



NATA LIGHTING CO.,LTD.
www.nata.cn
Email:info@nata.com
Tel:+86-750-3770000 Fax:+86-750-3771111
Address:380JinOU Road,GaoXin Zone,Jiang Men City,Guangdong,China

Nata

LumCAT: 1-0941-N	
Luminaire: 92.70.259.00	
Report No: 200902-B010	Voltage(V): 36.3000
Test No: 200902-C010	Current(A): 0.2500
LampCAT: LUMINUS CXM-6-AC40	Power (W): 9.0750
Lamp flux(lm): 1033.6	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(feet)(ft.):0.000	Width(feet)(ft.):0.000
Phm Type: C	Height(feet)(ft.):0.000

Photometric Results

Lumens(lm): 776.56
Efficiency(%): 75.13%
Lumens(lm)/Power(W): 85.57
Central intensity(cd): 3418.594
Maximum intensity(cd): 3418.594
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=23.4
 [C90/270]Total=23.4
Field angle(10%Imax): [C0/180]Total=49.5
 [C90/270]Total=49.5
Maximum s/h(1/2): C0_180=0.40 C90_270=0.40
Maximum s/h(1/4): C0_180=0.41 C90_270=0.41
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 75.20%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.126%

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2020/9/02
Humidity(%): 65.0%

Operator: NT07
Distance(feet): 24.61

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3418.594	0.818	0.818	.079%	.105%
1.0	3400.805	6.509	7.326	.630%	.943%
2.0	3345.398	12.803	20.13	1.239%	2.592%
3.0	3248.438	18.643	38.773	1.804%	4.993%
4.0	3131.016	23.951	62.724	2.317%	8.077%
5.0	2997.563	28.649	91.373	2.772%	11.767%
6.0	2819.813	32.323	123.696	3.127%	15.929%
7.0	2636.930	35.241	158.937	3.409%	20.467%
8.0	2460.023	37.544	196.481	3.632%	25.302%
9.0	2251.828	38.630	235.111	3.737%	30.276%
10.0	2032.313	38.700	273.811	3.744%	35.260%
11.0	1844.719	38.599	312.41	3.734%	40.230%
12.0	1654.734	37.728	350.138	3.650%	45.089%
13.0	1453.711	35.861	385.999	3.469%	49.706%
14.0	1269.028	33.667	419.665	3.257%	54.042%
15.0	1138.359	32.309	451.974	3.126%	58.202%
16.0	1004.027	30.348	482.323	2.936%	62.111%
17.0	880.334	28.225	510.548	2.731%	65.745%
18.0	779.955	26.430	536.978	2.557%	69.149%
19.0	691.734	24.696	561.675	2.389%	72.329%
20.0	615.698	23.093	584.767	2.234%	75.303%
21.0	546.398	21.473	606.24	2.077%	78.068%
22.0	484.235	19.892	626.132	1.924%	80.629%
23.0	433.807	18.588	644.72	1.798%	83.023%
24.0	380.602	16.976	661.696	1.642%	85.209%
25.0	330.047	15.296	676.992	1.480%	87.179%
26.0	286.727	13.784	690.775	1.334%	88.954%
27.0	250.636	12.478	703.253	1.207%	90.561%
28.0	193.936	9.984	713.238	.966%	91.846%
29.0	155.862	8.286	721.524	.802%	92.913%
30.0	120.375	6.600	728.124	.639%	93.763%
31.0	88.327	4.989	733.113	.483%	94.406%
32.0	62.093	3.608	736.721	.349%	94.870%
33.0	43.861	2.620	739.341	.253%	95.208%
34.0	32.140	1.971	741.312	.191%	95.462%
35.0	25.629	1.612	742.924	.156%	95.669%
36.0	22.472	1.448	744.372	.140%	95.856%
37.0	20.363	1.344	745.716	.130%	96.029%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	18.401	1.242	746.958	.120%	96.189%
39.0	16.727	1.154	748.113	.112%	96.337%
40.0	15.398	1.085	749.198	.105%	96.477%
41.0	14.182	1.020	750.218	.099%	96.608%
42.0	13.050	0.958	751.176	.093%	96.732%
43.0	12.101	0.905	752.081	.088%	96.848%
44.0	11.243	0.856	752.937	.083%	96.959%
45.0	10.477	0.812	753.75	.079%	97.063%
46.0	9.773	0.771	754.521	.075%	97.163%
47.0	9.155	0.734	755.255	.071%	97.257%
48.0	8.585	0.700	755.955	.068%	97.347%
49.0	8.079	0.669	756.623	.065%	97.433%
50.0	7.601	0.639	757.262	.062%	97.515%
51.0	7.207	0.614	757.876	.059%	97.595%
52.0	6.884	0.595	758.471	.058%	97.671%
53.0	6.560	0.575	759.045	.056%	97.745%
54.0	6.279	0.557	759.602	.054%	97.817%
55.0	6.103	0.548	760.151	.053%	97.887%
56.0	5.892	0.536	760.686	.052%	97.956%
57.0	5.759	0.530	761.216	.051%	98.025%
58.0	5.639	0.524	761.74	.051%	98.092%
59.0	5.541	0.521	762.261	.050%	98.159%
60.0	5.449	0.518	762.779	.050%	98.226%
61.0	5.358	0.514	763.293	.050%	98.292%
62.0	5.273	0.511	763.803	.049%	98.358%
63.0	5.224	0.510	764.314	.049%	98.424%
64.0	5.140	0.507	764.82	.049%	98.489%
65.0	5.063	0.503	765.323	.049%	98.554%
66.0	4.999	0.501	765.824	.048%	98.618%
67.0	4.936	0.498	766.322	.048%	98.682%
68.0	4.852	0.493	766.816	.048%	98.746%
69.0	4.795	0.491	767.307	.047%	98.809%
70.0	4.725	0.487	767.794	.047%	98.872%
71.0	4.669	0.484	768.278	.047%	98.934%
72.0	4.620	0.482	768.759	.047%	98.996%
73.0	4.549	0.477	769.236	.046%	99.057%
74.0	4.500	0.474	769.711	.046%	99.119%
75.0	4.437	0.470	770.181	.045%	99.179%

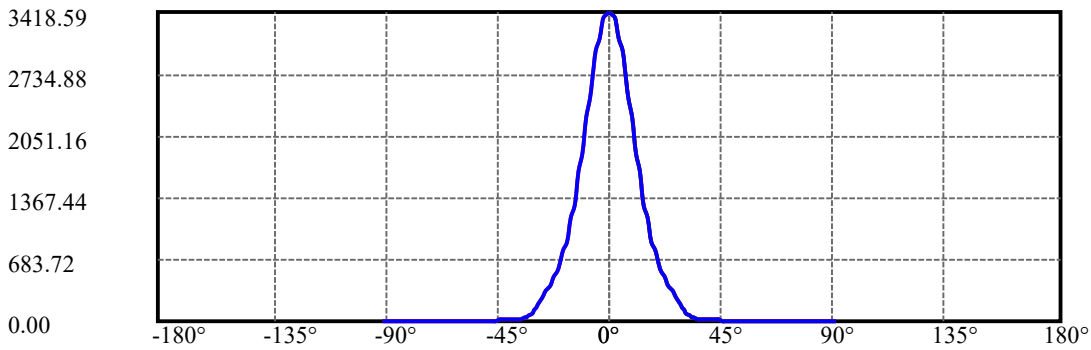
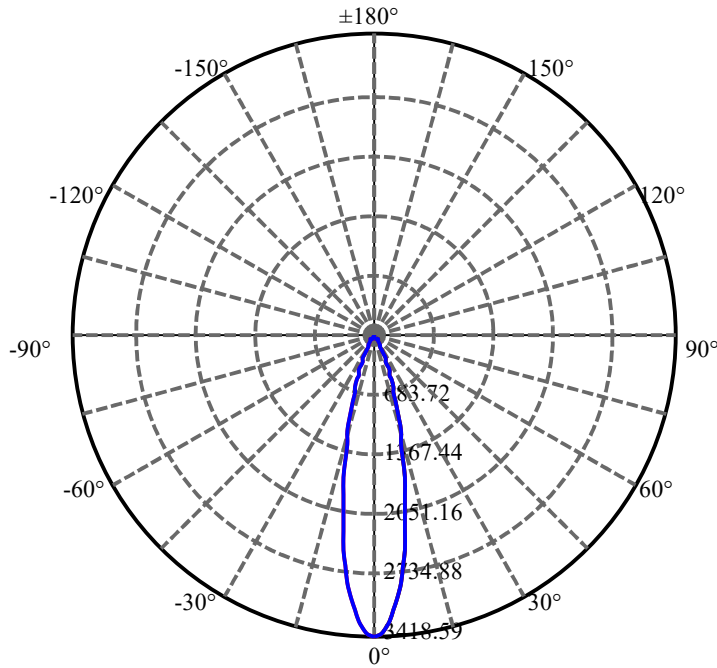
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	4.395	0.468	770.648	.045%	99.239%
77.0	4.345	0.464	771.113	.045%	99.299%
78.0	4.317	0.463	771.576	.045%	99.359%
79.0	4.275	0.460	772.036	.045%	99.418%
80.0	4.254	0.459	772.495	.044%	99.477%
81.0	4.212	0.456	772.952	.044%	99.536%
82.0	4.310	0.468	773.42	.045%	99.596%
83.0	4.430	0.482	773.902	.047%	99.658%
84.0	4.036	0.440	774.342	.043%	99.715%
85.0	3.923	0.429	774.77	.041%	99.770%
86.0	3.783	0.414	775.184	.040%	99.823%
87.0	3.656	0.400	775.585	.039%	99.875%
88.0	3.572	0.391	775.976	.038%	99.925%
89.0	3.530	0.387	776.363	.037%	99.975%
90.0	3.509	0.192	776.556	.019%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	728.12	70.44%	93.76%
0-40	749.20	72.48%	96.48%
0-60	762.78	73.80%	98.23%
0-90	776.36	75.11%	99.98%
0-120	776.36	75.11%	99.98%
0-180	776.56	75.13%	100.00%
60-90	14.10	1.36%	1.82%
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%
0-21.75	621.24	60.10%	80.00%

ZONAL LUMEN SUMMARY

0-10	273.81
10-20	310.96
20-30	143.36
30-40	21.07
40-50	8.06
50-60	5.52
60-70	5.01
70-80	4.70
80-90	3.87
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: —————

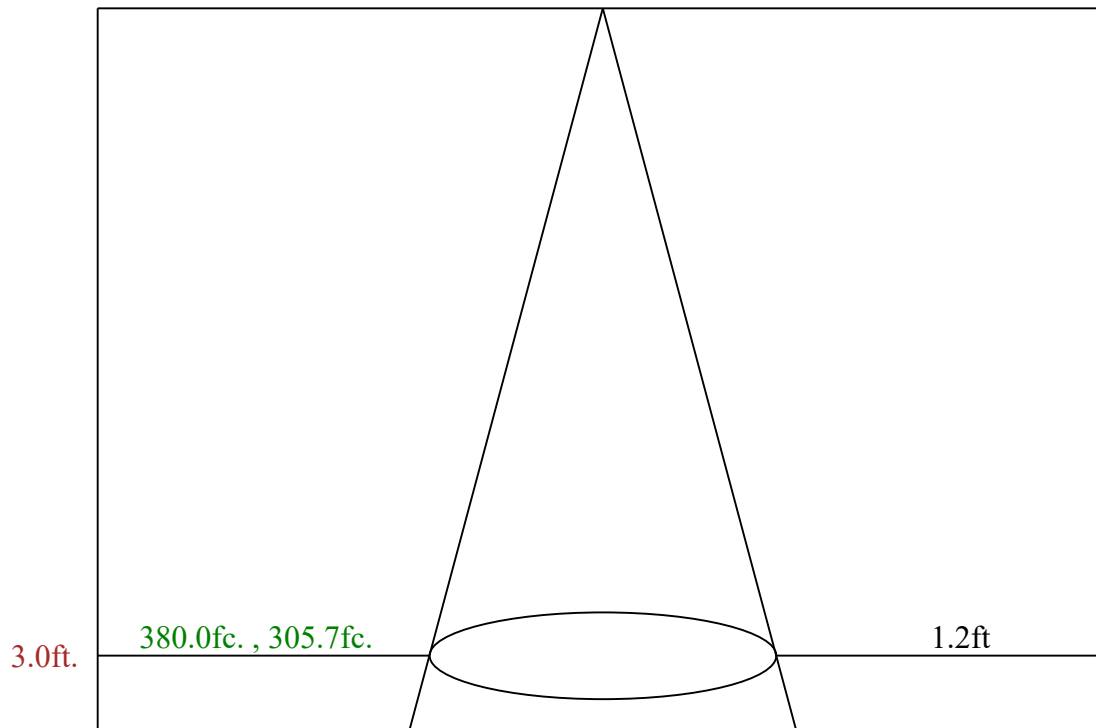
C90/C270: —————

Field angle(10%Imax):C0/180Left:24.8 Right:24.8

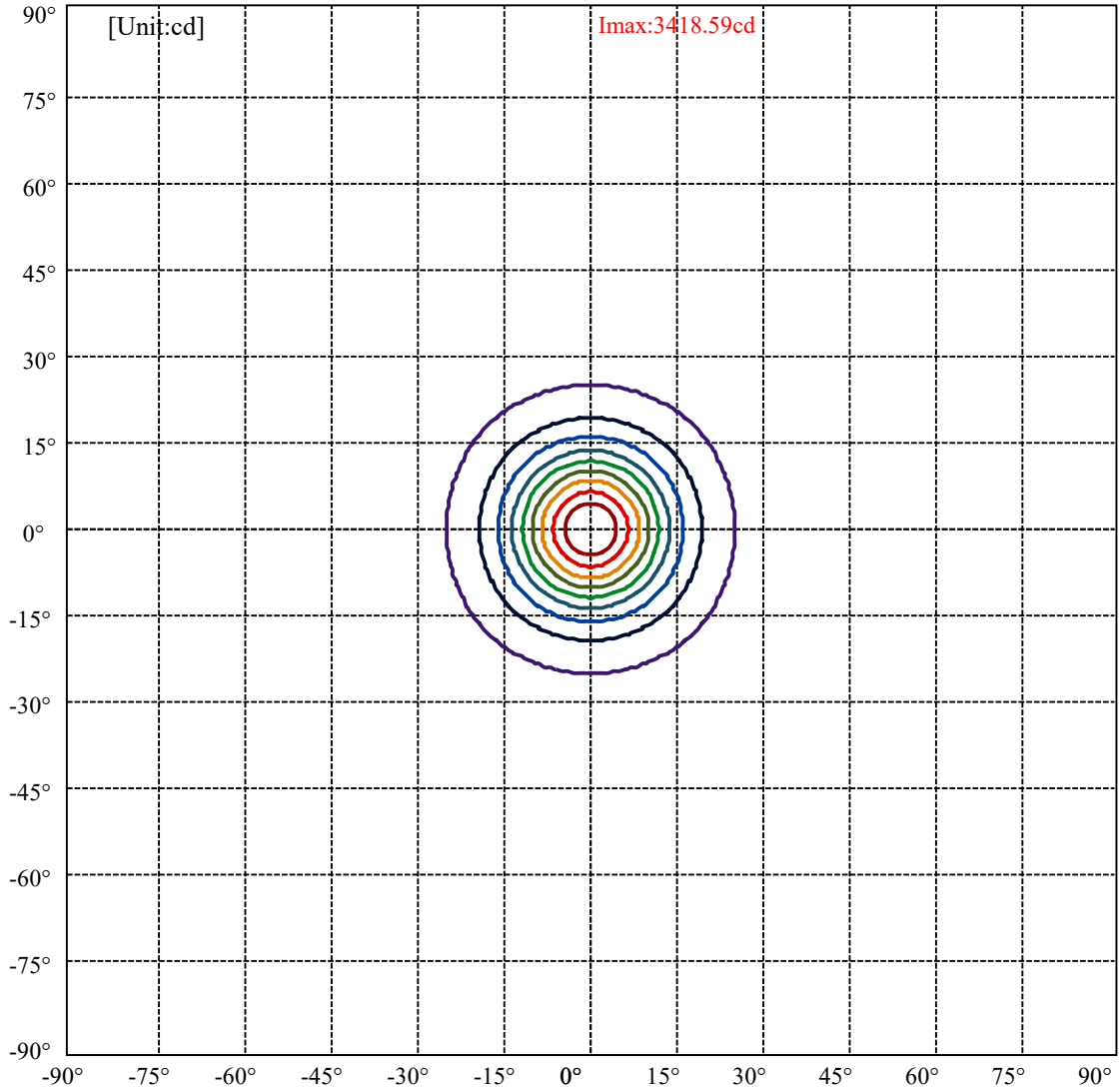
:C90/270Left:24.8 Right:24.8

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

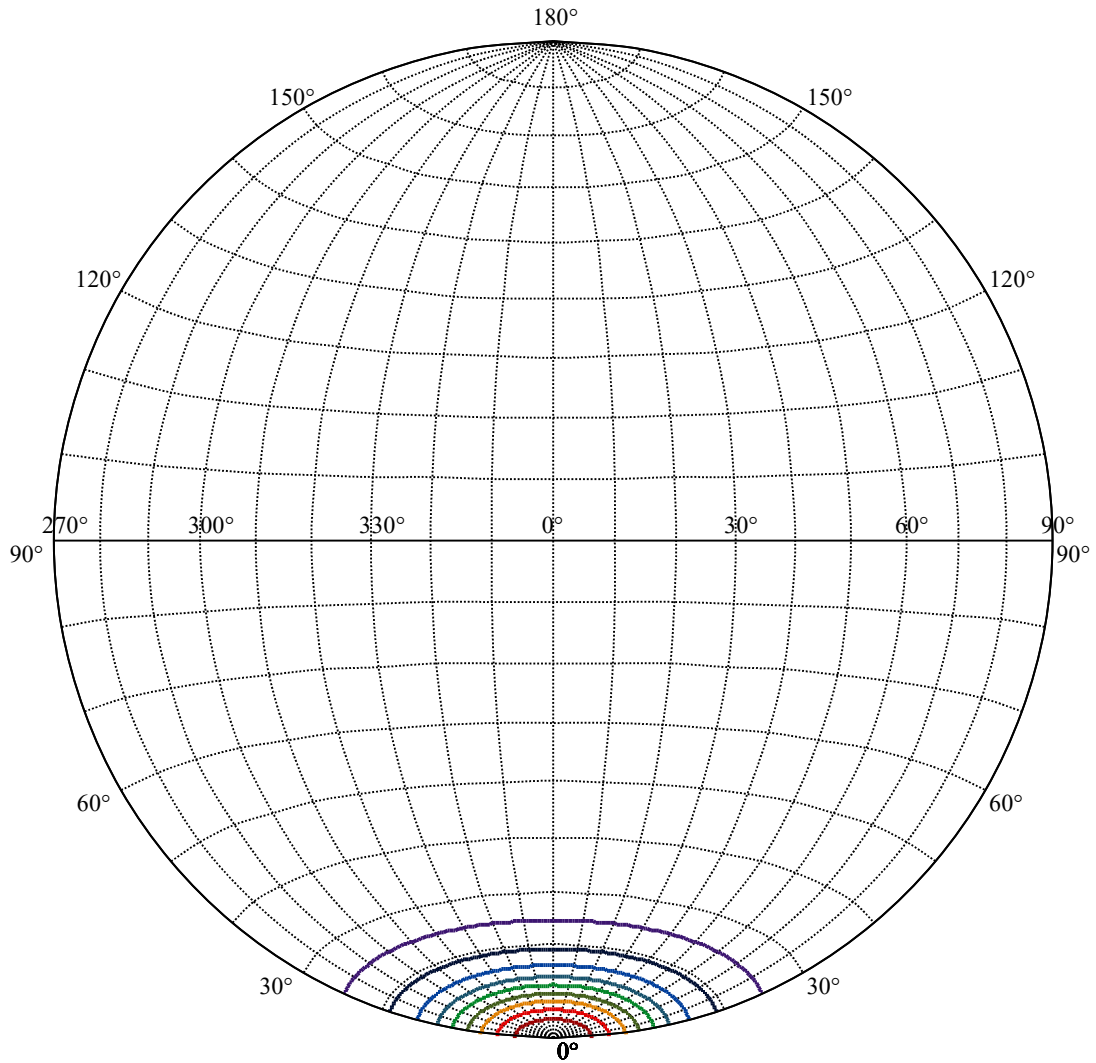
:C90/270Left:11.7 Right:11.7



Max , Ave Beam angle of C0 plane 23.52



(10%Imax) 341.859	—
(20%Imax) 683.719	—
(30%Imax) 1025.58	—
(40%Imax) 1367.44	—
(50%Imax) 1709.3	—
(60%Imax) 2051.16	—
(70%Imax) 2393.02	—
(80%Imax) 2734.88	—
(90%Imax) 3076.73	—



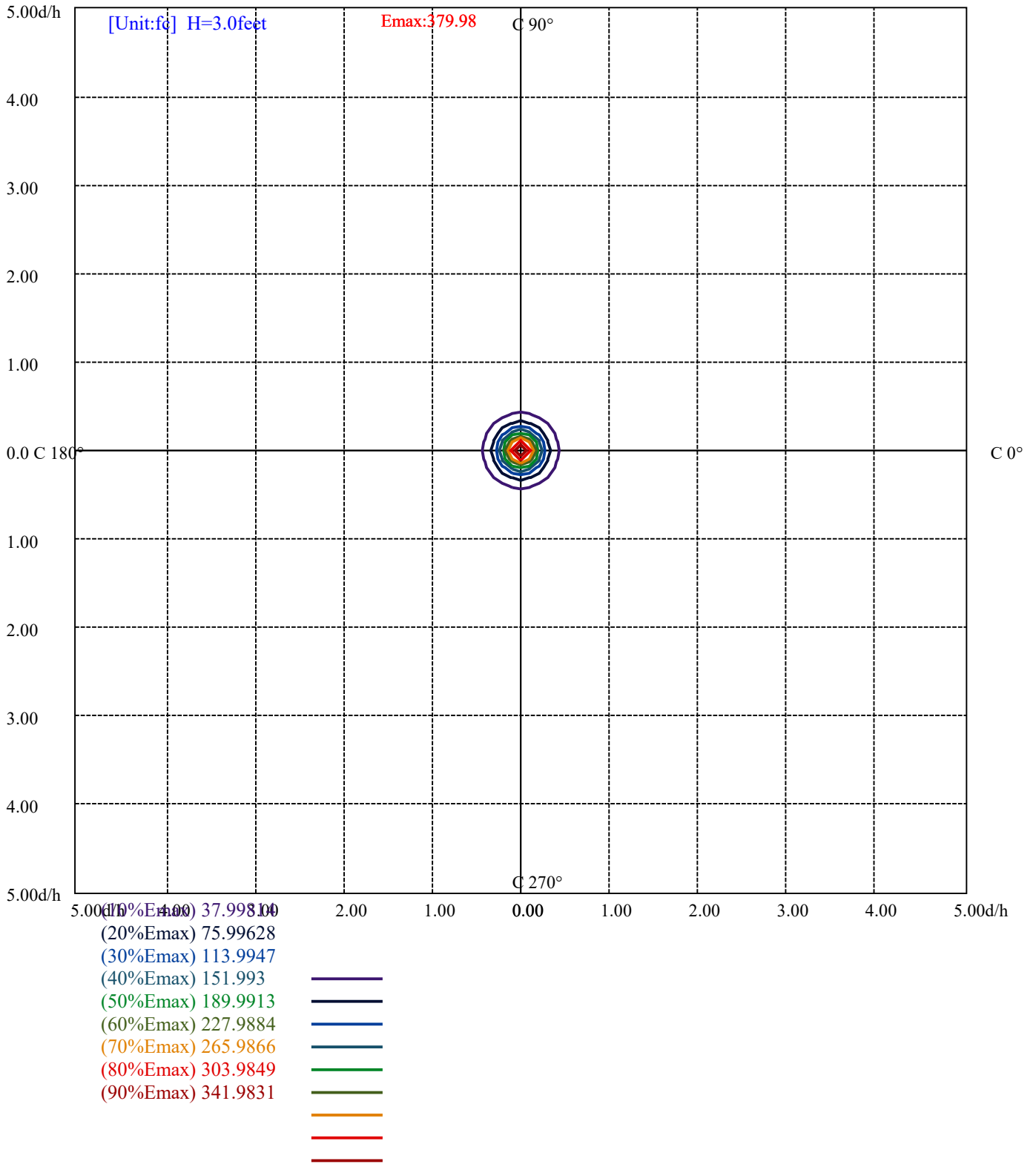
House

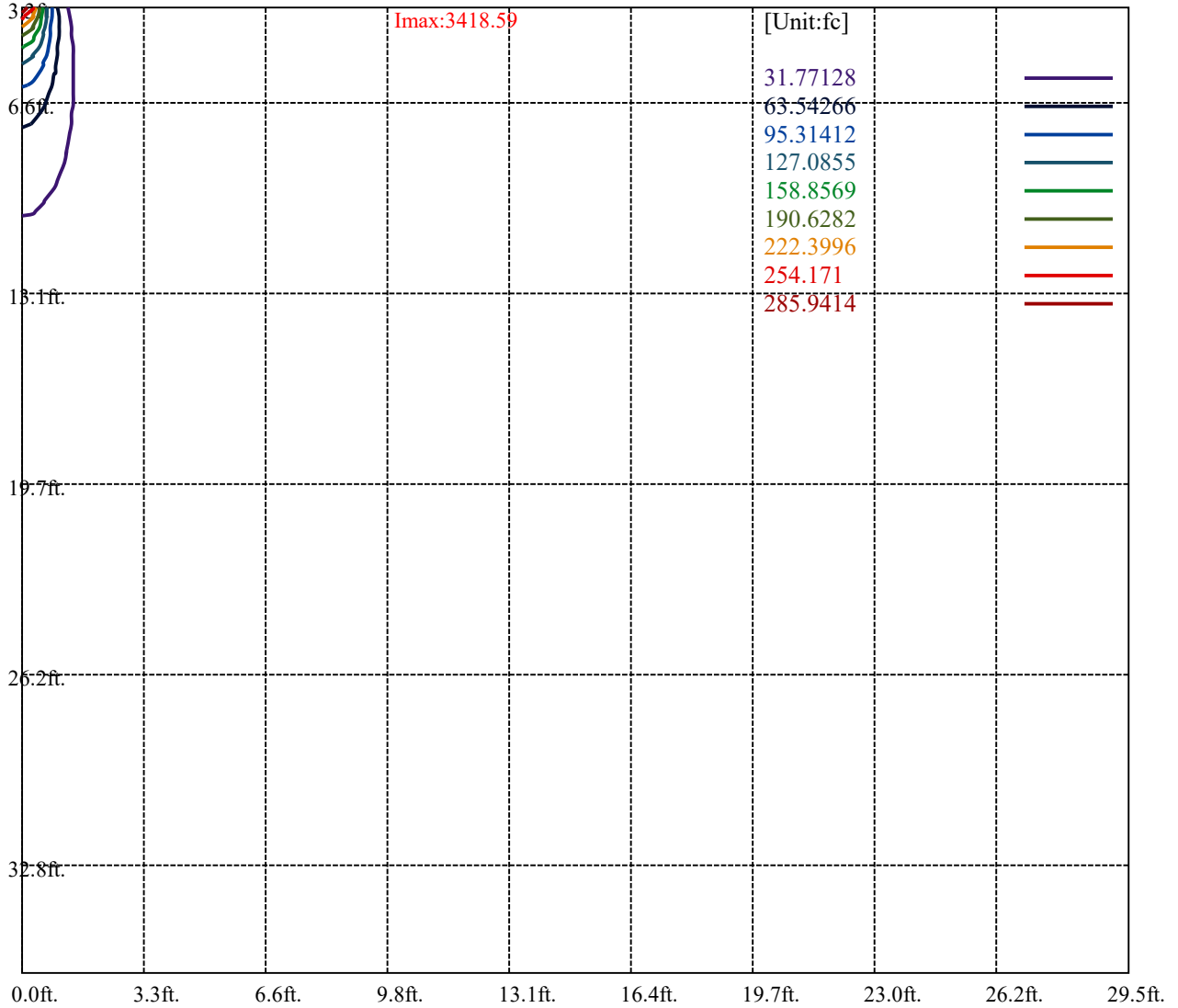
[Unit:cd]

Road

Imax:3418.59

(10%Imax) 341.859	—
(20%Imax) 683.719	—
(30%Imax) 1025.58	—
(40%Imax) 1367.44	—
(50%Imax) 1709.3	—
(60%Imax) 2051.16	—
(70%Imax) 2393.02	—
(80%Imax) 2734.88	—
(90%Imax) 3076.73	—





Luminance Table

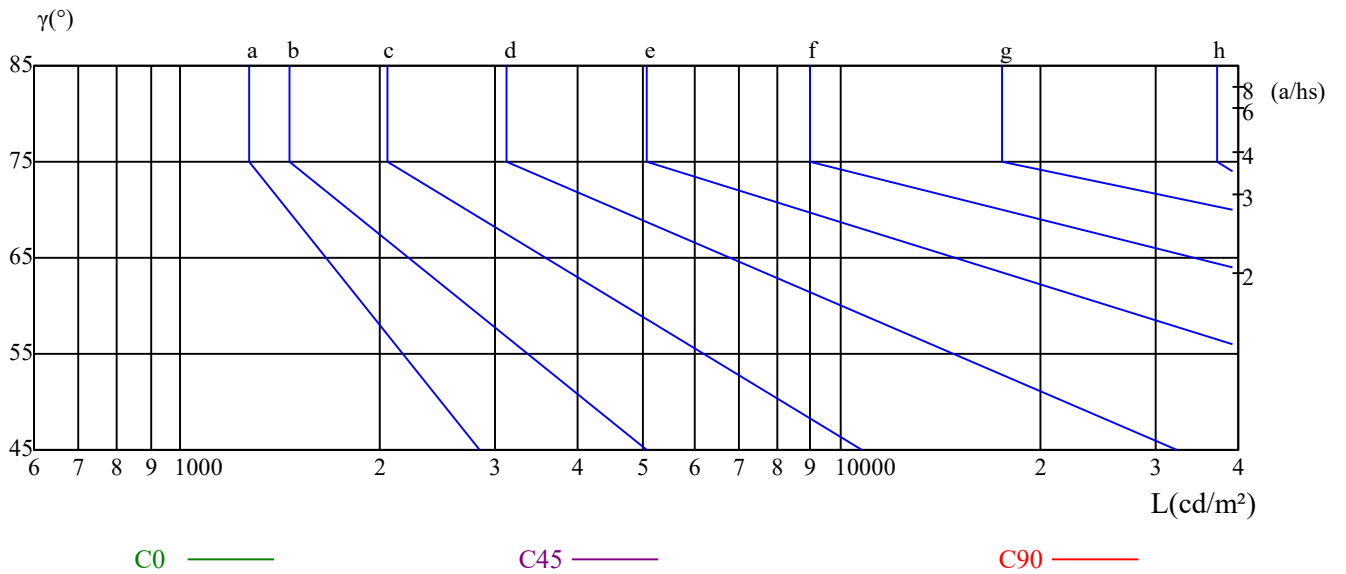
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

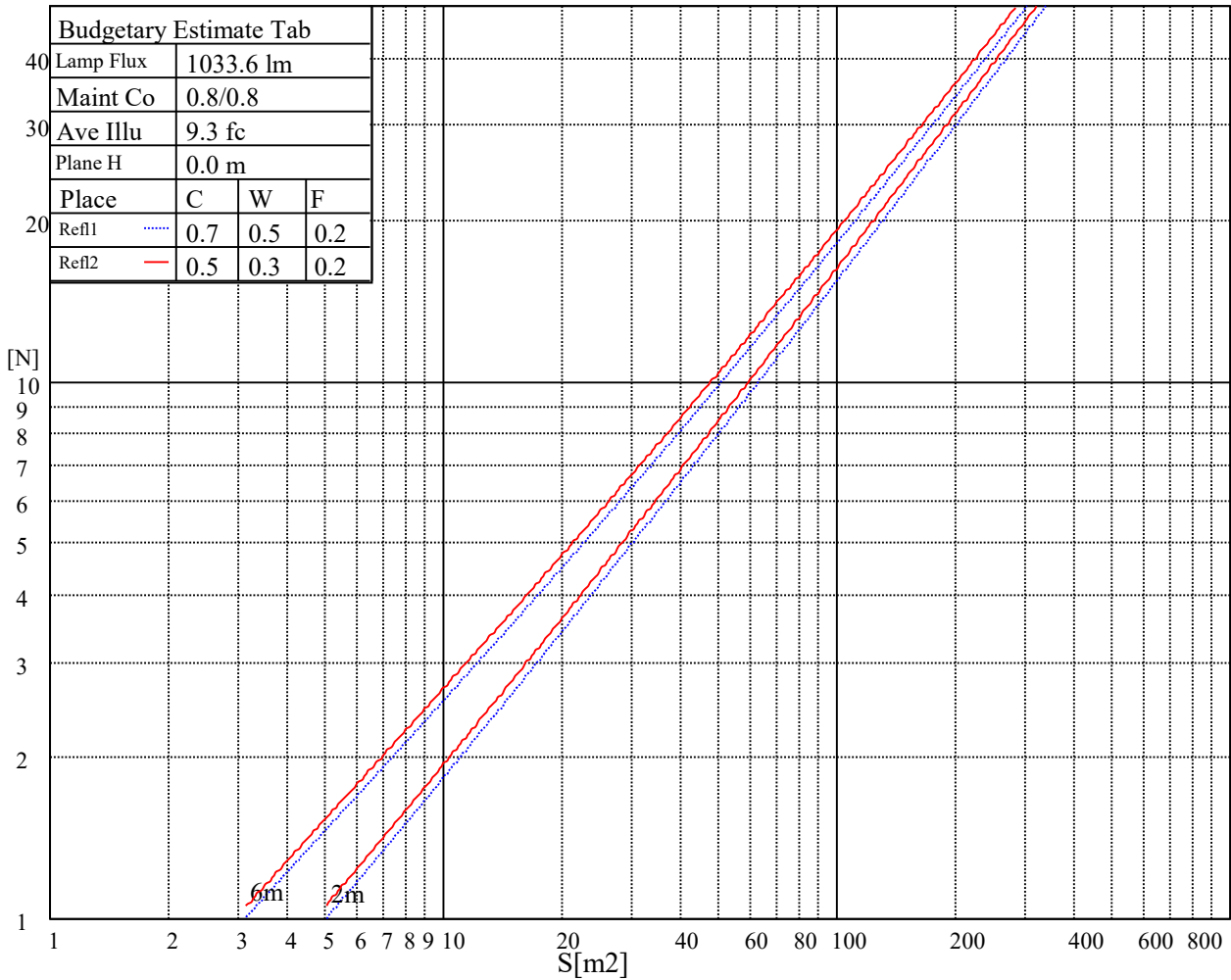
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

Glare Table

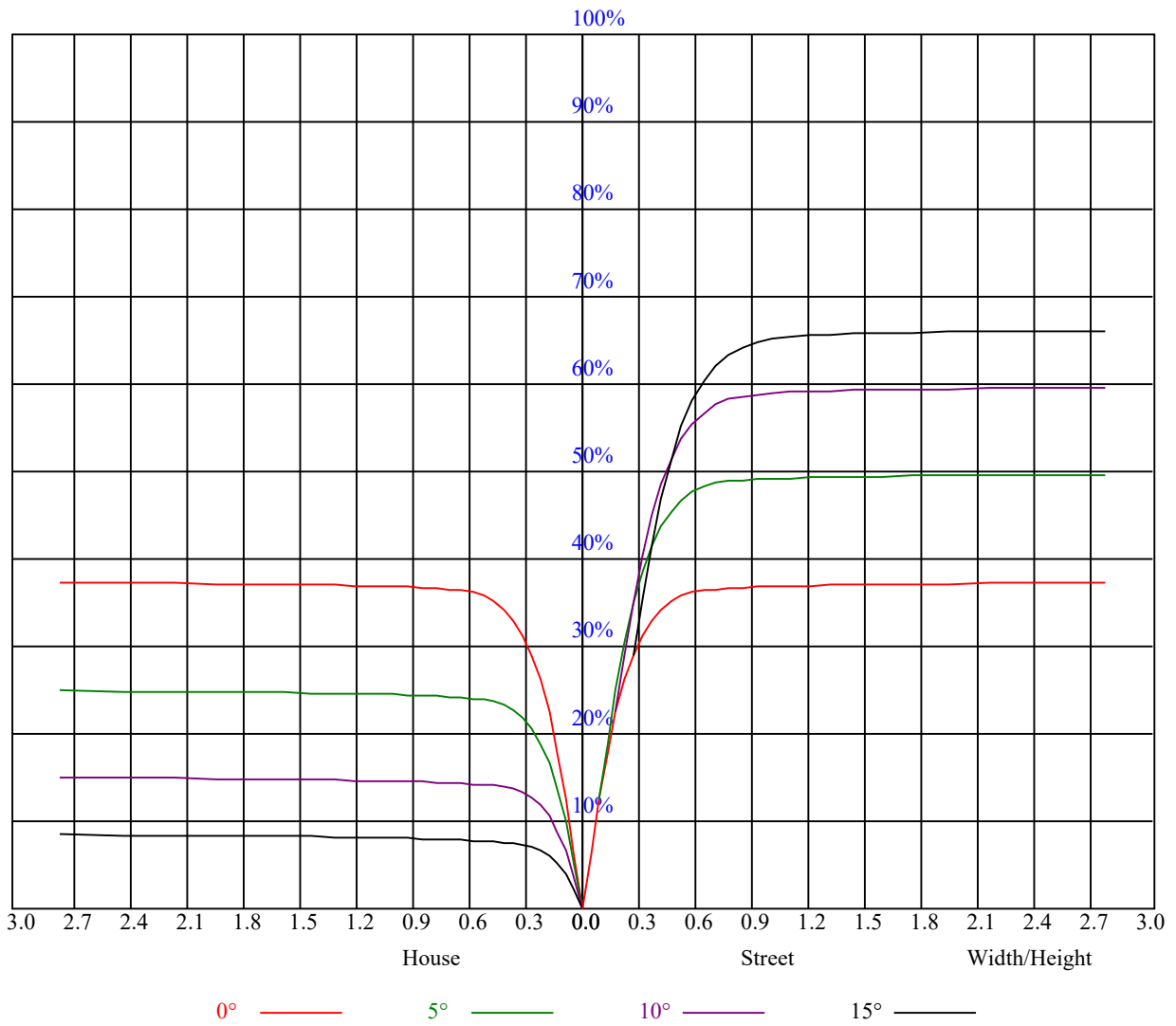
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve





RHOCC	80			70			50			30			10			0
RHOW	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR	COEFFICIENTS OF UTILIZATION RHOFC=20 CU															
0	0.90	0.90	0.90	0.87	0.87	0.87	0.84	0.84	0.84	0.80	0.80	0.80	0.77	0.77	0.77	0.75
1	0.84	0.83	0.81	0.83	0.81	0.80	0.80	0.79	0.78	0.77	0.76	0.75	0.74	0.74	0.73	0.72
2	0.80	0.78	0.76	0.79	0.77	0.75	0.77	0.75	0.73	0.74	0.73	0.72	0.72	0.71	0.70	0.69
3	0.77	0.74	0.71	0.76	0.73	0.71	0.74	0.71	0.70	0.72	0.70	0.69	0.70	0.69	0.68	0.67
4	0.73	0.70	0.68	0.73	0.70	0.67	0.71	0.69	0.67	0.70	0.68	0.66	0.68	0.67	0.65	0.64
5	0.71	0.67	0.65	0.70	0.67	0.65	0.69	0.66	0.64	0.68	0.65	0.64	0.67	0.65	0.63	0.62
6	0.68	0.65	0.62	0.68	0.64	0.62	0.67	0.64	0.62	0.66	0.63	0.61	0.65	0.63	0.61	0.60
7	0.66	0.63	0.60	0.65	0.62	0.60	0.65	0.62	0.60	0.64	0.61	0.60	0.63	0.61	0.59	0.58
8	0.64	0.61	0.58	0.63	0.60	0.58	0.63	0.60	0.58	0.62	0.60	0.58	0.61	0.59	0.58	0.57
9	0.62	0.59	0.57	0.62	0.59	0.56	0.61	0.58	0.56	0.60	0.58	0.56	0.60	0.58	0.56	0.55
10	0.60	0.57	0.55	0.60	0.57	0.55	0.59	0.57	0.55	0.59	0.56	0.55	0.58	0.56	0.54	0.54



Intensity data(cd)

C/γ(°)	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0
0.0	3408.19	3426.19	3391.88	3327.75	3220.31	3109.50	2955.38	2775.94	2606.06
45.0	3426.19	3393.00	3311.44	3219.19	3088.69	2950.88	2775.38	2581.88	2405.81
90.0	3413.81	3377.81	3309.19	3184.31	3063.38	2921.06	2721.94	2549.25	2366.44
135.0	3423.38	3399.75	3344.06	3263.63	3143.81	3001.50	2852.44	2668.50	2493.00
180.0	3413.81	3369.94	3297.94	3164.06	3040.31	2894.63	2685.38	2500.31	2314.69
225.0	3426.19	3412.69	3371.06	3272.06	3161.81	3035.25	2844.00	2672.44	2497.50
270.0	3413.81	3421.13	3382.31	3308.63	3195.56	3064.50	2895.75	2709.56	2539.69
315.0	3423.38	3405.94	3355.31	3247.88	3134.25	3003.19	2828.25	2637.56	2457.00
360.0	3408.19	3426.19	3391.88	3327.75	3220.31	3109.50	2955.38	2775.94	2606.06

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	2405.25	2190.94	1999.13	1833.75	1583.44	1412.44	1272.38	1095.19	955.69
45.0	2196.56	1975.50	1788.75	1608.75	1416.38	1244.25	1104.75	982.13	846.00
90.0	2152.69	1938.38	1754.44	1555.31	1370.25	1117.01	1069.59	949.44	833.51
135.0	2276.44	2059.88	1867.50	1683.00	1468.69	1311.19	1169.44	1014.75	903.94
180.0	2117.81	1881.56	1698.19	1525.50	1326.38	1111.84	1050.02	921.21	808.71
225.0	2287.13	2069.44	1882.69	1678.50	1482.19	1320.75	1122.13	1027.91	898.93
270.0	2333.25	2118.38	1929.94	1746.00	1526.63	1362.94	1208.25	1057.50	924.19
315.0	2245.50	2024.44	1837.13	1607.06	1455.75	1271.81	1110.32	984.09	871.71
360.0	2405.25	2190.94	1999.13	1833.75	1583.44	1412.44	1272.38	1095.19	955.69

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	860.63	743.06	657.56	596.81	520.88	465.19	416.81	357.75	311.63
45.0	751.50	674.44	586.69	522.00	465.19	413.44	361.69	320.06	285.75
90.0	734.96	659.70	592.03	517.16	461.19	413.04	352.52	307.63	264.88
135.0	808.88	718.31	634.50	567.56	496.69	452.81	399.38	344.81	297.56
180.0	722.81	640.63	575.55	510.02	450.00	402.75	351.73	300.77	258.41
225.0	789.92	707.40	637.43	557.72	500.01	447.08	387.79	342.68	299.19
270.0	821.25	721.13	640.13	574.88	510.19	457.31	402.75	352.13	304.88
315.0	749.70	669.21	601.71	525.04	469.74	418.84	372.15	314.55	271.52
360.0	860.63	743.06	657.56	596.81	520.88	465.19	416.81	357.75	311.63

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	288.56	212.79	176.96	143.10	104.01	77.12	54.84	37.07	27.23
45.0	226.86	182.87	142.03	106.48	74.25	48.77	34.09	28.35	24.81
90.0	213.36	175.16	137.53	98.16	75.43	52.26	36.56	30.71	26.38
135.0	286.88	204.69	165.77	131.85	92.70	64.35	44.78	29.36	24.92
180.0	217.91	171.23	137.19	105.64	74.98	51.41	36.28	26.27	21.32
225.0	252.00	206.21	167.23	128.14	97.76	69.19	48.09	34.82	26.55
270.0	288.56	213.13	170.33	134.94	100.46	72.62	52.48	39.71	28.74
315.0	230.96	185.40	149.85	114.69	87.02	61.03	43.76	30.83	25.09
360.0	288.56	212.79	176.96	143.10	104.01	77.12	54.84	37.07	27.23

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	23.40	21.15	19.18	17.21	15.75	14.57	13.39	12.26	11.53
45.0	22.33	20.03	18.00	16.48	15.08	13.89	12.83	11.98	11.03
90.0	22.95	21.09	19.24	17.21	15.92	14.74	13.61	12.54	11.64
135.0	22.16	19.91	17.66	16.26	14.91	13.67	12.49	11.64	10.74
180.0	18.90	16.99	15.64	14.46	13.22	12.26	11.48	10.58	9.90
225.0	22.50	20.42	18.62	16.82	15.64	14.46	13.22	12.32	11.53
270.0	25.14	23.23	20.53	18.51	17.33	15.69	14.23	13.39	12.26
315.0	22.39	20.08	18.34	16.88	15.36	14.18	13.16	12.09	11.31
360.0	23.40	21.15	19.18	17.21	15.75	14.57	13.39	12.26	11.53

Intensity data(cd)

C/γ(°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	10.80	9.96	9.34	8.78	8.27	7.71	7.26	6.92	6.58
45.0	10.35	9.68	9.06	8.49	8.04	7.48	7.14	6.81	6.47
90.0	10.74	10.07	9.45	8.83	8.27	7.88	7.43	7.09	6.75
135.0	9.96	9.39	8.78	8.27	7.71	7.26	6.92	6.64	6.30
180.0	9.28	8.61	8.21	7.71	7.26	6.92	6.58	6.24	6.02
225.0	10.63	9.96	9.34	8.66	8.21	7.76	7.26	6.98	6.64
270.0	11.53	10.69	9.90	9.34	8.83	8.21	7.82	7.48	7.09
315.0	10.52	9.84	9.17	8.61	8.04	7.59	7.26	6.92	6.64
360.0	10.80	9.96	9.34	8.78	8.27	7.71	7.26	6.92	6.58

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	6.30	6.08	5.91	5.74	5.51	5.46	5.40	5.29	5.23
45.0	6.24	6.08	5.85	5.74	5.68	5.57	5.46	5.34	5.29
90.0	6.47	6.30	6.08	5.96	5.85	5.79	5.68	5.57	5.46
135.0	6.08	5.91	5.63	5.57	5.46	5.40	5.29	5.29	5.12
180.0	5.79	5.63	5.46	5.34	5.29	5.18	5.18	5.06	5.01
225.0	6.24	6.13	5.91	5.74	5.63	5.46	5.40	5.29	5.29
270.0	6.81	6.64	6.41	6.19	6.02	5.91	5.74	5.63	5.51
315.0	6.30	6.08	5.91	5.79	5.68	5.57	5.46	5.40	5.29
360.0	6.30	6.08	5.91	5.74	5.51	5.46	5.40	5.29	5.23

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	5.18	5.12	5.06	5.01	4.95	4.89	4.78	4.78	4.73
45.0	5.29	5.18	5.06	5.01	4.95	4.89	4.84	4.73	4.67
90.0	5.40	5.29	5.18	5.06	5.01	4.95	4.89	4.78	4.78
135.0	5.12	5.01	4.95	4.89	4.84	4.73	4.73	4.67	4.56
180.0	4.95	4.89	4.84	4.78	4.73	4.61	4.56	4.50	4.44
225.0	5.18	5.12	5.06	5.01	4.89	4.84	4.78	4.73	4.67
270.0	5.46	5.34	5.23	5.18	5.12	5.01	4.95	4.89	4.84
315.0	5.23	5.18	5.12	5.06	5.01	4.89	4.84	4.73	4.67
360.0	5.18	5.12	5.06	5.01	4.95	4.89	4.78	4.78	4.73

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	4.67	4.56	4.56	4.50	4.39	4.39	4.33	4.28	4.28
45.0	4.61	4.56	4.50	4.44	4.39	4.33	4.28	4.22	4.22
90.0	4.73	4.61	4.61	4.50	4.50	4.44	4.50	4.44	4.44
135.0	4.50	4.50	4.44	4.33	4.33	4.28	4.28	4.22	4.16
180.0	4.39	4.33	4.28	4.22	4.16	4.11	4.11	4.05	4.05
225.0	4.61	4.50	4.44	4.39	4.39	4.33	4.28	4.22	4.22
270.0	4.78	4.73	4.67	4.61	4.56	4.50	4.44	4.44	4.39
315.0	4.67	4.61	4.50	4.50	4.44	4.39	4.33	4.33	4.28
360.0	4.67	4.56	4.56	4.50	4.39	4.39	4.33	4.28	4.28

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	4.22	4.16	4.16	4.11	4.05	3.99	3.77	3.60	3.54
45.0	4.11	4.11	4.05	3.99	3.94	3.71	3.66	3.54	3.54
90.0	4.50	5.51	6.75	3.94	3.77	3.60	3.60	3.54	3.49
135.0	4.11	4.11	4.05	3.94	3.71	3.60	3.54	3.54	3.49
180.0	3.99	3.94	3.88	3.88	3.66	3.54	3.54	3.49	3.49
225.0	4.16	4.16	4.11	4.11	4.05	3.83	3.71	3.60	3.60
270.0	4.33	4.28	4.22	4.16	4.11	3.99	3.77	3.66	3.60
315.0	4.28	4.22	4.22	4.16	4.11	3.99	3.66	3.60	3.49
360.0	4.22	4.16	4.16	4.11	4.05	3.99	3.77	3.60	3.54

Intensity data(cd)

C/ γ (°)	90.0
0.0	3.54
45.0	3.54
90.0	3.49
135.0	3.49
180.0	3.49
225.0	3.54
270.0	3.49
315.0	3.49
360.0	3.54