

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: P234529

Luminaire Tested: **4WSNLED-LD4-64HL-F-UNV-L835-CD1-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P234529  
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-LD4-64HL-F-UNV-L835-CD1-U  
Description: 4FT WSNLED WRAPAROUND  
Light Source: (224) 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

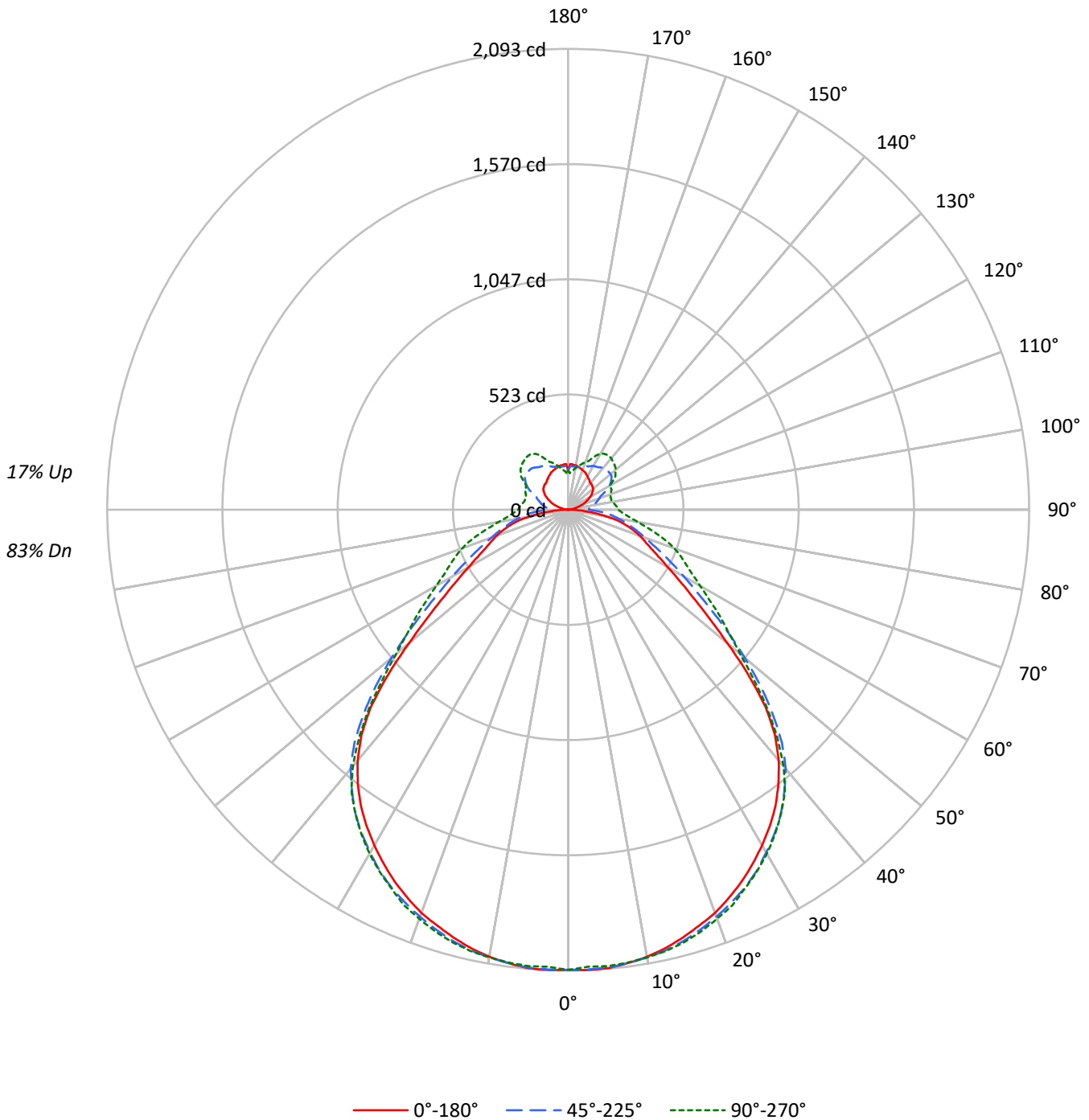
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6491.0 lumens  
Efficiency: N/A  
Efficacy: 100.5 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): 64.6  
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	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°	5624	5624	5624
5°	5630	5583	5559
10°	5603	5534	5520
15°	5557	5485	5481
20°	5517	5416	5415
25°	5454	5351	5326
30°	5372	5251	5228
35°	5274	5137	5089
40°	5089	4941	4836
45°	4674	4502	4327
50°	3806	3872	3710
55°	3091	3209	3340
60°	2664	2740	3059
65°	2476	2427	2967
70°	2505	2239	3000
75°	2546	2175	2919
80°	2358	2216	2907
85°	1715	2315	3317



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	198.2	3.1
10°-20°	571.0	8.8
20°-30°	868.6	13.4
30°-40°	1041.8	16.0
40°-50°	991.7	15.3
50°-60°	706.2	10.9
60°-70°	480.1	7.4
70°-80°	323.9	5.0
80°-90°	185.7	2.9
90°-100°	119.9	1.8
100°-110°	135.0	2.1
110°-120°	167.7	2.6
120°-130°	192.4	3.0
130°-140°	182.9	2.8
140°-150°	148.1	2.3
150°-160°	102.0	1.6
160°-170°	57.4	0.9
170°-180°	18.4	0.3
0°-30°	1637.8	25.2
0°-40°	2679.6	41.3
0°-60°	4377.5	67.4
0°-90°	5367.1	82.7
90°-120°	422.6	6.5
90°-150°	946.1	14.6
90°-180°	1124.0	17.3
0°-180°	6491.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2090	2090	2090	2090	2090	
5°	2090	2077	2087	2084	2081	198
15°	2011	2008	2027	2037	2033	568
25°	1864	1867	1895	1901	1898	858
35°	1641	1650	1685	1685	1685	1023
45°	1267	1298	1314	1314	1279	958
55°	688	757	792	798	839	629
65°	415	443	471	500	591	418
75°	273	229	295	352	412	285
85°	75	107	170	236	261	84
90°	0	47	94	179	226	5
95°	6	44	97	182	217	9
105°	44	66	132	182	201	47
115°	91	145	179	201	217	91
125°	132	176	239	258	261	118
135°	154	185	251	289	295	119
145°	167	185	236	289	305	104
155°	185	189	217	251	258	85
165°	198	198	201	204	211	56
175°	207	207	198	173	176	20
180°	176	176	176	176	176	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2090.0	2090.0	2090.0	2090.0	2090.0
2.5°	2093.1	2083.7	2090.0	2090.0	2077.4
5°	2090.0	2077.4	2086.8	2083.7	2080.6
7.5°	2077.4	2068.0	2077.4	2080.6	2074.3
10°	2061.7	2052.3	2064.8	2068.0	2064.8
12.5°	2039.7	2033.4	2049.1	2055.4	2052.3
15°	2011.4	2008.3	2027.1	2036.6	2033.4
17.5°	1980.0	1976.8	1998.8	2011.4	2008.3
20°	1948.6	1945.4	1967.4	1976.8	1976.8
22.5°	1907.7	1907.7	1932.8	1942.3	1945.4
25°	1863.7	1866.8	1895.1	1901.4	1898.3
27.5°	1813.4	1816.6	1851.1	1854.3	1854.3
30°	1760.0	1766.3	1797.7	1800.8	1804.0
32.5°	1703.4	1709.7	1744.3	1744.3	1747.4
35°	1640.6	1650.0	1684.6	1684.6	1684.6
37.5°	1568.3	1580.8	1612.3	1612.3	1615.4
40°	1486.6	1505.4	1536.9	1533.7	1521.1
42.5°	1389.1	1414.3	1436.3	1433.1	1404.9
45°	1266.6	1298.0	1313.7	1313.7	1279.1
47.5°	1109.4	1156.6	1184.9	1172.3	1144.0
50°	942.9	1012.0	1046.6	1040.3	1018.3
52.5°	801.4	880.0	914.6	911.4	917.7
55°	688.3	757.4	792.0	798.3	839.1
57.5°	597.1	660.0	688.3	707.1	757.4
60°	521.7	578.3	606.6	625.4	691.4
62.5°	462.0	506.0	534.3	556.3	634.9
65°	414.9	443.1	471.4	499.7	590.9
67.5°	377.1	383.4	414.9	455.7	553.1
70°	345.7	323.7	370.9	418.0	512.3
72.5°	311.1	273.4	333.1	380.3	465.1
75°	273.4	229.4	295.4	352.0	411.7
77.5°	232.6	191.7	264.0	320.6	361.4
80°	179.1	163.4	232.6	292.3	320.6
82.5°	125.7	135.1	201.1	267.1	286.0
85°	75.4	106.9	169.7	235.7	260.9
87.5°	34.6	78.6	128.9	204.3	242.0
90°	0.0	47.1	94.3	179.1	226.3
92.5°	3.1	47.1	94.3	182.3	223.1
95°	6.3	44.0	97.4	182.3	216.9
97.5°	12.6	44.0	106.9	179.1	210.6
100°	22.0	47.1	116.3	179.1	204.3
102.5°	31.4	50.3	125.7	182.3	201.1
105°	44.0	66.0	132.0	182.3	201.1
107.5°	56.6	88.0	141.4	185.4	201.1
110°	69.1	113.1	150.9	188.6	204.3



TEST NUMBER: P234529

CATALOG NUMBER: 4WSNLED-LD4-64HL-F-UNV-L835-CD1-U

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	81.7	132.0	157.1	198.0	210.6
115°	91.1	144.6	179.1	201.1	216.9
117.5°	103.7	154.0	201.1	204.3	216.9
120°	113.1	163.4	216.9	216.9	220.0
122.5°	125.7	169.7	229.4	242.0	238.9
125°	132.0	176.0	238.9	257.7	260.9
127.5°	141.4	179.1	248.3	267.1	270.3
130°	147.7	182.3	251.4	276.6	282.9
132.5°	150.9	182.3	251.4	282.9	289.1
135°	154.0	185.4	251.4	289.1	295.4
137.5°	157.1	182.3	251.4	292.3	298.6
140°	157.1	182.3	248.3	292.3	304.9
142.5°	160.3	182.3	242.0	292.3	304.9
145°	166.6	185.4	235.7	289.1	304.9
147.5°	169.7	185.4	232.6	282.9	301.7
150°	176.0	185.4	229.4	273.4	292.3
152.5°	179.1	185.4	223.1	264.0	279.7
155°	185.4	188.6	216.9	251.4	257.7
157.5°	188.6	188.6	213.7	238.9	238.9
160°	191.7	191.7	207.4	226.3	229.4
162.5°	194.9	194.9	204.3	213.7	220.0
165°	198.0	198.0	201.1	204.3	210.6
167.5°	201.1	201.1	198.0	191.7	201.1
170°	204.3	204.3	198.0	182.3	191.7
172.5°	204.3	207.4	198.0	176.0	182.3
175°	207.4	207.4	198.0	172.9	176.0
177.5°	207.4	207.4	198.0	166.6	166.6
180°	176.0	176.0	176.0	176.0	176.0

(END OF REPORT)