



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: 2-1672-M	
Luminaire: 92.70.131.00	
Report No: NATA0100	Voltage(V): 34.2000
Test No: GC2018071706	Current(A): 0.3000
LampCAT: BRIDGELUX V9 HD	Power (W): 10.2600
Lamp flux(lm): 1172.0	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 70	Width(mm): 70
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 1084.29
Efficiency(%): 92.52%
Lumens(lm)/Power(W): 105.68
Central intensity(cd): 5397.042
Maximum intensity(cd): 5397.042
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=20.6
 [C90/270]Total=20.6
Field angle(10%Imax): [C0/180]Total=38.3
 [C90/270]Total=38.3
Maximum s/h(1/2): C0_180=0.35 C90_270=0.35
Maximum s/h(1/4): C0_180=0.34 C90_270=0.34
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 92.94%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.200%

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2018/7/17
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.42

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	5397.041	5.165	5.165	.441%	.476%
2.0	5249.765	40.181	45.346	3.428%	4.182%
4.0	4848.267	74.171	119.517	6.329%	11.023%
6.0	4282.906	98.183	217.701	8.377%	20.078%
8.0	3613.833	110.303	328.004	9.412%	30.251%
10.0	2829.211	107.746	435.75	9.193%	40.188%
12.0	2019.331	92.077	527.827	7.856%	48.679%
14.0	1247.833	66.206	594.033	5.649%	54.785%
16.0	835.440	50.503	644.536	4.309%	59.443%
18.0	602.592	40.839	685.375	3.485%	63.209%
20.0	494.358	37.082	722.456	3.164%	66.629%
22.0	443.782	36.459	758.916	3.111%	69.992%
24.0	414.761	36.998	795.914	3.157%	73.404%
26.0	393.041	37.787	833.701	3.224%	76.889%
28.0	379.022	39.025	872.726	3.330%	80.488%
30.0	367.708	40.322	913.047	3.440%	84.207%
32.0	356.607	41.444	954.492	3.536%	88.029%
34.0	341.845	41.923	996.415	3.577%	91.895%
36.0	279.659	36.051	1032.466	3.076%	95.220%
38.0	148.301	20.024	1052.49	1.709%	97.067%
40.0	42.049	5.928	1058.417	.506%	97.614%
42.0	11.486	1.686	1060.103	.144%	97.769%
44.0	9.614	1.465	1061.568	.125%	97.904%
46.0	7.839	1.237	1062.804	.106%	98.018%
48.0	6.338	1.033	1063.837	.088%	98.114%
50.0	5.815	0.977	1064.814	.083%	98.204%
52.0	5.630	0.973	1065.787	.083%	98.293%
54.0	5.471	0.971	1066.758	.083%	98.383%
56.0	5.354	0.974	1067.731	.083%	98.473%
58.0	5.230	0.973	1068.704	.083%	98.562%
60.0	5.141	0.976	1069.681	.083%	98.652%
62.0	5.072	0.982	1070.663	.084%	98.743%
64.0	5.003	0.986	1071.649	.084%	98.834%
66.0	4.955	0.993	1072.642	.085%	98.926%
68.0	4.900	0.996	1073.638	.085%	99.017%
70.0	4.852	1.000	1074.638	.085%	99.110%
72.0	4.811	1.003	1075.642	.086%	99.202%
74.0	4.783	1.008	1076.65	.086%	99.295%

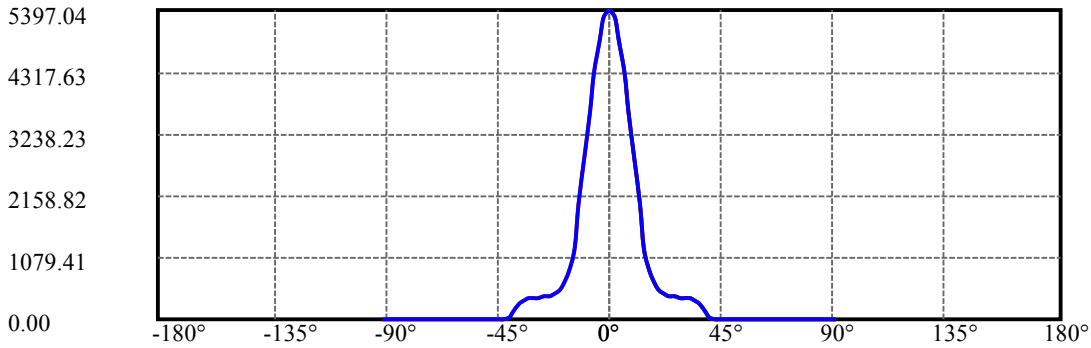
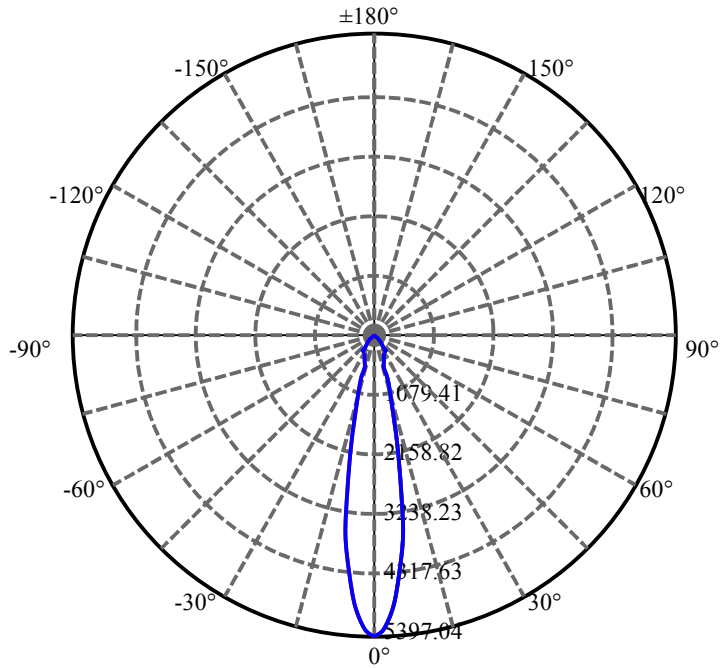
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	4.762	1.013	1077.663	.086%	99.389%
78.0	4.742	1.017	1078.68	.087%	99.482%
80.0	4.694	1.014	1079.694	.086%	99.576%
82.0	4.707	1.022	1080.717	.087%	99.670%
84.0	4.694	1.024	1081.74	.087%	99.765%
86.0	4.687	1.025	1082.766	.087%	99.859%
88.0	4.645	1.018	1083.784	.087%	99.953%
90.0	4.639	0.509	1084.292	.043%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	913.05	77.91%	84.21%
0-40	1058.42	90.31%	97.61%
0-60	1069.68	91.27%	98.65%
0-90	1083.78	92.47%	99.95%
0-120	1083.78	92.47%	99.95%
0-180	1084.29	92.52%	100.00%
60-90	15.08	1.29%	1.39%
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%
0-27.73	867.43	74.01%	80.00%

ZONAL LUMEN SUMMARY

0-10	435.75
10-20	286.71
20-30	190.59
30-40	145.37
40-50	6.40
50-60	4.87
60-70	4.96
70-80	5.06
80-90	4.09
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: —————

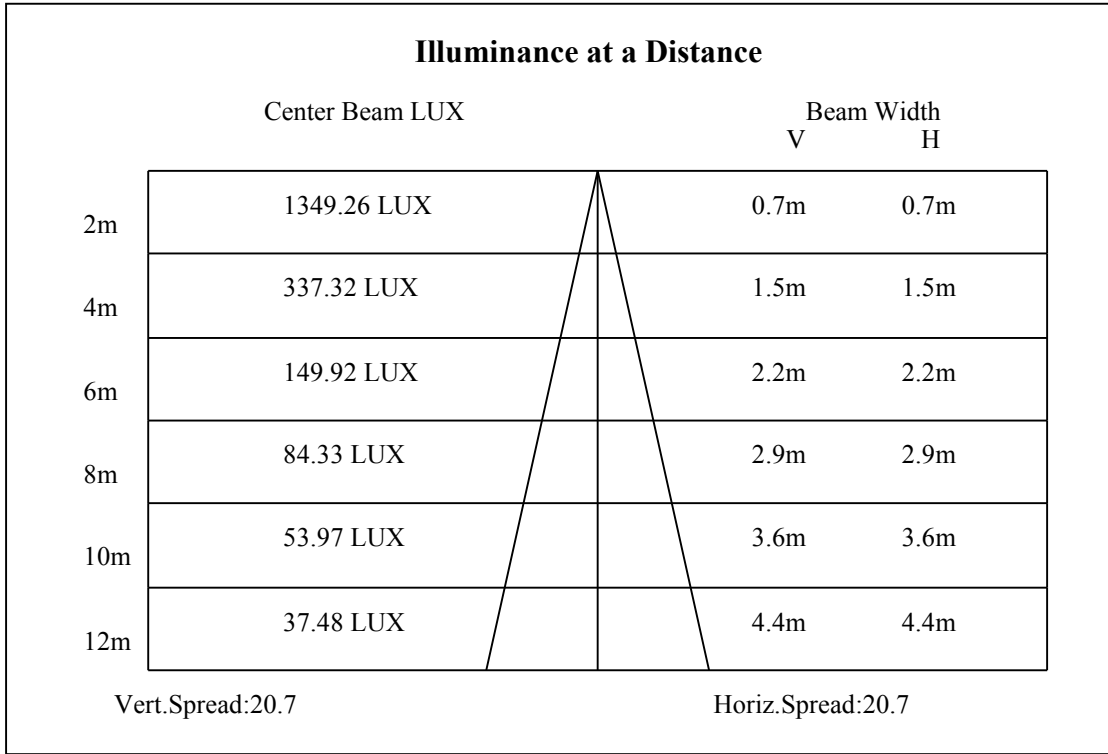
C90/C270: —————

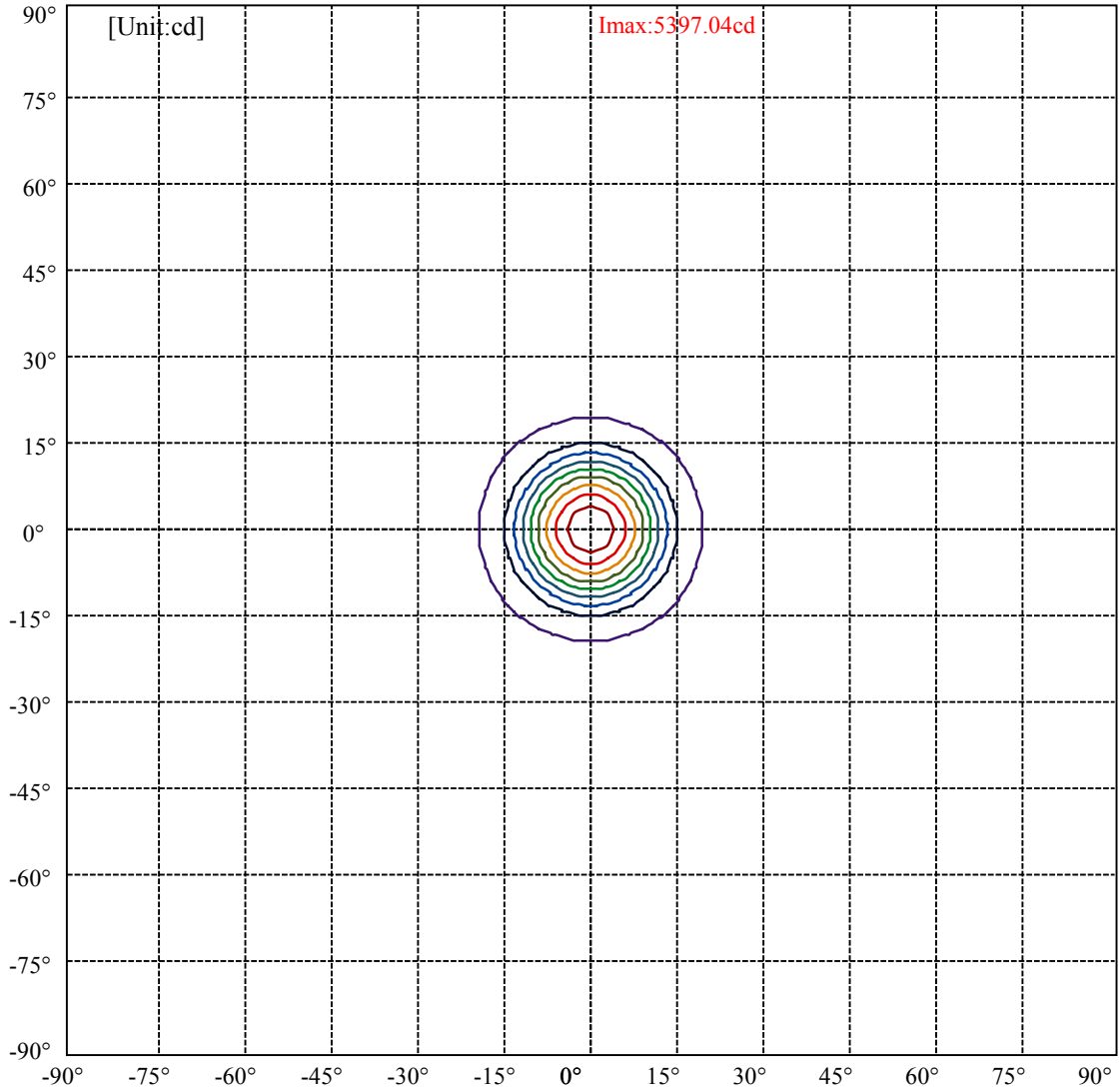
Field angle(10%Imax):C0/180Left:19.2 Right:19.2

:C90/270Left:19.2 Right:19.2

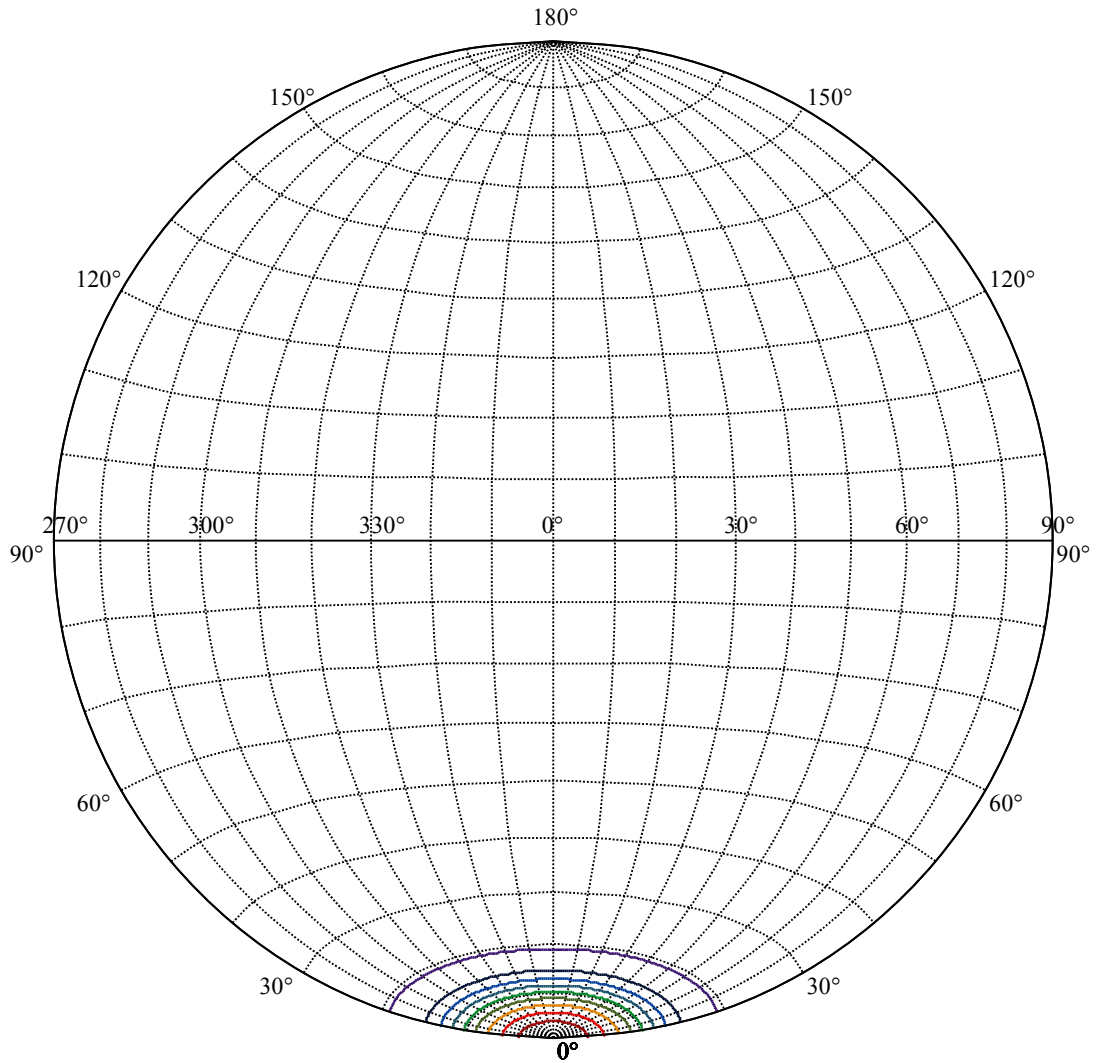
Beam Angle(50%Imax):C0/180Left:10.3 Right:10.3

:C90/270Left:10.3 Right:10.3





(10%Imax) 539.704	—
(20%Imax) 1079.41	—
(30%Imax) 1619.11	—
(40%Imax) 2158.82	—
(50%Imax) 2698.52	—
(60%Imax) 3238.22	—
(70%Imax) 3777.93	—
(80%Imax) 4317.63	—
(90%Imax) 4857.34	—



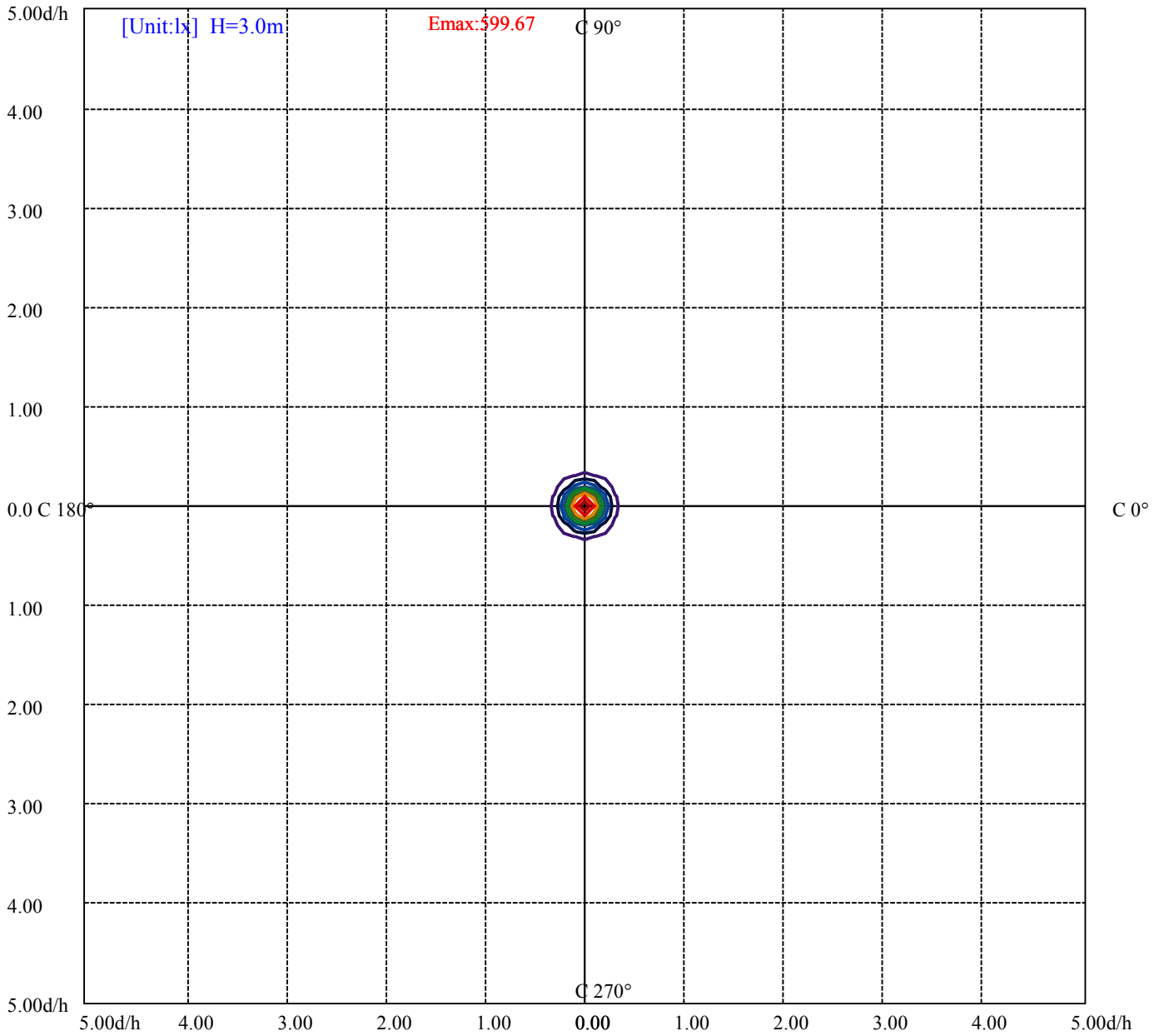
House

[Unit:cd]

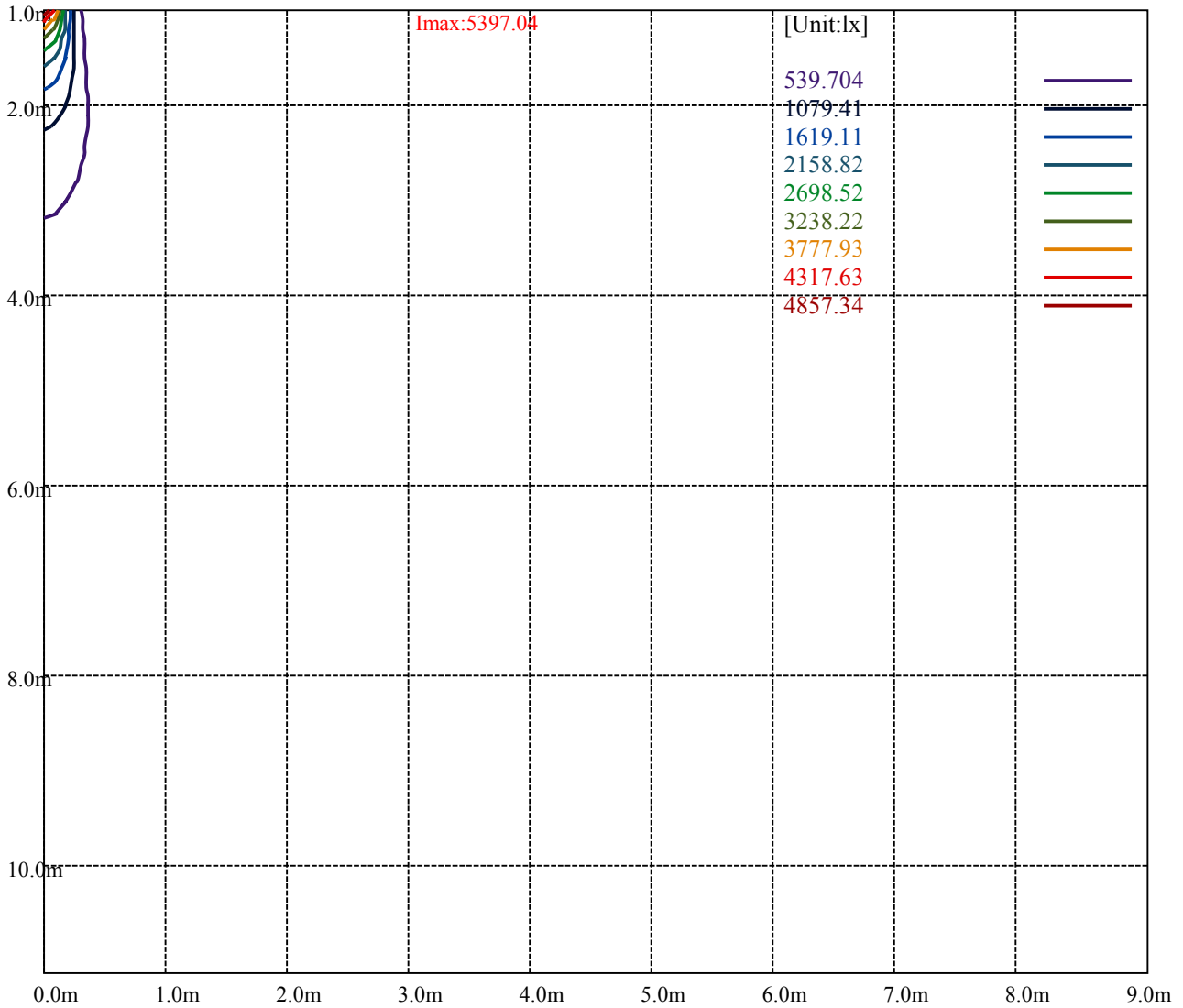
Road

Imax:5397.04

(10%Imax) 539.704	—
(20%Imax) 1079.41	—
(30%Imax) 1619.11	—
(40%Imax) 2158.82	—
(50%Imax) 2698.52	—
(60%Imax) 3238.22	—
(70%Imax) 3777.93	—
(80%Imax) 4317.63	—
(90%Imax) 4857.34	—



- (10%Emax) 59.967
- (20%Emax) 119.9344
- (30%Emax) 179.9011
- (40%Emax) 239.8678
- (50%Emax) 299.8356
- (60%Emax) 359.8022
- (70%Emax) 419.7689
- (80%Emax) 479.7356
- (90%Emax) 539.7034



Luminance Table

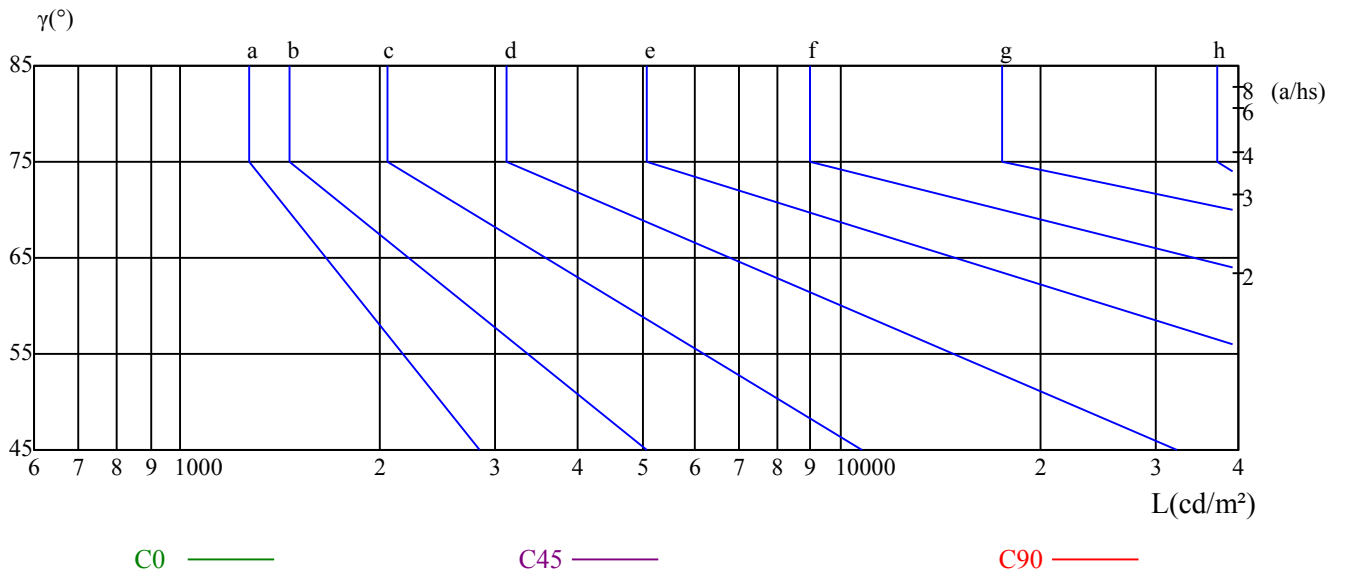
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

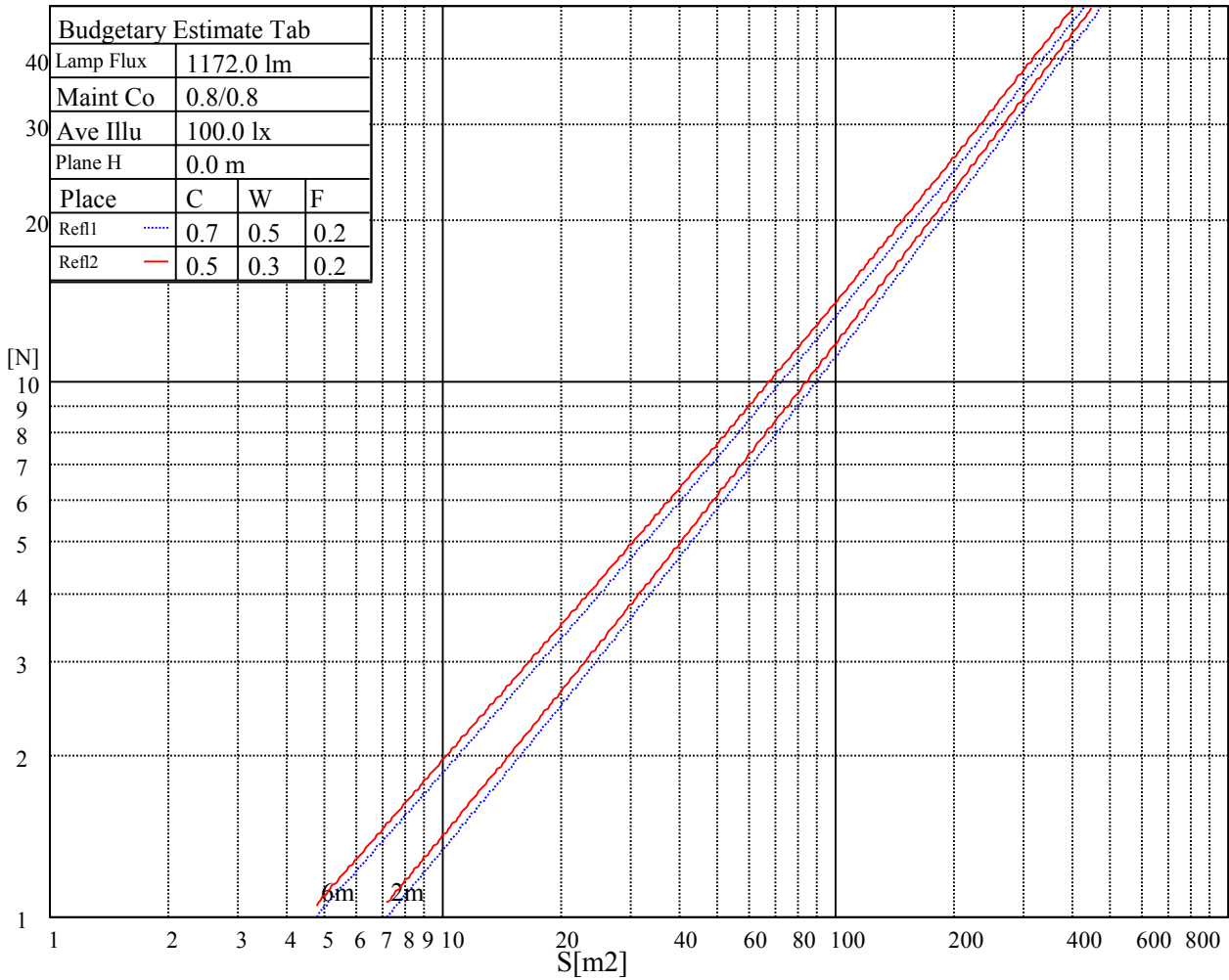
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

Glare Table

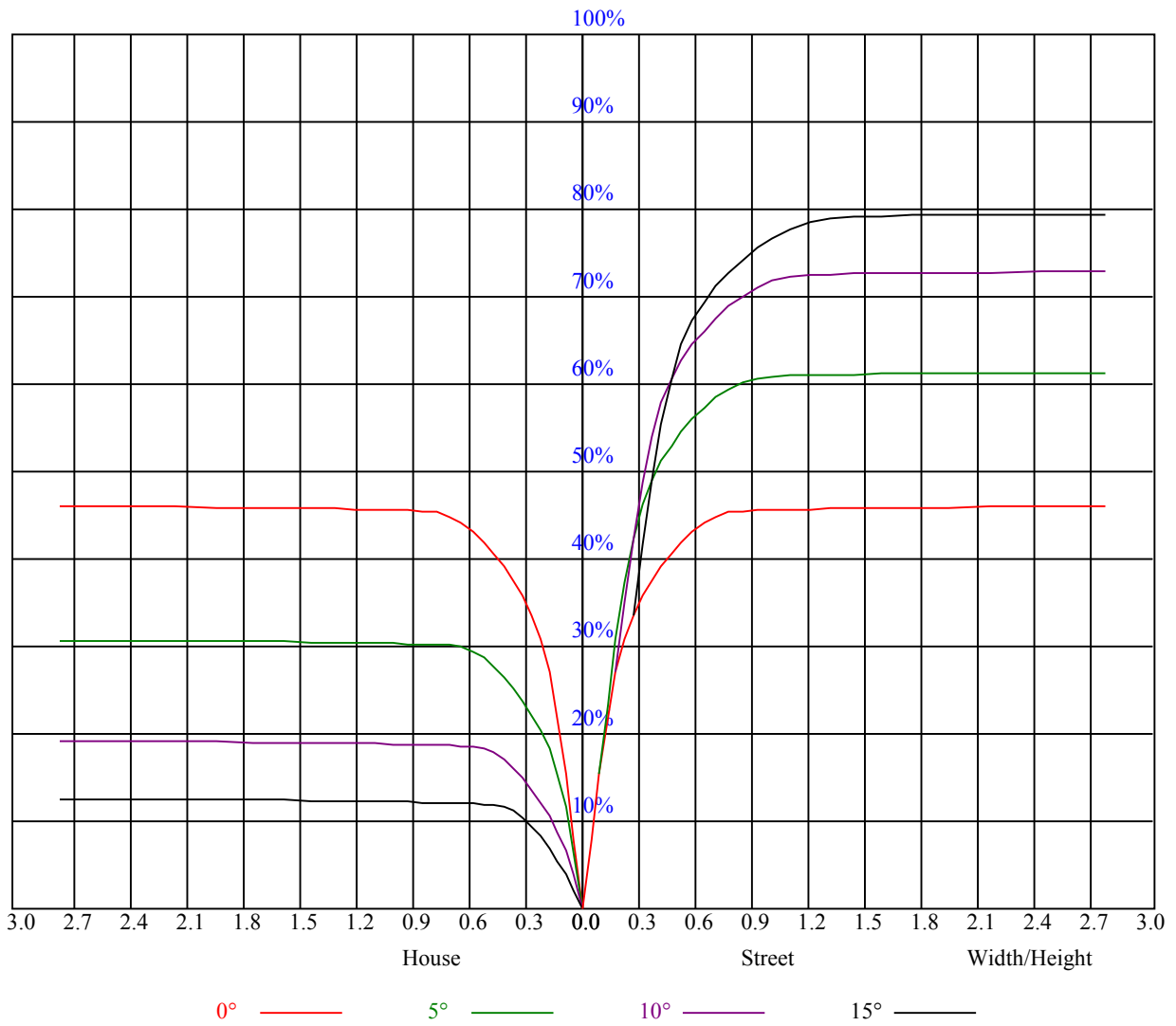
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.11	1.11	1.11	1.08	1.08	1.08	1.03	1.03	1.03	0.99	0.99	0.99	0.95	0.95	0.95	0.93
1	1.04	1.02	1.00	1.02	1.00	0.98	0.98	0.96	0.95	0.95	0.93	0.92	0.91	0.90	0.90	0.88
2	0.98	0.95	0.92	0.97	0.94	0.91	0.94	0.91	0.89	0.91	0.89	0.88	0.89	0.87	0.86	0.84
3	0.94	0.90	0.87	0.92	0.89	0.86	0.90	0.87	0.85	0.88	0.85	0.83	0.86	0.84	0.82	0.81
4	0.89	0.85	0.82	0.88	0.85	0.82	0.87	0.83	0.81	0.85	0.82	0.80	0.83	0.81	0.79	0.78
5	0.86	0.82	0.78	0.85	0.81	0.78	0.83	0.80	0.77	0.82	0.79	0.77	0.81	0.78	0.76	0.75
6	0.83	0.78	0.75	0.82	0.78	0.75	0.81	0.77	0.74	0.79	0.76	0.74	0.78	0.76	0.74	0.72
7	0.80	0.75	0.72	0.79	0.75	0.72	0.78	0.74	0.72	0.77	0.74	0.71	0.76	0.73	0.71	0.70
8	0.77	0.73	0.70	0.76	0.72	0.70	0.76	0.72	0.69	0.75	0.72	0.69	0.74	0.71	0.69	0.68
9	0.75	0.70	0.68	0.74	0.70	0.67	0.73	0.70	0.67	0.73	0.69	0.67	0.72	0.69	0.67	0.66
10	0.72	0.68	0.66	0.72	0.68	0.65	0.71	0.68	0.65	0.71	0.67	0.65	0.70	0.67	0.65	0.64



Intensity data(cd)

C/γ(°)	0.0	2.0	4.0	6.0	8.0	10.0	12.0	14.0	16.0
0.0	5398.28	5265.04	4874.14	4294.95	3608.95	2828.80	1972.67	1193.62	795.01
45.0	5414.25	5166.49	4675.39	4049.40	3387.62	2561.77	1723.27	1076.35	699.77
90.0	5369.65	5067.39	4507.47	3931.58	3194.92	2389.45	1659.40	1030.99	707.81
135.0	5405.99	5233.66	4799.82	4166.12	3582.52	2807.88	2019.47	1333.47	842.36
180.0	5398.28	5238.07	4850.47	4206.31	3516.45	2764.93	1961.11	1086.81	830.25
225.0	5414.25	5359.19	5040.96	4558.12	3859.45	3082.06	2297.50	1471.11	932.38
270.0	5369.65	5372.40	5135.11	4635.20	4056.00	3322.10	2480.84	1702.34	1052.68
315.0	5405.99	5295.88	4902.77	4421.58	3704.75	2876.70	2040.39	1087.97	823.26
360.0	5398.28	5265.04	4874.14	4294.95	3608.95	2828.80	1972.67	1193.62	795.01
C/γ(°)	18.0	20.0	22.0	24.0	26.0	28.0	30.0	32.0	34.0
0.0	579.74	486.15	448.16	420.08	399.71	384.84	374.38	363.92	352.91
45.0	537.90	466.33	431.09	406.32	385.95	374.38	363.92	352.36	329.24
90.0	528.54	456.36	418.70	396.30	376.31	367.12	354.67	343.66	312.83
135.0	605.07	492.75	438.25	407.97	386.50	373.28	361.72	350.71	340.80
180.0	590.20	479.49	433.73	406.54	385.23	372.24	360.84	349.72	339.97
225.0	659.19	522.21	455.70	425.53	402.02	384.57	374.11	361.39	350.05
270.0	726.19	558.27	475.69	434.95	411.27	390.90	378.79	368.88	356.77
315.0	593.89	493.31	448.93	420.41	397.34	384.84	373.23	362.22	352.20
360.0	579.74	486.15	448.16	420.08	399.71	384.84	374.38	363.92	352.91
C/γ(°)	36.0	38.0	40.0	42.0	44.0	46.0	48.0	50.0	52.0
0.0	282.44	161.87	40.63	11.95	10.46	8.20	6.17	5.84	5.62
45.0	281.34	98.00	15.47	10.74	8.97	7.05	5.89	5.67	5.56
90.0	197.16	77.57	11.23	9.69	7.98	6.72	5.84	5.67	5.51
135.0	283.54	134.50	31.16	10.41	9.03	7.60	6.06	5.84	5.67
180.0	269.12	144.14	42.28	10.90	9.41	7.65	6.11	5.78	5.62
225.0	314.43	200.90	65.74	12.44	10.63	8.70	6.99	5.89	5.67
270.0	329.79	214.06	87.70	14.15	10.63	8.81	7.05	5.95	5.73
315.0	279.47	155.37	42.17	11.62	9.80	7.98	6.61	5.89	5.67
360.0	282.44	161.87	40.63	11.95	10.46	8.20	6.17	5.84	5.62
C/γ(°)	54.0	56.0	58.0	60.0	62.0	64.0	66.0	68.0	70.0
0.0	5.45	5.34	5.23	5.12	5.07	4.96	4.90	4.84	4.84
45.0	5.40	5.29	5.18	5.12	5.01	4.96	4.90	4.84	4.79
90.0	5.40	5.29	5.18	5.12	5.07	4.96	4.96	4.90	4.84
135.0	5.51	5.40	5.29	5.18	5.12	5.07	5.01	4.96	4.90
180.0	5.45	5.34	5.23	5.18	5.07	5.01	4.96	4.90	4.84
225.0	5.51	5.40	5.23	5.12	5.07	5.01	4.96	4.90	4.84
270.0	5.56	5.45	5.29	5.18	5.12	5.07	5.01	4.96	4.90
315.0	5.51	5.34	5.23	5.12	5.07	5.01	4.96	4.90	4.84
360.0	5.45	5.34	5.23	5.12	5.07	4.96	4.90	4.84	4.84
C/γ(°)	72.0	74.0	76.0	78.0	80.0	82.0	84.0	86.0	88.0
0.0	4.79	4.73	4.73	4.73	4.68	4.68	4.68	4.68	4.62
45.0	4.79	4.73	4.73	4.73	4.68	4.68	4.68	4.68	4.62
90.0	4.79	4.79	4.73	4.73	4.73	4.73	4.68	4.68	4.68
135.0	4.84	4.79	4.79	4.73	4.68	4.68	4.68	4.68	4.62
180.0	4.79	4.79	4.73	4.73	4.68	4.68	4.68	4.68	4.62
225.0	4.84	4.79	4.79	4.73	4.68	4.68	4.68	4.68	4.68
270.0	4.84	4.84	4.84	4.79	4.73	4.79	4.79	4.73	4.68
315.0	4.79	4.79	4.73	4.73	4.68	4.73	4.68	4.68	4.62
360.0	4.79	4.73	4.73	4.73	4.68	4.68	4.68	4.68	4.62

Intensity data(cd)

C/ γ ($^{\circ}$)	90.0
0.0	4.62
45.0	4.62
90.0	4.68
135.0	4.68
180.0	4.62
225.0	4.62
270.0	4.62
315.0	4.62
360.0	4.62