



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: 2-2520-L

Luminaire: 92.70.412.00

Report No: 2024807-B012

Ballast type: AC

Test No: 2024807-C012

Voltage(V): 34.960

LampCAT: CITIZEN CLU038 LES14.5

Current(A): 0.450

Lamp flux(lm): 2561.0

Power (W): 15.732

Number of Lamps: 1

PF: 0.000

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 2360.59, Efficiency(%): 92.17% , Luminous Efficacy(lm/W): 150.05

Central intensity(cd): 5339.213, Maximum intensity(cd): 5339.213

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=38.2

[C90/270]Total=38.2

Field angle(10%Imax): [C0/180]Total=62.4

[C90/270]Total=62.4

Maximum s/h(1/2): C0_180=0.64 C90_270=0.64

Maximum s/h(1/4): C0_180=0.59 C90_270=0.59

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 92.17%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.010%

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	5339.213	0.000	0	0.00%	0.00%
1.0	5326.411	5.103	5.103	0.20%	0.22%
2.0	5295.613	15.246	20.349	0.60%	0.86%
3.0	5248.649	25.218	45.567	0.98%	1.93%
4.0	5179.373	34.906	80.473	1.36%	3.41%
5.0	5105.708	44.246	124.719	1.73%	5.28%
6.0	5030.433	53.268	177.987	2.08%	7.54%
7.0	4941.479	61.895	239.883	2.42%	10.16%
8.0	4844.039	70.033	309.916	2.73%	13.13%
9.0	4735.626	77.638	387.554	3.03%	16.42%
10.0	4622.385	84.687	472.241	3.31%	20.01%
11.0	4486.174	91.013	563.254	3.55%	23.86%
12.0	4347.768	96.568	659.821	3.77%	27.95%
13.0	4177.102	101.169	760.99	3.95%	32.24%
14.0	3975.931	104.358	865.348	4.07%	36.66%
15.0	3777.540	106.443	971.791	4.16%	41.17%
16.0	3520.918	106.943	1078.734	4.18%	45.70%
17.0	3259.323	105.587	1184.321	4.12%	50.17%
18.0	2972.709	102.753	1287.073	4.01%	54.52%
19.0	2697.434	98.649	1385.722	3.85%	58.70%
20.0	2397.433	93.250	1478.973	3.64%	62.65%
21.0	2135.837	87.048	1566.02	3.40%	66.34%
22.0	1893.408	80.969	1646.99	3.16%	69.77%
23.0	1623.268	73.789	1720.779	2.88%	72.90%
24.0	1421.621	66.572	1787.351	2.60%	75.72%
25.0	1286.690	61.581	1848.933	2.40%	78.32%
26.0	1167.158	57.923	1906.856	2.26%	80.78%
27.0	1040.779	54.018	1960.874	2.11%	83.07%
28.0	917.567	49.581	2010.455	1.94%	85.17%
29.0	795.028	44.806	2055.261	1.75%	87.07%
30.0	679.790	39.820	2095.081	1.55%	88.75%
31.0	556.827	34.413	2129.494	1.34%	90.21%
32.0	451.099	28.876	2158.37	1.13%	91.43%
33.0	346.526	23.498	2181.868	0.92%	92.43%
34.0	265.963	18.536	2200.404	0.72%	93.21%
35.0	225.502	15.263	2215.667	0.60%	93.86%
36.0	176.636	12.804	2228.471	0.50%	94.40%
37.0	107.301	9.260	2237.732	0.36%	94.80%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	91.339	6.630	2244.362	0.26%	95.08%
39.0	79.452	5.830	2250.192	0.23%	95.32%
40.0	69.949	5.211	2255.402	0.20%	95.54%
41.0	62.502	4.717	2260.119	0.18%	95.74%
42.0	56.606	4.327	2264.446	0.17%	95.93%
43.0	51.105	3.990	2268.436	0.16%	96.10%
44.0	46.547	3.686	2272.122	0.14%	96.25%
45.0	42.838	3.435	2275.557	0.13%	96.40%
46.0	40.007	3.240	2278.797	0.13%	96.54%
47.0	37.264	3.073	2281.87	0.12%	96.67%
48.0	34.967	2.920	2284.79	0.11%	96.79%
49.0	33.124	2.796	2287.586	0.11%	96.91%
50.0	31.441	2.692	2290.278	0.11%	97.02%
51.0	30.022	2.600	2292.879	0.10%	97.13%
52.0	28.808	2.524	2295.403	0.10%	97.24%
53.0	27.608	2.454	2297.857	0.10%	97.34%
54.0	26.650	2.391	2300.249	0.09%	97.44%
55.0	25.735	2.338	2302.587	0.09%	97.54%
56.0	24.923	2.289	2304.876	0.09%	97.64%
57.0	24.170	2.245	2307.121	0.09%	97.73%
58.0	23.511	2.205	2309.326	0.09%	97.83%
59.0	22.868	2.168	2311.494	0.08%	97.92%
60.0	22.290	2.133	2313.627	0.08%	98.01%
61.0	21.683	2.098	2315.726	0.08%	98.10%
62.0	21.171	2.065	2317.791	0.08%	98.19%
63.0	20.651	2.034	2319.825	0.08%	98.27%
64.0	20.044	1.997	2321.822	0.08%	98.36%
65.0	19.481	1.956	2323.778	0.08%	98.44%
66.0	18.852	1.913	2325.69	0.07%	98.52%
67.0	18.230	1.865	2327.555	0.07%	98.60%
68.0	17.586	1.814	2329.369	0.07%	98.68%
69.0	16.928	1.761	2331.13	0.07%	98.75%
70.0	16.342	1.709	2332.838	0.07%	98.82%
71.0	15.838	1.663	2334.502	0.06%	98.89%
72.0	15.399	1.624	2336.126	0.06%	98.96%
73.0	15.033	1.591	2337.717	0.06%	99.03%
74.0	14.740	1.565	2339.282	0.06%	99.10%
75.0	14.404	1.540	2340.822	0.06%	99.16%

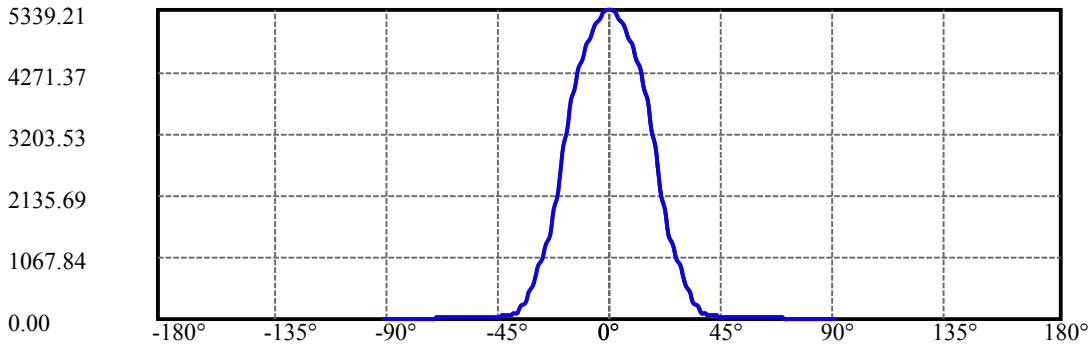
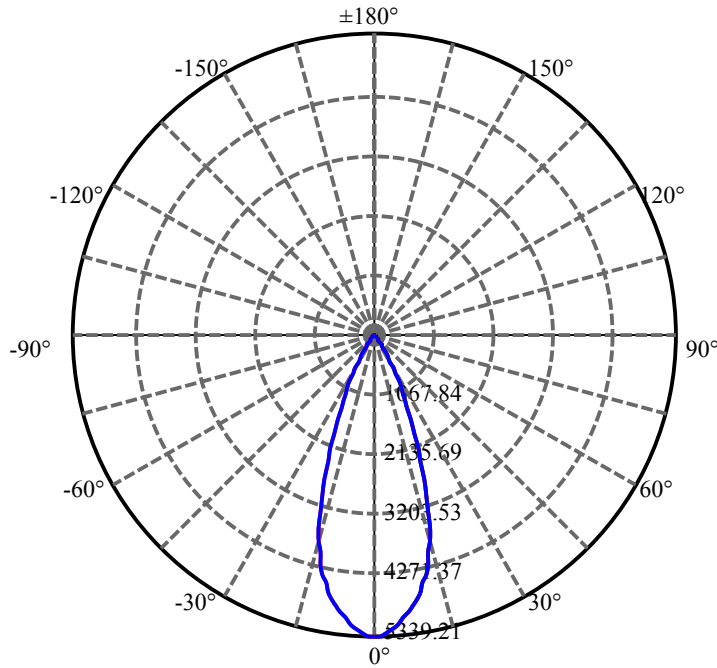
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	14.104	1.513	2342.336	0.06%	99.23%
77.0	13.767	1.486	2343.822	0.06%	99.29%
78.0	13.460	1.458	2345.279	0.06%	99.35%
79.0	13.138	1.429	2346.708	0.06%	99.41%
80.0	12.838	1.400	2348.109	0.05%	99.47%
81.0	12.509	1.371	2349.479	0.05%	99.53%
82.0	12.209	1.340	2350.82	0.05%	99.59%
83.0	11.931	1.312	2352.132	0.05%	99.64%
84.0	11.668	1.286	2353.418	0.05%	99.70%
85.0	11.405	1.259	2354.677	0.05%	99.75%
86.0	11.112	1.231	2355.908	0.05%	99.80%
87.0	10.849	1.202	2357.11	0.05%	99.85%
88.0	10.666	1.179	2358.288	0.05%	99.90%
89.0	10.483	1.159	2359.447	0.05%	99.95%
90.0	10.373	1.143	2360.591	0.04%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2095.08	81.81%	88.75%
0-40	2255.40	88.07%	95.54%
0-60	2313.63	90.34%	98.01%
0-90	2359.45	92.13%	99.95%
0-120	2359.45	92.13%	99.95%
0-180	2360.59	92.17%	100.00%
60-90	45.82	1.79%	1.94%
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%
0-25.68	1888.47	73.74%	80.00%

ZONAL LUMEN SUMMARY

0-10	472.24
10-20	1006.73
20-30	616.11
30-40	160.32
40-50	34.88
50-60	23.35
60-70	19.21
70-80	15.27
80-90	11.34
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



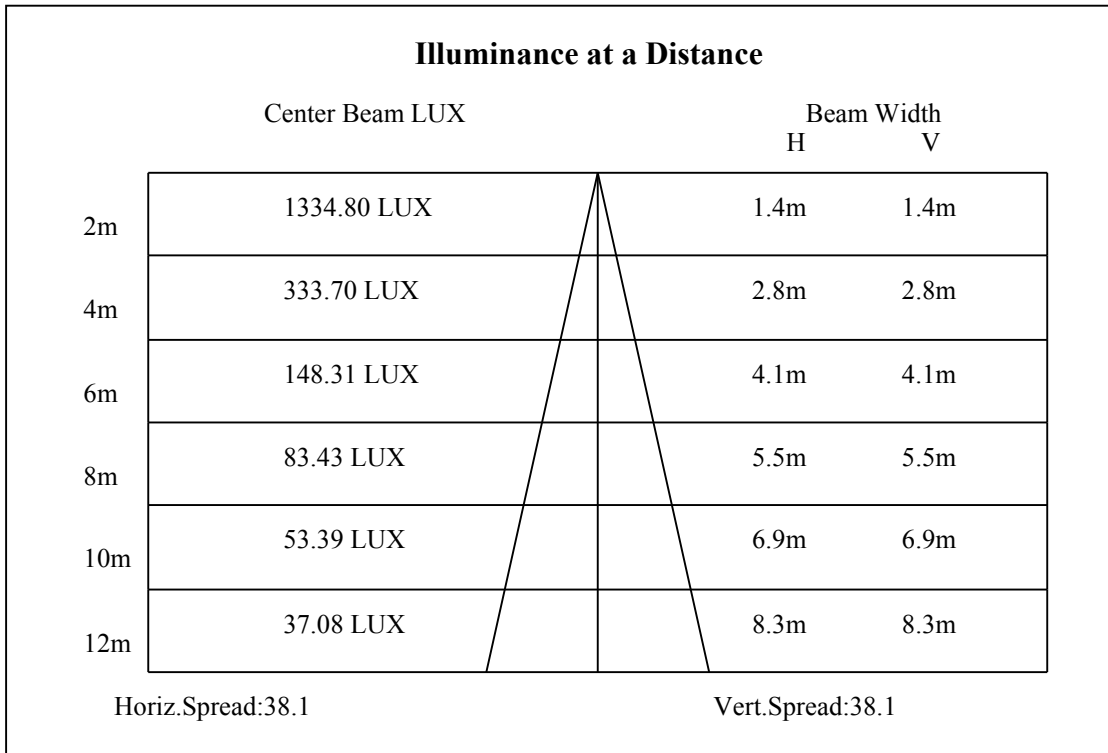
C0(Max): —————

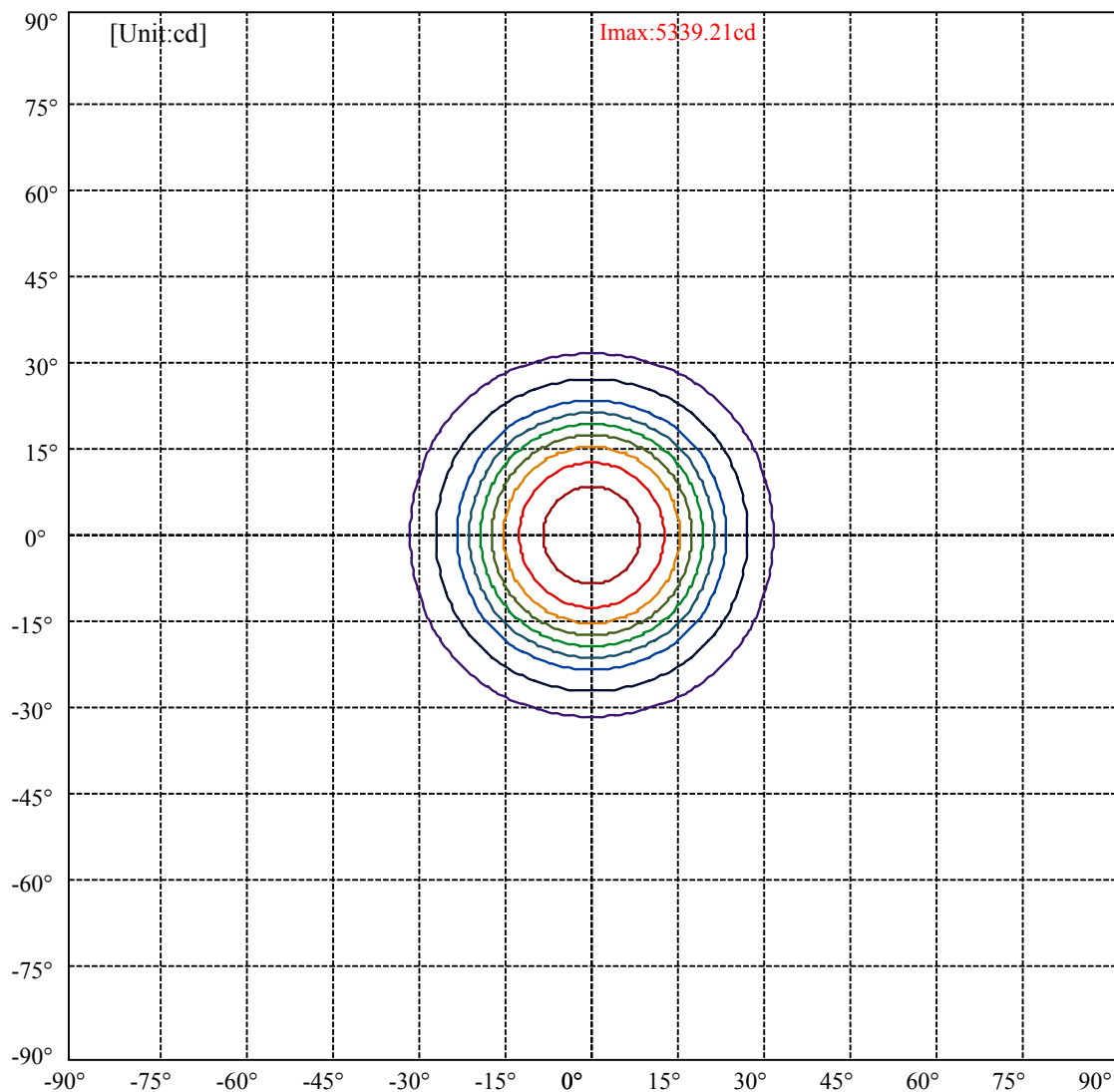
C0/C180: —————

C90/C270: —————

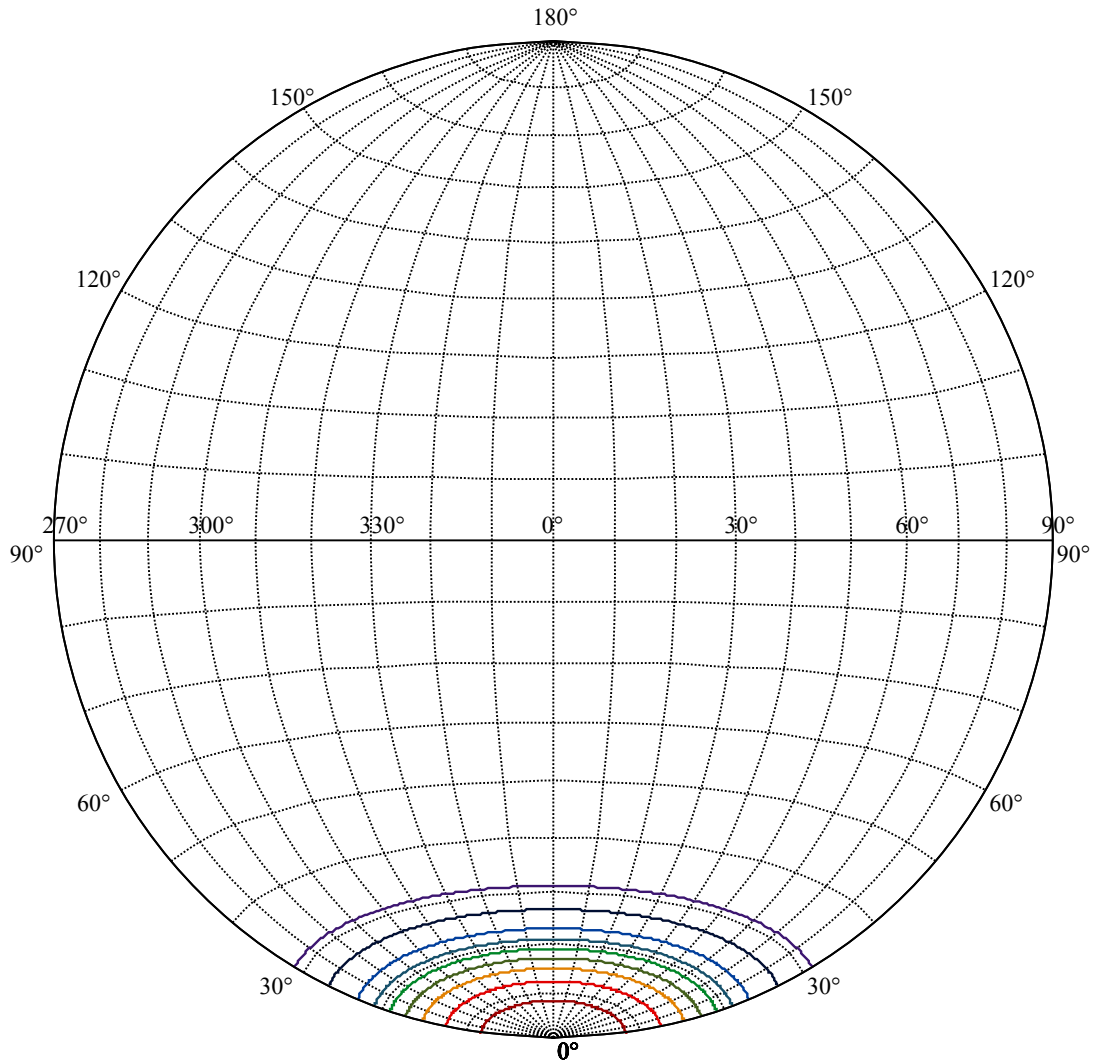
Field angle(10%Imax):C0/180Left:31.2 Right:31.2
:C90/270Left:31.2 Right:31.2

Beam Angle(50%Imax):C0/180Left:19.1 Right:19.1
:C90/270Left:19.1 Right:19.1





(10%Imax) 533.921	—
(20%Imax) 1067.84	—
(30%Imax) 1601.76	—
(40%Imax) 2135.69	—
(50%Imax) 2669.61	—
(60%Imax) 3203.53	—
(70%Imax) 3737.45	—
(80%Imax) 4271.37	—
(90%Imax) 4805.29	—



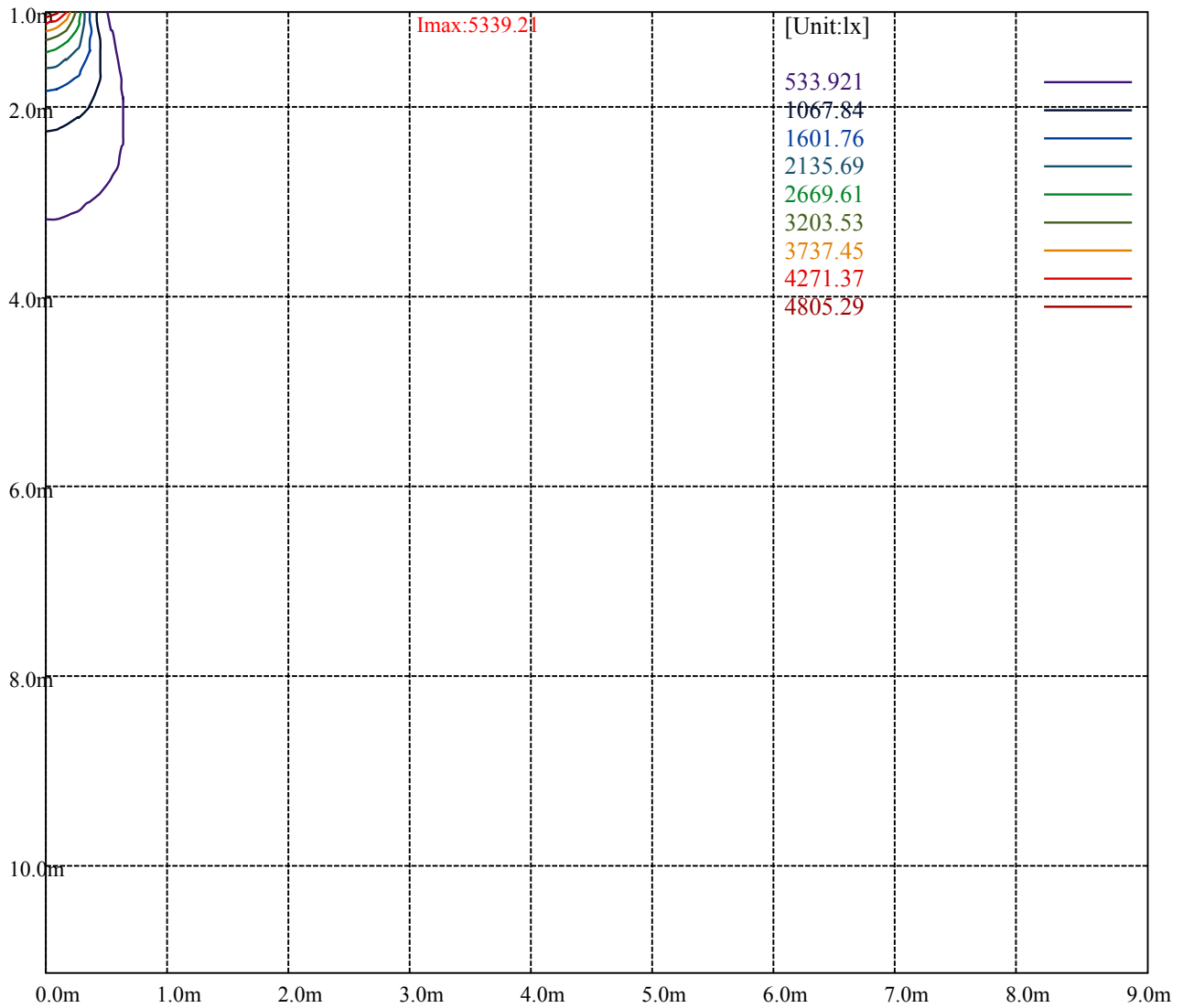
House

[Unit:cd]

Road

Imax:5339.21

(10%Imax) 533.921	—
(20%Imax) 1067.84	—
(30%Imax) 1601.76	—
(40%Imax) 2135.69	—
(50%Imax) 2669.61	—
(60%Imax) 3203.53	—
(70%Imax) 3737.45	—
(80%Imax) 4271.37	—
(90%Imax) 4805.29	—



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

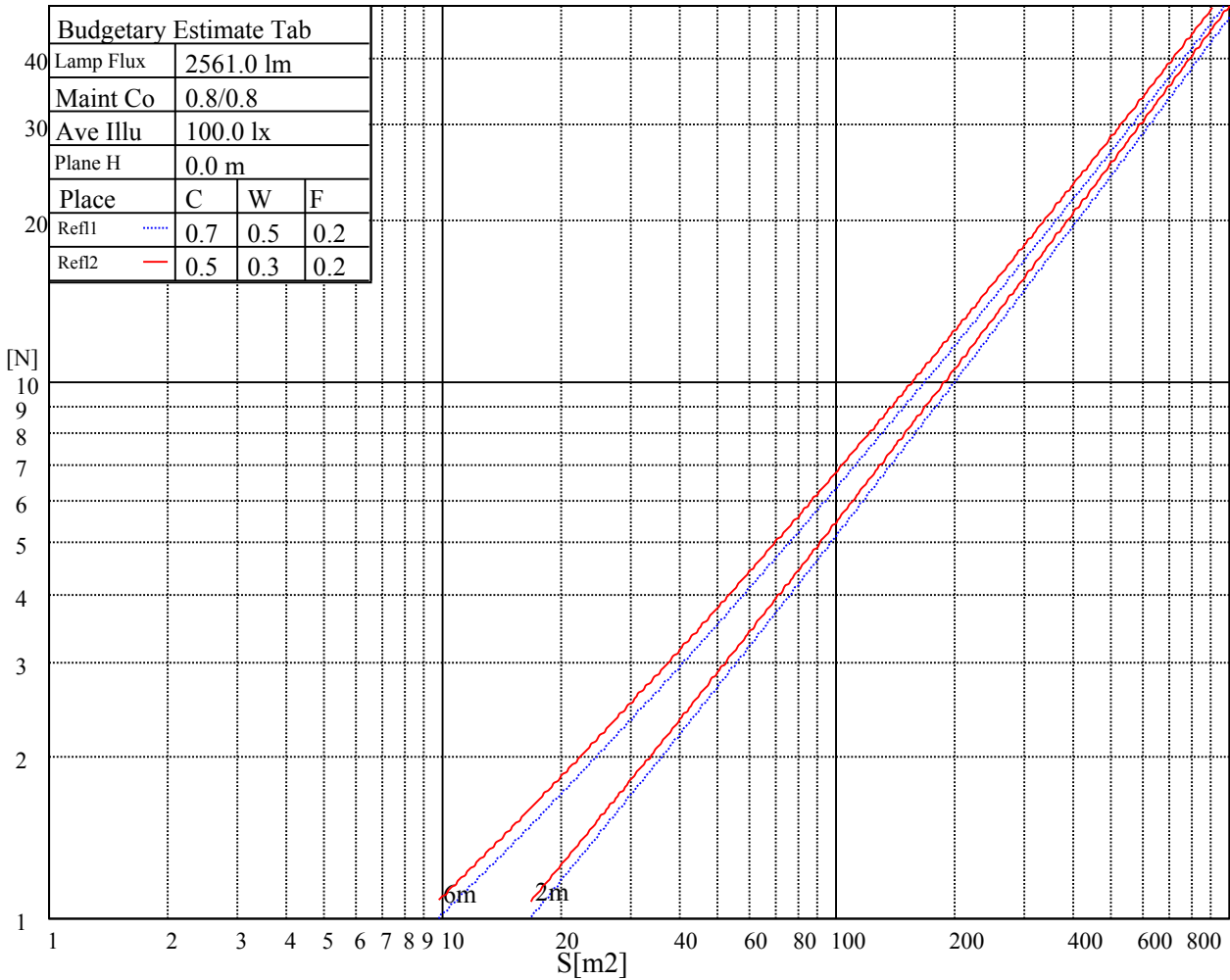
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

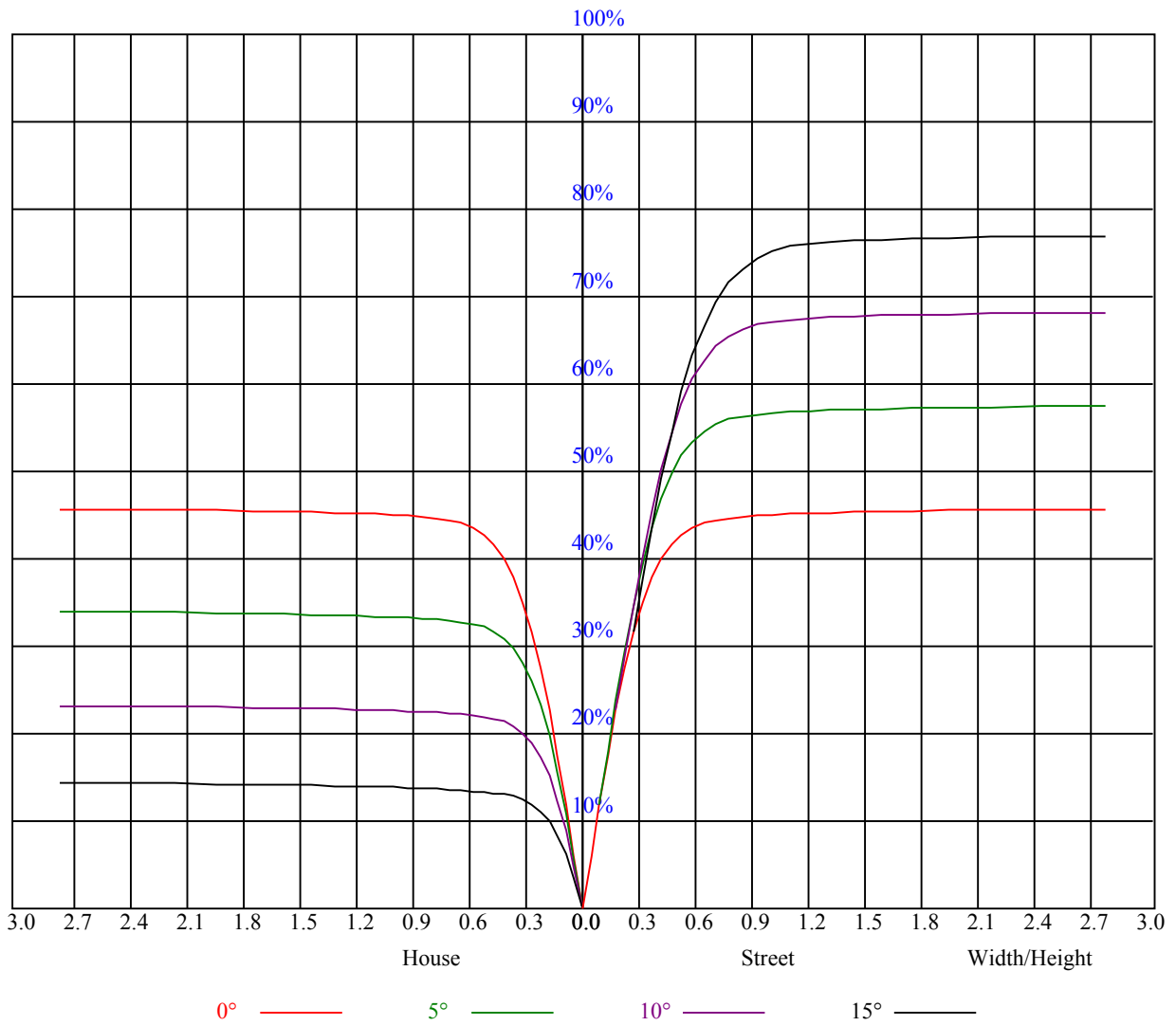


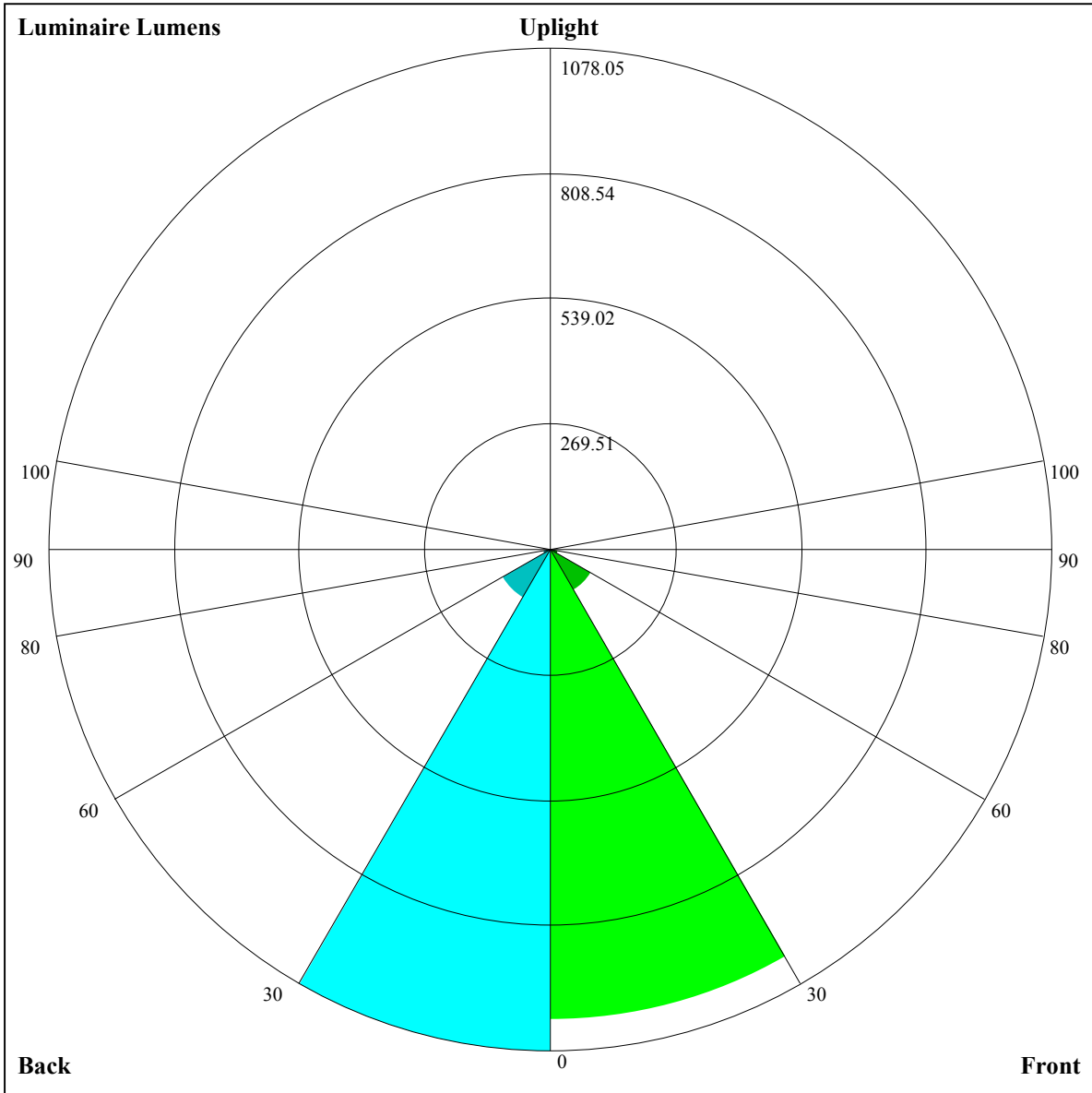
Illumination assessment according UGR										
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30
Rf of Wall	50	30	50	30	30	50	30	50	30	30
Rf of Floor	20	20	20	20	20	20	20	20	20	20
Room dimensions	Viewed crosswise					Viewed endwise				
X	Y									
2H	2H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字
	3H	非数字	非数字	非数字	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
4H	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
	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	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	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	1.10	1.10	1.10	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	0.96	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	0.85	0.84	0.83
3	0.92	0.88	0.84	0.90	0.87	0.84	0.88	0.85	0.82	0.86	0.83	0.81	0.84	0.82	0.80	0.79
4	0.87	0.83	0.79	0.86	0.82	0.79	0.84	0.81	0.78	0.82	0.79	0.77	0.81	0.78	0.76	0.75
5	0.83	0.78	0.75	0.82	0.78	0.74	0.80	0.77	0.74	0.79	0.76	0.73	0.78	0.75	0.73	0.71
6	0.79	0.74	0.71	0.78	0.74	0.71	0.77	0.73	0.70	0.76	0.72	0.70	0.75	0.72	0.69	0.68
7	0.76	0.71	0.68	0.75	0.71	0.67	0.74	0.70	0.67	0.73	0.69	0.67	0.72	0.69	0.66	0.65
8	0.72	0.68	0.65	0.72	0.68	0.65	0.71	0.67	0.64	0.70	0.67	0.64	0.69	0.66	0.64	0.63
9	0.70	0.65	0.62	0.69	0.65	0.62	0.68	0.64	0.62	0.68	0.64	0.61	0.67	0.64	0.61	0.60
10	0.67	0.62	0.59	0.66	0.62	0.59	0.66	0.62	0.59	0.65	0.62	0.59	0.65	0.61	0.59	0.58





Luminaire Lumens:

FL=1013.13,FM=102.54,FH=16.89,FVH=6.18

BL=1078.05,BM=119.61,BH=17.39,BVH=6.28

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	5336.73	5286.40	5249.53	5191.59	5115.51	5040.02	4957.50	4870.89	4771.40
45.0	5339.65	5329.12	5291.66	5233.73	5131.90	5050.55	4966.28	4873.23	4778.42
90.0	5334.38	5290.49	5216.75	5125.46	5014.85	4919.46	4827.58	4704.10	4595.25
135.0	5346.09	5344.33	5309.80	5241.92	5172.86	5087.42	5004.90	4899.56	4805.34
180.0	5336.73	5345.50	5336.14	5297.52	5245.43	5162.33	5102.05	5018.36	4940.53
225.0	5339.65	5332.63	5315.07	5299.27	5240.16	5169.94	5107.90	5031.82	4940.53
270.0	5334.38	5352.53	5345.50	5341.41	5304.54	5260.65	5217.92	5157.06	5061.08
315.0	5346.09	5330.29	5300.44	5258.31	5209.73	5155.31	5059.33	4976.81	4859.77
360.0	5336.73	5286.40	5249.53	5191.59	5115.51	5040.02	4957.50	4870.89	4771.40
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	4641.48	4522.09	4341.26	4185.00	3990.12	3727.36	3485.66	3219.38	2878.78
45.0	4678.35	4557.21	4438.40	4301.46	4138.77	3916.97	3709.21	3468.10	3200.65
90.0	4495.76	4357.64	4227.14	4083.17	3912.29	3676.44	3456.40	3210.02	2956.03
135.0	4676.01	4581.79	4478.79	4343.60	4212.51	4068.54	3908.78	3670.00	3454.64
180.0	4834.02	4732.19	4626.26	4515.07	4361.16	4221.29	4070.30	3837.96	3612.65
225.0	4838.11	4743.89	4589.39	4447.18	4268.69	4088.44	3888.88	3583.39	3311.26
270.0	4973.30	4856.84	4734.53	4613.39	4414.41	4249.96	4067.96	3794.07	3539.50
315.0	4747.99	4627.43	4453.62	4293.27	4118.87	3858.45	3633.14	3384.41	3121.06
360.0	4641.48	4522.09	4341.26	4185.00	3990.12	3727.36	3485.66	3219.38	2878.78
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2606.07	2343.88	2098.09	1814.84	1611.18	1318.57	1156.64	1127.08	1015.54
45.0	2861.81	2585.00	2255.52	2020.84	1804.31	1556.76	1391.72	1250.68	1123.11
90.0	2637.67	2380.17	2124.43	1851.13	1652.15	1165.94	1165.94	1135.04	1013.96
135.0	3217.63	2971.25	2645.28	2383.09	2139.64	1859.90	1654.49	1468.97	1271.75
180.0	3359.84	3032.11	2744.76	2473.80	2150.76	1913.74	1703.65	1519.30	1327.93
225.0	3039.72	2761.74	2419.38	2164.22	1937.74	1729.98	1509.35	1166.29	1166.29
270.0	3276.73	2992.31	2635.33	2360.86	2104.53	1884.48	1638.69	1473.66	1329.10
315.0	2782.22	2513.01	2256.69	2017.91	1746.96	1556.76	1152.48	1152.48	1089.57
360.0	2606.07	2343.88	2098.09	1814.84	1611.18	1318.57	1156.64	1127.08	1015.54
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	899.90	787.48	653.58	546.01	416.97	321.87	238.95	159.65	121.32
45.0	976.80	865.02	759.10	656.10	530.86	433.13	339.49	295.60	295.60
90.0	863.91	748.27	645.68	545.55	429.73	340.66	257.03	185.22	127.34
135.0	1138.91	1020.69	874.38	757.92	643.81	535.54	406.79	314.32	314.32
180.0	1197.43	1082.14	968.02	817.03	704.08	561.87	454.78	357.05	311.40
225.0	1106.60	960.41	846.29	732.64	596.99	491.30	366.41	275.70	200.09
270.0	1168.75	1051.12	904.23	787.77	675.41	568.31	440.15	343.00	299.11
315.0	973.93	825.40	708.94	595.29	456.77	356.11	268.62	197.16	134.84
360.0	899.90	787.48	653.58	546.01	416.97	321.87	238.95	159.65	121.32
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	100.66	88.02	75.32	67.65	61.33	55.77	49.86	45.88	42.72
45.0	125.12	100.37	87.26	76.90	67.30	60.92	55.36	50.56	45.65
90.0	104.76	87.78	77.19	69.35	61.16	55.48	50.68	45.82	42.78
135.0	218.29	118.10	98.96	85.27	73.27	66.25	59.93	53.26	48.63
180.0	311.40	132.44	108.09	89.89	78.13	69.52	62.91	55.42	50.15
225.0	145.90	111.13	96.15	83.28	73.74	65.02	58.82	53.20	48.52
270.0	299.11	127.05	106.04	91.88	80.18	69.99	63.32	57.24	50.56
315.0	107.86	93.52	81.70	71.40	64.49	57.06	51.97	47.46	43.37
360.0	100.66	88.02	75.32	67.65	61.33	55.77	49.86	45.88	42.72

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	39.27	36.87	34.47	32.77	31.31	30.08	28.68	27.68	26.80
45.0	42.55	39.91	37.57	35.17	33.42	31.89	30.37	29.26	28.27
90.0	39.91	37.34	34.53	32.54	30.72	29.14	27.45	26.22	24.93
135.0	44.30	41.43	38.92	36.81	34.59	33.01	31.72	30.61	29.32
180.0	45.82	42.55	39.03	36.58	34.65	32.66	31.25	30.02	28.79
225.0	44.07	41.08	37.69	35.52	33.65	31.66	30.31	29.09	27.74
270.0	46.35	42.96	40.03	36.75	34.59	32.42	30.90	29.55	27.97
315.0	40.44	37.92	35.87	33.59	32.07	30.67	29.50	28.03	27.04
360.0	39.27	36.87	34.47	32.77	31.31	30.08	28.68	27.68	26.80
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	25.98	25.11	24.35	23.64	23.06	22.41	21.95	21.36	20.83
45.0	27.21	26.45	25.52	24.81	24.11	23.53	22.82	22.30	21.77
90.0	23.82	23.00	22.36	21.65	21.24	20.83	20.25	19.66	19.20
135.0	28.50	27.62	26.63	25.98	25.28	24.40	23.82	23.29	22.65
180.0	27.80	26.74	26.04	25.34	24.70	23.94	23.35	22.82	22.41
225.0	26.80	25.93	25.16	24.23	23.53	22.94	22.30	21.59	21.13
270.0	26.92	25.87	24.99	23.99	23.29	22.53	22.00	21.19	20.66
315.0	26.16	25.16	24.35	23.70	22.88	22.36	21.83	21.24	20.72
360.0	25.98	25.11	24.35	23.64	23.06	22.41	21.95	21.36	20.83
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	20.31	19.61	19.02	18.43	17.67	17.09	16.62	16.15	15.74
45.0	21.24	20.42	19.78	19.14	18.43	17.67	16.91	16.21	15.74
90.0	18.73	18.20	17.85	17.62	17.26	16.62	16.09	15.74	15.27
135.0	22.06	21.54	20.89	20.07	19.37	18.67	17.91	17.09	16.39
180.0	21.95	21.48	20.95	20.25	19.66	19.02	18.26	17.62	17.03
225.0	20.54	20.01	19.37	18.79	18.02	17.44	16.62	16.04	15.57
270.0	20.19	19.66	19.20	18.49	18.02	17.56	16.97	16.33	15.80
315.0	20.19	19.43	18.79	18.02	17.38	16.62	16.04	15.57	15.16
360.0	20.31	19.61	19.02	18.43	17.67	17.09	16.62	16.15	15.74
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	15.39	15.16	14.86	14.46	14.22	13.93	13.52	13.23	12.87
45.0	15.33	14.98	14.75	14.40	14.10	13.75	13.40	13.11	12.76
90.0	14.98	14.63	14.34	14.05	13.75	13.34	13.05	12.76	12.41
135.0	15.86	15.27	14.98	14.57	14.28	13.99	13.69	13.28	12.99
180.0	16.33	15.92	15.63	15.33	14.92	14.63	14.40	14.05	13.75
225.0	15.16	14.81	14.51	14.22	13.93	13.58	13.28	12.99	12.76
270.0	15.33	15.04	14.69	14.40	14.10	13.75	13.46	13.11	12.82
315.0	14.81	14.46	14.16	13.81	13.52	13.17	12.87	12.58	12.35
360.0	15.39	15.16	14.86	14.46	14.22	13.93	13.52	13.23	12.87
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	12.58	12.35	12.06	11.82	11.53	11.24	10.94	10.77	10.48
45.0	12.41	12.11	11.82	11.59	11.35	11.06	10.83	10.59	10.42
90.0	12.06	11.76	11.47	11.29	11.06	10.77	10.53	10.36	10.30
135.0	12.70	12.35	12.00	11.70	11.41	11.18	10.83	10.65	10.42
180.0	13.40	13.05	12.76	12.41	12.17	11.82	11.41	11.29	11.06
225.0	12.41	12.11	11.88	11.59	11.29	11.00	10.83	10.65	10.48
270.0	12.52	12.23	11.94	11.70	11.41	11.12	10.83	10.65	10.42
315.0	12.00	11.70	11.53	11.24	11.00	10.71	10.59	10.36	10.30
360.0	12.58	12.35	12.06	11.82	11.53	11.24	10.94	10.77	10.48

Intensity data(cd)

C/ γ (°)	90.0
0.0	10.48
45.0	10.42
90.0	10.30
135.0	10.30
180.0	10.59
225.0	10.36
270.0	10.30
315.0	10.24
360.0	10.48