

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-L840-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-L840-CD2-U  
Description: Metalux 8' ILED WITH FROST LENS WITH UPL DISTRIBUTION

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

**Summary**

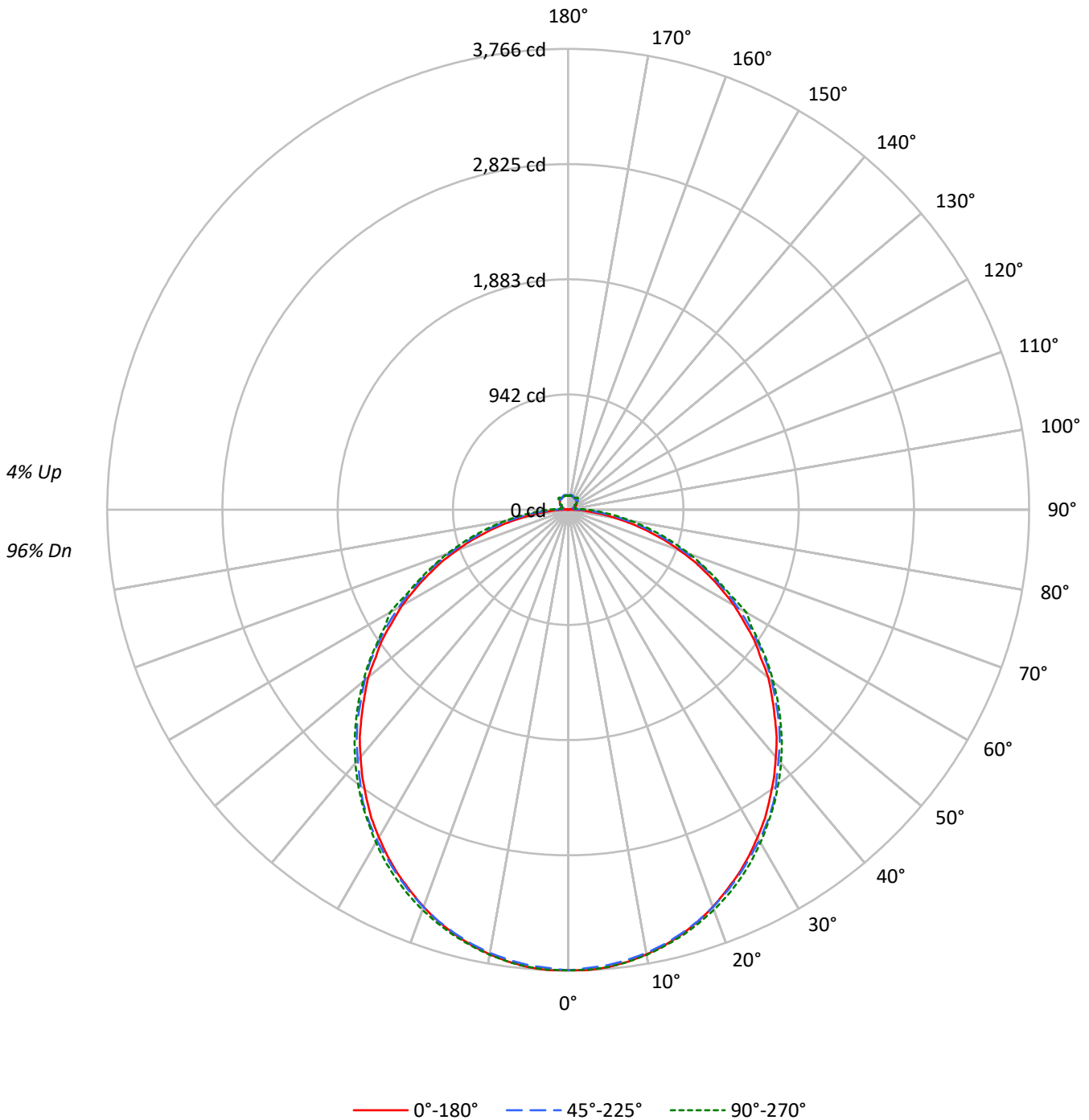
Lumens per Lamp: N/A  
Luminaire Lumens: 11111.0 lumens  
Efficiency: N/A  
Efficacy: 110.2 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.24 / 1.35  
Luminous Opening: Rectangular w/ Sides (W: 0.92' x L: 8' x H: 0.1')  
CIE Type: Direct

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°	5525	5525	5525
5°	5523	5462	5474
10°	5488	5401	5402
15°	5439	5322	5319
20°	5372	5235	5228
25°	5293	5136	5129
30°	5203	5040	5008
35°	5105	4940	4885
40°	5003	4778	4747
45°	4889	4648	4591
50°	4801	4492	4418
55°	4664	4308	4228
60°	4501	4087	4152
65°	4277	3828	3751
70°	4002	3524	3468
75°	3632	3145	3110
80°	3122	2668	2707
85°	2498	2118	2249



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	355.7	3.2
10°-20°	1013.6	9.1
20°-30°	1523.1	13.7
30°-40°	1822.3	16.4
40°-50°	1873.4	16.9
50°-60°	1687.2	15.2
60°-70°	1296.7	11.7
70°-80°	772.0	6.9
80°-90°	279.7	2.5
90°-100°	60.3	0.5
100°-110°	50.1	0.5
110°-120°	59.1	0.5
120°-130°	73.1	0.7
130°-140°	79.8	0.7
140°-150°	68.5	0.6
150°-160°	51.6	0.5
160°-170°	33.5	0.3
170°-180°	11.3	0.1
0°-30°	2892.5	26.0
0°-40°	4714.7	42.4
0°-60°	8275.4	74.5
0°-90°	10623.8	95.6
90°-120°	169.5	1.5
90°-150°	390.9	3.5
90°-180°	487.0	4.4
0°-180°	11111.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3764	3764	3764	3764	3764	
5°	3753	3751	3735	3749	3751	356
15°	3591	3593	3583	3599	3603	1013
25°	3287	3293	3299	3322	3328	1514
35°	2874	2909	2923	2928	2934	1799
45°	2385	2410	2432	2455	2453	1843
55°	1855	1863	1890	1906	1910	1652
65°	1265	1276	1306	1331	1333	1254
75°	670	690	733	774	772	711
85°	170	203	249	286	300	186
90°	4	51	101	138	150	13
95°	14	33	49	70	78	14
105°	41	35	45	72	64	42
115°	64	72	51	53	53	63
125°	82	82	94	76	66	73
135°	96	94	107	113	111	74
145°	105	107	103	113	121	66
155°	111	119	111	107	107	52
165°	115	119	123	119	115	33
175°	117	117	119	117	113	11
180°	115	115	115	115	115	



TEST NUMBER: P#

CATALOG NUMBER: 8ILED-LD5-14-W-FLUPL-UNV-L840-CD2-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3764.4	3764.4	3764.4	3764.4	3764.4
2.5°	3766.4	3764.4	3748.8	3760.5	3762.5
5°	3752.7	3750.8	3735.2	3748.8	3750.8
7.5°	3725.5	3725.5	3709.9	3725.5	3727.4
10°	3690.4	3690.4	3678.7	3692.3	3694.3
12.5°	3645.6	3647.5	3635.8	3651.4	3651.4
15°	3591.0	3593.0	3583.2	3598.8	3602.7
17.5°	3528.7	3528.7	3524.8	3542.3	3544.3
20°	3454.6	3464.4	3456.6	3476.1	3480.0
22.5°	3370.8	3380.6	3380.6	3402.0	3407.9
25°	3287.1	3292.9	3298.7	3322.1	3328.0
27.5°	3193.5	3205.2	3207.2	3232.5	3238.3
30°	3092.2	3111.7	3121.4	3137.0	3140.9
32.5°	2990.9	3016.2	3027.9	3035.7	3037.7
35°	2874.0	2909.1	2922.7	2928.5	2934.4
37.5°	2761.0	2790.2	2794.1	2815.5	2821.4
40°	2638.2	2673.3	2673.3	2698.6	2704.5
42.5°	2521.3	2529.1	2558.3	2575.9	2583.7
45°	2384.9	2410.2	2431.7	2455.1	2453.1
47.5°	2256.3	2289.4	2295.3	2316.7	2322.6
50°	2133.6	2156.9	2168.6	2186.2	2186.2
52.5°	1981.6	2012.8	2038.1	2047.8	2053.7
55°	1854.9	1862.7	1890.0	1905.6	1909.5
57.5°	1701.0	1720.5	1745.8	1765.3	1775.0
60°	1566.6	1578.3	1599.7	1627.0	1681.5
62.5°	1414.6	1428.2	1455.5	1537.3	1480.8
65°	1264.6	1276.2	1305.5	1330.8	1332.7
67.5°	1122.3	1134.0	1174.9	1182.7	1188.6
70°	964.5	980.1	1015.1	1040.5	1050.2
72.5°	820.3	833.9	869.0	898.2	908.0
75°	670.3	689.8	732.6	773.5	771.6
77.5°	528.0	563.1	598.2	631.3	641.0
80°	395.5	422.8	469.6	504.7	518.3
82.5°	276.7	307.9	354.6	389.7	403.3
85°	169.5	202.6	249.4	286.4	300.1
87.5°	81.8	115.0	165.6	202.6	218.2
90°	3.9	50.7	101.3	138.3	150.0
92.5°	7.8	29.2	66.2	95.5	105.2
95°	13.6	33.1	48.7	70.1	77.9
97.5°	19.5	29.2	42.9	56.5	62.4
100°	27.3	29.2	48.7	50.7	54.6
102.5°	33.1	31.2	46.8	50.7	50.7
105°	40.9	35.1	44.8	72.1	64.3
107.5°	46.8	48.7	42.9	50.7	54.6
110°	52.6	56.5	46.8	54.6	54.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	58.5	64.3	50.7	50.7	54.6
115°	64.3	72.1	50.7	52.6	52.6
117.5°	70.1	74.0	60.4	56.5	56.5
120°	74.0	76.0	76.0	56.5	60.4
122.5°	77.9	79.9	85.7	62.4	60.4
125°	81.8	81.8	93.5	76.0	66.2
127.5°	85.7	85.7	99.4	89.6	79.9
130°	89.6	85.7	105.2	97.4	93.5
132.5°	93.5	89.6	107.2	105.2	101.3
135°	95.5	93.5	107.2	113.0	111.1
137.5°	99.4	97.4	103.3	118.9	116.9
140°	101.3	101.3	103.3	118.9	122.8
142.5°	103.3	103.3	103.3	116.9	122.8
145°	105.2	107.2	103.3	113.0	120.8
147.5°	107.2	111.1	103.3	111.1	115.0
150°	109.1	113.0	103.3	109.1	111.1
152.5°	111.1	116.9	107.2	107.2	109.1
155°	111.1	118.9	111.1	107.2	107.2
157.5°	113.0	118.9	113.0	107.2	107.2
160°	113.0	120.8	116.9	111.1	109.1
162.5°	115.0	120.8	120.8	115.0	113.0
165°	115.0	118.9	122.8	118.9	115.0
167.5°	116.9	118.9	122.8	120.8	116.9
170°	116.9	118.9	120.8	120.8	116.9
172.5°	116.9	118.9	120.8	118.9	116.9
175°	116.9	116.9	118.9	116.9	113.0
177.5°	116.9	116.9	116.9	115.0	113.0
180°	115.0	115.0	115.0	115.0	115.0

(END OF REPORT)