



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: 1-0938-N	
Luminaire: 92.70.246.00	
Report No: 210706-B003	Voltage(V): 36.5300
Test No: 210706-C003	Current(A): 0.4510
LampCAT: Fortimo LED SLM 1203 G7N	Power (W): 16.4750
Lamp flux(lm): 2143.4	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 570	Width(mm): 45
Phm Type: C	Height(mm): 20

---

## Photometric Results

---

Lumens(lm): 1676.87  
Efficiency(%): 78.23%  
Lumens(lm)/Power(W): 101.78  
Central intensity(cd): 3415.219  
Maximum intensity(cd): 3415.219  
Angle of maximum intensity: C=0.0  $\gamma$ =0.0  
Beam Angle(50%Imax): [C0/180]Total=42.2  
                                  [C90/270]Total=42.2  
Field angle(10%Imax): [C0/180]Total=62.1  
                                  [C90/270]Total=62.1  
Maximum s/h(1/2): C0\_180=0.69 C90\_270=0.69  
Maximum s/h(1/4): C0\_180=0.65 C90\_270=0.65  
Up flux rate of lamp(%): 0.00%  
Down flux rate of lamp(%): 78.23%  
Up flux rate of LUM(%): - -  
Down flux rate of LUM(%): 100.00%  
CIE Type : Direct lighting  
Output flux ratio in  $\pi$  solid angle : 98.011%

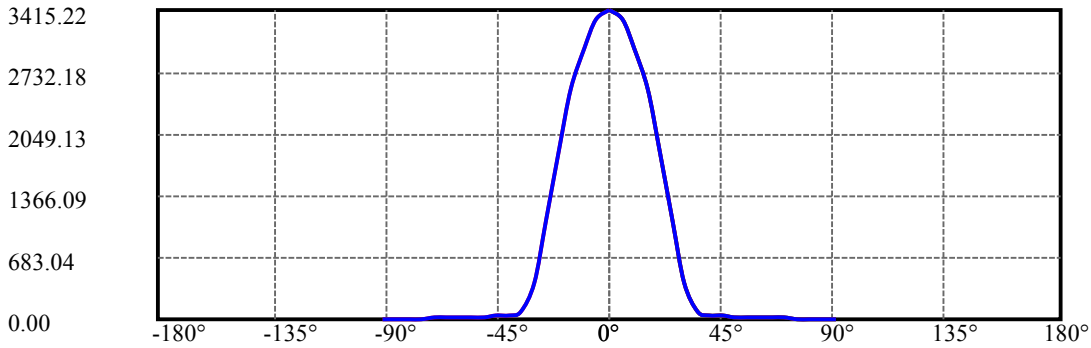
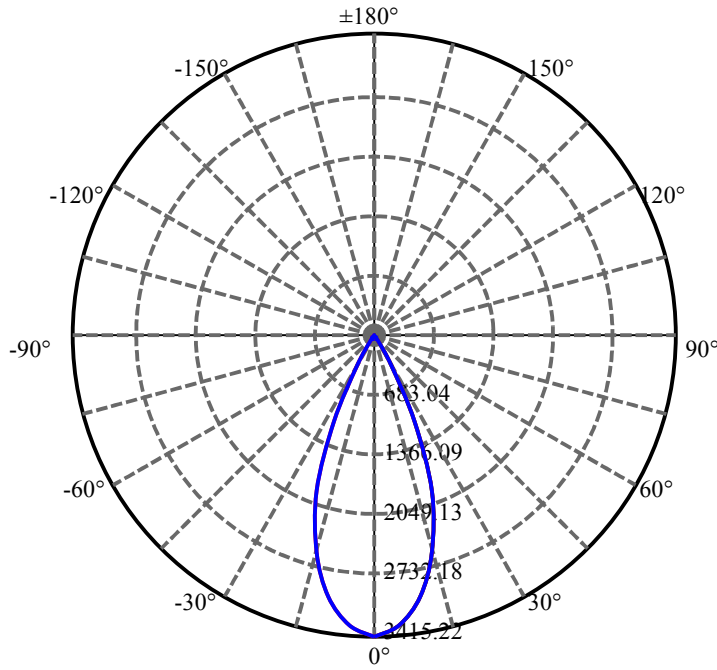
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3415.219	0.000	0	.000%	.000%
5.0	3307.922	80.373	80.373	3.750%	4.793%
10.0	3000.867	225.685	306.058	10.529%	18.252%
15.0	2544.609	328.954	635.012	15.347%	37.869%
20.0	1880.438	364.686	999.698	17.014%	59.617%
25.0	1087.088	311.239	1310.937	14.521%	78.178%
30.0	406.695	189.039	1499.976	8.819%	89.451%
35.0	89.578	73.080	1573.056	3.409%	93.809%
40.0	47.700	22.904	1595.96	1.069%	95.175%
45.0	34.685	15.254	1611.214	.712%	96.085%
50.0	27.394	12.544	1623.758	.585%	96.833%
55.0	21.769	10.690	1634.448	.499%	97.470%
60.0	17.487	9.074	1643.521	.423%	98.011%
65.0	13.901	7.630	1651.152	.356%	98.466%
70.0	11.524	6.438	1657.59	.300%	98.850%
75.0	9.752	5.561	1663.151	.259%	99.182%
80.0	8.775	4.957	1668.108	.231%	99.478%
85.0	8.009	4.561	1672.669	.213%	99.749%
90.0	7.334	4.201	1676.87	.196%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1499.98	69.98%	89.45%
0-40	1595.96	74.46%	95.17%
0-60	1643.52	76.68%	98.01%
0-90	1672.67	78.04%	99.75%
0-120	1672.67	78.04%	99.75%
0-180	1676.87	78.23%	100.00%
60-90	38.22	1.78%	2.28%
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%
0-25.81	1341.50	62.59%	80.00%

ZONAL LUMEN SUMMARY

0-10	306.06
10-20	693.64
20-30	500.28
30-40	95.98
40-50	27.80
50-60	19.76
60-70	14.07
70-80	10.52
80-90	4.56
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



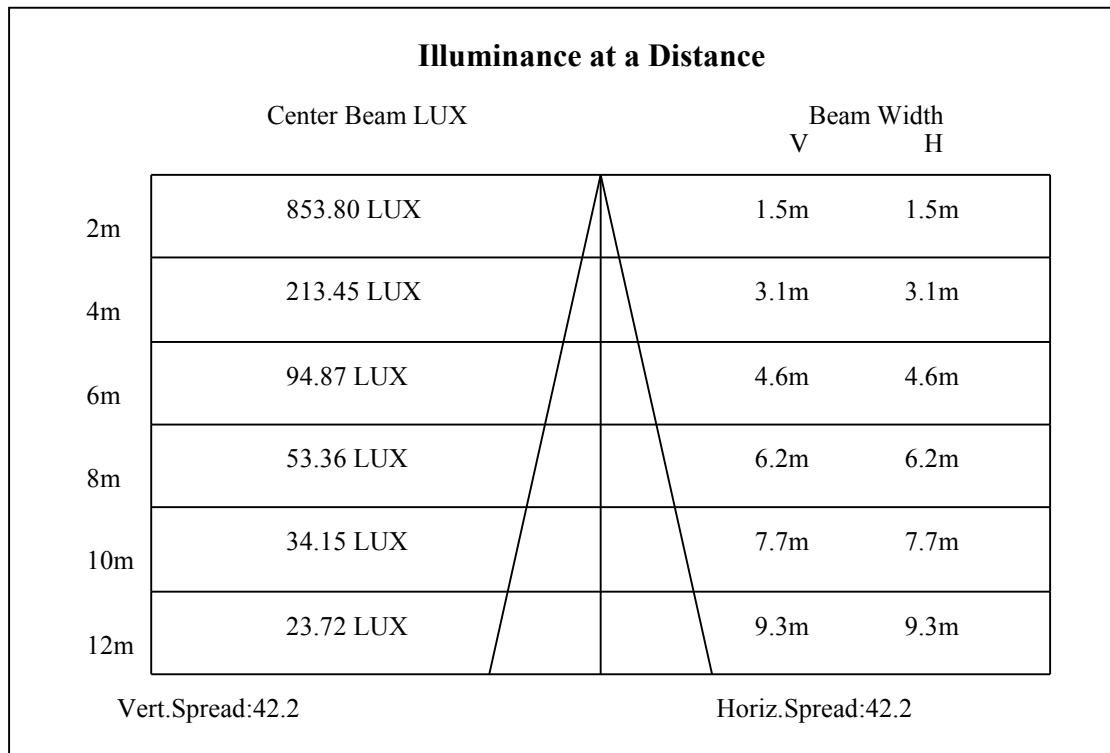
C0(Max): —————

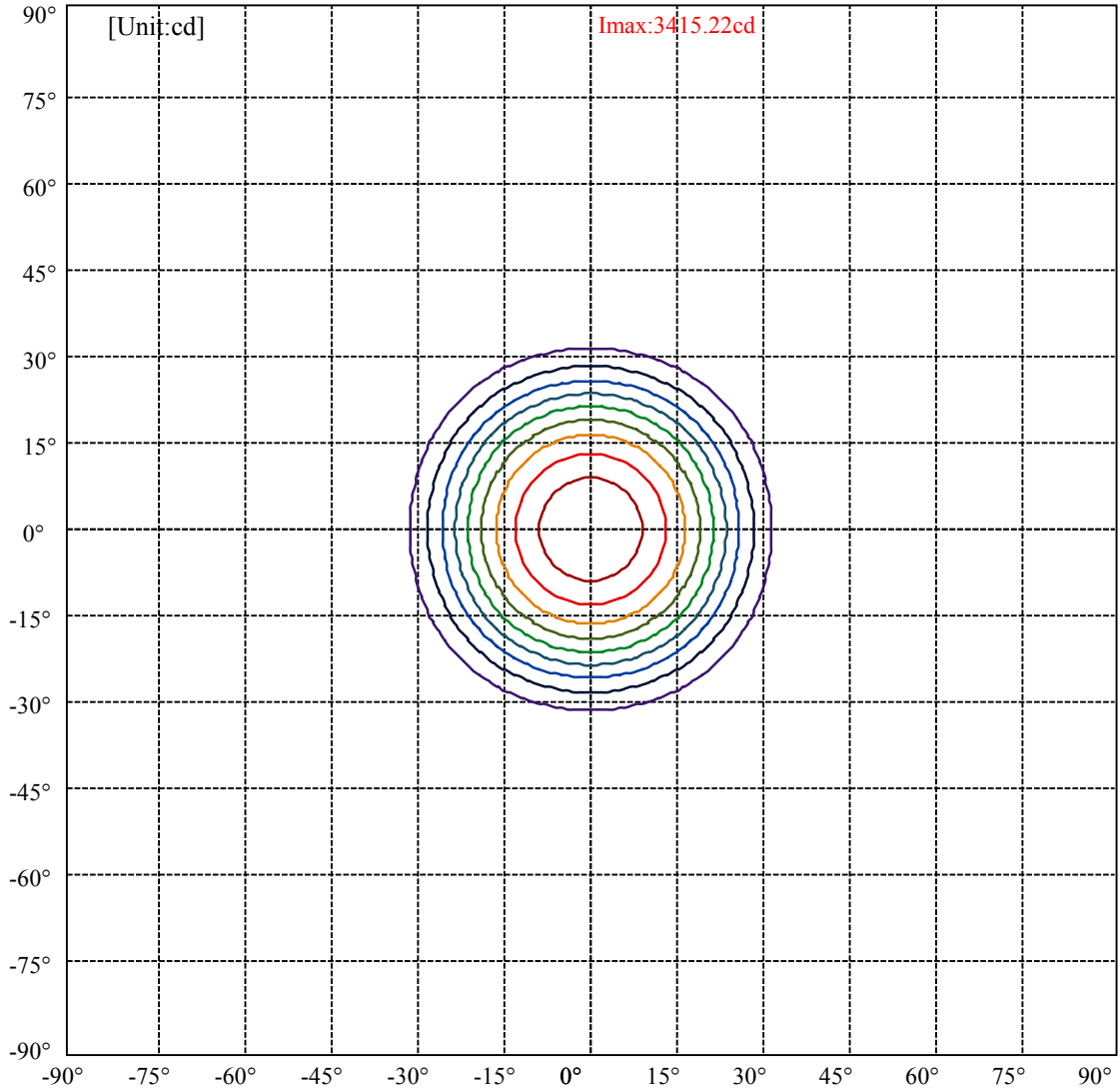
C0/C180: —————

C90/C270: —————

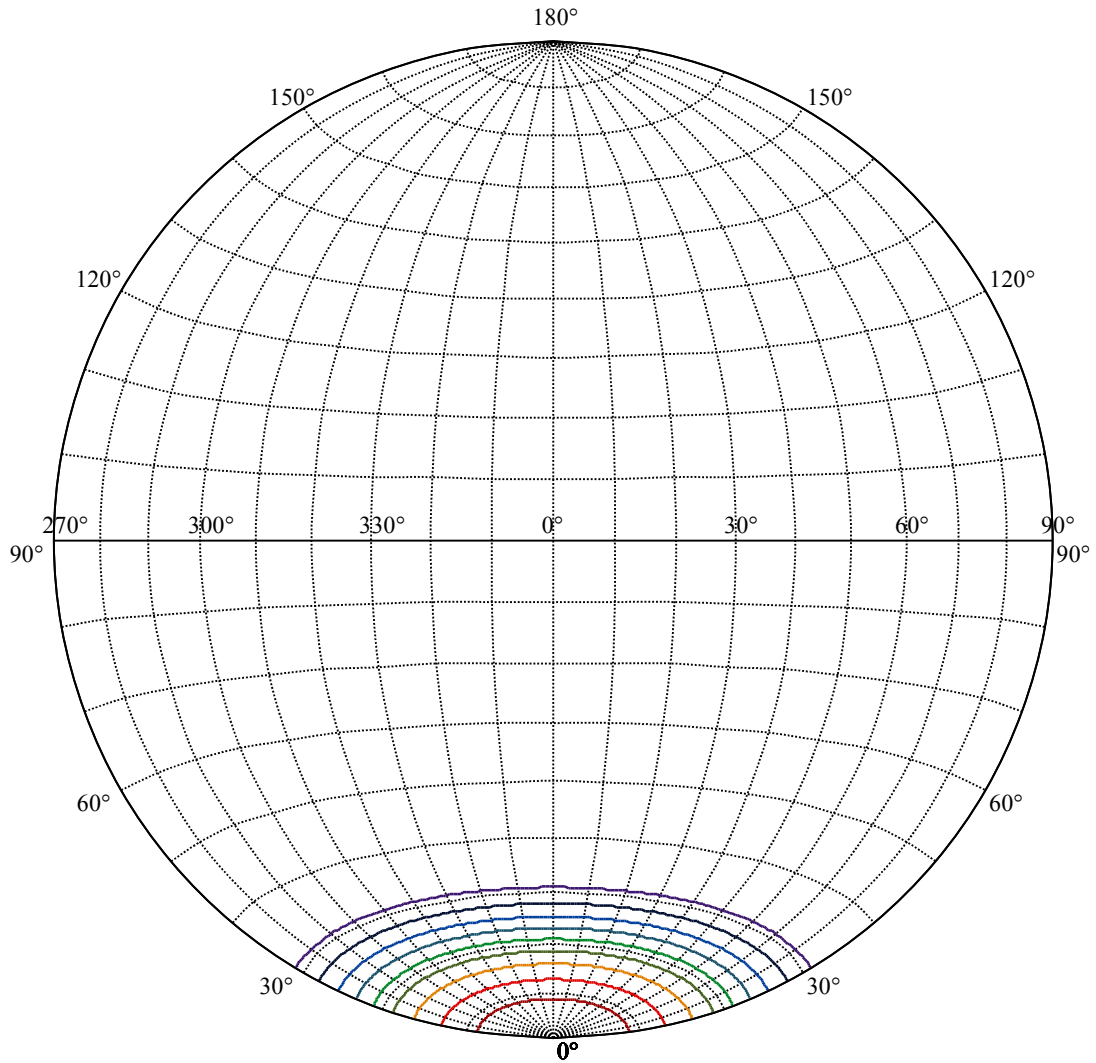
Field angle(10%Imax):C0/180Left:31.0 Right:31.0  
:C90/270Left:31.0 Right:31.0

Beam Angle(50%Imax):C0/180Left:21.1 Right:21.1  
:C90/270Left:21.1 Right:21.1





(10%I <sub>max</sub> ) 341.522	—
(20%I <sub>max</sub> ) 683.044	—
(30%I <sub>max</sub> ) 1024.57	—
(40%I <sub>max</sub> ) 1366.09	—
(50%I <sub>max</sub> ) 1707.61	—
(60%I <sub>max</sub> ) 2049.13	—
(70%I <sub>max</sub> ) 2390.65	—
(80%I <sub>max</sub> ) 2732.18	—
(90%I <sub>max</sub> ) 3073.7	—



House

[Unit:cd]

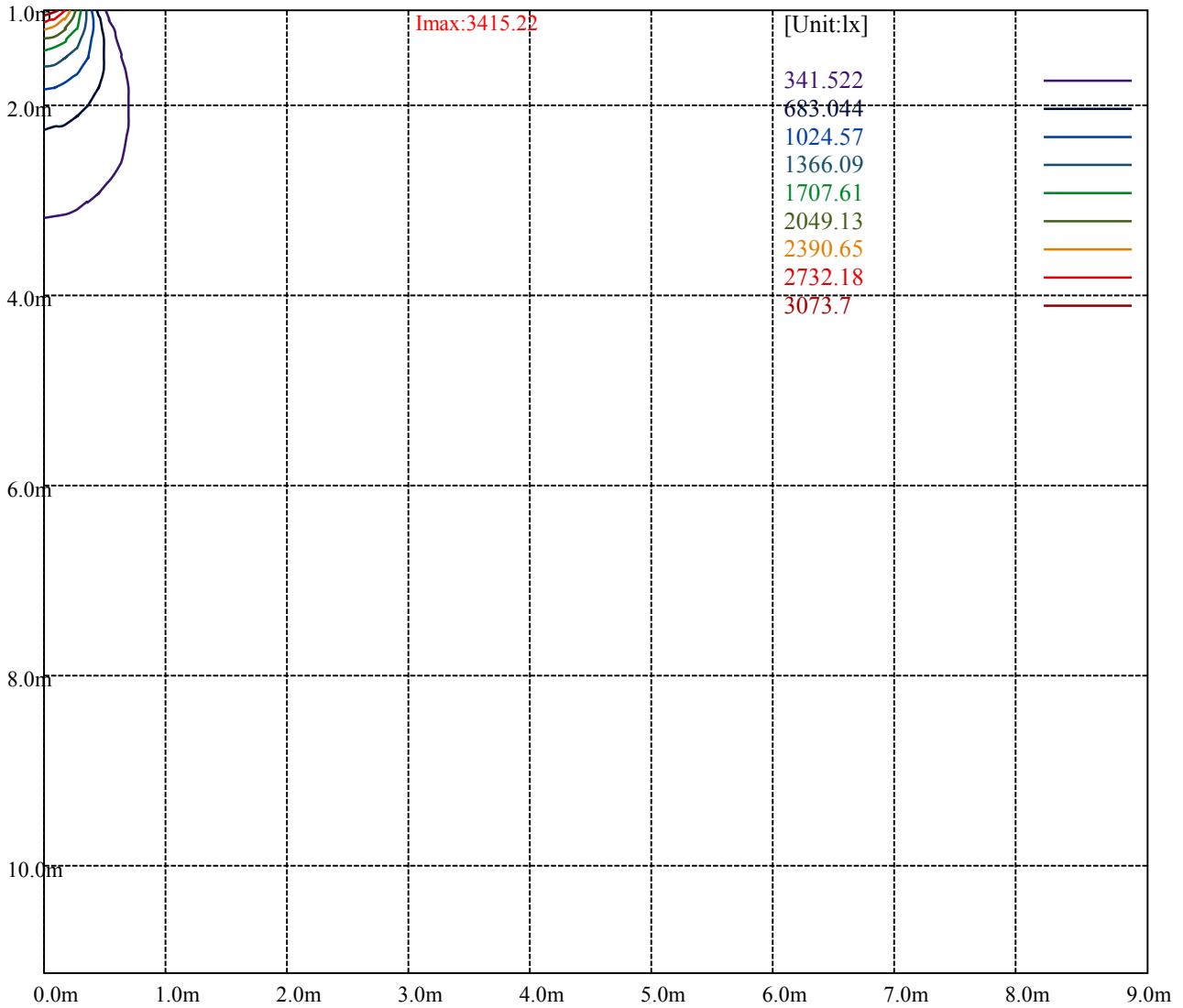
Road

**Imax:3415.22**

(10%Imax) 341.522	—
(20%Imax) 683.044	—
(30%Imax) 1024.57	—
(40%Imax) 1366.09	—
(50%Imax) 1707.61	—
(60%Imax) 2049.13	—
(70%Imax) 2390.65	—
(80%Imax) 2732.18	—
(90%Imax) 3073.7	—







Luminance Table

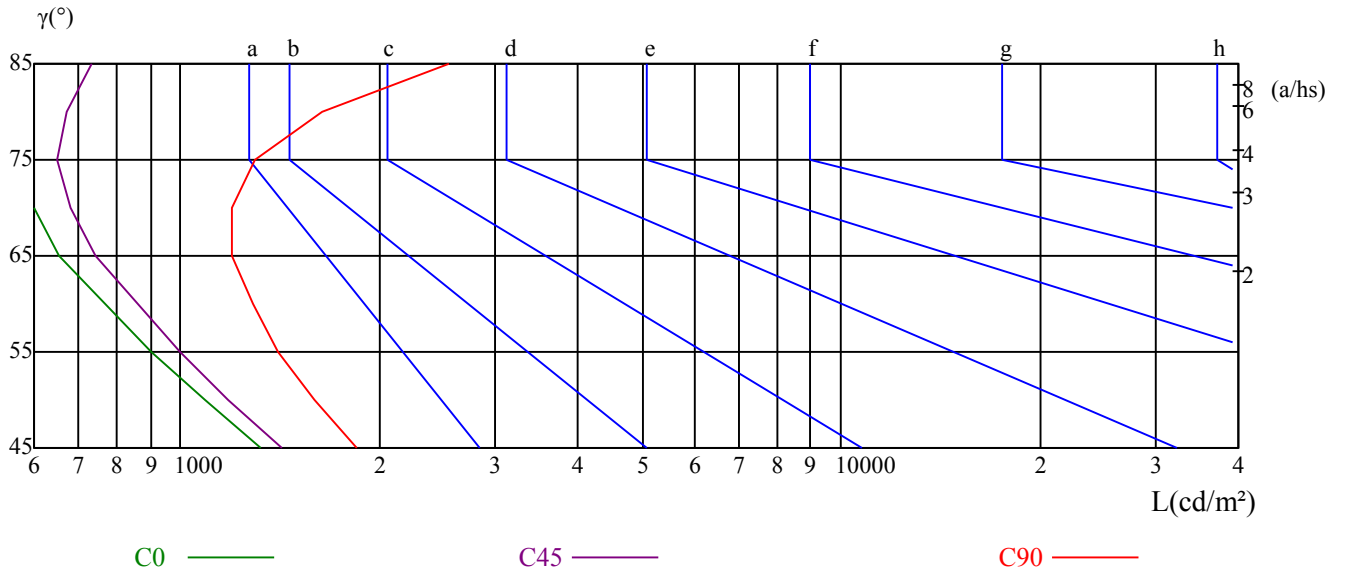
$\gamma$	45	50	55	60	65	70	75	80	85
C0	1324	1086	905	770	657	591	553	560	589
C45	1428	1183	997	859	742	680	648	674	735
C90	1848	1595	1409	1285	1193	1198	1299	1643	2557

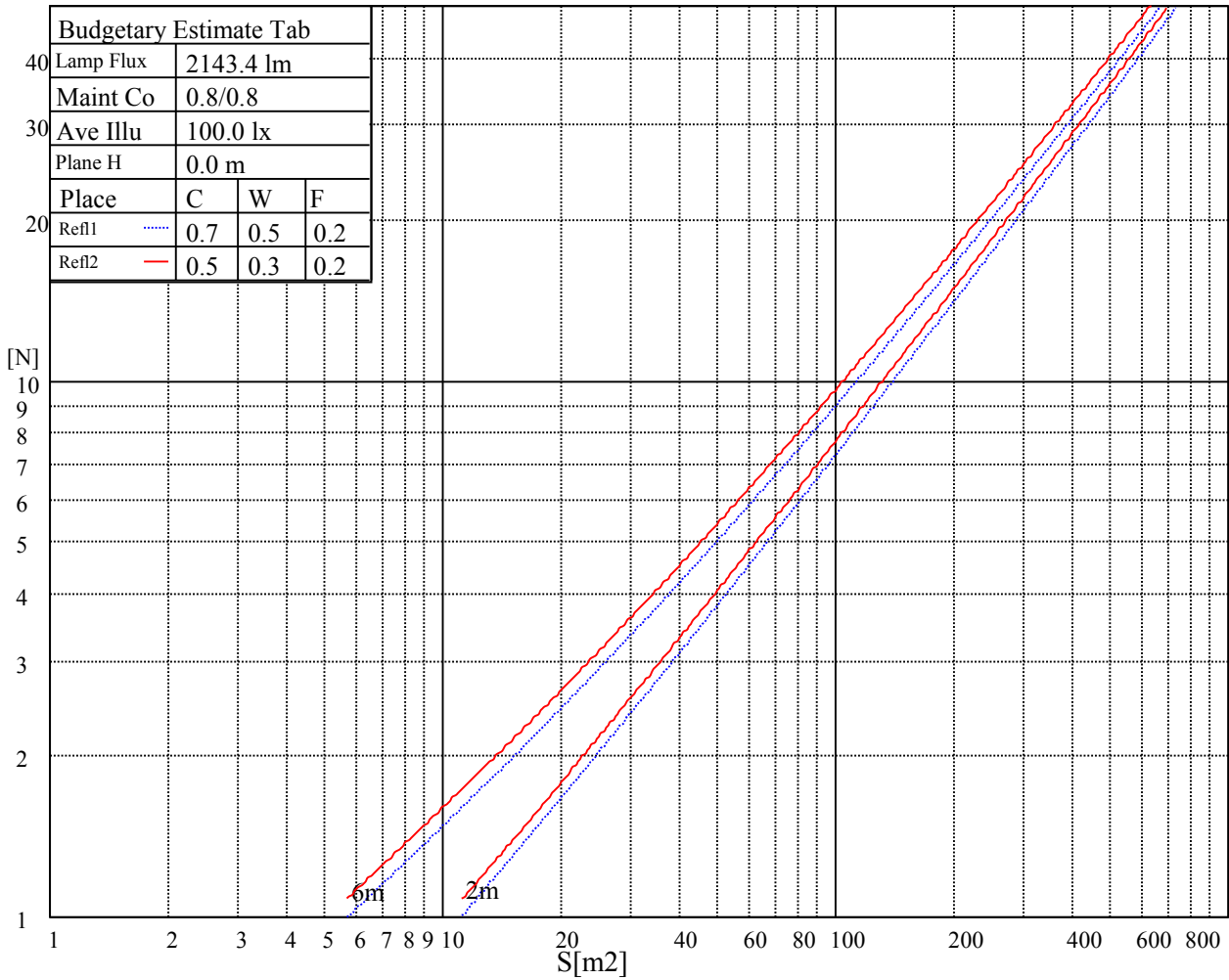
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
1282	1282	1282	1469	1469	1469	3582	3582	3582

Glare Table

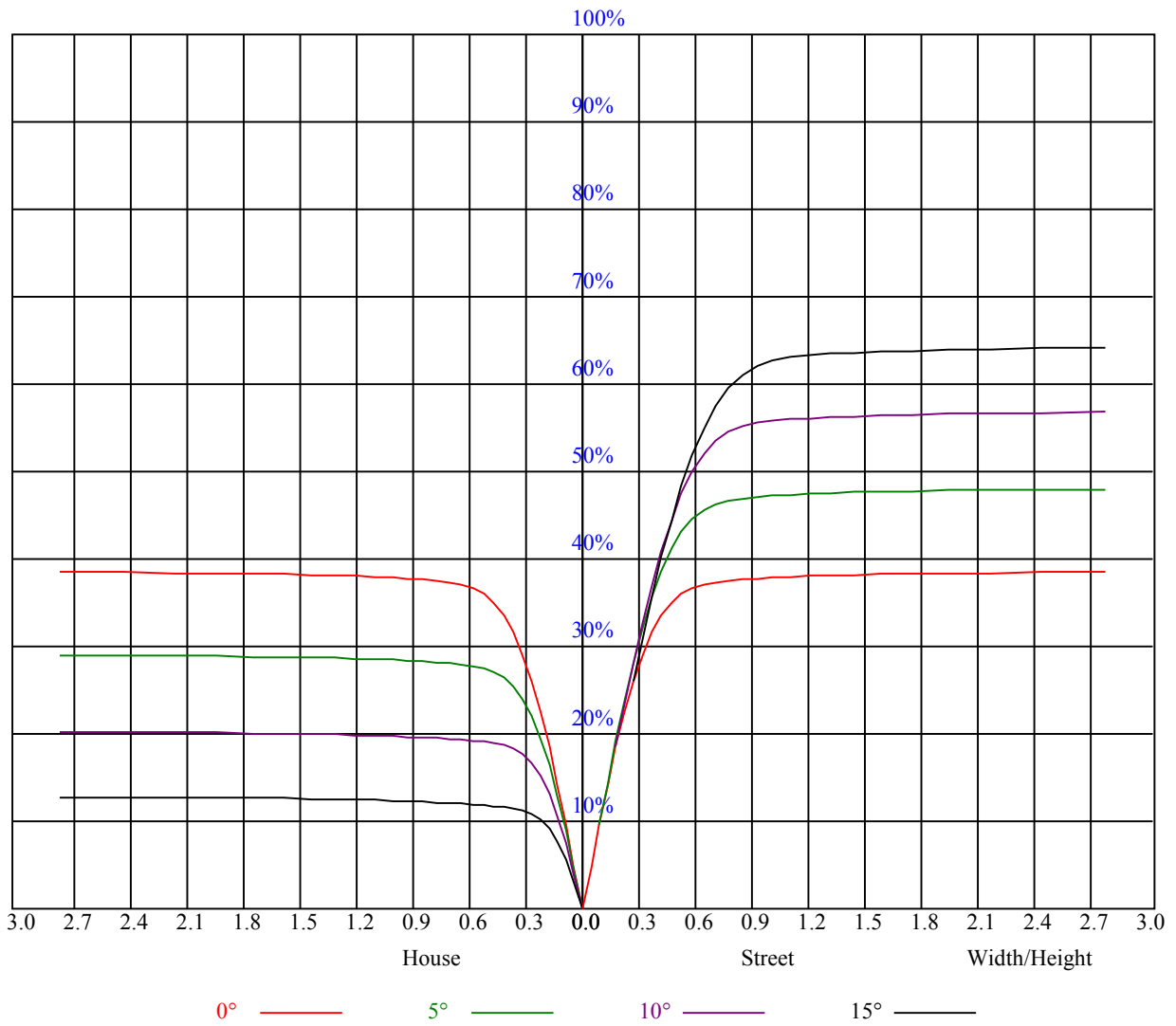
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	0.93	0.93	0.93	0.91	0.91	0.91	0.87	0.87	0.87	0.83	0.83	0.83	0.80	0.80	0.80	0.78
1	0.87	0.85	0.84	0.85	0.84	0.82	0.82	0.81	0.80	0.79	0.78	0.77	0.77	0.76	0.75	0.74
2	0.82	0.79	0.77	0.81	0.78	0.76	0.78	0.76	0.74	0.76	0.74	0.73	0.74	0.72	0.71	0.70
3	0.77	0.74	0.71	0.76	0.73	0.71	0.74	0.72	0.70	0.73	0.70	0.68	0.71	0.69	0.67	0.66
4	0.73	0.70	0.67	0.73	0.69	0.66	0.71	0.68	0.66	0.69	0.67	0.65	0.68	0.66	0.64	0.63
5	0.70	0.66	0.63	0.69	0.65	0.63	0.68	0.65	0.62	0.67	0.64	0.62	0.65	0.63	0.61	0.60
6	0.67	0.63	0.60	0.66	0.62	0.59	0.65	0.62	0.59	0.64	0.61	0.59	0.63	0.60	0.58	0.57
7	0.64	0.60	0.57	0.63	0.59	0.57	0.62	0.59	0.56	0.61	0.58	0.56	0.60	0.58	0.56	0.55
8	0.61	0.57	0.54	0.60	0.57	0.54	0.60	0.56	0.54	0.59	0.56	0.54	0.58	0.55	0.53	0.52
9	0.58	0.54	0.52	0.58	0.54	0.52	0.57	0.54	0.51	0.57	0.54	0.51	0.56	0.53	0.51	0.50
10	0.56	0.52	0.50	0.56	0.52	0.49	0.55	0.52	0.49	0.54	0.51	0.49	0.54	0.51	0.49	0.48



Intensity data(cd)

C/ $\gamma$ (°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	3404.25	3344.63	3090.94	2676.94	2066.63	1322.44	578.25	133.65	60.19
45.0	3425.06	3332.81	3047.63	2607.75	1972.69	1177.88	537.19	111.77	53.10
90.0	3417.75	3289.50	2954.25	2484.00	1831.50	1017.34	338.46	83.36	45.68
135.0	3413.81	3307.50	3016.69	2577.38	1910.81	1089.00	405.56	75.83	42.58
180.0	3404.25	3234.94	2887.88	2404.69	1685.25	857.64	252.90	57.43	38.53
225.0	3425.06	3306.94	2975.63	2482.31	1737.56	983.87	310.28	64.52	42.75
270.0	3417.75	3339.00	3044.81	2611.13	1978.88	1162.13	432.00	96.08	48.49
315.0	3413.81	3308.06	2989.13	2512.69	1860.19	1086.41	398.93	93.99	50.29
360.0	3404.25	3344.63	3090.94	2676.94	2066.63	1322.44	578.25	133.65	60.19
C/ $\gamma$ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	39.54	30.09	23.63	18.90	14.79	12.04	10.07	8.83	7.88
45.0	37.18	28.80	22.56	18.00	14.40	11.81	9.90	8.89	7.82
90.0	33.53	26.83	21.15	16.88	13.28	11.25	9.62	8.72	7.82
135.0	32.96	26.16	20.93	17.04	13.61	11.31	9.56	8.55	7.88
180.0	30.43	24.75	19.86	16.20	12.94	10.80	9.17	8.38	7.82
225.0	32.63	26.21	21.21	17.10	13.67	11.48	9.73	8.94	8.66
270.0	35.55	28.46	22.56	18.06	14.46	11.93	10.01	8.83	8.16
315.0	35.66	27.84	22.28	17.72	14.06	11.59	9.96	9.06	8.04
360.0	39.54	30.09	23.63	18.90	14.79	12.04	10.07	8.83	7.88
C/ $\gamma$ (°)	90.0								
0.0	7.31								
45.0	7.37								
90.0	7.31								
135.0	7.31								
180.0	7.31								
225.0	7.43								
270.0	7.31								
315.0	7.31								
360.0	7.31								