

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: P#

Luminaire Tested: **4ILED-LD5-7-W-ASY-UNV-L850-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P#  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P34179)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4ILED-LD5-7-W-ASY-UNV-L850-CD1-U  
Description: Metalux 4' ILED WITH ASYMMETRIC DIRECTIONAL LOUVER DISTRIBUTION

Light Source: (1) 5000 CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

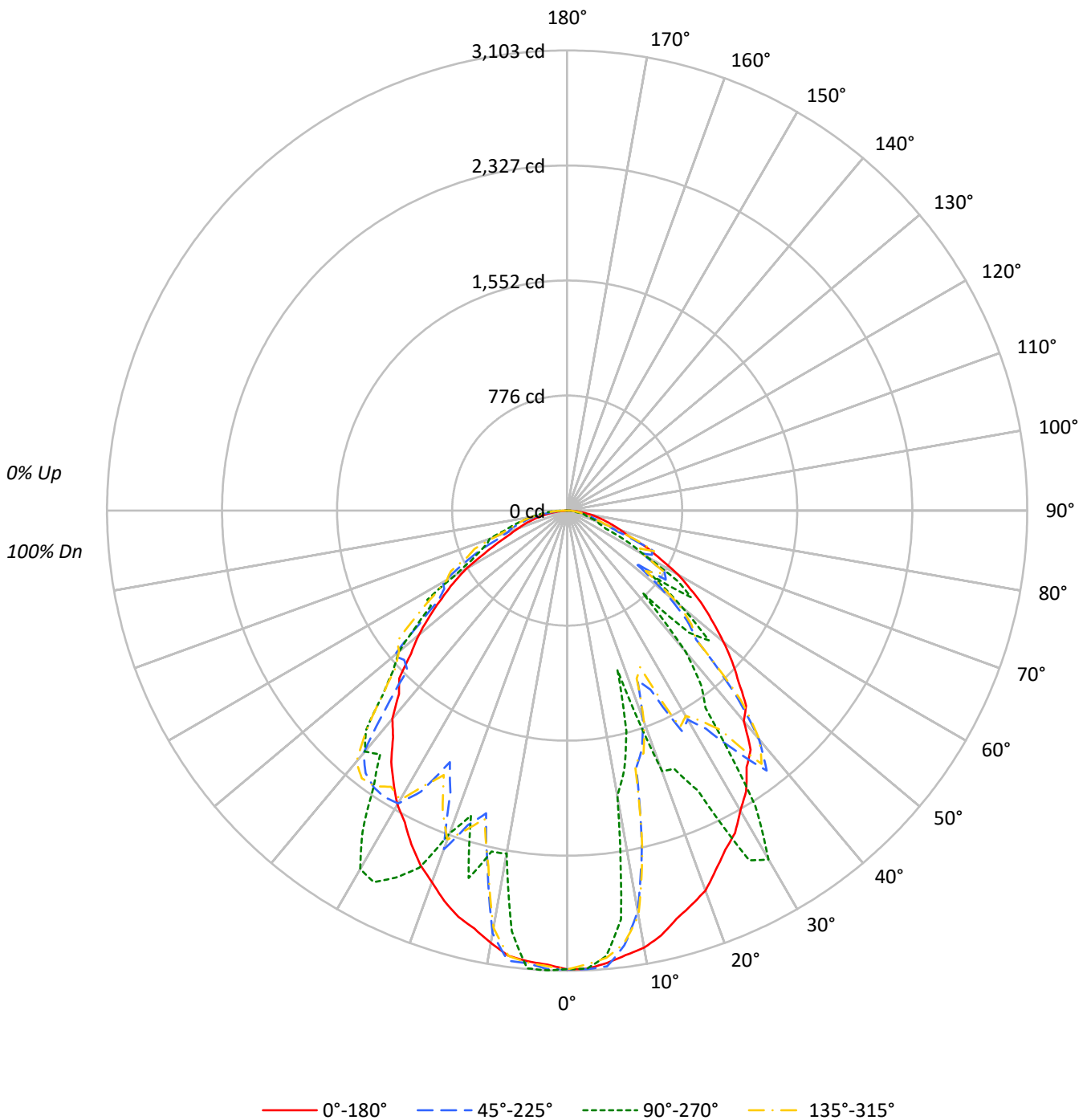
Lumens per Lamp: N/A  
Luminaire Lumens: 6092.0 lumens  
Efficiency: N/A  
Efficacy: 120.9 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.25 / 1.27  
Luminous Opening: Rectangular w/ Sides (W: 0.92' x L: 4' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 50.4  
Input Voltage (V):  
Input Current (A<sub>in</sub>): 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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86
2	101	93	87	81	98	91	85	80	88	83	79	84	80	77	81	78	75	73
3	92	82	75	69	90	81	74	68	78	72	67	75	70	66	73	68	65	63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	60	56	54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	34	29	28

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	9081	9081	9081	9081
5°	9006	8805	8972	9045
10°	8884	5712	8787	6871
15°	8604	4550	8559	7575
20°	8441	5618	8252	6951
25°	8079	6419	7954	8414
30°	7804	8661	7650	8900
35°	7435	5411	7283	7573
40°	6951	4355	6880	7449
45°	6626	4356	6481	6581
50°	6095	4055	5796	5981
55°	5537	4513	5099	4966
60°	4858	2967	4413	4289
65°	3926	1614	3405	3625
70°	3064	1413	2827	3668
75°	2712	1045	2483	2990
80°	2434	727	2045	2444
85°	2043	537	1326	2007



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	281.5	4.6
10°-20°	653.8	10.7
20°-30°	973.1	16.0
30°-40°	1227.3	20.1
40°-50°	1111.6	18.2
50°-60°	924.2	15.2
60°-70°	558.3	9.2
70°-80°	276.9	4.5
80°-90°	85.2	1.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1908.4	31.3
0°-40°	3135.8	51.5
0°-60°	5171.5	84.9
0°-90°	6092.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6092.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	3093	3093	3093	3093	3093	
5°	3063	3016	3051	3099	3063	290
15°	2850	1541	2835	2565	2850	806
25°	2523	2083	2484	2730	2523	1167
35°	2111	1625	2068	2274	2111	1326
45°	1636	1164	1600	1758	1636	1262
55°	1120	1019	1032	1121	1120	997
65°	596	287	516	644	596	585
75°	261	130	239	371	261	280
85°	78	36	51	134	78	86
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	3093.4	3093.4	3093.4	3093.4	3093.4	3093.4	3093.4	3093.4	3093.4	3093.4	3093.4
2.5°	3092.4	3110.3	3095.6	3092.4	3091.3	3094.5	3062.9	3053.4	3063.9	3095.6	3094.5
5°	3062.9	3089.2	3085.0	3040.7	3016.5	3042.9	3028.1	3030.2	3051.3	3073.4	3062.9
7.5°	3023.9	3056.6	2957.5	2832.1	2780.4	2845.8	2942.7	3018.6	3028.1	3063.9	3061.8
10°	2993.3	3022.8	2742.5	2315.6	1953.0	2239.7	2772.0	2957.5	2960.6	3010.2	2894.2
12.5°	2933.2	2891.1	2328.3	1815.0	1784.4	1832.9	2344.1	2821.5	2887.9	2921.6	2474.8
15°	2850.0	2724.6	1798.1	1586.2	1540.9	1592.6	1766.5	2703.5	2835.2	2866.8	2113.2
17.5°	2787.8	2550.6	1679.0	1405.0	1126.7	1340.7	1714.8	2603.3	2759.3	2708.7	2223.9
20°	2726.7	2375.7	1491.4	1528.3	1869.8	1520.9	1514.6	2409.4	2665.5	2364.1	2430.5
22.5°	2621.3	2001.5	1236.3	1822.3	1884.5	1804.4	1226.8	2069.0	2586.5	2134.3	2056.3
25°	2523.2	1659.0	1332.2	1891.9	2082.7	1865.6	1163.6	1640.0	2484.2	1908.8	1870.8
27.5°	2450.5	1565.2	1676.9	2175.4	2659.2	2025.8	1647.4	1514.6	2370.4	1805.5	2137.5
30°	2335.6	1434.5	1627.4	2656.0	2716.1	2608.6	1598.9	1456.6	2289.3	1910.9	2279.8
32.5°	2245.0	1274.3	1744.3	2505.3	2363.0	2492.7	1679.0	1358.6	2178.6	2011.0	2291.4
35°	2111.1	1207.9	1974.1	2191.2	1625.2	2121.7	1806.5	1247.9	2067.9	1858.2	2275.6
37.5°	2032.1	993.9	2210.2	1486.1	1485.1	1488.2	2153.3	1100.4	1926.7	1577.8	2232.3
40°	1851.9	1075.1	2013.1	1358.6	1240.5	1387.0	2018.4	898.0	1832.9	1394.4	2135.4
42.5°	1786.5	1206.8	1675.8	1116.2	752.5	1184.7	1735.9	1138.3	1679.0	1456.6	1811.8
45°	1635.8	1175.2	1232.1	706.2	1163.6	753.6	1226.8	1125.7	1600.0	1535.7	1523.0
47.5°	1509.3	1102.5	1097.2	1084.6	1296.4	1052.9	1137.3	1057.1	1428.2	1493.5	1490.3
50°	1374.4	1140.4	874.8	1140.4	1003.4	1156.2	972.8	995.0	1306.9	1400.7	1522.0
52.5°	1240.5	1193.1	574.4	852.7	727.3	882.2	668.2	982.3	1167.8	1316.4	1257.4
55°	1120.4	1185.7	811.6	732.5	1019.2	697.7	732.5	1088.8	1031.9	1184.7	1059.3
57.5°	985.5	1001.3	781.0	893.8	882.2	938.0	785.2	965.5	911.7	1054.0	983.4
60°	863.2	745.2	574.4	698.8	600.8	776.8	585.0	795.8	784.2	828.4	965.5
62.5°	707.2	602.9	645.0	511.2	471.1	503.8	553.3	576.5	627.1	702.0	801.0
65°	595.5	476.4	635.6	325.7	286.7	381.5	647.1	509.1	516.5	635.6	667.2
67.5°	445.8	351.0	364.7	261.4	236.1	256.1	455.3	394.2	414.2	470.1	514.3
70°	381.5	312.0	264.6	215.0	214.0	216.1	285.6	294.1	352.0	396.3	425.8
72.5°	318.3	257.2	210.8	177.1	160.2	195.0	208.7	242.4	298.3	471.1	388.9
75°	261.4	297.2	170.7	145.5	129.6	142.3	167.6	220.3	239.3	293.0	318.3
77.5°	210.8	172.9	133.9	121.2	115.9	125.4	129.6	229.8	187.6	226.6	268.8
80°	164.4	128.6	104.3	81.2	69.6	79.0	103.3	117.0	138.1	168.6	200.3
82.5°	118.0	98.0	72.7	59.0	50.6	58.0	68.5	82.2	93.8	115.9	140.2
85°	78.0	64.3	51.6	42.2	35.8	41.1	46.4	51.6	50.6	69.6	89.6
87.5°	39.0	34.8	34.8	30.6	25.3	28.5	31.6	27.4	14.8	30.6	54.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	3093.4	3093.4	3093.4	3093.4	3093.4	3093.4
2.5°	3094.5	3102.9	3100.8	3074.5	3076.6	3092.4
5°	3072.4	3098.7	3092.4	3058.7	3056.6	3062.9
7.5°	2965.9	2860.5	3015.5	3029.2	3017.6	3023.9
10°	2420.0	2349.3	2528.5	2857.4	2994.4	2993.3
12.5°	2172.3	2355.7	2208.1	2456.8	2929.0	2933.2
15°	2476.9	2565.4	2511.6	2150.1	2855.2	2850.0
17.5°	2318.8	2156.5	2339.8	2255.5	2761.4	2787.8
20°	2067.9	2313.5	2092.2	2360.9	2432.6	2726.7
22.5°	2509.5	2606.5	2411.5	2191.2	2201.8	2621.3
25°	2571.7	2729.8	2523.2	1967.8	2005.7	2523.2
27.5°	2644.4	2824.7	2628.6	2091.1	1887.7	2450.5
30°	2675.0	2791.0	2723.5	2251.3	1924.6	2335.6
32.5°	2616.0	2569.6	2676.1	2209.2	1899.3	2245.0
35°	2309.3	2274.5	2436.8	2267.1	1876.1	2111.1
37.5°	1959.4	2071.1	2139.6	2275.6	1711.7	2032.1
40°	1929.8	2121.7	1976.2	2209.2	1567.3	1851.9
42.5°	1975.2	2007.8	1936.2	1999.4	1448.2	1786.5
45°	1757.0	1758.0	1874.0	1760.2	1460.8	1635.8
47.5°	1529.3	1588.4	1642.1	1568.3	1450.3	1509.3
50°	1342.8	1479.8	1472.4	1480.8	1351.2	1374.4
52.5°	1342.8	1285.9	1300.6	1440.8	1289.0	1240.5
55°	1142.5	1121.4	1217.4	1240.5	1238.4	1120.4
57.5°	1013.9	1118.3	1047.7	1067.7	1113.0	985.5
60°	900.1	868.5	1003.4	935.9	986.5	863.2
62.5°	703.0	730.4	777.8	884.3	824.2	707.2
65°	601.8	644.0	673.5	739.9	667.2	595.5
67.5°	567.0	585.0	576.5	677.7	573.4	445.8
70°	498.5	555.5	517.5	508.0	473.2	381.5
72.5°	415.3	433.2	473.2	404.7	365.7	318.3
75°	354.1	371.0	374.2	349.9	359.4	261.4
77.5°	281.4	299.3	297.2	298.3	297.2	210.8
80°	221.3	234.0	234.0	228.7	200.3	164.4
82.5°	166.5	179.2	182.3	165.5	148.6	118.0
85°	119.1	133.9	132.8	118.0	98.0	78.0
87.5°	76.9	93.8	95.9	75.9	58.0	39.0
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)