

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-LD5-14-W-FLUPL-UNV-L850-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 (P34183)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8ILED-LD5-14-W-FLUPL-UNV-L850-CD2-U  
Description: Metalux 8' ILED WITH FROST LENS WITH UPL DISTRIBUTION

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

**Summary**

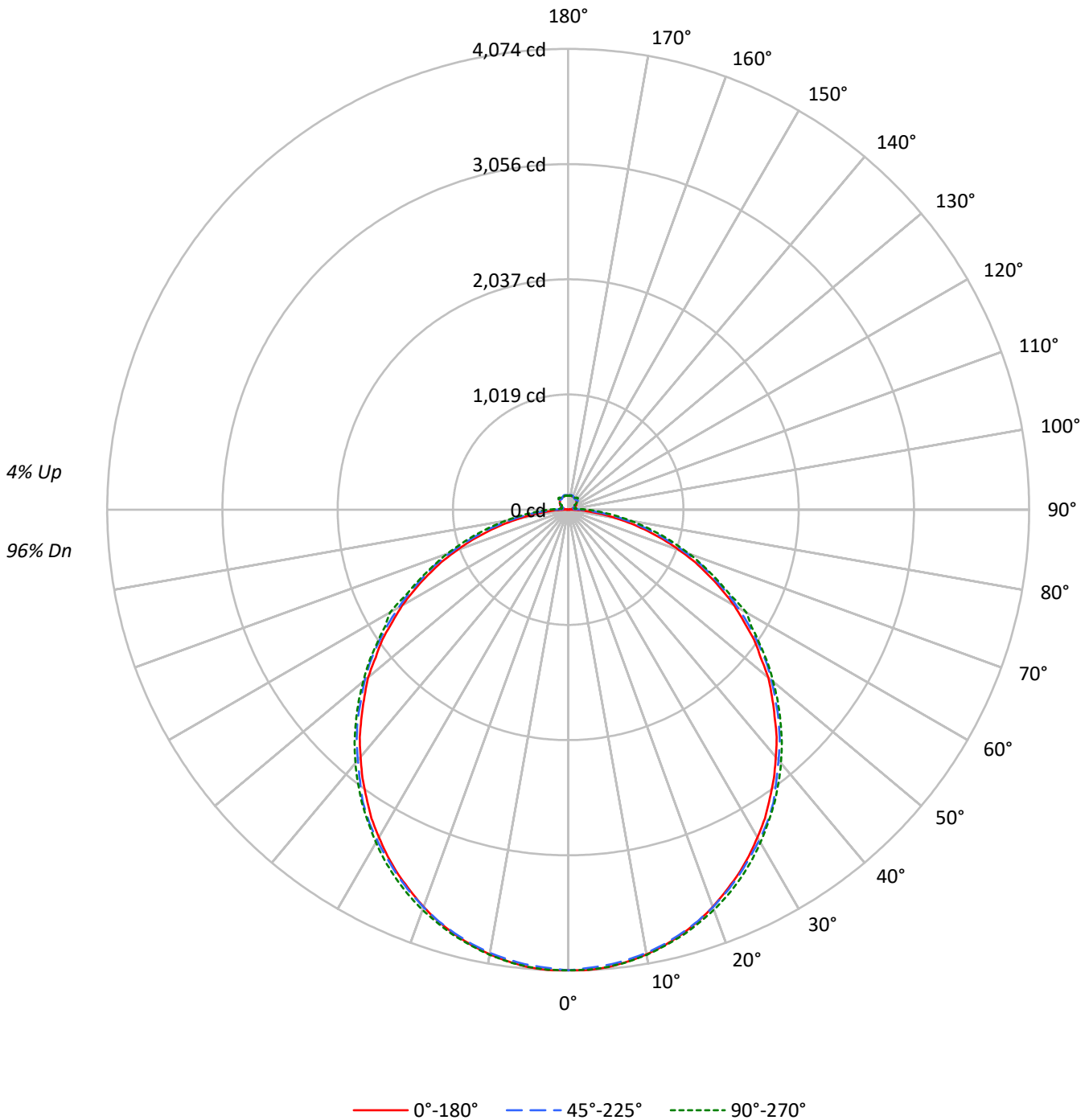
Lumens per Lamp: N/A  
Luminaire Lumens: 12019.0 lumens  
Efficiency: N/A  
Efficacy: 119.2 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.24 / 1.35  
Luminous Opening: Rectangular w/ Sides (W: 0.92' x L: 8' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 100.8  
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	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°	5977	5977	5977
5°	5975	5909	5922
10°	5937	5842	5844
15°	5883	5757	5754
20°	5811	5663	5655
25°	5725	5556	5548
30°	5629	5452	5417
35°	5522	5343	5284
40°	5411	5168	5135
45°	5289	5028	4967
50°	5193	4859	4779
55°	5045	4660	4573
60°	4869	4421	4491
65°	4627	4141	4058
70°	4329	3812	3751
75°	3928	3403	3364
80°	3378	2887	2927
85°	2703	2292	2433



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	384.8	3.2
10°-20°	1096.5	9.1
20°-30°	1647.5	13.7
30°-40°	1971.2	16.4
40°-50°	2026.5	16.9
50°-60°	1825.1	15.2
60°-70°	1402.7	11.7
70°-80°	835.1	6.9
80°-90°	302.6	2.5
90°-100°	65.2	0.5
100°-110°	54.2	0.5
110°-120°	63.9	0.5
120°-130°	79.1	0.7
130°-140°	86.3	0.7
140°-150°	74.1	0.6
150°-160°	55.8	0.5
160°-170°	36.2	0.3
170°-180°	12.2	0.1
0°-30°	3128.8	26.0
0°-40°	5100.0	42.4
0°-60°	8951.7	74.5
0°-90°	11492.0	95.6
90°-120°	183.3	1.5
90°-150°	422.8	3.5
90°-180°	527.0	4.4
0°-180°	12019.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4072	4072	4072	4072	4072	
5°	4059	4057	4040	4055	4057	385
15°	3884	3887	3876	3893	3897	1095
25°	3556	3562	3568	3594	3600	1638
35°	3109	3147	3162	3168	3174	1946
45°	2580	2607	2630	2656	2654	1994
55°	2006	2015	2044	2061	2066	1787
65°	1368	1380	1412	1440	1442	1356
75°	725	746	792	837	835	770
85°	183	219	270	310	325	201
90°	4	55	110	150	162	14
95°	15	36	53	76	84	15
105°	44	38	48	78	70	46
115°	70	78	55	57	57	69
125°	88	88	101	82	72	79
135°	103	101	116	122	120	80
145°	114	116	112	122	131	71
155°	120	129	120	116	116	56
165°	124	129	133	129	124	35
175°	126	126	129	126	122	12
180°	124	124	124	124	124	



TEST NUMBER: P#

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4072.1	4072.1	4072.1	4072.1	4072.1
2.5°	4074.2	4072.1	4055.2	4067.8	4070.0
5°	4059.4	4057.3	4040.4	4055.2	4057.3
7.5°	4029.9	4029.9	4013.0	4029.9	4032.0
10°	3992.0	3992.0	3979.3	3994.1	3996.2
12.5°	3943.5	3945.6	3933.0	3949.8	3949.8
15°	3884.5	3886.6	3876.0	3892.9	3897.1
17.5°	3817.0	3817.0	3812.8	3831.8	3833.9
20°	3736.9	3747.5	3739.0	3760.1	3764.3
22.5°	3646.3	3656.8	3656.8	3680.0	3686.4
25°	3555.7	3562.0	3568.3	3593.6	3599.9
27.5°	3454.5	3467.2	3469.3	3496.7	3503.0
30°	3344.9	3366.0	3376.5	3393.4	3397.6
32.5°	3235.3	3262.7	3275.4	3283.8	3285.9
35°	3108.8	3146.8	3161.5	3167.9	3174.2
37.5°	2986.6	3018.2	3022.4	3045.6	3051.9
40°	2853.8	2891.8	2891.8	2919.2	2925.5
42.5°	2727.4	2735.8	2767.4	2786.4	2794.8
45°	2579.8	2607.2	2630.4	2655.7	2653.6
47.5°	2440.7	2476.5	2482.9	2506.0	2512.4
50°	2307.9	2333.2	2345.9	2364.8	2364.8
52.5°	2143.5	2177.2	2204.6	2215.2	2221.5
55°	2006.5	2015.0	2044.5	2061.3	2065.5
57.5°	1840.0	1861.1	1888.5	1909.6	1920.1
60°	1694.6	1707.2	1730.4	1759.9	1818.9
62.5°	1530.2	1544.9	1574.4	1663.0	1601.8
65°	1367.9	1380.5	1412.2	1439.6	1441.7
67.5°	1214.0	1226.7	1270.9	1279.4	1285.7
70°	1043.3	1060.2	1098.1	1125.5	1136.0
72.5°	887.3	902.1	940.0	971.6	982.2
75°	725.0	746.1	792.5	836.8	834.6
77.5°	571.2	609.1	647.1	682.9	693.4
80°	427.9	457.4	508.0	545.9	560.6
82.5°	299.3	333.0	383.6	421.5	436.3
85°	183.4	219.2	269.8	309.8	324.6
87.5°	88.5	124.4	179.2	219.2	236.1
90°	4.2	54.8	109.6	149.6	162.3
92.5°	8.4	31.6	71.7	103.3	113.8
95°	14.8	35.8	52.7	75.9	84.3
97.5°	21.1	31.6	46.4	61.1	67.4
100°	29.5	31.6	52.7	54.8	59.0
102.5°	35.8	33.7	50.6	54.8	54.8
105°	44.3	37.9	48.5	78.0	69.6
107.5°	50.6	52.7	46.4	54.8	59.0
110°	56.9	61.1	50.6	59.0	59.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	63.2	69.6	54.8	54.8	59.0
115°	69.6	78.0	54.8	56.9	56.9
117.5°	75.9	80.1	65.3	61.1	61.1
120°	80.1	82.2	82.2	61.1	65.3
122.5°	84.3	86.4	92.7	67.4	65.3
125°	88.5	88.5	101.2	82.2	71.7
127.5°	92.7	92.7	107.5	97.0	86.4
130°	97.0	92.7	113.8	105.4	101.2
132.5°	101.2	97.0	115.9	113.8	109.6
135°	103.3	101.2	115.9	122.2	120.1
137.5°	107.5	105.4	111.7	128.6	126.5
140°	109.6	109.6	111.7	128.6	132.8
142.5°	111.7	111.7	111.7	126.5	132.8
145°	113.8	115.9	111.7	122.2	130.7
147.5°	115.9	120.1	111.7	120.1	124.4
150°	118.0	122.2	111.7	118.0	120.1
152.5°	120.1	126.5	115.9	115.9	118.0
155°	120.1	128.6	120.1	115.9	115.9
157.5°	122.2	128.6	122.2	115.9	115.9
160°	122.2	130.7	126.5	120.1	118.0
162.5°	124.4	130.7	130.7	124.4	122.2
165°	124.4	128.6	132.8	128.6	124.4
167.5°	126.5	128.6	132.8	130.7	126.5
170°	126.5	128.6	130.7	130.7	126.5
172.5°	126.5	128.6	130.7	128.6	126.5
175°	126.5	126.5	128.6	126.5	122.2
177.5°	126.5	126.5	126.5	124.4	122.2
180°	124.4	124.4	124.4	124.4	124.4

(END OF REPORT)