

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: P234503

Luminaire Tested: **4WSNLED-LD4-36SL-F-UNV-L850-CD1-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P234503  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1707-169-11)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4WSNLED-LD4-36SL-F-UNV-L850-CD1-U  
Description: 4FT WSNLED WRAPAROUND  
Light Source: (224) 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

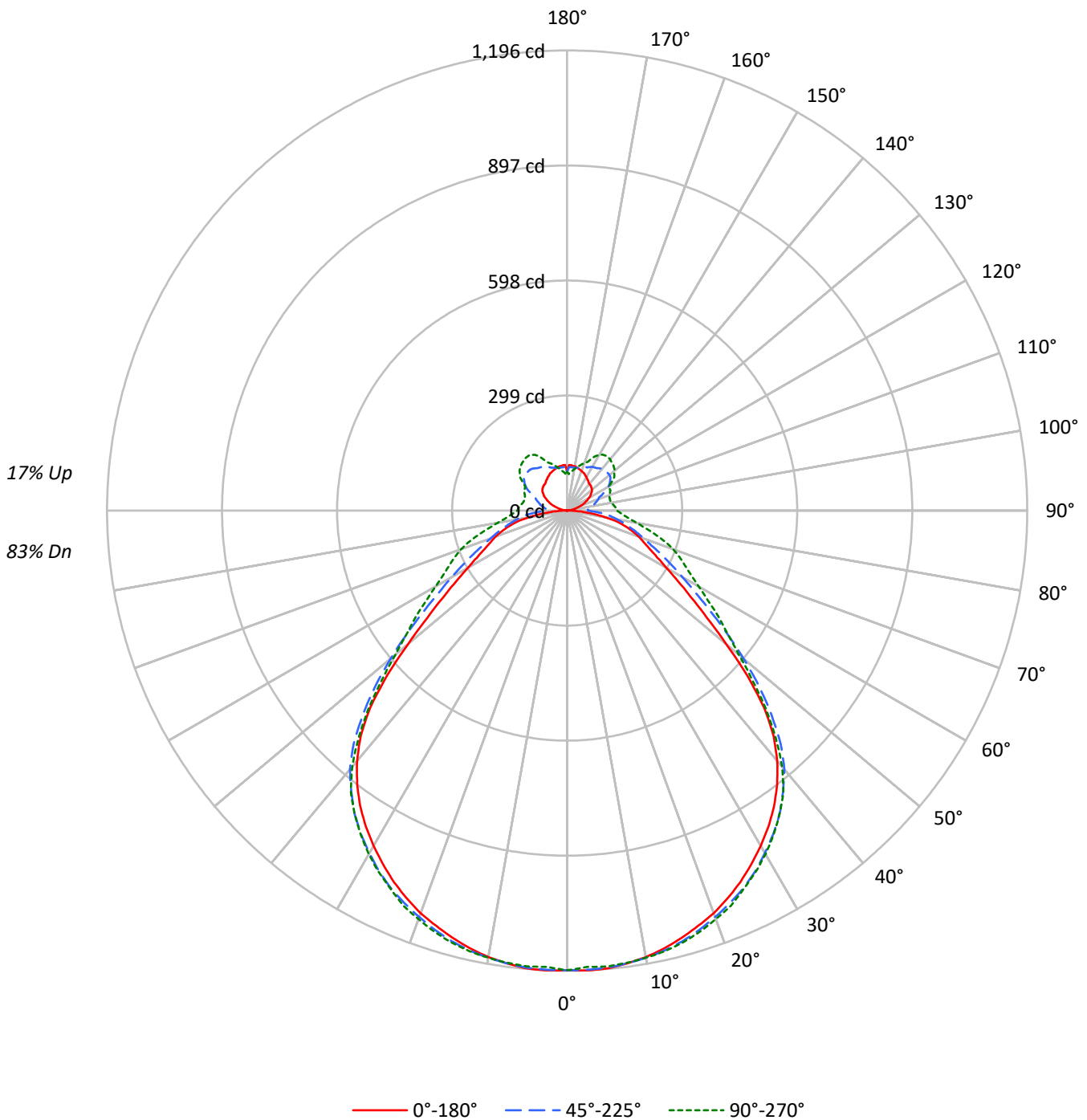
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3710.0 lumens  
Efficiency: N/A  
Efficacy: 115.6 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.35  
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 4' x H: 0.12')  
CIE Type: Semi-Direct  
  
Input Watts (W): 32.1  
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	115	115	115	115	110	110	110	110	101	101	101	93	93	93	86	86	86	83
1	105	100	96	92	100	96	93	89	89	86	83	82	80	78	76	74	72	69
2	96	88	82	76	92	85	79	74	78	74	70	73	69	65	67	64	62	59
3	88	78	70	64	84	75	68	62	70	64	59	65	60	56	60	56	53	50
4	81	69	61	55	77	67	59	53	62	56	51	58	53	48	54	50	46	43
5	74	62	54	47	71	60	52	46	56	49	44	52	47	42	49	44	40	38
6	69	56	48	42	66	54	46	41	51	44	39	48	42	37	44	40	36	33
7	64	51	43	37	61	49	42	36	46	40	35	43	38	33	41	36	32	30
8	59	47	38	33	57	45	38	32	42	36	31	40	34	30	38	32	29	27
9	56	43	35	30	53	41	34	29	39	33	28	37	31	27	35	30	26	24
10	52	39	32	27	50	38	31	26	36	30	25	34	29	25	32	27	24	22

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

	0°	45°	90°
0°	3215	3215	3215
5°	3218	3191	3178
10°	3202	3163	3155
15°	3176	3135	3133
20°	3153	3096	3095
25°	3117	3059	3044
30°	3070	3001	2988
35°	3014	2936	2908
40°	2909	2824	2764
45°	2671	2573	2473
50°	2175	2213	2121
55°	1767	1834	1909
60°	1522	1566	1748
65°	1415	1387	1696
70°	1432	1280	1715
75°	1455	1243	1668
80°	1348	1266	1661
85°	981	1324	1895



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	113.3	3.1
10°-20°	326.4	8.8
20°-30°	496.5	13.4
30°-40°	595.4	16.0
40°-50°	566.8	15.3
50°-60°	403.6	10.9
60°-70°	274.4	7.4
70°-80°	185.1	5.0
80°-90°	106.1	2.9
90°-100°	68.5	1.8
100°-110°	77.2	2.1
110°-120°	95.9	2.6
120°-130°	110.0	3.0
130°-140°	104.6	2.8
140°-150°	84.7	2.3
150°-160°	58.3	1.6
160°-170°	32.8	0.9
170°-180°	10.5	0.3
0°-30°	936.1	25.2
0°-40°	1531.6	41.3
0°-60°	2502.0	67.4
0°-90°	3067.7	82.7
90°-120°	241.6	6.5
90°-150°	540.7	14.6
90°-180°	642.0	17.3
0°-180°	3710.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1195	1195	1195	1195	1195	
5°	1195	1187	1193	1191	1189	113
15°	1150	1148	1159	1164	1162	325
25°	1065	1067	1083	1087	1085	491
35°	938	943	963	963	963	585
45°	724	742	751	751	731	548
55°	393	433	453	456	480	359
65°	237	253	269	286	338	239
75°	156	131	169	201	235	163
85°	43	61	97	135	149	48
90°	0	27	54	102	129	3
95°	4	25	56	104	124	5
105°	25	38	75	104	115	27
115°	52	83	102	115	124	52
125°	75	101	136	147	149	68
135°	88	106	144	165	169	68
145°	95	106	135	165	174	59
155°	106	108	124	144	147	49
165°	113	113	115	117	120	32
175°	119	119	113	99	101	11
180°	101	101	101	101	101	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1194.6	1194.6	1194.6	1194.6	1194.6
2.5°	1196.4	1191.0	1194.6	1194.6	1187.4
5°	1194.6	1187.4	1192.8	1191.0	1189.2
7.5°	1187.4	1182.0	1187.4	1189.2	1185.6
10°	1178.4	1173.0	1180.2	1182.0	1180.2
12.5°	1165.8	1162.2	1171.2	1174.8	1173.0
15°	1149.6	1147.9	1158.6	1164.0	1162.2
17.5°	1131.7	1129.9	1142.5	1149.6	1147.9
20°	1113.7	1111.9	1124.5	1129.9	1129.9
22.5°	1090.4	1090.4	1104.7	1110.1	1111.9
25°	1065.2	1067.0	1083.2	1086.8	1085.0
27.5°	1036.5	1038.3	1058.0	1059.8	1059.8
30°	1005.9	1009.5	1027.5	1029.3	1031.1
32.5°	973.6	977.2	997.0	997.0	998.8
35°	937.7	943.1	962.8	962.8	962.8
37.5°	896.4	903.6	921.5	921.5	923.3
40°	849.7	860.4	878.4	876.6	869.4
42.5°	794.0	808.3	820.9	819.1	803.0
45°	723.9	741.9	750.9	750.9	731.1
47.5°	634.1	661.0	677.2	670.0	653.9
50°	538.9	578.4	598.2	594.6	582.0
52.5°	458.1	503.0	522.7	520.9	524.5
55°	393.4	432.9	452.7	456.3	479.6
57.5°	341.3	377.2	393.4	404.2	432.9
60°	298.2	330.5	346.7	357.5	395.2
62.5°	264.1	289.2	305.4	317.9	362.9
65°	237.1	253.3	269.4	285.6	337.7
67.5°	215.6	219.2	237.1	260.5	316.2
70°	197.6	185.0	212.0	238.9	292.8
72.5°	177.8	156.3	190.4	217.4	265.9
75°	156.3	131.1	168.9	201.2	235.3
77.5°	132.9	109.6	150.9	183.2	206.6
80°	102.4	93.4	132.9	167.1	183.2
82.5°	71.9	77.2	115.0	152.7	163.5
85°	43.1	61.1	97.0	134.7	149.1
87.5°	19.8	44.9	73.6	116.8	138.3
90°	0.0	26.9	53.9	102.4	129.3
92.5°	1.8	26.9	53.9	104.2	127.5
95°	3.6	25.1	55.7	104.2	123.9
97.5°	7.2	25.1	61.1	102.4	120.4
100°	12.6	26.9	66.5	102.4	116.8
102.5°	18.0	28.7	71.9	104.2	115.0
105°	25.1	37.7	75.4	104.2	115.0
107.5°	32.3	50.3	80.8	106.0	115.0
110°	39.5	64.7	86.2	107.8	116.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	46.7	75.4	89.8	113.2	120.4
115°	52.1	82.6	102.4	115.0	123.9
117.5°	59.3	88.0	115.0	116.8	123.9
120°	64.7	93.4	123.9	123.9	125.7
122.5°	71.9	97.0	131.1	138.3	136.5
125°	75.4	100.6	136.5	147.3	149.1
127.5°	80.8	102.4	141.9	152.7	154.5
130°	84.4	104.2	143.7	158.1	161.7
132.5°	86.2	104.2	143.7	161.7	165.3
135°	88.0	106.0	143.7	165.3	168.9
137.5°	89.8	104.2	143.7	167.1	170.7
140°	89.8	104.2	141.9	167.1	174.2
142.5°	91.6	104.2	138.3	167.1	174.2
145°	95.2	106.0	134.7	165.3	174.2
147.5°	97.0	106.0	132.9	161.7	172.4
150°	100.6	106.0	131.1	156.3	167.1
152.5°	102.4	106.0	127.5	150.9	159.9
155°	106.0	107.8	123.9	143.7	147.3
157.5°	107.8	107.8	122.2	136.5	136.5
160°	109.6	109.6	118.6	129.3	131.1
162.5°	111.4	111.4	116.8	122.2	125.7
165°	113.2	113.2	115.0	116.8	120.4
167.5°	115.0	115.0	113.2	109.6	115.0
170°	116.8	116.8	113.2	104.2	109.6
172.5°	116.8	118.6	113.2	100.6	104.2
175°	118.6	118.6	113.2	98.8	100.6
177.5°	118.6	118.6	113.2	95.2	95.2
180°	100.6	100.6	100.6	100.6	100.6

(END OF REPORT)