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Nata

Client:

LumCAT: 2-1676-M

Luminaire: 92.70.131.00

Report No:

Voltage(V): 34.0200

Test No: GC20190823010

Current(A): 0.4480

LampCAT: TRIDONIC SLE 15MM G7

Power (W): 15.2400

Lamp flux(lm): 2050.0

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): 1839.83, Efficiency(%): 89.75% , Luminous Efficacy(lm/W): 120.72

Central intensity(cd): 4033.547, Maximum intensity(cd): 4033.547

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=35.4

[C90/270]Total=35.4

Field angle(10%Imax): [C0/180]Total=71.0

[C90/270]Total=71.0

Maximum s/h(1/2): C0_180=0.58 C90_270=0.58

Maximum s/h(1/4): C0_180=0.59 C90_270=0.59

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 89.75%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.503%

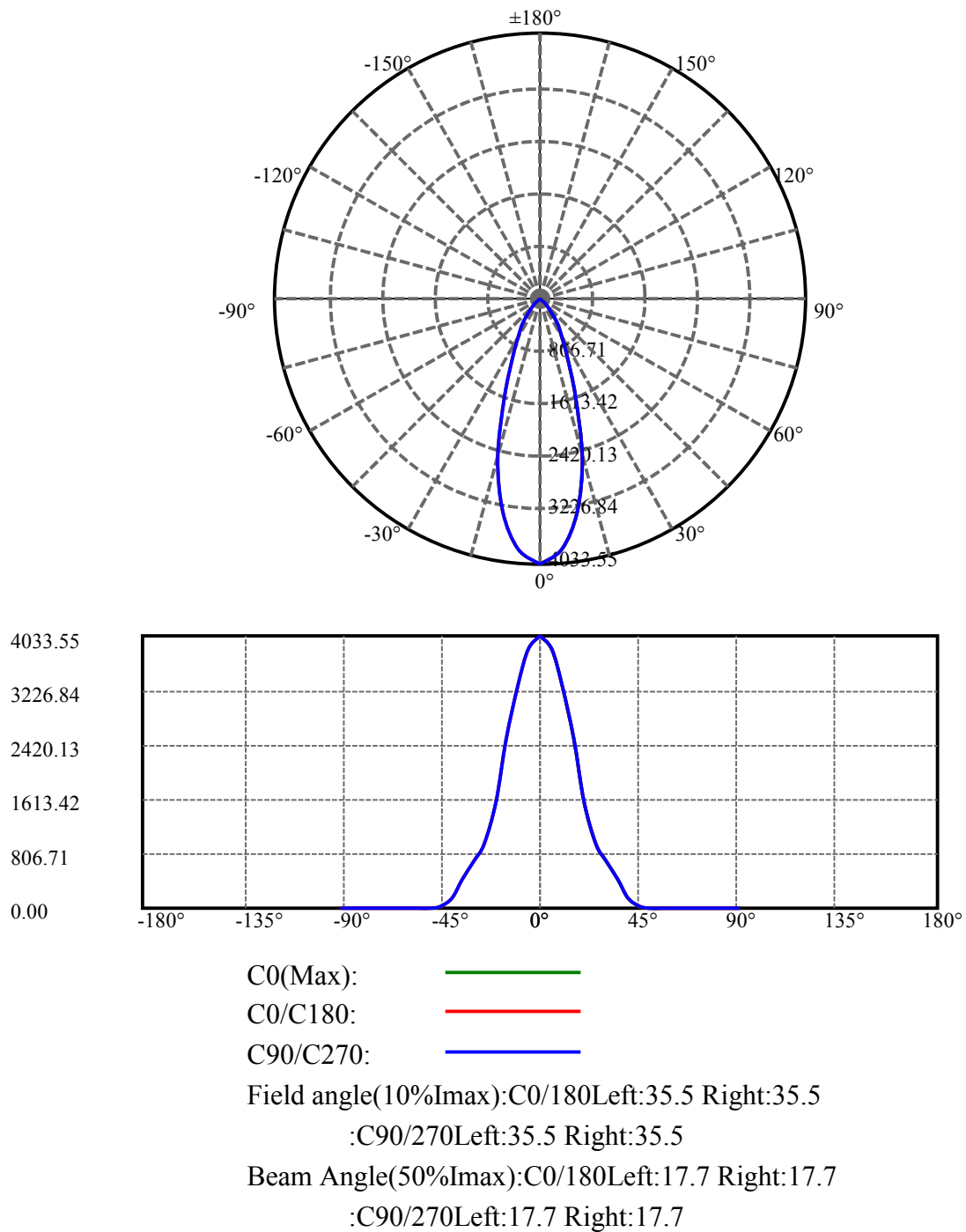
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	4033.547	0.000	0	.000%	.000%
5.0	3823.664	93.931	93.931	4.582%	5.105%
10.0	3294.492	254.639	348.57	12.421%	18.946%
15.0	2502.633	343.882	692.451	16.775%	37.637%
20.0	1586.848	337.031	1029.482	16.441%	55.955%
25.0	956.580	266.759	1296.24	13.013%	70.454%
30.0	693.274	208.790	1505.031	10.185%	81.803%
35.0	432.028	165.709	1670.74	8.083%	90.809%
40.0	145.223	96.310	1767.05	4.698%	96.044%
45.0	18.534	30.321	1797.371	1.479%	97.692%
50.0	11.060	5.980	1803.351	.292%	98.017%
55.0	9.788	4.533	1807.884	.221%	98.264%
60.0	9.246	4.400	1812.283	.215%	98.503%
65.0	8.873	4.405	1816.688	.215%	98.742%
70.0	8.655	4.438	1821.127	.217%	98.983%
75.0	8.529	4.492	1825.618	.219%	99.228%
80.0	8.902	4.664	1830.282	.228%	99.481%
85.0	8.993	4.862	1835.145	.237%	99.745%
90.0	8.121	4.686	1839.831	.229%	100.000%

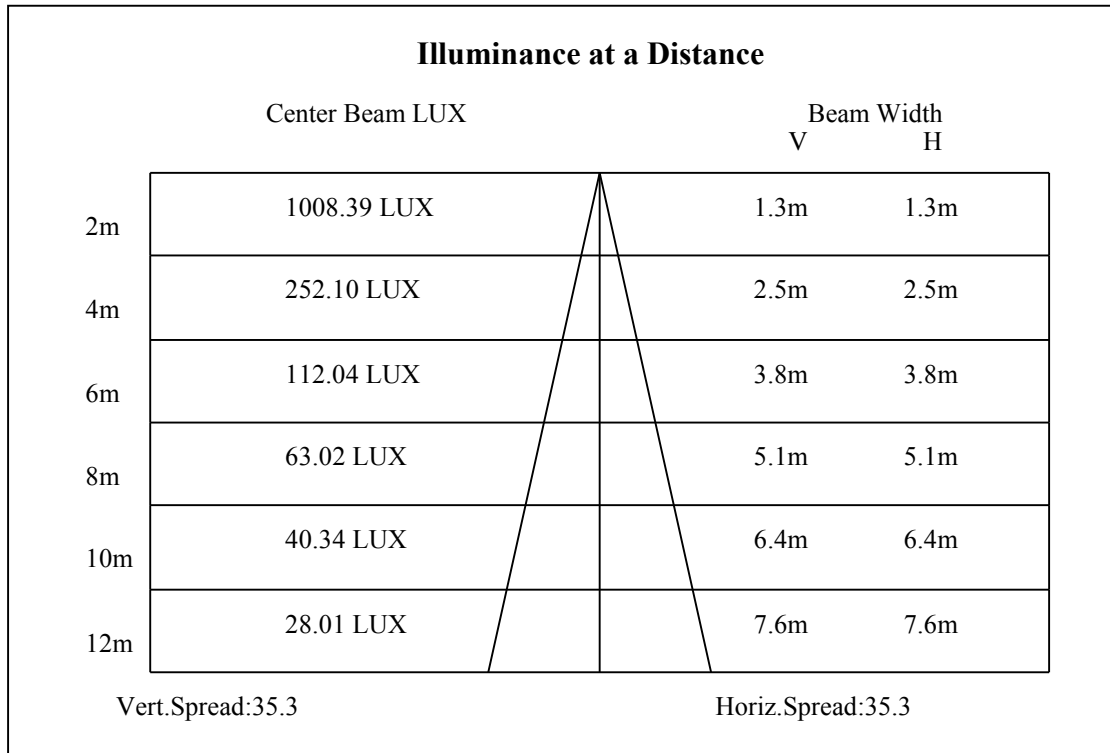
ZONAL LUMEN SUMMARY

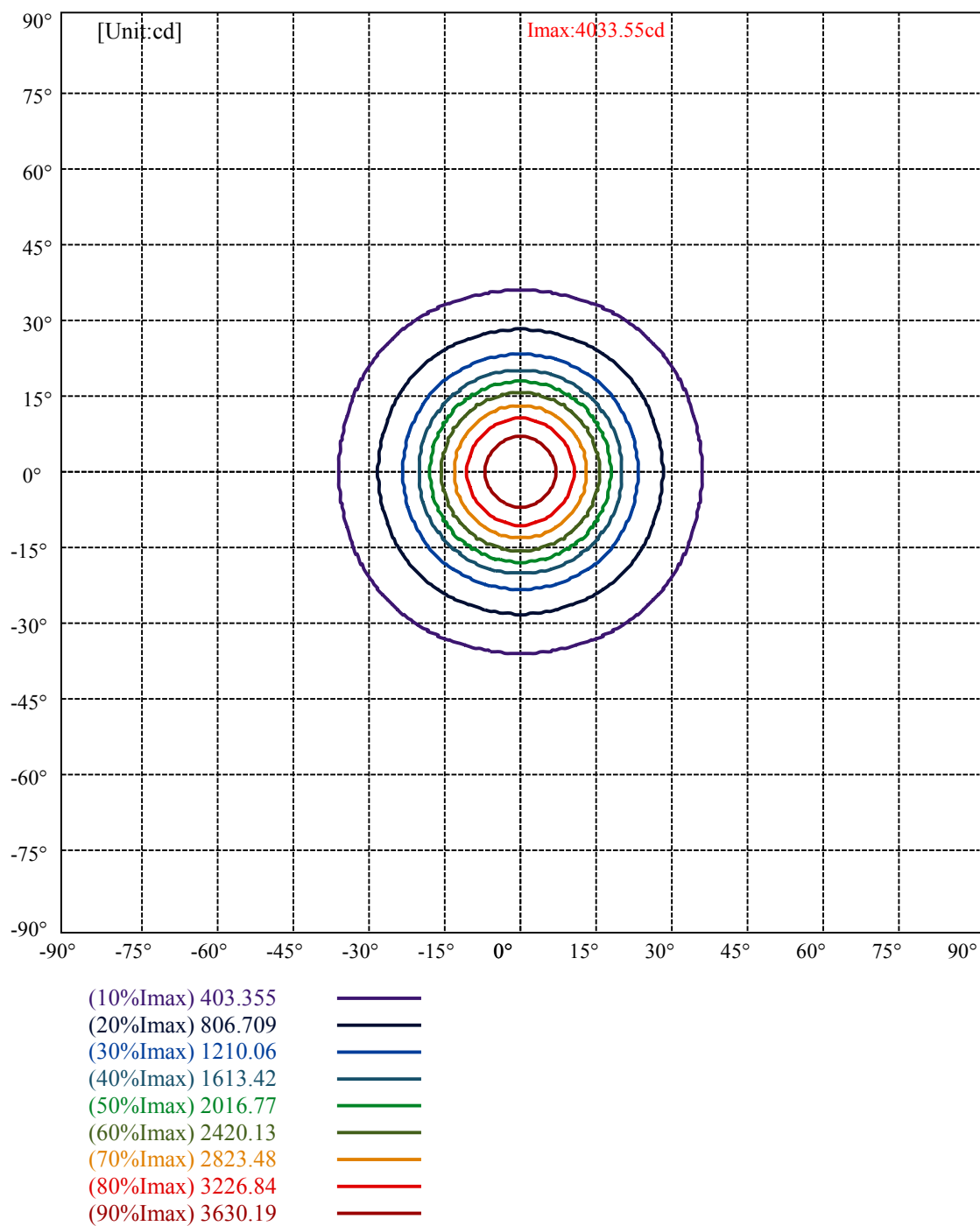
Zone	Lumens	%Lamp	%Fixt
0-30	1505.03	73.42%	81.80%
0-40	1767.05	86.20%	96.04%
0-60	1812.28	88.40%	98.50%
0-90	1835.14	89.52%	99.75%
0-120	1835.14	89.52%	99.75%
0-180	1839.83	89.75%	100.00%
60-90	27.26	1.33%	1.48%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-29.21	1471.86	71.80%	80.00%

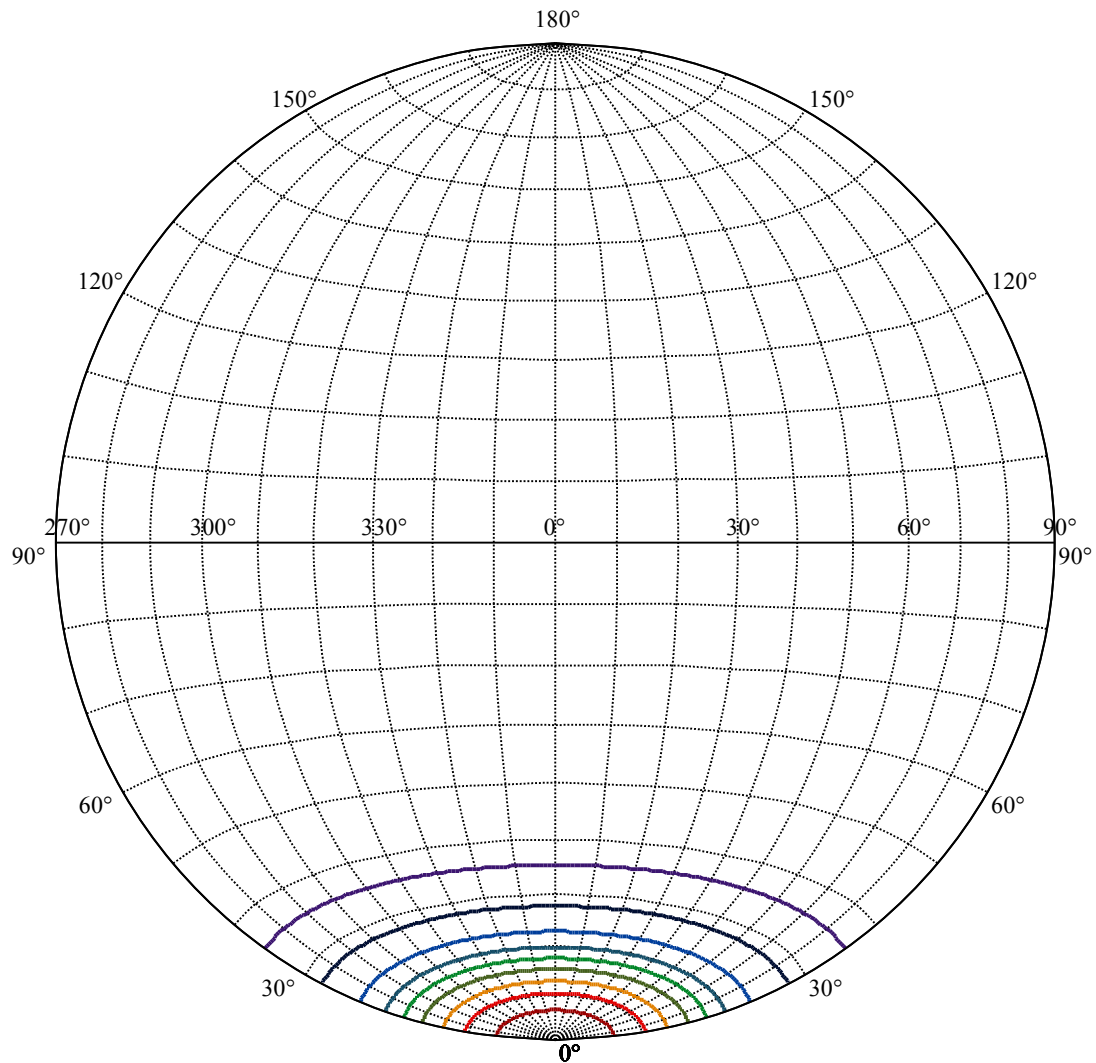
ZONAL LUMEN SUMMARY

0-10	348.57
10-20	680.91
20-30	475.55
30-40	262.02
40-50	36.30
50-60	8.93
60-70	8.84
70-80	9.16
80-90	4.86
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









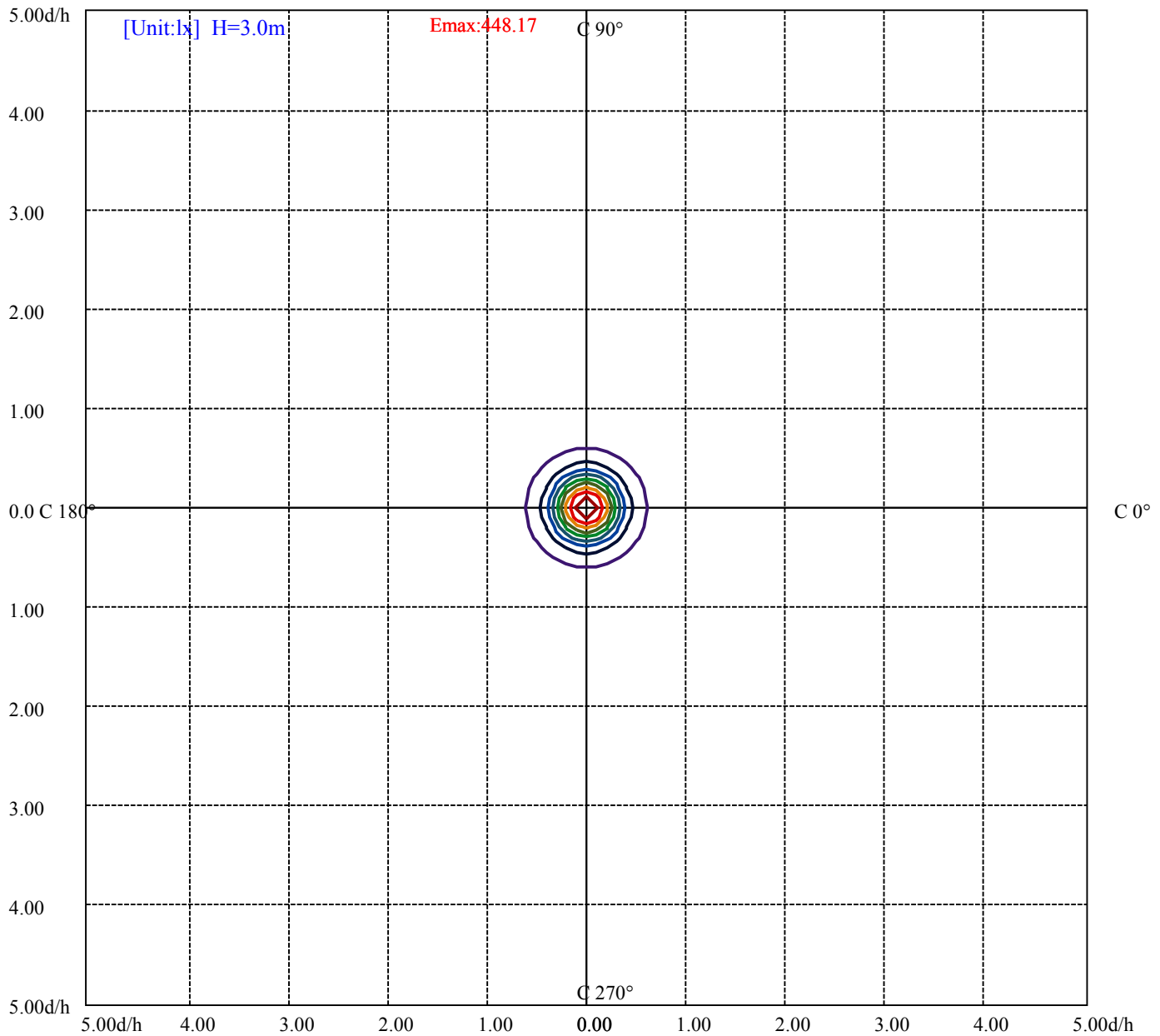
House

[Unit:cd]

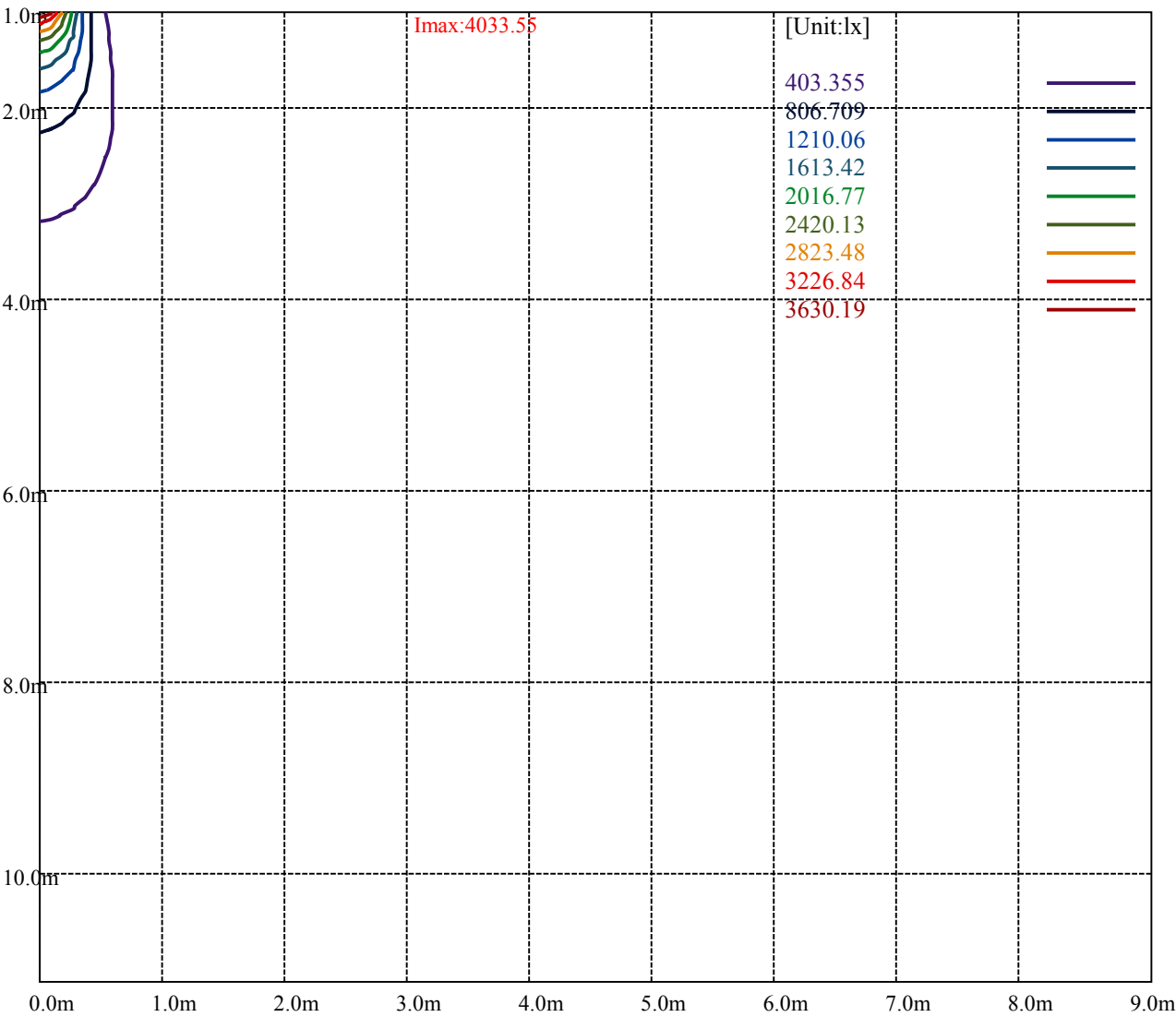
Road

Imax:4033.55

(10%Imax)	403.355	—
(20%Imax)	806.709	—
(30%Imax)	1210.06	—
(40%Imax)	1613.42	—
(50%Imax)	2016.77	—
(60%Imax)	2420.13	—
(70%Imax)	2823.48	—
(80%Imax)	3226.84	—
(90%Imax)	3630.19	—



(10%Emax) 44.81711	—
(20%Emax) 89.63422	—
(30%Emax) 134.4511	—
(40%Emax) 179.2689	—
(50%Emax) 224.0856	—
(60%Emax) 268.9022	—
(70%Emax) 313.72	—
(80%Emax) 358.5367	—
(90%Emax) 403.3544	—



Luminance Table

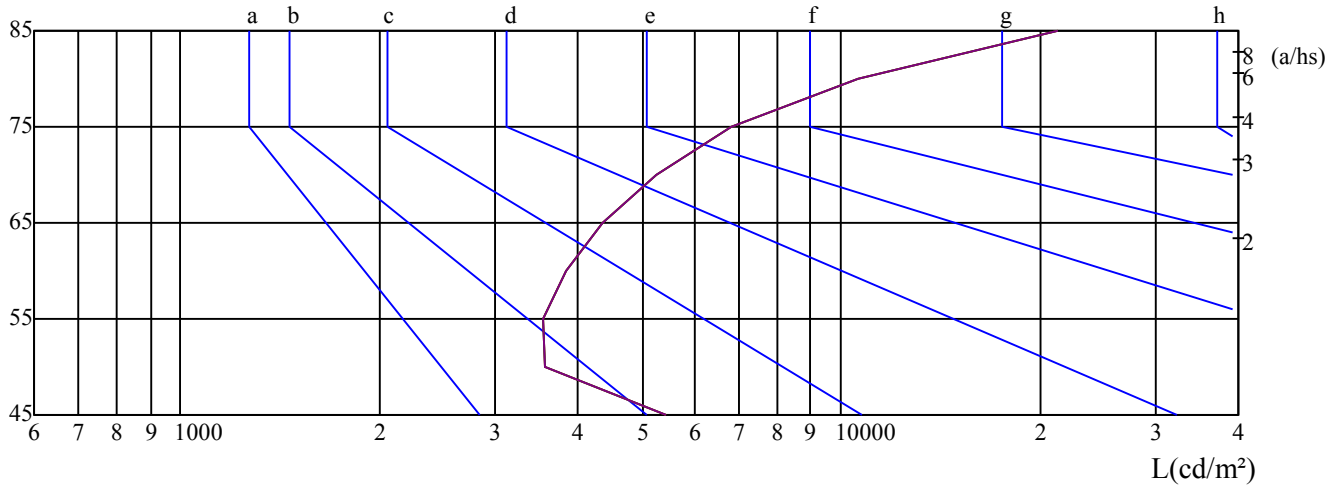
γ	45	50	55	60	65	70	75	80	85
C0	5427	3562	3533	3828	4347	5239	6822	10613	21362
C45	5427	3562	3533	3828	4347	5239	6822	10613	21362
C90	5427	3562	3533	3828	4347	5239	6822	10613	21362

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
4347	4347	4347	6822	6822	6822	21362	21362	21362

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

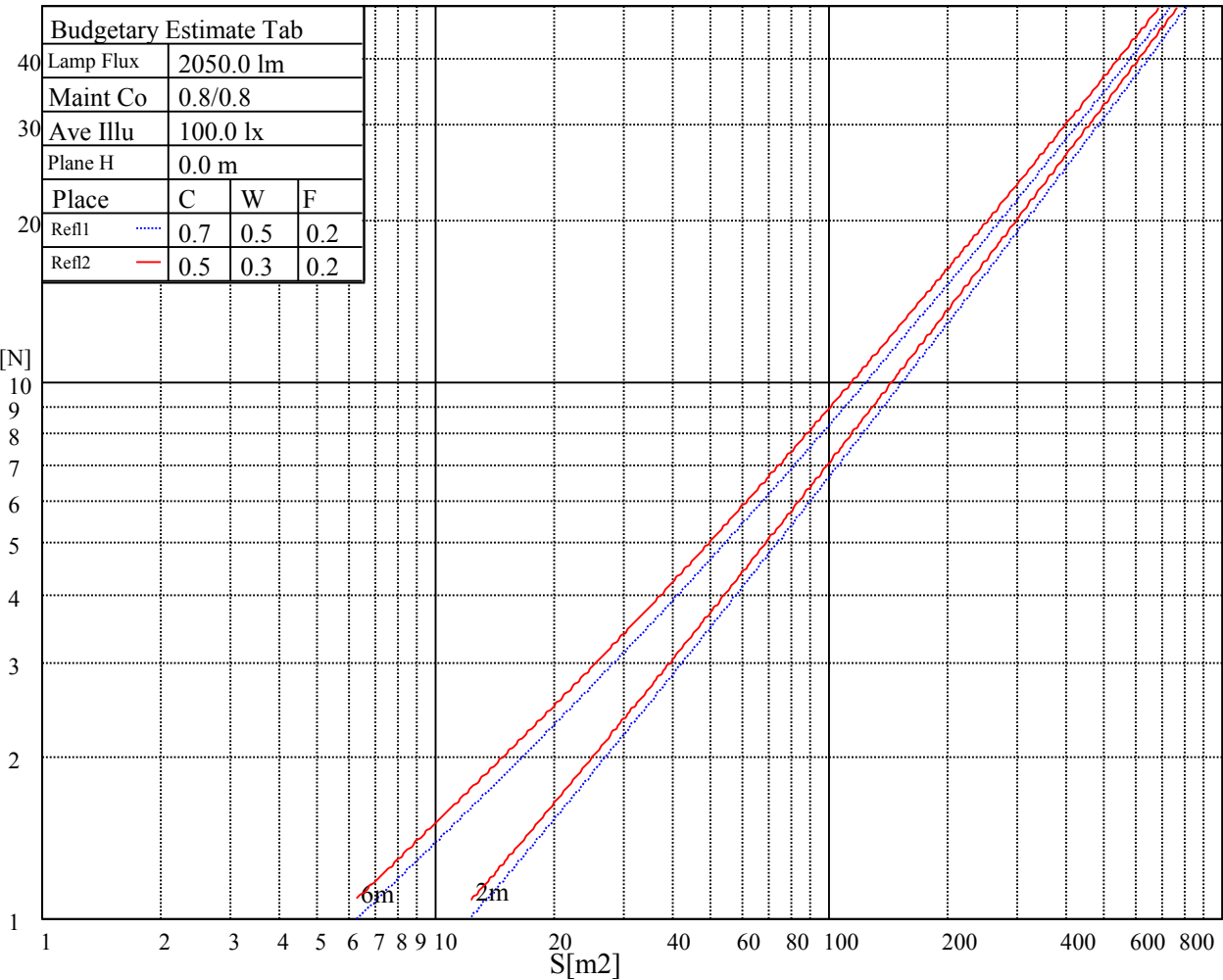
Luminance Limiting Curve

 $\gamma(^{\circ})$ 

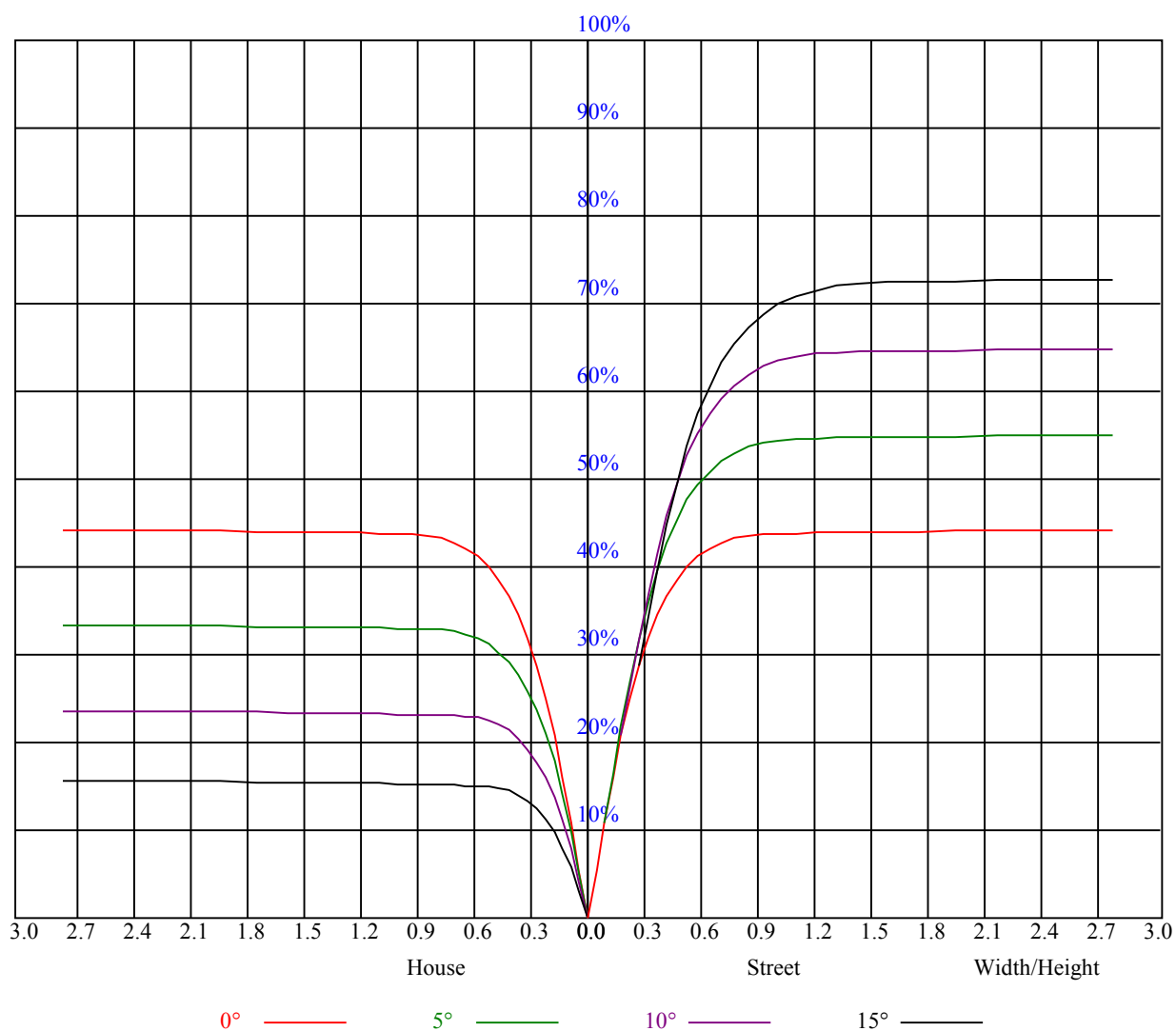
C0 ———

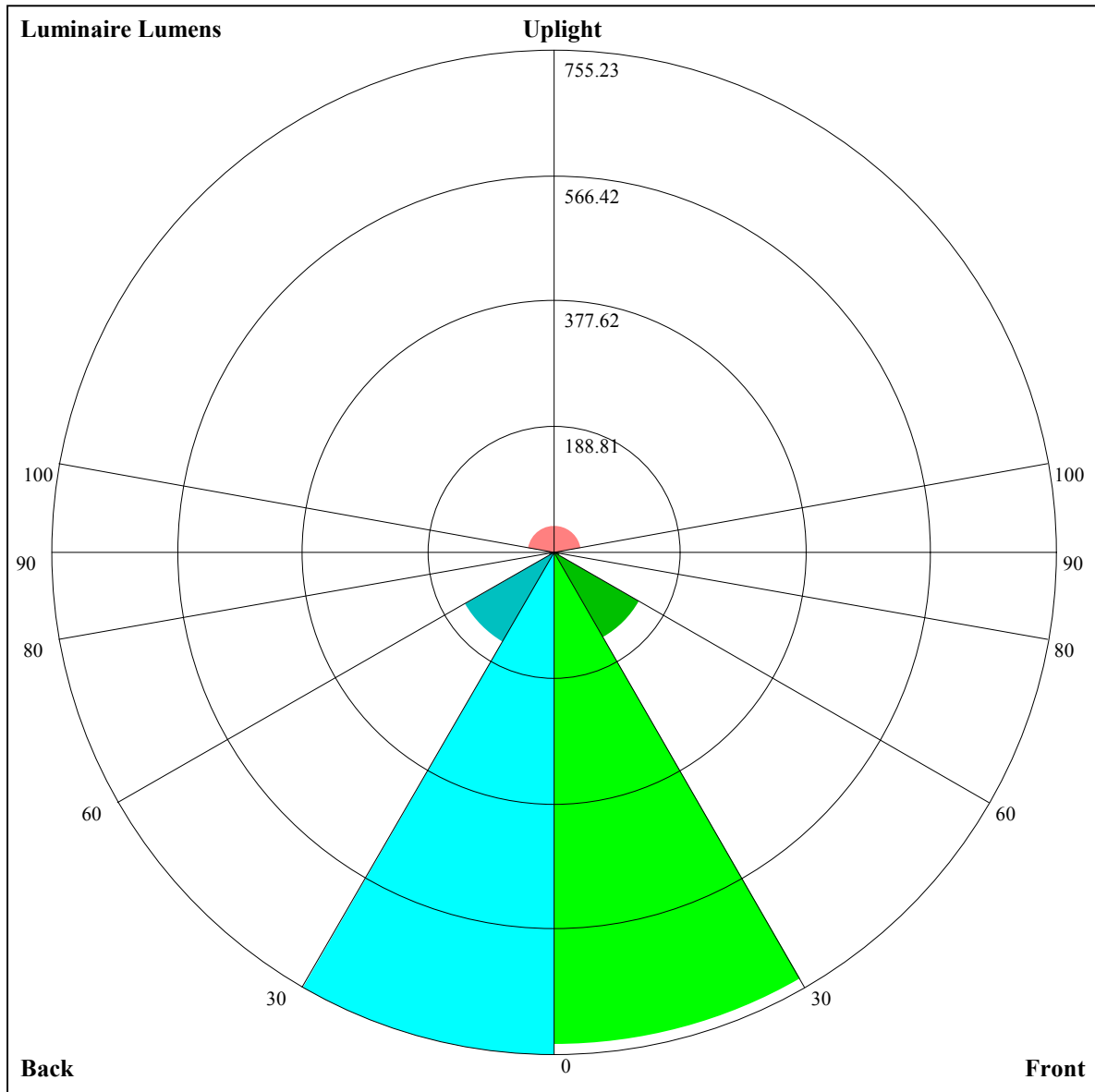
C45 ———

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	1.07	1.07	1.07	1.04	1.04	1.04	1.00	1.00	1.00	0.95	0.95	0.95	0.92	0.92	0.92	0.90
1	1.00	0.98	0.96	0.98	0.96	0.94	0.94	0.93	0.91	0.91	0.90	0.89	0.88	0.87	0.86	0.85
2	0.94	0.90	0.88	0.92	0.89	0.87	0.89	0.87	0.85	0.87	0.85	0.83	0.84	0.83	0.81	0.80
3	0.88	0.84	0.81	0.87	0.84	0.81	0.85	0.82	0.79	0.83	0.80	0.78	0.81	0.79	0.77	0.76
4	0.84	0.79	0.76	0.83	0.79	0.75	0.81	0.77	0.75	0.79	0.76	0.74	0.77	0.75	0.73	0.72
5	0.79	0.75	0.71	0.79	0.74	0.71	0.77	0.73	0.70	0.76	0.72	0.70	0.74	0.71	0.69	0.68
6	0.75	0.71	0.67	0.75	0.70	0.67	0.73	0.70	0.67	0.72	0.69	0.66	0.71	0.68	0.66	0.65
7	0.72	0.67	0.64	0.71	0.67	0.64	0.70	0.66	0.63	0.69	0.66	0.63	0.68	0.65	0.63	0.62
8	0.69	0.64	0.61	0.68	0.64	0.61	0.67	0.63	0.60	0.66	0.63	0.60	0.65	0.62	0.60	0.59
9	0.66	0.61	0.58	0.65	0.61	0.58	0.64	0.60	0.58	0.64	0.60	0.57	0.63	0.60	0.57	0.56
10	0.63	0.58	0.55	0.62	0.58	0.55	0.62	0.58	0.55	0.61	0.57	0.55	0.61	0.57	0.55	0.54





Luminaire Lumens:

FL=739.93,FM=149.19,FH=9.05,FVH=4.89

BL=755.23,BM=154.98,BH=8.98,BVH=4.67

UL=8.86,UH=42.17

BUG Rating:B2-U2-G0

Nata 2-1676-M

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	4029.19	3798.00	3295.69	2423.81	1525.50	906.19	686.25	425.81	115.99		
45.0	4032.00	3966.75	3526.88	2837.25	1949.06	1137.94	761.06	546.19	295.88		
90.0	4061.25	3951.00	3513.94	2822.06	1999.69	1111.39	772.20	549.56	228.15		
135.0	4011.75	3969.56	3574.69	2939.63	2073.94	1192.50	798.75	588.38	290.25		
180.0	4029.19	3836.25	3301.88	2529.00	1629.00	897.13	688.28	444.99	133.31		
225.0	4032.00	3680.44	3077.44	2205.56	1118.93	814.28	622.69	317.53	34.03		
270.0	4061.25	3739.50	3096.56	2259.56	1306.69	816.75	622.13	320.06	36.51		
315.0	4011.75	3647.81	2968.88	2004.19	1091.98	776.48	594.84	263.70	27.68		
360.0	4029.19	3798.00	3295.69	2423.81	1525.50	906.19	686.25	425.81	115.99		
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0		
0.0	16.26	10.52	9.62	9.11	8.72	8.55	8.44	8.38	8.55		
45.0	22.67	11.31	10.13	9.51	9.06	8.78	8.55	8.44	8.33		
90.0	24.64	11.53	10.24	9.56	9.06	8.72	8.55	8.33	8.27		
135.0	29.08	13.95	10.24	9.56	9.06	8.72	8.49	8.33	8.21		
180.0	19.13	10.63	9.68	9.17	8.78	8.55	8.38	8.27	8.27		
225.0	12.94	10.24	9.51	9.06	8.78	8.61	8.55	8.55	9.17		
270.0	12.32	10.24	9.51	9.06	8.83	8.72	8.61	9.96	9.62		
315.0	11.25	10.07	9.39	8.94	8.72	8.61	8.66	10.97	11.53		
360.0	16.26	10.52	9.62	9.11	8.72	8.55	8.44	8.38	8.55		
C/ γ (°)	90.0										
0.0	8.04										
45.0	8.21										
90.0	8.16										
135.0	8.10										
180.0	8.04										
225.0	8.21										
270.0	8.16										
315.0	8.04										
360.0	8.04										