



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: CR01D03506BV

Luminaire:

Report No: NATA0100

Voltage(V): 3.2000

Test No: GC2018112204

Current(A): 0.2300

LampCAT: CREE XPE2

Power (W): 0.7360

Lamp flux(lm): 61.0

PF: 1.0000

Number of Lamps: 1

Ballast type: DC

Length(mm): 35

Width(mm): 35

Phm Type: C

Height(mm): 0

---

## Photometric Results

---

Lumens(lm): 57.24

Efficiency(%): 93.83%

Lumens(lm)/Power(W): 77.93

Central intensity(cd): 2038.359

Maximum intensity(cd): 2038.359

Angle of maximum intensity: C=0.0  $\gamma$ =0.0

Beam Angle(50%Imax): [C0/180]Total=5.9

[C90/270]Total=5.9

Field angle(10%Imax): [C0/180]Total=14.5

[C90/270]Total=14.5

Maximum s/h(1/2): C0\_180=0.10 C90\_270=0.10

Maximum s/h(1/4): C0\_180=0.11 C90\_270=0.11

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 94.03%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 93.255%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2038.359	0.122	0.122	.200%	.213%
0.5	1985.625	0.950	1.072	1.558%	1.873%
1.0	1848.305	1.769	2.841	2.900%	4.963%
1.5	1720.132	2.469	5.31	4.047%	9.276%
2.0	1542.216	2.951	8.261	4.838%	14.432%
2.5	1272.105	3.042	11.303	4.988%	19.748%
3.0	984.352	2.825	14.128	4.631%	24.683%
3.5	772.280	2.585	16.713	4.238%	29.199%
4.0	591.666	2.263	18.976	3.710%	33.153%
4.5	453.478	1.951	20.927	3.198%	36.561%
5.0	364.875	1.744	22.671	2.858%	39.607%
5.5	297.263	1.562	24.233	2.561%	42.337%
6.0	266.412	1.527	25.76	2.503%	45.004%
6.5	234.598	1.456	27.216	2.387%	47.548%
7.0	213.771	1.428	28.644	2.342%	50.044%
7.5	195.495	1.399	30.043	2.294%	52.488%
8.0	179.916	1.373	31.416	2.251%	54.887%
8.5	160.399	1.300	32.716	2.131%	57.158%
9.0	148.535	1.274	33.99	2.089%	59.384%
9.5	132.478	1.199	35.189	1.965%	61.478%
10.0	120.347	1.146	36.335	1.878%	63.480%
10.5	108.009	1.079	37.414	1.769%	65.366%
11.0	97.638	1.022	38.436	1.675%	67.151%
11.5	87.333	0.955	39.391	1.565%	68.818%
12.0	77.855	0.888	40.278	1.455%	70.369%
12.5	68.536	0.813	41.092	1.333%	71.790%
13.0	60.143	0.742	41.833	1.216%	73.086%
13.5	52.263	0.669	42.502	1.097%	74.255%
14.0	46.106	0.612	43.114	1.003%	75.323%
14.5	40.235	0.552	43.666	.906%	76.288%
15.0	35.559	0.505	44.171	.827%	77.170%
15.5	30.846	0.452	44.623	.741%	77.960%
16.0	26.937	0.407	45.03	.667%	78.671%
16.5	22.966	0.358	45.388	.586%	79.296%
17.0	19.934	0.320	45.707	.524%	79.854%
17.5	17.271	0.285	45.992	.467%	80.352%
18.0	15.431	0.261	46.253	.429%	80.808%
18.5	13.493	0.235	46.488	.385%	81.218%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
19.0	12.340	0.220	46.708	.361%	81.603%
19.5	10.800	0.198	46.906	.324%	81.949%
20.0	9.820	0.184	47.09	.302%	82.270%
20.5	8.972	0.172	47.263	.282%	82.571%
21.0	8.339	0.164	47.426	.269%	82.858%
21.5	7.784	0.156	47.583	.256%	83.131%
22.0	7.455	0.153	47.736	.251%	83.398%
22.5	6.816	0.143	47.879	.234%	83.648%
23.0	6.396	0.137	48.016	.225%	83.888%
23.5	6.026	0.132	48.148	.216%	84.118%
24.0	5.695	0.127	48.275	.208%	84.340%
24.5	5.337	0.121	48.396	.199%	84.552%
25.0	5.107	0.118	48.514	.194%	84.759%
25.5	4.814	0.114	48.628	.186%	84.957%
26.0	4.547	0.109	48.737	.179%	85.148%
26.5	4.266	0.104	48.842	.171%	85.330%
27.0	4.001	0.100	48.941	.163%	85.504%
27.5	3.788	0.096	49.037	.157%	85.672%
28.0	3.635	0.094	49.131	.153%	85.835%
28.5	3.473	0.091	49.222	.149%	85.994%
29.0	3.338	0.089	49.31	.145%	86.149%
29.5	3.190	0.086	49.397	.141%	86.300%
30.0	3.091	0.085	49.481	.139%	86.448%
30.5	2.948	0.082	49.563	.135%	86.591%
31.0	2.838	0.080	49.644	.131%	86.731%
31.5	2.719	0.078	49.721	.128%	86.867%
32.0	2.632	0.076	49.798	.125%	87.001%
32.5	2.550	0.075	49.873	.123%	87.132%
33.0	2.480	0.074	49.947	.121%	87.261%
33.5	2.391	0.072	50.019	.119%	87.388%
34.0	2.327	0.071	50.091	.117%	87.512%
34.5	2.259	0.070	50.161	.115%	87.635%
35.0	2.194	0.069	50.23	.113%	87.756%
35.5	2.133	0.068	50.298	.111%	87.874%
36.0	2.072	0.067	50.365	.109%	87.991%
36.5	2.023	0.066	50.431	.108%	88.106%
37.0	1.995	0.066	50.496	.108%	88.221%
37.5	1.945	0.065	50.561	.106%	88.335%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	1.910	0.064	50.626	.106%	88.447%
38.5	1.873	0.064	50.69	.105%	88.559%
39.0	1.835	0.063	50.753	.104%	88.670%
39.5	1.807	0.063	50.816	.103%	88.780%
40.0	1.779	0.063	50.879	.103%	88.889%
40.5	1.741	0.062	50.941	.102%	88.998%
41.0	1.723	0.062	51.003	.102%	89.106%
41.5	1.688	0.061	51.064	.101%	89.213%
42.0	1.666	0.061	51.125	.100%	89.320%
42.5	1.636	0.061	51.186	.099%	89.426%
43.0	1.638	0.061	51.247	.100%	89.533%
43.5	1.615	0.061	51.308	.100%	89.639%
44.0	1.591	0.061	51.369	.099%	89.745%
44.5	1.575	0.061	51.429	.099%	89.851%
45.0	1.563	0.061	51.49	.099%	89.957%
45.5	1.552	0.061	51.55	.099%	90.063%
46.0	1.554	0.061	51.612	.100%	90.170%
46.5	1.540	0.061	51.673	.100%	90.277%
47.0	1.533	0.061	51.734	.101%	90.384%
47.5	1.516	0.061	51.796	.100%	90.491%
48.0	1.533	0.062	51.858	.102%	90.600%
48.5	1.523	0.063	51.921	.103%	90.710%
49.0	1.538	0.064	51.984	.104%	90.821%
49.5	1.535	0.064	52.048	.105%	90.933%
50.0	1.528	0.064	52.113	.105%	91.045%
50.5	1.533	0.065	52.177	.106%	91.158%
51.0	1.552	0.066	52.244	.108%	91.274%
51.5	1.547	0.066	52.31	.109%	91.390%
52.0	1.556	0.067	52.377	.110%	91.507%
52.5	1.547	0.067	52.444	.110%	91.625%
53.0	1.533	0.067	52.512	.110%	91.742%
53.5	1.526	0.067	52.579	.110%	91.859%
54.0	1.552	0.069	52.648	.113%	91.980%
54.5	1.547	0.069	52.717	.113%	92.100%
55.0	1.552	0.070	52.786	.114%	92.222%
55.5	1.538	0.069	52.856	.114%	92.343%
56.0	1.523	0.069	52.925	.114%	92.464%
56.5	1.528	0.070	52.995	.115%	92.586%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
57.0	1.526	0.070	53.065	.115%	92.709%
57.5	1.521	0.070	53.136	.115%	92.832%
58.0	1.526	0.071	53.206	.116%	92.956%
58.5	1.516	0.071	53.277	.116%	93.080%
59.0	1.502	0.071	53.348	.116%	93.203%
59.5	1.512	0.071	53.419	.117%	93.328%
60.0	1.514	0.072	53.491	.118%	93.453%
60.5	1.507	0.072	53.563	.118%	93.579%
61.0	1.505	0.072	53.635	.118%	93.705%
61.5	1.500	0.072	53.708	.118%	93.831%
62.0	1.500	0.073	53.78	.119%	93.958%
62.5	1.500	0.073	53.853	.120%	94.086%
63.0	1.509	0.074	53.927	.121%	94.215%
63.5	1.500	0.074	54.001	.121%	94.343%
64.0	1.505	0.074	54.075	.122%	94.473%
64.5	1.498	0.074	54.149	.122%	94.602%
65.0	1.498	0.074	54.223	.122%	94.732%
65.5	1.514	0.076	54.299	.124%	94.864%
66.0	1.500	0.075	54.374	.123%	94.995%
66.5	1.500	0.075	54.449	.124%	95.127%
67.0	1.498	0.076	54.525	.124%	95.259%
67.5	1.484	0.075	54.6	.123%	95.391%
68.0	1.479	0.075	54.675	.123%	95.522%
68.5	1.481	0.076	54.751	.124%	95.654%
69.0	1.477	0.076	54.826	.124%	95.786%
69.5	1.470	0.075	54.902	.124%	95.918%
70.0	1.460	0.075	54.977	.123%	96.049%
70.5	1.441	0.075	55.052	.122%	96.179%
71.0	1.446	0.075	55.127	.123%	96.310%
71.5	1.427	0.074	55.201	.122%	96.440%
72.0	1.406	0.073	55.274	.120%	96.568%
72.5	1.413	0.074	55.348	.121%	96.697%
73.0	1.380	0.072	55.42	.119%	96.824%
73.5	1.371	0.072	55.493	.118%	96.950%
74.0	1.352	0.071	55.564	.117%	97.074%
74.5	1.322	0.070	55.634	.114%	97.196%
75.0	1.327	0.070	55.704	.115%	97.319%
75.5	1.308	0.069	55.773	.114%	97.440%

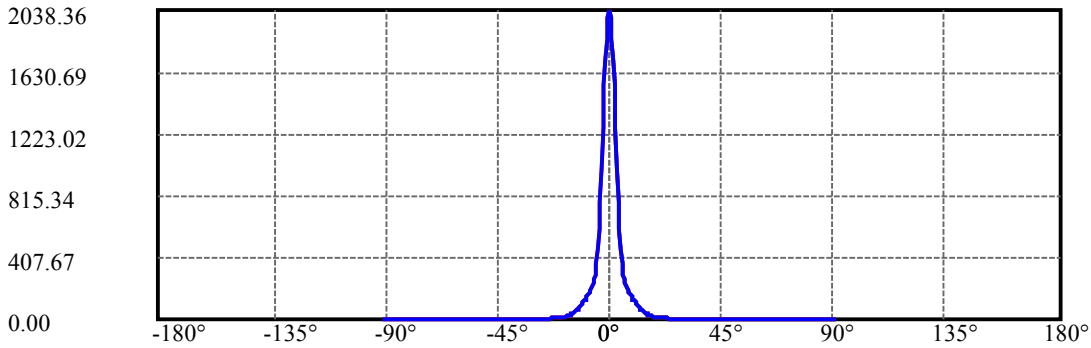
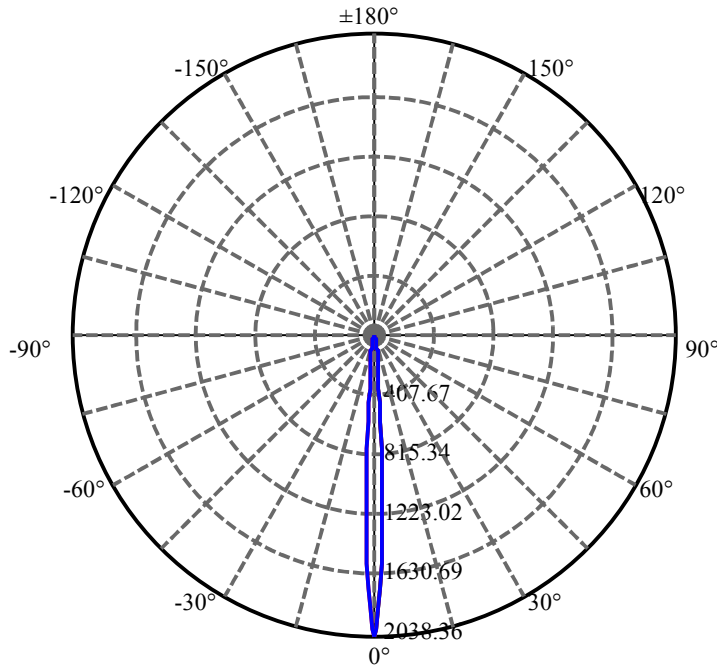
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	1.282	0.068	55.842	.112%	97.559%
76.5	1.282	0.068	55.91	.112%	97.679%
77.0	1.263	0.067	55.977	.111%	97.797%
77.5	1.238	0.066	56.044	.109%	97.913%
78.0	1.219	0.065	56.109	.107%	98.027%
78.5	1.209	0.065	56.174	.107%	98.140%
79.0	1.193	0.064	56.238	.105%	98.252%
79.5	1.181	0.064	56.302	.104%	98.364%
80.0	1.151	0.062	56.364	.102%	98.472%
80.5	1.134	0.061	56.425	.101%	98.579%
81.0	1.134	0.061	56.487	.101%	98.687%
81.5	1.123	0.061	56.548	.100%	98.793%
82.0	1.118	0.061	56.608	.100%	98.899%
82.5	1.083	0.059	56.667	.096%	99.002%
83.0	1.052	0.057	56.725	.094%	99.102%
83.5	1.041	0.057	56.781	.093%	99.201%
84.0	1.017	0.055	56.837	.091%	99.298%
84.5	0.991	0.054	56.891	.089%	99.393%
85.0	0.977	0.053	56.944	.088%	99.486%
85.5	0.935	0.051	56.995	.084%	99.575%
86.0	0.886	0.048	57.044	.079%	99.660%
86.5	0.764	0.042	57.086	.069%	99.733%
87.0	0.595	0.033	57.118	.053%	99.790%
87.5	0.485	0.027	57.145	.044%	99.836%
88.0	0.420	0.023	57.168	.038%	99.876%
88.5	0.387	0.021	57.189	.035%	99.913%
89.0	0.368	0.020	57.209	.033%	99.949%
89.5	0.361	0.020	57.229	.032%	99.983%
90.0	0.349	0.010	57.238	.016%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	49.48	81.12%	86.45%
0-40	50.88	83.41%	88.89%
0-60	53.49	87.69%	93.45%
0-90	57.23	93.82%	99.98%
0-120	57.23	93.82%	99.98%
0-180	57.24	93.83%	100.00%
60-90	3.81	6.25%	6.66%
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%
0-17.15	45.79	75.07%	80.00%

ZONAL LUMEN SUMMARY

0-10	36.34
10-20	10.76
20-30	2.39
30-40	1.40
40-50	1.23
50-60	1.38
60-70	1.49
70-80	1.39
80-90	0.86
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

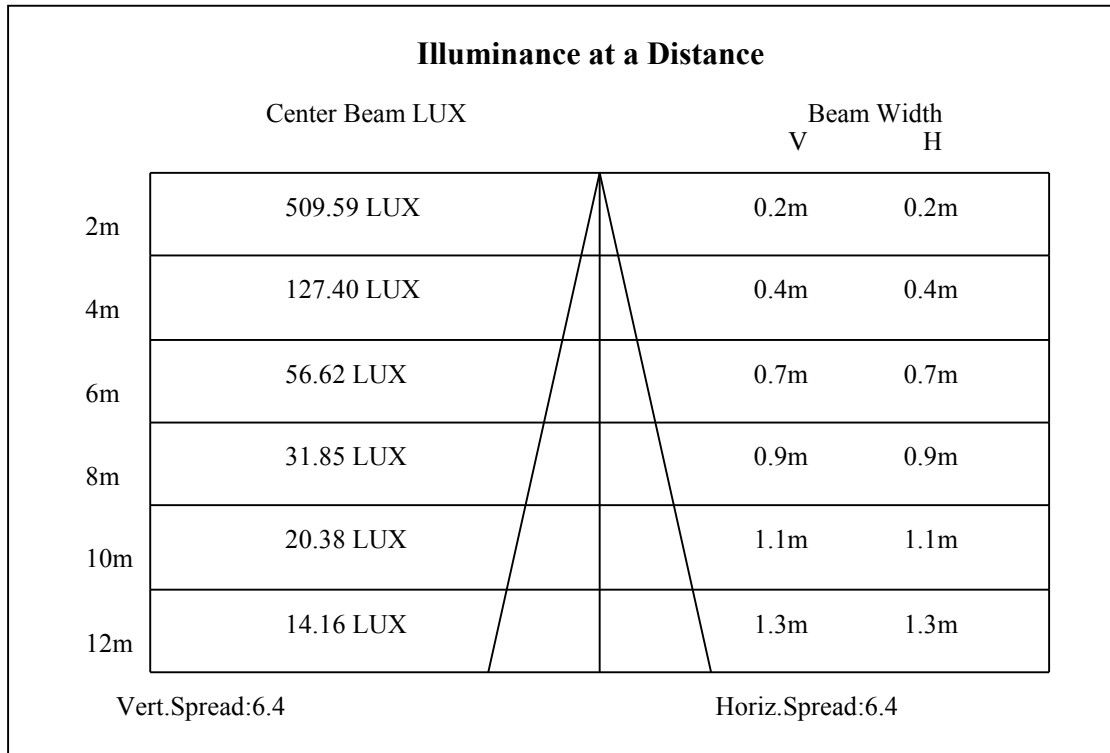


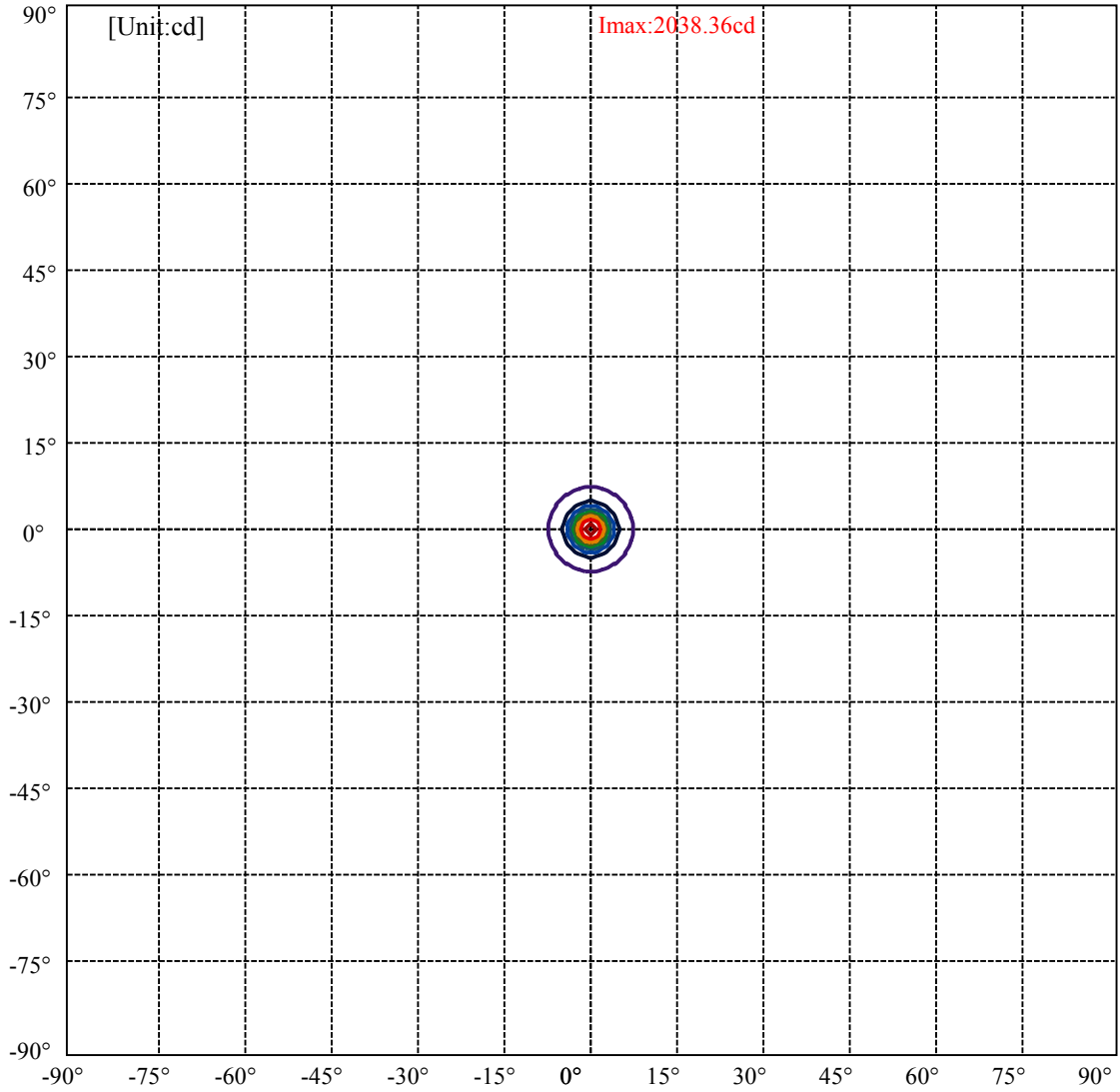
C0(Max): ———  
C0/C180: ———  
C90/C270: ———

Field angle(10%Imax):C0/180Left:7.3 Right:7.3  
:C90/270Left:7.3 Right:7.3

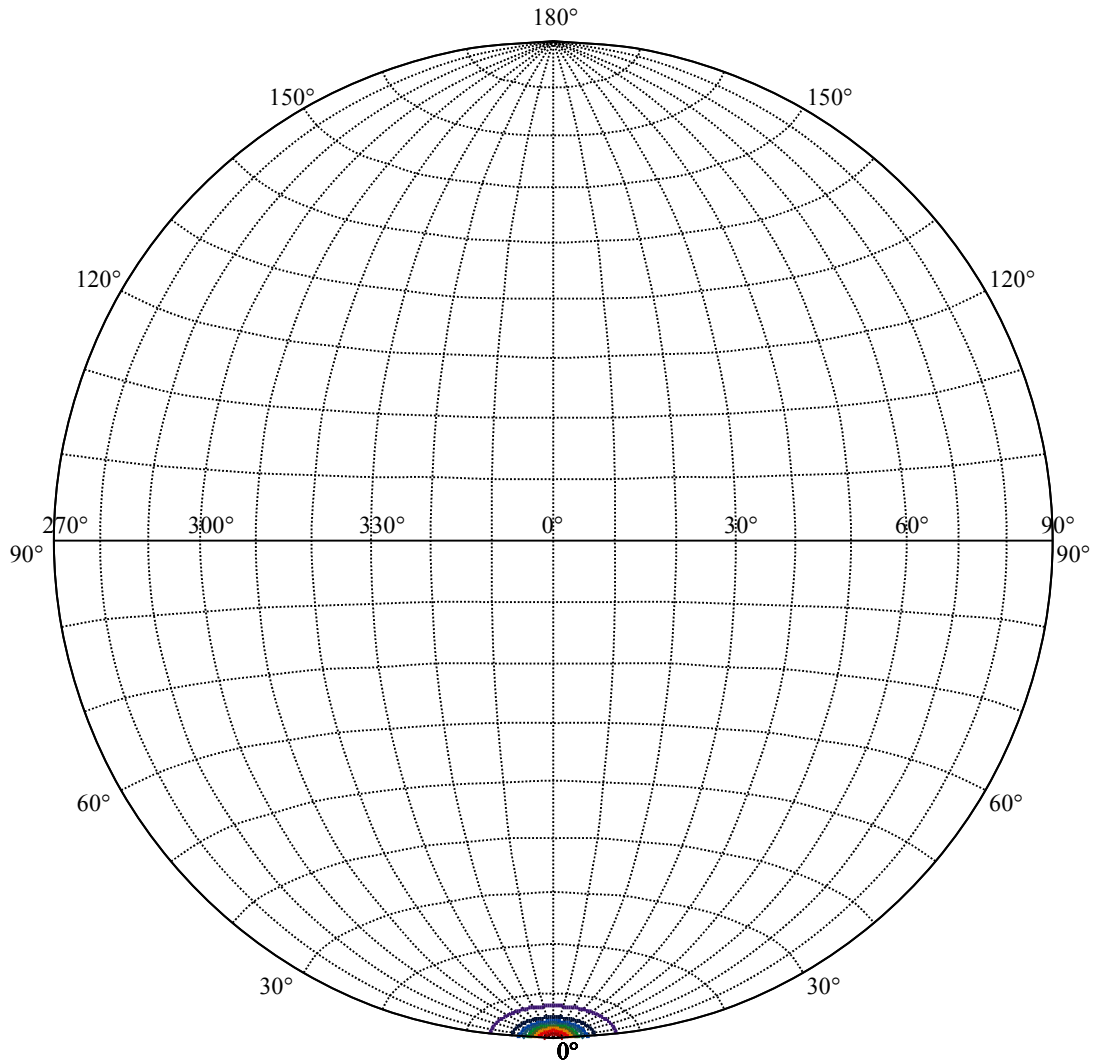
Beam Angle(50%Imax):C0/180Left:2.9 Right:2.9  
:C90/270Left:2.9 Right:2.9







(10%Imax) 203.836	—
(20%Imax) 407.672	—
(30%Imax) 611.508	—
(40%Imax) 815.344	—
(50%Imax) 1019.18	—
(60%Imax) 1223.02	—
(70%Imax) 1426.85	—
(80%Imax) 1630.69	—
(90%Imax) 1834.52	—



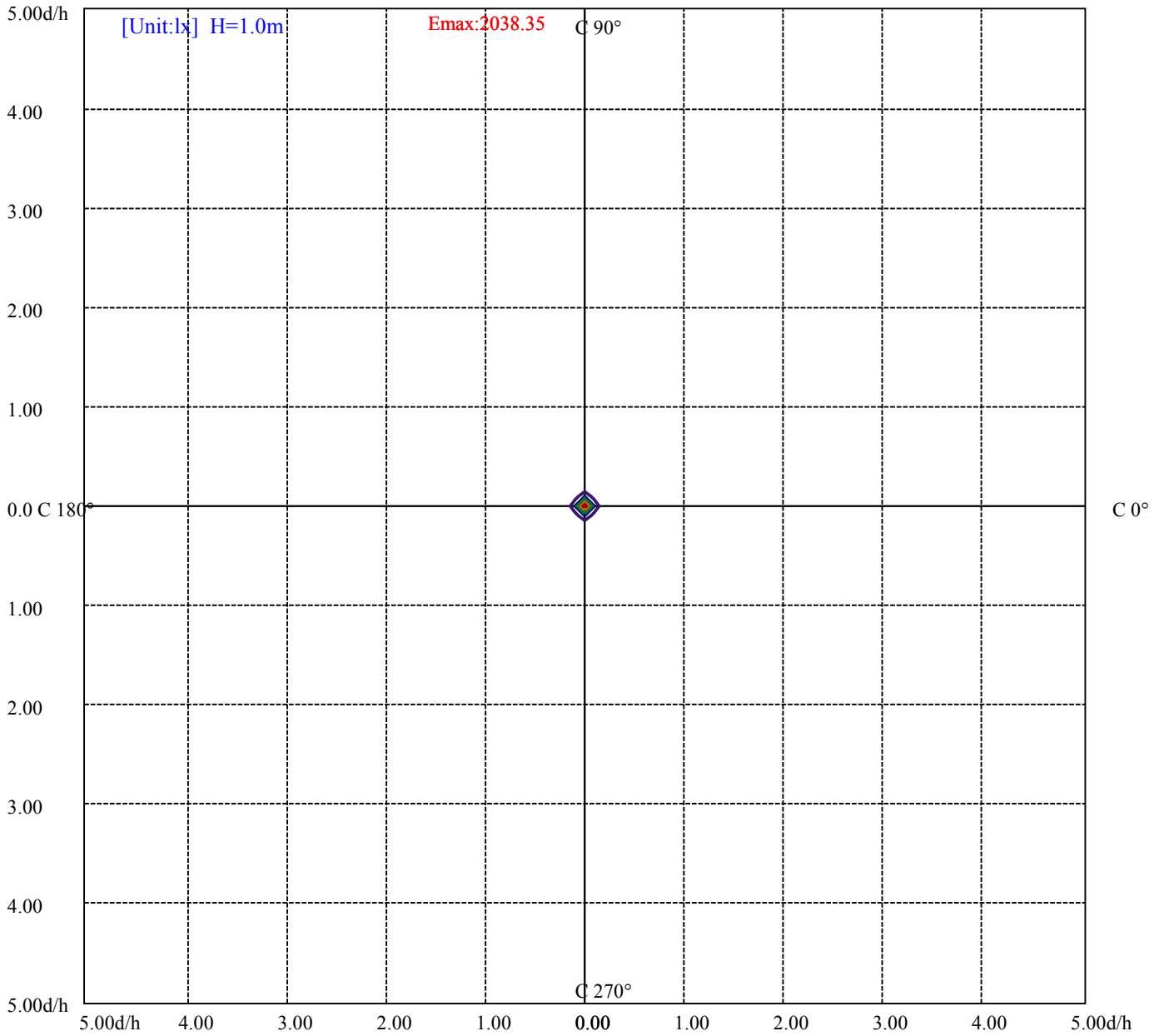
House

[Unit:cd]

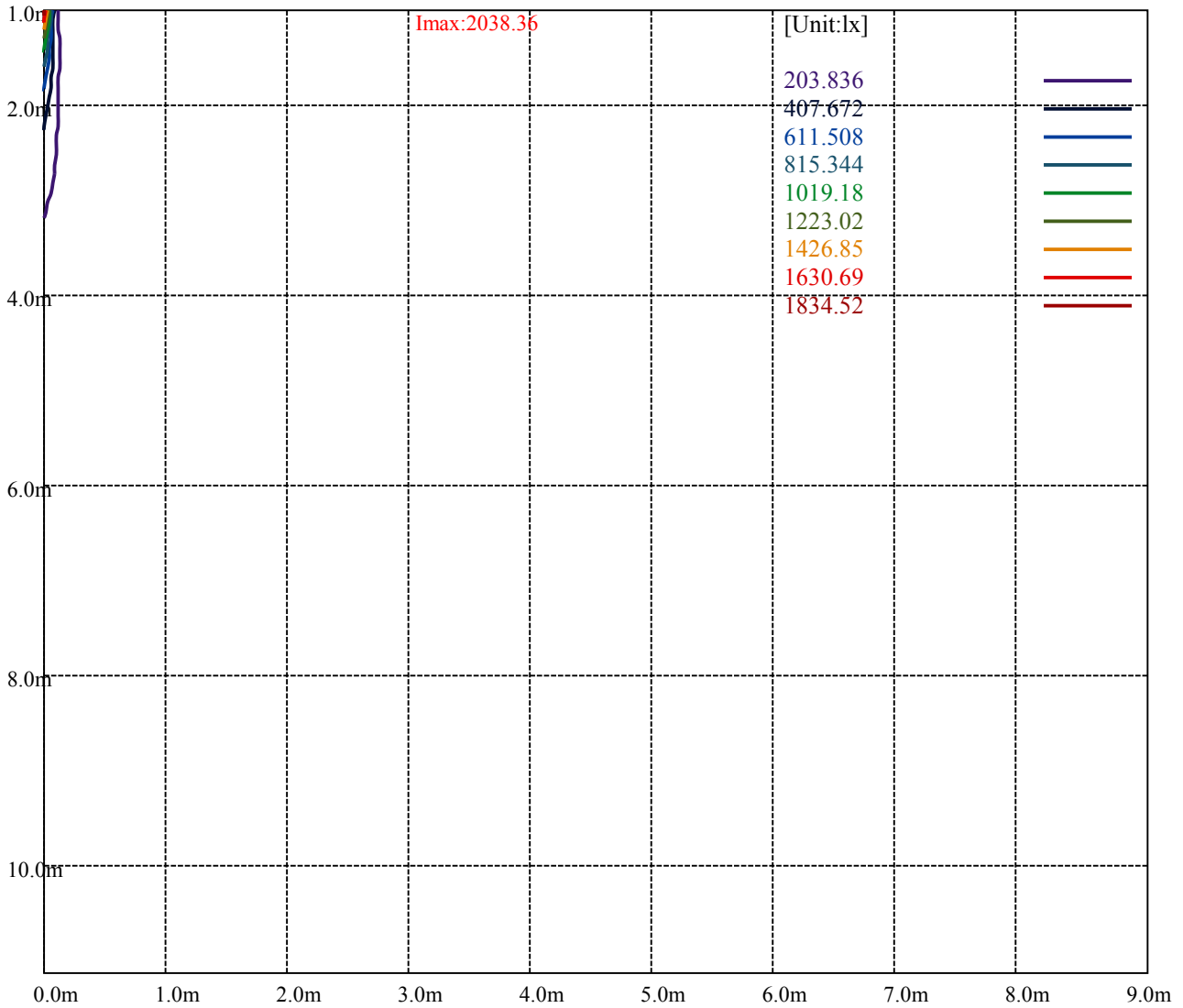
Road

**Imax:2038.36**

(10%Imax) 203.836	—
(20%Imax) 407.672	—
(30%Imax) 611.508	—
(40%Imax) 815.344	—
(50%Imax) 1019.18	—
(60%Imax) 1223.02	—
(70%Imax) 1426.85	—
(80%Imax) 1630.69	—
(90%Imax) 1834.52	—



- (10%Emax) 203.834
- (20%Emax) 407.669
- (30%Emax) 611.503
- (40%Emax) 815.337
- (50%Emax) 1019.17
- (60%Emax) 1223.01
- (70%Emax) 1426.84
- (80%Emax) 1630.67
- (90%Emax) 1834.51



Luminance Table

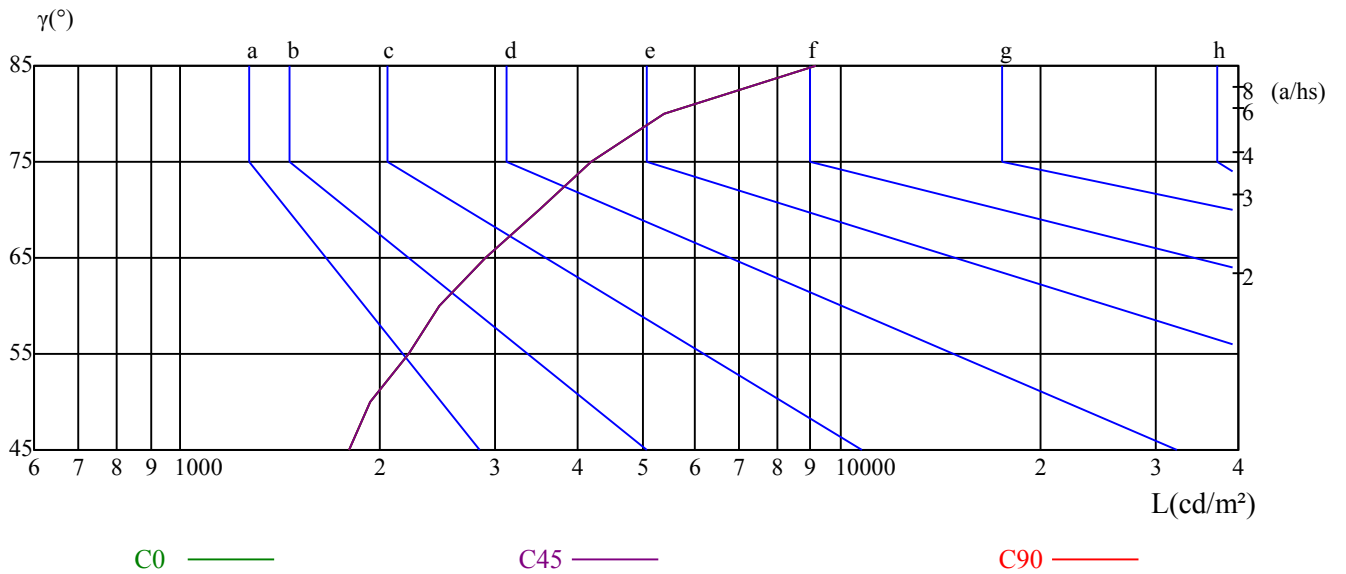
$\gamma$	45	50	55	60	65	70	75	80	85
C0	1805	1941	2208	2472	2893	3485	4184	5410	9154
C45	1805	1941	2208	2472	2893	3485	4184	5410	9154
C90	1805	1941	2208	2472	2893	3485	4184	5410	9154

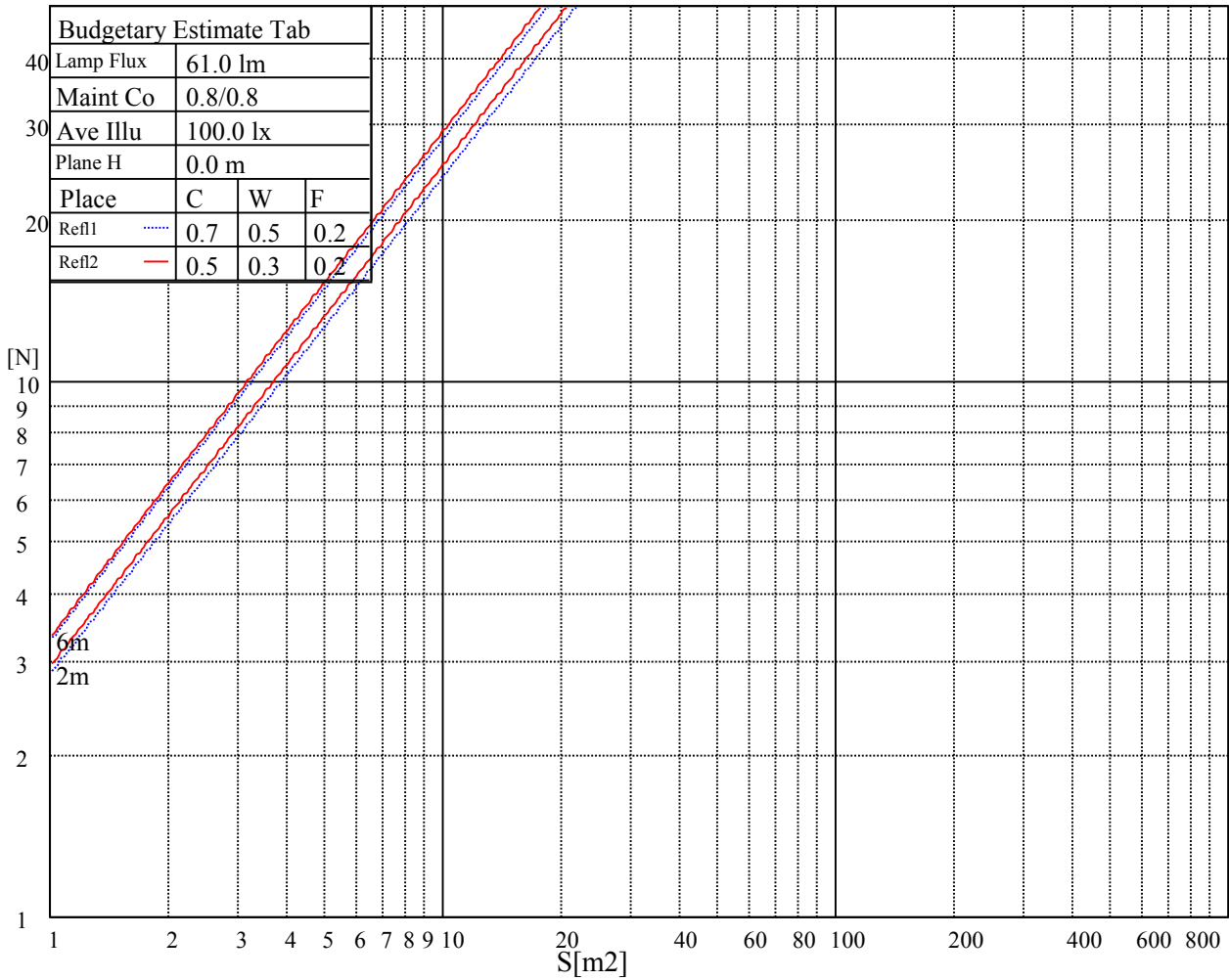
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
2893	2893	2893	4184	4184	4184	9154	9154	9154

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

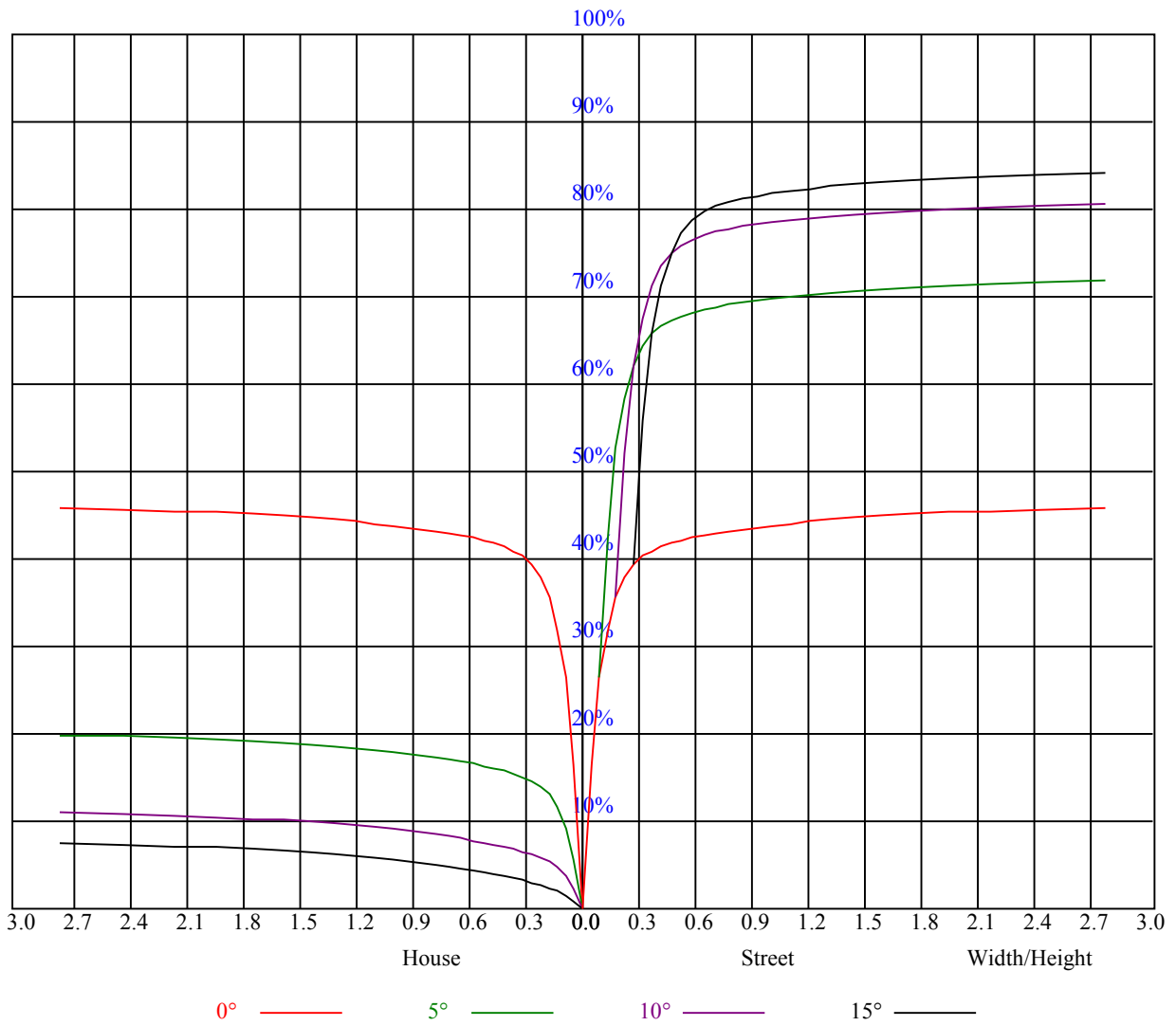
Luminance Limiting Curve





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	1.12	1.12	1.12	1.09	1.09	1.09	1.04	1.04	1.04	1.00	1.00	1.00	0.96	0.96	0.96	0.94
1	1.05	1.03	1.01	1.03	1.01	0.99	0.99	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89
2	1.00	0.96	0.94	0.98	0.95	0.93	0.95	0.93	0.91	0.92	0.90	0.89	0.90	0.88	0.87	0.85
3	0.95	0.92	0.89	0.94	0.91	0.88	0.92	0.89	0.87	0.90	0.87	0.86	0.88	0.86	0.84	0.83
4	0.92	0.88	0.85	0.91	0.88	0.85	0.89	0.86	0.84	0.88	0.85	0.83	0.86	0.84	0.82	0.81
5	0.90	0.86	0.83	0.89	0.85	0.82	0.87	0.84	0.82	0.86	0.83	0.81	0.85	0.82	0.80	0.79
6	0.87	0.83	0.81	0.87	0.83	0.80	0.85	0.82	0.80	0.84	0.82	0.79	0.83	0.81	0.79	0.78
7	0.85	0.82	0.79	0.85	0.81	0.79	0.84	0.81	0.78	0.83	0.80	0.78	0.82	0.80	0.78	0.77
8	0.84	0.80	0.78	0.83	0.80	0.78	0.82	0.79	0.77	0.82	0.79	0.77	0.81	0.78	0.77	0.76
9	0.82	0.79	0.76	0.82	0.79	0.76	0.81	0.78	0.76	0.81	0.78	0.76	0.80	0.77	0.76	0.75
10	0.81	0.78	0.75	0.81	0.77	0.75	0.80	0.77	0.75	0.79	0.77	0.75	0.79	0.77	0.75	0.74





Intensity data(cd)

C/γ(°)	0.0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0
0.0	2129.63	2035.69	1910.81	1650.94	1427.63	1149.19	903.38	582.75	426.94
15.0	2165.63	2096.44	1931.06	1608.75	1275.19	963.56	713.25	533.81	383.06
30.0	2086.31	1905.75	1050.13	1050.13	977.74	720.84	498.83	386.66	335.93
45.0	2169.56	2108.25	1914.19	1636.31	1252.13	941.06	693.00	472.50	375.75
60.0	1857.94	1447.31	1108.35	1108.35	805.16	428.12	236.98	139.05	95.01
75.0	1913.63	1884.38	1704.94	1401.75	1066.50	775.69	545.06	363.94	296.44
90.0	1857.38	1642.50	1108.52	1108.52	952.26	647.89	466.99	316.58	290.98
105.0	1976.63	2004.19	1855.69	1634.63	1448.44	1179.00	880.31	624.38	460.13
120.0	2156.06	1993.50	1815.75	1656.00	1086.53	1086.53	741.54	529.54	410.79
135.0	1987.88	2132.44	2066.06	1937.81	1818.00	1618.88	1424.81	904.50	630.00
150.0	2125.69	2099.81	2061.00	1980.00	1751.63	1063.91	1063.91	783.62	552.38
165.0	2034.00	2117.81	2122.31	2162.81	2131.31	1900.13	1602.56	1248.19	932.63
180.0	2129.63	2146.50	2234.81	2265.75	2136.94	1464.75	1064.64	994.11	758.48
195.0	2165.63	2155.50	2194.88	2230.31	2100.38	1761.75	1057.89	1057.89	852.53
210.0	2086.31	2161.69	2165.06	2181.94	2209.50	2103.75	1824.19	1491.75	1135.13
225.0	2169.56	2166.75	2170.13	2179.13	2072.81	1792.13	1081.58	1081.58	833.57
240.0	1857.94	1903.50	1886.06	1829.81	1861.88	1813.50	1612.13	1381.50	1130.06
255.0	1913.63	1905.19	1870.88	1866.38	1807.88	1653.75	1050.41	1050.41	899.66
270.0	1857.38	1884.38	1874.25	1861.88	1833.19	1722.94	1551.94	1366.31	1047.94
285.0	1976.63	1965.94	1939.50	1863.00	1653.75	1098.84	1098.84	802.58	589.22
300.0	2156.06	2015.44	1996.31	1884.94	1663.88	1416.94	1155.38	793.69	536.06
315.0	1987.88	1913.63	1798.31	1407.94	1110.26	1045.07	756.62	478.91	339.13
330.0	2125.69	2061.56	1963.13	1711.13	1505.25	1267.31	984.94	704.25	529.31
345.0	2034.00	1906.88	1617.19	1064.98	1064.98	915.02	615.26	446.23	358.88
360.0	2129.63	2035.69	1910.81	1650.94	1427.63	1149.19	903.38	582.75	426.94
C/γ(°)	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5
0.0	352.69	309.94	289.13	289.13	233.61	207.73	188.89	172.58	153.56
15.0	333.56	302.63	289.13	289.13	221.57	206.55	180.11	164.36	149.68
30.0	295.93	268.88	244.97	222.81	197.33	179.66	160.14	145.69	132.02
45.0	325.69	291.38	284.63	249.86	206.21	181.41	164.70	149.74	135.96
60.0	77.74	56.93	68.57	43.14	48.94	45.39	39.26	44.61	33.98
75.0	296.44	141.92	104.29	91.74	78.08	76.33	71.94	112.44	127.80
90.0	266.18	248.34	230.51	212.57	187.03	174.99	162.28	150.30	138.71
105.0	364.50	320.06	291.38	285.19	285.19	218.76	199.63	178.09	158.74
120.0	335.93	311.29	284.12	253.41	231.08	209.93	182.76	170.27	154.69
135.0	461.25	369.00	328.50	306.56	286.31	286.31	219.77	200.36	178.82
150.0	418.16	358.20	314.27	287.04	255.49	232.54	211.28	187.43	171.06
165.0	696.38	511.31	364.50	325.13	297.00	284.06	284.06	223.65	194.06
180.0	583.43	430.82	348.36	314.66	275.34	251.16	228.99	207.68	189.11
195.0	661.50	514.69	383.79	328.78	298.86	272.81	249.92	228.66	204.19
210.0	862.88	628.31	459.56	380.81	333.56	302.06	288.56	288.56	219.54
225.0	645.98	485.72	396.90	335.81	296.83	271.18	247.78	226.74	207.45
240.0	852.19	687.38	478.69	394.31	338.06	299.81	286.31	286.31	228.60
255.0	609.75	464.34	380.36	332.49	296.72	272.25	244.58	223.09	203.46
270.0	754.88	563.63	406.69	339.75	309.38	289.69	289.69	236.59	216.11
285.0	425.08	332.10	284.01	268.31	244.13	225.45	207.84	191.59	170.04
300.0	313.88	313.88	116.04	99.28	69.69	59.63	47.70	41.18	35.27
315.0	286.03	255.99	233.55	213.92	190.29	175.33	162.00	149.57	137.53
330.0	348.19	301.50	288.00	288.00	233.27	215.21	198.11	178.31	163.74
345.0	315.28	288.79	264.38	242.04	216.39	192.26	175.56	160.20	145.46
360.0	352.69	309.94	289.13	289.13	233.61	207.73	188.89	172.58	153.56

Intensity data(cd)

C/γ(°)	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0
0.0	139.73	126.39	111.32	100.13	89.66	79.93	71.10	61.26	52.26
15.0	132.53	119.70	110.70	93.94	83.93	75.09	66.88	59.06	52.09
30.0	119.59	107.83	94.22	82.07	73.58	65.81	58.11	51.36	45.17
45.0	120.54	106.43	95.79	86.01	77.51	69.30	61.65	54.62	45.06
60.0	93.04	54.45	77.06	73.01	65.87	58.78	51.47	47.36	39.77
75.0	118.91	109.52	98.89	89.66	83.14	72.23	64.97	56.59	50.34
90.0	126.79	109.29	98.78	89.38	80.38	71.94	64.35	57.43	48.38
105.0	144.11	130.39	117.51	102.88	92.42	82.80	73.46	64.46	59.29
120.0	140.34	123.92	111.88	95.91	89.27	80.55	71.61	63.06	53.94
135.0	163.52	148.56	131.63	118.91	107.33	97.03	87.53	76.50	66.26
150.0	155.93	141.98	126.17	114.53	105.75	92.93	82.46	75.38	69.36
165.0	177.69	162.34	147.66	134.16	121.50	109.58	95.74	83.36	74.08
180.0	172.52	153.56	136.41	123.64	111.60	100.29	89.94	78.13	69.30
195.0	186.98	167.12	152.21	138.38	125.33	110.08	98.66	88.09	76.33
210.0	200.76	183.83	167.96	153.23	139.33	126.45	111.32	97.20	86.79
225.0	189.84	165.99	151.26	137.42	124.03	111.77	100.13	84.32	74.98
240.0	203.68	186.98	170.78	151.93	138.43	125.21	112.89	101.08	87.75
255.0	186.24	170.10	150.98	133.65	120.66	108.28	96.75	86.23	76.44
270.0	197.72	173.19	157.95	143.38	129.77	117.34	105.47	91.97	79.54
285.0	159.53	145.97	130.28	118.58	107.16	93.60	83.59	74.25	65.87
300.0	30.77	27.84	25.20	22.67	20.70	18.96	17.66	17.04	16.20
315.0	125.72	111.94	98.72	88.99	79.59	70.88	63.00	54.34	48.38
330.0	146.42	132.86	120.54	109.01	95.51	85.39	76.05	65.31	57.94
345.0	131.96	119.31	104.46	90.79	80.89	71.78	63.73	56.48	47.93
360.0	139.73	126.39	111.32	100.13	89.66	79.93	71.10	61.26	52.26

C/γ(°)	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5
0.0	45.73	39.94	34.71	30.09	26.21	21.15	18.39	16.26	14.29
15.0	42.81	37.41	32.57	28.46	24.92	21.66	17.61	15.47	13.61
30.0	37.01	32.29	28.18	24.81	21.71	19.01	15.69	14.34	12.32
45.0	39.49	34.71	30.32	26.49	23.06	19.52	16.65	14.63	13.05
60.0	35.72	31.73	28.01	24.53	21.49	19.41	17.21	14.68	13.05
75.0	44.83	41.01	34.26	30.15	26.89	23.12	20.48	18.68	15.41
90.0	43.03	38.03	33.69	29.70	25.54	22.56	20.03	17.27	15.30
105.0	47.93	41.91	39.43	38.14	29.14	28.01	20.53	17.61	16.37
120.0	44.78	40.50	35.66	31.39	27.45	24.30	20.53	17.72	15.69
135.0	58.95	52.43	46.74	41.96	38.08	33.64	29.98	25.71	22.50
150.0	61.99	55.63	46.35	39.38	34.76	30.26	25.76	22.11	18.34
165.0	65.36	57.49	50.51	42.81	37.46	31.56	27.39	23.96	20.81
180.0	59.01	51.75	45.11	39.26	32.79	28.41	24.58	21.26	17.83
195.0	67.33	59.12	50.01	43.43	37.58	32.34	27.96	23.18	19.35
210.0	77.46	68.63	58.28	51.13	44.61	37.24	32.18	27.79	23.91
225.0	66.38	58.44	51.47	45.06	36.68	32.85	28.46	23.74	20.70
240.0	75.54	66.77	58.84	51.64	45.34	40.95	32.34	28.24	24.75
255.0	63.62	56.14	49.39	43.31	37.80	32.96	27.90	24.41	20.76
270.0	70.54	62.49	55.13	48.32	40.84	35.61	29.81	25.76	22.44
285.0	56.64	49.89	41.18	37.29	32.74	28.69	25.09	21.99	17.72
300.0	15.86	14.96	15.13	18.06	18.96	17.10	15.36	13.73	12.71
315.0	41.29	36.56	31.95	28.13	24.13	21.15	18.51	16.37	14.18
330.0	51.08	43.31	37.97	33.08	28.80	24.47	21.38	18.28	16.26
345.0	41.96	35.44	30.77	26.83	23.34	20.53	17.38	15.24	13.16
360.0	45.73	39.94	34.71	30.09	26.21	21.15	18.39	16.26	14.29

Intensity data(cd)

C/γ(°)	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0
0.0	12.49	11.25	10.07	9.17	8.61	8.10	7.59	7.20	6.64
15.0	11.98	10.80	9.90	9.17	8.49	7.93	7.37	6.92	6.41
30.0	10.97	10.01	9.17	8.33	7.88	7.37	6.75	6.30	6.02
45.0	11.48	10.29	9.11	8.21	7.31	6.86	6.47	6.13	5.74
60.0	11.59	10.29	9.51	8.55	8.04	7.14	6.64	6.30	5.91
75.0	13.78	12.26	11.08	9.90	9.39	8.33	7.71	7.26	6.75
90.0	13.61	12.09	11.03	10.13	9.39	8.66	8.16	7.48	7.03
105.0	19.91	14.18	18.45	11.25	9.11	8.61	8.55	8.61	11.81
120.0	13.95	12.60	11.53	10.18	9.51	8.66	8.16	7.48	7.14
135.0	19.97	18.06	15.47	13.73	12.54	11.64	10.69	9.96	9.06
150.0	16.43	14.57	13.11	11.81	10.86	9.45	8.83	8.21	7.71
165.0	17.44	15.41	13.78	12.04	11.03	10.18	9.28	8.61	8.21
180.0	15.53	13.39	11.87	10.80	9.96	9.28	8.61	8.04	7.54
195.0	16.76	14.74	12.83	11.36	10.29	9.17	8.61	8.10	7.59
210.0	19.91	17.38	15.13	12.94	11.53	10.13	9.28	8.55	7.99
225.0	18.06	14.91	13.67	12.15	10.91	9.73	9.00	8.10	7.71
240.0	21.71	19.13	17.38	14.34	12.38	11.08	10.13	9.39	8.83
255.0	18.23	16.09	14.29	12.54	11.42	10.41	9.45	8.78	8.27
270.0	19.63	16.71	14.85	13.33	11.81	10.86	10.01	9.11	8.61
285.0	16.14	14.46	13.11	11.93	10.91	10.07	9.39	8.94	8.44
300.0	11.93	10.80	9.79	9.23	8.61	7.88	7.43	6.92	6.53
315.0	12.66	11.03	9.90	9.00	8.27	7.71	7.03	6.53	6.08
330.0	14.40	12.71	11.42	10.18	9.17	8.38	7.82	7.26	6.75
345.0	11.81	10.69	9.73	8.94	8.27	7.71	7.20	6.64	6.19
360.0	12.49	11.25	10.07	9.17	8.61	8.10	7.59	7.20	6.64
C/γ(°)	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5
0.0	6.30	6.02	5.57	5.34	5.01	4.67	4.33	4.05	3.83
15.0	5.85	5.57	5.23	4.95	4.67	4.39	4.11	3.94	3.77
30.0	5.63	5.40	5.12	4.84	4.44	4.22	3.88	3.71	3.54
45.0	5.51	5.29	5.06	4.73	4.50	4.16	3.94	3.71	3.60
60.0	5.68	5.34	5.12	4.73	4.39	4.11	3.99	3.77	3.60
75.0	6.30	6.02	5.57	5.40	5.12	4.73	4.39	4.16	3.99
90.0	6.64	6.36	6.08	5.63	5.18	4.89	4.61	4.39	4.22
105.0	7.09	6.02	5.63	5.34	5.06	5.85	5.29	4.73	4.05
120.0	6.53	6.24	5.91	5.63	5.23	5.06	4.61	4.44	4.16
135.0	8.49	7.99	7.65	7.20	6.75	6.36	6.13	5.79	5.46
150.0	7.26	6.92	6.30	6.08	5.68	5.46	5.18	4.78	4.33
165.0	7.71	7.14	6.75	6.36	6.02	5.79	5.51	5.29	5.01
180.0	7.03	6.64	6.30	6.08	5.63	5.34	5.06	4.73	4.39
195.0	7.03	6.53	6.13	5.85	5.68	5.34	5.12	4.84	4.50
210.0	7.54	6.98	6.64	6.19	5.85	5.57	5.29	5.01	4.78
225.0	7.20	6.69	6.30	5.79	5.40	5.18	4.95	4.73	4.39
240.0	8.04	7.54	6.98	6.58	6.19	5.91	5.57	5.29	5.06
255.0	7.59	7.03	6.58	6.24	5.85	5.57	5.29	5.01	4.61
270.0	8.21	7.59	7.09	6.58	6.08	5.79	5.51	5.29	4.95
285.0	7.82	7.37	6.98	6.58	6.08	5.79	5.57	5.29	4.89
300.0	6.13	5.79	5.46	5.18	4.84	4.73	4.50	4.33	3.99
315.0	5.74	5.46	5.29	5.01	4.61	4.39	4.11	3.83	3.66
330.0	6.41	6.02	5.68	5.34	5.06	4.78	4.56	4.16	3.88
345.0	5.85	5.57	5.23	5.06	4.78	4.50	4.05	3.88	3.71
360.0	6.30	6.02	5.57	5.34	5.01	4.67	4.33	4.05	3.83

Intensity data(cd)

C/γ(°)	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0
0.0	3.66	3.49	3.38	3.26	3.09	2.93	2.81	2.64	2.59
15.0	3.60	3.38	3.26	3.09	2.93	2.81	2.70	2.64	2.53
30.0	3.38	3.32	3.21	2.93	2.87	2.76	2.64	2.53	2.48
45.0	3.49	3.32	3.21	3.09	2.93	2.81	2.70	2.64	2.48
60.0	3.49	3.43	3.32	3.15	2.93	2.81	2.76	2.64	2.64
75.0	3.77	3.71	3.54	3.49	3.26	3.09	2.93	2.81	2.70
90.0	4.05	3.88	3.71	3.60	3.38	3.21	3.09	3.04	2.93
105.0	3.77	3.60	3.71	3.43	3.71	3.15	3.21	2.81	2.76
120.0	4.05	3.83	3.77	3.49	3.43	3.15	3.09	2.93	2.93
135.0	5.12	4.89	4.61	4.50	4.28	4.16	3.94	3.71	3.54
150.0	4.16	3.99	3.77	3.66	3.54	3.38	3.21	3.04	2.93
165.0	4.33	4.11	3.88	3.71	3.54	3.43	3.26	3.04	2.93
180.0	4.05	3.71	3.54	3.32	3.21	3.15	3.04	2.81	2.76
195.0	4.11	3.83	3.60	3.43	3.26	3.21	3.09	2.93	2.76
210.0	4.22	3.99	3.77	3.60	3.43	3.32	3.21	3.04	2.93
225.0	4.11	3.77	3.54	3.43	3.26	3.15	3.09	2.93	2.87
240.0	4.73	4.33	4.16	3.88	3.71	3.54	3.43	3.43	3.32
255.0	4.39	4.11	3.88	3.66	3.49	3.49	3.32	3.32	3.04
270.0	4.56	4.16	3.94	3.77	3.60	3.43	3.43	3.32	3.15
285.0	4.56	4.33	4.22	4.05	3.94	3.77	3.71	3.49	3.32
300.0	3.71	3.54	3.38	3.26	3.15	3.04	2.98	2.87	2.64
315.0	3.54	3.32	3.21	3.15	3.04	2.93	2.87	2.64	2.59
330.0	3.66	3.49	3.38	3.26	3.09	2.98	2.93	2.81	2.70
345.0	3.54	3.38	3.26	3.15	3.04	2.87	2.76	2.70	2.64
360.0	3.66	3.49	3.38	3.26	3.09	2.93	2.81	2.64	2.59
C/γ(°)	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5
0.0	2.48	2.42	2.36	2.31	2.25	2.14	2.08	1.97	1.97
15.0	2.48	2.36	2.31	2.25	2.19	2.08	2.03	1.97	1.91
30.0	2.36	2.31	2.19	2.14	2.03	2.03	1.97	1.91	1.86
45.0	2.48	2.31	2.25	2.19	2.14	2.03	1.97	1.91	1.91
60.0	2.53	2.42	2.36	2.25	2.19	2.14	2.08	2.08	2.03
75.0	2.64	2.53	2.48	2.42	2.31	2.25	2.19	2.14	2.08
90.0	2.81	2.70	2.64	2.53	2.48	2.36	2.36	2.31	2.25
105.0	2.64	2.64	2.59	2.59	2.31	2.31	2.25	2.19	2.14
120.0	2.70	2.70	2.53	2.53	2.36	2.36	2.25	2.25	2.14
135.0	3.43	3.32	3.21	3.09	3.04	2.87	2.76	2.70	2.59
150.0	2.81	2.70	2.59	2.53	2.42	2.36	2.25	2.19	2.14
165.0	2.76	2.70	2.64	2.53	2.48	2.36	2.31	2.25	2.19
180.0	2.64	2.53	2.48	2.42	2.31	2.25	2.14	2.14	2.08
195.0	2.64	2.59	2.48	2.42	2.36	2.25	2.19	2.14	2.08
210.0	2.76	2.70	2.59	2.48	2.42	2.36	2.31	2.25	2.19
225.0	2.70	2.59	2.53	2.48	2.36	2.31	2.25	2.14	2.14
240.0	3.04	2.93	2.81	2.70	2.59	2.53	2.48	2.42	2.31
255.0	2.93	2.81	2.70	2.64	2.59	2.48	2.42	2.31	2.25
270.0	2.98	2.87	2.76	2.70	2.59	2.53	2.48	2.42	2.31
285.0	3.26	3.21	3.09	2.98	2.93	2.93	2.93	2.76	2.59
300.0	2.53	2.48	2.36	2.31	2.25	2.25	2.19	2.08	2.03
315.0	2.48	2.42	2.42	2.31	2.19	2.19	2.08	1.97	1.97
330.0	2.64	2.53	2.48	2.42	2.36	2.31	2.19	2.08	2.08
345.0	2.53	2.42	2.36	2.31	2.25	2.19	2.08	2.08	1.97
360.0	2.48	2.42	2.36	2.31	2.25	2.14	2.08	1.97	1.97

Intensity data(cd)

C/γ(°)	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0
0.0	1.91	1.91	1.86	1.80	1.74	1.74	1.69	1.69	1.63
15.0	1.86	1.80	1.80	1.80	1.69	1.69	1.69	1.63	1.58
30.0	1.80	1.80	1.74	1.69	1.69	1.63	1.58	1.58	1.58
45.0	1.86	1.86	1.74	1.74	1.69	1.69	1.63	1.63	1.58
60.0	1.97	1.91	1.91	1.86	1.80	1.80	1.74	1.74	1.69
75.0	2.03	1.97	1.97	1.91	1.91	1.86	1.86	1.80	1.80
90.0	2.19	2.14	2.08	2.08	2.03	1.97	1.97	1.91	1.86
105.0	2.25	2.03	2.14	1.86	1.91	1.97	1.97	1.80	1.91
120.0	2.14	2.03	2.08	1.97	2.03	1.91	1.97	1.86	1.86
135.0	2.59	2.53	2.48	2.42	2.31	2.25	2.25	2.25	2.14
150.0	2.08	2.03	2.03	1.97	1.91	1.86	1.80	1.80	1.74
165.0	2.08	2.03	1.97	1.97	1.91	1.91	1.86	1.86	1.80
180.0	2.03	1.91	1.91	1.86	1.80	1.80	1.74	1.74	1.69
195.0	1.97	1.91	1.86	1.86	1.80	1.80	1.74	1.74	1.69
210.0	2.08	2.03	1.97	1.91	1.86	1.86	1.80	1.80	1.80
225.0	2.03	2.03	1.97	1.91	1.86	1.86	1.80	1.74	1.69
240.0	2.19	2.19	2.14	2.08	2.08	1.97	1.97	1.91	1.91
255.0	2.14	2.14	2.08	2.03	2.03	1.97	1.91	1.91	1.86
270.0	2.25	2.19	2.14	2.08	2.08	2.03	1.97	1.91	1.91
285.0	2.48	2.53	2.53	2.53	2.53	2.31	2.19	2.25	2.36
300.0	1.97	1.86	1.86	1.80	1.80	1.74	1.69	1.69	1.63
315.0	1.91	1.86	1.80	1.80	1.74	1.74	1.69	1.63	1.63
330.0	2.03	1.97	1.91	1.91	1.80	1.80	1.80	1.74	1.69
345.0	1.91	1.91	1.91	1.86	1.86	1.80	1.74	1.74	1.69
360.0	1.91	1.91	1.86	1.80	1.74	1.74	1.69	1.69	1.63
C/γ(°)	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5
0.0	1.63	1.58	1.58	1.58	1.52	1.52	1.52	1.52	1.46
15.0	1.58	1.58	1.52	1.52	1.52	1.52	1.52	1.46	1.46
30.0	1.52	1.46	1.46	1.46	1.46	1.41	1.41	1.41	1.46
45.0	1.58	1.52	1.52	1.46	1.46	1.46	1.41	1.41	1.35
60.0	1.69	1.69	1.63	1.63	1.63	1.58	1.58	1.58	1.58
75.0	1.74	1.74	1.69	1.69	1.63	1.63	1.63	1.58	1.63
90.0	1.86	1.86	1.86	1.80	1.74	1.74	1.74	1.69	1.69
105.0	1.69	1.86	1.74	1.80	1.63	1.74	1.58	1.69	1.58
120.0	1.80	1.86	1.74	1.74	1.69	1.74	1.69	1.74	1.63
135.0	2.14	2.03	2.08	2.03	2.03	1.97	1.91	1.91	1.91
150.0	1.74	1.74	1.69	1.69	1.63	1.63	1.63	1.58	1.58
165.0	1.74	1.74	1.74	1.63	1.63	1.63	1.58	1.58	1.58
180.0	1.69	1.63	1.63	1.63	1.58	1.58	1.58	1.58	1.58
195.0	1.69	1.63	1.63	1.58	1.58	1.58	1.52	1.52	1.52
210.0	1.74	1.69	1.63	1.63	1.58	1.58	1.58	1.52	1.58
225.0	1.69	1.63	1.63	1.58	1.58	1.58	1.52	1.52	1.52
240.0	1.86	1.86	1.80	1.74	1.74	1.69	1.69	1.69	1.63
255.0	1.80	1.74	1.74	1.69	1.69	1.69	1.69	1.63	1.63
270.0	1.80	1.80	1.80	1.80	1.74	1.74	1.69	1.69	1.63
285.0	2.36	2.25	2.08	2.03	2.03	2.25	2.25	2.08	1.91
300.0	1.63	1.58	1.52	1.52	1.46	1.46	1.46	1.41	1.41
315.0	1.58	1.58	1.52	1.52	1.52	1.46	1.46	1.41	1.46
330.0	1.63	1.63	1.63	1.63	1.58	1.58	1.58	1.52	1.52
345.0	1.63	1.69	1.63	1.63	1.63	1.58	1.58	1.52	1.52
360.0	1.63	1.58	1.58	1.58	1.52	1.52	1.52	1.52	1.46

Intensity data(cd)

C/γ(°)	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.0
0.0	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46
15.0	1.46	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
30.0	1.46	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
45.0	1.41	1.41	1.41	1.35	1.35	1.35	1.35	1.35	1.35
60.0	1.52	1.58	1.58	1.58	1.58	1.52	1.58	1.52	1.58
75.0	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58
90.0	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63
105.0	1.69	1.58	1.69	1.52	1.58	1.52	1.69	1.46	1.63
120.0	1.69	1.63	1.63	1.63	1.69	1.63	1.63	1.69	1.63
135.0	1.86	1.86	1.80	1.80	1.80	1.80	1.80	1.80	1.74
150.0	1.52	1.58	1.52	1.58	1.52	1.52	1.52	1.52	1.52
165.0	1.58	1.52	1.52	1.52	1.52	1.52	1.46	1.46	1.52
180.0	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.46	1.46
195.0	1.46	1.46	1.46	1.46	1.46	1.46	1.52	1.46	1.46
210.0	1.58	1.52	1.52	1.52	1.46	1.46	1.46	1.46	1.46
225.0	1.46	1.46	1.46	1.41	1.41	1.41	1.41	1.41	1.41
240.0	1.63	1.58	1.63	1.58	1.58	1.58	1.58	1.58	1.58
255.0	1.58	1.63	1.58	1.58	1.58	1.58	1.58	1.58	1.58
270.0	1.63	1.58	1.63	1.58	1.58	1.58	1.58	1.58	1.58
285.0	1.97	2.14	2.14	2.14	1.97	1.80	1.91	2.08	2.14
300.0	1.35	1.35	1.35	1.35	1.35	1.35	1.41	1.35	1.41
315.0	1.46	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
330.0	1.52	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46
345.0	1.52	1.52	1.52	1.52	1.52	1.46	1.46	1.46	1.52
360.0	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46
C/γ(°)	49.5	50.0	50.5	51.0	51.5	52.0	52.5	53.0	53.5
0.0	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46
15.0	1.46	1.41	1.41	1.46	1.46	1.46	1.46	1.41	1.41
30.0	1.41	1.41	1.41	1.46	1.41	1.41	1.41	1.41	1.41
45.0	1.41	1.35	1.41	1.35	1.41	1.41	1.41	1.35	1.35
60.0	1.58	1.58	1.58	1.58	1.63	1.58	1.63	1.58	1.58
75.0	1.63	1.58	1.63	1.58	1.63	1.63	1.58	1.58	1.58
90.0	1.63	1.63	1.63	1.69	1.63	1.69	1.63	1.63	1.63
105.0	1.52	1.58	1.58	1.69	1.52	1.74	1.58	1.58	1.52
120.0	1.63	1.69	1.69	1.69	1.63	1.63	1.69	1.63	1.69
135.0	1.74	1.74	1.74	1.74	1.74	1.80	1.74	1.74	1.74
150.0	1.52	1.52	1.52	1.52	1.58	1.52	1.52	1.58	1.52
165.0	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.52
180.0	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.52
195.0	1.46	1.52	1.46	1.52	1.46	1.52	1.46	1.52	1.52
210.0	1.41	1.46	1.46	1.46	1.52	1.52	1.46	1.52	1.46
225.0	1.41	1.41	1.41	1.41	1.41	1.41	1.46	1.46	1.46
240.0	1.58	1.58	1.58	1.63	1.58	1.58	1.58	1.58	1.58
255.0	1.63	1.58	1.63	1.58	1.63	1.58	1.63	1.63	1.63
270.0	1.58	1.58	1.58	1.58	1.52	1.58	1.58	1.58	1.52
285.0	2.08	1.86	1.80	2.03	2.08	2.08	2.03	1.80	1.80
300.0	1.35	1.41	1.41	1.41	1.35	1.35	1.41	1.35	1.35
315.0	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
330.0	1.41	1.41	1.46	1.46	1.52	1.46	1.46	1.46	1.46
345.0	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.52
360.0	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46

Intensity data(cd)

C/γ(°)	54.0	54.5	55.0	55.5	56.0	56.5	57.0	57.5	58.0
0.0	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.41
15.0	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.35	1.35
30.0	1.41	1.41	1.41	1.41	1.41	1.35	1.35	1.35	1.35
45.0	1.35	1.35	1.35	1.35	1.35	1.41	1.35	1.35	1.35
60.0	1.58	1.58	1.58	1.58	1.52	1.52	1.46	1.58	1.52
75.0	1.58	1.58	1.58	1.58	1.63	1.58	1.58	1.58	1.52
90.0	1.63	1.69	1.69	1.69	1.69	1.69	1.69	1.74	1.74
105.0	1.69	1.52	1.74	1.52	1.58	1.58	1.63	1.52	1.69
120.0	1.69	1.69	1.58	1.69	1.58	1.63	1.63	1.63	1.58
135.0	1.74	1.74	1.74	1.69	1.69	1.69	1.63	1.63	1.69
150.0	1.52	1.52	1.46	1.52	1.46	1.52	1.46	1.46	1.46
165.0	1.52	1.52	1.52	1.52	1.52	1.52	1.46	1.46	1.46
180.0	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.46
195.0	1.52	1.52	1.52	1.52	1.46	1.46	1.46	1.46	1.46
210.0	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.58
225.0	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.52
240.0	1.58	1.58	1.58	1.58	1.52	1.58	1.58	1.58	1.58
255.0	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.58	1.58
270.0	1.58	1.58	1.58	1.58	1.58	1.52	1.52	1.52	1.52
285.0	2.03	2.08	2.08	1.91	1.80	1.86	2.03	1.91	2.03
300.0	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35
315.0	1.46	1.41	1.46	1.41	1.41	1.41	1.41	1.41	1.41
330.0	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.58	1.52
345.0	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.52
360.0	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.41
C/γ(°)	58.5	59.0	59.5	60.0	60.5	61.0	61.5	62.0	62.5
0.0	1.41	1.41	1.41	1.46	1.41	1.41	1.41	1.41	1.41
15.0	1.35	1.35	1.35	1.35	1.35	1.29	1.35	1.29	1.29
30.0	1.35	1.29	1.29	1.29	1.29	1.29	1.29	1.24	1.29
45.0	1.35	1.29	1.29	1.29	1.29	1.24	1.24	1.24	1.24
60.0	1.52	1.46	1.52	1.46	1.46	1.41	1.41	1.41	1.41
75.0	1.58	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.52
90.0	1.69	1.74	1.74	1.80	1.80	1.86	1.86	1.91	1.91
105.0	1.58	1.63	1.58	1.69	1.58	1.74	1.58	1.74	1.69
120.0	1.63	1.58	1.63	1.58	1.63	1.58	1.63	1.58	1.58
135.0	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.58	1.58
150.0	1.46	1.46	1.46	1.46	1.41	1.41	1.41	1.41	1.41
165.0	1.41	1.46	1.46	1.41	1.41	1.41	1.41	1.41	1.41
180.0	1.52	1.46	1.46	1.46	1.46	1.41	1.41	1.41	1.41
195.0	1.46	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
210.0	1.58	1.58	1.58	1.63	1.63	1.63	1.63	1.63	1.69
225.0	1.52	1.52	1.52	1.58	1.58	1.63	1.63	1.63	1.63
240.0	1.52	1.58	1.52	1.52	1.52	1.52	1.52	1.52	1.46
255.0	1.58	1.58	1.58	1.52	1.58	1.52	1.52	1.46	1.46
270.0	1.52	1.46	1.52	1.46	1.46	1.46	1.46	1.46	1.46
285.0	1.86	1.74	1.86	1.91	1.86	1.86	1.74	1.74	1.80
300.0	1.35	1.35	1.35	1.29	1.29	1.29	1.29	1.29	1.24
315.0	1.41	1.41	1.41	1.41	1.41	1.35	1.35	1.35	1.35
330.0	1.58	1.58	1.63	1.63	1.63	1.63	1.69	1.69	1.69
345.0	1.58	1.58	1.58	1.58	1.58	1.63	1.63	1.69	1.69
360.0	1.41	1.41	1.41	1.46	1.41	1.41	1.41	1.41	1.41



Intensity data(cd)

C/γ(°)	63.0	63.5	64.0	64.5	65.0	65.5	66.0	66.5	67.0
0.0	1.41	1.41	1.41	1.41	1.41	1.41	1.35	1.41	1.35
15.0	1.29	1.29	1.24	1.24	1.24	1.24	1.24	1.24	1.18
30.0	1.24	1.24	1.18	1.18	1.18	1.18	1.18	1.18	1.13
45.0	1.24	1.24	1.18	1.18	1.18	1.18	1.18	1.18	1.13
60.0	1.41	1.41	1.35	1.41	1.35	1.41	1.29	1.29	1.29
75.0	1.52	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46
90.0	1.97	1.97	2.03	2.03	2.08	2.08	2.08	2.08	2.14
105.0	1.86	1.69	1.80	1.74	1.86	1.80	1.91	1.80	1.97
120.0	1.58	1.63	1.52	1.63	1.52	1.58	1.52	1.63	1.46
135.0	1.58	1.58	1.58	1.52	1.52	1.52	1.52	1.46	1.46
150.0	1.35	1.35	1.35	1.35	1.29	1.29	1.29	1.24	1.24
165.0	1.41	1.41	1.41	1.35	1.29	1.35	1.29	1.29	1.29
180.0	1.41	1.41	1.41	1.35	1.35	1.35	1.29	1.29	1.29
195.0	1.41	1.41	1.41	1.35	1.35	1.35	1.35	1.35	1.35
210.0	1.69	1.74	1.74	1.74	1.80	1.86	1.86	1.86	1.91
225.0	1.63	1.69	1.80	1.80	1.86	1.86	1.91	1.91	1.97
240.0	1.46	1.46	1.46	1.52	1.52	1.52	1.46	1.46	1.52
255.0	1.46	1.46	1.46	1.41	1.41	1.41	1.41	1.41	1.41
270.0	1.41	1.41	1.41	1.41	1.35	1.35	1.35	1.41	1.35
285.0	1.80	1.80	1.80	1.69	1.74	1.86	1.69	1.74	1.74
300.0	1.29	1.24	1.24	1.24	1.24	1.24	1.18	1.18	1.18
315.0	1.35	1.29	1.35	1.35	1.35	1.35	1.35	1.29	1.29
330.0	1.74	1.74	1.74	1.80	1.80	1.86	1.91	1.91	1.91
345.0	1.74	1.69	1.80	1.80	1.80	1.86	1.91	1.91	1.91
360.0	1.41	1.41	1.41	1.41	1.41	1.41	1.35	1.41	1.35
C/γ(°)	67.5	68.0	68.5	69.0	69.5	70.0	70.5	71.0	71.5
0.0	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.29	1.29
15.0	1.18	1.18	1.13	1.13	1.13	1.13	1.13	1.13	1.07
30.0	1.13	1.13	1.13	1.13	1.07	1.07	1.07	1.07	1.01
45.0	1.13	1.07	1.13	1.07	1.07	1.07	1.07	1.07	1.01
60.0	1.29	1.29	1.24	1.29	1.24	1.24	1.18	1.24	1.24
75.0	1.46	1.41	1.46	1.46	1.41	1.41	1.41	1.35	1.41
90.0	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.08	2.14
105.0	1.86	1.91	1.86	1.97	1.91	2.08	1.86	1.91	1.86
120.0	1.52	1.41	1.52	1.46	1.52	1.41	1.46	1.35	1.41
135.0	1.46	1.46	1.41	1.41	1.41	1.41	1.35	1.35	1.35
150.0	1.24	1.24	1.18	1.24	1.18	1.18	1.18	1.13	1.13
165.0	1.24	1.24	1.24	1.24	1.18	1.18	1.18	1.18	1.13
180.0	1.29	1.29	1.29	1.29	1.24	1.24	1.18	1.18	1.18
195.0	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.29	1.29
210.0	1.91	1.91	1.97	1.91	1.91	1.91	1.91	1.97	1.97
225.0	1.97	1.97	1.97	1.97	1.97	1.97	1.97	2.03	2.03
240.0	1.46	1.46	1.46	1.46	1.46	1.41	1.41	1.41	1.41
255.0	1.41	1.35	1.35	1.35	1.35	1.29	1.29	1.29	1.29
270.0	1.41	1.35	1.35	1.35	1.29	1.29	1.29	1.24	1.24
285.0	1.52	1.69	1.69	1.58	1.74	1.58	1.46	1.80	1.52
300.0	1.13	1.13	1.13	1.13	1.13	1.13	1.07	1.07	1.07
315.0	1.35	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
330.0	1.91	1.97	1.97	1.97	1.97	1.97	1.97	2.03	1.97
345.0	1.91	1.91	1.97	1.91	1.97	1.97	2.03	1.97	1.97
360.0	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.29	1.29

Intensity data(cd)

C/γ(°)	72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0
0.0	1.29	1.29	1.24	1.24	1.24	1.18	1.24	1.18	1.18
15.0	1.07	1.07	1.01	1.07	1.01	1.01	1.01	0.96	0.96
30.0	1.01	1.01	1.01	1.01	0.96	0.96	0.96	0.96	0.96
45.0	1.01	1.01	1.01	1.01	1.01	0.96	0.96	0.96	0.96
60.0	1.13	1.18	1.13	1.13	1.13	1.07	1.13	1.07	1.07
75.0	1.35	1.35	1.35	1.35	1.29	1.29	1.24	1.29	1.24
90.0	2.08	2.08	2.03	2.03	1.97	1.97	1.91	1.86	1.80
105.0	1.91	1.80	1.97	1.74	1.86	1.69	1.80	1.63	1.74
120.0	1.29	1.46	1.29	1.41	1.29	1.35	1.24	1.35	1.24
135.0	1.29	1.29	1.24	1.24	1.24	1.24	1.24	1.18	1.18
150.0	1.13	1.13	1.13	1.07	1.07	1.07	1.07	1.01	1.01
165.0	1.13	1.13	1.13	1.13	1.07	1.07	1.07	1.01	1.01
180.0	1.18	1.18	1.13	1.13	1.13	1.07	1.13	1.07	1.07
195.0	1.29	1.29	1.24	1.24	1.24	1.24	1.18	1.18	1.18
210.0	1.91	1.91	1.91	1.86	1.86	1.80	1.80	1.74	1.74
225.0	2.03	1.97	1.97	1.91	1.86	1.86	1.86	1.80	1.74
240.0	1.41	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35
255.0	1.29	1.29	1.29	1.29	1.24	1.24	1.24	1.24	1.24
270.0	1.24	1.24	1.24	1.18	1.18	1.18	1.18	1.18	1.18
285.0	1.46	1.69	1.35	1.52	1.52	1.35	1.46	1.63	1.35
300.0	1.07	1.07	1.01	0.96	1.01	0.96	1.01	0.96	1.01
315.0	1.24	1.24	1.24	1.24	1.18	1.18	1.18	1.18	1.13
330.0	1.97	1.97	1.97	1.97	1.91	1.86	1.80	1.80	1.74
345.0	1.97	1.91	1.91	1.86	1.86	1.80	1.80	1.80	1.69
360.0	1.29	1.29	1.24	1.24	1.24	1.18	1.24	1.18	1.18
C/γ(°)	76.5	77.0	77.5	78.0	78.5	79.0	79.5	80.0	80.5
0.0	1.18	1.13	1.13	1.13	1.07	1.13	1.13	1.13	1.13
15.0	0.96	0.96	0.96	0.90	0.90	0.90	0.90	0.90	0.84
30.0	0.96	0.96	0.90	0.96	0.96	0.90	0.90	0.90	0.90
45.0	0.90	0.90	0.90	0.90	0.90	0.84	0.84	0.84	0.84
60.0	1.07	1.07	1.01	0.96	1.01	0.96	0.96	0.90	0.90
75.0	1.24	1.24	1.24	1.24	1.18	1.18	1.18	1.13	1.13
90.0	1.80	1.80	1.74	1.69	1.69	1.63	1.63	1.58	1.58
105.0	1.63	1.74	1.52	1.63	1.46	1.58	1.41	1.46	1.35
120.0	1.29	1.18	1.29	1.18	1.24	1.18	1.18	1.13	1.13
135.0	1.18	1.18	1.18	1.13	1.13	1.13	1.13	1.07	1.07
150.0	1.01	1.01	1.01	0.96	0.96	0.96	0.96	0.96	0.96
165.0	1.01	1.01	1.01	0.96	0.96	0.96	0.96	0.90	0.90
180.0	1.07	1.01	1.01	1.01	1.01	1.01	1.01	0.96	0.96
195.0	1.18	1.18	1.13	1.13	1.07	1.07	1.07	1.07	1.07
210.0	1.69	1.69	1.63	1.58	1.58	1.58	1.52	1.52	1.52
225.0	1.74	1.69	1.69	1.63	1.63	1.58	1.58	1.52	1.46
240.0	1.29	1.29	1.29	1.29	1.24	1.29	1.24	1.24	1.24
255.0	1.24	1.24	1.24	1.24	1.18	1.18	1.18	1.13	1.13
270.0	1.13	1.18	1.13	1.13	1.13	1.13	1.18	1.13	1.13
285.0	1.63	1.41	1.29	1.41	1.58	1.41	1.41	1.24	1.18
300.0	1.01	0.96	0.96	0.96	0.90	0.90	0.90	0.90	0.84
315.0	1.13	1.13	1.13	1.07	1.07	1.07	1.07	1.07	1.07
330.0	1.74	1.74	1.69	1.63	1.63	1.58	1.52	1.52	1.46
345.0	1.69	1.63	1.63	1.58	1.58	1.52	1.52	1.46	1.46
360.0	1.18	1.13	1.13	1.13	1.07	1.13	1.13	1.13	1.13

Intensity data(cd)

C/γ(°)	81.0	81.5	82.0	82.5	83.0	83.5	84.0	84.5	85.0
0.0	1.13	1.13	1.13	1.01	1.01	1.01	0.96	0.96	0.96
15.0	0.96	0.96	0.96	0.90	0.90	0.84	0.84	0.84	0.84
30.0	0.90	0.96	0.90	0.79	0.79	0.79	0.79	0.73	0.84
45.0	0.79	0.79	0.84	0.79	0.73	0.73	0.68	0.68	0.68
60.0	1.01	0.84	0.90	0.90	0.84	0.79	0.84	0.79	0.84
75.0	1.07	1.07	1.07	1.07	1.07	1.01	1.01	1.01	1.01
90.0	1.52	1.52	1.52	1.46	1.46	1.41	1.41	1.35	1.35
105.0	1.41	1.35	1.41	1.24	1.24	1.35	1.18	1.18	1.24
120.0	1.07	1.13	1.01	1.13	1.01	1.01	0.96	0.96	1.07
135.0	1.01	1.01	1.01	1.01	0.96	0.96	0.96	0.90	0.90
150.0	0.90	0.90	0.90	0.90	0.84	0.84	0.84	0.84	0.79
165.0	0.90	0.90	0.84	0.90	0.84	0.84	0.84	0.84	0.79
180.0	0.96	0.96	0.96	0.96	0.90	0.90	0.84	0.84	0.79
195.0	1.01	1.01	1.01	1.01	1.01	1.01	0.96	0.96	0.90
210.0	1.46	1.46	1.46	1.41	1.35	1.35	1.29	1.29	1.29
225.0	1.46	1.46	1.41	1.41	1.35	1.35	1.29	1.29	1.29
240.0	1.24	1.18	1.18	1.18	1.18	1.13	1.13	1.13	1.07
255.0	1.13	1.13	1.13	1.07	1.07	1.01	1.01	0.96	0.96
270.0	1.13	1.07	1.07	1.07	1.07	1.01	1.01	0.96	0.96
285.0	1.41	1.41	1.41	1.18	1.07	1.24	1.29	1.24	1.01
300.0	0.90	0.84	0.84	0.84	0.79	0.79	0.79	0.73	0.68
315.0	1.07	1.07	1.07	1.07	1.01	1.01	0.96	0.90	0.90
330.0	1.41	1.41	1.41	1.35	1.35	1.29	1.29	1.24	1.18
345.0	1.41	1.41	1.41	1.35	1.35	1.29	1.24	1.18	1.13
360.0	1.13	1.13	1.13	1.01	1.01	1.01	0.96	0.96	0.96
C/γ(°)	85.5	86.0	86.5	87.0	87.5	88.0	88.5	89.0	89.5
0.0	0.96	0.79	0.68	0.51	0.34	0.34	0.28	0.28	0.28
15.0	0.68	0.56	0.45	0.39	0.28	0.28	0.23	0.28	0.28
30.0	0.56	0.51	0.39	0.28	0.28	0.28	0.28	0.23	0.23
45.0	0.62	0.56	0.45	0.39	0.34	0.28	0.28	0.28	0.34
60.0	0.90	0.73	0.56	0.39	0.39	0.45	0.39	0.39	0.39
75.0	0.96	0.90	0.68	0.56	0.45	0.45	0.39	0.39	0.39
90.0	1.24	1.13	0.73	0.56	0.51	0.51	0.51	0.45	0.45
105.0	1.13	1.07	1.07	0.73	0.51	0.39	0.45	0.51	0.45
120.0	1.01	0.84	0.79	0.68	0.51	0.51	0.51	0.51	0.45
135.0	0.90	0.90	0.90	0.73	0.68	0.51	0.51	0.51	0.51
150.0	0.84	0.79	0.68	0.51	0.51	0.39	0.39	0.39	0.39
165.0	0.79	0.79	0.73	0.68	0.56	0.45	0.34	0.39	0.34
180.0	0.79	0.73	0.62	0.51	0.45	0.34	0.34	0.34	0.28
195.0	0.84	0.84	0.79	0.62	0.45	0.34	0.28	0.28	0.28
210.0	1.29	1.18	1.13	1.01	0.79	0.45	0.34	0.34	0.34
225.0	1.24	1.24	1.07	0.84	0.51	0.45	0.34	0.34	0.34
240.0	1.07	1.01	1.01	0.84	0.68	0.56	0.45	0.45	0.45
255.0	0.96	0.96	0.79	0.68	0.56	0.51	0.45	0.45	0.45
270.0	0.90	0.90	0.84	0.68	0.62	0.51	0.45	0.39	0.39
285.0	1.01	1.29	1.18	0.73	0.62	0.90	0.84	0.51	0.56
300.0	0.68	0.73	0.62	0.51	0.45	0.28	0.28	0.28	0.28
315.0	0.84	0.79	0.62	0.39	0.39	0.28	0.28	0.23	0.28
330.0	1.18	1.07	0.96	0.62	0.45	0.34	0.34	0.34	0.28
345.0	1.07	0.96	0.62	0.45	0.34	0.28	0.34	0.28	0.23
360.0	0.96	0.79	0.68	0.51	0.34	0.34	0.28	0.28	0.28

## Intensity data(cd)

C/γ(°)	90.0
0.0	0.28
15.0	0.23
30.0	0.28
45.0	0.28
60.0	0.34
75.0	0.45
90.0	0.45
105.0	0.39
120.0	0.51
135.0	0.45
150.0	0.39
165.0	0.34
180.0	0.34
195.0	0.23
210.0	0.28
225.0	0.34
240.0	0.45
255.0	0.45
270.0	0.39
285.0	0.39
300.0	0.28
315.0	0.28
330.0	0.28
345.0	0.28
360.0	0.28