



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: 2-1747-N	
Luminaire: 92.70.124.00	
Report No: 200407-B039	Voltage(V): 220.4000
Test No: 200407-C039	Current(A): 0.0410
LampCAT: TRIDONIC SLE G7 9MM	Power (W): 8.2900
Lamp flux(lm): 1028.0	PF: 0.8960
Number of Lamps: 1	Ballast type: AC
Length(mm): 0	Width(mm): 0
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 867.64
Efficiency(%): 84.40%
Lumens(lm)/Power(W): 104.66
Central intensity(cd): 1804.672
Maximum intensity(cd): 1804.672
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=37.6
 [C90/270]Total=37.6
Field angle(10%Imax): [C0/180]Total=67.0
 [C90/270]Total=67.0
Maximum s/h(1/2): C0_180=0.61 C90_270=0.61
Maximum s/h(1/4): C0_180=0.62 C90_270=0.62
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 84.40%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.365%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1804.672	0.000	0	.000%	.000%
1.0	1802.700	1.726	1.726	.168%	.199%
2.0	1793.710	5.162	6.888	.502%	.794%
3.0	1778.919	8.545	15.433	.831%	1.779%
4.0	1759.777	11.845	27.278	1.152%	3.144%
5.0	1732.051	15.022	42.299	1.461%	4.875%
6.0	1700.265	18.038	60.337	1.755%	6.954%
7.0	1662.156	20.870	81.208	2.030%	9.360%
8.0	1619.407	23.486	104.693	2.285%	12.066%
9.0	1571.032	25.857	130.55	2.515%	15.047%
10.0	1515.986	27.936	158.486	2.718%	18.266%
11.0	1460.302	29.739	188.225	2.893%	21.694%
12.0	1395.975	31.223	219.449	3.037%	25.293%
13.0	1330.546	32.357	251.806	3.148%	29.022%
14.0	1257.519	33.127	284.933	3.222%	32.840%
15.0	1186.580	33.554	318.486	3.264%	36.707%
16.0	1091.117	33.375	351.861	3.247%	40.554%
17.0	1019.423	32.867	384.728	3.197%	44.342%
18.0	950.172	32.474	417.202	3.159%	48.085%
19.0	889.773	32.011	449.213	3.114%	51.774%
20.0	819.181	31.279	480.492	3.043%	55.379%
21.0	752.888	30.187	510.679	2.936%	58.859%
22.0	688.985	28.975	539.654	2.819%	62.198%
23.0	629.630	27.668	567.322	2.691%	65.387%
24.0	576.051	26.361	593.683	2.564%	68.425%
25.0	531.661	25.187	618.869	2.450%	71.328%
26.0	482.676	23.944	642.813	2.329%	74.088%
27.0	441.203	22.603	665.416	2.199%	76.693%
28.0	404.440	21.410	686.826	2.083%	79.161%
29.0	365.635	20.147	706.973	1.960%	81.483%
30.0	323.362	18.603	725.576	1.810%	83.627%
31.0	282.231	16.853	742.429	1.639%	85.569%
32.0	241.964	15.018	757.446	1.461%	87.300%
33.0	200.422	13.033	770.479	1.268%	88.802%
34.0	162.226	10.975	781.454	1.068%	90.067%
35.0	127.650	9.002	790.456	.876%	91.105%
36.0	82.888	6.704	797.16	.652%	91.877%
37.0	63.619	4.778	801.938	.465%	92.428%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	50.609	3.813	805.751	.371%	92.867%
39.0	43.091	3.198	808.949	.311%	93.236%
40.0	37.848	2.823	811.772	.275%	93.561%
41.0	33.787	2.551	814.323	.248%	93.855%
42.0	30.742	2.344	816.667	.228%	94.125%
43.0	28.387	2.190	818.858	.213%	94.378%
44.0	26.195	2.060	820.918	.200%	94.615%
45.0	24.542	1.950	822.868	.190%	94.840%
46.0	23.051	1.861	824.729	.181%	95.055%
47.0	21.752	1.782	826.511	.173%	95.260%
48.0	20.470	1.707	828.218	.166%	95.457%
49.0	19.431	1.639	829.856	.159%	95.646%
50.0	18.538	1.583	831.439	.154%	95.828%
51.0	17.662	1.532	832.971	.149%	96.005%
52.0	16.902	1.483	834.454	.144%	96.175%
53.0	16.085	1.435	835.889	.140%	96.341%
54.0	15.418	1.388	837.277	.135%	96.501%
55.0	14.727	1.346	838.623	.131%	96.656%
56.0	14.112	1.303	839.926	.127%	96.806%
57.0	13.521	1.263	841.19	.123%	96.952%
58.0	12.987	1.226	842.416	.119%	97.093%
59.0	12.535	1.193	843.609	.116%	97.231%
60.0	12.071	1.162	844.771	.113%	97.365%
61.0	11.688	1.134	845.905	.110%	97.495%
62.0	11.270	1.106	847.011	.108%	97.623%
63.0	10.893	1.078	848.089	.105%	97.747%
64.0	10.499	1.050	849.139	.102%	97.868%
65.0	10.139	1.021	850.16	.099%	97.986%
66.0	9.826	0.996	851.156	.097%	98.101%
67.0	9.495	0.972	852.128	.095%	98.212%
68.0	9.182	0.946	853.074	.092%	98.322%
69.0	8.880	0.921	853.995	.090%	98.428%
70.0	8.614	0.898	854.894	.087%	98.531%
71.0	8.324	0.875	855.769	.085%	98.632%
72.0	8.028	0.850	856.619	.083%	98.730%
73.0	7.773	0.826	857.446	.080%	98.825%
74.0	7.488	0.802	858.248	.078%	98.918%
75.0	7.222	0.777	859.025	.076%	99.007%

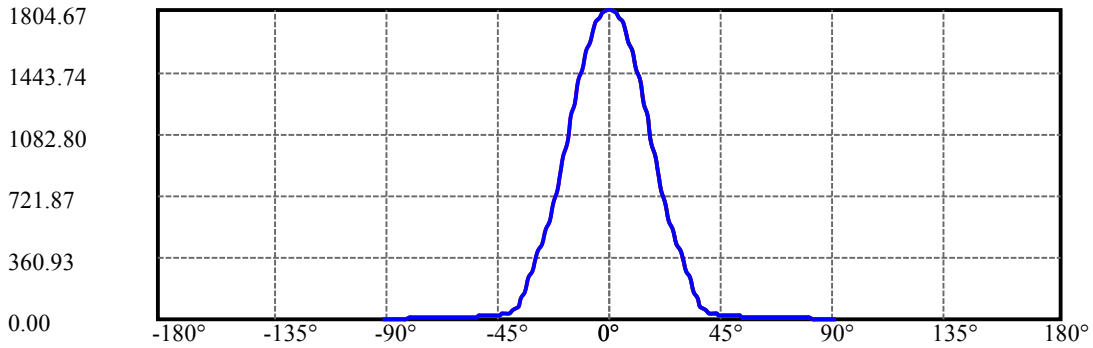
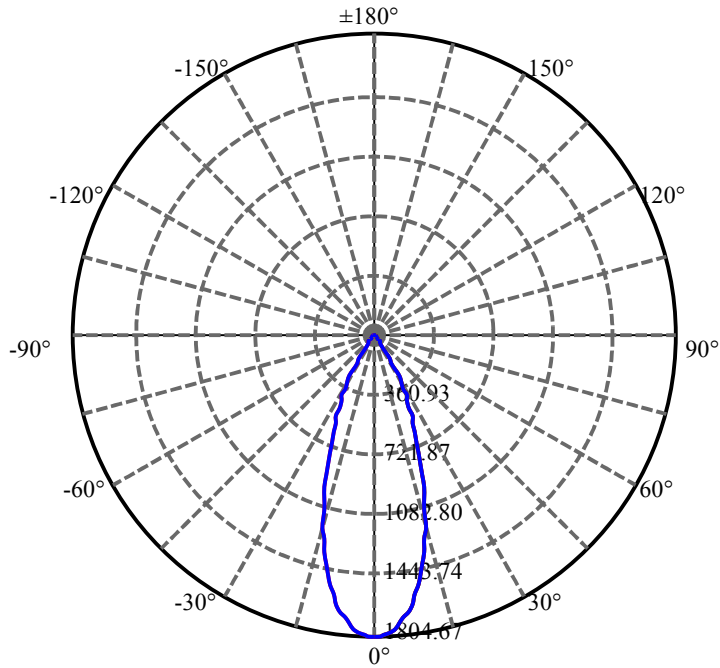
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	6.972	0.753	859.779	.073%	99.094%
77.0	6.653	0.726	860.505	.071%	99.178%
78.0	6.398	0.699	861.204	.068%	99.259%
79.0	6.119	0.673	861.876	.065%	99.336%
80.0	5.847	0.645	862.521	.063%	99.410%
81.0	5.592	0.619	863.14	.060%	99.482%
82.0	5.319	0.592	863.732	.058%	99.550%
83.0	5.070	0.565	864.296	.055%	99.615%
84.0	4.820	0.539	864.835	.052%	99.677%
85.0	4.600	0.514	865.349	.050%	99.736%
86.0	4.391	0.491	865.841	.048%	99.793%
87.0	4.234	0.472	866.313	.046%	99.847%
88.0	4.083	0.456	866.768	.044%	99.900%
89.0	3.950	0.440	867.209	.043%	99.951%
90.0	3.857	0.428	867.637	.042%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	725.58	70.58%	83.63%
0-40	811.77	78.97%	93.56%
0-60	844.77	82.18%	97.36%
0-90	867.21	84.36%	99.95%
0-120	867.21	84.36%	99.95%
0-180	867.64	84.40%	100.00%
60-90	23.60	2.30%	2.72%
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%
0-28.36	694.11	67.52%	80.00%

ZONAL LUMEN SUMMARY

0-10	158.49
10-20	322.01
20-30	245.08
30-40	86.20
40-50	19.67
50-60	13.33
60-70	10.12
70-80	7.63
80-90	4.69
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: —————

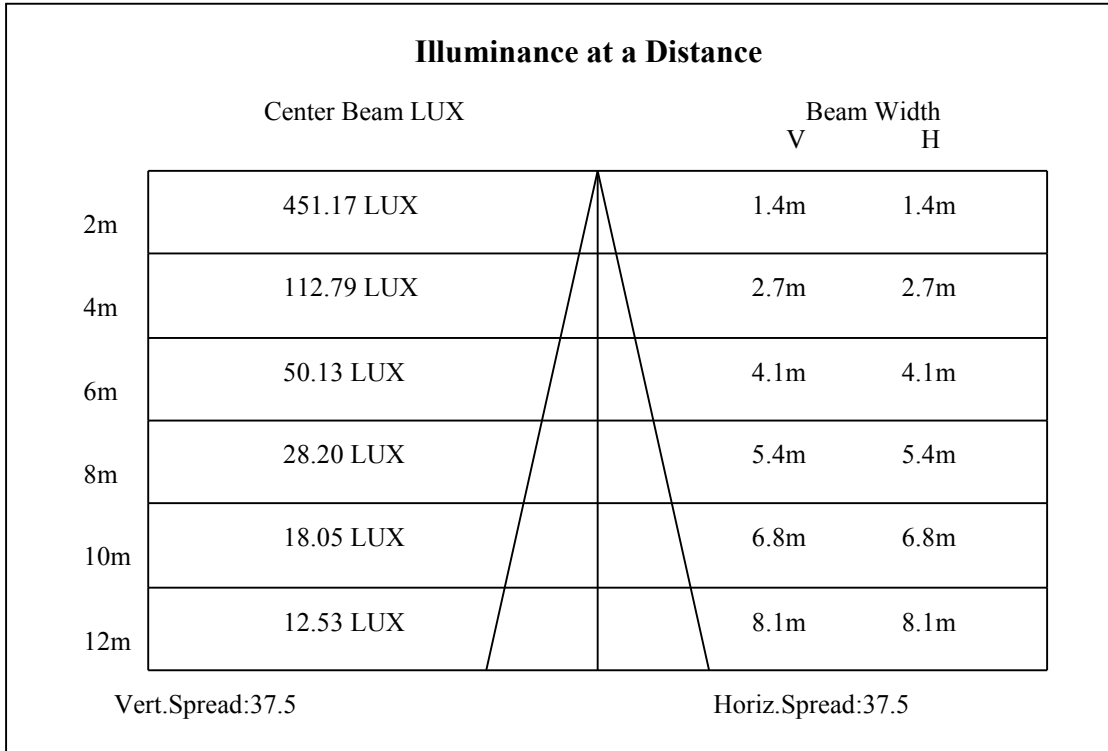
C90/C270: —————

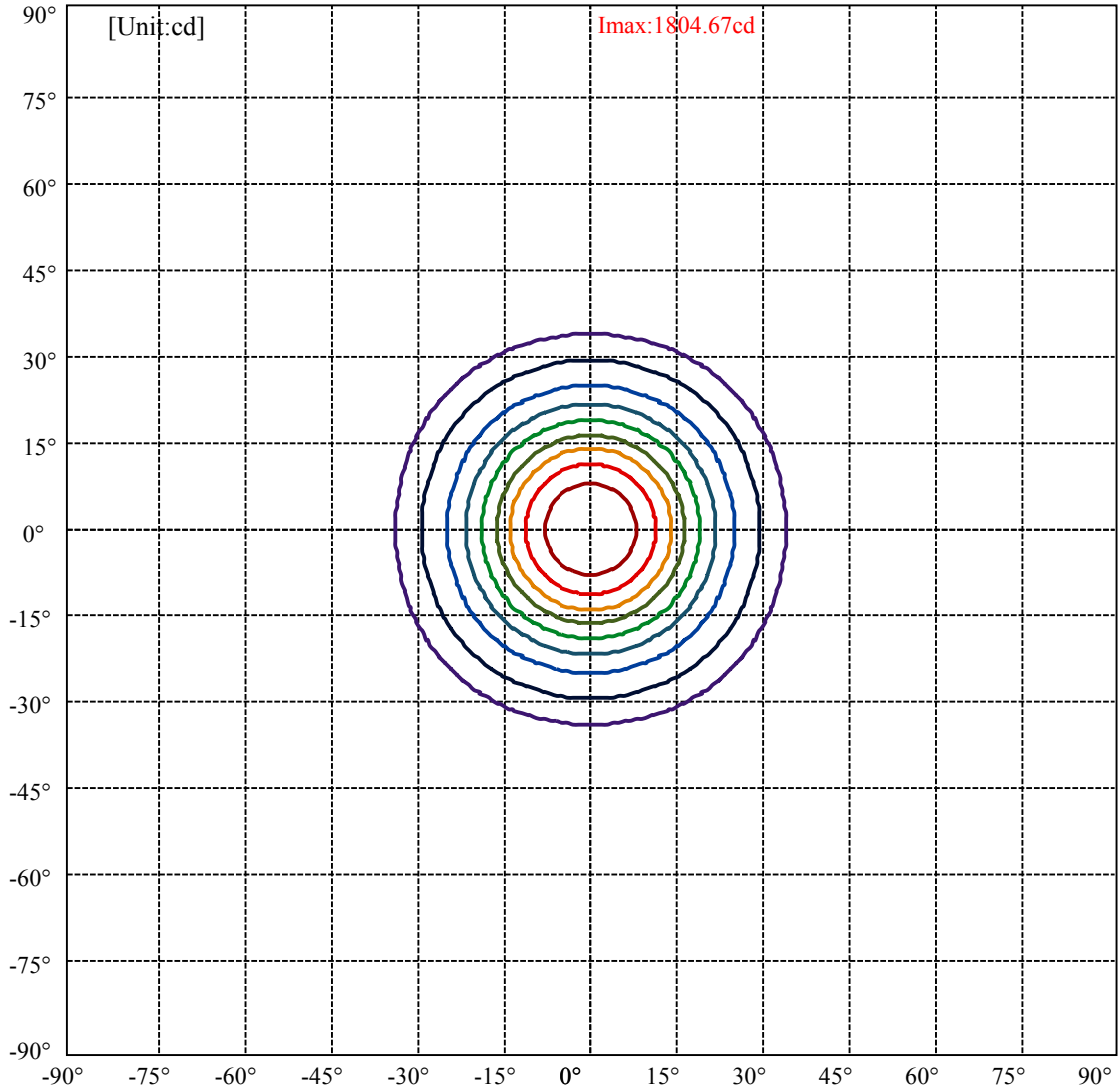
Field angle(10%Imax):C0/180Left:33.5 Right:33.5

:C90/270Left:33.5 Right:33.5

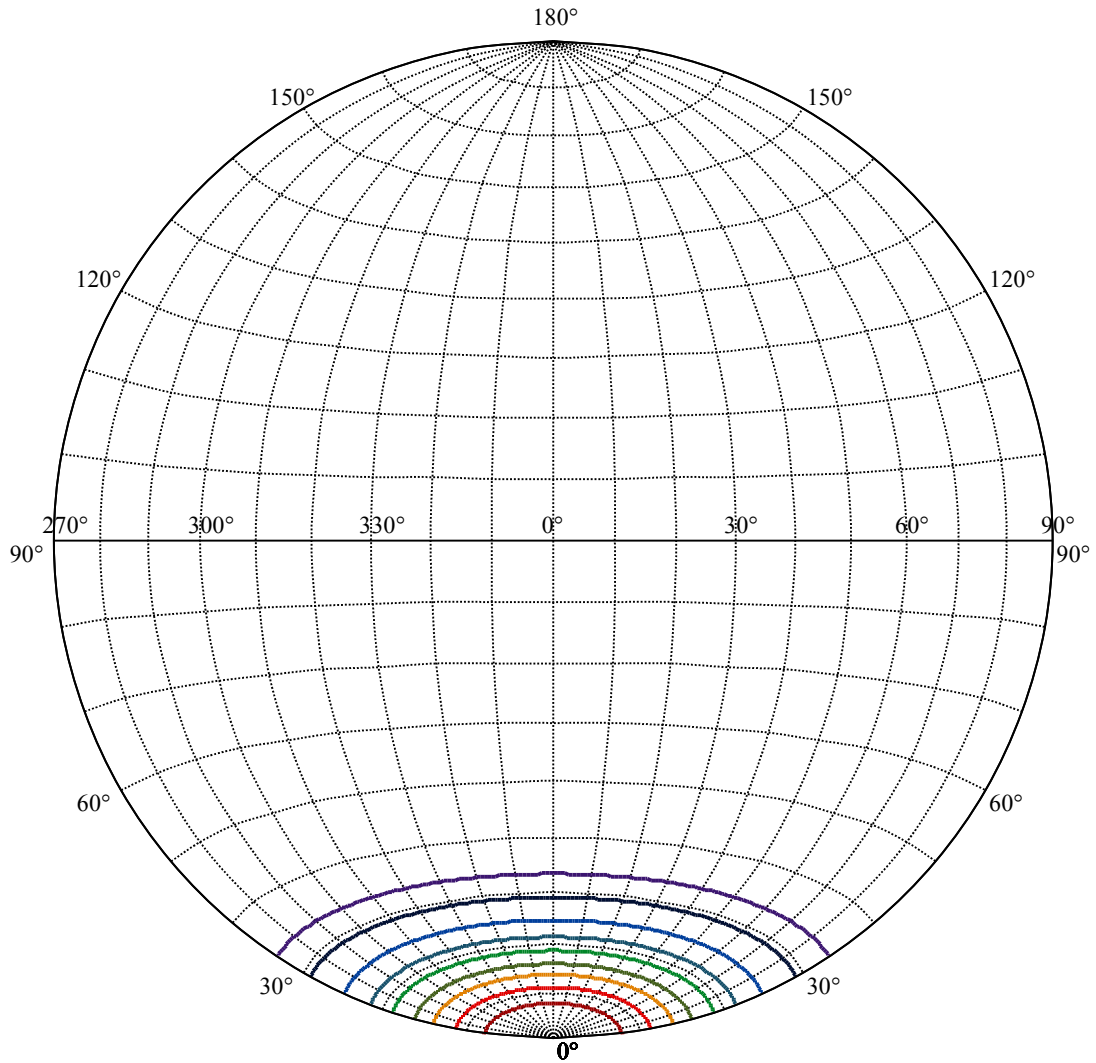
Beam Angle(50%Imax):C0/180Left:18.8 Right:18.8

:C90/270Left:18.8 Right:18.8





(10%Imax) 180.467	—
(20%Imax) 360.934	—
(30%Imax) 541.402	—
(40%Imax) 721.869	—
(50%Imax) 902.336	—
(60%Imax) 1082.8	—
(70%Imax) 1263.27	—
(80%Imax) 1443.74	—
(90%Imax) 1624.21	—



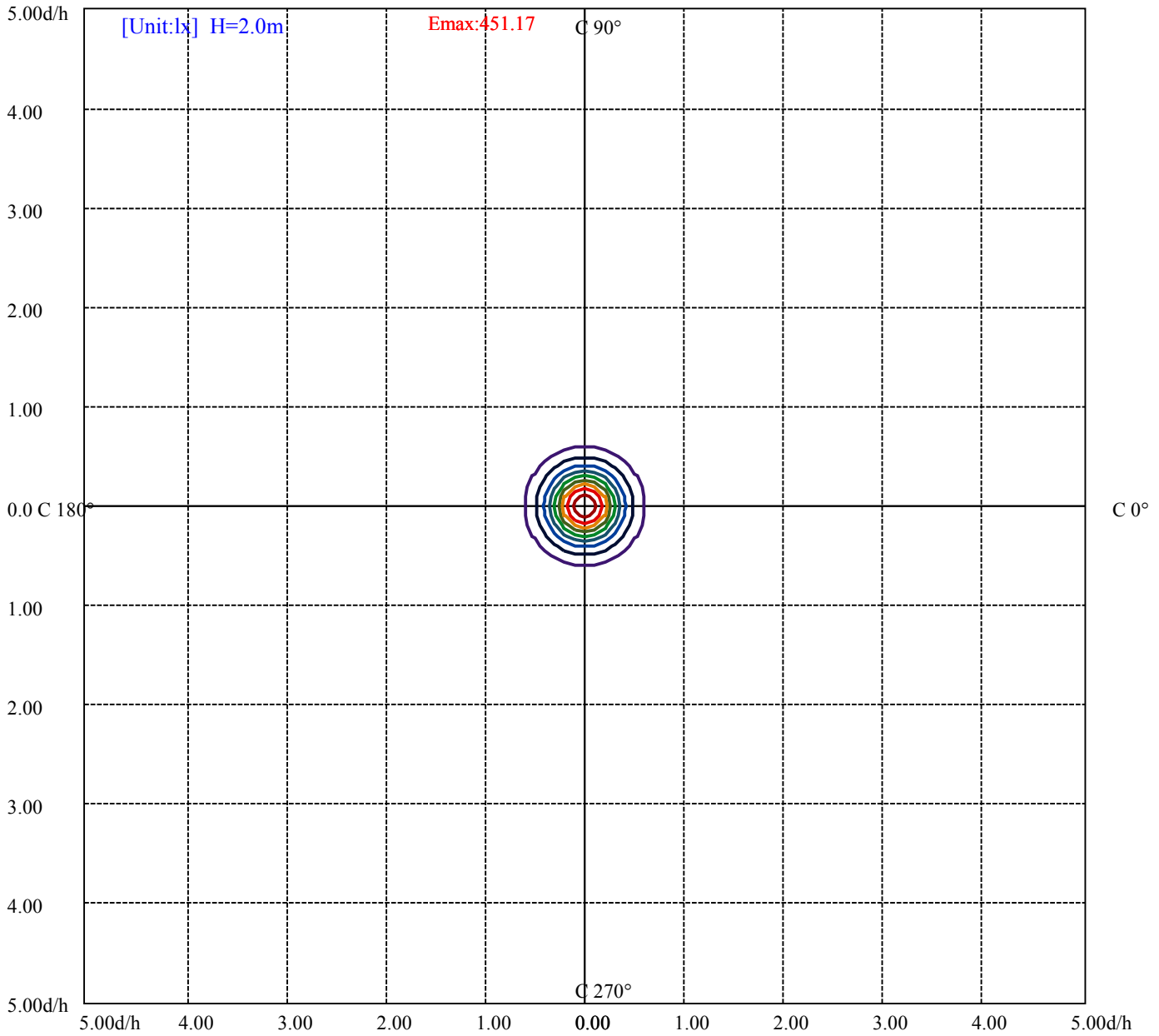
House

[Unit:cd]

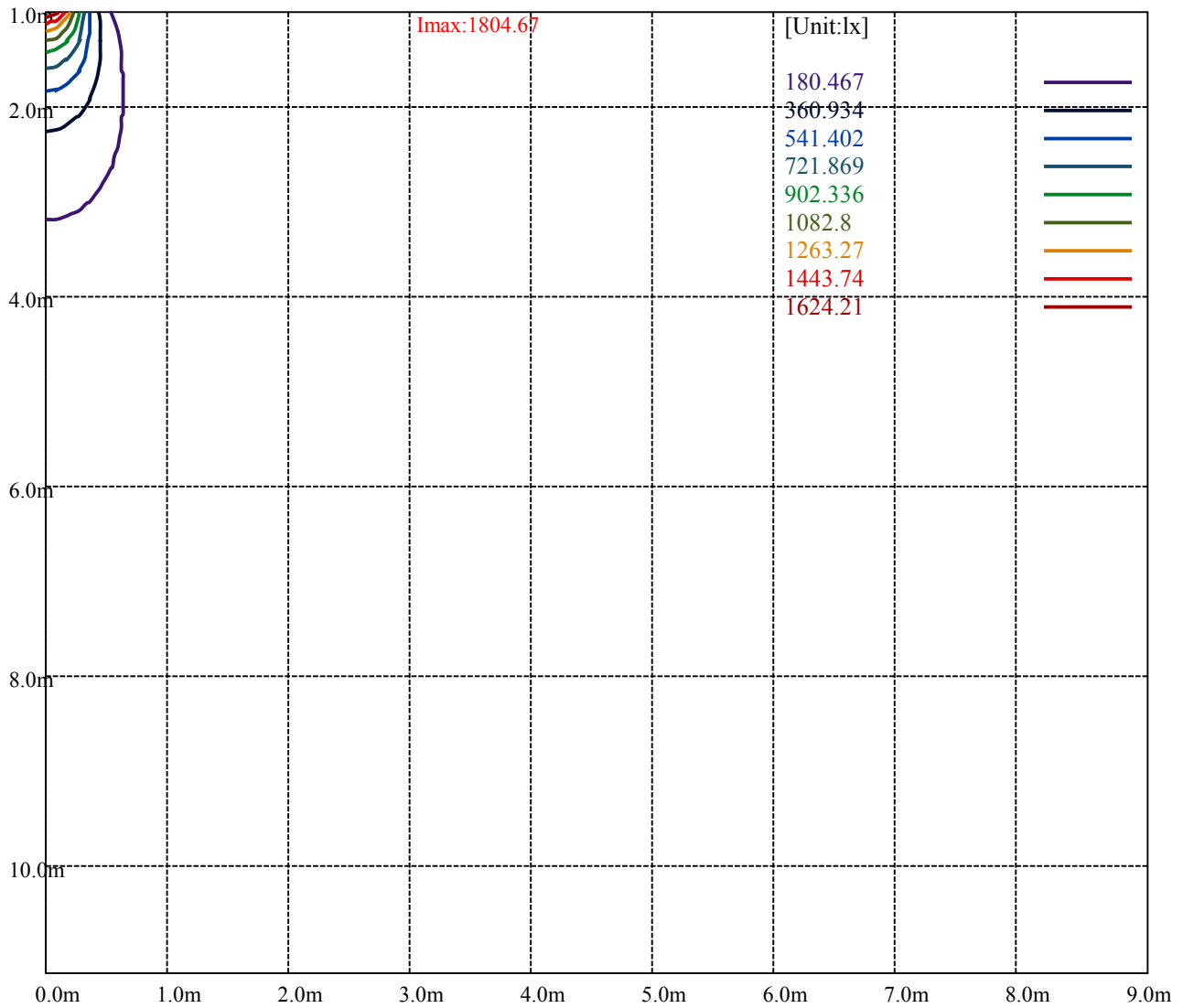
Road

Imax:1804.67

(10%Imax)	180.467	—
(20%Imax)	360.934	—
(30%Imax)	541.402	—
(40%Imax)	721.869	—
(50%Imax)	902.336	—
(60%Imax)	1082.8	—
(70%Imax)	1263.27	—
(80%Imax)	1443.74	—
(90%Imax)	1624.21	—



- (10%Emax) 45.11675
- (20%Emax) 90.2335
- (30%Emax) 135.3505
- (40%Emax) 180.4673
- (50%Emax) 225.584
- (60%Emax) 270.7
- (70%Emax) 315.8175
- (80%Emax) 360.935
- (90%Emax) 406.05



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

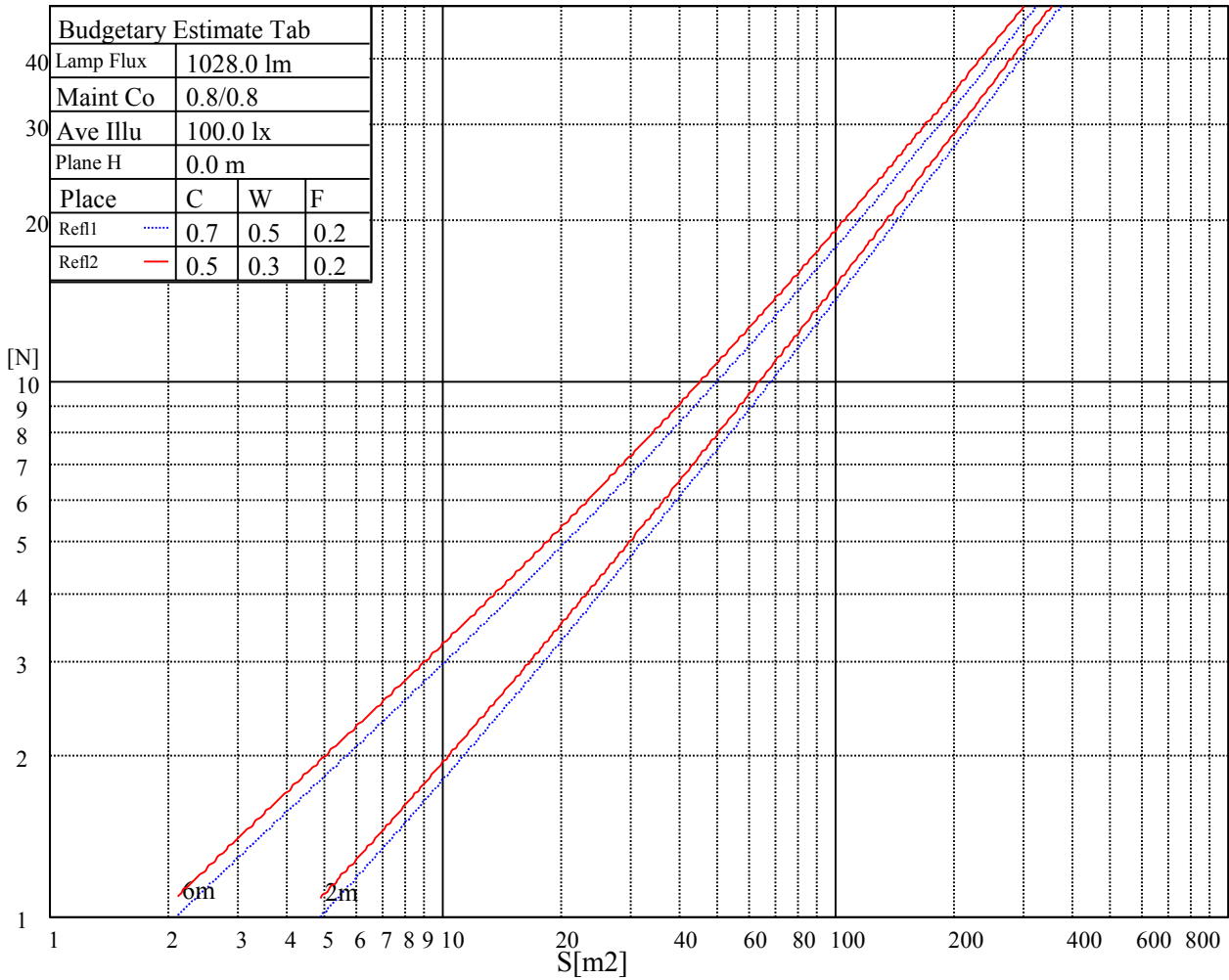
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

Glare Table

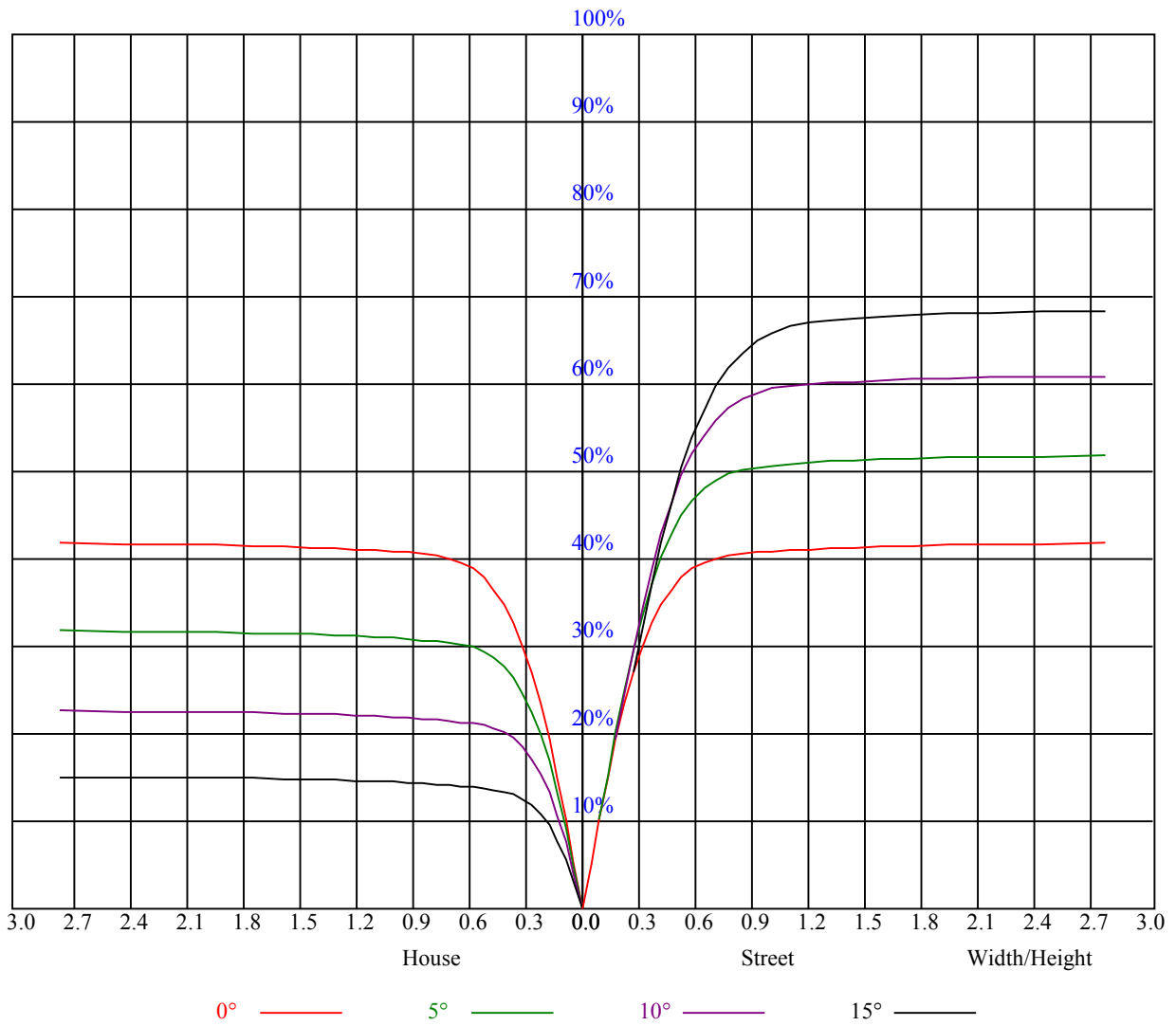
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.00	1.00	1.00	0.98	0.98	0.98	0.94	0.94	0.94	0.90	0.90	0.90	0.86	0.86	0.86	0.84
1	0.94	0.92	0.90	0.92	0.90	0.88	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.82	0.81	0.79
2	0.88	0.85	0.82	0.86	0.83	0.81	0.84	0.81	0.79	0.81	0.79	0.78	0.79	0.77	0.76	0.75
3	0.83	0.79	0.76	0.82	0.78	0.75	0.79	0.76	0.74	0.77	0.75	0.73	0.75	0.73	0.72	0.70
4	0.78	0.74	0.71	0.77	0.73	0.70	0.75	0.72	0.69	0.74	0.71	0.69	0.72	0.70	0.68	0.67
5	0.74	0.70	0.66	0.73	0.69	0.66	0.72	0.68	0.65	0.70	0.67	0.65	0.69	0.66	0.64	0.63
6	0.70	0.66	0.63	0.70	0.65	0.62	0.69	0.65	0.62	0.67	0.64	0.62	0.66	0.63	0.61	0.60
7	0.67	0.63	0.59	0.67	0.62	0.59	0.65	0.62	0.59	0.65	0.61	0.59	0.64	0.61	0.58	0.57
8	0.64	0.60	0.56	0.64	0.59	0.56	0.63	0.59	0.56	0.62	0.58	0.56	0.61	0.58	0.56	0.55
9	0.61	0.57	0.54	0.61	0.57	0.54	0.60	0.56	0.54	0.59	0.56	0.53	0.59	0.56	0.53	0.52
10	0.59	0.54	0.51	0.58	0.54	0.51	0.58	0.54	0.51	0.57	0.54	0.51	0.56	0.53	0.51	0.50



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	1802.82	1794.00	1768.48	1748.52	1716.04	1679.38	1630.66	1581.47	1526.72
45.0	1809.31	1802.82	1795.86	1774.97	1753.63	1716.97	1682.17	1635.30	1588.90
90.0	1802.35	1794.00	1781.47	1757.34	1736.92	1707.69	1672.42	1623.24	1581.94
135.0	1804.21	1807.92	1804.67	1794.46	1779.15	1764.77	1743.88	1708.15	1677.99
180.0	1802.82	1809.78	1804.67	1802.35	1785.18	1766.16	1742.49	1716.51	1677.99
225.0	1809.31	1807.46	1800.96	1784.72	1765.69	1742.49	1716.97	1679.85	1655.25
270.0	1802.35	1806.06	1808.38	1803.28	1792.61	1776.37	1748.99	1715.11	1676.60
315.0	1804.21	1799.57	1785.18	1765.69	1748.99	1702.59	1664.53	1637.62	1569.87
360.0	1802.82	1794.00	1768.48	1748.52	1716.04	1679.38	1630.66	1581.47	1526.72

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	1466.86	1398.64	1324.40	1248.76	1202.82	1093.31	1048.76	910.02	910.02
45.0	1556.41	1473.82	1407.46	1364.30	1291.45	1218.13	1143.42	1065.47	989.37
90.0	1509.55	1439.94	1383.79	1310.01	1231.13	1149.46	1071.04	893.87	893.87
135.0	1636.23	1581.94	1524.86	1458.04	1390.75	1316.97	1239.94	1177.30	1081.24
180.0	1634.84	1600.50	1554.09	1491.91	1430.20	1366.62	1295.63	1221.38	1147.14
225.0	1593.07	1560.59	1508.62	1423.70	1382.87	1309.55	1228.34	1142.50	1062.68
270.0	1630.66	1589.82	1558.27	1510.48	1425.09	1385.19	1319.29	1248.30	1174.05
315.0	1540.64	1482.63	1420.92	1360.59	1290.06	1220.92	1146.21	1070.11	897.02
360.0	1466.86	1398.64	1324.40	1248.76	1202.82	1093.31	1048.76	910.02	910.02

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	838.69	769.65	706.26	646.12	593.78	548.02	506.82	464.92	425.98
45.0	915.58	843.66	776.37	705.84	643.66	588.44	539.25	494.24	450.62
90.0	848.76	776.61	706.40	645.47	589.32	541.71	495.73	471.09	428.63
135.0	1021.85	946.67	874.75	799.58	730.90	667.33	608.39	556.42	510.95
180.0	1073.36	997.25	923.94	852.48	783.80	713.73	652.01	596.33	542.97
225.0	902.59	902.59	827.93	759.16	694.05	625.70	570.39	538.65	467.47
270.0	1103.52	1027.88	956.42	887.74	813.96	746.68	680.32	616.75	559.67
315.0	897.02	853.87	781.39	726.72	662.41	605.42	555.49	514.89	475.12
360.0	838.69	769.65	706.26	646.12	593.78	548.02	506.82	464.92	425.98

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	394.43	360.97	318.28	279.12	228.03	165.10	129.00	90.39	64.87
45.0	411.18	379.63	341.58	295.64	247.38	247.38	191.18	113.04	77.17
90.0	394.47	360.04	315.45	265.61	214.29	163.06	117.45	81.48	58.98
135.0	468.26	425.57	386.59	349.46	302.60	252.02	241.81	241.81	124.36
180.0	497.03	455.73	429.74	380.55	364.31	323.94	276.15	246.91	246.91
225.0	418.74	392.06	353.78	320.09	290.02	249.23	207.47	166.77	128.49
270.0	508.63	461.76	416.28	377.31	342.04	317.91	273.36	234.85	234.85
315.0	436.89	399.76	363.38	319.12	269.19	217.07	166.96	122.55	85.57
360.0	394.43	360.97	318.28	279.12	228.03	165.10	129.00	90.39	64.87

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	53.87	45.89	39.58	35.41	32.11	29.33	26.96	25.06	23.39
45.0	58.75	49.93	42.55	37.40	33.69	30.67	28.21	26.13	24.32
90.0	49.09	41.81	36.38	32.90	30.07	27.61	25.66	23.90	22.32
135.0	85.89	60.93	48.91	42.04	36.43	32.76	29.88	27.56	25.61
180.0	129.05	91.88	64.87	52.02	44.69	38.65	34.76	31.79	29.33
225.0	96.38	72.90	58.98	50.12	43.34	38.42	34.80	31.83	29.23
270.0	128.12	94.29	69.98	57.26	48.72	42.04	37.26	33.64	30.67
315.0	61.95	51.32	43.62	37.59	33.74	30.81	28.40	27.19	24.69
360.0	53.87	45.89	39.58	35.41	32.11	29.33	26.96	25.06	23.39

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	21.86	20.60	19.49	18.42	17.45	16.66	16.15	15.08	14.29
45.0	23.43	21.44	20.70	19.58	18.19	17.63	16.71	15.96	15.22
90.0	21.02	19.86	19.03	17.91	17.22	16.38	15.55	14.94	14.15
135.0	23.94	22.41	21.16	20.05	18.98	18.05	17.22	16.61	15.68
180.0	27.15	25.71	23.80	22.69	21.48	20.19	19.49	18.75	17.87
225.0	27.01	25.89	23.67	22.27	21.53	20.46	19.49	18.47	17.68
270.0	28.21	26.13	25.01	22.74	21.48	20.70	19.21	18.70	17.77
315.0	23.71	22.37	21.16	20.09	19.12	18.24	17.49	16.71	16.01
360.0	21.86	20.60	19.49	18.42	17.45	16.66	16.15	15.08	14.29
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	13.92	13.09	12.71	12.20	11.69	11.23	10.81	10.35	9.93
45.0	14.43	13.69	13.13	12.58	12.06	11.55	11.09	10.67	10.30
90.0	13.46	12.90	12.34	11.79	11.32	10.90	10.44	10.02	9.70
135.0	15.13	14.48	13.69	13.13	12.62	12.16	11.65	11.18	10.72
180.0	17.03	16.29	15.64	14.94	14.25	13.78	13.36	12.99	12.58
225.0	16.98	16.19	15.50	14.94	14.39	13.87	13.36	12.95	12.62
270.0	17.03	16.38	15.73	15.03	14.43	13.97	13.46	13.09	12.62
315.0	15.36	14.80	14.15	13.55	13.13	12.81	12.39	12.25	11.69
360.0	13.92	13.09	12.71	12.20	11.69	11.23	10.81	10.35	9.93
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	9.56	9.19	8.86	8.49	8.17	7.93	7.61	7.33	7.01
45.0	9.88	9.47	9.14	8.82	8.40	8.12	7.89	7.56	7.24
90.0	9.33	8.91	8.58	8.31	7.98	7.80	7.38	7.15	6.91
135.0	10.35	9.98	9.56	9.23	8.91	8.58	8.21	7.93	7.66
180.0	12.20	11.83	11.51	11.14	10.95	10.49	10.21	10.02	9.61
225.0	12.16	11.69	11.42	11.04	10.67	10.30	10.02	9.74	9.51
270.0	12.25	11.83	11.42	11.09	10.77	10.39	10.12	9.84	9.65
315.0	11.42	11.09	10.63	10.49	10.12	9.84	9.61	9.33	9.00
360.0	9.56	9.19	8.86	8.49	8.17	7.93	7.61	7.33	7.01
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	6.77	6.45	6.17	5.99	5.75	5.48	5.24	4.97	4.69
45.0	7.01	6.68	6.45	6.17	5.85	5.61	5.34	5.10	4.83
90.0	6.50	6.36	6.08	5.85	5.61	5.29	5.06	4.87	4.64
135.0	7.33	7.01	6.77	6.45	6.31	5.89	5.75	5.43	5.24
180.0	9.47	9.19	8.86	8.58	8.35	7.98	7.66	7.38	7.05
225.0	9.19	8.91	8.58	8.31	8.03	7.66	7.38	7.05	6.77
270.0	9.23	9.10	8.82	8.54	8.31	8.03	7.70	7.42	7.15
315.0	8.72	8.49	8.17	7.89	7.56	7.29	7.05	6.73	6.40
360.0	6.77	6.45	6.17	5.99	5.75	5.48	5.24	4.97	4.69
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	4.50	4.27	4.08	3.85	3.76	3.53	3.53	3.43	3.39
45.0	4.59	4.41	4.13	3.94	3.76	3.62	3.48	3.43	3.29
90.0	4.41	4.18	3.94	3.85	3.67	3.53	3.39	3.29	3.25
135.0	5.01	4.69	4.50	4.27	4.04	3.85	3.71	3.57	3.48
180.0	6.73	6.45	6.13	5.80	5.52	5.29	5.10	4.78	4.55
225.0	6.50	6.22	6.03	5.66	5.38	5.20	4.97	4.78	4.59
270.0	6.82	6.36	6.13	5.85	5.52	5.20	4.97	4.78	4.59
315.0	6.17	5.99	5.61	5.34	5.15	4.92	4.73	4.59	4.45
360.0	4.50	4.27	4.08	3.85	3.76	3.53	3.53	3.43	3.39

Intensity data(cd)

C/γ(°)	90.0
0.0	3.39
45.0	3.29
90.0	3.25
135.0	3.29
180.0	4.45
225.0	4.50
270.0	4.36
315.0	4.32
360.0	3.39