



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: 2-2759-L

Luminaire: 92.70.412.00

Report No: 2024806-B016

Ballast type: AC

Test No: 2024806-C016

Voltage(V): 34.990

LampCAT: CITIZEN CLU038 LES14.5

Current(A): 0.450

Lamp flux(lm): 2571.0

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): 2434.59, Efficiency(%): 94.69% , Luminous Efficacy(lm/W): 154.63

Central intensity(cd): 5199.490, Maximum intensity(cd): 5199.490

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=36.6

[C90/270]Total=36.6

Field angle(10%Imax): [C0/180]Total=66.4

[C90/270]Total=66.4

Maximum s/h(1/2): C0_180=0.59 C90_270=0.59

Maximum s/h(1/4): C0_180=0.63 C90_270=0.63

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 94.69%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 97.935%

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	5199.490	0.000	0	0.00%	0.00%
1.0	5180.104	4.966	4.966	0.19%	0.20%
2.0	5126.922	14.794	19.76	0.58%	0.81%
3.0	5065.254	24.376	44.136	0.95%	1.81%
4.0	4978.275	33.619	77.755	1.31%	3.19%
5.0	4878.787	42.405	120.16	1.65%	4.94%
6.0	4745.355	50.577	170.737	1.97%	7.01%
7.0	4602.707	58.023	228.761	2.26%	9.40%
8.0	4438.185	64.704	293.465	2.52%	12.05%
9.0	4273.445	70.603	364.068	2.75%	14.95%
10.0	4111.191	75.878	439.945	2.95%	18.07%
11.0	3928.162	80.330	520.275	3.12%	21.37%
12.0	3743.889	83.867	604.142	3.26%	24.81%
13.0	3565.981	86.750	690.891	3.37%	28.38%
14.0	3386.244	88.988	779.879	3.46%	32.03%
15.0	3215.065	90.626	870.505	3.52%	35.76%
16.0	3022.014	91.391	961.896	3.55%	39.51%
17.0	2831.377	91.153	1053.049	3.55%	43.25%
18.0	2648.933	90.358	1143.407	3.51%	46.97%
19.0	2496.921	89.527	1232.934	3.48%	50.64%
20.0	2335.326	88.444	1321.378	3.44%	54.28%
21.0	2176.145	86.629	1408.007	3.37%	57.83%
22.0	2018.426	84.292	1492.299	3.28%	61.30%
23.0	1871.023	81.611	1573.91	3.17%	64.65%
24.0	1733.276	78.803	1652.713	3.07%	67.88%
25.0	1588.871	75.538	1728.251	2.94%	70.99%
26.0	1384.357	70.183	1798.435	2.73%	73.87%
27.0	1279.960	65.183	1863.618	2.54%	76.55%
28.0	1189.887	62.531	1926.149	2.43%	79.12%
29.0	1056.748	58.778	1984.927	2.29%	81.53%
30.0	915.716	53.256	2038.184	2.07%	83.72%
31.0	779.425	47.173	2085.357	1.83%	85.66%
32.0	653.184	41.043	2126.399	1.60%	87.34%
33.0	542.182	35.216	2161.615	1.37%	88.79%
34.0	449.285	30.005	2191.62	1.17%	90.02%
35.0	370.623	25.463	2217.083	0.99%	91.07%
36.0	311.559	21.721	2238.804	0.84%	91.96%
37.0	268.238	18.910	2257.714	0.74%	92.74%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	233.827	16.758	2274.472	0.65%	93.42%
39.0	189.437	14.447	2288.919	0.56%	94.02%
40.0	150.973	11.872	2300.792	0.46%	94.50%
41.0	126.423	9.878	2310.67	0.38%	94.91%
42.0	105.721	8.434	2319.104	0.33%	95.26%
43.0	88.735	7.203	2326.307	0.28%	95.55%
44.0	75.465	6.197	2332.504	0.24%	95.81%
45.0	64.682	5.386	2337.89	0.21%	96.03%
46.0	56.781	4.750	2342.641	0.18%	96.22%
47.0	50.571	4.270	2346.91	0.17%	96.40%
48.0	45.772	3.895	2350.805	0.15%	96.56%
49.0	41.748	3.594	2354.399	0.14%	96.71%
50.0	38.647	3.352	2357.751	0.13%	96.84%
51.0	35.874	3.153	2360.904	0.12%	96.97%
52.0	33.716	2.986	2363.89	0.12%	97.10%
53.0	31.866	2.853	2366.743	0.11%	97.21%
54.0	30.307	2.740	2369.483	0.11%	97.33%
55.0	28.983	2.647	2372.13	0.10%	97.43%
56.0	27.791	2.565	2374.695	0.10%	97.54%
57.0	26.752	2.494	2377.189	0.10%	97.64%
58.0	25.750	2.428	2379.617	0.09%	97.74%
59.0	24.894	2.368	2381.985	0.09%	97.84%
60.0	24.206	2.320	2384.304	0.09%	97.93%
61.0	23.533	2.278	2386.582	0.09%	98.03%
62.0	22.882	2.237	2388.819	0.09%	98.12%
63.0	22.209	2.193	2391.012	0.09%	98.21%
64.0	21.558	2.148	2393.16	0.08%	98.30%
65.0	20.878	2.100	2395.26	0.08%	98.38%
66.0	20.227	2.051	2397.311	0.08%	98.47%
67.0	19.568	2.001	2399.312	0.08%	98.55%
68.0	18.947	1.951	2401.263	0.08%	98.63%
69.0	18.449	1.908	2403.171	0.07%	98.71%
70.0	17.886	1.866	2405.037	0.07%	98.79%
71.0	17.403	1.824	2406.861	0.07%	98.86%
72.0	16.884	1.783	2408.643	0.07%	98.93%
73.0	16.496	1.746	2410.389	0.07%	99.01%
74.0	16.094	1.713	2412.102	0.07%	99.08%
75.0	15.662	1.678	2413.78	0.07%	99.15%

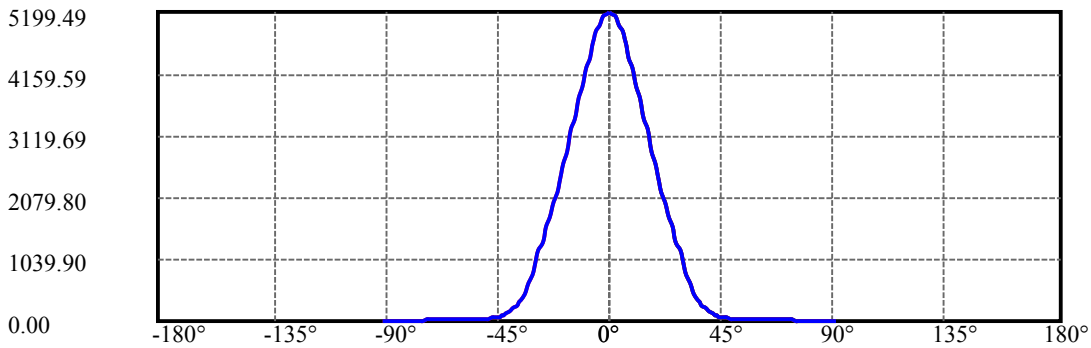
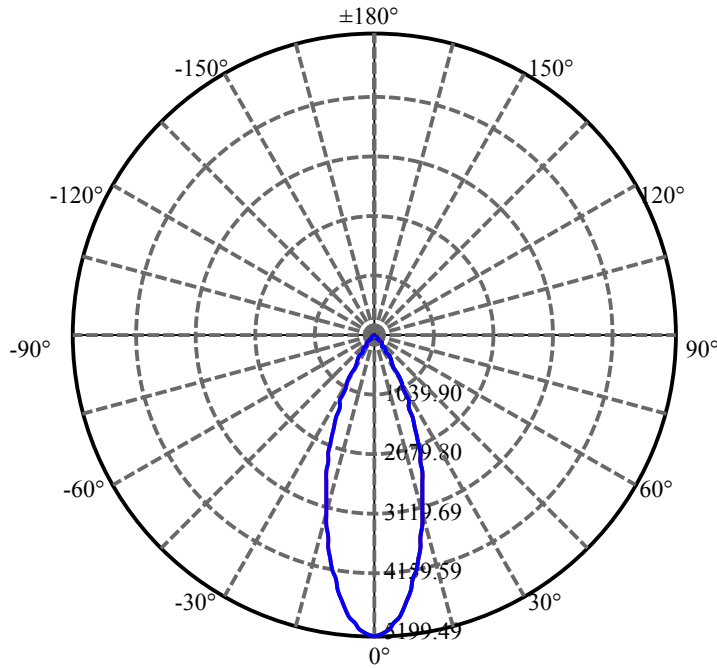
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	15.252	1.641	2415.421	0.06%	99.21%
77.0	14.828	1.604	2417.025	0.06%	99.28%
78.0	14.492	1.570	2418.594	0.06%	99.34%
79.0	14.067	1.534	2420.129	0.06%	99.41%
80.0	13.658	1.495	2421.624	0.06%	99.47%
81.0	13.270	1.456	2423.08	0.06%	99.53%
82.0	12.860	1.417	2424.497	0.06%	99.59%
83.0	12.487	1.378	2425.875	0.05%	99.64%
84.0	12.151	1.342	2427.217	0.05%	99.70%
85.0	11.822	1.308	2428.525	0.05%	99.75%
86.0	11.412	1.270	2429.795	0.05%	99.80%
87.0	11.134	1.234	2431.029	0.05%	99.85%
88.0	10.929	1.209	2432.238	0.05%	99.90%
89.0	10.680	1.184	2433.422	0.05%	99.95%
90.0	10.534	1.163	2434.585	0.05%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2038.18	79.28%	83.72%
0-40	2300.79	89.49%	94.50%
0-60	2384.30	92.74%	97.93%
0-90	2433.42	94.65%	99.95%
0-120	2433.42	94.65%	99.95%
0-180	2434.59	94.69%	100.00%
60-90	49.12	1.91%	2.02%
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%
0-28.37	1947.67	75.76%	80.00%

ZONAL LUMEN SUMMARY

0-10	439.95
10-20	881.43
20-30	716.81
30-40	262.61
40-50	56.96
50-60	26.55
60-70	20.73
70-80	16.59
80-90	11.80
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: —————

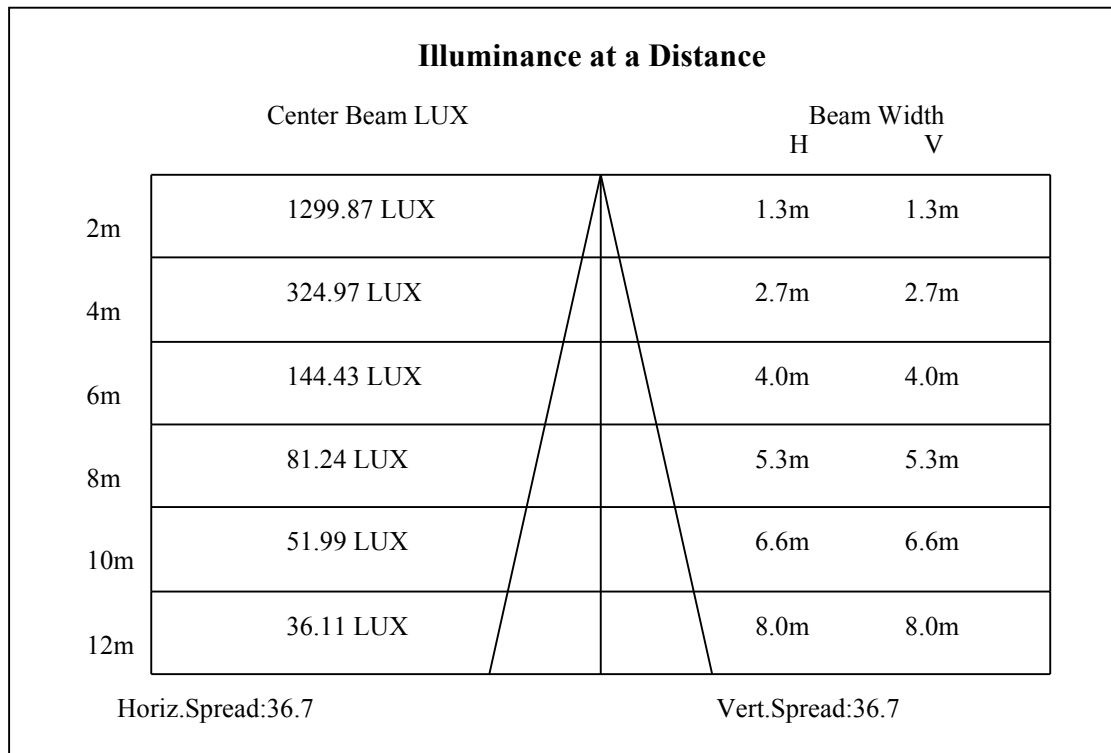
C90/C270: —————

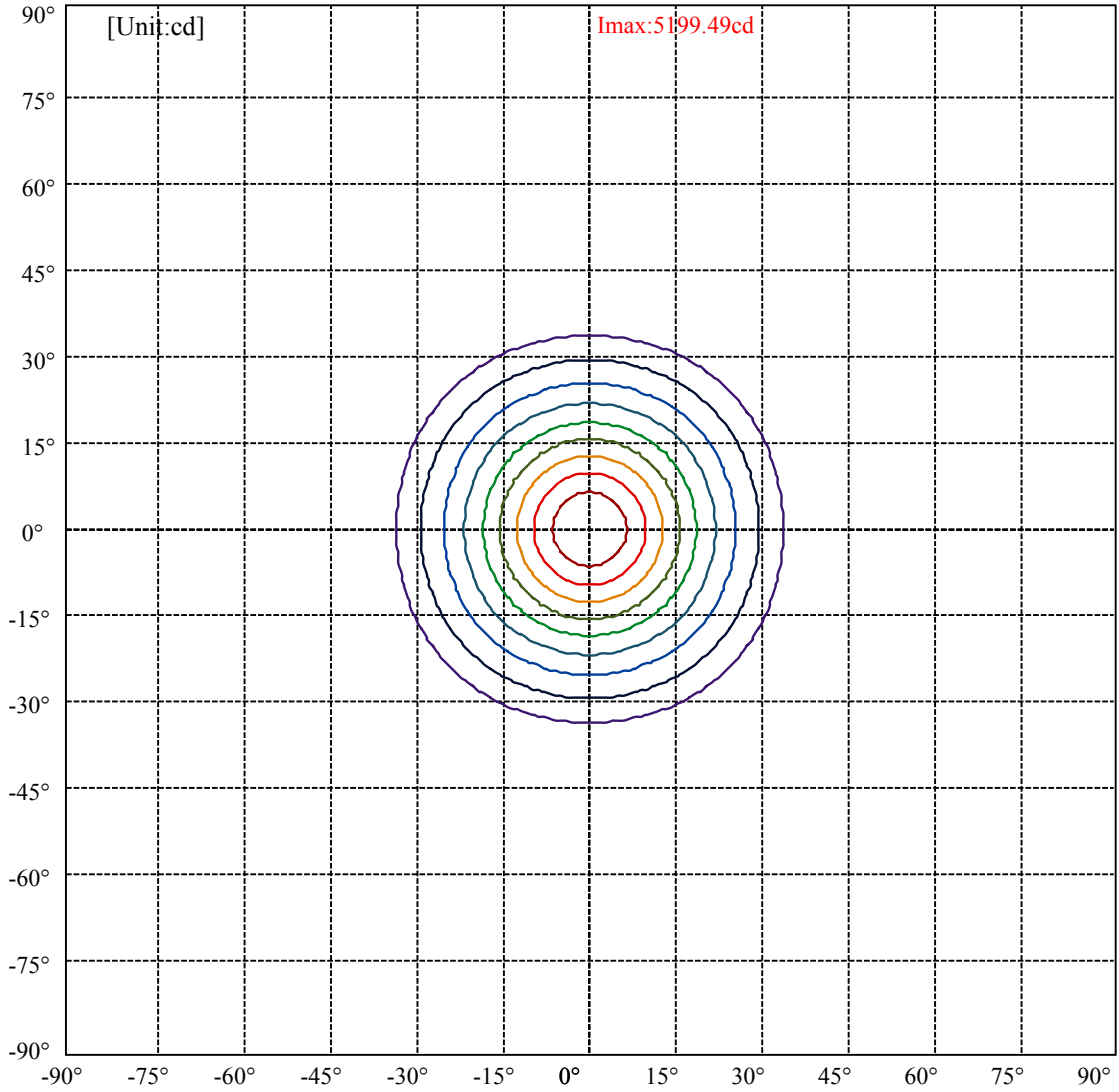
Field angle(10%Imax):C0/180Left:33.2 Right:33.2

:C90/270Left:33.2 Right:33.2

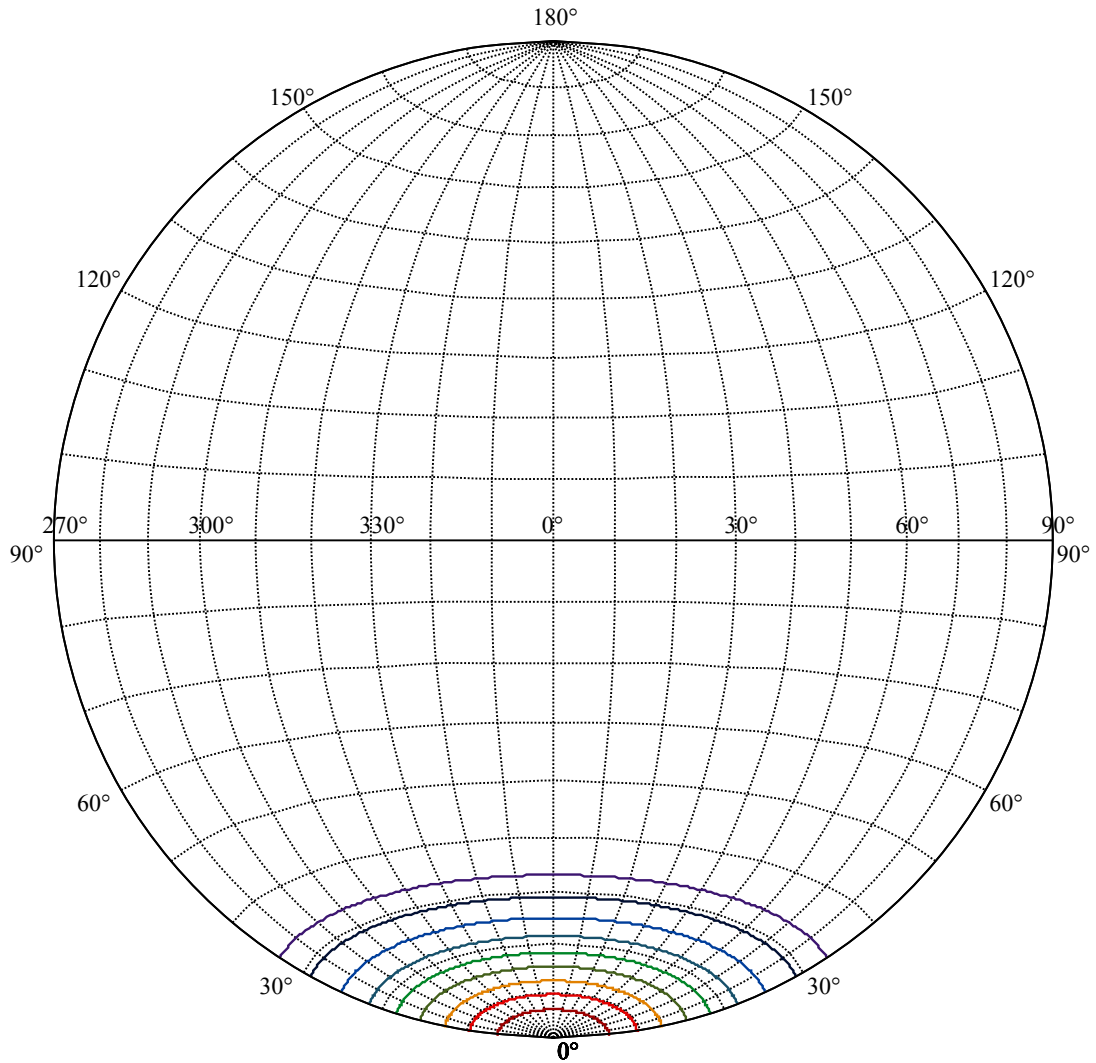
Beam Angle(50%Imax):C0/180Left:18.3 Right:18.3

:C90/270Left:18.3 Right:18.3





(10%Imax) 519.949	—
(20%Imax) 1039.9	—
(30%Imax) 1559.85	—
(40%Imax) 2079.8	—
(50%Imax) 2599.75	—
(60%Imax) 3119.69	—
(70%Imax) 3639.64	—
(80%Imax) 4159.59	—
(90%Imax) 4679.54	—



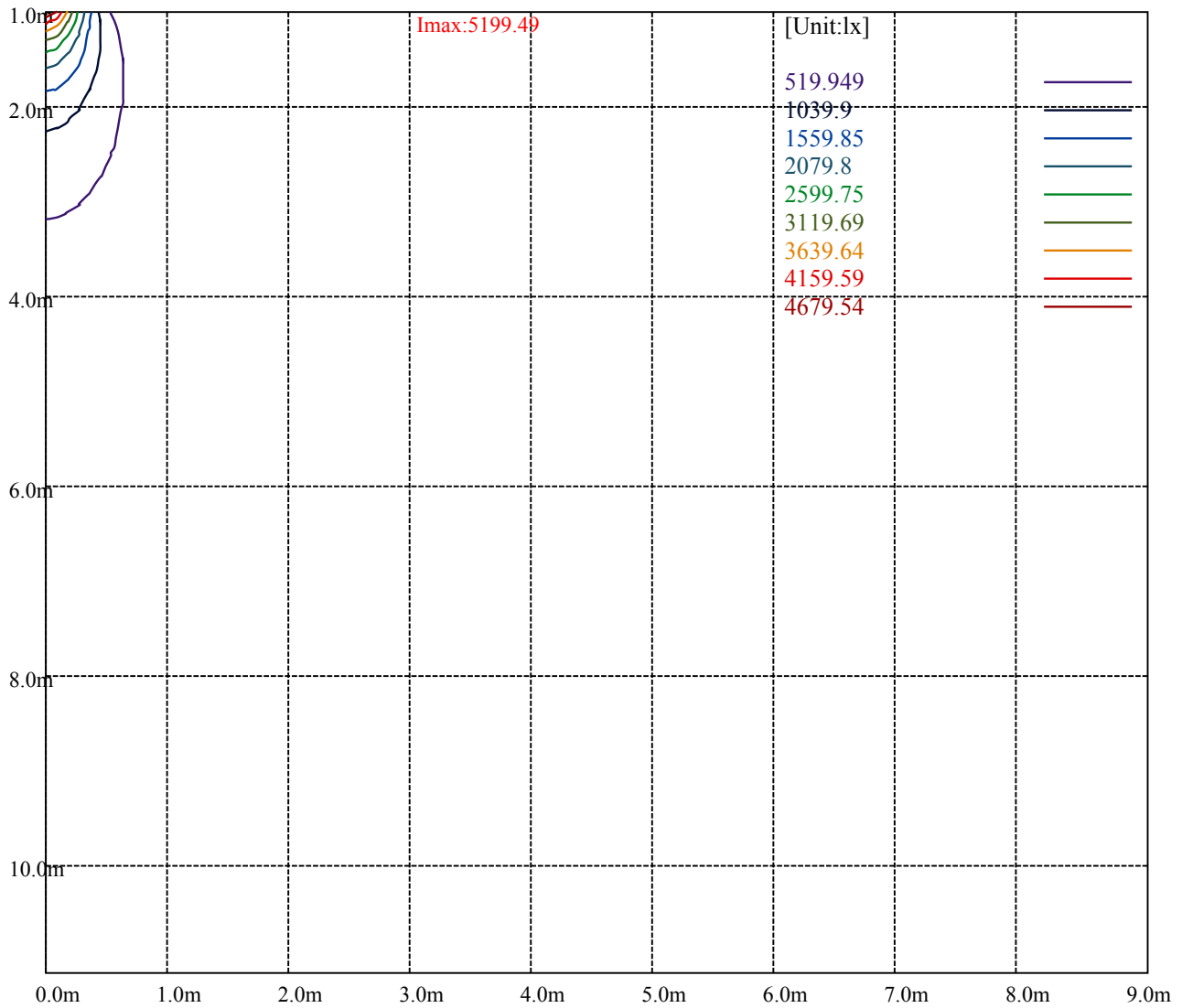
House

[Unit:cd]

Road

Imax:5199.49

(10%Imax)	519.949	—
(20%Imax)	1039.9	—
(30%Imax)	1559.85	—
(40%Imax)	2079.8	—
(50%Imax)	2599.75	—
(60%Imax)	3119.69	—
(70%Imax)	3639.64	—
(80%Imax)	4159.59	—
(90%Imax)	4679.54	—



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

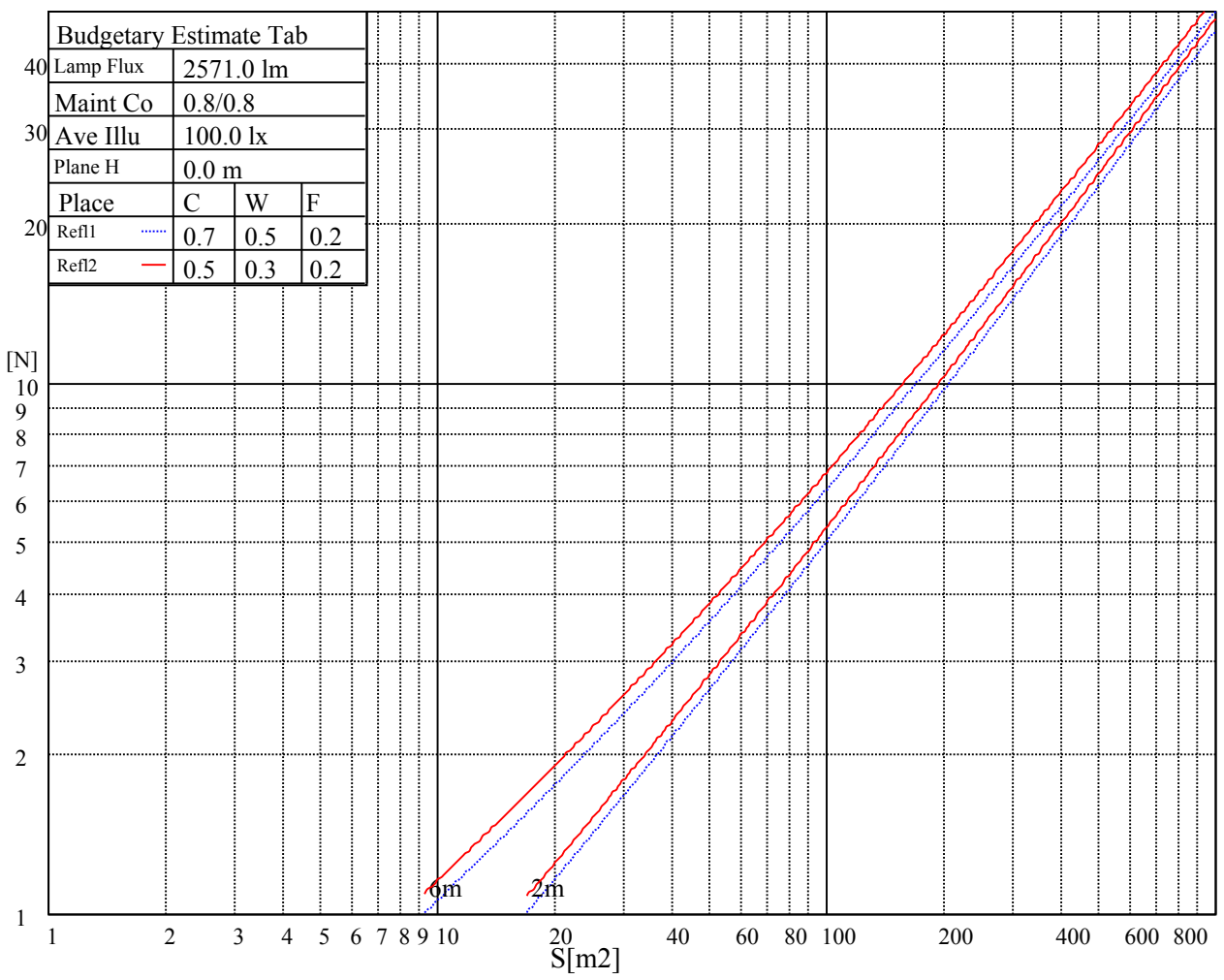
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

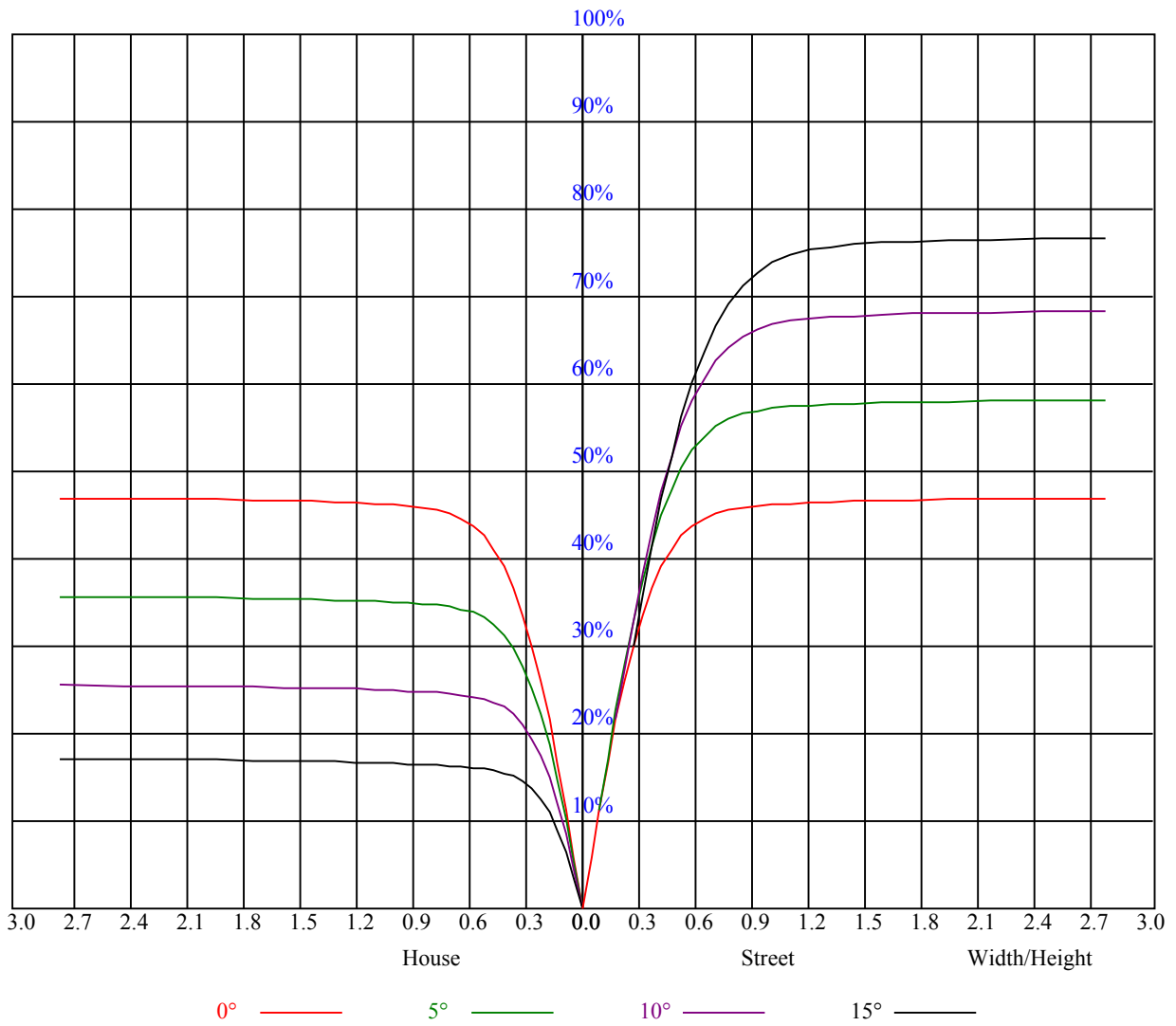


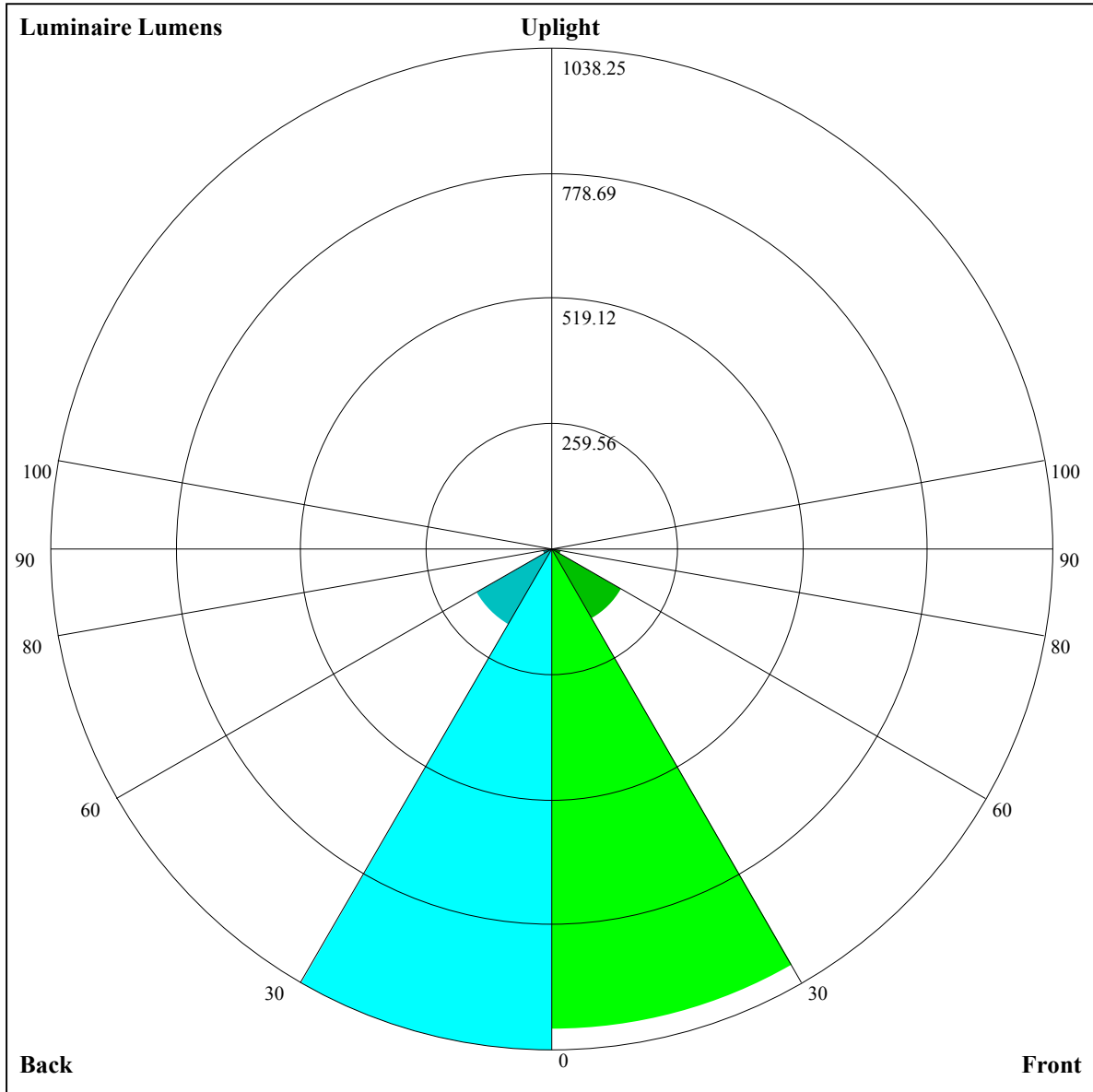
Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	3H	非数字	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 RHOFC=20 CU															
0	1.13	1.13	1.13	1.10	1.10	1.10	1.05	1.05	1.05	1.01	1.01	1.01	0.97	0.97	0.97	0.95
1	1.05	1.03	1.01	1.03	1.01	0.99	0.99	0.98	0.96	0.96	0.95	0.93	0.93	0.92	0.91	0.89
2	0.99	0.95	0.92	0.97	0.94	0.91	0.94	0.91	0.89	0.91	0.89	0.87	0.89	0.87	0.85	0.84
3	0.93	0.89	0.85	0.92	0.88	0.85	0.89	0.86	0.83	0.87	0.84	0.82	0.85	0.83	0.81	0.79
4	0.88	0.83	0.79	0.87	0.82	0.79	0.85	0.81	0.78	0.83	0.80	0.77	0.81	0.79	0.76	0.75
5	0.83	0.78	0.75	0.82	0.78	0.74	0.81	0.77	0.74	0.79	0.76	0.73	0.78	0.75	0.72	0.71
6	0.79	0.74	0.70	0.78	0.74	0.70	0.77	0.73	0.70	0.76	0.72	0.69	0.75	0.71	0.69	0.68
7	0.75	0.70	0.67	0.75	0.70	0.67	0.74	0.69	0.66	0.72	0.69	0.66	0.71	0.68	0.66	0.64
8	0.72	0.67	0.63	0.71	0.67	0.63	0.70	0.66	0.63	0.69	0.66	0.63	0.69	0.65	0.63	0.61
9	0.69	0.64	0.60	0.68	0.64	0.60	0.67	0.63	0.60	0.67	0.63	0.60	0.66	0.62	0.60	0.59
10	0.66	0.61	0.58	0.65	0.61	0.58	0.65	0.60	0.57	0.64	0.60	0.57	0.63	0.60	0.57	0.56





Luminaire Lumens:

FL=997.13,FM=165.52,FH=18.41,FVH=6.42

BL=1038.25,BM=182.63,BH=18.76,BVH=6.53

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	5182.23	5122.53	5061.08	4982.66	4852.74	4735.11	4604.61	4461.81	4271.03
45.0	5203.88	5215.58	5168.77	5123.12	5052.89	4965.69	4849.23	4739.21	4556.62
90.0	5221.44	5200.37	5148.87	5097.95	5005.49	4904.83	4797.73	4618.07	4475.86
135.0	5190.42	5226.70	5215.58	5175.79	5129.56	5058.74	4942.28	4824.07	4688.30
180.0	5182.23	5213.24	5183.40	5147.70	5082.74	5003.73	4872.06	4756.77	4615.73
225.0	5203.88	5139.50	5078.06	5011.34	4910.68	4803.59	4636.80	4486.39	4330.14
270.0	5221.44	5200.95	5137.16	5044.70	4966.28	4860.35	4736.28	4561.30	4400.95
315.0	5190.42	5121.95	5022.46	4938.77	4825.82	4698.24	4523.85	4374.03	4166.86
360.0	5182.23	5122.53	5061.08	4982.66	4852.74	4735.11	4604.61	4461.81	4271.03
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	4115.95	3954.42	3788.22	3575.78	3406.65	3204.17	3036.21	2866.49	2655.81
45.0	4420.85	4262.84	4092.54	3884.20	3716.24	3561.15	3391.44	3169.05	2988.80
90.0	4320.19	4155.16	3942.13	3769.49	3598.61	3425.97	3207.09	3031.52	2812.65
135.0	4505.12	4358.23	4195.54	3986.61	3816.90	3651.86	3482.73	3263.86	3082.44
180.0	4437.23	4273.96	4110.68	3942.13	3740.23	3575.78	3408.99	3239.28	3014.55
225.0	4133.50	3964.96	3801.68	3637.23	3435.33	3271.47	3107.02	2888.14	2711.41
270.0	4251.13	4090.20	3876.00	3704.53	3527.21	3321.80	3163.20	2956.62	2783.39
315.0	4003.58	3829.77	3618.50	3451.13	3286.68	3077.76	2923.84	2761.15	2602.97
360.0	4115.95	3954.42	3788.22	3575.78	3406.65	3204.17	3036.21	2866.49	2655.81
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2499.55	2354.42	2208.70	2033.13	1896.19	1759.24	1627.57	1467.80	1155.88
45.0	2759.98	2603.14	2444.54	2256.69	2102.19	1954.71	1814.84	1654.49	1523.40
90.0	2646.45	2491.36	2342.13	2162.46	2010.89	1834.15	1696.04	1570.80	1454.34
135.0	2917.41	2752.96	2560.42	2398.90	2252.59	2076.44	1940.66	1775.63	1639.27
180.0	2834.30	2679.80	2494.87	2342.71	2147.25	2000.94	1864.00	1730.57	1567.29
225.0	2506.58	2356.17	2209.87	2064.73	1893.26	1765.68	1634.59	1508.18	1138.73
270.0	2610.75	2458.59	2285.36	2143.15	2002.11	1862.24	1700.72	1576.65	1454.34
315.0	2416.45	2278.92	2136.71	2007.38	1842.93	1714.77	1587.77	1426.84	1141.60
360.0	2499.55	2354.42	2208.70	2033.13	1896.19	1759.24	1627.57	1467.80	1155.88
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1155.88	1060.90	936.48	808.90	655.39	546.13	455.66	365.94	309.88
45.0	1403.43	1284.63	1138.32	1020.69	901.89	746.22	629.76	527.35	423.18
90.0	1145.29	1145.29	1055.22	927.82	772.03	653.29	548.06	458.23	369.45
135.0	1519.30	1390.55	1229.62	1099.11	970.95	837.52	684.19	575.92	482.87
180.0	1438.54	1313.89	1187.48	1025.96	897.21	768.46	646.73	516.81	431.95
225.0	1138.73	1106.48	978.73	815.45	688.17	575.63	458.23	385.25	313.51
270.0	1296.92	1176.36	1055.22	887.84	756.75	606.35	505.11	420.25	353.53
315.0	1141.60	1041.00	872.92	739.96	593.01	491.88	409.72	344.52	280.62
360.0	1155.88	1060.90	936.48	808.90	655.39	546.13	455.66	365.94	309.88
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	263.29	224.02	183.18	155.44	132.32	112.30	91.47	77.89	64.84
45.0	358.22	302.03	302.03	201.73	170.24	138.05	117.75	100.25	85.56
90.0	311.81	263.82	214.02	179.78	145.96	123.19	103.58	84.27	72.16
135.0	389.23	328.95	301.45	301.45	185.17	156.31	127.29	107.92	91.76
180.0	364.07	296.18	296.18	201.02	170.65	144.67	123.07	101.48	86.67
225.0	265.46	225.72	192.36	156.96	133.02	113.01	96.09	78.71	68.00
270.0	301.45	301.45	207.23	177.21	150.23	121.96	103.47	87.90	72.57
315.0	238.95	203.72	174.16	141.92	120.21	101.89	83.04	71.46	62.15
360.0	263.29	224.02	183.18	155.44	132.32	112.30	91.47	77.89	64.84

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	56.94	50.62	44.54	40.79	37.63	34.24	32.07	30.20	28.68
45.0	70.99	62.21	55.30	49.86	44.77	41.38	37.92	35.70	33.83
90.0	62.56	55.30	49.57	44.24	40.73	37.81	34.82	33.01	31.43
135.0	75.96	66.48	58.76	52.67	47.05	43.25	39.97	37.45	35.00
180.0	74.85	65.43	56.77	51.32	47.17	43.72	40.09	37.57	35.00
225.0	59.69	52.03	47.29	43.60	40.03	37.40	35.17	32.95	31.49
270.0	63.09	54.37	48.92	44.65	40.38	37.63	35.29	33.24	31.19
315.0	53.37	47.81	43.42	39.03	36.23	33.77	31.66	29.61	28.32
360.0	56.94	50.62	44.54	40.79	37.63	34.24	32.07	30.20	28.68
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	27.04	25.87	24.99	24.23	23.53	23.12	22.65	22.12	21.71
45.0	31.95	30.67	29.50	28.38	26.86	25.81	24.93	24.17	23.41
90.0	29.73	28.44	26.98	25.93	24.99	24.23	23.58	22.82	22.18
135.0	33.18	31.60	30.14	28.56	27.21	26.22	25.34	24.58	23.64
180.0	33.42	31.95	30.31	29.09	28.03	26.69	25.81	25.05	24.35
225.0	30.14	28.68	27.62	26.63	25.75	24.70	24.05	23.41	22.77
270.0	29.79	28.50	27.33	26.34	25.28	24.52	23.82	23.23	22.71
315.0	27.21	26.16	25.46	24.87	24.35	23.88	23.47	22.88	22.30
360.0	27.04	25.87	24.99	24.23	23.53	23.12	22.65	22.12	21.71
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	21.24	20.83	20.48	20.13	19.49	19.08	18.79	18.14	17.32
45.0	22.77	22.12	21.19	20.48	19.78	18.84	18.26	17.73	17.32
90.0	21.59	20.95	20.19	19.61	18.84	18.32	17.91	17.32	16.97
135.0	23.00	22.30	21.54	20.72	20.13	19.43	18.84	18.20	17.79
180.0	23.53	22.82	22.12	21.48	20.66	19.96	19.25	18.73	18.32
225.0	21.95	21.24	20.54	19.72	19.08	18.38	17.91	17.50	17.03
270.0	21.89	21.24	20.60	19.84	19.20	18.73	18.08	17.62	17.26
315.0	21.71	20.95	20.37	19.84	19.37	18.84	18.55	17.85	17.21
360.0	21.24	20.83	20.48	20.13	19.49	19.08	18.79	18.14	17.32
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	16.80	16.44	16.04	15.57	15.22	14.75	14.46	13.99	13.58
45.0	16.85	16.50	16.09	15.68	15.27	14.92	14.57	14.10	13.75
90.0	16.62	16.09	15.80	15.39	15.04	14.57	14.28	13.93	13.46
135.0	17.21	16.80	16.39	15.98	15.63	15.22	14.81	14.40	14.05
180.0	17.79	17.38	16.97	16.62	16.09	15.68	15.33	14.98	14.51
225.0	16.50	16.15	15.80	15.39	14.92	14.51	14.22	13.69	13.34
270.0	16.80	16.39	15.92	15.51	15.10	14.63	14.28	13.93	13.40
315.0	16.50	16.21	15.74	15.16	14.75	14.34	13.99	13.52	13.17
360.0	16.80	16.44	16.04	15.57	15.22	14.75	14.46	13.99	13.58
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	13.17	12.82	12.52	12.11	11.88	11.35	11.06	10.89	10.53
45.0	13.40	12.93	12.52	12.23	11.88	11.53	11.18	10.94	10.71
90.0	13.05	12.64	12.29	11.94	11.70	11.29	11.06	10.83	10.59
135.0	13.64	13.17	12.76	12.35	12.00	11.65	11.35	11.12	10.89
180.0	14.10	13.64	13.17	12.87	12.41	12.00	11.76	11.59	11.24
225.0	12.99	12.64	12.23	11.94	11.59	11.24	11.00	10.83	10.53
270.0	13.05	12.64	12.29	12.00	11.65	11.29	10.89	10.71	10.48
315.0	12.76	12.41	12.11	11.76	11.47	10.94	10.77	10.53	10.48
360.0	13.17	12.82	12.52	12.11	11.88	11.35	11.06	10.89	10.53

Intensity data(cd)

C/γ(°)	90.0
0.0	10.53
45.0	10.53
90.0	10.53
135.0	10.65
180.0	10.53
225.0	10.53
270.0	10.48
315.0	10.48
360.0	10.53