



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

Nata

LumCAT: 1-0942-N	
Luminaire: 92.70.360.00	
Report No: 220513-B002	Voltage(V): 37.1200
Test No: 220513-C002	Current(A): 0.1720
LampCAT: NICHIA NTCWT012B-V3	Power (W): 6.3860
Lamp flux(lm): 754.4	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): 603.64
Efficiency(%): 80.02%
Lumens(lm)/Power(W): 94.53
Central intensity(cd): 1753.001
Maximum intensity(cd): 1753.001
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=32.8
 [C90/270]Total=32.8
Field angle(10%Imax): [C0/180]Total=55.9
 [C90/270]Total=55.9
Maximum s/h(1/2): C0_180=0.54 C90_270=0.54
Maximum s/h(1/4): C0_180=0.54 C90_270=0.54
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 80.02%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.155%

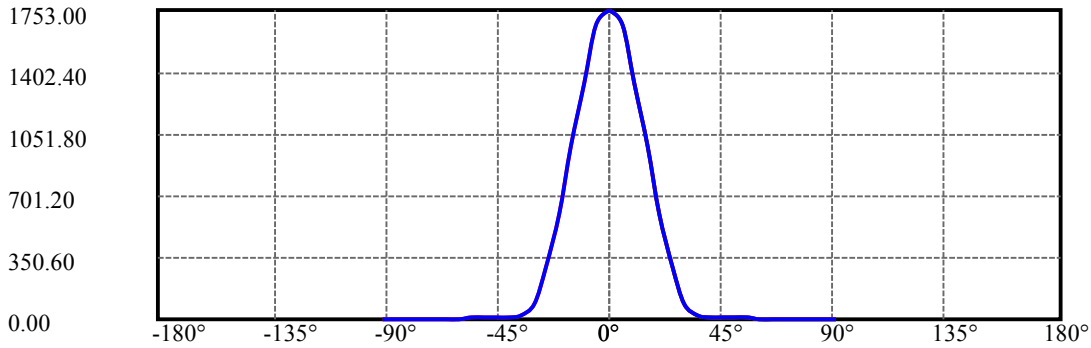
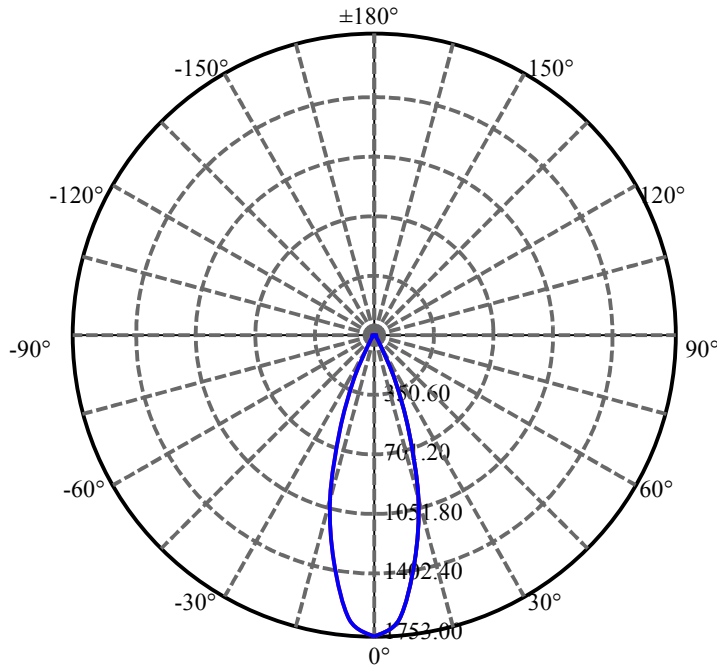
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1753.001	0.000	0	.000%	.000%
5.0	1661.355	40.818	40.818	5.411%	6.762%
10.0	1339.518	107.351	148.168	14.231%	24.546%
15.0	984.788	137.876	286.045	18.277%	47.386%
20.0	596.648	130.332	416.377	17.277%	68.977%
25.0	294.216	93.435	509.812	12.386%	84.456%
30.0	91.071	48.758	558.571	6.463%	92.533%
35.0	17.067	15.924	574.495	2.111%	95.171%
40.0	11.980	4.846	579.341	.642%	95.974%
45.0	9.299	3.940	583.281	.522%	96.627%
50.0	7.693	3.434	586.715	.455%	97.196%
55.0	6.438	3.073	589.787	.407%	97.705%
60.0	5.325	2.719	592.506	.360%	98.155%
65.0	4.302	2.341	594.847	.310%	98.543%
70.0	3.690	2.024	596.87	.268%	98.878%
75.0	3.301	1.827	598.698	.242%	99.181%
80.0	3.100	1.713	600.411	.227%	99.464%
85.0	3.144	1.697	602.107	.225%	99.746%
90.0	2.465	1.536	603.643	.204%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	558.57	74.04%	92.53%
0-40	579.34	76.80%	95.97%
0-60	592.51	78.54%	98.16%
0-90	602.11	79.82%	99.75%
0-120	602.11	79.82%	99.75%
0-180	603.64	80.02%	100.00%
60-90	12.32	1.63%	2.04%
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%
0-23.56	482.91	64.02%	80.00%

ZONAL LUMEN SUMMARY

0-10	148.17
10-20	268.21
20-30	142.19
30-40	20.77
40-50	7.37
50-60	5.79
60-70	4.36
70-80	3.54
80-90	1.70
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: —————

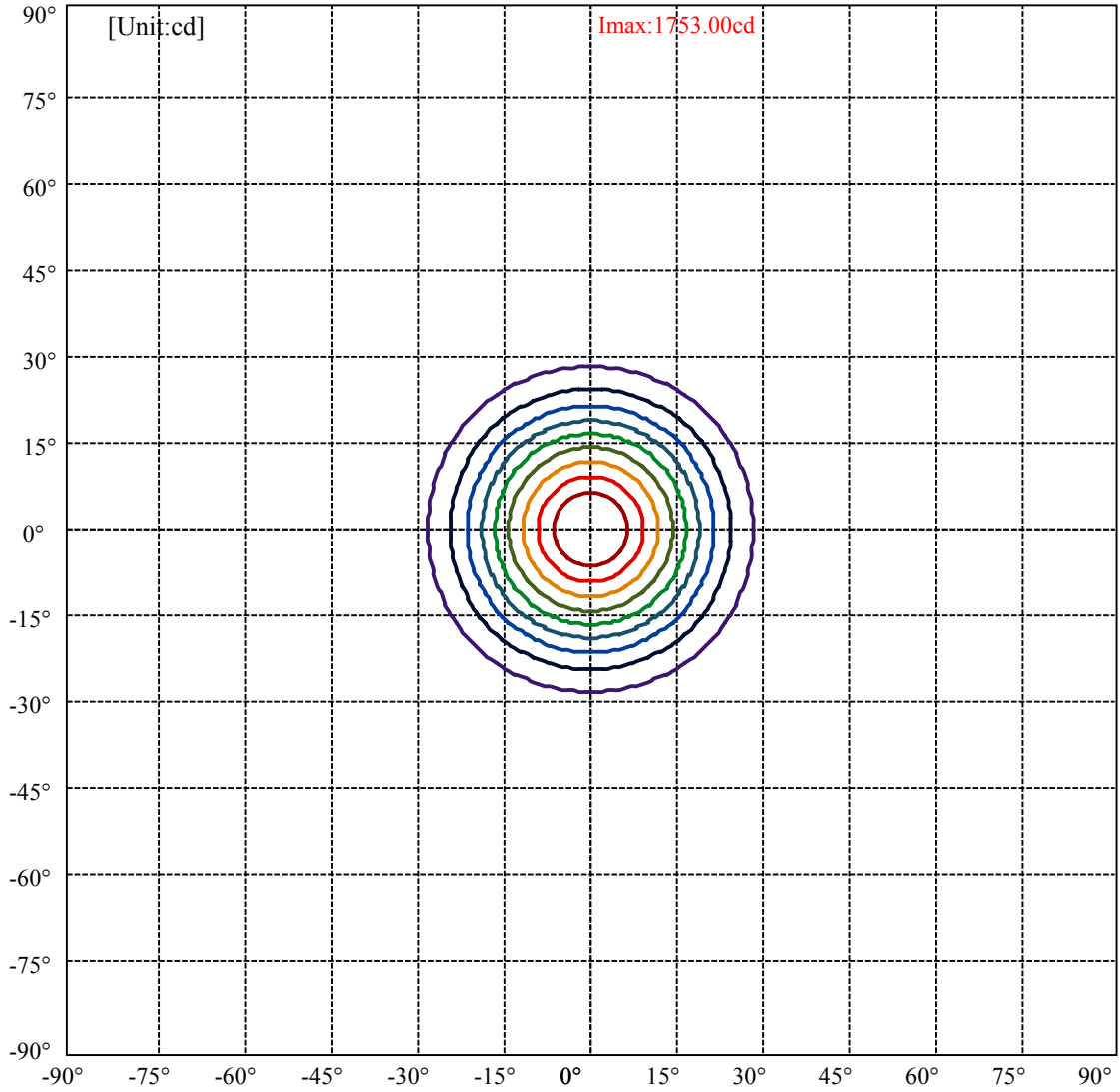
C90/C270: —————

Field angle(10%Imax):C0/180Left:27.9 Right:27.9

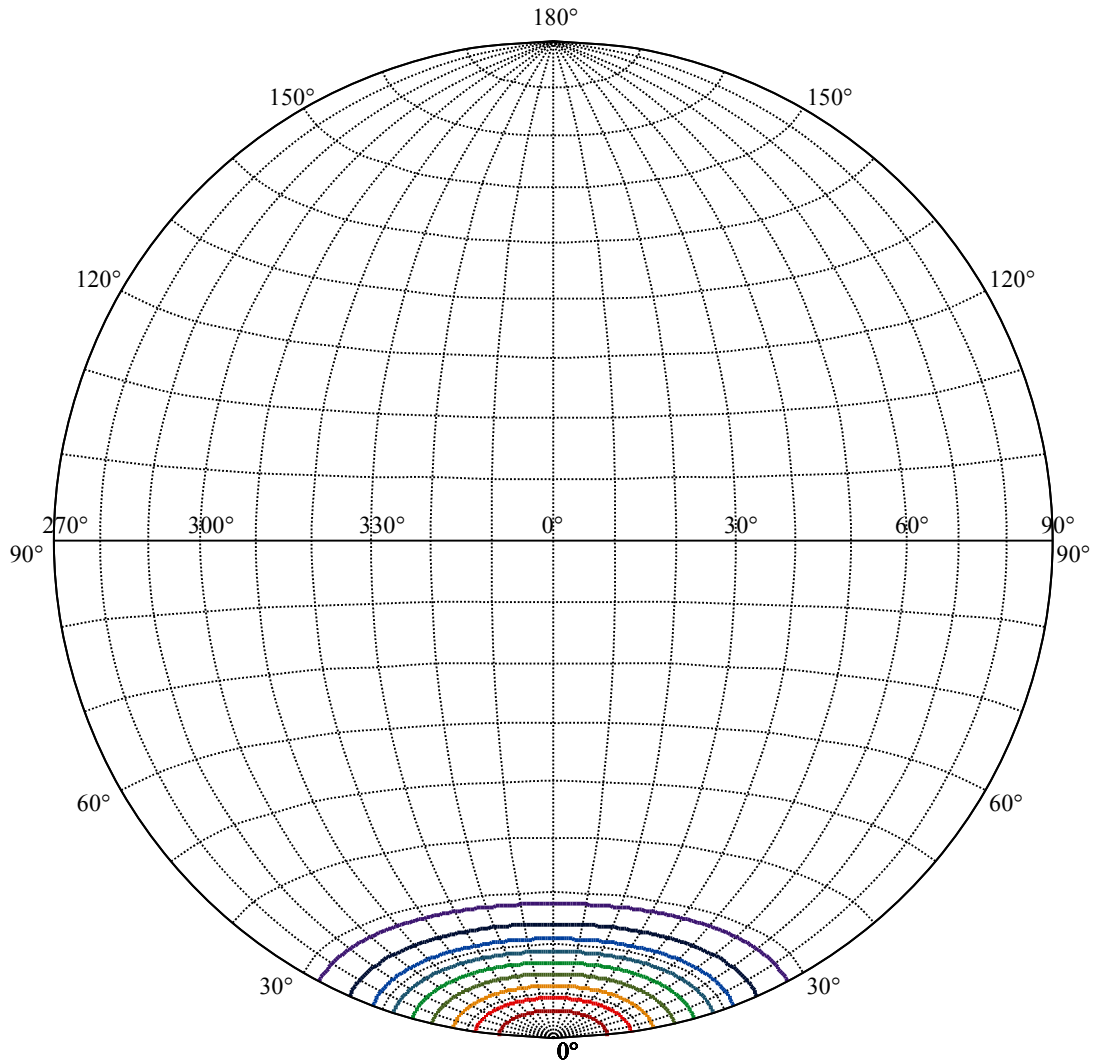
:C90/270Left:27.9 Right:27.9

Beam Angle(50%Imax):C0/180Left:16.4 Right:16.4

:C90/270Left:16.4 Right:16.4



(10%Imax) 175.3	—
(20%Imax) 350.6	—
(30%Imax) 525.9	—
(40%Imax) 701.2	—
(50%Imax) 876.5	—
(60%Imax) 1051.8	—
(70%Imax) 1227.1	—
(80%Imax) 1402.4	—
(90%Imax) 1577.7	—



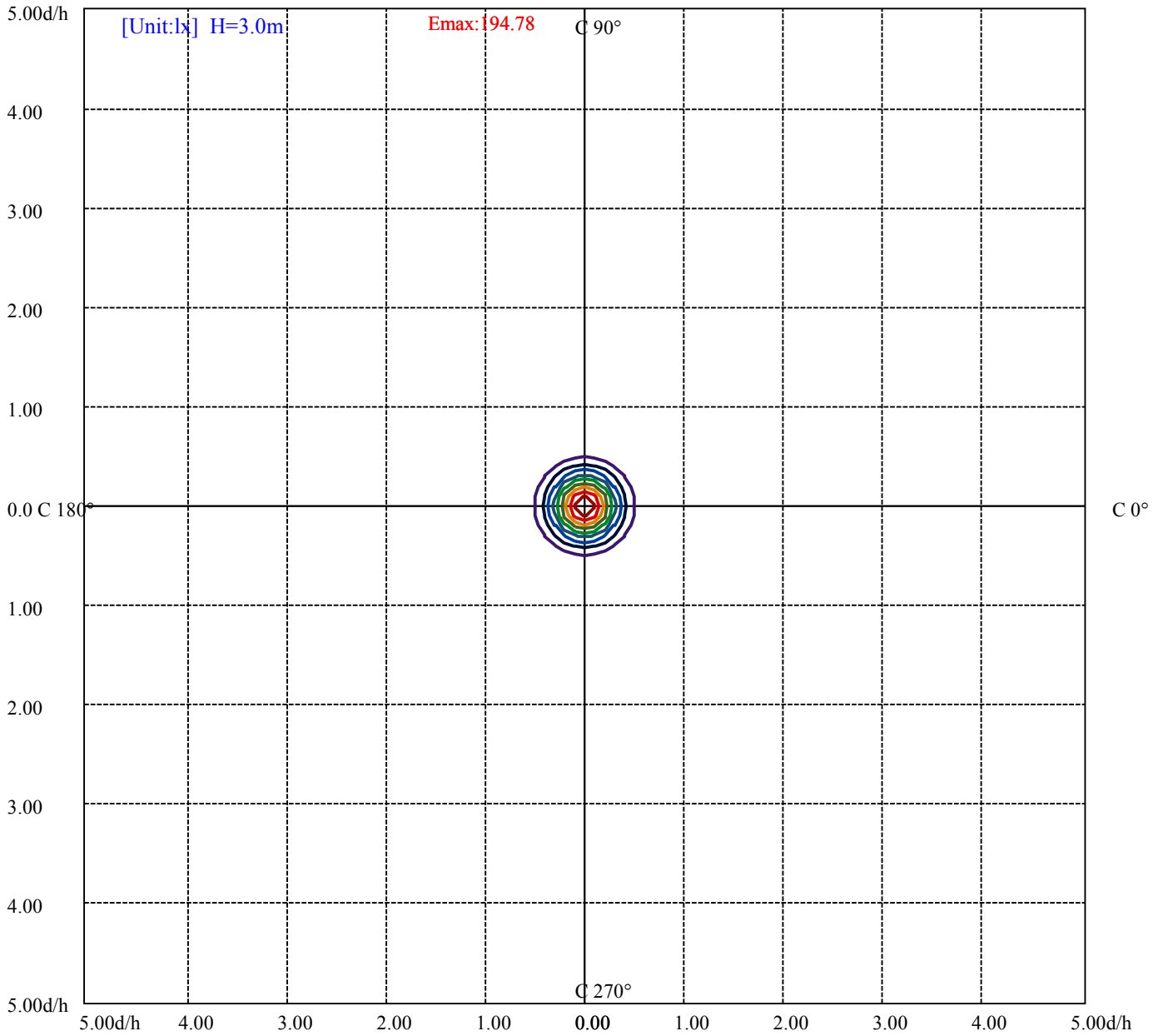
House

[Unit:cd]

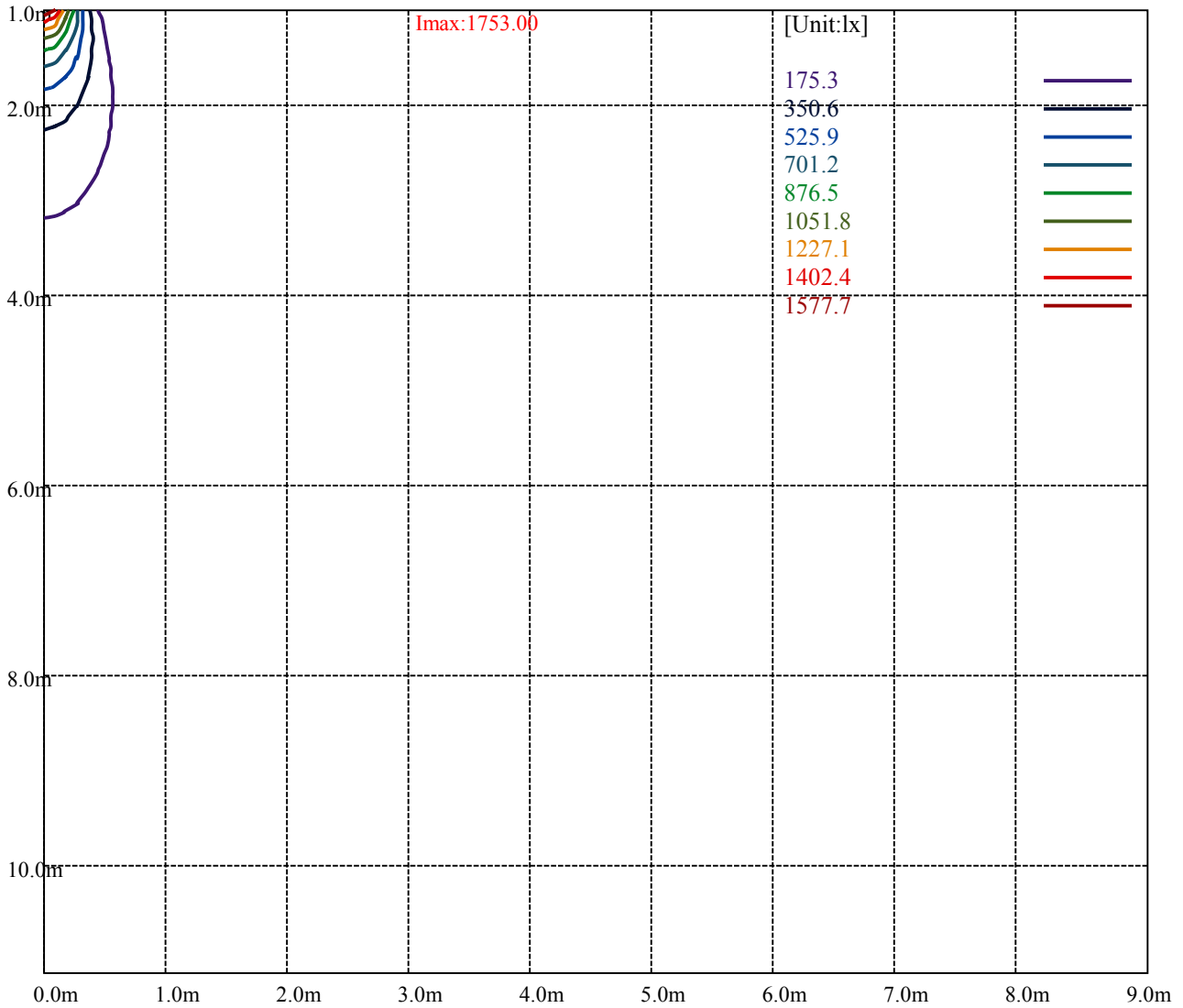
Road

Imax:1753.00

(10%Imax) 175.3	—
(20%Imax) 350.6	—
(30%Imax) 525.9	—
(40%Imax) 701.2	—
(50%Imax) 876.5	—
(60%Imax) 1051.8	—
(70%Imax) 1227.1	—
(80%Imax) 1402.4	—
(90%Imax) 1577.7	—



(10%Emax) 19.47778	—
(20%Emax) 38.95555	—
(30%Emax) 58.43322	—
(40%Emax) 77.911	—
(50%Emax) 97.38878	—
(60%Emax) 116.8667	—
(70%Emax) 136.3444	—
(80%Emax) 155.8222	—
(90%Emax) 175.3	—



Luminance Table

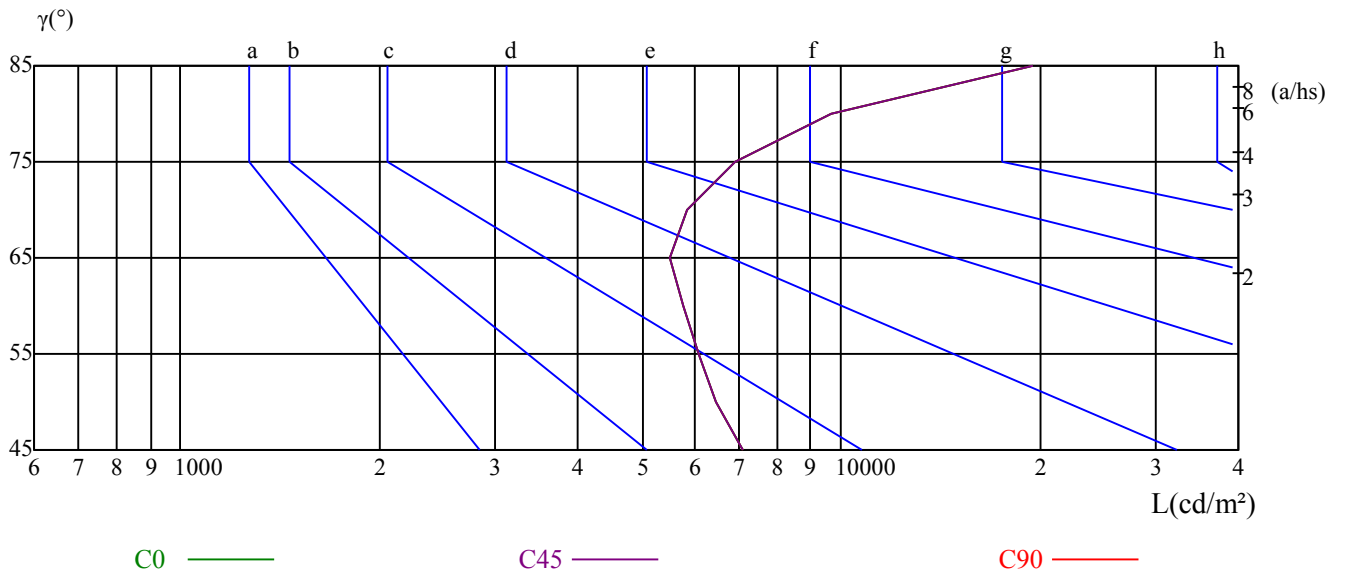
γ	45	50	55	60	65	70	75	80	85
C0	7112	6473	6071	5760	5506	5835	6899	9654	19513
C45	7112	6473	6071	5760	5506	5835	6899	9654	19513
C90	7112	6473	6071	5760	5506	5835	6899	9654	19513

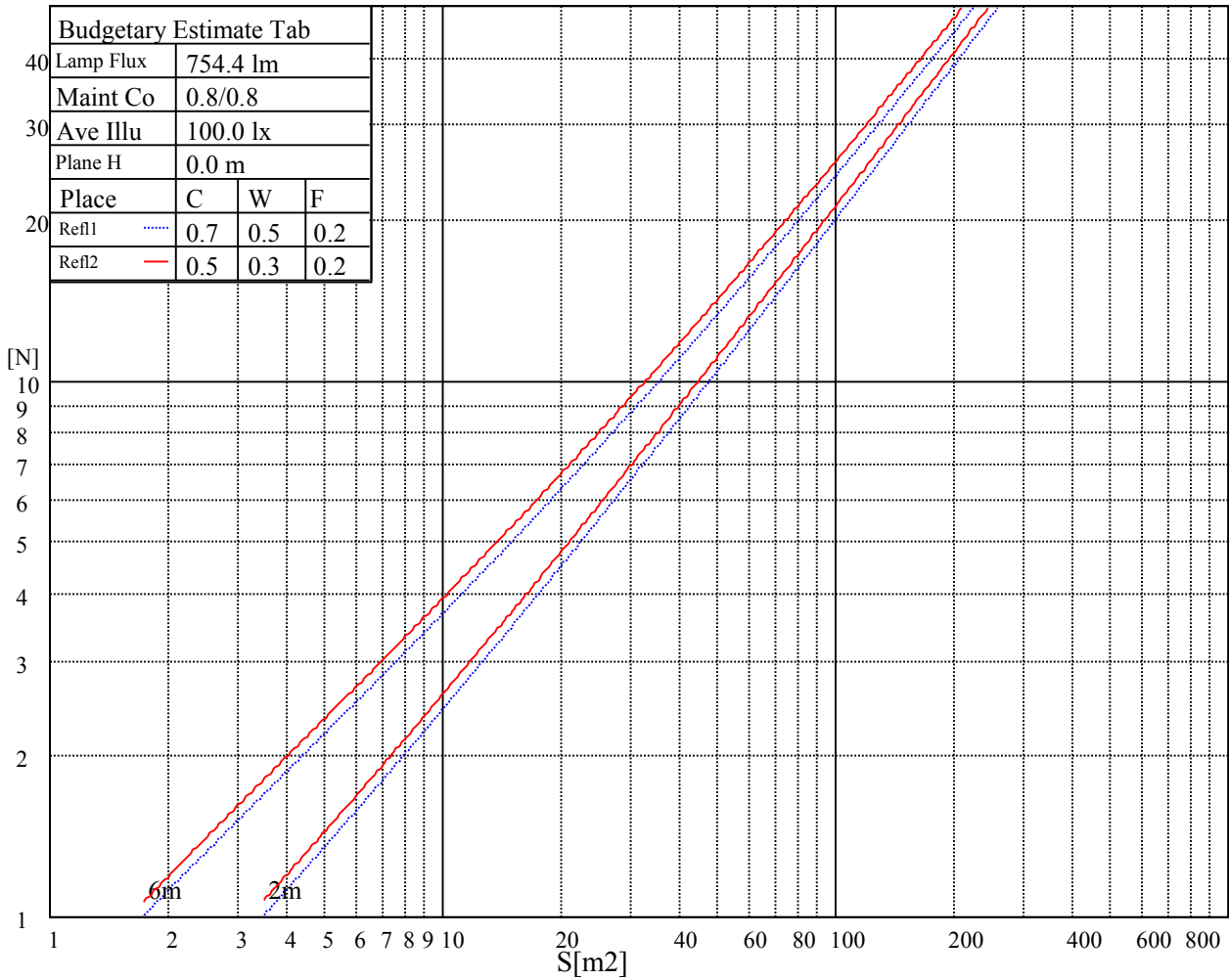
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
5506	5506	5506	6899	6899	6899	19513	19513	19513

Glare Table

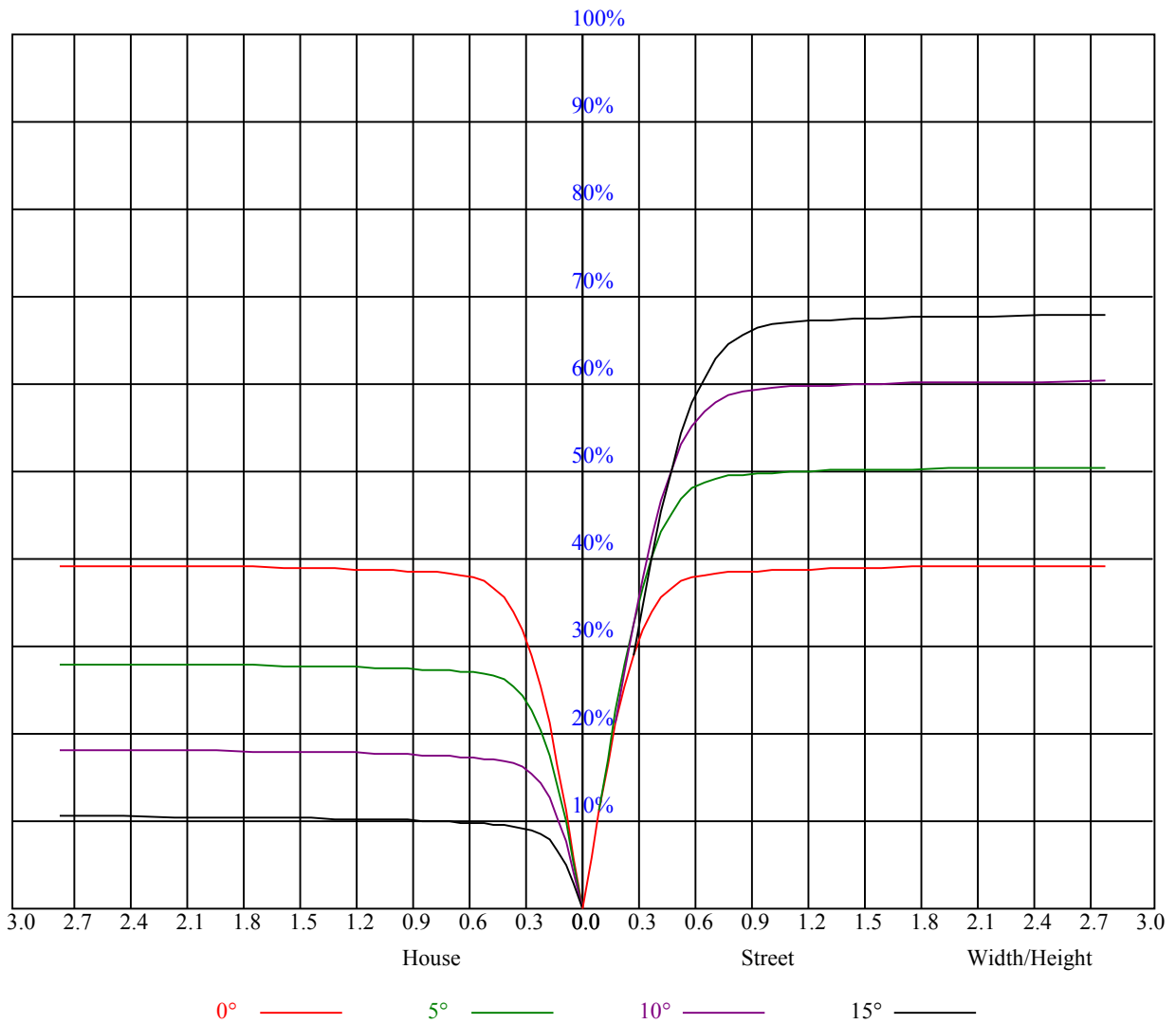
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	0.93	0.93	0.93	0.89	0.89	0.89	0.85	0.85	0.85	0.82	0.82	0.82	0.80
1	0.89	0.88	0.86	0.88	0.86	0.85	0.85	0.83	0.82	0.82	0.81	0.80	0.79	0.78	0.77	0.76
2	0.85	0.82	0.80	0.83	0.81	0.79	0.81	0.79	0.77	0.78	0.77	0.75	0.76	0.75	0.74	0.73
3	0.80	0.77	0.74	0.79	0.76	0.74	0.77	0.75	0.73	0.75	0.73	0.72	0.74	0.72	0.71	0.69
4	0.77	0.73	0.70	0.76	0.72	0.70	0.74	0.71	0.69	0.73	0.70	0.68	0.71	0.69	0.68	0.67
5	0.73	0.70	0.67	0.73	0.69	0.66	0.71	0.68	0.66	0.70	0.67	0.65	0.69	0.67	0.65	0.64
6	0.70	0.66	0.64	0.70	0.66	0.64	0.69	0.65	0.63	0.68	0.65	0.63	0.67	0.64	0.62	0.61
7	0.68	0.64	0.61	0.67	0.63	0.61	0.66	0.63	0.61	0.65	0.62	0.60	0.64	0.62	0.60	0.59
8	0.65	0.61	0.59	0.65	0.61	0.59	0.64	0.61	0.58	0.63	0.60	0.58	0.62	0.60	0.58	0.57
9	0.63	0.59	0.56	0.62	0.59	0.56	0.62	0.58	0.56	0.61	0.58	0.56	0.60	0.58	0.56	0.55
10	0.61	0.57	0.54	0.60	0.57	0.54	0.60	0.56	0.54	0.59	0.56	0.54	0.59	0.56	0.54	0.53



Intensity data(cd)

C/ γ ($^{\circ}$)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	1748.97	1694.59	1450.80	1079.73	657.28	348.96	121.42	19.96	13.38
45.0	1753.75	1683.84	1411.96	1005.04	645.93	307.13	96.50	18.64	12.37
90.0	1756.74	1676.07	1386.86	976.12	597.23	297.21	87.24	16.07	11.41
135.0	1752.55	1696.98	1433.47	1053.44	647.12	329.84	112.63	17.87	12.07
180.0	1748.97	1610.34	1187.11	905.14	523.91	227.36	65.25	15.83	11.53
225.0	1753.75	1644.40	1292.46	959.15	572.61	272.95	85.03	16.43	11.83
270.0	1756.74	1664.72	1381.49	992.50	599.32	311.91	94.65	16.13	11.53
315.0	1752.55	1619.90	1171.99	907.17	529.77	258.37	65.85	15.60	11.71
360.0	1748.97	1694.59	1450.80	1079.73	657.28	348.96	121.42	19.96	13.38
C/ γ ($^{\circ}$)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	10.04	8.19	6.87	5.56	4.36	3.70	3.23	2.99	2.75
45.0	9.38	7.65	6.45	5.26	4.30	3.64	3.29	3.05	2.75
90.0	8.90	7.41	6.33	5.26	4.24	3.70	3.35	3.23	2.63
135.0	9.38	7.77	6.51	5.56	4.42	3.76	3.29	3.05	2.75
180.0	9.08	7.53	6.21	5.14	4.12	3.59	3.17	2.93	2.63
225.0	9.26	7.71	6.33	5.26	4.36	3.70	3.35	3.11	2.87
270.0	9.08	7.59	6.39	5.32	4.42	3.82	3.53	3.47	5.98
315.0	9.26	7.71	6.39	5.26	4.18	3.59	3.23	2.99	2.81
360.0	10.04	8.19	6.87	5.56	4.36	3.70	3.23	2.99	2.75
C/ γ ($^{\circ}$)	90.0								
0.0	2.45								
45.0	2.51								
90.0	2.45								
135.0	2.45								
180.0	2.45								
225.0	2.51								
270.0	2.45								
315.0	2.45								
360.0	2.45								