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Nata

LumCAT: LN01D02836DA-N

Luminaire: 92.70.307.00

Report No: 211116-B001

Test No: 211117-C001

LampCAT: Bridgelux V3HD 30G0400-C-83

Lamp flux(lm): 345.5

Number of Lamps: 1

Length(mm): 111

Phm Type: C

Voltage(V): 11.8800

Current(A): 0.3200

Power (W): 3.8010

PF: 0.0000

Ballast type: DC

Width(mm): 111

Height(mm): 0

Photometric Results

Lumens(lm): 229.18

Efficiency(%): 66.33%

Lumens(lm)/Power(W): 60.29

Central intensity(cd): 425.052

Maximum intensity(cd): 425.052

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=37.9

[C90/270]Total=37.9

Field angle(10%Imax): [C0/180]Total=68.9

[C90/270]Total=68.9

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(%): 66.33%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 95.364%

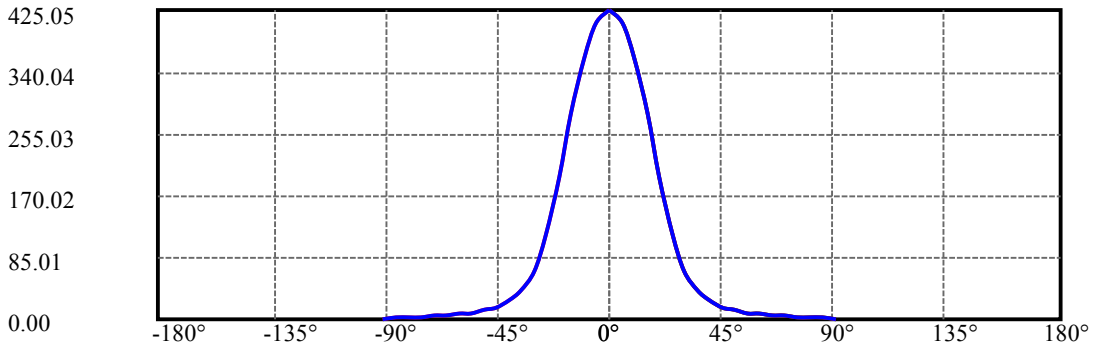
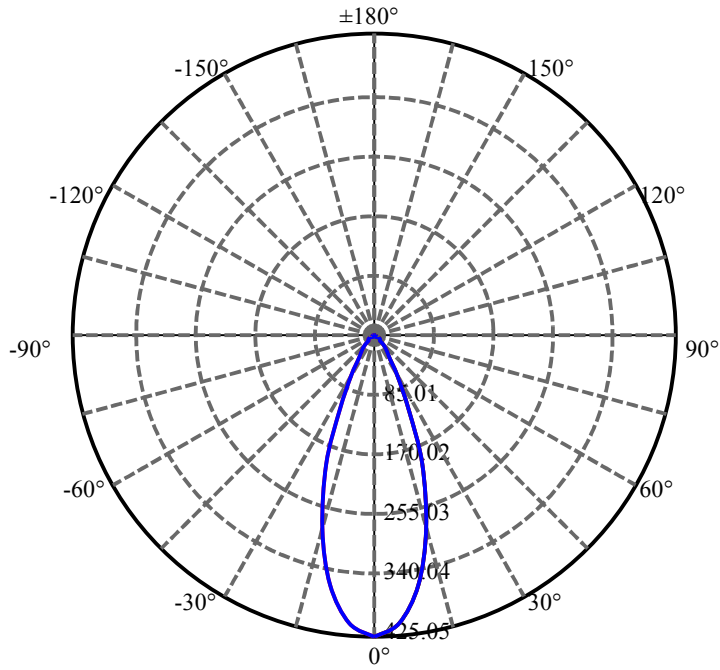
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	425.052	0.000	0	.000%	.000%
5.0	407.769	9.956	9.956	2.882%	4.344%
10.0	358.741	27.420	37.377	7.937%	16.309%
15.0	282.609	38.044	75.421	11.012%	32.909%
20.0	194.085	39.286	114.707	11.371%	50.051%
25.0	115.375	32.457	147.164	9.394%	64.213%
30.0	67.155	23.099	170.263	6.686%	74.293%
35.0	39.474	15.702	185.965	4.545%	81.144%
40.0	25.261	10.801	196.766	3.126%	85.857%
45.0	16.873	7.801	204.567	2.258%	89.261%
50.0	12.190	5.872	210.44	1.700%	91.823%
55.0	8.776	4.559	214.998	1.319%	93.812%
60.0	6.610	3.557	218.555	1.029%	95.364%
65.0	5.019	2.827	221.382	.818%	96.598%
70.0	3.966	2.275	223.657	.659%	97.590%
75.0	3.047	1.833	225.49	.531%	98.390%
80.0	3.227	1.679	227.169	.486%	99.123%
85.0	1.613	1.315	228.484	.381%	99.697%
90.0	0.926	0.695	229.179	.201%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	170.26	49.28%	74.29%
0-40	196.77	56.95%	85.86%
0-60	218.55	63.26%	95.36%
0-90	228.48	66.13%	99.70%
0-120	228.48	66.13%	99.70%
0-180	229.18	66.33%	100.00%
60-90	13.49	3.90%	5.88%
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%
0-34.17	183.34	53.07%	80.00%

ZONAL LUMEN SUMMARY

0-10	37.38
10-20	77.33
20-30	55.56
30-40	26.50
40-50	13.67
50-60	8.12
60-70	5.10
70-80	3.51
80-90	1.32
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: —————

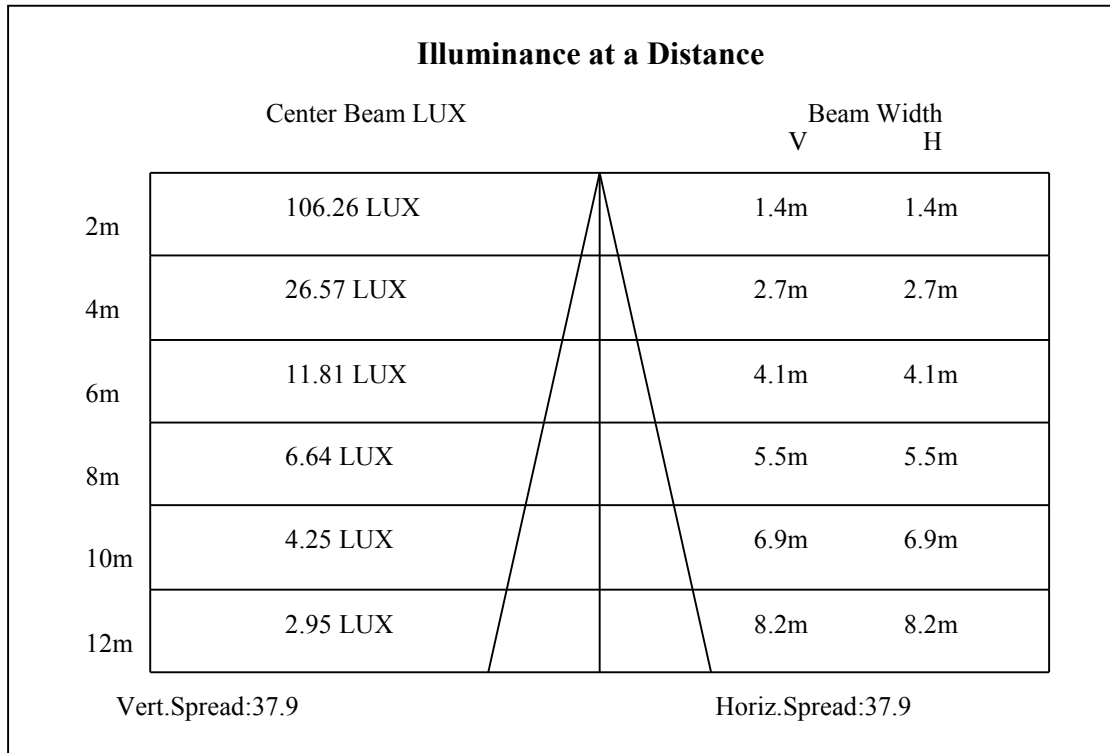
C90/C270: —————

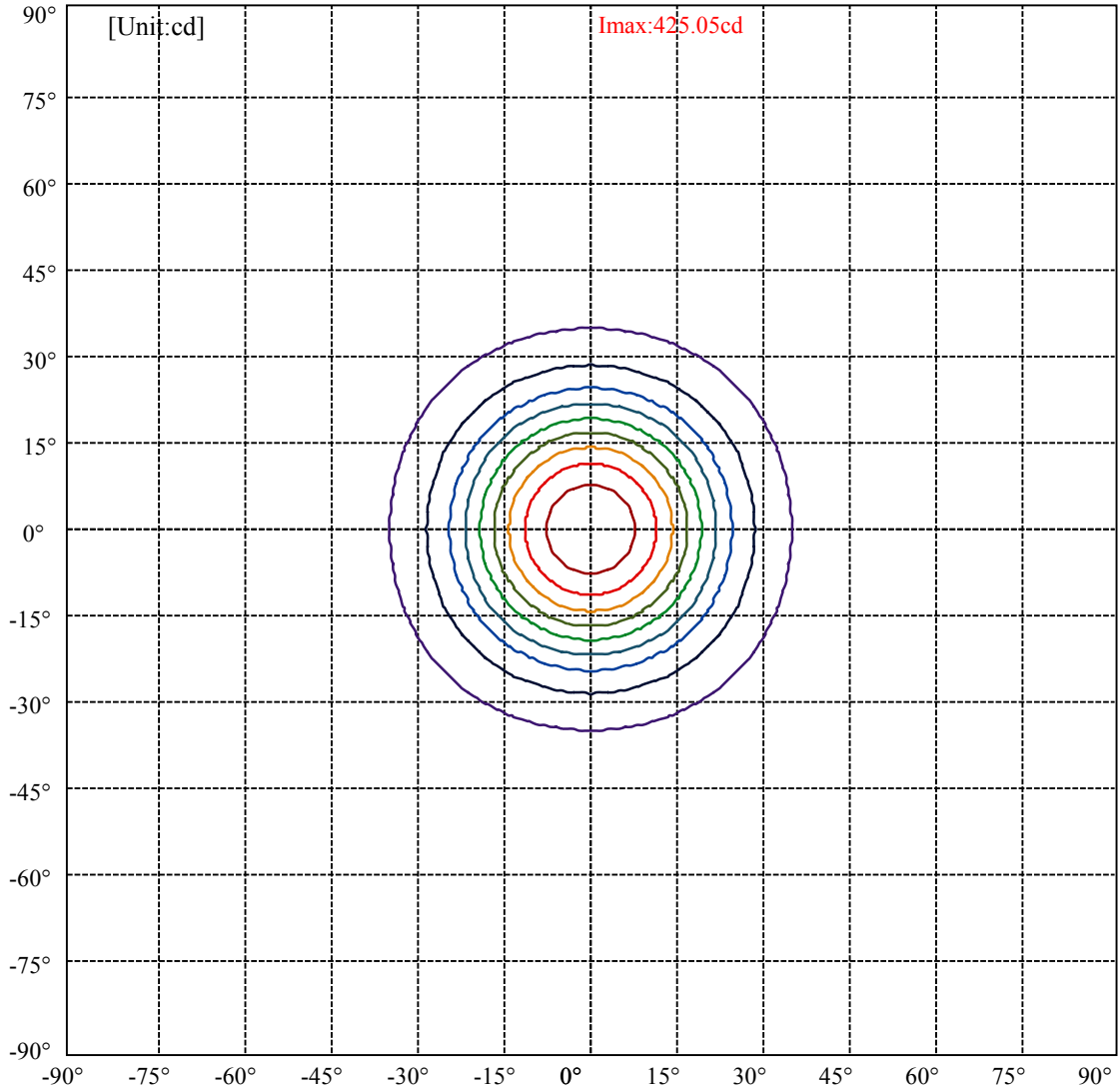
Field angle(10%Imax):C0/180Left:34.5 Right:34.5

:C90/270Left:34.5 Right:34.5

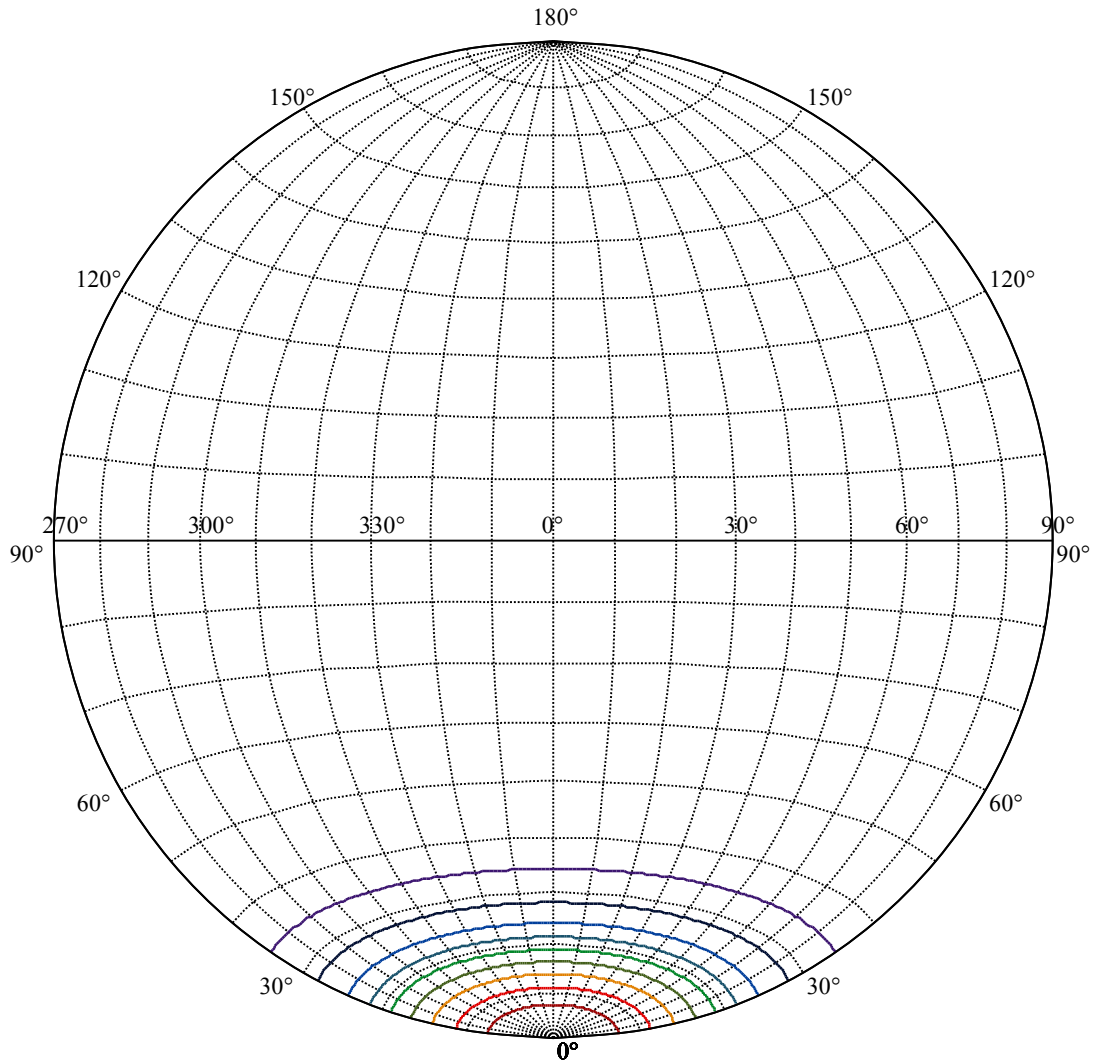
Beam Angle(50%Imax):C0/180Left:19.0 Right:19.0

:C90/270Left:19.0 Right:19.0





(10%Imax)	42.5052	—
(20%Imax)	85.0105	—
(30%Imax)	127.516	—
(40%Imax)	170.021	—
(50%Imax)	212.526	—
(60%Imax)	255.031	—
(70%Imax)	297.537	—
(80%Imax)	340.042	—
(90%Imax)	382.547	—



House

[Unit:cd]

Road

Imax:425.05

(10%Imax) 42.5052

(20%Imax) 85.0105

(30%Imax) 127.516

(40%Imax) 170.021

(50%Imax) 212.526

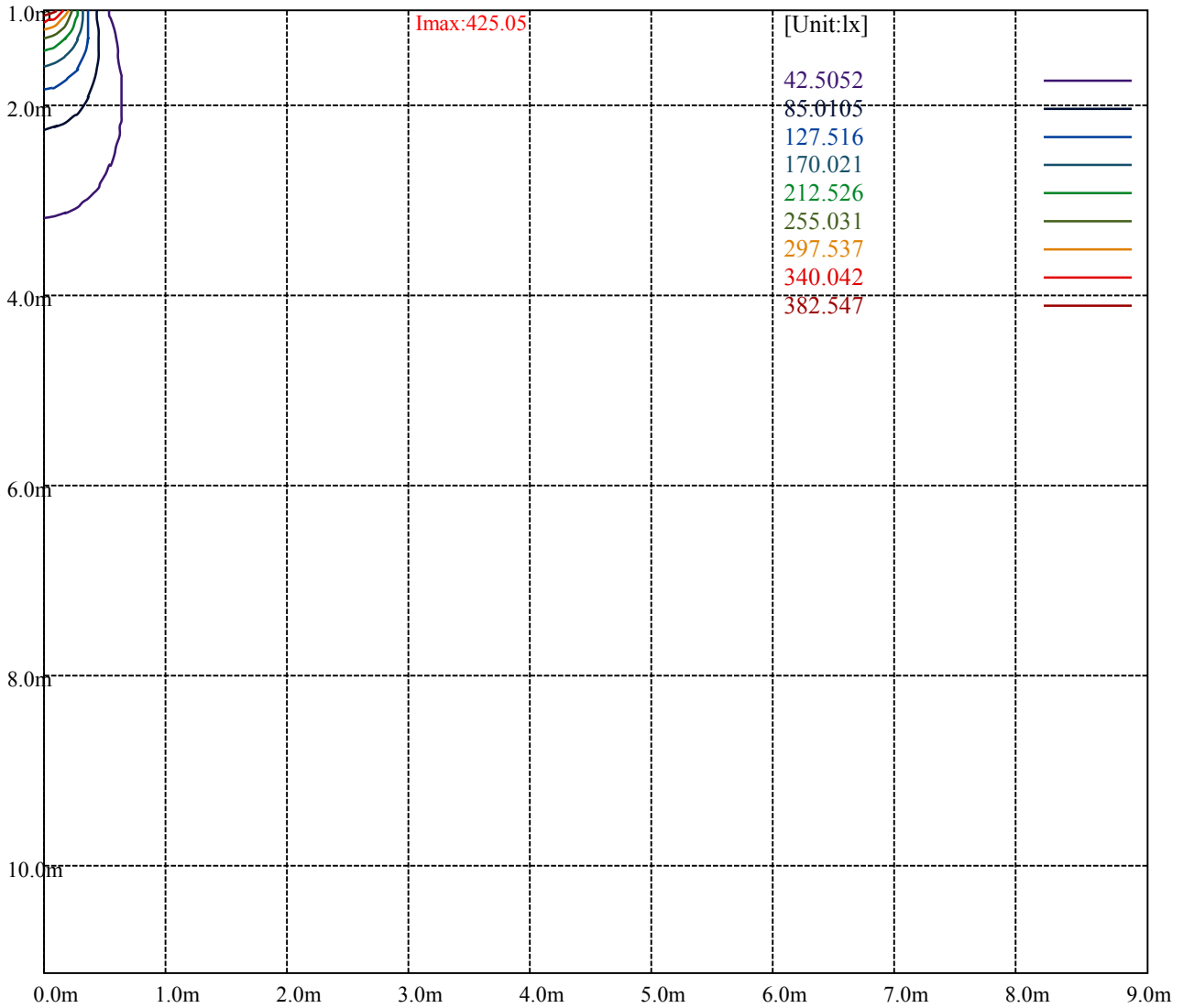
(60%Imax) 255.031

(70%Imax) 297.537

(80%Imax) 340.042

(90%Imax) 382.547





Luminance Table

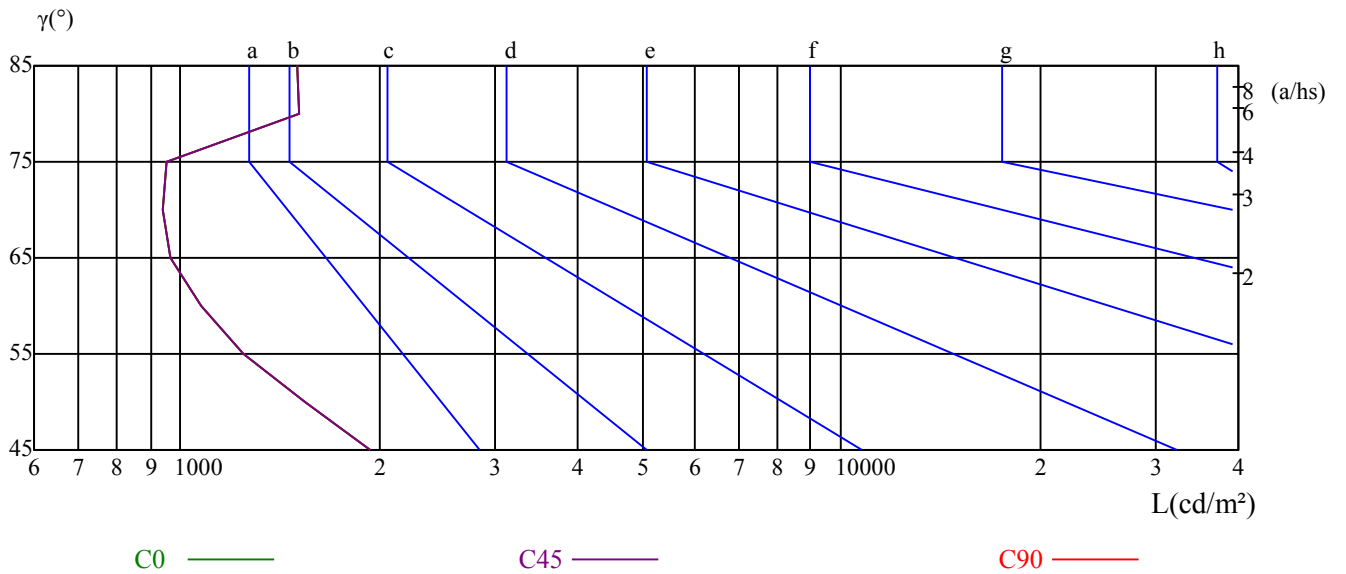
γ	45	50	55	60	65	70	75	80	85
C0	1937	1539	1242	1073	964	941	956	1508	1502
C45	1937	1539	1242	1073	964	941	956	1508	1502
C90	1937	1539	1242	1073	964	941	956	1508	1502

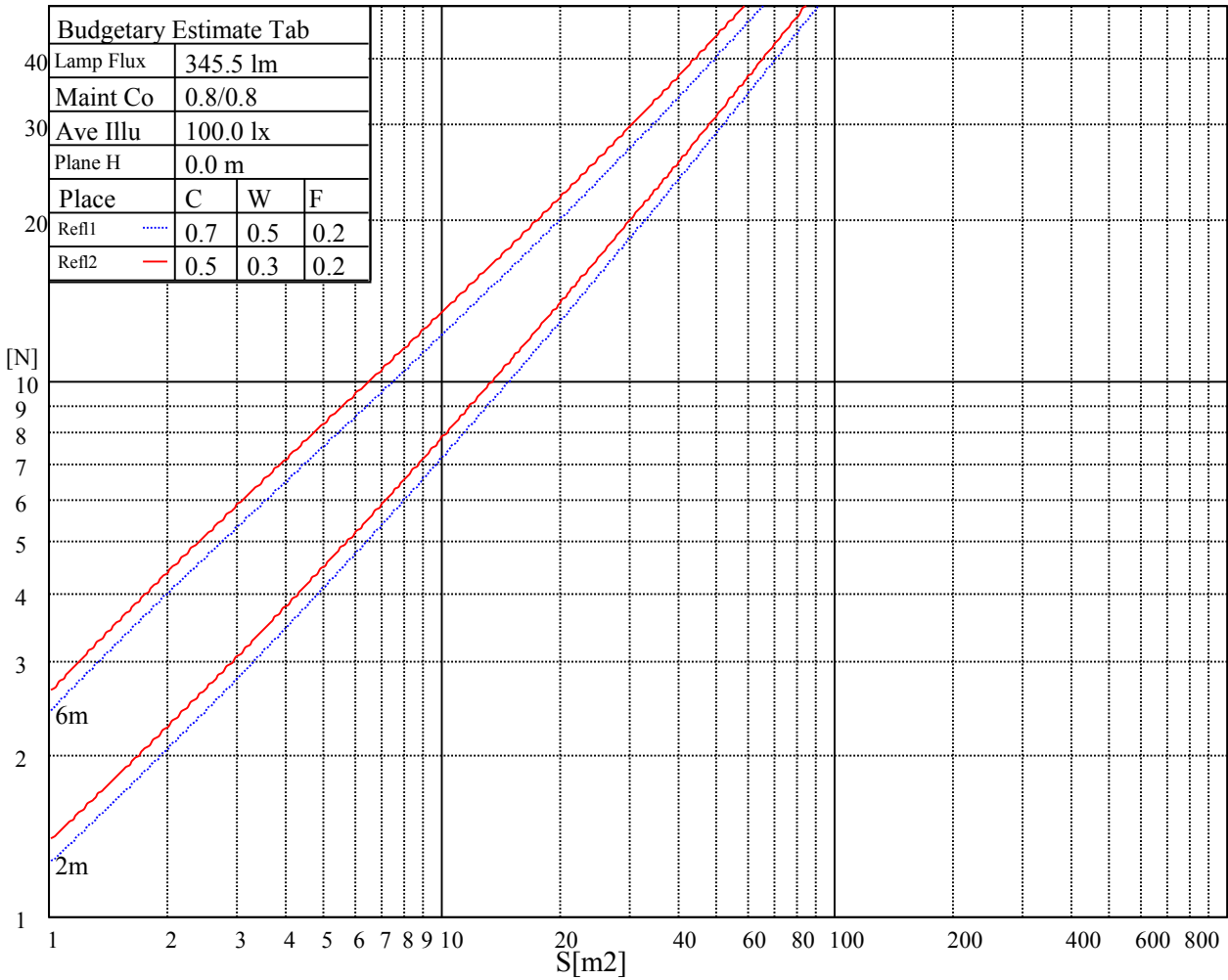
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
964	964	964	956	956	956	1502	1502	1502

Glare Table

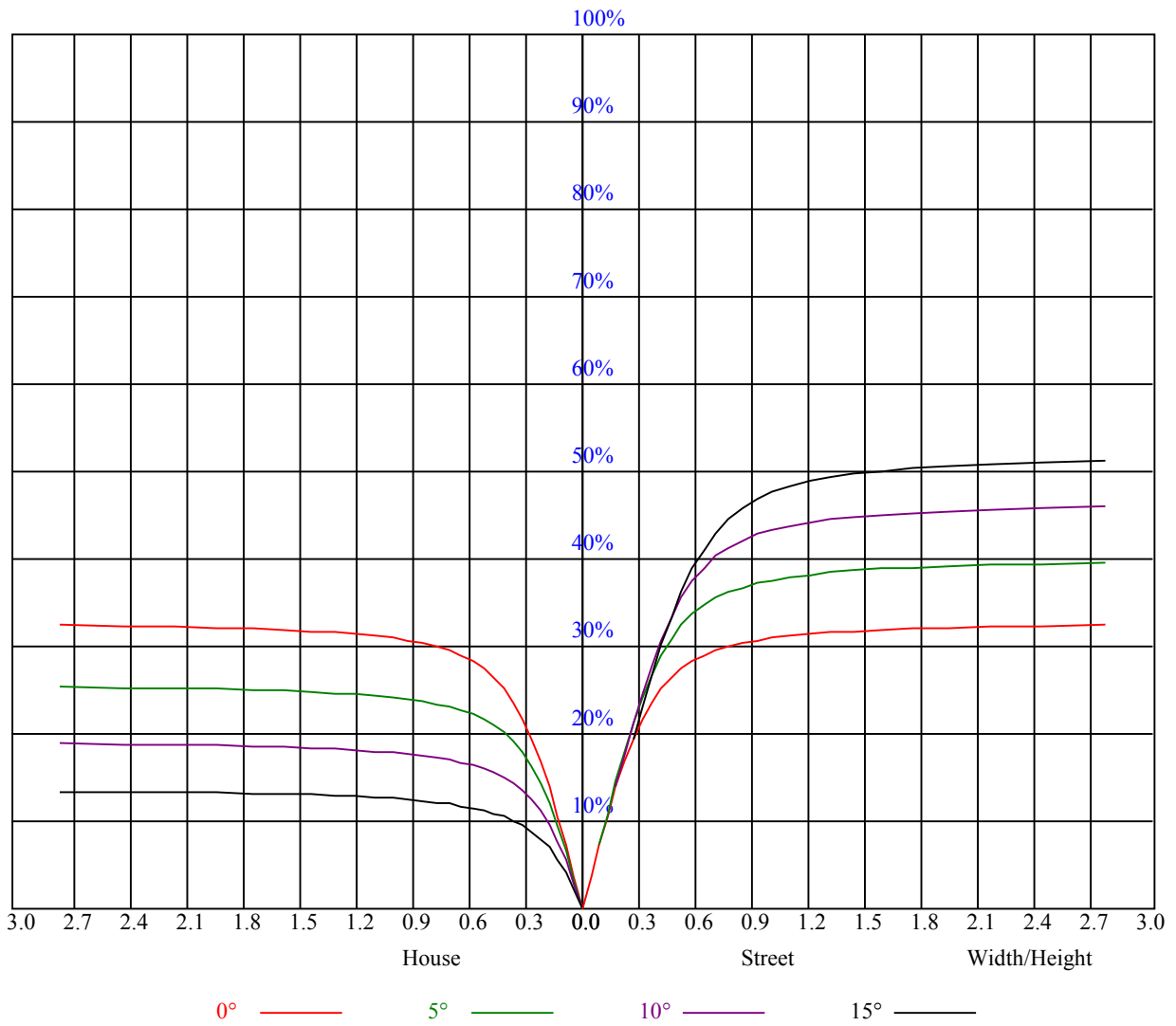
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	0.79	0.79	0.79	0.77	0.77	0.77	0.74	0.74	0.74	0.71	0.71	0.71	0.68	0.68	0.68	0.66
1	0.73	0.71	0.70	0.72	0.70	0.68	0.69	0.68	0.66	0.66	0.65	0.64	0.64	0.63	0.63	0.61
2	0.68	0.65	0.63	0.67	0.64	0.62	0.64	0.62	0.61	0.62	0.61	0.59	0.61	0.59	0.58	0.57
3	0.63	0.60	0.57	0.62	0.59	0.57	0.61	0.58	0.56	0.59	0.57	0.55	0.57	0.56	0.54	0.53
4	0.59	0.56	0.53	0.59	0.55	0.53	0.57	0.54	0.52	0.56	0.53	0.51	0.55	0.52	0.51	0.50
5	0.56	0.52	0.49	0.55	0.52	0.49	0.54	0.51	0.49	0.53	0.50	0.48	0.52	0.50	0.48	0.47
6	0.53	0.49	0.46	0.52	0.49	0.46	0.51	0.48	0.46	0.50	0.48	0.45	0.49	0.47	0.45	0.44
7	0.50	0.46	0.43	0.50	0.46	0.43	0.49	0.45	0.43	0.48	0.45	0.43	0.47	0.45	0.43	0.42
8	0.48	0.44	0.41	0.47	0.44	0.41	0.46	0.43	0.41	0.46	0.43	0.41	0.45	0.42	0.40	0.40
9	0.45	0.42	0.39	0.45	0.41	0.39	0.44	0.41	0.39	0.44	0.41	0.39	0.43	0.41	0.39	0.38
10	0.43	0.40	0.37	0.43	0.39	0.37	0.42	0.39	0.37	0.42	0.39	0.37	0.41	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	421.08	430.28	404.05	338.44	247.80	143.94	81.02	46.13	29.34
45.0	428.13	420.18	374.53	286.52	189.18	116.40	65.25	38.06	24.02
90.0	426.10	394.85	327.39	247.32	159.90	92.14	55.63	33.10	21.27
135.0	424.90	393.83	332.29	254.97	170.30	100.38	58.98	35.02	23.06
180.0	421.08	378.59	315.20	232.56	155.78	91.00	52.64	33.70	22.29
225.0	428.13	401.00	352.24	279.29	195.87	116.52	69.85	40.69	25.75
270.0	426.10	419.64	378.77	312.27	220.19	137.55	79.59	46.19	29.40
315.0	424.90	423.77	385.47	309.52	213.68	125.06	74.27	42.90	26.95
360.0	421.08	430.28	404.05	338.44	247.80	143.94	81.02	46.13	29.34
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	19.60	15.42	11.23	8.96	7.29	6.09	4.84	3.35	3.11
45.0	15.95	11.11	7.83	5.74	4.18	3.17	2.51	1.91	1.14
90.0	13.98	10.04	7.05	5.02	3.76	2.87	2.09	1.55	0.96
135.0	15.18	10.76	8.01	5.80	4.30	3.41	2.63	2.09	1.25
180.0	16.79	13.03	9.98	8.31	6.75	5.62	4.18	9.74	1.49
225.0	17.09	11.83	8.31	6.09	4.36	3.35	2.51	2.81	1.61
270.0	18.88	12.91	8.96	6.51	4.66	3.47	2.63	1.97	1.37
315.0	17.51	12.43	8.84	6.45	4.84	3.76	2.99	2.39	1.97
360.0	19.60	15.42	11.23	8.96	7.29	6.09	4.84	3.35	3.11
C/ γ (°)	90.0								
0.0	0.96								
45.0	0.90								
90.0	0.90								
135.0	0.90								
180.0	1.08								
225.0	0.90								
270.0	0.90								
315.0	0.90								
360.0	0.96								