
Client:

LumCAT: 1408-N

Luminaire: 92.70.043.00

Report No: nt0100

Test No: GC2019122009

LampCAT: LUMINUS CXM-6-AC40

Lamp flux(lm): 823.0

Number of Lamps: 1

Length(mm): 0

Phm Type: C

Voltage(V): 34.8400

Current(A): 0.1970

Power (W): 6.8600

PF: 1.0000

Ballast type: DC

Width(mm): 0

Height(mm): 0

Photometric Results

Lumens(lm): 699.78, Efficiency(%): 85.03% , Luminous Efficacy(lm/W): 102.01

Central intensity(cd): 651.572, Maximum intensity(cd): 651.572

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=57.4

[C90/270]Total=57.4

Field angle(10%Imax): [C0/180]Total=101.2

[C90/270]Total=101.2

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

Maximum s/h(1/4): C0_180=0.90 C90_270=0.90

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 85.03%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 94.206%

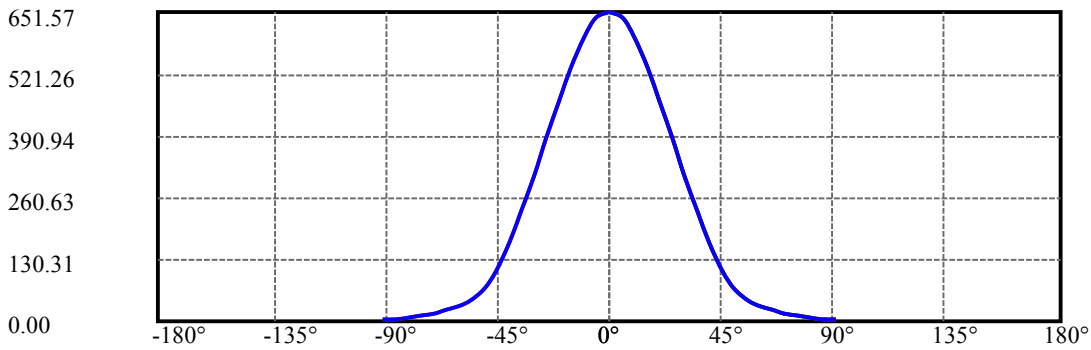
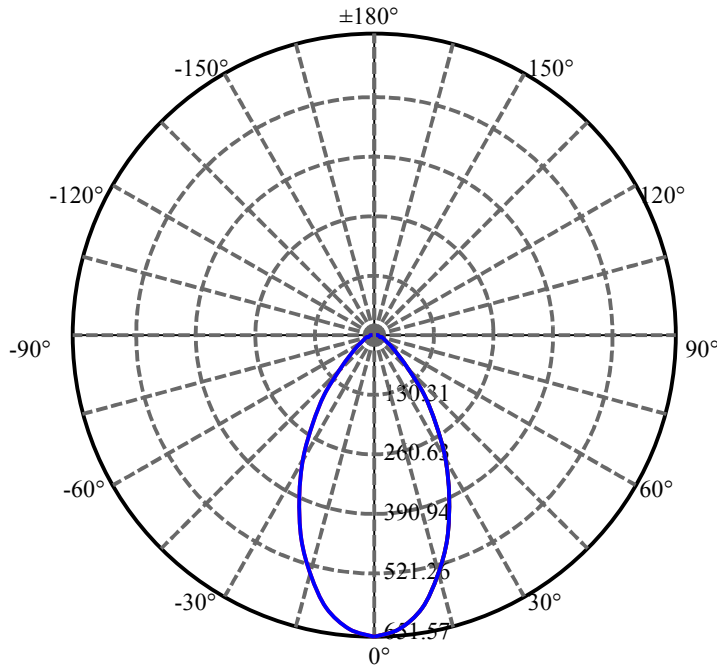
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	651.572	0.000	0	.000%	.000%
5.0	638.170	15.419	15.419	1.873%	2.203%
10.0	598.388	44.236	59.654	5.375%	8.525%
15.0	535.985	67.290	126.944	8.176%	18.141%
20.0	466.270	82.600	209.544	10.036%	29.944%
25.0	383.984	89.176	298.72	10.835%	42.688%
30.0	306.204	87.344	386.064	10.613%	55.169%
35.0	231.891	79.238	465.302	9.628%	66.492%
40.0	165.846	66.359	531.662	8.063%	75.975%
45.0	106.088	50.351	582.012	6.118%	83.170%
50.0	68.098	35.197	617.209	4.277%	88.200%
55.0	44.501	24.483	641.692	2.975%	91.699%
60.0	31.416	17.548	659.239	2.132%	94.206%
65.0	22.507	13.109	672.348	1.593%	96.080%
70.0	16.552	9.890	682.238	1.202%	97.493%
75.0	11.306	7.282	689.52	.885%	98.533%
80.0	7.298	4.978	694.498	.605%	99.245%
85.0	4.465	3.196	697.694	.388%	99.701%
90.0	3.164	2.089	699.783	.254%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	386.06	46.91%	55.17%
0-40	531.66	64.60%	75.98%
0-60	659.24	80.10%	94.21%
0-90	697.69	84.77%	99.70%
0-120	697.69	84.77%	99.70%
0-180	699.78	85.03%	100.00%
60-90	56.00	6.80%	8.00%
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%
0-42.80	559.83	68.02%	80.00%

ZONAL LUMEN SUMMARY

0-10	59.65
10-20	149.89
20-30	176.52
30-40	145.60
40-50	85.55
50-60	42.03
60-70	23.00
70-80	12.26
80-90	3.20
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



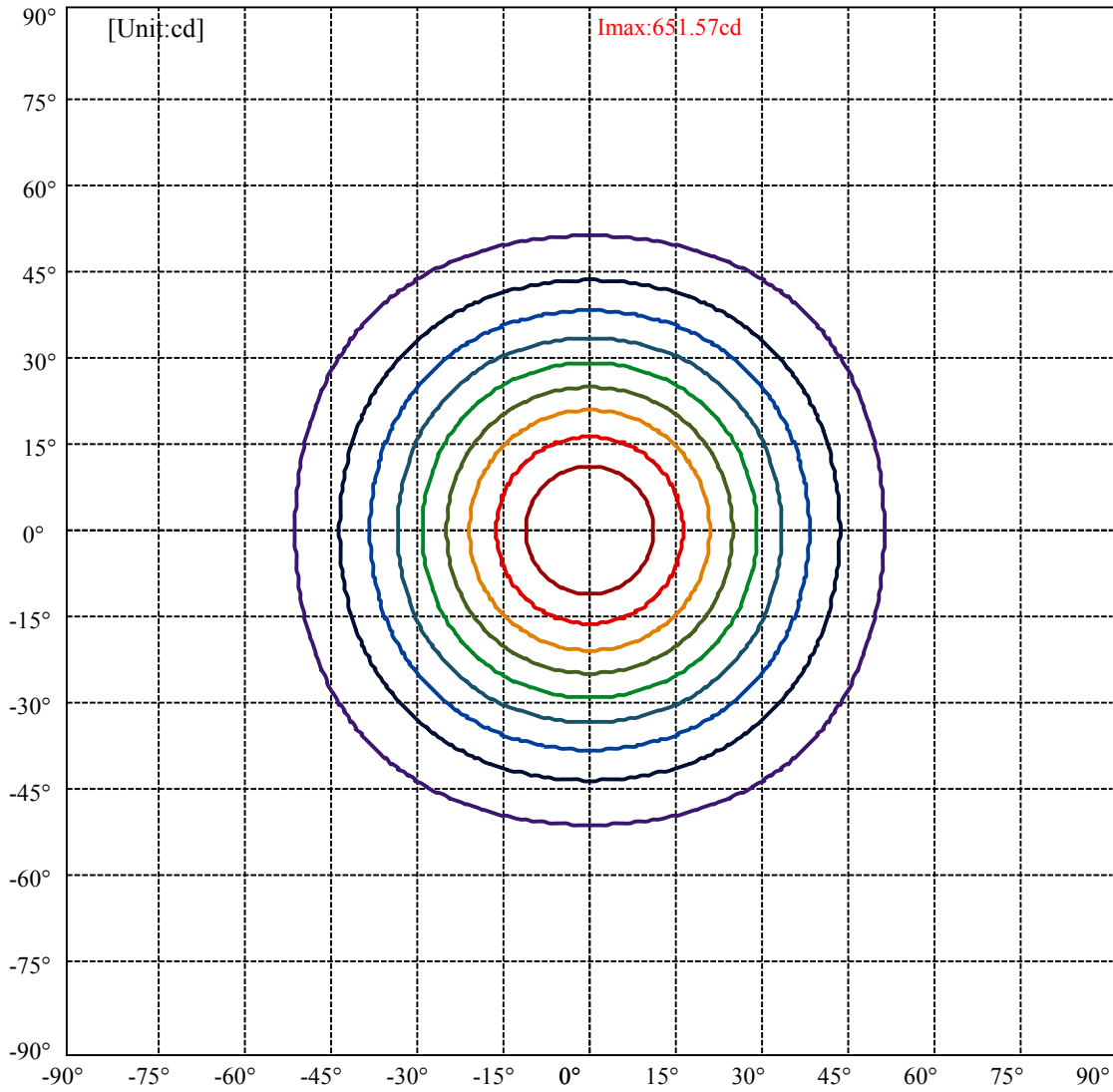
C0(Max): —————

C0/C180: —————

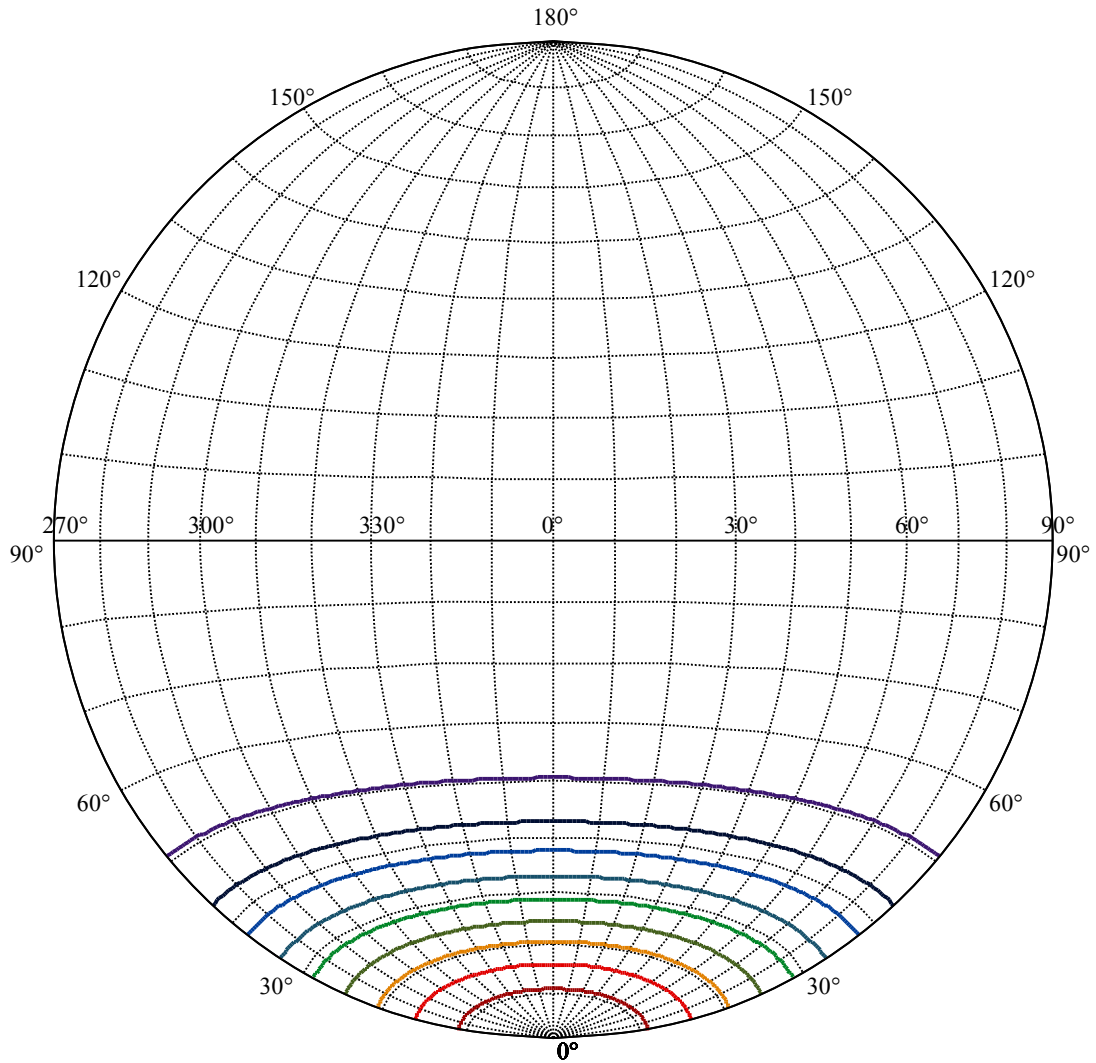
C90/C270: —————

Field angle(10%Imax):C0/180Left:50.6 Right:50.6
:C90/270Left:50.6 Right:50.6

Beam Angle(50%Imax):C0/180Left:28.7 Right:28.7
:C90/270Left:28.7 Right:28.7



(10%Imax) 65.1572	—
(20%Imax) 130.314	—
(30%Imax) 195.472	—
(40%Imax) 260.629	—
(50%Imax) 325.786	—
(60%Imax) 390.943	—
(70%Imax) 456.1	—
(80%Imax) 521.258	—
(90%Imax) 586.415	—

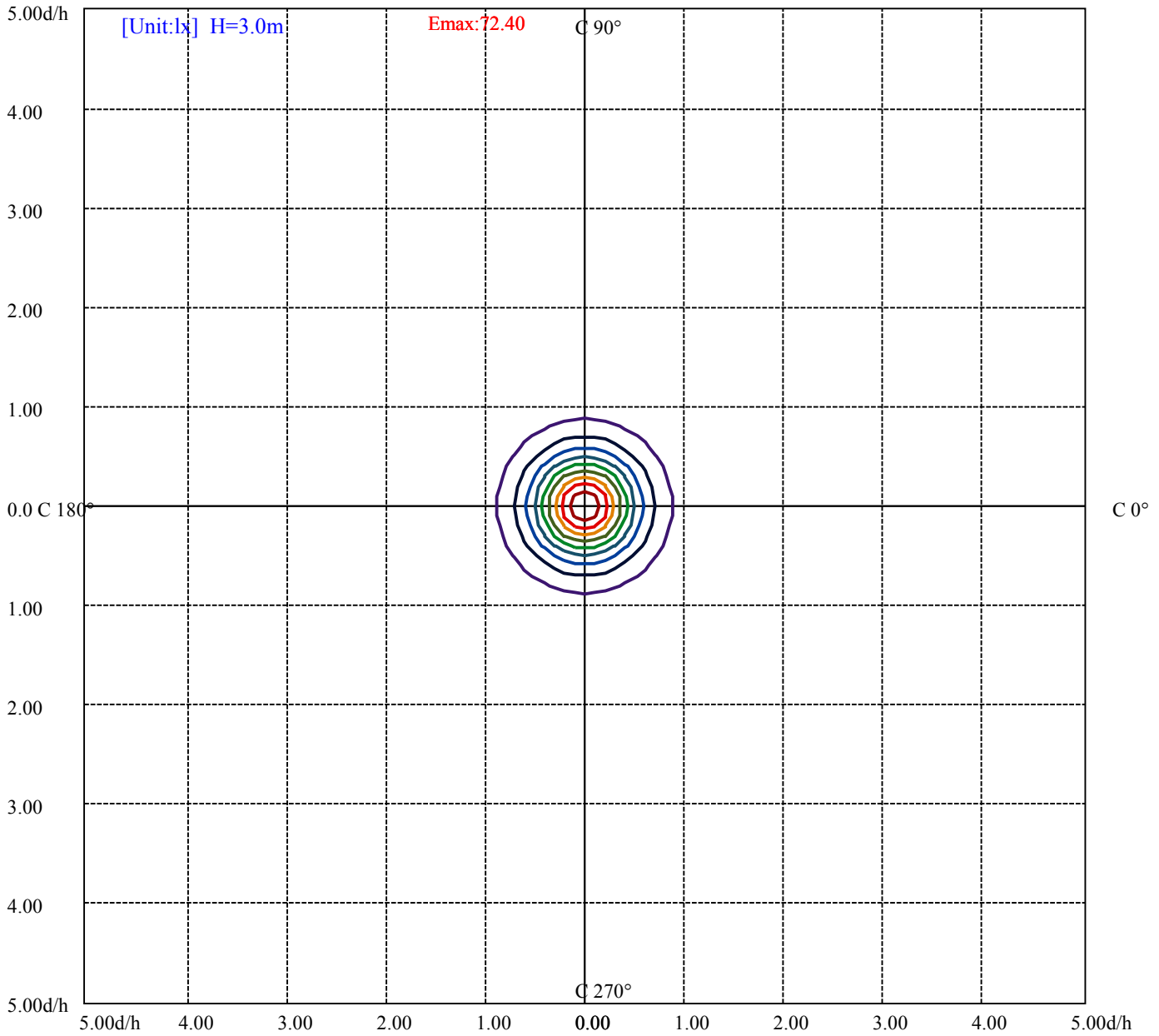


House

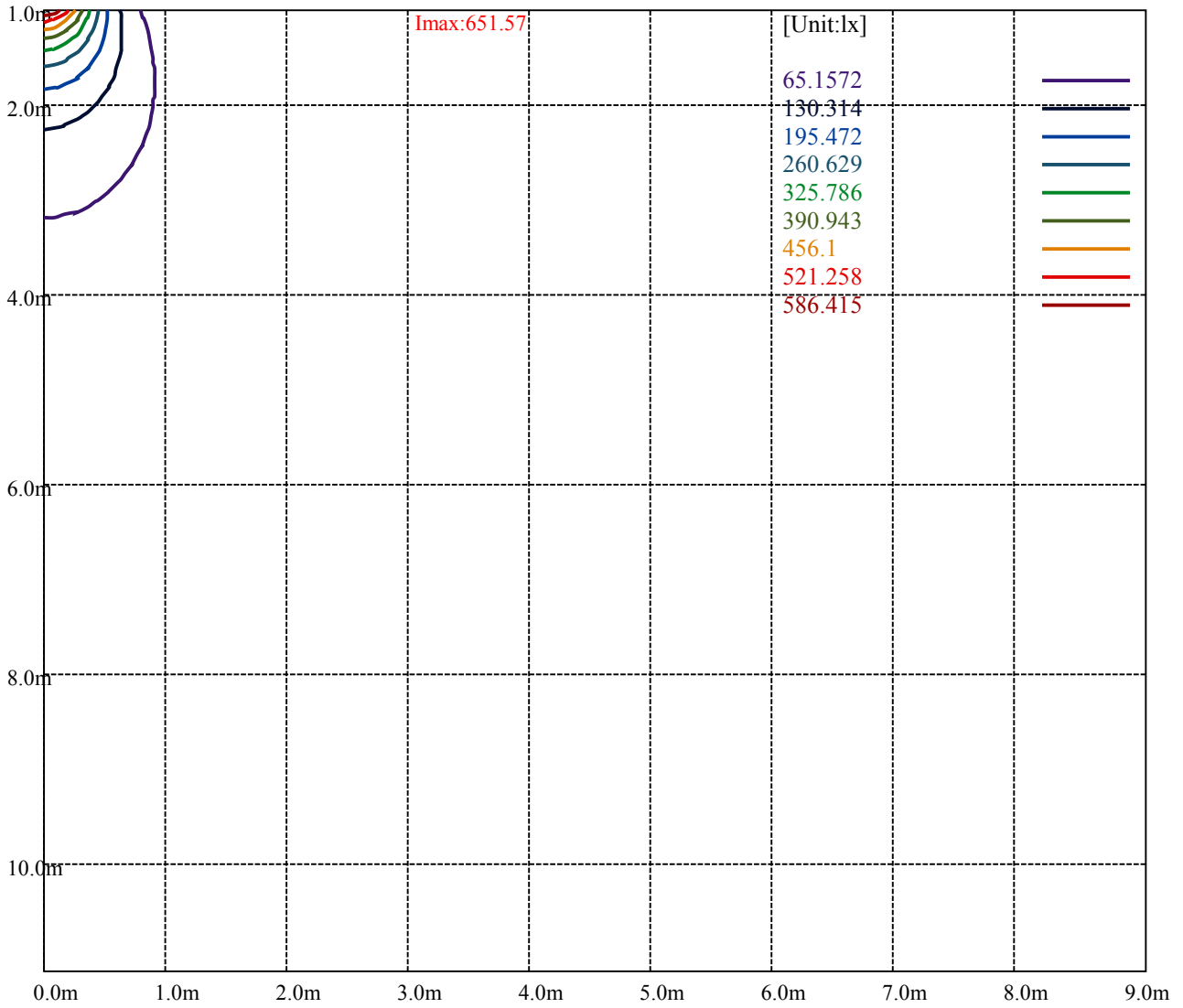
[Unit:cd]

Road

Imax:651.57	—
(10%Imax) 65.1572	—
(20%Imax) 130.314	—
(30%Imax) 195.472	—
(40%Imax) 260.629	—
(50%Imax) 325.786	—
(60%Imax) 390.943	—
(70%Imax) 456.1	—
(80%Imax) 521.258	—
(90%Imax) 586.415	—



(10%Emax) 7.239689	—
(20%Emax) 14.47933	—
(30%Emax) 21.719	—
(40%Emax) 28.95878	—
(50%Emax) 36.19844	—
(60%Emax) 43.43811	—
(70%Emax) 50.67778	—
(80%Emax) 57.91745	—
(90%Emax) 65.15711	—



Luminance Table

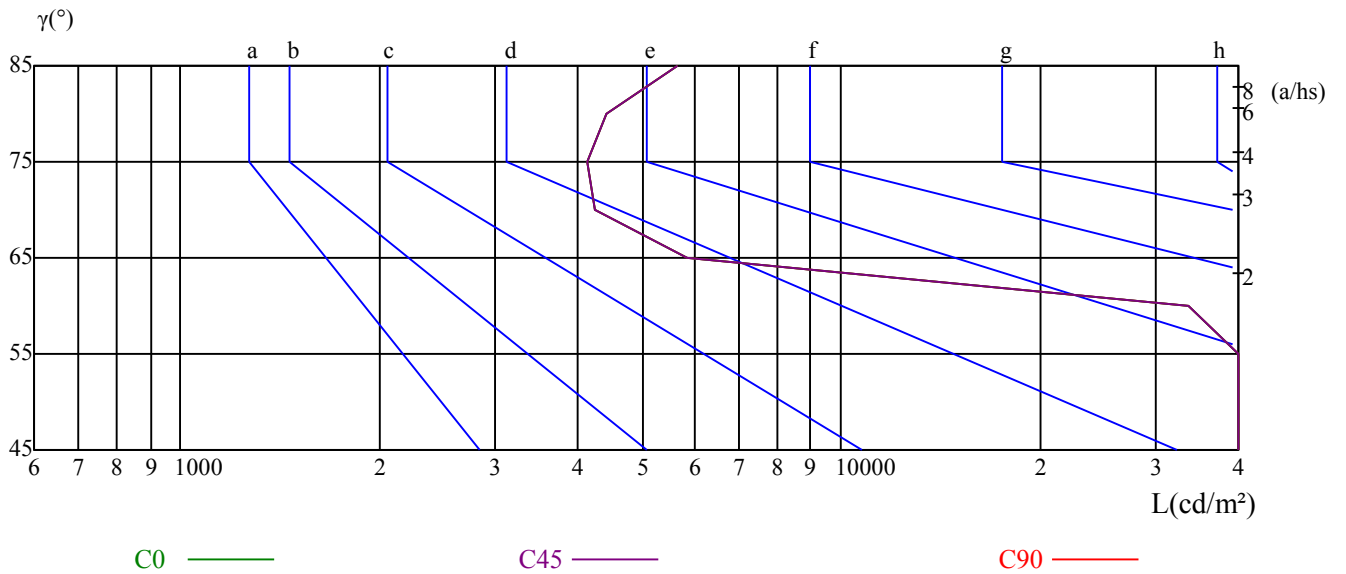
γ	45	50	55	60	65	70	75	80	85
C0	46650	52836	53885	33658	5848	4245	4131	4405	5640
C45	46650	52836	53885	33658	5848	4245	4131	4405	5640
C90	46650	52836	53885	33658	5848	4245	4131	4405	5640

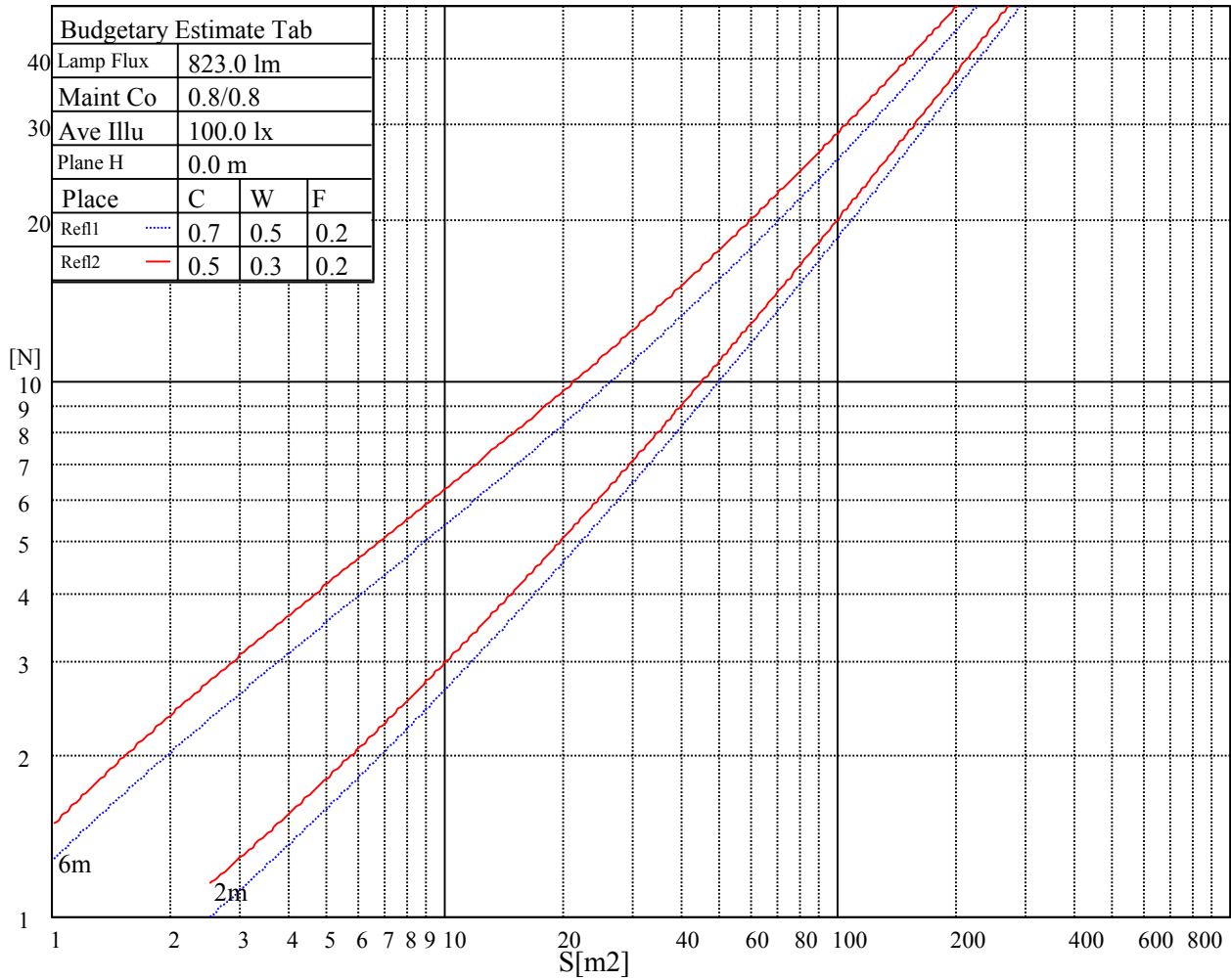
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
5848	5848	5848	4131	4131	4131	5640	5640	5640

Glare Table

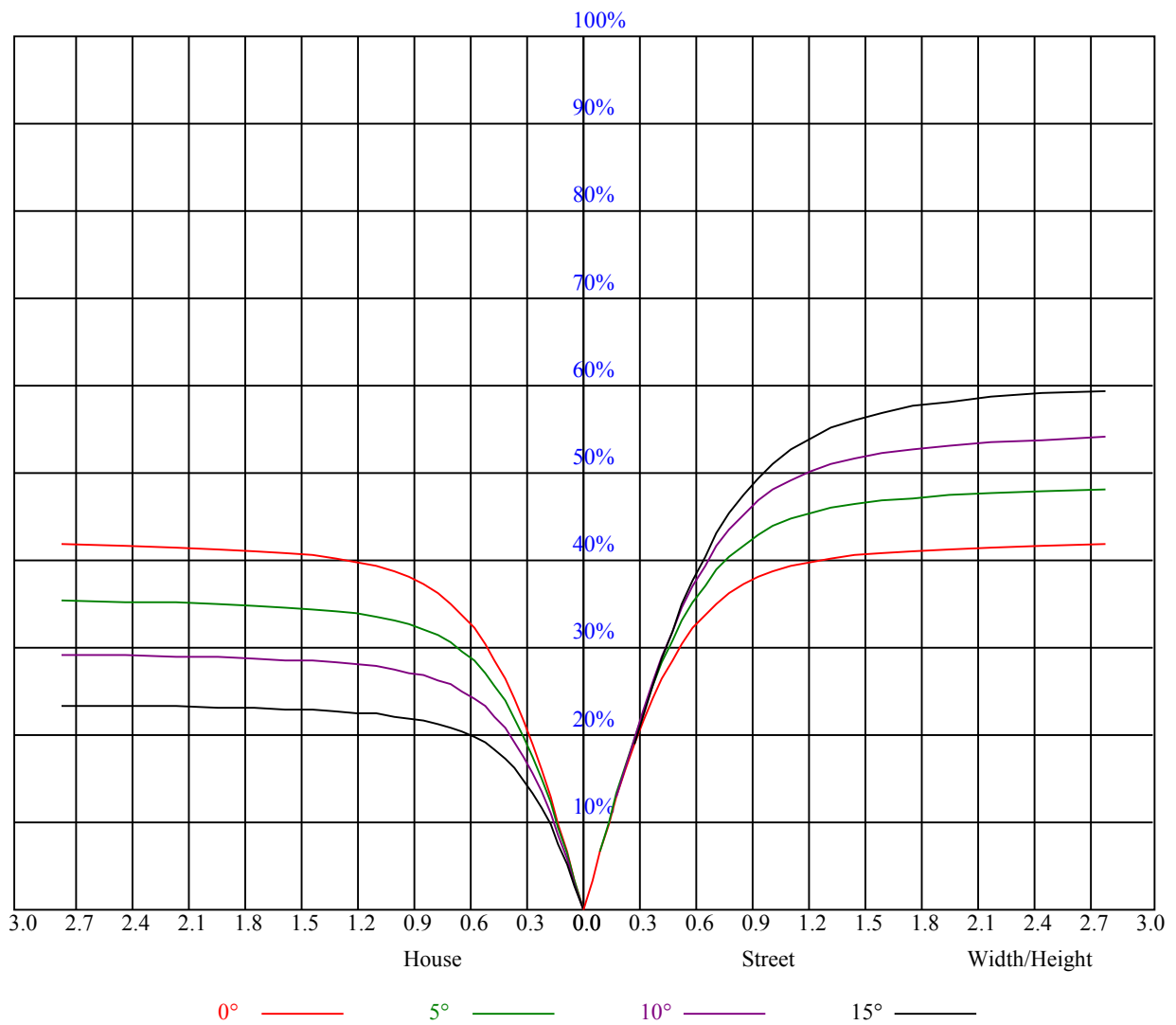
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

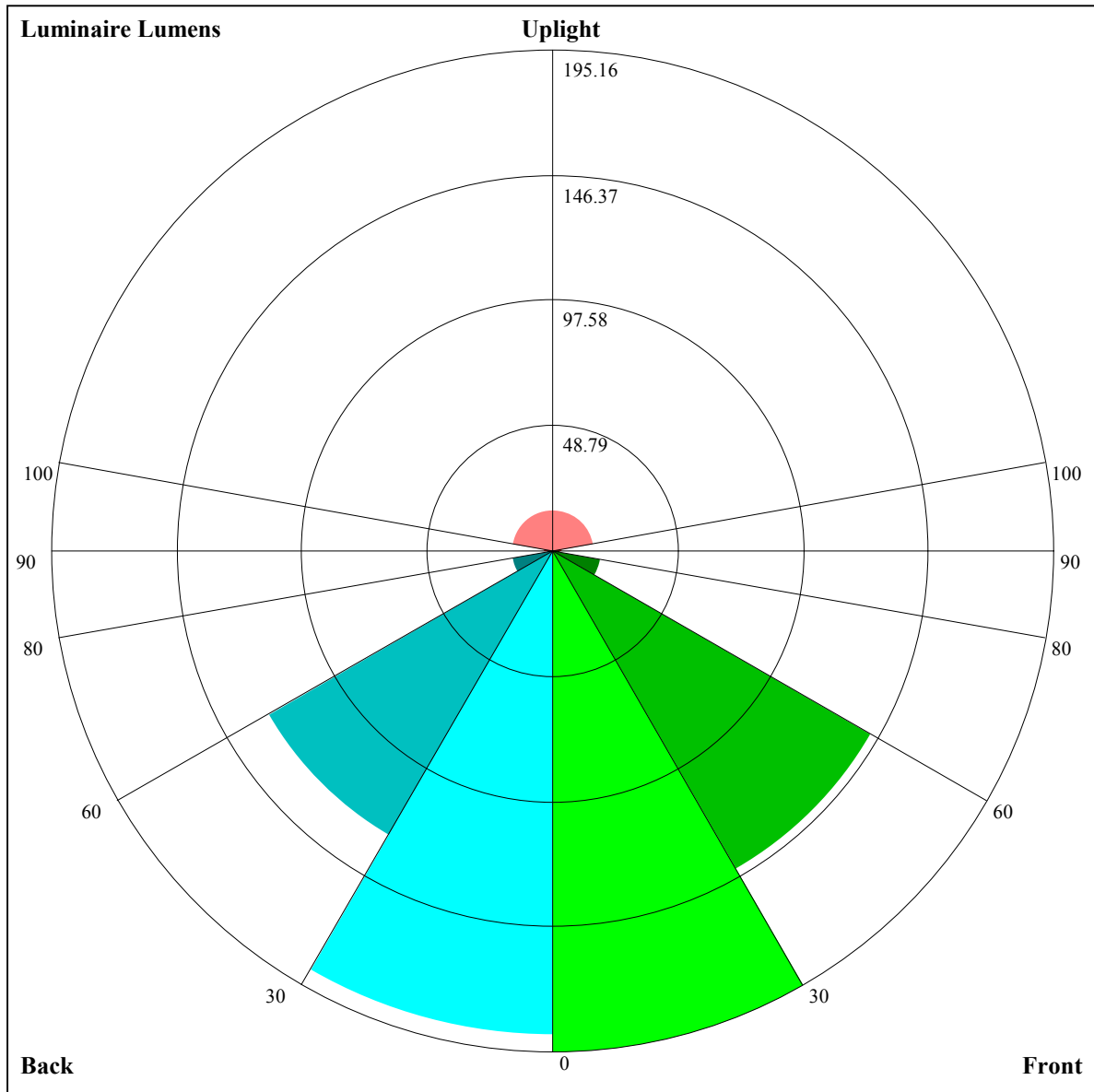
Luminance Limiting Curve





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	1.01	1.01	1.01	0.99	0.99	0.99	0.94	0.94	0.94	0.90	0.90	0.90	0.87	0.87	0.87	0.85
1	0.92	0.90	0.87	0.91	0.88	0.86	0.87	0.85	0.83	0.84	0.82	0.81	0.81	0.80	0.79	0.77
2	0.84	0.80	0.77	0.83	0.79	0.76	0.80	0.77	0.74	0.77	0.75	0.72	0.75	0.73	0.71	0.69
3	0.77	0.72	0.68	0.76	0.71	0.68	0.74	0.70	0.66	0.72	0.68	0.65	0.70	0.67	0.64	0.63
4	0.71	0.66	0.61	0.70	0.65	0.61	0.68	0.64	0.60	0.66	0.63	0.59	0.65	0.61	0.59	0.57
5	0.66	0.60	0.56	0.65	0.59	0.55	0.63	0.58	0.55	0.62	0.58	0.54	0.60	0.57	0.54	0.52
6	0.61	0.55	0.51	0.60	0.55	0.51	0.59	0.54	0.50	0.58	0.53	0.50	0.56	0.52	0.49	0.48
7	0.57	0.51	0.47	0.56	0.50	0.47	0.55	0.50	0.46	0.54	0.49	0.46	0.53	0.49	0.46	0.44
8	0.53	0.47	0.43	0.52	0.47	0.43	0.51	0.46	0.43	0.50	0.46	0.43	0.50	0.45	0.42	0.41
9	0.50	0.44	0.40	0.49	0.44	0.40	0.48	0.43	0.40	0.47	0.43	0.40	0.47	0.43	0.40	0.38
10	0.47	0.41	0.37	0.46	0.41	0.37	0.45	0.41	0.37	0.45	0.40	0.37	0.44	0.40	0.37	0.36





Luminaire Lumens:

FL=195.16,FM=143.04,FH=18.73,FVH=2.86

BL=188.91,BM=128.14,BH=16.3,BVH=2.38

UL=3.45,UH=16.43

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	654.58	642.04	609.19	559.07	492.24	412.93	335.81	264.49	195.24
45.0	651.66	645.69	617.85	561.49	491.23	405.79	326.81	250.31	188.04
90.0	651.54	645.69	611.61	544.05	473.79	387.23	309.66	239.01	171.39
135.0	648.51	643.44	607.95	544.73	473.79	391.05	313.88	239.79	171.06
180.0	654.58	639.06	590.68	516.94	445.05	363.38	283.84	199.91	140.63
225.0	651.66	629.49	579.99	513.00	439.31	357.30	280.69	207.45	140.12
270.0	651.54	630.68	584.21	523.29	453.54	371.93	291.09	219.04	154.07
315.0	648.51	629.27	585.62	525.32	461.19	382.28	307.86	235.13	166.22
360.0	654.58	642.04	609.19	559.07	492.24	412.93	335.81	264.49	195.24
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	129.66	84.38	53.83	37.35	26.94	19.74	13.84	9.45	5.68
45.0	124.54	79.37	50.79	35.27	25.37	18.90	13.22	8.83	5.29
90.0	108.79	70.65	44.94	31.73	22.56	16.93	11.48	7.14	4.44
135.0	107.83	69.02	44.33	31.56	22.39	16.43	11.08	7.09	4.22
180.0	87.69	56.36	38.19	27.34	19.52	14.23	9.45	5.68	3.66
225.0	86.12	55.91	37.29	26.66	19.35	13.73	9.06	5.57	3.49
270.0	98.33	61.93	41.51	29.48	21.04	15.58	10.58	6.81	4.05
315.0	105.75	67.16	45.11	31.95	22.89	16.88	11.76	7.82	4.89
360.0	129.66	84.38	53.83	37.35	26.94	19.74	13.84	9.45	5.68
C/γ(°)	90.0								
0.0	3.60								
45.0	3.26								
90.0	3.04								
135.0	3.09								
180.0	2.98								
225.0	2.98								
270.0	3.09								
315.0	3.26								
360.0	3.60								