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Nata

Client:

LumCAT: 2-2755-L

Luminaire: 92.70.412.00

Report No: 2024822-B013

Ballast type: AC

Test No: 2024822-C013

Voltage(V): 34.910

LampCAT: Fortimo_SLM_C_1208

Current(A): 0.576

Lamp flux(lm): 3311.0

Power (W): 20.100

Number of Lamps: 1

PF: 0.000

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 3101.36, Efficiency(%): 93.67% , Luminous Efficacy(lm/W): 154.30

Central intensity(cd): 11608.850, Maximum intensity(cd): 11608.850

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=24.2

[C90/270]Total=24.2

Field angle(10%Imax): [C0/180]Total=55.0

[C90/270]Total=55.0

Maximum s/h(1/2): C0_180=0.41 C90_270=0.41

Maximum s/h(1/4): C0_180=0.43 C90_270=0.43

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 93.67%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 99.186%

Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2024/8/22
Humidity(%): 60.0%

Operator: NT
Distance(m): 7.25

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	11608.849	0.000	0	0.00%	0.00%
1.0	11582.383	11.097	11.097	0.34%	0.36%
2.0	11475.616	33.095	44.192	1.00%	1.42%
3.0	11106.673	54.009	98.201	1.63%	3.17%
4.0	10699.005	72.991	171.192	2.20%	5.52%
5.0	10303.420	90.351	261.543	2.73%	8.43%
6.0	9769.871	105.490	367.033	3.19%	11.83%
7.0	9159.909	117.497	484.53	3.55%	15.62%
8.0	8514.862	126.495	611.025	3.82%	19.70%
9.0	7845.564	132.592	743.618	4.00%	23.98%
10.0	7193.402	136.097	879.715	4.11%	28.37%
11.0	6498.341	136.809	1016.523	4.13%	32.78%
12.0	5874.254	135.250	1151.773	4.08%	37.14%
13.0	5266.112	132.208	1283.982	3.99%	41.40%
14.0	4662.846	127.090	1411.071	3.84%	45.50%
15.0	4142.313	120.881	1531.952	3.65%	49.40%
16.0	3655.420	114.259	1646.211	3.45%	53.08%
17.0	3239.295	107.369	1753.58	3.24%	56.54%
18.0	2958.487	102.188	1855.768	3.09%	59.84%
19.0	2600.260	96.711	1952.479	2.92%	62.96%
20.0	2307.224	89.821	2042.3	2.71%	65.85%
21.0	2133.814	85.277	2127.577	2.58%	68.60%
22.0	1929.858	81.661	2209.238	2.47%	71.23%
23.0	1696.645	76.094	2285.332	2.30%	73.69%
24.0	1559.516	71.191	2356.523	2.15%	75.98%
25.0	1415.304	67.641	2424.164	2.04%	78.16%
26.0	1306.106	64.239	2488.403	1.94%	80.24%
27.0	1231.756	62.089	2550.492	1.88%	82.24%
28.0	1102.866	59.108	2609.6	1.79%	84.14%
29.0	1030.100	55.804	2665.405	1.69%	85.94%
30.0	931.480	52.962	2718.367	1.60%	87.65%
31.0	828.227	48.970	2767.337	1.48%	89.23%
32.0	723.273	44.449	2811.786	1.34%	90.66%
33.0	617.195	39.491	2851.276	1.19%	91.94%
34.0	517.268	34.332	2885.609	1.04%	93.04%
35.0	425.047	29.265	2914.873	0.88%	93.99%
36.0	347.937	24.612	2939.485	0.74%	94.78%
37.0	284.278	20.619	2960.105	0.62%	95.45%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	203.713	16.288	2976.393	0.49%	95.97%
39.0	167.871	12.683	2989.076	0.38%	96.38%
40.0	131.393	10.437	2999.514	0.32%	96.72%
41.0	92.911	7.987	3007.501	0.24%	96.97%
42.0	78.929	6.243	3013.744	0.19%	97.17%
43.0	69.895	5.513	3019.257	0.17%	97.35%
44.0	64.015	5.054	3024.311	0.15%	97.52%
45.0	58.640	4.714	3029.025	0.14%	97.67%
46.0	53.627	4.391	3033.415	0.13%	97.81%
47.0	49.770	4.112	3037.528	0.12%	97.94%
48.0	46.163	3.878	3041.406	0.12%	98.07%
49.0	43.082	3.665	3045.071	0.11%	98.19%
50.0	40.289	3.476	3048.547	0.10%	98.30%
51.0	37.852	3.306	3051.853	0.10%	98.40%
52.0	35.716	3.157	3055.01	0.10%	98.51%
53.0	33.824	3.025	3058.035	0.09%	98.60%
54.0	32.168	2.909	3060.943	0.09%	98.70%
55.0	30.572	2.801	3063.744	0.08%	98.79%
56.0	29.146	2.698	3066.442	0.08%	98.87%
57.0	27.661	2.597	3069.04	0.08%	98.96%
58.0	25.972	2.480	3071.52	0.07%	99.04%
59.0	24.415	2.356	3073.876	0.07%	99.11%
60.0	23.055	2.243	3076.118	0.07%	99.19%
61.0	21.485	2.126	3078.244	0.06%	99.25%
62.0	19.731	1.986	3080.23	0.06%	99.32%
63.0	18.252	1.847	3082.077	0.06%	99.38%
64.0	16.833	1.722	3083.799	0.05%	99.43%
65.0	15.434	1.597	3085.396	0.05%	99.49%
66.0	14.238	1.480	3086.876	0.04%	99.53%
67.0	12.957	1.367	3088.243	0.04%	99.58%
68.0	11.925	1.260	3089.504	0.04%	99.62%
69.0	10.933	1.166	3090.67	0.04%	99.66%
70.0	10.007	1.075	3091.745	0.03%	99.69%
71.0	9.060	0.985	3092.731	0.03%	99.72%
72.0	8.279	0.902	3093.632	0.03%	99.75%
73.0	7.615	0.831	3094.464	0.03%	99.78%
74.0	6.984	0.768	3095.231	0.02%	99.80%
75.0	6.393	0.707	3095.938	0.02%	99.83%

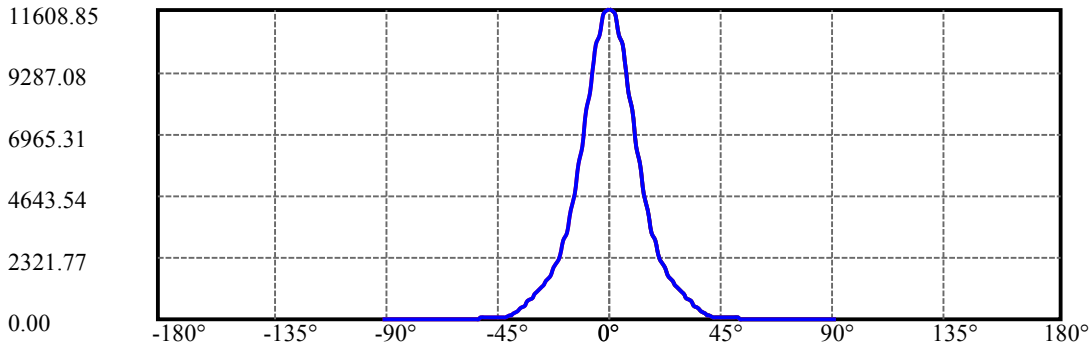
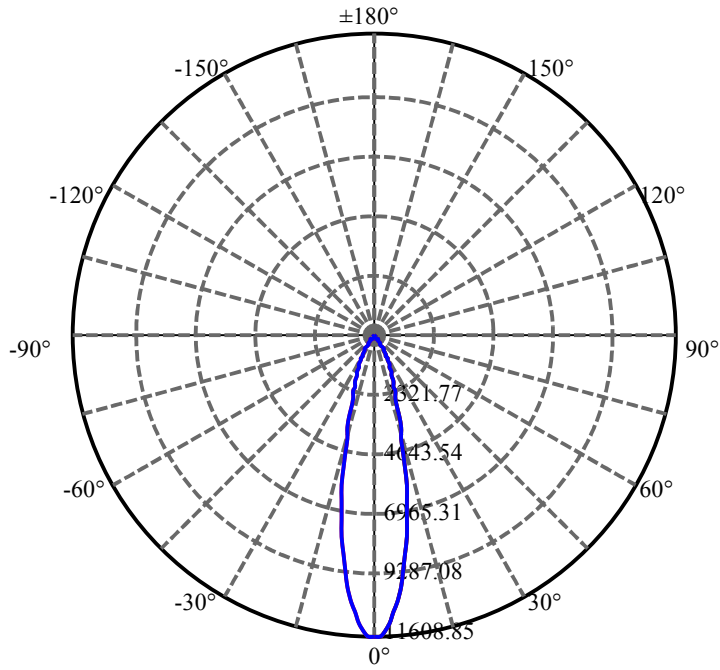
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	5.815	0.648	3096.586	0.02%	99.85%
77.0	5.361	0.596	3097.182	0.02%	99.87%
78.0	4.895	0.549	3097.731	0.02%	99.88%
79.0	4.455	0.502	3098.233	0.02%	99.90%
80.0	4.034	0.458	3098.691	0.01%	99.91%
81.0	3.679	0.417	3099.108	0.01%	99.93%
82.0	3.325	0.380	3099.488	0.01%	99.94%
83.0	2.976	0.343	3099.83	0.01%	99.95%
84.0	2.635	0.306	3100.136	0.01%	99.96%
85.0	2.359	0.273	3100.408	0.01%	99.97%
86.0	2.089	0.243	3100.652	0.01%	99.98%
87.0	1.807	0.213	3100.865	0.01%	99.98%
88.0	1.583	0.186	3101.051	0.01%	99.99%
89.0	1.373	0.162	3101.213	0.00%	100.00%
90.0	1.301	0.147	3101.359	0.00%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2718.37	82.10%	87.65%
0-40	2999.51	90.59%	96.72%
0-60	3076.12	92.91%	99.19%
0-90	3101.21	93.66%	100.00%
0-120	3101.21	93.66%	100.00%
0-180	3101.36	93.67%	100.00%
60-90	25.09	0.76%	0.81%
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%
0-25.89	2481.09	74.93%	80.00%

ZONAL LUMEN SUMMARY

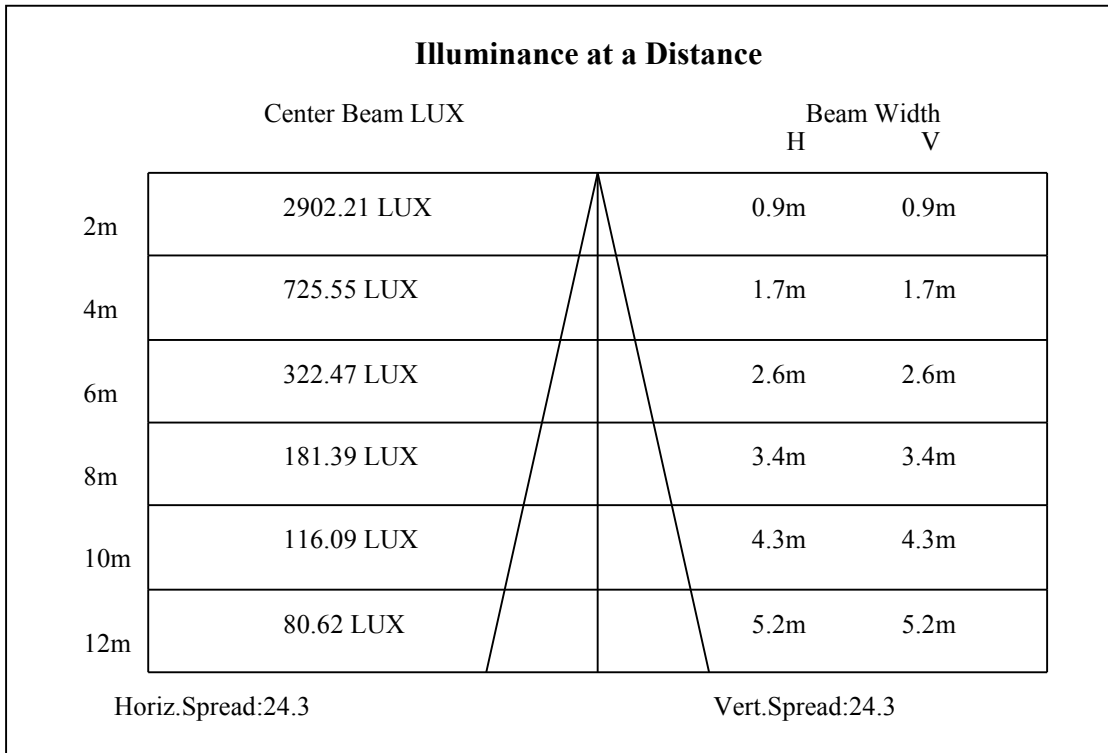
0-10	879.71
10-20	1162.59
20-30	676.07
30-40	281.15
40-50	49.03
50-60	27.57
60-70	15.63
70-80	6.95
80-90	2.52
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

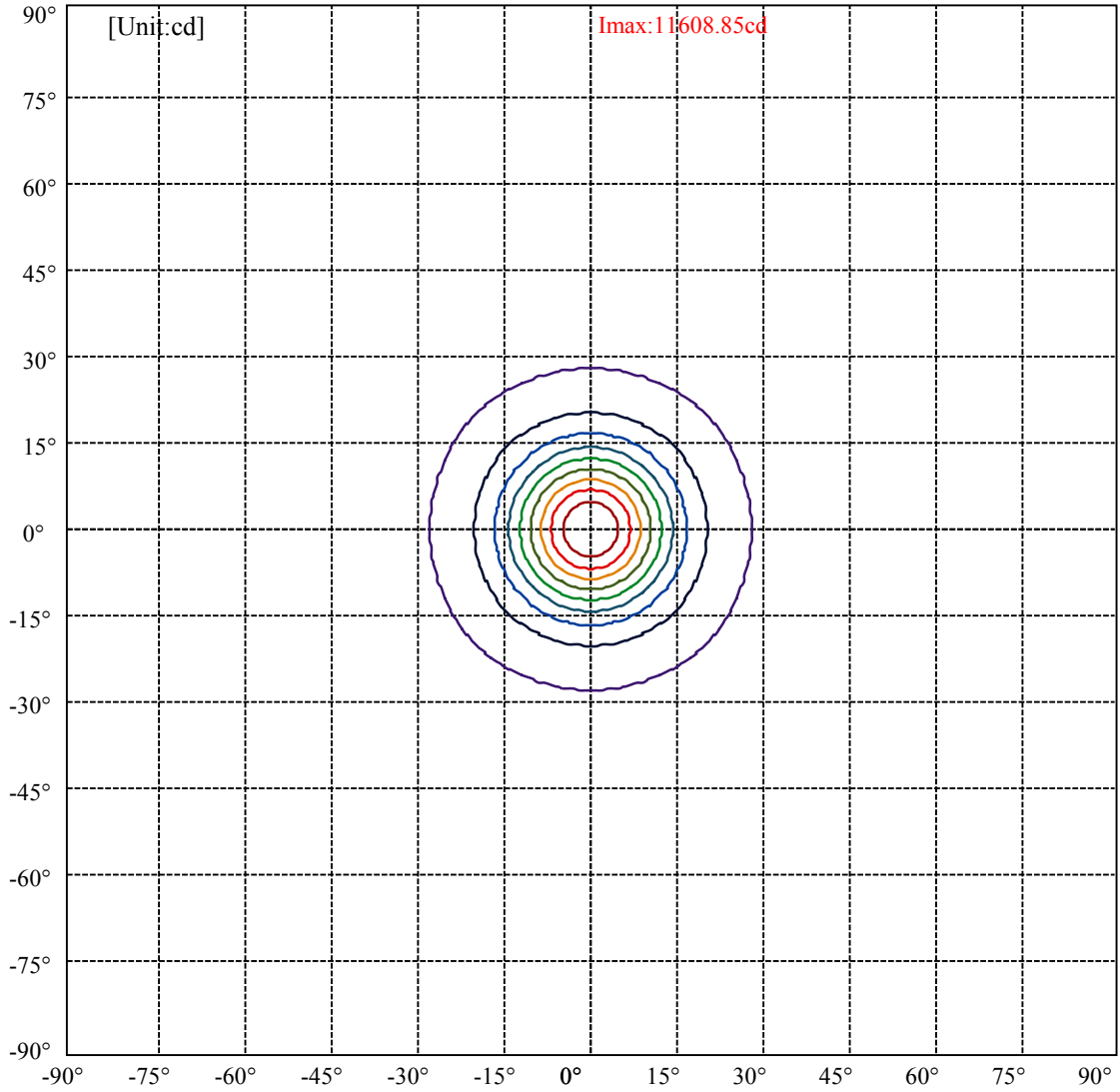


C0(Max): ———
C0/C180: ———
C90/C270: ———

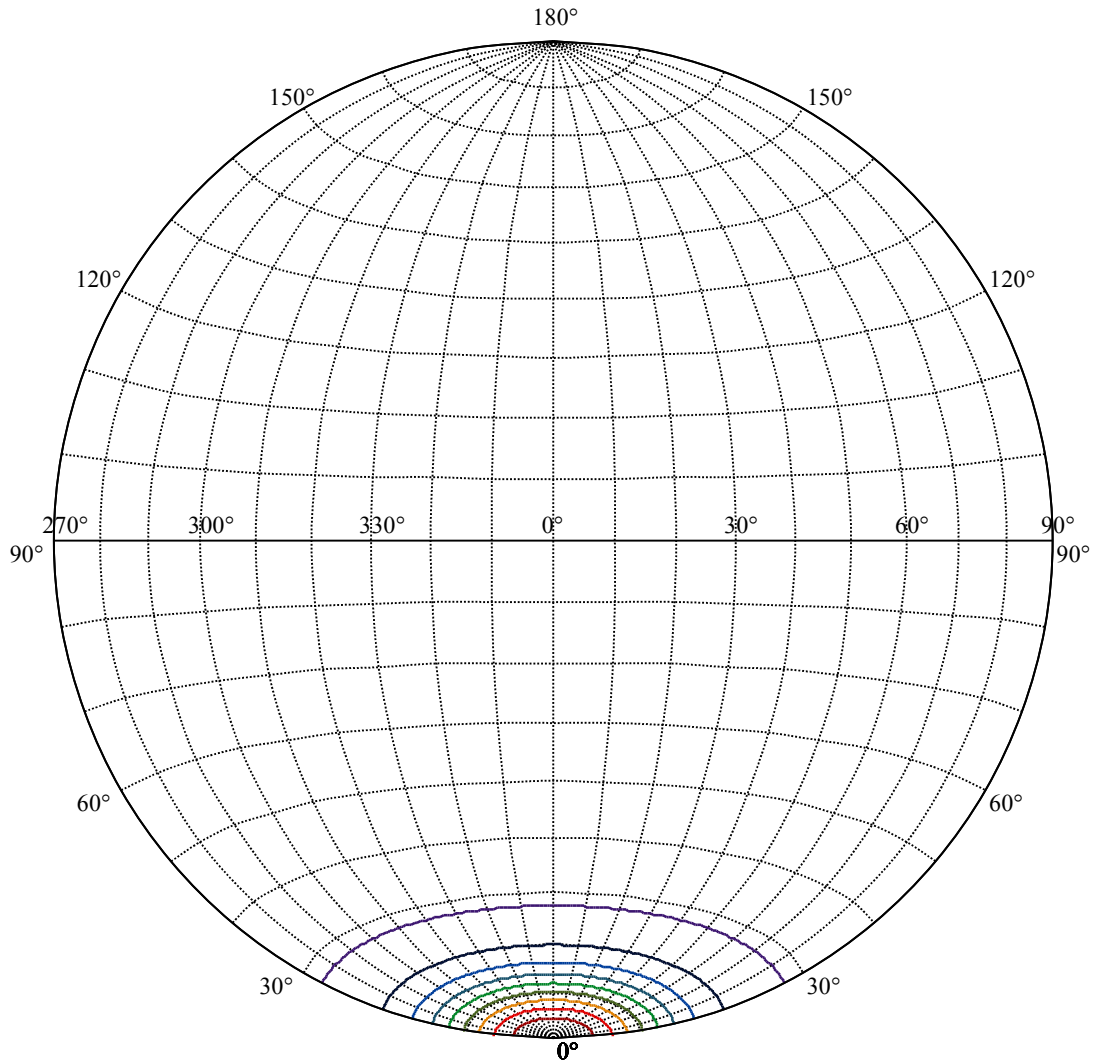
Field angle(10%Imax):C0/180Left:27.5 Right:27.5
:C90/270Left:27.5 Right:27.5

Beam Angle(50%Imax):C0/180Left:12.1 Right:12.1
:C90/270Left:12.1 Right:12.1





(10%Imax) 1160.88	—
(20%Imax) 2321.77	—
(30%Imax) 3482.65	—
(40%Imax) 4643.54	—
(50%Imax) 5804.42	—
(60%Imax) 6965.31	—
(70%Imax) 8126.19	—
(80%Imax) 9287.08	—
(90%Imax) 10448	—



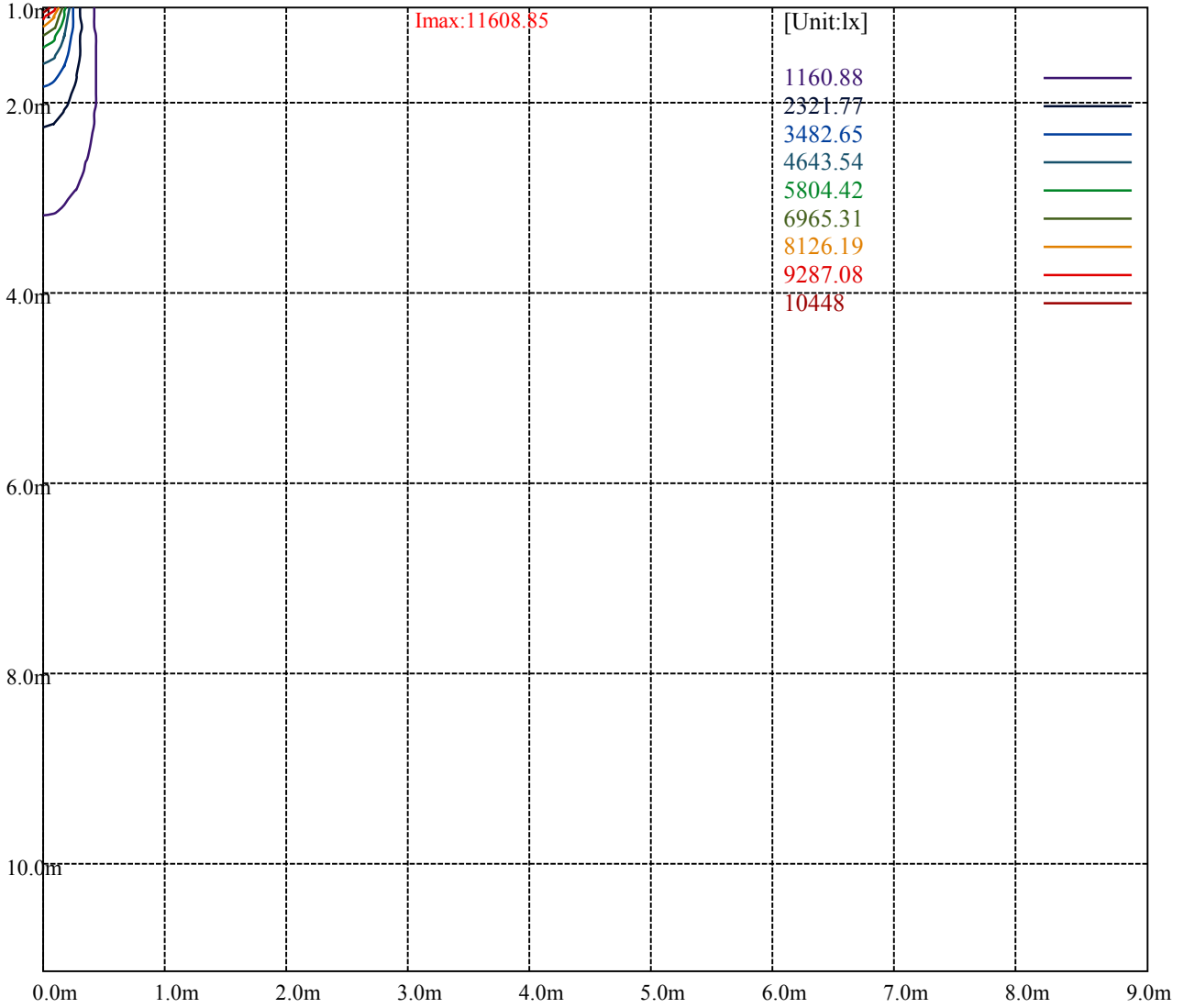
House

[Unit:cd]

Road

Imax:11608.85

(10%Imax)	1160.88	—
(20%Imax)	2321.77	—
(30%Imax)	3482.65	—
(40%Imax)	4643.54	—
(50%Imax)	5804.42	—
(60%Imax)	6965.31	—
(70%Imax)	8126.19	—
(80%Imax)	9287.08	—
(90%Imax)	10448	—



Luminance Table

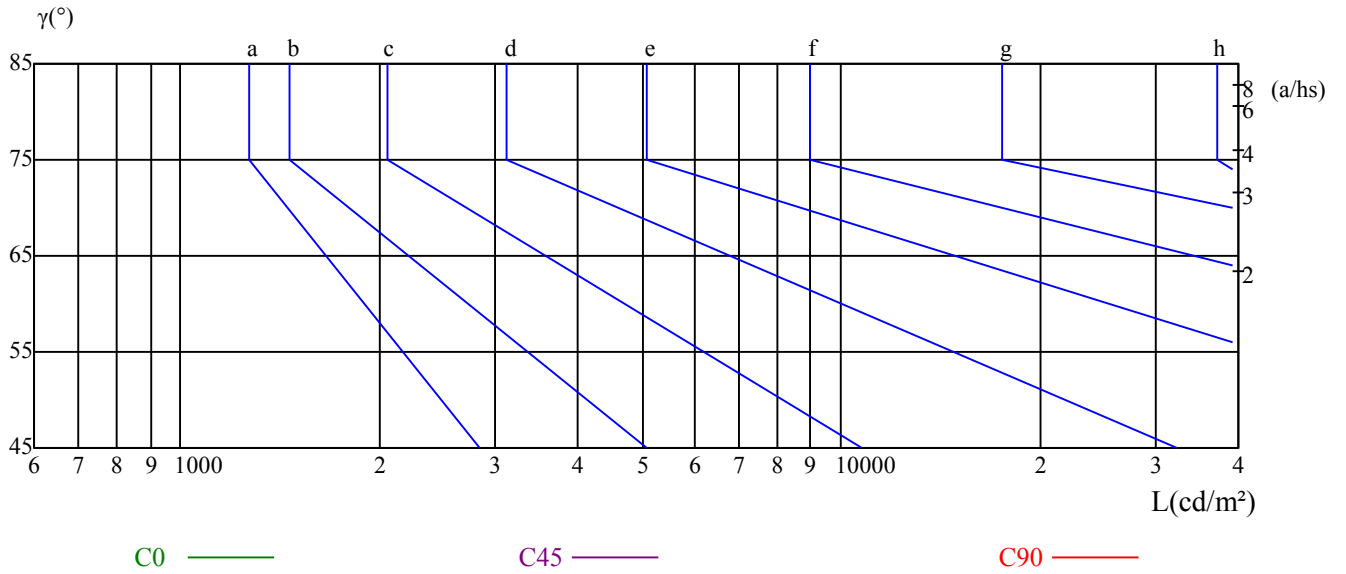
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

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



Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions	Viewed crosswise					Viewed endwise					
X	Y										
2H	2H										
	3H										
	4H										
	6H										
	8H										
	12H										
4H	2H										
	3H										
	4H										
	6H										
	8H										
	12H										
8H	4H										
	6H										
	8H										
	12H										
12H	4H										
	6H										
	8H										
Variation with the observer position at spacings:											
S = 1.0H											
S = 1.5H											
S = 2.0H											
Standard tables:											
Uncorrected UGR											