

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: P236225

Luminaire Tested: **4SWLED-16SL-LC-UNV-L850-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236225
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1709-316-16)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SWLED-16SL-LC-UNV-L850-CD1-U
Description: METALUX SWLED LINEAR LUMINAIRE
4FT FIXTURE WITH 1 ROW LED, CLEAR LENS
Light Source: (112) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

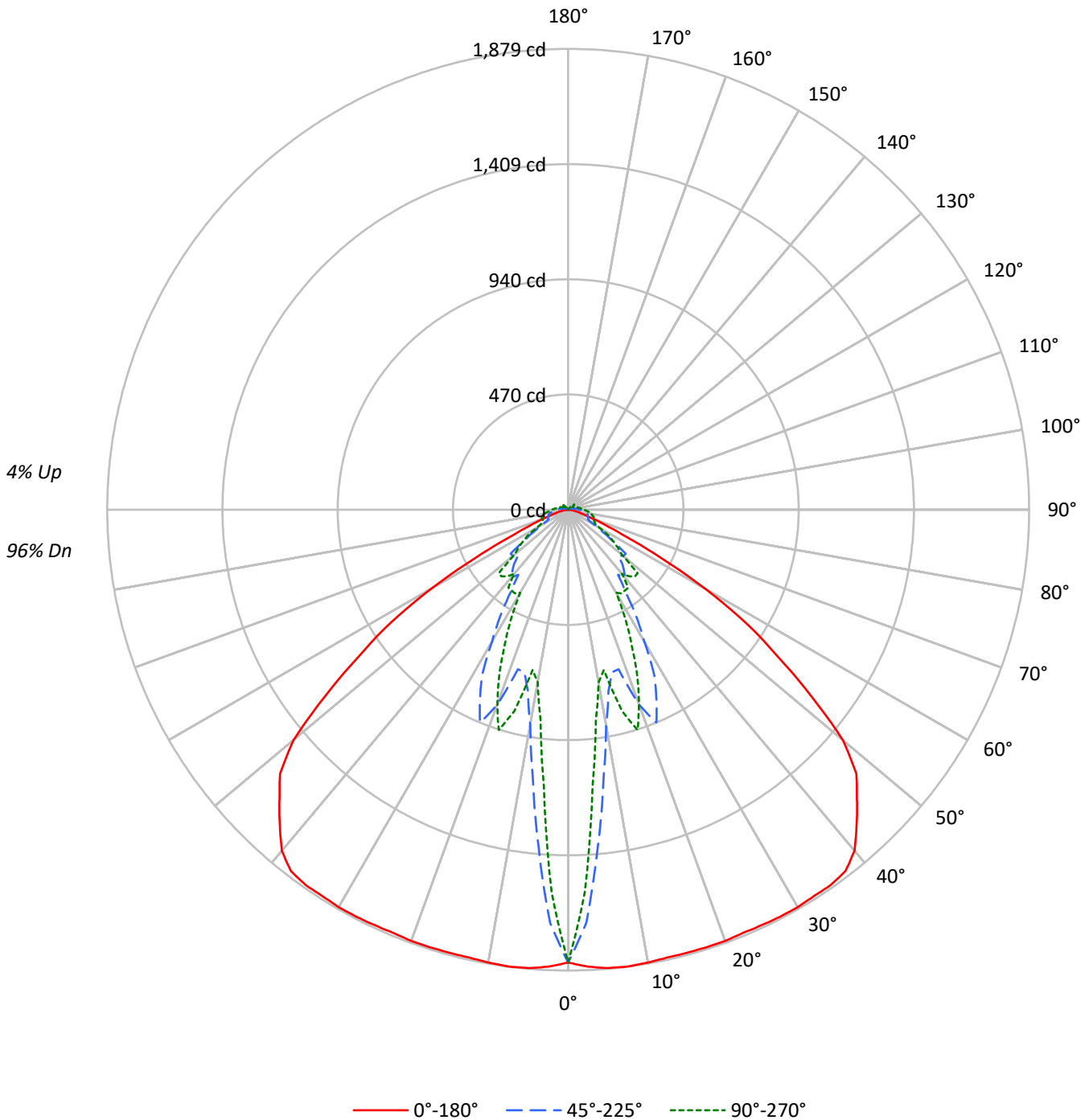
Lumens per Lamp: N/A
Luminaire Lumens: 2256.0 lumens
Efficiency: N/A
Efficacy: 157.8 lumens/watt
Spacing Criteria (0/90/45): 1.54 / 0.24 / 0.77
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')
CIE Type: Direct

Input Watts (W): 14.3
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	50	30	10	0	
RCR																						
0	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	99	99	99	96	
1	109	105	101	97	106	102	99	95	97	94	92	93	90	88	89	87	85	89	87	85	83	
2	100	93	87	82	98	91	85	81	87	82	78	83	79	76	80	77	74	80	77	74	72	
3	93	83	76	70	90	82	75	69	78	72	68	75	70	66	72	68	65	72	68	65	62	
4	86	75	67	61	83	73	66	61	71	64	59	68	63	58	65	61	57	65	61	57	55	
5	80	68	60	54	77	67	59	53	64	58	52	62	56	52	60	55	51	60	55	51	49	
6	74	62	54	48	72	61	53	47	59	52	47	57	51	46	55	50	45	55	50	45	44	
7	69	57	49	43	67	56	48	43	54	47	42	52	46	42	51	45	41	51	45	41	39	
8	65	52	44	39	63	51	44	39	50	43	38	48	42	38	47	41	37	47	41	37	36	
9	61	48	41	35	59	47	40	35	46	39	35	45	39	34	44	38	34	44	38	34	32	
10	57	45	37	32	56	44	37	32	43	36	32	42	36	32	41	35	31	41	35	31	30	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13248	13248	13248
5°	13471	9710	7898
10°	13572	6169	4867
15°	13757	4721	5719
20°	14098	5833	5645
25°	14548	5902	4127
30°	15184	4379	2648
35°	15952	2937	2772
40°	16502	2694	2409
45°	16296	2424	2811
50°	15641	2407	2177
55°	12371	1902	1798
60°	8721	1157	1265
65°	4069	918	1112
70°	2044	993	1125
75°	1247	1075	1193
80°	812	1116	1263
85°	413	1156	1225



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.2	5.6
10°-20°	276.5	12.3
20°-30°	394.7	17.5
30°-40°	421.5	18.7
40°-50°	392.0	17.4
50°-60°	288.3	12.8
60°-70°	128.2	5.7
70°-80°	84.4	3.7
80°-90°	58.5	2.6
90°-100°	34.5	1.5
100°-110°	20.0	0.9
110°-120°	12.2	0.5
120°-130°	8.7	0.4
130°-140°	7.4	0.3
140°-150°	2.1	0.1
150°-160°	0.6	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	797.3	35.3
0°-40°	1218.9	54.0
0°-60°	1899.2	84.2
0°-90°	2170.4	96.2
90°-120°	66.6	3.0
90°-150°	84.9	3.8
90°-180°	86.0	3.8
0°-180°	2256.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1846	1846	1846	1846	1846	
5°	1876	1673	1383	1204	1134	179
15°	1870	1014	687	759	850	530
25°	1869	654	850	669	616	865
35°	1867	787	406	412	403	1167
45°	1664	338	311	345	385	1281
55°	1040	202	217	220	224	936
65°	258	78	89	113	120	301
75°	51	50	82	109	106	59
85°	7	30	62	78	81	9
90°	0	22	48	62	65	0
95°	0	16	35	46	54	0
105°	0	9	20	27	37	0
115°	0	5	12	19	24	0
125°	0	2	8	15	25	0
135°	0	1	7	20	25	0
145°	1	1	3	5	5	0
155°	1	1	1	2	2	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°	1846.2	1846.2	1846.2	1846.2	1846.2
2.5°	1864.9	1783.9	1685.0	1597.8	1560.4
5°	1876.1	1673.4	1383.4	1203.5	1133.7
7.5°	1878.6	1518.4	1103.0	904.8	863.7
10°	1874.5	1336.5	891.5	735.7	713.7
12.5°	1870.3	1167.4	756.9	679.7	669.3
15°	1869.9	1013.7	686.7	758.6	850.0
17.5°	1870.7	864.9	681.7	943.9	941.8
20°	1870.7	755.7	847.5	901.1	843.8
22.5°	1867.0	678.4	939.7	799.3	736.2
25°	1868.6	653.5	850.0	668.9	615.7
27.5°	1870.7	687.1	760.3	559.6	507.3
30°	1871.1	782.3	620.3	452.8	391.3
32.5°	1866.6	831.3	516.0	360.6	404.2
35°	1867.4	787.3	405.9	412.1	402.6
37.5°	1857.0	686.7	334.0	382.6	401.3
40°	1815.5	553.4	360.2	358.9	341.1
42.5°	1740.7	429.6	336.9	327.0	368.5
45°	1664.3	338.2	310.7	345.2	384.7
47.5°	1592.8	272.5	276.3	378.9	383.9
50°	1461.9	255.9	292.9	320.7	285.4
52.5°	1250.5	233.1	295.4	250.9	255.5
55°	1040.3	201.5	217.3	219.8	223.5
57.5°	860.4	190.7	164.1	198.6	193.2
60°	646.0	166.2	122.6	156.2	147.5
62.5°	427.1	104.7	94.3	120.9	122.1
65°	258.4	78.1	88.9	112.6	120.1
67.5°	162.9	69.0	87.7	113.8	112.2
70°	107.2	62.3	86.4	113.8	110.9
72.5°	72.3	56.5	84.7	112.6	113.0
75°	51.1	50.3	82.3	108.8	105.5
77.5°	35.7	44.9	78.9	101.8	98.9
80°	23.7	39.5	73.1	94.3	98.0
82.5°	14.1	34.1	68.1	86.4	90.2
85°	7.1	29.5	62.3	78.1	81.0
87.5°	2.9	25.8	55.3	69.4	71.9
90°	0.0	22.0	48.2	61.5	65.2
92.5°	0.0	18.7	41.5	53.6	59.4
95°	0.0	15.8	35.3	46.1	53.6
97.5°	0.0	13.7	30.3	40.3	48.6
100°	0.0	11.6	26.2	34.9	44.5
102.5°	0.0	10.4	22.4	30.7	40.7
105°	0.0	8.7	19.9	27.4	37.0
107.5°	0.0	7.5	17.4	24.5	33.2
110°	0.0	6.6	15.4	22.4	29.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	5.8	14.1	20.4	26.6
115°	0.4	5.0	12.5	18.7	24.1
117.5°	0.4	4.2	11.2	17.0	22.4
120°	0.4	3.3	10.0	15.8	22.0
122.5°	0.4	2.5	8.7	15.0	22.8
125°	0.4	2.1	7.5	15.0	24.9
127.5°	0.4	1.7	6.2	16.6	28.7
130°	0.4	1.2	6.2	19.9	32.4
132.5°	0.4	0.8	6.2	22.0	31.2
135°	0.4	0.8	6.6	20.4	24.9
137.5°	0.4	0.8	6.6	15.8	17.9
140°	0.4	0.8	5.4	11.2	12.5
142.5°	0.4	0.8	3.7	7.9	8.3
145°	0.8	0.8	2.9	5.4	5.4
147.5°	0.8	0.8	2.1	3.7	3.7
150°	0.8	0.8	1.7	2.9	2.9
152.5°	0.8	0.8	1.2	2.5	2.1
155°	0.8	0.8	1.2	2.1	1.7
157.5°	0.8	0.8	0.8	1.7	1.2
160°	0.8	1.2	1.2	1.7	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)