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Nata

Client:

LumCAT: 2-2010-M

Luminaire: 92.70.131.00

Report No: GC2019091909

Test No: NATA07

LampCAT: TRIDONIC SLE G7 13MM

Lamp flux(lm): 1835.0

Number of Lamps: 1

Length(mm): 0

Phm Type: C

Voltage(V): 220.4000

Current(A): 0.0700

Power (W): 14.3800

PF: 0.9200

Ballast type: AC

Width(mm): 0

Height(mm): 0

Photometric Results

Lumens(lm): 1582.77, Efficiency(%): 86.25% , Luminous Efficacy(lm/W): 110.07

Central intensity(cd): 1680.543, Maximum intensity(cd): 1680.543

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=63.4

[C90/270]Total=63.4

Field angle(10%Imax): [C0/180]Total=82.4

[C90/270]Total=82.4

Maximum s/h(1/2): C0_180=0.98 C90_270=0.98

Maximum s/h(1/4): C0_180=0.94 C90_270=0.94

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 86.25%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 99.646%

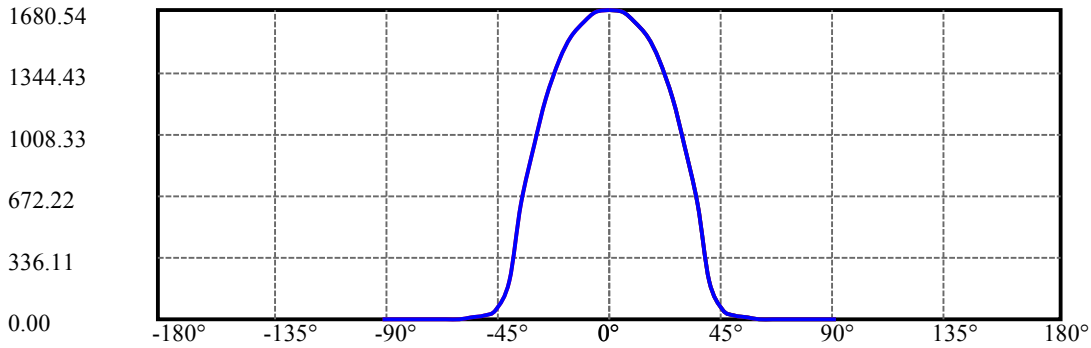
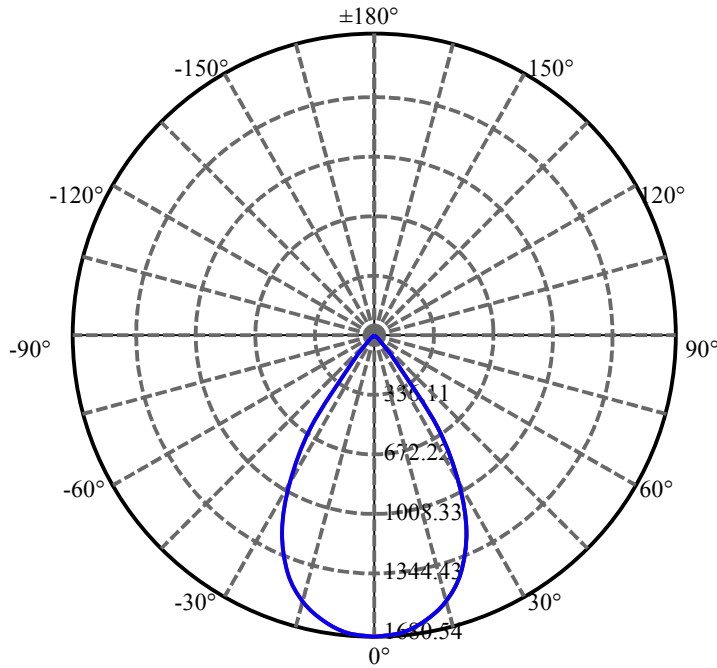
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1680.544	0.000	0	.000%	.000%
5.0	1665.636	40.003	40.003	2.180%	2.527%
10.0	1616.507	117.413	157.415	6.399%	9.946%
15.0	1537.447	187.090	344.506	10.196%	21.766%
20.0	1414.246	243.261	587.767	13.257%	37.135%
25.0	1204.619	274.671	862.437	14.968%	54.489%
30.0	951.112	272.810	1135.247	14.867%	71.725%
35.0	625.024	232.097	1367.344	12.648%	86.389%
40.0	207.742	138.941	1506.284	7.572%	95.168%
45.0	47.239	47.212	1553.496	2.573%	98.150%
50.0	20.325	13.652	1567.148	.744%	99.013%
55.0	9.826	6.556	1573.704	.357%	99.427%
60.0	5.133	3.458	1577.162	.188%	99.646%
65.0	2.564	1.871	1579.033	.102%	99.764%
70.0	1.392	1.002	1580.035	.055%	99.827%
75.0	1.264	0.694	1580.729	.038%	99.871%
80.0	1.247	0.672	1581.401	.037%	99.914%
85.0	1.235	0.675	1582.076	.037%	99.956%
90.0	1.299	0.694	1582.77	.038%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1135.25	61.87%	71.73%
0-40	1506.28	82.09%	95.17%
0-60	1577.16	85.95%	99.65%
0-90	1582.08	86.22%	99.96%
0-120	1582.08	86.22%	99.96%
0-180	1582.77	86.25%	100.00%
60-90	8.37	0.46%	0.53%
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%
0-32.82	1266.22	69.00%	80.00%

ZONAL LUMEN SUMMARY

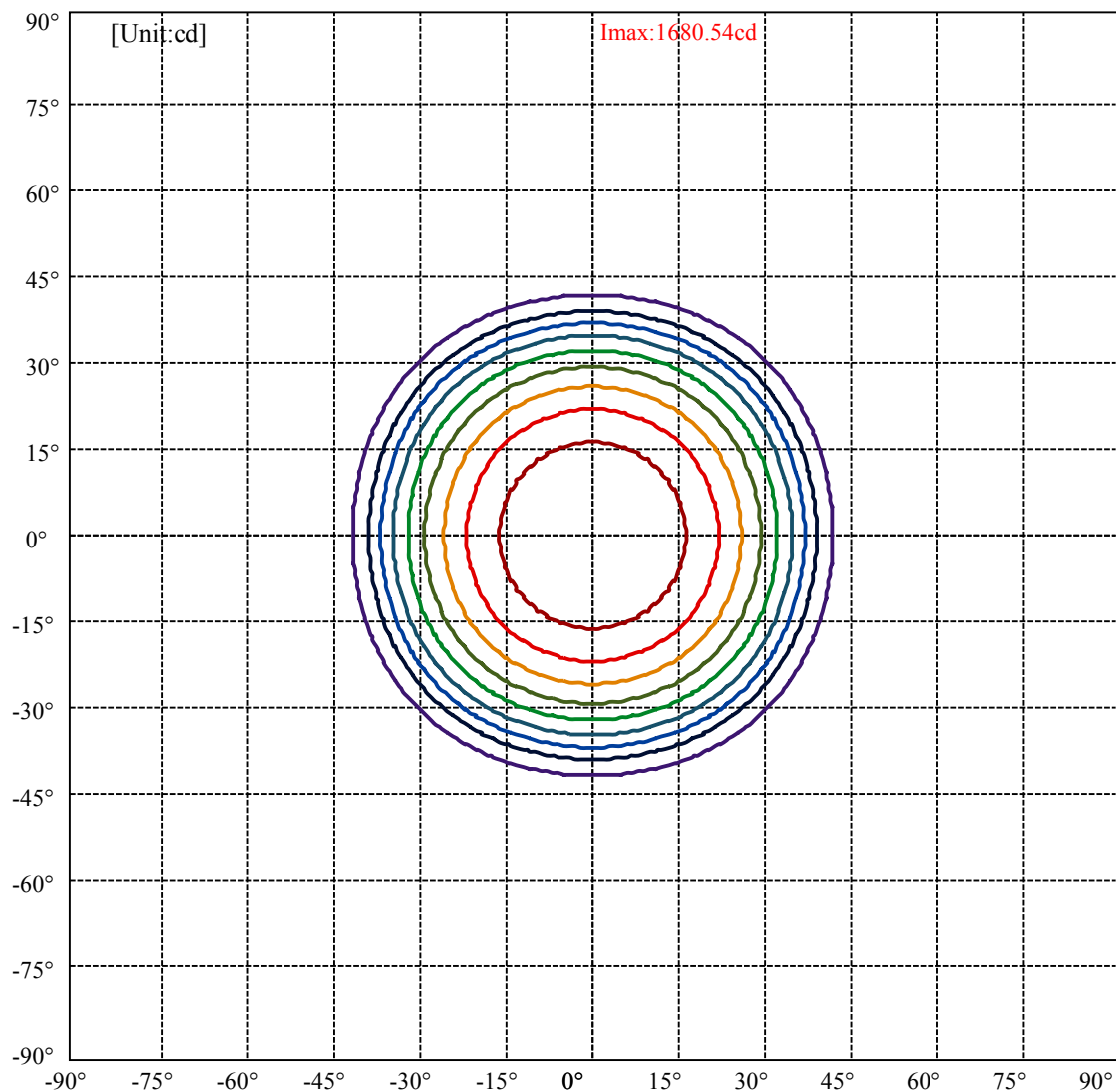
0-10	157.42
10-20	430.35
20-30	547.48
30-40	371.04
40-50	60.86
50-60	10.01
60-70	2.87
70-80	1.37
80-90	0.67
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00



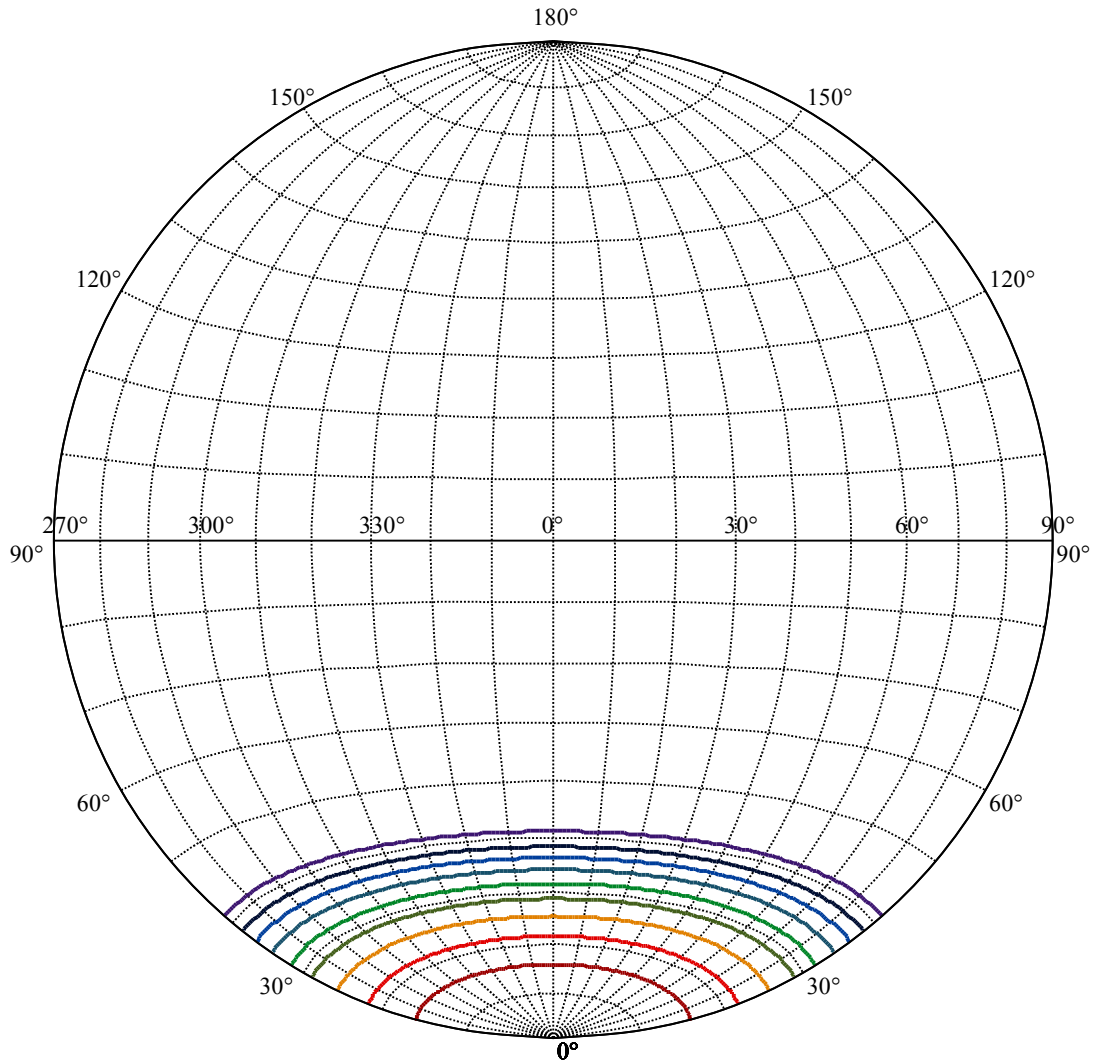
C0(Max): —————
C0/C180: —————
C90/C270: —————

Field angle(10%Imax):C0/180Left:41.2 Right:41.2
:C90/270Left:41.2 Right:41.2

Beam Angle(50%Imax):C0/180Left:31.7 Right:31.7
:C90/270Left:31.7 Right:31.7



(10%Imax) 168.054	—
(20%Imax) 336.109	—
(30%Imax) 504.163	—
(40%Imax) 672.217	—
(50%Imax) 840.272	—
(60%Imax) 1008.33	—
(70%Imax) 1176.38	—
(80%Imax) 1344.43	—
(90%Imax) 1512.49	—



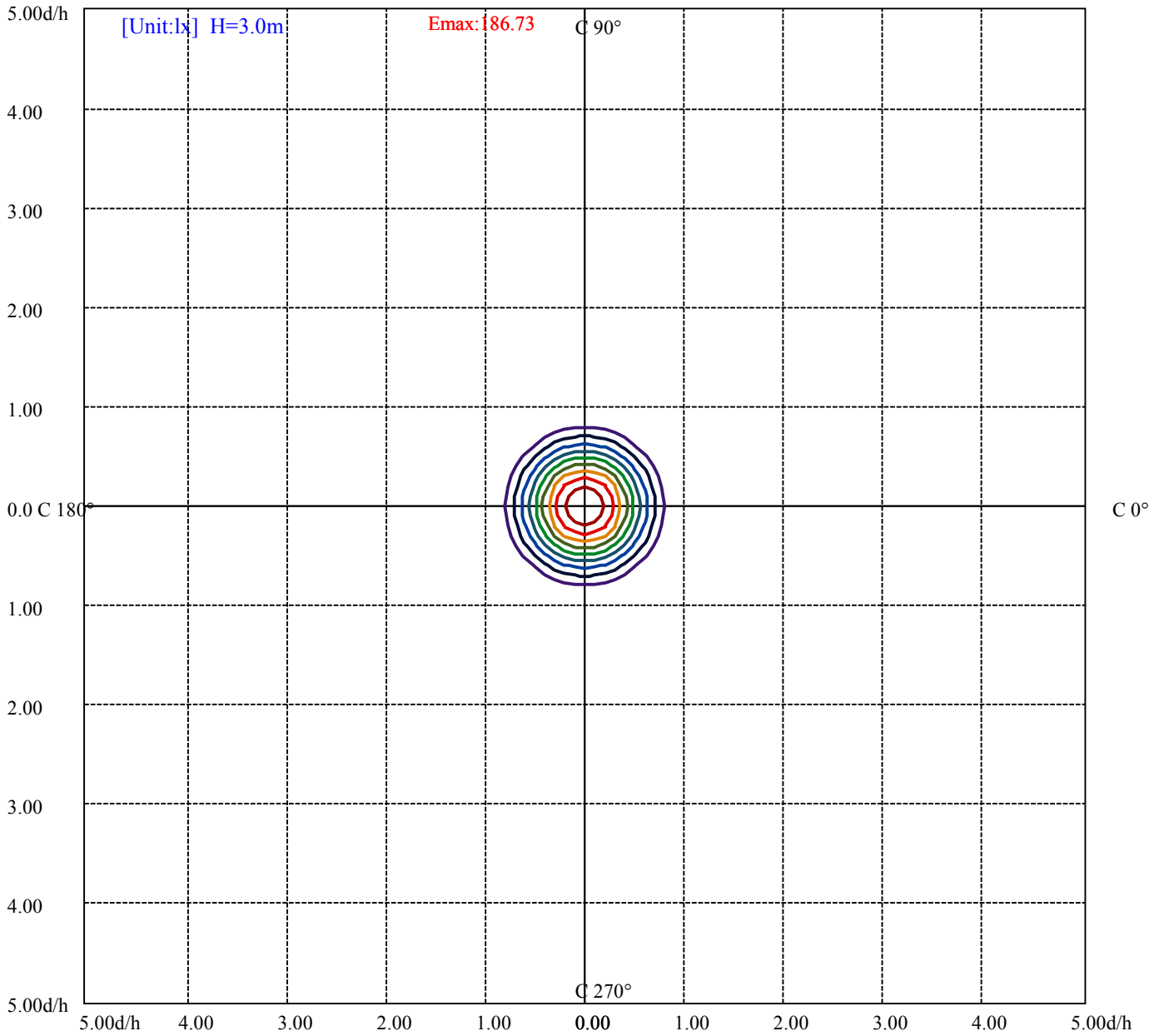
House

[Unit:cd]

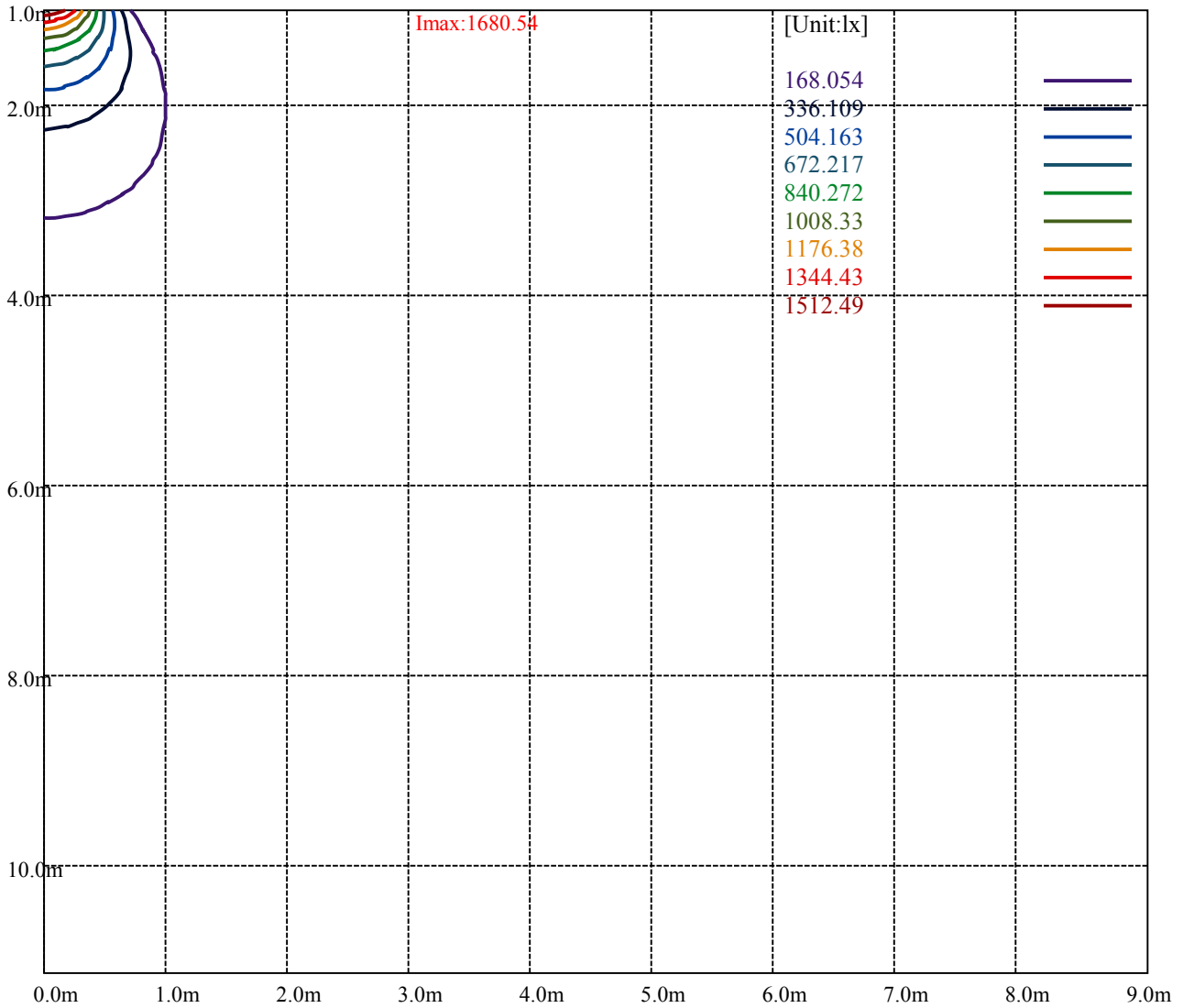
Road

Imax:1680.54

(10%Imax) 168.054	—
(20%Imax) 336.109	—
(30%Imax) 504.163	—
(40%Imax) 672.217	—
(50%Imax) 840.272	—
(60%Imax) 1008.33	—
(70%Imax) 1176.38	—
(80%Imax) 1344.43	—
(90%Imax) 1512.49	—



(10%Emax) 18.67267	—
(20%Emax) 37.34544	—
(30%Emax) 56.01811	—
(40%Emax) 74.69077	—
(50%Emax) 93.36344	—
(60%Emax) 112.0367	—
(70%Emax) 130.7089	—
(80%Emax) 149.3811	—
(90%Emax) 168.0544	—



Luminance Table

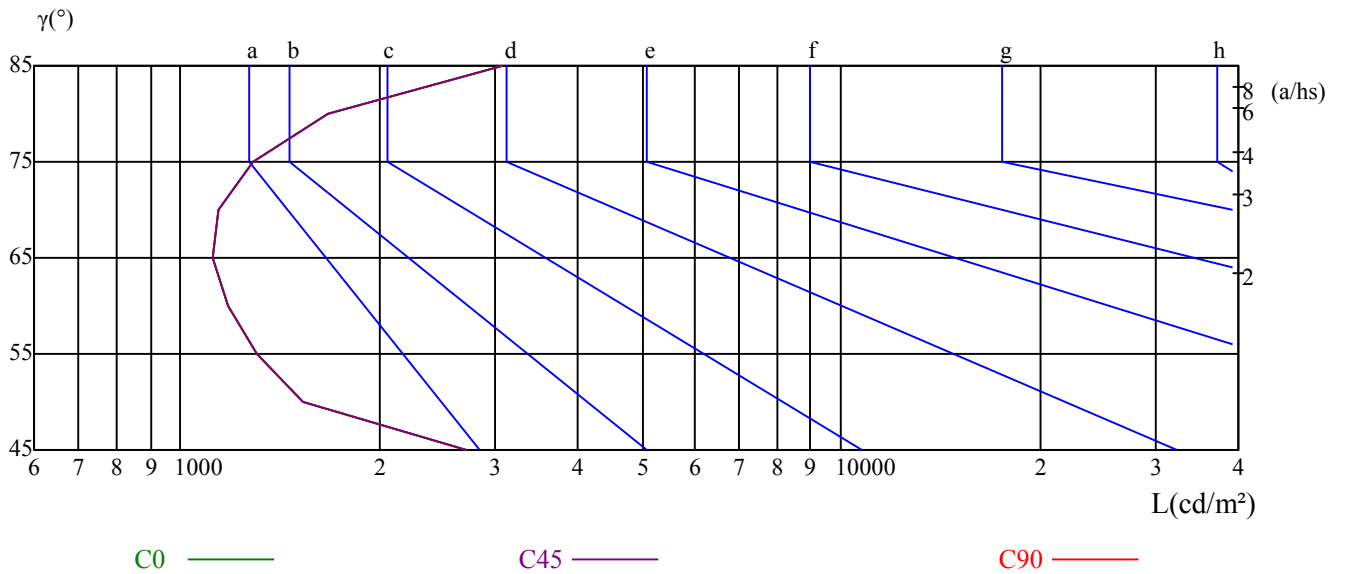
γ	45	50	55	60	65	70	75	80	85
C0	2710	1529	1308	1181	1118	1139	1285	1677	3070
C45	2710	1529	1308	1181	1118	1139	1285	1677	3070
C90	2710	1529	1308	1181	1118	1139	1285	1677	3070

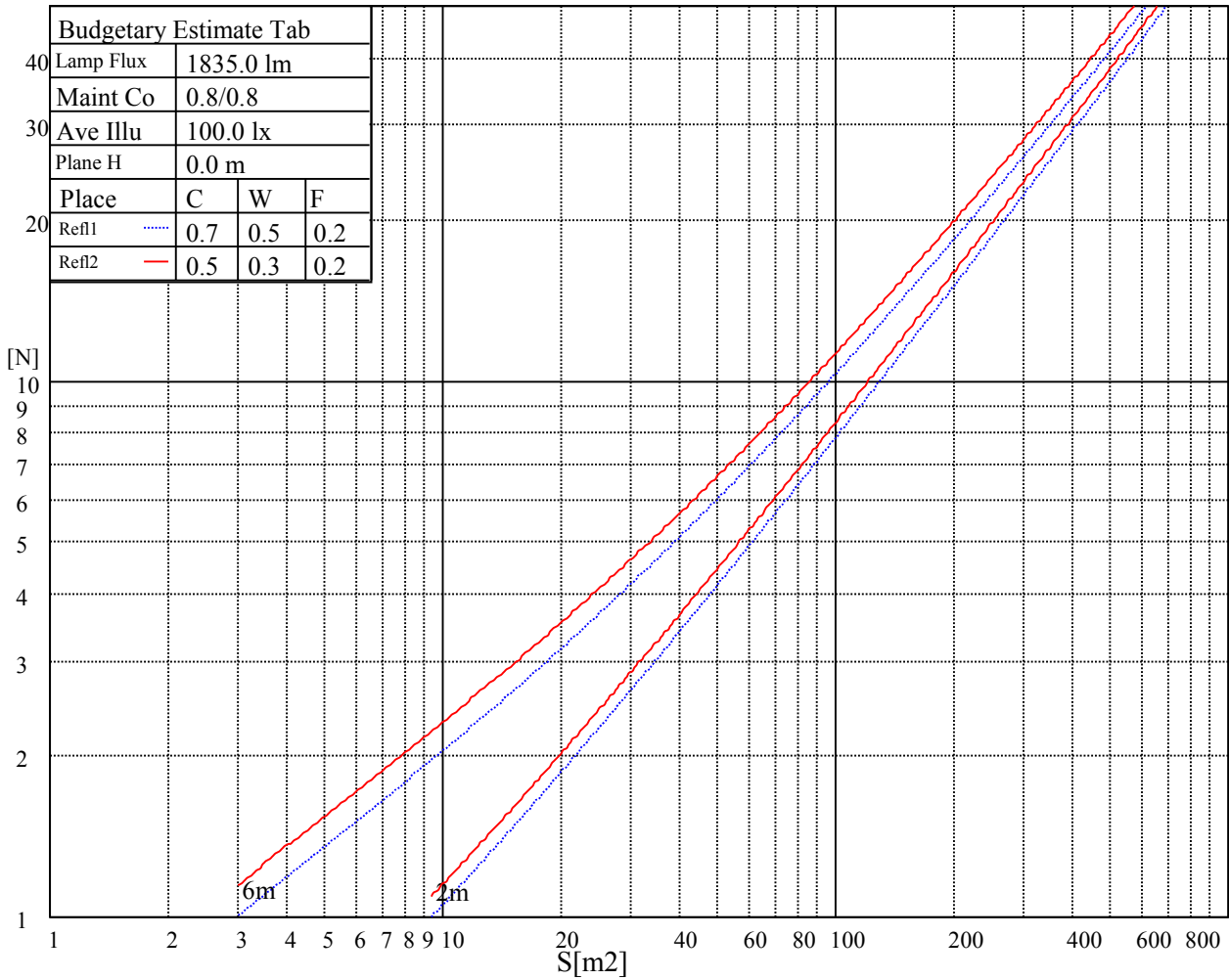
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
1118	1118	1118	1285	1285	1285	3070	3070	3070

Glare Table

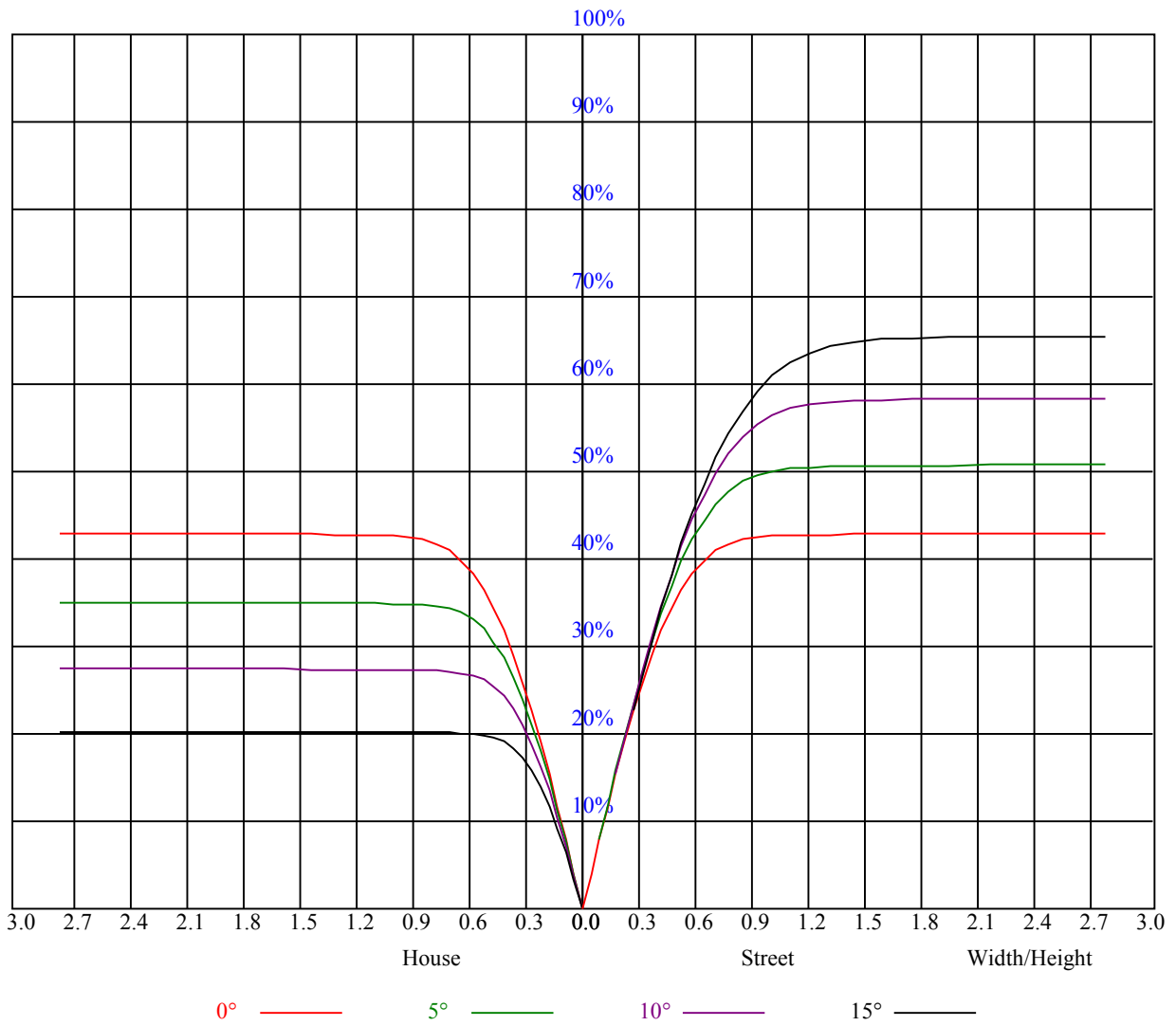
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

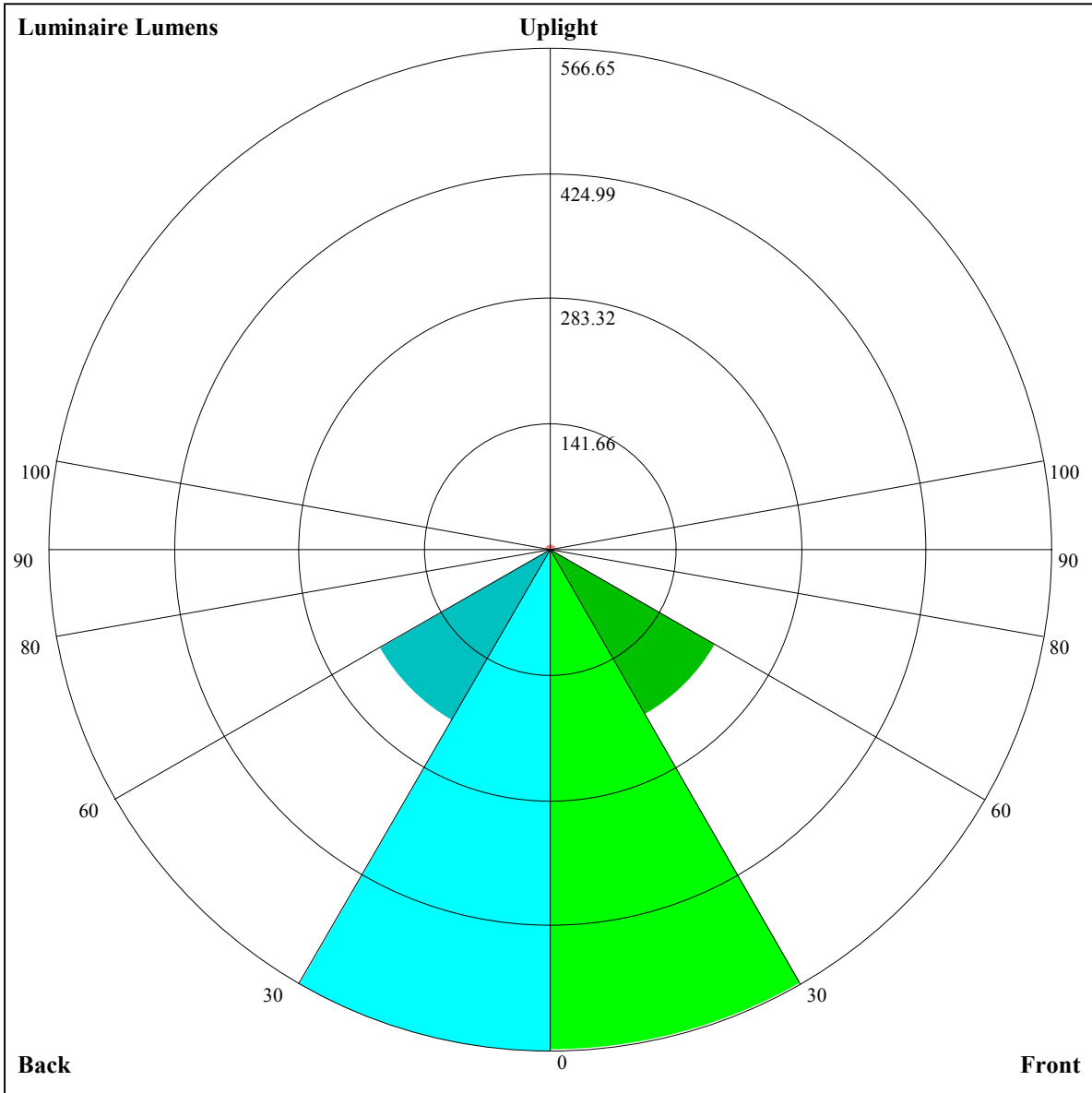
Luminance Limiting Curve





RHOCC	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	1.03	1.03	1.03	1.00	1.00	1.00	0.96	0.96	0.96	0.92	0.92	0.92	0.88	0.88	0.88	0.86
1	0.96	0.93	0.92	0.94	0.92	0.90	0.90	0.89	0.87	0.87	0.86	0.85	0.84	0.83	0.82	0.81
2	0.89	0.86	0.83	0.88	0.84	0.82	0.85	0.82	0.80	0.82	0.80	0.78	0.80	0.78	0.77	0.75
3	0.83	0.79	0.75	0.82	0.78	0.75	0.80	0.76	0.74	0.77	0.75	0.72	0.76	0.73	0.71	0.70
4	0.78	0.73	0.69	0.77	0.72	0.69	0.75	0.71	0.68	0.73	0.70	0.67	0.71	0.69	0.66	0.65
5	0.73	0.68	0.64	0.72	0.67	0.64	0.70	0.66	0.63	0.69	0.65	0.63	0.68	0.64	0.62	0.61
6	0.68	0.63	0.59	0.68	0.63	0.59	0.66	0.62	0.59	0.65	0.61	0.58	0.64	0.61	0.58	0.57
7	0.64	0.59	0.55	0.64	0.59	0.55	0.62	0.58	0.55	0.61	0.57	0.55	0.60	0.57	0.54	0.53
8	0.60	0.55	0.52	0.60	0.55	0.52	0.59	0.55	0.51	0.58	0.54	0.51	0.57	0.54	0.51	0.50
9	0.57	0.52	0.48	0.57	0.52	0.48	0.56	0.51	0.48	0.55	0.51	0.48	0.54	0.51	0.48	0.47
10	0.54	0.49	0.45	0.53	0.49	0.45	0.53	0.48	0.45	0.52	0.48	0.45	0.51	0.48	0.45	0.44





Luminaire Lumens:

FL=564.91,FM=215,FH=2.07,FVH=0.68

BL=566.65,BM=222.82,BH=2.14,BVH=0.69

UL=1.42,UH=6.75

BUG Rating:B2-U1-G0

Intensity data(cd)

C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	1682.17	1668.25	1619.06	1536.46	1396.79	1165.23	891.22	532.94	135.59
45.0	1675.21	1679.85	1650.61	1579.62	1471.50	1284.03	1037.16	700.27	306.77
90.0	1683.56	1672.89	1615.81	1542.49	1370.80	1141.10	883.66	513.08	99.63
135.0	1681.24	1677.06	1639.48	1572.19	1466.39	1238.09	994.93	713.27	291.00
180.0	1682.17	1667.78	1630.20	1557.81	1445.97	1246.90	996.79	689.60	269.19
225.0	1675.21	1639.01	1580.54	1479.39	1354.10	1141.57	904.22	516.33	120.93
270.0	1683.56	1666.39	1607.46	1524.86	1420.92	1282.17	1008.86	762.92	278.47
315.0	1681.24	1653.86	1588.90	1506.76	1387.51	1137.86	892.06	571.78	160.37
360.0	1682.17	1668.25	1619.06	1536.46	1396.79	1165.23	891.22	532.94	135.59
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	44.18	17.82	9.70	4.41	2.32	1.35	1.30	1.25	1.21
45.0	58.28	25.71	11.83	5.99	3.06	1.48	1.30	1.25	1.25
90.0	35.78	16.43	7.61	3.90	2.04	1.25	1.25	1.25	1.30
135.0	52.30	22.37	10.95	5.99	2.69	1.53	1.25	1.25	1.25
180.0	54.85	25.06	11.18	6.17	3.16	1.44	1.25	1.21	1.21
225.0	35.64	16.94	7.84	4.36	2.18	1.35	1.30	1.25	1.25
270.0	60.60	22.04	11.04	5.57	2.92	1.53	1.25	1.25	1.21
315.0	36.29	16.24	8.45	4.69	2.13	1.21	1.21	1.25	1.21
360.0	44.18	17.82	9.70	4.41	2.32	1.35	1.30	1.25	1.21
C/γ(°)	90.0								
0.0	1.44								
45.0	1.25								
90.0	1.25								
135.0	1.39								
180.0	1.35								
225.0	1.25								
270.0	1.25								
315.0	1.21								
360.0	1.44								