

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-LD5-28-W-ASY-UNV-L850-CD4-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-LD5-28-W-ASY-UNV-L850-CD4-U  
Description: Metalux 8' ILED WITH ASYMMETRIC DIRECTIONAL LOUVER DISTRIBUTION

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

**Summary**

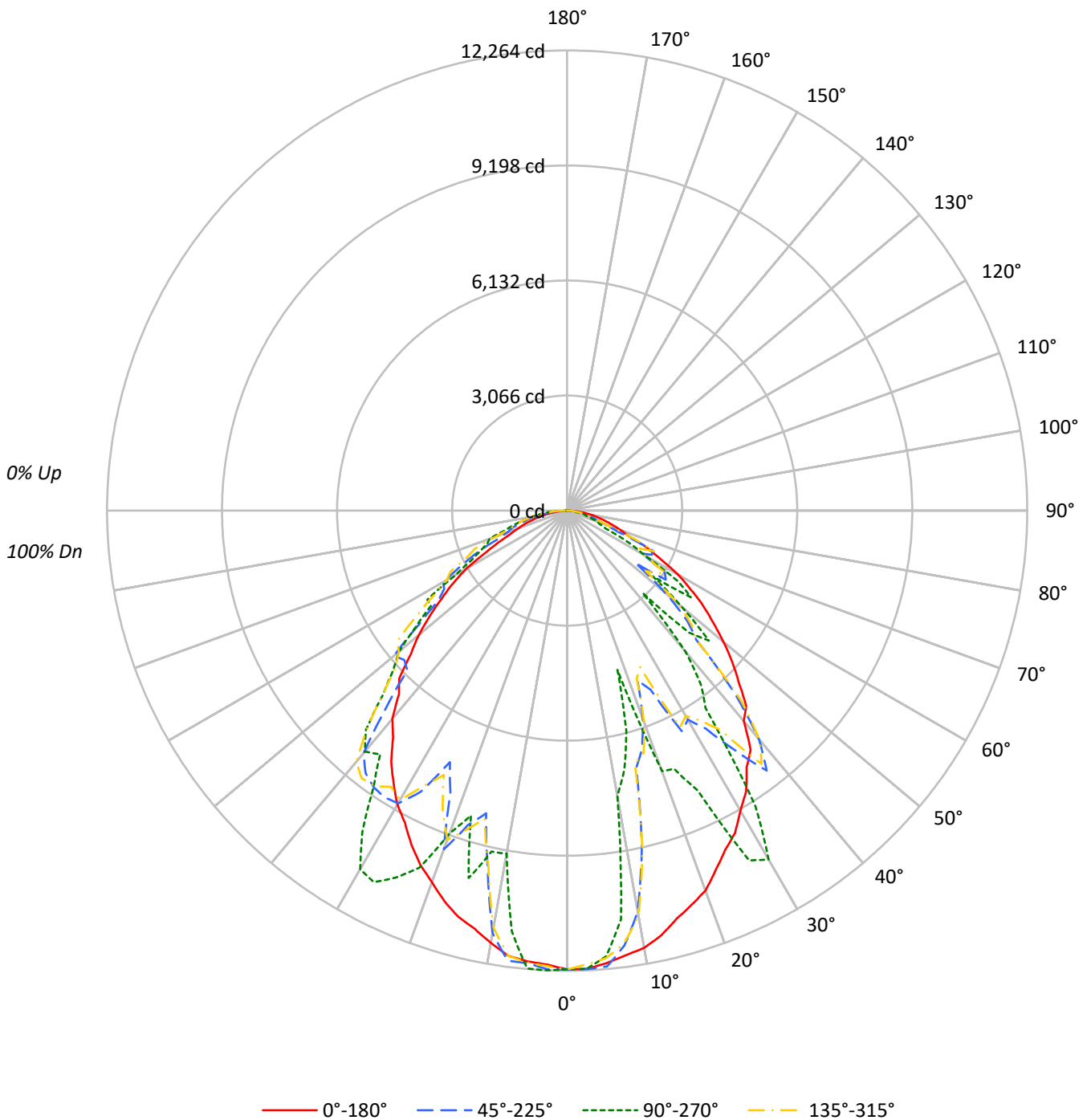
Lumens per Lamp: N/A  
Luminaire Lumens: 24079.0 lumens  
Efficiency: N/A  
Efficacy: 118.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.25 / 1.27  
Luminous Opening: Rectangular w/ Sides (W: 0.92' x L: 8' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 204  
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	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					100			
1	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86					86			
2	101	93	87	81	98	91	85	80	88	83	79	84	80	77	81	78	75	73					73			
3	92	82	75	69	90	81	74	68	78	72	67	75	70	66	73	68	65	63					63			
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	60	56	54					54			
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47					47			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42					42			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37					37			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34					34			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30					30			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	34	29	28					28			

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

	0°	90°	180°	270°
0°	17947	17947	17947	17947
5°	17818	17401	17751	17876
10°	17595	11288	17403	13579
15°	17061	8992	16972	14971
20°	16758	11103	16382	13738
25°	16059	12687	15810	16629
30°	15534	17117	15226	17589
35°	14822	10694	14519	14966
40°	13879	8607	13737	14721
45°	13255	8608	12965	13005
50°	12223	8014	11623	11820
55°	11134	8919	10254	9814
60°	9804	5863	8906	8476
65°	7962	3189	6905	7164
70°	6257	2792	5773	7249
75°	5598	2065	5124	5910
80°	5130	1436	4307	4829
85°	4543	1061	2947	3966



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1112.7	4.6
10°-20°	2584.1	10.7
20°-30°	3846.4	16.0
30°-40°	4851.0	20.1
40°-50°	4393.6	18.2
50°-60°	3652.9	15.2
60°-70°	2206.9	9.2
70°-80°	1094.5	4.5
80°-90°	336.9	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°	7543.2	31.3
0°-40°	12394.3	51.5
0°-60°	20440.7	84.9
0°-90°	24079.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	24079.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	12227	12227	12227	12227	12227	
5°	12106	11923	12060	12248	12106	###
15°	11265	6091	11206	10140	11265	3186
25°	9973	8232	9819	10790	9973	4612
35°	8344	6424	8174	8990	8344	5243
45°	6466	4599	6324	6949	6466	4987
55°	4428	4028	4078	4433	4428	3941
65°	2354	1133	2041	2545	2354	2313
75°	1033	512	946	1466	1033	1108
85°	308	142	200	529	308	341
90°	0	0	0	0	0	



TEST NUMBER: P#

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	12227.0	12227.0	12227.0	12227.0	12227.0	12227.0	12227.0	12227.0	12227.0	12227.0	12227.0
2.5°	12222.9	12293.7	12235.4	12222.9	12218.7	12231.2	12106.2	12068.7	12110.4	12235.4	12231.2
5°	12106.2	12210.4	12193.7	12018.7	11922.9	12027.1	11968.8	11977.1	12060.4	12147.9	12106.2
7.5°	11952.1	12081.2	11689.6	11193.9	10989.8	11248.0	11631.3	11931.3	11968.8	12110.4	12102.1
10°	11831.3	11947.9	10839.8	9152.6	7719.5	8852.6	10956.4	11689.6	11702.1	11897.9	11439.7
12.5°	11593.8	11427.2	9202.6	7173.8	7052.9	7244.6	9265.1	11152.2	11414.7	11548.0	9781.6
15°	11264.7	10769.0	7107.1	6269.7	6090.6	6294.7	6982.1	10685.6	11206.4	11331.4	8352.7
17.5°	11018.9	10081.6	6636.3	5553.2	4453.4	5299.1	6778.0	10289.9	10906.4	10706.5	8790.1
20°	10777.3	9390.0	5894.8	6040.6	7390.4	6011.5	5986.5	9523.3	10535.7	9344.2	9606.7
22.5°	10360.7	7911.1	4886.7	7202.9	7448.7	7132.1	4849.2	8177.7	10223.2	8436.0	8127.8
25°	9973.3	6557.2	5265.8	7477.9	8231.9	7373.7	4599.2	6482.2	9819.1	7544.5	7394.5
27.5°	9685.8	6186.4	6628.0	8598.5	10510.7	8006.9	6511.4	5986.5	9369.2	7136.3	8448.5
30°	9231.7	5669.8	6432.2	10498.2	10735.6	10310.7	6319.7	5757.3	9048.4	7552.9	9010.9
32.5°	8873.5	5036.6	6894.6	9902.4	9340.0	9852.5	6636.3	5369.9	8611.0	7948.6	9056.8
35°	8344.4	4774.2	7802.8	8661.0	6423.9	8386.0	7140.4	4932.5	8173.6	7344.6	8994.3
37.5°	8031.9	3928.5	8736.0	5874.0	5869.8	5882.3	8511.0	4349.2	7615.3	6236.4	8823.5
40°	7319.6	4249.3	7956.9	5369.9	4903.3	5482.4	7977.8	3549.4	7244.6	5511.5	8440.2
42.5°	7061.3	4770.0	6623.8	4411.7	2974.5	4682.5	6861.3	4499.2	6636.3	5757.3	7161.3
45°	6465.5	4645.0	4870.0	2791.2	4599.2	2978.6	4849.2	4449.2	6323.9	6069.8	6019.8
47.5°	5965.6	4357.6	4336.7	4286.8	5124.1	4161.8	4495.1	4178.4	5644.9	5903.1	5890.6
50°	5432.4	4507.5	3457.7	4507.5	3966.0	4570.0	3845.2	3932.6	5165.8	5536.5	6015.6
52.5°	4903.3	4715.8	2270.4	3370.2	2874.5	3486.9	2641.2	3882.7	4615.9	5203.3	4970.0
55°	4428.4	4686.7	3207.8	2895.3	4028.5	2757.9	2895.3	4303.4	4078.5	4682.5	4186.8
57.5°	3895.2	3957.6	3087.0	3532.7	3486.9	3707.7	3103.6	3816.0	3603.5	4165.9	3886.8
60°	3411.9	2945.3	2270.4	2762.0	2374.6	3070.3	2312.1	3145.3	3099.5	3274.4	3816.0
62.5°	2795.3	2382.9	2549.6	2020.5	1862.2	1991.3	2187.1	2278.8	2478.7	2774.5	3166.1
65°	2353.8	1883.0	2512.1	1287.3	1133.1	1508.1	2557.9	2012.2	2041.3	2512.1	2637.0
67.5°	1762.2	1387.3	1441.4	1033.2	933.2	1012.3	1799.7	1558.1	1637.2	1858.0	2033.0
70°	1508.1	1233.1	1045.7	849.9	845.7	854.0	1129.0	1162.3	1391.4	1566.4	1683.0
72.5°	1258.1	1016.5	833.2	699.9	633.2	770.7	824.9	958.2	1179.0	1862.2	1537.2
75°	1033.2	1174.8	674.9	574.9	512.4	562.4	662.4	870.7	945.7	1158.1	1258.1
77.5°	833.2	683.2	529.1	479.1	458.3	495.7	512.4	908.2	741.5	895.7	1062.3
80°	649.9	508.2	412.4	320.8	275.0	312.4	408.3	462.4	545.7	666.6	791.5
82.5°	466.6	387.4	287.5	233.3	200.0	229.1	270.8	324.9	370.8	458.3	554.1
85°	308.3	254.1	204.1	166.6	141.6	162.5	183.3	204.1	200.0	275.0	354.1
87.5°	154.1	137.5	137.5	120.8	100.0	112.5	125.0	108.3	58.3	120.8	216.6
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°	12227.0	12227.0	12227.0	12227.0	12227.0	12227.0
2.5°	12231.2	12264.5	12256.2	12152.1	12160.4	12222.9
5°	12143.7	12247.9	12222.9	12089.6	12081.2	12106.2
7.5°	11723.0	11306.4	11918.8	11972.9	11927.1	11952.1
10°	9565.0	9285.9	9994.1	11293.9	11835.4	11831.3
12.5°	8586.0	9310.9	8727.6	9710.8	11577.2	11593.8
15°	9790.0	10139.9	9927.4	8498.5	11285.5	11264.7
17.5°	9165.1	8523.5	9248.4	8915.1	10914.8	11018.9
20°	8173.6	9144.2	8269.4	9331.7	9615.0	10777.3
22.5°	9919.1	10302.4	9531.7	8661.0	8702.7	10360.7
25°	10164.9	10789.8	9973.3	7777.8	7927.8	9973.3
27.5°	10452.3	11164.7	10389.9	8265.2	7461.2	9685.8
30°	10573.2	11031.4	10764.8	8898.5	7607.0	9231.7
32.5°	10339.9	10156.6	10577.3	8731.8	7507.0	8873.5
35°	9127.6	8990.1	9631.7	8960.9	7415.4	8344.4
37.5°	7744.5	8186.1	8456.9	8994.3	6765.5	8031.9
40°	7627.8	8386.0	7811.1	8731.8	6194.8	7319.6
42.5°	7807.0	7936.1	7652.8	7902.8	5724.0	7061.3
45°	6944.6	6948.8	7407.0	6957.1	5774.0	6465.5
47.5°	6044.8	6278.1	6490.5	6198.9	5732.3	5965.6
50°	5307.4	5849.0	5819.8	5853.1	5340.7	5432.4
52.5°	5307.4	5082.4	5140.8	5694.8	5094.9	4903.3
55°	4515.9	4432.6	4811.7	4903.3	4895.0	4428.4
57.5°	4007.6	4420.1	4140.9	4220.1	4399.2	3895.2
60°	3557.7	3432.7	3966.0	3699.4	3899.3	3411.9
62.5°	2778.7	2887.0	3074.5	3495.2	3257.8	2795.3
65°	2378.8	2545.4	2662.0	2924.5	2637.0	2353.8
67.5°	2241.3	2312.1	2278.8	2678.7	2266.3	1762.2
70°	1970.5	2195.5	2045.5	2008.0	1870.5	1508.1
72.5°	1641.4	1712.2	1870.5	1599.7	1445.6	1258.1
75°	1399.8	1466.4	1478.9	1383.1	1420.6	1033.2
77.5°	1112.3	1183.1	1174.8	1179.0	1174.8	833.2
80°	874.8	924.8	924.8	904.0	791.5	649.9
82.5°	658.2	708.2	720.7	654.1	587.4	466.6
85°	470.8	529.1	524.9	466.6	387.4	308.3
87.5°	304.1	370.8	379.1	299.9	229.1	154.1
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)