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NT

Client:

LumCAT: 1-1380-L

Luminaire: 92.70.428.00

Report No: 20231205-B010

Ballast type: AC

Test No: 20231205-C010

Voltage(V): 34.950

LampCAT: CREE CXA1516 LES8.9

Current(A): 0.330

Lamp flux(lm): 1642.4

Power (W): 11.533

Number of Lamps: 1

PF: 0.000

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

### Photometric Results

Lumens(lm): 1523.63, Efficiency(%): 92.77% , Luminous Efficacy(lm/W): 132.11

Central intensity(cd): 2263.824, Maximum intensity(cd): 2263.824

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

Beam Angle(50%Imax): [C0/180]Total=51.0

[C90/270]Total=51.0

Field angle(10%Imax): [C0/180]Total=71.2

[C90/270]Total=71.2

Beam angle of C0 plane : 50.91

Average BeamAngle(IEC 61341):50.91

Maximum s/h(1/2): C0\_180=0.83 C90\_270=0.83

Maximum s/h(1/4): C0\_180=0.75 C90\_270=0.75

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 92.77%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 97.858%

Equipment: GMS1980  
Temperature(°C): 0.0

Date: 2023/12/05  
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	2263.824	0.000	0	0.00%	0.00%
1.0	2256.144	2.163	2.163	0.13%	0.14%
2.0	2245.004	6.460	8.623	0.39%	0.57%
3.0	2242.374	10.732	19.356	0.65%	1.27%
4.0	2241.267	15.008	34.364	0.91%	2.26%
5.0	2230.404	19.237	53.601	1.17%	3.52%
6.0	2214.698	23.360	76.961	1.42%	5.05%
7.0	2196.500	27.380	104.341	1.67%	6.85%
8.0	2174.220	31.280	135.621	1.90%	8.90%
9.0	2144.191	34.998	170.62	2.13%	11.20%
10.0	2113.746	38.533	209.153	2.35%	13.73%
11.0	2084.271	41.947	251.099	2.55%	16.48%
12.0	2052.373	45.219	296.319	2.75%	19.45%
13.0	2019.299	48.320	344.639	2.94%	22.62%
14.0	1984.011	51.242	395.881	3.12%	25.98%
15.0	1948.585	53.988	449.87	3.29%	29.53%
16.0	1904.164	56.454	506.323	3.44%	33.23%
17.0	1863.894	58.679	565.002	3.57%	37.08%
18.0	1809.232	60.562	625.564	3.69%	41.06%
19.0	1749.935	61.922	687.486	3.77%	45.12%
20.0	1680.397	62.785	750.271	3.82%	49.24%
21.0	1597.574	62.944	813.215	3.83%	53.37%
22.0	1508.109	62.410	875.625	3.80%	57.47%
23.0	1388.863	60.786	936.411	3.70%	61.46%
24.0	1254.797	57.800	994.211	3.52%	65.25%
25.0	1176.312	55.278	1049.489	3.37%	68.88%
26.0	1078.510	53.225	1102.714	3.24%	72.37%
27.0	960.793	49.892	1152.606	3.04%	75.65%
28.0	835.134	45.469	1198.075	2.77%	78.63%
29.0	718.407	40.645	1238.72	2.47%	81.30%
30.0	606.191	35.764	1274.484	2.18%	83.65%
31.0	508.617	31.023	1305.508	1.89%	85.68%
32.0	421.165	26.637	1332.145	1.62%	87.43%
33.0	345.178	22.577	1354.721	1.37%	88.91%
34.0	282.788	19.004	1373.726	1.16%	90.16%
35.0	240.435	16.249	1389.975	0.99%	91.23%
36.0	215.236	14.509	1404.484	0.88%	92.18%
37.0	147.683	11.836	1416.32	0.72%	92.96%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	120.069	8.937	1425.257	0.54%	93.54%
39.0	98.951	7.476	1432.733	0.46%	94.03%
40.0	82.456	6.327	1439.06	0.39%	94.45%
41.0	69.711	5.419	1444.478	0.33%	94.80%
42.0	59.547	4.696	1449.175	0.29%	95.11%
43.0	51.590	4.117	1453.291	0.25%	95.38%
44.0	45.411	3.661	1456.952	0.22%	95.62%
45.0	40.291	3.294	1460.246	0.20%	95.84%
46.0	36.340	2.997	1463.243	0.18%	96.04%
47.0	32.873	2.753	1465.996	0.17%	96.22%
48.0	30.285	2.553	1468.549	0.16%	96.38%
49.0	27.857	2.388	1470.936	0.15%	96.54%
50.0	25.899	2.241	1473.178	0.14%	96.69%
51.0	24.210	2.120	1475.298	0.13%	96.83%
52.0	22.764	2.016	1477.313	0.12%	96.96%
53.0	21.526	1.927	1479.24	0.12%	97.09%
54.0	20.419	1.849	1481.089	0.11%	97.21%
55.0	19.436	1.779	1482.868	0.11%	97.32%
56.0	18.613	1.719	1484.587	0.10%	97.44%
57.0	17.872	1.668	1486.255	0.10%	97.55%
58.0	17.167	1.620	1487.876	0.10%	97.65%
59.0	16.530	1.575	1489.451	0.10%	97.76%
60.0	15.976	1.536	1490.987	0.09%	97.86%
61.0	15.423	1.498	1492.485	0.09%	97.96%
62.0	14.918	1.462	1493.947	0.09%	98.05%
63.0	14.461	1.429	1495.376	0.09%	98.15%
64.0	14.025	1.398	1496.774	0.09%	98.24%
65.0	13.610	1.368	1498.141	0.08%	98.33%
66.0	13.236	1.339	1499.481	0.08%	98.41%
67.0	12.870	1.313	1500.794	0.08%	98.50%
68.0	12.489	1.285	1502.078	0.08%	98.59%
69.0	12.171	1.258	1503.336	0.08%	98.67%
70.0	11.839	1.233	1504.569	0.08%	98.75%
71.0	11.520	1.207	1505.777	0.07%	98.83%
72.0	11.168	1.180	1506.956	0.07%	98.91%
73.0	10.842	1.151	1508.107	0.07%	98.98%
74.0	10.524	1.123	1509.231	0.07%	99.05%
75.0	10.227	1.096	1510.327	0.07%	99.13%

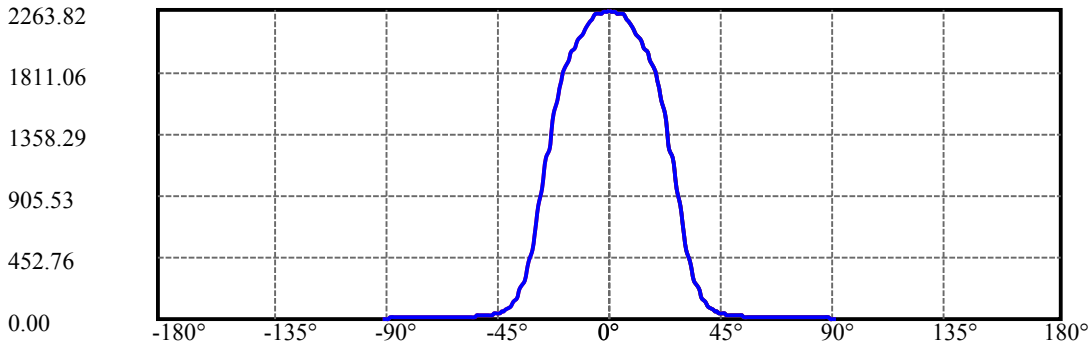
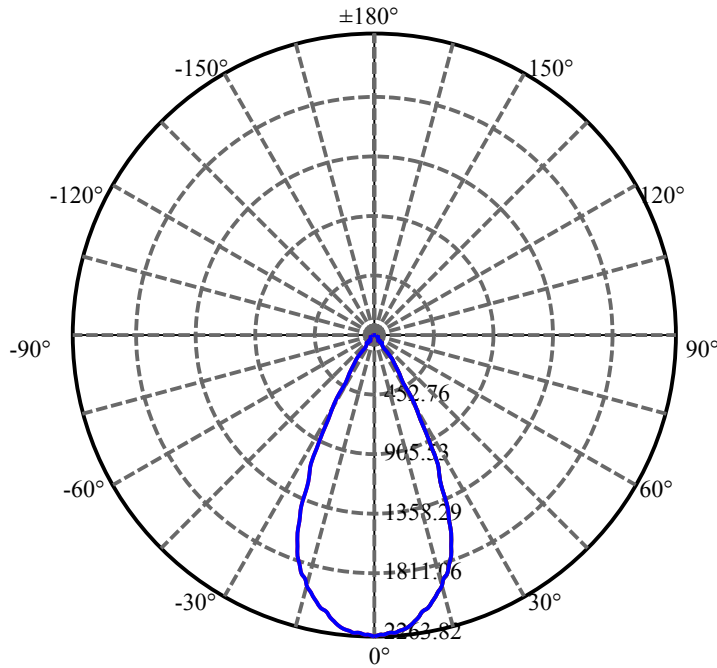
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	9.894	1.068	1511.395	0.07%	99.20%
77.0	9.604	1.040	1512.435	0.06%	99.27%
78.0	9.327	1.013	1513.448	0.06%	99.33%
79.0	9.016	0.986	1514.434	0.06%	99.40%
80.0	8.725	0.956	1515.39	0.06%	99.46%
81.0	8.469	0.930	1516.32	0.06%	99.52%
82.0	8.227	0.905	1517.225	0.06%	99.58%
83.0	7.992	0.882	1518.107	0.05%	99.64%
84.0	7.750	0.858	1518.964	0.05%	99.69%
85.0	7.507	0.833	1519.797	0.05%	99.75%
86.0	7.307	0.810	1520.607	0.05%	99.80%
87.0	7.092	0.788	1521.395	0.05%	99.85%
88.0	6.885	0.766	1522.161	0.05%	99.90%
89.0	6.684	0.744	1522.904	0.05%	99.95%
90.0	6.587	0.728	1523.632	0.04%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1274.48	77.60%	83.65%
0-40	1439.06	87.62%	94.45%
0-60	1490.99	90.78%	97.86%
0-90	1522.90	92.73%	99.95%
0-120	1522.90	92.73%	99.95%
0-180	1523.63	92.77%	100.00%
60-90	31.92	1.94%	2.09%
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%
0-28.51	1218.91	74.22%	80.00%

ZONAL LUMEN SUMMARY

0-10	209.15
10-20	541.12
20-30	524.21
30-40	164.58
40-50	34.12
50-60	17.81
60-70	13.58
70-80	10.82
80-90	7.51
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



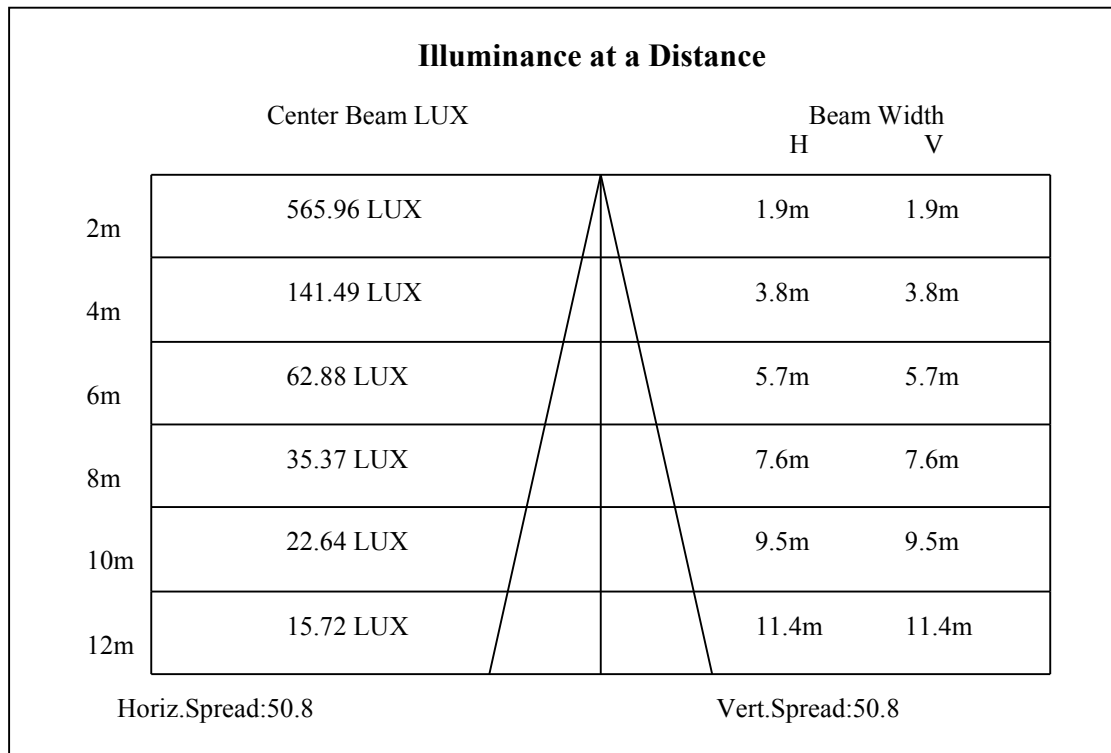
C0(Max): —————

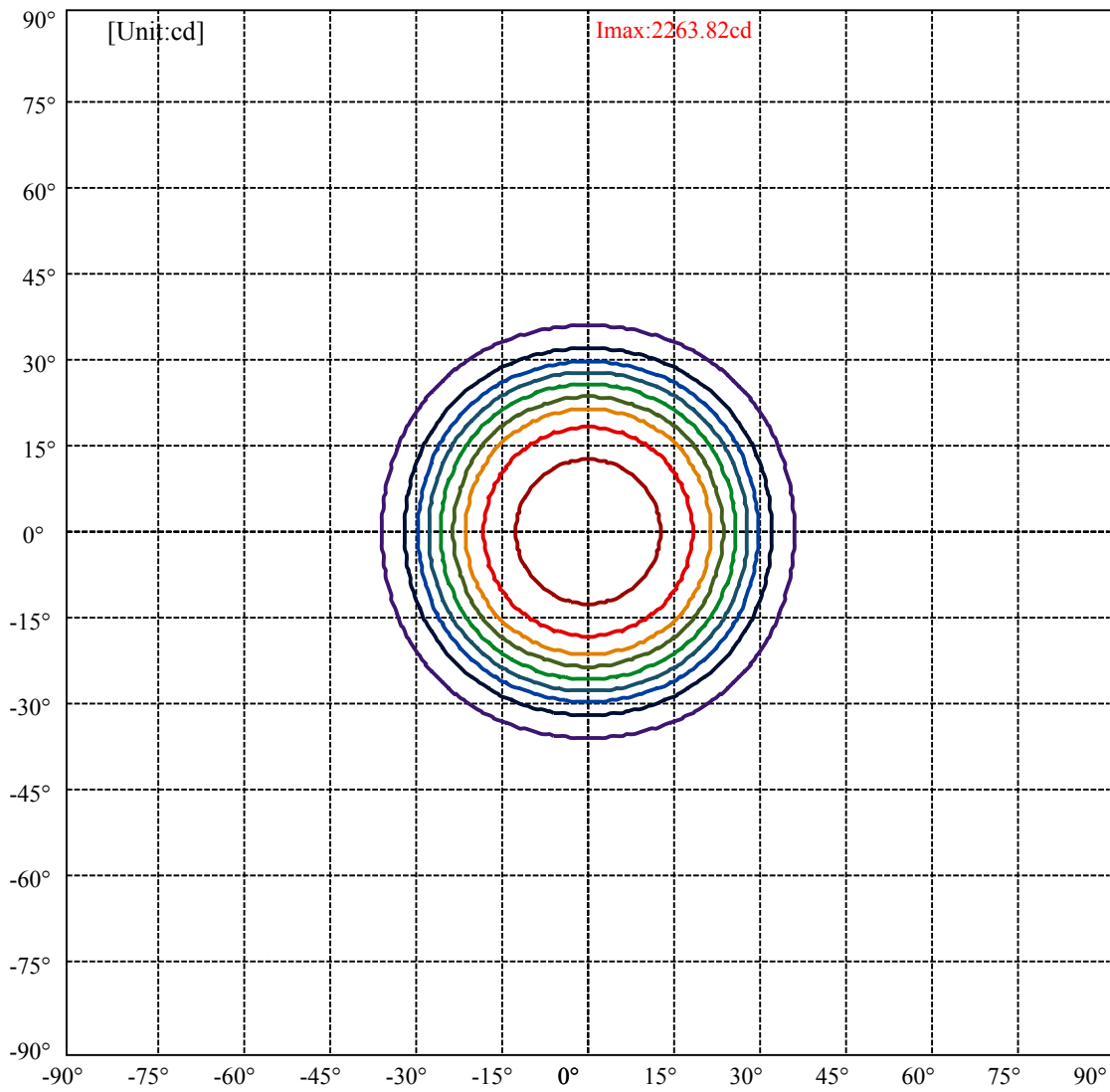
C0/C180: —————

C90/C270: —————

Field angle(10%Imax):C0/180Left:35.6 Right:35.6  
:C90/270Left:35.6 Right:35.6

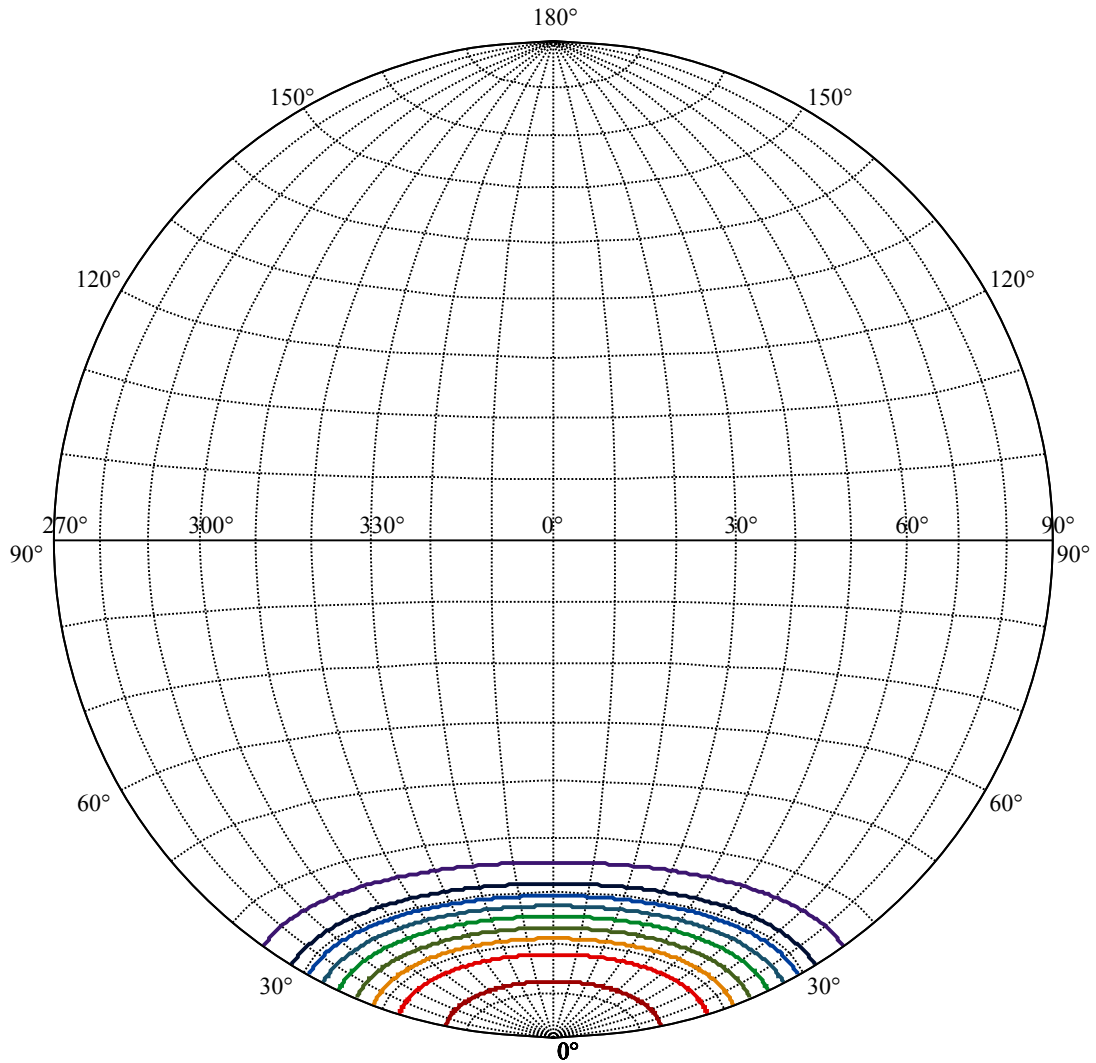
Beam Angle(50%Imax):C0/180Left:25.5 Right:25.5  
:C90/270Left:25.5 Right:25.5





(10%Imax) 226.382	—
(20%Imax) 452.765	—
(30%Imax) 679.147	—
(40%Imax) 905.53	—
(50%Imax) 1131.91	—
(60%Imax) 1358.29	—
(70%Imax) 1584.68	—
(80%Imax) 1811.06	—
(90%Imax) 2037.44	—





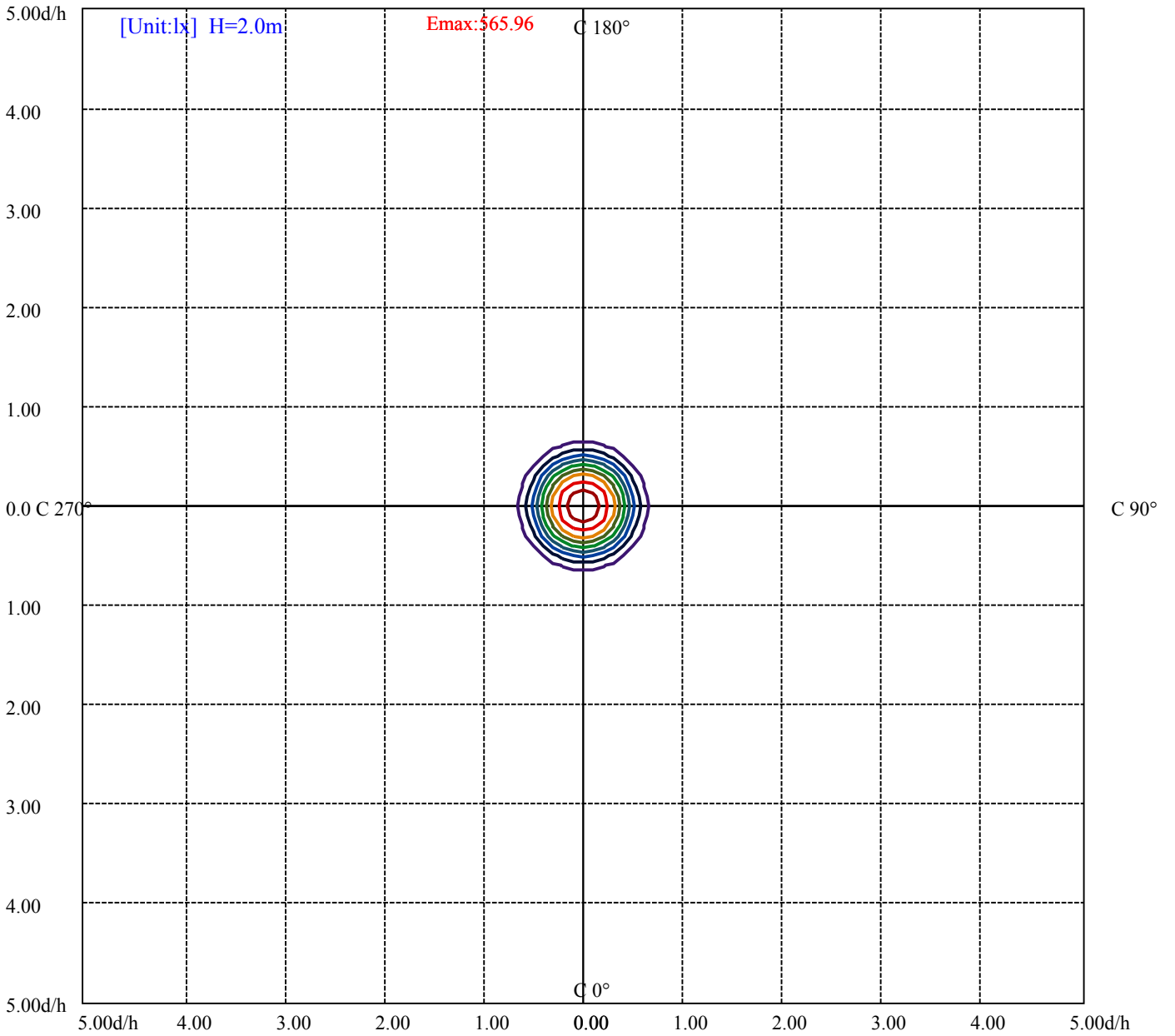
House

[Unit:cd]

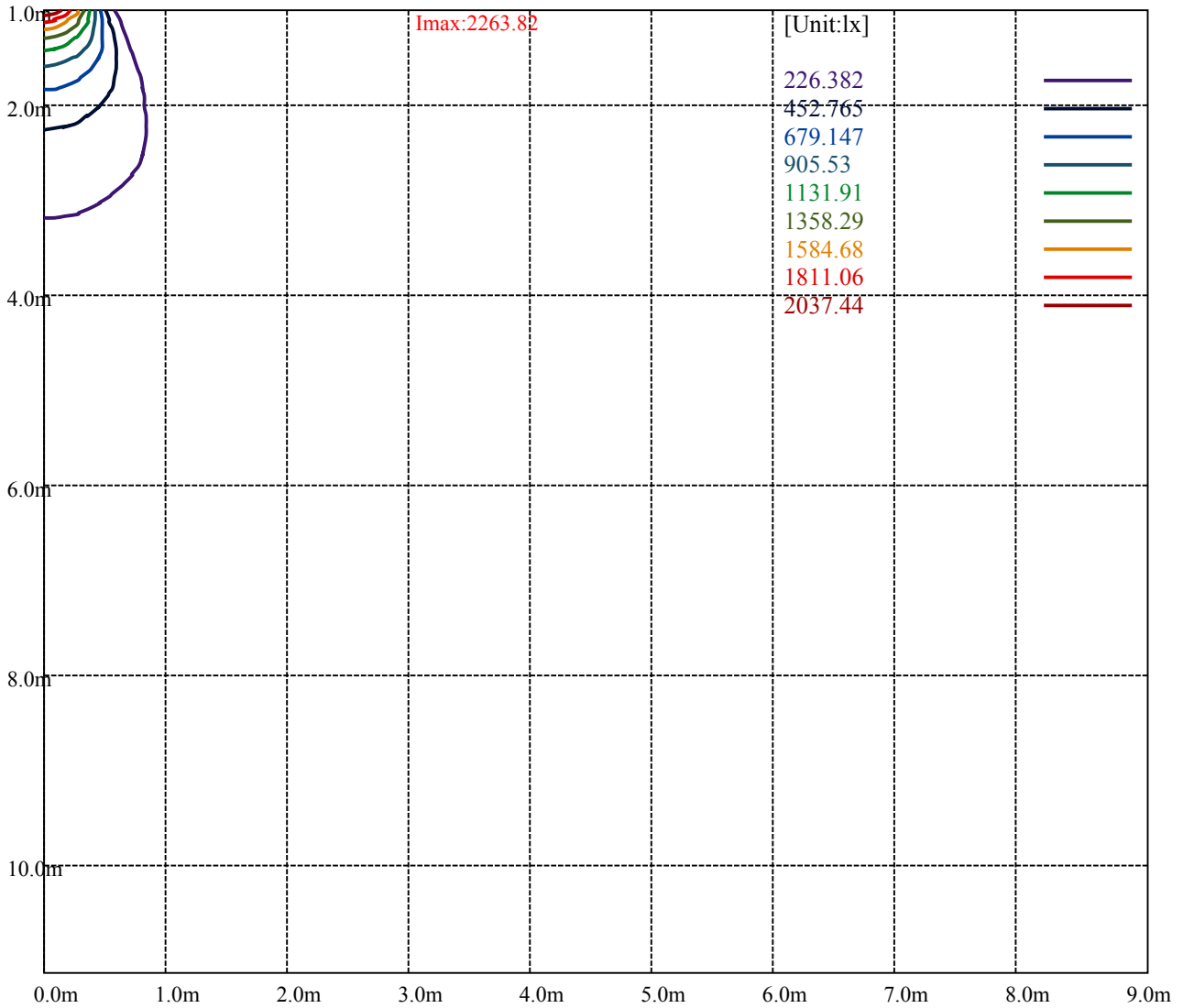
Road

**Imax:2263.82**

(10%Imax)	226.382	—
(20%Imax)	452.765	—
(30%Imax)	679.147	—
(40%Imax)	905.53	—
(50%Imax)	1131.91	—
(60%Imax)	1358.29	—
(70%Imax)	1584.68	—
(80%Imax)	1811.06	—
(90%Imax)	2037.44	—



(10%Emax) 56.5955	—
(20%Emax) 113.1913	—
(30%Emax) 169.7867	—
(40%Emax) 226.3822	—
(50%Emax) 282.9775	—
(60%Emax) 339.5725	—
(70%Emax) 396.17	—
(80%Emax) 452.765	—
(90%Emax) 509.36	—



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

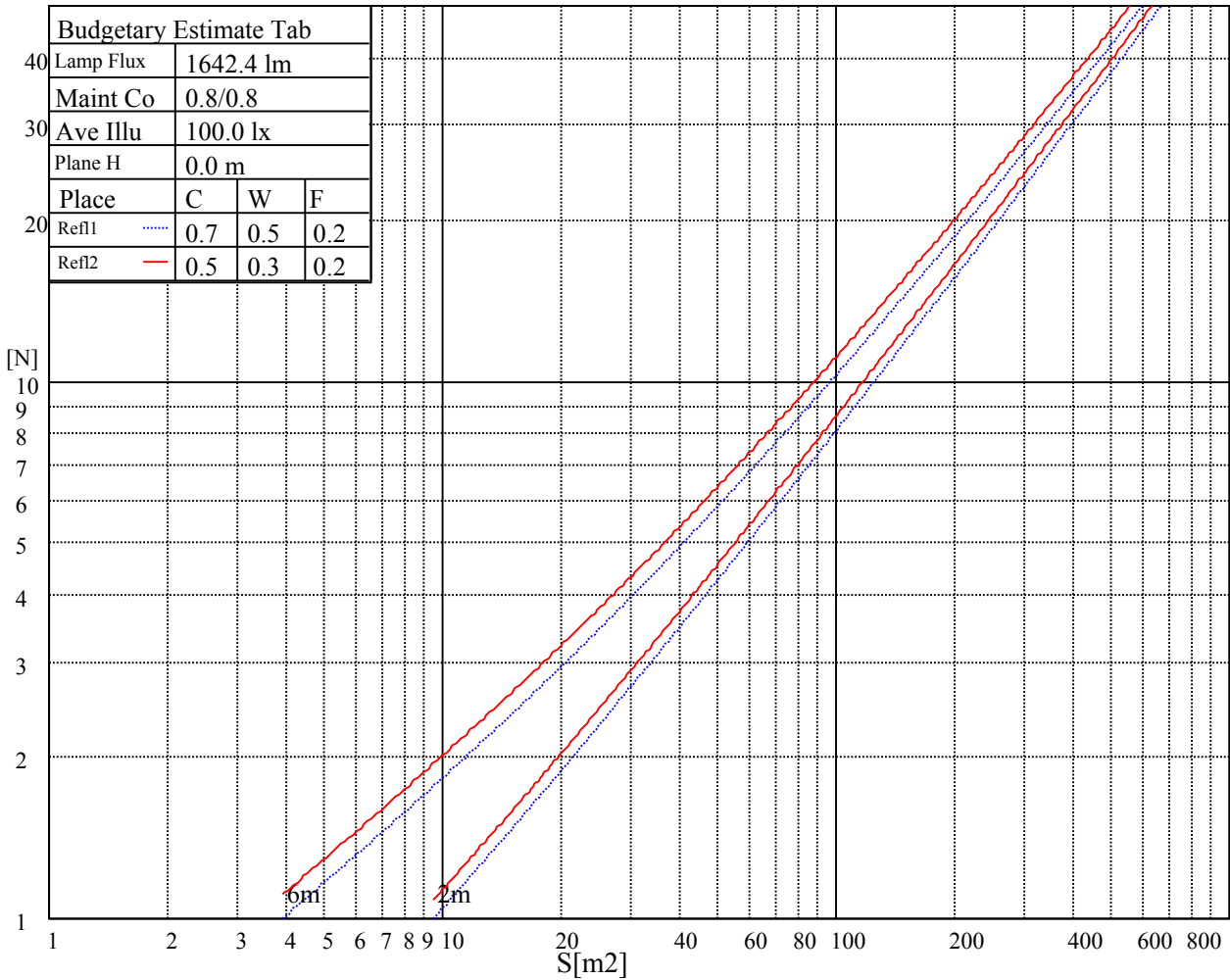
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

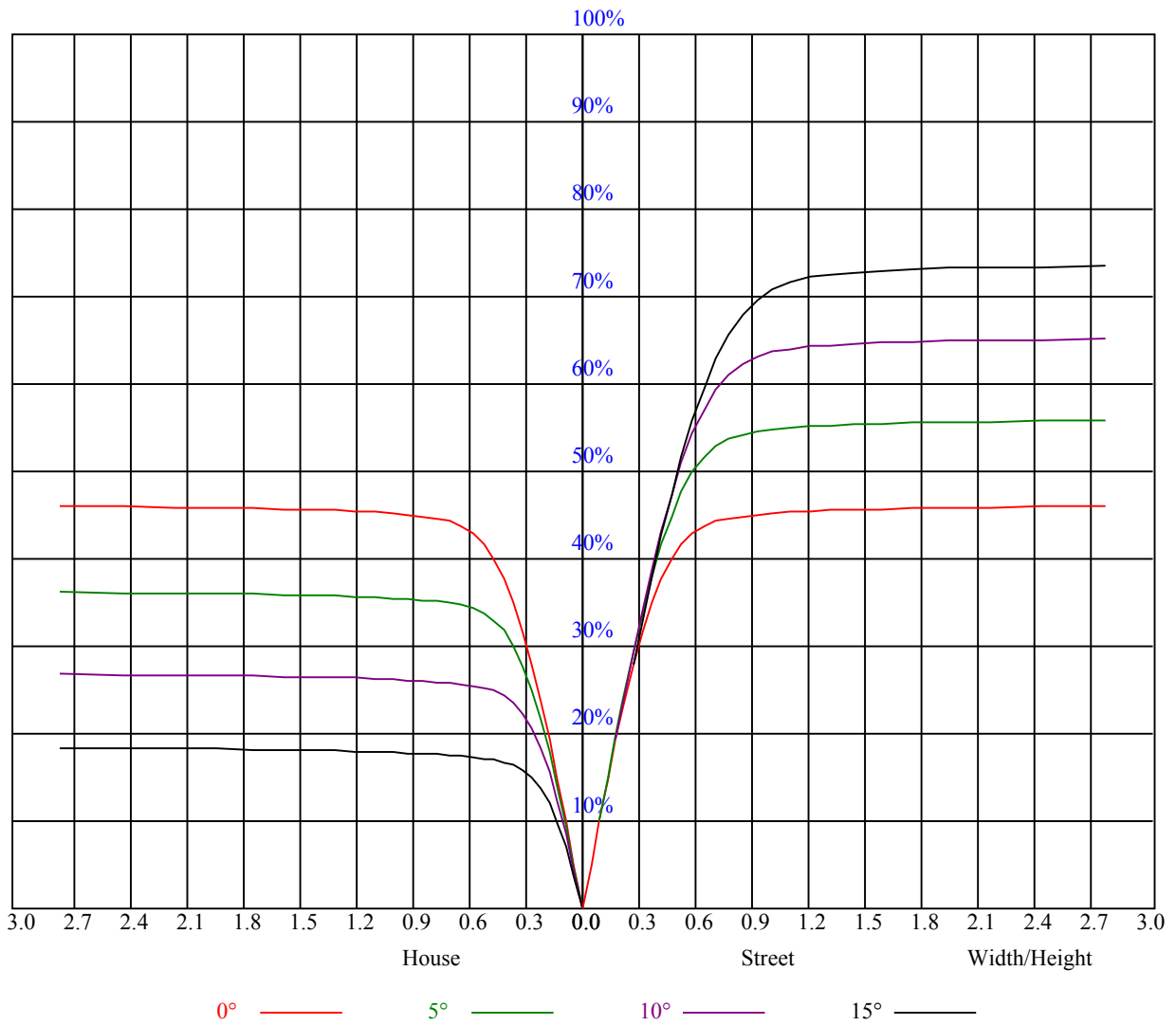


Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	3H	非数字	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 RHOFC=20 CU															
0	1.10	1.10	1.10	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	1.03	1.01	0.99	1.01	0.99	0.97	0.97	0.95	0.94	0.94	0.92	0.91	0.90	0.89	0.89	0.87
2	0.96	0.93	0.90	0.95	0.91	0.89	0.92	0.89	0.87	0.89	0.87	0.85	0.86	0.85	0.83	0.82
3	0.90	0.86	0.83	0.89	0.85	0.82	0.87	0.83	0.81	0.84	0.82	0.79	0.82	0.80	0.78	0.77
4	0.85	0.80	0.77	0.84	0.80	0.76	0.82	0.78	0.75	0.80	0.77	0.74	0.79	0.76	0.74	0.72
5	0.80	0.75	0.72	0.80	0.75	0.71	0.78	0.74	0.71	0.76	0.73	0.70	0.75	0.72	0.70	0.68
6	0.76	0.71	0.67	0.75	0.71	0.67	0.74	0.70	0.67	0.73	0.69	0.66	0.72	0.68	0.66	0.65
7	0.72	0.67	0.64	0.72	0.67	0.63	0.71	0.66	0.63	0.69	0.66	0.63	0.68	0.65	0.62	0.61
8	0.69	0.64	0.60	0.68	0.63	0.60	0.67	0.63	0.60	0.66	0.62	0.59	0.65	0.62	0.59	0.58
9	0.65	0.60	0.57	0.65	0.60	0.57	0.64	0.60	0.57	0.63	0.59	0.57	0.63	0.59	0.56	0.55
10	0.62	0.57	0.54	0.62	0.57	0.54	0.61	0.57	0.54	0.61	0.57	0.54	0.60	0.56	0.54	0.53





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	2250.12	2233.52	2242.93	2245.70	2227.98	2205.29	2187.02	2168.75	2128.90
45.0	2271.71	2269.50	2249.57	2235.73	2245.14	2242.37	2229.09	2211.38	2188.13
90.0	2275.59	2257.32	2247.36	2254.55	2251.78	2236.29	2218.57	2199.75	2182.59
135.0	2257.87	2260.64	2241.82	2245.70	2256.77	2249.02	2240.71	2227.98	2206.95
180.0	2250.12	2266.73	2260.64	2242.93	2247.36	2250.12	2237.39	2224.66	2219.13
225.0	2271.71	2249.02	2243.48	2247.36	2238.50	2223.00	2206.95	2183.15	2156.58
270.0	2275.59	2271.71	2249.02	2235.73	2237.39	2231.30	2209.72	2183.70	2161.00
315.0	2257.87	2240.71	2225.21	2231.30	2225.21	2205.84	2188.13	2172.63	2150.49
360.0	2250.12	2233.52	2242.93	2245.70	2227.98	2205.29	2187.02	2168.75	2128.90
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	2103.99	2079.63	2055.83	2018.75	1983.32	1941.80	1905.82	1853.79	1807.85
45.0	2169.86	2148.27	2107.87	2076.87	2049.19	2015.42	1989.41	1951.21	1920.22
90.0	2151.04	2123.36	2099.01	2060.26	2027.05	1985.53	1949.55	1913.57	1868.18
135.0	2178.16	2139.97	2112.29	2074.65	2047.53	2019.85	1977.23	1921.32	1870.95
180.0	2190.34	2157.68	2125.02	2099.56	2066.90	2034.80	2001.03	1948.45	1909.15
225.0	2123.36	2085.17	2054.17	2025.94	1989.96	1953.98	1921.32	1888.66	1848.81
270.0	2130.56	2099.56	2066.35	2029.82	2002.69	1971.70	1935.72	1893.65	1858.22
315.0	2106.20	2076.31	2053.62	2033.14	1987.75	1949.00	1908.59	1862.65	1827.78
360.0	2103.99	2079.63	2055.83	2018.75	1983.32	1941.80	1905.82	1853.79	1807.85
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1752.49	1668.36	1593.08	1477.94	1381.07	1089.14	1089.14	1033.51	917.71
45.0	1880.36	1826.67	1746.96	1678.87	1605.81	1526.65	1413.73	1316.86	1216.12
90.0	1803.97	1748.07	1682.75	1608.58	1497.31	1398.79	1224.42	1080.61	1052.22
135.0	1808.40	1753.60	1693.27	1610.24	1531.63	1444.73	1349.52	1217.78	1104.86
180.0	1853.24	1800.65	1746.41	1680.54	1595.29	1515.03	1420.37	1321.29	1195.08
225.0	1787.37	1721.50	1647.32	1548.79	1466.32	1355.61	1092.79	1092.79	1034.95
270.0	1821.69	1775.19	1699.36	1627.95	1553.22	1445.84	1351.18	1250.44	1119.80
315.0	1766.33	1705.44	1634.04	1547.69	1434.21	1335.13	1097.22	1097.22	987.34
360.0	1752.49	1668.36	1593.08	1477.94	1381.07	1089.14	1089.14	1033.51	917.71
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	797.26	685.78	561.29	472.89	394.17	314.74	261.77	215.49	168.44
45.0	1105.41	959.28	843.04	707.97	609.44	518.66	416.81	347.62	286.73
90.0	933.54	788.12	679.24	577.95	465.52	388.14	321.60	264.70	204.92
135.0	986.95	871.27	733.44	630.48	536.93	435.08	364.23	291.16	291.16
180.0	1089.36	975.33	860.19	719.04	613.32	498.74	416.81	348.17	290.05
225.0	892.36	779.82	673.43	575.79	465.30	387.86	320.88	249.26	202.26
270.0	1007.99	861.30	746.72	639.89	543.57	457.22	364.78	301.12	287.29
315.0	873.48	760.17	649.91	525.53	440.67	368.88	294.54	244.77	192.63
360.0	797.26	685.78	561.29	472.89	394.17	314.74	261.77	215.49	168.44
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	138.38	114.86	92.61	78.60	67.42	56.63	49.93	44.34	39.63
45.0	286.73	175.97	142.31	116.08	95.87	77.16	66.15	57.68	49.71
90.0	166.61	135.89	106.50	89.29	76.17	65.65	55.46	48.99	42.46
135.0	230.71	162.13	129.31	108.77	91.33	77.61	63.99	55.63	49.04
180.0	290.05	182.22	149.73	118.40	99.30	84.19	72.35	60.61	52.86
225.0	164.07	126.82	104.78	87.29	70.24	60.34	52.97	45.67	41.07
270.0	287.29	152.89	126.37	105.50	85.08	72.68	60.72	53.47	47.38
315.0	158.03	130.69	108.94	87.68	74.23	63.44	54.80	46.33	41.13
360.0	138.38	114.86	92.61	78.60	67.42	56.63	49.93	44.34	39.63

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	35.15	32.16	29.67	27.62	25.41	23.91	22.36	21.31	20.31
45.0	44.28	39.91	35.43	32.38	29.89	27.29	25.46	24.02	22.36
90.0	38.25	34.76	31.22	29.01	26.96	25.19	23.80	22.20	21.09
135.0	42.57	38.53	35.15	32.27	29.34	27.34	25.57	23.75	22.58
180.0	46.55	40.35	36.64	33.43	30.22	28.06	25.79	24.19	22.81
225.0	37.31	34.15	30.72	28.45	26.51	24.85	23.14	21.92	20.59
270.0	41.18	37.25	33.99	31.16	28.89	26.46	24.85	23.47	22.20
315.0	37.03	33.60	30.17	27.95	25.63	24.08	22.69	21.26	20.26
360.0	35.15	32.16	29.67	27.62	25.41	23.91	22.36	21.31	20.31
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	19.26	18.43	17.77	17.10	16.44	15.89	15.39	14.89	14.39
45.0	21.26	20.26	19.43	18.43	17.71	17.05	16.44	15.72	15.22
90.0	20.15	19.04	18.27	17.60	16.83	16.27	15.78	15.17	14.78
135.0	21.15	20.26	19.37	18.60	17.71	17.05	16.50	15.94	15.33
180.0	21.59	20.31	19.43	18.60	17.93	17.10	16.55	15.94	15.39
225.0	19.71	18.88	18.05	17.38	16.72	16.22	15.55	15.11	14.61
270.0	20.87	19.93	18.88	18.16	17.44	16.72	16.16	15.61	15.06
315.0	19.37	18.38	17.71	17.10	16.55	15.94	15.44	15.00	14.56
360.0	19.26	18.43	17.77	17.10	16.44	15.89	15.39	14.89	14.39
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	14.00	13.62	13.17	12.84	12.51	12.12	11.79	11.51	11.13
45.0	14.67	14.23	13.84	13.40	13.01	12.68	12.34	11.96	11.68
90.0	14.34	13.84	13.45	13.12	12.79	12.34	12.01	11.73	11.46
135.0	14.89	14.50	14.12	13.67	13.28	12.84	12.57	12.18	11.79
180.0	14.89	14.45	13.95	13.62	13.23	12.79	12.45	12.18	11.85
225.0	14.23	13.73	13.34	13.01	12.57	12.23	11.96	11.57	11.24
270.0	14.61	14.17	13.78	13.34	13.01	12.68	12.34	11.96	11.68
315.0	14.06	13.67	13.23	12.90	12.57	12.23	11.90	11.62	11.35
360.0	14.00	13.62	13.17	12.84	12.51	12.12	11.79	11.51	11.13
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	10.79	10.46	10.19	9.85	9.52	9.30	9.02	8.64	8.41
45.0	11.29	11.02	10.63	10.35	10.07	9.69	9.41	9.19	8.80
90.0	11.02	10.74	10.35	10.07	9.74	9.41	9.19	8.91	8.58
135.0	11.46	11.13	10.85	10.52	10.19	9.91	9.58	9.24	8.91
180.0	11.51	11.18	10.85	10.57	10.19	9.91	9.63	9.24	8.97
225.0	10.96	10.57	10.24	10.02	9.74	9.35	9.08	8.86	8.58
270.0	11.35	10.96	10.68	10.30	9.96	9.74	9.47	9.13	8.86
315.0	10.96	10.68	10.41	10.13	9.74	9.52	9.24	8.91	8.69
360.0	10.79	10.46	10.19	9.85	9.52	9.30	9.02	8.64	8.41
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	8.19	7.97	7.69	7.53	7.25	7.09	6.86	6.70	6.59
45.0	8.52	8.25	8.03	7.75	7.53	7.31	7.14	6.92	6.70
90.0	8.36	8.14	7.92	7.58	7.42	7.20	7.03	6.81	6.64
135.0	8.75	8.41	8.14	7.92	7.64	7.47	7.25	7.09	6.81
180.0	8.64	8.41	8.19	7.97	7.69	7.42	7.25	7.03	6.81
225.0	8.25	8.08	7.80	7.58	7.36	7.14	6.92	6.75	6.53
270.0	8.58	8.36	8.14	7.86	7.58	7.47	7.14	6.86	6.70
315.0	8.47	8.19	8.03	7.80	7.58	7.36	7.14	6.92	6.70
360.0	8.19	7.97	7.69	7.53	7.25	7.09	6.86	6.70	6.59

Intensity data(cd)

C/ $\gamma$ (°)	90.0
0.0	6.53
45.0	6.53
90.0	6.59
135.0	6.70
180.0	6.59
225.0	6.53
270.0	6.59
315.0	6.64
360.0	6.53