



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:CT01D03660AH

Luminaire:

Report No: NATA0100

Voltage(V): 33.6900

Test No: GC20190504

Current(A): 0.2970

LampCAT: XICATO XOB LES 9.8MM

Power (W): 10.0000

Lamp flux(lm): 1033.1

PF: 0.0000

Number of Lamps: 1

Ballast type: DC

Length(mm):35.8

Width(mm): 35.8

Phm Type: C

Height(mm): 0

---

## Photometric Results

---

Lumens(lm): 871.47

Efficiency(%): 84.36%

Lumens(lm)/Power(W): 87.15

Central intensity(cd): 708.863

Maximum intensity(cd): 708.863

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

Beam Angle(50%Imax): [C0/180]Total=63.2

[C90/270]Total=63.2

Field angle(10%Imax): [C0/180]Total=107.3

[C90/270]Total=107.3

Maximum s/h(1/2): C0\_180=0.93 C90\_270=0.93

Maximum s/h(1/4): C0\_180=0.95 C90\_270=0.95

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 84.36%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 92.537%

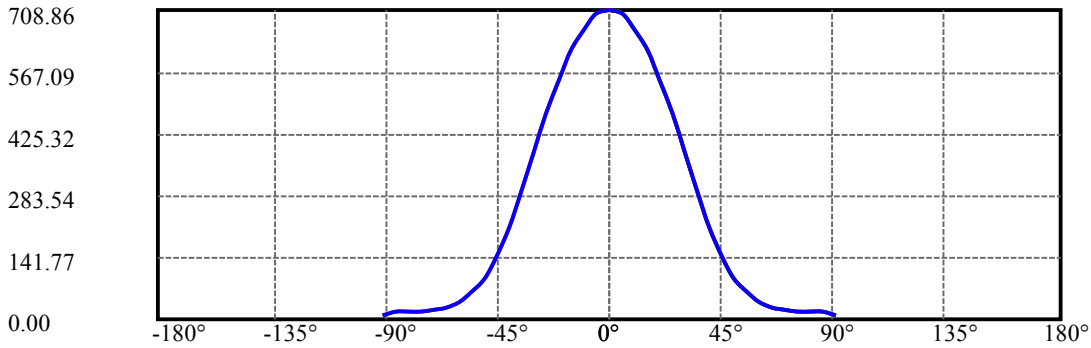
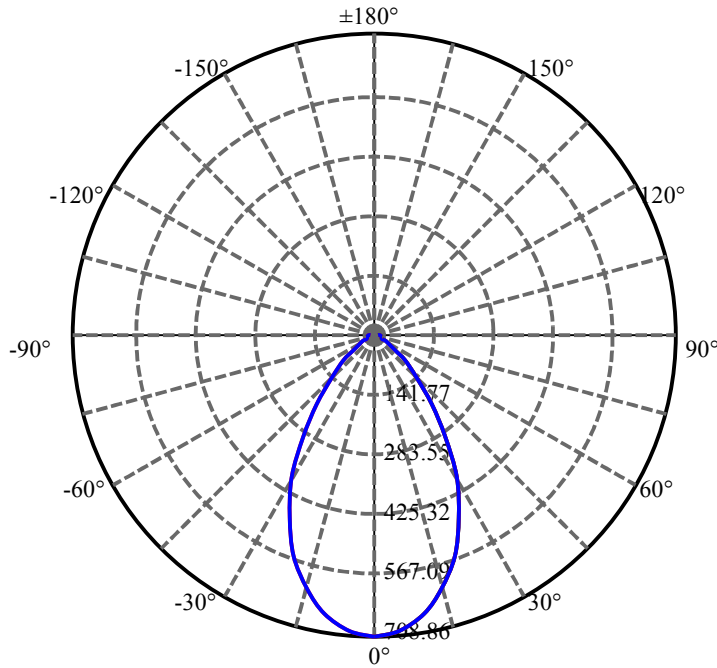
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	708.863	0.000	0	.000%	.000%
5.0	697.866	16.817	16.817	1.628%	1.930%
10.0	666.527	48.809	65.626	4.725%	7.530%
15.0	616.711	76.121	141.746	7.369%	16.265%
20.0	550.680	96.209	237.956	9.313%	27.305%
25.0	472.535	107.316	345.272	10.388%	39.620%
30.0	385.341	108.565	453.837	10.509%	52.078%
35.0	290.222	99.481	553.319	9.630%	63.493%
40.0	209.370	83.353	636.672	8.069%	73.058%
45.0	139.352	64.569	701.24	6.250%	80.467%
50.0	94.627	47.279	748.519	4.577%	85.892%
55.0	62.037	34.064	782.583	3.297%	89.801%
60.0	41.119	23.844	806.427	2.308%	92.537%
65.0	28.575	16.943	823.37	1.640%	94.481%
70.0	21.551	12.692	836.062	1.229%	95.938%
75.0	18.345	10.428	846.49	1.009%	97.134%
80.0	17.065	9.475	855.965	.917%	98.221%
85.0	15.855	8.945	864.91	.866%	99.248%
90.0	8.086	6.555	871.465	.635%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	453.84	43.93%	52.08%
0-40	636.67	61.63%	73.06%
0-60	806.43	78.06%	92.54%
0-90	864.91	83.72%	99.25%
0-120	864.91	83.72%	99.25%
0-180	871.47	84.36%	100.00%
60-90	82.33	7.97%	9.45%
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%
0-44.68	697.17	67.49%	80.00%

ZONAL LUMEN SUMMARY

0-10	65.63
10-20	172.33
20-30	215.88
30-40	182.83
40-50	111.85
50-60	57.91
60-70	29.63
70-80	19.90
80-90	8.95
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: —————

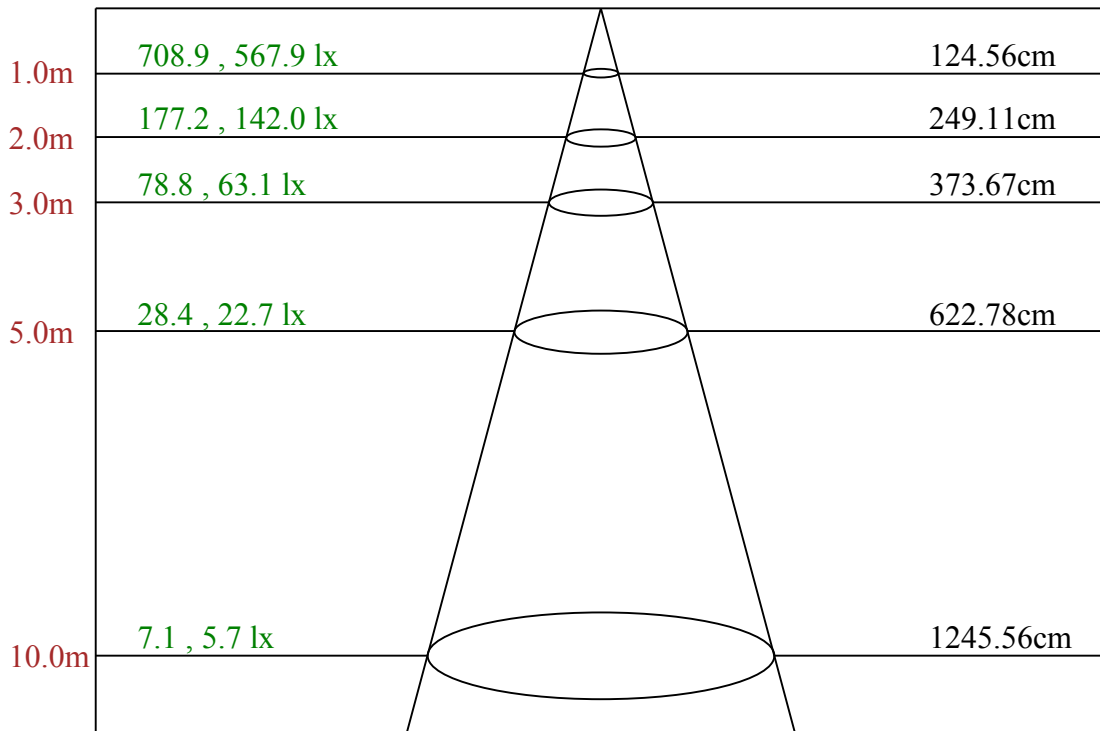
C90/C270: —————

Field angle(10%Imax):C0/180Left:53.6 Right:53.6

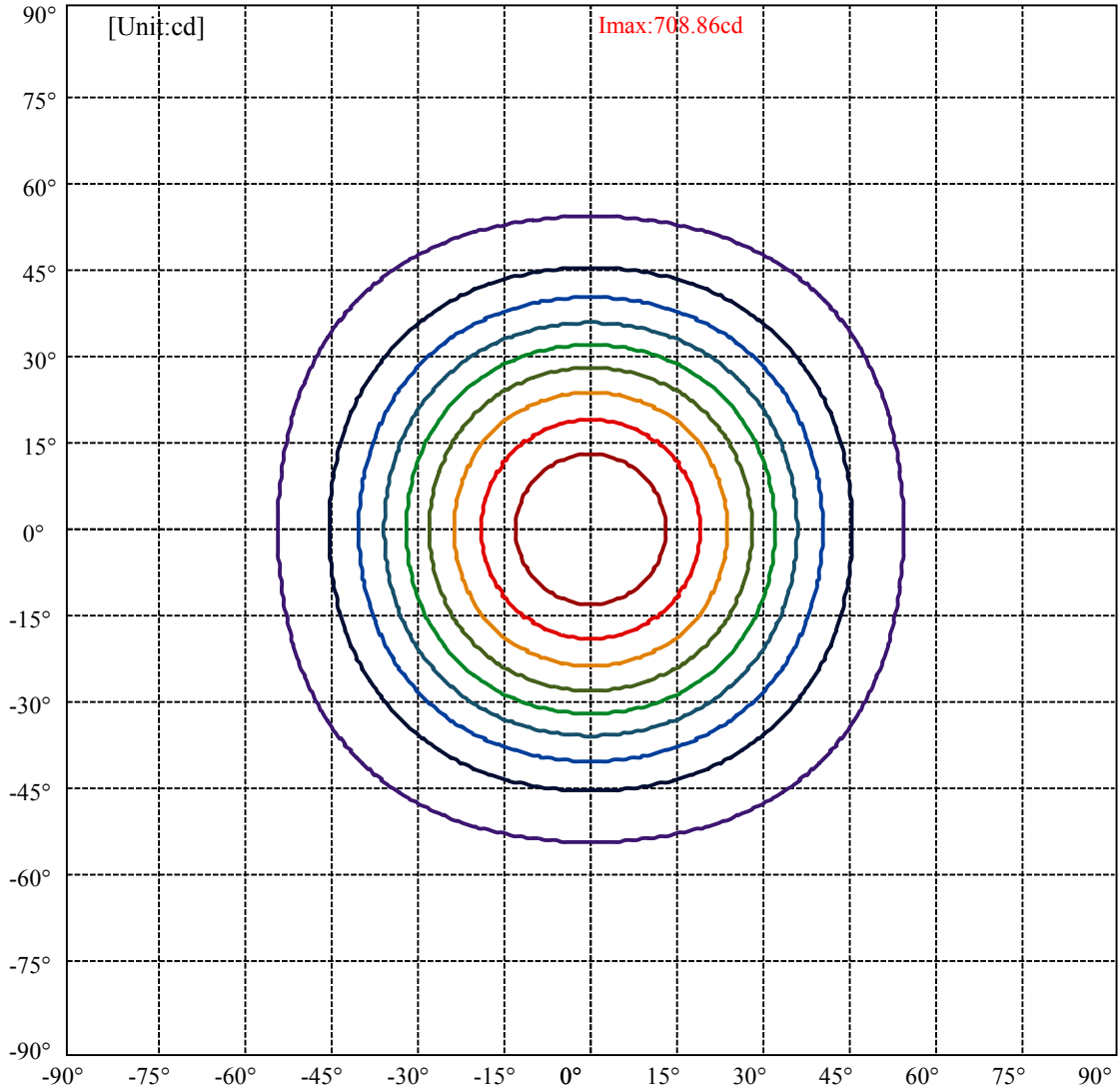
:C90/270Left:53.6 Right:53.6

Beam Angle(50%Imax):C0/180Left:31.6 Right:31.6

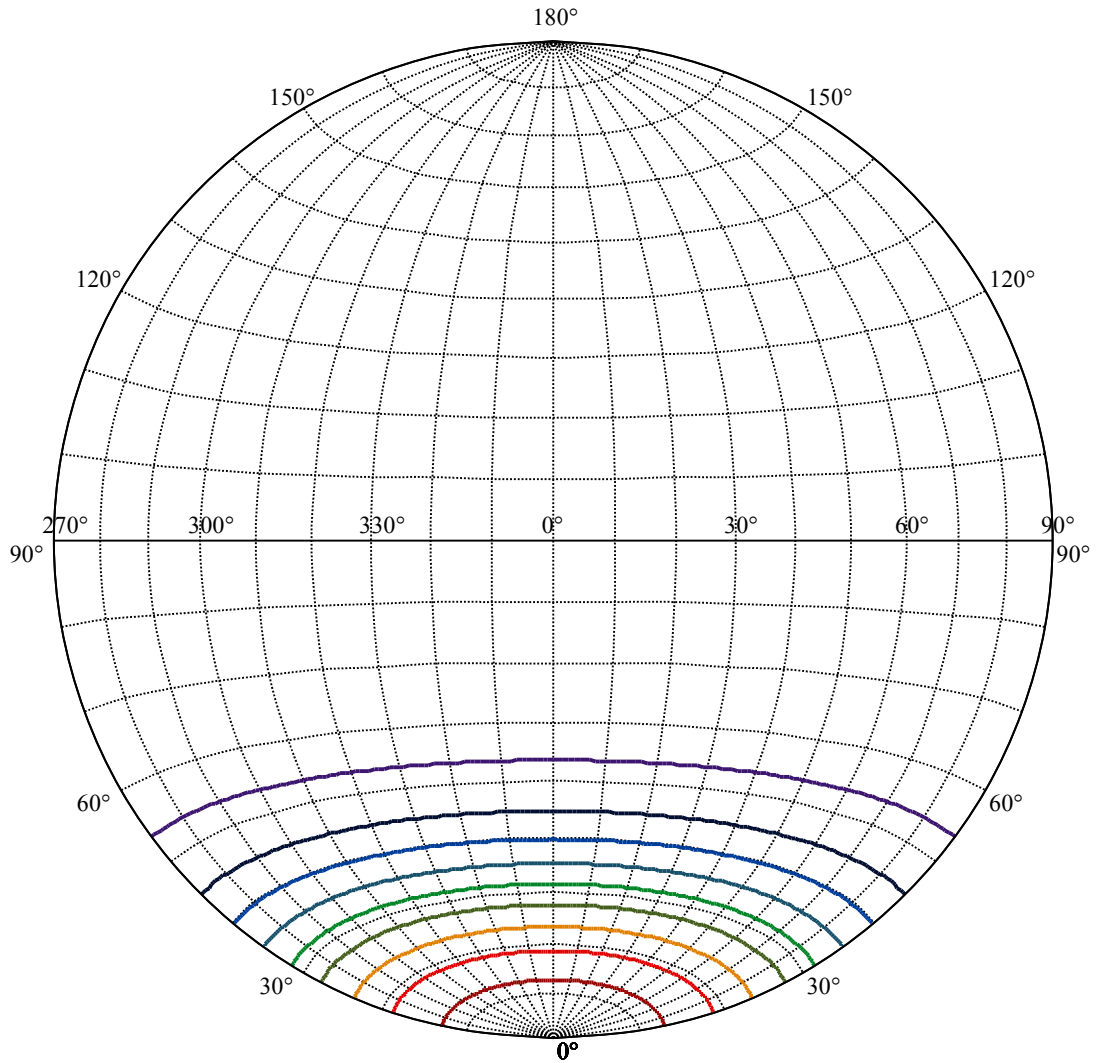
:C90/270Left:31.6 Right:31.6



Max , Ave      Beam angle of C0 plane 63.83



(10%I <sub>max</sub> ) 70.8862	—
(20%I <sub>max</sub> ) 141.772	—
(30%I <sub>max</sub> ) 212.659	—
(40%I <sub>max</sub> ) 283.545	—
(50%I <sub>max</sub> ) 354.431	—
(60%I <sub>max</sub> ) 425.318	—
(70%I <sub>max</sub> ) 496.204	—
(80%I <sub>max</sub> ) 567.09	—
(90%I <sub>max</sub> ) 637.976	—



House

[Unit:cd]

Road

**I<sub>max</sub>:708.86**

(10%I<sub>max</sub>) 70.8862

(20%I<sub>max</sub>) 141.772

(30%I<sub>max</sub>) 212.659

(40%I<sub>max</sub>) 283.545

(50%I<sub>max</sub>) 354.431

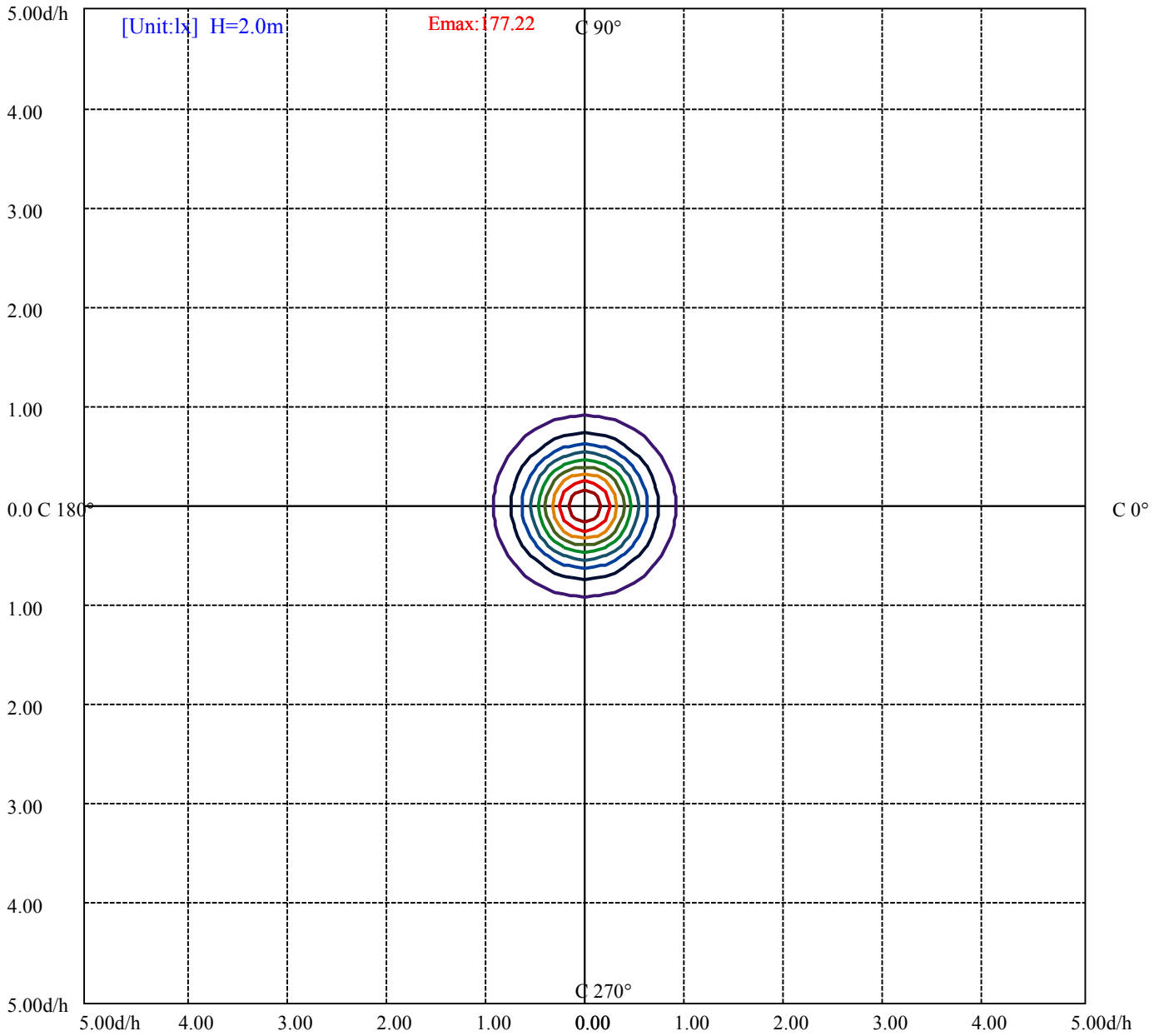
(60%I<sub>max</sub>) 425.318

(70%I<sub>max</sub>) 496.204

(80%I<sub>max</sub>) 567.09

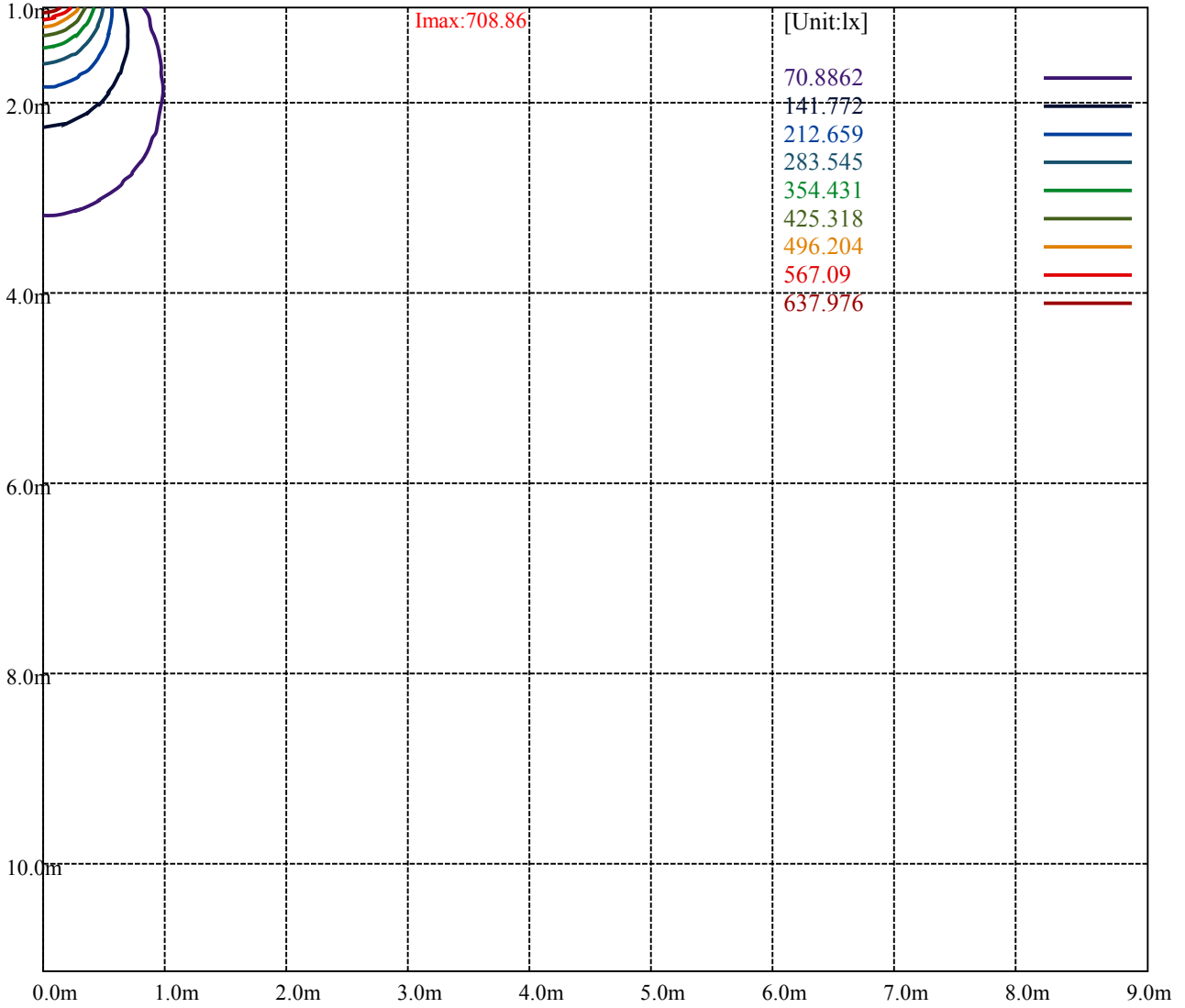
(90%I<sub>max</sub>) 637.976





- (10%Emax) 17.72155
- (20%Emax) 35.443
- (30%Emax) 53.16475
- (40%Emax) 70.88625
- (50%Emax) 88.60775
- (60%Emax) 106.3292
- (70%Emax) 124.051
- (80%Emax) 141.7725
- (90%Emax) 159.494





Luminance Table

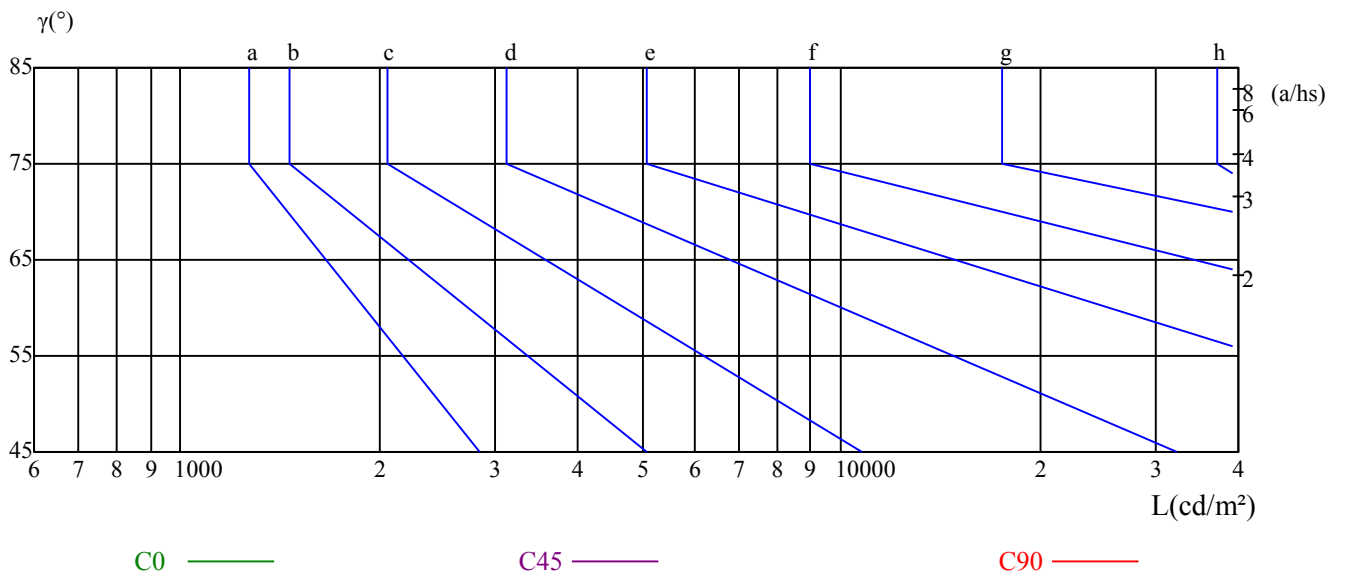
$\gamma$	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

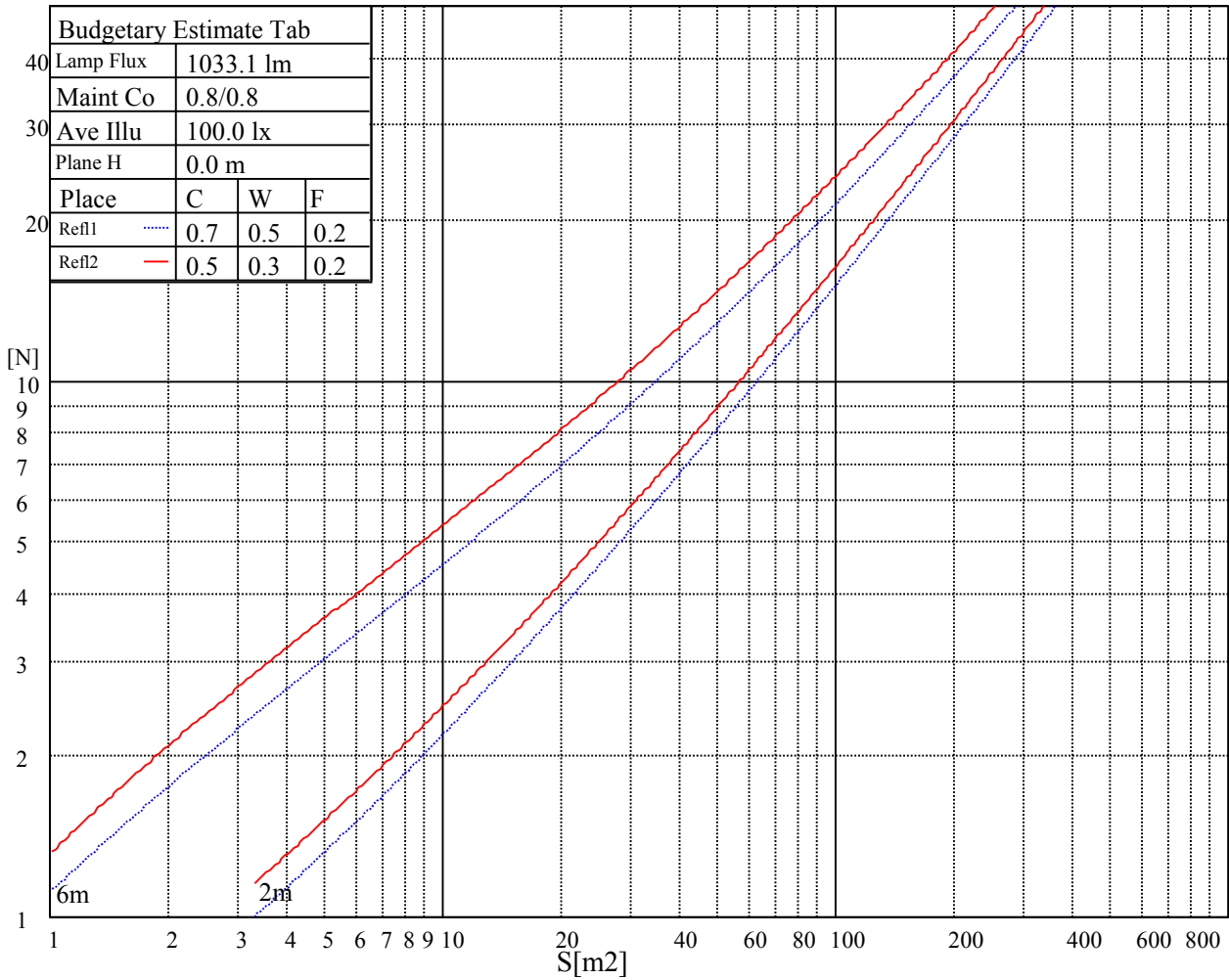
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

Glare Table

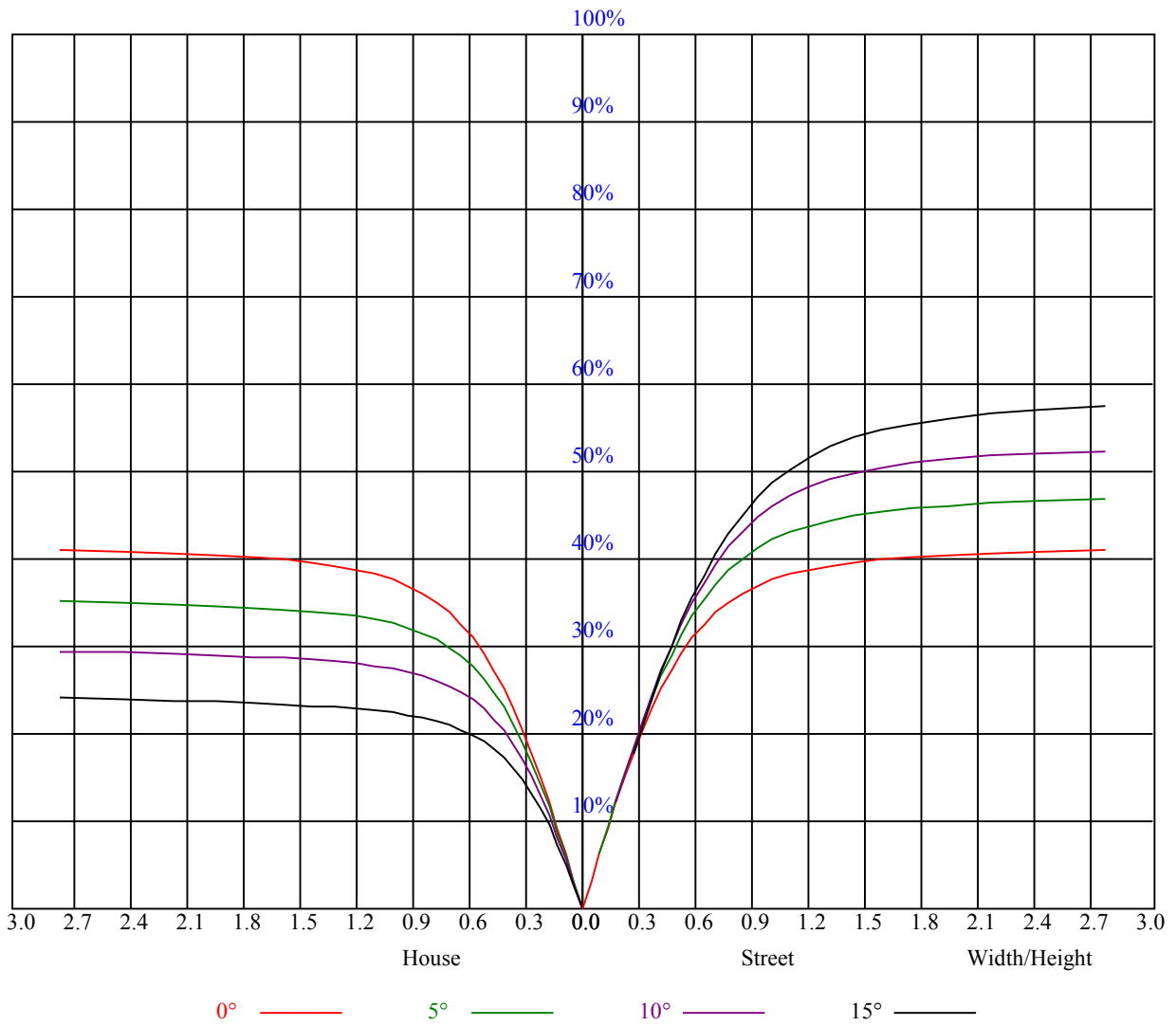
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.00	1.00	1.00	0.98	0.98	0.98	0.94	0.94	0.94	0.90	0.90	0.90	0.86	0.86	0.86	0.84
1	0.91	0.88	0.86	0.89	0.87	0.84	0.86	0.84	0.82	0.82	0.81	0.79	0.79	0.78	0.77	0.75
2	0.83	0.78	0.75	0.81	0.77	0.74	0.78	0.75	0.72	0.76	0.73	0.71	0.73	0.71	0.69	0.67
3	0.75	0.70	0.66	0.74	0.69	0.65	0.72	0.68	0.64	0.70	0.66	0.63	0.68	0.65	0.62	0.61
4	0.69	0.63	0.59	0.68	0.63	0.59	0.66	0.62	0.58	0.64	0.60	0.57	0.63	0.59	0.57	0.55
5	0.64	0.58	0.53	0.63	0.57	0.53	0.61	0.56	0.53	0.60	0.55	0.52	0.58	0.55	0.52	0.50
6	0.59	0.53	0.49	0.58	0.53	0.48	0.57	0.52	0.48	0.56	0.51	0.48	0.54	0.50	0.47	0.46
7	0.55	0.49	0.44	0.54	0.48	0.44	0.53	0.48	0.44	0.52	0.47	0.44	0.51	0.47	0.44	0.42
8	0.51	0.45	0.41	0.50	0.45	0.41	0.49	0.44	0.41	0.48	0.44	0.40	0.48	0.43	0.40	0.39
9	0.48	0.42	0.38	0.47	0.42	0.38	0.46	0.41	0.38	0.45	0.41	0.38	0.45	0.41	0.37	0.36
10	0.45	0.39	0.35	0.44	0.39	0.35	0.44	0.39	0.35	0.43	0.38	0.35	0.42	0.38	0.35	0.34



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	700.03	763.31	780.02	761.68	689.06	582.53	466.03	349.76	249.75
45.0	712.63	696.38	656.04	596.87	521.33	452.03	371.19	278.33	206.38
90.0	698.85	621.73	536.18	459.73	397.01	344.87	287.89	216.45	153.11
135.0	723.94	608.12	516.49	431.16	366.19	322.37	275.91	216.00	160.65
180.0	700.03	627.47	537.36	456.36	401.01	341.89	281.59	214.09	157.05
225.0	712.63	699.19	655.48	600.86	539.16	461.08	380.19	286.82	202.61
270.0	698.85	766.01	797.29	781.26	727.59	630.17	503.21	383.40	279.23
315.0	723.94	800.72	853.37	845.78	764.10	645.36	516.71	376.93	266.18
360.0	700.03	763.31	780.02	761.68	689.06	582.53	466.03	349.76	249.75

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	164.70	110.59	69.53	44.83	29.42	21.21	18.06	15.75	14.79
45.0	136.24	92.36	60.58	39.99	27.56	20.98	17.94	16.65	14.46
90.0	101.81	69.02	47.48	32.85	24.24	19.41	16.82	16.14	12.49
135.0	107.49	75.77	52.82	35.49	26.04	20.98	19.58	22.33	22.33
180.0	105.08	74.25	51.24	35.49	25.82	21.09	18.45	16.88	14.29
225.0	136.97	93.04	61.48	39.99	28.80	21.83	18.28	16.14	15.24
270.0	183.26	124.54	79.37	51.86	34.26	24.64	19.97	18.62	17.94
315.0	179.27	117.45	73.80	48.43	32.46	22.28	17.66	14.01	15.30
360.0	164.70	110.59	69.53	44.83	29.42	21.21	18.06	15.75	14.79

C/γ(°)	90.0
0.0	5.01
45.0	5.23
90.0	7.14
135.0	9.56
180.0	9.11
225.0	10.35
270.0	12.32
315.0	5.96
360.0	5.01