

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-LD5-9-W-ASY-UNV-L835-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-LD5-9-W-ASY-UNV-L835-CD1-U  
Description: Metalux 4' ILED WITH ASYMMETRIC DIRECTIONAL LOUVER DISTRIBUTION

Light Source: (1) 3500 CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

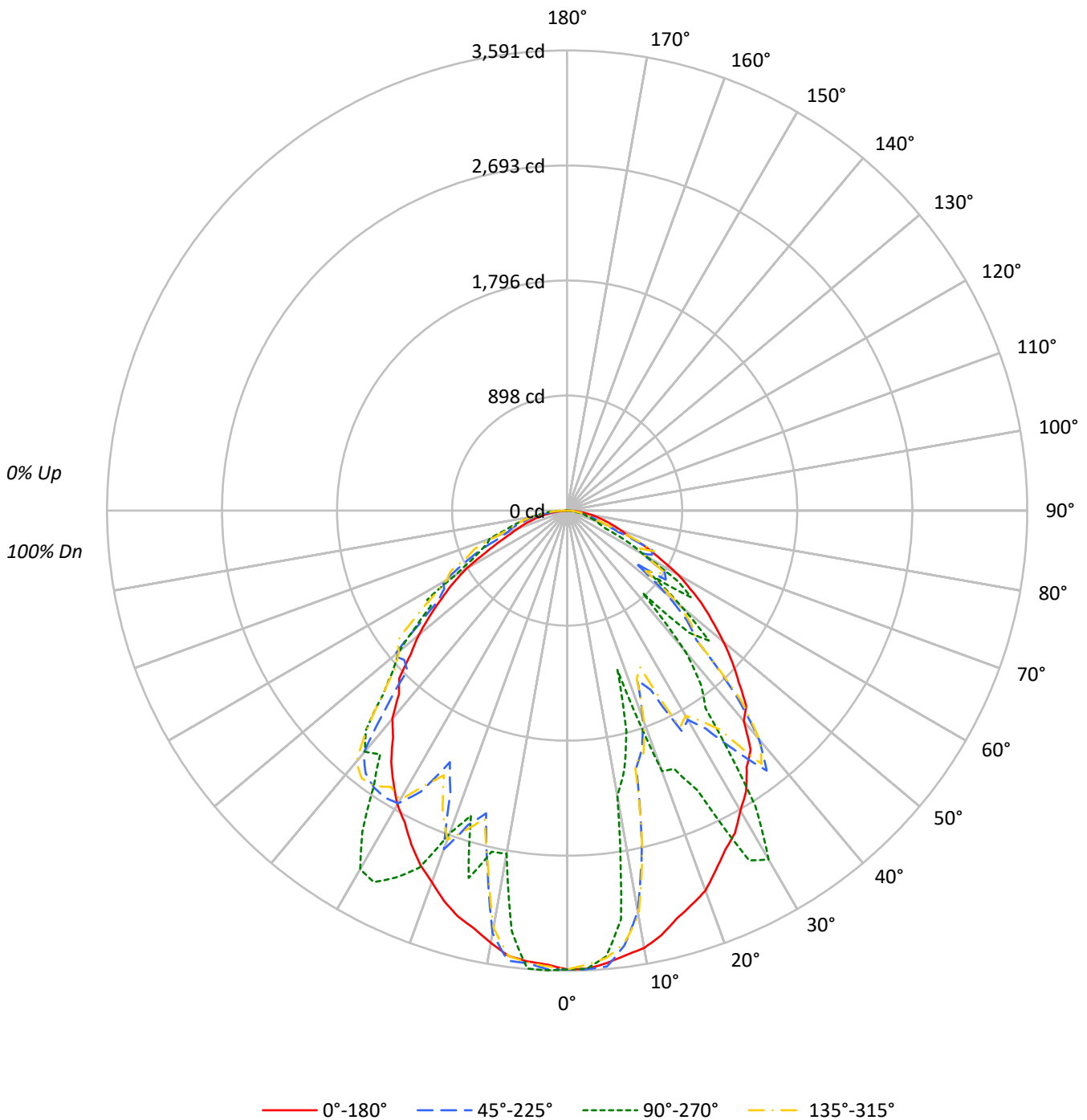
Lumens per Lamp: N/A  
Luminaire Lumens: 7051.0 lumens  
Efficiency: N/A  
Efficacy: 107.3 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.25 / 1.27  
Luminous Opening: Rectangular w/ Sides (W: 0.92' x L: 4' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 65.7  
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°	10511	10511	10511	10511
5°	10424	10191	10384	10469
10°	10282	6611	10170	7953
15°	9958	5266	9907	8768
20°	9770	6502	9551	8046
25°	9350	7430	9206	9739
30°	9033	10025	8854	10301
35°	8606	6263	8430	8765
40°	8045	5041	7963	8621
45°	7668	5041	7500	7617
50°	7055	4693	6709	6922
55°	6408	5223	5902	5748
60°	5622	3433	5108	4964
65°	4544	1868	3941	4196
70°	3547	1635	3272	4246
75°	3138	1209	2873	3461
80°	2818	841	2366	2828
85°	2366	622	1535	2322



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	325.8	4.6
10°-20°	756.7	10.7
20°-30°	1126.3	16.0
30°-40°	1420.5	20.1
40°-50°	1286.6	18.2
50°-60°	1069.7	15.2
60°-70°	646.2	9.2
70°-80°	320.5	4.5
80°-90°	98.7	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°	2208.9	31.3
0°-40°	3629.4	51.5
0°-60°	5985.6	84.9
0°-90°	7051.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7051.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	3580	3580	3580	3580	3580	
5°	3545	3491	3532	3586	3545	336
15°	3299	1784	3282	2969	3299	933
25°	2920	2410	2875	3160	2920	1350
35°	2444	1881	2394	2633	2444	1535
45°	1893	1347	1852	2035	1893	1460
55°	1297	1180	1194	1298	1297	1154
65°	689	332	598	745	689	677
75°	302	150	277	429	302	325
85°	90	42	59	155	90	100
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°	3580.4	3580.4	3580.4	3580.4	3580.4	3580.4	3580.4	3580.4	3580.4	3580.4	3580.4
2.5°	3579.2	3599.9	3582.9	3579.2	3578.0	3581.6	3545.0	3534.1	3546.3	3582.9	3581.6
5°	3545.0	3575.5	3570.7	3519.4	3491.4	3521.9	3504.8	3507.2	3531.6	3557.2	3545.0
7.5°	3499.9	3537.7	3423.0	3277.9	3218.1	3293.7	3406.0	3493.8	3504.8	3546.3	3543.8
10°	3464.5	3498.7	3174.2	2680.1	2260.5	2592.3	3208.3	3423.0	3426.7	3484.0	3349.9
12.5°	3395.0	3346.2	2694.8	2100.7	2065.3	2121.4	2713.1	3265.7	3342.5	3381.6	2864.3
15°	3298.6	3153.5	2081.2	1836.0	1783.5	1843.3	2044.6	3129.1	3281.5	3318.1	2445.9
17.5°	3226.6	2952.2	1943.3	1626.1	1304.1	1551.7	1984.8	3013.2	3193.7	3135.2	2574.0
20°	3155.9	2749.7	1726.2	1768.9	2164.1	1760.3	1753.0	2788.7	3085.1	2736.2	2813.1
22.5°	3033.9	2316.6	1430.9	2109.2	2181.2	2088.5	1420.0	2394.7	2993.6	2470.3	2380.0
25°	2920.4	1920.1	1542.0	2189.7	2410.5	2159.2	1346.8	1898.2	2875.3	2209.2	2165.3
27.5°	2836.3	1811.6	1940.9	2517.9	3077.8	2344.7	1906.7	1753.0	2743.6	2089.7	2474.0
30°	2703.3	1660.3	1883.5	3074.2	3143.7	3019.3	1850.6	1685.9	2649.6	2211.7	2638.7
32.5°	2598.4	1474.9	2018.9	2899.7	2735.0	2885.1	1943.3	1572.5	2521.5	2327.6	2652.1
35°	2443.5	1398.0	2284.9	2536.2	1881.1	2455.7	2090.9	1444.4	2393.5	2150.7	2633.8
37.5°	2352.0	1150.4	2558.1	1720.1	1718.8	1722.5	2492.3	1273.6	2230.0	1826.2	2583.8
40°	2143.4	1244.3	2330.0	1572.5	1435.8	1605.4	2336.1	1039.4	2121.4	1613.9	2471.5
42.5°	2067.7	1396.8	1939.6	1291.9	871.0	1371.2	2009.2	1317.5	1943.3	1685.9	2097.0
45°	1893.3	1360.2	1426.1	817.3	1346.8	872.2	1420.0	1302.9	1851.8	1777.4	1762.8
47.5°	1746.9	1276.0	1269.9	1255.3	1500.5	1218.7	1316.3	1223.6	1653.0	1728.6	1724.9
50°	1590.8	1319.9	1012.5	1319.9	1161.3	1338.2	1126.0	1151.6	1512.7	1621.3	1761.5
52.5°	1435.8	1380.9	664.8	986.9	841.7	1021.1	773.4	1137.0	1351.7	1523.7	1455.3
55°	1296.8	1372.4	939.3	847.8	1179.6	807.6	847.8	1260.2	1194.3	1371.2	1226.0
57.5°	1140.6	1158.9	903.9	1034.5	1021.1	1085.7	908.8	1117.4	1055.2	1219.9	1138.2
60°	999.1	862.5	664.8	808.8	695.3	899.1	677.0	921.0	907.6	958.8	1117.4
62.5°	818.6	697.8	746.6	591.7	545.3	583.1	640.4	667.3	725.8	812.5	927.1
65°	689.2	551.4	735.6	377.0	331.8	441.6	749.0	589.2	597.8	735.6	772.2
67.5°	516.0	406.2	422.1	302.5	273.3	296.4	527.0	456.2	479.4	544.1	595.3
70°	441.6	361.1	306.2	248.9	247.6	250.1	330.6	340.4	407.4	458.7	492.8
72.5°	368.4	297.7	244.0	204.9	185.4	225.7	241.5	280.6	345.2	545.3	450.1
75°	302.5	344.0	197.6	168.3	150.0	164.7	194.0	255.0	276.9	339.1	368.4
77.5°	244.0	200.1	154.9	140.3	134.2	145.2	150.0	265.9	217.1	262.3	311.1
80°	190.3	148.8	120.8	93.9	80.5	91.5	119.6	135.4	159.8	195.2	231.8
82.5°	136.6	113.5	84.2	68.3	58.6	67.1	79.3	95.2	108.6	134.2	162.2
85°	90.3	74.4	59.8	48.8	41.5	47.6	53.7	59.8	58.6	80.5	103.7
87.5°	45.1	40.3	40.3	35.4	29.3	32.9	36.6	31.7	17.1	35.4	63.4
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°	3580.4	3580.4	3580.4	3580.4	3580.4	3580.4
2.5°	3581.6	3591.4	3589.0	3558.5	3560.9	3579.2
5°	3556.0	3586.5	3579.2	3540.2	3537.7	3545.0
7.5°	3432.8	3310.8	3490.1	3506.0	3492.6	3499.9
10°	2800.9	2719.2	2926.5	3307.2	3465.7	3464.5
12.5°	2514.2	2726.5	2555.7	2843.6	3390.1	3395.0
15°	2866.8	2969.2	2907.0	2488.6	3304.7	3298.6
17.5°	2683.8	2495.9	2708.2	2610.6	3196.1	3226.6
20°	2393.5	2677.7	2421.5	2732.6	2815.5	3155.9
22.5°	2904.6	3016.8	2791.1	2536.2	2548.4	3033.9
25°	2976.6	3159.6	2920.4	2277.6	2321.5	2920.4
27.5°	3060.7	3269.3	3042.4	2420.3	2184.8	2836.3
30°	3096.1	3230.3	3152.2	2605.7	2227.5	2703.3
32.5°	3027.8	2974.1	3097.3	2556.9	2198.3	2598.4
35°	2672.8	2632.6	2820.4	2624.0	2171.4	2443.5
37.5°	2267.8	2397.1	2476.4	2633.8	1981.1	2352.0
40°	2233.6	2455.7	2287.3	2556.9	1814.0	2143.4
42.5°	2286.1	2323.9	2241.0	2314.2	1676.1	2067.7
45°	2033.6	2034.8	2169.0	2037.2	1690.8	1893.3
47.5°	1770.1	1838.4	1900.6	1815.2	1678.6	1746.9
50°	1554.2	1712.7	1704.2	1714.0	1563.9	1590.8
52.5°	1554.2	1488.3	1505.4	1667.6	1491.9	1435.8
55°	1322.4	1298.0	1409.0	1435.8	1433.4	1296.8
57.5°	1173.5	1294.3	1212.6	1235.8	1288.2	1140.6
60°	1041.8	1005.2	1161.3	1083.3	1141.8	999.1
62.5°	813.7	845.4	900.3	1023.5	954.0	818.6
65°	696.6	745.4	779.5	856.4	772.2	689.2
67.5°	656.3	677.0	667.3	784.4	663.6	516.0
70°	577.0	642.9	599.0	588.0	547.7	441.6
72.5°	480.6	501.4	547.7	468.4	423.3	368.4
75°	409.9	429.4	433.1	405.0	416.0	302.5
77.5°	325.7	346.5	344.0	345.2	344.0	244.0
80°	256.2	270.8	270.8	264.7	231.8	190.3
82.5°	192.7	207.4	211.0	191.5	172.0	136.6
85°	137.8	154.9	153.7	136.6	113.5	90.3
87.5°	89.1	108.6	111.0	87.8	67.1	45.1
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)