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Nata

Client:

LumCAT: 1655-S

Luminaire: 92.70.064.00

Report No: GC2019091909

Test No: NATA07

LampCAT: TRIDONIC SLE G7 9MM

Lamp flux(lm): 1011.0

Number of Lamps: 1

Length(mm): 32

Phm Type: C

Voltage(V): 220.5000

Current(A): 0.0410

Power (W): 8.2800

PF: 0.8970

Ballast type: AC

Width(mm): 32

Height(mm): 0

Photometric Results

Lumens(lm): 841.87, Efficiency(%): 83.27% , Luminous Efficacy(lm/W): 101.67

Central intensity(cd): 1630.196, Maximum intensity(cd): 1630.196

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=39.6

[C90/270]Total=39.6

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

[C90/270]Total=71.6

Maximum s/h(1/2): C0_180=0.64 C90_270=0.64

Maximum s/h(1/4): C0_180=0.64 C90_270=0.64

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 83.27%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.886%

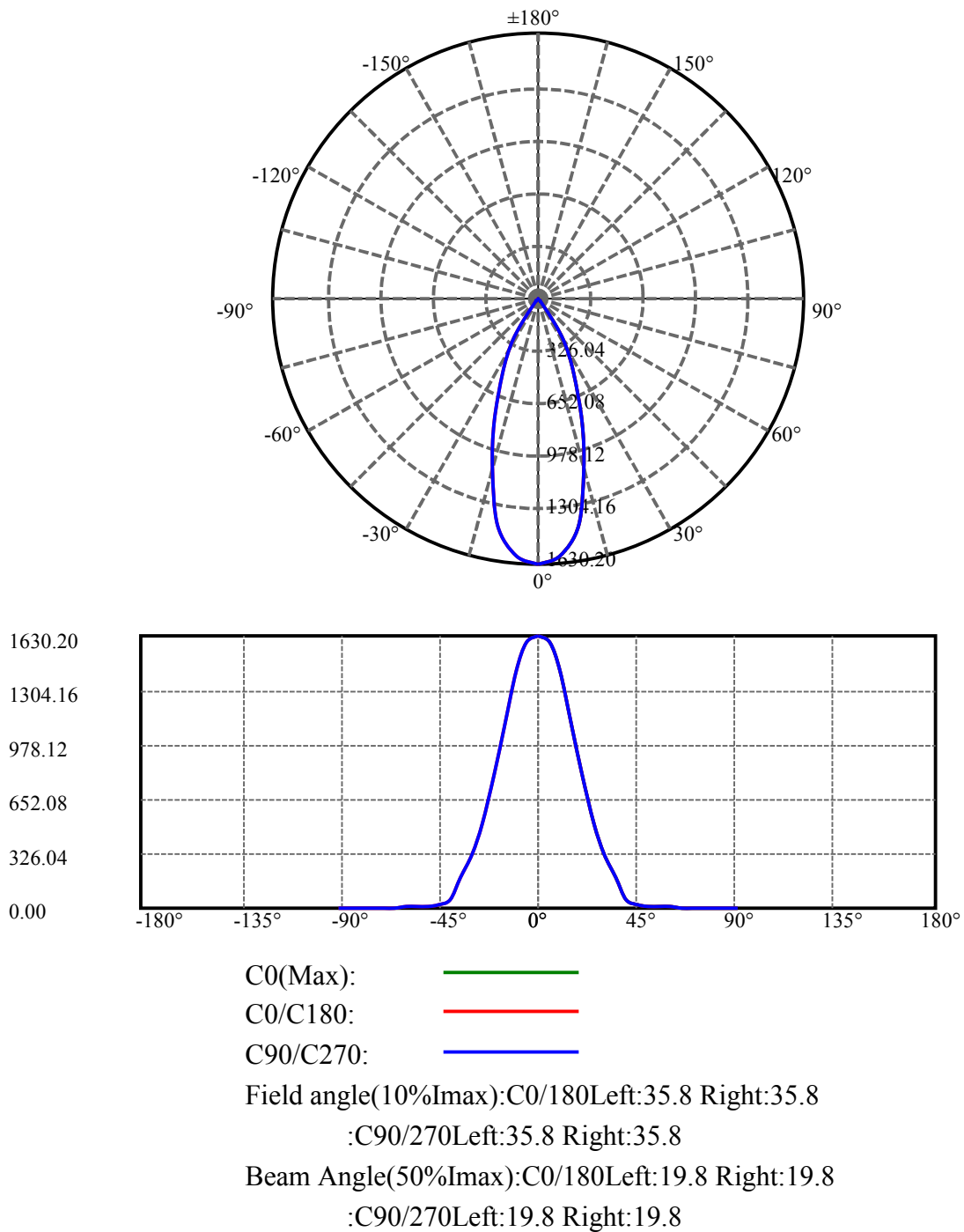
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1630.196	0.000	0	.000%	.000%
5.0	1585.939	38.448	38.448	3.803%	4.567%
10.0	1415.116	107.357	145.805	10.619%	17.319%
15.0	1087.955	148.481	294.286	14.686%	34.956%
20.0	803.097	155.849	450.135	15.415%	53.469%
25.0	506.980	137.403	587.538	13.591%	69.790%
30.0	322.294	104.945	692.483	10.380%	82.256%
35.0	184.796	74.673	767.156	7.386%	91.125%
40.0	49.043	39.014	806.17	3.859%	95.760%
45.0	18.115	12.435	818.604	1.230%	97.237%
50.0	11.972	6.079	824.684	.601%	97.959%
55.0	8.469	4.444	829.128	.440%	98.487%
60.0	6.067	3.360	832.488	.332%	98.886%
65.0	4.519	2.573	835.062	.255%	99.192%
70.0	3.469	2.022	837.084	.200%	99.432%
75.0	2.691	1.610	838.694	.159%	99.623%
80.0	2.100	1.282	839.976	.127%	99.775%
85.0	1.688	1.029	841.005	.102%	99.898%
90.0	1.462	0.862	841.868	.085%	100.000%

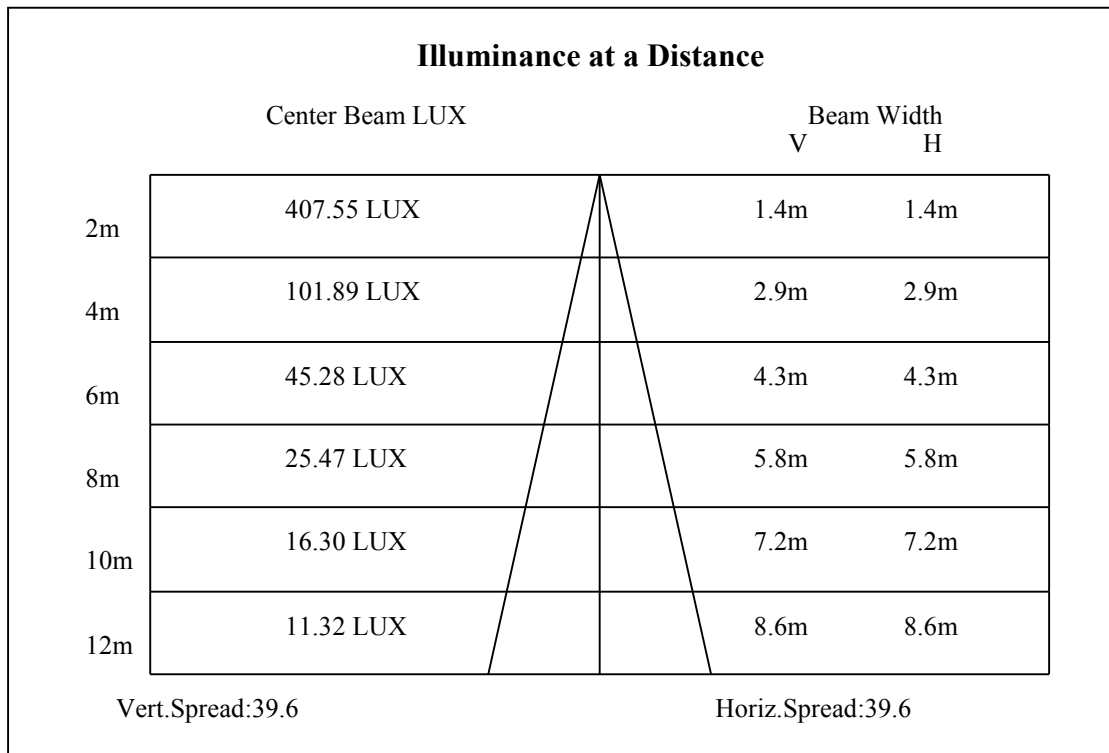
ZONAL LUMEN SUMMARY

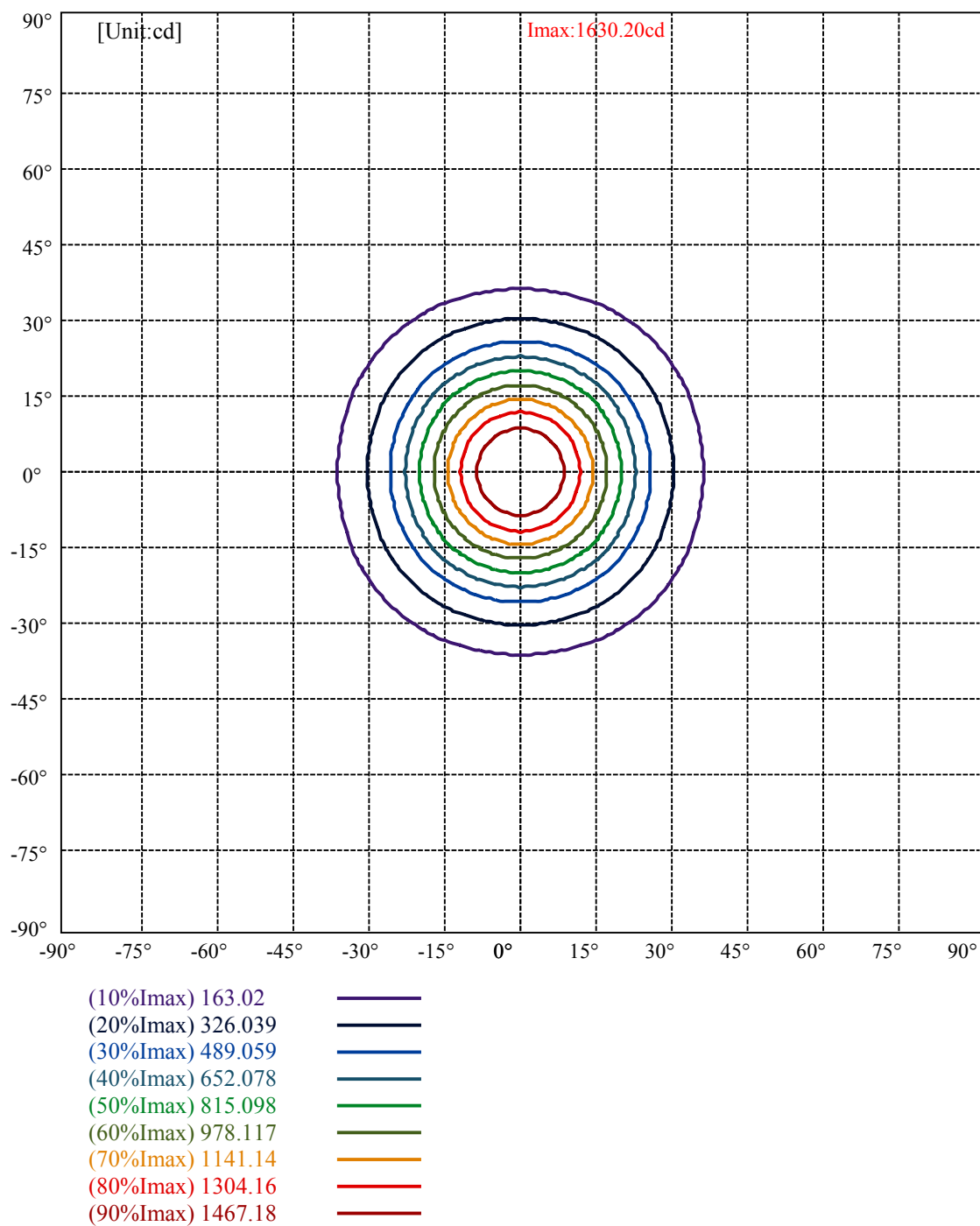
Zone	Lumens	%Lamp	%Fixt
0-30	692.48	68.49%	82.26%
0-40	806.17	79.74%	95.76%
0-60	832.49	82.34%	98.89%
0-90	841.01	83.19%	99.90%
0-120	841.01	83.19%	99.90%
0-180	841.87	83.27%	100.00%
60-90	11.88	1.17%	1.41%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-29.10	673.49	66.62%	80.00%

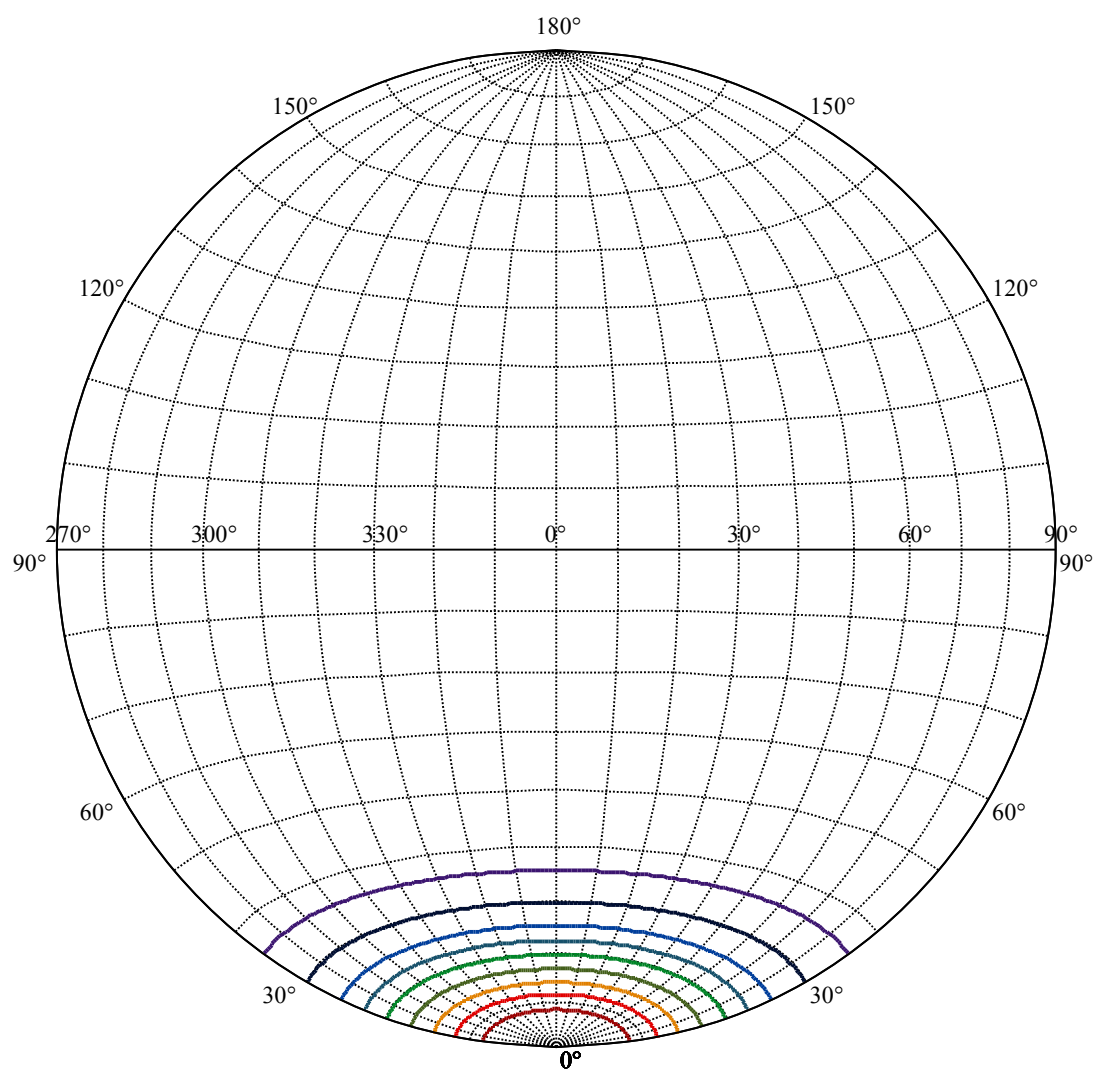
ZONAL LUMEN SUMMARY

0-10	145.81
10-20	304.33
20-30	242.35
30-40	113.69
40-50	18.51
50-60	7.80
60-70	4.60
70-80	2.89
80-90	1.03
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









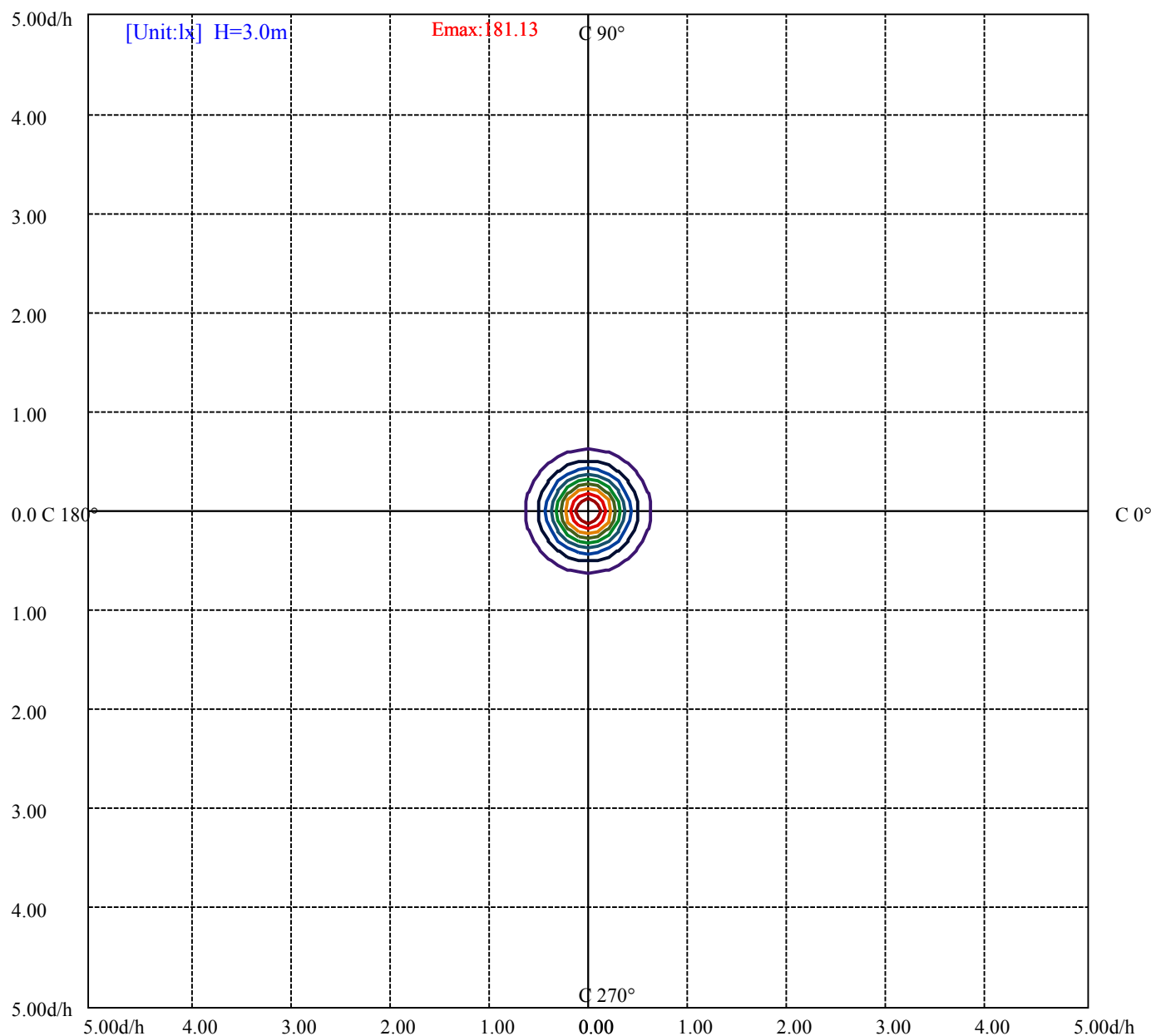
House

[Unit:cd]

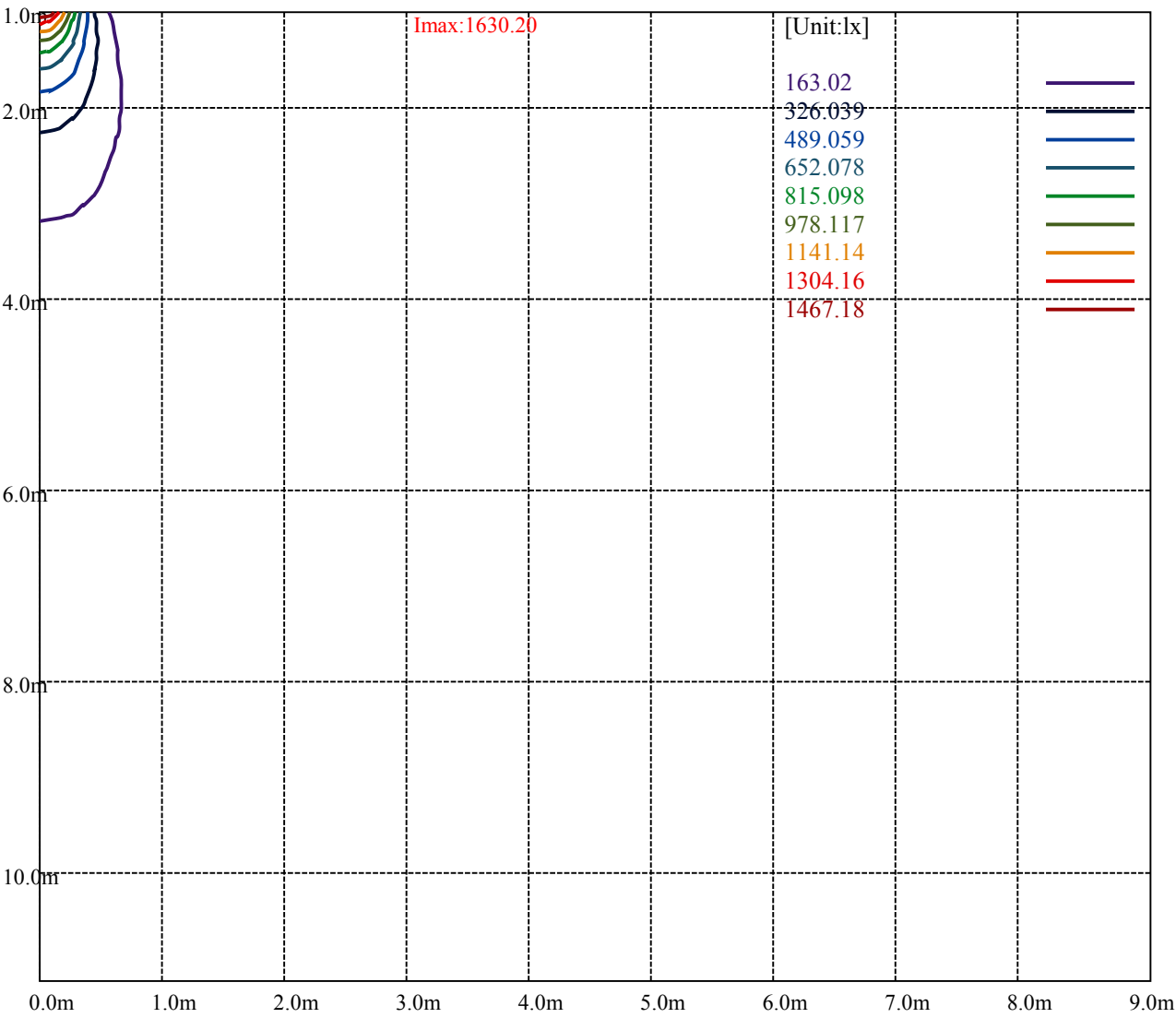
Road

Imax:1630.20

(10%Imax)	163.02	—
(20%Imax)	326.039	—
(30%Imax)	489.059	—
(40%Imax)	652.078	—
(50%Imax)	815.098	—
(60%Imax)	978.117	—
(70%Imax)	1141.14	—
(80%Imax)	1304.16	—
(90%Imax)	1467.18	—



(10%Emax)	18.11322	—
(20%Emax)	36.22655	—
(30%Emax)	54.33978	—
(40%Emax)	72.45311	—
(50%Emax)	90.56633	—
(60%Emax)	108.6797	—
(70%Emax)	126.7933	—
(80%Emax)	144.9067	—
(90%Emax)	163.02	—



Luminance Table

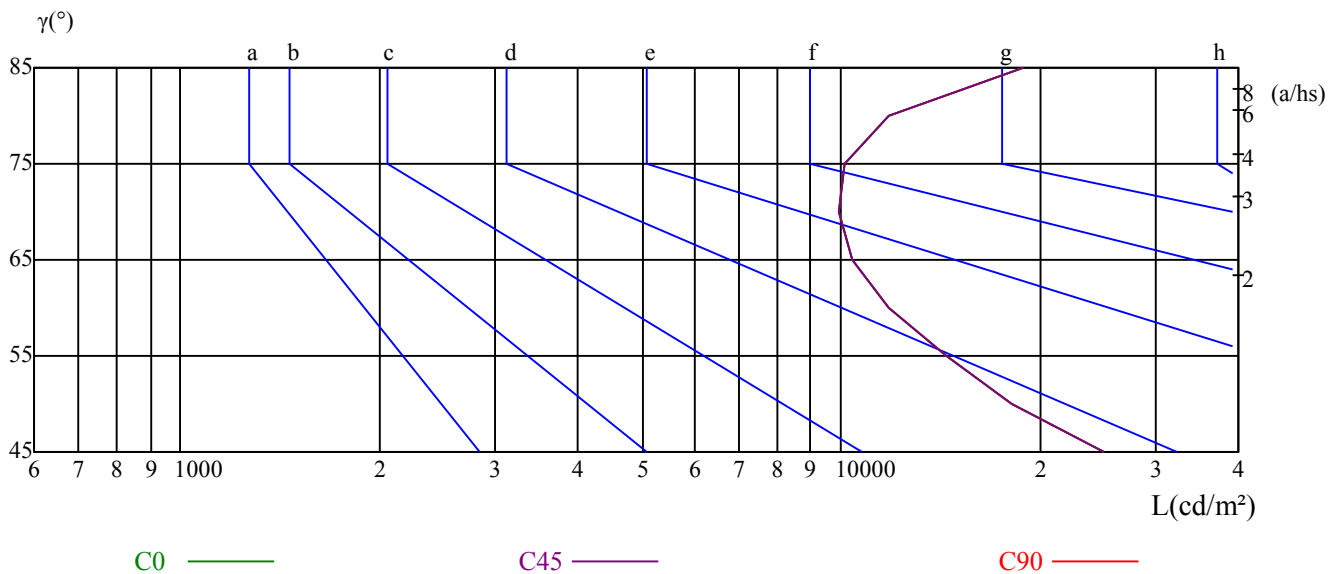
γ	45	50	55	60	65	70	75	80	85
C0	25018	18189	14419	11850	10441	9904	10155	11809	18913
C45	25018	18189	14419	11850	10441	9904	10155	11809	18913
C90	25018	18189	14419	11850	10441	9904	10155	11809	18913

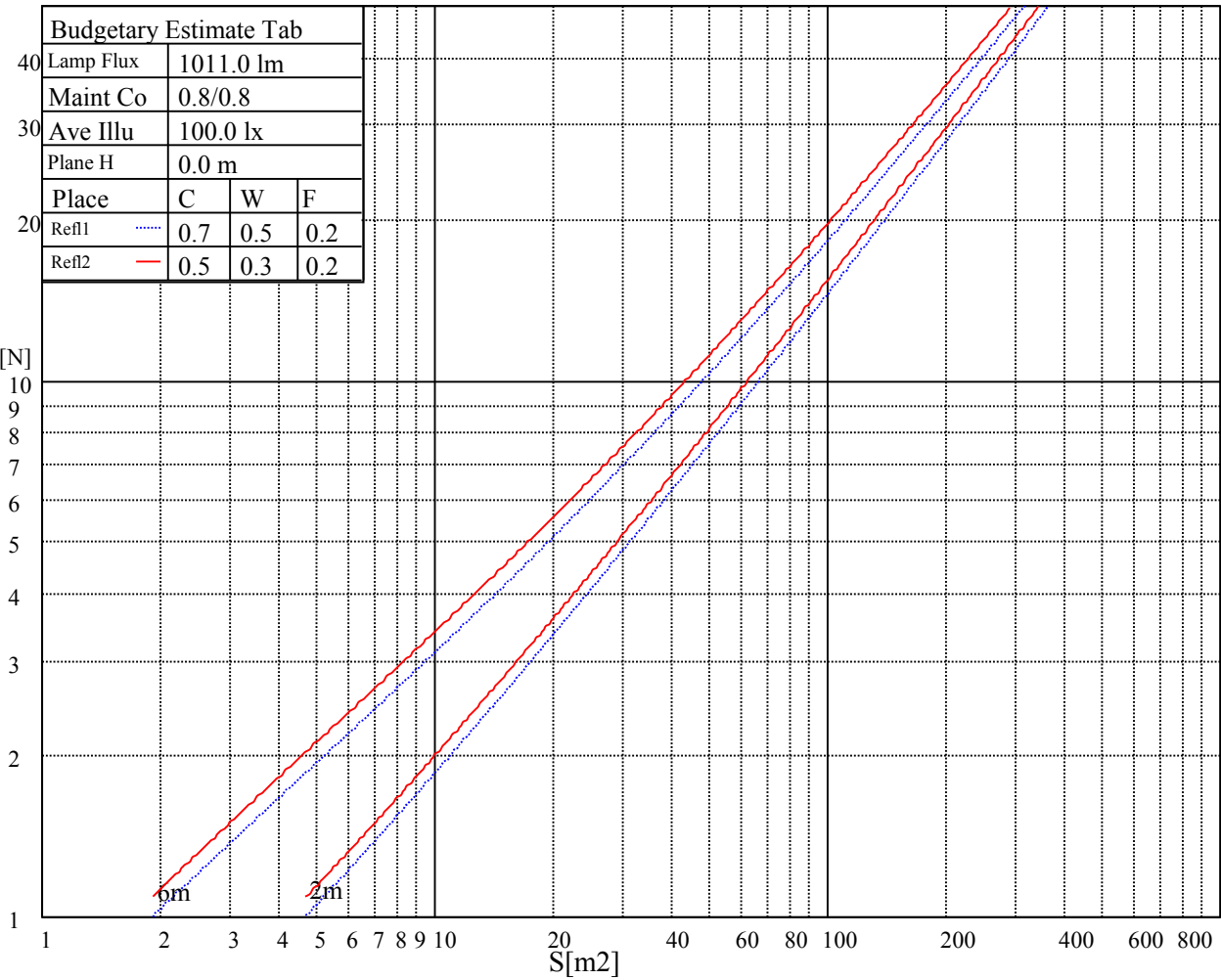
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
10441	10441	10441	10155	10155	10155	18913	18913	18913

Glare Table

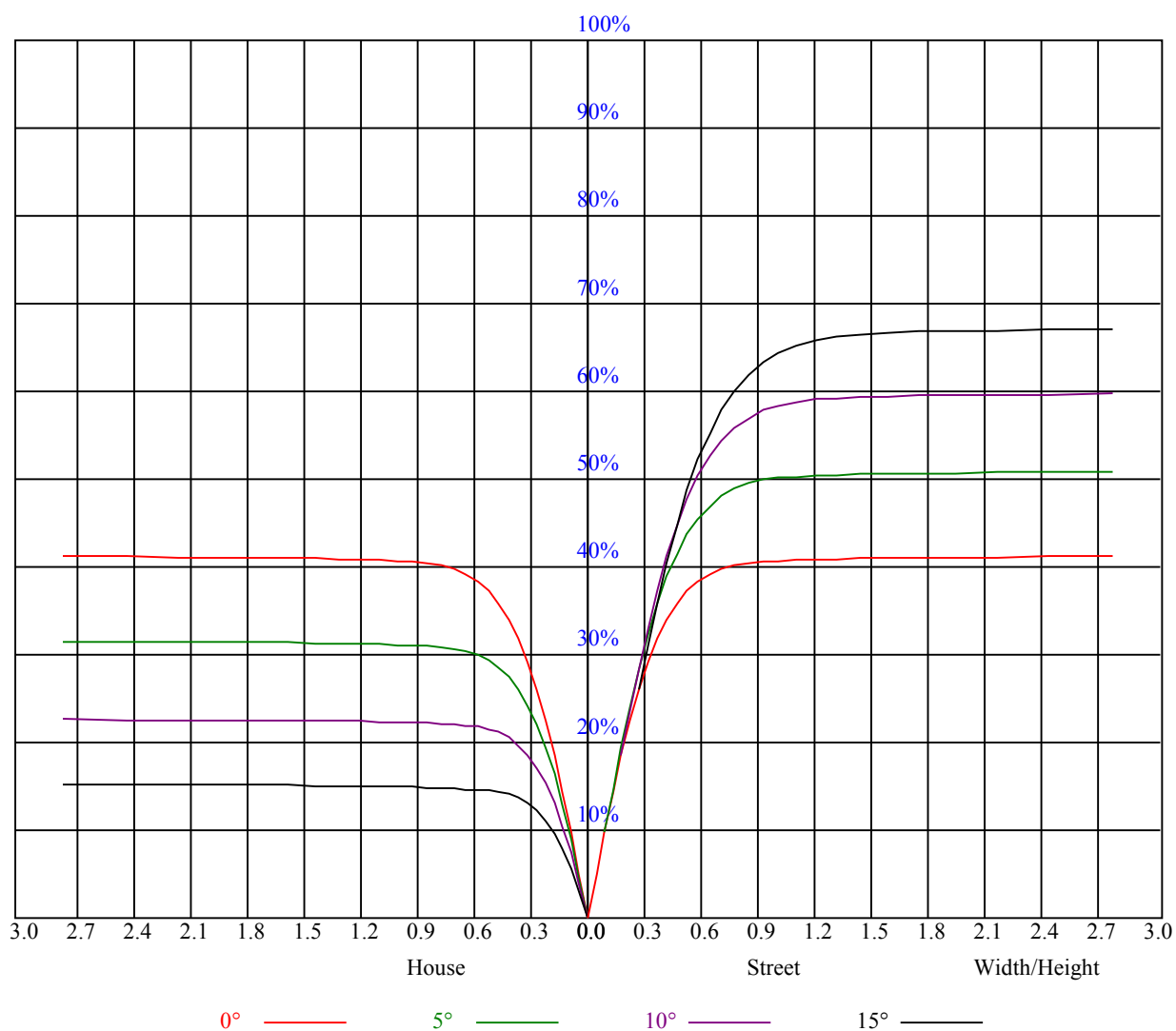
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

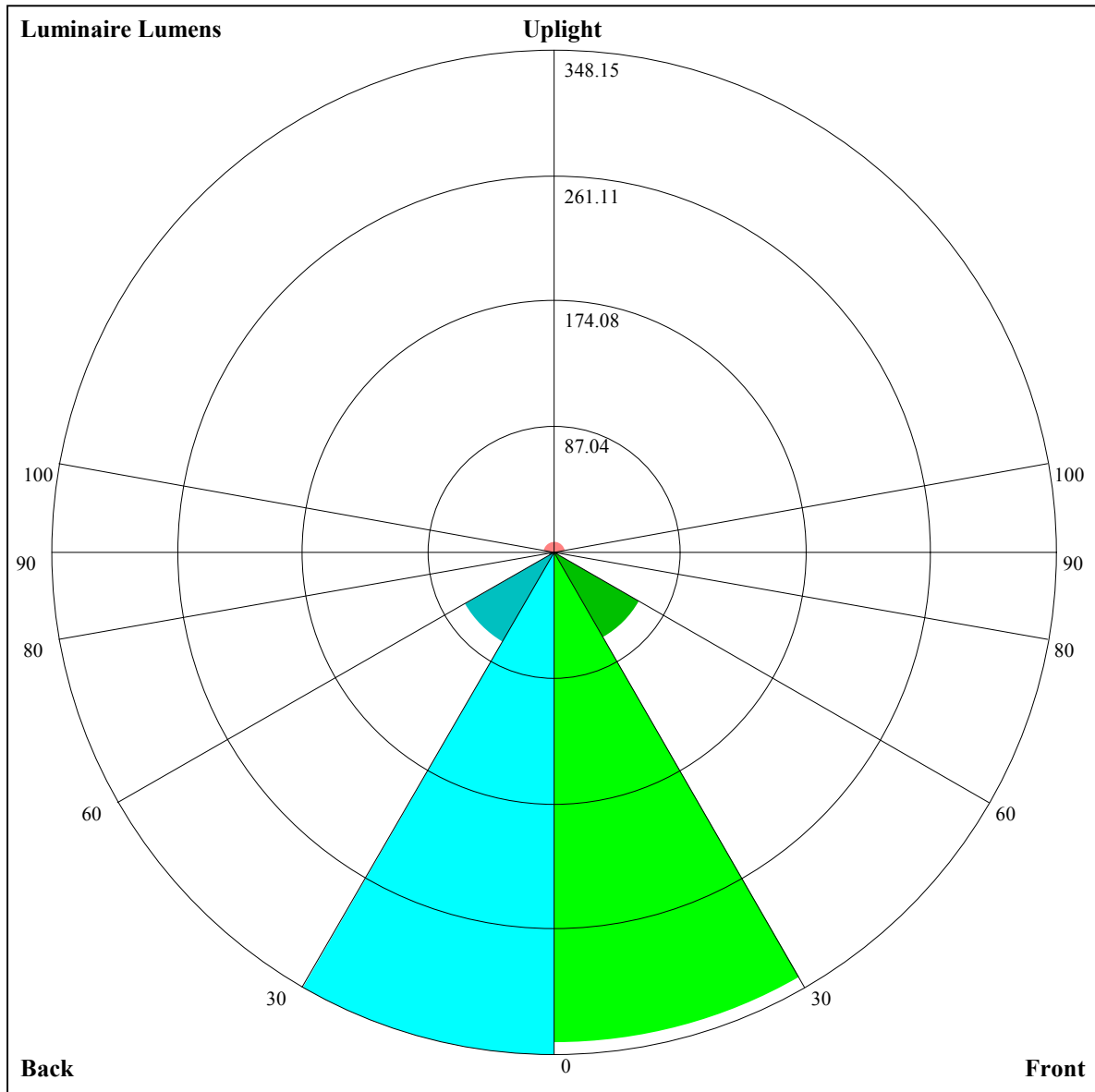
Luminance Limiting Curve





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	0.99	0.99	0.99	0.97	0.97	0.97	0.93	0.93	0.93	0.89	0.89	0.89	0.85	0.85	0.85	0.83
1	0.93	0.91	0.89	0.91	0.89	0.88	0.88	0.86	0.85	0.84	0.83	0.82	0.82	0.81	0.80	0.79
2	0.87	0.84	0.81	0.86	0.83	0.80	0.83	0.81	0.79	0.80	0.79	0.77	0.78	0.77	0.75	0.74
3	0.82	0.78	0.75	0.81	0.77	0.75	0.79	0.76	0.73	0.77	0.74	0.72	0.75	0.73	0.71	0.70
4	0.77	0.73	0.70	0.76	0.73	0.70	0.75	0.71	0.69	0.73	0.70	0.68	0.72	0.69	0.67	0.66
5	0.73	0.69	0.66	0.73	0.68	0.65	0.71	0.68	0.65	0.70	0.67	0.64	0.68	0.66	0.64	0.63
6	0.70	0.65	0.62	0.69	0.65	0.62	0.68	0.64	0.61	0.67	0.63	0.61	0.66	0.63	0.61	0.59
7	0.66	0.62	0.59	0.66	0.61	0.58	0.65	0.61	0.58	0.64	0.60	0.58	0.63	0.60	0.58	0.56
8	0.63	0.59	0.56	0.63	0.58	0.55	0.62	0.58	0.55	0.61	0.58	0.55	0.60	0.57	0.55	0.54
9	0.60	0.56	0.53	0.60	0.56	0.53	0.59	0.55	0.53	0.58	0.55	0.52	0.58	0.55	0.52	0.51
10	0.58	0.53	0.50	0.57	0.53	0.50	0.57	0.53	0.50	0.56	0.53	0.50	0.55	0.52	0.50	0.49





Luminaire Lumens:

FL=340.5,FM=68.14,FH=3.69,FVH=0.91

BL=348.15,BM=71.7,BH=3.8,BVH=0.98

UL=1.59,UH=7.59

BUG Rating:B1-U1-G0

Nata 1655-S

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	1627.41	1567.09	1346.67	881.43	729.74	479.62	297.35	134.76	33.78		
45.0	1628.80	1638.08	1532.28	1289.60	981.01	637.16	435.31	248.30	77.96		
90.0	1638.55	1613.49	1413.49	1159.67	830.43	498.42	332.62	167.47	39.30		
135.0	1626.02	1632.98	1521.15	1239.48	932.29	547.14	368.95	241.34	74.80		
180.0	1627.41	1605.14	1471.96	1223.24	884.49	544.82	351.32	242.27	67.61		
225.0	1628.80	1513.26	1326.72	891.97	639.86	432.39	249.23	90.86	22.55		
270.0	1638.55	1586.11	1412.10	1116.51	778.69	519.30	316.98	245.06	45.94		
315.0	1626.02	1531.36	1296.56	901.76	648.25	396.98	226.59	108.31	30.39		
360.0	1627.41	1567.09	1346.67	881.43	729.74	479.62	297.35	134.76	33.78		
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0		
0.0	16.10	11.04	7.93	5.71	4.18	3.25	2.55	1.86	1.53		
45.0	22.13	12.20	9.05	6.45	4.87	3.62	2.78	2.32	1.67		
90.0	15.96	11.28	7.93	5.80	4.50	3.43	2.69	2.09	1.72		
135.0	22.13	13.87	9.84	6.82	5.10	3.99	3.06	2.37	1.86		
180.0	18.14	12.20	8.45	6.22	4.69	3.62	2.92	2.27	1.86		
225.0	13.60	10.26	7.01	5.29	3.90	3.02	2.41	1.95	1.76		
270.0	19.58	13.04	9.23	6.50	4.69	3.53	2.69	2.04	1.67		
315.0	17.26	11.88	8.31	5.75	4.22	3.29	2.41	1.90	1.44		
360.0	16.10	11.04	7.93	5.71	4.18	3.25	2.55	1.86	1.53		
C/γ(°)	90.0										
0.0	1.35										
45.0	1.48										
90.0	1.53										
135.0	1.48										
180.0	1.62										
225.0	1.48										
270.0	1.44										
315.0	1.30										
360.0	1.35										