

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-LD5-10-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: 8ILED-LD5-10-W-FLUPL-UNV-L850-CD1-U  
Description: Metalux 8' ILED WITH FROST LENS WITH UPL DISTRIBUTION

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

**Summary**

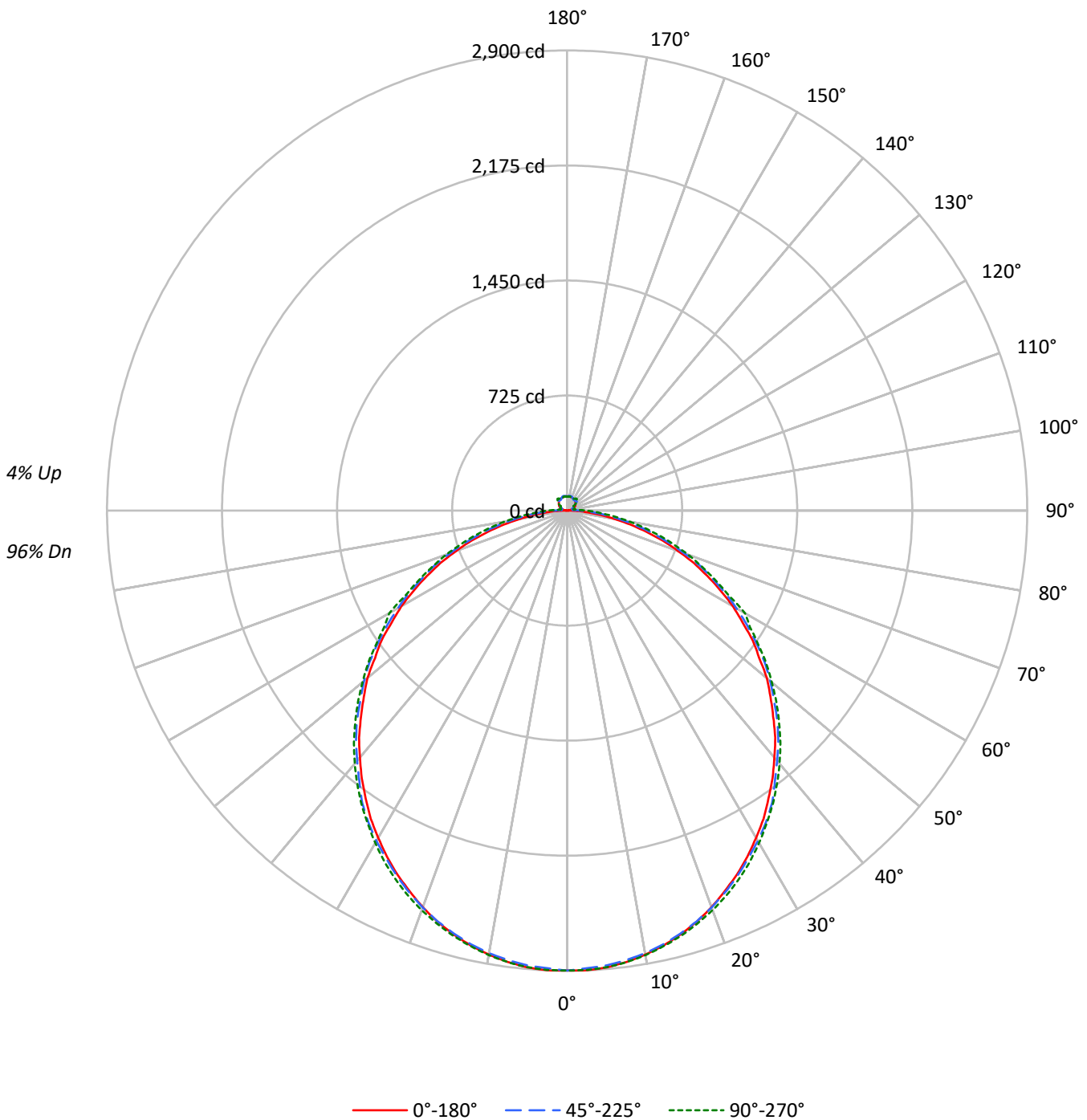
Lumens per Lamp: N/A  
Luminaire Lumens: 8555.9 lumens  
Efficiency: N/A  
Efficacy: 127.7 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.24 / 1.35  
Luminous Opening: Rectangular w/ Sides (W: 0.92' x L: 8' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 67  
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



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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	92	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°	4255	4255	4255
5°	4253	4206	4215
10°	4226	4159	4160
15°	4188	4099	4096
20°	4136	4031	4026
25°	4076	3955	3949
30°	4007	3881	3857
35°	3931	3804	3762
40°	3852	3679	3656
45°	3765	3579	3535
50°	3696	3459	3402
55°	3591	3317	3256
60°	3466	3147	3197
65°	3294	2948	2889
70°	3082	2714	2670
75°	2796	2422	2395
80°	2404	2055	2084
85°	1923	1632	1732



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	273.9	3.2
10°-20°	780.6	9.1
20°-30°	1172.8	13.7
30°-40°	1403.2	16.4
40°-50°	1442.6	16.9
50°-60°	1299.3	15.2
60°-70°	998.5	11.7
70°-80°	594.5	6.9
80°-90°	215.4	2.5
90°-100°	46.4	0.5
100°-110°	38.6	0.5
110°-120°	45.5	0.5
120°-130°	56.3	0.7
130°-140°	61.4	0.7
140°-150°	52.7	0.6
150°-160°	39.7	0.5
160°-170°	25.8	0.3
170°-180°	8.7	0.1
0°-30°	2227.3	26.0
0°-40°	3630.6	42.4
0°-60°	6372.5	74.5
0°-90°	8180.9	95.6
90°-120°	130.5	1.5
90°-150°	300.9	3.5
90°-180°	375.0	4.4
0°-180°	8555.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2899	2899	2899	2899	2899	
5°	2890	2888	2876	2887	2888	274
15°	2765	2767	2759	2771	2774	780
25°	2531	2536	2540	2558	2563	1166
35°	2213	2240	2251	2255	2260	1385
45°	1836	1856	1872	1890	1889	1419
55°	1428	1434	1455	1467	1470	1272
65°	974	983	1005	1025	1026	965
75°	516	531	564	596	594	548
85°	130	156	192	221	231	143
90°	3	39	78	106	116	10
95°	10	26	38	54	60	11
105°	32	27	34	56	50	33
115°	50	56	39	40	40	49
125°	63	63	72	58	51	56
135°	74	72	82	87	86	57
145°	81	82	80	87	93	51
155°	86	92	86	82	82	40
165°	88	92	94	92	88	25
175°	90	90	92	90	87	9
180°	88	88	88	88	88	



TEST NUMBER: P#

CATALOG NUMBER: 8ILED-LD5-10-W-FLUPL-UNV-L850-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2898.8	2898.8	2898.8	2898.8	2898.8
2.5°	2900.3	2898.8	2886.8	2895.8	2897.3
5°	2889.8	2888.3	2876.3	2886.8	2888.3
7.5°	2868.8	2868.8	2856.8	2868.8	2870.3
10°	2841.8	2841.8	2832.8	2843.3	2844.8
12.5°	2807.3	2808.8	2799.8	2811.8	2811.8
15°	2765.3	2766.8	2759.3	2771.3	2774.3
17.5°	2717.2	2717.2	2714.2	2727.7	2729.2
20°	2660.2	2667.7	2661.7	2676.7	2679.7
22.5°	2595.7	2603.2	2603.2	2619.7	2624.2
25°	2531.2	2535.7	2540.2	2558.2	2562.7
27.5°	2459.2	2468.2	2469.7	2489.2	2493.7
30°	2381.1	2396.2	2403.7	2415.7	2418.7
32.5°	2303.1	2322.6	2331.6	2337.6	2339.1
35°	2213.1	2240.1	2250.6	2255.1	2259.6
37.5°	2126.1	2148.6	2151.6	2168.1	2172.6
40°	2031.6	2058.6	2058.6	2078.1	2082.6
42.5°	1941.5	1947.5	1970.0	1983.5	1989.5
45°	1836.5	1856.0	1872.5	1890.5	1889.0
47.5°	1737.5	1763.0	1767.5	1784.0	1788.5
50°	1642.9	1661.0	1670.0	1683.5	1683.5
52.5°	1525.9	1549.9	1569.4	1576.9	1581.4
55°	1428.4	1434.4	1455.4	1467.4	1470.4
57.5°	1309.9	1324.9	1344.4	1359.4	1366.9
60°	1206.3	1215.3	1231.8	1252.8	1294.9
62.5°	1089.3	1099.8	1120.8	1183.8	1140.3
65°	973.8	982.8	1005.3	1024.8	1026.3
67.5°	864.2	873.2	904.7	910.7	915.2
70°	742.7	754.7	781.7	801.2	808.7
72.5°	631.7	642.2	669.2	691.7	699.2
75°	516.1	531.1	564.2	595.7	594.2
77.5°	406.6	433.6	460.6	486.1	493.6
80°	304.6	325.6	361.6	388.6	399.1
82.5°	213.1	237.1	273.1	300.1	310.6
85°	130.5	156.0	192.1	220.6	231.1
87.5°	63.0	88.5	127.5	156.0	168.0
90°	3.0	39.0	78.0	106.5	115.5
92.5°	6.0	22.5	51.0	73.5	81.0
95°	10.5	25.5	37.5	54.0	60.0
97.5°	15.0	22.5	33.0	43.5	48.0
100°	21.0	22.5	37.5	39.0	42.0
102.5°	25.5	24.0	36.0	39.0	39.0
105°	31.5	27.0	34.5	55.5	49.5
107.5°	36.0	37.5	33.0	39.0	42.0
110°	40.5	43.5	36.0	42.0	42.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	45.0	49.5	39.0	39.0	42.0
115°	49.5	55.5	39.0	40.5	40.5
117.5°	54.0	57.0	46.5	43.5	43.5
120°	57.0	58.5	58.5	43.5	46.5
122.5°	60.0	61.5	66.0	48.0	46.5
125°	63.0	63.0	72.0	58.5	51.0
127.5°	66.0	66.0	76.5	69.0	61.5
130°	69.0	66.0	81.0	75.0	72.0
132.5°	72.0	69.0	82.5	81.0	78.0
135°	73.5	72.0	82.5	87.0	85.5
137.5°	76.5	75.0	79.5	91.5	90.0
140°	78.0	78.0	79.5	91.5	94.5
142.5°	79.5	79.5	79.5	90.0	94.5
145°	81.0	82.5	79.5	87.0	93.0
147.5°	82.5	85.5	79.5	85.5	88.5
150°	84.0	87.0	79.5	84.0	85.5
152.5°	85.5	90.0	82.5	82.5	84.0
155°	85.5	91.5	85.5	82.5	82.5
157.5°	87.0	91.5	87.0	82.5	82.5
160°	87.0	93.0	90.0	85.5	84.0
162.5°	88.5	93.0	93.0	88.5	87.0
165°	88.5	91.5	94.5	91.5	88.5
167.5°	90.0	91.5	94.5	93.0	90.0
170°	90.0	91.5	93.0	93.0	90.0
172.5°	90.0	91.5	93.0	91.5	90.0
175°	90.0	90.0	91.5	90.0	87.0
177.5°	90.0	90.0	90.0	88.5	87.0
180°	88.5	88.5	88.5	88.5	88.5

(END OF REPORT)