

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-LD5-9-W-FLUPL-UNV-L840-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-LD5-9-W-FLUPL-UNV-L840-CD1-U  
Description: Metalux 4' ILED WITH FROST LENS WITH UPL DISTRIBUTION

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

**Summary**

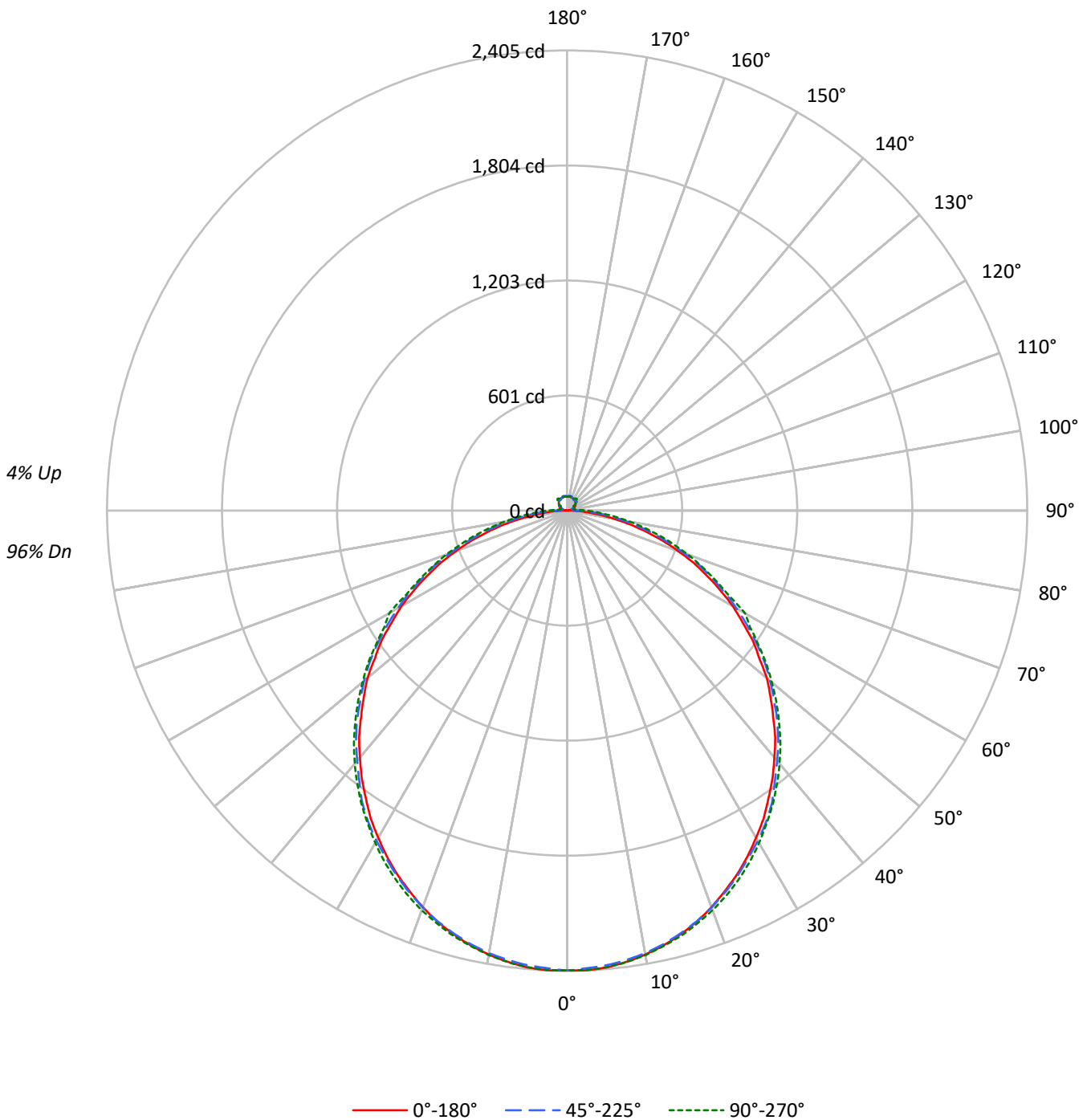
Lumens per Lamp: N/A  
Luminaire Lumens: 7095.0 lumens  
Efficiency: N/A  
Efficacy: 108.0 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.24 / 1.35  
Luminous Opening: Rectangular w/ Sides (W: 0.92' x L: 4' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 65.7  
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°	7057	7057	7057
5°	7046	6971	6991
10°	6994	6887	6899
15°	6923	6782	6793
20°	6829	6665	6677
25°	6721	6534	6550
30°	6598	6406	6396
35°	6464	6272	6239
40°	6323	6059	6063
45°	6168	5888	5864
50°	6042	5682	5642
55°	5853	5440	5399
60°	5629	5151	5302
65°	5324	4812	4791
70°	4947	4414	4429
75°	4440	3919	3971
80°	3740	3297	3457
85°	2834	2575	2872



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	227.2	3.2
10°-20°	647.3	9.1
20°-30°	972.6	13.7
30°-40°	1163.6	16.4
40°-50°	1196.3	16.9
50°-60°	1077.4	15.2
60°-70°	828.0	11.7
70°-80°	493.0	6.9
80°-90°	178.6	2.5
90°-100°	38.5	0.5
100°-110°	32.0	0.5
110°-120°	37.7	0.5
120°-130°	46.7	0.7
130°-140°	51.0	0.7
140°-150°	43.7	0.6
150°-160°	32.9	0.5
160°-170°	21.4	0.3
170°-180°	7.2	0.1
0°-30°	1847.0	26.0
0°-40°	3010.6	42.4
0°-60°	5284.3	74.5
0°-90°	6783.9	95.6
90°-120°	108.2	1.5
90°-150°	249.6	3.5
90°-180°	311.0	4.4
0°-180°	7095.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2404	2404	2404	2404	2404	
5°	2396	2395	2385	2394	2395	227
15°	2293	2294	2288	2298	2300	647
25°	2099	2103	2106	2121	2125	967
35°	1835	1858	1866	1870	1874	1149
45°	1523	1539	1553	1568	1566	1177
55°	1184	1190	1207	1217	1219	1055
65°	808	815	834	850	851	801
75°	428	440	468	494	493	454
85°	108	129	159	183	192	119
90°	2	32	65	88	96	9
95°	9	21	31	45	50	9
105°	26	22	29	46	41	27
115°	41	46	32	34	34	41
125°	52	52	60	48	42	47
135°	61	60	68	72	71	47
145°	67	68	66	72	77	42
155°	71	76	71	68	68	33
165°	73	76	78	76	73	21
175°	75	75	76	75	72	7
180°	73	73	73	73	73	



TEST NUMBER: P#

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2403.8	2403.8	2403.8	2403.8	2403.8
2.5°	2405.0	2403.8	2393.8	2401.3	2402.6
5°	2396.3	2395.1	2385.1	2393.8	2395.1
7.5°	2378.9	2378.9	2369.0	2378.9	2380.2
10°	2356.5	2356.5	2349.1	2357.8	2359.0
12.5°	2327.9	2329.1	2321.7	2331.6	2331.6
15°	2293.1	2294.3	2288.1	2298.0	2300.5
17.5°	2253.3	2253.3	2250.8	2262.0	2263.2
20°	2206.0	2212.2	2207.2	2219.7	2222.1
22.5°	2152.5	2158.7	2158.7	2172.4	2176.1
25°	2099.0	2102.7	2106.4	2121.4	2125.1
27.5°	2039.2	2046.7	2048.0	2064.1	2067.9
30°	1974.6	1987.0	1993.2	2003.2	2005.7
32.5°	1909.9	1926.0	1933.5	1938.5	1939.7
35°	1835.2	1857.6	1866.3	1870.0	1873.8
37.5°	1763.0	1781.7	1784.2	1797.9	1801.6
40°	1684.7	1707.0	1707.0	1723.2	1727.0
42.5°	1610.0	1615.0	1633.6	1644.8	1649.8
45°	1522.9	1539.1	1552.8	1567.7	1566.5
47.5°	1440.8	1461.9	1465.7	1479.4	1483.1
50°	1362.4	1377.3	1384.8	1396.0	1396.0
52.5°	1265.4	1285.3	1301.4	1307.7	1311.4
55°	1184.5	1189.5	1206.9	1216.8	1219.3
57.5°	1086.2	1098.6	1114.8	1127.2	1133.5
60°	1000.3	1007.8	1021.5	1038.9	1073.7
62.5°	903.3	912.0	929.4	981.7	945.6
65°	807.5	815.0	833.6	849.8	851.0
67.5°	716.7	724.1	750.3	755.2	759.0
70°	615.9	625.8	648.2	664.4	670.6
72.5°	523.8	532.5	554.9	573.6	579.8
75°	428.0	440.4	467.8	493.9	492.7
77.5°	337.2	359.6	382.0	403.1	409.3
80°	252.6	270.0	299.9	322.2	331.0
82.5°	176.7	196.6	226.4	248.8	257.6
85°	108.2	129.4	159.3	182.9	191.6
87.5°	52.3	73.4	105.8	129.4	139.4
90°	2.5	32.3	64.7	88.3	95.8
92.5°	5.0	18.7	42.3	61.0	67.2
95°	8.7	21.2	31.1	44.8	49.8
97.5°	12.4	18.7	27.4	36.1	39.8
100°	17.4	18.7	31.1	32.3	34.8
102.5°	21.2	19.9	29.9	32.3	32.3
105°	26.1	22.4	28.6	46.0	41.1
107.5°	29.9	31.1	27.4	32.3	34.8
110°	33.6	36.1	29.9	34.8	34.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	37.3	41.1	32.3	32.3	34.8
115°	41.1	46.0	32.3	33.6	33.6
117.5°	44.8	47.3	38.6	36.1	36.1
120°	47.3	48.5	48.5	36.1	38.6
122.5°	49.8	51.0	54.7	39.8	38.6
125°	52.3	52.3	59.7	48.5	42.3
127.5°	54.7	54.7	63.5	57.2	51.0
130°	57.2	54.7	67.2	62.2	59.7
132.5°	59.7	57.2	68.4	67.2	64.7
135°	61.0	59.7	68.4	72.2	70.9
137.5°	63.5	62.2	65.9	75.9	74.7
140°	64.7	64.7	65.9	75.9	78.4
142.5°	65.9	65.9	65.9	74.7	78.4
145°	67.2	68.4	65.9	72.2	77.1
147.5°	68.4	70.9	65.9	70.9	73.4
150°	69.7	72.2	65.9	69.7	70.9
152.5°	70.9	74.7	68.4	68.4	69.7
155°	70.9	75.9	70.9	68.4	68.4
157.5°	72.2	75.9	72.2	68.4	68.4
160°	72.2	77.1	74.7	70.9	69.7
162.5°	73.4	77.1	77.1	73.4	72.2
165°	73.4	75.9	78.4	75.9	73.4
167.5°	74.7	75.9	78.4	77.1	74.7
170°	74.7	75.9	77.1	77.1	74.7
172.5°	74.7	75.9	77.1	75.9	74.7
175°	74.7	74.7	75.9	74.7	72.2
177.5°	74.7	74.7	74.7	73.4	72.2
180°	73.4	73.4	73.4	73.4	73.4

(END OF REPORT)