



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: 2-2166-M	
Luminaire: BJB47.360.5080	
Report No: NATA0100	Voltage(V): 35.0800
Test No: GC2020022010	Current(A): 0.7000
LampCAT: LUMILEDS 1208	Power (W): 24.5770
Lamp flux(lm): 2931.0	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): 2293.54
Efficiency(%): 78.25%
Lumens(lm)/Power(W): 93.32
Central intensity(cd): 6137.859
Maximum intensity(cd): 6137.859
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=36.6
 [C90/270]Total=36.6
Field angle(10%Imax): [C0/180]Total=55.7
 [C90/270]Total=55.7
Maximum s/h(1/2): C0_180=0.60 C90_270=0.60
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(%): 78.25%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.938%

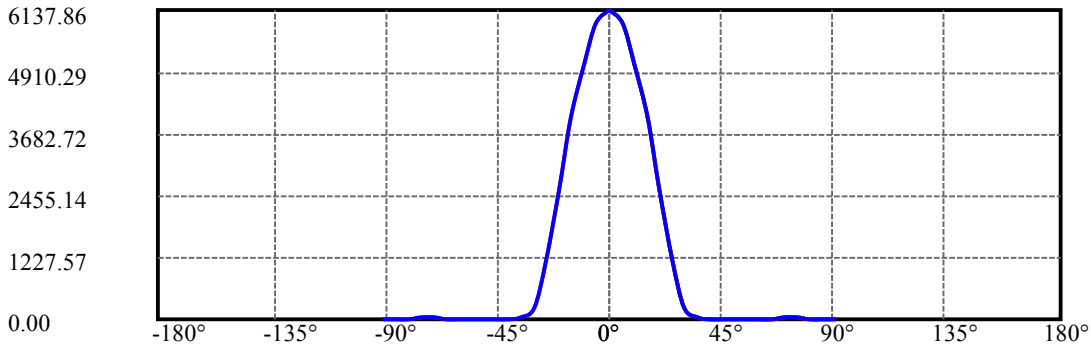
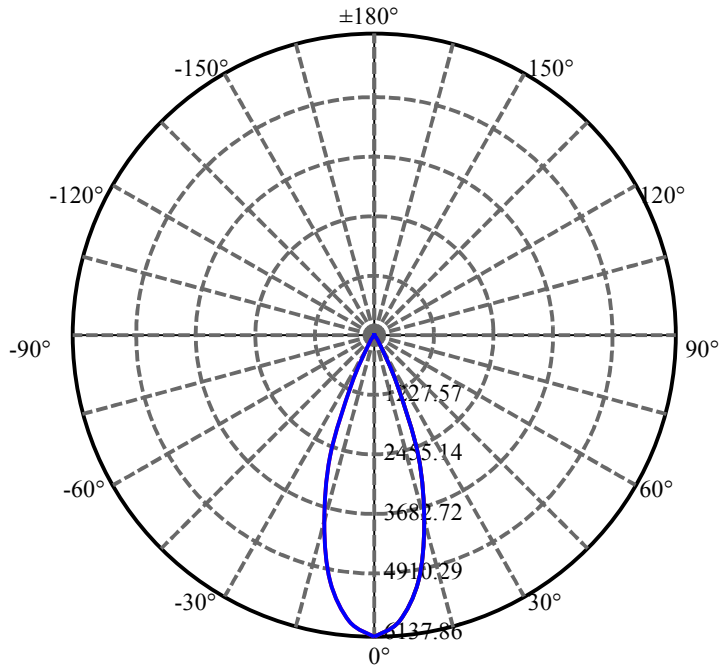
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	6137.859	0.000	0	.000%	.000%
5.0	5857.523	143.401	143.401	4.893%	6.252%
10.0	5081.273	391.315	534.717	13.351%	23.314%
15.0	3983.906	537.740	1072.457	18.347%	46.760%
20.0	2600.789	542.671	1615.128	18.515%	70.421%
25.0	1133.121	391.618	2006.747	13.361%	87.496%
30.0	221.963	171.487	2178.234	5.851%	94.973%
35.0	22.838	36.049	2214.282	1.230%	96.544%
40.0	17.318	6.700	2220.982	.229%	96.837%
45.0	15.673	6.108	2227.09	.208%	97.103%
50.0	14.906	6.179	2233.269	.211%	97.372%
55.0	14.358	6.363	2239.632	.217%	97.650%
60.0	14.210	6.603	2246.236	.225%	97.938%
65.0	15.630	7.254	2253.49	.248%	98.254%
70.0	19.969	9.014	2262.504	.308%	98.647%
75.0	20.714	10.634	2273.138	.363%	99.111%
80.0	12.227	8.814	2281.952	.301%	99.495%
85.0	10.371	6.141	2288.092	.210%	99.763%
90.0	9.513	5.444	2293.537	.186%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2178.23	74.32%	94.97%
0-40	2220.98	75.78%	96.84%
0-60	2246.24	76.64%	97.94%
0-90	2288.09	78.07%	99.76%
0-120	2288.09	78.07%	99.76%
0-180	2293.54	78.25%	100.00%
60-90	48.46	1.65%	2.11%
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%
0-22.81	1834.83	62.60%	80.00%

ZONAL LUMEN SUMMARY

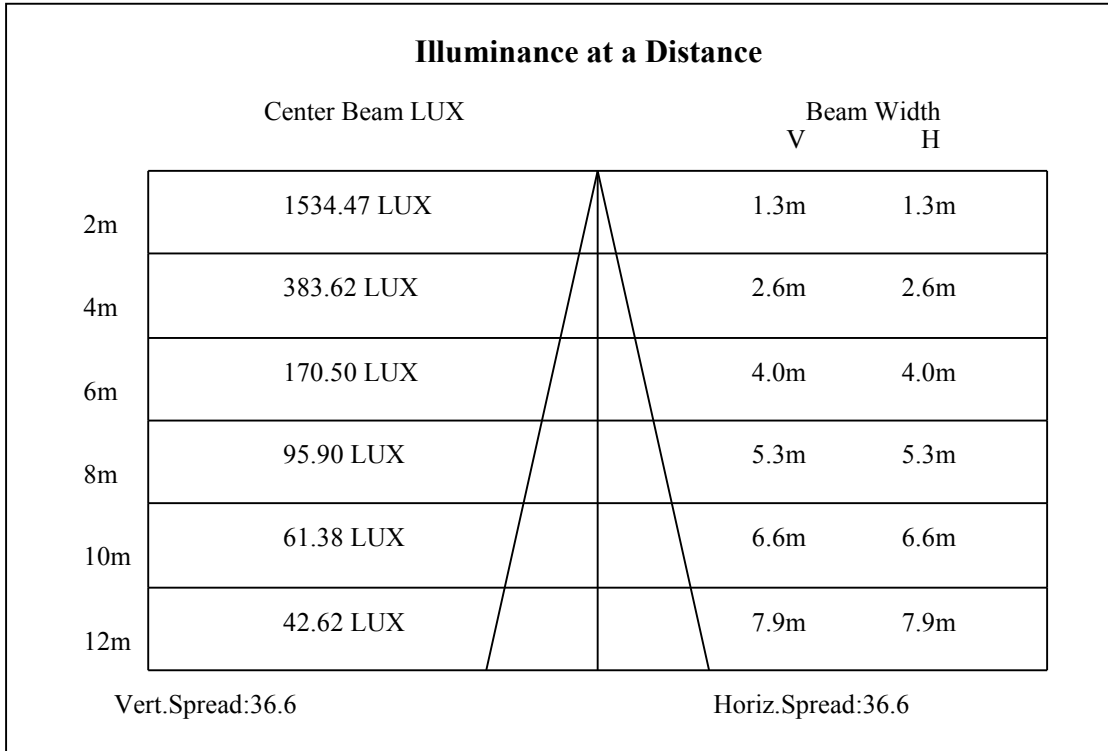
0-10	534.72
10-20	1080.41
20-30	563.11
30-40	42.75
40-50	12.29
50-60	12.97
60-70	16.27
70-80	19.45
80-90	6.14
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

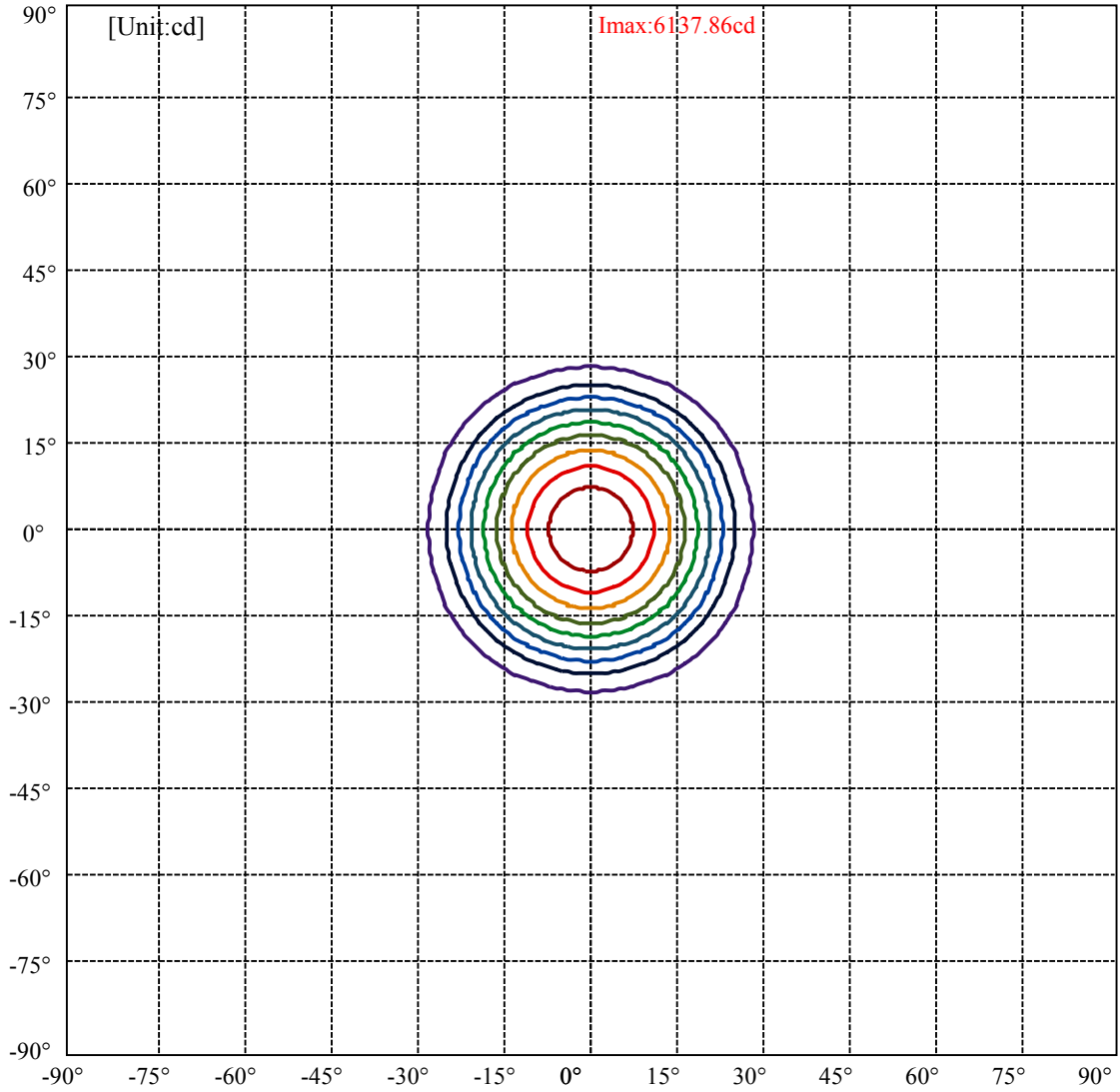


C0(Max): —————
C0/C180: —————
C90/C270: —————

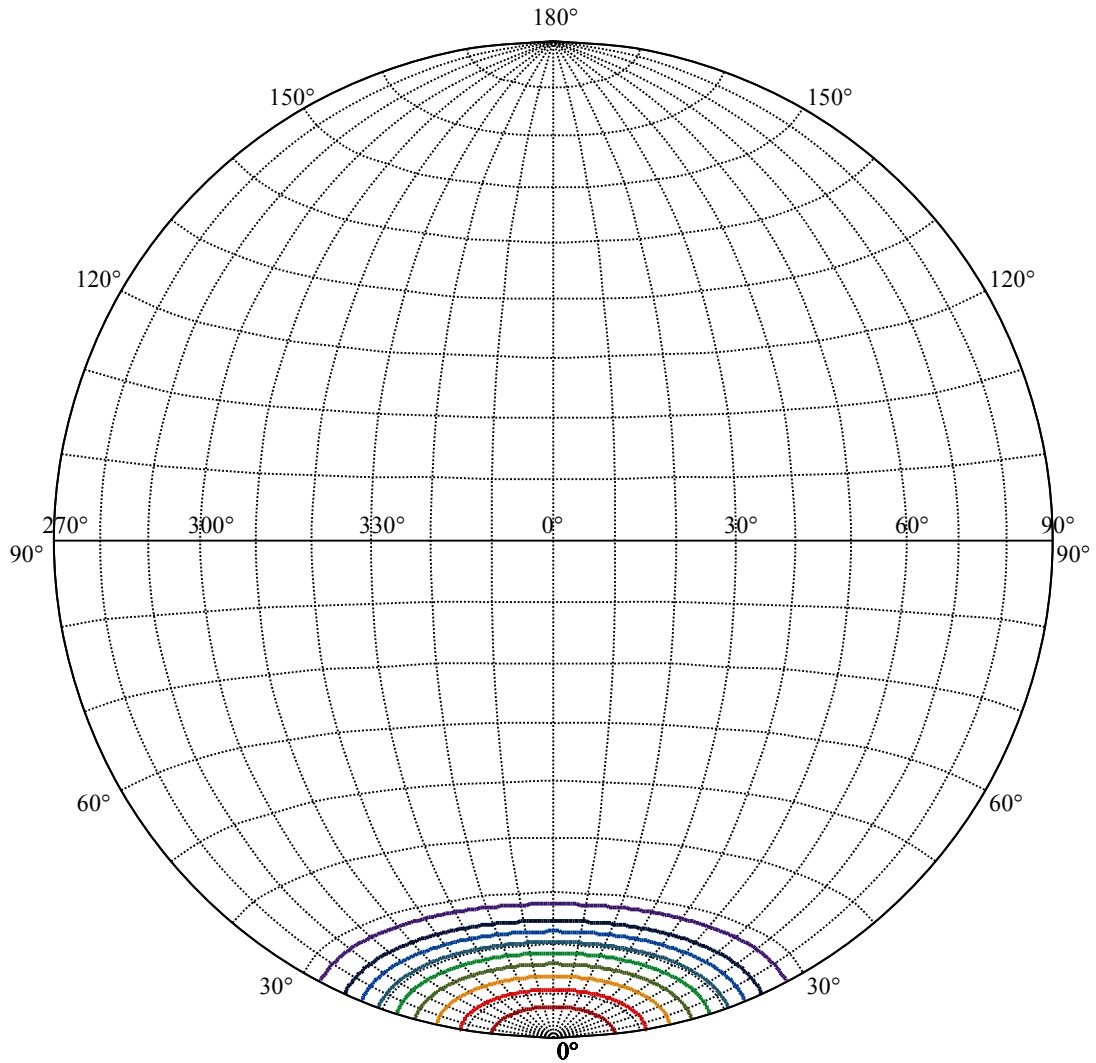
Field angle(10%Imax):C0/180Left:27.8 Right:27.8
:C90/270Left:27.8 Right:27.8

Beam Angle(50%Imax):C0/180Left:18.3 Right:18.3
:C90/270Left:18.3 Right:18.3





(10%Imax) 613.786	—
(20%Imax) 1227.57	—
(30%Imax) 1841.36	—
(40%Imax) 2455.14	—
(50%Imax) 3068.93	—
(60%Imax) 3682.72	—
(70%Imax) 4296.5	—
(80%Imax) 4910.29	—
(90%Imax) 5524.07	—



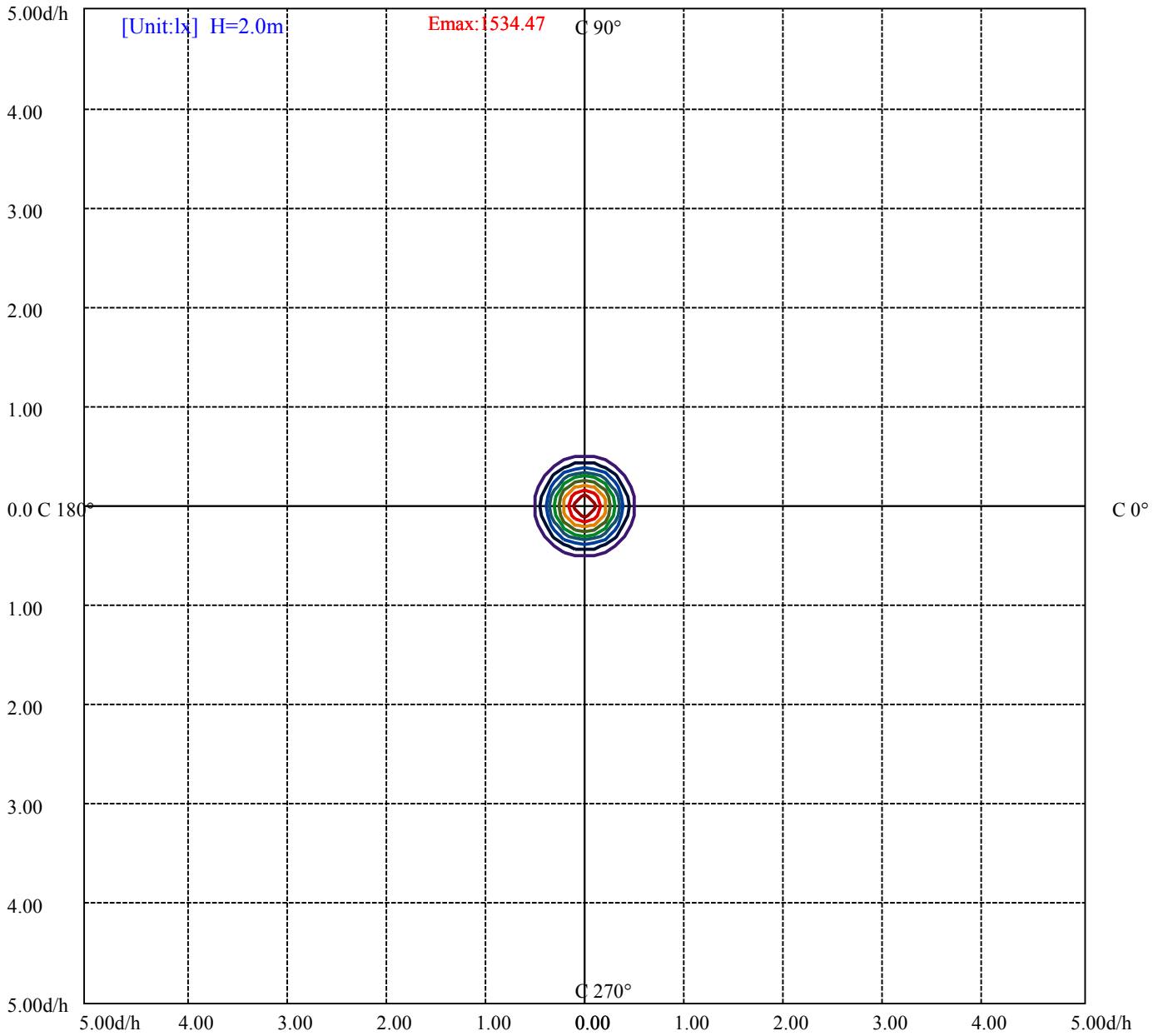
House

[Unit:cd]

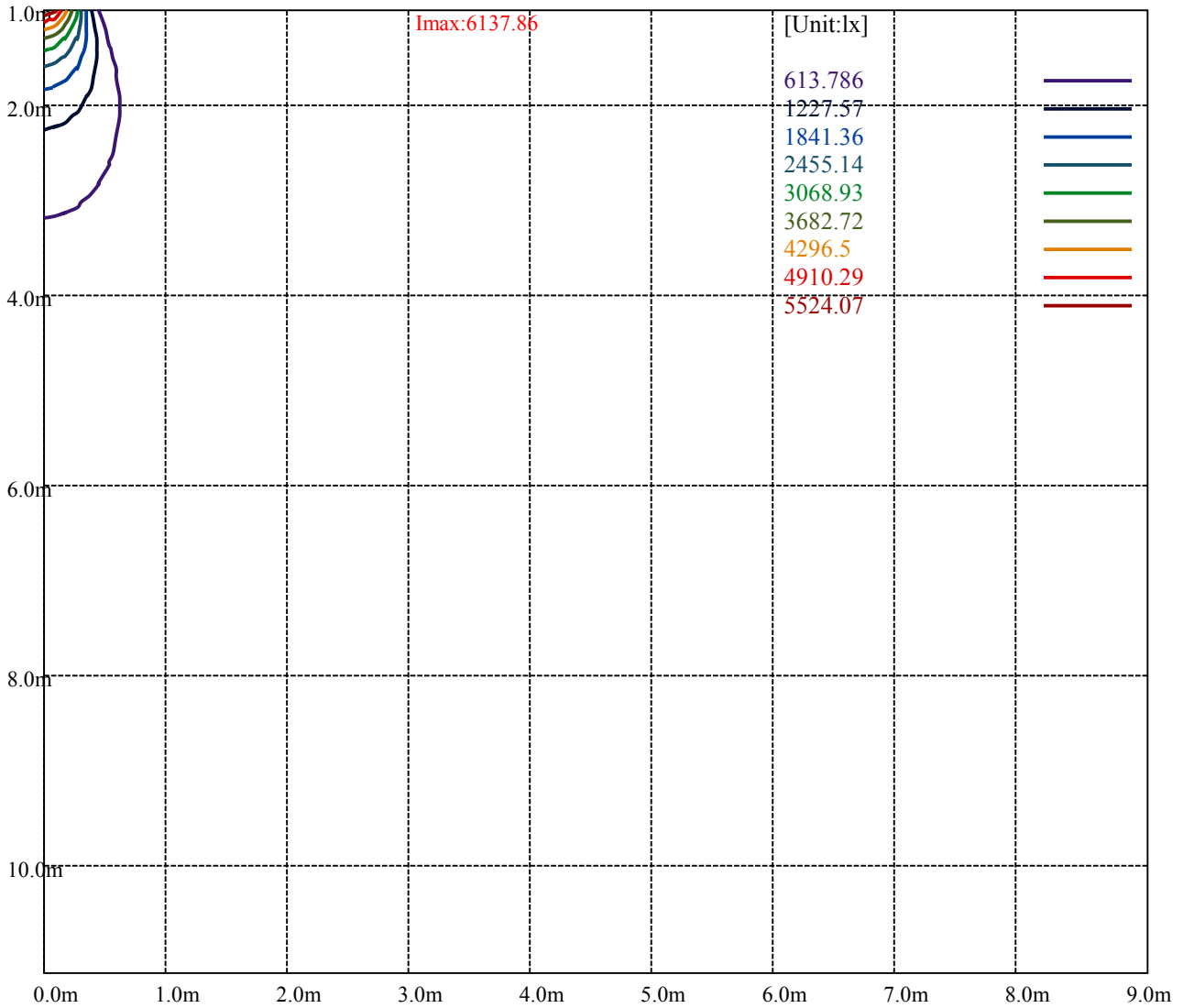
Road

Imax:6137.86

(10%Imax) 613.786	—
(20%Imax) 1227.57	—
(30%Imax) 1841.36	—
(40%Imax) 2455.14	—
(50%Imax) 3068.93	—
(60%Imax) 3682.72	—
(70%Imax) 4296.5	—
(80%Imax) 4910.29	—
(90%Imax) 5524.07	—



- (10%Emax) 153.4462
- (20%Emax) 306.8925
- (30%Emax) 460.34
- (40%Emax) 613.785
- (50%Emax) 767.2325
- (60%Emax) 920.6775
- (70%Emax) 1074.125
- (80%Emax) 1227.57
- (90%Emax) 1381.017



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

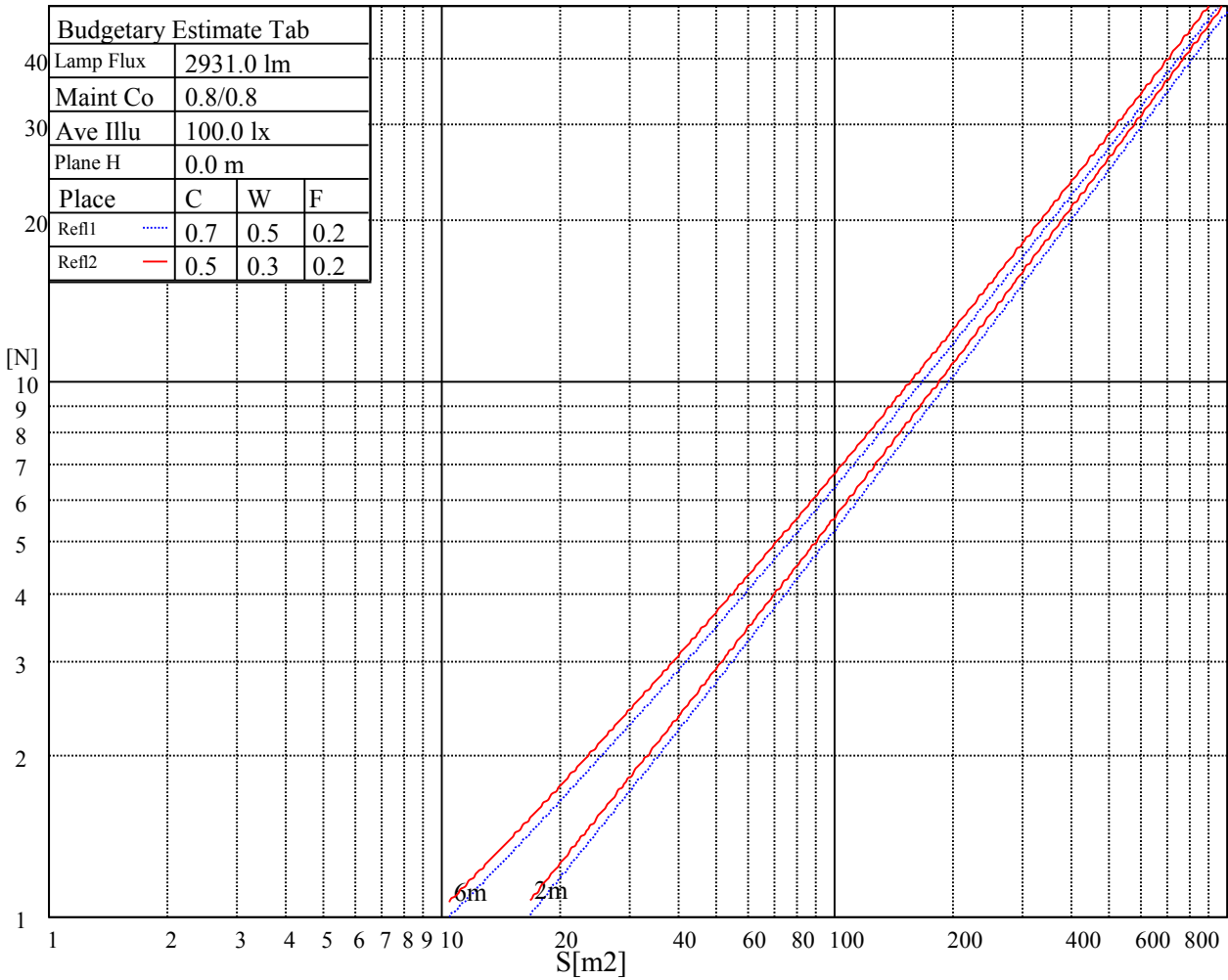
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

Glare Table

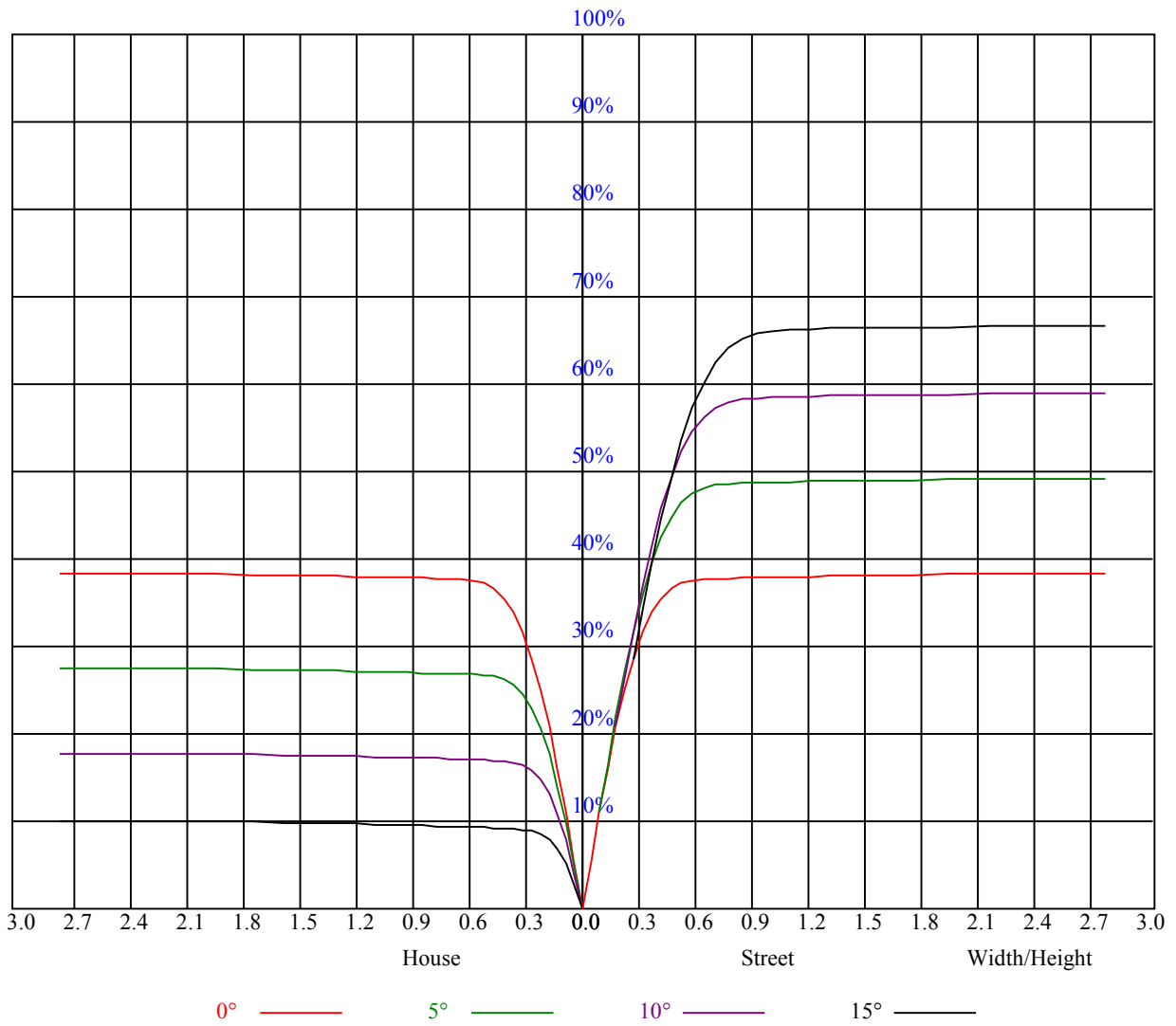
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	0.93	0.93	0.93	0.91	0.91	0.91	0.87	0.87	0.87	0.83	0.83	0.83	0.80	0.80	0.80	0.78
1	0.88	0.86	0.84	0.86	0.84	0.83	0.83	0.81	0.80	0.80	0.79	0.78	0.77	0.76	0.76	0.74
2	0.83	0.80	0.78	0.81	0.79	0.77	0.79	0.77	0.75	0.77	0.75	0.74	0.75	0.73	0.72	0.71
3	0.79	0.76	0.73	0.78	0.75	0.72	0.76	0.73	0.71	0.74	0.72	0.70	0.72	0.71	0.69	0.68
4	0.75	0.72	0.69	0.74	0.71	0.69	0.73	0.70	0.68	0.71	0.69	0.67	0.70	0.68	0.66	0.65
5	0.72	0.68	0.66	0.71	0.68	0.65	0.70	0.67	0.65	0.69	0.66	0.64	0.68	0.65	0.64	0.63
6	0.69	0.65	0.63	0.68	0.65	0.62	0.67	0.64	0.62	0.66	0.64	0.62	0.65	0.63	0.61	0.60
7	0.66	0.63	0.60	0.66	0.62	0.60	0.65	0.62	0.60	0.64	0.61	0.59	0.63	0.61	0.59	0.58
8	0.64	0.60	0.58	0.63	0.60	0.58	0.63	0.60	0.57	0.62	0.59	0.57	0.61	0.59	0.57	0.56
9	0.62	0.58	0.56	0.61	0.58	0.56	0.61	0.58	0.55	0.60	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	0.59	0.56	0.53	0.58	0.55	0.53	0.58	0.55	0.53	0.52



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	6140.81	5952.94	5259.94	4232.81	2802.38	1349.44	316.13	24.41	17.83
45.0	6105.94	6045.19	5457.94	4423.50	3102.75	1644.75	408.94	26.78	17.83
90.0	6149.25	5882.63	5063.63	3925.69	2580.75	1076.51	123.47	19.80	16.37
135.0	6155.44	5886.56	5135.63	4073.06	2678.63	1176.19	306.00	20.81	16.76
180.0	6140.81	5756.63	4917.94	3825.00	2396.25	924.41	104.91	22.28	18.56
225.0	6105.94	5626.69	4670.44	3506.06	2068.88	649.86	65.81	20.93	17.66
270.0	6149.25	5863.50	5090.63	3970.69	2673.00	1164.94	315.56	26.33	17.27
315.0	6155.44	5846.06	5054.06	3914.44	2503.69	1078.88	134.89	21.38	16.26
360.0	6140.81	5952.94	5259.94	4232.81	2802.38	1349.44	316.13	24.41	17.83
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	15.69	14.74	14.06	13.84	14.91	20.93	27.34	12.21	10.46
45.0	15.81	15.13	14.85	14.96	17.55	26.04	28.58	14.79	10.13
90.0	14.96	14.34	13.73	13.39	13.33	14.01	14.46	11.59	9.90
135.0	15.36	14.51	13.78	13.33	12.94	12.71	12.88	11.59	11.08
180.0	17.04	16.03	15.36	15.24	16.54	25.65	30.54	12.09	11.31
225.0	16.43	16.03	15.81	16.37	24.02	33.86	23.79	11.48	10.24
270.0	15.47	14.74	14.23	13.89	13.56	14.46	15.86	12.77	9.90
315.0	14.63	13.73	13.05	12.66	12.21	12.09	12.26	11.31	9.96
360.0	15.69	14.74	14.06	13.84	14.91	20.93	27.34	12.21	10.46
C/ γ (°)	90.0								
0.0	9.79								
45.0	9.28								
90.0	9.39								
135.0	9.62								
180.0	9.84								
225.0	9.28								
270.0	9.34								
315.0	9.56								
360.0	9.79								