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

SOTEN

LumCAT: D1016

Luminaire:

Report No:

Voltage(V): 220.8000

Test No:

Current(A): 0.0490

LampCAT: OSRAM2823 3000K 80Ra

Power (W): 10.5200

Lamp flux(lm): -1.0

PF: 0.9570

Number of Lamps: 1

Ballast type: HTUC1-010W-01-31

Length(mm): 128

Width(mm): 128

Phm Type: C

Height(mm): 81

Photometric Results

Lumens(lm): 674.40

Efficiency(%): 0.00%

Lumens(lm)/Power(W): 64.11

Central intensity(cd): 365.960

Maximum intensity(cd): 365.960

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=83.1

[C90/270]Total=83.1

Field angle(10%Imax): [C0/180]Total=129.4

[C90/270]Total=129.4

Maximum s/h(1/2): C0_180=1.14 C90_270=1.14

Maximum s/h(1/4): C0_180=1.63 C90_270=1.17

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 : 90.623%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	365.960	.000	.000	.000%	.000%
1.0	365.832	.350	.350	.000%	.000%
2.0	365.496	1.050	1.400	.000%	.000%
3.0	364.893	1.747	3.147	.000%	.000%
4.0	364.034	2.440	5.587	.000%	.000%
5.0	363.054	3.128	8.715	.000%	.000%
6.0	361.755	3.809	12.524	.000%	.000%
7.0	360.305	4.482	17.005	.000%	.000%
8.0	358.617	5.145	22.151	.000%	.000%
9.0	356.639	5.797	27.947	.000%	.000%
10.0	354.574	6.436	34.384	.000%	.000%
11.0	352.491	7.065	41.449	.000%	.000%
12.0	349.858	7.678	49.126	.000%	.000%
13.0	347.306	8.274	57.400	.000%	.000%
14.0	344.464	8.855	66.254	.000%	.000%
15.0	341.755	9.421	75.675	.000%	.000%
16.0	338.530	9.968	85.643	.000%	.000%
17.0	335.299	10.493	96.137	.000%	.000%
18.0	332.028	11.003	107.139	.000%	.000%
19.0	328.559	11.493	118.632	.000%	.000%
20.0	325.050	11.963	130.595	.000%	.000%
21.0	321.303	12.411	143.006	.000%	.000%
22.0	317.358	12.834	155.840	.000%	.000%
23.0	313.124	13.229	169.070	.000%	.000%
24.0	308.397	13.589	182.658	.000%	.000%
25.0	303.513	13.913	196.572	.000%	.000%
26.0	298.020	14.199	210.771	.000%	.000%
27.0	291.662	14.427	225.198	.000%	.000%
28.0	285.874	14.622	239.820	.000%	.000%
29.0	278.785	14.773	254.593	.000%	.000%
30.0	272.016	14.872	269.464	.000%	.000%
31.0	265.004	14.944	284.409	.000%	.000%
32.0	257.747	14.976	299.385	.000%	.000%
33.0	250.189	14.964	314.349	.000%	.000%
34.0	242.614	14.914	329.263	.000%	.000%
35.0	234.818	14.827	344.090	.000%	.000%
36.0	227.620	14.724	358.814	.000%	.000%
37.0	219.198	14.573	373.387	.000%	.000%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	211.037	14.361	387.747	.000%	.000%
39.0	203.276	14.142	401.889	.000%	.000%
40.0	194.697	13.880	415.769	.000%	.000%
41.0	187.377	13.605	429.374	.000%	.000%
42.0	179.204	13.319	442.693	.000%	.000%
43.0	171.083	12.976	455.669	.000%	.000%
44.0	162.986	12.609	468.277	.000%	.000%
45.0	155.034	12.222	480.499	.000%	.000%
46.0	147.551	11.833	492.333	.000%	.000%
47.0	139.976	11.436	503.768	.000%	.000%
48.0	132.128	11.000	514.768	.000%	.000%
49.0	124.813	10.551	525.320	.000%	.000%
50.0	117.435	10.100	535.420	.000%	.000%
51.0	110.388	9.639	545.059	.000%	.000%
52.0	103.880	9.194	554.253	.000%	.000%
53.0	96.676	8.724	562.977	.000%	.000%
54.0	90.707	8.259	571.236	.000%	.000%
55.0	84.002	7.799	579.035	.000%	.000%
56.0	78.062	7.323	586.358	.000%	.000%
57.0	72.523	6.885	593.243	.000%	.000%
58.0	66.380	6.423	599.666	.000%	.000%
59.0	60.980	5.954	605.621	.000%	.000%
60.0	56.241	5.538	611.158	.000%	.000%
61.0	51.514	5.142	616.301	.000%	.000%
62.0	47.001	4.747	621.048	.000%	.000%
63.0	42.755	4.365	625.413	.000%	.000%
64.0	39.048	4.014	629.427	.000%	.000%
65.0	35.580	3.693	633.120	.000%	.000%
66.0	32.564	3.400	636.520	.000%	.000%
67.0	29.756	3.134	639.654	.000%	.000%
68.0	27.436	2.897	642.551	.000%	.000%
69.0	25.545	2.703	645.254	.000%	.000%
70.0	24.002	2.545	647.799	.000%	.000%
71.0	22.906	2.424	650.223	.000%	.000%
72.0	22.030	2.337	652.559	.000%	.000%
73.0	21.003	2.250	654.810	.000%	.000%
74.0	19.959	2.154	656.963	.000%	.000%
75.0	18.927	2.055	659.018	.000%	.000%

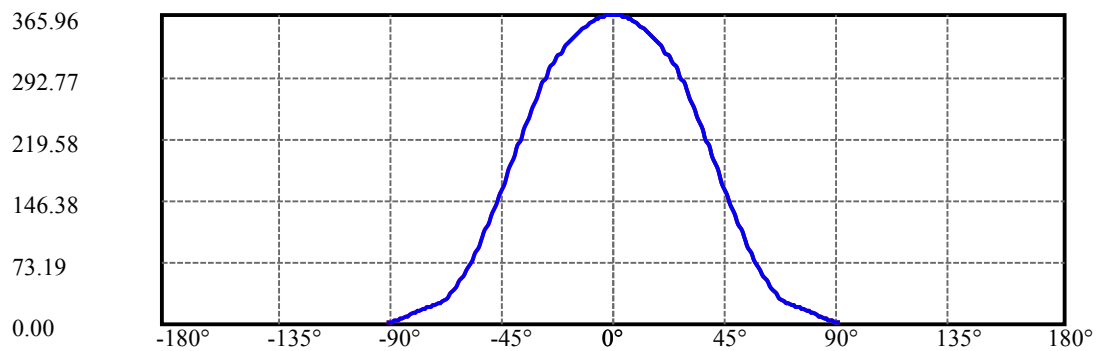
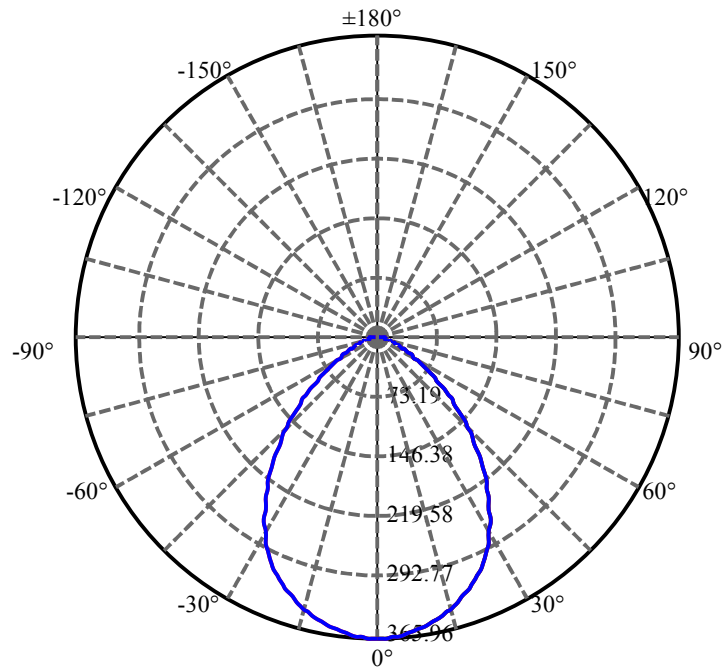
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	17.662	1.942	660.960	.000%	.000%
77.0	16.502	1.821	662.782	.000%	.000%
78.0	15.244	1.699	664.481	.000%	.000%
79.0	13.973	1.570	666.051	.000%	.000%
80.0	12.697	1.438	667.489	.000%	.000%
81.0	11.531	1.310	668.799	.000%	.000%
82.0	10.145	1.175	669.974	.000%	.000%
83.0	8.811	1.030	671.005	.000%	.000%
84.0	7.448	.886	671.891	.000%	.000%
85.0	6.102	.740	672.630	.000%	.000%
86.0	4.785	.595	673.225	.000%	.000%
87.0	3.463	.451	673.677	.000%	.000%
88.0	2.401	.321	673.998	.000%	.000%
89.0	1.740	.227	674.225	.000%	.000%
90.0	1.433	.174	674.399	.000%	.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	269.46	N.A.	39.96%
0-40	415.77	N.A.	61.65%
0-60	611.16	N.A.	90.62%
0-90	674.22	N.A.	99.97%
0-120	674.22	N.A.	99.97%
0-180	674.40	N.A.	100.00%
60-90	68.60	N.A.	10.17%
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%
0-50.43	539.52	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	34.38
10-20	96.21
20-30	138.87
30-40	146.30
40-50	119.65
50-60	75.74
60-70	36.64
70-80	19.69
80-90	6.74
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:

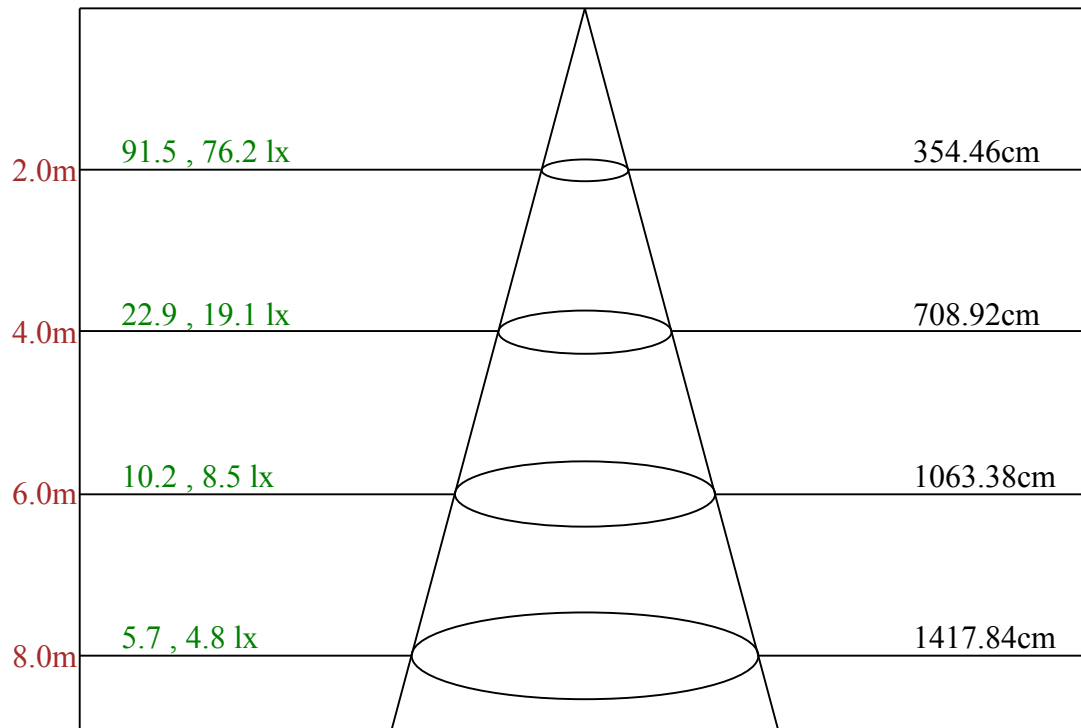
C90/C270:

Field angle(10%Imax):C0/180Left:64.7 Right:64.7

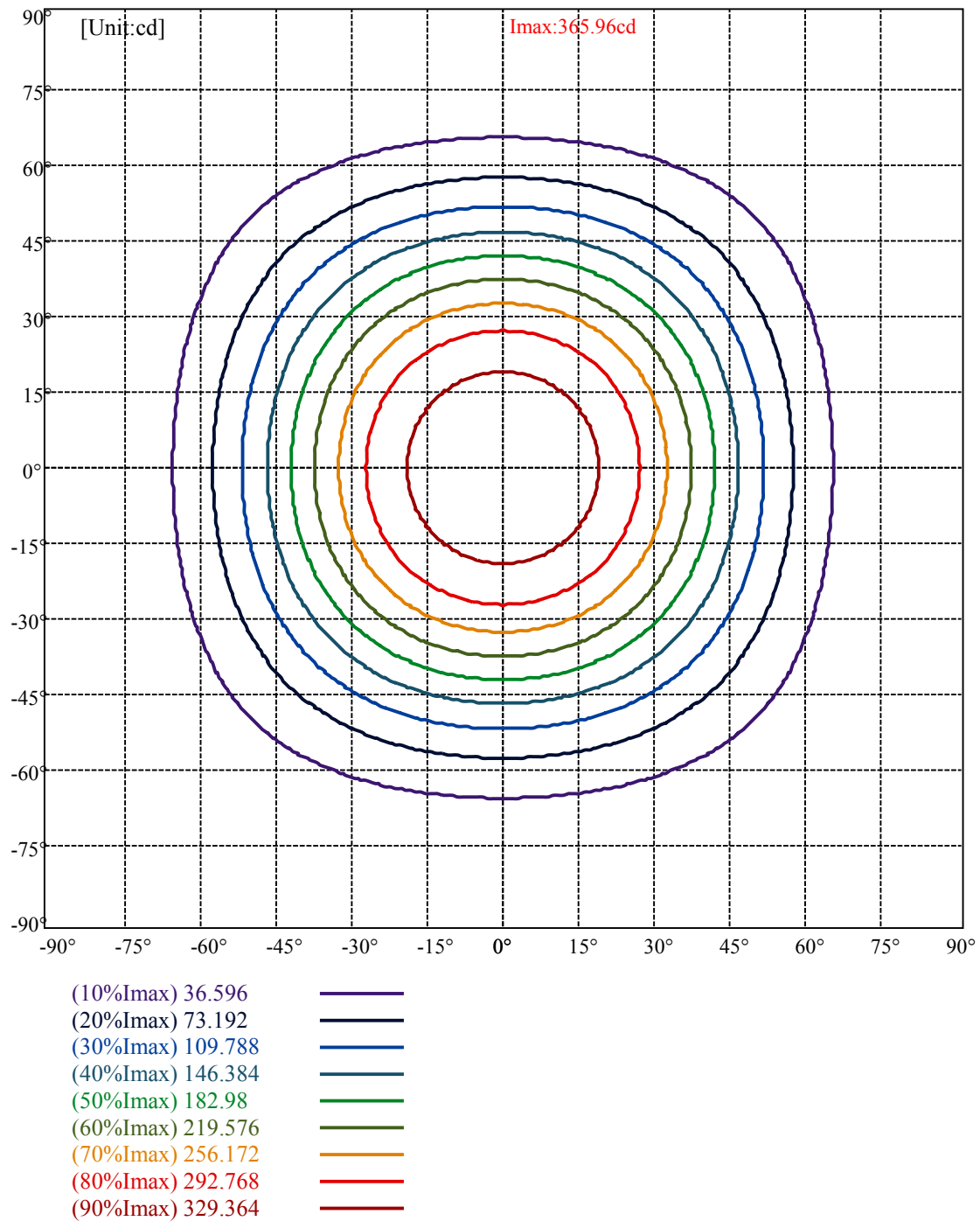
:C90/270Left:64.7 Right:64.7

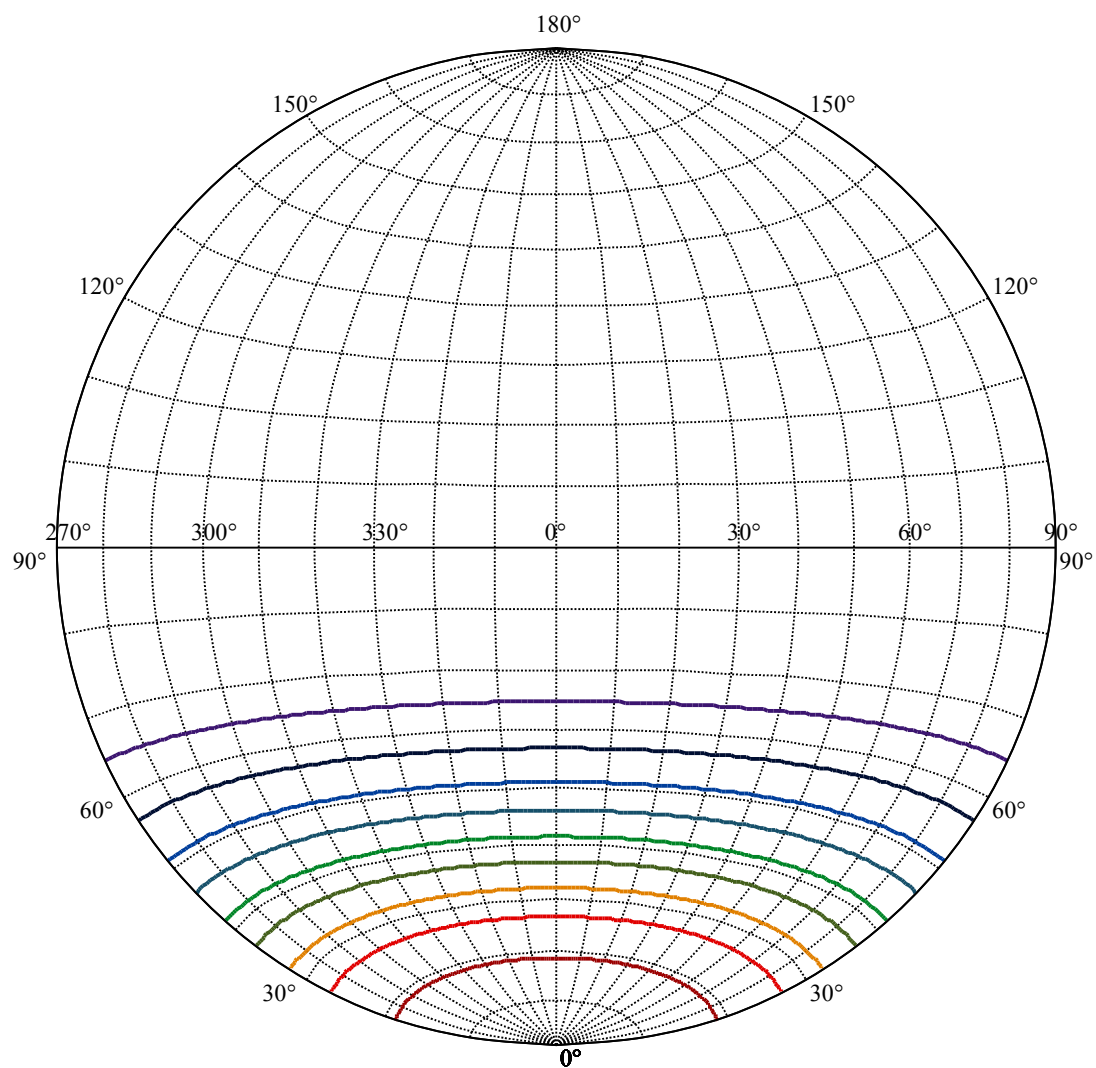
Beam Angle(50%Imax):C0/180Left:41.5 Right:41.5

:C90/270Left:41.5 Right:41.5



Max , Ave Beam angle of C0plane83.09





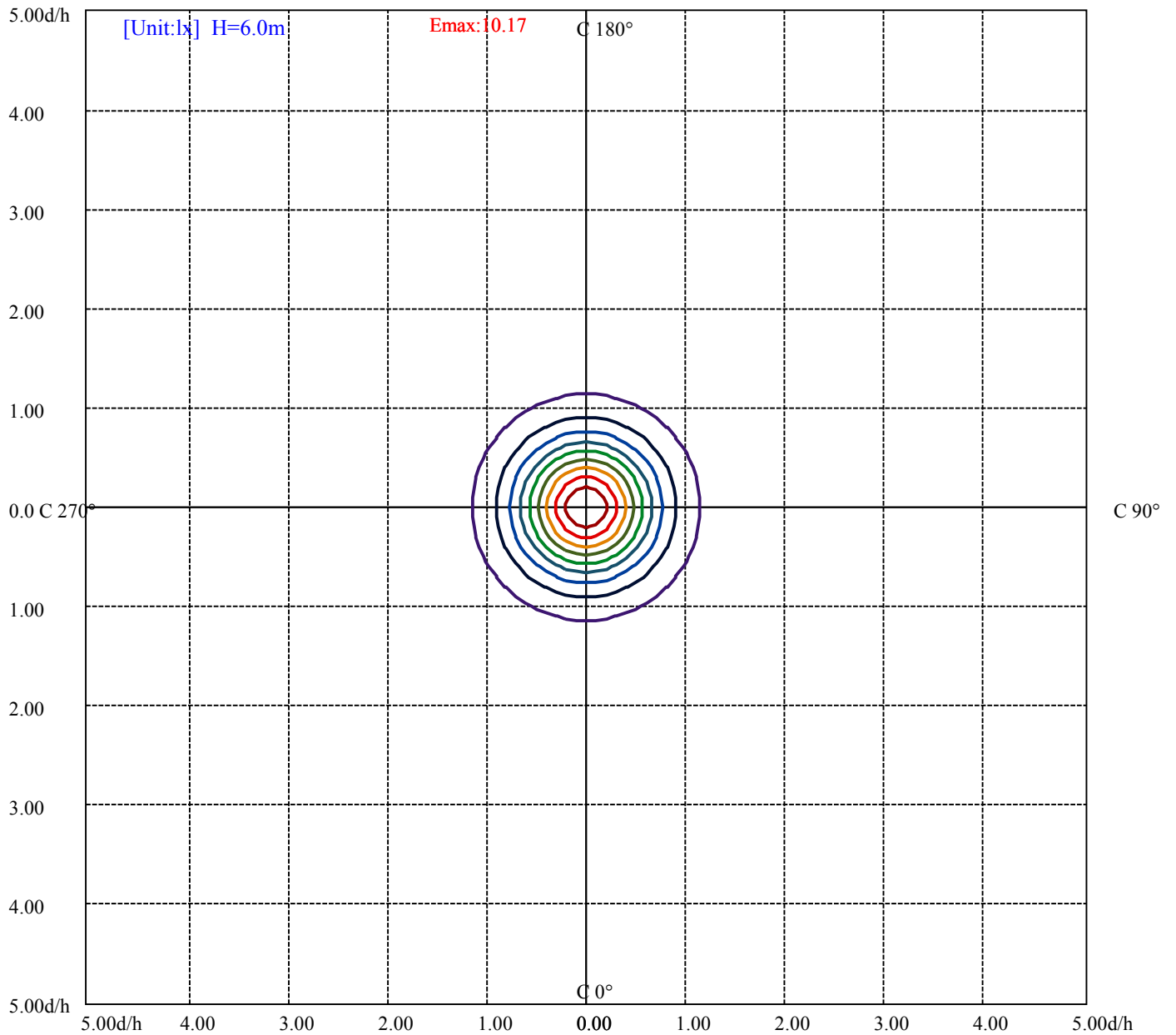
House

[Unit:cd]

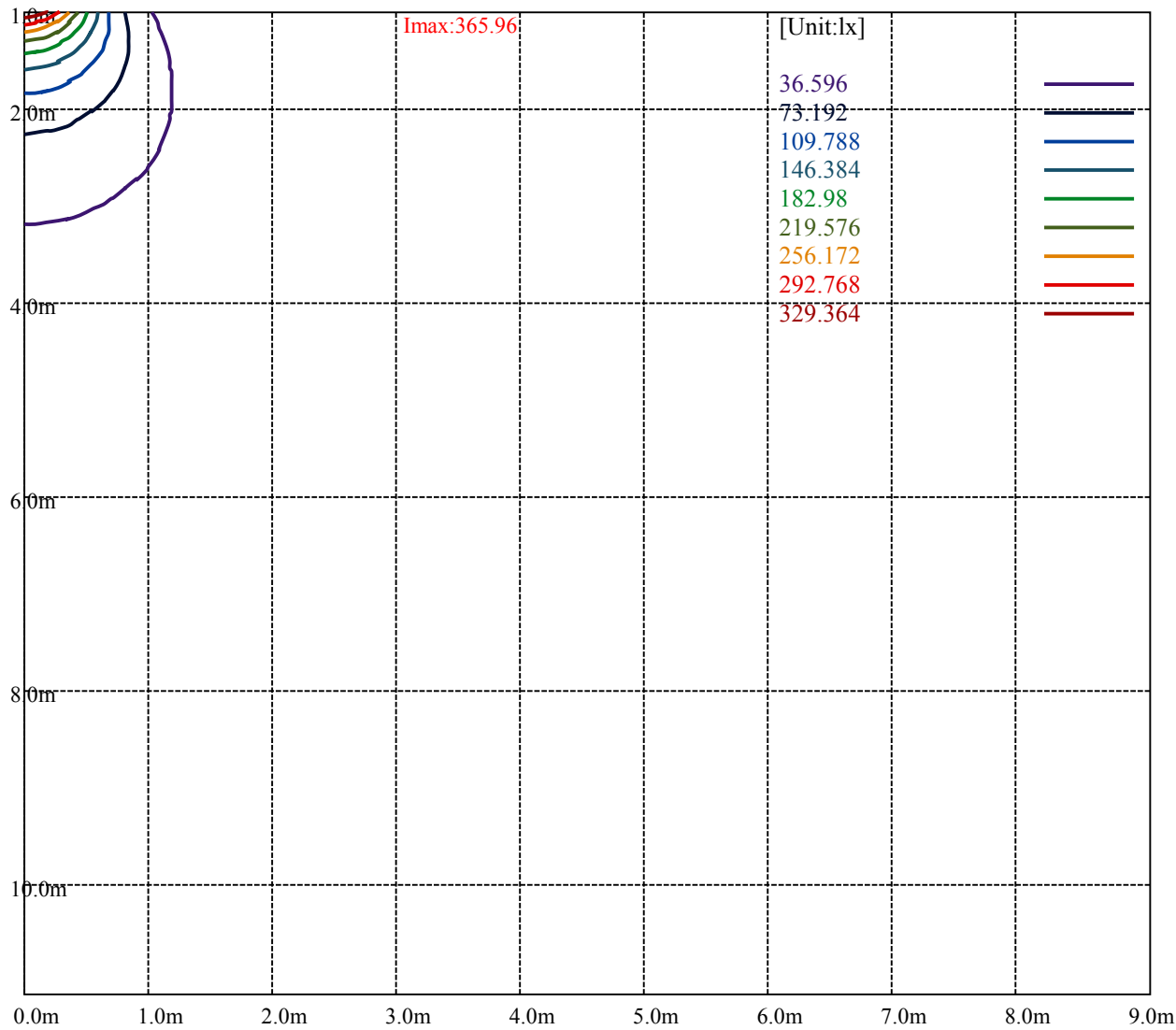
Road

Imax:365.96

(10%Imax)	36.596	
(20%Imax)	73.192	
(30%Imax)	109.788	
(40%Imax)	146.384	
(50%Imax)	182.98	
(60%Imax)	219.576	
(70%Imax)	256.172	
(80%Imax)	292.768	
(90%Imax)	329.364	



(10%Emax)	1.016556	—
(20%Emax)	2.033111	—
(30%Emax)	3.049667	—
(40%Emax)	4.066222	—
(50%Emax)	5.082778	—
(60%Emax)	6.099333	—
(70%Emax)	7.115889	—
(80%Emax)	8.132444	—
(90%Emax)	9.149	—



Luminance Table

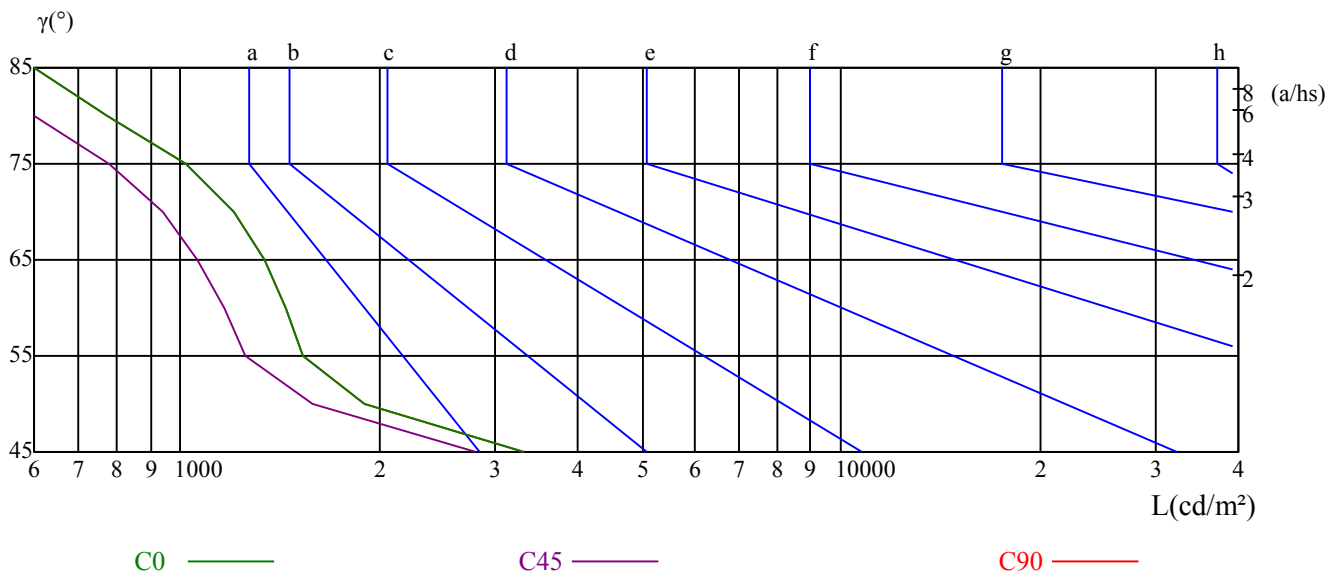
γ	45	50	55	60	65	70	75	80	85
C0	3313	1905	1535	1443	1340	1205	1019	772	490
C45	2793	1582	1255	1161	1060	937	777	576	357
C90	3313	1905	1535	1443	1340	1205	1019	772	490

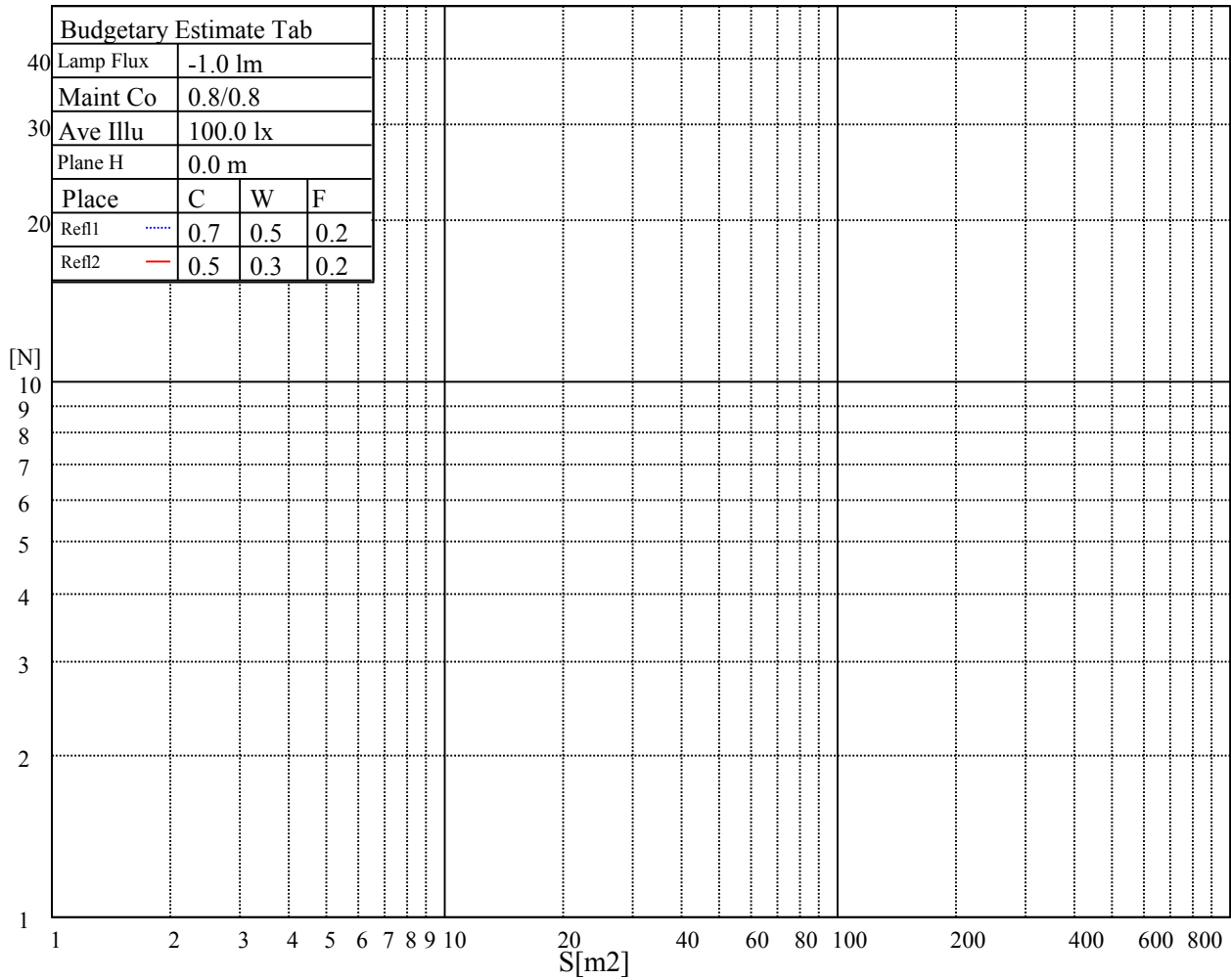
L横(65)	L纵(65)	L45(65)	L横(75)	L纵(75)	L45(75)	L横(85)	L纵(85)	L45(85)
3685	3685	3685	4122	4122	4122	5065	5065	5065

Glare Table

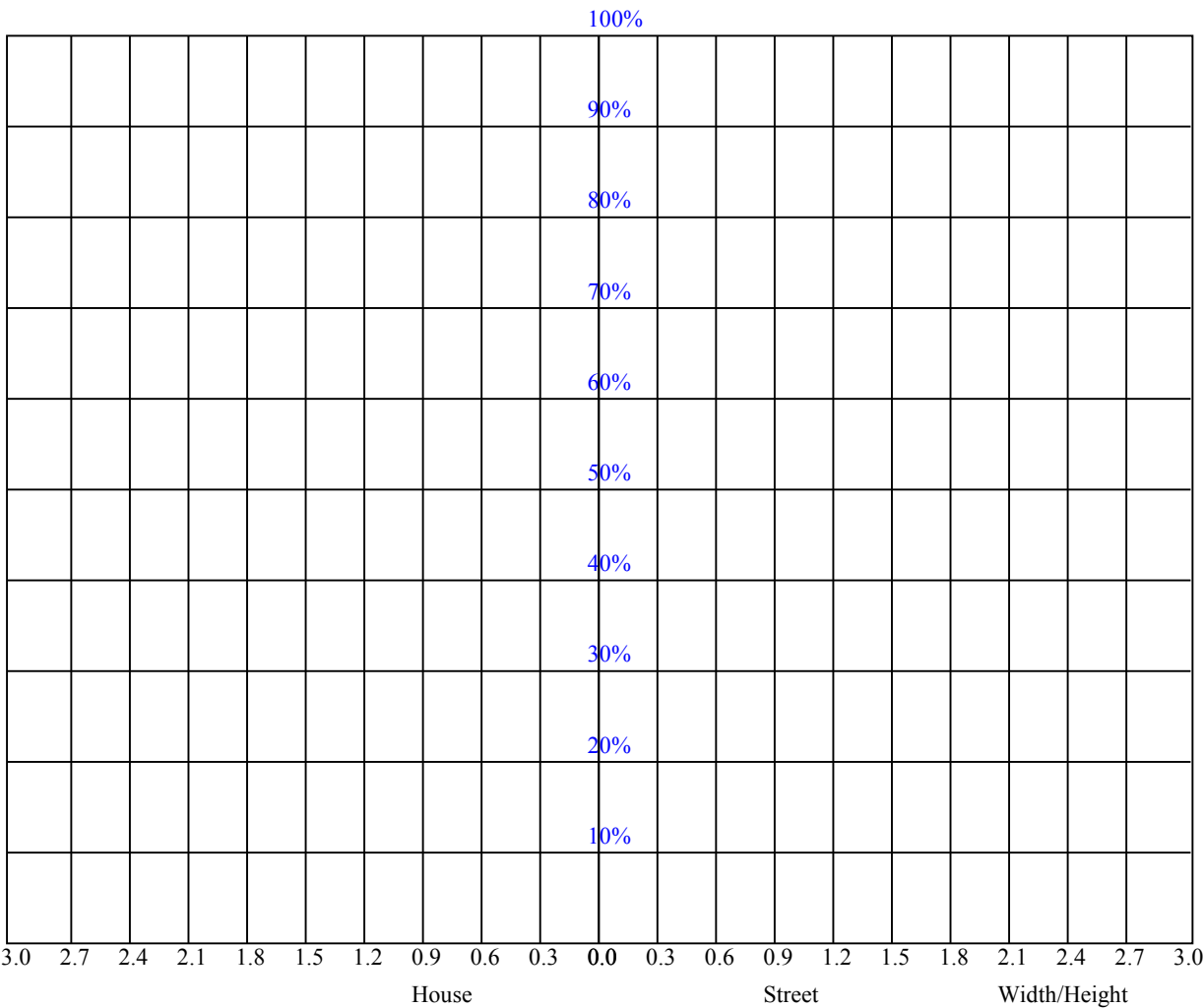
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

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	365.96	365.83	365.50	364.89	364.03	363.05	361.75	360.30	358.62
45.0	365.96	365.83	365.50	364.89	364.03	363.05	361.75	360.30	358.62
90.0	365.96	365.83	365.50	364.89	364.03	363.05	361.75	360.30	358.62
135.0	365.96	365.83	365.50	364.89	364.03	363.05	361.75	360.30	358.62
180.0	365.96	365.83	365.50	364.89	364.03	363.05	361.75	360.30	358.62
225.0	365.96	365.83	365.50	364.89	364.03	363.05	361.75	360.30	358.62
270.0	365.96	365.83	365.50	364.89	364.03	363.05	361.75	360.30	358.62
315.0	365.96	365.83	365.50	364.89	364.03	363.05	361.75	360.30	358.62
360.0	365.96	365.83	365.50	364.89	364.03	363.05	361.75	360.30	358.62
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	356.64	354.57	352.49	349.86	347.31	344.46	341.75	338.53	335.30
45.0	356.64	354.57	352.49	349.86	347.31	344.46	341.75	338.53	335.30
90.0	356.64	354.57	352.49	349.86	347.31	344.46	341.75	338.53	335.30
135.0	356.64	354.57	352.49	349.86	347.31	344.46	341.75	338.53	335.30
180.0	356.64	354.57	352.49	349.86	347.31	344.46	341.75	338.53	335.30
225.0	356.64	354.57	352.49	349.86	347.31	344.46	341.75	338.53	335.30
270.0	356.64	354.57	352.49	349.86	347.31	344.46	341.75	338.53	335.30
315.0	356.64	354.57	352.49	349.86	347.31	344.46	341.75	338.53	335.30
360.0	356.64	354.57	352.49	349.86	347.31	344.46	341.75	338.53	335.30
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	332.03	328.56	325.05	321.30	317.36	313.12	308.40	303.51	298.02
45.0	332.03	328.56	325.05	321.30	317.36	313.12	308.40	303.51	298.02
90.0	332.03	328.56	325.05	321.30	317.36	313.12	308.40	303.51	298.02
135.0	332.03	328.56	325.05	321.30	317.36	313.12	308.40	303.51	298.02
180.0	332.03	328.56	325.05	321.30	317.36	313.12	308.40	303.51	298.02
225.0	332.03	328.56	325.05	321.30	317.36	313.12	308.40	303.51	298.02
270.0	332.03	328.56	325.05	321.30	317.36	313.12	308.40	303.51	298.02
315.0	332.03	328.56	325.05	321.30	317.36	313.12	308.40	303.51	298.02
360.0	332.03	328.56	325.05	321.30	317.36	313.12	308.40	303.51	298.02
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	291.66	285.87	278.79	272.02	265.00	257.75	250.19	242.61	234.82
45.0	291.66	285.87	278.79	272.02	265.00	257.75	250.19	242.61	234.82
90.0	291.66	285.87	278.79	272.02	265.00	257.75	250.19	242.61	234.82
135.0	291.66	285.87	278.79	272.02	265.00	257.75	250.19	242.61	234.82
180.0	291.66	285.87	278.79	272.02	265.00	257.75	250.19	242.61	234.82
225.0	291.66	285.87	278.79	272.02	265.00	257.75	250.19	242.61	234.82
270.0	291.66	285.87	278.79	272.02	265.00	257.75	250.19	242.61	234.82
315.0	291.66	285.87	278.79	272.02	265.00	257.75	250.19	242.61	234.82
360.0	291.66	285.87	278.79	272.02	265.00	257.75	250.19	242.61	234.82
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	227.62	219.20	211.04	203.28	194.70	187.38	179.20	171.08	162.99
45.0	227.62	219.20	211.04	203.28	194.70	187.38	179.20	171.08	162.99
90.0	227.62	219.20	211.04	203.28	194.70	187.38	179.20	171.08	162.99
135.0	227.62	219.20	211.04	203.28	194.70	187.38	179.20	171.08	162.99
180.0	227.62	219.20	211.04	203.28	194.70	187.38	179.20	171.08	162.99
225.0	227.62	219.20	211.04	203.28	194.70	187.38	179.20	171.08	162.99
270.0	227.62	219.20	211.04	203.28	194.70	187.38	179.20	171.08	162.99
315.0	227.62	219.20	211.04	203.28	194.70	187.38	179.20	171.08	162.99
360.0	227.62	219.20	211.04	203.28	194.70	187.38	179.20	171.08	162.99

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	155.03	147.55	139.98	132.13	124.81	117.44	110.39	103.88	96.68
45.0	155.03	147.55	139.98	132.13	124.81	117.44	110.39	103.88	96.68
90.0	155.03	147.55	139.98	132.13	124.81	117.44	110.39	103.88	96.68
135.0	155.03	147.55	139.98	132.13	124.81	117.44	110.39	103.88	96.68
180.0	155.03	147.55	139.98	132.13	124.81	117.44	110.39	103.88	96.68
225.0	155.03	147.55	139.98	132.13	124.81	117.44	110.39	103.88	96.68
270.0	155.03	147.55	139.98	132.13	124.81	117.44	110.39	103.88	96.68
315.0	155.03	147.55	139.98	132.13	124.81	117.44	110.39	103.88	96.68
360.0	155.03	147.55	139.98	132.13	124.81	117.44	110.39	103.88	96.68
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	90.71	84.00	78.06	72.52	66.38	60.98	56.24	51.51	47.00
45.0	90.71	84.00	78.06	72.52	66.38	60.98	56.24	51.51	47.00
90.0	90.71	84.00	78.06	72.52	66.38	60.98	56.24	51.51	47.00
135.0	90.71	84.00	78.06	72.52	66.38	60.98	56.24	51.51	47.00
180.0	90.71	84.00	78.06	72.52	66.38	60.98	56.24	51.51	47.00
225.0	90.71	84.00	78.06	72.52	66.38	60.98	56.24	51.51	47.00
270.0	90.71	84.00	78.06	72.52	66.38	60.98	56.24	51.51	47.00
315.0	90.71	84.00	78.06	72.52	66.38	60.98	56.24	51.51	47.00
360.0	90.71	84.00	78.06	72.52	66.38	60.98	56.24	51.51	47.00
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	42.75	39.05	35.58	32.56	29.76	27.44	25.55	24.00	22.91
45.0	42.75	39.05	35.58	32.56	29.76	27.44	25.55	24.00	22.91
90.0	42.75	39.05	35.58	32.56	29.76	27.44	25.55	24.00	22.91
135.0	42.75	39.05	35.58	32.56	29.76	27.44	25.55	24.00	22.91
180.0	42.75	39.05	35.58	32.56	29.76	27.44	25.55	24.00	22.91
225.0	42.75	39.05	35.58	32.56	29.76	27.44	25.55	24.00	22.91
270.0	42.75	39.05	35.58	32.56	29.76	27.44	25.55	24.00	22.91
315.0	42.75	39.05	35.58	32.56	29.76	27.44	25.55	24.00	22.91
360.0	42.75	39.05	35.58	32.56	29.76	27.44	25.55	24.00	22.91
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	22.03	21.00	19.96	18.93	17.66	16.50	15.24	13.97	12.70
45.0	22.03	21.00	19.96	18.93	17.66	16.50	15.24	13.97	12.70
90.0	22.03	21.00	19.96	18.93	17.66	16.50	15.24	13.97	12.70
135.0	22.03	21.00	19.96	18.93	17.66	16.50	15.24	13.97	12.70
180.0	22.03	21.00	19.96	18.93	17.66	16.50	15.24	13.97	12.70
225.0	22.03	21.00	19.96	18.93	17.66	16.50	15.24	13.97	12.70
270.0	22.03	21.00	19.96	18.93	17.66	16.50	15.24	13.97	12.70
315.0	22.03	21.00	19.96	18.93	17.66	16.50	15.24	13.97	12.70
360.0	22.03	21.00	19.96	18.93	17.66	16.50	15.24	13.97	12.70
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	11.53	10.14	8.81	7.45	6.10	4.79	3.46	2.40	1.74
45.0	11.53	10.14	8.81	7.45	6.10	4.79	3.46	2.40	1.74
90.0	11.53	10.14	8.81	7.45	6.10	4.79	3.46	2.40	1.74
135.0	11.53	10.14	8.81	7.45	6.10	4.79	3.46	2.40	1.74
180.0	11.53	10.14	8.81	7.45	6.10	4.79	3.46	2.40	1.74
225.0	11.53	10.14	8.81	7.45	6.10	4.79	3.46	2.40	1.74
270.0	11.53	10.14	8.81	7.45	6.10	4.79	3.46	2.40	1.74
315.0	11.53	10.14	8.81	7.45	6.10	4.79	3.46	2.40	1.74
360.0	11.53	10.14	8.81	7.45	6.10	4.79	3.46	2.40	1.74

Intensity data(cd)

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C/ γ (°)	90.0
0.0	1.43
45.0	1.43
90.0	1.43
135.0	1.43
180.0	1.43
225.0	1.43
270.0	1.43
315.0	1.43
360.0	1.43