



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: 2-1672-M
Luminaire: 92.70.135.00
Report No: NATA0100
Test No: GC2018062705
LampCAT: NICHIA NFCWJ120B-V3
Lamp flux(lm): 2279.0
Number of Lamps: 1
Length(mm): 70
Phm Type: C

Voltage(V): 33.7000
Current(A): 0.5000
Power (W): 16.8500
PF: 0.0000
Ballast type: DC
Width(mm): 70
Height(mm): 0

Photometric Results

Lumens(lm): 2078.71
Efficiency(%): 91.21%
Lumens(lm)/Power(W): 125.56
Central intensity(cd): 6523.082
Maximum intensity(cd): 6523.082
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=27.6
 [C90/270]Total=27.6
Field angle(10%Imax): [C0/180]Total=63.0
 [C90/270]Total=63.0
Maximum s/h(1/2): C0_180=0.47 C90_270=0.47
Maximum s/h(1/4): C0_180=0.45 C90_270=0.45
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 92.84%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.028%

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2018/6/27
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.42

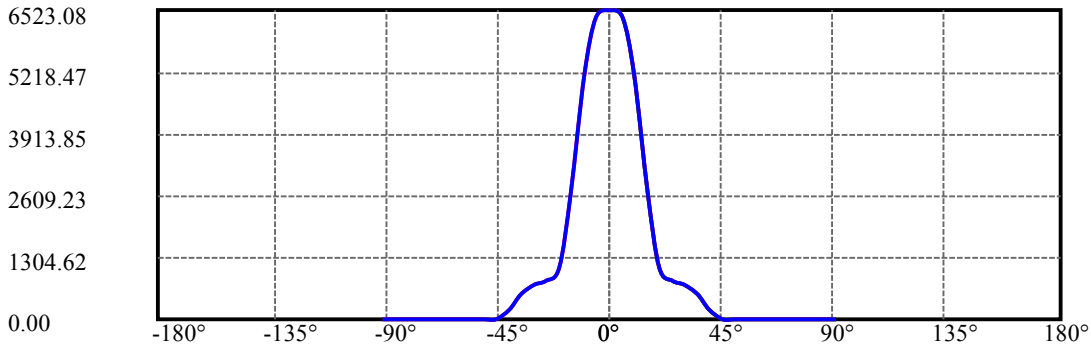
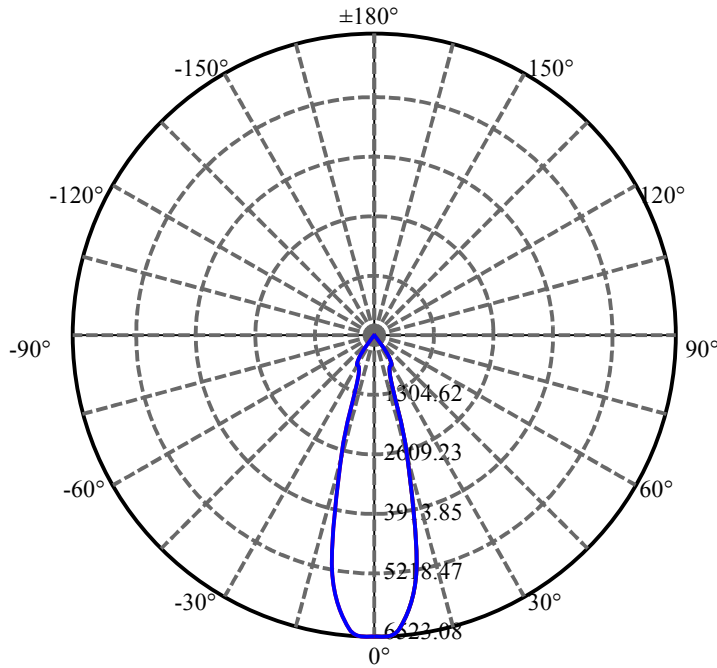
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	6523.082	39.009	39.009	1.712%	1.877%
5.0	6368.167	304.229	343.238	13.349%	16.512%
10.0	5159.129	491.062	834.299	21.547%	40.136%
15.0	2655.164	376.684	1210.983	16.528%	58.257%
20.0	1090.784	204.494	1415.477	8.973%	68.094%
25.0	790.768	183.184	1598.661	8.038%	76.907%
30.0	709.257	194.385	1793.046	8.529%	86.258%
35.0	517.083	162.570	1955.616	7.133%	94.079%
40.0	219.173	77.222	2032.839	3.388%	97.793%
45.0	16.964	6.575	2039.414	.289%	98.110%
50.0	10.640	4.468	2043.881	.196%	98.325%
55.0	9.917	4.453	2048.334	.195%	98.539%
60.0	9.518	4.518	2052.852	.198%	98.756%
65.0	9.229	4.585	2057.437	.201%	98.977%
70.0	9.029	4.651	2062.088	.204%	99.201%
75.0	8.878	4.700	2066.788	.206%	99.427%
80.0	8.816	4.759	2071.547	.209%	99.656%
85.0	8.747	4.776	2076.323	.210%	99.885%
90.0	8.692	2.382	2078.706	.105%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1793.05	78.68%	86.26%
0-40	2032.84	89.20%	97.79%
0-60	2052.85	90.08%	98.76%
0-90	2076.32	91.11%	99.89%
0-120	2076.32	91.11%	99.89%
0-180	2078.71	91.21%	100.00%
60-90	27.99	1.23%	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%
0-26.65	1662.97	72.97%	80.00%

ZONAL LUMEN SUMMARY

0-10	834.30
10-20	581.18
20-30	377.57
30-40	239.79
40-50	11.04
50-60	8.97
60-70	9.24
70-80	9.46
80-90	4.78
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: —————

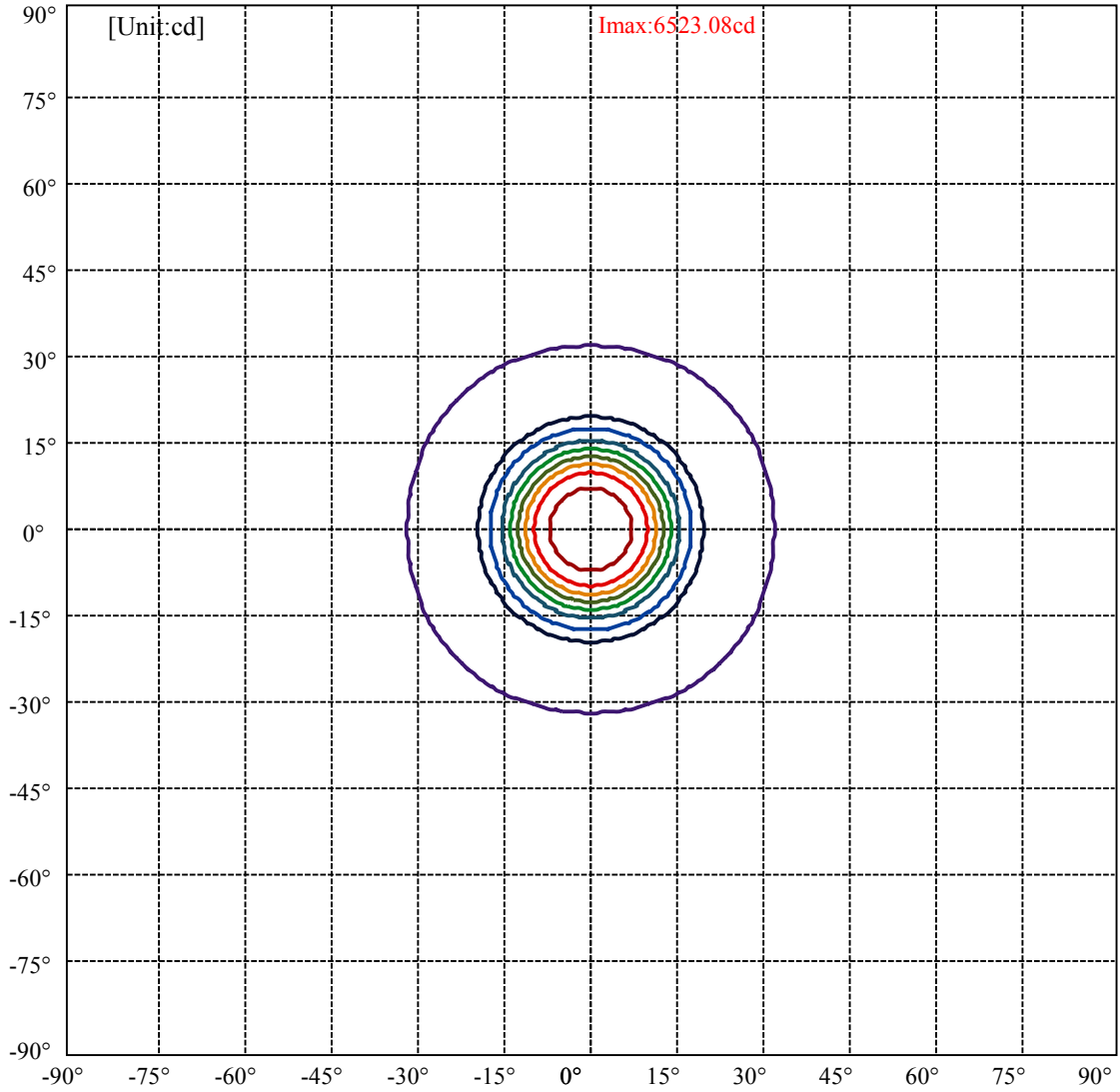
C90/C270: —————

Field angle(10%Imax):C0/180Left:31.5 Right:31.5

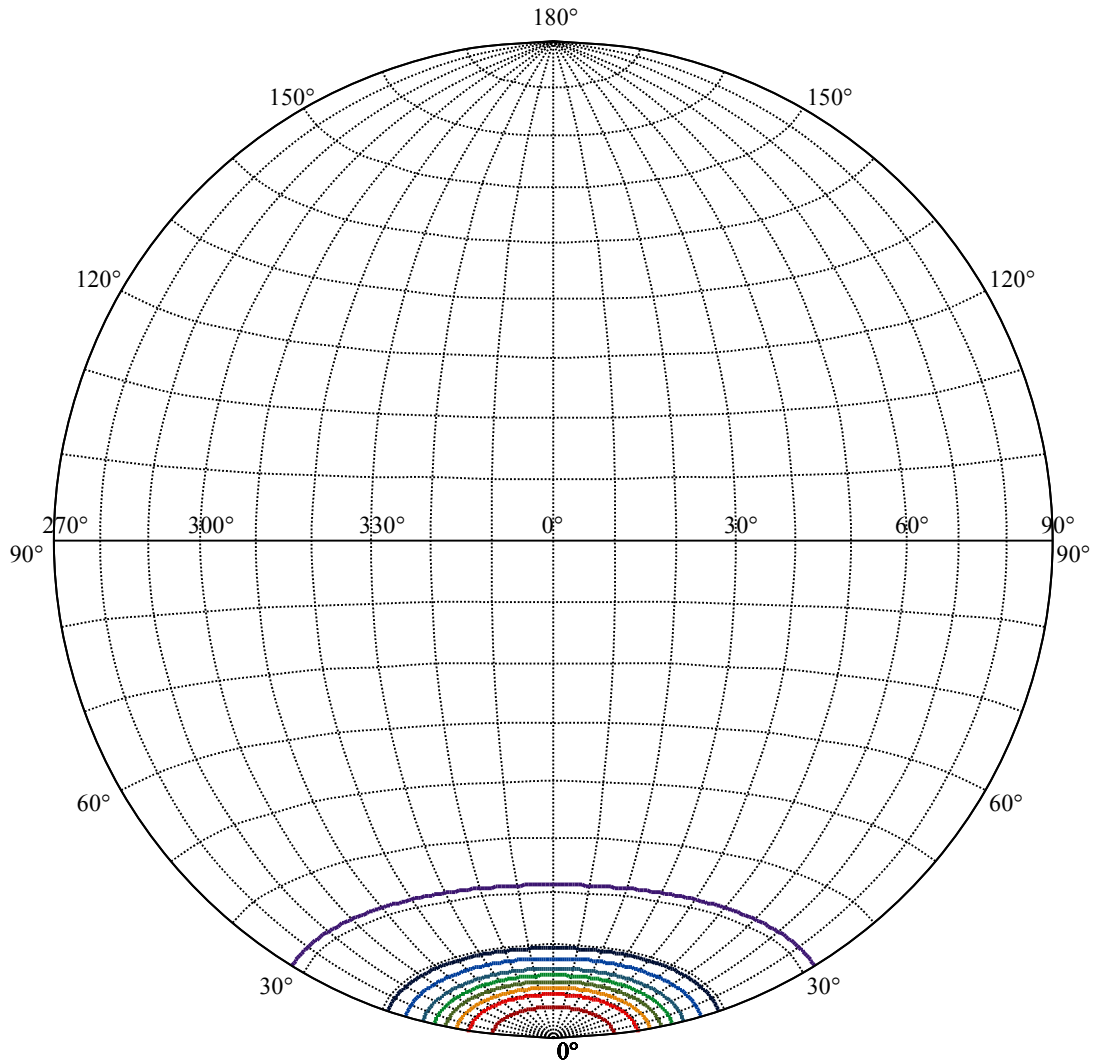
:C90/270Left:31.5 Right:31.5

Beam Angle(50%Imax):C0/180Left:13.8 Right:13.8

:C90/270Left:13.8 Right:13.8



(10%Imax) 652.308	—
(20%Imax) 1304.62	—
(30%Imax) 1956.92	—
(40%Imax) 2609.23	—
(50%Imax) 3261.54	—
(60%Imax) 3913.85	—
(70%Imax) 4566.16	—
(80%Imax) 5218.47	—
(90%Imax) 5870.77	—



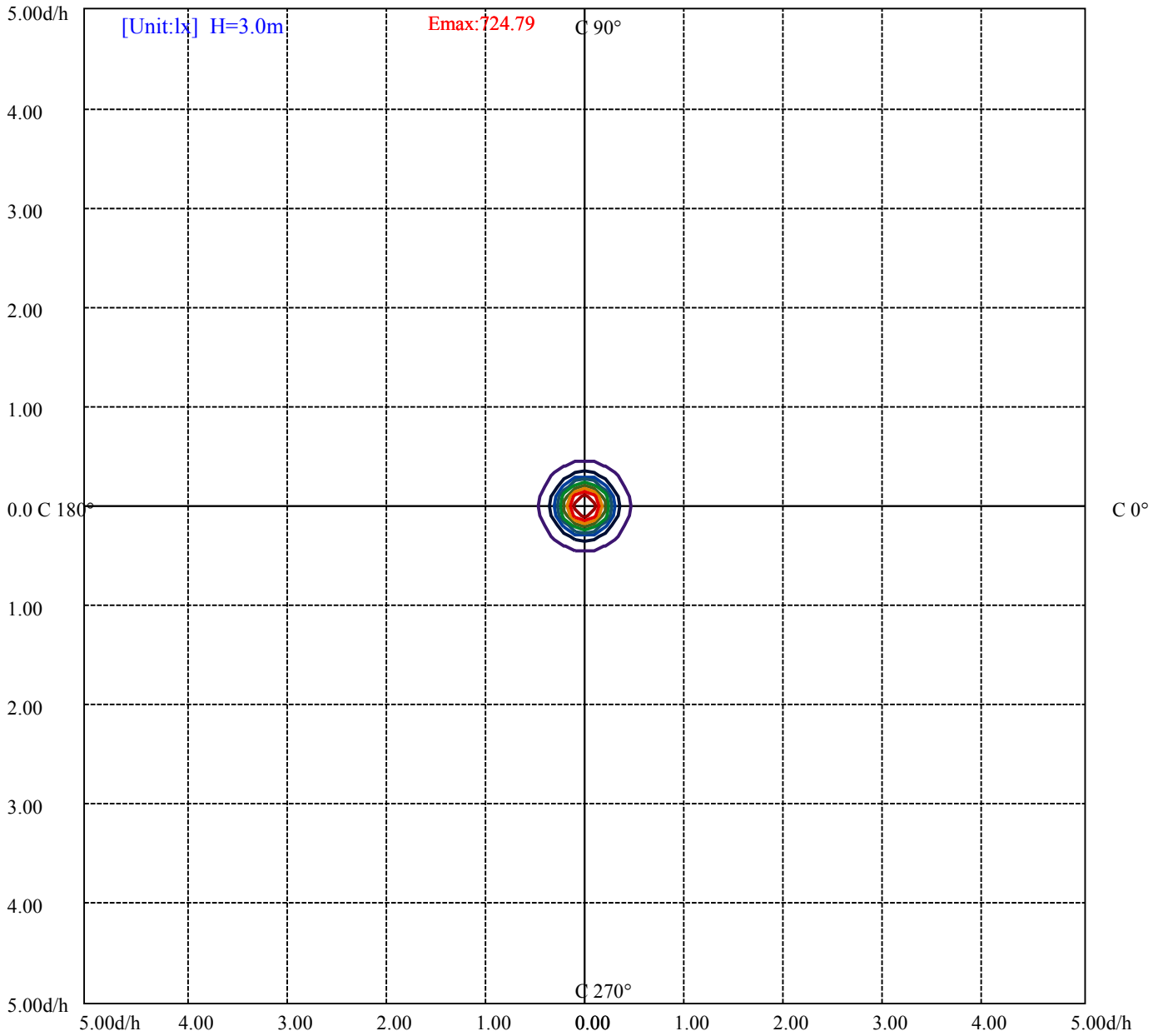
House

[Unit:cd]

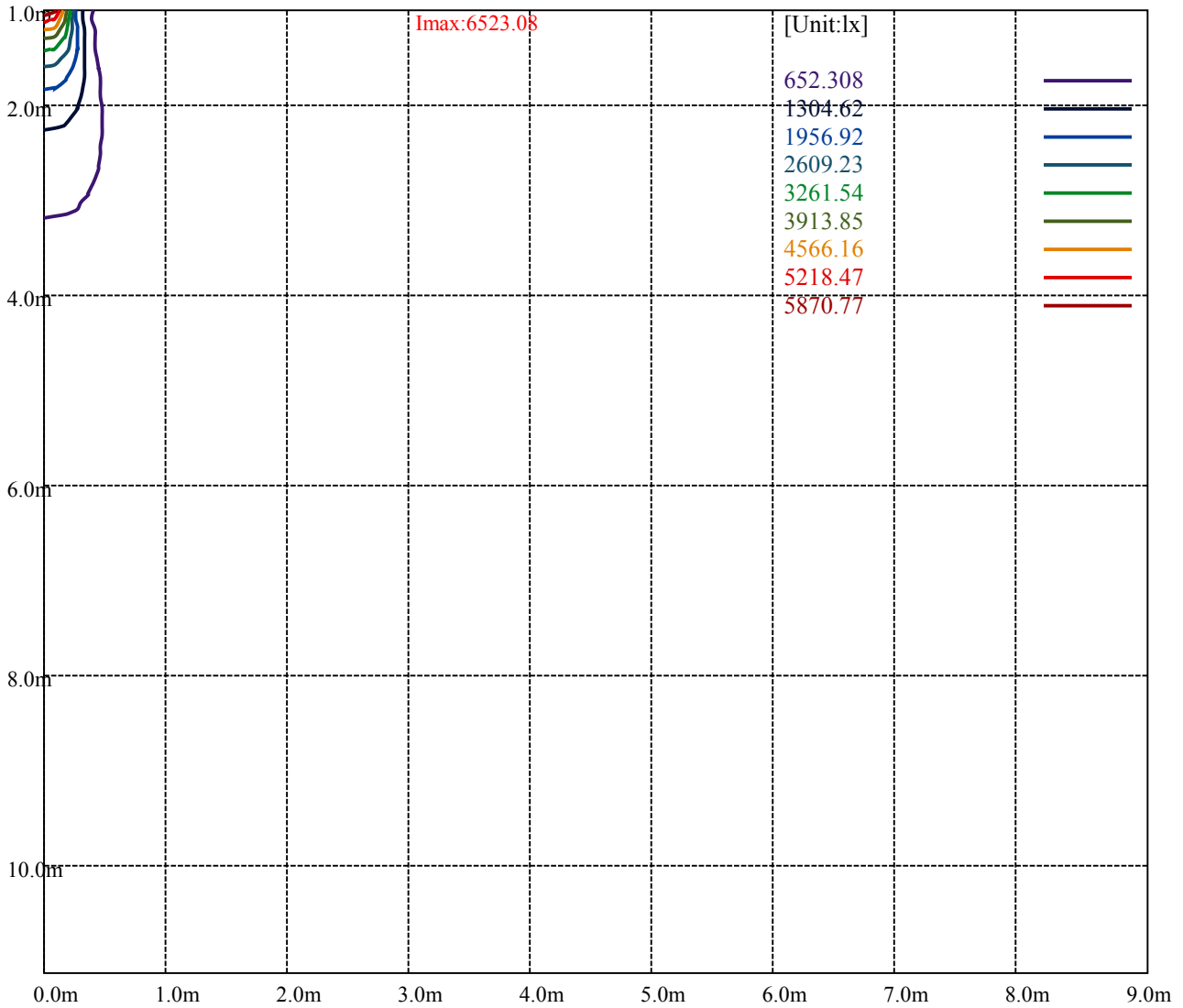
Road

Imax:6523.08

(10%Imax) 652.308	—
(20%Imax) 1304.62	—
(30%Imax) 1956.92	—
(40%Imax) 2609.23	—
(50%Imax) 3261.54	—
(60%Imax) 3913.85	—
(70%Imax) 4566.16	—
(80%Imax) 5218.47	—
(90%Imax) 5870.77	—



- (10%Emax) 72.47867
- (20%Emax) 144.9578
- (30%Emax) 217.4356
- (40%Emax) 289.9144
- (50%Emax) 362.3933
- (60%Emax) 434.8722
- (70%Emax) 507.35
- (80%Emax) 579.8289
- (90%Emax) 652.3078



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

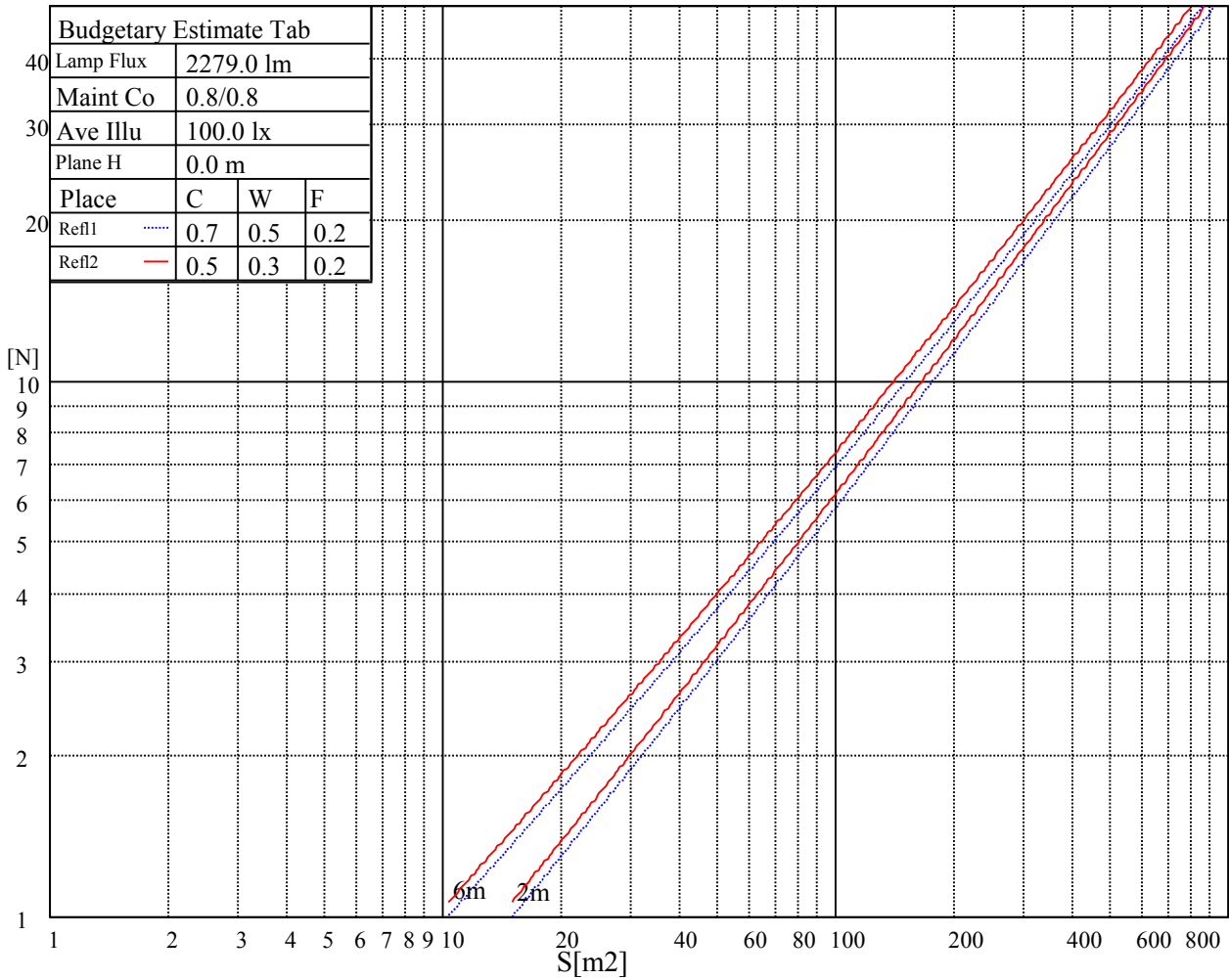
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

Glare Table

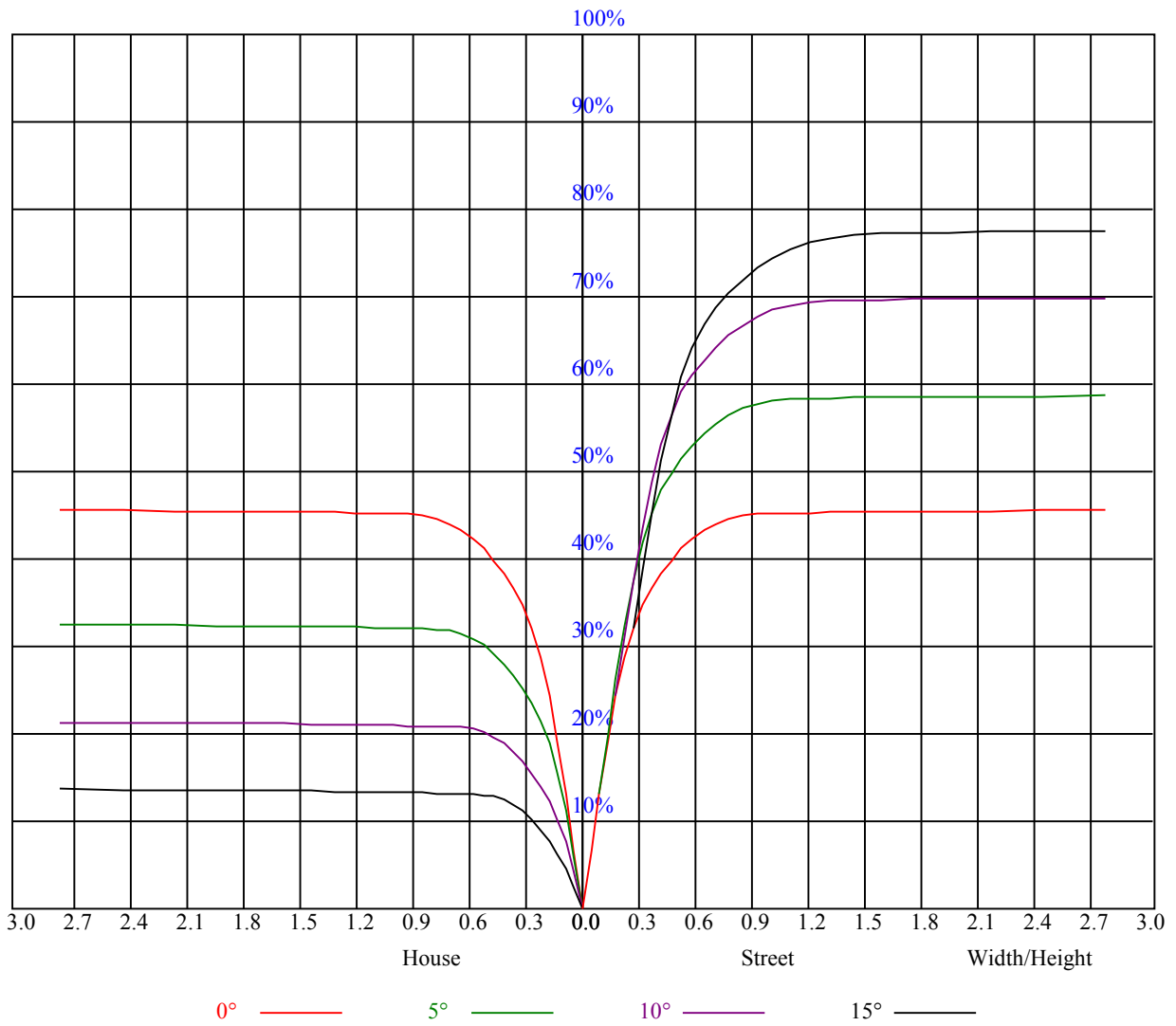
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.11	1.11	1.11	1.08	1.08	1.08	1.03	1.03	1.03	0.99	0.99	0.99	0.95	0.95	0.95	0.93
1	1.02	0.99	0.97	1.00	0.98	0.96	0.96	0.94	0.93	0.93	0.91	0.90	0.90	0.88	0.87	0.86
2	0.97	0.93	0.90	0.95	0.92	0.89	0.92	0.89	0.87	0.89	0.87	0.85	0.87	0.85	0.84	0.82
3	0.92	0.88	0.85	0.91	0.87	0.84	0.88	0.85	0.83	0.86	0.84	0.81	0.84	0.82	0.80	0.79
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	0.77	0.84	0.79	0.76	0.82	0.78	0.76	0.81	0.77	0.75	0.79	0.77	0.74	0.73
6	0.81	0.77	0.73	0.80	0.76	0.73	0.79	0.75	0.73	0.78	0.75	0.72	0.77	0.74	0.72	0.71
7	0.78	0.74	0.71	0.78	0.73	0.71	0.77	0.73	0.70	0.76	0.72	0.70	0.75	0.72	0.69	0.68
8	0.76	0.71	0.68	0.75	0.71	0.68	0.74	0.70	0.68	0.73	0.70	0.68	0.73	0.70	0.67	0.66
9	0.73	0.69	0.66	0.73	0.69	0.66	0.72	0.68	0.66	0.71	0.68	0.66	0.71	0.68	0.65	0.64
10	0.71	0.67	0.64	0.71	0.67	0.64	0.70	0.66	0.64	0.69	0.66	0.64	0.69	0.66	0.64	0.63



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	6520.33	6357.36	5124.10	2626.74	1099.48	792.81	717.38	527.44	296.75
45.0	6527.49	6406.36	5198.43	2634.45	1080.76	787.86	712.98	513.68	289.60
90.0	6524.73	6326.53	4628.59	2159.86	970.42	756.36	696.30	458.62	109.67
135.0	6519.78	6449.31	5415.35	2955.98	1147.38	798.87	711.33	557.72	284.64
180.0	6520.33	6390.40	5214.39	2627.84	1065.29	787.80	703.62	505.97	171.34
225.0	6527.49	6344.70	5252.93	2846.97	1045.63	795.51	707.14	508.23	171.28
270.0	6524.73	6397.00	5534.82	3112.34	1265.75	824.19	721.24	574.24	297.30
315.0	6519.78	6273.68	4904.42	2277.13	1051.58	782.74	704.06	490.77	132.80
360.0	6520.33	6357.36	5124.10	2626.74	1099.48	792.81	717.38	527.44	296.75
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	16.41	10.68	9.91	9.52	9.25	9.03	8.86	8.81	8.75
45.0	16.57	10.63	9.91	9.52	9.19	9.03	8.86	8.81	8.70
90.0	14.76	10.46	9.80	9.47	9.19	8.97	8.86	8.81	8.75
135.0	18.39	10.63	9.97	9.52	9.25	9.03	8.92	8.81	8.75
180.0	16.68	10.52	9.86	9.47	9.19	9.03	8.81	8.81	8.70
225.0	17.29	10.63	9.86	9.47	9.19	8.97	8.86	8.75	8.70
270.0	20.37	10.96	10.13	9.63	9.30	9.14	8.97	8.92	8.86
315.0	15.25	10.63	9.91	9.52	9.25	9.03	8.86	8.81	8.75
360.0	16.41	10.68	9.91	9.52	9.25	9.03	8.86	8.81	8.75
C/γ(°)	90.0								
0.0	8.70								
45.0	8.70								
90.0	8.70								
135.0	8.70								
180.0	8.70								
225.0	8.64								
270.0	8.70								
315.0	8.70								
360.0	8.70								