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Nata

LumCAT: LN01D02836DA-N

Luminaire: 92.70.307.00

Report No: 211117-B005

Test No: 211117-C005

LampCAT: Bridgelux V4HD LES5.2

Lamp flux(lm): 719.0

Number of Lamps: 1

Length(mm): 111

Phm Type: C

Voltage(V): 35.9500

Current(A): 0.1800

Power (W): 6.4710

PF: 0.0000

Ballast type: DC

Width(mm): 111

Height(mm): 0

Photometric Results

Lumens(lm): 473.08

Efficiency(%): 65.79%

Lumens(lm)/Power(W): 73.11

Central intensity(cd): 808.307

Maximum intensity(cd): 808.307

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=40.3

[C90/270]Total=40.3

Field angle(10%Imax): [C0/180]Total=71.1

[C90/270]Total=71.1

Maximum s/h(1/2): C0_180=0.66 C90_270=0.66

Maximum s/h(1/4): C0_180=0.64 C90_270=0.64

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 65.79%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 95.642%

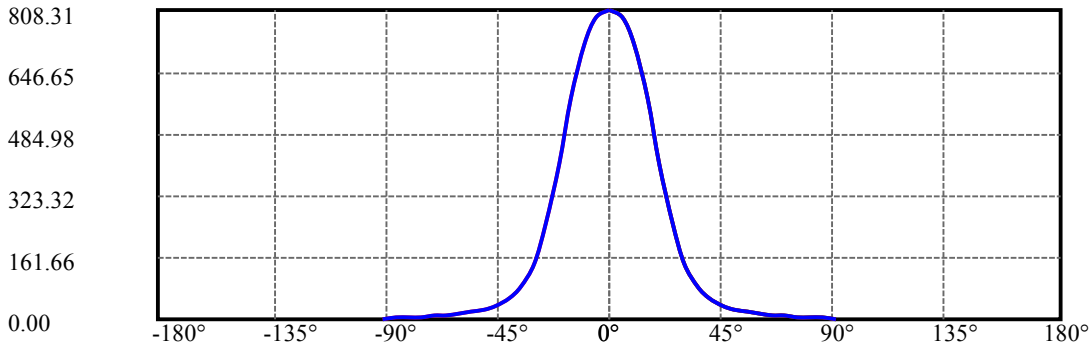
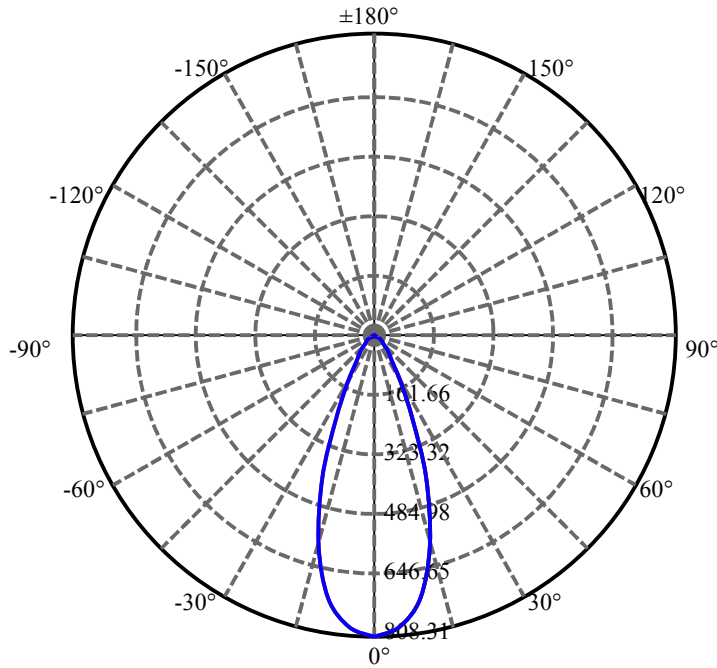
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	808.307	0.000	0	.000%	.000%
5.0	785.990	19.059	19.059	2.651%	4.029%
10.0	716.378	53.744	72.804	7.475%	15.389%
15.0	579.312	76.859	149.663	10.689%	31.636%
20.0	408.172	81.383	231.046	11.319%	48.839%
25.0	249.192	68.945	299.991	9.589%	63.413%
30.0	147.590	50.213	350.204	6.984%	74.027%
35.0	84.446	34.169	384.373	4.752%	81.250%
40.0	52.963	22.926	407.299	3.188%	86.096%
45.0	35.008	16.289	423.587	2.265%	89.539%
50.0	25.066	12.139	435.726	1.688%	92.105%
55.0	18.105	9.387	445.113	1.306%	94.089%
60.0	13.683	7.348	452.461	1.022%	95.642%
65.0	10.263	5.821	458.282	.810%	96.873%
70.0	7.910	4.601	462.884	.640%	97.846%
75.0	6.043	3.647	466.53	.507%	98.617%
80.0	4.937	2.938	469.468	.409%	99.238%
85.0	3.182	2.206	471.674	.307%	99.704%
90.0	1.935	1.401	473.075	.195%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	350.20	48.71%	74.03%
0-40	407.30	56.65%	86.10%
0-60	452.46	62.93%	95.64%
0-90	471.67	65.60%	99.70%
0-120	471.67	65.60%	99.70%
0-180	473.08	65.79%	100.00%
60-90	26.56	3.69%	5.61%
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%
0-34.13	378.46	52.64%	80.00%

ZONAL LUMEN SUMMARY

0-10	72.80
10-20	158.24
20-30	119.16
30-40	57.09
40-50	28.43
50-60	16.73
60-70	10.42
70-80	6.58
80-90	2.21
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



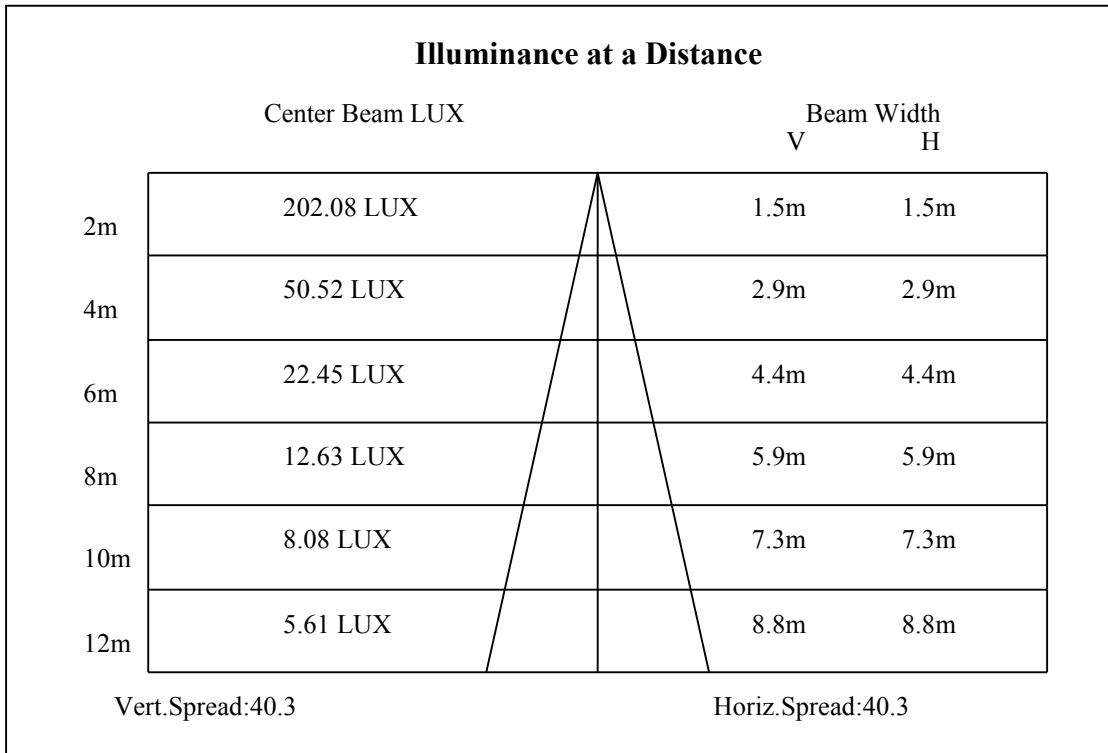
C0(Max): —————

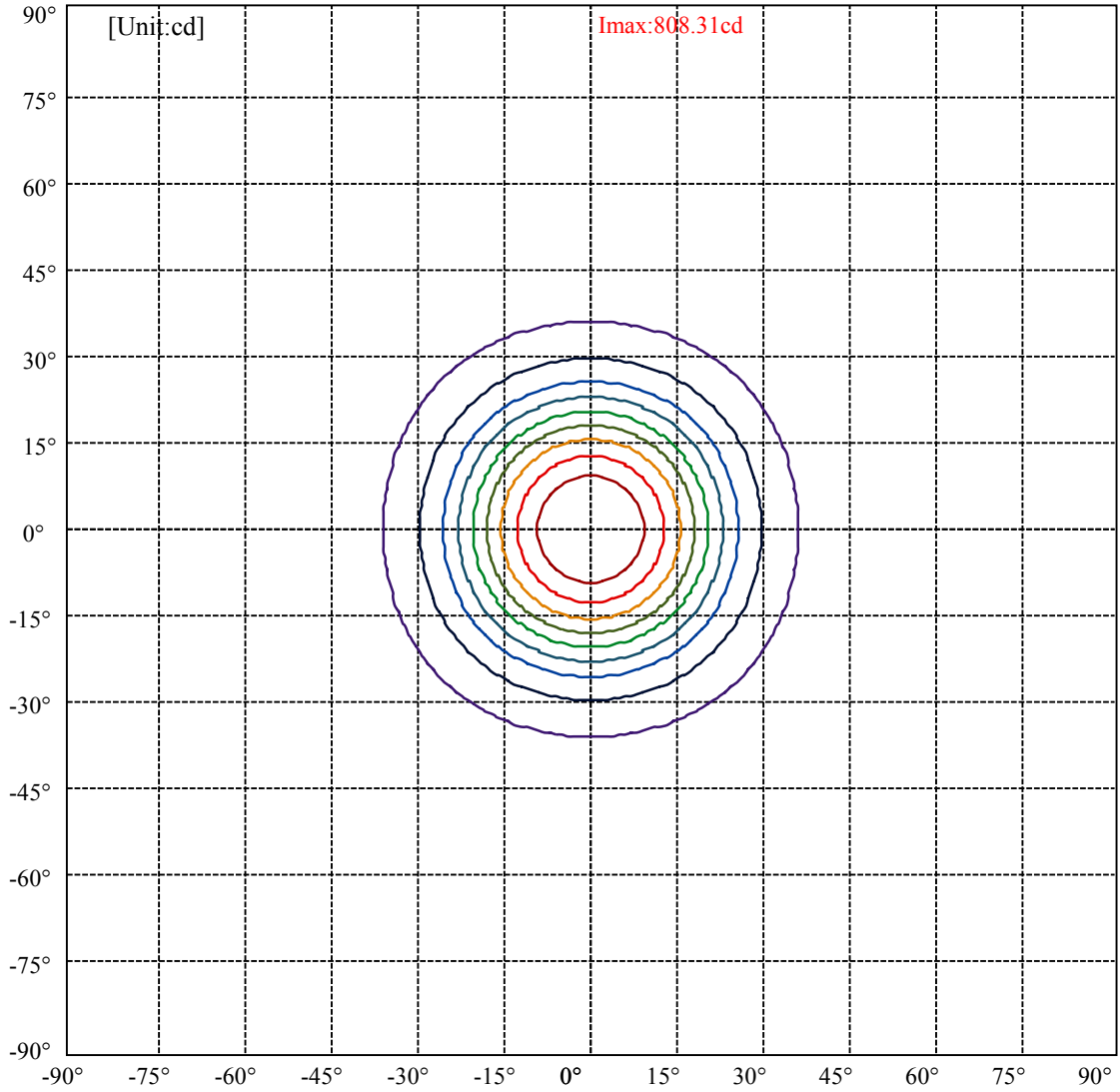
C0/C180: —————

C90/C270: —————

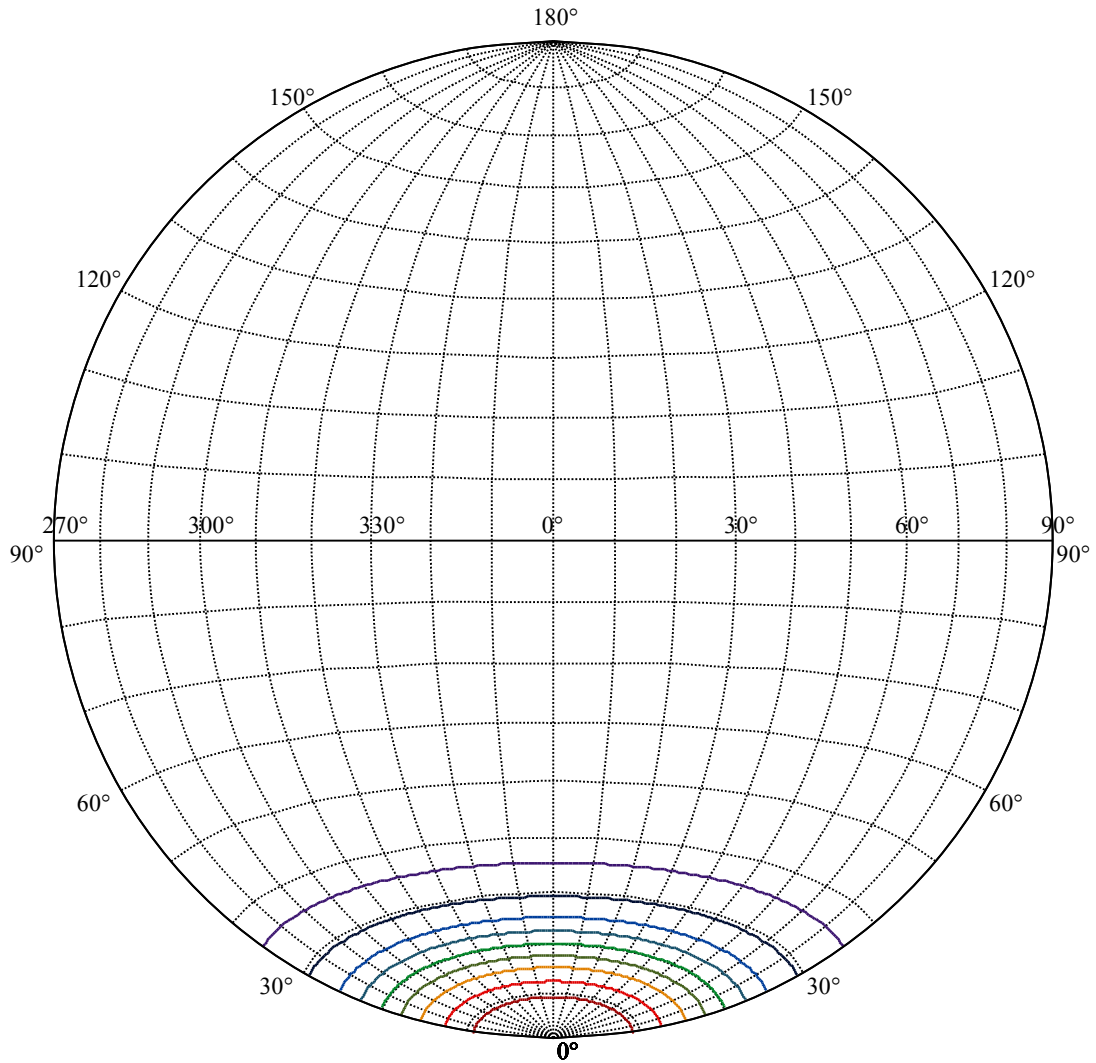
Field angle(10%Imax):C0/180Left:35.6 Right:35.6
:C90/270Left:35.6 Right:35.6

Beam Angle(50%Imax):C0/180Left:20.1 Right:20.1
:C90/270Left:20.1 Right:20.1





(10%I _{max})	80.8307	—
(20%I _{max})	161.661	—
(30%I _{max})	242.492	—
(40%I _{max})	323.323	—
(50%I _{max})	404.154	—
(60%I _{max})	484.984	—
(70%I _{max})	565.815	—
(80%I _{max})	646.646	—
(90%I _{max})	727.477	—



House

[Unit:cd]

Road

Imax:808.31

(10%Imax) 80.8307

(20%Imax) 161.661

(30%Imax) 242.492

(40%Imax) 323.323

(50%Imax) 404.154

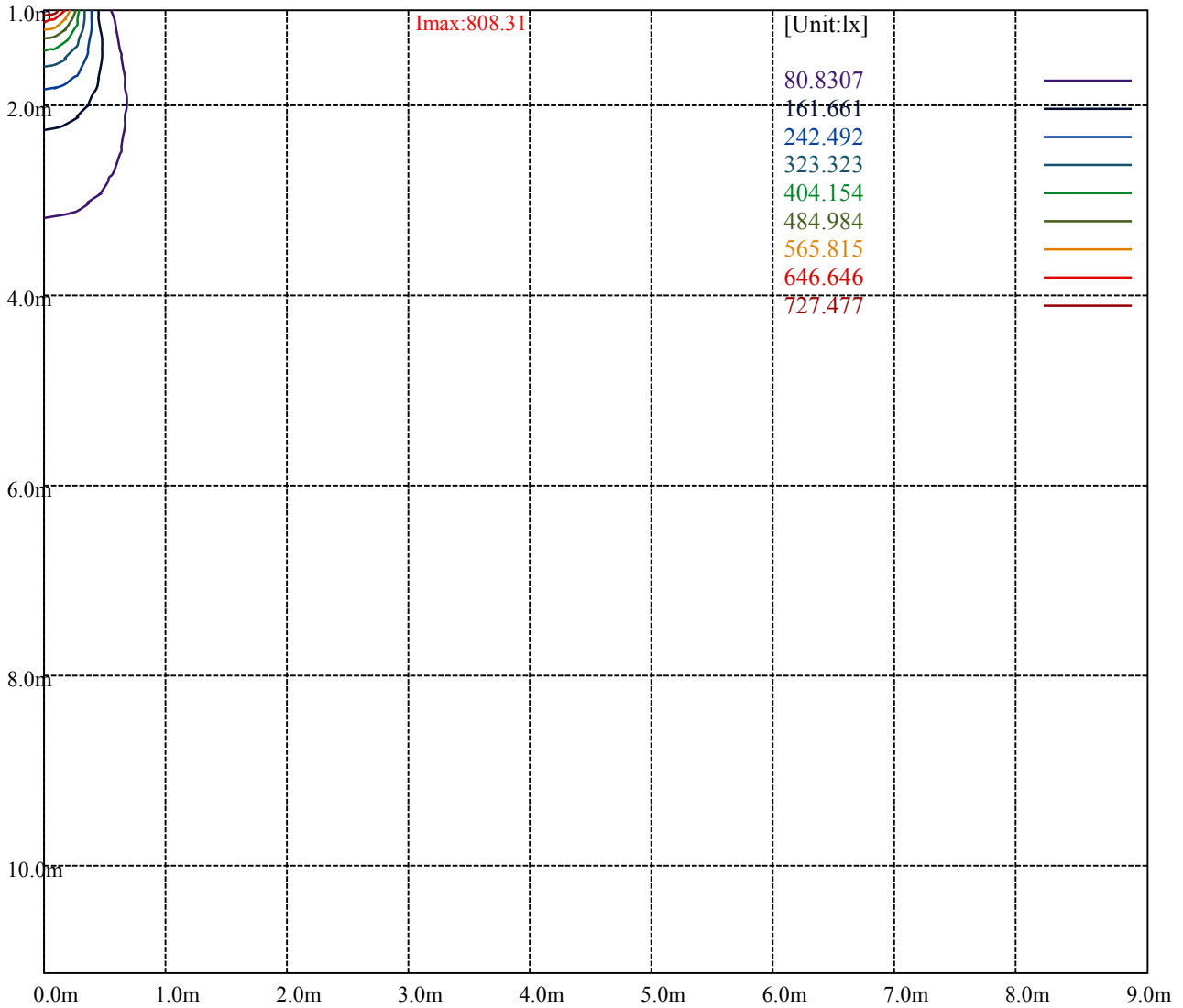
(60%Imax) 484.984

(70%Imax) 565.815

(80%Imax) 646.646

(90%Imax) 727.477





Luminance Table

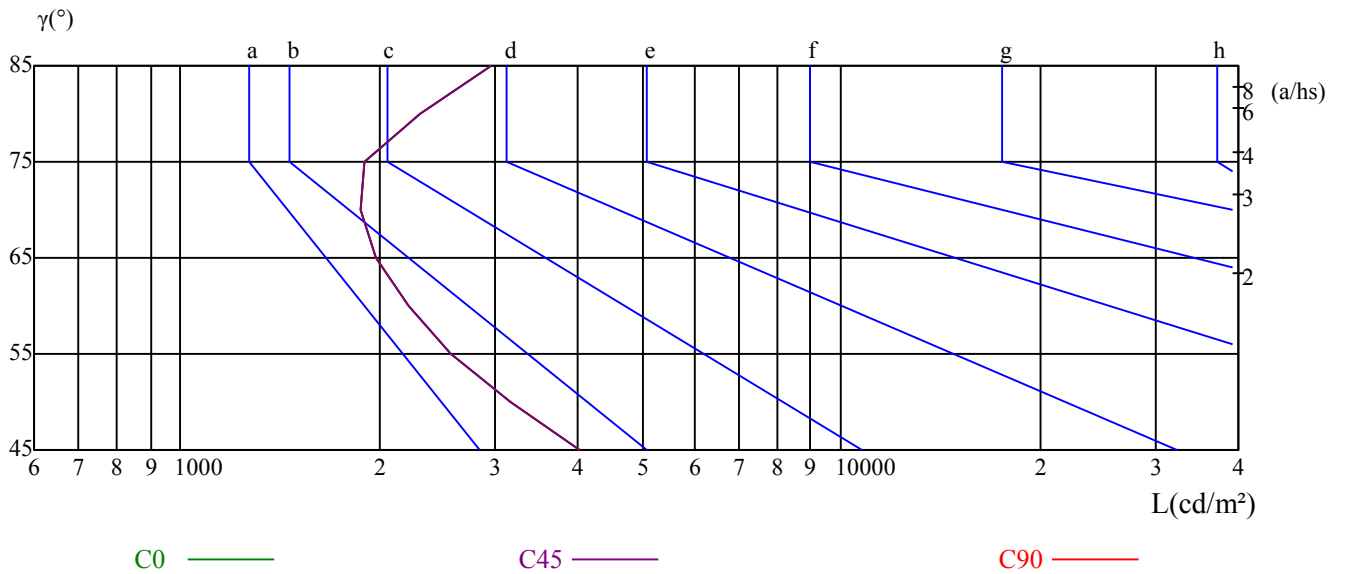
γ	45	50	55	60	65	70	75	80	85
C0	4018	3165	2562	2221	1971	1877	1895	2308	2963
C45	4018	3165	2562	2221	1971	1877	1895	2308	2963
C90	4018	3165	2562	2221	1971	1877	1895	2308	2963

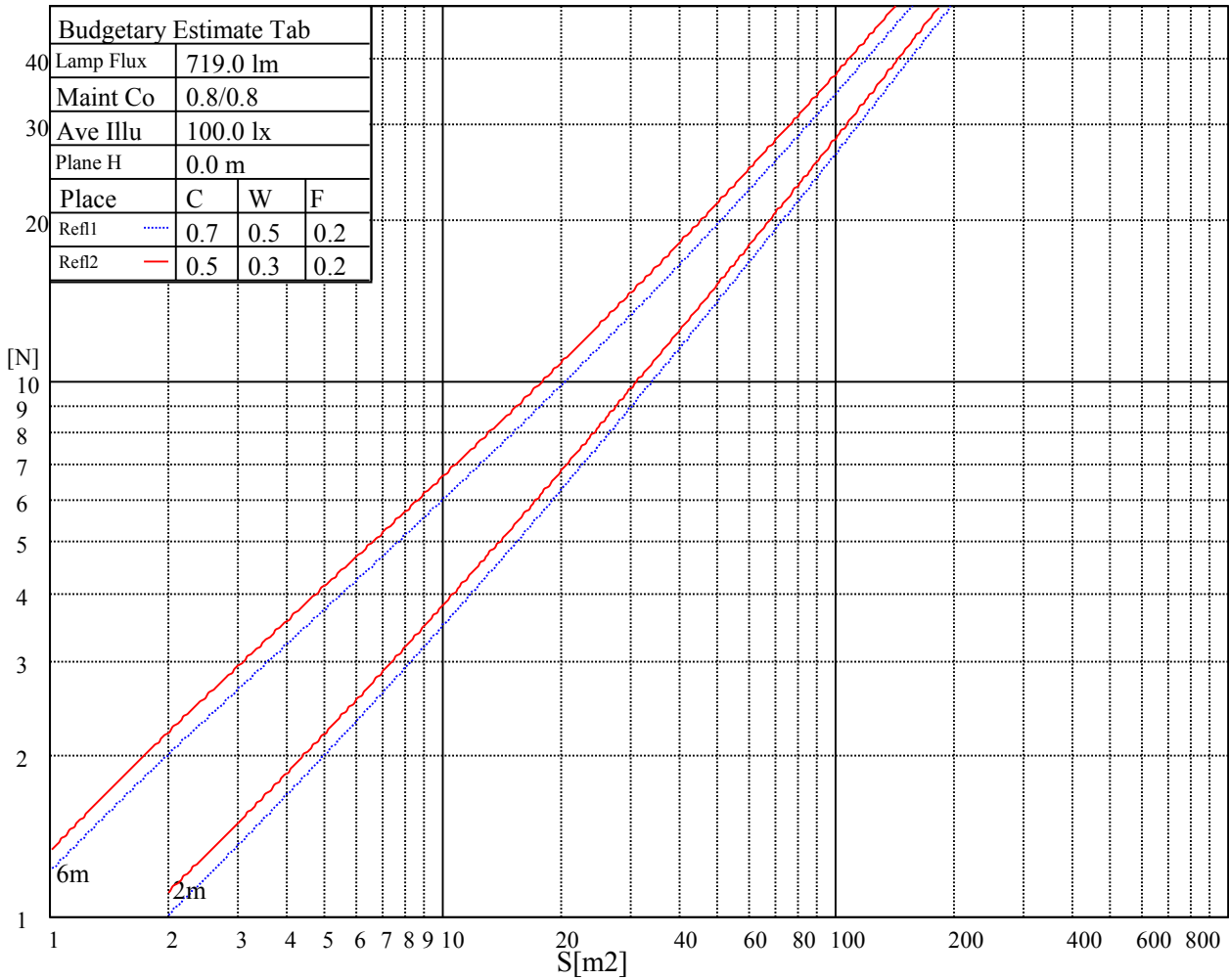
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
1971	1971	1971	1895	1895	1895	2963	2963	2963

Glare Table

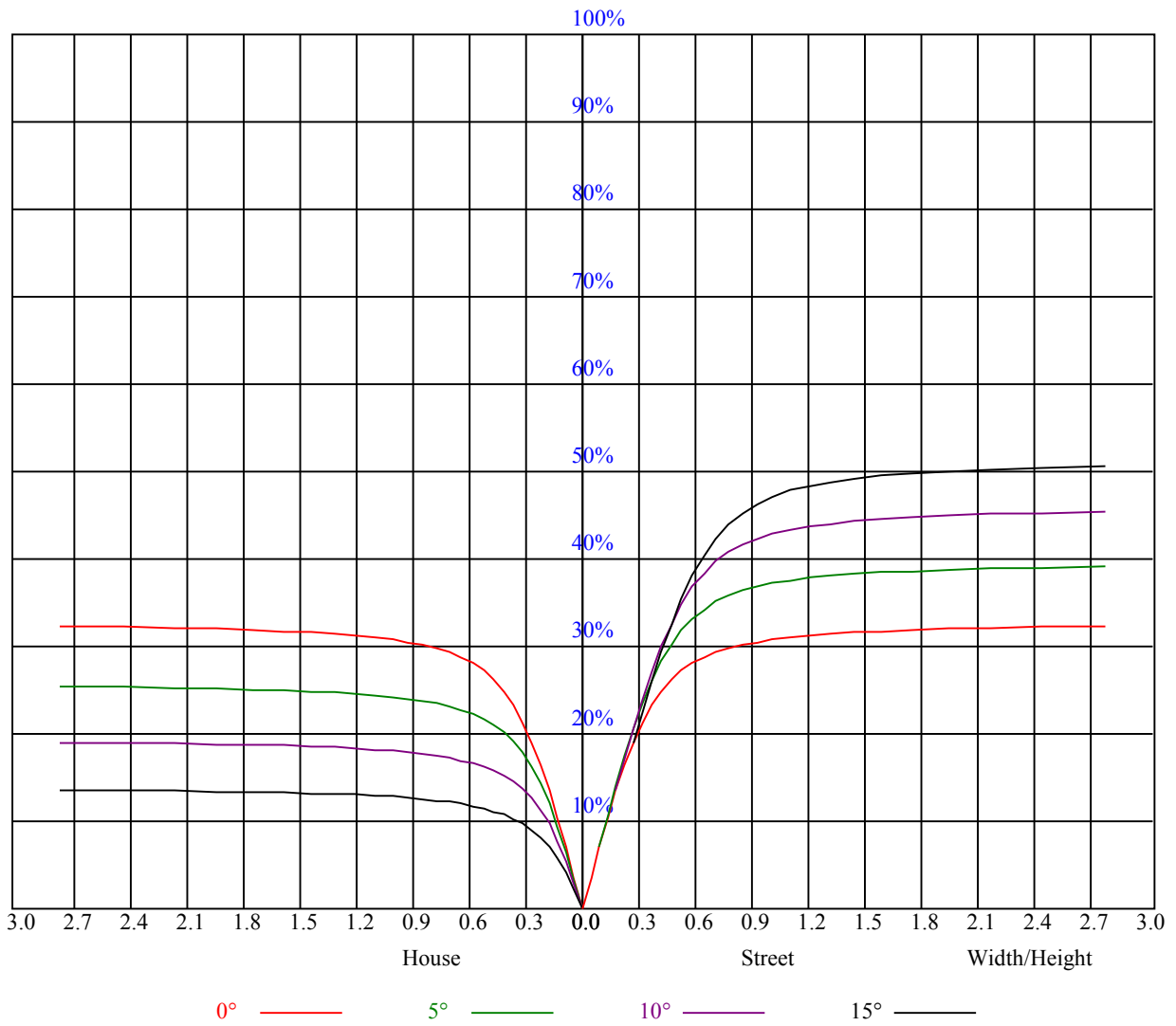
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	0.78	0.78	0.78	0.77	0.77	0.77	0.73	0.73	0.73	0.70	0.70	0.70	0.67	0.67	0.67	0.66
1	0.72	0.71	0.69	0.71	0.69	0.68	0.68	0.67	0.66	0.66	0.65	0.64	0.64	0.63	0.62	0.61
2	0.67	0.64	0.62	0.66	0.64	0.61	0.64	0.62	0.60	0.62	0.60	0.59	0.60	0.59	0.58	0.56
3	0.63	0.59	0.57	0.62	0.59	0.56	0.60	0.57	0.55	0.58	0.56	0.54	0.57	0.55	0.54	0.53
4	0.59	0.55	0.52	0.58	0.55	0.52	0.57	0.54	0.51	0.55	0.53	0.51	0.54	0.52	0.50	0.49
5	0.55	0.51	0.49	0.55	0.51	0.48	0.54	0.50	0.48	0.52	0.50	0.48	0.51	0.49	0.47	0.46
6	0.52	0.48	0.46	0.52	0.48	0.45	0.51	0.47	0.45	0.50	0.47	0.45	0.49	0.46	0.44	0.44
7	0.49	0.46	0.43	0.49	0.45	0.43	0.48	0.45	0.43	0.47	0.44	0.42	0.47	0.44	0.42	0.41
8	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
9	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
10	0.43	0.39	0.36	0.42	0.39	0.36	0.42	0.39	0.36	0.41	0.38	0.36	0.41	0.38	0.36	0.35



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	812.10	777.62	720.02	610.85	458.96	299.72	177.23	101.76	62.38
45.0	809.95	756.11	668.10	539.69	384.51	238.35	146.51	85.09	53.12
90.0	802.90	744.76	641.87	489.56	331.87	205.55	122.08	71.94	46.73
135.0	808.28	778.52	697.26	538.55	362.34	213.02	128.53	74.81	47.20
180.0	812.10	802.36	719.25	546.62	356.07	197.18	120.34	70.09	45.11
225.0	809.95	820.11	770.39	628.36	436.61	261.48	148.07	81.14	52.94
270.0	802.90	815.33	775.00	664.45	487.64	298.05	175.08	98.53	59.63
315.0	808.28	793.10	739.14	616.41	447.37	280.18	162.89	92.20	56.59
360.0	812.10	777.62	720.02	610.85	458.96	299.72	177.23	101.76	62.38
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	41.35	32.57	24.80	19.54	15.66	12.19	9.86	7.29	5.92
45.0	33.88	23.90	16.73	12.07	8.84	6.69	5.02	3.88	2.51
90.0	30.29	21.09	14.70	10.70	7.65	5.74	4.30	3.17	2.09
135.0	31.31	21.93	15.60	11.77	8.60	6.69	5.20	4.18	2.57
180.0	33.94	26.29	20.20	16.97	13.32	10.70	7.71	8.48	3.23
225.0	33.88	23.36	16.85	12.19	8.90	6.81	5.26	4.00	3.05
270.0	38.60	26.11	18.11	12.97	9.44	7.05	5.20	4.00	2.63
315.0	36.81	25.28	17.87	13.27	9.68	7.41	5.80	4.48	3.47
360.0	41.35	32.57	24.80	19.54	15.66	12.19	9.86	7.29	5.92
C/γ(°)	90.0								
0.0	2.03								
45.0	1.85								
90.0	1.85								
135.0	1.85								
180.0	2.27								
225.0	1.85								
270.0	1.85								
315.0	1.91								
360.0	2.03								