



NATA LIGHTING CO.,LTD.
www.nata.cn
Email:info@nata.com
Tel:+86-750-3770000 Fax:+86-750-3771111
Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

Nata

LumCAT: LN01D3536EE	
Luminaire: 92.70.308.00	
Report No: 210514-B006	Voltage(V): 220.7000
Test No: 210514-C006	Current(A): 0.0770
LampCAT: Bridgelux V4HD LES5.2	Power (W): 8.6000
Lamp flux(lm): 668.0	PF: 0.5050
Number of Lamps: 1	Ballast type: DC
Length(mm): 74	Width(mm): 74
Phm Type: C	Height(mm): 56

Photometric Results

Lumens(lm): 448.91
Efficiency(%): 67.20%
Lumens(lm)/Power(W): 52.20
Central intensity(cd): 802.336
Maximum intensity(cd): 802.336
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=39.0
 [C90/270]Total=39.0
Field angle(10%Imax): [C0/180]Total=68.1
 [C90/270]Total=68.1
Maximum s/h(1/2): C0_180=0.64 C90_270=0.64
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(%): 67.20%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 93.526%

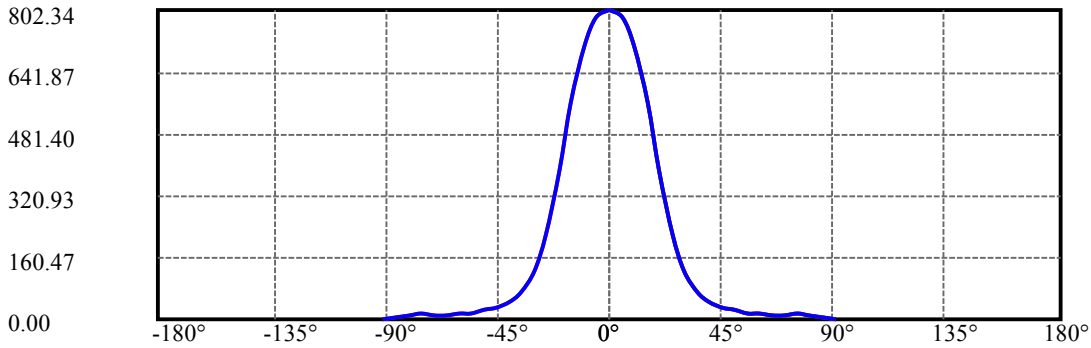
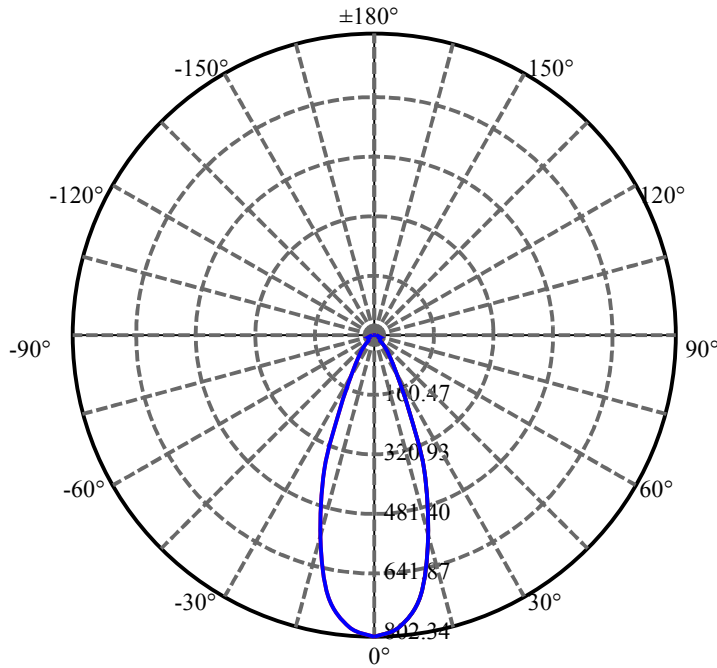
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	802.336	0.000	0	.000%	.000%
5.0	780.778	18.926	18.926	2.833%	4.216%
10.0	705.691	53.176	72.101	7.960%	16.061%
15.0	561.691	75.180	147.282	11.255%	32.809%
20.0	382.852	77.844	225.125	11.653%	50.149%
25.0	219.839	63.211	288.336	9.463%	64.230%
30.0	122.238	43.290	331.627	6.481%	73.874%
35.0	70.453	28.375	360.002	4.248%	80.194%
40.0	45.183	19.293	379.295	2.888%	84.492%
45.0	30.445	14.003	393.298	2.096%	87.612%
50.0	22.556	10.710	404.008	1.603%	89.997%
55.0	17.227	8.650	412.658	1.295%	91.924%
60.0	13.887	7.192	419.849	1.077%	93.526%
65.0	11.454	6.160	426.01	.922%	94.899%
70.0	11.524	5.818	431.828	.871%	96.195%
75.0	14.126	6.704	438.533	1.004%	97.688%
80.0	7.538	5.796	444.329	.868%	98.979%
85.0	3.593	3.024	447.353	.453%	99.653%
90.0	2.095	1.557	448.911	.233%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	331.63	49.64%	73.87%
0-40	379.29	56.78%	84.49%
0-60	419.85	62.85%	93.53%
0-90	447.35	66.97%	99.65%
0-120	447.35	66.97%	99.65%
0-180	448.91	67.20%	100.00%
60-90	34.70	5.19%	7.73%
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%
0-34.85	359.13	53.76%	80.00%

ZONAL LUMEN SUMMARY

0-10	72.10
10-20	153.02
20-30	106.50
30-40	47.67
40-50	24.71
50-60	15.84
60-70	11.98
70-80	12.50
80-90	3.02
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: —————

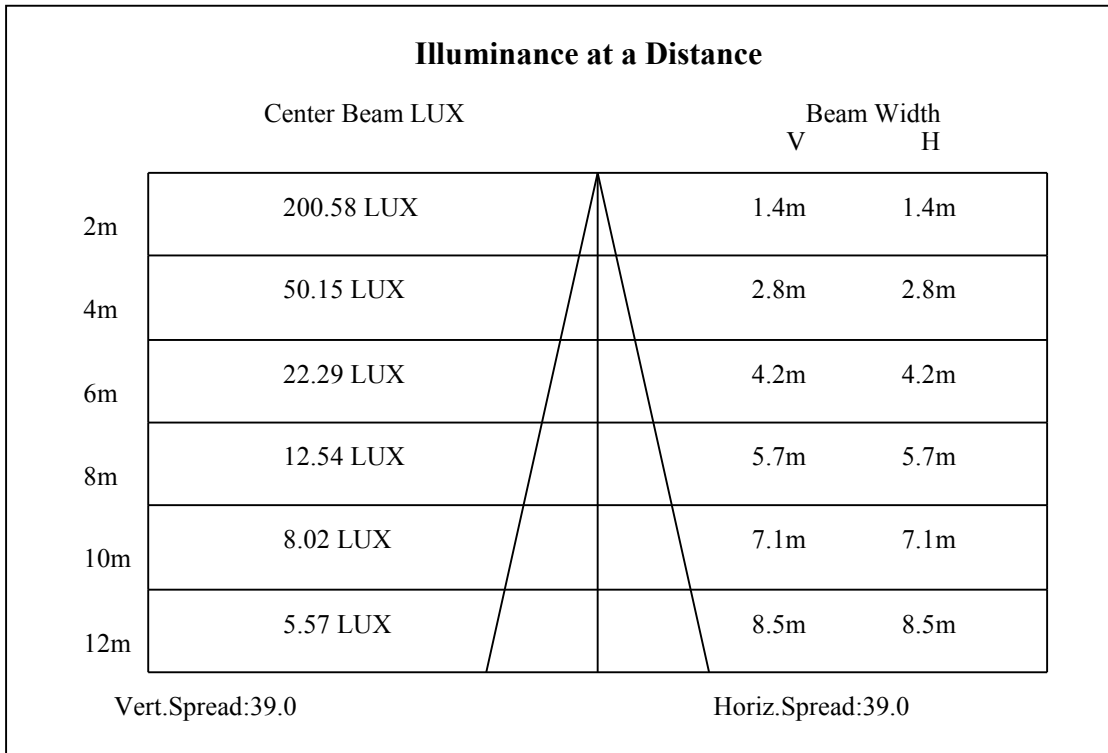
C90/C270: —————

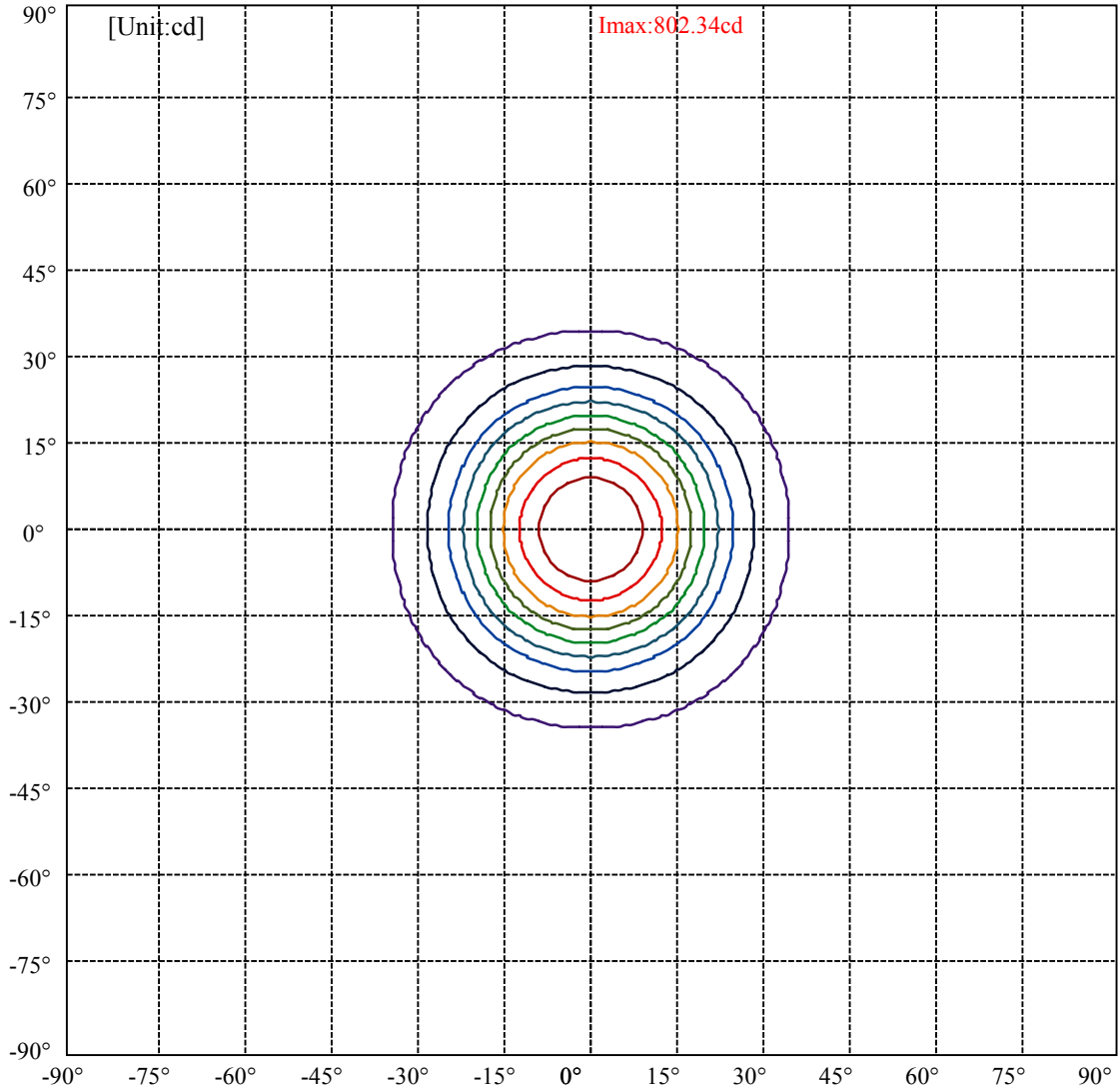
Field angle(10%Imax):C0/180Left:34.1 Right:34.1

:C90/270Left:34.1 Right:34.1

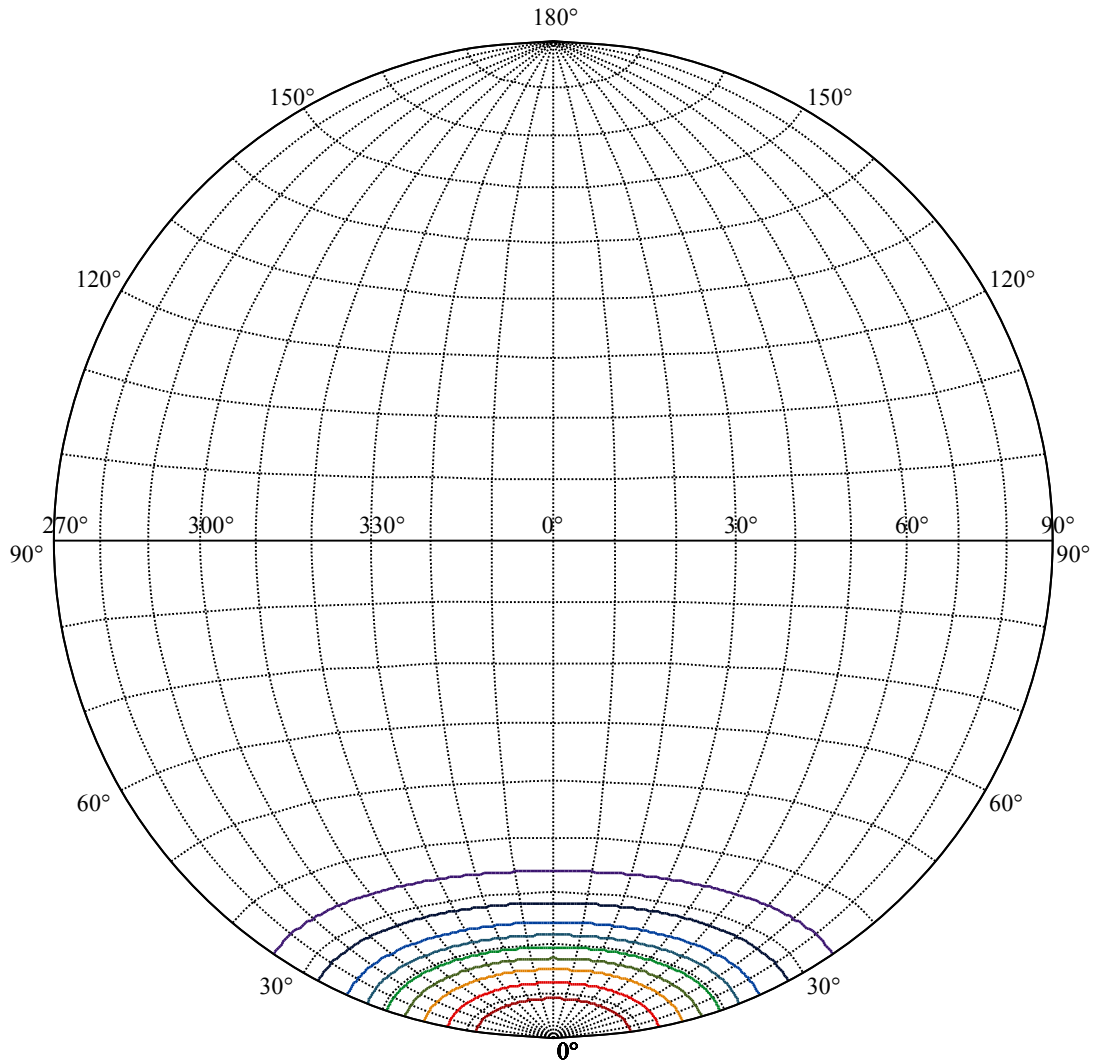
Beam Angle(50%Imax):C0/180Left:19.5 Right:19.5

:C90/270Left:19.5 Right:19.5





(10%Imax) 80.2336	—
(20%Imax) 160.467	—
(30%Imax) 240.701	—
(40%Imax) 320.934	—
(50%Imax) 401.168	—
(60%Imax) 481.402	—
(70%Imax) 561.635	—
(80%Imax) 641.869	—
(90%Imax) 722.102	—



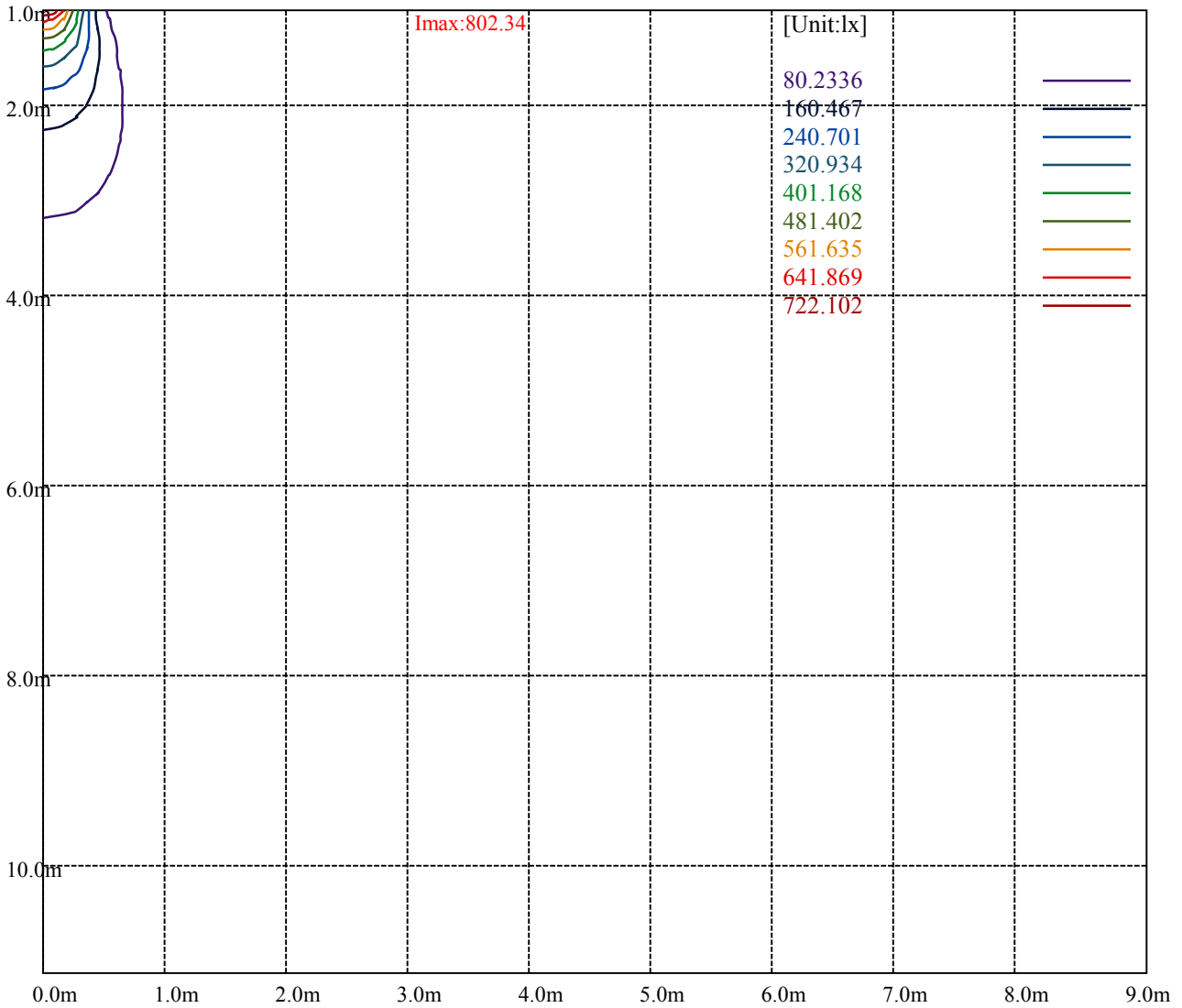
House

[Unit:cd]

Road

Imax:802.34

(10%Imax) 80.2336	—
(20%Imax) 160.467	—
(30%Imax) 240.701	—
(40%Imax) 320.934	—
(50%Imax) 401.168	—
(60%Imax) 481.402	—
(70%Imax) 561.635	—
(80%Imax) 641.869	—
(90%Imax) 722.102	—



Luminance Table

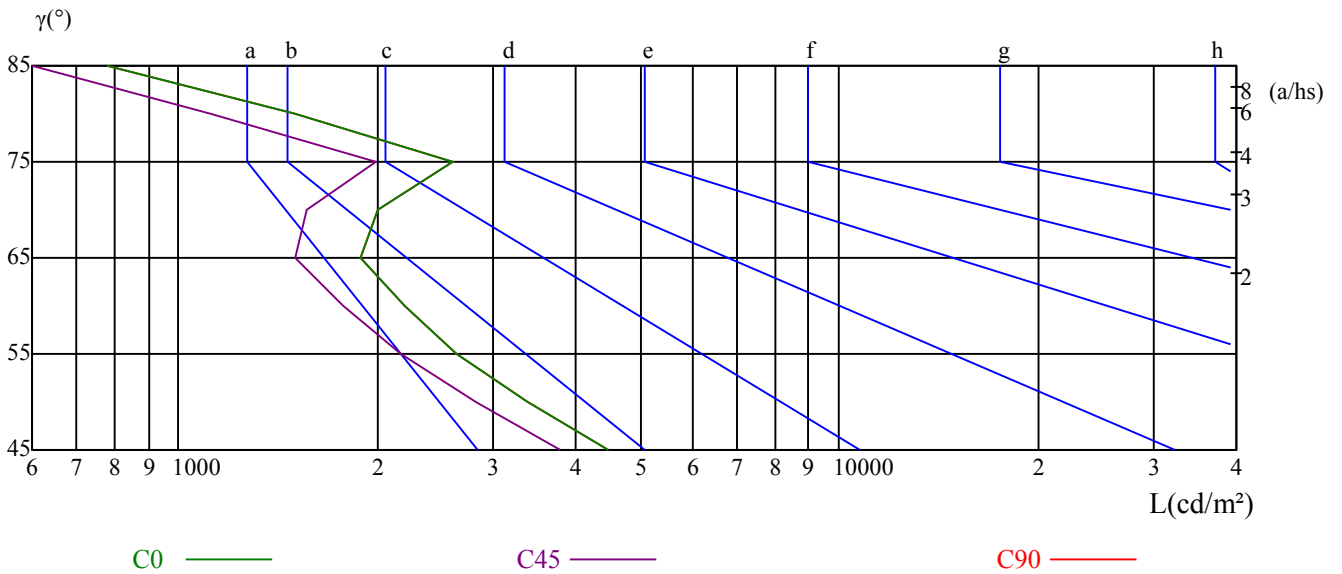
γ	45	50	55	60	65	70	75	80	85
C0	4476	3369	2636	2195	1887	1998	2606	1498	780
C45	3798	2816	2169	1777	1502	1562	1996	1121	569
C90	4476	3369	2636	2195	1887	1998	2606	1498	780

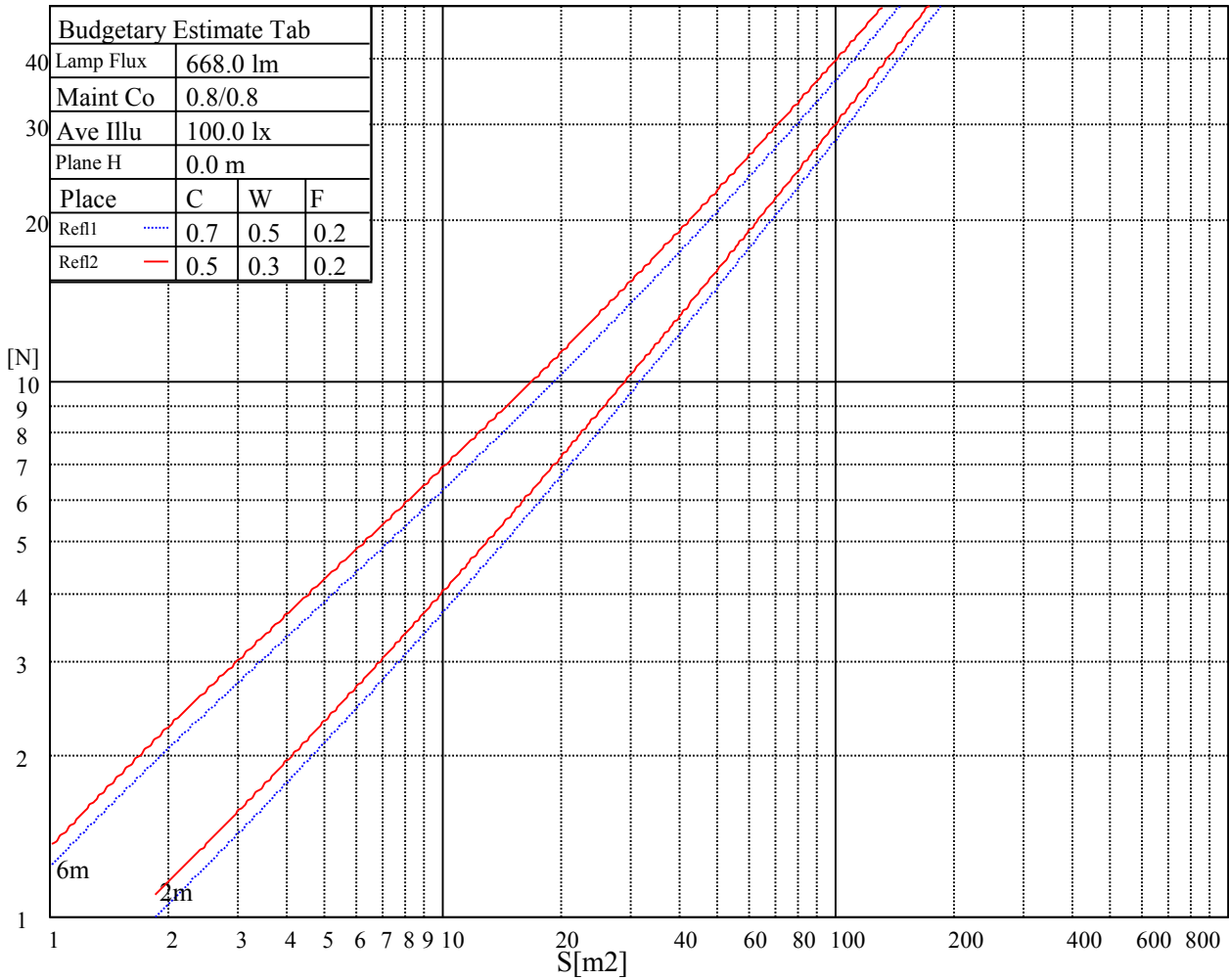
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
4949	4949	4949	9967	9967	9967	7528	7528	7528

Glare Table

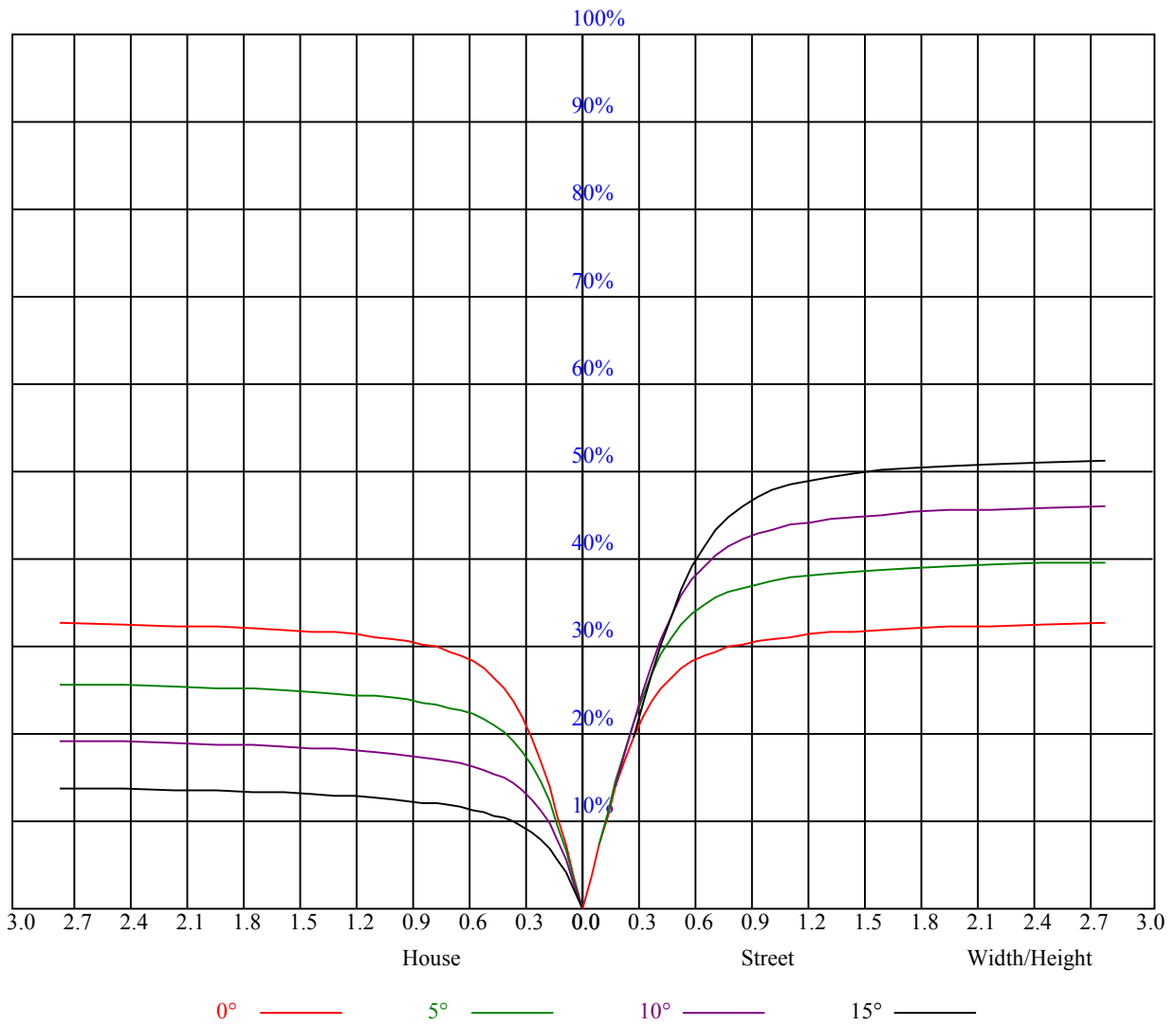
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	0.80	0.80	0.80	0.78	0.78	0.78	0.75	0.75	0.75	0.71	0.71	0.71	0.69	0.69	0.69	0.67
1	0.74	0.72	0.70	0.72	0.70	0.69	0.69	0.68	0.67	0.67	0.66	0.65	0.65	0.64	0.63	0.62
2	0.68	0.65	0.63	0.67	0.64	0.62	0.65	0.63	0.61	0.63	0.61	0.59	0.61	0.59	0.58	0.57
3	0.64	0.60	0.57	0.63	0.59	0.57	0.61	0.58	0.56	0.59	0.57	0.55	0.58	0.56	0.54	0.53
4	0.60	0.56	0.53	0.59	0.55	0.52	0.57	0.54	0.52	0.56	0.53	0.51	0.55	0.53	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	0.51	0.48	0.45	0.50	0.47	0.45	0.44
7	0.50	0.46	0.43	0.50	0.46	0.43	0.49	0.46	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	0.47	0.43	0.41	0.46	0.43	0.41	0.45	0.43	0.41	0.40
9	0.46	0.42	0.39	0.45	0.42	0.39	0.45	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	0.40	0.37	0.43	0.39	0.37	0.42	0.39	0.37	0.42	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	794.70	783.79	729.06	611.27	454.05	277.76	156.32	89.83	55.01
45.0	805.73	783.79	715.95	586.86	398.31	239.40	133.14	75.32	49.67
90.0	804.66	780.36	701.10	556.14	368.72	207.68	118.29	67.16	43.14
135.0	804.26	788.57	715.67	558.06	375.64	210.15	116.44	68.12	43.99
180.0	794.70	761.74	656.83	478.58	306.17	166.84	93.09	56.64	37.52
225.0	805.73	777.88	698.12	551.08	364.73	203.23	115.82	65.25	41.91
270.0	804.66	789.30	723.21	593.49	410.68	236.64	128.93	71.94	46.07
315.0	804.26	780.81	705.60	558.06	384.53	217.01	115.88	69.36	44.16
360.0	794.70	783.79	729.06	611.27	454.05	277.76	156.32	89.83	55.01
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	36.11	26.21	19.58	15.69	13.16	10.63	8.61	6.53	4.50
45.0	32.51	23.96	18.06	14.63	11.87	9.79	7.76	5.68	3.77
90.0	28.80	22.11	16.88	13.61	11.53	18.17	32.46	22.16	3.38
135.0	29.87	22.11	16.93	13.50	10.91	9.17	7.09	5.18	3.26
180.0	26.16	19.69	15.64	13.22	10.63	8.83	7.14	4.78	2.98
225.0	29.19	21.49	16.26	13.11	10.80	8.94	6.92	5.18	3.54
270.0	30.88	22.50	17.49	13.84	11.59	17.38	35.72	5.40	3.49
315.0	30.04	22.39	16.99	13.50	11.14	9.28	7.31	5.40	3.83
360.0	36.11	26.21	19.58	15.69	13.16	10.63	8.61	6.53	4.50
C/γ(°)	90.0								
0.0	2.70								
45.0	2.03								
90.0	1.86								
135.0	2.14								
180.0	2.03								
225.0	2.14								
270.0	1.86								
315.0	2.03								
360.0	2.70								