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Address: Jin Ou Road, Jiangmen City, Guangdong, China

SOTEN

LumCAT: D1015

Luminaire:

Report No:

Voltage(V): 220.8000

Test No:

Current(A): 0.0330

LampCAT: OSRAM2835 3000K 80RA

Power (W): 6.7300

Lamp flux(lm): -1.0

PF: 0.9180

Number of Lamps: 1

Ballast type: HTU-12W-01-0150-10

Length(mm): 100

Width(mm): 100

Phm Type: C

Height(mm): 58

Photometric Results

Lumens(lm): 440.08

Efficiency(%): 0.00%

Lumens(lm)/Power(W): 65.39

Central intensity(cd): 237.133

Maximum intensity(cd): 237.133

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=84.1

[C90/270]Total=84.1

Field angle(10%Imax): [C0/180]Total=128.4

[C90/270]Total=128.4

Maximum s/h(1/2): C0_180=1.16 C90_270=1.16

Maximum s/h(1/4): C0_180=1.65 C90_270=1.19

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 90.858%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	237.133	.000	.000	.000%	.000%
1.0	237.092	.227	.227	.000%	.000%
2.0	236.825	.680	.907	.000%	.000%
3.0	236.524	1.132	2.039	.000%	.000%
4.0	236.036	1.582	3.621	.000%	.000%
5.0	235.491	2.028	5.650	.000%	.000%
6.0	234.766	2.471	8.121	.000%	.000%
7.0	233.867	2.909	11.030	.000%	.000%
8.0	232.927	3.341	14.370	.000%	.000%
9.0	231.825	3.767	18.137	.000%	.000%
10.0	230.456	4.183	22.320	.000%	.000%
11.0	229.146	4.592	26.913	.000%	.000%
12.0	227.690	4.994	31.907	.000%	.000%
13.0	226.025	5.384	37.291	.000%	.000%
14.0	224.209	5.763	43.054	.000%	.000%
15.0	222.353	6.131	49.185	.000%	.000%
16.0	220.358	6.487	55.672	.000%	.000%
17.0	218.223	6.830	62.502	.000%	.000%
18.0	216.083	7.161	69.662	.000%	.000%
19.0	213.687	7.477	77.139	.000%	.000%
20.0	211.257	7.778	84.917	.000%	.000%
21.0	208.711	8.064	92.981	.000%	.000%
22.0	206.048	8.335	101.316	.000%	.000%
23.0	203.467	8.593	109.909	.000%	.000%
24.0	200.520	8.833	118.741	.000%	.000%
25.0	197.609	9.053	127.794	.000%	.000%
26.0	194.917	9.266	137.060	.000%	.000%
27.0	191.814	9.461	146.521	.000%	.000%
28.0	188.276	9.623	156.144	.000%	.000%
29.0	184.941	9.764	165.909	.000%	.000%
30.0	180.718	9.873	175.781	.000%	.000%
31.0	176.455	9.940	185.721	.000%	.000%
32.0	172.296	9.991	195.712	.000%	.000%
33.0	167.272	10.004	205.716	.000%	.000%
34.0	162.481	9.979	215.695	.000%	.000%
35.0	157.110	9.925	225.621	.000%	.000%
36.0	152.603	9.861	235.482	.000%	.000%
37.0	146.785	9.764	245.246	.000%	.000%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	141.223	9.613	254.860	.000%	.000%
39.0	135.863	9.458	264.317	.000%	.000%
40.0	129.605	9.259	273.576	.000%	.000%
41.0	124.407	9.045	282.621	.000%	.000%
42.0	118.723	8.833	291.454	.000%	.000%
43.0	113.021	8.584	300.039	.000%	.000%
44.0	107.517	8.324	308.363	.000%	.000%
45.0	101.739	8.042	316.405	.000%	.000%
46.0	96.246	7.743	324.147	.000%	.000%
47.0	90.997	7.447	331.595	.000%	.000%
48.0	85.678	7.142	338.737	.000%	.000%
49.0	80.342	6.818	345.554	.000%	.000%
50.0	75.933	6.516	352.070	.000%	.000%
51.0	70.980	6.216	358.286	.000%	.000%
52.0	65.945	5.876	364.161	.000%	.000%
53.0	61.751	5.555	369.716	.000%	.000%
54.0	57.233	5.244	374.960	.000%	.000%
55.0	52.923	4.917	379.877	.000%	.000%
56.0	48.857	4.599	384.477	.000%	.000%
57.0	44.942	4.289	388.765	.000%	.000%
58.0	41.032	3.976	392.741	.000%	.000%
59.0	37.778	3.684	396.425	.000%	.000%
60.0	34.692	3.424	399.849	.000%	.000%
61.0	31.461	3.157	403.006	.000%	.000%
62.0	28.811	2.904	405.910	.000%	.000%
63.0	26.305	2.681	408.591	.000%	.000%
64.0	24.078	2.472	411.063	.000%	.000%
65.0	22.065	2.284	413.347	.000%	.000%
66.0	20.423	2.120	415.467	.000%	.000%
67.0	18.857	1.975	417.442	.000%	.000%
68.0	17.674	1.851	419.292	.000%	.000%
69.0	16.844	1.761	421.053	.000%	.000%
70.0	16.038	1.689	422.742	.000%	.000%
71.0	15.418	1.626	424.368	.000%	.000%
72.0	14.727	1.567	425.935	.000%	.000%
73.0	13.927	1.498	427.434	.000%	.000%
74.0	13.150	1.423	428.857	.000%	.000%
75.0	12.355	1.348	430.205	.000%	.000%

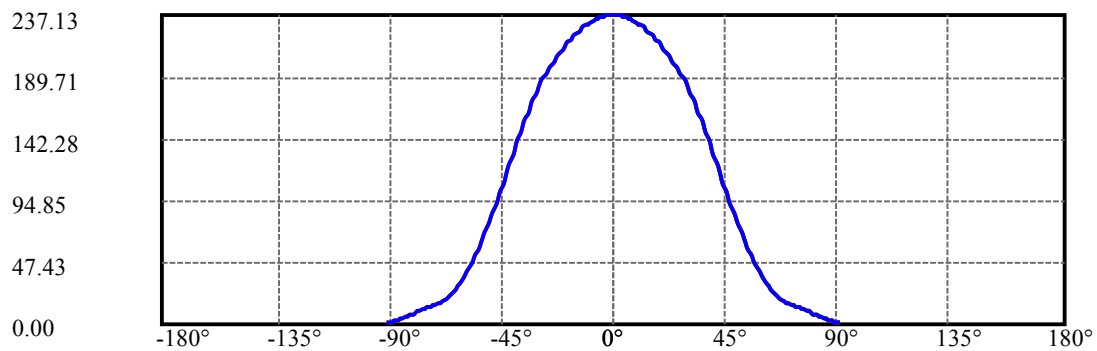
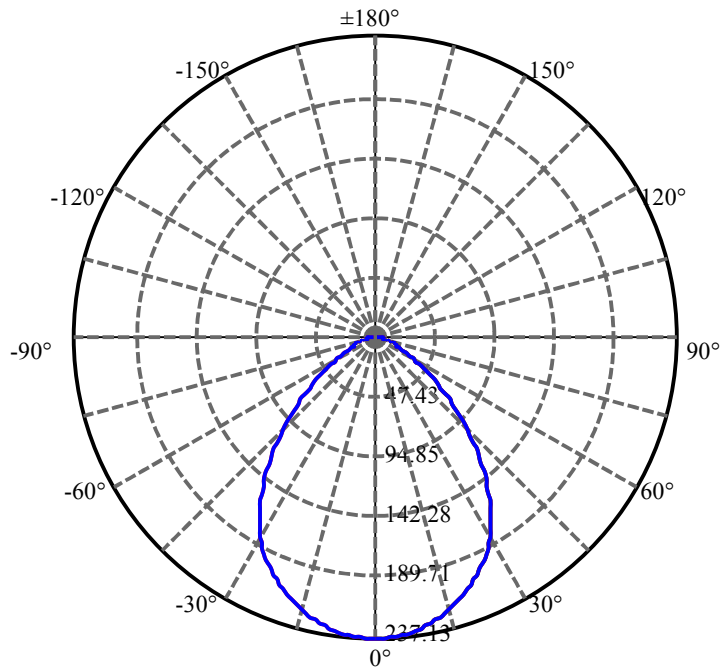
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	11.520	1.267	431.472	.000%	.000%
77.0	10.650	1.182	432.654	.000%	.000%
78.0	9.814	1.095	433.750	.000%	.000%
79.0	8.904	1.006	434.755	.000%	.000%
80.0	8.086	.916	435.671	.000%	.000%
81.0	7.181	.826	436.497	.000%	.000%
82.0	6.334	.733	437.230	.000%	.000%
83.0	5.487	.643	437.872	.000%	.000%
84.0	4.629	.551	438.423	.000%	.000%
85.0	3.782	.459	438.882	.000%	.000%
86.0	2.999	.371	439.253	.000%	.000%
87.0	2.256	.288	439.541	.000%	.000%
88.0	1.746	.219	439.760	.000%	.000%
89.0	1.433	.174	439.934	.000%	.000%
90.0	1.293	.149	440.084	.000%	.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	175.78	N.A.	39.94%
0-40	273.58	N.A.	62.16%
0-60	399.85	N.A.	90.86%
0-90	439.93	N.A.	99.97%
0-120	439.93	N.A.	99.97%
0-180	440.08	N.A.	100.00%
60-90	43.51	N.A.	9.89%
90-120	0.00	N.A.	0.00%
90-130	0.00	N.A.	0.00%
90-150	0.00	N.A.	0.00%
90-180	0.00	N.A.	0.00%
0-50.00	352.07	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	22.32
10-20	62.60
20-30	90.86
30-40	97.79
40-50	78.49
50-60	47.78
60-70	22.89
70-80	12.93
80-90	4.26
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:

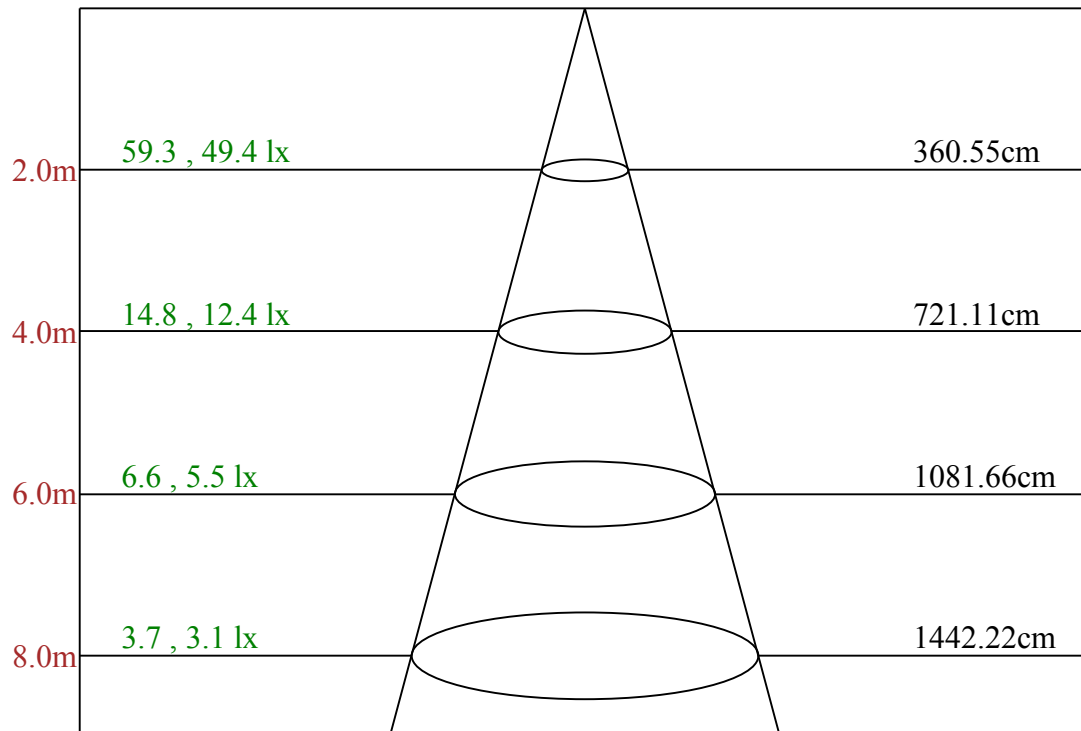
C90/C270:

Field angle(10%Imax):C0/180Left:64.2 Right:64.2

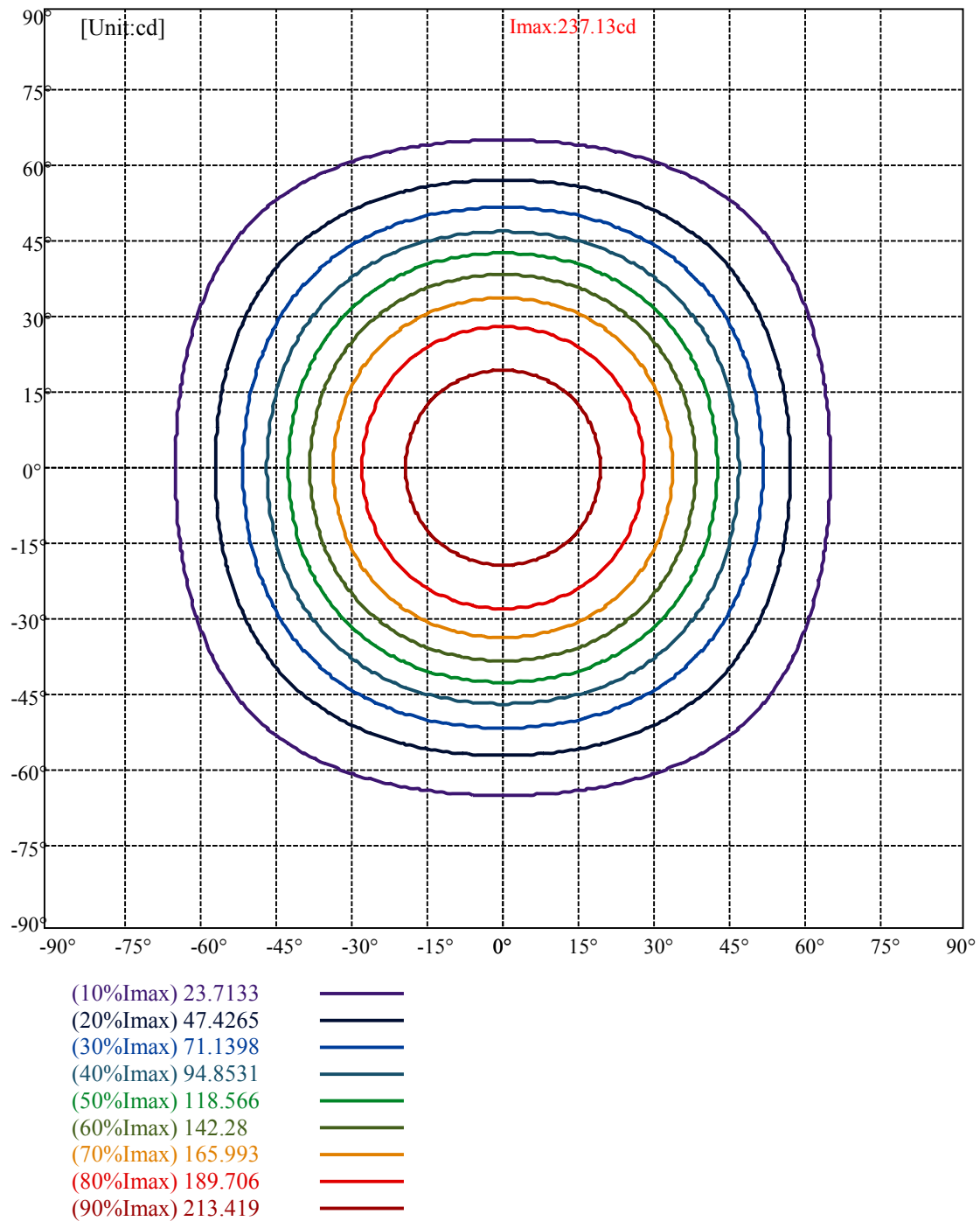
:C90/270Left:64.2 Right:64.2

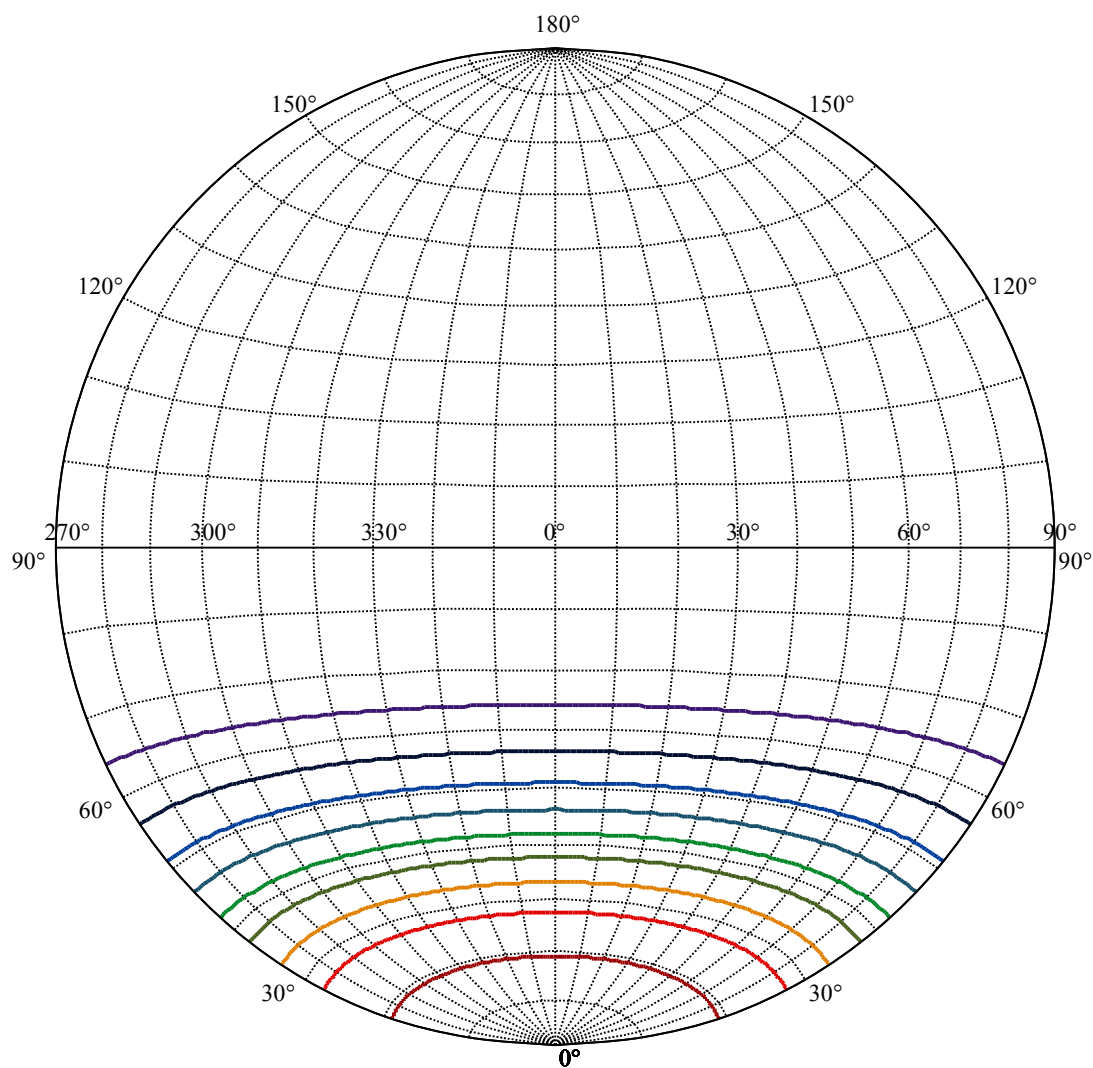
Beam Angle(50%Imax):C0/180Left:42.0 Right:42.0

:C90/270Left:42.0 Right:42.0



Max , Ave Beam angle of C0plane84.06





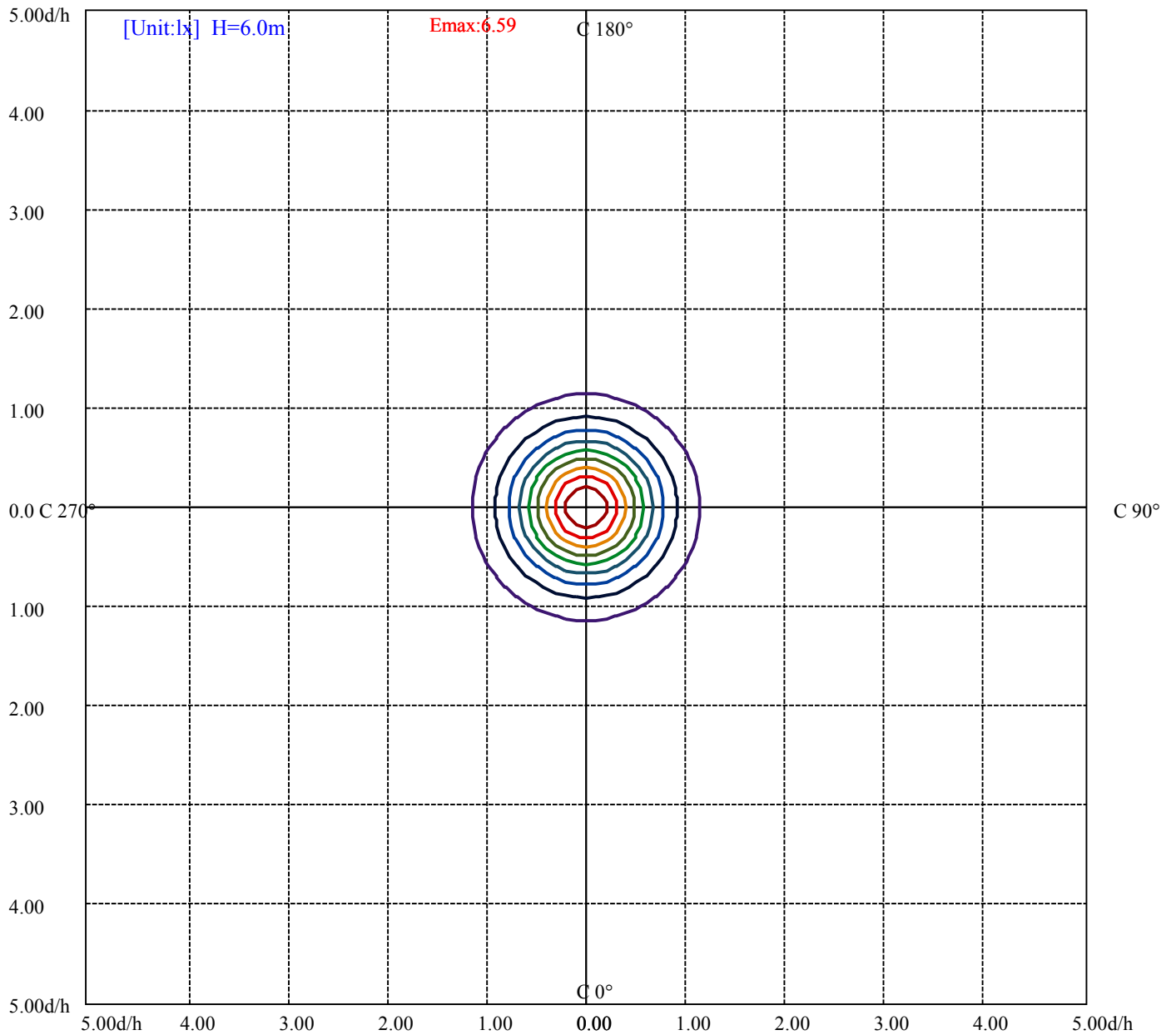
House

[Unit:cd]

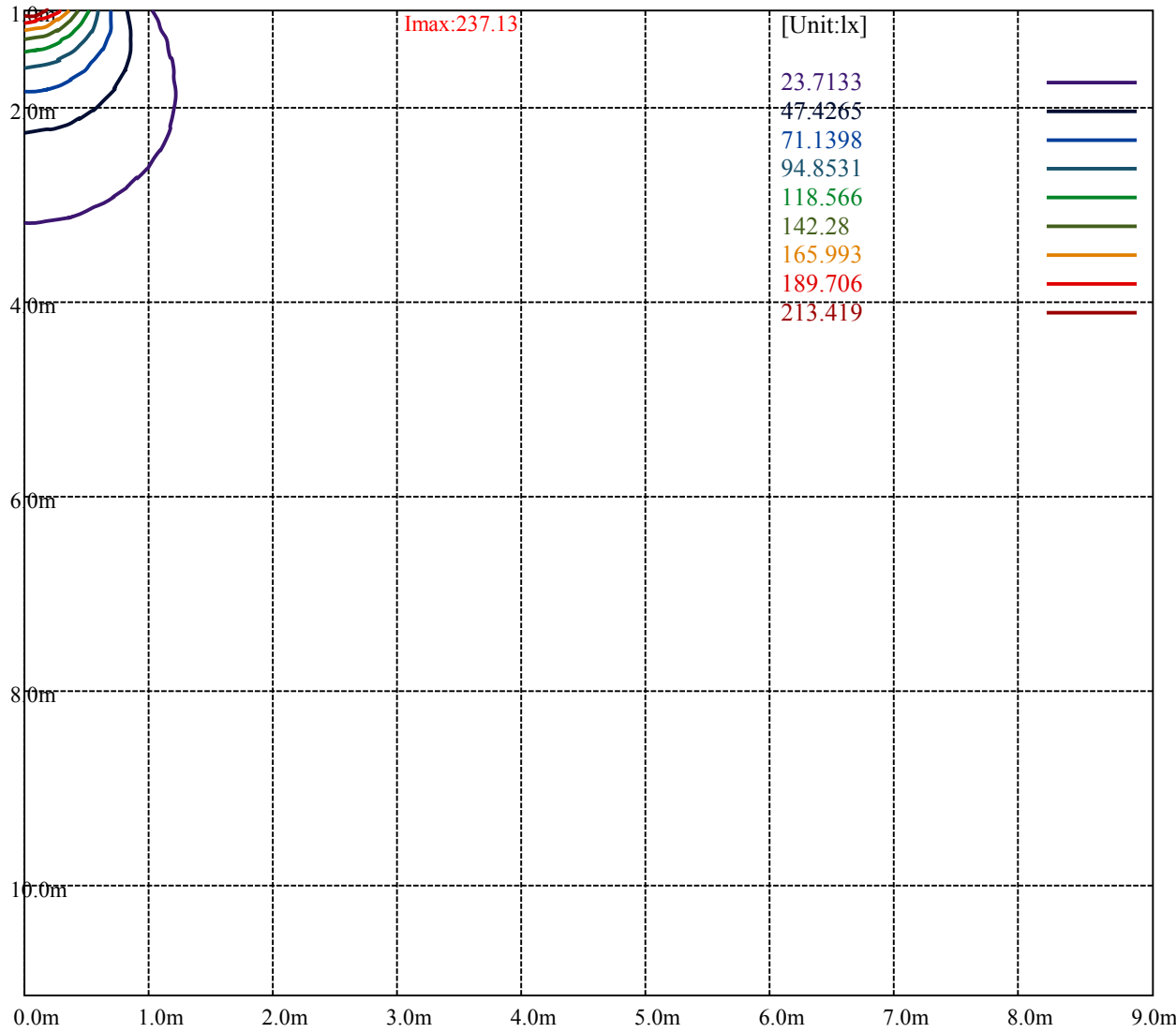
Road

Imax:237.13
(10%Imax) 23.7133
(20%Imax) 47.4265
(30%Imax) 71.1398
(40%Imax) 94.8531
(50%Imax) 118.566
(60%Imax) 142.28
(70%Imax) 165.993
(80%Imax) 189.706
(90%Imax) 213.419





(10%Emax) 0.6587028	—
(20%Emax) 1.317403	—
(30%Emax) 1.976106	—
(40%Emax) 2.634809	—
(50%Emax) 3.2935	—
(60%Emax) 3.952222	—
(70%Emax) 4.610917	—
(80%Emax) 5.269611	—
(90%Emax) 5.928306	—



Luminance Table

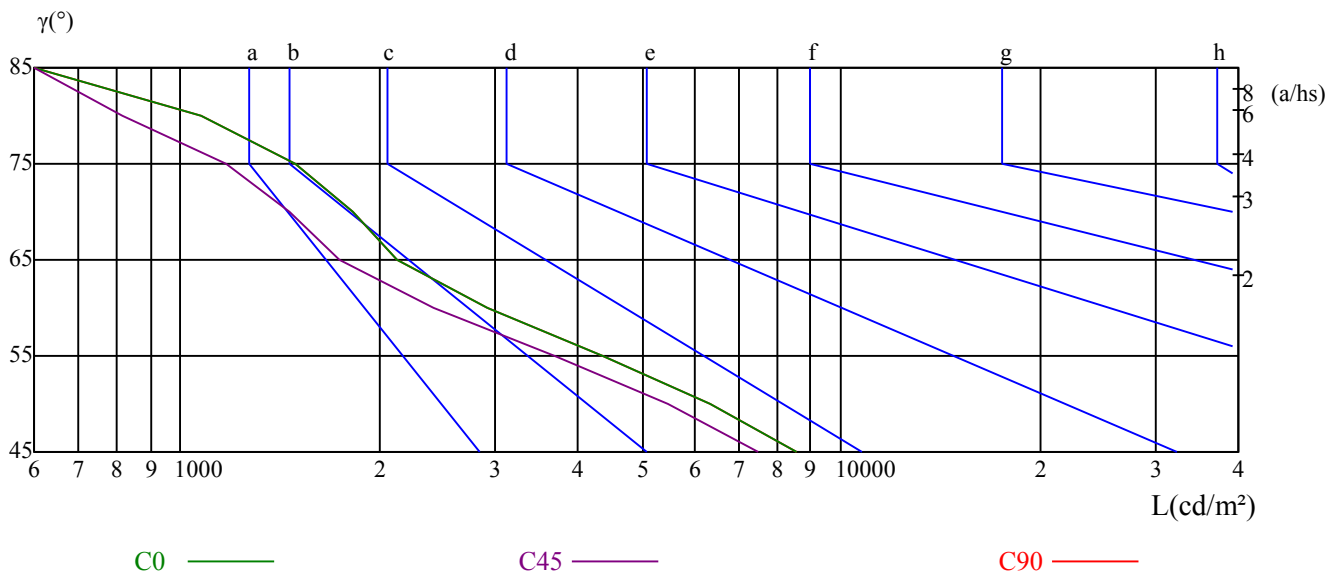
γ	45	50	55	60	65	70	75	80	85
C0	8583	6341	4355	2907	2133	1821	1496	1071	574
C45	7490	5453	3687	2421	1744	1459	1171	816	423
C90	8583	6341	4355	2907	2133	1821	1496	1071	574

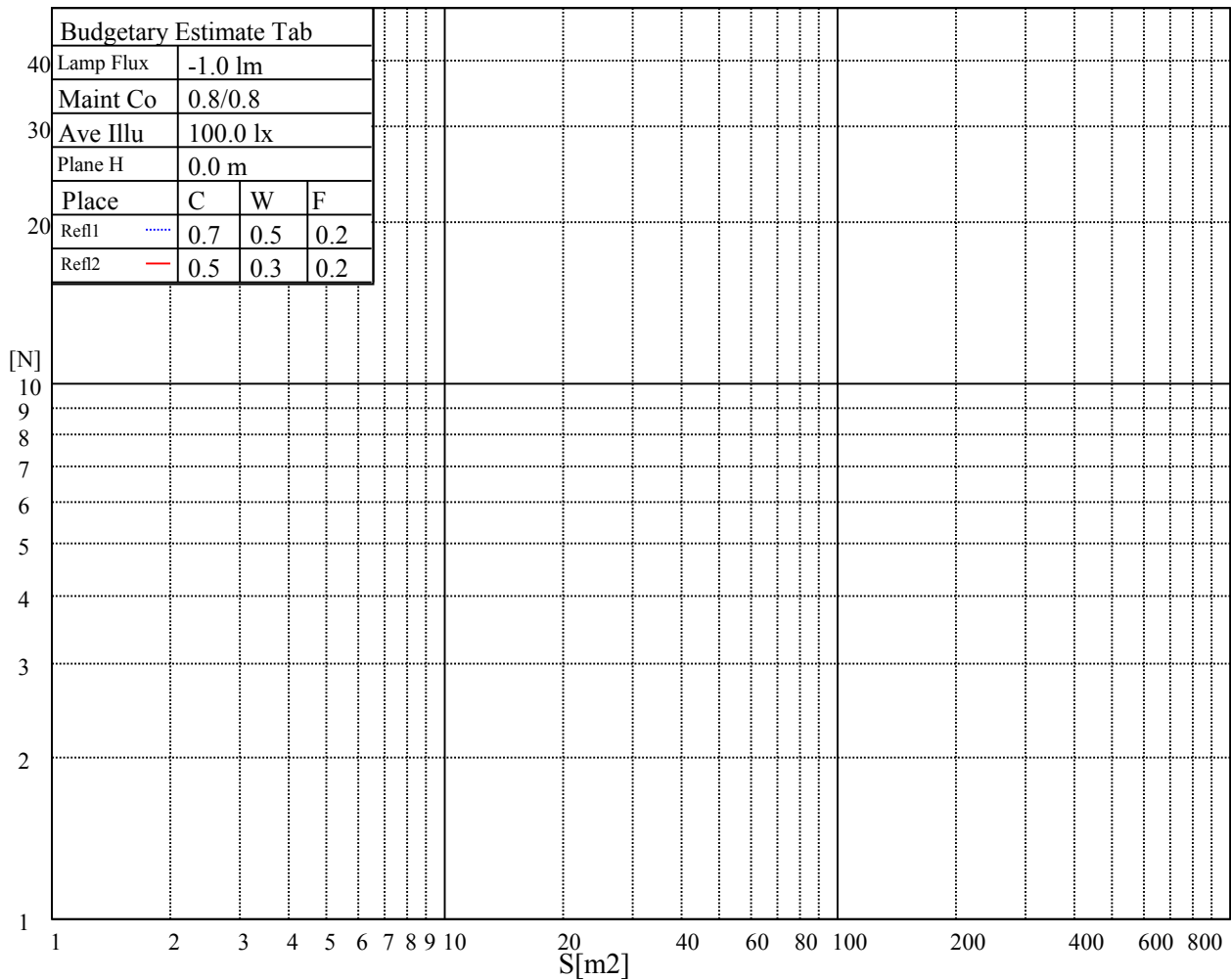
L横(65)	L纵(65)	L45(65)	L横(75)	L纵(75)	L45(75)	L横(85)	L纵(85)	L45(85)
4619	4619	4619	4531	4531	4531	4139	4139	4139

Glare Table

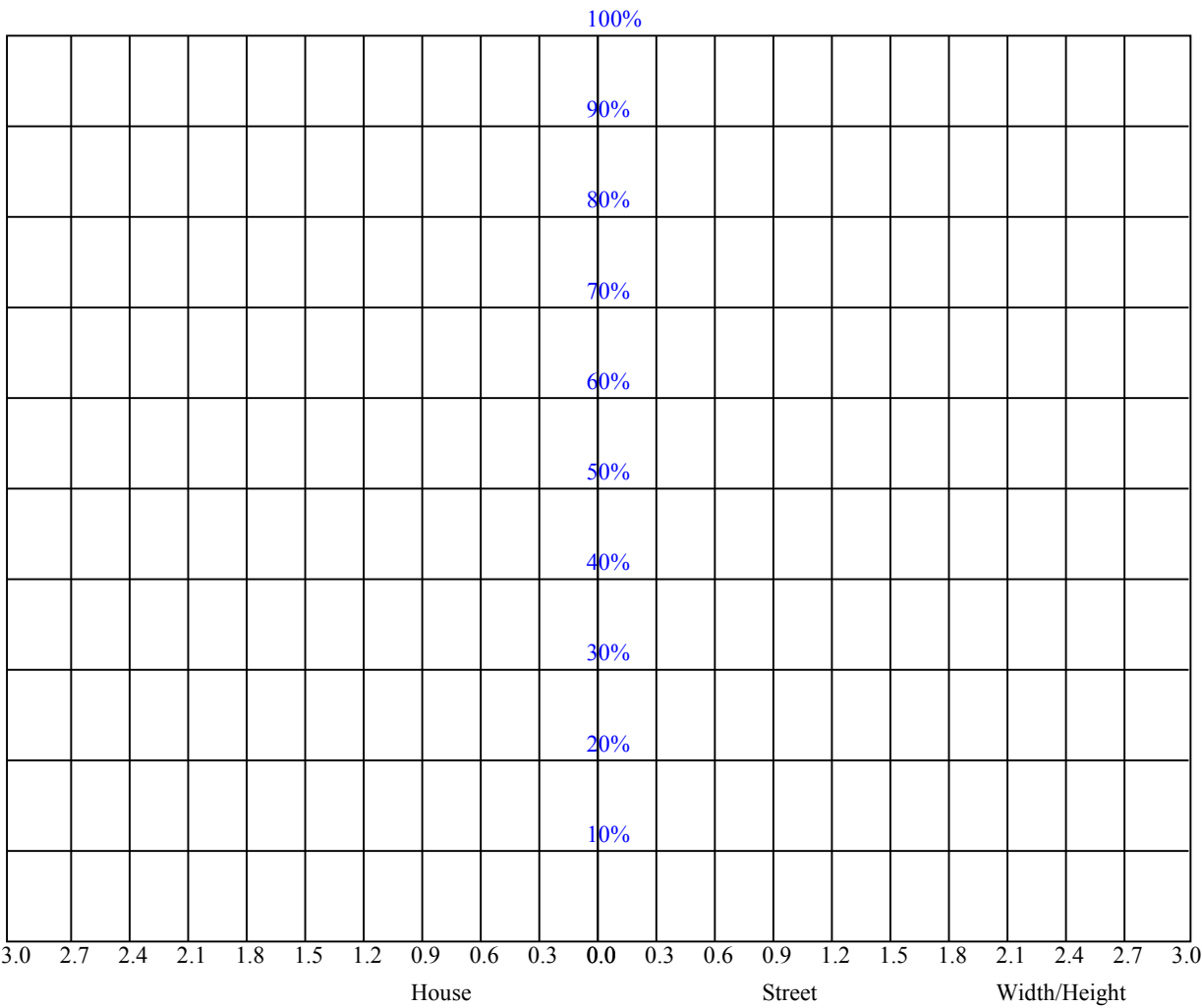
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve





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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



Intensity data(cd)

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C/γ(°)	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0
0.0	237.13	237.09	236.83	236.52	236.04	235.49	234.77	233.87	232.93
45.0	237.13	237.09	236.83	236.52	236.04	235.49	234.77	233.87	232.93
90.0	237.13	237.09	236.83	236.52	236.04	235.49	234.77	233.87	232.93
135.0	237.13	237.09	236.83	236.52	236.04	235.49	234.77	233.87	232.93
180.0	237.13	237.09	236.83	236.52	236.04	235.49	234.77	233.87	232.93
225.0	237.13	237.09	236.83	236.52	236.04	235.49	234.77	233.87	232.93
270.0	237.13	237.09	236.83	236.52	236.04	235.49	234.77	233.87	232.93
315.0	237.13	237.09	236.83	236.52	236.04	235.49	234.77	233.87	232.93
360.0	237.13	237.09	236.83	236.52	236.04	235.49	234.77	233.87	232.93
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	231.83	230.46	229.15	227.69	226.02	224.21	222.35	220.36	218.22
45.0	231.83	230.46	229.15	227.69	226.02	224.21	222.35	220.36	218.22
90.0	231.83	230.46	229.15	227.69	226.02	224.21	222.35	220.36	218.22
135.0	231.83	230.46	229.15	227.69	226.02	224.21	222.35	220.36	218.22
180.0	231.83	230.46	229.15	227.69	226.02	224.21	222.35	220.36	218.22
225.0	231.83	230.46	229.15	227.69	226.02	224.21	222.35	220.36	218.22
270.0	231.83	230.46	229.15	227.69	226.02	224.21	222.35	220.36	218.22
315.0	231.83	230.46	229.15	227.69	226.02	224.21	222.35	220.36	218.22
360.0	231.83	230.46	229.15	227.69	226.02	224.21	222.35	220.36	218.22
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	216.08	213.69	211.26	208.71	206.05	203.47	200.52	197.61	194.92
45.0	216.08	213.69	211.26	208.71	206.05	203.47	200.52	197.61	194.92
90.0	216.08	213.69	211.26	208.71	206.05	203.47	200.52	197.61	194.92
135.0	216.08	213.69	211.26	208.71	206.05	203.47	200.52	197.61	194.92
180.0	216.08	213.69	211.26	208.71	206.05	203.47	200.52	197.61	194.92
225.0	216.08	213.69	211.26	208.71	206.05	203.47	200.52	197.61	194.92
270.0	216.08	213.69	211.26	208.71	206.05	203.47	200.52	197.61	194.92
315.0	216.08	213.69	211.26	208.71	206.05	203.47	200.52	197.61	194.92
360.0	216.08	213.69	211.26	208.71	206.05	203.47	200.52	197.61	194.92
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	191.81	188.28	184.94	180.72	176.45	172.30	167.27	162.48	157.11
45.0	191.81	188.28	184.94	180.72	176.45	172.30	167.27	162.48	157.11
90.0	191.81	188.28	184.94	180.72	176.45	172.30	167.27	162.48	157.11
135.0	191.81	188.28	184.94	180.72	176.45	172.30	167.27	162.48	157.11
180.0	191.81	188.28	184.94	180.72	176.45	172.30	167.27	162.48	157.11
225.0	191.81	188.28	184.94	180.72	176.45	172.30	167.27	162.48	157.11
270.0	191.81	188.28	184.94	180.72	176.45	172.30	167.27	162.48	157.11
315.0	191.81	188.28	184.94	180.72	176.45	172.30	167.27	162.48	157.11
360.0	191.81	188.28	184.94	180.72	176.45	172.30	167.27	162.48	157.11
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	152.60	146.79	141.22	135.86	129.60	124.41	118.72	113.02	107.52
45.0	152.60	146.79	141.22	135.86	129.60	124.41	118.72	113.02	107.52
90.0	152.60	146.79	141.22	135.86	129.60	124.41	118.72	113.02	107.52
135.0	152.60	146.79	141.22	135.86	129.60	124.41	118.72	113.02	107.52
180.0	152.60	146.79	141.22	135.86	129.60	124.41	118.72	113.02	107.52
225.0	152.60	146.79	141.22	135.86	129.60	124.41	118.72	113.02	107.52
270.0	152.60	146.79	141.22	135.86	129.60	124.41	118.72	113.02	107.52
315.0	152.60	146.79	141.22	135.86	129.60	124.41	118.72	113.02	107.52
360.0	152.60	146.79	141.22	135.86	129.60	124.41	118.72	113.02	107.52

Intensity data(cd)

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C/γ(°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	101.74	96.25	91.00	85.68	80.34	75.93	70.98	65.94	61.75
45.0	101.74	96.25	91.00	85.68	80.34	75.93	70.98	65.94	61.75
90.0	101.74	96.25	91.00	85.68	80.34	75.93	70.98	65.94	61.75
135.0	101.74	96.25	91.00	85.68	80.34	75.93	70.98	65.94	61.75
180.0	101.74	96.25	91.00	85.68	80.34	75.93	70.98	65.94	61.75
225.0	101.74	96.25	91.00	85.68	80.34	75.93	70.98	65.94	61.75
270.0	101.74	96.25	91.00	85.68	80.34	75.93	70.98	65.94	61.75
315.0	101.74	96.25	91.00	85.68	80.34	75.93	70.98	65.94	61.75
360.0	101.74	96.25	91.00	85.68	80.34	75.93	70.98	65.94	61.75
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	57.23	52.92	48.86	44.94	41.03	37.78	34.69	31.46	28.81
45.0	57.23	52.92	48.86	44.94	41.03	37.78	34.69	31.46	28.81
90.0	57.23	52.92	48.86	44.94	41.03	37.78	34.69	31.46	28.81
135.0	57.23	52.92	48.86	44.94	41.03	37.78	34.69	31.46	28.81
180.0	57.23	52.92	48.86	44.94	41.03	37.78	34.69	31.46	28.81
225.0	57.23	52.92	48.86	44.94	41.03	37.78	34.69	31.46	28.81
270.0	57.23	52.92	48.86	44.94	41.03	37.78	34.69	31.46	28.81
315.0	57.23	52.92	48.86	44.94	41.03	37.78	34.69	31.46	28.81
360.0	57.23	52.92	48.86	44.94	41.03	37.78	34.69	31.46	28.81
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	26.30	24.08	22.06	20.42	18.86	17.67	16.84	16.04	15.42
45.0	26.30	24.08	22.06	20.42	18.86	17.67	16.84	16.04	15.42
90.0	26.30	24.08	22.06	20.42	18.86	17.67	16.84	16.04	15.42
135.0	26.30	24.08	22.06	20.42	18.86	17.67	16.84	16.04	15.42
180.0	26.30	24.08	22.06	20.42	18.86	17.67	16.84	16.04	15.42
225.0	26.30	24.08	22.06	20.42	18.86	17.67	16.84	16.04	15.42
270.0	26.30	24.08	22.06	20.42	18.86	17.67	16.84	16.04	15.42
315.0	26.30	24.08	22.06	20.42	18.86	17.67	16.84	16.04	15.42
360.0	26.30	24.08	22.06	20.42	18.86	17.67	16.84	16.04	15.42
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	14.73	13.93	13.15	12.35	11.52	10.65	9.81	8.90	8.09
45.0	14.73	13.93	13.15	12.35	11.52	10.65	9.81	8.90	8.09
90.0	14.73	13.93	13.15	12.35	11.52	10.65	9.81	8.90	8.09
135.0	14.73	13.93	13.15	12.35	11.52	10.65	9.81	8.90	8.09
180.0	14.73	13.93	13.15	12.35	11.52	10.65	9.81	8.90	8.09
225.0	14.73	13.93	13.15	12.35	11.52	10.65	9.81	8.90	8.09
270.0	14.73	13.93	13.15	12.35	11.52	10.65	9.81	8.90	8.09
315.0	14.73	13.93	13.15	12.35	11.52	10.65	9.81	8.90	8.09
360.0	14.73	13.93	13.15	12.35	11.52	10.65	9.81	8.90	8.09
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	7.18	6.33	5.49	4.63	3.78	3.00	2.26	1.75	1.43
45.0	7.18	6.33	5.49	4.63	3.78	3.00	2.26	1.75	1.43
90.0	7.18	6.33	5.49	4.63	3.78	3.00	2.26	1.75	1.43
135.0	7.18	6.33	5.49	4.63	3.78	3.00	2.26	1.75	1.43
180.0	7.18	6.33	5.49	4.63	3.78	3.00	2.26	1.75	1.43
225.0	7.18	6.33	5.49	4.63	3.78	3.00	2.26	1.75	1.43
270.0	7.18	6.33	5.49	4.63	3.78	3.00	2.26	1.75	1.43
315.0	7.18	6.33	5.49	4.63	3.78	3.00	2.26	1.75	1.43
360.0	7.18	6.33	5.49	4.63	3.78	3.00	2.26	1.75	1.43

Intensity data(cd)

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C/ γ (°)	90.0
0.0	1.29
45.0	1.29
90.0	1.29
135.0	1.29
180.0	1.29
225.0	1.29
270.0	1.29
315.0	1.29
360.0	1.29