



NATA LIGHTING CO.,LTD.
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Nata

Client: NT

LumCAT: 1-1891-A

Luminaire: 92.70.481.00

Report No: 20260423-B005

Ballast type: DC

Test No: 20260423-C005

Voltage(V): 38.240

LampCAT: CITIZEN CLU703

Current(A): 0.353

Lamp flux(lm): 1474.2

Power (W): 13.490

Number of Lamps: 1

PF: 0.000

Length(mm): 35

Width(mm): 35

Phm Type: C

Height(mm): 14

Photometric Results

Lumens(lm): 1342.44, Efficiency(%): 91.06% , Luminous Efficacy(lm/W): 99.51

Central intensity(cd): 2999.080, Maximum intensity(cd): 2999.080

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=27.0

[C90/270]Total=27.0

Field angle(10%Imax): [C0/180]Total=80.4

[C90/270]Total=80.4

Maximum s/h(1/2): C0_180=0.45 C90_270=0.45

Maximum s/h(1/4): C0_180=0.52 C90_270=0.52

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 91.06%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 99.130%

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2026/4/23
Humidity(%): 60.0%

Operator: 杨泽全
Distance(m): 9.16

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2999.080	0.000	0	0.00%	0.00%
1.0	2983.243	2.862	2.862	0.19%	0.21%
2.0	2942.444	8.505	11.368	0.58%	0.85%
3.0	2875.214	13.914	25.281	0.94%	1.88%
4.0	2795.714	18.982	44.264	1.29%	3.30%
5.0	2690.727	23.602	67.866	1.60%	5.06%
6.0	2568.015	27.636	95.502	1.87%	7.11%
7.0	2434.080	31.048	126.55	2.11%	9.43%
8.0	2296.685	33.857	160.407	2.30%	11.95%
9.0	2131.905	35.891	196.299	2.43%	14.62%
10.0	1957.623	37.009	233.307	2.51%	17.38%
11.0	1840.889	37.955	271.262	2.57%	20.21%
12.0	1686.576	38.560	309.823	2.62%	23.08%
13.0	1564.923	38.587	348.41	2.62%	25.95%
14.0	1435.415	38.404	386.814	2.61%	28.81%
15.0	1324.880	37.895	424.708	2.57%	31.64%
16.0	1207.590	37.108	461.816	2.52%	34.40%
17.0	1120.391	36.253	498.069	2.46%	37.10%
18.0	1035.469	35.545	533.615	2.41%	39.75%
19.0	969.498	34.882	568.497	2.37%	42.35%
20.0	913.145	34.458	602.954	2.34%	44.91%
21.0	864.616	34.137	637.091	2.32%	47.46%
22.0	822.726	33.908	670.999	2.30%	49.98%
23.0	783.343	33.700	704.698	2.29%	52.49%
24.0	748.406	33.490	738.188	2.27%	54.99%
25.0	715.694	33.290	771.478	2.26%	57.47%
26.0	686.799	33.106	804.584	2.25%	59.93%
27.0	659.959	32.949	837.533	2.24%	62.39%
28.0	634.945	32.784	870.317	2.22%	64.83%
29.0	613.528	32.664	902.981	2.22%	67.26%
30.0	594.314	32.611	935.592	2.21%	69.69%
31.0	577.459	32.609	968.201	2.21%	72.12%
32.0	560.322	32.596	1000.797	2.21%	74.55%
33.0	543.991	32.533	1033.331	2.21%	76.97%
34.0	526.361	32.392	1065.723	2.20%	79.39%
35.0	500.560	31.892	1097.615	2.16%	81.76%
36.0	472.997	30.998	1128.613	2.10%	84.07%
37.0	440.462	29.792	1158.405	2.02%	86.29%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	398.205	27.994	1186.399	1.90%	88.38%
39.0	350.243	25.547	1211.946	1.73%	90.28%
40.0	310.891	23.058	1235.004	1.56%	92.00%
41.0	245.885	19.827	1254.83	1.34%	93.47%
42.0	196.570	16.075	1270.905	1.09%	94.67%
43.0	153.421	12.965	1283.87	0.88%	95.64%
44.0	113.608	10.078	1293.948	0.68%	96.39%
45.0	79.994	7.440	1301.389	0.50%	96.94%
46.0	56.196	5.326	1306.715	0.36%	97.34%
47.0	40.893	3.861	1310.576	0.26%	97.63%
48.0	31.580	2.930	1313.506	0.20%	97.84%
49.0	26.651	2.391	1315.897	0.16%	98.02%
50.0	23.798	2.103	1318.001	0.14%	98.18%
51.0	21.522	1.917	1319.918	0.13%	98.32%
52.0	19.393	1.756	1321.674	0.12%	98.45%
53.0	17.327	1.597	1323.271	0.11%	98.57%
54.0	15.460	1.445	1324.716	0.10%	98.68%
55.0	13.624	1.298	1326.014	0.09%	98.78%
56.0	12.040	1.160	1327.174	0.08%	98.86%
57.0	10.625	1.036	1328.21	0.07%	98.94%
58.0	9.481	0.930	1329.14	0.06%	99.01%
59.0	8.558	0.843	1329.983	0.06%	99.07%
60.0	7.877	0.776	1330.76	0.05%	99.13%
61.0	7.216	0.720	1331.48	0.05%	99.18%
62.0	6.744	0.673	1332.153	0.05%	99.23%
63.0	6.272	0.633	1332.786	0.04%	99.28%
64.0	5.737	0.589	1333.375	0.04%	99.32%
65.0	5.265	0.544	1333.92	0.04%	99.36%
66.0	4.825	0.503	1334.423	0.03%	99.40%
67.0	4.520	0.470	1334.893	0.03%	99.44%
68.0	4.195	0.442	1335.334	0.03%	99.47%
69.0	3.975	0.417	1335.751	0.03%	99.50%
70.0	3.807	0.400	1336.151	0.03%	99.53%
71.0	3.692	0.388	1336.539	0.03%	99.56%
72.0	3.597	0.379	1336.918	0.03%	99.59%
73.0	3.503	0.371	1337.289	0.03%	99.62%
74.0	3.440	0.365	1337.654	0.02%	99.64%
75.0	3.367	0.360	1338.014	0.02%	99.67%

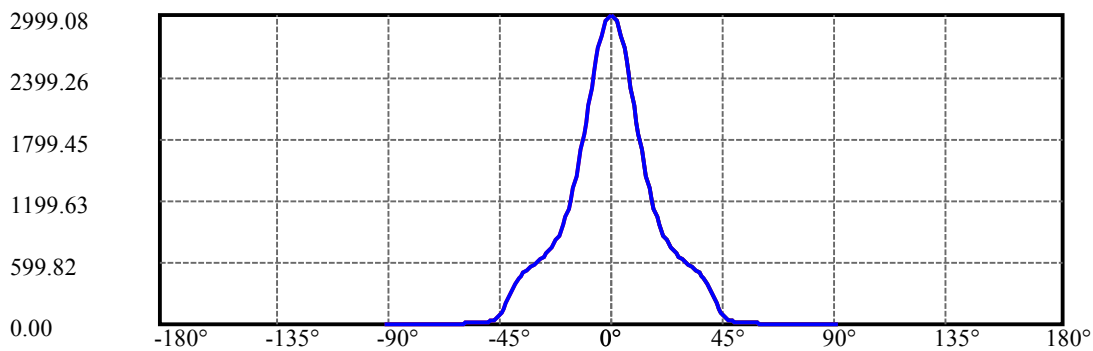
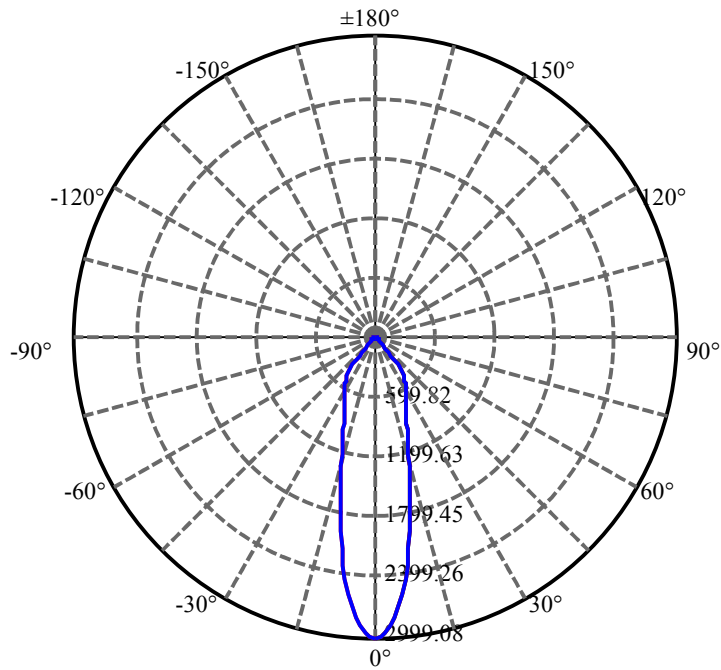
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	3.304	0.354	1338.368	0.02%	99.70%
77.0	3.241	0.349	1338.717	0.02%	99.72%
78.0	3.188	0.344	1339.061	0.02%	99.75%
79.0	3.115	0.339	1339.399	0.02%	99.77%
80.0	3.063	0.333	1339.732	0.02%	99.80%
81.0	2.989	0.327	1340.06	0.02%	99.82%
82.0	2.926	0.321	1340.38	0.02%	99.85%
83.0	2.832	0.313	1340.693	0.02%	99.87%
84.0	2.685	0.301	1340.994	0.02%	99.89%
85.0	2.528	0.284	1341.279	0.02%	99.91%
86.0	2.297	0.264	1341.542	0.02%	99.93%
87.0	2.140	0.243	1341.785	0.02%	99.95%
88.0	2.035	0.229	1342.014	0.02%	99.97%
89.0	1.982	0.220	1342.234	0.01%	99.98%
90.0	1.867	0.211	1342.445	0.01%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	935.59	63.46%	69.69%
0-40	1235.00	83.77%	92.00%
0-60	1330.76	90.27%	99.13%
0-90	1342.23	91.05%	99.98%
0-120	1342.23	91.05%	99.98%
0-180	1342.44	91.06%	100.00%
60-90	11.47	0.78%	0.85%
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%
0-34.26	1073.96	72.85%	80.00%

ZONAL LUMEN SUMMARY

0-10	233.31
10-20	369.65
20-30	332.64
30-40	299.41
40-50	83.00
50-60	12.76
60-70	5.39
70-80	3.58
80-90	2.50
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: ———

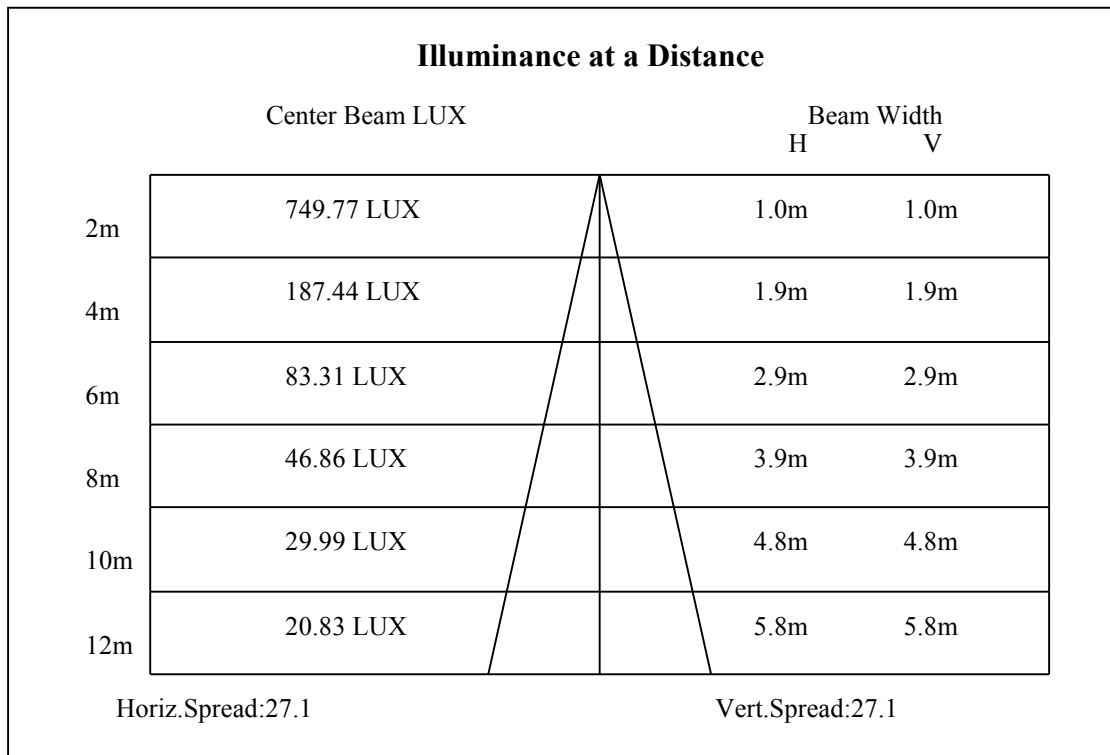
C90/C270: ———

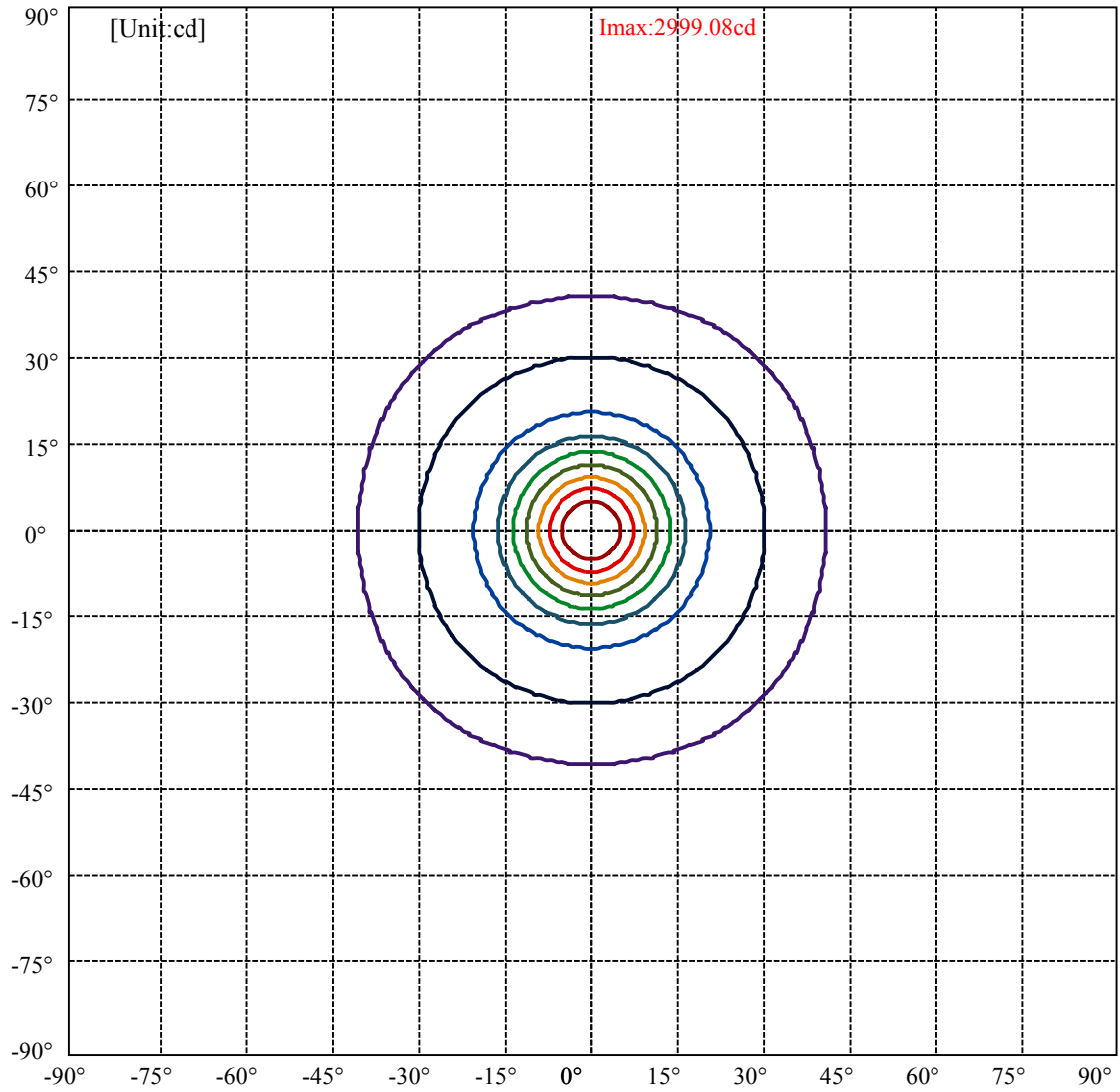
Field angle(10%Imax):C0/180Left:40.2 Right:40.2

:C90/270Left:40.2 Right:40.2

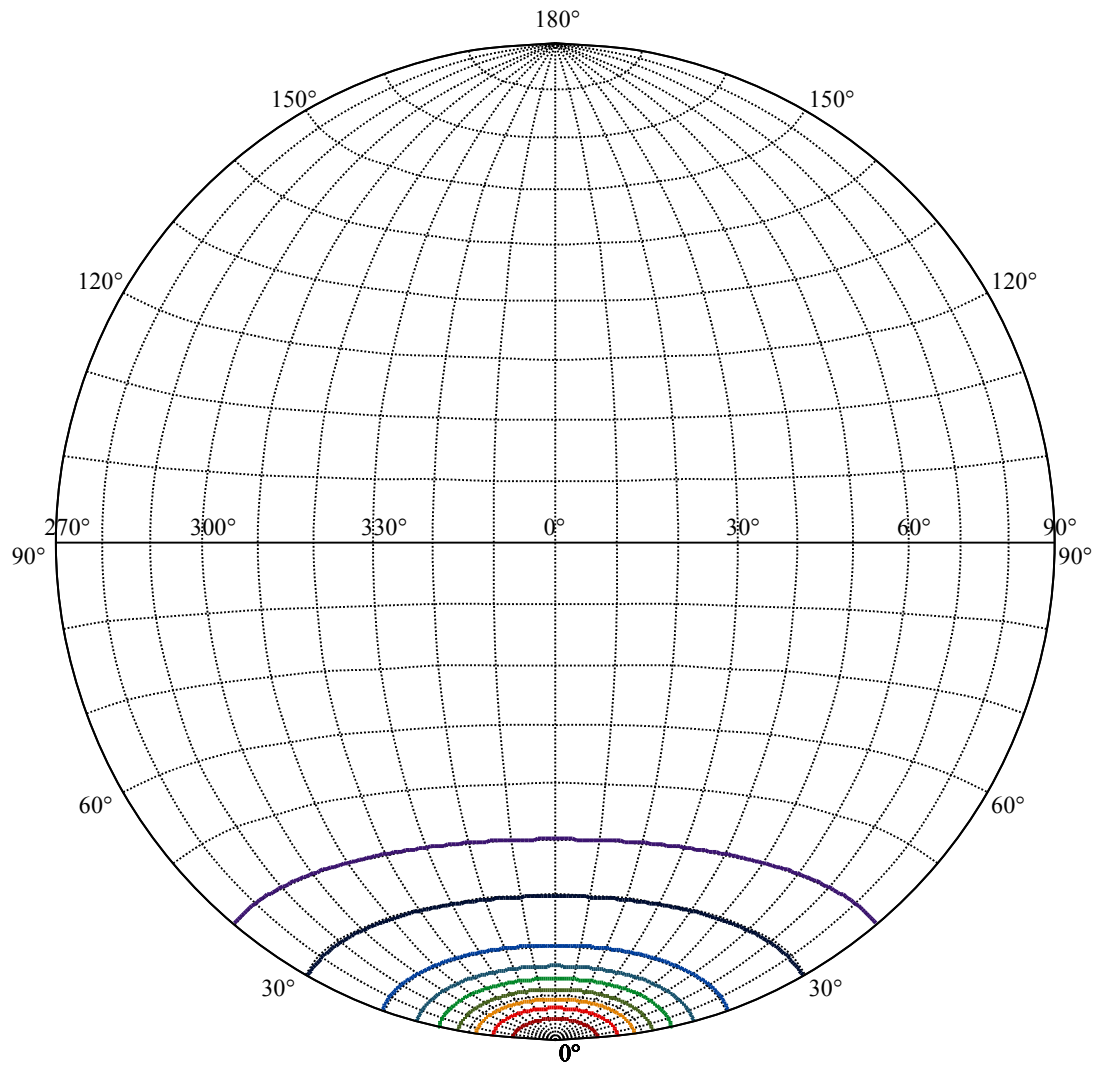
Beam Angle(50%Imax):C0/180Left:13.5 Right:13.5

:C90/270Left:13.5 Right:13.5





(10%Imax) 299.908	—
(20%Imax) 599.816	—
(30%Imax) 899.724	—
(40%Imax) 1199.63	—
(50%Imax) 1499.54	—
(60%Imax) 1799.45	—
(70%Imax) 2099.36	—
(80%Imax) 2399.26	—
(90%Imax) 2699.17	—



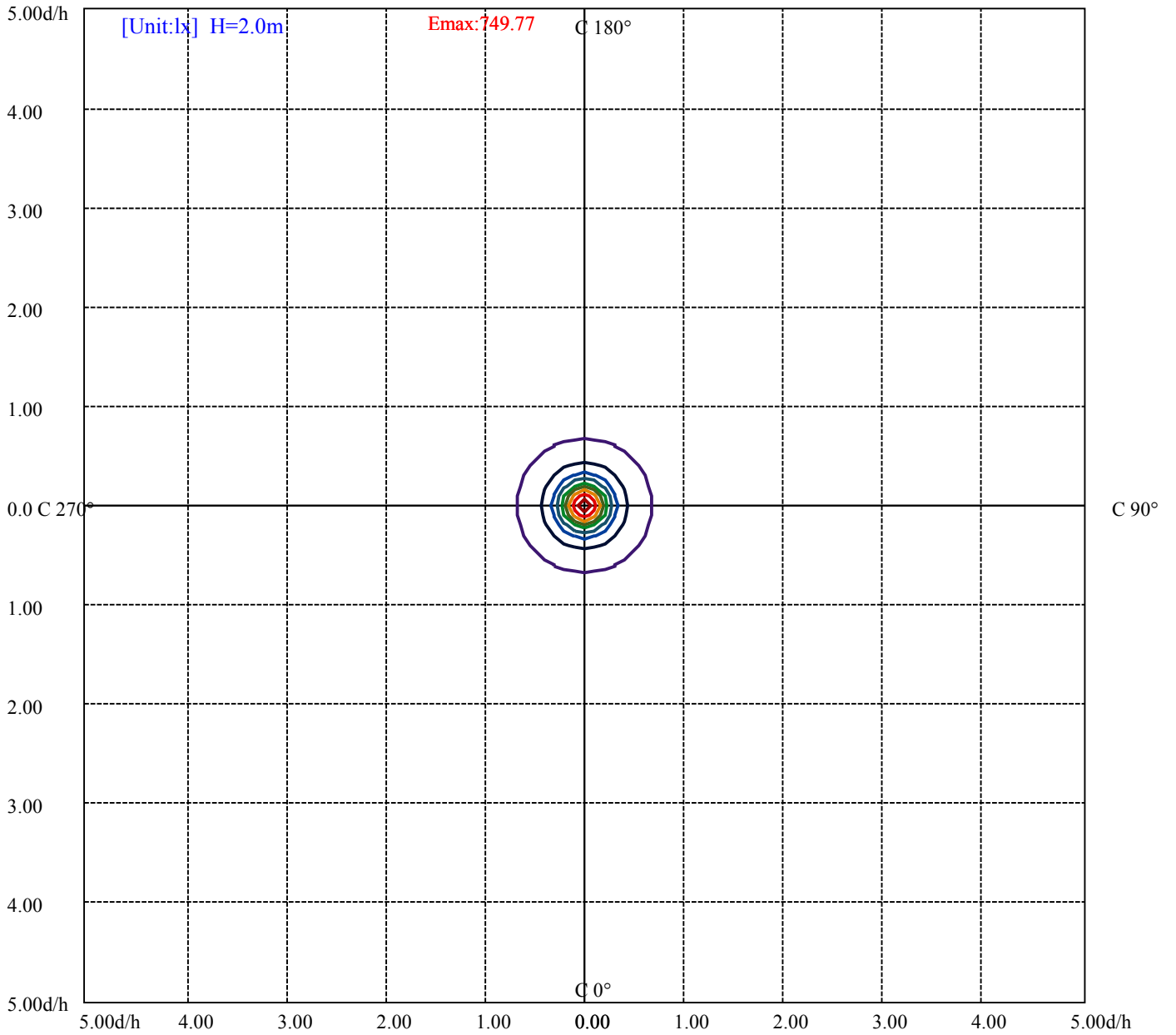
House

[Unit:cd]

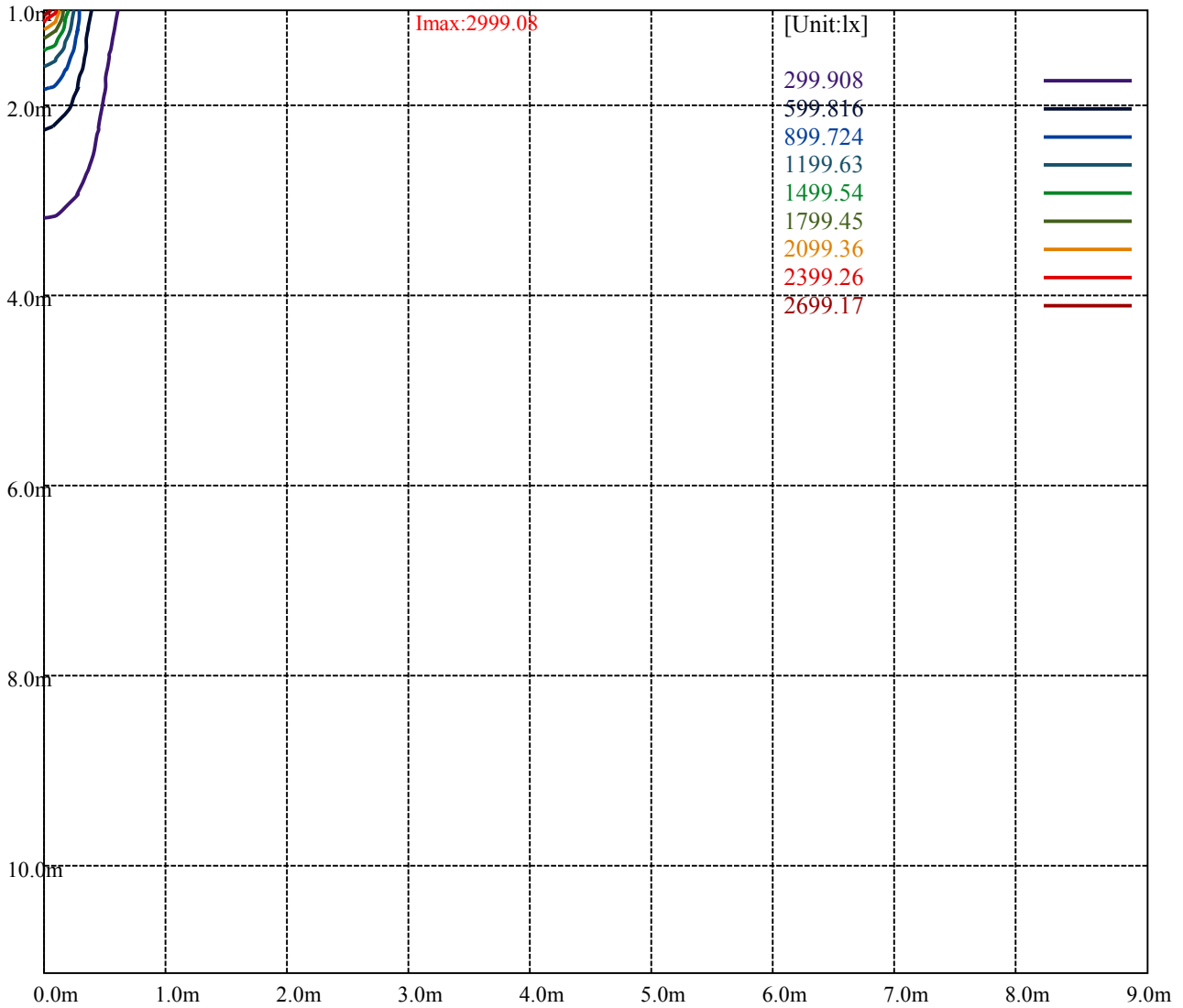
Road

Imax:2999.08

(10%Imax) 299.908	—
(20%Imax) 599.816	—
(30%Imax) 899.724	—
(40%Imax) 1199.63	—
(50%Imax) 1499.54	—
(60%Imax) 1799.45	—
(70%Imax) 2099.36	—
(80%Imax) 2399.26	—
(90%Imax) 2699.17	—



- (10%Emax) 74.977
- (20%Emax) 149.9538
- (30%Emax) 224.9308
- (40%Emax) 299.9075
- (50%Emax) 374.885
- (60%Emax) 449.8625
- (70%Emax) 524.8375
- (80%Emax) 599.815
- (90%Emax) 674.7925



Luminance Table

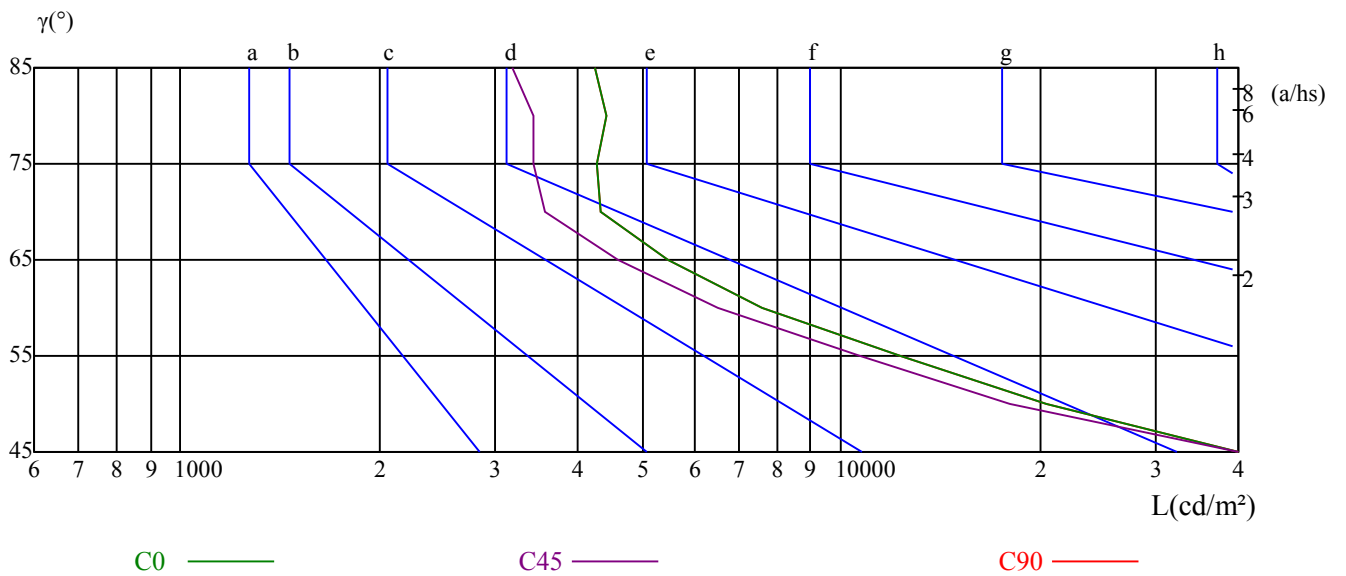
γ	45	50	55	60	65	70	75	80	85
C0	65964	20466	12341	7597	5474	4329	4260	4405	4249
C45	58983	18052	10725	6496	4595	3558	3413	3421	3171
C90	65964	20466	12341	7597	5474	4329	4260	4405	4249

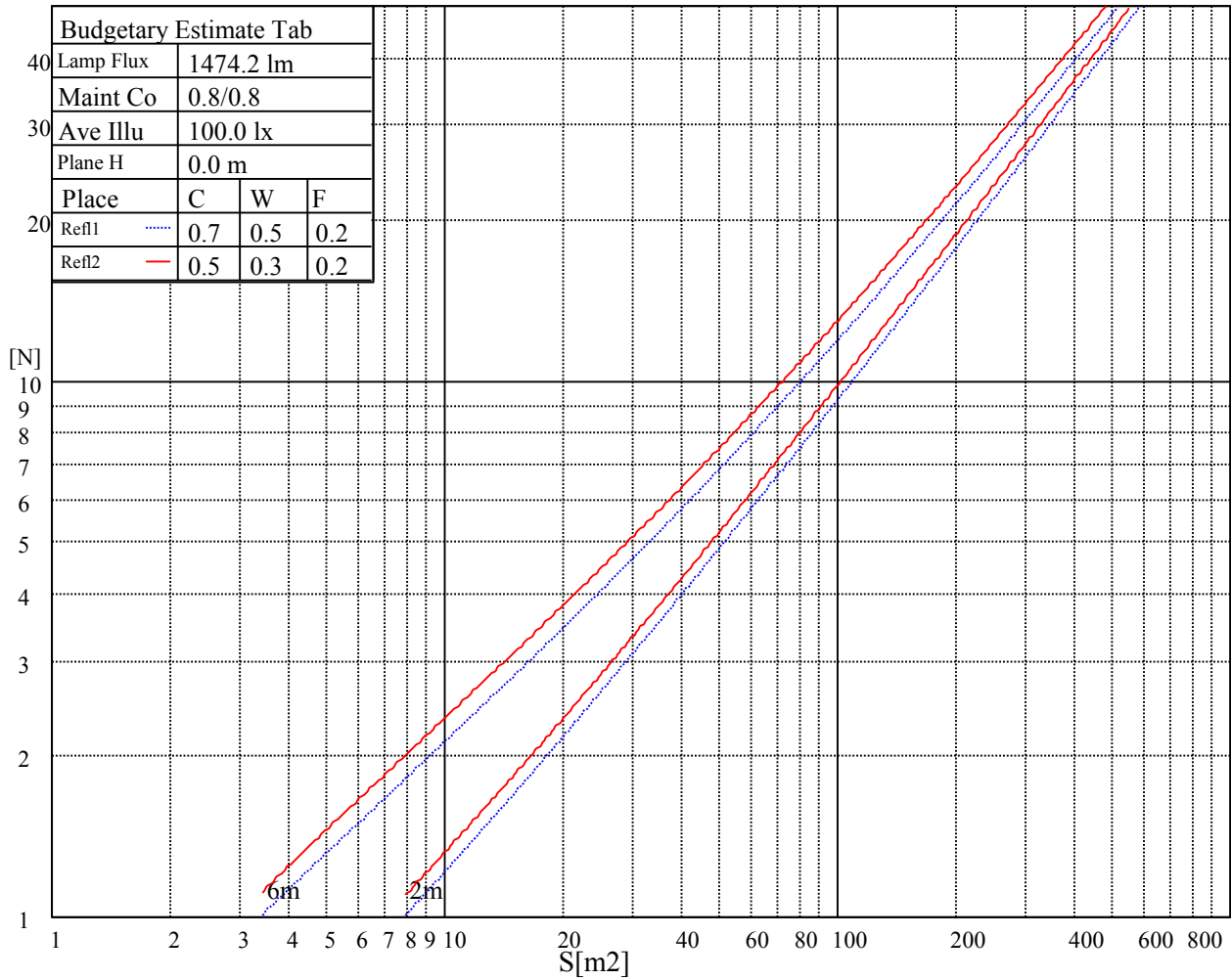
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
10170	10170	10170	10619	10619	10619	23675	23675	23675

Glare Table

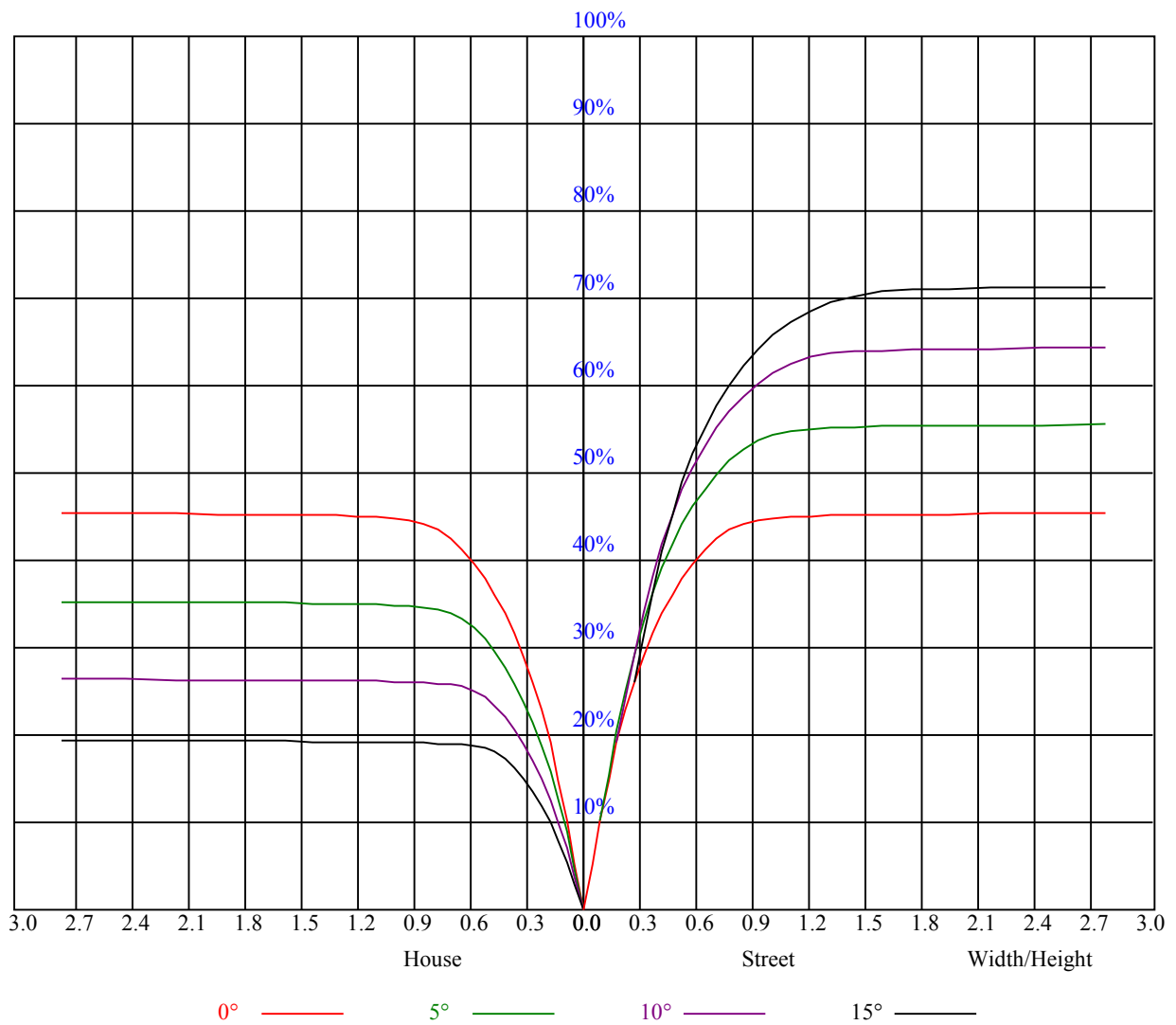
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

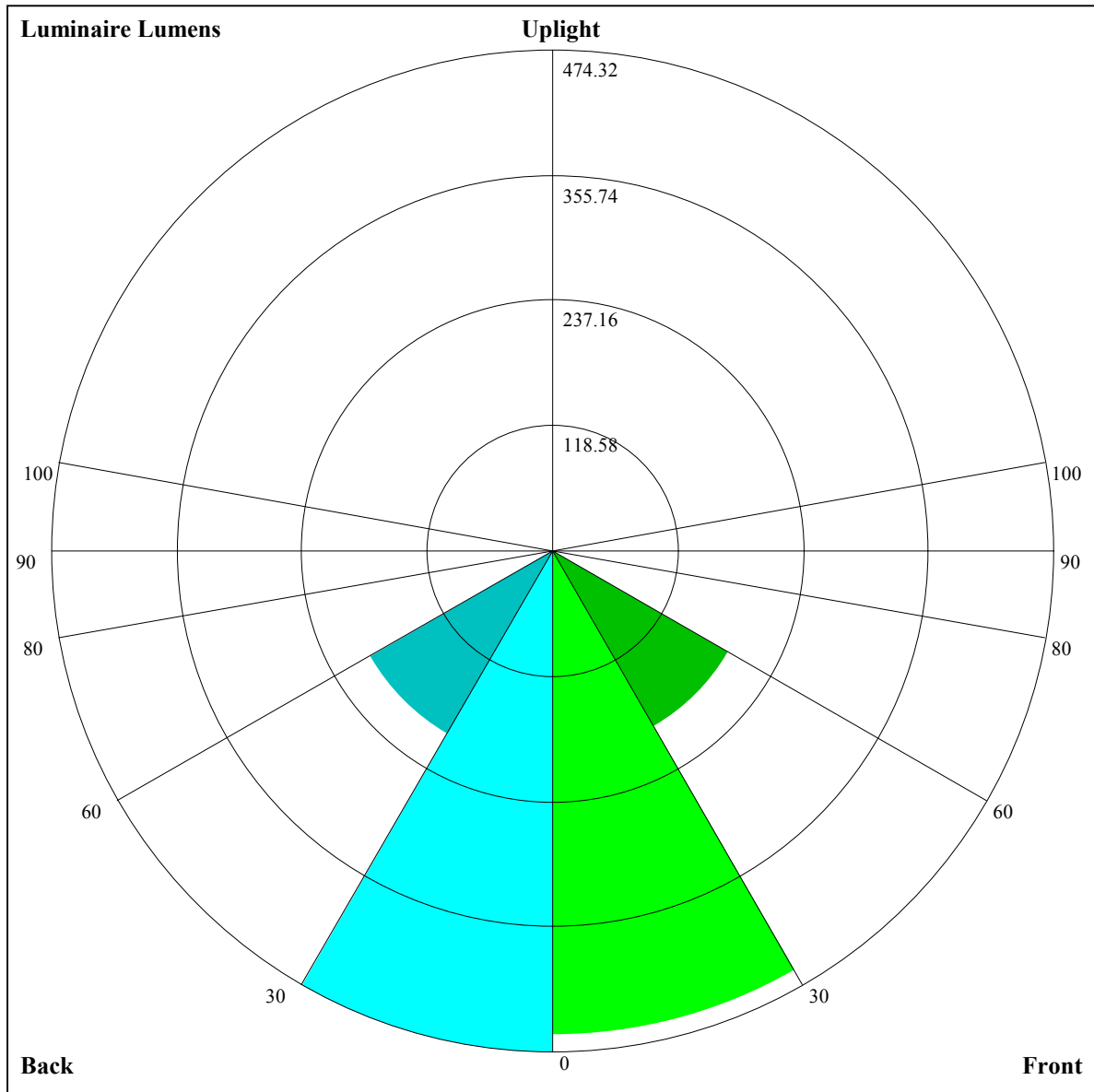
Luminance Limiting Curve





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	1.08	1.08	1.08	1.06	1.06	1.06	1.01	1.01	1.01	0.97	0.97	0.97	0.93	0.93	0.93	0.91
1	1.01	0.99	0.97	0.99	0.97	0.95	0.95	0.94	0.92	0.92	0.91	0.90	0.89	0.88	0.87	0.85
2	0.94	0.91	0.88	0.93	0.89	0.87	0.90	0.87	0.85	0.87	0.85	0.83	0.85	0.83	0.81	0.80
3	0.88	0.84	0.80	0.87	0.83	0.80	0.85	0.81	0.78	0.82	0.80	0.77	0.80	0.78	0.76	0.75
4	0.83	0.78	0.74	0.82	0.77	0.74	0.80	0.76	0.73	0.78	0.75	0.72	0.76	0.73	0.71	0.70
5	0.78	0.73	0.69	0.77	0.72	0.69	0.75	0.71	0.68	0.74	0.70	0.67	0.72	0.69	0.67	0.65
6	0.73	0.68	0.64	0.73	0.68	0.64	0.71	0.67	0.64	0.70	0.66	0.63	0.69	0.65	0.63	0.62
7	0.69	0.64	0.60	0.69	0.64	0.60	0.68	0.63	0.60	0.66	0.63	0.60	0.65	0.62	0.59	0.58
8	0.66	0.60	0.57	0.65	0.60	0.57	0.64	0.60	0.56	0.63	0.59	0.56	0.62	0.59	0.56	0.55
9	0.62	0.57	0.54	0.62	0.57	0.54	0.61	0.57	0.53	0.60	0.56	0.53	0.60	0.56	0.53	0.52
10	0.59	0.54	0.51	0.59	0.54	0.51	0.58	0.54	0.51	0.58	0.53	0.51	0.57	0.53	0.50	0.49





Luminaire Lumens:

FL=458.84,FM=192.64,FH=4.35,FVH=1.35

BL=474.32,BM=200.89,BH=4.78,BVH=1.37

UL=0,UH=0

BUG Rating:B1-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	3015.65	2978.73	2920.84	2846.16	2749.67	2612.07	2492.08	2359.51	2224.42
45.0	2997.19	3018.17	3015.65	2972.02	2920.00	2836.93	2739.60	2600.32	2478.66
90.0	3016.49	3027.40	2999.71	2956.92	2885.60	2800.85	2674.16	2564.24	2409.85
135.0	2966.99	3009.78	3034.95	3024.04	2982.93	2916.64	2832.74	2711.07	2602.84
180.0	3015.65	3013.97	2987.12	2943.49	2875.53	2765.61	2663.25	2543.26	2385.52
225.0	2997.19	2939.30	2870.49	2759.74	2660.73	2544.10	2380.49	2244.56	2103.60
270.0	3016.49	2979.57	2919.16	2810.92	2719.46	2607.03	2486.21	2320.91	2182.47
315.0	2966.99	2899.02	2791.62	2688.42	2571.79	2442.58	2275.60	2128.77	1986.13
360.0	3015.65	2978.73	2920.84	2846.16	2749.67	2612.07	2492.08	2359.51	2224.42
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	2047.38	1648.07	1648.07	1614.51	1452.15	1339.30	1239.71	1136.33	1062.16
45.0	2352.80	2220.23	2044.86	1901.38	1761.26	1592.61	1464.24	1315.72	1211.68
90.0	2276.44	2143.03	1968.51	1649.84	1649.84	1520.96	1398.29	1282.66	1178.87
135.0	2489.56	2359.51	2193.38	2057.45	1918.17	1777.20	1641.28	1475.14	1351.80
180.0	2257.14	2122.90	1982.77	1807.41	1670.64	1542.27	1424.80	1286.36	1184.83
225.0	1963.47	1642.28	1642.28	1511.14	1384.53	1242.64	1147.58	1070.13	1006.78
270.0	2010.46	1866.98	1725.18	1554.85	1425.64	1306.49	1202.45	1095.05	1026.25
315.0	1657.97	1657.97	1522.05	1396.02	1257.16	1161.84	1080.70	999.32	940.75
360.0	2047.38	1648.07	1648.07	1614.51	1452.15	1339.30	1239.71	1136.33	1062.16
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	982.53	928.92	886.21	848.87	805.83	777.13	744.49	714.54	681.65
45.0	1125.26	1056.46	983.46	934.79	887.81	847.53	802.22	772.02	741.81
90.0	1074.41	1005.78	948.64	897.37	848.54	792.49	753.39	710.43	680.56
135.0	1216.72	1126.10	1049.74	971.71	920.53	874.38	824.88	783.76	744.33
180.0	1096.73	1011.99	958.29	894.52	847.53	806.42	770.34	722.51	694.82
225.0	932.02	877.48	821.77	782.00	745.67	709.00	682.74	657.90	636.00
270.0	965.84	911.30	855.92	818.16	782.08	744.33	717.48	693.14	662.94
315.0	890.24	837.97	801.13	769.50	743.82	715.46	691.72	671.24	652.28
360.0	982.53	928.92	886.21	848.87	805.83	777.13	744.49	714.54	681.65
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	658.32	636.93	614.52	598.67	585.24	566.45	553.61	539.43	508.55
45.0	714.12	682.24	658.74	632.73	614.27	595.81	576.52	561.41	547.99
90.0	646.66	619.48	595.90	575.09	555.20	537.08	521.22	507.04	488.83
135.0	709.09	669.65	643.64	620.15	600.85	579.03	561.41	544.63	525.33
180.0	675.52	656.23	631.05	611.76	595.81	579.03	560.57	547.99	527.85
225.0	609.41	587.76	571.40	558.73	541.69	529.36	519.80	499.15	471.13
270.0	635.25	610.92	592.46	572.32	553.86	533.72	518.62	501.84	475.83
315.0	631.31	616.37	600.51	585.07	572.74	562.08	540.18	509.39	458.96
360.0	658.32	636.93	614.52	598.67	585.24	566.45	553.61	539.43	508.55
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	474.23	431.53	384.87	323.54	273.62	226.04	177.46	123.68	88.44
45.0	534.56	503.52	467.44	428.00	428.00	318.93	267.74	218.57	172.76
90.0	473.06	448.14	413.65	364.15	323.62	282.51	229.31	188.28	138.53
135.0	509.39	489.25	461.56	427.16	427.16	332.10	289.14	244.25	200.53
180.0	506.03	474.99	426.32	426.32	370.02	282.51	223.52	176.71	134.50
225.0	436.73	388.23	343.01	282.34	229.90	181.57	137.27	99.34	59.74
270.0	438.91	428.84	380.01	293.17	237.87	192.40	139.12	102.70	71.40
315.0	411.05	359.20	308.77	257.25	196.93	151.03	108.99	73.84	42.96
360.0	474.23	431.53	384.87	323.54	273.62	226.04	177.46	123.68	88.44

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	58.15	34.40	27.44	24.16	21.90	19.89	17.37	15.52	13.68
45.0	120.15	83.23	48.25	32.89	27.69	24.33	22.32	20.47	18.12
90.0	100.60	70.48	47.91	33.48	29.95	27.27	24.92	22.23	20.14
135.0	152.12	116.54	86.59	60.83	40.78	34.23	29.95	27.35	24.92
180.0	96.32	58.57	38.60	28.86	26.60	24.00	22.32	19.89	18.04
225.0	38.76	28.78	26.26	24.25	22.57	20.47	18.63	16.95	14.85
270.0	43.55	31.72	28.11	25.93	23.58	21.82	20.05	18.29	16.11
315.0	30.29	25.84	24.00	22.23	20.14	18.38	16.61	14.43	12.75
360.0	58.15	34.40	27.44	24.16	21.90	19.89	17.37	15.52	13.68
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	11.91	9.90	8.47	7.22	6.29	5.45	5.12	4.87	4.70
45.0	16.28	14.43	12.84	10.91	9.40	8.14	7.13	6.29	5.87
90.0	18.21	16.03	14.52	13.17	11.50	10.49	9.48	8.56	8.05
135.0	21.98	19.80	17.87	15.52	13.93	12.42	11.24	9.90	9.23
180.0	16.28	14.10	12.33	10.91	9.48	8.47	7.89	7.55	7.30
225.0	13.26	11.75	10.24	9.15	8.47	7.97	7.55	7.05	6.46
270.0	14.52	13.01	11.33	10.15	9.23	8.39	7.97	7.38	6.71
315.0	11.24	9.98	8.73	7.97	7.55	7.13	6.63	6.13	5.62
360.0	11.91	9.90	8.47	7.22	6.29	5.45	5.12	4.87	4.70
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	4.45	4.28	4.11	4.03	3.94	3.78	3.61	3.52	3.52
45.0	5.62	5.29	5.03	4.61	4.36	4.11	3.94	3.78	3.61
90.0	7.55	6.80	6.29	5.71	5.20	4.53	4.28	4.11	4.03
135.0	8.64	8.05	7.22	6.54	5.96	5.20	4.70	4.36	4.11
180.0	6.80	6.21	5.71	5.03	4.61	4.28	4.11	3.86	3.61
225.0	5.96	5.20	4.61	4.20	3.94	3.78	3.52	3.36	3.36
270.0	6.13	5.45	4.95	4.45	4.20	4.11	4.03	3.86	3.78
315.0	5.03	4.61	4.20	4.03	3.94	3.78	3.61	3.61	3.52
360.0	4.45	4.28	4.11	4.03	3.94	3.78	3.61	3.52	3.52
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	3.44	3.36	3.36	3.27	3.19	3.19	3.10	3.02	2.94
45.0	3.44	3.36	3.27	3.19	3.19	3.19	3.02	3.10	3.02
90.0	3.86	3.86	3.78	3.69	3.61	3.52	3.52	3.44	3.36
135.0	3.94	3.78	3.69	3.52	3.52	3.44	3.36	3.27	3.19
180.0	3.52	3.44	3.36	3.36	3.27	3.19	3.19	3.02	3.02
225.0	3.27	3.10	3.10	3.02	2.94	2.85	2.85	2.85	2.77
270.0	3.78	3.69	3.61	3.52	3.44	3.36	3.27	3.10	3.10
315.0	3.52	3.44	3.36	3.36	3.27	3.19	3.19	3.10	3.10
360.0	3.44	3.36	3.36	3.27	3.19	3.19	3.10	3.02	2.94
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	2.85	2.85	2.68	2.60	2.27	2.18	2.18	2.01	1.85
45.0	2.94	2.94	2.85	2.77	2.60	2.35	2.27	2.18	2.10
90.0	3.27	3.19	3.19	2.94	2.77	2.43	2.27	2.18	2.27
135.0	3.10	3.02	2.94	2.94	2.85	2.77	2.35	2.27	2.18
180.0	3.02	2.94	2.85	2.85	2.77	2.27	2.27	2.18	2.18
225.0	2.77	2.68	2.68	2.60	2.18	2.10	2.01	1.93	1.76
270.0	3.02	2.94	2.77	2.52	2.18	2.10	1.93	1.76	1.76
315.0	2.94	2.85	2.68	2.27	2.60	2.18	1.85	1.76	1.76
360.0	2.85	2.85	2.68	2.60	2.27	2.18	2.18	2.01	1.85

Intensity data(cd)

C/γ(°)	90.0
0.0	1.76
45.0	2.01
90.0	1.93
135.0	2.10
180.0	1.85
225.0	1.76
270.0	1.85
315.0	1.68
360.0	1.76