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Nata

LumCAT: LN01D03536EE-N

Luminaire: 92.70.307.00

Report No: 210520-B003

Test No: 210520-C003

LampCAT: CITIZEN CLU700 LES6

Lamp flux(lm): 642.2

Number of Lamps: 1

Length(mm): 74

Phm Type: C

Voltage(V): 221.5000

Current(A): 0.0650

Power (W): 6.9000

PF: 0.4830

Ballast type: DC

Width(mm): 74

Height(mm): 56

Photometric Results

Lumens(lm): 436.76

Efficiency(%): 68.01%

Lumens(lm)/Power(W): 63.30

Central intensity(cd): 798.961

Maximum intensity(cd): 798.961

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=37.8

[C90/270]Total=37.8

Field angle(10%Imax): [C0/180]Total=68.2

[C90/270]Total=68.2

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

Maximum s/h(1/4): C0_180=0.62 C90_270=0.62

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 68.01%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 93.174%

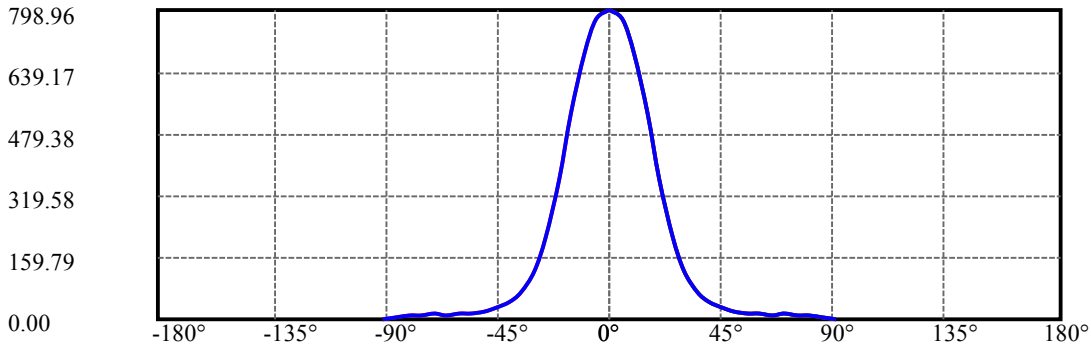
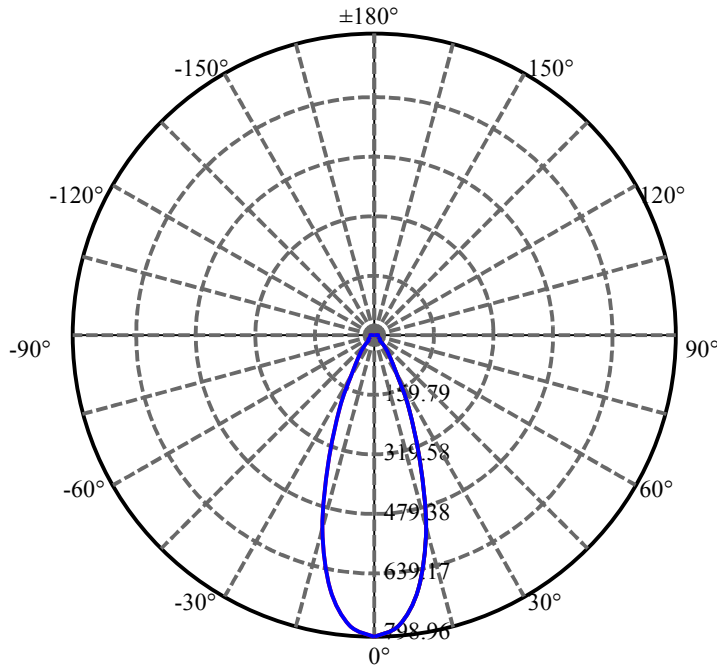
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	798.961	0.000	0	.000%	.000%
5.0	771.954	18.780	18.78	2.924%	4.300%
10.0	684.246	52.093	70.873	8.111%	16.227%
15.0	532.638	72.185	143.057	11.240%	32.754%
20.0	361.835	73.717	216.775	11.478%	49.633%
25.0	212.379	60.224	276.999	9.377%	63.421%
30.0	122.245	42.347	319.346	6.594%	73.117%
35.0	70.341	28.360	347.706	4.416%	79.610%
40.0	45.274	19.289	366.995	3.003%	84.027%
45.0	30.284	13.990	380.985	2.178%	87.230%
50.0	22.071	10.579	391.564	1.647%	89.652%
55.0	16.685	8.427	399.991	1.312%	91.582%
60.0	13.409	6.956	406.947	1.083%	93.174%
65.0	11.960	6.167	413.115	.960%	94.586%
70.0	12.445	6.180	419.294	.962%	96.001%
75.0	12.403	6.495	425.789	1.011%	97.488%
80.0	9.127	5.761	431.55	.897%	98.807%
85.0	3.902	3.540	435.09	.551%	99.618%
90.0	2.194	1.669	436.759	.260%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	319.35	49.72%	73.12%
0-40	367.00	57.14%	84.03%
0-60	406.95	63.36%	93.17%
0-90	435.09	67.75%	99.62%
0-120	435.09	67.75%	99.62%
0-180	436.76	68.01%	100.00%
60-90	35.10	5.47%	8.04%
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%
0-35.44	349.41	54.40%	80.00%

ZONAL LUMEN SUMMARY

0-10	70.87
10-20	145.90
20-30	102.57
30-40	47.65
40-50	24.57
50-60	15.38
60-70	12.35
70-80	12.26
80-90	3.54
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: —————

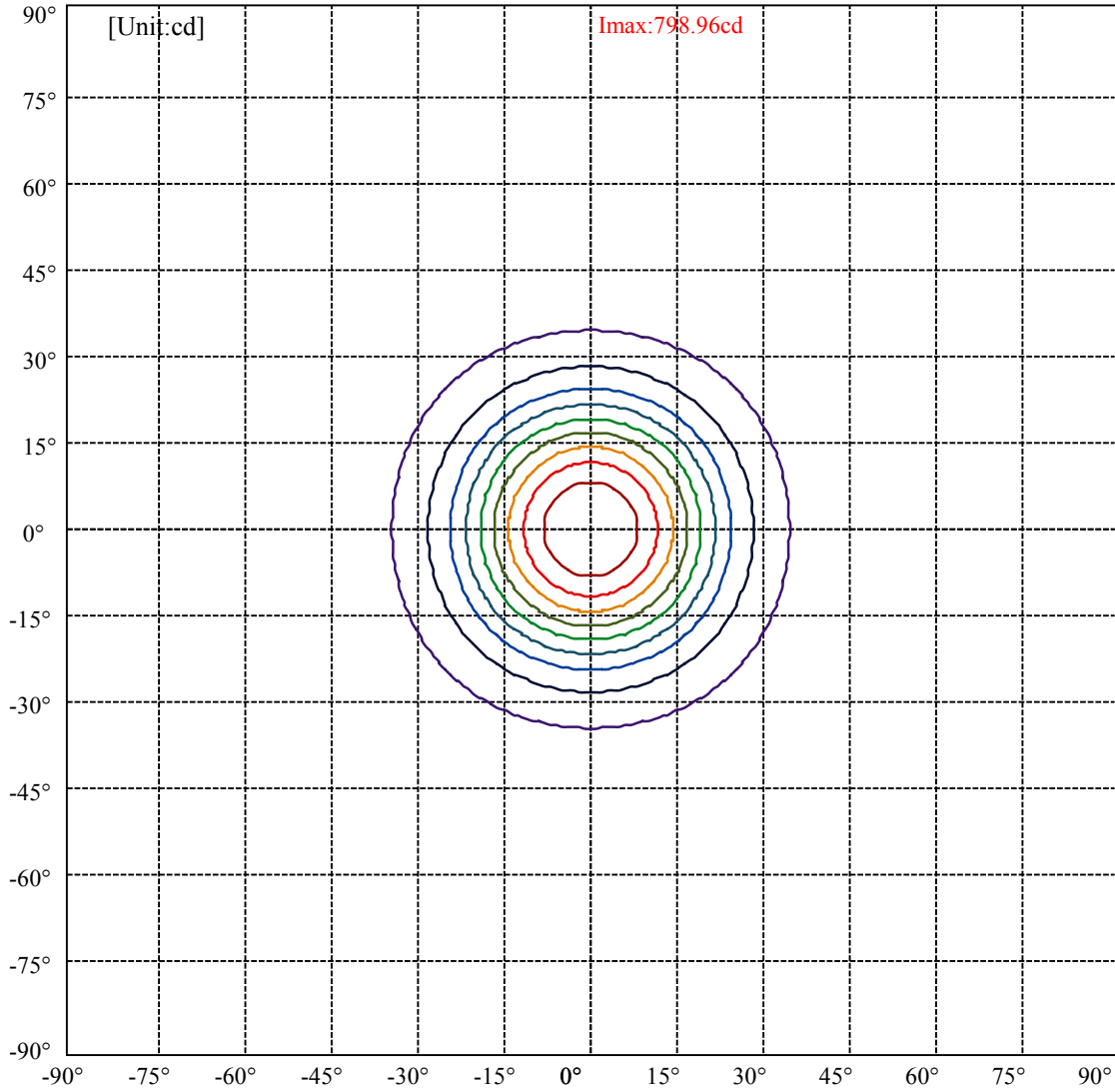
C90/C270: —————

Field angle(10%Imax):C0/180Left:34.1 Right:34.1

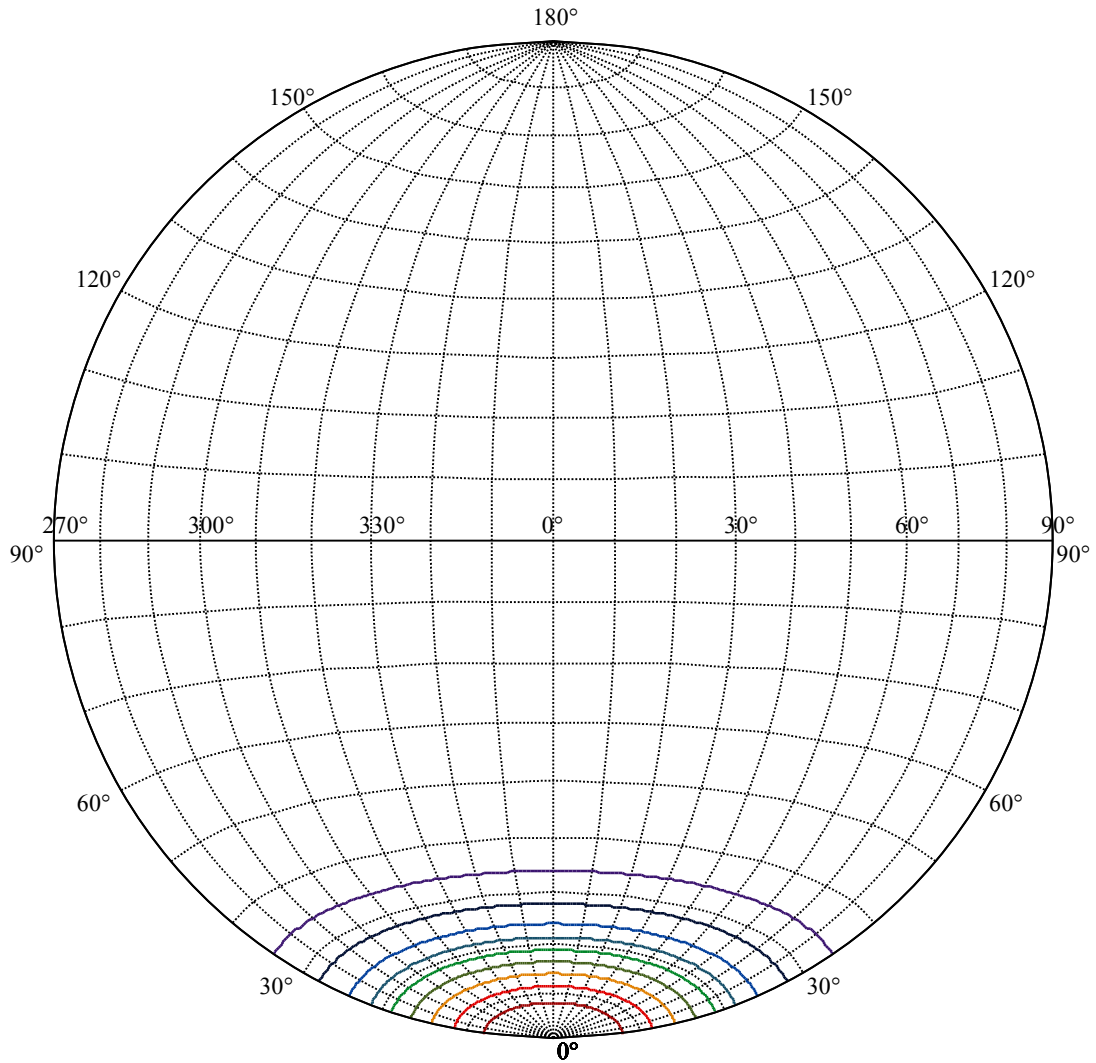
:C90/270Left:34.1 Right:34.1

Beam Angle(50%Imax):C0/180Left:18.9 Right:18.9

:C90/270Left:18.9 Right:18.9



(10%Imax) 79.8961	—
(20%Imax) 159.792	—
(30%Imax) 239.688	—
(40%Imax) 319.584	—
(50%Imax) 399.48	—
(60%Imax) 479.377	—
(70%Imax) 559.273	—
(80%Imax) 639.169	—
(90%Imax) 719.065	—



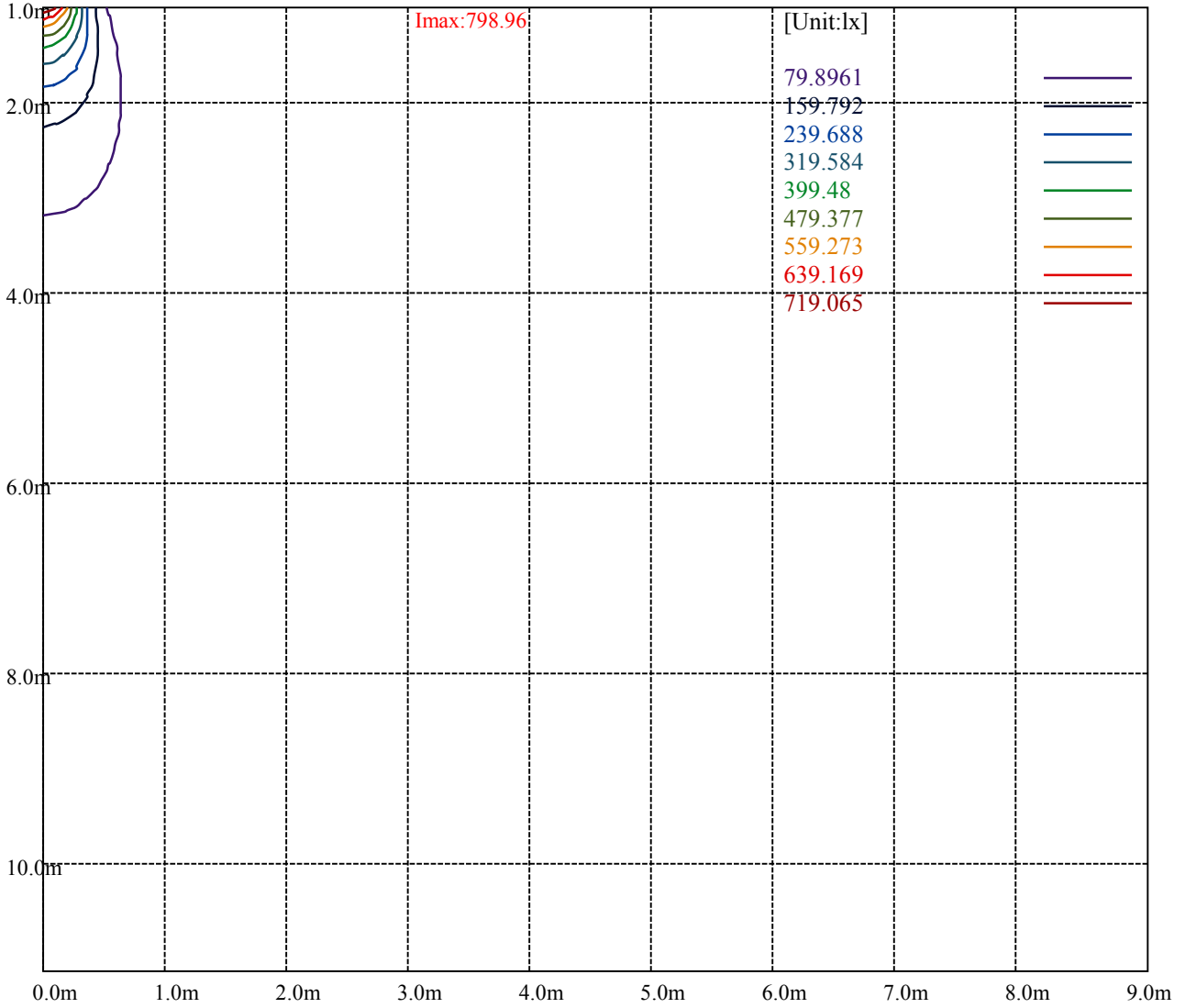
House

[Unit:cd]

Road

Imax:798.96

(10%Imax) 79.8961	—
(20%Imax) 159.792	—
(30%Imax) 239.688	—
(40%Imax) 319.584	—
(50%Imax) 399.48	—
(60%Imax) 479.377	—
(70%Imax) 559.273	—
(80%Imax) 639.169	—
(90%Imax) 719.065	—



Luminance Table

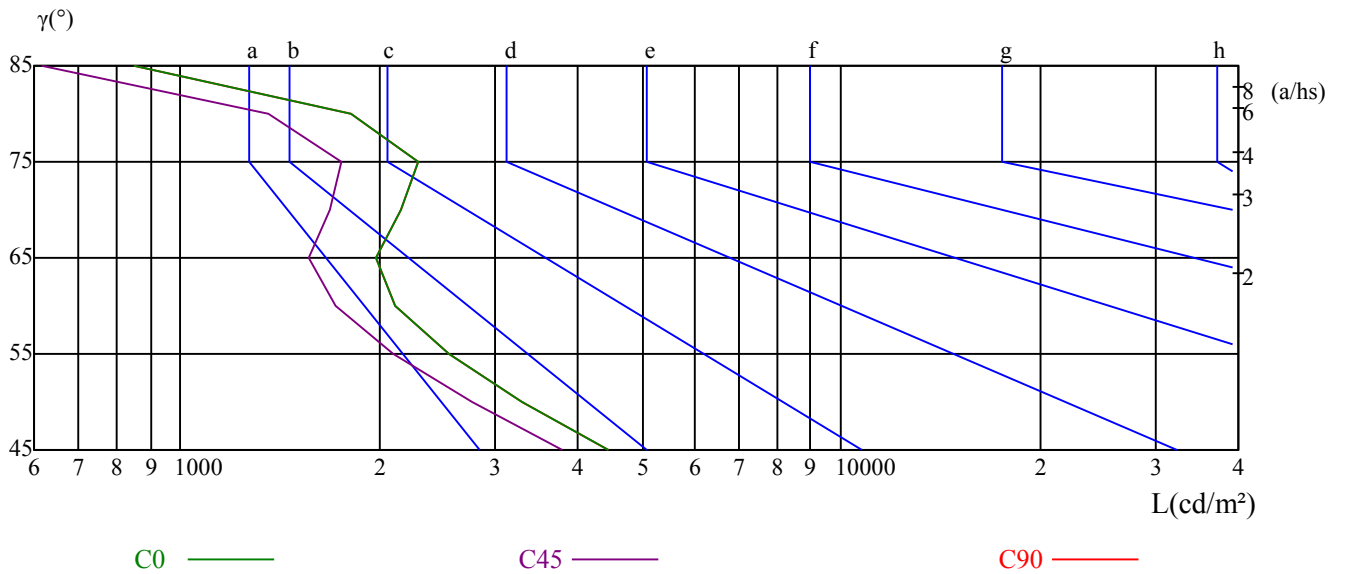
γ	45	50	55	60	65	70	75	80	85
C0	4452	3297	2553	2119	1970	2158	2288	1814	847
C45	3778	2756	2101	1716	1568	1686	1752	1358	618
C90	4452	3297	2553	2119	1970	2158	2288	1814	847

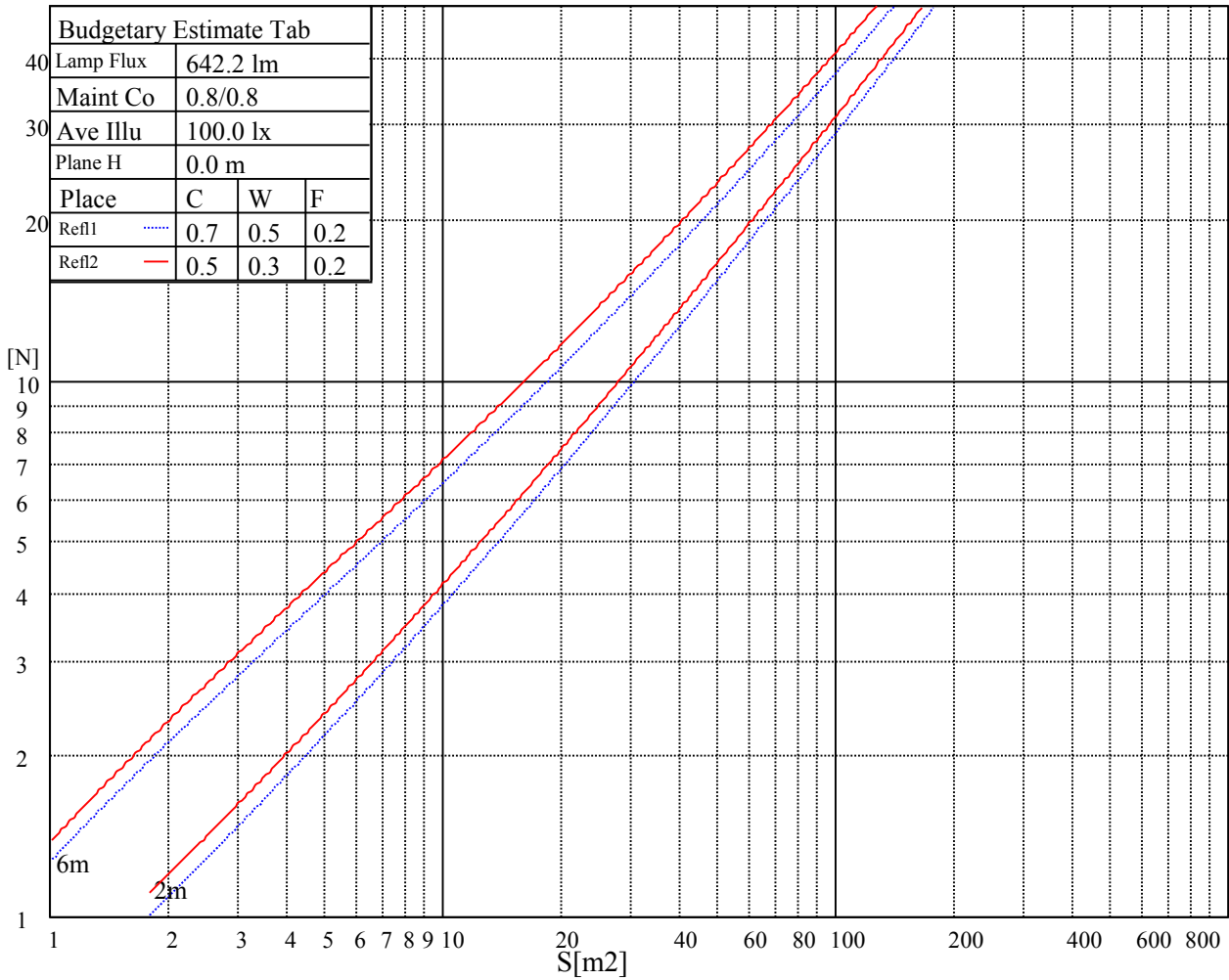
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
5168	5168	5168	8751	8751	8751	8176	8176	8176

Glare Table

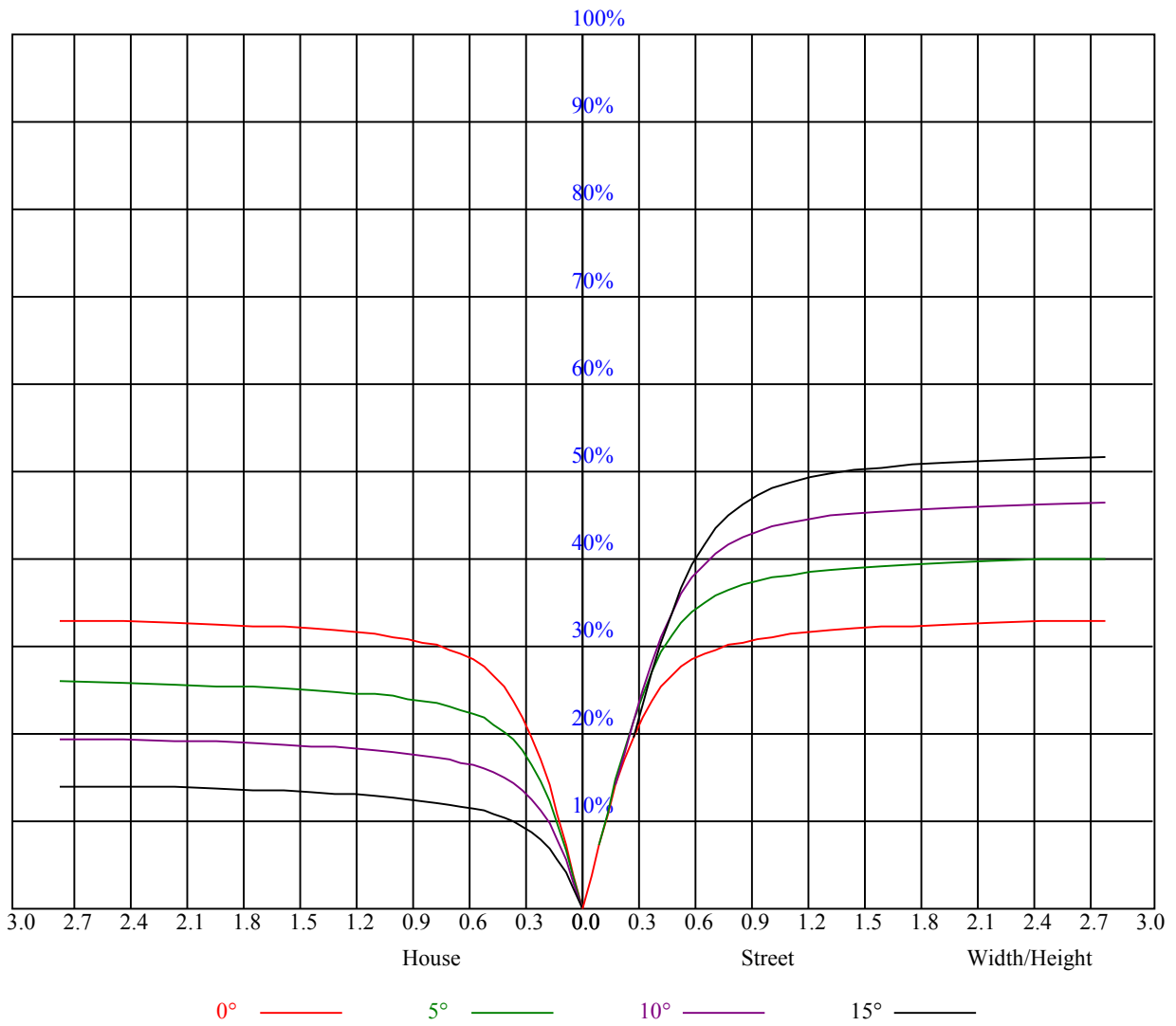
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	0.81	0.81	0.81	0.79	0.79	0.79	0.76	0.76	0.76	0.72	0.72	0.72	0.69	0.69	0.69	0.68
1	0.74	0.72	0.71	0.73	0.71	0.70	0.70	0.69	0.67	0.68	0.66	0.65	0.65	0.64	0.64	0.62
2	0.69	0.66	0.63	0.68	0.65	0.63	0.65	0.63	0.61	0.63	0.62	0.60	0.61	0.60	0.59	0.57
3	0.64	0.61	0.58	0.63	0.60	0.57	0.61	0.59	0.56	0.60	0.57	0.55	0.58	0.56	0.55	0.53
4	0.60	0.56	0.53	0.59	0.56	0.53	0.58	0.55	0.52	0.56	0.54	0.52	0.55	0.53	0.51	0.50
5	0.57	0.53	0.50	0.56	0.52	0.49	0.55	0.51	0.49	0.54	0.51	0.48	0.53	0.50	0.48	0.47
6	0.53	0.49	0.46	0.53	0.49	0.46	0.52	0.48	0.46	0.51	0.48	0.46	0.50	0.47	0.45	0.44
7	0.51	0.47	0.44	0.50	0.46	0.44	0.49	0.46	0.43	0.49	0.45	0.43	0.48	0.45	0.43	0.42
8	0.48	0.44	0.41	0.48	0.44	0.41	0.47	0.44	0.41	0.46	0.43	0.41	0.46	0.43	0.41	0.40
9	0.46	0.42	0.39	0.46	0.42	0.39	0.45	0.42	0.39	0.44	0.41	0.39	0.44	0.41	0.39	0.38
10	0.44	0.40	0.37	0.44	0.40	0.37	0.43	0.40	0.37	0.42	0.39	0.37	0.42	0.39	0.37	0.36



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	804.04	780.92	697.28	550.41	396.00	227.19	128.76	73.74	47.64
45.0	796.50	760.33	659.25	483.86	306.23	176.01	99.79	58.39	38.31
90.0	796.05	750.15	631.52	457.03	281.03	153.96	89.72	52.93	34.82
135.0	799.26	778.61	676.18	501.13	316.41	180.84	100.86	58.84	39.38
180.0	804.04	771.13	669.60	509.18	330.86	187.14	106.31	64.07	41.74
225.0	796.50	784.07	725.12	591.41	419.57	251.21	148.89	84.09	52.43
270.0	796.05	783.79	728.83	612.62	453.15	290.42	167.01	93.49	59.51
315.0	799.26	766.63	686.19	555.47	391.44	232.26	136.63	77.18	48.38
360.0	804.04	780.92	697.28	550.41	396.00	227.19	128.76	73.74	47.64
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	31.67	22.73	17.27	13.84	11.59	9.79	8.38	5.91	3.88
45.0	26.78	19.74	15.02	12.26	10.01	8.21	6.36	4.78	2.93
90.0	24.69	18.39	14.40	11.87	17.72	28.24	28.86	14.34	2.53
135.0	26.83	19.80	15.24	12.21	9.96	8.21	6.41	4.78	2.93
180.0	28.35	21.26	16.43	13.44	11.03	8.89	7.03	5.06	3.32
225.0	35.21	25.09	18.62	14.79	11.87	9.79	7.71	5.91	4.28
270.0	37.29	26.10	19.13	15.19	12.38	17.27	27.17	26.72	7.54
315.0	31.44	23.46	17.38	13.67	11.14	9.17	7.31	5.51	3.83
360.0	31.67	22.73	17.27	13.84	11.59	9.79	8.38	5.91	3.88
C/γ(°)	90.0								
0.0	2.25								
45.0	1.97								
90.0	1.80								
135.0	1.91								
180.0	2.14								
225.0	2.70								
270.0	2.53								
315.0	2.25								
360.0	2.25								