

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: P234511

Luminaire Tested: **4WSNLED-LD4-44SL-F-UNV-L850-CD1-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P234511  
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-LD4-44SL-F-UNV-L850-CD1-U  
Description: 4FT WSNLED WRAPAROUND  
Light Source: (224) 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

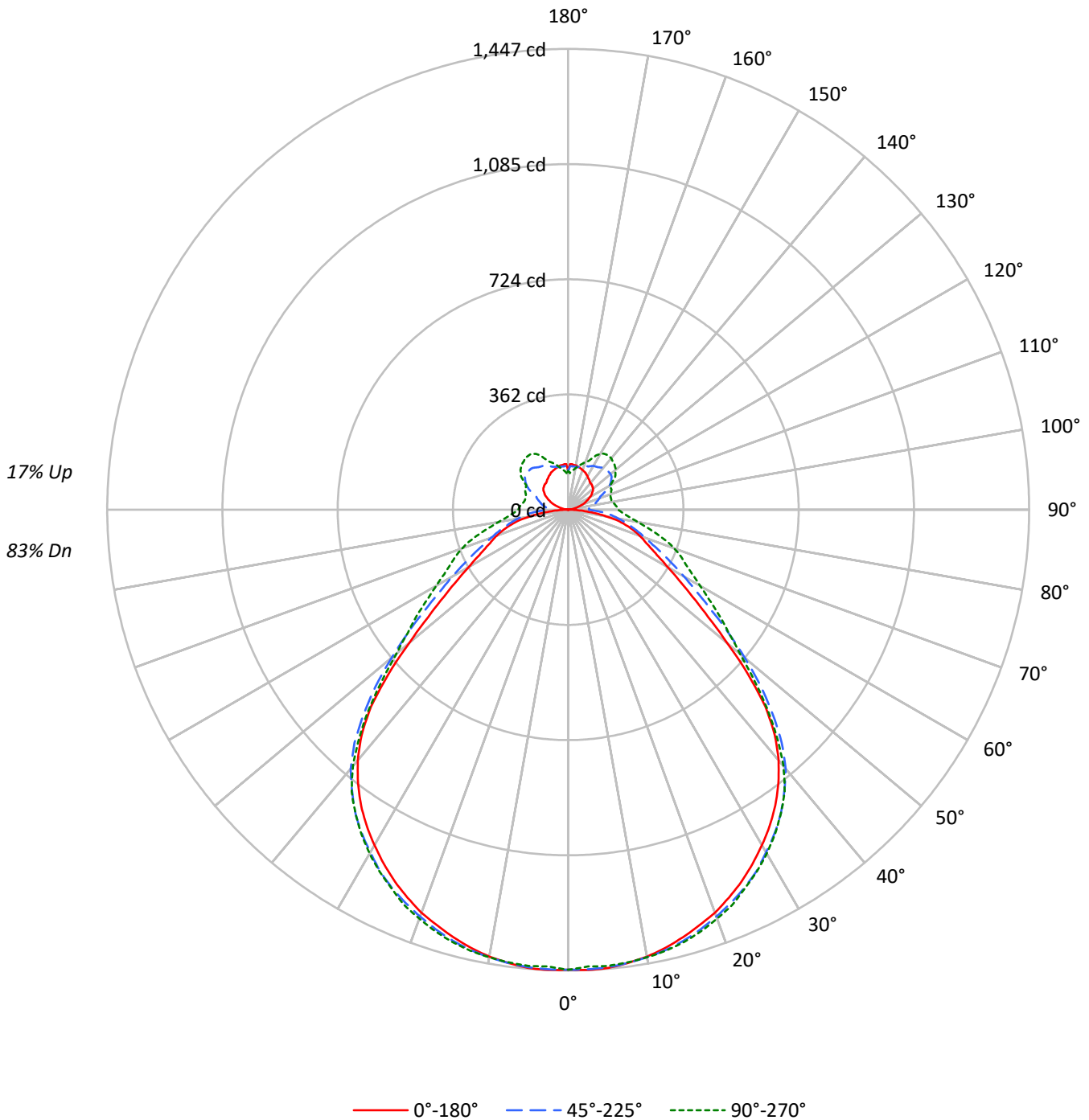
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4486.0 lumens  
Efficiency: N/A  
Efficacy: 113.0 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): 39.7  
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°	3887	3887	3887
5°	3891	3858	3842
10°	3872	3825	3815
15°	3841	3791	3788
20°	3813	3743	3742
25°	3769	3698	3681
30°	3712	3629	3613
35°	3645	3550	3517
40°	3517	3414	3342
45°	3230	3111	2990
50°	2630	2676	2564
55°	2136	2218	2309
60°	1841	1894	2114
65°	1711	1677	2050
70°	1731	1547	2073
75°	1760	1503	2017
80°	1630	1531	2009
85°	1185	1601	2292



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	137.0	3.1
10°-20°	394.6	8.8
20°-30°	600.3	13.4
30°-40°	720.0	16.0
40°-50°	685.4	15.3
50°-60°	488.1	10.9
60°-70°	331.8	7.4
70°-80°	223.9	5.0
80°-90°	128.3	2.9
90°-100°	82.9	1.8
100°-110°	93.3	2.1
110°-120°	115.9	2.6
120°-130°	133.0	3.0
130°-140°	126.4	2.8
140°-150°	102.4	2.3
150°-160°	70.5	1.6
160°-170°	39.7	0.9
170°-180°	12.7	0.3
0°-30°	1131.9	25.2
0°-40°	1851.9	41.3
0°-60°	3025.3	67.4
0°-90°	3709.3	82.7
90°-120°	292.1	6.5
90°-150°	653.9	14.6
90°-180°	777.0	17.3
0°-180°	4486.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1444	1444	1444	1444	1444	
5°	1444	1436	1442	1440	1438	137
15°	1390	1388	1401	1408	1405	392
25°	1288	1290	1310	1314	1312	593
35°	1134	1140	1164	1164	1164	707
45°	875	897	908	908	884	662
55°	476	524	547	552	580	435
65°	287	306	326	345	408	289
75°	189	159	204	243	284	197
85°	52	74	117	163	180	58
90°	0	33	65	124	156	4
95°	4	30	67	126	150	6
105°	30	46	91	126	139	32
115°	63	100	124	139	150	63
125°	91	122	165	178	180	82
135°	106	128	174	200	204	82
145°	115	128	163	200	211	72
155°	128	130	150	174	178	59
165°	137	137	139	141	146	39
175°	143	143	137	120	122	13
180°	122	122	122	122	122	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1444.4	1444.4	1444.4	1444.4	1444.4
2.5°	1446.6	1440.1	1444.4	1444.4	1435.7
5°	1444.4	1435.7	1442.2	1440.1	1437.9
7.5°	1435.7	1429.2	1435.7	1437.9	1433.6
10°	1424.9	1418.4	1427.0	1429.2	1427.0
12.5°	1409.7	1405.3	1416.2	1420.5	1418.4
15°	1390.1	1387.9	1401.0	1407.5	1405.3
17.5°	1368.4	1366.2	1381.4	1390.1	1387.9
20°	1346.7	1344.5	1359.7	1366.2	1366.2
22.5°	1318.4	1318.4	1335.8	1342.3	1344.5
25°	1288.0	1290.2	1309.7	1314.1	1311.9
27.5°	1253.3	1255.4	1279.3	1281.5	1281.5
30°	1216.3	1220.7	1242.4	1244.6	1246.8
32.5°	1177.3	1181.6	1205.5	1205.5	1207.7
35°	1133.8	1140.3	1164.2	1164.2	1164.2
37.5°	1083.9	1092.5	1114.3	1114.3	1116.4
40°	1027.4	1040.4	1062.1	1060.0	1051.3
42.5°	960.0	977.4	992.6	990.5	970.9
45°	875.3	897.1	907.9	907.9	884.0
47.5°	766.7	799.3	818.9	810.2	790.6
50°	651.6	699.4	723.3	718.9	703.7
52.5°	553.9	608.2	632.1	629.9	634.2
55°	475.7	523.5	547.4	551.7	579.9
57.5°	412.7	456.1	475.7	488.7	523.5
60°	360.6	399.7	419.2	432.2	477.9
62.5°	319.3	349.7	369.2	384.5	438.8
65°	286.7	306.3	325.8	345.4	408.3
67.5°	260.6	265.0	286.7	314.9	382.3
70°	238.9	223.7	256.3	288.9	354.0
72.5°	215.0	189.0	230.2	262.8	321.5
75°	189.0	158.6	204.2	243.3	284.5
77.5°	160.7	132.5	182.5	221.5	249.8
80°	123.8	112.9	160.7	202.0	221.5
82.5°	86.9	93.4	139.0	184.6	197.7
85°	52.1	73.8	117.3	162.9	180.3
87.5°	23.9	54.3	89.1	141.2	167.2
90°	0.0	32.6	65.2	123.8	156.4
92.5°	2.2	32.6	65.2	126.0	154.2
95°	4.3	30.4	67.3	126.0	149.9
97.5°	8.7	30.4	73.8	123.8	145.5
100°	15.2	32.6	80.4	123.8	141.2
102.5°	21.7	34.8	86.9	126.0	139.0
105°	30.4	45.6	91.2	126.0	139.0
107.5°	39.1	60.8	97.7	128.2	139.0
110°	47.8	78.2	104.3	130.3	141.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	56.5	91.2	108.6	136.8	145.5
115°	63.0	99.9	123.8	139.0	149.9
117.5°	71.7	106.4	139.0	141.2	149.9
120°	78.2	112.9	149.9	149.9	152.0
122.5°	86.9	117.3	158.6	167.2	165.1
125°	91.2	121.6	165.1	178.1	180.3
127.5°	97.7	123.8	171.6	184.6	186.8
130°	102.1	126.0	173.8	191.1	195.5
132.5°	104.3	126.0	173.8	195.5	199.8
135°	106.4	128.2	173.8	199.8	204.2
137.5°	108.6	126.0	173.8	202.0	206.3
140°	108.6	126.0	171.6	202.0	210.7
142.5°	110.8	126.0	167.2	202.0	210.7
145°	115.1	128.2	162.9	199.8	210.7
147.5°	117.3	128.2	160.7	195.5	208.5
150°	121.6	128.2	158.6	189.0	202.0
152.5°	123.8	128.2	154.2	182.5	193.3
155°	128.2	130.3	149.9	173.8	178.1
157.5°	130.3	130.3	147.7	165.1	165.1
160°	132.5	132.5	143.4	156.4	158.6
162.5°	134.7	134.7	141.2	147.7	152.0
165°	136.8	136.8	139.0	141.2	145.5
167.5°	139.0	139.0	136.8	132.5	139.0
170°	141.2	141.2	136.8	126.0	132.5
172.5°	141.2	143.4	136.8	121.6	126.0
175°	143.4	143.4	136.8	119.5	121.6
177.5°	143.4	143.4	136.8	115.1	115.1
180°	121.6	121.6	121.6	121.6	121.6

(END OF REPORT)