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Nata

LumCAT: 3-1700-N
Luminaire: 92.70.045.00+92.70.089.00
Report No: NATA0100
Test No: GC2018062212
LampCAT: NICHIA NFCWJ120B-V3
Lamp flux(lm): 2303.0
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): 1808.07
Efficiency(%): 78.51%
Lumens(lm)/Power(W): 108.21
Central intensity(cd): 3751.130
Maximum intensity(cd): 3751.130
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=37.6
 [C90/270]Total=37.6
Field angle(10%Imax): [C0/180]Total=66.6
 [C90/270]Total=66.6
Maximum s/h(1/2): C0_180=0.62 C90_270=0.62
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(%): 79.41%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 96.837%

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2018/6/22
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.42

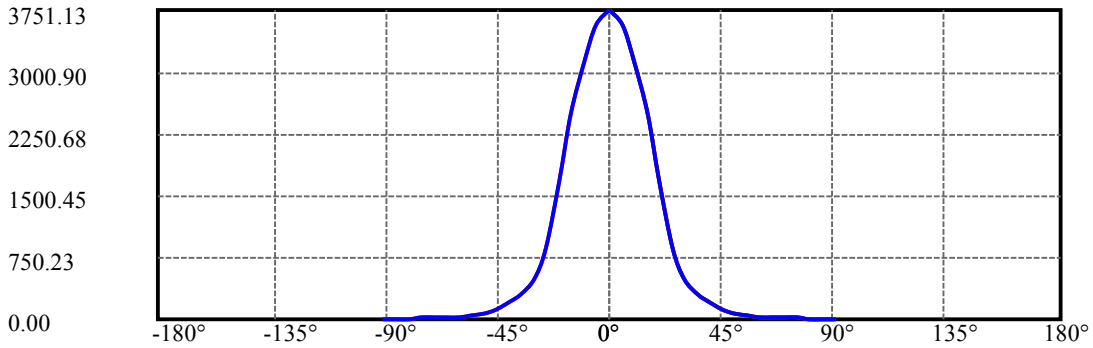
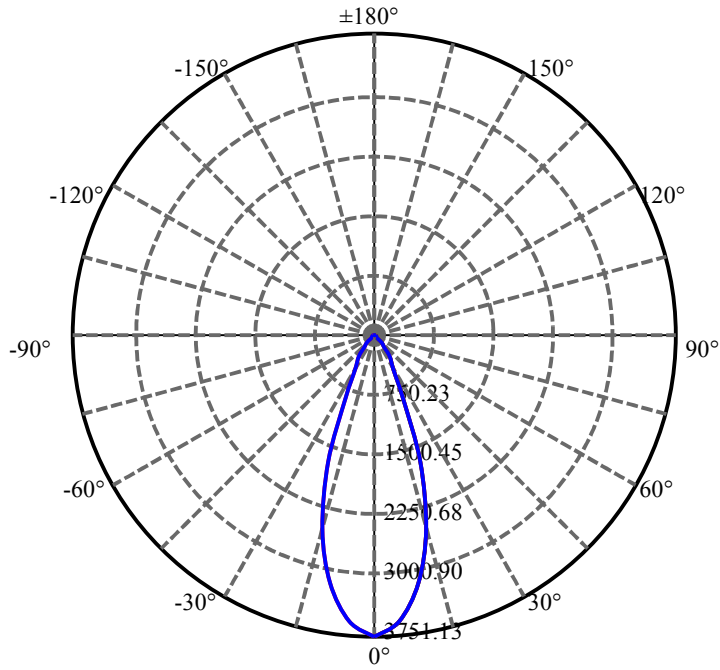
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3751.130	22.433	22.433	.974%	1.241%
5.0	3568.687	170.488	192.921	7.403%	10.670%
10.0	3118.532	296.831	489.752	12.889%	27.087%
15.0	2499.079	354.540	844.292	15.395%	46.696%
20.0	1673.852	313.804	1158.096	13.626%	64.051%
25.0	862.858	199.883	1357.98	8.679%	75.106%
30.0	495.150	135.705	1493.685	5.893%	82.612%
35.0	313.078	98.431	1592.116	4.274%	88.056%
40.0	201.217	70.896	1663.012	3.078%	91.977%
45.0	120.821	46.829	1709.841	2.033%	94.567%
50.0	72.420	30.409	1740.25	1.320%	96.249%
55.0	41.967	18.843	1759.094	.818%	97.291%
60.0	24.961	11.849	1770.943	.515%	97.946%
65.0	18.582	9.231	1780.174	.401%	98.457%
70.0	15.430	7.947	1788.121	.345%	98.896%
75.0	13.007	6.887	1795.008	.299%	99.277%
80.0	11.046	5.963	1800.971	.259%	99.607%
85.0	9.139	4.991	1805.961	.217%	99.883%
90.0	7.708	2.112	1808.074	.092%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1493.68	64.86%	82.61%
0-40	1663.01	72.21%	91.98%
0-60	1770.94	76.90%	97.95%
0-90	1805.96	78.42%	99.88%
0-120	1805.96	78.42%	99.88%
0-180	1808.07	78.51%	100.00%
60-90	46.87	2.04%	2.59%
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%
0-28.26	1446.46	62.81%	80.00%

ZONAL LUMEN SUMMARY

0-10	489.75
10-20	668.34
20-30	335.59
30-40	169.33
40-50	77.24
50-60	30.69
60-70	17.18
70-80	12.85
80-90	4.99
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: —————

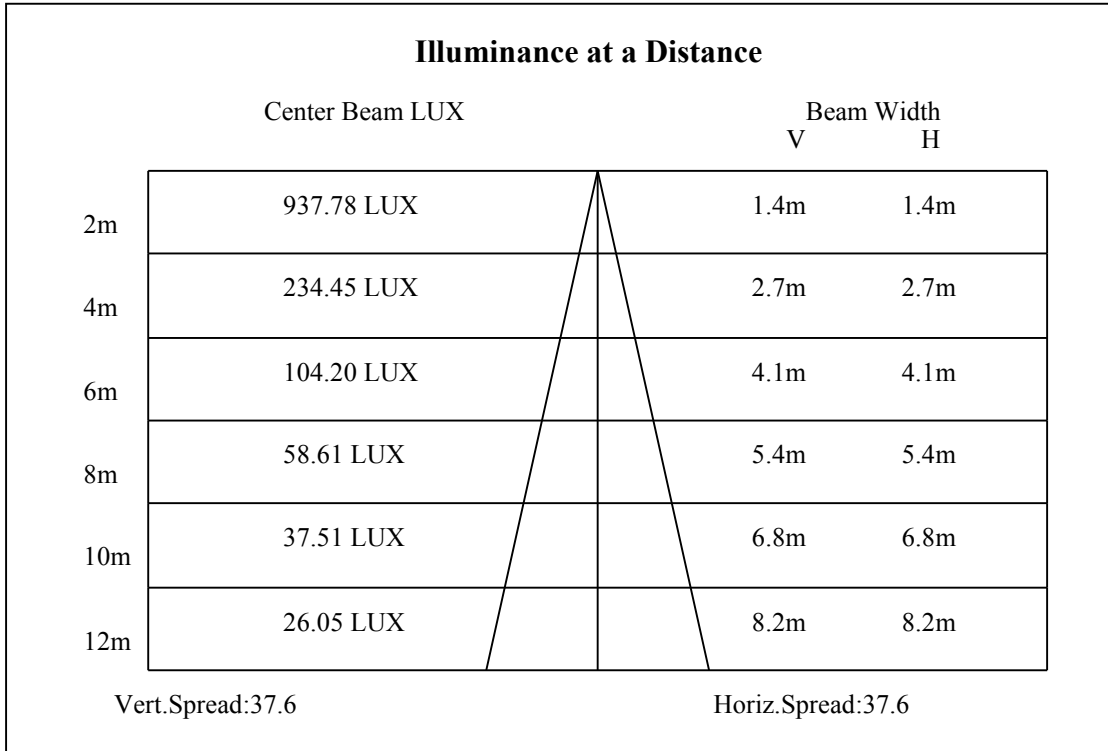
C90/C270: —————

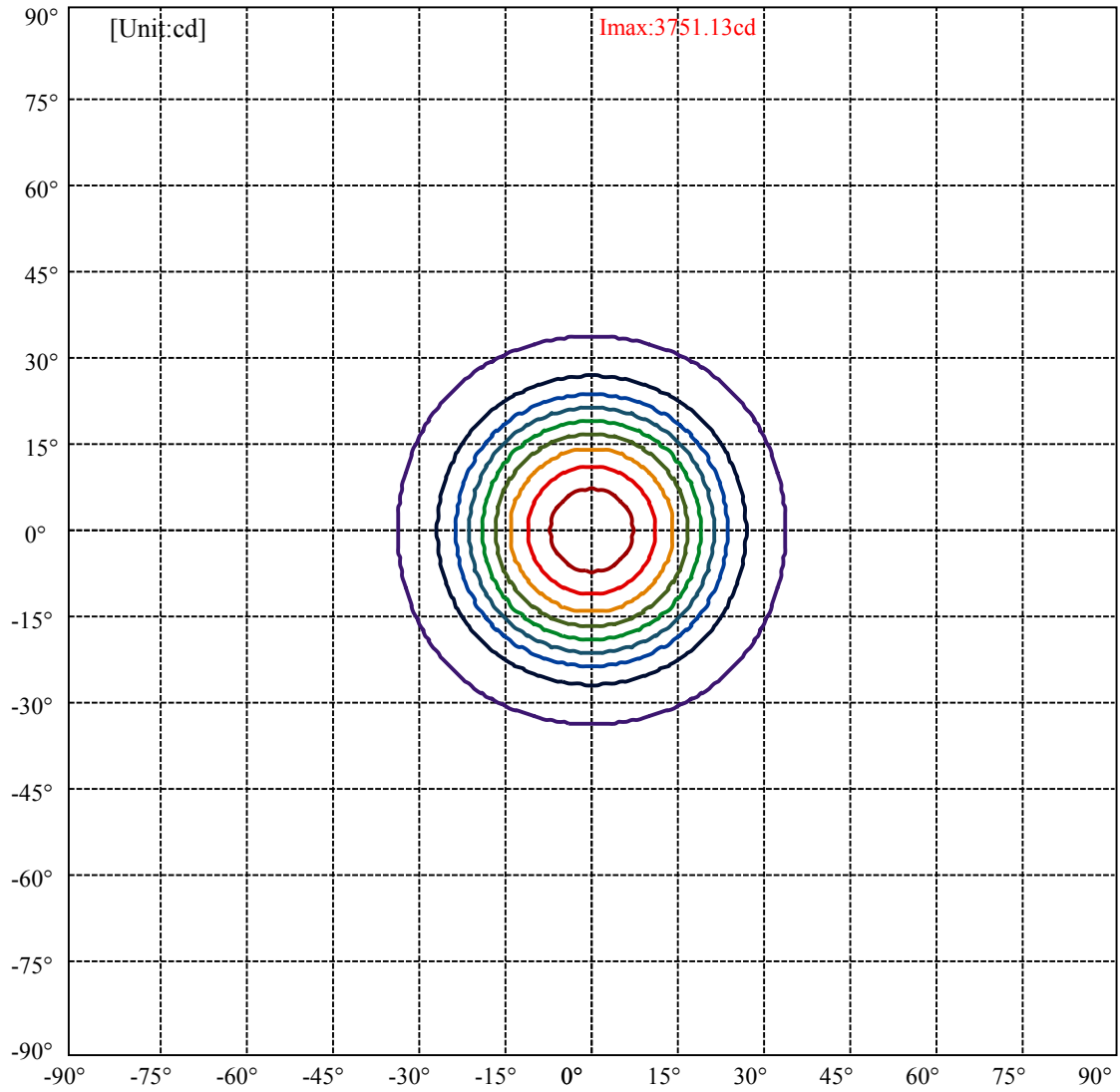
Field angle(10%Imax):C0/180Left:33.3 Right:33.3

:C90/270Left:33.3 Right:33.3

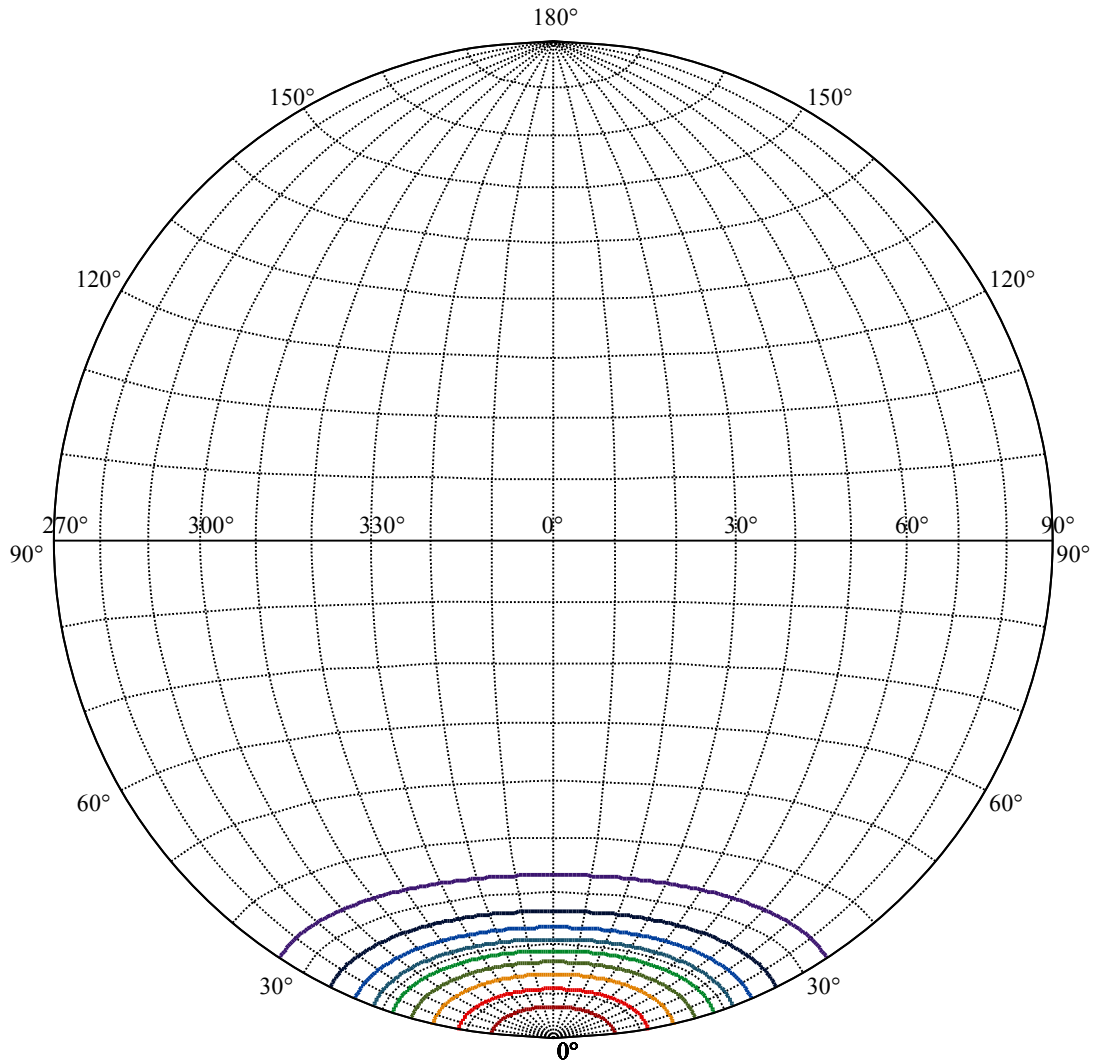
Beam Angle(50%Imax):C0/180Left:18.8 Right:18.8

:C90/270Left:18.8 Right:18.8





(10%Imax) 375.113	—
(20%Imax) 750.226	—
(30%Imax) 1125.34	—
(40%Imax) 1500.45	—
(50%Imax) 1875.57	—
(60%Imax) 2250.68	—
(70%Imax) 2625.79	—
(80%Imax) 3000.9	—
(90%Imax) 3376.02	—



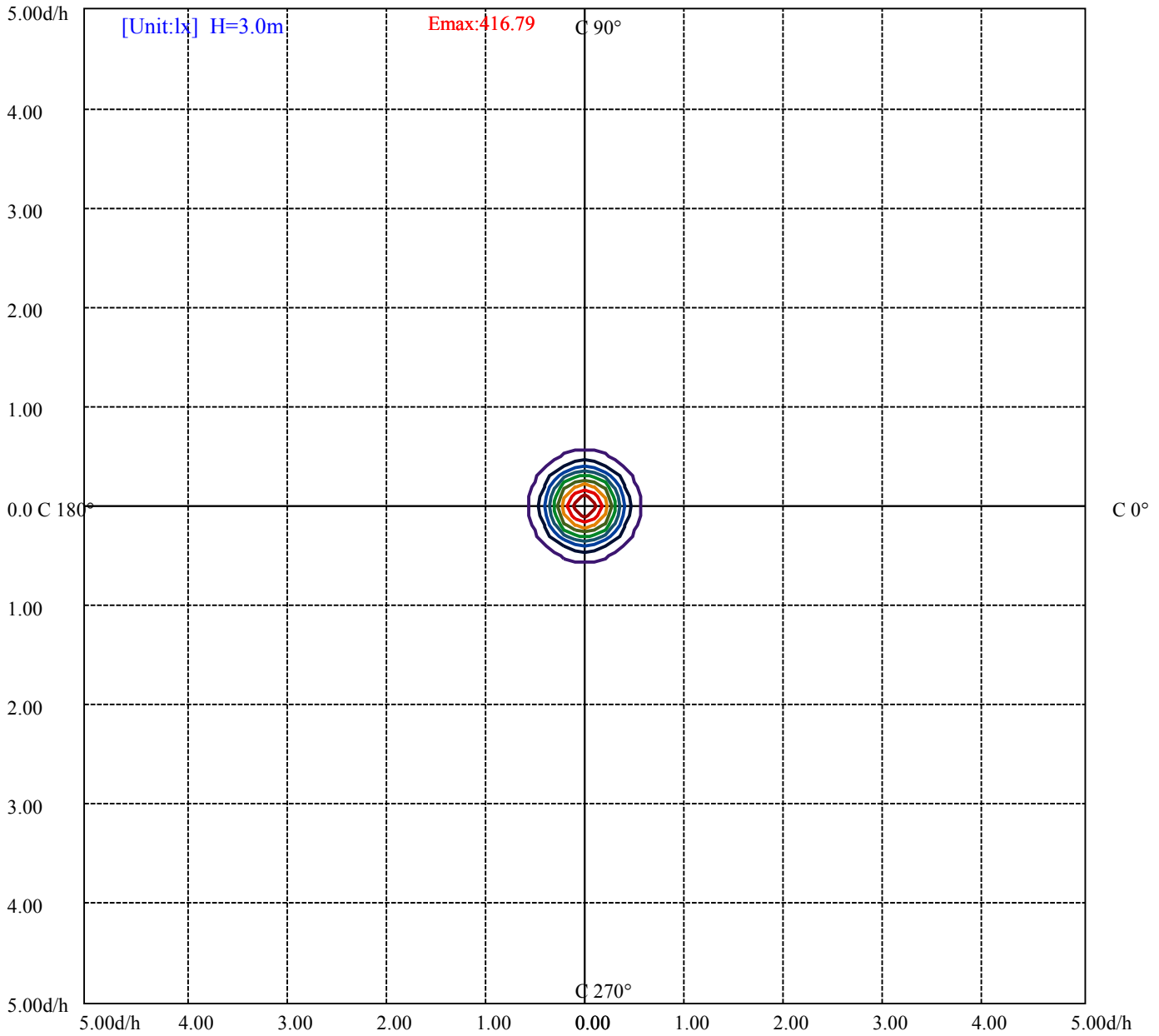
House

[Unit:cd]

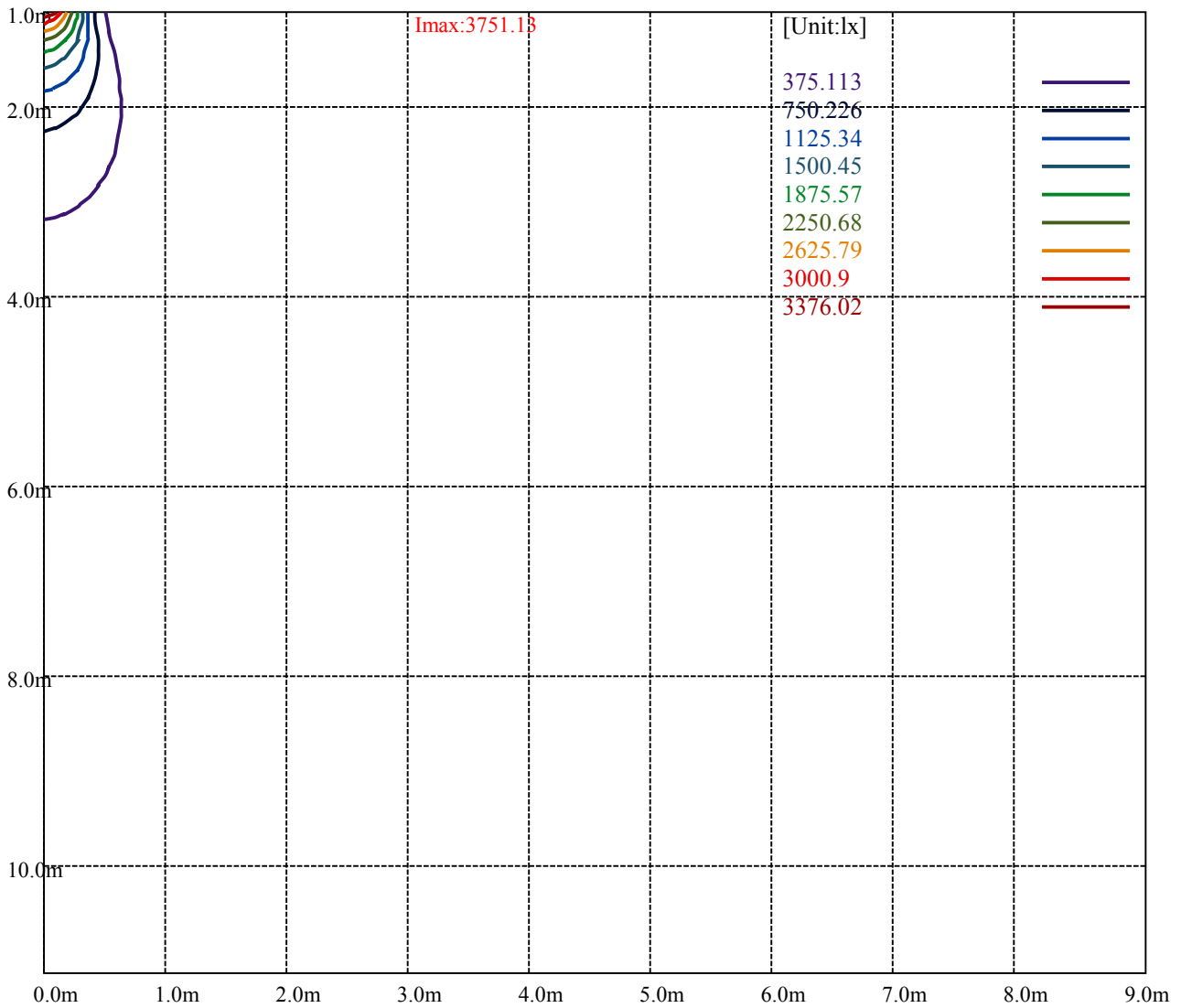
Road

Imax:3751.13

(10%Imax) 375.113	—
(20%Imax) 750.226	—
(30%Imax) 1125.34	—
(40%Imax) 1500.45	—
(50%Imax) 1875.57	—
(60%Imax) 2250.68	—
(70%Imax) 2625.79	—
(80%Imax) 3000.9	—
(90%Imax) 3376.02	—



(10%Emax) 41.67911	—
(20%Emax) 83.35833	—
(30%Emax) 125.0378	—
(40%Emax) 166.7167	—
(50%Emax) 208.3956	—
(60%Emax) 250.0744	—
(70%Emax) 291.7545	—
(80%Emax) 333.4333	—
(90%Emax) 375.1122	—



Luminance Table

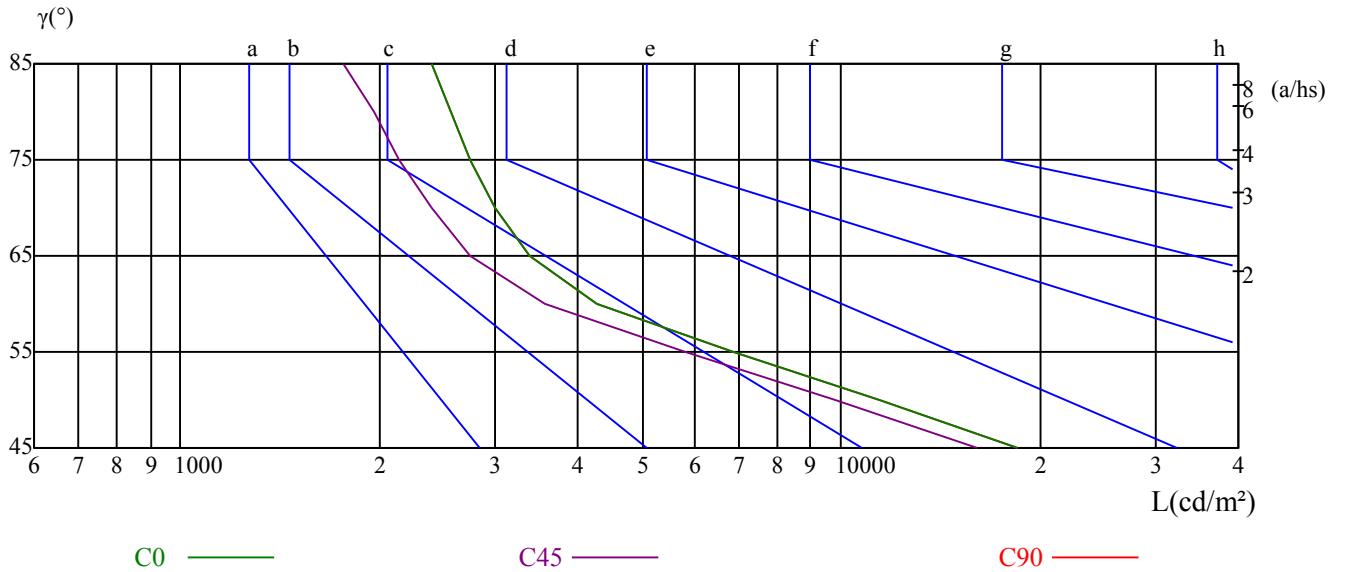
γ	45	50	55	60	65	70	75	80	85
C0	18492	11409	6865	4280	3374	3002	2748	2575	2396
C45	16102	9789	5799	3556	2753	2400	2147	1958	1764
C90	18492	11409	6865	4280	3374	3002	2748	2575	2396

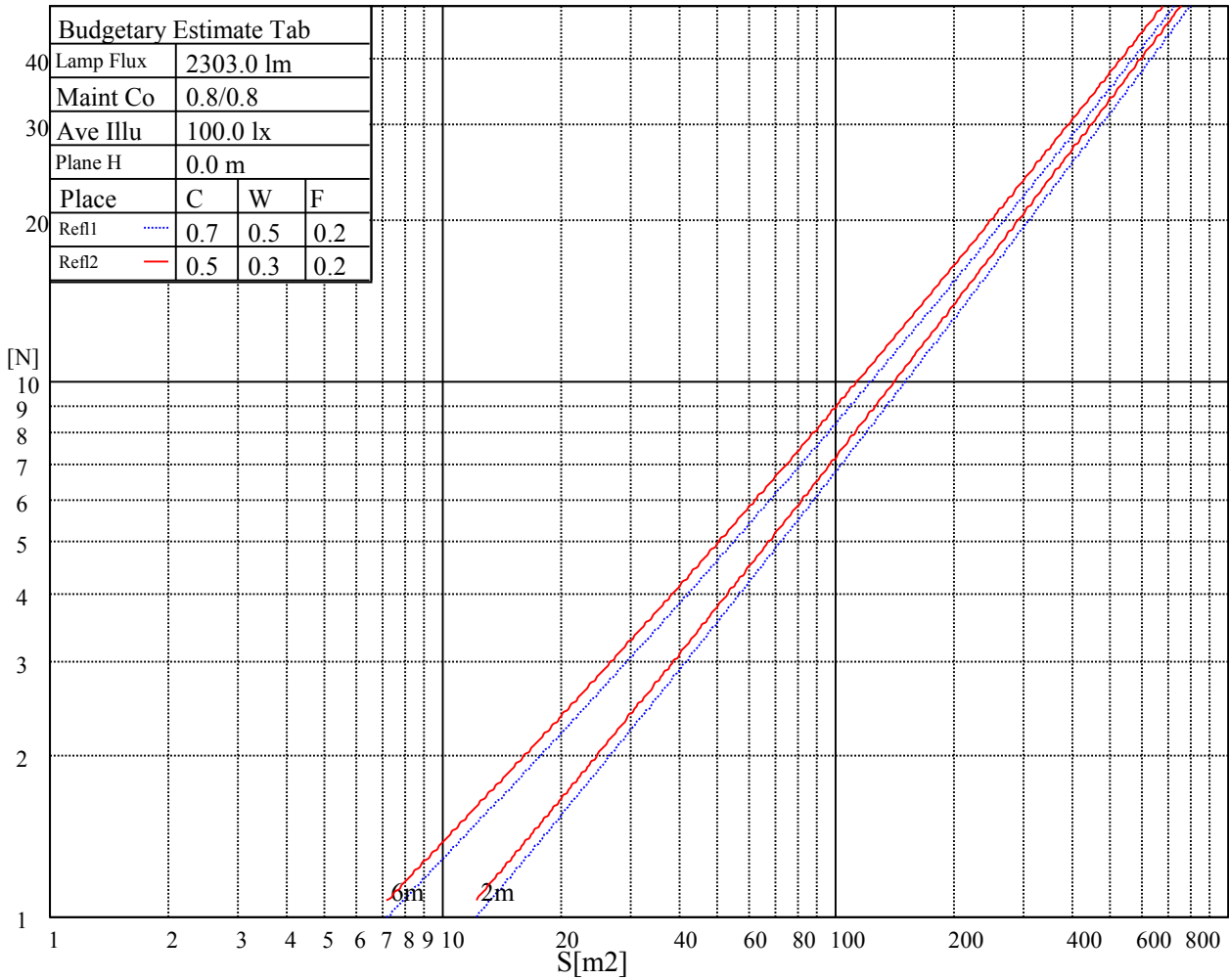
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
7416	7416	7416	8476	8476	8476	17686	17686	17686

Glare Table

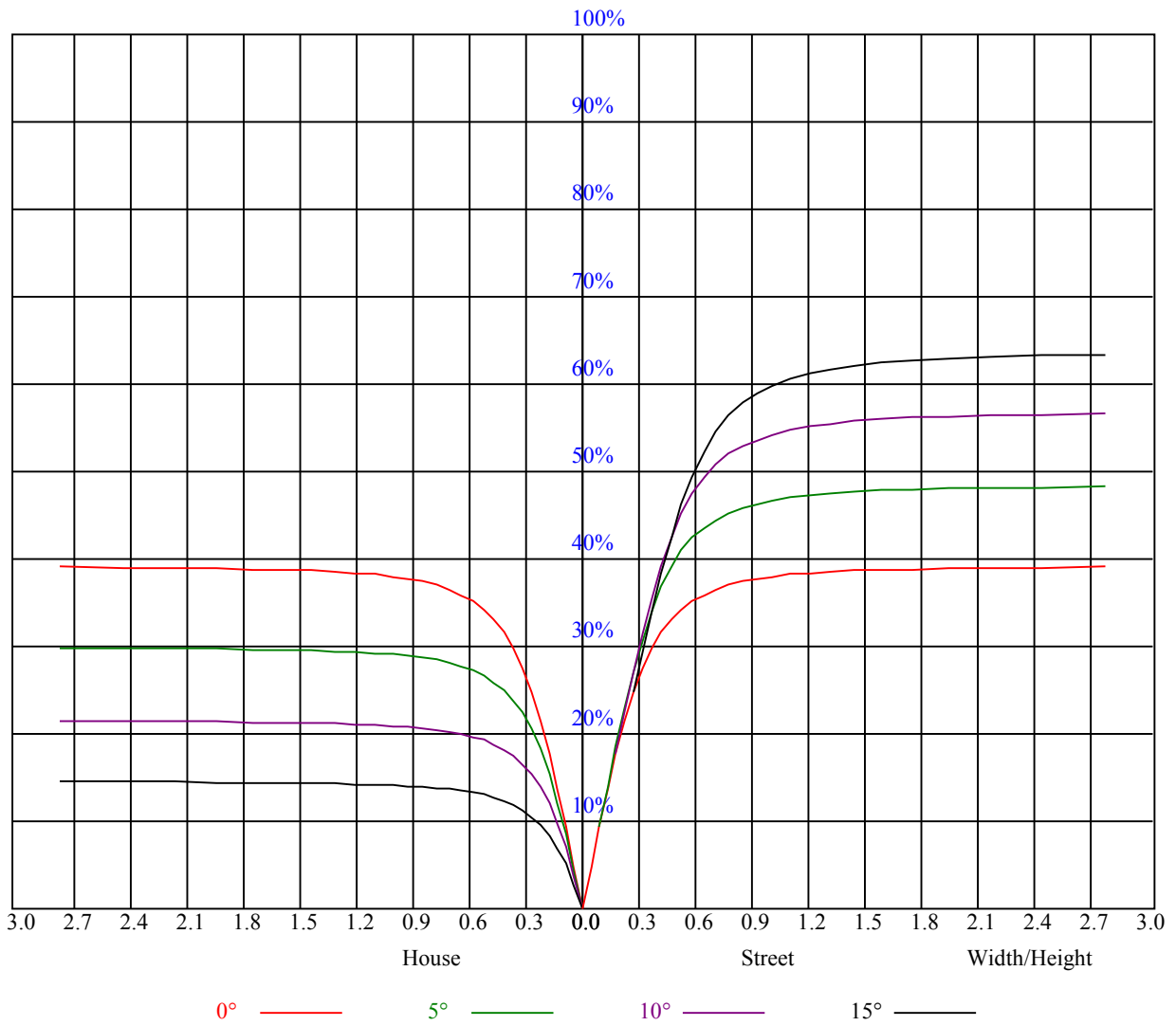
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	0.95	0.95	0.95	0.92	0.92	0.92	0.88	0.88	0.88	0.84	0.84	0.84	0.81	0.81	0.81	0.79
1	0.87	0.85	0.83	0.86	0.84	0.82	0.82	0.81	0.79	0.79	0.78	0.77	0.77	0.76	0.75	0.73
2	0.82	0.79	0.76	0.81	0.78	0.75	0.78	0.76	0.74	0.76	0.74	0.72	0.74	0.72	0.71	0.69
3	0.78	0.74	0.71	0.76	0.73	0.70	0.74	0.72	0.69	0.72	0.70	0.68	0.71	0.69	0.67	0.66
4	0.74	0.70	0.66	0.73	0.69	0.66	0.71	0.68	0.65	0.69	0.67	0.65	0.68	0.66	0.64	0.63
5	0.70	0.66	0.63	0.69	0.65	0.63	0.68	0.65	0.62	0.67	0.64	0.61	0.65	0.63	0.61	0.60
6	0.67	0.63	0.60	0.66	0.62	0.59	0.65	0.62	0.59	0.64	0.61	0.59	0.63	0.60	0.58	0.57
7	0.64	0.60	0.57	0.63	0.60	0.57	0.63	0.59	0.56	0.62	0.59	0.56	0.61	0.58	0.56	0.55
8	0.61	0.57	0.54	0.61	0.57	0.54	0.60	0.57	0.54	0.59	0.56	0.54	0.59	0.56	0.54	0.53
9	0.59	0.55	0.52	0.59	0.55	0.52	0.58	0.54	0.52	0.57	0.54	0.52	0.57	0.54	0.52	0.51
10	0.57	0.53	0.50	0.57	0.53	0.50	0.56	0.53	0.50	0.55	0.52	0.50	0.55	0.52	0.50	0.49



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	3753.19	3559.95	3094.72	2502.31	1685.83	870.44	501.56	321.53	200.46
45.0	3757.60	3557.19	3073.25	2506.17	1636.28	869.34	484.50	317.12	197.98
90.0	3745.49	3479.01	3024.25	2362.47	1515.70	792.92	461.21	287.39	189.12
135.0	3748.24	3618.31	3199.33	2571.13	1746.94	937.06	520.83	317.12	209.54
180.0	3753.19	3594.08	3147.02	2499.01	1700.14	864.55	488.85	313.00	201.89
225.0	3757.60	3597.39	3161.34	2508.37	1717.76	865.54	488.46	315.75	204.70
270.0	3745.49	3637.03	3207.59	2633.90	1832.28	950.27	545.06	336.95	215.00
315.0	3748.24	3506.54	3040.76	2409.27	1555.89	752.73	470.73	295.76	191.05
360.0	3753.19	3559.95	3094.72	2502.31	1685.83	870.44	501.56	321.53	200.46

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	118.98	71.79	40.80	24.00	18.17	15.25	12.77	10.79	8.70
45.0	118.26	72.12	41.57	24.11	18.66	15.31	12.88	10.90	8.70
90.0	110.44	65.30	37.16	22.96	17.67	14.87	12.61	10.68	8.81
135.0	126.19	75.43	45.09	26.04	18.83	15.64	13.27	11.23	9.19
180.0	119.20	73.06	41.95	24.89	18.72	15.47	12.99	11.01	9.30
225.0	123.44	73.50	43.94	25.82	19.05	15.69	13.32	11.29	9.63
270.0	133.13	78.95	45.37	28.13	19.38	16.02	13.54	11.62	9.74
315.0	116.94	69.21	39.86	23.73	18.17	15.20	12.66	10.85	9.03
360.0	118.98	71.79	40.80	24.00	18.17	15.25	12.77	10.79	8.70

C/γ(°)	90.0
0.0	7.71
45.0	7.71
90.0	7.71
135.0	7.71
180.0	7.71
225.0	7.71
270.0	7.71
315.0	7.71
360.0	7.71