



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: 2-2561-L

Luminaire: 92.70.412.00

Report No: 2024806-B004

Ballast type: AC

Test No: 2024806-C004

Voltage(V): 34.970

LampCAT: CITIZEN CLU038 LES14.5

Current(A): 0.450

Lamp flux(lm): 2571.0

Power (W): 15.736

Number of Lamps: 1

PF: 0.000

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 2406.98, Efficiency(%): 93.62% , Luminous Efficacy(lm/W): 152.96

Central intensity(cd): 10402.580, Maximum intensity(cd): 10402.580

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=20.2

[C90/270]Total=20.2

Field angle(10%Imax): [C0/180]Total=53.6

[C90/270]Total=53.6

Maximum s/h(1/2): C0_180=0.34 C90_270=0.34

Maximum s/h(1/4): C0_180=0.38 C90_270=0.38

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 93.62%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 97.821%

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2024/8/6
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	10402.579	0.000	0	0.00%	0.00%
1.0	10341.057	9.925	9.925	0.39%	0.41%
2.0	10148.006	29.408	39.333	1.14%	1.63%
3.0	9831.107	47.783	87.117	1.86%	3.62%
4.0	9391.822	64.345	151.462	2.50%	6.29%
5.0	8825.398	78.370	229.832	3.05%	9.55%
6.0	8124.006	89.074	318.905	3.46%	13.25%
7.0	7397.303	96.340	415.246	3.75%	17.25%
8.0	6643.825	100.490	515.735	3.91%	21.43%
9.0	5929.631	101.901	617.636	3.96%	25.66%
10.0	5242.724	101.106	718.742	3.93%	29.86%
11.0	4625.604	98.605	817.347	3.84%	33.96%
12.0	4112.215	95.517	912.864	3.72%	37.93%
13.0	3644.913	92.058	1004.921	3.58%	41.75%
14.0	3228.672	87.981	1092.903	3.42%	45.41%
15.0	2901.238	84.154	1177.057	3.27%	48.90%
16.0	2584.632	80.383	1257.44	3.13%	52.24%
17.0	2316.013	76.316	1333.756	2.97%	55.41%
18.0	2085.508	72.572	1406.328	2.82%	58.43%
19.0	1892.676	69.212	1475.54	2.69%	61.30%
20.0	1726.838	66.247	1541.787	2.58%	64.05%
21.0	1584.409	63.583	1605.37	2.47%	66.70%
22.0	1469.266	61.365	1666.735	2.39%	69.25%
23.0	1336.083	58.864	1725.599	2.29%	71.69%
24.0	1238.000	56.279	1781.877	2.19%	74.03%
25.0	1189.338	55.192	1837.07	2.15%	76.32%
26.0	1115.183	54.398	1891.468	2.12%	78.58%
27.0	1020.128	52.241	1943.709	2.03%	80.75%
28.0	930.201	49.378	1993.087	1.92%	82.80%
29.0	835.796	46.203	2039.291	1.80%	84.72%
30.0	739.307	42.527	2081.818	1.65%	86.49%
31.0	638.034	38.329	2120.148	1.49%	88.08%
32.0	549.043	34.008	2154.156	1.32%	89.50%
33.0	455.956	29.608	2183.764	1.15%	90.73%
34.0	371.340	25.036	2208.8	0.97%	91.77%
35.0	294.010	20.663	2229.463	0.80%	92.63%
36.0	249.138	17.294	2246.757	0.67%	93.34%
37.0	189.401	14.303	2261.06	0.56%	93.94%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	120.322	10.338	2271.398	0.40%	94.37%
39.0	92.839	7.276	2278.674	0.28%	94.67%
40.0	76.782	5.916	2284.59	0.23%	94.92%
41.0	68.793	5.184	2289.774	0.20%	95.13%
42.0	62.334	4.764	2294.538	0.19%	95.33%
43.0	57.147	4.426	2298.964	0.17%	95.51%
44.0	52.517	4.139	2303.103	0.16%	95.68%
45.0	48.815	3.894	2306.997	0.15%	95.85%
46.0	45.860	3.703	2310.699	0.14%	96.00%
47.0	43.321	3.547	2314.246	0.14%	96.15%
48.0	41.324	3.422	2317.668	0.13%	96.29%
49.0	39.444	3.317	2320.985	0.13%	96.43%
50.0	37.930	3.226	2324.211	0.13%	96.56%
51.0	36.533	3.150	2327.361	0.12%	96.69%
52.0	35.384	3.086	2330.447	0.12%	96.82%
53.0	34.455	3.038	2333.485	0.12%	96.95%
54.0	33.709	3.004	2336.49	0.12%	97.07%
55.0	33.212	2.987	2339.477	0.12%	97.20%
56.0	32.809	2.983	2342.46	0.12%	97.32%
57.0	32.612	2.991	2345.451	0.12%	97.44%
58.0	32.546	3.013	2348.465	0.12%	97.57%
59.0	32.326	3.033	2351.497	0.12%	97.70%
60.0	31.836	3.031	2354.529	0.12%	97.82%
61.0	30.724	2.986	2357.514	0.12%	97.94%
62.0	29.225	2.889	2360.403	0.11%	98.07%
63.0	27.023	2.736	2363.138	0.11%	98.18%
64.0	24.762	2.541	2365.679	0.10%	98.28%
65.0	22.773	2.352	2368.032	0.09%	98.38%
66.0	21.141	2.191	2370.223	0.09%	98.47%
67.0	19.993	2.068	2372.291	0.08%	98.56%
68.0	19.100	1.980	2374.272	0.08%	98.64%
69.0	18.420	1.914	2376.186	0.07%	98.72%
70.0	17.791	1.860	2378.045	0.07%	98.80%
71.0	17.235	1.810	2379.856	0.07%	98.87%
72.0	16.679	1.763	2381.619	0.07%	98.95%
73.0	16.189	1.719	2383.338	0.07%	99.02%
74.0	15.669	1.675	2385.013	0.07%	99.09%
75.0	15.194	1.631	2386.643	0.06%	99.16%

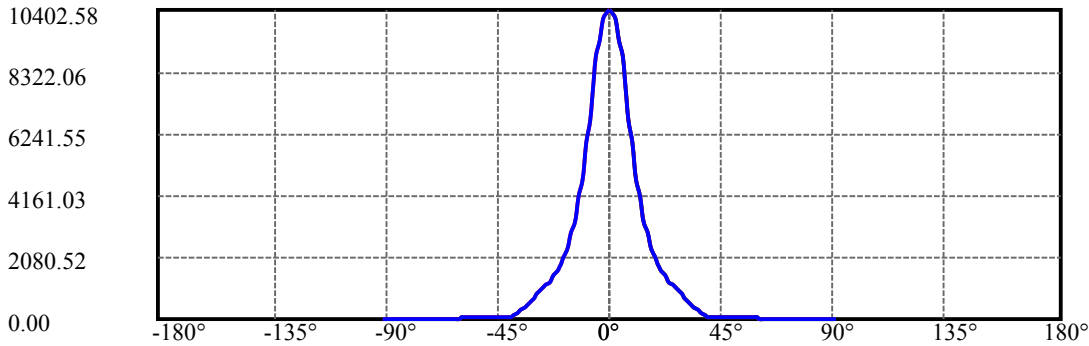
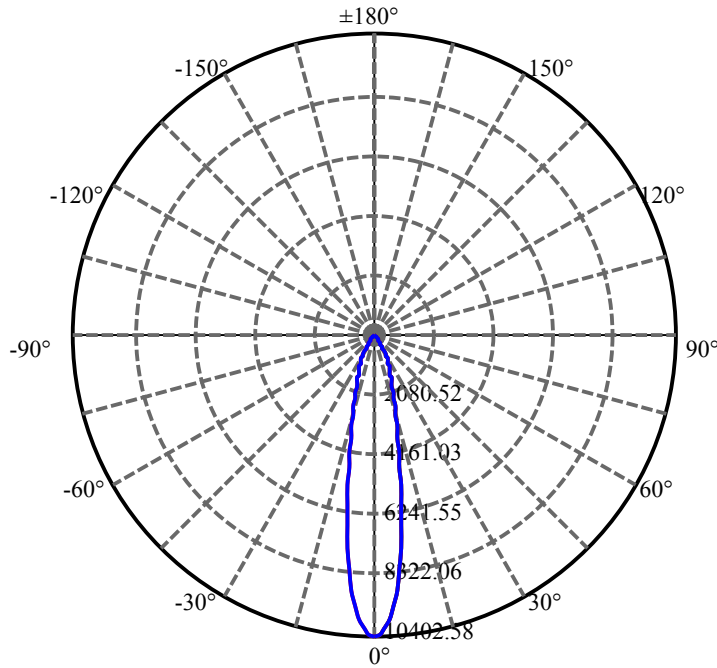
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	14.755	1.590	2388.233	0.06%	99.22%
77.0	14.301	1.549	2389.782	0.06%	99.29%
78.0	13.943	1.512	2391.294	0.06%	99.35%
79.0	13.592	1.479	2392.774	0.06%	99.41%
80.0	13.233	1.446	2394.22	0.06%	99.47%
81.0	12.919	1.414	2395.634	0.06%	99.53%
82.0	12.553	1.381	2397.016	0.05%	99.59%
83.0	12.231	1.347	2398.363	0.05%	99.64%
84.0	11.939	1.317	2399.68	0.05%	99.70%
85.0	11.646	1.287	2400.967	0.05%	99.75%
86.0	11.397	1.260	2402.226	0.05%	99.80%
87.0	11.097	1.231	2403.458	0.05%	99.85%
88.0	10.790	1.199	2404.656	0.05%	99.90%
89.0	10.556	1.170	2405.826	0.05%	99.95%
90.0	10.439	1.151	2406.978	0.04%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2081.82	80.97%	86.49%
0-40	2284.59	88.86%	94.92%
0-60	2354.53	91.58%	97.82%
0-90	2405.83	93.58%	99.95%
0-120	2405.83	93.58%	99.95%
0-180	2406.98	93.62%	100.00%
60-90	51.30	2.00%	2.13%
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%
0-26.65	1925.58	74.90%	80.00%

ZONAL LUMEN SUMMARY

0-10	718.74
10-20	823.05
20-30	540.03
30-40	202.77
40-50	39.62
50-60	30.32
60-70	23.52
70-80	16.17
80-90	11.61
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: —————

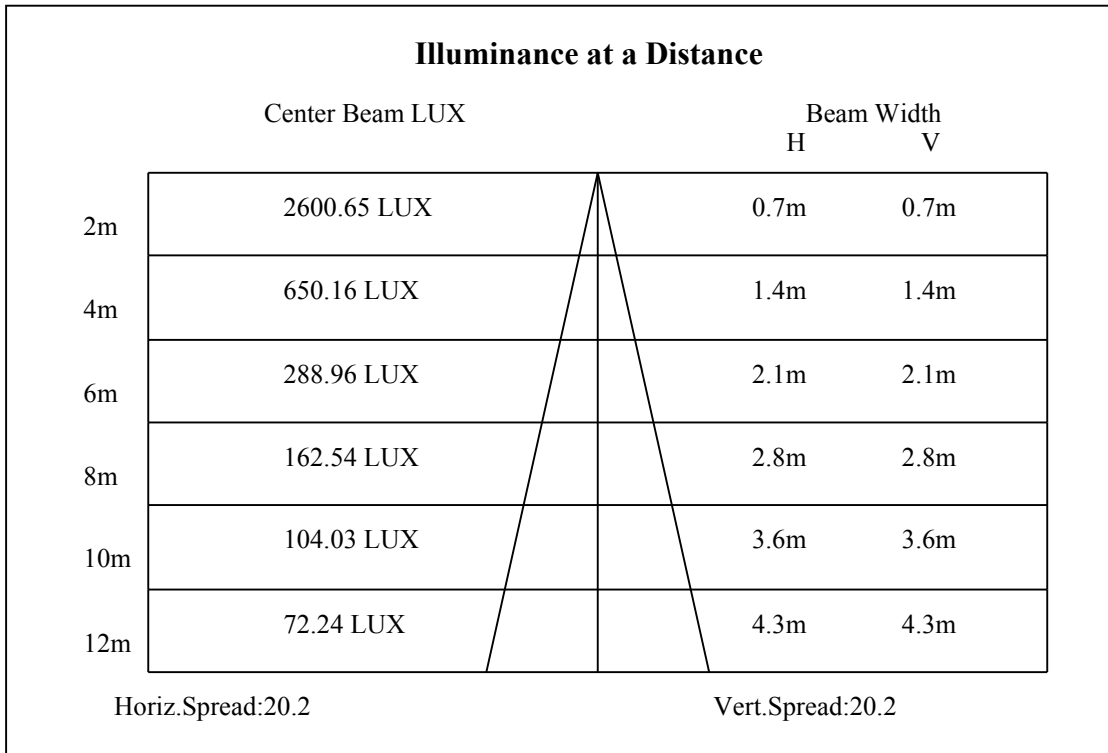
C90/C270: —————

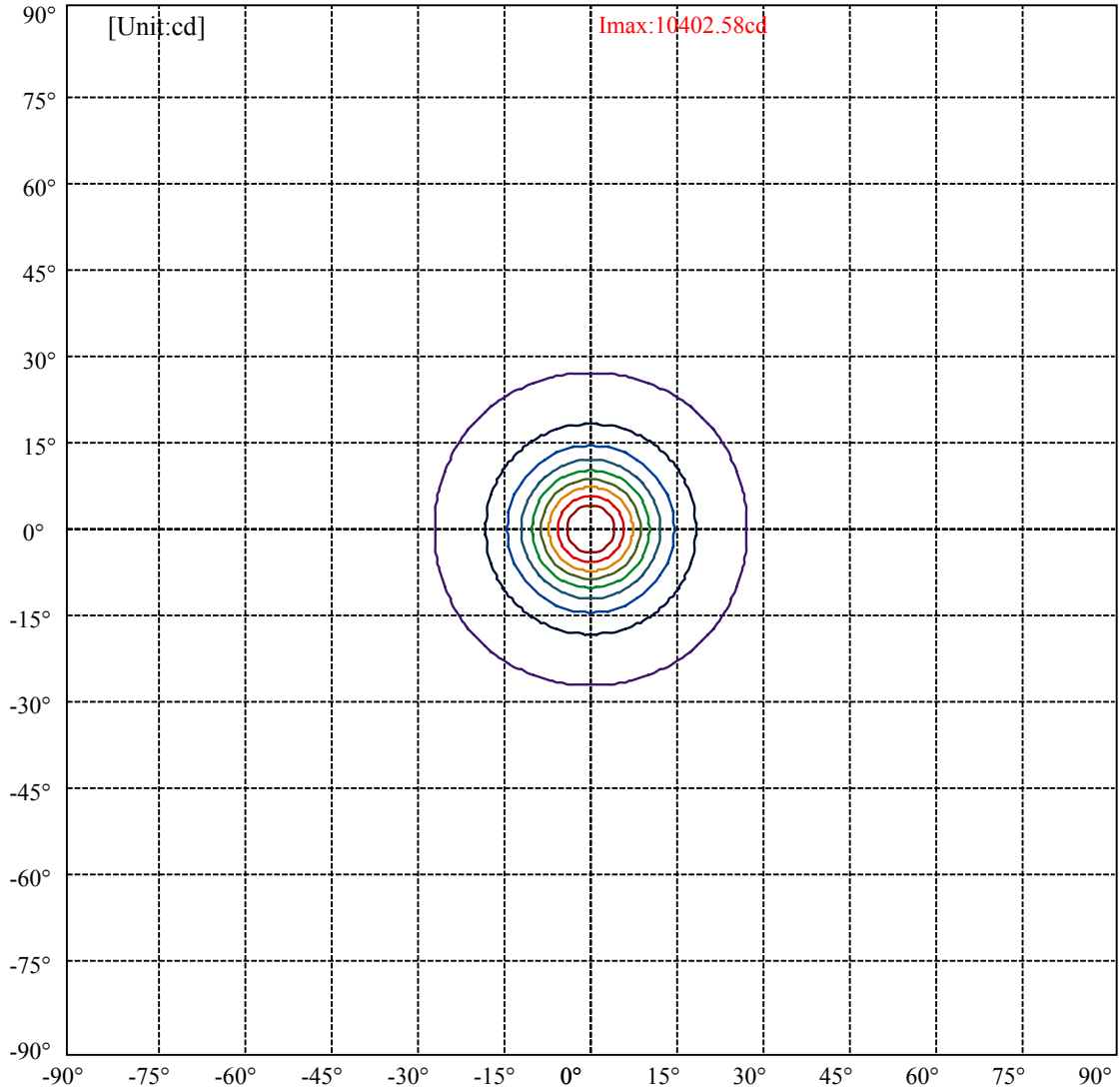
Field angle(10%Imax):C0/180Left:26.8 Right:26.8

:C90/270Left:26.8 Right:26.8

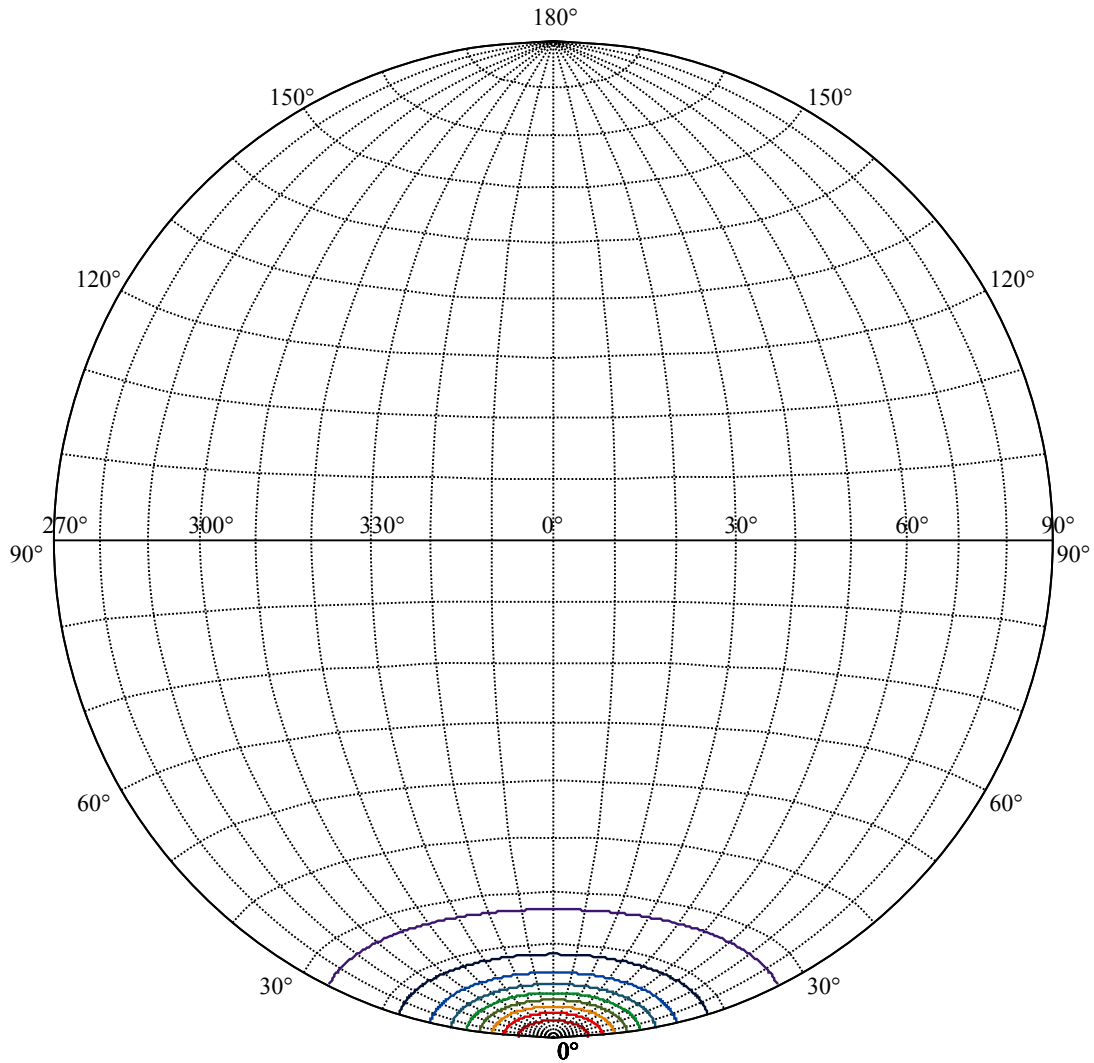
Beam Angle(50%Imax):C0/180Left:10.1 Right:10.1

:C90/270Left:10.1 Right:10.1





(10%Imax) 1040.26	—
(20%Imax) 2080.52	—
(30%Imax) 3120.77	—
(40%Imax) 4161.03	—
(50%Imax) 5201.29	—
(60%Imax) 6241.55	—
(70%Imax) 7281.81	—
(80%Imax) 8322.06	—
(90%Imax) 9362.32	—



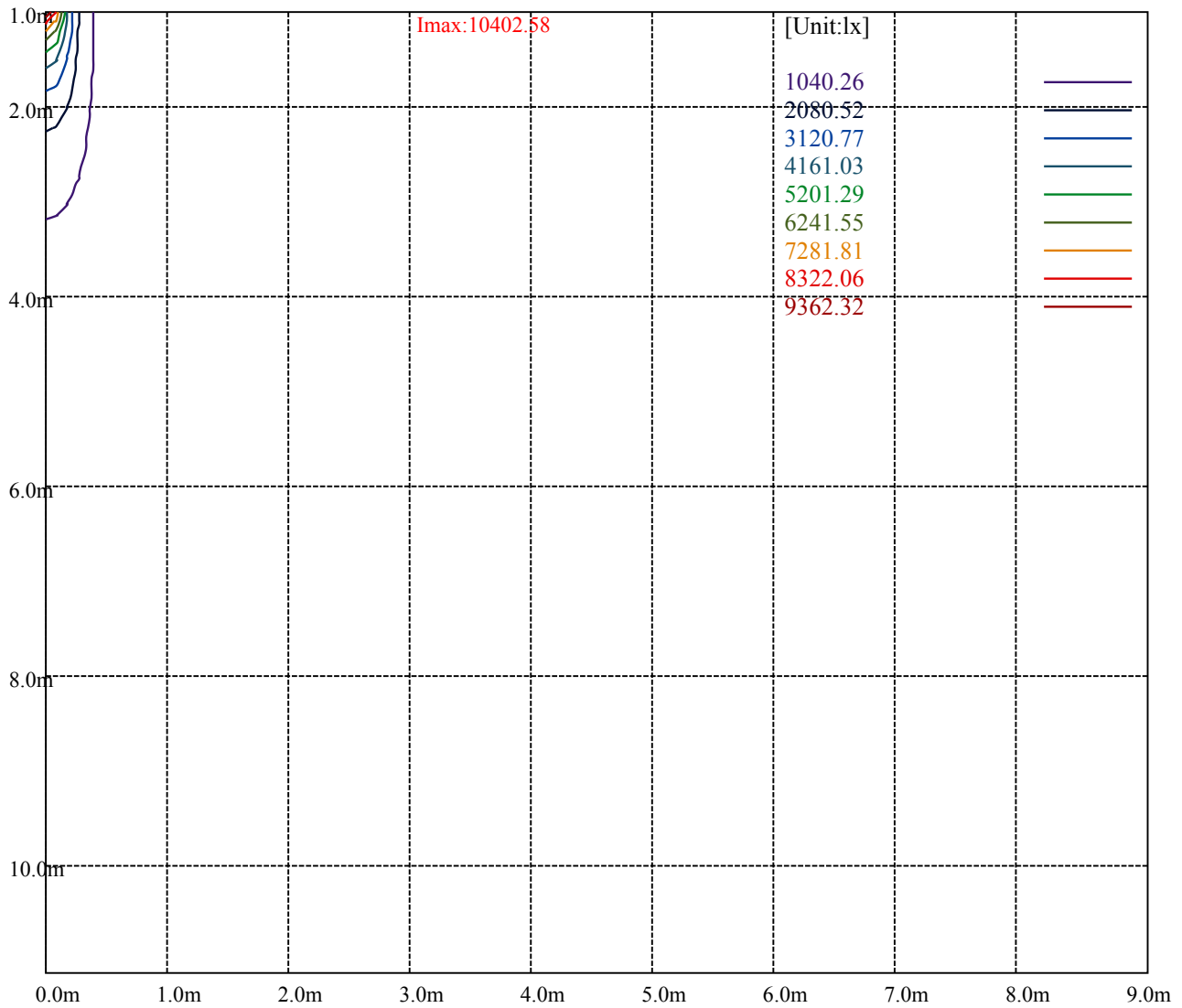
House

[Unit:cd]

Road

Imax:10402.58

(10%Imax)	1040.26	—
(20%Imax)	2080.52	—
(30%Imax)	3120.77	—
(40%Imax)	4161.03	—
(50%Imax)	5201.29	—
(60%Imax)	6241.55	—
(70%Imax)	7281.81	—
(80%Imax)	8322.06	—
(90%Imax)	9362.32	—



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

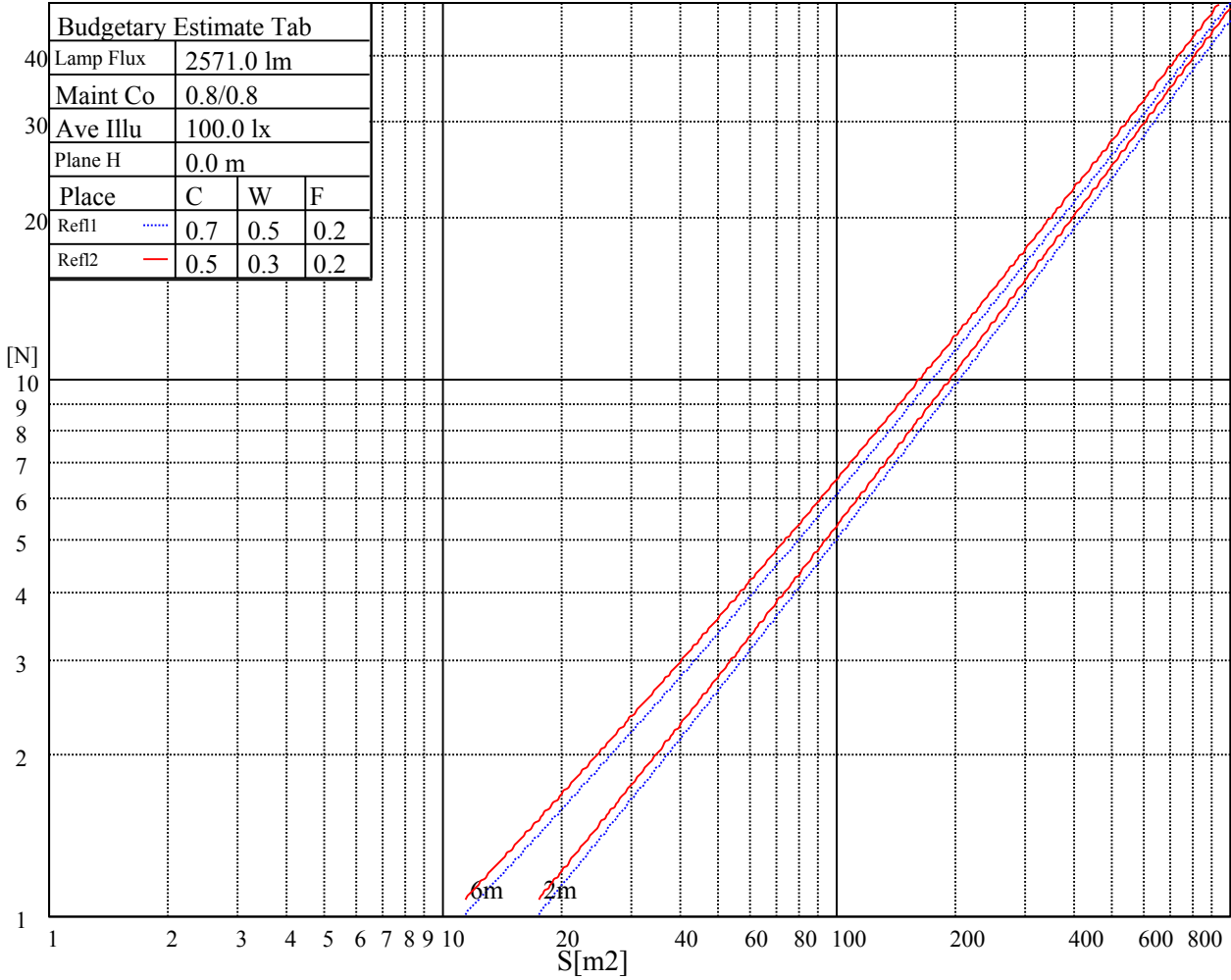
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

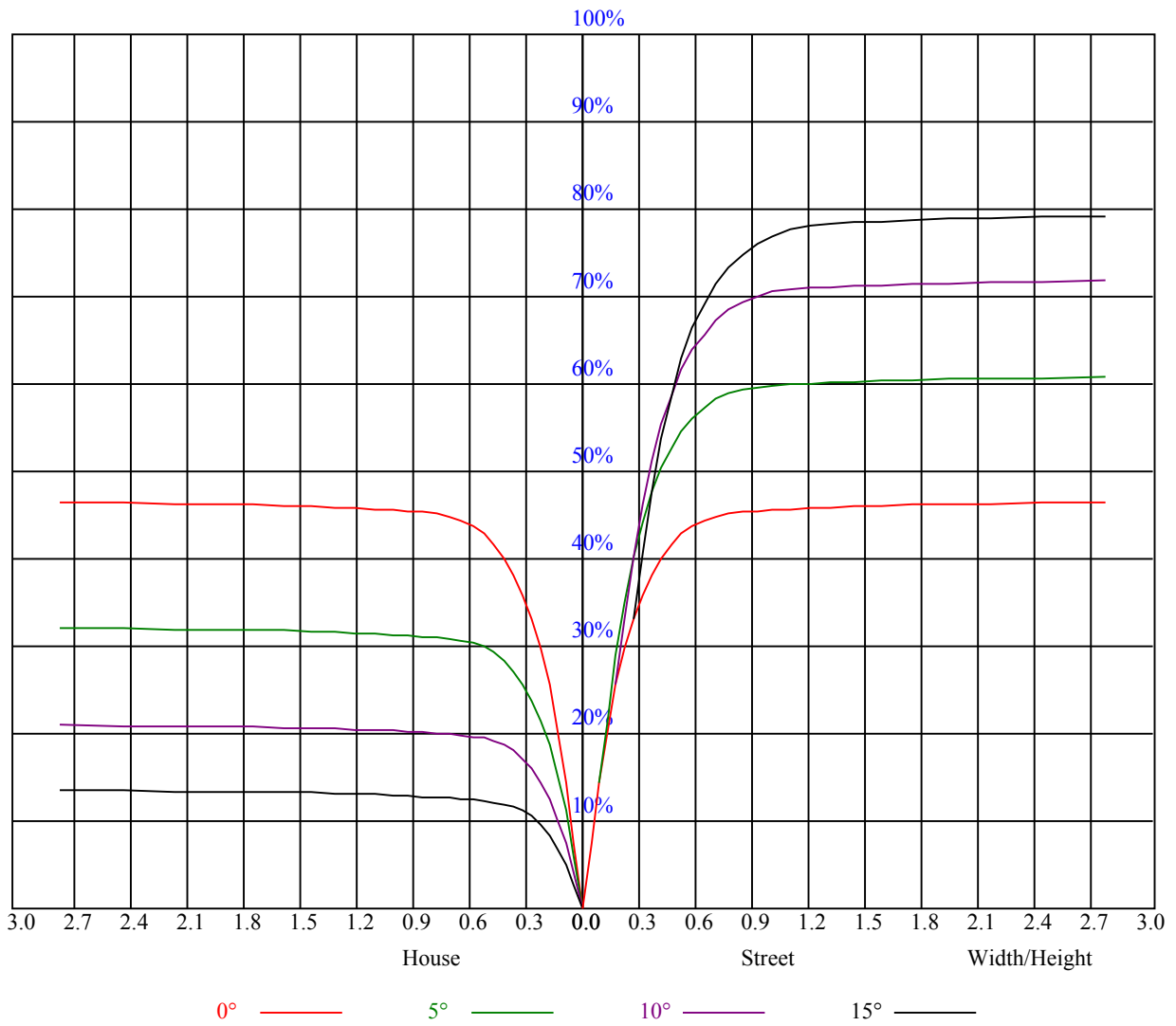


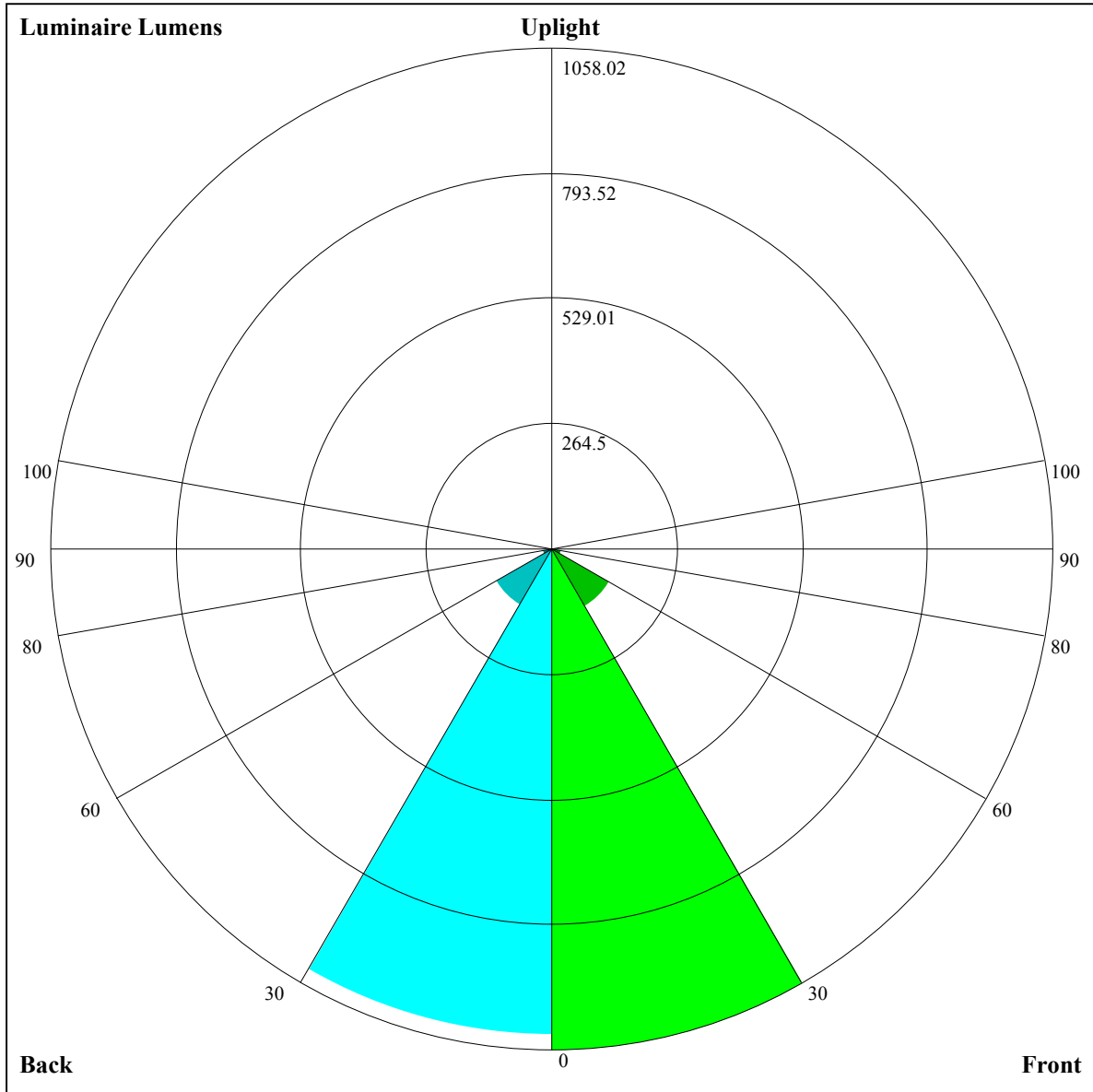
Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	3H	非数字	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	1.11	1.11	1.11	1.09	1.09	1.09	1.04	1.04	1.04	1.00	1.00	1.00	0.96	0.96	0.96	0.94
1	1.05	1.02	1.01	1.03	1.01	0.99	0.99	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89
2	0.99	0.95	0.93	0.97	0.94	0.92	0.94	0.92	0.90	0.91	0.89	0.88	0.89	0.87	0.86	0.84
3	0.94	0.90	0.86	0.92	0.89	0.86	0.90	0.87	0.84	0.88	0.85	0.83	0.86	0.84	0.82	0.81
4	0.89	0.85	0.82	0.88	0.84	0.81	0.86	0.83	0.80	0.84	0.82	0.79	0.83	0.80	0.78	0.77
5	0.85	0.81	0.77	0.84	0.80	0.77	0.83	0.79	0.76	0.81	0.78	0.76	0.80	0.77	0.75	0.74
6	0.82	0.77	0.74	0.81	0.77	0.74	0.80	0.76	0.73	0.78	0.75	0.73	0.77	0.74	0.72	0.71
7	0.78	0.74	0.71	0.78	0.73	0.70	0.77	0.73	0.70	0.76	0.72	0.70	0.75	0.72	0.69	0.68
8	0.75	0.71	0.68	0.75	0.71	0.68	0.74	0.70	0.67	0.73	0.70	0.67	0.72	0.69	0.67	0.66
9	0.73	0.68	0.65	0.72	0.68	0.65	0.71	0.68	0.65	0.71	0.67	0.65	0.70	0.67	0.65	0.64
10	0.70	0.66	0.63	0.70	0.66	0.63	0.69	0.65	0.63	0.69	0.65	0.63	0.68	0.65	0.63	0.62





Luminaire Lumens:

FL=1058.02,FM=139.72,FH=19.81,FVH=6.38

BL=1025.02,BM=134.67,BH=19.65,BVH=6.35

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	10429.35	10425.84	10302.94	10082.31	9625.25	9113.18	8350.63	7649.53	6934.97
45.0	10352.69	10393.07	10333.96	10093.43	9788.53	9323.86	8605.79	7918.15	7215.88
90.0	10353.86	10170.68	9797.90	9345.52	8796.58	8145.81	7306.59	6603.74	5932.48
135.0	10474.42	10365.56	10169.51	9738.79	9245.44	8682.46	8025.25	7180.18	6511.27
180.0	10429.35	10279.54	10047.20	9683.19	9217.94	8506.30	7878.94	7204.18	6368.48
225.0	10352.69	10196.43	9823.65	9399.94	8901.33	8299.72	7493.28	6833.15	6019.10
270.0	10353.86	10423.50	10384.88	10226.28	9930.16	9425.69	8880.26	8241.20	7364.53
315.0	10474.42	10473.83	10324.01	10079.39	9629.35	9106.16	8451.29	7548.29	6803.88
360.0	10429.35	10425.84	10302.94	10082.31	9625.25	9113.18	8350.63	7649.53	6934.97
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	6067.09	5402.86	4800.07	4274.54	3722.09	3332.91	2982.95	2667.51	2335.69
45.0	6348.58	5687.28	5072.20	4406.80	3946.82	3542.43	3167.88	2756.47	2462.69
90.0	5287.57	4581.20	4093.71	3651.86	3185.44	2869.42	2590.85	2277.75	2067.66
135.0	5858.75	5104.98	4566.57	4085.51	3564.08	3209.43	2885.80	2541.69	2297.65
180.0	5743.46	5133.07	4447.18	3976.08	3559.40	3117.55	2812.65	2544.62	2257.86
225.0	5392.32	4818.22	4199.63	3766.57	3382.07	2964.22	2679.80	2418.79	2197.58
270.0	6668.70	5974.04	5165.25	4580.03	4080.83	3550.03	3183.10	2863.56	2570.37
315.0	6070.60	5240.16	4660.21	4156.33	3718.58	3243.38	2906.87	2606.65	2338.62
360.0	6067.09	5402.86	4800.07	4274.54	3722.09	3332.91	2982.95	2667.51	2335.69
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2111.55	1913.74	1754.56	1588.94	1482.43	1353.10	1167.17	1167.17	1095.54
45.0	2218.06	2004.45	1786.75	1642.20	1500.58	1402.26	1315.06	1222.01	1152.95
90.0	1888.58	1708.92	1581.34	1474.24	1378.26	1153.77	1153.77	1115.61	1041.52
135.0	2091.65	1922.52	1742.86	1618.79	1508.77	1410.45	1307.45	1230.20	1155.29
180.0	2057.71	1891.51	1751.64	1596.55	1488.29	1392.89	1306.28	1209.72	1134.81
225.0	1956.47	1797.87	1661.51	1541.54	1415.13	1271.75	1165.89	1165.89	1072.54
270.0	2314.04	2045.42	1871.61	1675.56	1551.49	1443.81	1325.59	1241.32	1172.85
315.0	2046.01	1856.98	1664.44	1537.44	1429.18	1260.63	1162.78	1162.78	1095.95
360.0	2111.55	1913.74	1754.56	1588.94	1482.43	1353.10	1167.17	1167.17	1095.54
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1010.68	921.79	835.35	724.10	635.73	548.18	465.84	367.99	294.78
45.0	1075.70	987.92	874.97	790.70	702.33	615.13	508.62	428.44	352.95
90.0	929.69	838.98	752.31	659.67	549.76	464.90	365.41	294.31	227.36
135.0	1051.71	963.92	850.98	756.17	664.29	572.41	460.63	376.94	299.69
180.0	1031.22	942.86	849.22	730.42	637.95	546.07	458.29	357.63	301.45
225.0	986.40	872.80	782.15	690.86	578.79	492.06	410.48	333.75	252.29
270.0	1078.04	997.87	913.01	825.23	711.69	620.40	530.86	444.83	347.68
315.0	997.57	915.47	828.39	737.32	623.73	533.20	447.52	366.82	275.88
360.0	1010.68	921.79	835.35	724.10	635.73	548.18	465.84	367.99	294.78
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	230.34	175.39	120.97	94.10	77.95	70.52	63.85	57.70	53.26
45.0	300.86	300.86	150.75	112.83	86.91	78.01	69.06	63.50	58.70
90.0	160.12	121.08	96.15	79.77	72.63	66.66	61.80	56.42	53.02
135.0	299.69	156.61	118.51	92.00	77.48	68.88	63.20	58.64	53.67
180.0	301.45	162.22	112.36	89.13	76.14	67.59	62.09	57.59	52.85
225.0	192.66	142.50	105.52	79.24	70.75	63.67	56.71	52.32	48.40
270.0	295.01	295.01	144.73	107.92	80.70	70.34	63.38	57.41	51.85
315.0	212.96	161.52	113.59	87.73	71.69	64.67	58.58	53.61	48.40
360.0	230.34	175.39	120.97	94.10	77.95	70.52	63.85	57.70	53.26

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	49.51	45.59	43.13	41.14	39.44	37.45	36.17	35.05	34.12
45.0	53.78	50.45	47.81	45.53	43.13	41.49	40.03	38.62	37.28
90.0	50.04	47.58	44.83	42.96	40.97	39.50	38.22	36.81	35.93
135.0	50.39	47.75	45.12	43.31	41.14	39.68	38.33	37.22	36.11
180.0	49.74	47.17	44.59	42.78	41.20	39.80	38.16	37.16	36.28
225.0	44.30	41.84	39.39	37.63	36.23	35.00	33.83	33.01	32.48
270.0	47.81	44.42	41.79	39.62	37.40	35.82	34.00	32.77	31.72
315.0	44.95	42.08	39.91	37.63	36.05	34.70	33.53	32.42	31.72
360.0	49.51	45.59	43.13	41.14	39.44	37.45	36.17	35.05	34.12
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	33.30	32.83	32.42	32.30	32.25	32.30	32.01	31.19	29.85
45.0	36.40	35.64	34.94	34.53	34.06	33.71	33.18	32.54	30.96
90.0	35.11	34.47	33.77	33.47	33.12	32.30	31.49	29.61	27.62
135.0	35.41	34.94	34.41	34.18	34.00	33.88	33.47	32.13	30.72
180.0	35.58	35.05	34.70	34.47	34.70	34.35	33.47	32.01	30.14
225.0	32.13	32.13	32.19	32.13	32.30	32.01	31.31	29.32	27.15
270.0	30.67	29.96	29.55	29.20	29.26	29.14	28.97	28.68	28.03
315.0	31.08	30.67	30.49	30.61	30.67	30.90	30.78	30.31	29.32
360.0	33.30	32.83	32.42	32.30	32.25	32.30	32.01	31.19	29.85
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	27.45	25.40	23.17	21.65	20.13	19.31	18.61	17.91	17.38
45.0	29.38	27.27	25.05	22.82	21.42	20.42	19.61	18.84	18.26
90.0	25.11	23.12	21.54	20.07	19.25	18.49	17.73	17.15	16.62
135.0	27.86	25.57	23.17	21.48	20.37	19.49	18.79	18.02	17.44
180.0	27.15	24.87	23.17	21.83	20.66	19.96	19.31	18.73	18.02
225.0	24.87	22.12	20.78	19.72	18.96	18.32	17.79	17.38	16.91
270.0	26.92	25.11	22.88	20.95	19.78	18.55	17.91	17.21	16.74
315.0	27.45	24.64	22.41	20.60	19.37	18.26	17.62	17.09	16.50
360.0	27.45	25.40	23.17	21.65	20.13	19.31	18.61	17.91	17.38
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	16.91	16.39	15.98	15.57	15.10	14.69	14.34	14.05	13.64
45.0	17.50	16.97	16.39	15.74	15.27	14.75	14.34	13.87	13.52
90.0	15.92	15.51	15.04	14.57	14.10	13.75	13.46	13.11	12.70
135.0	16.80	16.21	15.57	15.10	14.63	14.10	13.75	13.40	13.05
180.0	17.56	17.03	16.39	15.92	15.45	14.92	14.57	14.22	13.81
225.0	16.33	15.92	15.45	14.86	14.46	13.99	13.64	13.34	12.99
270.0	16.33	15.92	15.39	15.04	14.69	14.34	13.87	13.52	13.23
315.0	16.09	15.57	15.16	14.75	14.34	13.87	13.58	13.23	12.93
360.0	16.91	16.39	15.98	15.57	15.10	14.69	14.34	14.05	13.64
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	13.34	12.99	12.70	12.41	12.11	11.76	11.41	11.12	10.89
45.0	13.23	12.82	12.47	12.11	11.82	11.59	11.24	10.89	10.65
90.0	12.41	12.00	11.76	11.53	11.24	11.00	10.77	10.53	10.42
135.0	12.76	12.35	12.00	11.70	11.41	11.18	10.89	10.65	10.48
180.0	13.52	13.11	12.76	12.41	12.06	11.94	11.59	11.06	10.53
225.0	12.64	12.35	12.00	11.70	11.47	11.24	11.00	10.65	10.48
270.0	12.87	12.52	12.17	11.94	11.59	11.35	11.06	10.83	10.59
315.0	12.58	12.29	12.00	11.70	11.47	11.12	10.83	10.59	10.42
360.0	13.34	12.99	12.70	12.41	12.11	11.76	11.41	11.12	10.89

Intensity data(cd)

C/γ(°)	90.0
0.0	10.65
45.0	10.48
90.0	10.42
135.0	10.42
180.0	10.42
225.0	10.42
270.0	10.42
315.0	10.30
360.0	10.65