



NATA LIGHTING CO.,LTD.
www.nata.cn
Email:info@nata.com
Tel:+86 571 85021543 Fax:+86 571 87977635
Address:Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

NT

Client: NT

LumCAT: 2-3216-A

Luminaire: 92.70.121.00

Report No: 20260327-B005

Ballast type: AC

Test No: 20260327-C005

Voltage(V): 35.780

LampCAT: CITIZEN CLU038

Current(A): 0.723

Lamp flux(lm): 3553.2

Power (W): 25.868

Number of Lamps: 1

PF: 0.000

Length(mm): 75

Width(mm): 75

Phm Type: C

Height(mm): 43

Photometric Results

Lumens(lm): 3173.27, Efficiency(%): 89.31% , Luminous Efficacy(lm/W): 122.67

Central intensity(cd): 6976.350, Maximum intensity(cd): 6976.350

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=37.6

[C90/270]Total=37.6

Field angle(10%Imax): [C0/180]Total=69.4

[C90/270]Total=69.4

Maximum s/h(1/2): C0_180=0.62 C90_270=0.62

Maximum s/h(1/4): C0_180=0.60 C90_270=0.60

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 89.31%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 99.834%

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	6976.350	0.000	0	0.00%	0.00%
1.0	6968.756	6.672	6.672	0.19%	0.21%
2.0	6946.327	19.972	26.645	0.56%	0.84%
3.0	6897.600	33.110	59.755	0.93%	1.88%
4.0	6829.889	45.950	105.705	1.29%	3.33%
5.0	6742.420	58.387	164.092	1.64%	5.17%
6.0	6625.842	70.254	234.346	1.98%	7.39%
7.0	6485.850	81.384	315.73	2.29%	9.95%
8.0	6315.413	91.616	407.347	2.58%	12.84%
9.0	6133.725	100.893	508.24	2.84%	16.02%
10.0	5932.491	109.195	617.435	3.07%	19.46%
11.0	5700.952	116.242	733.677	3.27%	23.12%
12.0	5449.163	121.887	855.563	3.43%	26.96%
13.0	5186.264	126.216	981.779	3.55%	30.94%
14.0	4903.256	129.145	1110.924	3.63%	35.01%
15.0	4625.663	130.817	1241.741	3.68%	39.13%
16.0	4331.897	131.253	1372.995	3.69%	43.27%
17.0	4022.873	130.106	1503.101	3.66%	47.37%
18.0	3731.217	127.848	1630.949	3.60%	51.40%
19.0	3410.592	124.253	1755.202	3.50%	55.31%
20.0	3109.584	119.337	1874.539	3.36%	59.07%
21.0	2800.561	113.487	1988.026	3.19%	62.65%
22.0	2524.866	107.017	2095.043	3.01%	66.02%
23.0	2257.327	100.343	2195.386	2.82%	69.18%
24.0	1998.998	93.059	2288.445	2.62%	72.12%
25.0	1793.053	86.223	2374.668	2.43%	74.83%
26.0	1606.303	80.242	2454.91	2.26%	77.36%
27.0	1453.303	74.854	2529.764	2.11%	79.72%
28.0	1332.246	70.524	2600.288	1.98%	81.94%
29.0	1221.947	66.825	2667.113	1.88%	84.05%
30.0	1156.690	64.223	2731.335	1.81%	86.07%
31.0	1089.373	62.505	2793.84	1.76%	88.04%
32.0	998.733	59.822	2853.662	1.68%	89.93%
33.0	886.936	55.553	2909.214	1.56%	91.68%
34.0	775.470	50.309	2959.524	1.42%	93.26%
35.0	658.716	44.540	3004.064	1.25%	94.67%
36.0	545.759	38.351	3042.415	1.08%	95.88%
37.0	433.624	31.942	3074.357	0.90%	96.88%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	320.562	25.174	3099.531	0.71%	97.68%
39.0	256.655	19.702	3119.233	0.55%	98.30%
40.0	205.903	16.132	3135.365	0.45%	98.81%
41.0	118.905	11.566	3146.931	0.33%	99.17%
42.0	48.530	6.083	3153.014	0.17%	99.36%
43.0	31.085	2.949	3155.964	0.08%	99.45%
44.0	24.286	2.090	3158.053	0.06%	99.52%
45.0	17.859	1.620	3159.673	0.05%	99.57%
46.0	13.310	1.219	3160.892	0.03%	99.61%
47.0	10.160	0.933	3161.826	0.03%	99.64%
48.0	8.501	0.754	3162.58	0.02%	99.66%
49.0	7.481	0.656	3163.236	0.02%	99.68%
50.0	6.785	0.595	3163.831	0.02%	99.70%
51.0	6.293	0.553	3164.384	0.02%	99.72%
52.0	5.780	0.518	3164.902	0.01%	99.74%
53.0	5.302	0.482	3165.384	0.01%	99.75%
54.0	4.922	0.451	3165.835	0.01%	99.77%
55.0	4.528	0.422	3166.257	0.01%	99.78%
56.0	4.184	0.394	3166.651	0.01%	99.79%
57.0	3.923	0.371	3167.021	0.01%	99.80%
58.0	3.600	0.348	3167.369	0.01%	99.81%
59.0	3.403	0.327	3167.697	0.01%	99.82%
60.0	3.178	0.311	3168.007	0.01%	99.83%
61.0	2.981	0.294	3168.301	0.01%	99.84%
62.0	2.834	0.280	3168.582	0.01%	99.85%
63.0	2.686	0.268	3168.85	0.01%	99.86%
64.0	2.573	0.258	3169.108	0.01%	99.87%
65.0	2.447	0.248	3169.357	0.01%	99.88%
66.0	2.313	0.238	3169.594	0.01%	99.88%
67.0	2.215	0.228	3169.822	0.01%	99.89%
68.0	2.138	0.220	3170.042	0.01%	99.90%
69.0	2.053	0.214	3170.256	0.01%	99.90%
70.0	1.969	0.207	3170.463	0.01%	99.91%
71.0	1.891	0.200	3170.662	0.01%	99.92%
72.0	1.807	0.192	3170.854	0.01%	99.92%
73.0	1.744	0.186	3171.04	0.01%	99.93%
74.0	1.666	0.179	3171.219	0.01%	99.94%
75.0	1.603	0.173	3171.392	0.00%	99.94%

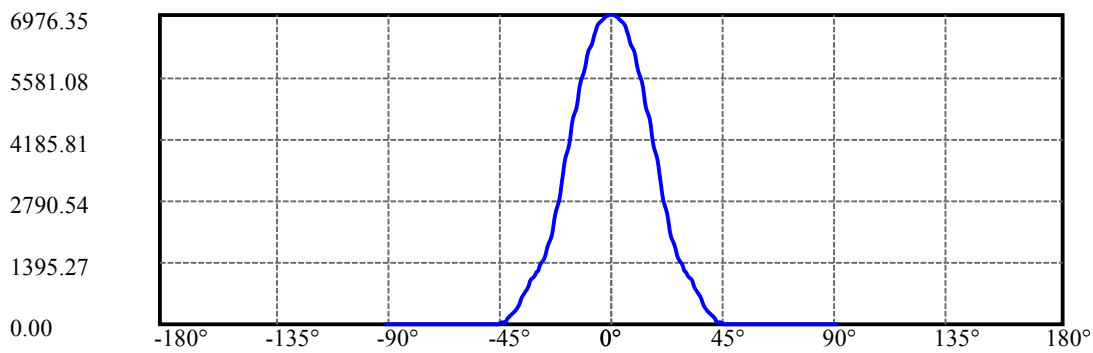
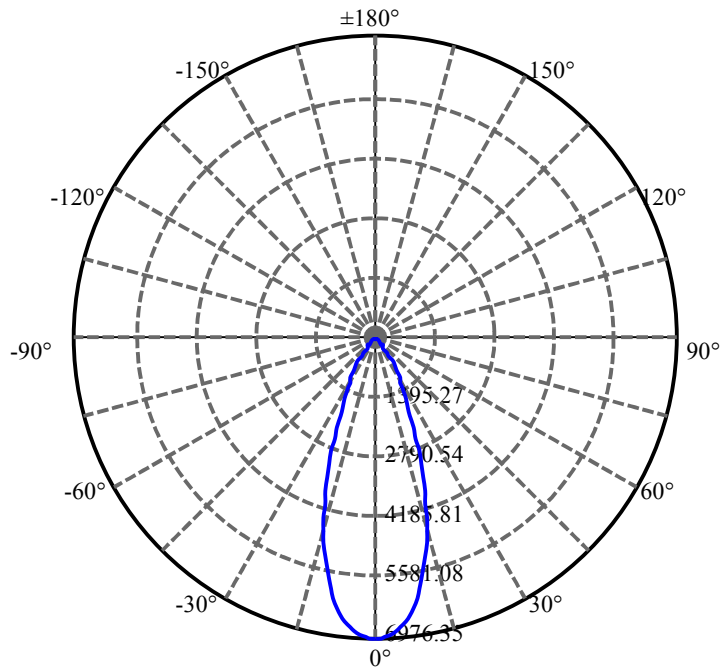
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	1.554	0.168	3171.56	0.00%	99.95%
77.0	1.484	0.162	3171.722	0.00%	99.95%
78.0	1.406	0.155	3171.876	0.00%	99.96%
79.0	1.357	0.148	3172.025	0.00%	99.96%
80.0	1.287	0.143	3172.167	0.00%	99.97%
81.0	1.216	0.135	3172.303	0.00%	99.97%
82.0	1.167	0.129	3172.432	0.00%	99.97%
83.0	1.062	0.121	3172.553	0.00%	99.98%
84.0	1.034	0.114	3172.667	0.00%	99.98%
85.0	0.991	0.111	3172.778	0.00%	99.98%
86.0	0.949	0.106	3172.884	0.00%	99.99%
87.0	0.928	0.103	3172.987	0.00%	99.99%
88.0	0.886	0.099	3173.086	0.00%	99.99%
89.0	0.858	0.096	3173.182	0.00%	100.00%
90.0	0.795	0.091	3173.272	0.00%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2731.34	76.87%	86.07%
0-40	3135.36	88.24%	98.81%
0-60	3168.01	89.16%	99.83%
0-90	3173.18	89.31%	100.00%
0-120	3173.18	89.31%	100.00%
0-180	3173.27	89.31%	100.00%
60-90	5.17	0.15%	0.16%
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%
0-27.13	2538.62	71.45%	80.00%

ZONAL LUMEN SUMMARY

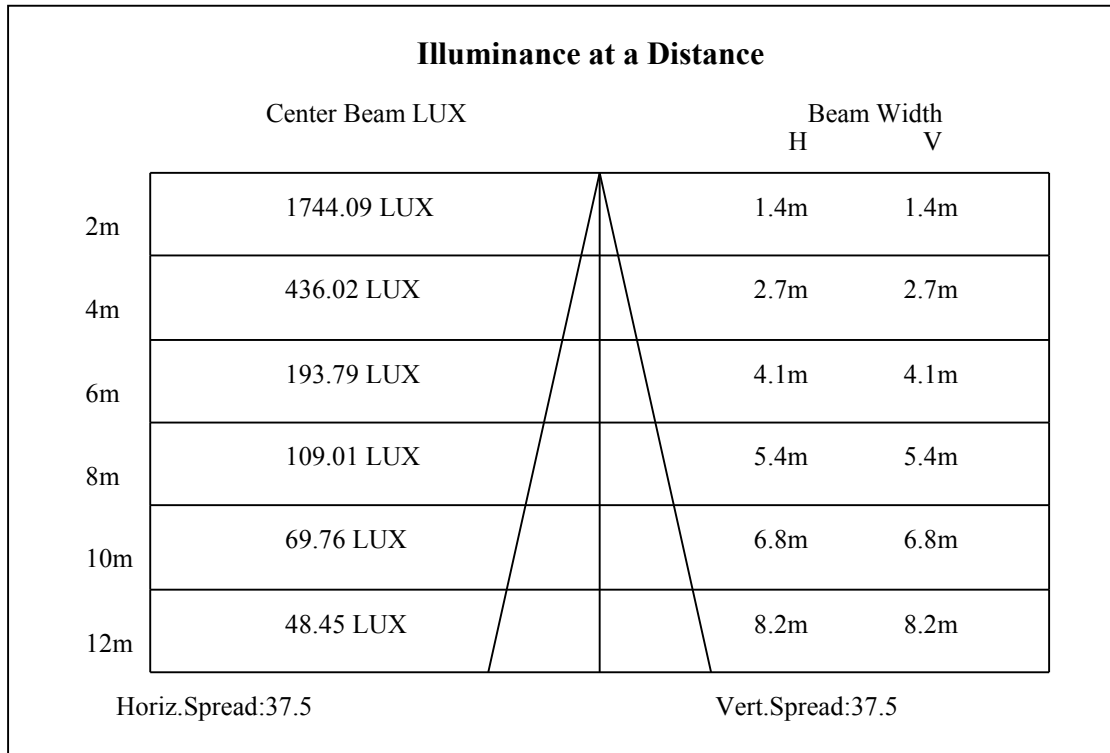
0-10	617.43
10-20	1257.10
20-30	856.80
30-40	404.03
40-50	28.47
50-60	4.18
60-70	2.46
70-80	1.70
80-90	1.01
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

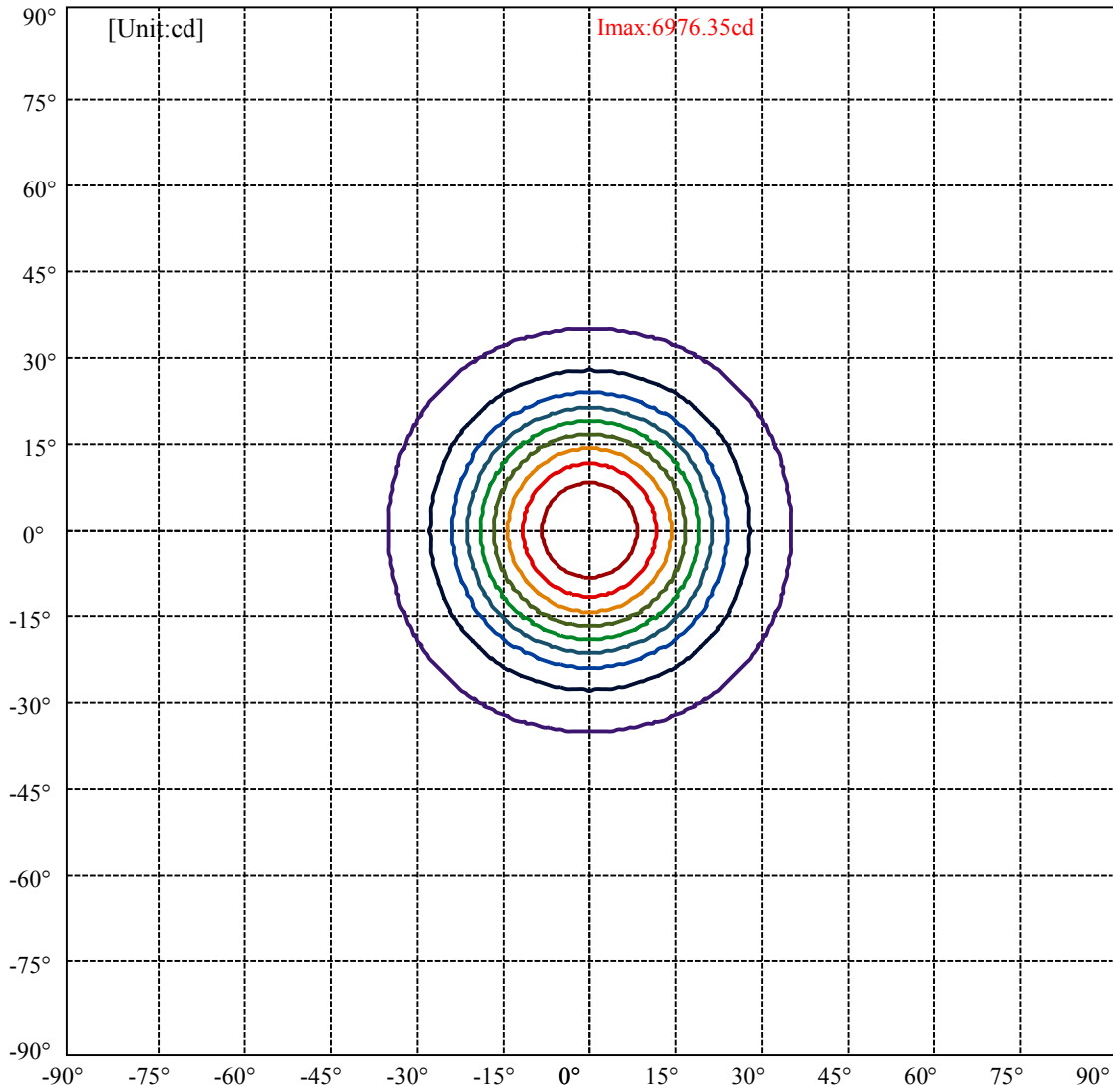


C90/C270: —————

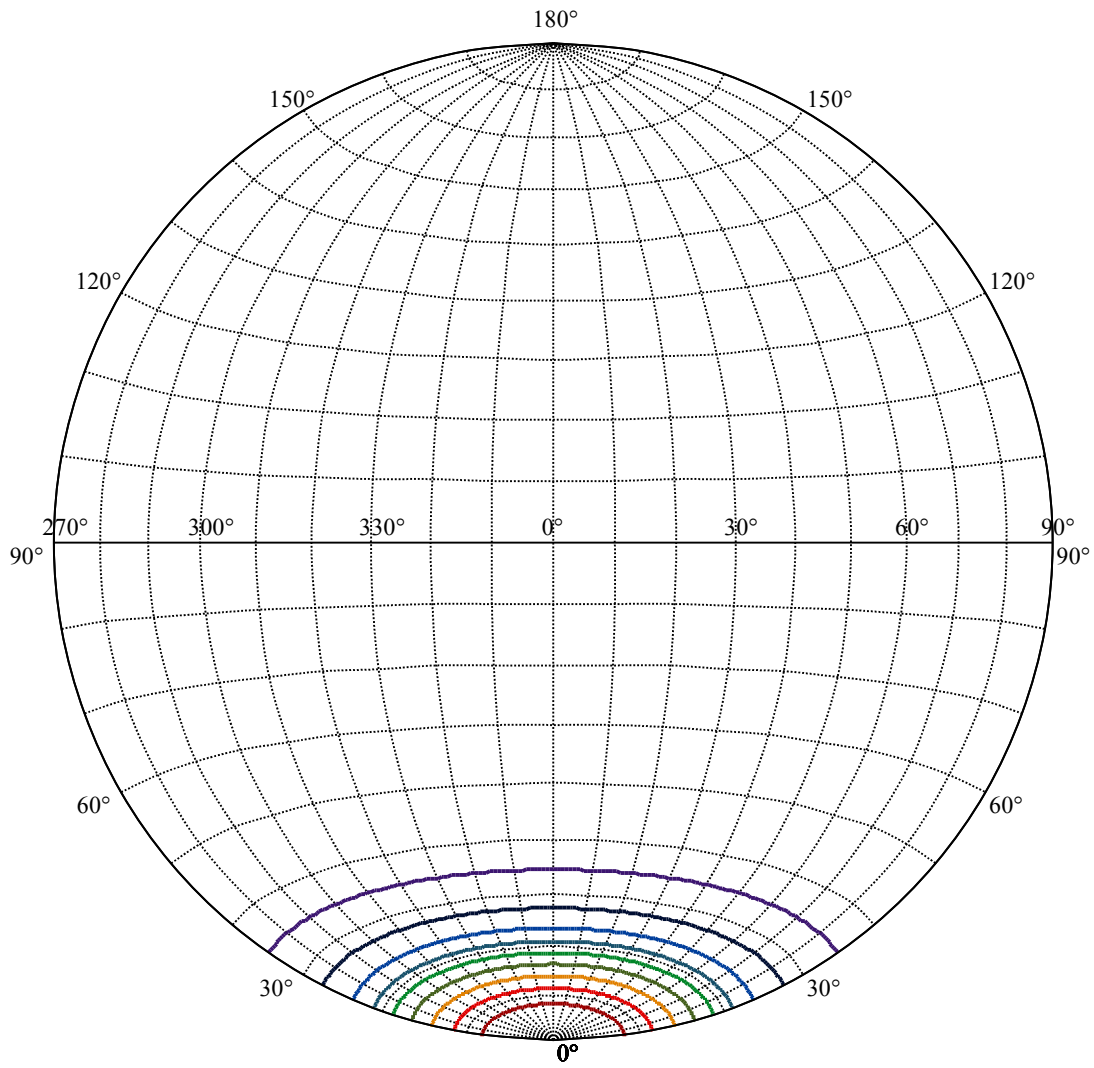
Field angle(10%Imax):C90/270Left:34.7 Right:34.7

Beam Angle(50%Imax):C90/270Left:18.8 Right:18.8





(10%Imax) 697.635	—
(20%Imax) 1395.27	—
(30%Imax) 2092.91	—
(40%Imax) 2790.54	—
(50%Imax) 3488.18	—
(60%Imax) 4185.81	—
(70%Imax) 4883.45	—
(80%Imax) 5581.08	—
(90%Imax) 6278.71	—



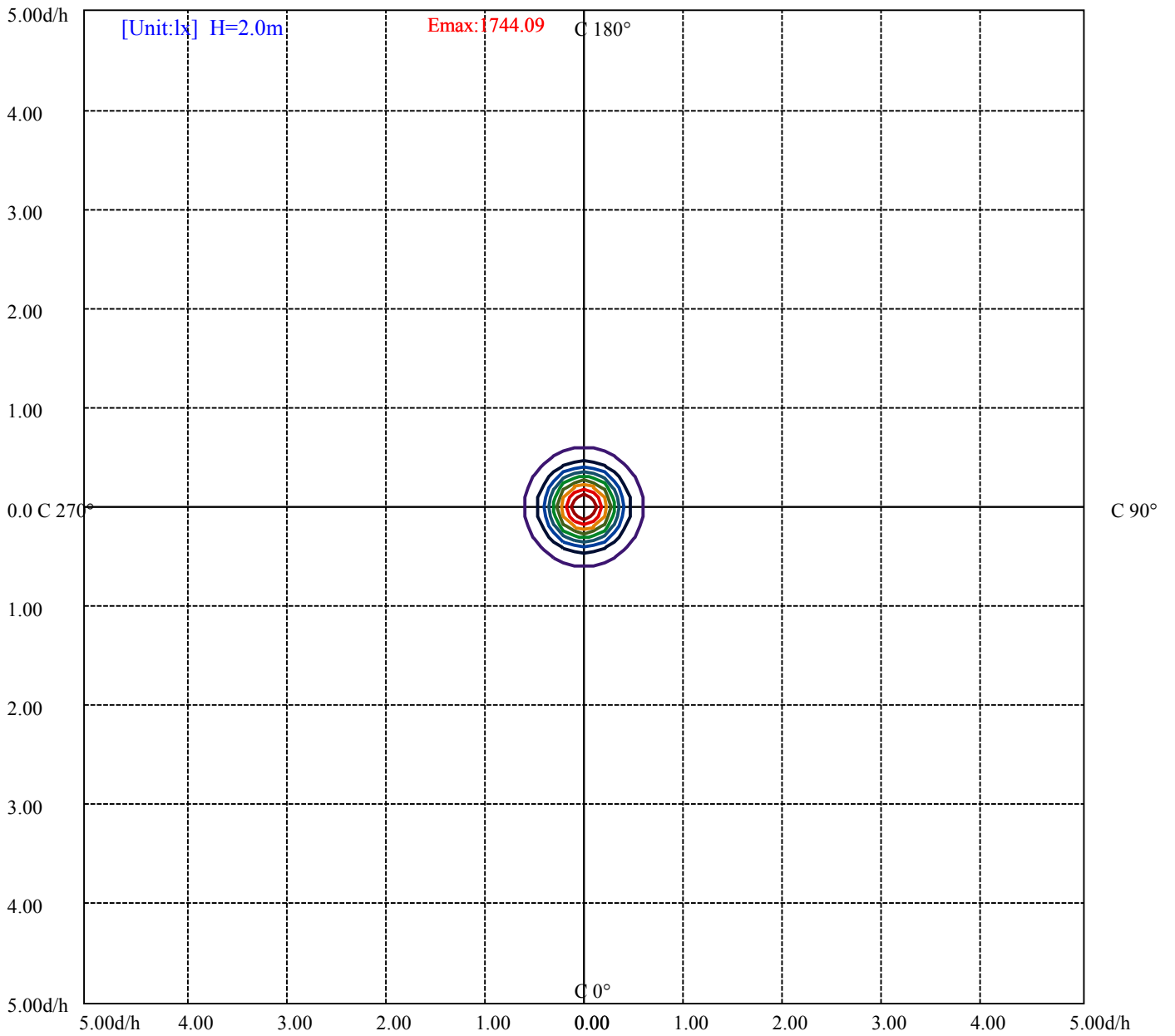
House

[Unit:cd]

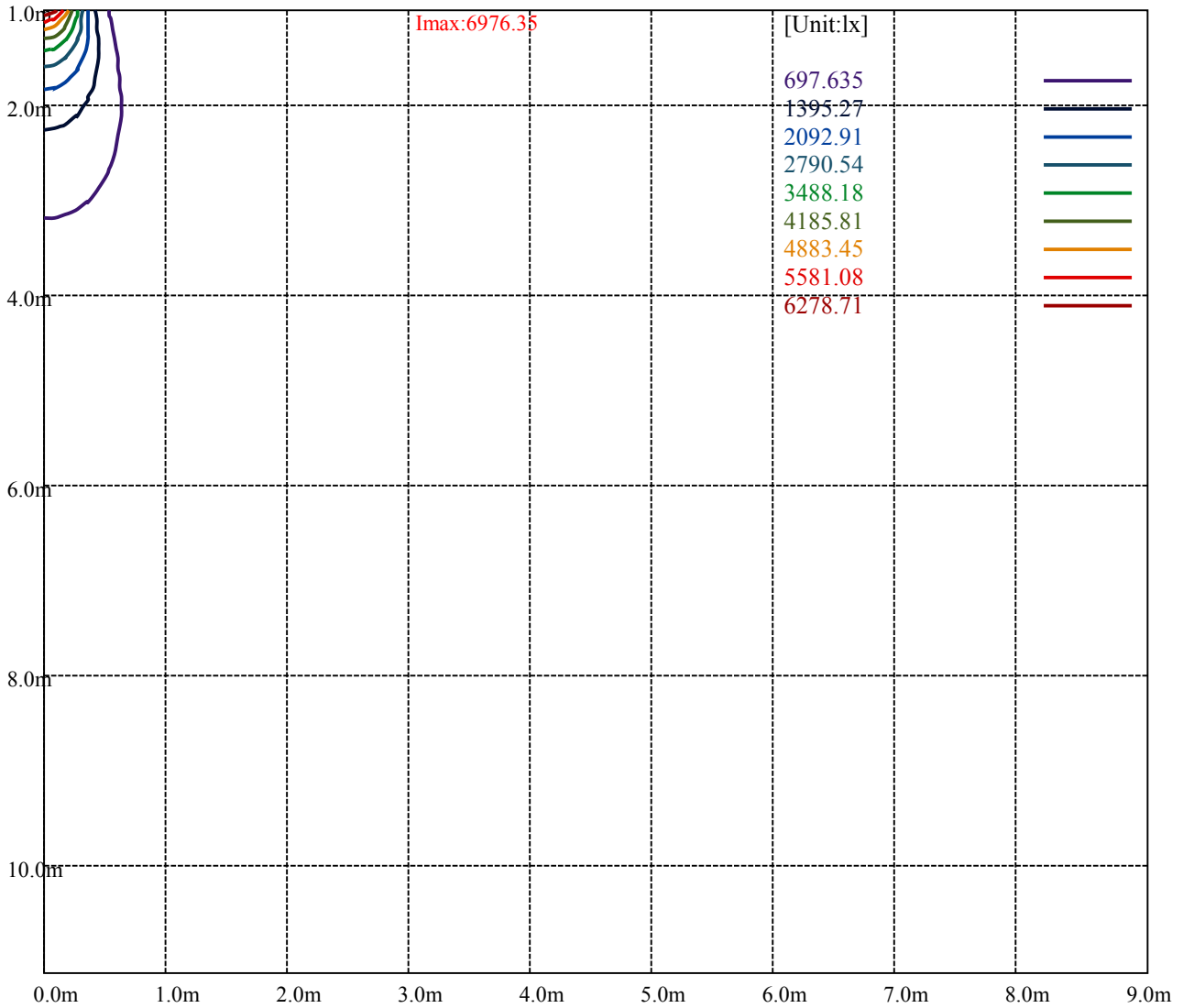
Road

Imax:6976.35

(10%Imax) 697.635	—
(20%Imax) 1395.27	—
(30%Imax) 2092.91	—
(40%Imax) 2790.54	—
(50%Imax) 3488.18	—
(60%Imax) 4185.81	—
(70%Imax) 4883.45	—
(80%Imax) 5581.08	—
(90%Imax) 6278.71	—



(10%Emax) 174.4088	—
(20%Emax) 348.8175	—
(30%Emax) 523.225	—
(40%Emax) 697.635	—
(50%Emax) 872.0425	—
(60%Emax) 1046.453	—
(70%Emax) 1220.86	—
(80%Emax) 1395.27	—
(90%Emax) 1569.677	—



Luminance Table

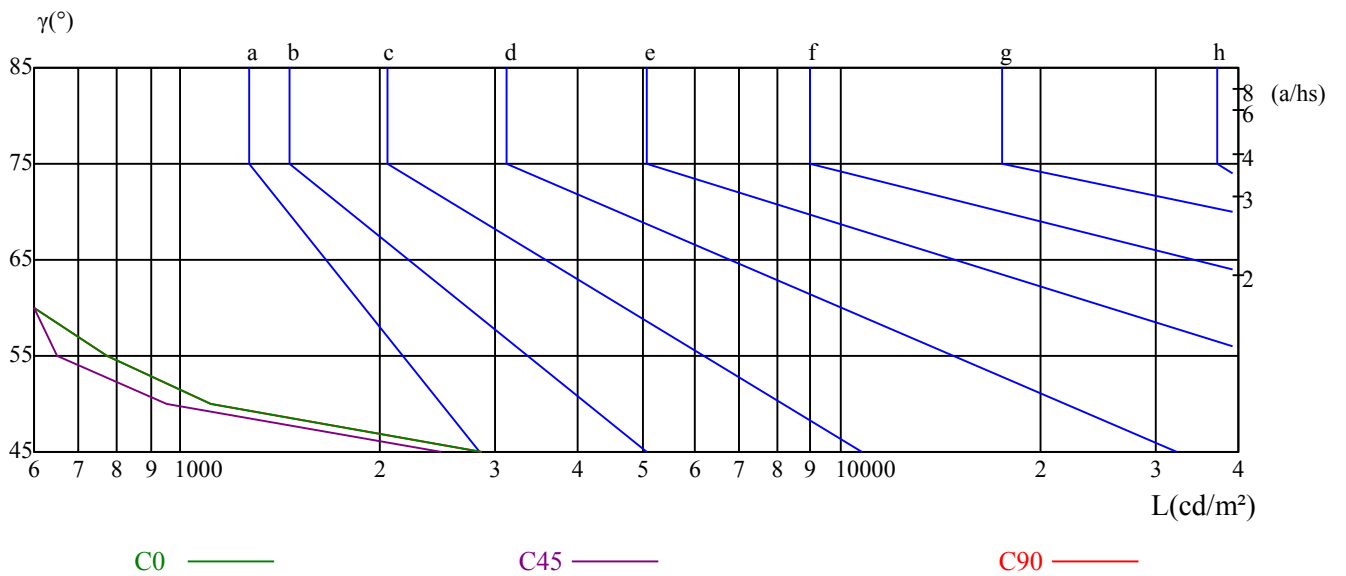
γ	45	50	55	60	65	70	75	80	85
C0	2854	1115	772	567	462	397	351	310	268
C45	2480	954	650	470	376	317	274	235	197
C90	2854	1115	772	567	462	397	351	310	268

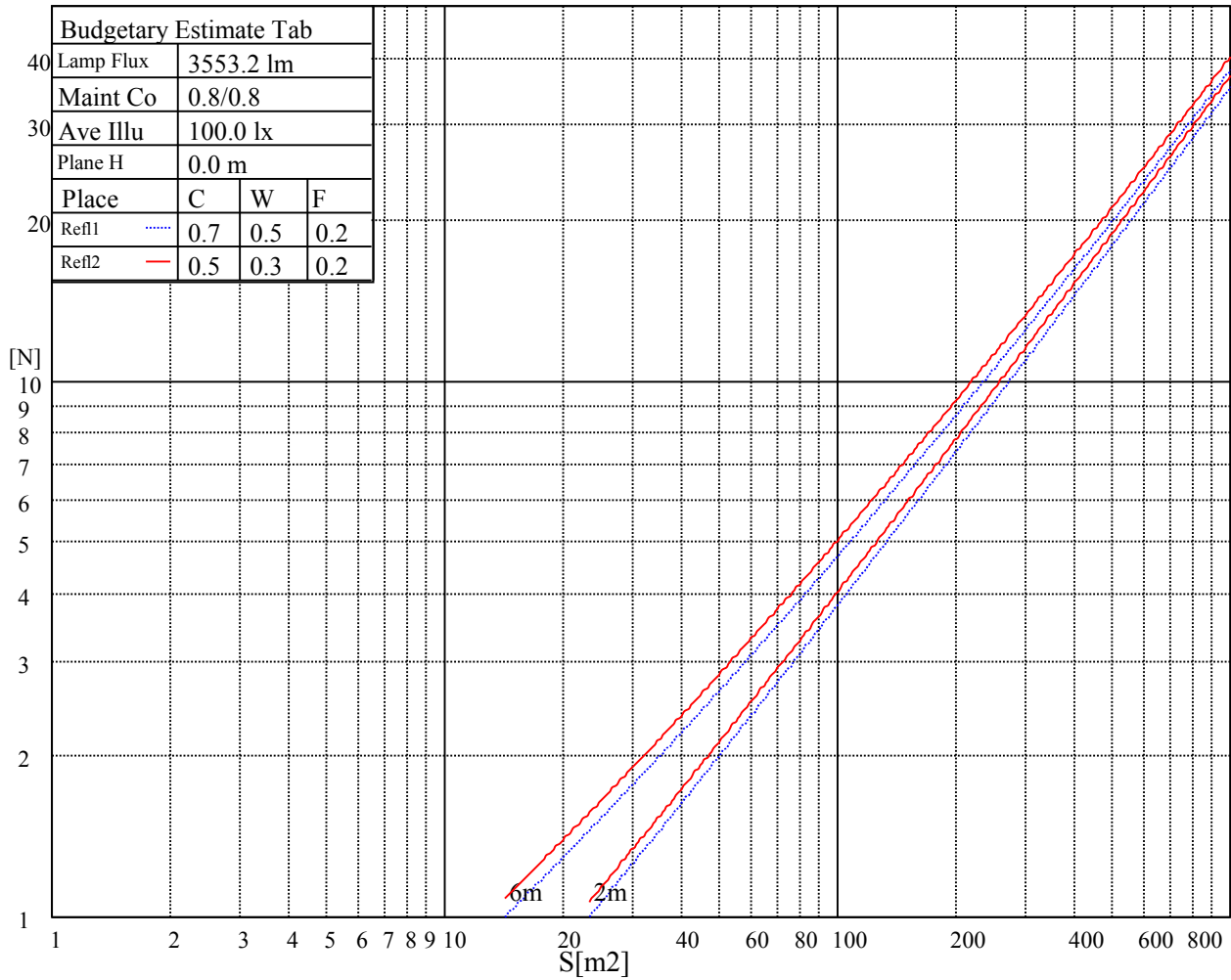
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
1029	1029	1029	1101	1101	1101	2022	2022	2022

Glare Table

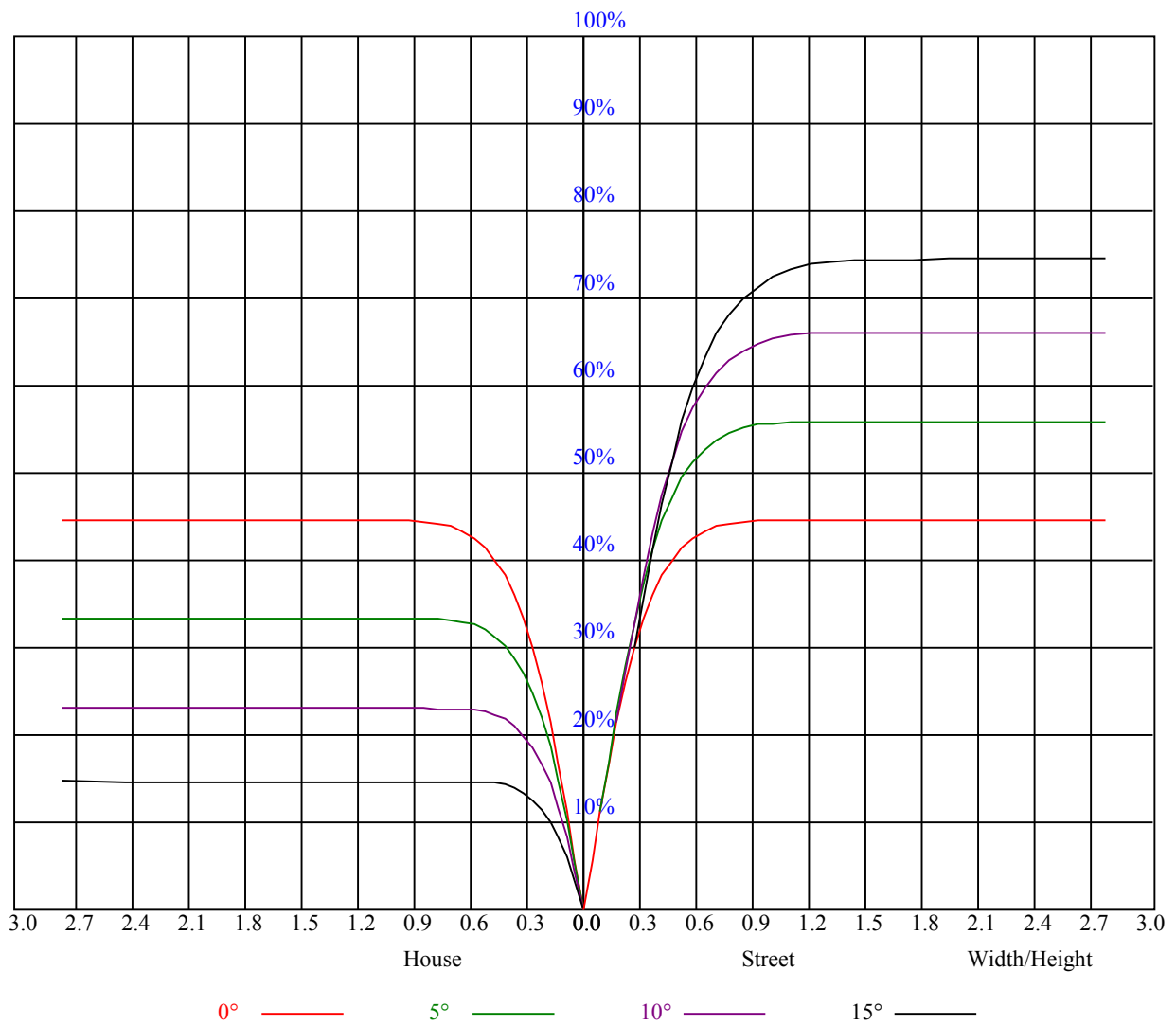
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

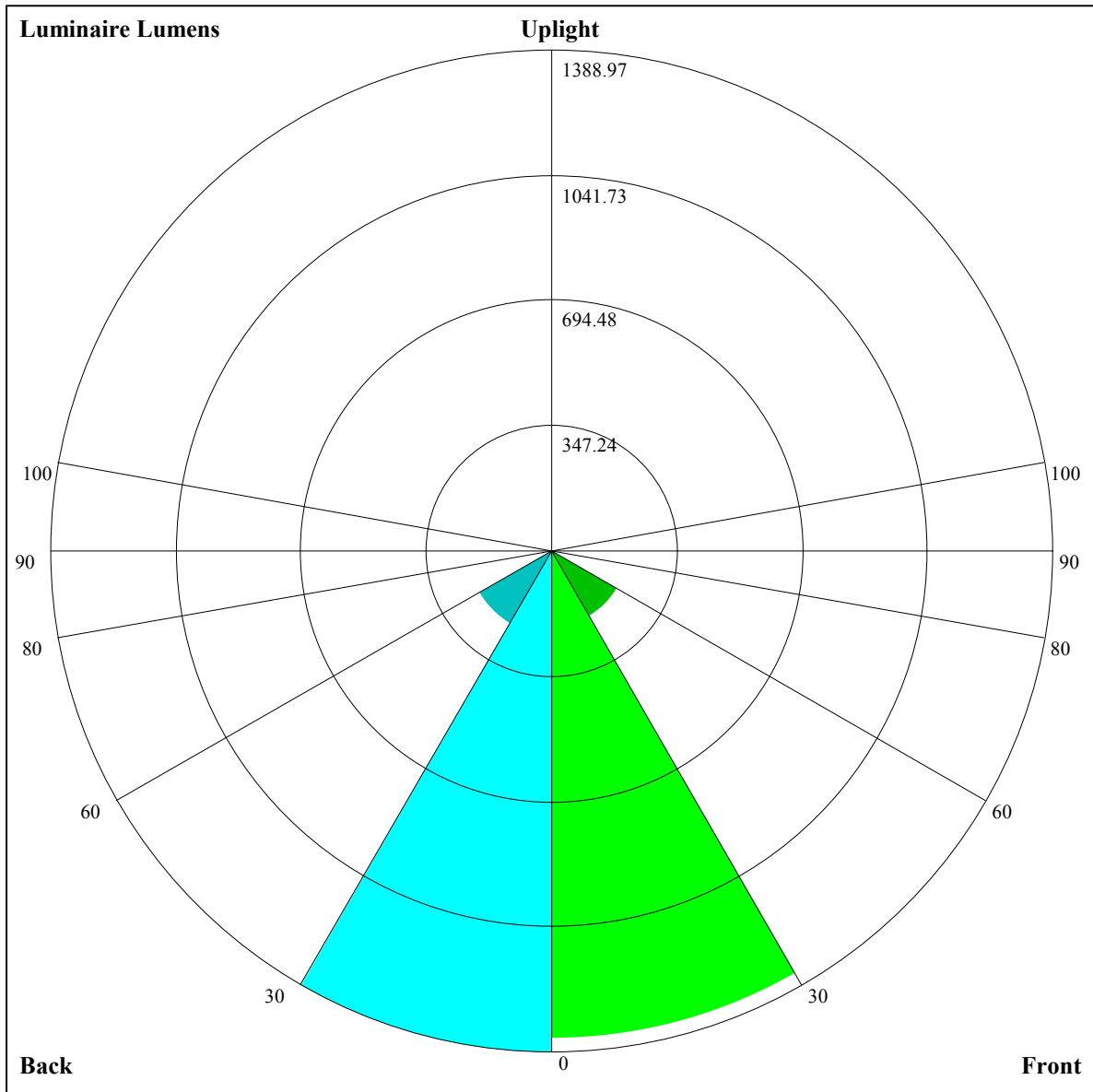
Luminance Limiting Curve





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	1.00	0.98	0.96	0.98	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.87	0.85
2	0.94	0.91	0.89	0.93	0.90	0.88	0.90	0.88	0.86	0.87	0.85	0.84	0.85	0.83	0.82	0.81
3	0.89	0.85	0.82	0.88	0.84	0.82	0.86	0.83	0.80	0.84	0.81	0.79	0.82	0.80	0.78	0.77
4	0.85	0.80	0.77	0.84	0.80	0.77	0.82	0.78	0.76	0.80	0.77	0.75	0.78	0.76	0.74	0.73
5	0.80	0.76	0.73	0.80	0.75	0.72	0.78	0.75	0.72	0.77	0.74	0.71	0.75	0.73	0.71	0.69
6	0.77	0.72	0.69	0.76	0.72	0.69	0.75	0.71	0.68	0.73	0.70	0.68	0.72	0.70	0.67	0.66
7	0.73	0.69	0.65	0.73	0.68	0.65	0.71	0.68	0.65	0.70	0.67	0.65	0.70	0.67	0.64	0.63
8	0.70	0.65	0.62	0.69	0.65	0.62	0.69	0.65	0.62	0.68	0.64	0.62	0.67	0.64	0.61	0.60
9	0.67	0.62	0.59	0.67	0.62	0.59	0.66	0.62	0.59	0.65	0.62	0.59	0.64	0.61	0.59	0.58
10	0.64	0.60	0.57	0.64	0.60	0.57	0.63	0.59	0.57	0.63	0.59	0.57	0.62	0.59	0.56	0.55





Luminaire Lumens:

FL=1350.62,FM=210.25,FH=2,FVH=0.53

BL=1388.97,BM=231.63,BH=2.11,BVH=0.55

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	6991.82	6960.88	6929.38	6859.63	6756.13	6629.57	6461.38	6365.19	6165.51
45.0	6973.82	6965.38	6944.57	6885.51	6794.94	6704.94	6641.94	6458.01	6279.69
90.0	6969.88	6936.13	6891.69	6787.07	6719.57	6599.19	6442.82	6257.19	6004.07
135.0	6969.88	6958.07	6929.94	6887.19	6855.13	6766.82	6666.69	6524.38	6366.88
180.0	6991.82	6994.07	6990.69	6969.32	6919.26	6851.19	6765.13	6699.32	6537.88
225.0	6973.82	6981.13	6940.07	6909.13	6845.01	6746.01	6621.69	6440.01	6333.13
270.0	6969.88	6992.38	7010.38	6998.01	6959.19	6915.32	6805.07	6688.63	6555.88
315.0	6969.88	6962.01	6933.88	6884.94	6789.88	6726.32	6602.01	6454.07	6280.26
360.0	6991.82	6960.88	6929.38	6859.63	6756.13	6629.57	6461.38	6365.19	6165.51
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	5948.38	5724.51	5445.51	5293.63	4924.07	4760.38	4406.57	4103.38	3792.32
45.0	6075.51	5850.51	5707.07	5407.82	5146.26	4867.26	4530.32	4414.44	3918.32
90.0	5864.57	5618.76	5361.13	5101.26	4787.38	4505.01	4208.01	3839.01	3656.76
135.0	6256.07	6001.82	5770.07	5528.19	5277.32	4955.57	4676.57	4387.44	4204.63
180.0	6365.19	6162.69	5933.19	5794.26	5503.44	5140.63	4972.44	4627.07	4327.82
225.0	6128.38	5917.44	5685.69	5372.38	5096.19	4809.32	4467.88	4283.38	3954.32
270.0	6393.88	6278.01	6028.82	5804.94	5563.63	5317.26	5159.76	4720.44	4423.44
315.0	6037.82	5906.19	5676.13	5290.82	5191.82	4870.63	4583.76	4280.01	3905.38
360.0	5948.38	5724.51	5445.51	5293.63	4924.07	4760.38	4406.57	4103.38	3792.32
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	3475.07	3088.07	2895.69	2596.44	2318.01	2068.82	1808.94	1697.57	1484.94
45.0	3593.76	3401.94	3025.07	2719.07	2423.19	2146.44	1992.88	1723.44	1536.13
90.0	3344.01	3024.51	2722.44	2384.94	2231.38	1898.94	1671.69	1607.01	1450.07
135.0	3826.63	3506.01	3189.88	2877.69	2695.44	2344.44	2087.94	1860.13	1673.38
180.0	4020.69	3693.88	3497.01	3108.88	2797.26	2498.57	2176.82	1933.26	1811.19
225.0	3627.51	3303.51	2919.88	2729.76	2419.82	2129.57	1871.38	1614.32	1434.88
270.0	4247.38	3882.88	3561.13	3229.26	2899.63	2714.57	2376.51	2117.19	1882.63
315.0	3714.69	3383.94	3065.57	2758.44	2414.19	2257.26	2005.82	1791.51	1577.19
360.0	3475.07	3088.07	2895.69	2596.44	2318.01	2068.82	1808.94	1697.57	1484.94
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1354.44	1317.88	1094.06	1094.06	1051.54	916.71	796.67	672.24	524.08
45.0	1384.82	1245.32	1169.38	1105.26	1031.57	975.88	847.63	736.82	623.19
90.0	1343.76	1262.76	1096.93	1096.93	991.35	849.21	773.21	643.44	510.98
135.0	1578.88	1379.19	1292.01	1246.44	1151.38	1050.13	934.82	815.01	741.88
180.0	1572.13	1495.07	1361.76	1278.51	1202.01	1110.32	1048.44	913.44	793.63
225.0	1301.57	1081.80	1081.80	1051.54	953.04	913.78	800.16	707.01	600.92
270.0	1650.88	1501.82	1427.01	1292.01	1245.32	1150.26	1058.57	953.38	834.13
315.0	1439.94	1374.13	1252.63	1088.78	1088.78	1023.58	835.99	762.41	640.91
360.0	1354.44	1317.88	1094.06	1094.06	1051.54	916.71	796.67	672.24	524.08
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	453.94	339.64	236.48	146.64	66.60	44.66	29.14	20.53	18.06
45.0	511.82	446.01	322.26	322.26	281.19	77.46	45.45	34.14	27.90
90.0	387.06	254.31	196.26	116.21	61.76	33.69	24.98	21.43	13.39
135.0	594.51	473.57	357.69	357.69	291.88	80.61	42.36	30.15	22.50
180.0	670.44	547.26	407.19	338.57	338.57	297.51	77.18	33.69	29.64
225.0	469.52	403.20	301.50	209.64	131.06	67.56	50.23	37.29	26.78
270.0	759.88	604.63	475.82	354.88	354.88	288.51	85.33	46.69	34.54
315.0	518.91	400.39	267.30	207.34	121.28	61.26	33.58	24.75	21.49
360.0	453.94	339.64	236.48	146.64	66.60	44.66	29.14	20.53	18.06

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	11.98	9.79	7.76	7.14	6.75	6.13	5.68	5.12	4.61
45.0	20.48	15.58	12.49	11.25	9.34	8.21	7.48	6.86	6.47
90.0	9.00	8.21	7.71	7.14	6.53	5.85	5.57	5.12	4.67
135.0	16.20	10.97	7.09	6.41	5.91	5.34	5.06	4.50	4.22
180.0	21.77	15.58	11.14	9.23	8.89	8.04	7.48	6.92	6.36
225.0	22.84	17.55	13.56	11.31	9.45	8.78	8.16	7.43	6.75
270.0	27.23	18.34	14.96	9.84	7.76	7.14	6.58	6.13	5.51
315.0	13.39	10.46	6.58	5.68	5.23	4.78	4.33	4.16	3.83
360.0	11.98	9.79	7.76	7.14	6.75	6.13	5.68	5.12	4.61
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	4.39	4.05	3.83	3.54	3.26	3.09	2.93	2.76	2.64
45.0	5.96	5.40	4.95	4.67	4.44	4.11	3.77	3.60	3.38
90.0	4.28	3.94	3.71	3.38	3.15	3.04	2.87	2.70	2.53
135.0	3.99	3.66	3.49	3.21	2.93	2.87	2.59	2.48	2.36
180.0	6.02	5.40	4.84	4.67	4.22	3.99	3.71	3.49	3.43
225.0	6.19	5.85	5.34	5.01	4.56	4.28	3.94	3.66	3.43
270.0	5.01	4.61	4.28	3.99	3.54	3.38	3.15	2.93	2.76
315.0	3.54	3.32	3.04	2.93	2.70	2.48	2.48	2.25	2.14
360.0	4.39	4.05	3.83	3.54	3.26	3.09	2.93	2.76	2.64
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	2.53	2.48	2.31	2.14	2.14	2.03	1.97	1.86	1.80
45.0	3.09	2.93	2.87	2.70	2.53	2.42	2.31	2.14	2.14
90.0	2.48	2.36	2.25	2.14	2.03	1.91	1.80	1.74	1.63
135.0	2.25	2.19	2.08	2.03	1.97	1.86	1.86	1.86	1.74
180.0	3.15	3.04	2.87	2.70	2.59	2.48	2.42	2.25	2.14
225.0	3.32	3.15	2.87	2.76	2.53	2.53	2.31	2.19	2.14
270.0	2.59	2.53	2.42	2.25	2.14	2.08	2.08	1.97	1.86
315.0	2.08	1.91	1.91	1.80	1.80	1.80	1.69	1.74	1.69
360.0	2.53	2.48	2.31	2.14	2.14	2.03	1.97	1.86	1.80
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	1.69	1.69	1.58	1.58	1.52	1.41	1.35	1.24	1.24
45.0	1.97	1.86	1.80	1.74	1.63	1.63	1.58	1.58	1.46
90.0	1.63	1.52	1.46	1.46	1.29	1.35	1.18	1.18	1.13
135.0	1.80	1.74	1.69	1.58	1.52	1.46	1.41	1.35	1.18
180.0	2.03	1.91	1.80	1.74	1.69	1.58	1.46	1.46	1.35
225.0	1.97	1.86	1.86	1.69	1.74	1.63	1.58	1.63	1.52
270.0	1.74	1.69	1.58	1.52	1.52	1.46	1.41	1.24	1.24
315.0	1.63	1.69	1.58	1.52	1.52	1.35	1.29	1.18	1.18
360.0	1.69	1.69	1.58	1.58	1.52	1.41	1.35	1.24	1.24
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	1.13	1.07	0.96	0.96	0.90	0.90	0.96	0.96	0.90
45.0	1.46	1.52	1.41	1.41	1.35	1.24	1.18	1.01	0.96
90.0	0.96	0.96	0.96	0.96	0.90	0.90	0.96	0.96	0.96
135.0	1.13	1.13	0.96	0.96	0.96	0.96	0.96	0.96	1.01
180.0	1.29	1.18	1.07	1.07	0.96	0.96	0.96	0.96	0.96
225.0	1.52	1.46	1.35	1.24	1.24	1.13	1.01	0.90	0.79
270.0	1.18	1.07	0.96	0.90	0.84	0.73	0.68	0.62	0.56
315.0	1.07	0.96	0.84	0.79	0.79	0.79	0.73	0.73	0.73
360.0	1.13	1.07	0.96	0.96	0.90	0.90	0.96	0.96	0.90

Intensity data(cd)

C/γ(°)	90.0
0.0	0.79
45.0	0.90
90.0	0.90
135.0	0.96
180.0	0.96
225.0	0.73
270.0	0.45
315.0	0.68
360.0	0.79