



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: 1-0919-M
Luminaire: 92.70.124.00
Report No: NATA0100
Test No: GC2019092409
LampCAT: TRIDONIC SLE G7 9MM
Lamp flux(lm): 1288.0
Number of Lamps: 1
Length(mm): 0
Phm Type: C

Voltage(V): 34.5800
Current(A): 0.2470
Power (W): 8.5400
PF: 0.0000
Ballast type: DC
Width(mm): 0
Height(mm): 0

Photometric Results

Lumens(lm): 997.05
Efficiency(%): 77.41%
Lumens(lm)/Power(W): 116.75
Central intensity(cd): 5562.703
Maximum intensity(cd): 5562.703
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=23.3
[C90/270]Total=23.3
Field angle(10%Imax): [C0/180]Total=41.4
[C90/270]Total=41.4
Maximum s/h(1/2): C0_180=0.40 C90_270=0.40
Maximum s/h(1/4): C0_180=0.39 C90_270=0.39
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 77.41%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.543%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	5562.703	0.000	0	.000%	.000%
1.0	5537.953	5.311	5.311	.412%	.533%
2.0	5471.086	15.801	21.113	1.227%	2.118%
3.0	5344.805	25.868	46.981	2.008%	4.712%
4.0	5174.227	35.211	82.191	2.734%	8.243%
5.0	4977.492	43.672	125.863	3.391%	12.624%
6.0	4729.922	51.015	176.878	3.961%	17.740%
7.0	4425.117	56.825	233.704	4.412%	23.439%
8.0	4120.313	61.158	294.862	4.748%	29.573%
9.0	3753.773	63.815	358.677	4.955%	35.974%
10.0	3366.422	64.435	423.112	5.003%	42.436%
11.0	3019.219	63.806	486.918	4.954%	48.836%
12.0	2657.742	62.057	548.975	4.818%	55.060%
13.0	2287.266	58.685	607.66	4.556%	60.945%
14.0	1959.820	54.362	662.022	4.221%	66.398%
15.0	1673.578	49.881	711.903	3.873%	71.401%
16.0	1342.624	44.196	756.099	3.431%	75.833%
17.0	1170.534	39.137	795.235	3.039%	79.758%
18.0	991.160	35.642	830.877	2.767%	83.333%
19.0	819.809	31.507	862.384	2.446%	86.493%
20.0	659.201	27.070	889.454	2.102%	89.208%
21.0	511.088	22.472	911.926	1.745%	91.462%
22.0	384.258	17.992	929.919	1.397%	93.267%
23.0	278.592	13.908	943.827	1.080%	94.662%
24.0	200.306	10.470	954.297	.813%	95.712%
25.0	98.993	6.805	961.103	.528%	96.394%
26.0	52.917	3.586	964.689	.278%	96.754%
27.0	26.536	1.944	966.632	.151%	96.949%
28.0	16.875	1.099	967.732	.085%	97.059%
29.0	12.445	0.767	968.499	.060%	97.136%
30.0	10.680	0.624	969.123	.048%	97.199%
31.0	9.626	0.565	969.688	.044%	97.255%
32.0	8.909	0.531	970.219	.041%	97.309%
33.0	8.318	0.508	970.727	.039%	97.359%
34.0	7.798	0.488	971.214	.038%	97.408%
35.0	7.376	0.471	971.686	.037%	97.456%
36.0	7.031	0.459	972.144	.036%	97.502%
37.0	6.722	0.449	972.593	.035%	97.547%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	6.434	0.439	973.032	.034%	97.591%
39.0	6.195	0.431	973.463	.033%	97.634%
40.0	6.026	0.426	973.889	.033%	97.677%
41.0	5.871	0.424	974.313	.033%	97.719%
42.0	5.723	0.421	974.734	.033%	97.761%
43.0	5.597	0.419	975.153	.033%	97.803%
44.0	5.513	0.419	975.573	.033%	97.845%
45.0	5.407	0.420	975.992	.033%	97.888%
46.0	5.344	0.420	976.413	.033%	97.930%
47.0	5.266	0.422	976.835	.033%	97.972%
48.0	5.210	0.424	977.258	.033%	98.015%
49.0	5.147	0.425	977.684	.033%	98.057%
50.0	5.098	0.427	978.111	.033%	98.100%
51.0	5.070	0.430	978.541	.033%	98.143%
52.0	5.027	0.433	978.974	.034%	98.187%
53.0	4.985	0.436	979.41	.034%	98.230%
54.0	4.957	0.438	979.848	.034%	98.274%
55.0	4.901	0.440	980.288	.034%	98.318%
56.0	4.880	0.442	980.73	.034%	98.363%
57.0	4.859	0.445	981.175	.035%	98.407%
58.0	4.823	0.448	981.623	.035%	98.452%
59.0	4.816	0.451	982.074	.035%	98.497%
60.0	4.788	0.454	982.527	.035%	98.543%
61.0	4.760	0.456	982.983	.035%	98.589%
62.0	4.746	0.458	983.441	.036%	98.635%
63.0	4.718	0.460	983.901	.036%	98.681%
64.0	4.704	0.462	984.364	.036%	98.727%
65.0	4.704	0.466	984.829	.036%	98.774%
66.0	4.697	0.469	985.298	.036%	98.821%
67.0	4.662	0.471	985.769	.037%	98.868%
68.0	4.655	0.472	986.241	.037%	98.915%
69.0	4.641	0.474	986.715	.037%	98.963%
70.0	4.634	0.476	987.191	.037%	99.011%
71.0	4.634	0.479	987.67	.037%	99.059%
72.0	4.634	0.482	988.152	.037%	99.107%
73.0	4.620	0.484	988.636	.038%	99.156%
74.0	4.598	0.485	989.121	.038%	99.204%
75.0	4.605	0.486	989.607	.038%	99.253%

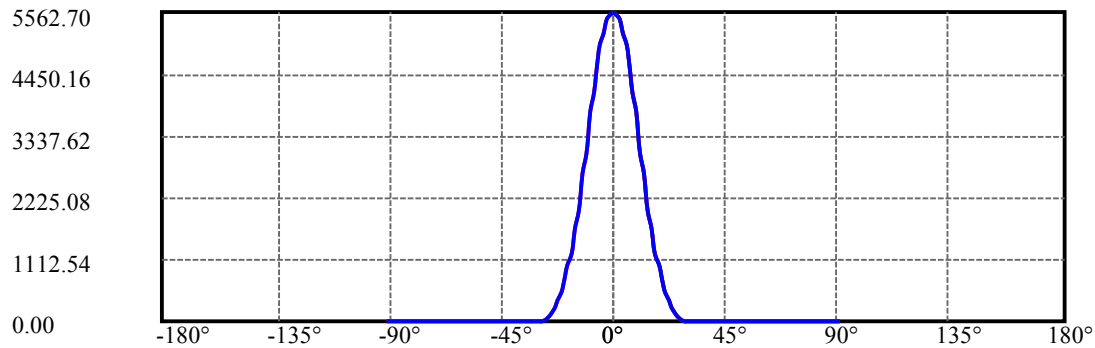
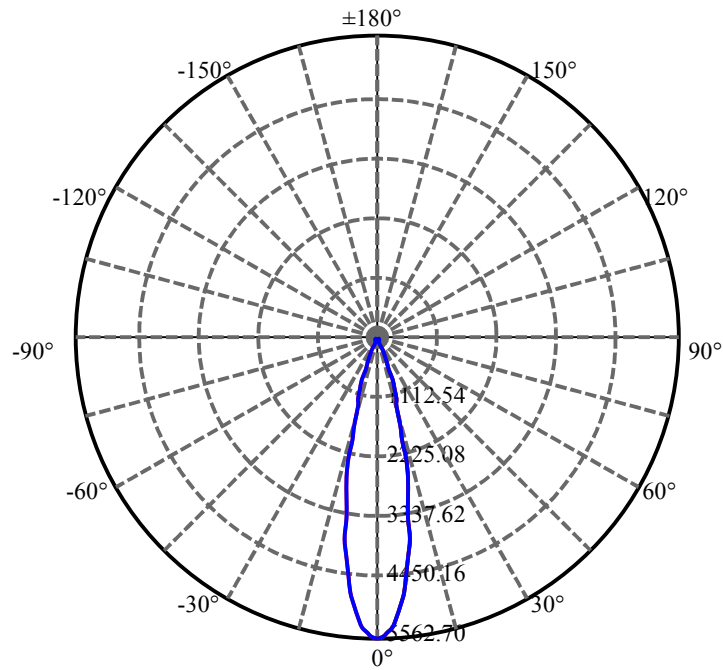
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	4.598	0.489	990.096	.038%	99.302%
77.0	4.598	0.490	990.586	.038%	99.351%
78.0	4.598	0.492	991.078	.038%	99.401%
79.0	4.577	0.493	991.571	.038%	99.450%
80.0	4.584	0.494	992.065	.038%	99.500%
81.0	4.584	0.496	992.561	.038%	99.549%
82.0	4.584	0.497	993.058	.039%	99.599%
83.0	4.598	0.499	993.557	.039%	99.649%
84.0	4.598	0.501	994.058	.039%	99.699%
85.0	4.605	0.502	994.561	.039%	99.750%
86.0	4.591	0.503	995.063	.039%	99.800%
87.0	4.570	0.501	995.565	.039%	99.851%
88.0	4.528	0.498	996.063	.039%	99.901%
89.0	4.521	0.496	996.559	.039%	99.950%
90.0	4.514	0.495	997.055	.038%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	969.12	75.24%	97.20%
0-40	973.89	75.61%	97.68%
0-60	982.53	76.28%	98.54%
0-90	996.56	77.37%	99.95%
0-120	996.56	77.37%	99.95%
0-180	997.05	77.41%	100.00%
60-90	14.49	1.12%	1.45%
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%
0-17.07	797.64	61.93%	80.00%

ZONAL LUMEN SUMMARY

0-10	423.11
10-20	466.34
20-30	79.67
30-40	4.77
40-50	4.22
50-60	4.42
60-70	4.66
70-80	4.87
80-90	4.49
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: —————

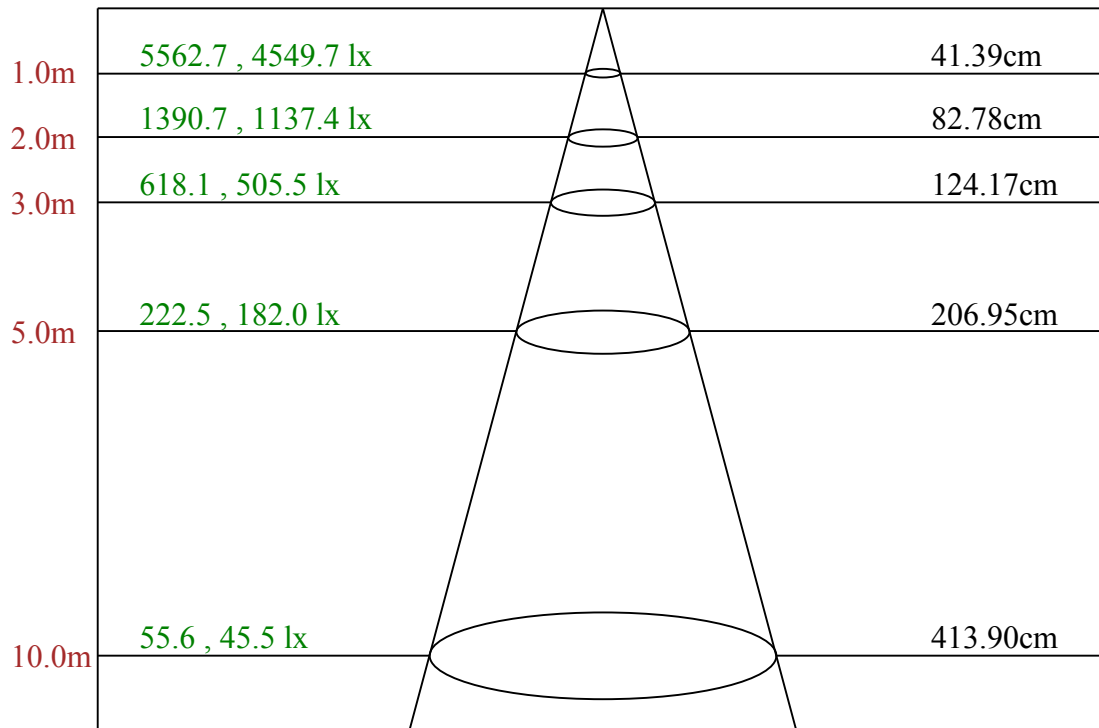
C90/C270: —————

Field angle(10%Imax):C0/180Left:20.7 Right:20.7

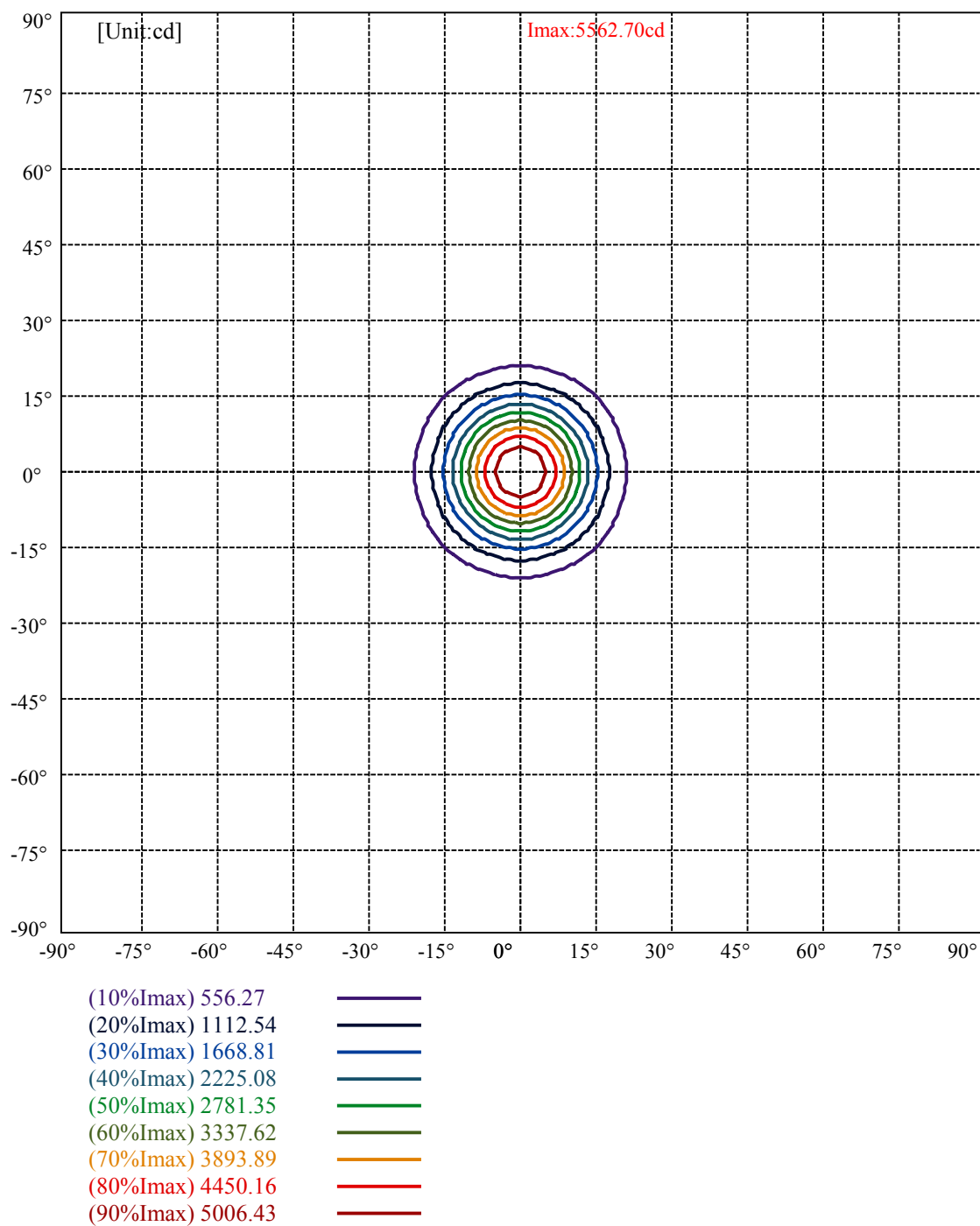
:C90/270Left:20.7 Right:20.7

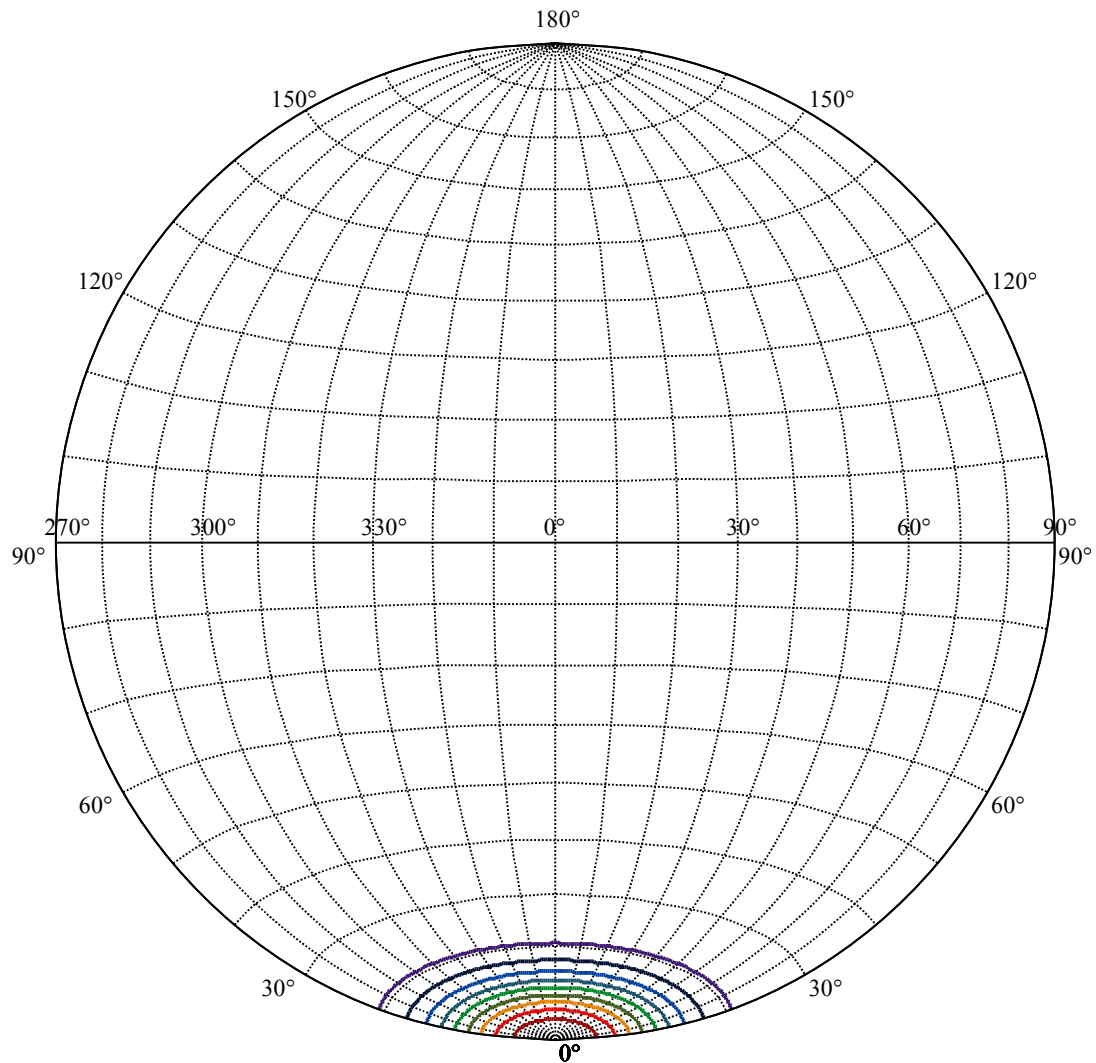
Beam Angle(50%Imax):C0/180Left:11.7 Right:11.7

:C90/270Left:11.7 Right:11.7



Max , Ave Beam angle of C0 plane 23.38





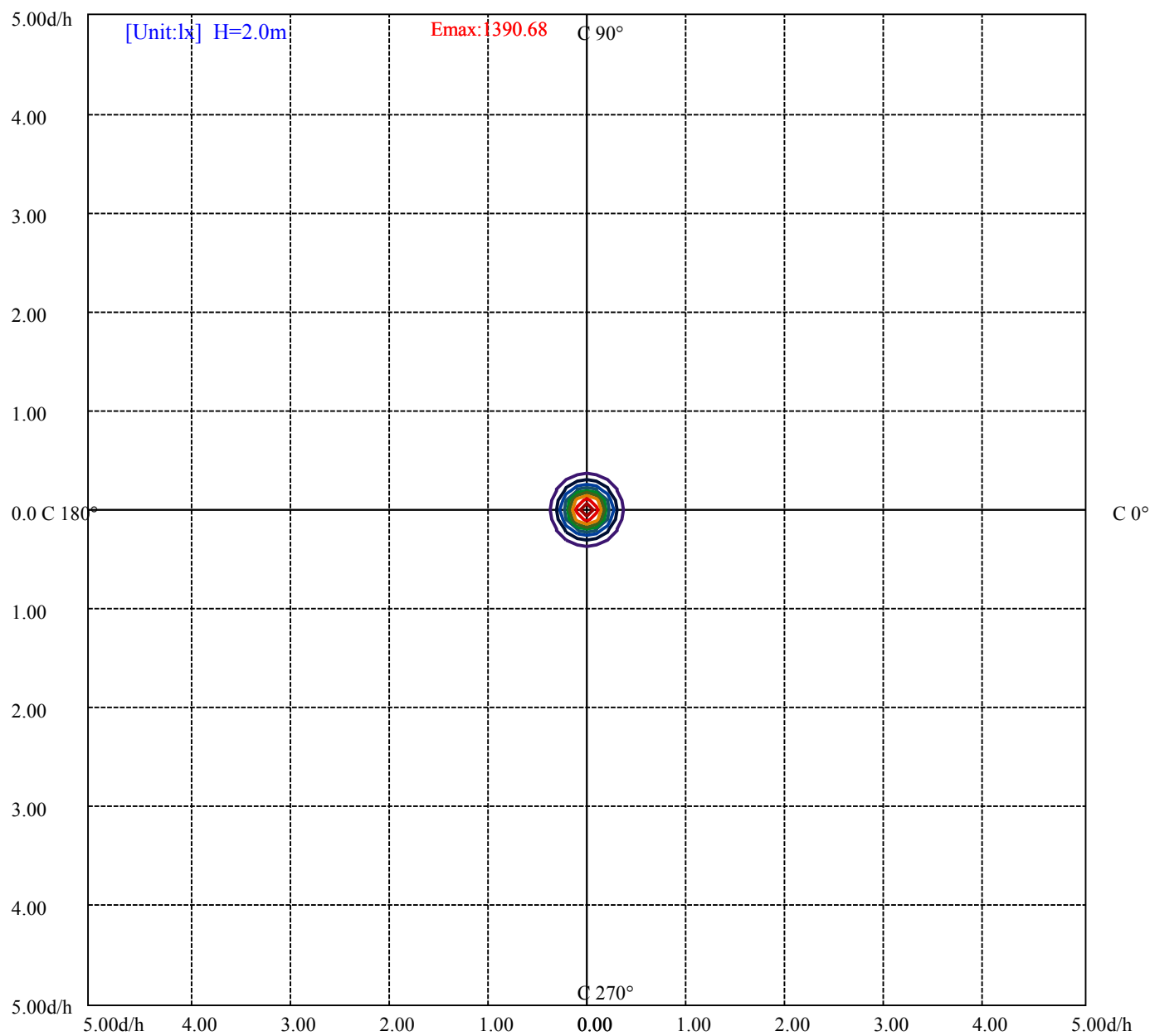
House

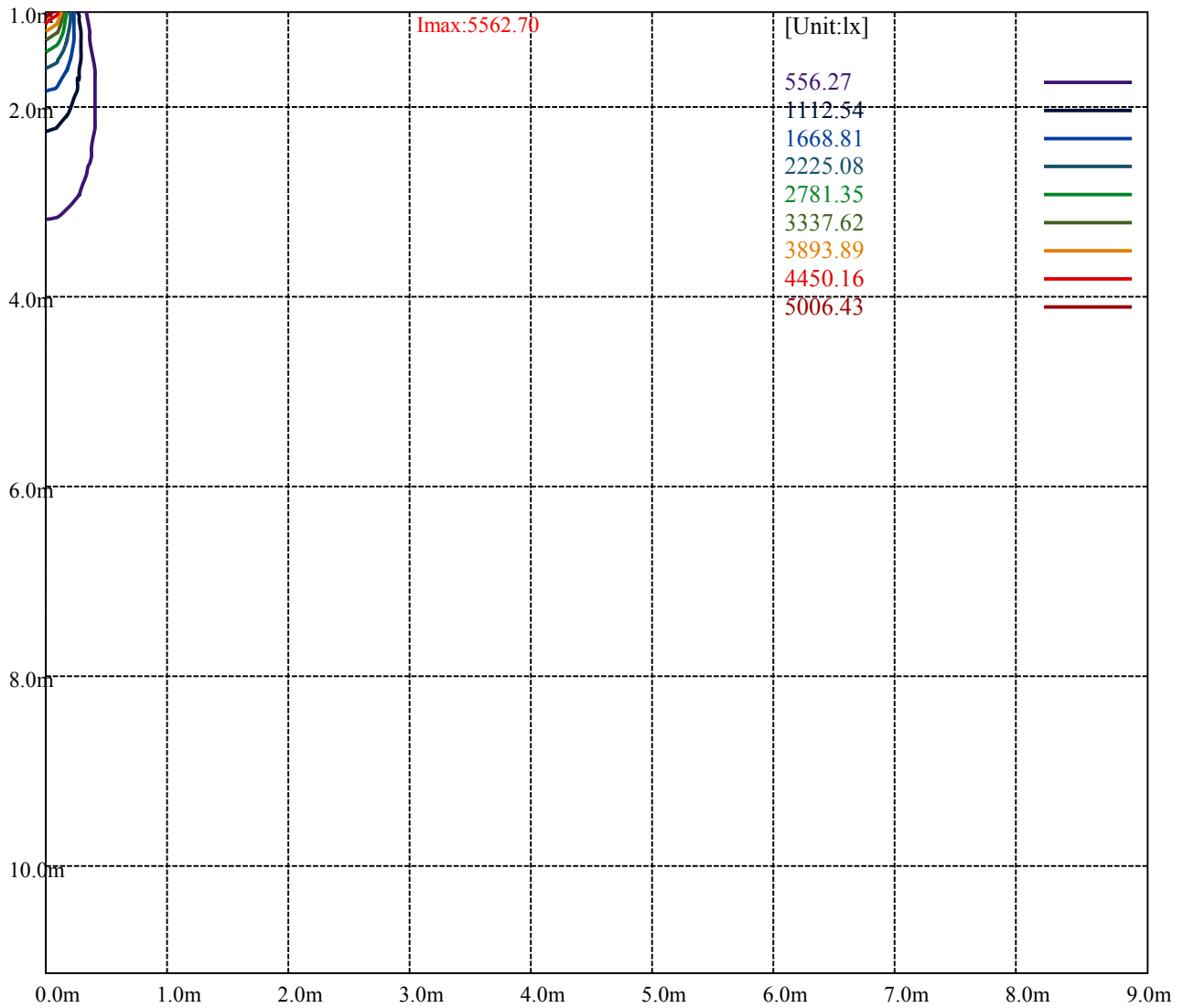
[Unit:cd]

Road

Imax:5562.70

(10%Imax)	556.27	—
(20%Imax)	1112.54	—
(30%Imax)	1668.81	—
(40%Imax)	2225.08	—
(50%Imax)	2781.35	—
(60%Imax)	3337.62	—
(70%Imax)	3893.89	—
(80%Imax)	4450.16	—
(90%Imax)	5006.43	—





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

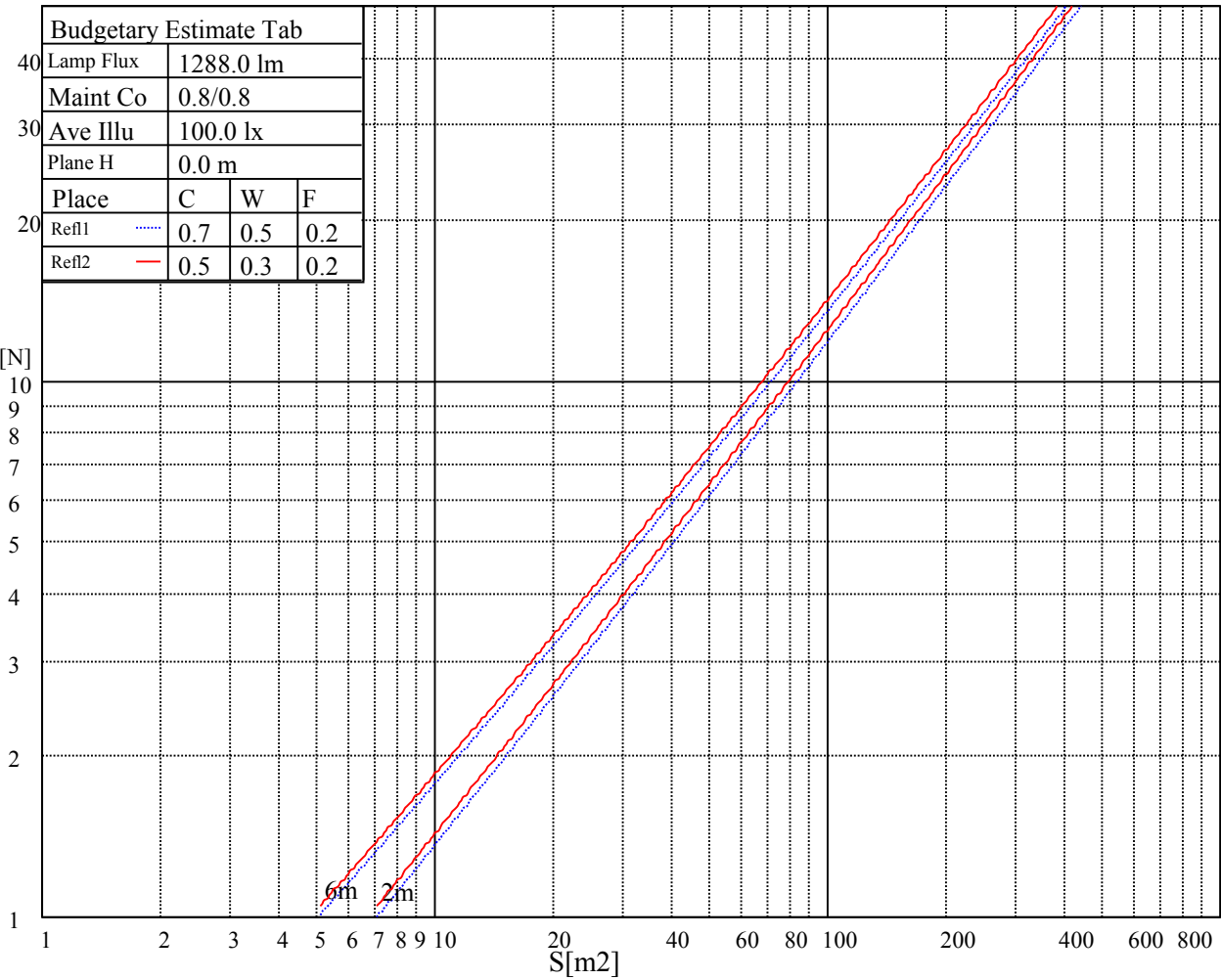
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

Glare Table

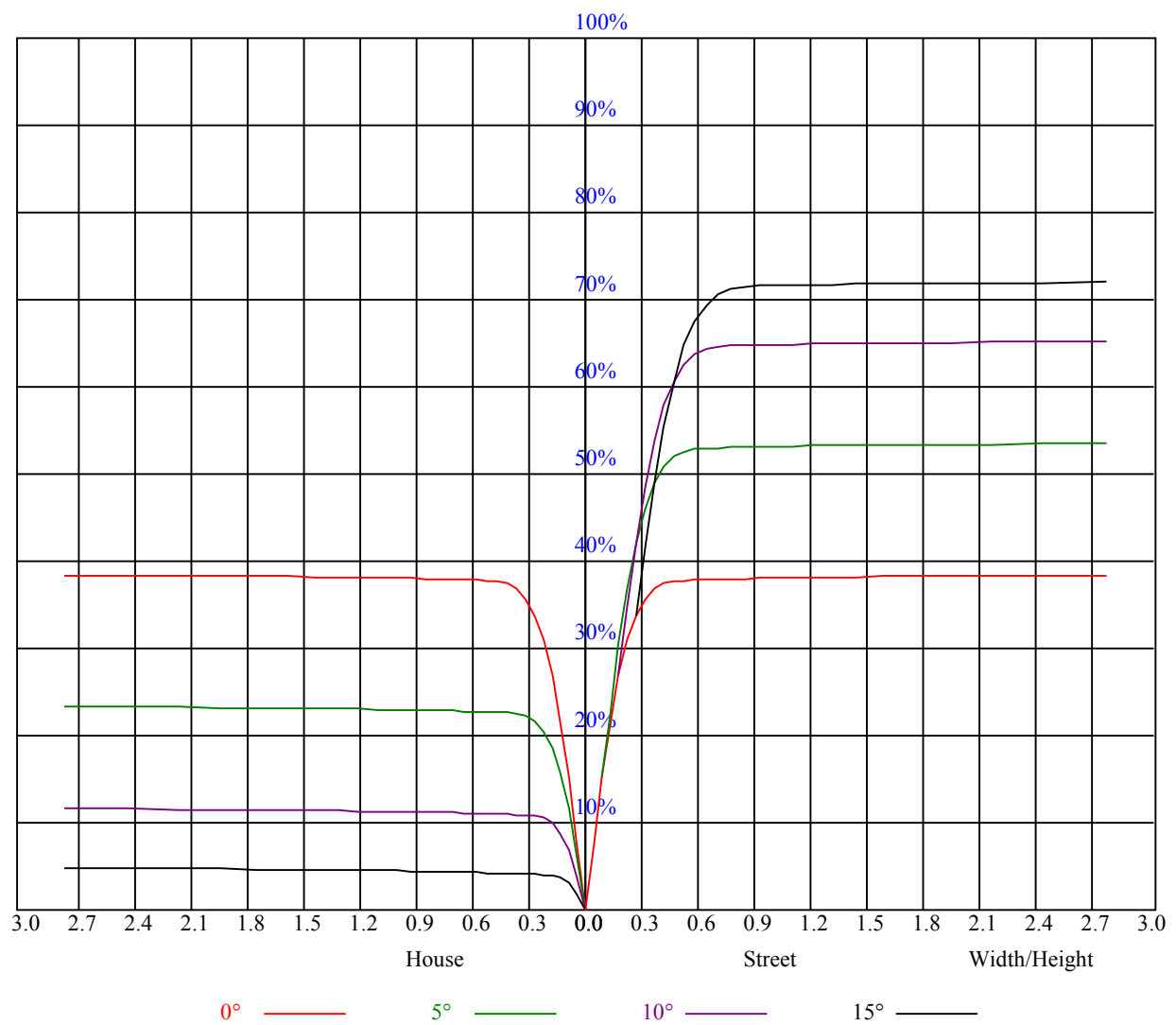
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

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	0.92	0.92	0.92	0.90	0.90	0.90	0.86	0.86	0.86	0.82	0.82	0.82	0.79	0.79	0.79	0.77
1	0.87	0.86	0.85	0.86	0.84	0.83	0.83	0.82	0.81	0.80	0.79	0.78	0.77	0.77	0.76	0.75
2	0.84	0.81	0.79	0.82	0.80	0.79	0.80	0.78	0.77	0.78	0.76	0.75	0.76	0.75	0.74	0.73
3	0.80	0.78	0.76	0.79	0.77	0.75	0.77	0.75	0.74	0.76	0.74	0.73	0.74	0.73	0.72	0.71
4	0.78	0.75	0.73	0.77	0.74	0.72	0.75	0.73	0.71	0.74	0.72	0.71	0.73	0.71	0.70	0.69
5	0.75	0.72	0.70	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
6	0.73	0.70	0.68	0.73	0.70	0.68	0.72	0.69	0.67	0.71	0.68	0.67	0.70	0.68	0.66	0.66
7	0.71	0.68	0.66	0.71	0.68	0.66	0.70	0.67	0.66	0.69	0.67	0.65	0.68	0.66	0.65	0.64
8	0.69	0.66	0.64	0.69	0.66	0.64	0.68	0.66	0.64	0.68	0.65	0.64	0.67	0.65	0.64	0.63
9	0.68	0.65	0.63	0.67	0.65	0.63	0.67	0.64	0.63	0.66	0.64	0.62	0.66	0.64	0.62	0.62
10	0.66	0.63	0.61	0.66	0.63	0.61	0.65	0.63	0.61	0.65	0.63	0.61	0.64	0.62	0.61	0.60



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	5561.44	5580.56	5532.19	5443.31	5306.63	5104.69	4867.31	4620.94	4343.06
45.0	5552.44	5558.06	5517.56	5420.25	5271.19	5080.50	4827.38	4564.69	4278.94
90.0	5562.00	5511.38	5421.38	5259.94	5050.69	4825.13	4566.94	4197.94	3870.00
135.0	5574.94	5538.94	5459.63	5307.75	5125.50	4928.63	4619.81	4334.06	4014.00
180.0	5561.44	5505.75	5401.69	5249.81	5073.75	4832.44	4575.38	4247.44	3884.63
225.0	5552.44	5493.94	5411.25	5264.44	5060.81	4859.44	4631.06	4278.38	3956.06
270.0	5562.00	5562.00	5513.63	5411.81	5283.56	5104.13	4874.06	4635.56	4361.06
315.0	5574.94	5553.00	5511.38	5401.13	5221.69	5085.00	4877.44	4521.94	4254.75
360.0	5561.44	5580.56	5532.19	5443.31	5306.63	5104.69	4867.31	4620.94	4343.06
C/ γ (°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	3957.19	3625.31	3285.56	2888.44	2505.38	2186.44	1851.19	1556.44	1326.38
45.0	3880.69	3538.69	3192.19	2840.63	2410.88	2080.13	1774.69	1502.44	1281.94
90.0	3519.56	3076.31	2728.69	2395.13	2048.06	1740.38	1499.06	1109.81	1066.67
135.0	3591.00	3236.63	2880.00	2493.56	2126.81	1826.44	1548.56	1306.69	1109.81
180.0	3538.13	3137.63	2741.63	2407.50	2091.38	1739.25	1492.88	1078.65	1056.15
225.0	3621.94	3192.19	2844.00	2497.50	2139.75	1815.75	1554.75	1114.03	1091.31
270.0	3980.81	3651.75	3311.44	2914.88	2532.94	2205.00	1870.31	1567.69	1330.31
315.0	3940.88	3472.88	3170.25	2824.31	2442.94	2085.19	1797.19	1505.25	1101.71
360.0	3957.19	3625.31	3285.56	2888.44	2505.38	2186.44	1851.19	1556.44	1326.38
C/ γ (°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1102.50	930.94	756.00	599.06	469.13	352.69	285.19	140.29	79.31
45.0	1095.19	902.81	734.06	594.00	450.56	335.25	296.44	124.37	70.20
90.0	881.61	711.11	575.66	431.61	299.76	205.82	130.78	62.61	32.29
135.0	926.44	765.00	606.94	465.75	345.38	289.13	133.26	73.58	38.81
180.0	869.12	713.70	561.88	417.54	308.87	200.31	127.01	67.50	32.12
225.0	897.47	724.78	582.41	441.51	314.78	218.48	135.79	65.53	34.82
270.0	1100.25	923.06	743.63	586.13	459.00	325.69	286.31	135.79	75.66
315.0	1056.71	887.06	713.03	553.11	426.60	301.39	207.68	122.29	60.13
360.0	1102.50	930.94	756.00	599.06	469.13	352.69	285.19	140.29	79.31
C/ γ (°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	33.75	20.87	14.68	11.93	10.69	9.84	9.06	8.44	7.93
45.0	32.91	18.51	13.16	10.97	9.79	9.11	8.49	7.88	7.48
90.0	18.45	12.94	10.46	9.62	8.78	8.21	7.71	7.37	6.98
135.0	18.96	13.28	10.86	9.68	8.94	8.38	7.88	7.43	7.09
180.0	19.24	13.33	10.63	9.68	9.00	8.33	7.88	7.43	7.09
225.0	21.38	14.18	11.25	10.18	9.28	8.55	8.04	7.54	7.14
270.0	35.89	21.26	14.79	11.87	10.18	9.45	8.78	8.10	7.65
315.0	31.73	20.64	13.73	11.53	10.35	9.39	8.72	8.21	7.65
360.0	33.75	20.87	14.68	11.93	10.69	9.84	9.06	8.44	7.93
C/ γ (°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	7.48	7.14	6.81	6.47	6.30	6.13	5.96	5.79	5.74
45.0	7.14	6.81	6.47	6.24	6.08	5.91	5.74	5.63	5.51
90.0	6.69	6.41	6.19	5.96	5.79	5.68	5.57	5.46	5.40
135.0	6.75	6.53	6.24	6.02	5.91	5.79	5.63	5.51	5.46
180.0	6.81	6.53	6.30	6.08	5.96	5.79	5.68	5.57	5.46
225.0	6.81	6.53	6.24	6.08	5.85	5.74	5.63	5.46	5.40
270.0	7.31	6.92	6.58	6.36	6.13	5.96	5.79	5.68	5.57
315.0	7.26	6.92	6.64	6.36	6.19	5.96	5.79	5.68	5.57
360.0	7.48	7.14	6.81	6.47	6.30	6.13	5.96	5.79	5.74

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	5.57	5.51	5.40	5.34	5.29	5.23	5.18	5.12	5.12
45.0	5.40	5.34	5.29	5.23	5.12	5.06	5.06	5.01	4.95
90.0	5.29	5.23	5.18	5.12	5.06	5.06	5.01	4.95	4.95
135.0	5.34	5.29	5.23	5.12	5.12	5.06	5.06	5.01	4.95
180.0	5.40	5.34	5.23	5.18	5.12	5.12	5.06	5.06	5.01
225.0	5.29	5.23	5.18	5.12	5.06	5.01	4.95	4.95	4.89
270.0	5.46	5.40	5.34	5.29	5.18	5.12	5.12	5.06	5.01
315.0	5.51	5.40	5.29	5.29	5.23	5.12	5.12	5.06	5.01
360.0	5.57	5.51	5.40	5.34	5.29	5.23	5.18	5.12	5.12
C/ γ (°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	5.06	5.01	5.01	4.95	4.89	4.89	4.89	4.84	4.84
45.0	4.95	4.89	4.84	4.84	4.84	4.78	4.78	4.73	4.73
90.0	4.89	4.84	4.84	4.78	4.78	4.78	4.73	4.73	4.73
135.0	4.95	4.89	4.89	4.89	4.84	4.84	4.78	4.78	4.78
180.0	4.95	4.89	4.89	4.89	4.84	4.84	4.78	4.78	4.78
225.0	4.89	4.84	4.78	4.78	4.73	4.73	4.73	4.67	4.67
270.0	4.95	4.89	4.89	4.89	4.84	4.84	4.78	4.78	4.73
315.0	5.01	4.95	4.89	4.84	4.84	4.84	4.84	4.78	4.73
360.0	5.06	5.01	5.01	4.95	4.89	4.89	4.89	4.84	4.84
C/ γ (°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	4.78	4.78	4.78	4.78	4.73	4.73	4.73	4.73	4.67
45.0	4.67	4.67	4.67	4.67	4.61	4.61	4.61	4.61	4.61
90.0	4.73	4.67	4.67	4.73	4.67	4.67	4.67	4.67	4.67
135.0	4.73	4.73	4.73	4.73	4.67	4.67	4.67	4.61	4.67
180.0	4.78	4.73	4.73	4.73	4.73	4.67	4.67	4.67	4.67
225.0	4.61	4.61	4.61	4.61	4.56	4.56	4.56	4.56	4.56
270.0	4.73	4.73	4.73	4.67	4.67	4.67	4.61	4.61	4.61
315.0	4.73	4.73	4.73	4.67	4.67	4.67	4.61	4.61	4.61
360.0	4.78	4.78	4.78	4.78	4.73	4.73	4.73	4.73	4.67
C/ γ (°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	4.67	4.67	4.61	4.67	4.67	4.67	4.61	4.61	4.61
45.0	4.61	4.56	4.56	4.56	4.56	4.56	4.56	4.50	4.50
90.0	4.67	4.67	4.67	4.67	4.61	4.67	4.67	4.61	4.67
135.0	4.67	4.67	4.61	4.61	4.61	4.61	4.61	4.61	4.61
180.0	4.67	4.67	4.67	4.67	4.61	4.61	4.61	4.61	4.61
225.0	4.56	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
270.0	4.61	4.61	4.61	4.61	4.61	4.61	4.61	4.61	4.61
315.0	4.61	4.61	4.56	4.56	4.61	4.56	4.61	4.56	4.56
360.0	4.67	4.67	4.61	4.67	4.67	4.67	4.61	4.61	4.61
C/ γ (°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	4.61	4.61	4.61	4.56	4.61	4.61	4.61	4.61	4.61
45.0	4.56	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.44
90.0	4.67	4.73	4.78	4.84	4.84	4.73	4.50	4.50	4.44
135.0	4.61	4.61	4.61	4.61	4.67	4.73	4.78	4.56	4.56
180.0	4.61	4.61	4.61	4.61	4.61	4.61	4.61	4.56	4.56
225.0	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.44	4.50
270.0	4.56	4.56	4.61	4.61	4.56	4.50	4.50	4.50	4.50
315.0	4.56	4.56	4.56	4.56	4.56	4.56	4.56	4.56	4.56
360.0	4.61	4.61	4.61	4.56	4.61	4.61	4.61	4.61	4.61

Intensity data(cd)

Appendix Page: 18 Total:18

C/γ(°)	90.0
0.0	4.56
45.0	4.50
90.0	4.50
135.0	4.56
180.0	4.56
225.0	4.44
270.0	4.50
315.0	4.50
360.0	4.56