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Nata

Client:

LumCAT: 2-1122-A4

Luminaire: 99.02.73.172+92.76.365.00

Report No:

Voltage(V): 34.9200

Test No: GC20190823010

Current(A): 0.3980

LampCAT: TRIDONIC SLE 13MM G7

Power (W): 13.9000

Lamp flux(lm): 1702.0

PF: 0.0000

Number of Lamps: 1

Ballast type: DC

Length(mm): 70

Width(mm): 70

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1562.97, Efficiency(%): 91.83% , Luminous Efficacy(lm/W): 112.44

Central intensity(cd): 3550.359, Maximum intensity(cd): 3550.359

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=34.2

[C90/270]Total=34.2

Field angle(10%Imax): [C0/180]Total=71.6

[C90/270]Total=71.6

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(%): 91.83%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.522%

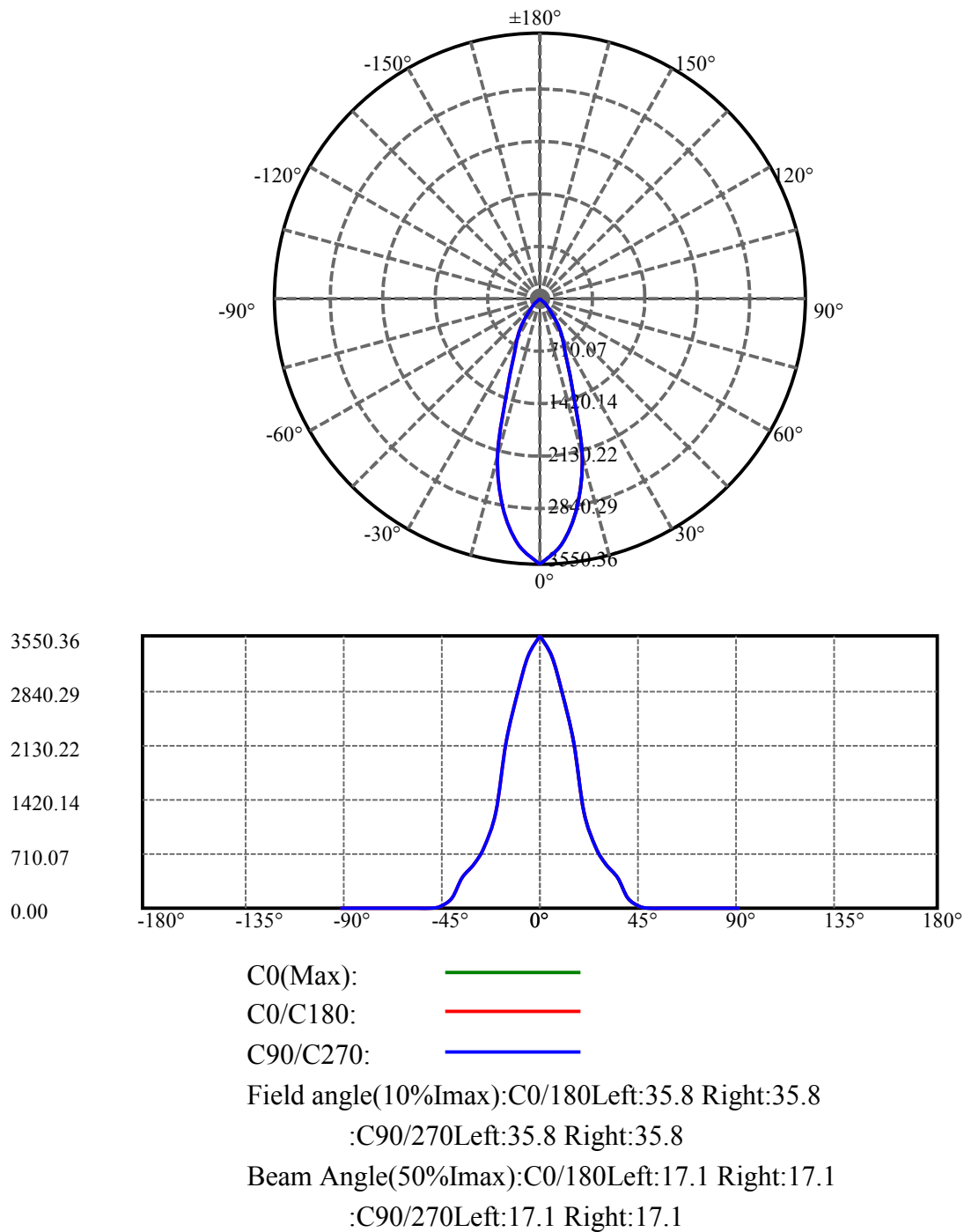
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3550.359	0.000	0	.000%	.000%
5.0	3293.016	81.811	81.811	4.807%	5.234%
10.0	2833.172	219.153	300.964	12.876%	19.256%
15.0	2163.797	296.417	597.38	17.416%	38.221%
20.0	1253.152	281.605	878.985	16.546%	56.238%
25.0	795.649	214.881	1093.866	12.625%	69.986%
30.0	583.446	174.526	1268.392	10.254%	81.153%
35.0	398.348	144.576	1412.968	8.494%	90.403%
40.0	123.884	87.130	1500.099	5.119%	95.977%
45.0	17.993	26.270	1526.368	1.543%	97.658%
50.0	9.717	5.599	1531.967	.329%	98.016%
55.0	8.712	4.007	1535.974	.235%	98.273%
60.0	8.114	3.889	1539.864	.229%	98.522%
65.0	7.734	3.853	1543.716	.226%	98.768%
70.0	7.488	3.854	1547.571	.226%	99.015%
75.0	7.291	3.863	1551.434	.227%	99.262%
80.0	7.144	3.862	1555.297	.227%	99.509%
85.0	7.024	3.850	1559.146	.226%	99.755%
90.0	6.940	3.823	1562.97	.225%	100.000%

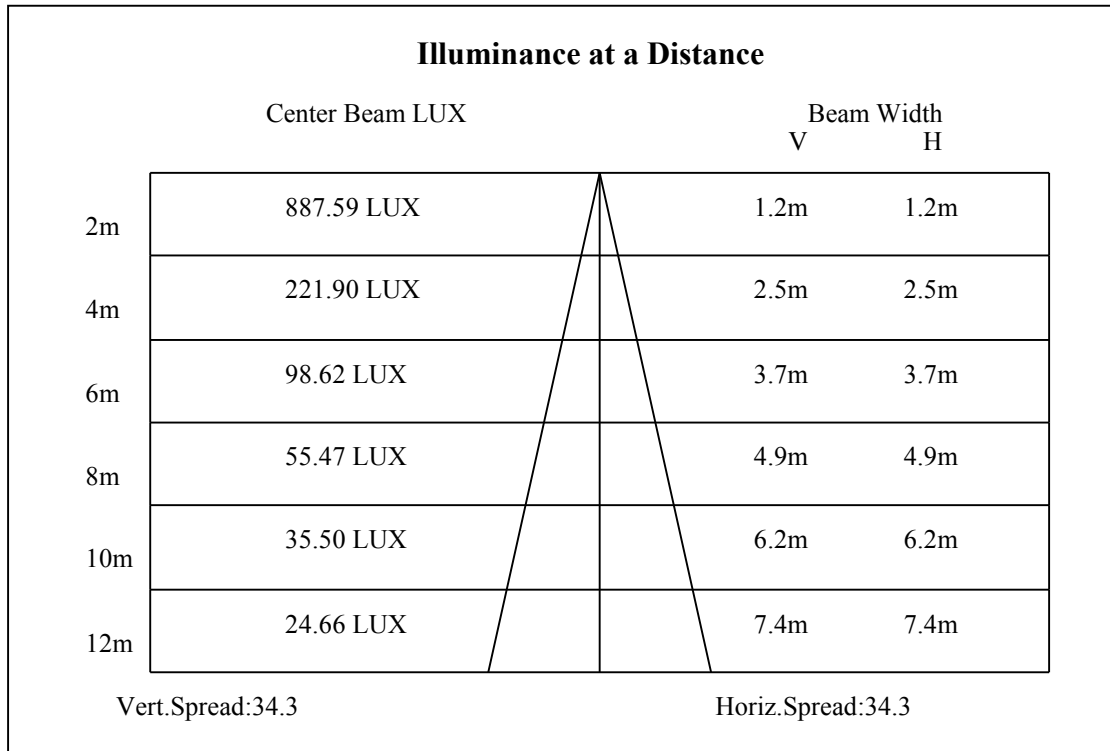
ZONAL LUMEN SUMMARY

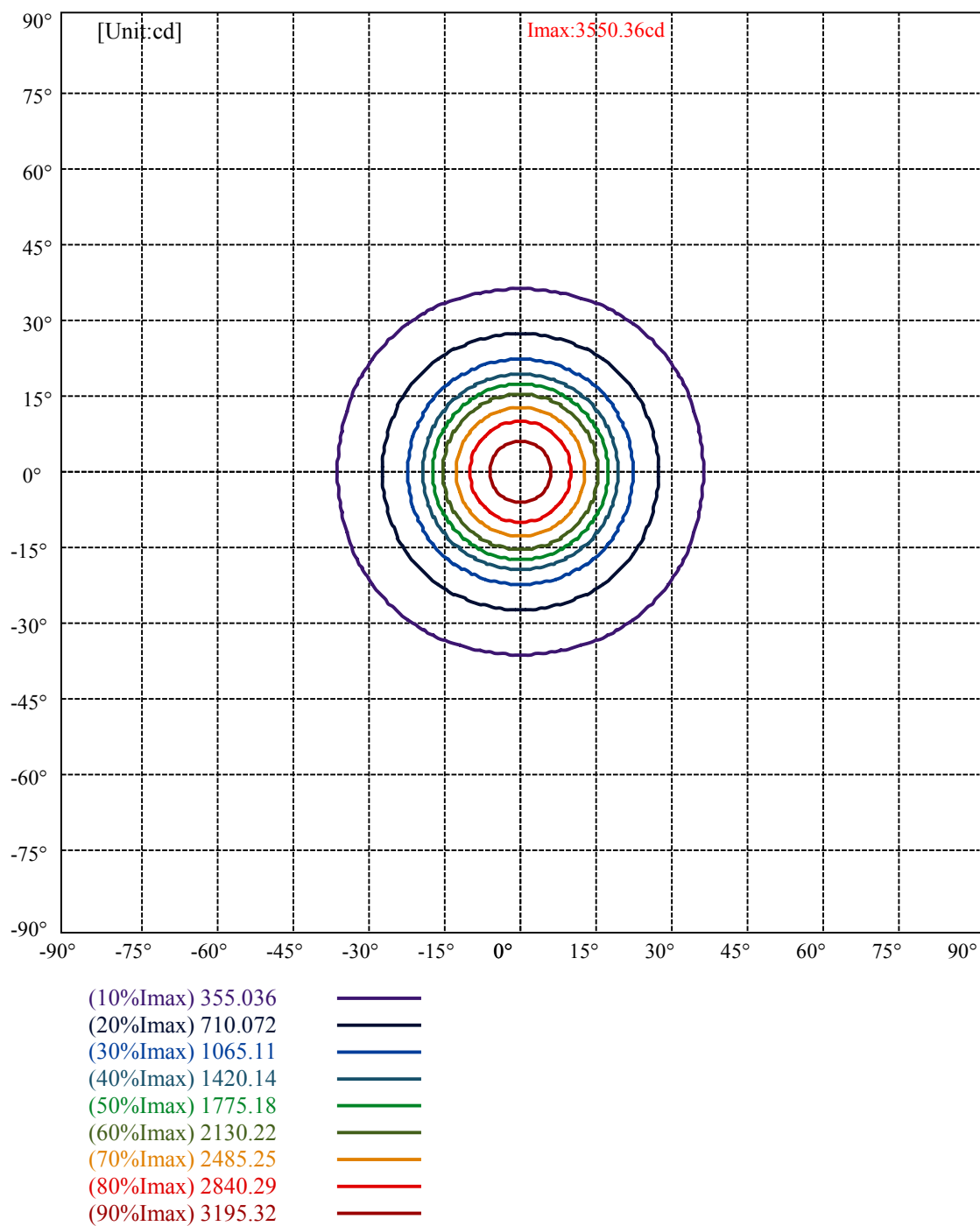
Zone	Lumens	%Lamp	%Fixt
0-30	1268.39	74.52%	81.15%
0-40	1500.10	88.14%	95.98%
0-60	1539.86	90.47%	98.52%
0-90	1559.15	91.61%	99.76%
0-120	1559.15	91.61%	99.76%
0-180	1562.97	91.83%	100.00%
60-90	23.17	1.36%	1.48%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-29.48	1250.38	73.47%	80.00%

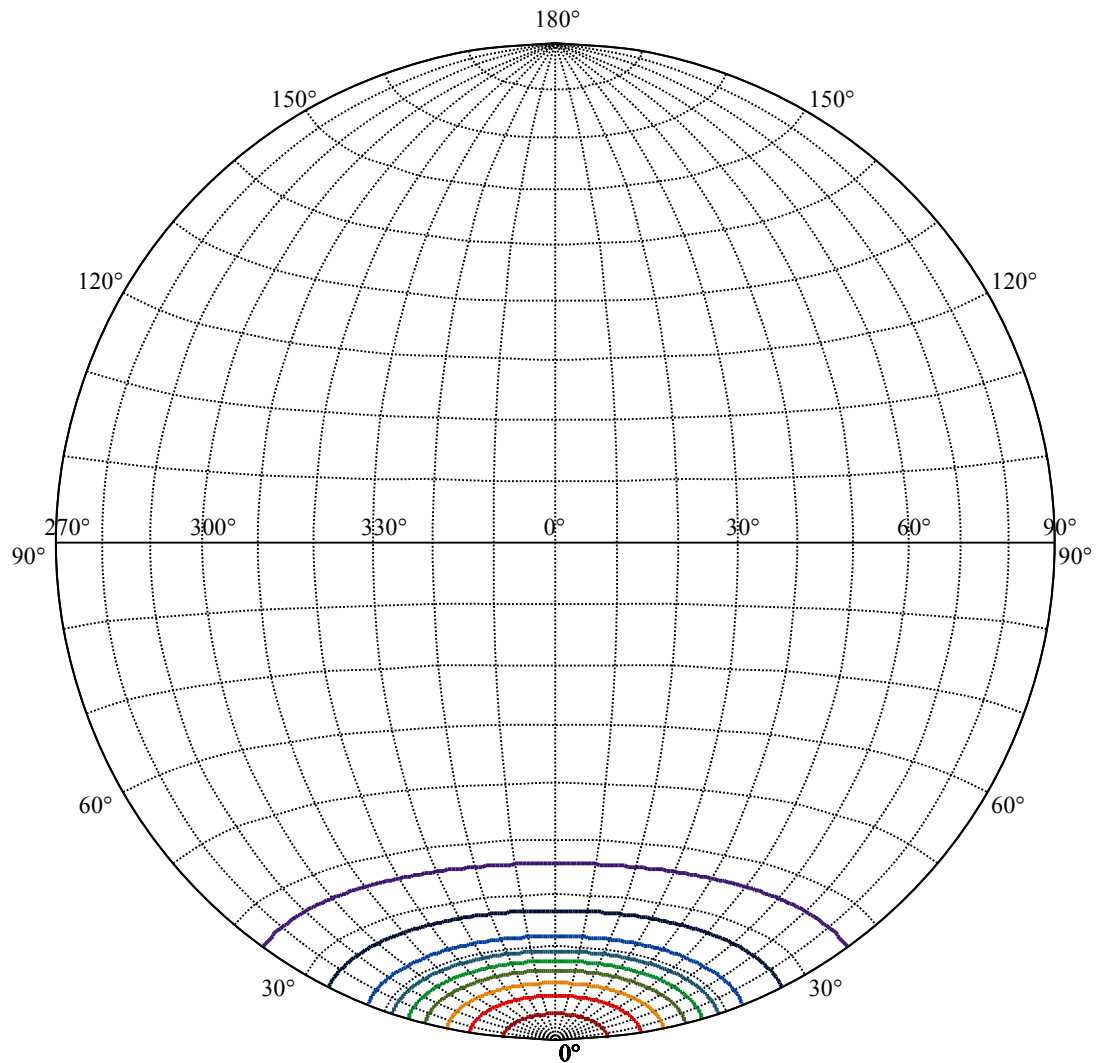
ZONAL LUMEN SUMMARY

0-10	300.96
10-20	578.02
20-30	389.41
30-40	231.71
40-50	31.87
50-60	7.90
60-70	7.71
70-80	7.73
80-90	3.85
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









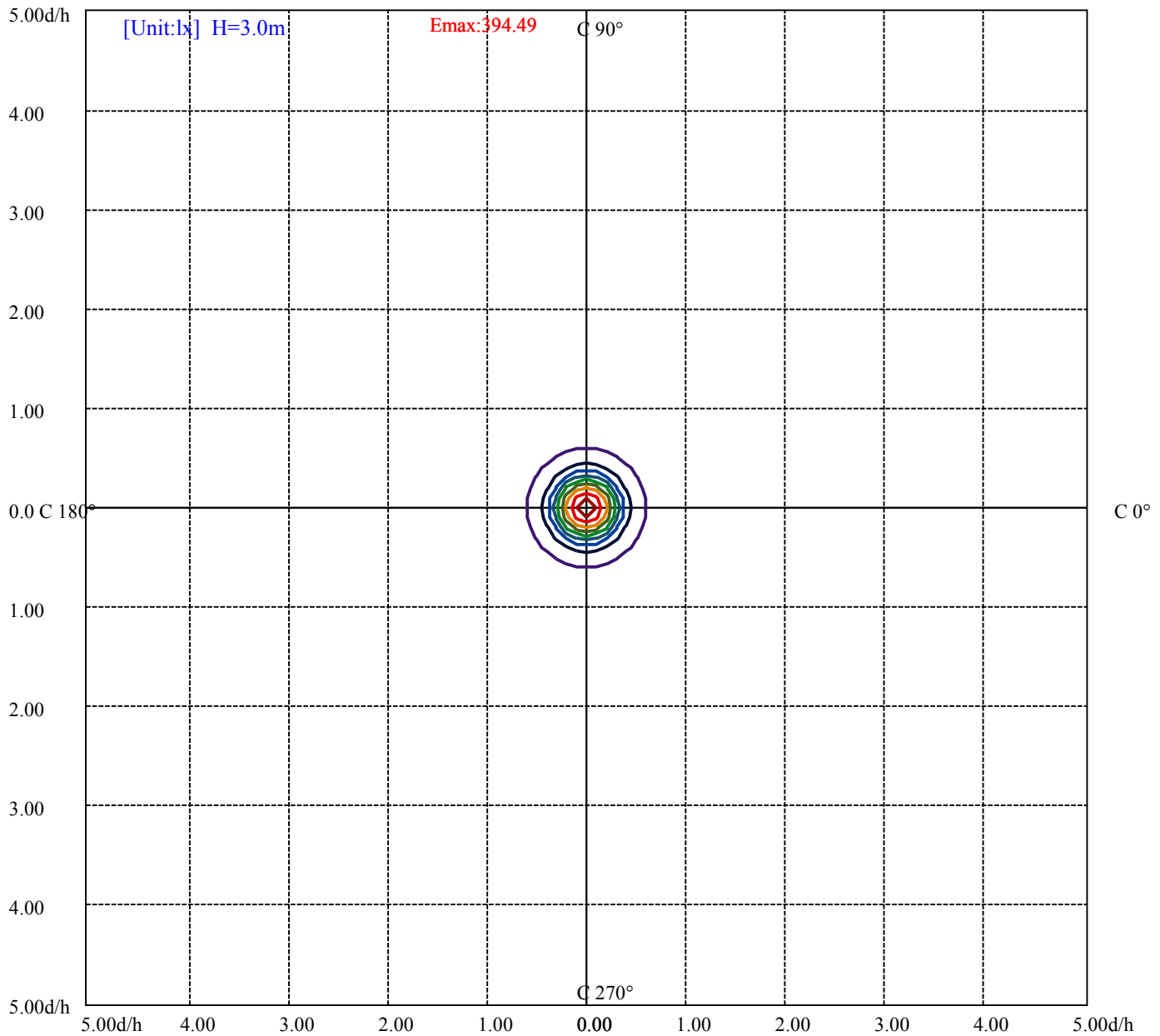
House

[Unit:cd]

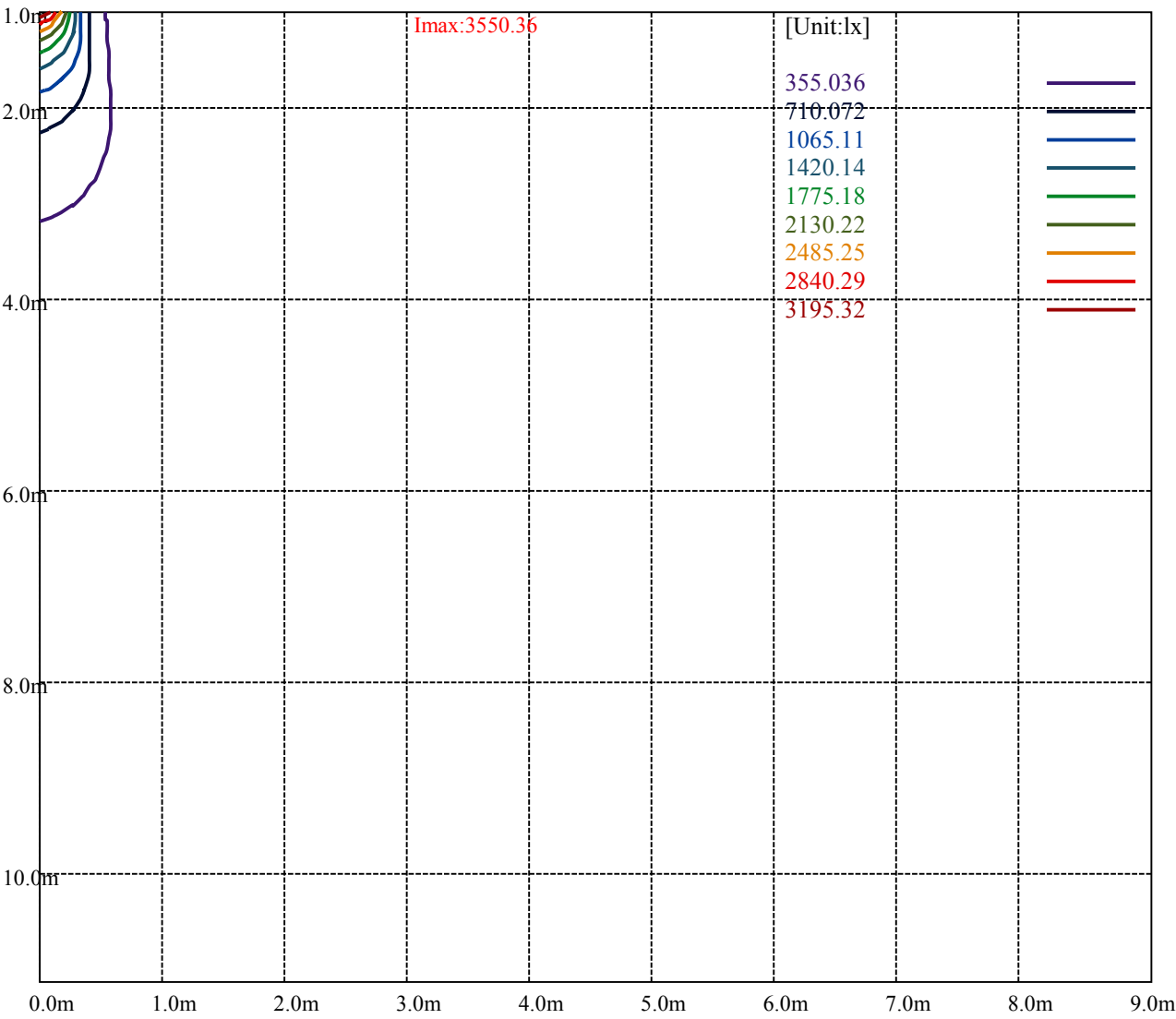
Road

Imax:3550.36

(10%Imax)	355.036	
(20%Imax)	710.072	
(30%Imax)	1065.11	
(40%Imax)	1420.14	
(50%Imax)	1775.18	
(60%Imax)	2130.22	
(70%Imax)	2485.25	
(80%Imax)	2840.29	
(90%Imax)	3195.32	



(10%Emax)	39.44833	
(20%Emax)	78.89667	
(30%Emax)	118.3456	
(40%Emax)	157.7933	
(50%Emax)	197.2422	
(60%Emax)	236.69	
(70%Emax)	276.1389	
(80%Emax)	315.5867	
(90%Emax)	355.0356	



Luminance Table

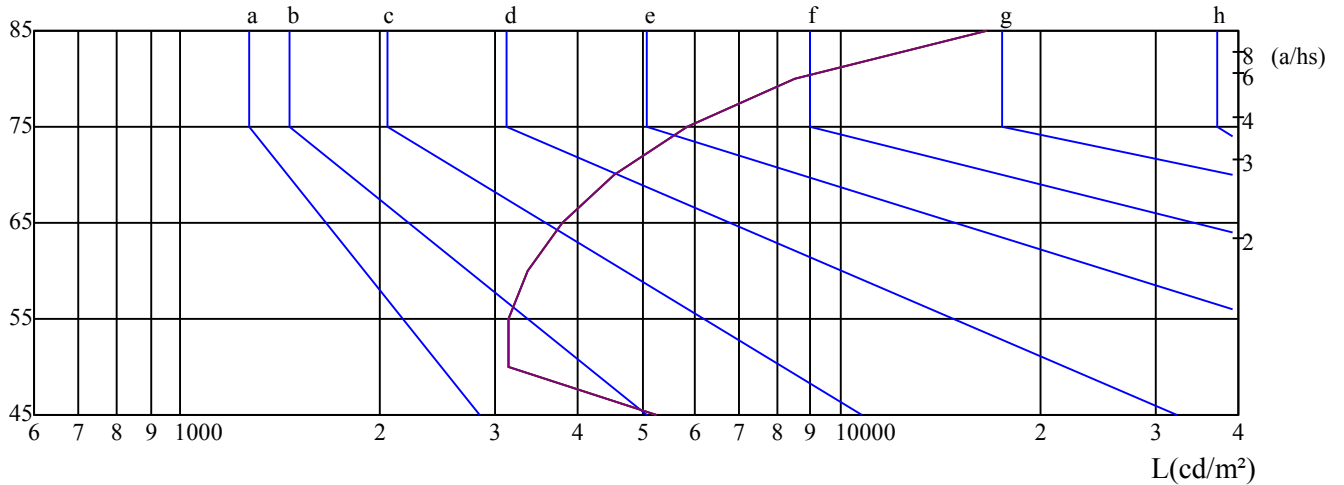
γ	45	50	55	60	65	70	75	80	85
C0	5268	3130	3144	3360	3789	4533	5832	8517	16685
C45	5268	3130	3144	3360	3789	4533	5832	8517	16685
C90	5268	3130	3144	3360	3789	4533	5832	8517	16685

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3789	3789	3789	5832	5832	5832	16685	16685	16685

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

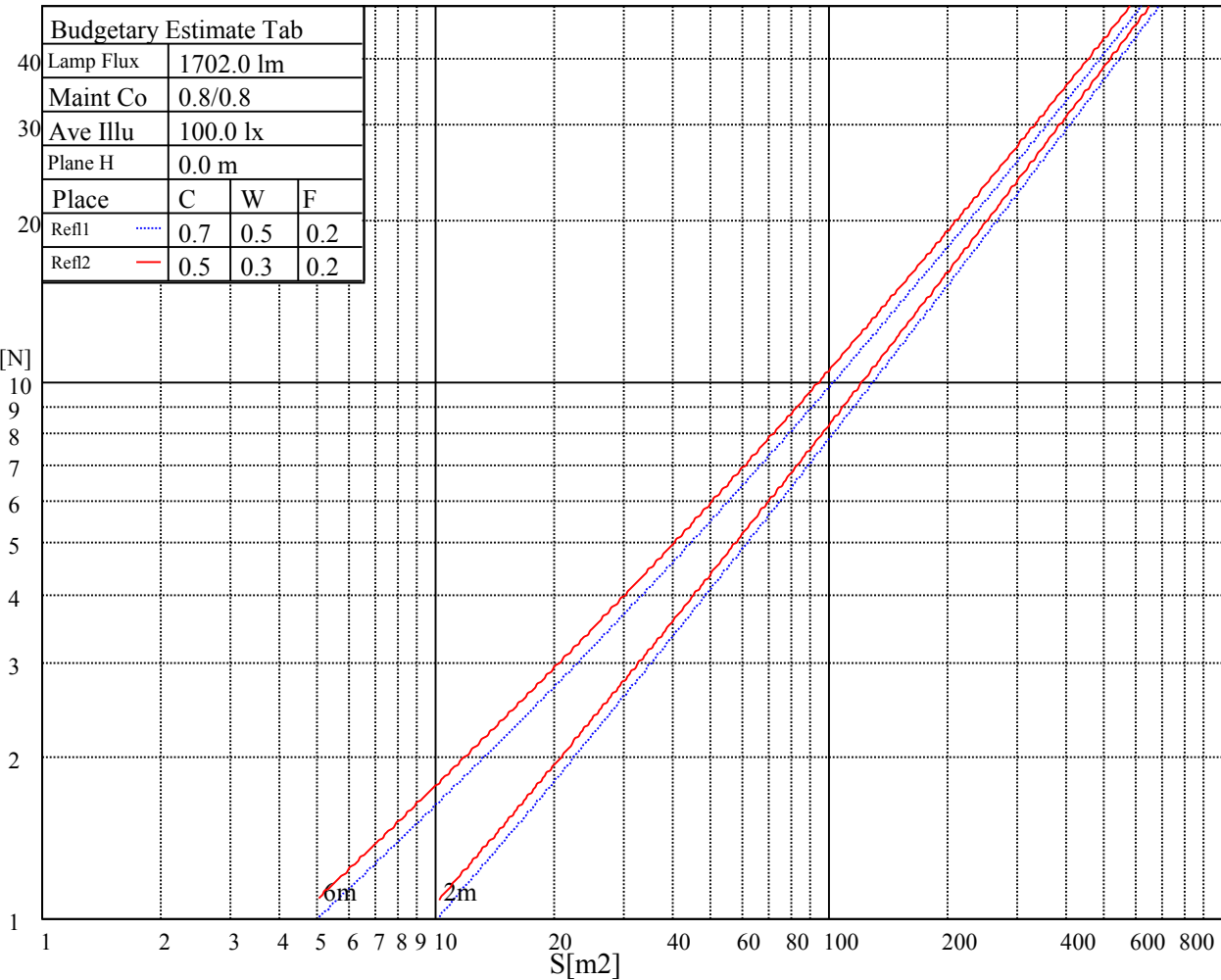
Luminance Limiting Curve

 $\gamma(^{\circ})$ 

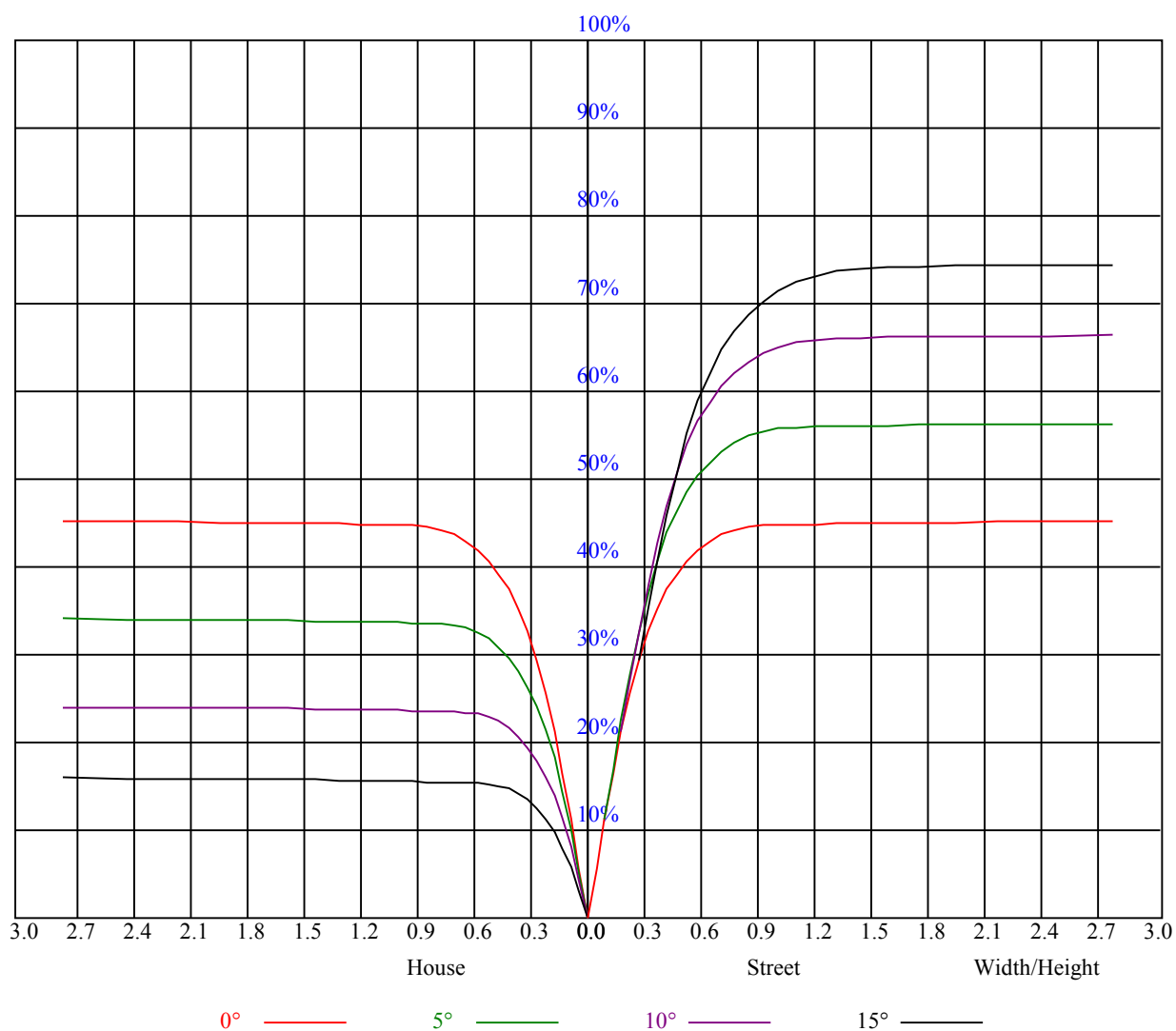
C0 ———

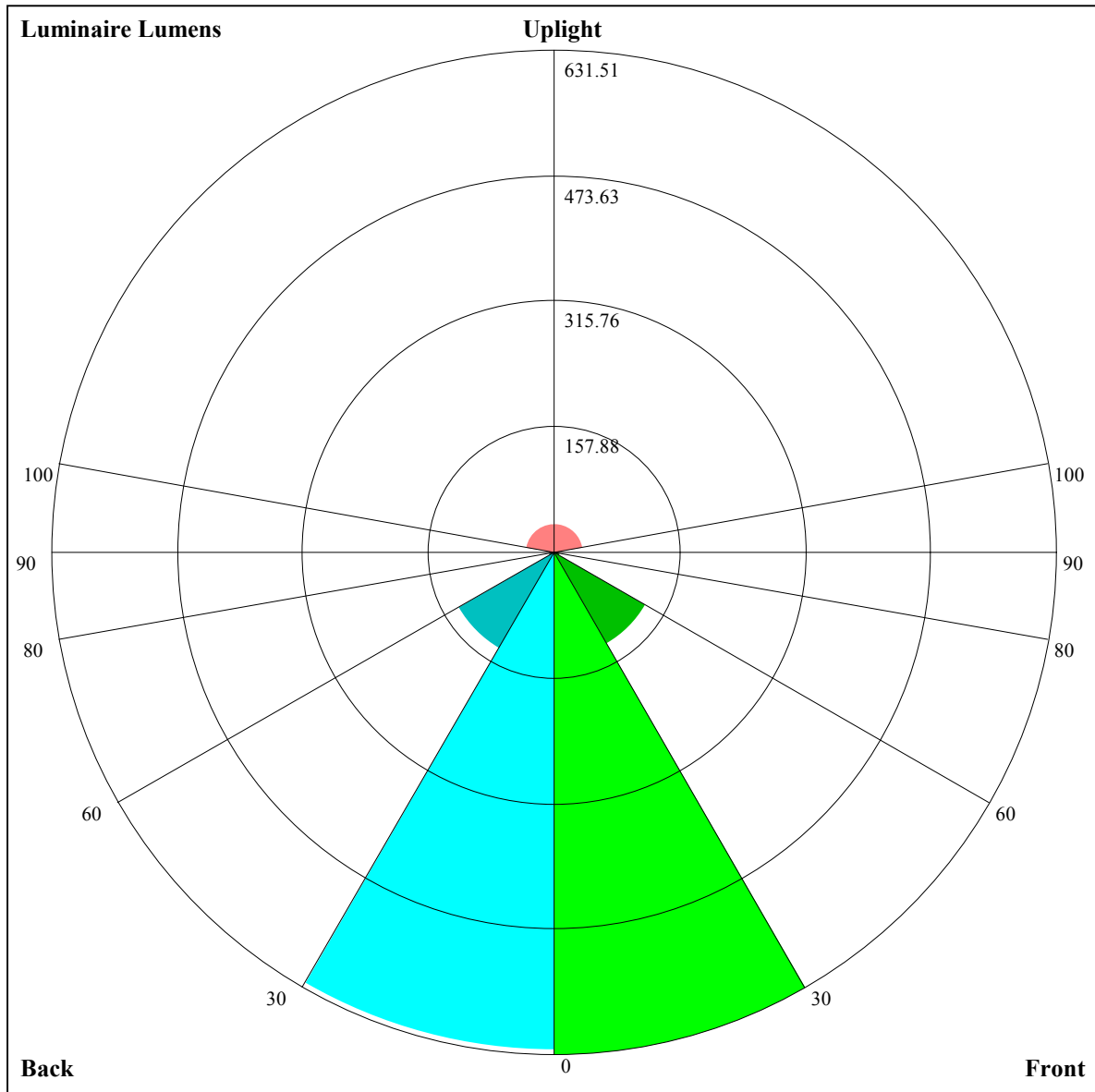
C45 ———

C90 ———



RHOC	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	1.09	1.09	1.09	1.07	1.07	1.07	1.02	1.02	1.02	0.98	0.98	0.98	0.94	0.94	0.94	0.92
1	1.02	1.00	0.98	1.00	0.98	0.97	0.97	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87
2	0.96	0.93	0.90	0.94	0.91	0.89	0.91	0.89	0.87	0.89	0.87	0.85	0.86	0.85	0.83	0.82
3	0.90	0.86	0.83	0.89	0.85	0.82	0.87	0.84	0.81	0.85	0.82	0.80	0.83	0.81	0.79	0.77
4	0.86	0.81	0.78	0.85	0.80	0.77	0.83	0.79	0.76	0.81	0.78	0.75	0.79	0.77	0.75	0.73
5	0.81	0.76	0.73	0.80	0.76	0.73	0.79	0.75	0.72	0.77	0.74	0.71	0.76	0.73	0.71	0.70
6	0.77	0.72	0.69	0.76	0.72	0.69	0.75	0.71	0.68	0.74	0.70	0.68	0.73	0.70	0.67	0.66
7	0.74	0.69	0.65	0.73	0.68	0.65	0.72	0.68	0.65	0.71	0.67	0.64	0.70	0.67	0.64	0.63
8	0.70	0.65	0.62	0.70	0.65	0.62	0.69	0.65	0.62	0.68	0.64	0.61	0.67	0.64	0.61	0.60
9	0.67	0.62	0.59	0.67	0.62	0.59	0.66	0.62	0.59	0.65	0.61	0.59	0.64	0.61	0.59	0.57
10	0.64	0.60	0.57	0.64	0.59	0.56	0.63	0.59	0.56	0.63	0.59	0.56	0.62	0.59	0.56	0.55





Luminaire Lumens:

FL=631.51,FM=133.58,FH=7.71,FVH=3.84

BL=626.72,BM=139.27,BH=7.72,BVH=3.83

UL=7.57,UH=36.03

BUG Rating:B2-U2-G0

Intensity data(cd)										Appendix Page: 15 Total:15	
C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0		
0.0	3540.38	3341.25	2860.88	2220.75	1362.38	806.06	582.75	386.44	100.35		
45.0	3563.44	3275.44	2835.56	2136.38	1345.50	777.94	574.88	388.13	96.92		
90.0	3540.94	3173.06	2669.06	1912.50	1090.74	719.78	543.04	315.11	61.65		
135.0	3557.25	3272.63	2847.94	2157.75	1347.19	791.44	586.13	409.50	117.23		
180.0	3540.38	3267.56	2807.44	2145.94	1100.14	781.43	582.13	402.98	113.68		
225.0	3562.31	3323.81	2842.31	2189.81	1106.16	820.80	586.86	429.53	122.96		
270.0	3540.94	3408.19	2963.25	2403.00	1558.13	883.13	638.44	473.06	284.06		
315.0	3557.25	3282.19	2838.94	2144.25	1114.99	784.63	573.36	382.05	94.22		
360.0	3540.38	3341.25	2860.88	2220.75	1362.38	806.06	582.75	386.44	100.35		
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0		
0.0	15.41	9.68	8.72	8.10	7.71	7.48	7.31	7.20	7.09		
45.0	13.95	9.62	8.66	8.04	7.71	7.43	7.26	7.14	7.03		
90.0	13.22	9.23	8.49	7.93	7.65	7.43	7.20	7.09	6.98		
135.0	19.01	9.56	8.61	8.10	7.71	7.48	7.31	7.14	7.03		
180.0	20.08	9.79	8.78	8.16	7.76	7.54	7.31	7.14	7.03		
225.0	19.86	9.96	8.83	8.21	7.76	7.48	7.26	7.09	6.98		
270.0	23.96	10.24	8.94	8.27	7.88	7.59	7.37	7.20	7.03		
315.0	18.45	9.68	8.66	8.10	7.71	7.48	7.31	7.14	7.03		
360.0	15.41	9.68	8.72	8.10	7.71	7.48	7.31	7.20	7.09		
C/γ(°)	90.0										
0.0	6.98										
45.0	6.92										
90.0	6.92										
135.0	6.98										
180.0	6.92										
225.0	6.92										
270.0	6.92										
315.0	6.98										
360.0	6.98										