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Nata

LumCAT: 1-0937-N	
Luminaire: 92.70.361.000	
Report No: 220518-B016	Voltage(V): 37.7000
Test No: 220518-C016	Current(A): 0.3600
LampCAT: CREE CXA1512	Power (W): 13.5720
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): 1308.96
Efficiency(%): 80.61%
Lumens(lm)/Power(W): 96.45
Central intensity(cd): 3479.561
Maximum intensity(cd): 3479.561
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=34.5
 [C90/270]Total=34.5
Field angle(10%Imax): [C0/180]Total=57.1
 [C90/270]Total=57.1
Maximum s/h(1/2): C0_180=0.57 C90_270=0.57
Maximum s/h(1/4): C0_180=0.56 C90_270=0.56
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 80.61%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.074%

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2022/5/18
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.73

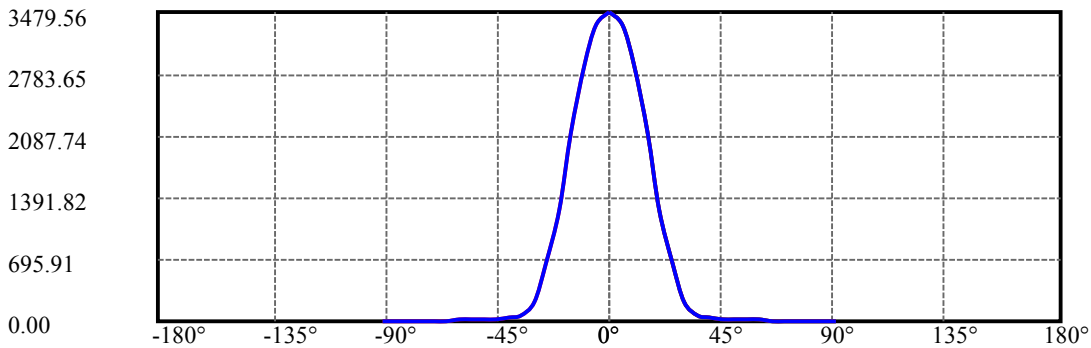
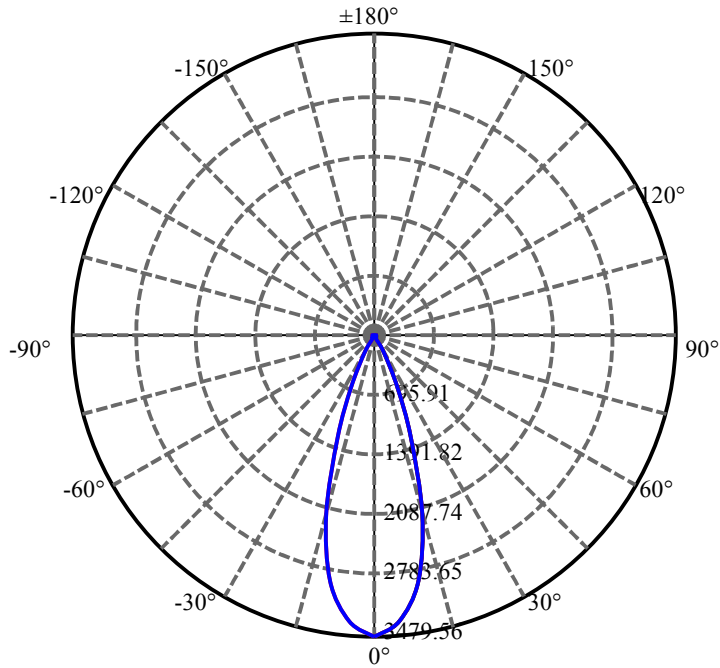
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3479.561	0.000	0	.000%	.000%
5.0	3318.377	81.267	81.267	5.005%	6.209%
10.0	2874.264	221.530	302.798	13.643%	23.133%
15.0	2128.324	296.750	599.548	18.276%	45.804%
20.0	1259.561	279.209	878.757	17.196%	67.134%
25.0	653.831	200.680	1079.437	12.359%	82.466%
30.0	225.858	111.325	1190.762	6.856%	90.970%
35.0	56.459	41.573	1232.335	2.560%	94.146%
40.0	38.533	15.849	1248.184	.976%	95.357%
45.0	27.158	12.163	1260.347	.749%	96.287%
50.0	19.980	9.525	1269.872	.587%	97.014%
55.0	15.028	7.612	1277.484	.469%	97.596%
60.0	12.055	6.260	1283.744	.386%	98.074%
65.0	10.076	5.380	1289.124	.331%	98.485%
70.0	8.821	4.785	1293.909	.295%	98.851%
75.0	7.753	4.332	1298.241	.267%	99.181%
80.0	6.916	3.925	1302.166	.242%	99.481%
85.0	6.199	3.564	1305.73	.219%	99.754%
90.0	5.579	3.225	1308.955	.199%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1190.76	73.33%	90.97%
0-40	1248.18	76.87%	95.36%
0-60	1283.74	79.06%	98.07%
0-90	1305.73	80.42%	99.75%
0-120	1305.73	80.42%	99.75%
0-180	1308.96	80.61%	100.00%
60-90	28.25	1.74%	2.16%
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%
0-24.20	1047.16	64.49%	80.00%

ZONAL LUMEN SUMMARY

0-10	302.80
10-20	575.96
20-30	312.01
30-40	57.42
40-50	21.69
50-60	13.87
60-70	10.16
70-80	8.26
80-90	3.56
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: ———

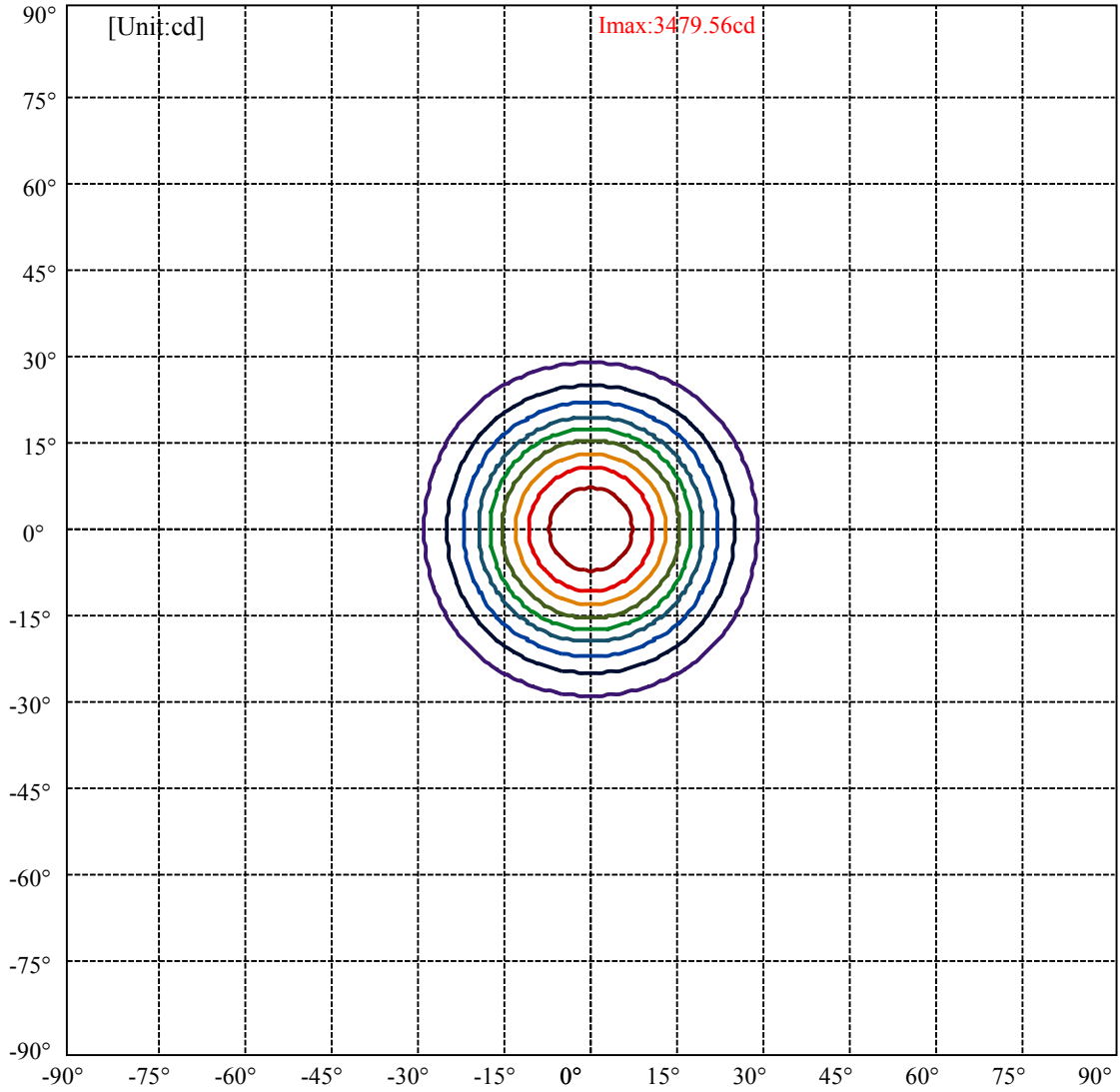
C90/C270: ———

Field angle(10%Imax):C0/180Left:28.6 Right:28.6

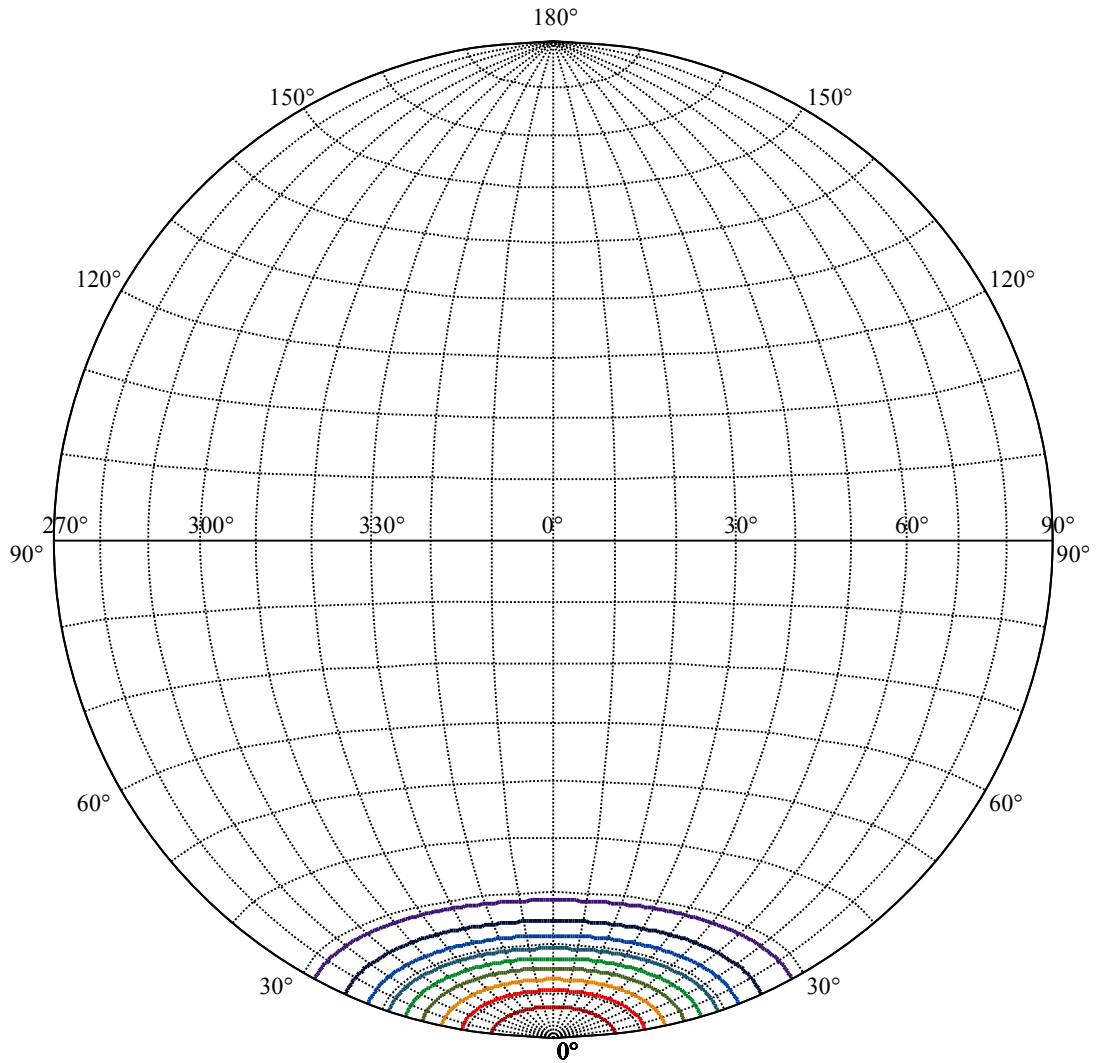
:C90/270Left:28.6 Right:28.6

Beam Angle(50%Imax):C0/180Left:17.2 Right:17.2

:C90/270Left:17.2 Right:17.2



(10%Imax) 347.956	—
(20%Imax) 695.912	—
(30%Imax) 1043.87	—
(40%Imax) 1391.82	—
(50%Imax) 1739.78	—
(60%Imax) 2087.74	—
(70%Imax) 2435.69	—
(80%Imax) 2783.65	—
(90%Imax) 3131.6	—



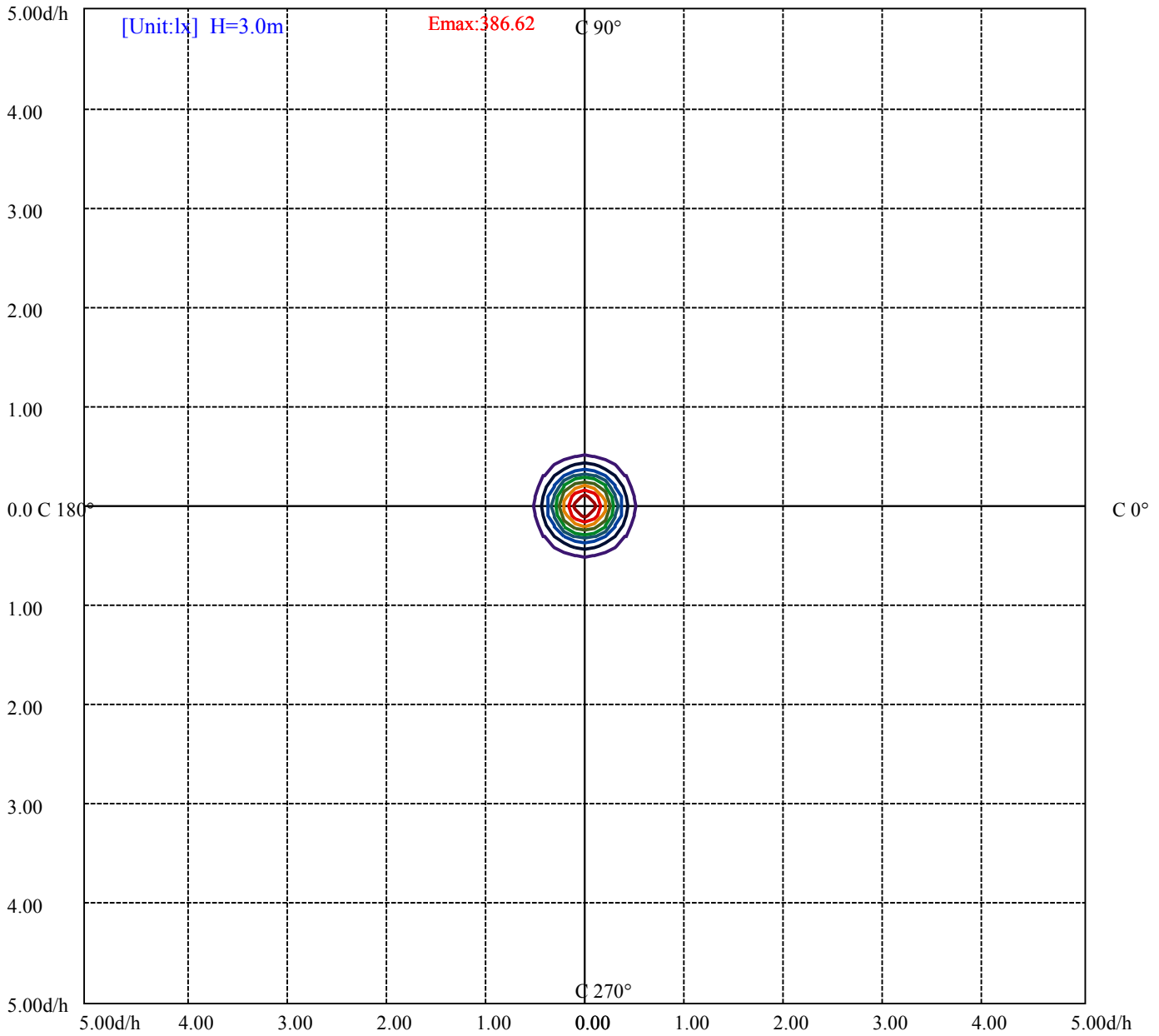
House

[Unit:cd]

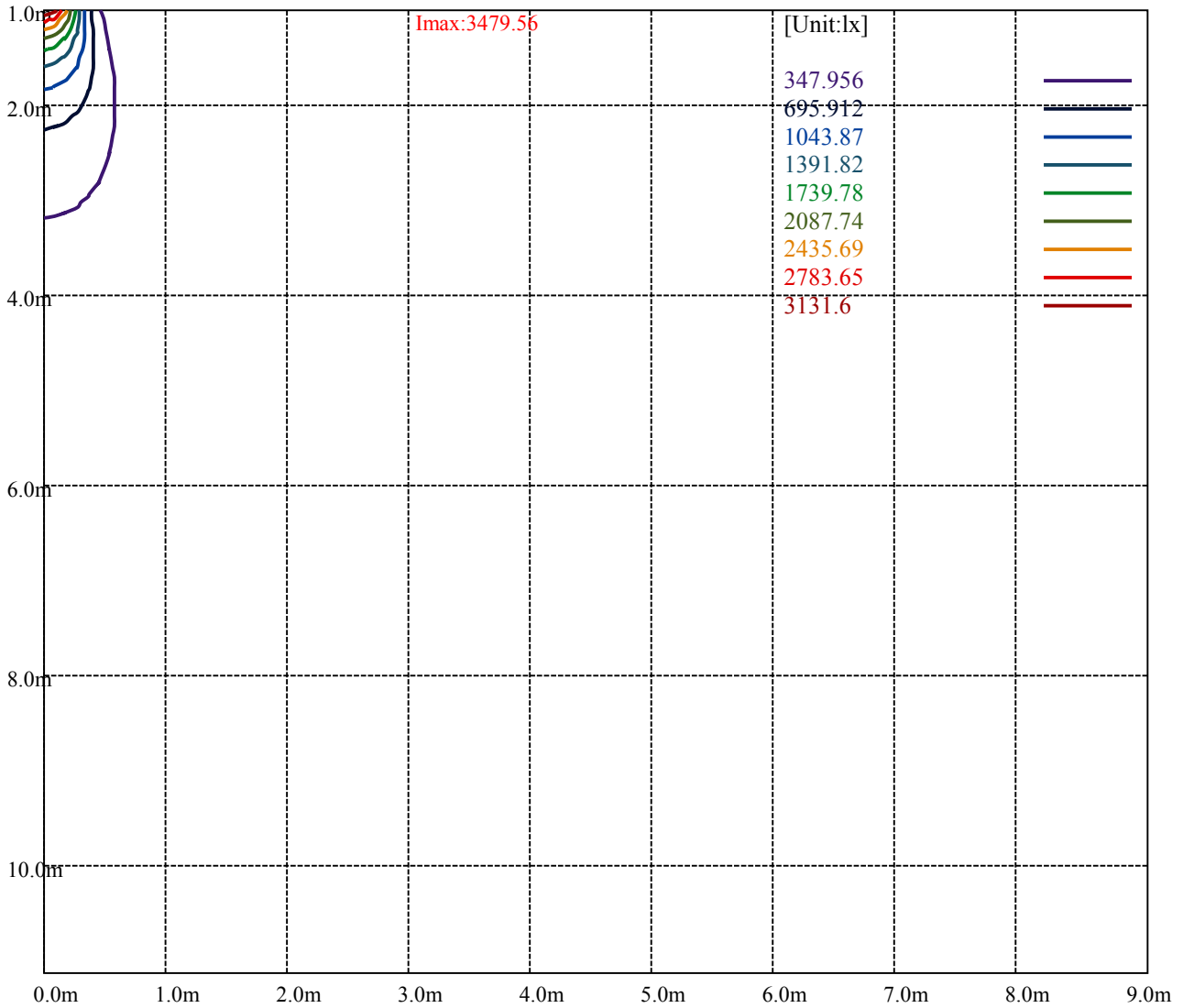
Road

Imax:3479.56

(10%Imax)	347.956	—
(20%Imax)	695.912	—
(30%Imax)	1043.87	—
(40%Imax)	1391.82	—
(50%Imax)	1739.78	—
(60%Imax)	2087.74	—
(70%Imax)	2435.69	—
(80%Imax)	2783.65	—
(90%Imax)	3131.6	—



(10%Emax) 38.66178	—
(20%Emax) 77.32345	—
(30%Emax) 115.9856	—
(40%Emax) 154.6467	—
(50%Emax) 193.3089	—
(60%Emax) 231.97	—
(70%Emax) 270.6322	—
(80%Emax) 309.2933	—
(90%Emax) 347.9556	—



Luminance Table

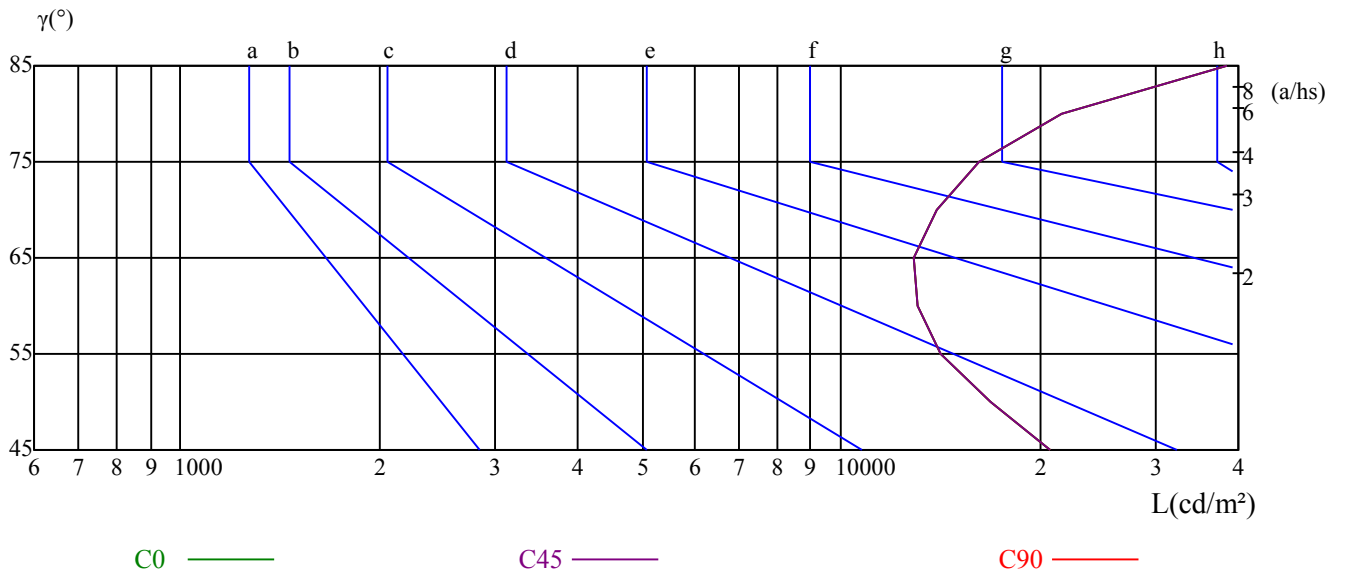
γ	45	50	55	60	65	70	75	80	85
C0	20772	16811	14170	13040	12894	13949	16201	21541	38469
C45	20772	16811	14170	13040	12894	13949	16201	21541	38469
C90	20772	16811	14170	13040	12894	13949	16201	21541	38469

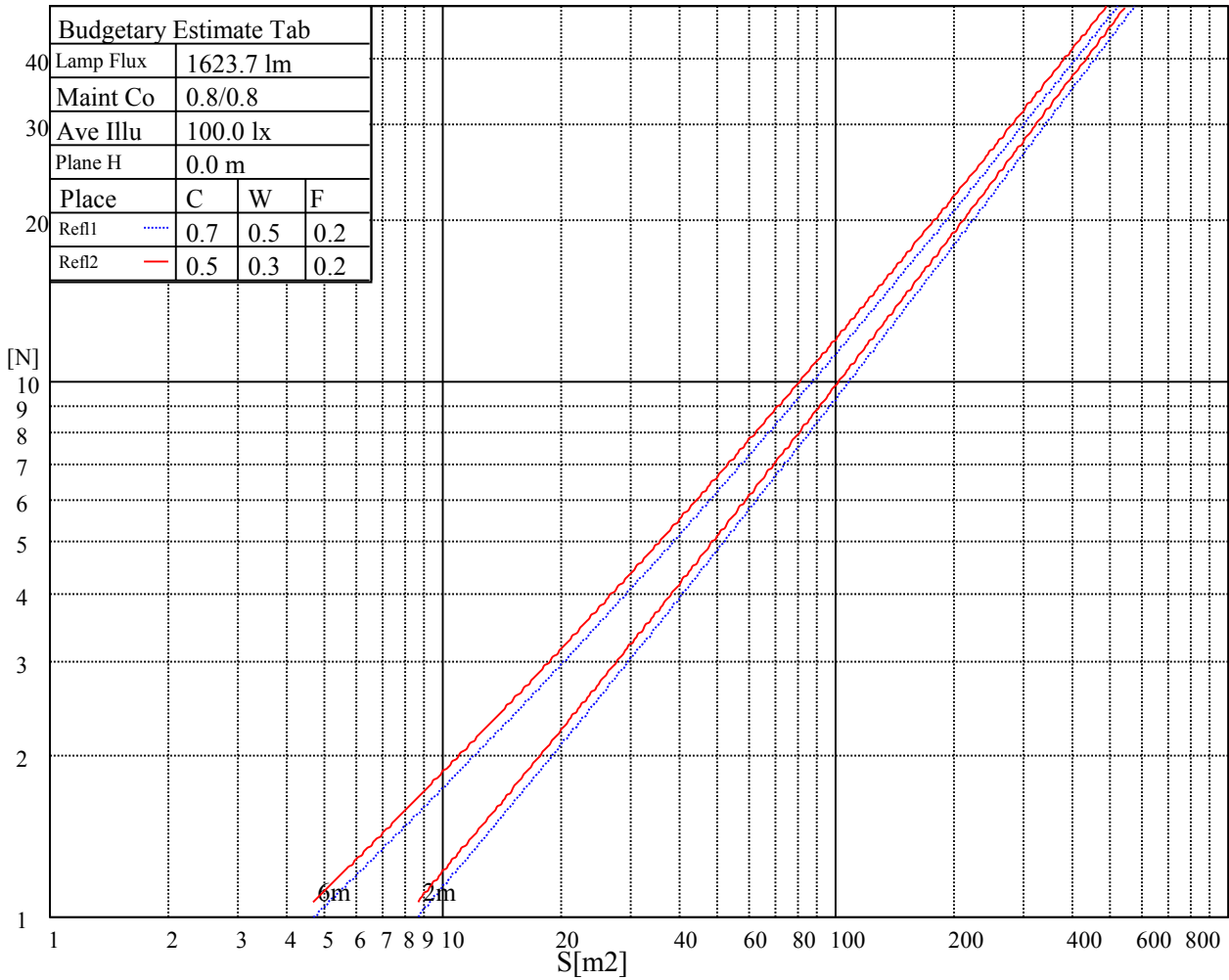
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
12894	12894	12894	16201	16201	16201	38469	38469	38469

Glare Table

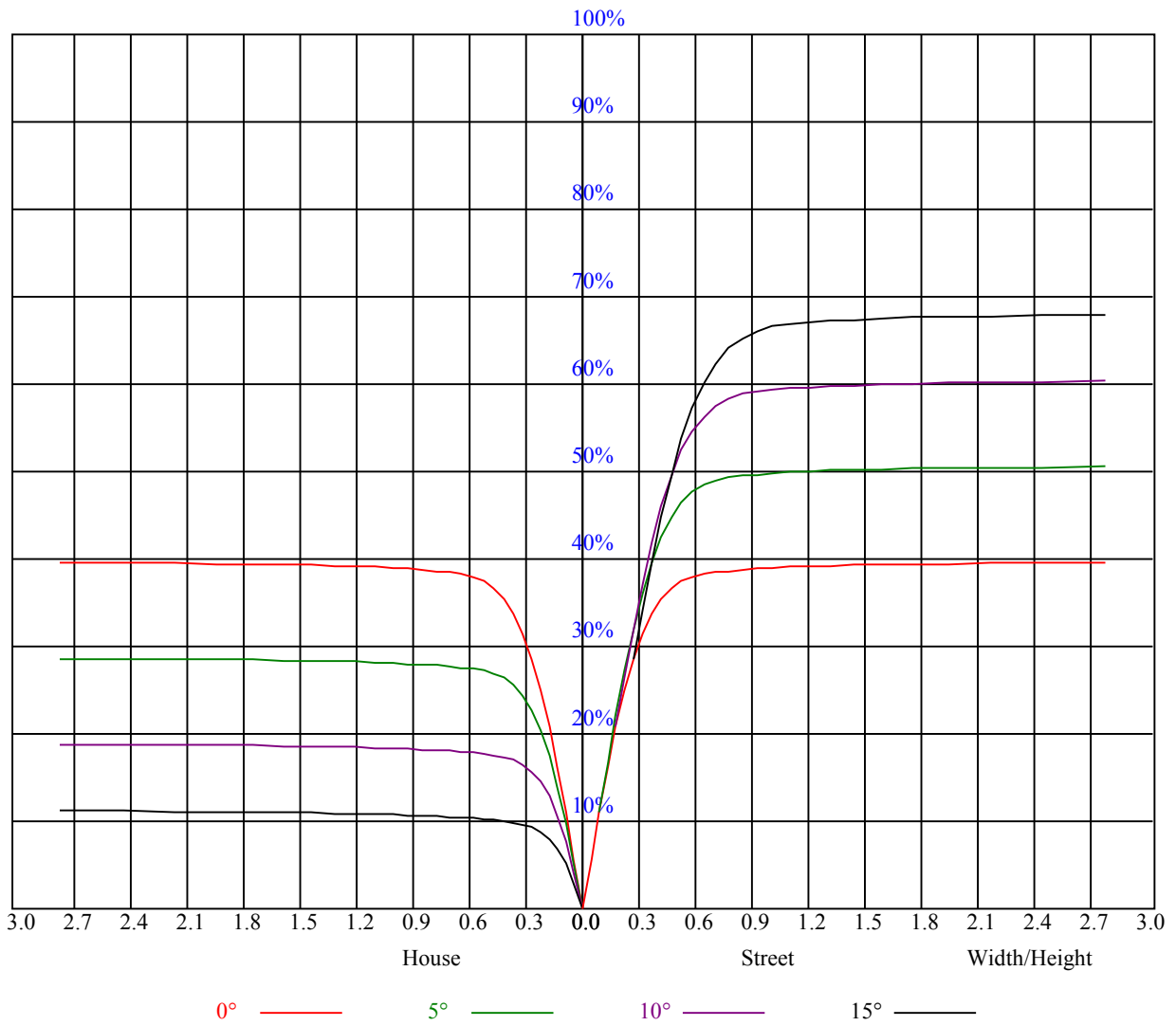
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	0.96	0.96	0.96	0.94	0.94	0.94	0.90	0.90	0.90	0.86	0.86	0.86	0.82	0.82	0.82	0.81
1	0.90	0.88	0.87	0.88	0.87	0.85	0.85	0.84	0.83	0.82	0.81	0.80	0.79	0.79	0.78	0.76
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	0.75	0.80	0.76	0.74	0.77	0.75	0.73	0.76	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	0.67	0.66
5	0.73	0.69	0.67	0.73	0.69	0.66	0.71	0.68	0.66	0.70	0.67	0.65	0.69	0.66	0.65	0.64
6	0.70	0.66	0.63	0.70	0.66	0.63	0.68	0.65	0.63	0.67	0.65	0.62	0.66	0.64	0.62	0.61
7	0.67	0.63	0.61	0.67	0.63	0.61	0.66	0.63	0.60	0.65	0.62	0.60	0.64	0.62	0.60	0.59
8	0.65	0.61	0.58	0.64	0.61	0.58	0.64	0.60	0.58	0.63	0.60	0.58	0.62	0.59	0.57	0.57
9	0.62	0.59	0.56	0.62	0.58	0.56	0.61	0.58	0.56	0.61	0.58	0.55	0.60	0.57	0.55	0.54
10	0.60	0.56	0.54	0.60	0.56	0.54	0.59	0.56	0.54	0.59	0.56	0.54	0.58	0.55	0.53	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	3480.61	3374.25	3030.07	2299.29	1460.96	753.48	301.75	58.98	40.03
45.0	3485.39	3257.73	2771.34	1973.04	1159.21	542.56	127.03	51.33	36.87
90.0	3465.67	3186.62	2635.70	1754.94	1065.57	447.55	93.51	50.73	35.49
135.0	3486.58	3281.03	2824.52	2085.97	1260.79	594.54	320.28	56.77	38.90
180.0	3480.61	3249.36	2765.36	1973.64	1161.95	558.93	143.47	52.34	36.93
225.0	3485.39	3393.96	2975.10	2311.24	1178.45	757.79	280.96	61.96	40.51
270.0	3465.67	3435.19	3068.91	2457.64	1618.11	879.56	325.65	66.86	41.53
315.0	3486.58	3368.87	2923.11	2170.82	1171.46	696.24	214.21	52.70	38.00
360.0	3480.61	3374.25	3030.07	2299.29	1460.96	753.48	301.75	58.98	40.03
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	28.92	21.03	15.60	12.49	10.34	8.90	7.89	6.93	6.33
45.0	25.81	18.82	14.52	11.47	9.62	8.43	7.47	6.63	5.98
90.0	24.80	18.52	13.98	11.35	9.62	8.60	7.65	6.93	5.92
135.0	27.49	20.02	14.82	11.89	9.98	8.72	7.71	6.93	6.04
180.0	25.93	19.00	14.28	11.65	9.80	8.60	7.59	6.69	6.04
225.0	28.26	20.91	15.60	12.43	10.40	9.02	7.89	7.05	6.33
270.0	29.16	21.69	16.25	12.97	10.70	9.38	8.13	7.23	6.57
315.0	26.89	19.84	15.18	12.19	10.16	8.90	7.71	6.93	6.39
360.0	28.92	21.03	15.60	12.49	10.34	8.90	7.89	6.93	6.33
C/γ(°)	90.0								
0.0	5.56								
45.0	5.50								
90.0	5.50								
135.0	5.56								
180.0	5.56								
225.0	5.68								
270.0	5.68								
315.0	5.62								
360.0	5.56								