

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: P236254

Luminaire Tested: **4SWLED-36SL-LN-UNV-L840-CD1-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P236254  
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-36SL-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**

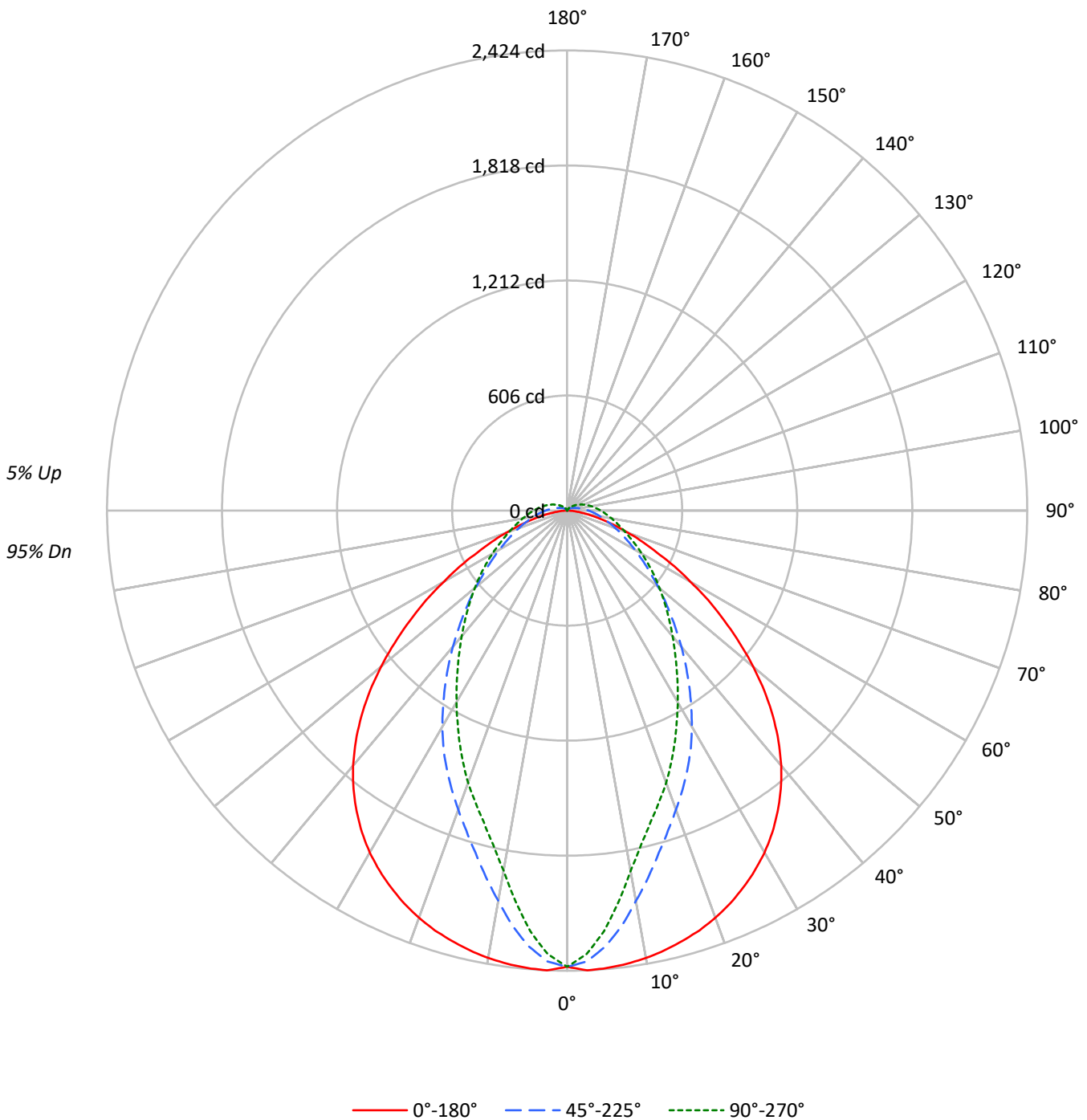
Lumens per Lamp: N/A  
Luminaire Lumens: 4507.0 lumens  
Efficiency: N/A  
Efficacy: 137.4 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 0.78 / 1  
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')  
CIE Type: Direct

Input Watts (W): 32.8  
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	50	30	10	0		
RCR																										
0	118	118	118	118	115	115	115	115	108	108	108	103	103	103	98	98	98	95					95			
1	108	103	99	95	105	101	97	93	95	92	90	91	88	86	86	84	83	80					80			
2	99	91	85	79	96	89	83	78	85	80	75	81	77	73	77	74	71	68					68			
3	91	81	73	67	88	79	72	66	76	70	65	72	67	63	69	65	61	59					59			
4	84	73	65	58	81	71	63	58	68	61	56	65	60	55	63	58	54	52					52			
5	78	66	57	51	75	64	56	51	62	55	50	59	53	49	57	52	48	46					46			
6	72	60	51	45	70	59	51	45	56	49	44	54	48	43	52	47	43	41					41			
7	67	55	46	41	65	54	46	40	52	45	40	50	44	39	48	43	38	37					37			
8	63	50	42	37	61	49	42	36	48	41	36	46	40	35	45	39	35	33					33			
9	59	46	39	33	57	46	38	33	44	37	33	43	37	32	41	36	32	30					30			
10	56	43	36	31	54	42	35	30	41	35	30	40	34	30	39	33	29	28					28			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	17243	17243	17243
5°	17369	16178	15493
10°	17326	14448	13133
15°	17266	12831	11430
20°	17204	11541	10204
25°	17073	10426	8995
30°	16878	9274	7883
35°	16520	8095	6912
40°	15944	6997	6104
45°	15023	5992	5417
50°	13692	5141	4847
55°	12012	4440	4338
60°	10115	3880	3900
65°	8170	3444	3535
70°	6501	3118	3277
75°	4908	2848	3121
80°	3534	2705	3063
85°	2174	2642	3082



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	214.1	4.8
10°-20°	544.4	12.1
20°-30°	738.1	16.4
30°-40°	784.0	17.4
40°-50°	701.1	15.6
50°-60°	543.2	12.1
60°-70°	375.4	8.3
70°-80°	240.0	5.3
80°-90°	147.0	3.3
90°-100°	91.4	2.0
100°-110°	57.3	1.3
110°-120°	35.1	0.8
120°-130°	20.0	0.4
130°-140°	10.2	0.2
140°-150°	4.2	0.1
150°-160°	1.4	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	1496.6	33.2
0°-40°	2280.6	50.6
0°-60°	3524.9	78.2
0°-90°	4287.3	95.1
90°-120°	183.8	4.1
90°-150°	218.2	4.8
90°-180°	220.0	4.9
0°-180°	4507.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2403	2403	2403	2403	2403	
5°	2419	2360	2305	2243	2224	230
15°	2347	2116	1866	1730	1699	663
25°	2193	1783	1501	1375	1342	1010
35°	1934	1411	1119	1021	1004	1207
45°	1534	989	768	736	741	1178
55°	1010	609	507	526	539	905
65°	519	345	334	370	382	526
75°	201	174	218	265	276	221
85°	37	78	142	190	204	45
90°	1	51	113	161	177	3
95°	0	32	88	135	152	0
105°	0	14	52	93	110	0
115°	0	8	33	61	75	0
125°	0	4	20	39	47	0
135°	1	2	12	23	28	1
145°	1	1	5	12	14	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°	2402.9	2402.9	2402.9	2402.9	2402.9
2.5°	2424.3	2385.1	2377.1	2354.0	2338.8
5°	2418.9	2360.2	2305.0	2242.7	2224.0
7.5°	2408.2	2317.5	2206.2	2101.2	2077.2
10°	2393.1	2259.6	2087.9	1958.8	1925.9
12.5°	2372.6	2192.0	1976.6	1834.2	1801.3
15°	2346.8	2116.3	1866.3	1730.1	1698.9
17.5°	2318.4	2038.9	1767.5	1637.5	1609.9
20°	2282.8	1952.6	1676.7	1548.5	1525.4
22.5°	2241.8	1870.7	1589.5	1460.4	1433.7
25°	2192.9	1782.6	1501.4	1375.0	1342.1
27.5°	2139.5	1693.6	1410.6	1282.4	1251.3
30°	2079.8	1603.7	1313.6	1189.0	1165.0
32.5°	2011.3	1509.4	1215.7	1102.7	1082.2
35°	1933.9	1410.6	1118.7	1020.8	1003.9
37.5°	1849.3	1307.4	1025.2	941.6	930.9
40°	1754.1	1201.5	935.4	868.6	864.2
42.5°	1648.2	1095.5	848.1	801.0	801.0
45°	1534.3	988.7	768.0	736.0	741.3
47.5°	1410.6	882.8	694.2	678.2	687.1
50°	1279.8	784.1	625.6	623.9	635.4
52.5°	1146.3	692.4	562.5	573.1	586.5
55°	1010.1	608.7	507.3	526.0	539.3
57.5°	882.8	532.2	457.4	483.3	495.7
60°	749.3	463.7	411.2	442.3	454.8
62.5°	637.2	400.5	372.0	404.0	416.5
65°	518.8	345.3	333.7	370.2	381.8
67.5°	428.1	295.5	300.8	340.0	350.6
70°	340.9	250.1	271.4	312.4	323.1
72.5°	269.7	208.3	244.7	287.5	298.1
75°	201.1	174.4	218.0	265.2	275.9
77.5°	146.8	145.1	196.7	244.7	256.3
80°	103.2	118.4	177.1	224.3	237.6
82.5°	66.7	96.1	159.3	205.6	218.9
85°	37.4	78.3	142.4	189.6	203.8
87.5°	17.8	63.2	127.3	175.3	190.5
90°	0.9	50.7	113.0	161.1	177.1
92.5°	0.0	40.0	100.6	147.7	164.6
95°	0.0	32.0	88.1	135.3	152.2
97.5°	0.0	25.8	77.4	123.7	140.6
100°	0.0	20.5	68.5	112.1	129.9
102.5°	0.0	16.9	59.6	102.3	120.1
105°	0.0	14.2	52.5	92.6	109.5
107.5°	0.0	12.5	46.3	83.7	100.6
110°	0.0	10.7	41.8	75.6	91.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	9.8	36.5	68.5	83.7
115°	0.0	8.0	32.9	61.4	74.8
117.5°	0.0	7.1	29.4	55.2	67.6
120°	0.0	6.2	25.8	49.8	60.5
122.5°	0.0	5.3	23.1	43.6	53.4
125°	0.0	4.4	20.5	39.2	47.2
127.5°	0.9	3.6	18.7	34.7	40.9
130°	0.9	2.7	16.0	30.3	36.5
132.5°	0.9	2.7	14.2	26.7	31.1
135°	0.9	1.8	12.5	23.1	27.6
137.5°	0.9	1.8	10.7	20.5	23.1
140°	0.9	0.9	8.9	16.9	20.5
142.5°	0.9	0.9	7.1	14.2	16.9
145°	0.9	0.9	5.3	12.5	14.2
147.5°	0.9	0.9	4.4	9.8	11.6
150°	0.9	0.9	3.6	8.0	8.9
152.5°	0.9	0.9	2.7	6.2	7.1
155°	1.8	0.9	1.8	4.4	5.3
157.5°	1.8	1.8	1.8	3.6	3.6
160°	1.8	1.8	1.8	1.8	2.7
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)