
Nata

Client:

LumCAT: 3-1920-E

Luminaire: 92.76.323.00

Report No: nata-0100

Test No: 2017031106

LampCAT: SLM 1205 G6 L13

Lamp flux(lm): 1107.5

Number of Lamps: 1

Length(mm): 76

Phm Type: C

Voltage(V):

Current(A):

Power (W): 21.9000

PF:

Ballast type:

Width(mm): 76

Height(mm): 0

Photometric Results

Lumens(lm): 992.87, Efficiency(%): 89.65% , Luminous Efficacy(lm/W): 45.34

Central intensity(cd): 1350.252, Maximum intensity(cd): 1350.252

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=55.8

[C90/270]Total=55.8

Field angle(10%Imax): [C0/180]Total=76.0

[C90/270]Total=76.0

Maximum s/h(1/2): C0_180=0.85 C90_270=0.85

Maximum s/h(1/4): C0_180=0.85 C90_270=0.85

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 90.29%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.009%

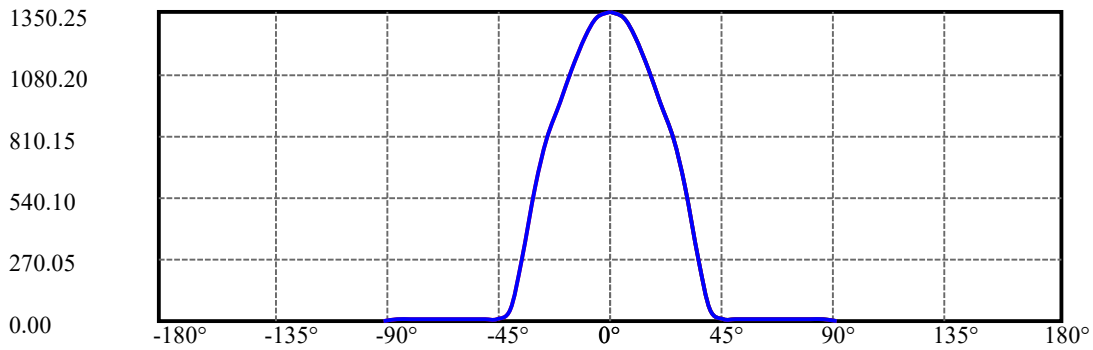
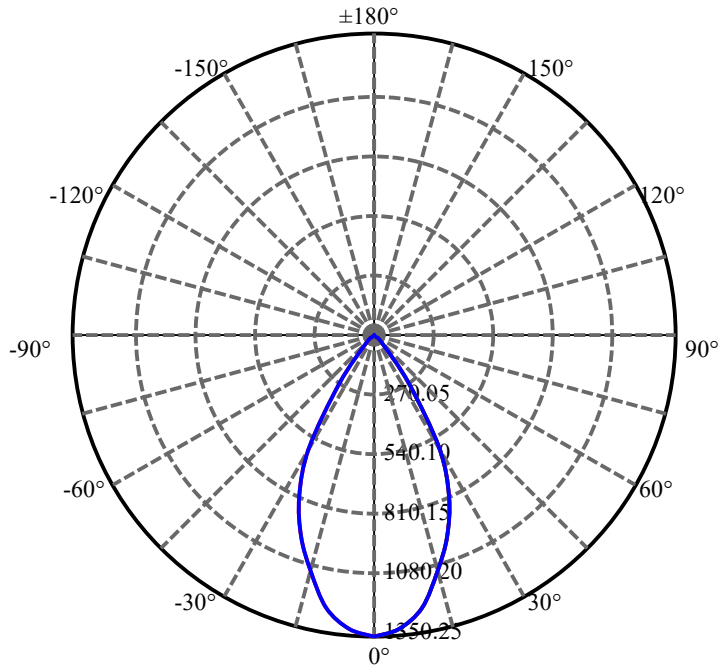
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1350.252	8.075	8.075	.729%	.813%
5.0	1321.473	63.131	71.206	5.700%	7.172%
10.0	1237.321	117.772	188.978	10.634%	19.033%
15.0	1098.680	155.868	344.846	14.074%	34.732%
20.0	959.237	179.832	524.678	16.238%	52.845%
25.0	796.876	184.599	709.276	16.668%	71.437%
30.0	585.000	160.330	869.607	14.477%	87.585%
35.0	264.264	83.084	952.691	7.502%	95.953%
40.0	47.639	16.785	969.476	1.516%	97.644%
45.0	8.639	3.348	972.824	.302%	97.981%
50.0	5.999	2.519	975.343	.227%	98.235%
55.0	5.330	2.393	977.736	.216%	98.476%
60.0	4.951	2.350	980.087	.212%	98.712%
65.0	4.694	2.332	982.419	.211%	98.947%
70.0	4.548	2.343	984.761	.212%	99.183%
75.0	4.423	2.342	987.103	.211%	99.419%
80.0	4.318	2.331	989.434	.210%	99.654%
85.0	4.213	2.301	991.735	.208%	99.886%
90.0	4.144	1.136	992.871	.103%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	869.61	78.52%	87.59%
0-40	969.48	87.54%	97.64%
0-60	980.09	88.50%	98.71%
0-90	991.73	89.55%	99.89%
0-120	991.73	89.55%	99.89%
0-180	992.87	89.65%	100.00%
60-90	14.00	1.26%	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%
0-27.65	794.30	71.72%	80.00%

ZONAL LUMEN SUMMARY

0-10	188.98
10-20	335.70
20-30	344.93
30-40	99.87
40-50	5.87
50-60	4.74
60-70	4.67
70-80	4.67
80-90	2.30
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: —————

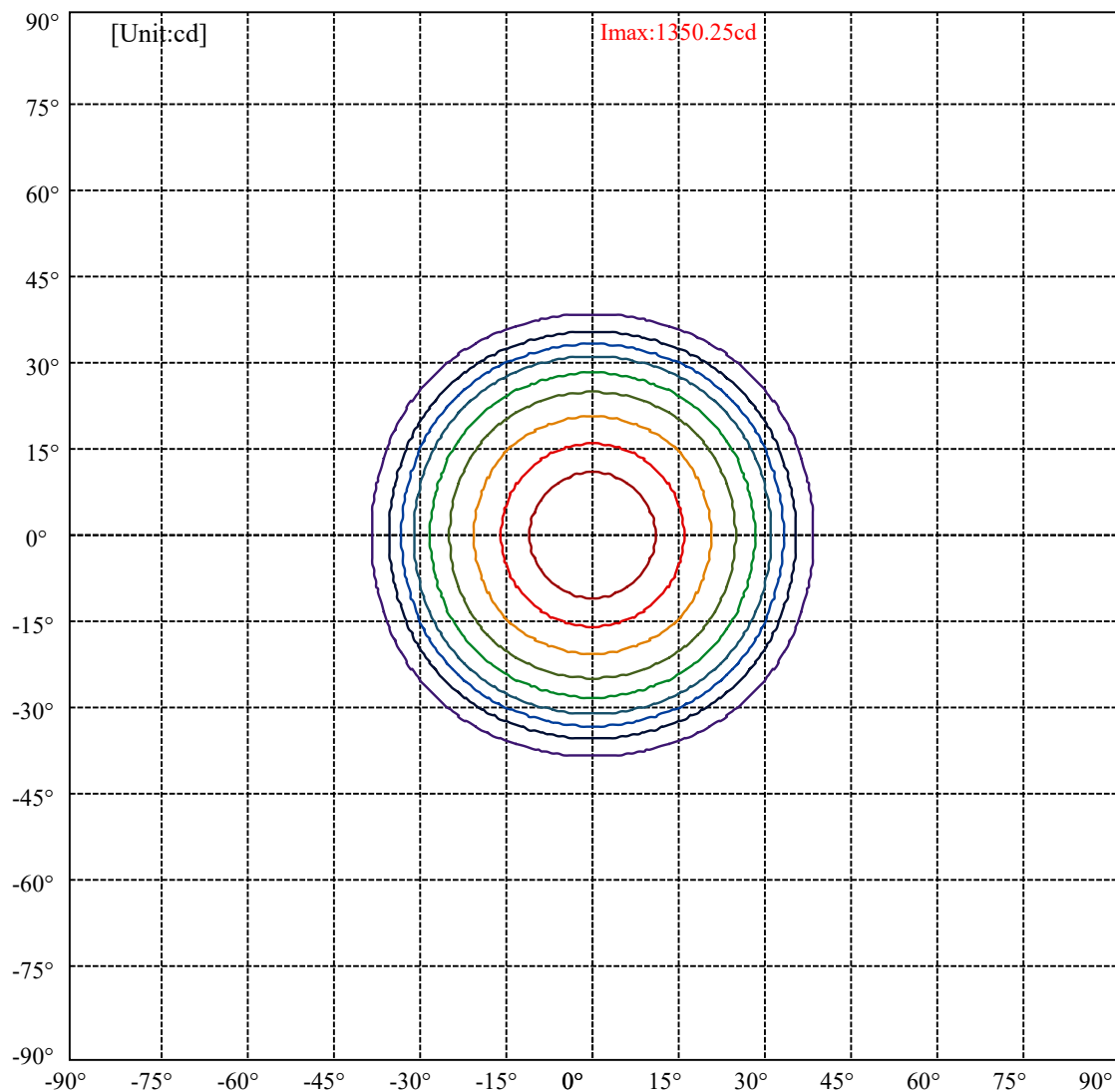
C90/C270: —————

Field angle(10%Imax):C0/180Left:38.0 Right:38.0

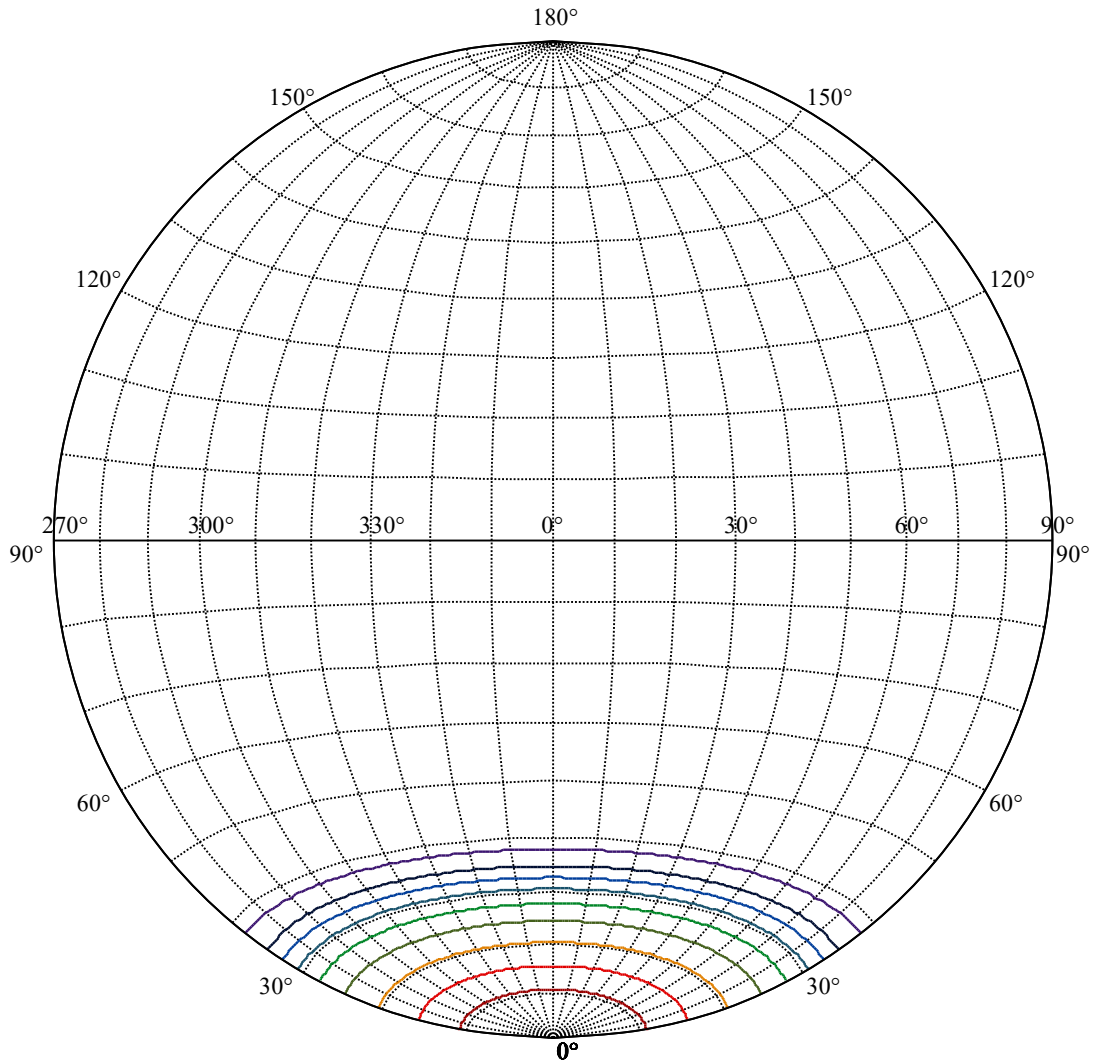
:C90/270Left:38.0 Right:38.0

Beam Angle(50%Imax):C0/180Left:27.9 Right:27.9

:C90/270Left:27.9 Right:27.9



(10%Imax) 135.025	—
(20%Imax) 270.05	—
(30%Imax) 405.076	—
(40%Imax) 540.101	—
(50%Imax) 675.126	—
(60%Imax) 810.151	—
(70%Imax) 945.176	—
(80%Imax) 1080.2	—
(90%Imax) 1215.23	—



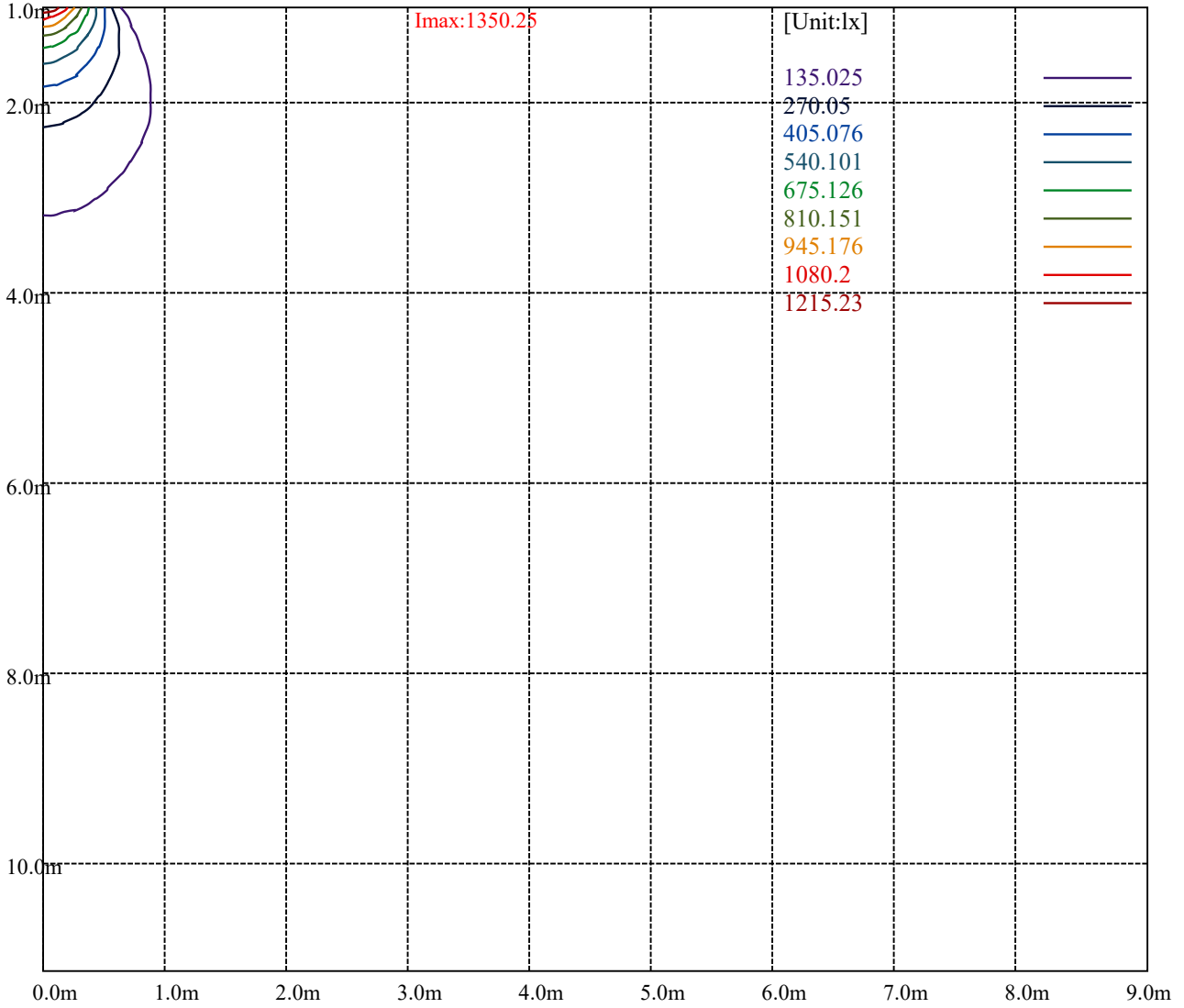
House

[Unit:cd]

Road

Imax:1350.25

(10%Imax) 135.025	—
(20%Imax) 270.05	—
(30%Imax) 405.076	—
(40%Imax) 540.101	—
(50%Imax) 675.126	—
(60%Imax) 810.151	—
(70%Imax) 945.176	—
(80%Imax) 1080.2	—
(90%Imax) 1215.23	—



Luminance Table

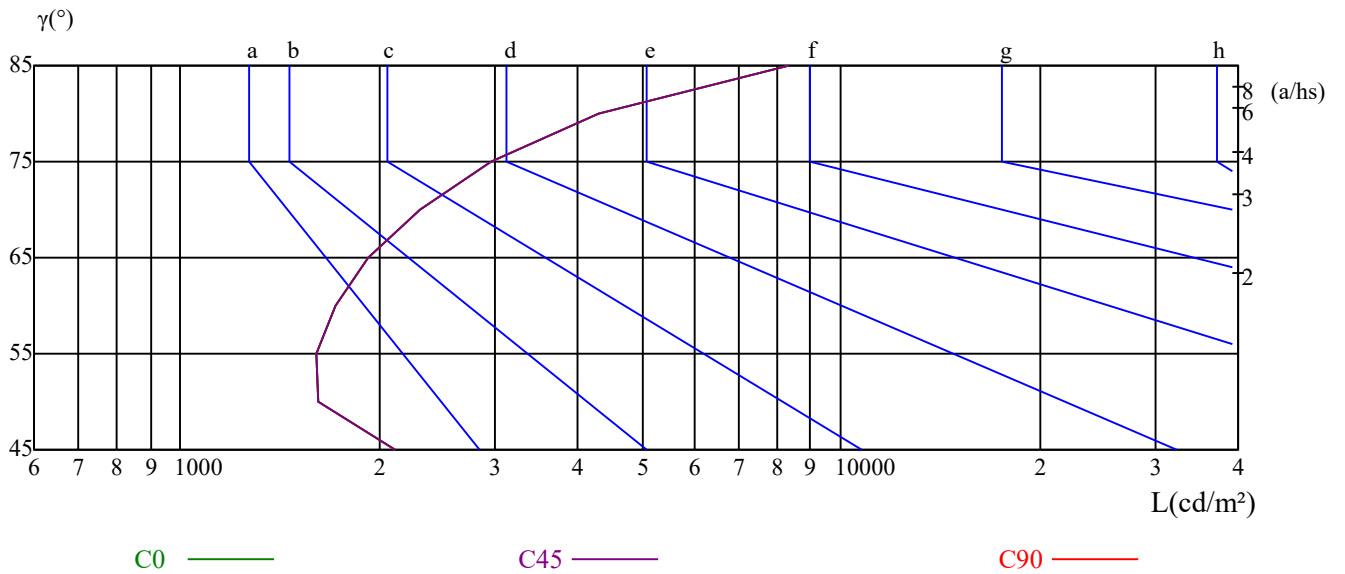
γ	45	50	55	60	65	70	75	80	85
C0	2115	1616	1609	1714	1923	2302	2959	4305	8369
C45	2115	1616	1609	1714	1923	2302	2959	4305	8369
C90	2115	1616	1609	1714	1923	2302	2959	4305	8369

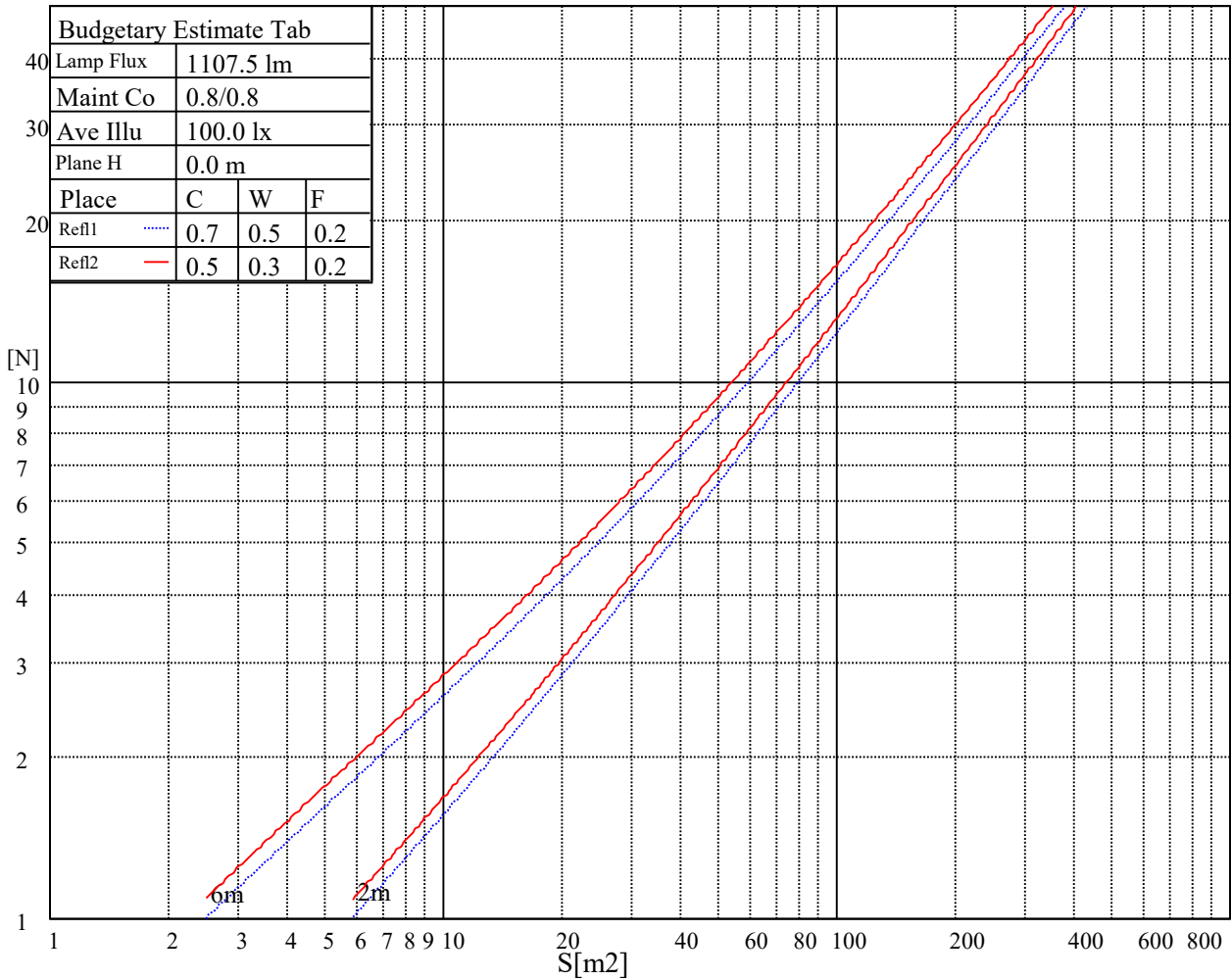
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
1923	1923	1923	2959	2959	2959	8369	8369	8369

Glare Table

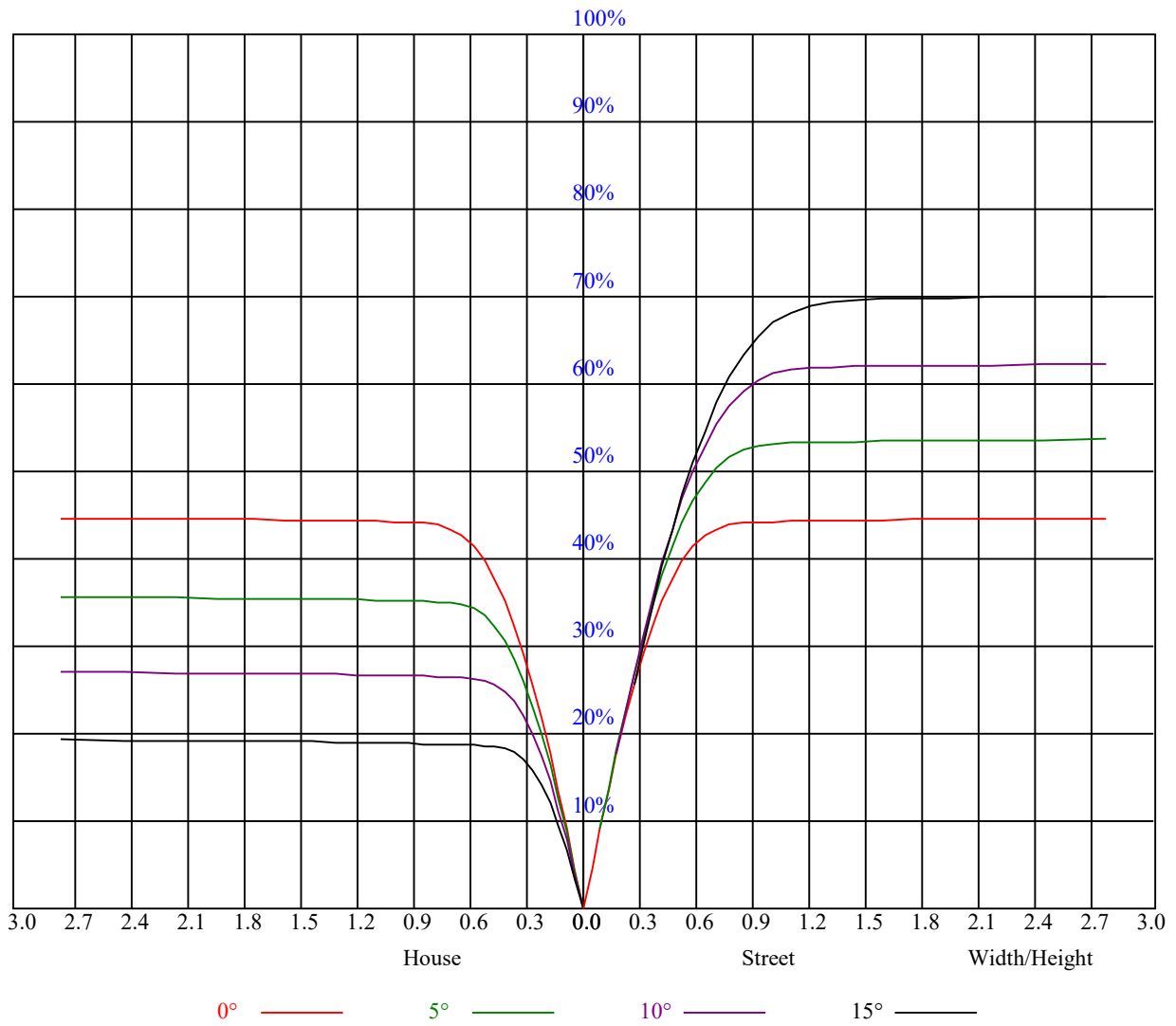
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

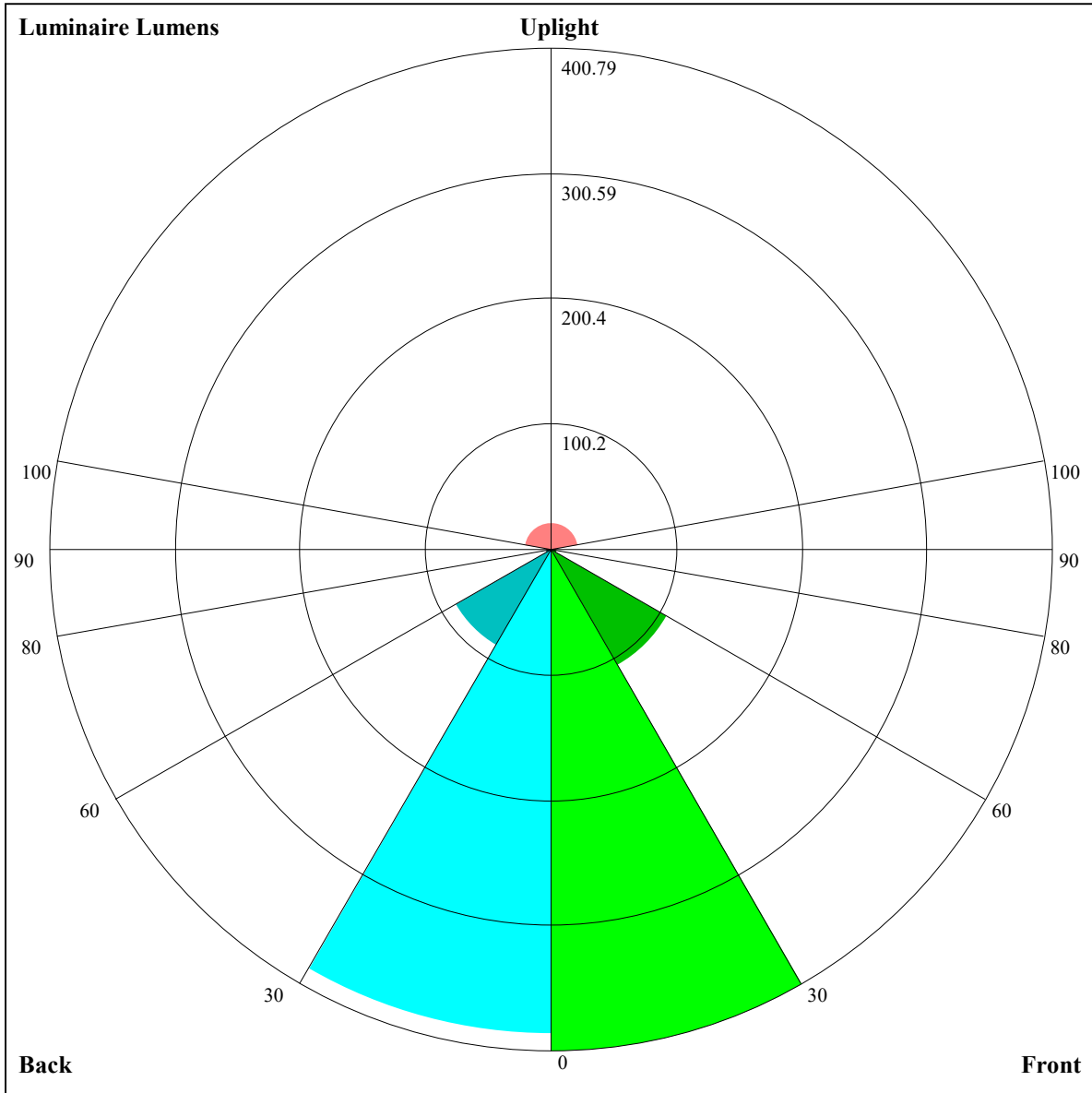
Luminance Limiting Curve





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	1.07	1.07	1.07	1.05	1.05	1.05	1.00	1.00	1.00	0.96	0.96	0.96	0.92	0.92	0.92	0.90
1	1.00	0.97	0.95	0.98	0.96	0.94	0.94	0.92	0.91	0.91	0.89	0.88	0.88	0.87	0.86	0.84
2	0.94	0.90	0.87	0.92	0.89	0.86	0.89	0.87	0.84	0.87	0.84	0.83	0.84	0.82	0.81	0.79
3	0.88	0.84	0.81	0.87	0.83	0.80	0.85	0.82	0.79	0.83	0.80	0.78	0.81	0.78	0.77	0.75
4	0.84	0.79	0.76	0.83	0.78	0.75	0.81	0.77	0.74	0.79	0.76	0.73	0.77	0.75	0.73	0.71
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	0.69	0.67	0.72	0.69	0.66	0.71	0.68	0.66	0.64
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	0.61
8	0.69	0.64	0.61	0.68	0.64	0.60	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	0.57	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	0.60	0.57	0.55	0.54





Luminaire Lumens:

FL=400.79,FM=106.4,FH=4.66,FVH=2.3

BL=387.09,BM=88.38,BH=4.7,BVH=2.31

UL=4.52,UH=21.52

BUG Rating:B1-U2-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	1347.10	1343.34	1264.39	1159.33	1014.25	854.13	672.56	383.28	119.65
45.0	1353.51	1322.33	1243.15	1109.13	968.91	801.94	611.29	287.78	30.01
90.0	1348.65	1319.01	1239.62	1094.98	971.12	825.38	619.48	294.59	115.67
135.0	1351.52	1314.59	1224.58	1069.10	946.80	784.02	579.45	251.68	26.94
180.0	1347.10	1298.45	1204.67	1048.97	904.78	734.04	438.32	153.27	18.25
225.0	1353.51	1321.67	1240.28	1101.17	947.68	789.55	582.76	233.99	22.93
270.0	1348.65	1321.89	1233.87	1095.86	944.81	776.94	578.12	225.03	21.14
315.0	1351.97	1330.51	1248.02	1110.90	975.55	809.01	598.02	284.50	26.52
360.0	1347.10	1343.34	1264.39	1159.33	1014.25	854.13	672.56	383.28	119.65
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	10.62	6.30	5.46	5.02	4.73	4.53	4.40	4.31	4.22
45.0	9.36	5.99	5.31	4.93	4.64	4.51	4.36	4.27	4.18
90.0	9.73	6.17	5.42	5.02	4.71	4.53	4.38	4.29	4.20
135.0	8.43	6.06	5.35	4.95	4.76	4.71	4.38	4.27	4.18
180.0	7.12	5.71	5.18	4.87	4.67	4.60	4.73	4.49	4.34
225.0	8.18	5.82	5.24	4.93	4.67	4.49	4.38	4.29	4.20
270.0	7.61	5.88	5.31	4.91	4.69	4.49	4.40	4.38	4.20
315.0	8.07	6.06	5.37	4.98	4.69	4.51	4.36	4.25	4.18
360.0	10.62	6.30	5.46	5.02	4.73	4.53	4.40	4.31	4.22
C/γ(°)	90.0								
0.0	4.16								
45.0	4.16								
90.0	4.16								
135.0	4.14								
180.0	4.14								
225.0	4.14								
270.0	4.14								
315.0	4.14								
360.0	4.16								