



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

Nata

LumCAT: 2-1569-M	
Luminaire: BJB47.319.2141	
Report No: NT2017041501	Voltage(V): 35.0000
Test No: GC2017041501	Current(A): 0.8000
LampCAT: V18B	Power (W): 28.0000
Lamp flux(lm): 3874.0	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 70	Width(mm): 70
Phm Type: C	Height(mm): 41

Photometric Results

Lumens(lm): 3436.08
Efficiency(%): 88.70%
Lumens(lm)/Power(W): 122.72
Central intensity(cd): 3797.516
Maximum intensity(cd): 3797.516
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=61.6
 [C90/270]Total=61.6
Field angle(10%Imax): [C0/180]Total=79.6
 [C90/270]Total=79.6
Maximum s/h(1/2): C0_180=0.98 C90_270=0.98
Maximum s/h(1/4): C0_180=0.90 C90_270=0.90
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 89.20%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.210%

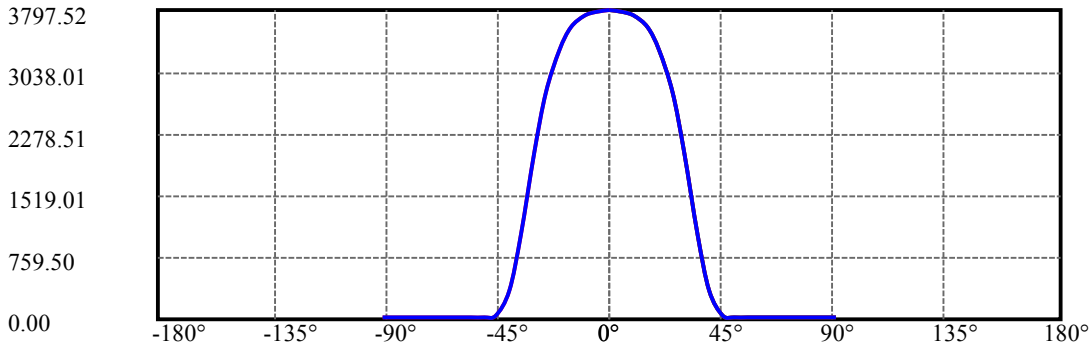
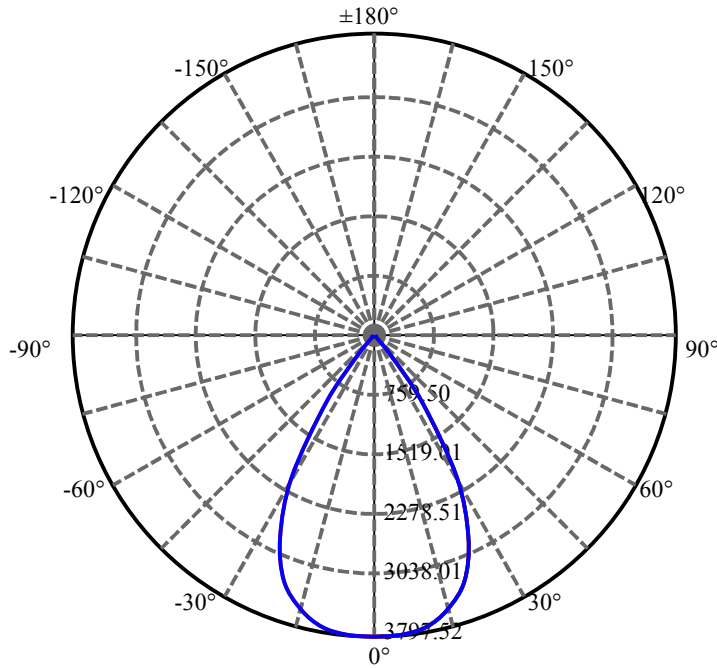
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3797.515	22.710	22.71	.586%	.661%
5.0	3785.265	180.835	203.545	4.668%	5.924%
10.0	3736.609	355.662	559.206	9.181%	16.275%
15.0	3583.277	508.354	1067.56	13.122%	31.069%
20.0	3296.571	618.021	1685.582	15.953%	49.055%
25.0	2792.254	646.834	2332.415	16.697%	67.880%
30.0	2056.425	563.602	2896.017	14.548%	84.282%
35.0	1047.359	329.288	3225.305	8.500%	93.866%
40.0	349.808	123.250	3348.555	3.181%	97.453%
45.0	50.170	19.446	3368.001	.502%	98.019%
50.0	23.674	9.941	3377.941	.257%	98.308%
55.0	17.721	7.957	3385.898	.205%	98.539%
60.0	16.386	7.779	3393.677	.201%	98.766%
65.0	15.512	7.706	3401.383	.199%	98.990%
70.0	14.927	7.689	3409.072	.198%	99.214%
75.0	14.673	7.769	3416.84	.201%	99.440%
80.0	14.445	7.798	3424.638	.201%	99.667%
85.0	14.094	7.696	3432.334	.199%	99.891%
90.0	13.682	3.750	3436.084	.097%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2896.02	74.76%	84.28%
0-40	3348.56	86.44%	97.45%
0-60	3393.68	87.60%	98.77%
0-90	3432.33	88.60%	99.89%
0-120	3432.33	88.60%	99.89%
0-180	3436.08	88.70%	100.00%
60-90	46.44	1.20%	1.35%
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%
0-28.69	2748.87	70.96%	80.00%

ZONAL LUMEN SUMMARY

0-10	559.21
10-20	1126.38
20-30	1210.44
30-40	452.54
40-50	29.39
50-60	15.74
60-70	15.39
70-80	15.57
80-90	7.70
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: —————

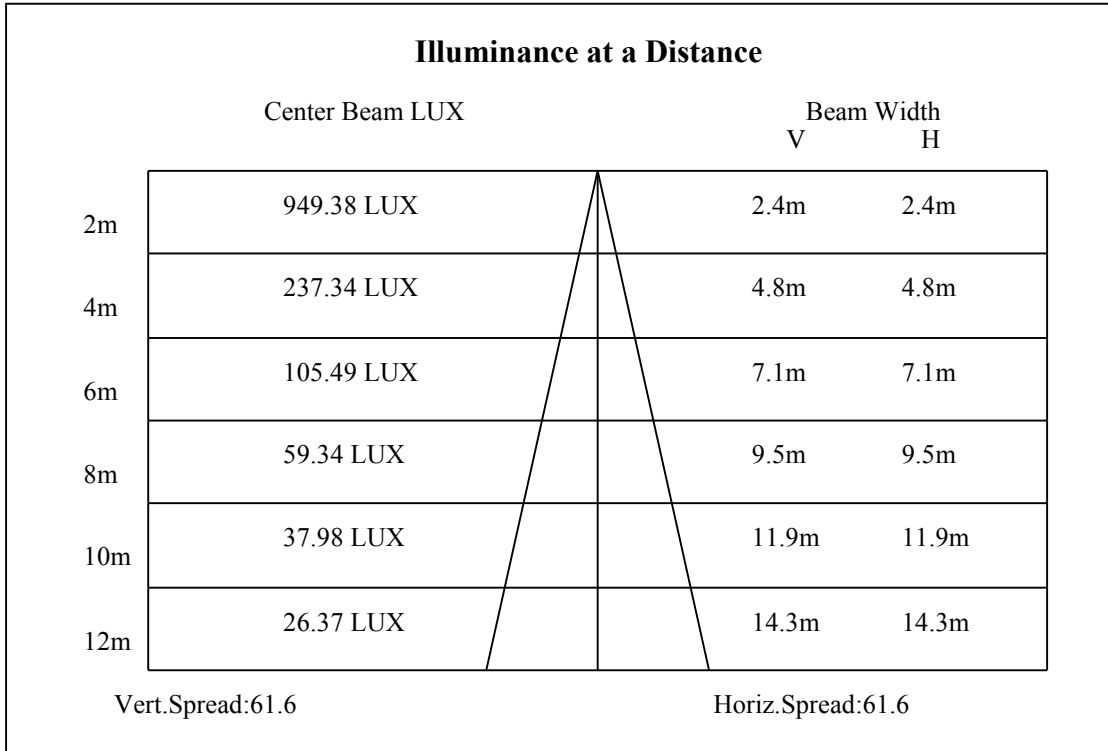
C90/C270: —————

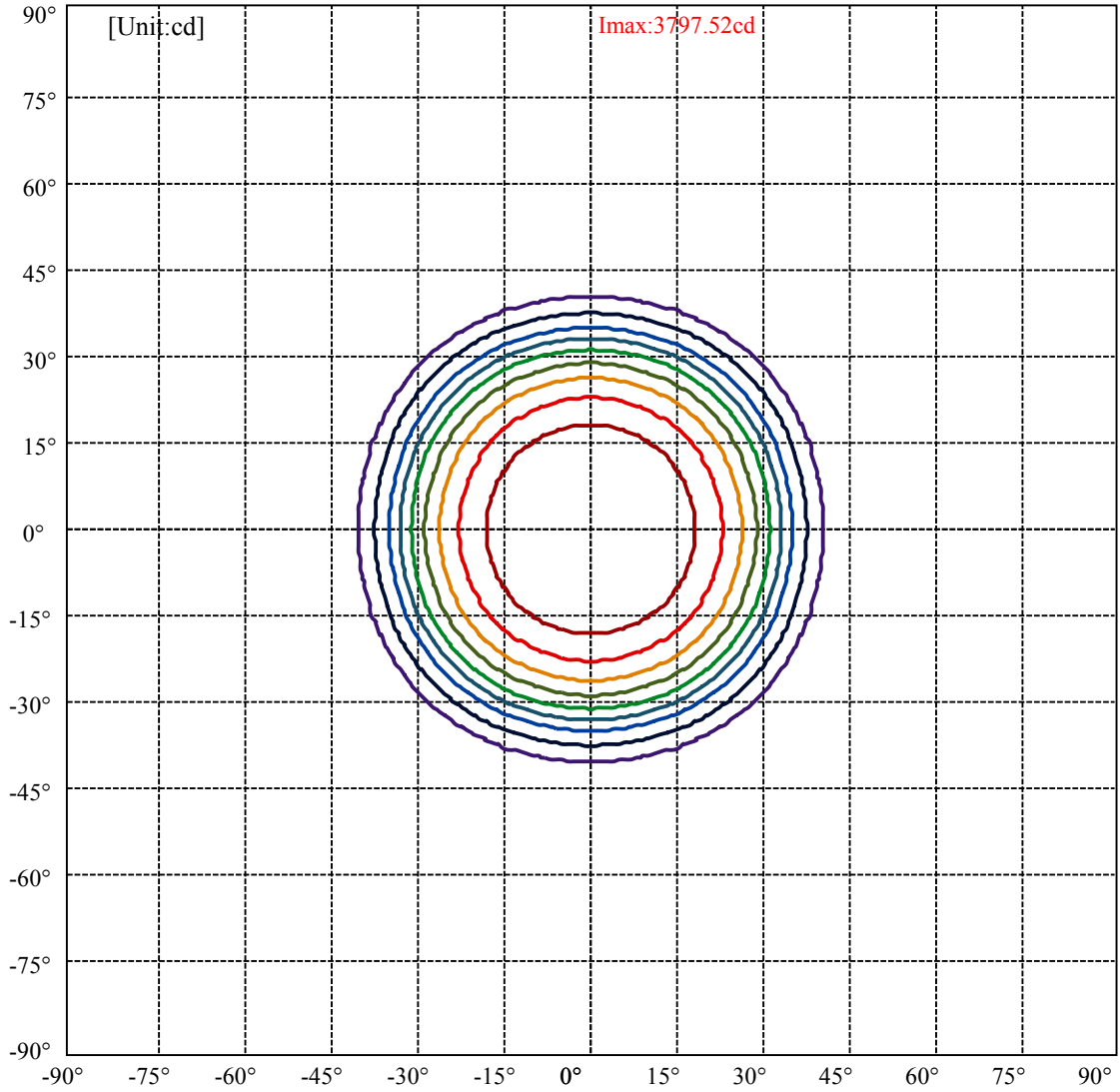
Field angle(10%Imax):C0/180Left:39.8 Right:39.8

:C90/270Left:39.8 Right:39.8

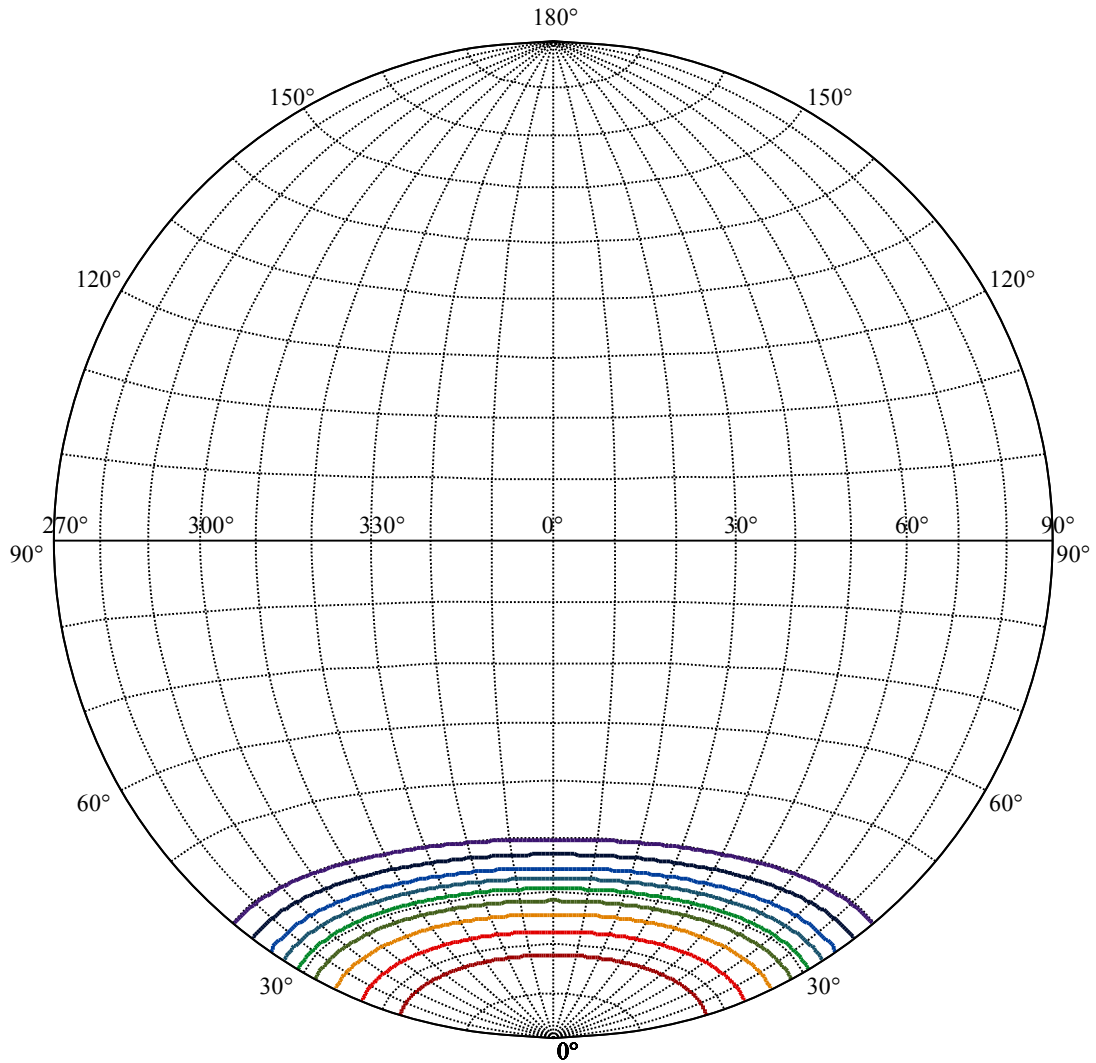
Beam Angle(50%Imax):C0/180Left:30.8 Right:30.8

:C90/270Left:30.8 Right:30.8





(10%Imax) 379.752	—
(20%Imax) 759.503	—
(30%Imax) 1139.25	—
(40%Imax) 1519.01	—
(50%Imax) 1898.76	—
(60%Imax) 2278.51	—
(70%Imax) 2658.26	—
(80%Imax) 3038.01	—
(90%Imax) 3417.76	—



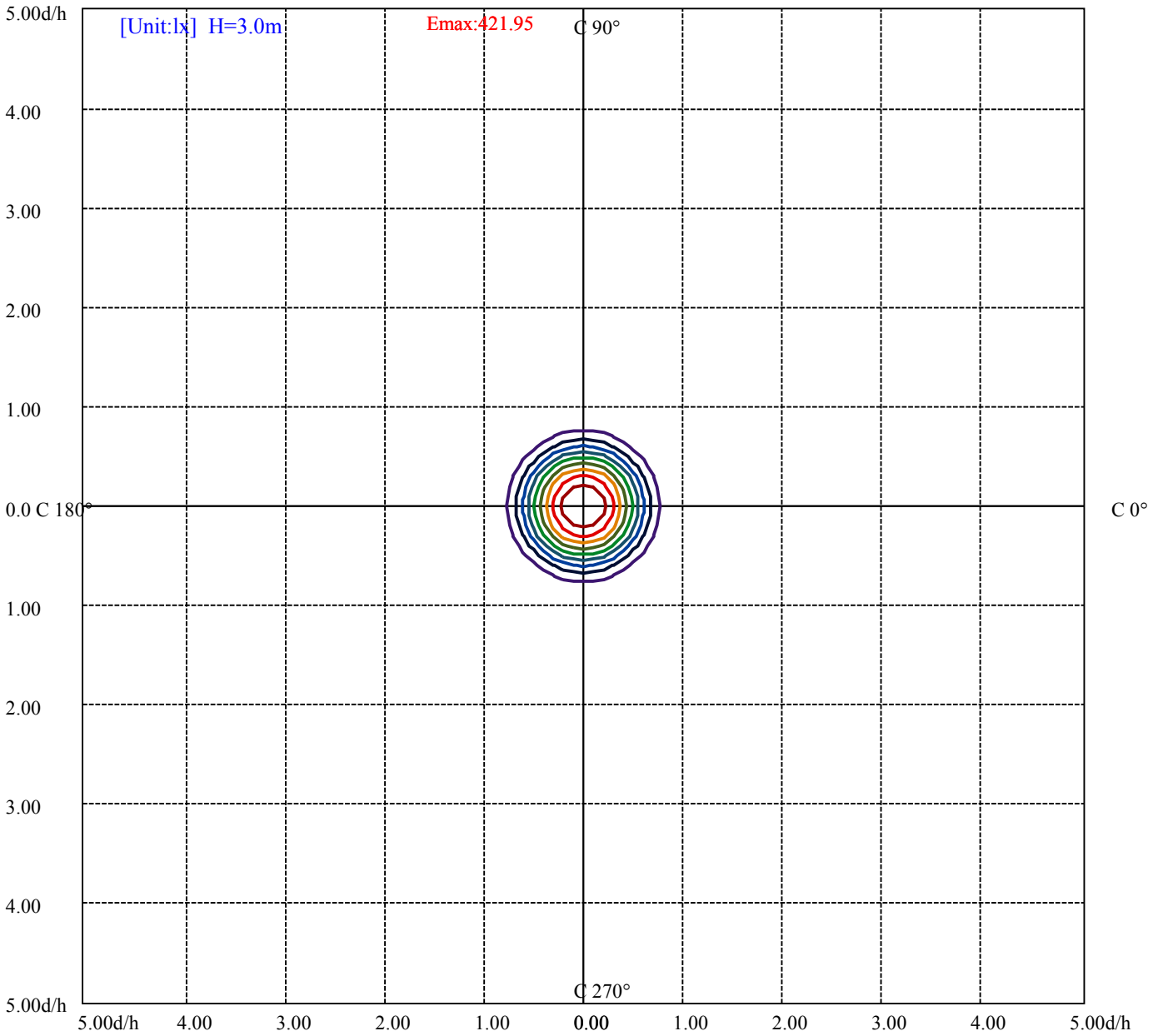
House

[Unit:cd]

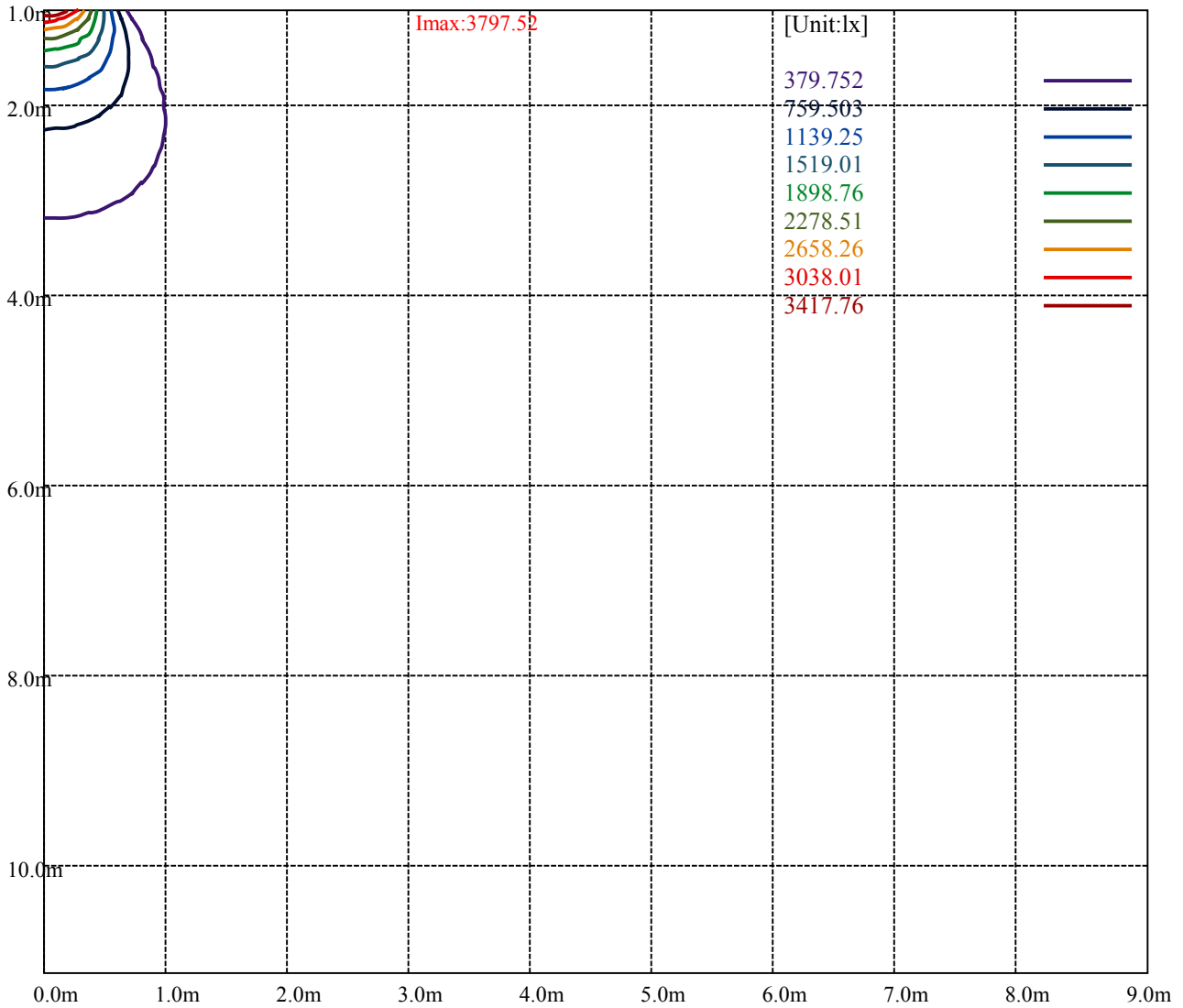
Road

Imax:3797.52

(10%Imax)	379.752	—
(20%Imax)	759.503	—
(30%Imax)	1139.25	—
(40%Imax)	1519.01	—
(50%Imax)	1898.76	—
(60%Imax)	2278.51	—
(70%Imax)	2658.26	—
(80%Imax)	3038.01	—
(90%Imax)	3417.76	—



- (10%Emax) 42.19467
- (20%Emax) 84.38922
- (30%Emax) 126.5833
- (40%Emax) 168.7789
- (50%Emax) 210.9733
- (60%Emax) 253.1678
- (70%Emax) 295.3622
- (80%Emax) 337.5567
- (90%Emax) 379.7511



Luminance Table

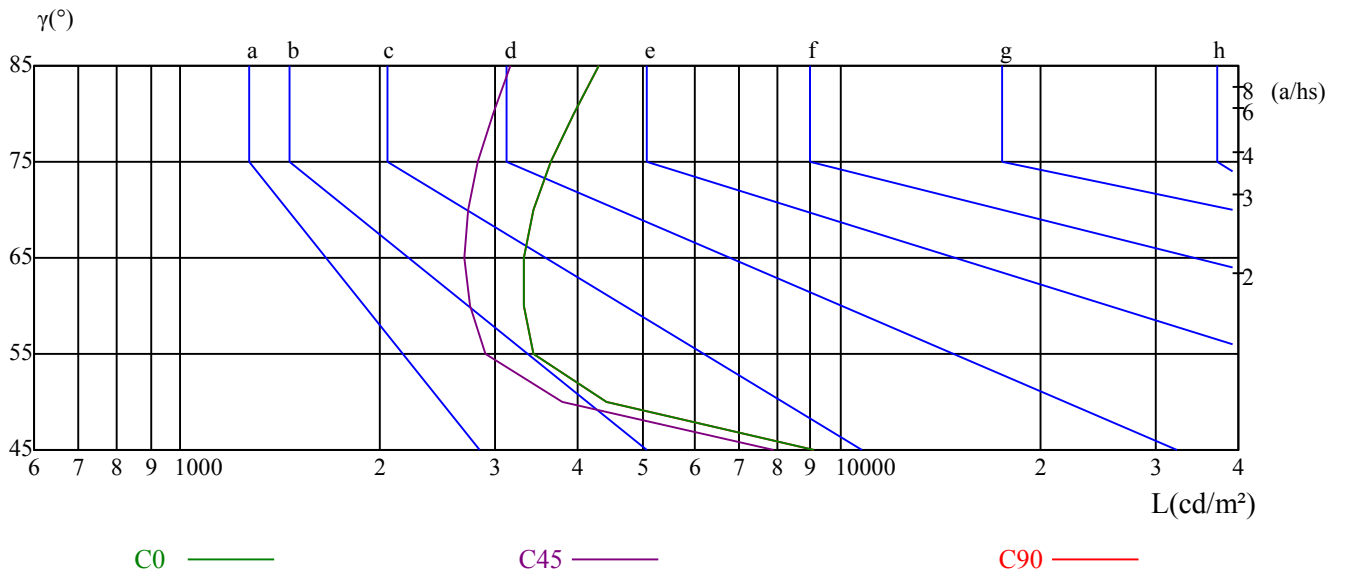
γ	45	50	55	60	65	70	75	80	85
C0	9131	4427	3433	3320	3320	3414	3631	3928	4289
C45	7920	3783	2888	2747	2698	2719	2828	2980	3153
C90	9131	4427	3433	3320	3320	3414	3631	3928	4289

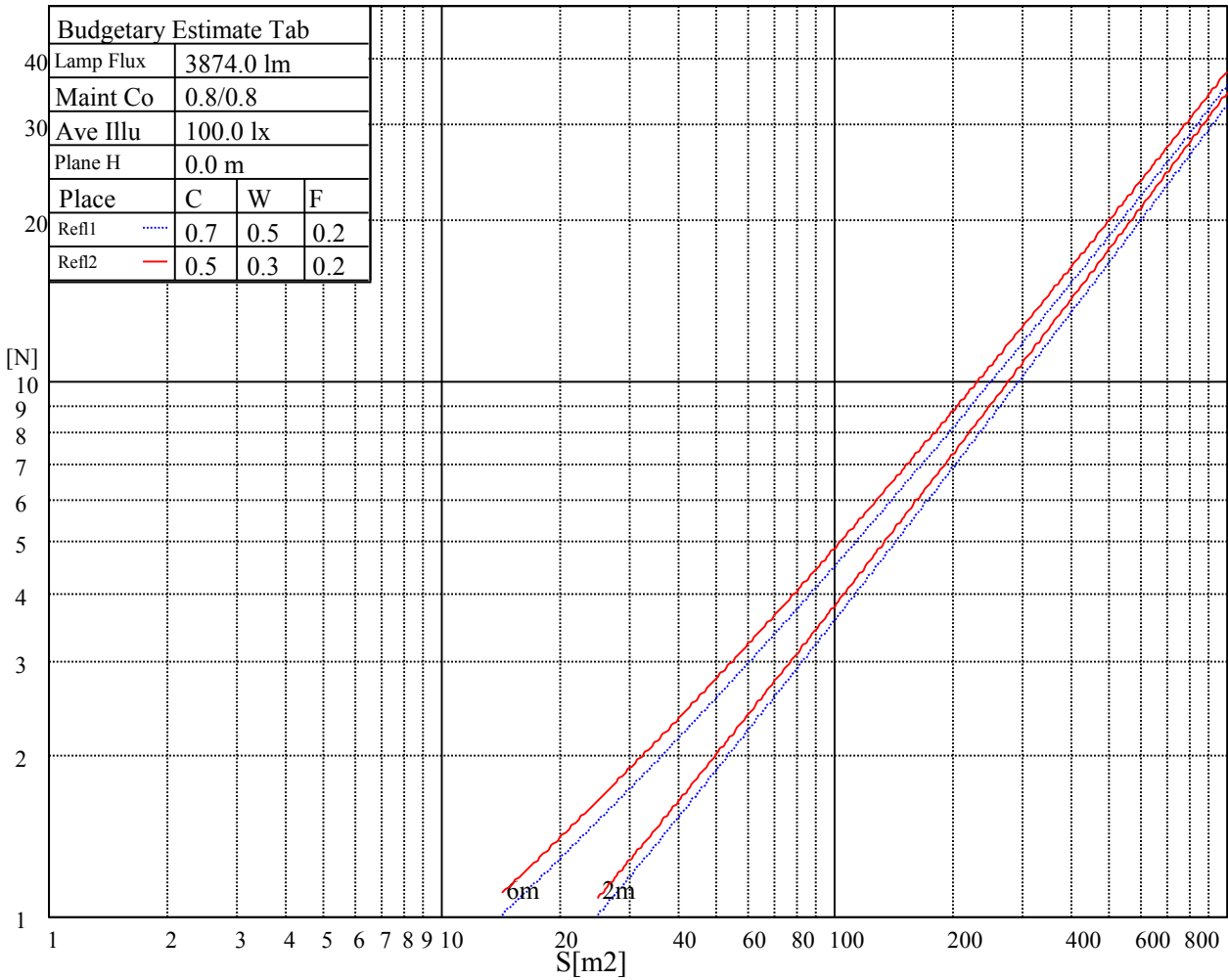
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
7491	7491	7491	11569	11569	11569	33003	33003	33003

Glare Table

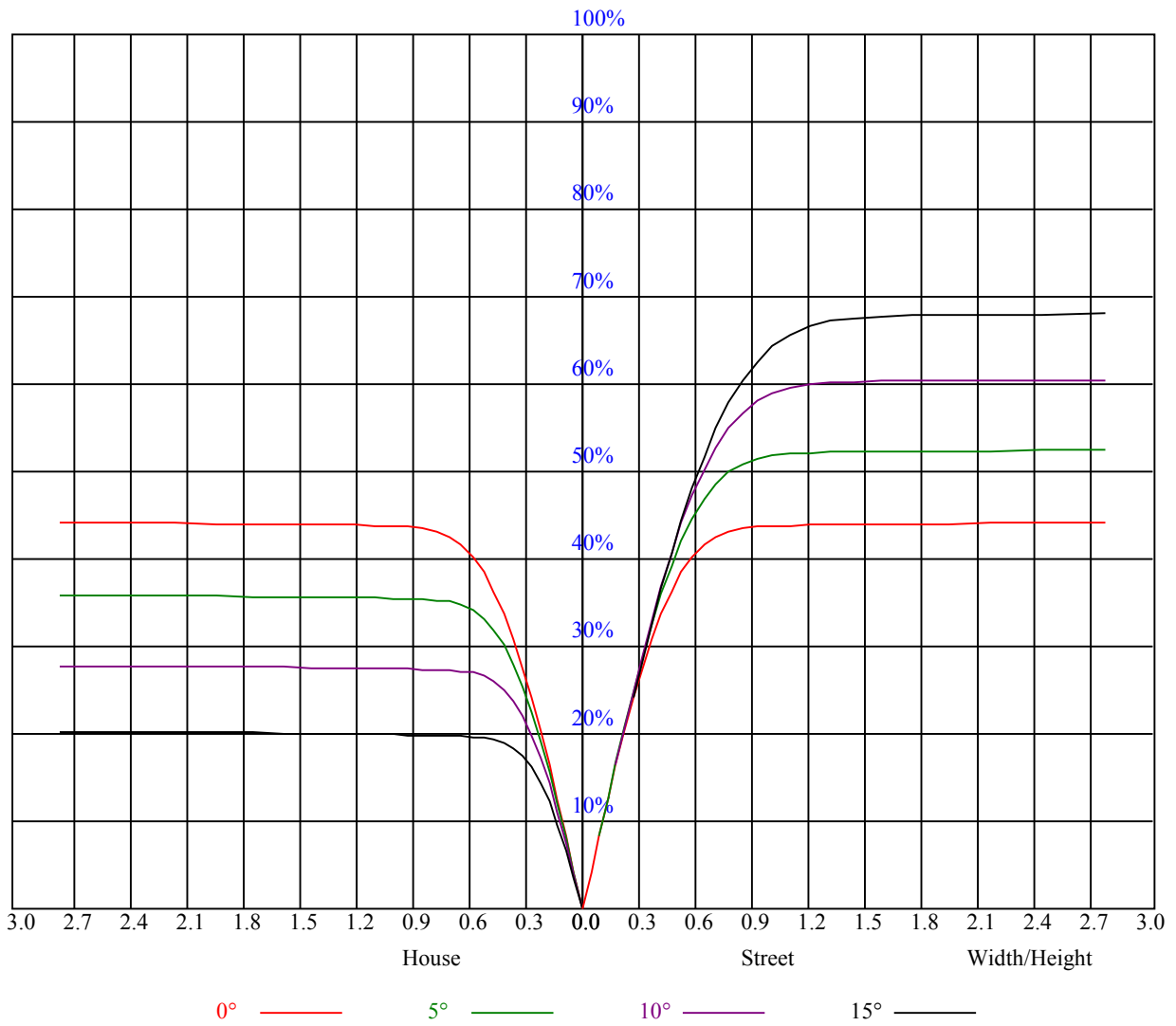
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.06	1.06	1.06	1.04	1.04	1.04	0.99	0.99	0.99	0.95	0.95	0.95	0.91	0.91	0.91	0.89
1	0.98	0.96	0.94	0.97	0.95	0.93	0.93	0.91	0.90	0.90	0.88	0.87	0.87	0.86	0.85	0.83
2	0.92	0.89	0.86	0.91	0.88	0.85	0.88	0.85	0.83	0.85	0.83	0.81	0.83	0.81	0.80	0.78
3	0.87	0.83	0.79	0.86	0.82	0.79	0.83	0.80	0.77	0.81	0.79	0.76	0.79	0.77	0.75	0.74
4	0.82	0.77	0.74	0.81	0.77	0.73	0.79	0.75	0.73	0.77	0.74	0.72	0.76	0.73	0.71	0.70
5	0.78	0.73	0.69	0.77	0.72	0.69	0.75	0.71	0.68	0.74	0.70	0.68	0.72	0.69	0.67	0.66
6	0.74	0.69	0.65	0.73	0.68	0.65	0.72	0.67	0.64	0.70	0.67	0.64	0.69	0.66	0.64	0.62
7	0.70	0.65	0.61	0.69	0.65	0.61	0.68	0.64	0.61	0.67	0.63	0.61	0.66	0.63	0.60	0.59
8	0.66	0.62	0.58	0.66	0.61	0.58	0.65	0.61	0.58	0.64	0.60	0.58	0.63	0.60	0.57	0.56
9	0.63	0.58	0.55	0.63	0.58	0.55	0.62	0.58	0.55	0.61	0.58	0.55	0.61	0.57	0.55	0.54
10	0.60	0.56	0.53	0.60	0.56	0.52	0.59	0.55	0.52	0.59	0.55	0.52	0.58	0.55	0.52	0.51



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	3807.15	3779.07	3722.36	3589.13	3343.02	2948.82	2223.73	1189.77	420.63
45.0	3792.84	3787.33	3760.90	3651.34	3403.59	3002.78	2381.19	1365.40	594.06
90.0	3796.14	3795.59	3759.80	3600.14	3295.68	2786.95	2054.15	1097.88	382.42
135.0	3793.94	3807.15	3777.97	3649.14	3339.17	2831.55	2155.46	1112.14	387.60
180.0	3807.15	3801.09	3763.10	3576.46	3253.28	2654.82	1922.57	892.08	230.91
225.0	3792.84	3773.02	3689.88	3491.13	3164.09	2551.86	1710.60	728.01	156.20
270.0	3796.14	3773.02	3721.26	3569.31	3311.09	2790.26	2018.37	1038.91	317.68
315.0	3793.94	3765.86	3697.59	3539.58	3262.64	2770.99	1985.33	954.68	308.98
360.0	3807.15	3779.07	3722.36	3589.13	3343.02	2948.82	2223.73	1189.77	420.63

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	54.23	24.89	17.84	16.52	15.58	14.92	14.53	14.04	14.04
45.0	80.27	30.17	18.83	16.90	15.80	15.09	14.42	13.98	13.87
90.0	53.13	25.33	18.22	16.63	15.53	14.87	14.87	14.65	14.04
135.0	52.58	25.00	17.78	16.52	15.64	15.14	14.76	14.53	14.26
180.0	39.75	20.15	17.07	16.02	15.20	14.70	14.26	14.04	14.15
225.0	34.91	19.27	16.96	15.80	15.14	14.59	14.15	13.98	13.93
270.0	44.60	23.29	17.67	16.46	15.75	15.14	15.86	15.86	14.20
315.0	41.90	21.31	17.40	16.24	15.47	14.98	14.53	14.48	14.26
360.0	54.23	24.89	17.84	16.52	15.58	14.92	14.53	14.04	14.04

C/γ(°)	90.0
0.0	13.71
45.0	13.65
90.0	13.65
135.0	13.65
180.0	13.71
225.0	13.65
270.0	13.71
315.0	13.71
360.0	13.71