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Nata

LumCAT: 61.0140.000

Luminaire:

Report No: 210728-B009

Voltage(V): 36.8800

Test No: 210728-C009

Current(A): 0.1210

LampCAT: LUMINUS CXM-3

Power (W): 6.4620

Lamp flux(lm): 414.1

PF: 0.0000

Number of Lamps: 1

Ballast type: DC

Length(mm): 570

Width(mm): 45

Phm Type: C

Height(mm): 20

Photometric Results

Lumens(lm): 250.61

Efficiency(%): 60.51%

Lumens(lm)/Power(W): 38.78

Central intensity(cd): 496.013

Maximum intensity(cd): 496.013

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=35.5

[C90/270]Total=35.5

Field angle(10%Imax): [C0/180]Total=67.8

[C90/270]Total=67.8

Maximum s/h(1/2): C0_180=0.58 C90_270=0.58

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(%): 60.51%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 94.964%

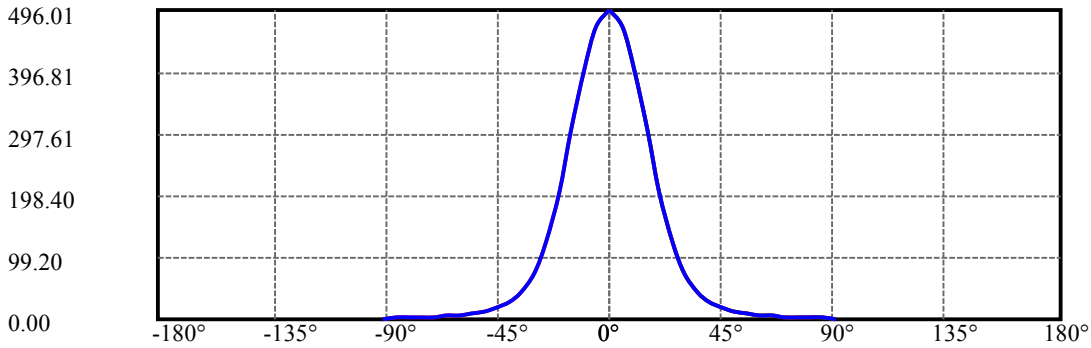
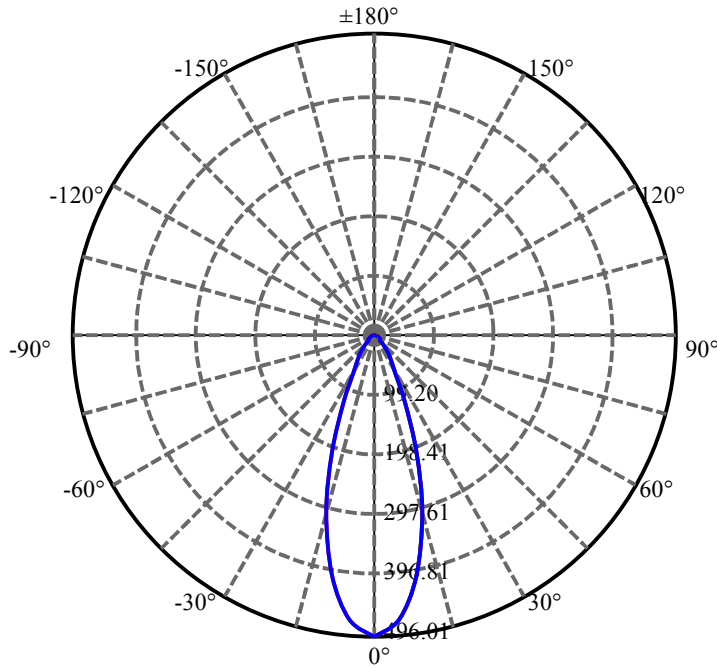
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	496.013	0.000	0	.000%	.000%
5.0	469.132	11.538	11.538	2.786%	4.604%
10.0	399.853	31.086	42.624	7.506%	17.009%
15.0	302.477	41.662	84.286	10.060%	33.633%
20.0	203.527	41.702	125.988	10.070%	50.273%
25.0	122.491	34.193	160.181	8.257%	63.918%
30.0	72.548	24.682	184.864	5.960%	73.767%
35.0	42.940	17.006	201.87	4.107%	80.553%
40.0	27.809	11.804	213.674	2.850%	85.263%
45.0	18.830	8.635	222.309	2.085%	88.709%
50.0	13.542	6.541	228.851	1.580%	91.319%
55.0	9.928	5.103	233.954	1.232%	93.355%
60.0	7.516	4.032	237.986	.974%	94.964%
65.0	5.653	3.202	241.188	.773%	96.242%
70.0	4.402	2.546	243.734	.615%	97.258%
75.0	3.459	2.055	245.788	.496%	98.078%
80.0	4.366	2.094	247.882	.506%	98.913%
85.0	2.257	1.800	249.682	.435%	99.631%
90.0	1.118	0.924	250.606	.223%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	184.86	44.64%	73.77%
0-40	213.67	51.60%	85.26%
0-60	237.99	57.47%	94.96%
0-90	249.68	60.29%	99.63%
0-120	249.68	60.29%	99.63%
0-180	250.61	60.51%	100.00%
60-90	15.73	3.80%	6.28%
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%
0-34.59	200.48	48.41%	80.00%

ZONAL LUMEN SUMMARY

0-10	42.62
10-20	83.36
20-30	58.88
30-40	28.81
40-50	15.18
50-60	9.14
60-70	5.75
70-80	4.15
80-90	1.80
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: —————

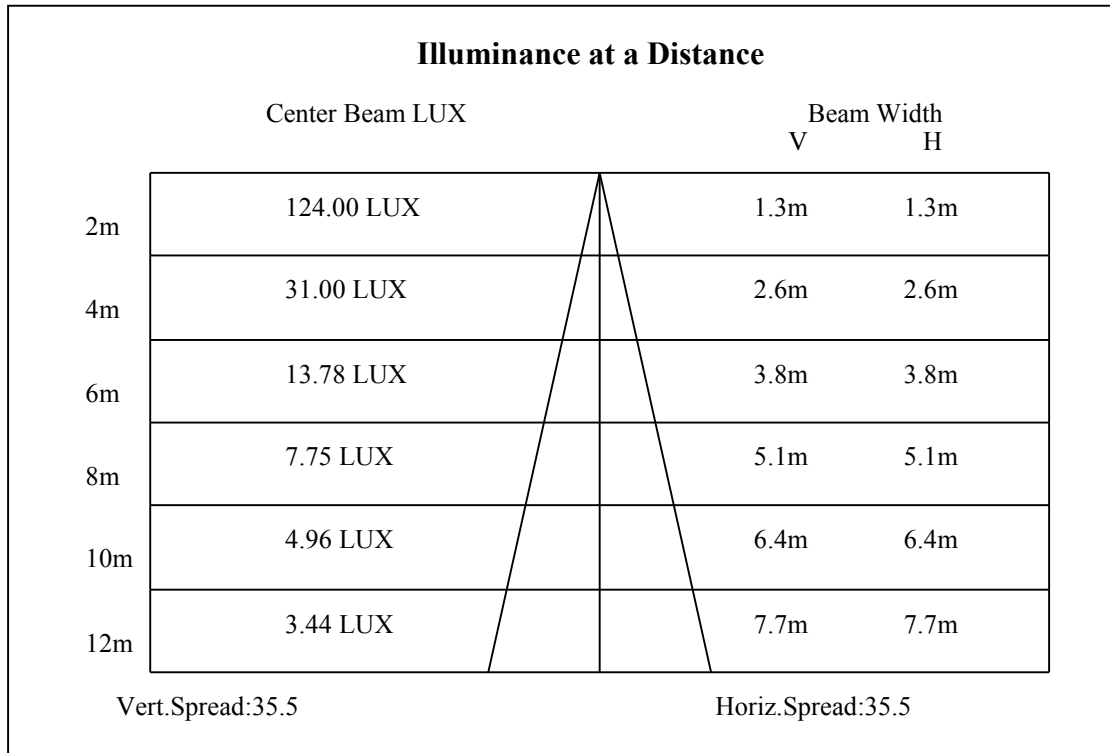
C90/C270: —————

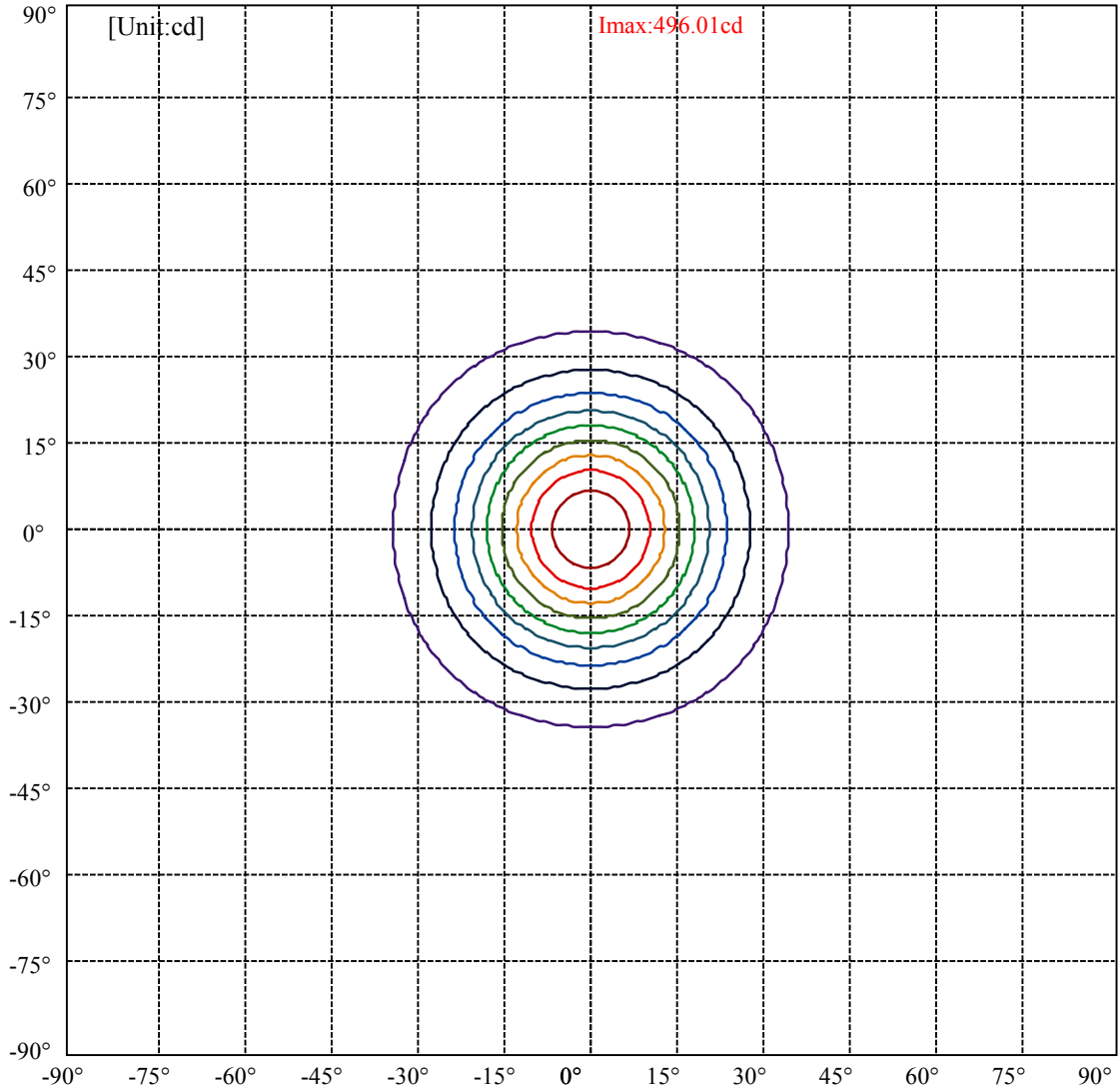
Field angle(10%Imax):C0/180Left:33.9 Right:33.9

:C90/270Left:33.9 Right:33.9

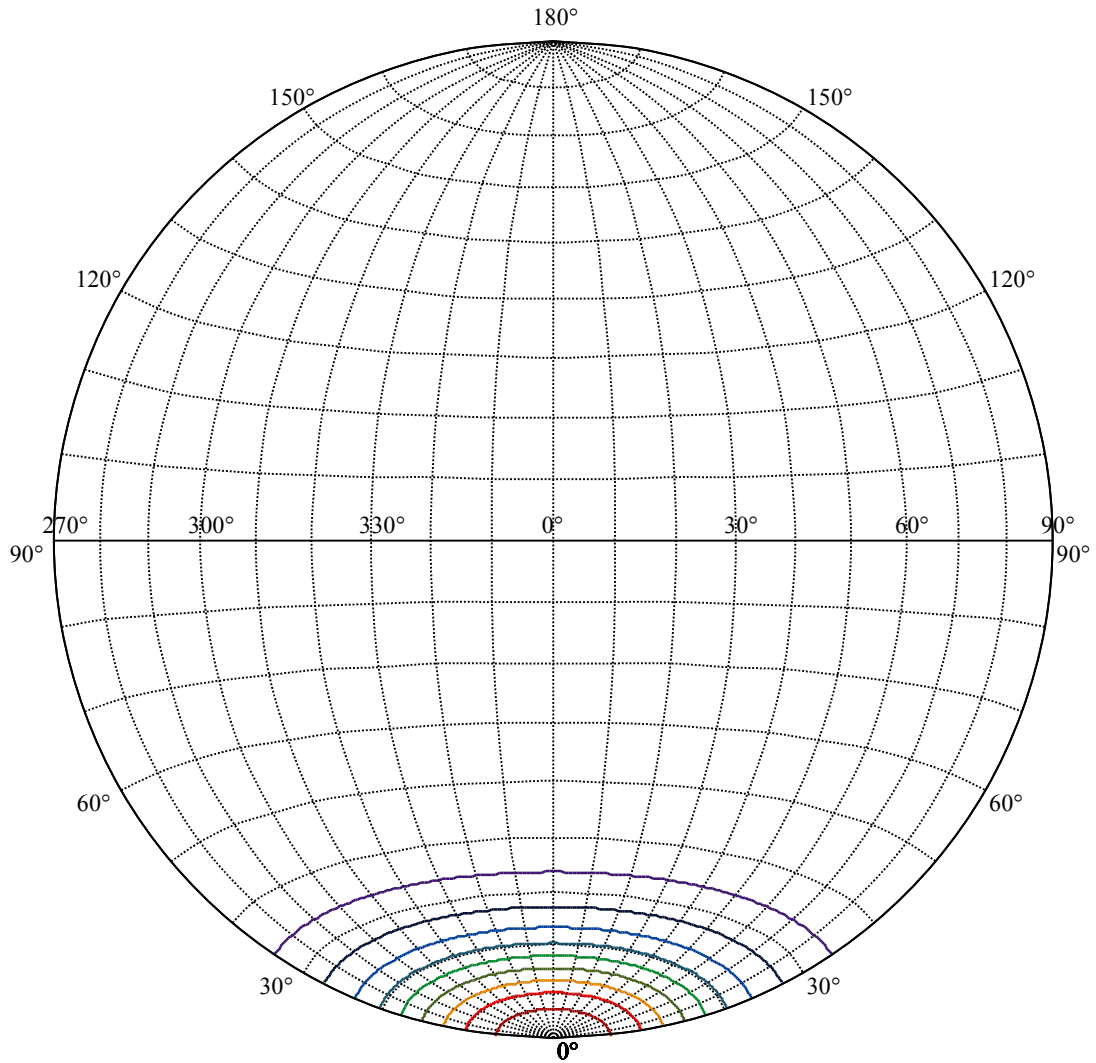
Beam Angle(50%Imax):C0/180Left:17.8 Right:17.8

:C90/270Left:17.8 Right:17.8





(10%Imax) 49.6012	—
(20%Imax) 99.2025	—
(30%Imax) 148.804	—
(40%Imax) 198.405	—
(50%Imax) 248.006	—
(60%Imax) 297.607	—
(70%Imax) 347.209	—
(80%Imax) 396.81	—
(90%Imax) 446.411	—



House

[Unit:cd]

Road

Imax:496.01

(10%Imax) 49.6012

(20%Imax) 99.2025

(30%Imax) 148.804

(40%Imax) 198.405

(50%Imax) 248.006

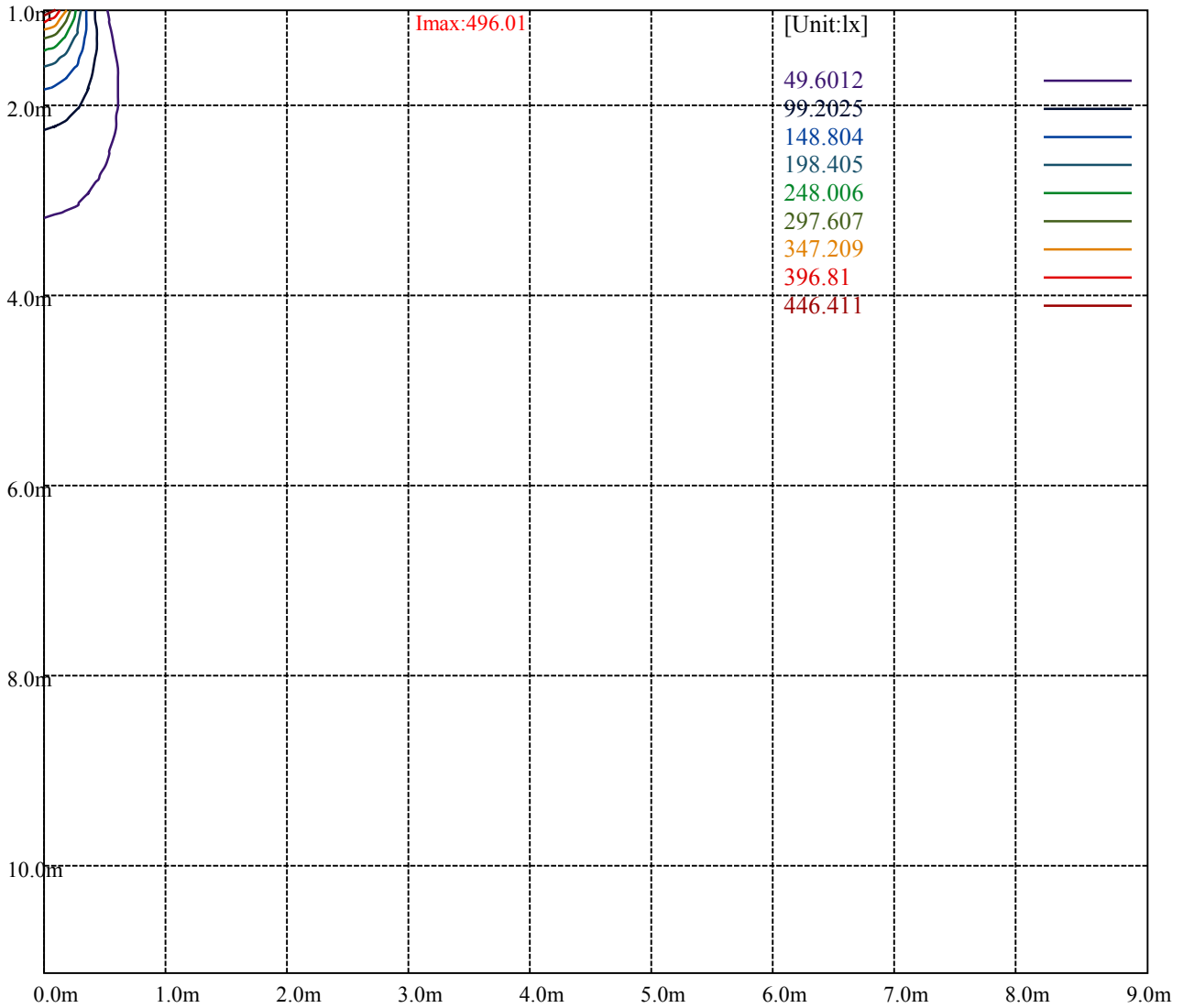
(60%Imax) 297.607

(70%Imax) 347.209

(80%Imax) 396.81

(90%Imax) 446.411





Luminance Table

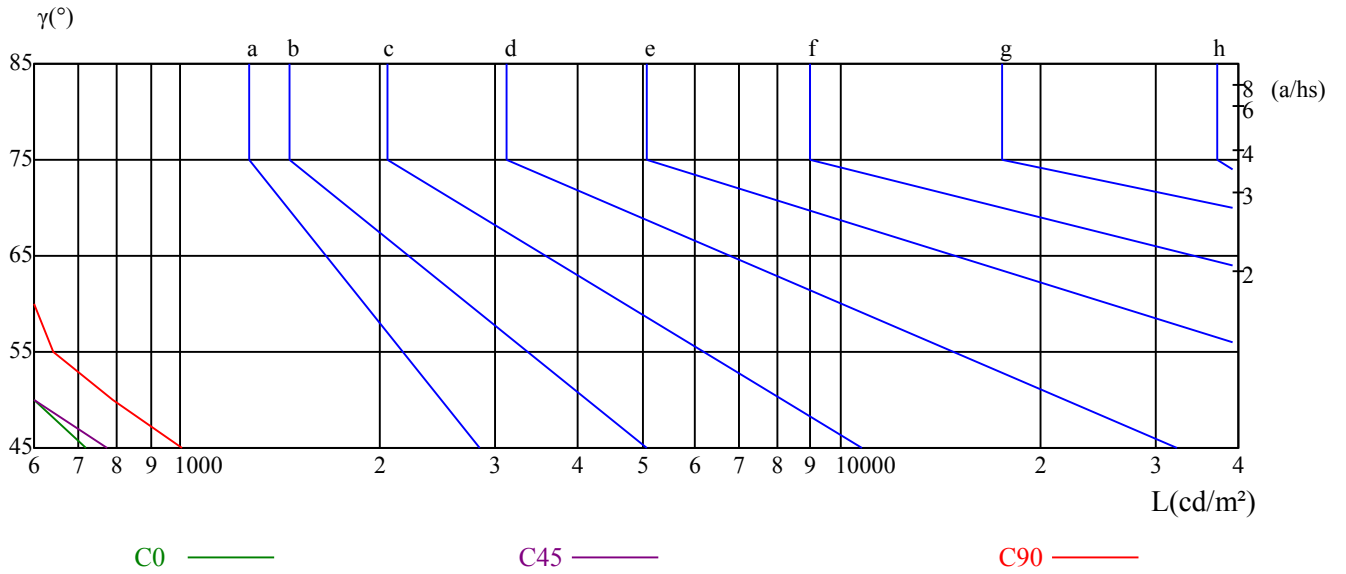
γ	45	50	55	60	65	70	75	80	85
C0	719	537	413	331	267	226	196	278	166
C45	775	585	455	369	302	260	230	335	207
C90	1003	788	643	552	485	458	461	818	721

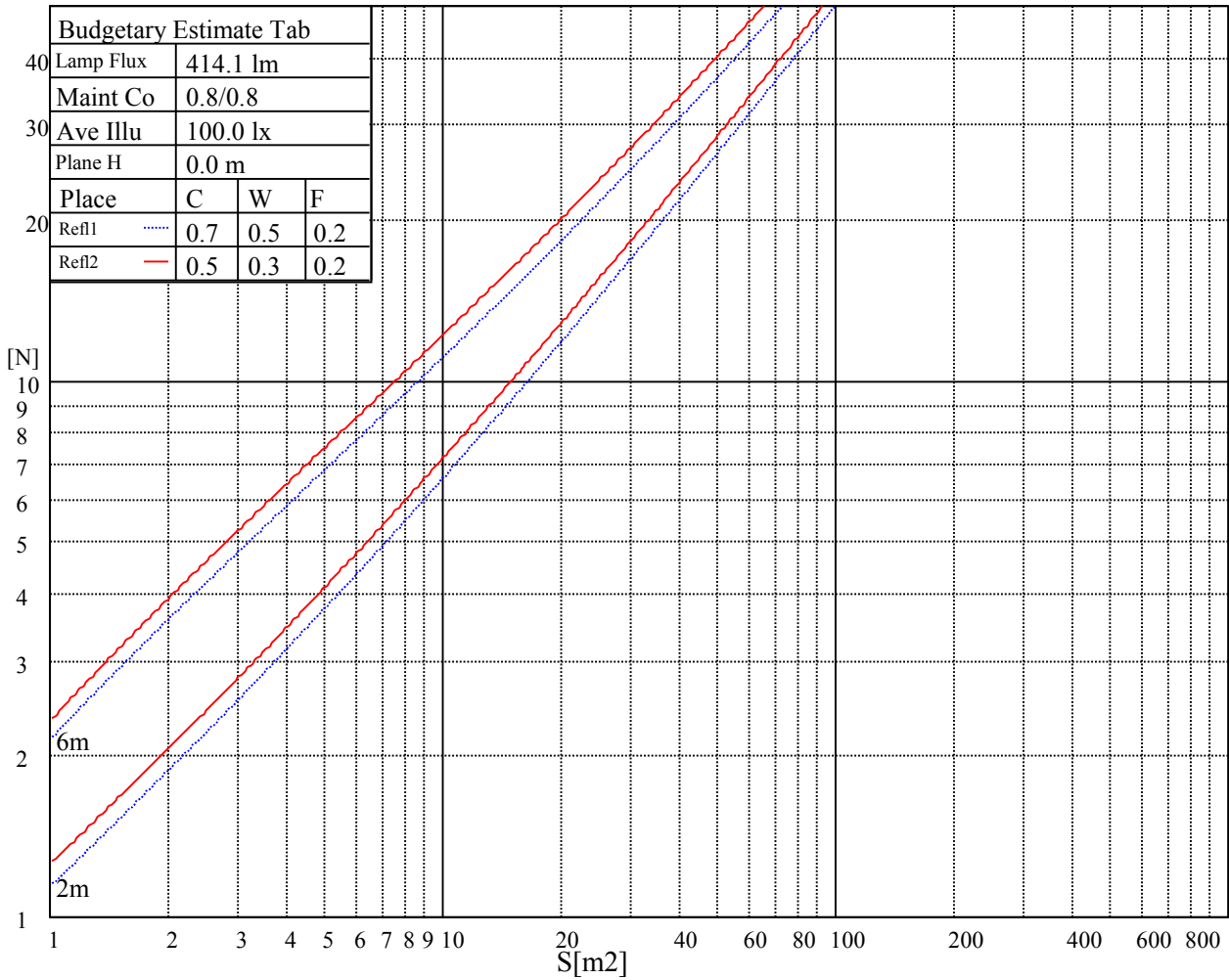
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
521	521	521	521	521	521	1010	1010	1010

Glare Table

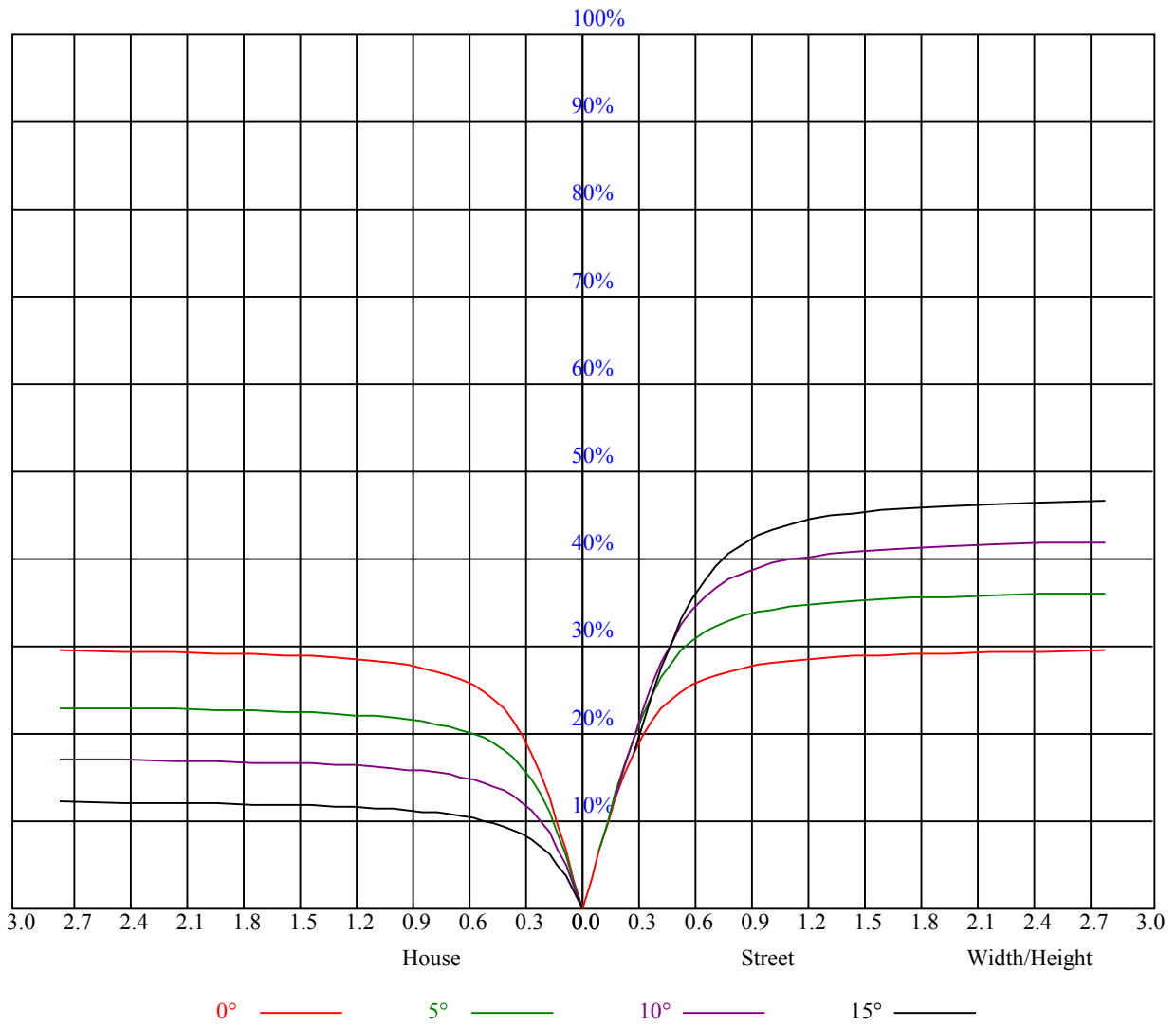
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	0.72	0.72	0.72	0.70	0.70	0.70	0.67	0.67	0.67	0.64	0.64	0.64	0.62	0.62	0.62	0.61
1	0.66	0.65	0.63	0.65	0.64	0.62	0.63	0.62	0.60	0.60	0.59	0.59	0.58	0.58	0.57	0.56
2	0.62	0.59	0.57	0.61	0.58	0.56	0.59	0.57	0.55	0.57	0.55	0.54	0.55	0.54	0.53	0.52
3	0.58	0.55	0.52	0.57	0.54	0.52	0.55	0.53	0.51	0.54	0.52	0.50	0.52	0.51	0.49	0.48
4	0.54	0.51	0.48	0.53	0.50	0.48	0.52	0.49	0.47	0.51	0.49	0.47	0.50	0.48	0.46	0.45
5	0.51	0.47	0.45	0.50	0.47	0.45	0.49	0.46	0.44	0.48	0.46	0.44	0.47	0.45	0.43	0.43
6	0.48	0.45	0.42	0.48	0.44	0.42	0.47	0.44	0.42	0.46	0.43	0.41	0.45	0.43	0.41	0.40
7	0.46	0.42	0.40	0.45	0.42	0.39	0.44	0.41	0.39	0.44	0.41	0.39	0.43	0.41	0.39	0.38
8	0.43	0.40	0.37	0.43	0.40	0.37	0.42	0.39	0.37	0.42	0.39	0.37	0.41	0.39	0.37	0.36
9	0.41	0.38	0.36	0.41	0.38	0.36	0.40	0.37	0.35	0.40	0.37	0.35	0.39	0.37	0.35	0.34
10	0.39	0.36	0.34	0.39	0.36	0.34	0.39	0.36	0.34	0.38	0.36	0.34	0.38	0.35	0.34	0.33



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	497.76	465.64	397.29	308.14	217.91	137.03	79.88	46.86	30.66
45.0	492.98	470.64	405.34	302.85	193.84	110.81	65.42	38.70	25.20
90.0	497.59	478.46	410.29	297.45	186.13	99.68	60.36	36.00	23.63
135.0	495.73	493.76	433.63	324.73	209.64	121.73	68.57	40.05	27.00
180.0	497.76	475.82	398.81	297.96	192.71	109.97	65.36	38.98	25.54
225.0	492.98	462.32	398.03	304.43	213.19	133.48	79.20	46.58	28.91
270.0	497.59	461.03	390.77	300.04	214.20	142.99	84.54	50.57	32.18
315.0	495.73	445.39	364.67	284.23	200.59	124.26	77.06	45.79	29.36
360.0	497.76	465.64	397.29	308.14	217.91	137.03	79.88	46.86	30.66
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	21.04	15.41	11.93	9.28	7.14	5.79	4.78	9.45	6.58
45.0	17.33	12.54	9.23	7.14	5.29	4.16	3.26	3.26	1.80
90.0	16.26	11.76	8.49	6.24	4.67	3.60	2.59	1.91	1.24
135.0	17.49	12.49	9.00	6.86	5.06	3.88	2.98	2.19	1.35
180.0	17.10	12.83	9.62	7.31	5.79	4.67	3.94	9.39	1.69
225.0	19.91	14.06	10.18	7.76	5.79	4.44	3.54	3.88	2.03
270.0	21.66	15.19	10.80	8.10	5.85	4.39	3.38	2.36	1.58
315.0	19.86	14.06	10.18	7.43	5.63	4.28	3.21	2.48	1.80
360.0	21.04	15.41	11.93	9.28	7.14	5.79	4.78	9.45	6.58
C/ γ (°)	90.0								
0.0	1.13								
45.0	1.07								
90.0	1.13								
135.0	1.13								
180.0	1.13								
225.0	1.13								
270.0	1.13								
315.0	1.13								
360.0	1.13								