



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

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## Nata

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LumCAT: 3-2116-N	
Luminaire: 92.70.131.00	
Report No: 200106-B025	Voltage(V): 34.3600
Test No: 200106-C025	Current(A): 0.6000
LampCAT: LUMINUS CXM-14-AC40	Power (W): 20.6160
Lamp flux(lm): 2579.0	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 0	Width(mm): 0
Phm Type: C	Height(mm): 0

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## Photometric Results

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Lumens(lm): 2182.70  
Efficiency(%): 84.63%  
Lumens(lm)/Power(W): 105.87  
Central intensity(cd): 7168.781  
Maximum intensity(cd): 7168.781  
Angle of maximum intensity: C=0.0  $\gamma$ =0.0  
Beam Angle(50%Imax): [C0/180]Total=27.1  
                                  [C90/270]Total=27.1  
Field angle(10%Imax): [C0/180]Total=56.3  
                                  [C90/270]Total=56.3  
Maximum s/h(1/2): C0\_180=0.46 C90\_270=0.46  
Maximum s/h(1/4): C0\_180=0.47 C90\_270=0.47  
Up flux rate of lamp(%): 0.00%  
Down flux rate of lamp(%): 84.63%  
Up flux rate of LUM(%): - -  
Down flux rate of LUM(%): 100.00%  
CIE Type : Direct lighting  
Output flux ratio in  $\pi$  solid angle : 97.620%

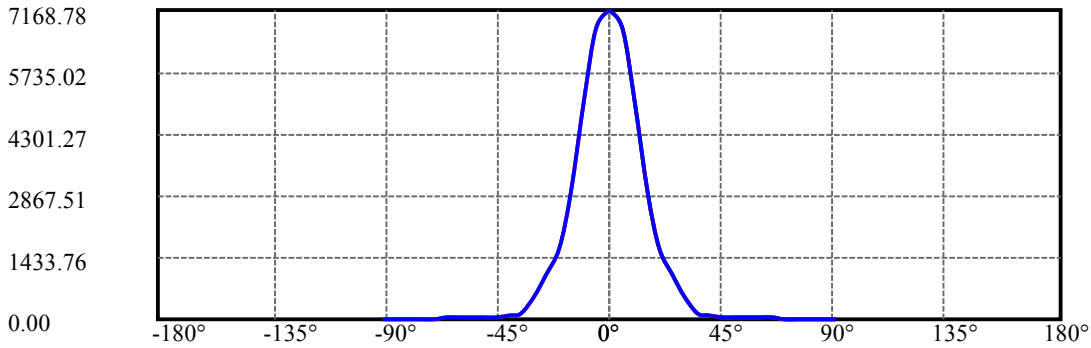
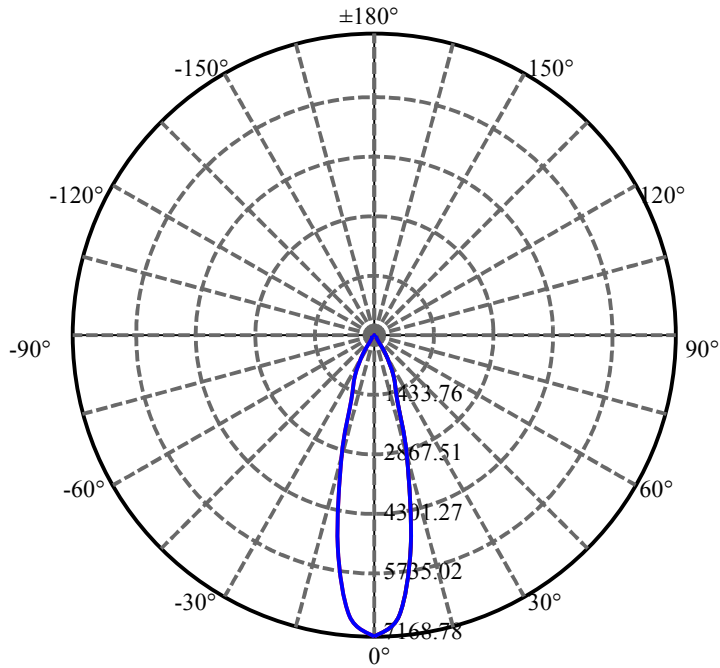
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	7168.781	0.000	0	.000%	.000%
5.0	6712.523	165.947	165.947	6.435%	7.603%
10.0	5113.969	423.071	589.018	16.404%	26.986%
15.0	2958.258	478.839	1067.857	18.567%	48.924%
20.0	1645.031	379.376	1447.233	14.710%	66.305%
25.0	1035.169	281.104	1728.336	10.900%	79.183%
30.0	530.079	198.083	1926.42	7.681%	88.259%
35.0	141.785	98.937	2025.356	3.836%	92.791%
40.0	67.999	35.001	2060.357	1.357%	94.395%
45.0	52.320	22.278	2082.635	.864%	95.416%
50.0	41.013	18.859	2101.494	.731%	96.280%
55.0	31.542	15.776	2117.27	.612%	97.002%
60.0	26.733	13.470	2130.741	.522%	97.620%
65.0	22.310	11.922	2142.663	.462%	98.166%
70.0	17.613	10.109	2152.772	.392%	98.629%
75.0	15.764	8.724	2161.496	.338%	99.029%
80.0	14.041	7.975	2169.471	.309%	99.394%
85.0	12.087	7.100	2176.571	.275%	99.719%
90.0	10.294	6.128	2182.699	.238%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1926.42	74.70%	88.26%
0-40	2060.36	79.89%	94.39%
0-60	2130.74	82.62%	97.62%
0-90	2176.57	84.40%	99.72%
0-120	2176.57	84.40%	99.72%
0-180	2182.70	84.63%	100.00%
60-90	59.30	2.30%	2.72%
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%
0-25.45	1746.16	67.71%	80.00%

ZONAL LUMEN SUMMARY

0-10	589.02
10-20	858.21
20-30	479.19
30-40	133.94
40-50	41.14
50-60	29.25
60-70	22.03
70-80	16.70
80-90	7.10
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: —————

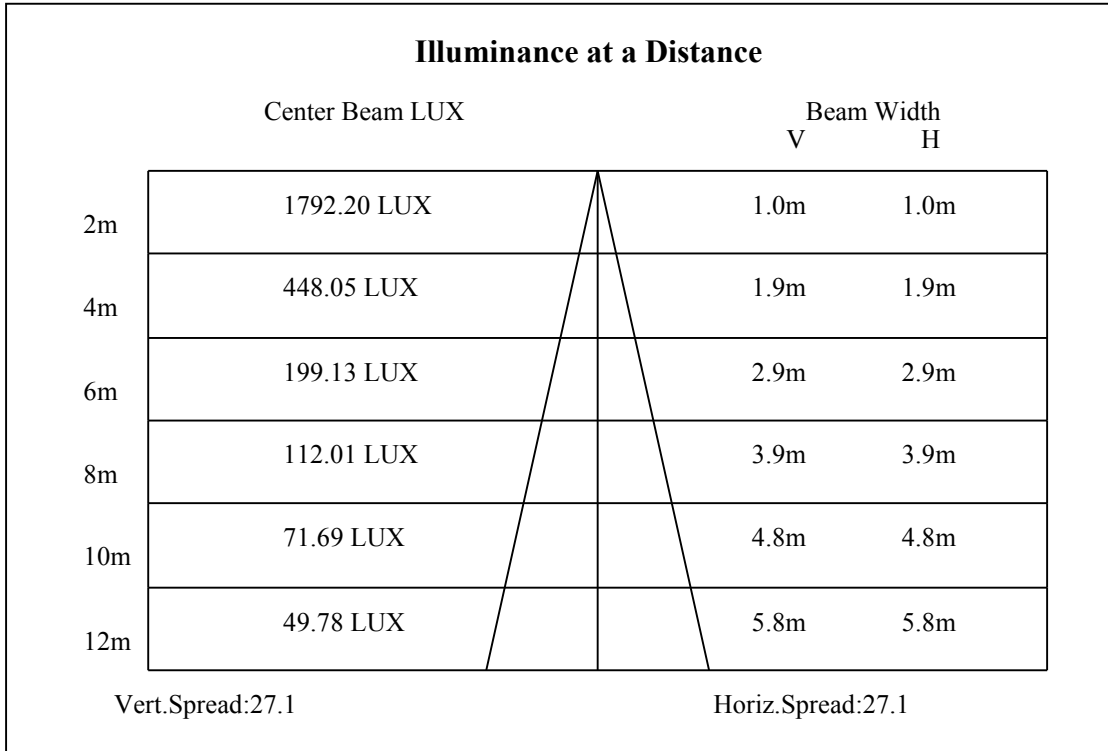
C90/C270: —————

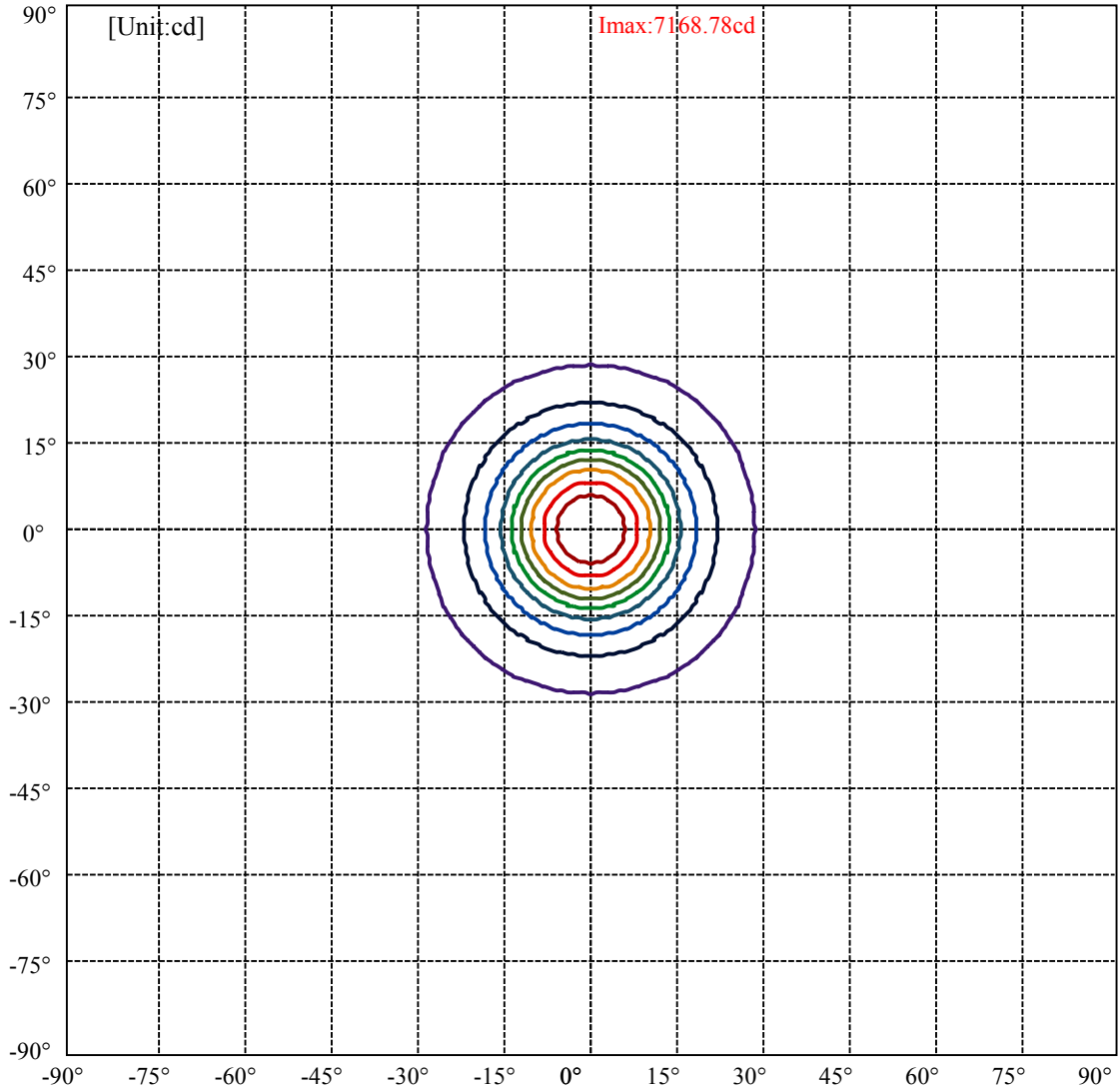
Field angle(10%Imax):C0/180Left:28.2 Right:28.2

:C90/270Left:28.2 Right:28.2

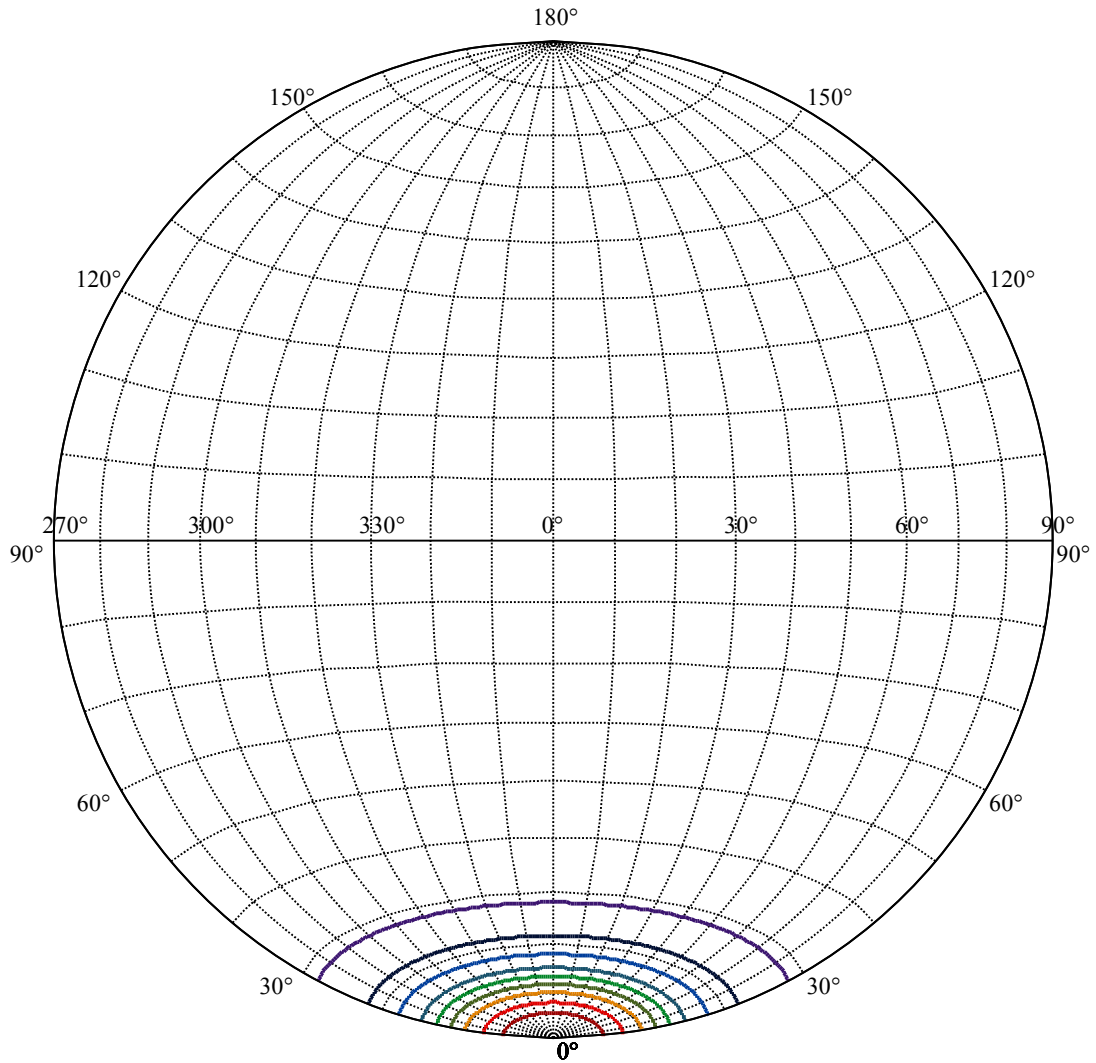
Beam Angle(50%Imax):C0/180Left:13.5 Right:13.5

:C90/270Left:13.5 Right:13.5





(10%Imax) 716.878	—
(20%Imax) 1433.76	—
(30%Imax) 2150.63	—
(40%Imax) 2867.51	—
(50%Imax) 3584.39	—
(60%Imax) 4301.27	—
(70%Imax) 5018.15	—
(80%Imax) 5735.02	—
(90%Imax) 6451.9	—



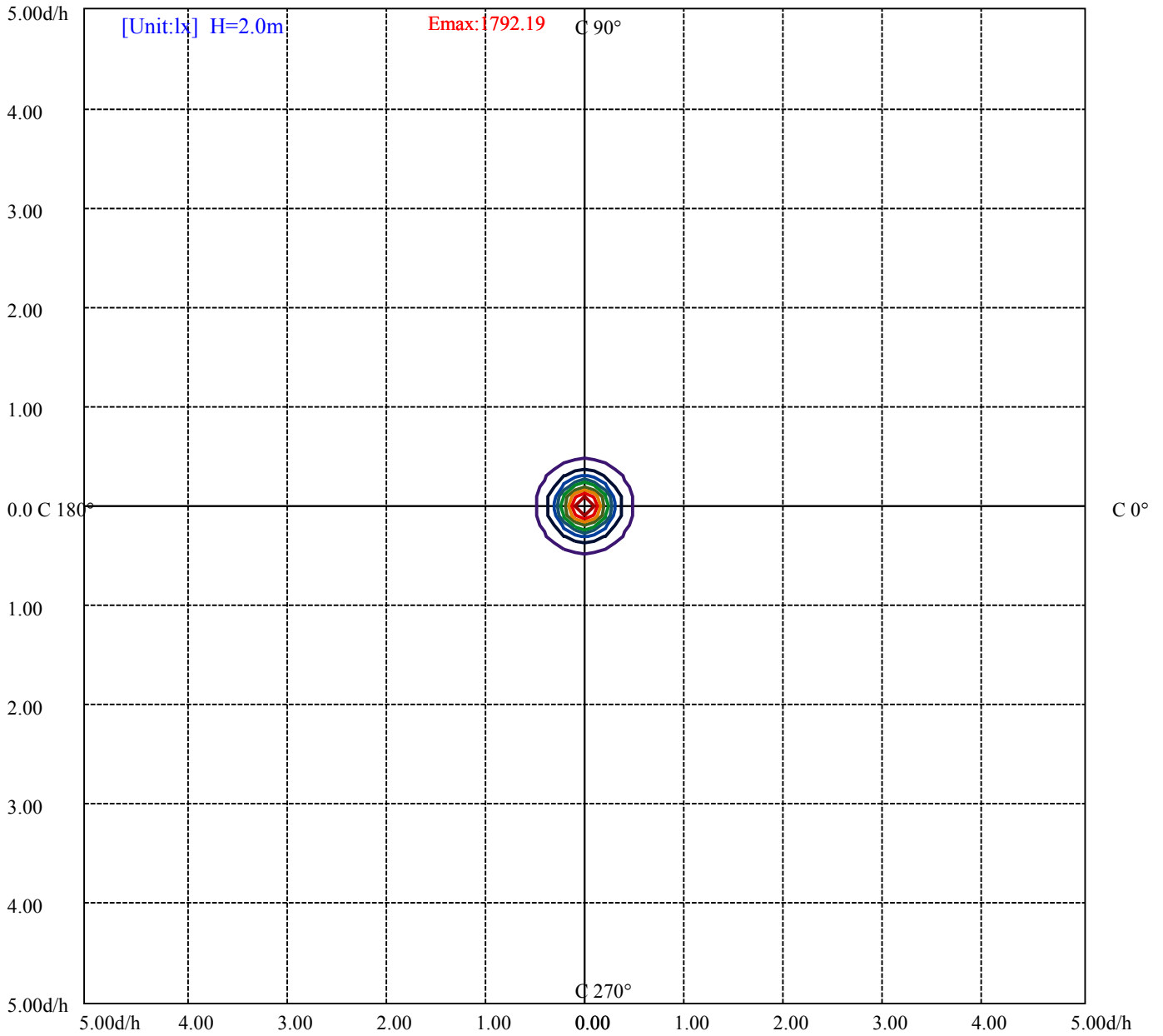
House

[Unit:cd]

Road

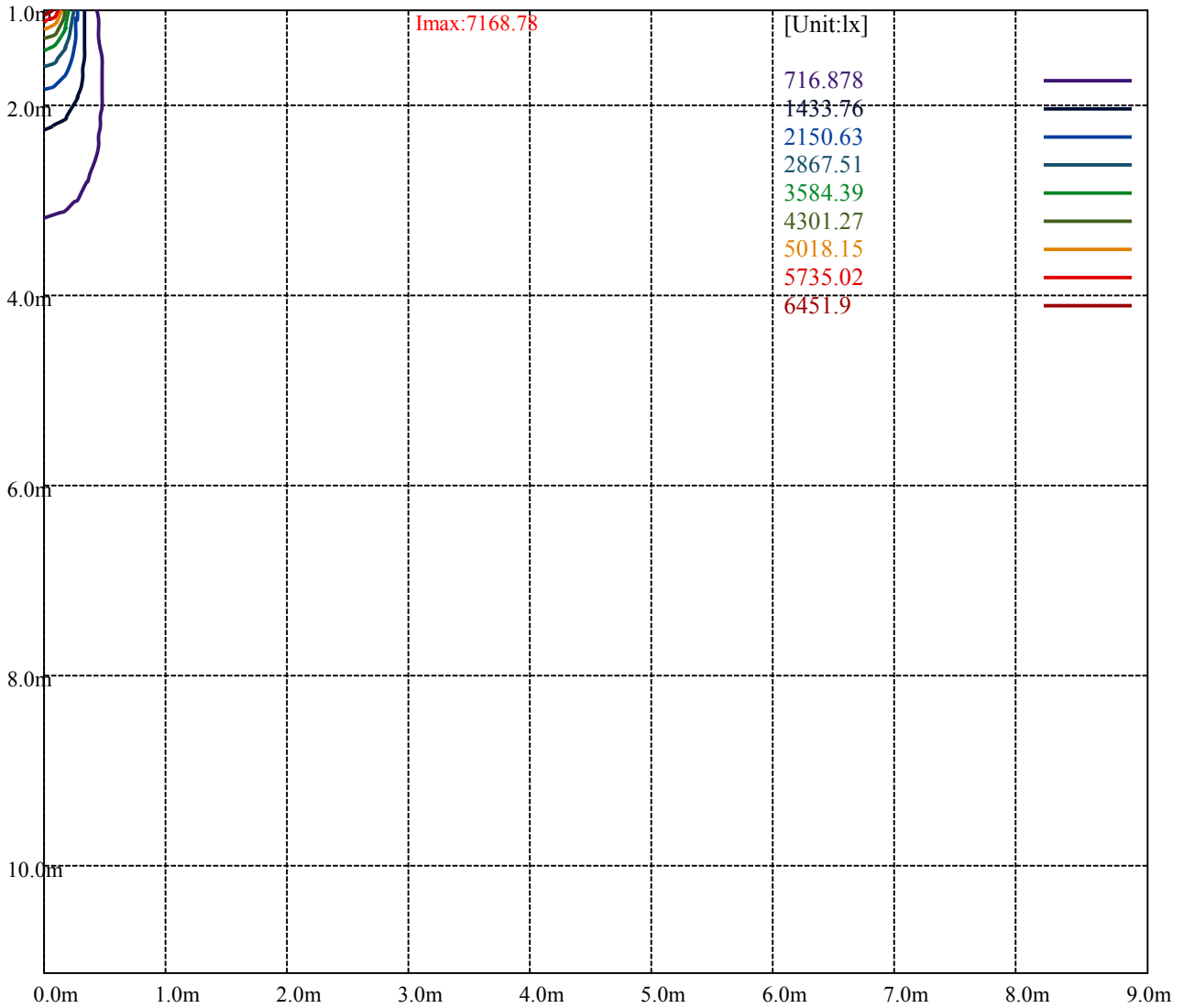
**Imax:7168.78**

(10%Imax) 716.878	—
(20%Imax) 1433.76	—
(30%Imax) 2150.63	—
(40%Imax) 2867.51	—
(50%Imax) 3584.39	—
(60%Imax) 4301.27	—
(70%Imax) 5018.15	—
(80%Imax) 5735.02	—
(90%Imax) 6451.9	—



- (10%Emax) 179.2193
- (20%Emax) 358.4375
- (30%Emax) 537.6575
- (40%Emax) 716.8775
- (50%Emax) 896.095
- (60%Emax) 1075.315
- (70%Emax) 1254.535
- (80%Emax) 1433.752
- (90%Emax) 1612.973





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

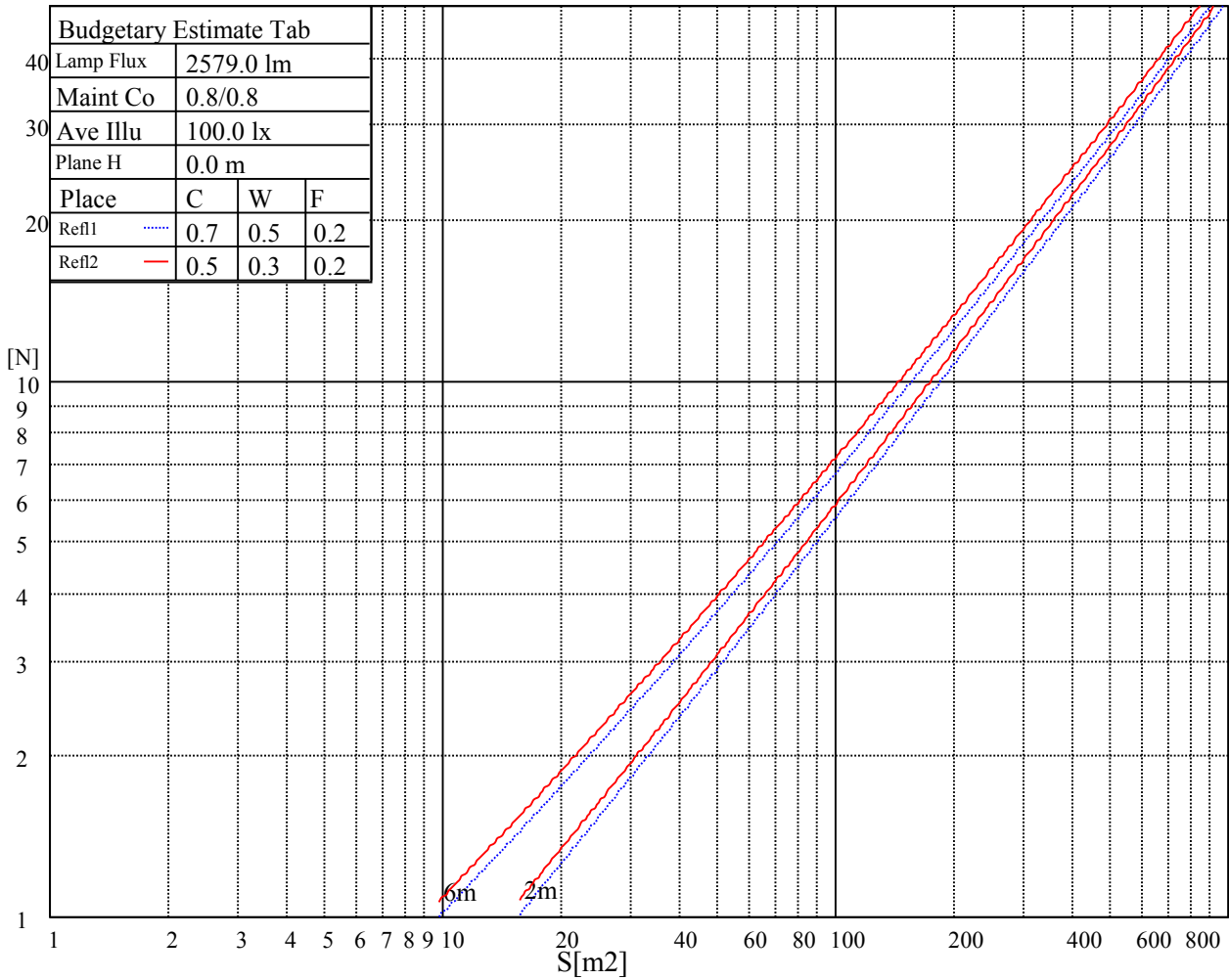
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

Glare Table

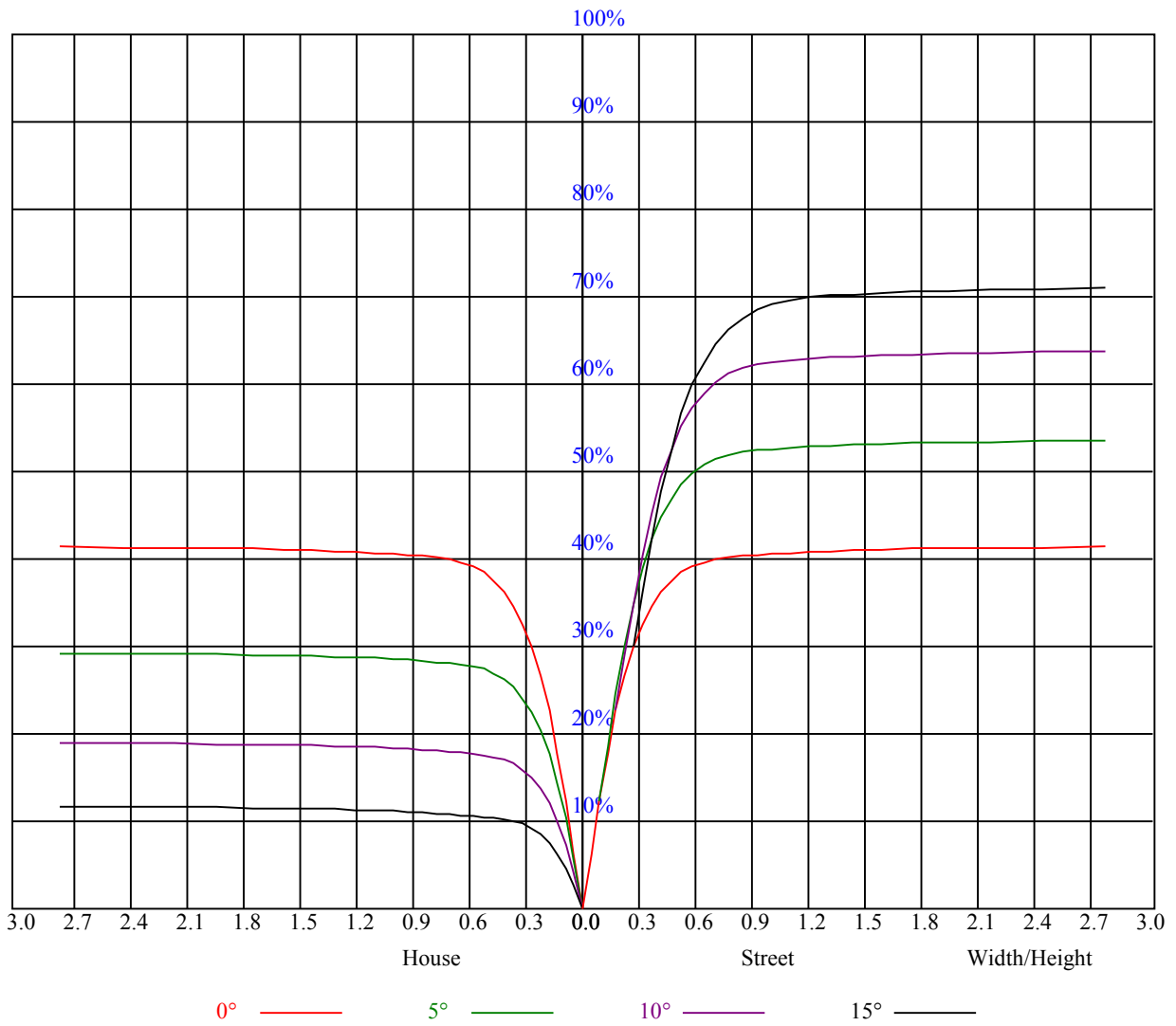
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.01	1.01	1.01	0.98	0.98	0.98	0.94	0.94	0.94	0.90	0.90	0.90	0.86	0.86	0.86	0.85
1	0.94	0.93	0.91	0.93	0.91	0.89	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.82	0.80
2	0.89	0.86	0.84	0.88	0.85	0.83	0.85	0.83	0.81	0.83	0.81	0.79	0.80	0.79	0.78	0.76
3	0.84	0.81	0.78	0.83	0.80	0.77	0.81	0.78	0.76	0.79	0.77	0.75	0.77	0.76	0.74	0.73
4	0.80	0.77	0.74	0.80	0.76	0.73	0.78	0.75	0.72	0.76	0.74	0.71	0.75	0.73	0.71	0.70
5	0.77	0.73	0.70	0.76	0.72	0.70	0.75	0.71	0.69	0.73	0.71	0.68	0.72	0.70	0.68	0.67
6	0.74	0.70	0.67	0.73	0.69	0.66	0.72	0.68	0.66	0.71	0.68	0.65	0.70	0.67	0.65	0.64
7	0.71	0.67	0.64	0.70	0.66	0.64	0.69	0.66	0.63	0.68	0.65	0.63	0.67	0.65	0.63	0.62
8	0.68	0.64	0.61	0.68	0.64	0.61	0.67	0.63	0.61	0.66	0.63	0.61	0.65	0.62	0.60	0.59
9	0.66	0.62	0.59	0.65	0.61	0.59	0.65	0.61	0.59	0.64	0.61	0.58	0.63	0.60	0.58	0.57
10	0.63	0.59	0.57	0.63	0.59	0.57	0.62	0.59	0.57	0.62	0.59	0.56	0.61	0.58	0.56	0.55



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	7181.44	6624.00	4965.19	2855.81	1576.69	1019.81	507.38	97.59	65.25
45.0	7177.50	6503.63	4818.38	2589.75	1459.69	974.81	453.94	94.84	65.64
90.0	7163.44	6528.94	4549.50	2534.06	1431.00	934.03	399.21	90.90	63.90
135.0	7152.75	6867.56	5456.81	3326.06	1818.56	1110.38	596.81	184.33	69.08
180.0	7181.44	6806.25	5385.38	3183.19	1744.88	1110.04	602.72	116.21	68.40
225.0	7177.50	6932.81	5451.75	3306.94	1812.38	1112.23	646.88	146.59	70.43
270.0	7163.44	6902.44	5545.13	3296.81	1810.69	1038.38	589.50	304.88	76.05
315.0	7152.75	6534.56	4739.63	2573.44	1506.38	981.68	444.21	98.94	65.25
360.0	7181.44	6624.00	4965.19	2855.81	1576.69	1019.81	507.38	97.59	65.25

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	51.92	41.51	29.31	26.21	21.43	16.99	15.24	13.84	12.04
45.0	50.91	39.26	30.49	25.93	20.93	17.10	15.36	13.84	11.48
90.0	49.05	38.98	31.84	26.66	21.77	17.94	15.69	13.50	11.48
135.0	52.99	41.57	32.34	27.11	23.23	17.44	15.69	14.01	12.32
180.0	53.33	40.95	32.06	26.78	22.95	17.44	15.69	13.95	12.54
225.0	54.51	43.09	32.96	28.07	24.19	18.28	16.43	14.79	12.60
270.0	55.46	43.82	33.75	27.62	23.34	18.73	16.82	14.74	12.26
315.0	50.40	38.93	29.59	25.48	20.64	16.99	15.19	13.67	11.98
360.0	51.92	41.51	29.31	26.21	21.43	16.99	15.24	13.84	12.04

C/γ(°)	90.0
0.0	10.07
45.0	10.18
90.0	10.13
135.0	10.24
180.0	10.41
225.0	10.58
270.0	10.41
315.0	10.35
360.0	10.07