



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: NA01D020060BW

Luminaire:

Report No: 200402-B009

Voltage(V): 6.2100

Test No: 200402-C009

Current(A): 0.1590

LampCAT: CREE 3030

Power (W): 0.9870

Lamp flux(lm): 141.9

PF: 0.0000

Number of Lamps: 1

Ballast type: DC

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 132.30

Efficiency(%): 93.26%

Lumens(lm)/Power(W): 134.05

Central intensity(cd): 118.111

Maximum intensity(cd): 118.111

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=58.4

[C90/270]Total=58.4

Field angle(10%Imax): [C0/180]Total=102.9

[C90/270]Total=102.9

Maximum s/h(1/2): C0_180=0.89 C90_270=0.89

Maximum s/h(1/4): C0_180=0.90 C90_270=0.90

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 93.26%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 92.776%

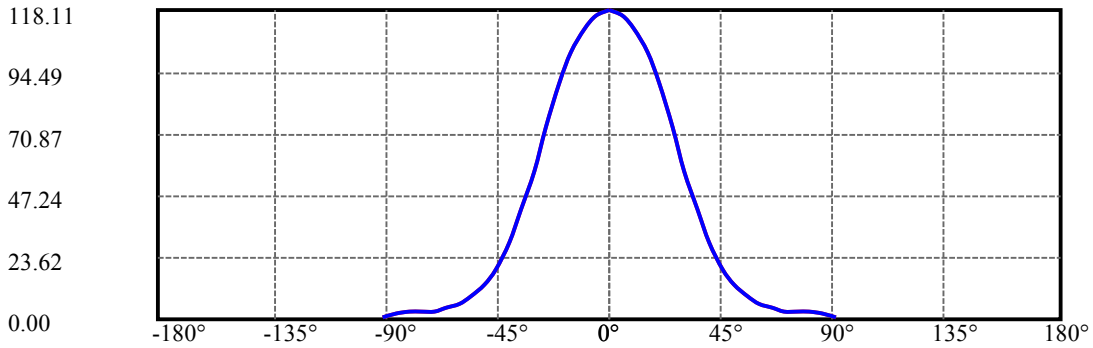
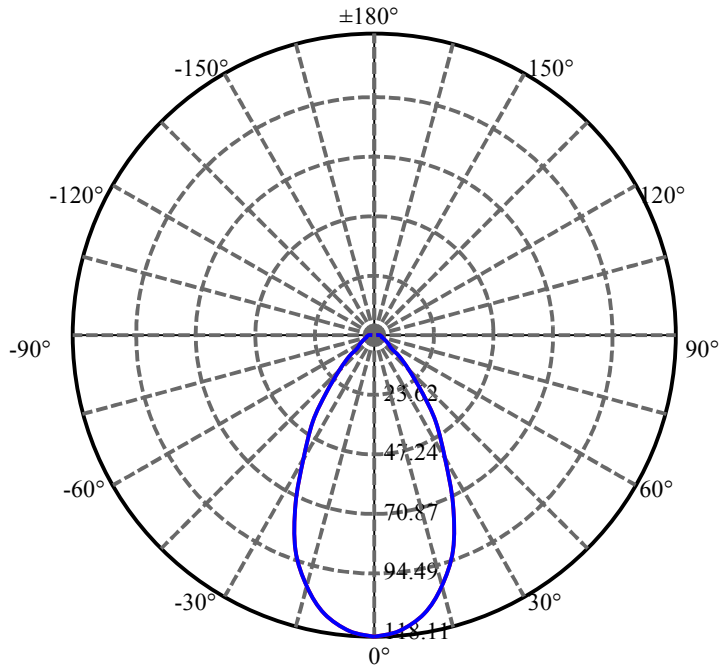
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	118.111	0.000	0	.000%	.000%
5.0	116.044	2.799	2.799	1.973%	2.116%
10.0	110.707	8.112	10.911	5.718%	8.247%
15.0	101.876	12.610	23.521	8.889%	17.778%
20.0	89.909	15.806	39.327	11.142%	29.725%
25.0	73.329	17.121	56.447	12.069%	42.665%
30.0	56.355	16.412	72.859	11.569%	55.070%
35.0	41.583	14.422	87.281	10.166%	65.971%
40.0	29.166	11.804	99.085	8.321%	74.893%
45.0	19.413	8.995	108.08	6.341%	81.691%
50.0	13.078	6.565	114.645	4.628%	86.654%
55.0	8.677	4.730	119.375	3.334%	90.229%
60.0	5.899	3.369	122.745	2.375%	92.776%
65.0	4.134	2.439	125.184	1.719%	94.619%
70.0	3.284	1.878	127.062	1.324%	96.039%
75.0	2.932	1.625	128.687	1.145%	97.267%
80.0	2.763	1.524	130.211	1.074%	98.419%
85.0	2.208	1.351	131.561	.952%	99.440%
90.0	0.499	0.741	132.303	.522%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	72.86	51.36%	55.07%
0-40	99.09	69.85%	74.89%
0-60	122.74	86.53%	92.78%
0-90	131.56	92.74%	99.44%
0-120	131.56	92.74%	99.44%
0-180	132.30	93.26%	100.00%
60-90	12.19	8.59%	9.21%
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%
0-43.76	105.84	74.61%	80.00%

ZONAL LUMEN SUMMARY

0-10	10.91
10-20	28.42
20-30	33.53
30-40	26.23
40-50	15.56
50-60	8.10
60-70	4.32
70-80	3.15
80-90	1.35
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

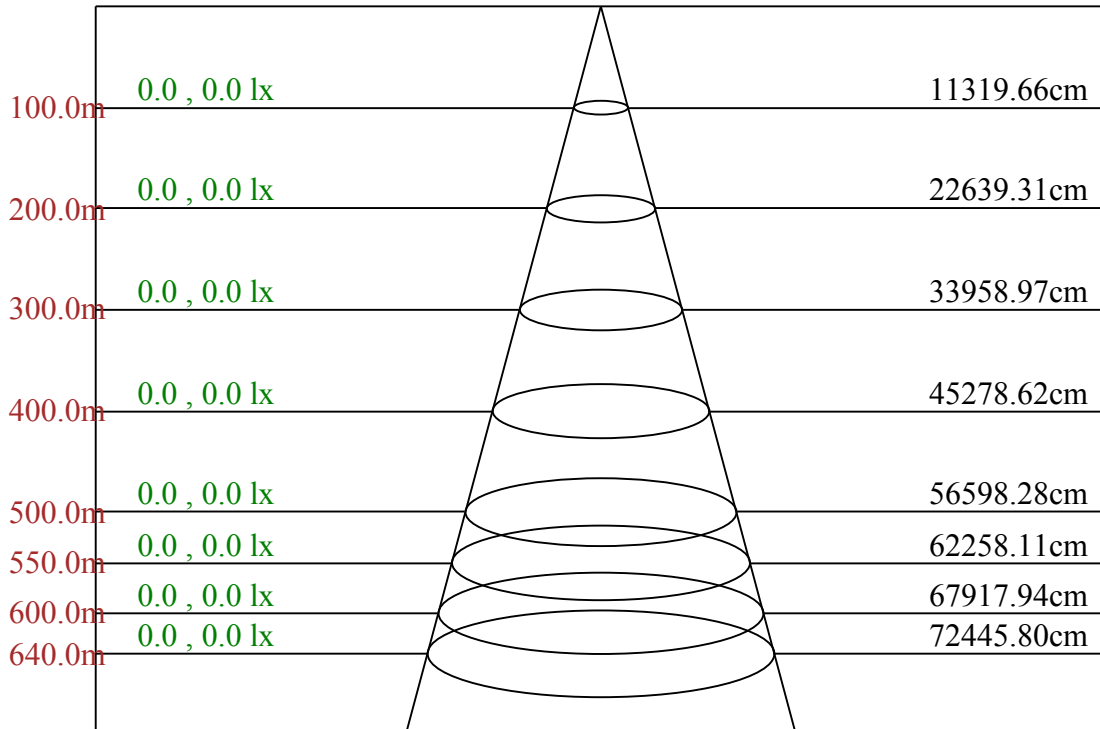


C0/C180: —

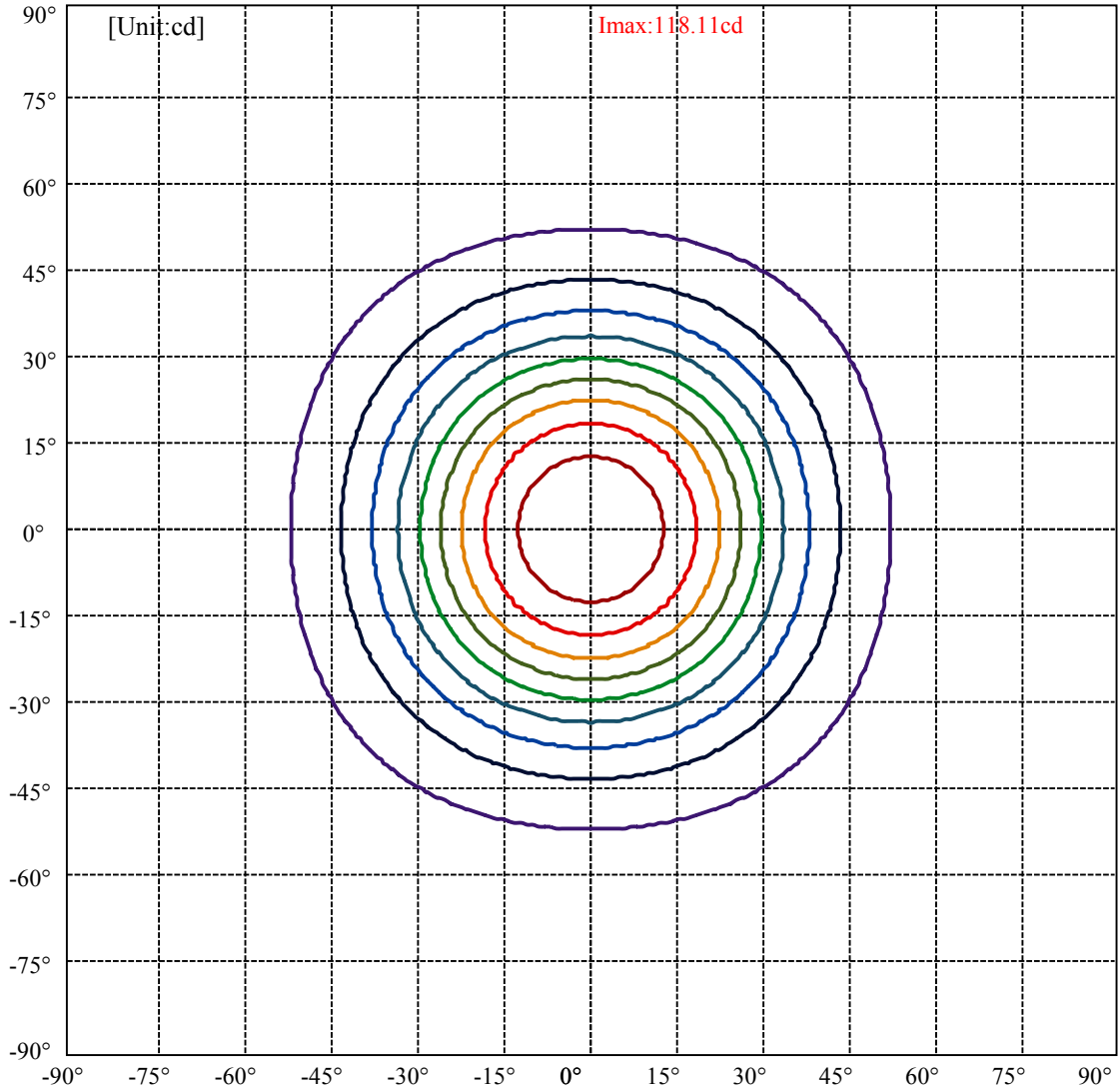
C90/C270: —

Field angle(10%Imax):C0/180Left:51.4 Right:51.4
:C90/270Left:51.4 Right:51.4

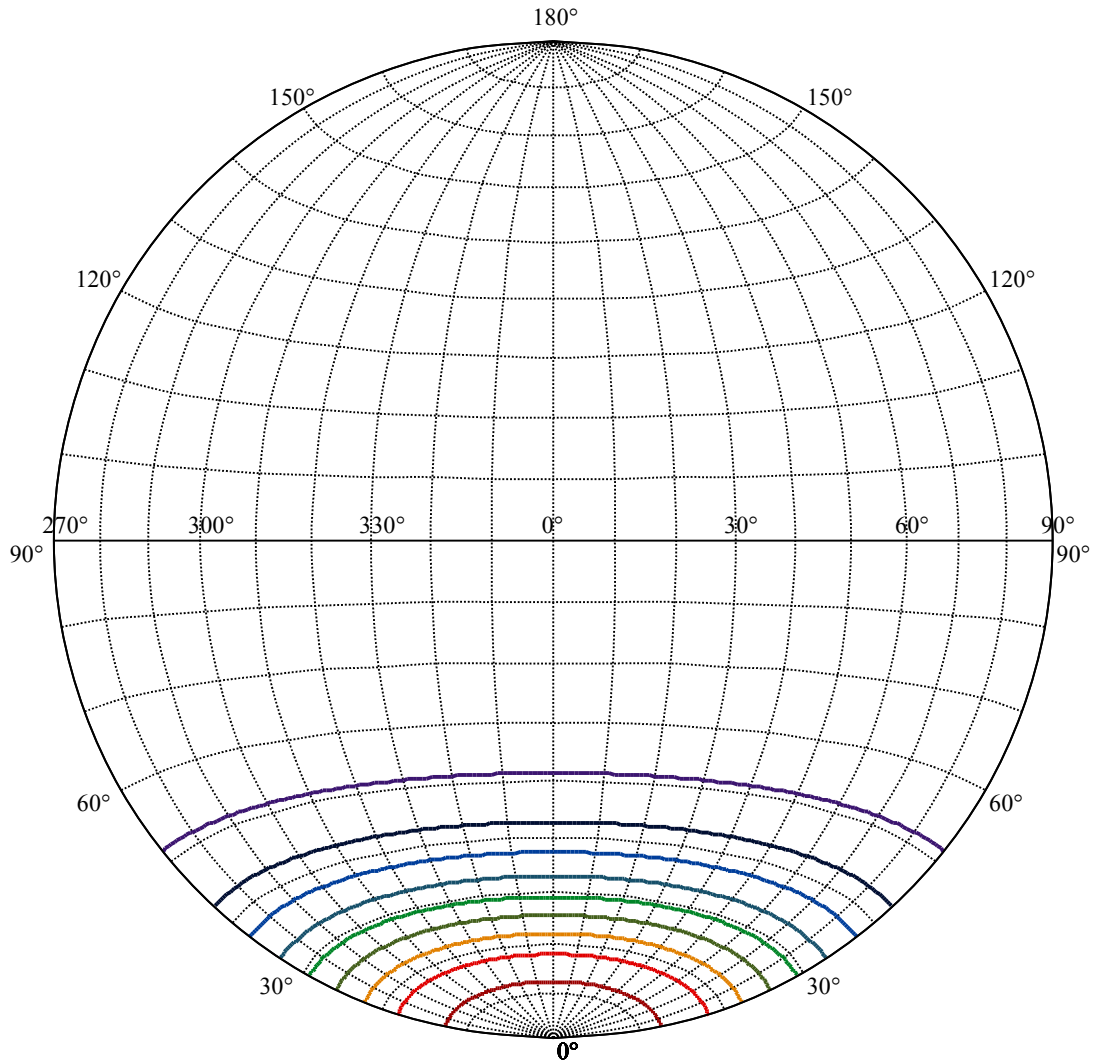
Beam Angle(50%Imax):C0/180Left:29.2 Right:29.2
:C90/270Left:29.2 Right:29.2



Max , Ave Beam angle of C0 plane 59.02



(10%Imax) 11.8111	—
(20%Imax) 23.6222	—
(30%Imax) 35.4333	—
(40%Imax) 47.2444	—
(50%Imax) 59.0555	—
(60%Imax) 70.8666	—
(70%Imax) 82.6776	—
(80%Imax) 94.4887	—
(90%Imax) 106.3	—



House

[Unit:cd]

Road

Imax:118.11

(10%Imax) 11.8111

(20%Imax) 23.6222

(30%Imax) 35.4333

(40%Imax) 47.2444

(50%Imax) 59.0555

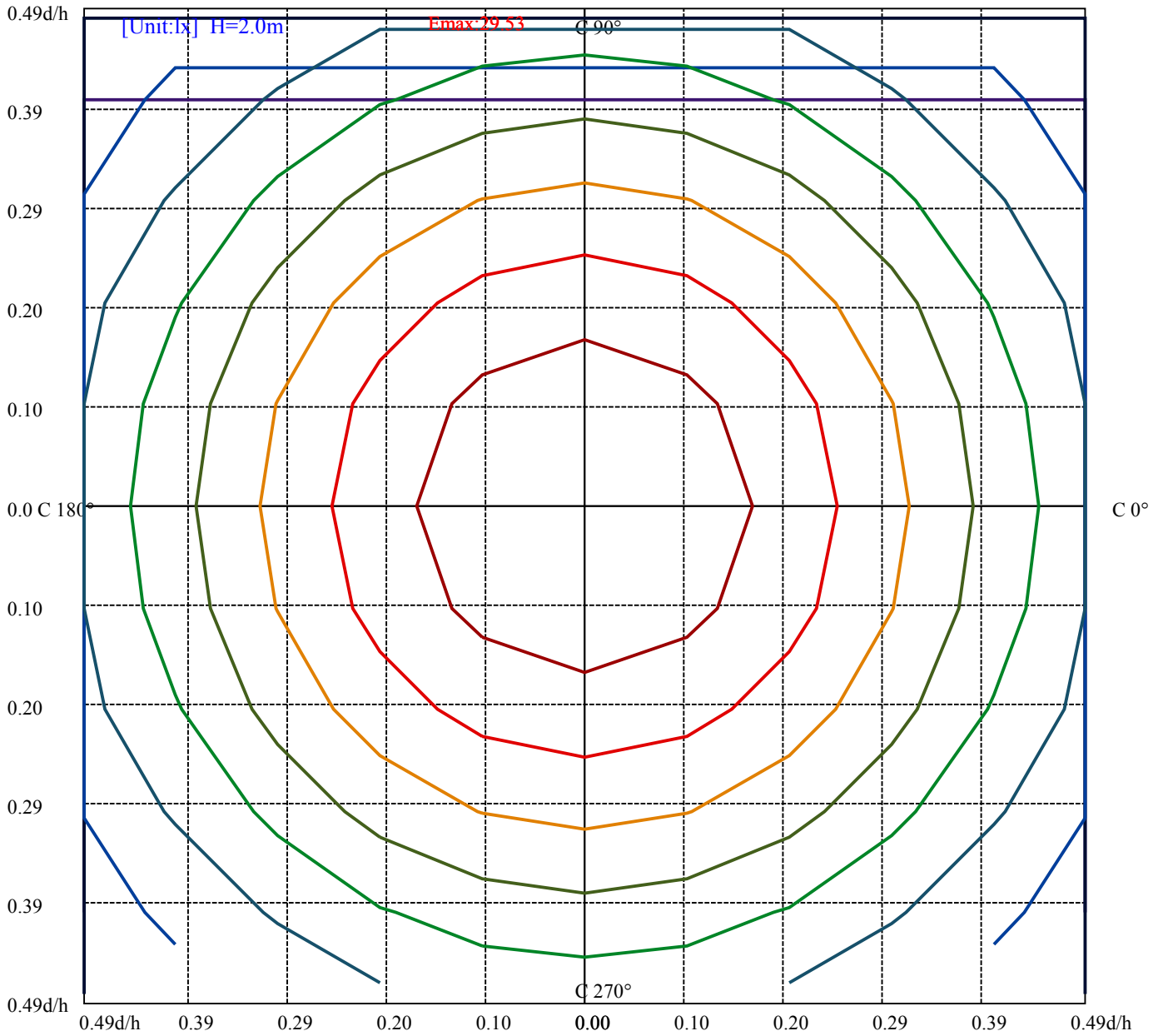
(60%Imax) 70.8666

(70%Imax) 82.6776

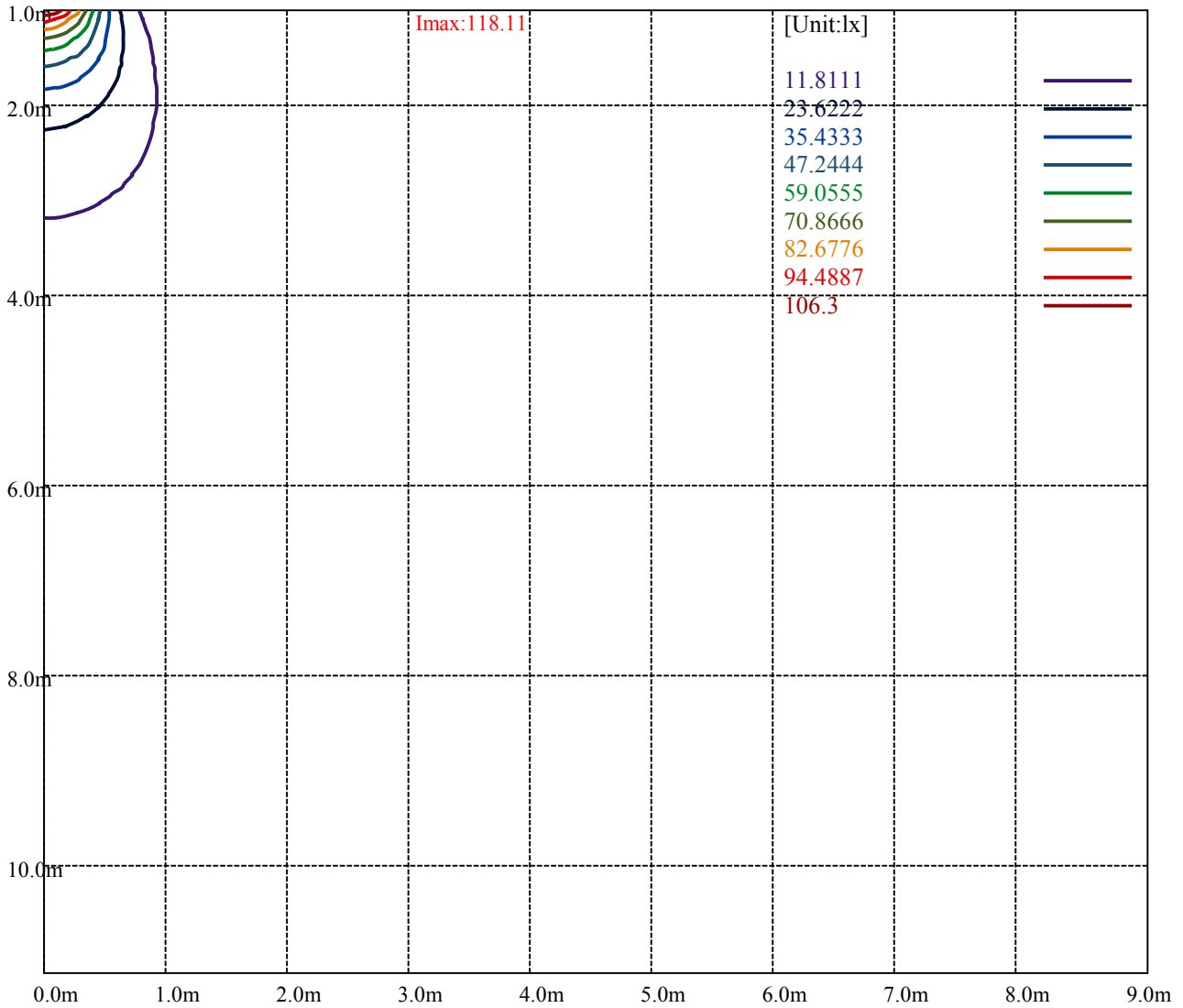
(80%Imax) 94.4887

(90%Imax) 106.3





- (10%Emax) 2.952775
- (20%Emax) 5.90555
- (30%Emax) 8.858325
- (40%Emax) 11.81108
- (50%Emax) 14.76385
- (60%Emax) 17.71663
- (70%Emax) 20.6694
- (80%Emax) 23.62218
- (90%Emax) 26.575



Luminance Table

γ	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

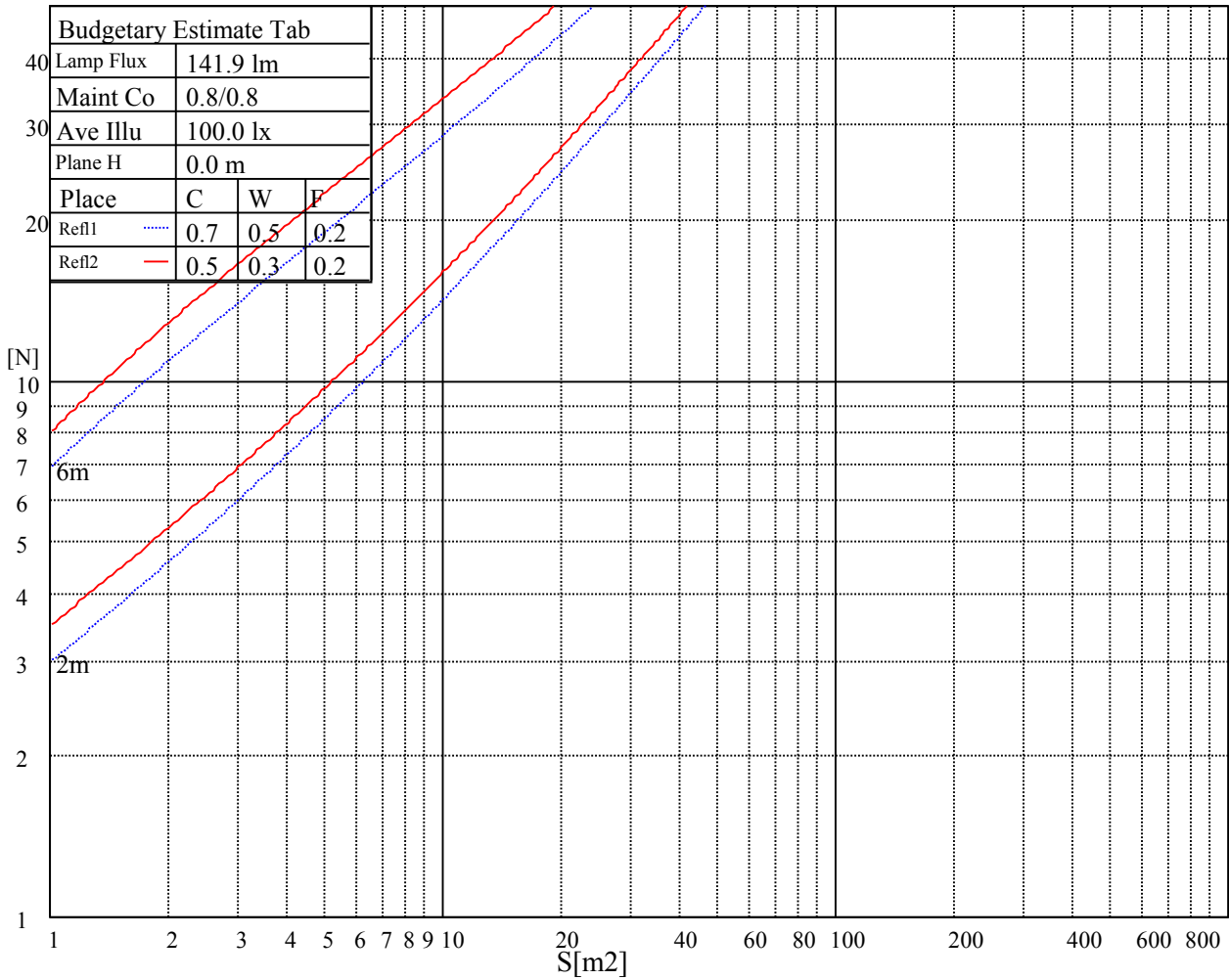
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

Glare Table

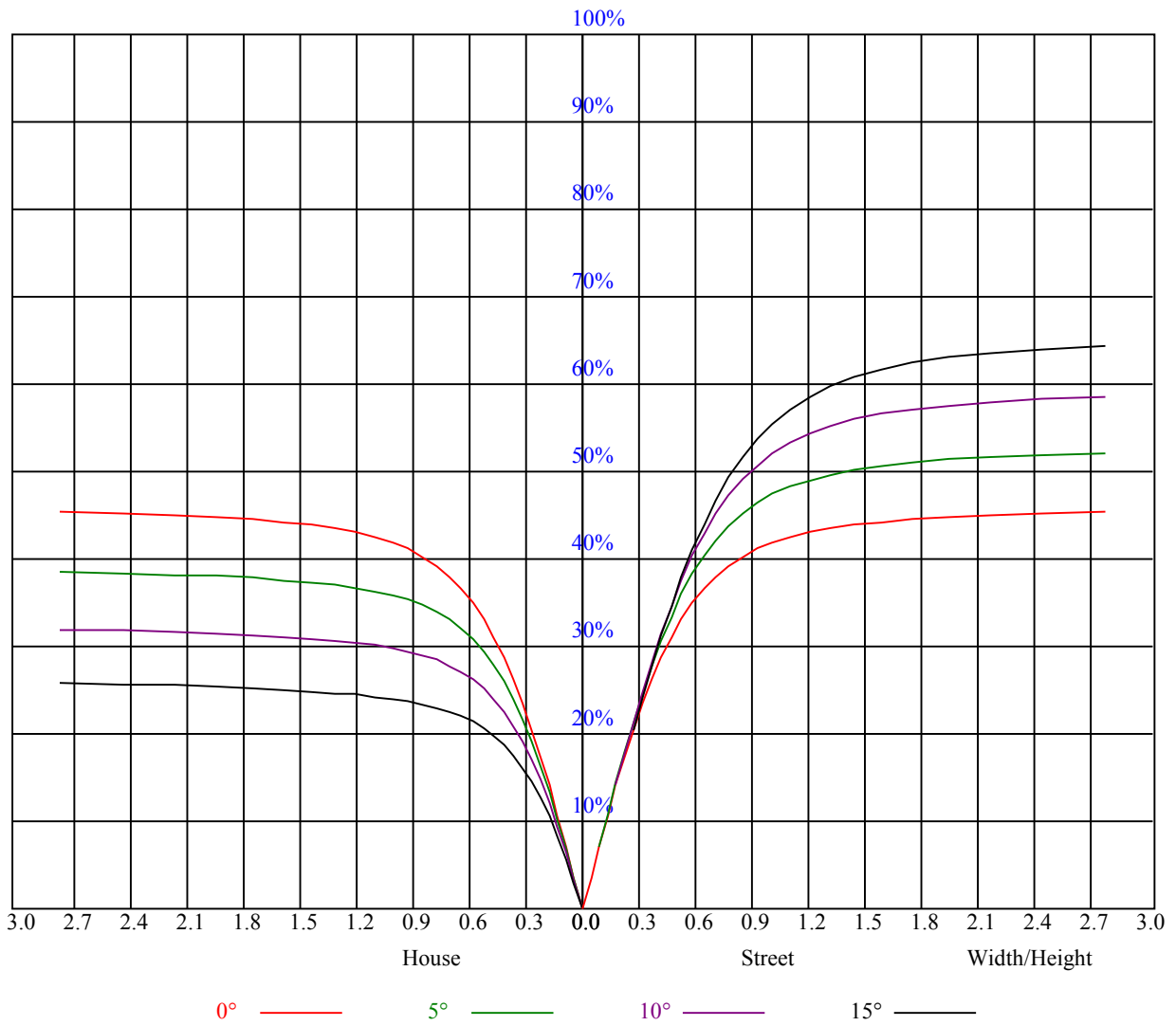
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.11	1.11	1.11	1.08	1.08	1.08	1.04	1.04	1.04	0.99	0.99	0.99	0.95	0.95	0.95	0.93
1	1.01	0.98	0.95	0.99	0.96	0.94	0.95	0.93	0.91	0.91	0.90	0.88	0.88	0.87	0.85	0.84
2	0.92	0.87	0.83	0.90	0.86	0.82	0.87	0.83	0.80	0.84	0.81	0.79	0.81	0.79	0.77	0.75
3	0.84	0.78	0.74	0.83	0.77	0.73	0.80	0.76	0.72	0.78	0.74	0.71	0.76	0.72	0.70	0.68
4	0.77	0.71	0.66	0.76	0.70	0.66	0.74	0.69	0.65	0.72	0.68	0.64	0.70	0.67	0.64	0.62
5	0.71	0.65	0.60	0.70	0.64	0.60	0.69	0.63	0.59	0.67	0.62	0.59	0.66	0.61	0.58	0.57
6	0.66	0.60	0.55	0.65	0.59	0.55	0.64	0.58	0.54	0.63	0.58	0.54	0.61	0.57	0.54	0.52
7	0.62	0.55	0.51	0.61	0.55	0.50	0.60	0.54	0.50	0.58	0.54	0.50	0.57	0.53	0.50	0.48
8	0.58	0.51	0.47	0.57	0.51	0.47	0.56	0.50	0.46	0.55	0.50	0.46	0.54	0.49	0.46	0.45
9	0.54	0.48	0.43	0.53	0.47	0.43	0.52	0.47	0.43	0.52	0.47	0.43	0.51	0.46	0.43	0.41
10	0.51	0.45	0.41	0.50	0.44	0.40	0.49	0.44	0.40	0.49	0.44	0.40	0.48	0.43	0.40	0.39



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	116.83	118.01	115.43	108.84	96.24	77.79	59.01	42.69	29.59
45.0	118.24	117.96	114.08	105.53	93.09	74.64	57.26	42.13	29.76
90.0	118.69	115.99	110.08	99.06	86.63	69.36	53.27	38.87	27.11
135.0	118.69	114.92	108.00	98.16	86.68	71.04	55.41	41.46	28.69
180.0	116.83	112.05	104.57	95.68	84.32	69.19	53.55	38.36	27.51
225.0	118.24	114.41	107.38	98.10	86.74	71.27	54.56	40.67	28.41
270.0	118.69	117.17	111.94	104.68	92.87	77.91	60.58	46.29	32.46
315.0	118.69	117.84	114.19	104.96	92.70	75.43	57.21	42.19	29.81
360.0	116.83	118.01	115.43	108.84	96.24	77.79	59.01	42.69	29.59
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	19.74	13.95	9.06	6.19	4.22	3.26	2.81	2.64	1.97
45.0	19.63	12.88	8.55	5.74	3.94	3.15	2.81	2.70	1.97
90.0	17.89	12.15	7.88	5.29	3.66	2.98	2.70	2.36	1.24
135.0	19.24	12.99	8.83	6.13	4.33	3.43	3.09	2.98	2.64
180.0	18.45	12.26	8.61	5.91	4.22	3.38	3.04	2.93	2.48
225.0	18.90	12.77	8.38	5.68	4.11	3.26	3.04	2.87	2.64
270.0	21.77	14.34	9.56	6.41	4.33	3.38	2.98	2.87	2.53
315.0	19.69	13.28	8.55	5.85	4.28	3.43	2.98	2.76	2.19
360.0	19.74	13.95	9.06	6.19	4.22	3.26	2.81	2.64	1.97
C/γ(°)	90.0								
0.0	0.45								
45.0	0.45								
90.0	0.45								
135.0	0.51								
180.0	0.56								
225.0	0.56								
270.0	0.56								
315.0	0.45								
360.0	0.45								