



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: 1-1063-N	
Luminaire: 92.70.361.000	
Report No: 220518-B013	Voltage(V): 37.7500
Test No: 220518-C013	Current(A): 0.3600
LampCAT: CREE CXA1512	Power (W): 13.5900
Lamp flux(lm): 1623.7	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): 1325.24
Efficiency(%): 81.62%
Lumens(lm)/Power(W): 97.52
Central intensity(cd): 2535.166
Maximum intensity(cd): 2535.166
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=43.5
 [C90/270]Total=43.5
Field angle(10%Imax): [C0/180]Total=64.1
 [C90/270]Total=64.1
Maximum s/h(1/2): C0_180=0.70 C90_270=0.70
Maximum s/h(1/4): C0_180=0.68 C90_270=0.68
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 81.62%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.792%

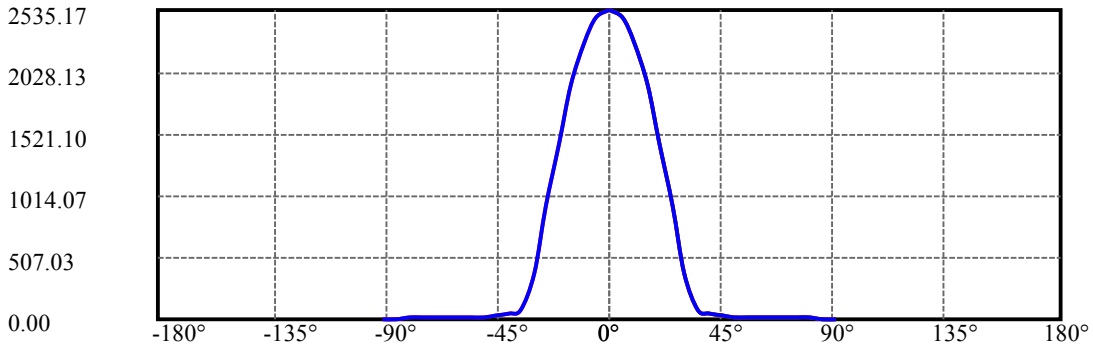
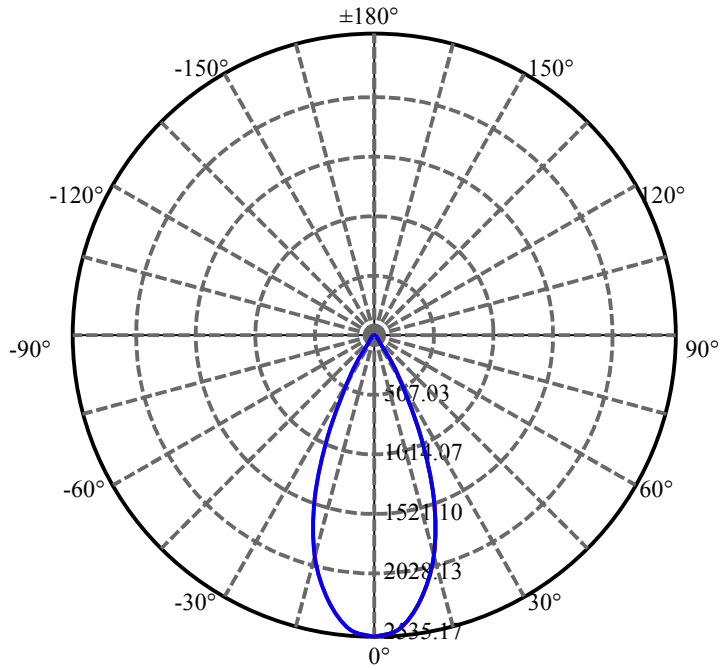
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2535.166	0.000	0	.000%	.000%
5.0	2473.397	59.876	59.876	3.688%	4.518%
10.0	2270.536	169.705	229.581	10.452%	17.324%
15.0	1916.948	248.399	477.98	15.298%	36.068%
20.0	1453.497	277.772	755.752	17.107%	57.028%
25.0	921.263	249.068	1004.82	15.339%	75.822%
30.0	376.346	164.213	1169.034	10.113%	88.213%
35.0	78.538	66.985	1236.019	4.125%	93.268%
40.0	40.916	19.930	1255.949	1.227%	94.772%
45.0	29.107	12.965	1268.914	.798%	95.750%
50.0	22.975	10.524	1279.438	.648%	96.544%
55.0	18.187	8.950	1288.388	.551%	97.219%
60.0	14.647	7.590	1295.978	.467%	97.792%
65.0	12.040	6.488	1302.465	.400%	98.282%
70.0	10.509	5.710	1308.175	.352%	98.713%
75.0	9.344	5.189	1313.364	.320%	99.104%
80.0	8.059	4.657	1318.021	.287%	99.456%
85.0	6.386	3.925	1321.946	.242%	99.752%
90.0	5.632	3.291	1325.236	.203%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1169.03	72.00%	88.21%
0-40	1255.95	77.35%	94.77%
0-60	1295.98	79.81%	97.79%
0-90	1321.95	81.41%	99.75%
0-120	1321.95	81.41%	99.75%
0-180	1325.24	81.62%	100.00%
60-90	33.56	2.07%	2.53%
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%
0-26.69	1060.19	65.29%	80.00%

ZONAL LUMEN SUMMARY

0-10	229.58
10-20	526.17
20-30	413.28
30-40	86.91
40-50	23.49
50-60	16.54
60-70	12.20
70-80	9.85
80-90	3.93
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: —————

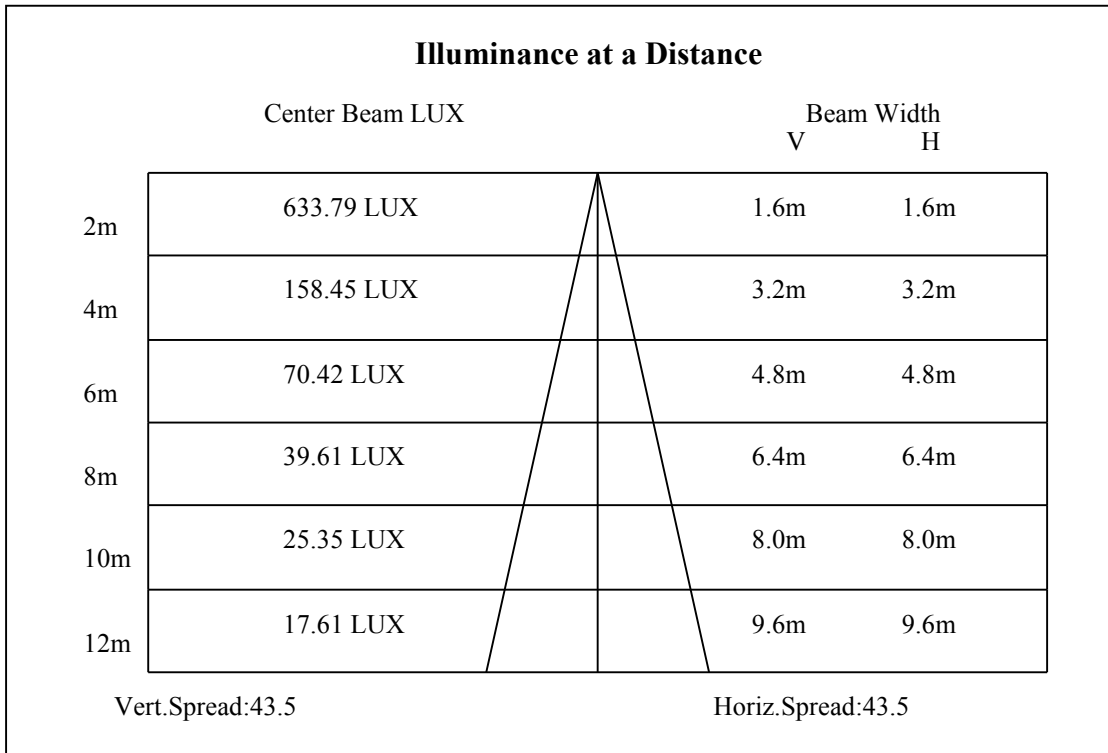
C90/C270: —————

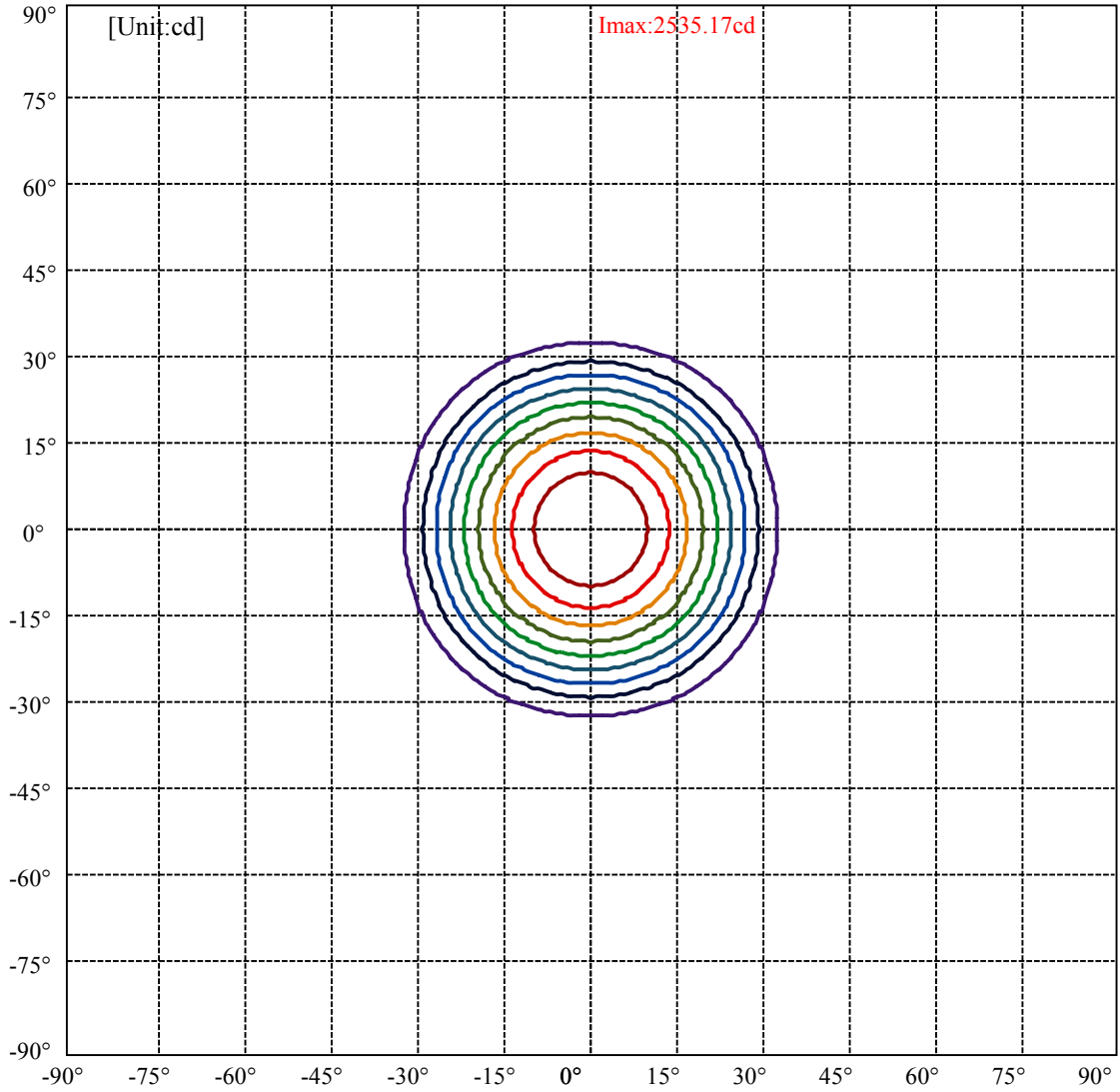
Field angle(10%Imax):C0/180Left:32.1 Right:32.1

:C90/270Left:32.1 Right:32.1

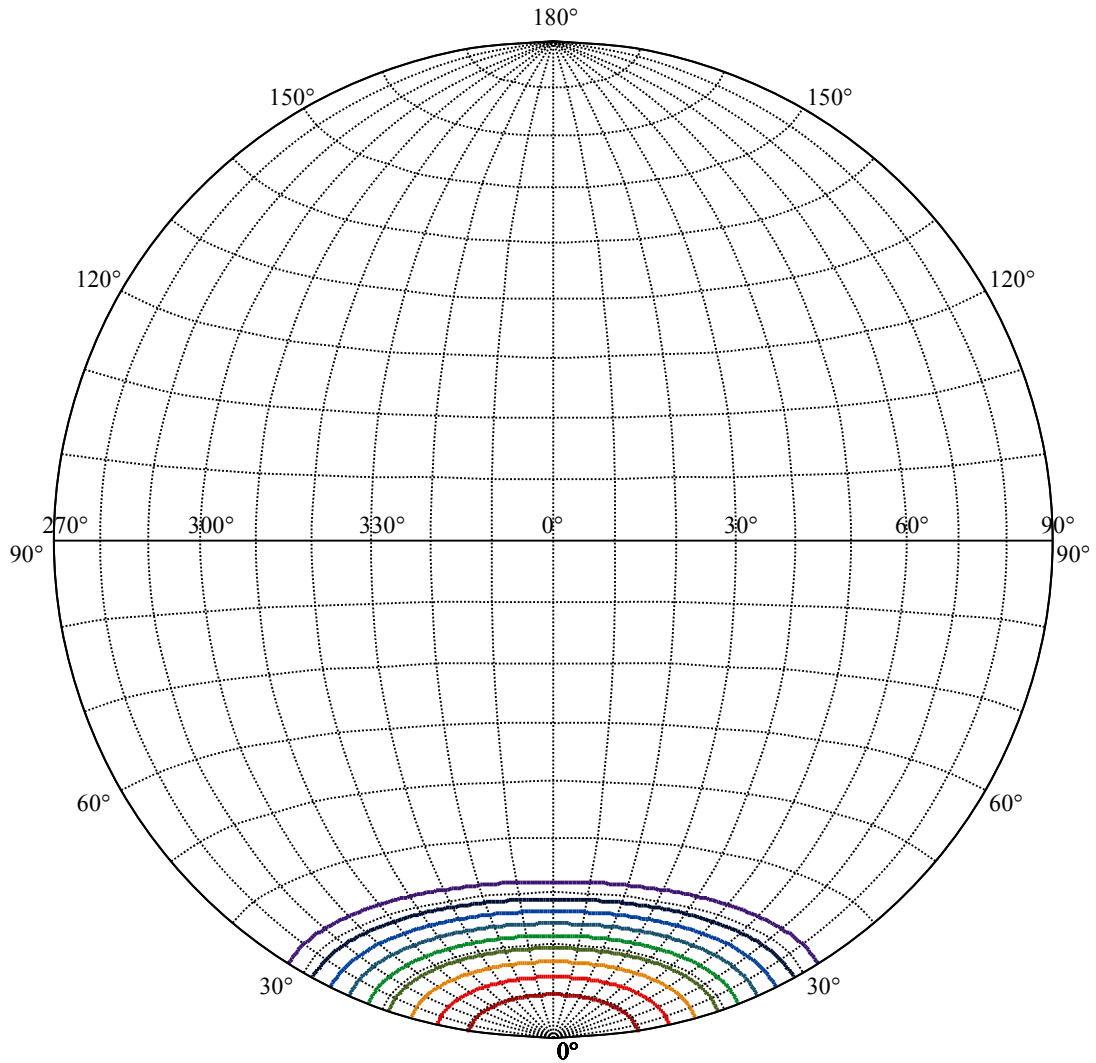
Beam Angle(50%Imax):C0/180Left:21.7 Right:21.7

:C90/270Left:21.7 Right:21.7





(10%Imax) 253.517	—
(20%Imax) 507.033	—
(30%Imax) 760.55	—
(40%Imax) 1014.07	—
(50%Imax) 1267.58	—
(60%Imax) 1521.1	—
(70%Imax) 1774.62	—
(80%Imax) 2028.13	—
(90%Imax) 2281.65	—



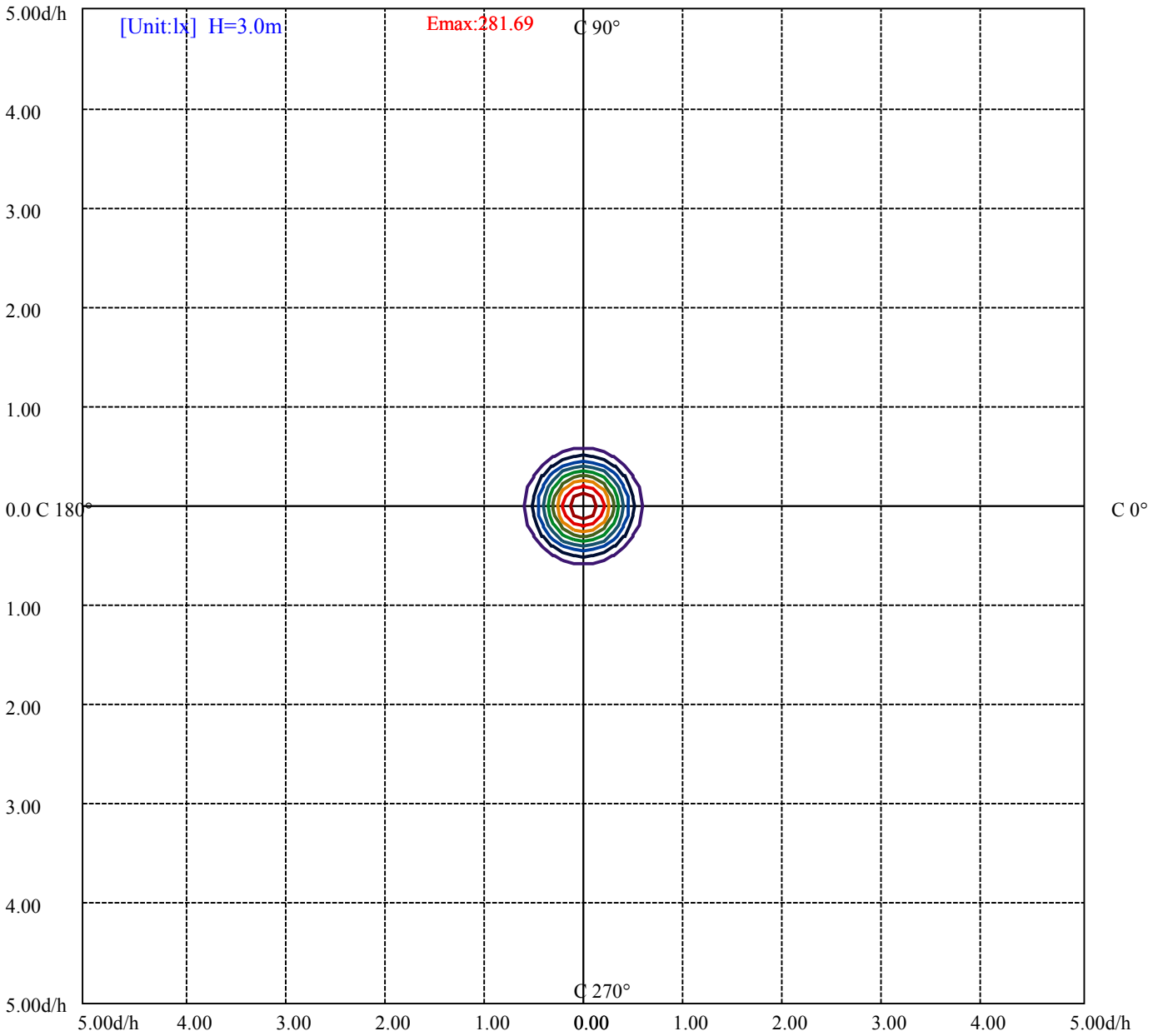
House

[Unit:cd]

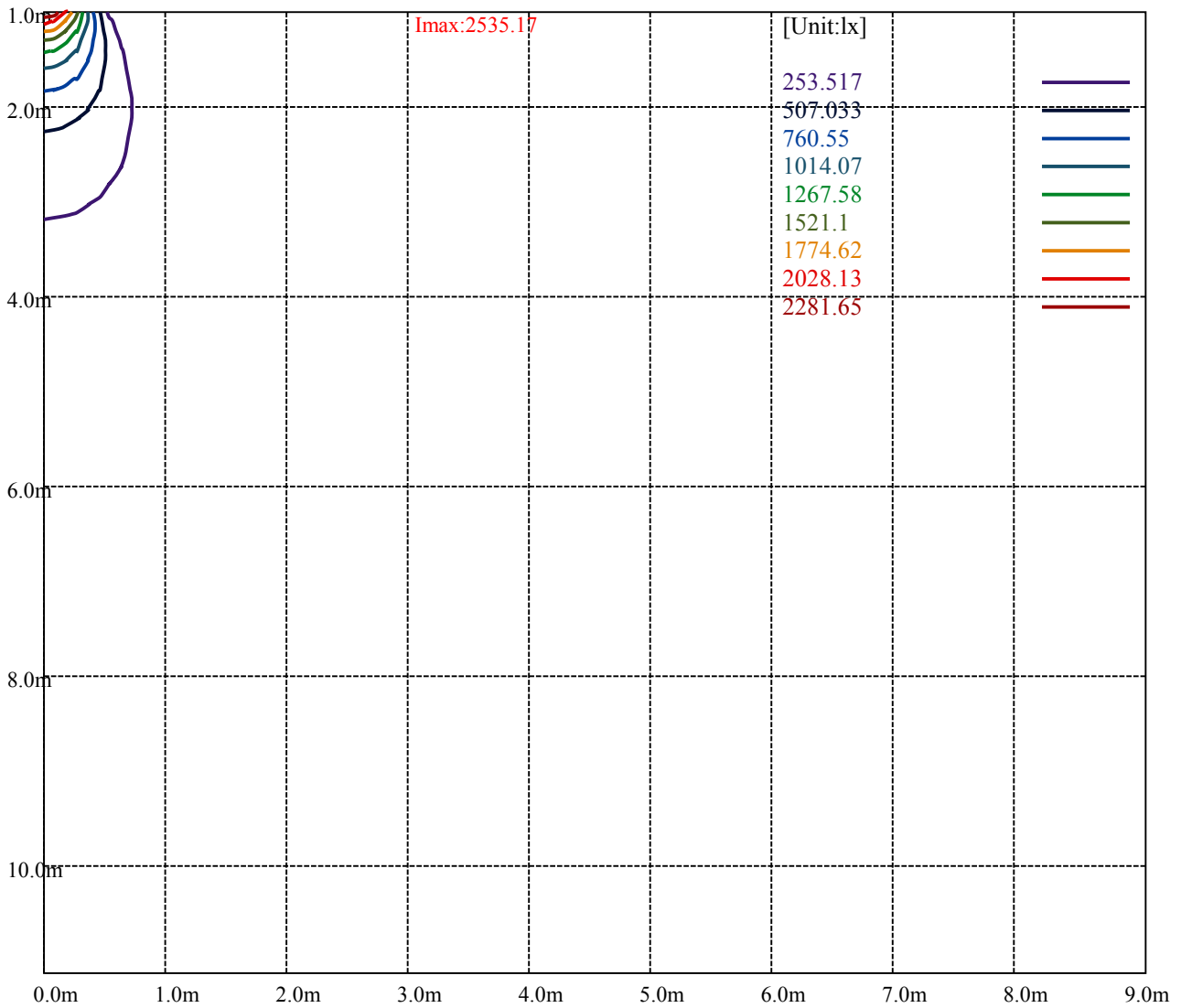
Road

Imax:2535.17

(10%Imax) 253.517	—
(20%Imax) 507.033	—
(30%Imax) 760.55	—
(40%Imax) 1014.07	—
(50%Imax) 1267.58	—
(60%Imax) 1521.1	—
(70%Imax) 1774.62	—
(80%Imax) 2028.13	—
(90%Imax) 2281.65	—



(10%Emax) 28.16845	—
(20%Emax) 56.337	—
(30%Emax) 84.50545	—
(40%Emax) 112.6744	—
(50%Emax) 140.8422	—
(60%Emax) 169.0111	—
(70%Emax) 197.1789	—
(80%Emax) 225.3478	—
(90%Emax) 253.5167	—



Luminance Table

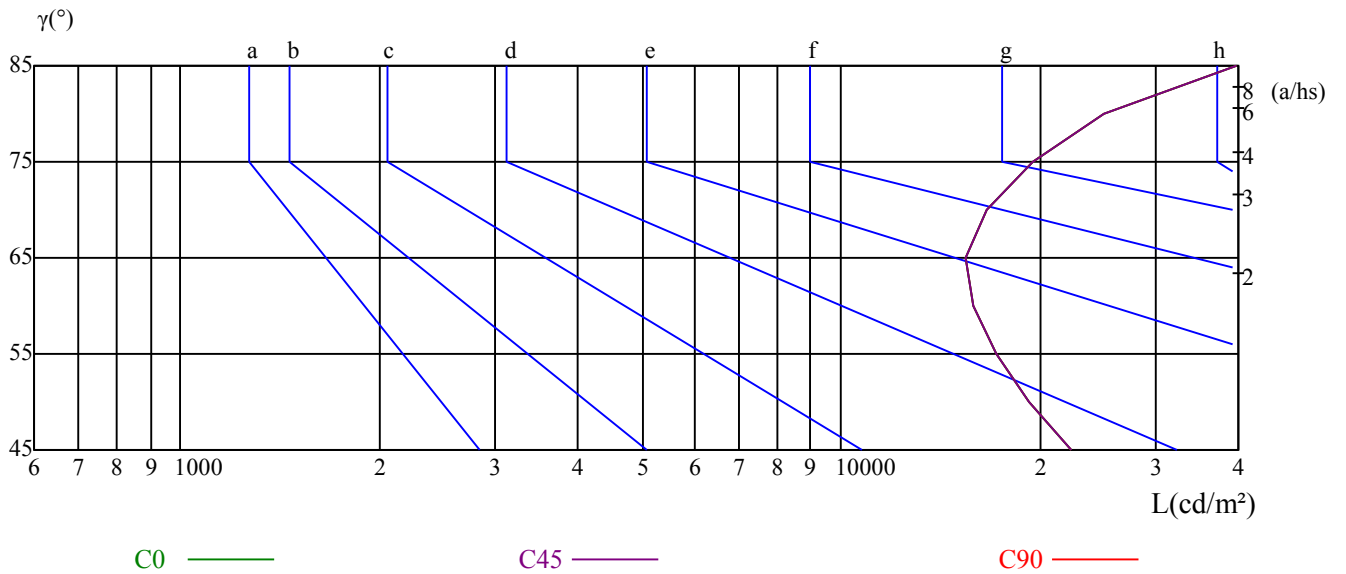
γ	45	50	55	60	65	70	75	80	85
C0	22263	19331	17149	15843	15408	16618	19525	25101	39628
C45	22263	19331	17149	15843	15408	16618	19525	25101	39628
C90	22263	19331	17149	15843	15408	16618	19525	25101	39628

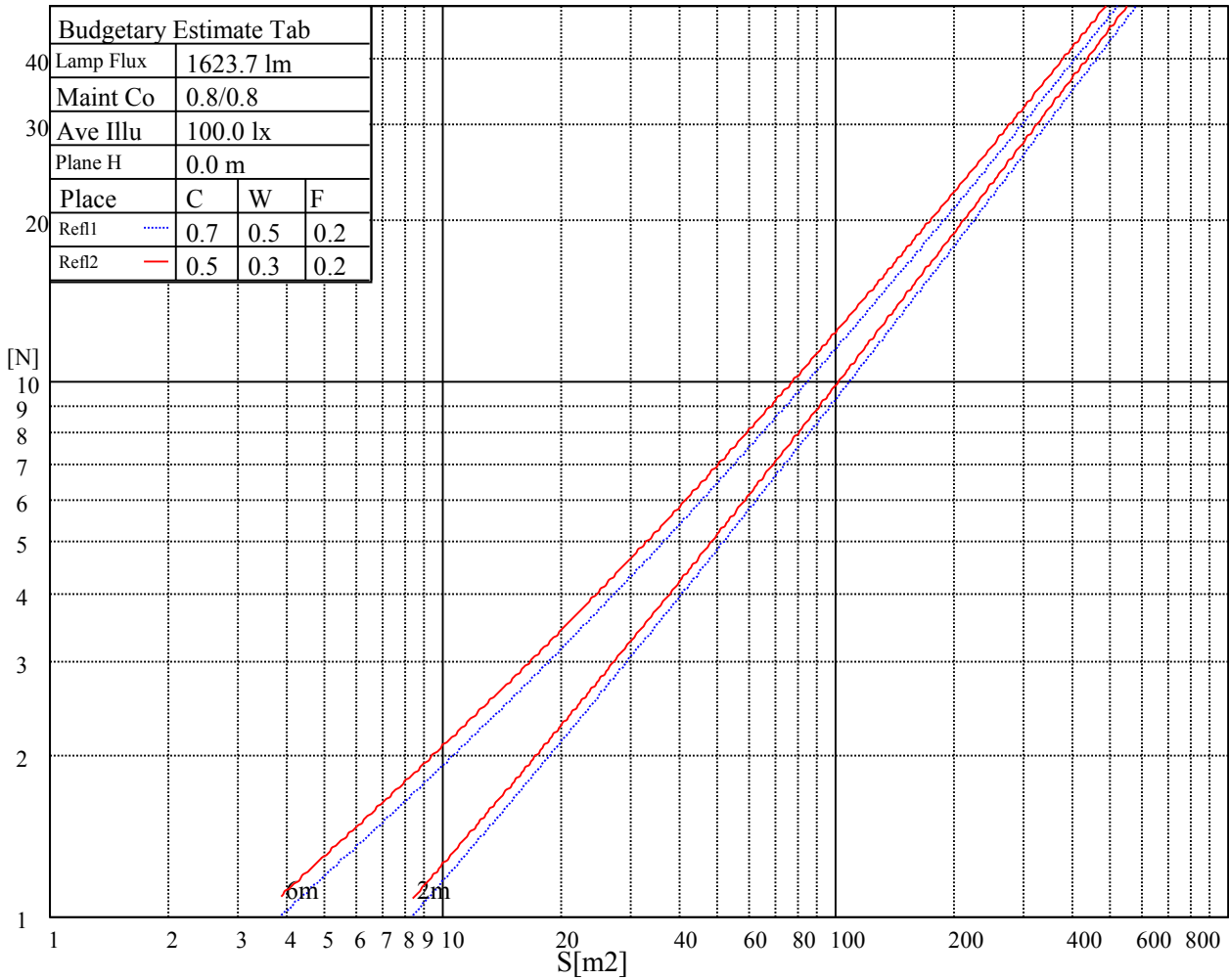
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
15408	15408	15408	19525	19525	19525	39628	39628	39628

Glare Table

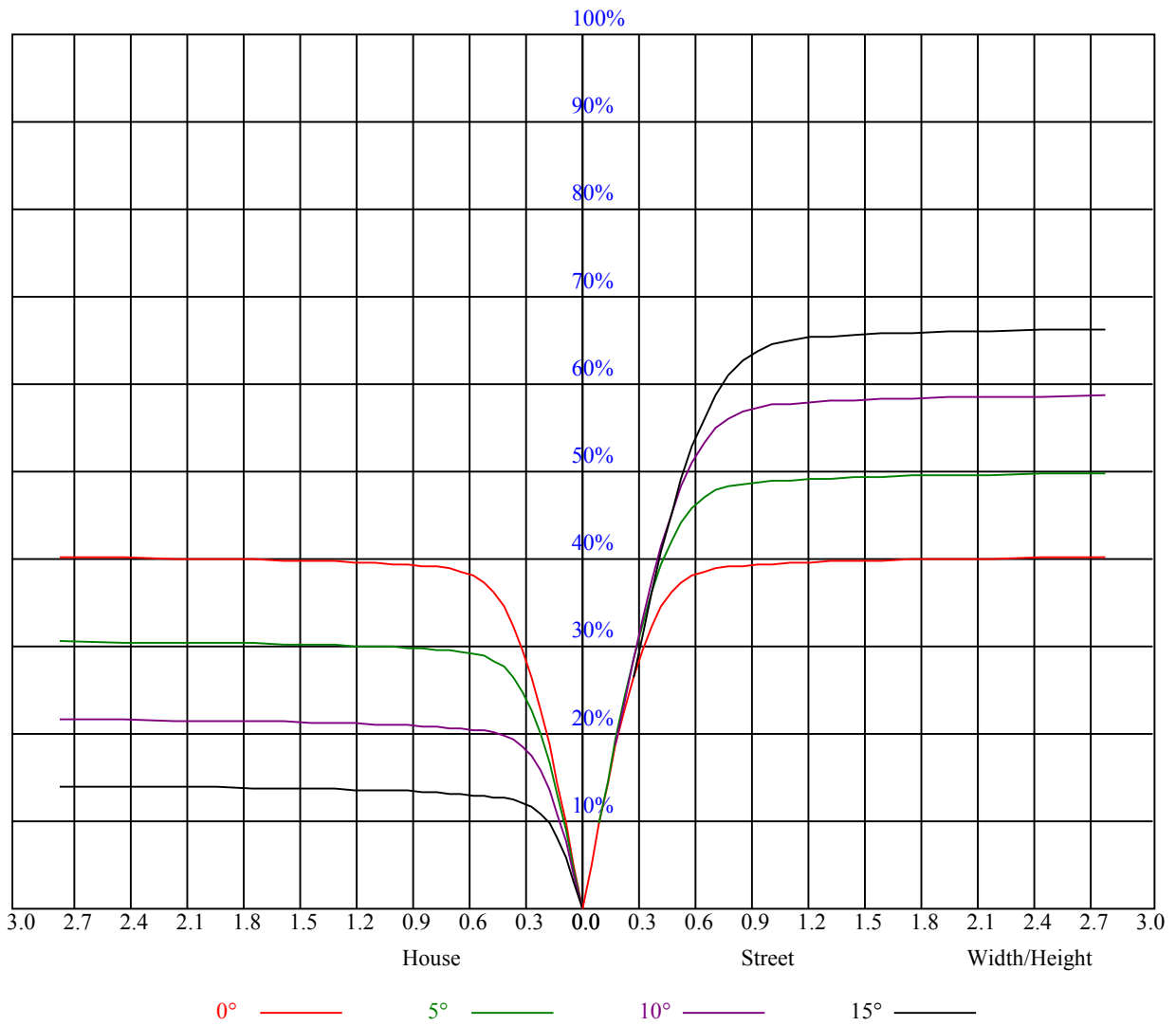
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	0.97	0.97	0.97	0.95	0.95	0.95	0.91	0.91	0.91	0.87	0.87	0.87	0.83	0.83	0.83	0.82
1	0.91	0.89	0.87	0.89	0.87	0.86	0.86	0.84	0.83	0.83	0.82	0.81	0.80	0.79	0.78	0.77
2	0.85	0.82	0.80	0.84	0.81	0.79	0.81	0.79	0.77	0.79	0.77	0.75	0.77	0.75	0.74	0.73
3	0.80	0.77	0.74	0.79	0.76	0.73	0.77	0.74	0.72	0.75	0.73	0.71	0.73	0.72	0.70	0.69
4	0.76	0.72	0.69	0.75	0.72	0.69	0.74	0.70	0.68	0.72	0.69	0.67	0.70	0.68	0.66	0.65
5	0.72	0.68	0.65	0.72	0.68	0.65	0.70	0.67	0.64	0.69	0.66	0.64	0.68	0.65	0.63	0.62
6	0.69	0.65	0.61	0.68	0.64	0.61	0.67	0.63	0.61	0.66	0.63	0.60	0.65	0.62	0.60	0.59
7	0.66	0.61	0.58	0.65	0.61	0.58	0.64	0.61	0.58	0.63	0.60	0.58	0.62	0.59	0.57	0.56
8	0.63	0.58	0.56	0.62	0.58	0.55	0.61	0.58	0.55	0.61	0.57	0.55	0.60	0.57	0.55	0.54
9	0.60	0.56	0.53	0.60	0.56	0.53	0.59	0.55	0.53	0.58	0.55	0.53	0.58	0.55	0.52	0.51
10	0.58	0.53	0.51	0.57	0.53	0.51	0.57	0.53	0.50	0.56	0.53	0.50	0.55	0.52	0.50	0.49



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	2522.77	2515.00	2380.56	2092.55	1688.62	1143.07	577.81	122.67	48.04
45.0	2545.47	2498.87	2296.90	1940.18	1520.11	949.47	374.65	70.27	39.26
90.0	2535.91	2441.50	2200.10	1805.73	1177.25	773.92	235.49	58.44	35.49
135.0	2536.51	2453.45	2229.98	1848.16	1432.28	834.75	303.54	63.70	37.94
180.0	2522.77	2413.42	2143.93	1743.59	1169.90	692.48	178.54	55.81	35.79
225.0	2545.47	2469.59	2267.62	1921.06	1473.51	912.37	371.13	73.20	41.59
270.0	2535.91	2501.85	2336.34	2002.32	1611.54	1068.38	506.11	98.83	46.07
315.0	2536.51	2493.49	2308.85	1982.00	1554.77	995.66	463.50	85.39	43.14
360.0	2522.77	2515.00	2380.56	2092.55	1688.62	1143.07	577.81	122.67	48.04
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	32.51	25.34	19.96	16.01	13.03	11.05	9.68	8.78	6.75
45.0	28.32	22.47	17.99	14.46	11.89	10.46	9.20	8.01	6.27
90.0	26.41	21.33	16.91	13.80	11.23	10.16	9.08	7.71	6.09
135.0	27.61	21.81	17.45	14.16	11.65	10.34	9.26	7.71	6.09
180.0	26.59	21.03	16.79	13.62	11.35	10.22	9.08	7.47	6.04
225.0	29.52	23.24	18.16	14.46	12.07	10.46	9.32	8.01	6.51
270.0	31.61	24.74	19.42	15.54	12.67	10.76	9.68	8.48	6.75
315.0	30.29	23.84	18.82	15.12	12.43	10.64	9.44	8.31	6.57
360.0	32.51	25.34	19.96	16.01	13.03	11.05	9.68	8.78	6.75
C/γ(°)	90.0								
0.0	5.80								
45.0	5.62								
90.0	5.56								
135.0	5.56								
180.0	5.62								
225.0	5.62								
270.0	5.62								
315.0	5.68								
360.0	5.80								