
Nata

Client:

LumCAT: 8370-E

Luminaire:

Report No: nata-0100

Voltage(V):

Test No: 00000020

Current(A):

LampCAT: CITIZEN CLU550

Power (W): 0.0000

Lamp flux(lm): 1000.0

PF:

Number of Lamps: 1

Ballast type:

Length(mm): 214

Width(mm): 214

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 941.36, Efficiency(%): 94.14% , Luminous Efficacy(lm/W): 0.00

Central intensity(cd): 9955.604, Maximum intensity(cd): 9955.604

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=12.2

[C90/270]Total=12.2

Field angle(10%Imax): [C0/180]Total=26.2

[C90/270]Total=26.2

Maximum s/h(1/2): C0_180=0.21 C90_270=0.21

Maximum s/h(1/4): C0_180=0.22 C90_270=0.22

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 100.00%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 93.867%

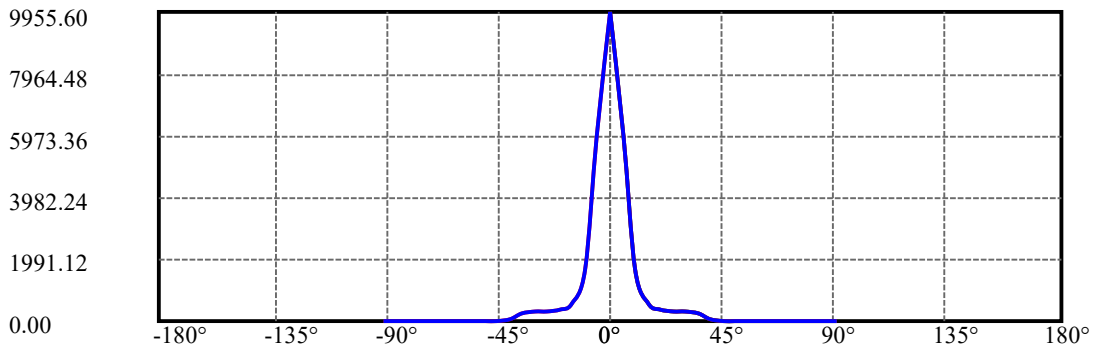
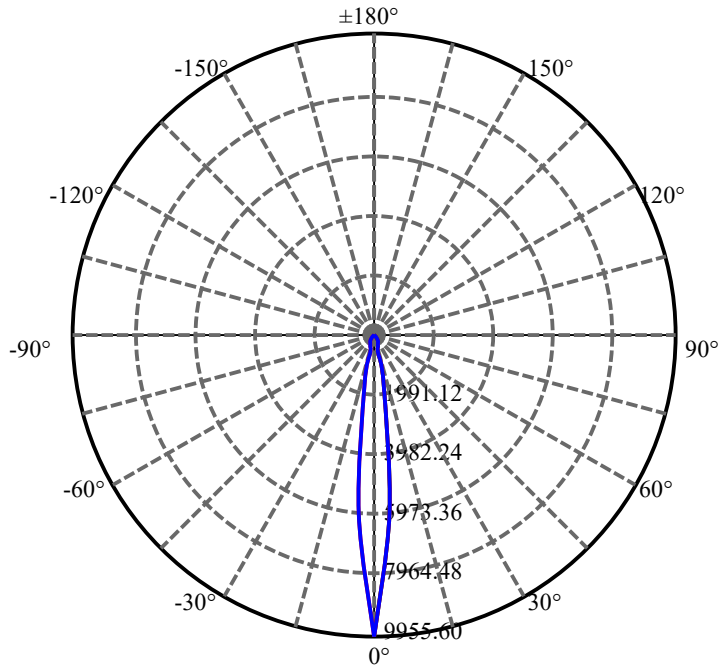
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	9955.603	59.536	59.536	5.954%	6.324%
5.0	5942.957	283.915	343.451	28.391%	36.484%
10.0	1689.866	160.847	504.298	16.085%	53.571%
15.0	583.001	82.709	587.007	8.271%	62.357%
20.0	373.373	69.998	657.005	7.000%	69.793%
25.0	334.578	77.506	734.511	7.751%	78.026%
30.0	313.832	86.012	820.523	8.601%	87.163%
35.0	230.461	72.456	892.979	7.246%	94.860%
40.0	77.901	27.447	920.426	2.745%	97.776%
45.0	10.856	4.208	924.634	.421%	98.223%
50.0	10.100	4.241	928.875	.424%	98.673%
55.0	12.022	5.398	934.273	.540%	99.247%
60.0	9.266	4.398	938.672	.440%	99.714%
65.0	1.794	0.891	939.563	.089%	99.809%
70.0	1.019	0.525	940.087	.052%	99.864%
75.0	0.942	0.499	940.586	.050%	99.917%
80.0	0.817	0.441	941.027	.044%	99.964%
85.0	0.442	0.242	941.269	.024%	99.990%
90.0	0.344	0.094	941.363	.009%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	820.52	82.05%	87.16%
0-40	920.43	92.04%	97.78%
0-60	938.67	93.87%	99.71%
0-90	941.27	94.13%	99.99%
0-120	941.27	94.13%	99.99%
0-180	941.36	94.14%	100.00%
60-90	7.00	0.70%	0.74%
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%
0-26.08	753.09	75.31%	80.00%

ZONAL LUMEN SUMMARY

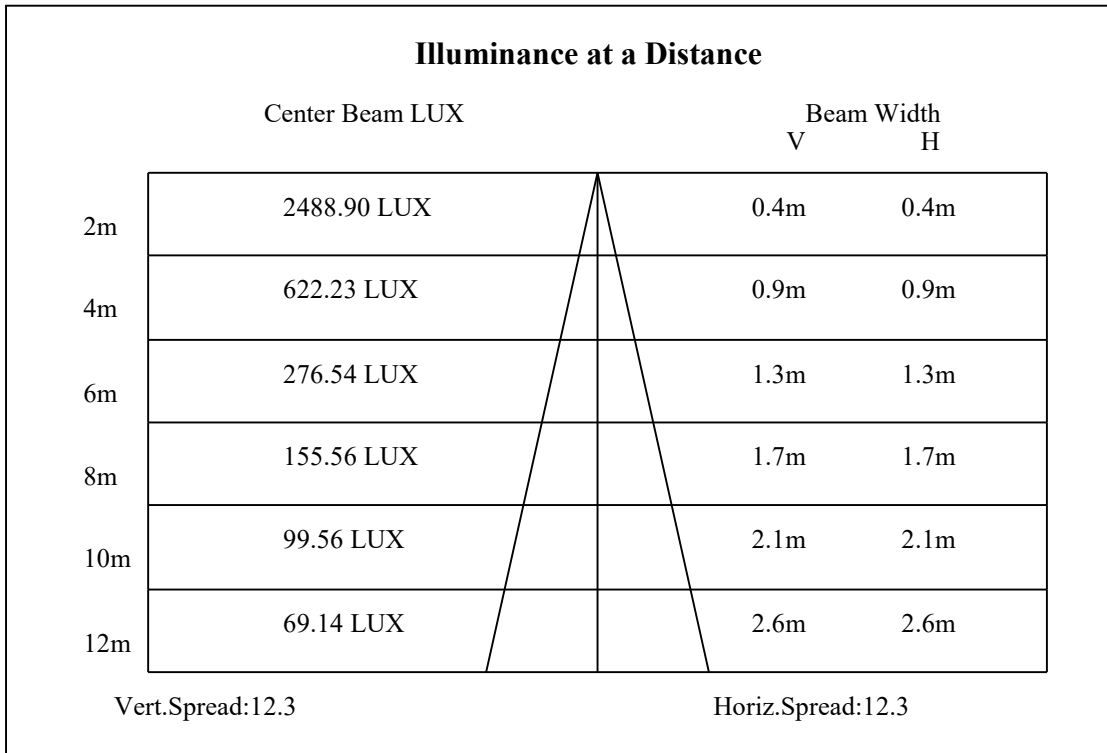
0-10	504.30
10-20	152.71
20-30	163.52
30-40	99.90
40-50	8.45
50-60	9.80
60-70	1.42
70-80	0.94
80-90	0.24
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

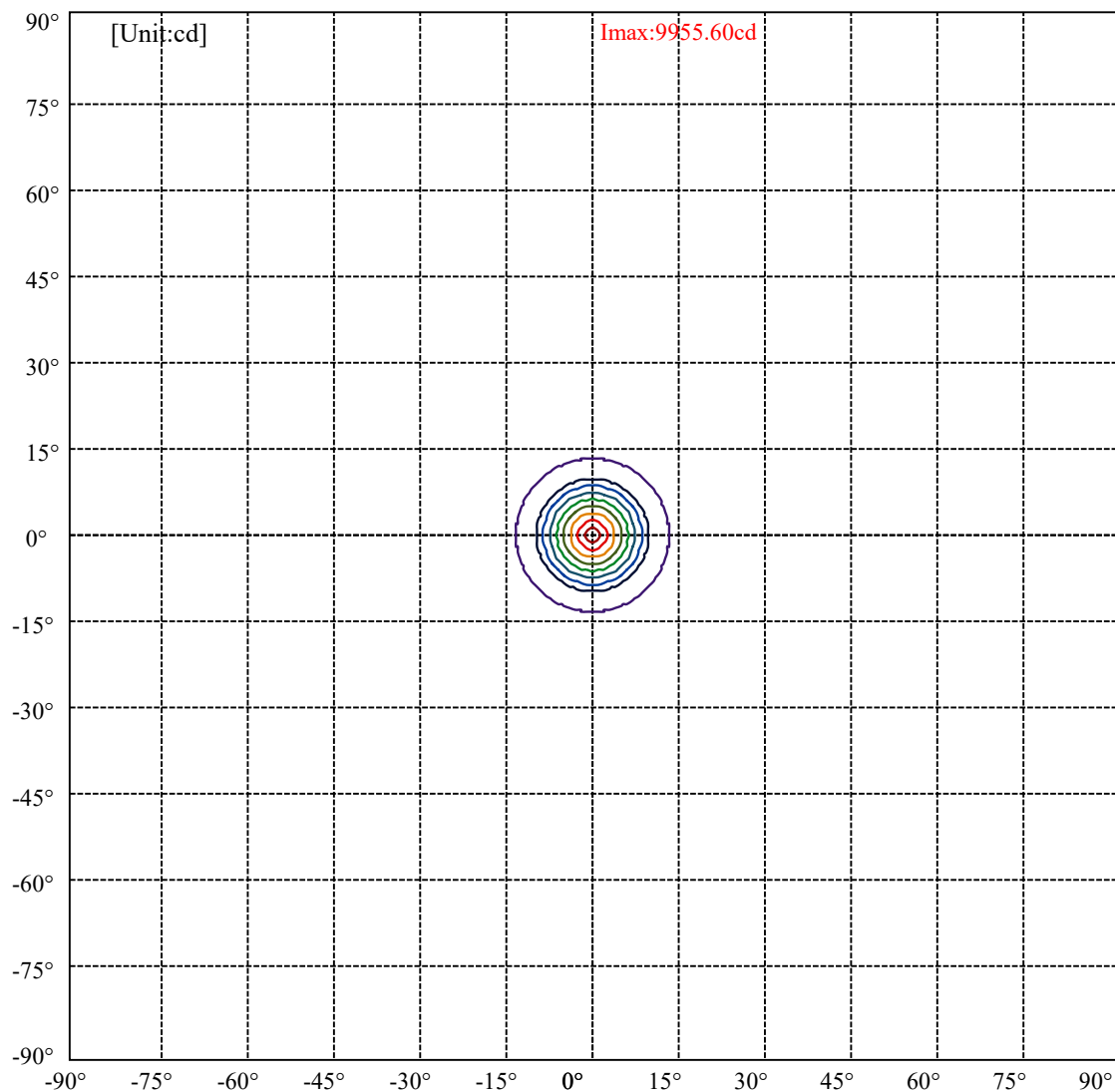


C0(Max): —————
C0/C180: —————
C90/C270: —————

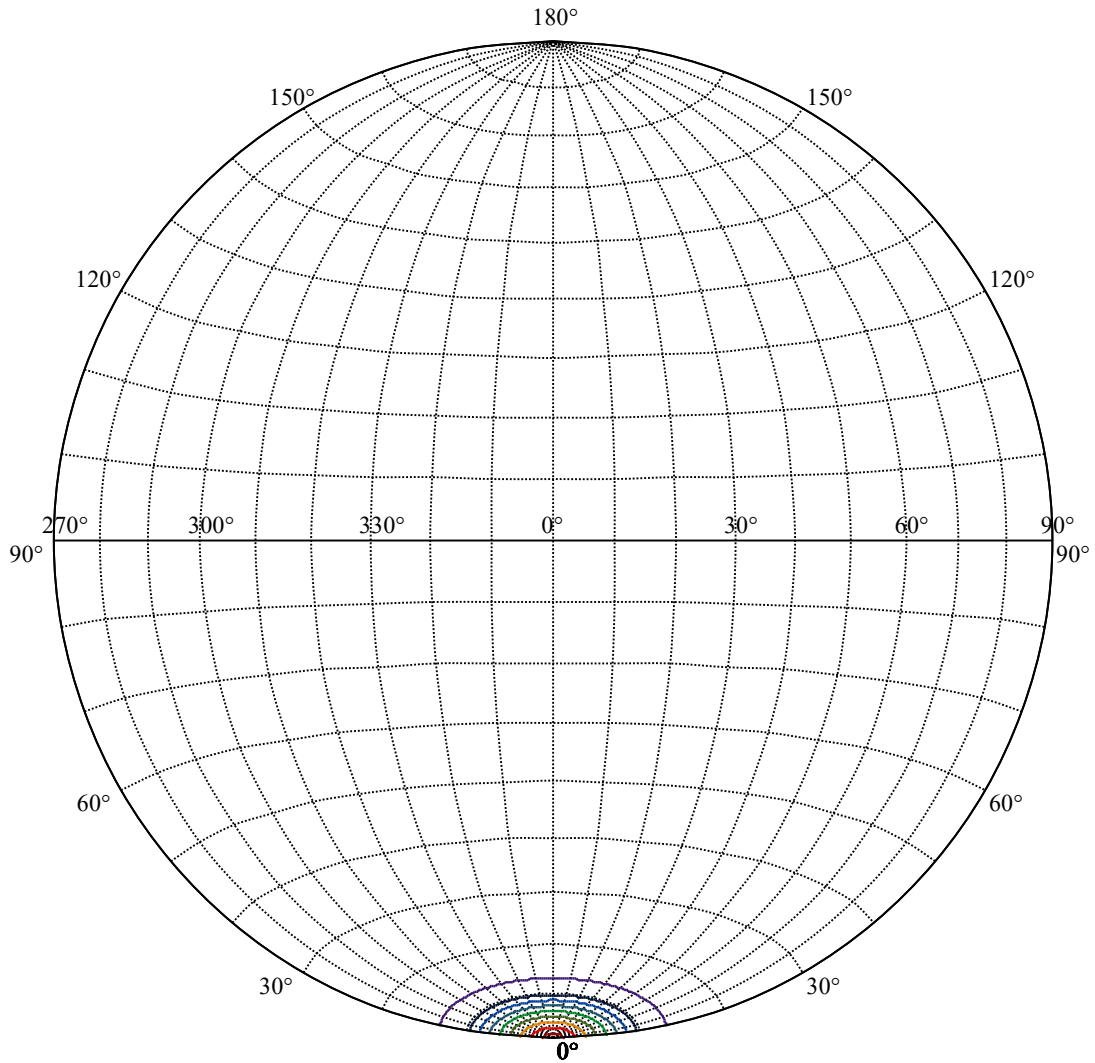
Field angle(10%Imax):C0/180Left:13.1 Right:13.1
:C90/270Left:13.1 Right:13.1

Beam Angle(50%Imax):C0/180Left:6.1 Right:6.1
:C90/270Left:6.1 Right:6.1





(10%Imax) 995.56	—
(20%Imax) 1991.12	—
(30%Imax) 2986.68	—
(40%Imax) 3982.24	—
(50%Imax) 4977.8	—
(60%Imax) 5973.36	—
(70%Imax) 6968.92	—
(80%Imax) 7964.48	—
(90%Imax) 8960.04	—



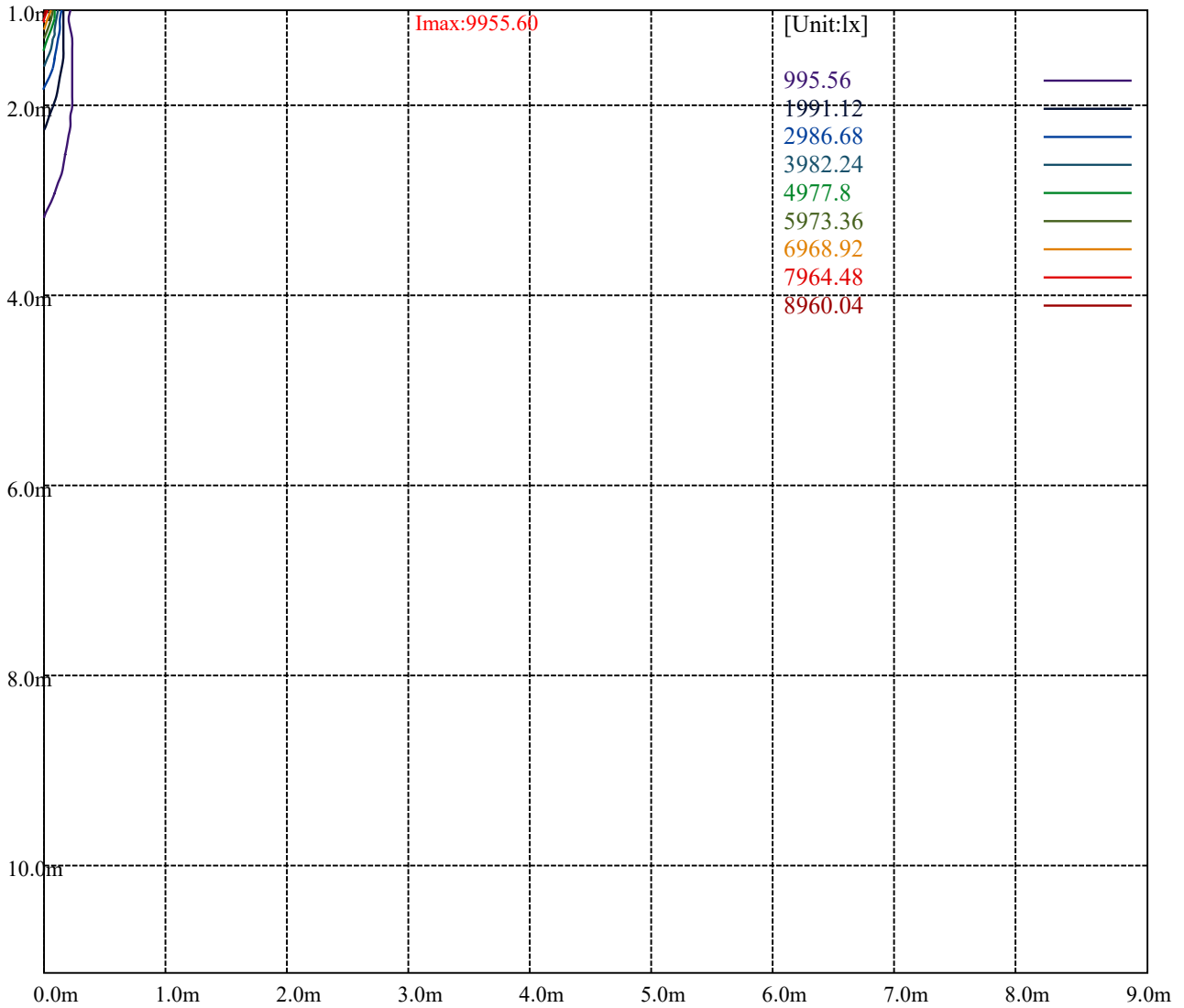
House

[Unit:cd]

Road

Imax:9955.60

(10%Imax) 995.56	—
(20%Imax) 1991.12	—
(30%Imax) 2986.68	—
(40%Imax) 3982.24	—
(50%Imax) 4977.8	—
(60%Imax) 5973.36	—
(70%Imax) 6968.92	—
(80%Imax) 7964.48	—
(90%Imax) 8960.04	—



Luminance Table

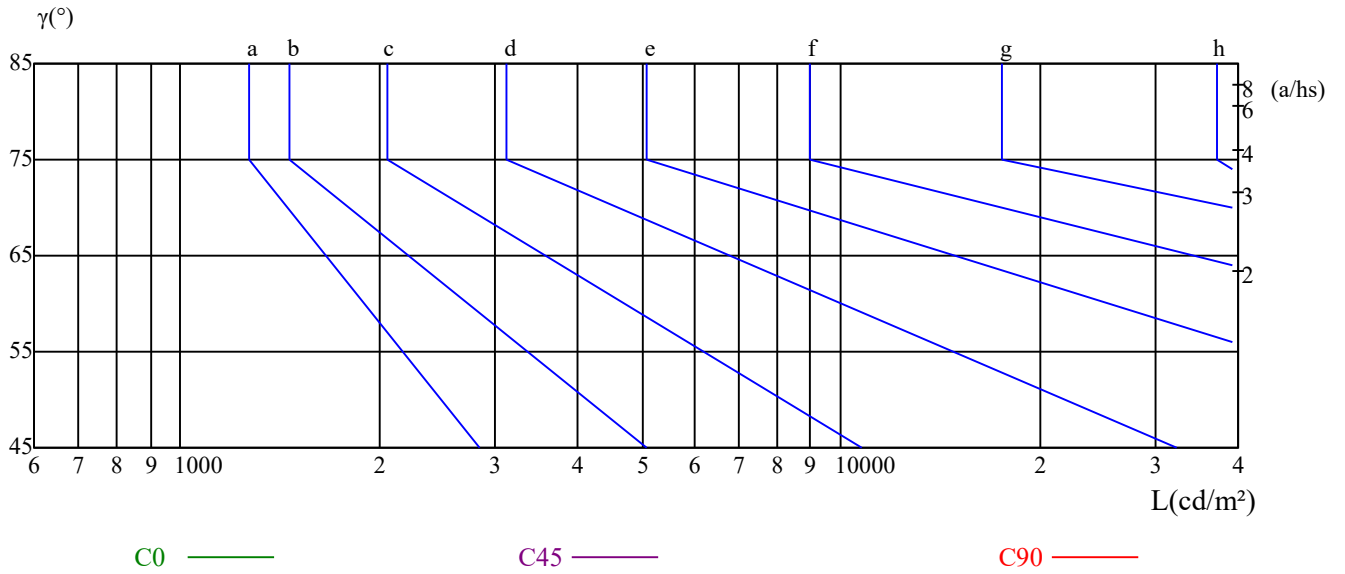
γ	45	50	55	60	65	70	75	80	85
C0	335	343	458	405	93	65	79	103	111
C45	0	0	0	0	0	0	0	0	0
C90	335	343	458	405	93	65	79	103	111

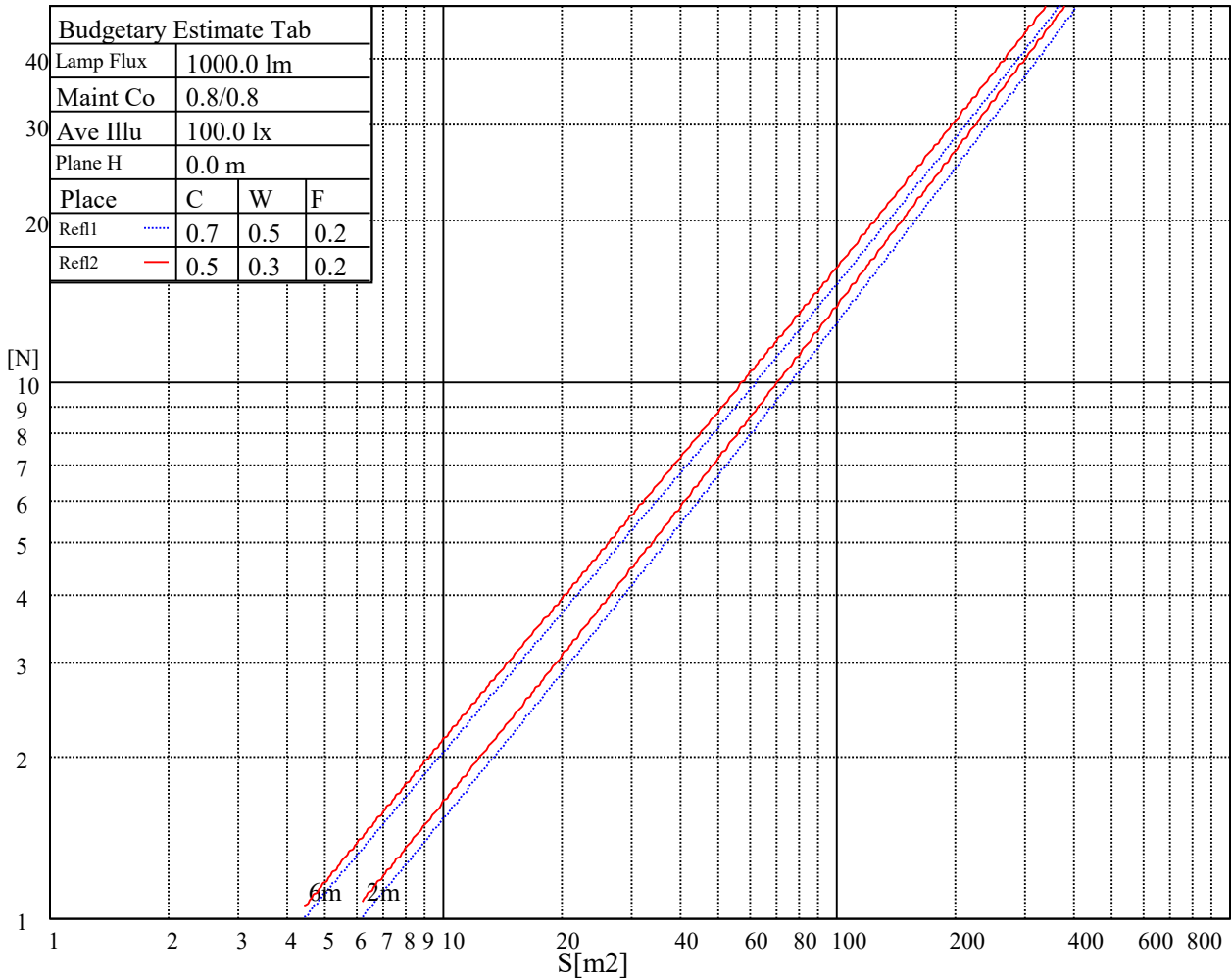
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
93	93	0	79	79	0	111	111	0

Glare Table

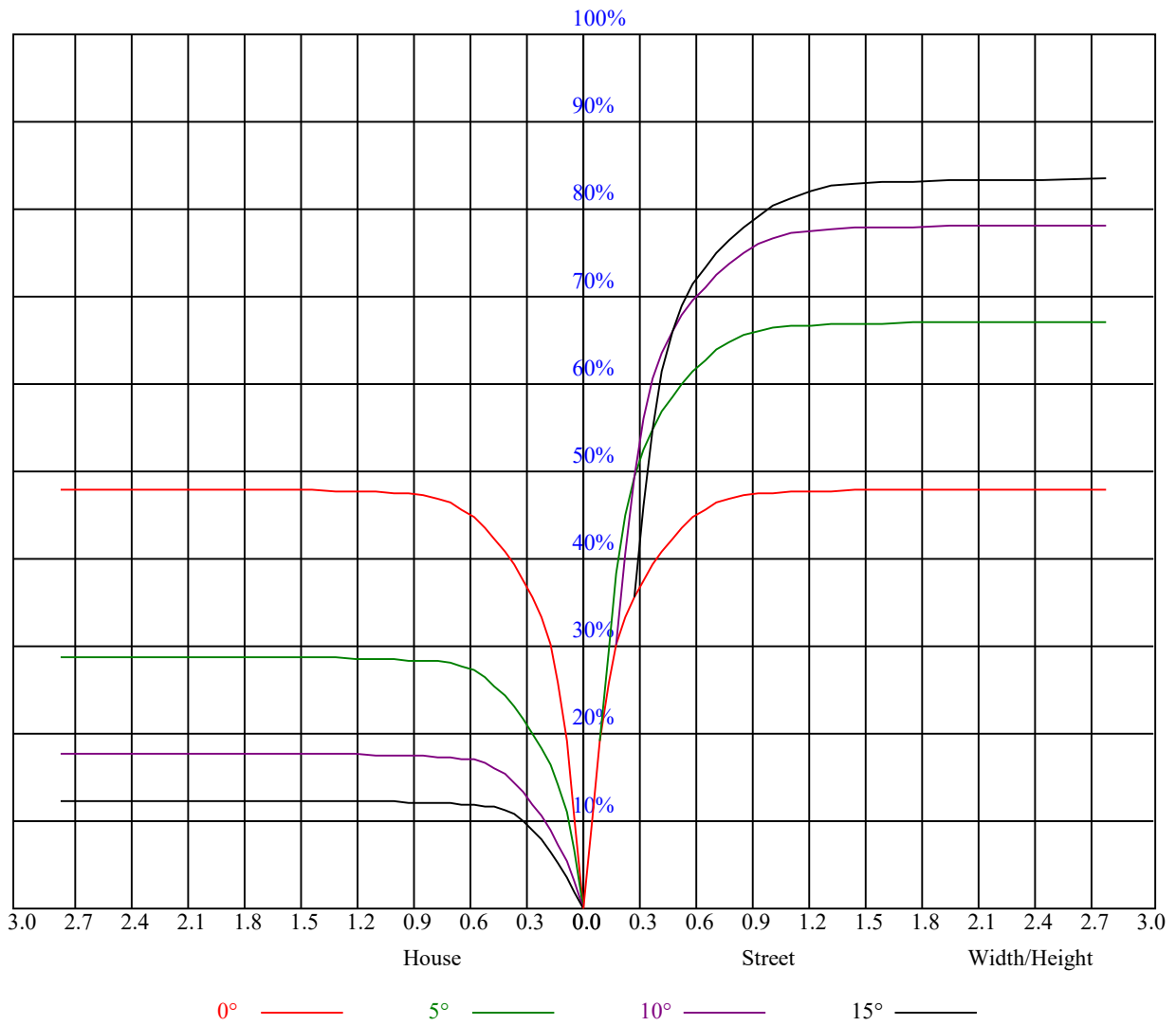
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

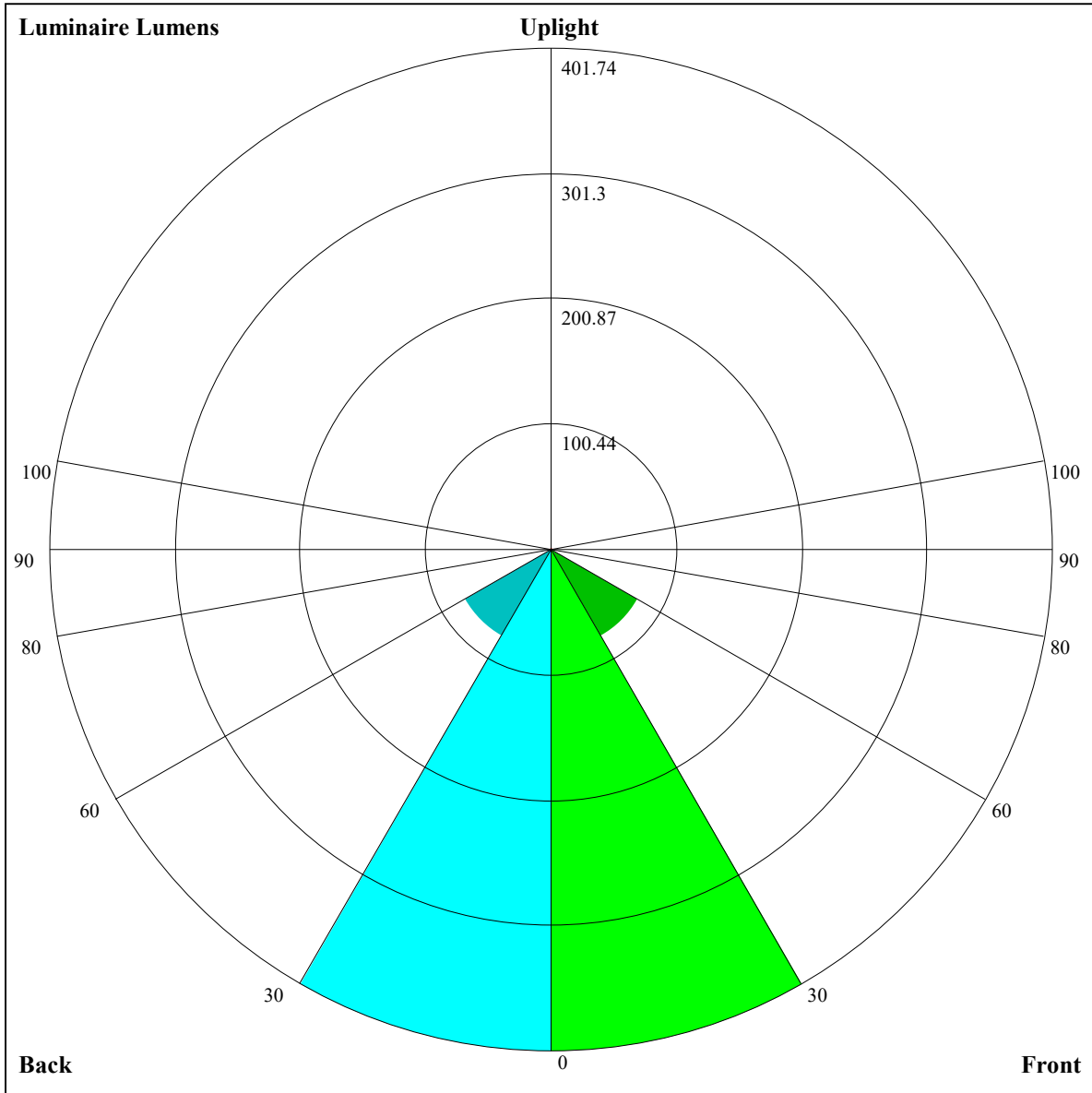
Luminance Limiting Curve





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	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1	1.05	1.01	0.97	1.03	0.99	0.96	0.98	0.95	0.93	0.95	0.92	0.90	0.91	0.89	0.87	0.85
2	1.00	0.95	0.91	0.98	0.93	0.90	0.94	0.91	0.88	0.91	0.88	0.86	0.89	0.86	0.84	0.82
3	0.95	0.90	0.85	0.93	0.89	0.85	0.91	0.87	0.83	0.88	0.85	0.82	0.86	0.83	0.81	0.79
4	0.91	0.85	0.81	0.90	0.85	0.81	0.88	0.83	0.80	0.86	0.82	0.79	0.84	0.81	0.78	0.77
5	0.87	0.82	0.78	0.86	0.81	0.78	0.85	0.80	0.77	0.83	0.79	0.76	0.81	0.78	0.76	0.74
6	0.84	0.79	0.75	0.83	0.78	0.75	0.82	0.78	0.74	0.81	0.77	0.74	0.79	0.76	0.73	0.72
7	0.81	0.76	0.73	0.81	0.76	0.72	0.79	0.75	0.72	0.78	0.74	0.72	0.77	0.74	0.71	0.70
8	0.79	0.74	0.70	0.78	0.74	0.70	0.77	0.73	0.70	0.76	0.72	0.70	0.75	0.72	0.69	0.68
9	0.76	0.72	0.68	0.76	0.71	0.68	0.75	0.71	0.68	0.74	0.71	0.68	0.74	0.70	0.68	0.67
10	0.74	0.70	0.67	0.74	0.70	0.67	0.73	0.69	0.66	0.73	0.69	0.66	0.72	0.69	0.66	0.65





Luminaire Lumens:

FL=401.74,FM=80.57,FH=2.23,FVH=0.28

BL=401.74,BM=80.57,BH=2.23,BVH=0.28

UL=0.37,UH=1.78

BUG Rating:B1-U1-G0

Intensity data(cd)

C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	8965.18	5212.51	1362.54	526.10	373.46	334.27	312.20	235.15	79.88
30.0	9702.31	5791.02	1386.60	525.15	369.54	334.09	314.21	241.85	82.12
60.0	9565.90	5750.16	2034.34	685.79	379.07	335.87	314.12	213.48	75.12
90.0	10963.58	7362.87	1934.78	550.02	369.56	333.29	314.14	236.96	73.05
120.0	10640.48	5750.16	2034.34	685.79	379.07	335.87	314.12	213.48	75.12
150.0	9896.17	5791.02	1386.60	525.15	369.54	334.09	314.21	241.85	82.12
180.0	8965.18	5212.51	1362.54	526.10	373.46	334.27	312.20	235.15	79.88
210.0	9702.31	5791.02	1386.60	525.15	369.54	334.09	314.21	241.85	82.12
240.0	9565.90	5750.16	2034.34	685.79	379.07	335.87	314.12	213.48	75.12
270.0	10963.58	7362.87	1934.78	550.02	369.56	333.29	314.14	236.96	73.05
300.0	10640.48	5750.16	2034.34	685.79	379.07	335.87	314.12	213.48	75.12
330.0	9896.17	5791.02	1386.60	525.15	369.54	334.09	314.21	241.85	82.12
360.0	8965.18	5212.51	1362.54	526.10	373.46	334.27	312.20	235.15	79.88
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	11.91	9.80	11.81	8.37	1.50	1.01	0.95	0.78	0.42
30.0	10.03	9.87	11.96	8.90	1.48	0.99	0.92	0.78	0.43
60.0	10.89	10.15	11.84	9.31	2.05	1.03	0.93	0.82	0.45
90.0	11.39	10.76	12.72	10.82	2.20	1.07	1.01	0.93	0.48
120.0	10.89	10.15	11.84	9.31	2.05	1.03	0.93	0.82	0.45
150.0	10.03	9.87	11.96	8.90	1.48	0.99	0.92	0.78	0.43
180.0	11.91	9.80	11.81	8.37	1.50	1.01	0.95	0.78	0.42
210.0	10.03	9.87	11.96	8.90	1.48	0.99	0.92	0.78	0.43
240.0	10.89	10.15	11.84	9.31	2.05	1.03	0.93	0.82	0.45
270.0	11.39	10.76	12.72	10.82	2.20	1.07	1.01	0.93	0.48
300.0	10.89	10.15	11.84	9.31	2.05	1.03	0.93	0.82	0.45
330.0	10.03	9.87	11.96	8.90	1.48	0.99	0.92	0.78	0.43
360.0	11.91	9.80	11.81	8.37	1.50	1.01	0.95	0.78	0.42
C/γ(°)	90.0								
0.0	0.33								
30.0	0.34								
60.0	0.35								
90.0	0.37								
120.0	0.35								
150.0	0.34								
180.0	0.33								
210.0	0.34								
240.0	0.35								
270.0	0.37								
300.0	0.35								
330.0	0.34								
360.0	0.33								