

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: P236340

Luminaire Tested: **4SWLED-48HL-LW-UNV-L835-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236340
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-48HL-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

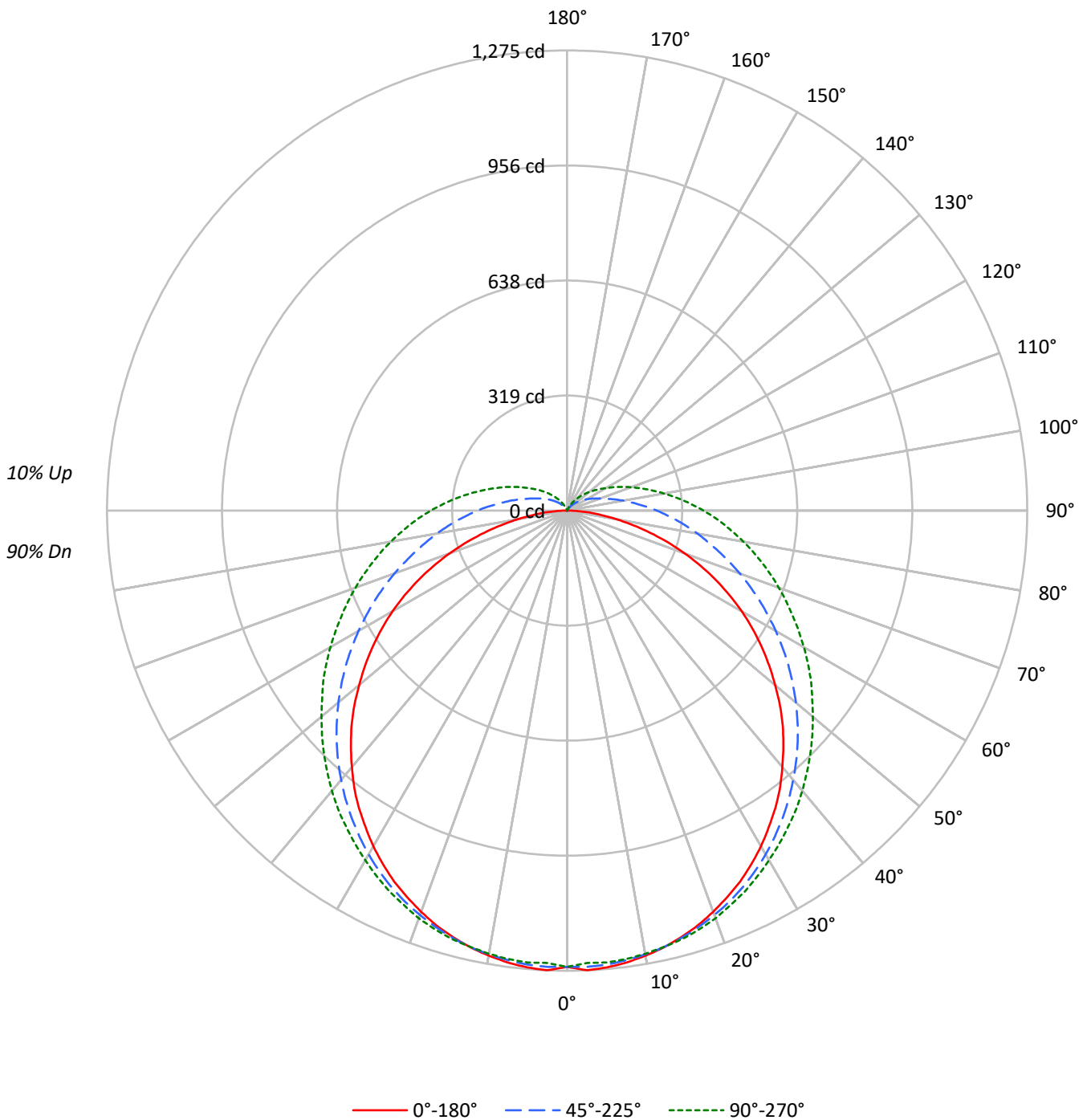
Lumens per Lamp: N/A
Luminaire Lumens: 4803.0 lumens
Efficiency: N/A
Efficacy: 107.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.32 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')
CIE Type: Direct

Input Watts (W): 44.6
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°	9070	9070	9070
5°	9123	8863	8756
10°	9065	8639	8501
15°	9002	8428	8272
20°	8916	8208	8041
25°	8829	7995	7805
30°	8715	7767	7569
35°	8593	7529	7357
40°	8434	7288	7160
45°	8275	7049	6963
50°	8047	6798	6779
55°	7831	6551	6634
60°	7546	6299	6496
65°	7151	6059	6384
70°	6593	5840	6329
75°	5818	5668	6323
80°	4794	5588	6392
85°	3533	5638	6587



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.9	2.5
10°-20°	345.4	7.2
20°-30°	528.7	11.0
30°-40°	648.1	13.5
40°-50°	693.6	14.4
50°-60°	665.3	13.9
60°-70°	573.8	11.9
70°-80°	442.1	9.2
80°-90°	306.5	6.4
90°-100°	199.6	4.2
100°-110°	126.8	2.6
110°-120°	77.4	1.6
120°-130°	44.3	0.9
130°-140°	21.8	0.5
140°-150°	8.2	0.2
150°-160°	1.6	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	993.9	20.7
0°-40°	1642.0	34.2
0°-60°	3000.9	62.5
0°-90°	4323.3	90.0
90°-120°	403.8	8.4
90°-150°	478.1	10.0
90°-180°	480.0	10.0
0°-180°	4803.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1264	1264	1264	1264	1264	
5°	1271	1259	1263	1257	1257	121
15°	1224	1215	1226	1227	1230	345
25°	1134	1129	1151	1157	1164	522
35°	1006	1007	1040	1056	1068	629
45°	845	858	904	934	953	651
55°	658	686	748	799	825	588
65°	454	498	587	658	690	449
75°	238	313	434	524	559	253
85°	61	166	304	400	436	66
90°	1	113	248	343	378	4
95°	0	76	198	290	322	0
105°	0	38	123	200	228	0
115°	0	21	79	132	154	0
125°	1	10	49	86	101	0
135°	1	2	26	51	61	0
145°	1	1	10	24	30	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°	1264.0	1264.0	1264.0	1264.0	1264.0
2.5°	1274.8	1262.2	1265.2	1260.4	1254.5
5°	1270.6	1258.7	1262.8	1256.9	1256.9
7.5°	1262.8	1252.1	1256.3	1252.7	1253.3
10°	1252.1	1241.4	1248.5	1245.5	1246.7
12.5°	1239.6	1228.9	1239.0	1236.6	1238.4
15°	1223.5	1215.2	1225.9	1227.1	1229.5
17.5°	1205.0	1197.9	1209.8	1213.4	1216.9
20°	1183.0	1177.6	1192.5	1196.1	1202.0
22.5°	1159.1	1154.4	1173.4	1176.4	1183.0
25°	1134.1	1129.3	1151.4	1156.8	1164.5
27.5°	1104.9	1103.1	1127.0	1134.7	1142.4
30°	1073.9	1072.7	1100.1	1109.1	1118.6
32.5°	1039.9	1041.1	1070.9	1082.9	1094.2
35°	1006.0	1007.2	1040.5	1056.0	1068.5
37.5°	969.0	972.6	1008.4	1026.8	1042.9
40°	927.9	936.2	974.4	997.0	1013.7
42.5°	886.8	898.1	939.8	966.0	983.3
45°	845.1	857.6	903.5	934.5	952.9
47.5°	800.4	816.5	865.9	901.1	921.3
50°	752.1	774.1	827.2	868.3	888.6
52.5°	705.6	730.6	787.9	834.3	855.8
55°	658.5	686.5	748.5	799.2	824.8
57.5°	609.1	639.5	708.0	763.4	791.4
60°	559.0	593.6	667.5	728.9	757.5
62.5°	507.2	546.5	626.9	693.1	723.5
65°	454.1	498.2	587.0	657.9	689.5
67.5°	400.5	450.5	547.7	624.6	656.7
70°	345.7	403.5	508.4	590.6	624.0
72.5°	292.0	357.6	470.2	556.0	591.2
75°	238.4	312.9	433.9	523.8	559.0
77.5°	187.1	270.6	398.1	492.3	527.4
80°	140.0	231.8	365.9	460.7	495.8
82.5°	96.5	197.3	334.3	430.3	464.8
85°	60.8	165.7	303.9	399.9	435.6
87.5°	29.2	137.7	274.7	371.3	406.4
90°	1.2	112.6	248.5	343.3	377.8
92.5°	0.0	92.4	222.9	315.9	349.8
95°	0.0	75.7	198.5	289.6	322.4
97.5°	0.0	62.6	177.0	265.2	296.8
100°	0.0	51.3	157.9	242.0	272.4
102.5°	0.0	43.5	140.0	219.9	249.1
105°	0.0	37.5	123.4	199.6	227.7
107.5°	0.0	32.2	110.3	181.2	207.4
110°	0.0	27.4	98.3	163.3	188.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.6	23.8	87.6	147.8	171.0
115°	0.0	20.9	78.7	131.7	154.4
117.5°	0.0	17.3	70.3	118.6	138.9
120°	0.0	14.9	62.6	106.7	124.6
122.5°	0.6	12.5	55.4	95.9	112.0
125°	0.6	10.1	48.9	85.8	100.7
127.5°	0.6	7.7	42.9	76.3	90.0
130°	0.6	6.0	36.9	67.3	79.3
132.5°	0.6	4.2	31.6	59.0	70.3
135°	0.6	2.4	26.2	51.3	60.8
137.5°	0.6	1.2	21.5	43.5	52.4
140°	0.6	0.6	17.3	36.9	44.7
142.5°	0.6	0.0	13.1	31.0	36.9
145°	0.6	0.6	10.1	24.4	30.4
147.5°	0.6	0.6	7.2	19.1	24.4
150°	0.6	0.6	4.2	13.7	18.5
152.5°	0.6	0.6	1.8	9.5	13.7
155°	0.6	0.6	0.6	6.0	8.9
157.5°	0.6	0.6	0.0	2.4	4.8
160°	1.2	0.6	0.0	0.0	1.2
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)