

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-L840-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-L840-CD4-U
Description: Metalux 8' ILED WITH ASYMMETRIC DIRECTIONAL LOUVER DISTRIBUTION

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

Summary

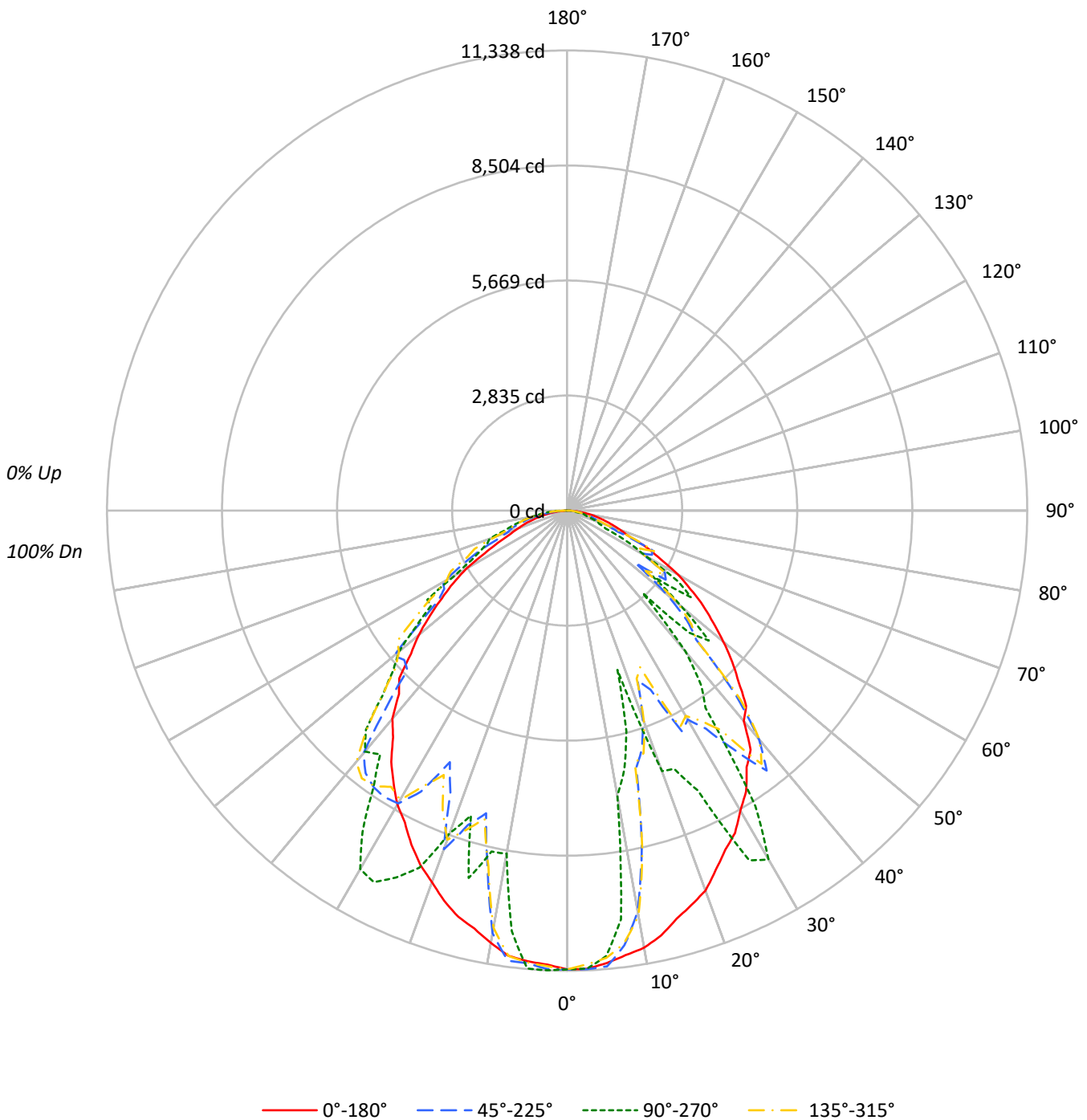
Lumens per Lamp: N/A
Luminaire Lumens: 22260.0 lumens
Efficiency: N/A
Efficacy: 109.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.25 / 1.27
Luminous Opening: Rectangular w/ Sides (W: 0.92' x L: 8' x H: 0.1')
CIE Type: Direct

Input Watts (W): 204
Input Voltage (V):
Input Current (A_{in}): 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				
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°	16591	16591	16591	16591
5°	16472	16087	16410	16525
10°	16266	10436	16088	12553
15°	15772	8313	15690	13840
20°	15492	10264	15145	12700
25°	14846	11728	14616	15372
30°	14361	15824	14076	16260
35°	13702	9886	13422	13835
40°	12831	7957	12699	13609
45°	12254	7958	11986	12023
50°	11299	7409	10745	10927
55°	10293	8245	9479	9073
60°	9063	5420	8233	7835
65°	7360	2948	6383	6623
70°	5784	2581	5337	6702
75°	5175	1909	4737	5463
80°	4742	1327	3982	4465
85°	4200	981	2725	3666



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1028.6	4.6
10°-20°	2388.9	10.7
20°-30°	3555.8	16.0
30°-40°	4484.6	20.1
40°-50°	4061.7	18.2
50°-60°	3377.0	15.2
60°-70°	2040.2	9.2
70°-80°	1011.8	4.5
80°-90°	311.4	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°	6973.4	31.3
0°-40°	11458.0	51.5
0°-60°	18896.6	84.9
0°-90°	22260.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	22260.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	11303	11303	11303	11303	11303	
5°	11192	11022	11149	11323	11192	###
15°	10414	5630	10360	9374	10414	2945
25°	9220	7610	9077	9975	9220	4263
35°	7714	5939	7556	8311	7714	4847
45°	5977	4252	5846	6424	5977	4610
55°	4094	3724	3770	4098	4094	3643
65°	2176	1048	1887	2353	2176	2138
75°	955	474	874	1356	955	1025
85°	285	131	185	489	285	315
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°	11303.4	11303.4	11303.4	11303.4	11303.4	11303.4	11303.4	11303.4	11303.4	11303.4	11303.4
2.5°	11299.5	11365.0	11311.1	11299.5	11295.7	11307.2	11191.7	11157.0	11195.5	11311.1	11307.2
5°	11191.7	11288.0	11272.6	11110.8	11022.2	11118.5	11064.6	11072.3	11149.3	11230.2	11191.7
7.5°	11049.2	11168.6	10806.6	10348.3	10159.6	10398.3	10752.6	11029.9	11064.6	11195.5	11187.8
10°	10937.5	11045.3	10020.9	8461.2	7136.3	8183.9	10128.7	10806.6	10818.1	10999.1	10575.5
12.5°	10718.0	10563.9	8507.4	6631.8	6520.1	6697.3	8565.1	10309.8	10552.4	10675.6	9042.7
15°	10413.7	9955.4	6570.2	5796.1	5630.5	5819.2	6454.7	9878.4	10359.8	10475.4	7721.7
17.5°	10186.5	9320.0	6135.0	5133.7	4117.0	4898.8	6266.0	9512.5	10082.5	9897.7	8126.1
20°	9963.1	8680.7	5449.5	5584.3	6832.1	5557.3	5534.2	8803.9	9739.8	8638.3	8880.9
22.5°	9578.0	7313.5	4517.5	6658.8	6886.0	6593.3	4482.8	7560.0	9450.9	7798.7	7513.8
25°	9219.9	6061.8	4868.0	6913.0	7610.0	6816.7	4251.8	5992.5	9077.4	6974.6	6835.9
27.5°	8954.1	5719.1	6127.3	7948.9	9716.7	7402.1	6019.5	5534.2	8661.4	6597.2	7810.3
30°	8534.3	5241.5	5946.3	9705.1	9924.6	9531.8	5842.3	5322.4	8364.9	6982.3	8330.2
32.5°	8203.1	4656.1	6373.8	9154.4	8634.5	9108.2	6135.0	4964.2	7960.5	7348.2	8372.6
35°	7714.0	4413.5	7213.4	8006.7	5938.6	7752.5	6601.0	4559.9	7556.1	6789.7	8314.8
37.5°	7425.2	3631.7	8076.0	5430.2	5426.4	5437.9	7868.1	4020.7	7040.1	5765.3	8156.9
40°	6766.6	3928.3	7355.9	4964.2	4532.9	5068.2	7375.1	3281.3	6697.3	5095.2	7802.6
42.5°	6527.8	4409.7	6123.5	4078.5	2749.8	4328.8	6343.0	4159.3	6135.0	5322.4	6620.3
45°	5977.1	4294.1	4502.1	2580.3	4251.8	2753.6	4482.8	4113.1	5846.2	5611.2	5565.0
47.5°	5515.0	4028.4	4009.1	3962.9	4737.0	3847.4	4155.5	3862.8	5218.4	5457.2	5445.6
50°	5022.0	4167.0	3196.5	4167.0	3666.4	4224.8	3554.7	3635.6	4775.5	5118.3	5561.2
52.5°	4532.9	4359.6	2098.9	3115.6	2657.4	3223.5	2441.7	3589.4	4267.2	4810.2	4594.5
55°	4093.9	4332.6	2965.5	2676.6	3724.1	2549.5	2676.6	3978.3	3770.4	4328.8	3870.5
57.5°	3600.9	3658.7	2853.8	3265.8	3223.5	3427.6	2869.2	3527.7	3331.3	3851.2	3593.2
60°	3154.2	2722.8	2098.9	2553.4	2195.2	2838.4	2137.4	2907.7	2865.3	3027.1	3527.7
62.5°	2584.2	2202.9	2357.0	1867.8	1721.5	1840.9	2021.9	2106.6	2291.5	2564.9	2926.9
65°	2175.9	1740.8	2322.3	1190.0	1047.5	1394.1	2364.7	1860.1	1887.1	2322.3	2437.8
67.5°	1629.1	1282.5	1332.5	955.1	862.7	935.8	1663.7	1440.4	1513.5	1717.7	1879.4
70°	1394.1	1140.0	966.7	785.7	781.8	789.5	1043.7	1074.5	1286.3	1448.1	1555.9
72.5°	1163.1	939.7	770.2	647.0	585.4	712.5	762.5	885.8	1089.9	1721.5	1421.1
75°	955.1	1086.0	623.9	531.5	473.7	519.9	612.3	804.9	874.2	1070.6	1163.1
77.5°	770.2	631.6	489.1	442.9	423.6	458.3	473.7	839.6	685.5	828.0	982.1
80°	600.8	469.9	381.3	296.5	254.2	288.8	377.4	427.5	504.5	616.2	731.7
82.5°	431.3	358.2	265.7	215.7	184.9	211.8	250.3	300.4	342.8	423.6	512.2
85°	285.0	234.9	188.7	154.0	130.9	150.2	169.5	188.7	184.9	254.2	327.4
87.5°	142.5	127.1	127.1	111.7	92.4	104.0	115.5	100.1	53.9	111.7	200.3
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°	11303.4	11303.4	11303.4	11303.4	11303.4	11303.4
2.5°	11307.2	11338.0	11330.3	11234.1	11241.8	11299.5
5°	11226.3	11322.6	11299.5	11176.3	11168.6	11191.7
7.5°	10837.4	10452.3	11018.4	11068.4	11026.1	11049.2
10°	8842.4	8584.4	9239.1	10440.7	10941.4	10937.5
12.5°	7937.4	8607.5	8068.3	8977.2	10702.6	10718.0
15°	9050.4	9373.9	9177.5	7856.5	10433.0	10413.7
17.5°	8472.7	7879.6	8549.7	8241.6	10090.2	10186.5
20°	7556.1	8453.5	7644.7	8626.8	8888.6	9963.1
22.5°	9169.8	9524.1	8811.6	8006.7	8045.2	9578.0
25°	9397.0	9974.7	9219.9	7190.3	7328.9	9219.9
27.5°	9662.7	10321.3	9605.0	7640.8	6897.6	8954.1
30°	9774.4	10198.1	9951.6	8226.2	7032.4	8534.3
32.5°	9558.8	9389.3	9778.3	8072.2	6939.9	8203.1
35°	8438.1	8311.0	8904.1	8284.0	6855.2	7714.0
37.5°	7159.4	7567.7	7818.0	8314.8	6254.4	7425.2
40°	7051.6	7752.5	7221.1	8072.2	5726.8	6766.6
42.5°	7217.2	7336.6	7074.7	7305.8	5291.6	6527.8
45°	6420.0	6423.9	6847.5	6431.6	5337.8	5977.1
47.5°	5588.1	5803.8	6000.2	5730.6	5299.3	5515.0
50°	4906.5	5407.1	5380.2	5411.0	4937.3	5022.0
52.5°	4906.5	4698.5	4752.4	5264.6	4710.1	4532.9
55°	4174.7	4097.7	4448.2	4532.9	4525.2	4093.9
57.5°	3704.9	4086.2	3828.1	3901.3	4066.9	3600.9
60°	3289.0	3173.4	3666.4	3419.9	3604.8	3154.2
62.5°	2568.8	2668.9	2842.2	3231.2	3011.7	2584.2
65°	2199.1	2353.1	2460.9	2703.6	2437.8	2175.9
67.5°	2072.0	2137.4	2106.6	2476.3	2095.1	1629.1
70°	1821.6	2029.6	1891.0	1856.3	1729.2	1394.1
72.5°	1517.4	1582.9	1729.2	1478.9	1336.4	1163.1
75°	1294.0	1355.6	1367.2	1278.6	1313.3	955.1
77.5°	1028.3	1093.8	1086.0	1089.9	1086.0	770.2
80°	808.8	855.0	855.0	835.7	731.7	600.8
82.5°	608.5	654.7	666.3	604.6	543.0	431.3
85°	435.2	489.1	485.3	431.3	358.2	285.0
87.5°	281.1	342.8	350.5	277.3	211.8	142.5
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)