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Nata

LumCAT: 2-1259-N
Luminaire: 92.70.045.00+92.70.059.00
Report No: NT2018010405
Test No: nata-0100
LampCAT: CREE CXA2520
Lamp flux(lm): 2275.0
Number of Lamps: 1
Length(mm): 70
Phm Type: C

Voltage(V): 36.0000
Current(A): 0.7100
Power (W): 25.5600
PF: 0.0000
Ballast type: DC
Width(mm): 70
Height(mm): 0

Photometric Results

Lumens(lm): 1790.65
Efficiency(%): 78.71%
Lumens(lm)/Power(W): 70.06
Central intensity(cd): 3598.762
Maximum intensity(cd): 3598.762
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=37.3
 [C90/270]Total=37.3
Field angle(10%Imax): [C0/180]Total=69.0
 [C90/270]Total=69.0
Maximum s/h(1/2): C0_180=0.61 C90_270=0.61
Maximum s/h(1/4): C0_180=0.61 C90_270=0.61
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 79.58%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.586%

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2018/1/4
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.42

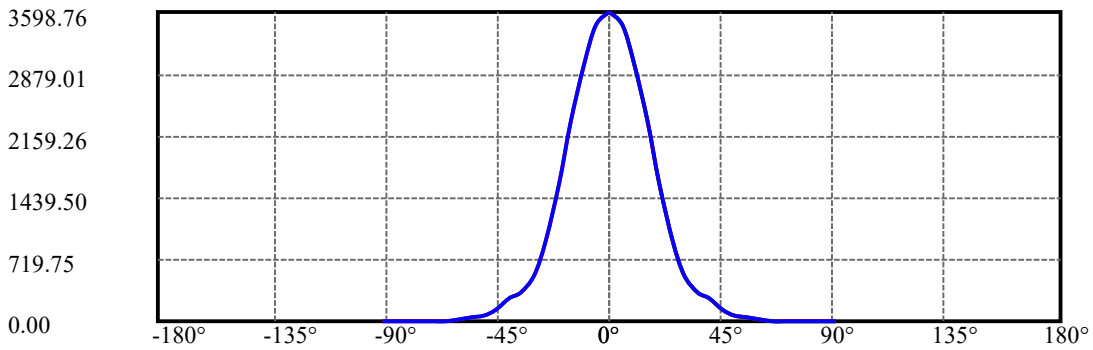
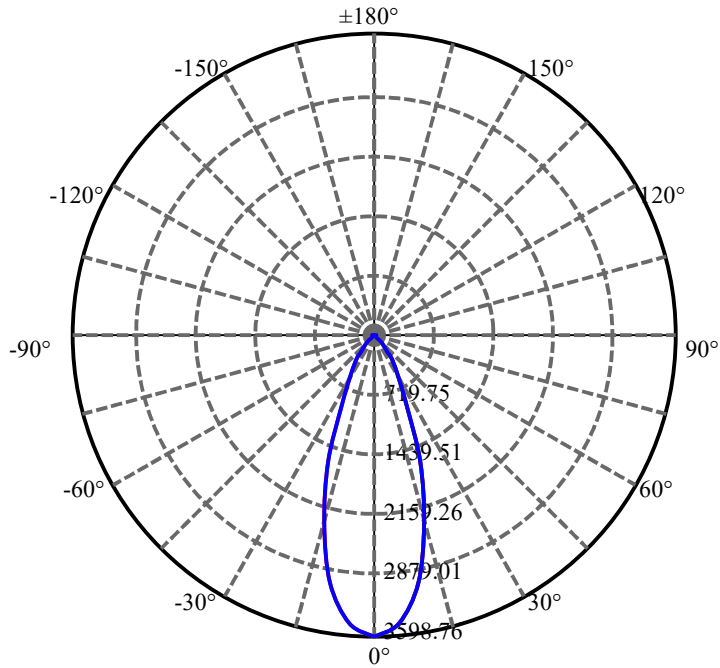
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3598.762	21.521	21.521	.946%	1.202%
5.0	3447.012	164.675	186.197	7.238%	10.398%
10.0	2998.372	285.394	471.591	12.545%	26.336%
15.0	2334.598	331.206	802.796	14.558%	44.833%
20.0	1605.651	301.018	1103.814	13.232%	61.643%
25.0	943.336	218.527	1322.341	9.606%	73.847%
30.0	532.512	145.945	1468.286	6.415%	81.997%
35.0	341.219	107.279	1575.565	4.716%	87.988%
40.0	257.444	90.707	1666.271	3.987%	93.054%
45.0	123.010	47.678	1713.949	2.096%	95.717%
50.0	67.210	28.221	1742.17	1.240%	97.293%
55.0	35.346	15.871	1758.041	.698%	98.179%
60.0	18.375	8.723	1766.764	.383%	98.666%
65.0	9.009	4.475	1771.239	.197%	98.916%
70.0	8.080	4.162	1775.4	.183%	99.148%
75.0	8.073	4.274	1779.675	.188%	99.387%
80.0	8.080	4.361	1784.036	.192%	99.631%
85.0	8.155	4.453	1788.489	.196%	99.879%
90.0	7.887	2.162	1790.651	.095%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1468.29	64.54%	82.00%
0-40	1666.27	73.24%	93.05%
0-60	1766.76	77.66%	98.67%
0-90	1788.49	78.61%	99.88%
0-120	1788.49	78.61%	99.88%
0-180	1790.65	78.71%	100.00%
60-90	30.45	1.34%	1.70%
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%
0-28.77	1432.52	62.97%	80.00%

ZONAL LUMEN SUMMARY

0-10	471.59
10-20	632.22
20-30	364.47
30-40	197.99
40-50	75.90
50-60	24.59
60-70	8.64
70-80	8.64
80-90	4.45
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: ———

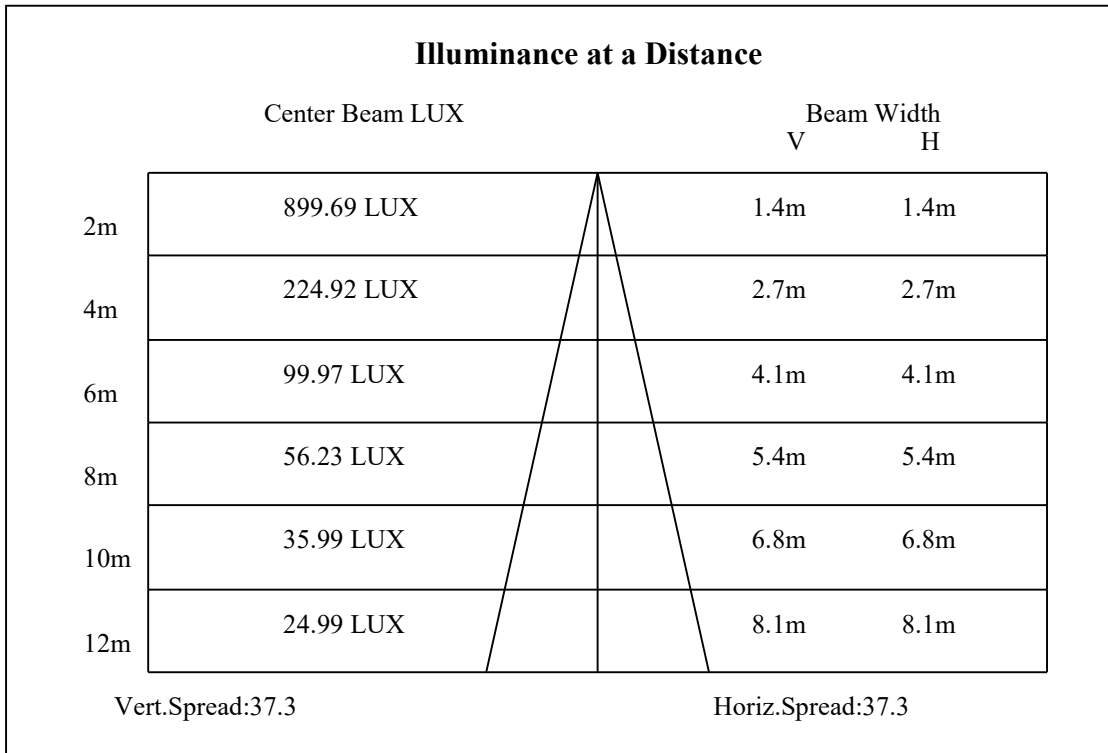
C90/C270: ———

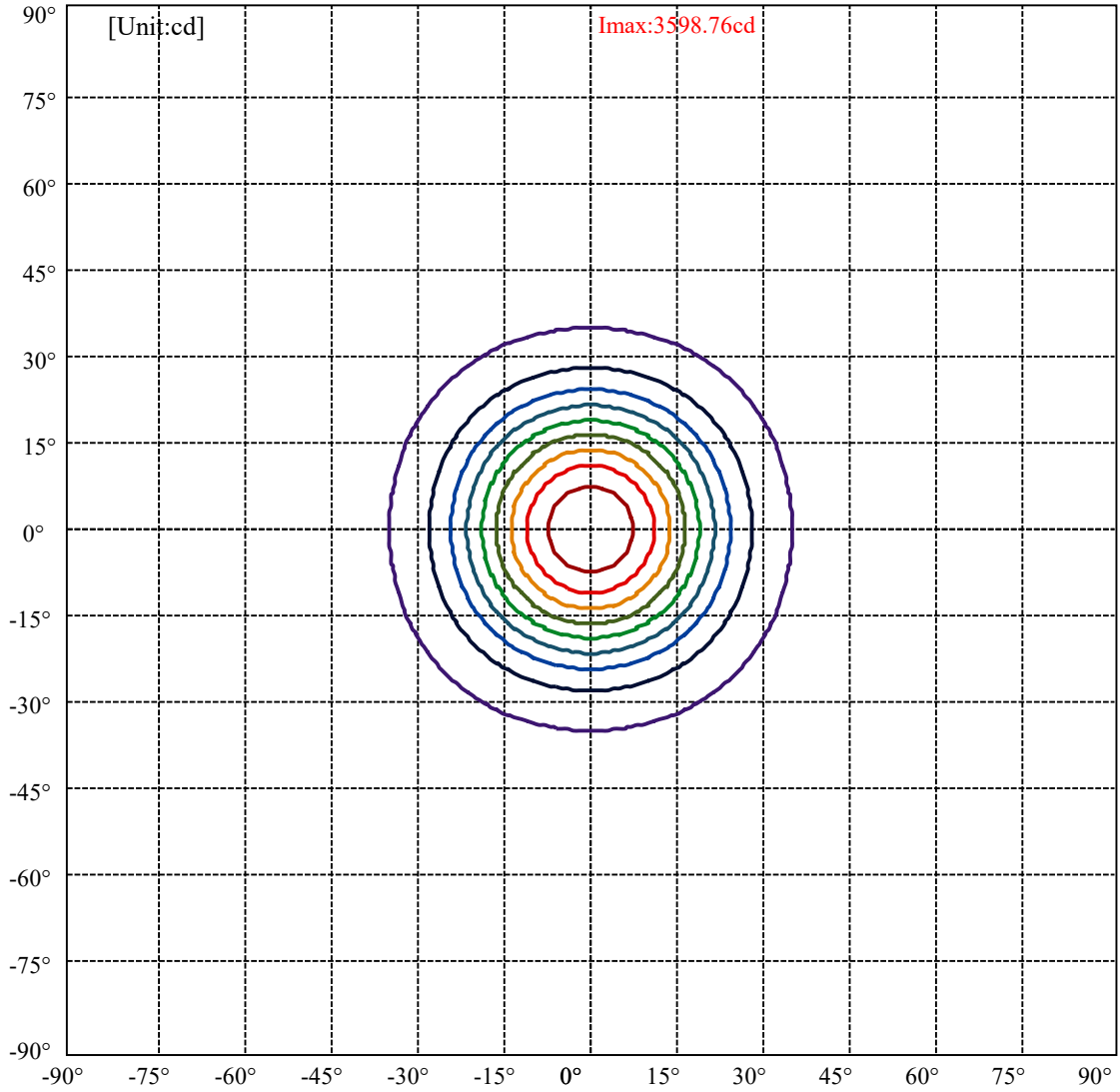
Field angle(10%Imax):C0/180Left:34.5 Right:34.5

:C90/270Left:34.5 Right:34.5

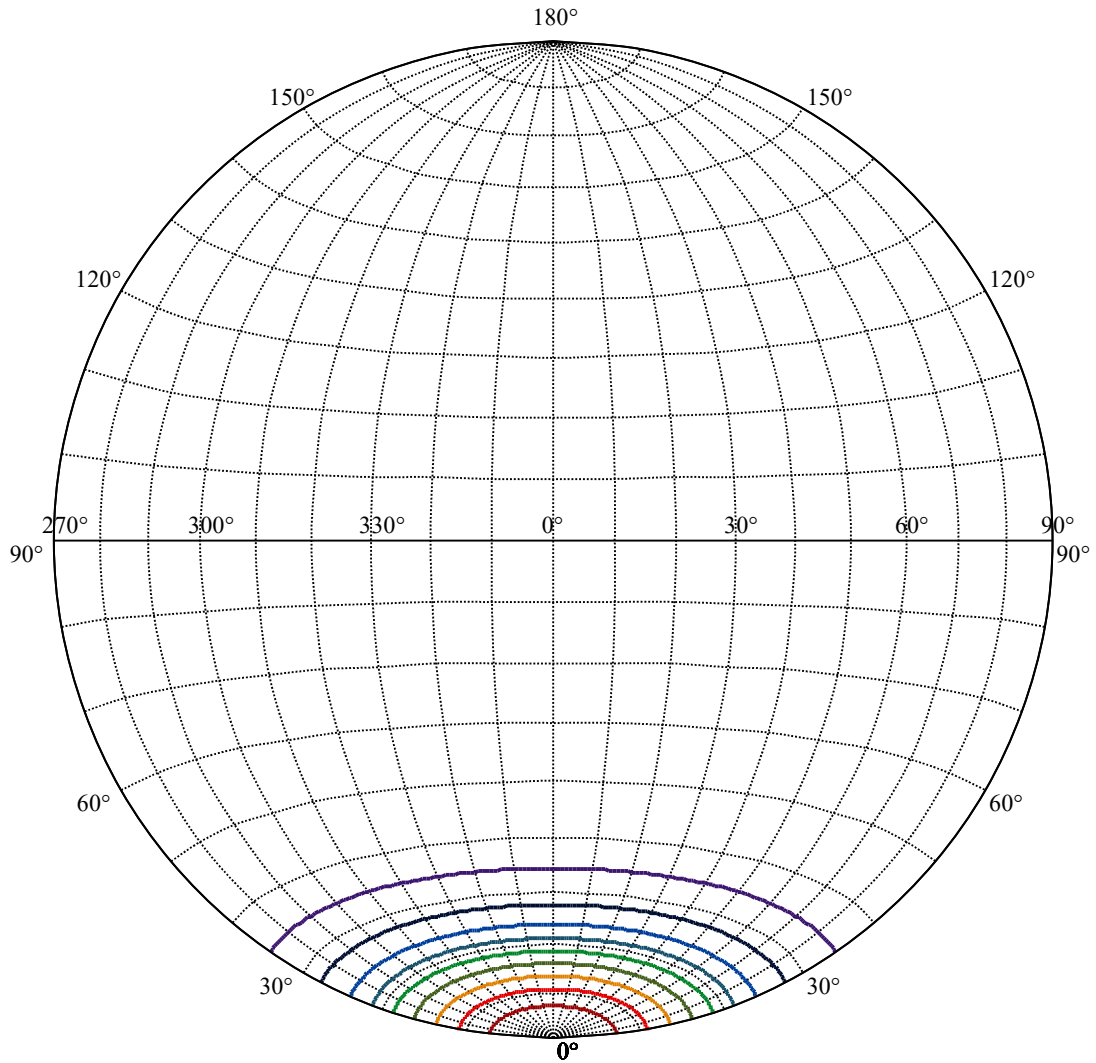
Beam Angle(50%Imax):C0/180Left:18.7 Right:18.7

:C90/270Left:18.7 Right:18.7





(10%Imax) 359.876	—
(20%Imax) 719.752	—
(30%Imax) 1079.63	—
(40%Imax) 1439.5	—
(50%Imax) 1799.38	—
(60%Imax) 2159.26	—
(70%Imax) 2519.13	—
(80%Imax) 2879.01	—
(90%Imax) 3238.89	—



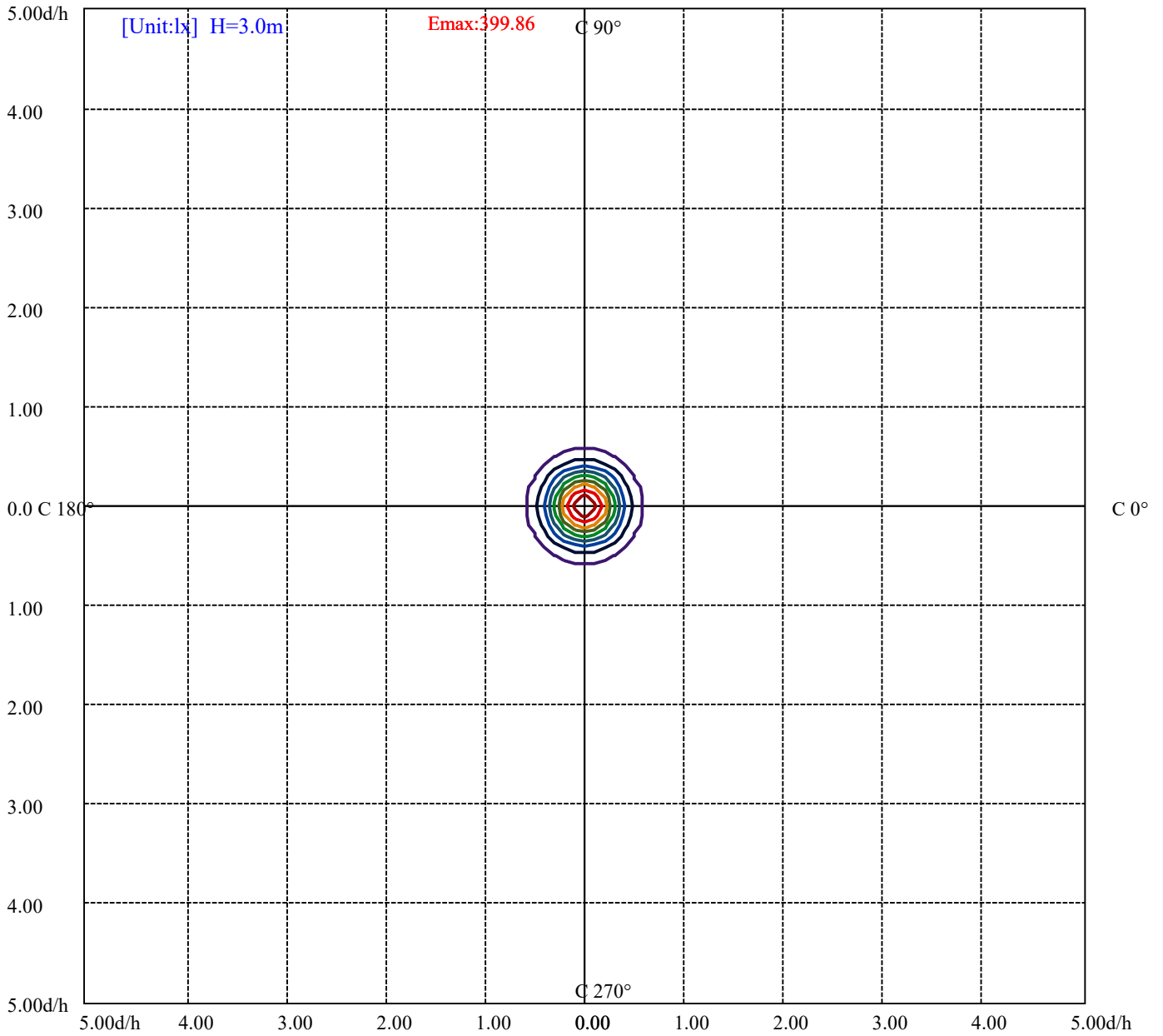
House

[Unit:cd]

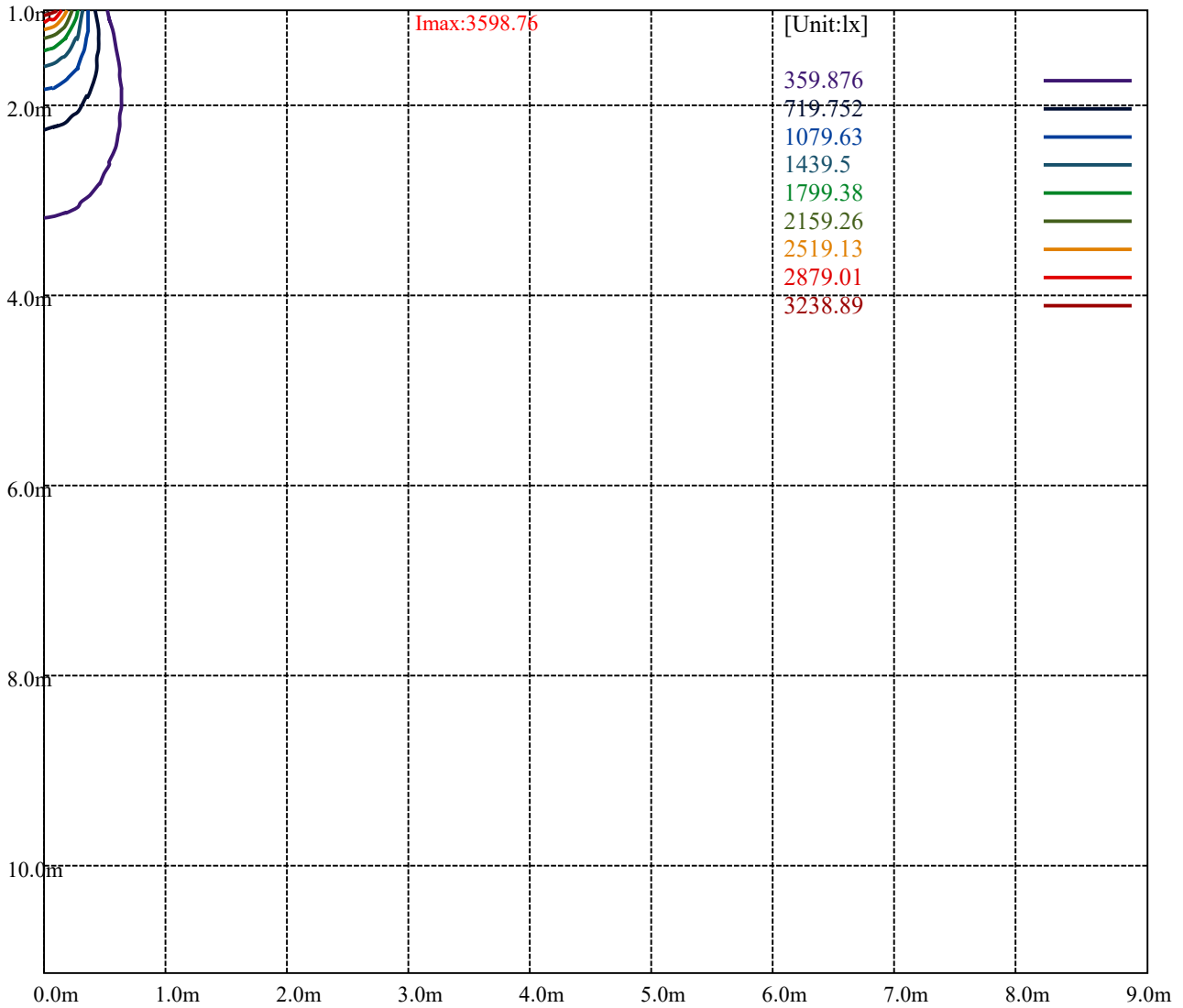
Road

Imax:3598.76

(10%Imax)	359.876	—
(20%Imax)	719.752	—
(30%Imax)	1079.63	—
(40%Imax)	1439.5	—
(50%Imax)	1799.38	—
(60%Imax)	2159.26	—
(70%Imax)	2519.13	—
(80%Imax)	2879.01	—
(90%Imax)	3238.89	—



- (10%Emax) 39.98622 ———
- (20%Emax) 79.97233 ———
- (30%Emax) 119.9589 ———
- (40%Emax) 159.9444 ———
- (50%Emax) 199.9311 ———
- (60%Emax) 239.9167 ———
- (70%Emax) 279.9033 ———
- (80%Emax) 319.89 ———
- (90%Emax) 359.8755 ———



Luminance Table

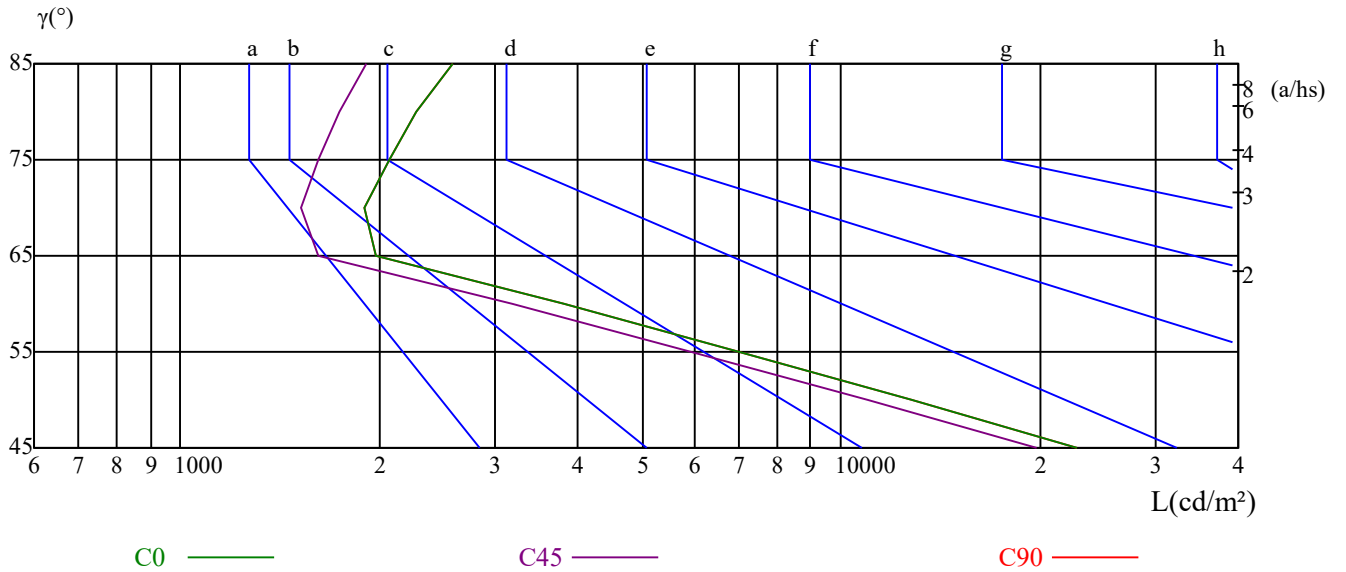
γ	45	50	55	60	65	70	75	80	85
C0	22800	12824	7004	3817	1982	1905	2067	2283	2592
C45	19857	11005	5918	3172	1617	1523	1615	1736	1908
C90	22800	12824	7004	3817	1982	1905	2067	2283	2592

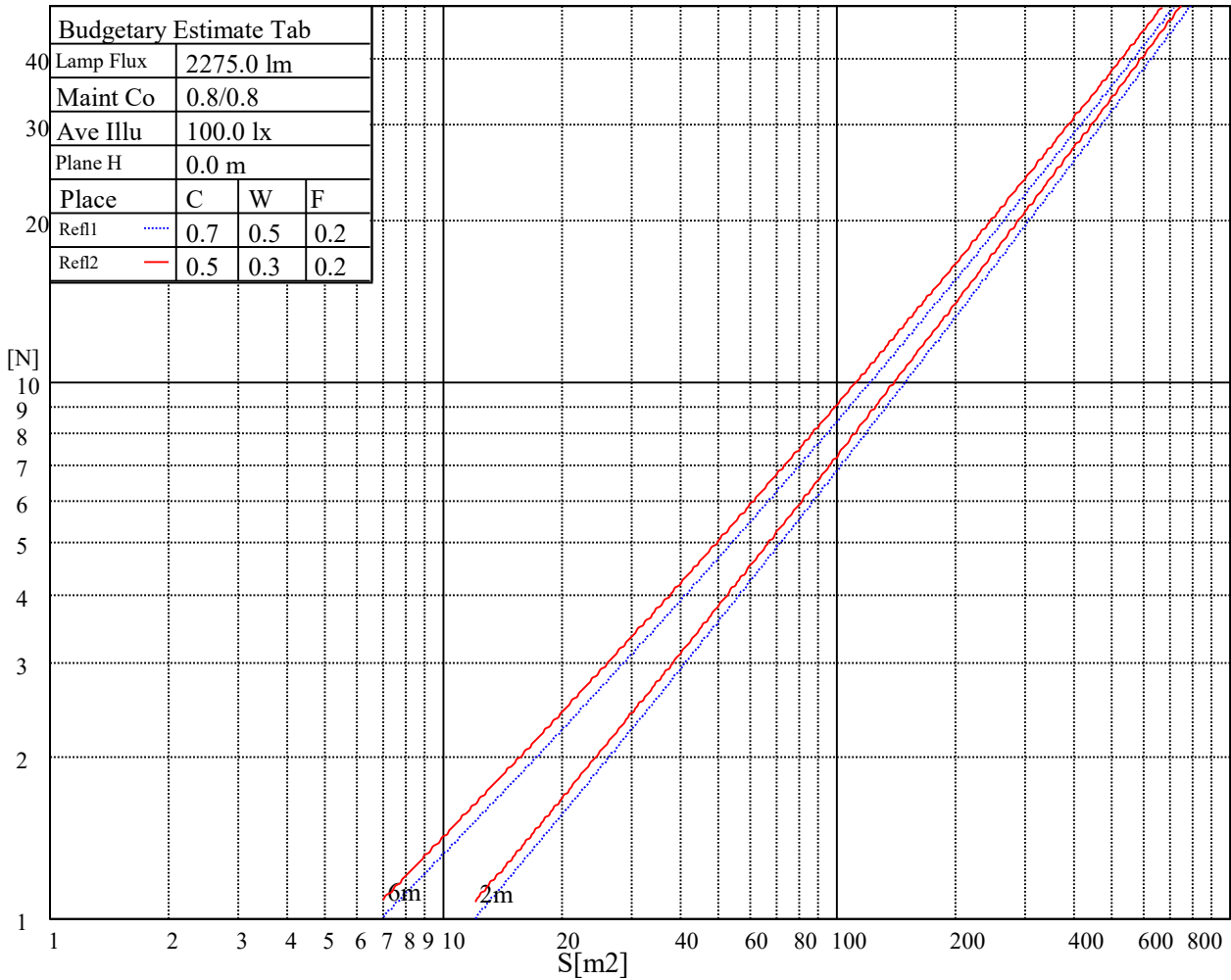
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
4350	4350	4350	6365	6365	6365	19096	19096	19096

Glare Table

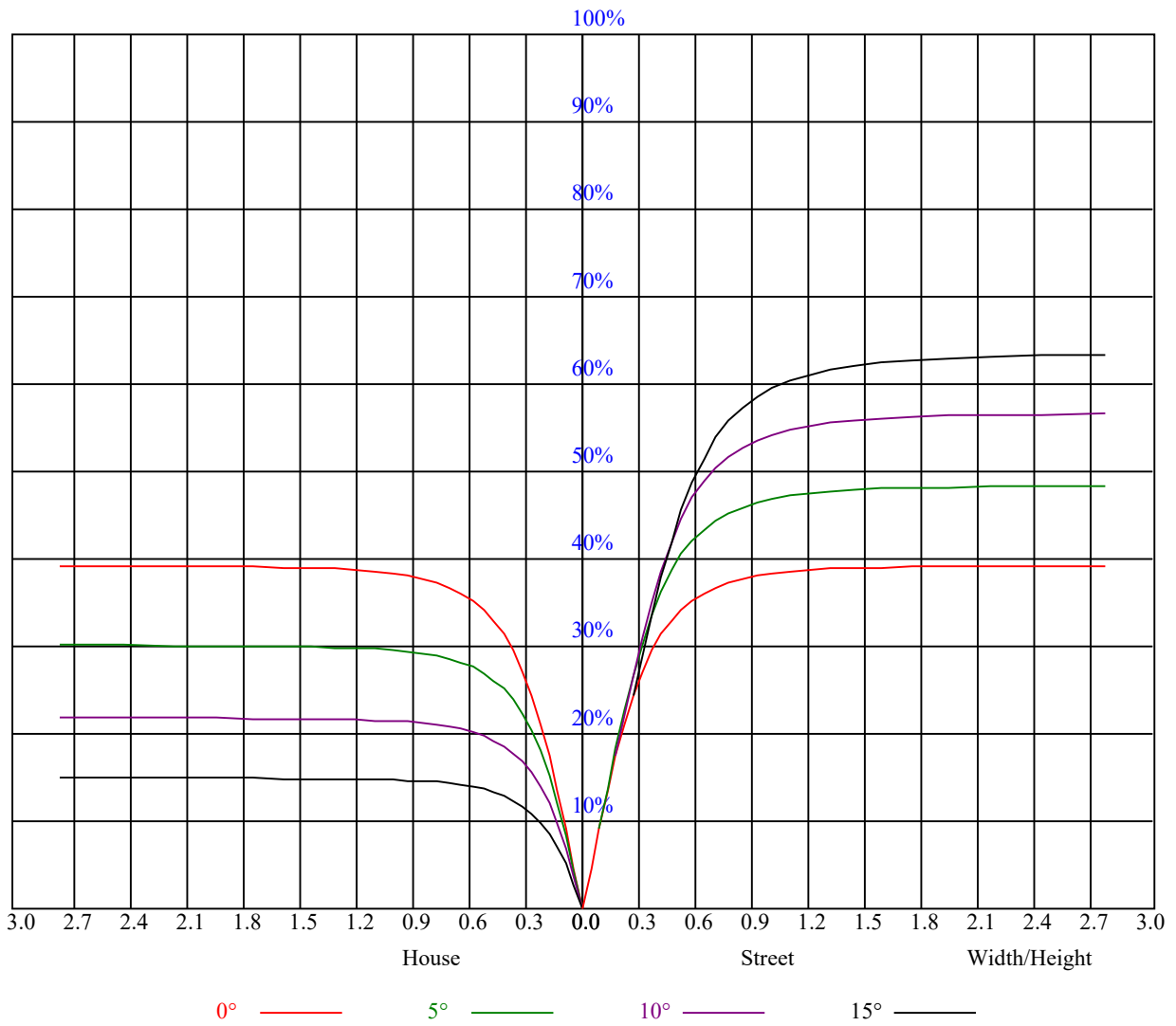
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	0.88	0.88	0.88	0.85	0.85	0.85	0.81	0.81	0.81	0.80
1	0.88	0.85	0.84	0.86	0.84	0.82	0.83	0.81	0.80	0.80	0.78	0.77	0.77	0.76	0.75	0.74
2	0.82	0.79	0.77	0.81	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	0.71	0.77	0.73	0.71	0.75	0.72	0.69	0.73	0.70	0.68	0.71	0.69	0.67	0.66
4	0.74	0.70	0.67	0.73	0.69	0.66	0.71	0.68	0.66	0.70	0.67	0.65	0.68	0.66	0.64	0.63
5	0.70	0.66	0.63	0.69	0.66	0.63	0.68	0.65	0.62	0.67	0.64	0.62	0.66	0.63	0.61	0.60
6	0.67	0.63	0.60	0.66	0.62	0.59	0.65	0.62	0.59	0.64	0.61	0.59	0.63	0.60	0.58	0.57
7	0.64	0.60	0.57	0.63	0.59	0.57	0.62	0.59	0.56	0.62	0.58	0.56	0.61	0.58	0.56	0.55
8	0.61	0.57	0.54	0.61	0.57	0.54	0.60	0.57	0.54	0.59	0.56	0.54	0.59	0.56	0.54	0.53
9	0.59	0.55	0.52	0.58	0.55	0.52	0.58	0.54	0.52	0.57	0.54	0.52	0.57	0.54	0.51	0.51
10	0.57	0.53	0.50	0.56	0.53	0.50	0.56	0.52	0.50	0.55	0.52	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	3605.09	3426.71	2929.55	2263.37	1537.17	870.99	498.81	332.54	279.69
45.0	3601.79	3459.19	3016.54	2326.13	1590.58	918.89	527.99	328.69	255.74
90.0	3606.74	3469.10	3030.30	2392.75	1657.75	959.85	550.34	343.00	250.40
135.0	3581.42	3554.99	3210.89	2595.36	1911.56	1160.04	632.05	383.19	280.79
180.0	3605.09	3462.50	3055.08	2404.86	1677.02	1005.61	553.15	350.32	257.28
225.0	3601.79	3426.16	3003.33	2331.09	1618.11	965.96	545.06	338.98	243.79
270.0	3606.74	3442.68	2966.44	2319.53	1599.94	923.30	523.04	340.25	279.14
315.0	3581.42	3334.77	2774.84	2043.69	1253.08	742.05	429.66	312.78	212.74
360.0	3605.09	3426.71	2929.55	2263.37	1537.17	870.99	498.81	332.54	279.69
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	118.26	62.49	32.04	16.79	8.26	8.04	8.09	8.20	8.59
45.0	118.81	65.79	34.02	18.17	8.53	8.20	8.15	8.15	8.15
90.0	123.88	70.36	36.56	18.11	9.14	8.09	8.04	8.09	8.09
135.0	162.91	84.02	44.16	23.18	11.34	7.98	7.98	7.93	7.98
180.0	129.27	70.31	37.66	19.66	9.19	8.04	7.98	7.93	7.87
225.0	120.02	66.78	35.73	19.38	9.03	8.15	8.15	8.15	8.20
270.0	114.52	63.54	34.74	17.84	8.53	8.15	8.15	8.15	8.20
315.0	96.40	54.40	27.86	13.87	8.04	7.98	8.04	8.04	8.15
360.0	118.26	62.49	32.04	16.79	8.26	8.04	8.09	8.20	8.59
C/ γ (°)	90.0								
0.0	7.82								
45.0	7.98								
90.0	7.93								
135.0	7.82								
180.0	7.76								
225.0	7.98								
270.0	7.93								
315.0	7.87								
360.0	7.82								