

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-LD5-32-W-ASYWG-UNV-L840-CD4-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 (P34184)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8ILED-LD5-32-W-ASYWG-UNV-L840-CD4-U  
Description: Metalux 8' ILED WITH ASYMMETRIC DIRECTIONAL LOUVER-HEAVY DUTY  
WIREGUARD DISTRIBUTION

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

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 24572.0 lumens  
Efficiency: N/A  
Efficacy: 97.0 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

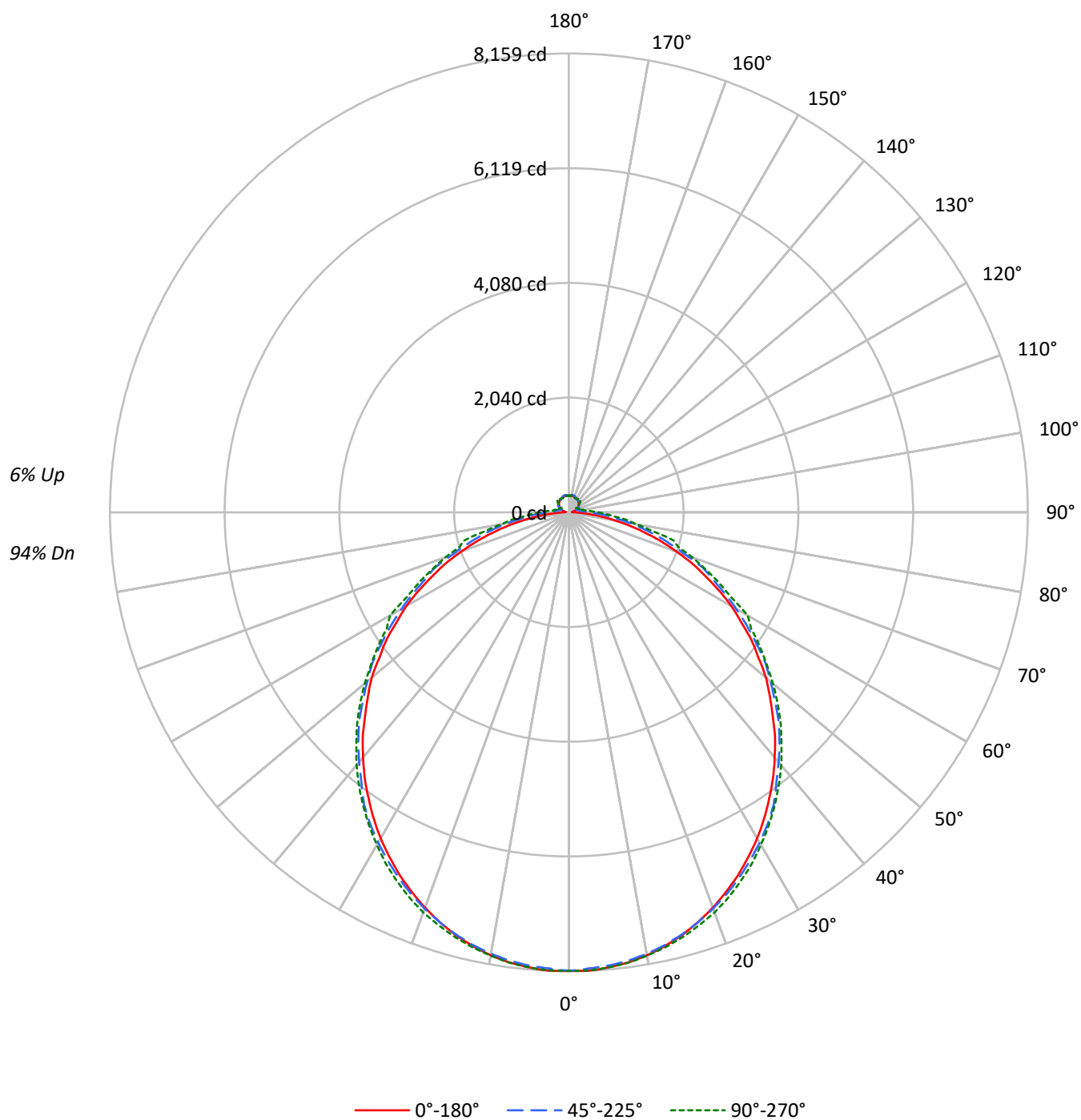
Input Watts (W): 253.2  
Input Voltage (V):  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P#

CATALOG NUMBER: 8ILED-LD5-32-W-ASYWG-UNV-L840-CD4-U

### Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: 8ILED-LD5-32-W-ASYWG-UNV-L840-CD4-U

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |  |     |     |     |     |  |     |     |     |  |     |     |     |  |    |    |    |
|-----|-----|-----|-----|-----|--|-----|-----|-----|-----|--|-----|-----|-----|--|-----|-----|-----|--|----|----|----|
| RF  | 20  |     |     |     |  | 20  |     |     |     |  | 20  |     |     |  |     | 20  |     |  |    |    | 20 |
| RC  | 80  |     |     |     |  | 70  |     |     |     |  | 50  |     |     |  |     | 30  |     |  |    |    | 10 |
| RW  | 70  | 50  | 30  | 10  |  | 70  | 50  | 30  | 10  |  | 50  | 30  | 10  |  | 50  | 30  | 10  |  | 50 | 30 | 10 |
| RCR |     |     |     |     |  |     |     |     |     |  |     |     |     |  |     |     |     |  |    |    |    |
| 0   | 118 | 118 | 118 | 118 |  | 114 | 114 | 114 | 114 |  | 108 | 108 | 108 |  | 102 | 102 | 102 |  | 97 | 97 | 97 |
| 1   | 107 | 102 | 98  | 94  |  | 104 | 99  | 95  | 91  |  | 94  | 91  | 87  |  | 89  | 86  | 84  |  | 84 | 82 | 80 |
| 2   | 97  | 89  | 82  | 76  |  | 94  | 86  | 80  | 75  |  | 82  | 76  | 72  |  | 78  | 73  | 69  |  | 74 | 70 | 67 |
| 3   | 88  | 78  | 70  | 63  |  | 85  | 76  | 68  | 62  |  | 72  | 66  | 60  |  | 68  | 63  | 58  |  | 65 | 61 | 57 |
| 4   | 81  | 69  | 60  | 53  |  | 78  | 67  | 59  | 53  |  | 64  | 57  | 51  |  | 61  | 55  | 50  |  | 58 | 53 | 49 |
| 5   | 74  | 62  | 52  | 46  |  | 72  | 60  | 52  | 45  |  | 57  | 50  | 44  |  | 55  | 48  | 43  |  | 52 | 47 | 42 |
| 6   | 69  | 55  | 46  | 40  |  | 66  | 54  | 46  | 40  |  | 52  | 44  | 39  |  | 49  | 43  | 38  |  | 47 | 42 | 37 |
| 7   | 64  | 50  | 41  | 35  |  | 62  | 49  | 41  | 35  |  | 47  | 40  | 34  |  | 45  | 39  | 34  |  | 43 | 37 | 33 |
| 8   | 59  | 46  | 37  | 31  |  | 57  | 45  | 37  | 31  |  | 43  | 36  | 31  |  | 41  | 35  | 30  |  | 40 | 34 | 30 |
| 9   | 55  | 42  | 34  | 28  |  | 54  | 41  | 33  | 28  |  | 40  | 33  | 28  |  | 38  | 32  | 27  |  | 37 | 31 | 27 |
| 10  | 52  | 39  | 31  | 26  |  | 50  | 38  | 30  | 25  |  | 37  | 30  | 25  |  | 35  | 29  | 25  |  | 34 | 28 | 24 |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 11969 | 11969 | 11969 |
| 5°  | 11956 | 11833 | 11856 |
| 10° | 11893 | 11702 | 11708 |
| 15° | 11785 | 11538 | 11542 |
| 20° | 11631 | 11357 | 11373 |
| 25° | 11458 | 11158 | 11147 |
| 30° | 11264 | 10946 | 10888 |
| 35° | 11028 | 10728 | 10611 |
| 40° | 10791 | 10364 | 10306 |
| 45° | 10506 | 10079 | 9962  |
| 50° | 10297 | 9693  | 9566  |
| 55° | 9968  | 9272  | 9157  |
| 60° | 9597  | 8776  | 9068  |
| 65° | 9032  | 8265  | 8237  |
| 70° | 8412  | 7678  | 7689  |
| 75° | 7600  | 7006  | 7772  |
| 80° | 6600  | 6335  | 6361  |
| 85° | 5498  | 5804  | 5964  |



TEST NUMBER: P#

CATALOG NUMBER: 8ILED-LD5-32-W-ASYWG-UNV-L840-CD4-U

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 770.7   | 3.1       |
| 10°-20°   | 2197.8  | 8.9       |
| 20°-30°   | 3306.5  | 13.5      |
| 30°-40°   | 3951.9  | 16.1      |
| 40°-50°   | 4054.4  | 16.5      |
| 50°-60°   | 3638.1  | 14.8      |
| 60°-70°   | 2795.4  | 11.4      |
| 70°-80°   | 1710.4  | 7.0       |
| 80°-90°   | 725.3   | 3.0       |
| 90°-100°  | 255.3   | 1.0       |
| 100°-110° | 178.5   | 0.7       |
| 110°-120° | 166.6   | 0.7       |
| 120°-130° | 194.1   | 0.8       |
| 130°-140° | 205.4   | 0.8       |
| 140°-150° | 173.8   | 0.7       |
| 150°-160° | 132.6   | 0.5       |
| 160°-170° | 86.1    | 0.4       |
| 170°-180° | 28.9    | 0.1       |
| 0°-30°    | 6275.1  | 25.5      |
| 0°-40°    | 10227.0 | 41.6      |
| 0°-60°    | 17919.5 | 72.9      |
| 0°-90°    | 23150.5 | 94.2      |
| 90°-120°  | 600.5   | 2.4       |
| 90°-150°  | 1173.8  | 4.8       |
| 90°-180°  | 1421.0  | 5.8       |
| 0°-180°   | 24572.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 8155 | 8155  | 8155 | 8155  | 8155 |      |
| 5°   | 8123 | 8123  | 8092 | 8123  | 8123 | 772  |
| 15°  | 7782 | 7786  | 7768 | 7808  | 7818 | 2193 |
| 25°  | 7116 | 7130  | 7166 | 7229  | 7233 | 3278 |
| 35°  | 6208 | 6289  | 6348 | 6361  | 6374 | 3886 |
| 45°  | 5125 | 5215  | 5273 | 5314  | 5322 | 3963 |
| 55°  | 3965 | 4001  | 4068 | 4127  | 4136 | 3533 |
| 65°  | 2670 | 2720  | 2819 | 2908  | 2926 | 2654 |
| 75°  | 1403 | 1479  | 1632 | 1726  | 1928 | 1494 |
| 85°  | 373  | 508   | 683  | 773   | 796  | 400  |
| 90°  | 72   | 202   | 387  | 490   | 512  | 55   |
| 95°  | 58   | 139   | 238  | 319   | 333  | 54   |
| 105° | 112  | 108   | 162  | 256   | 238  | 117  |
| 115° | 166  | 184   | 139  | 162   | 171  | 166  |
| 125° | 211  | 211   | 252  | 216   | 180  | 189  |
| 135° | 247  | 243   | 265  | 297   | 288  | 190  |
| 145° | 270  | 279   | 265  | 279   | 292  | 170  |
| 155° | 288  | 306   | 288  | 274   | 274  | 133  |
| 165° | 297  | 306   | 315  | 306   | 297  | 84   |
| 175° | 301  | 301   | 301  | 301   | 292  | 29   |
| 180° | 297  | 297   | 297  | 297   | 297  |      |



TEST NUMBER: P#

CATALOG NUMBER: 8ILED-LD5-32-W-ASYWG-UNV-L840-CD4-U

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 8154.6 | 8154.6 | 8154.6 | 8154.6 | 8154.6 |
| 2.5°   | 8159.1 | 8154.6 | 8118.6 | 8145.6 | 8154.6 |
| 5°     | 8123.1 | 8123.1 | 8091.7 | 8123.1 | 8123.1 |
| 7.5°   | 8073.7 | 8069.2 | 8042.2 | 8069.2 | 8078.2 |
| 10°    | 7997.3 | 7997.3 | 7970.3 | 8001.8 | 8006.3 |
| 12.5°  | 7898.4 | 7902.9 | 7880.4 | 7911.9 | 7920.9 |
| 15°    | 7781.5 | 7786.0 | 7768.0 | 7808.5 | 7817.5 |
| 17.5°  | 7637.6 | 7646.6 | 7642.1 | 7687.1 | 7700.6 |
| 20°    | 7480.3 | 7507.3 | 7498.3 | 7556.7 | 7570.2 |
| 22.5°  | 7305.0 | 7323.0 | 7340.9 | 7403.9 | 7412.9 |
| 25°    | 7116.2 | 7129.7 | 7165.6 | 7228.6 | 7233.1 |
| 27.5°  | 6909.4 | 6945.4 | 6976.8 | 7026.3 | 7044.3 |
| 30°    | 6693.6 | 6743.1 | 6779.0 | 6824.0 | 6828.5 |
| 32.5°  | 6459.9 | 6527.3 | 6572.2 | 6594.7 | 6608.2 |
| 35°    | 6208.1 | 6289.0 | 6347.5 | 6361.0 | 6374.4 |
| 37.5°  | 5960.9 | 6046.3 | 6059.8 | 6122.7 | 6127.2 |
| 40°    | 5691.1 | 5790.0 | 5799.0 | 5857.5 | 5871.0 |
| 42.5°  | 5425.9 | 5479.9 | 5542.8 | 5596.7 | 5592.2 |
| 45°    | 5124.7 | 5214.6 | 5273.1 | 5313.5 | 5322.5 |
| 47.5°  | 4846.0 | 4949.4 | 4967.4 | 5016.8 | 5034.8 |
| 50°    | 4576.3 | 4657.2 | 4679.7 | 4742.6 | 4733.6 |
| 52.5°  | 4248.1 | 4338.0 | 4405.5 | 4427.9 | 4427.9 |
| 55°    | 3964.9 | 4000.9 | 4068.3 | 4126.8 | 4135.7 |
| 57.5°  | 3627.8 | 3686.2 | 3749.1 | 3830.1 | 3839.1 |
| 60°    | 3340.1 | 3385.0 | 3434.5 | 3569.3 | 3672.7 |
| 62.5°  | 3002.9 | 3047.9 | 3119.8 | 3232.2 | 3232.2 |
| 65°    | 2670.3 | 2719.7 | 2818.6 | 2908.5 | 2926.5 |
| 67.5°  | 2369.1 | 2414.0 | 2580.3 | 2602.8 | 2616.3 |
| 70°    | 2027.4 | 2085.9 | 2211.7 | 2297.1 | 2328.6 |
| 72.5°  | 1717.2 | 1771.2 | 1906.0 | 2013.9 | 2031.9 |
| 75°    | 1402.6 | 1479.0 | 1631.8 | 1726.2 | 1928.5 |
| 77.5°  | 1114.9 | 1209.3 | 1353.1 | 1465.5 | 1506.0 |
| 80°    | 836.1  | 939.5  | 1114.9 | 1200.3 | 1218.2 |
| 82.5°  | 579.9  | 714.8  | 867.6  | 993.5  | 1024.9 |
| 85°    | 373.1  | 508.0  | 683.3  | 773.2  | 795.7  |
| 87.5°  | 197.8  | 341.6  | 512.5  | 620.4  | 647.3  |
| 90°    | 71.9   | 202.3  | 386.6  | 490.0  | 512.5  |
| 92.5°  | 62.9   | 143.9  | 292.2  | 382.1  | 404.6  |
| 95°    | 58.4   | 139.4  | 238.3  | 319.2  | 332.7  |
| 97.5°  | 67.4   | 121.4  | 211.3  | 251.7  | 265.2  |
| 100°   | 80.9   | 107.9  | 202.3  | 242.8  | 256.2  |
| 102.5° | 94.4   | 98.9   | 184.3  | 220.3  | 220.3  |
| 105°   | 112.4  | 107.9  | 161.8  | 256.2  | 238.3  |
| 107.5° | 125.9  | 143.9  | 157.3  | 188.8  | 206.8  |
| 110°   | 143.9  | 157.3  | 139.4  | 179.8  | 184.3  |



TEST NUMBER: P#

CATALOG NUMBER: 8ILED-LD5-32-W-ASYWG-UNV-L840-CD4-U

**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 157.3 | 175.3 | 139.4 | 175.3 | 175.3 |
| 115°   | 166.3 | 184.3 | 139.4 | 161.8 | 170.8 |
| 117.5° | 179.8 | 188.8 | 175.3 | 157.3 | 157.3 |
| 120°   | 193.3 | 193.3 | 215.8 | 152.8 | 152.8 |
| 122.5° | 202.3 | 202.3 | 229.3 | 170.8 | 152.8 |
| 125°   | 211.3 | 211.3 | 251.7 | 215.8 | 179.8 |
| 127.5° | 220.3 | 220.3 | 260.7 | 247.2 | 224.8 |
| 130°   | 229.3 | 224.8 | 269.7 | 265.2 | 251.7 |
| 132.5° | 238.3 | 233.8 | 269.7 | 278.7 | 269.7 |
| 135°   | 247.2 | 242.8 | 265.2 | 296.7 | 287.7 |
| 137.5° | 251.7 | 251.7 | 260.7 | 301.2 | 301.2 |
| 140°   | 260.7 | 260.7 | 260.7 | 296.7 | 310.2 |
| 142.5° | 265.2 | 269.7 | 265.2 | 287.7 | 301.2 |
| 145°   | 269.7 | 278.7 | 265.2 | 278.7 | 292.2 |
| 147.5° | 274.2 | 287.7 | 265.2 | 278.7 | 278.7 |
| 150°   | 283.2 | 292.2 | 269.7 | 274.2 | 278.7 |
| 152.5° | 283.2 | 301.2 | 278.7 | 274.2 | 274.2 |
| 155°   | 287.7 | 305.7 | 287.7 | 274.2 | 274.2 |
| 157.5° | 292.2 | 305.7 | 292.2 | 278.7 | 274.2 |
| 160°   | 292.2 | 310.2 | 301.2 | 287.7 | 278.7 |
| 162.5° | 296.7 | 310.2 | 310.2 | 296.7 | 287.7 |
| 165°   | 296.7 | 305.7 | 314.7 | 305.7 | 296.7 |
| 167.5° | 296.7 | 305.7 | 314.7 | 310.2 | 301.2 |
| 170°   | 301.2 | 305.7 | 310.2 | 310.2 | 301.2 |
| 172.5° | 301.2 | 301.2 | 305.7 | 305.7 | 301.2 |
| 175°   | 301.2 | 301.2 | 301.2 | 301.2 | 292.2 |
| 177.5° | 301.2 | 301.2 | 301.2 | 296.7 | 287.7 |
| 180°   | 296.7 | 296.7 | 296.7 | 296.7 | 296.7 |

(END OF REPORT)