
Client:

LumCAT: 1408-S

Luminaire: 92.70.043.00

Report No: nt0100

Test No: GC2019112607

LampCAT: LUMINUS CXM-3-AC40

Lamp flux(lm): 346.0

Number of Lamps: 1

Length(mm): 0

Phm Type: C

Voltage(V): 35.6500

Current(A): 0.0970

Power (W): 3.4500

PF: 1.0000

Ballast type: DC

Width(mm): 0

Height(mm): 0

Photometric Results

Lumens(lm): 294.57, Efficiency(%): 85.14% , Luminous Efficacy(lm/W): 85.38

Central intensity(cd): 272.756, Maximum intensity(cd): 272.756

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=58.2

[C90/270]Total=58.2

Field angle(10%Imax): [C0/180]Total=100.2

[C90/270]Total=100.2

Maximum s/h(1/2): C0_180=0.86 C90_270=0.86

Maximum s/h(1/4): C0_180=0.91 C90_270=0.91

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 85.14%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 94.501%

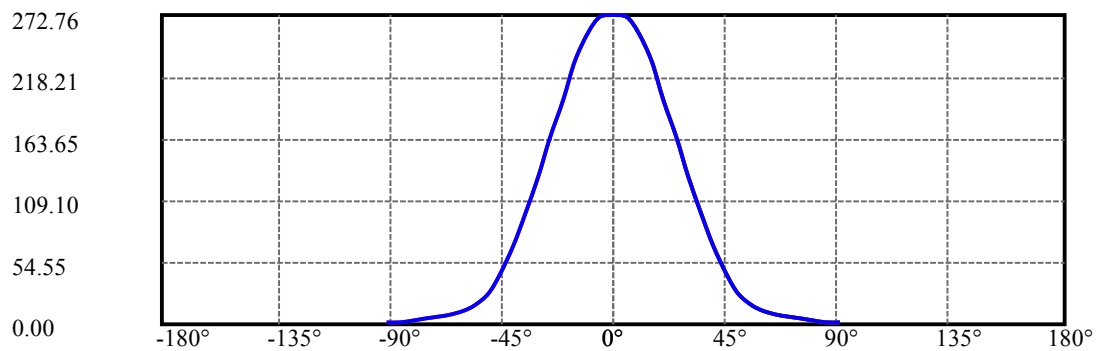
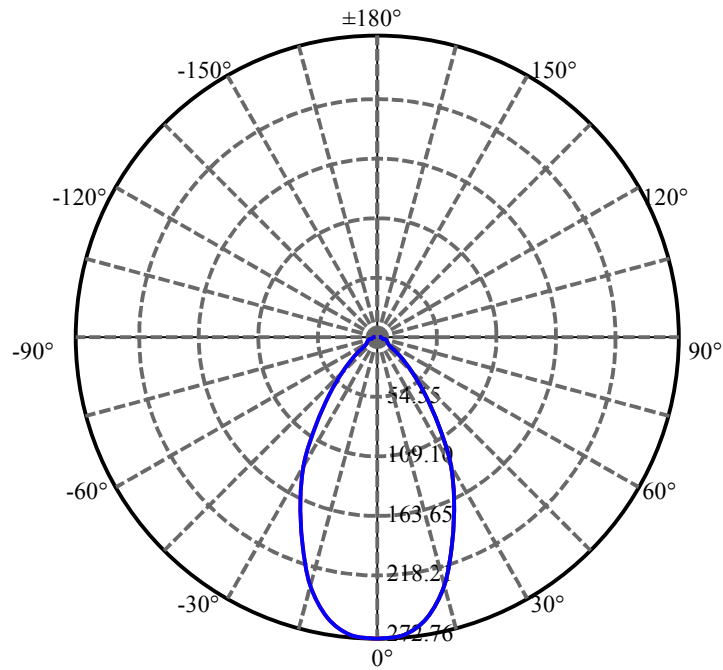
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	272.756	0.000	0	.000%	.000%
5.0	270.218	6.491	6.491	1.876%	2.204%
10.0	258.096	18.899	25.391	5.462%	8.619%
15.0	231.771	29.059	54.449	8.398%	18.484%
20.0	198.696	35.477	89.926	10.253%	30.527%
25.0	163.610	37.999	127.925	10.982%	43.427%
30.0	130.458	37.215	165.139	10.756%	56.060%
35.0	97.109	33.511	198.65	9.685%	67.436%
40.0	68.674	27.660	226.31	7.994%	76.826%
45.0	43.952	20.854	247.164	6.027%	83.905%
50.0	27.457	14.429	261.593	4.170%	88.804%
55.0	17.627	9.803	271.396	2.833%	92.131%
60.0	12.572	6.980	278.376	2.017%	94.501%
65.0	8.972	5.237	283.614	1.514%	96.279%
70.0	6.504	3.919	287.532	1.133%	97.609%
75.0	4.521	2.882	290.414	.833%	98.587%
80.0	3.016	2.017	292.431	.583%	99.272%
85.0	1.814	1.313	293.743	.379%	99.718%
90.0	1.223	0.832	294.575	.240%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	165.14	47.73%	56.06%
0-40	226.31	65.41%	76.83%
0-60	278.38	80.46%	94.50%
0-90	293.74	84.90%	99.72%
0-120	293.74	84.90%	99.72%
0-180	294.57	85.14%	100.00%
60-90	22.35	6.46%	7.59%
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%
0-42.24	235.66	68.11%	80.00%

ZONAL LUMEN SUMMARY

0-10	25.39
10-20	64.54
20-30	75.21
30-40	61.17
40-50	35.28
50-60	16.78
60-70	9.16
70-80	4.90
80-90	1.31
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:

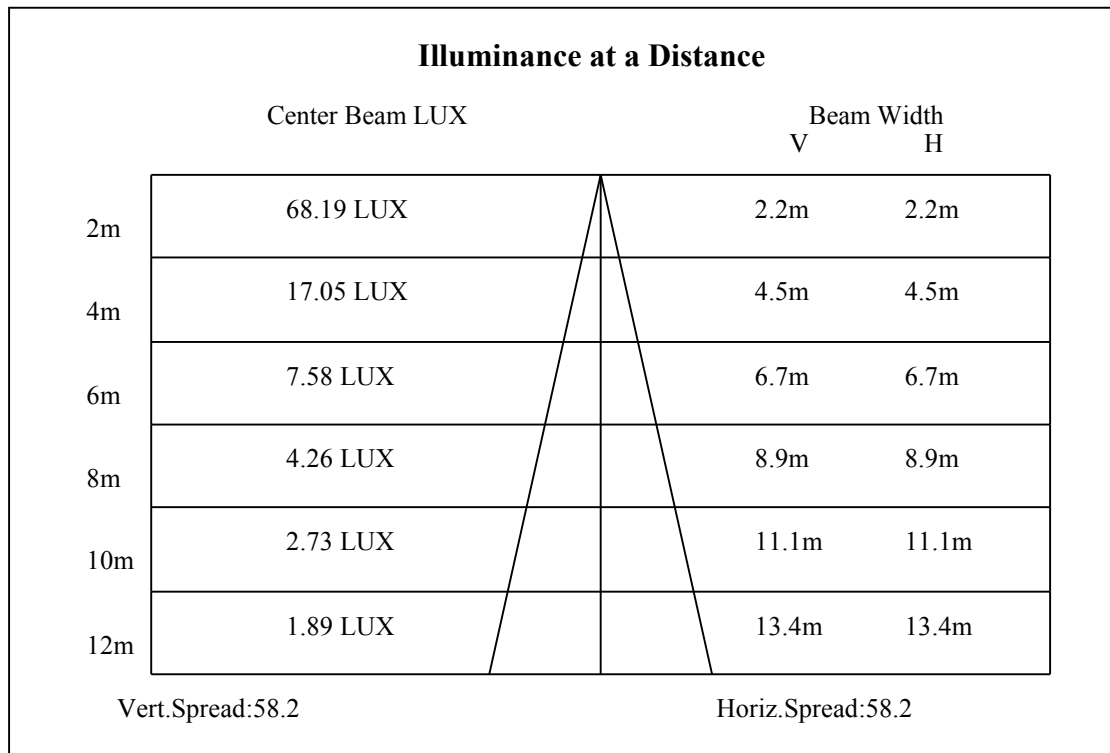
C90/C270:

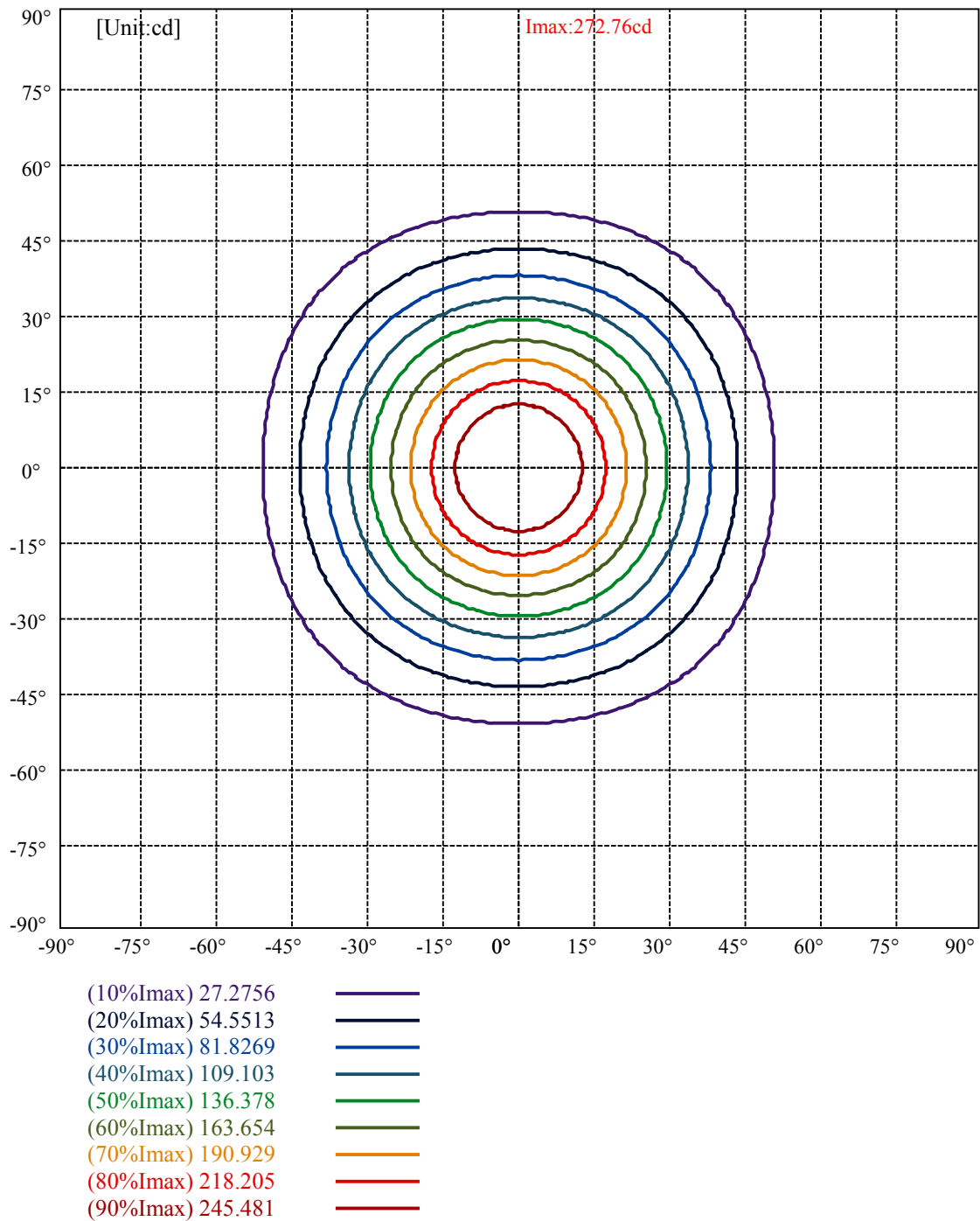
Field angle(10%Imax):C0/180Left:50.1 Right:50.1

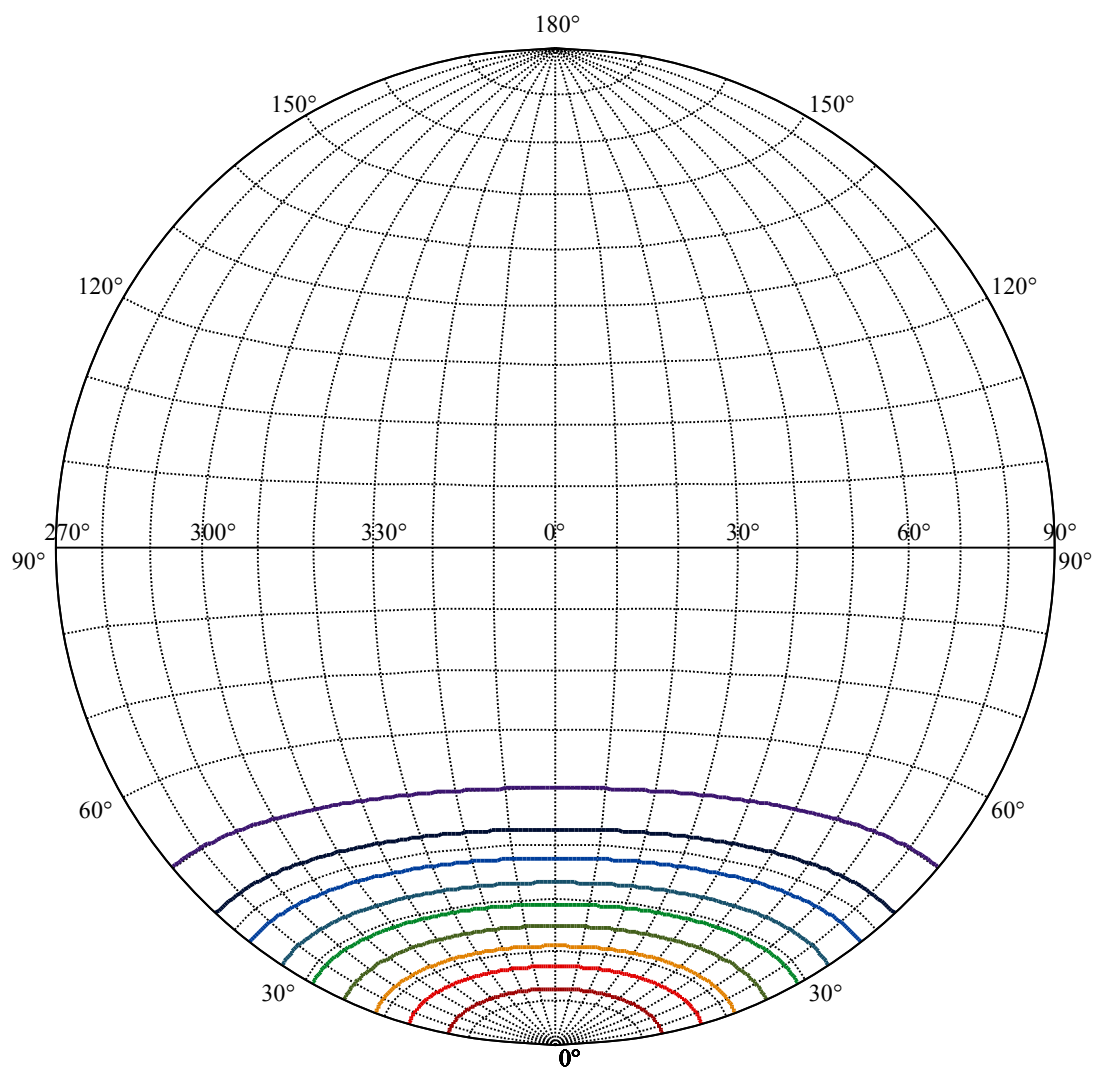
:C90/270Left:50.1 Right:50.1

Beam Angle(50%Imax):C0/180Left:29.1 Right:29.1

:C90/270Left:29.1 Right:29.1







House

[Unit:cd]

Road

Imax:272.76

(10%Imax) 27.2756

(20%Imax) 54.5513

(30%Imax) 81.8269

(40%Imax) 109.103

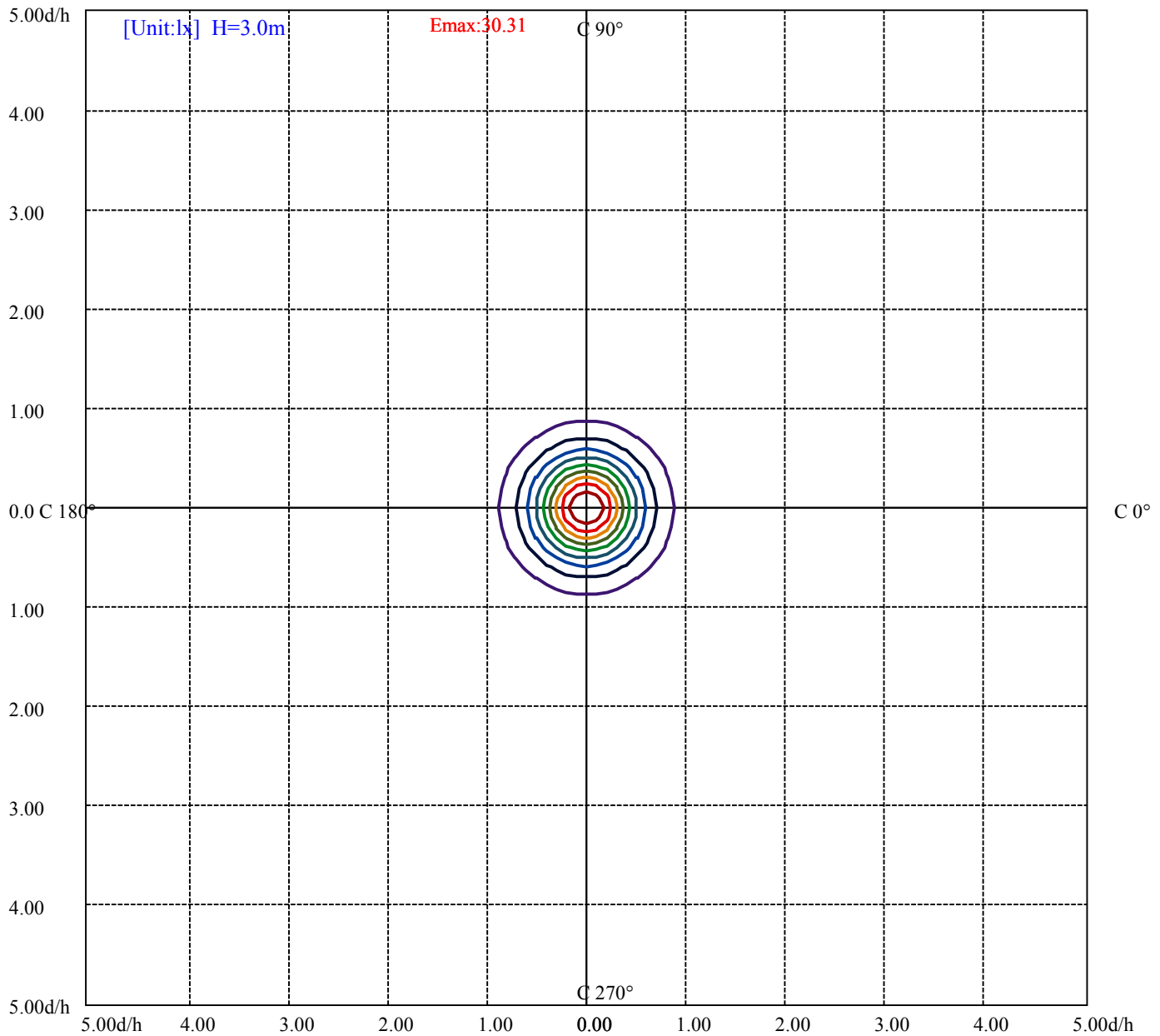
(50%Imax) 136.378

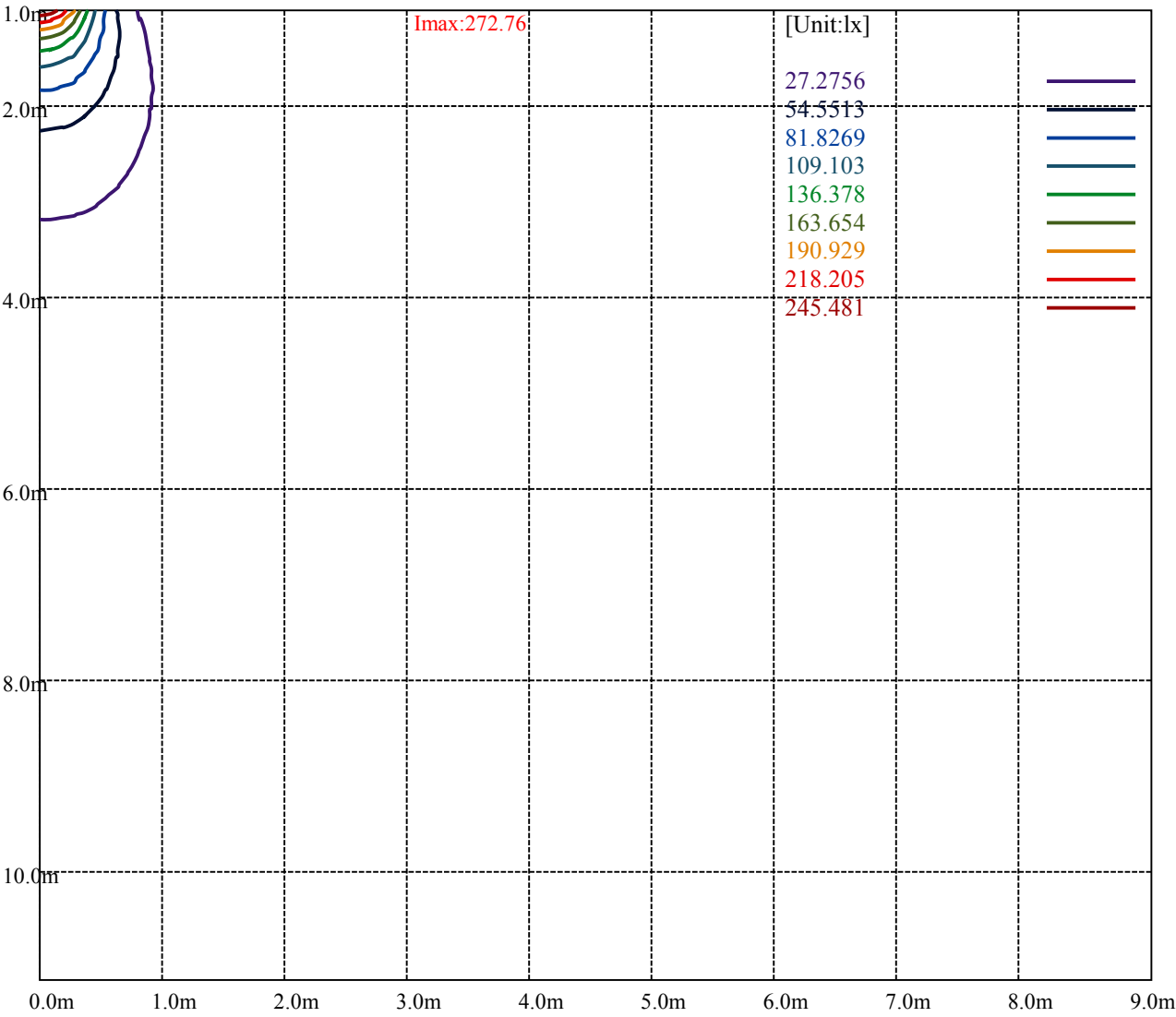
(60%Imax) 163.654

(70%Imax) 190.929

(80%Imax) 218.205

(90%Imax) 245.481





Luminance Table

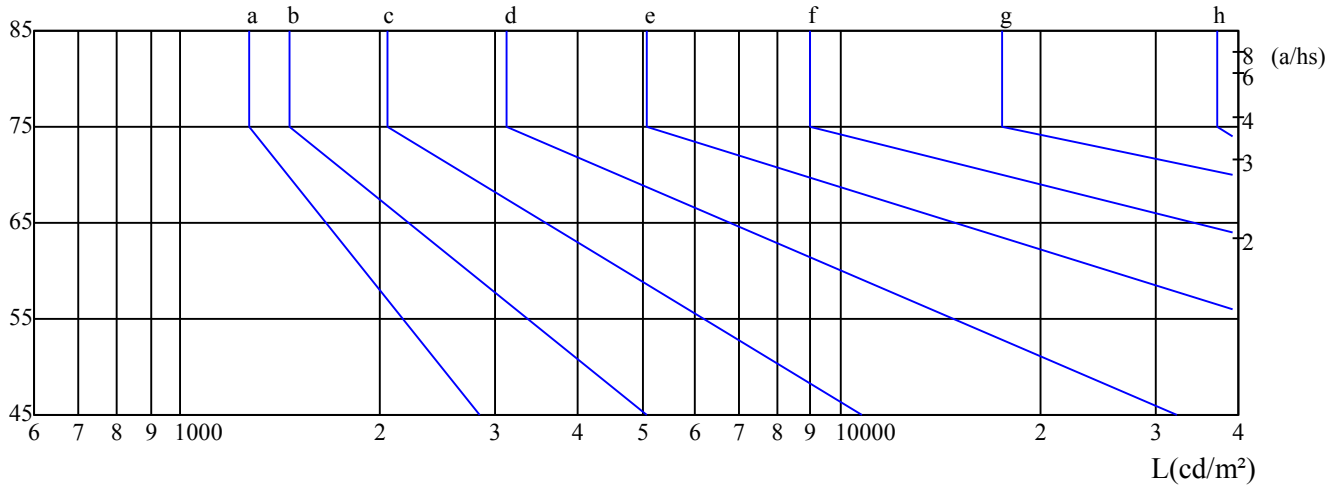
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

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

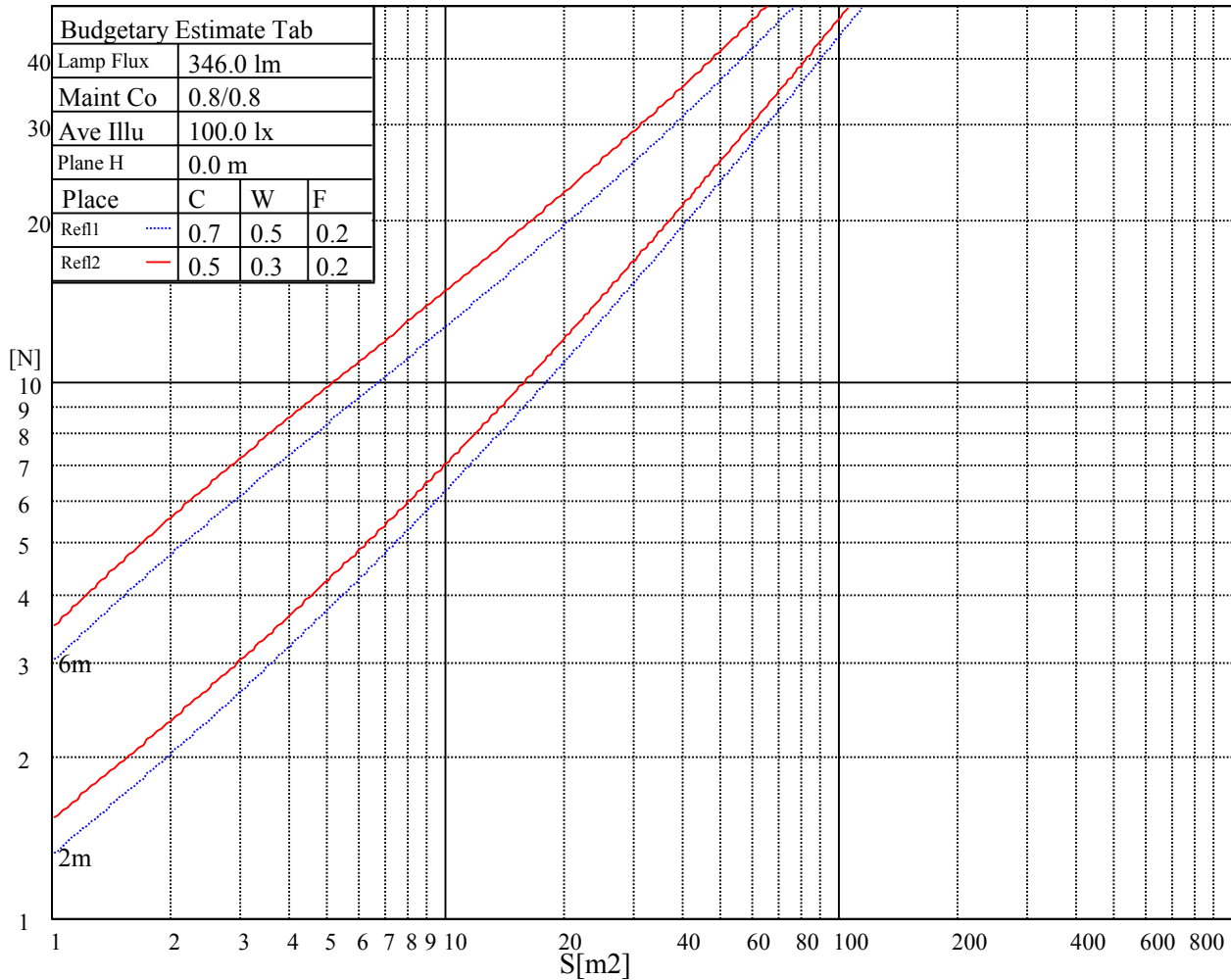
Luminance Limiting Curve

 $\gamma(^{\circ})$ 

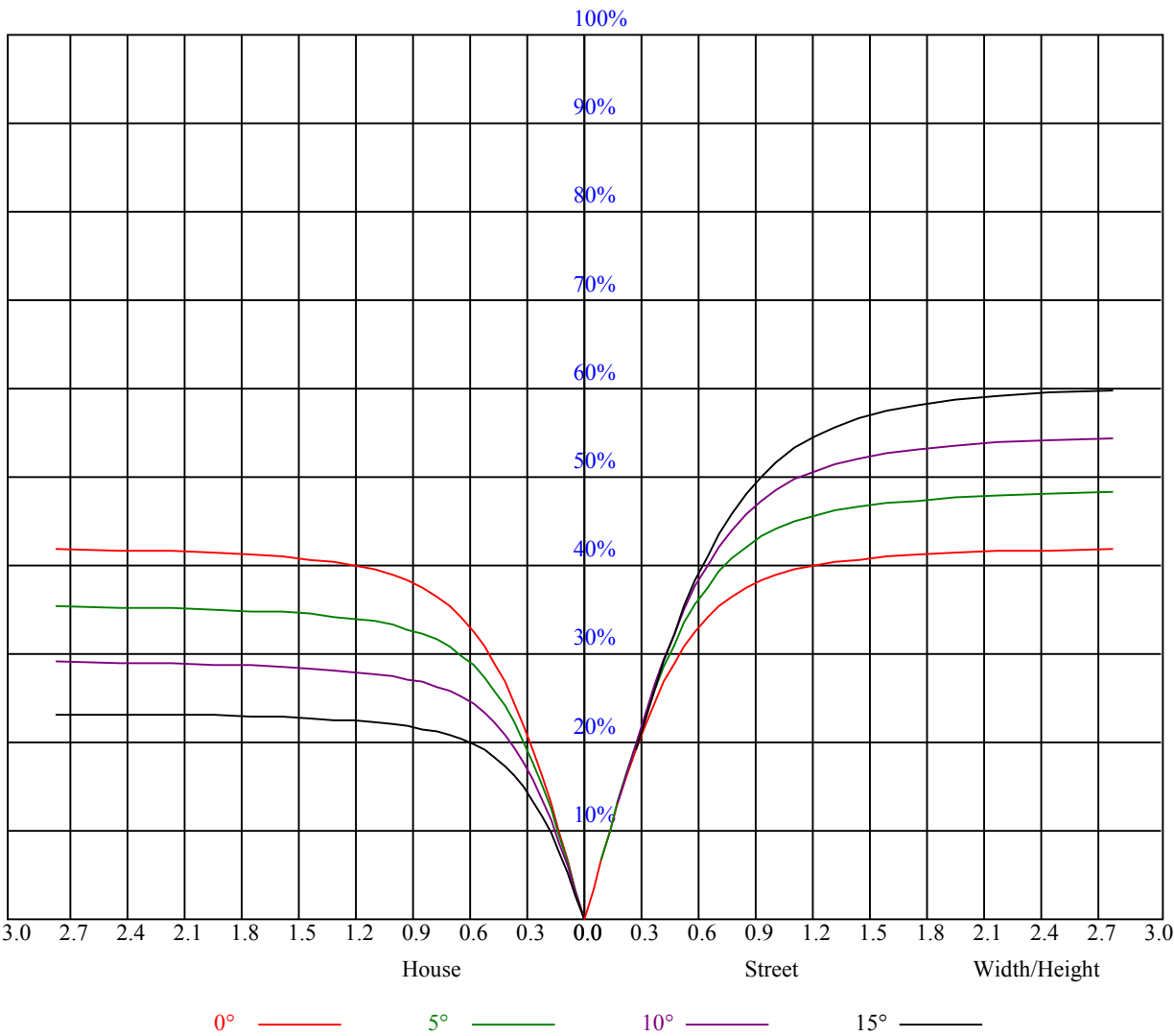
C0 ———

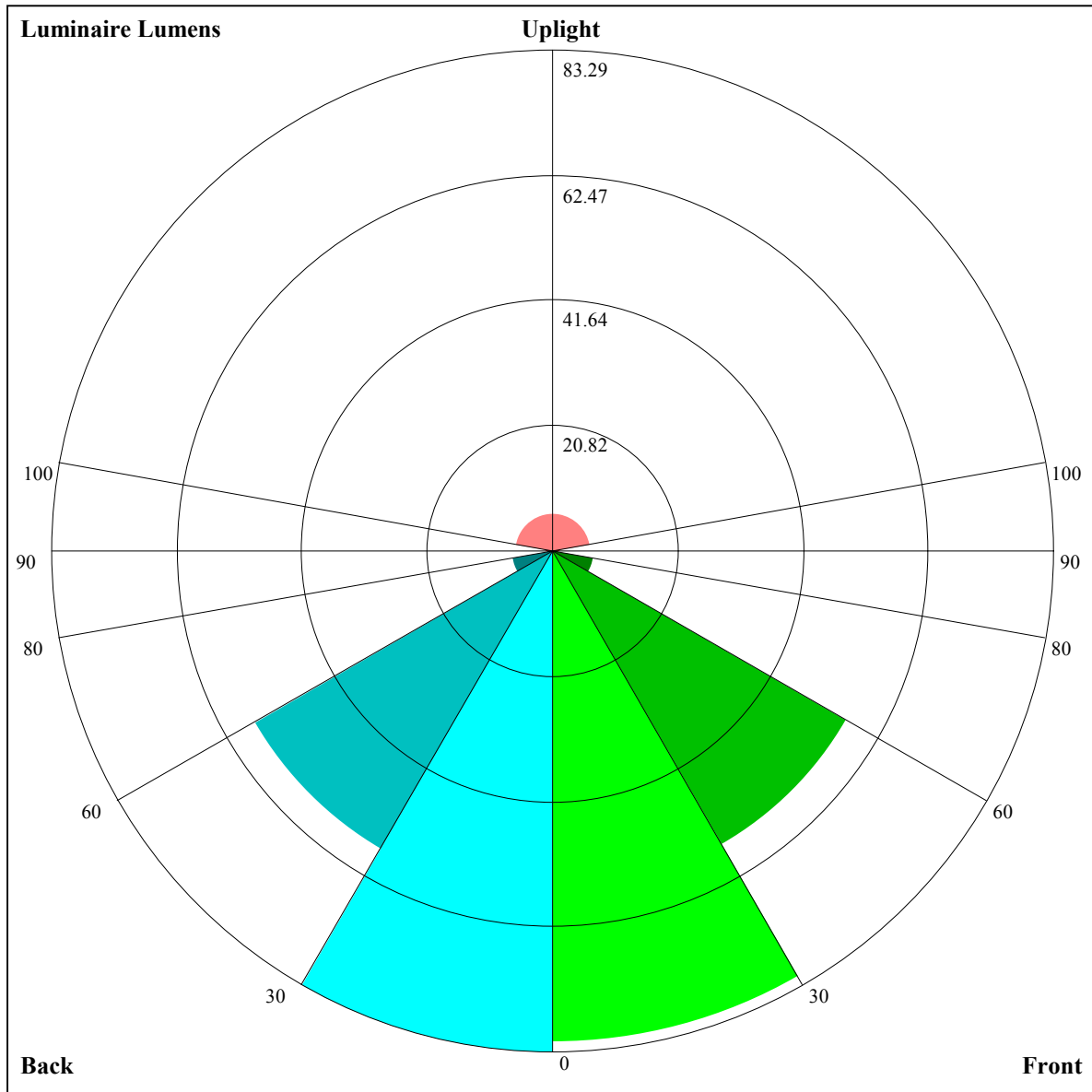
C45 ———

C90 ———



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	1.01	1.01	1.01	0.99	0.99	0.99	0.95	0.95	0.95	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	0.84	0.84	0.83	0.81	0.81	0.80	0.79	0.77
2	0.85	0.81	0.77	0.83	0.79	0.76	0.80	0.77	0.74	0.78	0.75	0.73	0.75	0.73	0.71	0.70
3	0.78	0.73	0.69	0.76	0.72	0.68	0.74	0.70	0.67	0.72	0.69	0.66	0.70	0.67	0.65	0.63
4	0.71	0.66	0.62	0.70	0.65	0.61	0.69	0.64	0.61	0.67	0.63	0.60	0.65	0.62	0.59	0.58
5	0.66	0.60	0.56	0.65	0.60	0.56	0.64	0.59	0.55	0.62	0.58	0.55	0.61	0.57	0.54	0.53
6	0.61	0.55	0.51	0.61	0.55	0.51	0.59	0.54	0.51	0.58	0.54	0.50	0.57	0.53	0.50	0.49
7	0.57	0.51	0.47	0.57	0.51	0.47	0.55	0.50	0.47	0.54	0.50	0.46	0.53	0.49	0.46	0.45
8	0.53	0.48	0.44	0.53	0.47	0.44	0.52	0.47	0.43	0.51	0.46	0.43	0.50	0.46	0.43	0.42
9	0.50	0.44	0.41	0.50	0.44	0.40	0.49	0.44	0.40	0.48	0.43	0.40	0.47	0.43	0.40	0.39
10	0.47	0.42	0.38	0.47	0.41	0.38	0.46	0.41	0.38	0.45	0.41	0.38	0.44	0.40	0.37	0.36





Luminaire Lumens:

FL=81.53,FM=56.34,FH=7.03,FVH=1.07

BL=83.29,BM=57.14,BH=6.96,BVH=1.08

UL=1.33,UH=6.35

BUG Rating:B0-U1-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	273.77	270.00	256.28	228.77	197.49	160.09	127.91	98.38	72.84
45.0	273.04	267.98	255.09	224.55	188.04	150.08	118.01	85.78	59.57
90.0	272.98	267.41	252.90	228.26	194.34	153.45	124.48	93.04	64.80
135.0	271.24	269.78	262.80	237.94	204.41	169.71	134.61	100.18	72.56
180.0	273.77	272.81	259.99	232.59	198.62	167.06	132.69	97.82	67.89
225.0	273.04	271.86	261.28	234.51	199.07	166.05	131.51	96.69	65.64
270.0	272.98	272.36	259.88	235.24	207.62	179.61	144.17	107.66	77.34
315.0	271.24	269.55	256.56	232.31	199.97	162.84	130.28	97.31	68.74
360.0	273.77	270.00	256.28	228.77	197.49	160.09	127.91	98.38	72.84

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	47.25	29.25	19.13	13.39	9.51	6.86	4.84	3.15	1.80
45.0	38.93	25.03	16.54	12.26	8.66	6.24	4.22	2.81	1.69
90.0	39.99	24.47	15.75	11.42	8.10	5.85	3.88	2.70	1.69
135.0	45.34	27.96	17.72	12.66	8.89	6.47	4.61	3.09	1.91
180.0	40.84	26.66	16.93	11.93	8.66	6.30	4.33	2.87	1.74
225.0	43.37	27.28	17.78	12.83	9.23	6.69	4.73	3.04	1.86
270.0	51.41	31.33	19.29	13.50	9.51	6.92	4.95	3.38	1.97
315.0	44.49	27.68	17.89	12.60	9.23	6.69	4.61	3.09	1.86
360.0	47.25	29.25	19.13	13.39	9.51	6.86	4.84	3.15	1.80

C/γ(°)	90.0
0.0	1.29
45.0	1.18
90.0	1.18
135.0	1.18
180.0	1.18
225.0	1.24
270.0	1.29
315.0	1.24
360.0	1.29