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Nata

LumCAT: LN01D03536EE-N

Luminaire: 92.70.307.00

Report No: 210519-B008

Test No: 210519-C008

LampCAT: LUMINUS CXM-4 LES4.5

Lamp flux(lm): 764.7

Number of Lamps: 1

Length(mm): 74

Phm Type: C

Voltage(V): 221.4000

Current(A): 0.0750

Power (W): 8.3000

PF: 0.4990

Ballast type: DC

Width(mm): 74

Height(mm): 56

Photometric Results

Lumens(lm): 520.72

Efficiency(%): 68.09%

Lumens(lm)/Power(W): 62.74

Central intensity(cd): 999.971

Maximum intensity(cd): 999.971

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=37.1

[C90/270]Total=37.1

Field angle(10%Imax): [C0/180]Total=66.3

[C90/270]Total=66.3

Maximum s/h(1/2): C0_180=0.61 C90_270=0.61

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(%): 68.09%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 93.440%

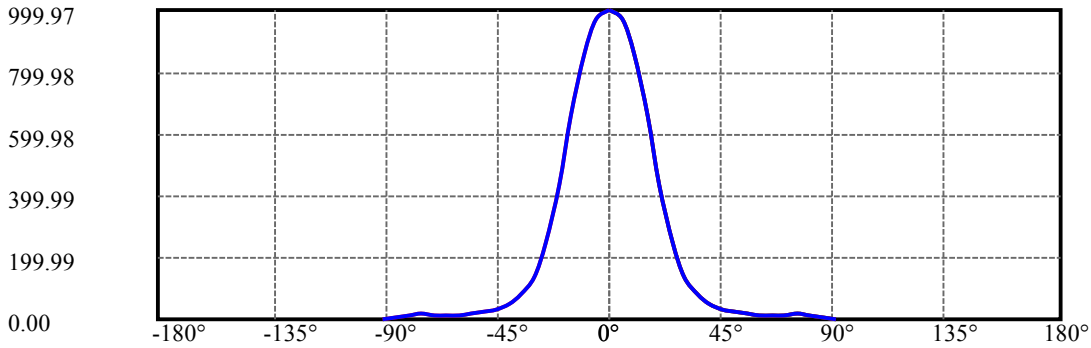
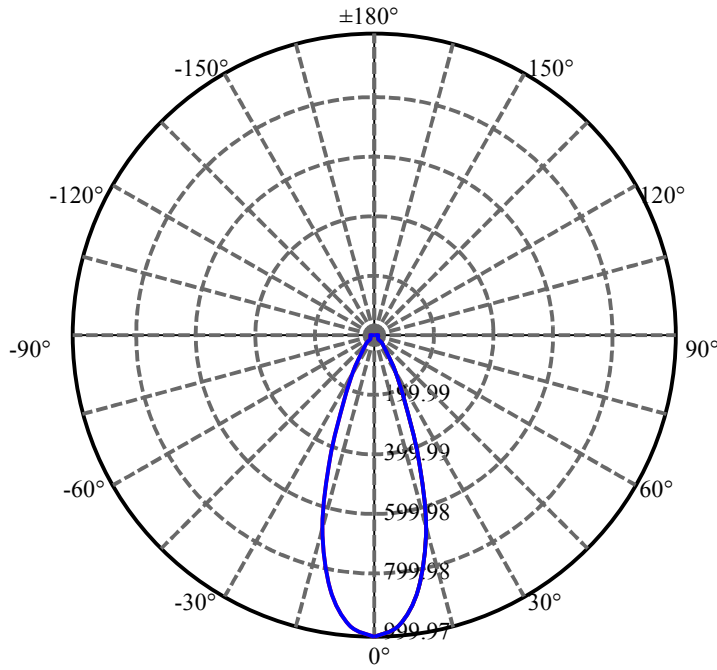
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	999.970	0.000	0	.000%	.000%
5.0	966.143	23.504	23.504	3.074%	4.514%
10.0	856.167	65.190	88.694	8.524%	17.033%
15.0	660.670	89.978	178.672	11.766%	34.312%
20.0	434.538	90.261	268.932	11.803%	51.646%
25.0	246.185	71.395	340.328	9.336%	65.357%
30.0	136.934	48.484	388.812	6.340%	74.668%
35.0	78.082	31.663	420.474	4.140%	80.748%
40.0	50.133	21.392	441.866	2.797%	84.856%
45.0	33.855	15.551	457.417	2.034%	87.843%
50.0	24.785	11.849	469.266	1.549%	90.118%
55.0	18.752	9.467	478.733	1.238%	91.936%
60.0	15.124	7.830	486.563	1.024%	93.440%
65.0	12.466	6.707	493.271	.877%	94.728%
70.0	13.472	6.568	499.838	.859%	95.990%
75.0	15.933	7.686	507.524	1.005%	97.466%
80.0	11.067	7.224	514.749	.945%	98.853%
85.0	4.205	4.150	518.898	.543%	99.650%
90.0	2.454	1.823	520.722	.238%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	388.81	50.84%	74.67%
0-40	441.87	57.78%	84.86%
0-60	486.56	63.62%	93.44%
0-90	518.90	67.85%	99.65%
0-120	518.90	67.85%	99.65%
0-180	520.72	68.09%	100.00%
60-90	40.17	5.25%	7.71%
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%
0-34.38	416.58	54.47%	80.00%

ZONAL LUMEN SUMMARY

0-10	88.69
10-20	180.24
20-30	119.88
30-40	53.05
40-50	27.40
50-60	17.30
60-70	13.28
70-80	14.91
80-90	4.15
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: —————

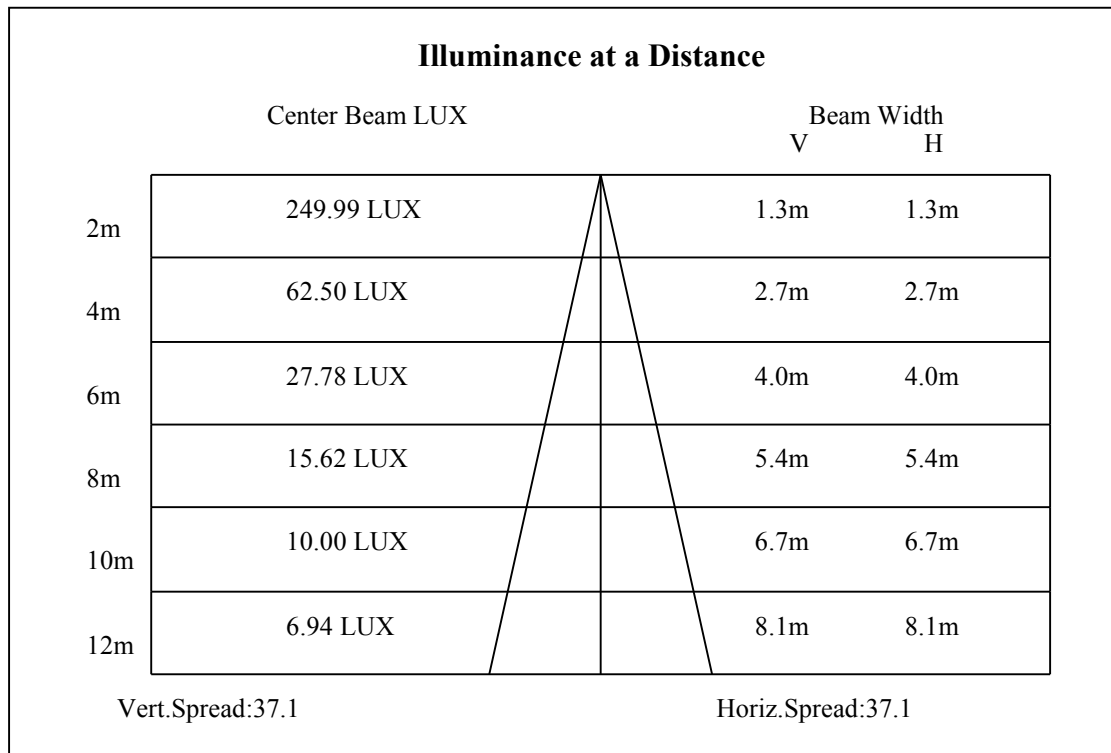
C90/C270: —————

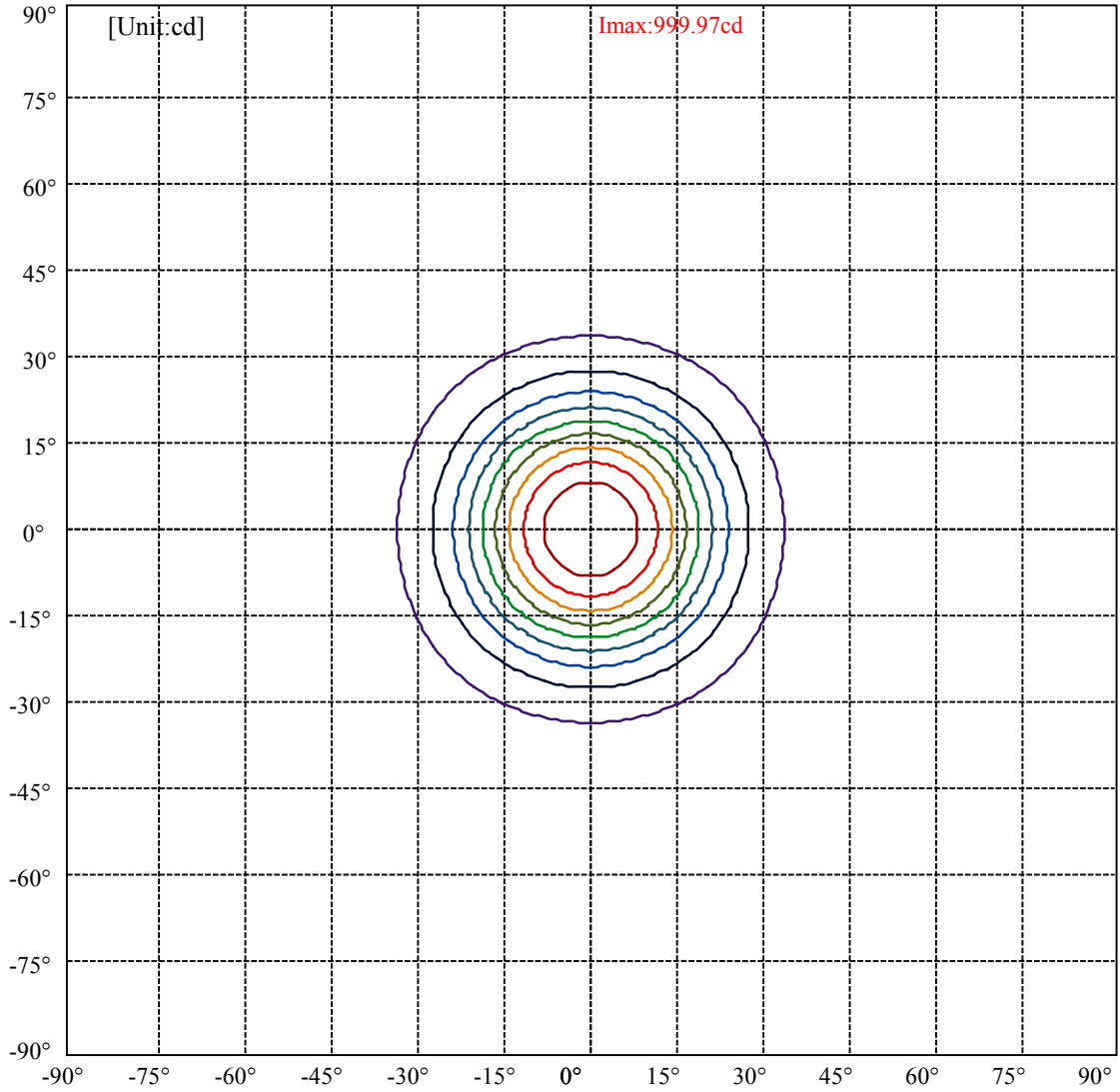
Field angle(10%Imax):C0/180Left:33.1 Right:33.1

:C90/270Left:33.1 Right:33.1

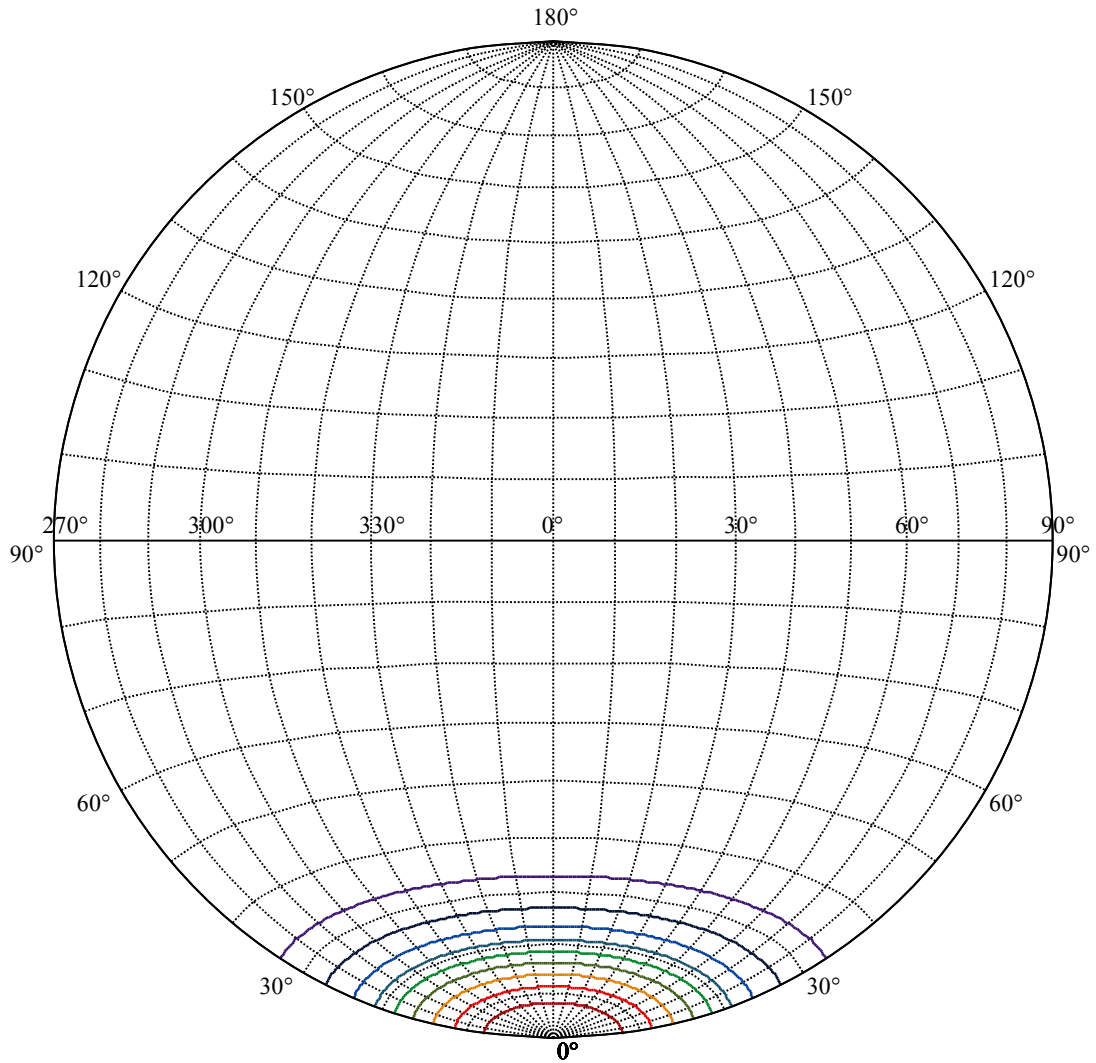
Beam Angle(50%Imax):C0/180Left:18.6 Right:18.6

:C90/270Left:18.6 Right:18.6





(10%Imax) 99.997	—
(20%Imax) 199.994	—
(30%Imax) 299.991	—
(40%Imax) 399.988	—
(50%Imax) 499.985	—
(60%Imax) 599.982	—
(70%Imax) 699.979	—
(80%Imax) 799.976	—
(90%Imax) 899.973	—



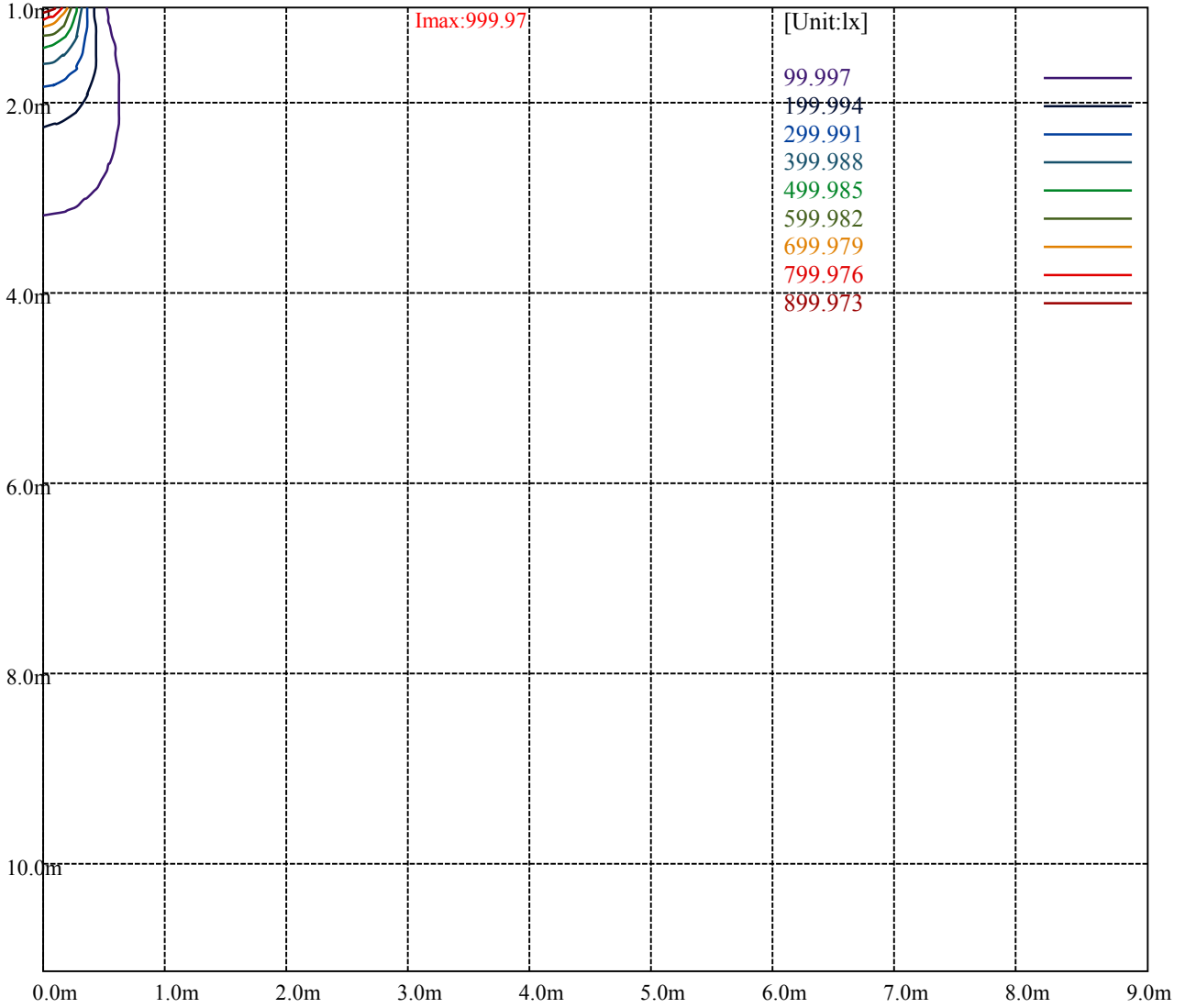
House

[Unit:cd]

Road

Imax:999.97

(10%Imax) 99.997	—
(20%Imax) 199.994	—
(30%Imax) 299.991	—
(40%Imax) 399.988	—
(50%Imax) 499.985	—
(60%Imax) 599.982	—
(70%Imax) 699.979	—
(80%Imax) 799.976	—
(90%Imax) 899.973	—



Luminance Table

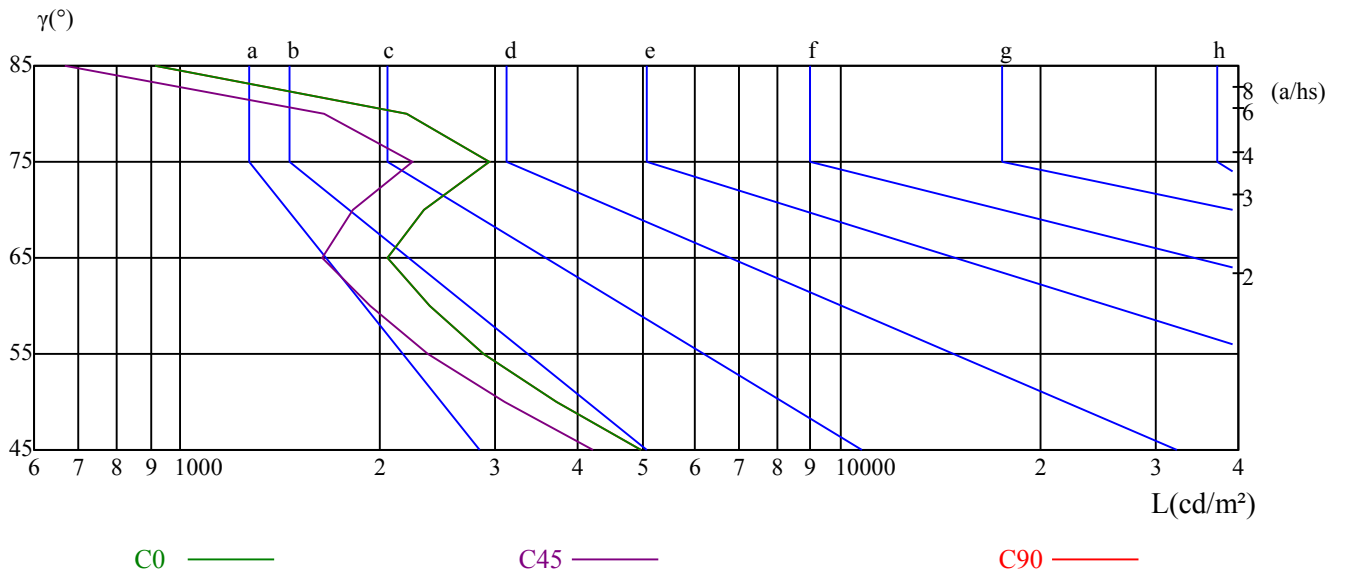
γ	45	50	55	60	65	70	75	80	85
C0	4977	3702	2869	2390	2054	2336	2940	2199	913
C45	4223	3095	2361	1936	1635	1825	2251	1646	666
C90	4977	3702	2869	2390	2054	2336	2940	2199	913

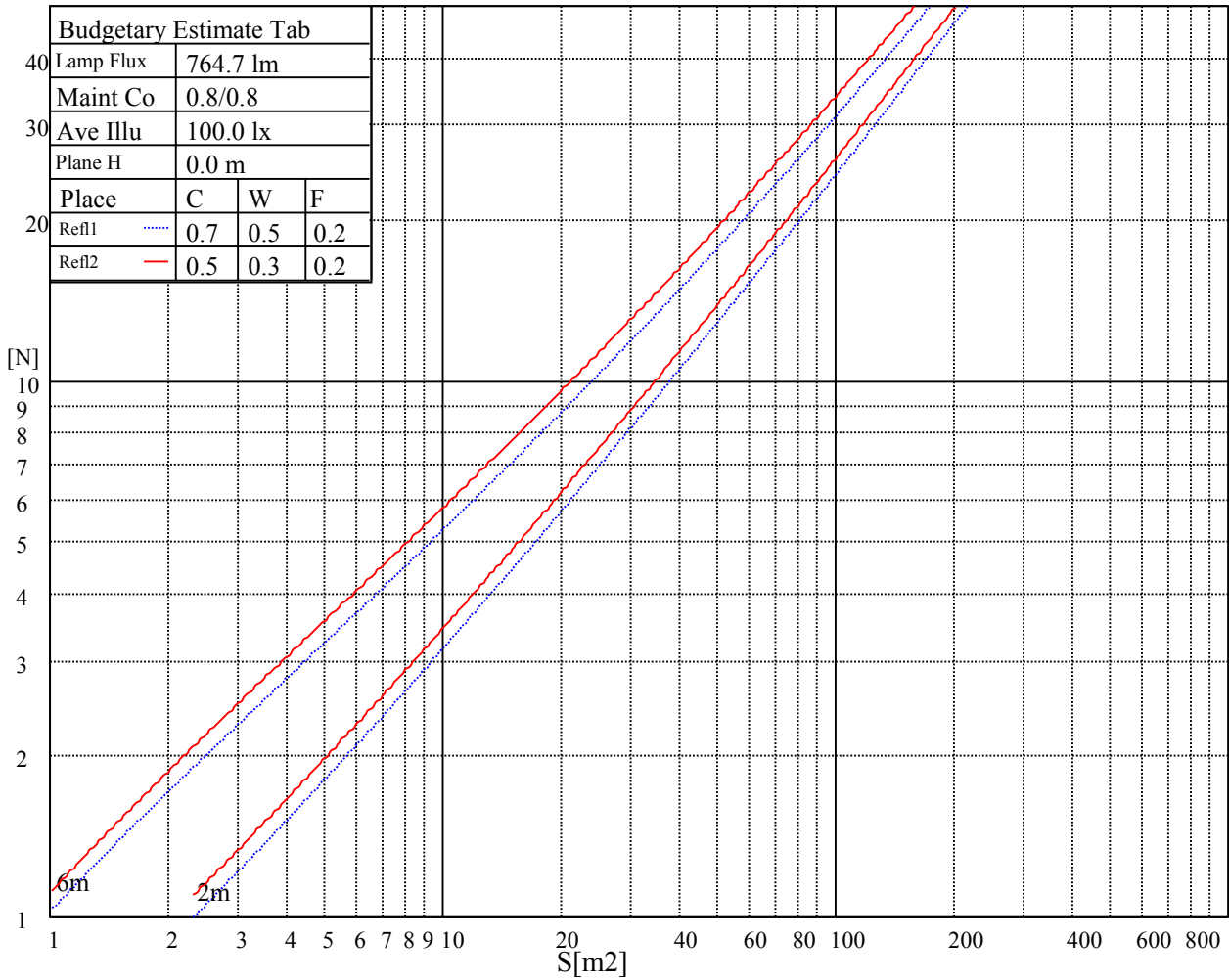
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
5387	5387	5387	11242	11242	11242	8810	8810	8810

Glare Table

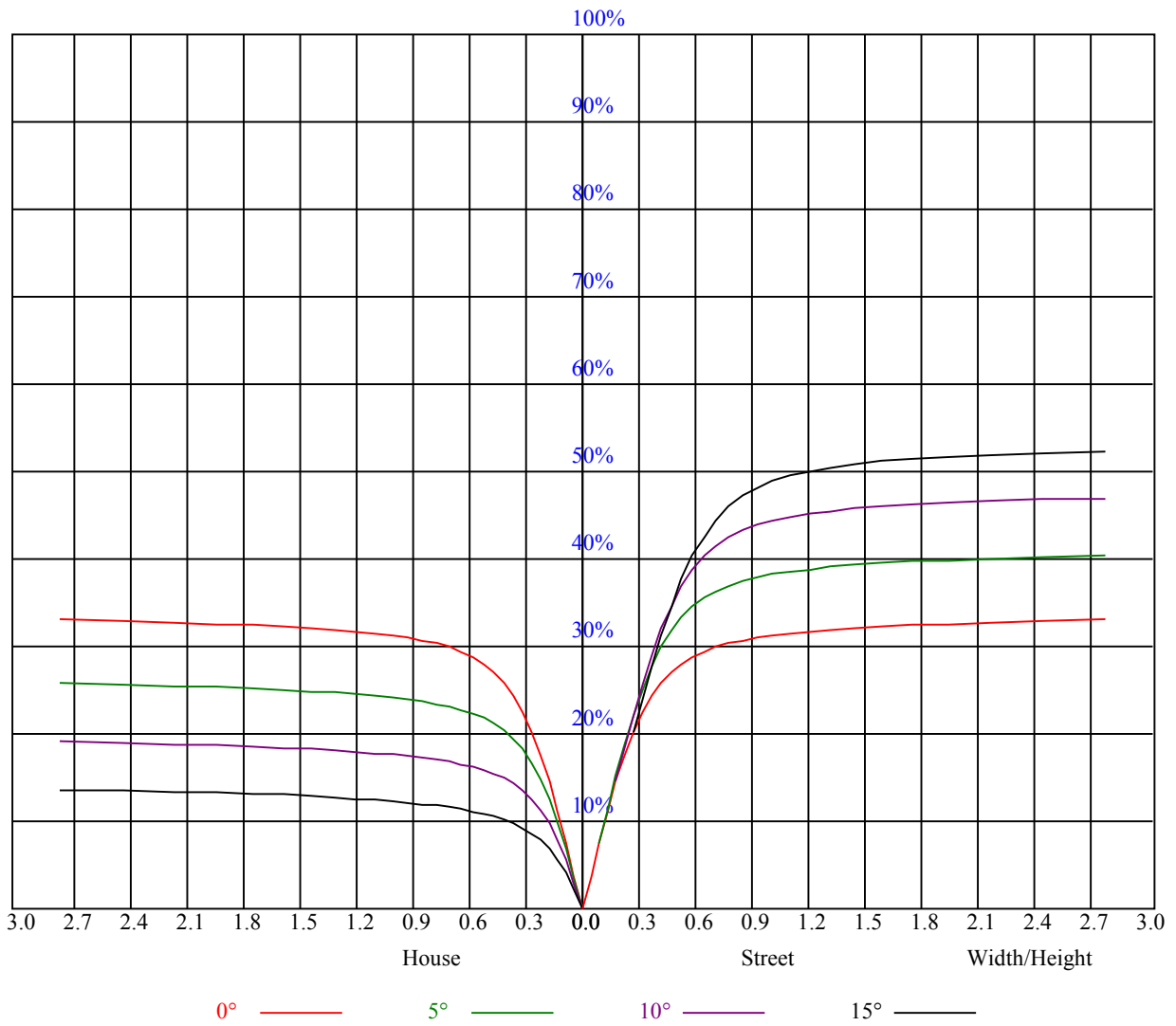
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	0.75	0.73	0.71	0.73	0.71	0.70	0.70	0.69	0.68	0.68	0.67	0.66	0.65	0.65	0.64	0.63
2	0.69	0.66	0.64	0.68	0.65	0.63	0.66	0.64	0.62	0.64	0.62	0.60	0.62	0.60	0.59	0.58
3	0.65	0.61	0.58	0.64	0.60	0.58	0.62	0.59	0.57	0.60	0.58	0.56	0.59	0.57	0.55	0.54
4	0.61	0.57	0.54	0.60	0.56	0.53	0.58	0.55	0.53	0.57	0.54	0.52	0.56	0.53	0.52	0.51
5	0.57	0.53	0.50	0.56	0.53	0.50	0.55	0.52	0.50	0.54	0.51	0.49	0.53	0.51	0.49	0.48
6	0.54	0.50	0.47	0.54	0.50	0.47	0.52	0.49	0.47	0.52	0.49	0.46	0.51	0.48	0.46	0.45
7	0.51	0.47	0.45	0.51	0.47	0.44	0.50	0.47	0.44	0.49	0.46	0.44	0.48	0.46	0.44	0.43
8	0.49	0.45	0.42	0.48	0.45	0.42	0.48	0.44	0.42	0.47	0.44	0.42	0.46	0.44	0.42	0.41
9	0.47	0.43	0.40	0.46	0.43	0.40	0.46	0.42	0.40	0.45	0.42	0.40	0.44	0.42	0.40	0.39
10	0.45	0.41	0.38	0.44	0.41	0.38	0.44	0.40	0.38	0.43	0.40	0.38	0.43	0.40	0.38	0.37



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	992.70	983.70	895.78	742.50	512.10	301.73	173.36	96.98	59.85
45.0	1007.33	973.74	863.38	682.31	458.21	262.29	146.03	84.38	53.55
90.0	1002.09	956.64	829.91	627.75	416.03	231.53	127.35	70.71	47.76
135.0	997.76	956.03	844.26	642.77	416.36	230.46	131.06	74.53	47.87
180.0	992.70	926.89	792.06	569.25	350.83	195.08	108.17	63.51	42.69
225.0	1007.33	972.39	856.80	642.32	423.51	232.31	127.86	74.48	47.64
270.0	1002.09	988.59	895.22	708.58	473.40	266.40	144.45	83.03	51.47
315.0	997.76	971.16	871.93	669.88	425.87	249.69	137.19	77.06	50.23
360.0	992.70	983.70	895.78	742.50	512.10	301.73	173.36	96.98	59.85
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	40.89	28.46	21.15	17.16	14.40	11.59	9.39	7.20	5.01
45.0	35.66	26.94	19.91	15.86	12.88	10.69	8.38	6.13	4.22
90.0	32.34	23.79	18.39	14.91	12.49	25.31	38.59	25.76	4.05
135.0	32.40	24.19	18.17	14.40	11.81	9.73	7.54	5.63	3.60
180.0	29.36	21.83	16.88	14.40	11.59	9.90	7.82	5.40	3.38
225.0	32.12	23.40	17.89	14.29	11.70	9.79	7.65	5.74	4.11
270.0	34.31	25.09	18.90	15.19	12.83	20.81	40.05	26.61	4.95
315.0	33.75	24.58	18.73	14.79	12.04	9.96	8.04	6.08	4.33
360.0	40.89	28.46	21.15	17.16	14.40	11.59	9.39	7.20	5.01
C/γ(°)	90.0								
0.0	3.09								
45.0	2.36								
90.0	2.14								
135.0	2.48								
180.0	2.42								
225.0	2.53								
270.0	2.19								
315.0	2.42								
360.0	3.09								