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NATA

Client:

LumCAT: 1-1377-L Luminaire:

92.70.410.00 Report No: 2023829-

B017 Ballast type: AC

Test No: 2023829-C017

LampCAT: LUXEON CoB 1203 LES9

Voltage(V): 35.820

Lamp flux(lm): 1615.6 Number of

Current(A): 0.378

Lamps: 1 Length(mm): 0

Power (W): 13.539

Phm Type: C

PF: 0.000

Width(mm): 0

Height(mm): 0

Photometric Results

Lumens(lm): 1500.52, Efficiency(%): 92.88% , Luminous Efficacy(lm/W): 110.83

Central intensity(cd): 7261.922, Maximum intensity(cd): 7261.922

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=19.4

[C90/270]Total=19.4

Field angle(10%Imax): [C0/180]Total=49.6

[C90/270]Total=49.6

Maximum s/h(1/2): C0_180=0.33 C90_270=0.33

Maximum s/h(1/4): C0_180=0.36 C90_270=0.36

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 92.88%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.086%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	7261.922	0.000	0	0.00%	0.00%
1.0	7218.538	6.929	6.929	0.43%	0.46%
2.0	7100.843	20.553	27.481	1.27%	1.83%
3.0	6887.455	33.455	60.937	2.07%	4.06%
4.0	6583.356	45.091	106.028	2.79%	7.07%
5.0	6181.973	54.916	160.943	3.40%	10.73%
6.0	5665.178	62.260	223.203	3.85%	14.88%
7.0	5132.054	67.018	290.222	4.15%	19.34%
8.0	4562.188	69.380	359.601	4.29%	23.97%
9.0	3996.544	69.364	428.965	4.29%	28.59%
10.0	3505.004	67.886	496.852	4.20%	33.11%
11.0	3018.515	65.183	562.035	4.03%	37.46%
12.0	2647.784	61.941	623.976	3.83%	41.58%
13.0	2338.012	59.169	683.145	3.66%	45.53%
14.0	2071.484	56.441	739.586	3.49%	49.29%
15.0	1833.879	53.615	793.2	3.32%	52.86%
16.0	1635.989	50.843	844.044	3.15%	56.25%
17.0	1482.383	48.561	892.605	3.01%	59.49%
18.0	1270.455	45.388	937.993	2.81%	62.51%
19.0	1188.345	42.778	980.771	2.65%	65.36%
20.0	1108.435	42.037	1022.809	2.60%	68.16%
21.0	1016.728	40.807	1063.616	2.53%	70.88%
22.0	938.292	39.287	1102.903	2.43%	73.50%
23.0	866.166	37.862	1140.766	2.34%	76.02%
24.0	789.813	36.206	1176.971	2.24%	78.44%
25.0	714.954	34.215	1211.186	2.12%	80.72%
26.0	637.757	31.931	1243.117	1.98%	82.85%
27.0	558.746	29.273	1272.39	1.81%	84.80%
28.0	485.589	26.440	1298.83	1.64%	86.56%
29.0	412.640	23.500	1322.331	1.45%	88.12%
30.0	342.272	20.382	1342.713	1.26%	89.48%
31.0	279.294	17.297	1360.01	1.07%	90.64%
32.0	239.577	14.865	1374.875	0.92%	91.63%
33.0	200.491	12.965	1387.84	0.80%	92.49%
34.0	133.485	10.107	1397.947	0.63%	93.16%
35.0	109.116	7.534	1405.481	0.47%	93.67%
36.0	93.880	6.463	1411.945	0.40%	94.10%
37.0	82.304	5.746	1417.691	0.36%	94.48%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	73.344	5.195	1422.886	0.32%	94.83%
39.0	64.646	4.710	1427.596	0.29%	95.14%
40.0	57.021	4.243	1431.839	0.26%	95.42%
41.0	49.964	3.810	1435.649	0.24%	95.68%
42.0	44.311	3.425	1439.074	0.21%	95.91%
43.0	39.170	3.092	1442.167	0.19%	96.11%
44.0	34.721	2.789	1444.955	0.17%	96.30%
45.0	30.984	2.525	1447.48	0.16%	96.47%
46.0	28.064	2.309	1449.79	0.14%	96.62%
47.0	25.476	2.129	1451.919	0.13%	96.76%
48.0	23.435	1.977	1453.896	0.12%	96.89%
49.0	21.671	1.852	1455.749	0.11%	97.02%
50.0	20.239	1.747	1457.496	0.11%	97.13%
51.0	18.972	1.659	1459.155	0.10%	97.24%
52.0	17.983	1.586	1460.741	0.10%	97.35%
53.0	17.090	1.526	1462.267	0.09%	97.45%
54.0	16.302	1.472	1463.738	0.09%	97.55%
55.0	15.672	1.427	1465.166	0.09%	97.64%
56.0	15.042	1.388	1466.553	0.09%	97.74%
57.0	14.523	1.352	1467.905	0.08%	97.83%
58.0	14.074	1.322	1469.228	0.08%	97.91%
59.0	13.665	1.297	1470.525	0.08%	98.00%
60.0	13.333	1.276	1471.8	0.08%	98.09%
61.0	12.967	1.255	1473.055	0.08%	98.17%
62.0	12.683	1.236	1474.291	0.08%	98.25%
63.0	12.399	1.220	1475.511	0.08%	98.33%
64.0	12.102	1.202	1476.713	0.07%	98.41%
65.0	11.790	1.182	1477.896	0.07%	98.49%
66.0	11.493	1.162	1479.057	0.07%	98.57%
67.0	11.168	1.139	1480.197	0.07%	98.65%
68.0	10.842	1.115	1481.312	0.07%	98.72%
69.0	10.503	1.089	1482.401	0.07%	98.79%
70.0	10.164	1.061	1483.462	0.07%	98.86%
71.0	9.874	1.036	1484.498	0.06%	98.93%
72.0	9.604	1.013	1485.511	0.06%	99.00%
73.0	9.320	0.990	1486.5	0.06%	99.07%
74.0	9.071	0.967	1487.467	0.06%	99.13%
75.0	8.822	0.945	1488.412	0.06%	99.19%

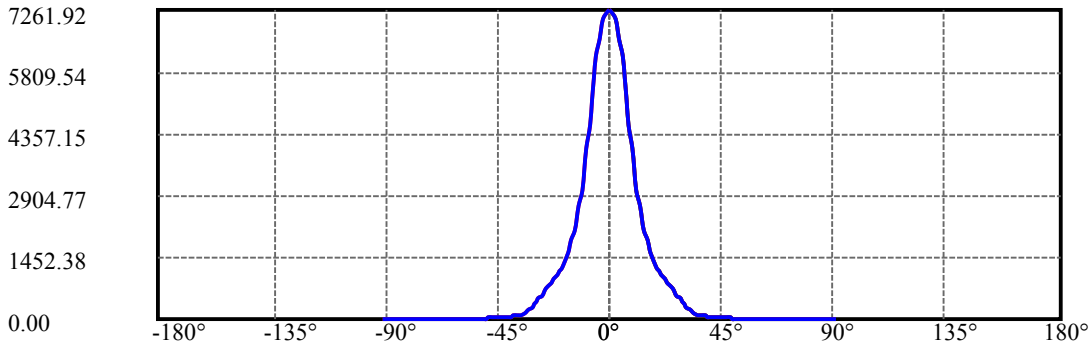
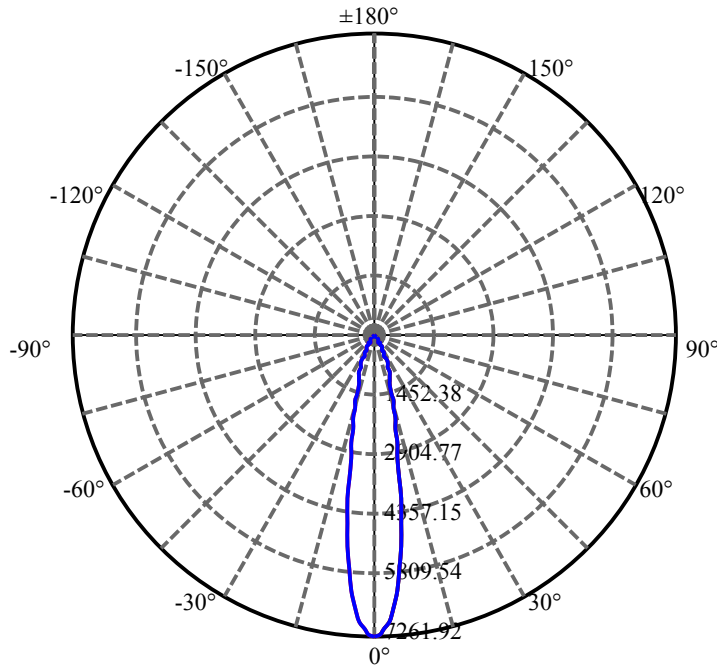
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	8.628	0.926	1489.339	0.06%	99.25%
77.0	8.393	0.907	1490.246	0.06%	99.32%
78.0	8.172	0.887	1491.133	0.05%	99.37%
79.0	7.964	0.867	1492	0.05%	99.43%
80.0	7.798	0.850	1492.85	0.05%	99.49%
81.0	7.597	0.833	1493.682	0.05%	99.54%
82.0	7.452	0.816	1494.498	0.05%	99.60%
83.0	7.300	0.802	1495.3	0.05%	99.65%
84.0	7.134	0.786	1496.087	0.05%	99.70%
85.0	6.995	0.771	1496.858	0.05%	99.76%
86.0	6.885	0.759	1497.616	0.05%	99.81%
87.0	6.760	0.747	1498.363	0.05%	99.86%
88.0	6.629	0.733	1499.097	0.05%	99.91%
89.0	6.469	0.718	1499.814	0.04%	99.95%
90.0	6.393	0.705	1500.52	0.04%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1342.71	83.11%	89.48%
0-40	1431.84	88.63%	95.42%
0-60	1471.80	91.10%	98.09%
0-90	1499.81	92.83%	99.95%
0-120	1499.81	92.83%	99.95%
0-180	1500.52	92.88%	100.00%
60-90	28.01	1.73%	1.87%
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%
0-24.69	1200.42	74.30%	80.00%

ZONAL LUMEN SUMMARY

0-10	496.85
10-20	525.96
20-30	319.90
30-40	89.13
40-50	25.66
50-60	14.30
60-70	11.66
70-80	9.39
80-90	6.96
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: —————

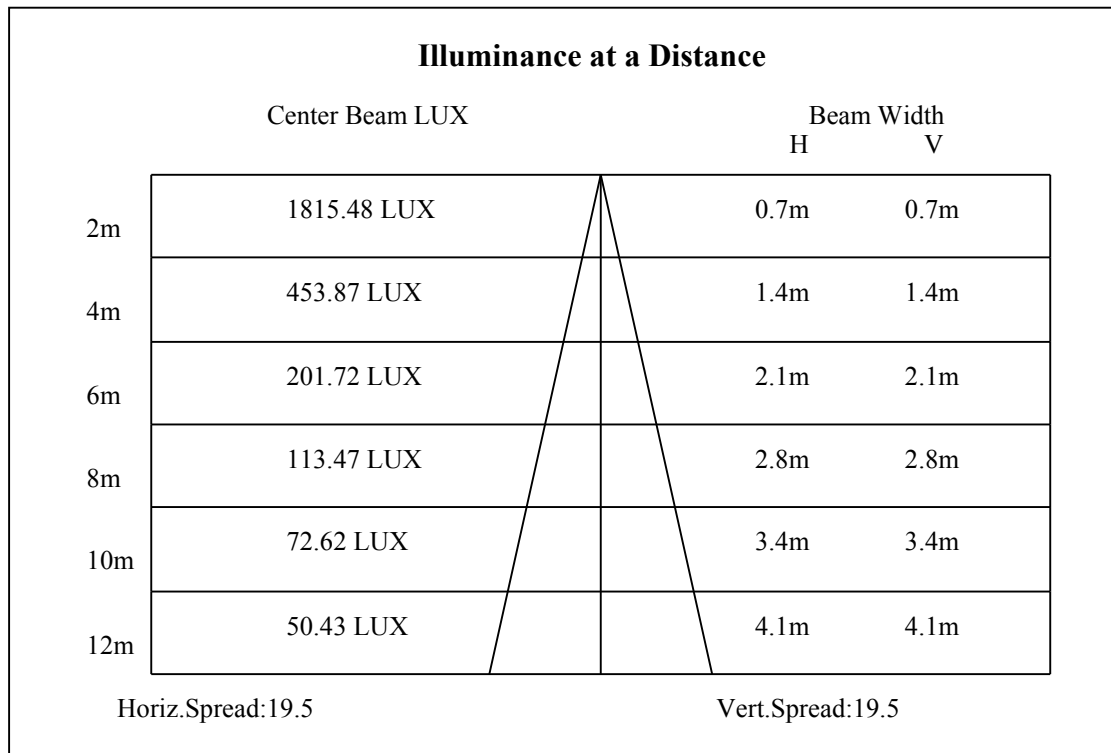
C90/C270: —————

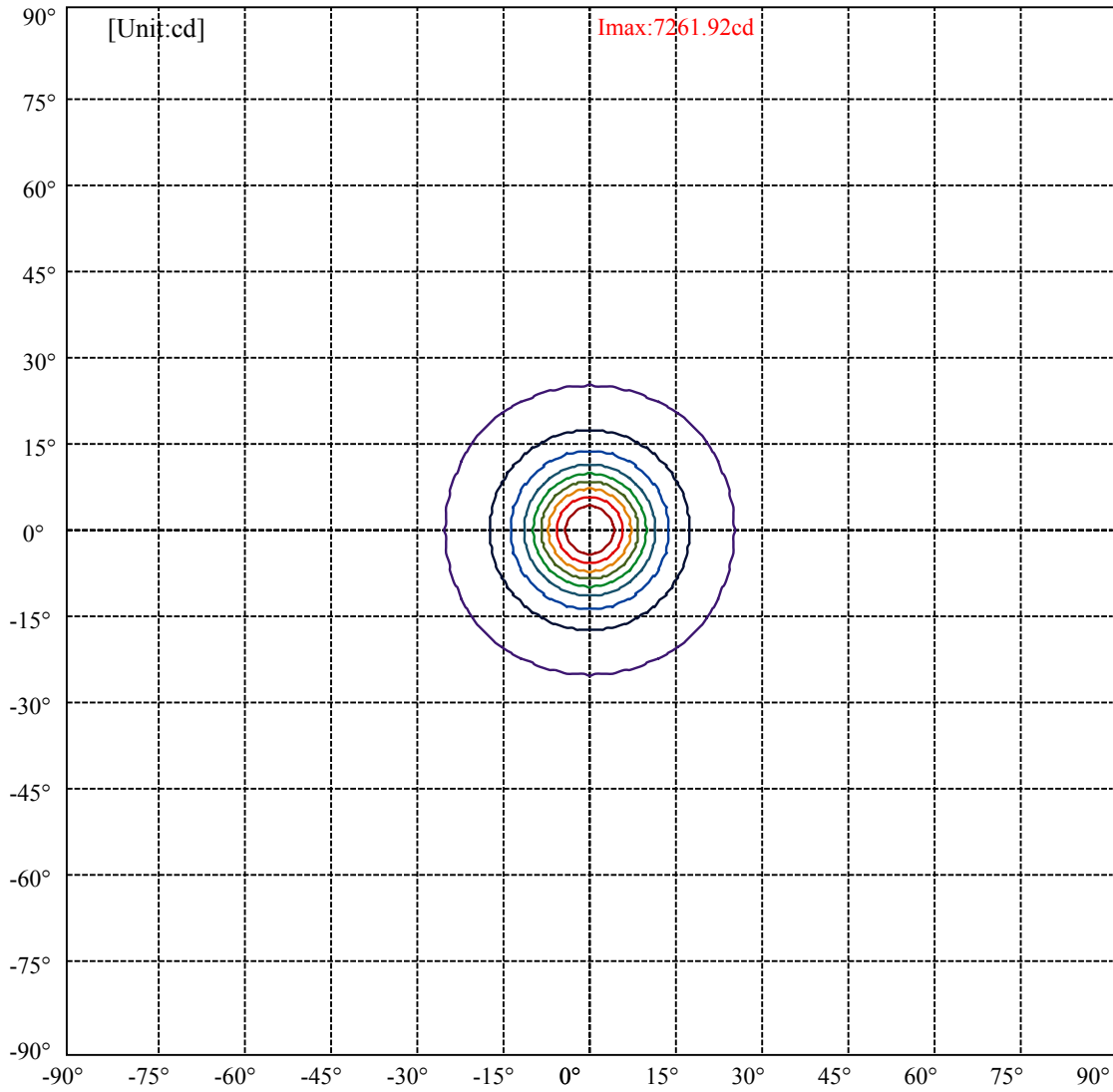
Field angle(10%Imax):C0/180Left:24.8 Right:24.8

:C90/270Left:24.8 Right:24.8

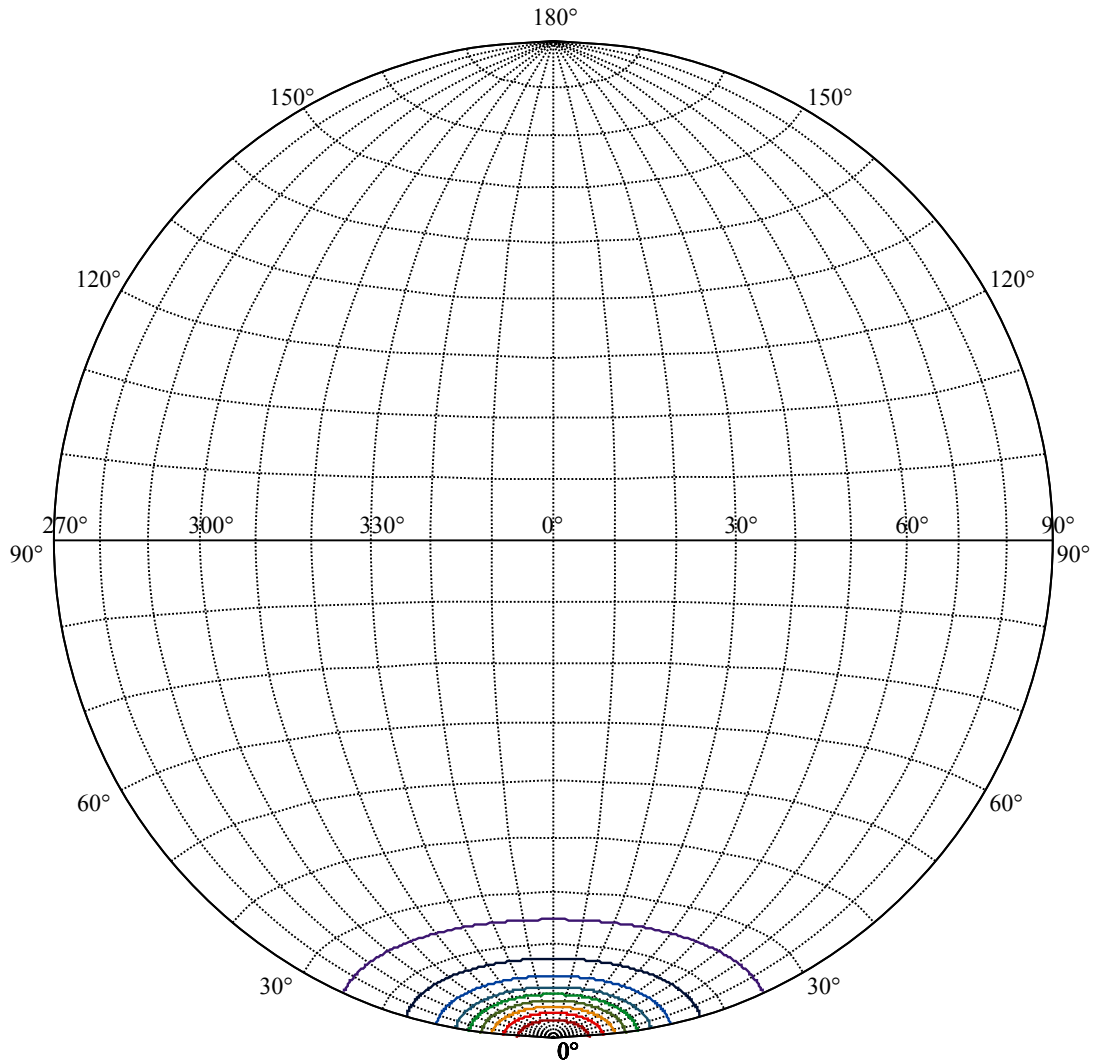
Beam Angle(50%Imax):C0/180Left:9.7 Right:9.7

:C90/270Left:9.7 Right:9.7





(10%Imax) 726.192	—
(20%Imax) 1452.38	—
(30%Imax) 2178.58	—
(40%Imax) 2904.77	—
(50%Imax) 3630.96	—
(60%Imax) 4357.15	—
(70%Imax) 5083.35	—
(80%Imax) 5809.54	—
(90%Imax) 6535.73	—



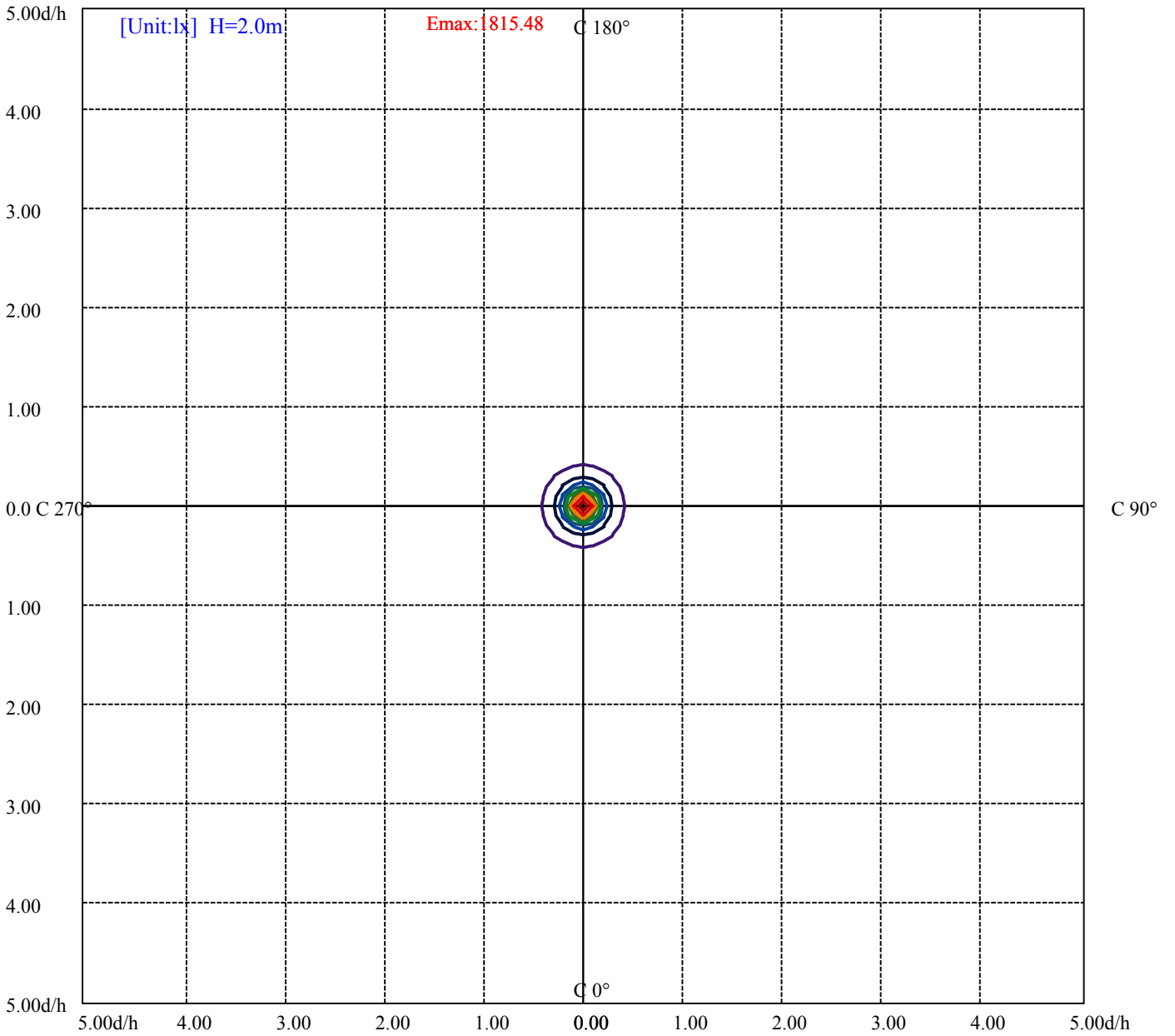
House

[Unit:cd]

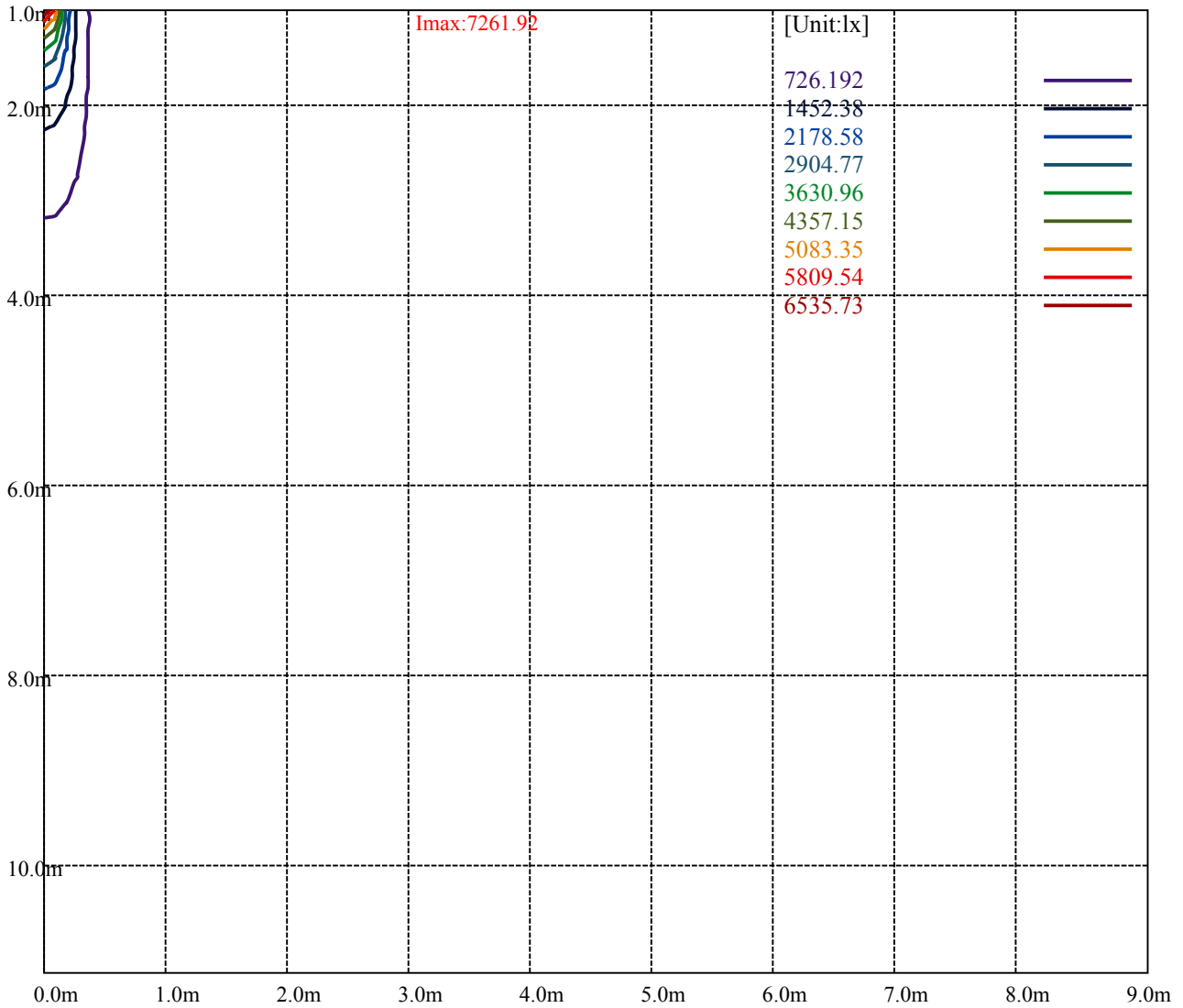
Road

Imax:7261.92

(10%Imax)	726.192	—
(20%Imax)	1452.38	—
(30%Imax)	2178.58	—
(40%Imax)	2904.77	—
(50%Imax)	3630.96	—
(60%Imax)	4357.15	—
(70%Imax)	5083.35	—
(80%Imax)	5809.54	—
(90%Imax)	6535.73	—



- (10%Emax) 181.548
- (20%Emax) 363.095
- (30%Emax) 544.6425
- (40%Emax) 726.1925
- (50%Emax) 907.74
- (60%Emax) 1089.287
- (70%Emax) 1270.835
- (80%Emax) 1452.382
- (90%Emax) 1633.93



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

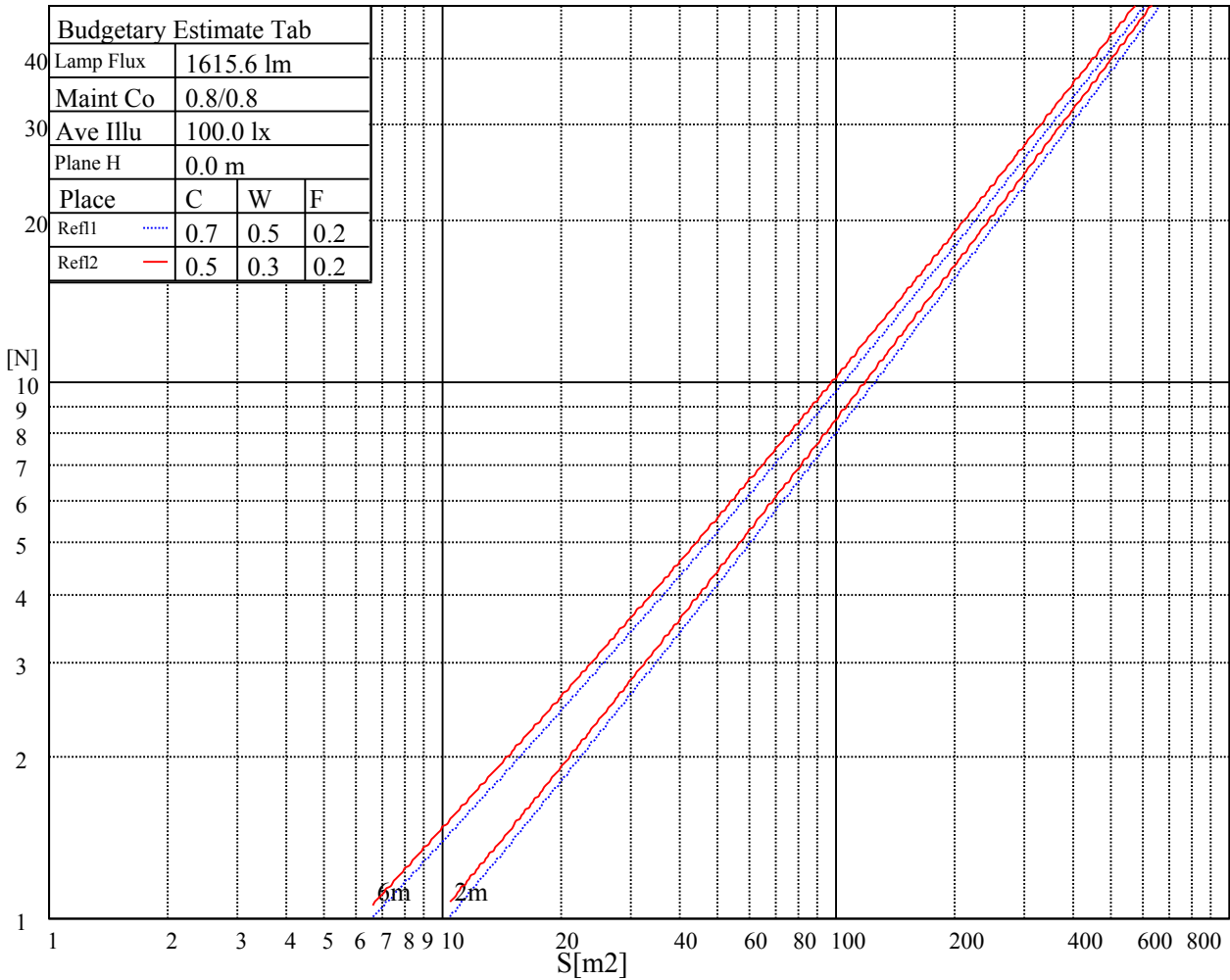
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

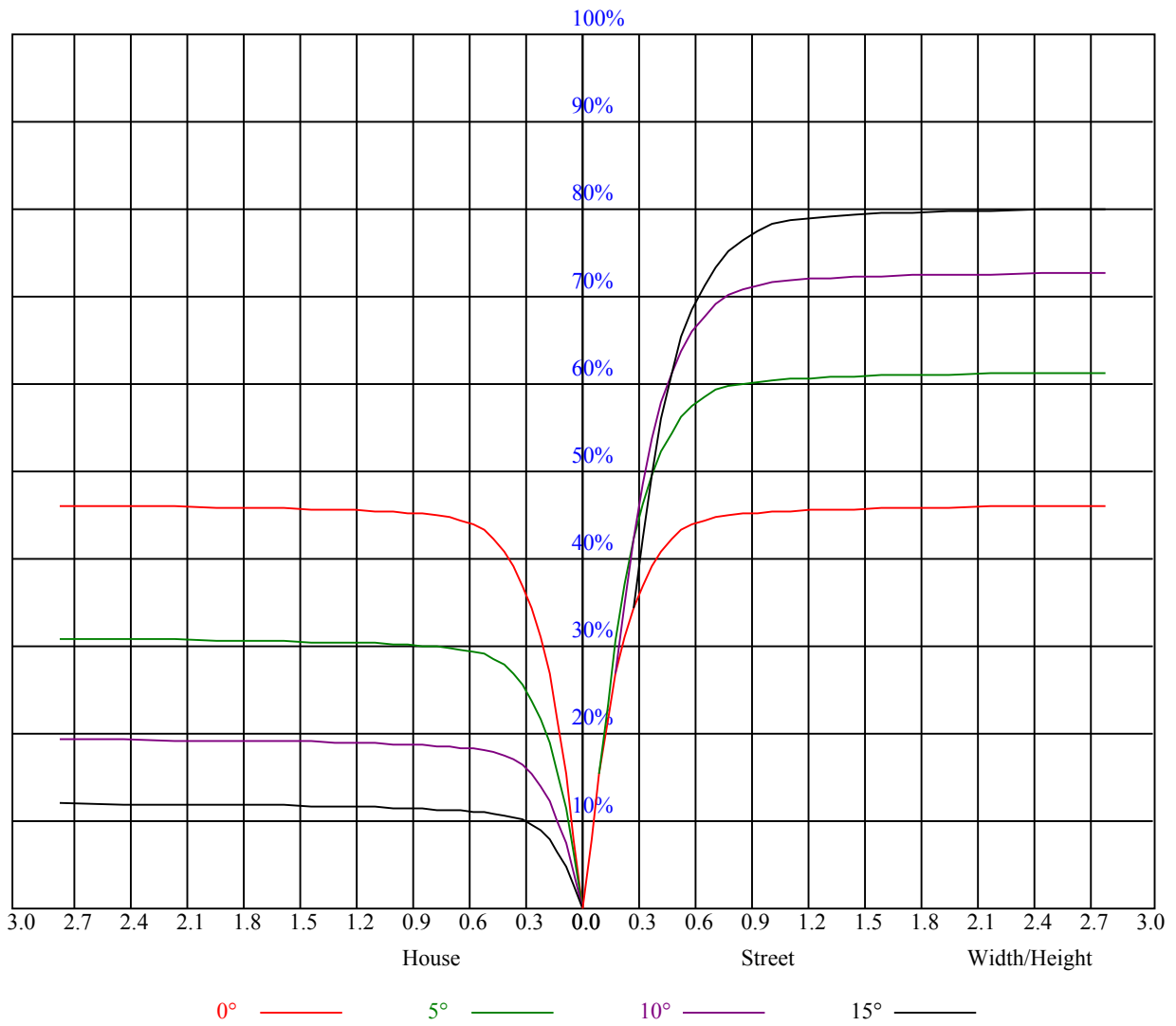


Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	3H	非数字	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	
	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	
8H	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	1.11	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	0.99	0.98	0.97	0.96	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	0.85
3	0.94	0.90	0.87	0.92	0.89	0.86	0.90	0.87	0.85	0.88	0.86	0.84	0.86	0.84	0.82	0.81
4	0.89	0.85	0.82	0.88	0.85	0.82	0.87	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	0.77	0.81	0.78	0.76	0.75
6	0.82	0.78	0.75	0.82	0.78	0.75	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	0.75	0.72	0.78	0.74	0.72	0.77	0.74	0.71	0.76	0.73	0.71	0.70
8	0.77	0.72	0.69	0.76	0.72	0.69	0.75	0.72	0.69	0.74	0.71	0.69	0.74	0.71	0.69	0.68
9	0.74	0.70	0.67	0.74	0.70	0.67	0.73	0.69	0.67	0.72	0.69	0.67	0.72	0.69	0.66	0.65
10	0.72	0.68	0.65	0.71	0.68	0.65	0.71	0.67	0.65	0.70	0.67	0.65	0.70	0.67	0.64	0.64



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	7264.55	7140.56	6972.84	6633.52	6247.15	5779.97	5121.81	4592.08	4051.83
45.0	7267.32	7260.68	7168.79	6970.07	6717.10	6377.79	5831.45	5329.94	4792.46
90.0	7237.43	7138.34	6888.15	6608.61	6244.38	5679.78	5184.36	4642.45	4118.25
135.0	7278.39	7205.88	7104.03	6893.13	6518.94	6125.93	5665.94	5022.73	4507.39
180.0	7264.55	7257.91	7208.64	7085.21	6836.11	6542.74	6161.35	5709.67	5054.84
225.0	7267.32	7203.66	7039.82	6830.03	6516.17	6115.41	5494.90	4933.06	4382.29
270.0	7237.43	7283.92	7242.41	7133.36	6944.61	6561.56	6170.76	5676.46	4997.27
315.0	7278.39	7257.36	7182.07	6945.71	6642.38	6272.61	5690.85	5150.04	4593.19
360.0	7264.55	7140.56	6972.84	6633.52	6247.15	5779.97	5121.81	4592.08	4051.83
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	3566.93	3026.13	2658.02	2349.70	2090.10	1823.85	1647.82	1491.17	1322.90
45.0	4142.05	3652.73	3111.37	2744.93	2426.09	2157.63	1884.18	1700.96	1544.86
90.0	3512.13	3083.14	2727.77	2421.66	2105.04	1904.66	1725.87	1531.58	1403.71
135.0	3997.03	3523.20	3002.32	2647.51	2359.67	2058.55	1855.95	1642.84	1496.15
180.0	4505.17	3997.58	3405.85	2990.15	2632.01	2319.26	2015.37	1775.13	1609.07
225.0	3750.70	3276.32	2788.66	2464.84	2183.09	1947.28	1708.71	1549.85	1403.71
270.0	4447.61	3922.85	3437.96	2909.88	2558.39	2260.59	2006.51	1754.65	1589.15
315.0	4050.72	3558.07	3016.16	2653.60	2349.70	2100.06	1826.61	1641.73	1489.51
360.0	3566.93	3026.13	2658.02	2349.70	2090.10	1823.85	1647.82	1491.17	1322.90
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1089.41	1089.41	1006.61	932.54	865.12	782.15	706.59	633.36	562.17
45.0	1409.25	1264.22	1160.16	1067.16	990.22	901.10	837.44	771.57	680.79
90.0	1092.74	1092.74	1071.37	989.28	906.08	844.42	775.89	703.05	612.60
135.0	1369.95	1254.26	1128.05	1038.93	963.65	895.57	819.18	751.65	680.24
180.0	1463.49	1331.20	1190.05	1095.95	1010.70	937.63	850.73	786.52	716.77
225.0	1093.57	1093.57	1050.00	968.74	880.90	820.23	750.65	660.70	589.35
270.0	1408.14	1281.38	1161.26	1049.45	975.28	899.99	825.27	736.70	655.33
315.0	1237.10	1099.99	1099.99	991.77	914.39	848.24	752.75	676.09	604.79
360.0	1089.41	1089.41	1006.61	932.54	865.12	782.15	706.59	633.36	562.17
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	474.82	410.00	347.18	287.23	218.70	171.98	136.83	114.31	98.36
45.0	605.51	534.11	448.31	380.22	317.12	288.89	288.89	152.33	122.50
90.0	540.31	470.89	401.76	319.11	260.49	205.09	147.74	116.69	96.48
135.0	587.25	516.95	448.31	365.28	304.94	290.00	218.98	139.88	113.42
180.0	643.71	556.80	486.50	405.69	341.48	294.43	294.43	161.25	127.04
225.0	519.05	434.42	364.61	299.52	244.44	183.22	145.14	119.18	101.46
270.0	583.37	511.41	422.85	360.30	298.85	283.91	213.94	137.66	108.94
315.0	515.95	450.14	381.61	320.83	248.32	199.11	157.98	126.59	104.73
360.0	474.82	410.00	347.18	287.23	218.70	171.98	136.83	114.31	98.36
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	87.96	76.39	68.31	59.06	52.70	46.94	42.01	36.59	32.88
45.0	100.30	88.95	78.88	69.91	60.11	53.25	47.44	41.02	36.70
90.0	85.41	75.67	67.64	58.45	51.70	45.83	41.02	35.81	32.22
135.0	94.38	83.42	73.62	65.21	57.62	49.43	43.90	39.25	34.10
180.0	104.67	88.62	78.55	69.52	61.89	52.92	46.61	41.24	36.53
225.0	87.79	78.60	70.19	60.67	53.75	47.60	41.18	36.81	32.16
270.0	96.09	83.97	75.11	67.42	60.61	52.31	46.44	41.46	37.14
315.0	94.43	82.81	74.45	66.92	57.79	51.42	45.89	41.18	36.04
360.0	87.96	76.39	68.31	59.06	52.70	46.94	42.01	36.59	32.88

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	29.84	27.12	24.96	22.75	21.26	19.98	18.65	17.77	16.83
45.0	32.27	29.17	26.63	24.52	22.25	20.81	19.60	18.54	17.44
90.0	29.17	26.07	24.08	22.42	20.65	19.48	18.27	17.44	16.66
135.0	30.72	27.84	24.91	22.97	21.37	19.71	18.60	17.71	16.83
180.0	31.77	28.67	25.46	23.30	21.59	19.82	18.65	17.60	16.77
225.0	29.12	26.57	24.36	22.25	20.81	19.60	18.54	17.38	16.61
270.0	32.44	29.45	26.90	24.74	22.58	21.09	19.60	18.54	17.66
315.0	32.55	29.61	26.51	24.52	22.86	21.42	19.87	18.88	17.93
360.0	29.84	27.12	24.96	22.75	21.26	19.98	18.65	17.77	16.83
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	16.16	15.55	14.89	14.45	14.06	13.67	13.28	12.95	12.62
45.0	16.72	16.00	15.28	14.72	14.28	13.78	13.45	13.01	12.79
90.0	16.05	15.50	14.83	14.39	14.00	13.56	13.23	12.95	12.68
135.0	16.00	15.44	14.89	14.28	13.89	13.51	13.23	12.79	12.57
180.0	15.89	15.22	14.72	14.23	13.73	13.34	13.06	12.73	12.51
225.0	15.94	15.33	14.78	14.23	13.78	13.51	13.17	12.84	12.57
270.0	16.72	16.05	15.44	14.89	14.34	13.89	13.56	13.23	12.84
315.0	16.94	16.27	15.50	15.00	14.50	14.06	13.67	13.23	12.90
360.0	16.16	15.55	14.89	14.45	14.06	13.67	13.28	12.95	12.62
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	12.34	12.01	11.73	11.46	11.06	10.68	10.35	9.96	9.74
45.0	12.45	12.18	11.85	11.57	11.29	10.96	10.57	10.24	9.96
90.0	12.34	12.07	11.73	11.40	11.07	10.79	10.41	10.07	9.80
135.0	12.29	12.01	11.73	11.40	11.13	10.79	10.46	10.13	9.85
180.0	12.29	11.96	11.73	11.40	11.18	10.85	10.57	10.24	9.91
225.0	12.29	12.01	11.68	11.40	11.13	10.79	10.41	10.07	9.80
270.0	12.57	12.29	11.96	11.68	11.35	10.96	10.68	10.41	10.02
315.0	12.62	12.29	11.90	11.62	11.24	10.90	10.57	10.19	9.91
360.0	12.34	12.01	11.73	11.46	10.96	10.68	10.35	9.96	9.74
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	9.41	9.13	8.86	8.64	8.47	8.19	8.03	7.80	7.64
45.0	9.69	9.35	9.13	8.80	8.64	8.41	8.14	7.97	7.80
90.0	9.58	9.24	9.02	8.80	8.58	8.36	8.14	7.92	7.75
135.0	9.58	9.35	9.08	8.86	8.69	8.47	8.19	8.03	7.86
180.0	9.69	9.41	9.13	8.91	8.69	8.47	8.25	8.08	7.86
225.0	9.47	9.24	8.97	8.75	8.52	8.30	8.08	7.86	7.75
270.0	9.74	9.47	9.24	8.97	8.75	8.52	8.36	8.08	7.92
315.0	9.69	9.35	9.13	8.86	8.69	8.41	8.19	7.97	7.80
360.0	9.41	9.13	8.86	8.64	8.47	8.19	8.03	7.80	7.64
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	7.47	7.31	7.14	7.03	6.86	6.81	6.64	6.53	6.42
45.0	7.58	7.47	7.31	7.09	6.97	6.86	6.75	6.64	6.42
90.0	7.58	7.47	7.25	7.09	6.97	6.86	6.70	6.59	6.42
135.0	7.64	7.47	7.31	7.14	6.97	6.86	6.81	6.64	6.48
180.0	7.64	7.47	7.36	7.20	7.03	6.92	6.75	6.64	6.53
225.0	7.53	7.42	7.31	7.09	6.97	6.86	6.75	6.59	6.42
270.0	7.75	7.58	7.42	7.25	7.14	6.97	6.86	6.75	6.59
315.0	7.58	7.42	7.31	7.20	7.03	6.92	6.81	6.64	6.48
360.0	7.47	7.31	7.14	7.03	6.86	6.81	6.64	6.53	6.42

Intensity data(cd)

C/γ(°)	90.0
0.0	6.37
45.0	6.37
90.0	6.42
135.0	6.42
180.0	6.37
225.0	6.37
270.0	6.42
315.0	6.42
360.0	6.37