

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: METALUX

Report Number: P601472

Luminaire Tested: 22CGSB-45-L840

Issue Date: 1/24/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P601472  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2307-104-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/24/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 22CGSB-45-L840  
Description: 2x2 CGSB AT 4500lm 4000K 80CRI  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

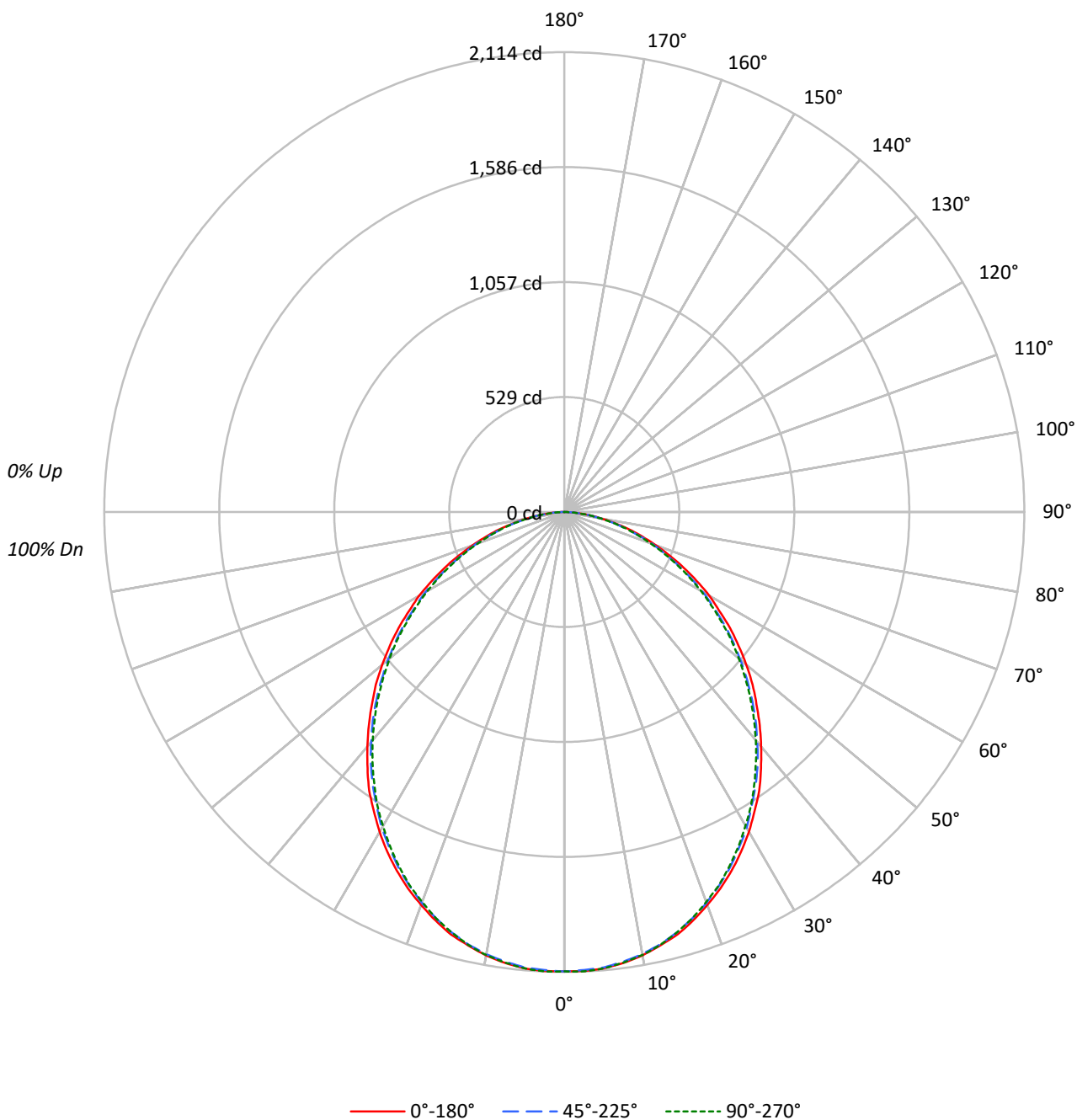
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5277.0 lumens  
Efficiency: N/A  
Efficacy: 138.1 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.29  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 38.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	73	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61
4	84	72	64	57	81	71	63	57	68	61	56	66	60	55	64	59	54	52
5	77	65	56	49	75	64	55	49	61	54	49	59	53	48	58	52	48	45
6	71	58	50	43	69	57	49	43	56	48	43	54	47	42	52	47	42	40
7	66	53	44	38	65	52	44	38	51	43	38	49	43	38	48	42	37	36
8	62	49	40	34	60	48	40	34	47	39	34	45	39	34	44	38	34	32
9	58	45	37	31	56	44	36	31	43	36	31	42	35	31	41	35	31	29
10	54	41	33	28	53	41	33	28	40	33	28	39	32	28	38	32	28	26

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5683	5683	5683
5°	5687	5676	5687
10°	5655	5638	5650
15°	5602	5572	5572
20°	5505	5475	5463
25°	5402	5352	5333
30°	5274	5209	5176
35°	5134	5037	5003
40°	4943	4847	4810
45°	4755	4642	4603
50°	4570	4420	4385
55°	4362	4204	4145
60°	4143	3962	3905
65°	3857	3670	3629
70°	3525	3393	3310
75°	3215	3018	3040
80°	2771	2608	2641
85°	2143	2078	1948

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4755 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	199.5	3.8
10°-20°	564.0	10.7
20°-30°	830.7	15.7
30°-40°	961.0	18.2
40°-50°	944.7	17.9
50°-60°	805.1	15.3
60°-70°	576.9	10.9
70°-80°	313.4	5.9
80°-90°	81.7	1.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1594.2	30.2
0°-40°	2555.2	48.4
0°-60°	4305.0	81.6
0°-90°	5277.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5277.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2112	2112	2112	2112	2112	
5°	2105	2101	2101	2101	2105	200
15°	2011	2002	2000	1998	2000	566
25°	1819	1811	1802	1798	1796	837
35°	1563	1550	1533	1525	1523	975
45°	1249	1241	1220	1209	1209	965
55°	930	913	896	886	883	830
65°	606	593	576	570	570	600
75°	309	299	290	286	292	327
85°	69	69	67	65	63	84
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2111.7	2111.7	2111.7	2111.7	2111.7
2.5°	2111.7	2109.6	2107.5	2109.6	2113.8
5°	2105.4	2101.2	2101.2	2101.2	2105.4
7.5°	2090.7	2086.5	2084.4	2086.5	2088.6
10°	2069.7	2065.5	2063.3	2065.5	2067.6
12.5°	2040.2	2038.1	2036.0	2036.0	2038.1
15°	2010.8	2002.4	2000.2	1998.1	2000.2
17.5°	1968.7	1966.6	1958.2	1958.2	1958.2
20°	1922.4	1918.2	1911.9	1907.7	1907.7
22.5°	1874.1	1869.8	1859.3	1855.1	1857.2
25°	1819.4	1811.0	1802.5	1798.3	1796.2
27.5°	1760.5	1752.1	1739.4	1733.1	1733.1
30°	1697.4	1691.1	1676.3	1667.9	1665.8
32.5°	1628.0	1623.8	1602.7	1598.5	1598.5
35°	1562.8	1550.1	1533.3	1524.9	1522.8
37.5°	1484.9	1476.5	1459.7	1449.2	1447.1
40°	1407.1	1396.6	1379.8	1371.4	1369.3
42.5°	1329.3	1318.8	1301.9	1291.4	1289.3
45°	1249.4	1241.0	1219.9	1209.4	1209.4
47.5°	1173.6	1156.8	1137.9	1129.5	1127.4
50°	1091.6	1076.9	1055.9	1047.4	1047.4
52.5°	1009.6	999.1	975.9	971.7	967.5
55°	929.7	912.8	896.0	885.5	883.4
57.5°	843.4	828.7	811.9	803.5	803.5
60°	769.8	750.9	736.2	725.6	725.6
62.5°	685.7	668.9	654.1	647.8	645.7
65°	605.8	593.1	576.3	570.0	570.0
67.5°	525.8	515.3	500.6	494.3	496.4
70°	448.0	441.7	431.2	422.8	420.7
72.5°	376.5	368.1	357.6	355.5	355.5
75°	309.2	298.7	290.3	286.1	292.4
77.5°	239.8	233.5	229.3	227.2	229.3
80°	178.8	170.4	168.3	170.4	170.4
82.5°	124.1	119.9	117.8	117.8	117.8
85°	69.4	69.4	67.3	65.2	63.1
87.5°	27.3	27.3	29.4	29.4	31.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)