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Nata

Client:

LumCAT: 2-2520-L

Luminaire: 92.70.412.00

Report No: 2024815-B012

Ballast type: AC

Test No: 2024816-C012

Voltage(V): 34.780

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): 2270.65, Efficiency(%): 89.57% , Luminous Efficacy(lm/W): 145.09

Central intensity(cd): 5092.768, Maximum intensity(cd): 5092.768

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=38.6

[C90/270]Total=38.6

Field angle(10%Imax): [C0/180]Total=63.4

[C90/270]Total=63.4

Maximum s/h(1/2): C0_180=0.64 C90_270=0.64

Maximum s/h(1/4): C0_180=0.61 C90_270=0.61

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 89.57%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 99.274%

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	5092.767	0.000	0	0.00%	0.00%
1.0	5085.028	4.870	4.87	0.19%	0.21%
2.0	5071.940	14.578	19.448	0.58%	0.86%
3.0	5037.945	24.180	43.628	0.95%	1.92%
4.0	4982.025	33.540	77.168	1.32%	3.40%
5.0	4911.821	42.563	119.731	1.68%	5.27%
6.0	4839.324	51.245	170.975	2.02%	7.53%
7.0	4745.927	59.495	230.471	2.35%	10.15%
8.0	4646.466	67.220	297.69	2.65%	13.11%
9.0	4543.115	74.477	372.167	2.94%	16.39%
10.0	4425.782	81.165	453.332	3.20%	19.96%
11.0	4298.739	87.176	540.508	3.44%	23.80%
12.0	4151.925	92.378	632.886	3.64%	27.87%
13.0	3988.607	96.608	729.494	3.81%	32.13%
14.0	3817.752	99.921	829.414	3.94%	36.53%
15.0	3600.190	101.837	931.251	4.02%	41.01%
16.0	3376.700	102.231	1033.482	4.03%	45.51%
17.0	3126.950	101.279	1134.761	4.00%	49.98%
18.0	2910.353	99.542	1234.303	3.93%	54.36%
19.0	2629.820	96.388	1330.691	3.80%	58.60%
20.0	2389.058	91.859	1422.55	3.62%	62.65%
21.0	2138.466	86.938	1509.488	3.43%	66.48%
22.0	1881.757	80.788	1590.276	3.19%	70.04%
23.0	1678.393	74.702	1664.978	2.95%	73.33%
24.0	1468.347	68.799	1733.777	2.71%	76.36%
25.0	1248.576	61.777	1795.554	2.44%	79.08%
26.0	1144.706	56.494	1852.047	2.23%	81.56%
27.0	1042.465	53.510	1905.557	2.11%	83.92%
28.0	918.379	49.644	1955.201	1.96%	86.11%
29.0	793.247	44.781	1999.982	1.77%	88.08%
30.0	678.056	39.725	2039.707	1.57%	89.83%
31.0	573.017	34.816	2074.523	1.37%	91.36%
32.0	476.564	30.069	2104.592	1.19%	92.69%
33.0	393.069	25.620	2130.212	1.01%	93.81%
34.0	312.123	21.341	2151.553	0.84%	94.75%
35.0	261.275	17.808	2169.36	0.70%	95.54%
36.0	227.720	15.570	2184.93	0.61%	96.22%
37.0	148.404	12.267	2197.197	0.48%	96.76%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	116.091	8.828	2206.026	0.35%	97.15%
39.0	88.561	6.985	2213.011	0.28%	97.46%
40.0	70.132	5.535	2218.546	0.22%	97.71%
41.0	54.251	4.429	2222.975	0.17%	97.90%
42.0	42.674	3.521	2226.496	0.14%	98.06%
43.0	36.373	2.928	2229.425	0.12%	98.18%
44.0	30.611	2.528	2231.953	0.10%	98.30%
45.0	26.971	2.213	2234.166	0.09%	98.39%
46.0	23.863	1.988	2236.154	0.08%	98.48%
47.0	21.544	1.806	2237.96	0.07%	98.56%
48.0	19.586	1.663	2239.622	0.07%	98.63%
49.0	18.036	1.545	2241.167	0.06%	98.70%
50.0	16.761	1.451	2242.618	0.06%	98.77%
51.0	15.650	1.371	2243.989	0.05%	98.83%
52.0	14.757	1.305	2245.294	0.05%	98.88%
53.0	13.949	1.249	2246.543	0.05%	98.94%
54.0	13.259	1.199	2247.742	0.05%	98.99%
55.0	12.622	1.155	2248.897	0.05%	99.04%
56.0	12.083	1.116	2250.014	0.04%	99.09%
57.0	11.603	1.083	2251.097	0.04%	99.14%
58.0	11.091	1.049	2252.146	0.04%	99.18%
59.0	10.769	1.022	2253.168	0.04%	99.23%
60.0	10.421	1.001	2254.169	0.04%	99.27%
61.0	10.138	0.981	2255.15	0.04%	99.32%
62.0	9.842	0.963	2256.113	0.04%	99.36%
63.0	9.580	0.945	2257.057	0.04%	99.40%
64.0	9.310	0.927	2257.984	0.04%	99.44%
65.0	8.949	0.904	2258.888	0.04%	99.48%
66.0	8.594	0.875	2259.763	0.03%	99.52%
67.0	8.233	0.846	2260.609	0.03%	99.56%
68.0	7.898	0.817	2261.426	0.03%	99.59%
69.0	7.503	0.786	2262.212	0.03%	99.63%
70.0	7.070	0.748	2262.961	0.03%	99.66%
71.0	6.728	0.713	2263.674	0.03%	99.69%
72.0	6.373	0.681	2264.355	0.03%	99.72%
73.0	5.979	0.646	2265.001	0.03%	99.75%
74.0	5.532	0.605	2265.606	0.02%	99.78%
75.0	5.053	0.559	2266.165	0.02%	99.80%

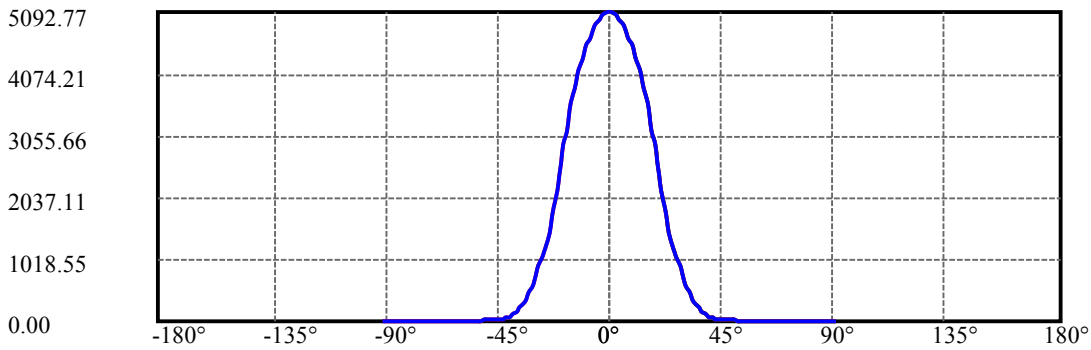
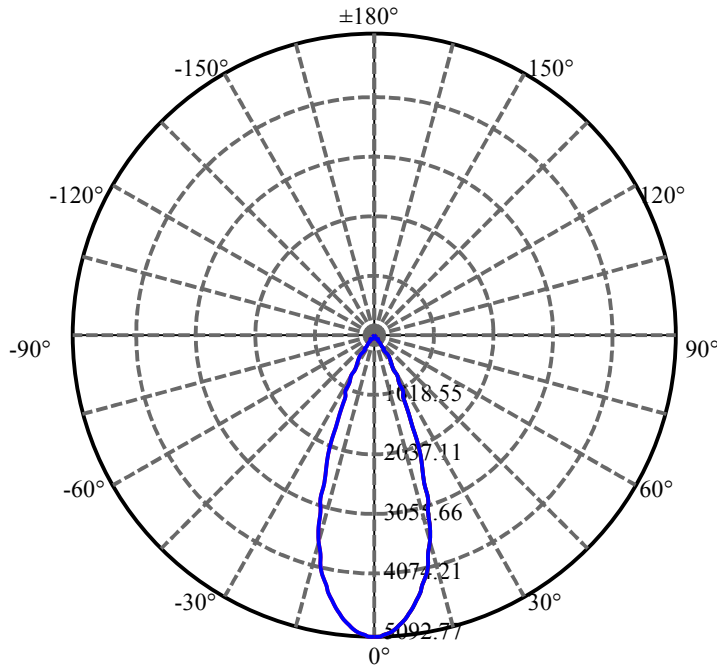
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	4.599	0.512	2266.678	0.02%	99.82%
77.0	4.225	0.470	2267.148	0.02%	99.85%
78.0	3.850	0.432	2267.58	0.02%	99.86%
79.0	3.548	0.398	2267.978	0.02%	99.88%
80.0	3.325	0.371	2268.348	0.01%	99.90%
81.0	2.996	0.342	2268.69	0.01%	99.91%
82.0	2.746	0.311	2269.002	0.01%	99.93%
83.0	2.503	0.285	2269.287	0.01%	99.94%
84.0	2.240	0.258	2269.545	0.01%	99.95%
85.0	2.037	0.233	2269.779	0.01%	99.96%
86.0	1.827	0.211	2269.99	0.01%	99.97%
87.0	1.682	0.192	2270.182	0.01%	99.98%
88.0	1.518	0.175	2270.357	0.01%	99.99%
89.0	1.347	0.157	2270.514	0.01%	99.99%
90.0	1.189	0.139	2270.653	0.01%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2039.71	80.46%	89.83%
0-40	2218.55	87.52%	97.71%
0-60	2254.17	88.92%	99.27%
0-90	2270.51	89.57%	99.99%
0-120	2270.51	89.57%	99.99%
0-180	2270.65	89.57%	100.00%
60-90	16.35	0.64%	0.72%
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%
0-25.37	1816.52	71.66%	80.00%

ZONAL LUMEN SUMMARY

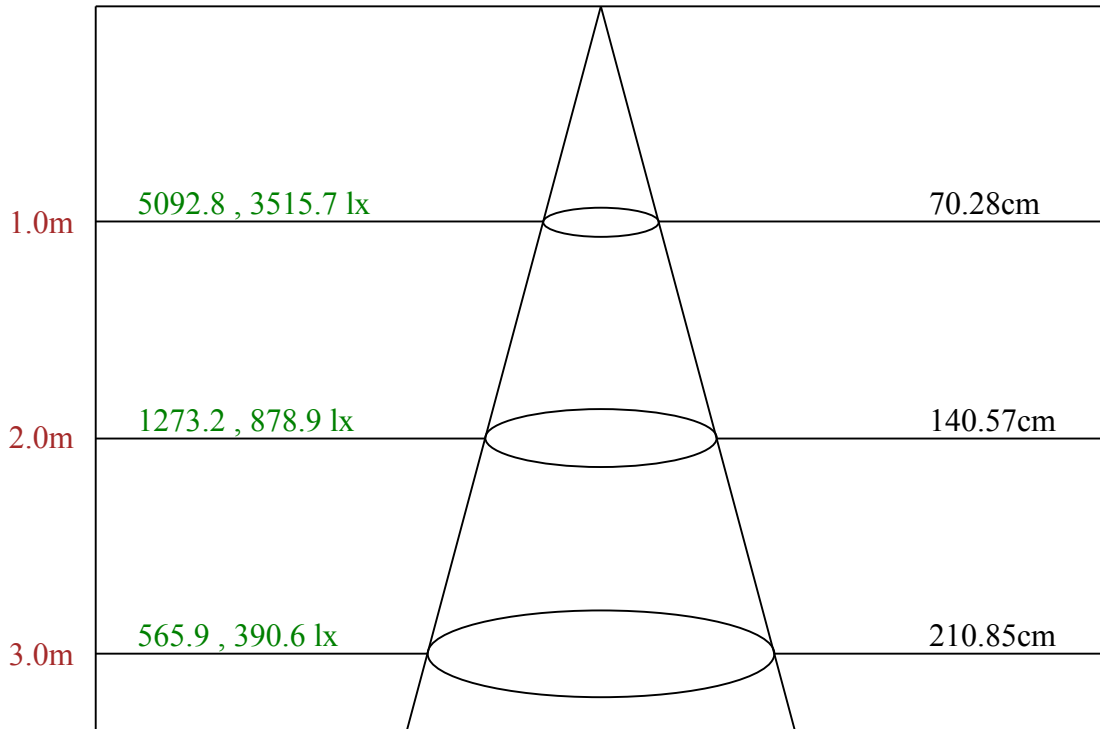
0-10	453.33
10-20	969.22
20-30	617.16
30-40	178.84
40-50	24.07
50-60	11.55
60-70	8.79
70-80	5.39
80-90	2.17
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00



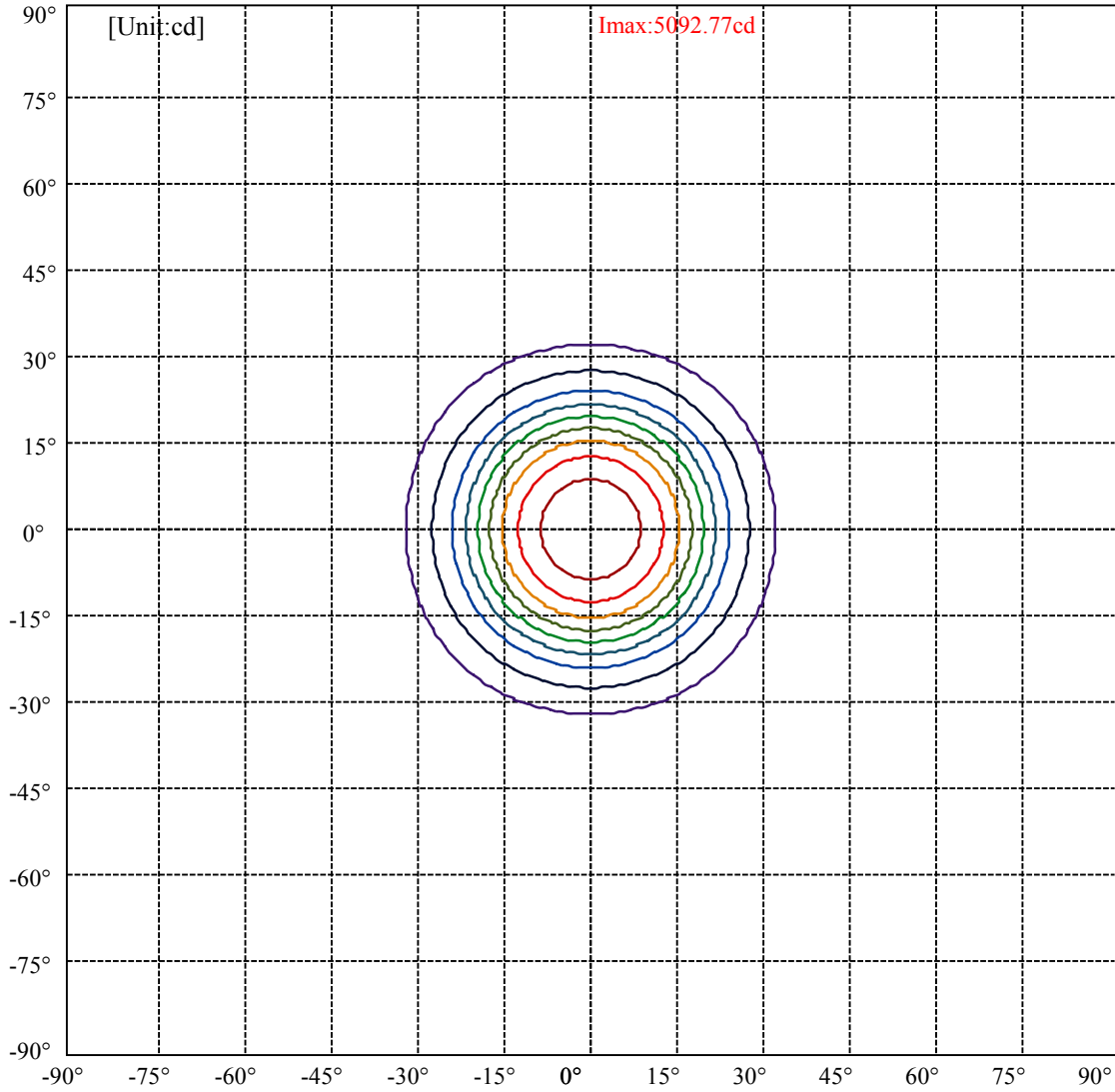
C0(Max): —————
C0/C180: —————
C90/C270: —————

Field angle(10%Imax):C0/180Left:31.7 Right:31.7
:C90/270Left:31.7 Right:31.7

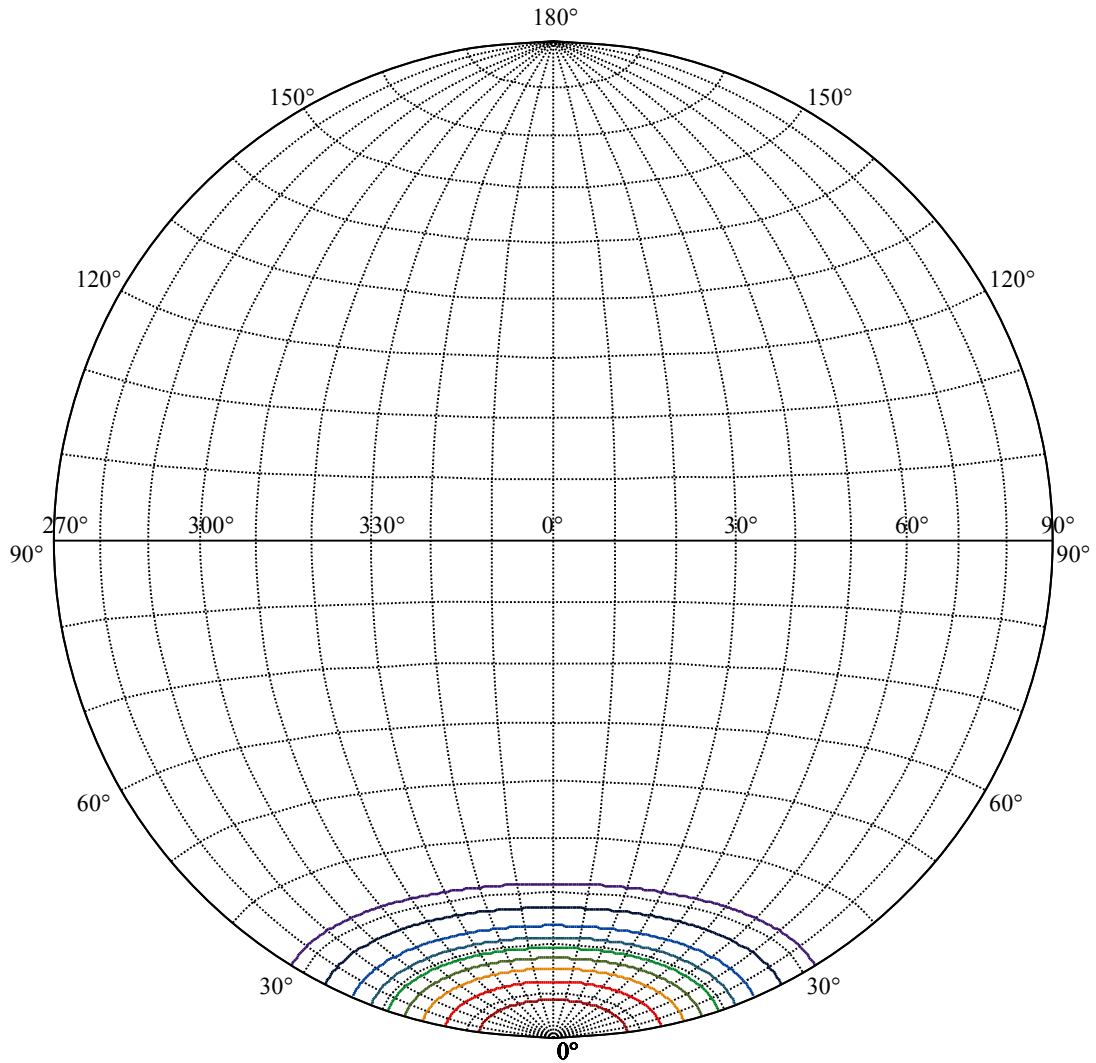
Beam Angle(50%Imax):C0/180Left:19.3 Right:19.3
:C90/270Left:19.3 Right:19.3



Max , Ave Beam angle of C0 plane 38.73



(10%I _{max}) 509.277	—
(20%I _{max}) 1018.55	—
(30%I _{max}) 1527.83	—
(40%I _{max}) 2037.11	—
(50%I _{max}) 2546.38	—
(60%I _{max}) 3055.66	—
(70%I _{max}) 3564.94	—
(80%I _{max}) 4074.21	—
(90%I _{max}) 4583.49	—



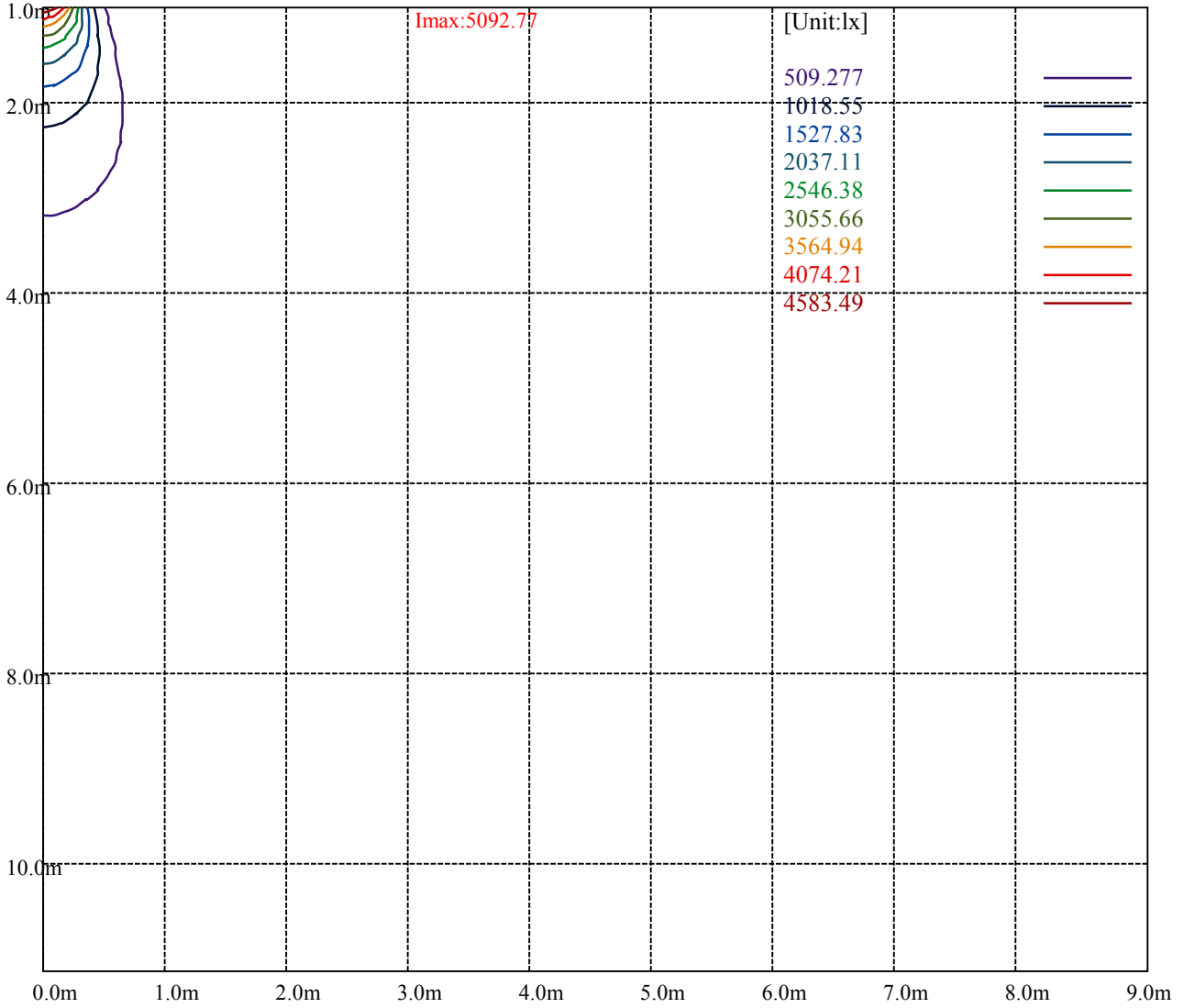
House

[Unit:cd]

Road

Imax:5092.77

(10%Imax) 509.277	—
(20%Imax) 1018.55	—
(30%Imax) 1527.83	—
(40%Imax) 2037.11	—
(50%Imax) 2546.38	—
(60%Imax) 3055.66	—
(70%Imax) 3564.94	—
(80%Imax) 4074.21	—
(90%Imax) 4583.49	—



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										