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Nata

Client:

LumCAT: 2-2763-L

Luminaire: 92.70.412.00

Report No: 2024822-B018

Ballast type: AC

Test No: 2024822-C018

Voltage(V): 34.930

LampCAT: Fortimo_SLM_C_1208

Current(A): 0.576

Lamp flux(lm): 3311.0

Power (W): 20.110

Number of Lamps: 1

PF: 0.000

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 3093.77, Efficiency(%): 93.44% , Luminous Efficacy(lm/W): 153.84

Central intensity(cd): 4569.863, Maximum intensity(cd): 4569.863

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=50.6

[C90/270]Total=50.6

Field angle(10%Imax): [C0/180]Total=74.0

[C90/270]Total=74.0

Maximum s/h(1/2): C0_180=0.80 C90_270=0.80

Maximum s/h(1/4): C0_180=0.77 C90_270=0.77

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 93.44%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 99.114%

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	4569.863	0.000	0	0.00%	0.00%
1.0	4567.701	4.372	4.372	0.13%	0.14%
2.0	4561.229	13.103	17.475	0.40%	0.56%
3.0	4544.593	21.778	39.253	0.66%	1.27%
4.0	4531.906	30.382	69.635	0.92%	2.25%
5.0	4516.236	38.925	108.56	1.18%	3.51%
6.0	4487.477	47.317	155.876	1.43%	5.04%
7.0	4448.759	55.467	211.344	1.68%	6.83%
8.0	4401.393	63.339	274.682	1.91%	8.88%
9.0	4342.825	70.867	345.55	2.14%	11.17%
10.0	4272.681	77.967	423.517	2.35%	13.69%
11.0	4190.782	84.567	508.084	2.55%	16.42%
12.0	4095.788	90.584	598.668	2.74%	19.35%
13.0	3989.579	95.953	694.621	2.90%	22.45%
14.0	3882.818	100.766	795.387	3.04%	25.71%
15.0	3770.118	105.063	900.45	3.17%	29.11%
16.0	3629.795	108.429	1008.879	3.27%	32.61%
17.0	3502.134	111.063	1119.943	3.35%	36.20%
18.0	3370.078	113.308	1233.251	3.42%	39.86%
19.0	3228.428	114.801	1348.051	3.47%	43.57%
20.0	3089.755	115.640	1463.691	3.49%	47.31%
21.0	2948.178	115.941	1579.632	3.50%	51.06%
22.0	2810.070	115.714	1695.346	3.49%	54.80%
23.0	2653.158	114.633	1809.98	3.46%	58.50%
24.0	2478.138	112.189	1922.168	3.39%	62.13%
25.0	2329.997	109.326	2031.495	3.30%	65.66%
26.0	2163.269	106.064	2137.559	3.20%	69.09%
27.0	1993.400	101.694	2239.253	3.07%	72.38%
28.0	1786.291	95.694	2334.946	2.89%	75.47%
29.0	1605.574	88.741	2423.687	2.68%	78.34%
30.0	1454.516	82.622	2506.309	2.50%	81.01%
31.0	1276.401	75.997	2582.306	2.30%	83.47%
32.0	1040.225	66.369	2648.675	2.00%	85.61%
33.0	923.917	57.864	2706.539	1.75%	87.48%
34.0	793.707	51.980	2758.52	1.57%	89.16%
35.0	674.561	45.599	2804.119	1.38%	90.64%
36.0	558.877	39.273	2843.392	1.19%	91.91%
37.0	456.374	33.112	2876.503	1.00%	92.98%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	389.810	28.244	2904.748	0.85%	93.89%
39.0	326.991	24.466	2929.214	0.74%	94.68%
40.0	271.380	20.869	2950.083	0.63%	95.36%
41.0	217.293	17.401	2967.485	0.53%	95.92%
42.0	185.243	14.625	2982.11	0.44%	96.39%
43.0	159.974	12.788	2994.897	0.39%	96.80%
44.0	120.454	10.584	3005.482	0.32%	97.15%
45.0	98.719	8.423	3013.905	0.25%	97.42%
46.0	81.728	7.057	3020.962	0.21%	97.65%
47.0	68.601	5.979	3026.94	0.18%	97.84%
48.0	58.456	5.136	3032.077	0.16%	98.01%
49.0	50.578	4.478	3036.554	0.14%	98.15%
50.0	44.744	3.974	3040.529	0.12%	98.28%
51.0	39.547	3.566	3044.095	0.11%	98.39%
52.0	35.605	3.225	3047.32	0.10%	98.50%
53.0	32.582	2.966	3050.286	0.09%	98.59%
54.0	30.039	2.760	3053.046	0.08%	98.68%
55.0	27.523	2.569	3055.615	0.08%	98.77%
56.0	25.591	2.400	3058.015	0.07%	98.84%
57.0	23.923	2.264	3060.279	0.07%	98.92%
58.0	22.247	2.135	3062.414	0.06%	98.99%
59.0	20.966	2.020	3064.435	0.06%	99.05%
60.0	19.704	1.921	3066.356	0.06%	99.11%
61.0	18.712	1.833	3068.189	0.06%	99.17%
62.0	17.635	1.751	3069.941	0.05%	99.23%
63.0	16.728	1.671	3071.612	0.05%	99.28%
64.0	15.907	1.601	3073.213	0.05%	99.34%
65.0	15.118	1.535	3074.749	0.05%	99.39%
66.0	14.376	1.472	3076.22	0.04%	99.43%
67.0	13.653	1.409	3077.63	0.04%	99.48%
68.0	13.009	1.351	3078.98	0.04%	99.52%
69.0	12.392	1.296	3080.276	0.04%	99.56%
70.0	11.728	1.239	3081.515	0.04%	99.60%
71.0	11.110	1.180	3082.695	0.04%	99.64%
72.0	10.499	1.124	3083.819	0.03%	99.68%
73.0	9.757	1.059	3084.878	0.03%	99.71%
74.0	9.054	0.989	3085.867	0.03%	99.74%
75.0	8.423	0.923	3086.791	0.03%	99.77%

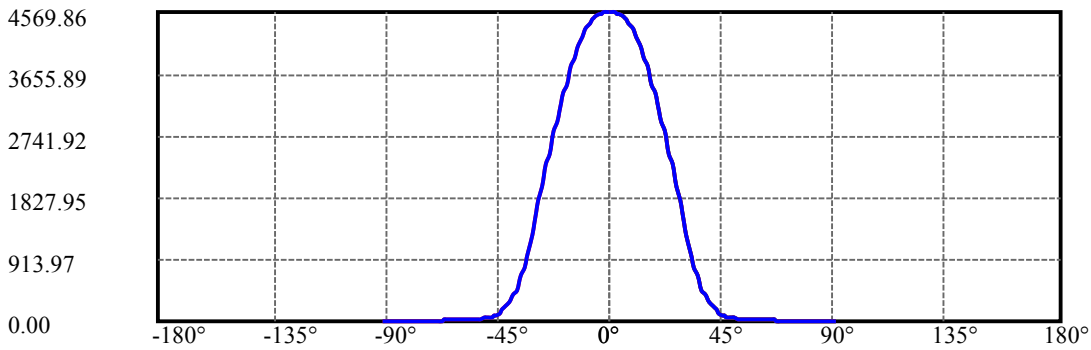
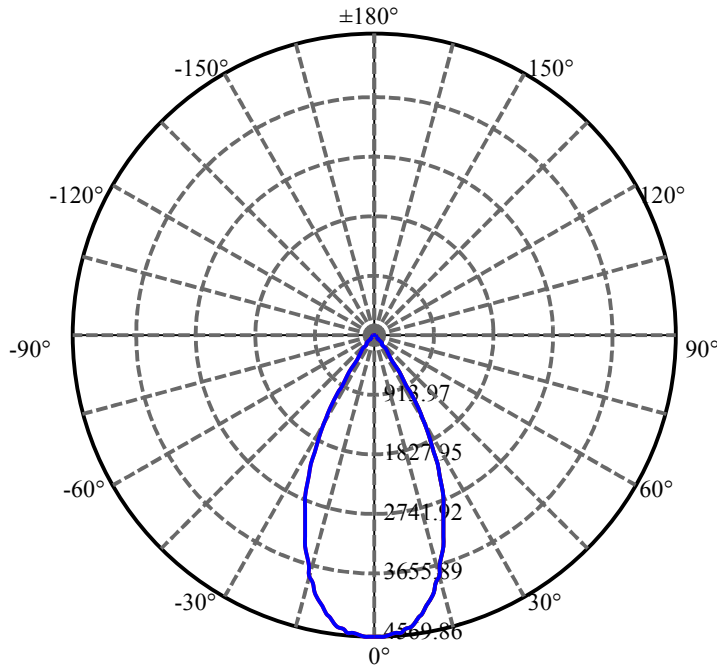
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	7.786	0.860	3087.651	0.03%	99.80%
77.0	7.168	0.797	3088.448	0.02%	99.83%
78.0	6.636	0.739	3089.187	0.02%	99.85%
79.0	5.940	0.676	3089.863	0.02%	99.87%
80.0	5.375	0.610	3090.473	0.02%	99.89%
81.0	4.803	0.550	3091.023	0.02%	99.91%
82.0	4.271	0.492	3091.515	0.01%	99.93%
83.0	3.791	0.438	3091.954	0.01%	99.94%
84.0	3.311	0.387	3092.34	0.01%	99.95%
85.0	2.852	0.336	3092.677	0.01%	99.96%
86.0	2.457	0.290	3092.967	0.01%	99.97%
87.0	2.076	0.248	3093.215	0.01%	99.98%
88.0	1.767	0.211	3093.426	0.01%	99.99%
89.0	1.537	0.181	3093.607	0.01%	99.99%
90.0	1.399	0.161	3093.768	0.00%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2506.31	75.70%	81.01%
0-40	2950.08	89.10%	95.36%
0-60	3066.36	92.61%	99.11%
0-90	3093.61	93.43%	99.99%
0-120	3093.61	93.43%	99.99%
0-180	3093.77	93.44%	100.00%
60-90	27.25	0.82%	0.88%
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%
0-29.62	2475.01	74.75%	80.00%

ZONAL LUMEN SUMMARY

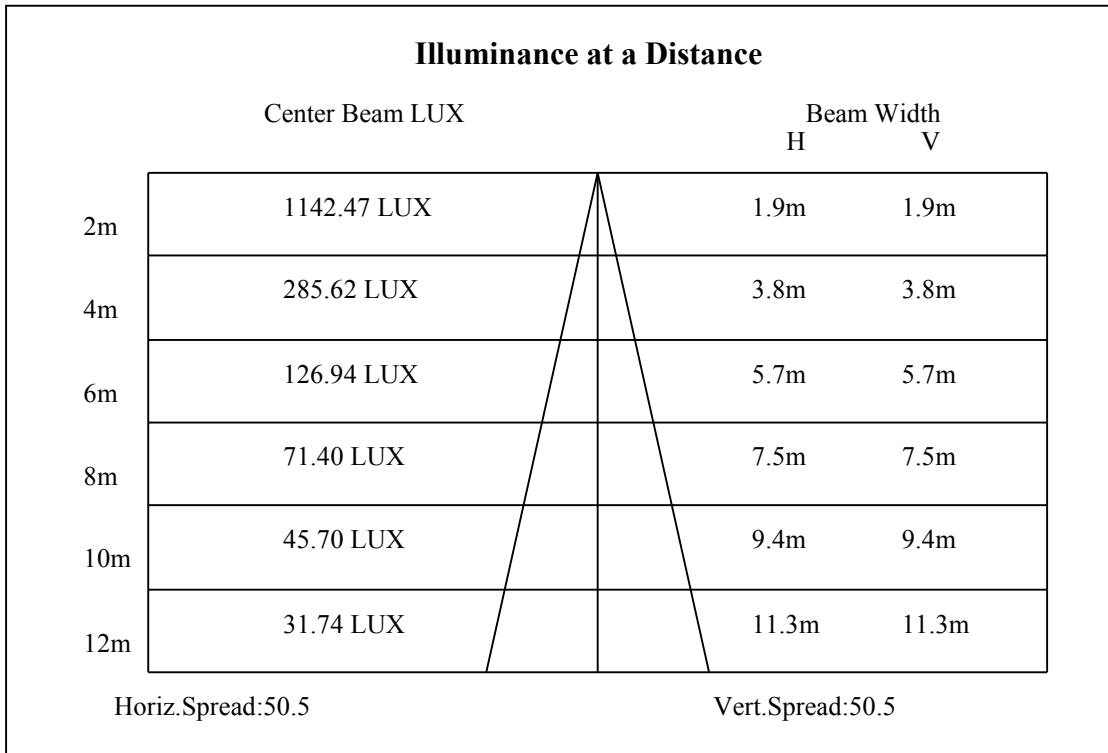
0-10	423.52
10-20	1040.17
20-30	1042.62
30-40	443.77
40-50	90.45
50-60	25.83
60-70	15.16
70-80	8.96
80-90	3.13
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

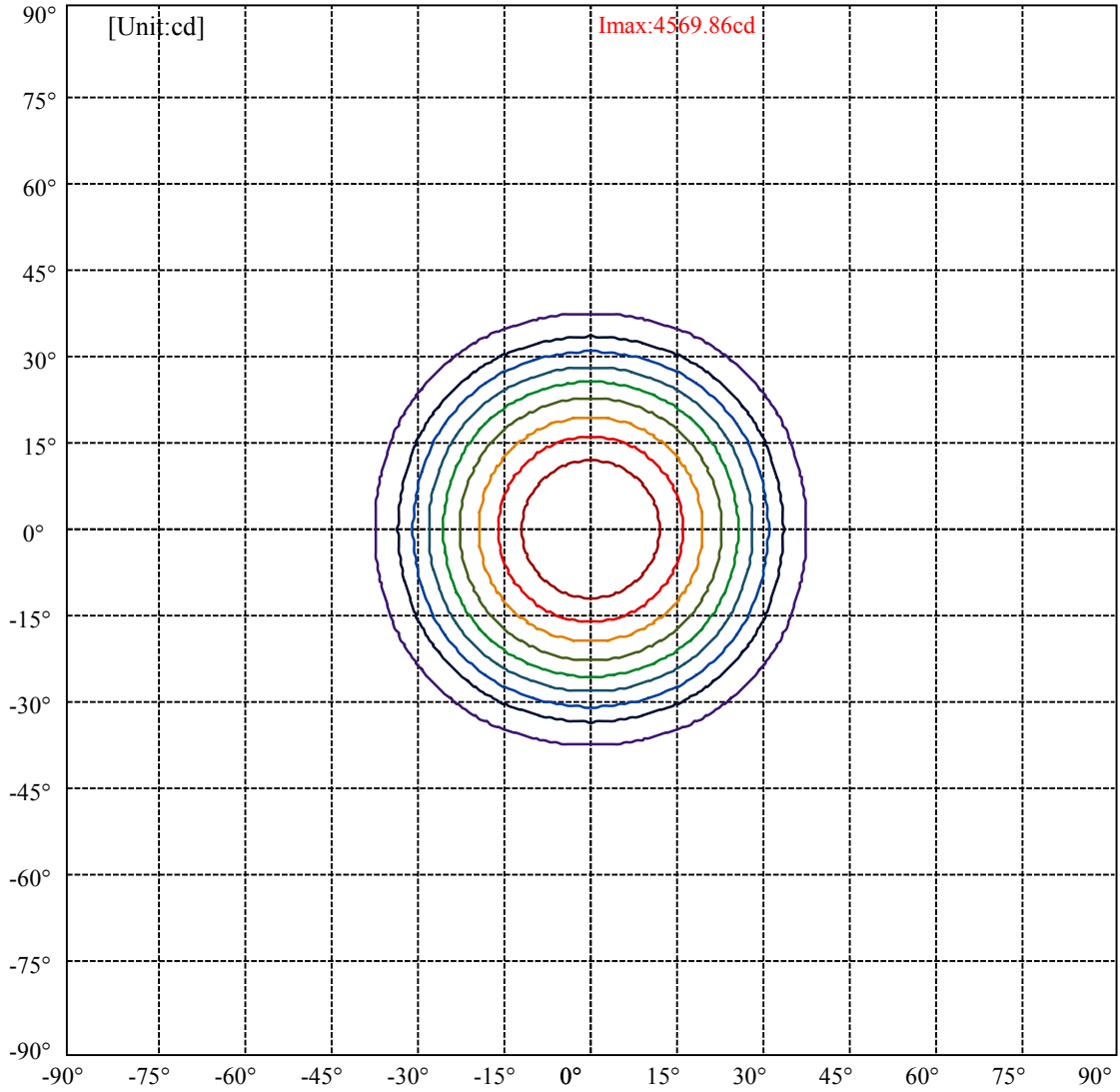


C0(Max): —————
C0/C180: —————
C90/C270: —————

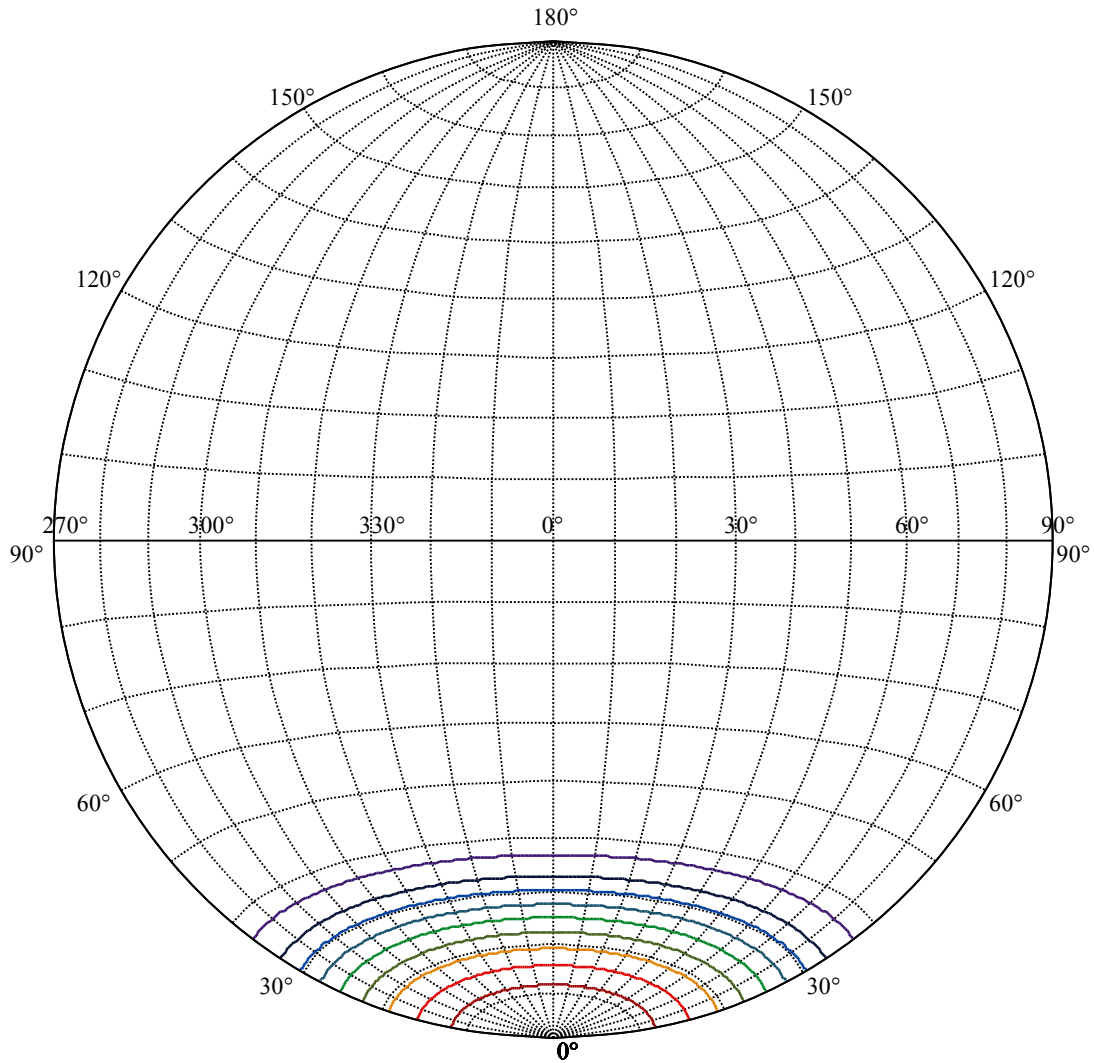
Field angle(10%Imax):C0/180Left:37.0 Right:37.0
:C90/270Left:37.0 Right:37.0

Beam Angle(50%Imax):C0/180Left:25.3 Right:25.3
:C90/270Left:25.3 Right:25.3





(10%Imax) 456.986	—
(20%Imax) 913.973	—
(30%Imax) 1370.96	—
(40%Imax) 1827.95	—
(50%Imax) 2284.93	—
(60%Imax) 2741.92	—
(70%Imax) 3198.9	—
(80%Imax) 3655.89	—
(90%Imax) 4112.88	—



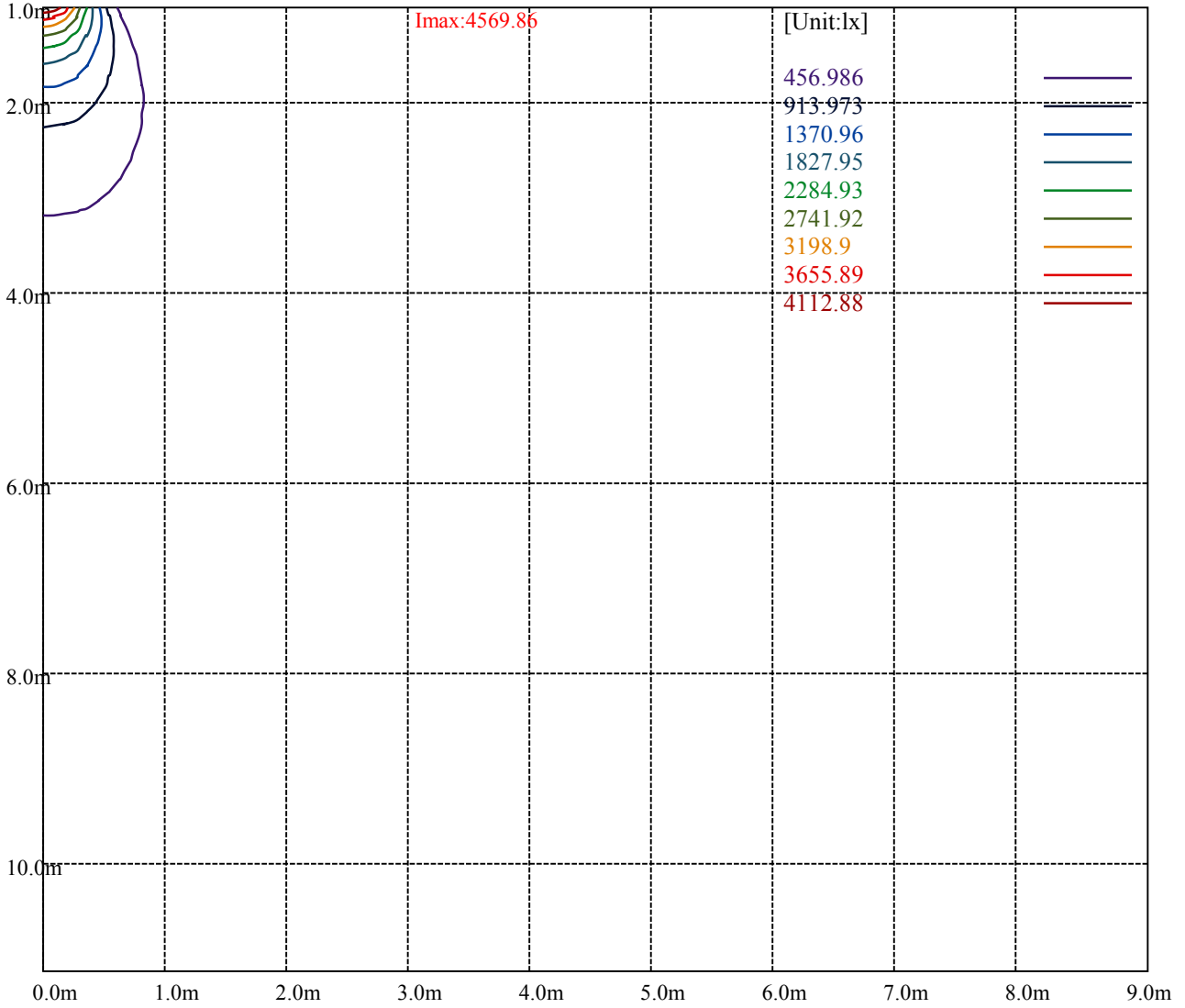
House

[Unit:cd]

Road

Imax:4569.86

(10%Imax) 456.986	—
(20%Imax) 913.973	—
(30%Imax) 1370.96	—
(40%Imax) 1827.95	—
(50%Imax) 2284.93	—
(60%Imax) 2741.92	—
(70%Imax) 3198.9	—
(80%Imax) 3655.89	—
(90%Imax) 4112.88	—



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										