



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: 2-1259-N
Luminaire: 92.70.045.00+92.70.059.00
Report No: NATA0100
Test No: GC2018062016
LampCAT: NICHIA NFCW108B-V3
Lamp flux(lm): 2254.7
Number of Lamps: 1
Length(mm): 70
Phm Type: C

Voltage(V): 33.8000
Current(A): 0.5000
Power (W): 16.9000
PF: 0.0000
Ballast type: DC
Width(mm): 70
Height(mm): 0

Photometric Results

Lumens(lm): 1694.27
Efficiency(%): 75.14%
Lumens(lm)/Power(W): 100.25
Central intensity(cd): 3461.396
Maximum intensity(cd): 3461.396
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=36.4
 [C90/270]Total=36.4
Field angle(10%Imax): [C0/180]Total=67.4
 [C90/270]Total=67.4
Maximum s/h(1/2): C0_180=0.60 C90_270=0.60
Maximum s/h(1/4): C0_180=0.60 C90_270=0.60
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 75.99%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 96.516%

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2018/6/20
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.42

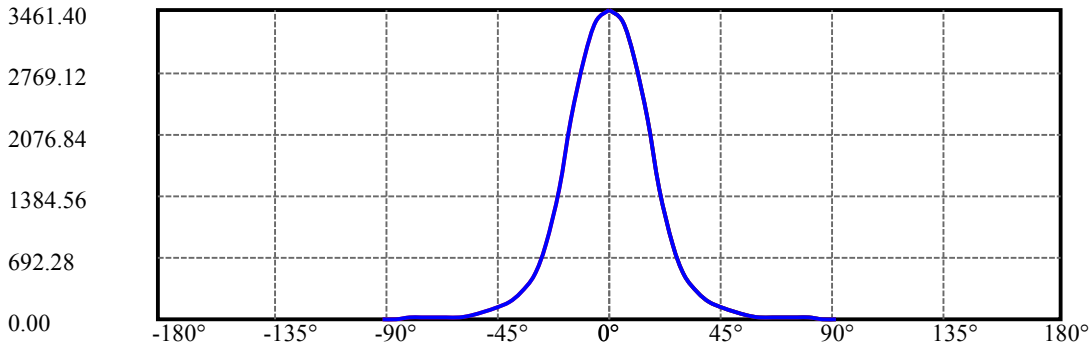
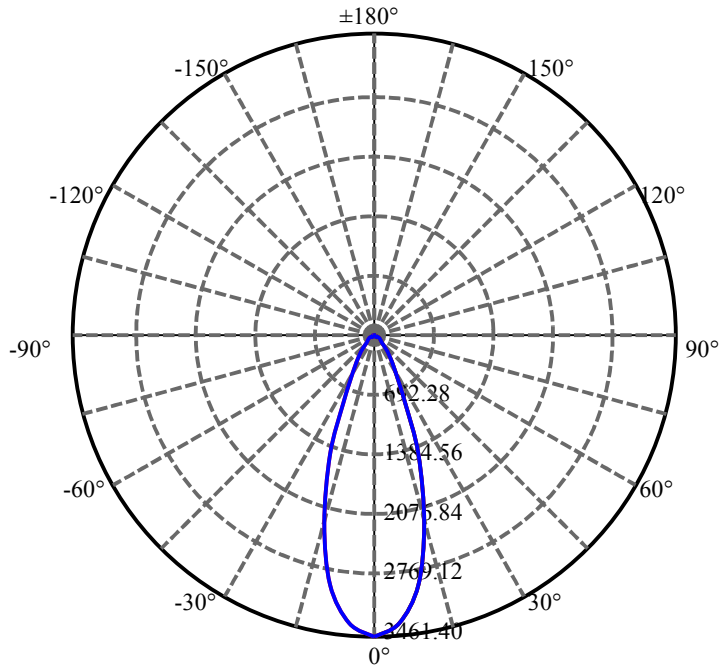
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3461.396	20.700	20.7	.918%	1.222%
5.0	3324.994	158.846	179.546	7.045%	10.597%
10.0	2916.750	277.625	457.171	12.313%	26.983%
15.0	2230.059	316.375	773.546	14.032%	45.657%
20.0	1452.615	272.328	1045.874	12.078%	61.730%
25.0	842.212	195.101	1240.974	8.653%	73.245%
30.0	486.747	133.402	1374.376	5.917%	81.119%
35.0	297.250	93.455	1467.831	4.145%	86.635%
40.0	195.877	69.014	1536.846	3.061%	90.708%
45.0	121.310	47.019	1583.864	2.085%	93.483%
50.0	78.153	32.816	1616.68	1.455%	95.420%
55.0	48.814	21.918	1638.598	.972%	96.714%
60.0	31.747	15.070	1653.669	.668%	97.604%
65.0	21.520	10.691	1664.36	.474%	98.235%
70.0	17.508	9.018	1673.378	.400%	98.767%
75.0	14.418	7.634	1681.011	.339%	99.217%
80.0	11.686	6.308	1687.319	.280%	99.590%
85.0	9.043	4.938	1692.257	.219%	99.881%
90.0	7.350	2.014	1694.272	.089%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1374.38	60.96%	81.12%
0-40	1536.85	68.16%	90.71%
0-60	1653.67	73.34%	97.60%
0-90	1692.26	75.05%	99.88%
0-120	1692.26	75.05%	99.88%
0-180	1694.27	75.14%	100.00%
60-90	53.66	2.38%	3.17%
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%
0-29.29	1355.42	60.12%	80.00%

ZONAL LUMEN SUMMARY

0-10	457.17
10-20	588.70
20-30	328.50
30-40	162.47
40-50	79.83
50-60	36.99
60-70	19.71
70-80	13.94
80-90	4.94
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: —————

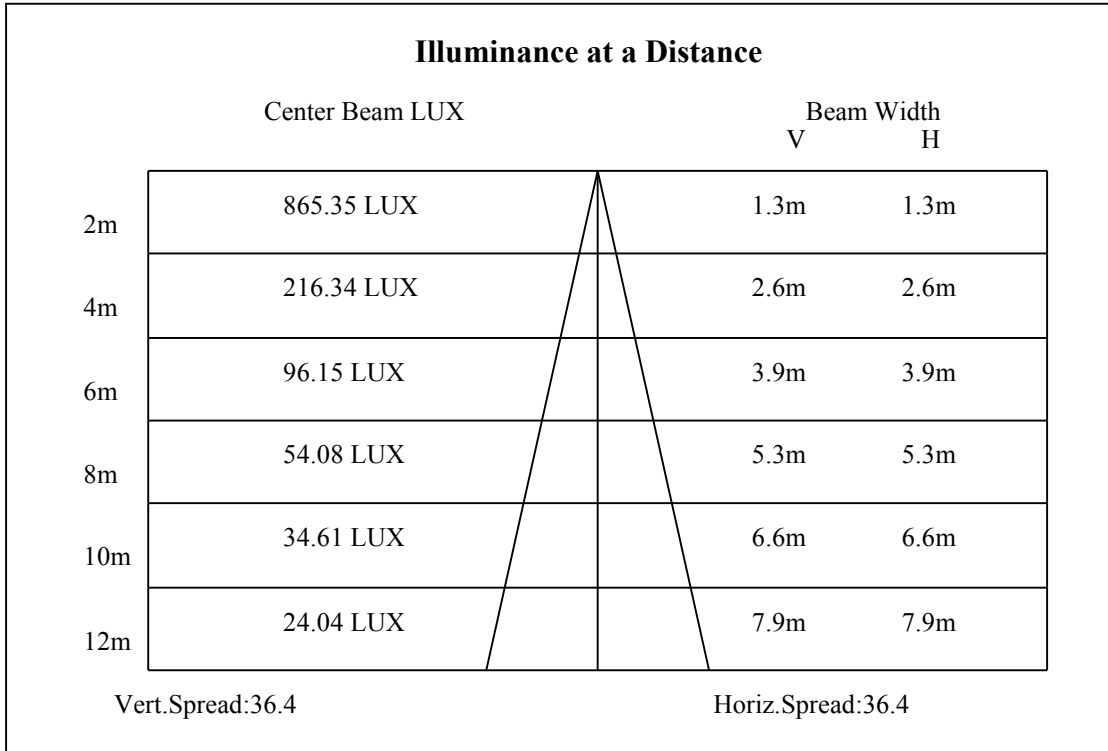
C90/C270: —————

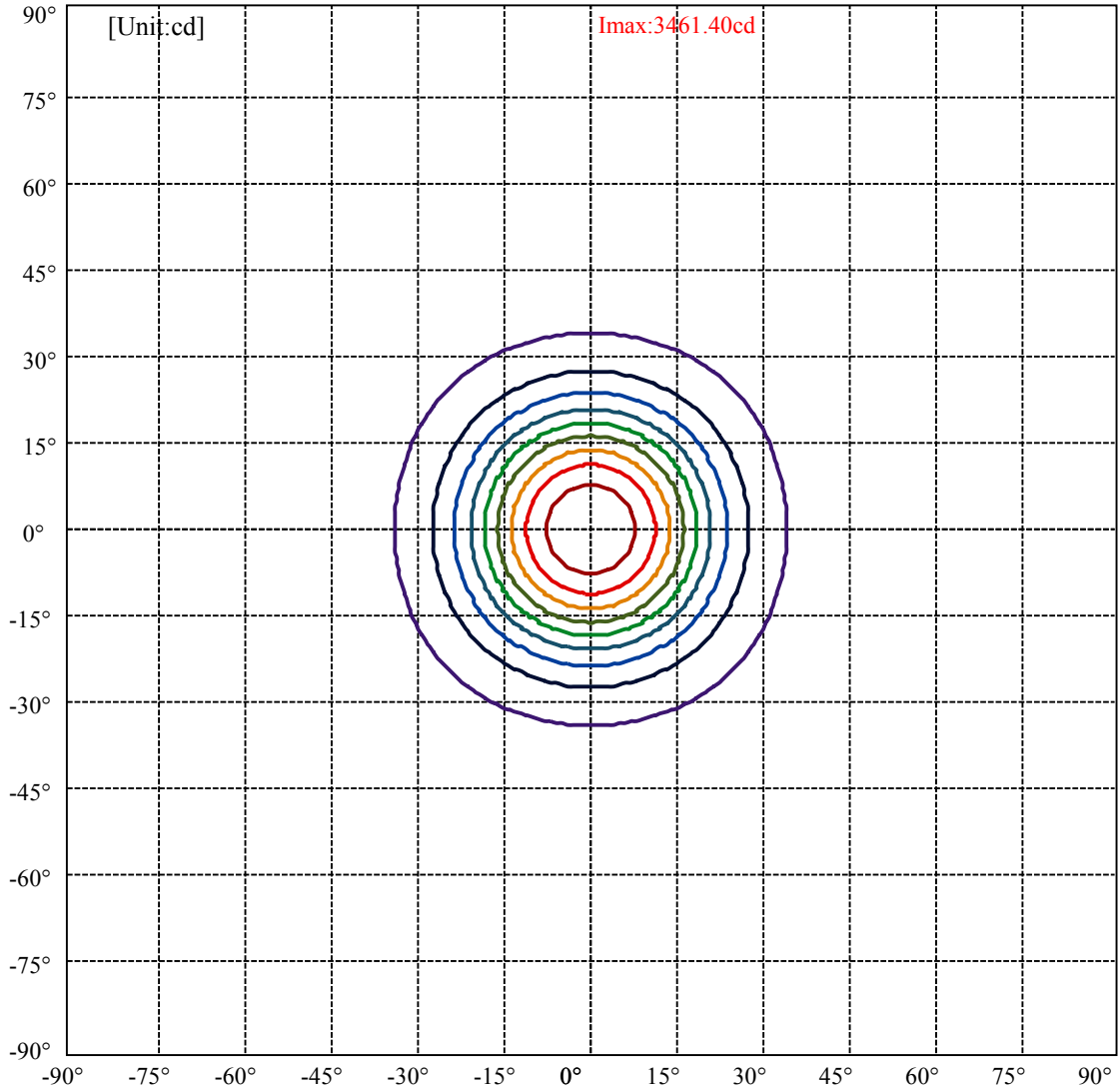
Field angle(10%Imax):C0/180Left:33.7 Right:33.7

:C90/270Left:33.7 Right:33.7

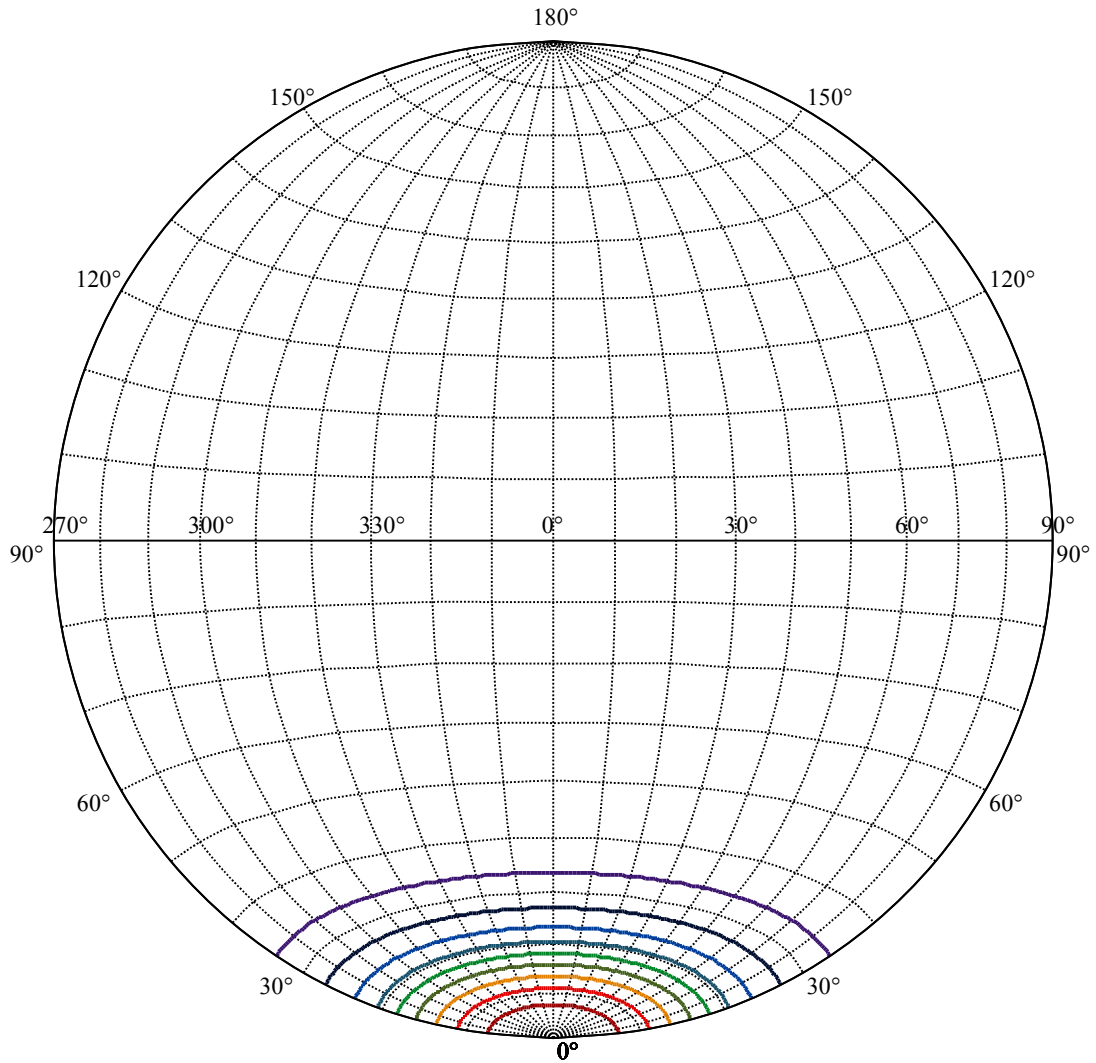
Beam Angle(50%Imax):C0/180Left:18.2 Right:18.2

:C90/270Left:18.2 Right:18.2





(10%Imax) 346.14	—
(20%Imax) 692.279	—
(30%Imax) 1038.42	—
(40%Imax) 1384.56	—
(50%Imax) 1730.7	—
(60%Imax) 2076.84	—
(70%Imax) 2422.98	—
(80%Imax) 2769.12	—
(90%Imax) 3115.26	—



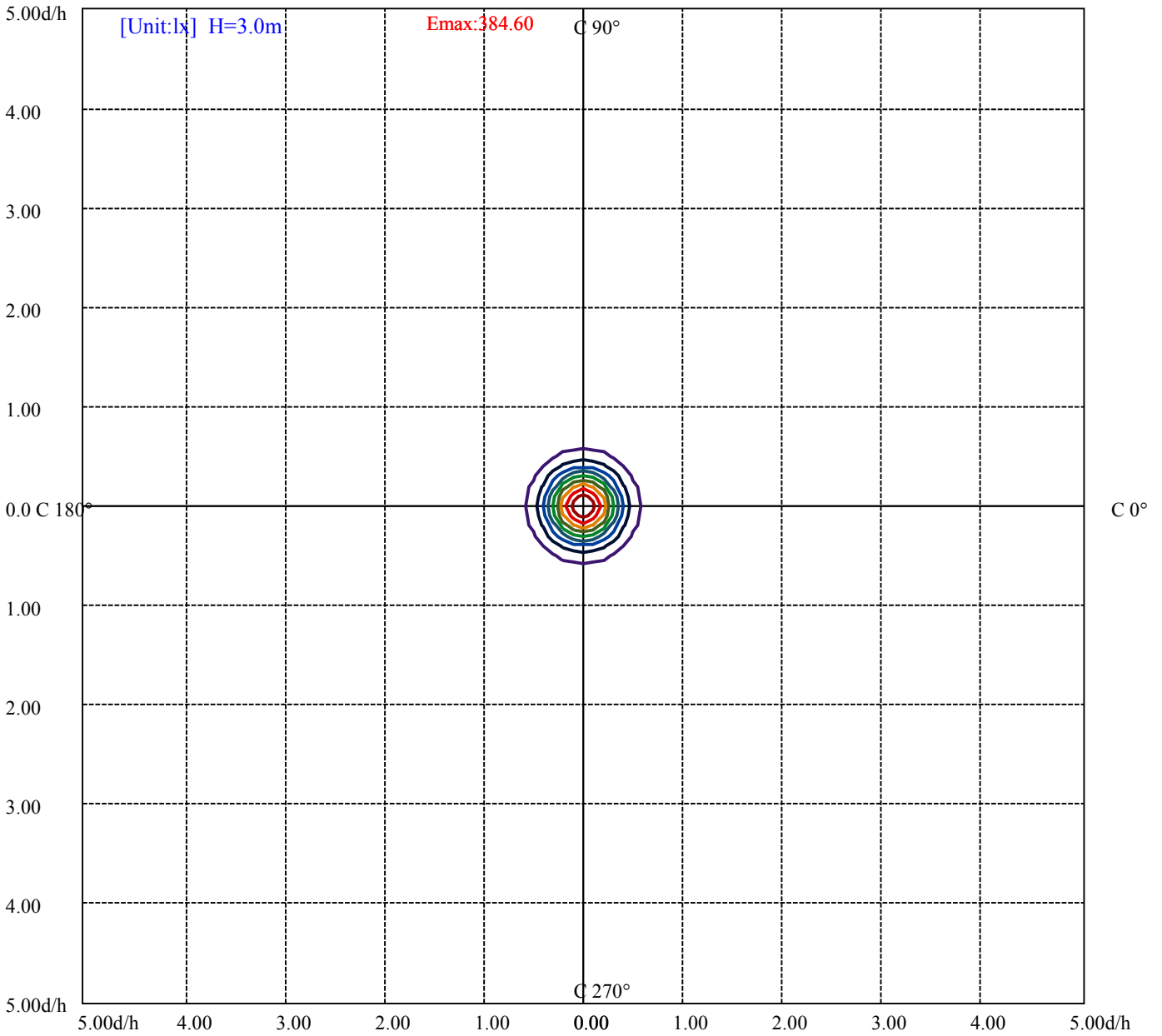
House

[Unit:cd]

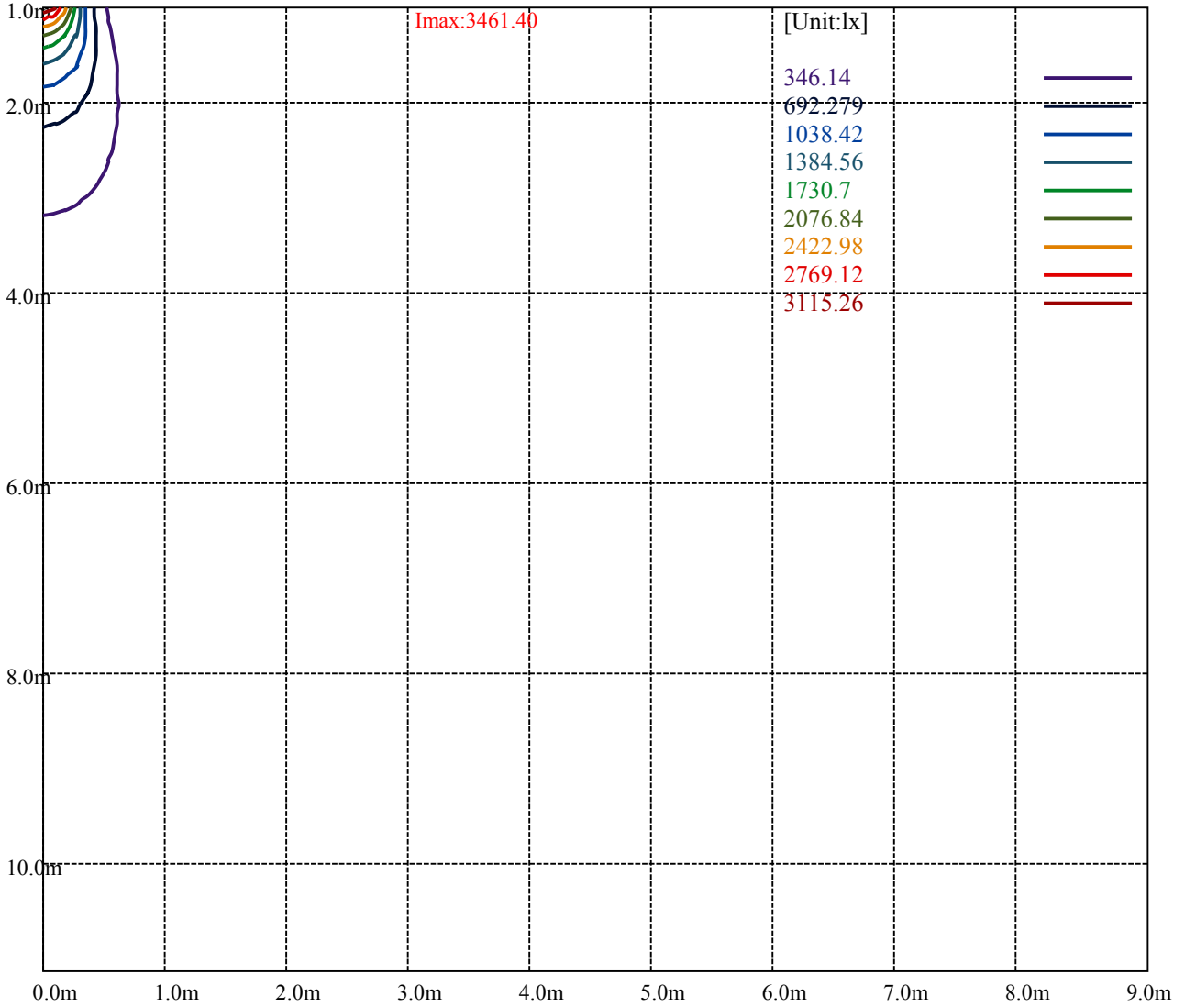
Road

Imax:3461.40

(10%Imax)	346.14	—
(20%Imax)	692.279	—
(30%Imax)	1038.42	—
(40%Imax)	1384.56	—
(50%Imax)	1730.7	—
(60%Imax)	2076.84	—
(70%Imax)	2422.98	—
(80%Imax)	2769.12	—
(90%Imax)	3115.26	—



(10%Emax) 38.45989	—
(20%Emax) 76.91978	—
(30%Emax) 115.38	—
(40%Emax) 153.84	—
(50%Emax) 192.3	—
(60%Emax) 230.76	—
(70%Emax) 269.2189	—
(80%Emax) 307.6789	—
(90%Emax) 346.1389	—



Luminance Table

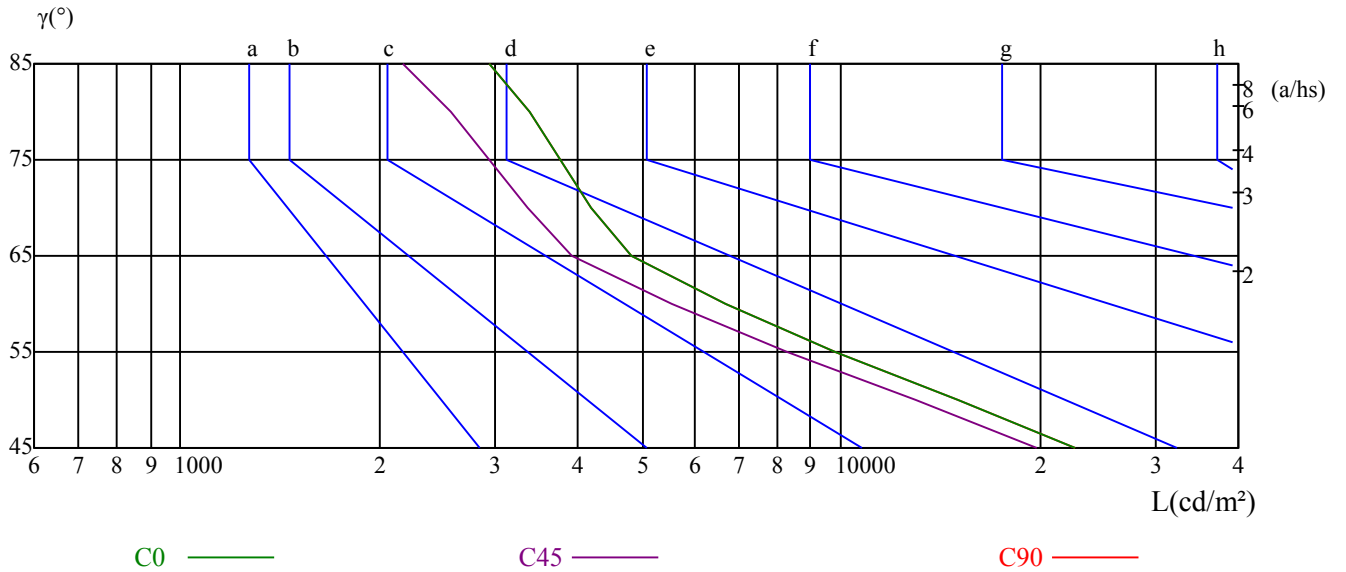
γ	45	50	55	60	65	70	75	80	85
C0	22693	15066	9783	6678	4802	4193	3757	3367	2939
C45	19806	12958	8285	5562	3927	3360	2941	2565	2166
C90	22693	15066	9783	6678	4802	4193	3757	3367	2939

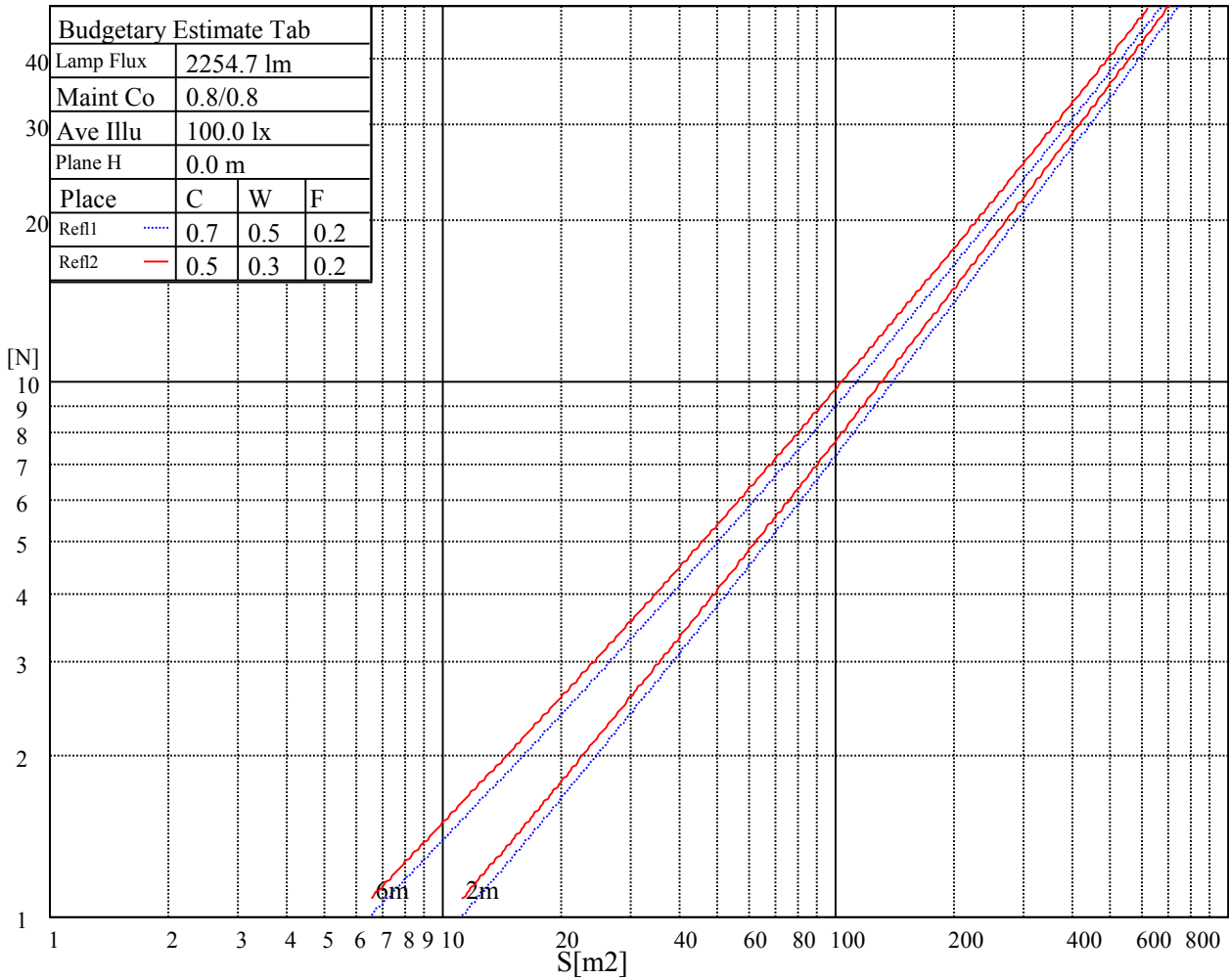
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
10392	10392	10392	11369	11369	11369	21175	21175	21175

Glare Table

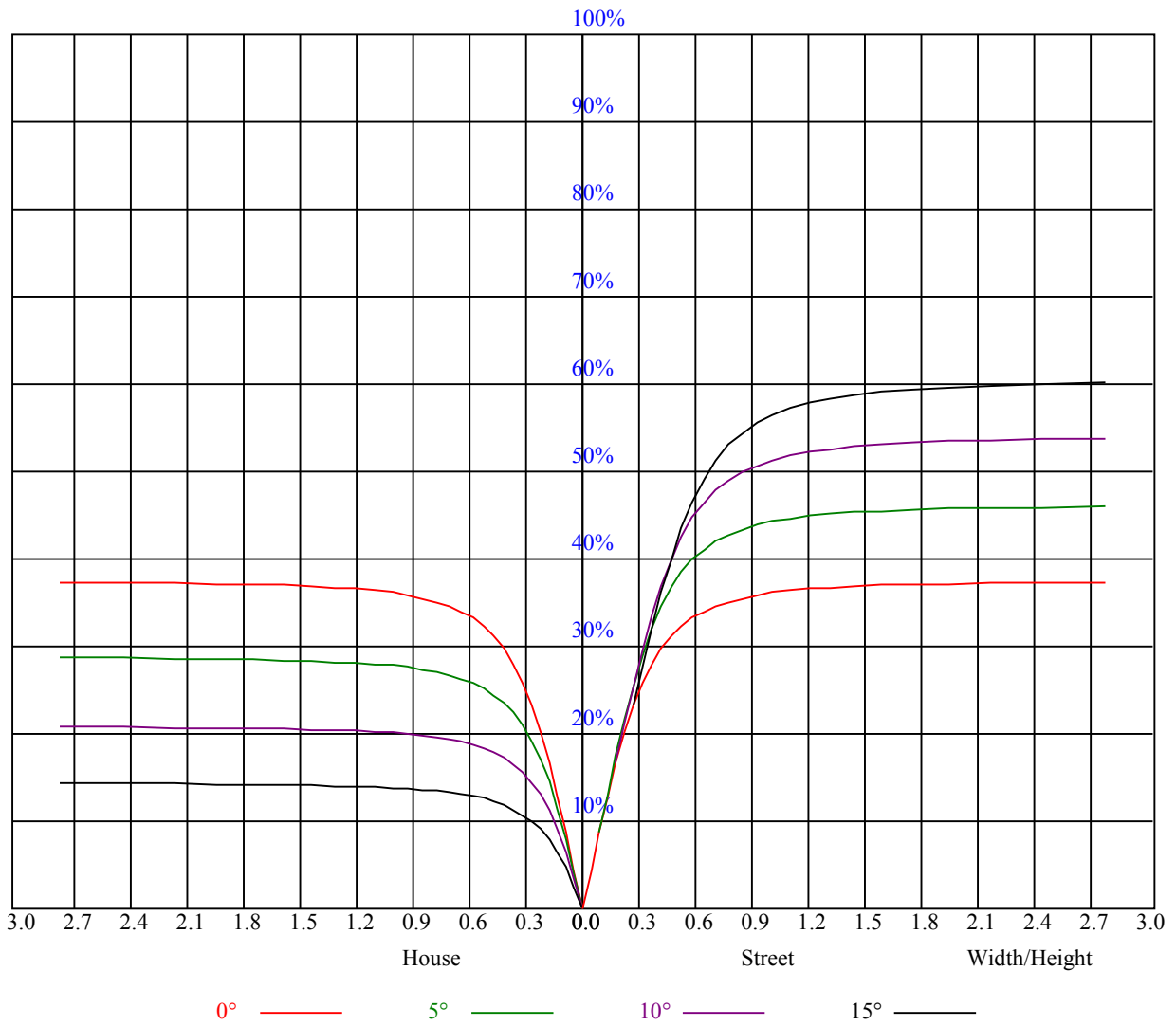
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	0.90	0.90	0.90	0.88	0.88	0.88	0.84	0.84	0.84	0.81	0.81	0.81	0.78	0.78	0.78	0.76
1	0.83	0.81	0.79	0.82	0.80	0.78	0.79	0.77	0.76	0.76	0.75	0.73	0.73	0.72	0.71	0.70
2	0.78	0.75	0.73	0.77	0.74	0.72	0.75	0.72	0.70	0.72	0.70	0.69	0.70	0.69	0.67	0.66
3	0.74	0.70	0.67	0.73	0.69	0.67	0.71	0.68	0.66	0.69	0.67	0.65	0.67	0.65	0.64	0.63
4	0.70	0.66	0.63	0.69	0.65	0.63	0.67	0.64	0.62	0.66	0.63	0.61	0.65	0.62	0.61	0.59
5	0.66	0.62	0.59	0.66	0.62	0.59	0.64	0.61	0.59	0.63	0.60	0.58	0.62	0.60	0.58	0.57
6	0.63	0.59	0.56	0.63	0.59	0.56	0.62	0.58	0.56	0.61	0.58	0.55	0.60	0.57	0.55	0.54
7	0.61	0.57	0.54	0.60	0.56	0.54	0.59	0.56	0.53	0.58	0.55	0.53	0.58	0.55	0.53	0.52
8	0.58	0.54	0.51	0.58	0.54	0.51	0.57	0.53	0.51	0.56	0.53	0.51	0.55	0.53	0.51	0.50
9	0.56	0.52	0.49	0.55	0.52	0.49	0.55	0.51	0.49	0.54	0.51	0.49	0.54	0.51	0.49	0.48
10	0.54	0.50	0.47	0.53	0.50	0.47	0.53	0.50	0.47	0.52	0.49	0.47	0.52	0.49	0.47	0.46



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	3460.85	3378.81	3060.03	2419.18	1656.65	964.04	545.06	317.68	211.31
45.0	3464.15	3287.42	2786.95	2096.55	1324.11	711.88	433.84	279.14	174.75
90.0	3444.33	3180.06	2623.44	1824.02	1076.85	627.20	366.57	242.85	156.75
135.0	3476.26	3303.38	2799.07	2100.40	1339.52	733.90	447.06	282.44	176.57
180.0	3460.85	3255.48	2793.56	2064.62	1082.63	751.91	435.72	270.05	173.87
225.0	3464.15	3380.46	3046.27	2391.65	1675.37	943.17	542.36	323.29	218.52
270.0	3444.33	3422.86	3170.15	2564.53	1851.55	1075.25	600.11	365.57	248.58
315.0	3476.26	3391.47	3054.53	2379.54	1614.25	930.34	523.26	296.97	206.68
360.0	3460.85	3378.81	3060.03	2419.18	1656.65	964.04	545.06	317.68	211.31
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	132.85	85.67	53.51	35.35	22.68	18.22	15.25	12.33	9.41
45.0	107.80	70.58	44.05	28.35	20.70	16.79	13.65	10.96	8.09
90.0	96.84	63.48	39.86	25.88	19.21	16.13	13.16	10.46	7.98
135.0	110.88	70.36	43.99	29.35	20.43	16.85	13.76	11.18	8.37
180.0	110.77	69.65	43.27	28.68	20.15	16.74	13.76	11.01	8.64
225.0	135.77	85.17	53.74	34.41	22.24	18.17	15.03	12.28	9.80
270.0	146.34	97.95	59.02	37.88	24.45	18.99	15.69	12.99	10.30
315.0	129.22	82.36	53.07	34.08	22.30	18.17	15.03	12.28	9.74
360.0	132.85	85.67	53.51	35.35	22.68	18.22	15.25	12.33	9.41
C/ γ (°)	90.0								
0.0	7.27								
45.0	7.21								
90.0	7.27								
135.0	7.27								
180.0	7.21								
225.0	7.43								
270.0	7.65								
315.0	7.49								
360.0	7.27								