

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-FLUPL-UNV-L850-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 (P34183)
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-FLUPL-UNV-L850-CD1-U
Description: Metalux 4' ILED WITH FROST LENS WITH UPL DISTRIBUTION

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

Summary

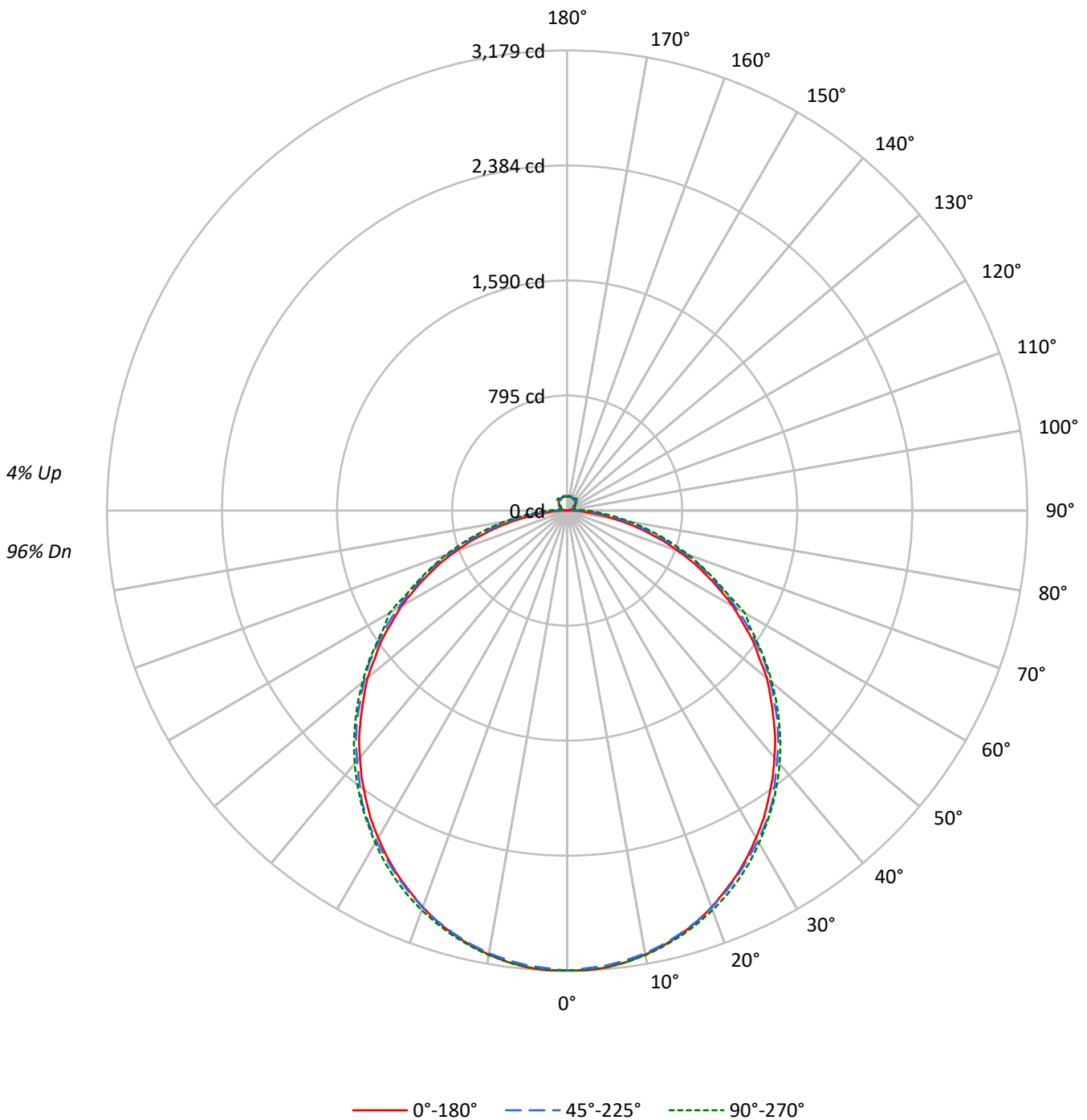
Lumens per Lamp: N/A
Luminaire Lumens: 9379.0 lumens
Efficiency: N/A
Efficacy: 111.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.24 / 1.35
Luminous Opening: Rectangular w/ Sides (W: 0.92' x L: 4' x H: 0.1')
CIE Type: Direct

Input Watts (W): 83.9
Input Voltage (V):
Input Current (A_{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	0	
RCR																						
0	118	118	118	118	115	115	115	115	109	109	109	103	103	103	98	98	98	96				
1	107	103	98	94	104	100	96	92	95	91	89	90	87	85	86	84	82	79				
2	98	89	82	76	95	87	81	75	83	77	73	79	74	70	75	72	68	66				
3	89	78	70	63	86	76	69	63	73	66	61	69	64	59	66	62	58	55				
4	81	69	60	54	79	68	59	53	65	58	52	62	56	51	59	54	50	47				
5	75	62	53	46	72	60	52	46	58	50	45	55	49	44	53	48	43	41				
6	69	56	47	40	67	55	46	40	52	45	39	50	44	39	48	42	38	36				
7	64	50	42	36	62	49	41	35	48	40	35	46	39	34	44	38	34	32				
8	60	46	38	32	58	45	37	31	43	36	31	42	35	31	40	35	30	28				
9	56	42	34	28	54	41	34	28	40	33	28	39	32	28	37	31	27	25				
10	52	39	31	26	51	38	31	26	37	30	25	36	29	25	35	29	25	23				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9328	9328	9328
5°	9315	9215	9242
10°	9245	9104	9120
15°	9151	8965	8980
20°	9028	8811	8826
25°	8884	8637	8659
30°	8722	8468	8455
35°	8545	8291	8247
40°	8359	8010	8015
45°	8154	7784	7751
50°	7987	7512	7458
55°	7738	7192	7137
60°	7442	6810	7009
65°	7037	6361	6333
70°	6538	5835	5854
75°	5870	5181	5250
80°	4944	4358	4569
85°	3749	3403	3797



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	300.3	3.2
10°-20°	855.6	9.1
20°-30°	1285.7	13.7
30°-40°	1538.2	16.4
40°-50°	1581.4	16.9
50°-60°	1424.2	15.2
60°-70°	1094.6	11.7
70°-80°	651.7	6.9
80°-90°	236.1	2.5
90°-100°	50.9	0.5
100°-110°	42.3	0.5
110°-120°	49.9	0.5
120°-130°	61.7	0.7
130°-140°	67.4	0.7
140°-150°	57.8	0.6
150°-160°	43.5	0.5
160°-170°	28.3	0.3
170°-180°	9.5	0.1
0°-30°	2441.6	26.0
0°-40°	3979.8	42.4
0°-60°	6985.4	74.5
0°-90°	8967.8	95.6
90°-120°	143.1	1.5
90°-150°	330.0	3.5
90°-180°	411.0	4.4
0°-180°	9379.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3178	3178	3178	3178	3178	
5°	3168	3166	3153	3164	3166	301
15°	3031	3033	3025	3038	3041	855
25°	2775	2780	2784	2804	2809	1278
35°	2426	2456	2467	2472	2477	1519
45°	2013	2034	2053	2072	2071	1556
55°	1566	1572	1595	1608	1612	1395
65°	1067	1077	1102	1123	1125	1058
75°	566	582	618	653	651	601
85°	143	171	210	242	253	157
90°	3	43	86	117	127	11
95°	12	28	41	59	66	12
105°	34	30	38	61	54	36
115°	54	61	43	44	44	54
125°	69	69	79	64	56	62
135°	81	79	90	95	94	63
145°	89	90	87	95	102	56
155°	94	100	94	90	90	44
165°	97	100	104	100	97	28
175°	99	99	100	99	95	9
180°	97	97	97	97	97	



TEST NUMBER: P#

CATALOG NUMBER: 4ILED-LD5-11-W-FLUPL-UNV-L850-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3177.6	3177.6	3177.6	3177.6	3177.6
2.5°	3179.3	3177.6	3164.5	3174.3	3176.0
5°	3167.8	3166.1	3153.0	3164.5	3166.1
7.5°	3144.7	3144.7	3131.6	3144.7	3146.4
10°	3115.1	3115.1	3105.3	3116.8	3118.4
12.5°	3077.3	3078.9	3069.1	3082.2	3082.2
15°	3031.2	3032.9	3024.7	3037.8	3041.1
17.5°	2978.6	2978.6	2975.3	2990.1	2991.8
20°	2916.1	2924.3	2917.8	2934.2	2937.5
22.5°	2845.4	2853.6	2853.6	2871.7	2876.6
25°	2774.7	2779.6	2784.5	2804.3	2809.2
27.5°	2695.7	2705.6	2707.2	2728.6	2733.5
30°	2610.2	2626.6	2634.9	2648.0	2651.3
32.5°	2524.7	2546.0	2555.9	2562.5	2564.1
35°	2426.0	2455.6	2467.1	2472.0	2477.0
37.5°	2330.6	2355.3	2358.5	2376.6	2381.6
40°	2227.0	2256.6	2256.6	2278.0	2282.9
42.5°	2128.3	2134.9	2159.5	2174.3	2180.9
45°	2013.2	2034.5	2052.6	2072.4	2070.7
47.5°	1904.6	1932.6	1937.5	1955.6	1960.5
50°	1801.0	1820.7	1830.6	1845.4	1845.4
52.5°	1672.7	1699.0	1720.4	1728.6	1733.5
55°	1565.8	1572.4	1595.4	1608.5	1611.8
57.5°	1435.9	1452.3	1473.7	1490.1	1498.4
60°	1322.4	1332.2	1350.3	1373.4	1419.4
62.5°	1194.1	1205.6	1228.6	1297.7	1250.0
65°	1067.4	1077.3	1102.0	1123.4	1125.0
67.5°	947.4	957.2	991.8	998.4	1003.3
70°	814.1	827.3	856.9	878.3	886.5
72.5°	692.4	703.9	733.6	758.2	766.4
75°	565.8	582.2	618.4	653.0	651.3
77.5°	445.7	475.3	504.9	532.9	541.1
80°	333.9	356.9	396.4	426.0	437.5
82.5°	233.6	259.9	299.3	328.9	340.5
85°	143.1	171.1	210.5	241.8	253.3
87.5°	69.1	97.0	139.8	171.1	184.2
90°	3.3	42.8	85.5	116.8	126.6
92.5°	6.6	24.7	55.9	80.6	88.8
95°	11.5	28.0	41.1	59.2	65.8
97.5°	16.4	24.7	36.2	47.7	52.6
100°	23.0	24.7	41.1	42.8	46.1
102.5°	28.0	26.3	39.5	42.8	42.8
105°	34.5	29.6	37.8	60.9	54.3
107.5°	39.5	41.1	36.2	42.8	46.1
110°	44.4	47.7	39.5	46.1	46.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	49.3	54.3	42.8	42.8	46.1
115°	54.3	60.9	42.8	44.4	44.4
117.5°	59.2	62.5	51.0	47.7	47.7
120°	62.5	64.1	64.1	47.7	51.0
122.5°	65.8	67.4	72.4	52.6	51.0
125°	69.1	69.1	78.9	64.1	55.9
127.5°	72.4	72.4	83.9	75.7	67.4
130°	75.7	72.4	88.8	82.2	78.9
132.5°	78.9	75.7	90.5	88.8	85.5
135°	80.6	78.9	90.5	95.4	93.7
137.5°	83.9	82.2	87.2	100.3	98.7
140°	85.5	85.5	87.2	100.3	103.6
142.5°	87.2	87.2	87.2	98.7	103.6
145°	88.8	90.5	87.2	95.4	102.0
147.5°	90.5	93.7	87.2	93.7	97.0
150°	92.1	95.4	87.2	92.1	93.7
152.5°	93.7	98.7	90.5	90.5	92.1
155°	93.7	100.3	93.7	90.5	90.5
157.5°	95.4	100.3	95.4	90.5	90.5
160°	95.4	102.0	98.7	93.7	92.1
162.5°	97.0	102.0	102.0	97.0	95.4
165°	97.0	100.3	103.6	100.3	97.0
167.5°	98.7	100.3	103.6	102.0	98.7
170°	98.7	100.3	102.0	102.0	98.7
172.5°	98.7	100.3	102.0	100.3	98.7
175°	98.7	98.7	100.3	98.7	95.4
177.5°	98.7	98.7	98.7	97.0	95.4
180°	97.0	97.0	97.0	97.0	97.0

(END OF REPORT)