
Client:

LumCAT: 1365-M

Luminaire:

Report No: nata-0100

Test No:

LampCAT: XICATO XTM 9

Lamp flux(lm): 1446.0

Number of Lamps: 1

Length(mm): 45

Phm Type: C

Voltage(V):

Current(A):

Power (W): 26.1900

PF:

Ballast type:

Width(mm): 45

Height(mm): 0

Photometric Results

Lumens(lm): 1218.21, Efficiency(%): 84.25% , Luminous Efficacy(lm/W): 46.51

Central intensity(cd): 9379.105, Maximum intensity(cd): 9379.105

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=16.0

[C90/270]Total=16.0

Field angle(10%Imax): [C0/180]Total=33.4

[C90/270]Total=33.4

Maximum s/h(1/2): C0_180=0.28 C90_270=0.28

Maximum s/h(1/4): C0_180=0.28 C90_270=0.28

Up flux rate of lamp(%): 3.20%

Down flux rate of lamp(%): 84.85%

Up flux rate of LUM(%): 7.80%

Down flux rate of LUM(%): 96.36%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 90.396%

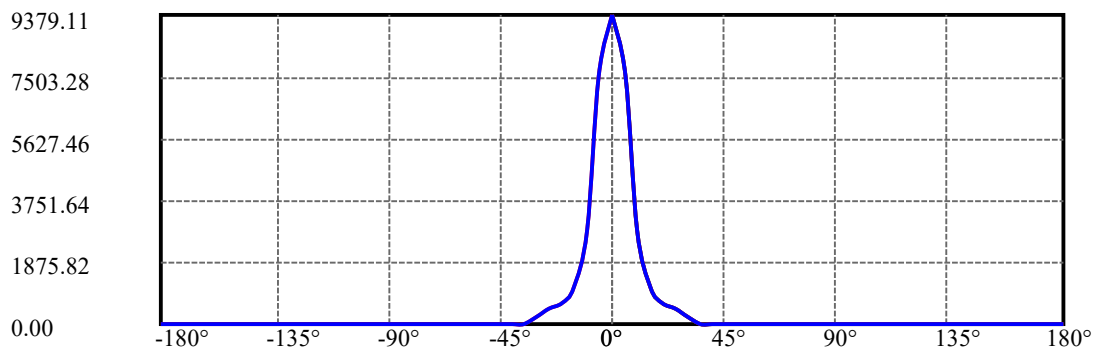
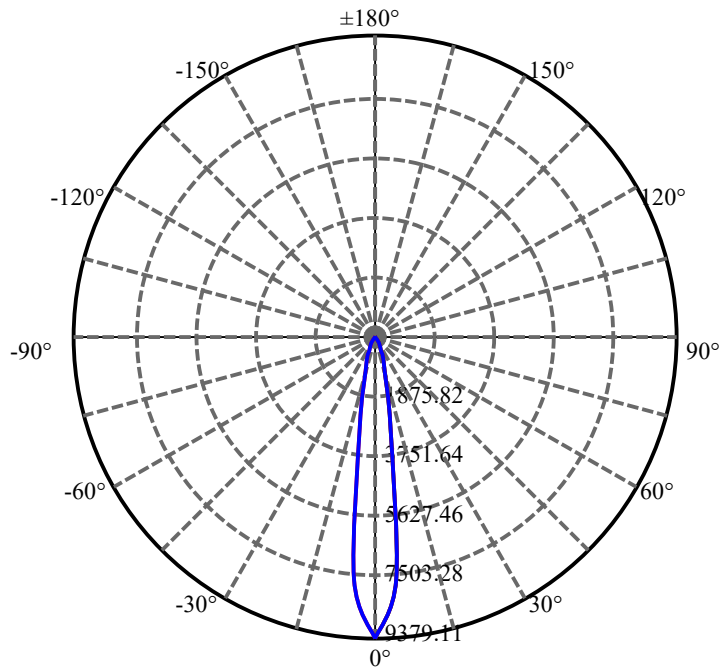
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	9379.106	56.089	56.089	3.879%	4.604%
5.0	7538.687	360.148	416.237	24.907%	34.168%
10.0	2837.664	270.098	686.335	18.679%	56.339%
15.0	1095.474	155.413	841.748	10.748%	69.097%
20.0	630.372	118.178	959.926	8.173%	78.798%
25.0	471.480	109.220	1069.146	7.553%	87.763%
30.0	221.396	60.678	1129.824	4.196%	92.744%
35.0	16.142	5.075	1134.898	.351%	93.161%
40.0	8.372	2.950	1137.848	.204%	93.403%
45.0	7.868	3.050	1140.898	.211%	93.653%
50.0	7.595	3.189	1144.087	.221%	93.915%
55.0	7.427	3.335	1147.422	.231%	94.189%
60.0	7.358	3.493	1150.914	.242%	94.476%
65.0	7.281	3.617	1154.531	.250%	94.773%
70.0	7.260	3.739	1158.271	.259%	95.079%
75.0	7.218	3.822	1162.093	.264%	95.393%
80.0	7.197	3.885	1165.978	.269%	95.712%
85.0	7.218	3.941	1169.919	.273%	96.036%
90.0	7.176	3.933	1173.852	.272%	96.359%
95.0	7.197	3.930	1177.782	.272%	96.681%
100.0	7.190	3.881	1181.664	.268%	97.000%
105.0	7.183	3.803	1185.467	.263%	97.312%
110.0	7.183	3.700	1189.166	.256%	97.616%
115.0	7.183	3.568	1192.735	.247%	97.909%
120.0	7.190	3.413	1196.148	.236%	98.189%
125.0	7.190	3.228	1199.376	.223%	98.454%
130.0	7.204	3.025	1202.401	.209%	98.702%
135.0	7.239	2.806	1205.207	.194%	98.932%
140.0	7.253	2.555	1207.762	.177%	99.142%
145.0	7.295	2.293	1210.056	.159%	99.330%
150.0	7.442	2.039	1212.095	.141%	99.498%
155.0	8.127	1.883	1213.978	.130%	99.652%
160.0	8.966	1.681	1215.659	.116%	99.790%
165.0	9.127	1.295	1216.954	.090%	99.897%
170.0	8.610	0.819	1217.773	.057%	99.964%
175.0	8.218	0.393	1218.166	.027%	99.996%
180.0	7.987	0.048	1218.213	.003%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1129.82	78.13%	92.74%
0-40	1137.85	78.69%	93.40%
0-60	1150.91	79.59%	94.48%
0-90	1173.85	81.18%	96.36%
0-120	1196.15	82.72%	98.19%
0-180	1218.21	84.25%	100.00%
60-90	26.43	1.83%	2.17%
90-120	26.23	1.81%	2.15%
90-130	32.48	2.25%	2.67%
90-150	42.18	2.92%	3.46%
90-180	48.25	3.34%	3.96%
0-20.67	974.57	67.40%	80.00%

ZONAL LUMEN SUMMARY

0-10	686.33
10-20	273.59
20-30	169.90
30-40	8.02
40-50	6.24
50-60	6.83
60-70	7.36
70-80	7.71
80-90	7.87
90-100	7.81
100-110	7.50
110-120	6.98
120-130	6.25
130-140	5.36
140-150	4.33
150-160	3.56
160-170	2.11
170-180	0.39



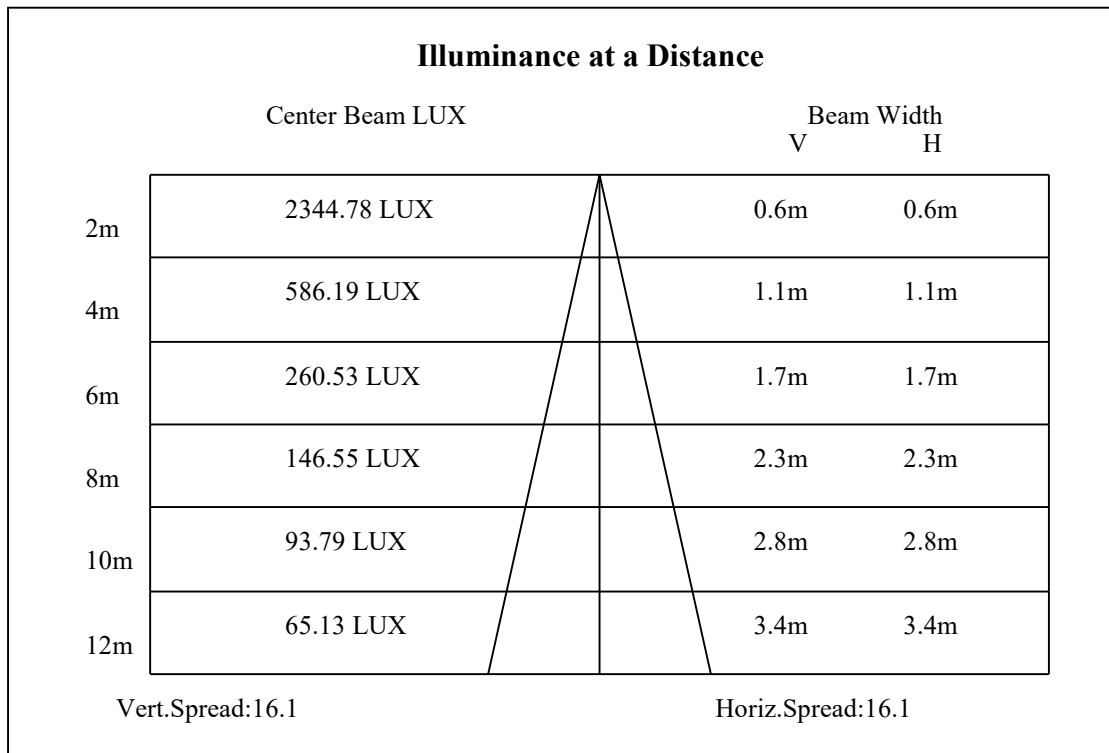
C0(Max): —————

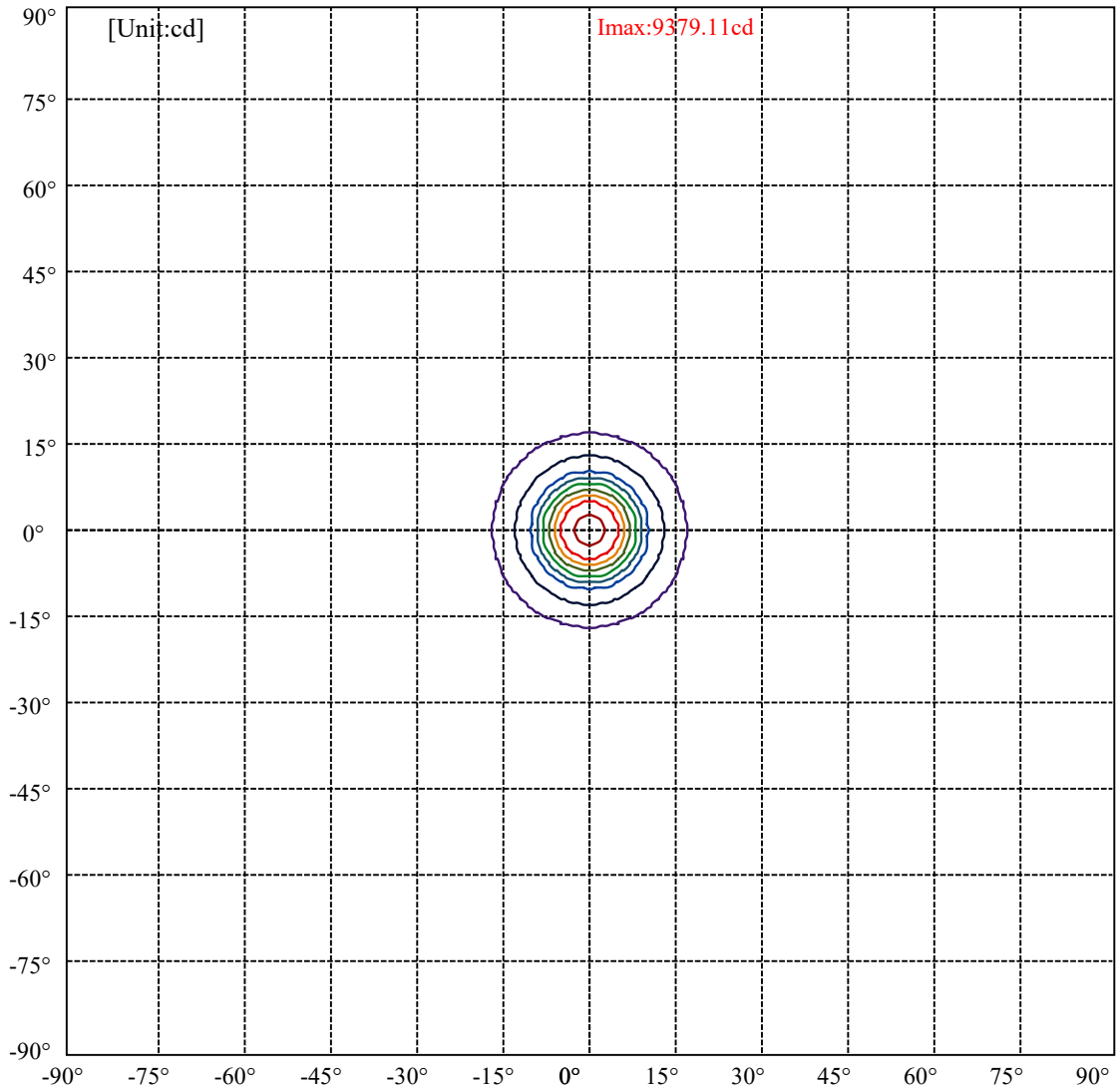
C0/C180: —————

C90/C270: —————

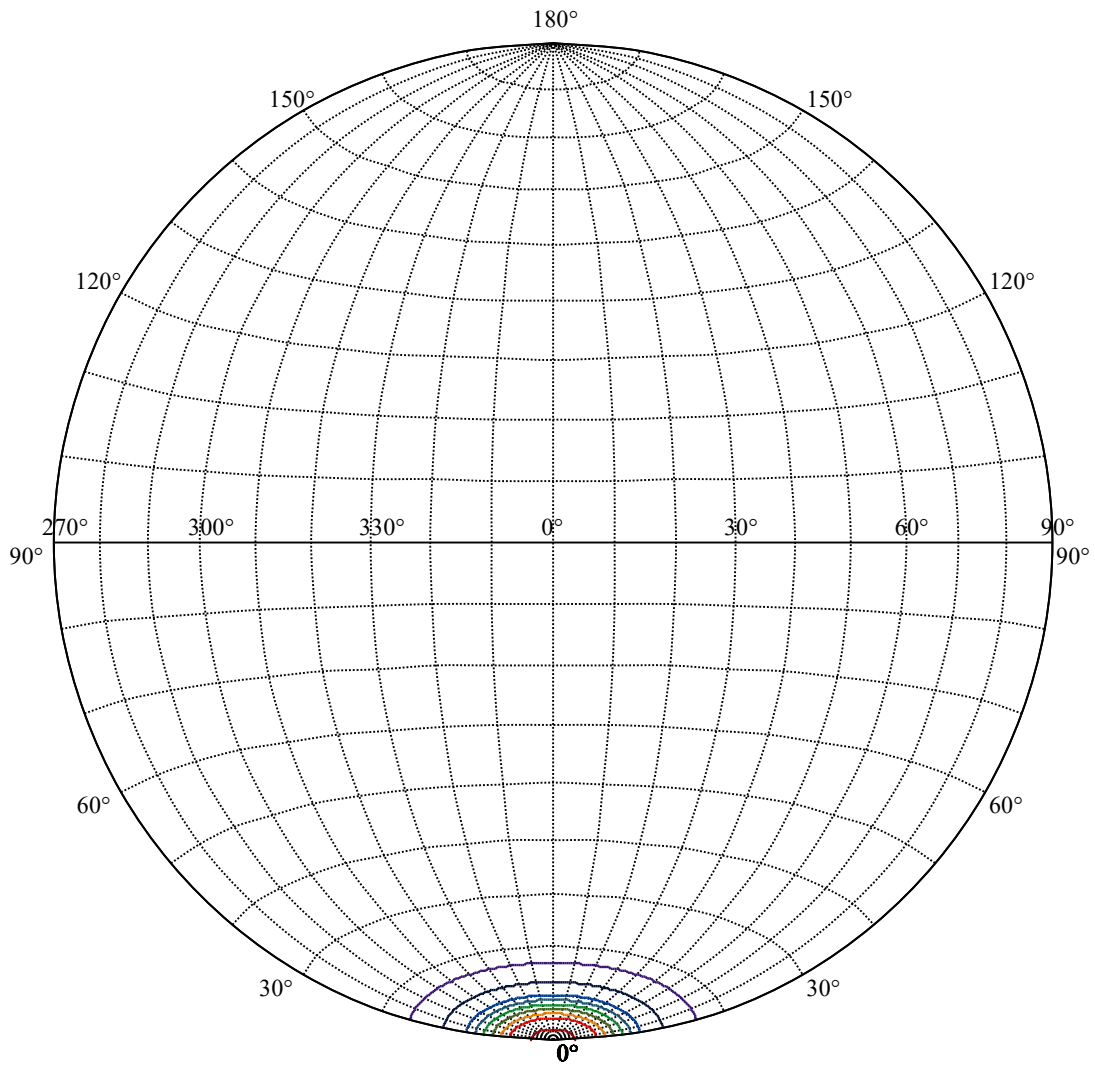
Field angle(10%Imax):C0/180Left:16.7 Right:16.7
:C90/270Left:16.7 Right:16.7

Beam Angle(50%Imax):C0/180Left:8.0 Right:8.0
:C90/270Left:8.0 Right:8.0





(10%I _{max}) 937.911	—
(20%I _{max}) 1875.82	—
(30%I _{max}) 2813.73	—
(40%I _{max}) 3751.64	—
(50%I _{max}) 4689.55	—
(60%I _{max}) 5627.46	—
(70%I _{max}) 6565.37	—
(80%I _{max}) 7503.28	—
(90%I _{max}) 8441.2	—



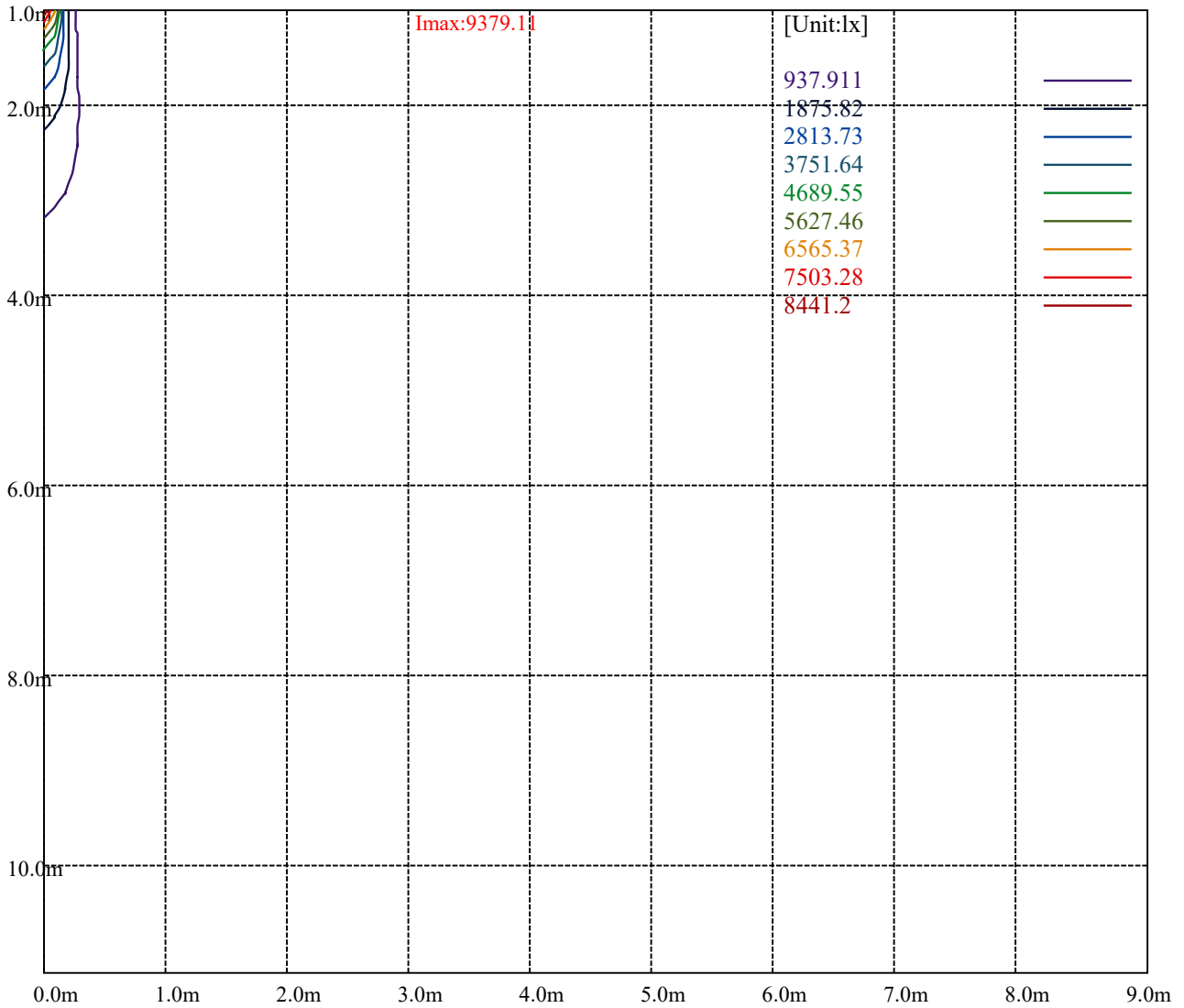
House

[Unit:cd]

Road

Imax:9379.11

(10%Imax) 937.911	—
(20%Imax) 1875.82	—
(30%Imax) 2813.73	—
(40%Imax) 3751.64	—
(50%Imax) 4689.55	—
(60%Imax) 5627.46	—
(70%Imax) 6565.37	—
(80%Imax) 7503.28	—
(90%Imax) 8441.2	—



Luminance Table

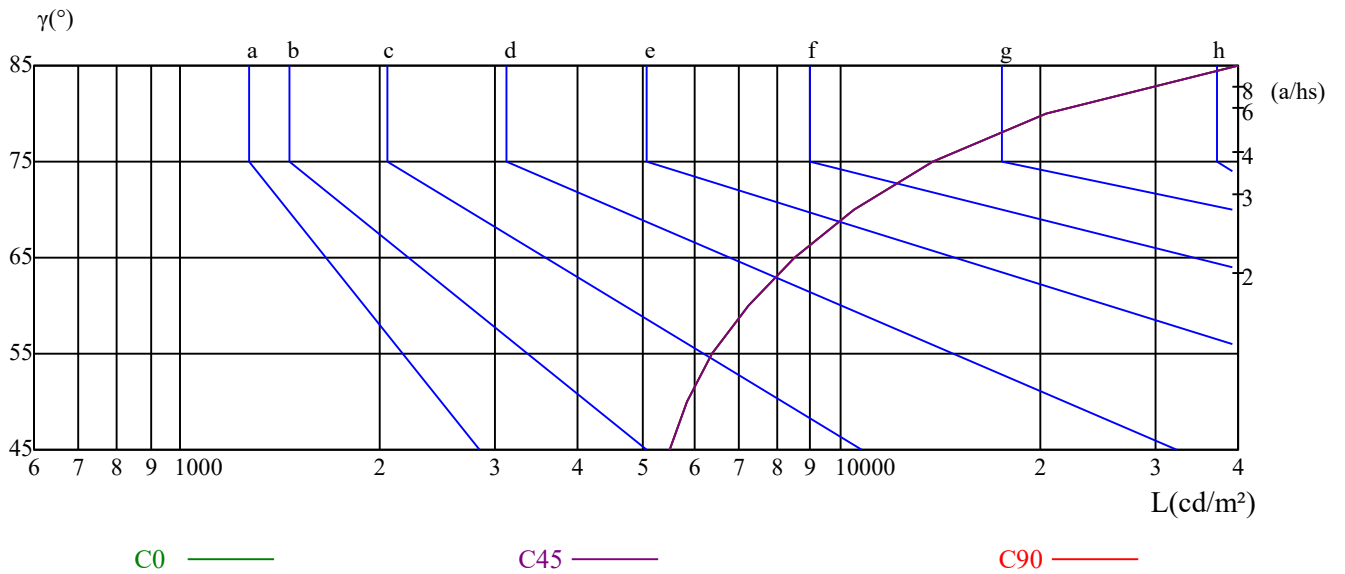
γ	45	50	55	60	65	70	75	80	85
C0	5495	5835	6394	7267	8508	10482	13772	20467	40897
C45	5495	5835	6394	7267	8508	10482	13772	20467	40897
C90	5495	5835	6394	7267	8508	10482	13772	20467	40897

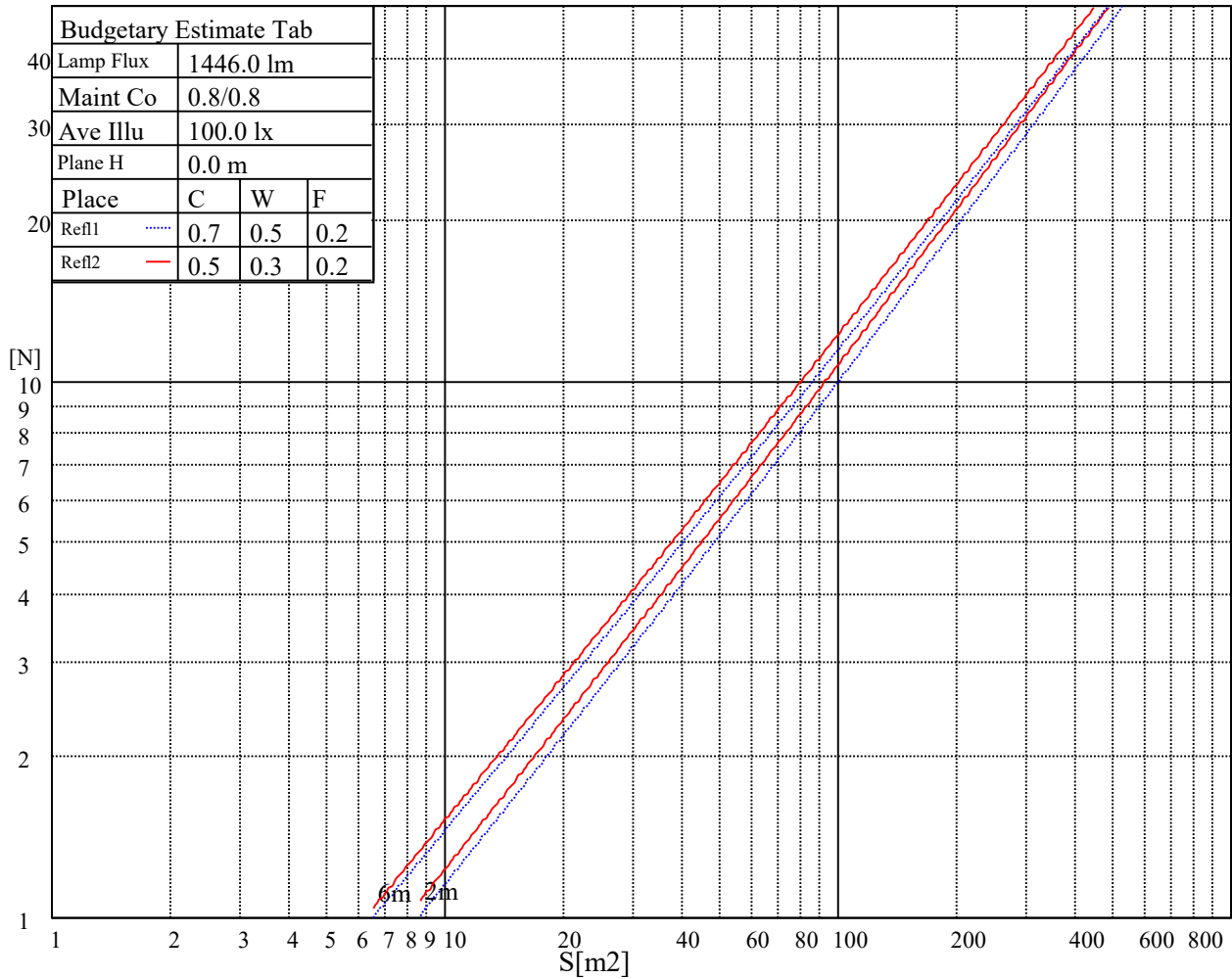
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
8508	8508	8508	13772	13772	13772	40897	40897	40897

Glare Table

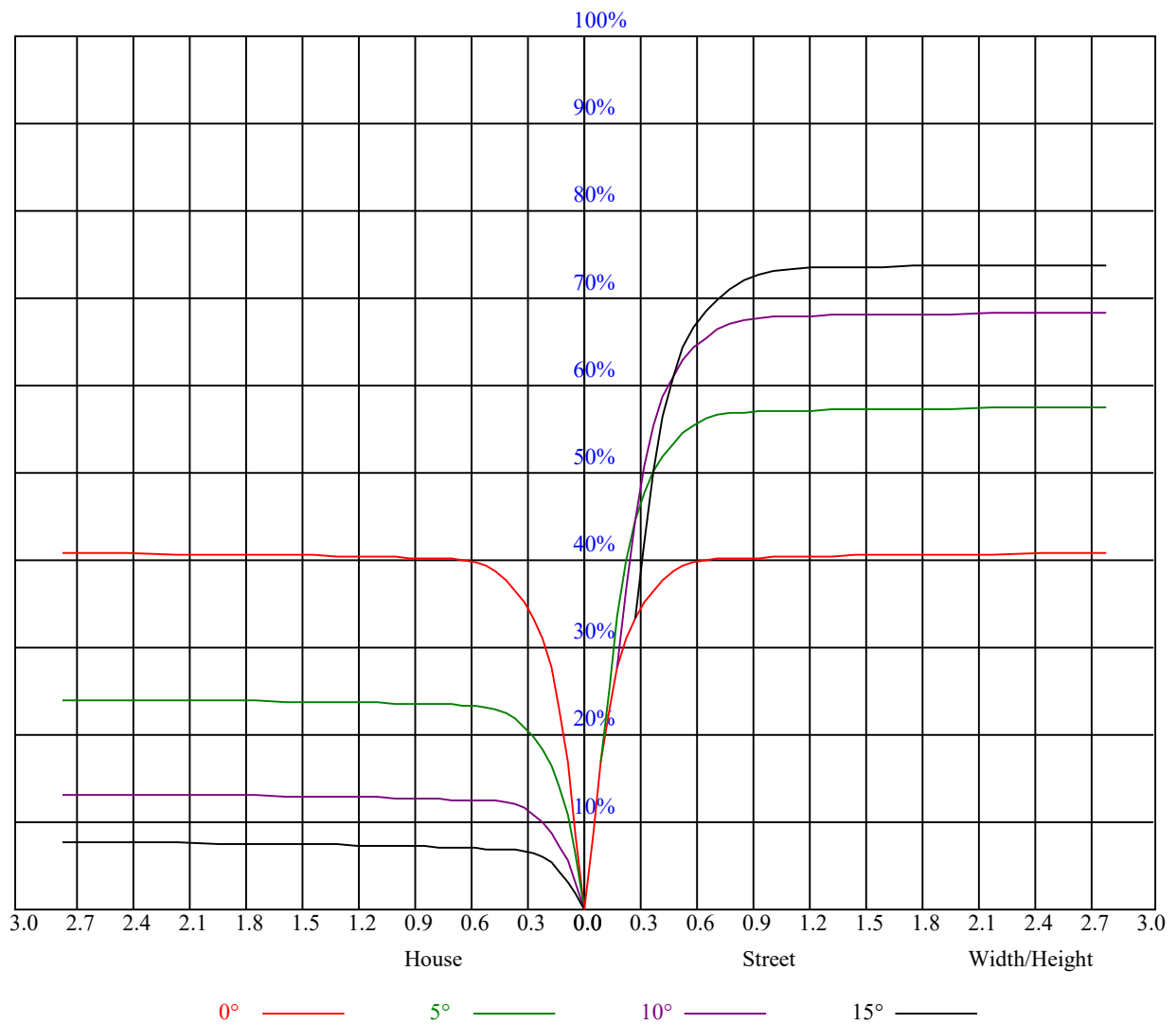
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

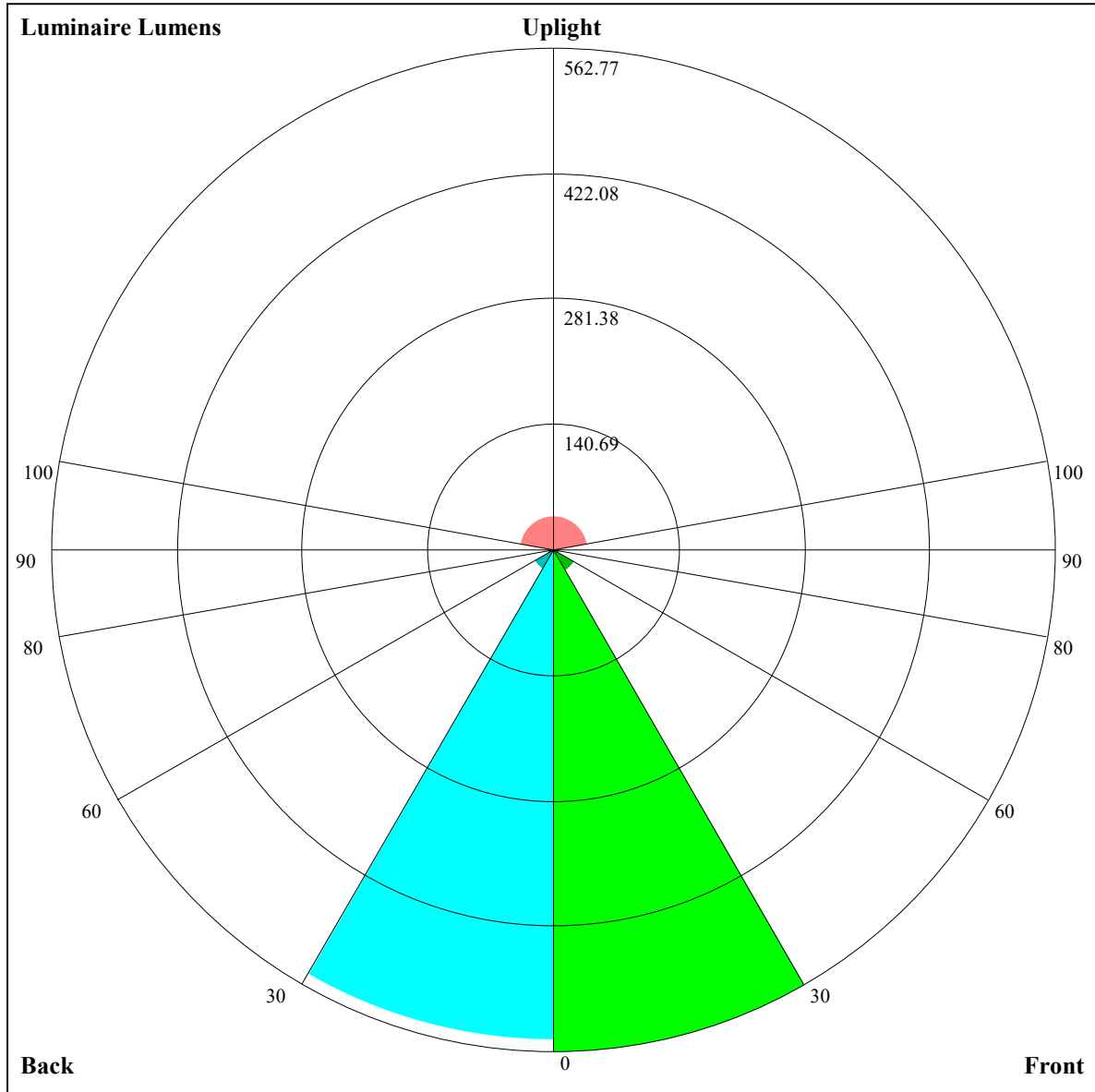
Luminance Limiting Curve





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	1.04	1.04	1.04	1.01	1.01	1.01	0.96	0.96	0.96	0.91	0.91	0.91	0.87	0.87	0.87	0.85
1	0.93	0.90	0.88	0.91	0.88	0.86	0.87	0.85	0.83	0.83	0.81	0.80	0.79	0.78	0.77	0.75
2	0.89	0.85	0.82	0.87	0.84	0.81	0.84	0.81	0.79	0.81	0.78	0.76	0.78	0.76	0.74	0.73
3	0.85	0.81	0.78	0.84	0.80	0.77	0.81	0.78	0.75	0.78	0.76	0.74	0.76	0.74	0.72	0.71
4	0.82	0.78	0.75	0.81	0.77	0.74	0.79	0.75	0.73	0.77	0.74	0.72	0.75	0.72	0.71	0.69
5	0.79	0.75	0.72	0.78	0.75	0.72	0.77	0.73	0.71	0.75	0.72	0.70	0.73	0.71	0.69	0.68
6	0.77	0.73	0.70	0.76	0.72	0.70	0.75	0.71	0.69	0.73	0.70	0.68	0.72	0.69	0.68	0.66
7	0.75	0.71	0.68	0.74	0.70	0.68	0.73	0.70	0.67	0.72	0.69	0.67	0.71	0.68	0.66	0.65
8	0.73	0.69	0.67	0.72	0.69	0.66	0.71	0.68	0.66	0.70	0.67	0.65	0.69	0.67	0.65	0.64
9	0.71	0.68	0.65	0.71	0.67	0.65	0.70	0.67	0.65	0.69	0.66	0.64	0.68	0.66	0.64	0.63
10	0.70	0.66	0.64	0.69	0.66	0.64	0.69	0.66	0.63	0.68	0.65	0.63	0.67	0.65	0.63	0.62





Luminaire Lumens:

FL=562.77,FM=26.78,FH=7.44,FVH=3.93

BL=550.14,BM=24.87,BH=7.44,BVH=3.93

UL=7.84,UH=38.48

BUG Rating:B2-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	9354.35	7664.65	3043.70	1138.59	668.05	498.52	282.55	19.30	8.39
45.0	9415.89	7986.92	3442.63	1219.16	675.32	499.08	286.47	18.24	8.39
90.0	9411.98	7648.98	2700.73	1069.04	624.85	479.33	198.85	16.23	8.23
135.0	9334.21	8222.47	3357.58	1207.97	666.93	490.69	296.54	17.51	8.50
180.0	9354.35	7426.30	2501.54	999.50	594.81	450.18	148.72	13.54	8.39
225.0	9415.89	6898.69	2420.97	983.61	581.44	431.04	137.75	14.32	8.39
270.0	9411.98	7571.21	2874.73	1158.73	636.72	474.46	284.23	16.11	8.45
315.0	9334.21	6890.29	2359.43	987.19	594.87	448.55	136.07	13.88	8.23
360.0	9354.35	7664.65	3043.70	1138.59	668.05	498.52	282.55	19.30	8.39
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	7.83	7.55	7.39	7.33	7.22	7.22	7.16	7.16	7.16
45.0	7.89	7.67	7.50	7.50	7.39	7.33	7.33	7.27	7.33
90.0	7.83	7.55	7.44	7.33	7.27	7.27	7.22	7.22	7.22
135.0	7.95	7.67	7.44	7.39	7.33	7.27	7.22	7.16	7.22
180.0	7.89	7.61	7.44	7.33	7.27	7.22	7.16	7.16	7.16
225.0	7.89	7.61	7.44	7.39	7.27	7.27	7.27	7.22	7.27
270.0	7.89	7.61	7.44	7.33	7.27	7.27	7.22	7.22	7.22
315.0	7.78	7.50	7.33	7.27	7.22	7.22	7.16	7.16	7.16
360.0	7.83	7.55	7.39	7.33	7.22	7.22	7.16	7.16	7.16
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	7.16	7.16	7.16	7.16	7.16	7.16	7.16	7.16	7.16
45.0	7.27	7.27	7.27	7.27	7.27	7.22	7.22	7.27	7.27
90.0	7.16	7.22	7.22	7.16	7.16	7.16	7.22	7.16	7.22
135.0	7.16	7.16	7.16	7.11	7.16	7.16	7.16	7.16	7.16
180.0	7.11	7.16	7.16	7.11	7.11	7.11	7.11	7.11	7.11
225.0	7.22	7.22	7.22	7.27	7.22	7.27	7.27	7.27	7.27
270.0	7.16	7.22	7.22	7.22	7.22	7.22	7.22	7.22	7.22
315.0	7.16	7.16	7.11	7.16	7.16	7.16	7.16	7.16	7.22
360.0	7.16	7.16	7.16	7.16	7.16	7.16	7.16	7.16	7.16
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	7.22	7.27	7.39	7.55	8.45	9.57	9.79	9.29	8.62
45.0	7.27	7.27	7.22	7.27	7.67	8.23	8.34	7.95	7.78
90.0	7.22	7.22	7.16	7.27	7.67	8.34	8.50	8.11	8.00
135.0	7.16	7.16	7.16	7.16	7.67	8.28	8.62	8.34	8.17
180.0	7.16	7.11	7.11	7.22	7.72	8.45	8.67	8.34	8.23
225.0	7.39	7.39	7.50	7.78	8.67	9.62	9.62	8.73	8.11
270.0	7.27	7.33	7.44	7.61	8.50	9.57	9.74	9.01	8.28
315.0	7.22	7.27	7.39	7.67	8.67	9.68	9.74	9.12	8.56
360.0	7.22	7.27	7.39	7.55	8.45	9.57	9.79	9.29	8.62
C/γ(°)	180.0								
0.0	8.17								
45.0	7.72								
90.0	7.89								
135.0	8.17								
180.0	8.17								
225.0	7.72								
270.0	7.89								
315.0	8.17								
360.0	8.17								