



NATA LIGHTNG CO.,LTD.
www.nata.cn
Email:info@nata.con
Tel:+86-750-3770000 Fax:+86-750-3771111
Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,Ching

Nata

LumCAT: 1-0942-N	
Luminaire: 92.70.360.000	
Report No: 220512-B002	Voltage(V): 36.8700
Test No: 220512-C002	Current(A): 0.2010
LampCAT: NICHIA NVNWS007Z-V1	Power (W): 7.4100
Lamp flux(lm): 848.6	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 43	Width(mm): 43
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 658.09
Efficiency(%): 77.55%
Lumens(lm)/Power(W): 88.81
Central intensity(cd): 1816.787
Maximum intensity(cd): 1816.787
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=33.6
 [C90/270]Total=33.6
Field angle(10%Imax): [C0/180]Total=56.8
 [C90/270]Total=56.8
Maximum s/h(1/2): C0_180=0.55 C90_270=0.55
Maximum s/h(1/4): C0_180=0.56 C90_270=0.56
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 77.55%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.977%

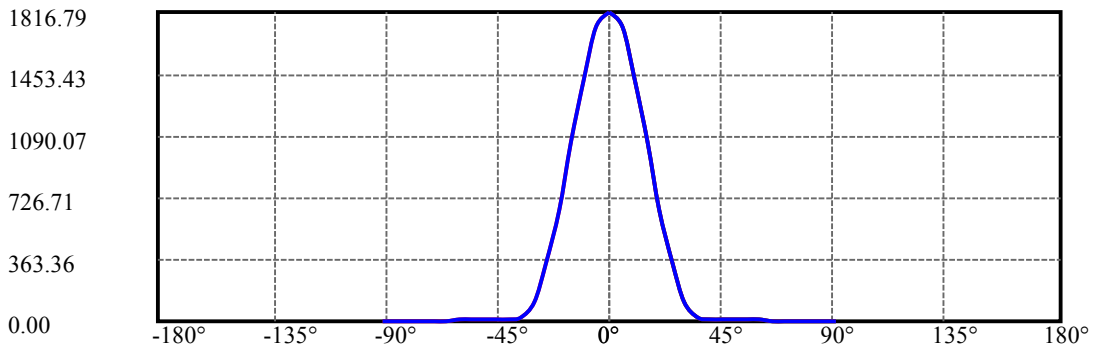
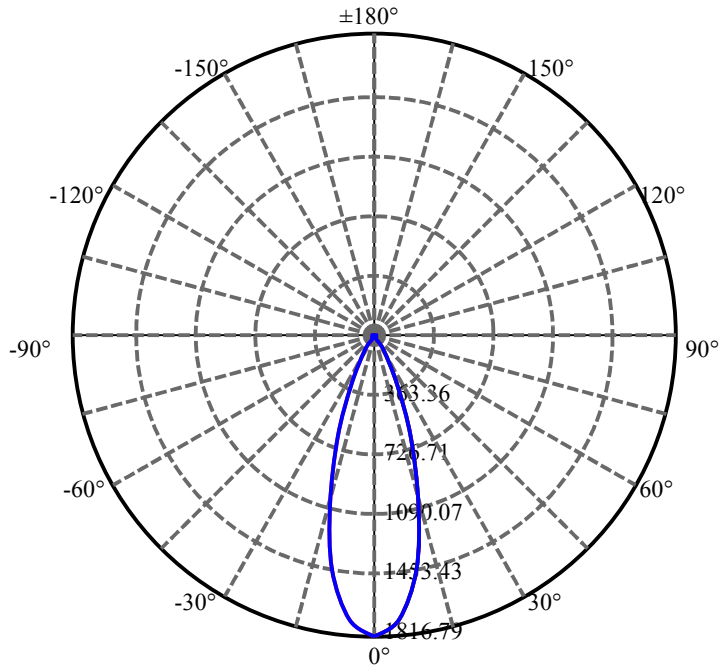
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1816.787	0.000	0	.000%	.000%
5.0	1724.693	42.337	42.337	4.989%	6.433%
10.0	1433.771	112.988	155.326	13.315%	23.602%
15.0	1050.531	147.367	302.693	17.366%	45.995%
20.0	658.245	140.827	443.52	16.595%	67.395%
25.0	336.581	104.339	547.859	12.295%	83.249%
30.0	109.206	56.415	604.273	6.648%	91.822%
35.0	21.227	19.207	623.481	2.263%	94.741%
40.0	13.781	5.841	629.321	.688%	95.628%
45.0	10.890	4.568	633.889	.538%	96.322%
50.0	9.105	4.040	637.93	.476%	96.936%
55.0	7.604	3.633	641.562	.428%	97.488%
60.0	6.326	3.220	644.782	.379%	97.977%
65.0	5.154	2.791	647.573	.329%	98.402%
70.0	4.414	2.423	649.996	.285%	98.770%
75.0	3.951	2.187	652.182	.258%	99.102%
80.0	3.697	2.046	654.229	.241%	99.413%
85.0	3.869	2.056	656.285	.242%	99.725%
90.0	2.734	1.808	658.093	.213%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	604.27	71.21%	91.82%
0-40	629.32	74.16%	95.63%
0-60	644.78	75.98%	97.98%
0-90	656.28	77.34%	99.73%
0-120	656.28	77.34%	99.73%
0-180	658.09	77.55%	100.00%
60-90	14.72	1.73%	2.24%
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%
0-23.98	526.47	62.04%	80.00%

ZONAL LUMEN SUMMARY

0-10	155.33
10-20	288.19
20-30	160.75
30-40	25.05
40-50	8.61
50-60	6.85
60-70	5.21
70-80	4.23
80-90	2.06
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: —————

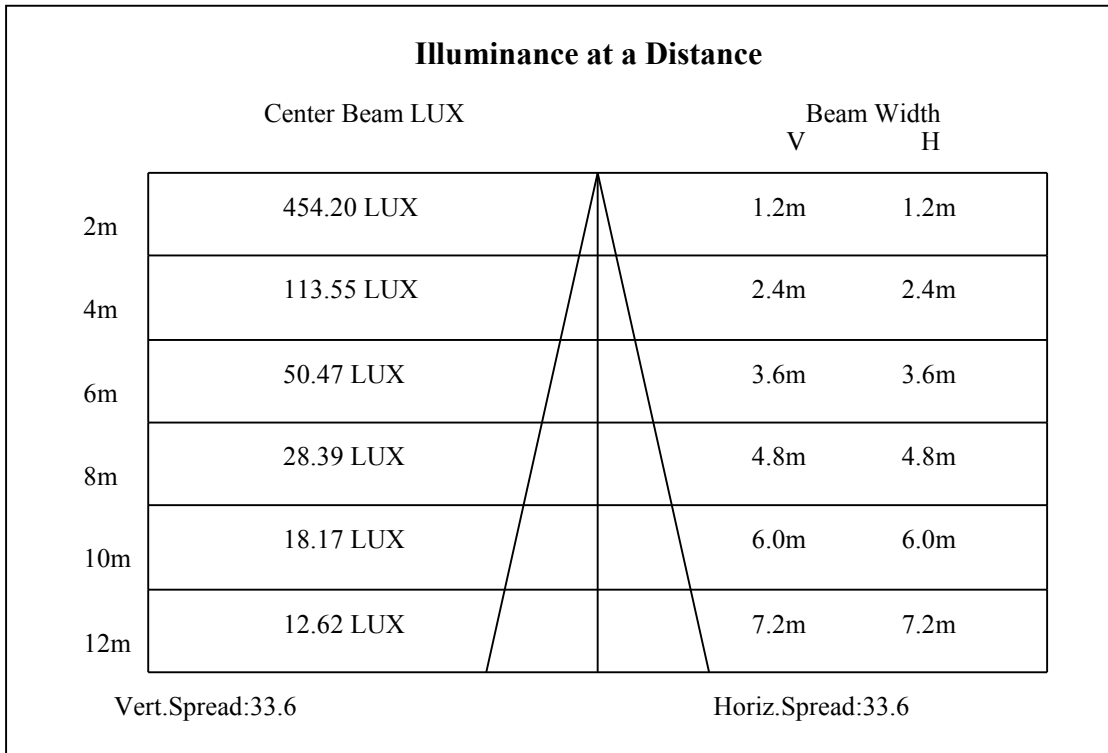
C90/C270: —————

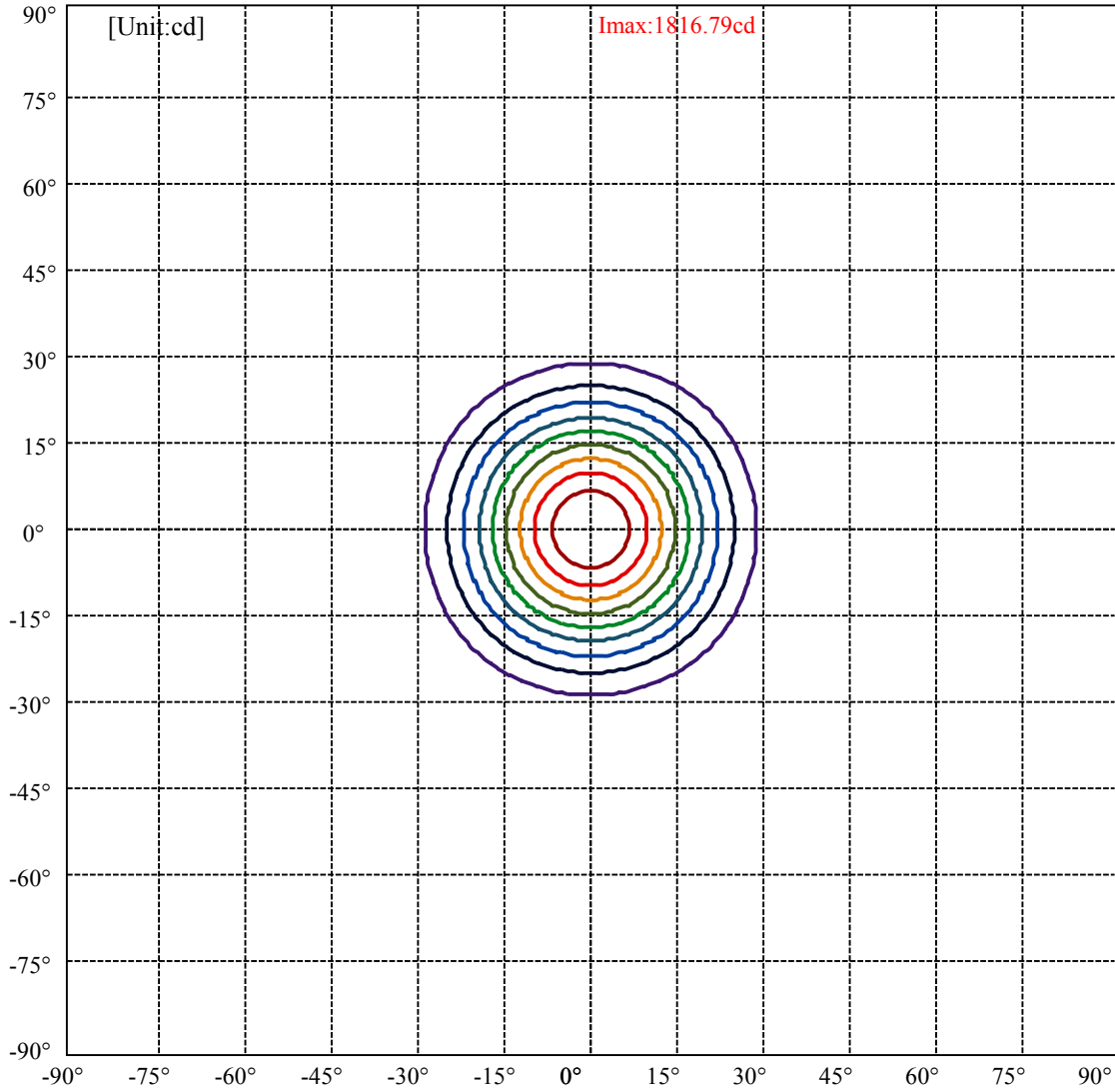
Field angle(10%Imax):C0/180Left:28.4 Right:28.4

:C90/270Left:28.4 Right:28.4

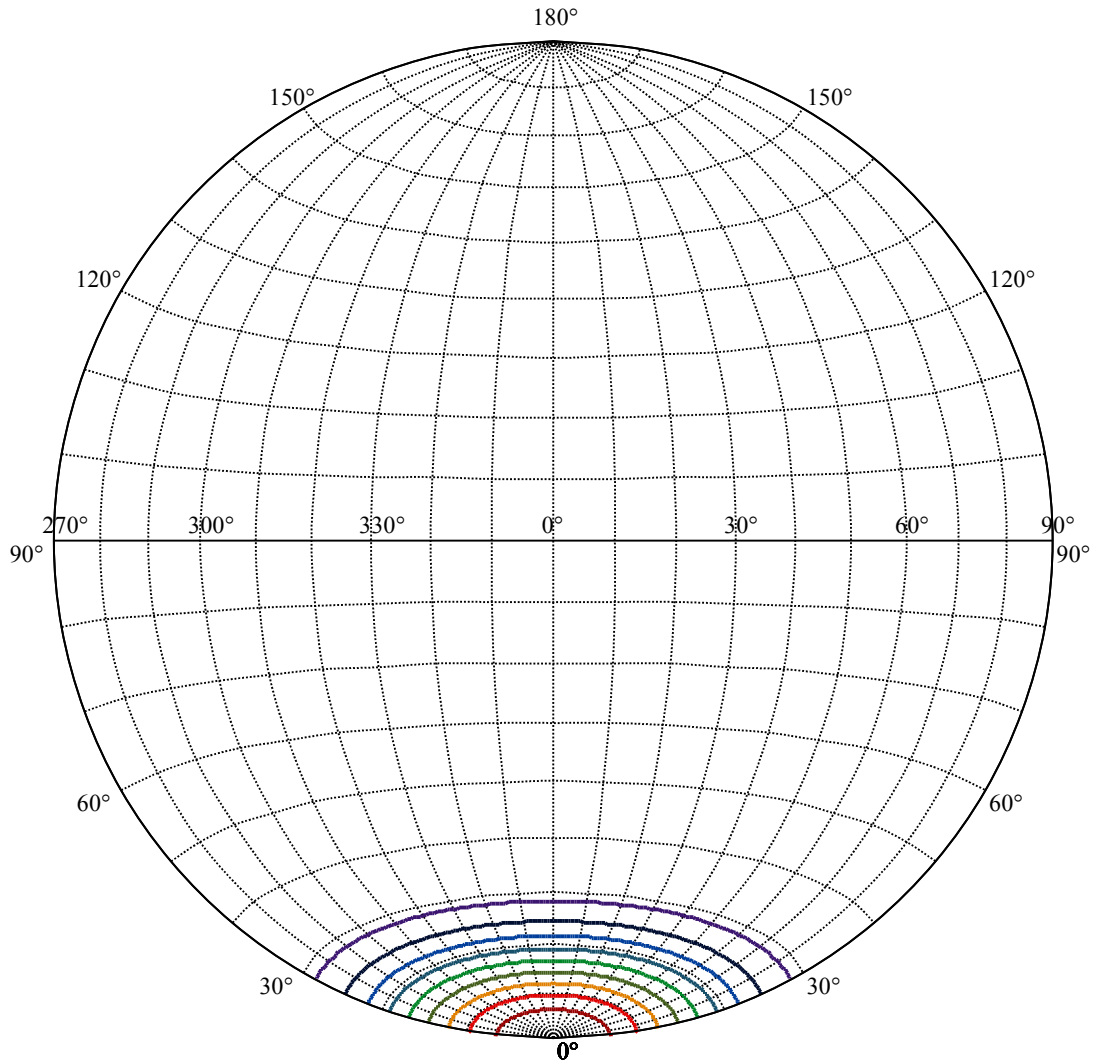
Beam Angle(50%Imax):C0/180Left:16.8 Right:16.8

:C90/270Left:16.8 Right:16.8





(10%Imax) 181.679	—
(20%Imax) 363.357	—
(30%Imax) 545.036	—
(40%Imax) 726.715	—
(50%Imax) 908.393	—
(60%Imax) 1090.07	—
(70%Imax) 1271.75	—
(80%Imax) 1453.43	—
(90%Imax) 1635.11	—



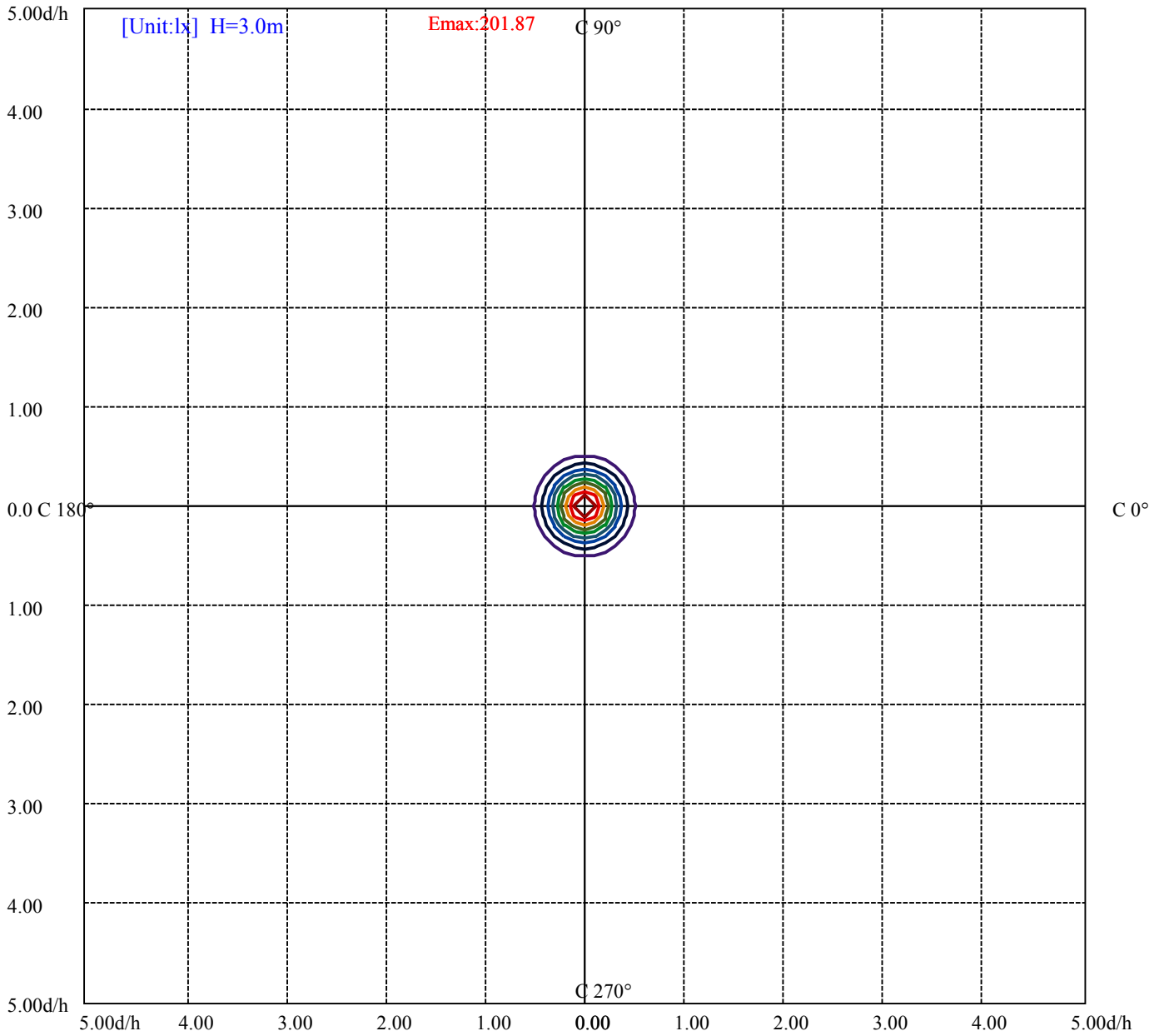
House

[Unit:cd]

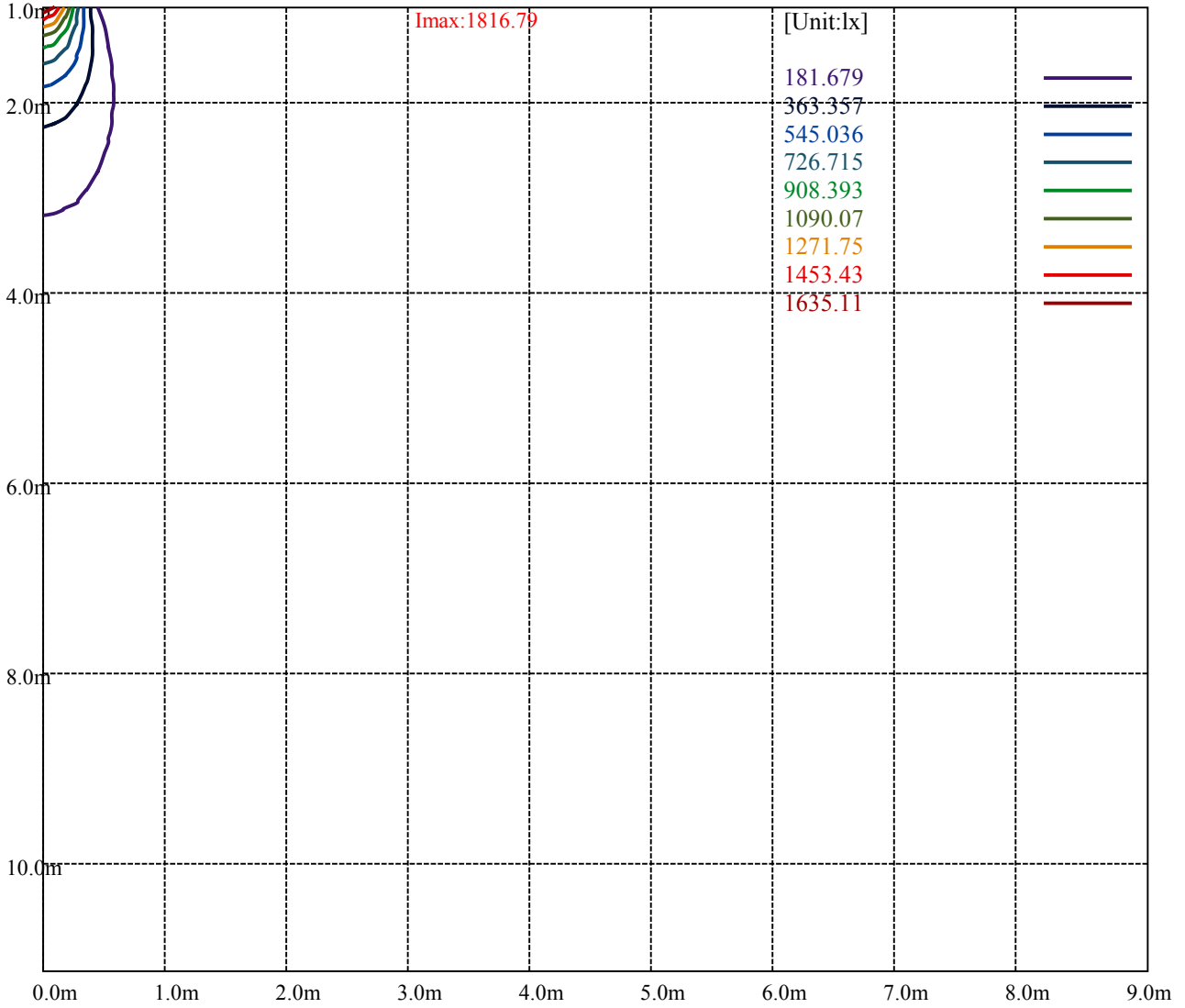
Road

Imax:1816.79

(10%Imax) 181.679	—
(20%Imax) 363.357	—
(30%Imax) 545.036	—
(40%Imax) 726.715	—
(50%Imax) 908.393	—
(60%Imax) 1090.07	—
(70%Imax) 1271.75	—
(80%Imax) 1453.43	—
(90%Imax) 1635.11	—



(10%E _{max}) 20.18644	—
(20%E _{max}) 40.373	—
(30%E _{max}) 60.55944	—
(40%E _{max}) 80.746	—
(50%E _{max}) 100.9324	—
(60%E _{max}) 121.1189	—
(70%E _{max}) 141.3056	—
(80%E _{max}) 161.4922	—
(90%E _{max}) 181.6789	—



Luminance Table

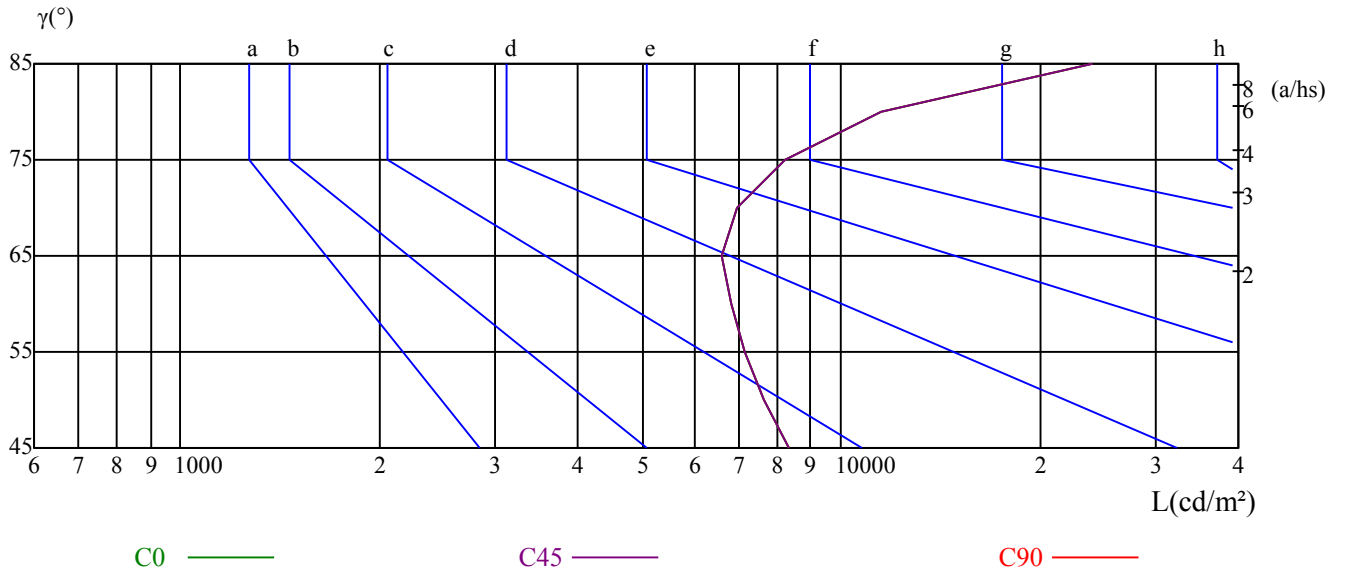
γ	45	50	55	60	65	70	75	80	85
C0	8329	7661	7169	6843	6595	6980	8256	11515	24009
C45	8329	7661	7169	6843	6595	6980	8256	11515	24009
C90	8329	7661	7169	6843	6595	6980	8256	11515	24009

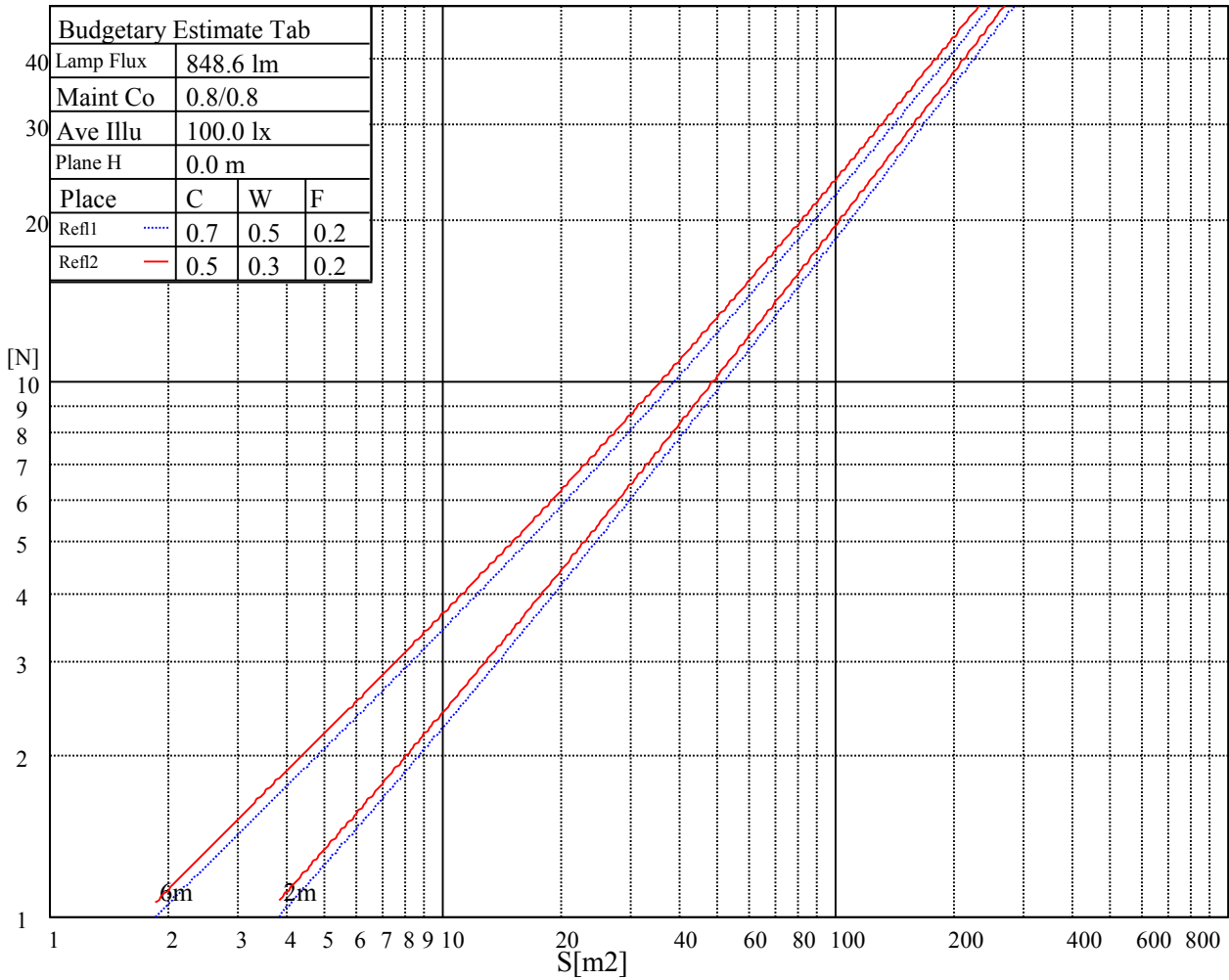
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
6595	6595	6595	8256	8256	8256	24009	24009	24009

Glare Table

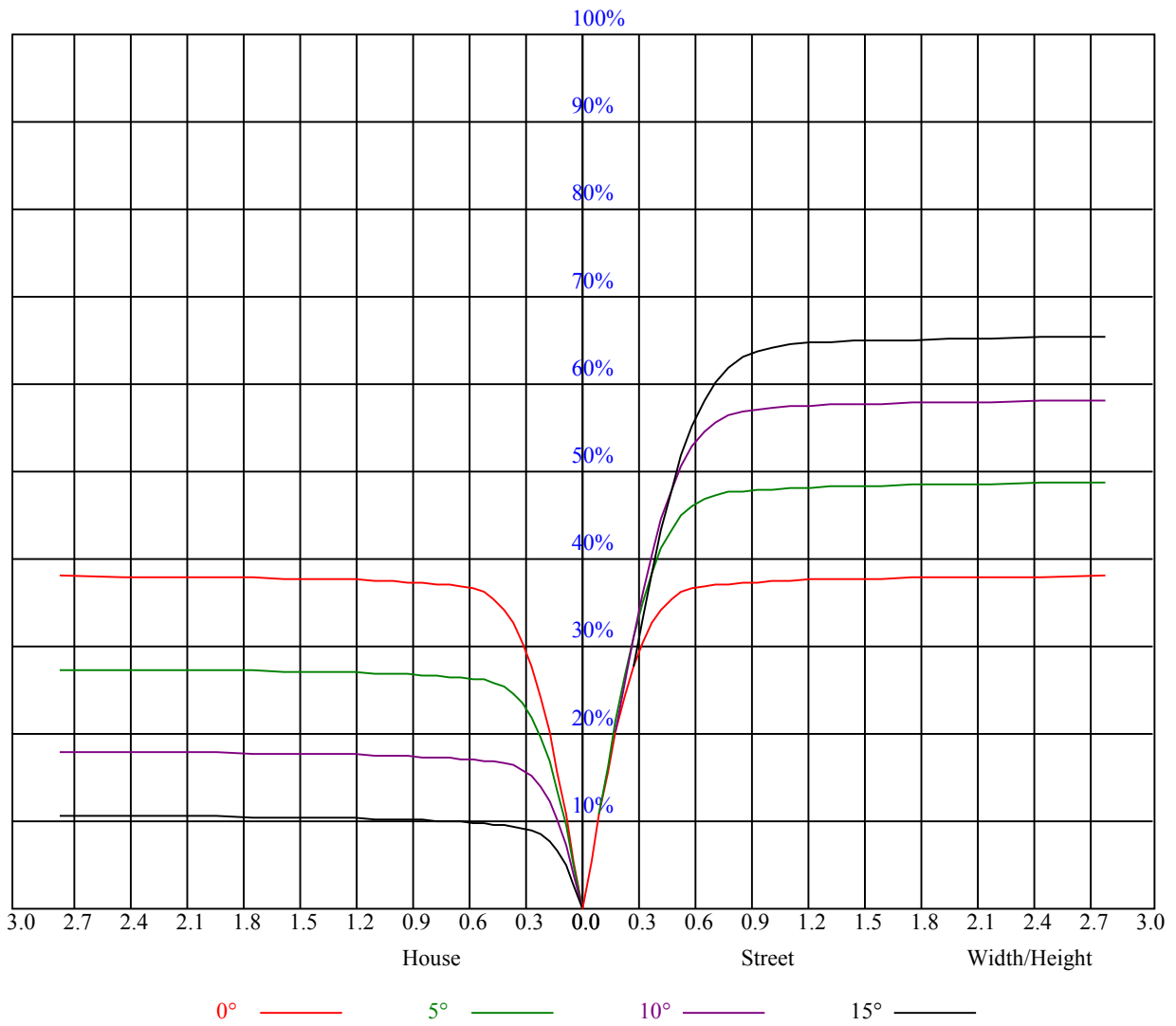
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	0.92	0.92	0.92	0.90	0.90	0.90	0.86	0.86	0.86	0.82	0.82	0.82	0.79	0.79	0.79	0.78
1	0.87	0.85	0.83	0.85	0.83	0.82	0.82	0.81	0.79	0.79	0.78	0.77	0.76	0.76	0.75	0.74
2	0.82	0.79	0.77	0.80	0.78	0.76	0.78	0.76	0.74	0.76	0.74	0.73	0.74	0.72	0.71	0.70
3	0.78	0.74	0.72	0.77	0.74	0.71	0.75	0.72	0.70	0.73	0.71	0.69	0.71	0.69	0.68	0.67
4	0.74	0.70	0.68	0.73	0.70	0.67	0.72	0.69	0.67	0.70	0.68	0.66	0.69	0.67	0.65	0.64
5	0.71	0.67	0.64	0.70	0.67	0.64	0.69	0.66	0.63	0.67	0.65	0.63	0.66	0.64	0.62	0.61
6	0.68	0.64	0.61	0.67	0.64	0.61	0.66	0.63	0.61	0.65	0.62	0.60	0.64	0.62	0.60	0.59
7	0.65	0.61	0.59	0.64	0.61	0.58	0.64	0.60	0.58	0.63	0.60	0.58	0.62	0.59	0.58	0.57
8	0.62	0.59	0.56	0.62	0.59	0.56	0.61	0.58	0.56	0.61	0.58	0.56	0.60	0.57	0.55	0.55
9	0.60	0.57	0.54	0.60	0.56	0.54	0.59	0.56	0.54	0.59	0.56	0.54	0.58	0.55	0.54	0.53
10	0.58	0.54	0.52	0.58	0.54	0.52	0.57	0.54	0.52	0.57	0.54	0.52	0.56	0.54	0.52	0.51



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	1816.49	1759.72	1524.30	1131.12	723.61	378.83	137.79	23.24	14.46
45.0	1820.67	1683.24	1370.13	959.03	567.06	304.14	71.29	17.39	13.32
90.0	1809.92	1643.20	1183.11	871.02	514.05	224.85	51.39	15.72	12.13
135.0	1822.46	1699.97	1403.60	1015.20	612.47	310.12	86.46	16.85	12.79
180.0	1816.49	1687.42	1385.67	970.75	572.79	281.14	79.23	17.57	13.09
225.0	1820.67	1771.67	1523.70	1151.98	743.39	385.59	151.53	25.87	14.88
270.0	1805.14	1793.18	1590.62	1220.15	829.97	450.54	177.59	33.82	15.42
315.0	1822.46	1759.13	1489.04	1084.99	702.63	357.44	118.37	19.36	14.16
360.0	1816.49	1759.72	1524.30	1131.12	723.61	378.83	137.79	23.24	14.46
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	11.41	9.50	7.95	6.63	5.32	4.48	3.94	3.59	3.29
45.0	10.52	8.78	7.23	5.98	4.84	4.18	3.76	3.47	3.11
90.0	9.86	8.43	7.05	5.86	4.90	4.36	4.00	4.30	2.93
135.0	10.40	8.84	7.47	6.15	5.08	4.30	3.88	3.53	3.05
180.0	10.52	8.84	7.35	6.09	4.90	4.18	3.76	3.41	2.93
225.0	11.53	9.38	7.83	6.45	5.32	4.48	3.94	3.59	3.29
270.0	11.83	9.86	8.19	6.93	5.62	4.84	4.36	4.12	9.14
315.0	11.05	9.20	7.77	6.51	5.26	4.48	3.94	3.59	3.23
360.0	11.41	9.50	7.95	6.63	5.32	4.48	3.94	3.59	3.29
C/γ(°)	90.0								
0.0	2.75								
45.0	2.69								
90.0	2.69								
135.0	2.75								
180.0	2.75								
225.0	2.75								
270.0	2.75								
315.0	2.75								
360.0	2.75								