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Nata

LumCAT: 1-0941-N	
Luminaire: 92.70.259.00	
Report No: 200923-B042	Voltage(V): 230.9000
Test No: 200923-C042	Current(A): 0.0910
LampCAT: BRIDGELUX V6HD	Power (W): 11.3500
Lamp flux(lm): 1100.5	PF: 0.5400
Number of Lamps: 1	Ballast type: AC
Length(feet)(ft.):0.000	Width(feet)(ft.):0.000
Phm Type: C	Height(feet)(ft.):0.000

Photometric Results

Lumens(lm): 855.16
Efficiency(%): 77.71%
Lumens(lm)/Power(W): 75.42
Central intensity(cd): 3765.167
Maximum intensity(cd): 3765.167
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=23.2
[C90/270]Total=23.2
Field angle(10%Imax): [C0/180]Total=49.9
[C90/270]Total=49.9
Maximum s/h(1/2): C0_180=0.39 C90_270=0.39
Maximum s/h(1/4): C0_180=0.40 C90_270=0.40
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 77.79%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.412%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3765.167	0.901	0.901	.082%	.105%
1.0	3739.587	7.157	8.058	.650%	.942%
2.0	3674.797	14.064	22.122	1.278%	2.587%
3.0	3572.593	20.504	42.625	1.863%	4.985%
4.0	3432.919	26.260	68.886	2.386%	8.055%
5.0	3279.730	31.346	100.232	2.848%	11.721%
6.0	3087.737	35.394	135.626	3.216%	15.860%
7.0	2894.235	38.679	174.305	3.515%	20.383%
8.0	2694.120	41.117	215.422	3.736%	25.191%
9.0	2470.166	42.375	257.798	3.851%	30.146%
10.0	2233.973	42.540	300.338	3.866%	35.121%
11.0	2007.699	42.010	342.347	3.817%	40.033%
12.0	1793.141	40.883	383.231	3.715%	44.814%
13.0	1593.375	39.306	422.537	3.572%	49.410%
14.0	1399.989	37.141	459.677	3.375%	53.754%
15.0	1233.279	35.003	494.681	3.181%	57.847%
16.0	1051.552	31.785	526.466	2.888%	61.564%
17.0	950.781	30.484	556.949	2.770%	65.128%
18.0	855.422	28.988	585.937	2.634%	68.518%
19.0	759.321	27.109	613.046	2.463%	71.688%
20.0	675.940	25.352	638.398	2.304%	74.653%
21.0	602.350	23.672	662.07	2.151%	77.421%
22.0	534.549	21.959	684.029	1.995%	79.989%
23.0	474.590	20.335	704.364	1.848%	82.367%
24.0	420.525	18.757	723.121	1.704%	84.560%
25.0	373.164	17.294	740.415	1.572%	86.582%
26.0	324.707	15.609	756.025	1.418%	88.408%
27.0	279.441	13.912	769.937	1.264%	90.035%
28.0	237.655	12.235	782.172	1.112%	91.465%
29.0	214.610	11.410	793.581	1.037%	92.800%
30.0	159.987	8.772	802.354	.797%	93.825%
31.0	125.428	7.084	809.438	.644%	94.654%
32.0	87.662	5.094	814.532	.463%	95.249%
33.0	60.075	3.588	818.12	.326%	95.669%
34.0	42.163	2.586	820.705	.235%	95.971%
35.0	31.119	1.957	822.663	.178%	96.200%
36.0	24.919	1.606	824.269	.146%	96.388%
37.0	21.810	1.439	825.708	.131%	96.556%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	19.466	1.314	827.022	.119%	96.710%
39.0	17.488	1.207	828.229	.110%	96.851%
40.0	15.899	1.121	829.35	.102%	96.982%
41.0	14.443	1.039	830.389	.094%	97.104%
42.0	13.179	0.967	831.356	.088%	97.217%
43.0	12.146	0.908	832.265	.083%	97.323%
44.0	11.282	0.859	833.124	.078%	97.424%
45.0	10.412	0.807	833.931	.073%	97.518%
46.0	9.571	0.755	834.686	.069%	97.606%
47.0	8.909	0.715	835.401	.065%	97.690%
48.0	8.300	0.676	836.077	.061%	97.769%
49.0	7.738	0.640	836.718	.058%	97.844%
50.0	7.245	0.609	837.326	.055%	97.915%
51.0	6.792	0.579	837.905	.053%	97.983%
52.0	6.462	0.558	838.463	.051%	98.048%
53.0	6.154	0.539	839.002	.049%	98.111%
54.0	5.858	0.520	839.522	.047%	98.172%
55.0	5.632	0.506	840.028	.046%	98.231%
56.0	5.441	0.495	840.523	.045%	98.289%
57.0	5.278	0.485	841.008	.044%	98.346%
58.0	5.151	0.479	841.487	.044%	98.402%
59.0	5.046	0.474	841.962	.043%	98.457%
60.0	4.936	0.469	842.43	.043%	98.512%
61.0	4.861	0.466	842.897	.042%	98.566%
62.0	4.768	0.462	843.358	.042%	98.620%
63.0	4.675	0.457	843.815	.042%	98.674%
64.0	4.594	0.453	844.268	.041%	98.727%
65.0	4.553	0.453	844.72	.041%	98.780%
66.0	4.484	0.449	845.17	.041%	98.832%
67.0	4.449	0.449	845.619	.041%	98.885%
68.0	4.379	0.445	846.064	.040%	98.937%
69.0	4.345	0.445	846.509	.040%	98.989%
70.0	4.292	0.442	846.951	.040%	99.040%
71.0	4.263	0.442	847.393	.040%	99.092%
72.0	4.240	0.442	847.835	.040%	99.144%
73.0	4.205	0.441	848.276	.040%	99.195%
74.0	4.182	0.441	848.717	.040%	99.247%
75.0	4.159	0.441	849.158	.040%	99.299%

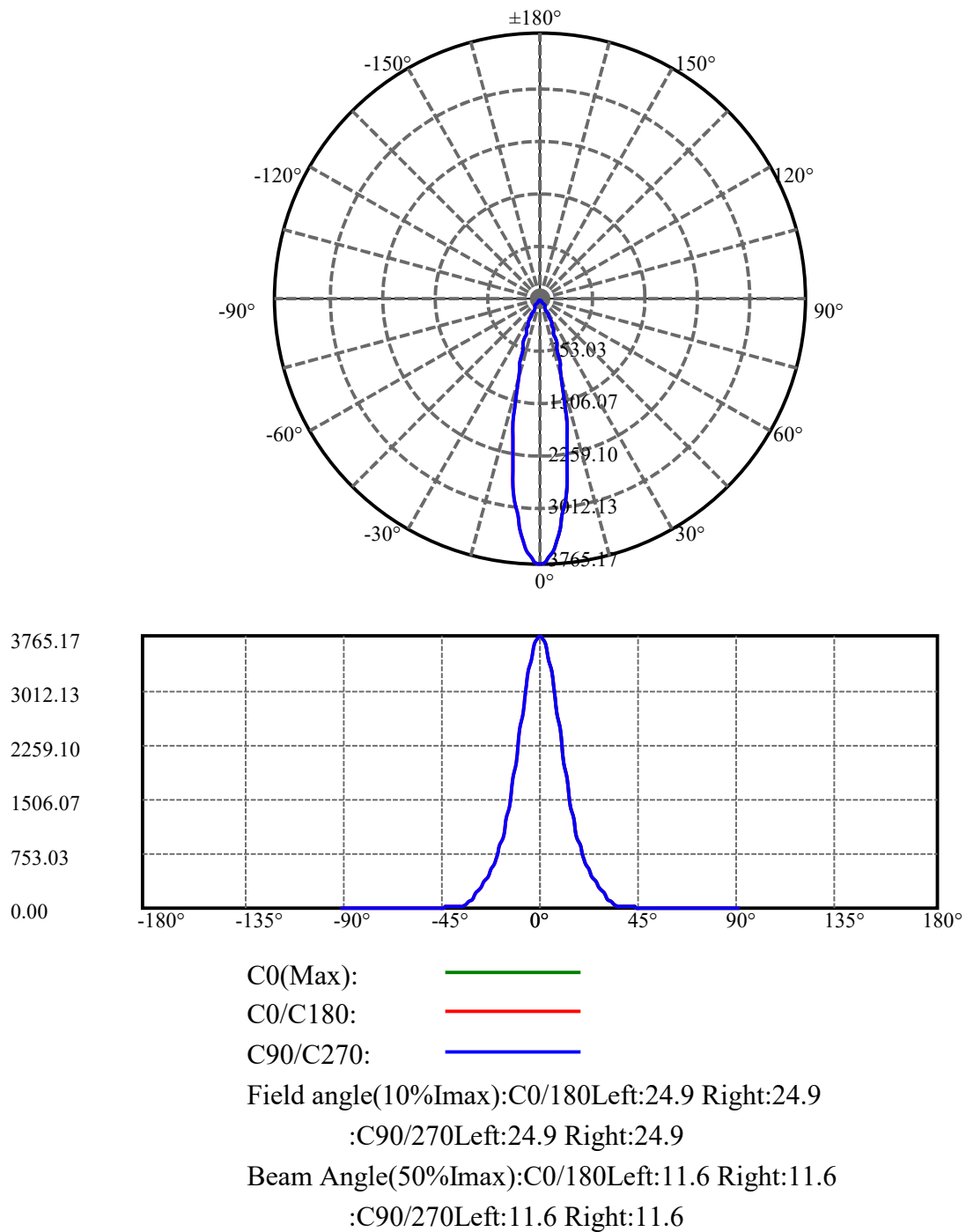
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	4.147	0.441	849.599	.040%	99.350%
77.0	4.107	0.439	850.038	.040%	99.401%
78.0	4.078	0.437	850.475	.040%	99.453%
79.0	4.037	0.435	850.91	.039%	99.503%
80.0	3.973	0.429	851.339	.039%	99.554%
81.0	3.915	0.424	851.763	.039%	99.603%
82.0	3.834	0.416	852.179	.038%	99.652%
83.0	3.799	0.414	852.593	.038%	99.700%
84.0	3.846	0.419	853.012	.038%	99.749%
85.0	3.962	0.433	853.445	.039%	99.800%
86.0	3.938	0.431	853.876	.039%	99.850%
87.0	3.677	0.403	854.278	.037%	99.897%
88.0	3.387	0.371	854.65	.034%	99.941%
89.0	3.138	0.344	854.994	.031%	99.981%
90.0	2.964	0.163	855.156	.015%	100.000%

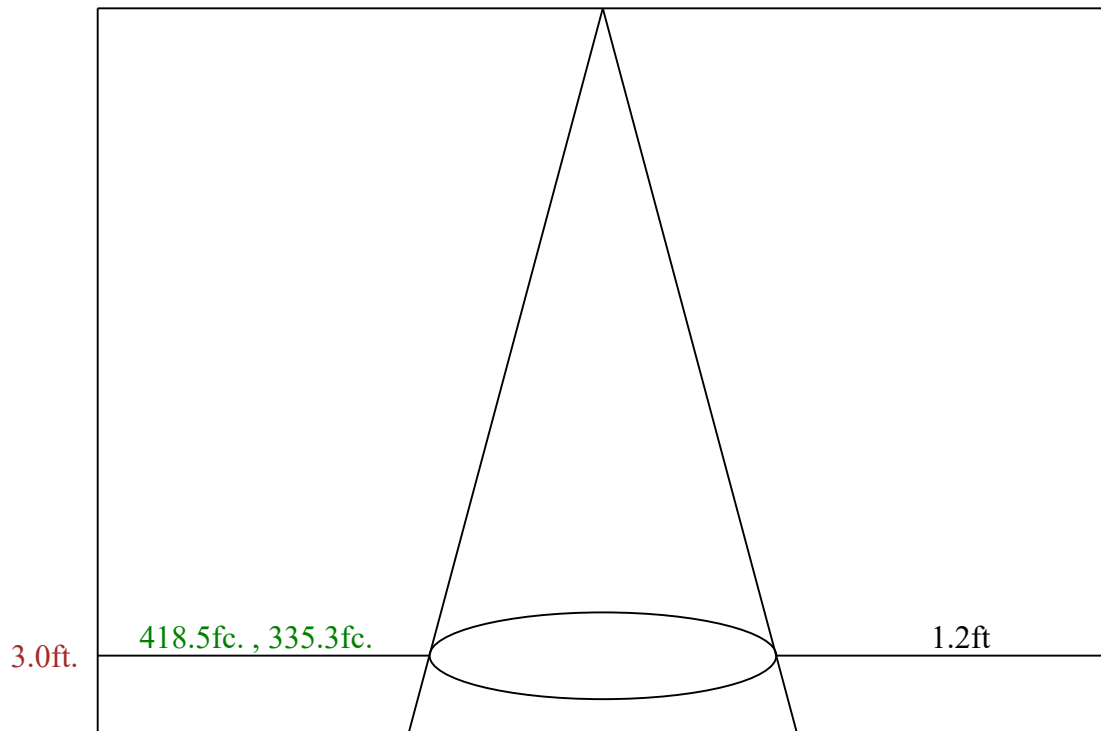
ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	802.35	72.91%	93.83%
0-40	829.35	75.36%	96.98%
0-60	842.43	76.55%	98.51%
0-90	854.99	77.69%	99.98%
0-120	854.99	77.69%	99.98%
0-180	855.16	77.71%	100.00%
60-90	13.03	1.18%	1.52%
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%
0-22.00	684.13	62.17%	80.00%

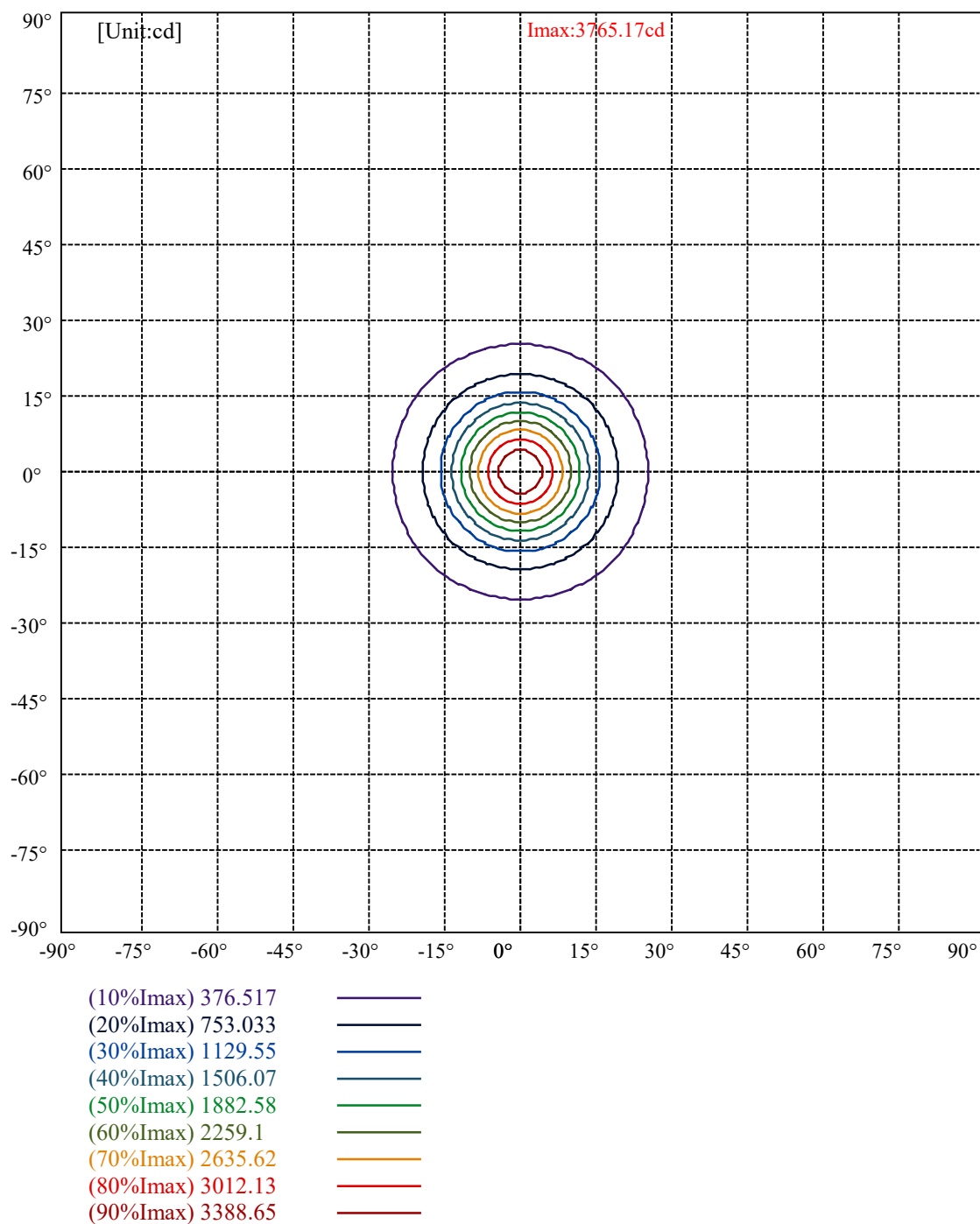
ZONAL LUMEN SUMMARY

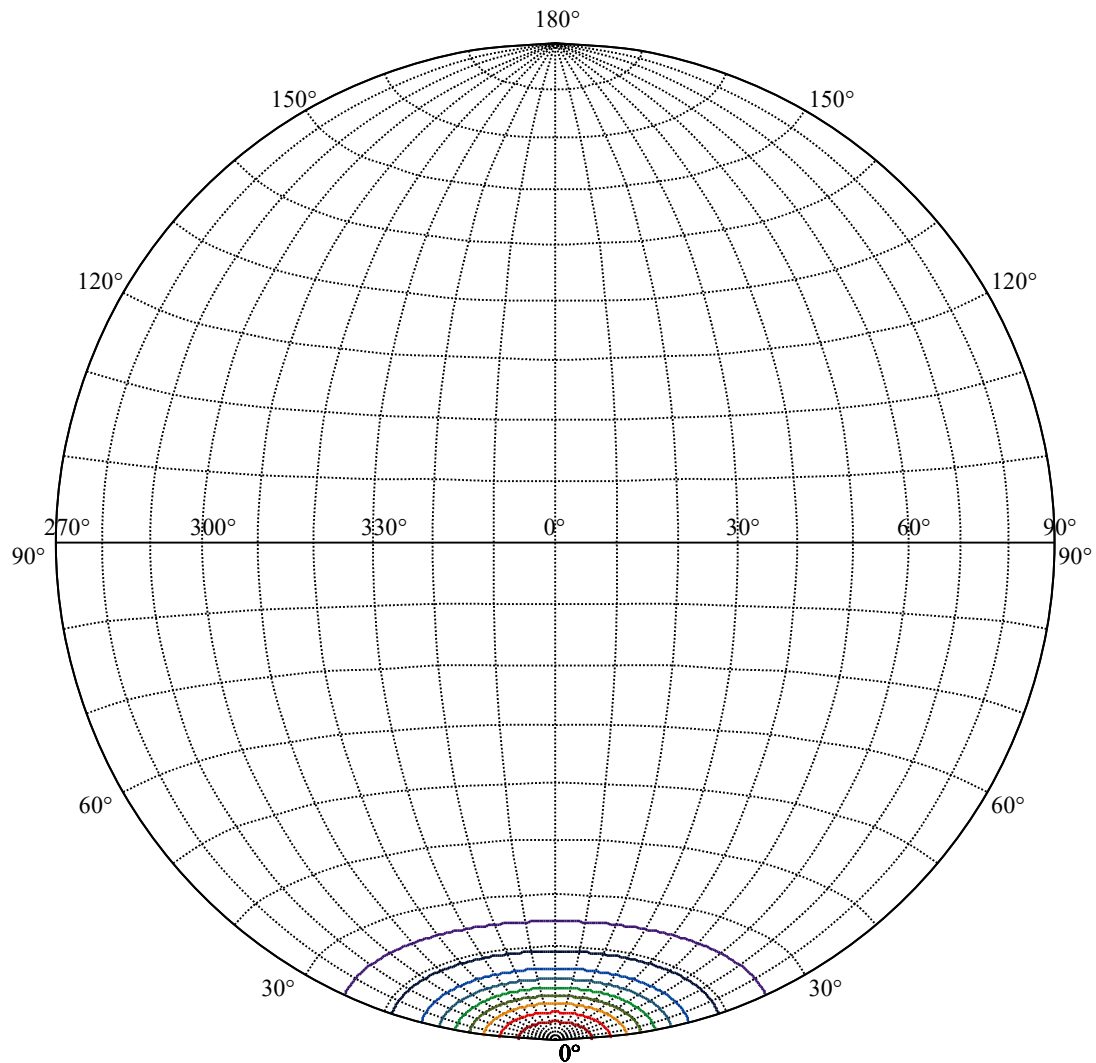
0-10	300.34
10-20	338.06
20-30	163.96
30-40	27.00
40-50	7.98
50-60	5.10
60-70	4.52
70-80	4.39
80-90	3.66
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00





Max , Ave Beam angle of C0 plane 23.29





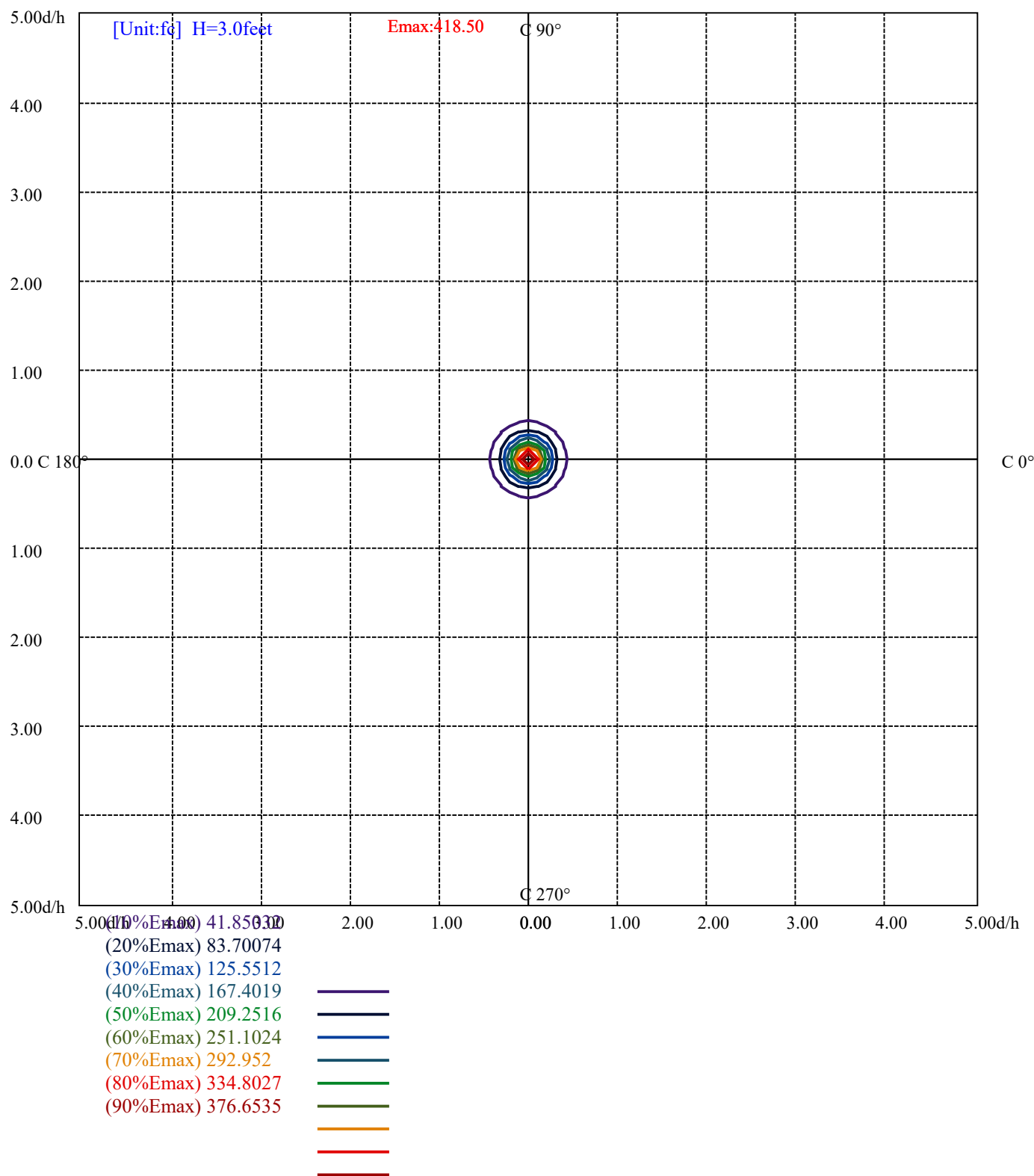
House

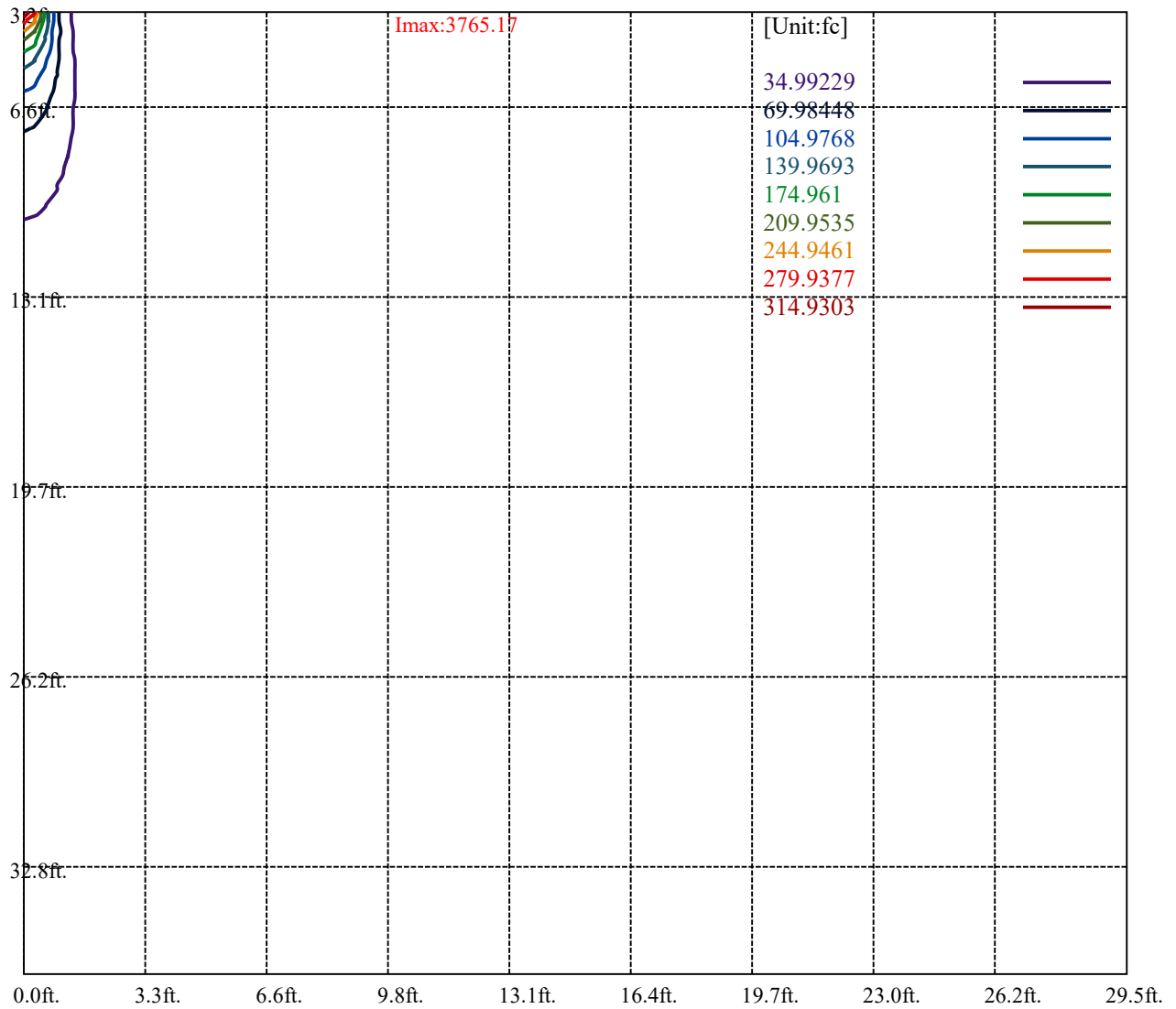
[Unit:cd]

Road

Imax:3765.17

(10%Imax)	376.517	—
(20%Imax)	753.033	—
(30%Imax)	1129.55	—
(40%Imax)	1506.07	—
(50%Imax)	1882.58	—
(60%Imax)	2259.1	—
(70%Imax)	2635.62	—
(80%Imax)	3012.13	—
(90%Imax)	3388.65	—





Luminance Table

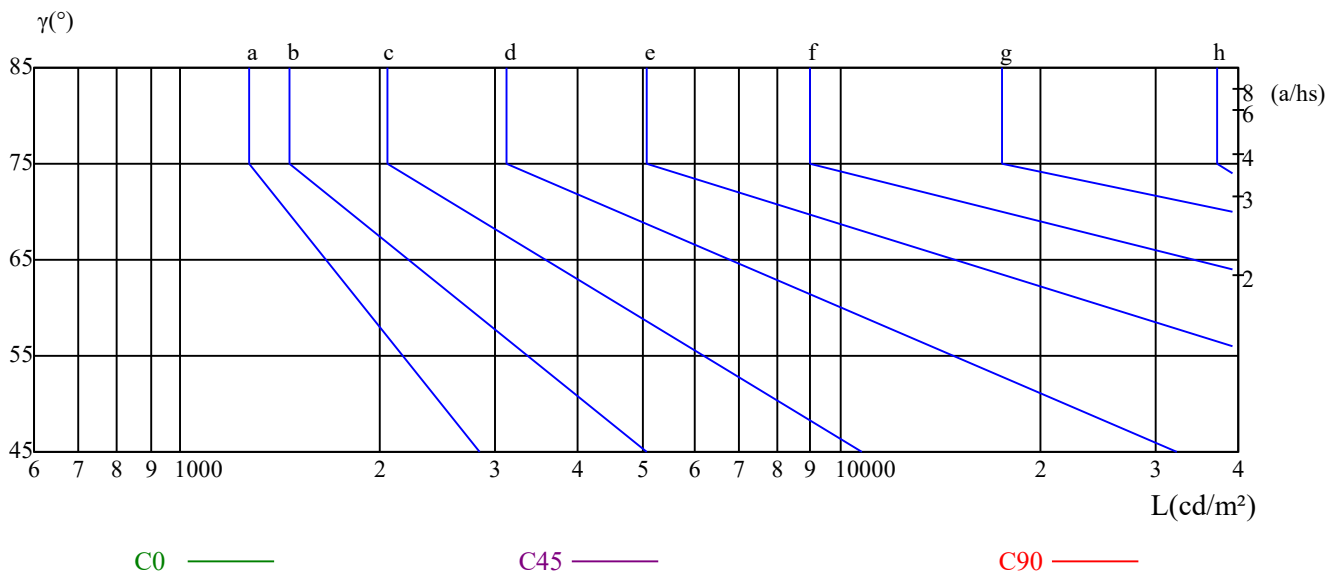
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

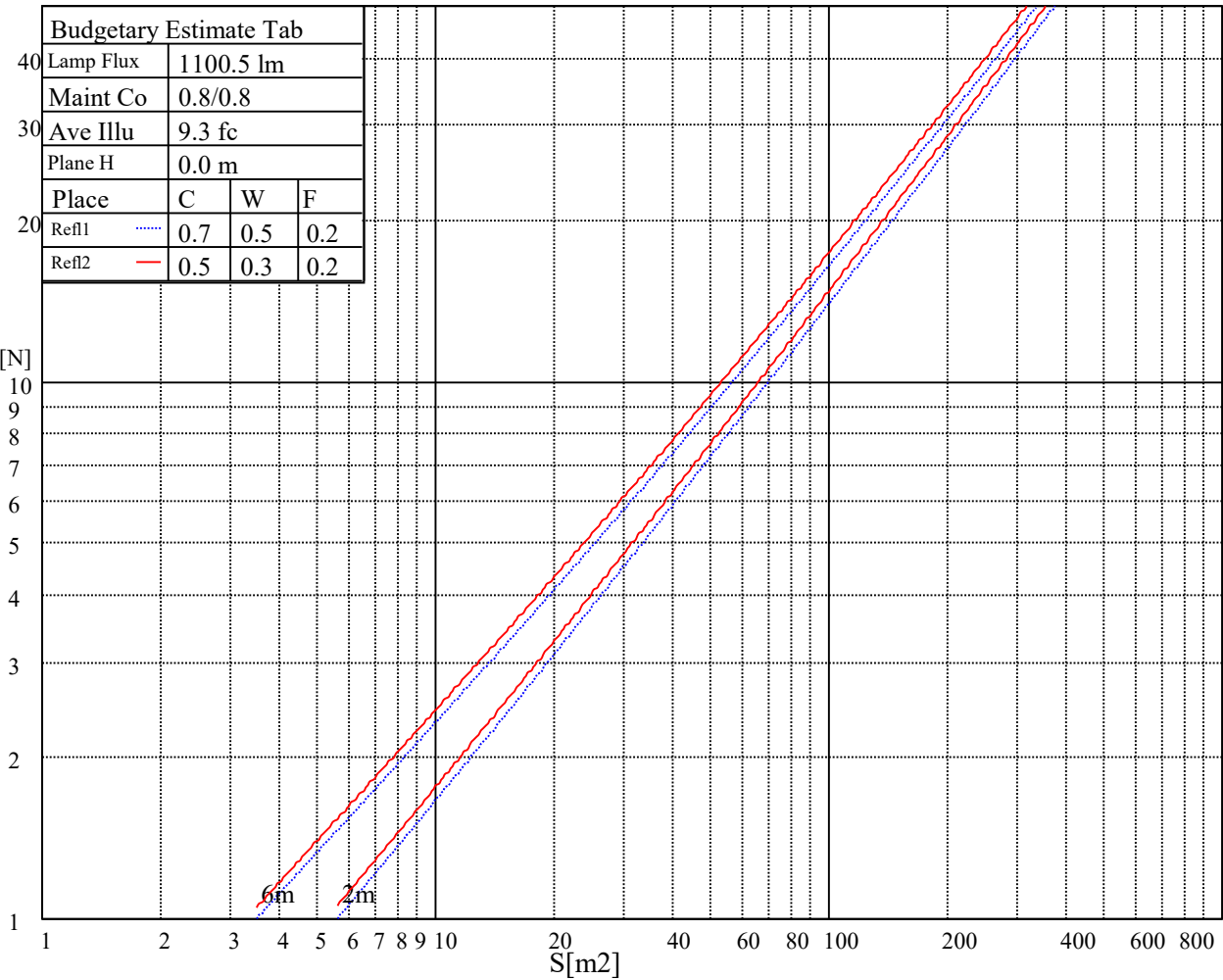
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

Glare Table

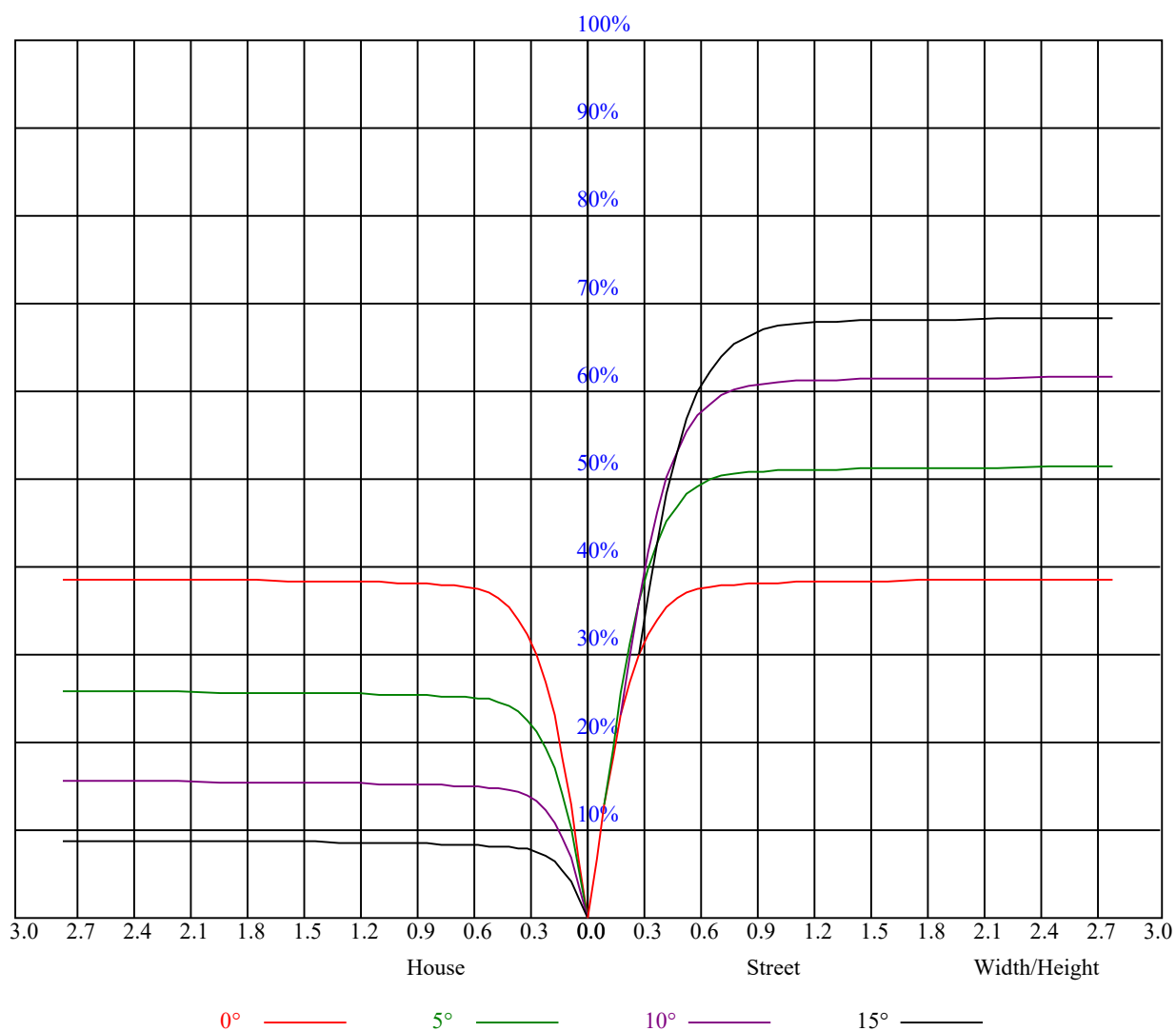
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve





RHOC	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	0.93	0.93	0.93	0.90	0.90	0.90	0.86	0.86	0.86	0.83	0.83	0.83	0.79	0.79	0.79	0.78
1	0.87	0.86	0.84	0.86	0.84	0.83	0.83	0.81	0.80	0.80	0.79	0.78	0.77	0.76	0.76	0.74
2	0.83	0.80	0.78	0.82	0.79	0.77	0.79	0.77	0.76	0.77	0.75	0.74	0.75	0.74	0.73	0.72
3	0.79	0.76	0.74	0.78	0.75	0.73	0.76	0.74	0.72	0.74	0.73	0.71	0.73	0.71	0.70	0.69
4	0.76	0.73	0.70	0.75	0.72	0.70	0.74	0.71	0.69	0.72	0.70	0.68	0.71	0.69	0.68	0.67
5	0.73	0.70	0.67	0.72	0.69	0.67	0.71	0.68	0.66	0.70	0.68	0.66	0.69	0.67	0.65	0.64
6	0.70	0.67	0.65	0.70	0.67	0.64	0.69	0.66	0.64	0.68	0.65	0.64	0.67	0.65	0.63	0.62
7	0.68	0.65	0.62	0.68	0.64	0.62	0.67	0.64	0.62	0.66	0.63	0.62	0.65	0.63	0.61	0.60
8	0.66	0.63	0.60	0.66	0.62	0.60	0.65	0.62	0.60	0.64	0.62	0.60	0.63	0.61	0.60	0.59
9	0.64	0.61	0.58	0.64	0.60	0.58	0.63	0.60	0.58	0.62	0.60	0.58	0.62	0.60	0.58	0.57
10	0.62	0.59	0.57	0.62	0.59	0.57	0.61	0.58	0.57	0.61	0.58	0.56	0.60	0.58	0.56	0.56



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	3786.28	3772.82	3710.64	3617.37	3481.41	3319.46	3137.10	2939.42	2724.11
45.0	3755.65	3777.46	3770.04	3723.64	3635.47	3534.31	3393.24	3219.70	3037.79
90.0	3762.15	3718.53	3642.89	3531.06	3381.64	3205.78	3030.83	2826.66	2605.32
135.0	3756.58	3729.20	3666.10	3572.36	3431.76	3265.17	3077.70	2882.34	2663.32
180.0	3786.28	3761.69	3693.47	3580.25	3432.22	3263.32	3073.53	2864.25	2726.43
225.0	3755.65	3668.42	3546.38	3388.14	3212.74	3018.31	2794.64	2565.87	2330.61
270.0	3762.15	3750.55	3700.43	3604.84	3472.13	3379.32	3131.99	3005.31	2792.79
315.0	3756.58	3738.02	3668.42	3563.08	3415.98	3252.18	3062.85	2850.33	2672.60
360.0	3786.28	3772.82	3710.64	3617.37	3481.41	3319.46	3137.10	2939.42	2724.11
C/ γ (°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	2488.84	2260.54	2028.99	1801.15	1592.33	1438.27	1233.63	1050.80	916.93
45.0	2827.59	2599.75	2370.98	2135.25	1912.98	1691.17	1493.49	1314.37	1153.36
90.0	2377.01	2147.78	1925.04	1708.34	1511.12	1330.62	1230.85	908.44	908.44
135.0	2529.68	2205.32	1979.80	1846.62	1636.88	1442.91	1267.97	1114.38	976.56
180.0	2485.60	2258.22	2026.67	1806.25	1596.51	1408.11	1233.63	1087.00	954.28
225.0	2100.45	1872.61	1657.76	1457.30	1284.68	1064.26	924.08	924.08	818.37
270.0	2561.23	2320.40	2092.56	1868.89	1655.90	1456.37	1277.72	1122.73	987.70
315.0	2390.93	2207.18	1979.80	1721.33	1556.60	1368.20	1204.86	890.62	890.62
360.0	2488.84	2260.54	2028.99	1801.15	1592.33	1438.27	1233.63	1050.80	916.93
C/ γ (°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	871.83	772.75	689.55	617.35	546.58	483.80	431.92	383.48	332.94
45.0	1016.47	896.74	793.27	706.49	629.46	558.93	488.40	437.35	408.58
90.0	827.19	738.28	657.72	581.67	510.02	457.58	408.30	355.31	307.75
135.0	861.48	764.96	681.90	605.33	536.65	474.94	423.43	373.78	322.74
180.0	841.06	747.79	663.34	591.87	525.05	465.66	411.83	363.57	314.38
225.0	730.76	649.69	579.62	516.42	459.81	406.91	358.37	308.03	259.81
270.0	868.44	770.06	686.07	615.08	548.26	487.47	433.64	384.92	338.51
315.0	826.17	734.29	656.05	584.59	520.55	461.43	408.30	378.88	312.94
360.0	871.83	772.75	689.55	617.35	546.58	483.80	431.92	383.48	332.94
C/ γ (°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	284.27	240.04	213.92	156.84	133.36	97.12	57.17	44.69	31.42
45.0	357.54	290.25	261.95	245.24	236.43	137.59	102.09	73.60	48.49
90.0	260.00	215.59	170.86	131.83	95.96	74.57	48.35	29.93	27.47
135.0	275.87	248.49	248.49	152.16	114.71	82.51	56.38	38.28	28.96
180.0	284.68	238.28	238.28	145.71	109.93	79.02	54.71	37.77	27.70
225.0	216.70	174.80	142.41	99.95	70.77	53.04	37.31	28.68	24.92
270.0	291.18	254.52	246.17	195.22	126.63	93.46	65.99	45.01	32.30
315.0	265.29	239.26	194.80	152.95	115.64	83.99	58.61	39.35	27.70
360.0	284.27	240.04	213.92	156.84	133.36	97.12	57.17	44.69	31.42
C/ γ (°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	24.73	21.62	19.16	17.17	15.64	14.20	12.90	11.79	10.86
45.0	32.58	26.40	23.53	20.79	18.51	16.61	14.94	13.64	12.76
90.0	24.55	21.81	19.21	17.22	15.78	14.20	12.95	11.93	11.04
135.0	24.50	21.90	19.54	17.49	15.87	14.43	13.18	12.06	11.14
180.0	23.02	20.79	18.61	16.89	15.41	14.11	12.95	12.02	11.46
225.0	22.27	19.81	18.10	16.43	14.99	13.64	12.67	11.65	10.77
270.0	25.71	22.69	20.23	18.24	16.61	15.08	13.78	12.99	11.93
315.0	22.00	19.44	17.35	15.68	14.39	13.27	12.06	11.09	10.30
360.0	24.73	21.62	19.16	17.17	15.64	14.20	12.90	11.79	10.86

Intensity data(cd)										Appendix Page: 17 Total:18	
C/ γ (°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0		
0.0	10.02	9.14	8.49	7.89	7.33	6.77	6.26	5.94	5.66		
45.0	11.79	10.81	9.93	9.19	8.58	7.93	7.33	6.87	6.50		
90.0	10.12	9.28	8.63	8.03	7.42	6.87	6.40	6.08	5.80		
135.0	10.53	9.33	8.68	8.26	7.47	7.10	6.54	6.22	5.80		
180.0	10.35	9.61	9.19	8.63	8.12	7.61	7.29	7.01	6.68		
225.0	9.93	9.23	8.68	8.07	7.56	7.19	6.87	6.64	6.40		
270.0	11.00	10.16	9.33	8.63	8.12	7.56	7.10	6.68	6.40		
315.0	9.56	9.00	8.35	7.70	7.29	6.91	6.54	6.26	5.99		
360.0	10.02	9.14	8.49	7.89	7.33	6.77	6.26	5.94	5.66		
C/ γ (°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0		
0.0	5.20	4.97	4.78	4.64	4.41	4.32	4.22	4.18	4.04		
45.0	6.08	5.71	5.38	5.20	4.97	4.78	4.64	4.59	4.45		
90.0	5.52	5.10	4.92	4.78	4.59	4.41	4.32	4.27	4.18		
135.0	5.48	5.15	4.92	4.73	4.55	4.45	4.32	4.18	4.13		
180.0	6.54	6.59	6.40	6.08	5.89	5.85	5.71	5.57	5.48		
225.0	6.13	6.03	5.94	5.85	5.85	5.80	5.66	5.61	5.52		
270.0	6.13	5.85	5.66	5.57	5.57	5.48	5.48	5.43	5.34		
315.0	5.80	5.66	5.52	5.38	5.38	5.29	5.15	5.06	5.01		
360.0	5.20	4.97	4.78	4.64	4.41	4.32	4.22	4.18	4.04		
C/ γ (°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0		
0.0	3.99	3.94	3.85	3.76	3.71	3.67	3.62	3.53	3.48		
45.0	4.27	4.22	4.13	4.08	4.04	3.90	3.81	3.76	3.67		
90.0	4.04	3.94	3.99	3.85	3.76	3.67	3.67	3.57	3.48		
135.0	4.08	3.99	3.94	3.90	3.85	3.76	3.76	3.62	3.57		
180.0	5.43	5.34	5.34	5.20	5.15	5.10	5.06	5.01	4.97		
225.0	5.43	5.29	5.24	5.24	5.20	5.15	5.10	5.10	5.15		
270.0	5.15	5.06	5.01	4.97	4.97	4.92	4.87	4.83	4.87		
315.0	5.01	4.97	4.92	4.87	4.92	4.87	4.87	4.92	4.92		
360.0	3.99	3.94	3.85	3.76	3.71	3.67	3.62	3.53	3.48		
C/ γ (°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0		
0.0	3.43	3.34	3.34	3.25	3.25	3.16	3.16	3.11	3.11		
45.0	3.57	3.48	3.43	3.39	3.29	3.20	3.16	3.16	3.02		
90.0	3.43	3.39	3.39	3.29	3.20	3.20	3.16	3.06	2.97		
135.0	3.57	3.53	3.43	3.39	3.39	3.34	3.29	3.29	3.29		
180.0	4.97	5.01	4.97	4.97	5.06	5.06	5.06	5.06	5.06		
225.0	5.15	5.15	5.15	5.15	5.20	5.15	5.10	4.97	4.87		
270.0	4.87	4.83	4.83	4.87	4.87	4.83	4.83	4.78	4.73		
315.0	4.92	4.92	4.92	4.97	4.92	4.92	4.87	4.87	4.73		
360.0	3.43	3.34	3.34	3.25	3.25	3.16	3.16	3.11	3.11		
C/ γ (°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0		
0.0	3.06	2.97	3.02	3.02	3.48	3.57	3.25	2.97	2.78		
45.0	2.97	2.92	2.83	2.83	2.78	2.69	2.64	2.60	2.55		
90.0	2.97	2.92	2.88	2.83	2.78	2.74	2.74	2.69	2.64		
135.0	3.29	3.25	3.34	3.71	4.50	5.15	4.59	3.99	3.48		
180.0	4.97	4.92	4.97	5.48	5.52	4.83	4.27	3.94	3.57		
225.0	4.78	4.59	4.50	4.27	4.18	3.94	3.81	3.57	3.34		
270.0	4.59	4.50	4.41	4.22	4.04	3.85	3.71	3.57	3.34		
315.0	4.69	4.59	4.45	4.41	4.41	4.73	4.41	3.76	3.39		
360.0	3.06	2.97	3.02	3.02	3.48	3.57	3.25	2.97	2.78		

Intensity data(cd)

Appendix Page: 18 Total:18

C/ γ (°)	90.0
0.0	2.74
45.0	2.51
90.0	2.60
135.0	3.16
180.0	2.97
225.0	3.25
270.0	3.20
315.0	3.29
360.0	2.74