

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: P234530

Luminaire Tested: **4WSNLED-LD4-64HL-F-UNV-L840-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P234530
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-L840-CD1-U
Description: 4FT WSNLED WRAPAROUND
Light Source: (224) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

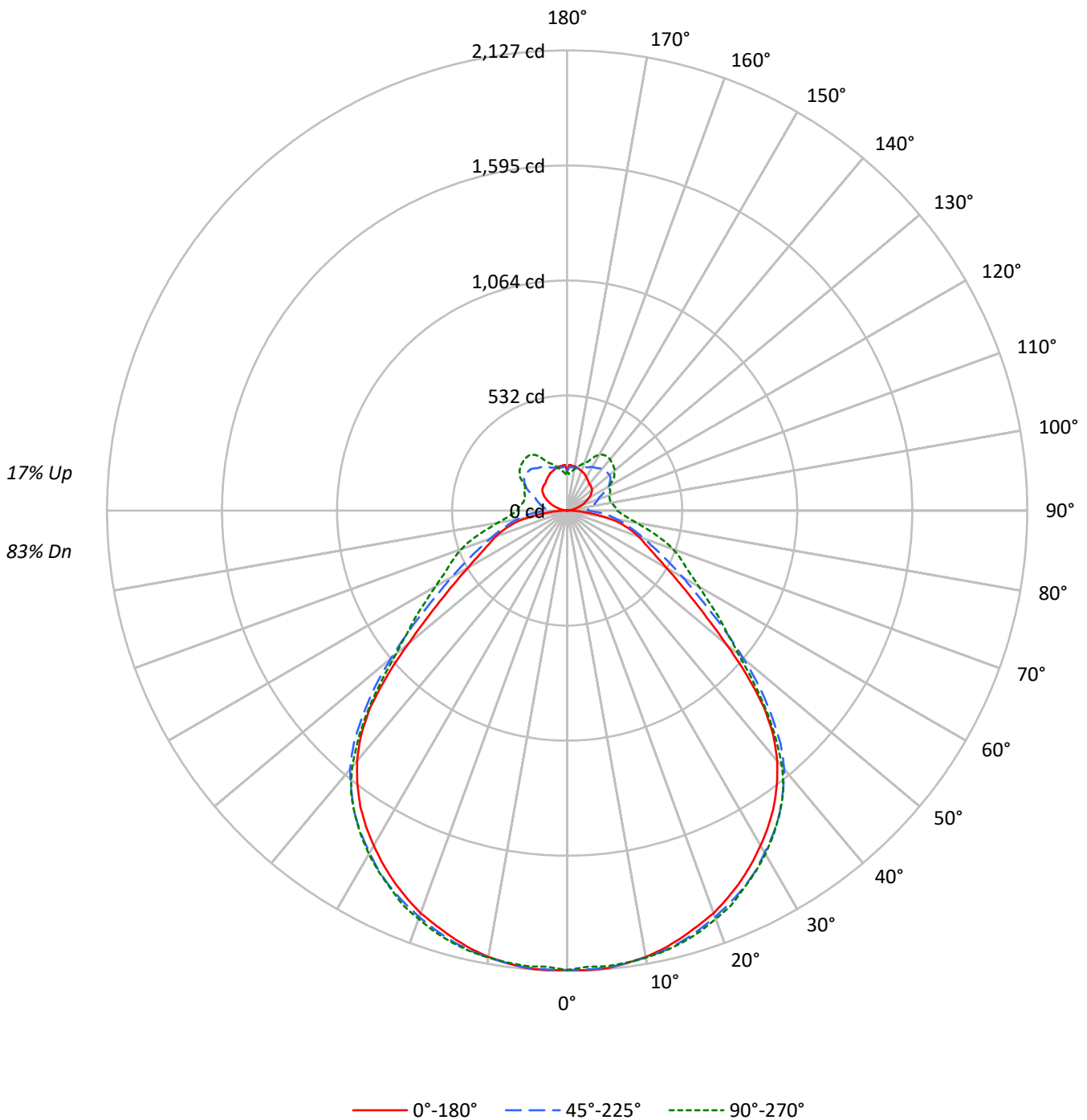
Lumens per Lamp: N/A
Luminaire Lumens: 6595.0 lumens
Efficiency: N/A
Efficacy: 102.1 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.35
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 4' x H: 0.12')
CIE Type: Semi-Direct

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			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°	5714	5714	5714
5°	5720	5673	5648
10°	5692	5623	5609
15°	5646	5573	5569
20°	5606	5503	5501
25°	5542	5437	5411
30°	5458	5335	5312
35°	5358	5219	5170
40°	5170	5020	4914
45°	4749	4574	4396
50°	3867	3933	3770
55°	3141	3261	3394
60°	2706	2784	3108
65°	2515	2466	3014
70°	2545	2274	3048
75°	2587	2210	2966
80°	2396	2251	2954
85°	1743	2352	3369



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	201.4	3.1
10°-20°	580.1	8.8
20°-30°	882.6	13.4
30°-40°	1058.5	16.0
40°-50°	1007.6	15.3
50°-60°	717.5	10.9
60°-70°	487.8	7.4
70°-80°	329.1	5.0
80°-90°	188.7	2.9
90°-100°	121.8	1.8
100°-110°	137.2	2.1
110°-120°	170.4	2.6
120°-130°	195.5	3.0
130°-140°	185.9	2.8
140°-150°	150.5	2.3
150°-160°	103.6	1.6
160°-170°	58.3	0.9
170°-180°	18.7	0.3
0°-30°	1664.1	25.2
0°-40°	2722.5	41.3
0°-60°	4447.6	67.4
0°-90°	5453.1	82.7
90°-120°	429.4	6.5
90°-150°	961.3	14.6
90°-180°	1142.0	17.3
0°-180°	6595.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2124	2124	2124	2124	2124	
5°	2124	2111	2120	2117	2114	202
15°	2044	2040	2060	2069	2066	577
25°	1894	1897	1926	1932	1929	872
35°	1667	1676	1712	1712	1712	1039
45°	1287	1319	1335	1335	1300	974
55°	699	770	805	811	853	639
65°	422	450	479	508	600	424
75°	278	233	300	358	418	289
85°	77	109	172	240	265	85
90°	0	48	96	182	230	5
95°	6	45	99	185	220	9
105°	45	67	134	185	204	48
115°	93	147	182	204	220	92
125°	134	179	243	262	265	120
135°	156	188	256	294	300	121
145°	169	188	240	294	310	106
155°	188	192	220	256	262	86
165°	201	201	204	208	214	57
175°	211	211	201	176	179	20
180°	179	179	179	179	179	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2123.5	2123.5	2123.5	2123.5	2123.5
2.5°	2126.7	2117.1	2123.5	2123.5	2110.7
5°	2123.5	2110.7	2120.3	2117.1	2113.9
7.5°	2110.7	2101.1	2110.7	2113.9	2107.5
10°	2094.7	2085.2	2097.9	2101.1	2097.9
12.5°	2072.4	2066.0	2082.0	2088.4	2085.2
15°	2043.6	2040.5	2059.6	2069.2	2066.0
17.5°	2011.7	2008.5	2030.9	2043.6	2040.5
20°	1979.8	1976.6	1998.9	2008.5	2008.5
22.5°	1938.3	1938.3	1963.8	1973.4	1976.6
25°	1893.6	1896.8	1925.5	1931.9	1928.7
27.5°	1842.5	1845.7	1880.8	1884.0	1884.0
30°	1788.2	1794.6	1826.5	1829.7	1832.9
32.5°	1730.7	1737.1	1772.2	1772.2	1775.4
35°	1666.8	1676.4	1711.6	1711.6	1711.6
37.5°	1593.4	1606.2	1638.1	1638.1	1641.3
40°	1510.4	1529.5	1561.5	1558.3	1545.5
42.5°	1411.4	1436.9	1459.3	1456.1	1427.4
45°	1286.9	1318.8	1334.8	1334.8	1299.6
47.5°	1127.2	1175.1	1203.8	1191.1	1162.3
50°	958.0	1028.2	1063.3	1056.9	1034.6
52.5°	814.3	894.1	929.2	926.0	932.4
55°	699.3	769.6	804.7	811.1	852.6
57.5°	606.7	670.6	699.3	718.5	769.6
60°	530.1	587.5	616.3	635.4	702.5
62.5°	469.4	514.1	542.8	565.2	645.0
65°	421.5	450.2	479.0	507.7	600.3
67.5°	383.2	389.6	421.5	463.0	562.0
70°	351.3	328.9	376.8	424.7	520.5
72.5°	316.1	277.8	338.5	386.4	472.6
75°	277.8	233.1	300.2	357.6	418.3
77.5°	236.3	194.8	268.2	325.7	367.2
80°	182.0	166.0	236.3	297.0	325.7
82.5°	127.7	137.3	204.4	271.4	290.6
85°	76.6	108.6	172.4	239.5	265.0
87.5°	35.1	79.8	130.9	207.6	245.9
90°	0.0	47.9	95.8	182.0	229.9
92.5°	3.2	47.9	95.8	185.2	226.7
95°	6.4	44.7	99.0	185.2	220.3
97.5°	12.8	44.7	108.6	182.0	213.9
100°	22.4	47.9	118.1	182.0	207.6
102.5°	31.9	51.1	127.7	185.2	204.4
105°	44.7	67.1	134.1	185.2	204.4
107.5°	57.5	89.4	143.7	188.4	204.4
110°	70.3	115.0	153.3	191.6	207.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	83.0	134.1	159.7	201.2	213.9
115°	92.6	146.9	182.0	204.4	220.3
117.5°	105.4	156.5	204.4	207.6	220.3
120°	115.0	166.0	220.3	220.3	223.5
122.5°	127.7	172.4	233.1	245.9	242.7
125°	134.1	178.8	242.7	261.8	265.0
127.5°	143.7	182.0	252.3	271.4	274.6
130°	150.1	185.2	255.5	281.0	287.4
132.5°	153.3	185.2	255.5	287.4	293.8
135°	156.5	188.4	255.5	293.8	300.2
137.5°	159.7	185.2	255.5	297.0	303.4
140°	159.7	185.2	252.3	297.0	309.7
142.5°	162.9	185.2	245.9	297.0	309.7
145°	169.2	188.4	239.5	293.8	309.7
147.5°	172.4	188.4	236.3	287.4	306.5
150°	178.8	188.4	233.1	277.8	297.0
152.5°	182.0	188.4	226.7	268.2	284.2
155°	188.4	191.6	220.3	255.5	261.8
157.5°	191.6	191.6	217.1	242.7	242.7
160°	194.8	194.8	210.8	229.9	233.1
162.5°	198.0	198.0	207.6	217.1	223.5
165°	201.2	201.2	204.4	207.6	213.9
167.5°	204.4	204.4	201.2	194.8	204.4
170°	207.6	207.6	201.2	185.2	194.8
172.5°	207.6	210.8	201.2	178.8	185.2
175°	210.8	210.8	201.2	175.6	178.8
177.5°	210.8	210.8	201.2	169.2	169.2
180°	178.8	178.8	178.8	178.8	178.8

(END OF REPORT)