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Nata

LumCAT: 2-1299-N
Luminaire: 92.70.045.00+92.70.059.00
Report No: NT2018010404
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): 1816.49
Efficiency(%): 79.85%
Lumens(lm)/Power(W): 71.07
Central intensity(cd): 6382.551
Maximum intensity(cd): 6382.551
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=25.0
 [C90/270]Total=25.0
Field angle(10%Imax): [C0/180]Total=51.0
 [C90/270]Total=51.0
Maximum s/h(1/2): C0_180=0.42 C90_270=0.42
Maximum s/h(1/4): C0_180=0.44 C90_270=0.44
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 81.45%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 96.725%

Equipment: GMS1980
Temperature(°C): 25.0

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

Operator: NT07
Distance(m): 7.42

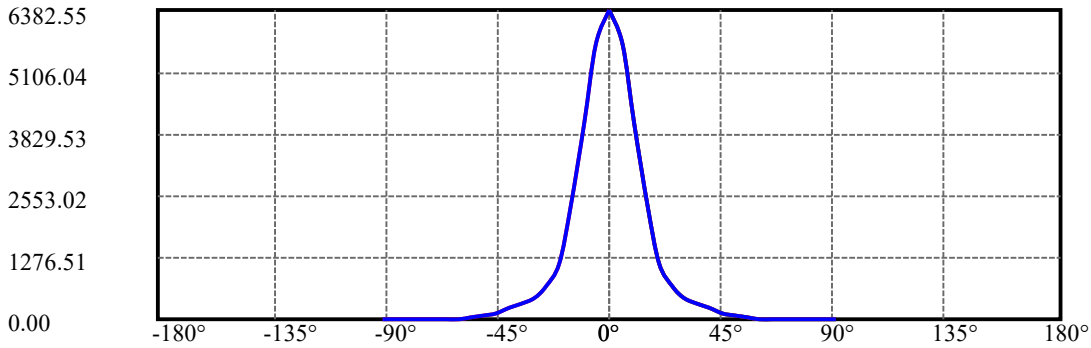
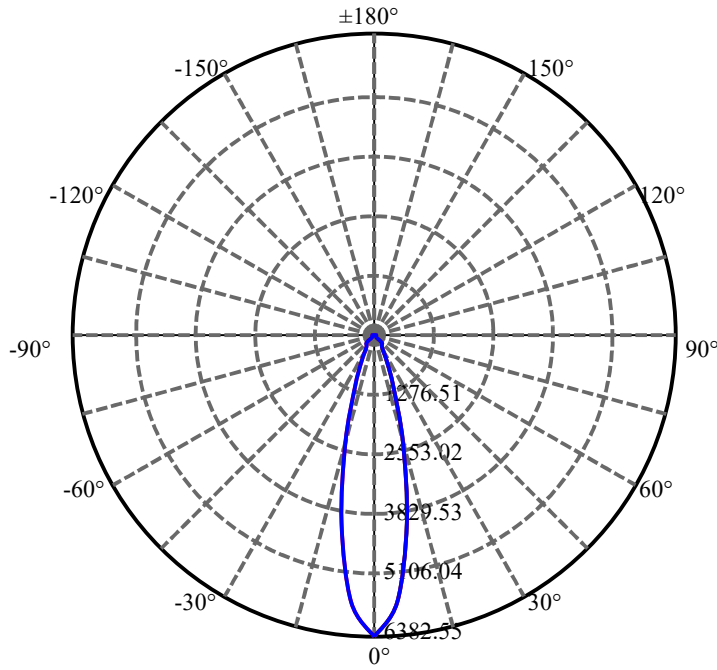
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	6382.551	38.169	38.169	1.678%	2.101%
5.0	5664.271	270.601	308.77	11.895%	16.998%
10.0	4054.284	385.899	694.669	16.963%	38.242%
15.0	2343.407	332.455	1027.125	14.613%	56.545%
20.0	1159.068	217.295	1244.42	9.551%	68.507%
25.0	659.872	152.861	1397.281	6.719%	76.922%
30.0	436.411	119.607	1516.888	5.257%	83.507%
35.0	314.751	98.957	1615.845	4.350%	88.954%
40.0	232.118	81.783	1697.628	3.595%	93.457%
45.0	118.275	45.842	1743.471	2.015%	95.980%
50.0	62.434	26.216	1769.686	1.152%	97.424%
55.0	32.463	14.576	1784.262	.641%	98.226%
60.0	16.799	7.975	1792.237	.351%	98.665%
65.0	9.160	4.551	1796.787	.200%	98.916%
70.0	8.141	4.194	1800.981	.184%	99.146%
75.0	8.121	4.300	1805.281	.189%	99.383%
80.0	8.148	4.399	1809.679	.193%	99.625%
85.0	8.486	4.634	1814.313	.204%	99.880%
90.0	7.928	2.173	1816.486	.096%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1516.89	66.68%	83.51%
0-40	1697.63	74.62%	93.46%
0-60	1792.24	78.78%	98.67%
0-90	1814.31	79.75%	99.88%
0-120	1814.31	79.75%	99.88%
0-180	1816.49	79.85%	100.00%
60-90	30.05	1.32%	1.65%
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%
0-27.34	1453.19	63.88%	80.00%

ZONAL LUMEN SUMMARY

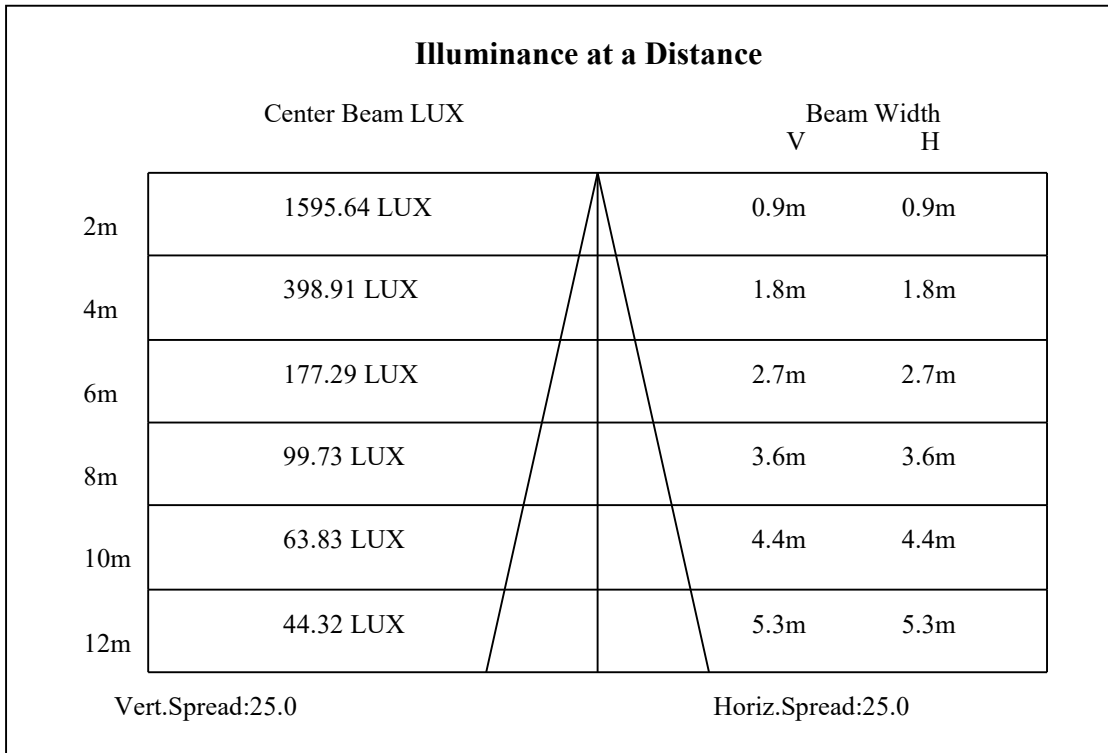
0-10	694.67
10-20	549.75
20-30	272.47
30-40	180.74
40-50	72.06
50-60	22.55
60-70	8.74
70-80	8.70
80-90	4.63
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

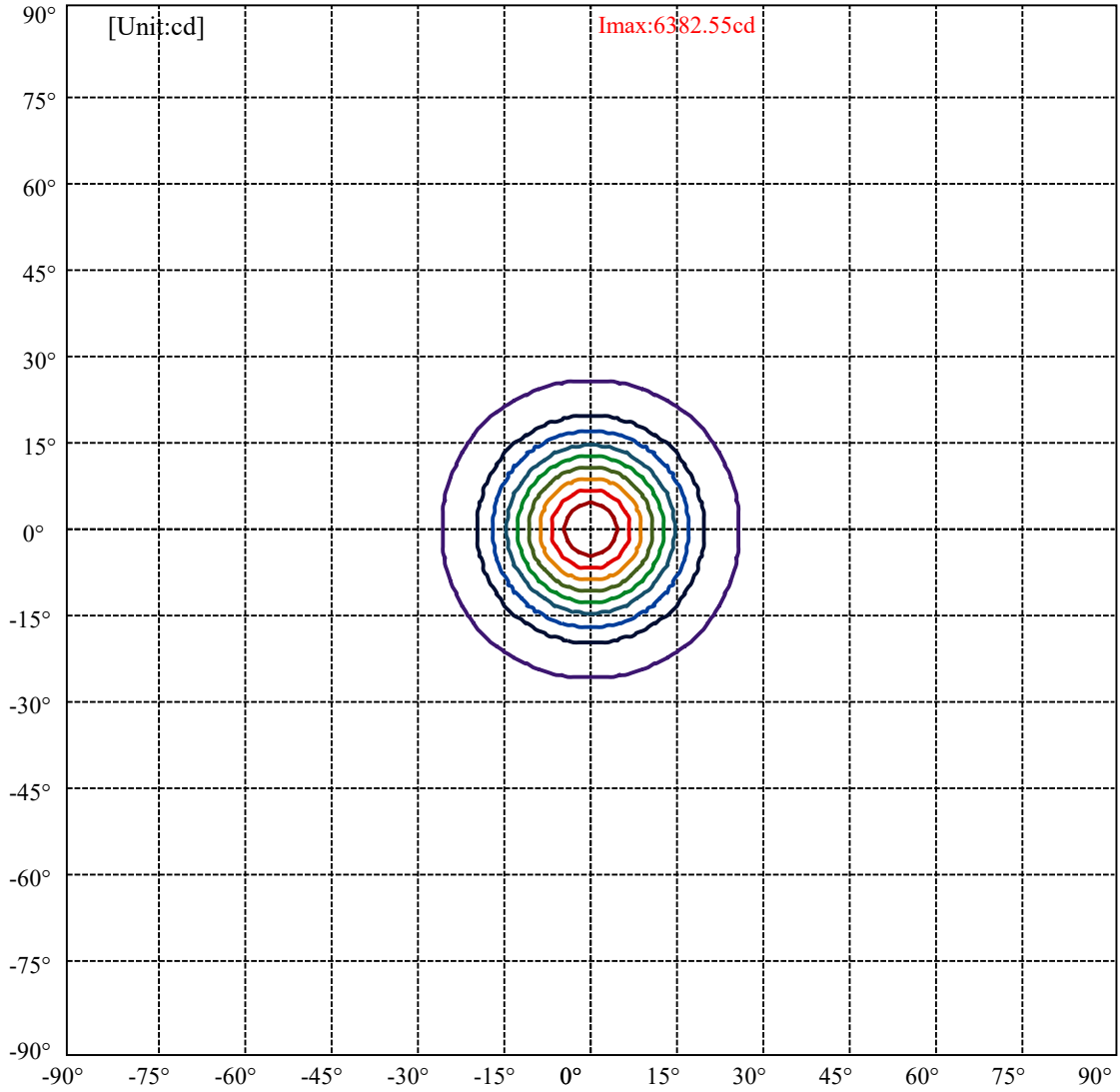


C0(Max): —————
C0/C180: —————
C90/C270: —————

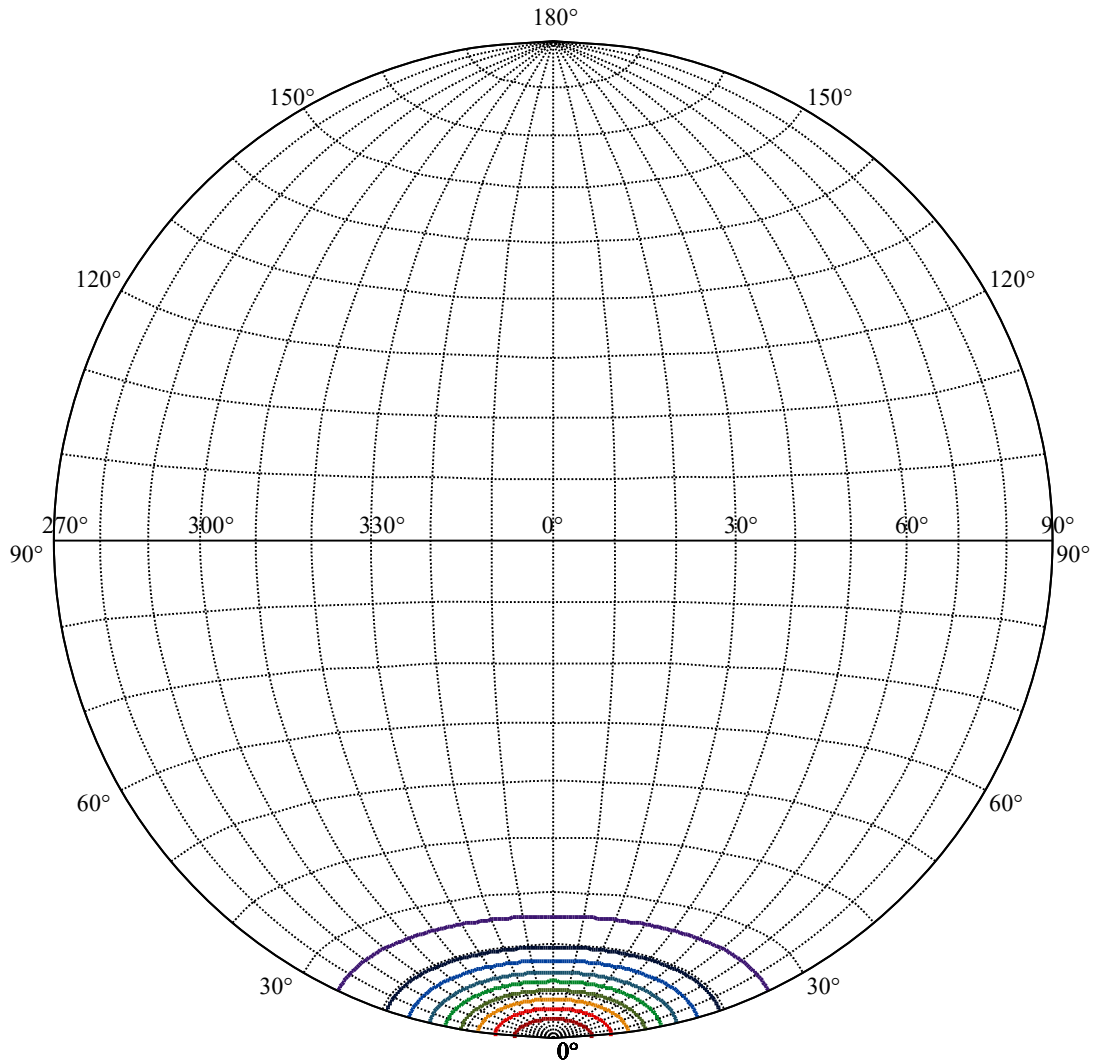
Field angle(10%Imax):C0/180Left:25.5 Right:25.5
:C90/270Left:25.5 Right:25.5

Beam Angle(50%Imax):C0/180Left:12.5 Right:12.5
:C90/270Left:12.5 Right:12.5





(10%Imax) 638.255	—
(20%Imax) 1276.51	—
(30%Imax) 1914.77	—
(40%Imax) 2553.02	—
(50%Imax) 3191.28	—
(60%Imax) 3829.53	—
(70%Imax) 4467.79	—
(80%Imax) 5106.04	—
(90%Imax) 5744.3	—



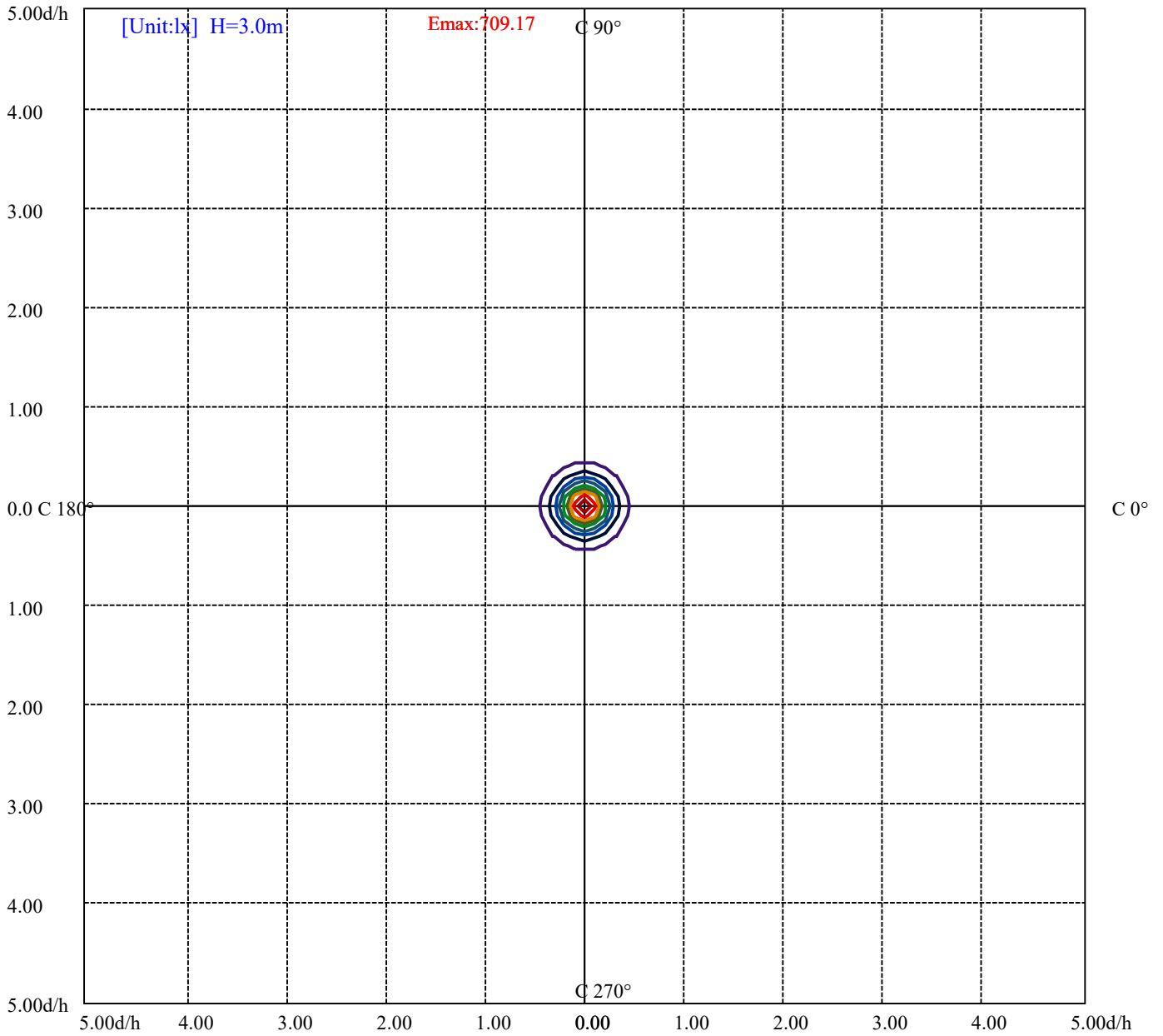
House

[Unit:cd]

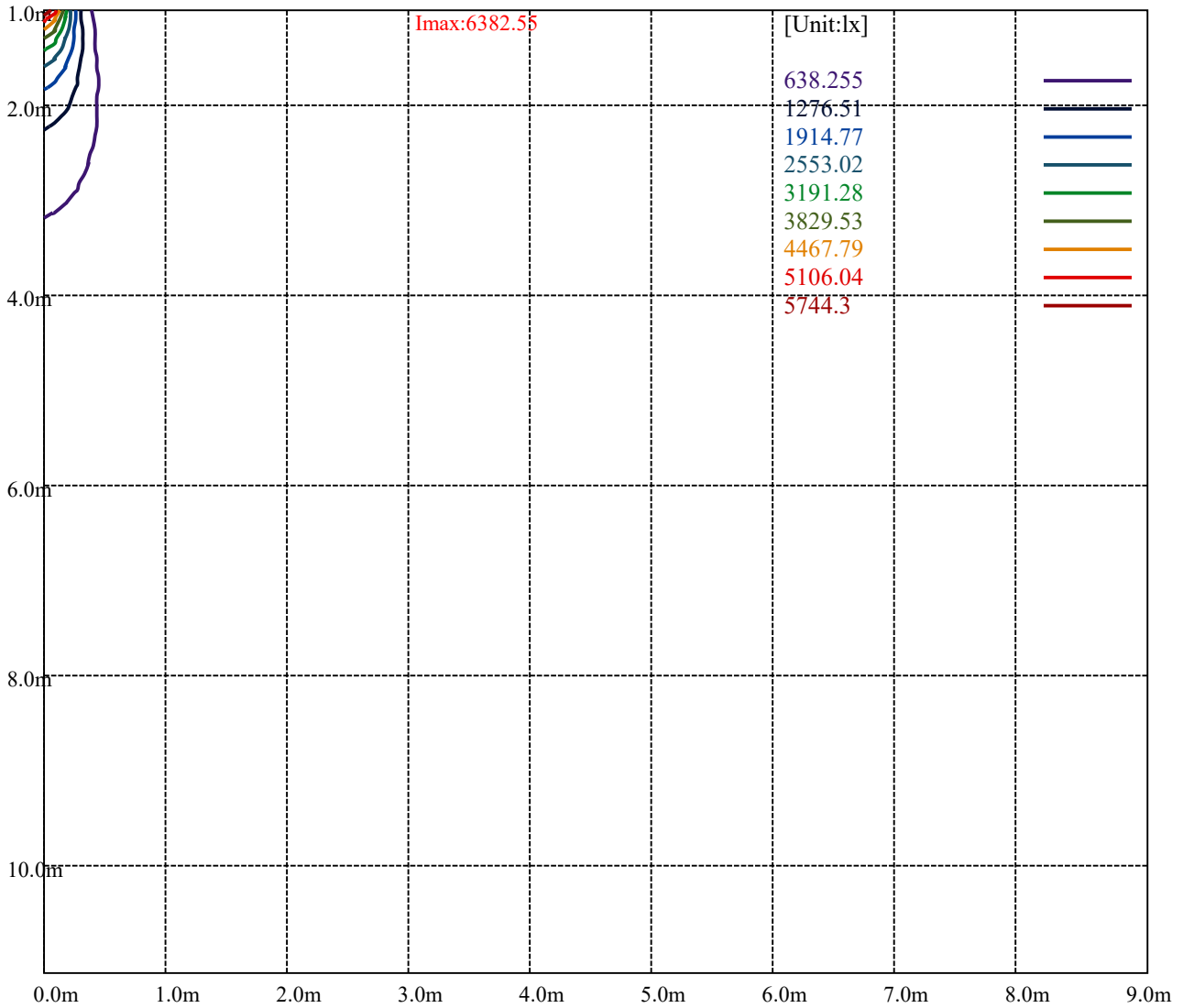
Road

Imax:6382.55

(10%Imax) 638.255	—
(20%Imax) 1276.51	—
(30%Imax) 1914.77	—
(40%Imax) 2553.02	—
(50%Imax) 3191.28	—
(60%Imax) 3829.53	—
(70%Imax) 4467.79	—
(80%Imax) 5106.04	—
(90%Imax) 5744.3	—



- (10%Emax) 70.917
- (20%Emax) 141.8344
- (30%Emax) 212.7511
- (40%Emax) 283.6678
- (50%Emax) 354.5844
- (60%Emax) 425.5022
- (70%Emax) 496.4189
- (80%Emax) 567.3356
- (90%Emax) 638.2533



Luminance Table

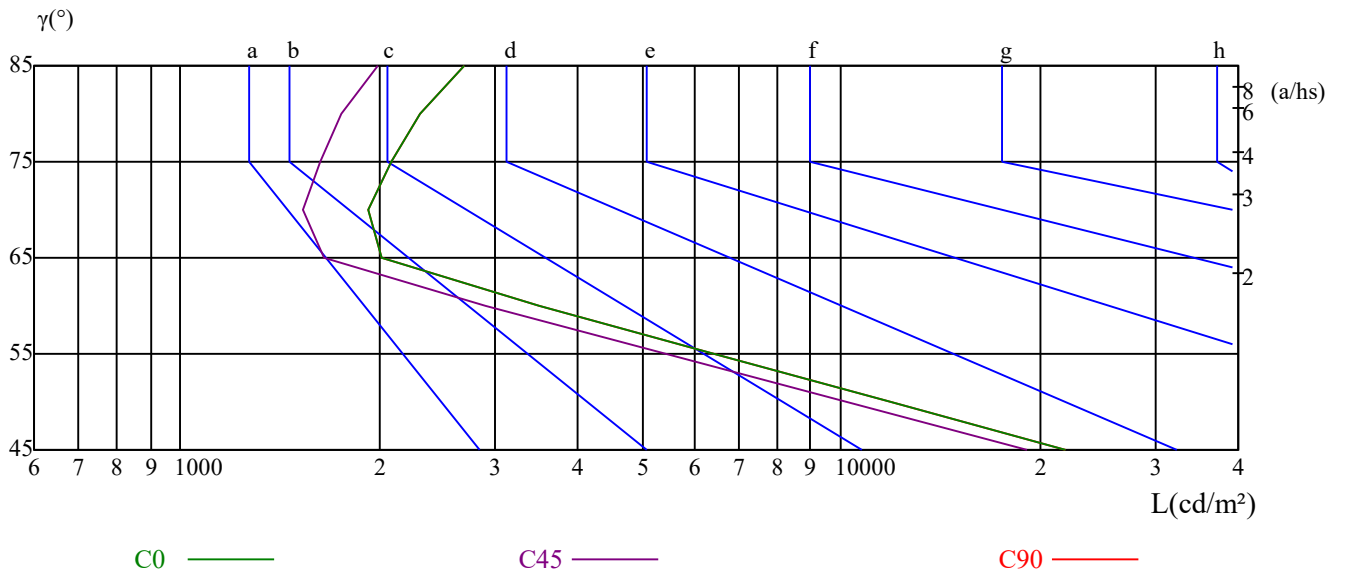
γ	45	50	55	60	65	70	75	80	85
C0	21922	11913	6432	3489	2015	1920	2079	2302	2697
C45	19093	10223	5435	2900	1645	1535	1625	1751	1986
C90	21922	11913	6432	3489	2015	1920	2079	2302	2697

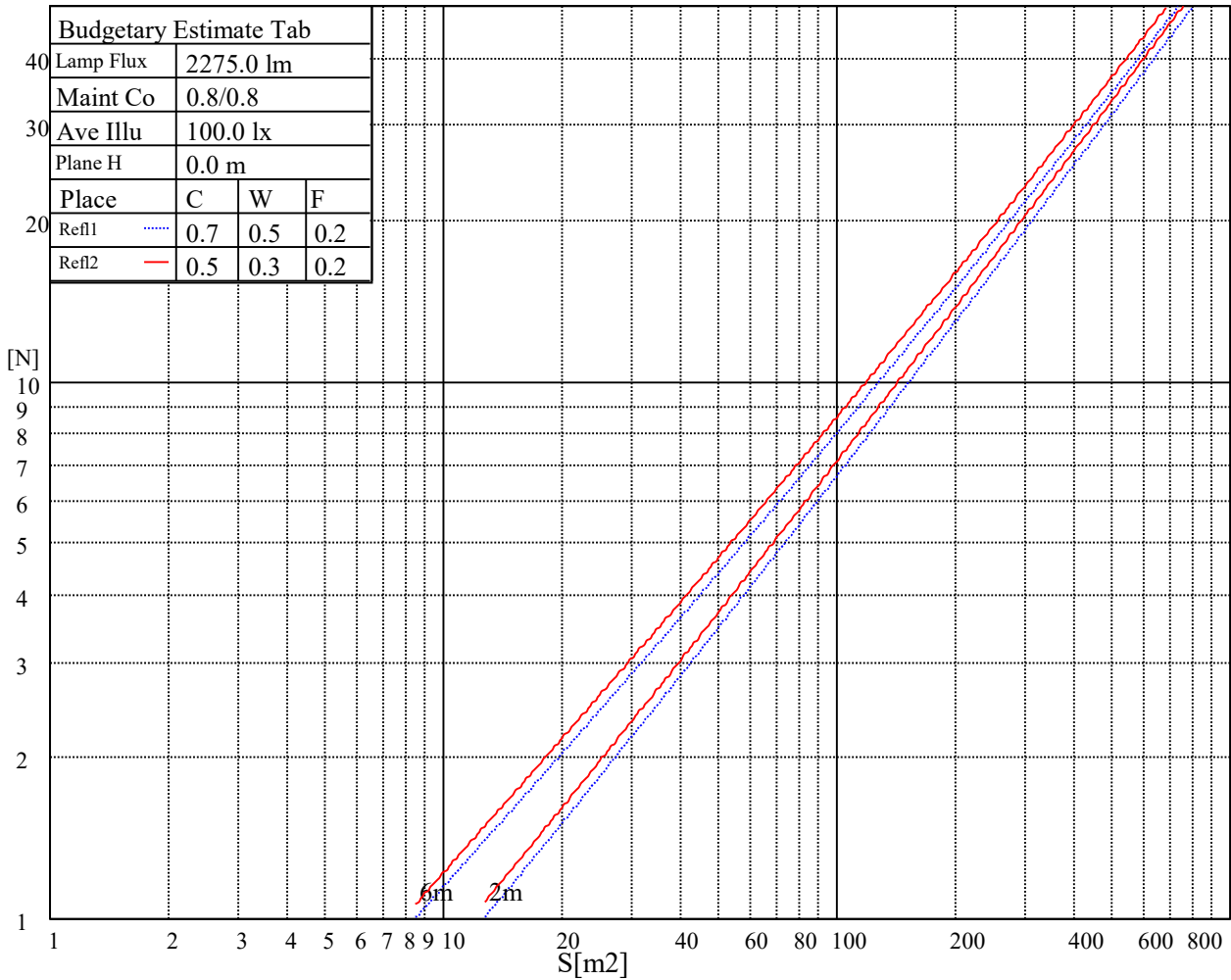
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
4423	4423	4423	6403	6403	6403	19870	19870	19870

Glare Table

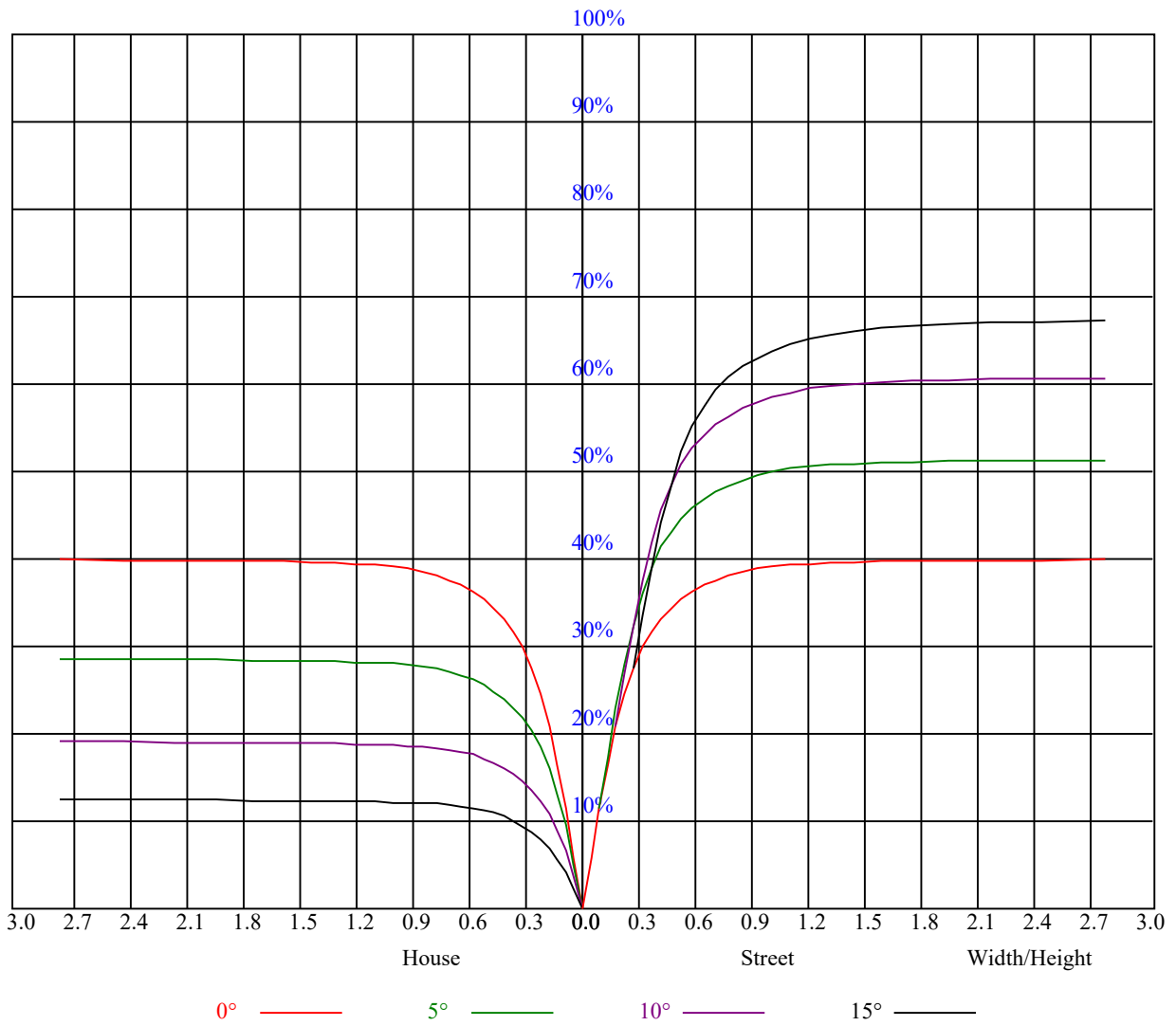
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	0.90	0.90	0.90	0.87	0.87	0.87	0.83	0.83	0.83	0.81
1	0.89	0.87	0.85	0.87	0.85	0.83	0.84	0.82	0.81	0.81	0.80	0.78	0.78	0.77	0.76	0.75
2	0.84	0.81	0.78	0.83	0.80	0.77	0.80	0.78	0.76	0.78	0.76	0.74	0.75	0.74	0.72	0.71
3	0.80	0.76	0.73	0.79	0.75	0.73	0.77	0.74	0.71	0.75	0.72	0.70	0.73	0.71	0.69	0.68
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	0.71	0.68	0.66	0.65
5	0.73	0.69	0.66	0.72	0.68	0.66	0.71	0.67	0.65	0.69	0.67	0.64	0.68	0.66	0.64	0.63
6	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	0.64	0.62	0.61
7	0.67	0.63	0.60	0.67	0.63	0.60	0.66	0.62	0.60	0.65	0.62	0.60	0.64	0.61	0.59	0.58
8	0.65	0.61	0.58	0.65	0.61	0.58	0.64	0.60	0.58	0.63	0.60	0.58	0.62	0.60	0.57	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	0.55	0.61	0.57	0.55	0.60	0.57	0.54	0.59	0.56	0.54	0.59	0.56	0.54	0.53



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	6332.04	6241.19	4973.24	3091.97	1599.94	825.30	508.72	359.52	280.24
45.0	6403.06	5937.83	4345.05	2604.17	1314.20	699.22	448.71	315.47	240.32
90.0	6345.80	5228.71	3494.43	1845.49	971.53	562.24	387.93	288.44	201.95
135.0	6449.31	5327.26	3595.18	1945.14	931.55	540.65	395.86	294.55	202.72
180.0	6332.04	5043.72	3072.15	1667.66	852.00	514.45	374.55	279.36	175.63
225.0	6403.06	5420.85	3753.19	2023.32	1073.10	616.14	410.78	295.16	213.40
270.0	6345.80	6073.27	4557.57	2806.78	1454.59	772.44	489.45	346.30	281.34
315.0	6449.31	6041.34	4643.46	2762.73	1075.64	748.55	475.30	339.20	261.35
360.0	6332.04	6241.19	4973.24	3091.97	1599.94	825.30	508.72	359.52	280.24
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	163.96	80.71	45.26	22.63	11.23	8.31	8.26	8.20	8.37
45.0	118.32	66.95	35.02	17.95	8.86	8.04	7.98	7.98	7.98
90.0	89.91	48.50	26.26	13.54	8.09	8.09	8.04	8.09	8.15
135.0	92.77	50.60	25.22	13.49	8.20	8.15	8.09	8.09	8.15
180.0	84.51	45.26	22.35	11.62	8.37	8.31	8.37	8.64	10.96
225.0	98.94	56.05	28.57	14.53	8.09	8.04	8.04	8.04	8.09
270.0	144.03	75.15	39.03	19.88	10.19	8.09	8.09	8.04	8.09
315.0	153.77	76.25	37.99	20.76	10.24	8.09	8.09	8.09	8.09
360.0	163.96	80.71	45.26	22.63	11.23	8.31	8.26	8.20	8.37
C/ γ (°)	90.0								
0.0	8.04								
45.0	7.87								
90.0	7.87								
135.0	7.93								
180.0	8.04								
225.0	7.87								
270.0	7.87								
315.0	7.93								
360.0	8.04								