



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: LN01D05015DA-N

Luminaire: 97.70.273.00

Report No: 200805-B005

Test No: 200805-B005

LampCAT: CITIZEN CLU700 LES6.0

Lamp flux(lm): 504.1

Number of Lamps: 1

Length(mm): 0

Phm Type: C

Voltage(V): 29.0400

Current(A): 0.1500

Power (W): 4.3560

PF: 0.0000

Ballast type: DC

Width(mm): 0

Height(mm): 0

Photometric Results

Lumens(lm): 451.94

Efficiency(%): 89.66%

Lumens(lm)/Power(W): 103.75

Central intensity(cd): 4561.171

Maximum intensity(cd): 4561.171

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=15.3

[C90/270]Total=15.3

Field angle(10%Imax): [C0/180]Total=28.5

[C90/270]Total=28.5

Maximum s/h(1/2): C0_180=0.26 C90_270=0.26

Maximum s/h(1/4): C0_180=0.26 C90_270=0.26

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 89.66%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 96.436%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	4561.172	0.000	0	.000%	.000%
1.0	4511.883	4.341	4.341	.861%	.961%
2.0	4365.352	12.741	17.083	2.528%	3.780%
3.0	4114.828	20.282	37.365	4.024%	8.268%
4.0	3799.969	26.493	63.858	5.256%	14.130%
5.0	3434.063	31.120	94.978	6.174%	21.015%
6.0	2957.766	33.591	128.569	6.664%	28.448%
7.0	2536.734	34.104	162.673	6.766%	35.994%
8.0	2150.930	33.549	196.222	6.656%	43.417%
9.0	1742.695	31.556	227.778	6.260%	50.399%
10.0	1324.434	27.756	255.534	5.507%	56.541%
11.0	1068.138	23.907	279.441	4.743%	61.831%
12.0	841.641	20.877	300.318	4.142%	66.450%
13.0	627.560	17.436	317.753	3.459%	70.308%
14.0	484.509	14.234	331.988	2.824%	73.458%
15.0	371.102	11.746	343.734	2.330%	76.057%
16.0	292.767	9.728	353.461	1.930%	78.209%
17.0	228.748	8.121	361.583	1.611%	80.006%
18.0	177.652	6.701	368.283	1.329%	81.489%
19.0	143.810	5.593	373.876	1.110%	82.726%
20.0	118.392	4.799	378.675	.952%	83.788%
21.0	99.485	4.184	382.859	.830%	84.714%
22.0	84.663	3.701	386.559	.734%	85.532%
23.0	73.659	3.322	389.881	.659%	86.267%
24.0	63.837	3.006	392.888	.596%	86.933%
25.0	56.180	2.729	395.617	.541%	87.536%
26.0	50.154	2.510	398.127	.498%	88.092%
27.0	45.035	2.329	400.455	.462%	88.607%
28.0	39.839	2.149	402.604	.426%	89.083%
29.0	36.000	1.984	404.588	.394%	89.522%
30.0	32.702	1.855	406.443	.368%	89.932%
31.0	29.573	1.733	408.176	.344%	90.316%
32.0	27.084	1.623	409.8	.322%	90.675%
33.0	25.010	1.535	411.334	.304%	91.014%
34.0	23.154	1.458	412.792	.289%	91.337%
35.0	21.488	1.386	414.178	.275%	91.644%
36.0	20.208	1.328	415.506	.263%	91.937%
37.0	18.935	1.277	416.782	.253%	92.220%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	17.909	1.230	418.012	.244%	92.492%
39.0	16.847	1.186	419.199	.235%	92.754%
40.0	15.884	1.142	420.34	.226%	93.007%
41.0	15.047	1.101	421.442	.219%	93.251%
42.0	14.154	1.061	422.502	.210%	93.485%
43.0	13.268	1.016	423.518	.202%	93.710%
44.0	12.473	0.972	424.49	.193%	93.925%
45.0	11.728	0.930	425.42	.185%	94.131%
46.0	10.905	0.885	426.305	.176%	94.327%
47.0	10.266	0.842	427.147	.167%	94.513%
48.0	9.689	0.807	427.954	.160%	94.692%
49.0	9.155	0.774	428.728	.154%	94.863%
50.0	8.670	0.743	429.471	.147%	95.027%
51.0	8.304	0.718	430.189	.142%	95.186%
52.0	7.924	0.696	430.885	.138%	95.340%
53.0	7.608	0.676	431.561	.134%	95.490%
54.0	7.313	0.658	432.218	.130%	95.635%
55.0	7.045	0.641	432.859	.127%	95.777%
56.0	6.785	0.625	433.484	.124%	95.915%
57.0	6.532	0.609	434.093	.121%	96.050%
58.0	6.321	0.594	434.688	.118%	96.182%
59.0	6.103	0.581	435.268	.115%	96.310%
60.0	5.906	0.567	435.836	.113%	96.436%
61.0	5.716	0.555	436.39	.110%	96.558%
62.0	5.555	0.543	436.934	.108%	96.679%
63.0	5.386	0.532	437.466	.106%	96.796%
64.0	5.203	0.520	437.985	.103%	96.911%
65.0	5.055	0.508	438.493	.101%	97.024%
66.0	4.950	0.499	438.992	.099%	97.134%
67.0	4.802	0.490	439.483	.097%	97.243%
68.0	4.683	0.480	439.963	.095%	97.349%
69.0	4.570	0.472	440.435	.094%	97.453%
70.0	4.507	0.466	440.901	.092%	97.556%
71.0	4.690	0.475	441.377	.094%	97.662%
72.0	5.203	0.514	441.891	.102%	97.775%
73.0	5.955	0.584	442.475	.116%	97.905%
74.0	6.729	0.667	443.141	.132%	98.052%
75.0	7.488	0.751	443.893	.149%	98.218%

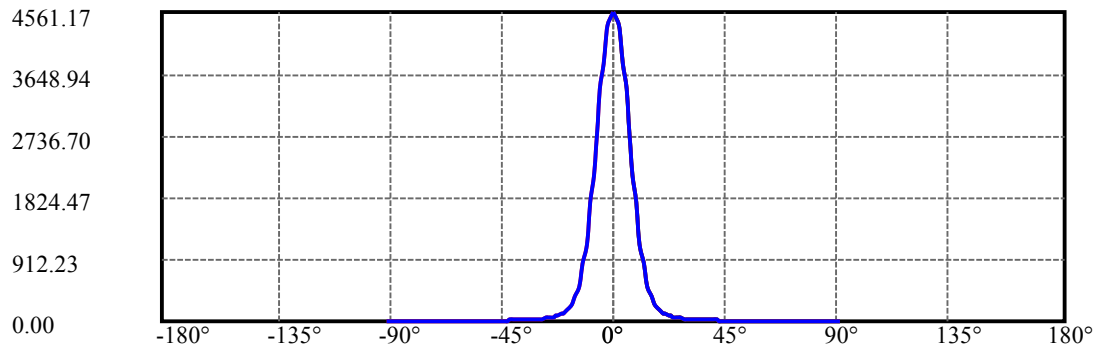
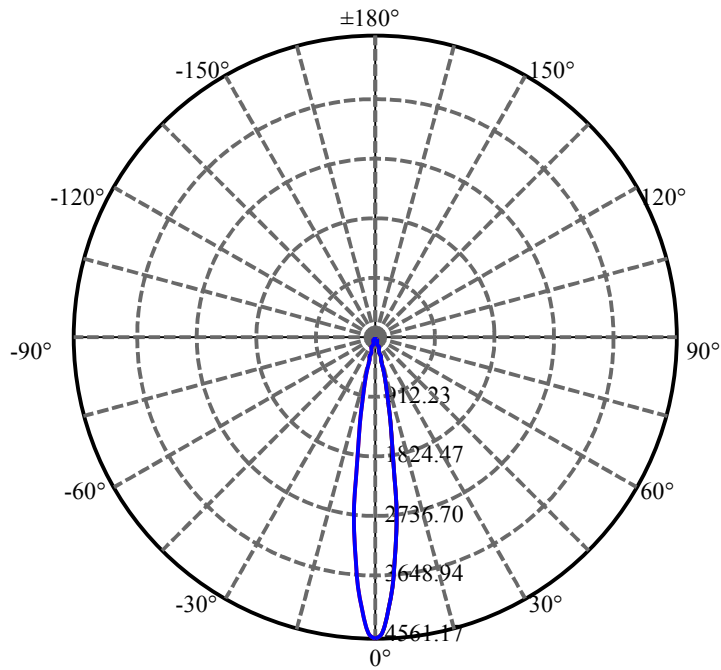
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	8.044	0.825	444.717	.164%	98.401%
77.0	8.248	0.869	445.586	.172%	98.593%
78.0	8.114	0.876	446.461	.174%	98.787%
79.0	7.587	0.844	447.305	.167%	98.973%
80.0	6.884	0.780	448.085	.155%	99.146%
81.0	6.223	0.709	448.794	.141%	99.303%
82.0	5.259	0.623	449.417	.124%	99.441%
83.0	4.022	0.505	449.921	.100%	99.552%
84.0	3.192	0.393	450.314	.078%	99.639%
85.0	2.721	0.323	450.637	.064%	99.711%
86.0	2.573	0.289	450.926	.057%	99.775%
87.0	2.412	0.273	451.199	.054%	99.835%
88.0	2.285	0.257	451.456	.051%	99.892%
89.0	2.215	0.247	451.703	.049%	99.947%
90.0	2.194	0.242	451.945	.048%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	406.44	80.63%	89.93%
0-40	420.34	83.39%	93.01%
0-60	435.84	86.47%	96.44%
0-90	451.70	89.61%	99.95%
0-120	451.70	89.61%	99.95%
0-180	451.94	89.66%	100.00%
60-90	16.43	3.26%	3.64%
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%
0-17.00	361.56	71.73%	80.00%

ZONAL LUMEN SUMMARY

0-10	255.53
10-20	123.14
20-30	27.77
30-40	13.90
40-50	9.13
50-60	6.37
60-70	5.07
70-80	7.18
80-90	3.62
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: —————

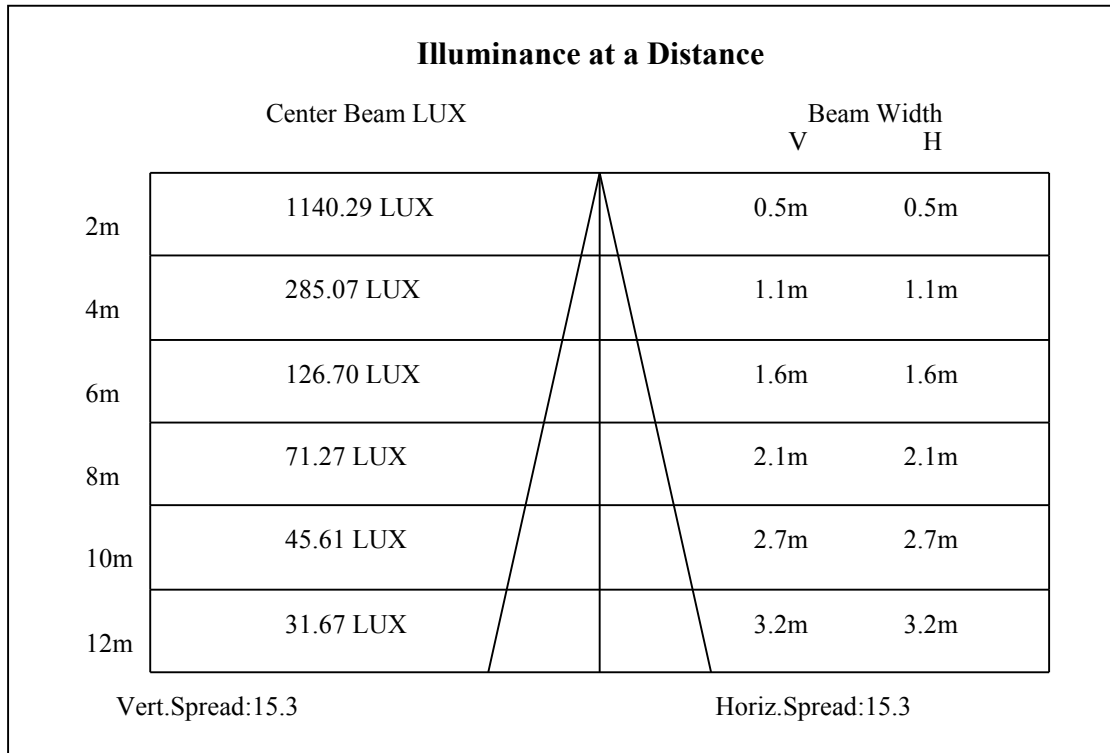
C90/C270: —————

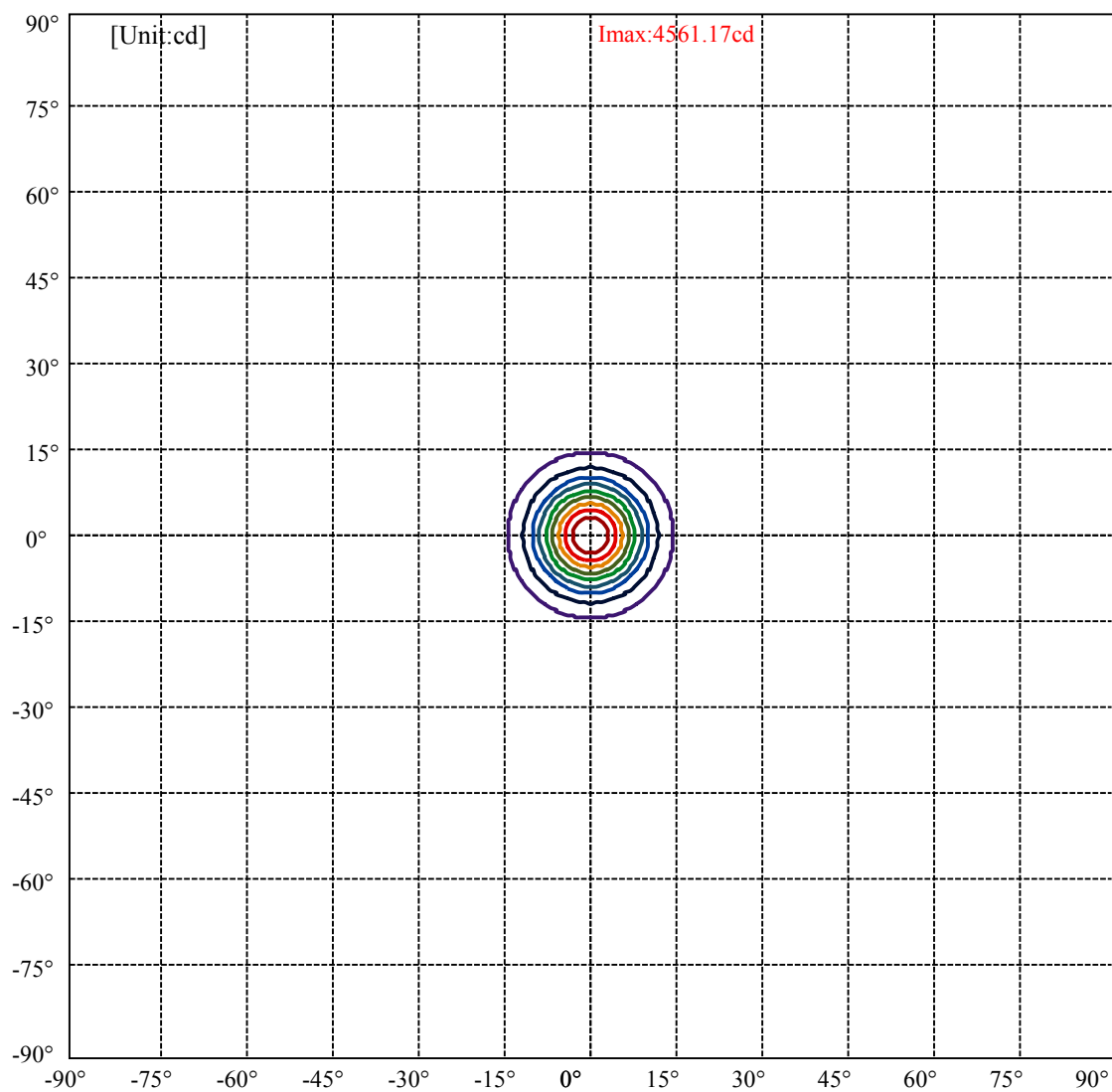
Field angle(10%Imax):C0/180Left:14.3 Right:14.3

:C90/270Left:14.3 Right:14.3

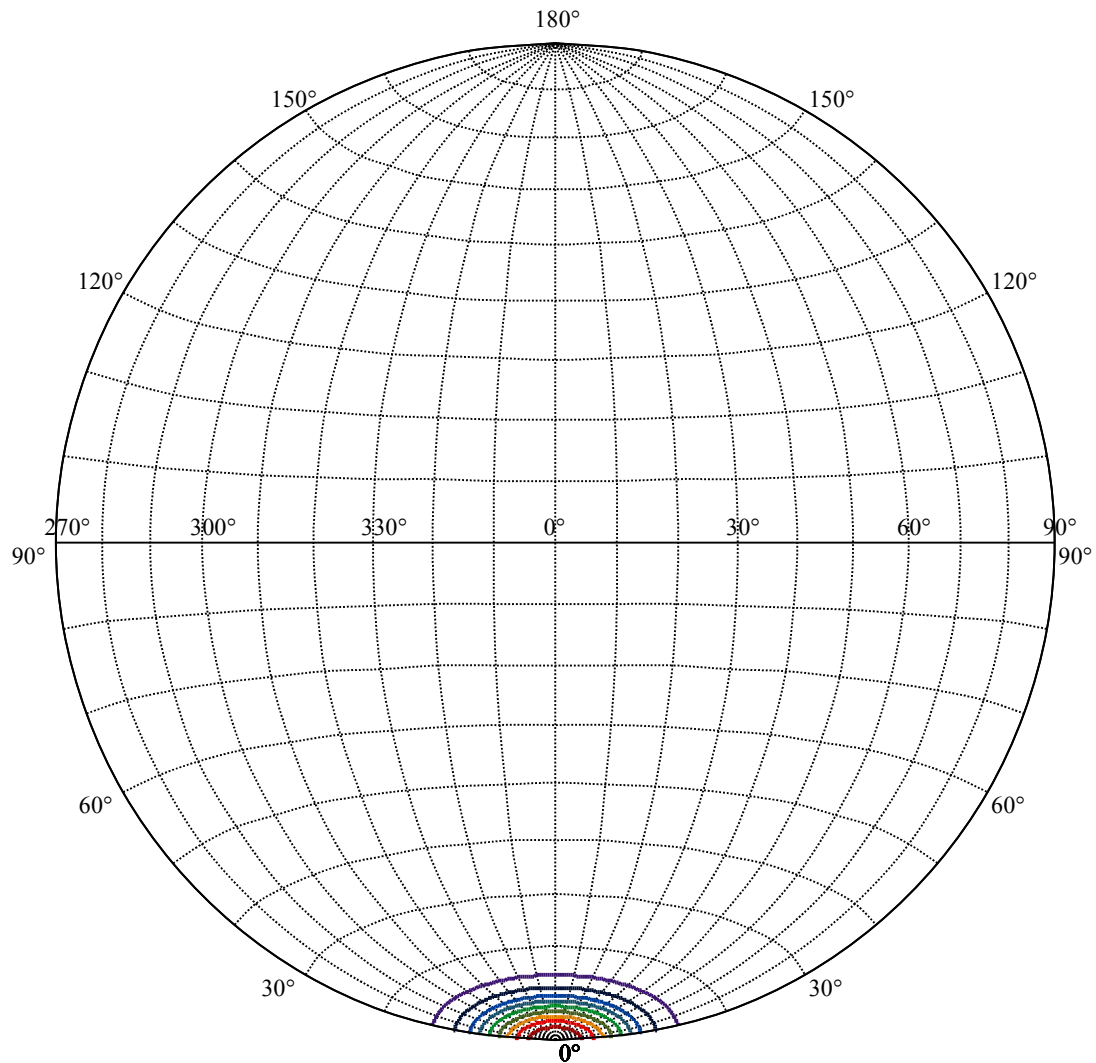
Beam Angle(50%Imax):C0/180Left:7.7 Right:7.7

:C90/270Left:7.7 Right:7.7





(10%Imax)	456.117	—
(20%Imax)	912.234	—
(30%Imax)	1368.35	—
(40%Imax)	1824.47	—
(50%Imax)	2280.59	—
(60%Imax)	2736.7	—
(70%Imax)	3192.82	—
(80%Imax)	3648.94	—
(90%Imax)	4105.05	—



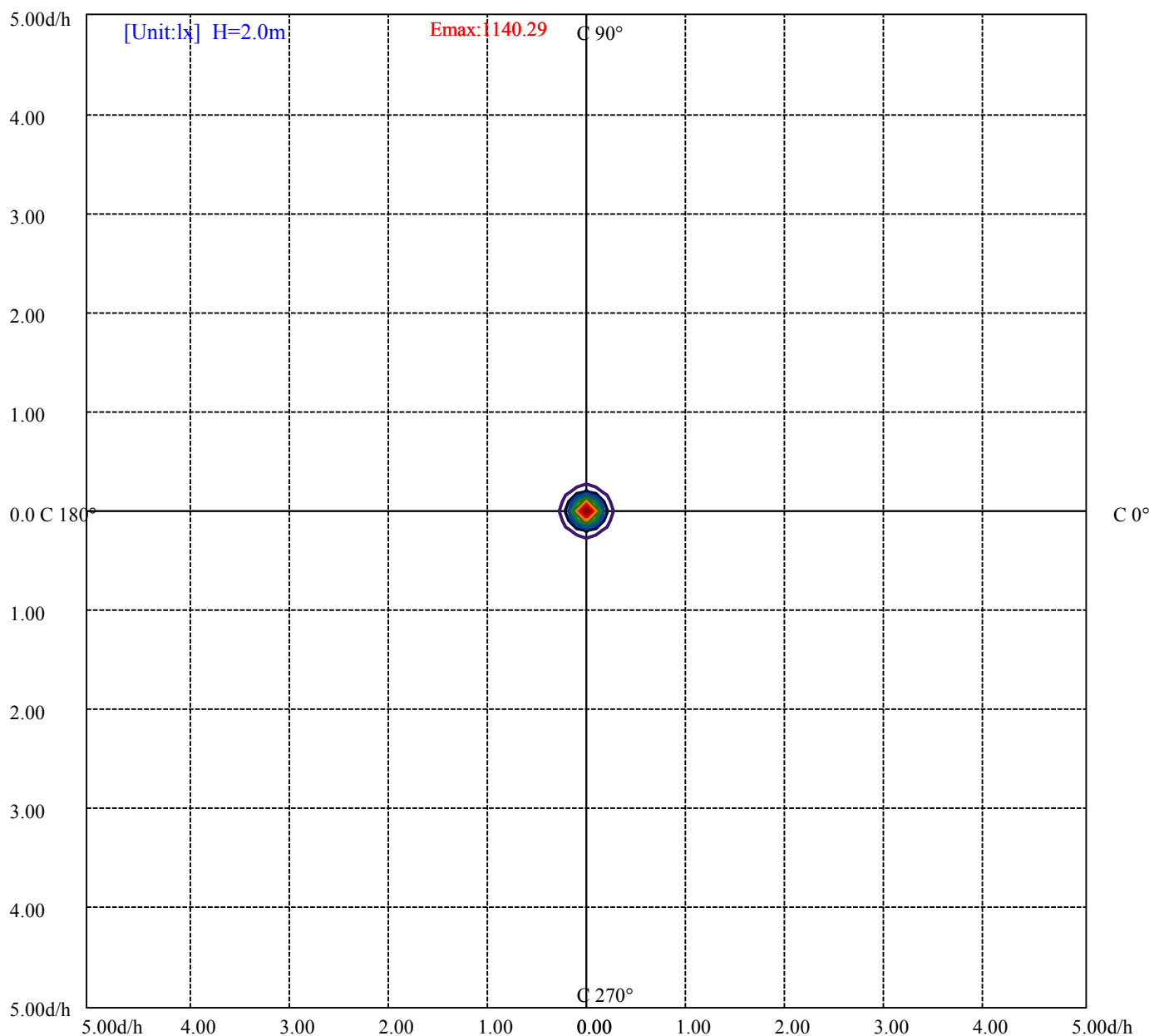
House

[Unit:cd]

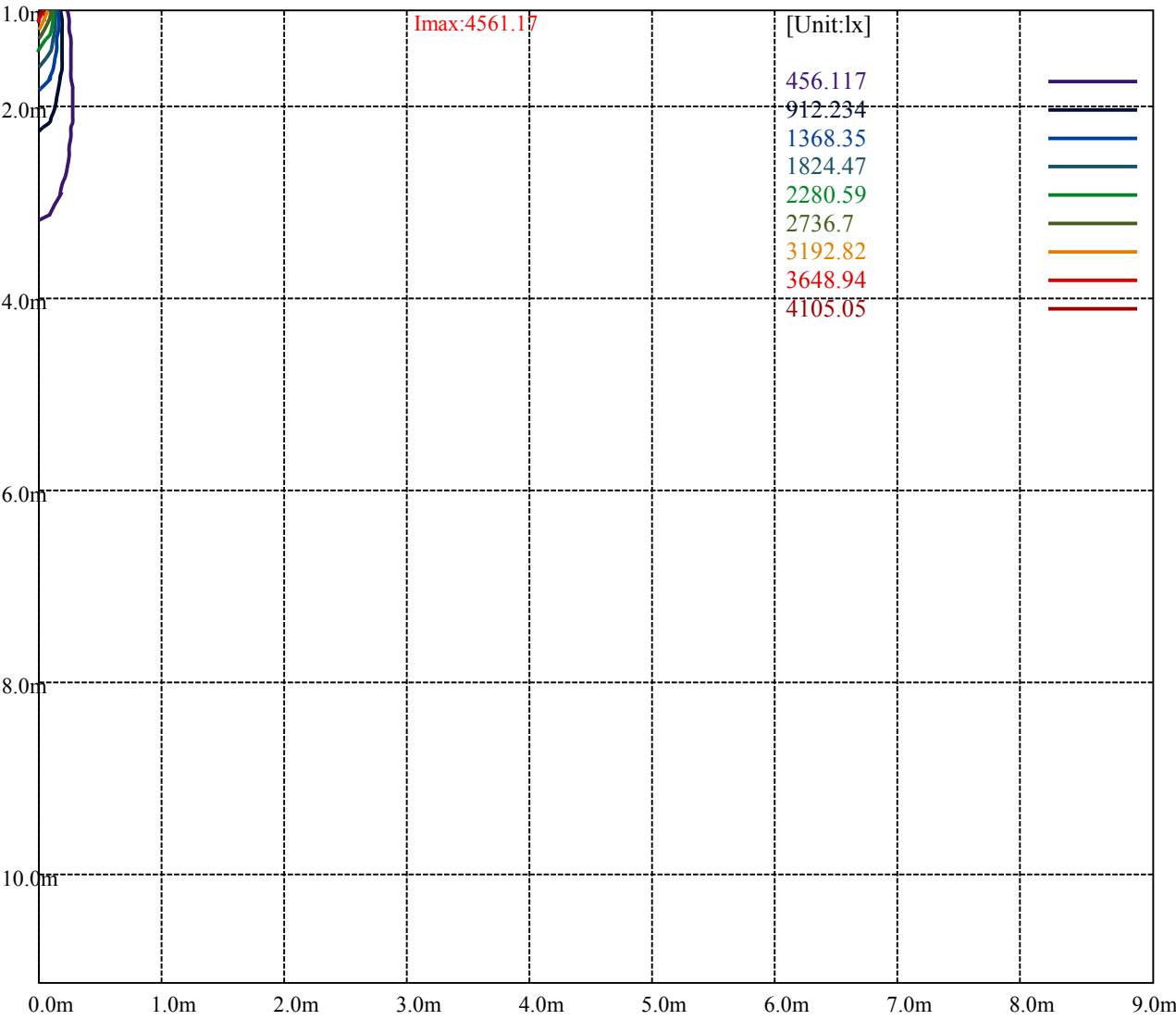
Road

Imax:4561.17

(10%Imax)	456.117	—
(20%Imax)	912.234	—
(30%Imax)	1368.35	—
(40%Imax)	1824.47	—
(50%Imax)	2280.59	—
(60%Imax)	2736.7	—
(70%Imax)	3192.82	—
(80%Imax)	3648.94	—
(90%Imax)	4105.05	—



(10%Emax) 114.029	—
(20%Emax) 228.0582	—
(30%Emax) 342.0875	—
(40%Emax) 456.1175	—
(50%Emax) 570.145	—
(60%Emax) 684.175	—
(70%Emax) 798.2025	—
(80%Emax) 912.2325	—
(90%Emax) 1026.262	—



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

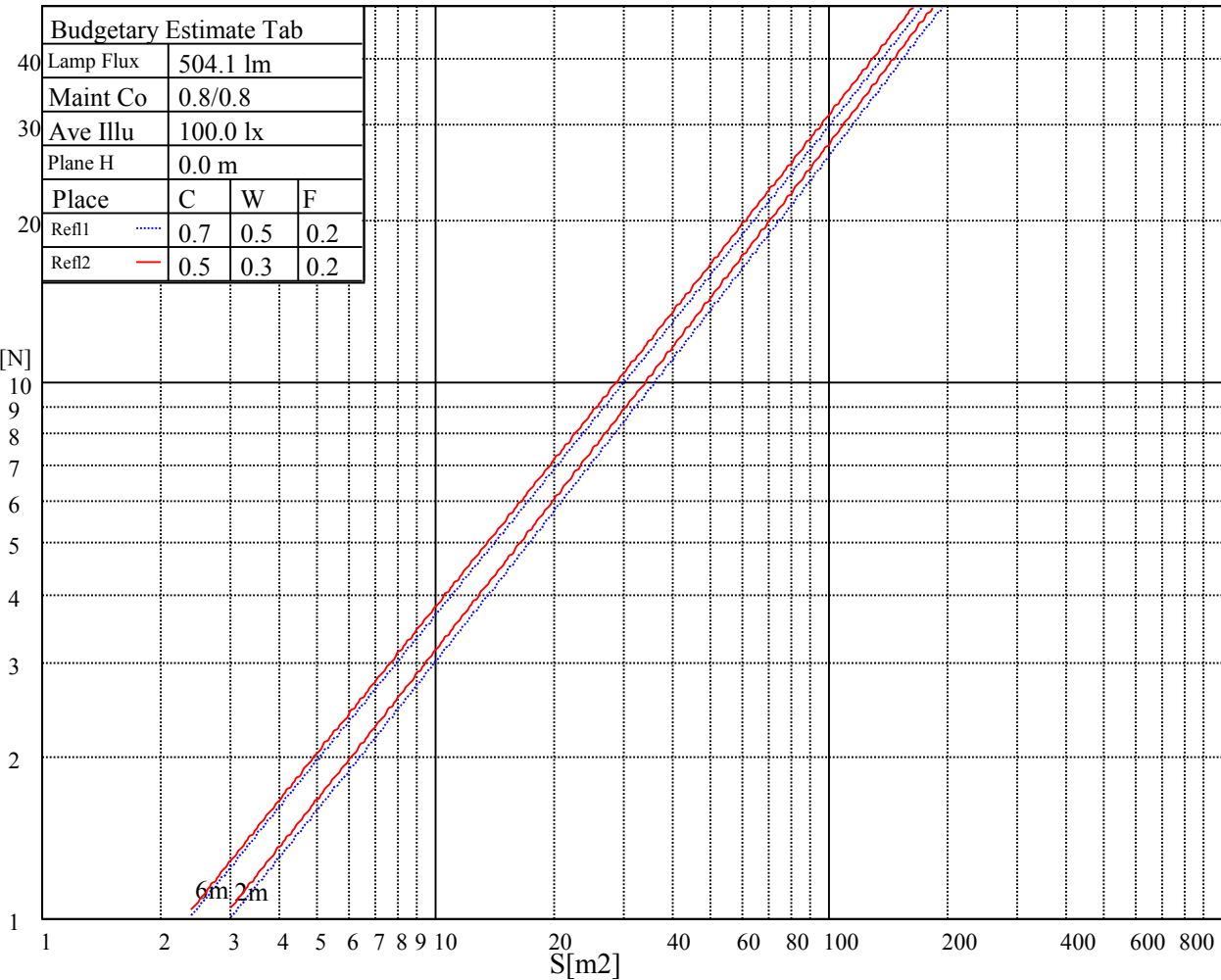
 $\gamma(^{\circ})$ 

C0 ———

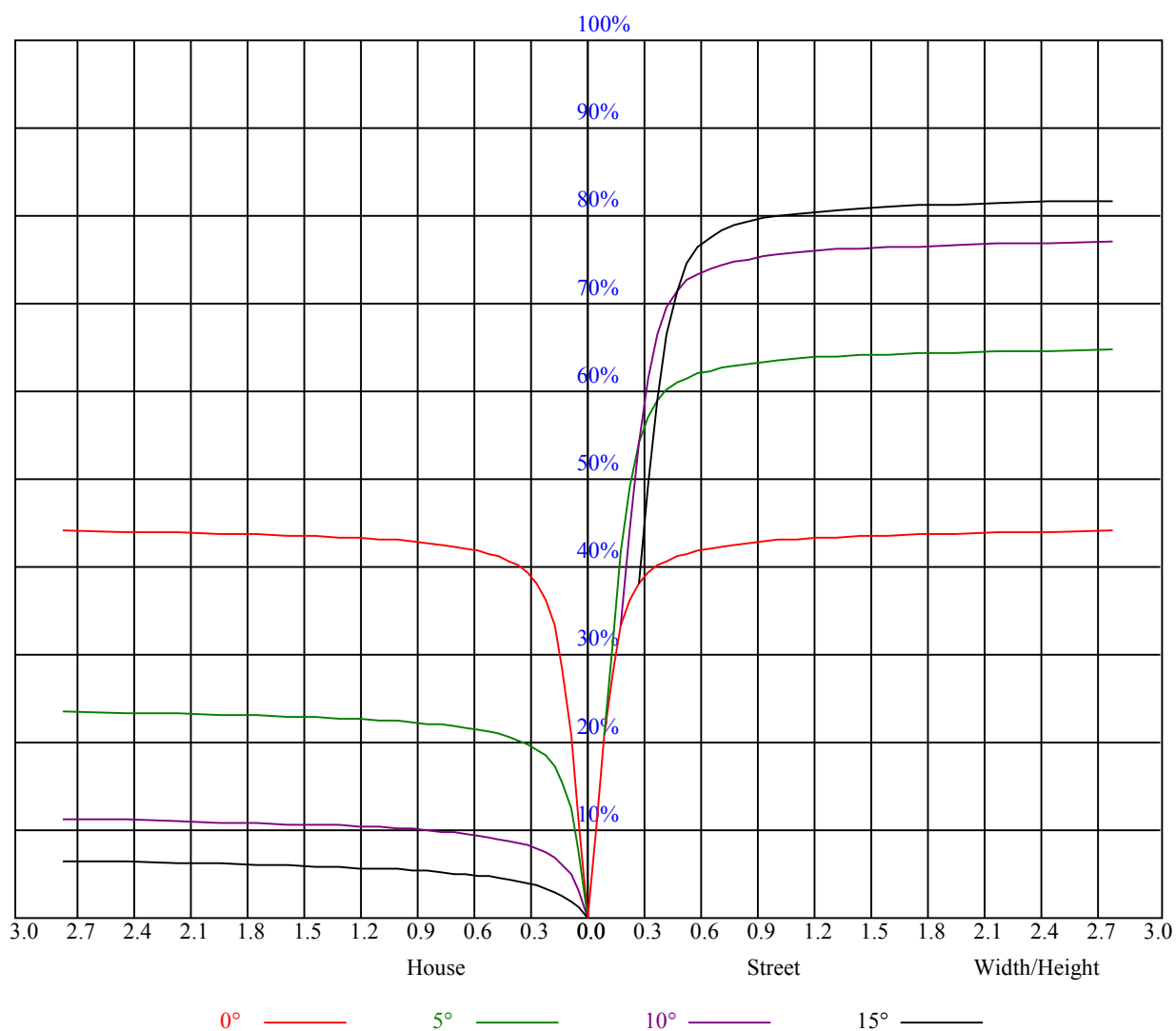
C45 ———

C90 ———

Illumination assessment according UGR										
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30
Rf of Wall	50	30	50	30	30	50	30	50	30	30
Rf of Floor	20	20	20	20	20	20	20	20	20	20
Room dimensions	Viewed crosswise					Viewed endwise				
X	Y									
2H	2H	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大
	3H	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大
	4H	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大
	6H	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大
	8H	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大
4H	12H	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大
	2H	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大
	3H	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大
	4H	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大
	6H	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大
8H	8H	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大
	12H	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大
	4H	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大
	6H	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大
	8H	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大
12H	12H	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大
	4H	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大
	6H	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大
	8H	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大
Variation with the observer position at spacings:										
S = 1.0H		非数字/非数字					非数字/非数字			
S = 1.5H		非数字/非数字					非数字/非数字			
S = 2.0H		非数字/非数字					非数字/非数字			
Standard tables:		BK0					BK0			
Uncorrected UGR		负无穷大					负无穷大			



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	1.07	1.07	1.07	1.04	1.04	1.04	1.00	1.00	1.00	0.95	0.95	0.95	0.91	0.91	0.91	0.90
1	1.01	0.99	0.97	0.99	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.88	0.86
2	0.96	0.93	0.91	0.95	0.92	0.90	0.92	0.90	0.88	0.89	0.88	0.86	0.87	0.86	0.84	0.83
3	0.92	0.89	0.87	0.91	0.88	0.86	0.89	0.87	0.85	0.87	0.85	0.83	0.85	0.83	0.82	0.81
4	0.89	0.86	0.83	0.88	0.85	0.83	0.87	0.84	0.82	0.85	0.83	0.81	0.83	0.81	0.80	0.79
5	0.87	0.83	0.80	0.86	0.83	0.80	0.84	0.82	0.79	0.83	0.81	0.79	0.82	0.80	0.78	0.77
6	0.84	0.81	0.78	0.84	0.80	0.78	0.82	0.80	0.77	0.81	0.79	0.77	0.80	0.78	0.77	0.76
7	0.82	0.79	0.76	0.82	0.78	0.76	0.81	0.78	0.76	0.80	0.77	0.75	0.79	0.77	0.75	0.74
8	0.80	0.77	0.75	0.80	0.77	0.75	0.79	0.76	0.74	0.78	0.76	0.74	0.78	0.75	0.74	0.73
9	0.79	0.76	0.73	0.78	0.75	0.73	0.78	0.75	0.73	0.77	0.75	0.73	0.77	0.74	0.73	0.72
10	0.77	0.74	0.72	0.77	0.74	0.72	0.76	0.74	0.72	0.76	0.73	0.72	0.75	0.73	0.71	0.71



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	4573.69	4551.75	4421.81	4169.81	3877.31	3515.63	3021.75	2621.25	2233.13
45.0	4555.13	4439.25	4208.06	3884.63	3533.63	3153.94	2700.56	2253.94	1880.44
90.0	4537.69	4404.38	4156.88	3865.50	3467.25	3084.75	2627.44	2177.44	1801.13
135.0	4575.94	4539.38	4401.56	4138.88	3830.63	3521.81	2977.88	2565.00	2220.19
180.0	4573.69	4515.75	4354.88	4072.50	3752.44	3325.50	2859.75	2446.31	2006.44
225.0	4559.63	4571.44	4512.94	4348.69	4057.31	3728.25	3246.19	2845.13	2449.13
270.0	4537.69	4559.63	4499.44	4334.63	4087.69	3766.50	3298.50	2898.56	2511.56
315.0	4575.94	4513.50	4367.25	4104.00	3793.50	3376.13	2930.06	2486.25	2105.44
360.0	4573.69	4551.75	4421.81	4169.81	3877.31	3515.63	3021.75	2621.25	2233.13

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	1783.69	1453.50	1160.44	887.06	669.94	518.63	389.81	303.75	285.75
45.0	1502.44	1166.06	919.13	719.44	531.00	417.38	331.88	290.25	204.69
90.0	1451.81	1083.38	845.55	658.97	480.21	371.93	292.67	227.59	180.39
135.0	1712.81	1376.44	1117.13	817.31	610.88	486.56	352.69	284.63	209.25
180.0	1645.88	1101.71	976.50	759.54	568.07	422.72	325.74	253.46	188.83
225.0	2065.50	1617.19	1121.79	1025.61	752.40	583.48	454.84	343.80	262.07
270.0	2035.69	1677.38	1349.44	1038.94	786.38	608.06	456.75	352.69	284.06
315.0	1743.75	1119.83	1055.14	826.26	621.62	467.33	364.44	285.98	214.93
360.0	1783.69	1453.50	1160.44	887.06	669.94	518.63	389.81	303.75	285.75

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	180.79	148.50	120.66	99.68	85.50	74.03	62.83	55.46	49.28
45.0	170.33	138.88	113.68	96.98	82.07	71.83	62.33	54.06	48.38
90.0	149.01	122.01	104.01	88.37	75.99	67.33	59.29	52.71	47.70
135.0	167.06	137.31	113.51	94.61	81.28	70.65	60.13	53.27	47.53
180.0	151.76	124.31	101.93	85.61	74.53	64.69	56.64	50.74	44.89
225.0	210.54	167.29	138.38	114.24	95.57	82.91	71.16	61.82	55.18
270.0	217.18	168.13	137.03	118.63	98.44	86.23	76.39	66.38	59.74
315.0	174.54	144.06	117.96	97.76	83.93	71.61	61.93	55.01	48.54
360.0	180.79	148.50	120.66	99.68	85.50	74.03	62.83	55.46	49.28

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	43.48	38.64	34.99	31.39	28.46	26.33	24.30	22.78	21.26
45.0	43.48	38.08	34.48	31.56	28.29	26.16	24.36	22.67	21.09
90.0	43.26	38.31	34.88	31.84	28.97	26.49	24.53	22.50	21.15
135.0	42.13	37.52	33.81	30.43	27.28	25.37	23.06	21.49	20.14
180.0	40.56	36.34	32.46	29.59	27.11	24.58	22.89	21.43	19.91
225.0	49.33	43.31	39.21	35.66	32.12	29.19	26.89	24.58	22.61
270.0	54.45	47.70	43.37	39.54	35.38	32.46	29.87	27.23	24.92
315.0	43.59	38.81	34.82	31.61	28.97	26.10	24.19	22.56	20.81
360.0	43.48	38.64	34.99	31.39	28.46	26.33	24.30	22.78	21.26

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	19.97	18.90	18.00	16.93	16.14	15.36	14.40	13.67	12.88
45.0	19.97	18.68	17.66	16.71	15.64	14.79	13.78	12.83	12.04
90.0	19.97	18.51	17.61	16.54	15.36	14.57	13.67	12.54	11.81
135.0	18.84	17.89	17.04	16.03	15.24	14.51	13.61	12.94	12.21
180.0	18.84	17.89	16.88	16.09	15.30	14.46	13.78	12.99	12.09
225.0	21.21	19.69	18.56	17.38	16.37	15.53	14.74	13.67	12.94
270.0	23.23	21.43	20.03	18.62	17.38	16.37	15.24	14.29	13.44
315.0	19.63	18.51	17.49	16.48	15.64	14.79	14.01	13.22	12.38
360.0	19.97	18.90	18.00	16.93	16.14	15.36	14.40	13.67	12.88

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	12.04	11.31	10.69	10.01	9.45	9.00	8.55	8.21	7.88
45.0	11.31	10.46	9.90	9.39	8.89	8.44	8.16	7.82	7.48
90.0	11.14	10.18	9.68	9.17	8.66	8.21	7.93	7.54	7.31
135.0	11.48	10.69	10.13	9.56	9.11	8.66	8.27	7.93	7.59
180.0	11.48	10.80	10.07	9.56	9.17	8.61	8.27	7.93	7.59
225.0	12.15	11.25	10.58	9.96	9.34	8.83	8.49	7.99	7.76
270.0	12.60	11.64	10.86	10.24	9.51	8.94	8.49	8.04	7.65
315.0	11.64	10.91	10.24	9.62	9.11	8.66	8.27	7.93	7.59
360.0	12.04	11.31	10.69	10.01	9.45	9.00	8.55	8.21	7.88
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	7.54	7.31	7.03	6.69	6.47	6.24	6.02	5.85	5.68
45.0	7.20	6.92	6.69	6.47	6.24	6.02	5.79	5.63	5.46
90.0	7.03	6.75	6.53	6.30	6.08	5.85	5.74	5.51	5.34
135.0	7.26	7.03	6.81	6.53	6.36	6.19	5.91	5.74	5.57
180.0	7.31	7.09	6.75	6.53	6.36	6.13	5.96	5.79	5.63
225.0	7.43	7.14	6.92	6.64	6.41	6.24	6.08	5.85	5.68
270.0	7.43	7.09	6.81	6.58	6.36	6.13	5.91	5.74	5.63
315.0	7.31	7.03	6.75	6.53	6.30	6.02	5.85	5.63	5.46
360.0	7.54	7.31	7.03	6.69	6.47	6.24	6.02	5.85	5.68
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	5.51	5.29	5.18	5.01	4.84	4.73	4.56	4.44	4.33
45.0	5.29	5.06	4.89	4.84	4.73	4.61	4.50	4.39	4.28
90.0	5.18	5.06	4.89	4.84	4.73	4.67	4.56	4.78	6.41
135.0	5.40	5.18	5.06	4.95	4.78	4.73	4.56	4.44	4.28
180.0	5.46	5.29	5.18	5.01	4.89	4.73	4.67	4.56	4.44
225.0	5.51	5.34	5.23	5.12	4.95	4.78	4.73	4.61	4.50
270.0	5.46	5.29	5.12	5.06	4.89	4.78	4.67	4.56	5.18
315.0	5.29	5.12	4.89	4.78	4.61	4.44	4.33	4.28	4.11
360.0	5.51	5.29	5.18	5.01	4.84	4.73	4.56	4.44	4.33
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	4.16	4.05	3.99	3.83	3.71	3.66	3.49	3.43	3.32
45.0	4.22	4.05	3.88	3.77	3.66	3.54	3.43	3.26	3.21
90.0	9.62	12.94	16.54	19.52	21.15	20.53	18.56	16.09	13.61
135.0	4.16	4.05	3.88	3.77	3.66	3.54	3.38	3.26	3.15
180.0	4.33	4.22	4.05	3.88	3.71	3.60	3.49	3.38	3.26
225.0	4.39	4.28	4.16	3.99	3.83	3.71	3.66	3.49	3.38
270.0	6.81	10.18	13.61	17.49	21.09	23.96	25.59	24.58	22.05
315.0	3.94	3.88	3.71	3.66	3.54	3.43	3.32	3.21	3.09
360.0	4.16	4.05	3.99	3.83	3.71	3.66	3.49	3.43	3.32
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	3.21	3.09	2.98	2.87	2.76	2.64	2.48	2.42	2.31
45.0	3.09	2.93	2.81	2.76	2.59	2.48	2.31	2.19	2.14
90.0	11.59	7.76	3.66	2.93	2.70	2.48	2.25	2.19	2.14
135.0	3.04	2.93	2.81	2.70	2.53	2.42	2.31	2.25	2.19
180.0	3.15	3.04	2.93	2.81	2.70	2.59	2.42	2.31	2.31
225.0	3.26	3.15	3.04	2.93	2.81	2.64	2.53	2.36	2.25
270.0	19.46	16.26	11.14	5.91	3.15	2.93	2.70	2.36	2.25
315.0	2.98	2.93	2.81	2.64	2.53	2.42	2.31	2.19	2.14
360.0	3.21	3.09	2.98	2.87	2.76	2.64	2.48	2.42	2.31

Intensity data(cd)

Appendix Page: 19 Total:19

C/ γ (°)	90.0
0.0	2.31
45.0	2.14
90.0	2.14
135.0	2.14
180.0	2.36
225.0	2.19
270.0	2.14
315.0	2.14
360.0	2.31