

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: P234521

Luminaire Tested: **4WSNLED-LD4-56HL-F-UNV-L835-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P234521
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-LD4-56HL-F-UNV-L835-CD1-U
Description: 4FT WSNLED WRAPAROUND
Light Source: (224) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

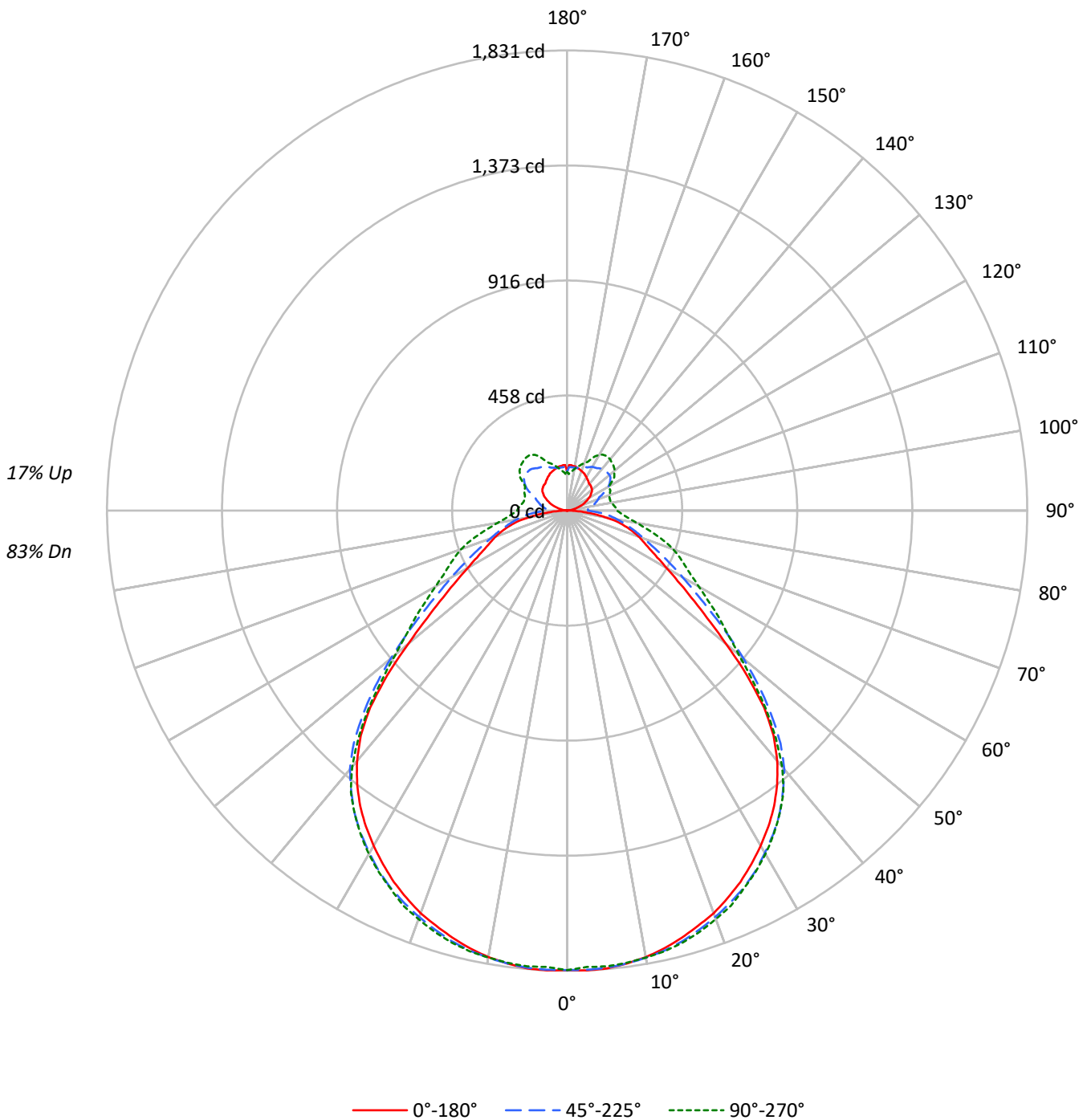
Lumens per Lamp: N/A
Luminaire Lumens: 5679.0 lumens
Efficiency: N/A
Efficacy: 105.0 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.35
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 4' x H: 0.12')
CIE Type: Semi-Direct

Input Watts (W): 54.1
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°	4920	4920	4920
5°	4926	4885	4864
10°	4902	4842	4830
15°	4862	4799	4796
20°	4827	4739	4737
25°	4772	4682	4660
30°	4700	4594	4574
35°	4614	4494	4452
40°	4452	4323	4231
45°	4089	3939	3786
50°	3329	3387	3246
55°	2705	2808	2923
60°	2330	2397	2676
65°	2166	2123	2596
70°	2192	1959	2625
75°	2227	1903	2554
80°	2063	1939	2544
85°	1501	2026	2901



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.4	3.1
10°-20°	499.6	8.8
20°-30°	760.0	13.4
30°-40°	911.4	16.0
40°-50°	867.6	15.3
50°-60°	617.8	10.9
60°-70°	420.0	7.4
70°-80°	283.4	5.0
80°-90°	162.5	2.9
90°-100°	104.9	1.8
100°-110°	118.1	2.1
110°-120°	146.8	2.6
120°-130°	168.3	3.0
130°-140°	160.0	2.8
140°-150°	129.6	2.3
150°-160°	89.2	1.6
160°-170°	50.2	0.9
170°-180°	16.1	0.3
0°-30°	1432.9	25.2
0°-40°	2344.4	41.3
0°-60°	3829.9	67.4
0°-90°	4695.7	82.7
90°-120°	369.7	6.5
90°-150°	827.7	14.6
90°-180°	983.0	17.3
0°-180°	5679.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1828	1828	1828	1828	1828	
5°	1828	1818	1826	1823	1820	174
15°	1760	1757	1774	1782	1779	497
25°	1631	1633	1658	1664	1661	751
35°	1435	1444	1474	1474	1474	895
45°	1108	1136	1149	1149	1119	838
55°	602	663	693	698	734	550
65°	363	388	412	437	517	365
75°	239	201	258	308	360	249
85°	66	94	148	206	228	73
90°	0	41	82	157	198	5
95°	6	38	85	160	190	7
105°	38	58	116	160	176	41
115°	80	126	157	176	190	80
125°	116	154	209	226	228	104
135°	135	162	220	253	258	104
145°	146	162	206	253	267	91
155°	162	165	190	220	226	74
165°	173	173	176	179	184	49
175°	182	182	173	151	154	17
180°	154	154	154	154	154	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1828.5	1828.5	1828.5	1828.5	1828.5
2.5°	1831.3	1823.0	1828.5	1828.5	1817.5
5°	1828.5	1817.5	1825.8	1823.0	1820.3
7.5°	1817.5	1809.3	1817.5	1820.3	1814.8
10°	1803.8	1795.5	1806.5	1809.3	1806.5
12.5°	1784.5	1779.0	1792.8	1798.3	1795.5
15°	1759.8	1757.0	1773.5	1781.8	1779.0
17.5°	1732.3	1729.6	1748.8	1759.8	1757.0
20°	1704.8	1702.1	1721.3	1729.6	1729.6
22.5°	1669.1	1669.1	1691.1	1699.3	1702.1
25°	1630.6	1633.3	1658.1	1663.6	1660.8
27.5°	1586.6	1589.3	1619.6	1622.3	1622.3
30°	1539.8	1545.3	1572.8	1575.6	1578.3
32.5°	1490.3	1495.8	1526.1	1526.1	1528.8
35°	1435.3	1443.6	1473.8	1473.8	1473.8
37.5°	1372.1	1383.1	1410.6	1410.6	1413.3
40°	1300.6	1317.1	1344.6	1341.8	1330.8
42.5°	1215.4	1237.4	1256.6	1253.9	1229.1
45°	1108.1	1135.6	1149.4	1149.4	1119.1
47.5°	970.6	1011.9	1036.6	1025.6	1000.9
50°	824.9	885.4	915.6	910.1	890.9
52.5°	701.2	769.9	800.2	797.4	802.9
55°	602.2	662.7	692.9	698.4	734.2
57.5°	522.4	577.4	602.2	618.7	662.7
60°	456.4	505.9	530.7	547.2	604.9
62.5°	404.2	442.7	467.4	486.7	555.4
65°	363.0	387.7	412.5	437.2	516.9
67.5°	330.0	335.5	363.0	398.7	483.9
70°	302.5	283.2	324.5	365.7	448.2
72.5°	272.2	239.2	291.5	332.7	407.0
75°	239.2	200.7	258.5	308.0	360.2
77.5°	203.5	167.7	231.0	280.5	316.2
80°	156.7	143.0	203.5	255.7	280.5
82.5°	110.0	118.2	176.0	233.7	250.2
85°	66.0	93.5	148.5	206.2	228.2
87.5°	30.2	68.7	112.7	178.7	211.7
90°	0.0	41.2	82.5	156.7	198.0
92.5°	2.7	41.2	82.5	159.5	195.2
95°	5.5	38.5	85.2	159.5	189.7
97.5°	11.0	38.5	93.5	156.7	184.2
100°	19.2	41.2	101.7	156.7	178.7
102.5°	27.5	44.0	110.0	159.5	176.0
105°	38.5	57.7	115.5	159.5	176.0
107.5°	49.5	77.0	123.7	162.2	176.0
110°	60.5	99.0	132.0	165.0	178.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	71.5	115.5	137.5	173.2	184.2
115°	79.7	126.5	156.7	176.0	189.7
117.5°	90.7	134.7	176.0	178.7	189.7
120°	99.0	143.0	189.7	189.7	192.5
122.5°	110.0	148.5	200.7	211.7	209.0
125°	115.5	154.0	209.0	225.5	228.2
127.5°	123.7	156.7	217.2	233.7	236.5
130°	129.2	159.5	220.0	242.0	247.5
132.5°	132.0	159.5	220.0	247.5	253.0
135°	134.7	162.2	220.0	253.0	258.5
137.5°	137.5	159.5	220.0	255.7	261.2
140°	137.5	159.5	217.2	255.7	266.7
142.5°	140.2	159.5	211.7	255.7	266.7
145°	145.7	162.2	206.2	253.0	266.7
147.5°	148.5	162.2	203.5	247.5	264.0
150°	154.0	162.2	200.7	239.2	255.7
152.5°	156.7	162.2	195.2	231.0	244.7
155°	162.2	165.0	189.7	220.0	225.5
157.5°	165.0	165.0	187.0	209.0	209.0
160°	167.7	167.7	181.5	198.0	200.7
162.5°	170.5	170.5	178.7	187.0	192.5
165°	173.2	173.2	176.0	178.7	184.2
167.5°	176.0	176.0	173.2	167.7	176.0
170°	178.7	178.7	173.2	159.5	167.7
172.5°	178.7	181.5	173.2	154.0	159.5
175°	181.5	181.5	173.2	151.2	154.0
177.5°	181.5	181.5	173.2	145.7	145.7
180°	154.0	154.0	154.0	154.0	154.0

(END OF REPORT)