

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-LD5-11-W-ASYWG-UNV-L840-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 (P34184)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4ILED-LD5-11-W-ASYWG-UNV-L840-CD1-U  
Description: Metalux 4' ILED WITH ASYMMETRIC DIRECTIONAL LOUVER-HEAVY DUTY WIREGUARD DISTRIBUTION

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

**Summary**

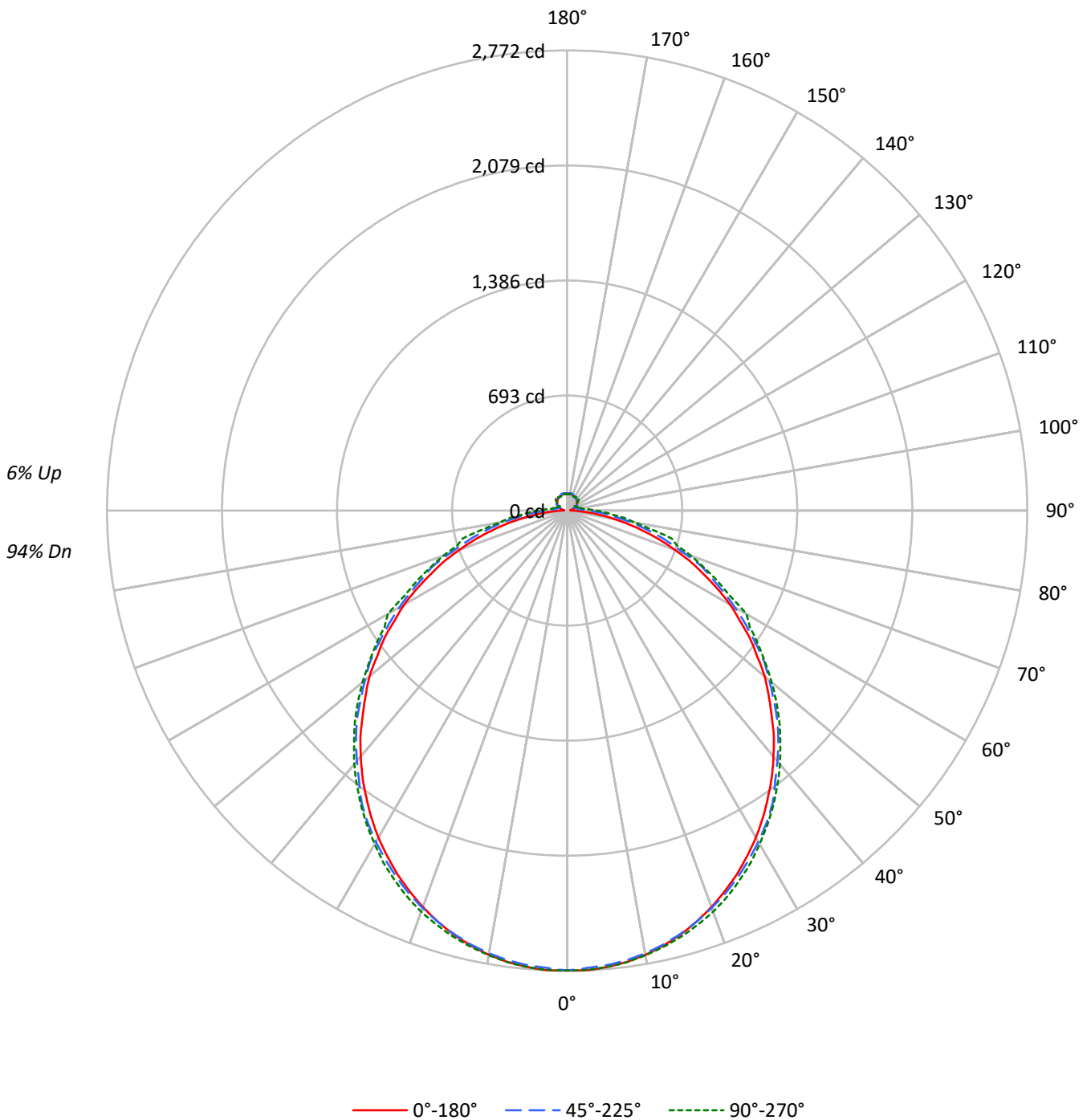
Lumens per Lamp: N/A  
Luminaire Lumens: 8348.0 lumens  
Efficiency: N/A  
Efficacy: 99.5 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.24 / 1.35  
Luminous Opening: Rectangular w/ Sides (W: 0.92' x L: 4' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 83.9  
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	118	118	118	118	114	114	114	114	108	108	108	102	102	102	97	97	97	94
1	107	102	98	94	104	99	95	91	94	91	87	89	86	84	84	82	80	78
2	97	89	82	76	94	86	80	75	82	76	72	78	73	69	74	70	67	65
3	88	78	70	63	85	76	68	62	72	66	60	68	63	58	65	61	57	54
4	81	69	60	53	78	67	59	53	64	57	51	61	55	50	58	53	49	46
5	74	62	52	46	72	60	52	45	57	50	44	55	48	43	52	47	42	40
6	69	55	46	40	66	54	46	40	52	44	39	49	43	38	47	42	37	35
7	64	50	41	35	62	49	41	35	47	40	34	45	39	34	43	37	33	31
8	59	46	37	31	57	45	37	31	43	36	31	41	35	30	40	34	30	28
9	55	42	34	28	54	41	33	28	40	33	28	38	32	27	37	31	27	25
10	52	39	31	26	50	38	30	25	37	30	25	35	29	25	34	28	24	22

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

	0°	45°	90°
0°	8133	8133	8133
5°	8115	8034	8055
10°	8064	7939	7955
15°	7981	7822	7842
20°	7867	7693	7728
25°	7741	7551	7574
30°	7599	7402	7398
35°	7428	7247	7210
40°	7257	6993	7003
45°	7052	6793	6769
50°	6895	6524	6500
55°	6656	6231	6222
60°	6386	5884	6162
65°	5981	5528	5597
70°	5532	5117	5224
75°	4943	4645	5281
80°	4206	4164	4323
85°	3322	3752	4052



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	261.8	3.1
10°-20°	746.7	8.9
20°-30°	1123.4	13.5
30°-40°	1342.6	16.1
40°-50°	1377.4	16.5
50°-60°	1236.0	14.8
60°-70°	949.7	11.4
70°-80°	581.1	7.0
80°-90°	246.4	3.0
90°-100°	86.7	1.0
100°-110°	60.7	0.7
110°-120°	56.6	0.7
120°-130°	65.9	0.8
130°-140°	69.8	0.8
140°-150°	59.1	0.7
150°-160°	45.1	0.5
160°-170°	29.2	0.4
170°-180°	9.8	0.1
0°-30°	2131.9	25.5
0°-40°	3474.5	41.6
0°-60°	6087.9	72.9
0°-90°	7865.1	94.2
90°-120°	204.0	2.4
90°-150°	398.8	4.8
90°-180°	483.0	5.8
0°-180°	8348.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2770	2770	2770	2770	2770	
5°	2760	2760	2749	2760	2760	262
15°	2644	2645	2639	2653	2656	745
25°	2418	2422	2434	2456	2457	1114
35°	2109	2137	2156	2161	2166	1320
45°	1741	1772	1792	1805	1808	1346
55°	1347	1359	1382	1402	1405	1200
65°	907	924	958	988	994	902
75°	476	502	554	586	655	508
85°	127	173	232	263	270	136
90°	24	69	131	166	174	19
95°	20	47	81	108	113	18
105°	38	37	55	87	81	40
115°	56	63	47	55	58	57
125°	72	72	86	73	61	64
135°	84	82	90	101	98	64
145°	92	95	90	95	99	58
155°	98	104	98	93	93	45
165°	101	104	107	104	101	29
175°	102	102	102	102	99	10
180°	101	101	101	101	101	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2770.4	2770.4	2770.4	2770.4	2770.4
2.5°	2771.9	2770.4	2758.2	2767.4	2770.4
5°	2759.7	2759.7	2749.0	2759.7	2759.7
7.5°	2742.9	2741.4	2732.2	2741.4	2744.5
10°	2717.0	2717.0	2707.8	2718.5	2720.0
12.5°	2683.4	2684.9	2677.3	2687.9	2691.0
15°	2643.7	2645.2	2639.1	2652.8	2655.9
17.5°	2594.8	2597.8	2596.3	2611.6	2616.2
20°	2541.3	2550.5	2547.4	2567.3	2571.9
22.5°	2481.8	2487.9	2494.0	2515.4	2518.4
25°	2417.6	2422.2	2434.4	2455.8	2457.3
27.5°	2347.4	2359.6	2370.3	2387.1	2393.2
30°	2274.1	2290.9	2303.1	2318.4	2319.9
32.5°	2194.6	2217.6	2232.8	2240.5	2245.0
35°	2109.1	2136.6	2156.5	2161.0	2165.6
37.5°	2025.1	2054.1	2058.7	2080.1	2081.6
40°	1933.5	1967.1	1970.1	1990.0	1994.6
42.5°	1843.4	1861.7	1883.1	1901.4	1899.9
45°	1741.1	1771.6	1791.5	1805.2	1808.3
47.5°	1646.4	1681.5	1687.6	1704.4	1710.5
50°	1554.7	1582.2	1589.9	1611.2	1608.2
52.5°	1443.2	1473.8	1496.7	1504.3	1504.3
55°	1347.0	1359.2	1382.2	1402.0	1405.1
57.5°	1232.5	1252.3	1273.7	1301.2	1304.3
60°	1134.7	1150.0	1166.8	1212.6	1247.8
62.5°	1020.2	1035.5	1059.9	1098.1	1098.1
65°	907.2	924.0	957.6	988.1	994.2
67.5°	804.9	820.1	876.6	884.3	888.9
70°	688.8	708.6	751.4	780.4	791.1
72.5°	583.4	601.7	647.6	684.2	690.3
75°	476.5	502.5	554.4	586.5	655.2
77.5°	378.8	410.8	459.7	497.9	511.6
80°	284.1	319.2	378.8	407.8	413.9
82.5°	197.0	242.8	294.8	337.5	348.2
85°	126.8	172.6	232.1	262.7	270.3
87.5°	67.2	116.1	174.1	210.8	219.9
90°	24.4	68.7	131.3	166.5	174.1
92.5°	21.4	48.9	99.3	129.8	137.5
95°	19.9	47.3	80.9	108.4	113.0
97.5°	22.9	41.2	71.8	85.5	90.1
100°	27.5	36.7	68.7	82.5	87.1
102.5°	32.1	33.6	62.6	74.8	74.8
105°	38.2	36.7	55.0	87.1	80.9
107.5°	42.8	48.9	53.5	64.1	70.3
110°	48.9	53.5	47.3	61.1	62.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	53.5	59.6	47.3	59.6	59.6
115°	56.5	62.6	47.3	55.0	58.0
117.5°	61.1	64.1	59.6	53.5	53.5
120°	65.7	65.7	73.3	51.9	51.9
122.5°	68.7	68.7	77.9	58.0	51.9
125°	71.8	71.8	85.5	73.3	61.1
127.5°	74.8	74.8	88.6	84.0	76.4
130°	77.9	76.4	91.6	90.1	85.5
132.5°	80.9	79.4	91.6	94.7	91.6
135°	84.0	82.5	90.1	100.8	97.7
137.5°	85.5	85.5	88.6	102.3	102.3
140°	88.6	88.6	88.6	100.8	105.4
142.5°	90.1	91.6	90.1	97.7	102.3
145°	91.6	94.7	90.1	94.7	99.3
147.5°	93.2	97.7	90.1	94.7	94.7
150°	96.2	99.3	91.6	93.2	94.7
152.5°	96.2	102.3	94.7	93.2	93.2
155°	97.7	103.9	97.7	93.2	93.2
157.5°	99.3	103.9	99.3	94.7	93.2
160°	99.3	105.4	102.3	97.7	94.7
162.5°	100.8	105.4	105.4	100.8	97.7
165°	100.8	103.9	106.9	103.9	100.8
167.5°	100.8	103.9	106.9	105.4	102.3
170°	102.3	103.9	105.4	105.4	102.3
172.5°	102.3	102.3	103.9	103.9	102.3
175°	102.3	102.3	102.3	102.3	99.3
177.5°	102.3	102.3	102.3	100.8	97.7
180°	100.8	100.8	100.8	100.8	100.8

(END OF REPORT)