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Nata

Client:

LumCAT: 2-2561-L

Luminaire: 92.70.412.00

Report No: 2024807-B003

Ballast type: AC

Test No: 2024809-C003

Voltage(V): 36.520

LampCAT: P2141-036-1206-P3090-1

Current(A): 0.695

Lamp flux(lm): 3120.0

Power (W): 25.380

Number of Lamps: 1

PF: 0.000

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 2900.86, Efficiency(%): 92.98% , Luminous Efficacy(lm/W): 114.30

Central intensity(cd): 10995.630, Maximum intensity(cd): 10995.630

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=22.6

[C90/270]Total=22.6

Field angle(10%Imax): [C0/180]Total=56.8

[C90/270]Total=56.8

Maximum s/h(1/2): C0_180=0.38 C90_270=0.38

Maximum s/h(1/4): C0_180=0.42 C90_270=0.42

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 92.98%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 99.113%

Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2024/8/9
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	10995.628	0.000	0	0.00%	0.00%
1.0	10949.229	10.500	10.5	0.34%	0.36%
2.0	10798.105	31.214	41.714	1.00%	1.44%
3.0	10569.116	51.103	92.817	1.64%	3.20%
4.0	10205.134	69.538	162.355	2.23%	5.60%
5.0	9690.606	85.590	247.946	2.74%	8.55%
6.0	9110.389	98.804	346.75	3.17%	11.95%
7.0	8434.691	108.902	455.652	3.49%	15.71%
8.0	7718.875	115.608	571.26	3.71%	19.69%
9.0	7008.565	119.358	690.618	3.83%	23.81%
10.0	6317.401	120.595	811.213	3.87%	27.96%
11.0	5670.469	119.783	930.997	3.84%	32.09%
12.0	5077.643	117.492	1048.489	3.77%	36.14%
13.0	4561.433	114.392	1162.88	3.67%	40.09%
14.0	4092.930	110.775	1273.655	3.55%	43.91%
15.0	3673.593	106.622	1380.278	3.42%	47.58%
16.0	3299.815	102.180	1482.458	3.27%	51.10%
17.0	2971.575	97.662	1580.12	3.13%	54.47%
18.0	2697.797	93.476	1673.596	3.00%	57.69%
19.0	2466.640	89.851	1763.446	2.88%	60.79%
20.0	2242.743	86.195	1849.641	2.76%	63.76%
21.0	2054.832	82.522	1932.163	2.64%	66.61%
22.0	1904.261	79.560	2011.723	2.55%	69.35%
23.0	1746.994	76.613	2088.336	2.46%	71.99%
24.0	1615.646	73.519	2161.855	2.36%	74.52%
25.0	1507.834	71.021	2232.877	2.28%	76.97%
26.0	1363.130	67.769	2300.646	2.17%	79.31%
27.0	1250.186	63.935	2364.581	2.05%	81.51%
28.0	1134.489	60.375	2424.956	1.94%	83.59%
29.0	1048.228	57.106	2482.062	1.83%	85.56%
30.0	930.271	53.419	2535.481	1.71%	87.40%
31.0	813.622	48.530	2584.011	1.56%	89.08%
32.0	701.946	43.419	2627.431	1.39%	90.57%
33.0	594.442	38.192	2665.623	1.22%	91.89%
34.0	494.528	32.955	2698.578	1.06%	93.03%
35.0	408.161	28.034	2726.612	0.90%	93.99%
36.0	329.974	23.502	2750.115	0.75%	94.80%
37.0	276.518	19.780	2769.895	0.63%	95.49%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	228.102	16.844	2786.739	0.54%	96.07%
39.0	180.795	13.957	2800.695	0.45%	96.55%
40.0	129.685	10.828	2811.524	0.35%	96.92%
41.0	96.111	8.040	2819.564	0.26%	97.20%
42.0	76.400	6.268	2825.832	0.20%	97.41%
43.0	61.518	5.109	2830.941	0.16%	97.59%
44.0	51.150	4.252	2835.193	0.14%	97.74%
45.0	43.686	3.645	2838.838	0.12%	97.86%
46.0	38.384	3.210	2842.047	0.10%	97.97%
47.0	34.626	2.904	2844.951	0.09%	98.07%
48.0	31.781	2.684	2847.636	0.09%	98.17%
49.0	29.547	2.518	2850.154	0.08%	98.25%
50.0	27.884	2.394	2852.549	0.08%	98.33%
51.0	26.721	2.310	2854.859	0.07%	98.41%
52.0	25.861	2.256	2857.115	0.07%	98.49%
53.0	25.210	2.222	2859.337	0.07%	98.57%
54.0	24.836	2.206	2861.543	0.07%	98.64%
55.0	24.639	2.208	2863.751	0.07%	98.72%
56.0	24.626	2.226	2865.977	0.07%	98.80%
57.0	24.691	2.255	2868.232	0.07%	98.88%
58.0	24.744	2.286	2870.518	0.07%	98.95%
59.0	24.527	2.303	2872.822	0.07%	99.03%
60.0	24.172	2.301	2875.122	0.07%	99.11%
61.0	23.114	2.257	2877.379	0.07%	99.19%
62.0	21.537	2.152	2879.53	0.07%	99.26%
63.0	19.711	2.006	2881.537	0.06%	99.33%
64.0	17.516	1.827	2883.363	0.06%	99.40%
65.0	15.585	1.638	2885.001	0.05%	99.45%
66.0	13.857	1.469	2886.47	0.05%	99.50%
67.0	12.484	1.324	2887.795	0.04%	99.55%
68.0	11.347	1.207	2889.002	0.04%	99.59%
69.0	10.447	1.112	2890.114	0.04%	99.63%
70.0	9.691	1.034	2891.148	0.03%	99.67%
71.0	8.982	0.965	2892.113	0.03%	99.70%
72.0	8.318	0.900	2893.013	0.03%	99.73%
73.0	7.707	0.838	2893.851	0.03%	99.76%
74.0	7.116	0.779	2894.63	0.02%	99.79%
75.0	6.551	0.722	2895.352	0.02%	99.81%

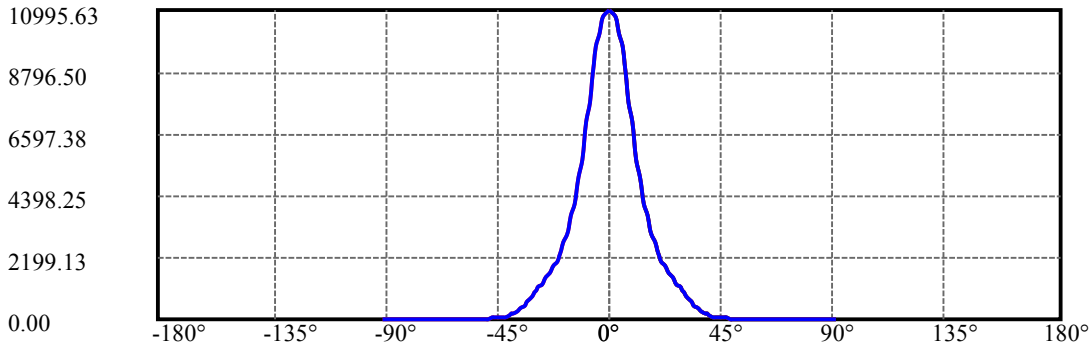
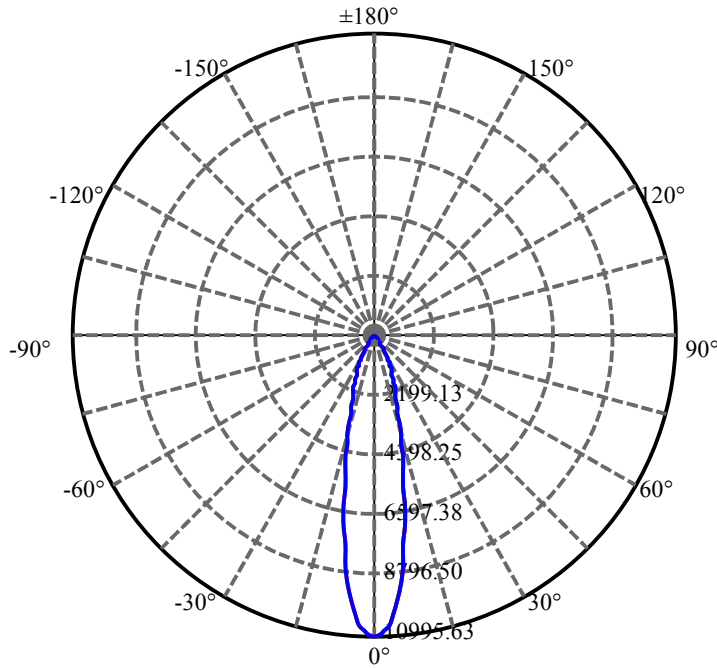
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	5.972	0.665	2896.017	0.02%	99.83%
77.0	5.460	0.610	2896.626	0.02%	99.85%
78.0	5.020	0.561	2897.187	0.02%	99.87%
79.0	4.606	0.517	2897.705	0.02%	99.89%
80.0	4.192	0.474	2898.179	0.02%	99.91%
81.0	3.791	0.432	2898.611	0.01%	99.92%
82.0	3.417	0.391	2899.001	0.01%	99.94%
83.0	3.029	0.350	2899.352	0.01%	99.95%
84.0	2.707	0.312	2899.664	0.01%	99.96%
85.0	2.365	0.277	2899.941	0.01%	99.97%
86.0	2.076	0.243	2900.184	0.01%	99.98%
87.0	1.787	0.211	2900.395	0.01%	99.98%
88.0	1.511	0.181	2900.576	0.01%	99.99%
89.0	1.255	0.152	2900.728	0.00%	100.00%
90.0	1.137	0.131	2900.859	0.00%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2535.48	81.27%	87.40%
0-40	2811.52	90.11%	96.92%
0-60	2875.12	92.15%	99.11%
0-90	2900.73	92.97%	100.00%
0-120	2900.73	92.97%	100.00%
0-180	2900.86	92.98%	100.00%
60-90	25.61	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%
0-26.31	2320.69	74.38%	80.00%

ZONAL LUMEN SUMMARY

0-10	811.21
10-20	1038.43
20-30	685.84
30-40	276.04
40-50	41.02
50-60	22.57
60-70	16.03
70-80	7.03
80-90	2.55
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: —————

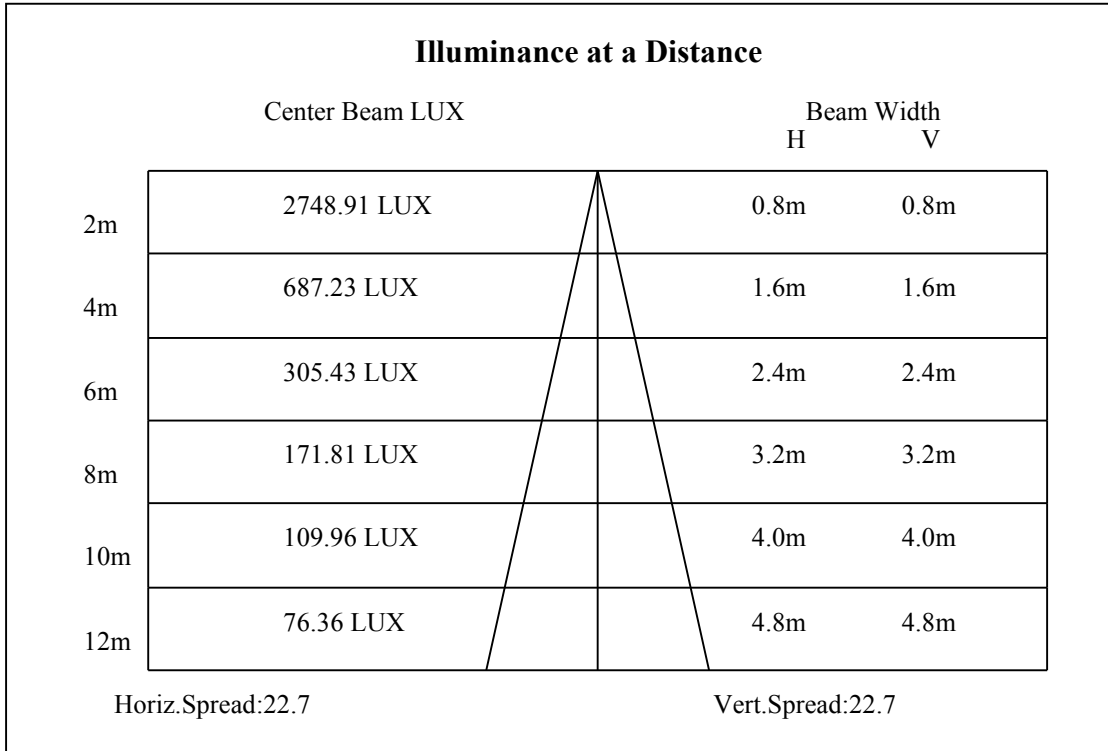
C90/C270: —————

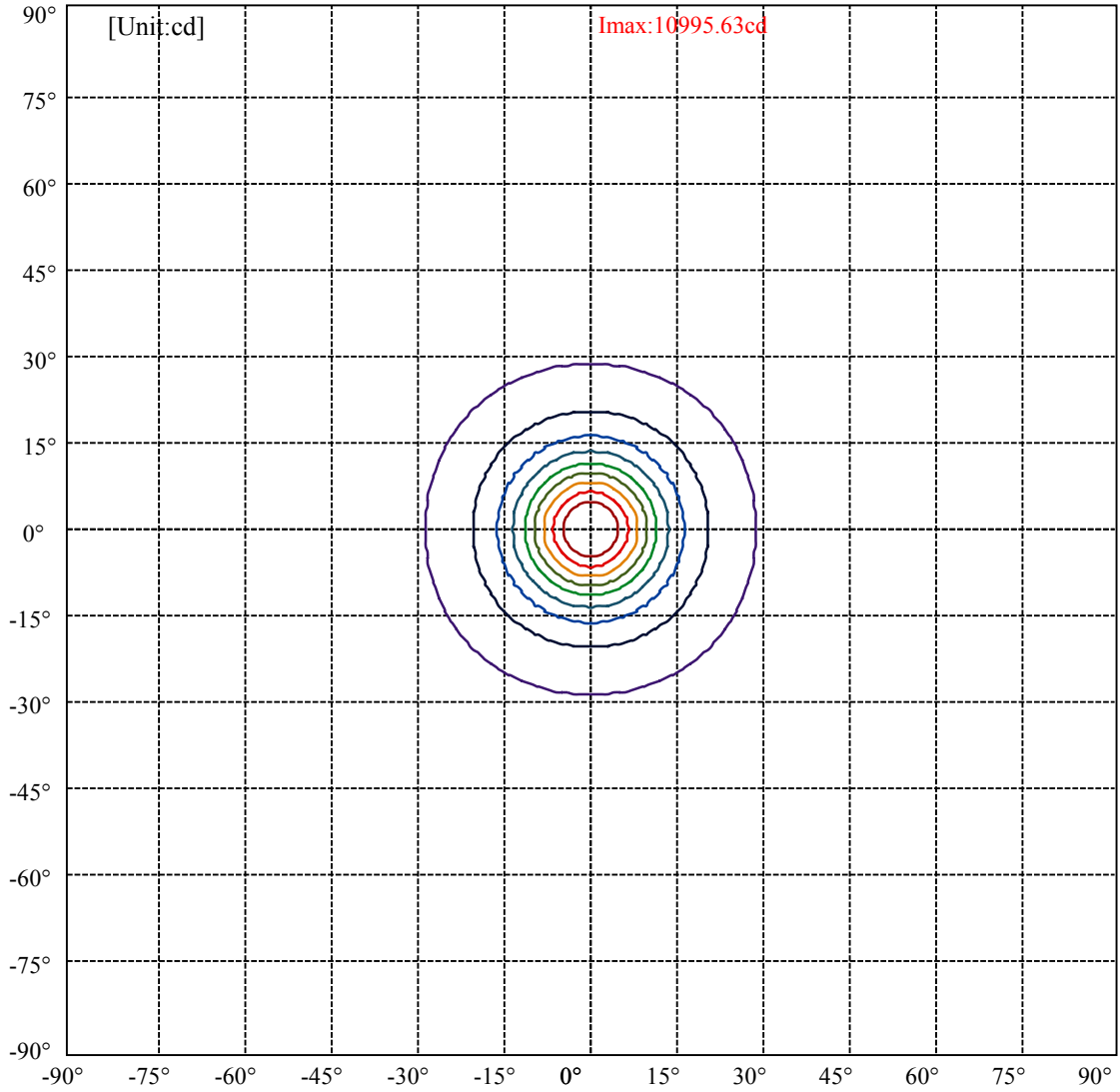
Field angle(10%Imax):C0/180Left:28.4 Right:28.4

:C90/270Left:28.4 Right:28.4

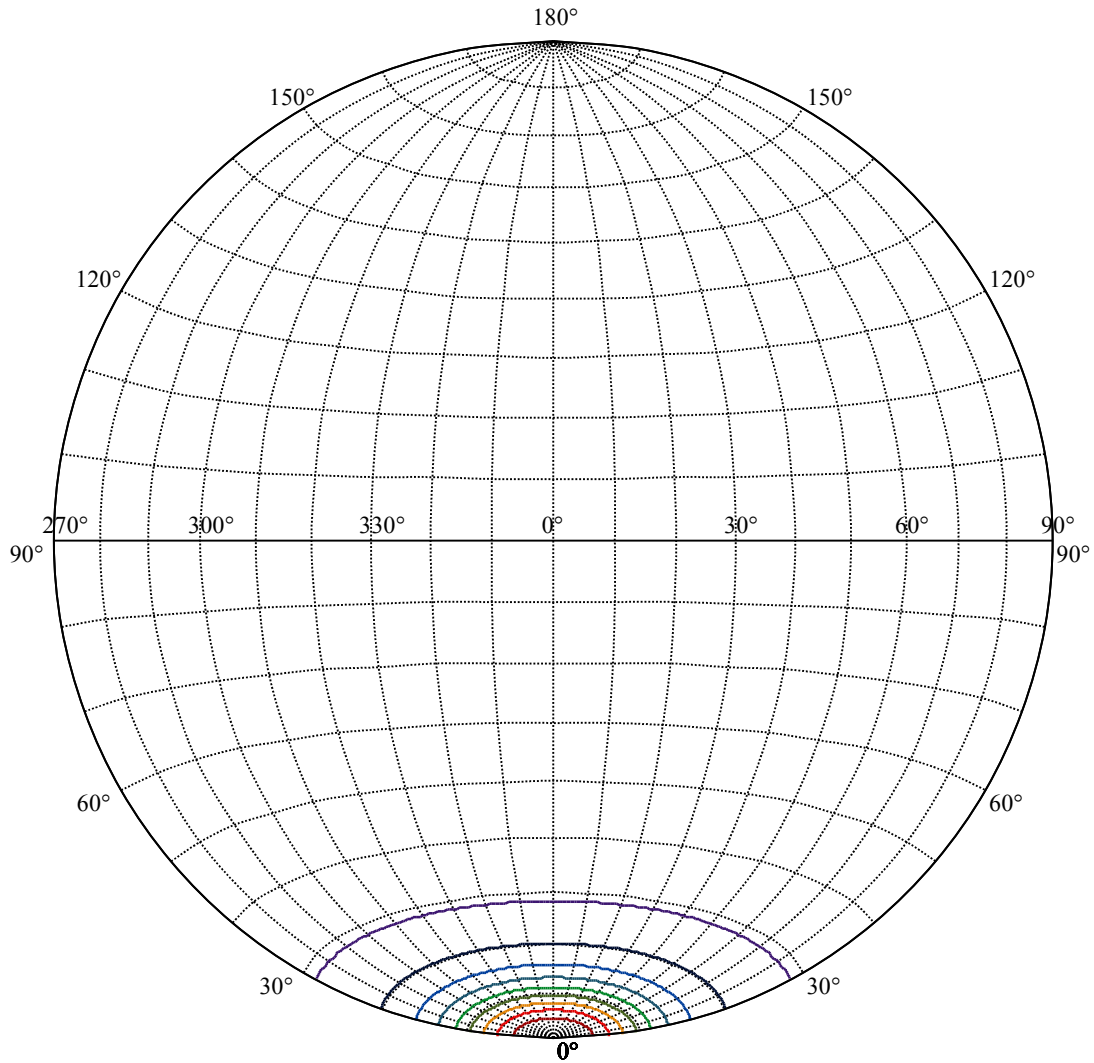
Beam Angle(50%Imax):C0/180Left:11.3 Right:11.3

:C90/270Left:11.3 Right:11.3





(10%Imax) 1099.56	—
(20%Imax) 2199.13	—
(30%Imax) 3298.69	—
(40%Imax) 4398.25	—
(50%Imax) 5497.81	—
(60%Imax) 6597.38	—
(70%Imax) 7696.94	—
(80%Imax) 8796.5	—
(90%Imax) 9896.07	—



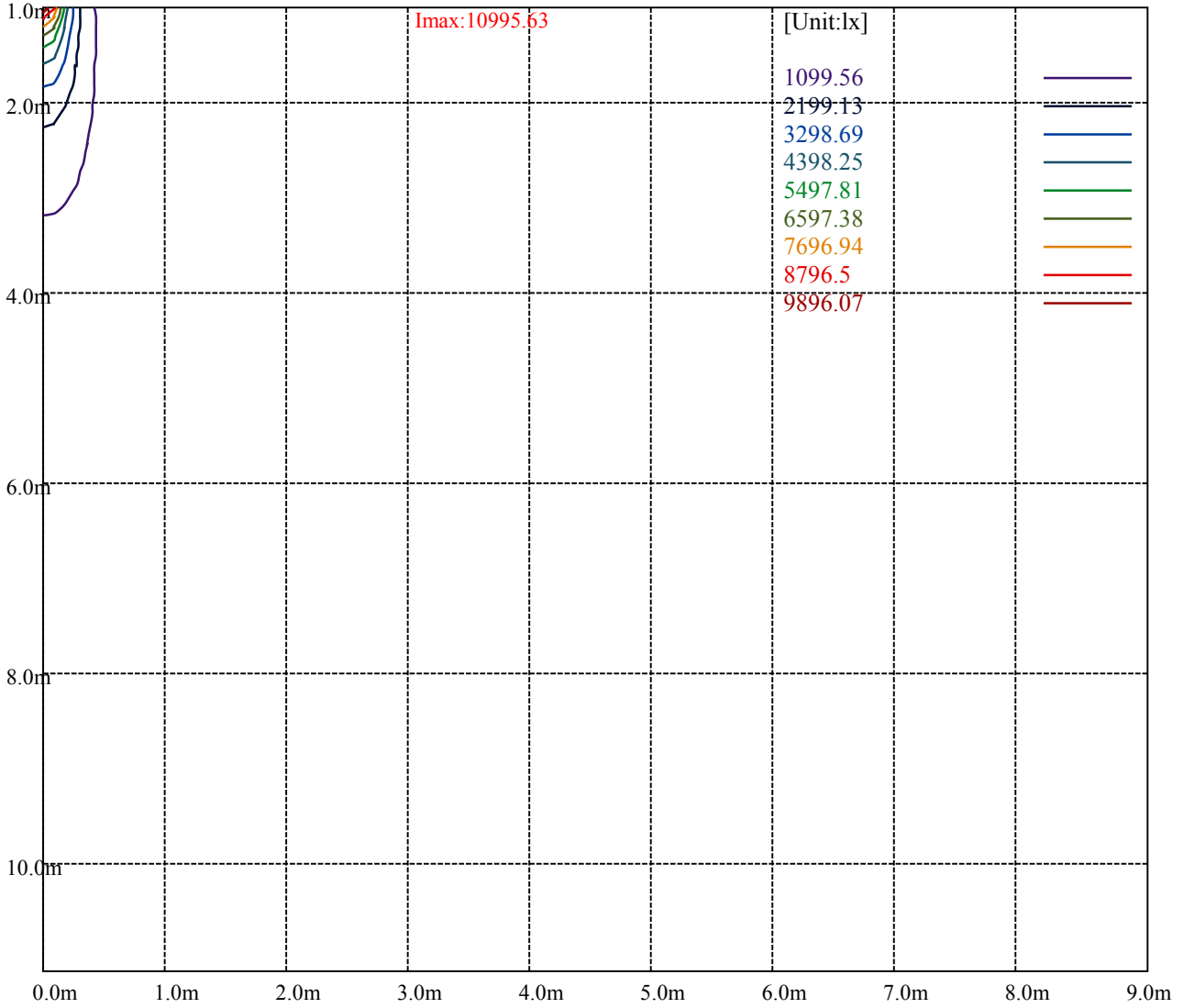
House

[Unit:cd]

Road

Imax:10995.63

(10%Imax) 1099.56	—
(20%Imax) 2199.13	—
(30%Imax) 3298.69	—
(40%Imax) 4398.25	—
(50%Imax) 5497.81	—
(60%Imax) 6597.38	—
(70%Imax) 7696.94	—
(80%Imax) 8796.5	—
(90%Imax) 9896.07	—



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											