



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: 1-0938-N	
Luminaire: 92.361.000	
Report No: 220519-B005	Voltage(V): 38.1800
Test No: 220519-C005	Current(A): 0.3610
LampCAT: CREE CXA1507	Power (W): 13.7820
Lamp flux(lm): 1272.8	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): 1038.49
Efficiency(%): 81.59%
Lumens(lm)/Power(W): 75.35
Central intensity(cd): 2120.929
Maximum intensity(cd): 2120.929
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=41.9
 [C90/270]Total=41.9
Field angle(10%Imax): [C0/180]Total=62.4
 [C90/270]Total=62.4
Maximum s/h(1/2): C0_180=0.68 C90_270=0.68
Maximum s/h(1/4): C0_180=0.65 C90_270=0.65
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 81.59%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.972%

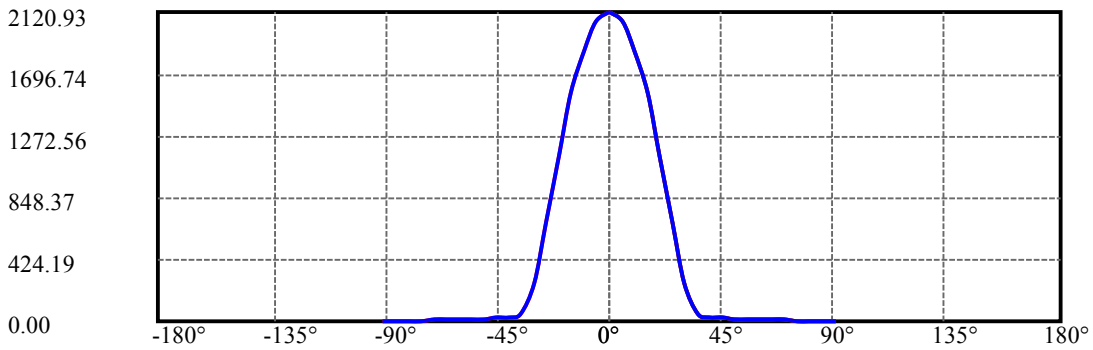
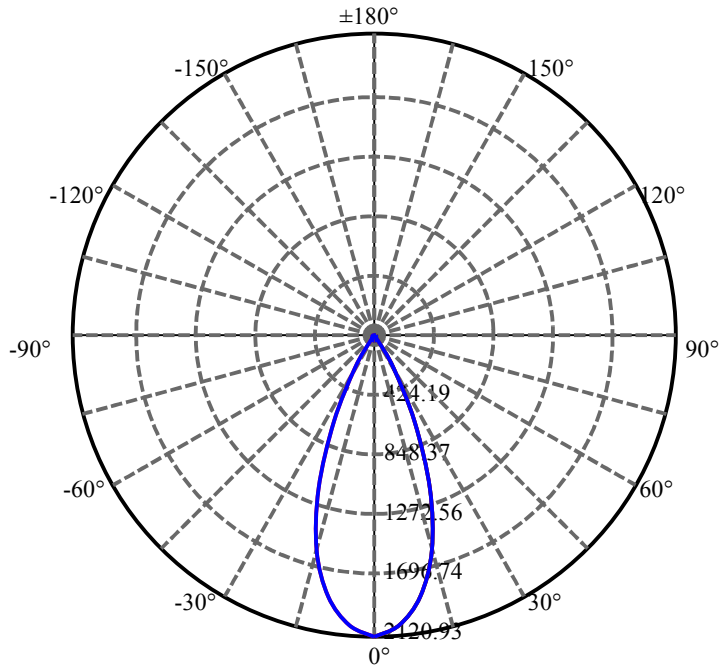
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2120.929	0.000	0	.000%	.000%
5.0	2050.944	49.874	49.874	3.919%	4.803%
10.0	1858.913	139.868	189.741	10.989%	18.271%
15.0	1564.555	203.078	392.819	15.956%	37.826%
20.0	1152.208	223.899	616.719	17.592%	59.386%
25.0	673.654	191.499	808.218	15.046%	77.827%
30.0	260.963	118.277	926.494	9.293%	89.216%
35.0	54.569	46.464	972.959	3.651%	93.690%
40.0	30.063	14.120	987.079	1.109%	95.050%
45.0	22.153	9.668	996.748	.760%	95.981%
50.0	17.523	8.017	1004.765	.630%	96.753%
55.0	13.960	6.845	1011.61	.538%	97.412%
60.0	11.204	5.816	1017.426	.457%	97.972%
65.0	8.963	4.903	1022.329	.385%	98.444%
70.0	7.342	4.129	1026.457	.324%	98.842%
75.0	6.169	3.532	1029.989	.277%	99.182%
80.0	5.430	3.104	1033.093	.244%	99.481%
85.0	4.982	2.829	1035.922	.222%	99.753%
90.0	4.384	2.565	1038.487	.201%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	926.49	72.79%	89.22%
0-40	987.08	77.55%	95.05%
0-60	1017.43	79.94%	97.97%
0-90	1035.92	81.39%	99.75%
0-120	1035.92	81.39%	99.75%
0-180	1038.49	81.59%	100.00%
60-90	24.31	1.91%	2.34%
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%
0-25.95	830.79	65.27%	80.00%

ZONAL LUMEN SUMMARY

0-10	189.74
10-20	426.98
20-30	309.78
30-40	60.58
40-50	17.69
50-60	12.66
60-70	9.03
70-80	6.64
80-90	2.83
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: —————

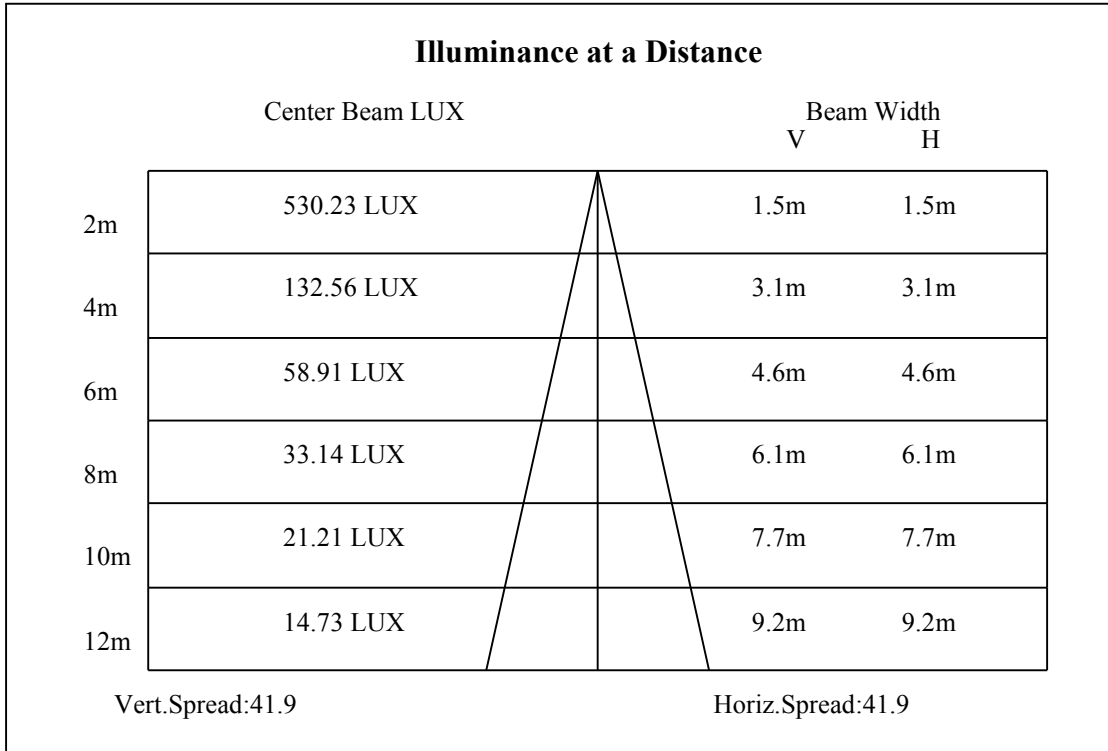
C90/C270: —————

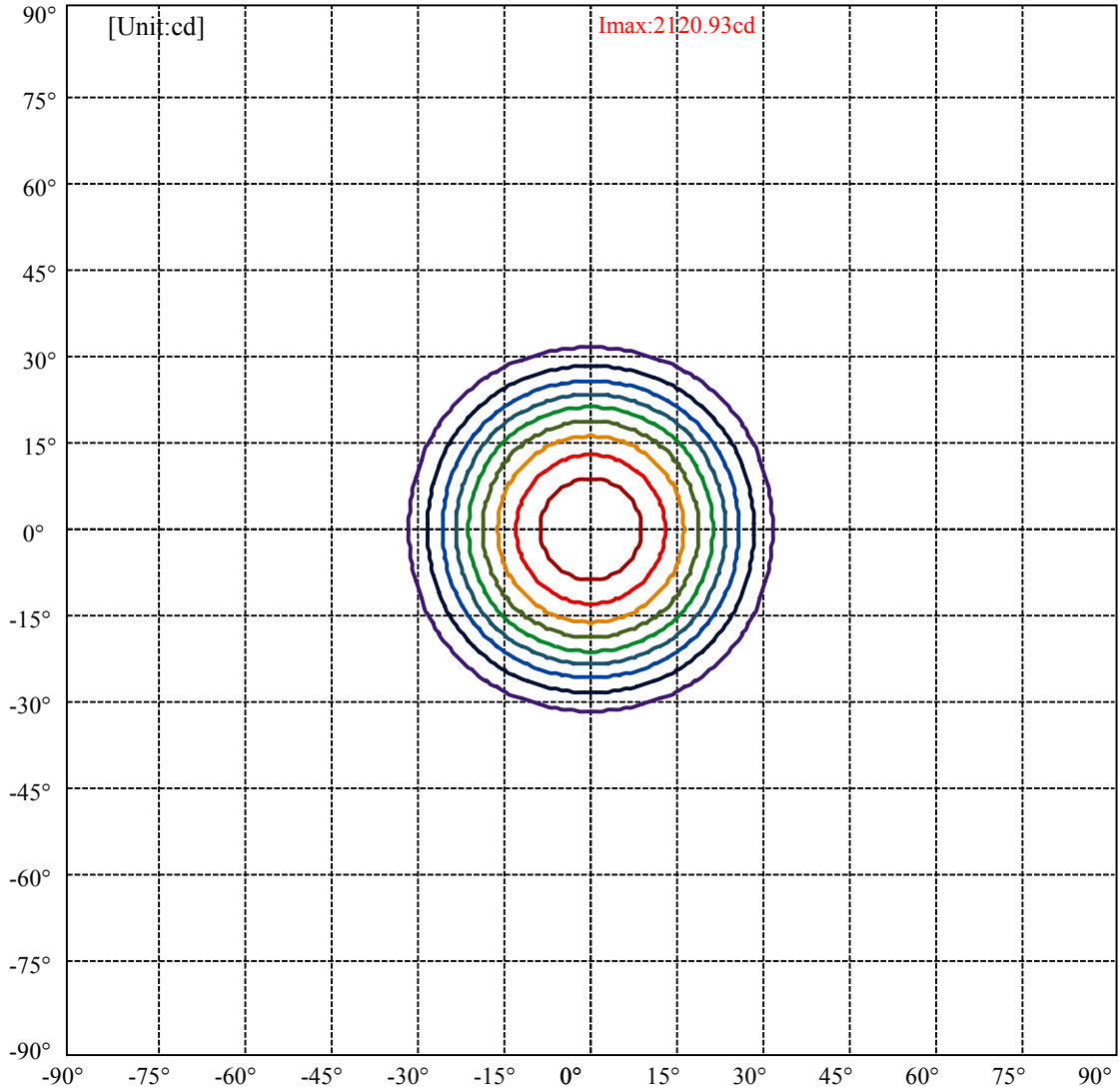
Field angle(10%Imax):C0/180Left:31.2 Right:31.2

:C90/270Left:31.2 Right:31.2

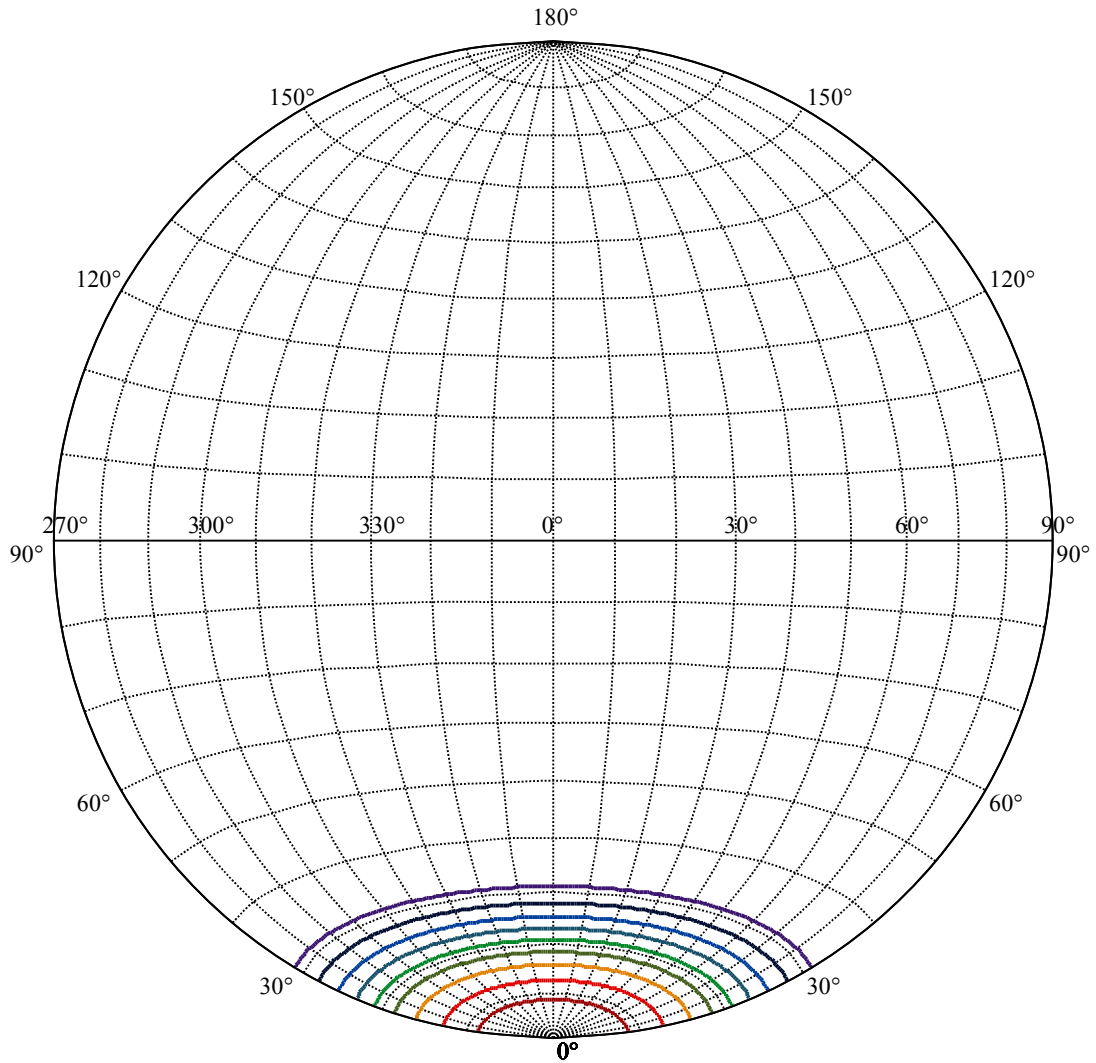
Beam Angle(50%Imax):C0/180Left:21.0 Right:21.0

:C90/270Left:21.0 Right:21.0





(10%I _{max}) 212.093	—
(20%I _{max}) 424.186	—
(30%I _{max}) 636.279	—
(40%I _{max}) 848.372	—
(50%I _{max}) 1060.46	—
(60%I _{max}) 1272.56	—
(70%I _{max}) 1484.65	—
(80%I _{max}) 1696.74	—
(90%I _{max}) 1908.84	—



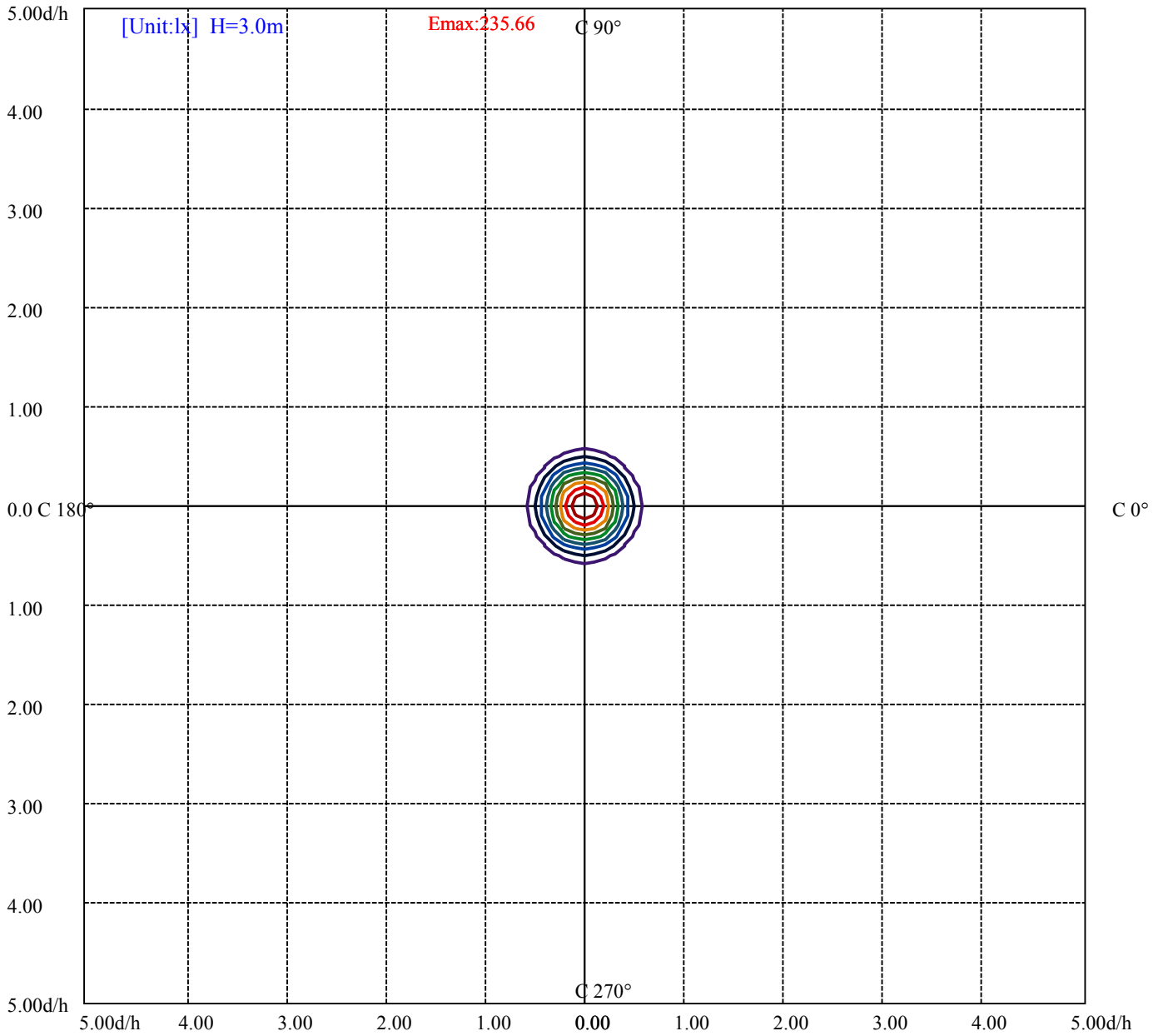
House

[Unit:cd]

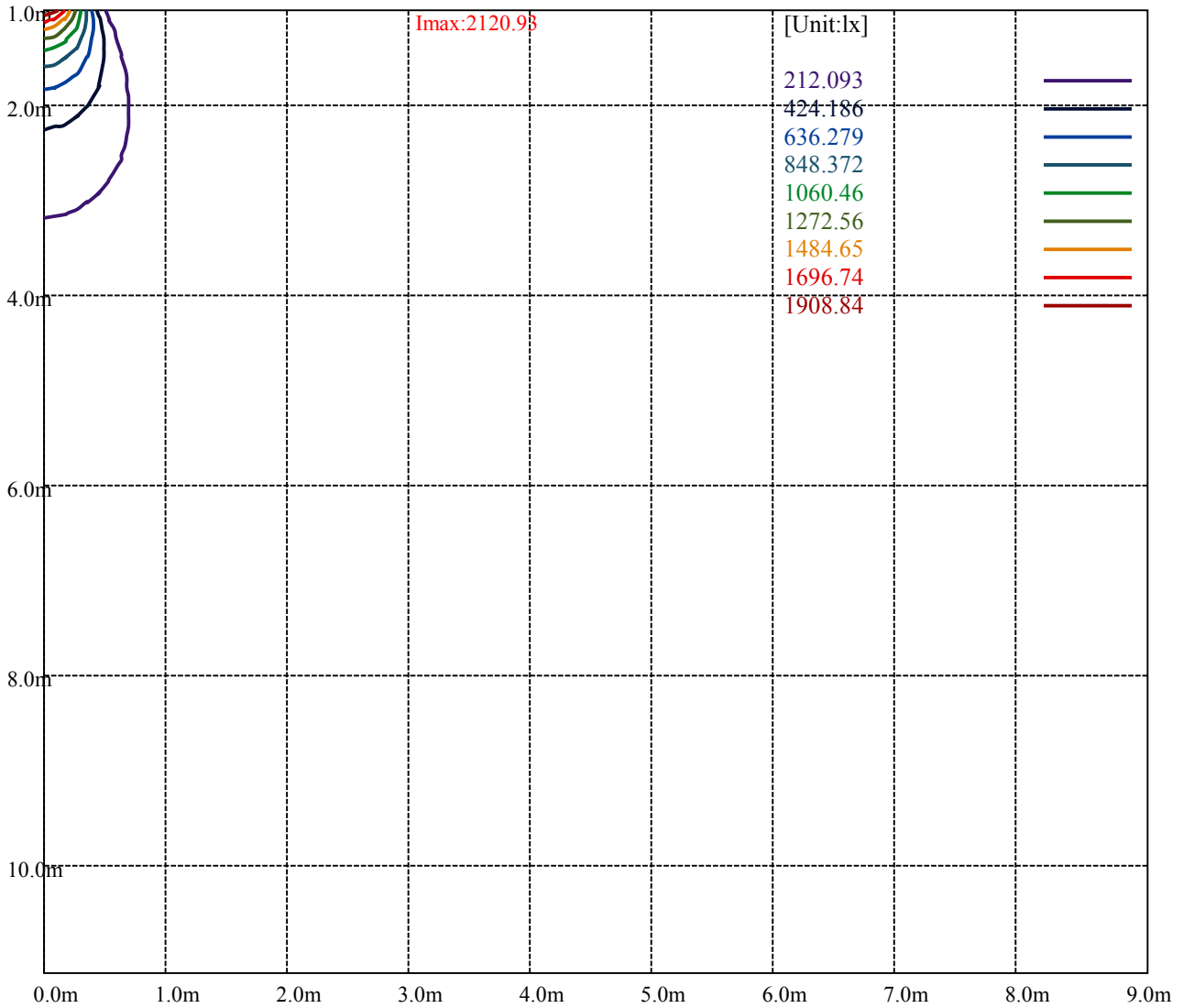
Road

Imax:2120.93

(10%Imax)	212.093	—
(20%Imax)	424.186	—
(30%Imax)	636.279	—
(40%Imax)	848.372	—
(50%Imax)	1060.46	—
(60%Imax)	1272.56	—
(70%Imax)	1484.65	—
(80%Imax)	1696.74	—
(90%Imax)	1908.84	—



(10%Emax) 23.56589	—
(20%Emax) 47.13167	—
(30%Emax) 70.69756	—
(40%Emax) 94.26344	—
(50%Emax) 117.8289	—
(60%Emax) 141.3956	—
(70%Emax) 164.9611	—
(80%Emax) 188.5267	—
(90%Emax) 212.0922	—



Luminance Table

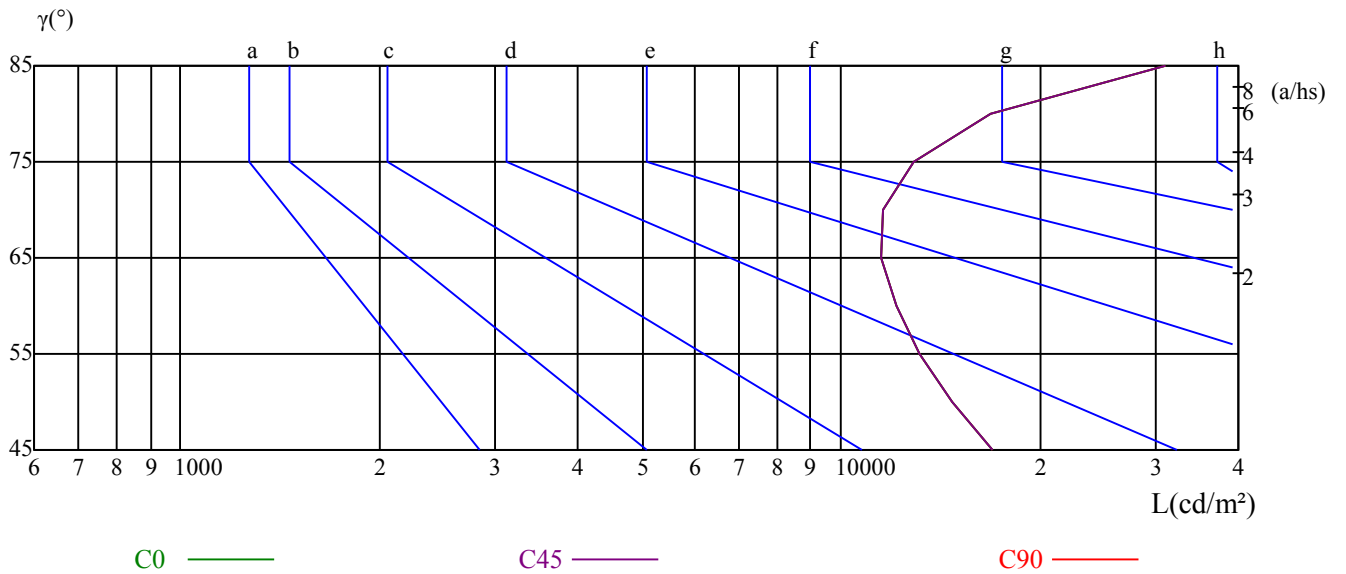
γ	45	50	55	60	65	70	75	80	85
C0	16944	14743	13163	12119	11470	11610	12892	16912	30914
C45	16944	14743	13163	12119	11470	11610	12892	16912	30914
C90	16944	14743	13163	12119	11470	11610	12892	16912	30914

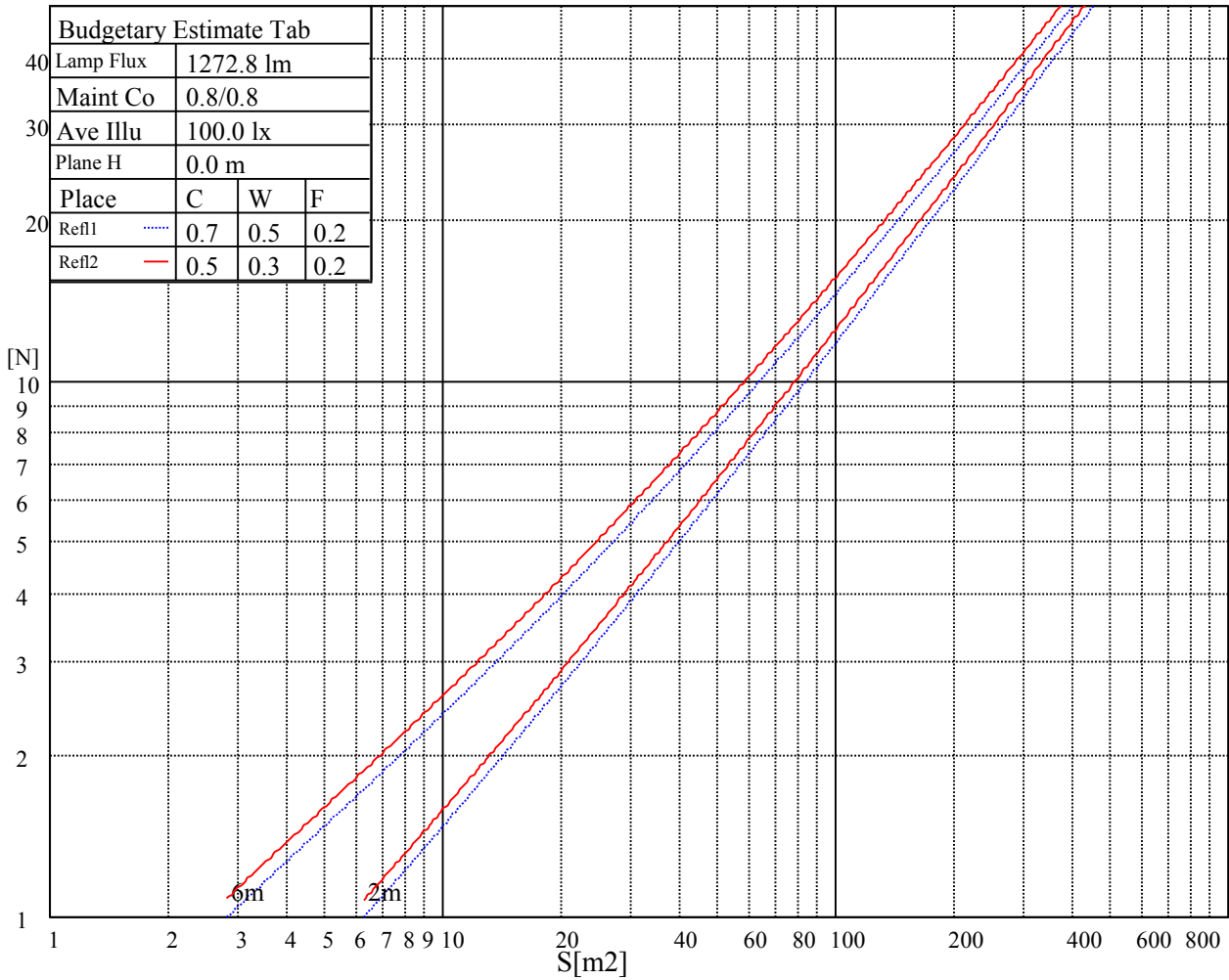
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
11470	11470	11470	12892	12892	12892	30914	30914	30914

Glare Table

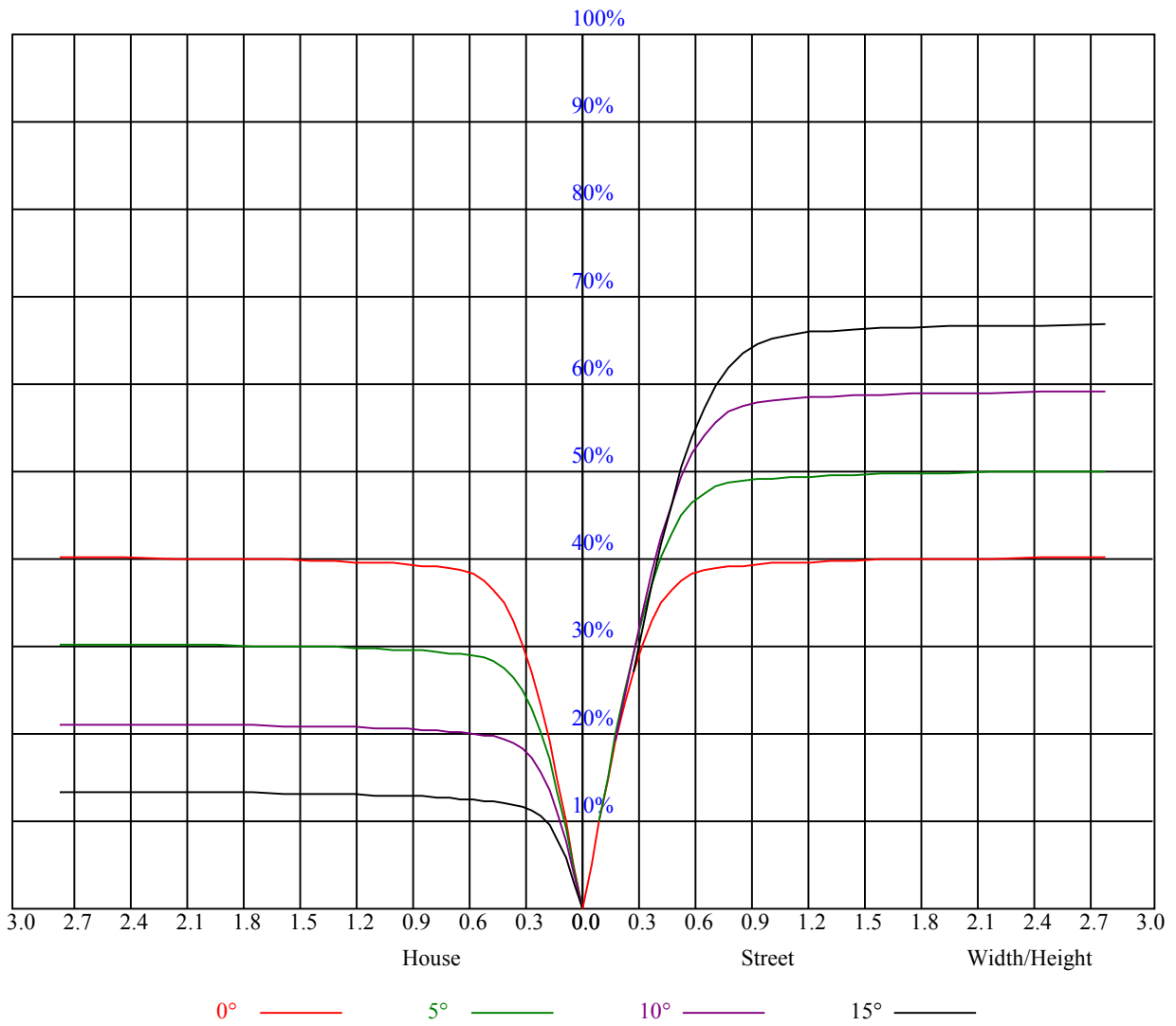
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	0.76	0.77	0.75	0.74	0.73
3	0.81	0.77	0.74	0.80	0.76	0.74	0.78	0.75	0.72	0.76	0.73	0.71	0.74	0.72	0.70	0.69
4	0.77	0.73	0.70	0.76	0.72	0.69	0.74	0.71	0.68	0.72	0.70	0.68	0.71	0.69	0.67	0.66
5	0.73	0.69	0.66	0.72	0.68	0.65	0.71	0.67	0.65	0.69	0.66	0.64	0.68	0.66	0.64	0.63
6	0.69	0.65	0.62	0.69	0.65	0.62	0.68	0.64	0.62	0.66	0.63	0.61	0.65	0.63	0.61	0.60
7	0.66	0.62	0.59	0.66	0.62	0.59	0.65	0.61	0.59	0.64	0.61	0.58	0.63	0.60	0.58	0.57
8	0.63	0.59	0.56	0.63	0.59	0.56	0.62	0.59	0.56	0.61	0.58	0.56	0.61	0.58	0.56	0.55
9	0.61	0.57	0.54	0.60	0.56	0.54	0.60	0.56	0.54	0.59	0.56	0.53	0.58	0.55	0.53	0.52
10	0.58	0.54	0.52	0.58	0.54	0.51	0.57	0.54	0.51	0.57	0.54	0.51	0.56	0.53	0.51	0.50



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	2117.05	2084.78	1916.28	1640.22	1291.86	788.14	310.72	65.01	31.37
45.0	2121.23	2048.93	1868.47	1566.12	1132.91	664.45	302.95	42.36	27.01
90.0	2123.02	2036.38	1830.83	1514.14	1087.50	593.41	172.03	41.65	26.71
135.0	2122.42	2056.69	1884.01	1588.83	1166.38	703.89	314.30	51.21	29.88
180.0	2117.05	2013.08	1795.57	1489.64	1046.63	559.29	182.19	47.09	28.62
225.0	2121.23	2053.11	1838.60	1566.72	1160.34	677.42	269.07	63.82	33.04
270.0	2123.02	2070.44	1887.00	1612.13	1221.35	746.91	311.31	71.88	33.76
315.0	2122.42	2044.15	1850.55	1538.64	1110.69	655.73	225.15	53.54	30.12
360.0	2117.05	2084.78	1916.28	1640.22	1291.86	788.14	310.72	65.01	31.37
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	22.65	17.87	14.34	11.59	9.20	7.65	6.33	5.44	4.90
45.0	20.55	16.61	13.56	10.88	8.72	7.17	6.09	5.38	4.84
90.0	20.50	16.73	13.38	10.70	8.66	7.17	5.98	5.32	4.78
135.0	22.11	17.57	13.98	11.35	9.02	7.35	6.27	5.50	4.78
180.0	21.27	17.09	13.44	10.76	8.60	7.11	5.98	5.20	4.66
225.0	23.66	18.34	14.46	11.59	9.20	7.47	6.15	5.44	4.84
270.0	24.32	18.52	14.76	11.59	9.38	7.53	6.33	5.44	4.78
315.0	22.17	17.45	13.74	11.17	8.90	7.29	6.21	5.74	6.27
360.0	22.65	17.87	14.34	11.59	9.20	7.65	6.33	5.44	4.90
C/ γ (°)	90.0								
0.0	4.36								
45.0	4.42								
90.0	4.42								
135.0	4.36								
180.0	4.36								
225.0	4.42								
270.0	4.36								
315.0	4.36								
360.0	4.36								