

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: P236251

Luminaire Tested: **4SWLED-32SL-LN-UNV-L840-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236251
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1709-316-17)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SWLED-32SL-LN-UNV-L840-CD1-U
Description: METALUX SWLED LINEAR LUMINAIRE
4FT FIXTURE WITH 1 ROW LED, NARROW LENS
Light Source: (112) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

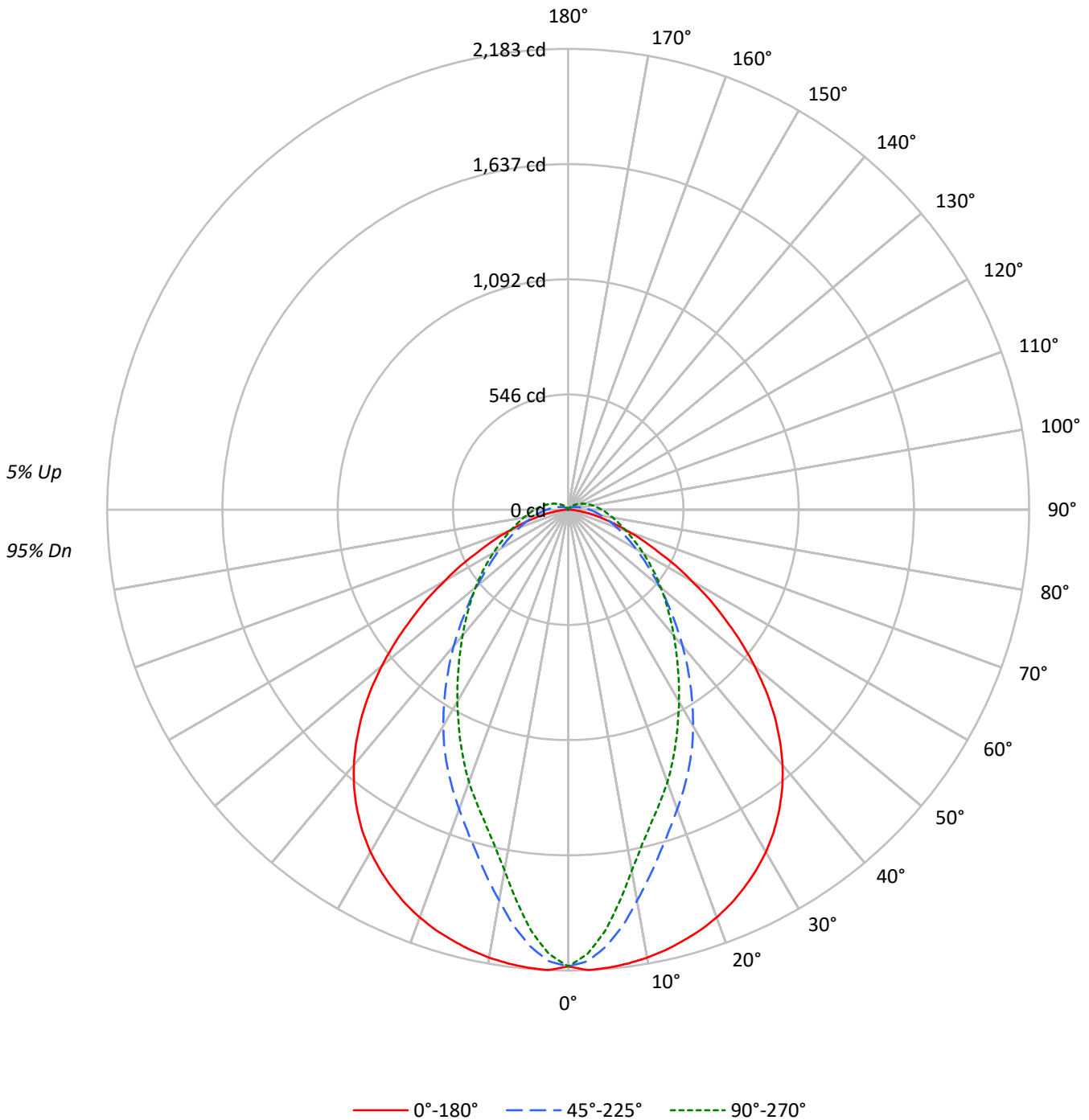
Lumens per Lamp: N/A
Luminaire Lumens: 4058.0 lumens
Efficiency: N/A
Efficacy: 141.9 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 0.78 / 1
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')
CIE Type: Direct

Input Watts (W): 28.6
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	50	30	10	0	
RCR																						
0	118	118	118	118	115	115	115	115	108	108	108	103	103	103	98	98	98	95				
1	108	103	99	95	105	101	97	93	95	92	90	91	88	86	86	84	83	80				
2	99	91	85	79	96	89	83	78	85	80	75	81	77	73	77	74	71	68				
3	91	81	73	67	88	79	72	66	76	70	65	72	67	63	69	65	61	59				
4	84	73	65	58	81	71	63	58	68	61	56	65	60	55	63	58	54	52				
5	78	66	57	51	75	64	56	51	62	55	50	59	53	49	57	52	48	46				
6	72	60	51	45	70	59	51	45	56	49	44	54	48	43	52	47	43	41				
7	67	55	46	41	65	54	46	40	52	45	40	50	44	39	48	43	38	37				
8	63	50	42	37	61	49	42	36	48	41	36	46	40	35	45	39	35	33				
9	59	46	39	33	57	46	38	33	44	37	33	43	37	32	41	36	32	30				
10	56	43	36	31	54	42	35	30	41	35	30	40	34	30	39	33	29	28				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15525	15525	15525
5°	15638	14567	13950
10°	15600	13008	11824
15°	15546	11552	10292
20°	15490	10391	9188
25°	15372	9387	8099
30°	15197	8350	7098
35°	14874	7288	6224
40°	14356	6300	5496
45°	13526	5395	4877
50°	12328	4629	4364
55°	10816	3997	3906
60°	9108	3493	3512
65°	7358	3102	3183
70°	5853	2808	2951
75°	4420	2564	2810
80°	3185	2436	2758
85°	1959	2379	2775



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	192.8	4.8
10°-20°	490.1	12.1
20°-30°	664.6	16.4
30°-40°	705.9	17.4
40°-50°	631.2	15.6
50°-60°	489.1	12.1
60°-70°	338.0	8.3
70°-80°	216.1	5.3
80°-90°	132.3	3.3
90°-100°	82.3	2.0
100°-110°	51.6	1.3
110°-120°	31.6	0.8
120°-130°	18.0	0.4
130°-140°	9.2	0.2
140°-150°	3.8	0.1
150°-160°	1.2	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	1347.5	33.2
0°-40°	2053.4	50.6
0°-60°	3173.7	78.2
0°-90°	3860.2	95.1
90°-120°	165.5	4.1
90°-150°	196.4	4.8
90°-180°	198.0	4.9
0°-180°	4058.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2164	2164	2164	2164	2164	
5°	2178	2125	2075	2019	2002	207
15°	2113	1906	1680	1558	1530	597
25°	1974	1605	1352	1238	1208	910
35°	1741	1270	1007	919	904	1087
45°	1381	890	692	663	668	1061
55°	910	548	457	474	486	815
65°	467	311	300	333	344	473
75°	181	157	196	239	248	199
85°	34	70	128	171	184	40
90°	1	46	102	145	160	2
95°	0	29	79	122	137	0
105°	0	13	47	83	99	0
115°	0	7	30	55	67	0
125°	0	4	18	35	42	0
135°	1	2	11	21	25	1
145°	1	1	5	11	13	1
155°	2	1	2	4	5	1
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°	2163.5	2163.5	2163.5	2163.5	2163.5
2.5°	2182.7	2147.5	2140.3	2119.4	2105.8
5°	2177.9	2125.1	2075.4	2019.3	2002.5
7.5°	2168.3	2086.6	1986.4	1891.9	1870.2
10°	2154.7	2034.5	1879.9	1763.7	1734.0
12.5°	2136.3	1973.6	1779.7	1651.5	1621.8
15°	2113.0	1905.5	1680.3	1557.7	1529.7
17.5°	2087.4	1835.8	1591.4	1474.4	1449.6
20°	2055.3	1758.1	1509.7	1394.3	1373.4
22.5°	2018.5	1684.3	1431.1	1314.9	1290.9
25°	1974.4	1605.0	1351.8	1238.0	1208.4
27.5°	1926.3	1524.9	1270.1	1154.7	1126.6
30°	1872.6	1443.9	1182.7	1070.5	1048.9
32.5°	1810.9	1359.0	1094.6	992.8	974.4
35°	1741.2	1270.1	1007.2	919.1	903.9
37.5°	1665.1	1177.1	923.1	847.8	838.2
40°	1579.4	1081.8	842.2	782.1	778.1
42.5°	1484.0	986.4	763.6	721.2	721.2
45°	1381.4	890.2	691.5	662.7	667.5
47.5°	1270.1	794.9	625.0	610.6	618.6
50°	1152.3	705.9	563.3	561.7	572.1
52.5°	1032.1	623.4	506.4	516.0	528.1
55°	909.5	548.1	456.7	473.6	485.6
57.5°	794.9	479.2	411.9	435.1	446.3
60°	674.7	417.5	370.2	398.2	409.5
62.5°	573.7	360.6	334.9	363.8	375.0
65°	467.2	310.9	300.5	333.3	343.8
67.5°	385.4	266.0	270.8	306.1	315.7
70°	306.9	225.2	244.4	281.3	290.9
72.5°	242.8	187.5	220.4	258.8	268.4
75°	181.1	157.1	196.3	238.8	248.4
77.5°	132.2	130.6	177.1	220.4	230.8
80°	93.0	106.6	159.5	201.9	213.9
82.5°	60.1	86.5	143.4	185.1	197.1
85°	33.7	70.5	128.2	170.7	183.5
87.5°	16.0	56.9	114.6	157.9	171.5
90°	0.8	45.7	101.8	145.0	159.5
92.5°	0.0	36.1	90.5	133.0	148.2
95°	0.0	28.8	79.3	121.8	137.0
97.5°	0.0	23.2	69.7	111.4	126.6
100°	0.0	18.4	61.7	101.0	117.0
102.5°	0.0	15.2	53.7	92.1	108.2
105°	0.0	12.8	47.3	83.3	98.6
107.5°	0.0	11.2	41.7	75.3	90.5
110°	0.0	9.6	37.7	68.1	82.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	8.8	32.9	61.7	75.3
115°	0.0	7.2	29.6	55.3	67.3
117.5°	0.0	6.4	26.4	49.7	60.9
120°	0.0	5.6	23.2	44.9	54.5
122.5°	0.0	4.8	20.8	39.3	48.1
125°	0.0	4.0	18.4	35.3	42.5
127.5°	0.8	3.2	16.8	31.3	36.9
130°	0.8	2.4	14.4	27.2	32.9
132.5°	0.8	2.4	12.8	24.0	28.0
135°	0.8	1.6	11.2	20.8	24.8
137.5°	0.8	1.6	9.6	18.4	20.8
140°	0.8	0.8	8.0	15.2	18.4
142.5°	0.8	0.8	6.4	12.8	15.2
145°	0.8	0.8	4.8	11.2	12.8
147.5°	0.8	0.8	4.0	8.8	10.4
150°	0.8	0.8	3.2	7.2	8.0
152.5°	0.8	0.8	2.4	5.6	6.4
155°	1.6	0.8	1.6	4.0	4.8
157.5°	1.6	1.6	1.6	3.2	3.2
160°	1.6	1.6	1.6	1.6	2.4
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)