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Nata

Client:

LumCAT: 2-2519-L

Luminaire: 92.70.412.00

Report No: 2024815-B010

Ballast type: AC

Test No: 2024816-C010

Voltage(V): 34.790

LampCAT: BRIDGELUX V13B LES13

Current(A): 0.450

Lamp flux(lm): 2535.0

Power (W): 15.650

Number of Lamps: 1

PF: 0.000

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 2282.40, Efficiency(%): 90.04% , Luminous Efficacy(lm/W): 145.84

Central intensity(cd): 7484.111, Maximum intensity(cd): 7484.111

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=26.8

[C90/270]Total=26.8

Field angle(10%Imax): [C0/180]Total=57.4

[C90/270]Total=57.4

Maximum s/h(1/2): C0_180=0.45 C90_270=0.45

Maximum s/h(1/4): C0_180=0.49 C90_270=0.49

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 90.04%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.894%

Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2024/8/16
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	7484.112	0.000	0	0.00%	0.00%
1.0	7445.104	7.143	7.143	0.28%	0.31%
2.0	7361.174	21.251	28.395	0.84%	1.24%
3.0	7211.168	34.852	63.247	1.37%	2.77%
4.0	7033.782	47.682	110.929	1.88%	4.86%
5.0	6759.938	59.340	170.269	2.34%	7.46%
6.0	6482.113	69.590	239.86	2.75%	10.51%
7.0	6139.116	78.340	318.199	3.09%	13.94%
8.0	5771.868	85.245	403.444	3.36%	17.68%
9.0	5386.454	90.432	493.876	3.57%	21.64%
10.0	5000.409	93.997	587.874	3.71%	25.76%
11.0	4612.556	96.053	683.927	3.79%	29.97%
12.0	4235.631	96.723	780.65	3.82%	34.20%
13.0	3870.558	96.200	876.85	3.79%	38.42%
14.0	3530.676	94.735	971.585	3.74%	42.57%
15.0	3212.127	92.568	1064.154	3.65%	46.62%
16.0	2927.843	89.968	1154.121	3.55%	50.57%
17.0	2646.811	86.812	1240.934	3.42%	54.37%
18.0	2437.547	83.830	1324.764	3.31%	58.04%
19.0	2204.773	80.767	1405.531	3.19%	61.58%
20.0	1995.969	76.885	1482.416	3.03%	64.95%
21.0	1809.405	73.071	1555.487	2.88%	68.15%
22.0	1622.480	68.965	1624.452	2.72%	71.17%
23.0	1473.123	64.954	1689.406	2.56%	74.02%
24.0	1335.258	61.401	1750.807	2.42%	76.71%
25.0	1182.696	57.253	1808.06	2.26%	79.22%
26.0	1039.305	52.451	1860.511	2.07%	81.52%
27.0	932.019	48.229	1908.739	1.90%	83.63%
28.0	825.823	44.505	1953.244	1.76%	85.58%
29.0	718.897	40.414	1993.659	1.59%	87.35%
30.0	617.570	36.084	2029.743	1.42%	88.93%
31.0	524.107	31.771	2061.514	1.25%	90.32%
32.0	439.836	27.616	2089.13	1.09%	91.53%
33.0	373.213	23.953	2113.083	0.94%	92.58%
34.0	318.608	20.937	2134.019	0.83%	93.50%
35.0	255.329	17.824	2151.844	0.70%	94.28%
36.0	205.355	14.668	2166.512	0.58%	94.92%
37.0	173.818	12.366	2178.878	0.49%	95.46%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	144.048	10.610	2189.488	0.42%	95.93%
39.0	108.206	8.610	2198.098	0.34%	96.31%
40.0	88.857	6.873	2204.971	0.27%	96.61%
41.0	72.806	5.757	2210.728	0.23%	96.86%
42.0	61.925	4.895	2215.623	0.19%	97.07%
43.0	52.628	4.243	2219.866	0.17%	97.26%
44.0	45.243	3.694	2223.56	0.15%	97.42%
45.0	40.158	3.282	2226.842	0.13%	97.57%
46.0	35.972	2.977	2229.82	0.12%	97.70%
47.0	32.589	2.727	2232.547	0.11%	97.82%
48.0	29.777	2.521	2235.068	0.10%	97.93%
49.0	27.372	2.347	2237.414	0.09%	98.03%
50.0	25.342	2.198	2239.612	0.09%	98.13%
51.0	23.699	2.075	2241.687	0.08%	98.22%
52.0	22.346	1.976	2243.663	0.08%	98.30%
53.0	21.058	1.888	2245.551	0.07%	98.39%
54.0	20.145	1.816	2247.367	0.07%	98.46%
55.0	19.277	1.760	2249.127	0.07%	98.54%
56.0	18.469	1.706	2250.832	0.07%	98.62%
57.0	17.779	1.657	2252.49	0.07%	98.69%
58.0	16.958	1.606	2254.096	0.06%	98.76%
59.0	16.354	1.557	2255.653	0.06%	98.83%
60.0	15.723	1.515	2257.169	0.06%	98.89%
61.0	15.217	1.476	2258.645	0.06%	98.96%
62.0	14.823	1.447	2260.093	0.06%	99.02%
63.0	14.534	1.428	2261.521	0.06%	99.08%
64.0	14.304	1.415	2262.936	0.06%	99.15%
65.0	14.212	1.411	2264.347	0.06%	99.21%
66.0	13.909	1.403	2265.75	0.06%	99.27%
67.0	13.594	1.383	2267.133	0.05%	99.33%
68.0	13.574	1.376	2268.509	0.05%	99.39%
69.0	13.292	1.371	2269.88	0.05%	99.45%
70.0	12.819	1.341	2271.221	0.05%	99.51%
71.0	11.951	1.280	2272.501	0.05%	99.57%
72.0	11.445	1.217	2273.717	0.05%	99.62%
73.0	10.039	1.124	2274.841	0.04%	99.67%
74.0	8.607	0.980	2275.821	0.04%	99.71%
75.0	7.497	0.851	2276.672	0.03%	99.75%

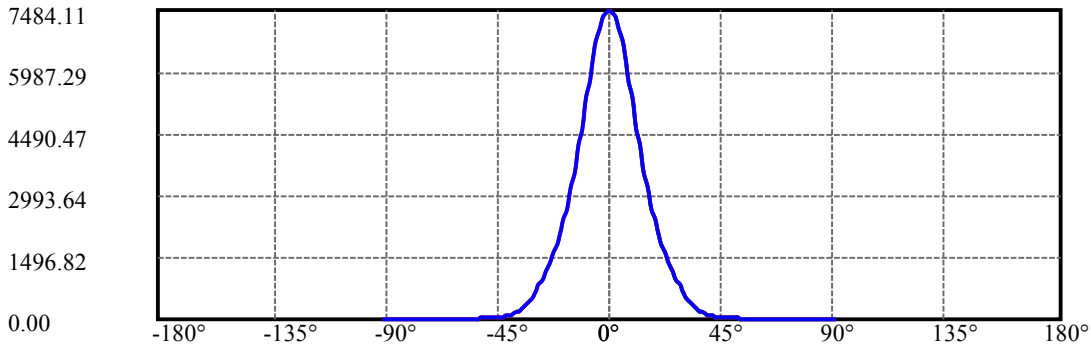
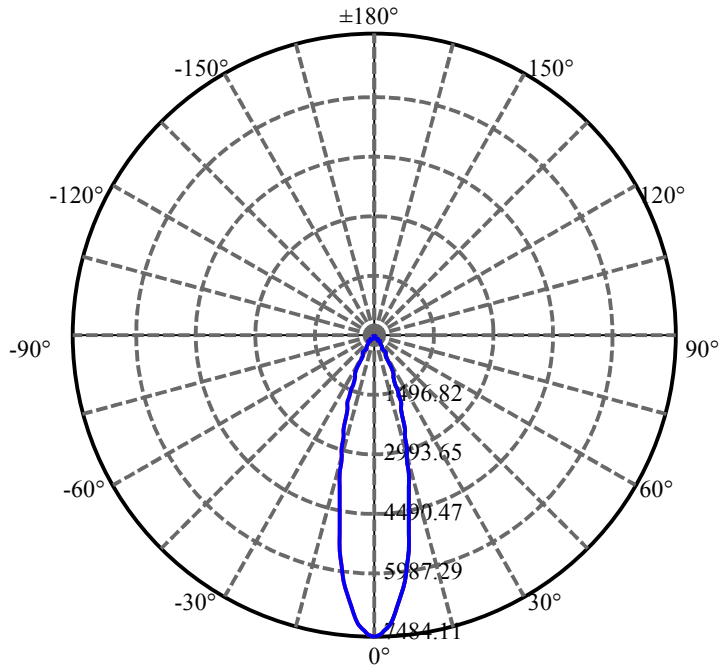
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	6.465	0.741	2277.413	0.03%	99.78%
77.0	5.506	0.638	2278.051	0.03%	99.81%
78.0	4.737	0.548	2278.6	0.02%	99.83%
79.0	4.284	0.485	2279.085	0.02%	99.85%
80.0	3.903	0.441	2279.526	0.02%	99.87%
81.0	3.627	0.407	2279.933	0.02%	99.89%
82.0	3.344	0.378	2280.311	0.01%	99.91%
83.0	3.049	0.348	2280.659	0.01%	99.92%
84.0	2.819	0.320	2280.978	0.01%	99.94%
85.0	2.562	0.294	2281.272	0.01%	99.95%
86.0	2.346	0.268	2281.54	0.01%	99.96%
87.0	2.129	0.245	2281.785	0.01%	99.97%
88.0	1.945	0.223	2282.008	0.01%	99.98%
89.0	1.800	0.205	2282.214	0.01%	99.99%
90.0	1.689	0.191	2282.405	0.01%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2029.74	80.07%	88.93%
0-40	2204.97	86.98%	96.61%
0-60	2257.17	89.04%	98.89%
0-90	2282.21	90.03%	99.99%
0-120	2282.21	90.03%	99.99%
0-180	2282.40	90.04%	100.00%
60-90	25.04	0.99%	1.10%
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%
0-25.34	1825.92	72.03%	80.00%

ZONAL LUMEN SUMMARY

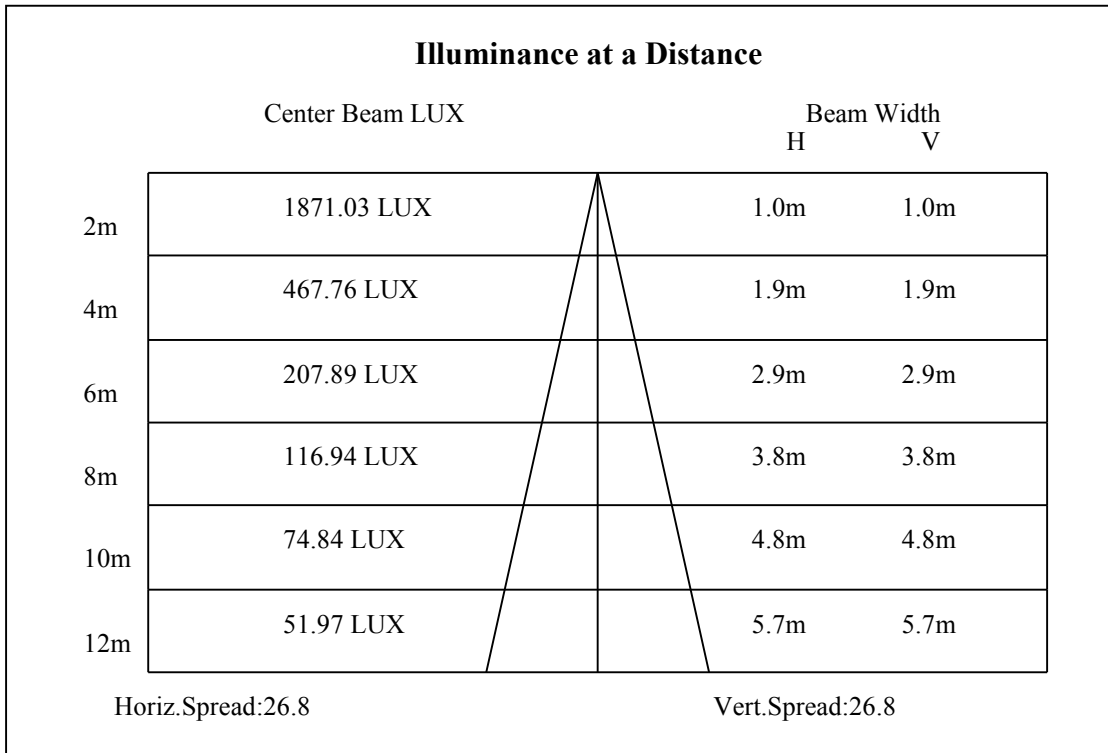
0-10	587.87
10-20	894.54
20-30	547.33
30-40	175.23
40-50	34.64
50-60	17.56
60-70	14.05
70-80	8.31
80-90	2.69
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

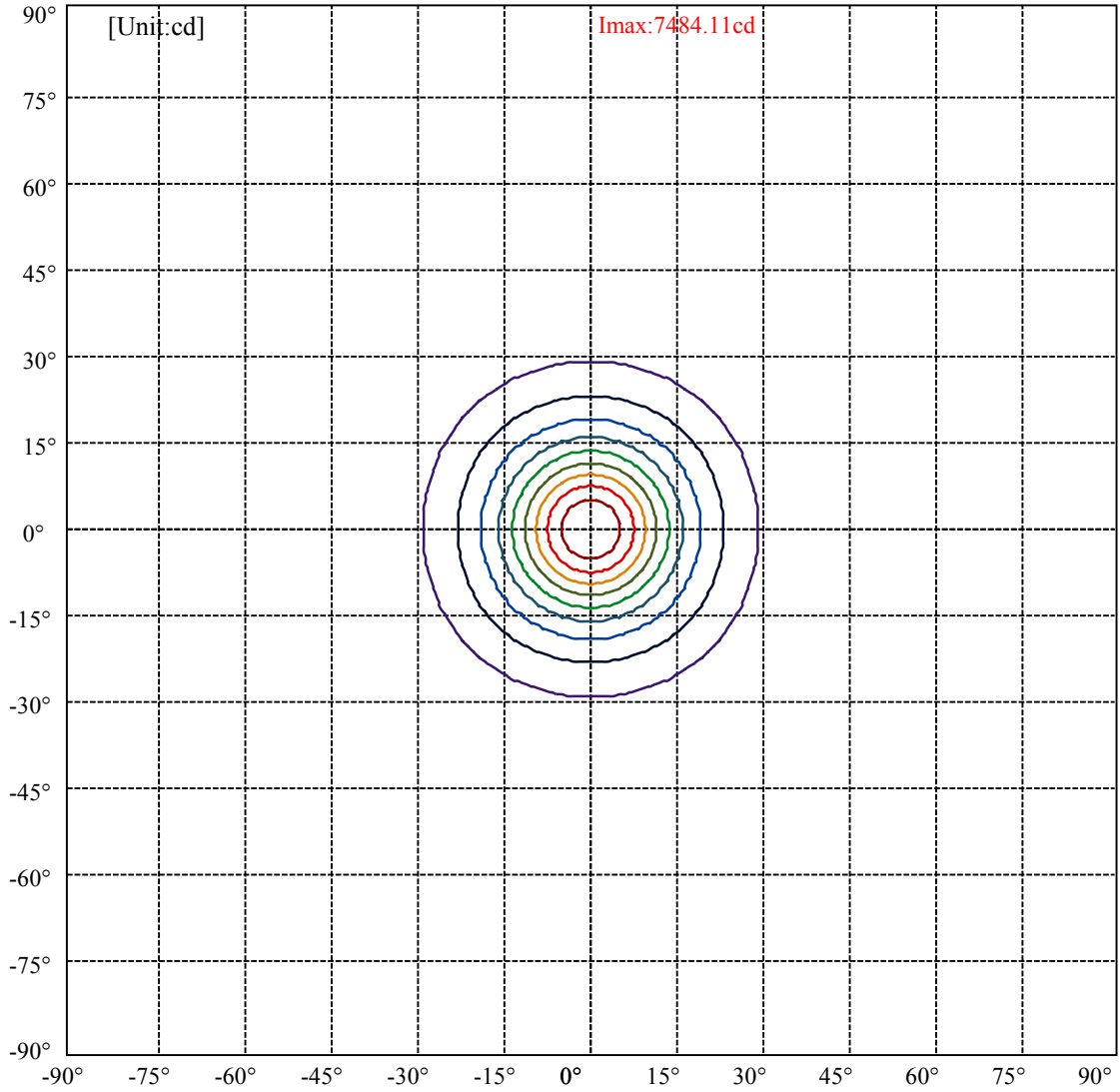


C0(Max): ———
C0/C180: ———
C90/C270: ———

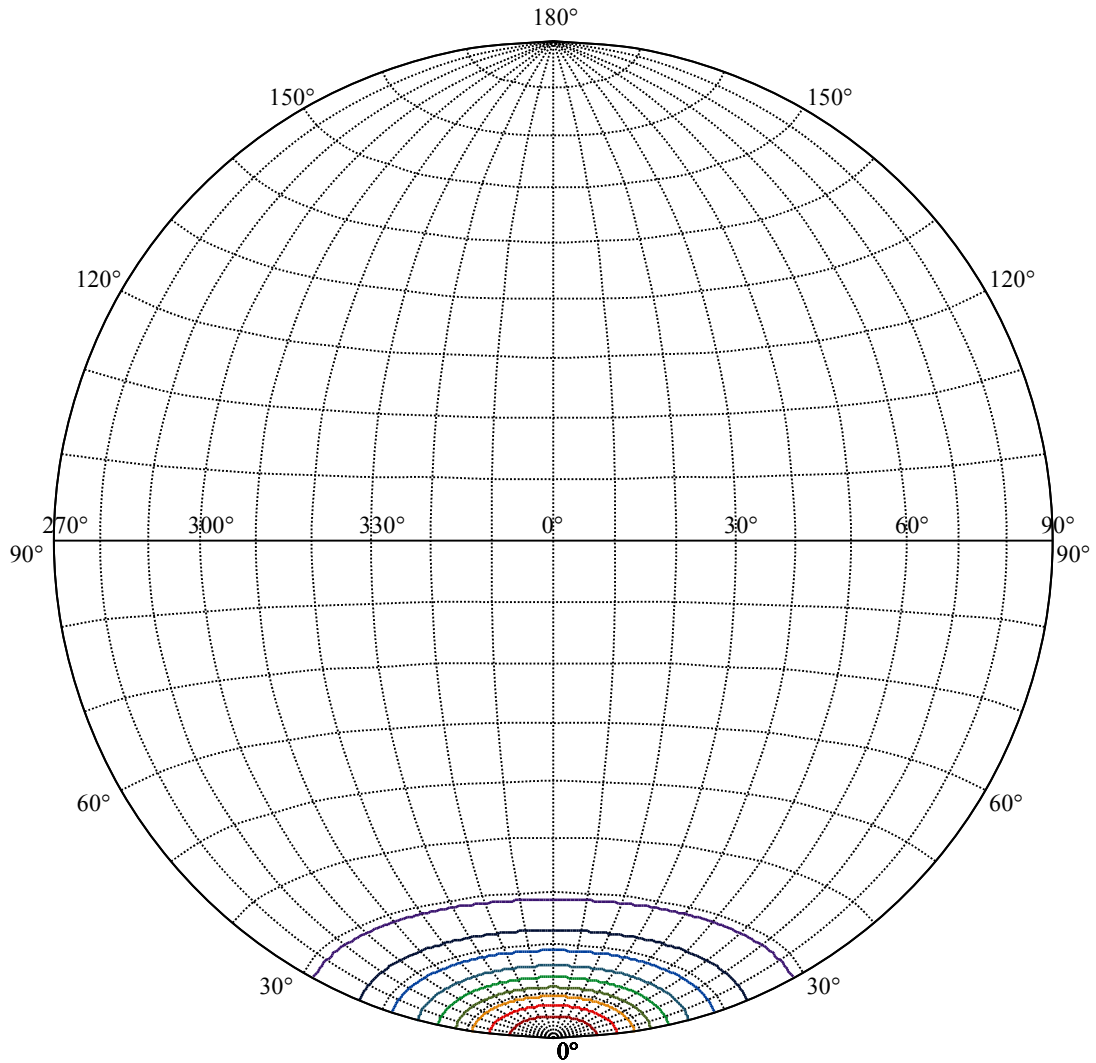
Field angle(10%Imax):C0/180Left:28.7 Right:28.7
:C90/270Left:28.7 Right:28.7

Beam Angle(50%Imax):C0/180Left:13.4 Right:13.4
:C90/270Left:13.4 Right:13.4





(10%Imax) 748.411	—
(20%Imax) 1496.82	—
(30%Imax) 2245.23	—
(40%Imax) 2993.64	—
(50%Imax) 3742.06	—
(60%Imax) 4490.47	—
(70%Imax) 5238.88	—
(80%Imax) 5987.29	—
(90%Imax) 6735.7	—



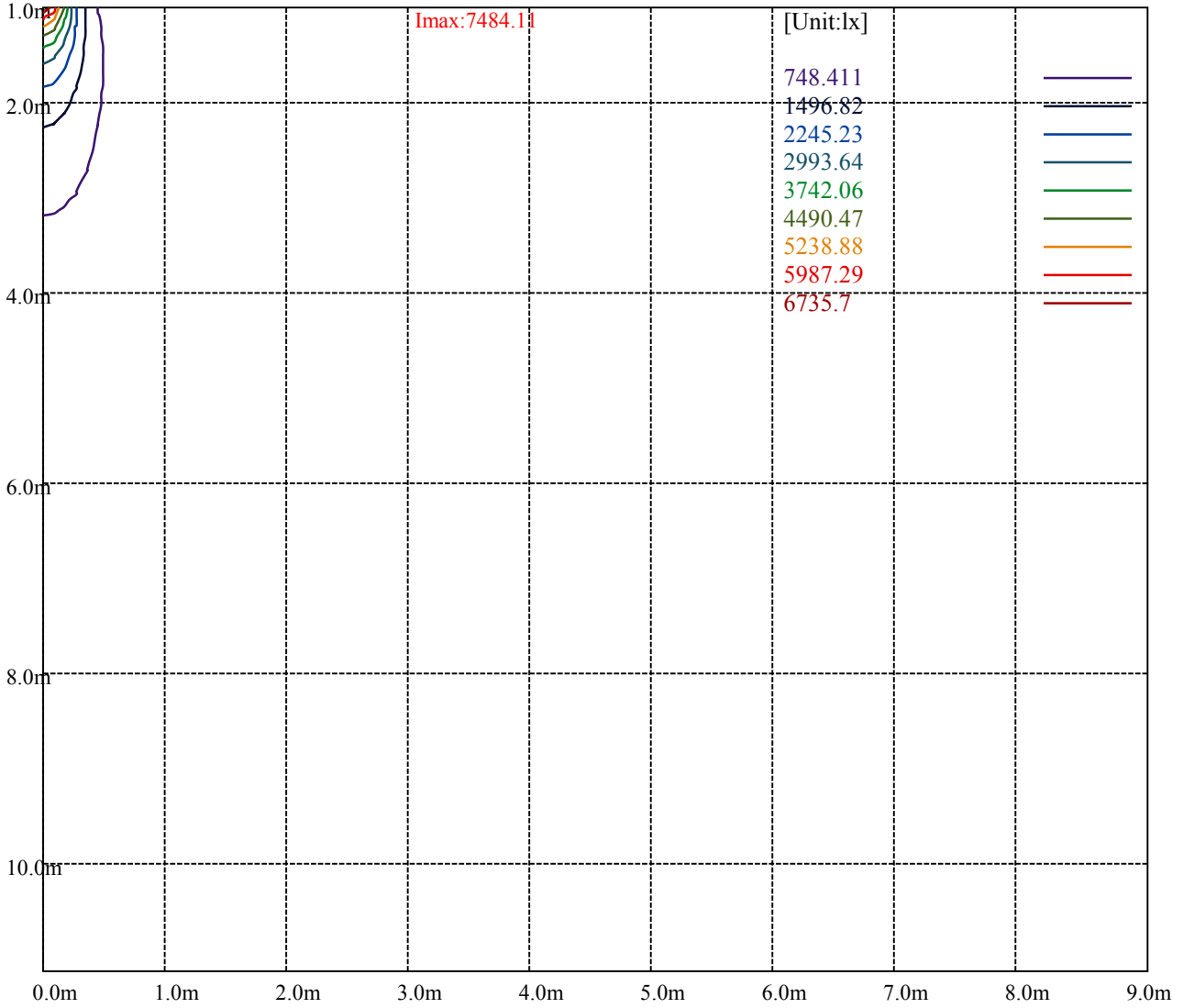
House

[Unit:cd]

Road

Imax:7484.11

(10%Imax) 748.411	—
(20%Imax) 1496.82	—
(30%Imax) 2245.23	—
(40%Imax) 2993.64	—
(50%Imax) 3742.06	—
(60%Imax) 4490.47	—
(70%Imax) 5238.88	—
(80%Imax) 5987.29	—
(90%Imax) 6735.7	—



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											