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Nata

LumCAT: LN01D03536EE-N

Luminaire: 92.70.307.00

Report No: 210521-B004

Test No: 210521-C004

LampCAT: LUMINUS CXM-3 LES3.5

Lamp flux(lm): 548.1

Number of Lamps: 1

Length(mm): 74

Phm Type: C

Voltage(V): 221.4000

Current(A): 0.0800

Power (W): 9.0000

PF: 0.5090

Ballast type: DC

Width(mm): 74

Height(mm): 56

Photometric Results

Lumens(lm): 373.98

Efficiency(%): 68.23%

Lumens(lm)/Power(W): 41.55

Central intensity(cd): 731.306

Maximum intensity(cd): 731.306

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=65.4

[C90/270]Total=65.4

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(%): 68.23%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 93.381%

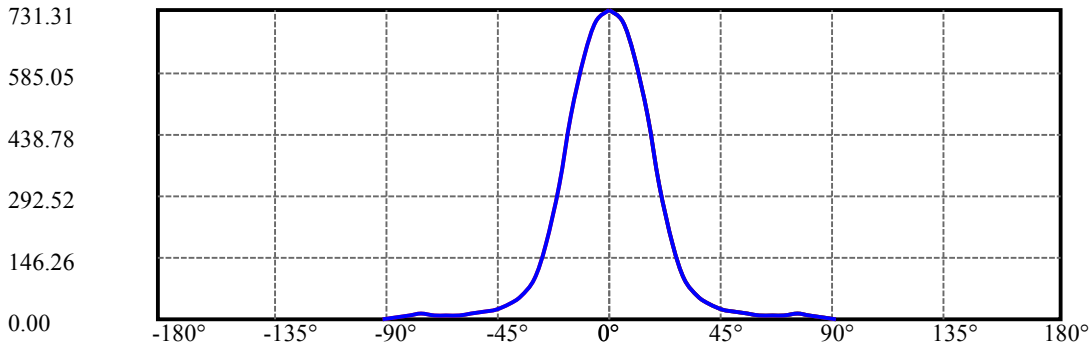
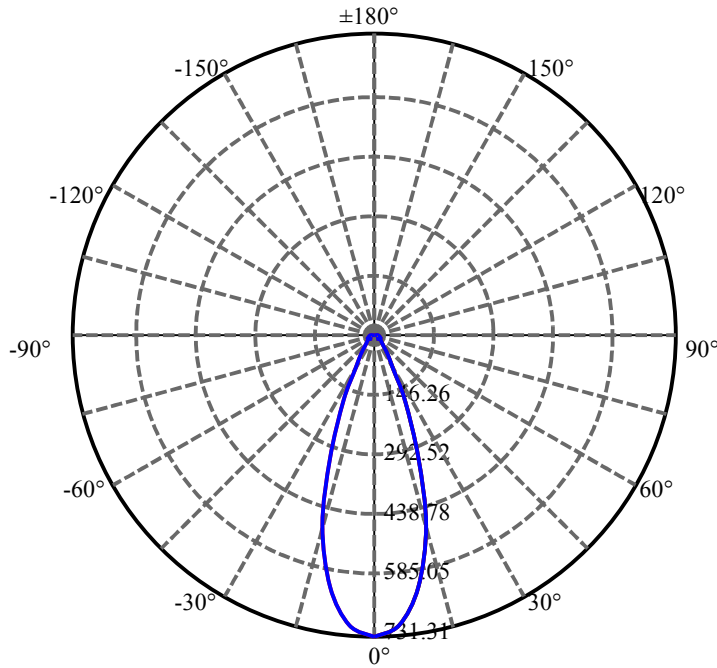
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	731.306	0.000	0	.000%	.000%
5.0	704.566	17.165	17.165	3.132%	4.590%
10.0	621.056	47.422	64.587	8.651%	17.270%
15.0	479.651	65.293	129.88	11.912%	34.730%
20.0	318.776	65.802	195.682	12.005%	52.325%
25.0	174.973	51.785	247.467	9.447%	66.172%
30.0	94.873	34.149	281.616	6.230%	75.303%
35.0	54.710	22.027	303.643	4.019%	81.193%
40.0	34.622	14.904	318.548	2.719%	85.179%
45.0	23.154	10.698	329.245	1.952%	88.039%
50.0	16.959	8.105	337.351	1.479%	90.207%
55.0	12.888	6.490	343.841	1.184%	91.942%
60.0	10.399	5.383	349.223	.982%	93.381%
65.0	8.543	4.605	353.828	.840%	94.613%
70.0	9.190	4.490	358.318	.819%	95.813%
75.0	12.691	5.719	364.038	1.043%	97.343%
80.0	8.346	5.629	369.667	1.027%	98.848%
85.0	2.855	3.044	372.71	.555%	99.662%
90.0	1.765	1.265	373.975	.231%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	281.62	51.38%	75.30%
0-40	318.55	58.11%	85.18%
0-60	349.22	63.71%	93.38%
0-90	372.71	68.00%	99.66%
0-120	372.71	68.00%	99.66%
0-180	373.98	68.23%	100.00%
60-90	28.87	5.27%	7.72%
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%
0-33.99	299.18	54.58%	80.00%

ZONAL LUMEN SUMMARY

0-10	64.59
10-20	131.09
20-30	85.93
30-40	36.93
40-50	18.80
50-60	11.87
60-70	9.09
70-80	11.35
80-90	3.04
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: —————

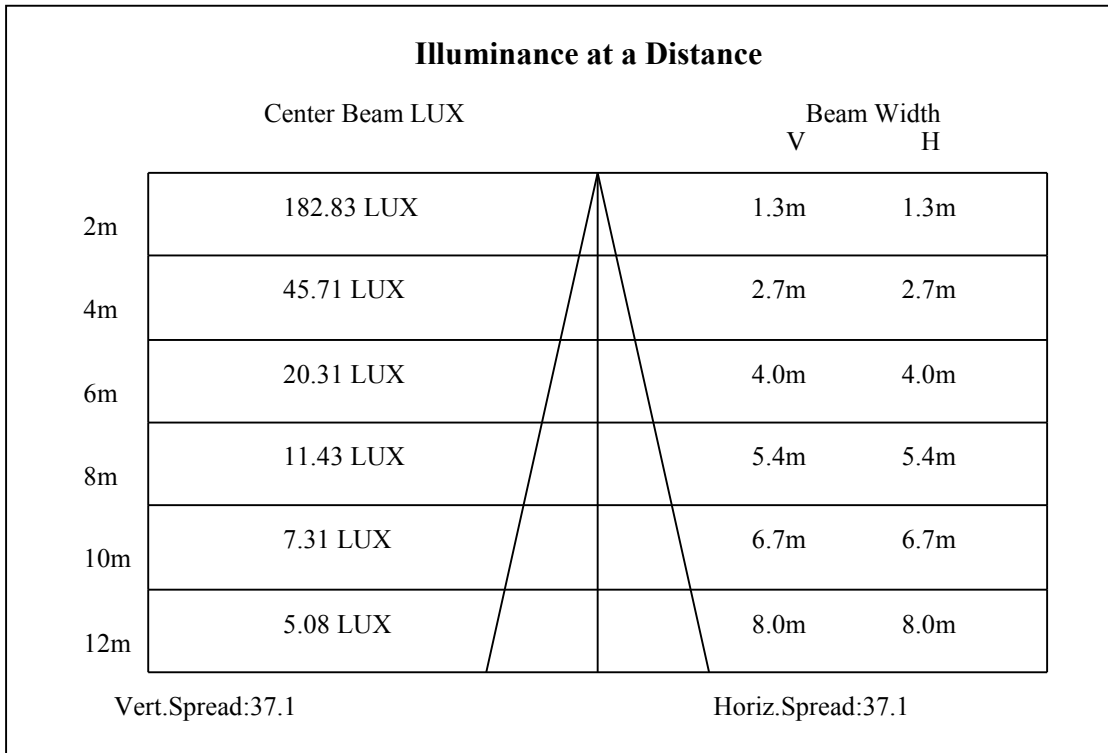
C90/C270: —————

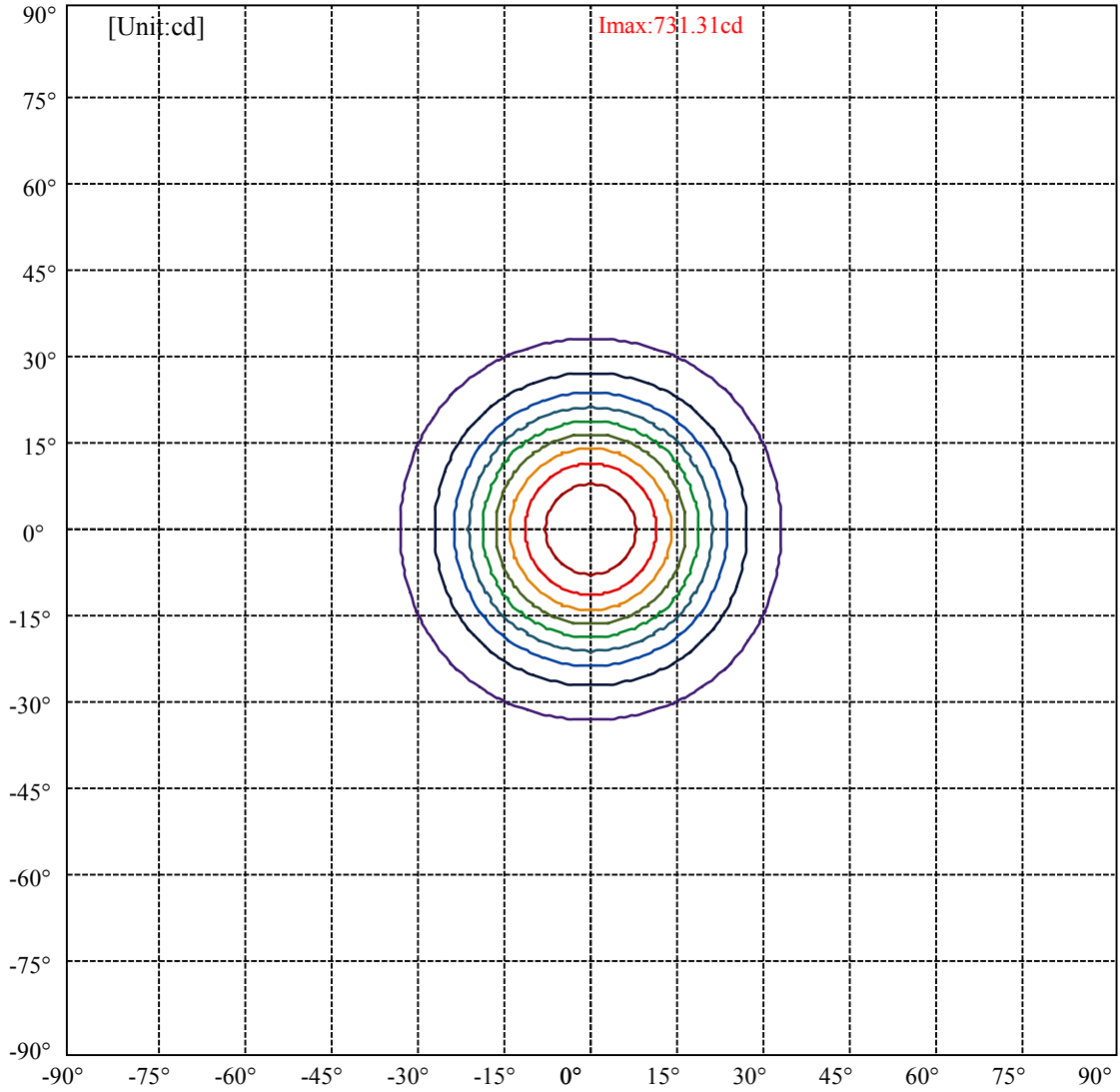
Field angle(10%Imax):C0/180Left:32.7 Right:32.7

:C90/270Left:32.7 Right:32.7

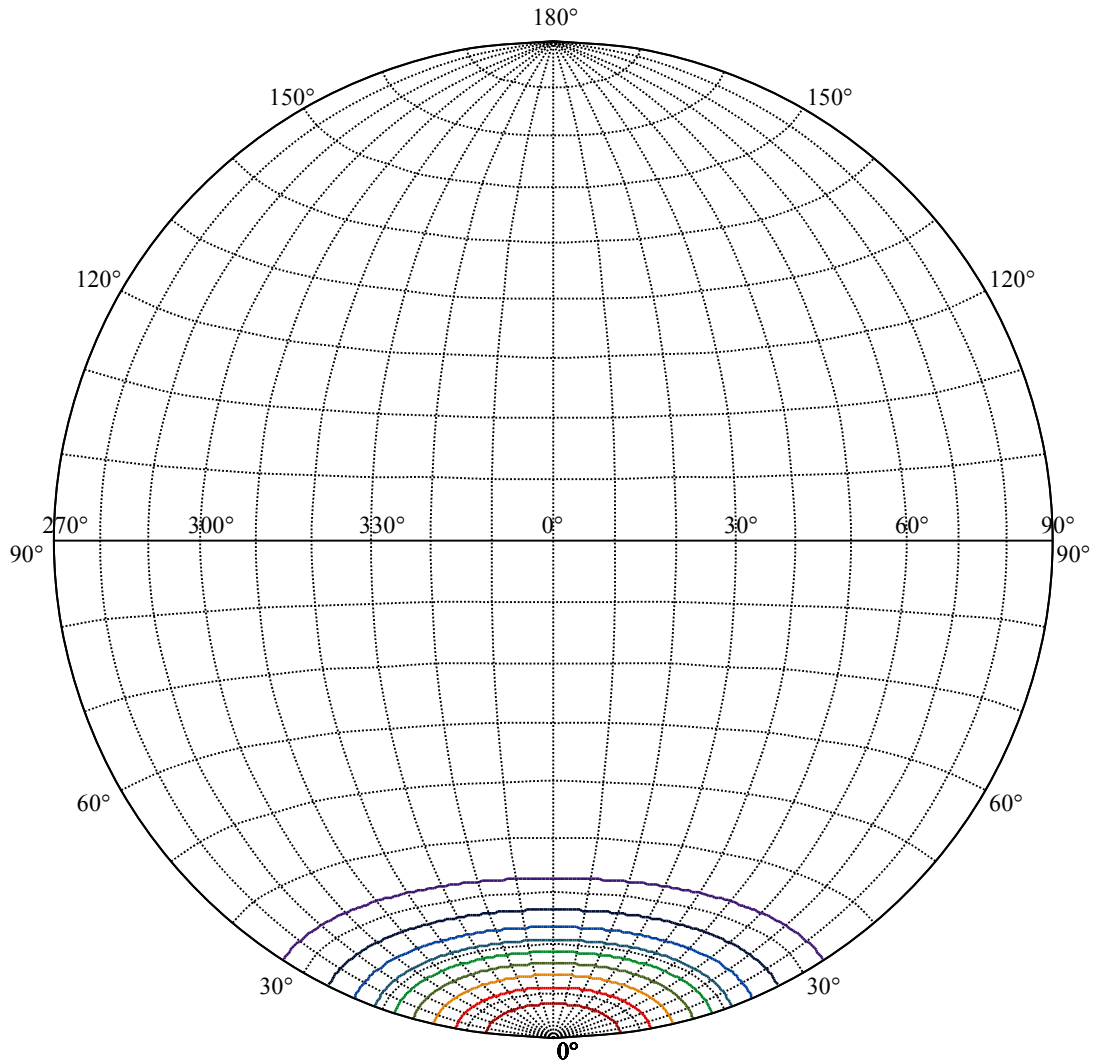
Beam Angle(50%Imax):C0/180Left:18.5 Right:18.5

:C90/270Left:18.5 Right:18.5





(10%Imax) 73.1306	—
(20%Imax) 146.261	—
(30%Imax) 219.392	—
(40%Imax) 292.523	—
(50%Imax) 365.653	—
(60%Imax) 438.784	—
(70%Imax) 511.914	—
(80%Imax) 585.045	—
(90%Imax) 658.176	—



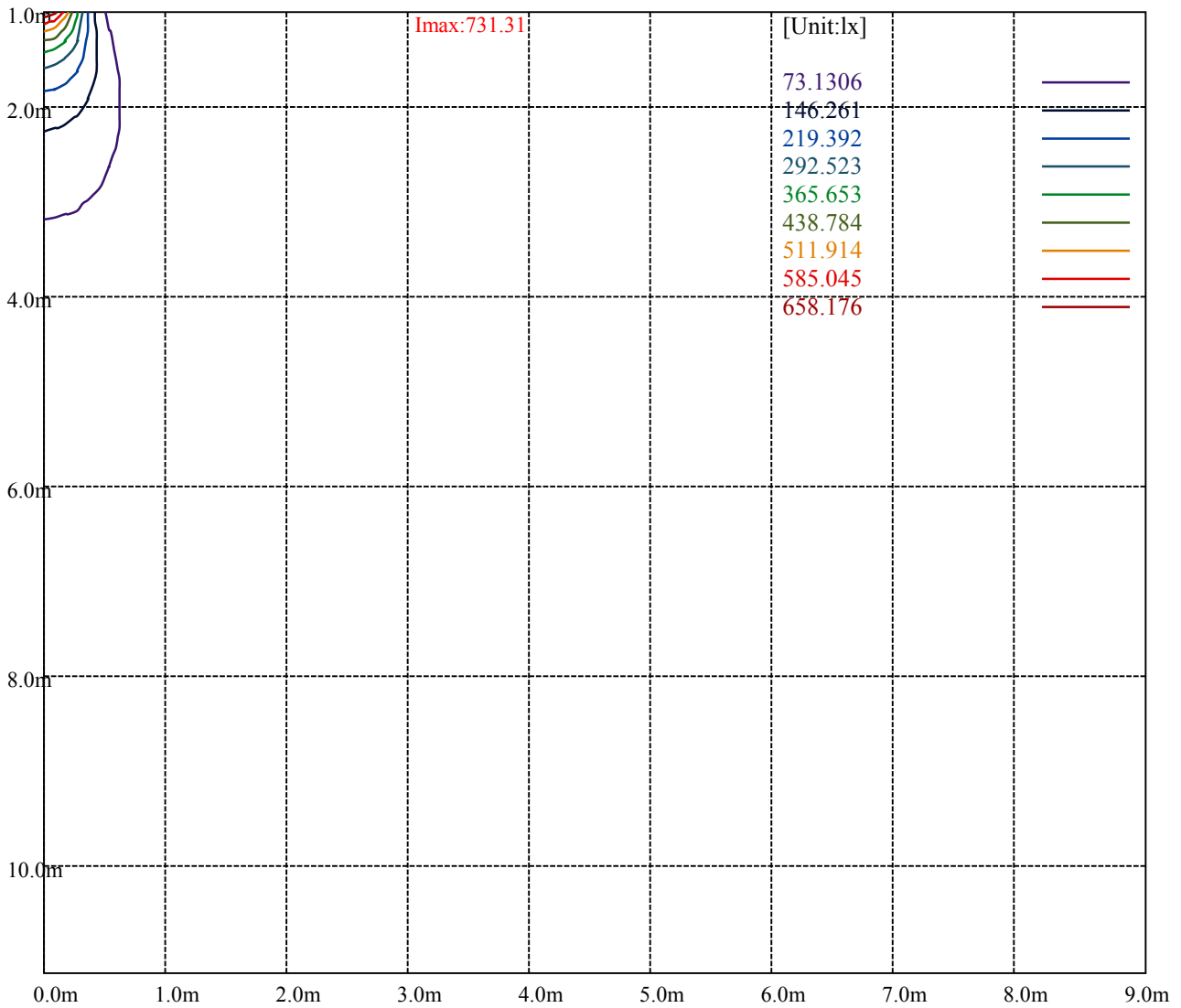
House

[Unit:cd]

Road

Imax:731.31

(10%Imax) 73.1306	—
(20%Imax) 146.261	—
(30%Imax) 219.392	—
(40%Imax) 292.523	—
(50%Imax) 365.653	—
(60%Imax) 438.784	—
(70%Imax) 511.914	—
(80%Imax) 585.045	—
(90%Imax) 658.176	—



Luminance Table

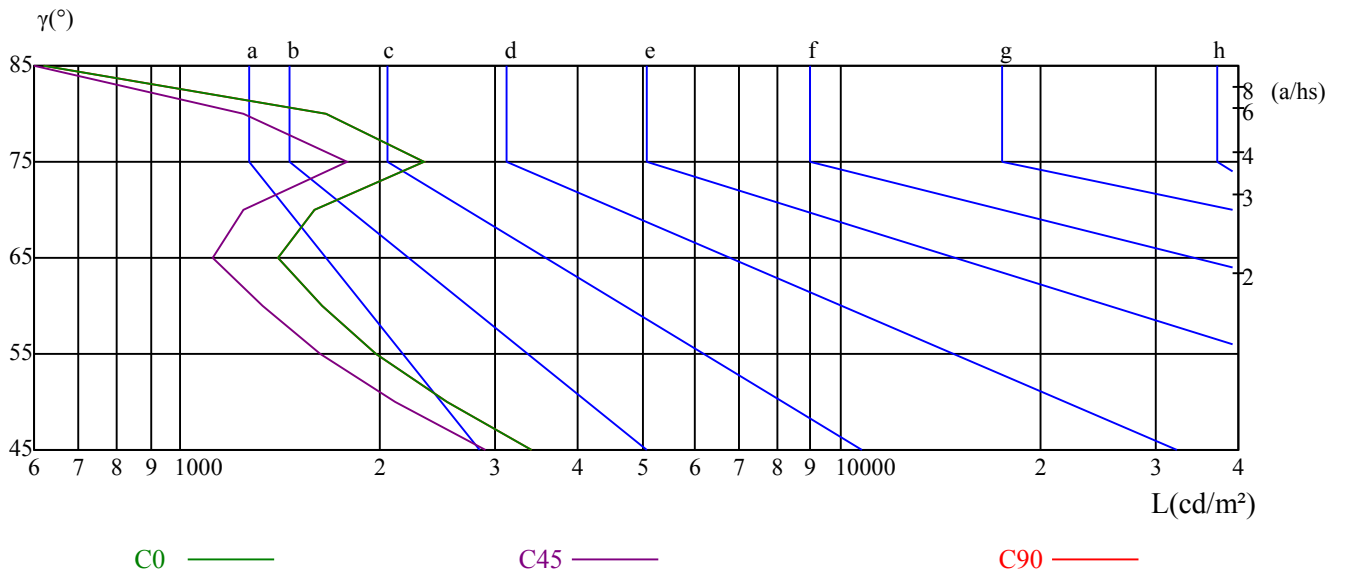
γ	45	50	55	60	65	70	75	80	85
C0	3404	2533	1972	1644	1407	1594	2342	1659	620
C45	2888	2117	1623	1331	1120	1245	1793	1242	452
C90	3404	2533	1972	1644	1407	1594	2342	1659	620

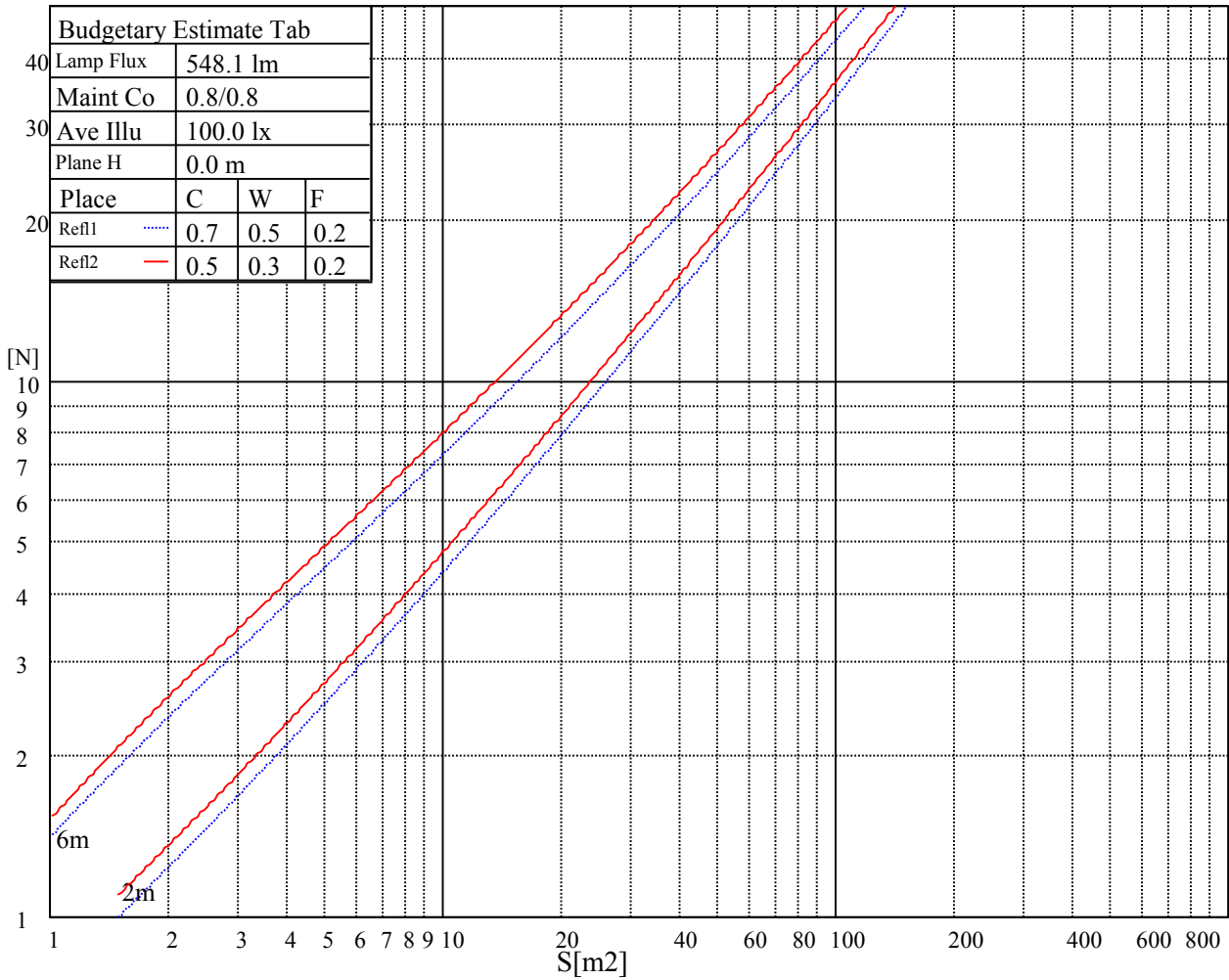
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3691	3691	3691	8955	8955	8955	5981	5981	5981

Glare Table

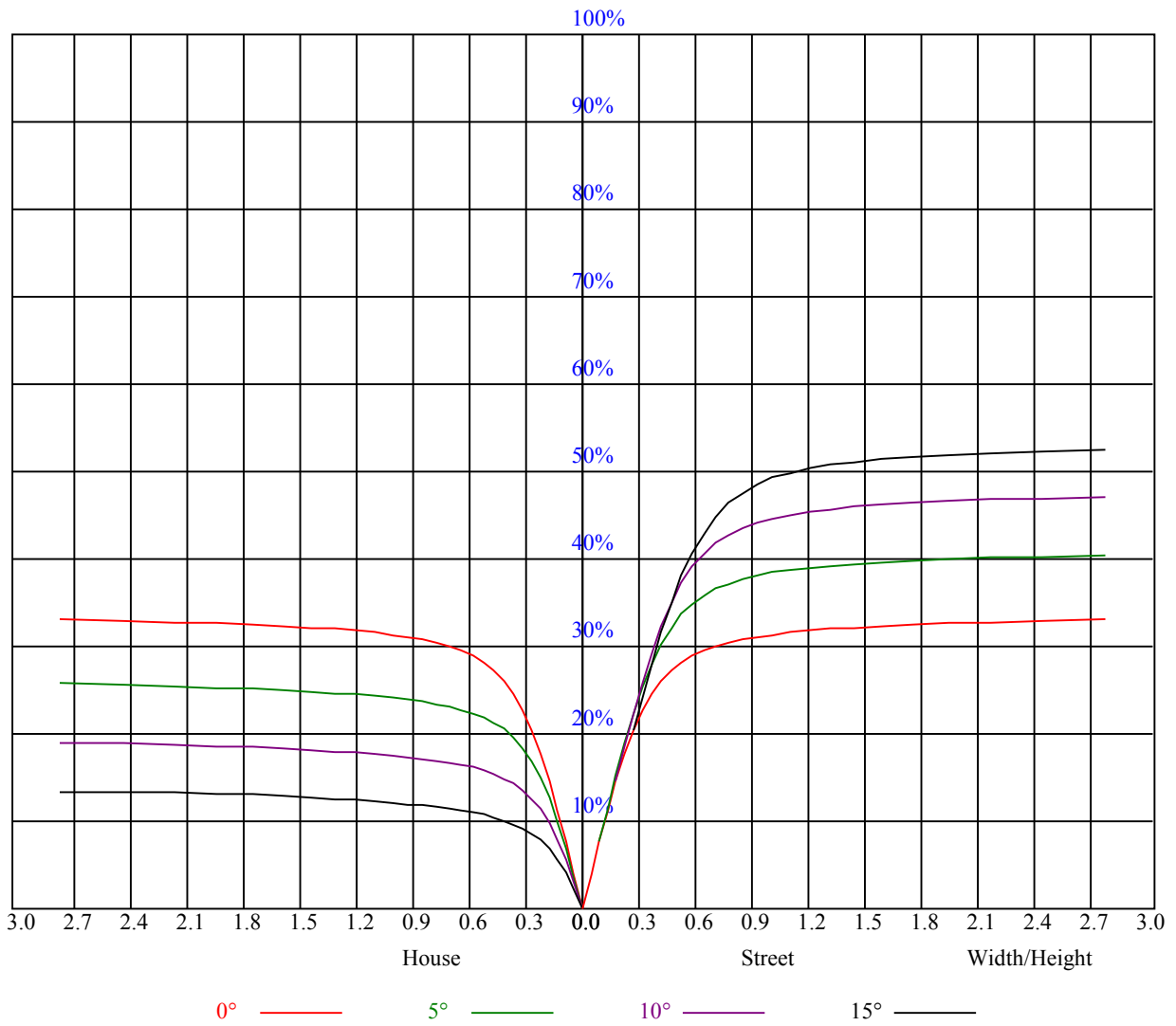
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	0.73	0.73	0.73	0.70	0.70	0.70	0.68
1	0.75	0.73	0.71	0.73	0.72	0.70	0.70	0.69	0.68	0.68	0.67	0.66	0.66	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	0.61	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	0.54	0.59	0.55	0.53	0.57	0.55	0.52	0.56	0.54	0.52	0.51
5	0.57	0.53	0.50	0.57	0.53	0.50	0.56	0.52	0.50	0.54	0.52	0.49	0.53	0.51	0.49	0.48
6	0.54	0.50	0.47	0.54	0.50	0.47	0.53	0.49	0.47	0.52	0.49	0.47	0.51	0.48	0.46	0.45
7	0.52	0.48	0.45	0.51	0.47	0.45	0.50	0.47	0.44	0.49	0.46	0.44	0.49	0.46	0.44	0.43
8	0.49	0.45	0.43	0.49	0.45	0.42	0.48	0.45	0.42	0.47	0.44	0.42	0.47	0.44	0.42	0.41
9	0.47	0.43	0.40	0.47	0.43	0.40	0.46	0.43	0.40	0.45	0.42	0.40	0.45	0.42	0.40	0.39
10	0.45	0.41	0.39	0.45	0.41	0.39	0.44	0.41	0.39	0.44	0.41	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	739.80	693.06	601.48	489.49	328.28	185.63	104.40	58.22	36.56
45.0	725.51	673.48	572.51	432.96	285.41	148.89	81.90	46.86	31.22
90.0	728.72	682.65	577.80	417.83	264.43	142.37	77.23	45.62	29.53
135.0	731.19	720.56	640.29	484.09	317.14	169.59	89.78	51.24	32.34
180.0	739.80	727.99	643.33	472.28	296.21	154.86	82.01	46.69	30.94
225.0	725.51	729.68	668.93	535.50	357.64	198.96	104.85	61.88	38.70
270.0	728.72	720.39	658.63	530.72	375.13	216.90	118.91	69.92	41.68
315.0	731.19	688.73	605.48	474.36	325.97	182.59	99.90	57.26	36.00
360.0	739.80	693.06	601.48	489.49	328.28	185.63	104.40	58.22	36.56
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	24.41	17.94	13.39	10.52	8.66	7.14	5.68	4.39	2.87
45.0	21.21	15.64	12.26	10.41	8.33	6.86	5.91	3.94	2.48
90.0	20.25	15.13	11.48	9.23	7.48	6.24	4.78	3.66	2.25
135.0	21.71	16.09	12.21	9.90	8.27	18.17	33.30	19.24	2.48
180.0	21.04	15.53	11.93	9.56	7.76	6.53	5.06	3.71	2.48
225.0	25.43	18.51	13.89	11.36	9.68	7.54	6.19	4.56	3.32
270.0	27.17	19.74	14.63	11.48	9.23	7.71	6.19	4.61	3.26
315.0	24.02	17.10	13.33	10.74	8.94	13.33	34.43	22.67	3.71
360.0	24.41	17.94	13.39	10.52	8.66	7.14	5.68	4.39	2.87
C/γ(°)	90.0								
0.0	1.74								
45.0	1.63								
90.0	1.63								
135.0	1.58								
180.0	1.63								
225.0	2.14								
270.0	2.03								
315.0	1.74								
360.0	1.74								