



NATA LIGHTING CO.,LTD.
www.nata.cn
Email:info@nata.com
Tel:+86-750-3770000 Fax:+86-750-3771111
Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

Nata

LumCAT: 1-1006-M	
Luminaire: BJB 47.360.1020	
Report No: NATA0100	Voltage(V): 35.0000
Test No: GC2019101912	Current(A): 0.2970
LampCAT: TRIDONIC SLE G7 9MM	Power (W): 10.3950
Lamp flux(lm): 1539.0	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 0	Width(mm): 0
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 1162.77
Efficiency(%): 75.55%
Lumens(lm)/Power(W): 111.86
Central intensity(cd): 6359.204
Maximum intensity(cd): 6359.204
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=23.4
 [C90/270]Total=23.4
Field angle(10%Imax): [C0/180]Total=41.8
 [C90/270]Total=41.8
Maximum s/h(1/2): C0_180=0.40 C90_270=0.40
Maximum s/h(1/4): C0_180=0.40 C90_270=0.40
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 75.55%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.568%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	6359.203	0.000	0	.000%	.000%
1.0	6334.172	6.074	6.074	.395%	.522%
2.0	6228.633	18.031	24.105	1.172%	2.073%
3.0	6085.055	29.450	53.555	1.914%	4.606%
4.0	5905.617	40.137	93.692	2.608%	8.058%
5.0	5647.359	49.700	143.392	3.229%	12.332%
6.0	5356.758	57.830	201.222	3.758%	17.305%
7.0	5042.672	64.549	265.771	4.194%	22.857%
8.0	4670.227	69.513	335.284	4.517%	28.835%
9.0	4273.805	72.487	407.771	4.710%	35.069%
10.0	3868.453	73.684	481.455	4.788%	41.406%
11.0	3444.469	73.071	554.526	4.748%	47.690%
12.0	3054.164	71.039	625.566	4.616%	53.800%
13.0	2662.664	67.844	693.41	4.408%	59.634%
14.0	2280.656	63.274	756.684	4.111%	65.076%
15.0	1966.008	58.300	814.984	3.788%	70.090%
16.0	1662.511	53.168	868.152	3.455%	74.662%
17.0	1382.948	47.426	915.578	3.082%	78.741%
18.0	1174.352	42.164	957.742	2.740%	82.367%
19.0	961.636	37.162	994.904	2.415%	85.563%
20.0	789.188	32.045	1026.949	2.082%	88.319%
21.0	618.188	27.024	1053.974	1.756%	90.643%
22.0	477.302	22.014	1075.988	1.430%	92.537%
23.0	353.130	17.425	1093.413	1.132%	94.035%
24.0	240.342	12.975	1106.388	.843%	95.151%
25.0	159.286	9.087	1115.475	.590%	95.933%
26.0	107.754	6.304	1121.778	.410%	96.475%
27.0	54.935	3.980	1125.758	.259%	96.817%
28.0	32.885	2.223	1127.982	.144%	97.008%
29.0	21.621	1.426	1129.408	.093%	97.131%
30.0	15.567	1.004	1130.412	.065%	97.217%
31.0	12.347	0.777	1131.189	.050%	97.284%
32.0	10.631	0.658	1131.847	.043%	97.341%
33.0	9.788	0.602	1132.449	.039%	97.392%
34.0	9.204	0.575	1133.023	.037%	97.442%
35.0	8.663	0.555	1133.578	.036%	97.490%
36.0	8.205	0.537	1134.115	.035%	97.536%
37.0	7.868	0.524	1134.64	.034%	97.581%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	7.530	0.514	1135.154	.033%	97.625%
39.0	7.256	0.505	1135.658	.033%	97.668%
40.0	7.052	0.499	1136.157	.032%	97.711%
41.0	6.855	0.495	1136.653	.032%	97.754%
42.0	6.666	0.491	1137.144	.032%	97.796%
43.0	6.525	0.489	1137.632	.032%	97.838%
44.0	6.398	0.488	1138.12	.032%	97.880%
45.0	6.286	0.487	1138.608	.032%	97.922%
46.0	6.166	0.487	1139.095	.032%	97.964%
47.0	6.103	0.488	1139.583	.032%	98.006%
48.0	6.012	0.490	1140.072	.032%	98.048%
49.0	5.934	0.491	1140.563	.032%	98.090%
50.0	5.857	0.492	1141.055	.032%	98.133%
51.0	5.815	0.494	1141.548	.032%	98.175%
52.0	5.766	0.497	1142.045	.032%	98.218%
53.0	5.709	0.499	1142.544	.032%	98.261%
54.0	5.660	0.501	1143.046	.033%	98.304%
55.0	5.639	0.504	1143.55	.033%	98.347%
56.0	5.597	0.508	1144.058	.033%	98.391%
57.0	5.569	0.511	1144.568	.033%	98.435%
58.0	5.534	0.513	1145.082	.033%	98.479%
59.0	5.505	0.516	1145.598	.034%	98.523%
60.0	5.484	0.519	1146.117	.034%	98.568%
61.0	5.463	0.522	1146.639	.034%	98.613%
62.0	5.442	0.525	1147.165	.034%	98.658%
63.0	5.421	0.528	1147.693	.034%	98.703%
64.0	5.407	0.531	1148.224	.035%	98.749%
65.0	5.386	0.534	1148.759	.035%	98.795%
66.0	5.379	0.537	1149.296	.035%	98.841%
67.0	5.379	0.541	1149.837	.035%	98.888%
68.0	5.372	0.545	1150.381	.035%	98.935%
69.0	5.337	0.546	1150.928	.035%	98.982%
70.0	5.330	0.548	1151.475	.036%	99.029%
71.0	5.337	0.551	1152.027	.036%	99.076%
72.0	5.323	0.554	1152.581	.036%	99.124%
73.0	5.309	0.556	1153.137	.036%	99.172%
74.0	5.295	0.557	1153.694	.036%	99.220%
75.0	5.295	0.559	1154.254	.036%	99.268%

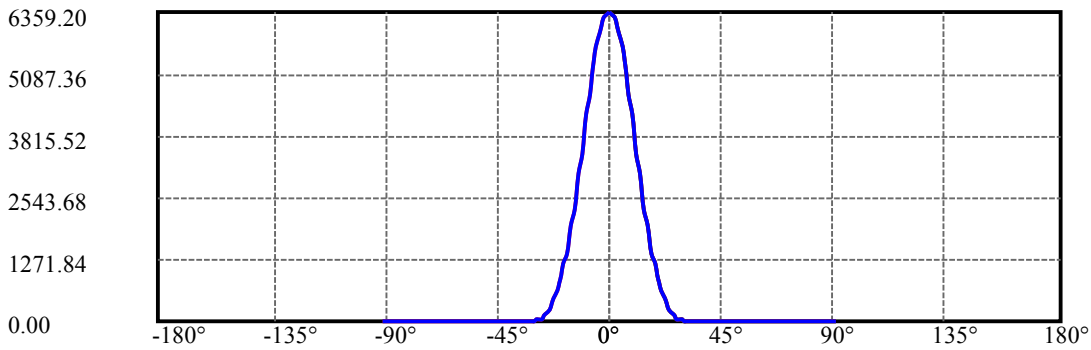
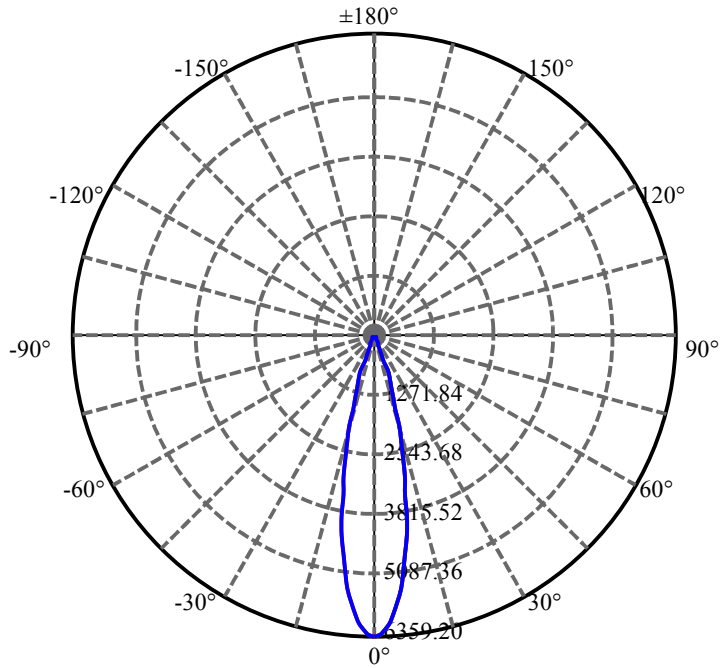
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	5.280	0.561	1154.815	.036%	99.316%
77.0	5.288	0.563	1155.379	.037%	99.364%
78.0	5.280	0.566	1155.944	.037%	99.413%
79.0	5.266	0.567	1156.511	.037%	99.462%
80.0	5.259	0.567	1157.078	.037%	99.511%
81.0	5.231	0.567	1157.646	.037%	99.559%
82.0	5.245	0.568	1158.214	.037%	99.608%
83.0	5.210	0.568	1158.782	.037%	99.657%
84.0	5.210	0.568	1159.35	.037%	99.706%
85.0	5.203	0.568	1159.918	.037%	99.755%
86.0	5.217	0.570	1160.488	.037%	99.804%
87.0	5.210	0.571	1161.058	.037%	99.853%
88.0	5.203	0.570	1161.629	.037%	99.902%
89.0	5.203	0.570	1162.199	.037%	99.951%
90.0	5.189	0.570	1162.769	.037%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1130.41	73.45%	97.22%
0-40	1136.16	73.82%	97.71%
0-60	1146.12	74.47%	98.57%
0-90	1162.20	75.52%	99.95%
0-120	1162.20	75.52%	99.95%
0-180	1162.77	75.55%	100.00%
60-90	16.60	1.08%	1.43%
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%
0-17.35	930.22	60.44%	80.00%

ZONAL LUMEN SUMMARY

0-10	481.46
10-20	545.49
20-30	103.46
30-40	5.75
40-50	4.90
50-60	5.06
60-70	5.36
70-80	5.60
80-90	5.12
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: ———

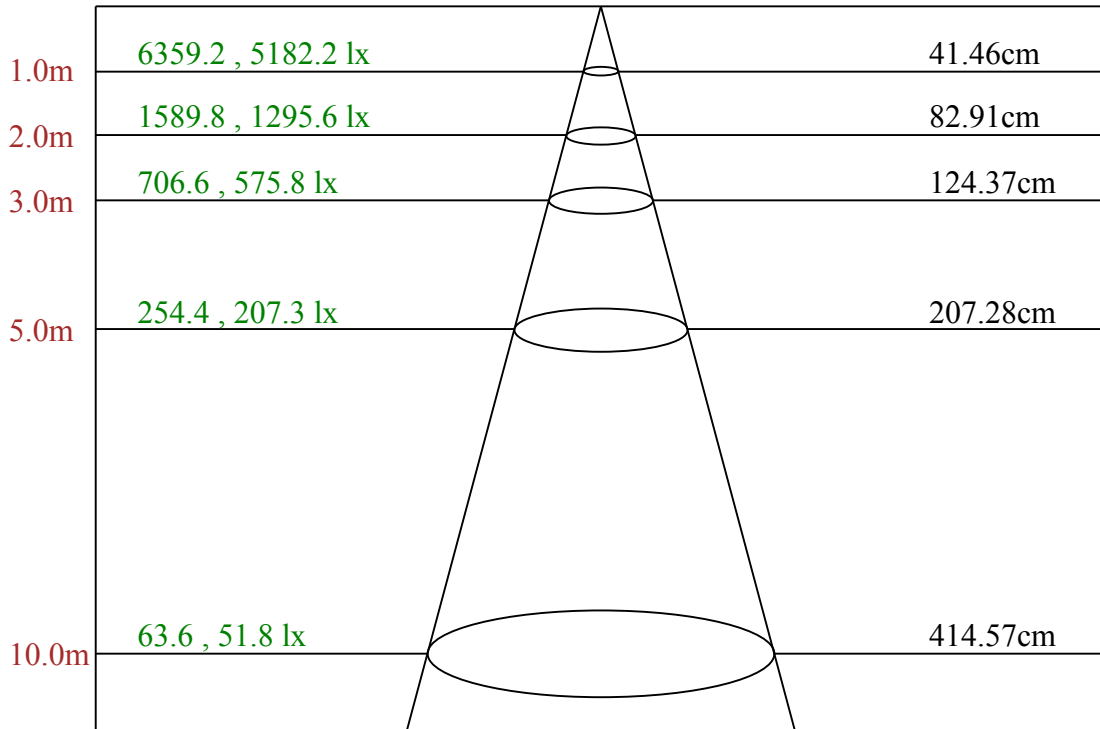
C90/C270: ———

Field angle(10%Imax):C0/180Left:20.9 Right:20.9

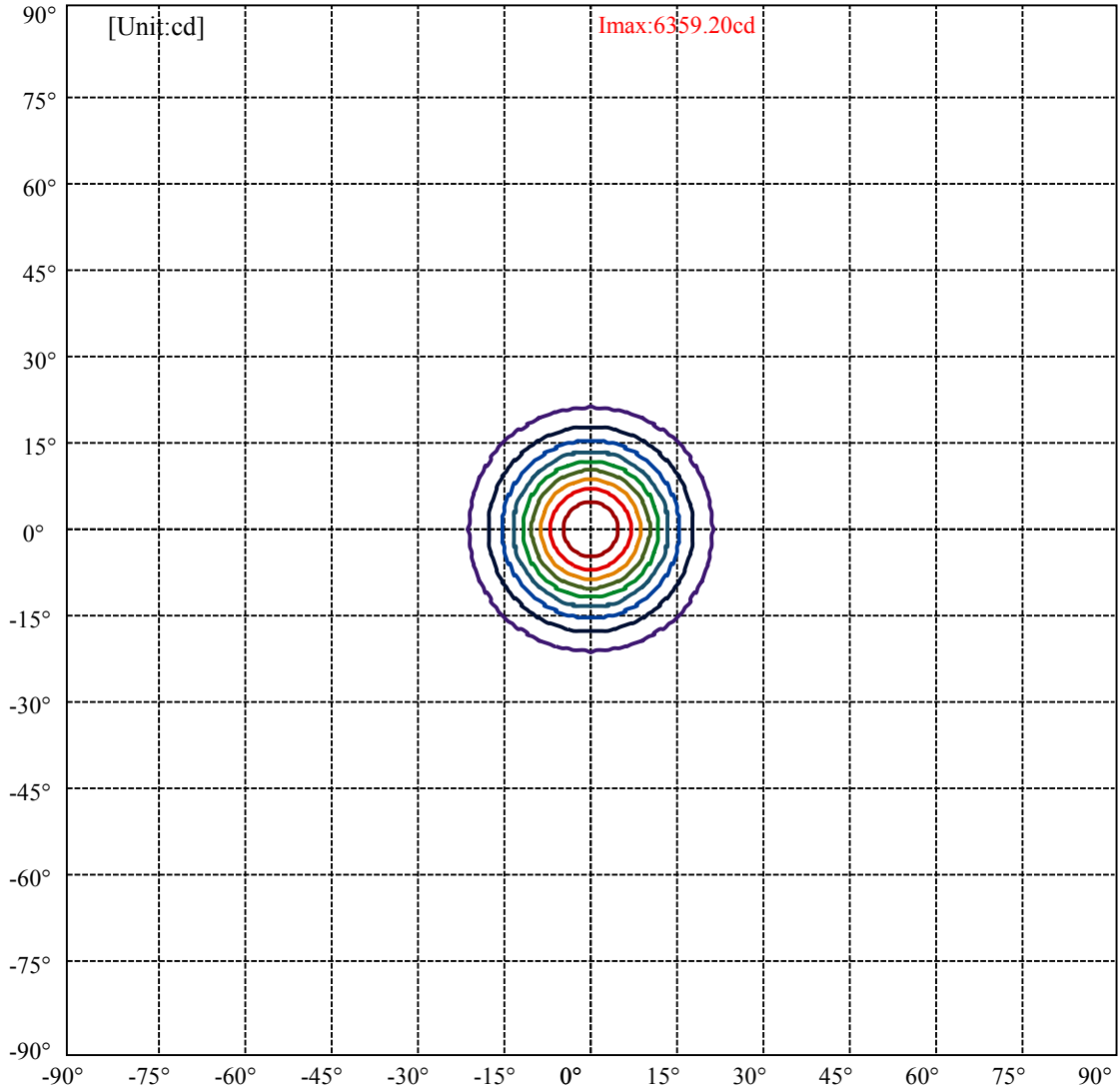
:C90/270Left:20.9 Right:20.9

Beam Angle(50%Imax):C0/180Left:11.7 Right:11.7

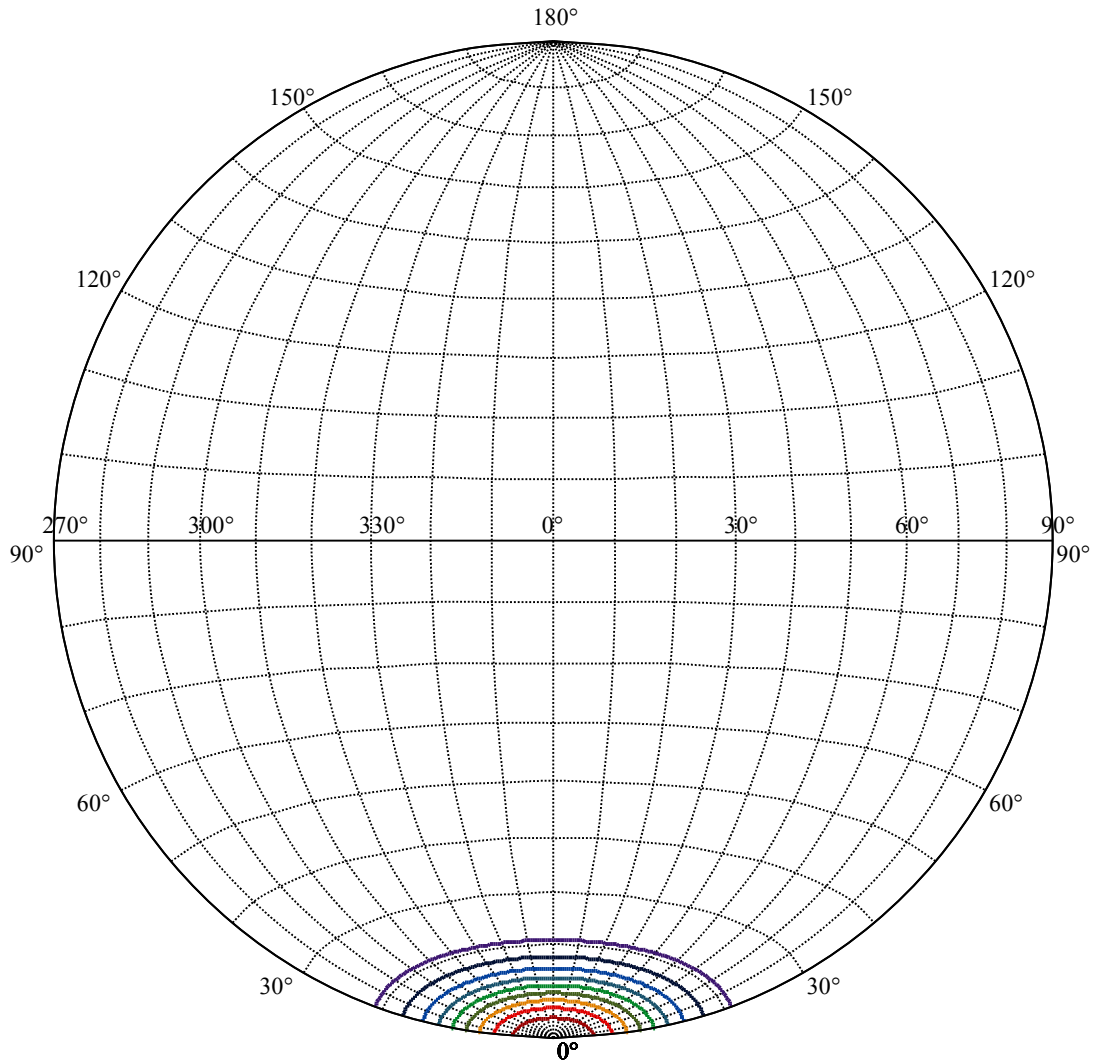
:C90/270Left:11.7 Right:11.7



Max , Ave Beam angle of C0 plane 23.42



(10%Imax) 635.92	—
(20%Imax) 1271.84	—
(30%Imax) 1907.76	—
(40%Imax) 2543.68	—
(50%Imax) 3179.6	—
(60%Imax) 3815.52	—
(70%Imax) 4451.44	—
(80%Imax) 5087.36	—
(90%Imax) 5723.28	—



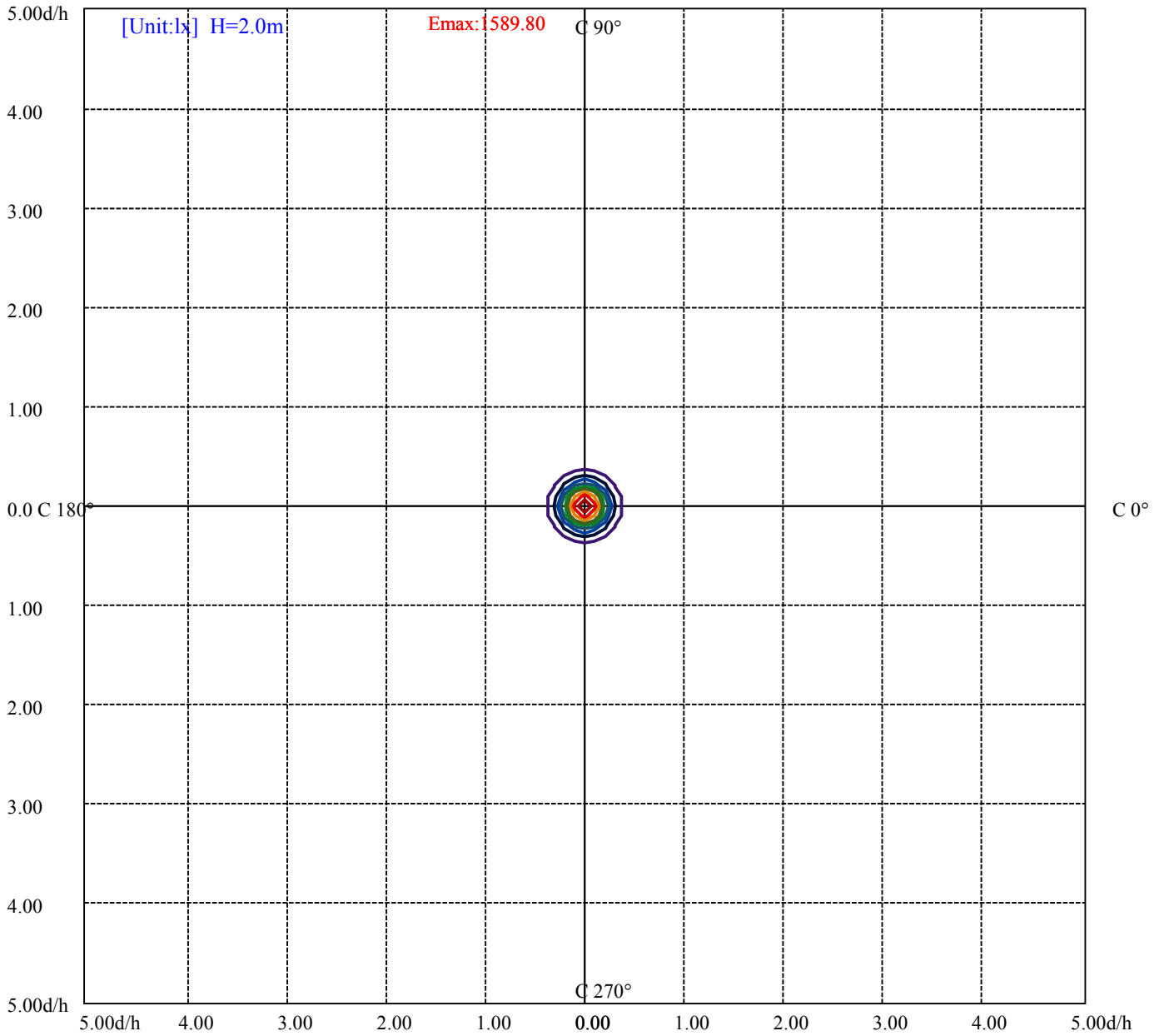
House

[Unit:cd]

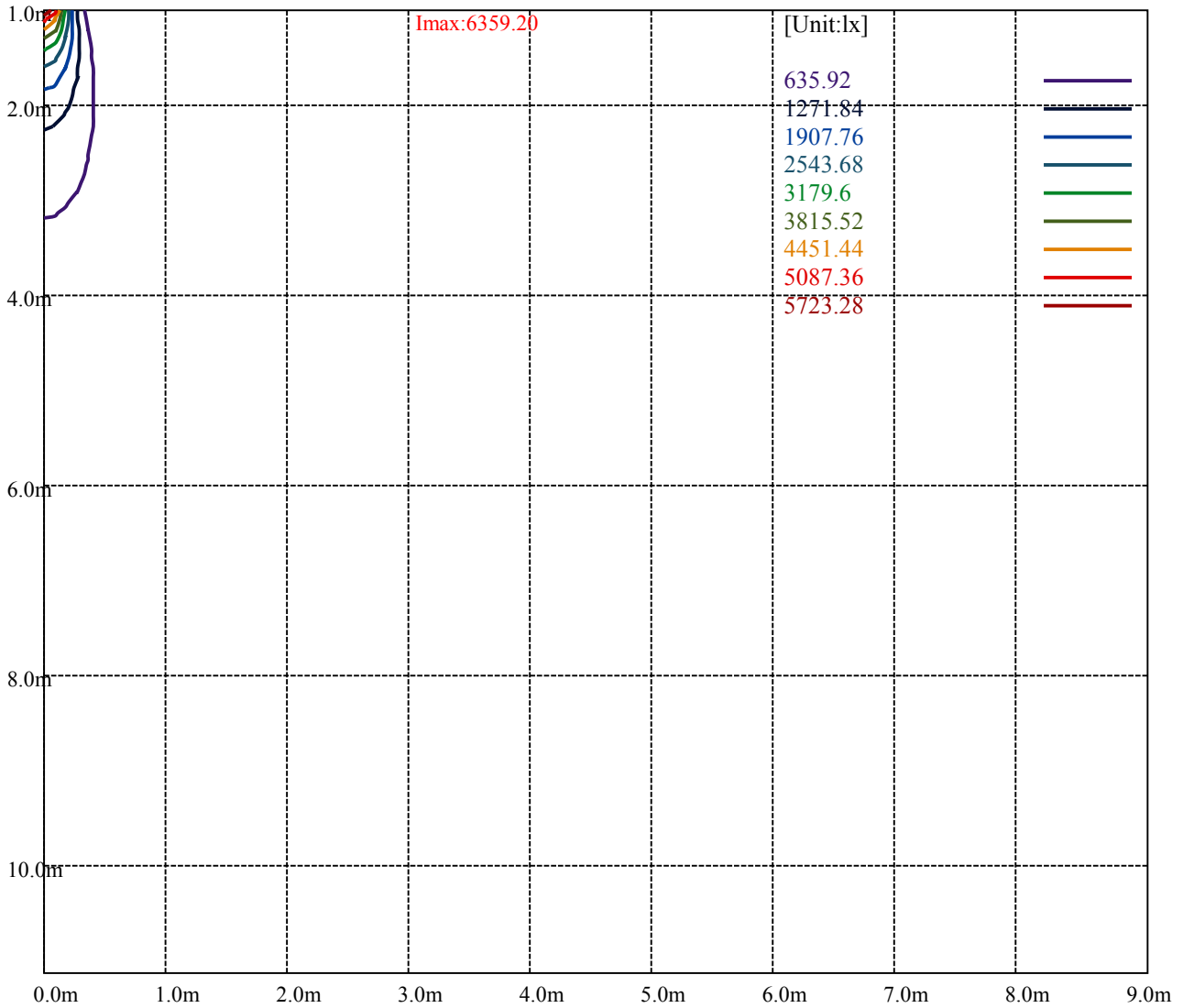
Road

Imax:6359.20

(10%Imax) 635.92	—
(20%Imax) 1271.84	—
(30%Imax) 1907.76	—
(40%Imax) 2543.68	—
(50%Imax) 3179.6	—
(60%Imax) 3815.52	—
(70%Imax) 4451.44	—
(80%Imax) 5087.36	—
(90%Imax) 5723.28	—



(10%Emax) 158.98	—
(20%Emax) 317.96	—
(30%Emax) 476.94	—
(40%Emax) 635.92	—
(50%Emax) 794.9	—
(60%Emax) 953.88	—
(70%Emax) 1112.86	—
(80%Emax) 1271.84	—
(90%Emax) 1430.82	—



Luminance Table

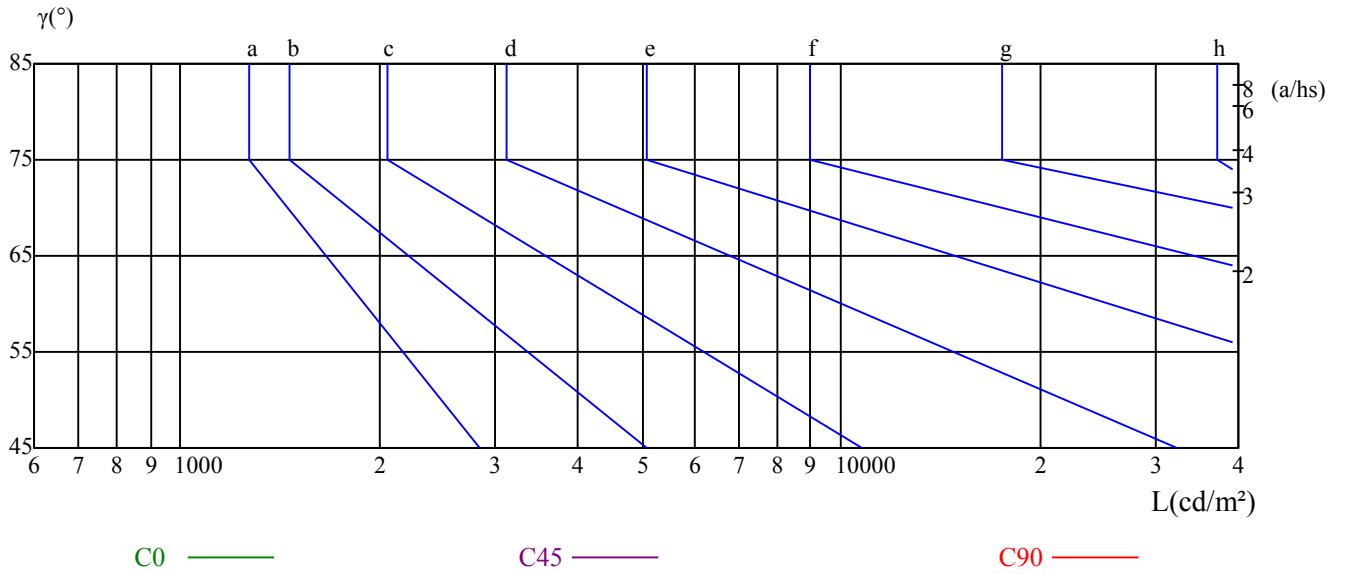
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

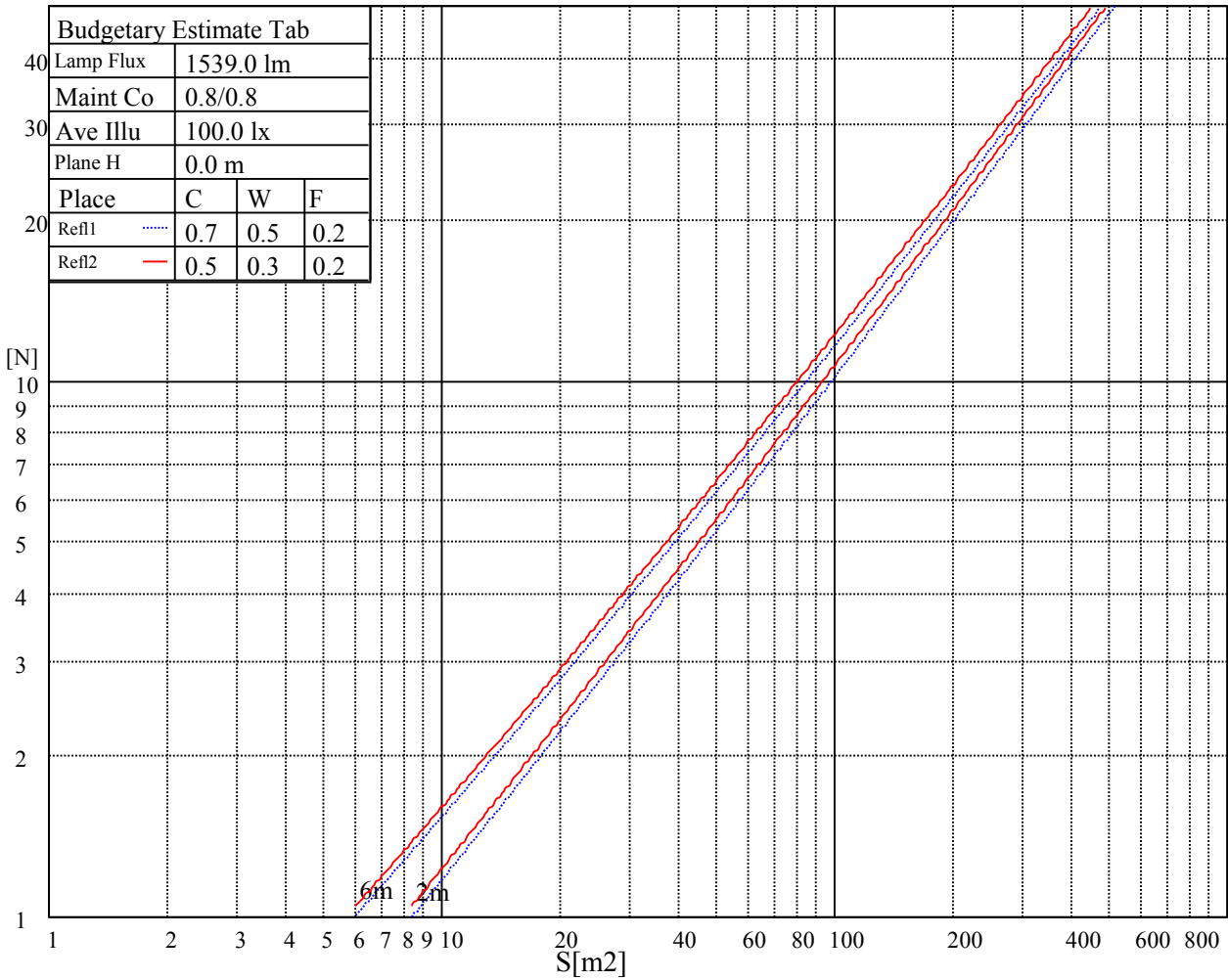
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

Glare Table

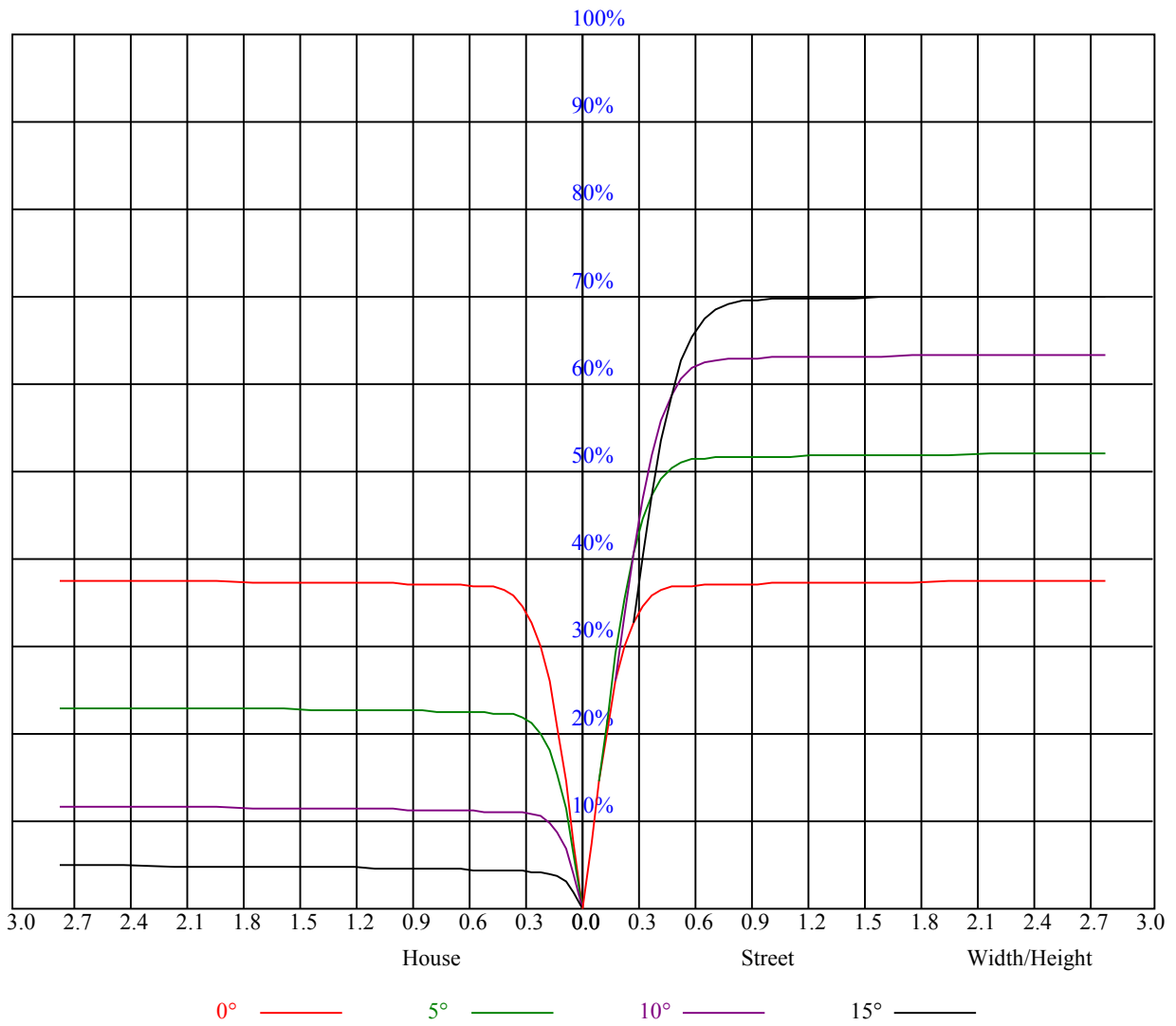
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve





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	0.90	0.90	0.90	0.88	0.88	0.88	0.84	0.84	0.84	0.80	0.80	0.80	0.77	0.77	0.77	0.76
1	0.85	0.84	0.83	0.84	0.82	0.81	0.81	0.80	0.79	0.78	0.77	0.76	0.75	0.75	0.74	0.73
2	0.82	0.79	0.77	0.80	0.78	0.77	0.78	0.76	0.75	0.76	0.74	0.73	0.74	0.73	0.72	0.71
3	0.78	0.76	0.74	0.77	0.75	0.73	0.76	0.74	0.72	0.74	0.72	0.71	0.72	0.71	0.70	0.69
4	0.76	0.73	0.71	0.75	0.72	0.70	0.73	0.71	0.69	0.72	0.70	0.69	0.71	0.69	0.68	0.67
5	0.73	0.70	0.68	0.73	0.70	0.68	0.71	0.69	0.67	0.70	0.68	0.67	0.69	0.68	0.66	0.65
6	0.71	0.68	0.66	0.71	0.68	0.66	0.70	0.67	0.65	0.69	0.67	0.65	0.68	0.66	0.65	0.64
7	0.69	0.66	0.64	0.69	0.66	0.64	0.68	0.65	0.64	0.67	0.65	0.63	0.66	0.65	0.63	0.62
8	0.67	0.64	0.62	0.67	0.64	0.62	0.66	0.64	0.62	0.66	0.63	0.62	0.65	0.63	0.62	0.61
9	0.66	0.63	0.61	0.65	0.63	0.61	0.65	0.62	0.61	0.64	0.62	0.61	0.64	0.62	0.60	0.60
10	0.64	0.61	0.60	0.64	0.61	0.59	0.63	0.61	0.59	0.63	0.61	0.59	0.63	0.61	0.59	0.58



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	6327.56	6407.44	6416.44	6378.75	6264.00	6111.00	5886.00	5627.81	5354.44
45.0	6367.50	6385.50	6321.94	6208.88	6049.13	5794.31	5552.44	5266.69	4907.81
90.0	6354.00	6274.69	6090.19	5896.69	5661.56	5354.44	5045.06	4650.75	4233.38
135.0	6387.75	6307.31	6084.00	5877.56	5675.06	5292.00	4965.19	4646.25	4165.31
180.0	6327.56	6194.81	5996.81	5748.19	5486.63	5187.94	4754.25	4376.25	3976.31
225.0	6367.50	6303.38	6168.38	5975.44	5770.69	5493.94	5162.63	4824.00	4406.63
270.0	6354.00	6381.00	6347.25	6264.00	6123.38	5902.88	5680.13	5414.63	5072.63
315.0	6387.75	6419.25	6404.06	6330.94	6214.50	6042.38	5808.38	5535.00	5245.31
360.0	6327.56	6407.44	6416.44	6378.75	6264.00	6111.00	5886.00	5627.81	5354.44
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	5009.63	4623.75	4255.31	3871.69	3385.69	2996.44	2625.19	2236.50	1894.50
45.0	4515.19	4138.31	3703.50	3312.00	2876.06	2467.69	2139.75	1796.63	1539.56
90.0	3843.00	3396.94	2954.81	2586.38	2245.50	1865.25	1596.38	1357.31	1076.51
135.0	3722.63	3368.81	2875.50	2503.69	2162.25	1789.88	1531.69	1295.44	1062.56
180.0	3517.31	3063.38	2685.94	2296.69	1947.38	1672.88	1403.44	1102.84	987.41
225.0	4019.63	3573.56	3121.88	2742.75	2391.75	2002.50	1724.63	1476.00	1100.48
270.0	4689.56	4322.25	3885.19	3488.06	3052.13	2633.06	2289.38	1941.75	1636.88
315.0	4873.50	4460.63	4073.63	3632.06	3240.56	2817.56	2417.63	2093.63	1765.69
360.0	5009.63	4623.75	4255.31	3871.69	3385.69	2996.44	2625.19	2236.50	1894.50
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1621.13	1347.19	1118.25	928.13	740.25	585.00	437.63	300.94	287.44
45.0	1275.19	1077.19	875.81	689.63	534.38	425.81	291.38	172.80	104.85
90.0	918.17	751.11	581.34	427.89	309.60	202.78	126.28	67.50	42.13
135.0	880.88	714.38	536.63	406.13	290.81	179.72	95.29	54.06	33.69
180.0	795.04	639.06	494.83	340.65	236.59	154.01	75.09	41.96	28.58
225.0	1030.05	858.32	677.87	517.95	389.93	265.05	170.38	90.90	47.53
270.0	1396.13	1195.88	965.81	797.63	645.19	484.31	339.19	284.06	145.91
315.0	1478.25	1109.98	1062.96	837.51	671.68	528.36	387.51	262.07	171.90
360.0	1621.13	1347.19	1118.25	928.13	740.25	585.00	437.63	300.94	287.44
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	124.31	70.82	39.88	27.96	18.56	13.67	12.15	11.25	10.29
45.0	54.28	37.35	25.26	15.53	12.15	10.91	10.07	9.39	8.94
90.0	28.80	17.27	12.54	10.91	10.13	9.34	8.89	8.49	8.10
135.0	21.09	14.63	11.64	10.63	9.84	9.17	8.66	8.33	7.88
180.0	16.65	12.60	10.86	9.84	9.34	8.72	8.21	7.93	7.59
225.0	30.38	18.34	13.11	11.14	10.18	9.34	8.78	8.27	7.82
270.0	71.38	41.57	26.44	17.33	12.94	11.31	10.24	9.51	8.89
315.0	92.59	50.51	33.24	21.21	15.64	12.60	11.31	10.46	9.79
360.0	124.31	70.82	39.88	27.96	18.56	13.67	12.15	11.25	10.29
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	9.68	9.11	8.61	8.21	7.88	7.54	7.31	7.09	6.86
45.0	8.44	8.10	7.76	7.48	7.20	7.03	6.81	6.64	6.53
90.0	7.71	7.48	7.20	7.03	6.86	6.69	6.53	6.41	6.30
135.0	7.59	7.37	7.09	6.92	6.75	6.64	6.47	6.36	6.24
180.0	7.31	7.09	6.92	6.69	6.64	6.47	6.36	6.24	6.19
225.0	7.48	7.20	6.92	6.69	6.58	6.36	6.24	6.13	6.08
270.0	8.38	7.99	7.54	7.26	7.03	6.86	6.64	6.53	6.36
315.0	9.06	8.61	8.21	7.76	7.48	7.26	6.98	6.81	6.64
360.0	9.68	9.11	8.61	8.21	7.88	7.54	7.31	7.09	6.86

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	6.75	6.53	6.47	6.36	6.24	6.13	6.08	6.02	5.96
45.0	6.36	6.24	6.19	6.08	5.96	5.91	5.85	5.79	5.68
90.0	6.19	6.08	6.02	5.96	5.85	5.79	5.74	5.68	5.63
135.0	6.19	6.08	6.02	5.91	5.85	5.79	5.74	5.68	5.68
180.0	6.08	6.02	5.96	5.91	5.85	5.79	5.74	5.74	5.68
225.0	5.96	5.91	5.79	5.79	5.74	5.63	5.63	5.57	5.57
270.0	6.30	6.13	6.08	5.96	5.91	5.79	5.79	5.74	5.68
315.0	6.47	6.36	6.30	6.13	6.08	6.02	5.96	5.91	5.79
360.0	6.75	6.53	6.47	6.36	6.24	6.13	6.08	6.02	5.96
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	5.91	5.85	5.79	5.79	5.74	5.68	5.68	5.63	5.57
45.0	5.68	5.63	5.57	5.57	5.51	5.46	5.46	5.40	5.40
90.0	5.57	5.57	5.51	5.51	5.46	5.46	5.40	5.40	5.40
135.0	5.63	5.63	5.57	5.57	5.51	5.51	5.46	5.51	5.46
180.0	5.63	5.63	5.63	5.57	5.57	5.57	5.51	5.51	5.51
225.0	5.51	5.46	5.46	5.40	5.40	5.34	5.40	5.34	5.29
270.0	5.63	5.63	5.57	5.51	5.51	5.46	5.46	5.46	5.40
315.0	5.74	5.74	5.68	5.63	5.57	5.57	5.51	5.46	5.51
360.0	5.91	5.85	5.79	5.79	5.74	5.68	5.68	5.63	5.57
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	5.57	5.57	5.51	5.51	5.51	5.51	5.46	5.46	5.46
45.0	5.40	5.40	5.34	5.34	5.34	5.34	5.34	5.29	5.29
90.0	5.34	5.34	5.34	5.34	5.34	5.34	5.29	5.29	5.34
135.0	5.40	5.40	5.40	5.34	5.40	5.40	5.34	5.34	5.34
180.0	5.51	5.46	5.46	5.46	5.40	5.40	5.40	5.40	5.40
225.0	5.29	5.29	5.29	5.29	5.29	5.23	5.23	5.23	5.23
270.0	5.40	5.34	5.34	5.34	5.34	5.34	5.29	5.29	5.29
315.0	5.46	5.46	5.40	5.40	5.40	5.40	5.34	5.34	5.34
360.0	5.57	5.57	5.51	5.51	5.51	5.51	5.46	5.46	5.46
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	5.46	5.40	5.40	5.40	5.40	5.40	5.40	5.34	5.40
45.0	5.29	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23
90.0	5.29	5.34	5.29	5.29	5.29	5.29	5.29	5.23	5.12
135.0	5.34	5.29	5.29	5.34	5.29	5.29	5.29	5.29	5.29
180.0	5.40	5.40	5.34	5.34	5.34	5.40	5.34	5.34	5.34
225.0	5.18	5.18	5.18	5.23	5.18	5.18	5.18	5.18	5.18
270.0	5.29	5.29	5.29	5.23	5.23	5.23	5.23	5.23	5.23
315.0	5.34	5.34	5.34	5.29	5.29	5.29	5.29	5.29	5.29
360.0	5.46	5.40	5.40	5.40	5.40	5.40	5.40	5.34	5.40
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	5.40	5.40	5.34	5.34	5.34	5.34	5.34	5.34	5.34
45.0	5.18	5.23	5.18	5.18	5.12	5.18	5.18	5.12	5.12
90.0	5.12	5.12	5.12	5.12	5.12	5.18	5.12	5.12	5.12
135.0	5.23	5.29	5.23	5.23	5.23	5.23	5.23	5.23	5.23
180.0	5.34	5.34	5.34	5.29	5.34	5.29	5.34	5.34	5.34
225.0	5.18	5.18	5.12	5.12	5.12	5.18	5.12	5.12	5.12
270.0	5.18	5.18	5.12	5.18	5.12	5.12	5.12	5.12	5.12
315.0	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23
360.0	5.40	5.40	5.34	5.34	5.34	5.34	5.34	5.34	5.34

Intensity data(cd)

C/γ(°)	90.0
0.0	5.34
45.0	5.12
90.0	5.12
135.0	5.23
180.0	5.29
225.0	5.12
270.0	5.12
315.0	5.18
360.0	5.34