



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

---

## Nata

---

### Client:

LumCAT: 3-1742-N

Luminaire: 92.70.065.00+92.70.061.00

Report No: nata-0100

Test No:

LampCAT: CREE CMT1922

Lamp flux(lm): 2762.0

Number of Lamps: 1

Length(mm): 86

Phm Type: C

Voltage(V): 35.4000

Current(A): 0.6000

Power (W): 21.2400

PF: 1.0000

Ballast type: DC

Width(mm): 86

Height(mm): 0

---

## Photometric Results

---

Lumens(lm): 2163.26, Efficiency(%): 78.32% , Luminous Efficacy(lm/W): 101.85

Central intensity(cd): 8803.656, Maximum intensity(cd): 8803.656

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

Beam Angle(50%Imax): [C0/180]Total=23.6

[C90/270]Total=23.6

Field angle(10%Imax): [C0/180]Total=47.0

[C90/270]Total=47.0

Maximum s/h(1/2): C0\_180=0.40 C90\_270=0.40

Maximum s/h(1/4): C0\_180=0.41 C90\_270=0.41

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 80.16%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 95.910%

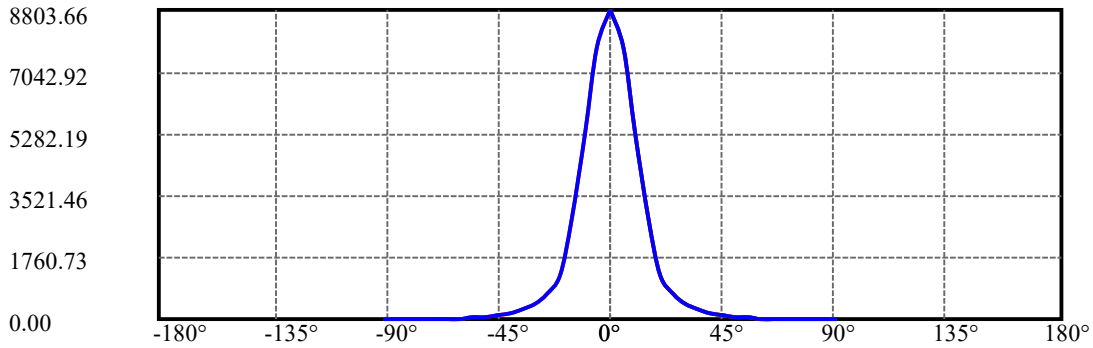
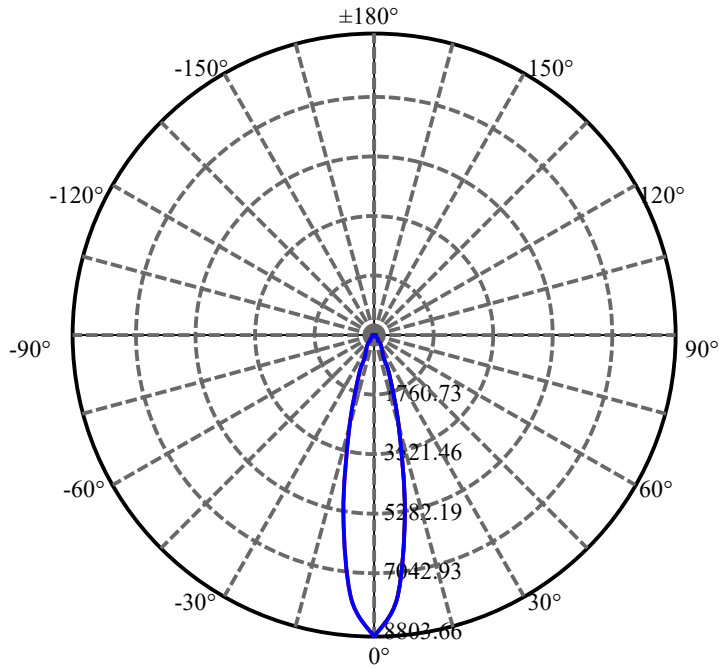
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	8803.656	52.648	52.648	1.906%	2.434%
5.0	7706.520	368.166	420.814	13.330%	19.453%
10.0	5285.827	503.121	923.935	18.216%	42.710%
15.0	2832.376	401.825	1325.76	14.549%	61.285%
20.0	1256.745	235.607	1561.367	8.530%	72.177%
25.0	720.468	166.898	1728.265	6.043%	79.892%
30.0	459.962	126.061	1854.326	4.564%	85.719%
35.0	289.893	91.142	1945.468	3.300%	89.932%
40.0	191.101	67.332	2012.8	2.438%	93.045%
45.0	120.470	46.693	2059.493	1.691%	95.203%
50.0	75.028	31.504	2090.997	1.141%	96.660%
55.0	43.866	19.696	2110.693	.713%	97.570%
60.0	26.551	12.604	2123.297	.456%	98.153%
65.0	19.146	9.511	2132.808	.344%	98.592%
70.0	16.531	8.515	2141.323	.308%	98.986%
75.0	14.370	7.608	2148.931	.275%	99.338%
80.0	12.250	6.613	2155.544	.239%	99.643%
85.0	9.896	5.404	2160.948	.196%	99.893%
90.0	8.431	2.311	2163.258	.084%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1854.33	67.14%	85.72%
0-40	2012.80	72.88%	93.04%
0-60	2123.30	76.88%	98.15%
0-90	2160.95	78.24%	99.89%
0-120	2160.95	78.24%	99.89%
0-180	2163.26	78.32%	100.00%
60-90	50.25	1.82%	2.32%
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%
0-25.09	1730.61	62.66%	80.00%

ZONAL LUMEN SUMMARY

0-10	923.93
10-20	637.43
20-30	292.96
30-40	158.47
40-50	78.20
50-60	32.30
60-70	18.03
70-80	14.22
80-90	5.40
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: —————

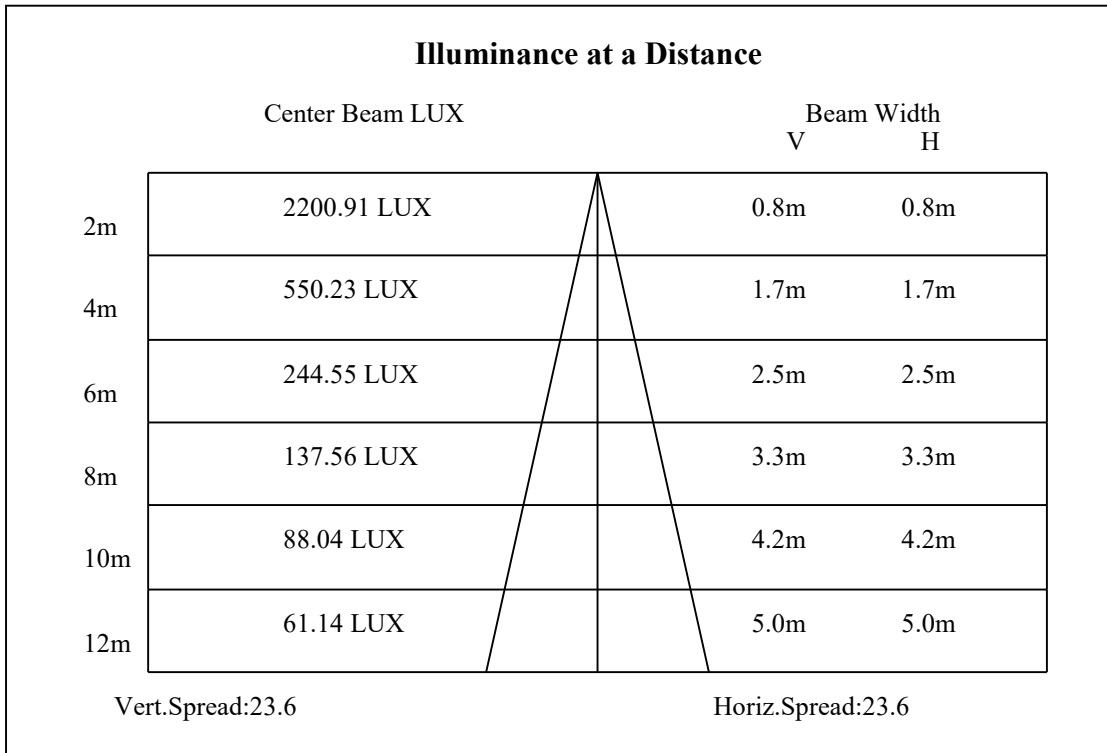
C90/C270: —————

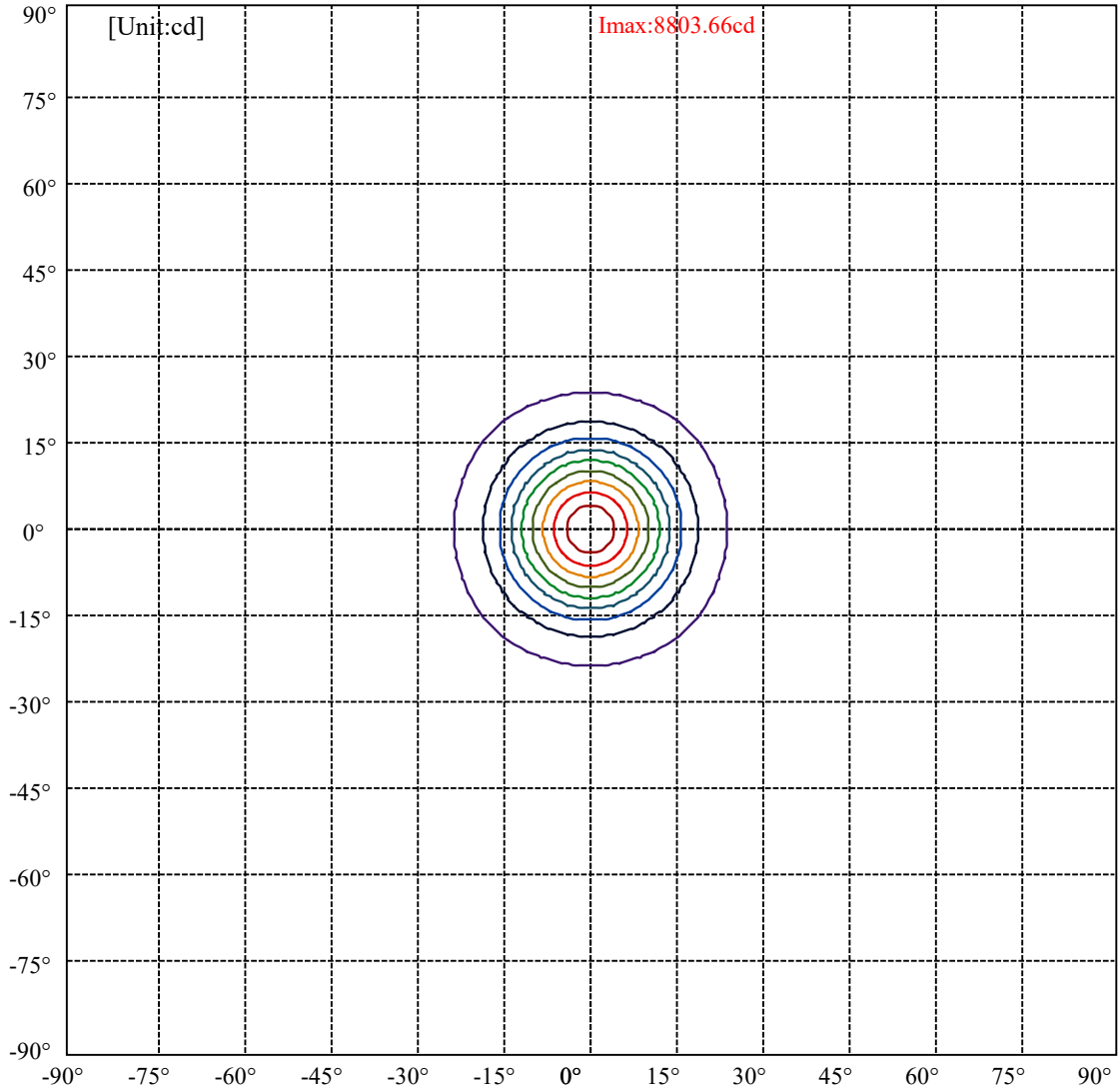
Field angle(10%Imax):C0/180Left:23.5 Right:23.5

:C90/270Left:23.5 Right:23.5

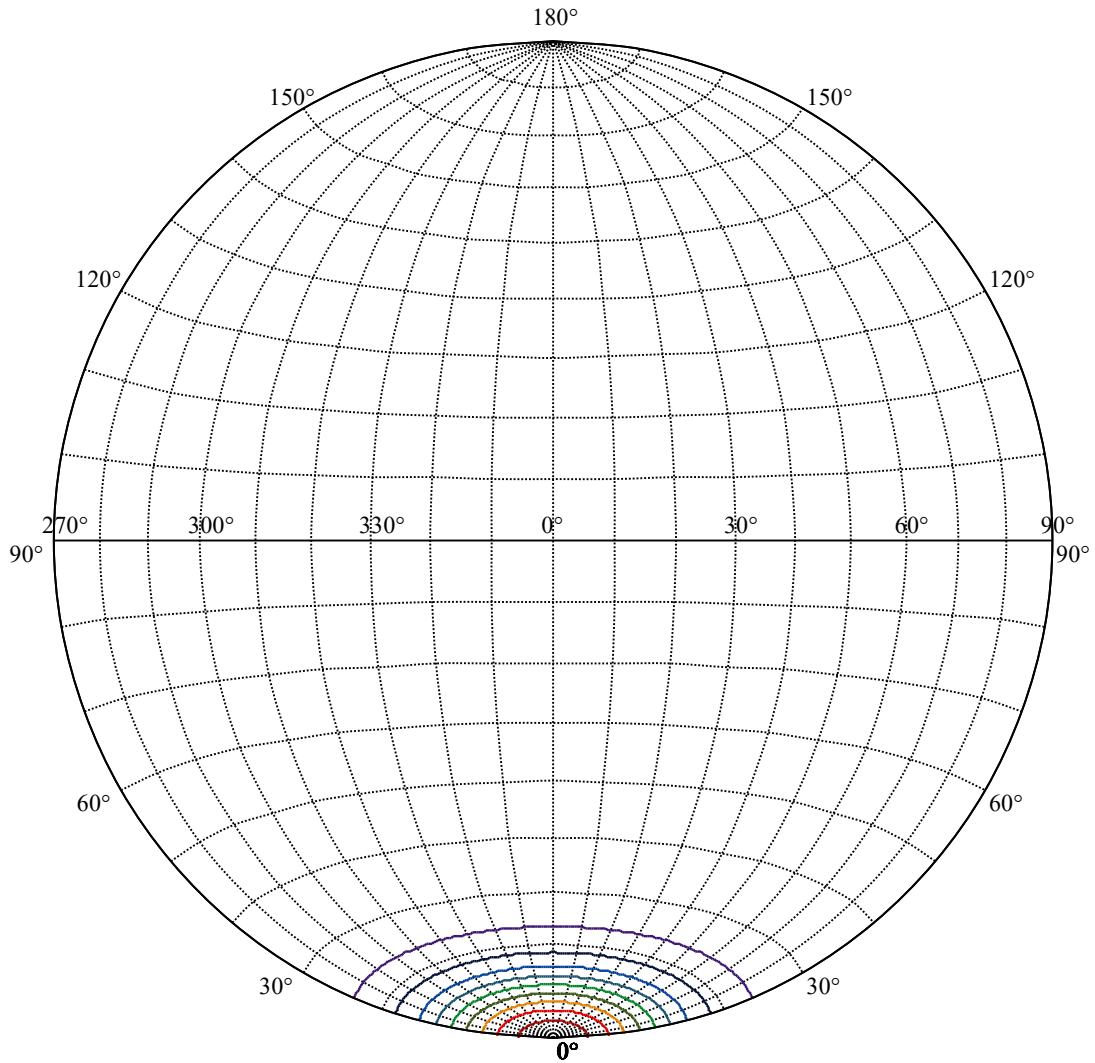
Beam Angle(50%Imax):C0/180Left:11.8 Right:11.8

:C90/270Left:11.8 Right:11.8





(10%Imax) 880.366	—
(20%Imax) 1760.73	—
(30%Imax) 2641.1	—
(40%Imax) 3521.46	—
(50%Imax) 4401.83	—
(60%Imax) 5282.19	—
(70%Imax) 6162.56	—
(80%Imax) 7042.92	—
(90%Imax) 7923.29	—



House

[Unit:cd]

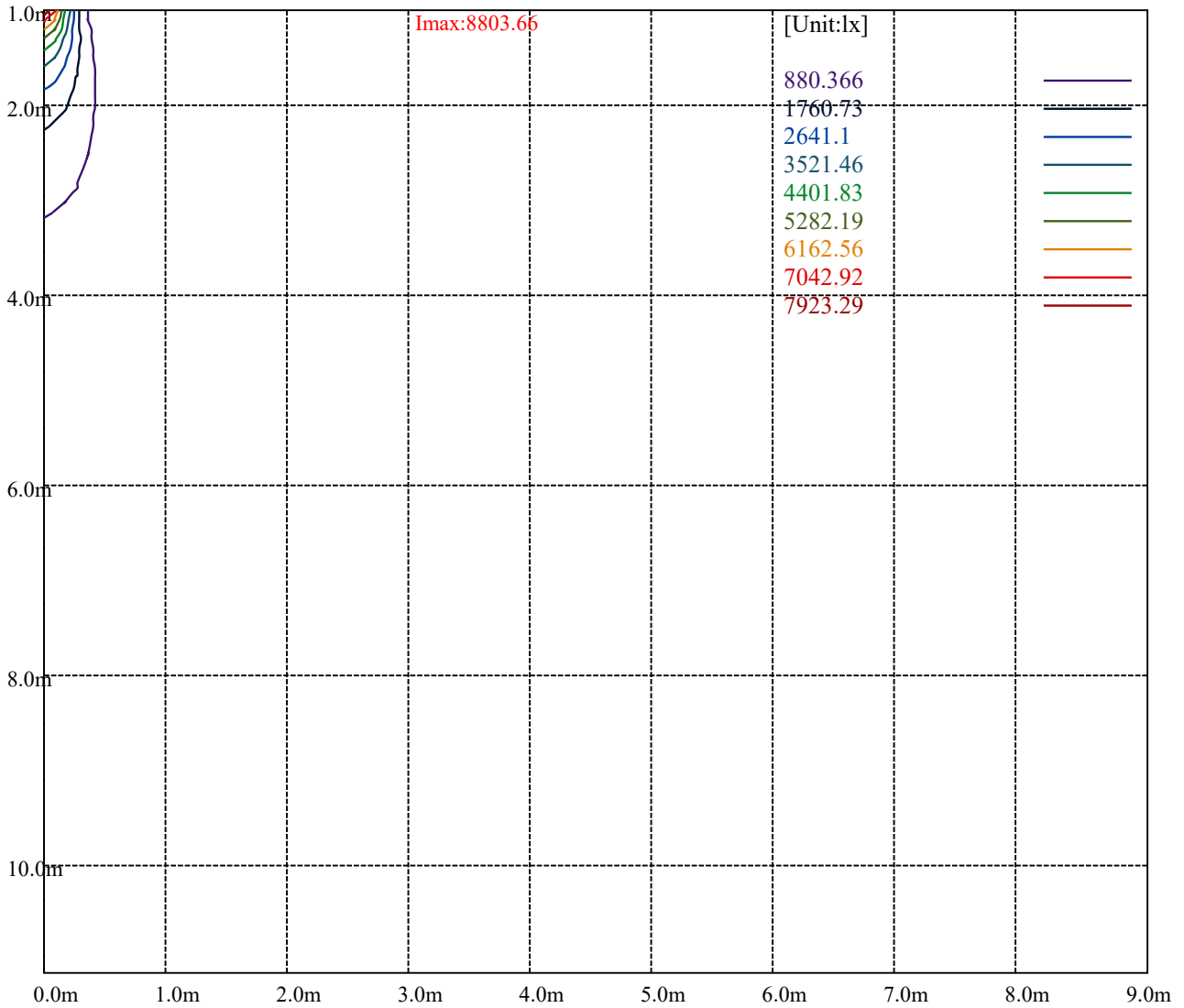
Road

**Imax:8803.66**

(10%Imax) 880.366	—
(20%Imax) 1760.73	—
(30%Imax) 2641.1	—
(40%Imax) 3521.46	—
(50%Imax) 4401.83	—
(60%Imax) 5282.19	—
(70%Imax) 6162.56	—
(80%Imax) 7042.92	—
(90%Imax) 7923.29	—







Luminance Table

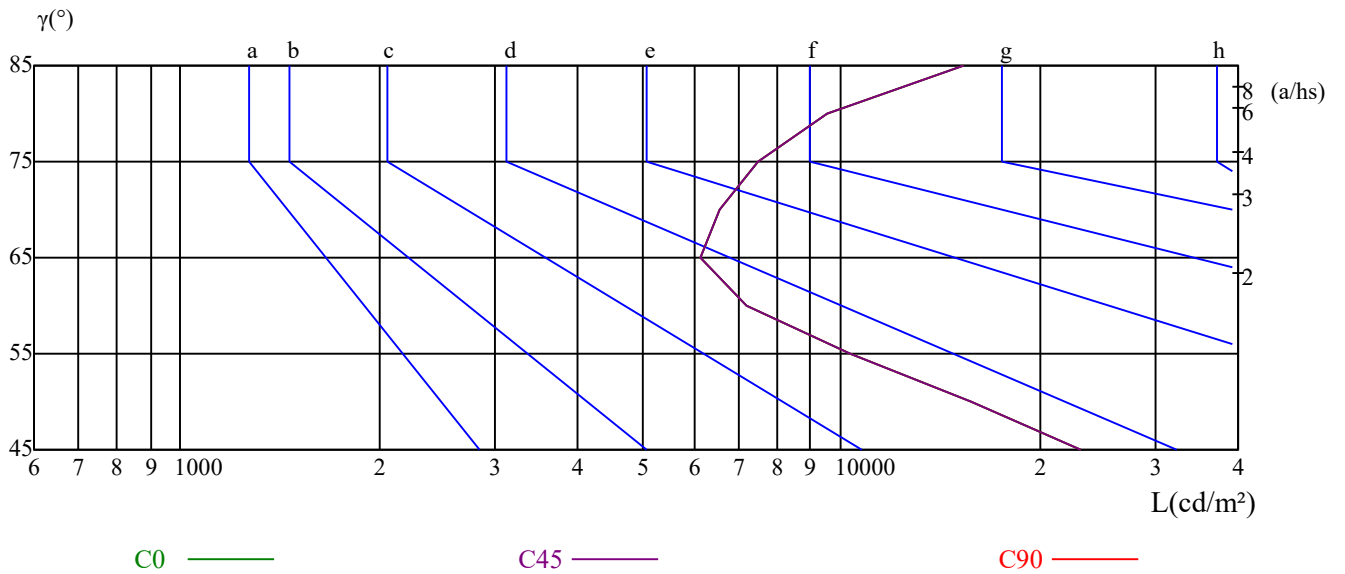
$\gamma$	45	50	55	60	65	70	75	80	85
C0	23036	15782	10341	7180	6125	6535	7507	9538	15353
C45	23036	15782	10341	7180	6125	6535	7507	9538	15353
C90	23036	15782	10341	7180	6125	6535	7507	9538	15353

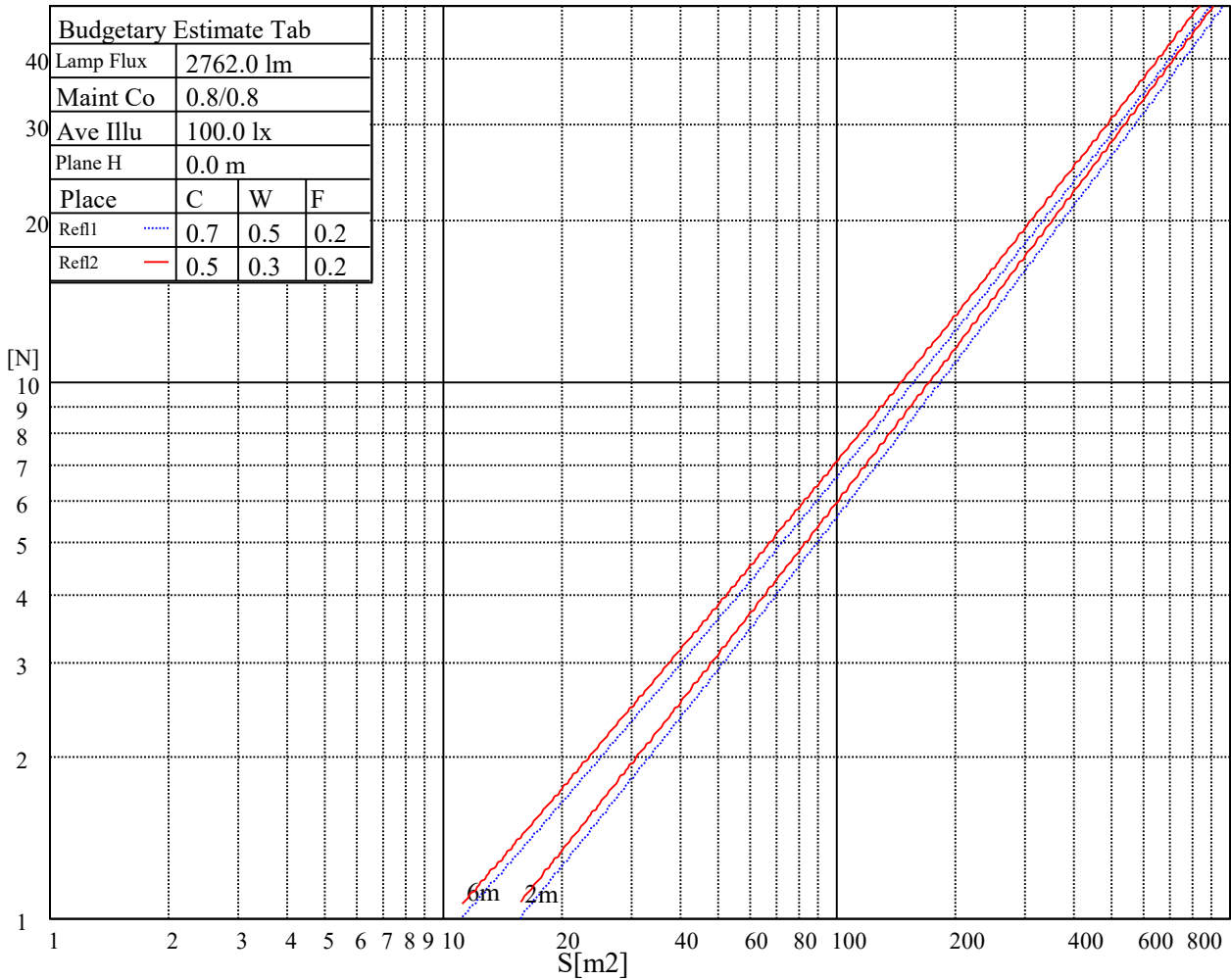
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
6125	6125	6125	7507	7507	7507	15353	15353	15353

Glare Table

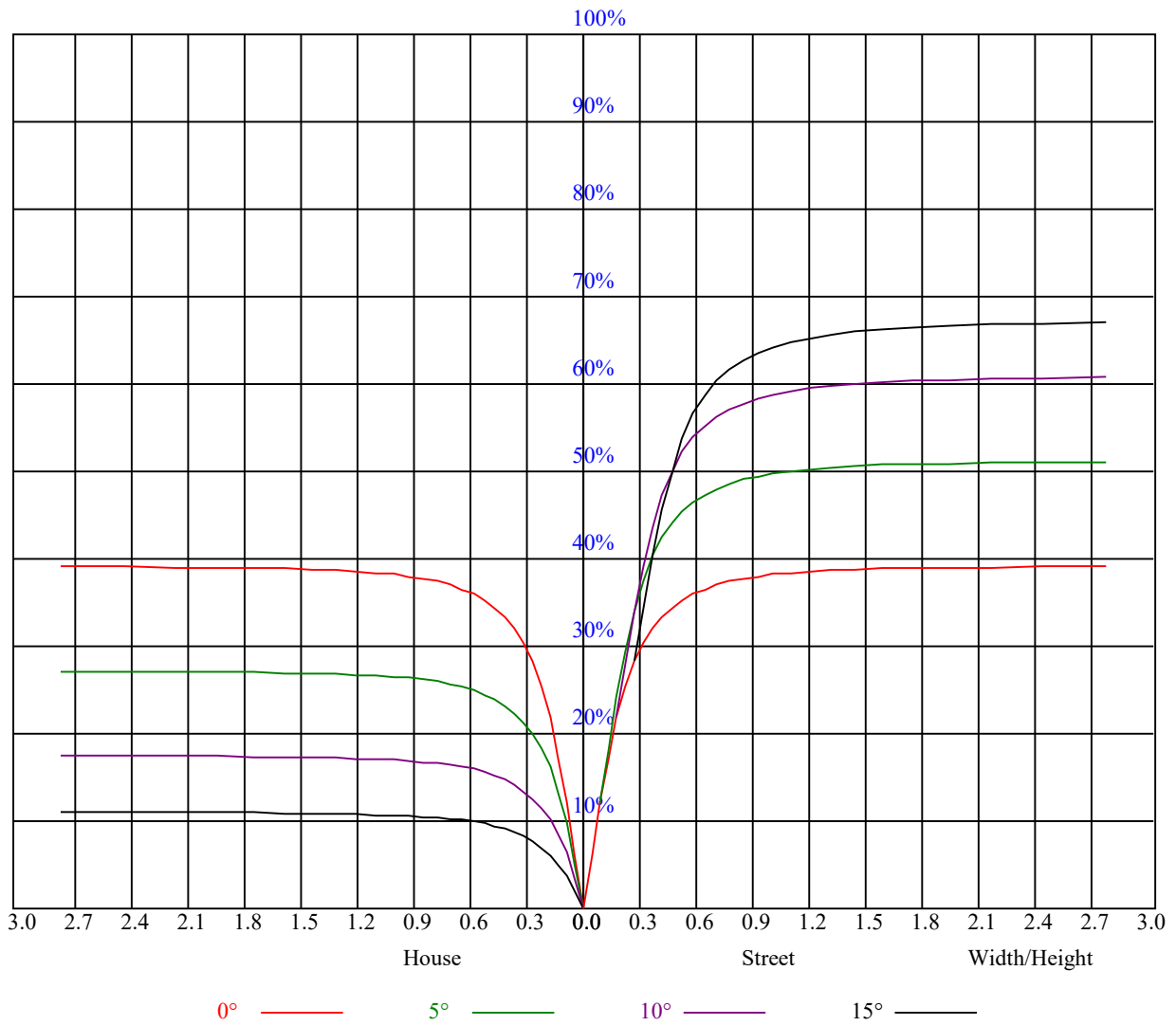
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

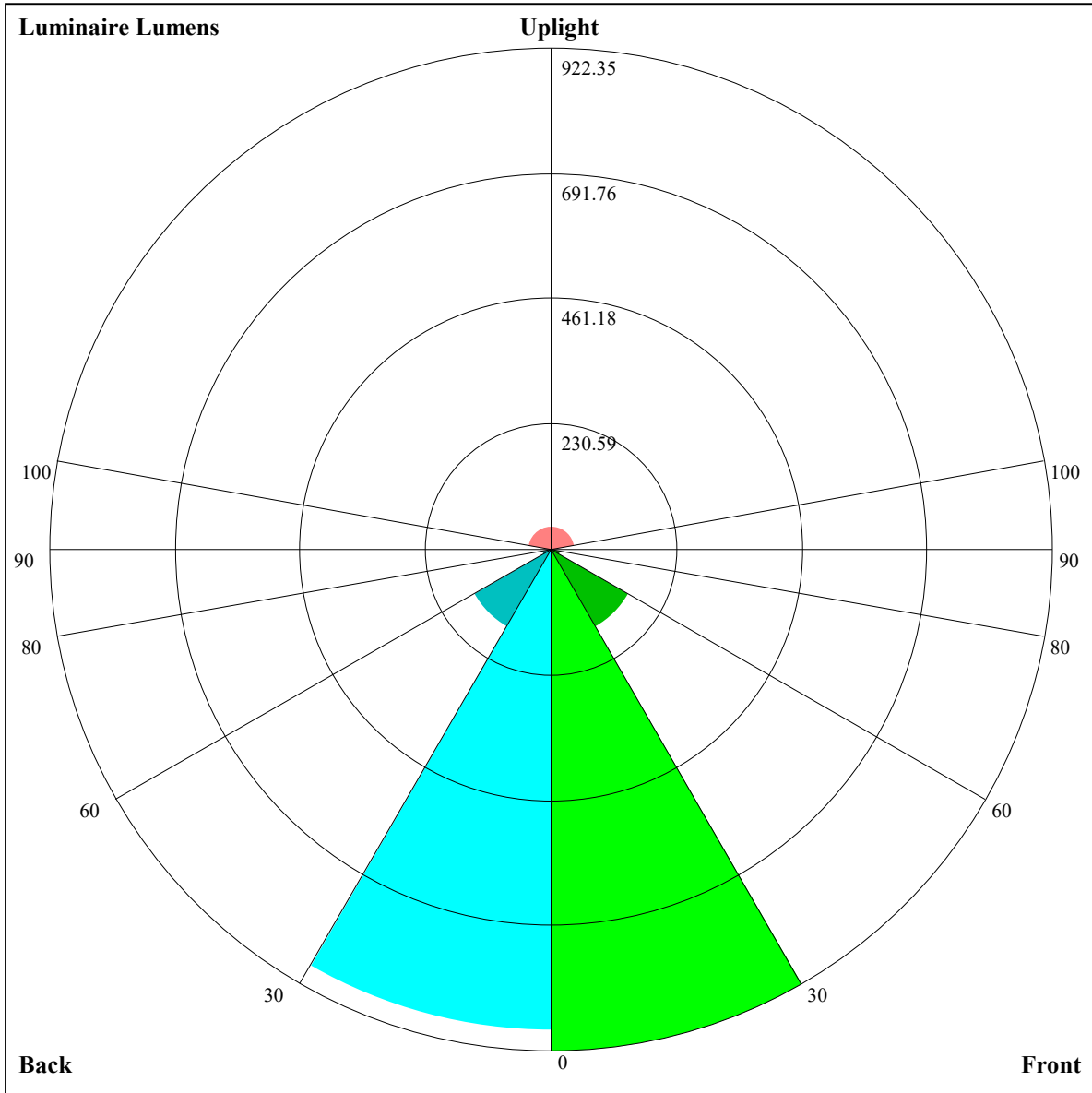
Luminance Limiting Curve





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	0.95	0.95	0.95	0.93	0.93	0.93	0.89	0.89	0.89	0.85	0.85	0.85	0.82	0.82	0.82	0.80
1	0.87	0.85	0.83	0.86	0.84	0.82	0.82	0.81	0.79	0.79	0.78	0.77	0.77	0.75	0.74	0.73
2	0.83	0.80	0.77	0.81	0.78	0.76	0.79	0.76	0.74	0.76	0.74	0.73	0.74	0.73	0.71	0.70
3	0.79	0.75	0.72	0.78	0.74	0.72	0.76	0.73	0.70	0.74	0.71	0.69	0.72	0.70	0.68	0.67
4	0.75	0.71	0.68	0.74	0.71	0.68	0.73	0.70	0.67	0.71	0.69	0.66	0.70	0.68	0.66	0.65
5	0.72	0.68	0.65	0.71	0.68	0.65	0.70	0.67	0.64	0.69	0.66	0.64	0.68	0.65	0.63	0.62
6	0.69	0.66	0.63	0.69	0.65	0.63	0.68	0.65	0.62	0.67	0.64	0.62	0.66	0.63	0.61	0.60
7	0.67	0.63	0.60	0.67	0.63	0.60	0.66	0.62	0.60	0.65	0.62	0.60	0.64	0.61	0.59	0.59
8	0.65	0.61	0.59	0.65	0.61	0.58	0.64	0.60	0.58	0.63	0.60	0.58	0.62	0.60	0.58	0.57
9	0.63	0.59	0.57	0.63	0.59	0.57	0.62	0.59	0.57	0.61	0.58	0.56	0.61	0.58	0.56	0.55
10	0.61	0.58	0.55	0.61	0.57	0.55	0.60	0.57	0.55	0.60	0.57	0.55	0.59	0.57	0.55	0.54





Luminaire Lumens:

FL=922.35,FM=165.67,FH=17.66,FVH=5.5

BL=885.63,BM=163.56,BH=17.65,BVH=5.52

UL=9.2,UH=43.77

BUG Rating:B2-U2-G0

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	8763.88	7967.21	5642.18	3189.97	1476.61	769.14	478.44	308.87	193.91
45.0	8848.66	7692.48	5238.07	2844.21	1297.68	690.41	443.20	279.14	184.11
90.0	8768.28	7266.89	4793.21	2426.34	1068.48	647.02	411.49	254.86	167.98
135.0	8833.80	7656.69	5289.82	2785.30	1390.72	716.83	457.52	284.64	191.38
180.0	8763.88	7366.00	4754.67	2426.34	1087.80	664.15	432.47	281.50	185.26
225.0	8848.66	7745.88	5185.21	2702.17	1085.60	711.22	454.82	290.48	196.06
270.0	8768.28	8081.73	5991.79	3354.04	1573.51	835.21	527.44	328.69	220.67
315.0	8833.80	7875.27	5391.67	2930.65	1073.54	729.77	474.31	290.97	189.45
360.0	8763.88	7967.21	5642.18	3189.97	1476.61	769.14	478.44	308.87	193.91
C/ $\gamma$ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	124.37	80.05	46.80	28.02	19.49	16.63	14.31	12.50	9.91
45.0	116.77	73.78	42.50	26.32	18.94	16.41	14.20	12.28	9.63
90.0	108.02	66.95	38.21	24.06	18.44	16.02	13.93	11.67	9.52
135.0	120.35	75.21	45.09	26.76	19.16	16.63	14.48	12.22	9.91
180.0	114.63	67.83	40.69	24.67	18.94	16.57	14.37	12.06	9.80
225.0	123.60	75.48	44.49	26.54	19.38	16.68	14.65	12.39	10.30
270.0	135.88	84.07	48.45	29.40	19.77	16.90	14.81	12.72	10.19
315.0	120.13	76.86	44.71	26.65	19.05	16.41	14.20	12.17	9.91
360.0	124.37	80.05	46.80	28.02	19.49	16.63	14.31	12.50	9.91
C/ $\gamma$ (°)	90.0								
0.0	8.48								
45.0	8.42								
90.0	8.42								
135.0	8.42								
180.0	8.42								
225.0	8.42								
270.0	8.42								
315.0	8.42								
360.0	8.48								