



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: 2-1676-M
Luminaire: 92.70.135.00
Report No: NATA0100
Test No: GC2018062706
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): 2064.38
Efficiency(%): 90.58%
Lumens(lm)/Power(W): 123.99
Central intensity(cd): 4484.895
Maximum intensity(cd): 4484.895
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=36.3
 [C90/270]Total=36.3
Field angle(10%Imax): [C0/180]Total=71.2
 [C90/270]Total=71.2
Maximum s/h(1/2): C0_180=0.60 C90_270=0.60
Maximum s/h(1/4): C0_180=0.59 C90_270=0.59
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 91.67%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.554%

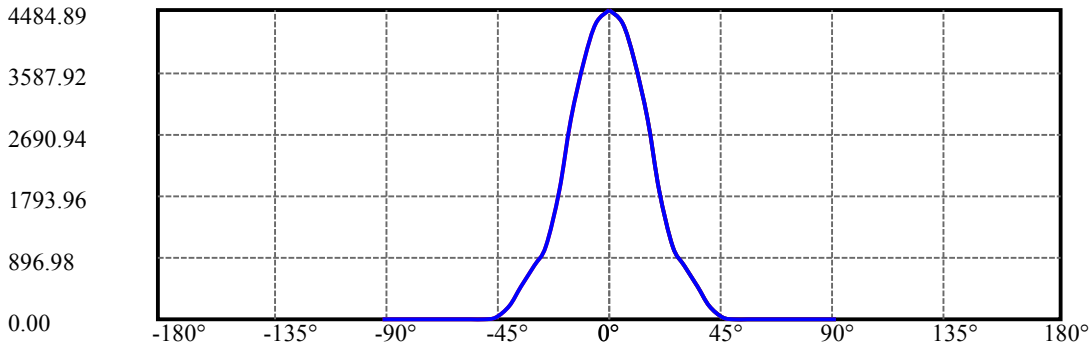
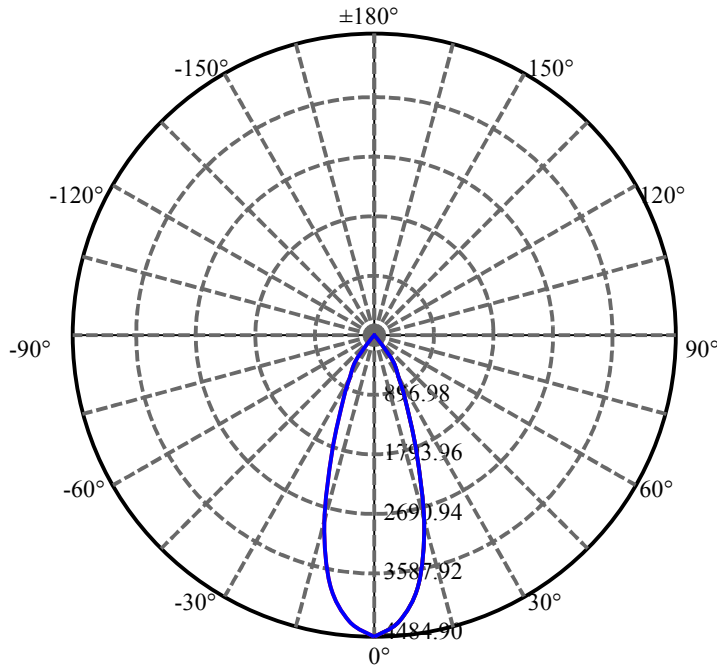
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	4484.894	26.821	26.821	1.177%	1.299%
5.0	4284.420	204.681	231.502	8.981%	11.214%
10.0	3763.105	358.184	589.685	15.717%	28.565%
15.0	2892.319	410.329	1000.014	18.005%	48.441%
20.0	1853.405	347.465	1347.479	15.246%	65.273%
25.0	1048.879	242.976	1590.455	10.662%	77.043%
30.0	771.175	211.355	1801.81	9.274%	87.281%
35.0	485.274	152.570	1954.38	6.695%	94.672%
40.0	181.239	63.857	2018.237	2.802%	97.765%
45.0	16.056	6.223	2024.46	.273%	98.066%
50.0	10.805	4.537	2028.997	.199%	98.286%
55.0	10.096	4.533	2033.53	.199%	98.506%
60.0	9.676	4.593	2038.123	.202%	98.728%
65.0	9.401	4.670	2042.793	.205%	98.954%
70.0	9.188	4.732	2047.526	.208%	99.184%
75.0	9.050	4.792	2052.317	.210%	99.416%
80.0	8.933	4.822	2057.139	.212%	99.649%
85.0	8.837	4.825	2061.964	.212%	99.883%
90.0	8.809	2.414	2064.379	.106%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1801.81	79.06%	87.28%
0-40	2018.24	88.56%	97.76%
0-60	2038.12	89.43%	98.73%
0-90	2061.96	90.48%	99.88%
0-120	2061.96	90.48%	99.88%
0-180	2064.38	90.58%	100.00%
60-90	28.43	1.25%	1.38%
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%
0-26.44	1651.50	72.47%	80.00%

ZONAL LUMEN SUMMARY

0-10	589.69
10-20	757.79
20-30	454.33
30-40	216.43
40-50	10.76
50-60	9.13
60-70	9.40
70-80	9.61
80-90	4.83
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



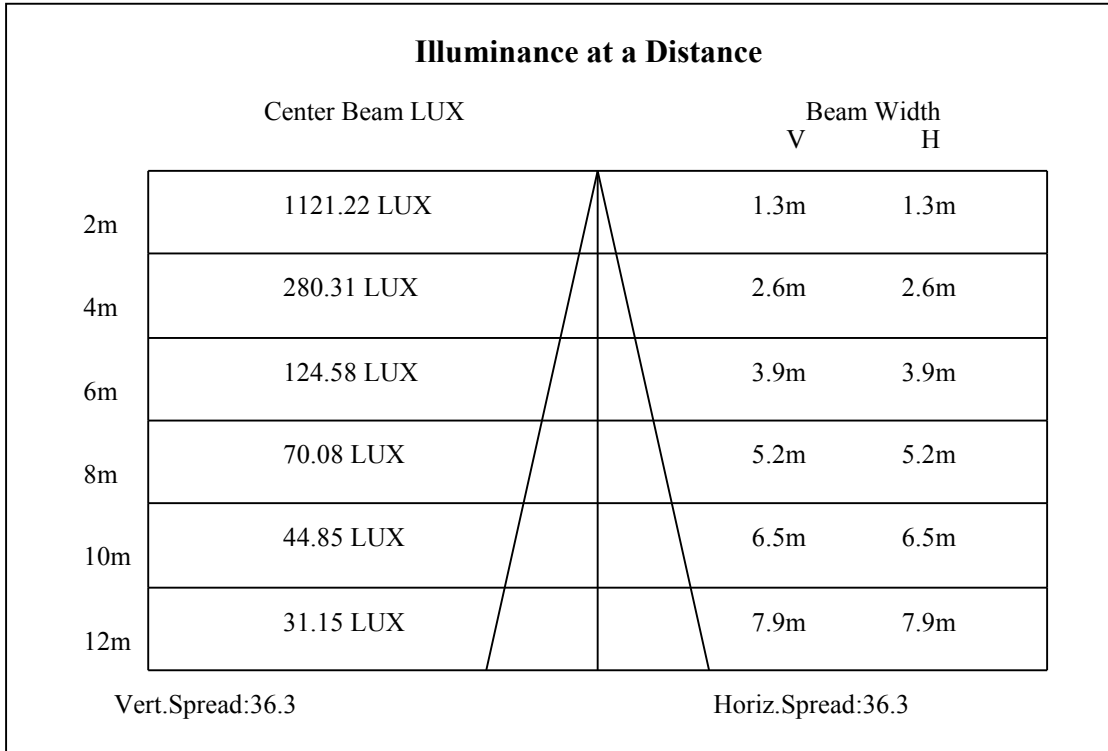
C0(Max): —————

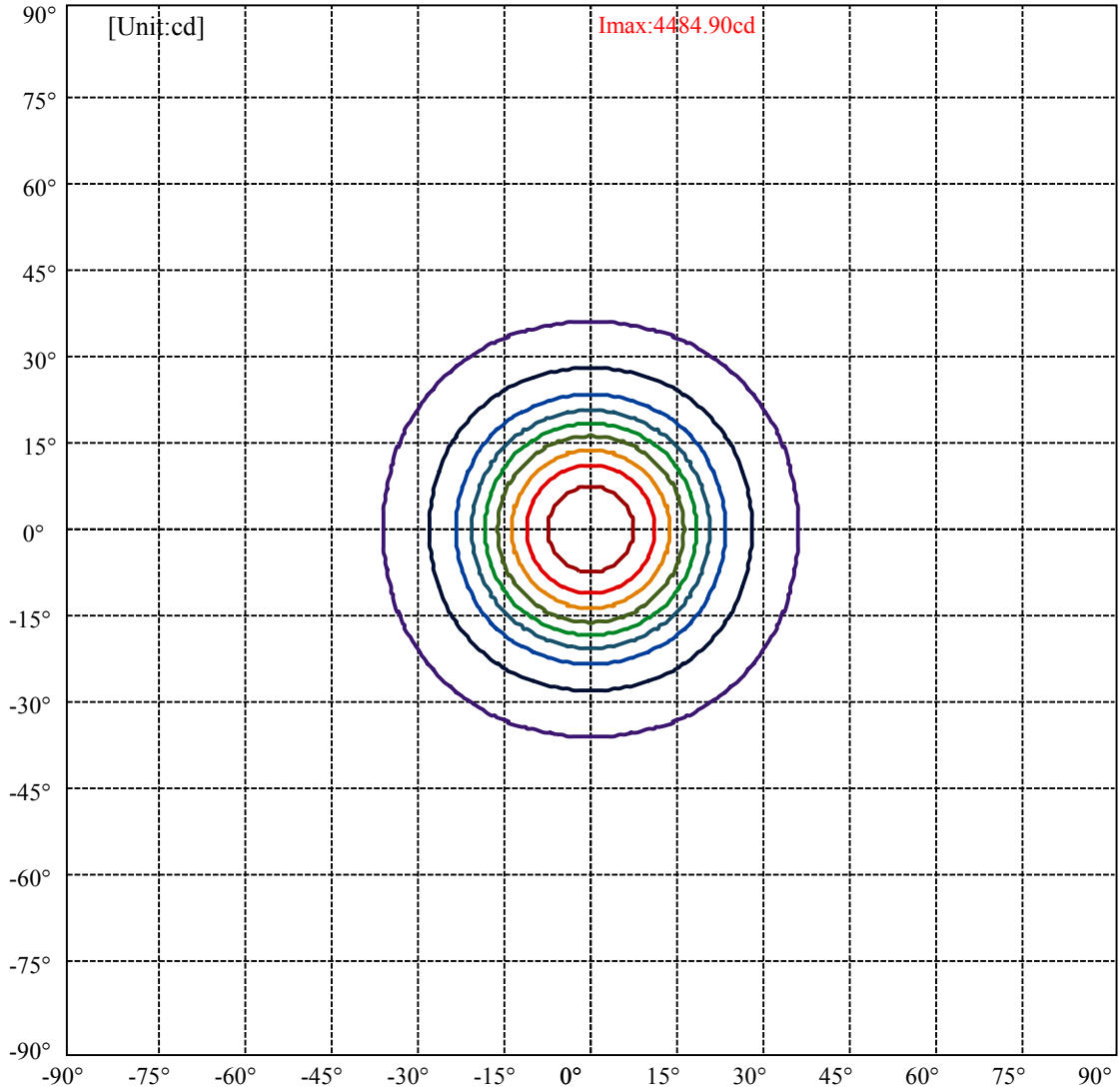
C0/C180: —————

C90/C270: —————

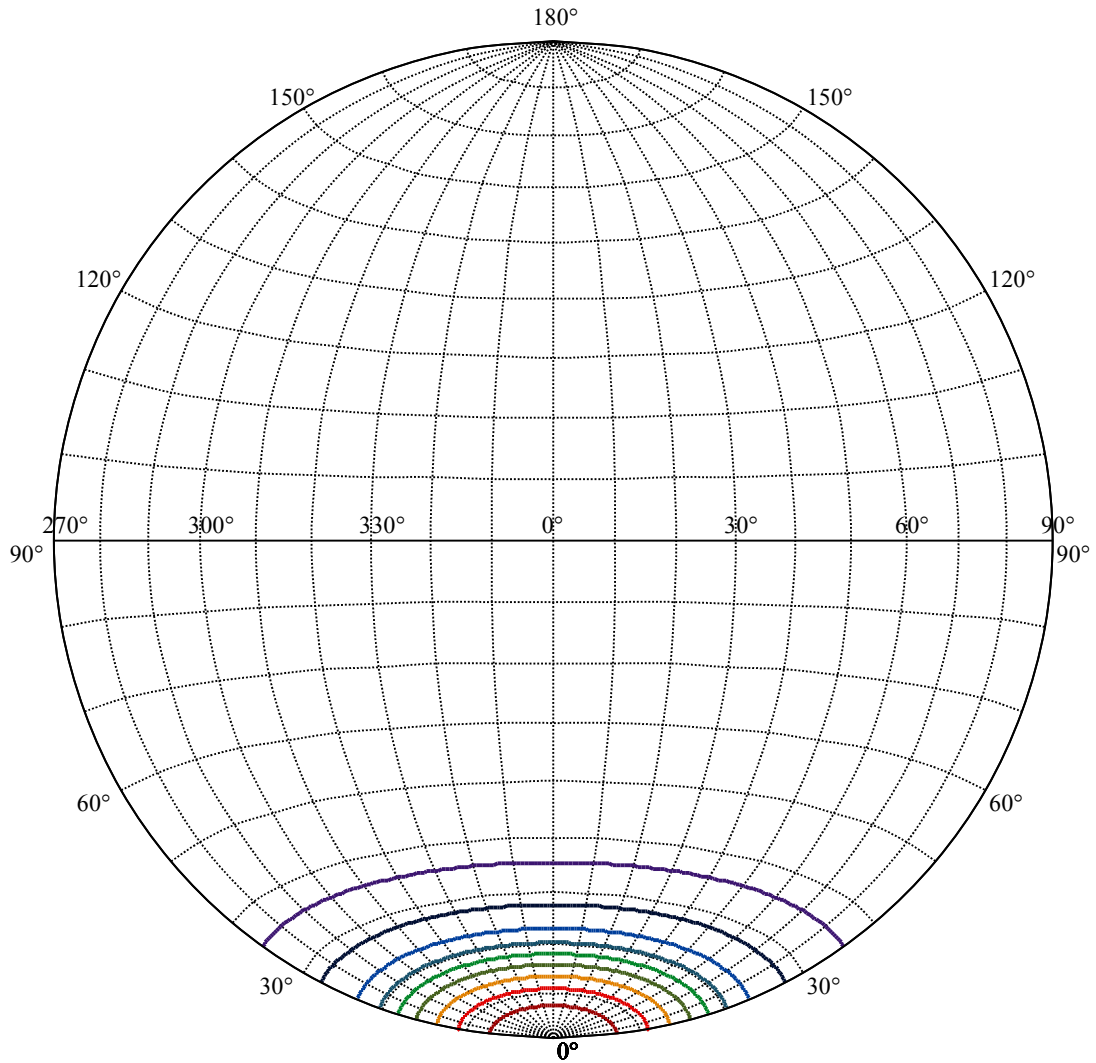
Field angle(10%Imax):C0/180Left:35.6 Right:35.6
:C90/270Left:35.6 Right:35.6

Beam Angle(50%Imax):C0/180Left:18.1 Right:18.1
:C90/270Left:18.1 Right:18.1





(10%Imax) 448.489	—
(20%Imax) 896.979	—
(30%Imax) 1345.47	—
(40%Imax) 1793.96	—
(50%Imax) 2242.45	—
(60%Imax) 2690.94	—
(70%Imax) 3139.43	—
(80%Imax) 3587.92	—
(90%Imax) 4036.41	—



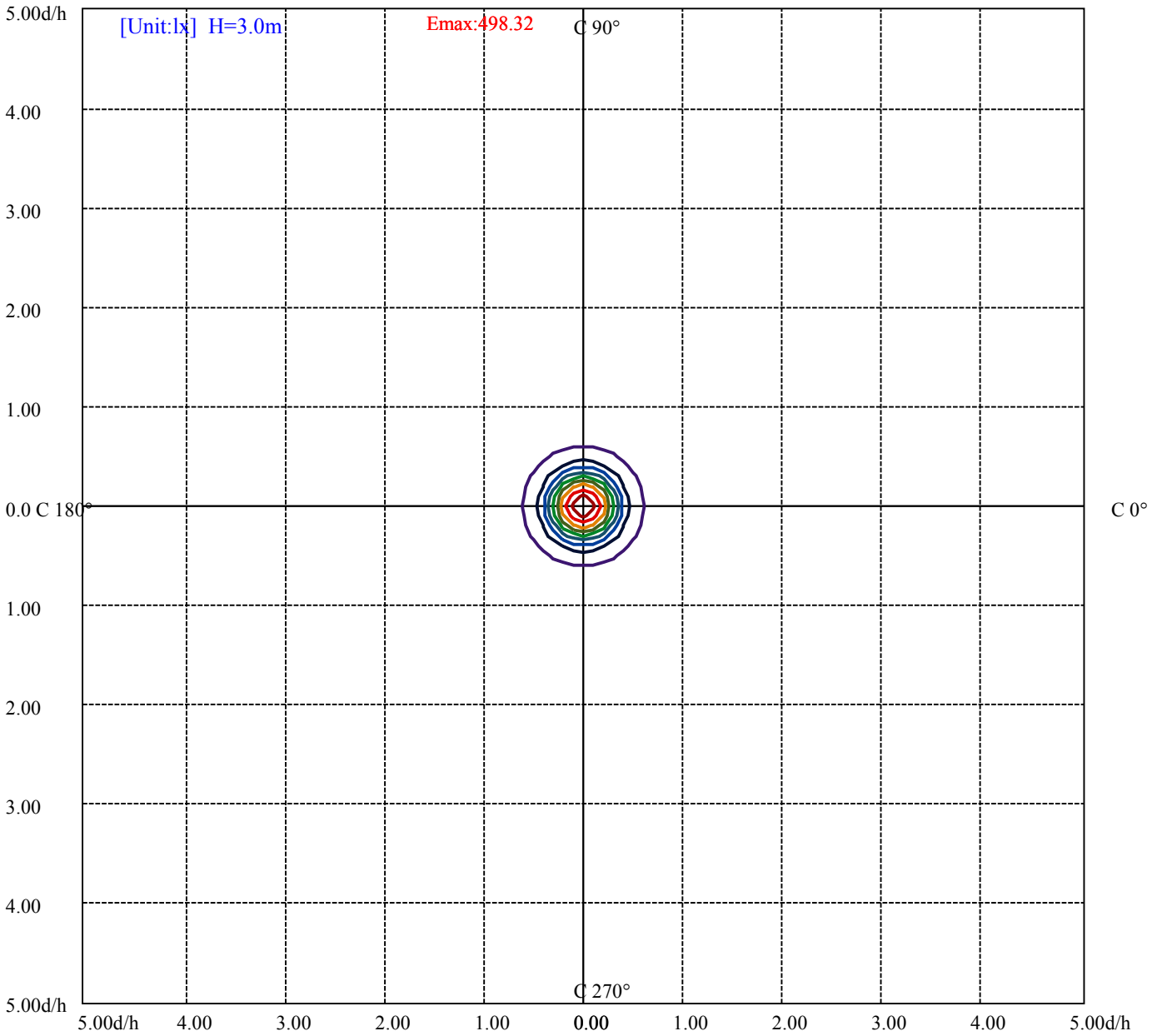
House

[Unit:cd]

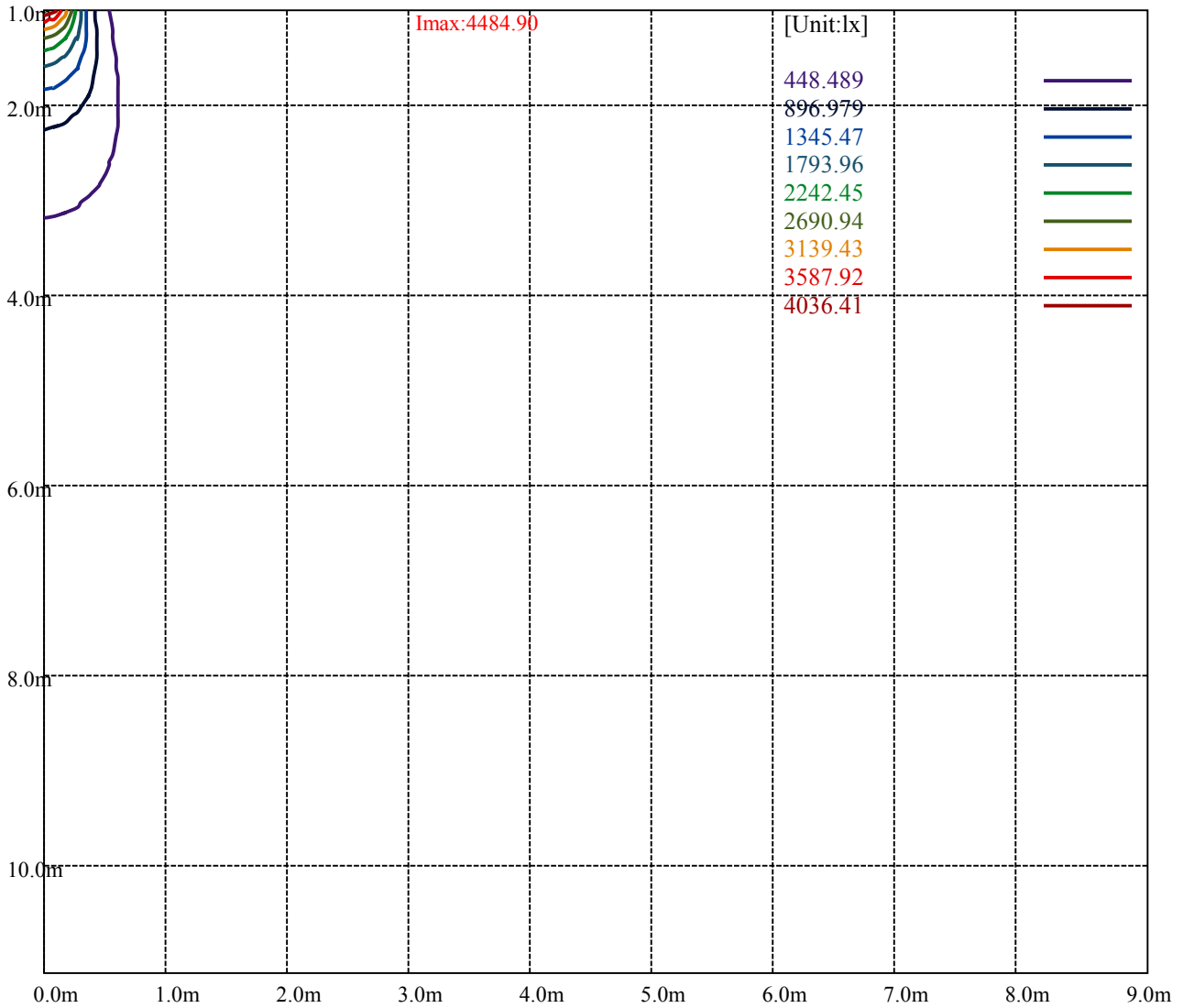
Road

Imax:4484.90

(10%Imax) 448.489	—
(20%Imax) 896.979	—
(30%Imax) 1345.47	—
(40%Imax) 1793.96	—
(50%Imax) 2242.45	—
(60%Imax) 2690.94	—
(70%Imax) 3139.43	—
(80%Imax) 3587.92	—
(90%Imax) 4036.41	—



- (10%Emax) 49.83211
- (20%Emax) 99.66422
- (30%Emax) 149.4967
- (40%Emax) 199.3289
- (50%Emax) 249.16
- (60%Emax) 298.9922
- (70%Emax) 348.8244
- (80%Emax) 398.6566
- (90%Emax) 448.4889



Luminance Table

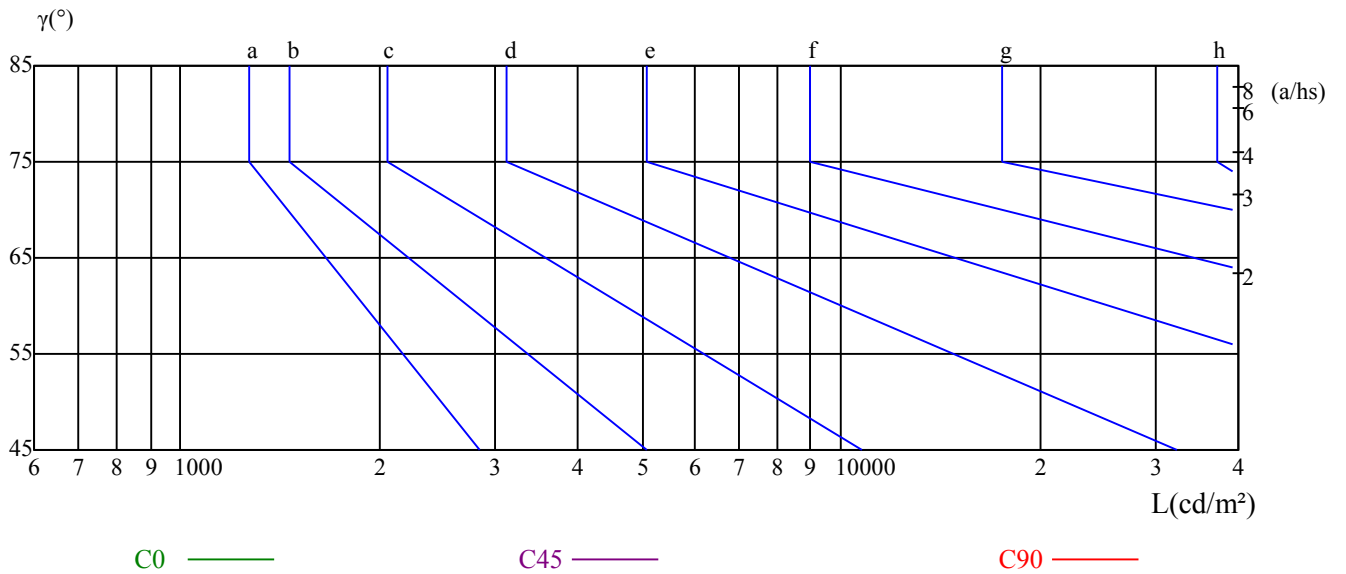
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

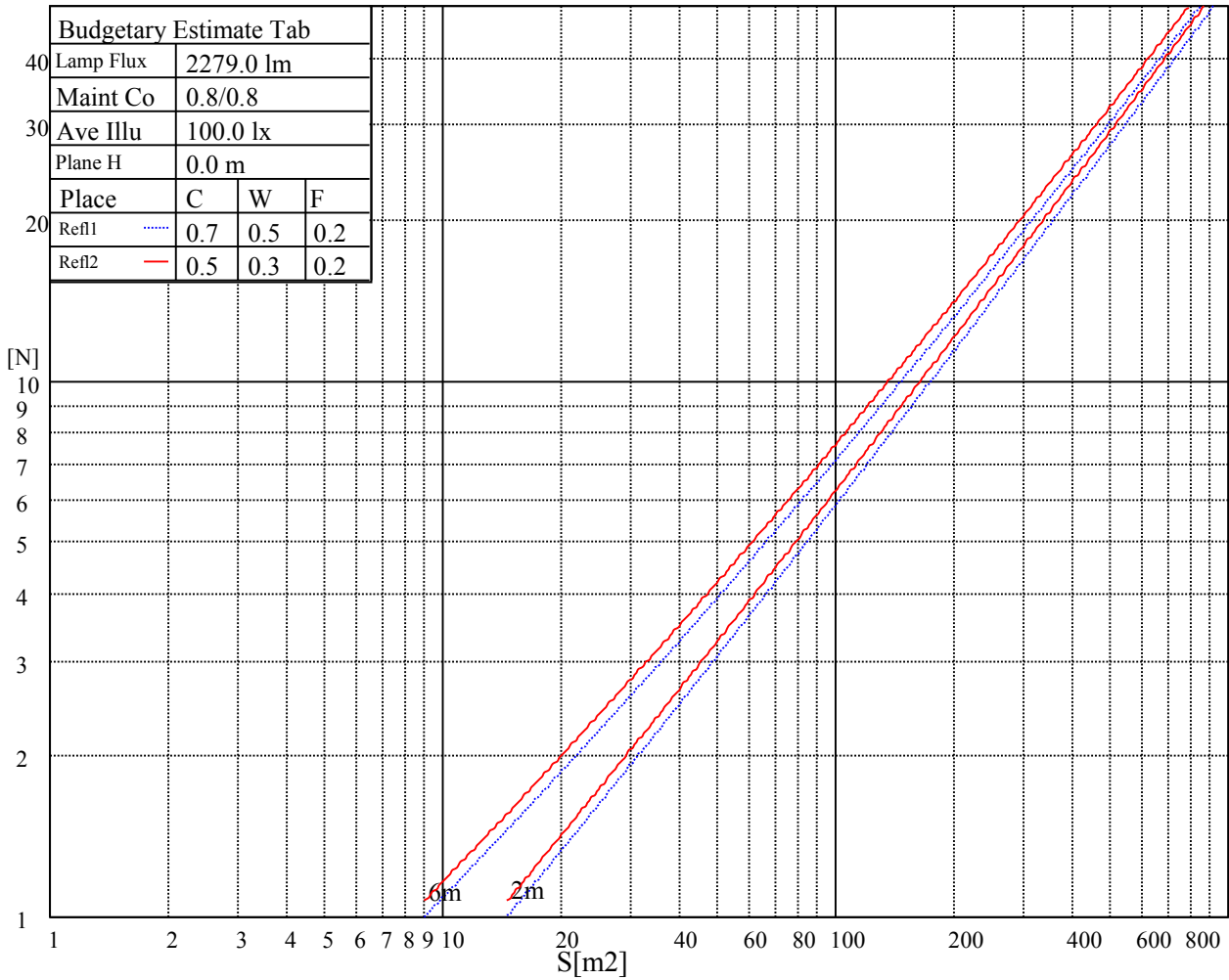
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

Glare Table

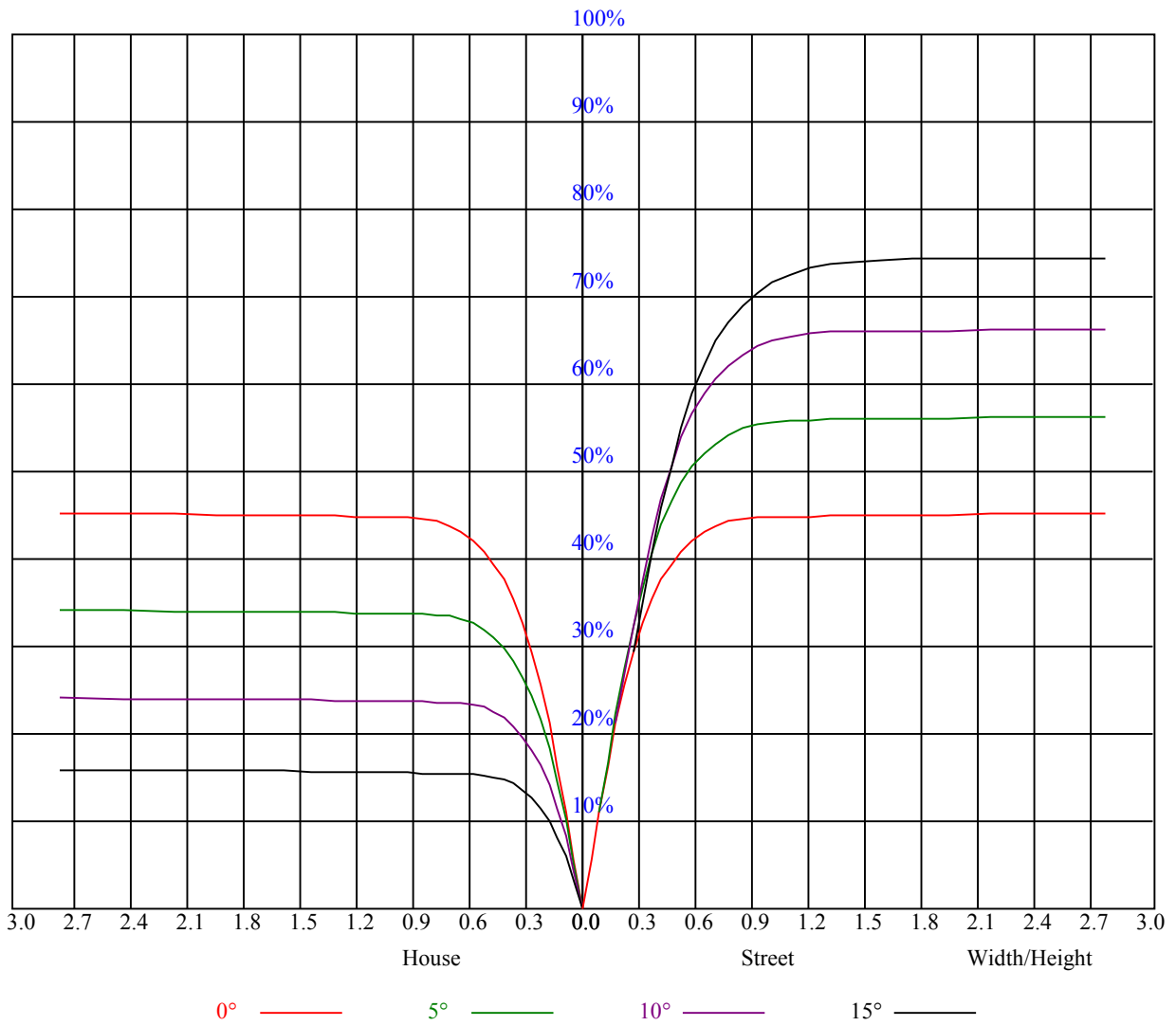
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.09	1.09	1.09	1.07	1.07	1.07	1.02	1.02	1.02	0.98	0.98	0.98	0.94	0.94	0.94	0.92
1	1.01	0.99	0.97	0.99	0.97	0.95	0.95	0.94	0.92	0.92	0.91	0.89	0.89	0.88	0.87	0.85
2	0.95	0.92	0.89	0.94	0.91	0.88	0.91	0.88	0.86	0.88	0.86	0.84	0.86	0.84	0.83	0.81
3	0.91	0.87	0.83	0.89	0.86	0.83	0.87	0.84	0.81	0.85	0.82	0.80	0.83	0.81	0.79	0.78
4	0.86	0.82	0.79	0.85	0.81	0.78	0.83	0.80	0.77	0.82	0.79	0.76	0.80	0.77	0.75	0.74
5	0.82	0.78	0.75	0.82	0.77	0.74	0.80	0.76	0.74	0.79	0.75	0.73	0.77	0.74	0.72	0.71
6	0.79	0.74	0.71	0.78	0.74	0.71	0.77	0.73	0.70	0.76	0.72	0.70	0.75	0.72	0.69	0.68
7	0.76	0.71	0.68	0.75	0.71	0.68	0.74	0.70	0.67	0.73	0.70	0.67	0.72	0.69	0.67	0.66
8	0.73	0.68	0.65	0.72	0.68	0.65	0.71	0.68	0.65	0.70	0.67	0.65	0.70	0.67	0.64	0.63
9	0.70	0.66	0.63	0.70	0.65	0.63	0.69	0.65	0.62	0.68	0.65	0.62	0.67	0.64	0.62	0.61
10	0.68	0.63	0.60	0.67	0.63	0.60	0.67	0.63	0.60	0.66	0.62	0.60	0.65	0.62	0.60	0.59



Intensity data(cd)

C/\u03b3(\u00b0)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	4486.55	4324.68	3872.12	3028.10	1983.13	1135.81	804.92	536.80	286.29
45.0	4484.89	4368.17	3904.05	3095.82	2113.06	1171.05	813.73	559.37	296.20
90.0	4485.44	4267.42	3761.45	2903.67	1915.41	1058.73	770.24	499.42	149.31
135.0	4482.69	4316.42	3876.52	3074.35	2028.28	1125.90	810.43	529.09	287.39
180.0	4486.55	4248.70	3623.81	2771.54	1701.24	971.80	740.29	431.48	83.47
225.0	4484.89	4196.95	3603.99	2650.42	1592.78	929.13	727.90	408.52	69.32
270.0	4485.44	4320.83	3767.51	2881.65	1820.16	1015.79	758.68	493.31	183.28
315.0	4482.69	4232.19	3695.39	2733.00	1673.16	982.81	743.21	424.21	94.64
360.0	4486.55	4324.68	3872.12	3028.10	1983.13	1135.81	804.92	536.80	286.29
C/\u03b3(\u00b0)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	17.67	10.79	10.08	9.63	9.36	9.14	9.03	8.92	8.81
45.0	18.83	10.90	10.13	9.74	9.47	9.25	9.14	8.97	8.86
90.0	16.46	10.85	10.19	9.74	9.47	9.25	9.08	8.97	8.92
135.0	18.50	11.12	10.30	9.80	9.47	9.25	9.08	8.92	8.81
180.0	14.48	10.68	10.02	9.63	9.36	9.14	8.97	8.86	8.81
225.0	13.65	10.68	10.02	9.58	9.36	9.14	9.03	8.97	8.86
270.0	14.81	10.79	10.08	9.69	9.41	9.19	9.08	8.97	8.81
315.0	14.04	10.63	9.97	9.58	9.30	9.14	8.97	8.86	8.81
360.0	17.67	10.79	10.08	9.63	9.36	9.14	9.03	8.92	8.81
C/\u03b3(\u00b0)	90.0								
0.0	8.81								
45.0	8.86								
90.0	8.81								
135.0	8.81								
180.0	8.75								
225.0	8.86								
270.0	8.81								
315.0	8.75								
360.0	8.81								