



NATA LIGHTING CO.,LTD.
www.nata.cn
Email:info@nata.com
Tel:+86-750-3770000 Fax:+86-750-3771111
Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

Nata

Client:

LumCAT: 3-2035-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): 78

Width(mm): 78

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1826.43, Efficiency(%): 89.09% , Luminous Efficacy(lm/W): 119.84

Central intensity(cd): 3058.172, Maximum intensity(cd): 3058.172

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=43.6

[C90/270]Total=43.6

Field angle(10%Imax): [C0/180]Total=74.4

[C90/270]Total=74.4

Maximum s/h(1/2): C0_180=0.70 C90_270=0.70

Maximum s/h(1/4): C0_180=0.72 C90_270=0.72

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 89.09%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.488%

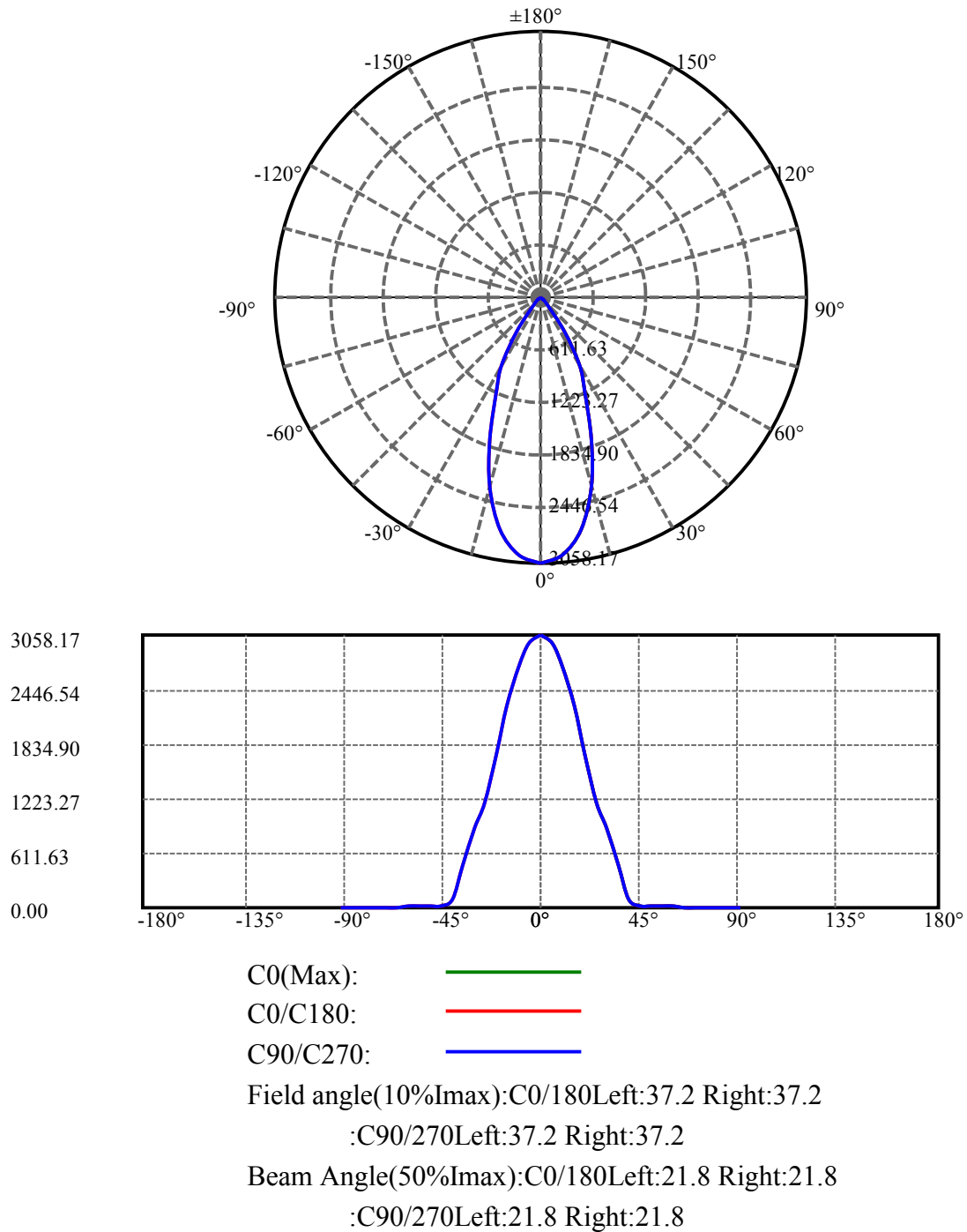
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3058.172	0.000	0	.000%	.000%
5.0	2966.414	72.022	72.022	3.513%	3.943%
10.0	2700.563	202.726	274.748	9.889%	15.043%
15.0	2261.109	294.323	569.071	14.357%	31.157%
20.0	1731.305	329.031	898.102	16.050%	49.172%
25.0	1175.850	304.907	1203.009	14.874%	65.867%
30.0	899.466	262.633	1465.642	12.811%	80.246%
35.0	481.430	203.346	1668.988	9.919%	91.380%
40.0	88.291	95.054	1764.042	4.637%	96.584%
45.0	15.701	19.255	1783.297	.939%	97.638%
50.0	12.255	5.649	1788.946	.276%	97.948%
55.0	10.898	5.034	1793.98	.246%	98.223%
60.0	10.062	4.845	1798.825	.236%	98.488%
65.0	9.415	4.735	1803.56	.231%	98.748%
70.0	8.944	4.649	1808.208	.227%	99.002%
75.0	8.613	4.589	1812.798	.224%	99.253%
80.0	8.430	4.560	1817.358	.222%	99.503%
85.0	8.311	4.549	1821.907	.222%	99.752%
90.0	8.220	4.526	1826.433	.221%	100.000%

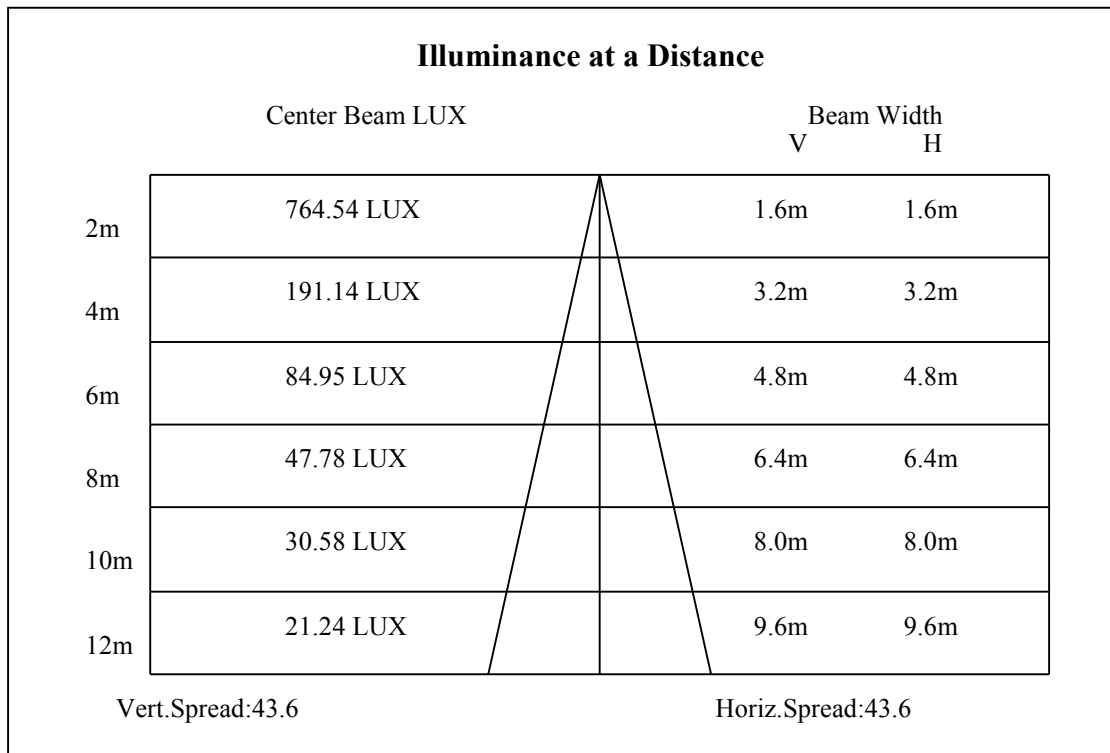
ZONAL LUMEN SUMMARY

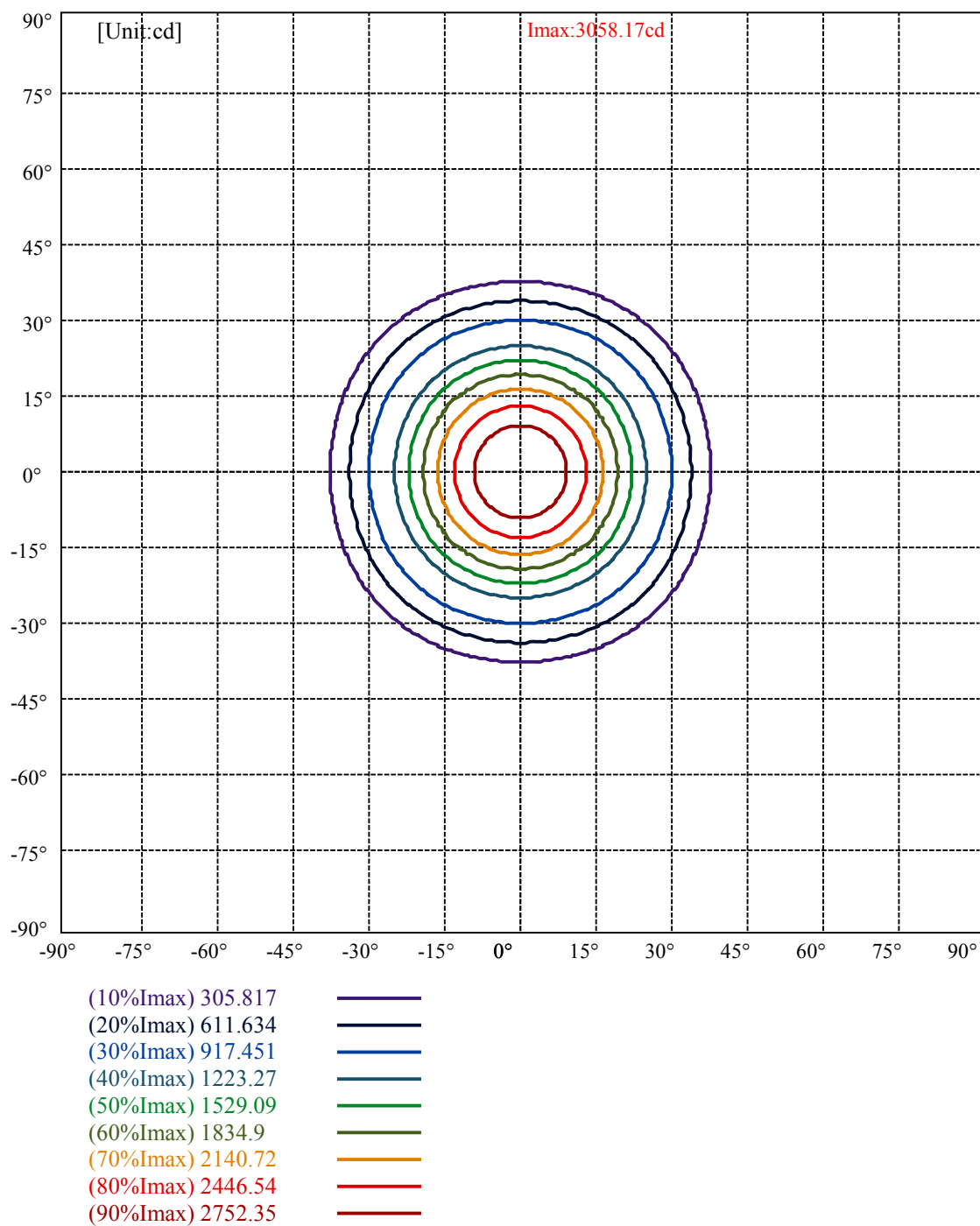
Zone	Lumens	%Lamp	%Fixt
0-30	1465.64	71.49%	80.25%
0-40	1764.04	86.05%	96.58%
0-60	1798.83	87.75%	98.49%
0-90	1821.91	88.87%	99.75%
0-120	1821.91	88.87%	99.75%
0-180	1826.43	89.09%	100.00%
60-90	27.93	1.36%	1.53%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-29.91	1461.15	71.28%	80.00%

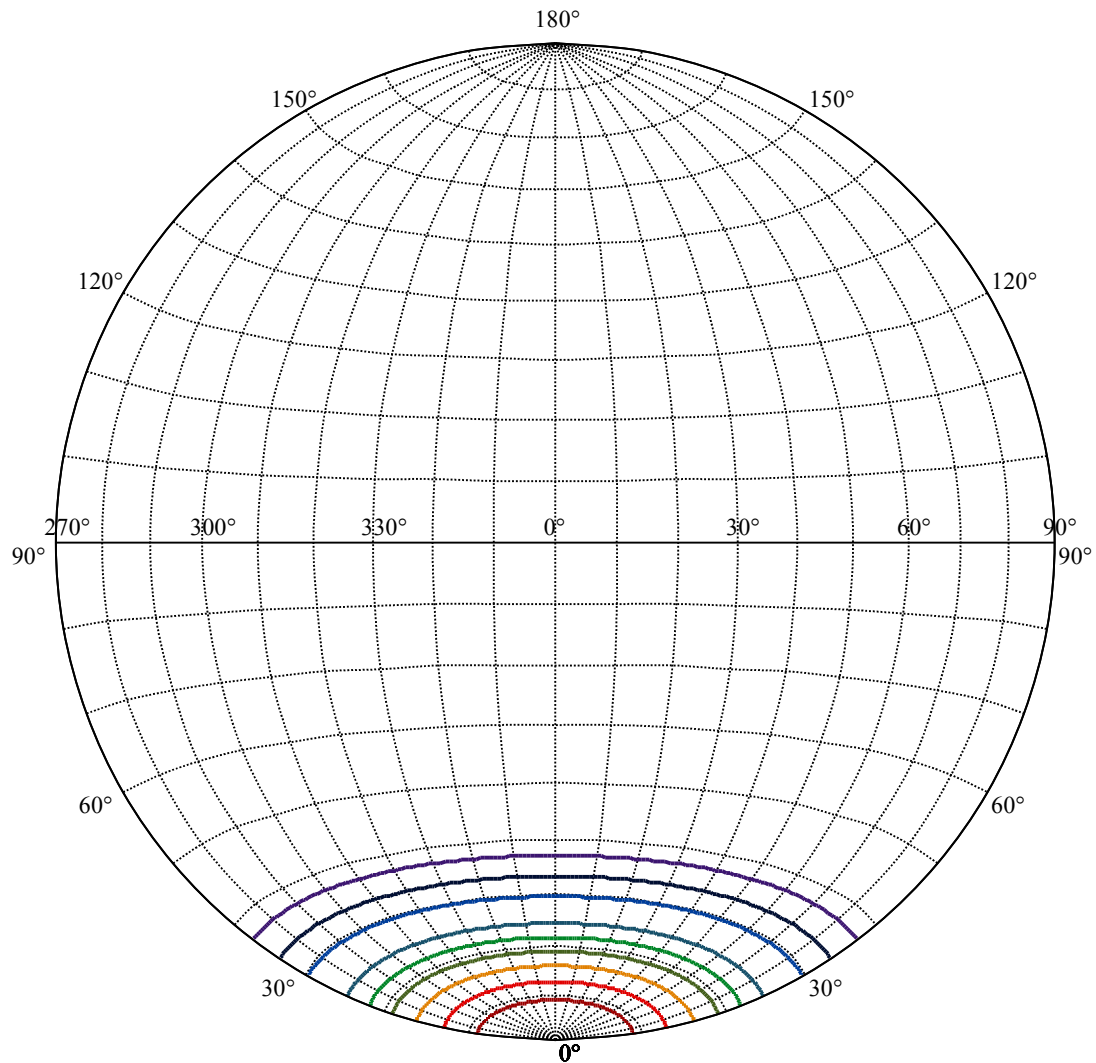
ZONAL LUMEN SUMMARY

0-10	274.75
10-20	623.35
20-30	567.54
30-40	298.40
40-50	24.90
50-60	9.88
60-70	9.38
70-80	9.15
80-90	4.55
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









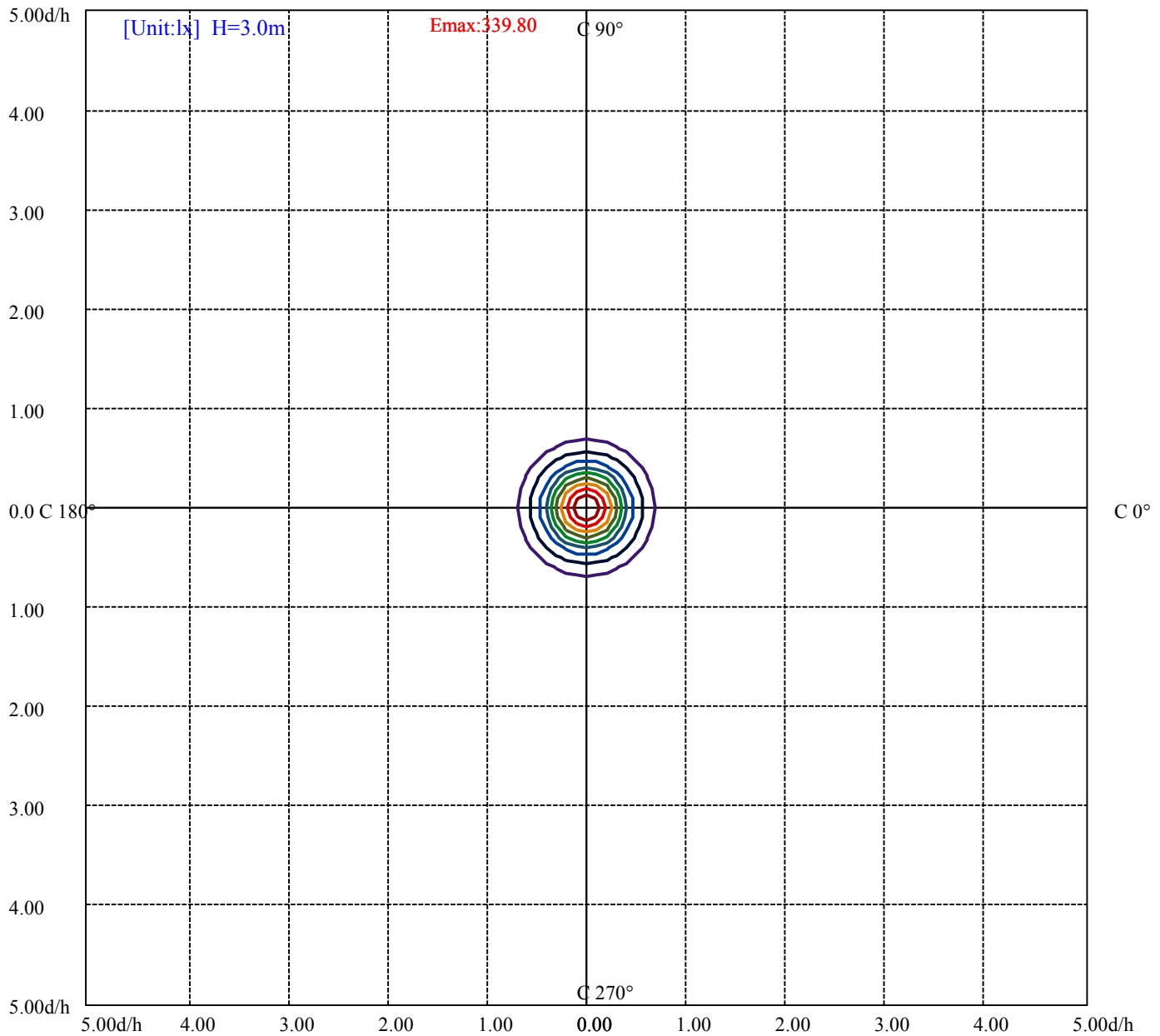
House

[Unit:cd]

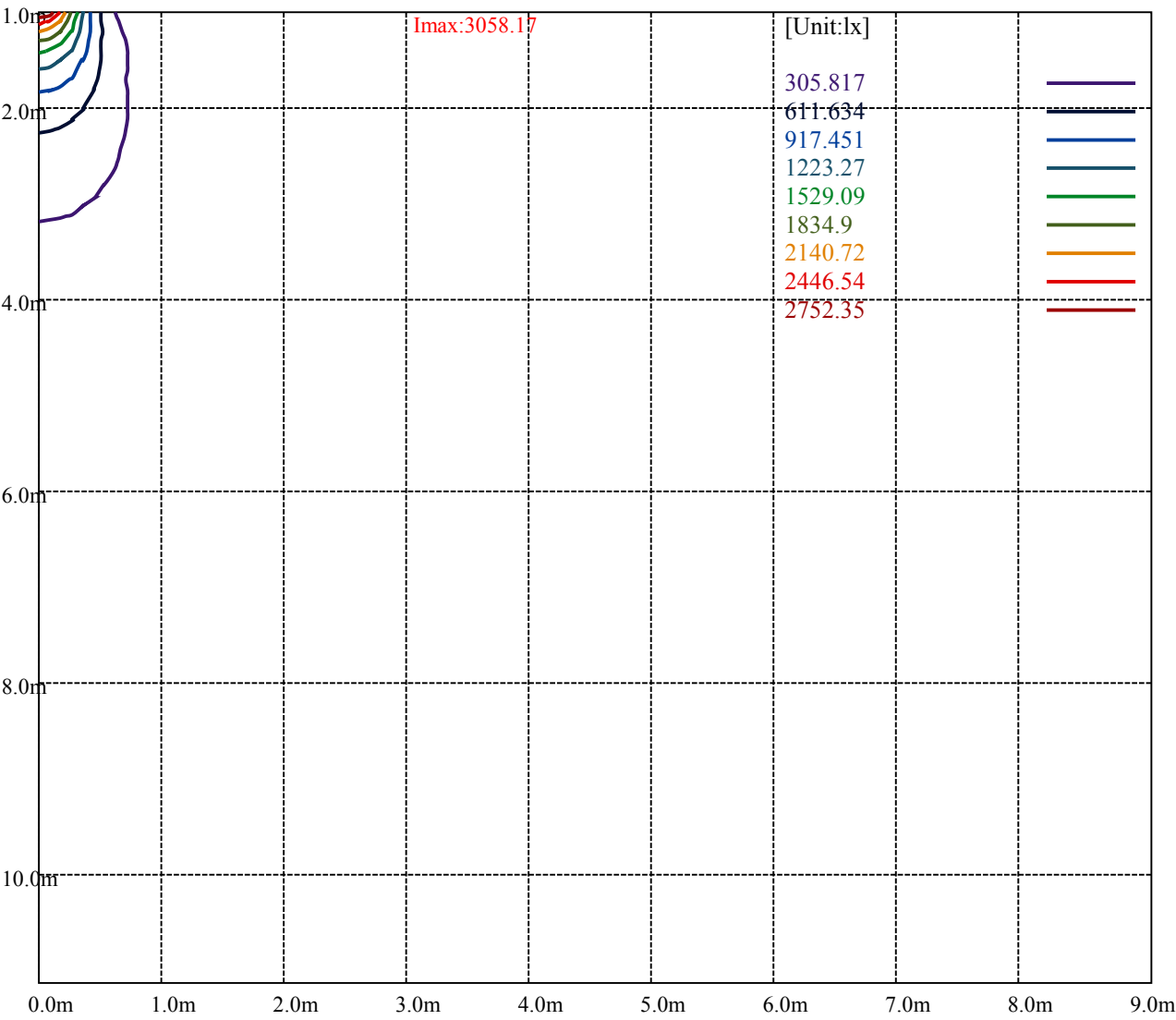
Road

Imax:3058.17

(10%Imax)	305.817	
(20%Imax)	611.634	
(30%Imax)	917.451	
(40%Imax)	1223.27	
(50%Imax)	1529.09	
(60%Imax)	1834.9	
(70%Imax)	2140.72	
(80%Imax)	2446.54	
(90%Imax)	2752.35	



(10%Emax)	33.97966	—
(20%Emax)	67.95933	—
(30%Emax)	101.939	—
(40%Emax)	135.9189	—
(50%Emax)	169.8978	—
(60%Emax)	203.8778	—
(70%Emax)	237.8578	—
(80%Emax)	271.8378	—
(90%Emax)	305.8167	—



Luminance Table

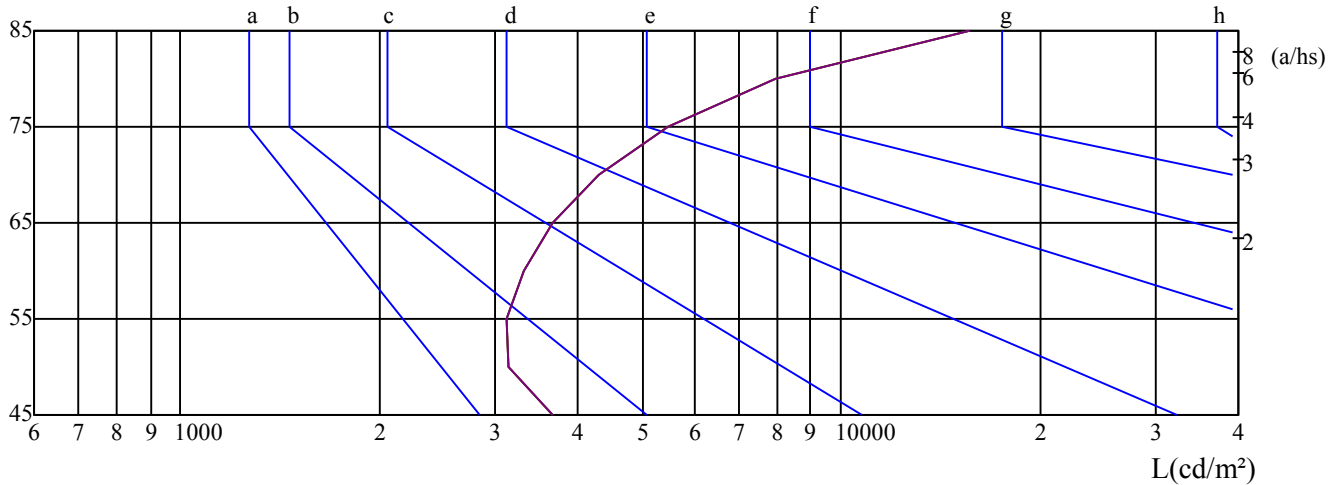
γ	45	50	55	60	65	70	75	80	85
C0	3650	3134	3123	3308	3662	4298	5470	7980	15673
C45	3650	3134	3123	3308	3662	4298	5470	7980	15673
C90	3650	3134	3123	3308	3662	4298	5470	7980	15673

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3662	3662	3662	5470	5470	5470	15673	15673	15673

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

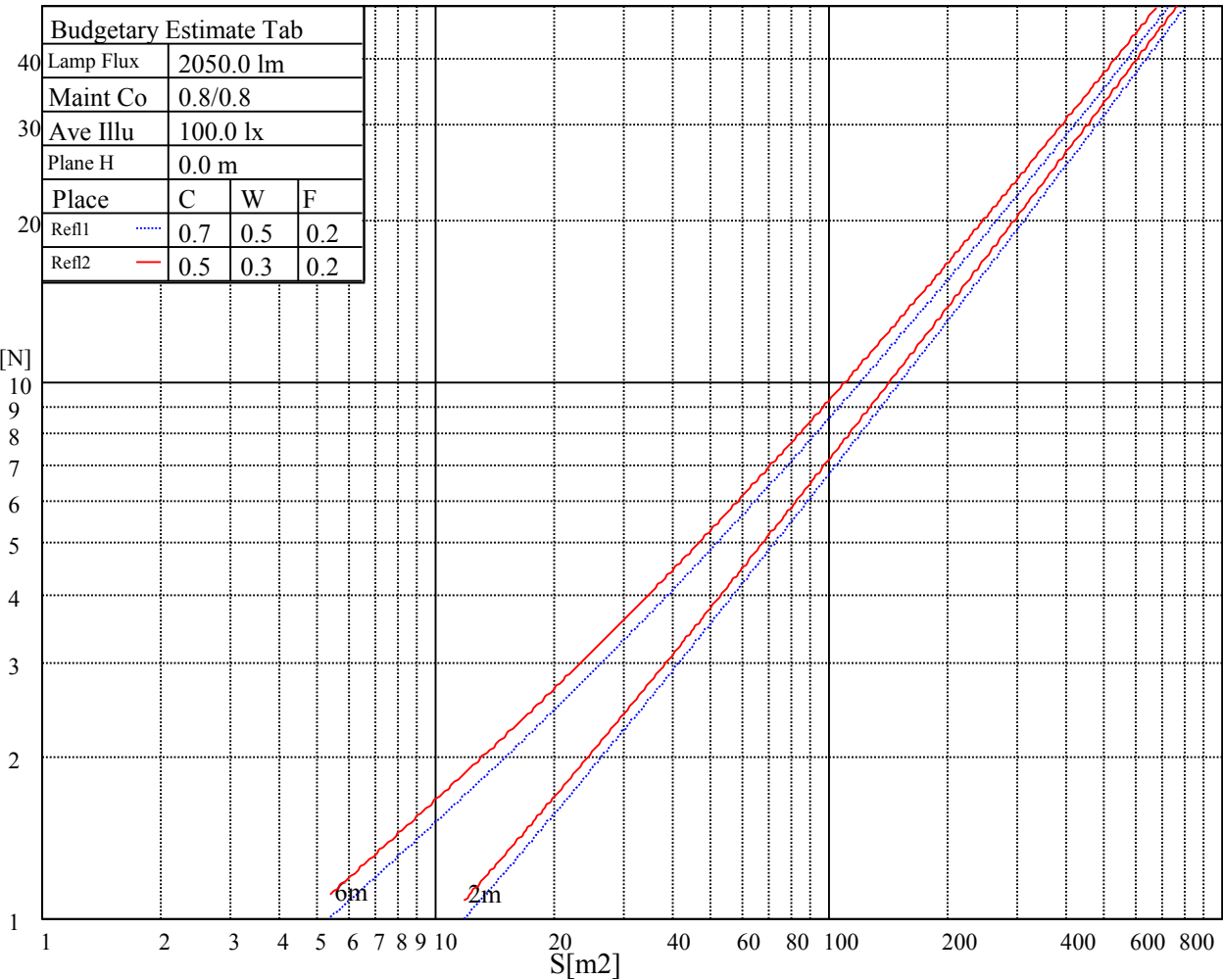
Luminance Limiting Curve

 $\gamma(^{\circ})$ 

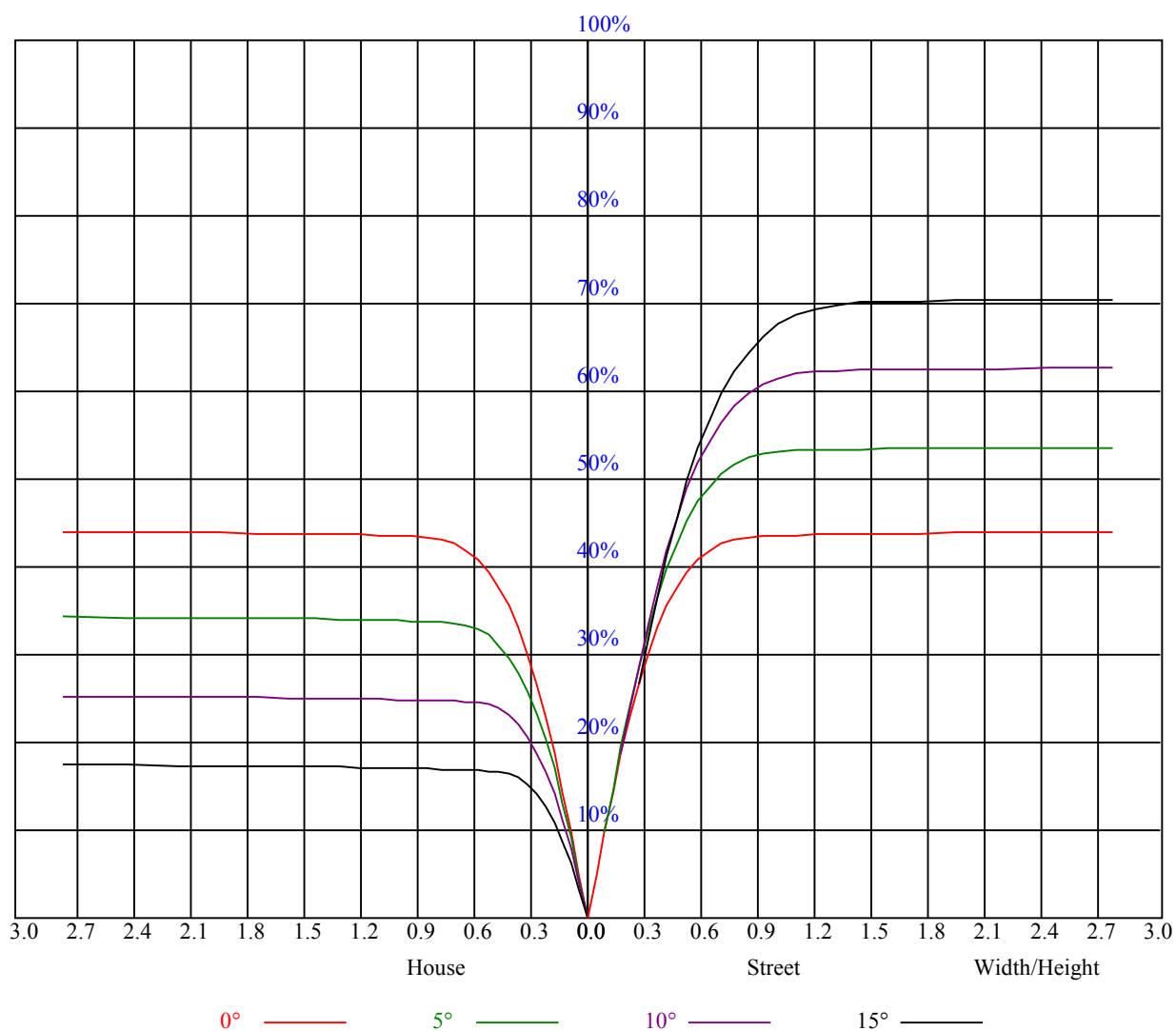
C0 ———

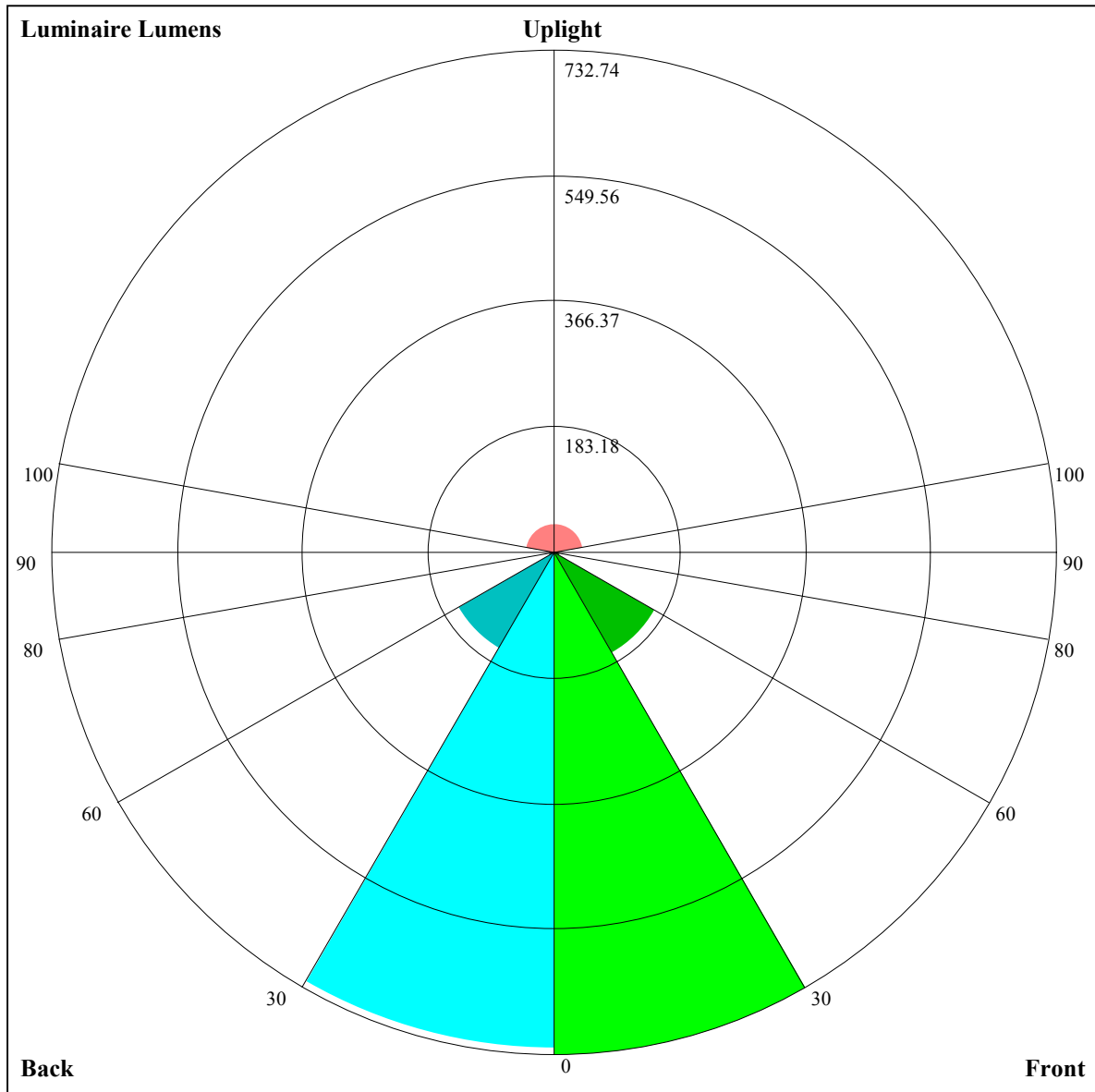
C45 ———

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	1.06	1.06	1.06	1.04	1.04	1.04	0.99	0.99	0.99	0.95	0.95	0.95	0.91	0.91	0.91	0.89
1	0.99	0.97	0.95	0.97	0.95	0.93	0.93	0.92	0.90	0.90	0.89	0.88	0.87	0.86	0.85	0.84
2	0.93	0.89	0.86	0.91	0.88	0.85	0.88	0.86	0.84	0.86	0.84	0.82	0.83	0.82	0.80	0.79
3	0.87	0.83	0.80	0.86	0.82	0.79	0.84	0.80	0.78	0.81	0.79	0.77	0.79	0.77	0.75	0.74
4	0.82	0.77	0.74	0.81	0.77	0.74	0.79	0.76	0.73	0.77	0.74	0.72	0.76	0.73	0.71	0.70
5	0.78	0.73	0.69	0.77	0.72	0.69	0.75	0.71	0.68	0.74	0.70	0.68	0.72	0.69	0.67	0.66
6	0.73	0.69	0.65	0.73	0.68	0.65	0.71	0.67	0.64	0.70	0.67	0.64	0.69	0.66	0.63	0.62
7	0.70	0.65	0.61	0.69	0.64	0.61	0.68	0.64	0.61	0.67	0.63	0.60	0.66	0.63	0.60	0.59
8	0.66	0.61	0.58	0.66	0.61	0.58	0.65	0.61	0.58	0.64	0.60	0.57	0.63	0.60	0.57	0.56
9	0.63	0.58	0.55	0.63	0.58	0.55	0.62	0.58	0.55	0.61	0.57	0.54	0.60	0.57	0.54	0.53
10	0.60	0.55	0.52	0.60	0.55	0.52	0.59	0.55	0.52	0.58	0.55	0.52	0.58	0.54	0.52	0.51





Luminaire Lumens:

FL=732.74,FM=170.42,FH=9.3,FVH=4.54

BL=724.32,BM=162.14,BH=9.23,BVH=4.53

UL=8.97,UH=42.68

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	3059.44	2980.13	2727.56	2286.56	1755.00	1239.19	939.94	519.19	96.69		
45.0	3054.94	2981.81	2735.44	2288.25	1827.00	1231.88	923.63	515.81	107.78		
90.0	3053.25	2941.31	2652.75	2183.63	1648.69	1118.53	830.48	418.28	48.99		
135.0	3065.06	2963.25	2729.81	2319.75	1766.81	1213.88	906.75	506.81	86.91		
180.0	3059.44	2951.44	2648.81	2232.56	1666.13	1116.28	879.69	430.88	51.47		
225.0	3054.94	2958.19	2666.81	2218.50	1679.06	1119.60	886.05	433.97	52.37		
270.0	3053.25	2998.69	2764.69	2343.38	1827.56	1257.19	933.19	574.31	189.68		
315.0	3065.06	2956.50	2678.63	2216.25	1680.19	1110.26	896.01	452.19	72.45		
360.0	3059.44	2980.13	2727.56	2286.56	1755.00	1239.19	939.94	519.19	96.69		
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0		
0.0	17.44	12.66	11.08	10.18	9.51	9.00	8.61	8.44	8.27		
45.0	16.26	12.32	10.97	10.13	9.45	9.00	8.66	8.44	8.27		
90.0	14.12	11.70	10.63	9.90	9.23	8.83	8.55	8.38	8.27		
135.0	15.41	12.09	10.86	10.07	9.45	8.94	8.66	8.49	8.38		
180.0	14.34	11.87	10.63	9.90	9.28	8.83	8.55	8.33	8.27		
225.0	14.12	12.04	10.74	9.90	9.34	8.89	8.55	8.38	8.27		
270.0	17.27	12.77	11.19	10.24	9.56	9.06	8.66	8.49	8.33		
315.0	16.65	12.60	11.08	10.18	9.51	9.00	8.66	8.49	8.44		
360.0	17.44	12.66	11.08	10.18	9.51	9.00	8.61	8.44	8.27		
C/γ(°)	90.0										
0.0	8.21										
45.0	8.21										
90.0	8.21										
135.0	8.21										
180.0	8.21										
225.0	8.27										
270.0	8.21										
315.0	8.21										
360.0	8.21										