



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: 2-2137-A	
Luminaire: BJB 47.360.1010	
Report No: NATA0100	Voltage(V): 34.2400
Test No: GC2020011321	Current(A): 0.6020
LampCAT: LUMINUS CXM-14-AC40	Power (W): 20.6000
Lamp flux(lm): 2552.0	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): 1899.85
Efficiency(%): 74.45%
Lumens(lm)/Power(W): 92.23
Central intensity(cd): 6218.296
Maximum intensity(cd): 6218.296
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=33.1
 [C90/270]Total=33.1
Field angle(10%Imax): [C0/180]Total=49.0
 [C90/270]Total=49.0
Maximum s/h(1/2): C0_180=0.55 C90_270=0.55
Maximum s/h(1/4): C0_180=0.52 C90_270=0.52
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 74.45%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.960%

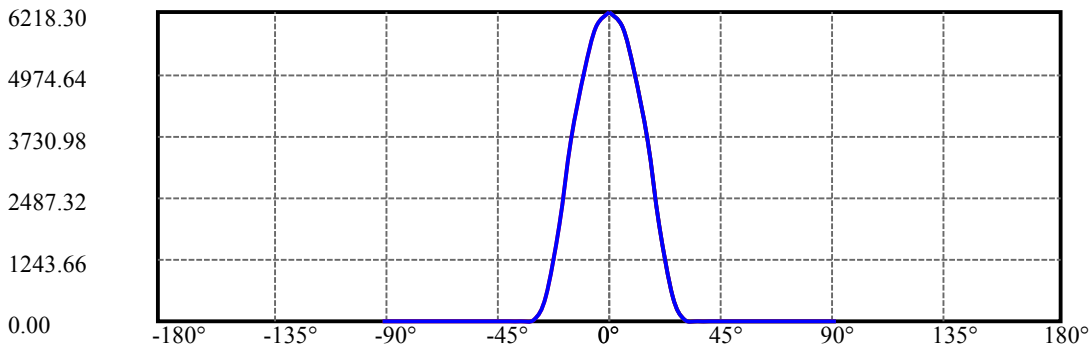
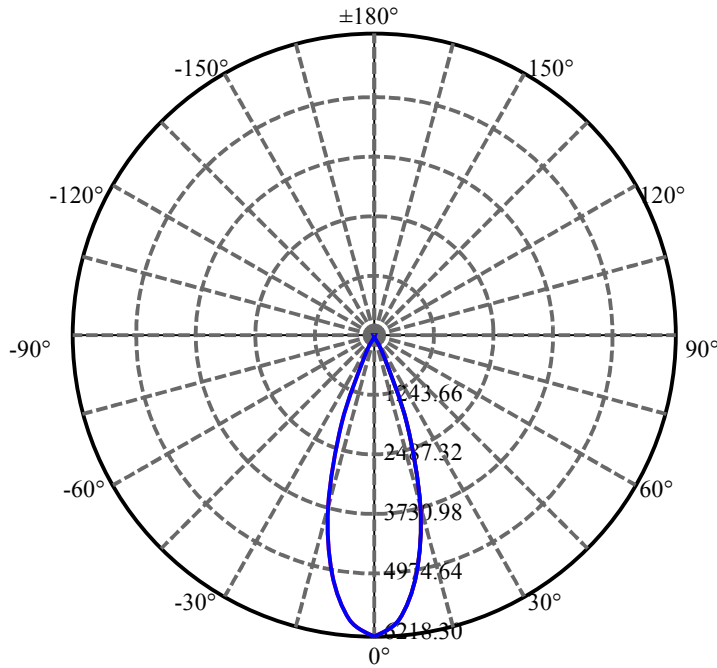
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	6218.297	0.000	0	.000%	.000%
5.0	5902.945	144.906	144.906	5.678%	7.627%
10.0	5002.383	390.118	535.024	15.287%	28.161%
15.0	3635.648	512.402	1047.426	20.078%	55.132%
20.0	1930.725	458.747	1506.173	17.976%	79.279%
25.0	483.609	253.219	1759.393	9.922%	92.607%
30.0	29.025	64.874	1824.267	2.542%	96.022%
35.0	17.438	6.842	1831.109	.268%	96.382%
40.0	15.138	5.435	1836.544	.213%	96.668%
45.0	14.112	5.416	1841.96	.212%	96.953%
50.0	14.027	5.686	1847.646	.223%	97.252%
55.0	14.836	6.276	1853.922	.246%	97.583%
60.0	16.144	7.161	1861.082	.281%	97.959%
65.0	16.530	7.943	1869.026	.311%	98.378%
70.0	14.948	7.971	1876.996	.312%	98.797%
75.0	11.841	7.002	1883.998	.274%	99.166%
80.0	9.893	5.815	1889.814	.228%	99.472%
85.0	9.063	5.151	1894.965	.202%	99.743%
90.0	8.775	4.884	1899.849	.191%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1824.27	71.48%	96.02%
0-40	1836.54	71.96%	96.67%
0-60	1861.08	72.93%	97.96%
0-90	1894.96	74.25%	99.74%
0-120	1894.96	74.25%	99.74%
0-180	1899.85	74.45%	100.00%
60-90	41.04	1.61%	2.16%
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%
0-20.27	1519.88	59.56%	80.00%

ZONAL LUMEN SUMMARY

0-10	535.02
10-20	971.15
20-30	318.09
30-40	12.28
40-50	11.10
50-60	13.44
60-70	15.91
70-80	12.82
80-90	5.15
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: —————

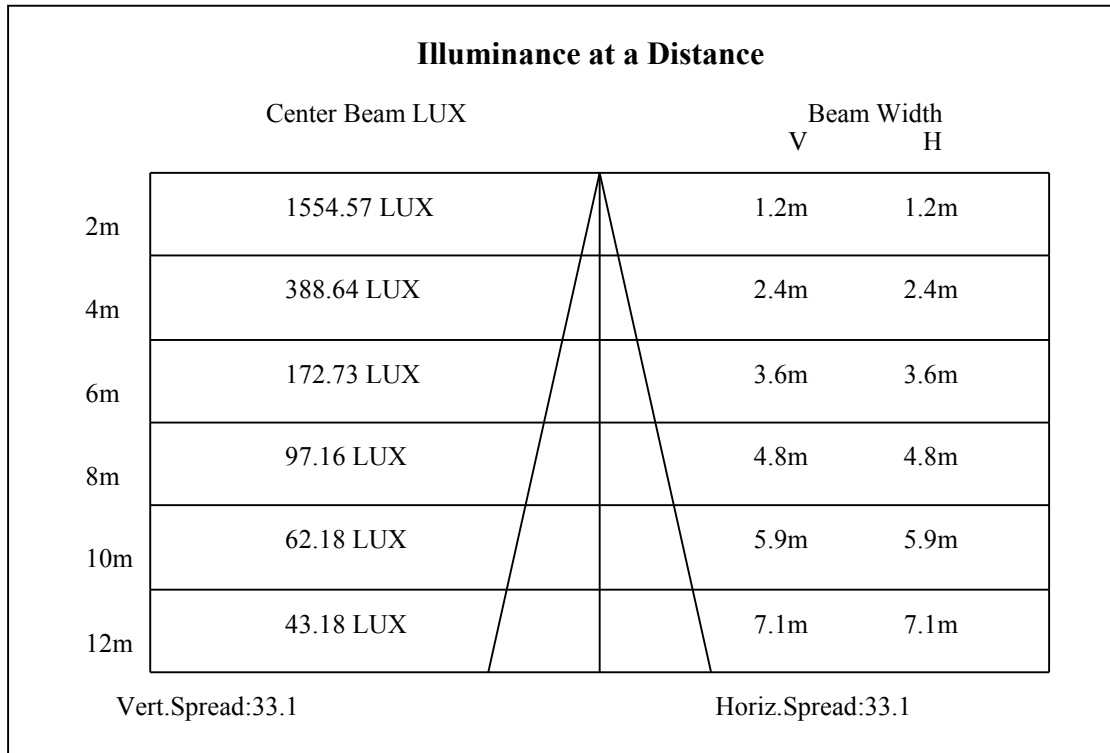
C90/C270: —————

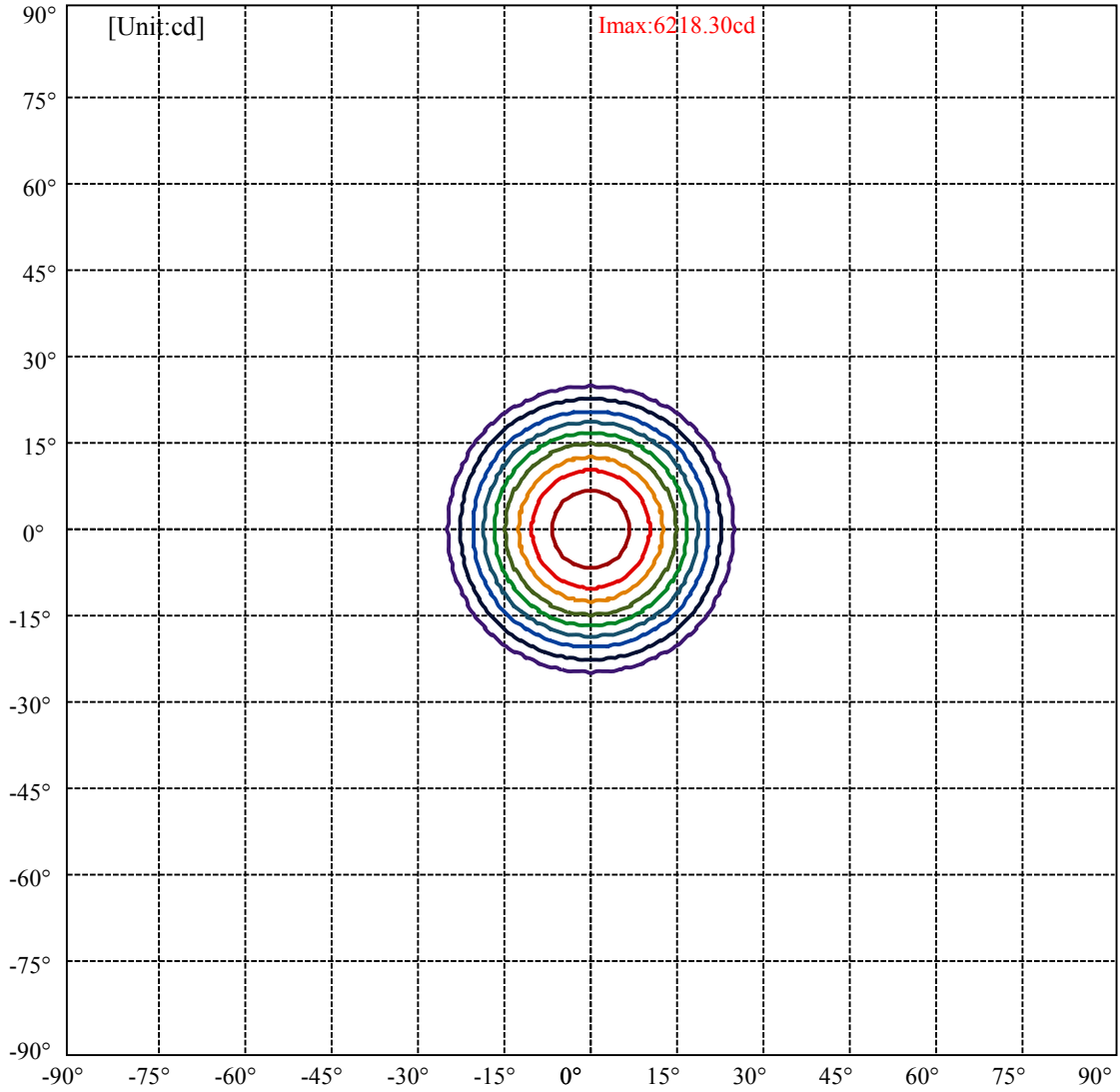
Field angle(10%Imax):C0/180Left:24.5 Right:24.5

:C90/270Left:24.5 Right:24.5

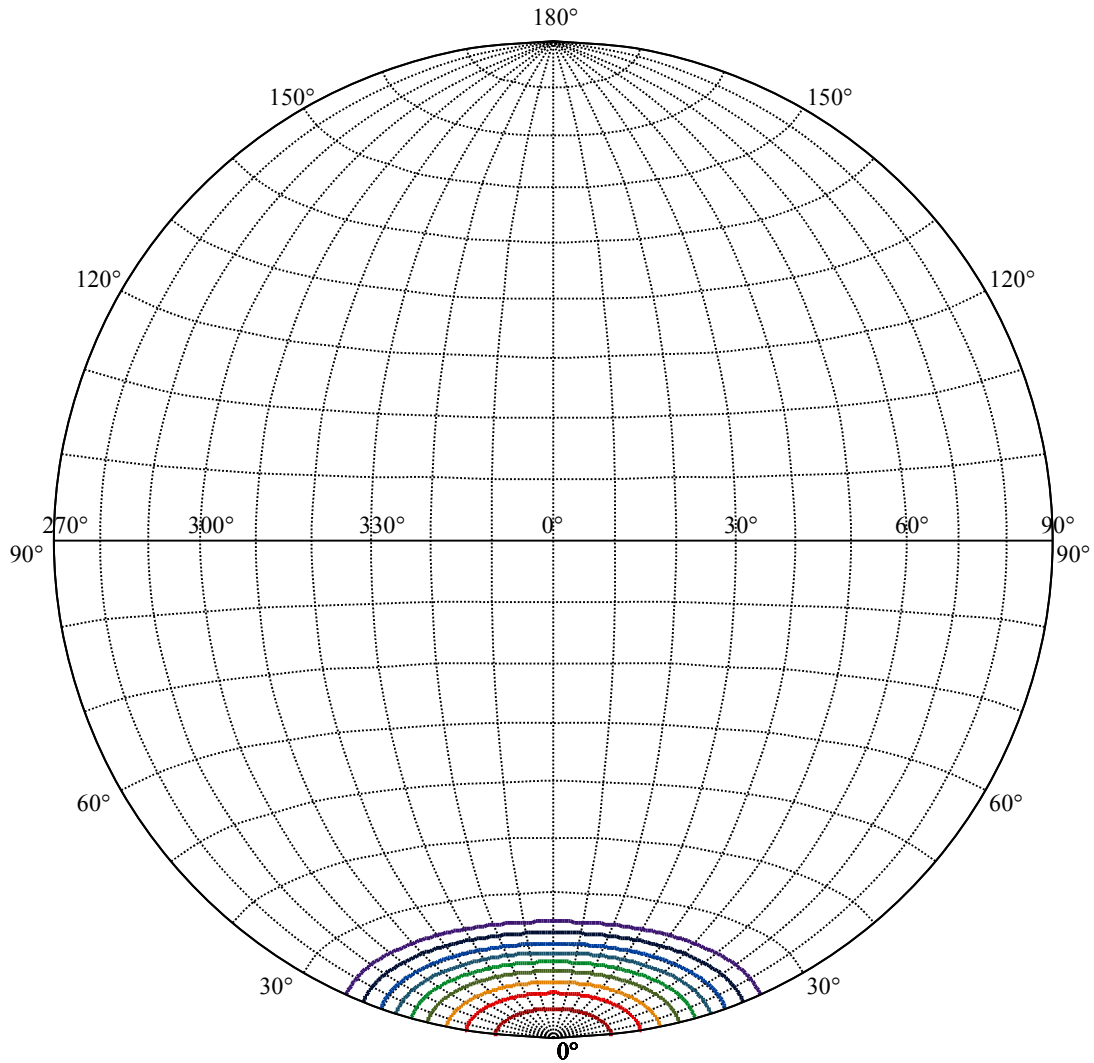
Beam Angle(50%Imax):C0/180Left:16.5 Right:16.5

:C90/270Left:16.5 Right:16.5





(10%I _{max}) 621.83	—
(20%I _{max}) 1243.66	—
(30%I _{max}) 1865.49	—
(40%I _{max}) 2487.32	—
(50%I _{max}) 3109.15	—
(60%I _{max}) 3730.98	—
(70%I _{max}) 4352.81	—
(80%I _{max}) 4974.64	—
(90%I _{max}) 5596.47	—



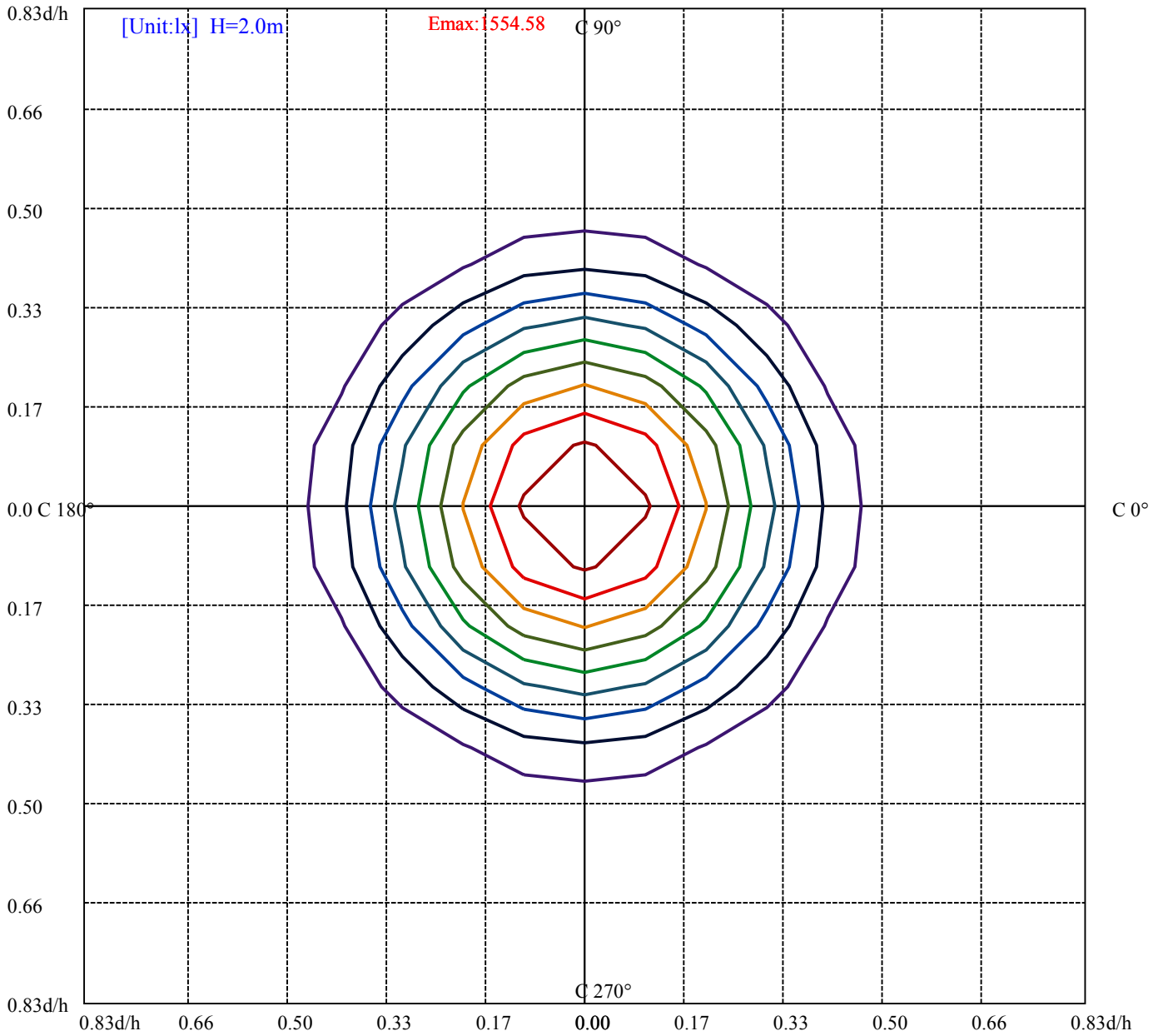
House

[Unit:cd]

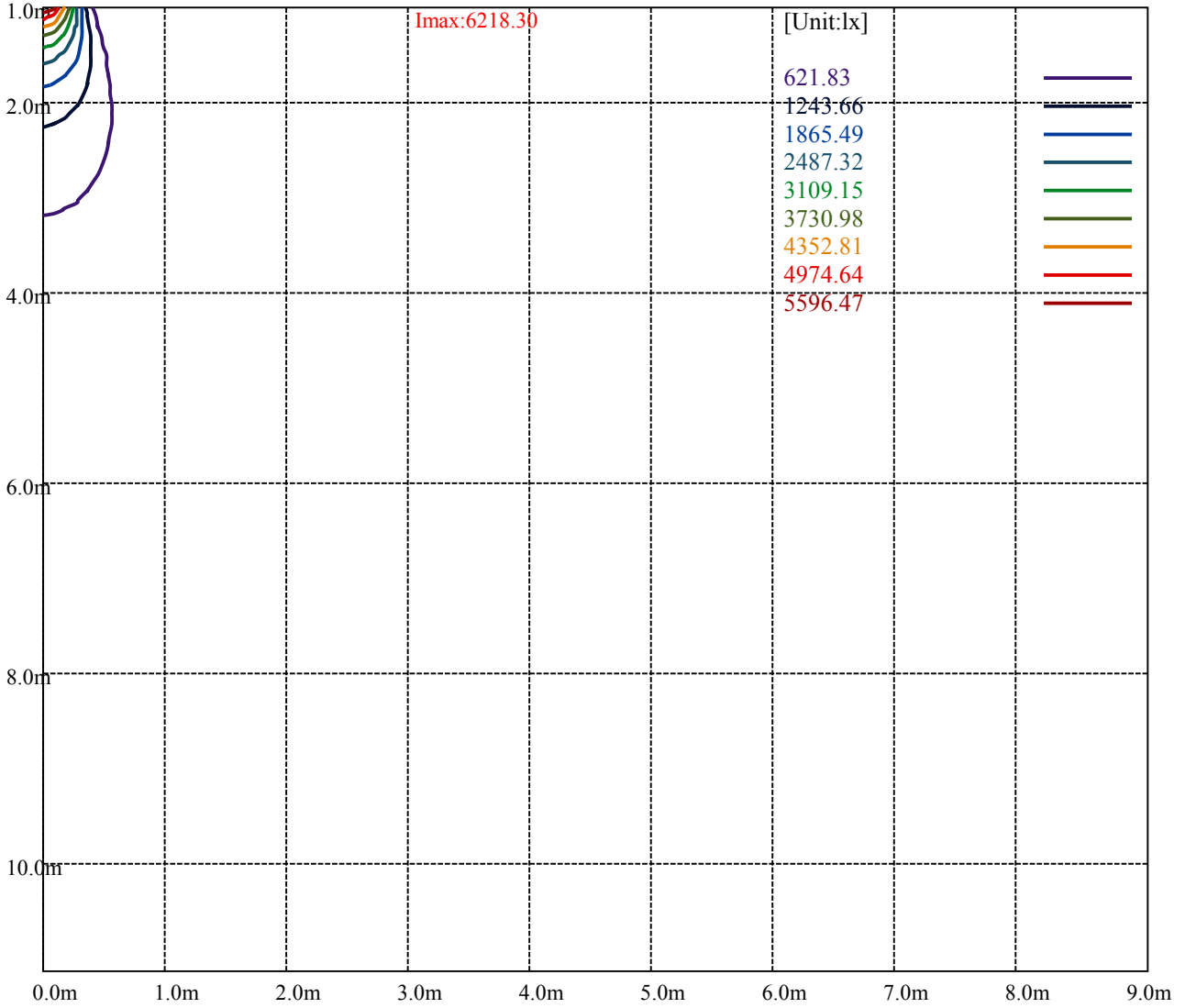
Road

Imax:6218.30

(10%Imax) 621.83	—
(20%Imax) 1243.66	—
(30%Imax) 1865.49	—
(40%Imax) 2487.32	—
(50%Imax) 3109.15	—
(60%Imax) 3730.98	—
(70%Imax) 4352.81	—
(80%Imax) 4974.64	—
(90%Imax) 5596.47	—



- (10%Emax) 155.4572
- (20%Emax) 310.915
- (30%Emax) 466.3725
- (40%Emax) 621.8275
- (50%Emax) 777.285
- (60%Emax) 932.7425
- (70%Emax) 1088.2
- (80%Emax) 1243.657
- (90%Emax) 1399.115



Luminance Table

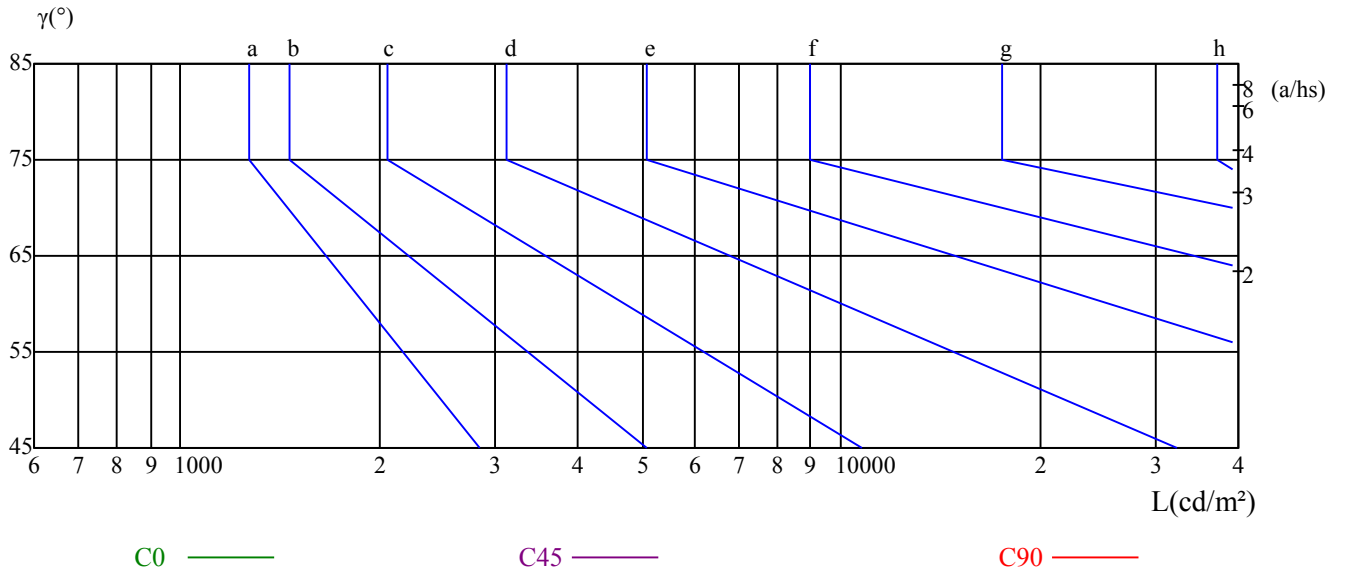
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

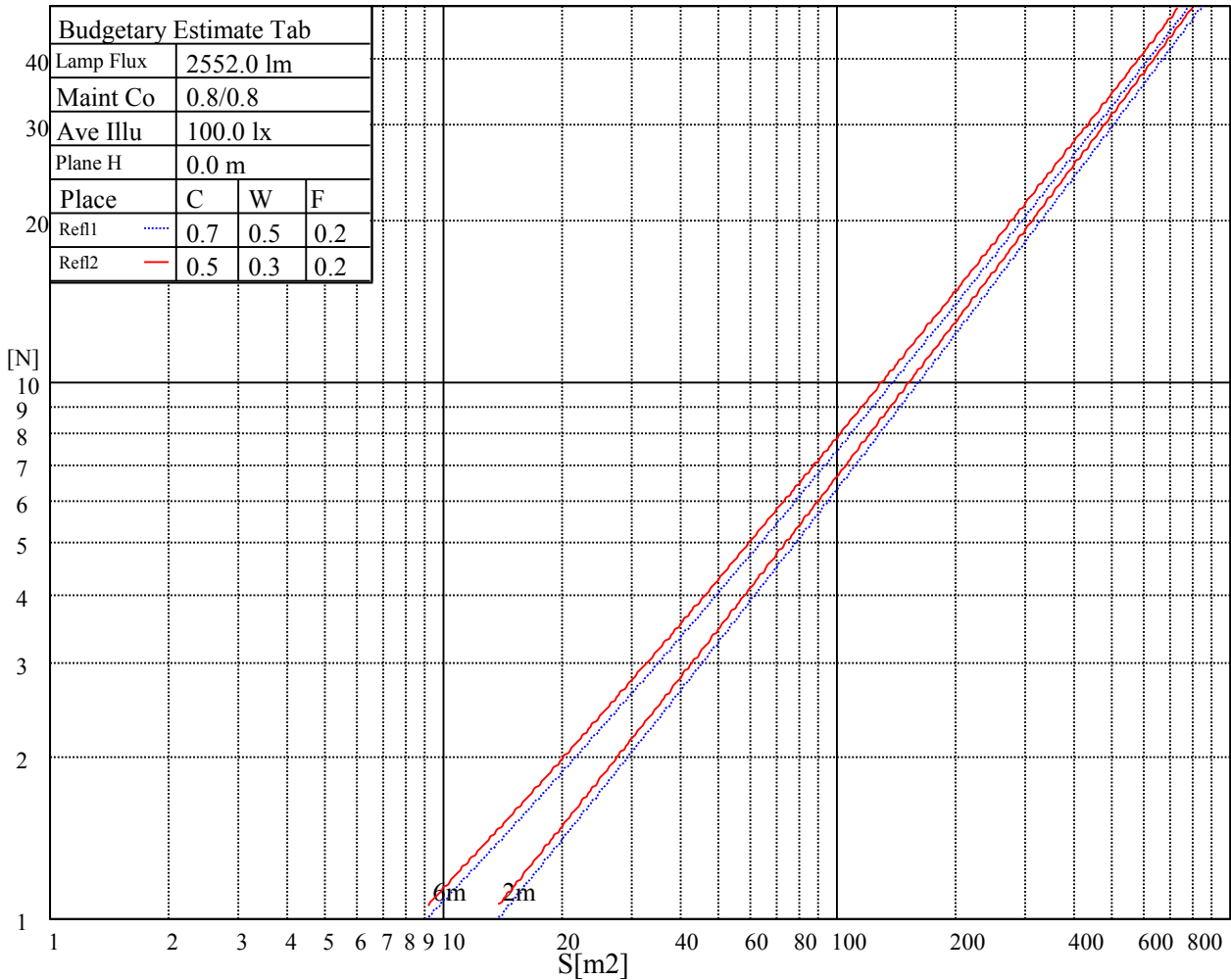
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

Glare Table

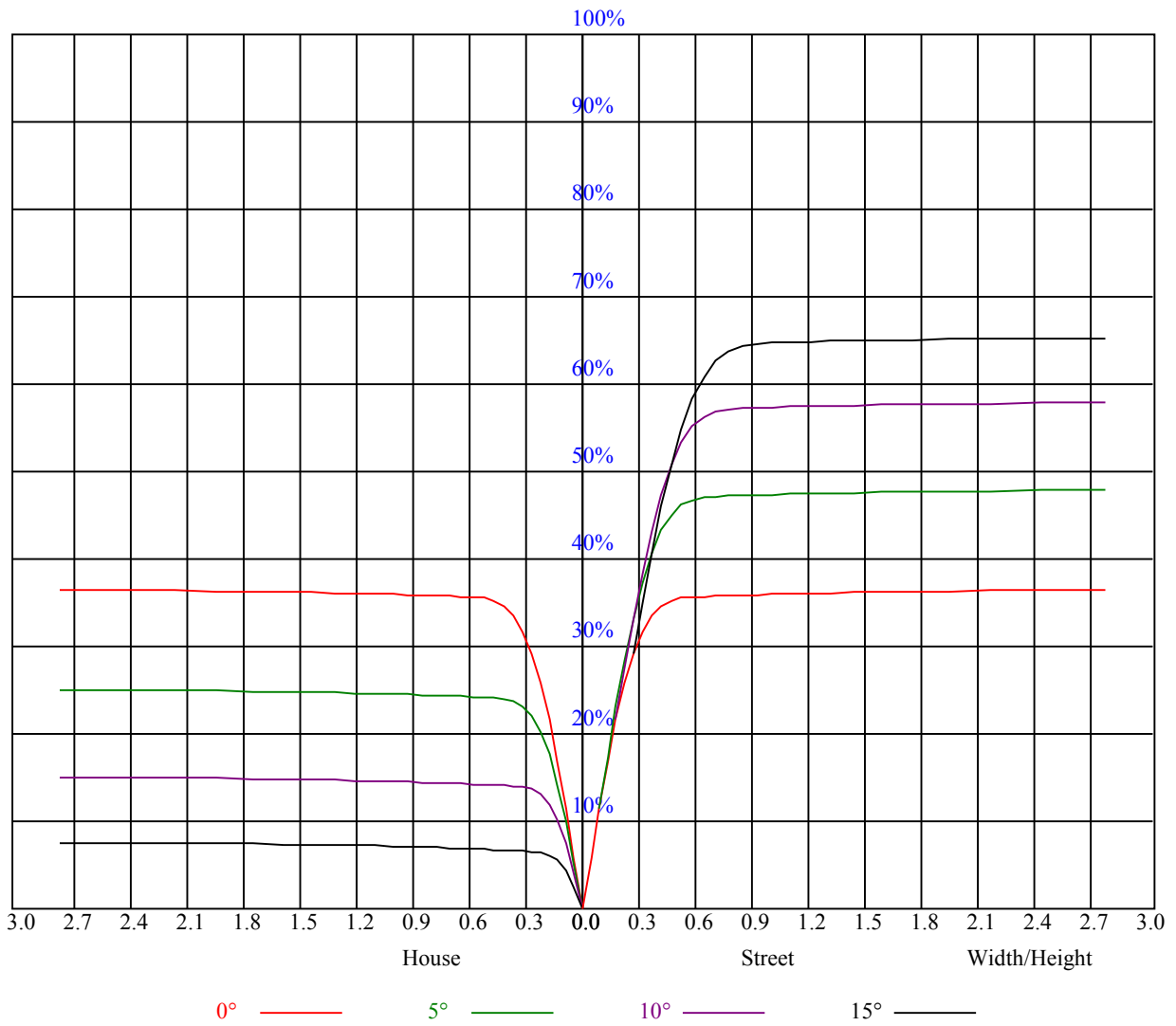
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	0.89	0.89	0.89	0.87	0.87	0.87	0.83	0.83	0.83	0.79	0.79	0.79	0.76	0.76	0.76	0.74
1	0.83	0.82	0.81	0.82	0.81	0.79	0.79	0.78	0.77	0.76	0.75	0.75	0.74	0.73	0.72	0.71
2	0.79	0.77	0.75	0.78	0.76	0.74	0.76	0.74	0.72	0.74	0.72	0.71	0.72	0.70	0.69	0.68
3	0.76	0.73	0.70	0.75	0.72	0.70	0.73	0.71	0.69	0.71	0.69	0.68	0.70	0.68	0.67	0.66
4	0.73	0.69	0.67	0.72	0.69	0.67	0.70	0.68	0.66	0.69	0.67	0.65	0.68	0.66	0.64	0.63
5	0.70	0.66	0.64	0.69	0.66	0.64	0.68	0.65	0.63	0.67	0.64	0.63	0.66	0.64	0.62	0.61
6	0.67	0.64	0.62	0.67	0.64	0.61	0.66	0.63	0.61	0.65	0.62	0.61	0.64	0.62	0.60	0.59
7	0.65	0.62	0.59	0.64	0.61	0.59	0.64	0.61	0.59	0.63	0.60	0.59	0.62	0.60	0.58	0.57
8	0.63	0.59	0.57	0.62	0.59	0.57	0.62	0.59	0.57	0.61	0.59	0.57	0.60	0.58	0.57	0.56
9	0.61	0.58	0.55	0.60	0.57	0.55	0.60	0.57	0.55	0.59	0.57	0.55	0.59	0.57	0.55	0.54
10	0.59	0.56	0.54	0.59	0.56	0.54	0.58	0.55	0.54	0.58	0.55	0.53	0.57	0.55	0.53	0.53



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	6215.06	5914.13	5044.50	3751.31	2100.94	496.69	28.18	16.09	13.56
45.0	6229.13	5860.13	4998.38	3614.63	1922.63	410.06	26.61	17.44	15.24
90.0	6210.56	5743.69	4662.56	3264.19	1057.61	240.86	23.91	18.45	16.76
135.0	6218.44	5924.25	5031.56	3652.31	2081.25	510.19	28.58	18.28	16.14
180.0	6215.06	5916.38	4944.94	3538.69	1850.06	420.58	24.19	15.58	13.95
225.0	6229.13	5951.25	5076.56	3698.44	2031.19	522.45	29.53	17.04	14.34
270.0	6210.56	6038.44	5299.88	4023.56	2420.44	830.81	44.49	19.29	16.20
315.0	6218.44	5875.31	4960.69	3542.06	1981.69	437.23	26.72	17.33	14.91
360.0	6215.06	5914.13	5044.50	3751.31	2100.94	496.69	28.18	16.09	13.56
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	12.66	12.15	11.81	11.48	11.14	11.25	12.32	9.73	9.06
45.0	14.12	13.39	12.83	12.54	12.32	11.93	11.03	10.01	9.06
90.0	16.48	20.31	27.11	31.61	29.03	21.21	11.03	9.34	9.06
135.0	15.02	14.40	14.85	16.20	17.27	17.44	13.44	10.86	9.11
180.0	13.11	12.54	12.09	11.76	11.48	11.64	11.53	9.56	9.11
225.0	12.99	12.32	11.81	11.42	11.08	10.80	10.41	9.79	9.06
270.0	14.79	13.95	15.53	21.38	26.33	21.43	13.05	9.56	9.06
315.0	13.73	13.16	12.66	12.77	13.61	13.89	11.93	10.29	9.00
360.0	12.66	12.15	11.81	11.48	11.14	11.25	12.32	9.73	9.06
C/ γ (°)	90.0								
0.0	8.83								
45.0	8.78								
90.0	8.72								
135.0	8.78								
180.0	8.83								
225.0	8.78								
270.0	8.72								
315.0	8.78								
360.0	8.83								