



NATA LIGHTING CO.,LTD.
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NT

Client: NT

LumCAT: 2-3217-A

Luminaire: 92.70.121.00

Report No: 20260327-B002

Ballast type: AC

Test No: 20260327-C002

Voltage(V): 35.760

LampCAT: CITIZEN CLU038

Current(A): 0.723

Lamp flux(lm): 3553.2

Power (W): 25.854

Number of Lamps: 1

PF: 0.000

Length(mm): 75

Width(mm): 75

Phm Type: C

Height(mm): 43

Photometric Results

Lumens(lm): 3177.94, Efficiency(%): 89.44% , Luminous Efficacy(lm/W): 122.92

Central intensity(cd): 3775.303, Maximum intensity(cd): 3775.303

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=60.4

[C90/270]Total=60.4

Field angle(10%Imax): [C0/180]Total=77.4

[C90/270]Total=77.4

Maximum s/h(1/2): C0_180=0.96 C90_270=0.96

Maximum s/h(1/4): C0_180=0.88 C90_270=0.88

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 89.44%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 99.801%

Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2026/3/27
Humidity(%): 60.0%

Operator: 杨泽全
Distance(m): 7.50

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3775.303	0.000	0	0.00%	0.00%
1.0	3774.741	3.613	3.613	0.10%	0.11%
2.0	3768.834	10.827	14.44	0.30%	0.45%
3.0	3756.952	17.999	32.439	0.51%	1.02%
4.0	3751.116	25.132	57.571	0.71%	1.81%
5.0	3739.936	32.226	89.797	0.91%	2.83%
6.0	3718.280	39.195	128.992	1.10%	4.06%
7.0	3697.819	46.032	175.024	1.30%	5.51%
8.0	3681.014	52.809	227.832	1.49%	7.17%
9.0	3653.241	59.440	287.273	1.67%	9.04%
10.0	3628.209	65.894	353.167	1.85%	11.11%
11.0	3603.319	72.258	425.425	2.03%	13.39%
12.0	3565.561	78.366	503.791	2.21%	15.85%
13.0	3529.772	84.204	587.995	2.37%	18.50%
14.0	3489.694	89.849	677.843	2.53%	21.33%
15.0	3451.163	95.287	773.13	2.68%	24.33%
16.0	3404.897	100.460	873.591	2.83%	27.49%
17.0	3349.209	105.180	978.77	2.96%	30.80%
18.0	3293.030	109.516	1088.286	3.08%	34.24%
19.0	3235.584	113.585	1201.871	3.20%	37.82%
20.0	3169.420	117.229	1319.1	3.30%	41.51%
21.0	3093.483	120.260	1439.361	3.38%	45.29%
22.0	3005.241	122.556	1561.917	3.45%	49.15%
23.0	2887.116	123.638	1685.555	3.48%	53.04%
24.0	2785.795	124.030	1809.585	3.49%	56.94%
25.0	2675.827	124.185	1933.77	3.50%	60.85%
26.0	2532.248	122.937	2056.707	3.46%	64.72%
27.0	2381.639	120.219	2176.927	3.38%	68.50%
28.0	2229.905	116.755	2293.681	3.29%	72.18%
29.0	2090.686	113.039	2406.72	3.18%	75.73%
30.0	1924.116	108.399	2515.119	3.05%	79.14%
31.0	1745.381	102.117	2617.236	2.87%	82.36%
32.0	1482.736	92.482	2709.717	2.60%	85.27%
33.0	1279.737	81.383	2791.101	2.29%	87.83%
34.0	1144.013	73.350	2864.451	2.06%	90.14%
35.0	961.629	65.393	2929.844	1.84%	92.19%
36.0	788.695	55.731	2985.575	1.57%	93.95%
37.0	623.904	46.071	3031.646	1.30%	95.40%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	476.339	36.725	3068.371	1.03%	96.55%
39.0	342.028	27.933	3096.304	0.79%	97.43%
40.0	256.057	20.859	3117.163	0.59%	98.09%
41.0	197.248	16.142	3133.305	0.45%	98.60%
42.0	119.011	11.490	3144.795	0.32%	98.96%
43.0	61.580	6.690	3151.485	0.19%	99.17%
44.0	44.416	4.001	3155.485	0.11%	99.29%
45.0	33.159	2.981	3158.466	0.08%	99.39%
46.0	23.955	2.234	3160.7	0.06%	99.46%
47.0	18.513	1.689	3162.389	0.05%	99.51%
48.0	14.302	1.327	3163.716	0.04%	99.55%
49.0	12.094	1.084	3164.8	0.03%	99.59%
50.0	10.448	0.940	3165.74	0.03%	99.62%
51.0	9.211	0.832	3166.571	0.02%	99.64%
52.0	8.248	0.749	3167.32	0.02%	99.67%
53.0	7.474	0.684	3168.004	0.02%	99.69%
54.0	6.799	0.629	3168.633	0.02%	99.71%
55.0	6.230	0.582	3169.215	0.02%	99.73%
56.0	5.766	0.542	3169.757	0.02%	99.74%
57.0	5.379	0.510	3170.267	0.01%	99.76%
58.0	4.992	0.480	3170.746	0.01%	99.77%
59.0	4.704	0.453	3171.2	0.01%	99.79%
60.0	4.388	0.430	3171.629	0.01%	99.80%
61.0	4.078	0.404	3172.033	0.01%	99.81%
62.0	3.874	0.383	3172.416	0.01%	99.83%
63.0	3.656	0.366	3172.782	0.01%	99.84%
64.0	3.445	0.348	3173.131	0.01%	99.85%
65.0	3.248	0.331	3173.462	0.01%	99.86%
66.0	3.080	0.316	3173.778	0.01%	99.87%
67.0	2.918	0.302	3174.08	0.01%	99.88%
68.0	2.749	0.287	3174.367	0.01%	99.89%
69.0	2.609	0.273	3174.64	0.01%	99.90%
70.0	2.482	0.261	3174.901	0.01%	99.90%
71.0	2.327	0.249	3175.15	0.01%	99.91%
72.0	2.222	0.237	3175.387	0.01%	99.92%
73.0	2.081	0.225	3175.612	0.01%	99.93%
74.0	1.962	0.213	3175.824	0.01%	99.93%
75.0	1.884	0.203	3176.027	0.01%	99.94%

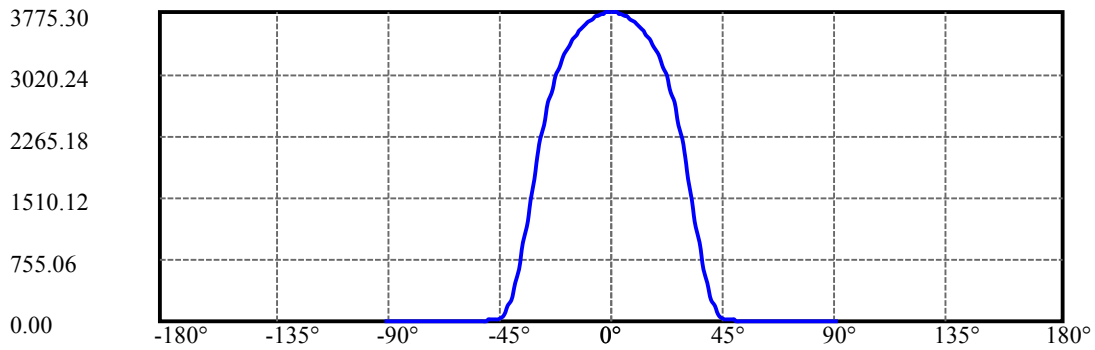
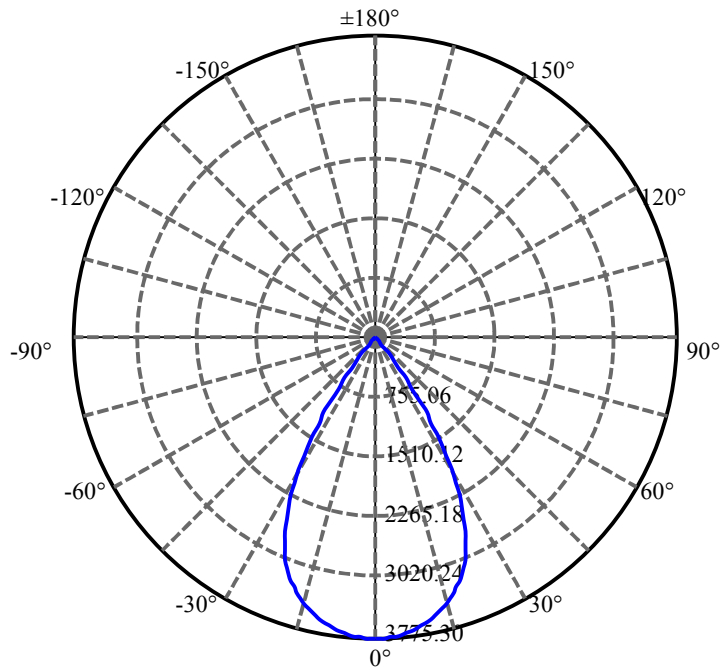
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	1.758	0.193	3176.221	0.01%	99.95%
77.0	1.666	0.183	3176.403	0.01%	99.95%
78.0	1.582	0.174	3176.577	0.00%	99.96%
79.0	1.455	0.163	3176.74	0.00%	99.96%
80.0	1.392	0.154	3176.894	0.00%	99.97%
81.0	1.266	0.144	3177.038	0.00%	99.97%
82.0	1.146	0.131	3177.168	0.00%	99.98%
83.0	1.076	0.121	3177.289	0.00%	99.98%
84.0	0.970	0.111	3177.401	0.00%	99.98%
85.0	0.907	0.102	3177.503	0.00%	99.99%
86.0	0.830	0.095	3177.598	0.00%	99.99%
87.0	0.830	0.091	3177.689	0.00%	99.99%
88.0	0.788	0.089	3177.777	0.00%	99.99%
89.0	0.752	0.084	3177.862	0.00%	100.00%
90.0	0.738	0.082	3177.944	0.00%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2515.12	70.79%	79.14%
0-40	3117.16	87.73%	98.09%
0-60	3171.63	89.26%	99.80%
0-90	3177.86	89.44%	100.00%
0-120	3177.86	89.44%	100.00%
0-180	3177.94	89.44%	100.00%
60-90	6.23	0.18%	0.20%
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%
0-30.27	2542.36	71.55%	80.00%

ZONAL LUMEN SUMMARY

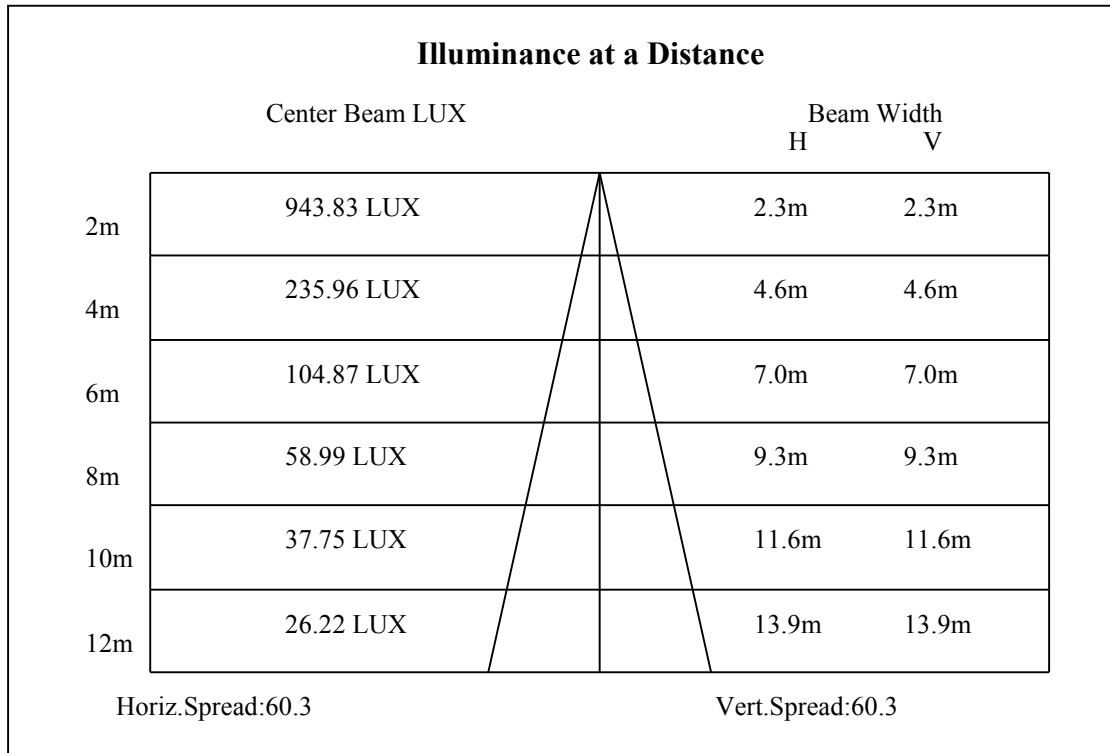
0-10	353.17
10-20	965.93
20-30	1196.02
30-40	602.04
40-50	48.58
50-60	5.89
60-70	3.27
70-80	1.99
80-90	0.97
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

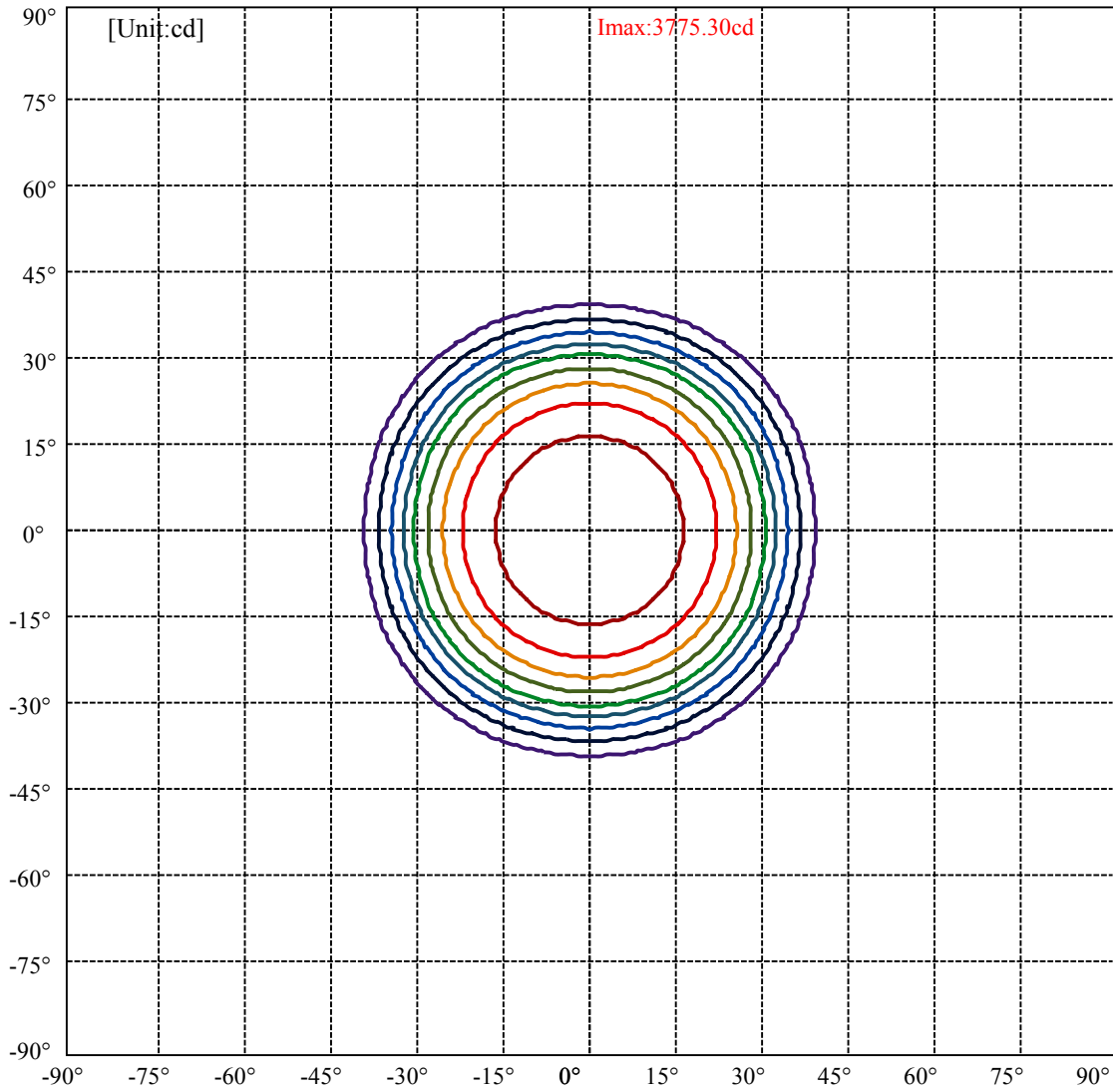


C90/C270: —————

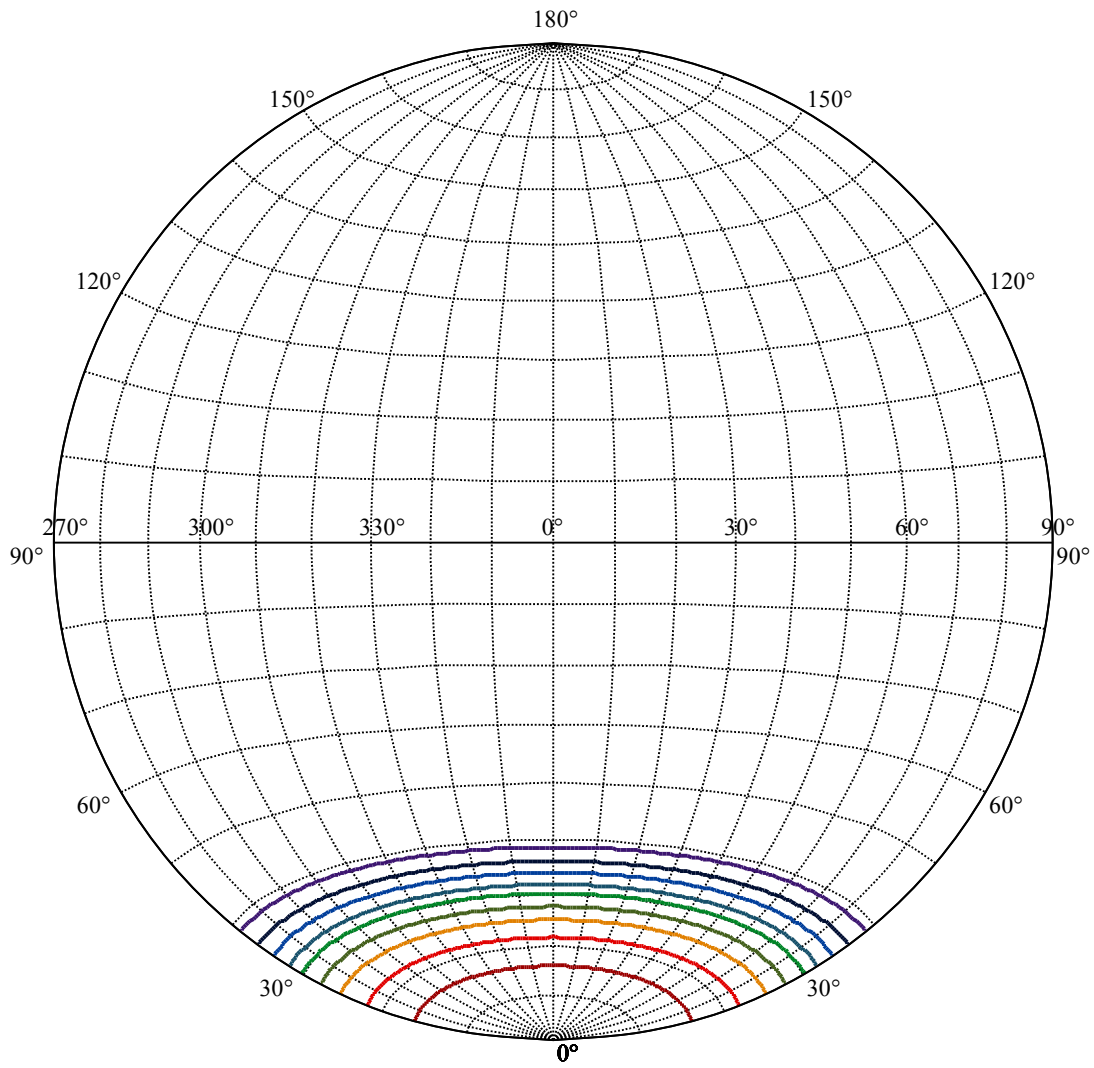
Field angle(10%Imax):C90/270Left:38.7 Right:38.7

Beam Angle(50%Imax):C90/270Left:30.2 Right:30.2





(10%Imax) 377.53	—
(20%Imax) 755.061	—
(30%Imax) 1132.59	—
(40%Imax) 1510.12	—
(50%Imax) 1887.65	—
(60%Imax) 2265.18	—
(70%Imax) 2642.71	—
(80%Imax) 3020.24	—
(90%Imax) 3397.77	—



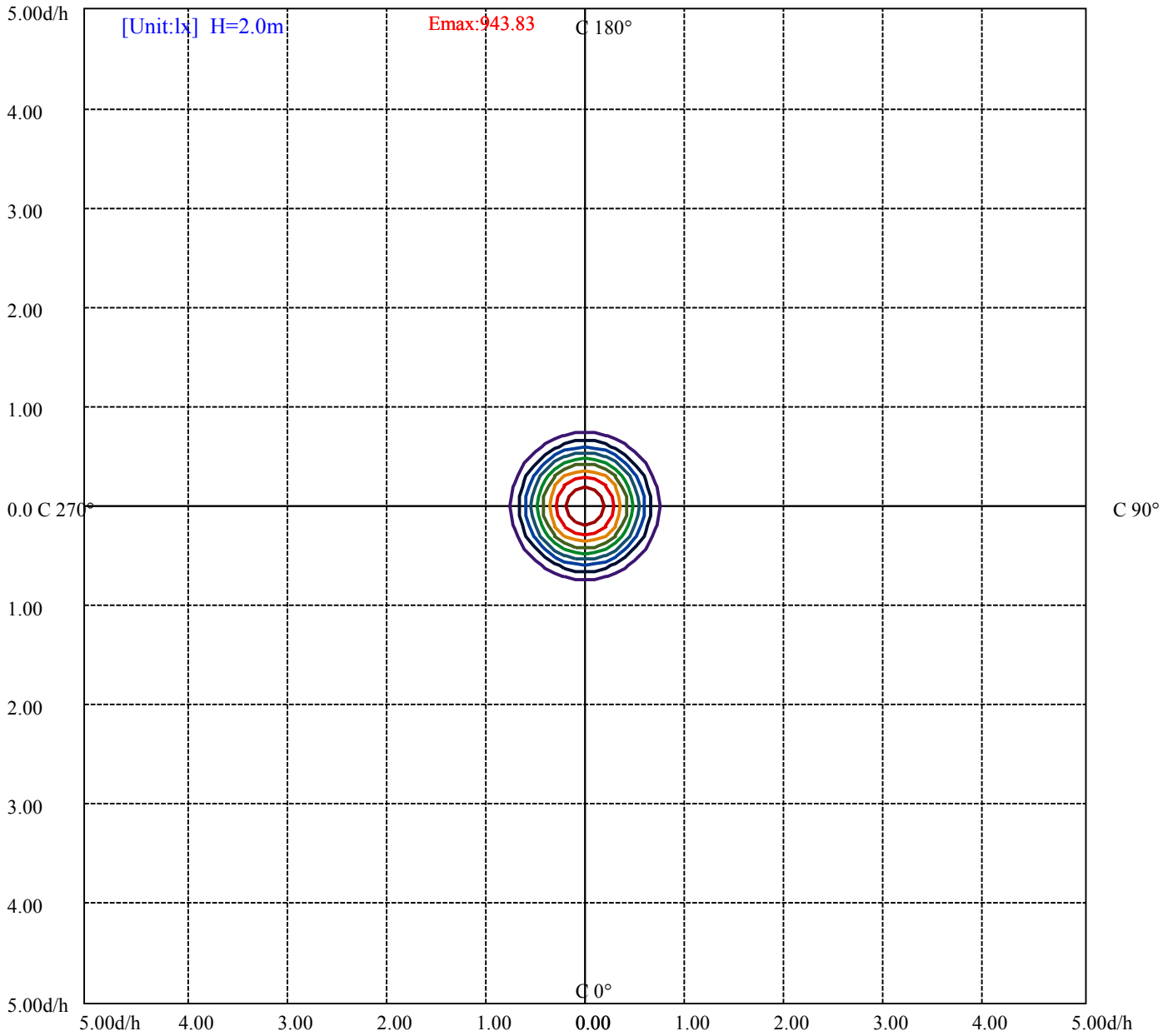
House

[Unit:cd]

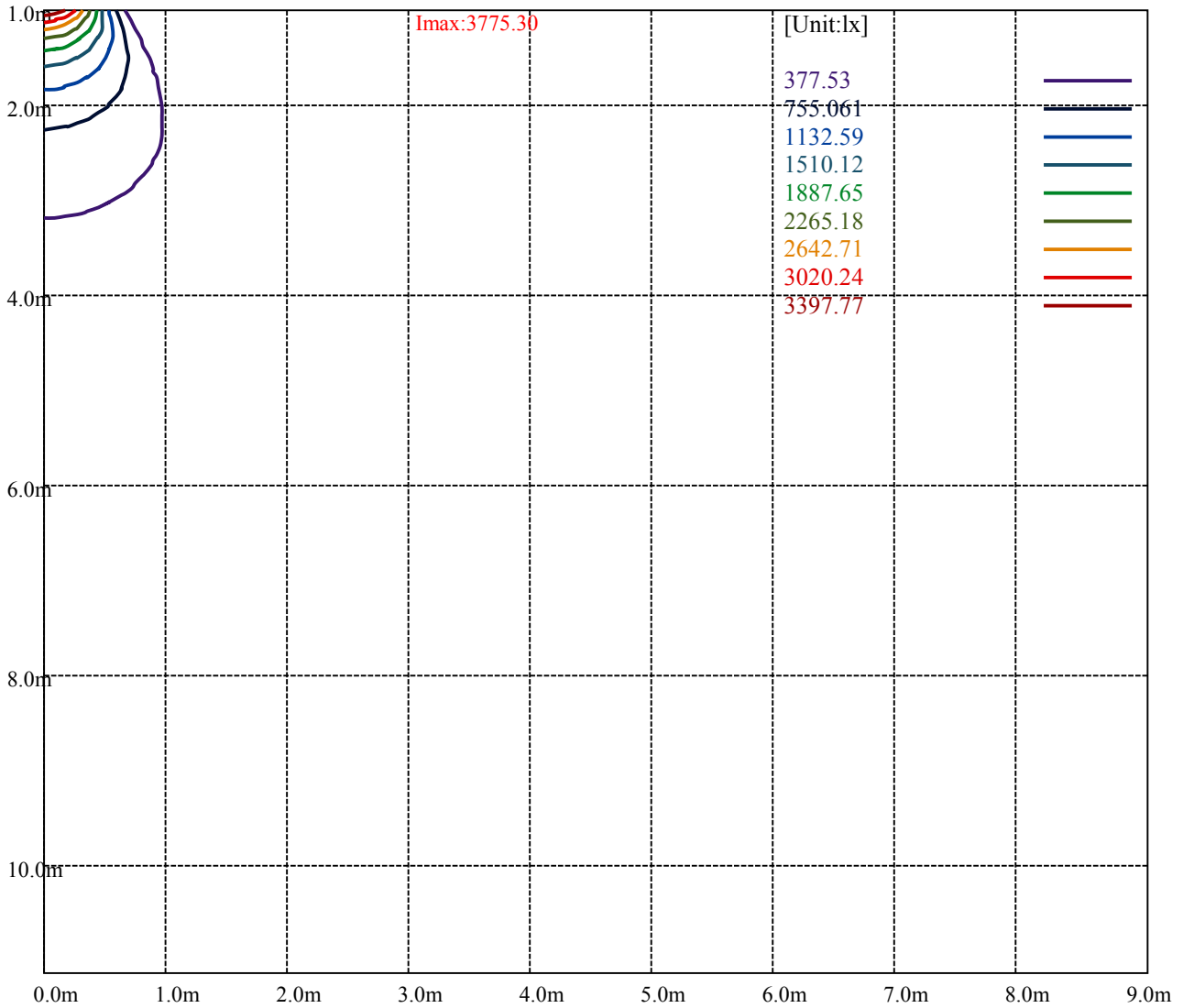
Road

Imax:3775.30

(10%Imax) 377.53	—
(20%Imax) 755.061	—
(30%Imax) 1132.59	—
(40%Imax) 1510.12	—
(50%Imax) 1887.65	—
(60%Imax) 2265.18	—
(70%Imax) 2642.71	—
(80%Imax) 3020.24	—
(90%Imax) 3397.77	—



- (10%Emax) 94.3825
- (20%Emax) 188.7652
- (30%Emax) 283.1475
- (40%Emax) 377.53
- (50%Emax) 471.9125
- (60%Emax) 566.295
- (70%Emax) 660.6775
- (80%Emax) 755.06
- (90%Emax) 849.4425



Luminance Table

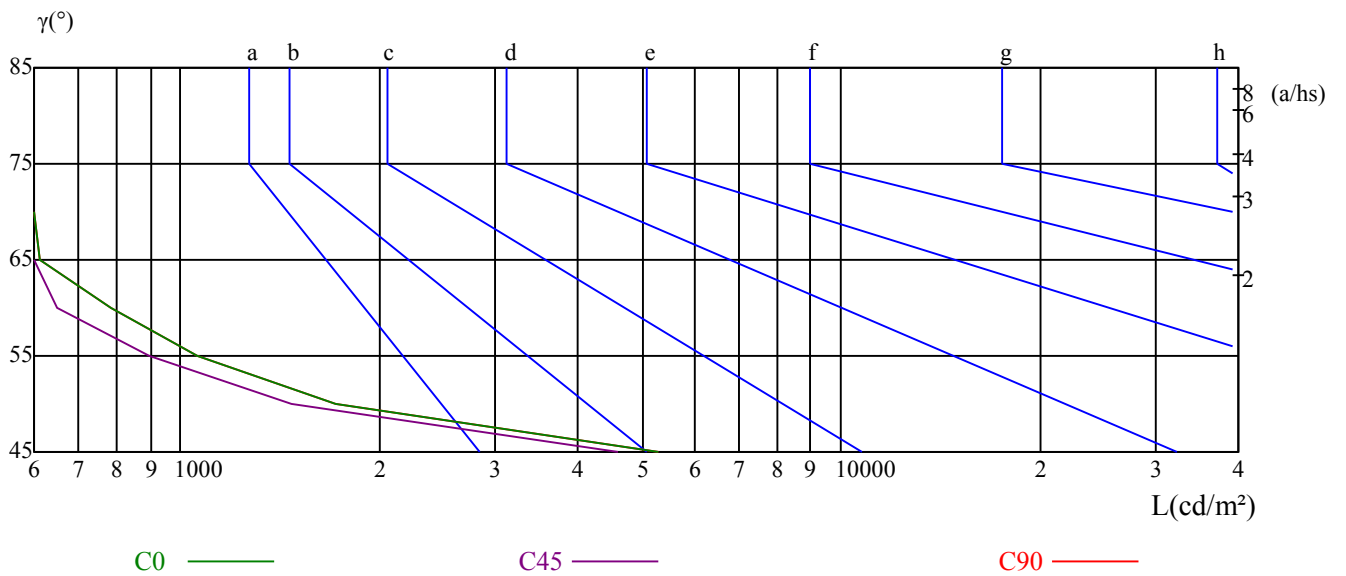
γ	45	50	55	60	65	70	75	80	85
C0	5299	1717	1062	783	613	501	412	335	245
C45	4604	1470	895	649	499	400	321	255	180
C90	5299	1717	1062	783	613	501	412	335	245

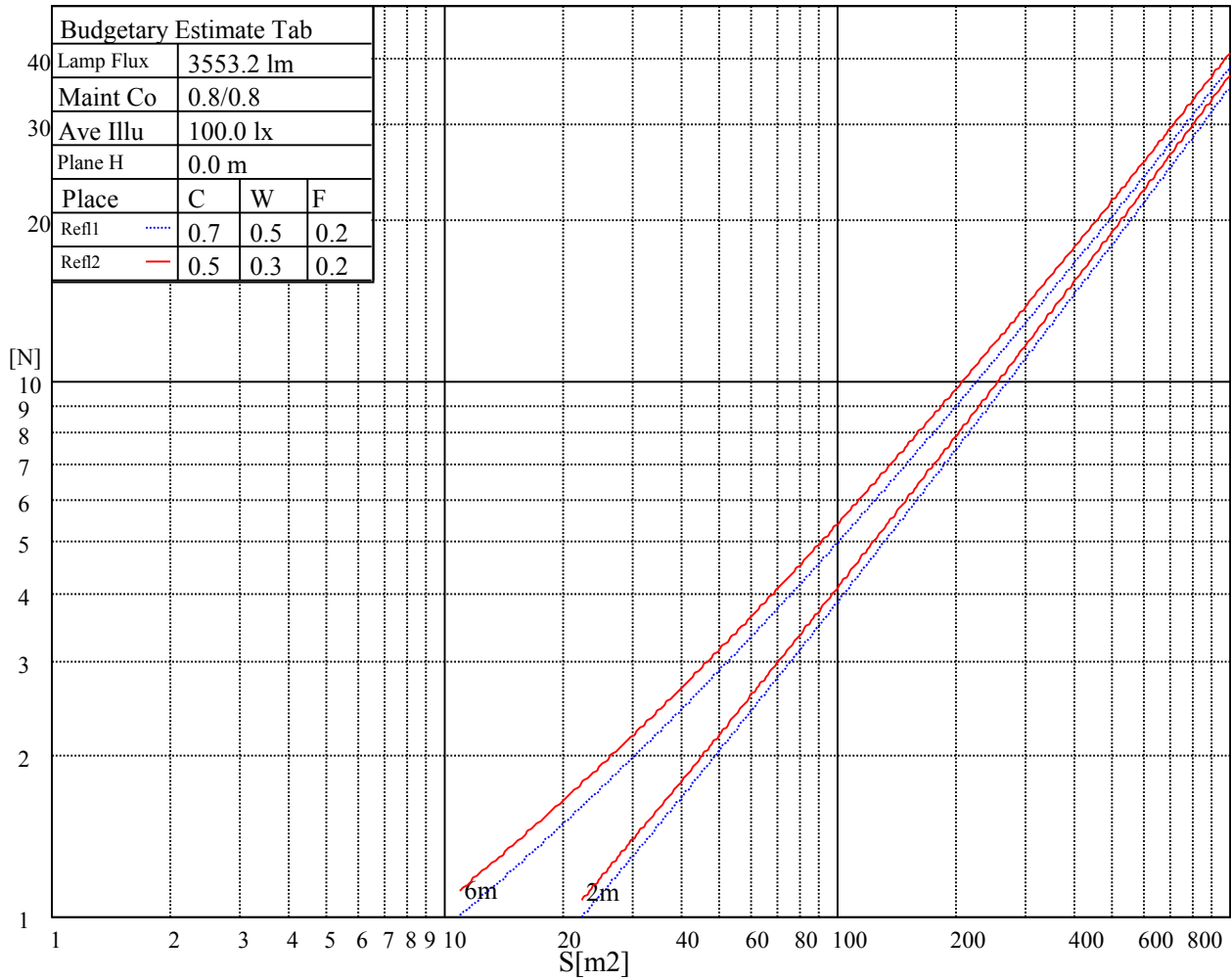
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
1366	1366	1366	1294	1294	1294	1850	1850	1850

Glare Table

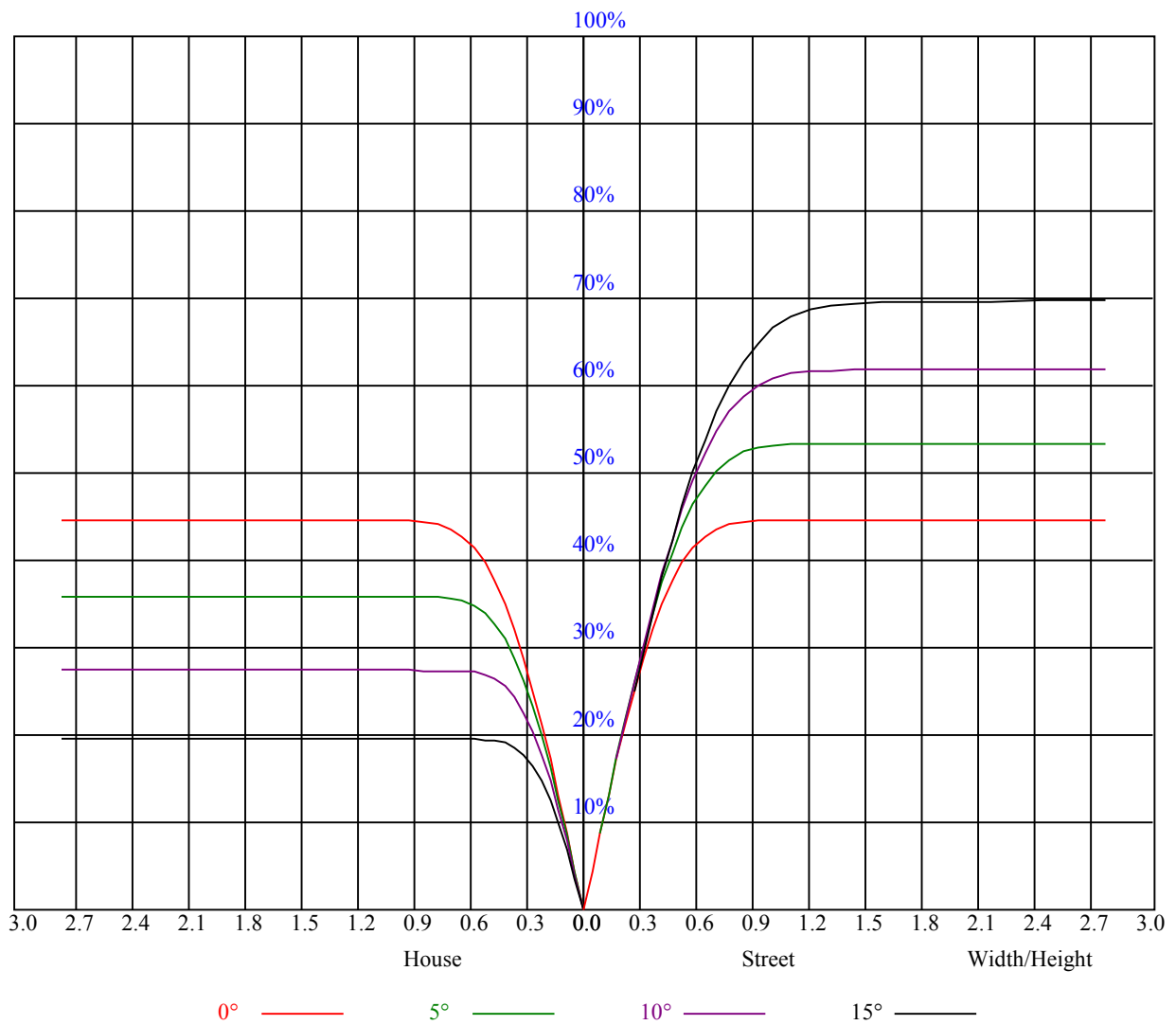
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

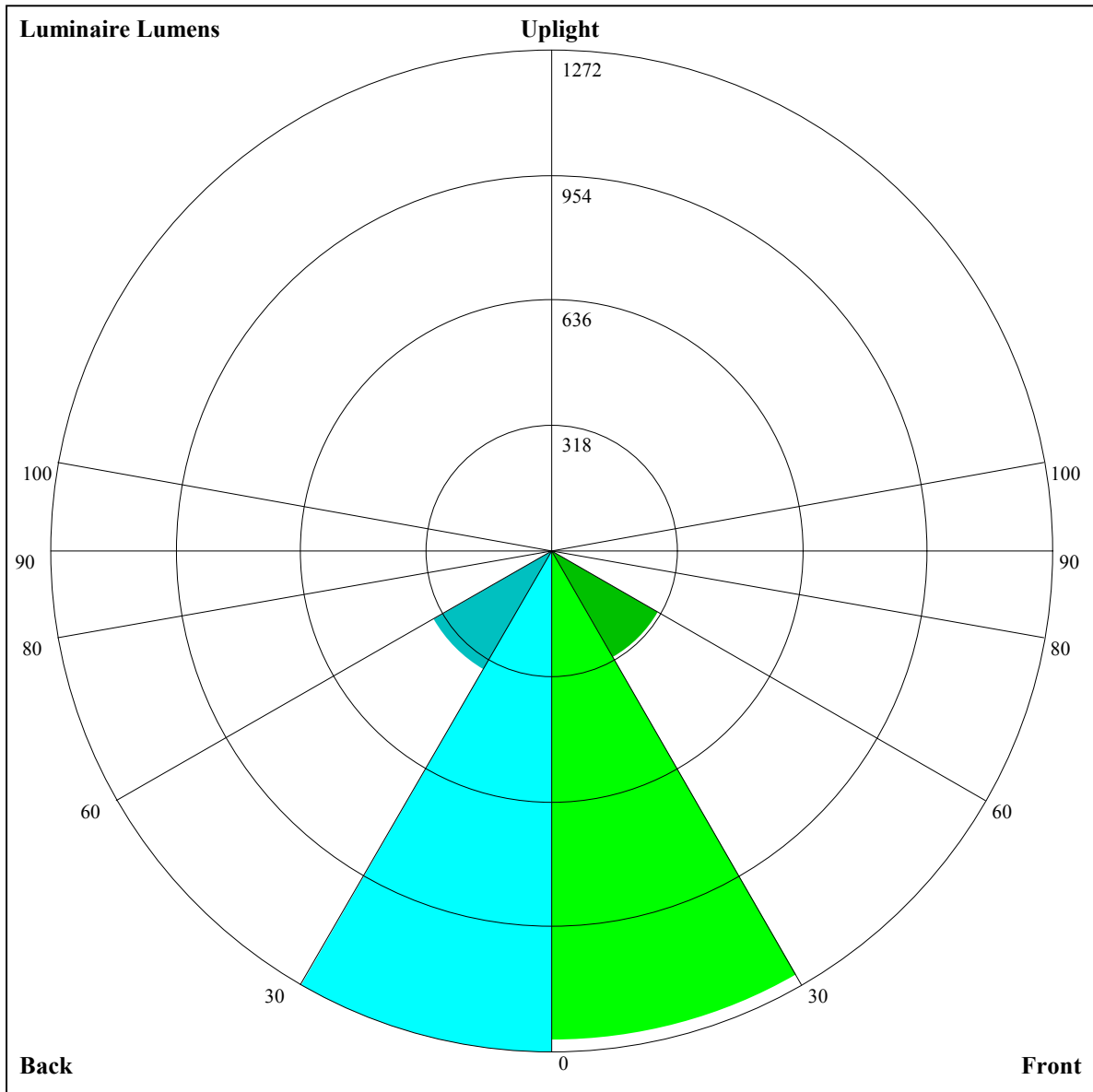
Luminance Limiting Curve





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	1.06	1.06	1.06	1.04	1.04	1.04	0.99	0.99	0.99	0.95	0.95	0.95	0.91	0.91	0.91	0.89
1	0.99	0.97	0.95	0.98	0.96	0.94	0.94	0.92	0.91	0.91	0.89	0.88	0.88	0.87	0.86	0.84
2	0.93	0.90	0.87	0.91	0.88	0.86	0.89	0.86	0.84	0.86	0.84	0.82	0.84	0.82	0.80	0.79
3	0.87	0.83	0.80	0.86	0.82	0.79	0.84	0.80	0.78	0.81	0.79	0.77	0.79	0.77	0.75	0.74
4	0.82	0.77	0.74	0.81	0.77	0.73	0.79	0.75	0.72	0.77	0.74	0.71	0.76	0.73	0.71	0.69
5	0.77	0.72	0.68	0.76	0.72	0.68	0.75	0.71	0.68	0.73	0.70	0.67	0.72	0.69	0.66	0.65
6	0.73	0.68	0.64	0.72	0.67	0.64	0.71	0.66	0.63	0.69	0.66	0.63	0.68	0.65	0.62	0.61
7	0.69	0.63	0.60	0.68	0.63	0.60	0.67	0.63	0.59	0.66	0.62	0.59	0.65	0.61	0.59	0.58
8	0.65	0.60	0.56	0.64	0.59	0.56	0.63	0.59	0.56	0.62	0.59	0.56	0.62	0.58	0.55	0.54
9	0.61	0.56	0.53	0.61	0.56	0.53	0.60	0.56	0.53	0.59	0.55	0.53	0.59	0.55	0.52	0.51
10	0.58	0.53	0.50	0.58	0.53	0.50	0.57	0.53	0.50	0.56	0.52	0.50	0.56	0.52	0.50	0.48





Luminaire Lumens:

FL=1241.12,FM=312.21,FH=2.59,FVH=0.52

BL=1272,BM=350.23,BH=2.66,BVH=0.52

UL=0,UH=0

BUG Rating:B3-U0-G0

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	3785.57	3780.51	3765.32	3749.01	3743.94	3718.63	3698.94	3674.76	3641.01
45.0	3770.38	3778.26	3777.69	3759.69	3755.76	3750.69	3717.51	3699.51	3669.13
90.0	3787.26	3793.44	3787.26	3778.82	3770.94	3760.82	3743.94	3708.51	3696.13
135.0	3758.01	3769.82	3770.94	3769.82	3769.82	3767.01	3750.13	3738.88	3729.88
180.0	3785.57	3787.82	3787.82	3794.01	3791.19	3779.94	3768.69	3772.07	3768.13
225.0	3770.38	3765.88	3766.44	3737.19	3731.01	3724.26	3691.07	3665.19	3658.44
270.0	3787.26	3774.88	3761.94	3755.19	3742.26	3723.69	3702.32	3681.51	3669.69
315.0	3758.01	3747.32	3733.26	3711.88	3704.01	3694.44	3673.63	3642.13	3615.69
360.0	3785.57	3780.51	3765.32	3749.01	3743.94	3718.63	3698.94	3674.76	3641.01
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	3602.76	3565.07	3551.01	3489.13	3438.51	3420.51	3380.01	3332.19	3274.82
45.0	3636.51	3598.26	3561.13	3529.07	3483.51	3442.44	3396.88	3342.88	3268.07
90.0	3672.51	3637.63	3615.69	3578.57	3548.19	3509.38	3454.82	3420.51	3359.19
135.0	3716.38	3706.82	3690.51	3673.63	3648.32	3601.07	3583.07	3530.19	3462.13
180.0	3730.44	3714.13	3701.76	3675.88	3656.76	3600.51	3567.32	3540.88	3492.51
225.0	3610.63	3590.94	3552.13	3513.32	3464.38	3413.76	3380.01	3333.88	3273.69
270.0	3651.13	3629.76	3606.13	3563.38	3530.19	3498.13	3460.44	3403.63	3356.38
315.0	3605.57	3583.07	3548.19	3501.51	3468.32	3431.76	3386.76	3335.01	3306.88
360.0	3602.76	3565.07	3551.01	3489.13	3438.51	3420.51	3380.01	3332.19	3274.82
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	3202.26	3163.44	3093.13	3006.51	2908.63	2772.51	2693.19	2561.01	2342.76
45.0	3212.94	3151.07	3113.94	3007.07	2901.88	2793.32	2683.07	2612.19	2462.01
90.0	3288.88	3219.13	3113.94	3054.88	2947.44	2759.01	2680.26	2540.19	2384.38
135.0	3422.76	3344.57	3277.63	3198.88	3108.88	3045.32	2917.07	2788.82	2651.01
180.0	3437.38	3388.44	3319.82	3278.76	3187.07	3099.32	2996.94	2881.63	2801.76
225.0	3205.63	3129.69	3090.32	3011.57	2918.76	2784.88	2672.38	2546.38	2411.94
270.0	3317.57	3292.82	3220.26	3158.38	3091.44	3011.01	2956.44	2839.44	2723.57
315.0	3256.82	3195.51	3126.32	3031.82	2977.82	2831.57	2687.01	2636.94	2480.57
360.0	3202.26	3163.44	3093.13	3006.51	2908.63	2772.51	2693.19	2561.01	2342.76
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	2256.69	2109.32	1946.76	1756.07	1514.19	1118.42	1118.42	922.11	807.97
45.0	2328.13	2170.07	1994.57	1882.63	1659.32	1389.88	1270.63	1045.07	866.76
90.0	2226.32	2030.01	1931.01	1747.07	1554.13	1072.18	1072.18	949.39	753.97
135.0	2506.44	2314.07	2150.38	1988.94	1886.57	1656.51	1445.57	1235.76	1033.26
180.0	2575.63	2426.01	2330.38	2135.19	1973.19	1792.07	1593.51	1467.51	1212.13
225.0	2222.94	2129.01	1976.01	1822.44	1657.63	1428.13	1047.43	1047.43	864.90
270.0	2600.38	2467.63	2383.26	2148.13	1991.76	1887.13	1658.19	1452.88	1239.13
315.0	2336.57	2193.13	2013.13	1912.44	1726.26	1517.57	1031.96	1031.96	914.91
360.0	2256.69	2109.32	1946.76	1756.07	1514.19	1118.42	1118.42	922.11	807.97
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	631.74	473.34	335.64	200.53	148.78	91.46	66.21	52.20	36.68
45.0	695.19	537.13	448.26	299.76	299.76	196.99	99.28	72.68	53.78
90.0	543.21	448.93	312.13	200.53	119.76	62.61	44.66	32.96	21.38
135.0	915.69	694.63	529.26	381.88	381.88	303.13	82.63	49.44	41.06
180.0	1010.19	816.69	639.51	542.76	368.38	316.07	316.07	82.58	53.55
225.0	758.08	594.56	447.24	320.06	195.36	146.03	78.53	56.14	47.31
270.0	1027.63	903.88	668.76	497.19	349.82	349.82	196.20	87.64	62.21
315.0	727.82	522.06	429.92	293.51	184.72	111.88	68.51	59.01	39.38
360.0	631.74	473.34	335.64	200.53	148.78	91.46	66.21	52.20	36.68

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	26.78	20.70	16.82	15.24	13.11	11.36	10.01	8.66	8.10
45.0	39.99	33.69	24.36	19.41	15.86	12.88	11.03	9.68	8.66
90.0	17.10	12.66	10.91	9.68	8.49	8.04	7.14	6.75	6.24
135.0	27.34	15.69	12.43	9.68	8.27	7.48	6.81	6.47	5.85
180.0	39.77	25.54	21.94	13.22	11.48	10.58	9.28	8.38	7.59
225.0	35.10	25.65	19.86	15.69	14.23	12.09	10.58	9.51	8.38
270.0	52.99	36.28	25.43	18.11	14.12	11.98	10.41	9.23	8.55
315.0	26.21	21.43	16.37	13.39	11.19	9.17	8.44	7.31	6.41
360.0	26.78	20.70	16.82	15.24	13.11	11.36	10.01	8.66	8.10
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	7.03	6.30	6.08	5.51	5.12	4.78	4.39	4.22	3.94
45.0	8.10	7.31	6.64	6.13	5.68	5.46	5.06	4.56	4.44
90.0	5.74	5.34	5.01	4.61	4.50	4.16	3.94	3.71	3.38
135.0	5.40	5.12	4.78	4.61	4.22	3.99	3.77	3.49	3.32
180.0	7.03	6.64	6.13	5.68	5.29	4.95	4.61	4.28	4.05
225.0	7.71	7.09	6.36	6.13	5.68	5.34	5.01	4.56	4.44
270.0	7.65	6.92	6.30	5.91	5.51	5.12	4.78	4.44	4.16
315.0	5.74	5.12	4.84	4.44	3.94	3.83	3.54	3.38	3.26
360.0	7.03	6.30	6.08	5.51	5.12	4.78	4.39	4.22	3.94
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	3.66	3.49	3.26	3.15	2.98	2.70	2.64	2.48	2.31
45.0	4.16	3.88	3.66	3.43	3.32	3.15	2.98	2.81	2.64
90.0	3.32	3.09	2.87	2.76	2.59	2.53	2.25	2.14	2.03
135.0	3.21	2.98	2.93	2.70	2.53	2.42	2.31	2.25	2.08
180.0	3.94	3.71	3.43	3.26	3.09	2.93	2.81	2.64	2.48
225.0	4.11	3.88	3.71	3.43	3.32	3.15	2.93	2.87	2.70
270.0	3.88	3.66	3.43	3.32	3.09	2.87	2.76	2.59	2.48
315.0	2.98	2.87	2.70	2.59	2.42	2.25	2.19	2.08	1.91
360.0	3.66	3.49	3.26	3.15	2.98	2.70	2.64	2.48	2.31
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	2.19	2.03	1.97	1.86	1.74	1.58	1.52	1.41	1.41
45.0	2.53	2.36	2.14	2.19	1.97	1.97	1.74	1.58	1.52
90.0	1.97	1.80	1.63	1.58	1.46	1.41	1.29	1.18	1.13
135.0	1.97	1.91	1.74	1.63	1.58	1.46	1.46	1.29	1.24
180.0	2.42	2.25	2.14	2.08	1.91	1.86	1.74	1.58	1.52
225.0	2.53	2.42	2.25	2.19	2.08	1.91	1.86	1.69	1.69
270.0	2.31	2.14	2.08	1.97	1.80	1.69	1.63	1.58	1.41
315.0	1.86	1.74	1.74	1.58	1.52	1.46	1.41	1.35	1.24
360.0	2.19	2.03	1.97	1.86	1.74	1.58	1.52	1.41	1.41
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	1.24	1.13	0.96	0.90	0.84	0.90	0.84	0.84	0.96
45.0	1.35	1.18	1.13	1.07	1.01	0.96	1.01	1.13	1.07
90.0	0.96	0.84	0.90	0.79	0.73	0.62	0.68	0.68	0.68
135.0	1.18	1.07	1.07	1.01	0.90	0.79	0.73	0.68	0.62
180.0	1.46	1.35	1.18	1.07	1.01	0.96	0.90	0.84	0.79
225.0	1.46	1.29	1.13	1.07	0.96	0.90	0.96	0.79	0.73
270.0	1.29	1.24	1.18	0.96	0.90	0.79	0.73	0.62	0.51
315.0	1.18	1.07	1.07	0.90	0.90	0.73	0.79	0.73	0.68
360.0	1.24	1.13	0.96	0.90	0.84	0.90	0.84	0.84	0.96

Intensity data(cd)

C/γ(°)	90.0
0.0	0.96
45.0	1.13
90.0	0.68
135.0	0.56
180.0	0.73
225.0	0.68
270.0	0.45
315.0	0.73
360.0	0.96