.0	1568.900	66.807	1666.427	2.61%	70.77%
23.0	1361.906	61.496	1727.923	2.40%	73.38%
24.0	1252.191	57.154	1785.077	2.23%	75.81%
25.0	1161.218	54.876	1839.953	2.14%	78.14%
26.0	1048.935	52.171	1892.123	2.04%	80.36%
27.0	928.715	48.384	1940.507	1.89%	82.41%
28.0	818.152	44.227	1984.734	1.73%	84.29%
29.0	701.765	39.765	2024.499	1.55%	85.98%
30.0	604.815	35.277	2059.777	1.38%	87.48%
31.0	498.524	30.704	2090.481	1.20%	88.78%
32.0	406.036	25.915	2116.396	1.01%	89.88%
33.0	325.019	21.537	2137.933	0.84%	90.80%
34.0	262.649	17.785	2155.718	0.69%	91.55%
35.0	233.278	15.402	2171.119	0.60%	92.20%
36.0	186.028	13.351	2184.47	0.52%	92.77%
37.0	139.232	10.608	2195.078	0.41%	93.22%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	125.136	8.824	2203.902	0.34%	93.60%
39.0	112.787	8.121	2212.023	0.32%	93.94%
40.0	102.444	7.506	2219.53	0.29%	94.26%
41.0	92.656	6.947	2226.477	0.27%	94.56%
42.0	84.675	6.443	2232.92	0.25%	94.83%
43.0	77.147	5.994	2238.914	0.23%	95.08%
44.0	70.395	5.569	2244.483	0.22%	95.32%
45.0	64.477	5.183	2249.666	0.20%	95.54%
46.0	59.378	4.844	2254.51	0.19%	95.75%
47.0	54.997	4.549	2259.059	0.18%	95.94%
48.0	50.951	4.283	2263.342	0.17%	96.12%
49.0	47.469	4.042	2267.384	0.16%	96.29%
50.0	44.572	3.838	2271.221	0.15%	96.46%
51.0	42.012	3.663	2274.884	0.14%	96.61%
52.0	39.773	3.509	2278.394	0.14%	96.76%
53.0	37.879	3.378	2281.772	0.13%	96.90%
54.0	36.211	3.266	2285.037	0.13%	97.04%
55.0	34.828	3.171	2288.208	0.12%	97.18%
56.0	33.490	3.087	2291.295	0.12%	97.31%
57.0	32.209	3.004	2294.299	0.12%	97.44%
58.0	30.966	2.921	2297.221	0.11%	97.56%
59.0	29.766	2.839	2300.06	0.11%	97.68%
60.0	28.427	2.749	2302.809	0.11%	97.80%
61.0	27.154	2.652	2305.462	0.10%	97.91%
62.0	25.911	2.557	2308.019	0.10%	98.02%
63.0	24.748	2.464	2310.483	0.10%	98.12%
64.0	23.650	2.375	2312.857	0.09%	98.22%
65.0	22.582	2.288	2315.145	0.09%	98.32%
66.0	21.690	2.209	2317.354	0.09%	98.42%
67.0	20.841	2.139	2319.493	0.08%	98.51%
68.0	20.124	2.075	2321.568	0.08%	98.59%
69.0	19.364	2.014	2323.583	0.08%	98.68%
70.0	18.676	1.954	2325.536	0.08%	98.76%
71.0	17.930	1.892	2327.428	0.07%	98.84%
72.0	17.271	1.830	2329.259	0.07%	98.92%
73.0	16.628	1.773	2331.031	0.07%	99.00%
74.0	16.013	1.716	2332.747	0.07%	99.07%
75.0	15.421	1.661	2334.408	0.06%	99.14%

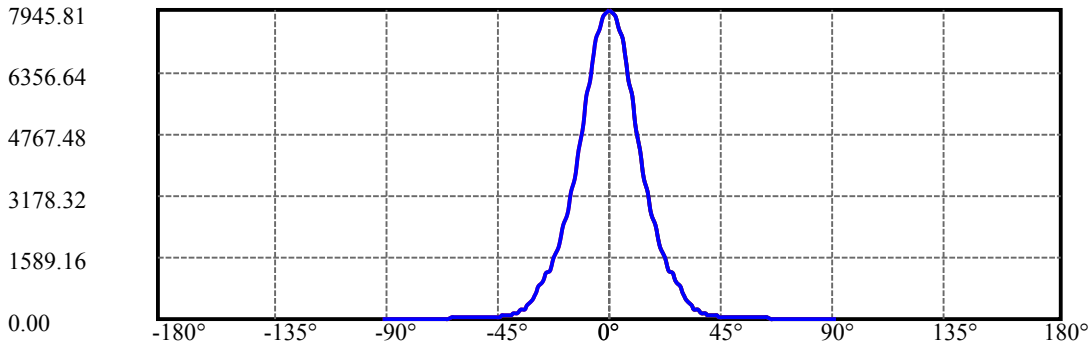
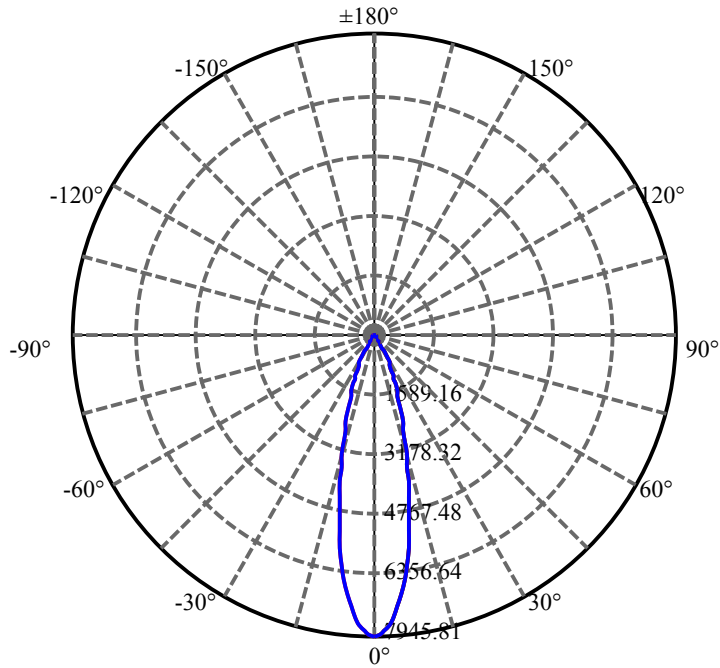
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	14.931	1.611	2336.019	0.06%	99.21%
77.0	14.462	1.567	2337.586	0.06%	99.27%
78.0	14.016	1.524	2339.111	0.06%	99.34%
79.0	13.628	1.485	2340.596	0.06%	99.40%
80.0	13.248	1.449	2342.045	0.06%	99.46%
81.0	12.853	1.412	2343.457	0.06%	99.52%
82.0	12.509	1.375	2344.832	0.05%	99.58%
83.0	12.158	1.341	2346.173	0.05%	99.64%
84.0	11.843	1.308	2347.481	0.05%	99.69%
85.0	11.529	1.276	2348.756	0.05%	99.75%
86.0	11.200	1.242	2349.999	0.05%	99.80%
87.0	10.893	1.209	2351.208	0.05%	99.85%
88.0	10.622	1.179	2352.386	0.05%	99.90%
89.0	10.410	1.153	2353.539	0.05%	99.95%
90.0	10.293	1.135	2354.674	0.04%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2059.78	80.43%	87.48%
0-40	2219.53	86.67%	94.26%
0-60	2302.81	89.92%	97.80%
0-90	2353.54	91.90%	99.95%
0-120	2353.54	91.90%	99.95%
0-180	2354.67	91.94%	100.00%
60-90	50.73	1.98%	2.15%
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%
0-25.84	1883.74	73.55%	80.00%

ZONAL LUMEN SUMMARY

0-10	622.68
10-20	905.87
20-30	531.22
30-40	159.75
40-50	51.69
50-60	31.59
60-70	22.73
70-80	16.51
80-90	11.49
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



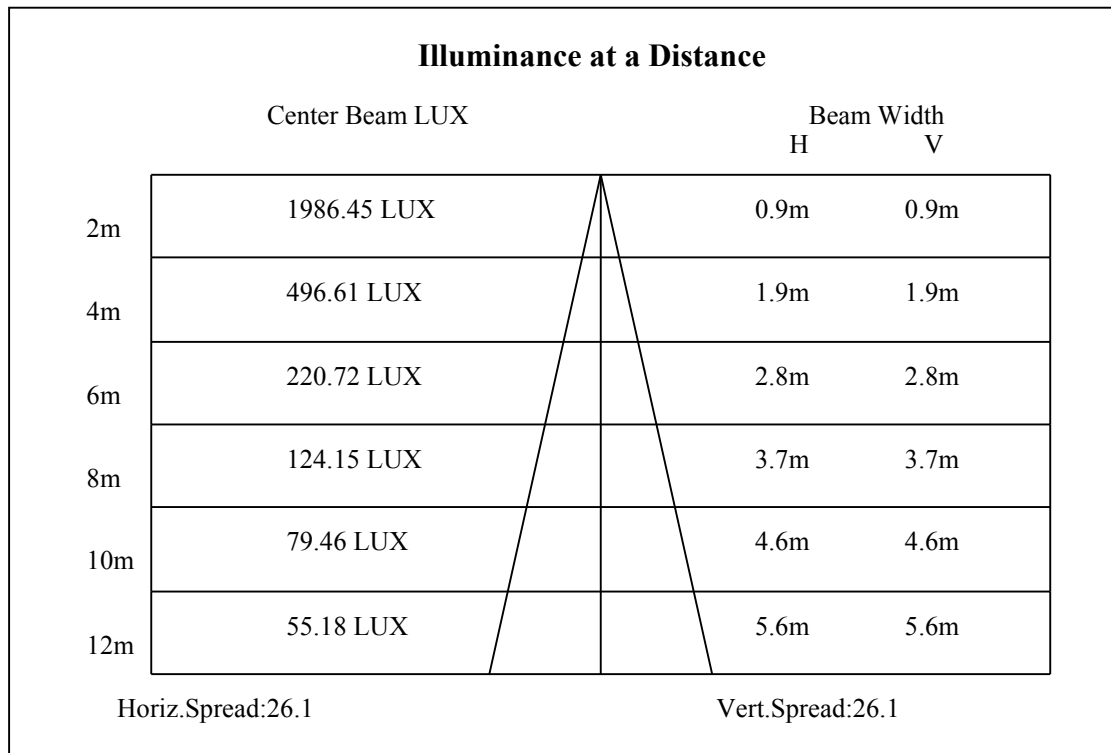
C0(Max): —————

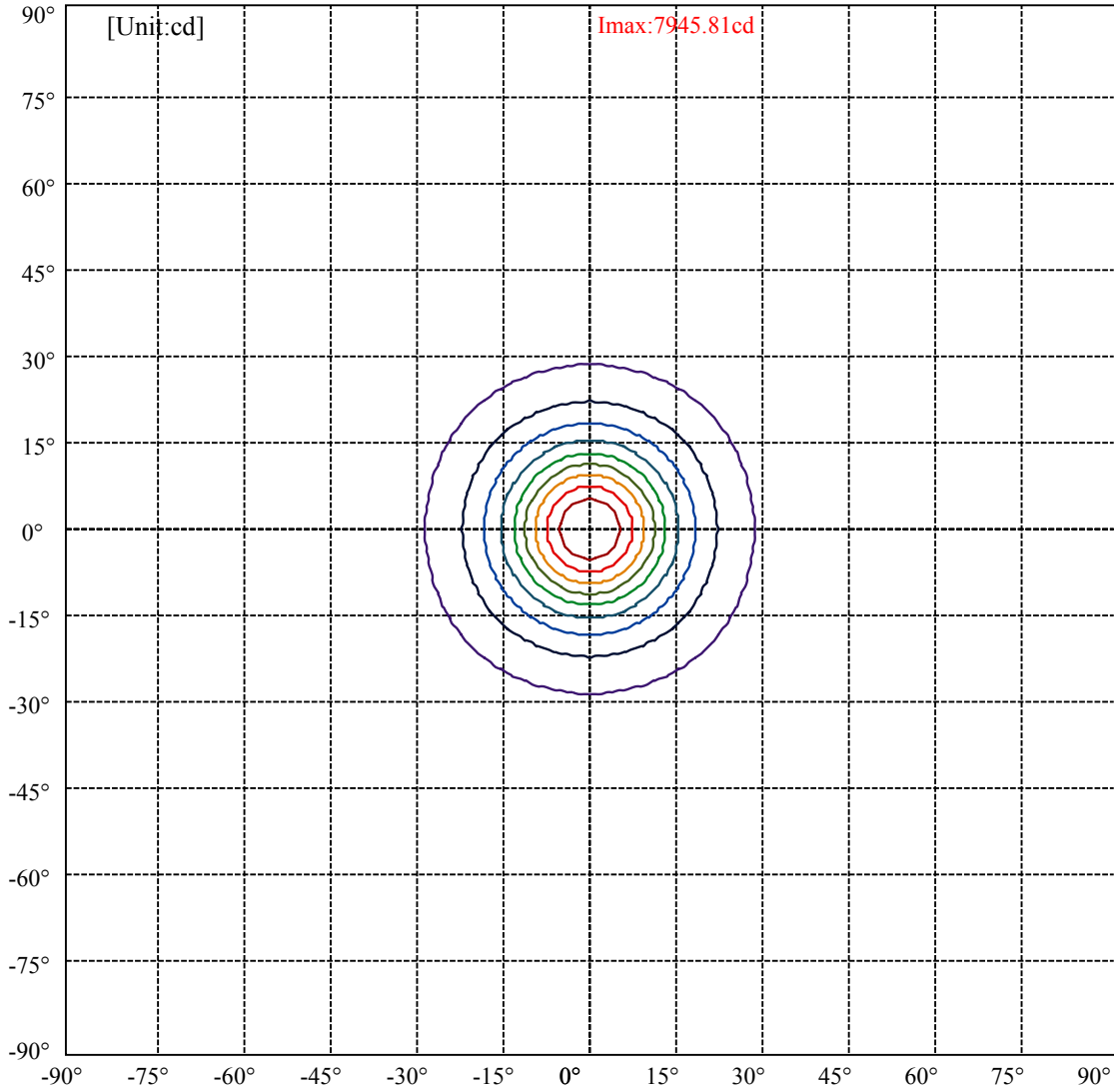
C0/C180: —————

C90/C270: —————

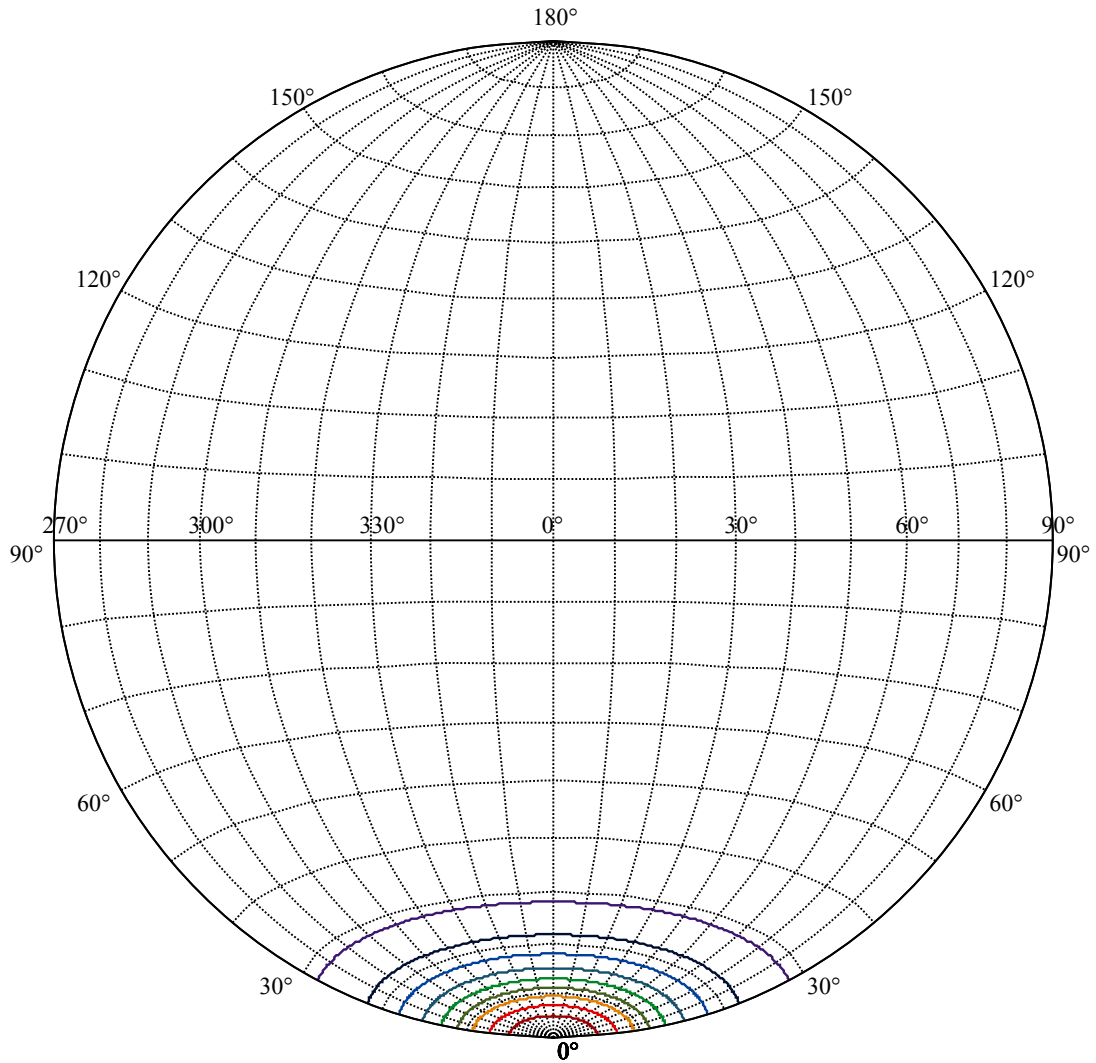
Field angle(10%Imax):C0/180Left:28.2 Right:28.2
:C90/270Left:28.2 Right:28.2

Beam Angle(50%Imax):C0/180Left:13.0 Right:13.0
:C90/270Left:13.0 Right:13.0





(10%Imax) 794.581	—
(20%Imax) 1589.16	—
(30%Imax) 2383.74	—
(40%Imax) 3178.32	—
(50%Imax) 3972.9	—
(60%Imax) 4767.48	—
(70%Imax) 5562.06	—
(80%Imax) 6356.64	—
(90%Imax) 7151.22	—



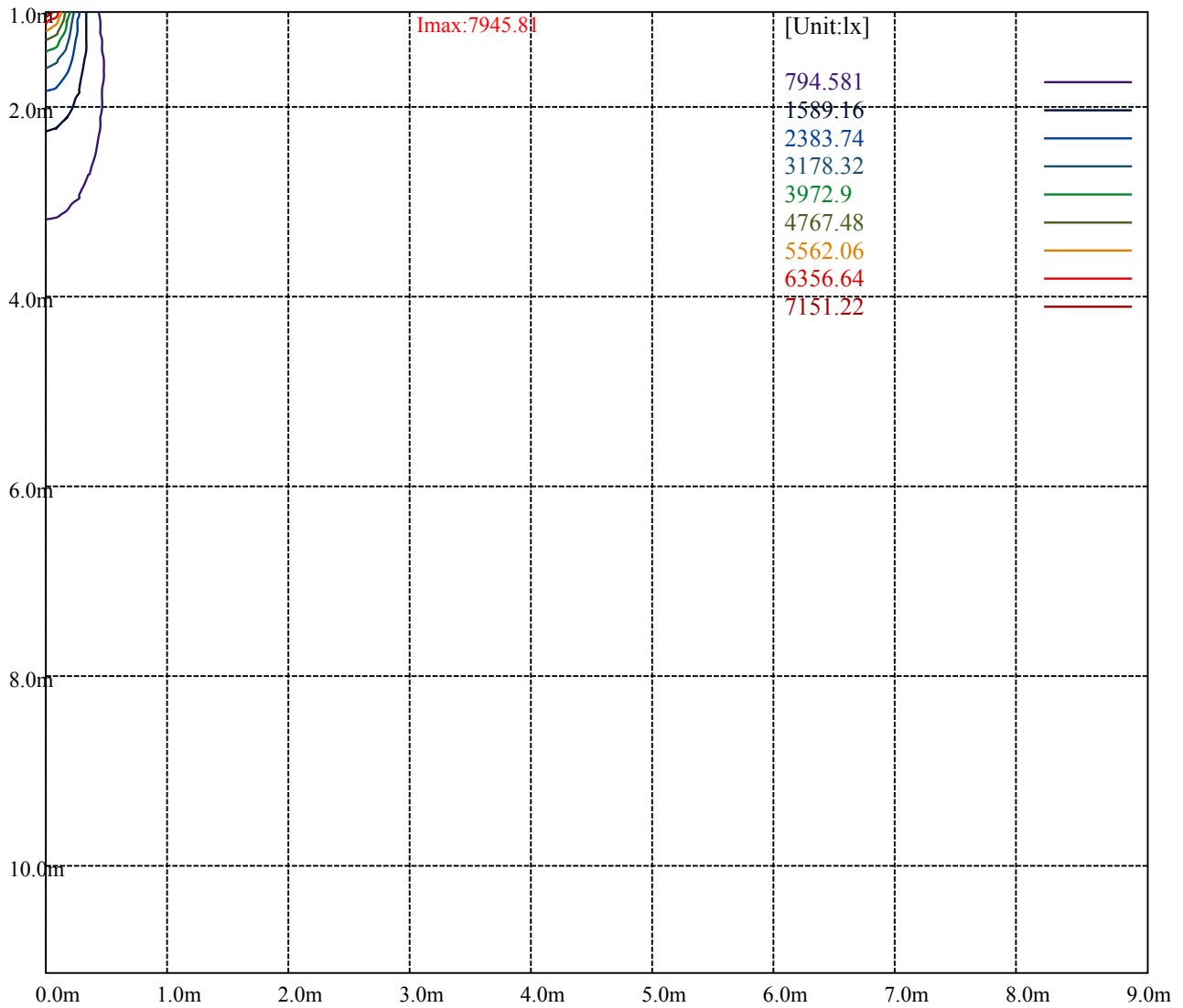
House

[Unit:cd]

Road

Imax:7945.81

(10%Imax) 794.581	—
(20%Imax) 1589.16	—
(30%Imax) 2383.74	—
(40%Imax) 3178.32	—
(50%Imax) 3972.9	—
(60%Imax) 4767.48	—
(70%Imax) 5562.06	—
(80%Imax) 6356.64	—
(90%Imax) 7151.22	—



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

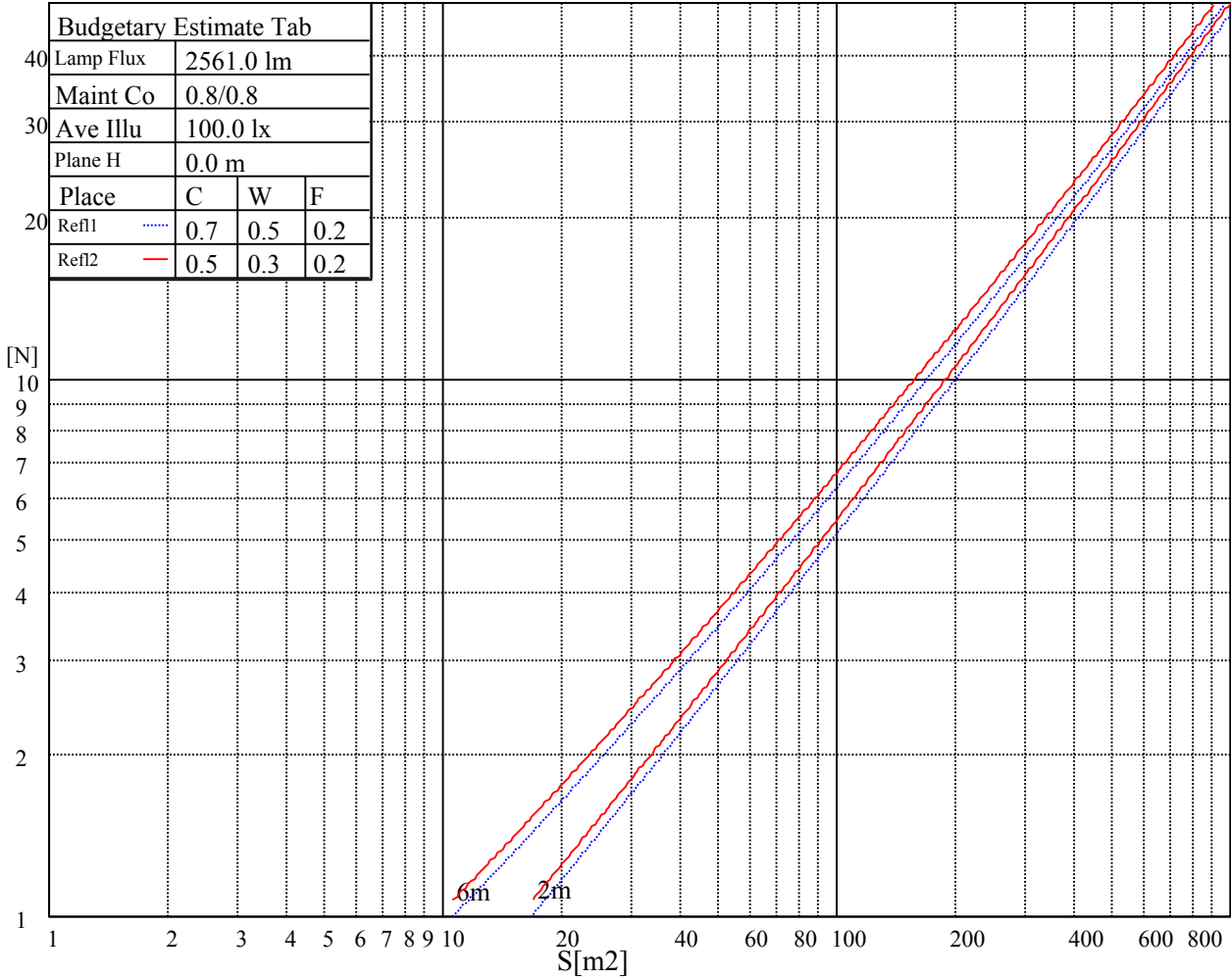
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

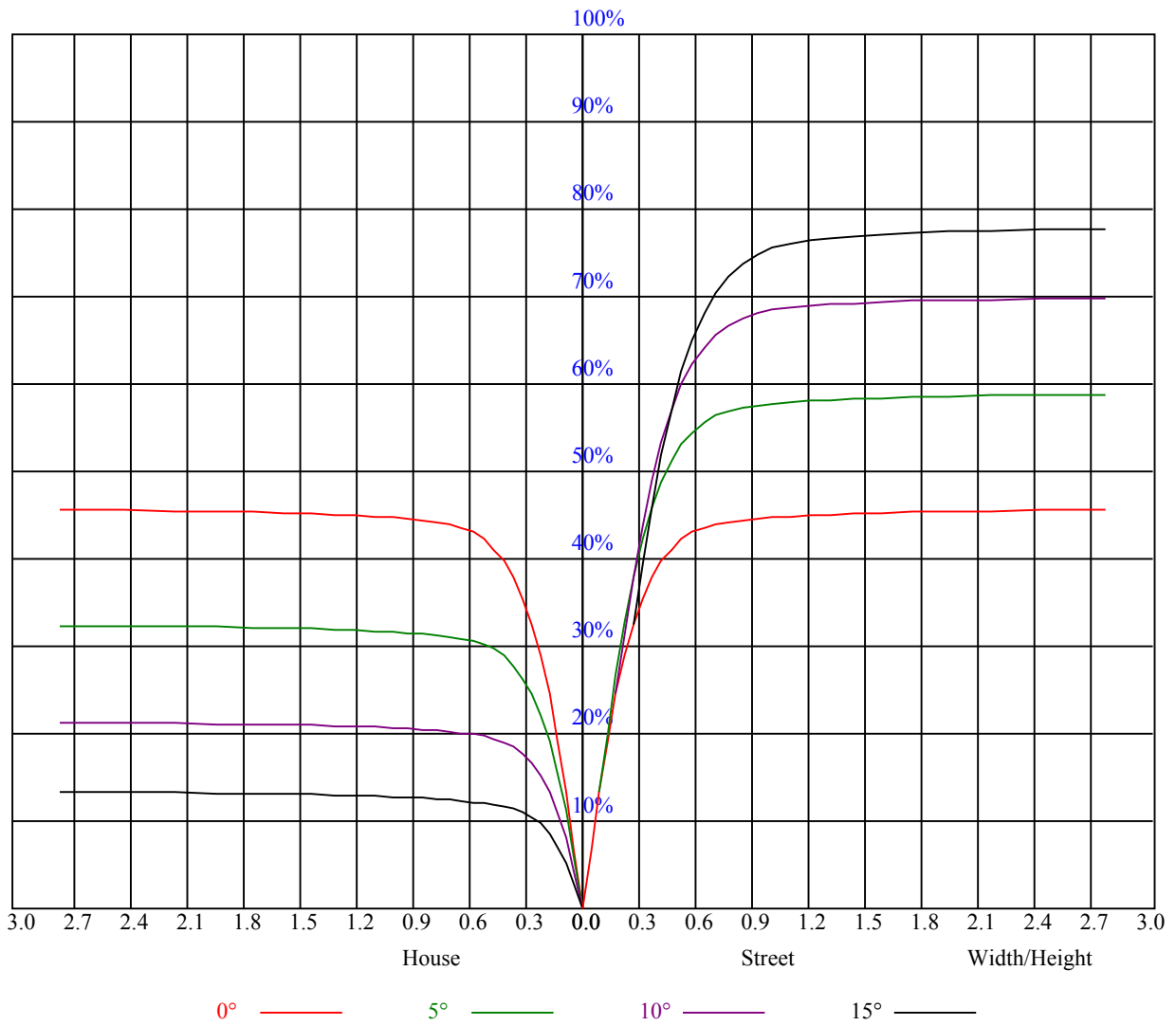


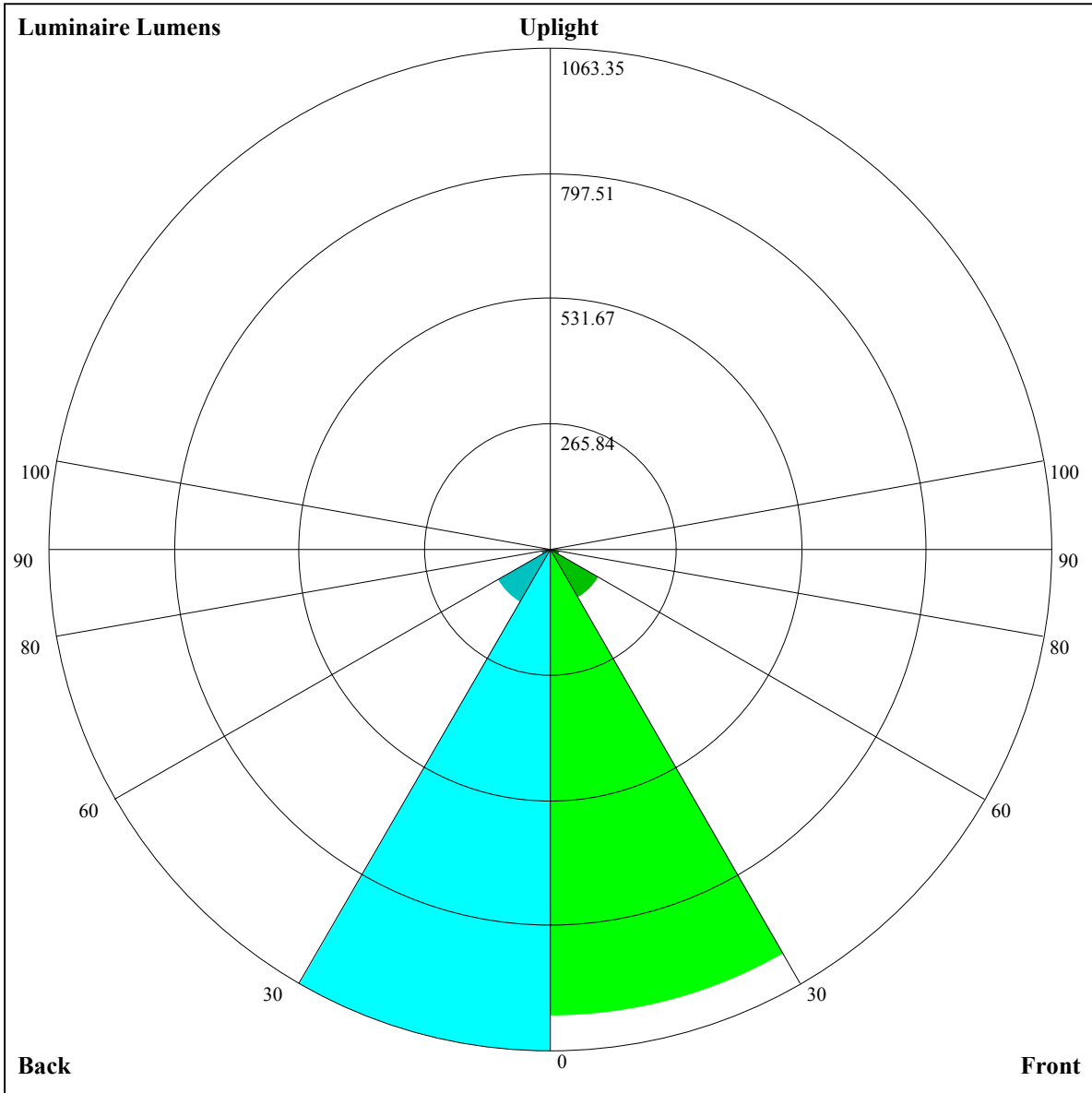
Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	3H	非数字	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	
8H	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 RHOF=20 CU															
0	1.09	1.09	1.09	1.07	1.07	1.07	1.02	1.02	1.02	0.98	0.98	0.98	0.94	0.94	0.94	0.92
1	1.03	1.01	0.99	1.01	0.99	0.97	0.97	0.95	0.94	0.94	0.92	0.91	0.90	0.90	0.89	0.87
2	0.97	0.93	0.91	0.95	0.92	0.90	0.92	0.90	0.88	0.90	0.88	0.86	0.87	0.86	0.84	0.83
3	0.92	0.88	0.85	0.90	0.87	0.84	0.88	0.85	0.83	0.86	0.83	0.81	0.84	0.82	0.80	0.79
4	0.87	0.83	0.80	0.86	0.82	0.79	0.84	0.81	0.78	0.83	0.80	0.77	0.81	0.79	0.77	0.75
5	0.83	0.79	0.76	0.82	0.78	0.75	0.81	0.77	0.75	0.79	0.76	0.74	0.78	0.75	0.73	0.72
6	0.80	0.75	0.72	0.79	0.75	0.72	0.78	0.74	0.71	0.77	0.73	0.71	0.75	0.73	0.70	0.69
7	0.76	0.72	0.69	0.76	0.72	0.69	0.75	0.71	0.68	0.74	0.70	0.68	0.73	0.70	0.68	0.67
8	0.74	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	0.70	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	0.64	0.61	0.67	0.63	0.61	0.66	0.63	0.61	0.60





Luminaire Lumens:

FL=991.42,FM=117.38,FH=19.4,FVH=6.26

BL=1063.35,BM=129.24,BH=19.73,BVH=6.36

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	7928.69	7842.07	7676.45	7483.92	7156.19	6844.85	6510.10	6045.43	5644.55
45.0	7943.90	7955.02	7902.35	7746.68	7554.14	7289.62	6914.49	6567.45	6103.37
90.0	7963.22	7907.03	7786.48	7558.24	7322.39	7036.80	6638.85	6267.23	5872.79
135.0	7947.41	7975.50	7957.36	7841.49	7692.84	7481.57	7246.90	6885.23	6560.43
180.0	7928.69	7970.24	7937.47	7834.47	7692.84	7506.74	7278.50	6922.10	6606.08
225.0	7943.90	7924.01	7782.38	7639.00	7442.36	7195.99	6842.51	6508.35	6123.27
270.0	7963.22	7947.41	7870.75	7746.68	7536.00	7304.25	7032.12	6730.73	6310.54
315.0	7947.41	7831.54	7653.63	7460.51	7133.37	6837.83	6514.78	6056.55	5653.92
360.0	7928.69	7842.07	7676.45	7483.92	7156.19	6844.85	6510.10	6045.43	5644.55
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	5239.58	4723.99	4317.26	3944.48	3594.51	3212.36	2933.79	2669.27	2429.91
45.0	5712.44	5291.08	4874.40	4371.10	3996.56	3650.11	3327.65	2963.05	2703.80
90.0	5435.63	4915.95	4508.05	4124.14	3757.20	3356.32	3054.35	2714.33	2475.56
135.0	6205.20	5693.13	5265.91	4756.77	4350.62	3973.74	3537.74	3222.31	2923.26
180.0	6246.16	5752.82	5339.07	4910.10	4397.44	4003.00	3651.28	3236.94	2939.06
225.0	5632.26	5225.53	4807.68	4293.85	3902.34	3547.11	3147.40	2857.13	2585.00
270.0	5939.51	5543.31	5126.63	4599.34	4187.93	3815.73	3387.34	3081.27	2728.96
315.0	5237.24	4822.90	4321.95	3934.53	3581.64	3262.69	2901.02	2640.01	2398.90
360.0	5239.58	4723.99	4317.26	3944.48	3594.51	3212.36	2933.79	2669.27	2429.91
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2165.39	1974.02	1789.09	1576.07	1421.57	1146.28	1146.28	1038.60	931.97
45.0	2469.71	2209.87	2010.31	1830.06	1619.38	1464.29	1300.43	1189.82	1084.48
90.0	2250.83	2012.65	1822.45	1651.56	1457.85	1160.74	1160.74	1108.65	1004.01
135.0	2665.17	2434.01	2165.98	1967.58	1790.26	1615.28	1431.52	1308.04	1176.95
180.0	2680.39	2439.28	2160.12	1965.24	1785.58	1610.01	1418.64	1295.75	1191.58
225.0	2349.74	2080.53	1889.75	1718.28	1554.42	1281.70	1145.87	1145.87	1014.90
270.0	2480.24	2246.15	1970.51	1783.82	1617.62	1454.34	1278.78	1168.75	1056.97
315.0	2130.86	1933.64	1755.15	1552.08	1304.53	1162.61	1135.28	1034.27	930.62
360.0	2165.39	1974.02	1789.09	1576.07	1421.57	1146.28	1146.28	1038.60	931.97
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	800.82	697.06	599.04	505.75	396.78	318.19	249.83	195.58	154.27
45.0	973.29	837.52	728.08	632.10	539.05	429.61	348.85	311.40	311.40
90.0	867.48	763.54	662.59	569.42	458.00	374.49	299.23	220.69	176.50
135.0	1066.34	954.56	822.88	721.06	622.15	502.18	412.06	331.88	295.01
180.0	1058.15	942.86	807.67	702.33	601.67	505.11	393.33	315.49	297.94
225.0	904.35	795.85	670.61	574.22	460.05	375.71	299.52	234.73	173.99
270.0	955.73	852.73	722.81	629.76	519.15	431.37	351.78	296.18	296.18
315.0	803.57	701.10	600.44	503.88	391.34	311.63	245.56	195.23	160.94
360.0	800.82	697.06	599.04	505.75	396.78	318.19	249.83	195.58	154.27
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	137.94	126.23	113.07	103.99	96.09	86.96	80.29	73.15	68.06
45.0	159.47	139.52	126.82	112.89	103.12	94.10	84.57	77.66	71.34
90.0	147.01	133.31	120.38	106.80	97.38	89.07	81.35	72.98	67.30
135.0	295.01	164.51	147.13	133.37	118.39	108.38	99.37	90.83	81.23
180.0	297.94	153.86	137.76	125.53	114.47	102.41	94.22	86.32	77.37
225.0	146.42	130.68	118.63	105.16	95.92	87.32	79.82	71.57	65.72
270.0	166.96	141.39	128.16	115.29	103.58	92.00	83.75	76.43	69.82
315.0	137.47	124.36	109.14	99.25	90.59	81.00	74.03	68.24	62.33
360.0	137.94	126.23	113.07	103.99	96.09	86.96	80.29	73.15	68.06

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	63.50	59.40	55.71	51.85	49.04	46.53	43.89	42.02	40.44
45.0	64.49	59.69	55.54	51.68	47.52	44.54	42.02	40.03	37.69
90.0	62.03	57.18	51.91	48.40	45.41	41.79	39.62	37.04	35.46
135.0	74.44	67.07	61.86	57.24	52.26	48.81	45.53	42.90	40.09
180.0	71.05	64.20	59.11	54.78	50.15	46.94	44.07	41.67	39.80
225.0	59.58	55.19	51.27	47.23	44.48	41.96	39.85	37.69	35.93
270.0	62.68	58.11	53.61	48.92	45.82	43.19	40.15	38.16	36.46
315.0	58.05	54.19	50.97	47.52	45.06	42.84	40.97	38.68	37.16
360.0	63.50	59.40	55.71	51.85	49.04	46.53	43.89	42.02	40.44
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	38.68	37.22	35.93	34.47	33.01	31.60	29.90	28.56	27.15
45.0	36.05	34.82	33.18	31.95	30.61	29.44	28.15	26.92	25.52
90.0	34.35	32.95	31.37	30.37	29.09	27.80	26.57	25.22	24.17
135.0	38.04	36.34	35.00	33.24	31.95	30.78	29.14	27.68	26.51
180.0	37.40	35.82	34.76	33.53	32.13	31.13	29.73	28.56	27.39
225.0	34.53	33.42	32.01	31.08	30.14	28.91	27.80	26.74	25.46
270.0	34.59	33.59	32.54	31.31	30.37	29.38	28.32	27.27	25.98
315.0	36.05	34.47	33.12	31.72	30.43	29.09	27.80	26.28	25.11
360.0	38.68	37.22	35.93	34.47	33.01	31.60	29.90	28.56	27.15
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	25.98	24.58	23.47	22.47	21.59	20.54	19.66	18.84	17.91
45.0	24.35	23.23	22.30	21.19	20.37	19.66	18.90	18.26	17.67
90.0	23.17	22.12	21.30	20.42	19.66	19.02	18.32	17.73	17.15
135.0	25.05	23.94	22.82	21.95	21.13	20.42	19.61	18.96	18.32
180.0	25.98	24.87	23.82	22.94	21.95	21.19	20.48	19.66	19.02
225.0	24.40	23.41	22.30	21.42	20.60	19.96	19.14	18.49	17.85
270.0	24.99	23.94	22.65	21.89	20.89	20.25	19.66	19.02	18.26
315.0	24.05	23.12	22.00	21.24	20.54	19.96	19.14	18.43	17.26
360.0	25.98	24.58	23.47	22.47	21.59	20.54	19.66	18.84	17.91
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	17.21	16.33	15.74	15.22	14.81	14.28	13.93	13.52	13.17
45.0	16.91	16.33	15.80	15.16	14.75	14.34	13.81	13.46	13.11
90.0	16.44	15.92	15.45	15.04	14.51	14.10	13.69	13.34	12.87
135.0	17.67	16.97	16.44	15.92	15.39	14.92	14.51	14.05	13.64
180.0	18.38	17.73	16.91	16.27	15.68	15.10	14.69	14.22	13.81
225.0	17.26	16.56	15.92	15.22	14.75	14.28	13.81	13.46	13.11
270.0	17.67	17.15	16.44	15.68	15.10	14.63	14.10	13.75	13.40
315.0	16.62	16.04	15.39	14.86	14.46	14.05	13.58	13.23	12.87
360.0	17.21	16.33	15.74	15.22	14.81	14.28	13.93	13.52	13.17
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	12.76	12.41	12.11	11.88	11.59	11.24	10.94	10.71	10.42
45.0	12.70	12.41	12.06	11.70	11.41	11.12	10.83	10.53	10.36
90.0	12.58	12.23	11.82	11.53	11.18	10.94	10.65	10.48	10.30
135.0	13.23	12.82	12.47	12.11	11.76	11.47	11.06	10.83	10.48
180.0	13.46	13.05	12.64	12.35	12.00	11.65	11.29	10.89	10.65
225.0	12.70	12.41	12.11	11.76	11.47	11.18	10.83	10.53	10.36
270.0	12.93	12.64	12.17	11.88	11.59	11.18	10.89	10.59	10.42
315.0	12.47	12.11	11.88	11.53	11.24	10.83	10.65	10.42	10.30
360.0	12.76	12.41	12.11	11.88	11.59	11.24	10.94	10.71	10.42

Intensity data(cd)

C/ γ (°)	90.0
0.0	10.36
45.0	10.30
90.0	10.24
135.0	10.30
180.0	10.36
225.0	10.24
270.0	10.24
315.0	10.30
360.0	10.36