



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: 3-1700-N
Luminaire: 92.70.045.00+92.70.089.00
Report No: NATA0100
Test No: GC2018062020
LampCAT: NICHIA NFCW108B-V3
Lamp flux(lm): 2255.0
Number of Lamps: 1
Length(mm): 77
Phm Type: C

Voltage(V): 33.8000
Current(A): 0.5000
Power (W): 16.9000
PF: 0.0000
Ballast type: DC
Width(mm): 77
Height(mm): 0

Photometric Results

Lumens(lm): 1755.57
Efficiency(%): 77.85%
Lumens(lm)/Power(W): 105.06
Central intensity(cd): 3612.938
Maximum intensity(cd): 3612.938
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=37.2
 [C90/270]Total=37.2
Field angle(10%Imax): [C0/180]Total=67.2
 [C90/270]Total=67.2
Maximum s/h(1/2): C0_180=0.61 C90_270=0.61
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(%): 78.74%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 96.844%

Equipment: GMS1980
Temperature(°C): 25.0

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

Operator: NT07
Distance(m): 7.42

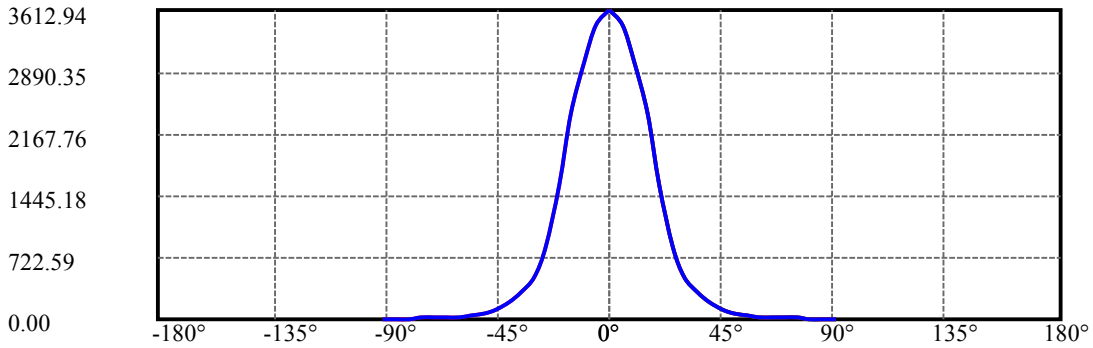
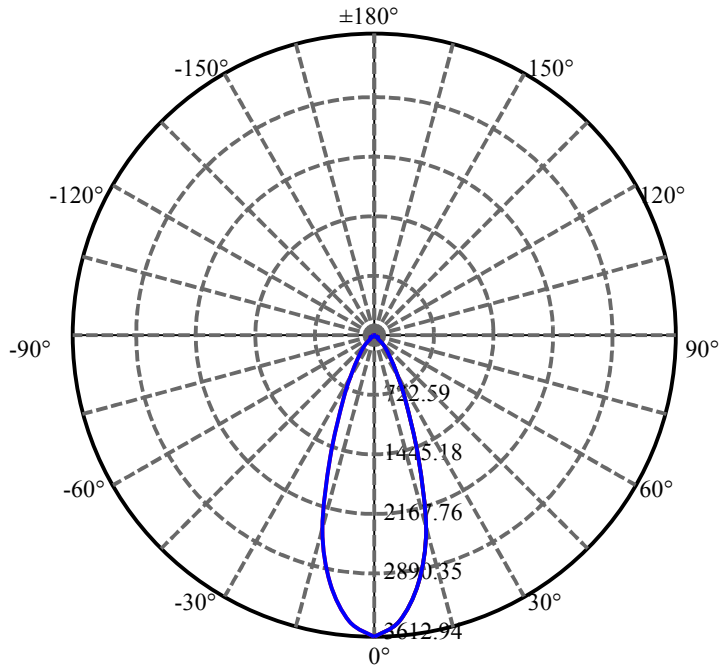
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3612.939	21.606	21.606	.958%	1.231%
5.0	3439.236	164.304	185.91	7.286%	10.590%
10.0	3008.763	286.383	472.293	12.700%	26.903%
15.0	2403.350	340.959	813.252	15.120%	46.324%
20.0	1572.459	294.795	1108.048	13.073%	63.116%
25.0	847.332	196.287	1304.334	8.705%	74.297%
30.0	489.396	134.128	1438.463	5.948%	81.937%
35.0	312.005	98.094	1536.557	4.350%	87.525%
40.0	209.710	73.888	1610.445	3.277%	91.734%
45.0	122.315	47.408	1657.853	2.102%	94.434%
50.0	73.686	30.941	1688.794	1.372%	96.196%
55.0	42.173	18.936	1707.73	.840%	97.275%
60.0	24.720	11.735	1719.464	.520%	97.943%
65.0	18.182	9.033	1728.497	.401%	98.458%
70.0	15.113	7.784	1736.282	.345%	98.901%
75.0	12.691	6.719	1743.001	.298%	99.284%
80.0	10.681	5.766	1748.766	.256%	99.613%
85.0	8.747	4.776	1753.543	.212%	99.885%
90.0	7.391	2.026	1755.568	.090%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1438.46	63.79%	81.94%
0-40	1610.44	71.42%	91.73%
0-60	1719.46	76.25%	97.94%
0-90	1753.54	77.76%	99.88%
0-120	1753.54	77.76%	99.88%
0-180	1755.57	77.85%	100.00%
60-90	45.81	2.03%	2.61%
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%
0-28.73	1404.46	62.28%	80.00%

ZONAL LUMEN SUMMARY

0-10	472.29
10-20	635.75
20-30	330.42
30-40	171.98
40-50	78.35
50-60	30.67
60-70	16.82
70-80	12.48
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: ———

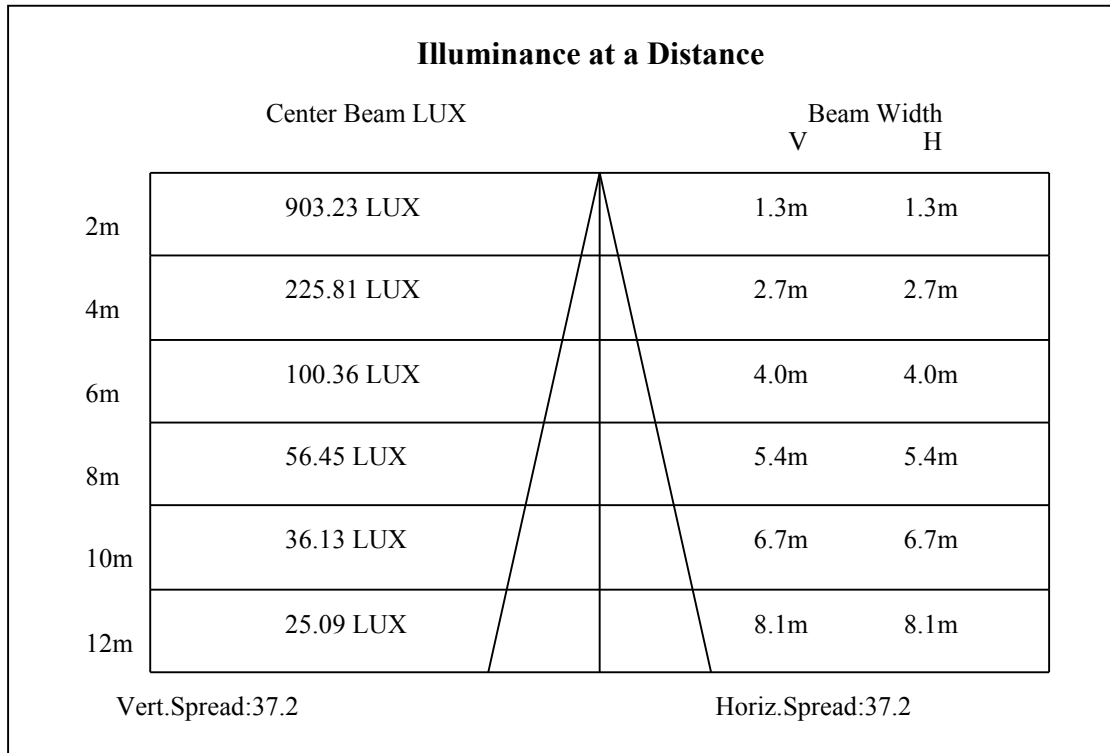
C90/C270: ———

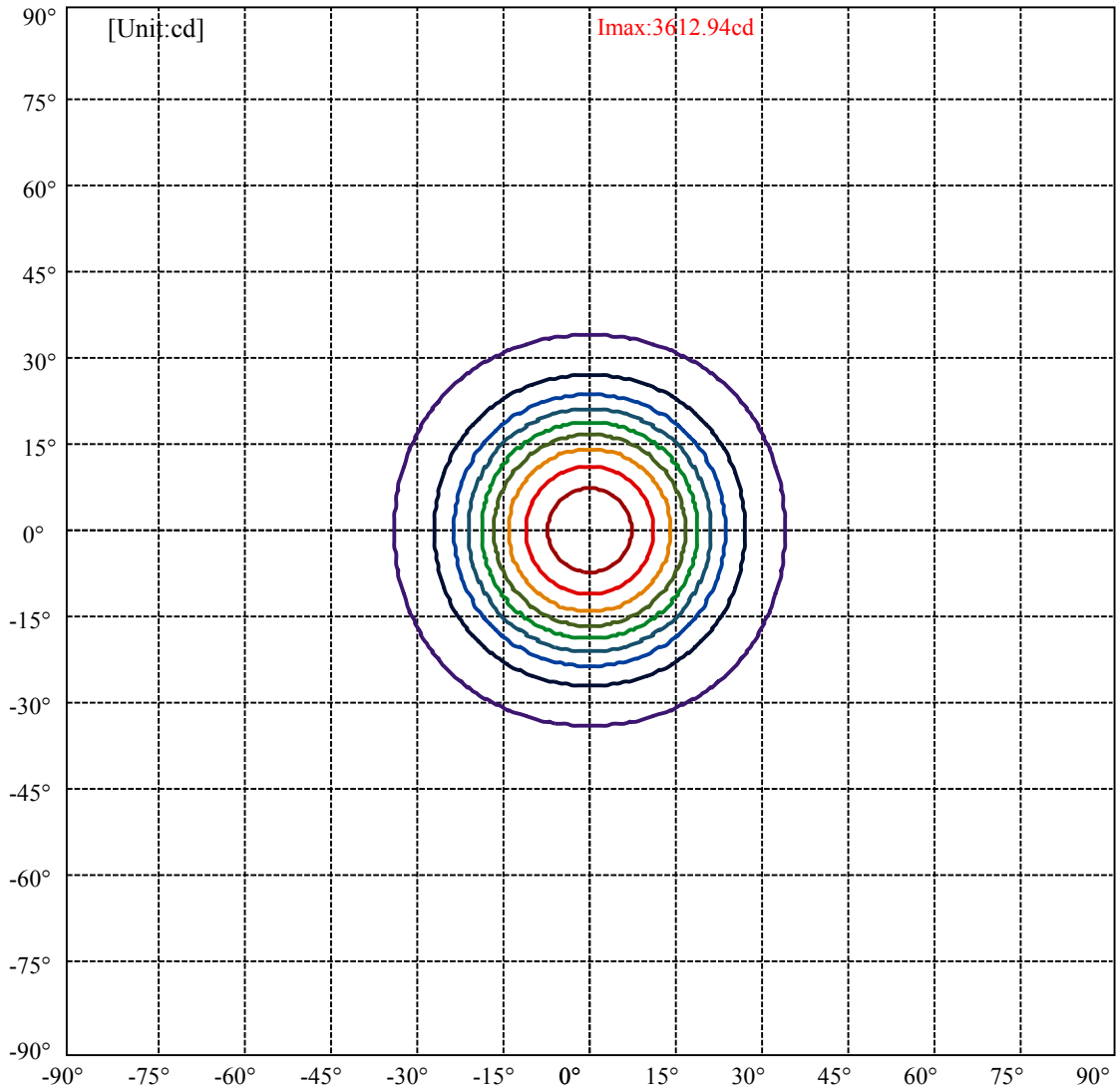
Field angle(10%Imax):C0/180Left:33.6 Right:33.6

:C90/270Left:33.6 Right:33.6

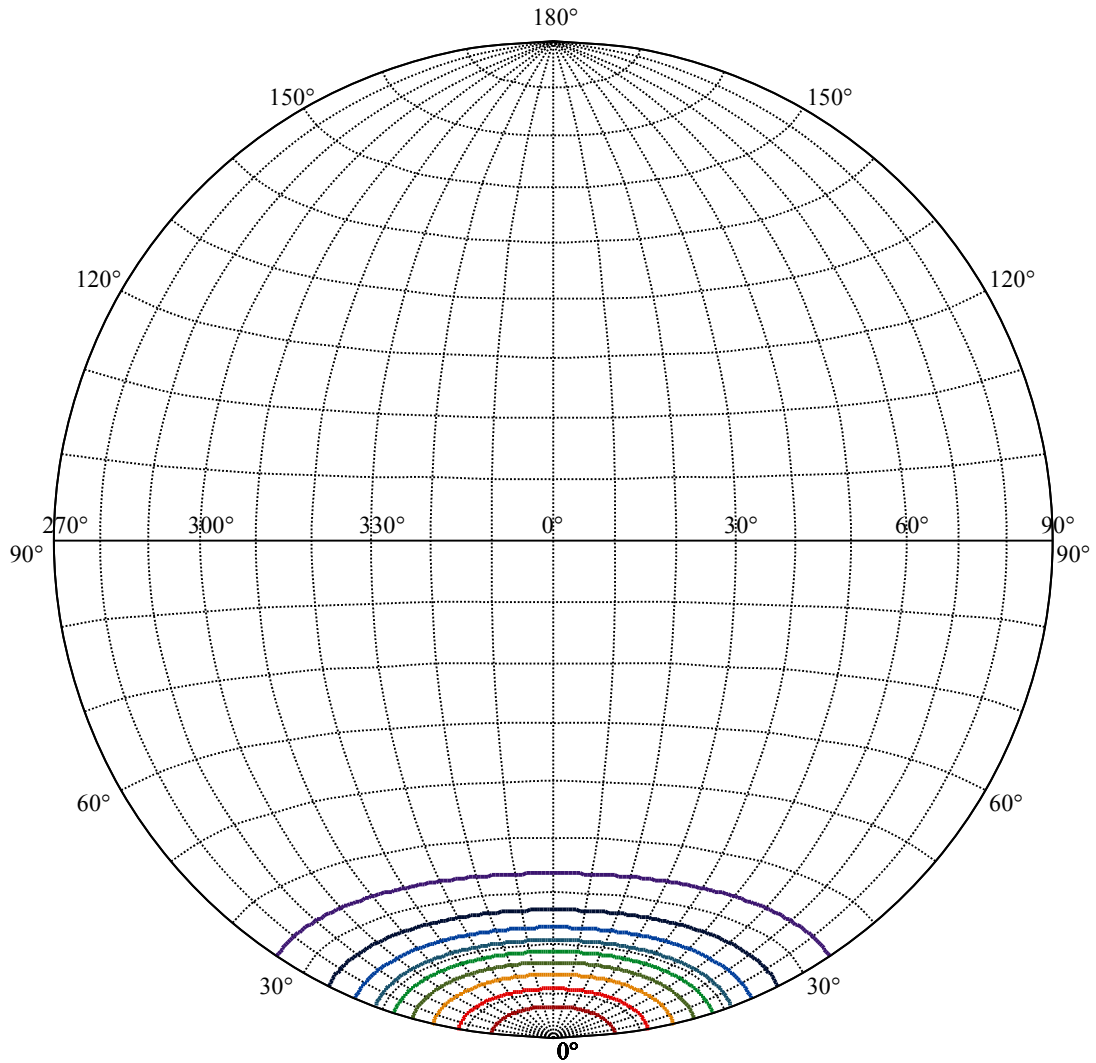
Beam Angle(50%Imax):C0/180Left:18.6 Right:18.6

:C90/270Left:18.6 Right:18.6





(10%Imax) 361.294	—
(20%Imax) 722.588	—
(30%Imax) 1083.88	—
(40%Imax) 1445.18	—
(50%Imax) 1806.47	—
(60%Imax) 2167.76	—
(70%Imax) 2529.06	—
(80%Imax) 2890.35	—
(90%Imax) 3251.64	—



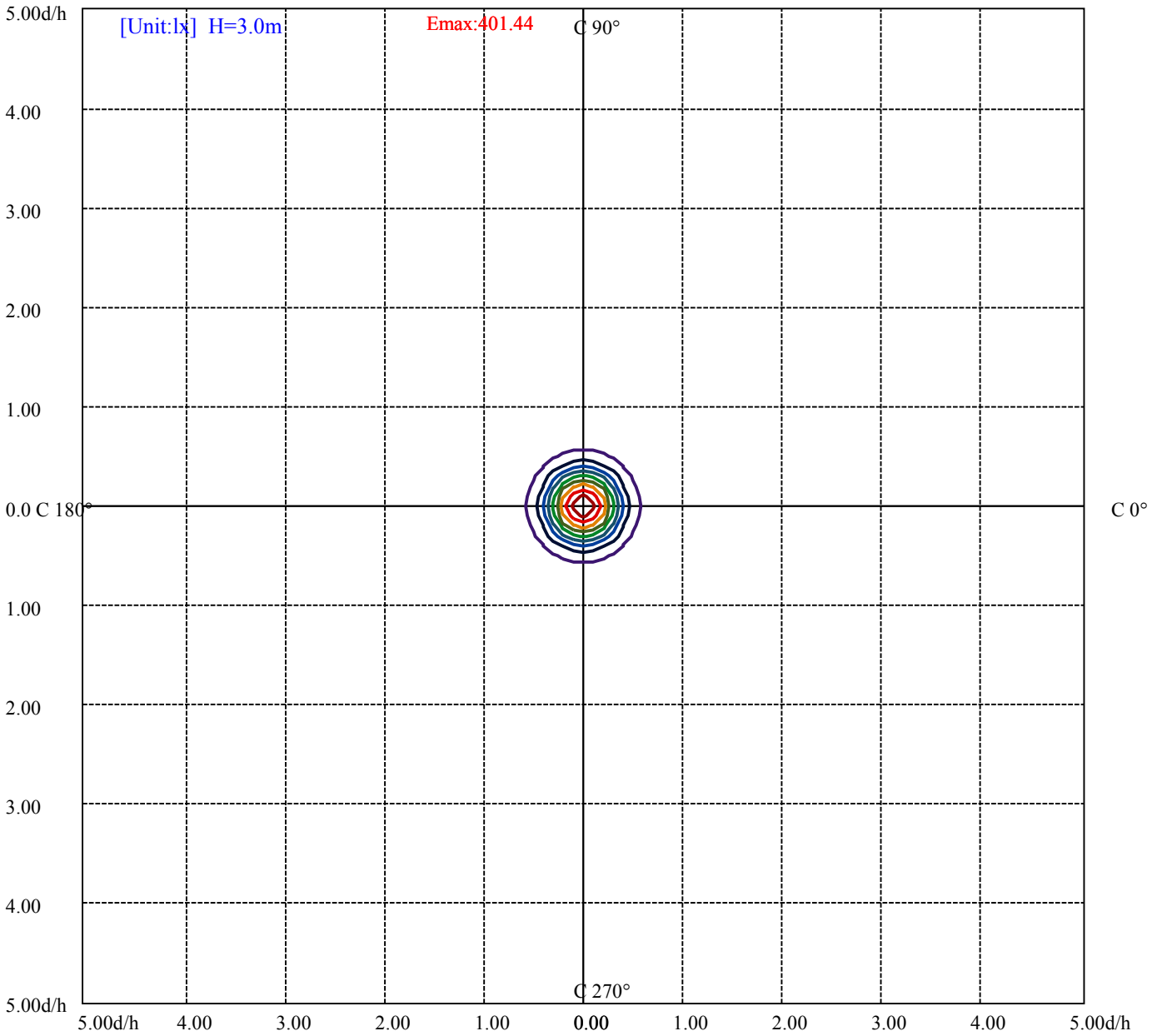
House

[Unit:cd]

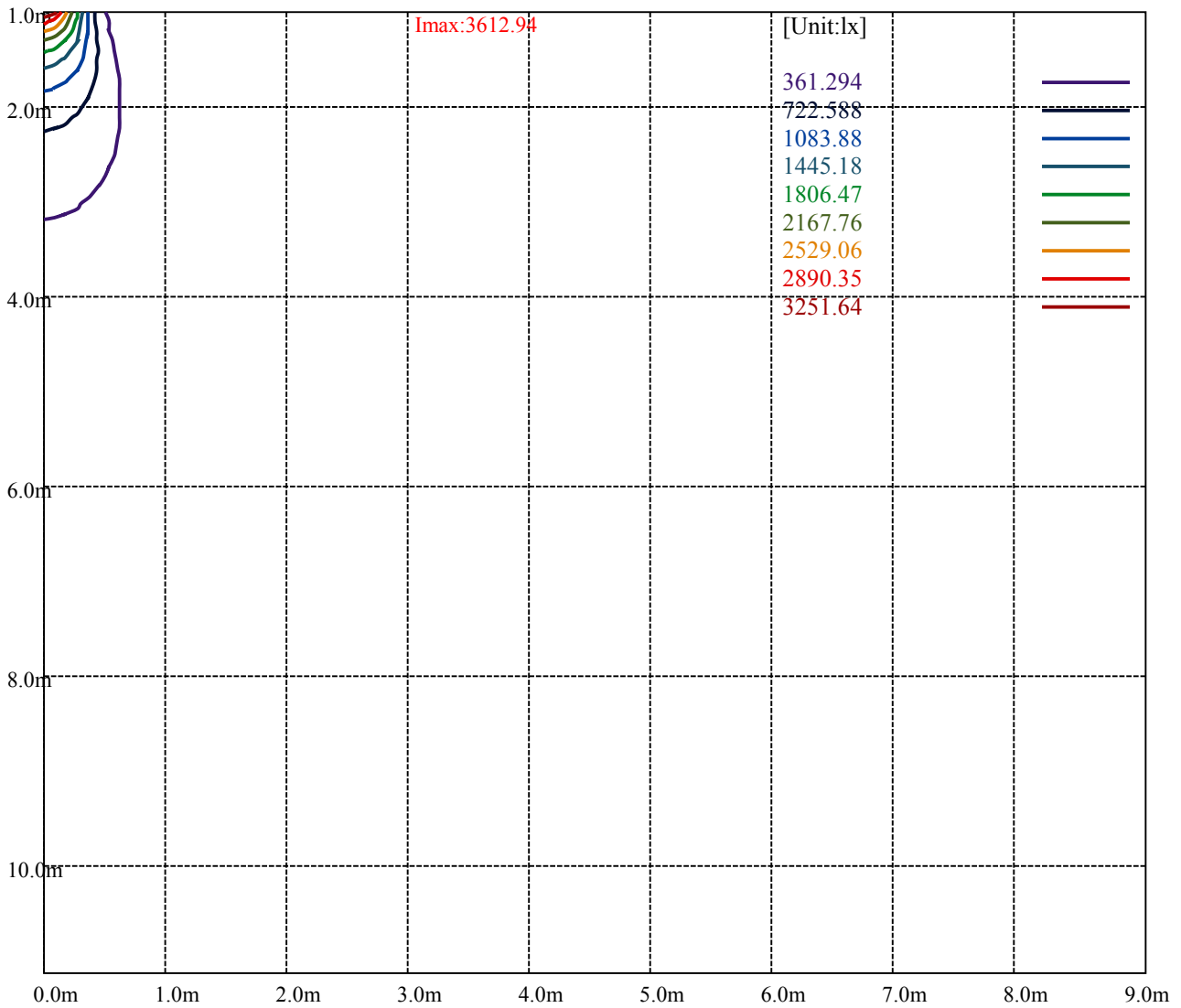
Road

Imax:3612.94

(10%Imax)	361.294	—
(20%Imax)	722.588	—
(30%Imax)	1083.88	—
(40%Imax)	1445.18	—
(50%Imax)	1806.47	—
(60%Imax)	2167.76	—
(70%Imax)	2529.06	—
(80%Imax)	2890.35	—
(90%Imax)	3251.64	—



- (10%E_{max}) 40.14367
- (20%E_{max}) 80.28745
- (30%E_{max}) 120.4311
- (40%E_{max}) 160.5744
- (50%E_{max}) 200.7189
- (60%E_{max}) 240.8622
- (70%E_{max}) 281.0056
- (80%E_{max}) 321.15
- (90%E_{max}) 361.2933



Luminance Table

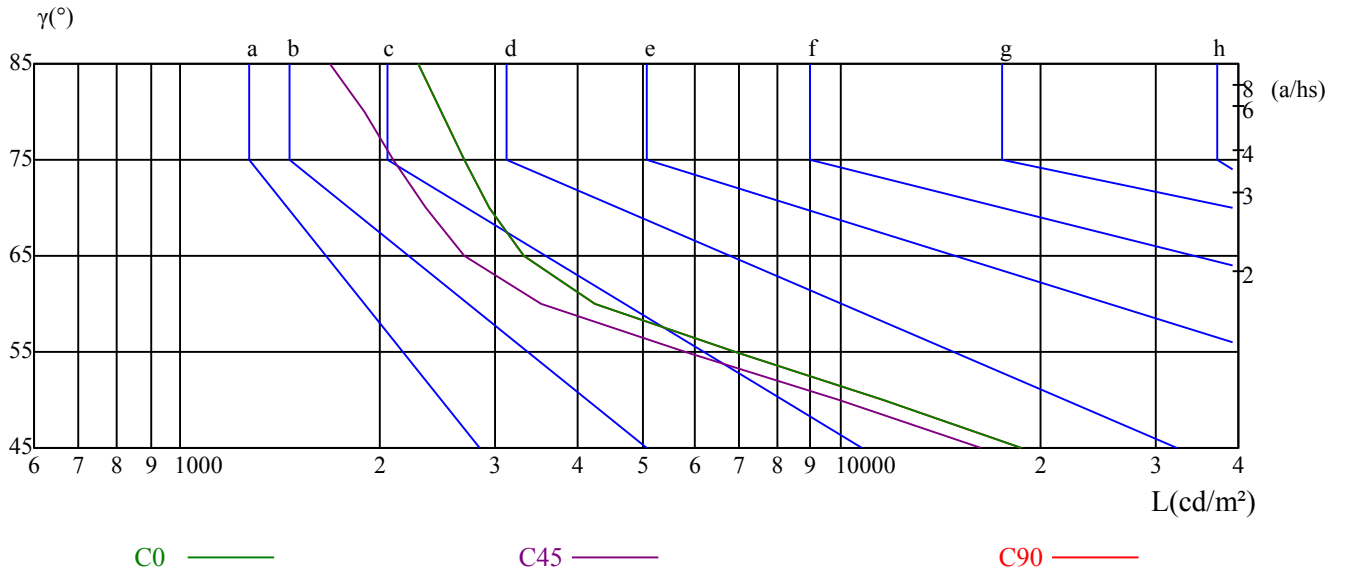
γ	45	50	55	60	65	70	75	80	85
C0	18721	11609	6899	4239	3302	2941	2681	2490	2293
C45	16301	9960	5828	3522	2694	2351	2095	1893	1688
C90	18721	11609	6899	4239	3302	2941	2681	2490	2293

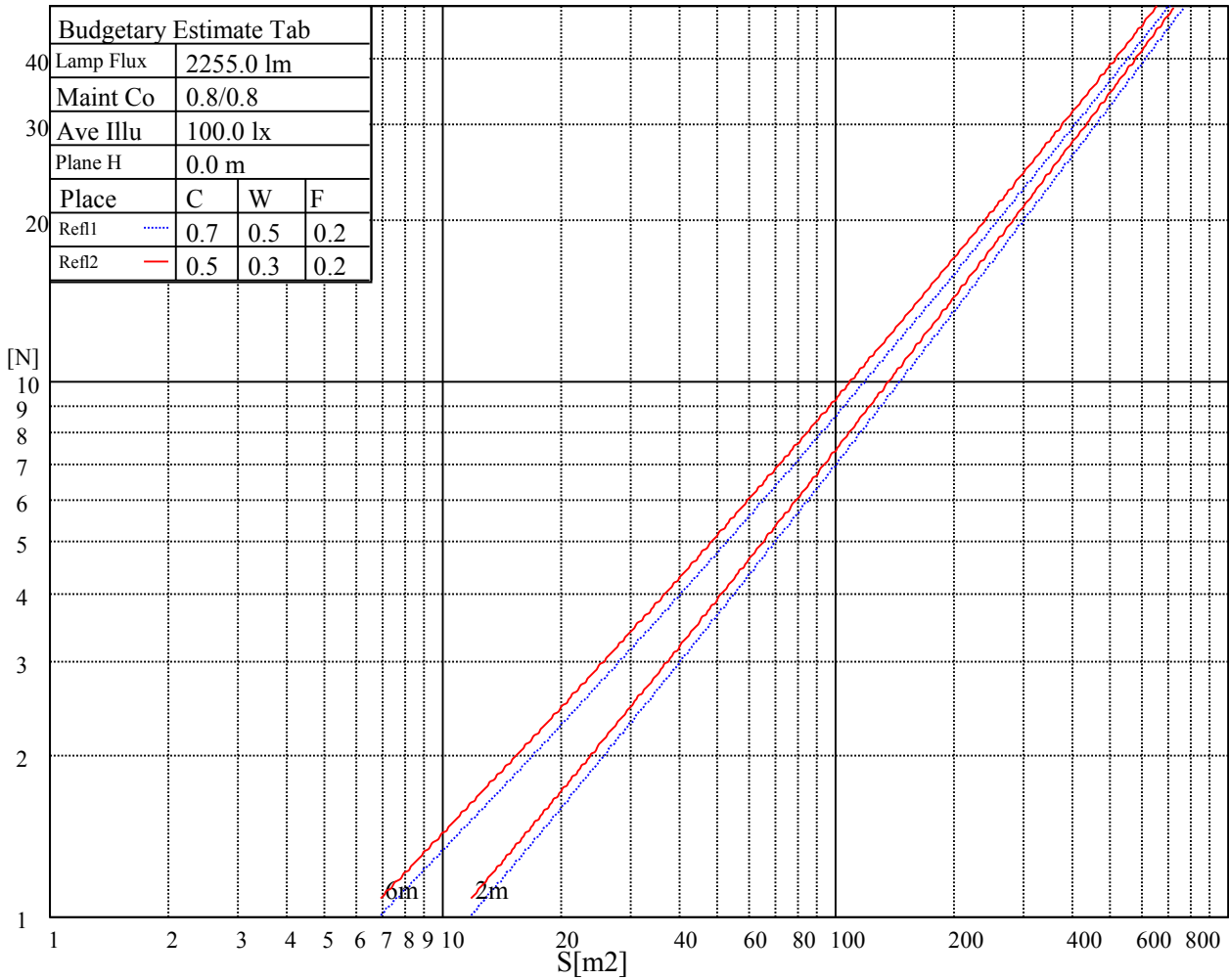
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
7256	7256	7256	8270	8270	8270	16927	16927	16927

Glare Table

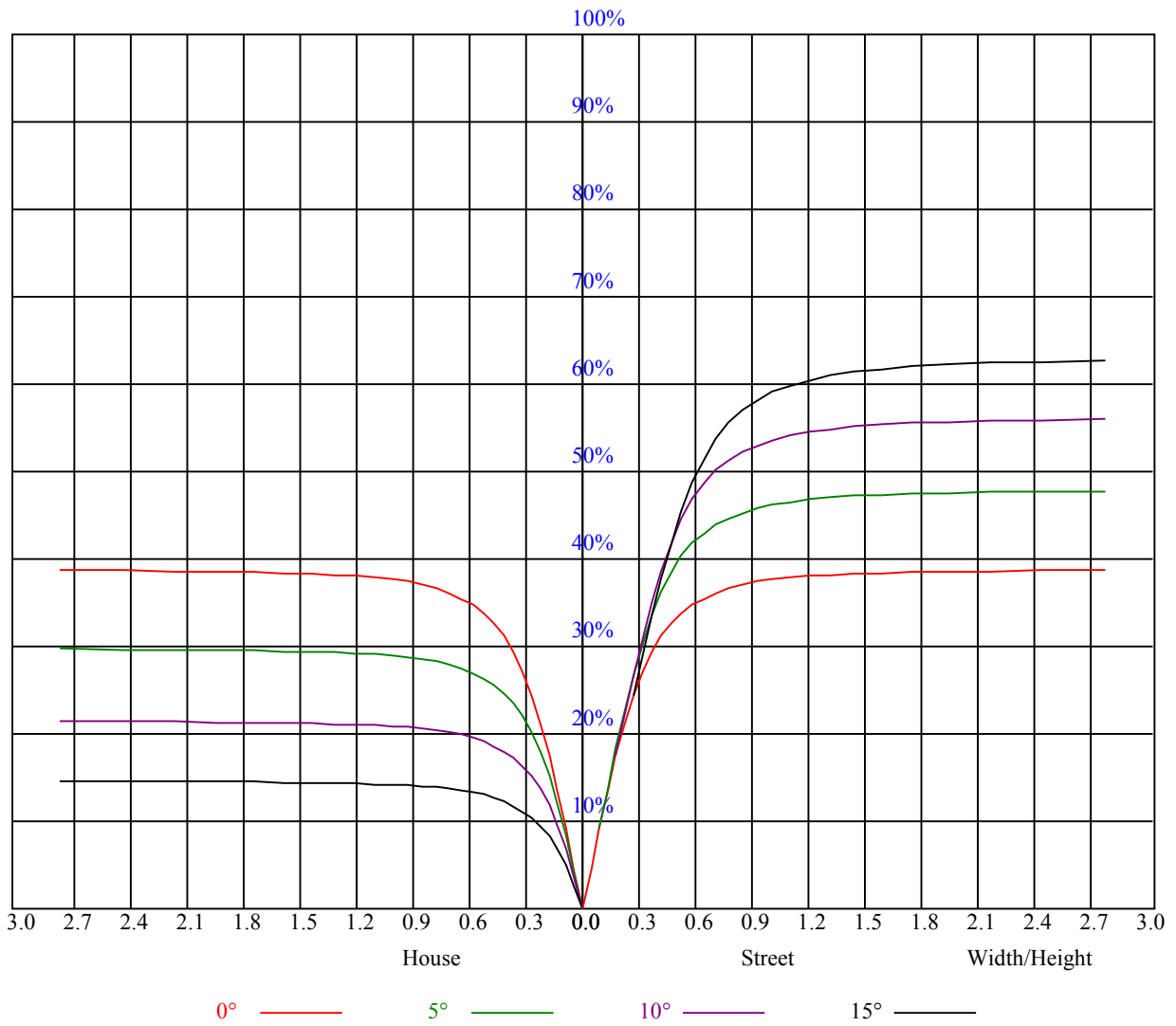
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	0.94	0.94	0.94	0.92	0.92	0.92	0.87	0.87	0.87	0.84	0.84	0.84	0.80	0.80	0.80	0.79
1	0.87	0.84	0.82	0.85	0.83	0.81	0.82	0.80	0.79	0.79	0.77	0.76	0.76	0.75	0.74	0.73
2	0.81	0.78	0.76	0.80	0.77	0.75	0.77	0.75	0.73	0.75	0.73	0.71	0.73	0.71	0.70	0.69
3	0.77	0.73	0.70	0.76	0.72	0.70	0.74	0.71	0.68	0.72	0.69	0.67	0.70	0.68	0.66	0.65
4	0.73	0.69	0.66	0.72	0.68	0.65	0.70	0.67	0.65	0.69	0.66	0.64	0.67	0.65	0.63	0.62
5	0.69	0.65	0.62	0.68	0.65	0.62	0.67	0.64	0.61	0.66	0.63	0.61	0.65	0.62	0.60	0.59
6	0.66	0.62	0.59	0.65	0.62	0.59	0.64	0.61	0.58	0.63	0.60	0.58	0.62	0.60	0.58	0.57
7	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
8	0.61	0.57	0.54	0.60	0.56	0.54	0.59	0.56	0.53	0.59	0.55	0.53	0.58	0.55	0.53	0.52
9	0.58	0.54	0.52	0.58	0.54	0.51	0.57	0.54	0.51	0.57	0.53	0.51	0.56	0.53	0.51	0.50
10	0.56	0.52	0.50	0.56	0.52	0.50	0.55	0.52	0.49	0.55	0.52	0.49	0.54	0.51	0.49	0.48



Nata 3-1700-N

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	3601.24	3508.74	3151.98	2601.97	1858.70	1058.18	567.63	354.56	281.89
45.0	3616.10	3492.23	3062.24	2513.32	1751.34	953.03	534.60	343.55	219.84
90.0	3620.51	3425.06	2979.65	2360.82	1559.20	832.73	472.22	299.18	200.07
135.0	3613.90	3492.78	3101.33	2464.32	1659.95	862.73	502.11	314.92	202.28
180.0	3601.24	3361.74	2854.12	2183.54	1070.68	669.93	418.59	270.38	175.13
225.0	3616.10	3398.08	2948.82	2283.74	1504.14	754.88	456.91	300.06	194.84
270.0	3620.51	3447.63	3000.57	2467.08	1623.61	830.25	488.35	311.62	202.44
315.0	3613.90	3387.62	2971.39	2352.01	1552.04	816.93	474.75	301.76	201.18
360.0	3601.24	3508.74	3151.98	2601.97	1858.70	1058.18	567.63	354.56	281.89

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	144.96	86.71	51.26	29.35	19.43	15.97	13.27	11.07	8.97
45.0	130.81	79.45	45.15	26.26	18.55	15.42	12.88	10.74	8.70
90.0	119.69	71.19	41.90	23.95	17.78	14.98	12.61	10.46	8.59
135.0	124.59	74.44	41.95	25.00	18.28	15.14	12.77	10.74	8.75
180.0	103.23	63.26	35.40	21.75	17.12	14.31	12.00	10.19	8.26
225.0	114.30	69.81	39.37	23.23	17.84	14.81	12.50	10.41	8.86
270.0	121.78	74.55	42.56	24.56	18.55	15.47	12.99	11.29	9.19
315.0	119.14	70.09	39.81	23.67	17.89	14.81	12.50	10.57	8.64
360.0	144.96	86.71	51.26	29.35	19.43	15.97	13.27	11.07	8.97

C/γ(°)	90.0
0.0	7.43
45.0	7.43
90.0	7.38
135.0	7.38
180.0	7.38
225.0	7.43
270.0	7.38
315.0	7.32
360.0	7.43