

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-LD5-7-W-FLUPL-UNV-L835-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-LD5-7-W-FLUPL-UNV-L835-CD1-U  
Description: Metalux 4' ILED WITH FROST LENS WITH UPL DISTRIBUTION

Light Source: (1) 3500 CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

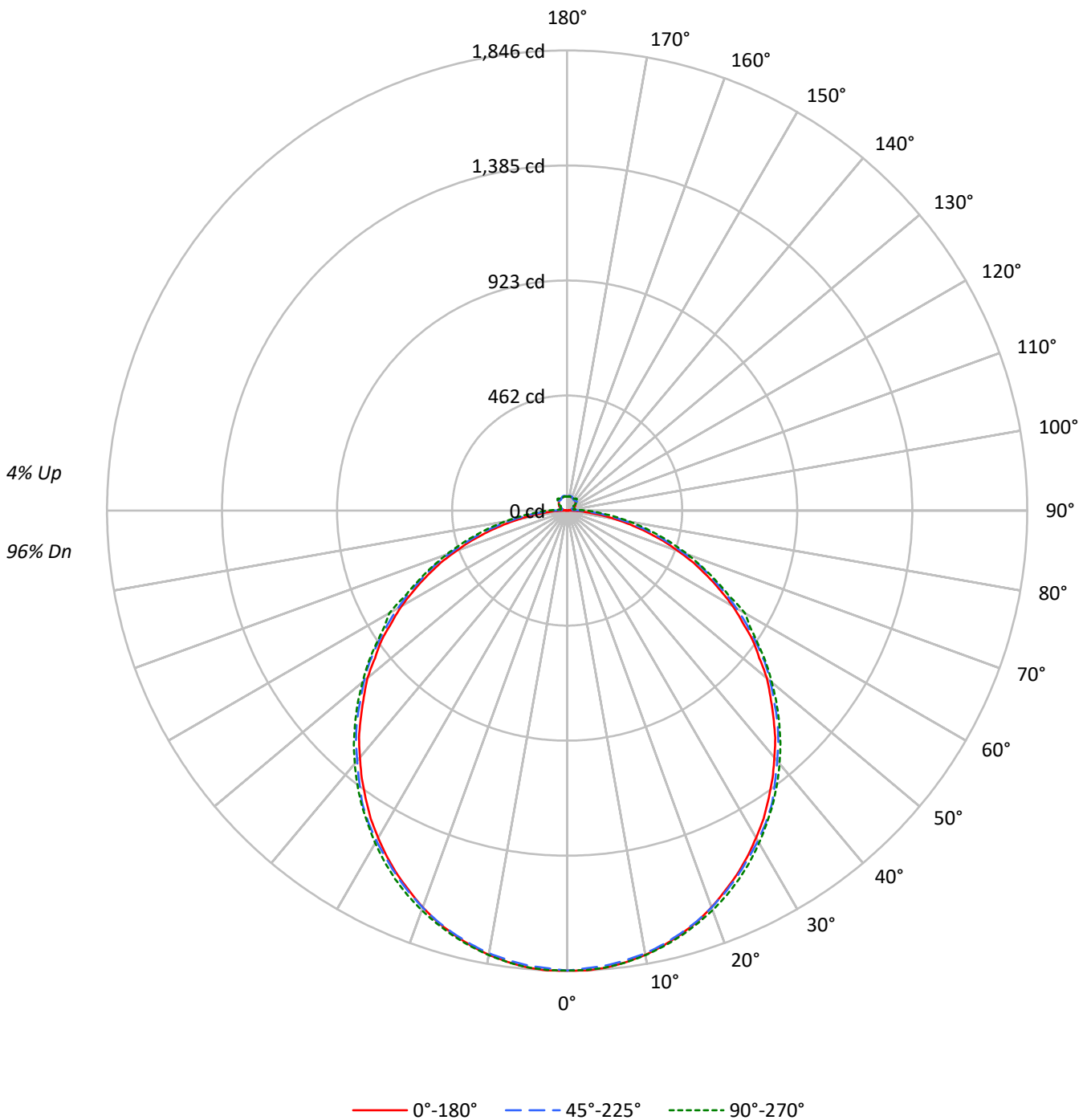
Lumens per Lamp: N/A  
Luminaire Lumens: 5446.9 lumens  
Efficiency: N/A  
Efficacy: 108.1 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.24 / 1.35  
Luminous Opening: Rectangular w/ Sides (W: 0.92' x L: 4' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 50.4  
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	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°	5418	5418	5418
5°	5409	5352	5367
10°	5369	5287	5297
15°	5315	5206	5215
20°	5243	5117	5126
25°	5159	5016	5029
30°	5065	4918	4910
35°	4962	4815	4789
40°	4854	4652	4655
45°	4736	4520	4502
50°	4638	4362	4331
55°	4494	4176	4145
60°	4322	3955	4071
65°	4087	3694	3678
70°	3797	3389	3400
75°	3409	3009	3049
80°	2871	2531	2654
85°	2177	1977	2205



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	174.4	3.2
10°-20°	496.9	9.1
20°-30°	746.7	13.7
30°-40°	893.3	16.4
40°-50°	918.4	16.9
50°-60°	827.1	15.2
60°-70°	635.7	11.7
70°-80°	378.5	6.9
80°-90°	137.1	2.5
90°-100°	29.5	0.5
100°-110°	24.6	0.5
110°-120°	28.9	0.5
120°-130°	35.8	0.7
130°-140°	39.1	0.7
140°-150°	33.6	0.6
150°-160°	25.3	0.5
160°-170°	16.4	0.3
170°-180°	5.5	0.1
0°-30°	1418.0	26.0
0°-40°	2311.3	42.4
0°-60°	4056.9	74.5
0°-90°	5208.2	95.6
90°-120°	83.0	1.5
90°-150°	191.6	3.5
90°-180°	239.0	4.4
0°-180°	5446.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1846	1846	1846	1846	1846	
5°	1840	1839	1831	1838	1839	175
15°	1760	1761	1757	1764	1766	496
25°	1611	1614	1617	1629	1632	742
35°	1409	1426	1433	1436	1438	882
45°	1169	1182	1192	1204	1203	904
55°	909	913	926	934	936	810
65°	620	626	640	652	653	615
75°	329	338	359	379	378	349
85°	83	99	122	140	147	91
90°	2	25	50	68	74	7
95°	7	16	24	34	38	7
105°	20	17	22	35	32	21
115°	32	35	25	26	26	31
125°	40	40	46	37	32	36
135°	47	46	52	55	54	36
145°	52	52	51	55	59	32
155°	54	58	54	52	52	25
165°	56	58	60	58	56	16
175°	57	57	58	57	55	5
180°	56	56	56	56	56	



TEST NUMBER: P#

CATALOG NUMBER: 4ILED-LD5-7-W-FLUPL-UNV-L835-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1845.5	1845.5	1845.5	1845.5	1845.5
2.5°	1846.4	1845.5	1837.8	1843.5	1844.5
5°	1839.7	1838.8	1831.1	1837.8	1838.8
7.5°	1826.4	1826.4	1818.7	1826.4	1827.3
10°	1809.2	1809.2	1803.4	1810.1	1811.1
12.5°	1787.2	1788.1	1782.4	1790.1	1790.1
15°	1760.4	1761.4	1756.6	1764.3	1766.2
17.5°	1729.9	1729.9	1728.0	1736.6	1737.5
20°	1693.6	1698.4	1694.5	1704.1	1706.0
22.5°	1652.5	1657.3	1657.3	1667.8	1670.7
25°	1611.4	1614.3	1617.2	1628.6	1631.5
27.5°	1565.6	1571.3	1572.3	1584.7	1587.5
30°	1515.9	1525.5	1530.2	1537.9	1539.8
32.5°	1466.2	1478.7	1484.4	1488.2	1489.2
35°	1408.9	1426.1	1432.8	1435.7	1438.5
37.5°	1353.5	1367.9	1369.8	1380.3	1383.1
40°	1293.3	1310.5	1310.5	1323.0	1325.8
42.5°	1236.0	1239.9	1254.2	1262.8	1266.6
45°	1169.2	1181.6	1192.1	1203.6	1202.6
47.5°	1106.1	1122.4	1125.2	1135.7	1138.6
50°	1045.9	1057.4	1063.1	1071.7	1071.7
52.5°	971.4	986.7	999.1	1003.9	1006.8
55°	909.4	913.2	926.5	934.2	936.1
57.5°	833.9	843.4	855.9	865.4	870.2
60°	768.0	773.7	784.2	797.6	824.3
62.5°	693.5	700.2	713.5	753.7	726.0
65°	619.9	625.7	640.0	652.4	653.4
67.5°	550.2	555.9	576.0	579.8	582.7
70°	472.8	480.5	497.7	510.1	514.9
72.5°	402.1	408.8	426.0	440.3	445.1
75°	328.6	338.1	359.2	379.2	378.3
77.5°	258.9	276.1	293.2	309.5	314.3
80°	193.9	207.3	230.2	247.4	254.1
82.5°	135.6	150.9	173.8	191.0	197.7
85°	83.1	99.3	122.3	140.4	147.1
87.5°	40.1	56.4	81.2	99.3	107.0
90°	1.9	24.8	49.7	67.8	73.6
92.5°	3.8	14.3	32.5	46.8	51.6
95°	6.7	16.2	23.9	34.4	38.2
97.5°	9.6	14.3	21.0	27.7	30.6
100°	13.4	14.3	23.9	24.8	26.7
102.5°	16.2	15.3	22.9	24.8	24.8
105°	20.1	17.2	22.0	35.3	31.5
107.5°	22.9	23.9	21.0	24.8	26.7
110°	25.8	27.7	22.9	26.7	26.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	28.7	31.5	24.8	24.8	26.7
115°	31.5	35.3	24.8	25.8	25.8
117.5°	34.4	36.3	29.6	27.7	27.7
120°	36.3	37.3	37.3	27.7	29.6
122.5°	38.2	39.2	42.0	30.6	29.6
125°	40.1	40.1	45.8	37.3	32.5
127.5°	42.0	42.0	48.7	43.9	39.2
130°	43.9	42.0	51.6	47.8	45.8
132.5°	45.8	43.9	52.5	51.6	49.7
135°	46.8	45.8	52.5	55.4	54.4
137.5°	48.7	47.8	50.6	58.3	57.3
140°	49.7	49.7	50.6	58.3	60.2
142.5°	50.6	50.6	50.6	57.3	60.2
145°	51.6	52.5	50.6	55.4	59.2
147.5°	52.5	54.4	50.6	54.4	56.4
150°	53.5	55.4	50.6	53.5	54.4
152.5°	54.4	57.3	52.5	52.5	53.5
155°	54.4	58.3	54.4	52.5	52.5
157.5°	55.4	58.3	55.4	52.5	52.5
160°	55.4	59.2	57.3	54.4	53.5
162.5°	56.4	59.2	59.2	56.4	55.4
165°	56.4	58.3	60.2	58.3	56.4
167.5°	57.3	58.3	60.2	59.2	57.3
170°	57.3	58.3	59.2	59.2	57.3
172.5°	57.3	58.3	59.2	58.3	57.3
175°	57.3	57.3	58.3	57.3	55.4
177.5°	57.3	57.3	57.3	56.4	55.4
180°	56.4	56.4	56.4	56.4	56.4

(END OF REPORT)