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Nata

Client:

LumCAT: 4-2267-M

Luminaire: 92.70.131.00

Report No:

Voltage(V): 34.9800

Test No: GC2019082206

Current(A): 0.3980

LampCAT: TRIDONIC SLE 13MM G7

Power (W): 13.9200

Lamp flux(lm): 1702.0

PF: 0.0000

Number of Lamps: 1

Ballast type: DC

Length(mm): 100

Width(mm): 100

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1575.84, Efficiency(%): 92.59% , Luminous Efficacy(lm/W): 113.21

Central intensity(cd): 3718.828, Maximum intensity(cd): 3718.828

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=32.6

[C90/270]Total=32.6

Field angle(10%Imax): [C0/180]Total=69.8

[C90/270]Total=69.8

Maximum s/h(1/2): C0_180=0.53 C90_270=0.53

Maximum s/h(1/4): C0_180=0.57 C90_270=0.57

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 92.59%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.377%

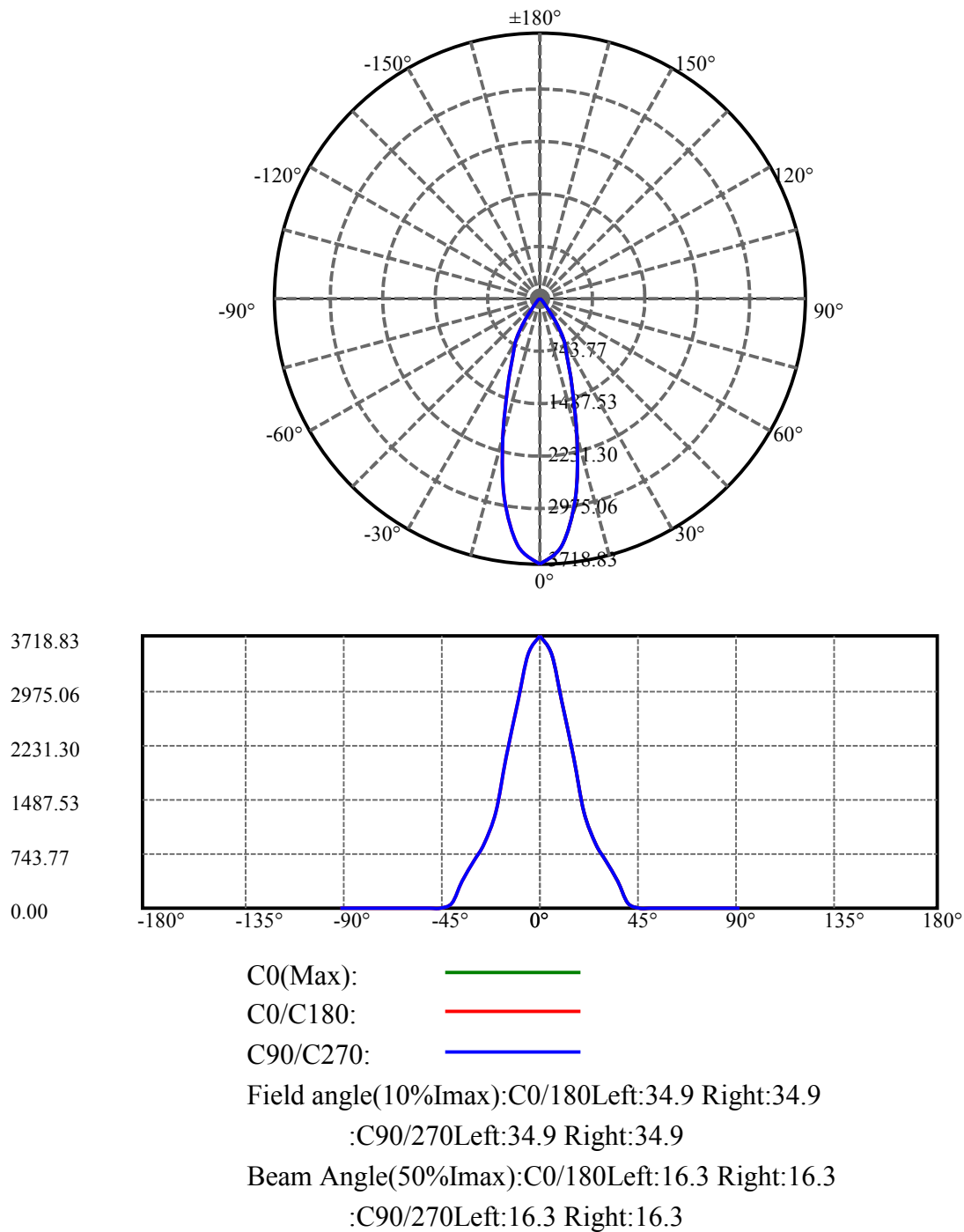
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3718.828	0.000	0	.000%	.000%
5.0	3474.563	85.995	85.995	5.053%	5.457%
10.0	2826.492	225.409	311.403	13.244%	19.761%
15.0	2048.203	289.164	600.567	16.990%	38.111%
20.0	1318.261	277.444	878.011	16.301%	55.717%
25.0	880.573	230.617	1108.628	13.550%	70.351%
30.0	645.391	193.112	1301.74	11.346%	82.606%
35.0	367.980	149.226	1450.966	8.768%	92.075%
40.0	68.850	72.882	1523.848	4.282%	96.700%
45.0	11.348	14.849	1538.697	.872%	97.643%
50.0	9.176	4.147	1542.845	.244%	97.906%
55.0	8.177	3.773	1546.618	.222%	98.145%
60.0	7.643	3.657	1550.275	.215%	98.377%
65.0	7.362	3.648	1553.922	.214%	98.609%
70.0	7.383	3.733	1557.656	.219%	98.846%
75.0	10.041	4.554	1562.21	.268%	99.135%
80.0	9.309	5.178	1567.387	.304%	99.463%
85.0	7.305	4.515	1571.902	.265%	99.750%
90.0	7.095	3.943	1575.845	.232%	100.000%

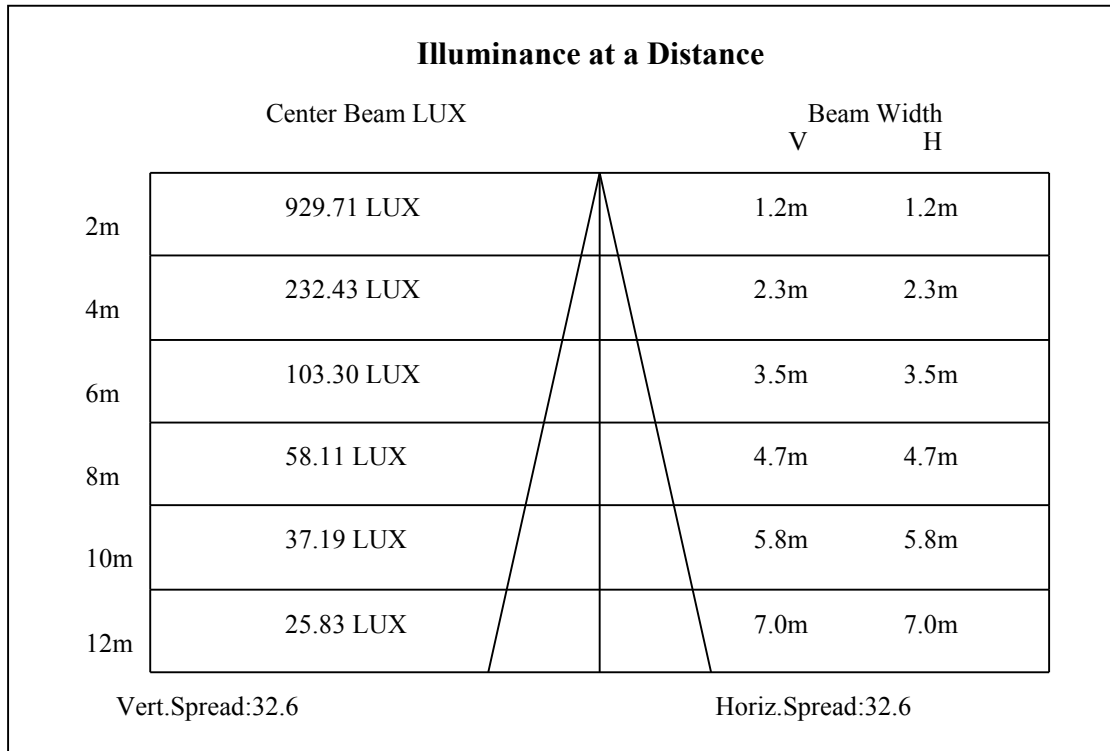
ZONAL LUMEN SUMMARY

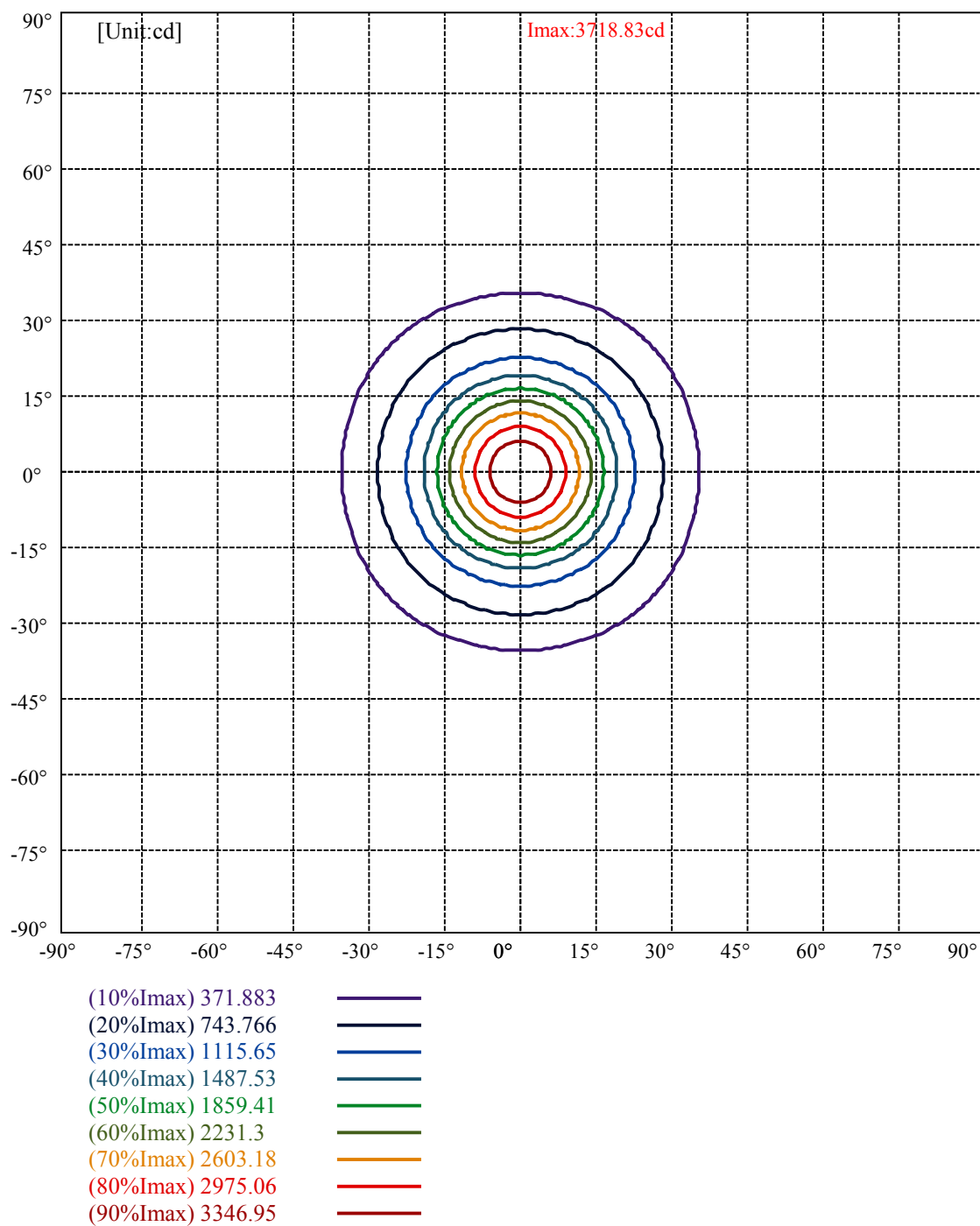
Zone	Lumens	%Lamp	%Fixt
0-30	1301.74	76.48%	82.61%
0-40	1523.85	89.53%	96.70%
0-60	1550.27	91.09%	98.38%
0-90	1571.90	92.36%	99.75%
0-120	1571.90	92.36%	99.75%
0-180	1575.84	92.59%	100.00%
60-90	25.28	1.49%	1.60%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-28.94	1260.68	74.07%	80.00%

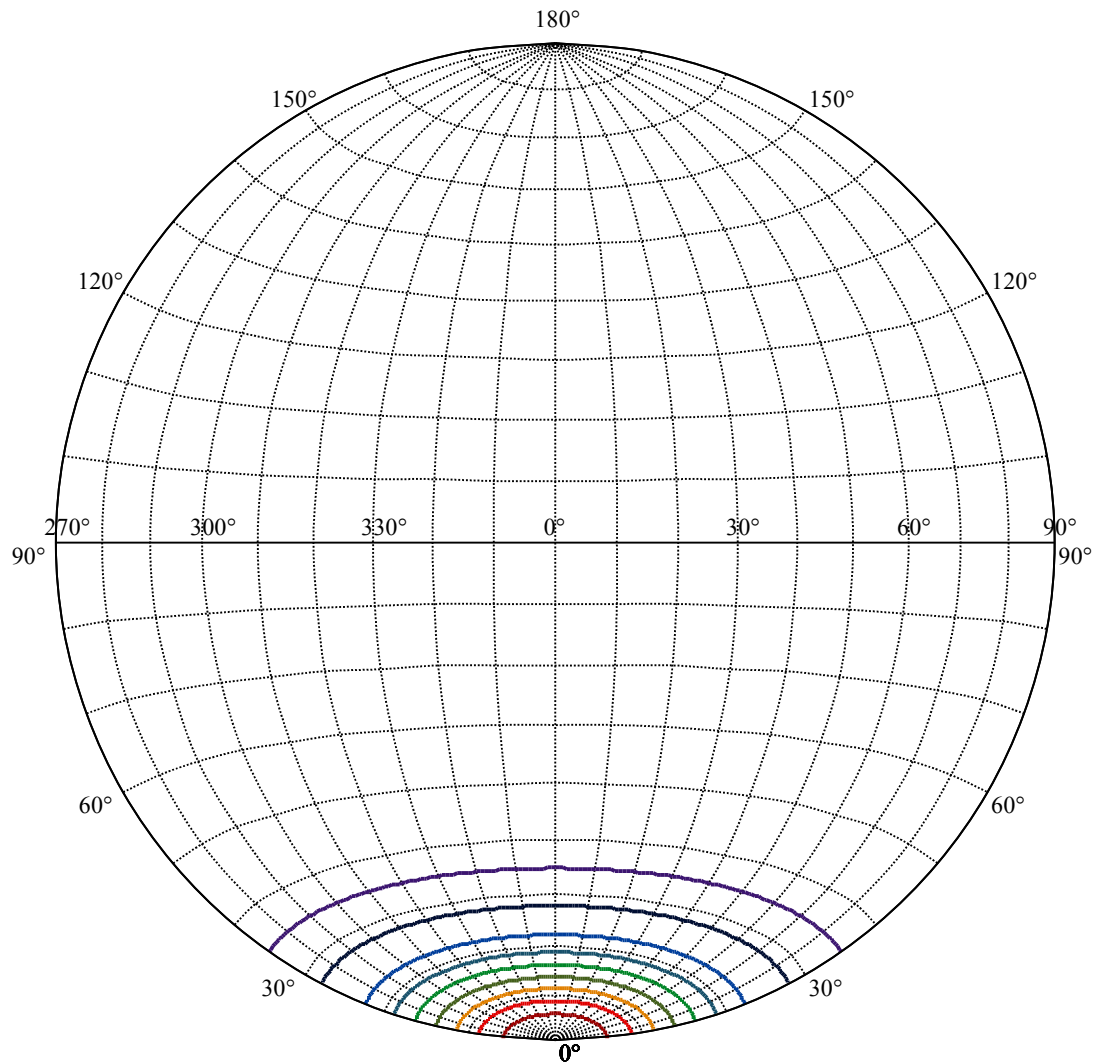
ZONAL LUMEN SUMMARY

0-10	311.40
10-20	566.61
20-30	423.73
30-40	222.11
40-50	19.00
50-60	7.43
60-70	7.38
70-80	9.73
80-90	4.51
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









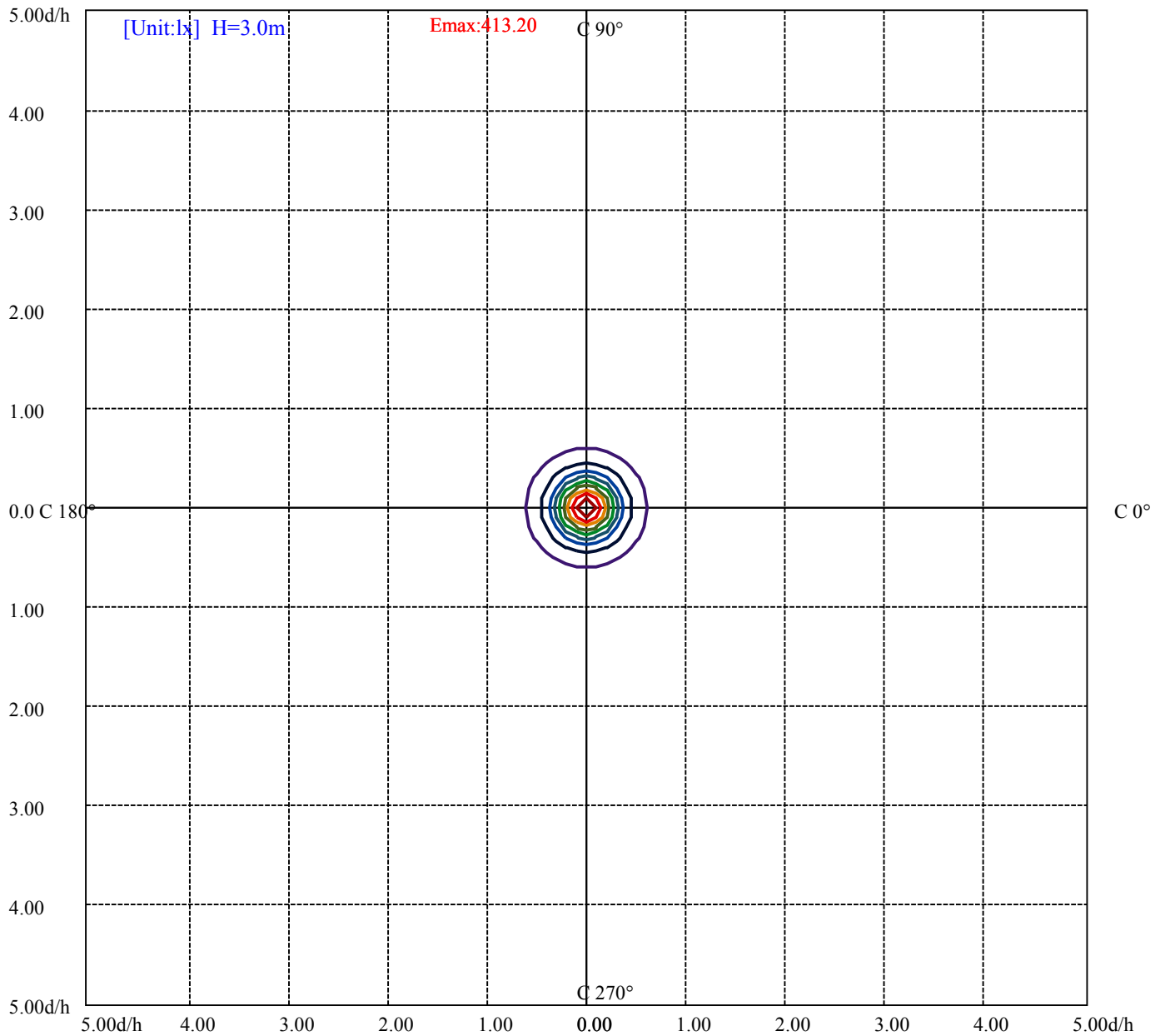
House

[Unit:cd]

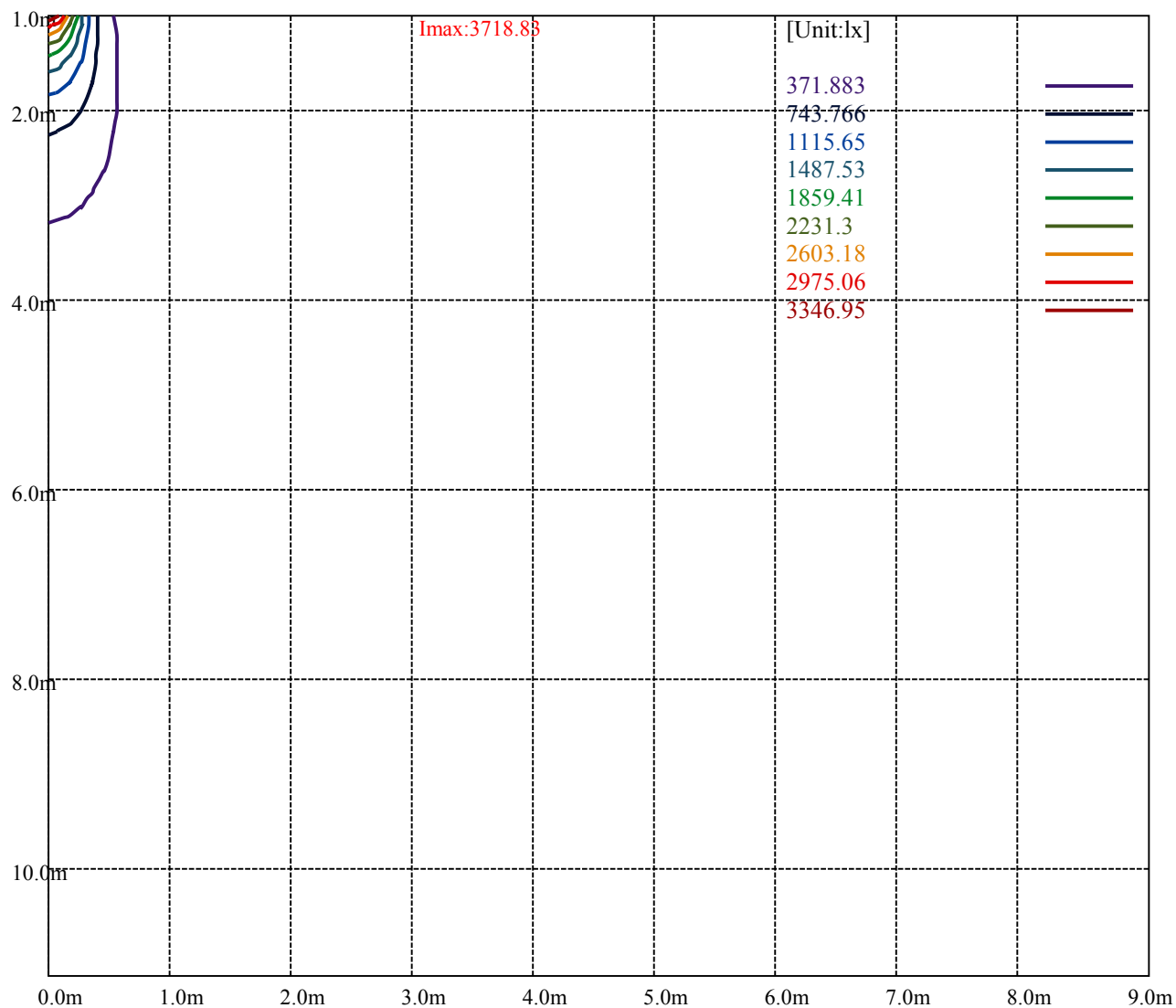
Road

Imax:3718.83

(10%Imax)	371.883	—
(20%Imax)	743.766	—
(30%Imax)	1115.65	—
(40%Imax)	1487.53	—
(50%Imax)	1859.41	—
(60%Imax)	2231.3	—
(70%Imax)	2603.18	—
(80%Imax)	2975.06	—
(90%Imax)	3346.95	—



(10%Emax)	41.32022	—
(20%Emax)	82.64044	—
(30%Emax)	123.9611	—
(40%Emax)	165.2811	—
(50%Emax)	206.6011	—
(60%Emax)	247.9211	—
(70%Emax)	289.2411	—
(80%Emax)	330.5622	—
(90%Emax)	371.8822	—



Luminance Table

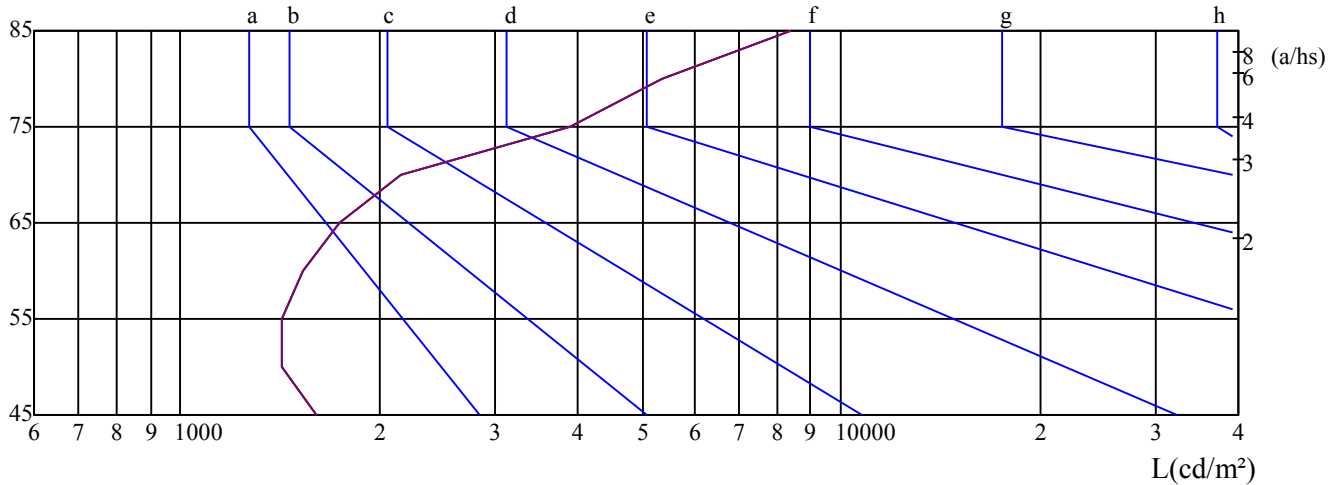
γ	45	50	55	60	65	70	75	80	85
C0	1605	1427	1426	1529	1742	2159	3879	5361	8382
C45	1605	1427	1426	1529	1742	2159	3879	5361	8382
C90	1605	1427	1426	1529	1742	2159	3879	5361	8382

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
1742	1742	1742	3879	3879	3879	8382	8382	8382

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

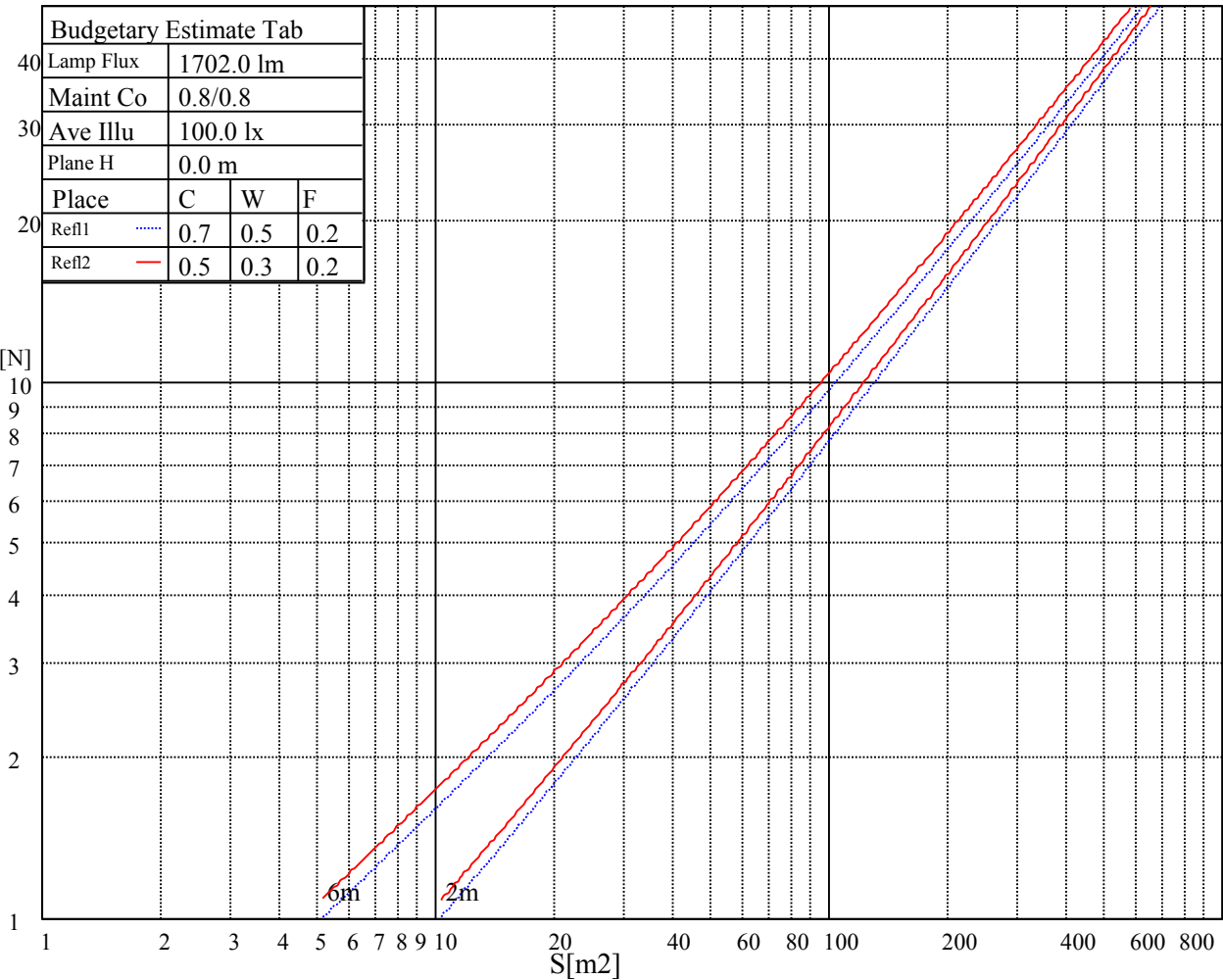
Luminance Limiting Curve

 $\gamma(^{\circ})$ 

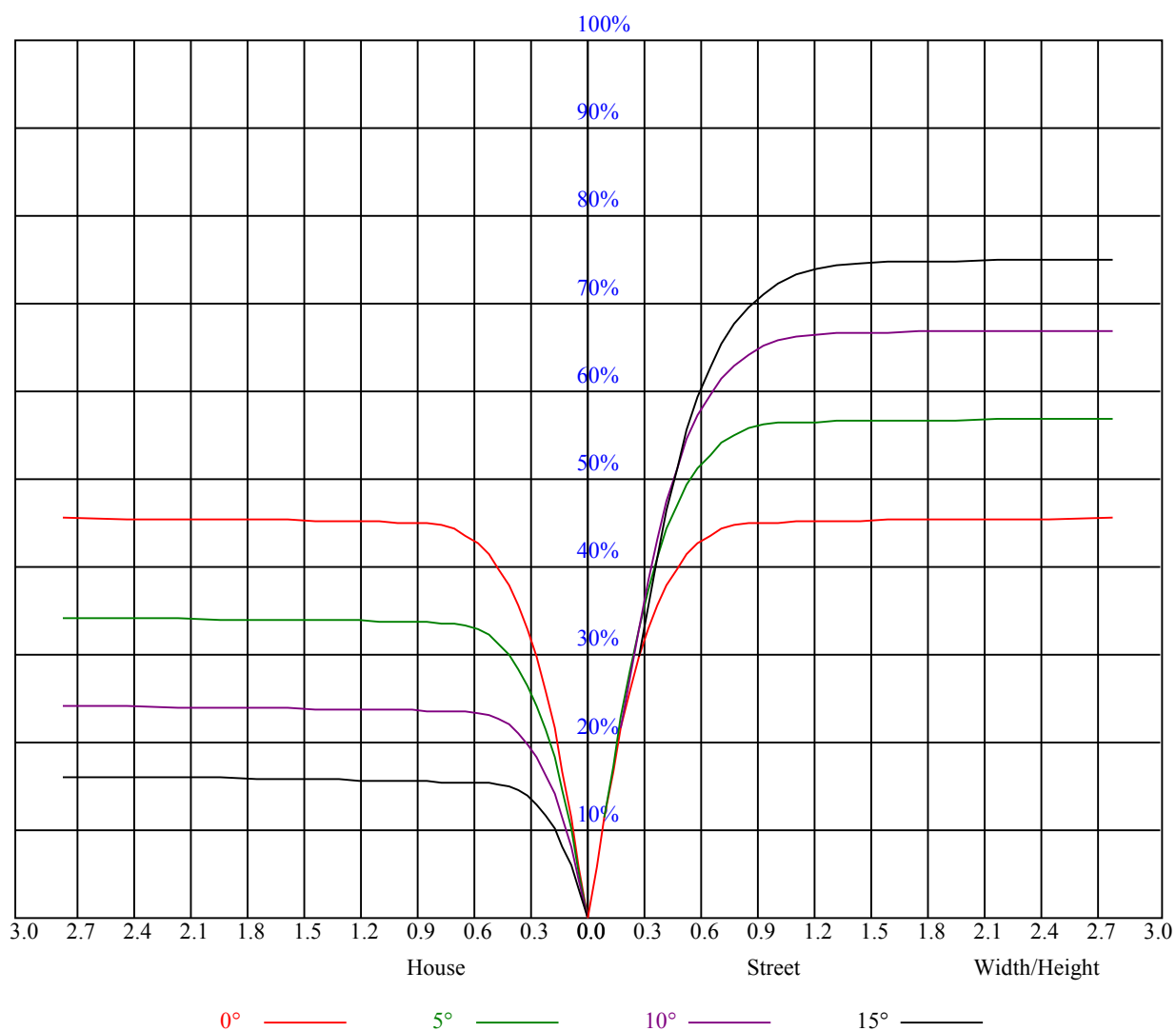
C0 ———

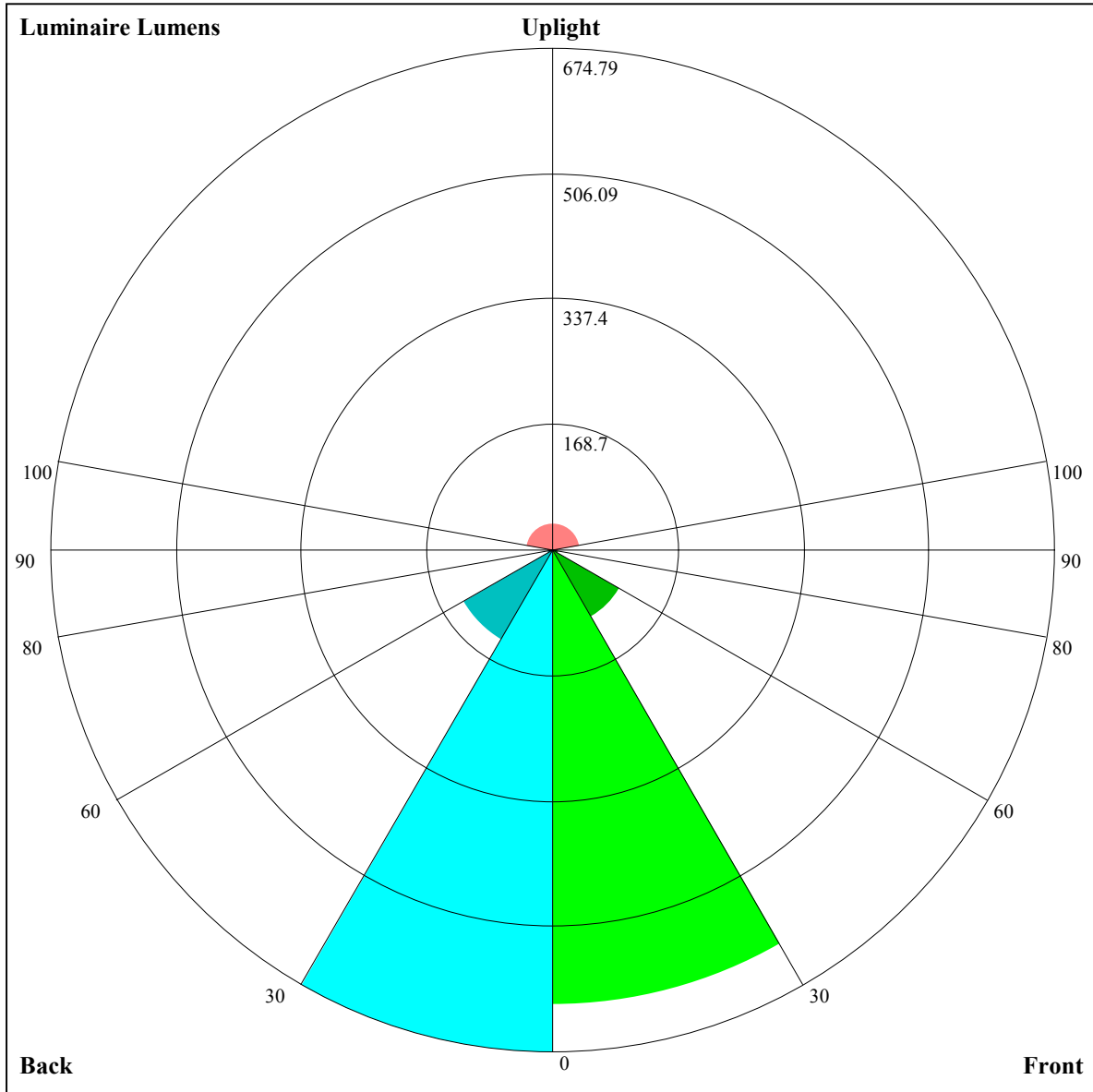
C45 ———

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	1.10	1.10	1.10	1.08	1.08	1.08	1.03	1.03	1.03	0.98	0.98	0.98	0.94	0.94	0.94	0.93
1	1.03	1.01	0.99	1.01	0.99	0.97	0.97	0.96	0.94	0.94	0.93	0.92	0.91	0.90	0.89	0.87
2	0.97	0.93	0.91	0.95	0.92	0.90	0.92	0.90	0.88	0.90	0.88	0.86	0.87	0.85	0.84	0.82
3	0.91	0.87	0.84	0.90	0.86	0.83	0.88	0.85	0.82	0.86	0.83	0.81	0.83	0.81	0.79	0.78
4	0.86	0.82	0.78	0.85	0.81	0.78	0.83	0.80	0.77	0.82	0.79	0.76	0.80	0.77	0.75	0.74
5	0.82	0.77	0.74	0.81	0.77	0.73	0.80	0.76	0.73	0.78	0.75	0.72	0.77	0.74	0.72	0.70
6	0.78	0.73	0.70	0.77	0.73	0.69	0.76	0.72	0.69	0.75	0.71	0.69	0.74	0.71	0.68	0.67
7	0.74	0.70	0.66	0.74	0.69	0.66	0.73	0.69	0.66	0.72	0.68	0.65	0.71	0.67	0.65	0.64
8	0.71	0.66	0.63	0.71	0.66	0.63	0.70	0.65	0.63	0.69	0.65	0.62	0.68	0.65	0.62	0.61
9	0.68	0.63	0.60	0.68	0.63	0.60	0.67	0.63	0.60	0.66	0.62	0.60	0.65	0.62	0.59	0.58
10	0.65	0.60	0.57	0.65	0.60	0.57	0.64	0.60	0.57	0.63	0.60	0.57	0.63	0.59	0.57	0.56





Luminaire Lumens:

FL=610.85,FM=104.53,FH=8.79,FVH=4.22

BL=674.79,BM=138.42,BH=8.37,BVH=4.27

UL=7.74,UH=36.84

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	3715.31	3353.06	2598.19	1839.38	1197.00	791.44	587.81	325.13	18.96		
45.0	3733.88	3427.88	2734.88	1974.94	1318.50	848.25	644.63	324.56	22.28		
90.0	3722.06	3435.75	2780.44	1987.88	1114.31	871.48	640.86	356.91	26.44		
135.0	3704.06	3625.88	3142.13	2331.00	1581.75	1026.00	724.50	501.19	291.38		
180.0	3715.31	3625.31	3070.13	2264.63	1564.31	981.17	697.33	476.66	109.01		
225.0	3733.88	3564.00	2930.63	2133.56	1275.75	905.74	658.91	382.89	39.04		
270.0	3722.06	3497.06	2863.13	2117.25	1378.13	887.63	645.75	372.94	26.78		
315.0	3704.06	3267.56	2492.44	1737.00	1116.34	732.88	563.34	203.57	16.93		
360.0	3715.31	3353.06	2598.19	1839.38	1197.00	791.44	587.81	325.13	18.96		
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0		
0.0	10.29	8.89	8.10	7.76	7.48	7.43	10.58	8.27	7.20		
45.0	10.69	8.94	8.04	7.59	7.48	7.59	11.53	10.69	7.43		
90.0	10.97	9.06	8.10	7.65	7.43	7.54	10.24	9.73	7.43		
135.0	14.23	9.90	8.61	7.88	7.43	7.37	7.48	11.19	7.37		
180.0	12.49	9.68	8.38	7.65	7.20	7.20	7.31	9.00	7.20		
225.0	11.25	9.17	8.16	7.54	7.26	7.26	11.14	8.16	7.26		
270.0	10.97	9.17	8.16	7.59	7.26	7.31	10.18	9.84	7.26		
315.0	9.90	8.61	7.88	7.48	7.37	7.37	11.87	7.59	7.31		
360.0	10.29	8.89	8.10	7.76	7.48	7.43	10.58	8.27	7.20		
C/ γ (°)	90.0										
0.0	7.03										
45.0	7.09										
90.0	7.14										
135.0	7.09										
180.0	7.03										
225.0	7.14										
270.0	7.14										
315.0	7.09										
360.0	7.03										