



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: LN01D04536DA-N

Luminaire: 97.70.234.00

Report No: 210624-B004

Test No: 210624-C004

LampCAT: Fortimo LED SLM 1201 G7N

Lamp flux(lm): 1175.3

Number of Lamps: 1

Length(mm): 570

Phm Type: C

Voltage(V): 39.4900

Current(A): 0.2520

Power (W): 9.9510

PF: 0.0000

Ballast type: DC

Width(mm): 45

Height(mm): 20

---

## Photometric Results

---

Lumens(lm): 1074.20

Efficiency(%): 91.39%

Lumens(lm)/Power(W): 107.95

Central intensity(cd): 2139.469

Maximum intensity(cd): 2139.469

Angle of maximum intensity: C=0.0  $\gamma$ =0.0

Beam Angle(50%Imax): [C0/180]Total=39.5

[C90/270]Total=39.5

Field angle(10%Imax): [C0/180]Total=65.2

[C90/270]Total=65.2

Maximum s/h(1/2): C0\_180=0.65 C90\_270=0.65

Maximum s/h(1/4): C0\_180=0.63 C90\_270=0.63

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 91.39%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 96.753%

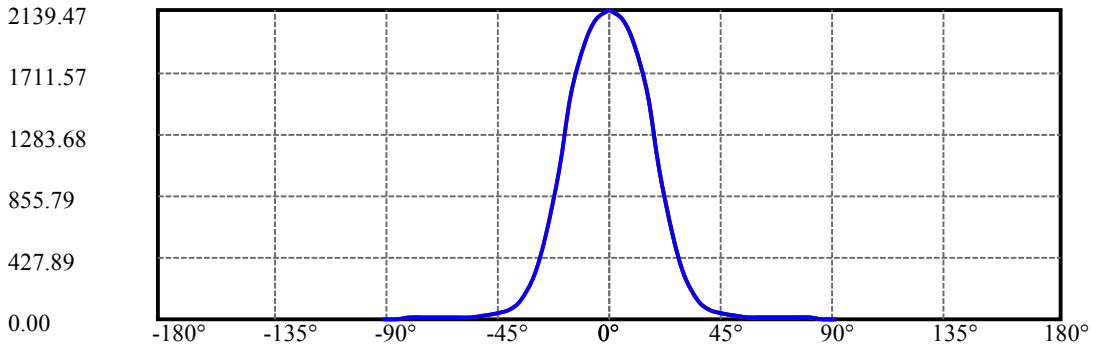
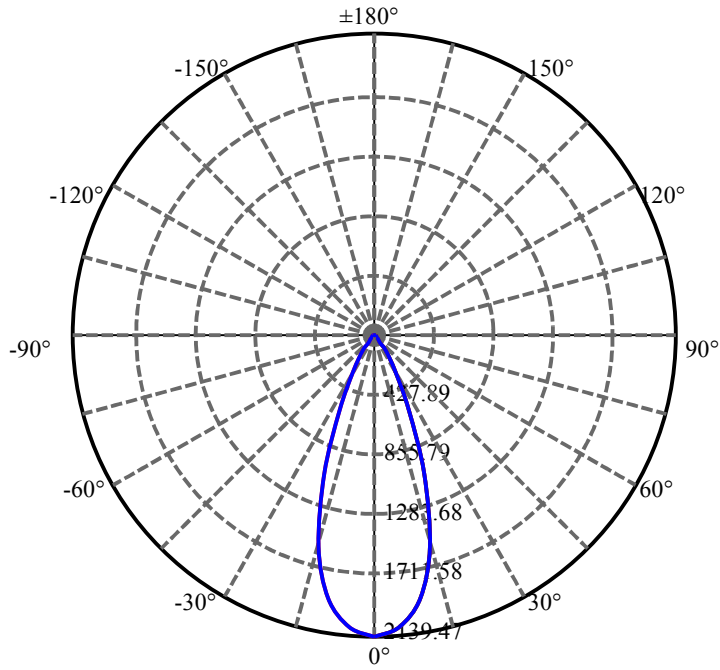
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2139.469	0.000	0	.000%	.000%
5.0	2073.727	50.368	50.368	4.285%	4.689%
10.0	1899.281	142.127	192.495	12.092%	17.920%
15.0	1551.234	204.682	397.177	17.415%	36.974%
20.0	1042.615	213.770	610.946	18.188%	56.875%
25.0	587.602	170.980	781.926	14.547%	72.792%
30.0	302.527	112.646	894.573	9.584%	83.278%
35.0	133.383	64.191	958.763	5.461%	89.254%
40.0	67.155	33.458	992.222	2.847%	92.368%
45.0	37.589	19.394	1011.616	1.650%	94.174%
50.0	23.906	12.426	1024.042	1.057%	95.331%
55.0	16.165	8.713	1032.755	.741%	96.142%
60.0	12.227	6.563	1039.317	.558%	96.753%
65.0	10.941	5.632	1044.95	.479%	97.277%
70.0	13.725	6.245	1051.195	.531%	97.858%
75.0	15.982	7.765	1058.96	.661%	98.581%
80.0	12.059	7.503	1066.463	.638%	99.280%
85.0	5.871	4.872	1071.335	.415%	99.733%
90.0	4.591	2.865	1074.2	.244%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	894.57	76.11%	83.28%
0-40	992.22	84.42%	92.37%
0-60	1039.32	88.43%	96.75%
0-90	1071.33	91.15%	99.73%
0-120	1071.33	91.15%	99.73%
0-180	1074.20	91.39%	100.00%
60-90	38.58	3.28%	3.59%
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%
0-28.44	859.36	73.12%	80.00%

ZONAL LUMEN SUMMARY

0-10	192.49
10-20	418.45
20-30	283.63
30-40	97.65
40-50	31.82
50-60	15.28
60-70	11.88
70-80	15.27
80-90	4.87
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: —————

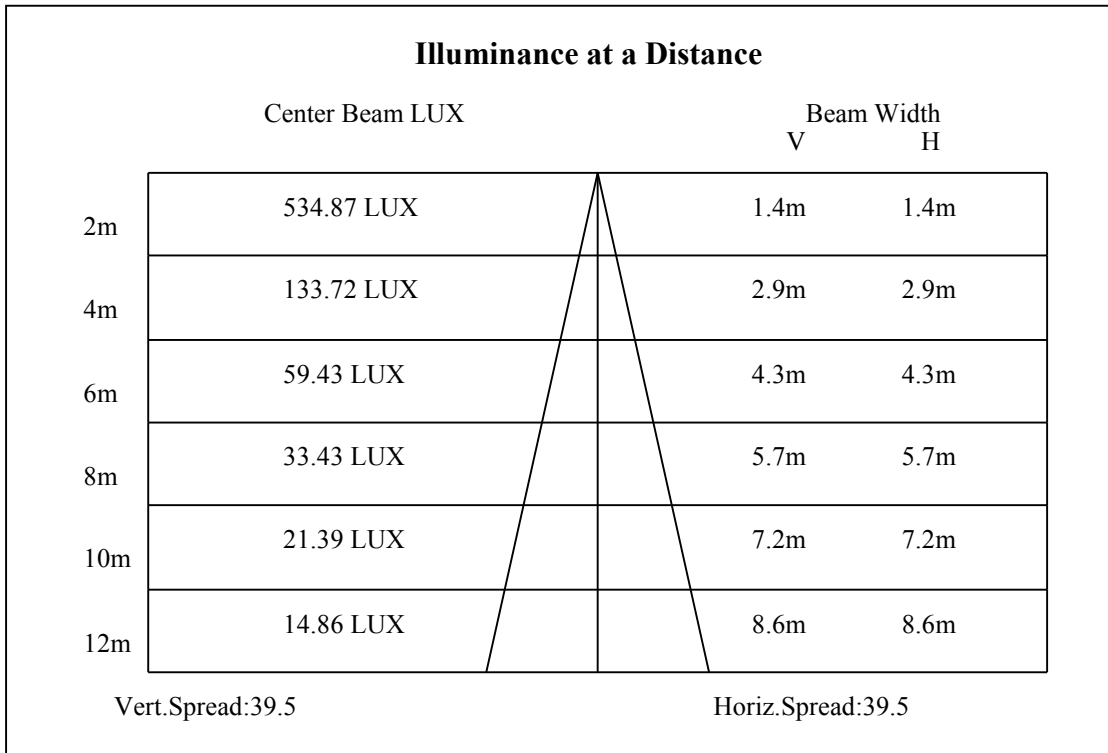
C90/C270: —————

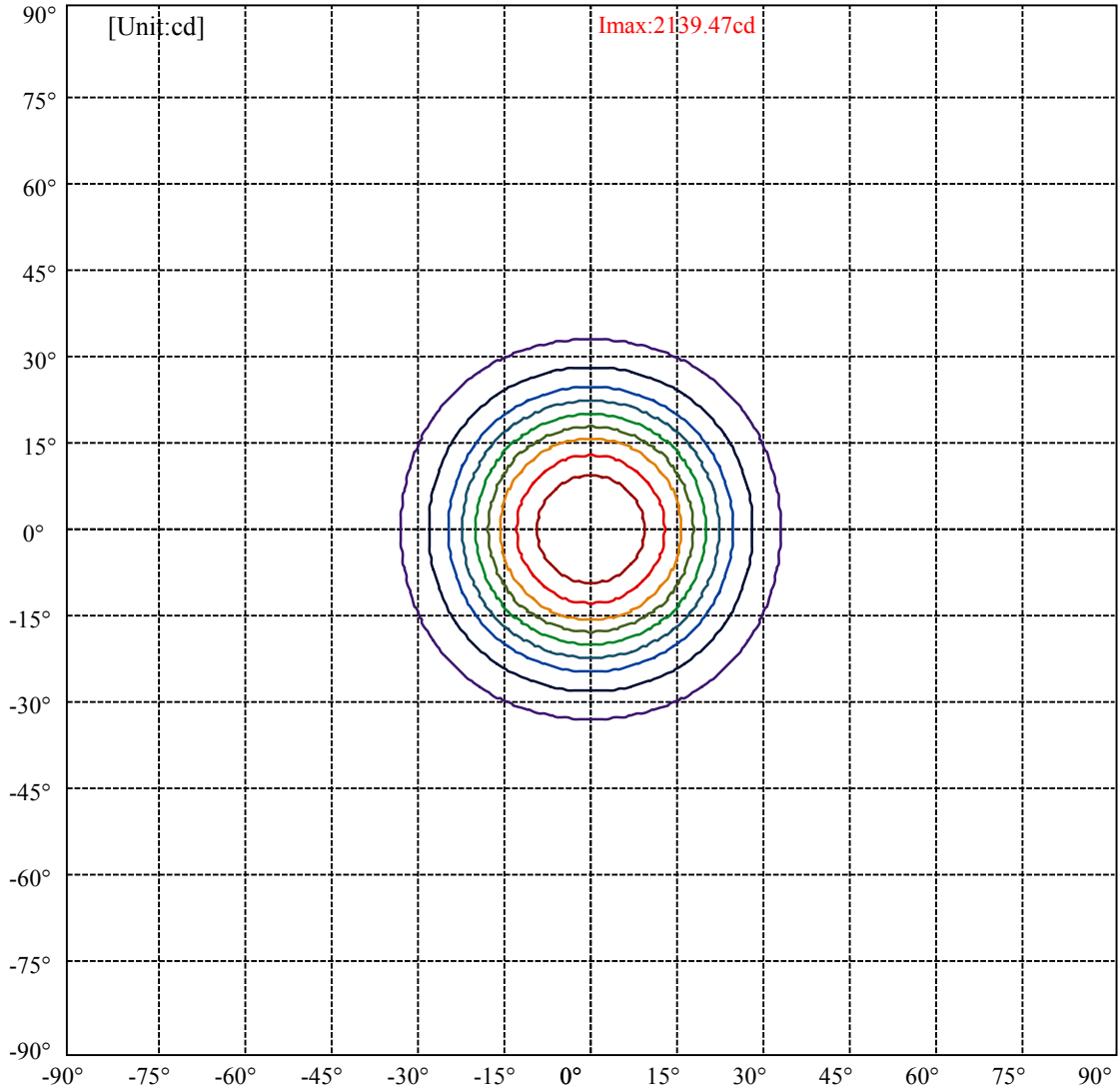
Field angle(10%Imax):C0/180Left:32.6 Right:32.6

:C90/270Left:32.6 Right:32.6

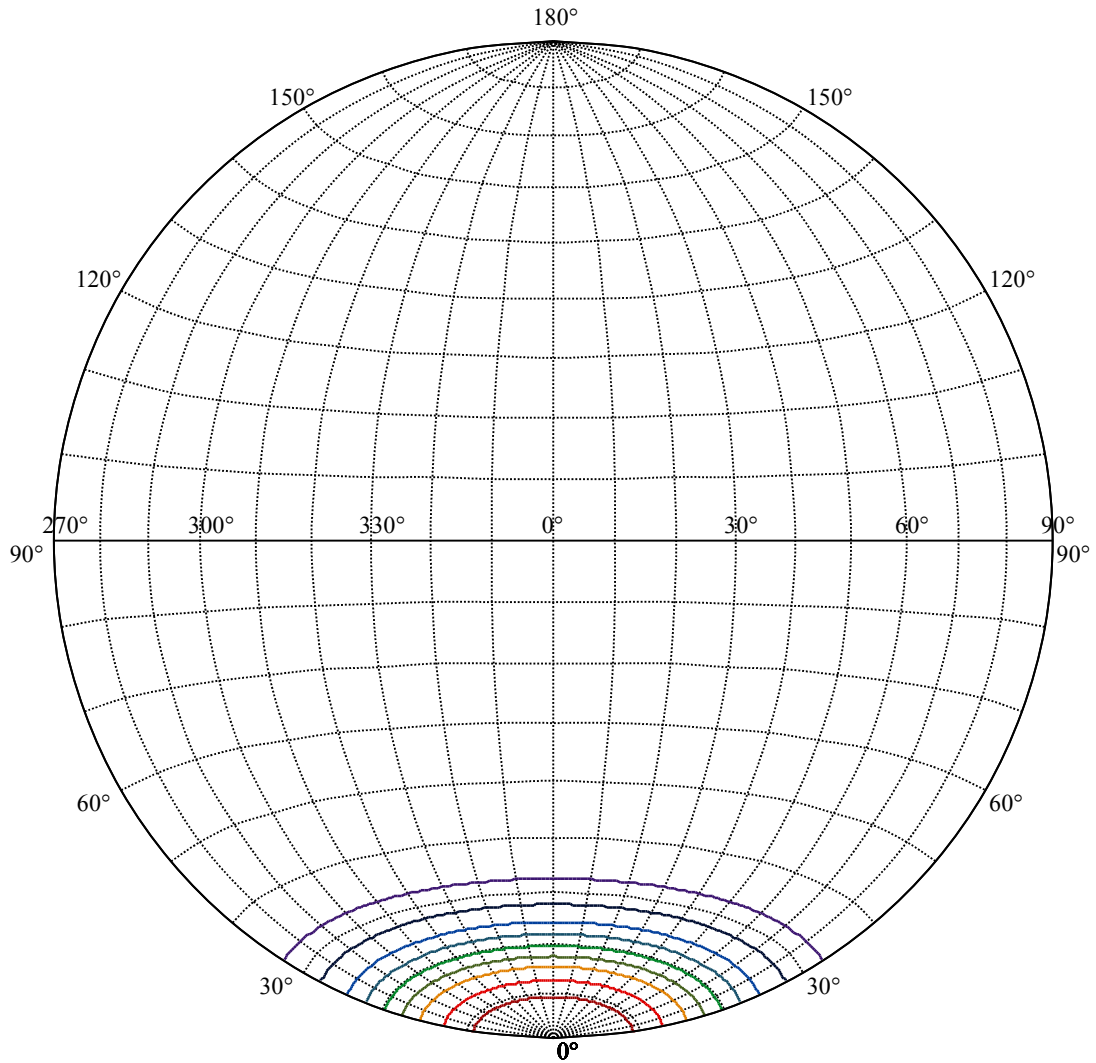
Beam Angle(50%Imax):C0/180Left:19.7 Right:19.7

:C90/270Left:19.7 Right:19.7





(10%Imax) 213.947	—
(20%Imax) 427.894	—
(30%Imax) 641.841	—
(40%Imax) 855.787	—
(50%Imax) 1069.73	—
(60%Imax) 1283.68	—
(70%Imax) 1497.63	—
(80%Imax) 1711.57	—
(90%Imax) 1925.52	—



House

[Unit:cd]

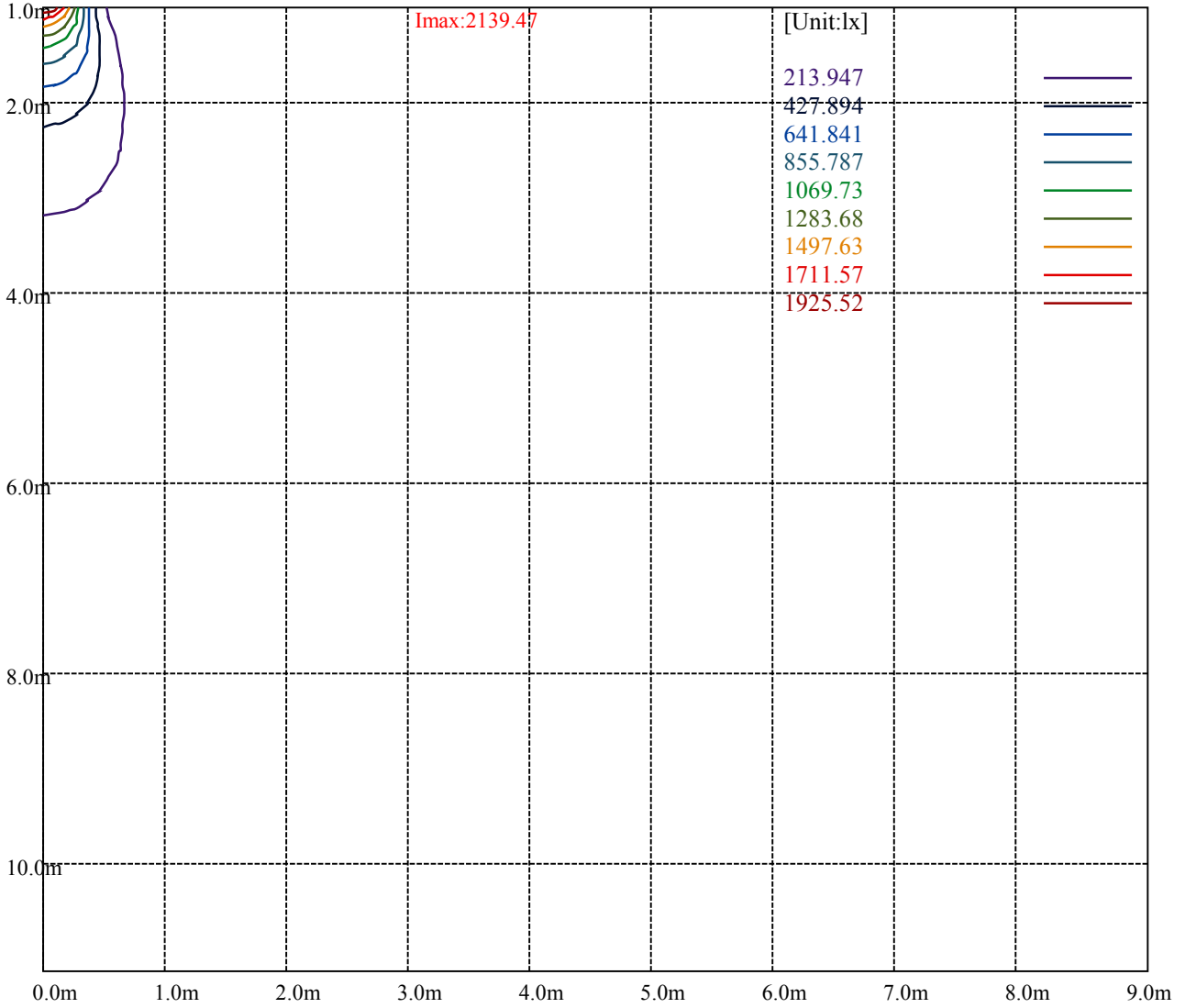
Road

**I<sub>max</sub>:2139.47**

(10%I <sub>max</sub> ) 213.947	—
(20%I <sub>max</sub> ) 427.894	—
(30%I <sub>max</sub> ) 641.841	—
(40%I <sub>max</sub> ) 855.787	—
(50%I <sub>max</sub> ) 1069.73	—
(60%I <sub>max</sub> ) 1283.68	—
(70%I <sub>max</sub> ) 1497.63	—
(80%I <sub>max</sub> ) 1711.57	—
(90%I <sub>max</sub> ) 1925.52	—







Luminance Table

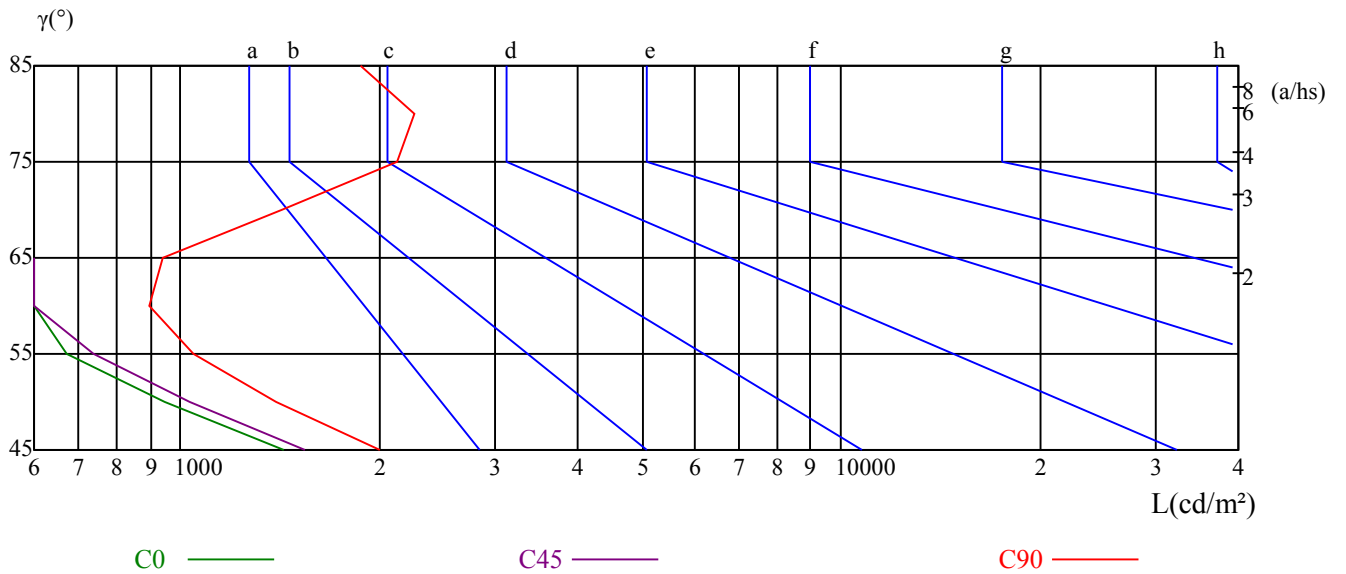
$\gamma$	45	50	55	60	65	70	75	80	85
C0	1435	948	672	539	517	704	905	769	432
C45	1548	1033	740	601	584	810	1063	926	539
C90	2002	1392	1046	899	939	1427	2129	2258	1874

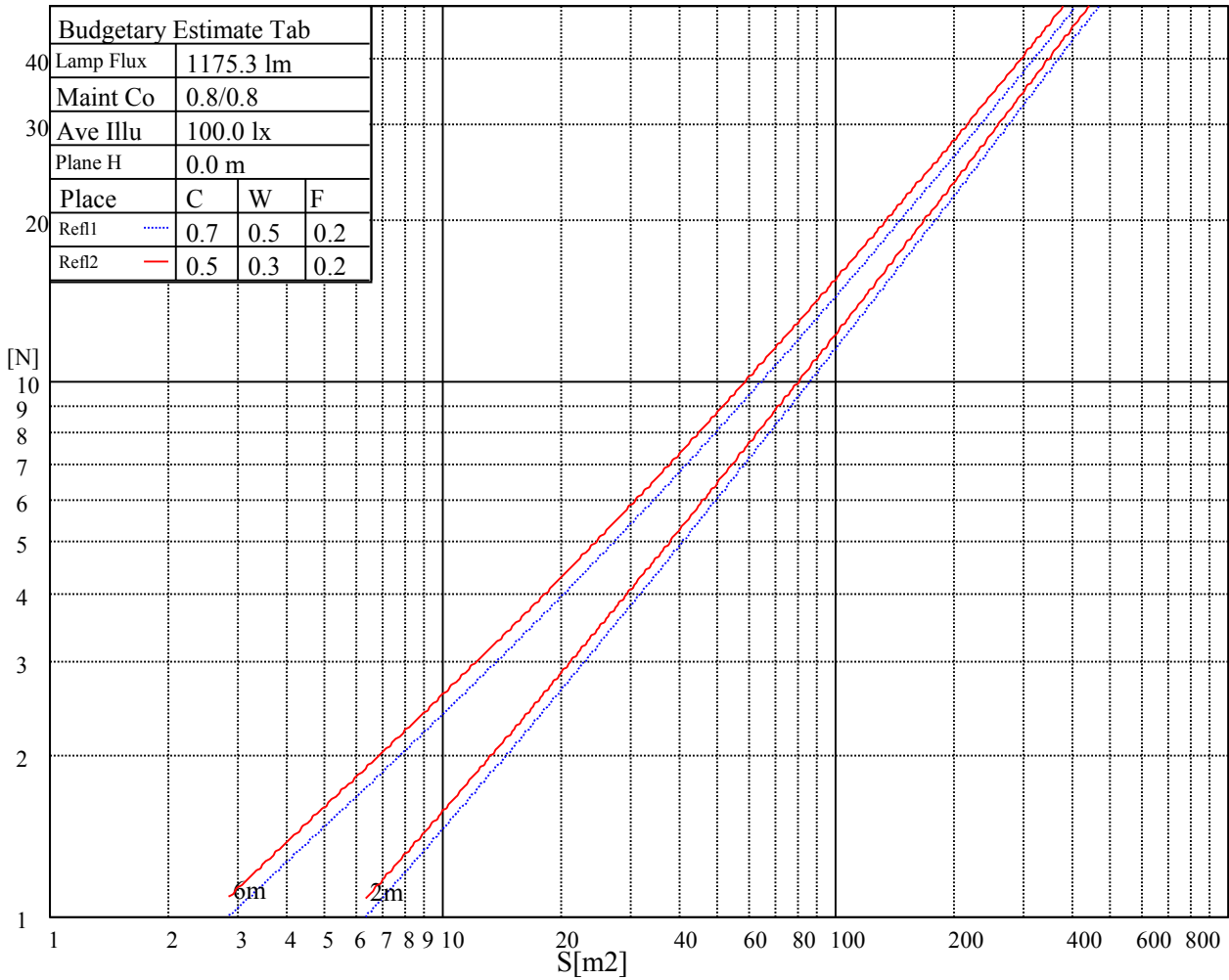
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
1009	1009	1009	2407	2407	2407	2626	2626	2626

Glare Table

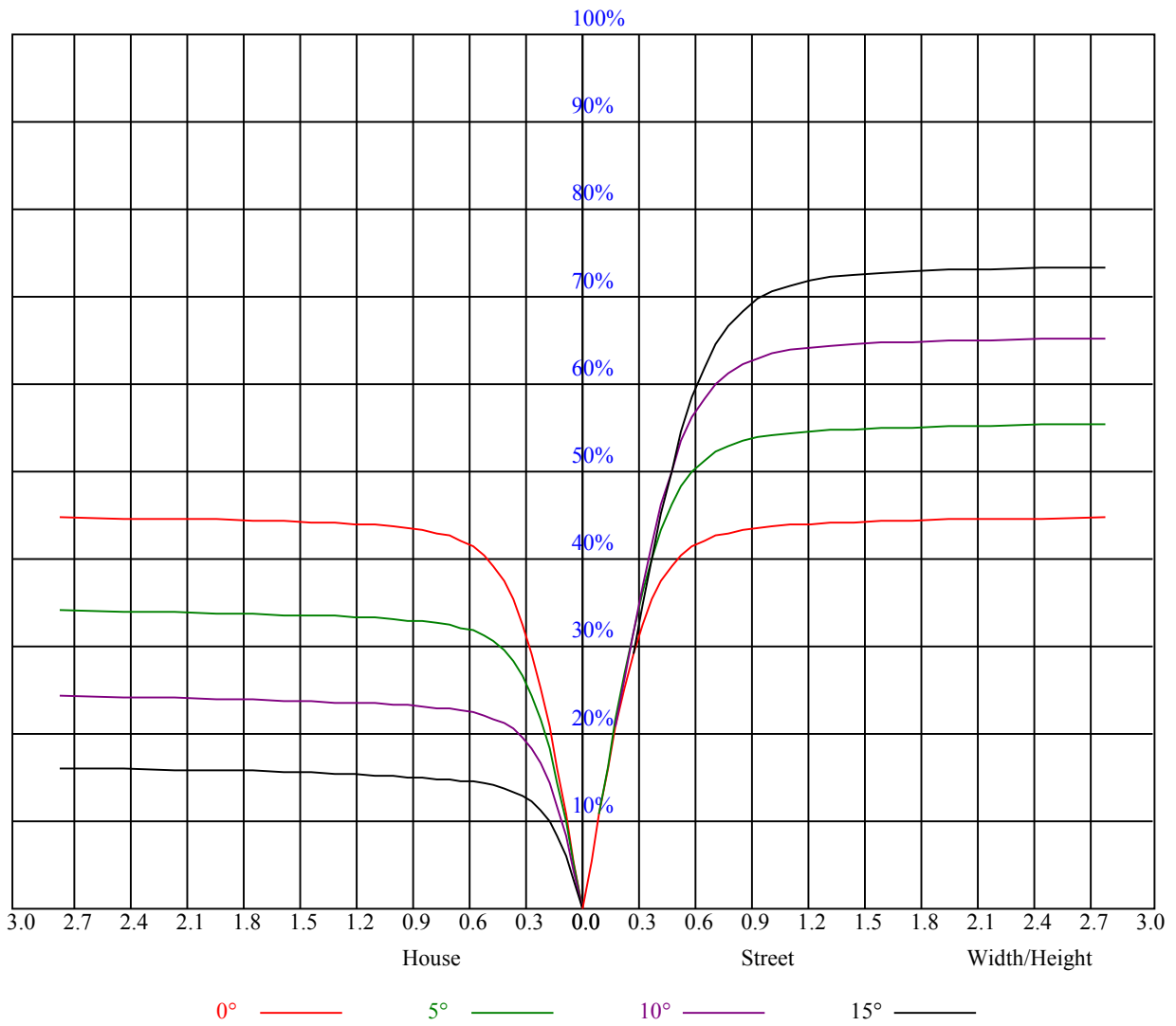
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.09	1.09	1.09	1.06	1.06	1.06	1.02	1.02	1.02	0.97	0.97	0.97	0.93	0.93	0.93	0.91
1	1.01	0.99	0.97	0.99	0.97	0.95	0.96	0.94	0.92	0.92	0.91	0.90	0.89	0.88	0.87	0.86
2	0.95	0.91	0.88	0.93	0.90	0.87	0.90	0.88	0.85	0.88	0.85	0.84	0.85	0.83	0.82	0.80
3	0.89	0.85	0.82	0.88	0.84	0.81	0.86	0.82	0.80	0.83	0.81	0.78	0.81	0.79	0.77	0.76
4	0.84	0.80	0.76	0.83	0.79	0.76	0.81	0.78	0.75	0.80	0.76	0.74	0.78	0.75	0.73	0.72
5	0.80	0.75	0.72	0.79	0.75	0.71	0.78	0.74	0.71	0.76	0.73	0.70	0.75	0.72	0.69	0.68
6	0.76	0.71	0.68	0.75	0.71	0.67	0.74	0.70	0.67	0.73	0.69	0.66	0.72	0.68	0.66	0.65
7	0.72	0.68	0.64	0.72	0.67	0.64	0.71	0.67	0.64	0.70	0.66	0.63	0.69	0.65	0.63	0.62
8	0.69	0.64	0.61	0.69	0.64	0.61	0.68	0.64	0.61	0.67	0.63	0.60	0.66	0.63	0.60	0.59
9	0.66	0.61	0.58	0.66	0.61	0.58	0.65	0.61	0.58	0.64	0.60	0.58	0.63	0.60	0.58	0.56
10	0.63	0.59	0.56	0.63	0.59	0.56	0.62	0.58	0.55	0.62	0.58	0.55	0.61	0.58	0.55	0.54



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	2143.69	2068.31	1883.25	1522.69	997.31	559.13	293.63	121.73	63.68
45.0	2144.25	2040.19	1821.38	1424.25	945.56	501.19	287.44	112.89	58.22
90.0	2129.06	2038.50	1818.56	1425.38	883.29	495.06	237.60	107.44	56.93
135.0	2140.88	2086.88	1931.06	1640.25	1119.38	622.69	320.63	140.18	69.36
180.0	2143.69	2081.25	1902.38	1577.25	1076.18	600.08	307.24	139.33	68.57
225.0	2144.25	2103.75	1956.38	1625.63	1104.86	661.78	334.24	157.44	76.39
270.0	2129.06	2101.50	1996.31	1692.56	1221.75	713.81	371.81	167.34	79.93
315.0	2140.88	2069.44	1884.94	1501.88	992.59	547.09	267.64	120.71	64.18
360.0	2143.69	2068.31	1883.25	1522.69	997.31	559.13	293.63	121.73	63.68
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	36.23	23.18	16.37	12.04	9.73	8.21	7.48	6.64	5.51
45.0	34.43	23.40	15.92	12.21	10.07	8.38	7.43	6.47	5.23
90.0	32.01	20.76	14.46	11.59	15.41	27.45	29.87	15.75	5.06
135.0	38.81	24.30	16.14	12.26	10.24	12.21	17.49	13.16	6.13
180.0	39.04	24.86	16.65	12.38	10.07	8.49	7.48	6.75	5.57
225.0	41.29	26.10	17.72	12.99	10.29	8.72	7.54	6.69	5.68
270.0	43.26	26.10	16.93	12.54	11.53	22.28	32.29	29.25	7.71
315.0	35.66	22.56	15.13	11.81	10.18	14.06	18.28	11.76	6.08
360.0	36.23	23.18	16.37	12.04	9.73	8.21	7.48	6.64	5.51
C/γ(°)	90.0								
0.0	4.61								
45.0	4.73								
90.0	4.44								
135.0	4.44								
180.0	4.56								
225.0	4.89								
270.0	4.56								
315.0	4.50								
360.0	4.61								