

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-LD5-22-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-LD5-22-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**

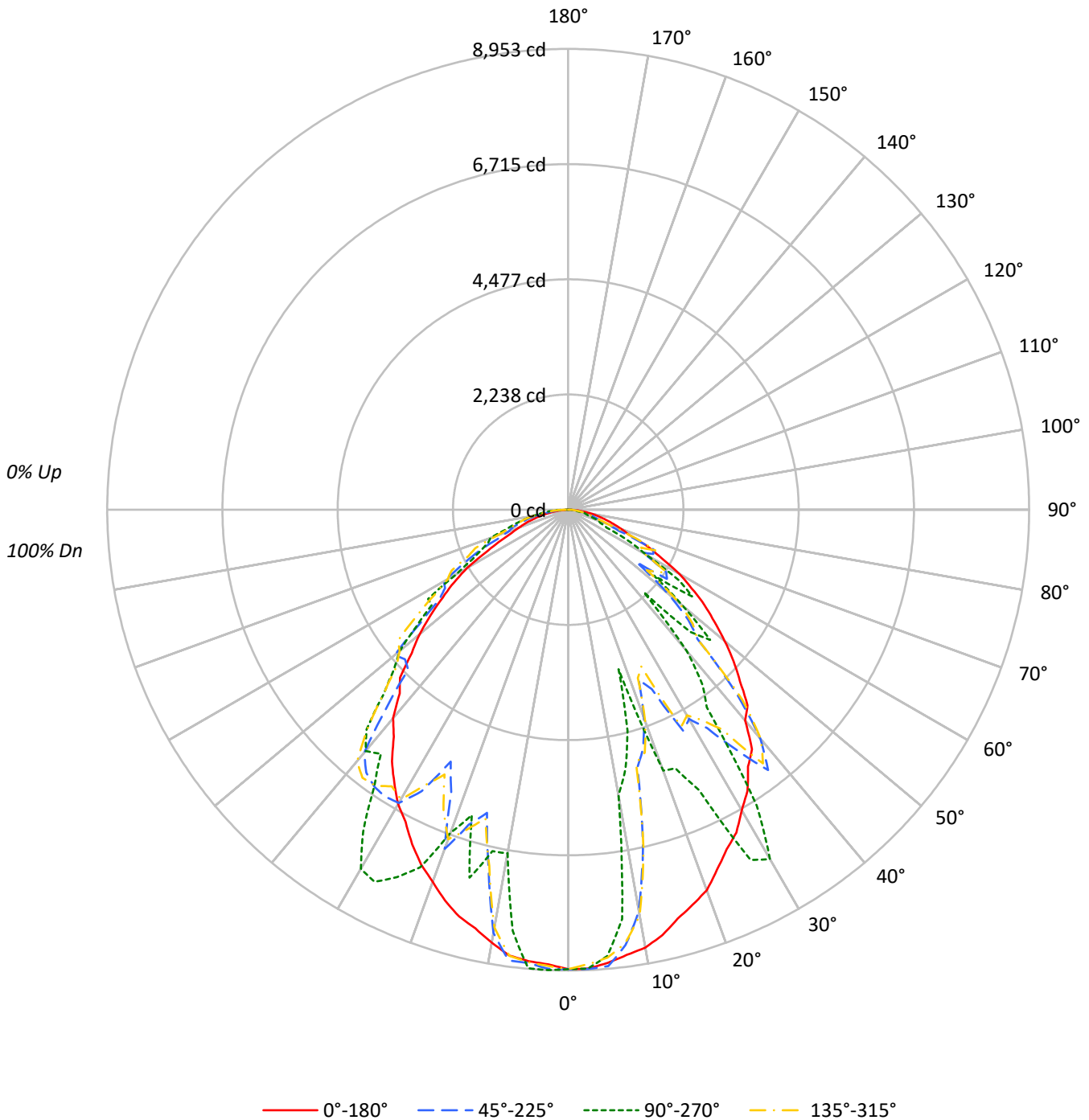
Lumens per Lamp: N/A  
Luminaire Lumens: 17578.0 lumens  
Efficiency: N/A  
Efficacy: 104.8 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.25 / 1.27  
Luminous Opening: Rectangular w/ Sides (W: 0.92' x L: 8' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 167.7  
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	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°	13101	13101	13101	13101
5°	13007	12703	12958	13049
10°	12845	8241	12704	9913
15°	12454	6564	12390	10929
20°	12234	8105	11959	10029
25°	11723	9261	11542	12139
30°	11340	12496	11115	12840
35°	10820	7807	10599	10925
40°	10132	6283	10028	10746
45°	9677	6284	9465	9494
50°	8923	5851	8485	8628
55°	8128	6511	7485	7164
60°	7157	4280	6501	6187
65°	5812	2328	5041	5230
70°	4568	2039	4215	5292
75°	4087	1508	3741	4314
80°	3745	1048	3145	3525
85°	3316	775	2151	2895



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	812.3	4.6
10°-20°	1886.5	10.7
20°-30°	2807.9	16.0
30°-40°	3541.3	20.1
40°-50°	3207.4	18.2
50°-60°	2666.7	15.2
60°-70°	1611.1	9.2
70°-80°	799.0	4.5
80°-90°	245.9	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°	5506.6	31.3
0°-40°	9048.0	51.5
0°-60°	14922.0	84.9
0°-90°	17578.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17578.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	8926	8926	8926	8926	8926	
5°	8838	8704	8804	8941	8838	837
15°	8223	4446	8181	7402	8223	2326
25°	7281	6009	7168	7877	7281	3367
35°	6092	4690	5967	6563	6092	3827
45°	4720	3358	4616	5073	4720	3641
55°	3233	2941	2977	3236	3233	2877
65°	1718	827	1490	1858	1718	1689
75°	754	374	690	1070	754	809
85°	225	103	146	386	225	249
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°	8925.9	8925.9	8925.9	8925.9	8925.9	8925.9	8925.9	8925.9	8925.9	8925.9	8925.9
2.5°	8922.9	8974.6	8932.0	8922.9	8919.8	8928.9	8837.7	8810.3	8840.8	8932.0	8928.9
5°	8837.7	8913.7	8901.6	8773.8	8703.9	8779.9	8737.4	8743.4	8804.3	8868.1	8837.7
7.5°	8725.2	8819.5	8533.6	8171.7	8022.7	8211.2	8491.0	8710.0	8737.4	8840.8	8834.7
10°	8637.0	8722.1	7913.2	6681.5	5635.3	6462.5	7998.3	8533.6	8542.7	8685.7	8351.1
12.5°	8463.6	8342.0	6718.0	5236.9	5148.7	5288.6	6763.6	8141.3	8332.9	8430.2	7140.7
15°	8223.4	7861.5	5188.3	4577.0	4446.2	4595.2	5097.0	7800.7	8180.8	8272.1	6097.6
17.5°	8044.0	7359.7	4844.6	4053.9	3251.0	3868.4	4948.0	7511.8	7961.8	7815.9	6416.9
20°	7867.6	6854.9	4303.3	4409.7	5395.1	4388.4	4370.2	6952.2	7691.2	6821.4	7013.0
22.5°	7563.5	5775.2	3567.3	5258.2	5437.7	5206.5	3540.0	5969.9	7463.1	6158.4	5933.4
25°	7280.6	4786.8	3844.1	5458.9	6009.4	5382.9	3357.5	4732.1	7168.1	5507.6	5398.1
27.5°	7070.8	4516.2	4838.5	6277.0	7672.9	5845.2	4753.4	4370.2	6839.6	5209.6	6167.5
30°	6739.3	4139.1	4695.6	7663.8	7837.2	7527.0	4613.5	4202.9	6605.5	5513.7	6578.1
32.5°	6477.7	3676.8	5033.2	7228.9	6818.4	7192.4	4844.6	3920.1	6286.2	5802.6	6611.6
35°	6091.5	3485.2	5696.2	6322.6	4689.5	6121.9	5212.6	3600.8	5966.8	5361.6	6565.9
37.5°	5863.4	2867.8	6377.4	4288.1	4285.0	4294.2	6213.2	3175.0	5559.3	4552.7	6441.3
40°	5343.4	3102.0	5808.7	3920.1	3579.5	4002.2	5823.9	2591.1	5288.6	4023.5	6161.5
42.5°	5154.8	3482.2	4835.5	3220.6	2171.4	3418.3	5008.8	3284.5	4844.6	4202.9	5227.8
45°	4719.9	3390.9	3555.2	2037.6	3357.5	2174.5	3540.0	3248.0	4616.5	4431.0	4394.5
47.5°	4355.0	3181.1	3165.9	3129.4	3740.7	3038.2	3281.4	3050.3	4120.8	4309.4	4300.2
50°	3965.7	3290.6	2524.2	3290.6	2895.2	3336.2	2807.0	2870.9	3771.1	4041.7	4391.5
52.5°	3579.5	3442.6	1657.5	2460.3	2098.4	2545.5	1928.1	2834.4	3369.6	3798.5	3628.1
55°	3232.8	3421.3	2341.7	2113.6	2940.8	2013.3	2113.6	3141.6	2977.3	3418.3	3056.4
57.5°	2843.5	2889.1	2253.5	2578.9	2545.5	2706.7	2265.7	2785.7	2630.6	3041.2	2837.4
60°	2490.7	2150.1	1657.5	2016.3	1733.5	2241.4	1687.9	2296.1	2262.6	2390.4	2785.7
62.5°	2040.6	1739.6	1861.2	1475.0	1359.4	1453.7	1596.6	1663.5	1809.5	2025.4	2311.3
65°	1718.3	1374.6	1833.8	939.7	827.2	1100.9	1867.3	1468.9	1490.2	1833.8	1925.1
67.5°	1286.4	1012.7	1052.3	754.2	681.2	739.0	1313.8	1137.4	1195.2	1356.4	1484.1
70°	1100.9	900.2	763.3	620.4	617.4	623.4	824.2	848.5	1015.8	1143.5	1228.6
72.5°	918.4	742.1	608.2	510.9	462.3	562.6	602.2	699.5	860.7	1359.4	1122.2
75°	754.2	857.6	492.7	419.7	374.1	410.6	483.6	635.6	690.4	845.5	918.4
77.5°	608.2	498.8	386.2	349.7	334.5	361.9	374.1	663.0	541.3	653.9	775.5
80°	474.4	371.0	301.1	234.2	200.7	228.1	298.0	337.6	398.4	486.6	577.8
82.5°	340.6	282.8	209.8	170.3	146.0	167.3	197.7	237.2	270.7	334.5	404.5
85°	225.0	185.5	149.0	121.6	103.4	118.6	133.8	149.0	146.0	200.7	258.5
87.5°	112.5	100.4	100.4	88.2	73.0	82.1	91.2	79.1	42.6	88.2	158.1
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°	8925.9	8925.9	8925.9	8925.9	8925.9	8925.9
2.5°	8928.9	8953.3	8947.2	8871.2	8877.2	8922.9
5°	8865.1	8941.1	8922.9	8825.5	8819.5	8837.7
7.5°	8557.9	8253.8	8700.9	8740.4	8706.9	8725.2
10°	6982.6	6778.8	7295.8	8244.7	8640.0	8637.0
12.5°	6267.9	6797.1	6371.3	7089.0	8451.5	8463.6
15°	7146.8	7402.3	7247.2	6204.0	8238.6	8223.4
17.5°	6690.6	6222.3	6751.5	6508.2	7967.9	8044.0
20°	5966.8	6675.4	6036.8	6812.3	7019.1	7867.6
22.5°	7241.1	7520.9	6958.3	6322.6	6353.1	7563.5
25°	7420.5	7876.7	7280.6	5677.9	5787.4	7280.6
27.5°	7630.4	8150.4	7584.7	6033.7	5446.8	7070.8
30°	7718.6	8053.1	7858.4	6496.0	5553.2	6739.3
32.5°	7548.2	7414.4	7721.6	6374.3	5480.2	6477.7
35°	6663.3	6562.9	7031.2	6541.6	5413.3	6091.5
37.5°	5653.6	5975.9	6173.6	6565.9	4938.9	5863.4
40°	5568.4	6121.9	5702.2	6374.3	4522.3	5343.4
42.5°	5699.2	5793.5	5586.7	5769.1	4178.6	5154.8
45°	5069.7	5072.7	5407.2	5078.8	4215.1	4719.9
47.5°	4412.8	4583.1	4738.2	4525.3	4184.7	4355.0
50°	3874.5	4269.8	4248.5	4272.9	3898.8	3965.7
52.5°	3874.5	3710.3	3752.8	4157.3	3719.4	3579.5
55°	3296.7	3235.8	3512.6	3579.5	3573.4	3232.8
57.5°	2925.6	3226.7	3022.9	3080.7	3211.5	2843.5
60°	2597.2	2505.9	2895.2	2700.6	2846.6	2490.7
62.5°	2028.5	2107.5	2244.4	2551.6	2378.2	2040.6
65°	1736.5	1858.2	1943.3	2134.9	1925.1	1718.3
67.5°	1636.2	1687.9	1663.5	1955.5	1654.4	1286.4
70°	1438.5	1602.7	1493.2	1465.9	1365.5	1100.9
72.5°	1198.2	1249.9	1365.5	1167.8	1055.3	918.4
75°	1021.8	1070.5	1079.6	1009.7	1037.0	754.2
77.5°	812.0	863.7	857.6	860.7	857.6	608.2
80°	638.7	675.1	675.1	659.9	577.8	474.4
82.5°	480.5	517.0	526.1	477.5	428.8	340.6
85°	343.7	386.2	383.2	340.6	282.8	225.0
87.5°	222.0	270.7	276.7	219.0	167.3	112.5
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)