



NATA LIGHTING CO.,LTD
www.nata.cn
Email:info@nata.cn
Tel:+86 0750-377 0000(10 lines) Fax:+86 0750-377 1111
Address:380JinOu Road,Gaoxin Zone,Jiang Men City,Guangdong,China

Nata

LumCAT: 3-2040-M
Luminaire: 92.70.135.00
Report No: GC2017122802
Test No: NT-0010
LampCAT: NICHIA NVEWJ048Z-V1
Lamp flux(lm): 3051.0
Number of Lamps: 1
Length(mm): 79
Phm Type: C

Voltage(V): 43.4000
Current(A): 0.5000
Power (W): 21.7000
PF: 0.0000
Ballast type: DC
Width(mm): 79
Height(mm): 0

Photometric Results

Lumens(lm): 2835.45
Efficiency(%): 92.94%
Lumens(lm)/Power(W): 130.67
Central intensity(cd): 11886.680
Maximum intensity(cd): 11886.680
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=21.5
 [C90/270]Total=21.5
Field angle(10%Imax): [C0/180]Total=49.2
 [C90/270]Total=49.2
Maximum s/h(1/2): C0_180=0.36 C90_270=0.36
Maximum s/h(1/4): C0_180=0.38 C90_270=0.38
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 92.94%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.532%

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2017/12/28
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.42

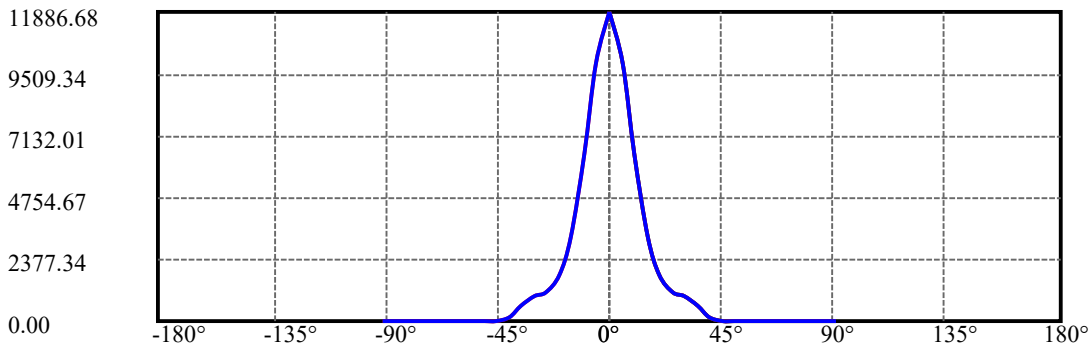
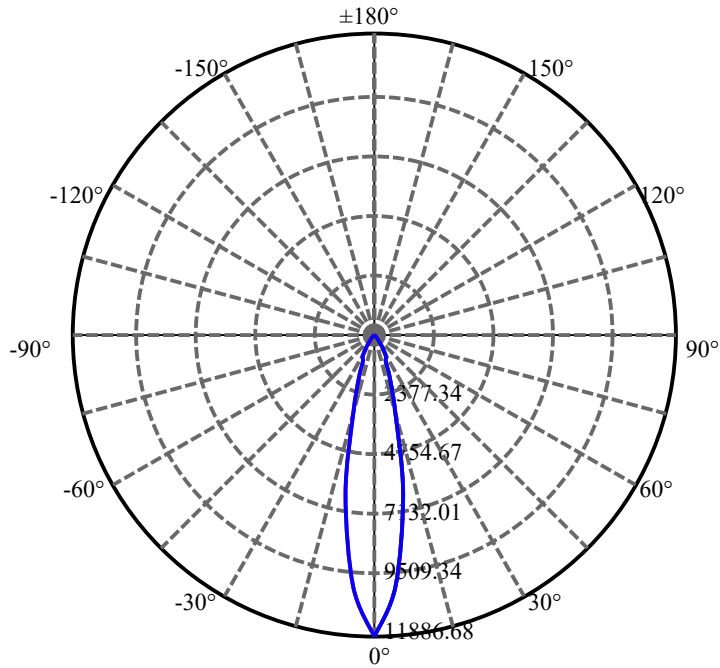
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	11886.677	0.000	0	.000%	.000%
5.0	9920.819	260.702	260.702	8.545%	9.194%
10.0	6407.739	584.124	844.826	19.145%	29.795%
15.0	3234.839	571.991	1416.818	18.748%	49.968%
20.0	1752.239	411.005	1827.823	13.471%	64.463%
25.0	1140.025	303.345	2131.168	9.942%	75.162%
30.0	964.306	266.305	2397.473	8.728%	84.554%
35.0	571.238	226.120	2623.592	7.411%	92.528%
40.0	139.816	118.634	2742.226	3.888%	96.712%
45.0	20.915	29.761	2771.987	.975%	97.762%
50.0	17.418	7.746	2779.733	.254%	98.035%
55.0	15.526	7.163	2786.896	.235%	98.288%
60.0	14.494	6.939	2793.835	.227%	98.532%
65.0	13.812	6.881	2800.716	.226%	98.775%
70.0	13.406	6.892	2807.608	.226%	99.018%
75.0	13.097	6.927	2814.535	.227%	99.262%
80.0	12.911	6.959	2821.494	.228%	99.508%
85.0	12.794	6.985	2828.479	.229%	99.754%
90.0	12.656	6.968	2835.447	.228%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2397.47	78.58%	84.55%
0-40	2742.23	89.88%	96.71%
0-60	2793.83	91.57%	98.53%
0-90	2828.48	92.71%	99.75%
0-120	2828.48	92.71%	99.75%
0-180	2835.45	92.94%	100.00%
60-90	41.58	1.36%	1.47%
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%
0-27.58	2268.36	74.35%	80.00%

ZONAL LUMEN SUMMARY

0-10	844.83
10-20	983.00
20-30	569.65
30-40	344.75
40-50	37.51
50-60	14.10
60-70	13.77
70-80	13.89
80-90	6.98
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: —————

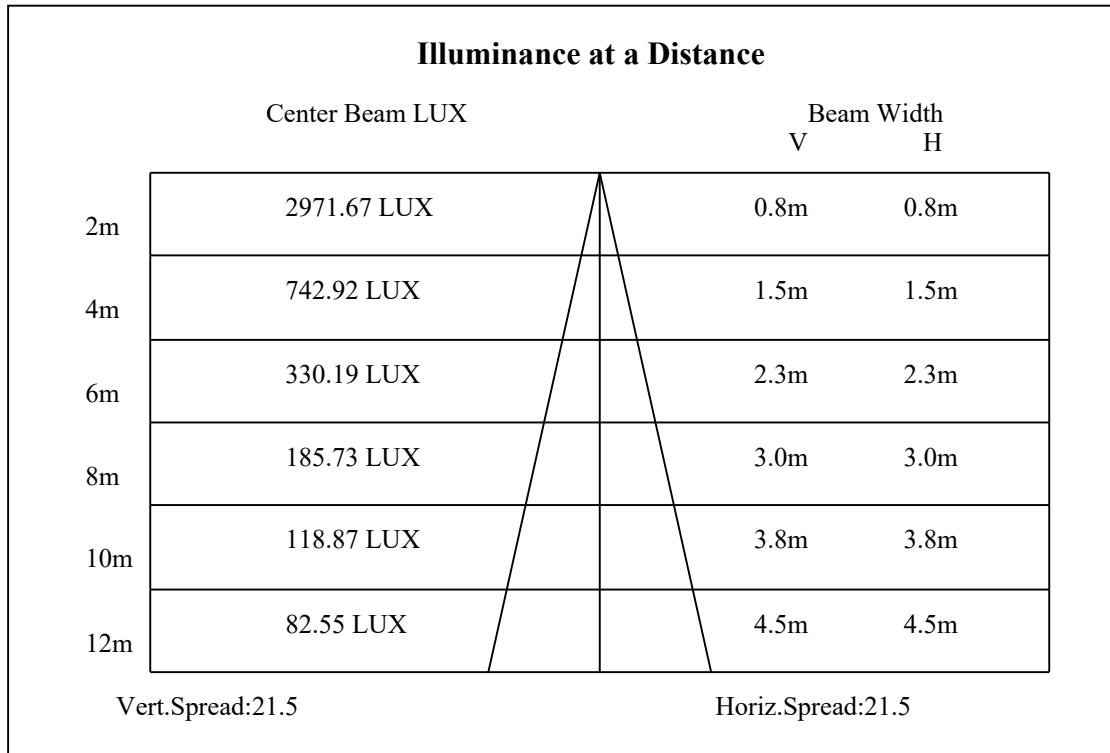
C90/C270: —————

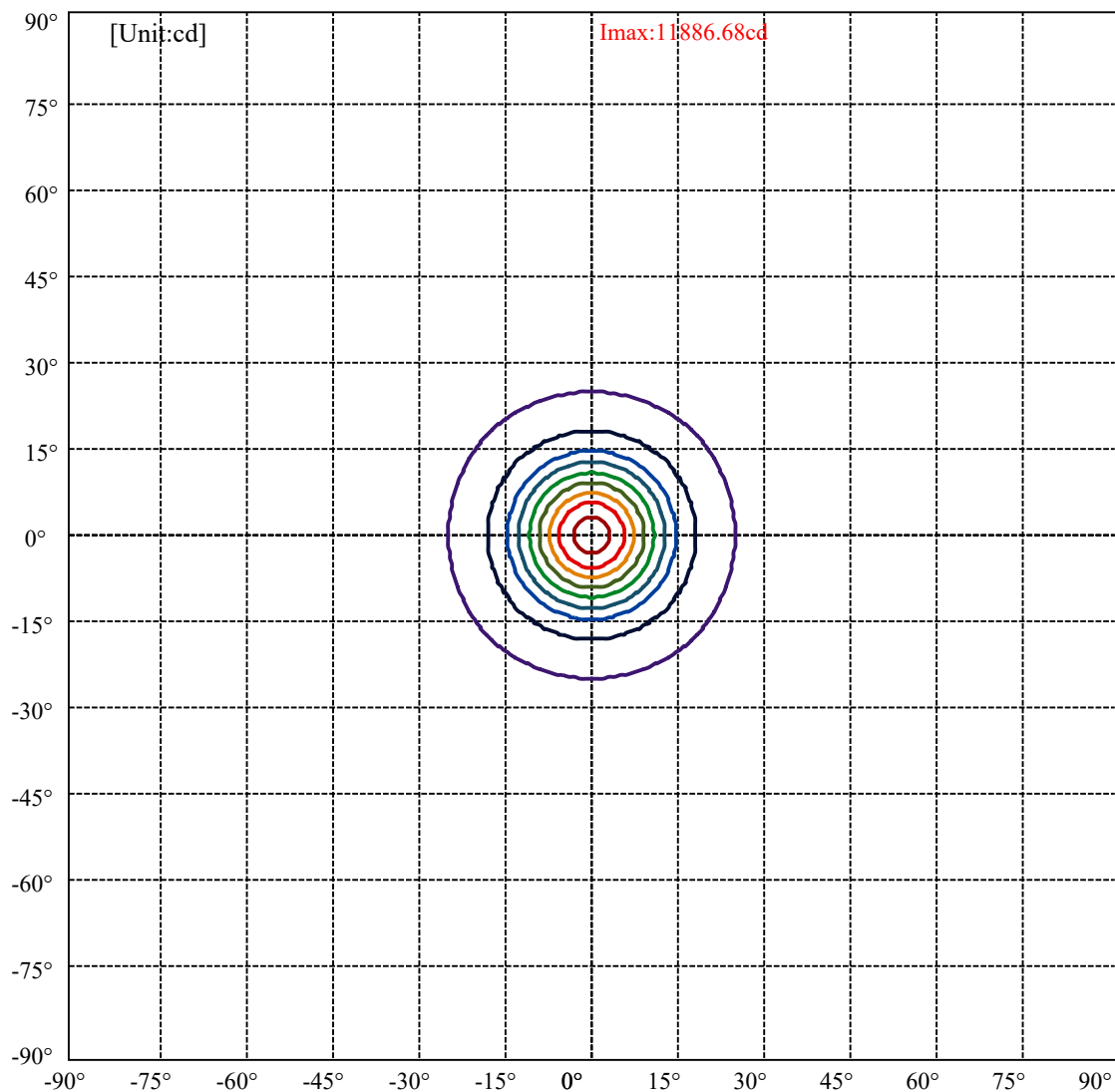
Field angle(10%Imax):C0/180Left:24.6 Right:24.6

:C90/270Left:24.6 Right:24.6

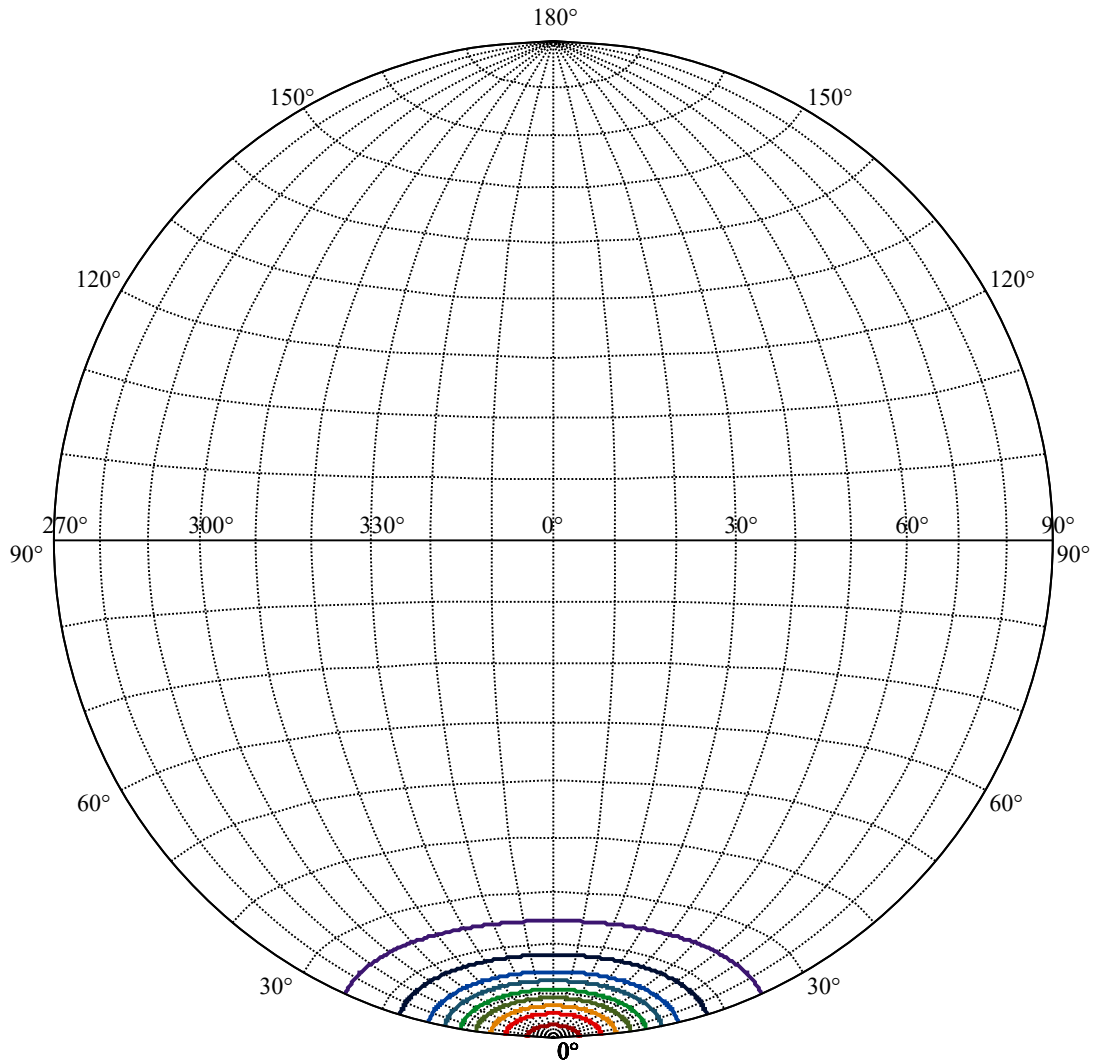
Beam Angle(50%Imax):C0/180Left:10.7 Right:10.7

:C90/270Left:10.7 Right:10.7





(10%Imax) 1188.67	—
(20%Imax) 2377.34	—
(30%Imax) 3566	—
(40%Imax) 4754.67	—
(50%Imax) 5943.34	—
(60%Imax) 7132.01	—
(70%Imax) 8320.67	—
(80%Imax) 9509.34	—
(90%Imax) 10698	—



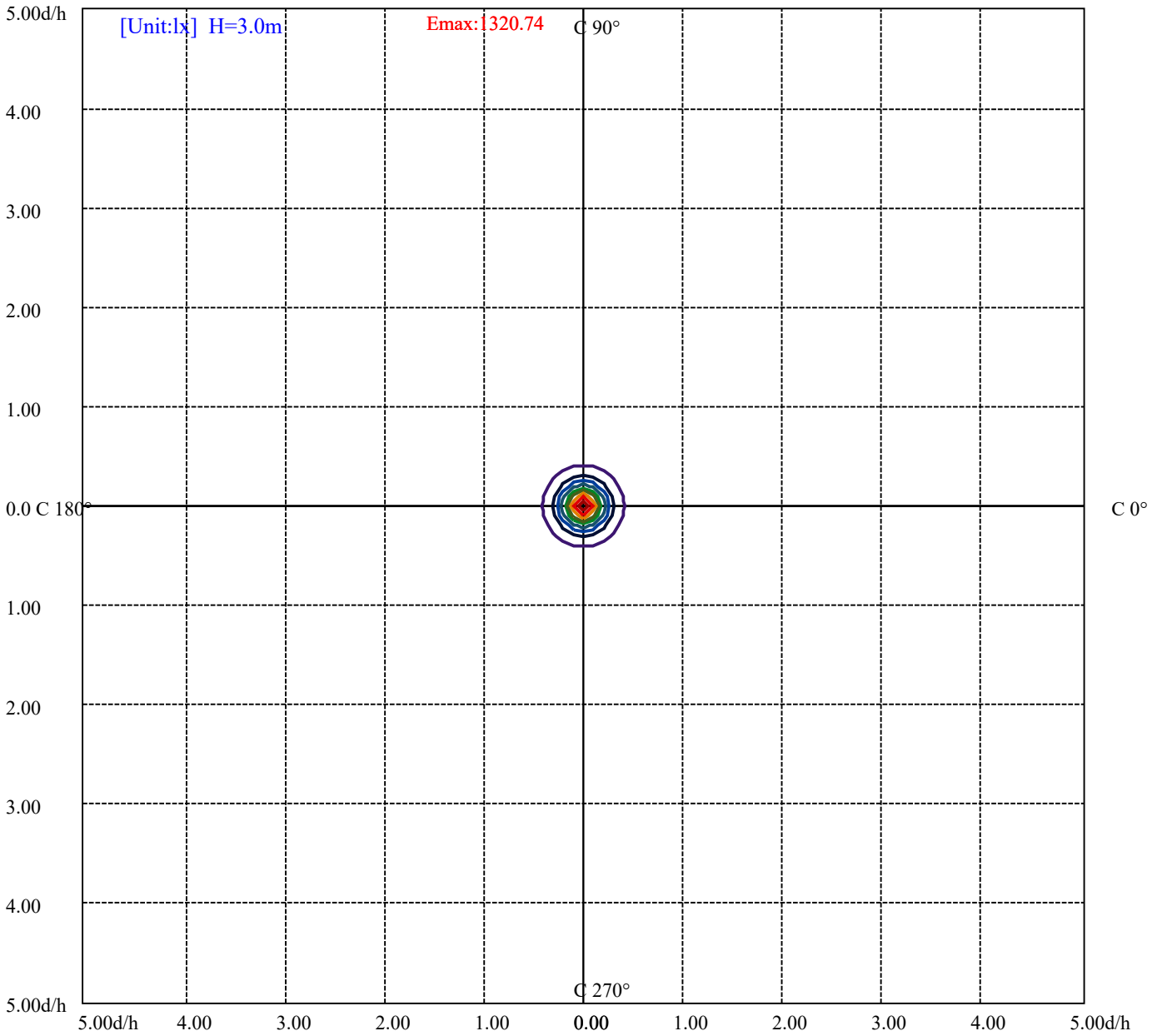
House

[Unit:cd]

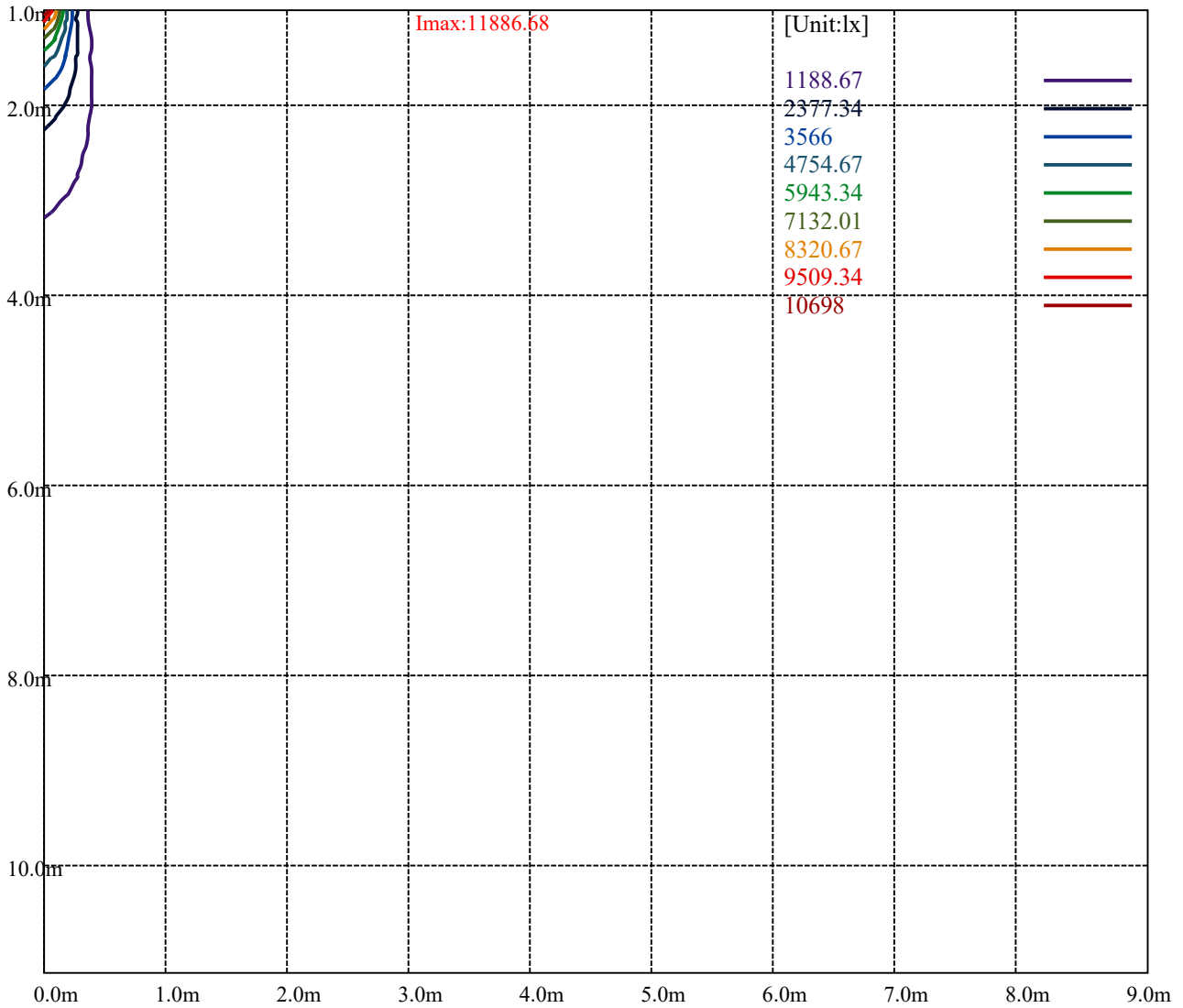
Road

Imax:11886.68

(10%Imax) 1188.67	—
(20%Imax) 2377.34	—
(30%Imax) 3566	—
(40%Imax) 4754.67	—
(50%Imax) 5943.34	—
(60%Imax) 7132.01	—
(70%Imax) 8320.67	—
(80%Imax) 9509.34	—
(90%Imax) 10698	—



(10%Emax) 132.0733	—
(20%Emax) 264.1467	—
(30%Emax) 396.2211	—
(40%Emax) 528.2944	—
(50%Emax) 660.3678	—
(60%Emax) 792.4412	—
(70%Emax) 924.5144	—
(80%Emax) 1056.588	—
(90%Emax) 1188.667	—



Luminance Table

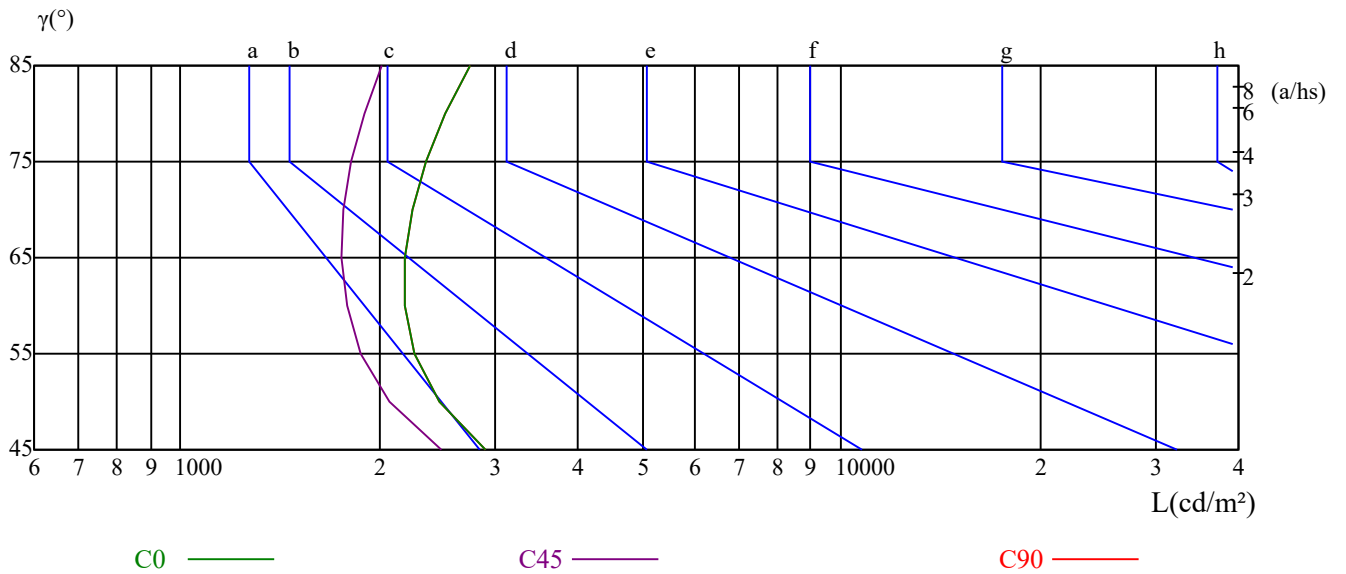
γ	45	50	55	60	65	70	75	80	85
C0	2895	2461	2258	2189	2186	2247	2352	2518	2752
C45	2479	2076	1875	1788	1755	1770	1813	1895	2013
C90	2895	2461	2258	2189	2186	2247	2352	2518	2752

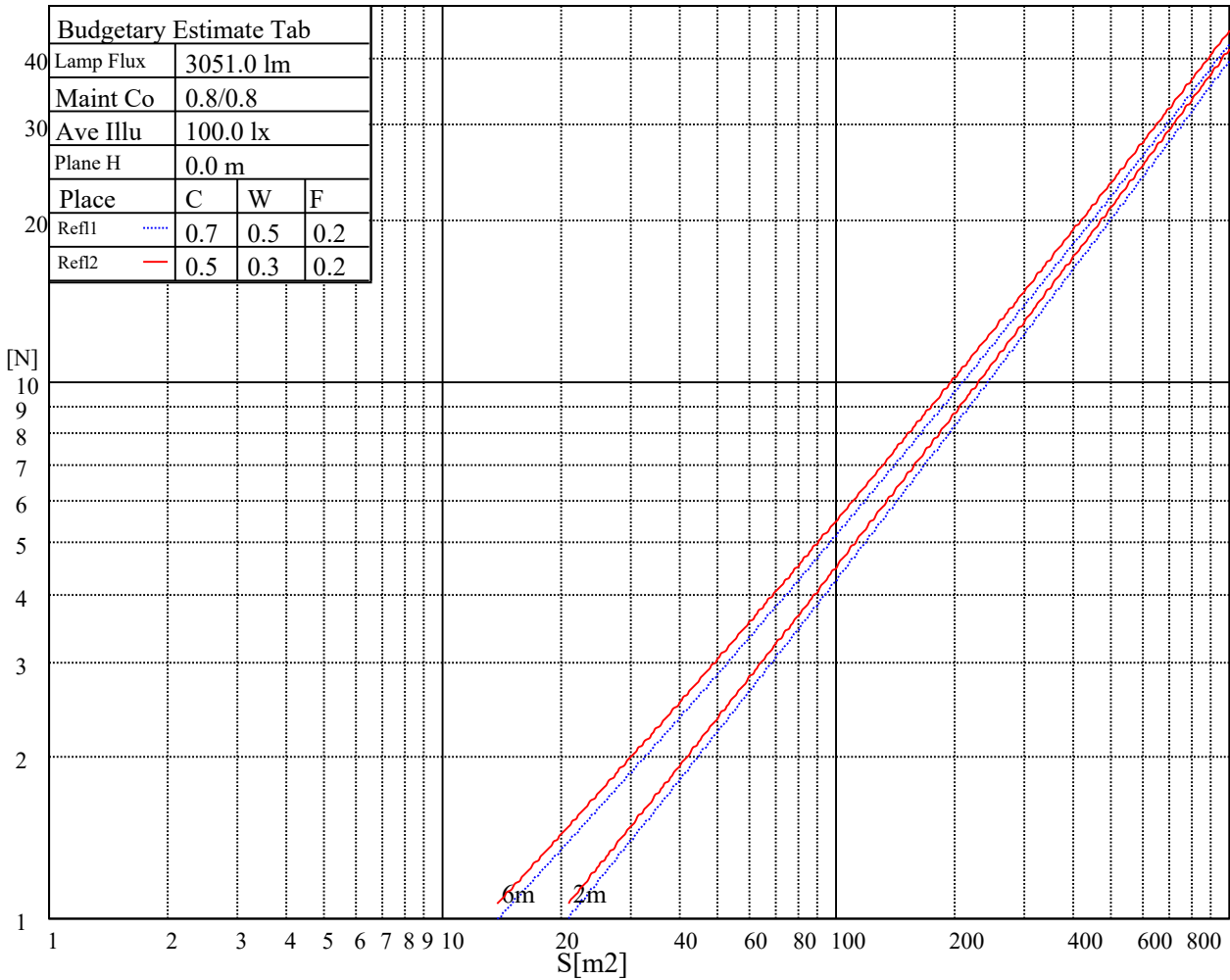
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
5372	5372	5372	8317	8317	8317	24127	24127	24127

Glare Table

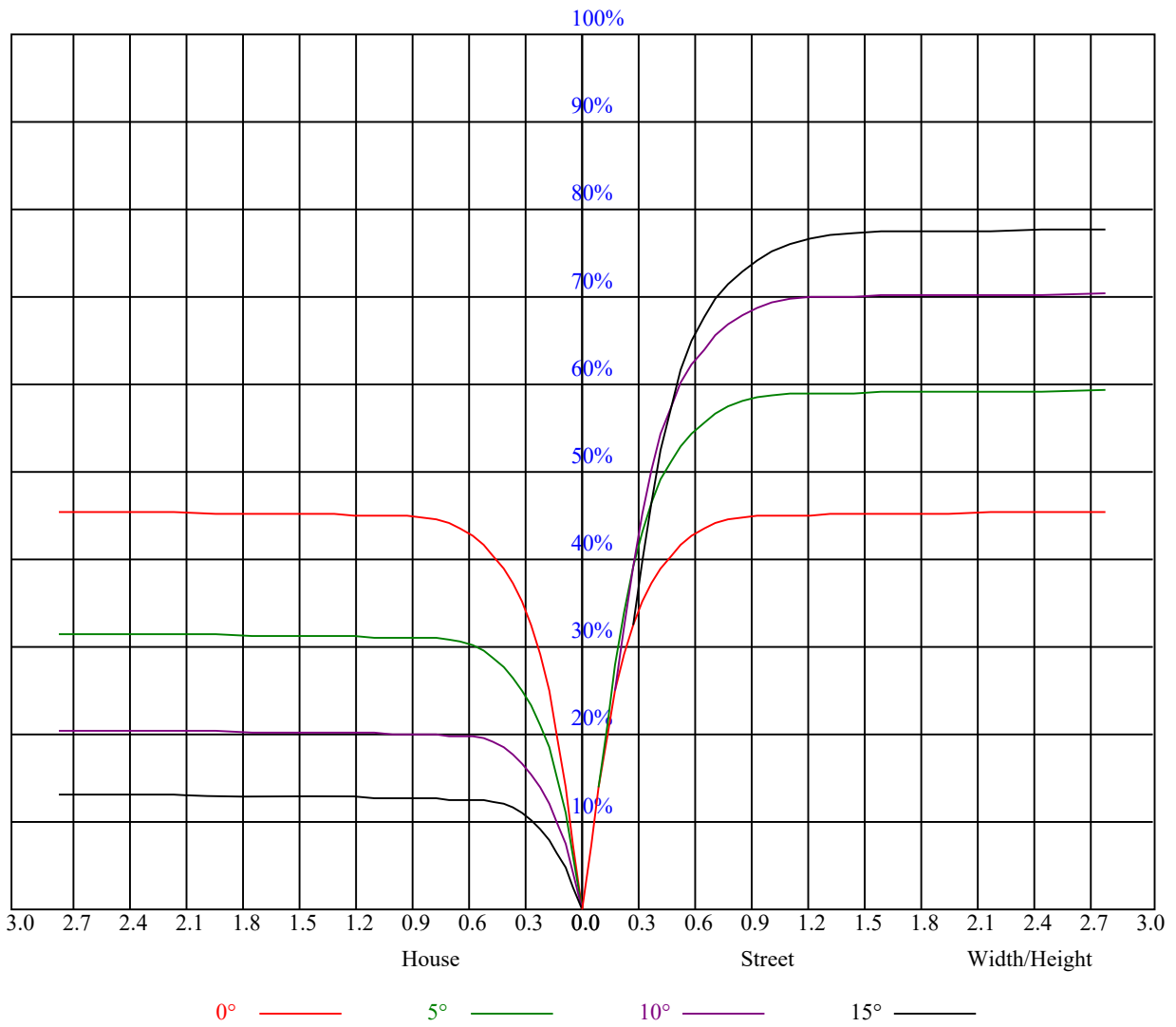
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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 RHOF=20 CU															
0	1.11	1.11	1.11	1.08	1.08	1.08	1.03	1.03	1.03	0.99	0.99	0.99	0.95	0.95	0.95	0.93
1	1.04	1.02	1.00	1.02	1.00	0.98	0.98	0.97	0.95	0.95	0.94	0.93	0.92	0.91	0.90	0.88
2	0.98	0.95	0.92	0.97	0.94	0.91	0.94	0.91	0.89	0.91	0.89	0.87	0.88	0.87	0.86	0.84
3	0.93	0.89	0.86	0.92	0.88	0.86	0.90	0.87	0.84	0.87	0.85	0.83	0.85	0.83	0.82	0.80
4	0.89	0.85	0.81	0.88	0.84	0.81	0.86	0.83	0.80	0.84	0.81	0.79	0.82	0.80	0.78	0.77
5	0.85	0.80	0.77	0.84	0.80	0.77	0.82	0.79	0.76	0.81	0.78	0.76	0.80	0.77	0.75	0.74
6	0.81	0.77	0.74	0.81	0.76	0.73	0.79	0.76	0.73	0.78	0.75	0.72	0.77	0.74	0.72	0.71
7	0.78	0.73	0.70	0.77	0.73	0.70	0.76	0.73	0.70	0.75	0.72	0.69	0.74	0.71	0.69	0.68
8	0.75	0.71	0.68	0.75	0.70	0.67	0.74	0.70	0.67	0.73	0.69	0.67	0.72	0.69	0.67	0.66
9	0.72	0.68	0.65	0.72	0.68	0.65	0.71	0.67	0.65	0.70	0.67	0.64	0.70	0.67	0.64	0.63
10	0.70	0.66	0.63	0.69	0.65	0.63	0.69	0.65	0.62	0.68	0.65	0.62	0.68	0.64	0.62	0.61



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	11704.99	10736.00	7410.59	3958.56	1955.05	1240.97	997.62	738.31	293.45
45.0	11903.19	10614.87	7036.21	3694.28	1936.33	1209.59	983.31	659.03	290.15
90.0	11974.77	9788.48	6035.28	3054.53	1670.41	1094.14	948.90	506.90	50.98
135.0	11963.76	10097.34	6419.58	3237.32	1722.16	1130.86	966.24	596.26	148.27
180.0	11704.99	9009.43	5572.26	2663.63	1500.84	1064.74	929.79	437.48	40.19
225.0	11903.19	9311.69	5755.60	2801.82	1635.18	1098.60	944.99	437.75	41.35
270.0	11974.77	9948.69	6694.86	3363.95	1876.32	1194.17	982.76	597.36	168.09
315.0	11963.76	9860.05	6337.54	3104.63	1721.61	1087.14	960.84	596.81	86.05
360.0	11704.99	10736.00	7410.59	3958.56	1955.05	1240.97	997.62	738.31	293.45
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	24.06	17.89	15.86	14.70	13.87	13.43	13.16	12.94	12.77
45.0	22.41	17.89	15.80	14.70	13.93	13.49	13.16	12.94	12.83
90.0	19.55	17.01	15.25	14.37	13.76	13.32	13.05	12.88	12.77
135.0	20.59	17.29	15.47	14.42	13.82	13.43	13.10	12.94	12.77
180.0	19.38	17.07	15.31	14.42	13.82	13.38	13.10	12.99	12.88
225.0	20.04	17.45	15.58	14.53	13.82	13.43	13.10	12.88	12.83
270.0	21.36	17.56	15.64	14.48	13.82	13.43	13.10	12.88	12.77
315.0	19.93	17.18	15.31	14.31	13.65	13.32	12.99	12.83	12.72
360.0	24.06	17.89	15.86	14.70	13.87	13.43	13.16	12.94	12.77
C/ γ (°)	90.0								
0.0	12.66								
45.0	12.66								
90.0	12.66								
135.0	12.66								
180.0	12.66								
225.0	12.66								
270.0	12.61								
315.0	12.66								
360.0	12.66								