



NATA LIGHTING CO.,LTD.
www.nata.cn
Email:info@nata.com
Tel:+86-750-3770000 Fax:+86 750 3771111
Address:Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

NT

Client: NT

LumCAT: 62-0092-1

Luminaire: 92.70.427.00

Report No: 20251212-B006

Ballast type: AC

Test No: 20251212-C006

LampCAT: CITIZEN CLU028

Lamp flux(lm): 1546.7

Number of Lamps: 1

Length(mm): 55

Phm Type: C

Voltage(V): 35.150

Current(A): 0.360

Power (W): 12.654

PF: 0.000

Width(mm): 55

Height(mm): 25

Photometric Results

Lumens(lm): 1406.24, Efficiency(%): 90.92% , Luminous Efficacy(lm/W): 111.13

Central intensity(cd): 6269.991, Maximum intensity(cd): 6269.991

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=25.4

[C90/270]Total=25.4

Field angle(10%Imax): [C0/180]Total=43.2

[C90/270]Total=43.2

Maximum s/h(1/2): C0_180=0.43 C90_270=0.43

Maximum s/h(1/4): C0_180=0.41 C90_270=0.41

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 90.92%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 97.074%

Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2025/12/12
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	6269.991	0.000	0	0.00%	0.00%
1.0	6228.998	5.981	5.981	0.39%	0.43%
2.0	6156.225	17.776	23.757	1.15%	1.69%
3.0	6044.569	29.180	52.937	1.89%	3.76%
4.0	5895.014	39.966	92.903	2.58%	6.61%
5.0	5703.131	49.895	142.797	3.23%	10.15%
6.0	5450.991	58.618	201.415	3.79%	14.32%
7.0	5179.725	65.985	267.4	4.27%	19.02%
8.0	4861.069	71.860	339.26	4.65%	24.13%
9.0	4528.491	76.097	415.357	4.92%	29.54%
10.0	4186.772	78.870	494.227	5.10%	35.15%
11.0	3768.975	79.494	573.722	5.14%	40.80%
12.0	3426.061	78.652	652.374	5.09%	46.39%
13.0	3034.280	76.668	729.042	4.96%	51.84%
14.0	2591.170	72.005	801.047	4.66%	56.96%
15.0	2249.311	66.452	867.499	4.30%	61.69%
16.0	1814.977	59.553	927.052	3.85%	65.92%
17.0	1574.845	52.789	979.841	3.41%	69.68%
18.0	1356.532	48.332	1028.173	3.12%	73.11%
19.0	1071.942	42.250	1070.423	2.73%	76.12%
20.0	899.402	36.081	1106.504	2.33%	78.69%
21.0	712.709	30.956	1137.46	2.00%	80.89%
22.0	567.872	25.734	1163.194	1.66%	82.72%
23.0	448.664	21.330	1184.524	1.38%	84.23%
24.0	356.133	17.596	1202.12	1.14%	85.48%
25.0	294.778	14.800	1216.92	0.96%	86.54%
26.0	232.066	12.436	1229.356	0.80%	87.42%
27.0	192.966	10.399	1239.755	0.67%	88.16%
28.0	171.077	9.217	1248.971	0.60%	88.82%
29.0	126.612	7.788	1256.76	0.50%	89.37%
30.0	109.751	6.382	1263.141	0.41%	89.82%
31.0	97.193	5.759	1268.9	0.37%	90.23%
32.0	85.514	5.234	1274.135	0.34%	90.61%
33.0	78.630	4.836	1278.97	0.31%	90.95%
34.0	71.585	4.546	1283.516	0.29%	91.27%
35.0	66.227	4.280	1287.796	0.28%	91.58%
36.0	61.938	4.081	1291.877	0.26%	91.87%
37.0	57.783	3.905	1295.782	0.25%	92.14%

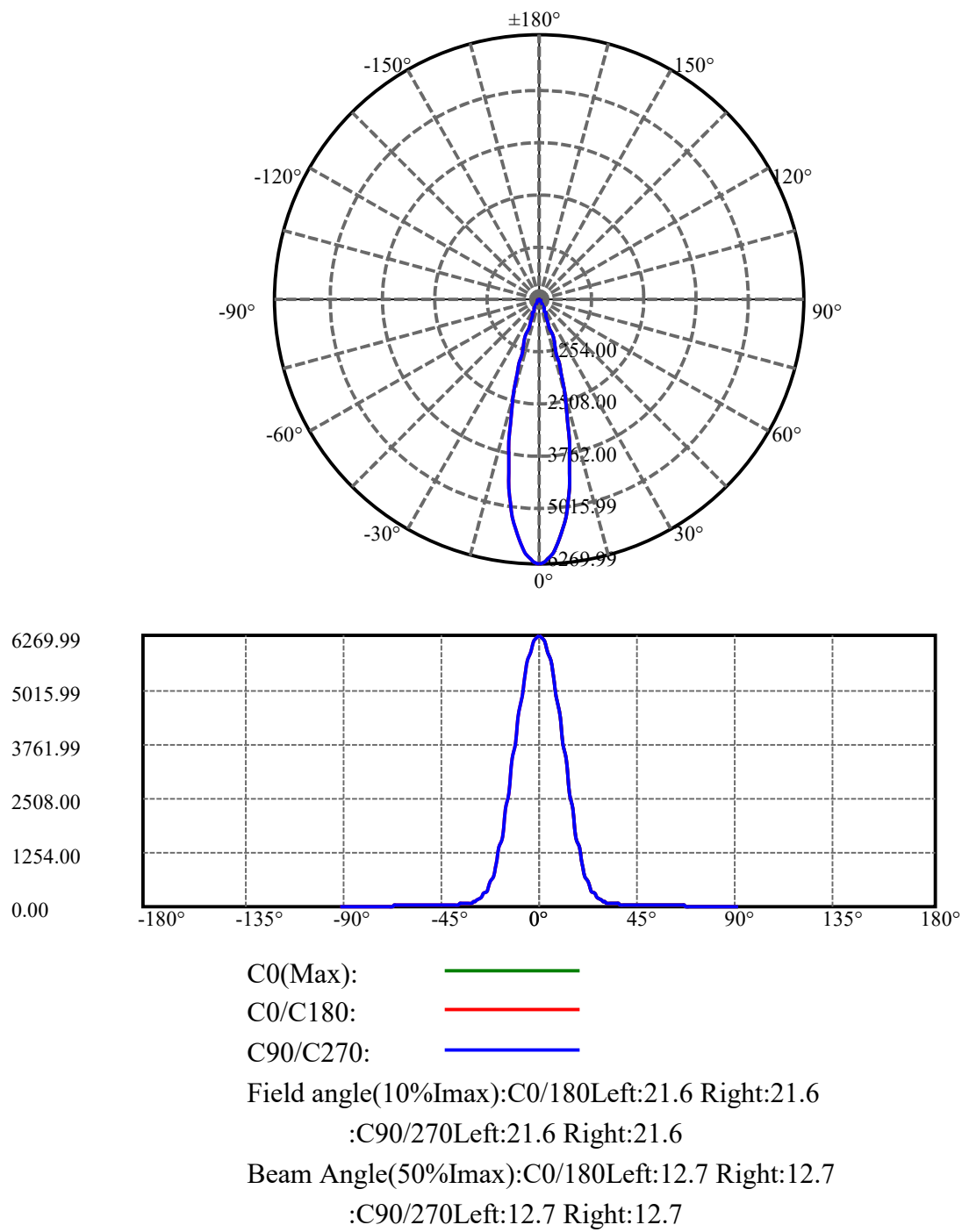
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	54.759	3.757	1299.538	0.24%	92.41%
39.0	51.891	3.640	1303.179	0.24%	92.67%
40.0	49.331	3.530	1306.709	0.23%	92.92%
41.0	46.877	3.426	1310.135	0.22%	93.17%
42.0	44.817	3.331	1313.466	0.22%	93.40%
43.0	42.961	3.252	1316.718	0.21%	93.63%
44.0	41.330	3.181	1319.899	0.21%	93.86%
45.0	39.916	3.122	1323.022	0.20%	94.08%
46.0	38.686	3.074	1326.096	0.20%	94.30%
47.0	37.505	3.030	1329.126	0.20%	94.52%
48.0	36.450	2.990	1332.115	0.19%	94.73%
49.0	35.473	2.954	1335.069	0.19%	94.94%
50.0	34.601	2.922	1337.991	0.19%	95.15%
51.0	33.771	2.893	1340.883	0.19%	95.35%
52.0	32.934	2.862	1343.746	0.19%	95.56%
53.0	32.070	2.828	1346.573	0.18%	95.76%
54.0	31.254	2.791	1349.364	0.18%	95.96%
55.0	30.396	2.752	1352.116	0.18%	96.15%
56.0	29.489	2.706	1354.822	0.17%	96.34%
57.0	28.702	2.661	1357.483	0.17%	96.53%
58.0	27.570	2.602	1360.085	0.17%	96.72%
59.0	26.705	2.537	1362.623	0.16%	96.90%
60.0	25.763	2.479	1365.101	0.16%	97.07%
61.0	24.778	2.412	1367.513	0.16%	97.25%
62.0	23.864	2.344	1369.857	0.15%	97.41%
63.0	22.929	2.276	1372.133	0.15%	97.57%
64.0	22.029	2.206	1374.339	0.14%	97.73%
65.0	21.150	2.137	1376.476	0.14%	97.88%
66.0	20.145	2.060	1378.536	0.13%	98.03%
67.0	19.238	1.980	1380.516	0.13%	98.17%
68.0	18.330	1.903	1382.419	0.12%	98.31%
69.0	17.473	1.827	1384.246	0.12%	98.44%
70.0	16.636	1.752	1385.998	0.11%	98.56%
71.0	15.652	1.669	1387.666	0.11%	98.68%
72.0	14.850	1.586	1389.252	0.10%	98.79%
73.0	14.048	1.511	1390.764	0.10%	98.90%
74.0	13.247	1.435	1392.199	0.09%	99.00%
75.0	12.544	1.363	1393.561	0.09%	99.10%

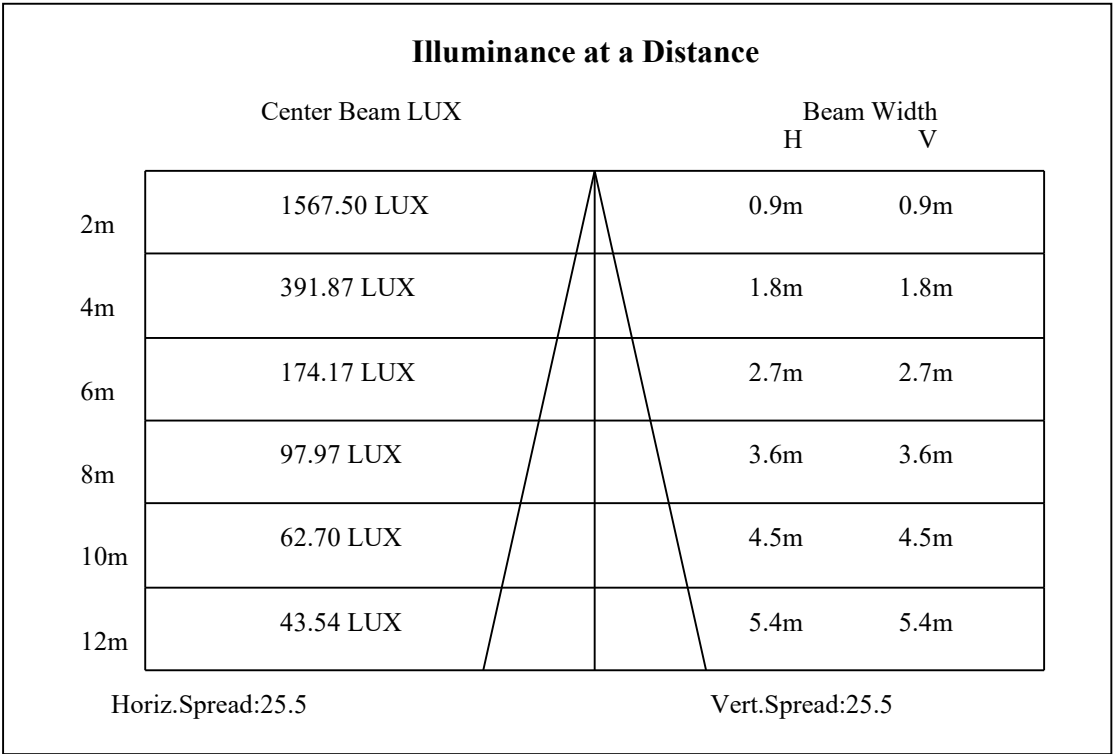
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	11.714	1.288	1394.849	0.08%	99.19%
77.0	11.166	1.220	1396.069	0.08%	99.28%
78.0	10.786	1.175	1397.244	0.08%	99.36%
79.0	10.013	1.117	1398.361	0.07%	99.44%
80.0	9.668	1.061	1399.422	0.07%	99.52%
81.0	9.534	1.038	1400.461	0.07%	99.59%
82.0	8.803	0.994	1401.455	0.06%	99.66%
83.0	7.439	0.883	1402.338	0.06%	99.72%
84.0	6.216	0.744	1403.082	0.05%	99.78%
85.0	5.723	0.652	1403.734	0.04%	99.82%
86.0	5.168	0.595	1404.329	0.04%	99.86%
87.0	4.683	0.539	1404.868	0.03%	99.90%
88.0	4.338	0.494	1405.362	0.03%	99.94%
89.0	3.973	0.456	1405.818	0.03%	99.97%
90.0	3.769	0.424	1406.242	0.03%	100.00%

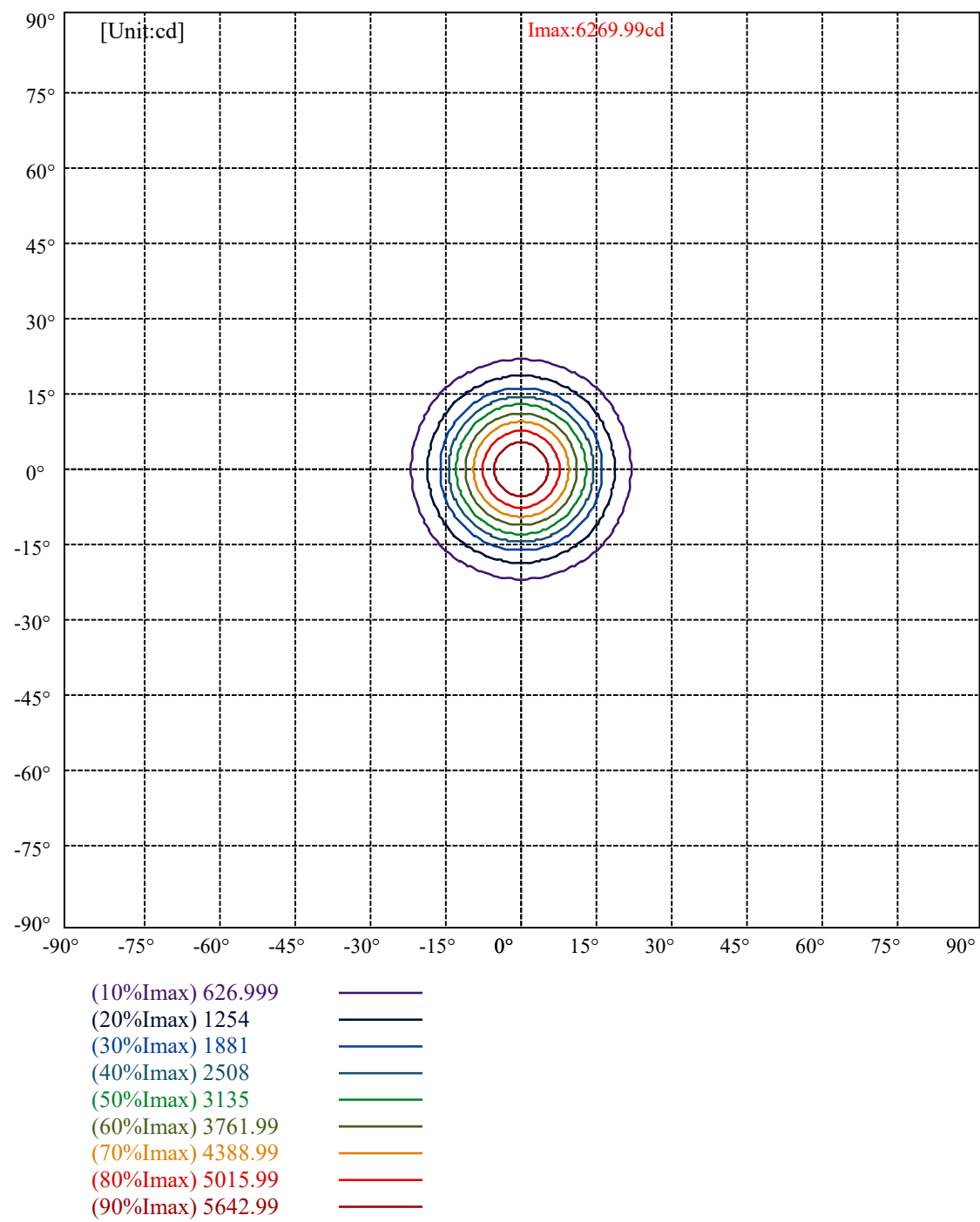
ZONAL LUMEN SUMMARY			
Zone	Lumens	%Lamp	%Fixt
0-30	1263.14	81.67%	89.82%
0-40	1306.71	84.49%	92.92%
0-60	1365.10	88.26%	97.07%
0-90	1405.82	90.89%	99.97%
0-120	1405.82	90.89%	99.97%
0-180	1406.24	90.92%	100.00%
60-90	40.72	2.63%	2.90%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-20.60	1124.99	72.74%	80.00%

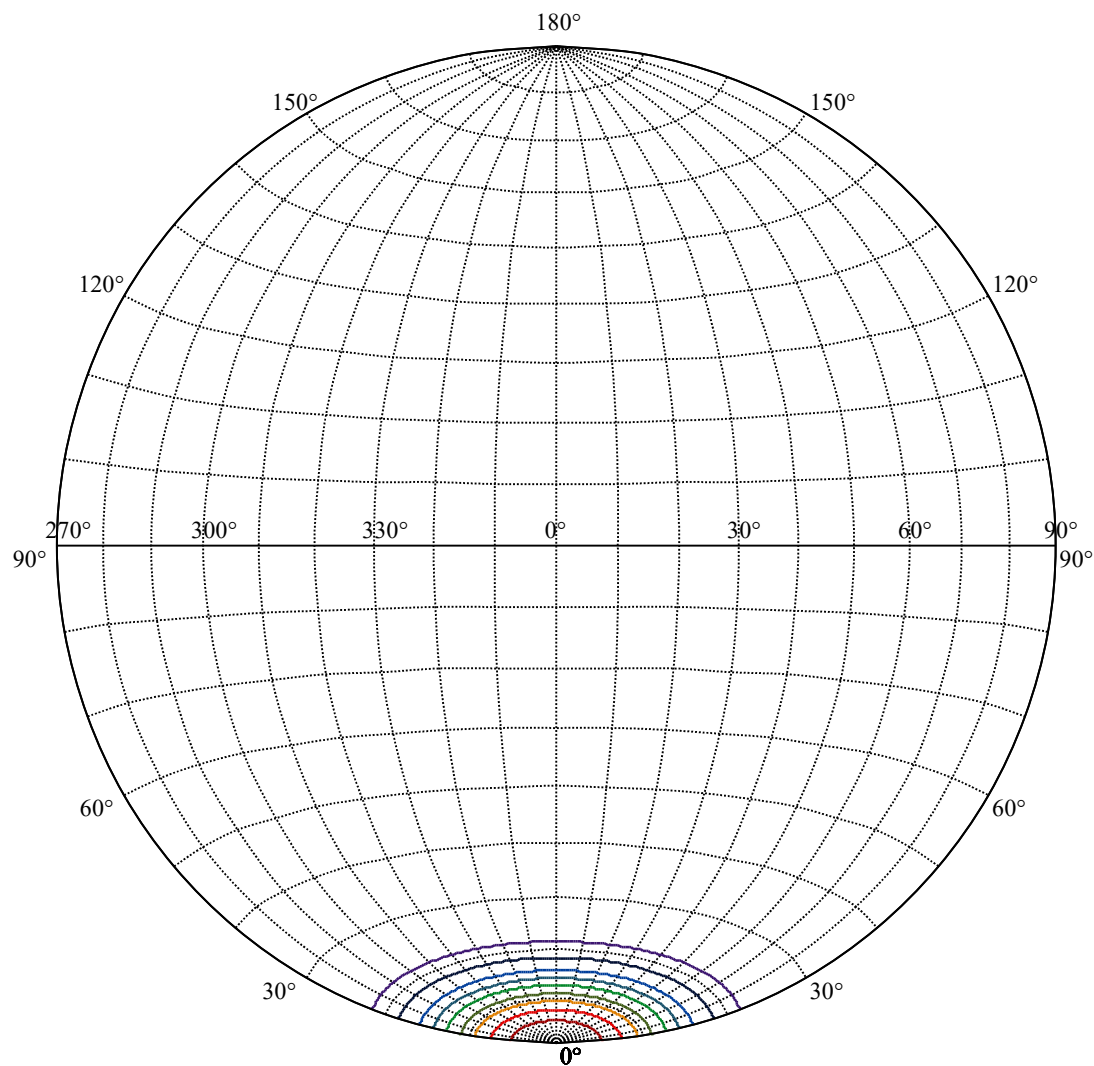
ZONAL LUMEN SUMMARY

0-10	494.23
10-20	612.28
20-30	156.64
30-40	43.57
40-50	31.28
50-60	27.11
60-70	20.90
70-80	13.42
80-90	6.40
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









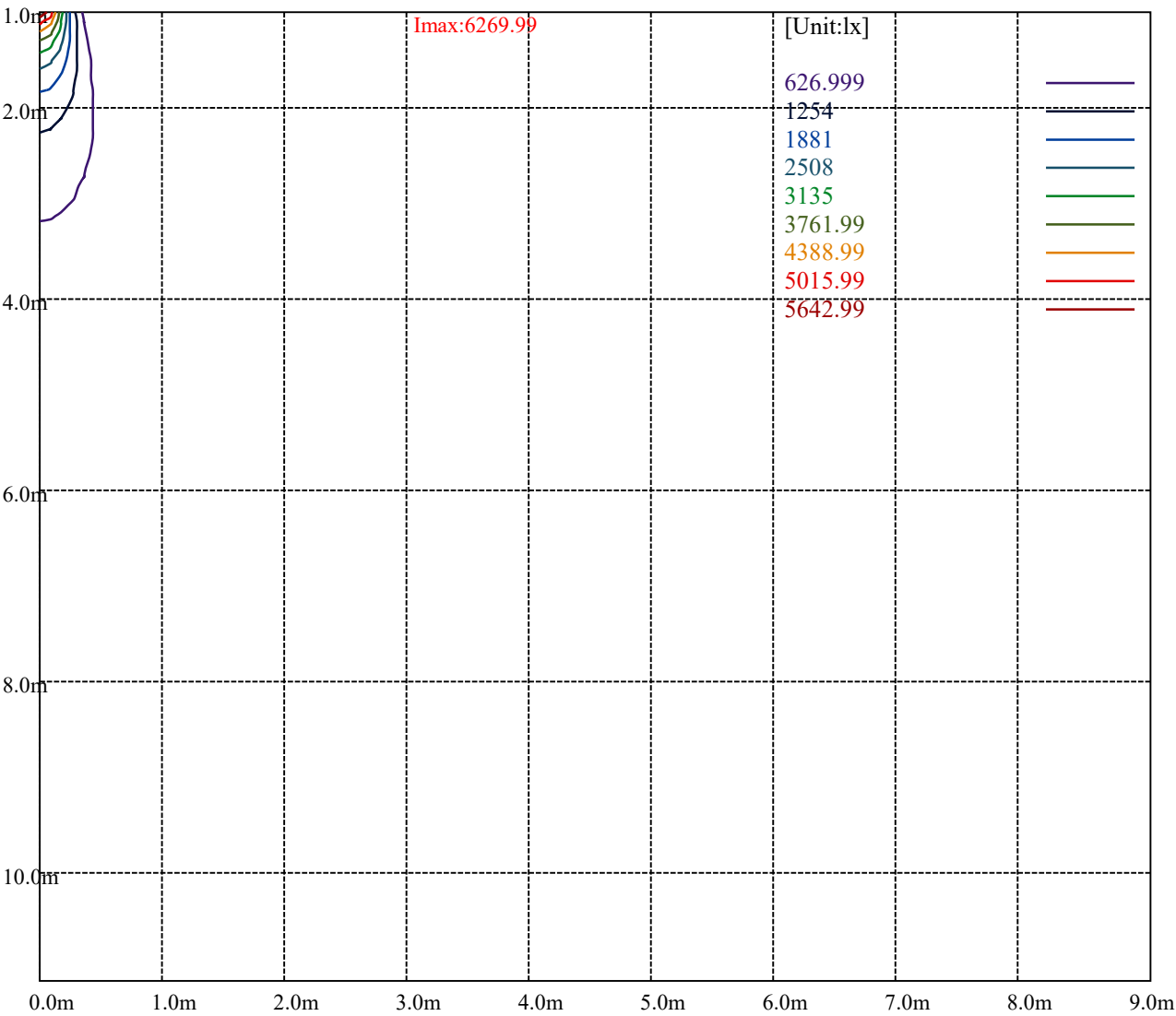
House

[Unit:cd]

Road

Imax:6269.99

(10%Imax)	626.999	—
(20%Imax)	1254	—
(30%Imax)	1881	—
(40%Imax)	2508	—
(50%Imax)	3135	—
(60%Imax)	3761.99	—
(70%Imax)	4388.99	—
(80%Imax)	5015.99	—
(90%Imax)	5642.99	—



Luminance Table

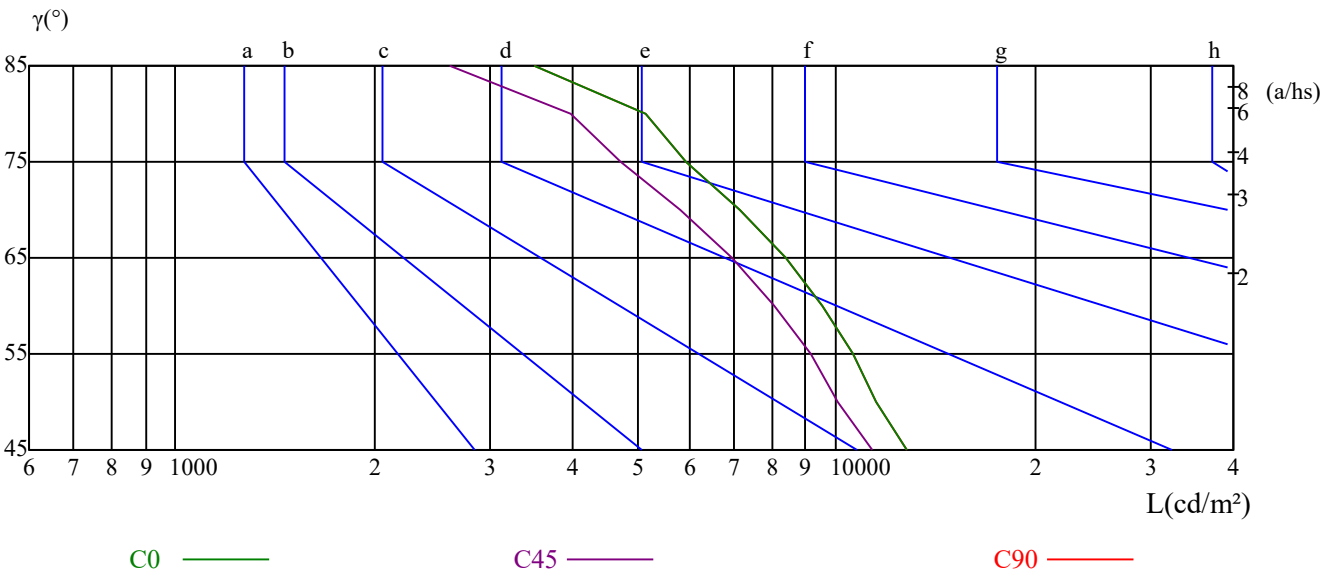
γ	45	50	55	60	65	70	75	80	85
C0	12830	11542	10623	9530	8378	7150	5942	5144	3504
C45	11359	10076	9134	8060	6955	5813	4714	3962	2601
C90	12830	11542	10623	9530	8378	7150	5942	5144	3504

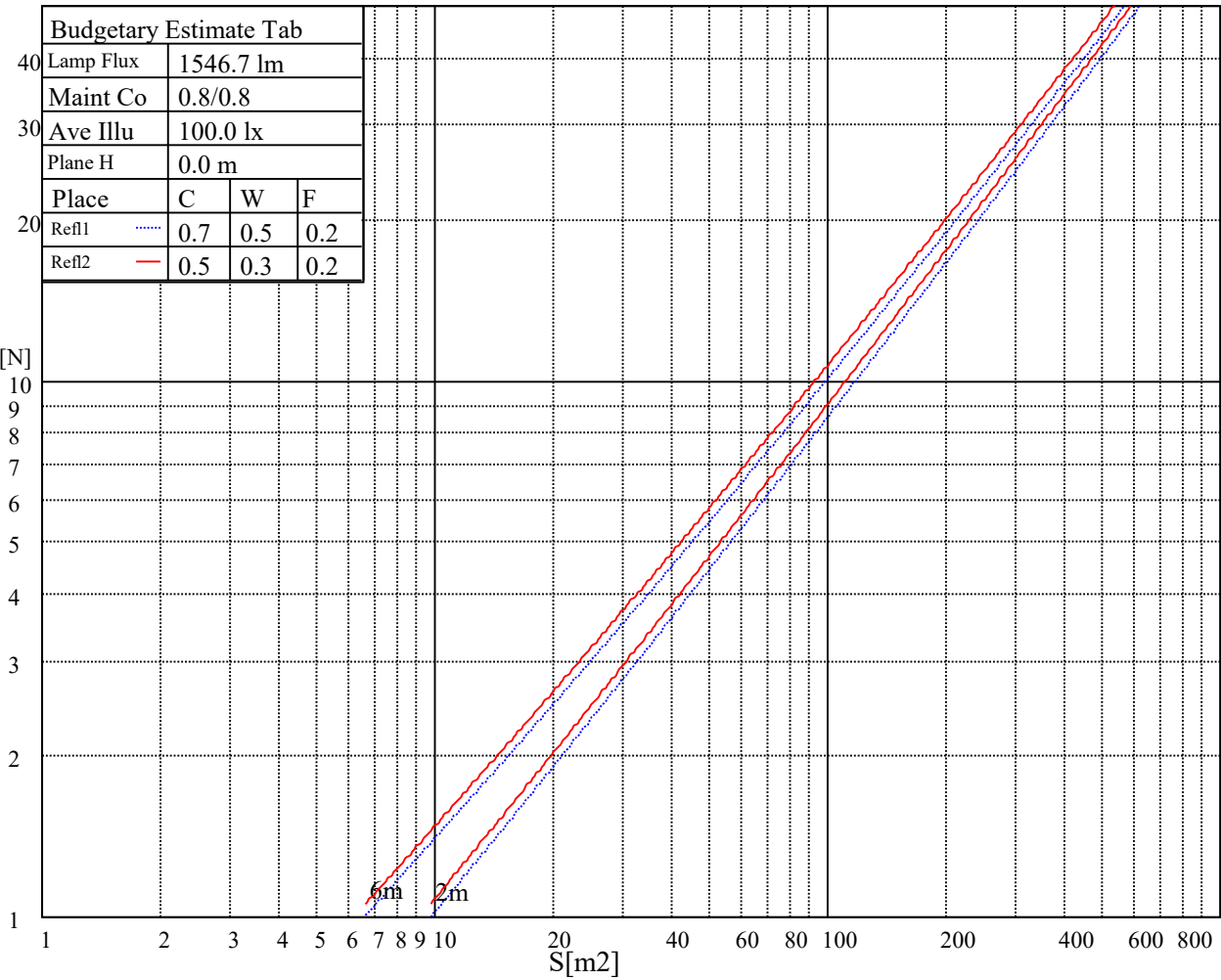
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
16544	16544	16544	16022	16022	16022	21709	21709	21709

Glare Table

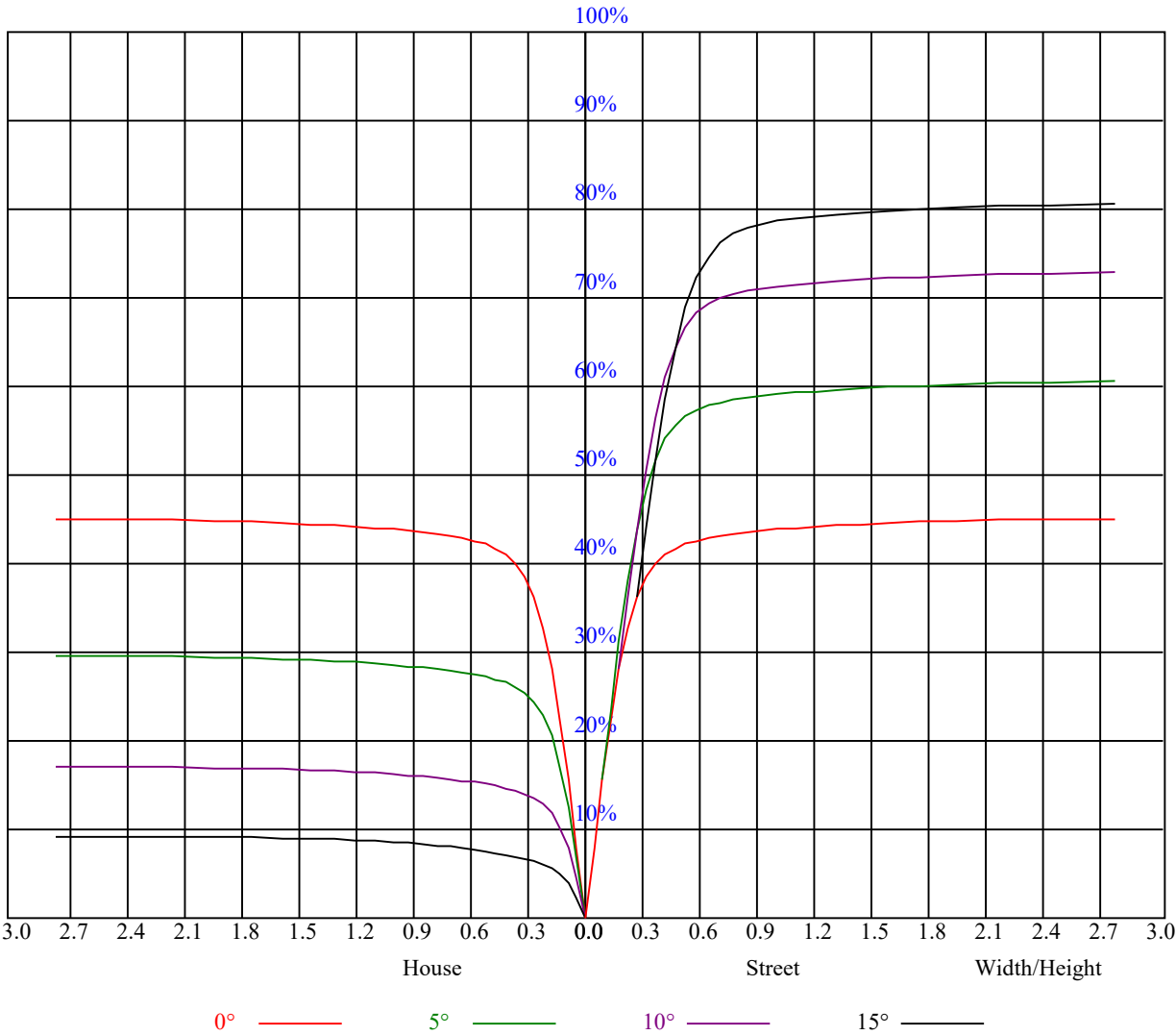
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

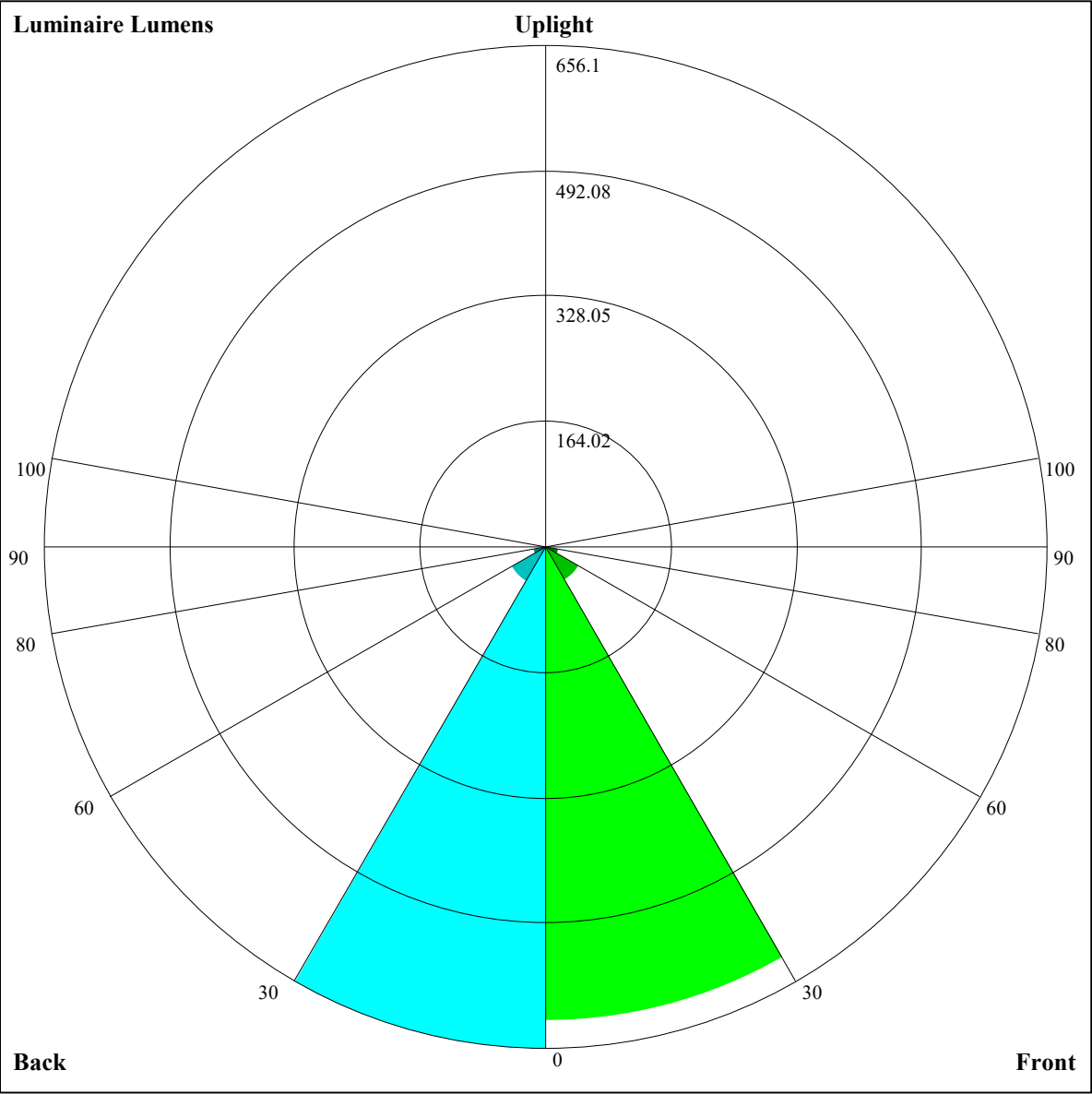
Luminance Limiting Curve





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	COEFFCIENTS 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	1.02	1.00	0.98	1.00	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87
2	0.96	0.93	0.91	0.95	0.92	0.90	0.92	0.90	0.88	0.89	0.88	0.86	0.87	0.86	0.84	0.83
3	0.92	0.88	0.85	0.91	0.87	0.85	0.88	0.86	0.83	0.86	0.84	0.82	0.84	0.83	0.81	0.80
4	0.88	0.84	0.81	0.87	0.83	0.81	0.85	0.82	0.80	0.84	0.81	0.79	0.82	0.80	0.78	0.77
5	0.85	0.81	0.78	0.84	0.80	0.77	0.82	0.79	0.77	0.81	0.78	0.76	0.80	0.77	0.75	0.74
6	0.82	0.78	0.75	0.81	0.77	0.74	0.80	0.76	0.74	0.79	0.76	0.73	0.78	0.75	0.73	0.72
7	0.79	0.75	0.72	0.78	0.75	0.72	0.77	0.74	0.72	0.76	0.73	0.71	0.75	0.73	0.71	0.70
8	0.76	0.72	0.70	0.76	0.72	0.70	0.75	0.72	0.69	0.74	0.71	0.69	0.74	0.71	0.69	0.68
9	0.74	0.70	0.68	0.74	0.70	0.68	0.73	0.70	0.67	0.72	0.69	0.67	0.72	0.69	0.67	0.66
10	0.72	0.68	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





Luminaire Lumens:

FL=619.63,FM=50.8,FH=17.14,FVH=3.21

BL=656.1,BM=51.5,BH=17.29,BVH=3.55

UL=0,UH=0

BUG Rating:B2-U0-G0

Intensity data(cd)

Appendix Page: 17 Total:19

C/γ(°)	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0
0.0	6275.19	6164.38	6090.69	5931.51	5813.38	5471.94	5116.44	4917.88	4553.94
45.0	6256.63	6289.26	6297.69	6256.07	6162.69	6024.32	5918.57	5658.13	5392.07
90.0	6322.44	6338.19	6315.13	6224.57	6154.82	5997.32	5798.76	5556.32	5207.57
135.0	6225.69	6279.69	6294.32	6264.51	6222.88	6098.01	5942.19	5745.32	5501.76
180.0	6275.19	6281.38	6262.82	6175.07	6047.38	5876.38	5658.69	5506.26	5154.69
225.0	6256.63	6118.26	5920.82	5798.19	5560.26	5276.19	4953.32	4520.19	4290.13
270.0	6322.44	6259.44	6123.32	5960.76	5754.88	5613.13	5276.19	4950.51	4592.19
315.0	6225.69	6101.38	5945.01	5745.88	5443.82	5267.76	4943.76	4583.19	4196.19
360.0	6275.19	6164.38	6090.69	5931.51	5813.38	5471.94	5116.44	4917.88	4553.94
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	4167.51	3766.44	3290.01	3056.57	2674.63	2308.44	1896.13	1582.82	1063.52
45.0	5087.19	4748.57	4532.01	4073.01	3679.26	3284.94	2828.19	2459.76	2105.94
90.0	5009.01	4646.19	4257.51	3858.69	3372.69	2971.63	2585.19	2152.07	1947.32
135.0	5333.57	4953.88	4445.38	4210.82	3805.82	3314.76	2915.94	2528.94	2307.88
180.0	4817.76	4444.82	3971.76	3809.19	3325.44	2775.88	2546.38	2106.51	1768.44
225.0	3893.01	3494.76	3101.57	2640.88	2421.51	1939.44	1748.19	1058.68	1058.68
270.0	4208.01	3970.63	3484.07	3084.13	2698.26	2257.82	1913.57	1599.69	1315.63
315.0	3711.88	3468.88	3069.51	2675.19	2296.63	1876.44	1560.88	1031.34	1031.34
360.0	4167.51	3766.44	3290.01	3056.57	2674.63	2308.44	1896.13	1582.82	1063.52
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1063.52	849.94	738.68	526.56	391.39	337.56	263.98	209.87	170.83
45.0	1776.32	1593.51	1261.63	1025.94	821.19	649.63	562.44	418.44	296.38
90.0	1630.07	1095.58	1095.58	878.40	697.50	549.73	409.78	353.93	278.49
135.0	1886.01	1568.19	1286.38	1038.88	908.94	687.32	542.19	426.88	319.44
180.0	1463.01	1190.76	1043.38	786.32	614.76	477.51	351.51	317.76	317.76
225.0	970.88	739.74	584.61	458.38	359.10	269.10	235.07	190.41	157.89
270.0	1163.19	897.13	712.63	561.32	439.82	379.07	297.51	297.51	188.16
315.0	899.27	640.69	472.33	425.87	310.28	239.40	186.58	143.44	127.58
360.0	1063.52	849.94	738.68	526.56	391.39	337.56	263.98	209.87	170.83
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	138.21	126.96	112.33	100.41	90.96	81.56	75.60	70.09	64.63
45.0	296.38	281.76	163.35	136.63	114.53	101.53	95.12	82.58	78.08
90.0	220.78	177.75	141.13	119.70	104.34	90.68	86.68	76.50	69.64
135.0	319.44	290.19	169.48	152.04	125.83	104.85	97.88	86.40	78.81
180.0	176.06	155.03	123.98	105.98	92.31	79.99	72.06	65.87	60.58
225.0	134.04	113.46	105.53	90.62	85.22	77.57	70.48	65.53	61.48
270.0	150.58	128.64	112.50	97.48	93.43	82.97	73.52	70.20	64.24
315.0	108.23	94.84	84.60	75.15	70.93	64.97	57.71	55.52	52.37
360.0	138.21	126.96	112.33	100.41	90.96	81.56	75.60	70.09	64.63
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	62.10	58.22	55.35	52.37	49.39	48.15	45.84	44.04	42.41
45.0	70.65	65.59	61.37	57.77	55.91	52.20	49.78	47.19	45.11
90.0	64.07	58.67	56.31	52.93	50.06	47.31	44.49	43.26	40.89
135.0	72.62	67.50	64.52	59.63	56.31	53.27	49.78	47.42	46.18
180.0	58.05	53.38	50.46	47.93	45.51	42.92	41.79	39.49	38.59
225.0	57.32	55.41	52.43	49.67	47.53	45.06	44.04	42.30	39.83
270.0	60.19	56.64	53.38	51.86	48.66	46.46	44.44	42.81	40.95
315.0	50.51	46.86	44.27	42.98	41.29	39.66	38.36	37.18	36.68
360.0	62.10	58.22	55.35	52.37	49.39	48.15	45.84	44.04	42.41

Intensity data(cd)

Appendix Page: 18 Total:19

C/ γ (°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	40.78	39.99	38.31	36.90	36.23	35.21	34.31	33.36	32.12
45.0	44.04	41.40	40.11	39.32	37.80	36.73	35.66	34.65	33.98
90.0	39.21	38.53	37.46	36.34	35.27	34.31	33.81	32.91	32.06
135.0	43.31	42.24	40.39	39.04	37.74	36.56	35.89	34.48	33.47
180.0	37.01	36.06	35.04	34.26	33.75	32.91	32.23	31.56	30.99
225.0	39.15	38.03	37.07	36.17	35.10	34.59	33.69	32.85	32.01
270.0	40.05	38.19	37.41	36.17	35.10	34.26	33.24	32.74	31.78
315.0	35.78	35.04	34.26	33.41	32.79	32.23	31.33	30.94	30.15
360.0	40.78	39.99	38.31	36.90	36.23	35.21	34.31	33.36	32.12
C/ γ (°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	31.56	30.49	29.59	28.46	27.39	26.78	25.48	24.30	23.68
45.0	32.91	31.95	30.99	30.04	29.48	28.35	27.06	26.44	25.37
90.0	31.33	30.43	29.93	29.14	27.73	27.17	26.27	25.31	24.41
135.0	32.51	31.44	30.32	29.31	28.35	27.79	26.72	25.76	24.81
180.0	30.54	29.76	28.80	28.41	27.51	26.55	25.59	24.69	24.13
225.0	30.88	30.32	29.42	28.41	27.11	26.04	25.03	24.02	22.73
270.0	30.88	30.04	29.08	28.52	27.00	26.10	25.43	24.30	23.34
315.0	29.42	28.74	27.79	27.34	25.99	24.86	24.53	23.40	22.44
360.0	31.56	30.49	29.59	28.46	27.39	26.78	25.48	24.30	23.68
C/ γ (°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	22.73	21.83	20.87	19.58	19.01	18.17	17.21	16.31	15.24
45.0	24.30	23.34	22.44	21.77	20.59	19.52	18.51	17.66	16.59
90.0	23.40	22.84	21.88	20.93	20.03	18.90	18.39	17.16	16.14
135.0	23.96	23.40	22.39	21.54	20.59	19.63	19.13	18.00	16.88
180.0	23.06	22.11	21.21	20.25	19.63	18.56	17.72	16.88	15.92
225.0	22.05	20.98	19.97	18.84	17.66	17.16	16.31	15.41	14.68
270.0	22.39	21.43	20.76	19.52	18.56	17.72	16.65	16.31	15.30
315.0	21.54	20.31	19.69	18.73	17.83	16.99	15.86	15.36	14.46
360.0	22.73	21.83	20.87	19.58	19.01	18.17	17.21	16.31	15.24
C/ γ (°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	14.51	13.67	12.71	12.21	11.42	11.87	13.56	12.26	10.74
45.0	16.09	14.91	14.40	13.50	12.71	11.87	11.14	10.63	9.68
90.0	15.64	14.85	14.06	13.33	12.32	11.93	11.08	10.24	9.39
135.0	16.43	15.41	14.63	13.84	13.11	12.66	11.70	11.08	15.36
180.0	15.08	14.29	13.56	13.05	12.21	11.36	10.46	9.62	8.61
225.0	13.61	12.83	11.98	11.03	10.52	9.62	8.89	8.33	7.48
270.0	14.23	13.73	12.77	11.98	11.19	10.91	10.91	10.07	9.11
315.0	13.22	12.71	11.87	11.42	10.24	9.11	8.55	7.88	6.97
360.0	14.51	13.67	12.71	12.21	11.42	11.87	13.56	12.26	10.74
C/ γ (°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	8.72	8.10	7.76	6.81	6.13	5.34	4.89	4.78	4.78
45.0	8.83	8.21	7.59	6.81	6.13	5.57	5.06	4.61	4.22
90.0	8.61	7.88	7.09	6.41	5.96	5.46	4.95	4.56	4.11
135.0	20.36	19.63	13.50	8.04	7.71	7.14	6.47	5.85	4.95
180.0	8.27	7.14	6.36	5.91	5.29	4.84	4.33	3.94	3.60
225.0	6.86	6.36	5.68	5.18	4.84	4.44	3.99	3.60	3.26
270.0	8.33	7.43	6.47	5.85	5.40	4.61	4.22	4.16	3.88
315.0	6.30	5.68	5.06	4.73	4.33	3.94	3.54	3.21	2.98
360.0	8.72	8.10	7.76	6.81	6.13	5.34	4.89	4.78	4.78

Intensity data(cd)

C/ $\gamma(^{\circ})$	90.0
0.0	4.61
45.0	3.77
90.0	3.94
135.0	5.34
180.0	3.21
225.0	3.04
270.0	3.49
315.0	2.76
360.0	4.61