

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P571816

Luminaire Tested: **4APVTLD-54L840**

Issue Date: 9/28/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P571816  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2108-352-2)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/28/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4APVTLTD-54L840  
Description: 4FT VAPORTIGHT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

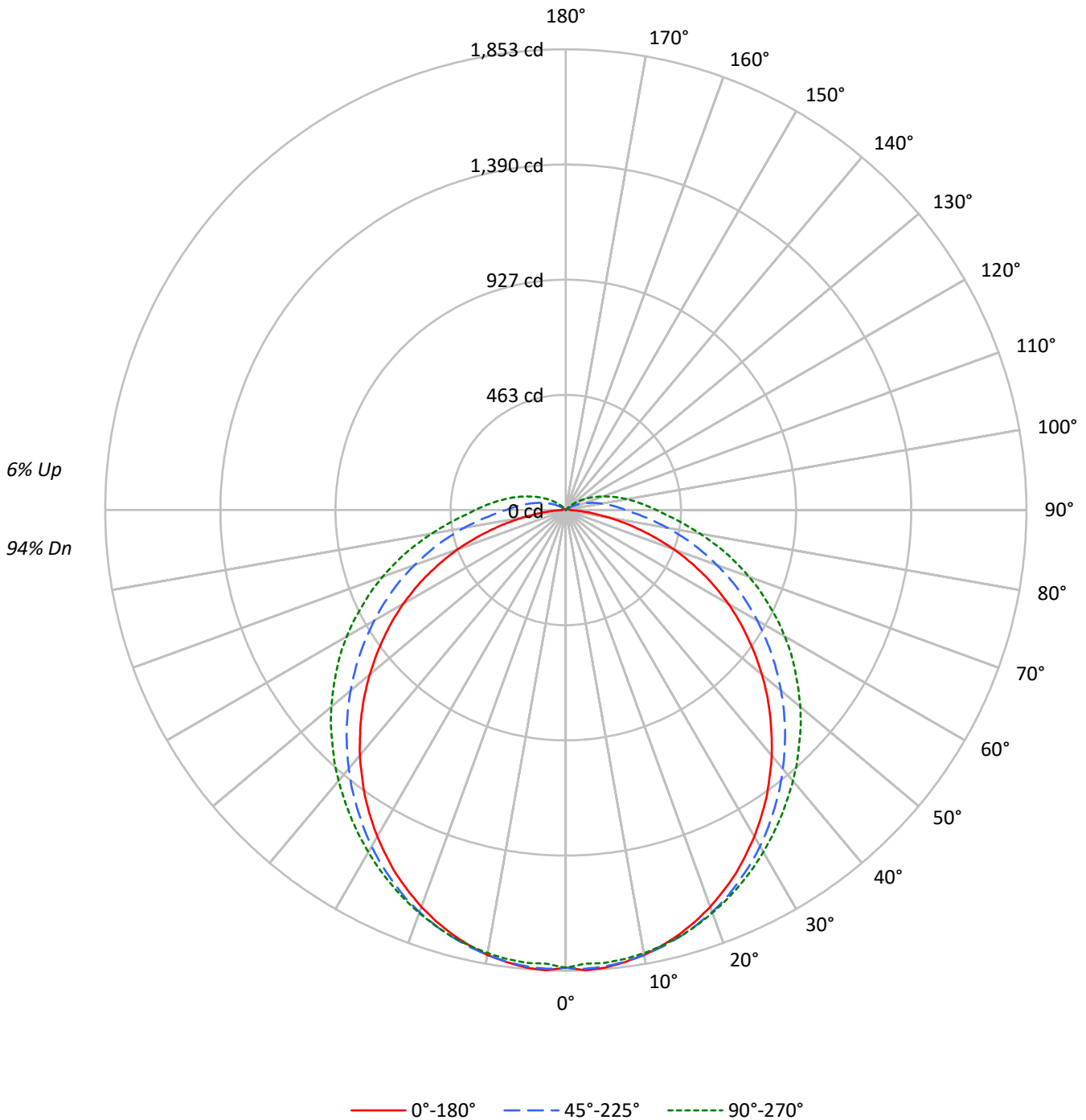
Lumens per Lamp: N/A  
Luminaire Lumens: 6209.0 lumens  
Efficiency: N/A  
Efficacy: 123.4 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.17')  
CIE Type: Direct

Input Watts (W): 50.3  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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: 28.75 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				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	50	30	10	0
RCR																					
0	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96	96	96	96	94
1	106	100	95	91	102	97	93	89	92	88	85	87	84	81	82	80	77	77	77	77	75
2	95	86	79	73	92	84	77	71	79	73	68	75	70	66	71	67	64	64	64	64	61
3	87	75	67	60	83	73	65	59	69	62	57	66	60	55	62	57	53	53	53	53	51
4	79	66	57	50	76	65	56	49	61	54	48	58	52	47	55	50	45	45	45	45	43
5	73	59	50	43	70	58	49	42	55	47	41	52	45	40	50	44	39	39	39	39	37
6	67	53	44	37	65	52	43	37	49	42	36	47	40	35	45	39	34	34	34	34	32
7	62	48	39	33	60	47	38	32	45	37	32	43	36	31	41	35	30	30	30	30	28
8	58	44	35	29	56	43	35	29	41	34	28	39	33	28	38	32	27	27	27	27	25
9	54	40	32	26	52	39	31	26	38	30	25	36	30	25	35	29	24	24	24	24	23
10	50	37	29	24	49	36	29	23	35	28	23	33	27	23	32	26	22	22	22	22	20

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

	0°	45°	90°
0°	11889	11889	11889
5°	11930	11624	11453
10°	11831	11296	11087
15°	11681	10961	10720
20°	11500	10620	10346
25°	11295	10250	9979
30°	11046	9873	9624
35°	10787	9469	9289
40°	10503	9076	8974
45°	10189	8682	8662
50°	9857	8273	8378
55°	9486	7874	8070
60°	9099	7461	7763
65°	8567	7049	7403
70°	7855	6571	7051
75°	6755	6097	6670
80°	5355	5591	6232
85°	3539	5132	5918



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	174.2	2.8
10°-20°	498.7	8.0
20°-30°	754.1	12.1
30°-40°	910.9	14.7
40°-50°	958.6	15.4
50°-60°	901.5	14.5
60°-70°	753.8	12.1
70°-80°	540.4	8.7
80°-90°	323.3	5.2
90°-100°	193.0	3.1
100°-110°	114.1	1.8
110°-120°	58.0	0.9
120°-130°	22.9	0.4
130°-140°	5.5	0.1
140°-150°	0.2	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1427.1	23.0
0°-40°	2338.0	37.7
0°-60°	4198.0	67.6
0°-90°	5815.4	93.7
90°-120°	365.0	5.9
90°-150°	393.6	6.3
90°-180°	394.0	6.3
0°-180°	6209.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1841	1841	1841	1841	1841	
5°	1847	1828	1842	1827	1828	175
15°	1767	1753	1776	1770	1775	498
25°	1616	1610	1648	1649	1662	744
35°	1408	1413	1464	1487	1508	880
45°	1162	1179	1247	1296	1328	896
55°	893	921	1011	1088	1126	799
65°	611	654	770	864	900	604
75°	313	396	529	629	666	333
85°	70	179	316	412	445	80
90°	17	114	240	332	364	12
95°	16	77	192	273	304	12
105°	12	30	111	179	203	13
115°	7	9	53	103	122	8
125°	5	5	16	46	59	4
135°	2	2	2	11	17	2
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1840.8	1840.8	1840.8	1840.8	1840.8
2.5°	1853.1	1834.6	1846.9	1833.3	1825.9
5°	1846.9	1828.4	1842.0	1827.2	1828.4
7.5°	1833.3	1816.0	1832.1	1818.5	1821.0
10°	1817.3	1800.0	1817.3	1806.1	1809.8
12.5°	1793.8	1778.9	1798.7	1788.8	1793.8
15°	1766.6	1753.0	1776.5	1770.3	1775.2
17.5°	1734.4	1722.1	1750.5	1746.8	1751.7
20°	1698.6	1688.7	1720.8	1715.9	1724.5
22.5°	1657.8	1651.6	1687.5	1683.8	1694.9
25°	1615.8	1609.6	1647.9	1649.1	1661.5
27.5°	1566.3	1563.8	1607.1	1610.8	1626.9
30°	1516.9	1516.9	1562.6	1571.3	1588.6
32.5°	1462.5	1466.2	1514.4	1530.5	1549.0
35°	1408.1	1413.0	1463.7	1487.2	1508.2
37.5°	1347.5	1357.4	1413.0	1441.5	1464.9
40°	1289.4	1299.3	1358.6	1393.2	1421.7
42.5°	1225.1	1239.9	1303.0	1345.0	1377.2
45°	1162.1	1179.4	1247.4	1295.6	1327.7
47.5°	1096.5	1116.3	1189.3	1244.9	1282.0
50°	1029.8	1053.3	1129.9	1193.0	1231.3
52.5°	961.8	987.8	1070.6	1141.0	1178.1
55°	892.6	921.0	1011.2	1087.9	1126.2
57.5°	824.6	856.7	949.4	1033.5	1074.3
60°	755.3	791.2	890.1	976.6	1017.4
62.5°	683.6	723.2	829.5	922.2	960.6
65°	610.7	654.0	770.2	864.1	900.0
67.5°	536.5	588.4	709.6	806.0	844.3
70°	463.6	522.9	646.6	744.2	783.8
72.5°	385.7	457.4	587.2	687.3	724.4
75°	312.8	395.6	529.1	629.2	666.3
77.5°	243.5	337.5	471.0	569.9	604.5
80°	178.0	276.9	416.6	514.3	547.7
82.5°	118.7	225.0	363.5	461.1	494.5
85°	70.5	179.3	316.5	411.7	445.0
87.5°	33.4	142.2	273.2	367.2	399.3
90°	17.3	113.7	239.8	332.5	363.5
92.5°	16.1	94.0	215.1	302.9	332.5
95°	16.1	76.6	191.6	273.2	304.1
97.5°	14.8	61.8	169.4	249.7	275.7
100°	13.6	49.4	148.3	223.8	249.7
102.5°	13.6	38.3	128.6	200.3	226.2
105°	12.4	29.7	111.3	179.3	202.7
107.5°	11.1	22.3	94.0	158.2	180.5
110°	9.9	17.3	79.1	138.5	159.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	8.7	12.4	65.5	119.9	139.7
115°	7.4	8.7	53.2	102.6	122.4
117.5°	7.4	7.4	40.8	86.5	105.1
120°	6.2	6.2	30.9	71.7	89.0
122.5°	6.2	4.9	23.5	58.1	72.9
125°	4.9	4.9	16.1	45.7	59.3
127.5°	3.7	3.7	9.9	34.6	47.0
130°	3.7	3.7	6.2	26.0	35.9
132.5°	2.5	2.5	2.5	18.5	26.0
135°	2.5	2.5	2.5	11.1	17.3
137.5°	2.5	1.2	1.2	6.2	11.1
140°	1.2	1.2	1.2	2.5	4.9
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)