



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: 4-2275-M	
Luminaire: 92.70.131.00	
Report No: NATA0100	Voltage(V): 34.3600
Test No: GC2019123019	Current(A): 0.6000
LampCAT: LUMINUS CXM-14-AC40	Power (W): 20.6160
Lamp flux(lm): 2608.0	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): 2390.30
Efficiency(%): 91.65%
Lumens(lm)/Power(W): 115.94
Central intensity(cd): 10864.970
Maximum intensity(cd): 10864.970
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=20.6
 [C90/270]Total=20.6
Field angle(10%Imax): [C0/180]Total=43.8
 [C90/270]Total=43.8
Maximum s/h(1/2): C0_180=0.35 C90_270=0.35
Maximum s/h(1/4): C0_180=0.36 C90_270=0.36
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 91.65%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.571%

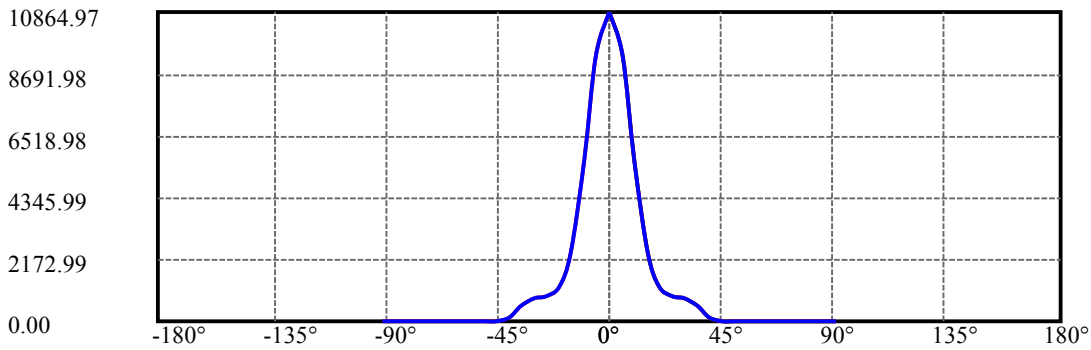
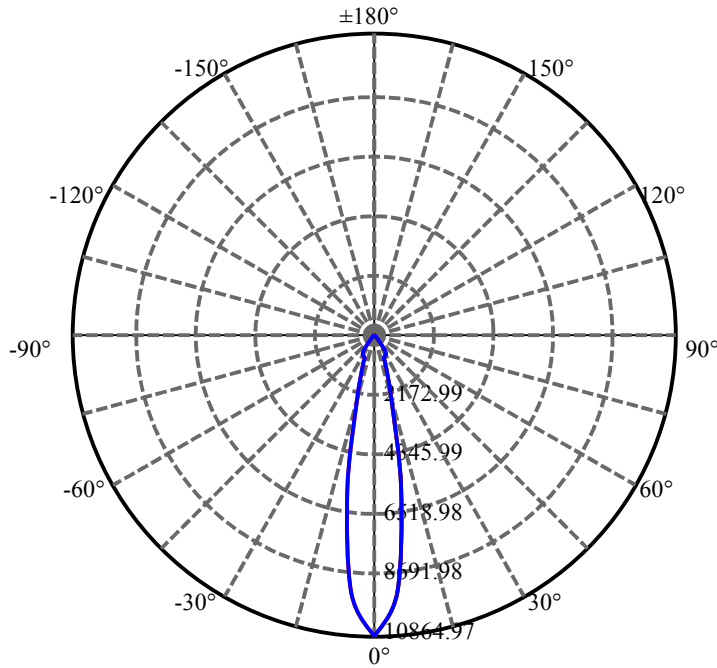
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	10864.969	0.000	0	.000%	.000%
5.0	9307.406	241.155	241.155	9.247%	10.089%
10.0	5637.305	534.619	775.774	20.499%	32.455%
15.0	2438.508	479.052	1254.826	18.369%	52.497%
20.0	1201.866	300.018	1554.844	11.504%	65.048%
25.0	897.546	220.190	1775.034	8.443%	74.260%
30.0	820.181	217.380	1992.413	8.335%	83.354%
35.0	566.641	204.219	2196.633	7.830%	91.898%
40.0	126.000	115.562	2312.195	4.431%	96.733%
45.0	16.467	26.379	2338.574	1.011%	97.836%
50.0	13.887	6.133	2344.707	.235%	98.093%
55.0	12.656	5.771	2350.478	.221%	98.334%
60.0	11.862	5.667	2356.146	.217%	98.571%
65.0	11.341	5.641	2361.786	.216%	98.807%
70.0	11.004	5.658	2367.444	.217%	99.044%
75.0	10.758	5.688	2373.133	.218%	99.282%
80.0	10.603	5.716	2378.848	.219%	99.521%
85.0	10.484	5.730	2384.578	.220%	99.761%
90.0	10.399	5.718	2390.296	.219%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1992.41	76.40%	83.35%
0-40	2312.19	88.66%	96.73%
0-60	2356.15	90.34%	98.57%
0-90	2384.58	91.43%	99.76%
0-120	2384.58	91.43%	99.76%
0-180	2390.30	91.65%	100.00%
60-90	34.10	1.31%	1.43%
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%
0-28.16	1912.24	73.32%	80.00%

ZONAL LUMEN SUMMARY

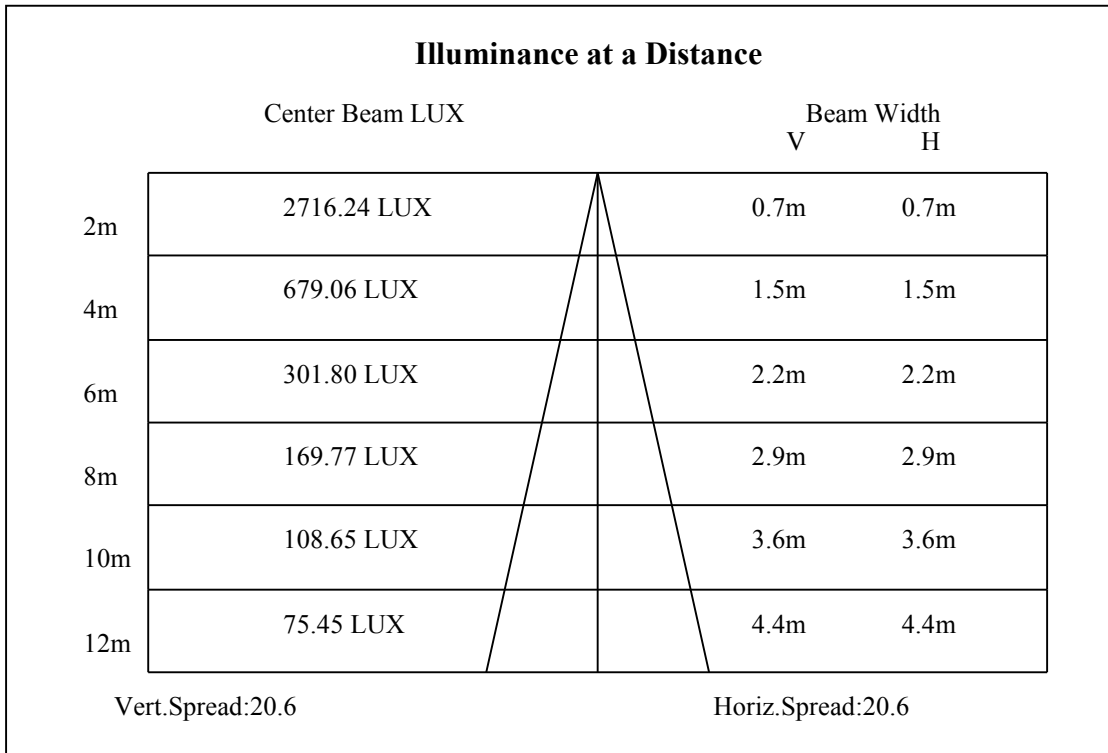
0-10	775.77
10-20	779.07
20-30	437.57
30-40	319.78
40-50	32.51
50-60	11.44
60-70	11.30
70-80	11.40
80-90	5.73
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

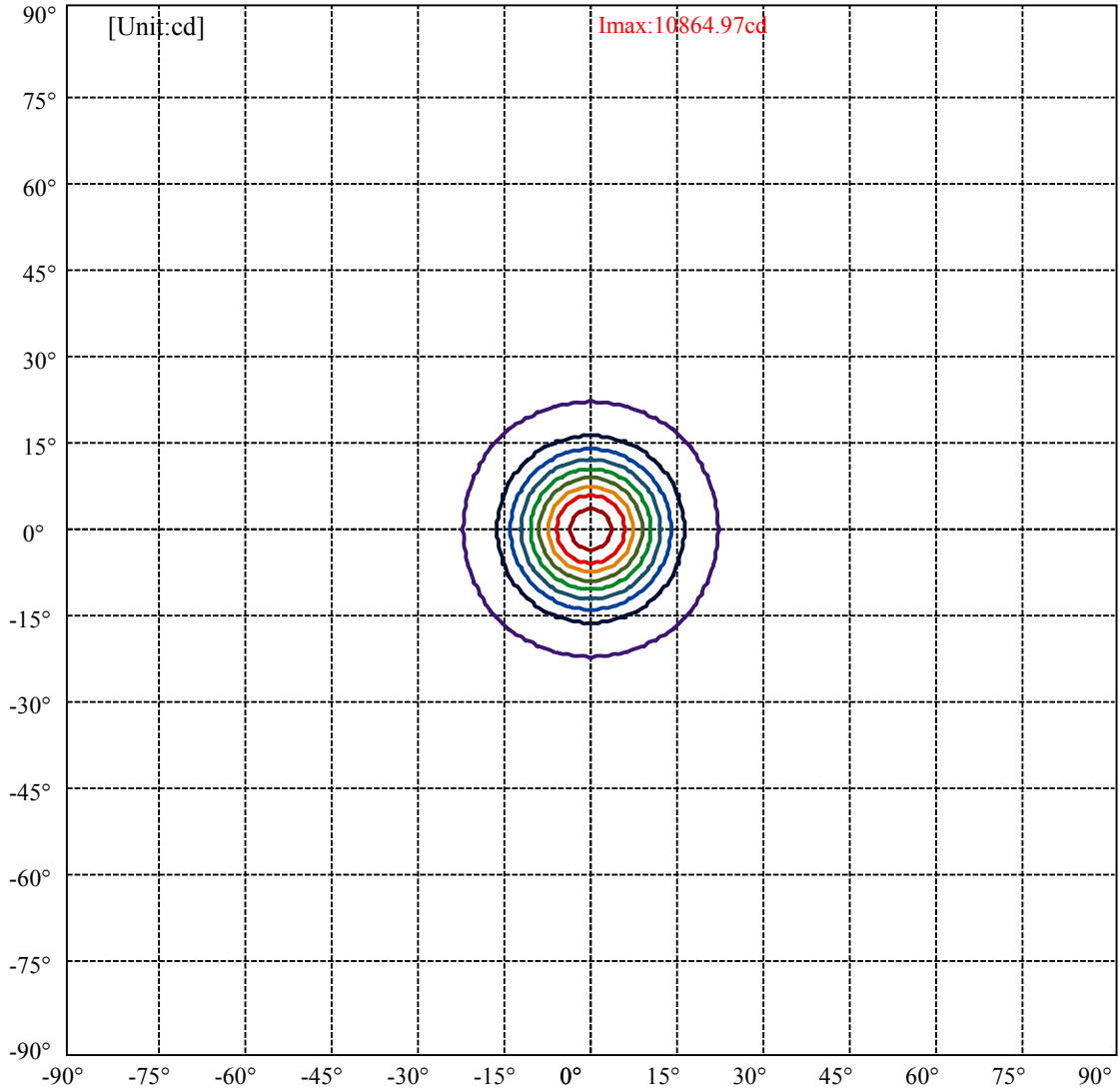


C0(Max): ———
C0/C180: ———
C90/C270: ———

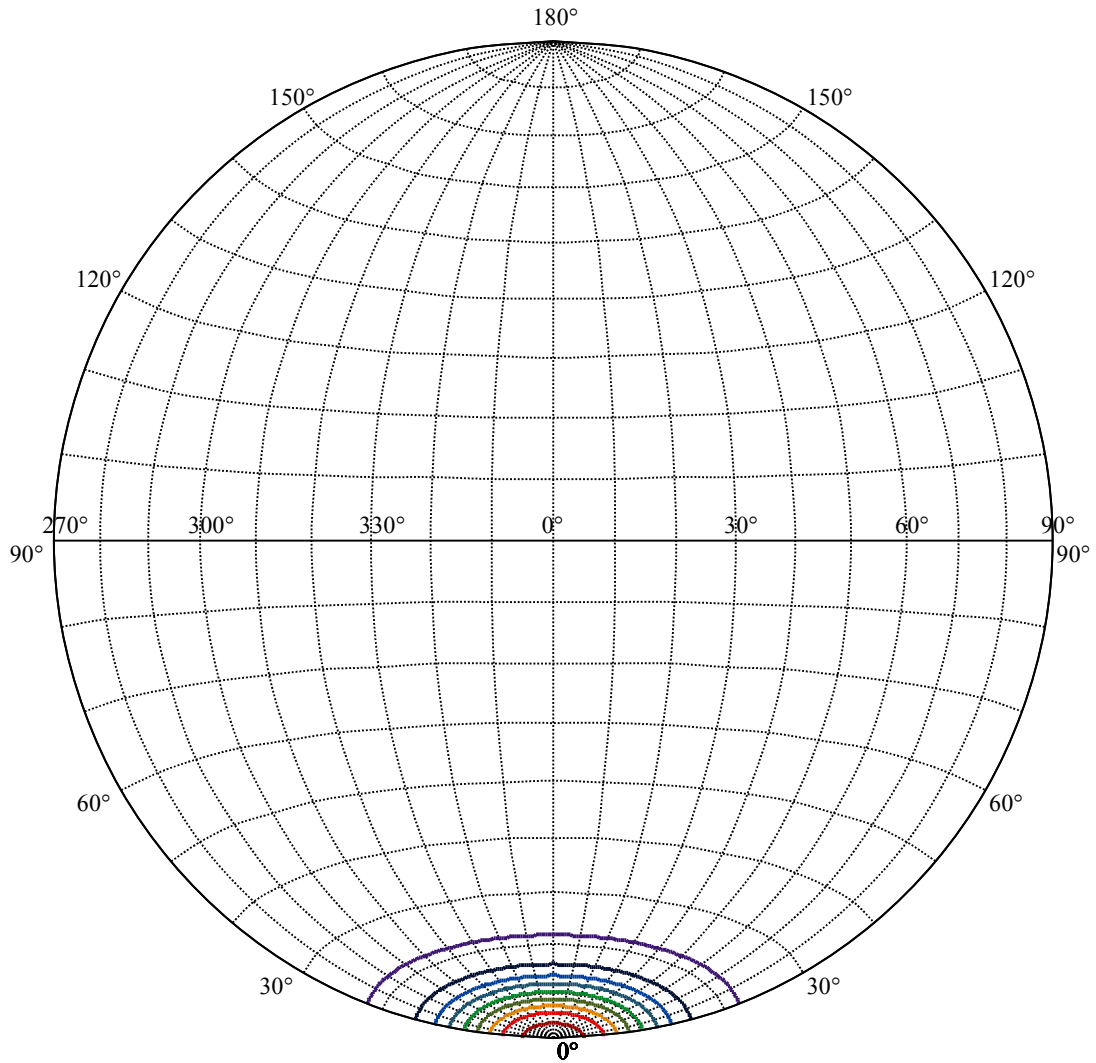
Field angle(10%Imax):C0/180Left:21.9 Right:21.9
:C90/270Left:21.9 Right:21.9

Beam Angle(50%Imax):C0/180Left:10.3 Right:10.3
:C90/270Left:10.3 Right:10.3





(10%Imax) 1086.5	—
(20%Imax) 2172.99	—
(30%Imax) 3259.49	—
(40%Imax) 4345.99	—
(50%Imax) 5432.48	—
(60%Imax) 6518.98	—
(70%Imax) 7605.48	—
(80%Imax) 8691.98	—
(90%Imax) 9778.47	—



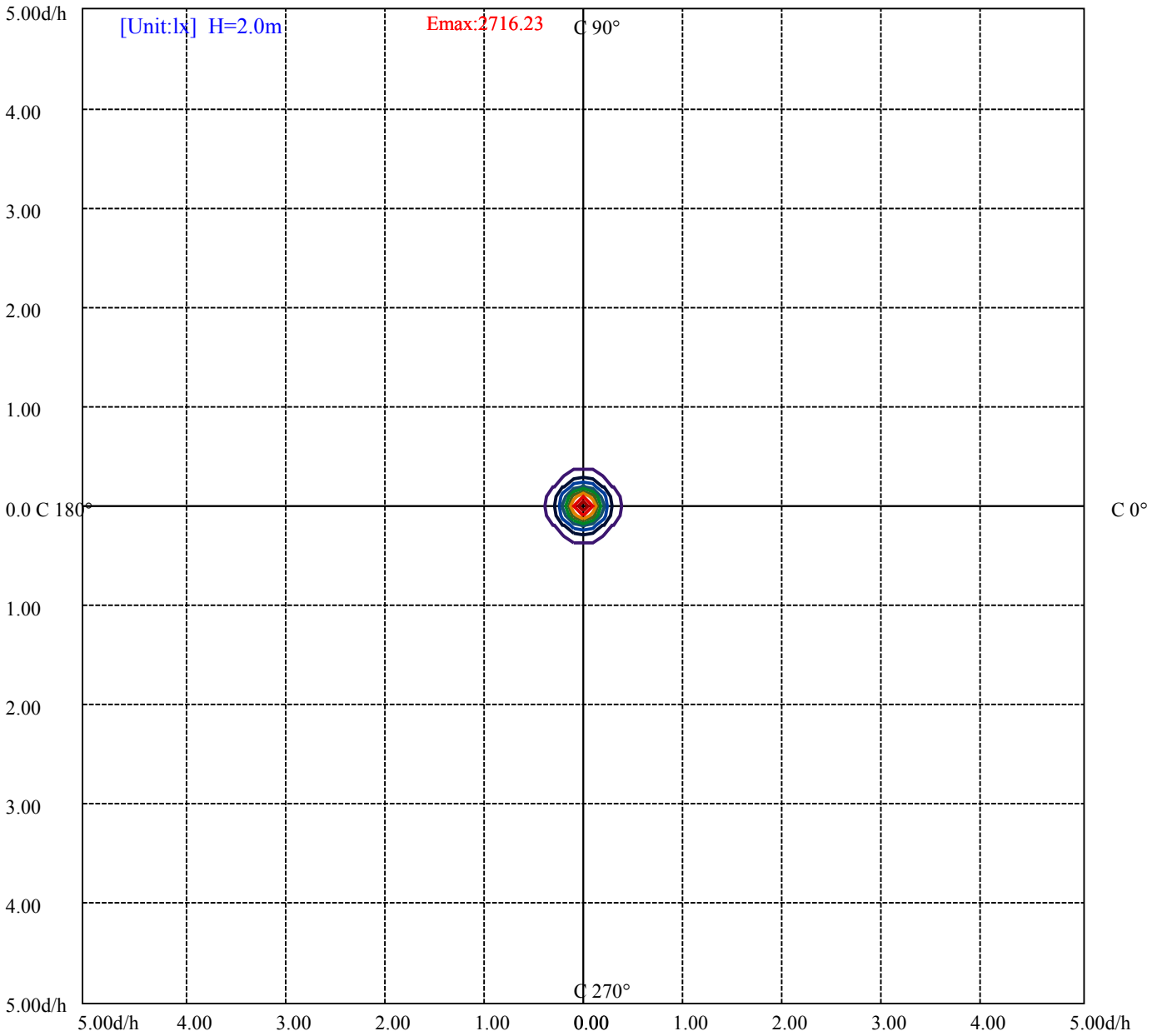
House

[Unit:cd]

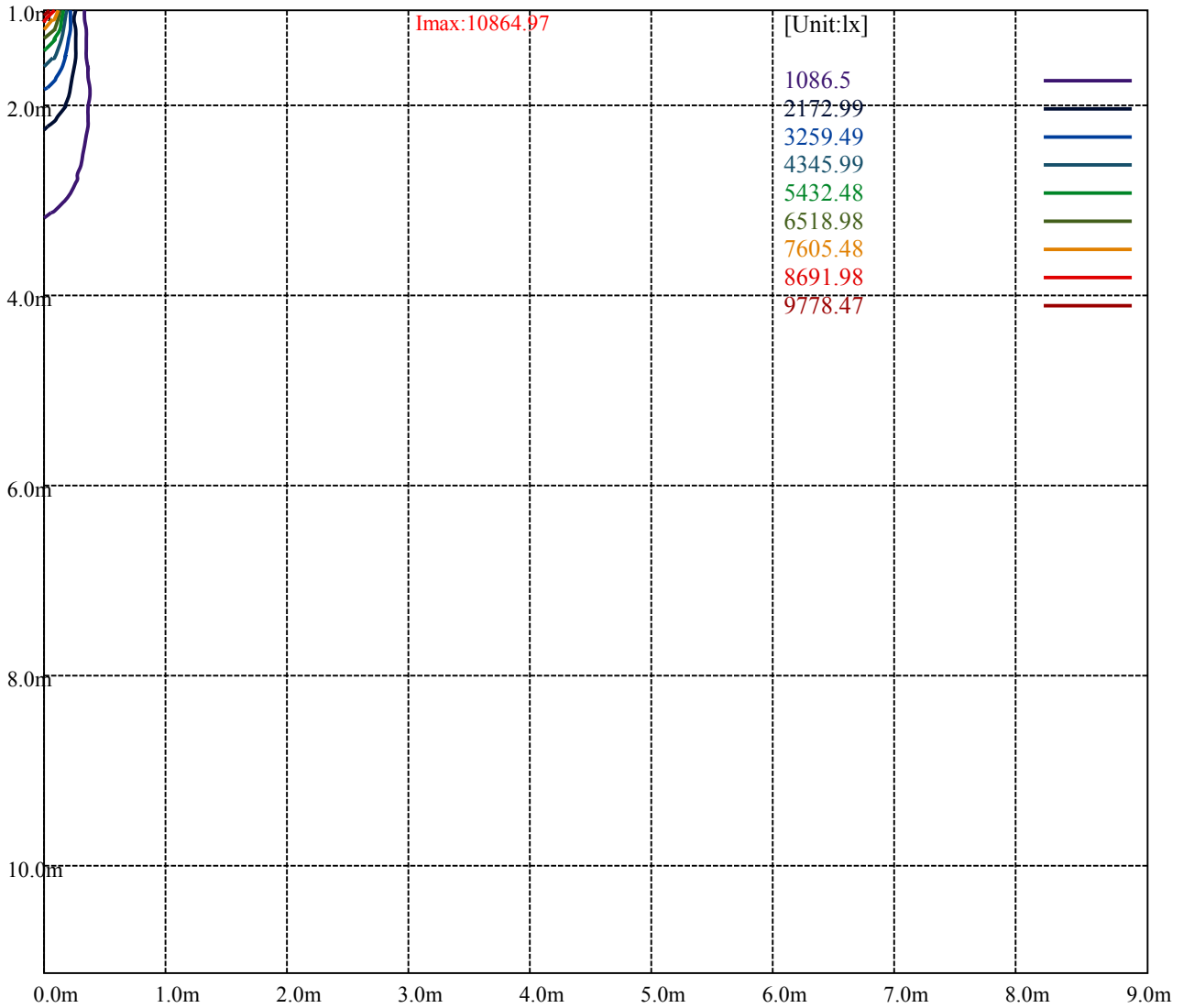
Road

I_{max}:10864.97

(10%I _{max}) 1086.5	—
(20%I _{max}) 2172.99	—
(30%I _{max}) 3259.49	—
(40%I _{max}) 4345.99	—
(50%I _{max}) 5432.48	—
(60%I _{max}) 6518.98	—
(70%I _{max}) 7605.48	—
(80%I _{max}) 8691.98	—
(90%I _{max}) 9778.47	—



(10%Emax) 271.6225	—
(20%Emax) 543.245	—
(30%Emax) 814.87	—
(40%Emax) 1086.493	—
(50%Emax) 1358.115	—
(60%Emax) 1629.738	—
(70%Emax) 1901.363	—
(80%Emax) 2172.985	—
(90%Emax) 2444.607	—



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

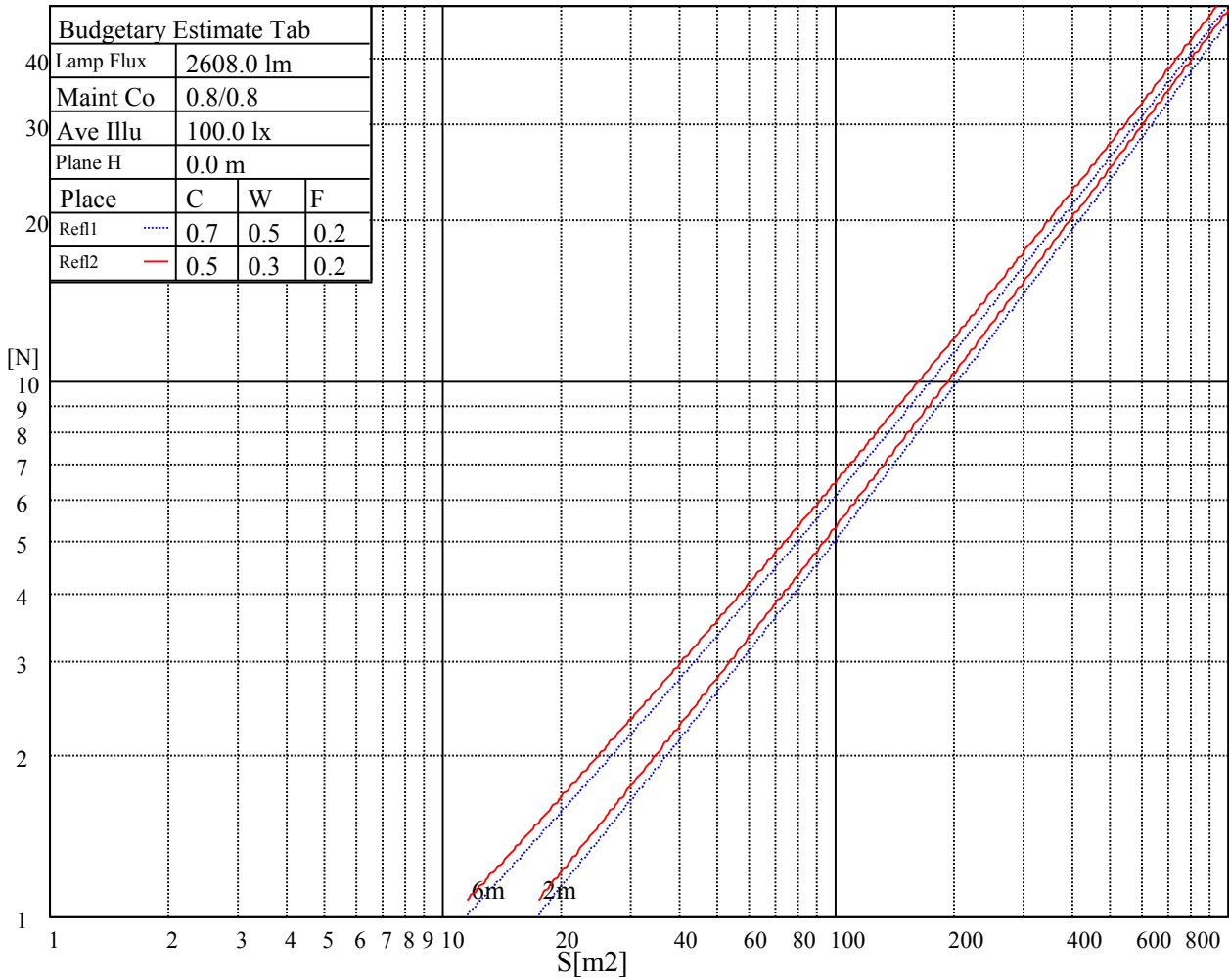
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

Glare Table

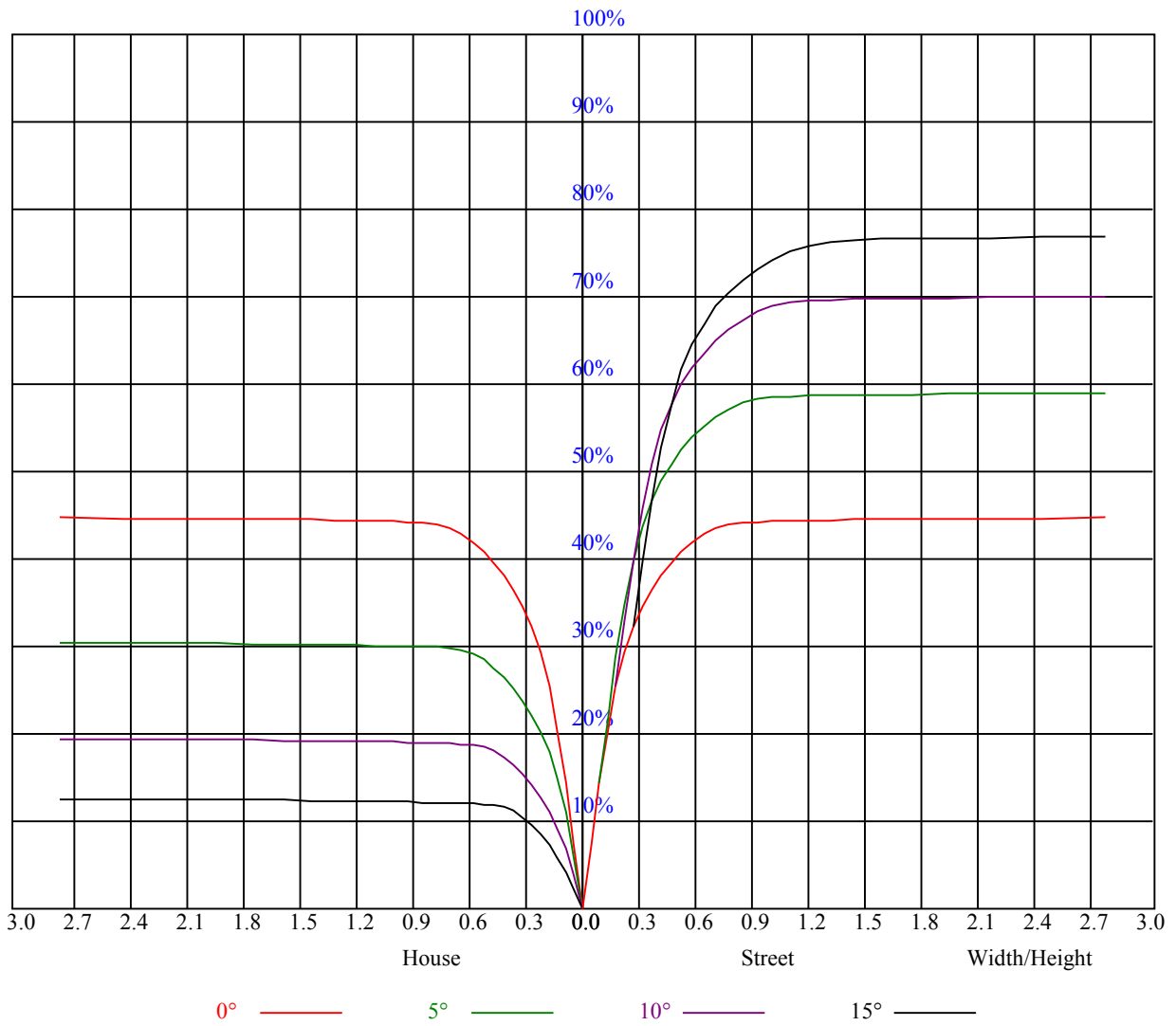
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.09	1.09	1.09	1.07	1.07	1.07	1.02	1.02	1.02	0.98	0.98	0.98	0.94	0.94	0.94	0.92
1	1.03	1.01	0.99	1.01	0.99	0.97	0.97	0.96	0.94	0.94	0.92	0.91	0.90	0.90	0.89	0.87
2	0.97	0.94	0.91	0.95	0.93	0.90	0.93	0.90	0.88	0.90	0.88	0.86	0.87	0.86	0.85	0.83
3	0.92	0.88	0.85	0.91	0.87	0.85	0.89	0.86	0.83	0.86	0.84	0.82	0.84	0.82	0.81	0.80
4	0.88	0.84	0.80	0.87	0.83	0.80	0.85	0.82	0.79	0.83	0.80	0.78	0.82	0.79	0.77	0.76
5	0.84	0.80	0.76	0.83	0.79	0.76	0.82	0.78	0.75	0.80	0.77	0.75	0.79	0.76	0.74	0.73
6	0.80	0.76	0.73	0.80	0.76	0.73	0.79	0.75	0.72	0.77	0.74	0.72	0.76	0.73	0.71	0.70
7	0.77	0.73	0.70	0.77	0.73	0.70	0.76	0.72	0.69	0.75	0.71	0.69	0.74	0.71	0.69	0.68
8	0.74	0.70	0.67	0.74	0.70	0.67	0.73	0.69	0.67	0.72	0.69	0.67	0.71	0.68	0.66	0.65
9	0.72	0.68	0.65	0.71	0.67	0.65	0.71	0.67	0.64	0.70	0.67	0.64	0.69	0.66	0.64	0.63
10	0.69	0.65	0.63	0.69	0.65	0.62	0.68	0.65	0.62	0.68	0.64	0.62	0.67	0.64	0.62	0.61



NATA 4-2275-M

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	10783.69	10398.94	7601.63	3506.06	1560.38	973.69	860.63	777.38	309.94
45.0	10800.00	10340.44	7197.19	3201.75	1563.19	955.69	852.19	745.88	306.00
90.0	10914.19	9417.38	5372.44	2178.00	1113.13	884.36	813.71	559.41	49.11
135.0	10962.00	9097.31	5181.19	2154.38	1090.69	867.94	807.19	500.63	30.38
180.0	10783.69	7895.25	3683.81	1661.63	967.61	835.71	780.36	320.79	23.34
225.0	10800.00	8267.06	4058.44	1721.81	991.86	852.75	793.74	371.59	25.48
270.0	10914.19	9438.75	5797.69	2498.63	1224.56	900.00	823.50	628.88	155.64
315.0	10962.00	9604.13	6206.06	2585.81	1103.51	910.24	830.14	628.59	108.11
360.0	10783.69	10398.94	7601.63	3506.06	1560.38	973.69	860.63	777.38	309.94

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	19.91	14.68	13.39	12.21	11.53	11.19	10.86	10.69	10.58
45.0	18.90	14.34	13.11	12.15	11.53	11.14	10.80	10.63	10.46
90.0	15.36	13.56	12.43	11.76	11.19	10.91	10.69	10.58	10.46
135.0	15.30	13.61	12.43	11.70	11.25	10.97	10.74	10.58	10.46
180.0	15.02	13.44	12.32	11.70	11.25	10.91	10.74	10.58	10.46
225.0	15.08	13.56	12.38	11.76	11.25	10.91	10.69	10.52	10.46
270.0	16.03	14.01	12.66	11.81	11.36	11.03	10.80	10.63	10.46
315.0	16.14	13.89	12.54	11.81	11.36	10.97	10.74	10.63	10.52
360.0	19.91	14.68	13.39	12.21	11.53	11.19	10.86	10.69	10.58

C/γ(°)	90.0
0.0	10.46
45.0	10.41
90.0	10.35
135.0	10.41
180.0	10.41
225.0	10.41
270.0	10.35
315.0	10.41
360.0	10.46