



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: LN01D05060DA-N

Luminaire: 97.70.234.00

Report No: 210623-B012

Test No: 210623-C012

LampCAT: Fortimo LED SLM 1201 G7N

Lamp flux(lm): 1187.6

Number of Lamps: 1

Length(mm): 570

Phm Type: C

Voltage(V): 39.5300

Current(A): 0.2520

Power (W): 9.9610

PF: 0.0000

Ballast type: DC

Width(mm): 45

Height(mm): 20

Photometric Results

Lumens(lm): 1041.47

Efficiency(%): 87.70%

Lumens(lm)/Power(W): 104.55

Central intensity(cd): 1138.078

Maximum intensity(cd): 1138.078

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=55.4

[C90/270]Total=55.4

Field angle(10%Imax): [C0/180]Total=88.9

[C90/270]Total=88.9

Maximum s/h(1/2): C0_180=0.84 C90_270=0.84

Maximum s/h(1/4): C0_180=0.86 C90_270=0.86

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 87.70%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 96.227%

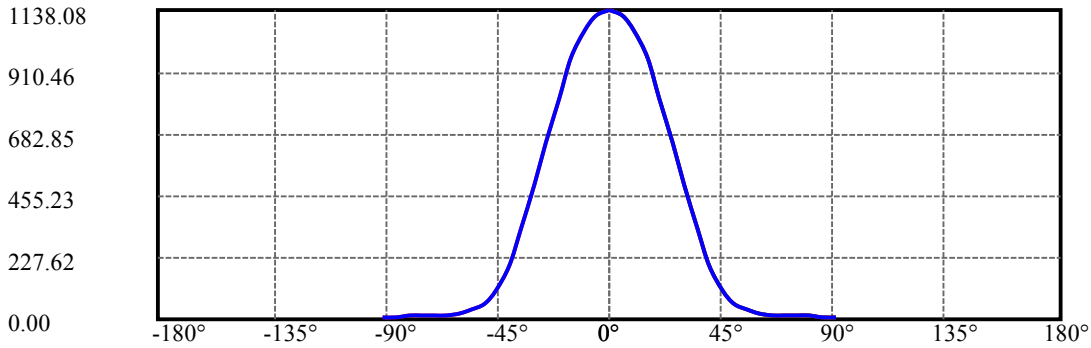
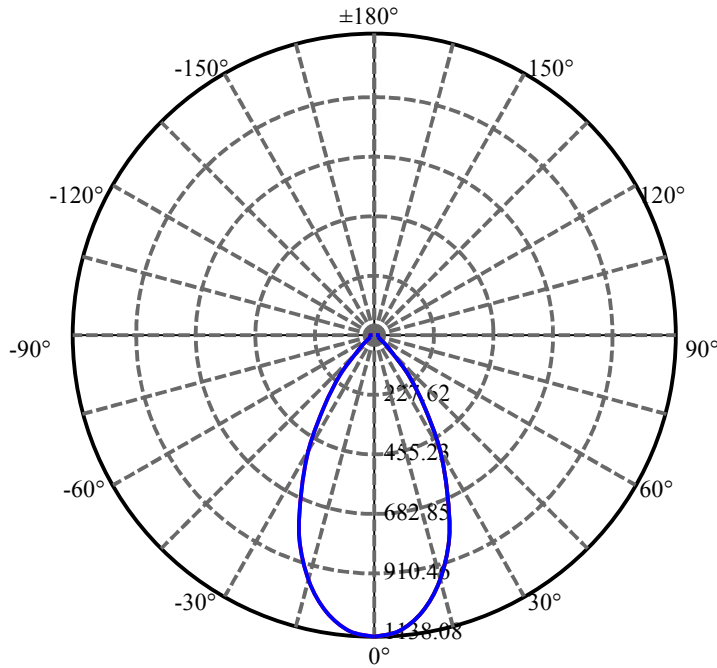
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1138.078	0.000	0	.000%	.000%
5.0	1119.502	26.989	26.989	2.273%	2.591%
10.0	1062.998	78.075	105.064	6.574%	10.088%
15.0	958.008	119.885	224.948	10.095%	21.599%
20.0	816.159	146.216	371.165	12.312%	35.639%
25.0	653.034	154.091	525.256	12.975%	50.434%
30.0	497.925	145.655	670.911	12.265%	64.420%
35.0	330.666	122.016	792.927	10.274%	76.136%
40.0	198.056	88.213	881.14	7.428%	84.606%
45.0	102.881	55.721	936.861	4.692%	89.956%
50.0	57.966	32.501	969.362	2.737%	93.077%
55.0	33.687	19.928	989.291	1.678%	94.990%
60.0	22.029	12.879	1002.169	1.084%	96.227%
65.0	15.595	9.147	1011.316	.770%	97.105%
70.0	14.309	7.572	1018.888	.638%	97.832%
75.0	15.026	7.668	1026.555	.646%	98.568%
80.0	12.403	7.339	1033.894	.618%	99.273%
85.0	5.611	4.895	1038.789	.412%	99.743%
90.0	4.170	2.678	1041.467	.225%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	670.91	56.49%	64.42%
0-40	881.14	74.20%	84.61%
0-60	1002.17	84.39%	96.23%
0-90	1038.79	87.47%	99.74%
0-120	1038.79	87.47%	99.74%
0-180	1041.47	87.70%	100.00%
60-90	49.50	4.17%	4.75%
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%
0-37.28	833.17	70.16%	80.00%

ZONAL LUMEN SUMMARY

0-10	105.06
10-20	266.10
20-30	299.75
30-40	210.23
40-50	88.22
50-60	32.81
60-70	16.72
70-80	15.01
80-90	4.89
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



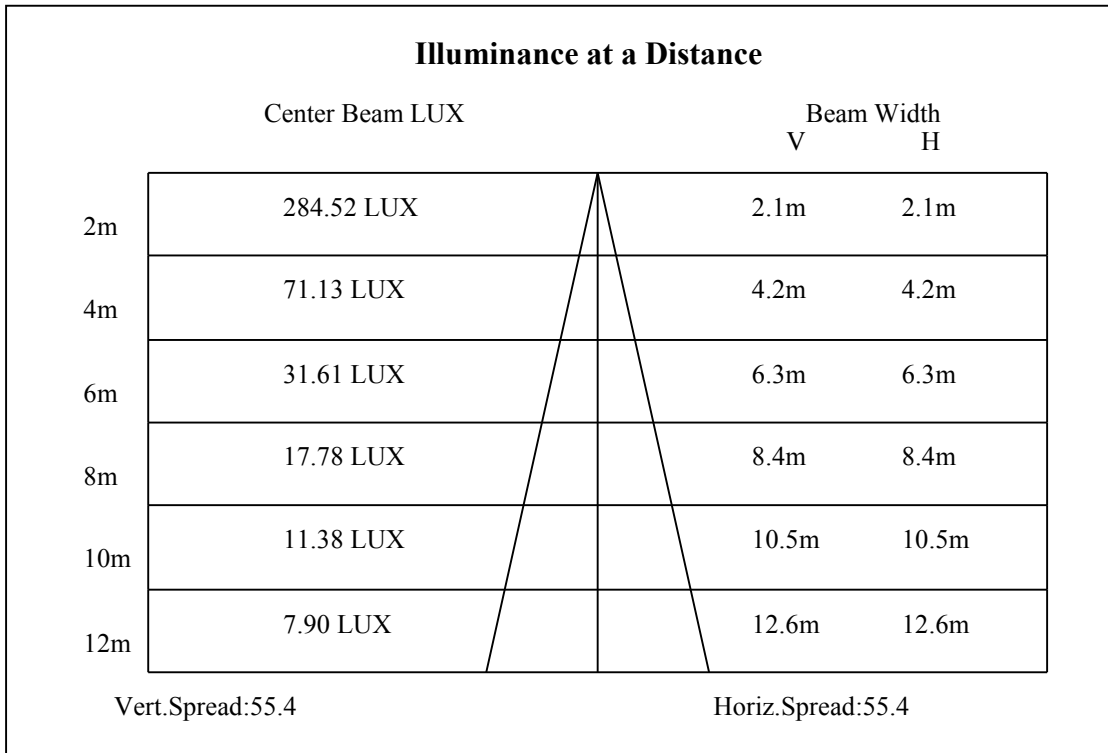
C0(Max): —————

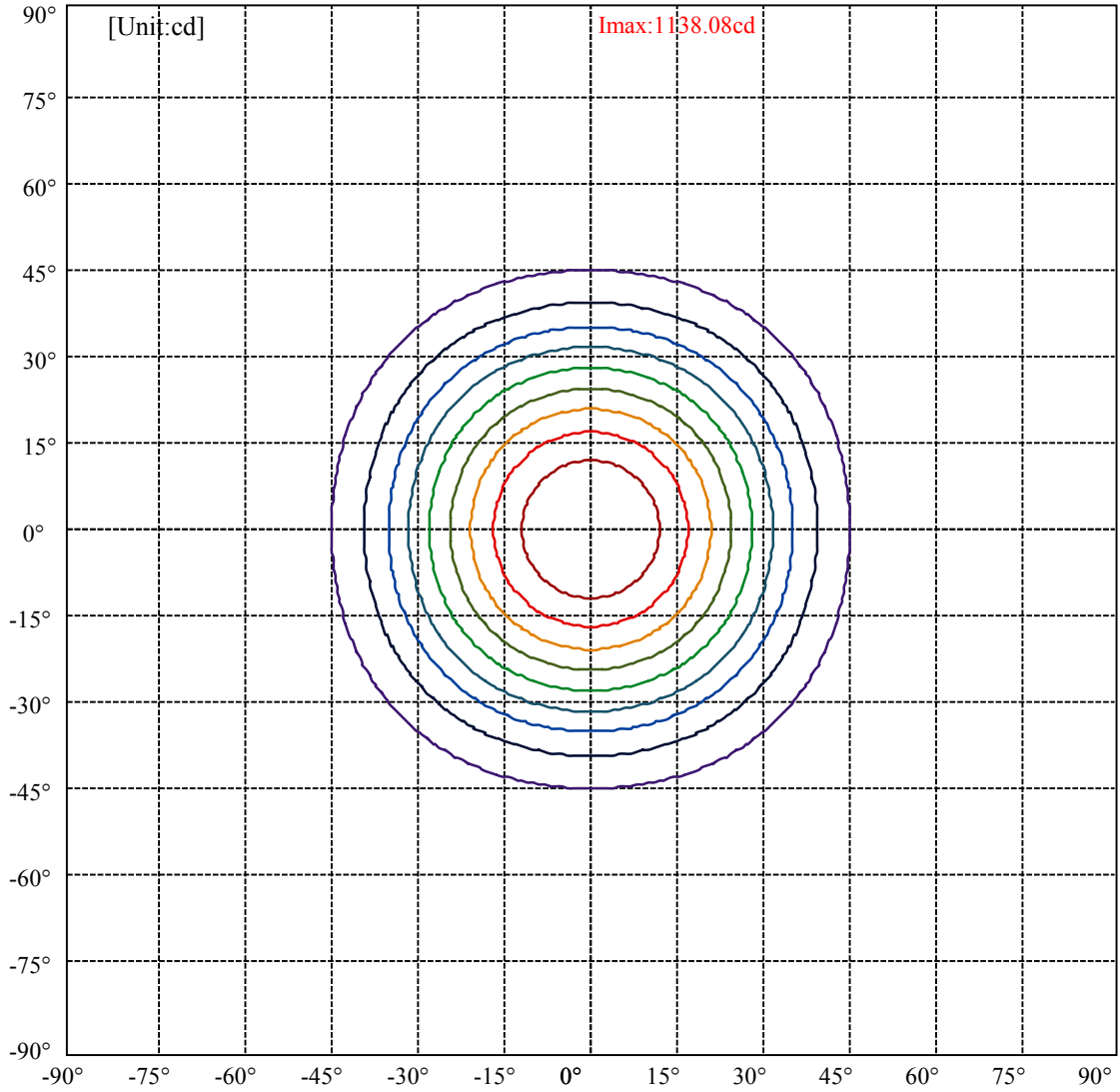
C0/C180: —————

C90/C270: —————

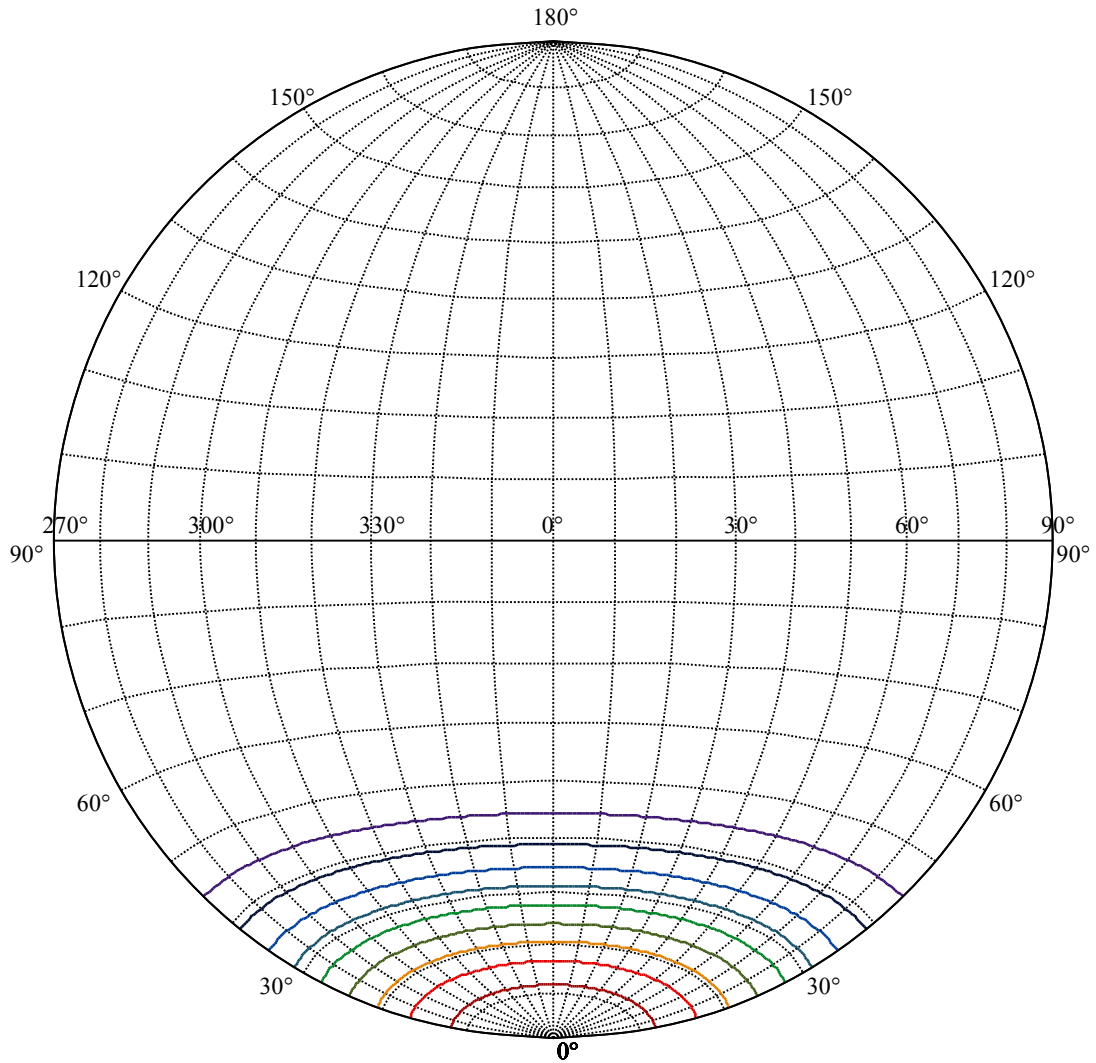
Field angle(10%Imax):C0/180Left:44.4 Right:44.4
:C90/270Left:44.4 Right:44.4

Beam Angle(50%Imax):C0/180Left:27.7 Right:27.7
:C90/270Left:27.7 Right:27.7





(10%Imax) 113.808	—
(20%Imax) 227.616	—
(30%Imax) 341.423	—
(40%Imax) 455.231	—
(50%Imax) 569.039	—
(60%Imax) 682.847	—
(70%Imax) 796.655	—
(80%Imax) 910.462	—
(90%Imax) 1024.27	—



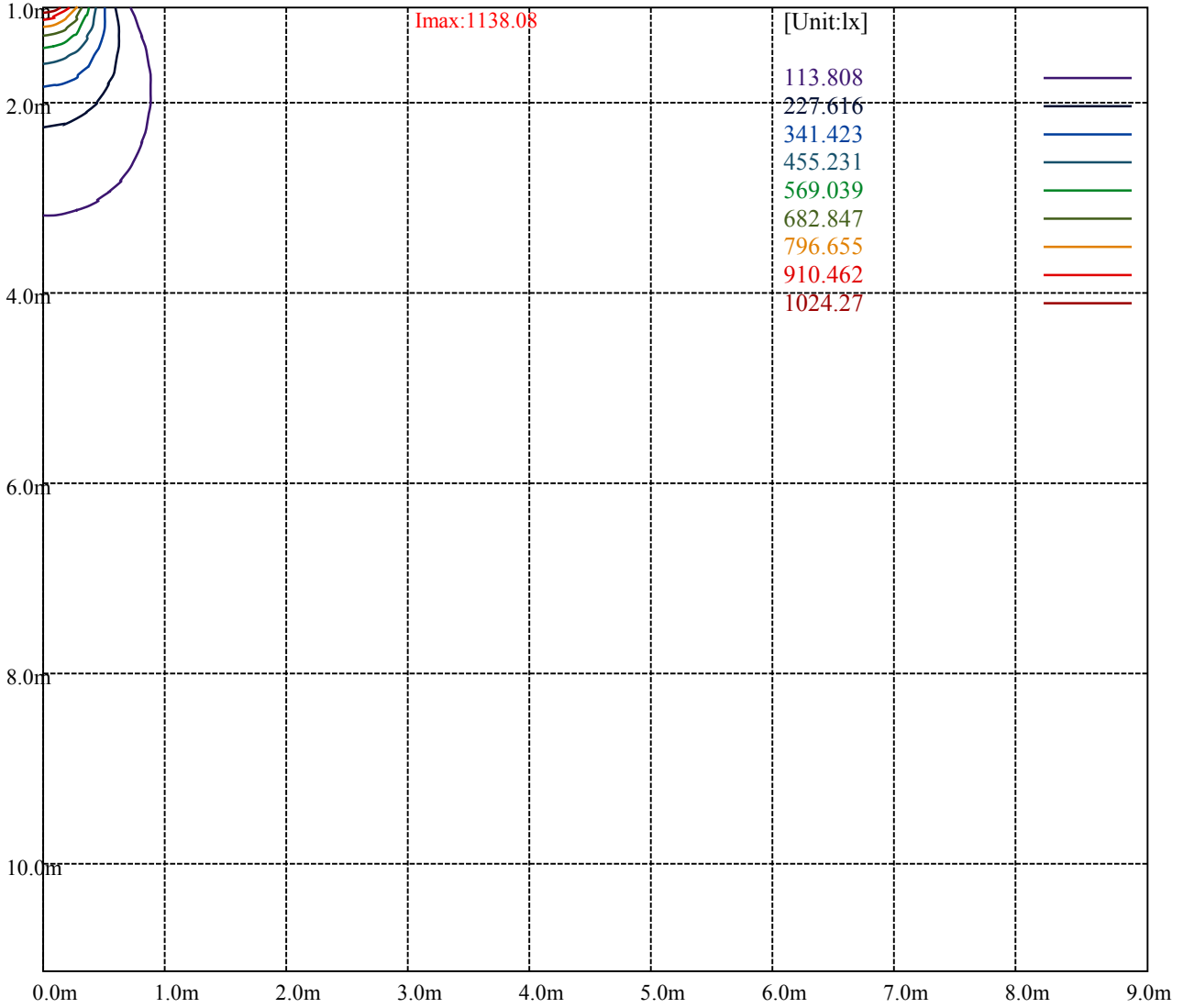
House

[Unit:cd]

Road

Imax:1138.08

(10%Imax) 113.808	—
(20%Imax) 227.616	—
(30%Imax) 341.423	—
(40%Imax) 455.231	—
(50%Imax) 569.039	—
(60%Imax) 682.847	—
(70%Imax) 796.655	—
(80%Imax) 910.462	—
(90%Imax) 1024.27	—



Luminance Table

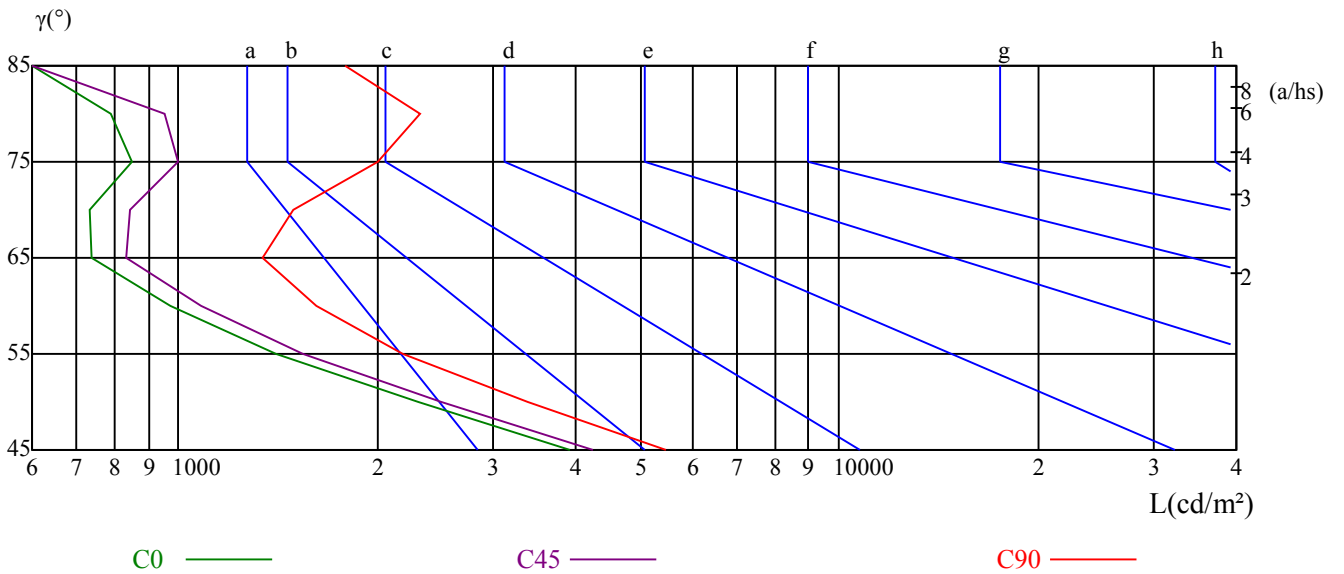
γ	45	50	55	60	65	70	75	80	85
C0	3927	2298	1401	971	737	734	851	791	413
C45	4236	2504	1543	1082	833	844	999	953	515
C90	5480	3375	2180	1619	1338	1488	2001	2323	1791

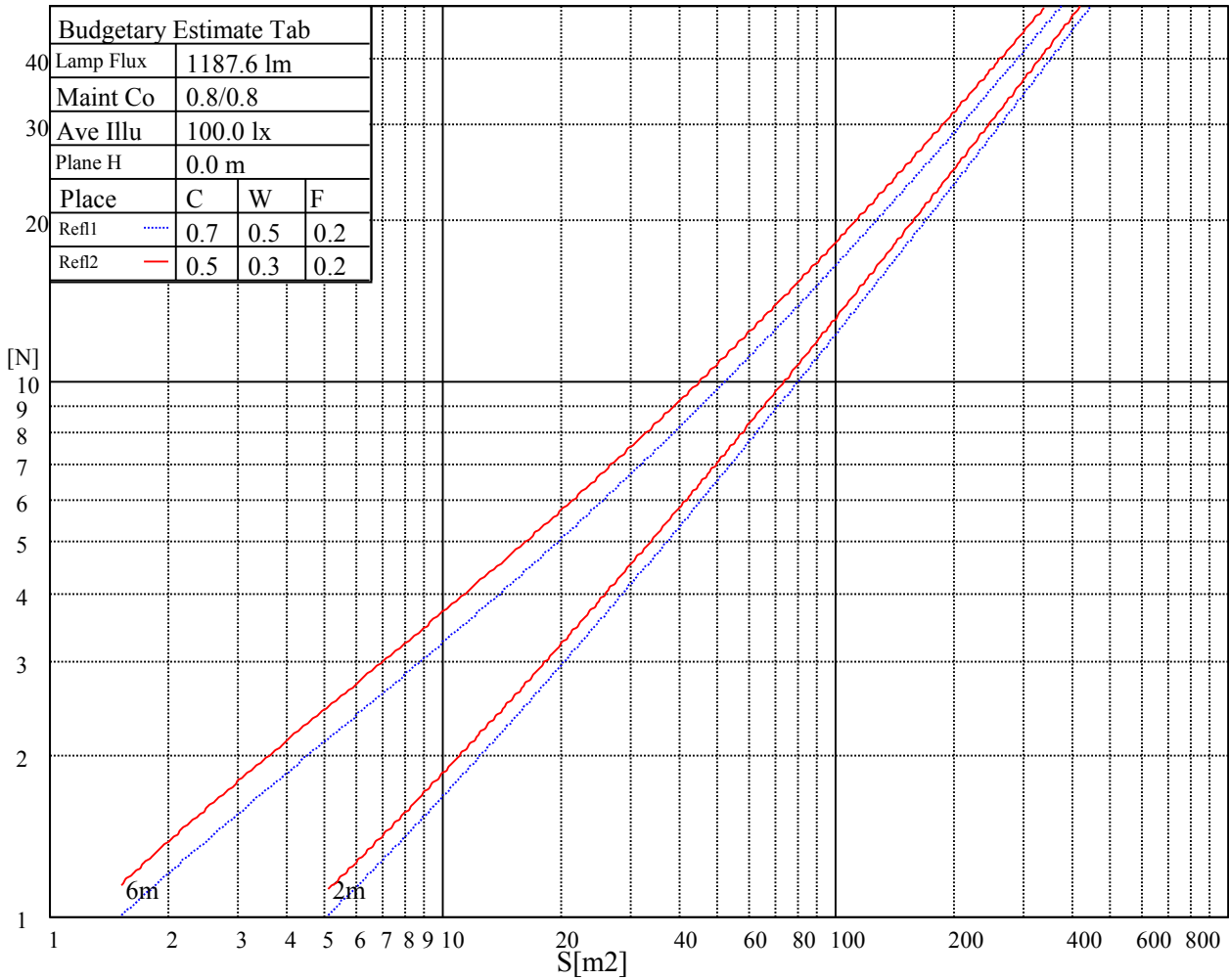
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
1439	1439	1439	2263	2263	2263	2510	2510	2510

Glare Table

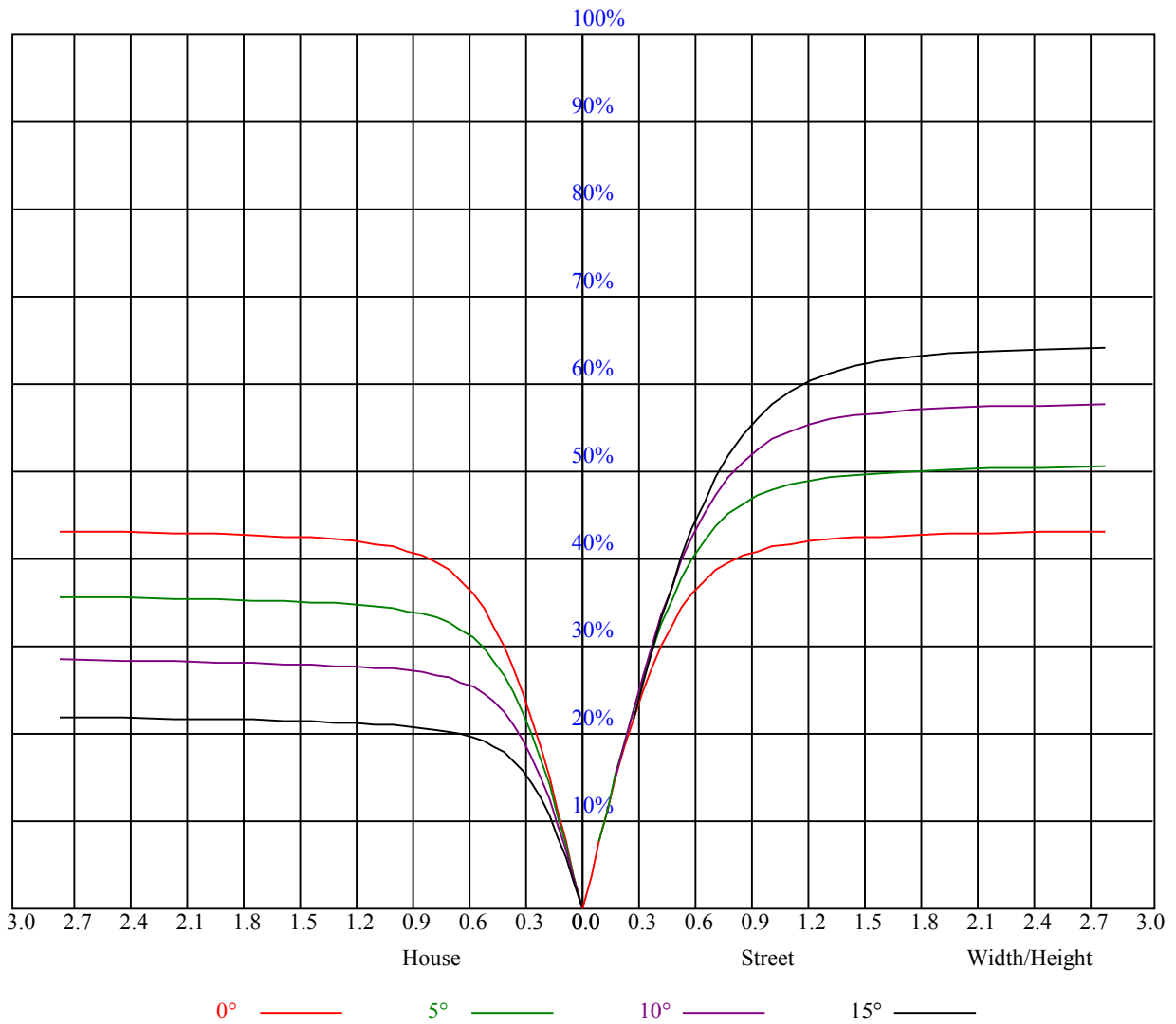
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.04	1.04	1.04	1.02	1.02	1.02	0.97	0.97	0.97	0.93	0.93	0.93	0.89	0.89	0.89	0.88
1	0.96	0.94	0.91	0.94	0.92	0.90	0.91	0.89	0.87	0.87	0.86	0.85	0.84	0.83	0.82	0.80
2	0.89	0.85	0.81	0.87	0.83	0.80	0.84	0.81	0.79	0.82	0.79	0.77	0.79	0.77	0.75	0.74
3	0.82	0.77	0.73	0.81	0.76	0.73	0.78	0.75	0.72	0.76	0.73	0.70	0.74	0.72	0.69	0.68
4	0.76	0.71	0.67	0.75	0.70	0.66	0.73	0.69	0.66	0.71	0.68	0.65	0.70	0.67	0.64	0.63
5	0.71	0.65	0.61	0.70	0.65	0.61	0.68	0.64	0.61	0.67	0.63	0.60	0.66	0.62	0.59	0.58
6	0.66	0.61	0.57	0.66	0.60	0.56	0.64	0.60	0.56	0.63	0.59	0.56	0.62	0.58	0.55	0.54
7	0.62	0.57	0.53	0.62	0.56	0.52	0.60	0.56	0.52	0.59	0.55	0.52	0.58	0.54	0.52	0.50
8	0.58	0.53	0.49	0.58	0.53	0.49	0.57	0.52	0.49	0.56	0.52	0.48	0.55	0.51	0.48	0.47
9	0.55	0.50	0.46	0.55	0.49	0.46	0.54	0.49	0.46	0.53	0.49	0.45	0.52	0.48	0.45	0.44
10	0.52	0.47	0.43	0.52	0.46	0.43	0.51	0.46	0.43	0.50	0.46	0.43	0.49	0.45	0.43	0.41



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	1140.19	1116.56	1055.25	941.06	803.25	639.00	486.00	332.44	187.54
45.0	1137.38	1117.69	1044.56	930.38	781.31	616.50	469.69	296.44	163.80
90.0	1137.94	1109.98	1046.31	931.28	777.71	612.51	446.46	273.77	152.66
135.0	1136.81	1137.94	1087.31	994.50	867.94	687.94	520.88	334.13	191.48
180.0	1140.19	1120.44	1075.73	972.62	833.46	664.59	501.92	337.56	192.66
225.0	1137.38	1120.95	1077.64	975.15	831.09	676.29	527.12	361.18	220.16
270.0	1137.94	1126.13	1077.75	986.06	846.56	700.31	542.81	383.63	289.69
315.0	1136.81	1106.33	1039.44	933.02	787.95	627.13	488.53	326.19	186.47
360.0	1140.19	1116.56	1055.25	941.06	803.25	639.00	486.00	332.44	187.54
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	99.79	57.32	33.08	21.54	15.30	11.76	9.00	7.03	5.40
45.0	92.64	50.96	29.98	20.08	14.57	11.14	8.61	6.69	5.06
90.0	83.98	48.04	28.69	19.74	14.23	12.94	15.08	8.10	4.78
135.0	101.14	57.04	33.98	22.33	15.86	19.01	25.88	24.24	5.51
180.0	102.43	59.74	34.54	22.50	15.41	12.09	9.23	7.09	5.51
225.0	117.34	65.03	38.25	24.30	16.65	12.60	9.90	7.65	6.02
270.0	127.24	69.53	38.81	25.14	17.10	13.50	15.98	15.13	6.36
315.0	98.49	56.08	32.18	20.59	15.64	21.43	26.55	23.29	6.24
360.0	99.79	57.32	33.08	21.54	15.30	11.76	9.00	7.03	5.40
C/ γ (°)	90.0								
0.0	4.11								
45.0	4.28								
90.0	4.11								
135.0	3.99								
180.0	4.05								
225.0	4.50								
270.0	4.28								
315.0	4.05								
360.0	4.11								