

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: P236346

Luminaire Tested: **4SWLED-56HL-LW-UNV-L835-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236346
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-56HL-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

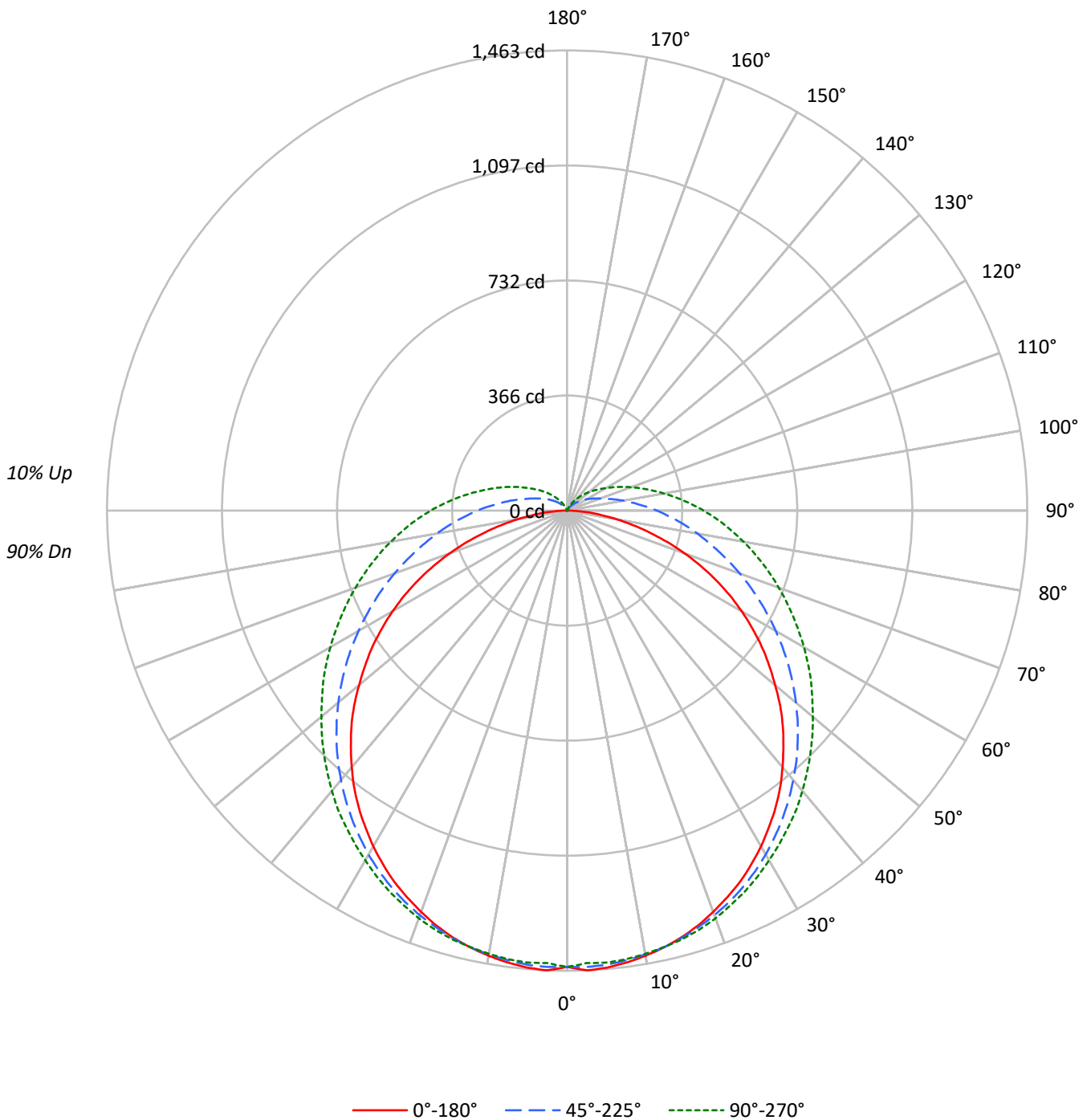
Lumens per Lamp: N/A
Luminaire Lumens: 5513.0 lumens
Efficiency: N/A
Efficacy: 104.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.32 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')
CIE Type: Direct

Input Watts (W): 52.9
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				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	117	117	117	117	113	113	113	113	106	106	106	99	99	99	93	93	93	93	93	93	90
1	104	98	93	88	100	95	90	86	89	85	82	83	80	77	78	75	73	78	75	73	70
2	94	84	77	70	90	82	75	69	76	71	66	72	67	63	67	63	60	67	63	60	57
3	85	73	65	57	82	71	63	56	67	60	54	62	57	52	59	54	50	59	54	50	47
4	78	65	55	48	74	63	54	47	59	51	45	55	49	44	52	47	42	52	47	42	40
5	71	58	48	41	68	56	47	40	52	45	39	49	43	38	47	41	36	47	41	36	34
6	65	52	42	36	63	50	41	35	47	40	34	45	38	33	42	36	32	42	36	32	29
7	61	47	38	31	58	45	37	31	43	35	30	41	34	29	38	32	28	38	32	28	26
8	56	42	34	28	54	41	33	27	39	32	27	37	31	26	35	29	25	35	29	25	23
9	53	39	30	25	51	38	30	24	36	29	24	34	28	23	32	27	22	32	27	22	21
10	49	36	28	22	47	35	27	22	33	26	21	32	25	21	30	24	20	30	24	20	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10412	10412	10412
5°	10472	10174	10050
10°	10405	9917	9758
15°	10332	9674	9495
20°	10233	9421	9230
25°	10135	9177	8958
30°	10004	8915	8689
35°	9864	8643	8445
40°	9681	8365	8218
45°	9498	8090	7992
50°	9236	7803	7780
55°	8989	7519	7615
60°	8661	7229	7456
65°	8208	6955	7327
70°	7567	6703	7265
75°	6677	6505	7257
80°	5506	6415	7337
85°	4057	6473	7561



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.6	2.5
10°-20°	396.5	7.2
20°-30°	606.8	11.0
30°-40°	743.9	13.5
40°-50°	796.1	14.4
50°-60°	763.7	13.9
60°-70°	658.6	11.9
70°-80°	507.4	9.2
80°-90°	351.8	6.4
90°-100°	229.0	4.2
100°-110°	145.6	2.6
110°-120°	88.8	1.6
120°-130°	50.8	0.9
130°-140°	25.1	0.5
140°-150°	9.4	0.2
150°-160°	1.8	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1140.9	20.7
0°-40°	1884.7	34.2
0°-60°	3444.5	62.5
0°-90°	4962.4	90.0
90°-120°	463.4	8.4
90°-150°	548.8	10.0
90°-180°	551.0	10.0
0°-180°	5513.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1451	1451	1451	1451	1451	
5°	1458	1445	1450	1443	1443	138
15°	1404	1395	1407	1408	1411	396
25°	1302	1296	1322	1328	1337	600
35°	1155	1156	1194	1212	1226	722
45°	970	984	1037	1073	1094	747
55°	756	788	859	917	947	675
65°	521	572	674	755	791	515
75°	274	359	498	601	642	291
85°	70	190	349	459	500	76
90°	1	129	285	394	434	5
95°	0	87	228	332	370	0
105°	0	43	142	229	261	0
115°	0	24	90	151	177	0
125°	1	12	56	98	116	1
135°	1	3	30	59	70	1
145°	1	1	12	28	35	0
155°	1	1	1	7	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°	1450.9	1450.9	1450.9	1450.9	1450.9
2.5°	1463.2	1448.8	1452.2	1446.8	1439.9
5°	1458.4	1444.7	1449.5	1442.7	1442.7
7.5°	1449.5	1437.2	1442.0	1437.9	1438.6
10°	1437.2	1424.9	1433.1	1429.7	1431.0
12.5°	1422.8	1410.5	1422.1	1419.4	1421.5
15°	1404.4	1394.8	1407.1	1408.5	1411.2
17.5°	1383.2	1374.9	1388.6	1392.7	1396.8
20°	1357.8	1351.7	1368.8	1372.9	1379.7
22.5°	1330.5	1325.0	1346.9	1350.3	1357.8
25°	1301.8	1296.3	1321.6	1327.7	1336.6
27.5°	1268.2	1266.2	1293.5	1302.4	1311.3
30°	1232.7	1231.3	1262.8	1273.0	1284.0
32.5°	1193.7	1195.0	1229.2	1242.9	1255.9
35°	1154.7	1156.0	1194.4	1212.1	1226.5
37.5°	1112.3	1116.4	1157.4	1178.6	1197.1
40°	1065.1	1074.6	1118.4	1144.4	1163.6
42.5°	1017.9	1030.9	1078.8	1108.8	1128.7
45°	970.0	984.4	1037.0	1072.6	1093.8
47.5°	918.7	937.2	993.9	1034.3	1057.5
50°	863.3	888.6	949.5	996.7	1019.9
52.5°	809.9	838.6	904.3	957.7	982.3
55°	755.9	788.0	859.2	917.3	946.7
57.5°	699.1	734.0	812.7	876.3	908.4
60°	641.6	681.3	766.1	836.6	869.4
62.5°	582.1	627.3	719.6	795.6	830.4
65°	521.2	571.9	673.8	755.2	791.4
67.5°	459.7	517.1	628.6	716.9	753.8
70°	396.8	463.1	583.5	677.9	716.2
72.5°	335.2	410.4	539.7	638.2	678.6
75°	273.6	359.1	498.0	601.3	641.6
77.5°	214.8	310.6	456.9	565.0	605.4
80°	160.8	266.1	420.0	528.8	569.1
82.5°	110.8	226.4	383.8	493.9	533.6
85°	69.8	190.2	348.9	459.0	500.0
87.5°	33.5	158.0	315.3	426.2	466.5
90°	1.4	129.3	285.3	394.0	433.7
92.5°	0.0	106.0	255.8	362.5	401.5
95°	0.0	86.9	227.8	332.4	370.1
97.5°	0.0	71.8	203.2	304.4	340.7
100°	0.0	58.8	181.3	277.7	312.6
102.5°	0.0	49.9	160.8	252.4	285.9
105°	0.0	43.1	141.6	229.2	261.3
107.5°	0.0	36.9	126.5	208.0	238.1
110°	0.0	31.5	112.9	187.4	216.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.7	27.4	100.6	169.6	196.3
115°	0.0	23.9	90.3	151.2	177.2
117.5°	0.0	19.8	80.7	136.1	159.4
120°	0.0	17.1	71.8	122.4	143.0
122.5°	0.7	14.4	63.6	110.1	128.6
125°	0.7	11.6	56.1	98.5	115.6
127.5°	0.7	8.9	49.3	87.6	103.3
130°	0.7	6.8	42.4	77.3	91.0
132.5°	0.7	4.8	36.3	67.7	80.7
135°	0.7	2.7	30.1	58.8	69.8
137.5°	0.7	1.4	24.6	49.9	60.2
140°	0.7	0.7	19.8	42.4	51.3
142.5°	0.7	0.0	15.0	35.6	42.4
145°	0.7	0.7	11.6	28.0	34.9
147.5°	0.7	0.7	8.2	21.9	28.0
150°	0.7	0.7	4.8	15.7	21.2
152.5°	0.7	0.7	2.1	10.9	15.7
155°	0.7	0.7	0.7	6.8	10.3
157.5°	0.7	0.7	0.0	2.7	5.5
160°	1.4	0.7	0.0	0.0	1.4
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)