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Nata

Client:

LumCAT: 2-2752-L

Luminaire: 92.70.412.00

Report No: 2024827-B002

Ballast type: AC

Test No: 2024827-C002

Voltage(V): 34.930

LampCAT: Fortimo_SLM_C_1210

Current(A): 0.715

Lamp flux(lm): 4003.0

Power (W): 24.970

Number of Lamps: 1

PF: 0.000

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 3726.91, Efficiency(%): 93.10% , Luminous Efficacy(lm/W): 149.26

Central intensity(cd): 13829.350, Maximum intensity(cd): 13829.350

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=24.6

[C90/270]Total=24.6

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(%): 93.10%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 99.220%

Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2024/8/27
Humidity(%): 60.0%

Operator: NT
Distance(m): 7.25

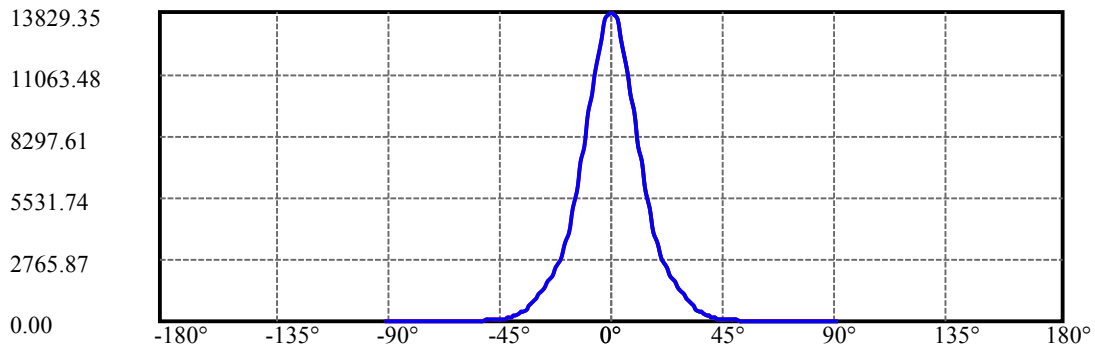
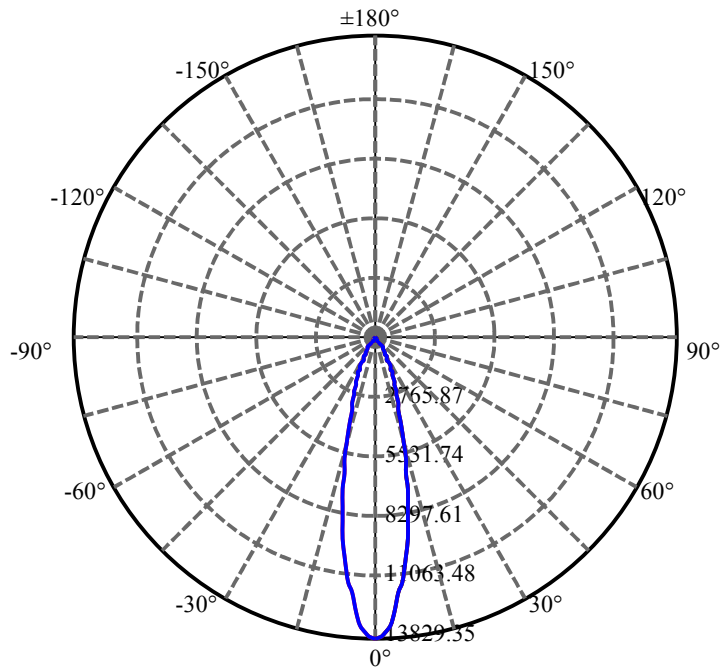
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	13829.351	0.000	0	0.00%	0.00%
1.0	13752.045	13.197	13.197	0.33%	0.35%
2.0	13544.502	39.179	52.376	0.98%	1.41%
3.0	13188.615	63.937	116.313	1.60%	3.12%
4.0	12622.641	86.399	202.711	2.16%	5.44%
5.0	11766.523	104.921	307.632	2.62%	8.25%
6.0	11377.271	121.627	429.259	3.04%	11.52%
7.0	10852.501	137.980	567.239	3.45%	15.22%
8.0	10142.605	150.258	717.497	3.75%	19.25%
9.0	9397.262	158.360	875.857	3.96%	23.50%
10.0	8624.823	163.093	1038.95	4.07%	27.88%
11.0	7852.180	164.639	1203.589	4.11%	32.29%
12.0	7119.788	163.665	1367.254	4.09%	36.69%
13.0	6391.574	160.346	1527.6	4.01%	40.99%
14.0	5737.125	155.246	1682.846	3.88%	45.15%
15.0	5091.164	148.656	1831.502	3.71%	49.14%
16.0	4463.864	140.008	1971.51	3.50%	52.90%
17.0	3958.659	131.161	2102.671	3.28%	56.42%
18.0	3521.287	123.328	2225.999	3.08%	59.73%
19.0	3144.985	115.979	2341.978	2.90%	62.84%
20.0	2824.972	109.267	2451.245	2.73%	65.77%
21.0	2637.205	104.885	2556.13	2.62%	68.59%
22.0	2393.657	101.097	2657.227	2.53%	71.30%
23.0	2180.779	95.984	2753.211	2.40%	73.87%
24.0	1962.283	90.582	2843.794	2.26%	76.30%
25.0	1791.632	85.356	2929.149	2.13%	78.59%
26.0	1629.924	80.766	3009.916	2.02%	80.76%
27.0	1459.779	75.590	3085.506	1.89%	82.79%
28.0	1309.963	70.124	3155.63	1.75%	84.67%
29.0	1173.576	64.976	3220.606	1.62%	86.41%
30.0	1058.123	60.255	3280.862	1.51%	88.03%
31.0	928.904	55.296	3336.158	1.38%	89.52%
32.0	783.483	49.058	3385.216	1.23%	90.83%
33.0	656.381	42.419	3427.635	1.06%	91.97%
34.0	552.760	36.592	3464.227	0.91%	92.95%
35.0	463.016	31.546	3495.773	0.79%	93.80%
36.0	391.545	27.209	3522.982	0.68%	94.53%
37.0	324.206	23.344	3546.326	0.58%	95.15%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	273.654	19.956	3566.282	0.50%	95.69%
39.0	246.801	17.765	3584.046	0.44%	96.17%
40.0	204.770	15.749	3599.796	0.39%	96.59%
41.0	154.678	12.800	3612.595	0.32%	96.93%
42.0	128.410	10.285	3622.88	0.26%	97.21%
43.0	106.170	8.690	3631.57	0.22%	97.44%
44.0	88.377	7.343	3638.913	0.18%	97.64%
45.0	75.191	6.286	3645.199	0.16%	97.81%
46.0	64.061	5.446	3650.645	0.14%	97.95%
47.0	56.807	4.807	3655.452	0.12%	98.08%
48.0	50.979	4.357	3659.809	0.11%	98.20%
49.0	46.676	4.010	3663.819	0.10%	98.31%
50.0	43.410	3.756	3667.575	0.09%	98.41%
51.0	40.900	3.567	3671.142	0.09%	98.50%
52.0	38.601	3.411	3674.554	0.09%	98.60%
53.0	36.623	3.272	3677.826	0.08%	98.68%
54.0	34.974	3.156	3680.982	0.08%	98.77%
55.0	33.601	3.061	3684.043	0.08%	98.85%
56.0	32.188	2.973	3687.016	0.07%	98.93%
57.0	30.670	2.874	3689.89	0.07%	99.01%
58.0	29.028	2.761	3692.65	0.07%	99.08%
59.0	27.576	2.646	3695.296	0.07%	99.15%
60.0	26.097	2.536	3697.832	0.06%	99.22%
61.0	24.323	2.406	3700.238	0.06%	99.28%
62.0	22.543	2.258	3702.497	0.06%	99.34%
63.0	21.078	2.121	3704.618	0.05%	99.40%
64.0	19.593	1.996	3706.614	0.05%	99.46%
65.0	18.173	1.869	3708.483	0.05%	99.51%
66.0	16.682	1.739	3710.222	0.04%	99.55%
67.0	15.322	1.609	3711.831	0.04%	99.60%
68.0	14.146	1.493	3713.324	0.04%	99.64%
69.0	13.022	1.386	3714.71	0.03%	99.67%
70.0	11.892	1.280	3715.989	0.03%	99.71%
71.0	10.657	1.165	3717.155	0.03%	99.74%
72.0	9.704	1.059	3718.214	0.03%	99.77%
73.0	8.896	0.973	3719.186	0.02%	99.79%
74.0	8.187	0.898	3720.084	0.02%	99.82%
75.0	7.523	0.830	3720.914	0.02%	99.84%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	6.853	0.763	3721.678	0.02%	99.86%
77.0	6.268	0.700	3722.377	0.02%	99.88%
78.0	5.762	0.644	3723.021	0.02%	99.90%
79.0	5.184	0.588	3723.609	0.01%	99.91%
80.0	4.645	0.530	3724.139	0.01%	99.93%
81.0	4.205	0.479	3724.618	0.01%	99.94%
82.0	3.647	0.426	3725.044	0.01%	99.95%
83.0	3.206	0.373	3725.416	0.01%	99.96%
84.0	2.786	0.326	3725.742	0.01%	99.97%
85.0	2.385	0.282	3726.025	0.01%	99.98%
86.0	2.076	0.244	3726.269	0.01%	99.98%
87.0	1.735	0.209	3726.477	0.01%	99.99%
88.0	1.426	0.173	3726.65	0.00%	99.99%
89.0	1.163	0.142	3726.792	0.00%	100.00%
90.0	1.045	0.121	3726.913	0.00%	100.00%

ZONAL LUMEN SUMMARY			
Zone	Lumens	%Lamp	%Fixt
0-30	3280.86	81.96%	88.03%
0-40	3599.80	89.93%	96.59%
0-60	3697.83	92.38%	99.22%
0-90	3726.79	93.10%	100.00%
0-120	3726.79	93.10%	100.00%
0-180	3726.91	93.10%	100.00%
60-90	28.96	0.72%	0.78%
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%
0-25.65	2981.53	74.48%	80.00%

ZONAL LUMEN SUMMARY	
0-10	1038.95
10-20	1412.30
20-30	829.62
30-40	318.93
40-50	67.78
50-60	30.26
60-70	18.16
70-80	8.15
80-90	2.65
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: —————

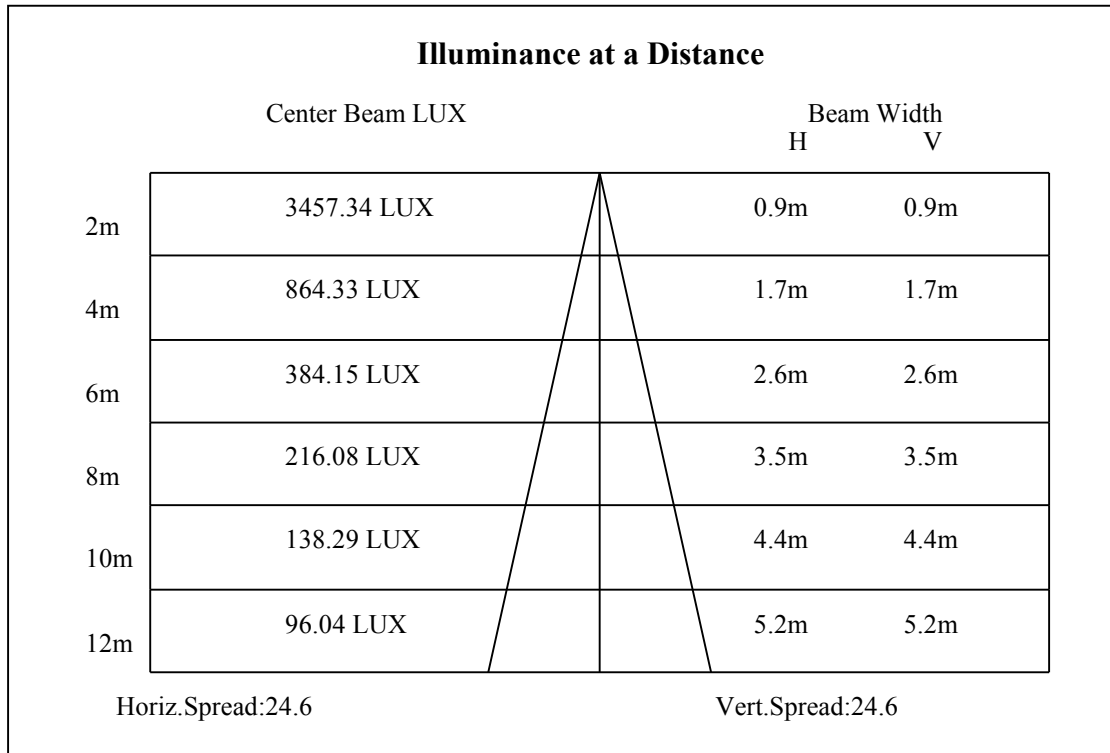
C90/C270: —————

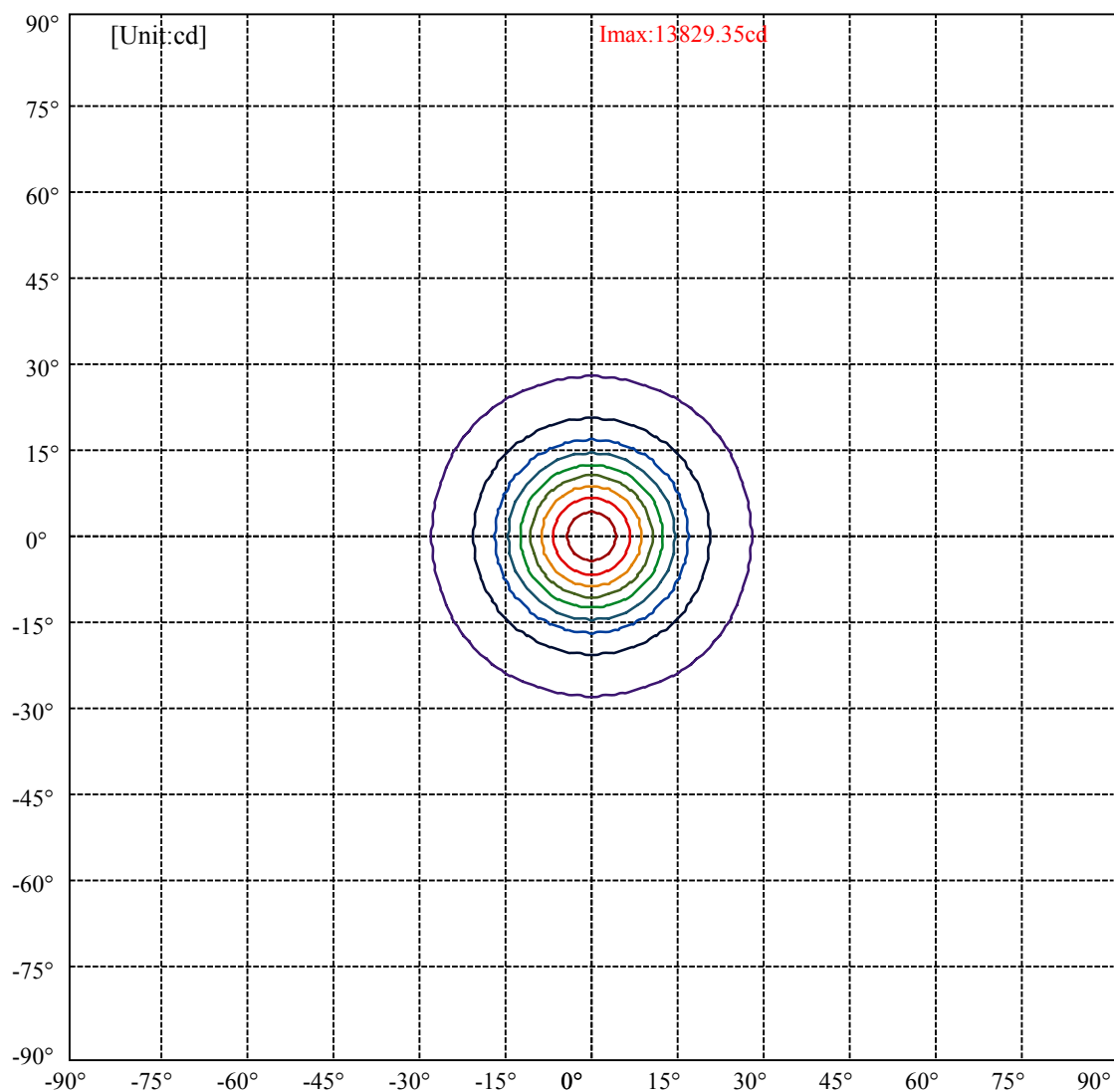
Field angle(10%Imax):C0/180Left:27.5 Right:27.5

:C90/270Left:27.5 Right:27.5

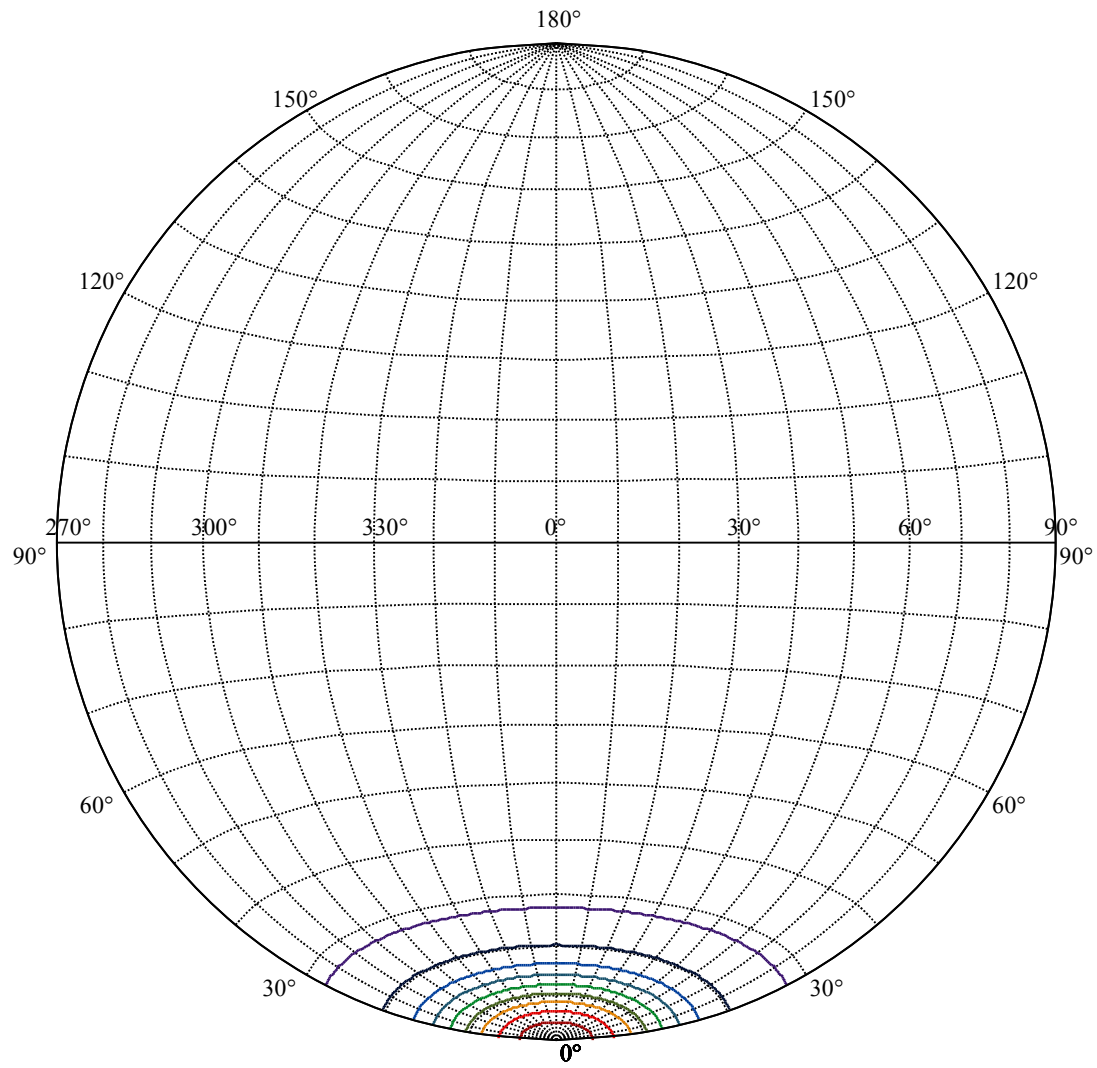
Beam Angle(50%Imax):C0/180Left:12.3 Right:12.3

:C90/270Left:12.3 Right:12.3





(10%Imax) 1382.94	—
(20%Imax) 2765.87	—
(30%Imax) 4148.81	—
(40%Imax) 5531.74	—
(50%Imax) 6914.68	—
(60%Imax) 8297.61	—
(70%Imax) 9680.55	—
(80%Imax) 11063.5	—
(90%Imax) 12446.4	—

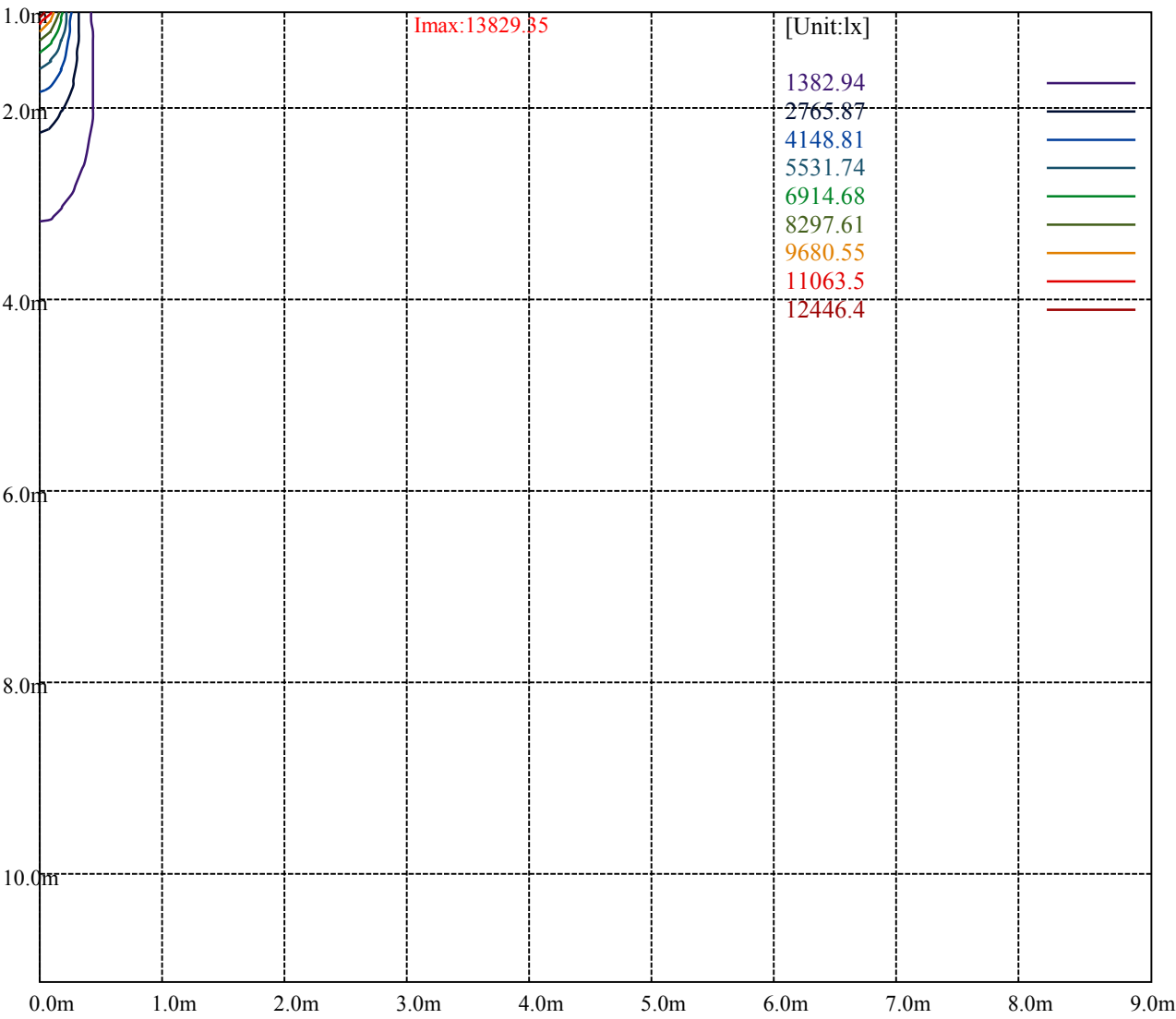


House

[Unit:cd]

Road

Imax:13829.35	
(10%Imax)	1382.94
(20%Imax)	2765.87
(30%Imax)	4148.81
(40%Imax)	5531.74
(50%Imax)	6914.68
(60%Imax)	8297.61
(70%Imax)	9680.55
(80%Imax)	11063.5
(90%Imax)	12446.4



Luminance Table

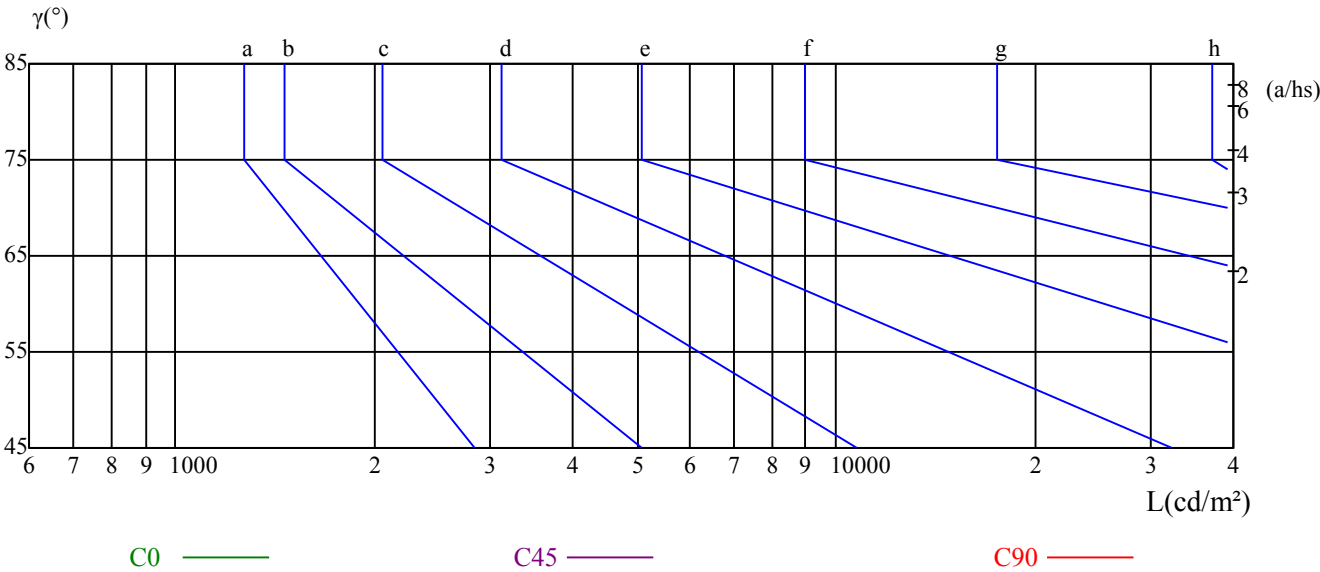
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

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											