

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: P236344

Luminaire Tested: **4SWLED-52HL-LW-UNV-L840-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236344
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-L840-CD1-U
Description: METALUX SWLED LINEAR LUMINAIRE
4FT FIXTURE WITH 2 ROW LED, WIDE LENS
Light Source: (224) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

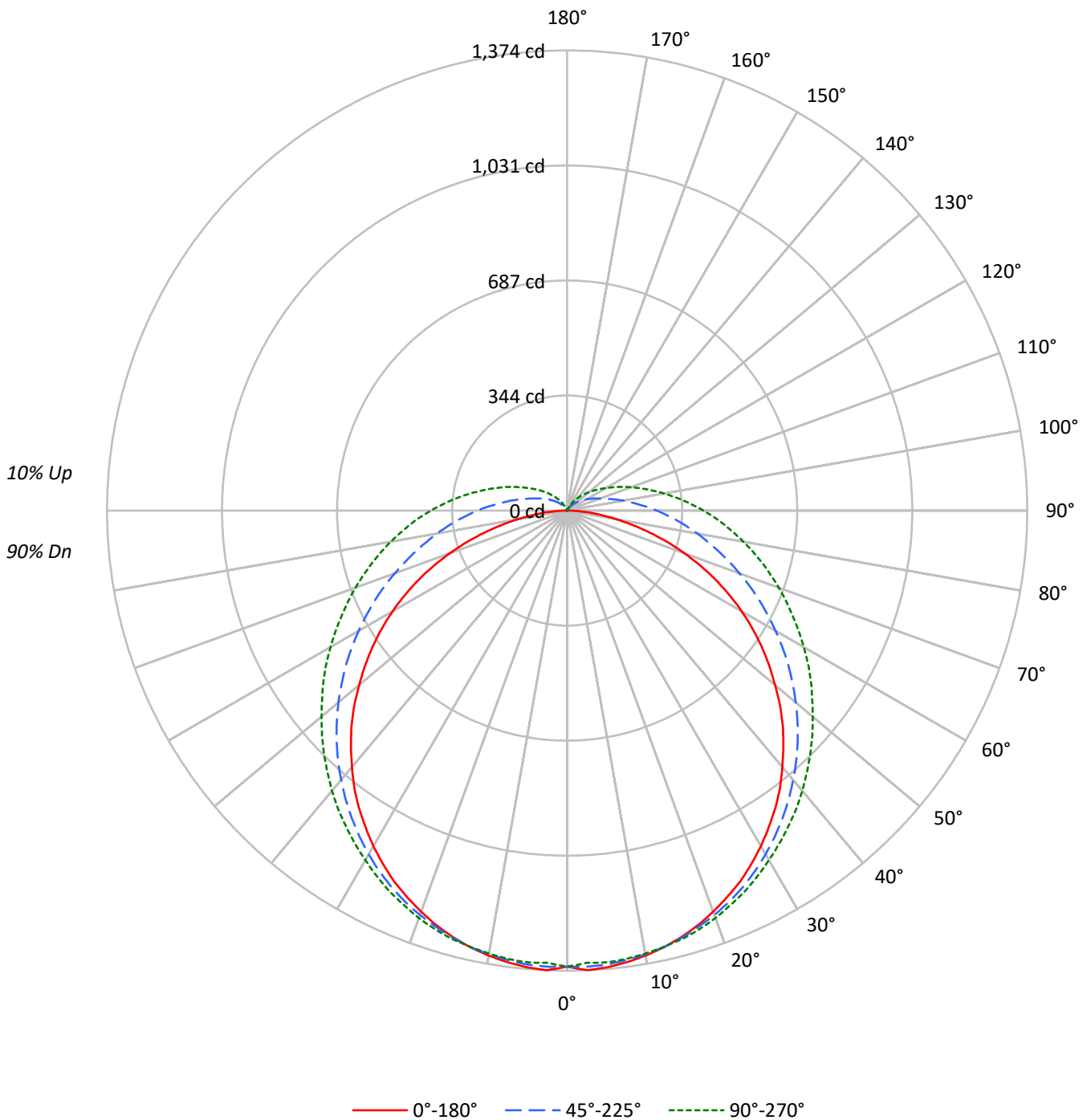
Lumens per Lamp: N/A
Luminaire Lumens: 5175.0 lumens
Efficiency: N/A
Efficacy: 108.5 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.32 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')
CIE Type: Direct

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°	9773	9773	9773
5°	9830	9550	9434
10°	9768	9308	9160
15°	9699	9081	8913
20°	9606	8844	8664
25°	9513	8615	8409
30°	9390	8368	8155
35°	9259	8113	7927
40°	9088	7853	7714
45°	8915	7594	7502
50°	8669	7325	7303
55°	8437	7058	7148
60°	8131	6787	6999
65°	7706	6529	6878
70°	7102	6292	6819
75°	6267	6107	6812
80°	5167	6022	6887
85°	3807	6076	7098



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.1	2.5
10°-20°	372.2	7.2
20°-30°	569.6	11.0
30°-40°	698.3	13.5
40°-50°	747.3	14.4
50°-60°	716.8	13.9
60°-70°	618.2	11.9
70°-80°	476.3	9.2
80°-90°	330.2	6.4
90°-100°	215.0	4.2
100°-110°	136.6	2.6
110°-120°	83.4	1.6
120°-130°	47.7	0.9
130°-140°	23.5	0.5
140°-150°	8.8	0.2
150°-160°	1.7	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1070.9	20.7
0°-40°	1769.2	34.2
0°-60°	3233.4	62.5
0°-90°	4658.1	90.0
90°-120°	435.0	8.4
90°-150°	515.1	10.0
90°-180°	517.0	10.0
0°-180°	5175.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1362	1362	1362	1362	1362	
5°	1369	1356	1361	1354	1354	130
15°	1318	1309	1321	1322	1325	372
25°	1222	1217	1241	1246	1255	563
35°	1084	1085	1121	1138	1151	678
45°	910	924	973	1007	1027	701
55°	710	740	806	861	889	633
65°	489	537	632	709	743	484
75°	257	337	468	564	602	273
85°	66	178	328	431	469	71
90°	1	121	268	370	407	5
95°	0	82	214	312	347	0
105°	0	40	133	215	245	0
115°	0	22	85	142	166	0
125°	1	11	53	92	108	0
135°	1	3	28	55	66	0
145°	1	1	11	26	33	0
155°	1	1	1	6	10	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°	1361.9	1361.9	1361.9	1361.9	1361.9
2.5°	1373.5	1360.0	1363.2	1358.1	1351.6
5°	1369.0	1356.1	1360.6	1354.2	1354.2
7.5°	1360.6	1349.1	1353.6	1349.7	1350.4
10°	1349.1	1337.5	1345.2	1342.0	1343.3
12.5°	1335.6	1324.0	1335.0	1332.4	1334.3
15°	1318.3	1309.3	1320.8	1322.1	1324.7
17.5°	1298.4	1290.6	1303.5	1307.3	1311.2
20°	1274.6	1268.8	1284.9	1288.7	1295.1
22.5°	1248.9	1243.8	1264.3	1267.5	1274.6
25°	1221.9	1216.8	1240.6	1246.3	1254.7
27.5°	1190.5	1188.6	1214.2	1222.6	1230.9
30°	1157.1	1155.8	1185.3	1195.0	1205.2
32.5°	1120.5	1121.8	1153.9	1166.7	1178.9
35°	1083.9	1085.2	1121.1	1137.8	1151.3
37.5°	1044.1	1047.9	1086.5	1106.4	1123.7
40°	999.8	1008.8	1049.9	1074.3	1092.2
42.5°	955.5	967.7	1012.6	1040.9	1059.5
45°	910.5	924.0	973.4	1006.8	1026.7
47.5°	862.4	879.7	933.0	970.9	992.7
50°	810.3	834.1	891.3	935.6	957.4
52.5°	760.3	787.2	848.9	899.0	922.1
55°	709.5	739.7	806.5	861.1	888.7
57.5°	656.2	689.0	762.8	822.5	852.7
60°	602.3	639.5	719.2	785.3	816.1
62.5°	546.4	588.8	675.5	746.8	779.5
65°	489.3	536.8	632.5	708.9	742.9
67.5°	431.5	485.4	590.1	672.9	707.6
70°	372.4	434.7	547.7	636.3	672.3
72.5°	314.6	385.3	506.6	599.1	637.0
75°	256.8	337.1	467.5	564.4	602.3
77.5°	201.6	291.5	428.9	530.4	568.3
80°	150.9	249.8	394.3	496.4	534.2
82.5°	104.0	212.5	360.2	463.6	500.8
85°	65.5	178.5	327.5	430.9	469.4
87.5°	31.5	148.3	296.0	400.0	437.9
90°	1.3	121.4	267.8	369.9	407.1
92.5°	0.0	99.5	240.2	340.3	376.9
95°	0.0	81.5	213.8	312.1	347.4
97.5°	0.0	67.4	190.7	285.7	319.8
100°	0.0	55.2	170.2	260.7	293.4
102.5°	0.0	46.9	150.9	236.9	268.4
105°	0.0	40.5	132.9	215.1	245.3
107.5°	0.0	34.7	118.8	195.2	223.5
110°	0.0	29.5	105.9	175.9	203.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.6	25.7	94.4	159.2	184.3
115°	0.0	22.5	84.8	141.9	166.3
117.5°	0.0	18.6	75.8	127.8	149.6
120°	0.0	16.1	67.4	114.9	134.2
122.5°	0.6	13.5	59.7	103.4	120.7
125°	0.6	10.9	52.7	92.5	108.5
127.5°	0.6	8.3	46.2	82.2	97.0
130°	0.6	6.4	39.8	72.6	85.4
132.5°	0.6	4.5	34.0	63.6	75.8
135°	0.6	2.6	28.3	55.2	65.5
137.5°	0.6	1.3	23.1	46.9	56.5
140°	0.6	0.6	18.6	39.8	48.2
142.5°	0.6	0.0	14.1	33.4	39.8
145°	0.6	0.6	10.9	26.3	32.7
147.5°	0.6	0.6	7.7	20.5	26.3
150°	0.6	0.6	4.5	14.8	19.9
152.5°	0.6	0.6	1.9	10.3	14.8
155°	0.6	0.6	0.6	6.4	9.6
157.5°	0.6	0.6	0.0	2.6	5.1
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)