



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

---

## Nata

---

LumCAT: 1-1062-N	
Luminaire: 92.70.361.000	
Report No: 220517-B001	Voltage(V): 35.3900
Test No: 220517-C005	Current(A): 0.3600
LampCAT: CREE CXA1516	Power (W): 12.7040
Lamp flux(lm): 1756.1	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 43	Width(mm): 43
Phm Type: C	Height(mm): 0

---

## Photometric Results

---

Lumens(lm): 1489.51  
Efficiency(%): 84.82%  
Lumens(lm)/Power(W): 117.25  
Central intensity(cd): 3784.151  
Maximum intensity(cd): 3784.151  
Angle of maximum intensity: C=0.0  $\gamma$ =0.0  
Beam Angle(50%Imax): [C0/180]Total=35.2  
                                  [C90/270]Total=35.2  
Field angle(10%Imax): [C0/180]Total=58.7  
                                  [C90/270]Total=58.7  
Maximum s/h(1/2): C0\_180=0.58 C90\_270=0.58  
Maximum s/h(1/4): C0\_180=0.58 C90\_270=0.58  
Up flux rate of lamp(%): 0.00%  
Down flux rate of lamp(%): 84.82%  
Up flux rate of LUM(%): - -  
Down flux rate of LUM(%): 100.00%  
CIE Type : Direct lighting  
Output flux ratio in  $\pi$  solid angle : 98.127%

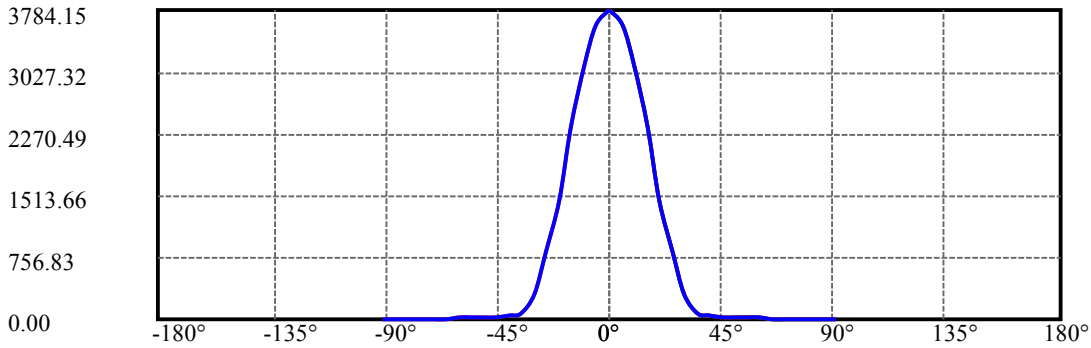
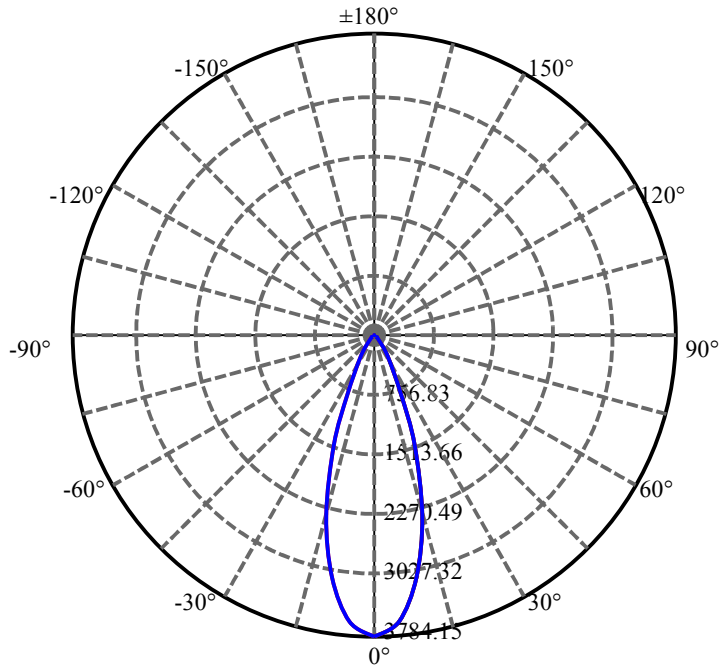
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3784.151	0.000	0	.000%	.000%
5.0	3604.220	88.326	88.326	5.030%	5.930%
10.0	3093.930	239.614	327.94	13.645%	22.017%
15.0	2349.633	322.909	650.848	18.388%	43.695%
20.0	1465.178	314.394	965.242	17.903%	64.803%
25.0	812.430	238.879	1204.122	13.603%	80.840%
30.0	315.518	142.743	1346.864	8.129%	90.423%
35.0	65.616	56.125	1402.989	3.196%	94.191%
40.0	42.036	17.961	1420.95	1.023%	95.397%
45.0	29.981	13.335	1434.285	.759%	96.292%
50.0	23.236	10.753	1445.038	.612%	97.014%
55.0	18.225	9.015	1454.053	.513%	97.620%
60.0	14.468	7.557	1461.61	.430%	98.127%
65.0	11.480	6.308	1467.918	.359%	98.550%
70.0	9.620	5.343	1473.26	.304%	98.909%
75.0	8.298	4.684	1477.944	.267%	99.223%
80.0	7.409	4.203	1482.147	.239%	99.506%
85.0	6.722	3.840	1485.987	.219%	99.763%
90.0	6.147	3.524	1489.51	.201%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1346.86	76.70%	90.42%
0-40	1420.95	80.92%	95.40%
0-60	1461.61	83.23%	98.13%
0-90	1485.99	84.62%	99.76%
0-120	1485.99	84.62%	99.76%
0-180	1489.51	84.82%	100.00%
60-90	31.93	1.82%	2.14%
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%
0-24.74	1191.61	67.86%	80.00%

ZONAL LUMEN SUMMARY

0-10	327.94
10-20	637.30
20-30	381.62
30-40	74.09
40-50	24.09
50-60	16.57
60-70	11.65
70-80	8.89
80-90	3.84
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: —————

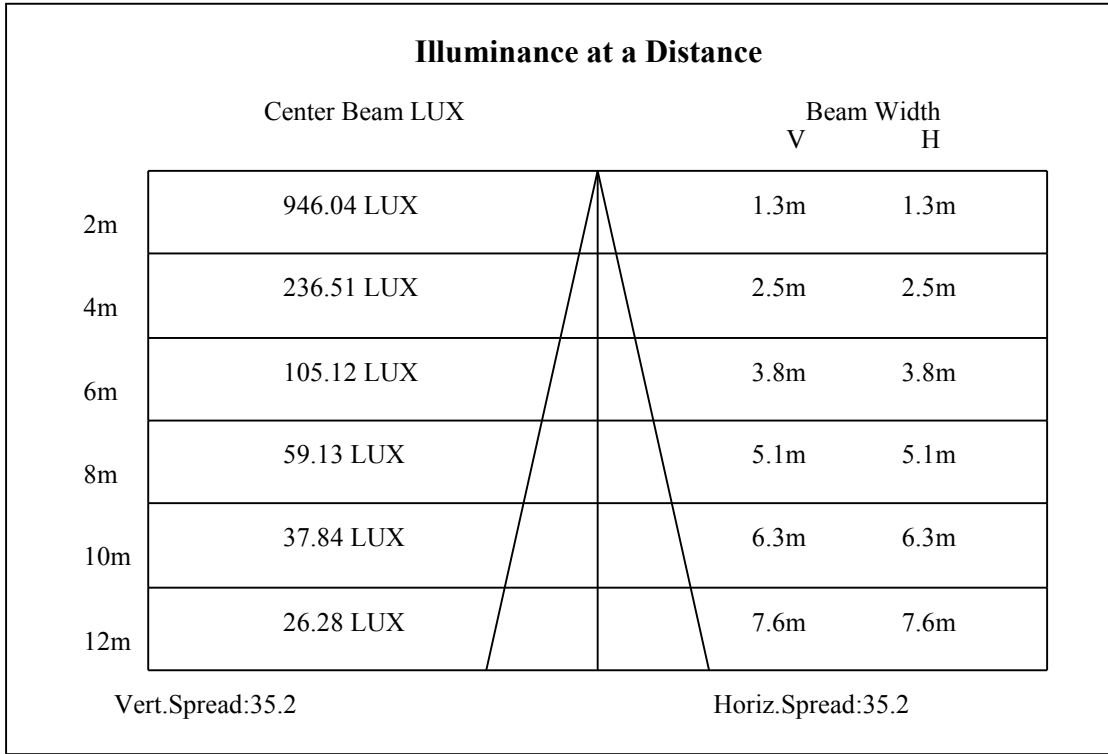
C90/C270: —————

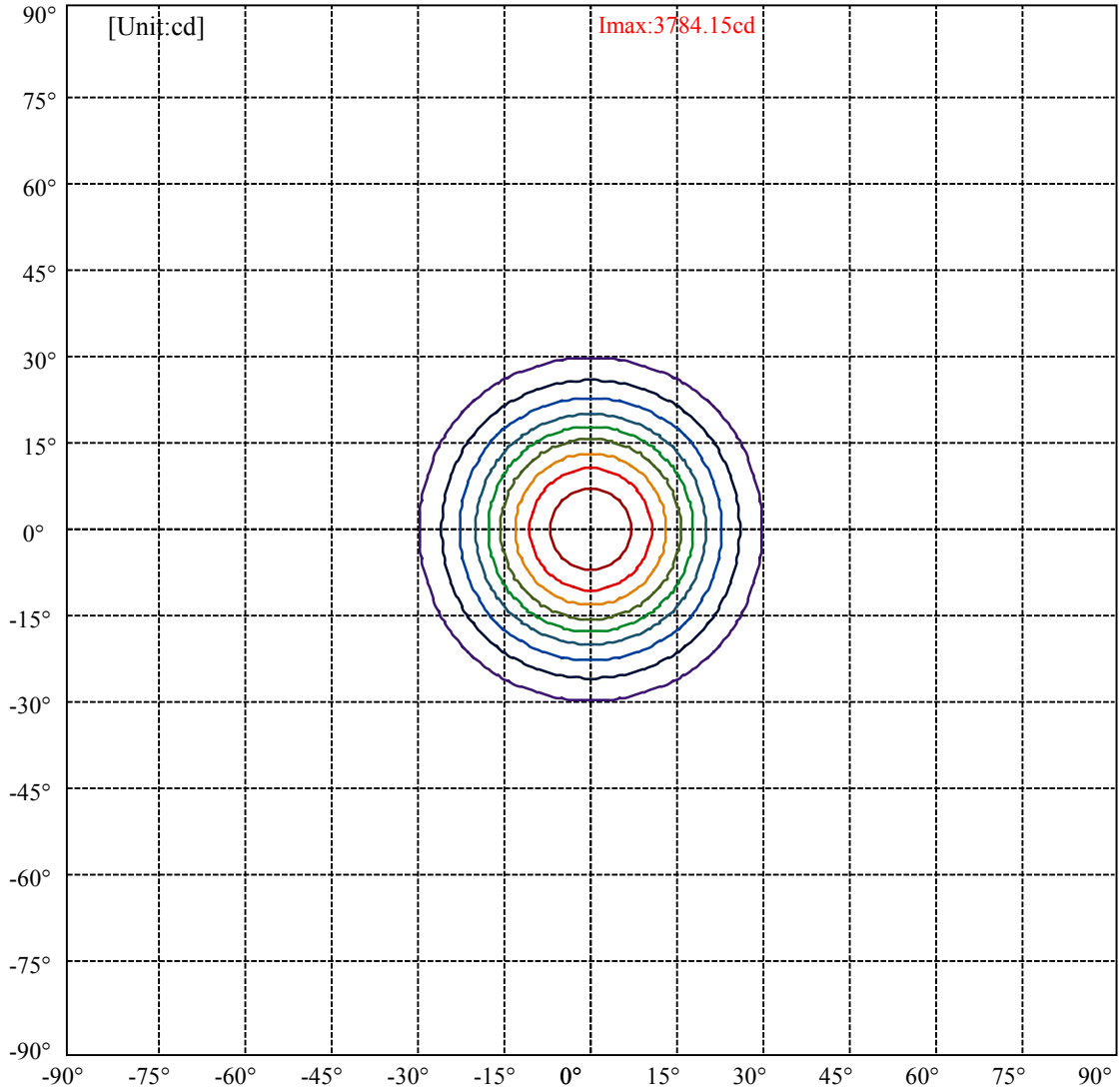
Field angle(10%Imax):C0/180Left:29.4 Right:29.4

:C90/270Left:29.4 Right:29.4

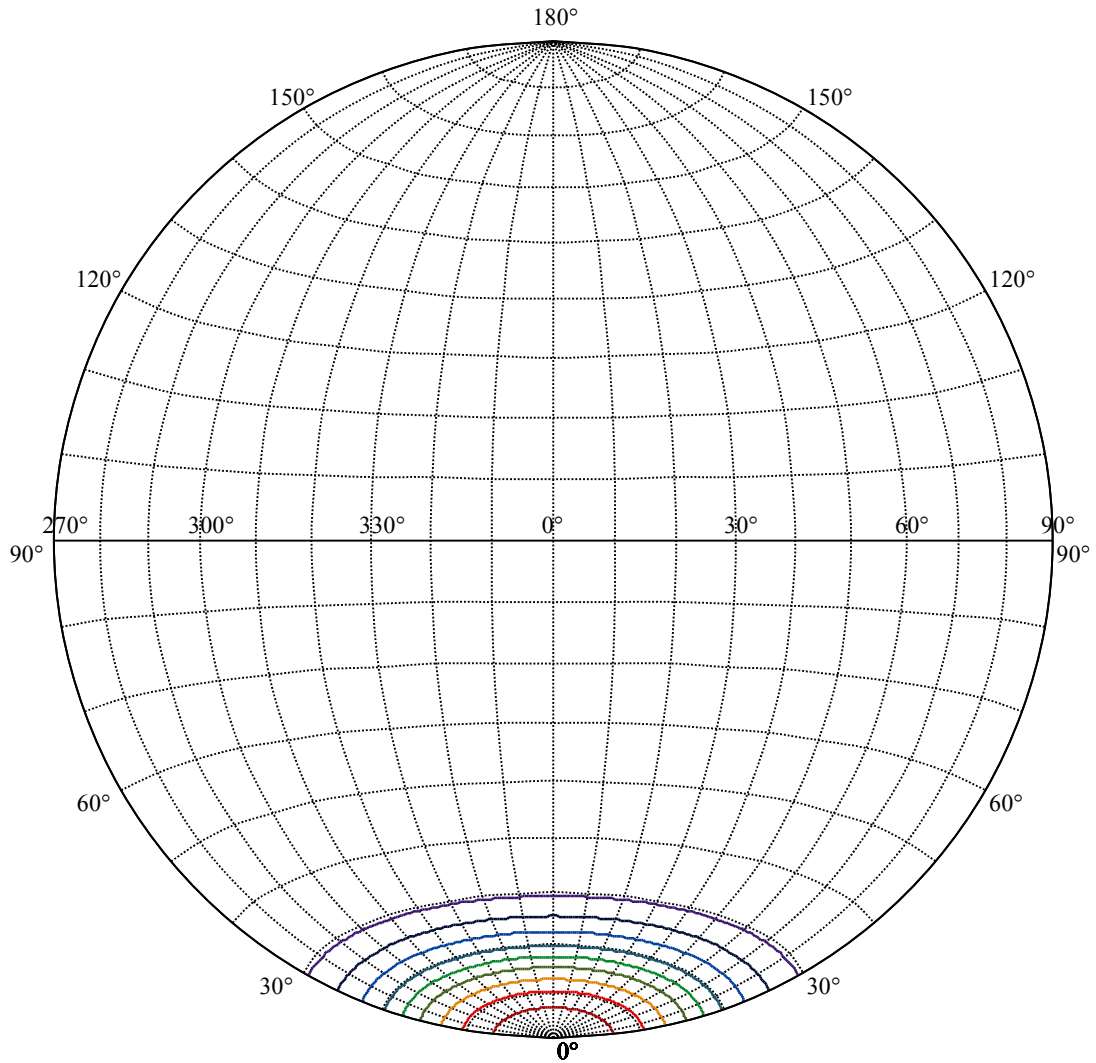
Beam Angle(50%Imax):C0/180Left:17.6 Right:17.6

:C90/270Left:17.6 Right:17.6





(10%Imax) 378.415	—
(20%Imax) 756.83	—
(30%Imax) 1135.25	—
(40%Imax) 1513.66	—
(50%Imax) 1892.08	—
(60%Imax) 2270.49	—
(70%Imax) 2648.91	—
(80%Imax) 3027.32	—
(90%Imax) 3405.74	—



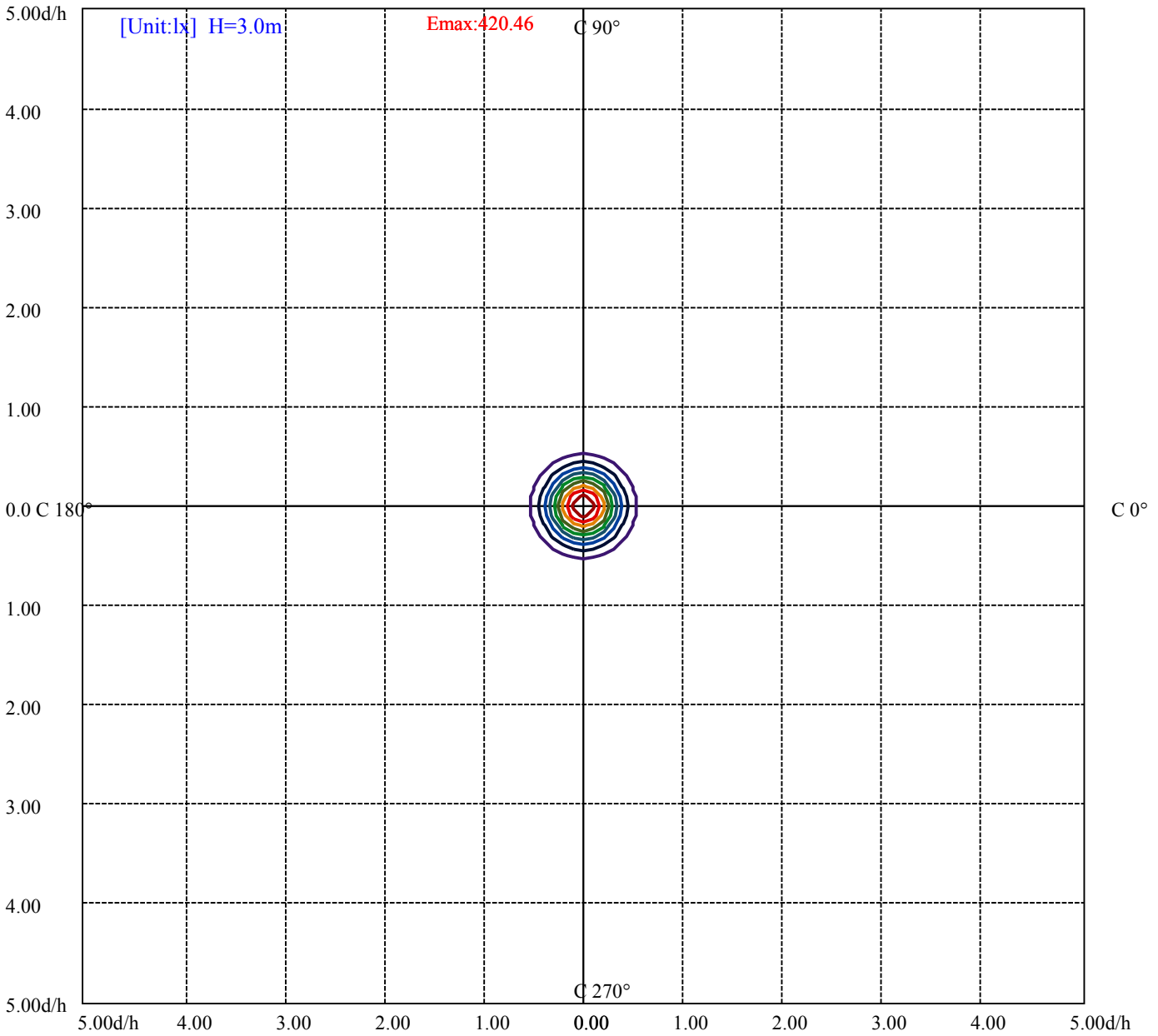
House

[Unit:cd]

Road

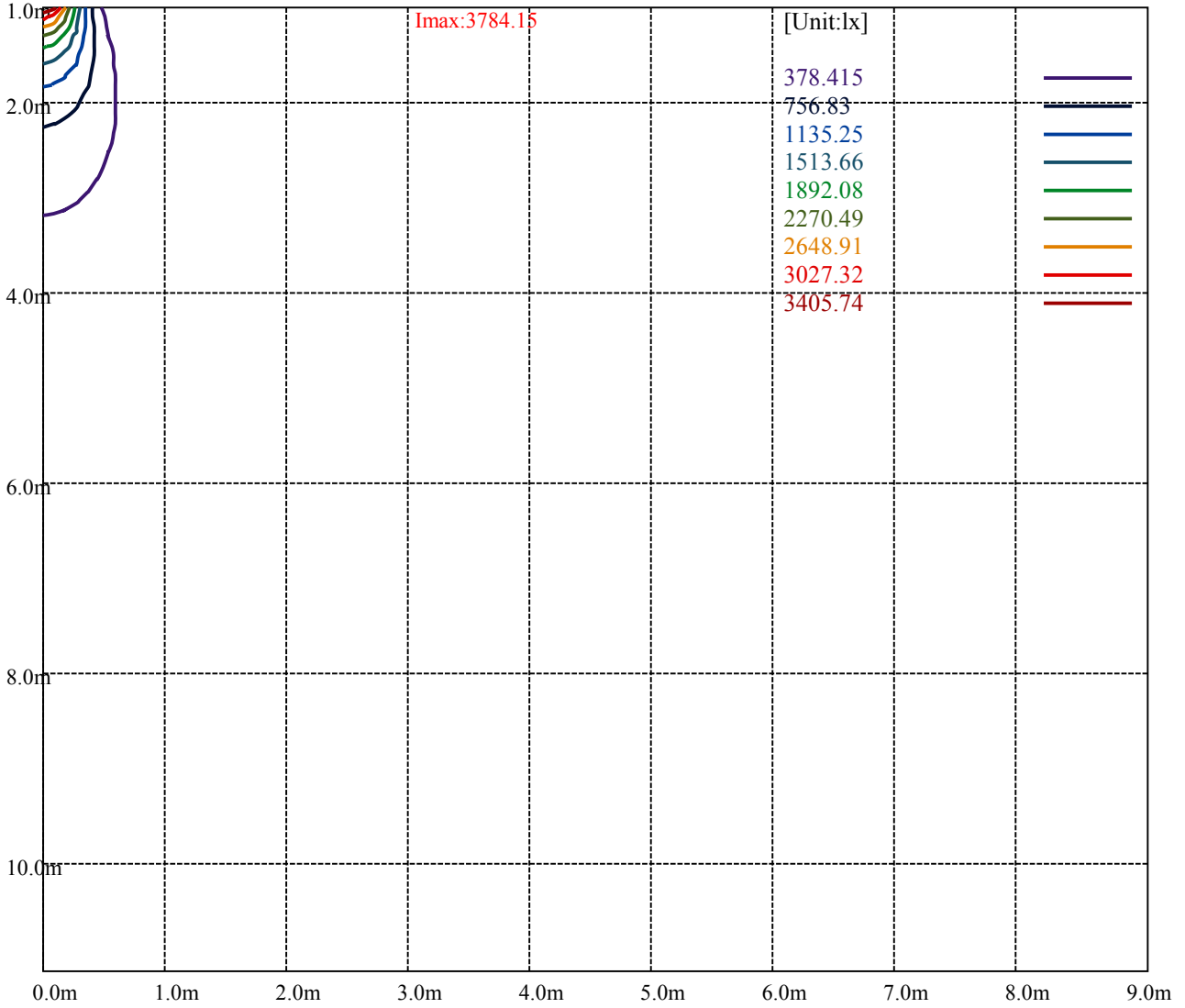
**Imax:3784.15**

(10%Imax) 378.415	—
(20%Imax) 756.83	—
(30%Imax) 1135.25	—
(40%Imax) 1513.66	—
(50%Imax) 1892.08	—
(60%Imax) 2270.49	—
(70%Imax) 2648.91	—
(80%Imax) 3027.32	—
(90%Imax) 3405.74	—



- (10%Emax) 42.04611
- (20%Emax) 84.09211
- (30%Emax) 126.1378
- (40%Emax) 168.1844
- (50%Emax) 210.23
- (60%Emax) 252.2767
- (70%Emax) 294.3222
- (80%Emax) 336.3689
- (90%Emax) 378.4144





Luminance Table

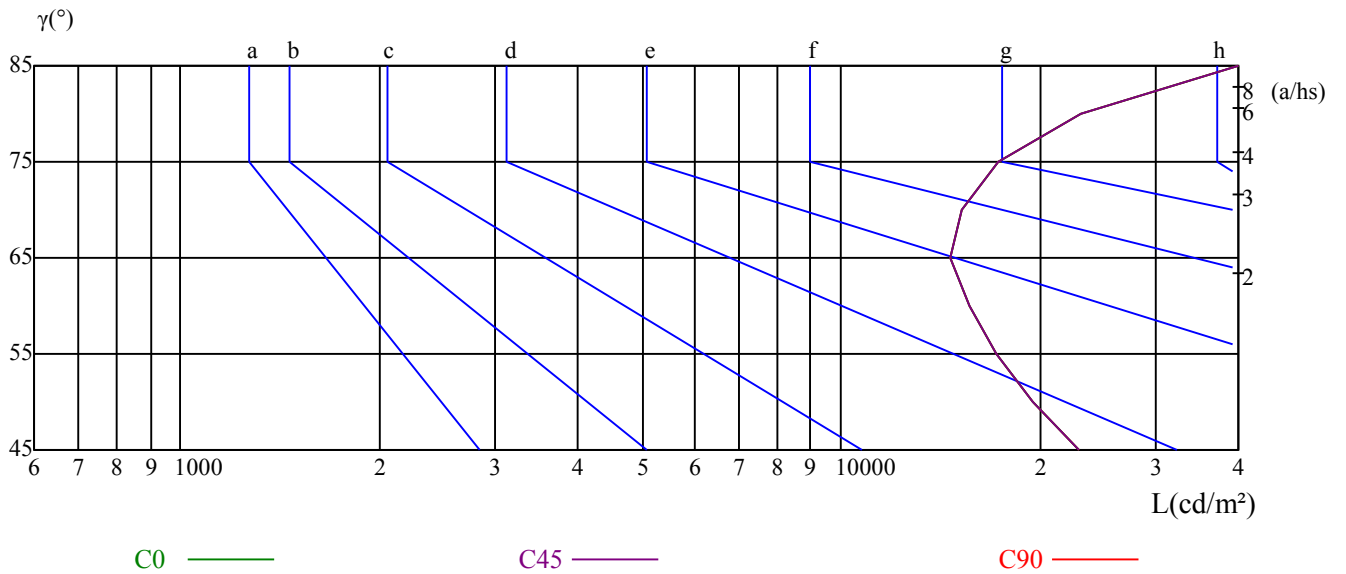
$\gamma$	45	50	55	60	65	70	75	80	85
C0	22931	19551	17184	15649	14691	15212	17340	23077	41714
C45	22931	19551	17184	15649	14691	15212	17340	23077	41714
C90	22931	19551	17184	15649	14691	15212	17340	23077	41714

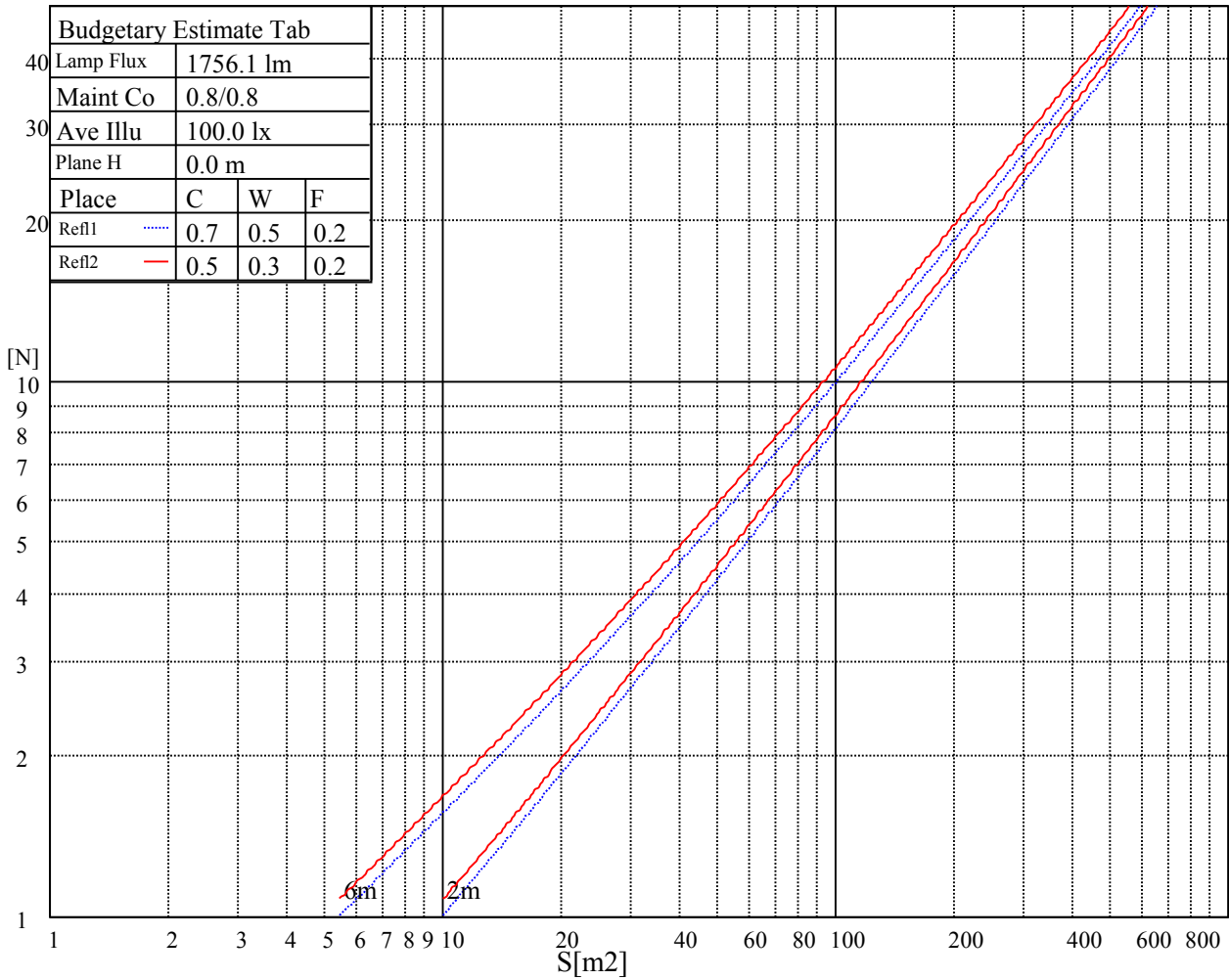
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
14691	14691	14691	17340	17340	17340	41714	41714	41714

Glare Table

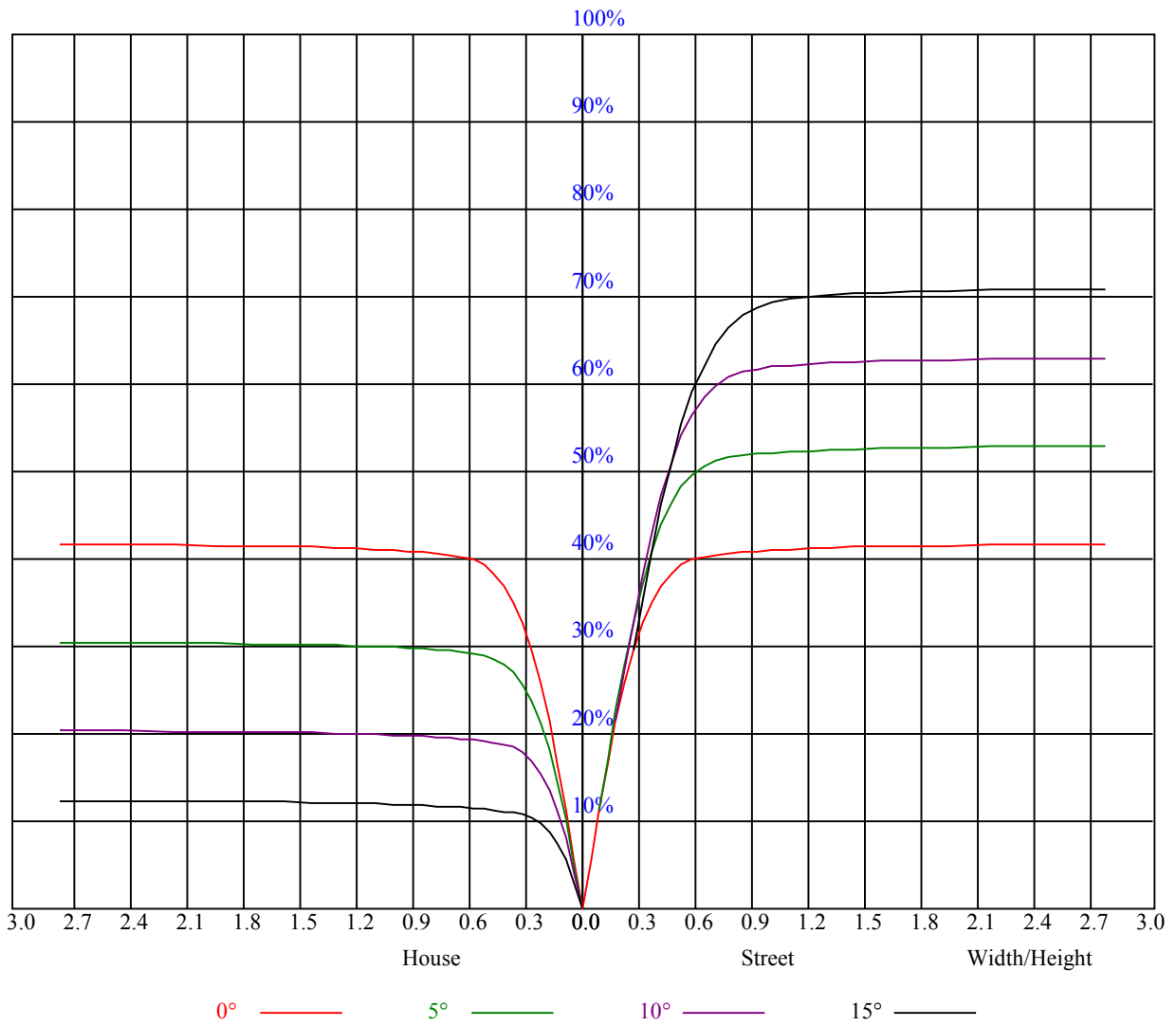
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	0.99	0.99	0.99	0.94	0.94	0.94	0.90	0.90	0.90	0.87	0.87	0.87	0.85
1	0.95	0.93	0.91	0.93	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.83	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	0.85	0.81	0.78	0.83	0.80	0.78	0.81	0.79	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	0.72	0.71	0.69
5	0.77	0.73	0.70	0.76	0.72	0.69	0.75	0.71	0.69	0.73	0.70	0.68	0.72	0.70	0.68	0.66
6	0.73	0.69	0.66	0.73	0.69	0.66	0.72	0.68	0.66	0.70	0.67	0.65	0.69	0.67	0.65	0.64
7	0.70	0.66	0.63	0.70	0.66	0.63	0.69	0.65	0.63	0.68	0.65	0.62	0.67	0.64	0.62	0.61
8	0.68	0.63	0.61	0.67	0.63	0.60	0.66	0.63	0.60	0.65	0.62	0.60	0.65	0.62	0.60	0.59
9	0.65	0.61	0.58	0.65	0.61	0.58	0.64	0.60	0.58	0.63	0.60	0.58	0.62	0.60	0.57	0.57
10	0.63	0.59	0.56	0.62	0.58	0.56	0.62	0.58	0.56	0.61	0.58	0.56	0.60	0.57	0.55	0.54



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	3774.59	3709.46	3309.12	2595.67	1753.75	1006.84	431.42	79.11	48.40
45.0	3791.92	3586.97	3067.71	2310.64	1456.78	764.84	325.06	62.80	41.65
90.0	3776.38	3515.86	2890.85	2071.04	1168.53	643.48	180.69	55.81	37.94
135.0	3793.71	3578.60	2988.24	2278.98	1403.00	723.01	316.09	58.26	38.18
180.0	3774.59	3466.86	2859.77	2094.94	1190.22	595.92	185.65	54.43	36.51
225.0	3791.92	3642.54	3142.41	2380.56	1356.99	859.49	313.22	63.82	42.19
270.0	3776.38	3692.73	3286.41	2615.38	1784.22	1001.46	421.26	81.56	46.43
315.0	3793.71	3640.74	3206.94	2449.87	1607.95	904.42	350.75	69.13	44.99
360.0	3774.59	3709.46	3309.12	2595.67	1753.75	1006.84	431.42	79.11	48.40
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	33.58	25.45	20.08	15.83	12.31	10.22	8.78	7.71	6.87
45.0	29.94	23.18	18.11	14.16	11.35	9.56	8.19	7.35	6.57
90.0	27.37	21.45	16.91	13.38	10.76	9.14	7.95	7.17	6.51
135.0	28.26	22.23	17.39	14.10	11.11	9.38	8.07	7.23	6.51
180.0	27.07	21.27	16.55	13.38	10.76	9.08	7.89	7.11	6.51
225.0	29.88	23.12	18.40	14.52	11.59	9.62	8.37	7.47	6.87
270.0	32.27	24.98	19.42	15.36	12.13	10.10	8.60	7.71	6.99
315.0	31.49	24.20	18.94	15.00	11.83	9.86	8.54	7.53	6.93
360.0	33.58	25.45	20.08	15.83	12.31	10.22	8.78	7.71	6.87
C/γ(°)	90.0								
0.0	6.27								
45.0	6.09								
90.0	6.09								
135.0	6.09								
180.0	6.09								
225.0	6.09								
270.0	6.21								
315.0	6.21								
360.0	6.27								