

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: P236343

Luminaire Tested: **4SWLED-52HL-LW-UNV-L835-CD1-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P236343  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1709-316-27)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4SWLED-52HL-LW-UNV-L835-CD1-U  
Description: METALUX SWLED LINEAR LUMINAIRE  
4FT FIXTURE WITH 2 ROW LED, WIDE LENS  
Light Source: (224) 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

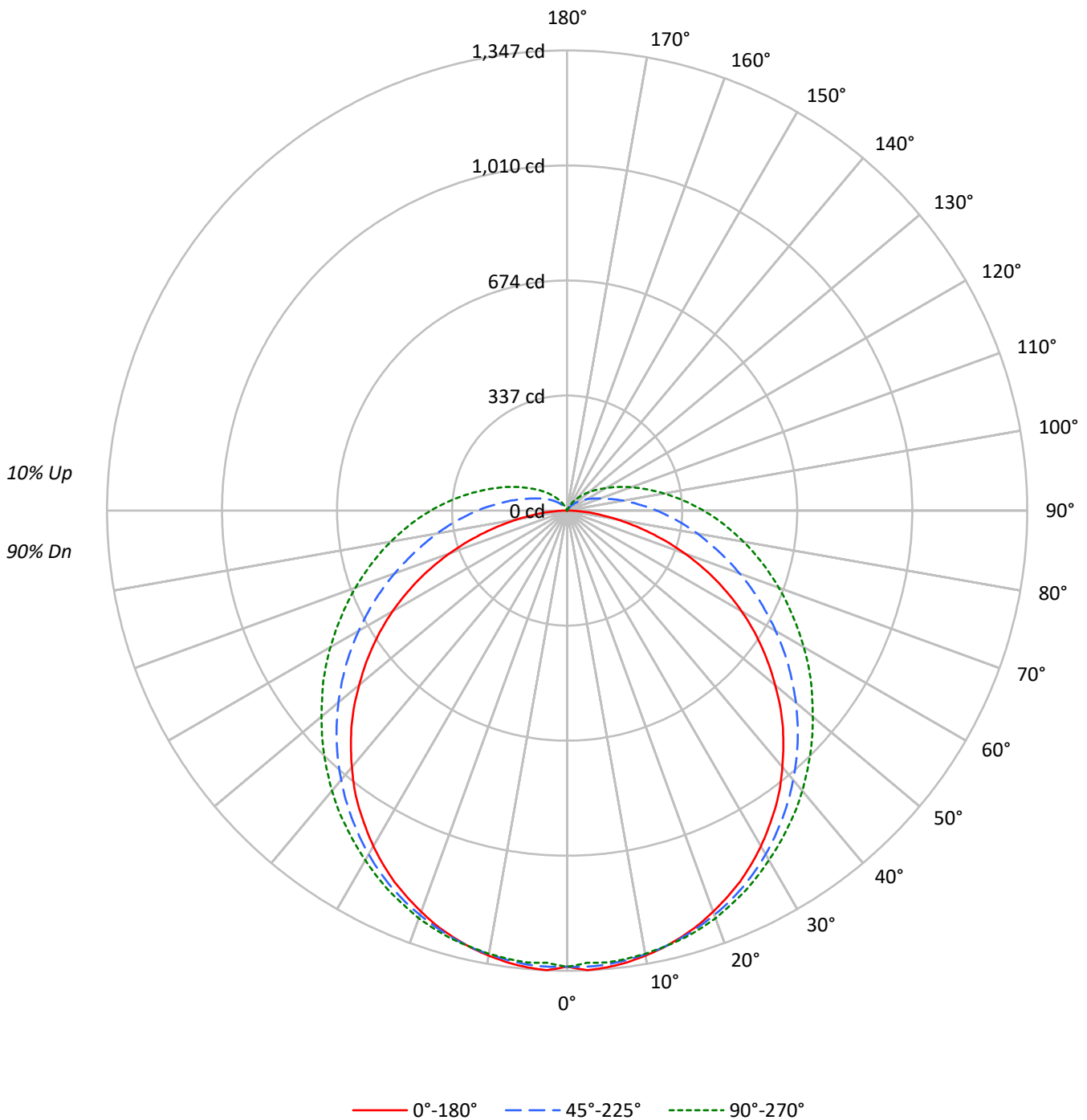
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5074.0 lumens  
Efficiency: N/A  
Efficacy: 106.4 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.32 / 1.42  
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')  
CIE Type: Direct  
  
Input Watts (W): 47.7  
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: 25 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	117	117	117	117	113	113	113	113	106	106	106	99	99	99	93	93	93	90
1	104	98	93	88	100	95	90	86	89	85	82	83	80	77	78	75	73	70
2	94	84	77	70	90	82	75	69	76	71	66	72	67	63	67	63	60	57
3	85	73	65	57	82	71	63	56	67	60	54	62	57	52	59	54	50	47
4	78	65	55	48	74	63	54	47	59	51	45	55	49	44	52	47	42	40
5	71	58	48	41	68	56	47	40	52	45	39	49	43	38	47	41	36	34
6	65	52	42	36	63	50	41	35	47	40	34	45	38	33	42	36	32	29
7	61	47	38	31	58	45	37	31	43	35	30	41	34	29	38	32	28	26
8	56	42	34	28	54	41	33	27	39	32	27	37	31	26	35	29	25	23
9	53	39	30	25	51	38	30	24	36	29	24	34	28	23	32	27	22	21
10	49	36	28	22	47	35	27	22	33	26	21	32	25	21	30	24	20	19

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

	0°	45°	90°
0°	9582	9582	9582
5°	9638	9364	9250
10°	9577	9127	8981
15°	9509	8903	8738
20°	9418	8671	8495
25°	9328	8447	8245
30°	9207	8205	7996
35°	9078	7954	7772
40°	8910	7700	7564
45°	8741	7446	7356
50°	8500	7182	7161
55°	8273	6921	7008
60°	7971	6653	6862
65°	7555	6401	6744
70°	6965	6169	6686
75°	6145	5987	6679
80°	5068	5905	6753
85°	3731	5957	6959



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	126.6	2.5
10°-20°	364.9	7.2
20°-30°	558.5	11.0
30°-40°	684.6	13.5
40°-50°	732.7	14.4
50°-60°	702.8	13.9
60°-70°	606.2	11.9
70°-80°	467.0	9.2
80°-90°	323.8	6.4
90°-100°	210.8	4.2
100°-110°	134.0	2.6
110°-120°	81.8	1.6
120°-130°	46.8	0.9
130°-140°	23.1	0.5
140°-150°	8.7	0.2
150°-160°	1.7	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1050.0	20.7
0°-40°	1734.7	34.2
0°-60°	3170.3	62.5
0°-90°	4567.2	90.0
90°-120°	426.6	8.4
90°-150°	505.1	10.0
90°-180°	507.0	10.0
0°-180°	5074.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1335	1335	1335	1335	1335	
5°	1342	1330	1334	1328	1328	127
15°	1292	1284	1295	1296	1299	365
25°	1198	1193	1216	1222	1230	552
35°	1063	1064	1099	1116	1129	664
45°	893	906	954	987	1007	688
55°	696	725	791	844	871	621
65°	480	526	620	695	728	474
75°	252	330	458	553	590	267
85°	64	175	321	422	460	70
90°	1	119	262	363	399	5
95°	0	80	210	306	341	0
105°	0	40	130	211	240	0
115°	0	22	83	139	163	0
125°	1	11	52	91	106	0
135°	1	2	28	54	64	0
145°	1	1	11	26	32	0
155°	1	1	1	6	9	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°	1335.3	1335.3	1335.3	1335.3	1335.3
2.5°	1346.7	1333.5	1336.6	1331.6	1325.3
5°	1342.3	1329.7	1334.1	1327.8	1327.8
7.5°	1334.1	1322.8	1327.2	1323.4	1324.0
10°	1322.8	1311.4	1319.0	1315.8	1317.1
12.5°	1309.5	1298.2	1308.9	1306.4	1308.3
15°	1292.5	1283.7	1295.0	1296.3	1298.8
17.5°	1273.0	1265.5	1278.1	1281.8	1285.6
20°	1249.7	1244.1	1259.8	1263.6	1269.9
22.5°	1224.5	1219.5	1239.6	1242.8	1249.7
25°	1198.1	1193.1	1216.4	1222.0	1230.2
27.5°	1167.2	1165.4	1190.5	1198.7	1206.9
30°	1134.5	1133.2	1162.2	1171.7	1181.7
32.5°	1098.6	1099.9	1131.4	1144.0	1155.9
35°	1062.7	1064.0	1099.2	1115.6	1128.8
37.5°	1023.7	1027.5	1065.3	1084.8	1101.8
40°	980.3	989.1	1029.4	1053.3	1070.9
42.5°	936.8	948.8	992.9	1020.6	1038.8
45°	892.7	906.0	954.4	987.2	1006.7
47.5°	845.5	862.5	914.8	951.9	973.3
50°	794.5	817.8	873.9	917.3	938.7
52.5°	745.4	771.9	832.3	881.4	904.1
55°	695.7	725.3	790.8	844.3	871.3
57.5°	643.4	675.5	747.9	806.5	836.1
60°	590.5	627.1	705.1	770.0	800.2
62.5°	535.8	577.3	662.3	732.2	764.3
65°	479.7	526.3	620.1	695.1	728.4
67.5°	423.1	476.0	578.6	659.8	693.8
70°	365.2	426.2	537.0	623.9	659.2
72.5°	308.5	377.7	496.7	587.4	624.5
75°	251.8	330.5	458.3	553.4	590.5
77.5°	197.7	285.8	420.6	520.0	557.2
80°	148.0	244.9	386.6	486.7	523.8
82.5°	102.0	208.4	353.2	454.6	491.1
85°	64.2	175.0	321.1	422.4	460.2
87.5°	30.8	145.4	290.2	392.2	429.4
90°	1.3	119.0	262.5	362.6	399.2
92.5°	0.0	97.6	235.5	333.7	369.6
95°	0.0	80.0	209.7	306.0	340.6
97.5°	0.0	66.1	187.0	280.2	313.5
100°	0.0	54.1	166.8	255.6	287.7
102.5°	0.0	46.0	148.0	232.3	263.2
105°	0.0	39.7	130.3	210.9	240.5
107.5°	0.0	34.0	116.5	191.4	219.1
110°	0.0	29.0	103.9	172.5	199.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.6	25.2	92.5	156.1	180.7
115°	0.0	22.0	83.1	139.1	163.1
117.5°	0.0	18.3	74.3	125.3	146.7
120°	0.0	15.7	66.1	112.7	131.6
122.5°	0.6	13.2	58.6	101.4	118.4
125°	0.6	10.7	51.6	90.7	106.4
127.5°	0.6	8.2	45.3	80.6	95.1
130°	0.6	6.3	39.0	71.1	83.7
132.5°	0.6	4.4	33.4	62.3	74.3
135°	0.6	2.5	27.7	54.1	64.2
137.5°	0.6	1.3	22.7	46.0	55.4
140°	0.6	0.6	18.3	39.0	47.2
142.5°	0.6	0.0	13.9	32.7	39.0
145°	0.6	0.6	10.7	25.8	32.1
147.5°	0.6	0.6	7.6	20.1	25.8
150°	0.6	0.6	4.4	14.5	19.5
152.5°	0.6	0.6	1.9	10.1	14.5
155°	0.6	0.6	0.6	6.3	9.4
157.5°	0.6	0.6	0.0	2.5	5.0
160°	1.3	0.6	0.0	0.0	1.3
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)