

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: P234509

Luminaire Tested: **4WSNLED-LD4-44SL-F-UNV-L835-CD1-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P234509  
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-L835-CD1-U  
Description: 4FT WSNLED WRAPAROUND  
Light Source: (224) 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

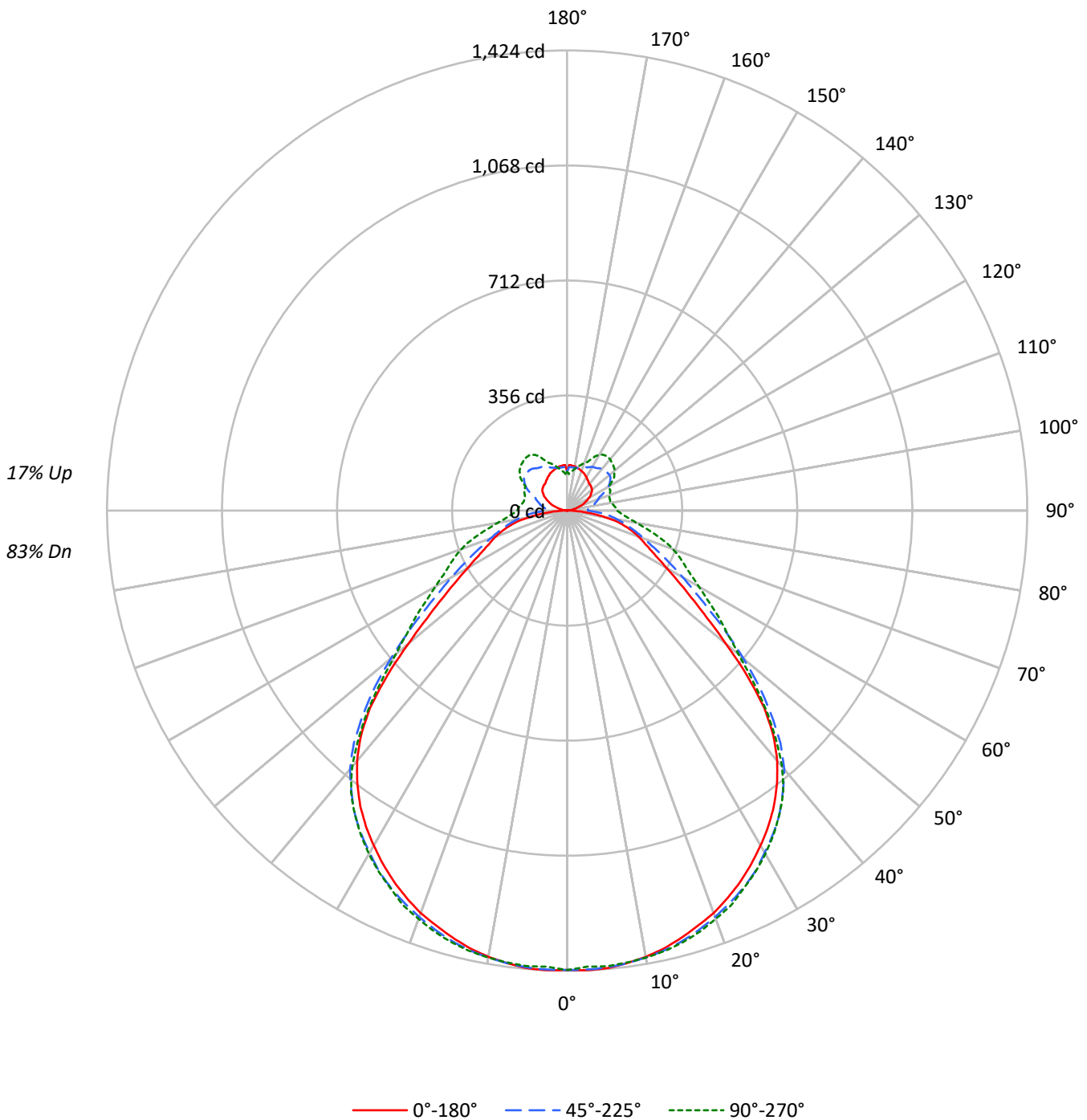
Lumens per Lamp: N/A  
Luminaire Lumens: 4415.0 lumens  
Efficiency: N/A  
Efficacy: 111.2 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.35  
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 4' x H: 0.12')  
CIE Type: Semi-Direct

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°	3825	3825	3825
5°	3830	3797	3781
10°	3811	3764	3755
15°	3780	3731	3728
20°	3753	3684	3683
25°	3710	3640	3623
30°	3654	3572	3556
35°	3587	3494	3461
40°	3461	3360	3289
45°	3179	3062	2943
50°	2588	2633	2524
55°	2103	2183	2272
60°	1812	1864	2081
65°	1684	1651	2018
70°	1703	1522	2040
75°	1732	1479	1985
80°	1603	1507	1977
85°	1167	1575	2255



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	134.8	3.1
10°-20°	388.4	8.8
20°-30°	590.8	13.4
30°-40°	708.6	16.0
40°-50°	674.5	15.3
50°-60°	480.3	10.9
60°-70°	326.5	7.4
70°-80°	220.3	5.0
80°-90°	126.3	2.9
90°-100°	81.6	1.8
100°-110°	91.8	2.1
110°-120°	114.1	2.6
120°-130°	130.9	3.0
130°-140°	124.4	2.8
140°-150°	100.7	2.3
150°-160°	69.4	1.6
160°-170°	39.0	0.9
170°-180°	12.5	0.3
0°-30°	1114.0	25.2
0°-40°	1822.6	41.3
0°-60°	2977.4	67.4
0°-90°	3650.6	82.7
90°-120°	287.5	6.5
90°-150°	643.5	14.6
90°-180°	764.0	17.3
0°-180°	4415.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1422	1422	1422	1422	1422	
5°	1422	1413	1419	1417	1415	135
15°	1368	1366	1379	1385	1383	386
25°	1268	1270	1289	1293	1291	584
35°	1116	1122	1146	1146	1146	696
45°	862	883	894	894	870	652
55°	468	515	539	543	571	428
65°	282	301	321	340	402	284
75°	186	156	201	239	280	194
85°	51	73	115	160	177	57
90°	0	32	64	122	154	4
95°	4	30	66	124	148	6
105°	30	45	90	124	137	32
115°	62	98	122	137	148	62
125°	90	120	162	175	177	81
135°	105	126	171	197	201	81
145°	113	126	160	197	207	71
155°	126	128	148	171	175	58
165°	135	135	137	139	143	38
175°	141	141	135	118	120	13
180°	120	120	120	120	120	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1421.6	1421.6	1421.6	1421.6	1421.6
2.5°	1423.7	1417.3	1421.6	1421.6	1413.0
5°	1421.6	1413.0	1419.4	1417.3	1415.1
7.5°	1413.0	1406.6	1413.0	1415.1	1410.9
10°	1402.3	1395.9	1404.5	1406.6	1404.5
12.5°	1387.4	1383.1	1393.8	1398.0	1395.9
15°	1368.1	1366.0	1378.8	1385.2	1383.1
17.5°	1346.7	1344.6	1359.6	1368.1	1366.0
20°	1325.4	1323.2	1338.2	1344.6	1344.6
22.5°	1297.6	1297.6	1314.7	1321.1	1323.2
25°	1267.6	1269.8	1289.0	1293.3	1291.2
27.5°	1233.4	1235.6	1259.1	1261.2	1261.2
30°	1197.1	1201.4	1222.8	1224.9	1227.0
32.5°	1158.6	1162.9	1186.4	1186.4	1188.5
35°	1115.9	1122.3	1145.8	1145.8	1145.8
37.5°	1066.7	1075.3	1096.6	1096.6	1098.8
40°	1011.1	1023.9	1045.3	1043.2	1034.6
42.5°	944.9	962.0	976.9	974.8	955.5
45°	861.5	882.9	893.5	893.5	870.0
47.5°	754.6	786.7	805.9	797.4	778.1
50°	641.3	688.3	711.8	707.6	692.6
52.5°	545.1	598.5	622.1	619.9	624.2
55°	468.2	515.2	538.7	543.0	570.8
57.5°	406.2	448.9	468.2	481.0	515.2
60°	354.9	393.3	412.6	425.4	470.3
62.5°	314.2	344.2	363.4	378.4	431.8
65°	282.2	301.4	320.7	339.9	401.9
67.5°	256.5	260.8	282.2	310.0	376.2
70°	235.1	220.2	252.2	284.3	348.4
72.5°	211.6	186.0	226.6	258.7	316.4
75°	186.0	156.1	200.9	239.4	280.0
77.5°	158.2	130.4	179.6	218.0	245.8
80°	121.8	111.2	158.2	198.8	218.0
82.5°	85.5	91.9	136.8	181.7	194.5
85°	51.3	72.7	115.4	160.3	177.4
87.5°	23.5	53.4	87.6	138.9	164.6
90°	0.0	32.1	64.1	121.8	153.9
92.5°	2.1	32.1	64.1	124.0	151.8
95°	4.3	29.9	66.3	124.0	147.5
97.5°	8.6	29.9	72.7	121.8	143.2
100°	15.0	32.1	79.1	121.8	138.9
102.5°	21.4	34.2	85.5	124.0	136.8
105°	29.9	44.9	89.8	124.0	136.8
107.5°	38.5	59.9	96.2	126.1	136.8
110°	47.0	77.0	102.6	128.3	138.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	55.6	89.8	106.9	134.7	143.2
115°	62.0	98.3	121.8	136.8	147.5
117.5°	70.5	104.7	136.8	138.9	147.5
120°	77.0	111.2	147.5	147.5	149.6
122.5°	85.5	115.4	156.1	164.6	162.5
125°	89.8	119.7	162.5	175.3	177.4
127.5°	96.2	121.8	168.9	181.7	183.8
130°	100.5	124.0	171.0	188.1	192.4
132.5°	102.6	124.0	171.0	192.4	196.7
135°	104.7	126.1	171.0	196.7	200.9
137.5°	106.9	124.0	171.0	198.8	203.1
140°	106.9	124.0	168.9	198.8	207.4
142.5°	109.0	124.0	164.6	198.8	207.4
145°	113.3	126.1	160.3	196.7	207.4
147.5°	115.4	126.1	158.2	192.4	205.2
150°	119.7	126.1	156.1	186.0	198.8
152.5°	121.8	126.1	151.8	179.6	190.3
155°	126.1	128.3	147.5	171.0	175.3
157.5°	128.3	128.3	145.4	162.5	162.5
160°	130.4	130.4	141.1	153.9	156.1
162.5°	132.5	132.5	138.9	145.4	149.6
165°	134.7	134.7	136.8	138.9	143.2
167.5°	136.8	136.8	134.7	130.4	136.8
170°	138.9	138.9	134.7	124.0	130.4
172.5°	138.9	141.1	134.7	119.7	124.0
175°	141.1	141.1	134.7	117.6	119.7
177.5°	141.1	141.1	134.7	113.3	113.3
180°	119.7	119.7	119.7	119.7	119.7

(END OF REPORT)