



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: 1-1377-L

Luminaire: 92.70.410.00

Report No: 20231122-B009

Ballast type: AC

Test No: 20231122-C009

Voltage(V): 35.960

LampCAT: LUXEON CoB 1203 LES9

Current(A): 0.379

Lamp flux(lm): 1490.3

Power (W): 13.628

Number of Lamps: 1

PF: 0.000

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

### Photometric Results

Lumens(lm): 1383.33, Efficiency(%): 92.82% , Luminous Efficacy(lm/W): 101.51

Central intensity(cd): 6378.395, Maximum intensity(cd): 6378.395

Angle of maximum intensity: C=0.0  $\gamma$ =0.0

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

[C90/270]Total=20.2

Field angle(10%Imax): [C0/180]Total=50.0

[C90/270]Total=50.0

Maximum s/h(1/2): C0\_180=0.35 C90\_270=0.35

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(%): 92.82%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 98.105%

Equipment: GMS1980  
Temperature(°C): 0.0

Date: 2023/11/22  
Humidity(%): 0.0%

Operator: NT07  
Distance(m): 7.44

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	6378.395	0.000	0	0.00%	0.00%
1.0	6343.523	6.087	6.087	0.41%	0.44%
2.0	6230.324	18.047	24.134	1.21%	1.74%
3.0	6020.188	29.299	53.434	1.97%	3.86%
4.0	5760.718	39.434	92.868	2.65%	6.71%
5.0	5419.048	48.095	140.963	3.23%	10.19%
6.0	5014.483	54.831	195.794	3.68%	14.15%
7.0	4581.341	59.561	255.355	4.00%	18.46%
8.0	4130.278	62.347	317.702	4.18%	22.97%
9.0	3683.436	63.326	381.028	4.25%	27.54%
10.0	3237.840	62.635	443.663	4.20%	32.07%
11.0	2863.027	60.960	504.623	4.09%	36.48%
12.0	2495.894	58.581	563.204	3.93%	40.71%
13.0	2208.539	55.830	619.034	3.75%	44.75%
14.0	1948.308	53.207	672.241	3.57%	48.60%
15.0	1735.197	50.569	722.81	3.39%	52.25%
16.0	1536.478	47.939	770.749	3.22%	55.72%
17.0	1368.604	45.240	815.989	3.04%	58.99%
18.0	1233.984	42.911	858.9	2.88%	62.09%
19.0	1135.482	41.224	900.124	2.77%	65.07%
20.0	1043.588	39.883	940.007	2.68%	67.95%
21.0	954.462	38.367	978.374	2.57%	70.73%
22.0	864.443	36.552	1014.925	2.45%	73.37%
23.0	786.838	34.648	1049.574	2.32%	75.87%
24.0	714.075	32.815	1082.389	2.20%	78.25%
25.0	637.687	30.736	1113.125	2.06%	80.47%
26.0	569.256	28.490	1141.615	1.91%	82.53%
27.0	501.082	26.186	1167.801	1.76%	84.42%
28.0	434.249	23.681	1191.482	1.59%	86.13%
29.0	372.128	21.097	1212.579	1.42%	87.66%
30.0	318.512	18.647	1231.226	1.25%	89.00%
31.0	272.776	16.455	1247.681	1.10%	90.19%
32.0	236.408	14.588	1262.268	0.98%	91.25%
33.0	202.290	12.924	1275.192	0.87%	92.18%
34.0	163.639	11.074	1286.266	0.74%	92.98%
35.0	128.116	9.061	1295.327	0.61%	93.64%
36.0	105.649	7.443	1302.77	0.50%	94.18%
37.0	87.549	6.301	1309.071	0.42%	94.63%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	72.250	5.334	1314.405	0.36%	95.02%
39.0	60.329	4.525	1318.931	0.30%	95.34%
40.0	51.486	3.900	1322.83	0.26%	95.63%
41.0	43.591	3.386	1326.216	0.23%	95.87%
42.0	37.737	2.955	1329.171	0.20%	96.08%
43.0	33.101	2.624	1331.795	0.18%	96.27%
44.0	29.289	2.355	1334.15	0.16%	96.44%
45.0	26.058	2.127	1336.277	0.14%	96.60%
46.0	23.539	1.940	1338.216	0.13%	96.74%
47.0	21.629	1.796	1340.013	0.12%	96.87%
48.0	19.775	1.674	1341.686	0.11%	96.99%
49.0	18.391	1.567	1343.254	0.11%	97.10%
50.0	17.236	1.485	1344.739	0.10%	97.21%
51.0	16.253	1.417	1346.156	0.10%	97.31%
52.0	15.361	1.357	1347.513	0.09%	97.41%
53.0	14.662	1.306	1348.819	0.09%	97.51%
54.0	14.074	1.267	1350.085	0.08%	97.60%
55.0	13.513	1.231	1351.317	0.08%	97.69%
56.0	13.070	1.201	1352.518	0.08%	97.77%
57.0	12.704	1.178	1353.696	0.08%	97.86%
58.0	12.351	1.159	1354.855	0.08%	97.94%
59.0	12.046	1.141	1355.995	0.08%	98.02%
60.0	11.804	1.127	1357.122	0.08%	98.11%
61.0	11.583	1.116	1358.238	0.07%	98.19%
62.0	11.368	1.106	1359.344	0.07%	98.27%
63.0	11.168	1.096	1360.44	0.07%	98.35%
64.0	10.946	1.085	1361.525	0.07%	98.42%
65.0	10.711	1.072	1362.597	0.07%	98.50%
66.0	10.448	1.056	1363.653	0.07%	98.58%
67.0	10.164	1.036	1364.689	0.07%	98.65%
68.0	9.832	1.013	1365.702	0.07%	98.73%
69.0	9.542	0.988	1366.691	0.07%	98.80%
70.0	9.258	0.966	1367.656	0.06%	98.87%
71.0	8.988	0.943	1368.599	0.06%	98.94%
72.0	8.725	0.921	1369.52	0.06%	99.00%
73.0	8.497	0.901	1370.421	0.06%	99.07%
74.0	8.303	0.883	1371.304	0.06%	99.13%
75.0	8.089	0.866	1372.17	0.06%	99.19%

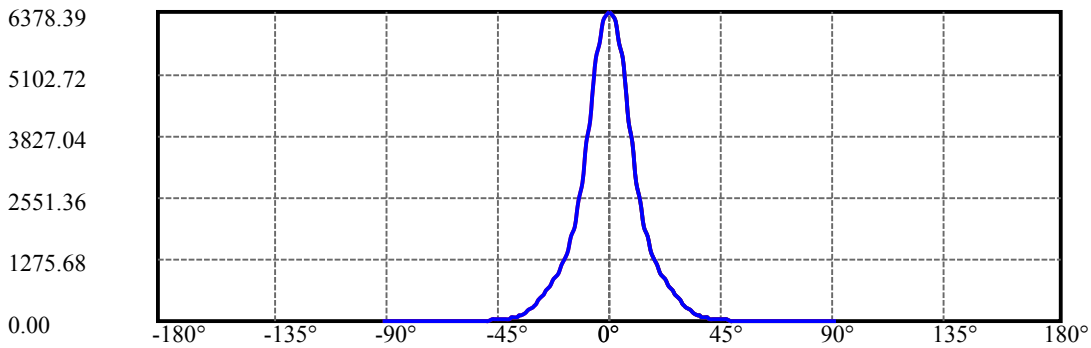
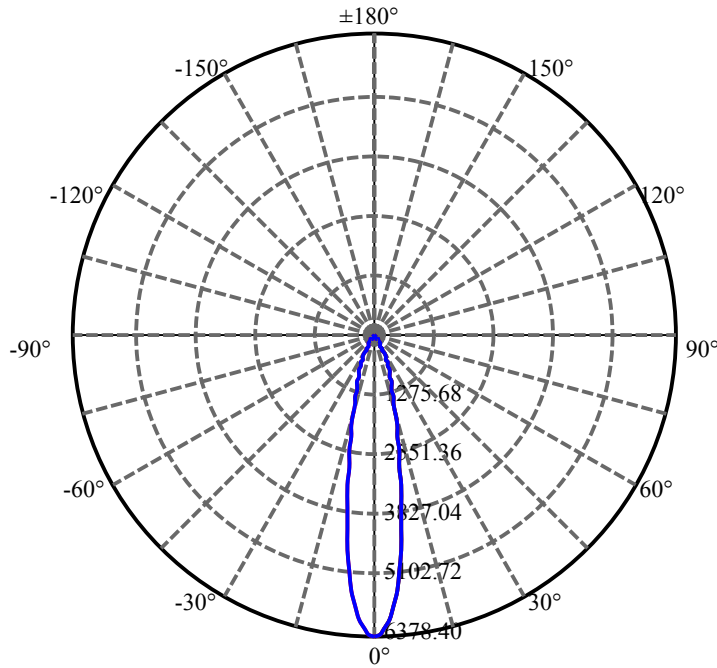
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	7.902	0.849	1373.019	0.06%	99.25%
77.0	7.729	0.833	1373.852	0.06%	99.31%
78.0	7.535	0.817	1374.669	0.05%	99.37%
79.0	7.334	0.799	1375.468	0.05%	99.43%
80.0	7.189	0.783	1376.251	0.05%	99.49%
81.0	7.030	0.769	1377.02	0.05%	99.54%
82.0	6.892	0.755	1377.775	0.05%	99.60%
83.0	6.739	0.741	1378.516	0.05%	99.65%
84.0	6.601	0.727	1379.243	0.05%	99.70%
85.0	6.449	0.712	1379.955	0.05%	99.76%
86.0	6.324	0.698	1380.653	0.05%	99.81%
87.0	6.213	0.686	1381.339	0.05%	99.86%
88.0	6.110	0.675	1382.014	0.05%	99.90%
89.0	5.999	0.664	1382.678	0.04%	99.95%
90.0	5.909	0.653	1383.331	0.04%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1231.23	82.61%	89.00%
0-40	1322.83	88.76%	95.63%
0-60	1357.12	91.06%	98.11%
0-90	1382.68	92.78%	99.95%
0-120	1382.68	92.78%	99.95%
0-180	1383.33	92.82%	100.00%
60-90	25.56	1.71%	1.85%
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%
0-24.79	1106.67	74.26%	80.00%

ZONAL LUMEN SUMMARY

0-10	443.66
10-20	496.34
20-30	291.22
30-40	91.60
40-50	21.91
50-60	12.38
60-70	10.53
70-80	8.60
80-90	6.43
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



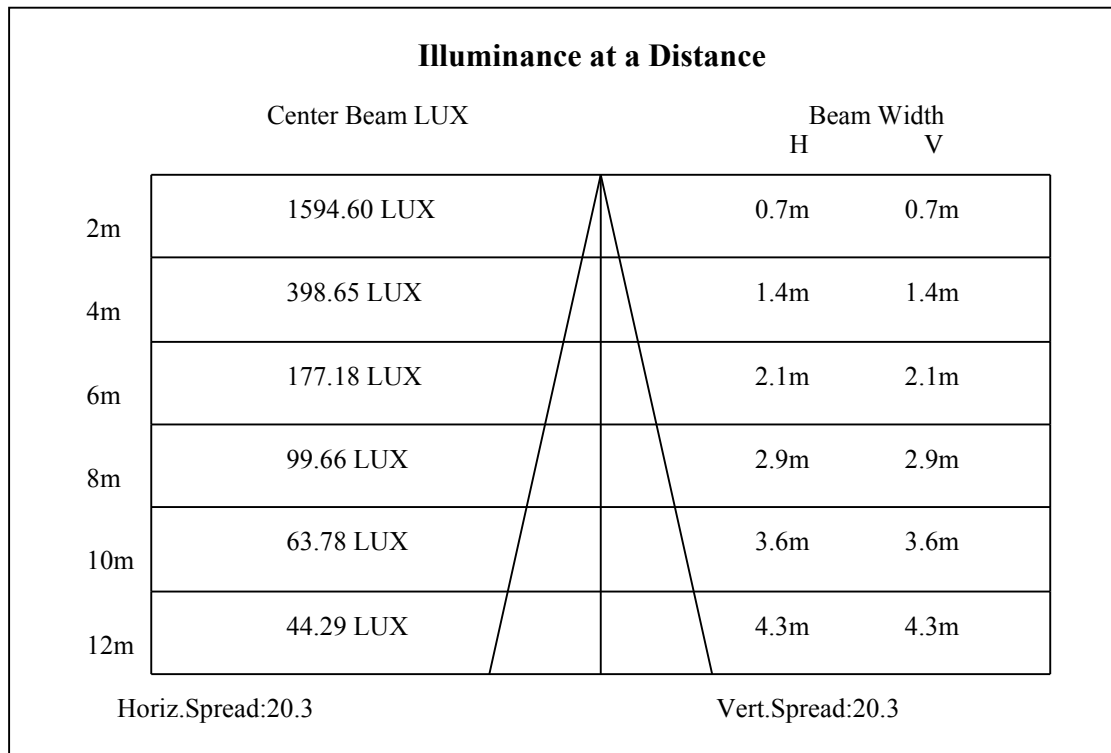
C0(Max): —————

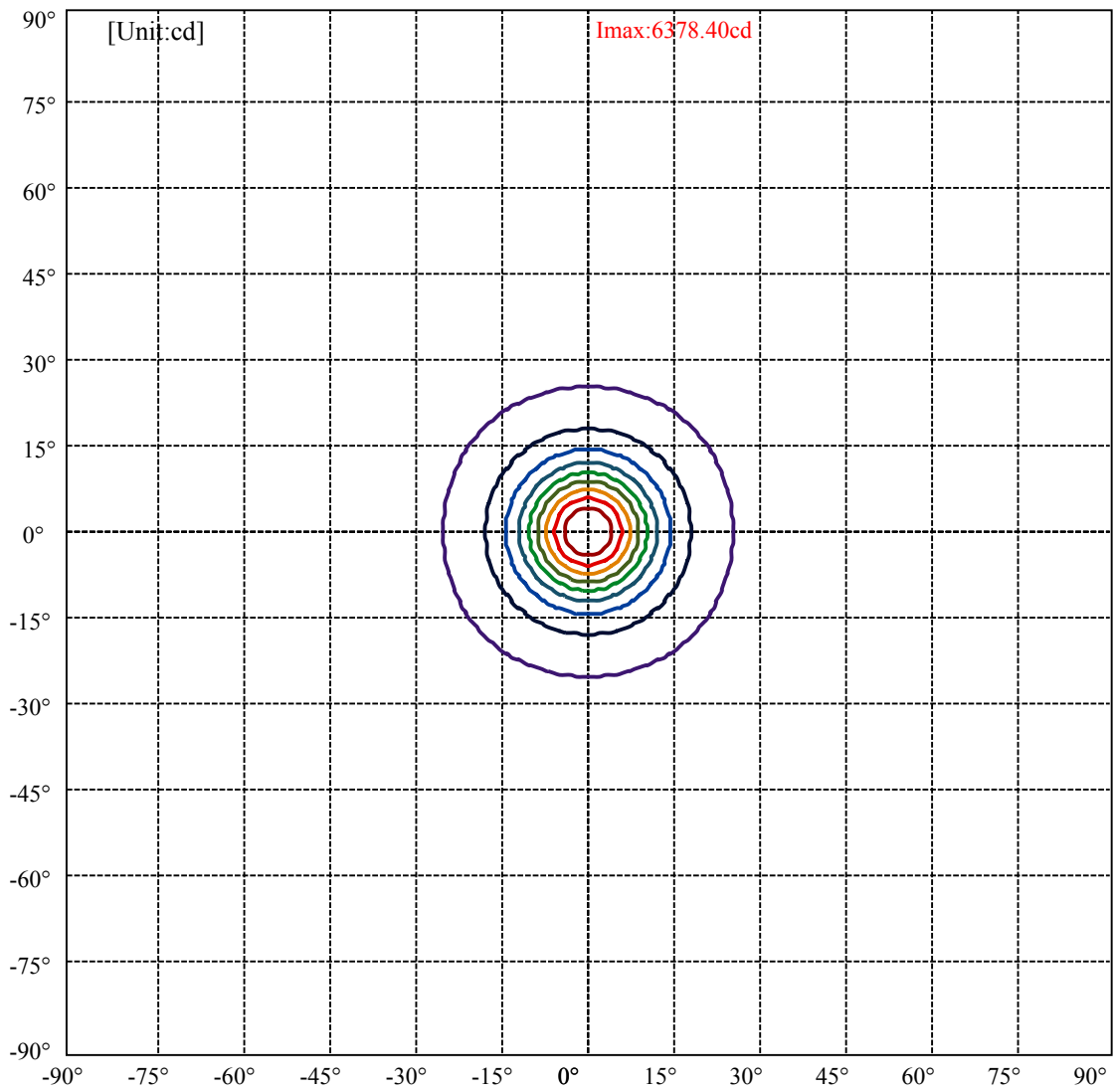
C0/C180: —————

C90/C270: —————

Field angle(10%Imax):C0/180Left:25.0 Right:25.0  
:C90/270Left:25.0 Right:25.0

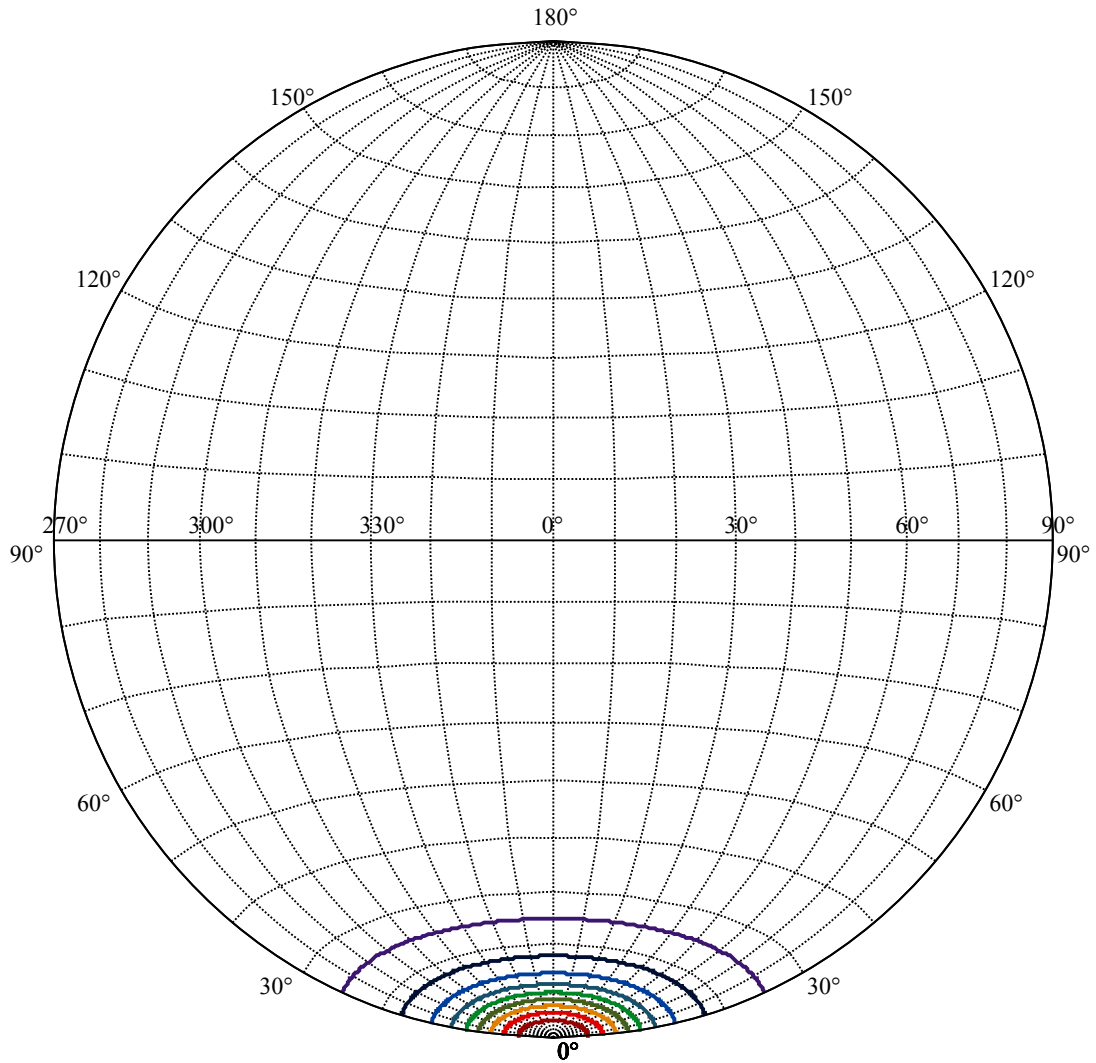
Beam Angle(50%Imax):C0/180Left:10.1 Right:10.1  
:C90/270Left:10.1 Right:10.1





(10%Imax) 637.839	—
(20%Imax) 1275.68	—
(30%Imax) 1913.52	—
(40%Imax) 2551.36	—
(50%Imax) 3189.2	—
(60%Imax) 3827.04	—
(70%Imax) 4464.88	—
(80%Imax) 5102.72	—
(90%Imax) 5740.56	—





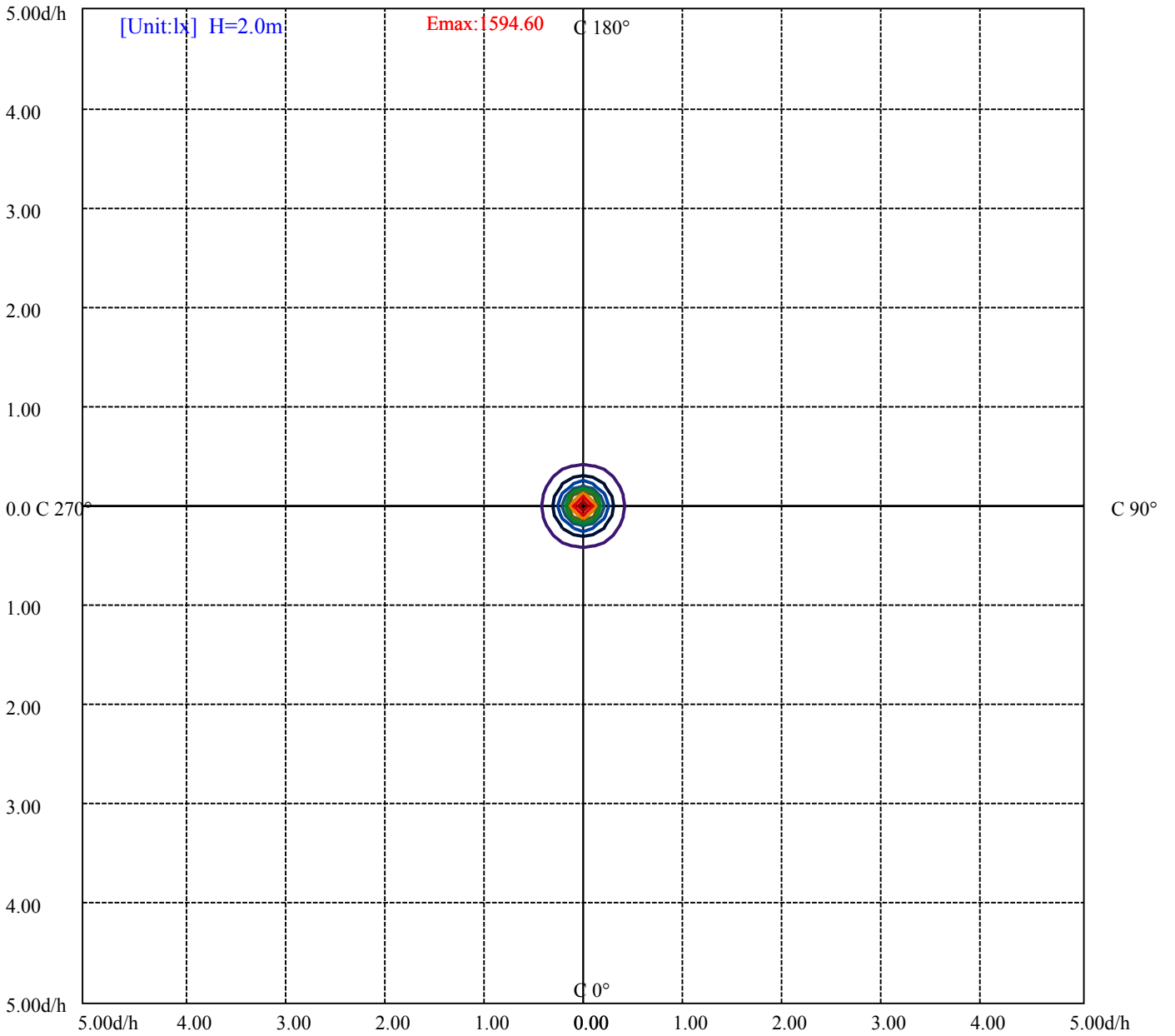
House

[Unit:cd]

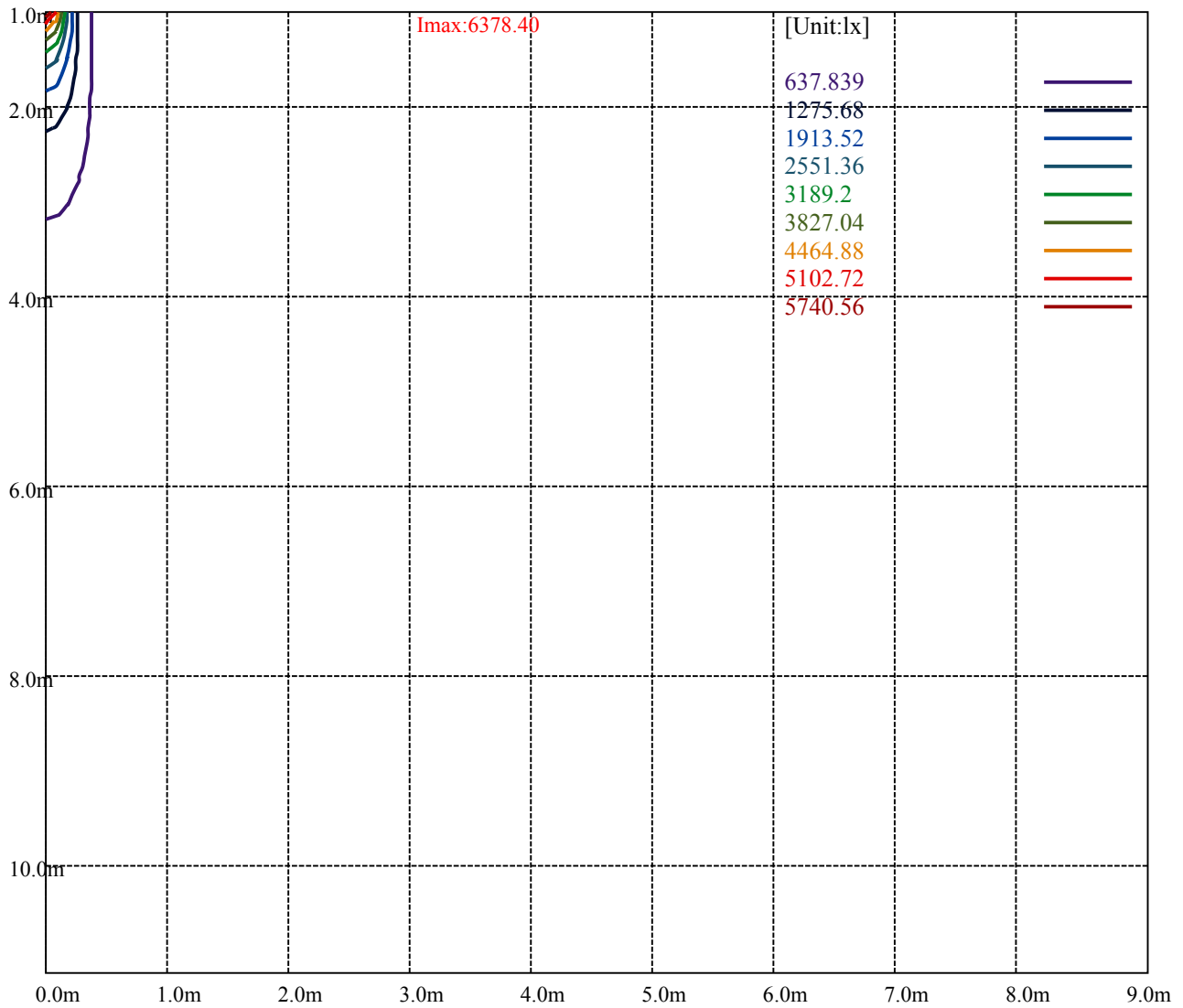
Road

**Imax:6378.40**

(10%Imax) 637.839	—
(20%Imax) 1275.68	—
(30%Imax) 1913.52	—
(40%Imax) 2551.36	—
(50%Imax) 3189.2	—
(60%Imax) 3827.04	—
(70%Imax) 4464.88	—
(80%Imax) 5102.72	—
(90%Imax) 5740.56	—



- (10%Emax) 159.4597
- (20%Emax) 318.92
- (30%Emax) 478.38
- (40%Emax) 637.84
- (50%Emax) 797.2975
- (60%Emax) 956.7575
- (70%Emax) 1116.218
- (80%Emax) 1275.677
- (90%Emax) 1435.137



Luminance Table

$\gamma$	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

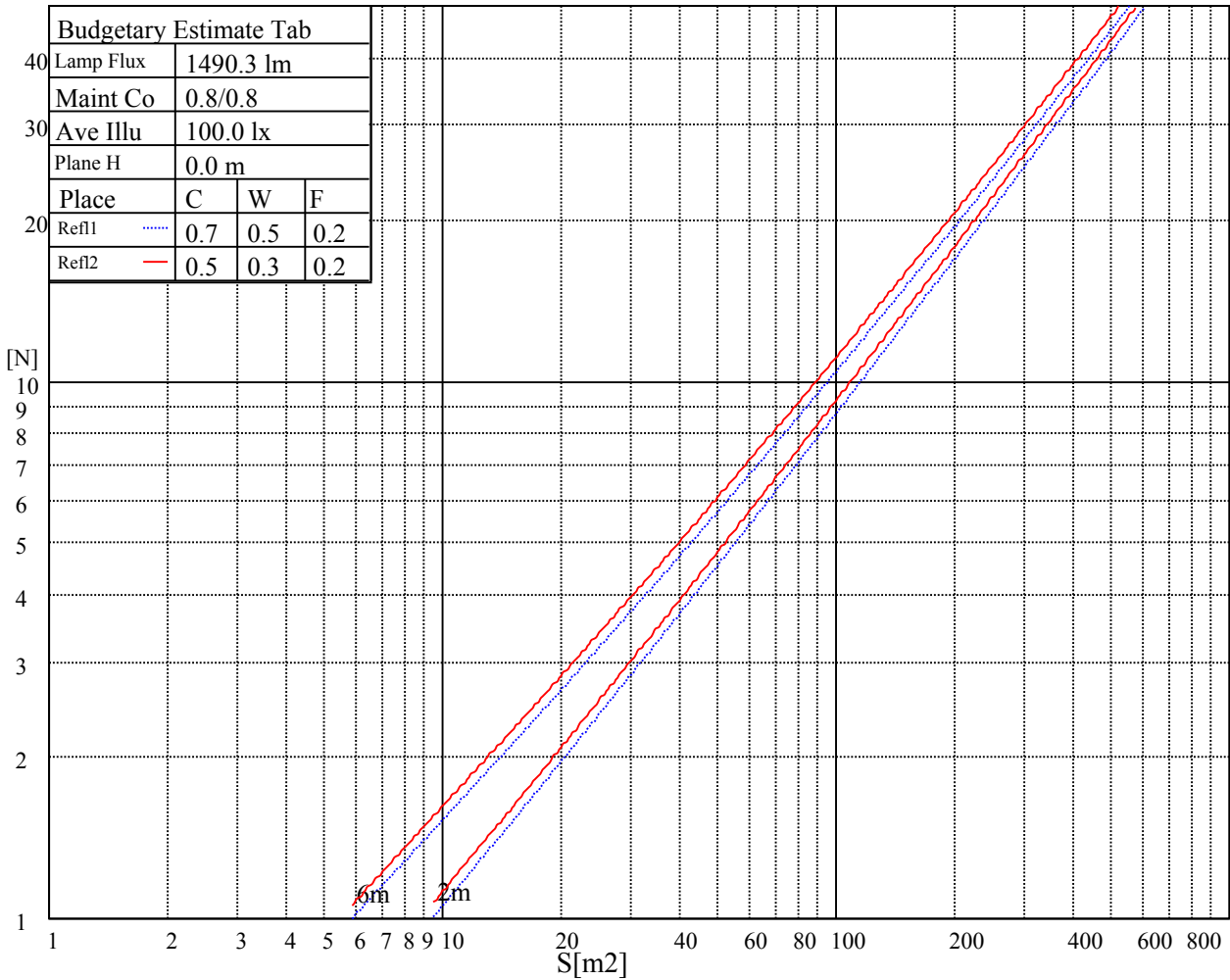
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

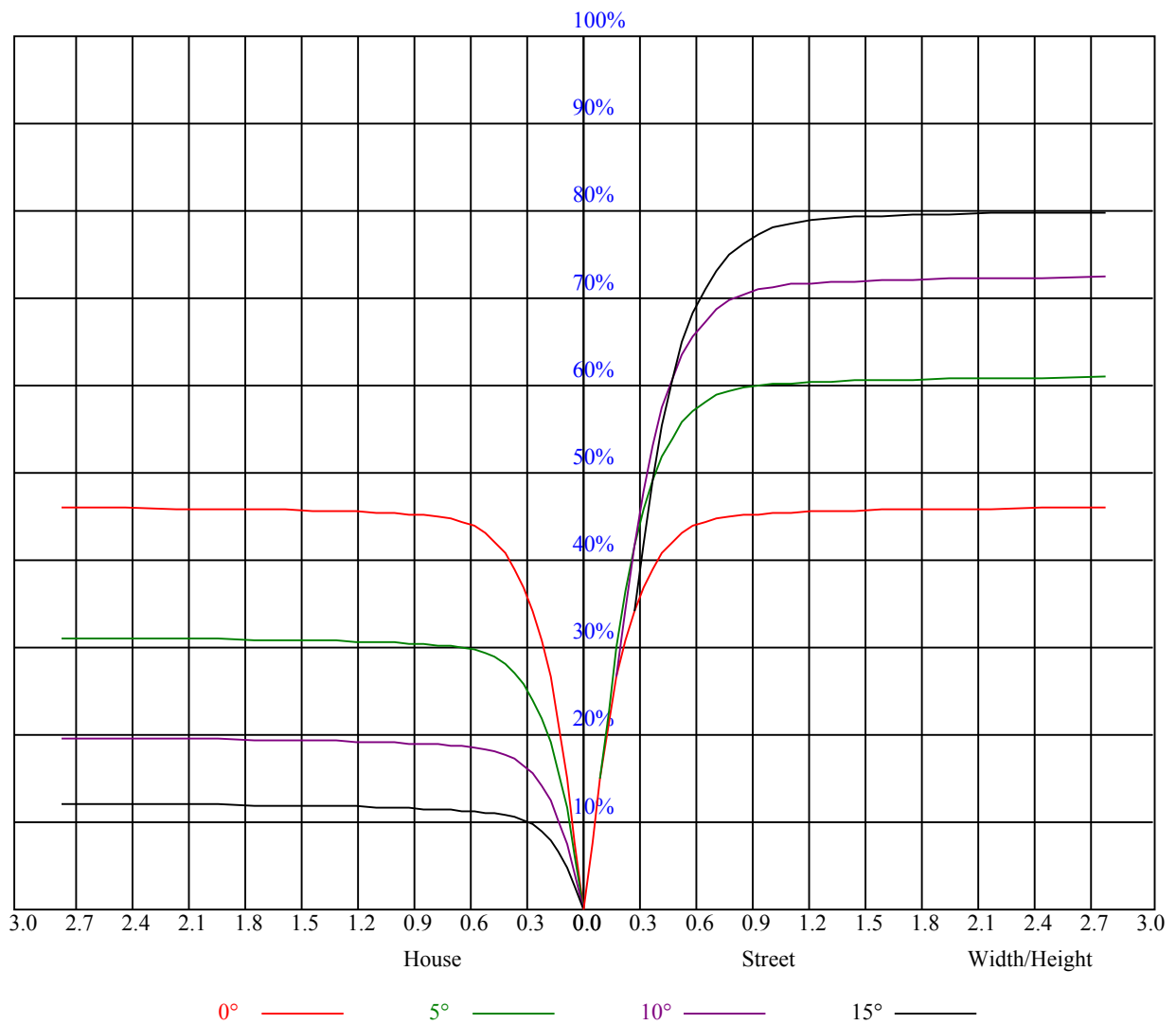


Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	3H	非数字	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	1.11	1.11	1.11	1.08	1.08	1.08	1.03	1.03	1.03	0.99	0.99	0.99	0.95	0.95	0.95	0.93
1	1.04	1.02	1.00	1.02	1.00	0.98	0.98	0.97	0.95	0.95	0.94	0.93	0.92	0.91	0.90	0.88
2	0.98	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	0.93	0.90	0.87	0.92	0.89	0.86	0.90	0.87	0.85	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	0.82	0.86	0.83	0.81	0.85	0.82	0.80	0.83	0.81	0.79	0.78
5	0.86	0.81	0.78	0.85	0.81	0.78	0.83	0.80	0.77	0.82	0.79	0.76	0.80	0.78	0.76	0.75
6	0.82	0.78	0.75	0.81	0.77	0.74	0.80	0.77	0.74	0.79	0.76	0.74	0.78	0.75	0.73	0.72
7	0.79	0.75	0.72	0.79	0.74	0.72	0.77	0.74	0.71	0.76	0.73	0.71	0.76	0.73	0.71	0.69
8	0.76	0.72	0.69	0.76	0.72	0.69	0.75	0.71	0.69	0.74	0.71	0.68	0.73	0.70	0.68	0.67
9	0.74	0.70	0.67	0.73	0.69	0.67	0.73	0.69	0.66	0.72	0.69	0.66	0.71	0.68	0.66	0.65
10	0.71	0.67	0.65	0.71	0.67	0.64	0.70	0.67	0.64	0.70	0.66	0.64	0.69	0.66	0.64	0.63





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	6357.91	6238.90	6056.24	5721.35	5371.51	4985.15	4457.07	4013.69	3579.16
45.0	6398.32	6354.04	6246.10	6006.42	5714.71	5378.71	4998.98	4472.02	4036.38
90.0	6340.75	6215.10	5956.60	5668.76	5316.71	4924.26	4402.83	3977.16	3561.45
135.0	6416.59	6350.16	6234.48	5978.19	5693.67	5340.52	4959.68	4443.79	4022.55
180.0	6357.91	6404.97	6381.72	6276.54	6108.27	5825.97	5523.18	5161.17	4765.39
225.0	6398.32	6378.95	6262.71	6096.65	5866.93	5486.65	5120.21	4711.70	4173.11
270.0	6340.75	6404.97	6392.23	6303.11	6152.00	5861.39	5565.25	5205.45	4692.88
315.0	6416.59	6401.09	6312.52	6110.48	5861.95	5549.75	5088.66	4665.75	4211.30
360.0	6357.91	6238.90	6056.24	5721.35	5371.51	4985.15	4457.07	4013.69	3579.16
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	3076.00	2709.56	2382.97	2103.44	1817.26	1631.27	1465.21	1228.85	1091.79
45.0	3617.91	3123.05	2766.57	2358.62	2092.37	1861.54	1662.82	1460.23	1319.63
90.0	3175.08	2735.02	2421.72	2089.04	1870.95	1691.61	1492.33	1356.72	1091.24
135.0	3616.25	3227.11	2787.61	2477.07	2210.82	1924.09	1733.67	1531.63	1397.68
180.0	4233.44	3817.74	3417.53	2955.33	2619.33	2266.73	2018.75	1808.96	1637.91
225.0	3741.90	3243.17	2878.94	2551.80	2269.50	2025.39	1771.32	1604.15	1462.44
270.0	4250.05	3817.18	3400.37	2919.35	2573.39	2276.14	2021.51	1755.26	1586.99
315.0	3756.85	3229.88	2848.50	2512.50	2214.70	1909.70	1715.96	1546.03	1361.15
360.0	3076.00	2709.56	2382.97	2103.44	1817.26	1631.27	1465.21	1228.85	1091.79
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1069.10	983.52	879.07	801.35	710.41	643.54	578.83	499.12	437.57
45.0	1201.73	1097.11	981.97	898.39	822.00	730.67	658.15	590.62	509.81
90.0	1091.24	1025.81	941.18	862.80	770.36	699.28	634.24	570.03	490.82
135.0	1283.10	1181.25	1069.43	985.29	907.25	833.07	745.61	676.97	610.00
180.0	1459.67	1329.59	1213.35	1117.04	1004.67	929.39	853.55	766.65	700.22
225.0	1216.67	1088.36	1088.36	998.86	894.62	819.34	748.55	663.36	598.59
270.0	1448.05	1275.90	1164.09	1045.63	956.51	881.23	806.50	712.40	648.19
315.0	1102.31	1102.31	1011.25	926.34	849.73	758.18	687.16	622.34	558.85
360.0	1069.10	983.52	879.07	801.35	710.41	643.54	578.83	499.12	437.57
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	379.17	326.81	269.85	230.16	195.67	165.45	133.35	111.48	93.16
45.0	447.81	375.30	324.37	281.20	281.20	230.99	164.23	138.38	115.86
90.0	426.50	366.94	302.45	258.61	218.87	176.80	148.57	124.05	98.53
135.0	543.02	460.54	399.65	329.35	281.75	281.75	229.05	159.92	133.68
180.0	634.35	555.75	490.99	427.88	354.82	303.89	280.09	280.09	173.81
225.0	518.28	455.39	392.35	336.16	276.10	233.48	197.22	166.45	133.68
270.0	581.21	515.90	437.85	377.51	324.37	287.29	287.29	185.16	156.10
315.0	478.31	417.37	359.52	307.21	249.42	211.62	178.52	143.59	120.12
360.0	379.17	326.81	269.85	230.16	195.67	165.45	133.35	111.48	93.16
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	75.28	63.71	54.69	45.78	40.19	35.54	30.83	27.68	25.02
45.0	92.83	77.88	65.98	56.02	48.32	40.63	35.81	30.83	27.68
90.0	82.70	69.75	59.06	48.71	42.35	37.36	33.21	28.89	26.02
135.0	111.26	88.51	73.90	61.89	52.53	43.78	38.36	33.88	30.22
180.0	145.58	121.45	96.59	80.48	67.31	56.68	46.22	39.80	34.76
225.0	111.92	93.94	76.11	64.38	54.86	45.56	40.02	35.43	30.72
270.0	125.21	104.62	83.86	70.35	59.23	48.27	41.46	36.37	32.11
315.0	100.41	80.54	67.81	55.02	47.11	40.91	35.98	31.94	27.79
360.0	75.28	63.71	54.69	45.78	40.19	35.54	30.83	27.68	25.02

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	22.86	20.65	19.21	17.99	16.99	15.89	15.17	14.45	13.89
45.0	24.96	22.25	20.59	19.10	17.60	16.61	15.78	15.11	14.34
90.0	23.64	21.31	19.76	18.21	17.16	16.27	15.50	14.61	14.06
135.0	26.40	24.02	22.03	19.98	18.60	17.16	16.27	15.44	14.78
180.0	29.95	26.96	24.47	21.86	20.26	18.88	17.44	16.44	15.67
225.0	27.57	25.08	23.03	20.81	19.37	18.10	17.05	15.89	15.17
270.0	28.01	25.19	22.92	21.03	19.15	17.99	16.94	15.83	15.06
315.0	25.08	22.86	21.03	19.21	17.99	16.99	15.89	15.11	14.34
360.0	22.86	20.65	19.21	17.99	16.99	15.89	15.17	14.45	13.89
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	13.45	13.01	12.62	12.34	12.07	11.79	11.57	11.35	11.18
45.0	13.84	13.40	13.01	12.57	12.29	11.96	11.68	11.51	11.24
90.0	13.56	13.06	12.73	12.40	12.12	11.79	11.62	11.40	11.24
135.0	14.06	13.56	13.12	12.73	12.34	12.07	11.79	11.57	11.35
180.0	14.95	14.17	13.62	13.23	12.84	12.45	12.18	11.96	11.68
225.0	14.50	13.78	13.34	12.95	12.51	12.23	12.01	11.73	11.51
270.0	14.45	13.78	13.28	12.90	12.45	12.18	11.90	11.68	11.46
315.0	13.78	13.34	12.84	12.51	12.18	11.90	11.68	11.46	11.29
360.0	13.45	13.01	12.62	12.34	12.07	11.79	11.57	11.35	11.18
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	10.96	10.74	10.52	10.24	9.91	9.58	9.24	8.97	8.75
45.0	11.07	10.90	10.68	10.41	10.07	9.74	9.47	9.13	8.86
90.0	10.96	10.74	10.46	10.13	9.85	9.47	9.19	8.91	8.69
135.0	11.18	10.90	10.63	10.41	10.07	9.80	9.52	9.19	8.97
180.0	11.51	11.24	11.02	10.79	10.63	10.24	9.96	9.69	9.41
225.0	11.35	11.13	10.90	10.63	10.35	9.96	9.69	9.47	9.13
270.0	11.24	11.07	10.85	10.57	10.35	10.07	9.74	9.52	9.13
315.0	11.07	10.85	10.63	10.41	10.07	9.80	9.52	9.19	8.97
360.0	10.96	10.74	10.52	10.24	9.91	9.58	9.24	8.97	8.75
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	8.47	8.25	8.08	7.86	7.69	7.53	7.36	7.14	7.03
45.0	8.64	8.41	8.19	8.03	7.80	7.69	7.53	7.31	7.14
90.0	8.47	8.25	8.08	7.86	7.69	7.53	7.36	7.14	7.03
135.0	8.64	8.41	8.25	8.03	7.86	7.69	7.47	7.31	7.14
180.0	9.08	8.86	8.69	8.41	8.19	8.03	7.75	7.58	7.42
225.0	8.86	8.69	8.41	8.19	8.03	7.80	7.58	7.42	7.25
270.0	8.91	8.69	8.47	8.25	8.03	7.86	7.69	7.47	7.31
315.0	8.75	8.41	8.25	8.08	7.92	7.69	7.53	7.31	7.20
360.0	8.47	8.25	8.08	7.86	7.69	7.53	7.36	7.14	7.03
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	6.86	6.75	6.59	6.48	6.37	6.25	6.09	5.98	5.98
45.0	6.97	6.86	6.70	6.59	6.42	6.31	6.20	6.14	5.92
90.0	6.92	6.75	6.59	6.42	6.31	6.20	6.09	5.92	5.92
135.0	6.97	6.86	6.70	6.53	6.42	6.25	6.14	6.14	5.87
180.0	7.25	7.03	6.92	6.81	6.59	6.48	6.37	6.20	6.20
225.0	7.09	6.97	6.81	6.64	6.53	6.37	6.31	6.20	6.09
270.0	7.14	7.03	6.86	6.75	6.53	6.42	6.31	6.20	6.09
315.0	7.03	6.86	6.75	6.59	6.42	6.31	6.20	6.09	5.92
360.0	6.86	6.75	6.59	6.48	6.37	6.25	6.09	5.98	5.98

Intensity data(cd)

<b>C/γ(°)</b>	<b>90.0</b>
<b>0.0</b>	<b>5.98</b>
<b>45.0</b>	<b>5.92</b>
<b>90.0</b>	<b>5.92</b>
<b>135.0</b>	<b>5.87</b>
<b>180.0</b>	<b>5.92</b>
<b>225.0</b>	<b>5.92</b>
<b>270.0</b>	<b>5.87</b>
<b>315.0</b>	<b>5.87</b>
<b>360.0</b>	<b>5.98</b>