



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: 2-3214-A

Luminaire: 92.70.121.00

Report No: 20260328-B003

Ballast type: AC

Test No: 20260328-C003

Voltage(V): 35.970

LampCAT: CITIZEN CLU038

Current(A): 0.723

Lamp flux(lm): 3534.3

Power (W): 26.006

Number of Lamps: 1

PF: 0.000

Length(mm): 75

Width(mm): 75

Phm Type: C

Height(mm): 43

Photometric Results

Lumens(lm): 3161.60, Efficiency(%): 89.45% , Luminous Efficacy(lm/W): 121.57

Central intensity(cd): 18439.880, Maximum intensity(cd): 18439.880

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=17.8

[C90/270]Total=17.8

Field angle(10%Imax): [C0/180]Total=38.8

[C90/270]Total=38.8

Maximum s/h(1/2): C0_180=0.31 C90_270=0.31

Maximum s/h(1/4): C0_180=0.31 C90_270=0.31

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 89.45%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 99.823%

Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2026/3/28
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	18439.875	0.000	0	0.00%	0.00%
1.0	18318.234	17.588	17.588	0.50%	0.56%
2.0	17947.688	52.052	69.64	1.47%	2.20%
3.0	17241.750	84.162	153.802	2.38%	4.86%
4.0	16349.484	112.441	266.243	3.18%	8.42%
5.0	14911.095	134.481	400.724	3.81%	12.67%
6.0	13105.104	147.233	547.956	4.17%	17.33%
7.0	11900.995	155.212	703.169	4.39%	22.24%
8.0	10665.394	161.503	864.672	4.57%	27.35%
9.0	9053.972	159.815	1024.487	4.52%	32.40%
10.0	7673.527	151.378	1175.865	4.28%	37.19%
11.0	6273.675	139.361	1315.226	3.94%	41.60%
12.0	5265.323	126.138	1441.364	3.57%	45.59%
13.0	4415.527	114.887	1556.251	3.25%	49.22%
14.0	3688.706	103.733	1659.984	2.94%	52.50%
15.0	3123.534	93.521	1753.506	2.65%	55.46%
16.0	2781.183	86.521	1840.027	2.45%	58.20%
17.0	2485.441	82.015	1922.042	2.32%	60.79%
18.0	2139.068	76.248	1998.29	2.16%	63.20%
19.0	1906.678	70.388	2068.678	1.99%	65.43%
20.0	1729.420	66.551	2135.229	1.88%	67.54%
21.0	1596.038	63.856	2199.084	1.81%	69.56%
22.0	1487.334	61.962	2261.046	1.75%	71.52%
23.0	1401.905	60.624	2321.67	1.72%	73.43%
24.0	1323.858	59.595	2381.265	1.69%	75.32%
25.0	1274.077	59.071	2440.336	1.67%	77.19%
26.0	1231.327	59.140	2499.476	1.67%	79.06%
27.0	1173.987	58.847	2558.323	1.67%	80.92%
28.0	1143.513	58.674	2616.997	1.66%	82.77%
29.0	1114.270	59.070	2676.067	1.67%	84.64%
30.0	1078.636	59.208	2735.275	1.68%	86.52%
31.0	1030.191	58.686	2793.961	1.66%	88.37%
32.0	948.727	56.694	2850.654	1.60%	90.16%
33.0	856.990	53.197	2903.851	1.51%	91.85%
34.0	768.368	49.188	2953.04	1.39%	93.40%
35.0	642.066	43.803	2996.842	1.24%	94.79%
36.0	535.598	37.497	3034.339	1.06%	95.97%
37.0	419.259	31.142	3065.482	0.88%	96.96%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	336.417	25.223	3090.705	0.71%	97.76%
39.0	266.632	20.584	3111.289	0.58%	98.41%
40.0	165.600	15.075	3126.363	0.43%	98.89%
41.0	103.078	9.567	3135.931	0.27%	99.19%
42.0	48.270	5.499	3141.43	0.16%	99.36%
43.0	29.630	2.886	3144.315	0.08%	99.45%
44.0	21.431	1.927	3146.242	0.05%	99.51%
45.0	15.630	1.424	3147.667	0.04%	99.56%
46.0	11.412	1.058	3148.724	0.03%	99.59%
47.0	9.028	0.813	3149.537	0.02%	99.62%
48.0	7.664	0.675	3150.212	0.02%	99.64%
49.0	7.123	0.607	3150.819	0.02%	99.66%
50.0	6.581	0.571	3151.391	0.02%	99.68%
51.0	6.145	0.538	3151.929	0.02%	99.69%
52.0	5.730	0.510	3152.439	0.01%	99.71%
53.0	5.351	0.482	3152.921	0.01%	99.73%
54.0	5.126	0.462	3153.382	0.01%	99.74%
55.0	4.838	0.445	3153.827	0.01%	99.75%
56.0	4.676	0.430	3154.257	0.01%	99.77%
57.0	4.669	0.427	3154.684	0.01%	99.78%
58.0	4.690	0.433	3155.117	0.01%	99.79%
59.0	4.676	0.438	3155.555	0.01%	99.81%
60.0	4.676	0.442	3155.997	0.01%	99.82%
61.0	4.584	0.442	3156.439	0.01%	99.84%
62.0	4.521	0.439	3156.877	0.01%	99.85%
63.0	4.303	0.429	3157.307	0.01%	99.86%
64.0	3.973	0.406	3157.713	0.01%	99.88%
65.0	3.607	0.375	3158.088	0.01%	99.89%
66.0	3.220	0.341	3158.428	0.01%	99.90%
67.0	2.855	0.305	3158.734	0.01%	99.91%
68.0	2.370	0.265	3158.999	0.01%	99.92%
69.0	1.955	0.221	3159.219	0.01%	99.92%
70.0	1.716	0.189	3159.408	0.01%	99.93%
71.0	1.582	0.170	3159.578	0.00%	99.94%
72.0	1.463	0.158	3159.736	0.00%	99.94%
73.0	1.399	0.150	3159.886	0.00%	99.95%
74.0	1.315	0.143	3160.029	0.00%	99.95%
75.0	1.273	0.137	3160.165	0.00%	99.95%

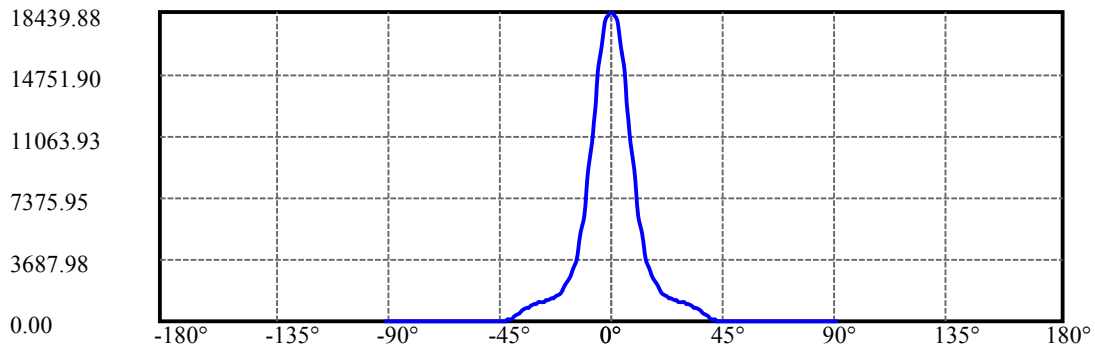
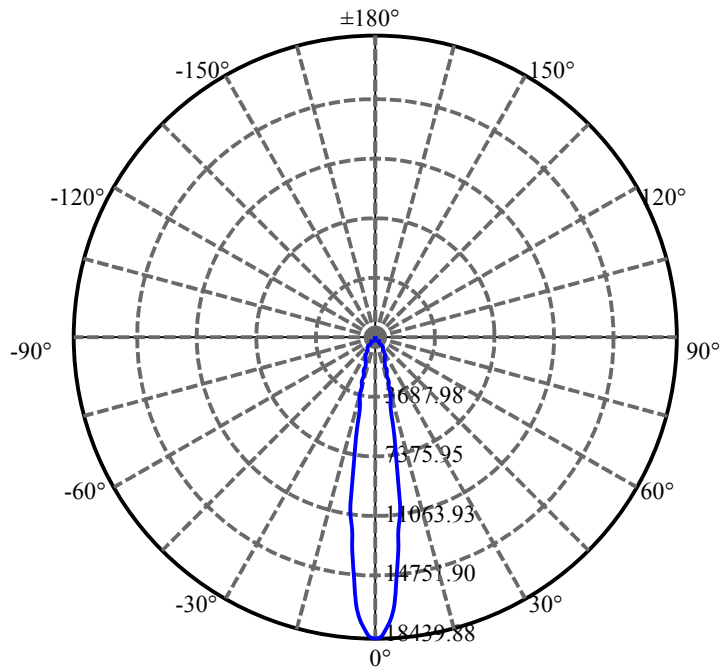
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	1.209	0.132	3160.297	0.00%	99.96%
77.0	1.153	0.126	3160.423	0.00%	99.96%
78.0	1.097	0.120	3160.544	0.00%	99.97%
79.0	1.048	0.115	3160.659	0.00%	99.97%
80.0	0.977	0.109	3160.768	0.00%	99.97%
81.0	0.942	0.104	3160.872	0.00%	99.98%
82.0	0.872	0.098	3160.97	0.00%	99.98%
83.0	0.802	0.091	3161.061	0.00%	99.98%
84.0	0.759	0.085	3161.146	0.00%	99.99%
85.0	0.724	0.081	3161.227	0.00%	99.99%
86.0	0.710	0.078	3161.306	0.00%	99.99%
87.0	0.689	0.077	3161.382	0.00%	99.99%
88.0	0.675	0.075	3161.457	0.00%	100.00%
89.0	0.654	0.073	3161.53	0.00%	100.00%
90.0	0.661	0.072	3161.602	0.00%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2735.28	77.39%	86.52%
0-40	3126.36	88.46%	98.89%
0-60	3156.00	89.30%	99.82%
0-90	3161.53	89.45%	100.00%
0-120	3161.53	89.45%	100.00%
0-180	3161.60	89.45%	100.00%
60-90	5.53	0.16%	0.18%
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%
0-26.51	2529.28	71.56%	80.00%

ZONAL LUMEN SUMMARY

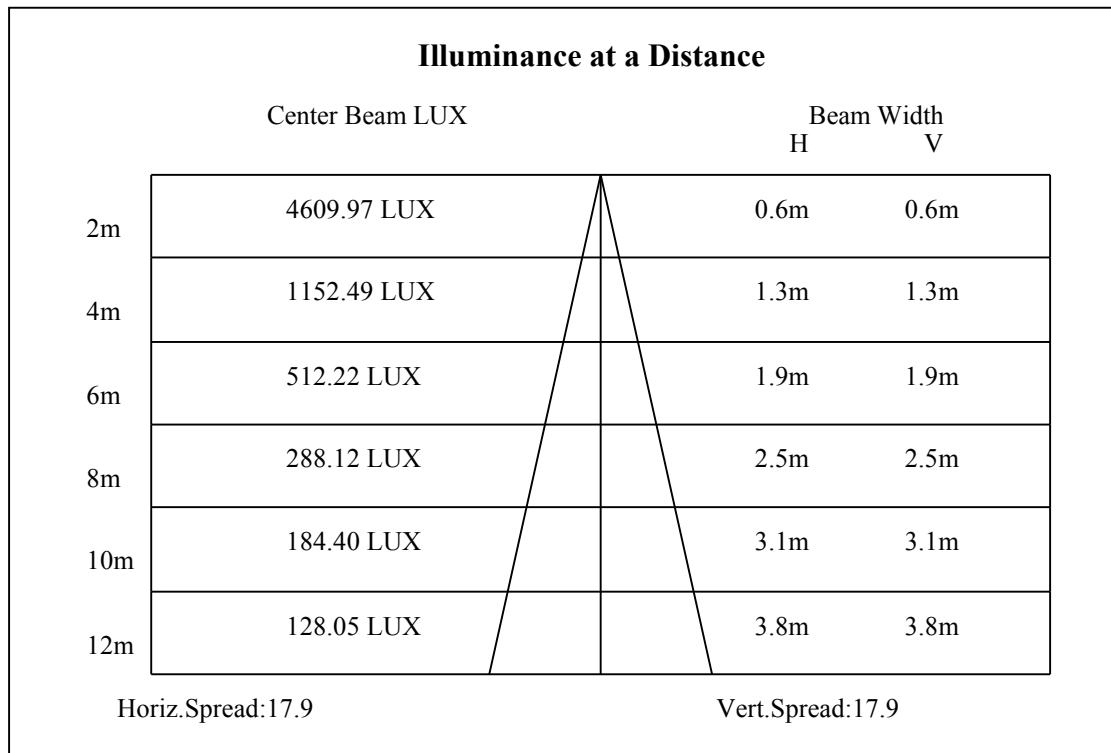
0-10	1175.86
10-20	959.36
20-30	600.05
30-40	391.09
40-50	25.03
50-60	4.61
60-70	3.41
70-80	1.36
80-90	0.76
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

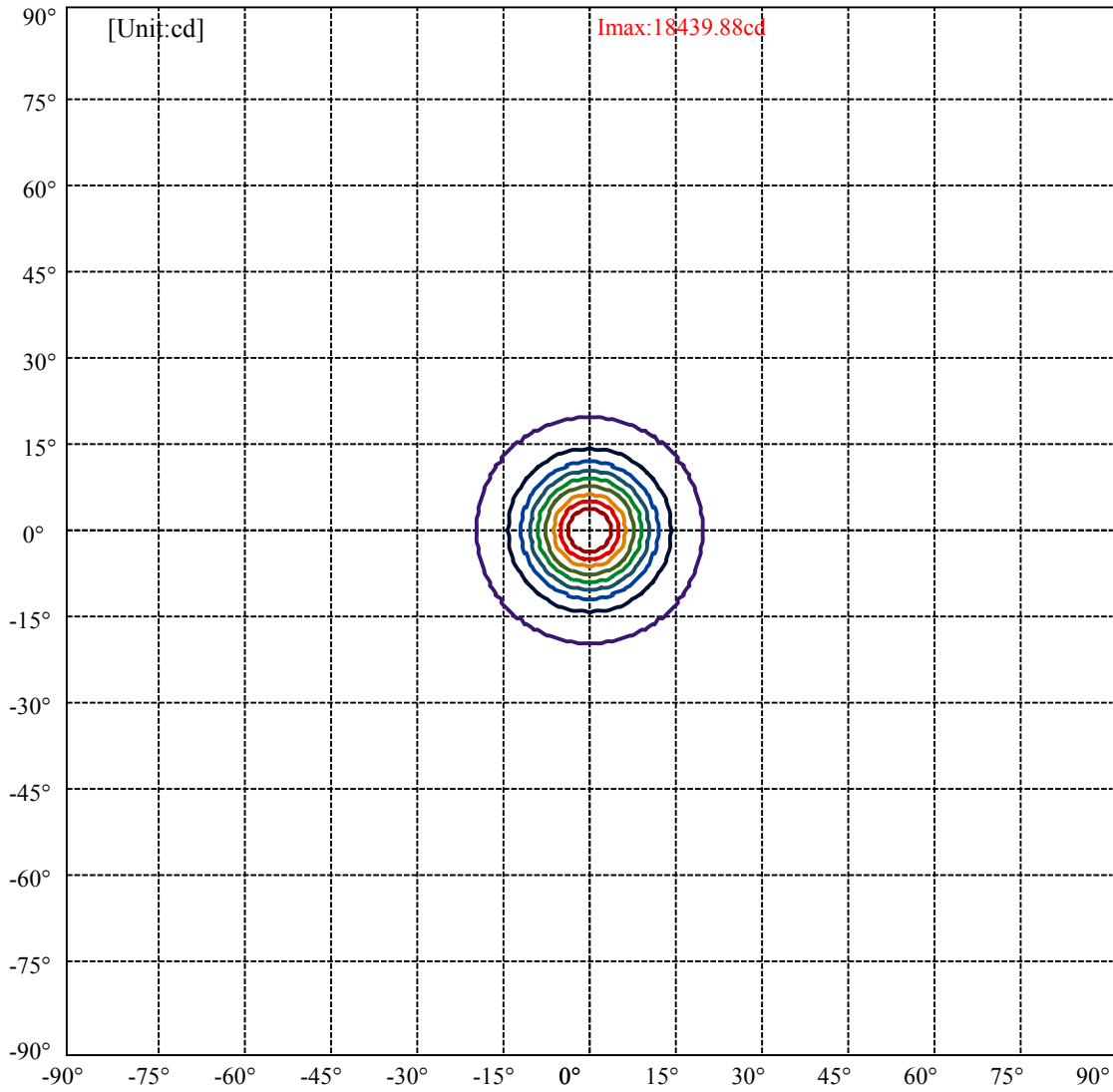


C90/C270: —————

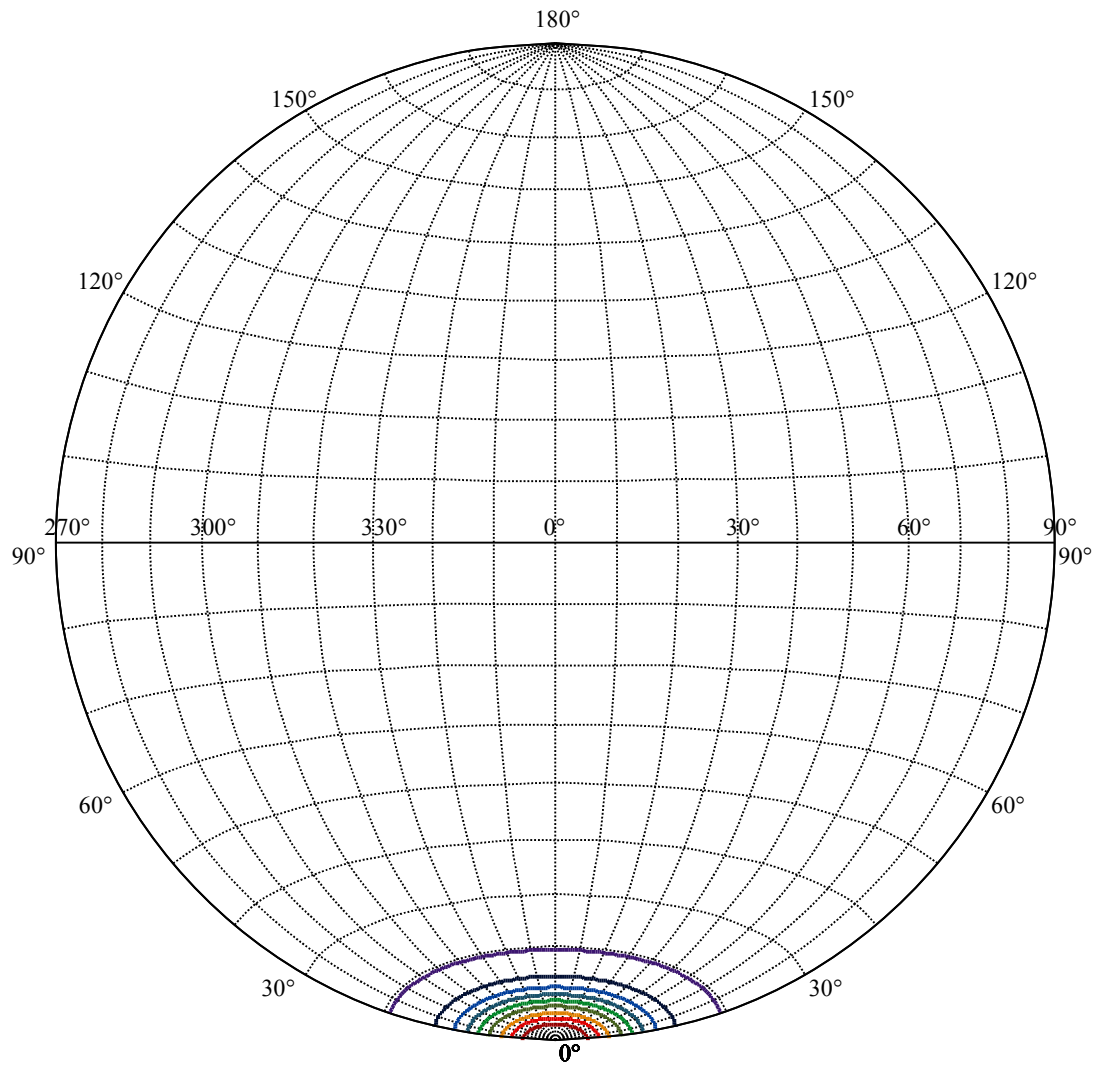
Field angle(10%Imax):C90/270Left:19.4 Right:19.4

Beam Angle(50%Imax):C90/270Left:8.9 Right:8.9





(10%Imax) 1843.99	—
(20%Imax) 3687.98	—
(30%Imax) 5531.96	—
(40%Imax) 7375.95	—
(50%Imax) 9219.94	—
(60%Imax) 11063.9	—
(70%Imax) 12907.9	—
(80%Imax) 14751.9	—
(90%Imax) 16595.9	—



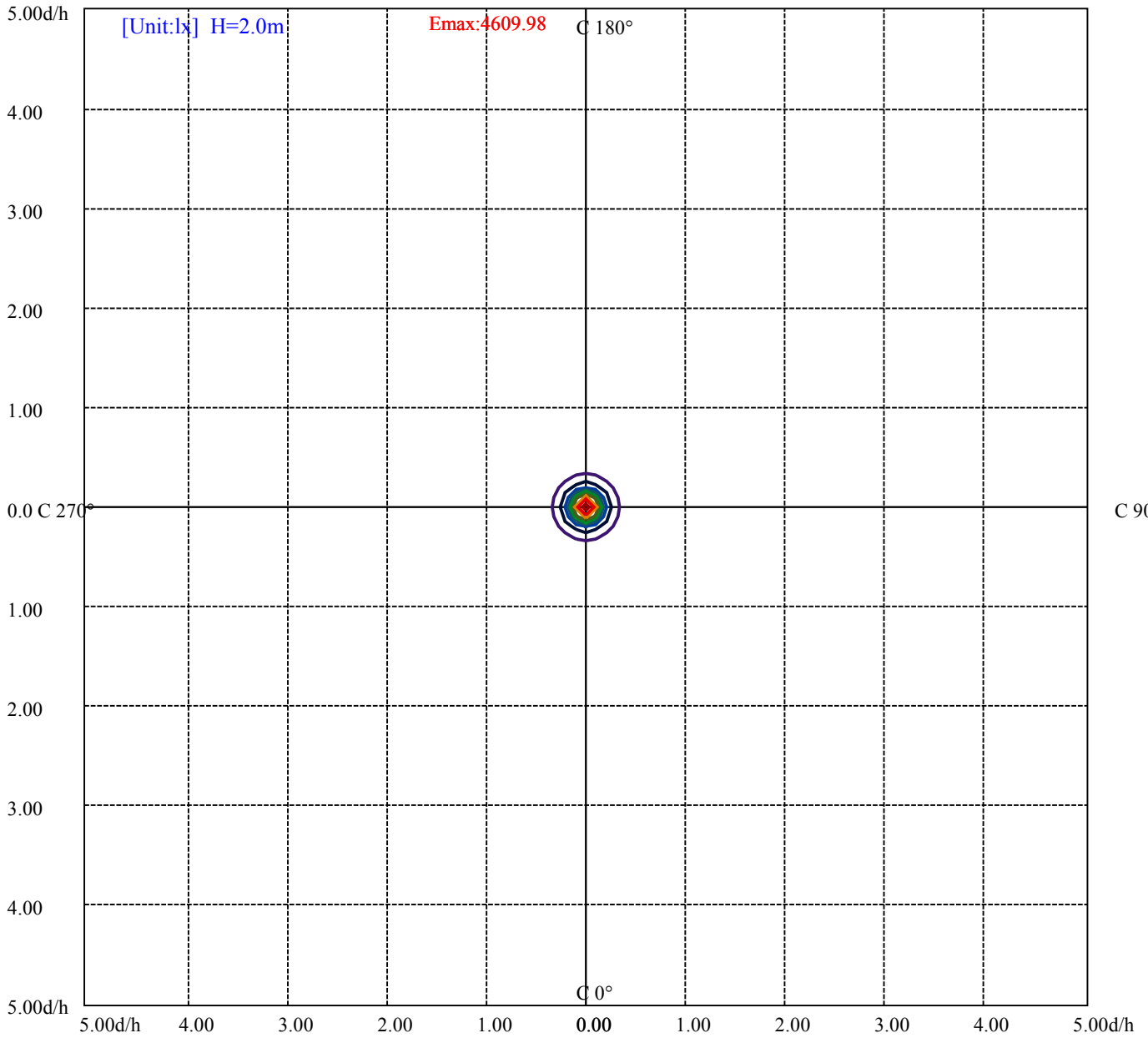
House

[Unit:cd]

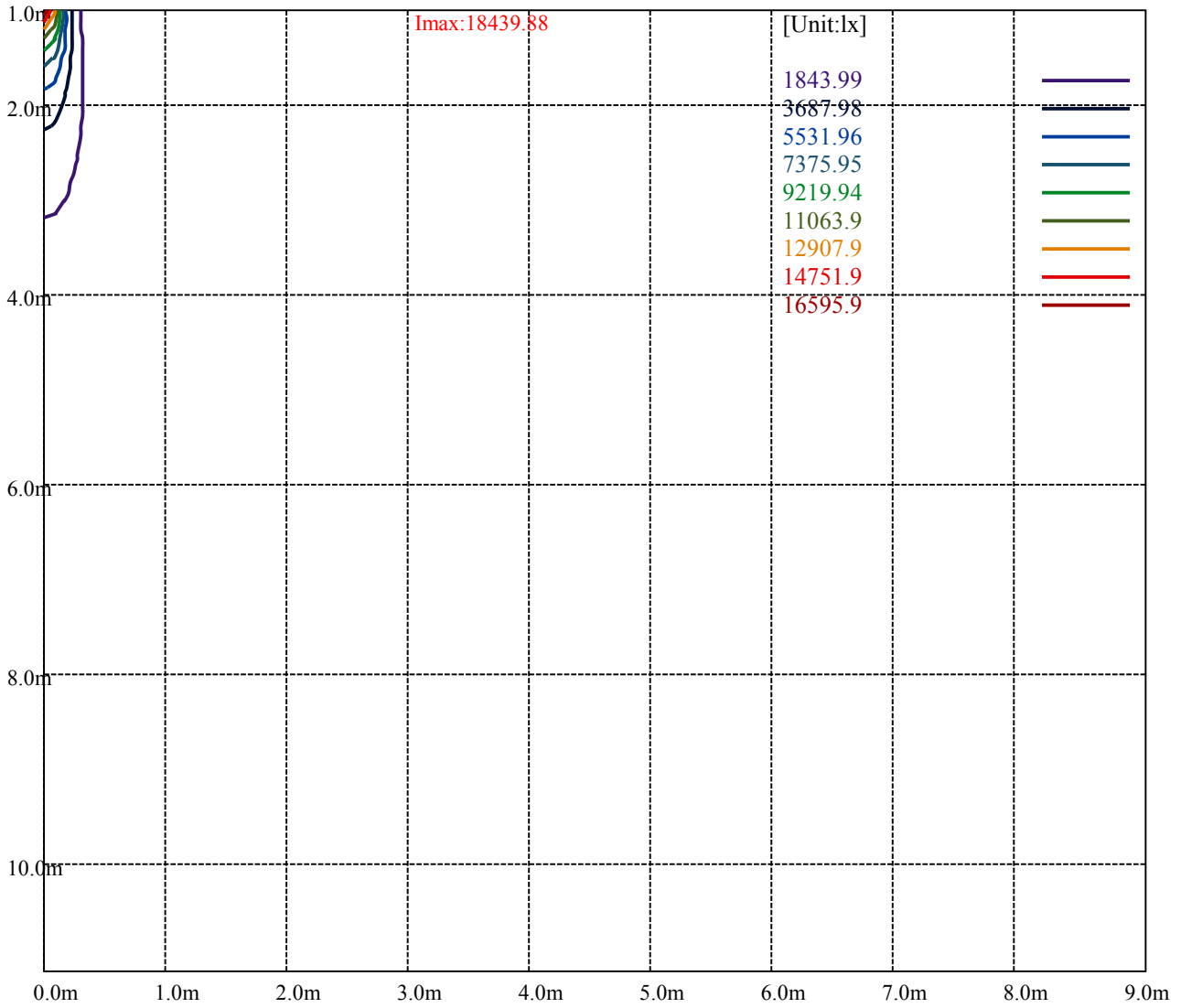
Road

Imax:18439.88

(10%Imax) 1843.99	—
(20%Imax) 3687.98	—
(30%Imax) 5531.96	—
(40%Imax) 7375.95	—
(50%Imax) 9219.94	—
(60%Imax) 11063.9	—
(70%Imax) 12907.9	—
(80%Imax) 14751.9	—
(90%Imax) 16595.9	—



- (10%Emax) 460.9975
- (20%Emax) 921.9925
- (30%Emax) 1382.99
- (40%Emax) 1843.985
- (50%Emax) 2304.982
- (60%Emax) 2765.975
- (70%Emax) 3226.975
- (80%Emax) 3687.975
- (90%Emax) 4148.975



Luminance Table

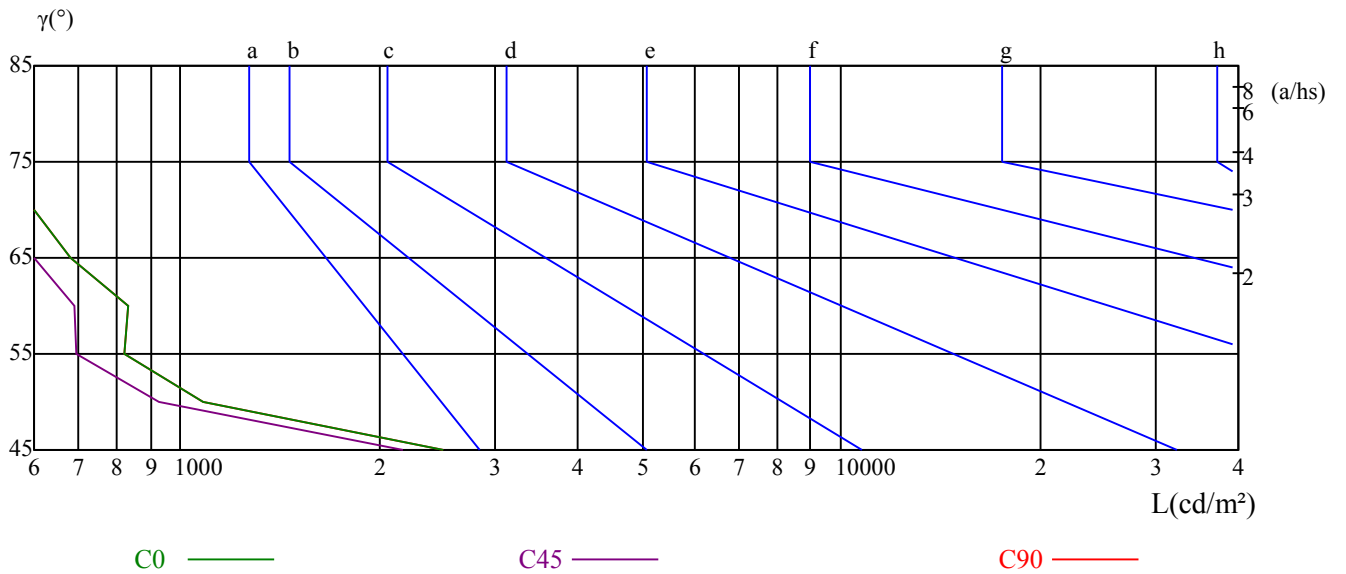
γ	45	50	55	60	65	70	75	80	85
C0	2498	1081	824	834	681	346	278	235	196
C45	2170	926	695	691	554	276	217	179	144
C90	2498	1081	824	834	681	346	278	235	196

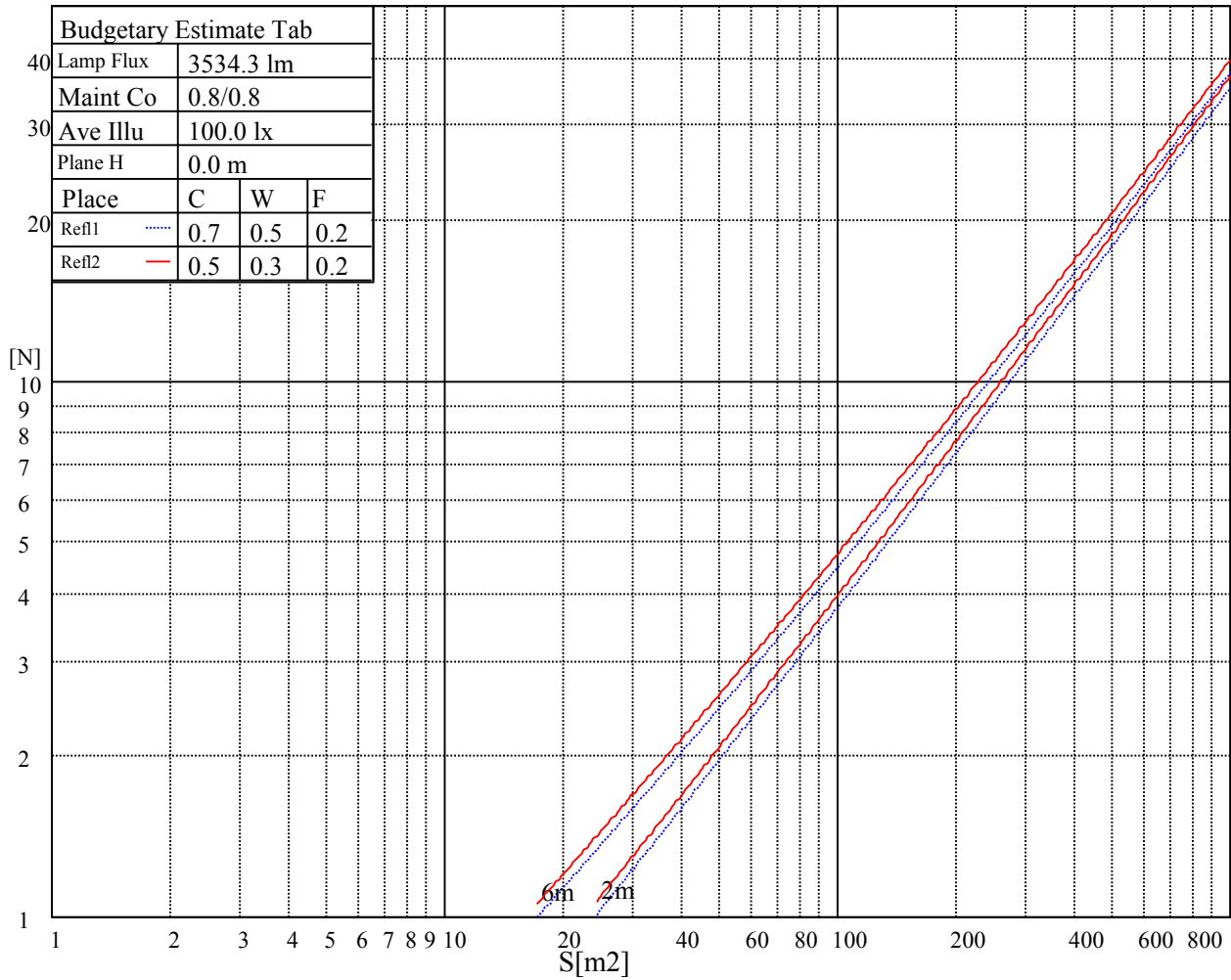
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
1517	1517	1517	874	874	874	1477	1477	1477

Glare Table

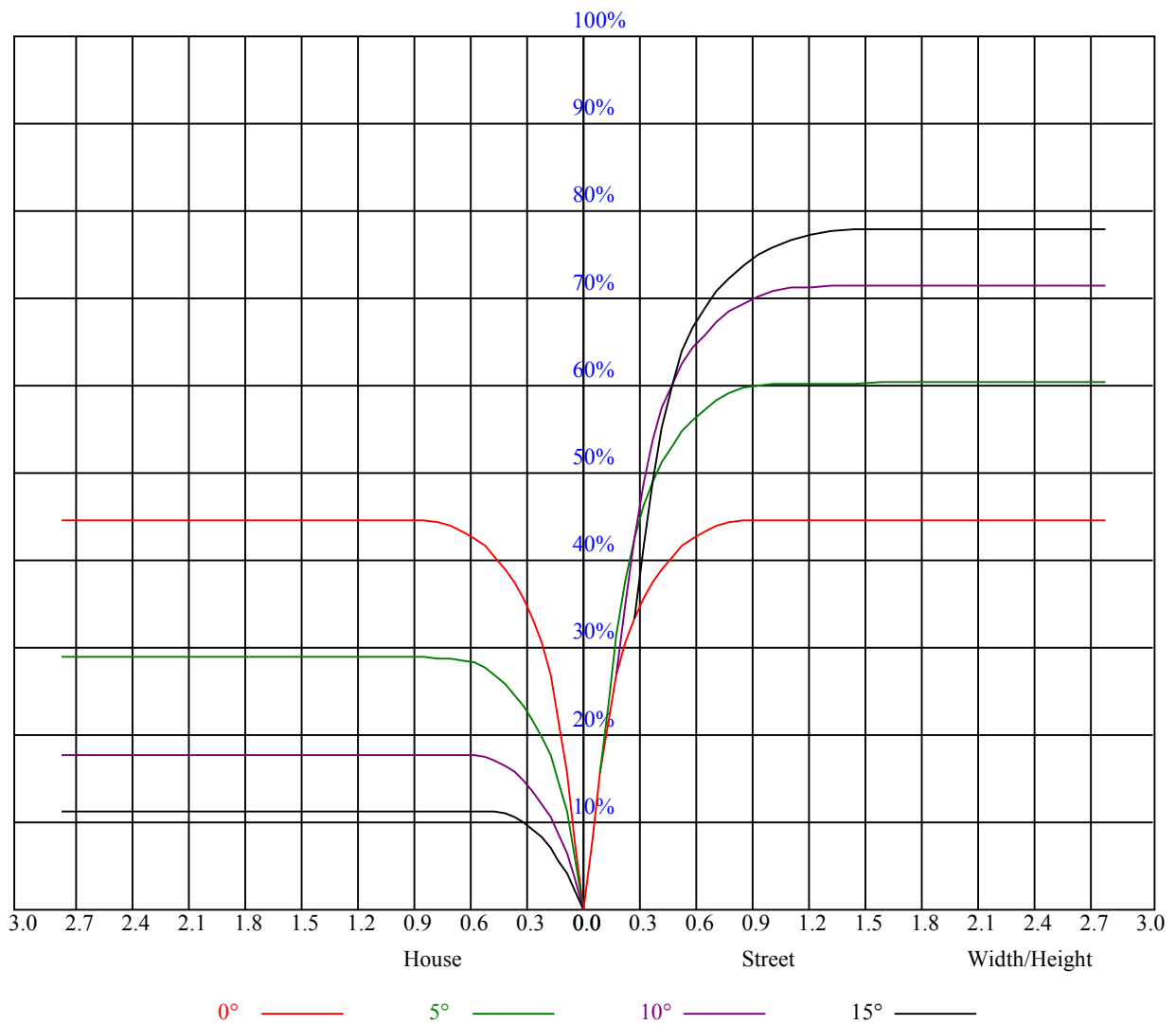
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

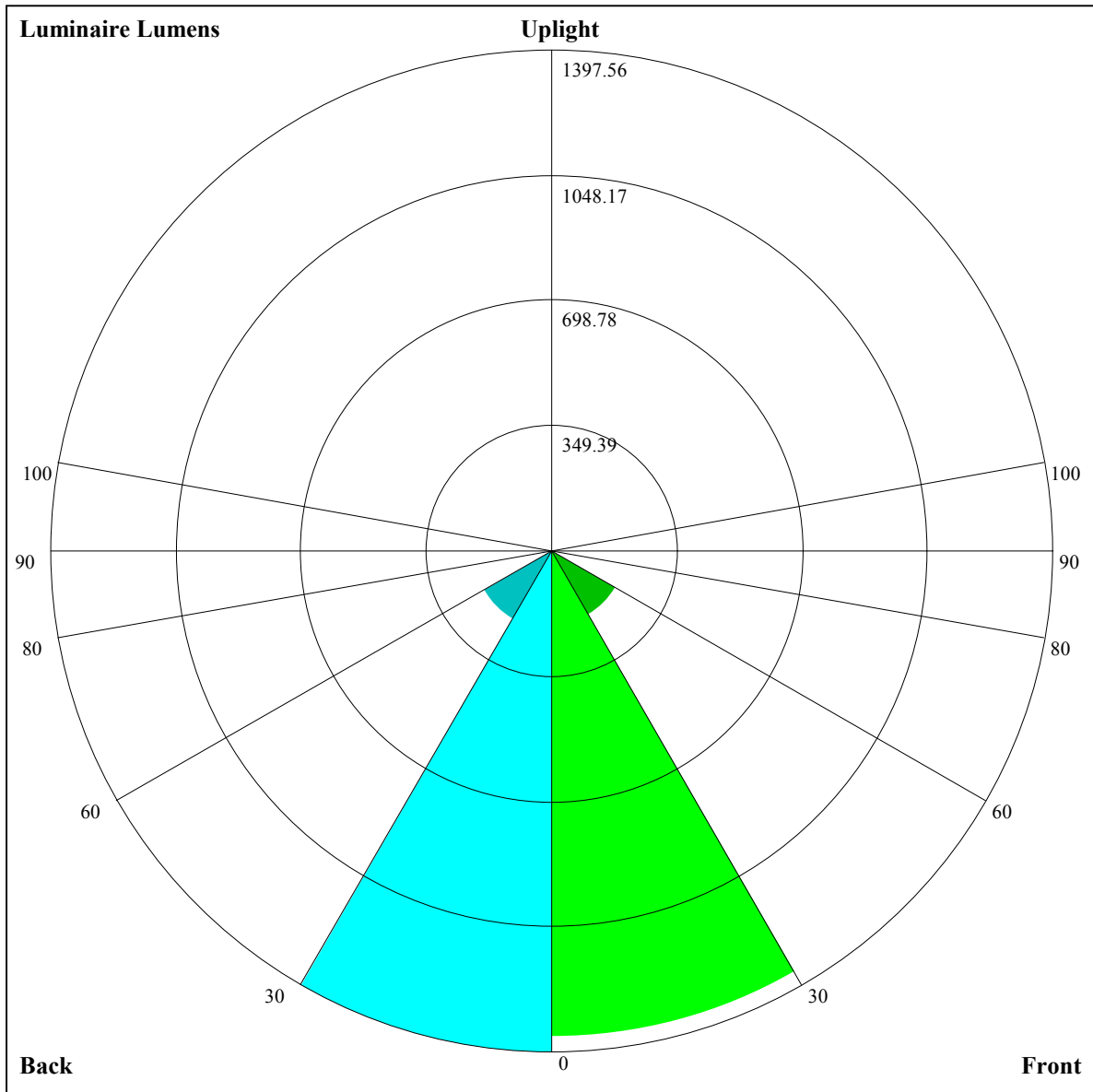
Luminance Limiting Curve





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	1.01	0.99	0.97	0.99	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.88	0.86
2	0.96	0.93	0.90	0.94	0.92	0.89	0.91	0.89	0.87	0.89	0.87	0.86	0.86	0.85	0.84	0.83
3	0.91	0.88	0.85	0.90	0.87	0.84	0.88	0.85	0.83	0.86	0.84	0.82	0.84	0.82	0.81	0.79
4	0.87	0.83	0.81	0.86	0.83	0.80	0.84	0.81	0.79	0.83	0.80	0.78	0.81	0.79	0.77	0.76
5	0.84	0.80	0.77	0.83	0.79	0.76	0.81	0.78	0.76	0.80	0.77	0.75	0.79	0.76	0.75	0.74
6	0.80	0.76	0.74	0.80	0.76	0.73	0.79	0.75	0.73	0.77	0.75	0.72	0.76	0.74	0.72	0.71
7	0.77	0.73	0.71	0.77	0.73	0.71	0.76	0.73	0.70	0.75	0.72	0.70	0.74	0.72	0.70	0.69
8	0.75	0.71	0.68	0.74	0.71	0.68	0.74	0.70	0.68	0.73	0.70	0.68	0.72	0.69	0.67	0.66
9	0.72	0.69	0.66	0.72	0.68	0.66	0.71	0.68	0.66	0.71	0.68	0.65	0.70	0.67	0.65	0.64
10	0.70	0.66	0.64	0.70	0.66	0.64	0.69	0.66	0.64	0.69	0.66	0.63	0.68	0.65	0.63	0.62





Luminaire Lumens:

FL=1357.39,FM=202.94,FH=2.22,FVH=0.34

BL=1397.56,BM=218.55,BH=2.38,BVH=0.45

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	18423.00	18226.13	17393.63	16887.38	15796.13	14170.50	10974.32	10974.32	9328.44
45.0	18518.63	18316.13	18051.75	17241.75	16263.00	15053.63	13619.25	12674.25	10694.25
90.0	18254.25	17489.25	16971.75	15858.00	14530.50	10695.88	10695.88	9714.88	8147.19
135.0	18563.63	18462.38	17961.75	16876.13	16218.00	14699.25	13225.50	11622.38	9985.50
180.0	18423.00	18513.00	18271.13	17748.00	16966.13	16369.88	14862.38	13405.50	11830.50
225.0	18518.63	18445.50	18102.38	17326.13	16403.63	15188.63	11181.88	10526.01	10526.01
270.0	18254.25	18597.38	18653.63	18439.88	18175.50	17365.50	15874.88	15081.75	13602.38
315.0	18563.63	18496.13	18175.50	17556.75	16443.00	15745.50	14406.75	11208.88	11208.88
360.0	18423.00	18226.13	17393.63	16887.38	15796.13	14170.50	10974.32	10974.32	9328.44
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	7791.69	6423.69	5084.94	4539.32	3794.57	3197.76	2729.76	2330.38	2164.44
45.0	9074.25	7589.25	5997.38	4951.13	4096.13	3421.13	3094.88	3094.88	2188.63
90.0	6487.26	5762.19	4753.07	3952.63	3209.01	2739.32	2390.57	2110.44	1851.69
135.0	9012.38	7246.13	5980.50	4939.88	4101.75	3691.13	3044.25	2875.50	2875.50
180.0	10204.88	8292.38	6874.88	5648.63	5035.50	4039.88	3393.00	2881.13	2881.13
225.0	8590.44	7988.57	6373.07	5241.88	4336.82	3497.01	3167.38	2713.44	2360.19
270.0	11701.13	10058.63	8461.13	7572.38	6031.13	4979.25	4141.13	3477.38	3151.13
315.0	9569.76	8027.38	6664.44	5276.76	4719.32	3944.19	3027.32	2766.32	2410.82
360.0	7791.69	6423.69	5084.94	4539.32	3794.57	3197.76	2729.76	2330.38	2164.44
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1950.13	1769.57	1634.01	1499.01	1444.44	1341.51	1274.57	1247.57	1207.63
45.0	2028.88	1770.69	1611.51	1478.76	1374.13	1321.26	1230.69	1172.19	1129.44
90.0	1756.07	1618.26	1507.44	1424.19	1346.01	1297.63	1253.76	1212.69	1199.19
135.0	2094.13	1898.94	1748.19	1595.76	1555.82	1442.19	1342.07	1306.63	1250.38
180.0	2203.26	1971.51	1789.26	1697.01	1548.51	1450.63	1373.57	1313.38	1284.13
225.0	2084.01	1829.76	1726.26	1582.82	1409.57	1357.82	1285.82	1230.13	1182.88
270.0	2864.25	2480.01	2103.13	1856.76	1700.38	1574.94	1474.82	1424.19	1339.82
315.0	2131.82	1914.69	1715.57	1634.01	1519.82	1429.26	1355.57	1285.82	1257.13
360.0	1950.13	1769.57	1634.01	1499.01	1444.44	1341.51	1274.57	1247.57	1207.63
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1175.01	1103.29	1103.29	1069.31	992.48	879.92	816.41	703.91	585.90
45.0	1090.63	1067.01	1006.82	964.07	937.07	848.19	758.19	663.13	560.19
90.0	1116.00	1095.81	1095.81	1012.11	920.87	813.04	667.74	592.09	464.12
135.0	1212.69	1176.69	1146.32	1124.94	1060.26	973.63	871.82	760.44	620.38
180.0	1220.57	1189.63	1173.32	1145.19	1105.82	1037.19	947.19	887.57	754.82
225.0	1096.48	1096.48	1086.02	1044.06	1012.67	936.79	844.48	743.34	613.24
270.0	1265.57	1239.13	1194.69	1161.51	1132.82	1094.57	1058.57	968.01	867.88
315.0	1214.94	1180.07	1107.90	1107.90	1079.55	1006.48	891.51	828.45	669.99
360.0	1175.01	1103.29	1103.29	1069.31	992.48	879.92	816.41	703.91	585.90
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	469.01	332.49	268.99	173.76	61.14	39.71	25.09	22.50	15.02
45.0	498.32	373.44	332.94	332.94	116.83	67.73	40.05	30.54	26.10
90.0	344.53	237.66	132.81	93.49	48.37	26.33	24.36	17.27	12.49
135.0	502.82	386.94	318.88	318.88	123.58	61.59	29.19	22.56	16.43
180.0	638.94	521.94	408.32	340.82	340.82	116.27	78.41	37.41	28.97
225.0	548.78	436.22	330.13	229.73	129.71	90.00	40.05	28.86	25.48
270.0	754.82	608.57	557.38	408.32	361.63	361.63	108.17	54.96	28.52
315.0	527.57	456.81	341.89	235.13	142.71	61.37	40.84	22.95	18.45
360.0	469.01	332.49	268.99	173.76	61.14	39.71	25.09	22.50	15.02

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	9.51	7.65	5.85	5.29	4.89	4.50	4.22	3.99	3.94
45.0	19.29	13.39	12.15	11.19	10.80	9.90	9.39	9.17	8.72
90.0	9.73	9.06	8.61	7.88	7.37	6.58	5.85	5.57	4.95
135.0	10.86	8.44	5.91	5.34	4.84	4.39	4.16	3.71	3.32
180.0	22.73	16.03	14.29	11.64	11.14	10.69	10.01	8.89	8.10
225.0	19.69	14.96	12.09	11.08	10.52	9.90	9.51	8.89	8.61
270.0	20.36	14.74	9.34	5.46	4.33	3.71	3.26	3.09	2.87
315.0	12.88	7.03	3.99	3.43	3.09	2.98	2.76	2.53	2.31
360.0	9.51	7.65	5.85	5.29	4.89	4.50	4.22	3.99	3.94
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	3.83	3.77	3.83	3.94	4.22	4.44	4.73	4.78	5.01
45.0	8.44	7.99	7.93	7.99	7.93	7.82	7.82	7.37	6.98
90.0	4.61	4.33	3.99	3.88	3.88	4.05	4.16	4.33	3.99
135.0	3.21	2.93	2.81	2.70	2.59	2.53	2.36	2.31	2.25
180.0	7.59	7.20	6.53	6.30	5.91	5.40	5.34	5.34	5.29
225.0	8.33	7.76	7.71	8.04	8.49	8.78	8.66	8.10	7.99
270.0	2.76	2.59	2.53	2.53	2.59	2.48	2.48	2.59	2.76
315.0	2.25	2.14	2.08	1.97	1.91	1.91	1.86	1.86	1.91
360.0	3.83	3.77	3.83	3.94	4.22	4.44	4.73	4.78	5.01
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	4.84	4.73	4.16	3.54	2.81	2.36	1.80	1.58	1.46
45.0	6.24	5.23	4.73	3.77	3.09	2.70	2.36	2.08	1.86
90.0	3.38	3.15	2.81	2.48	2.25	1.58	1.29	1.18	1.01
135.0	2.19	2.14	1.97	1.97	1.91	1.74	1.69	1.52	1.41
180.0	5.29	4.89	4.22	3.94	3.38	2.81	2.14	1.69	1.52
225.0	7.82	6.86	5.96	5.01	4.28	3.04	2.31	2.03	1.91
270.0	2.81	2.93	3.15	3.26	3.38	3.04	2.42	2.19	2.08
315.0	1.86	1.86	1.86	1.80	1.74	1.69	1.63	1.46	1.41
360.0	4.84	4.73	4.16	3.54	2.81	2.36	1.80	1.58	1.46
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	1.46	1.35	1.29	1.29	1.24	1.24	1.13	1.07	1.01
45.0	1.80	1.80	1.74	1.63	1.63	1.52	1.46	1.35	1.24
90.0	0.96	0.84	0.84	0.79	0.73	0.62	0.56	0.56	0.51
135.0	1.29	1.24	1.13	1.07	1.01	0.96	0.90	0.84	0.84
180.0	1.41	1.35	1.29	1.18	1.13	1.01	1.01	0.96	0.90
225.0	1.91	1.91	1.80	1.86	1.80	1.86	1.80	1.74	1.69
270.0	1.58	1.46	1.29	1.24	1.13	1.07	1.01	1.01	0.90
315.0	1.29	1.24	1.13	1.13	1.01	0.96	0.90	0.84	0.73
360.0	1.46	1.35	1.29	1.29	1.24	1.24	1.13	1.07	1.01
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	0.96	0.84	0.79	0.62	0.56	0.56	0.51	0.51	0.45
45.0	1.18	0.96	0.84	0.79	0.67	0.62	0.56	0.51	0.45
90.0	0.45	0.45	0.45	0.51	0.45	0.45	0.45	0.45	0.45
135.0	0.84	0.84	0.79	0.79	0.84	0.84	0.84	0.90	0.84
180.0	0.90	0.90	0.84	0.90	0.96	0.96	1.01	1.01	0.96
225.0	1.63	1.41	1.35	1.29	1.13	1.07	0.96	0.84	0.90
270.0	0.90	0.90	0.79	0.68	0.62	0.62	0.62	0.62	0.56
315.0	0.68	0.68	0.56	0.51	0.56	0.56	0.56	0.56	0.62
360.0	0.96	0.84	0.79	0.62	0.56	0.56	0.51	0.51	0.45

Intensity data(cd)

C/γ(°)	90.0
0.0	0.45
45.0	0.45
90.0	0.39
135.0	0.90
180.0	0.96
225.0	0.90
270.0	0.62
315.0	0.62
360.0	0.45