



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: LN01D03536DA-N
Luminaire: 97.70.267.00
Report No: 200611-B010
Test No: 200611-C010
LampCAT: LUMINUS CXM-4-AC40
Lamp flux(lm): 606.0
Number of Lamps: 1
Length(mm): 0
Phm Type: C

Voltage(V): 34.6000
Current(A): 0.1500
Power (W): 5.1900
PF: 0.0000
Ballast type: DC
Width(mm): 0
Height(mm): 0

Photometric Results

Lumens(lm): 550.99
Efficiency(%): 90.92%
Lumens(lm)/Power(W): 106.16
Central intensity(cd): 1265.906
Maximum intensity(cd): 1265.906
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=37.0
 [C90/270]Total=37.0
Field angle(10%Imax): [C0/180]Total=59.4
 [C90/270]Total=59.4
Maximum s/h(1/2): C0_180=0.61 C90_270=0.61
Maximum s/h(1/4): C0_180=0.59 C90_270=0.59
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 90.92%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.091%

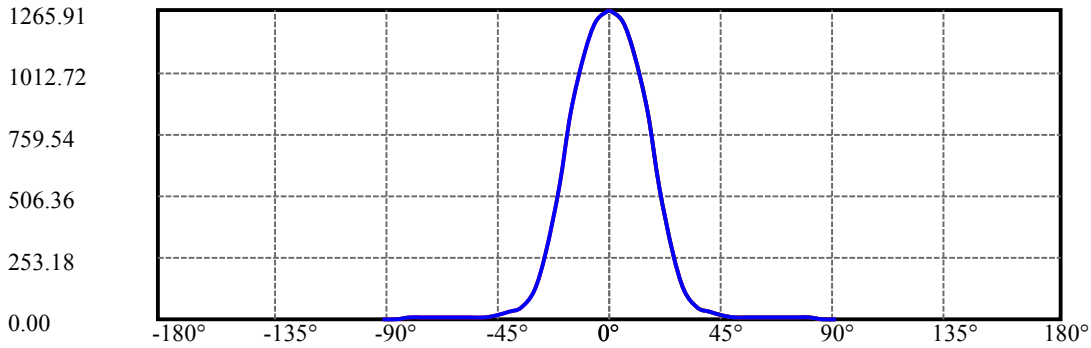
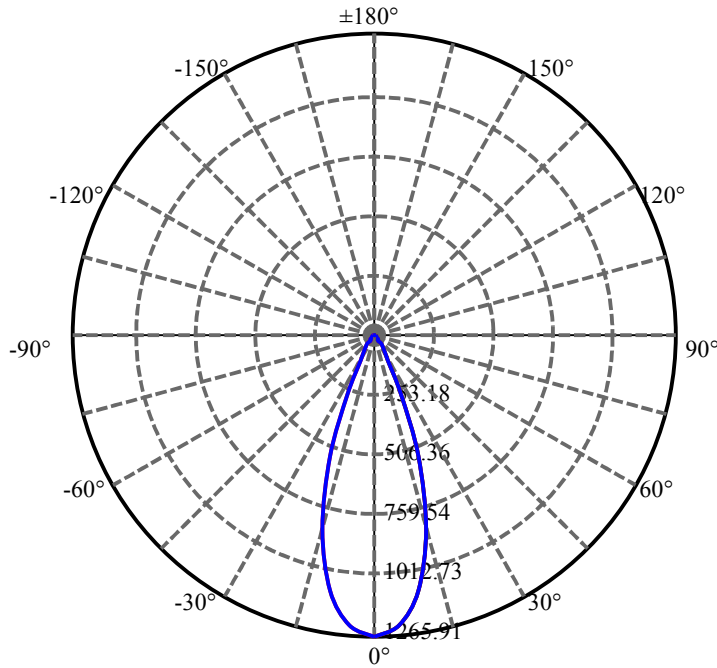
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1265.906	0.000	0	.000%	.000%
5.0	1221.420	29.735	29.735	4.907%	5.397%
10.0	1086.553	82.563	112.299	13.624%	20.381%
15.0	845.536	114.610	226.909	18.913%	41.182%
20.0	540.619	114.239	341.148	18.851%	61.915%
25.0	272.215	85.251	426.399	14.068%	77.387%
30.0	116.838	49.235	475.634	8.125%	86.323%
35.0	49.746	24.531	500.165	4.048%	90.775%
40.0	28.048	12.979	513.144	2.142%	93.131%
45.0	17.213	8.380	521.524	1.383%	94.652%
50.0	11.588	5.819	527.344	.960%	95.708%
55.0	8.121	4.285	531.629	.707%	96.486%
60.0	6.321	3.338	534.967	.551%	97.091%
65.0	5.259	2.815	537.782	.465%	97.602%
70.0	5.702	2.776	540.558	.458%	98.106%
75.0	8.044	3.593	544.151	.593%	98.758%
80.0	4.591	3.381	547.532	.558%	99.372%
85.0	2.911	2.039	549.57	.336%	99.742%
90.0	2.285	1.423	550.993	.235%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	475.63	78.49%	86.32%
0-40	513.14	84.68%	93.13%
0-60	534.97	88.28%	97.09%
0-90	549.57	90.69%	99.74%
0-120	549.57	90.69%	99.74%
0-180	550.99	90.92%	100.00%
60-90	17.94	2.96%	3.26%
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%
0-26.46	440.79	72.74%	80.00%

ZONAL LUMEN SUMMARY

0-10	112.30
10-20	228.85
20-30	134.49
30-40	37.51
40-50	14.20
50-60	7.62
60-70	5.59
70-80	6.97
80-90	2.04
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



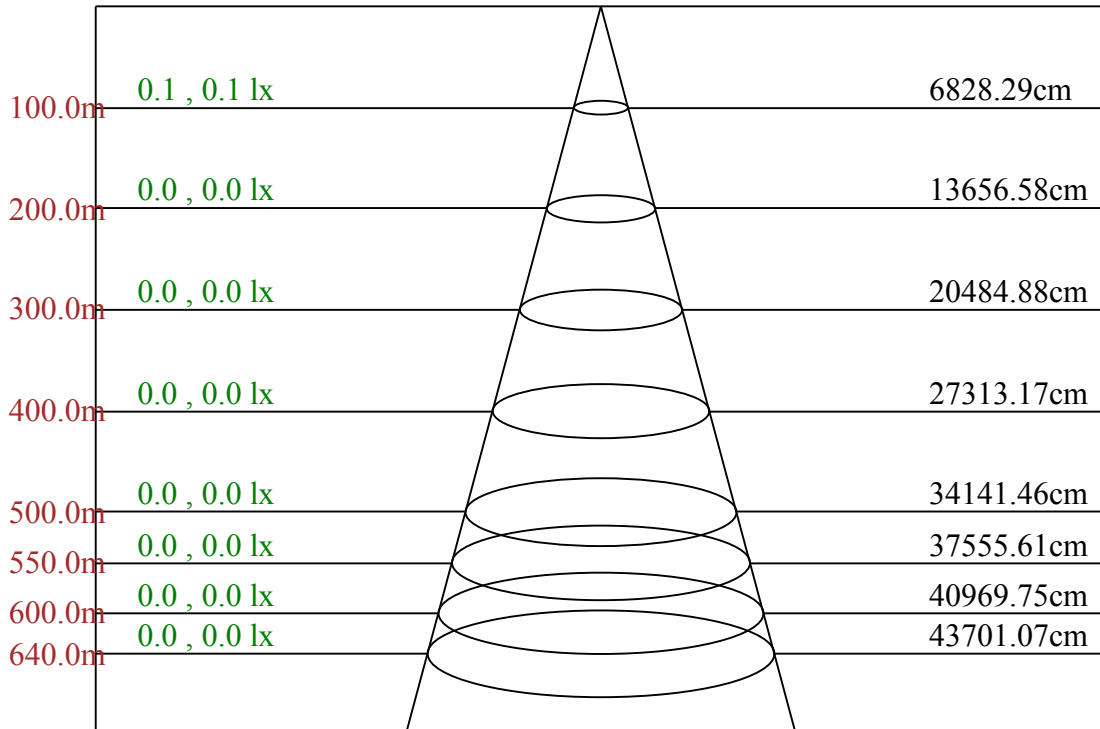
C0(Max): —————

C0/C180: —————

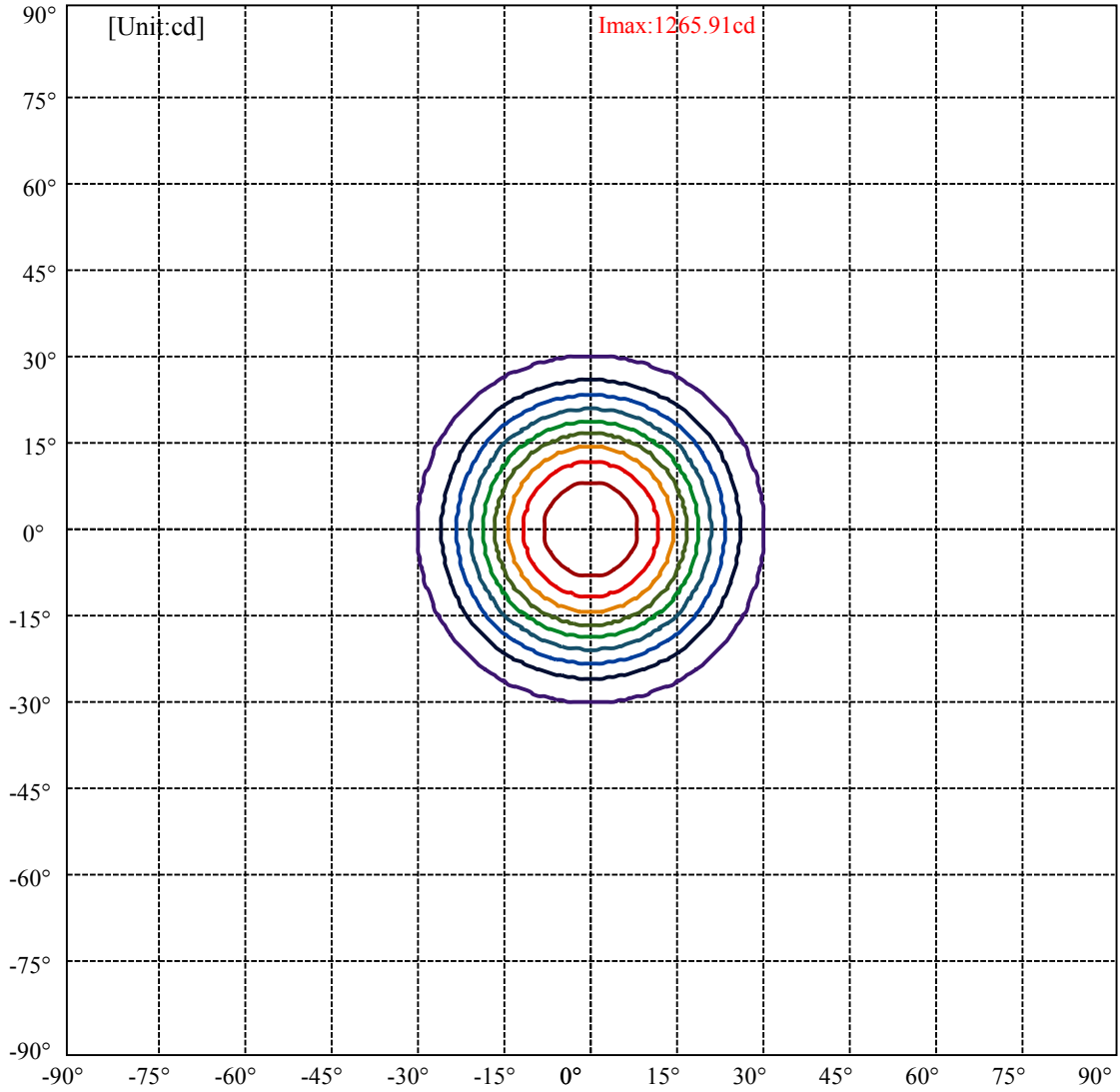
C90/C270: —————

Field angle(10%Imax):C0/180Left:29.7 Right:29.7
:C90/270Left:29.7 Right:29.7

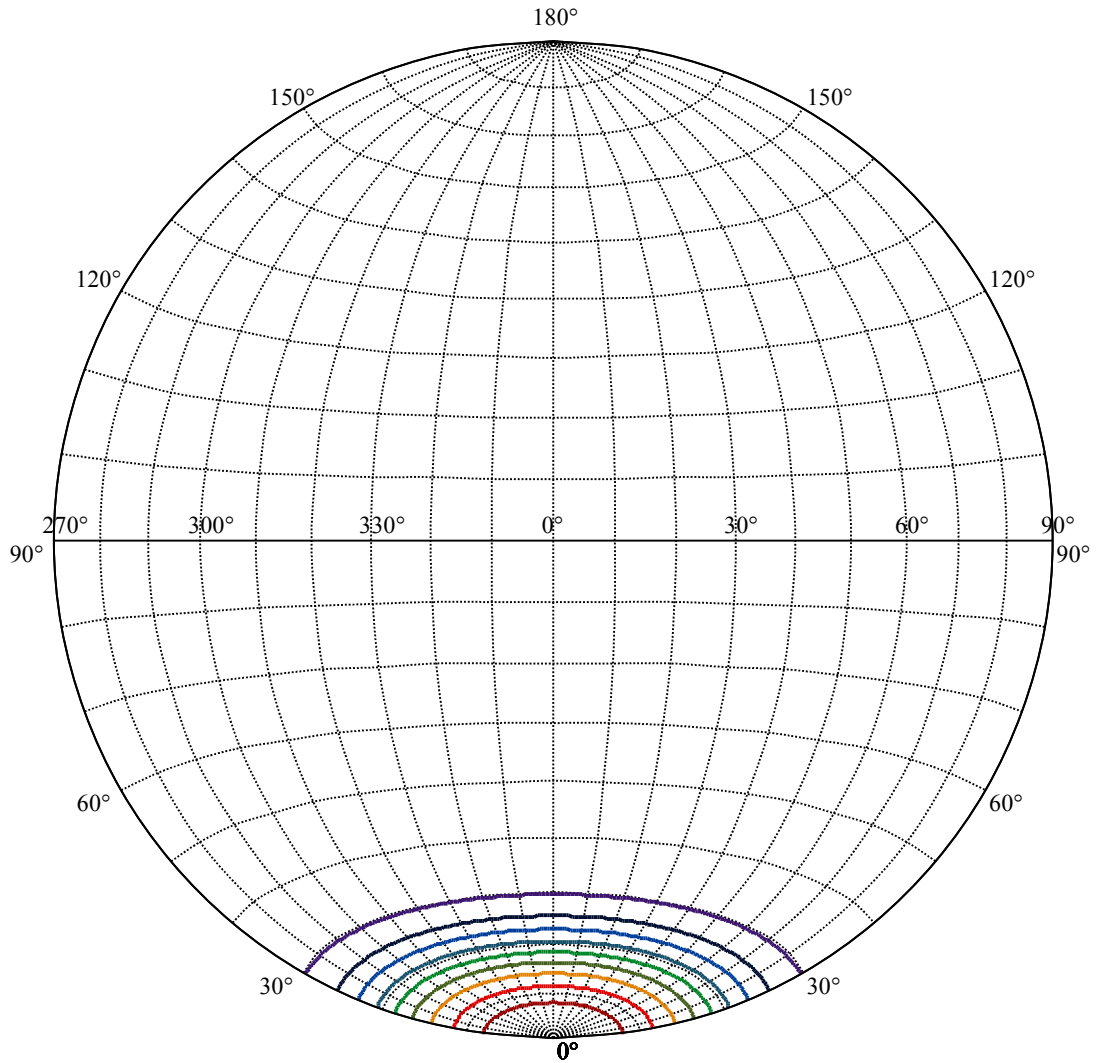
Beam Angle(50%Imax):C0/180Left:18.5 Right:18.5
:C90/270Left:18.5 Right:18.5



Max , Ave Beam angle of C0 plane 37.70



(10%I _{max}) 126.591	—
(20%I _{max}) 253.181	—
(30%I _{max}) 379.772	—
(40%I _{max}) 506.362	—
(50%I _{max}) 632.953	—
(60%I _{max}) 759.544	—
(70%I _{max}) 886.134	—
(80%I _{max}) 1012.72	—
(90%I _{max}) 1139.32	—



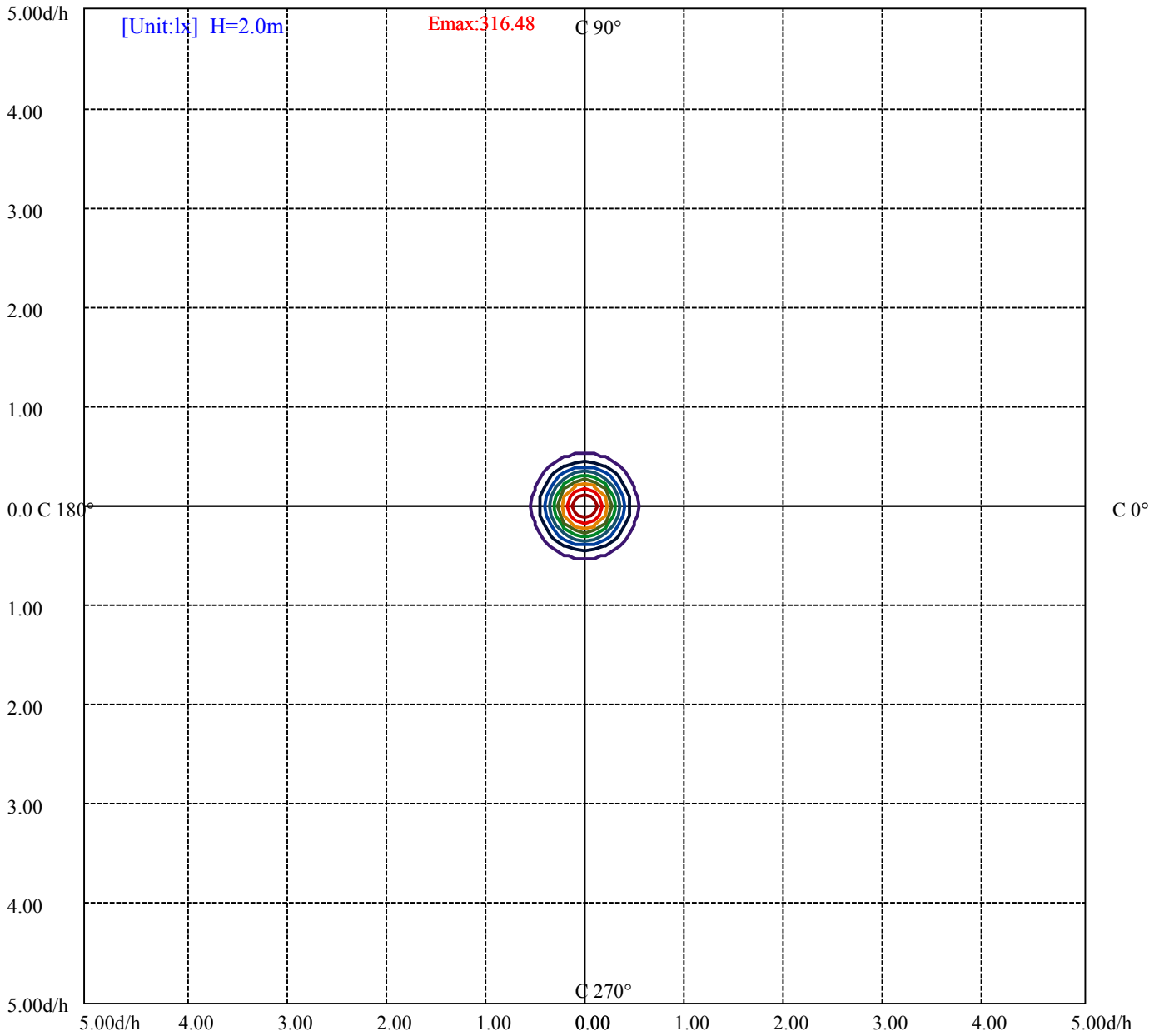
House

[Unit:cd]

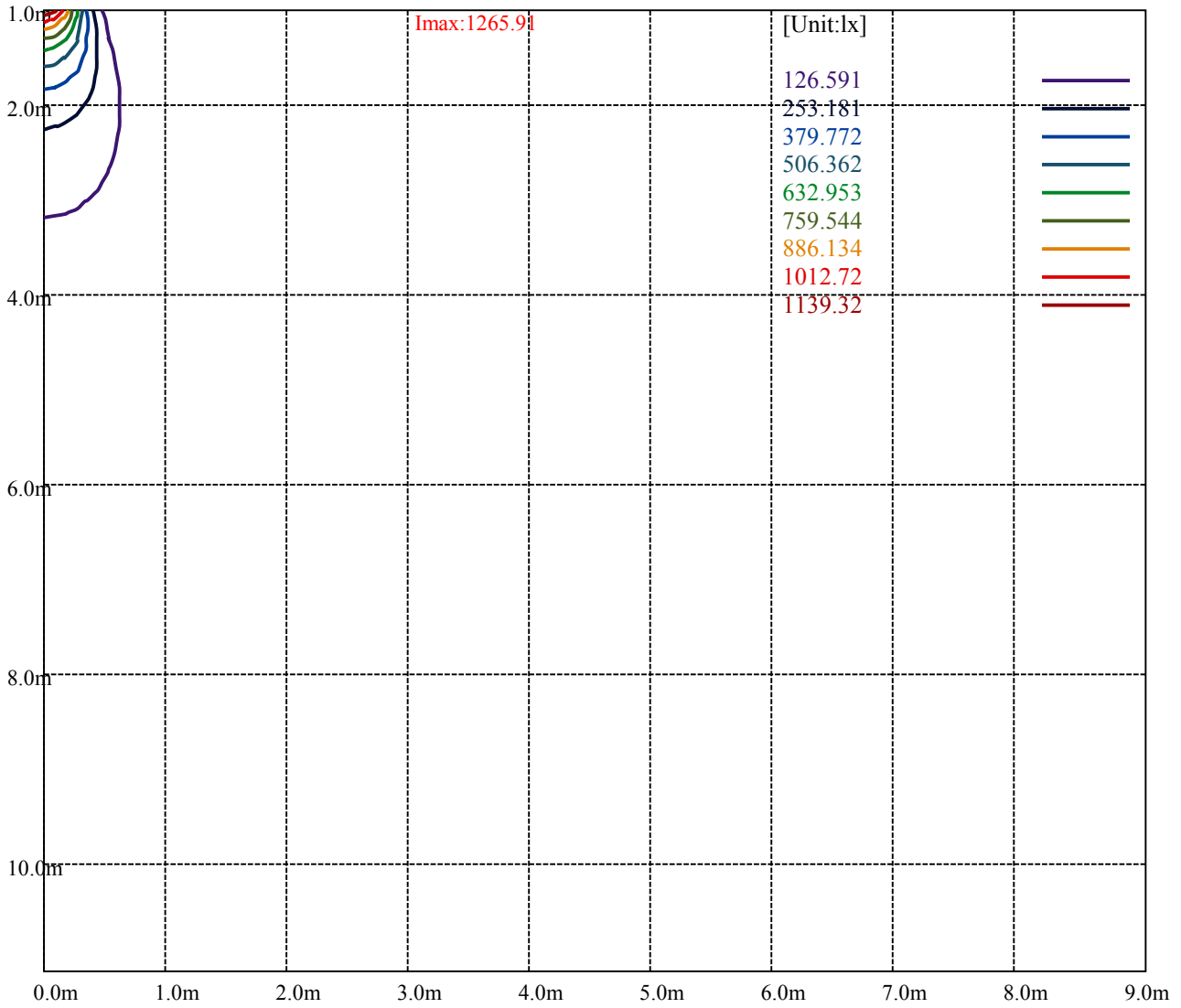
Road

Imax:1265.91

(10%Imax) 126.591	—
(20%Imax) 253.181	—
(30%Imax) 379.772	—
(40%Imax) 506.362	—
(50%Imax) 632.953	—
(60%Imax) 759.544	—
(70%Imax) 886.134	—
(80%Imax) 1012.72	—
(90%Imax) 1139.32	—



(10%Emax) 31.6475	—
(20%Emax) 63.29525	—
(30%Emax) 94.94275	—
(40%Emax) 126.5905	—
(50%Emax) 158.238	—
(60%Emax) 189.8858	—
(70%Emax) 221.5332	—
(80%Emax) 253.18	—
(90%Emax) 284.8275	—



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

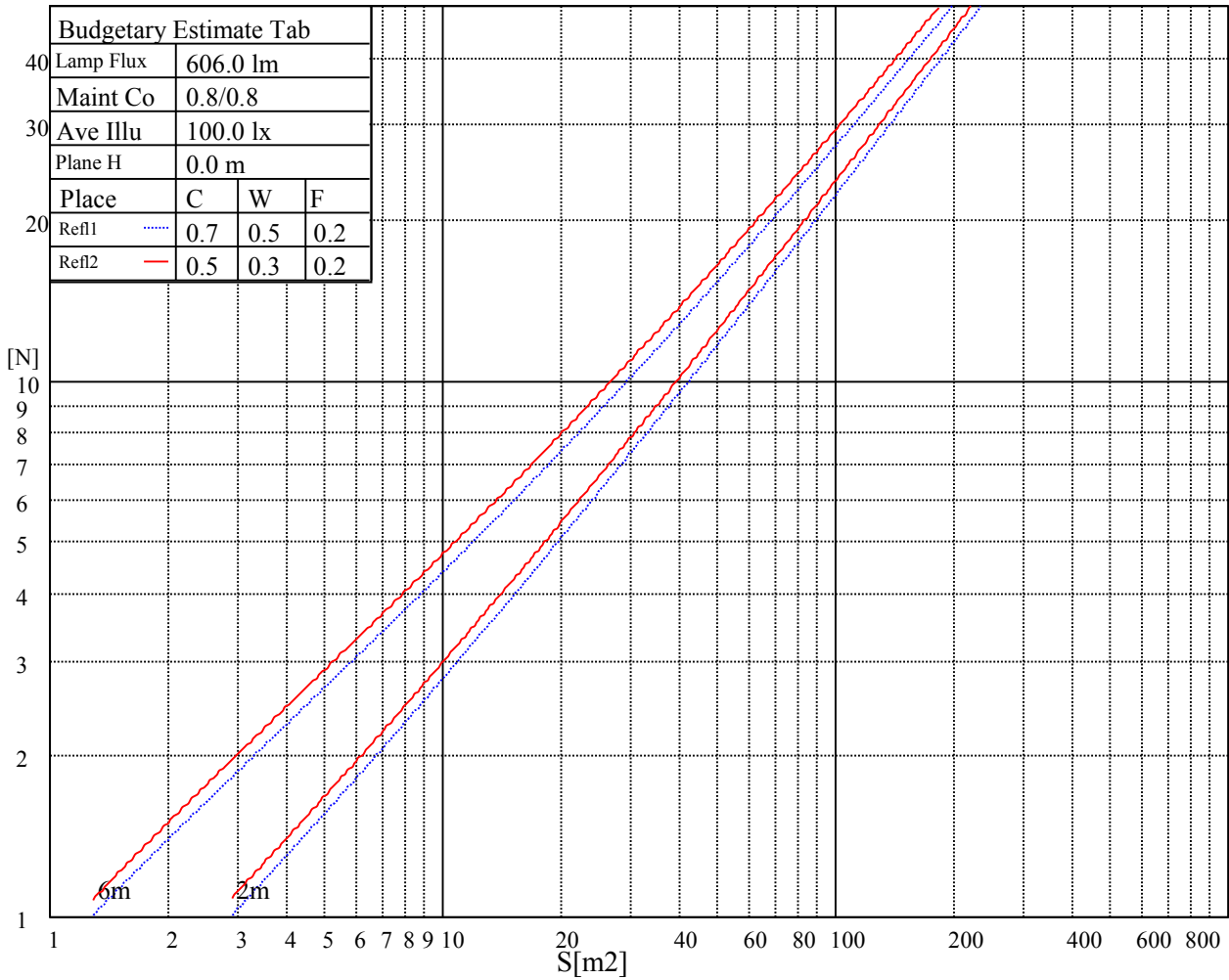
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

Glare Table

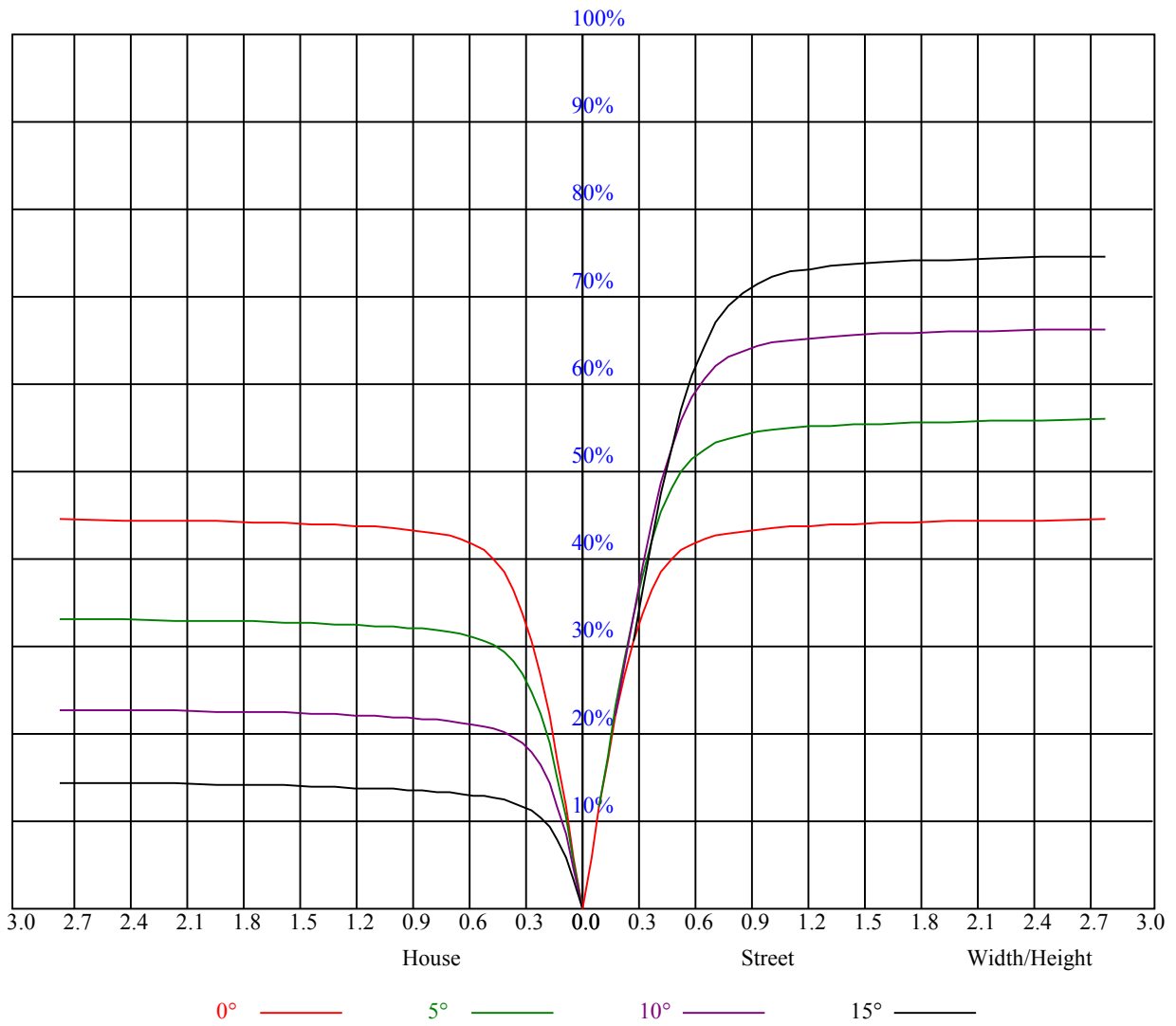
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.08	1.08	1.08	1.06	1.06	1.06	1.01	1.01	1.01	0.97	0.97	0.97	0.93	0.93	0.93	0.91
1	1.01	0.99	0.97	0.99	0.97	0.95	0.95	0.94	0.92	0.92	0.91	0.90	0.89	0.88	0.87	0.86
2	0.95	0.92	0.89	0.93	0.90	0.88	0.90	0.88	0.86	0.88	0.86	0.84	0.85	0.84	0.82	0.81
3	0.90	0.86	0.82	0.88	0.85	0.82	0.86	0.83	0.80	0.84	0.81	0.79	0.82	0.80	0.78	0.77
4	0.85	0.81	0.77	0.84	0.80	0.77	0.82	0.79	0.76	0.80	0.77	0.75	0.79	0.76	0.74	0.73
5	0.81	0.76	0.73	0.80	0.76	0.72	0.78	0.75	0.72	0.77	0.74	0.71	0.76	0.73	0.71	0.69
6	0.77	0.72	0.69	0.76	0.72	0.69	0.75	0.71	0.68	0.74	0.71	0.68	0.73	0.70	0.67	0.66
7	0.74	0.69	0.66	0.73	0.69	0.66	0.72	0.68	0.65	0.71	0.68	0.65	0.70	0.67	0.65	0.63
8	0.71	0.66	0.63	0.70	0.66	0.63	0.69	0.65	0.62	0.68	0.65	0.62	0.68	0.64	0.62	0.61
9	0.68	0.63	0.60	0.67	0.63	0.60	0.67	0.63	0.60	0.66	0.62	0.60	0.65	0.62	0.59	0.58
10	0.65	0.61	0.58	0.65	0.61	0.58	0.64	0.60	0.58	0.63	0.60	0.57	0.63	0.60	0.57	0.56



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	1273.50	1204.88	1051.88	814.50	549.00	289.69	120.09	52.82	28.52
45.0	1265.63	1220.06	1073.25	841.50	539.44	286.88	120.60	50.34	27.62
90.0	1264.50	1227.94	1092.94	824.51	493.99	239.63	102.26	45.39	26.72
135.0	1260.00	1275.19	1175.63	927.00	591.75	297.56	127.24	52.59	30.38
180.0	1273.50	1268.44	1119.26	885.71	559.46	261.28	107.04	46.69	26.10
225.0	1265.63	1240.88	1114.09	853.76	534.15	263.76	113.51	45.39	26.78
270.0	1264.50	1220.06	1084.50	853.31	567.00	297.00	130.56	55.46	30.66
315.0	1260.00	1113.92	980.89	763.99	490.16	241.93	113.40	49.28	27.62
360.0	1273.50	1204.88	1051.88	814.50	549.00	289.69	120.09	52.82	28.52
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	17.21	11.81	7.99	6.19	5.18	4.78	7.88	3.94	2.93
45.0	17.04	11.31	7.88	6.13	5.23	10.01	17.38	8.61	3.09
90.0	17.04	11.48	8.10	6.36	5.18	4.44	4.11	3.26	2.70
135.0	18.68	12.54	8.94	6.92	5.63	4.89	4.73	3.71	2.98
180.0	15.86	10.80	7.65	6.02	5.06	4.89	7.65	3.94	2.87
225.0	16.14	10.74	7.71	6.08	5.12	7.37	13.78	6.19	3.04
270.0	18.73	12.43	8.61	6.69	5.46	4.73	4.33	3.54	2.81
315.0	16.99	11.59	8.10	6.19	5.23	4.50	4.50	3.54	2.87
360.0	17.21	11.81	7.99	6.19	5.18	4.78	7.88	3.94	2.93
C/γ(°)	90.0								
0.0	2.19								
45.0	2.25								
90.0	2.31								
135.0	2.42								
180.0	2.19								
225.0	2.19								
270.0	2.31								
315.0	2.42								
360.0	2.19								