



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: 3-2035-M	
Luminaire: 92.70.135.00	
Report No: NATA0100	Voltage(V): 33.7000
Test No: GC2018062702	Current(A): 0.5000
LampCAT: NICHIA NFCWJ120B-V3	Power (W): 16.8500
Lamp flux(lm): 2279.0	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 78	Width(mm): 78
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 2027.89
Efficiency(%): 88.98%
Lumens(lm)/Power(W): 120.35
Central intensity(cd): 3498.174
Maximum intensity(cd): 3498.174
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=43.0
 [C90/270]Total=43.0
Field angle(10%Imax): [C0/180]Total=74.1
 [C90/270]Total=74.1
Maximum s/h(1/2): C0_180=0.69 C90_270=0.69
Maximum s/h(1/4): C0_180=0.71 C90_270=0.71
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 89.81%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.780%

Equipment: GMS1980
Temperature(°C): 25.0

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

Operator: NT07
Distance(m): 7.42

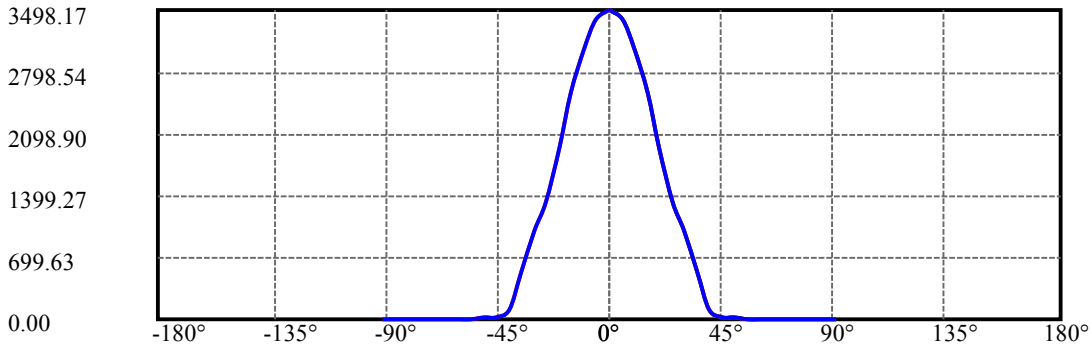
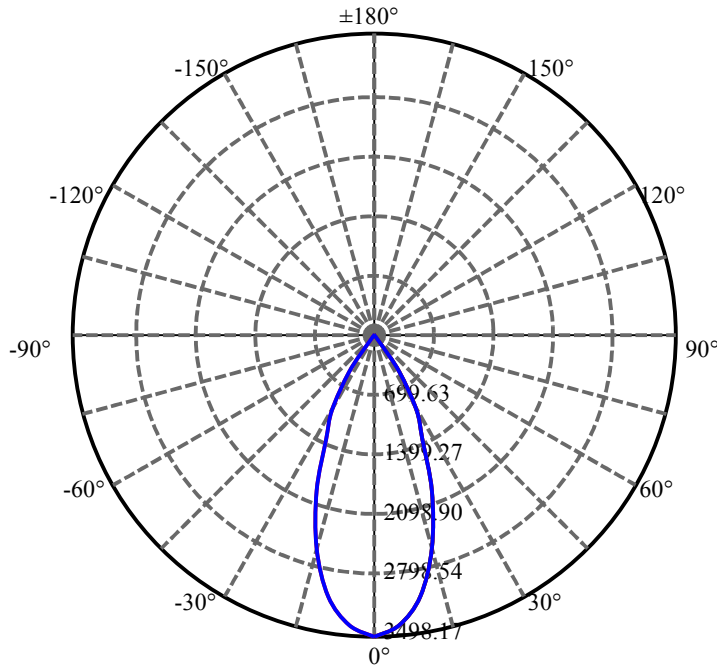
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3498.174	20.920	20.92	.918%	1.032%
5.0	3387.620	161.838	182.758	7.101%	9.012%
10.0	3070.716	292.280	475.038	12.825%	23.425%
15.0	2557.094	362.771	837.809	15.918%	41.314%
20.0	1929.176	361.670	1199.479	15.870%	59.149%
25.0	1327.740	307.575	1507.054	13.496%	74.316%
30.0	1000.265	274.141	1781.195	12.029%	87.835%
35.0	514.832	161.863	1943.058	7.102%	95.817%
40.0	110.663	38.991	1982.048	1.711%	97.739%
45.0	13.929	5.399	1987.447	.237%	98.006%
50.0	11.121	4.670	1992.117	.205%	98.236%
55.0	10.351	4.648	1996.765	.204%	98.465%
60.0	9.855	4.678	2001.443	.205%	98.696%
65.0	9.525	4.732	2006.175	.208%	98.929%
70.0	9.249	4.764	2010.939	.209%	99.164%
75.0	9.084	4.810	2015.749	.211%	99.401%
80.0	8.974	4.844	2020.593	.213%	99.640%
85.0	8.919	4.870	2025.463	.214%	99.880%
90.0	8.864	2.429	2027.893	.107%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1781.20	78.16%	87.83%
0-40	1982.05	86.97%	97.74%
0-60	2001.44	87.82%	98.70%
0-90	2025.46	88.88%	99.88%
0-120	2025.46	88.88%	99.88%
0-180	2027.89	88.98%	100.00%
60-90	28.70	1.26%	1.42%
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%
0-27.10	1622.31	71.19%	80.00%

ZONAL LUMEN SUMMARY

0-10	475.04
10-20	724.44
20-30	581.72
30-40	200.85
40-50	10.07
50-60	9.33
60-70	9.50
70-80	9.65
80-90	4.87
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: —————

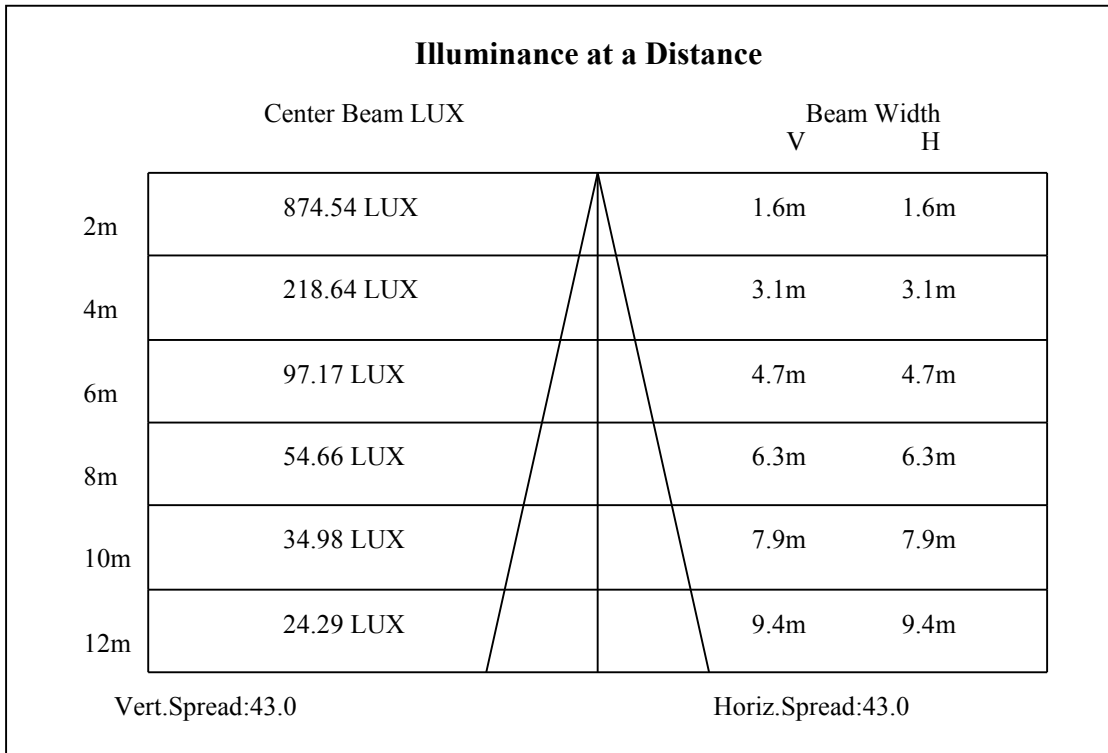
C90/C270: —————

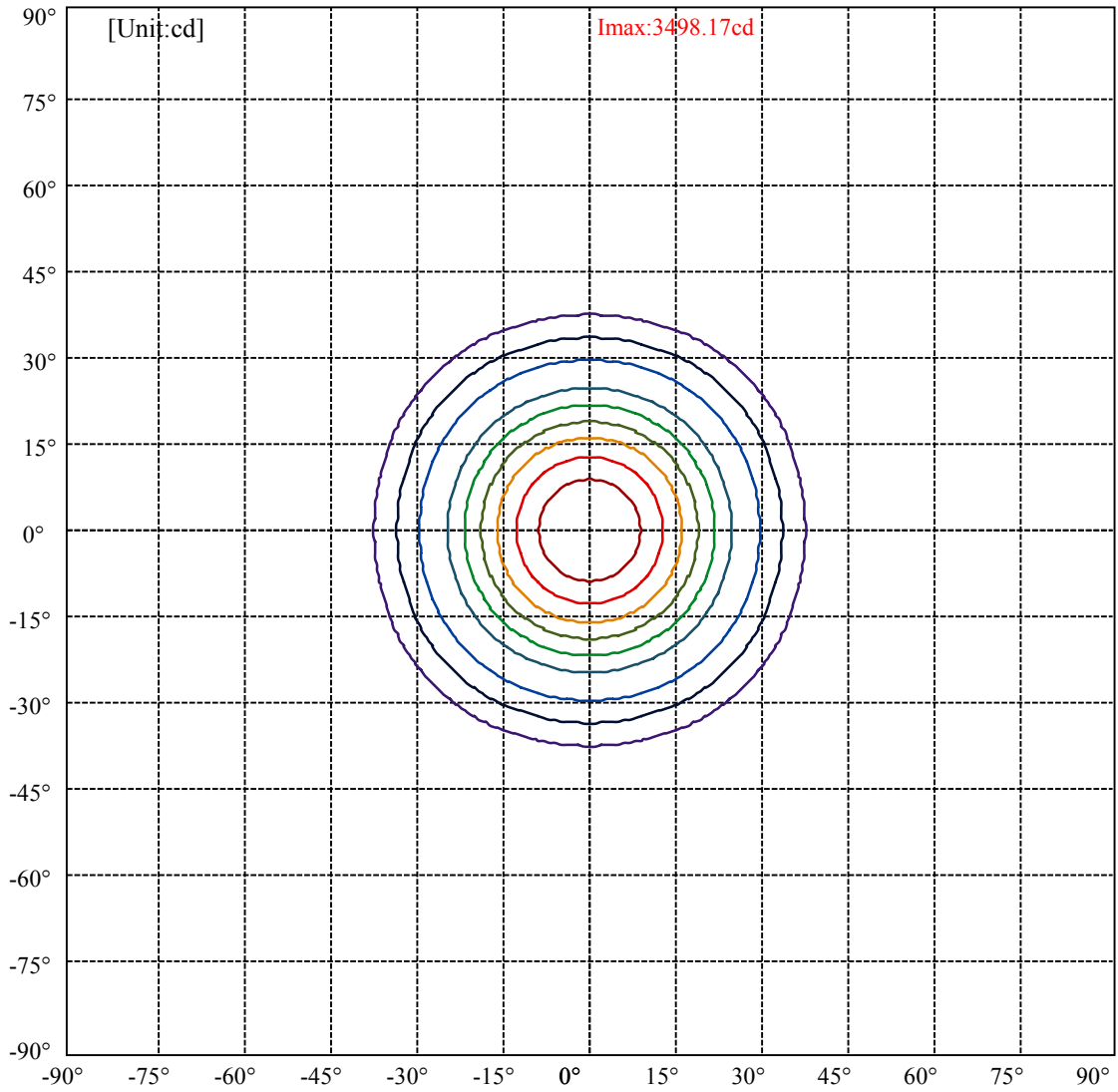
Field angle(10%Imax):C0/180Left:37.0 Right:37.0

:C90/270Left:37.0 Right:37.0

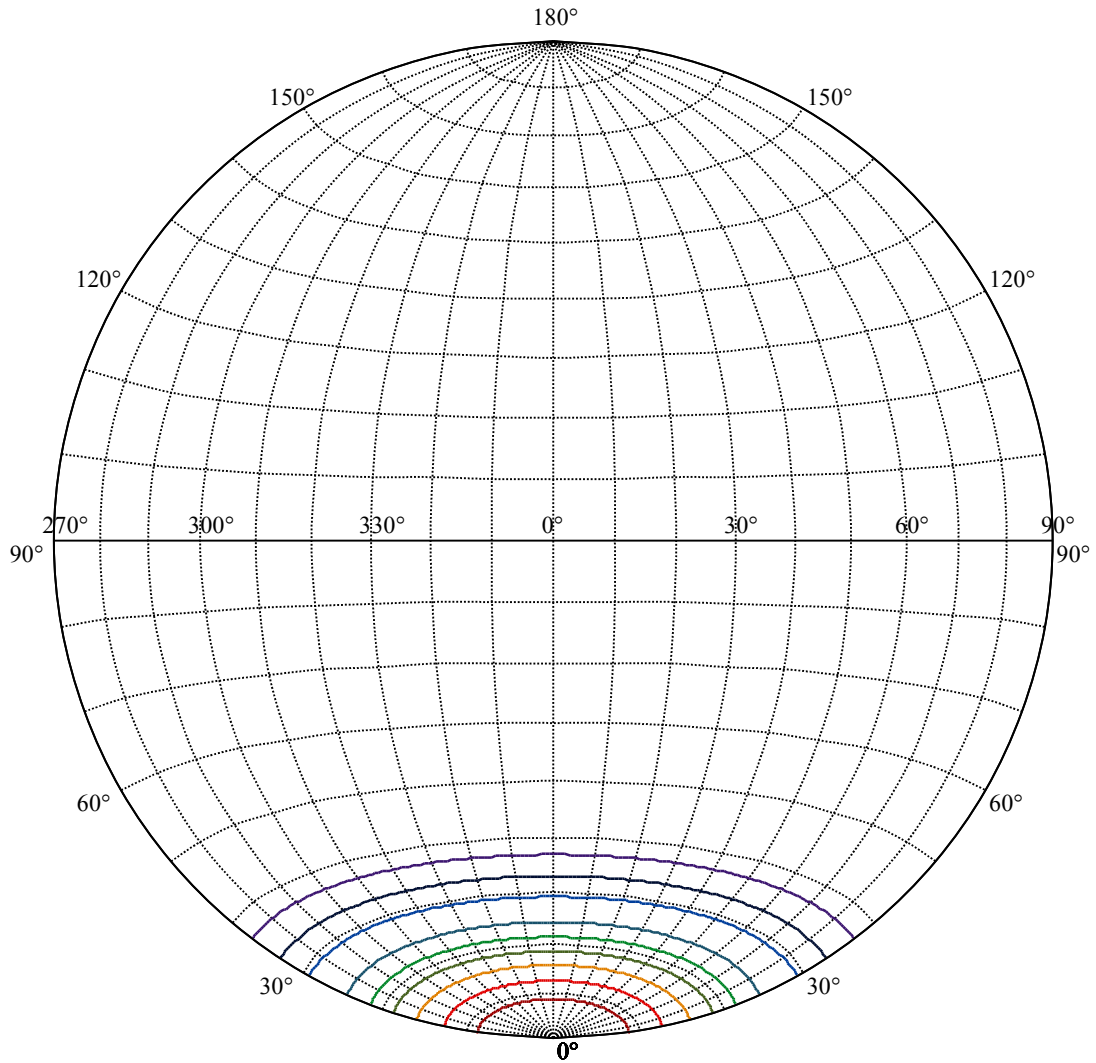
Beam Angle(50%Imax):C0/180Left:21.5 Right:21.5

:C90/270Left:21.5 Right:21.5





(10%Imax) 349.817	—
(20%Imax) 699.635	—
(30%Imax) 1049.45	—
(40%Imax) 1399.27	—
(50%Imax) 1749.09	—
(60%Imax) 2098.9	—
(70%Imax) 2448.72	—
(80%Imax) 2798.54	—
(90%Imax) 3148.36	—



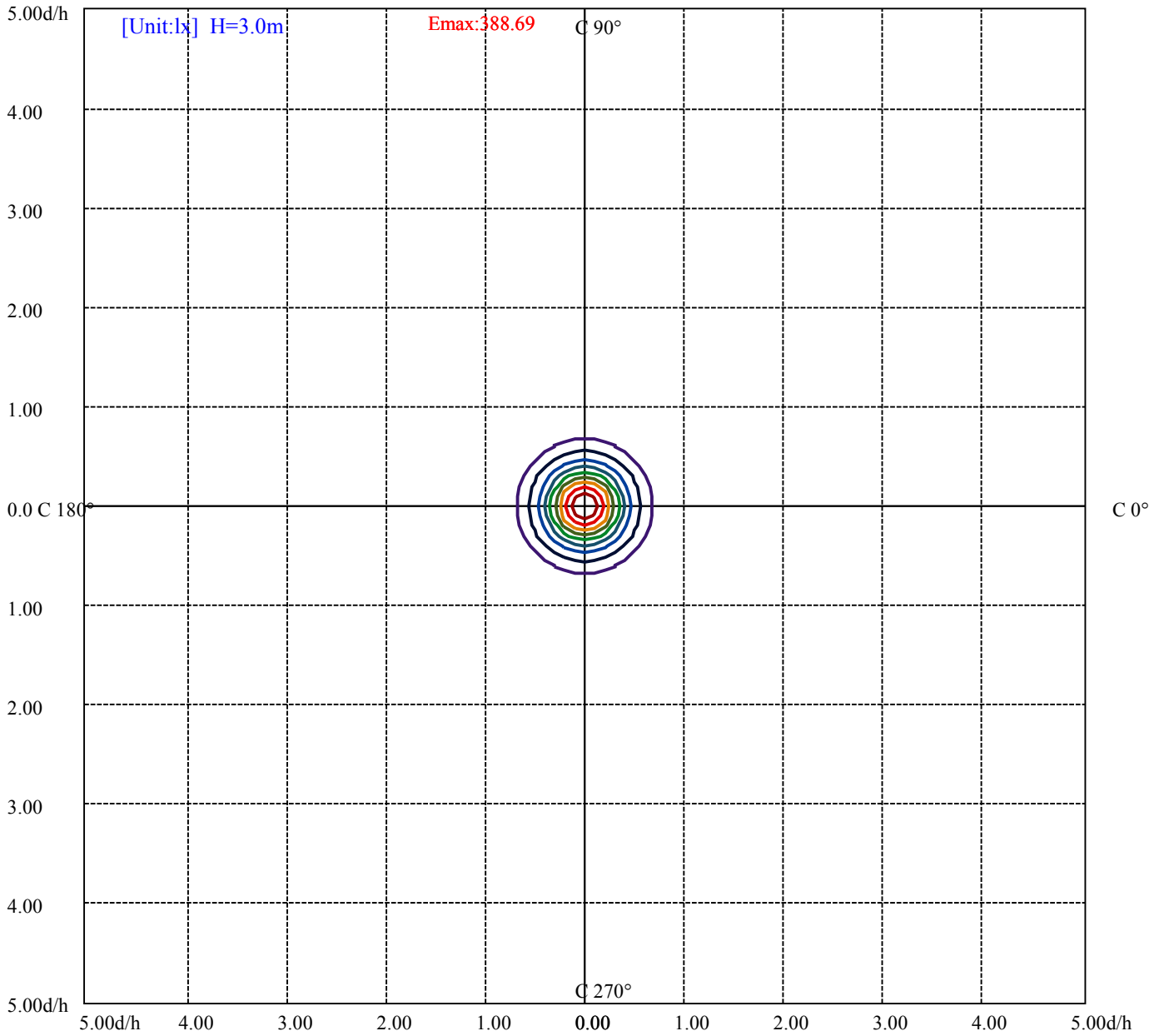
House

[Unit:cd]

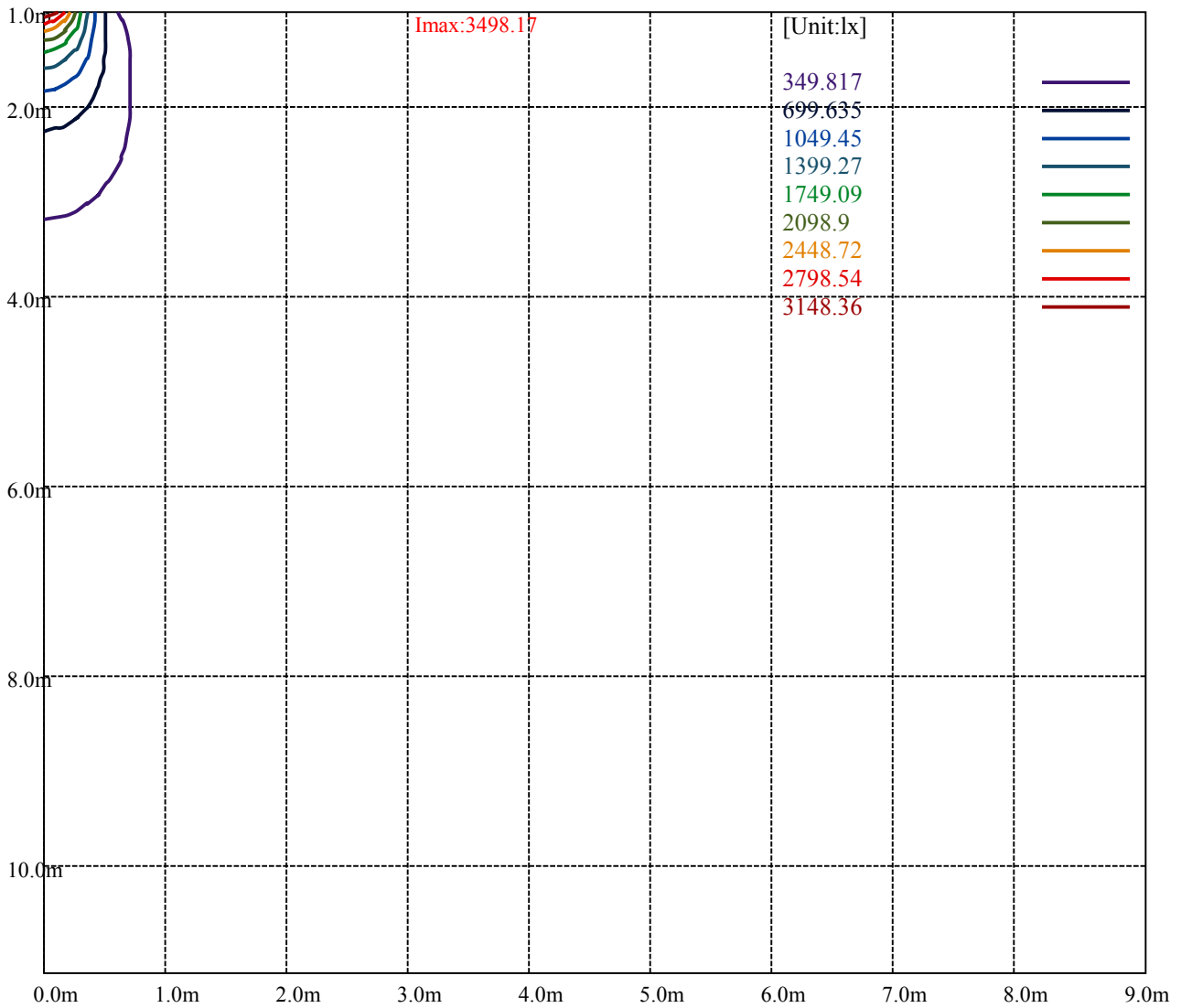
Road

Imax:3498.17

(10%Imax) 349.817	—
(20%Imax) 699.635	—
(30%Imax) 1049.45	—
(40%Imax) 1399.27	—
(50%Imax) 1749.09	—
(60%Imax) 2098.9	—
(70%Imax) 2448.72	—
(80%Imax) 2798.54	—
(90%Imax) 3148.36	—



(10%Emax) 38.86855	—
(20%Emax) 77.73711	—
(30%Emax) 116.6056	—
(40%Emax) 155.4744	—
(50%Emax) 194.3433	—
(60%Emax) 233.2111	—
(70%Emax) 272.08	—
(80%Emax) 310.9489	—
(90%Emax) 349.8167	—



Luminance Table

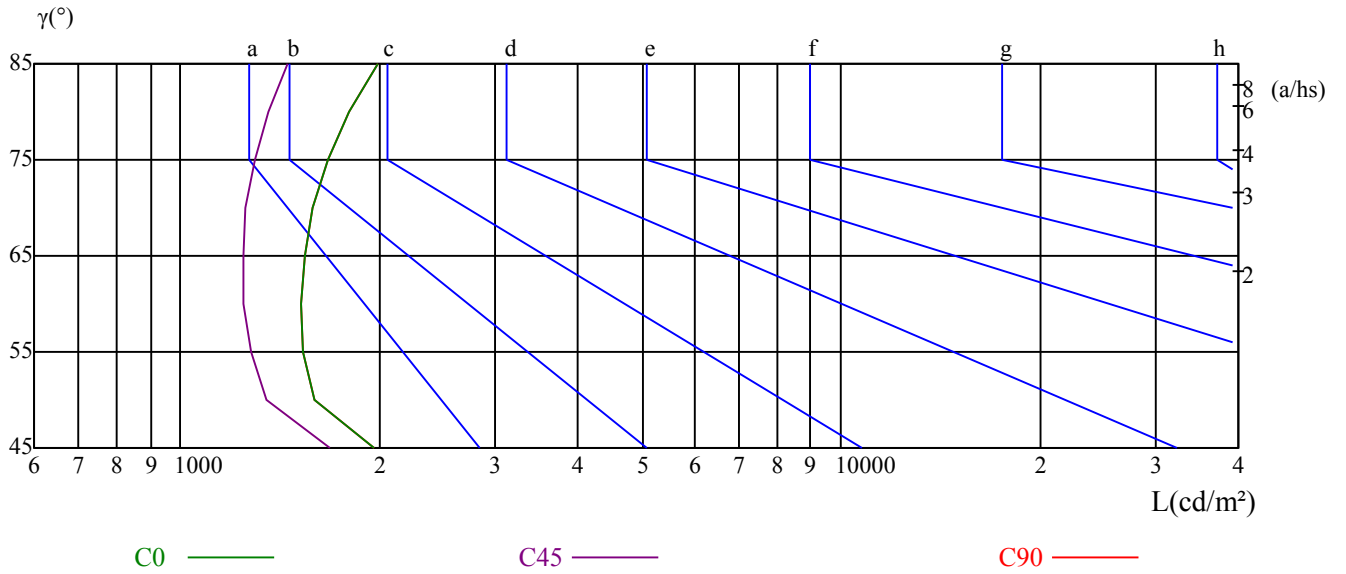
γ	45	50	55	60	65	70	75	80	85
C0	1958	1598	1534	1519	1542	1590	1677	1804	1985
C45	1682	1353	1278	1245	1242	1255	1296	1360	1454
C90	1958	1598	1534	1519	1542	1590	1677	1804	1985

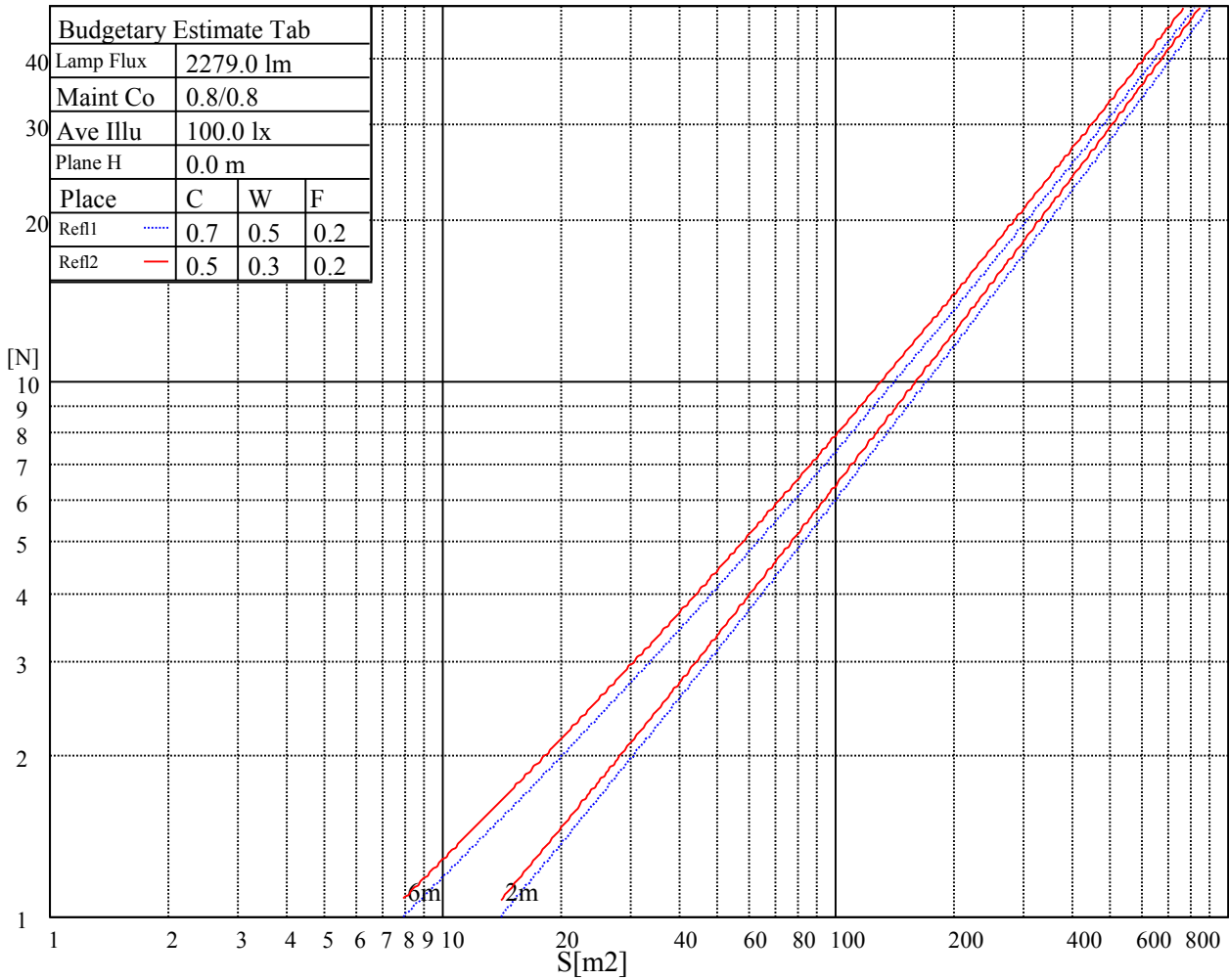
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3704	3704	3704	5769	5769	5769	16820	16820	16820

Glare Table

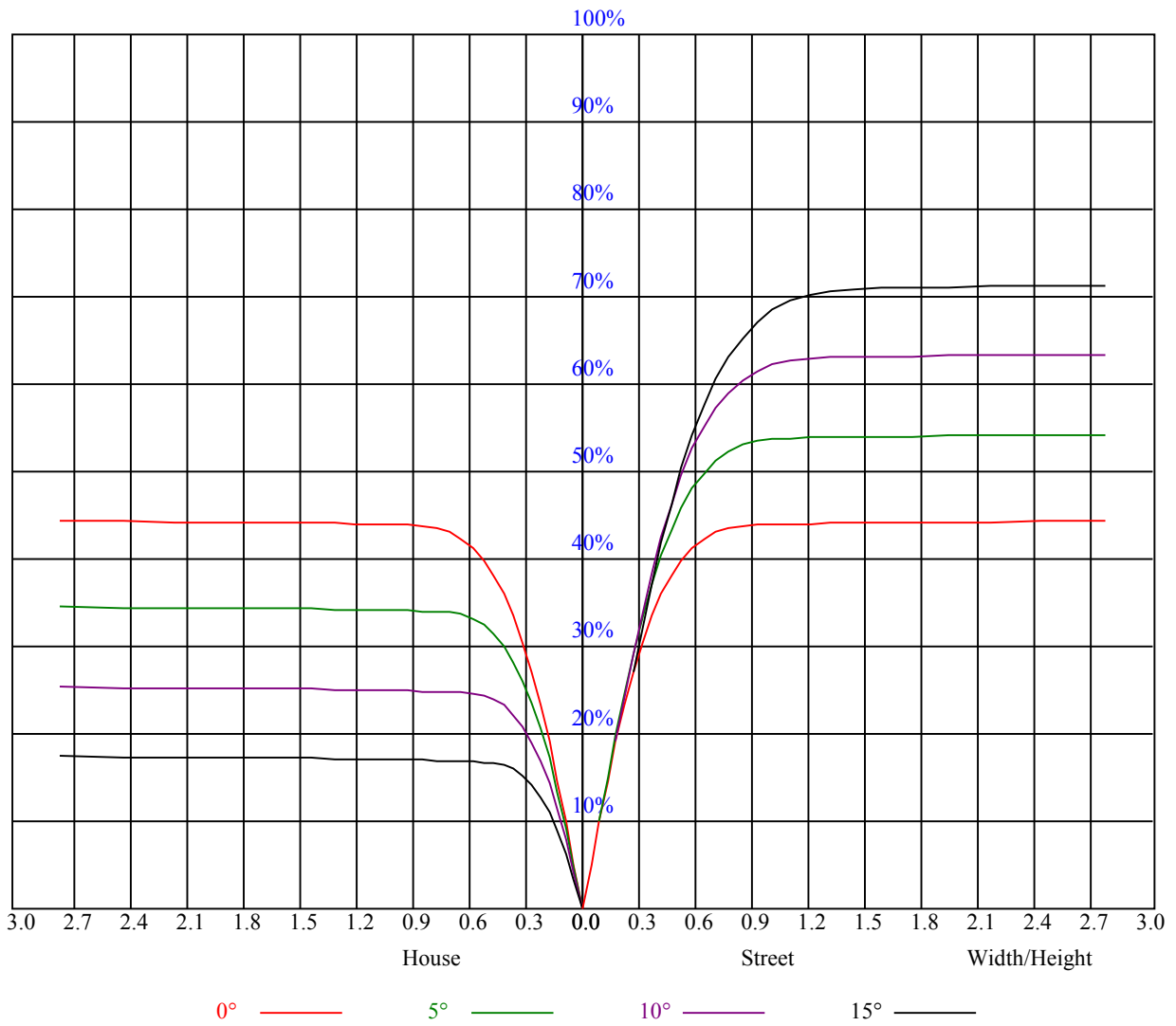
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.07	1.07	1.07	1.04	1.04	1.04	1.00	1.00	1.00	0.96	0.96	0.96	0.92	0.92	0.92	0.90
1	0.99	0.97	0.95	0.97	0.95	0.93	0.94	0.92	0.90	0.90	0.89	0.88	0.87	0.86	0.85	0.84
2	0.93	0.90	0.87	0.92	0.89	0.86	0.89	0.86	0.84	0.86	0.84	0.82	0.84	0.82	0.81	0.79
3	0.88	0.84	0.81	0.87	0.83	0.80	0.85	0.82	0.79	0.83	0.80	0.78	0.81	0.79	0.77	0.75
4	0.84	0.79	0.76	0.83	0.79	0.76	0.81	0.78	0.75	0.79	0.76	0.74	0.78	0.75	0.73	0.72
5	0.80	0.75	0.72	0.79	0.75	0.72	0.78	0.74	0.71	0.76	0.73	0.70	0.75	0.72	0.70	0.69
6	0.76	0.72	0.68	0.76	0.71	0.68	0.74	0.70	0.68	0.73	0.70	0.67	0.72	0.69	0.67	0.66
7	0.73	0.68	0.65	0.72	0.68	0.65	0.71	0.67	0.64	0.70	0.67	0.64	0.69	0.66	0.64	0.63
8	0.70	0.65	0.62	0.69	0.65	0.62	0.68	0.64	0.62	0.68	0.64	0.61	0.67	0.64	0.61	0.60
9	0.67	0.62	0.59	0.67	0.62	0.59	0.66	0.62	0.59	0.65	0.61	0.59	0.64	0.61	0.59	0.58
10	0.64	0.60	0.57	0.64	0.60	0.57	0.63	0.59	0.57	0.63	0.59	0.57	0.62	0.59	0.56	0.55



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	3498.17	3387.62	3070.72	2557.09	1929.18	1327.74	1000.26	514.83	110.66
45.0	3498.17	3387.62	3070.72	2557.09	1929.18	1327.74	1000.26	514.83	110.66
90.0	3498.17	3387.62	3070.72	2557.09	1929.18	1327.74	1000.26	514.83	110.66
135.0	3498.17	3387.62	3070.72	2557.09	1929.18	1327.74	1000.26	514.83	110.66
180.0	3498.17	3387.62	3070.72	2557.09	1929.18	1327.74	1000.26	514.83	110.66
225.0	3498.17	3387.62	3070.72	2557.09	1929.18	1327.74	1000.26	514.83	110.66
270.0	3498.17	3387.62	3070.72	2557.09	1929.18	1327.74	1000.26	514.83	110.66
315.0	3498.17	3387.62	3070.72	2557.09	1929.18	1327.74	1000.26	514.83	110.66
360.0	3498.17	3387.62	3070.72	2557.09	1929.18	1327.74	1000.26	514.83	110.66

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	13.93	11.12	10.35	9.86	9.52	9.25	9.08	8.97	8.92
45.0	13.93	11.12	10.35	9.86	9.52	9.25	9.08	8.97	8.92
90.0	13.93	11.12	10.35	9.86	9.52	9.25	9.08	8.97	8.92
135.0	13.93	11.12	10.35	9.86	9.52	9.25	9.08	8.97	8.92
180.0	13.93	11.12	10.35	9.86	9.52	9.25	9.08	8.97	8.92
225.0	13.93	11.12	10.35	9.86	9.52	9.25	9.08	8.97	8.92
270.0	13.93	11.12	10.35	9.86	9.52	9.25	9.08	8.97	8.92
315.0	13.93	11.12	10.35	9.86	9.52	9.25	9.08	8.97	8.92
360.0	13.93	11.12	10.35	9.86	9.52	9.25	9.08	8.97	8.92

C/γ(°)	90.0
0.0	8.86
45.0	8.86
90.0	8.86
135.0	8.86
180.0	8.86
225.0	8.86
270.0	8.86
315.0	8.86
360.0	8.86