

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: **8ILED-LD5-18-W-ASY-UNV-L840-CD2-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: 8ILED-LD5-18-W-ASY-UNV-L840-CD2-U  
Description: Metalux 8' ILED WITH ASYMMETRIC DIRECTIONAL LOUVER DISTRIBUTION

Light Source: (1) 4000 CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

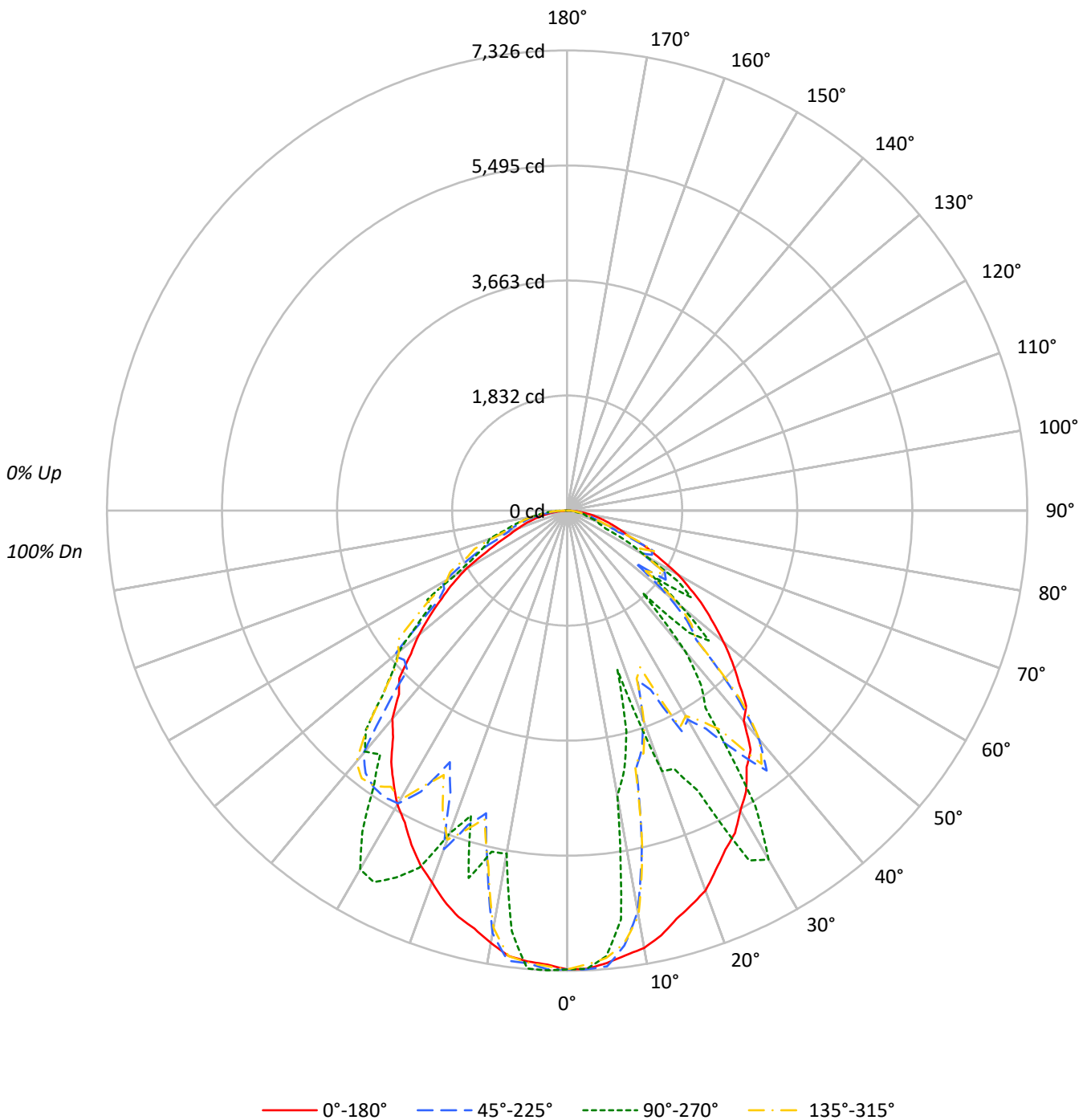
Lumens per Lamp: N/A  
Luminaire Lumens: 14384.0 lumens  
Efficiency: N/A  
Efficacy: 109.6 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.25 / 1.27  
Luminous Opening: Rectangular w/ Sides (W: 0.92' x L: 8' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 131.3  
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°	10721	10721	10721	10721
5°	10644	10395	10604	10678
10°	10511	6743	10396	8112
15°	10191	5372	10139	8943
20°	10011	6633	9786	8207
25°	9593	7579	9445	9933
30°	9280	10225	9096	10507
35°	8854	6388	8673	8940
40°	8291	5142	8206	8794
45°	7918	5142	7745	7769
50°	7301	4787	6943	7061
55°	6651	5328	6125	5863
60°	5857	3502	5320	5063
65°	4756	1905	4125	4280
70°	3738	1668	3449	4330
75°	3344	1234	3061	3531
80°	3064	857	2573	2885
85°	2714	634	1761	2369



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	664.7	4.6
10°-20°	1543.7	10.7
20°-30°	2297.7	16.0
30°-40°	2897.9	20.1
40°-50°	2624.6	18.2
50°-60°	2182.1	15.2
60°-70°	1318.3	9.2
70°-80°	653.8	4.5
80°-90°	201.2	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°	4506.1	31.3
0°-40°	7403.9	51.5
0°-60°	12210.6	84.9
0°-90°	14384.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14384.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	7304	7304	7304	7304	7304	
5°	7232	7122	7204	7316	7232	685
15°	6729	3638	6694	6057	6729	1903
25°	5958	4918	5866	6446	5958	2755
35°	4985	3837	4883	5370	4985	3132
45°	3862	2747	3778	4151	3862	2979
55°	2645	2406	2436	2648	2645	2354
65°	1406	677	1219	1520	1406	1382
75°	617	306	565	876	617	662
85°	184	85	120	316	184	204
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°	7304.0	7304.0	7304.0	7304.0	7304.0	7304.0	7304.0	7304.0	7304.0	7304.0	7304.0
2.5°	7301.5	7343.8	7309.0	7301.5	7299.1	7306.5	7231.9	7209.5	7234.3	7309.0	7306.5
5°	7231.9	7294.1	7284.1	7179.6	7122.4	7184.6	7149.7	7154.7	7204.5	7256.7	7231.9
7.5°	7139.8	7216.9	6983.0	6686.9	6564.9	6719.2	6948.2	7127.3	7149.7	7234.3	7229.4
10°	7067.6	7137.3	6475.3	5467.4	4611.4	5288.3	6545.0	6983.0	6990.5	7107.4	6833.7
12.5°	6925.8	6826.2	5497.3	4285.4	4213.2	4327.7	5534.6	6662.0	6818.8	6898.4	5843.2
15°	6729.2	6433.0	4245.5	3745.3	3638.3	3760.3	4170.9	6383.2	6694.3	6769.0	4989.6
17.5°	6582.3	6022.4	3964.3	3317.3	2660.3	3165.5	4048.9	6146.8	6515.1	6395.7	5250.9
20°	6438.0	5609.3	3521.4	3608.5	4414.8	3591.0	3576.1	5688.9	6293.7	5581.9	5738.7
22.5°	6189.1	4725.8	2919.1	4302.8	4449.6	4260.5	2896.7	4885.1	6107.0	5039.4	4855.3
25°	5957.7	3917.1	3145.6	4467.0	4917.5	4404.8	2747.4	3872.3	5865.6	4506.8	4417.3
27.5°	5786.0	3695.6	3959.4	5136.5	6278.7	4783.1	3889.7	3576.1	5596.9	4263.0	5046.9
30°	5514.7	3387.0	3842.4	6271.3	6413.1	6159.3	3775.2	3439.2	5405.2	4511.8	5382.8
32.5°	5300.7	3008.7	4118.6	5915.4	5579.4	5885.5	3964.3	3207.8	5143.9	4748.2	5410.2
35°	4984.7	2851.9	4661.1	5173.8	3837.4	5009.5	4265.5	2946.5	4882.6	4387.4	5372.9
37.5°	4798.0	2346.7	5218.6	3508.9	3506.4	3513.9	5084.2	2598.1	4549.2	3725.4	5270.8
40°	4372.5	2538.4	4753.2	3207.8	2929.1	3275.0	4765.7	2120.3	4327.7	3292.4	5041.9
42.5°	4218.2	2849.4	3956.9	2635.4	1776.9	2797.2	4098.7	2687.7	3964.3	3439.2	4277.9
45°	3862.3	2774.8	2909.2	1667.4	2747.4	1779.3	2896.7	2657.8	3777.7	3625.9	3596.0
47.5°	3563.7	2603.1	2590.6	2560.8	3061.0	2486.1	2685.2	2496.1	3372.0	3526.3	3518.9
50°	3245.1	2692.7	2065.5	2692.7	2369.1	2730.0	2297.0	2349.2	3085.9	3307.3	3593.5
52.5°	2929.1	2817.1	1356.3	2013.3	1717.1	2083.0	1577.8	2319.4	2757.4	3108.3	2968.9
55°	2645.4	2799.7	1916.2	1729.6	2406.5	1647.5	1729.6	2570.7	2436.3	2797.2	2501.0
57.5°	2326.8	2364.2	1844.0	2110.3	2083.0	2214.9	1854.0	2279.6	2152.6	2488.6	2321.9
60°	2038.2	1759.4	1356.3	1649.9	1418.5	1834.1	1381.2	1878.9	1851.5	1956.0	2279.6
62.5°	1669.8	1423.5	1523.0	1207.0	1112.4	1189.5	1306.5	1361.3	1480.7	1657.4	1891.3
65°	1406.1	1124.8	1500.6	769.0	676.9	900.9	1528.0	1202.0	1219.4	1500.6	1575.3
67.5°	1052.7	828.7	861.1	617.2	557.4	604.7	1075.1	930.7	978.0	1109.9	1214.4
70°	900.9	736.6	624.6	507.7	505.2	510.2	674.4	694.3	831.2	935.7	1005.4
72.5°	751.6	607.2	497.7	418.1	378.3	460.4	492.7	572.4	704.3	1112.4	918.3
75°	617.2	701.8	403.2	343.4	306.1	336.0	395.7	520.1	564.9	691.8	751.6
77.5°	497.7	408.1	316.1	286.2	273.7	296.1	306.1	542.5	443.0	535.0	634.6
80°	388.2	303.6	246.4	191.6	164.2	186.6	243.9	276.2	326.0	398.2	472.8
82.5°	278.7	231.4	171.7	139.4	119.5	136.9	161.8	194.1	221.5	273.7	331.0
85°	184.2	151.8	121.9	99.5	84.6	97.1	109.5	121.9	119.5	164.2	211.5
87.5°	92.1	82.1	82.1	72.2	59.7	67.2	74.7	64.7	34.8	72.2	129.4
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°	7304.0	7304.0	7304.0	7304.0	7304.0	7304.0
2.5°	7306.5	7326.4	7321.5	7259.2	7264.2	7301.5
5°	7254.3	7316.5	7301.5	7221.9	7216.9	7231.9
7.5°	7002.9	6754.1	7119.9	7152.2	7124.9	7139.8
10°	5713.8	5547.1	5970.1	6746.6	7070.1	7067.6
12.5°	5129.0	5562.0	5213.6	5800.9	6915.8	6925.8
15°	5848.2	6057.2	5930.3	5076.7	6741.6	6729.2
17.5°	5474.9	5091.7	5524.7	5325.6	6520.1	6582.3
20°	4882.6	5462.5	4939.9	5574.5	5743.7	6438.0
22.5°	5925.3	6154.3	5693.9	5173.8	5198.7	6189.1
25°	6072.2	6445.5	5957.7	4646.2	4735.8	5957.7
27.5°	6243.9	6669.4	6206.6	4937.4	4457.1	5786.0
30°	6316.1	6589.8	6430.5	5315.6	4544.2	5514.7
32.5°	6176.7	6067.2	6318.5	5216.1	4484.5	5300.7
35°	5452.5	5370.4	5753.6	5353.0	4429.7	4984.7
37.5°	4626.3	4890.1	5051.9	5372.9	4041.5	4798.0
40°	4556.6	5009.5	4666.1	5216.1	3700.5	4372.5
42.5°	4663.6	4740.8	4571.6	4720.9	3419.3	4218.2
45°	4148.5	4151.0	4424.7	4156.0	3449.2	3862.3
47.5°	3611.0	3750.3	3877.2	3703.0	3424.3	3563.7
50°	3170.5	3494.0	3476.6	3496.5	3190.4	3245.1
52.5°	3170.5	3036.1	3070.9	3401.9	3043.6	2929.1
55°	2697.6	2647.9	2874.3	2929.1	2924.1	2645.4
57.5°	2394.0	2640.4	2473.7	2520.9	2628.0	2326.8
60°	2125.3	2050.6	2369.1	2209.9	2329.3	2038.2
62.5°	1659.9	1724.6	1836.6	2087.9	1946.1	1669.8
65°	1421.0	1520.5	1590.2	1747.0	1575.3	1406.1
67.5°	1338.9	1381.2	1361.3	1600.2	1353.8	1052.7
70°	1177.1	1311.5	1221.9	1199.5	1117.4	900.9
72.5°	980.5	1022.8	1117.4	955.6	863.5	751.6
75°	836.2	876.0	883.5	826.2	848.6	617.2
77.5°	664.5	706.8	701.8	704.3	701.8	497.7
80°	522.6	552.5	552.5	540.0	472.8	388.2
82.5°	393.2	423.1	430.5	390.7	350.9	278.7
85°	281.2	316.1	313.6	278.7	231.4	184.2
87.5°	181.7	221.5	226.5	179.2	136.9	92.1
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)