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## NATA

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Client:

LumCAT: 2-2640-L Luminaire:

92.70.411.00 Report No: 2023829-

B004 Ballast type: AC

Test No: 2023829-C004

LampCAT: LUXEON CoB 1205

LES13 Lamp flux(lm): 1852.5 Number  
of Lamps: 1 Length(mm): 0

Phm Type: C

Voltage(V): 35.340

Current(A): 0.433

Power (W): 15.302

PF: 0.000

Width(mm): 0

Height(mm): 0

## Photometric Results

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Lumens(lm): 1702.99, Efficiency(%): 91.93% , Luminous Efficacy(lm/W): 111.29

Central intensity(cd): 5423.283, Maximum intensity(cd): 5423.283

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

Beam Angle(50%Imax): [C0/180]Total=24.8

[C90/270]Total=24.8

Field angle(10%Imax): [C0/180]Total=61.6

[C90/270]Total=61.6

Maximum s/h(1/2): C0\_180=0.42 C90\_270=0.42

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(%): 91.93%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 97.802%

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Equipment: GMS1980  
Temperature(°C): 25.0

Date: 2023/8/29  
Humidity(%): 60.0%

Operator: NT07  
Distance(m): 7.44

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	5423.283	0.000	0	0.00%	0.00%
1.0	5383.151	5.171	5.171	0.28%	0.30%
2.0	5288.289	15.317	20.487	0.83%	1.20%
3.0	5130.185	24.918	45.405	1.35%	2.67%
4.0	4925.792	33.661	79.065	1.82%	4.64%
5.0	4693.653	41.382	120.448	2.23%	7.07%
6.0	4439.373	47.996	168.444	2.59%	9.89%
7.0	4159.837	53.375	221.819	2.88%	13.03%
8.0	3872.275	57.484	279.304	3.10%	16.40%
9.0	3601.873	60.574	339.878	3.27%	19.96%
10.0	3312.788	62.575	402.453	3.38%	23.63%
11.0	3072.623	63.803	466.256	3.44%	27.38%
12.0	2819.173	64.406	530.662	3.48%	31.16%
13.0	2579.630	64.070	594.732	3.46%	34.92%
14.0	2351.642	63.120	657.852	3.41%	38.63%
15.0	2162.679	61.975	719.827	3.35%	42.27%
16.0	1977.590	60.667	780.493	3.27%	45.83%
17.0	1801.981	58.858	839.351	3.18%	49.29%
18.0	1657.993	57.047	896.399	3.08%	52.64%
19.0	1519.401	55.280	951.679	2.98%	55.88%
20.0	1379.384	53.056	1004.735	2.86%	59.00%
21.0	1252.085	50.530	1055.264	2.73%	61.97%
22.0	1173.130	48.736	1104	2.63%	64.83%
23.0	1111.500	47.938	1151.938	2.59%	67.64%
24.0	1027.321	46.762	1198.7	2.52%	70.39%
25.0	963.333	45.263	1243.963	2.44%	73.05%
26.0	896.500	43.902	1287.865	2.37%	75.62%
27.0	828.111	42.193	1330.058	2.28%	78.10%
28.0	759.313	40.190	1370.248	2.17%	80.46%
29.0	679.659	37.648	1407.895	2.03%	82.67%
30.0	604.987	34.685	1442.58	1.87%	84.71%
31.0	525.555	31.461	1474.042	1.70%	86.56%
32.0	453.394	28.046	1502.088	1.51%	88.20%
33.0	377.429	24.476	1526.564	1.32%	89.64%
34.0	305.144	20.657	1547.221	1.12%	90.85%
35.0	252.343	17.313	1564.534	0.93%	91.87%
36.0	209.949	14.719	1579.254	0.79%	92.73%
37.0	152.250	11.813	1591.066	0.64%	93.43%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	101.698	8.476	1599.543	0.46%	93.93%
39.0	81.245	6.244	1605.787	0.34%	94.29%
40.0	69.773	5.267	1611.054	0.28%	94.60%
41.0	60.854	4.652	1615.706	0.25%	94.87%
42.0	54.689	4.198	1619.904	0.23%	95.12%
43.0	48.815	3.834	1623.738	0.21%	95.35%
44.0	43.660	3.490	1627.228	0.19%	95.55%
45.0	39.474	3.195	1630.423	0.17%	95.74%
46.0	35.814	2.944	1633.367	0.16%	95.91%
47.0	33.046	2.739	1636.106	0.15%	96.07%
48.0	30.818	2.582	1638.688	0.14%	96.22%
49.0	29.137	2.462	1641.15	0.13%	96.37%
50.0	27.691	2.369	1643.519	0.13%	96.51%
51.0	26.542	2.295	1645.814	0.12%	96.64%
52.0	25.726	2.243	1648.057	0.12%	96.77%
53.0	25.054	2.209	1650.266	0.12%	96.90%
54.0	24.549	2.186	1652.452	0.12%	97.03%
55.0	24.238	2.178	1654.63	0.12%	97.16%
56.0	24.003	2.180	1656.81	0.12%	97.29%
57.0	23.774	2.184	1658.994	0.12%	97.42%
58.0	23.567	2.189	1661.183	0.12%	97.55%
59.0	23.283	2.190	1663.373	0.12%	97.67%
60.0	22.806	2.177	1665.551	0.12%	97.80%
61.0	22.176	2.147	1667.697	0.12%	97.93%
62.0	21.360	2.098	1669.795	0.11%	98.05%
63.0	20.349	2.029	1671.824	0.11%	98.17%
64.0	19.097	1.936	1673.759	0.10%	98.28%
65.0	17.803	1.826	1675.586	0.10%	98.39%
66.0	16.544	1.714	1677.299	0.09%	98.49%
67.0	15.271	1.600	1678.899	0.09%	98.59%
68.0	14.191	1.492	1680.391	0.08%	98.67%
69.0	13.264	1.401	1681.792	0.08%	98.76%
70.0	12.579	1.327	1683.119	0.07%	98.83%
71.0	12.053	1.273	1684.392	0.07%	98.91%
72.0	11.631	1.232	1685.624	0.07%	98.98%
73.0	11.264	1.197	1686.821	0.06%	99.05%
74.0	10.925	1.167	1687.988	0.06%	99.12%
75.0	10.607	1.138	1689.126	0.06%	99.19%

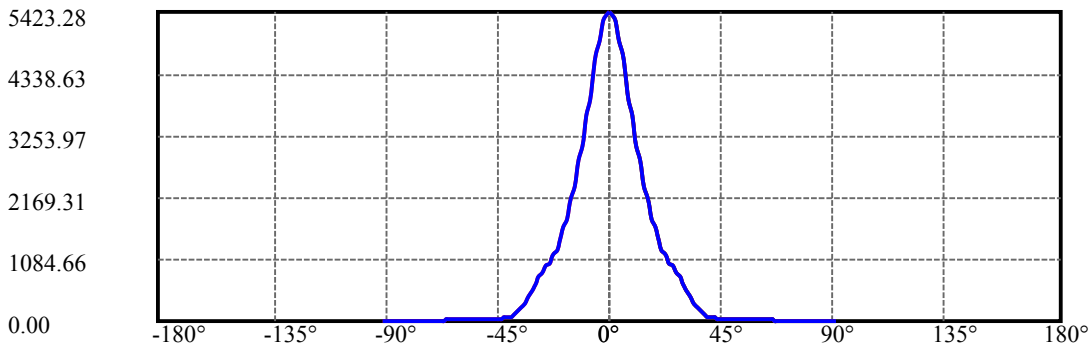
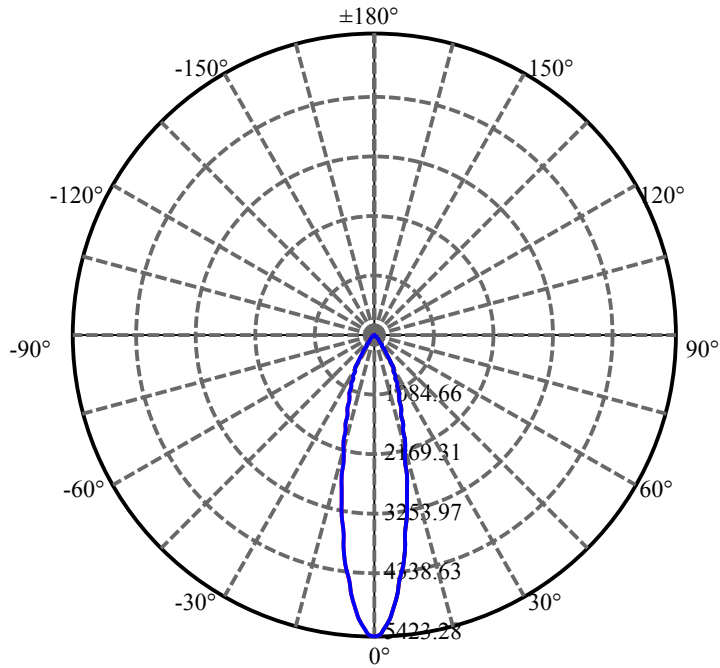
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	10.275	1.109	1690.234	0.06%	99.25%
77.0	9.971	1.079	1691.313	0.06%	99.31%
78.0	9.666	1.051	1692.365	0.06%	99.38%
79.0	9.348	1.022	1693.386	0.06%	99.44%
80.0	9.050	0.992	1694.378	0.05%	99.49%
81.0	8.774	0.964	1695.342	0.05%	99.55%
82.0	8.490	0.936	1696.278	0.05%	99.61%
83.0	8.234	0.909	1697.187	0.05%	99.66%
84.0	8.012	0.885	1698.072	0.05%	99.71%
85.0	7.812	0.864	1698.936	0.05%	99.76%
86.0	7.639	0.845	1699.781	0.05%	99.81%
87.0	7.466	0.827	1700.607	0.04%	99.86%
88.0	7.293	0.808	1701.416	0.04%	99.91%
89.0	7.148	0.792	1702.207	0.04%	99.95%
90.0	7.085	0.780	1702.988	0.04%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1442.58	77.87%	84.71%
0-40	1611.05	86.97%	94.60%
0-60	1665.55	89.91%	97.80%
0-90	1702.21	91.89%	99.95%
0-120	1702.21	91.89%	99.95%
0-180	1702.99	91.93%	100.00%
60-90	36.66	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%
0-27.80	1362.39	73.54%	80.00%

ZONAL LUMEN SUMMARY

0-10	402.45
10-20	602.28
20-30	437.85
30-40	168.47
40-50	32.47
50-60	22.03
60-70	17.57
70-80	11.26
80-90	7.83
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



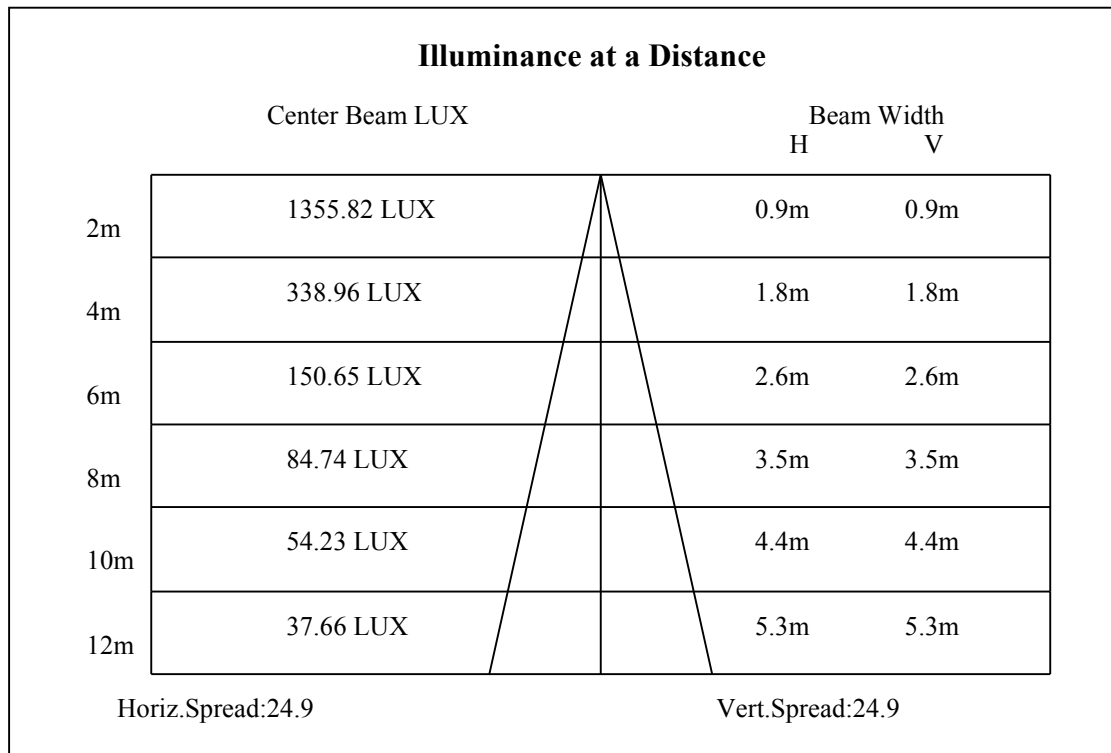
C0(Max): —————

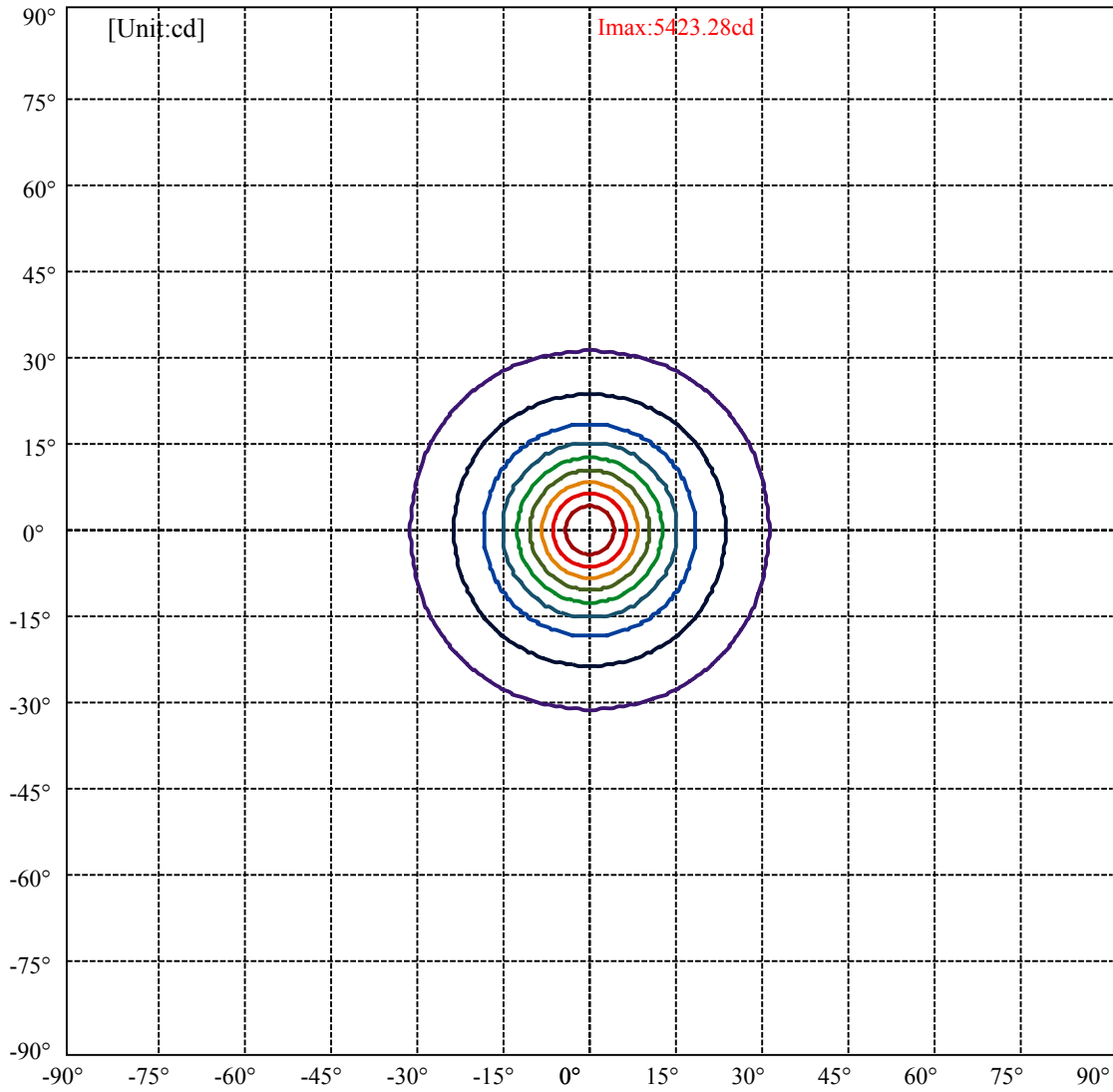
C0/C180: —————

C90/C270: —————

Field angle(10%Imax):C0/180Left:30.8 Right:30.8  
:C90/270Left:30.8 Right:30.8

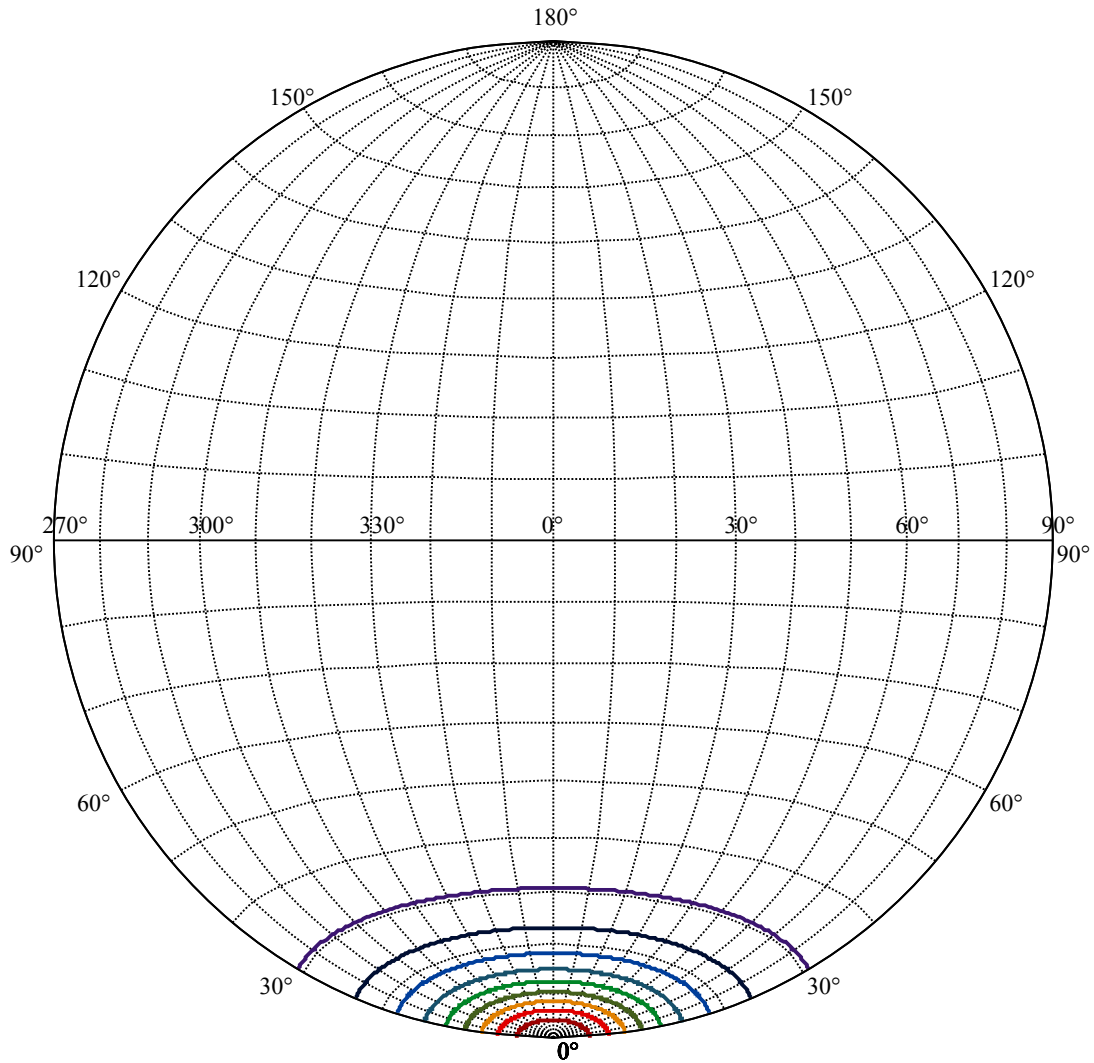
Beam Angle(50%Imax):C0/180Left:12.4 Right:12.4  
:C90/270Left:12.4 Right:12.4





(10%Imax) 542.328	—
(20%Imax) 1084.66	—
(30%Imax) 1626.98	—
(40%Imax) 2169.31	—
(50%Imax) 2711.64	—
(60%Imax) 3253.97	—
(70%Imax) 3796.3	—
(80%Imax) 4338.63	—
(90%Imax) 4880.96	—





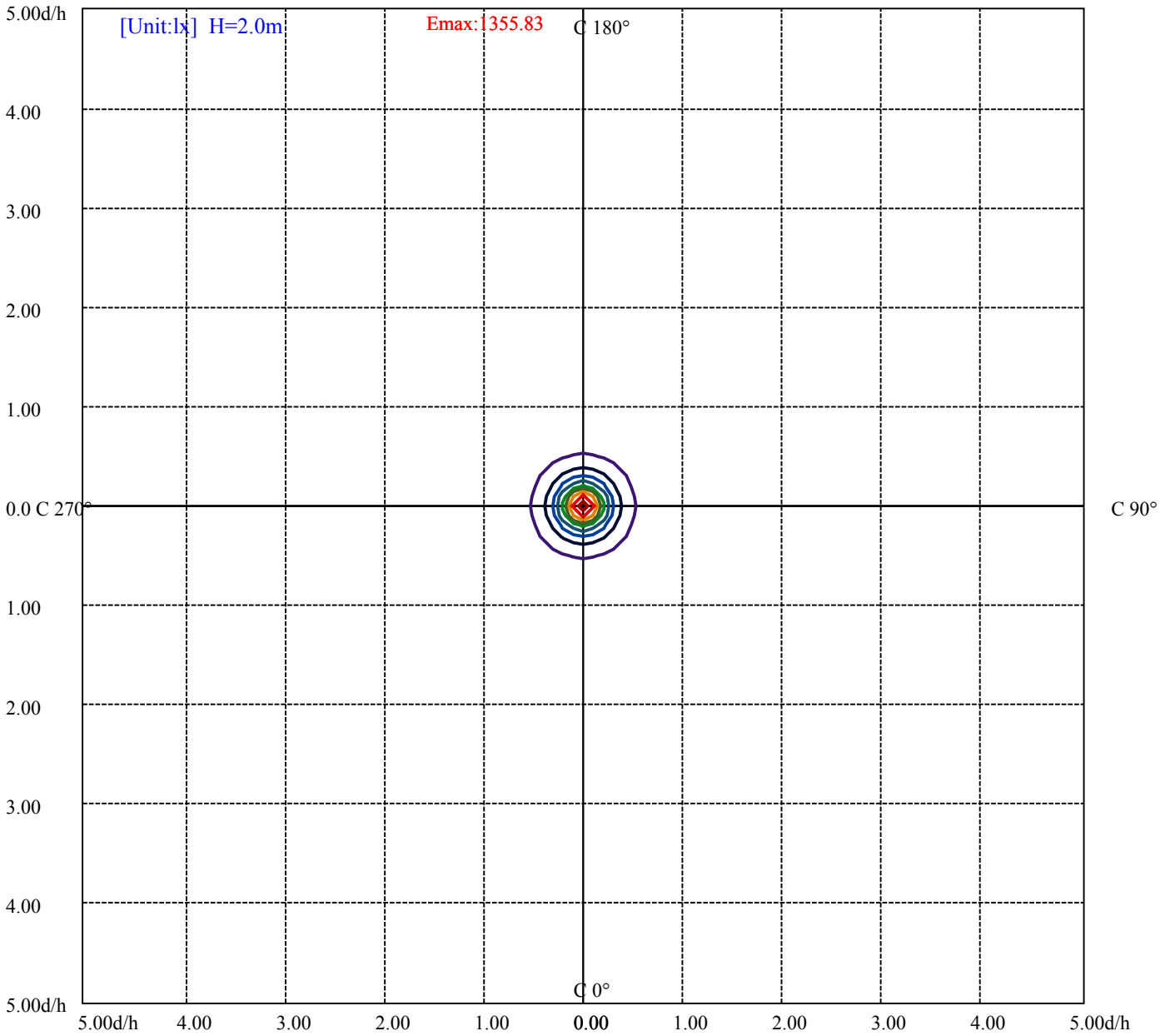
House

[Unit:cd]

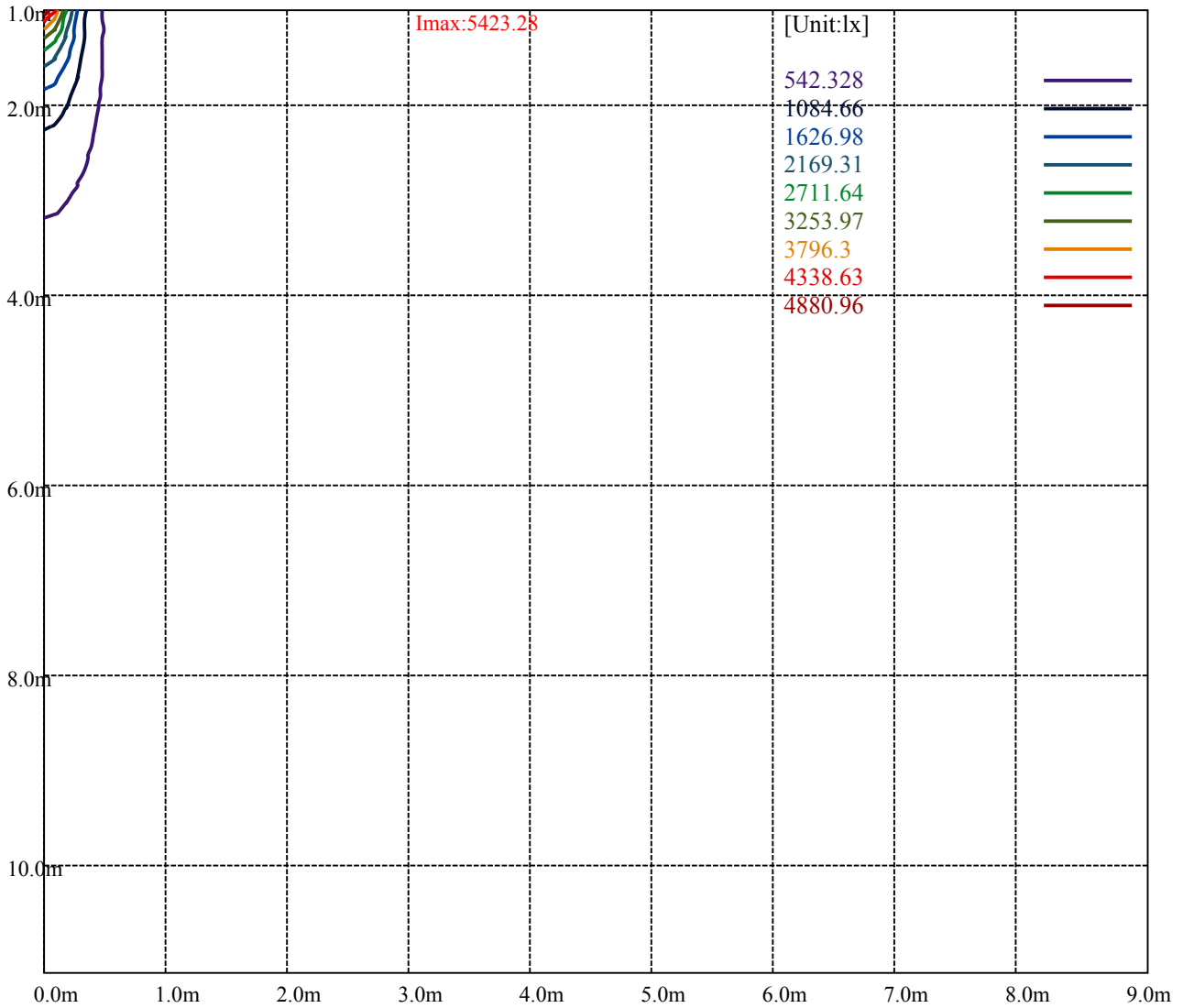
Road

**Imax:5423.28**

(10%Imax) 542.328	—
(20%Imax) 1084.66	—
(30%Imax) 1626.98	—
(40%Imax) 2169.31	—
(50%Imax) 2711.64	—
(60%Imax) 3253.97	—
(70%Imax) 3796.3	—
(80%Imax) 4338.63	—
(90%Imax) 4880.96	—



- (10%Emax) 135.582
- (20%Emax) 271.165
- (30%Emax) 406.745
- (40%Emax) 542.3275
- (50%Emax) 677.91
- (60%Emax) 813.4925
- (70%Emax) 949.0725
- (80%Emax) 1084.655
- (90%Emax) 1220.238



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

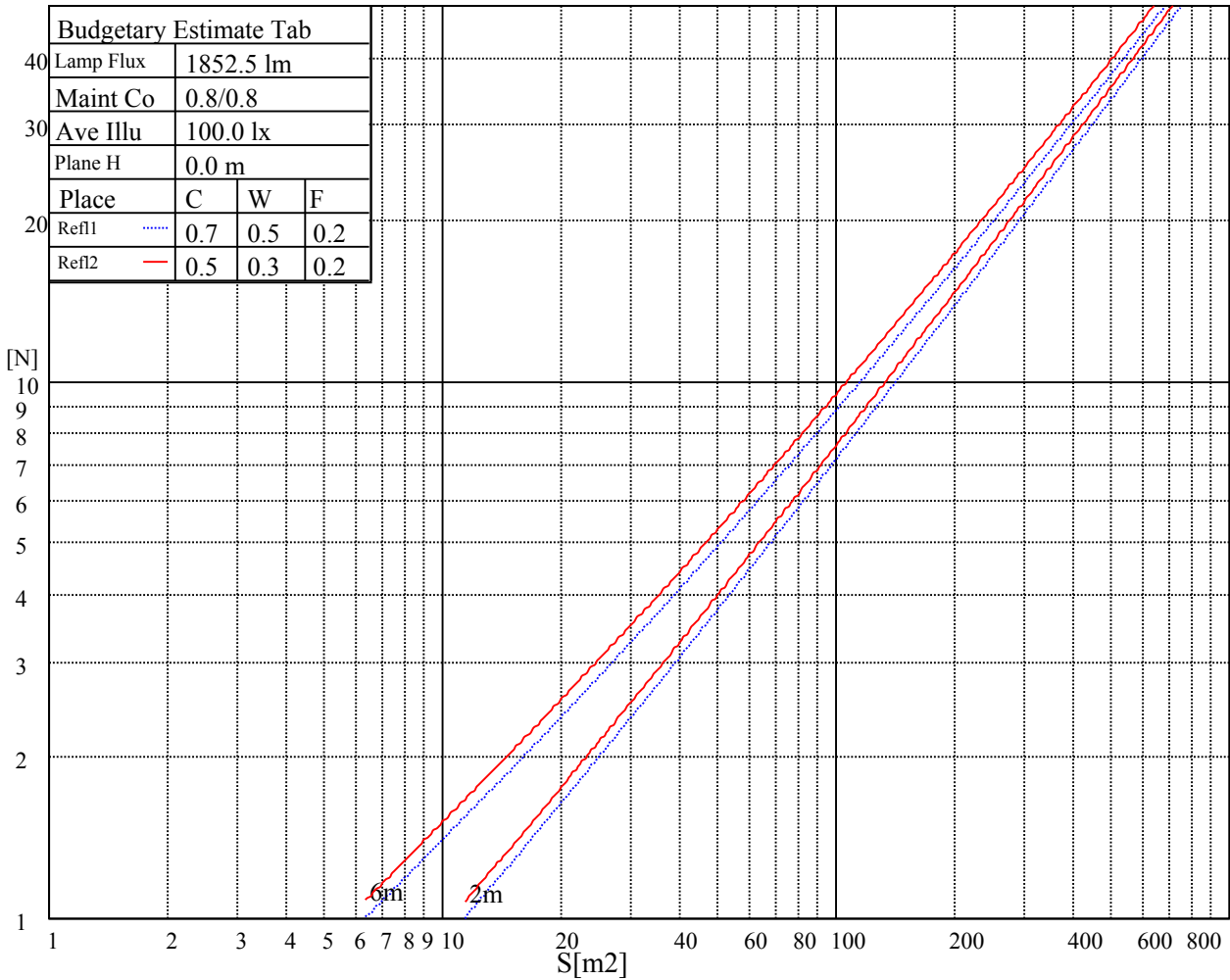
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

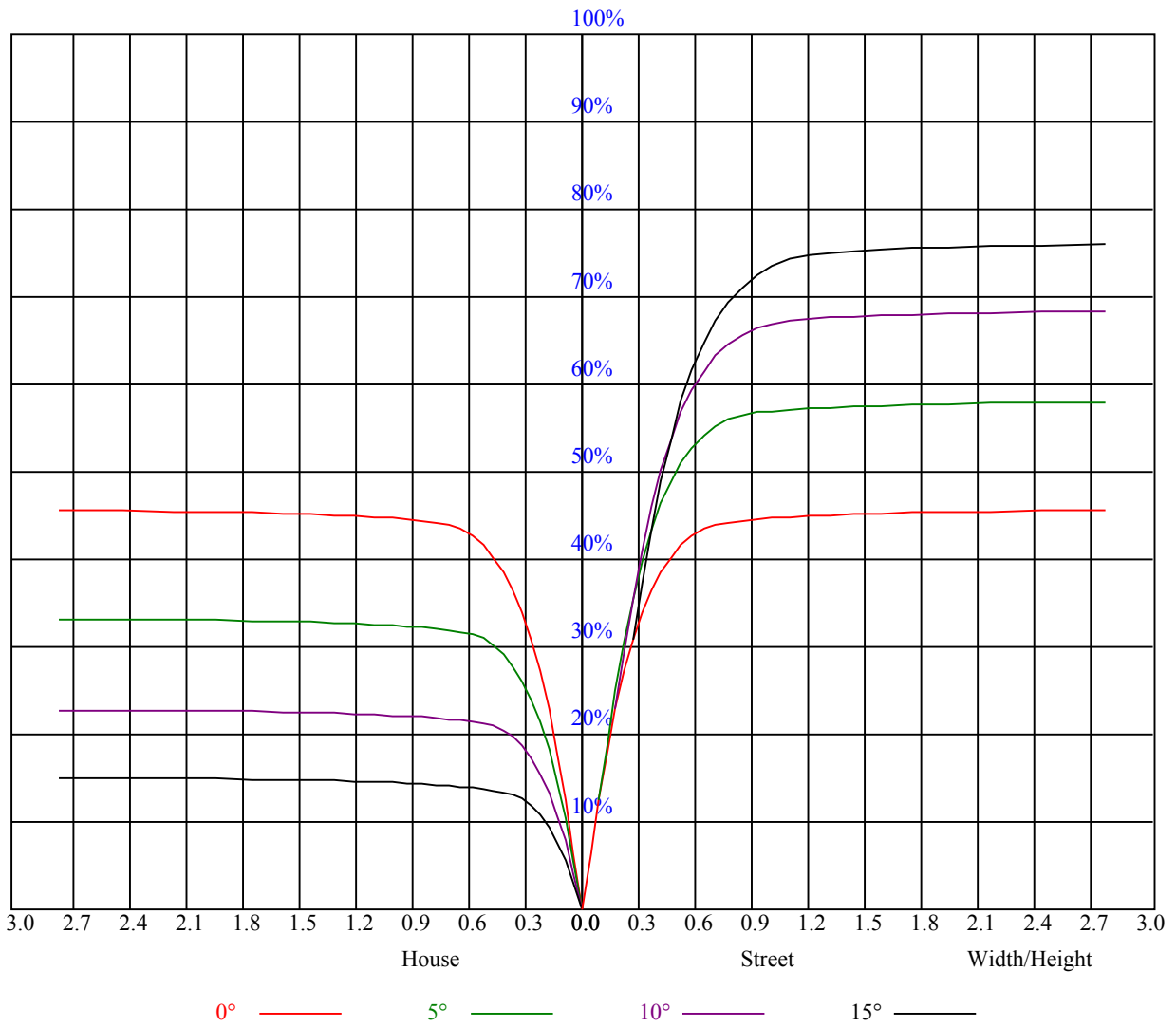


Illumination assessment according UGR										
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30
Rf of Wall	50	30	50	30	30	50	30	50	30	30
Rf of Floor	20	20	20	20	20	20	20	20	20	20
Room dimensions	Viewed crosswise					Viewed endwise				
X	Y									
2H	2H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字
	3H	非数字	非数字	非数字	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
	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
	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
8H	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
12H	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	1.02	1.00	0.98	1.00	0.98	0.97	0.97	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87
2	0.96	0.93	0.90	0.95	0.92	0.89	0.92	0.89	0.87	0.89	0.87	0.85	0.87	0.85	0.84	0.82
3	0.91	0.87	0.84	0.90	0.86	0.83	0.87	0.84	0.82	0.85	0.83	0.80	0.83	0.81	0.79	0.78
4	0.86	0.82	0.78	0.85	0.81	0.78	0.83	0.80	0.77	0.82	0.79	0.76	0.80	0.77	0.75	0.74
5	0.82	0.77	0.74	0.81	0.77	0.74	0.80	0.76	0.73	0.78	0.75	0.72	0.77	0.74	0.72	0.71
6	0.78	0.74	0.70	0.78	0.73	0.70	0.76	0.72	0.70	0.75	0.72	0.69	0.74	0.71	0.69	0.67
7	0.75	0.70	0.67	0.74	0.70	0.67	0.73	0.69	0.66	0.72	0.69	0.66	0.71	0.68	0.66	0.65
8	0.72	0.67	0.64	0.71	0.67	0.64	0.70	0.66	0.63	0.69	0.66	0.63	0.69	0.65	0.63	0.62
9	0.69	0.64	0.61	0.68	0.64	0.61	0.68	0.64	0.61	0.67	0.63	0.61	0.66	0.63	0.60	0.59
10	0.66	0.62	0.59	0.66	0.62	0.59	0.65	0.61	0.59	0.65	0.61	0.58	0.64	0.61	0.58	0.57





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	5375.89	5222.56	5059.82	4862.20	4578.79	4330.81	4077.84	3741.29	3480.03
45.0	5438.44	5407.44	5302.82	5119.05	4928.63	4657.40	4412.73	4160.87	3835.40
90.0	5435.67	5317.76	5169.42	4931.95	4719.95	4481.93	4164.75	3901.82	3640.00
135.0	5452.27	5437.33	5359.83	5232.52	4992.29	4771.42	4531.19	4216.78	3954.96
180.0	5375.89	5436.22	5438.99	5378.65	5202.63	5032.69	4822.35	4590.42	4270.47
225.0	5438.44	5403.56	5291.75	5133.44	4952.98	4732.12	4434.88	4174.71	3903.48
270.0	5417.40	5449.51	5410.76	5273.48	5103.55	4904.83	4684.52	4376.75	4115.48
315.0	5452.27	5390.83	5272.93	5110.19	4927.52	4638.02	4386.72	4116.04	3778.38
360.0	5375.89	5222.56	5059.82	4862.20	4578.79	4330.81	4077.84	3741.29	3480.03
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	3230.38	2930.92	2706.74	2491.96	2236.78	2051.90	1888.61	1730.85	1565.90
45.0	3577.45	3336.11	3098.64	2866.15	2592.15	2379.60	2188.07	1964.44	1806.13
90.0	3386.48	3084.80	2844.01	2617.06	2408.93	2171.47	1991.57	1827.17	1649.48
135.0	3698.12	3380.94	3138.49	2849.55	2628.69	2419.45	2226.82	2004.30	1845.43
180.0	4002.56	3679.30	3424.67	3180.56	2883.87	2666.88	2457.64	2264.46	2041.94
225.0	3573.02	3323.37	3089.78	2798.62	2583.85	2335.87	2150.43	1983.26	1822.19
270.0	3839.82	3576.34	3325.59	3018.93	2785.34	2518.53	2312.06	2128.29	1916.29
315.0	3507.15	3190.53	2953.06	2730.54	2517.43	2269.44	2086.22	1917.95	1768.49
360.0	3230.38	2930.92	2706.74	2491.96	2236.78	2051.90	1888.61	1730.85	1565.90
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1448.55	1342.82	1100.04	1100.04	1062.12	996.48	922.91	867.94	804.40
45.0	1665.53	1504.46	1389.32	1286.36	1176.21	1098.71	1011.81	949.26	891.69
90.0	1522.17	1383.23	1286.92	1099.21	1099.21	1027.92	961.38	905.03	842.76
135.0	1698.75	1573.09	1430.28	1326.77	1236.54	1152.41	1059.97	993.54	919.37
180.0	1885.84	1735.83	1598.00	1445.23	1347.25	1258.69	1154.62	1076.02	989.67
225.0	1678.27	1517.74	1404.82	1304.63	1103.92	1103.92	1033.62	969.80	899.94
270.0	1765.17	1624.57	1464.05	1360.54	1265.88	1180.08	1084.88	1014.02	952.03
315.0	1599.66	1473.46	1361.64	1093.90	1093.90	1073.80	989.39	931.05	872.15
360.0	1448.55	1342.82	1100.04	1100.04	1062.12	996.48	922.91	867.94	804.40
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	715.17	641.16	569.04	481.13	410.89	342.97	278.32	205.14	154.93
45.0	826.37	755.52	663.08	591.12	523.04	448.86	361.40	296.64	282.25
90.0	753.36	680.41	608.11	535.66	446.70	378.07	310.26	236.25	182.50
135.0	857.93	786.52	696.29	620.46	550.16	475.43	390.19	324.87	293.32
180.0	931.55	872.32	792.05	717.33	644.26	567.87	495.91	407.35	338.71
225.0	843.75	777.44	689.76	615.53	527.30	456.06	385.37	318.39	243.00
270.0	897.23	829.70	756.63	689.65	602.19	528.02	435.58	369.15	301.07
315.0	799.53	731.44	662.31	589.02	499.90	429.88	362.40	283.36	222.96
360.0	715.17	641.16	569.04	481.13	410.89	342.97	278.32	205.14	154.93
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	115.19	88.29	72.18	64.38	57.68	50.65	45.50	40.08	36.48
45.0	210.07	123.66	93.49	75.67	67.64	59.28	53.69	47.88	43.07
90.0	126.93	95.82	78.93	70.08	61.00	54.86	49.60	44.78	39.63
135.0	293.32	139.10	102.85	82.09	72.24	63.21	56.85	51.59	45.50
180.0	290.00	290.00	148.96	113.03	88.57	73.51	65.87	58.95	51.64
225.0	189.09	142.04	105.23	79.65	70.96	63.93	57.29	50.54	45.89
270.0	285.57	213.39	124.43	92.55	75.45	65.48	58.56	52.70	47.16
315.0	169.44	125.71	87.51	72.51	64.65	55.91	50.15	44.01	39.91
360.0	115.19	88.29	72.18	64.38	57.68	50.65	45.50	40.08	36.48

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	33.49	31.22	29.06	27.68	26.57	25.68	24.85	24.41	24.08
45.0	38.19	34.98	32.33	30.28	28.29	27.01	25.91	25.08	24.36
90.0	36.20	33.38	31.22	29.12	27.73	26.29	25.46	24.80	24.13
135.0	41.40	37.03	34.26	32.11	30.28	28.51	27.34	26.40	25.63
180.0	46.72	41.40	37.70	34.82	32.49	30.22	28.78	27.57	26.57
225.0	41.79	37.31	34.49	31.94	30.28	28.89	27.73	26.74	26.13
270.0	41.57	37.81	34.71	31.72	29.89	28.45	26.90	26.02	25.24
315.0	36.42	33.38	30.61	28.89	27.57	26.46	25.35	24.80	24.30
360.0	33.49	31.22	29.06	27.68	26.57	25.68	24.85	24.41	24.08
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	23.86	23.69	23.58	23.36	23.08	22.75	21.81	21.09	20.04
45.0	23.86	23.58	23.30	23.08	22.86	22.53	22.25	21.59	20.65
90.0	23.86	23.58	23.36	23.14	22.92	22.58	21.92	21.15	20.48
135.0	24.96	24.52	24.19	23.91	23.69	23.36	22.92	22.36	21.37
180.0	25.57	25.08	24.69	24.30	23.97	23.80	23.41	23.03	22.53
225.0	25.63	25.30	25.08	24.80	24.58	24.19	23.80	22.97	22.09
270.0	24.69	24.36	24.13	24.02	23.91	23.80	23.47	23.03	22.42
315.0	23.97	23.80	23.69	23.58	23.53	23.25	22.86	22.20	21.31
360.0	23.86	23.69	23.58	23.36	23.08	22.75	21.81	21.09	20.04
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	18.49	17.21	16.00	15.06	13.62	12.90	12.34	11.90	11.51
45.0	19.82	18.60	17.44	16.00	15.06	14.06	12.95	12.34	11.90
90.0	19.37	17.88	16.66	15.50	14.28	13.28	12.51	12.07	11.68
135.0	20.59	19.37	18.21	16.77	15.61	14.61	13.56	12.73	12.23
180.0	21.48	20.65	19.48	18.27	16.72	15.67	14.61	13.62	12.73
225.0	21.15	19.82	18.21	16.88	15.78	14.34	13.40	12.79	12.29
270.0	21.48	20.48	18.93	17.66	16.00	15.00	13.84	12.84	12.29
315.0	20.43	18.76	17.49	16.22	15.11	13.67	12.90	12.34	11.79
360.0	18.49	17.21	16.00	15.06	13.62	12.90	12.34	11.90	11.51
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	11.18	10.79	10.52	10.24	9.85	9.58	9.30	9.02	8.69
45.0	11.46	11.18	10.79	10.52	10.24	9.96	9.63	9.30	9.08
90.0	11.35	10.96	10.68	10.41	10.07	9.74	9.47	9.13	8.80
135.0	11.79	11.35	11.07	10.74	10.41	10.13	9.80	9.47	9.19
180.0	12.23	11.85	11.40	11.02	10.74	10.35	10.07	9.69	9.41
225.0	11.79	11.40	11.07	10.74	10.35	10.07	9.69	9.41	9.08
270.0	11.85	11.46	11.13	10.79	10.46	10.13	9.85	9.52	9.24
315.0	11.40	11.13	10.74	10.41	10.07	9.80	9.52	9.24	8.91
360.0	11.18	10.79	10.52	10.24	9.85	9.58	9.30	9.02	8.69
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	8.41	8.19	7.97	7.80	7.64	7.42	7.31	7.09	7.09
45.0	8.80	8.47	8.19	7.97	7.80	7.64	7.47	7.25	7.14
90.0	8.58	8.25	8.08	7.86	7.64	7.53	7.36	7.20	7.03
135.0	8.91	8.58	8.30	8.08	7.86	7.69	7.53	7.36	7.14
180.0	9.13	8.86	8.52	8.30	8.03	7.86	7.64	7.47	7.31
225.0	8.75	8.52	8.25	8.03	7.86	7.69	7.47	7.36	7.14
270.0	8.91	8.64	8.36	8.14	7.92	7.69	7.53	7.36	7.25
315.0	8.69	8.41	8.19	7.92	7.75	7.58	7.42	7.25	7.09
360.0	8.41	8.19	7.97	7.80	7.64	7.42	7.31	7.09	7.09

Intensity data(cd)

C/γ(°)	90.0
0.0	7.09
45.0	7.09
90.0	7.03
135.0	7.09
180.0	7.14
225.0	7.09
270.0	7.09
315.0	7.09
360.0	7.09