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## NATA

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LumCAT: CR01D020015BW

Luminaire:

Report No: NATA0100

Voltage(V): 3.2000

Test No: GC2018112205

Current(A): 0.2300

LampCAT: CREE XPE2

Power (W): 0.7360

Lamp flux(lm): 61.0

PF: 0.0000

Number of Lamps: 1

Ballast type: DC

Length(mm): 18

Width(mm): 18

Phm Type: C

Height(mm): 0

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## Photometric Results

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Lumens(lm): 59.84

Efficiency(%): 98.10%

Lumens(lm)/Power(W): 81.31

Central intensity(cd): 447.239

Maximum intensity(cd): 447.239

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

Beam Angle(50%Imax): [C0/180]Total=15.7

[C90/270]Total=15.7

Field angle(10%Imax): [C0/180]Total=34.3

[C90/270]Total=34.3

Maximum s/h(1/2): C0\_180=0.27 C90\_270=0.27

Maximum s/h(1/4): C0\_180=0.29 C90\_270=0.29

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 98.15%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 95.850%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	447.239	0.027	0.027	.044%	.045%
0.5	446.180	0.213	0.24	.350%	.401%
1.0	441.900	0.423	0.663	.693%	1.108%
1.5	435.157	0.625	1.288	1.024%	2.152%
2.0	426.138	0.815	2.103	1.337%	3.514%
2.5	413.918	0.990	3.093	1.623%	5.169%
3.0	400.446	1.149	4.242	1.884%	7.089%
3.5	385.870	1.292	5.534	2.117%	9.247%
4.0	369.305	1.413	6.946	2.316%	11.608%
4.5	352.580	1.517	8.463	2.487%	14.142%
5.0	333.030	1.591	10.055	2.609%	16.802%
5.5	314.091	1.651	11.705	2.706%	19.560%
6.0	294.691	1.689	13.394	2.769%	22.382%
6.5	274.134	1.702	15.096	2.789%	25.225%
7.0	254.620	1.701	16.797	2.789%	28.069%
7.5	236.252	1.691	18.488	2.772%	30.894%
8.0	219.021	1.671	20.159	2.740%	33.687%
8.5	200.625	1.626	21.785	2.666%	36.404%
9.0	184.317	1.581	23.366	2.592%	39.046%
9.5	169.212	1.531	24.898	2.510%	41.604%
10.0	154.228	1.468	26.366	2.407%	44.058%
10.5	141.820	1.417	27.783	2.323%	46.426%
11.0	130.777	1.368	29.152	2.243%	48.713%
11.5	120.532	1.318	30.469	2.160%	50.914%
12.0	110.569	1.260	31.73	2.066%	53.021%
12.5	101.130	1.200	32.93	1.968%	55.026%
13.0	92.585	1.142	34.072	1.872%	56.934%
13.5	84.459	1.081	35.153	1.772%	58.741%
14.0	77.653	1.030	36.183	1.689%	60.462%
14.5	71.245	0.978	37.161	1.603%	62.096%
15.0	65.477	0.929	38.09	1.523%	63.649%
15.5	60.047	0.880	38.97	1.442%	65.119%
16.0	54.724	0.827	39.797	1.356%	66.501%
16.5	50.044	0.779	40.576	1.278%	67.804%
17.0	45.844	0.735	41.311	1.205%	69.032%
17.5	41.941	0.692	42.003	1.134%	70.187%
18.0	38.520	0.653	42.656	1.070%	71.278%
18.5	35.456	0.617	43.272	1.011%	72.309%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
19.0	32.733	0.584	43.857	.958%	73.285%
19.5	29.972	0.549	44.405	.899%	74.202%
20.0	27.684	0.519	44.925	.851%	75.069%
20.5	25.641	0.492	45.417	.807%	75.892%
21.0	23.604	0.464	45.881	.760%	76.667%
21.5	21.926	0.441	46.321	.722%	77.403%
22.0	20.440	0.420	46.741	.688%	78.105%
22.5	19.099	0.401	47.142	.657%	78.775%
23.0	17.836	0.382	47.524	.626%	79.413%
23.5	16.615	0.363	47.887	.596%	80.020%
24.0	15.471	0.345	48.232	.566%	80.597%
24.5	14.416	0.328	48.56	.537%	81.144%
25.0	13.495	0.313	48.873	.513%	81.667%
25.5	12.591	0.297	49.17	.487%	82.164%
26.0	11.770	0.283	49.453	.464%	82.636%
26.5	11.009	0.269	49.722	.442%	83.086%
27.0	10.247	0.255	49.977	.418%	83.513%
27.5	9.619	0.244	50.221	.399%	83.920%
28.0	9.033	0.233	50.453	.381%	84.308%
28.5	8.517	0.223	50.676	.365%	84.681%
29.0	8.084	0.215	50.891	.352%	85.040%
29.5	7.690	0.208	51.099	.340%	85.387%
30.0	7.345	0.201	51.3	.330%	85.723%
30.5	6.998	0.195	51.495	.319%	86.049%
31.0	6.720	0.190	51.685	.311%	86.366%
31.5	6.436	0.184	51.869	.302%	86.674%
32.0	6.143	0.178	52.047	.293%	86.972%
32.5	5.899	0.174	52.221	.285%	87.262%
33.0	5.670	0.169	52.391	.278%	87.545%
33.5	5.445	0.165	52.555	.270%	87.821%
34.0	5.220	0.160	52.715	.262%	88.088%
34.5	5.009	0.156	52.871	.255%	88.348%
35.0	4.809	0.151	53.022	.248%	88.601%
35.5	4.622	0.147	53.169	.241%	88.847%
36.0	4.460	0.144	53.313	.236%	89.087%
36.5	4.308	0.140	53.454	.230%	89.322%
37.0	4.160	0.137	53.591	.225%	89.551%
37.5	4.008	0.134	53.725	.219%	89.775%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	3.846	0.130	53.855	.213%	89.991%
38.5	3.698	0.126	53.981	.207%	90.202%
39.0	3.551	0.123	54.103	.201%	90.407%
39.5	3.429	0.120	54.223	.196%	90.607%
40.0	3.302	0.116	54.339	.191%	90.802%
40.5	3.180	0.113	54.452	.186%	90.991%
41.0	3.061	0.110	54.563	.181%	91.175%
41.5	2.946	0.107	54.67	.175%	91.354%
42.0	2.836	0.104	54.774	.171%	91.527%
42.5	2.733	0.101	54.875	.166%	91.697%
43.0	2.634	0.099	54.973	.161%	91.861%
43.5	2.545	0.096	55.07	.157%	92.022%
44.0	2.466	0.094	55.163	.154%	92.179%
44.5	2.388	0.092	55.255	.150%	92.332%
45.0	2.306	0.089	55.345	.147%	92.482%
45.5	2.222	0.087	55.432	.142%	92.627%
46.0	2.156	0.085	55.517	.139%	92.769%
46.5	2.093	0.083	55.6	.136%	92.908%
47.0	2.032	0.081	55.681	.134%	93.044%
47.5	1.988	0.080	55.762	.132%	93.178%
48.0	1.924	0.078	55.84	.129%	93.309%
48.5	1.863	0.077	55.917	.125%	93.437%
49.0	1.830	0.076	55.992	.124%	93.564%
49.5	1.774	0.074	56.066	.121%	93.687%
50.0	1.730	0.073	56.139	.119%	93.809%
50.5	1.692	0.072	56.211	.117%	93.928%
51.0	1.638	0.070	56.28	.114%	94.045%
51.5	1.620	0.069	56.35	.114%	94.161%
52.0	1.577	0.068	56.418	.112%	94.275%
52.5	1.547	0.067	56.485	.110%	94.388%
53.0	1.509	0.066	56.551	.108%	94.498%
53.5	1.484	0.065	56.617	.107%	94.607%
54.0	1.434	0.064	56.68	.104%	94.714%
54.5	1.418	0.063	56.744	.104%	94.819%
55.0	1.380	0.062	56.806	.102%	94.923%
55.5	1.359	0.061	56.867	.101%	95.026%
56.0	1.331	0.061	56.928	.099%	95.127%
56.5	1.313	0.060	56.988	.098%	95.227%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
57.0	1.287	0.059	57.047	.097%	95.326%
57.5	1.256	0.058	57.105	.095%	95.423%
58.0	1.238	0.058	57.162	.094%	95.519%
58.5	1.216	0.057	57.219	.093%	95.614%
59.0	1.191	0.056	57.275	.092%	95.708%
59.5	1.172	0.055	57.331	.091%	95.800%
60.0	1.160	0.055	57.386	.090%	95.892%
60.5	1.127	0.054	57.44	.088%	95.982%
61.0	1.118	0.054	57.493	.088%	96.072%
61.5	1.102	0.053	57.546	.087%	96.160%
62.0	1.080	0.052	57.599	.086%	96.248%
62.5	1.066	0.052	57.65	.085%	96.334%
63.0	1.059	0.052	57.702	.085%	96.421%
63.5	1.041	0.051	57.753	.084%	96.506%
64.0	1.027	0.051	57.804	.083%	96.591%
64.5	1.015	0.050	57.854	.082%	96.675%
65.0	0.998	0.050	57.904	.081%	96.758%
65.5	0.975	0.049	57.952	.080%	96.839%
66.0	0.975	0.049	58.001	.080%	96.921%
66.5	0.959	0.048	58.049	.079%	97.001%
67.0	0.945	0.048	58.097	.078%	97.081%
67.5	0.947	0.048	58.145	.079%	97.161%
68.0	0.933	0.047	58.192	.078%	97.240%
68.5	0.928	0.047	58.24	.078%	97.319%
69.0	0.898	0.046	58.286	.075%	97.396%
69.5	0.898	0.046	58.332	.076%	97.473%
70.0	0.888	0.046	58.378	.075%	97.550%
70.5	0.879	0.045	58.423	.074%	97.625%
71.0	0.867	0.045	58.468	.074%	97.701%
71.5	0.853	0.044	58.512	.073%	97.775%
72.0	0.855	0.045	58.557	.073%	97.849%
72.5	0.855	0.045	58.602	.073%	97.924%
73.0	0.846	0.044	58.646	.073%	97.998%
73.5	0.837	0.044	58.69	.072%	98.072%
74.0	0.834	0.044	58.734	.072%	98.145%
74.5	0.823	0.043	58.777	.071%	98.218%
75.0	0.825	0.044	58.821	.072%	98.291%
75.5	0.811	0.043	58.864	.071%	98.363%

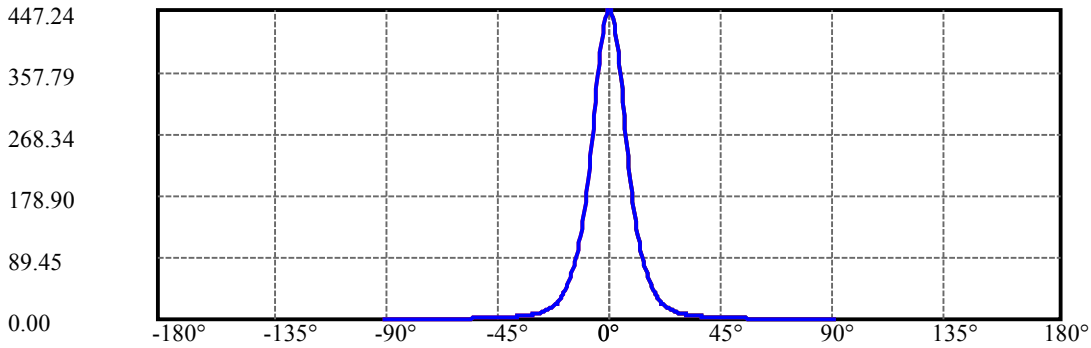
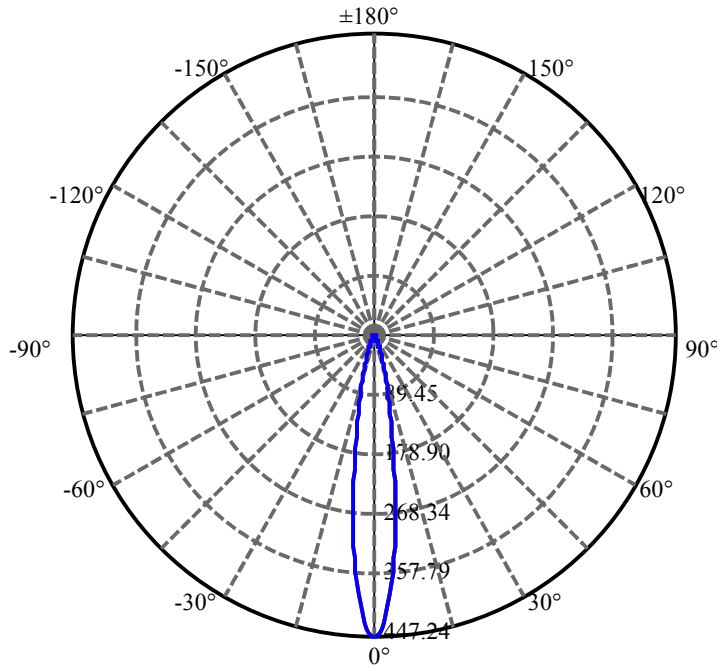
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	0.816	0.043	58.908	.071%	98.435%
76.5	0.806	0.043	58.951	.070%	98.507%
77.0	0.799	0.043	58.993	.070%	98.578%
77.5	0.816	0.044	59.037	.072%	98.651%
78.0	0.806	0.043	59.08	.071%	98.724%
78.5	0.797	0.043	59.123	.070%	98.795%
79.0	0.792	0.043	59.166	.070%	98.866%
79.5	0.797	0.043	59.209	.070%	98.938%
80.0	0.785	0.042	59.251	.070%	99.009%
80.5	0.792	0.043	59.294	.070%	99.081%
81.0	0.792	0.043	59.337	.070%	99.152%
81.5	0.790	0.043	59.38	.070%	99.224%
82.0	0.785	0.043	59.422	.070%	99.295%
82.5	0.783	0.043	59.465	.070%	99.366%
83.0	0.759	0.041	59.506	.068%	99.435%
83.5	0.743	0.040	59.547	.066%	99.503%
84.0	0.727	0.040	59.586	.065%	99.569%
84.5	0.713	0.039	59.625	.064%	99.634%
85.0	0.698	0.038	59.663	.063%	99.698%
85.5	0.668	0.037	59.7	.060%	99.759%
86.0	0.600	0.033	59.733	.054%	99.814%
86.5	0.469	0.026	59.758	.042%	99.857%
87.0	0.333	0.018	59.776	.030%	99.887%
87.5	0.274	0.015	59.791	.025%	99.912%
88.0	0.246	0.013	59.805	.022%	99.935%
88.5	0.220	0.012	59.817	.020%	99.955%
89.0	0.213	0.012	59.829	.019%	99.974%
89.5	0.190	0.010	59.839	.017%	99.992%
90.0	0.178	0.005	59.844	.008%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	51.30	84.10%	85.72%
0-40	54.34	89.08%	90.80%
0-60	57.39	94.07%	95.89%
0-90	59.84	98.10%	99.99%
0-120	59.84	98.10%	99.99%
0-180	59.84	98.10%	100.00%
60-90	2.51	4.11%	4.19%
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%
0-23.48	47.88	78.48%	80.00%

ZONAL LUMEN SUMMARY

0-10	26.37
10-20	18.56
20-30	6.38
30-40	3.04
40-50	1.80
50-60	1.25
60-70	0.99
70-80	0.87
80-90	0.59
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): —————

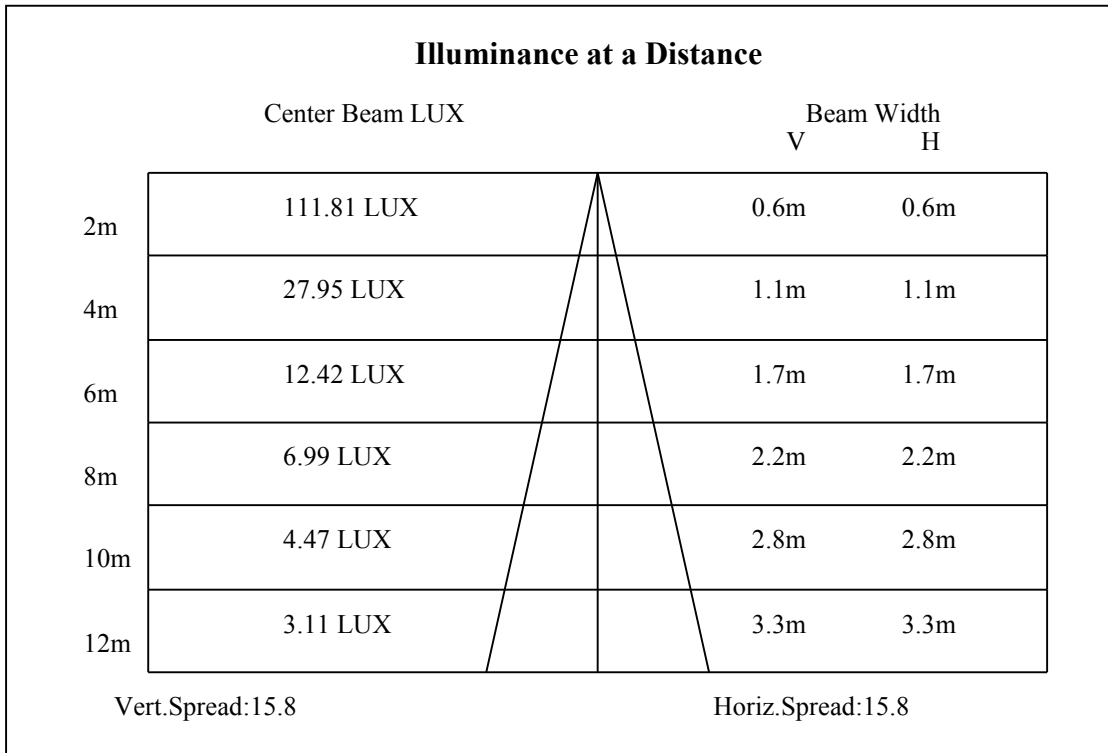
C0/C180: —————

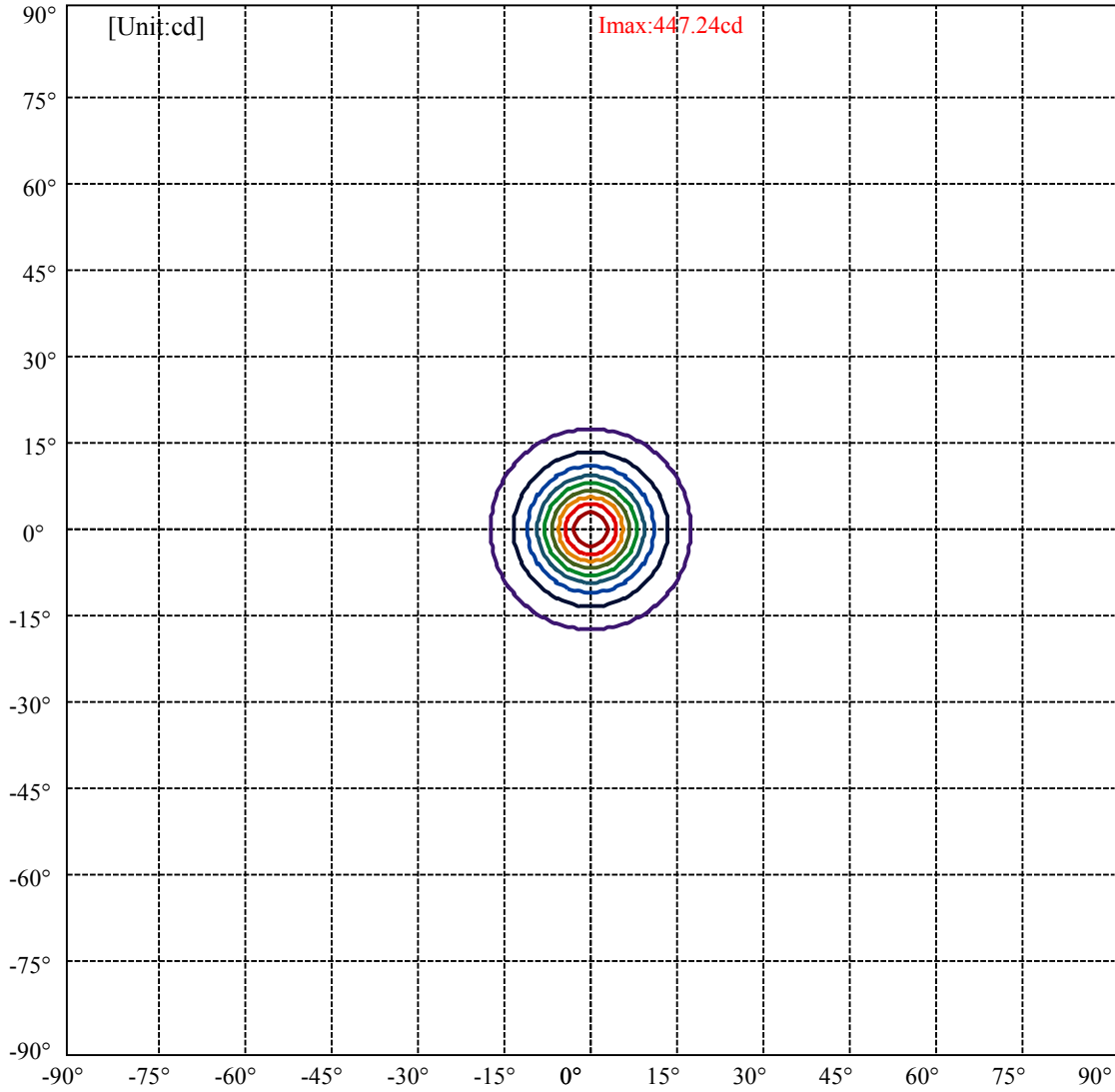
C90/C270: —————

Field angle(10%Imax):C0/180Left:17.1 Right:17.1  
:C90/270Left:17.1 Right:17.1

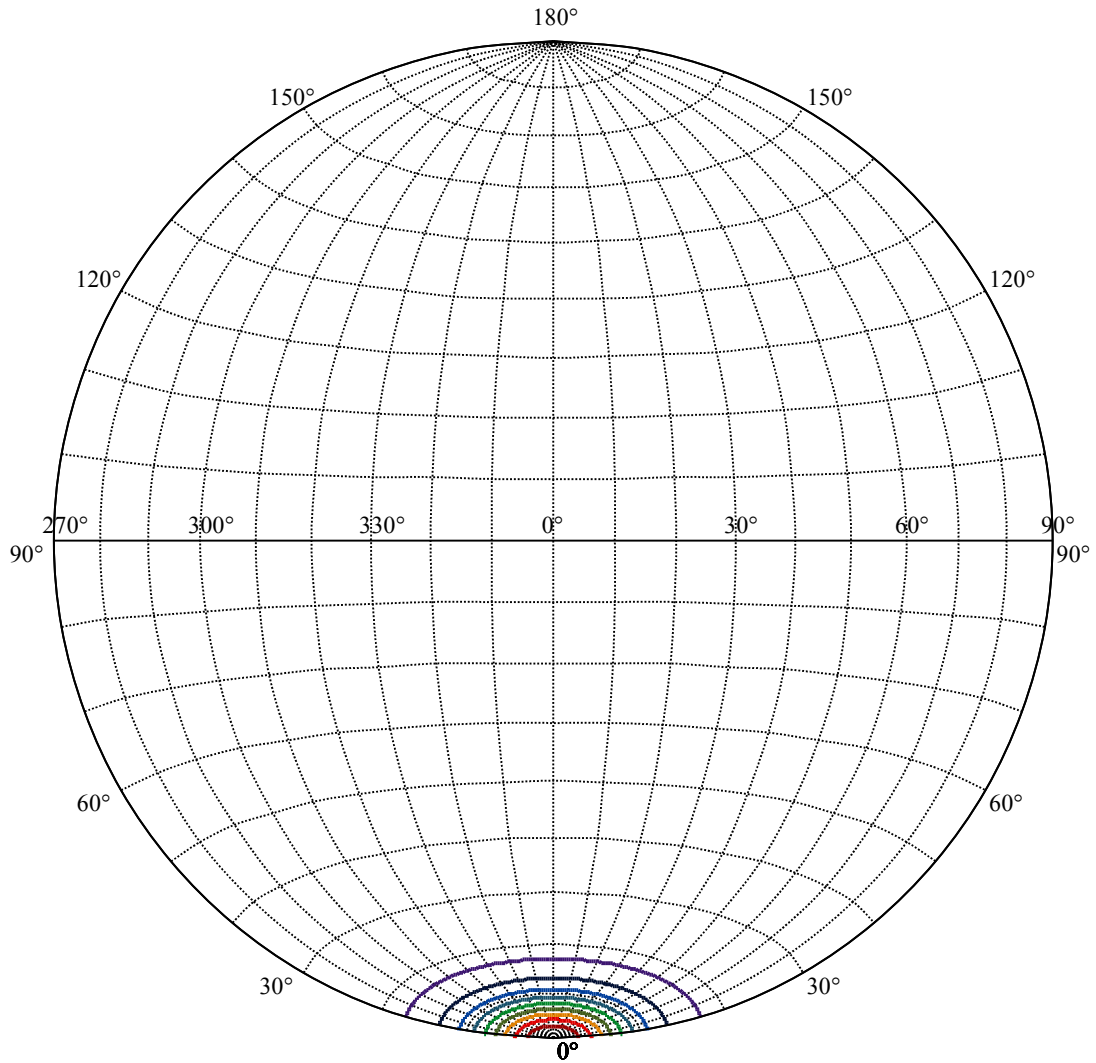
Beam Angle(50%Imax):C0/180Left:7.9 Right:7.9  
:C90/270Left:7.9 Right:7.9







(10%Imax)	44.7239	—
(20%Imax)	89.4478	—
(30%Imax)	134.172	—
(40%Imax)	178.896	—
(50%Imax)	223.62	—
(60%Imax)	268.343	—
(70%Imax)	313.067	—
(80%Imax)	357.791	—
(90%Imax)	402.515	—



House

[Unit:cd]

Road

Imax:447.24

(10%Imax) 44.7239

(20%Imax) 89.4478

(30%Imax) 134.172

(40%Imax) 178.896

(50%Imax) 223.62

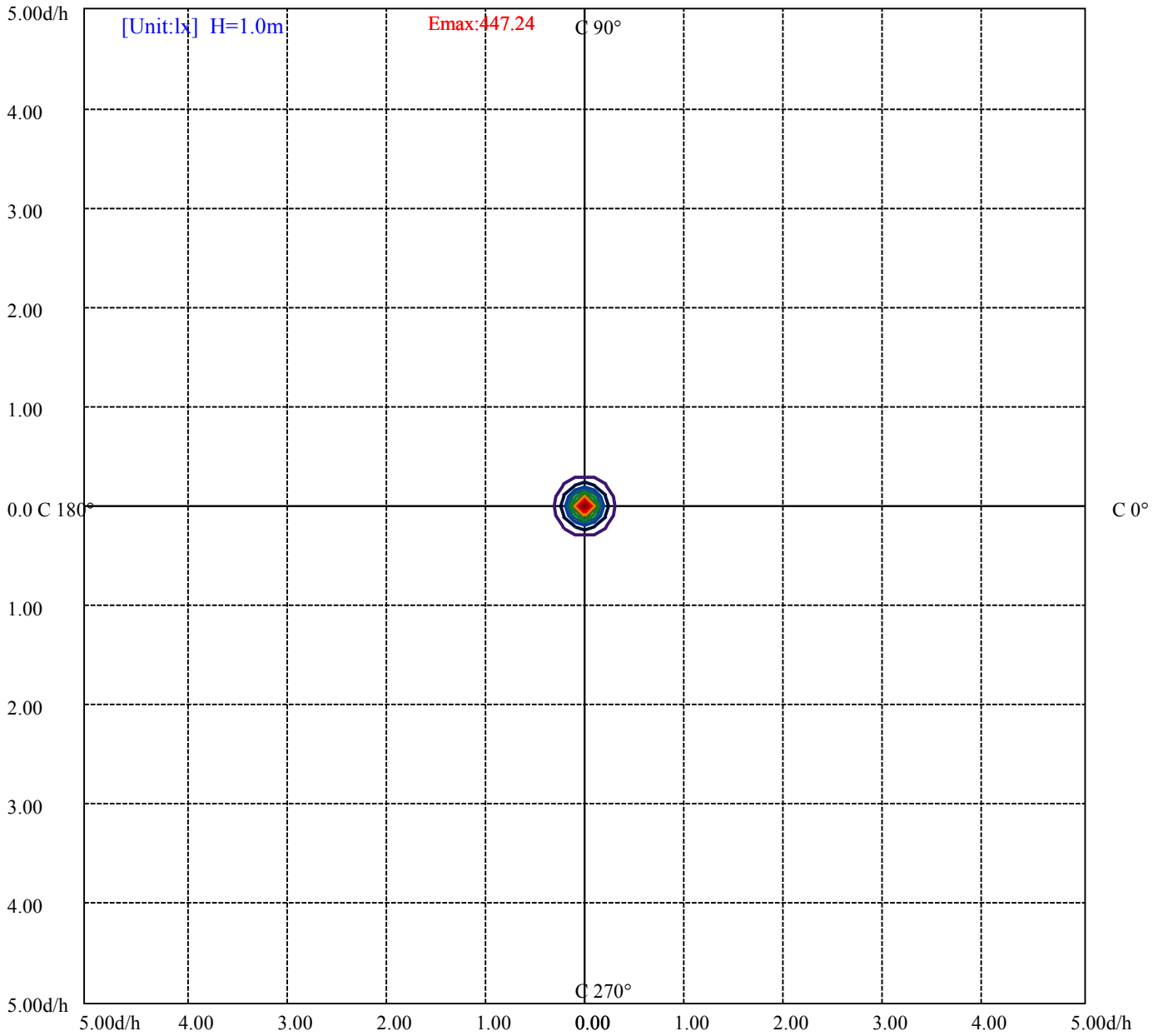
(60%Imax) 268.343

(70%Imax) 313.067

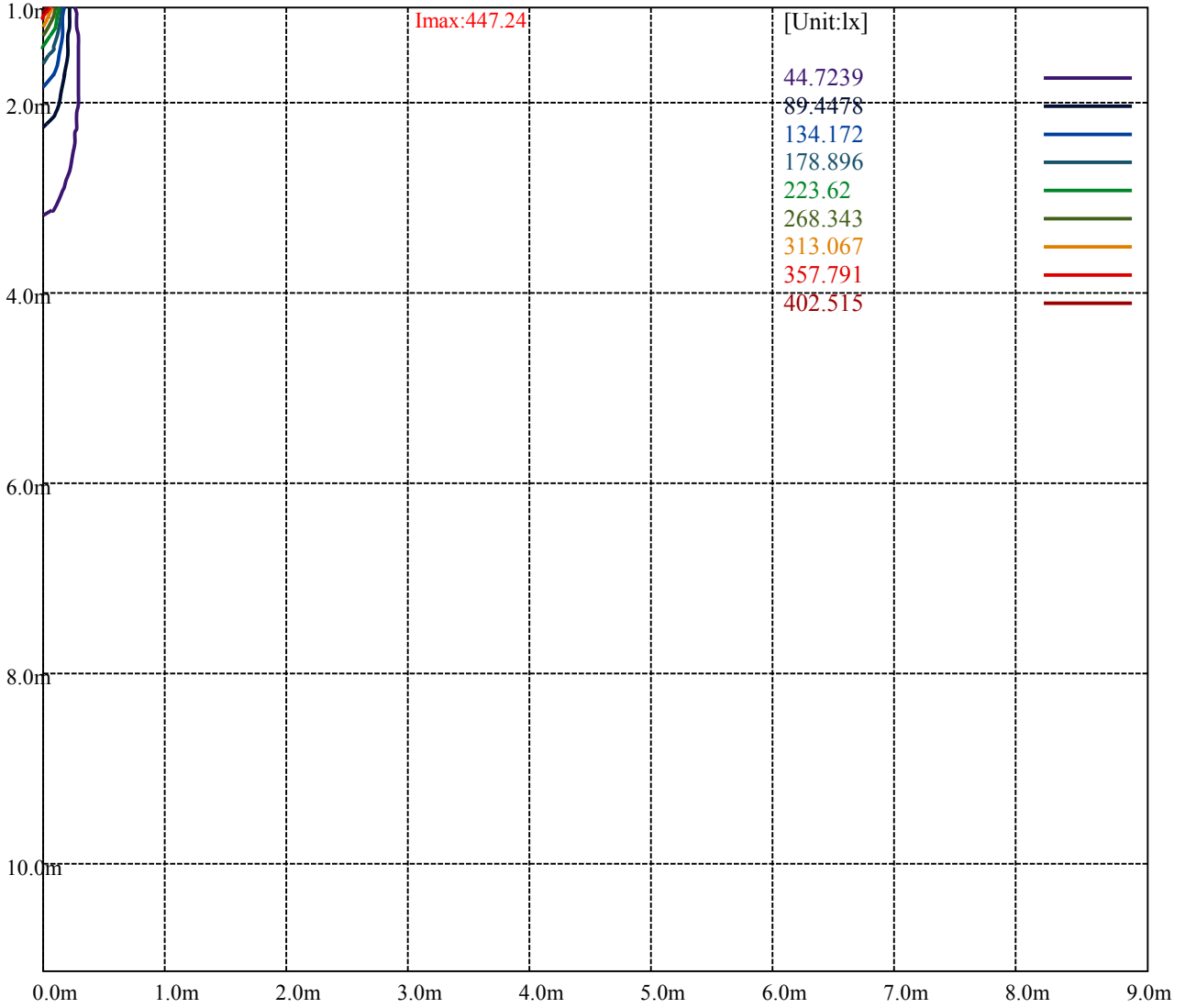
(80%Imax) 357.791

(90%Imax) 402.515





- (10%Emax) 44.7239
- (20%Emax) 89.4477
- (30%Emax) 134.172
- (40%Emax) 178.895
- (50%Emax) 223.619
- (60%Emax) 268.343
- (70%Emax) 313.067
- (80%Emax) 357.791
- (90%Emax) 402.515



Luminance Table

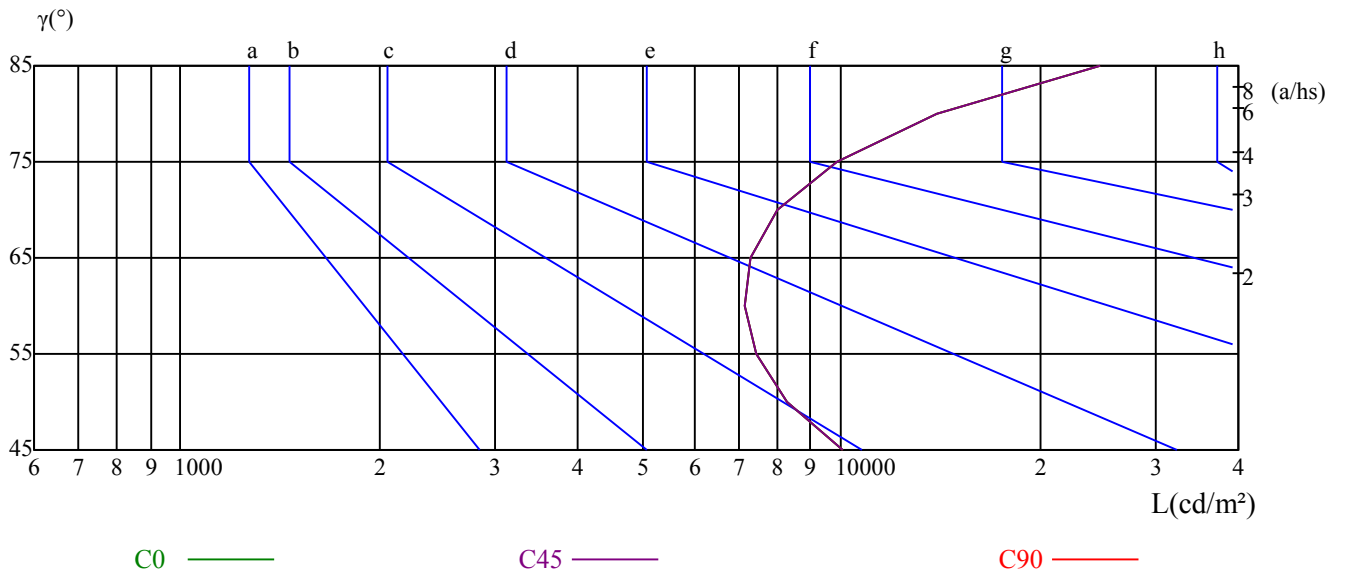
$\gamma$	45	50	55	60	65	70	75	80	85
C0	10066	8305	7428	7161	7292	8016	9838	13955	24734
C45	10066	8305	7428	7161	7292	8016	9838	13955	24734
C90	10066	8305	7428	7161	7292	8016	9838	13955	24734

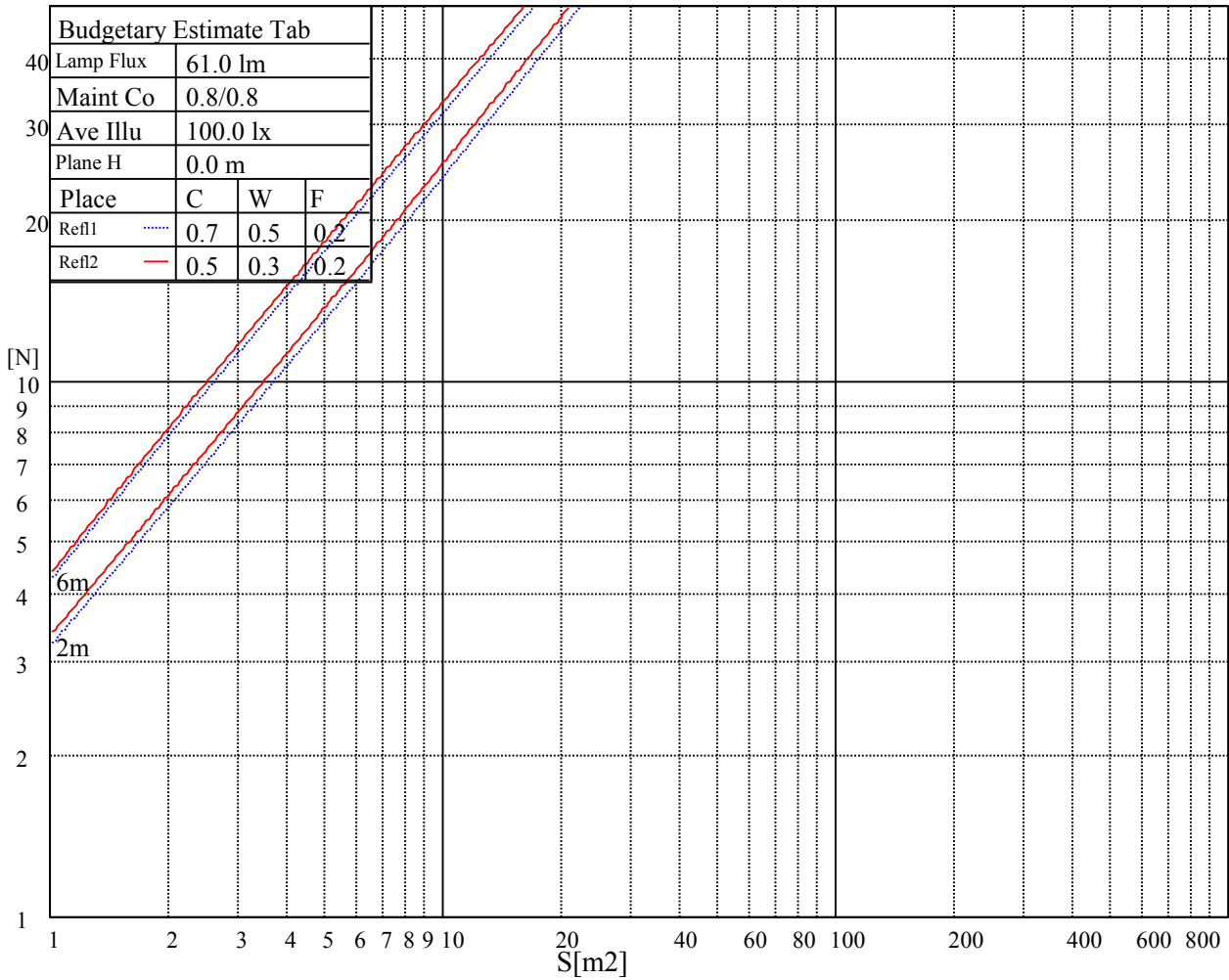
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
7292	7292	7292	9838	9838	9838	24734	24734	24734

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

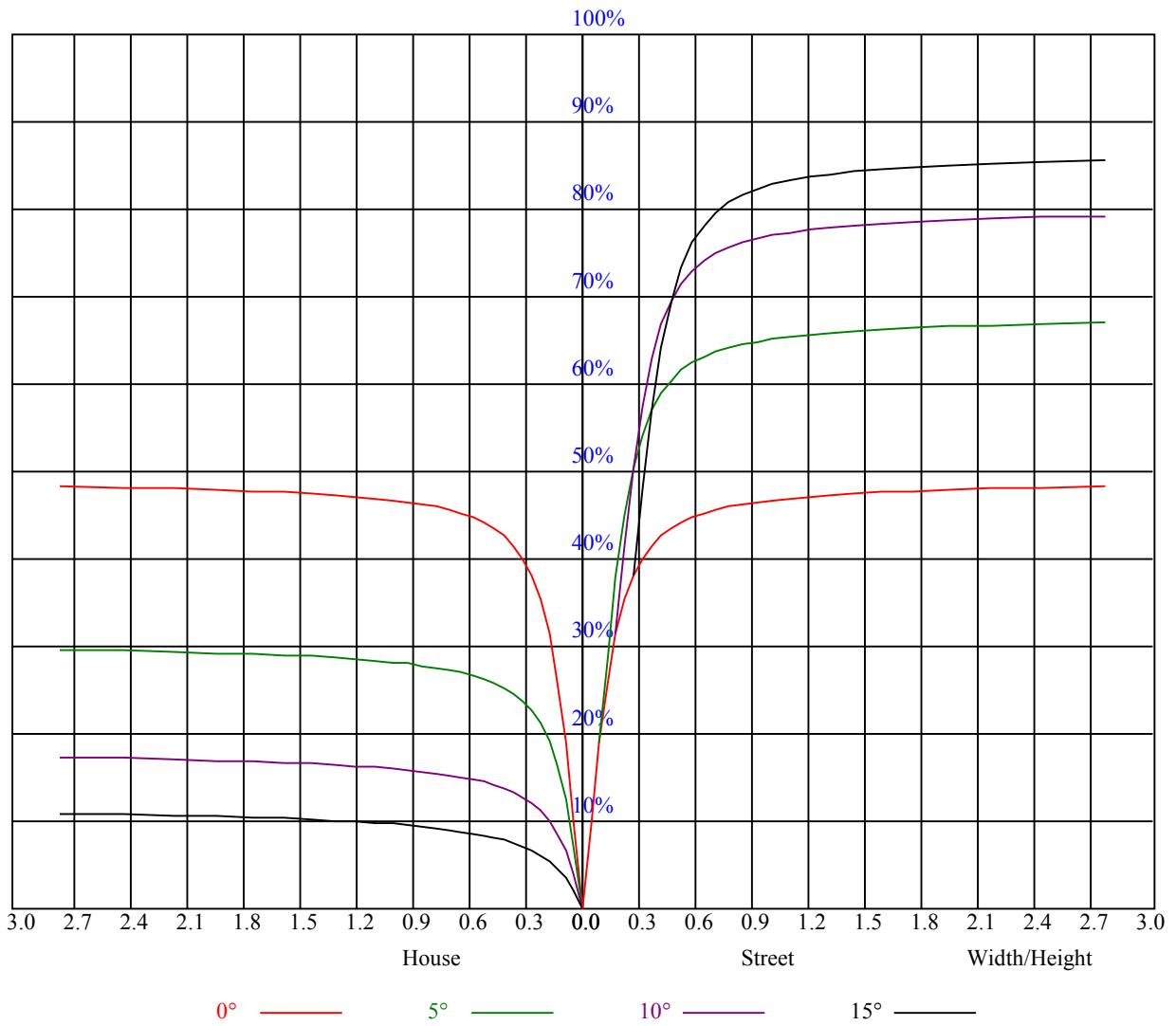
Luminance Limiting Curve





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	1.17	1.17	1.17	1.14	1.14	1.14	1.09	1.09	1.09	1.04	1.04	1.04	1.00	1.00	1.00	0.98
1	1.10	1.07	1.05	1.07	1.05	1.04	1.03	1.02	1.00	1.00	0.99	0.97	0.96	0.96	0.95	0.93
2	1.04	1.00	0.97	1.02	0.99	0.96	0.99	0.96	0.94	0.96	0.94	0.92	0.93	0.92	0.90	0.89
3	0.99	0.95	0.92	0.97	0.94	0.91	0.95	0.92	0.89	0.93	0.90	0.88	0.91	0.89	0.87	0.85
4	0.95	0.90	0.87	0.94	0.90	0.87	0.92	0.88	0.86	0.90	0.87	0.85	0.88	0.86	0.84	0.82
5	0.91	0.87	0.83	0.90	0.86	0.83	0.89	0.85	0.82	0.87	0.84	0.82	0.86	0.83	0.81	0.80
6	0.88	0.84	0.80	0.87	0.83	0.80	0.86	0.82	0.80	0.85	0.82	0.79	0.84	0.81	0.79	0.78
7	0.85	0.81	0.78	0.85	0.81	0.78	0.84	0.80	0.77	0.83	0.79	0.77	0.82	0.79	0.77	0.75
8	0.83	0.79	0.76	0.82	0.78	0.75	0.81	0.78	0.75	0.81	0.77	0.75	0.80	0.77	0.75	0.74
9	0.81	0.76	0.74	0.80	0.76	0.74	0.79	0.76	0.73	0.79	0.75	0.73	0.78	0.75	0.73	0.72
10	0.79	0.75	0.72	0.78	0.74	0.72	0.78	0.74	0.72	0.77	0.74	0.71	0.76	0.73	0.71	0.70





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	443.98	447.81	449.04	446.91	441.62	429.47	418.44	405.73	391.61
15.0	444.32	450.56	454.16	454.39	449.44	442.58	434.08	423.51	411.36
30.0	452.08	458.38	462.38	462.21	458.89	451.07	442.41	431.21	415.69
45.0	439.93	454.22	462.77	469.63	471.71	470.48	466.59	457.71	447.64
60.0	456.24	465.98	473.51	477.51	478.74	476.89	468.28	459.11	447.86
75.0	441.23	454.67	465.41	475.31	480.71	481.28	478.74	473.40	465.19
90.0	456.24	466.03	473.51	479.08	479.08	474.98	468.28	459.11	443.76
105.0	442.63	454.11	462.26	469.13	470.93	469.29	464.12	456.36	446.06
120.0	451.86	459.23	462.09	462.04	459.39	451.86	443.03	428.46	415.01
135.0	443.19	450.00	454.33	454.28	450.84	444.77	436.33	426.04	410.63
150.0	448.48	448.26	445.50	440.16	432.39	419.91	405.00	391.39	376.26
165.0	446.68	446.34	443.08	437.40	424.63	413.66	401.12	387.62	372.49
180.0	443.98	437.63	423.96	415.80	403.26	386.27	371.53	355.73	330.08
195.0	444.32	435.66	425.19	405.96	395.10	380.31	360.90	344.31	327.15
210.0	452.08	443.25	432.23	416.25	401.68	381.88	365.23	347.74	330.08
225.0	439.93	426.71	411.92	396.17	379.18	361.69	339.58	316.91	298.29
240.0	456.24	444.15	426.38	406.52	389.42	371.36	352.46	333.73	309.49
255.0	441.23	426.15	410.40	392.91	374.74	346.50	327.60	308.48	289.24
270.0	456.24	443.64	428.96	408.88	387.06	368.33	348.98	329.51	309.60
285.0	442.63	429.13	406.29	393.64	375.64	352.41	333.51	314.10	285.81
300.0	451.86	442.69	430.82	413.83	397.74	380.70	362.53	338.34	319.61
315.0	443.19	433.86	422.27	408.38	393.08	376.43	350.10	332.33	313.82
330.0	448.48	445.56	439.99	426.94	414.90	400.84	385.31	368.89	351.73
345.0	446.68	444.32	439.14	430.48	417.15	401.12	386.55	371.19	354.88
360.0	443.98	447.81	449.04	446.91	441.62	429.47	418.44	405.73	391.61

C/γ(°)	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5
0.0	376.65	360.51	335.19	317.81	299.31	280.74	262.52	244.91	223.59
15.0	398.19	375.36	359.10	341.27	322.71	304.20	285.47	266.96	239.57
30.0	401.34	385.88	369.11	351.06	327.32	302.96	283.78	264.26	245.42
45.0	435.94	418.78	403.59	386.55	363.49	345.04	325.41	305.49	280.74
60.0	434.25	419.01	402.58	379.86	355.39	335.03	314.21	293.29	272.14
75.0	451.35	437.68	417.66	399.94	380.64	360.39	334.52	313.88	293.23
90.0	429.41	412.99	395.16	376.03	351.00	330.19	304.03	283.22	263.25
105.0	433.58	415.13	394.20	375.69	355.78	335.93	315.56	295.09	265.73
120.0	399.66	382.11	363.54	344.25	313.76	293.57	273.49	253.74	234.96
135.0	396.39	375.86	357.92	338.51	318.49	293.34	273.32	254.08	230.91
150.0	359.55	336.60	317.14	297.17	272.25	252.51	233.61	212.12	196.09
165.0	356.40	334.86	311.51	291.94	272.36	252.84	234.00	212.34	196.14
180.0	316.52	297.73	278.66	254.25	235.24	208.52	196.03	180.45	166.39
195.0	299.76	285.86	266.79	247.84	225.23	207.96	184.05	173.08	159.47
210.0	311.96	288.34	264.49	245.76	227.42	210.26	193.95	178.71	157.73
225.0	279.62	260.55	241.59	223.31	197.78	181.63	166.95	153.28	140.57
240.0	290.19	266.23	247.16	228.99	211.16	190.13	174.71	160.31	144.06
255.0	270.51	246.94	228.99	207.23	190.86	175.56	161.27	148.16	133.09
270.0	289.91	261.79	243.11	225.79	208.80	192.94	178.03	160.54	144.56
285.0	271.97	253.58	235.80	218.98	199.13	176.91	166.67	153.73	141.69
300.0	300.21	276.86	258.64	236.59	224.04	203.96	188.72	174.54	158.01
315.0	295.43	277.37	259.54	237.60	216.84	201.15	186.24	172.07	158.85
330.0	329.40	306.79	288.73	270.96	252.79	235.58	214.99	199.35	180.84
345.0	333.73	315.96	297.96	275.23	257.46	239.57	218.53	202.89	187.99
360.0	376.65	360.51	335.19	317.81	299.31	280.74	262.52	244.91	223.59

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	203.79	188.78	174.49	161.61	149.57	138.49	125.94	116.55	106.03
15.0	222.24	205.59	189.73	175.33	161.94	146.70	135.51	122.79	113.40
30.0	227.25	209.64	185.29	170.94	157.73	145.69	134.44	123.75	109.29
45.0	260.61	236.42	217.63	199.86	183.94	169.09	149.12	136.74	125.55
60.0	246.09	226.24	203.46	186.81	171.79	158.23	141.98	130.28	119.25
75.0	267.53	247.50	228.49	206.33	190.18	175.05	161.04	147.94	132.81
90.0	243.68	225.39	204.30	185.06	171.11	158.06	145.97	134.38	123.53
105.0	246.66	228.26	210.88	194.79	179.83	166.39	150.64	136.18	125.27
120.0	217.07	192.83	178.37	164.76	152.21	140.51	129.88	114.92	108.06
135.0	213.41	196.99	178.14	164.48	154.91	140.12	129.26	116.94	105.47
150.0	180.96	167.06	151.31	139.67	126.73	117.06	108.23	99.79	91.74
165.0	177.64	164.19	151.71	140.12	126.90	117.34	108.45	100.18	90.51
180.0	153.17	138.26	122.51	115.43	106.65	98.83	91.46	84.43	76.28
195.0	147.09	135.45	122.34	108.45	102.21	94.50	87.24	80.61	74.53
210.0	145.13	133.31	122.85	113.34	104.46	96.64	87.47	79.26	73.35
225.0	128.93	116.04	104.68	96.41	89.04	82.46	76.22	69.47	64.41
240.0	132.41	121.56	109.52	100.52	92.76	85.78	79.37	72.06	65.81
255.0	122.29	110.03	101.19	93.21	84.38	77.96	72.28	67.11	61.26
270.0	132.86	122.01	112.33	103.28	95.29	86.29	79.82	72.73	67.67
285.0	130.50	120.15	103.84	97.76	90.28	83.70	77.63	72.11	65.87
300.0	142.76	131.51	121.44	112.33	104.06	96.36	89.44	80.10	74.42
315.0	140.68	132.30	119.36	110.25	102.15	94.84	86.29	79.93	74.03
330.0	167.34	154.63	142.65	129.04	119.14	110.19	101.93	92.70	86.06
345.0	173.53	156.94	144.96	133.93	121.39	112.50	104.06	96.19	87.47
360.0	203.79	188.78	174.49	161.61	149.57	138.49	125.94	116.55	106.03

C/γ(°)	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5
0.0	98.27	90.84	82.46	76.28	70.43	65.03	59.01	54.79	50.96
15.0	104.68	96.41	87.02	80.04	73.80	66.38	61.03	55.18	50.91
30.0	100.46	92.42	84.94	77.96	71.49	62.66	58.78	53.94	48.66
45.0	114.86	105.13	96.02	87.75	78.41	70.09	64.24	58.78	53.83
60.0	106.65	97.54	88.82	79.09	71.94	65.53	59.68	54.45	48.66
75.0	118.97	108.62	98.94	89.89	81.73	76.05	64.07	58.05	52.82
90.0	108.79	99.39	90.84	82.69	75.09	68.18	60.64	55.01	48.83
105.0	115.43	106.14	95.29	87.19	78.02	71.16	64.91	59.01	53.61
120.0	97.37	89.27	81.79	74.81	66.71	60.75	55.52	50.68	45.23
135.0	96.92	89.16	81.62	74.76	68.46	59.79	54.84	50.01	45.73
150.0	82.46	75.66	67.67	61.76	56.53	51.69	47.31	42.47	38.25
165.0	83.25	74.76	68.57	62.94	57.83	53.27	48.15	43.48	40.11
180.0	68.91	63.45	58.50	54.11	50.06	45.39	41.29	38.31	35.49
195.0	67.44	61.09	56.81	52.82	48.94	45.51	41.40	38.53	34.99
210.0	67.95	62.94	58.16	53.10	49.39	45.06	41.96	38.98	36.17
225.0	58.84	54.56	50.91	47.42	43.20	40.16	37.35	34.65	31.56
240.0	61.20	56.93	53.16	49.56	46.97	41.46	38.70	36.06	33.47
255.0	56.93	52.14	48.49	45.28	42.24	39.43	36.68	32.68	30.26
270.0	63.06	57.66	53.66	49.95	46.52	42.47	39.43	36.11	33.41
285.0	60.24	56.19	52.37	48.94	45.68	41.91	38.93	36.17	33.08
300.0	69.02	64.35	59.91	55.80	51.02	46.86	43.76	40.78	38.14
315.0	67.50	62.72	58.16	53.33	49.67	46.41	43.43	40.50	37.13
330.0	78.30	72.45	67.33	62.49	58.11	53.21	48.77	45.51	42.41
345.0	79.54	73.86	68.46	63.51	58.89	54.96	51.19	46.13	42.92
360.0	98.27	90.84	82.46	76.28	70.43	65.03	59.01	54.79	50.96

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	46.63	43.59	40.61	37.97	34.82	32.29	29.25	27.11	25.03
15.0	47.03	43.71	40.56	37.07	33.81	31.28	28.91	26.78	24.75
30.0	44.94	41.57	37.18	35.16	32.63	30.26	27.68	25.82	23.40
45.0	49.33	44.49	41.12	37.29	34.65	32.29	30.04	27.62	25.82
60.0	43.65	40.16	37.01	34.31	31.73	29.64	26.83	25.14	23.68
75.0	48.04	43.76	41.01	36.28	32.96	30.71	28.58	26.66	25.31
90.0	44.55	40.73	37.46	33.92	31.50	29.31	27.00	25.37	23.96
105.0	47.64	43.65	40.11	36.39	33.64	31.22	28.52	26.55	24.86
120.0	41.40	36.51	34.37	31.67	29.53	27.34	25.20	23.01	21.99
135.0	41.96	38.53	34.93	31.78	29.53	27.45	25.59	23.85	21.94
150.0	35.16	32.51	30.04	27.90	26.10	23.96	22.11	20.81	19.69
165.0	37.07	34.37	31.78	30.04	26.49	24.69	23.12	21.71	20.25
180.0	32.91	30.49	27.68	25.76	24.08	22.16	20.81	19.52	18.06
195.0	32.40	30.04	27.84	25.37	23.74	22.16	20.42	19.01	17.83
210.0	32.79	30.32	28.07	25.65	23.96	22.39	20.36	19.01	17.78
225.0	29.25	26.10	24.75	22.89	21.32	19.74	18.00	16.14	15.36
240.0	31.05	29.36	26.21	23.91	22.16	20.53	19.01	17.94	16.14
255.0	28.01	25.88	23.91	22.16	20.53	18.34	17.04	15.81	14.79
270.0	30.99	28.74	26.55	24.02	21.77	20.08	18.45	17.04	15.92
285.0	30.66	28.24	25.48	23.51	21.77	20.19	18.34	16.99	15.53
300.0	35.38	32.23	29.81	26.89	24.86	23.18	21.49	19.46	18.00
315.0	33.92	31.50	29.14	26.94	24.86	23.06	20.59	19.18	17.72
330.0	39.60	37.13	35.21	30.94	28.74	26.61	24.69	22.89	21.60
345.0	40.11	37.35	34.76	31.50	29.25	26.49	24.47	22.78	21.15
360.0	46.63	43.59	40.61	37.97	34.82	32.29	29.25	27.11	25.03
C/γ(°)	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5
0.0	23.29	21.66	19.41	18.00	16.65	15.41	14.29	13.28	12.32
15.0	23.01	21.26	19.24	18.00	16.88	15.75	14.57	13.56	12.43
30.0	22.33	20.98	19.58	18.28	16.82	15.13	14.29	13.33	12.43
45.0	24.13	22.39	20.81	19.52	18.06	16.88	15.58	14.46	13.44
60.0	22.28	21.04	19.86	18.17	17.10	16.03	14.96	13.95	13.11
75.0	22.95	21.83	20.70	19.29	18.34	17.55	16.09	15.08	14.12
90.0	22.39	21.32	20.19	19.18	17.89	16.93	15.69	14.68	13.73
105.0	23.46	22.44	20.53	19.41	18.45	17.49	16.54	15.58	14.57
120.0	20.87	19.74	18.73	17.66	16.03	15.36	14.40	13.56	12.71
135.0	20.70	19.35	18.23	17.21	16.31	15.24	14.34	13.50	12.83
150.0	18.68	17.72	16.48	15.58	14.51	13.61	12.88	12.09	11.25
165.0	19.41	17.78	16.65	15.41	14.40	13.44	12.88	11.76	11.08
180.0	16.99	15.86	14.91	13.67	12.83	11.87	11.19	10.52	9.96
195.0	16.54	15.47	14.51	13.56	12.43	11.70	10.86	10.18	9.62
210.0	16.65	15.41	14.46	13.28	12.43	11.64	10.86	10.18	9.56
225.0	14.34	13.44	12.54	11.64	10.35	9.90	9.34	8.78	8.27
240.0	15.13	14.01	13.11	12.21	11.59	10.41	9.68	9.06	8.49
255.0	13.78	12.94	11.87	10.80	10.13	9.51	8.94	8.38	7.82
270.0	14.96	13.84	12.83	12.04	11.31	10.58	9.90	9.11	8.44
285.0	14.40	13.56	12.71	11.87	10.91	10.13	9.51	9.00	8.44
300.0	16.65	15.19	14.18	13.33	12.26	11.48	10.74	10.07	9.39
315.0	16.54	15.36	14.29	12.83	12.04	11.25	10.58	9.96	9.34
330.0	19.29	17.61	16.37	15.24	14.23	13.50	12.09	11.25	10.46
345.0	19.63	17.89	16.59	15.13	14.06	13.11	11.98	11.19	10.41
360.0	23.29	21.66	19.41	18.00	16.65	15.41	14.29	13.28	12.32

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	11.25	10.29	9.73	9.17	8.66	8.16	7.71	7.37	6.98
15.0	11.42	10.69	10.07	9.51	9.00	8.38	7.99	7.48	7.20
30.0	11.64	10.91	10.13	9.39	8.94	8.49	8.10	7.71	7.37
45.0	12.26	11.36	10.63	10.07	9.56	9.11	8.78	8.16	7.76
60.0	11.81	11.31	10.58	9.84	9.34	8.94	8.38	8.10	7.82
75.0	13.28	12.26	11.70	10.80	10.07	9.51	9.11	8.66	8.38
90.0	12.94	12.09	11.25	10.29	9.62	9.06	8.66	8.33	7.99
105.0	13.22	12.32	11.53	10.86	10.29	9.73	9.11	8.66	8.21
120.0	12.04	11.19	10.35	9.84	9.34	8.94	8.55	8.10	7.82
135.0	11.87	11.25	10.41	9.90	9.34	8.89	8.49	8.04	7.65
150.0	10.63	10.07	9.39	8.94	8.49	7.93	7.71	7.37	7.14
165.0	10.41	9.73	9.23	8.89	8.27	7.88	7.54	7.20	6.86
180.0	9.45	8.94	8.27	7.82	7.48	7.14	6.86	6.53	6.30
195.0	9.11	8.61	8.21	7.59	7.31	6.92	6.64	6.36	6.13
210.0	8.78	8.33	7.93	7.48	7.14	6.86	6.53	6.24	6.02
225.0	7.82	7.37	6.92	6.69	6.41	6.24	5.96	5.63	5.46
240.0	7.88	7.54	6.98	6.75	6.41	6.24	5.96	5.79	5.46
255.0	7.43	7.03	6.69	6.41	6.19	5.91	5.63	5.46	5.23
270.0	7.93	7.48	7.20	6.86	6.47	6.24	5.96	5.74	5.51
285.0	7.99	7.54	6.92	6.69	6.47	6.13	5.96	5.68	5.51
300.0	8.78	8.10	7.71	7.31	6.92	6.64	6.47	6.02	5.79
315.0	8.55	8.16	7.76	7.31	7.03	6.69	6.30	6.08	5.85
330.0	9.68	9.06	8.66	7.99	7.65	7.26	6.92	6.58	6.41
345.0	9.79	9.23	8.55	7.99	7.59	7.26	6.98	6.69	6.41
360.0	11.25	10.29	9.73	9.17	8.66	8.16	7.71	7.37	6.98
C/γ(°)	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5
0.0	6.69	6.41	6.19	5.85	5.68	5.51	5.23	5.06	4.89
15.0	6.86	6.58	6.24	6.08	5.85	5.51	5.29	5.12	4.89
30.0	7.09	6.69	6.41	6.19	5.91	5.63	5.46	5.29	5.01
45.0	7.48	7.20	6.92	6.75	6.30	6.02	5.79	5.57	5.40
60.0	7.48	7.14	6.86	6.47	6.30	6.02	5.79	5.57	5.34
75.0	7.82	7.54	7.20	6.92	6.64	6.41	6.08	5.79	5.63
90.0	7.65	7.20	6.92	6.64	6.41	6.19	5.91	5.63	5.34
105.0	7.88	7.54	7.20	6.92	6.58	6.24	6.02	5.74	5.57
120.0	7.54	7.09	6.81	6.53	6.19	5.96	5.74	5.51	5.29
135.0	7.37	7.03	6.81	6.47	6.30	5.85	5.63	5.46	5.18
150.0	6.81	6.47	6.08	5.91	5.63	5.46	5.23	5.06	4.78
165.0	6.64	6.24	5.96	5.79	5.51	5.34	5.18	4.84	4.73
180.0	5.91	5.68	5.46	5.29	5.06	4.89	4.67	4.44	4.33
195.0	5.91	5.51	5.29	5.12	4.89	4.73	4.50	4.33	4.16
210.0	5.74	5.51	5.34	5.06	4.89	4.67	4.50	4.33	4.22
225.0	5.29	5.01	4.89	4.67	4.50	4.33	4.16	3.99	3.83
240.0	5.29	5.06	4.89	4.73	4.50	4.28	4.11	3.99	3.83
255.0	5.06	4.89	4.61	4.44	4.28	4.16	3.99	3.83	3.60
270.0	5.34	5.12	4.89	4.73	4.56	4.39	4.22	3.99	3.88
285.0	5.29	5.06	4.89	4.67	4.50	4.33	4.16	3.99	3.83
300.0	5.57	5.40	5.23	5.06	4.84	4.61	4.44	4.28	4.11
315.0	5.63	5.40	5.23	4.95	4.78	4.61	4.44	4.33	4.16
330.0	6.08	5.79	5.63	5.40	5.29	5.06	4.78	4.67	4.44
345.0	6.08	5.85	5.63	5.46	5.29	5.06	4.89	4.61	4.50
360.0	6.69	6.41	6.19	5.85	5.68	5.51	5.23	5.06	4.89

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	4.67	4.50	4.39	4.22	4.11	3.88	3.77	3.66	3.54
15.0	4.73	4.61	4.44	4.33	4.16	3.99	3.83	3.77	3.60
30.0	4.84	4.67	4.50	4.39	4.22	4.11	3.99	3.83	3.71
45.0	5.23	5.01	4.84	4.73	4.56	4.39	4.28	4.11	3.99
60.0	5.06	4.95	4.78	4.61	4.44	4.33	4.16	3.99	3.88
75.0	5.40	5.23	5.06	4.78	4.67	4.44	4.28	4.16	4.05
90.0	5.18	5.01	4.78	4.61	4.50	4.28	4.11	3.99	3.83
105.0	5.29	5.06	4.89	4.78	4.50	4.39	4.22	4.11	3.94
120.0	5.06	4.84	4.73	4.56	4.44	4.28	4.11	3.94	3.83
135.0	5.06	4.89	4.73	4.56	4.28	4.22	4.11	3.94	3.71
150.0	4.67	4.56	4.39	4.22	4.11	3.94	3.71	3.60	3.43
165.0	4.56	4.39	4.22	4.11	3.94	3.83	3.60	3.49	3.38
180.0	4.16	4.05	3.88	3.77	3.60	3.38	3.26	3.15	3.04
195.0	3.99	3.88	3.77	3.60	3.43	3.26	3.15	3.04	2.93
210.0	4.05	3.88	3.77	3.60	3.43	3.26	3.09	2.98	2.87
225.0	3.71	3.54	3.49	3.32	3.21	3.04	2.93	2.81	2.70
240.0	3.77	3.66	3.49	3.32	3.15	3.04	2.93	2.81	2.70
255.0	3.54	3.43	3.26	3.15	2.98	2.87	2.76	2.64	2.59
270.0	3.71	3.54	3.43	3.32	3.09	2.98	2.81	2.76	2.70
285.0	3.71	3.54	3.43	3.32	3.21	3.04	2.81	2.76	2.64
300.0	4.05	3.83	3.71	3.54	3.38	3.26	3.26	2.98	2.93
315.0	3.94	3.88	3.77	3.54	3.49	3.38	3.15	3.04	2.87
330.0	4.33	4.22	4.05	3.88	3.71	3.60	3.43	3.38	3.21
345.0	4.33	4.22	4.05	3.94	3.71	3.60	3.49	3.38	3.21
360.0	4.67	4.50	4.39	4.22	4.11	3.88	3.77	3.66	3.54
C/γ(°)	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5
0.0	3.38	3.21	3.09	2.98	2.87	2.76	2.64	2.64	2.53
15.0	3.49	3.38	3.15	3.09	2.98	2.87	2.76	2.70	2.59
30.0	3.54	3.38	3.32	3.21	3.09	2.98	2.81	2.76	2.64
45.0	3.83	3.71	3.54	3.43	3.26	3.21	3.09	2.98	2.93
60.0	3.77	3.60	3.49	3.32	3.21	3.09	2.98	2.87	2.81
75.0	3.88	3.71	3.60	3.38	3.32	3.21	3.09	2.98	2.87
90.0	3.71	3.54	3.38	3.26	3.15	3.04	2.98	2.81	2.76
105.0	3.83	3.66	3.49	3.32	3.21	3.15	2.98	2.93	2.87
120.0	3.66	3.54	3.38	3.26	3.15	2.98	2.93	2.81	2.76
135.0	3.66	3.49	3.26	3.21	3.09	2.93	2.87	2.76	2.70
150.0	3.32	3.15	3.04	2.98	2.87	2.76	2.70	2.59	2.48
165.0	3.21	3.09	3.04	2.87	2.87	2.70	2.64	2.53	2.42
180.0	2.87	2.81	2.76	2.64	2.59	2.48	2.31	2.31	2.19
195.0	2.81	2.76	2.64	2.59	2.48	2.36	2.31	2.25	2.14
210.0	2.81	2.70	2.64	2.53	2.42	2.31	2.25	2.14	2.14
225.0	2.64	2.53	2.48	2.36	2.25	2.14	2.08	2.08	1.97
240.0	2.59	2.53	2.42	2.31	2.25	2.19	2.08	2.03	1.97
255.0	2.53	2.42	2.31	2.25	2.14	2.14	2.03	2.03	1.91
270.0	2.59	2.53	2.42	2.31	2.25	2.14	2.14	2.03	1.97
285.0	2.53	2.48	2.36	2.31	2.19	2.08	2.03	1.97	1.97
300.0	2.76	2.70	2.59	2.48	2.36	2.31	2.25	2.14	2.08
315.0	2.81	2.70	2.64	2.48	2.42	2.31	2.25	2.14	2.08
330.0	3.04	2.93	2.81	2.76	2.59	2.53	2.42	2.36	2.25
345.0	3.09	2.93	2.87	2.76	2.59	2.59	2.48	2.36	2.31
360.0	3.38	3.21	3.09	2.98	2.87	2.76	2.64	2.64	2.53

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	2.48	2.36	2.31	2.14	2.14	2.08	1.97	1.91	1.86
15.0	2.48	2.42	2.36	2.25	2.19	2.14	2.08	2.03	1.97
30.0	2.59	2.48	2.42	2.31	2.31	2.19	2.14	2.08	2.03
45.0	2.81	2.64	2.59	2.53	2.42	2.36	2.25	2.19	2.14
60.0	2.70	2.59	2.53	2.48	2.36	2.31	2.25	2.19	2.14
75.0	2.76	2.64	2.59	2.48	2.42	2.36	2.25	2.19	2.14
90.0	2.64	2.53	2.48	2.36	2.31	2.25	2.19	2.08	2.08
105.0	2.70	2.59	2.53	2.48	2.36	2.36	2.25	2.14	2.14
120.0	2.64	2.59	2.48	2.42	2.31	2.31	2.19	2.14	2.08
135.0	2.59	2.53	2.42	2.36	2.25	2.25	2.14	2.08	2.03
150.0	2.36	2.31	2.25	2.19	2.08	2.03	2.03	1.97	1.86
165.0	2.36	2.25	2.19	2.14	2.08	2.03	1.97	1.91	1.86
180.0	2.14	2.08	2.03	1.97	1.91	1.86	1.80	1.74	1.74
195.0	2.14	2.03	1.97	1.91	1.86	1.80	1.74	1.69	1.69
210.0	2.08	1.97	1.91	1.86	1.86	1.80	1.74	1.63	1.63
225.0	1.91	1.86	1.80	1.80	1.69	1.69	1.69	1.58	1.52
240.0	1.91	1.86	1.80	1.74	1.74	1.69	1.63	1.58	1.58
255.0	1.86	1.80	1.74	1.74	1.69	1.63	1.63	1.58	1.58
270.0	1.91	1.86	1.74	1.74	1.74	1.69	1.63	1.58	1.58
285.0	1.86	1.80	1.74	1.74	1.63	1.69	1.63	1.58	1.58
300.0	2.03	1.97	1.86	1.80	1.80	1.74	1.69	1.63	1.63
315.0	1.97	1.97	1.91	1.86	1.80	1.74	1.69	1.63	1.63
330.0	2.19	2.08	2.03	1.91	1.91	1.86	1.80	1.80	1.74
345.0	2.25	2.14	2.08	2.03	1.91	1.86	1.80	1.80	1.74
360.0	2.48	2.36	2.31	2.14	2.14	2.08	1.97	1.91	1.86
C/γ(°)	49.5	50.0	50.5	51.0	51.5	52.0	52.5	53.0	53.5
0.0	1.86	1.80	1.74	1.69	1.69	1.63	1.58	1.52	1.52
15.0	1.91	1.86	1.80	1.74	1.74	1.69	1.63	1.63	1.58
30.0	1.97	1.91	1.91	1.80	1.74	1.74	1.69	1.69	1.63
45.0	2.08	2.03	2.03	1.97	1.91	1.86	1.74	1.74	1.69
60.0	2.08	1.97	1.91	1.91	1.86	1.80	1.80	1.80	1.74
75.0	2.03	2.03	1.97	1.91	1.86	1.80	1.80	1.74	1.69
90.0	2.03	1.91	1.86	1.80	1.80	1.74	1.74	1.63	1.63
105.0	2.03	2.03	1.97	1.91	1.86	1.80	1.74	1.74	1.69
120.0	1.97	1.97	1.86	1.86	1.80	1.74	1.74	1.69	1.69
135.0	1.91	1.91	1.86	1.80	1.80	1.74	1.69	1.63	1.63
150.0	1.86	1.80	1.74	1.69	1.69	1.63	1.58	1.52	1.52
165.0	1.86	1.74	1.69	1.63	1.63	1.58	1.58	1.52	1.46
180.0	1.69	1.63	1.63	1.58	1.52	1.52	1.46	1.41	1.41
195.0	1.63	1.58	1.58	1.52	1.46	1.46	1.46	1.41	1.41
210.0	1.58	1.52	1.52	1.46	1.46	1.46	1.41	1.35	1.35
225.0	1.52	1.46	1.41	1.41	1.41	1.35	1.35	1.29	1.29
240.0	1.52	1.52	1.46	1.41	1.41	1.41	1.35	1.29	1.29
255.0	1.52	1.52	1.46	1.41	1.41	1.35	1.35	1.35	1.29
270.0	1.52	1.52	1.46	1.41	1.41	1.35	1.35	1.35	1.29
285.0	1.52	1.46	1.46	1.41	1.41	1.35	1.35	1.35	1.29
300.0	1.58	1.52	1.52	1.46	1.46	1.41	1.41	1.35	1.35
315.0	1.58	1.58	1.52	1.46	1.46	1.46	1.41	1.35	1.35
330.0	1.69	1.63	1.58	1.52	1.52	1.46	1.46	1.41	1.41
345.0	1.69	1.63	1.69	1.58	1.58	1.52	1.46	1.46	1.41
360.0	1.86	1.80	1.74	1.69	1.69	1.63	1.58	1.52	1.52

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	1.41	1.41	1.41	1.35	1.35	1.29	1.29	1.29
15.0	1.52	1.52	1.52	1.46	1.41	1.41	1.35	1.35	1.29
30.0	1.58	1.58	1.52	1.46	1.46	1.41	1.41	1.35	1.29
45.0	1.63	1.63	1.58	1.58	1.52	1.46	1.46	1.41	1.35
60.0	1.63	1.63	1.58	1.52	1.52	1.52	1.46	1.41	1.41
75.0	1.69	1.63	1.58	1.52	1.52	1.52	1.46	1.46	1.41
90.0	1.58	1.52	1.46	1.46	1.41	1.41	1.41	1.35	1.35
105.0	1.58	1.58	1.52	1.52	1.52	1.46	1.41	1.35	1.41
120.0	1.58	1.58	1.52	1.46	1.46	1.46	1.41	1.35	1.29
135.0	1.52	1.52	1.46	1.46	1.41	1.41	1.41	1.35	1.35
150.0	1.46	1.46	1.41	1.41	1.35	1.29	1.29	1.24	1.24
165.0	1.46	1.41	1.41	1.35	1.35	1.29	1.29	1.24	1.24
180.0	1.35	1.35	1.29	1.24	1.24	1.24	1.24	1.18	1.18
195.0	1.35	1.35	1.29	1.29	1.29	1.24	1.18	1.18	1.18
210.0	1.29	1.24	1.24	1.24	1.24	1.18	1.18	1.18	1.13
225.0	1.24	1.24	1.24	1.18	1.18	1.18	1.13	1.13	1.13
240.0	1.29	1.29	1.24	1.24	1.18	1.18	1.18	1.18	1.13
255.0	1.29	1.24	1.18	1.24	1.18	1.18	1.13	1.13	1.13
270.0	1.24	1.29	1.24	1.24	1.18	1.18	1.18	1.13	1.13
285.0	1.29	1.29	1.24	1.18	1.18	1.18	1.18	1.13	1.13
300.0	1.35	1.29	1.29	1.24	1.24	1.24	1.18	1.18	1.18
315.0	1.29	1.29	1.24	1.29	1.24	1.18	1.24	1.18	1.13
330.0	1.35	1.35	1.35	1.29	1.24	1.24	1.18	1.18	1.18
345.0	1.41	1.35	1.35	1.35	1.29	1.29	1.24	1.24	1.18
360.0	1.46	1.41	1.41	1.41	1.35	1.35	1.29	1.29	1.29
C/γ(°)	58.5	59.0	59.5	60.0	60.5	61.0	61.5	62.0	62.5
0.0	1.24	1.18	1.18	1.18	1.13	1.13	1.13	1.13	1.07
15.0	1.29	1.29	1.24	1.24	1.18	1.18	1.13	1.13	1.13
30.0	1.29	1.29	1.24	1.24	1.18	1.18	1.18	1.18	1.13
45.0	1.35	1.35	1.35	1.29	1.29	1.24	1.24	1.18	1.18
60.0	1.41	1.35	1.29	1.29	1.24	1.24	1.24	1.18	1.13
75.0	1.41	1.35	1.29	1.29	1.29	1.24	1.24	1.18	1.18
90.0	1.29	1.24	1.24	1.24	1.18	1.18	1.13	1.13	1.13
105.0	1.35	1.29	1.29	1.24	1.18	1.24	1.18	1.18	1.13
120.0	1.29	1.29	1.24	1.24	1.18	1.18	1.18	1.13	1.13
135.0	1.29	1.29	1.18	1.24	1.18	1.18	1.18	1.13	1.13
150.0	1.18	1.18	1.18	1.13	1.13	1.13	1.07	1.07	1.07
165.0	1.24	1.18	1.18	1.13	1.13	1.13	1.07	1.07	1.07
180.0	1.13	1.13	1.13	1.13	1.07	1.07	1.01	1.07	1.01
195.0	1.13	1.13	1.13	1.13	1.07	1.07	1.07	1.01	1.01
210.0	1.13	1.13	1.13	1.07	1.07	1.01	1.07	1.01	1.01
225.0	1.07	1.07	1.07	1.07	1.01	1.01	1.01	1.01	1.01
240.0	1.13	1.07	1.07	1.07	1.07	1.07	1.01	1.01	1.01
255.0	1.13	1.07	1.07	1.07	1.07	1.01	1.01	0.96	0.96
270.0	1.13	1.13	1.07	1.07	1.01	1.01	1.01	1.01	1.01
285.0	1.13	1.07	1.07	1.07	1.01	1.07	1.01	1.01	0.96
300.0	1.13	1.13	1.13	1.13	1.07	1.07	1.07	1.01	1.01
315.0	1.13	1.13	1.13	1.07	1.07	1.07	1.07	1.01	1.01
330.0	1.18	1.13	1.13	1.13	1.07	1.07	1.07	1.07	1.07
345.0	1.18	1.13	1.13	1.13	1.13	1.07	1.07	1.07	1.07
360.0	1.24	1.18	1.18	1.18	1.13	1.13	1.13	1.13	1.07



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	1.07	1.07	1.01	1.01	1.01	0.96	0.96	0.96	0.96
15.0	1.07	1.07	1.07	1.07	1.07	1.01	1.01	1.01	0.96
30.0	1.13	1.13	1.07	1.01	1.07	1.01	1.01	1.01	0.96
45.0	1.18	1.18	1.13	1.13	1.13	1.01	1.07	1.01	1.01
60.0	1.18	1.18	1.13	1.13	1.07	1.07	1.07	1.01	1.07
75.0	1.18	1.13	1.13	1.13	1.07	1.07	1.07	1.07	1.01
90.0	1.13	1.13	1.07	1.07	1.07	1.01	1.01	1.01	1.01
105.0	1.13	1.07	1.07	1.01	1.01	1.01	1.01	1.01	0.96
120.0	1.13	1.07	1.07	1.07	1.01	1.01	1.01	0.96	0.96
135.0	1.07	1.07	1.07	1.07	1.01	1.01	0.96	0.96	0.96
150.0	1.01	1.01	1.01	0.96	1.01	0.96	0.96	0.90	0.90
165.0	1.01	1.01	1.01	1.01	1.01	0.96	0.96	0.96	0.90
180.0	1.07	1.01	1.01	0.96	0.90	0.96	0.90	0.90	0.90
195.0	1.01	1.01	1.01	0.96	1.01	0.96	0.96	0.96	0.90
210.0	0.96	1.01	0.96	0.96	0.96	0.96	0.96	0.90	0.90
225.0	1.01	0.96	0.96	0.96	0.90	0.90	0.90	0.90	0.90
240.0	1.01	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
255.0	0.96	0.96	0.96	0.96	0.96	0.96	0.90	0.90	0.90
270.0	1.01	1.01	0.96	0.96	0.96	0.90	0.96	0.90	0.90
285.0	0.96	0.96	0.96	0.96	0.96	0.90	0.96	0.90	0.84
300.0	1.01	1.01	1.01	1.01	0.96	0.96	0.96	0.96	0.96
315.0	1.07	1.01	1.01	1.01	0.96	0.96	0.96	0.96	0.96
330.0	1.07	1.01	1.01	1.01	0.96	0.96	0.96	0.96	0.96
345.0	1.01	0.96	1.01	1.01	0.96	0.96	0.96	0.96	0.96
360.0	1.07	1.07	1.01	1.01	1.01	0.96	0.96	0.96	0.96
C/γ(°)	67.5	68.0	68.5	69.0	69.5	70.0	70.5	71.0	71.5
0.0	1.01	0.96	0.96	0.90	0.90	0.90	0.90	0.90	0.84
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	0.96	0.96	0.96	0.90	0.90	0.90	0.90
45.0	1.01	1.01	0.96	0.96	0.96	0.90	0.96	0.96	0.90
60.0	1.01	1.01	1.01	0.96	0.96	0.96	0.90	0.90	0.96
75.0	1.07	1.01	1.01	0.96	0.96	0.96	0.96	0.90	0.90
90.0	1.01	1.01	1.01	0.96	0.96	0.90	0.90	0.90	0.84
105.0	0.96	0.96	0.96	0.90	0.90	0.90	0.90	0.84	0.84
120.0	0.96	0.96	0.90	0.90	0.90	0.90	0.84	0.84	0.84
135.0	0.90	0.96	0.96	0.90	0.90	0.90	0.84	0.84	0.84
150.0	0.90	0.90	0.84	0.90	0.84	0.84	0.84	0.84	0.84
165.0	0.90	0.90	0.90	0.90	0.90	0.84	0.84	0.84	0.84
180.0	0.90	0.90	0.90	0.90	0.90	0.84	0.84	0.79	0.79
195.0	0.96	0.90	0.90	0.84	0.84	0.90	0.84	0.84	0.84
210.0	0.90	0.90	0.90	0.84	0.90	0.84	0.84	0.84	0.79
225.0	0.90	0.90	0.84	0.84	0.84	0.84	0.84	0.84	0.79
240.0	0.90	0.90	0.90	0.84	0.84	0.84	0.84	0.84	0.79
255.0	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.84
270.0	0.90	0.90	0.90	0.90	0.90	0.90	0.84	0.90	0.84
285.0	0.90	0.84	0.90	0.84	0.84	0.84	0.84	0.84	0.84
300.0	0.96	0.96	0.96	0.90	0.90	0.90	0.90	0.90	0.90
315.0	0.96	0.90	0.96	0.90	0.90	0.90	0.90	0.84	0.90
330.0	0.96	0.90	0.90	0.84	0.90	0.90	0.90	0.84	0.84
345.0	0.96	0.90	0.90	0.90	0.84	0.90	0.90	0.84	0.90
360.0	1.01	0.96	0.96	0.90	0.90	0.90	0.90	0.90	0.84

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	0.90	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
15.0	0.84	0.90	0.84	0.84	0.84	0.84	0.84	0.84	0.79
30.0	0.84	0.84	0.84	0.84	0.84	0.79	0.79	0.79	0.79
45.0	0.90	0.90	0.90	0.84	0.84	0.84	0.84	0.84	0.79
60.0	0.90	0.90	0.90	0.90	0.90	0.84	0.84	0.84	0.84
75.0	0.96	0.96	0.90	0.90	0.90	0.84	0.84	0.84	0.84
90.0	0.90	0.84	0.90	0.84	0.84	0.90	0.84	0.84	0.79
105.0	0.84	0.84	0.84	0.84	0.84	0.84	0.79	0.79	0.79
120.0	0.84	0.84	0.84	0.79	0.79	0.79	0.79	0.79	0.79
135.0	0.84	0.84	0.79	0.84	0.79	0.79	0.79	0.79	0.79
150.0	0.79	0.79	0.79	0.79	0.79	0.73	0.79	0.79	0.79
165.0	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
180.0	0.79	0.79	0.79	0.73	0.79	0.79	0.79	0.73	0.79
195.0	0.84	0.84	0.84	0.84	0.84	0.79	0.79	0.79	0.79
210.0	0.84	0.84	0.79	0.79	0.79	0.79	0.84	0.79	0.79
225.0	0.84	0.84	0.84	0.79	0.84	0.79	0.79	0.73	0.79
240.0	0.79	0.84	0.84	0.79	0.79	0.79	0.79	0.79	0.79
255.0	0.84	0.84	0.84	0.84	0.84	0.79	0.84	0.84	0.84
270.0	0.84	0.90	0.84	0.84	0.84	0.90	0.90	0.84	0.90
285.0	0.90	0.84	0.84	0.90	0.90	0.90	0.90	0.84	0.90
300.0	0.84	0.90	0.90	0.90	0.84	0.90	0.90	0.90	0.90
315.0	0.90	0.90	0.90	0.90	0.84	0.84	0.84	0.84	0.84
330.0	0.90	0.84	0.84	0.84	0.84	0.84	0.84	0.79	0.84
345.0	0.84	0.84	0.84	0.84	0.84	0.79	0.79	0.79	0.79
360.0	0.90	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
C/γ(°)	76.5	77.0	77.5	78.0	78.5	79.0	79.5	80.0	80.5
0.0	0.79	0.79	0.84	0.79	0.79	0.79	0.79	0.79	0.79
15.0	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
30.0	0.79	0.79	0.79	0.79	0.73	0.73	0.73	0.73	0.73
45.0	0.79	0.79	0.79	0.79	0.79	0.73	0.79	0.73	0.73
60.0	0.84	0.79	0.84	0.79	0.79	0.79	0.79	0.79	0.79
75.0	0.84	0.84	0.84	0.84	0.79	0.84	0.79	0.79	0.79
90.0	0.79	0.79	0.79	0.79	0.79	0.79	0.73	0.79	0.73
105.0	0.79	0.79	0.79	0.79	0.73	0.73	0.79	0.73	0.73
120.0	0.79	0.73	0.79	0.79	0.73	0.73	0.73	0.73	0.73
135.0	0.79	0.73	0.79	0.73	0.73	0.73	0.73	0.73	0.73
150.0	0.79	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
165.0	0.79	0.79	0.79	0.79	0.73	0.73	0.73	0.73	0.79
180.0	0.73	0.79	0.79	0.73	0.79	0.73	0.73	0.73	0.73
195.0	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
210.0	0.73	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.84
225.0	0.73	0.73	0.79	0.73	0.79	0.73	0.73	0.73	0.73
240.0	0.79	0.79	0.79	0.79	0.84	0.79	0.84	0.79	0.79
255.0	0.84	0.84	0.84	0.84	0.79	0.79	0.84	0.84	0.84
270.0	0.90	0.90	0.90	0.90	0.96	0.96	0.96	0.90	0.90
285.0	0.90	0.90	0.96	0.90	0.90	0.96	0.96	0.90	0.90
300.0	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.96
315.0	0.84	0.79	0.84	0.90	0.84	0.84	0.84	0.84	0.84
330.0	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
345.0	0.79	0.79	0.79	0.84	0.79	0.79	0.79	0.73	0.79
360.0	0.79	0.79	0.84	0.79	0.79	0.79	0.79	0.79	0.79

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	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.73	0.73
15.0	0.79	0.79	0.79	0.79	0.73	0.73	0.73	0.73	0.73
30.0	0.73	0.73	0.68	0.68	0.68	0.68	0.68	0.68	0.68
45.0	0.73	0.73	0.68	0.73	0.73	0.68	0.68	0.68	0.68
60.0	0.79	0.79	0.79	0.73	0.73	0.73	0.68	0.68	0.68
75.0	0.79	0.79	0.79	0.79	0.73	0.73	0.73	0.68	0.68
90.0	0.73	0.73	0.73	0.68	0.73	0.68	0.68	0.68	0.68
105.0	0.73	0.73	0.68	0.73	0.68	0.68	0.56	0.62	0.56
120.0	0.73	0.68	0.73	0.68	0.62	0.62	0.62	0.62	0.62
135.0	0.73	0.73	0.68	0.68	0.68	0.68	0.68	0.68	0.62
150.0	0.73	0.73	0.68	0.68	0.68	0.68	0.68	0.68	0.62
165.0	0.73	0.73	0.73	0.73	0.79	0.73	0.73	0.73	0.68
180.0	0.79	0.79	0.79	0.79	0.79	0.73	0.73	0.68	0.68
195.0	0.79	0.84	0.90	0.90	0.79	0.84	0.79	0.73	0.73
210.0	0.84	0.84	0.90	0.90	0.84	0.73	0.73	0.73	0.68
225.0	0.73	0.73	0.73	0.79	0.73	0.73	0.68	0.68	0.68
240.0	0.79	0.79	0.79	0.79	0.79	0.73	0.73	0.73	0.73
255.0	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.79
270.0	0.90	0.90	0.90	0.90	0.84	0.84	0.84	0.79	0.79
285.0	0.96	0.96	0.96	0.90	0.84	0.84	0.79	0.79	0.79
300.0	0.90	0.84	0.90	0.84	0.84	0.79	0.84	0.73	0.79
315.0	0.90	0.84	0.84	0.84	0.84	0.79	0.79	0.79	0.73
330.0	0.84	0.84	0.84	0.84	0.79	0.84	0.79	0.79	0.79
345.0	0.73	0.79	0.73	0.79	0.73	0.73	0.68	0.68	0.68
360.0	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.73	0.73
C/γ(°)	85.5	86.0	86.5	87.0	87.5	88.0	88.5	89.0	89.5
0.0	0.73	0.73	0.68	0.51	0.39	0.28	0.28	0.23	0.17
15.0	0.73	0.68	0.62	0.45	0.28	0.28	0.23	0.23	0.23
30.0	0.62	0.62	0.45	0.28	0.28	0.28	0.23	0.17	0.23
45.0	0.68	0.68	0.56	0.39	0.28	0.28	0.23	0.23	0.23
60.0	0.68	0.62	0.39	0.34	0.28	0.28	0.23	0.23	0.17
75.0	0.68	0.62	0.56	0.39	0.28	0.23	0.23	0.23	0.23
90.0	0.62	0.56	0.39	0.28	0.28	0.23	0.17	0.23	0.17
105.0	0.56	0.51	0.39	0.28	0.28	0.28	0.23	0.23	0.23
120.0	0.56	0.51	0.34	0.28	0.23	0.23	0.17	0.17	0.17
135.0	0.62	0.56	0.39	0.28	0.28	0.23	0.17	0.23	0.17
150.0	0.56	0.39	0.28	0.23	0.23	0.23	0.23	0.17	0.17
165.0	0.68	0.51	0.34	0.28	0.23	0.17	0.23	0.23	0.17
180.0	0.56	0.34	0.23	0.28	0.23	0.17	0.17	0.17	0.17
195.0	0.68	0.45	0.34	0.28	0.23	0.23	0.23	0.23	0.23
210.0	0.68	0.56	0.39	0.28	0.28	0.28	0.23	0.23	0.23
225.0	0.62	0.45	0.34	0.28	0.28	0.23	0.23	0.23	0.17
240.0	0.68	0.68	0.45	0.28	0.28	0.23	0.23	0.23	0.23
255.0	0.79	0.68	0.39	0.28	0.28	0.23	0.23	0.23	0.17
270.0	0.73	0.73	0.62	0.34	0.28	0.28	0.23	0.23	0.17
285.0	0.73	0.68	0.51	0.28	0.28	0.23	0.23	0.17	0.17
300.0	0.73	0.73	0.68	0.45	0.28	0.28	0.23	0.23	0.23
315.0	0.79	0.73	0.62	0.34	0.28	0.23	0.23	0.23	0.17
330.0	0.73	0.79	0.73	0.51	0.28	0.28	0.28	0.23	0.17
345.0	0.62	0.62	0.56	0.39	0.28	0.28	0.23	0.23	0.17
360.0	0.73	0.73	0.68	0.51	0.39	0.28	0.28	0.23	0.17

Intensity data(cd)

C/ $\gamma$ ( $^{\circ}$ )	90.0
0.0	0.17
15.0	0.23
30.0	0.17
45.0	0.17
60.0	0.17
75.0	0.23
90.0	0.17
105.0	0.17
120.0	0.23
135.0	0.17
150.0	0.17
165.0	0.17
180.0	0.17
195.0	0.17
210.0	0.17
225.0	0.17
240.0	0.17
255.0	0.17
270.0	0.17
285.0	0.17
300.0	0.17
315.0	0.17
330.0	0.23
345.0	0.17
360.0	0.17