

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-L835-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-L835-CD1-U  
Description: Metalux 4' ILED WITH ASYMMETRIC DIRECTIONAL LOUVER-HEAVY DUTY WIREGUARD DISTRIBUTION

Light Source: (1) 3500 CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

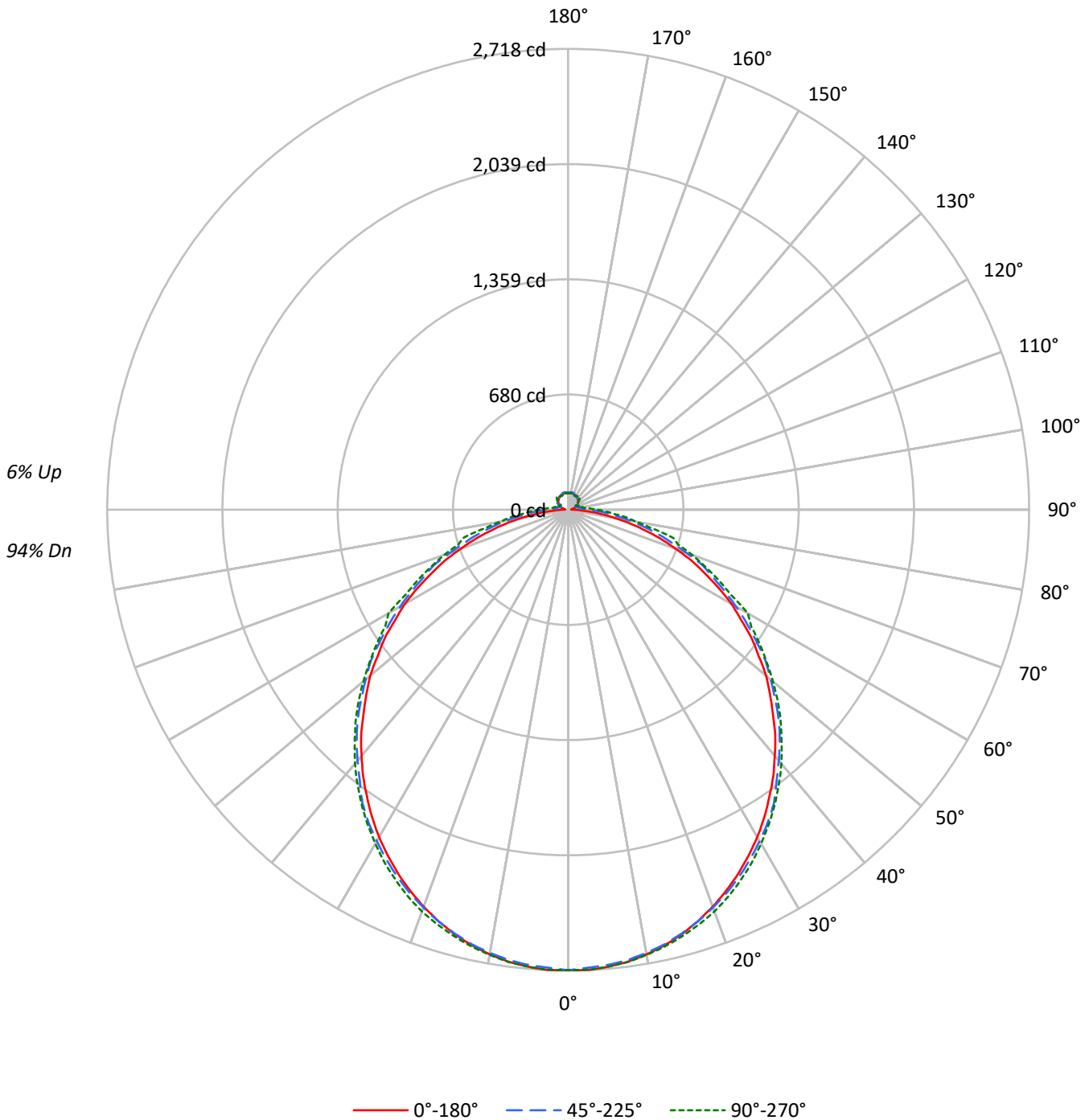
Lumens per Lamp: N/A  
Luminaire Lumens: 8184.0 lumens  
Efficiency: N/A  
Efficacy: 97.5 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.24 / 1.35  
Luminous Opening: Rectangular w/ Sides (W: 0.92' x L: 4' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 83.9  
Input Voltage (V):  
Input Current (Ain): 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



TEST NUMBER: P#  
CATALOG NUMBER: 4ILED-LD5-11-W-ASYWG-UNV-L835-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: 4ILED-LD5-11-W-ASYWG-UNV-L835-CD1-U

**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°	7973	7973	7973
5°	7955	7876	7897
10°	7905	7783	7799
15°	7824	7668	7688
20°	7713	7542	7576
25°	7589	7403	7426
30°	7450	7256	7253
35°	7283	7105	7069
40°	7115	6856	6865
45°	6913	6660	6636
50°	6760	6395	6372
55°	6526	6108	6100
60°	6260	5769	6040
65°	5864	5419	5487
70°	5424	5016	5122
75°	4846	4553	5177
80°	4124	4082	4238
85°	3256	3679	3972



TEST NUMBER: P#

CATALOG NUMBER: 4ILED-LD5-11-W-ASYWG-UNV-L835-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	256.7	3.1
10°-20°	732.0	8.9
20°-30°	1101.3	13.5
30°-40°	1316.2	16.1
40°-50°	1350.4	16.5
50°-60°	1211.7	14.8
60°-70°	931.0	11.4
70°-80°	569.7	7.0
80°-90°	241.6	3.0
90°-100°	85.0	1.0
100°-110°	59.5	0.7
110°-120°	55.5	0.7
120°-130°	64.6	0.8
130°-140°	68.4	0.8
140°-150°	57.9	0.7
150°-160°	44.2	0.5
160°-170°	28.7	0.4
170°-180°	9.6	0.1
0°-30°	2090.0	25.5
0°-40°	3406.2	41.6
0°-60°	5968.3	72.9
0°-90°	7710.6	94.2
90°-120°	200.0	2.4
90°-150°	391.0	4.8
90°-180°	473.0	5.8
0°-180°	8184.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2716	2716	2716	2716	2716	
5°	2706	2706	2695	2706	2706	257
15°	2592	2593	2587	2601	2604	731
25°	2370	2375	2387	2408	2409	1092
35°	2068	2095	2114	2119	2123	1294
45°	1707	1737	1756	1770	1773	1320
55°	1321	1332	1355	1374	1378	1177
65°	889	906	939	969	975	884
75°	467	493	544	575	642	498
85°	124	169	228	258	265	133
90°	24	67	129	163	171	18
95°	20	46	79	106	111	18
105°	37	36	54	85	79	39
115°	55	61	46	54	57	55
125°	70	70	84	72	60	63
135°	82	81	88	99	96	63
145°	90	93	88	93	97	56
155°	96	102	96	91	91	44
165°	99	102	105	102	99	28
175°	100	100	100	100	97	10
180°	99	99	99	99	99	



TEST NUMBER: P#

CATALOG NUMBER: 4ILED-LD5-11-W-ASYWG-UNV-L835-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2716.0	2716.0	2716.0	2716.0	2716.0
2.5°	2717.5	2716.0	2704.0	2713.0	2716.0
5°	2705.5	2705.5	2695.0	2705.5	2705.5
7.5°	2689.0	2687.5	2678.6	2687.5	2690.5
10°	2663.6	2663.6	2654.6	2665.1	2666.6
12.5°	2630.6	2632.1	2624.7	2635.1	2638.1
15°	2591.7	2593.2	2587.2	2600.7	2603.7
17.5°	2543.8	2546.8	2545.3	2560.3	2564.8
20°	2491.4	2500.4	2497.4	2516.9	2521.4
22.5°	2433.0	2439.0	2445.0	2466.0	2468.9
25°	2370.1	2374.6	2386.6	2407.6	2409.1
27.5°	2301.3	2313.2	2323.7	2340.2	2346.2
30°	2229.4	2245.9	2257.8	2272.8	2274.3
32.5°	2151.5	2174.0	2189.0	2196.4	2200.9
35°	2067.7	2094.6	2114.1	2118.6	2123.1
37.5°	1985.3	2013.8	2018.3	2039.2	2040.7
40°	1895.5	1928.4	1931.4	1950.9	1955.4
42.5°	1807.2	1825.1	1846.1	1864.1	1862.6
45°	1706.9	1736.8	1756.3	1769.7	1772.7
47.5°	1614.0	1648.5	1654.4	1670.9	1676.9
50°	1524.2	1551.1	1558.6	1579.6	1576.6
52.5°	1414.9	1444.8	1467.3	1474.8	1474.8
55°	1320.6	1332.5	1355.0	1374.5	1377.5
57.5°	1208.3	1227.7	1248.7	1275.6	1278.6
60°	1112.4	1127.4	1143.9	1188.8	1223.2
62.5°	1000.2	1015.1	1039.1	1076.5	1076.5
65°	889.4	905.8	938.8	968.7	974.7
67.5°	789.0	804.0	859.4	866.9	871.4
70°	675.3	694.7	736.6	765.1	775.6
72.5°	571.9	589.9	634.8	670.8	676.8
75°	467.1	492.6	543.5	574.9	642.3
77.5°	371.3	402.8	450.7	488.1	501.6
80°	278.5	312.9	371.3	399.8	405.8
82.5°	193.1	238.1	289.0	330.9	341.4
85°	124.3	169.2	227.6	257.5	265.0
87.5°	65.9	113.8	170.7	206.6	215.6
90°	24.0	67.4	128.8	163.2	170.7
92.5°	21.0	47.9	97.3	127.3	134.8
95°	19.5	46.4	79.4	106.3	110.8
97.5°	22.5	40.4	70.4	83.8	88.3
100°	27.0	35.9	67.4	80.9	85.3
102.5°	31.4	32.9	61.4	73.4	73.4
105°	37.4	35.9	53.9	85.3	79.4
107.5°	41.9	47.9	52.4	62.9	68.9
110°	47.9	52.4	46.4	59.9	61.4



TEST NUMBER: P#

CATALOG NUMBER: 4ILED-LD5-11-W-ASYWG-UNV-L835-CD1-U

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	52.4	58.4	46.4	58.4	58.4
115°	55.4	61.4	46.4	53.9	56.9
117.5°	59.9	62.9	58.4	52.4	52.4
120°	64.4	64.4	71.9	50.9	50.9
122.5°	67.4	67.4	76.4	56.9	50.9
125°	70.4	70.4	83.8	71.9	59.9
127.5°	73.4	73.4	86.8	82.3	74.9
130°	76.4	74.9	89.8	88.3	83.8
132.5°	79.4	77.9	89.8	92.8	89.8
135°	82.3	80.9	88.3	98.8	95.8
137.5°	83.8	83.8	86.8	100.3	100.3
140°	86.8	86.8	86.8	98.8	103.3
142.5°	88.3	89.8	88.3	95.8	100.3
145°	89.8	92.8	88.3	92.8	97.3
147.5°	91.3	95.8	88.3	92.8	92.8
150°	94.3	97.3	89.8	91.3	92.8
152.5°	94.3	100.3	92.8	91.3	91.3
155°	95.8	101.8	95.8	91.3	91.3
157.5°	97.3	101.8	97.3	92.8	91.3
160°	97.3	103.3	100.3	95.8	92.8
162.5°	98.8	103.3	103.3	98.8	95.8
165°	98.8	101.8	104.8	101.8	98.8
167.5°	98.8	101.8	104.8	103.3	100.3
170°	100.3	101.8	103.3	103.3	100.3
172.5°	100.3	100.3	101.8	101.8	100.3
175°	100.3	100.3	100.3	100.3	97.3
177.5°	100.3	100.3	100.3	98.8	95.8
180°	98.8	98.8	98.8	98.8	98.8

(END OF REPORT)