

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: P236232

Luminaire Tested: **4SWLED-32SL-LC-UNV-L835-CD1-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P236232  
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-32SL-LC-UNV-L835-CD1-U  
Description: METALUX SWLED LINEAR LUMINAIRE  
4FT FIXTURE WITH 1 ROW LED, CLEAR LENS  
Light Source: (112) 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

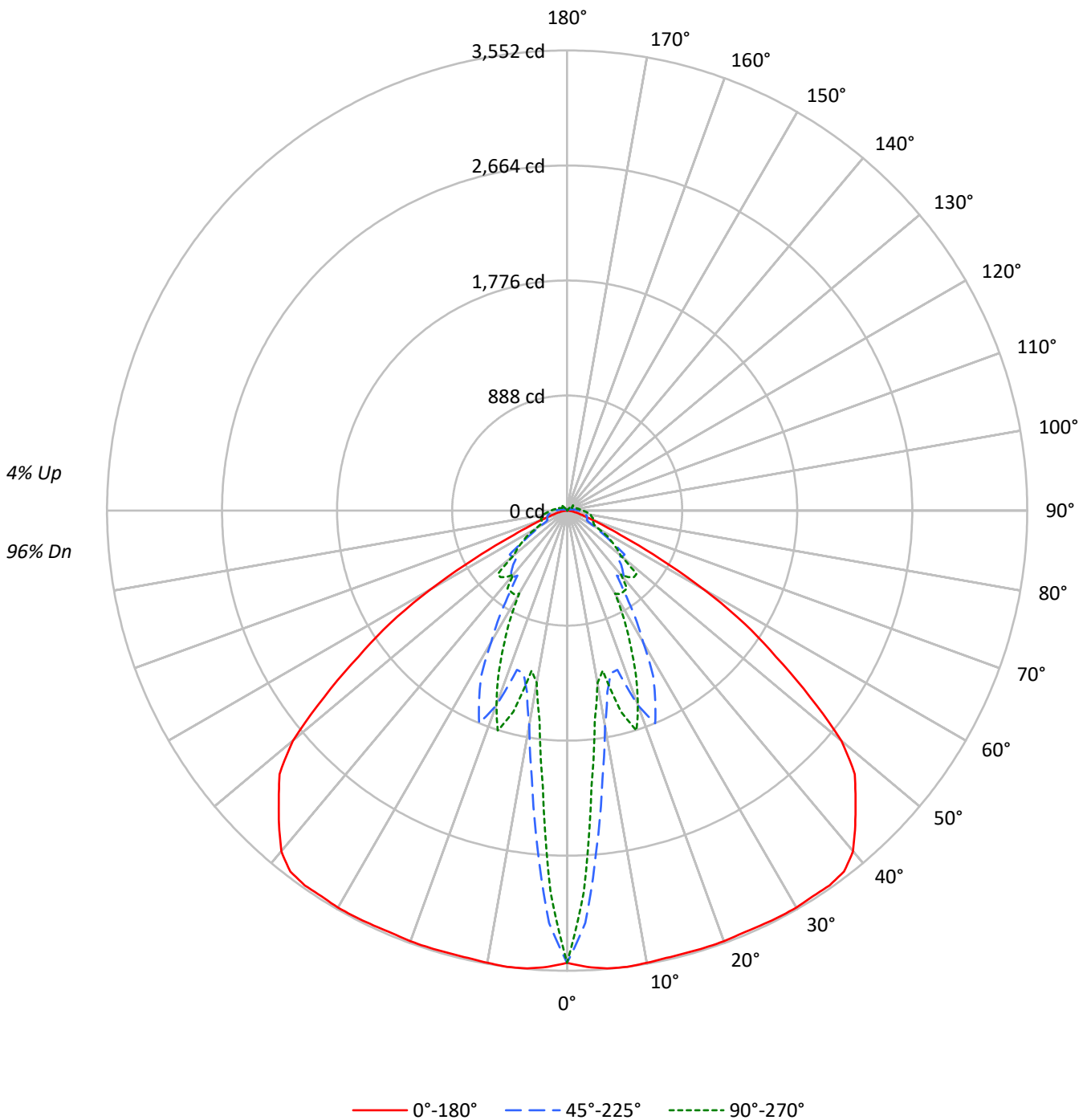
Lumens per Lamp: N/A  
Luminaire Lumens: 4266.0 lumens  
Efficiency: N/A  
Efficacy: 149.2 lumens/watt  
Spacing Criteria (0/90/45): 1.54 / 0.24 / 0.77  
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')  
CIE Type: Direct

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

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

	0°	45°	90°
0°	25052	25052	25052
5°	25474	18361	14934
10°	25663	11666	9203
15°	26014	8928	10814
20°	26660	11031	10673
25°	27510	11161	7803
30°	28713	8281	5007
35°	30164	5554	5241
40°	31204	5095	4556
45°	30813	4584	5315
50°	29577	4551	4117
55°	23392	3596	3399
60°	16491	2186	2392
65°	7695	1735	2102
70°	3866	1877	2127
75°	2358	2031	2256
80°	1534	2112	2390
85°	779	2186	2317



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	238.6	5.6
10°-20°	522.8	12.3
20°-30°	746.3	17.5
30°-40°	797.1	18.7
40°-50°	741.3	17.4
50°-60°	545.1	12.8
60°-70°	242.5	5.7
70°-80°	159.7	3.7
80°-90°	110.6	2.6
90°-100°	65.3	1.5
100°-110°	37.8	0.9
110°-120°	23.0	0.5
120°-130°	16.5	0.4
130°-140°	14.0	0.3
140°-150°	4.1	0.1
150°-160°	1.2	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	1507.7	35.3
0°-40°	2304.8	54.0
0°-60°	3591.2	84.2
0°-90°	4104.0	96.2
90°-120°	126.1	3.0
90°-150°	160.7	3.8
90°-180°	162.0	3.8
0°-180°	4266.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3491	3491	3491	3491	3491	
5°	3548	3164	2616	2276	2144	338
15°	3536	1917	1299	1434	1607	1003
25°	3534	1236	1607	1265	1164	1636
35°	3531	1489	768	779	761	2207
45°	3147	640	588	653	727	2423
55°	1967	381	411	416	423	1770
65°	489	148	168	213	227	568
75°	97	95	156	206	200	112
85°	13	56	118	148	153	18
90°	0	42	91	116	123	1
95°	0	30	67	87	101	0
105°	0	16	38	52	70	0
115°	1	9	24	35	46	0
125°	1	4	14	28	47	1
135°	1	2	13	38	47	1
145°	2	2	6	10	10	1
155°	2	2	2	4	3	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°	3491.1	3491.1	3491.1	3491.1	3491.1
2.5°	3526.5	3373.3	3186.3	3021.3	2950.6
5°	3547.7	3164.3	2616.0	2275.8	2143.8
7.5°	3552.4	2871.3	2085.7	1711.0	1633.2
10°	3544.5	2527.2	1685.9	1391.3	1349.6
12.5°	3536.7	2207.5	1431.3	1285.2	1265.6
15°	3535.9	1916.8	1298.6	1434.5	1607.3
17.5°	3537.5	1635.6	1289.1	1784.8	1780.9
20°	3537.5	1429.0	1602.6	1703.9	1595.5
22.5°	3530.4	1282.9	1777.0	1511.5	1392.0
25°	3533.5	1235.7	1607.3	1264.8	1164.2
27.5°	3537.5	1299.3	1437.6	1058.2	959.2
30°	3538.2	1479.2	1172.9	856.3	740.0
32.5°	3529.6	1571.9	975.7	681.9	764.4
35°	3531.2	1488.7	767.5	779.3	761.2
37.5°	3511.5	1298.6	631.6	723.5	758.9
40°	3433.0	1046.4	681.1	678.7	645.0
42.5°	3291.6	812.3	637.1	618.3	696.8
45°	3147.0	639.5	587.6	652.8	727.4
47.5°	3011.9	515.3	522.4	716.4	725.9
50°	2764.5	483.9	553.8	606.5	539.7
52.5°	2364.6	440.7	558.5	474.5	483.1
55°	1967.1	381.0	410.9	415.6	422.6
57.5°	1626.9	360.6	310.3	375.5	365.3
60°	1221.6	314.2	231.7	295.4	278.9
62.5°	807.6	198.0	178.3	228.6	231.0
65°	488.6	147.7	168.1	212.9	227.0
67.5°	307.9	130.4	165.8	215.2	212.1
70°	202.7	117.8	163.4	215.2	209.7
72.5°	136.7	106.8	160.3	212.9	213.7
75°	96.6	95.1	155.5	205.8	199.5
77.5°	67.6	84.8	149.3	192.5	187.0
80°	44.8	74.6	138.3	178.3	185.4
82.5°	26.7	64.4	128.8	163.4	170.5
85°	13.4	55.8	117.8	147.7	153.2
87.5°	5.5	48.7	104.5	131.2	135.9
90°	0.0	41.6	91.1	116.3	123.3
92.5°	0.0	35.4	78.6	101.3	112.3
95°	0.0	29.9	66.8	87.2	101.3
97.5°	0.0	25.9	57.3	76.2	91.9
100°	0.0	22.0	49.5	66.0	84.1
102.5°	0.0	19.6	42.4	58.1	77.0
105°	0.0	16.5	37.7	51.8	69.9
107.5°	0.0	14.1	33.0	46.3	62.8
110°	0.0	12.6	29.1	42.4	56.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	11.0	26.7	38.5	50.3
115°	0.8	9.4	23.6	35.4	45.6
117.5°	0.8	7.9	21.2	32.2	42.4
120°	0.8	6.3	18.9	29.9	41.6
122.5°	0.8	4.7	16.5	28.3	43.2
125°	0.8	3.9	14.1	28.3	47.1
127.5°	0.8	3.1	11.8	31.4	54.2
130°	0.8	2.4	11.8	37.7	61.3
132.5°	0.8	1.6	11.8	41.6	58.9
135°	0.8	1.6	12.6	38.5	47.1
137.5°	0.8	1.6	12.6	29.9	33.8
140°	0.8	1.6	10.2	21.2	23.6
142.5°	0.8	1.6	7.1	14.9	15.7
145°	1.6	1.6	5.5	10.2	10.2
147.5°	1.6	1.6	3.9	7.1	7.1
150°	1.6	1.6	3.1	5.5	5.5
152.5°	1.6	1.6	2.4	4.7	3.9
155°	1.6	1.6	2.4	3.9	3.1
157.5°	1.6	1.6	1.6	3.1	2.4
160°	1.6	2.4	2.4	3.1	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)