

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-TWBWG-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 (P34176)  
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-TWBWG-UNV-L840-CD4-U  
Description: Metalux 8' ILED WITH THIN WHITE BAFFLE-HEAVY DUTY WIREGUARD  
DISTRIBUTION

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

**Summary**

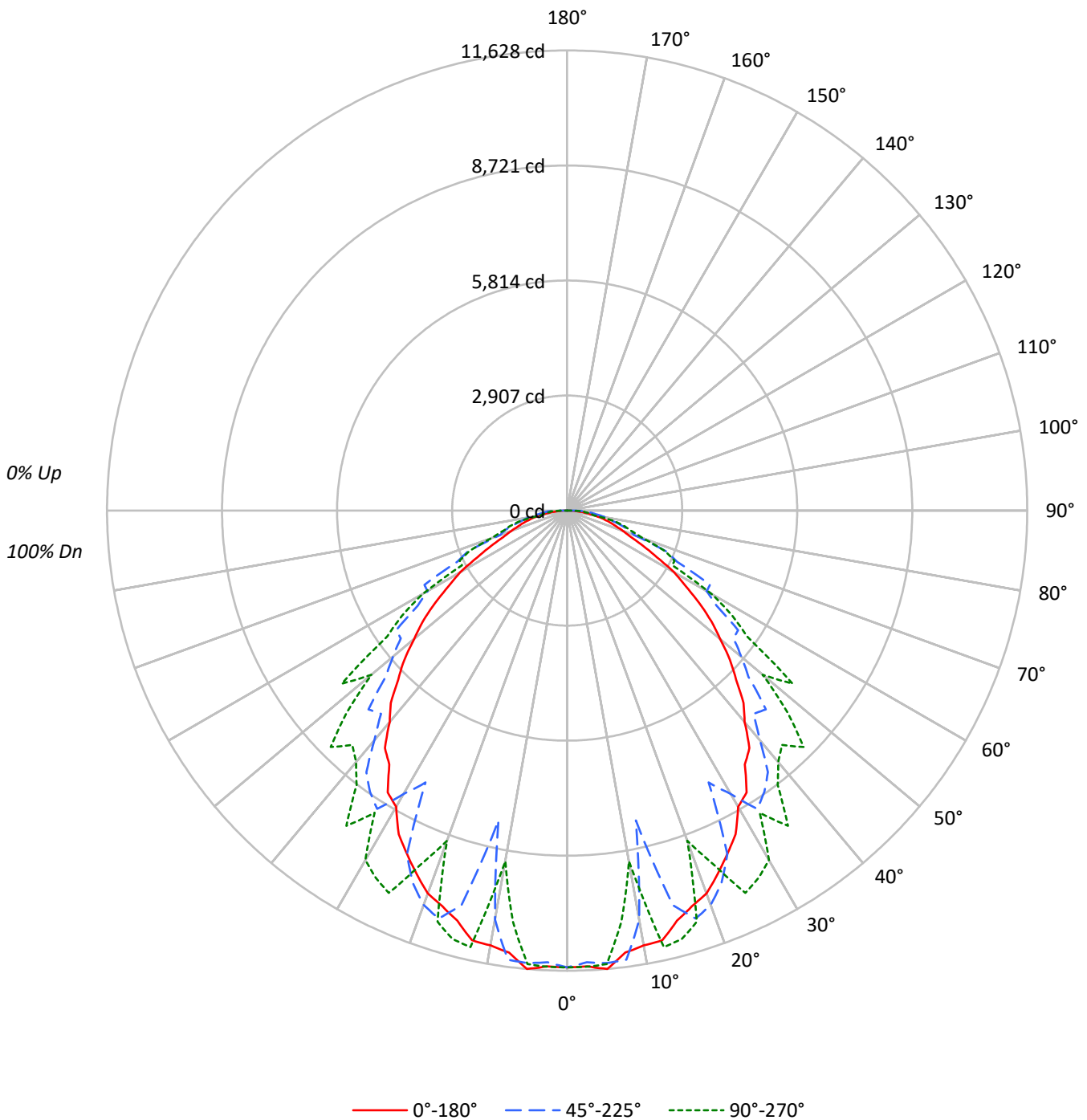
Lumens per Lamp: N/A  
Luminaire Lumens: 28046.0 lumens  
Efficiency: N/A  
Efficacy: 110.8 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.24 / 1.28  
Luminous Opening: Rectangular w/ Sides (W: 0.92' x L: 8' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 253.2  
Input Voltage (V):  
Input Current (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   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1   | 109 | 105 | 101 | 97  | 107 | 102 | 99  | 95  | 98  | 95  | 92  | 94  | 92  | 90  | 91  | 89  | 87  | 85  |
| 2   | 100 | 92  | 85  | 80  | 97  | 90  | 84  | 79  | 87  | 82  | 77  | 83  | 79  | 75  | 80  | 77  | 74  | 72  |
| 3   | 91  | 81  | 73  | 67  | 89  | 80  | 72  | 67  | 77  | 70  | 65  | 74  | 69  | 64  | 71  | 67  | 63  | 61  |
| 4   | 84  | 72  | 64  | 57  | 82  | 71  | 63  | 57  | 69  | 62  | 56  | 66  | 60  | 55  | 64  | 59  | 55  | 53  |
| 5   | 77  | 65  | 56  | 50  | 75  | 64  | 56  | 49  | 62  | 54  | 49  | 60  | 53  | 48  | 58  | 52  | 48  | 46  |
| 6   | 72  | 59  | 50  | 44  | 70  | 58  | 49  | 43  | 56  | 48  | 43  | 54  | 48  | 43  | 53  | 47  | 42  | 40  |
| 7   | 66  | 53  | 45  | 39  | 65  | 52  | 44  | 38  | 51  | 43  | 38  | 49  | 43  | 38  | 48  | 42  | 38  | 36  |
| 8   | 62  | 49  | 40  | 34  | 60  | 48  | 40  | 34  | 47  | 39  | 34  | 45  | 39  | 34  | 44  | 38  | 34  | 32  |
| 9   | 58  | 45  | 37  | 31  | 56  | 44  | 36  | 31  | 43  | 36  | 31  | 42  | 35  | 31  | 41  | 35  | 31  | 29  |
| 10  | 54  | 41  | 33  | 28  | 53  | 41  | 33  | 28  | 40  | 33  | 28  | 39  | 32  | 28  | 38  | 32  | 28  | 26  |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 16943 | 16943 | 16943 |
| 5°  | 17114 | 16782 | 16788 |
| 10° | 16594 | 15422 | 13155 |
| 15° | 16248 | 15330 | 16546 |
| 20° | 16007 | 16059 | 13334 |
| 25° | 15415 | 14914 | 16430 |
| 30° | 14543 | 13348 | 16256 |
| 35° | 13913 | 14675 | 16190 |
| 40° | 13231 | 13542 | 14558 |
| 45° | 12378 | 13577 | 15815 |
| 50° | 11359 | 11894 | 13033 |
| 55° | 10229 | 12017 | 12288 |
| 60° | 8964  | 10395 | 10388 |
| 65° | 7191  | 8977  | 8428  |
| 70° | 6184  | 6246  | 6695  |
| 75° | 5869  | 5995  | 5953  |
| 80° | 5405  | 5646  | 3529  |
| 85° | 5013  | 5094  | 3355  |



TEST NUMBER: P#

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

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 1052.6  | 3.8       |
| 10°-20°   | 2953.5  | 10.5      |
| 20°-30°   | 4269.8  | 15.2      |
| 30°-40°   | 5347.6  | 19.1      |
| 40°-50°   | 5205.5  | 18.6      |
| 50°-60°   | 4455.8  | 15.9      |
| 60°-70°   | 2764.1  | 9.9       |
| 70°-80°   | 1438.4  | 5.1       |
| 80°-90°   | 558.7   | 2.0       |
| 90°-100°  | 0.0     | 0.0       |
| 100°-110° | 0.0     | 0.0       |
| 110°-120° | 0.0     | 0.0       |
| 120°-130° | 0.0     | 0.0       |
| 130°-140° | 0.0     | 0.0       |
| 140°-150° | 0.0     | 0.0       |
| 150°-160° | 0.0     | 0.0       |
| 160°-170° | 0.0     | 0.0       |
| 170°-180° | 0.0     | 0.0       |
| 0°-30°    | 8275.9  | 29.5      |
| 0°-40°    | 13623.5 | 48.6      |
| 0°-60°    | 23284.8 | 83.0      |
| 0°-90°    | 28046.0 | 100.0     |
| 90°-120°  | 0.0     | 0.0       |
| 90°-150°  | 0.0     | 0.0       |
| 90°-180°  | 0.0     | 0.0       |
| 0°-180°   | 28046.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°    | 22.5° | 45°   | 67.5° | 90°   | Flux |
|-----|-------|-------|-------|-------|-------|------|
| 0°  | 11543 | 11543 | 11543 | 11543 | 11543 |      |
| 5°  | 11628 | 11592 | 11476 | 11431 | 11502 | ###  |
| 15° | 10728 | 10768 | 10321 | 11265 | 11207 | 3037 |
| 25° | 9574  | 7935  | 9578  | 9846  | 10661 | 4399 |
| 35° | 7832  | 8164  | 8683  | 8611  | 9726  | 4949 |
| 45° | 6038  | 5420  | 7103  | 7264  | 8450  | 4670 |
| 55° | 4068  | 4453  | 5272  | 6293  | 5550  | 3638 |
| 65° | 2126  | 2386  | 3061  | 2591  | 2994  | 2158 |
| 75° | 1083  | 1258  | 1396  | 1499  | 1477  | 1146 |
| 85° | 340   | 452   | 600   | 689   | 448   | 365  |
| 90° | 0     | 0     | 0     | 0     | 0     |      |



TEST NUMBER: P#

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

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 22.5°   | 45°     | 67.5°   | 90°     |
|-------|---------|---------|---------|---------|---------|
| 0°    | 11542.8 | 11542.8 | 11542.8 | 11542.8 | 11542.8 |
| 2.5°  | 11529.4 | 11480.1 | 11426.4 | 11520.4 | 11538.3 |
| 5°    | 11627.8 | 11592.0 | 11475.6 | 11430.9 | 11502.5 |
| 7.5°  | 11265.3 | 11341.4 | 11448.8 | 10867.0 | 10491.0 |
| 10°   | 11157.9 | 11117.6 | 10504.4 | 8087.6  | 8996.1  |
| 12.5° | 11122.1 | 11072.8 | 8020.4  | 11242.9 | 11296.6 |
| 15°   | 10728.2 | 10768.5 | 10320.9 | 11265.3 | 11207.1 |
| 17.5° | 10486.5 | 9931.5  | 10808.8 | 10996.8 | 10893.8 |
| 20°   | 10294.1 | 8656.0  | 10602.9 | 10101.6 | 8875.3  |
| 22.5° | 9940.5  | 7380.4  | 10191.1 | 8105.5  | 9680.9  |
| 25°   | 9573.5  | 7935.4  | 9578.0  | 9846.5  | 10661.1 |
| 27.5° | 9219.9  | 8991.6  | 7747.4  | 10276.2 | 10468.6 |
| 30°   | 8642.5  | 8915.6  | 8266.6  | 10061.3 | 10195.6 |
| 32.5° | 8441.1  | 8512.7  | 8937.9  | 9501.9  | 9054.3  |
| 35°   | 7832.4  | 8163.6  | 8682.8  | 8611.2  | 9725.7  |
| 37.5° | 7563.9  | 7657.9  | 8333.7  | 9067.7  | 8736.5  |
| 40°   | 6977.6  | 7120.8  | 7577.3  | 8011.5  | 8293.4  |
| 42.5° | 6597.2  | 6118.3  | 6964.2  | 7765.3  | 8033.8  |
| 45°   | 6037.7  | 5420.1  | 7102.9  | 7264.0  | 8450.1  |
| 47.5° | 5581.2  | 5384.2  | 6216.7  | 7559.4  | 7559.4  |
| 50°   | 5048.6  | 5308.2  | 5742.3  | 6753.8  | 6449.5  |
| 52.5° | 4592.0  | 4945.6  | 5299.2  | 5872.1  | 7183.5  |
| 55°   | 4068.4  | 4453.3  | 5272.4  | 6292.8  | 5549.8  |
| 57.5° | 3553.7  | 3880.4  | 4475.7  | 4820.3  | 4950.1  |
| 60°   | 3119.6  | 3437.3  | 4068.4  | 4332.5  | 4207.1  |
| 62.5° | 2560.1  | 2962.9  | 4068.4  | 3414.9  | 2994.2  |
| 65°   | 2125.9  | 2385.5  | 3061.4  | 2591.4  | 2994.2  |
| 67.5° | 1745.5  | 2014.1  | 2721.2  | 2501.9  | 2667.5  |
| 70°   | 1490.4  | 1682.9  | 1799.2  | 2237.8  | 2027.5  |
| 72.5° | 1275.6  | 1414.3  | 1647.1  | 1691.8  | 1682.9  |
| 75°   | 1083.1  | 1257.7  | 1396.4  | 1499.4  | 1477.0  |
| 77.5° | 899.6   | 1145.8  | 1150.3  | 1378.5  | 1199.5  |
| 80°   | 684.8   | 783.2   | 993.6   | 899.6   | 675.8   |
| 82.5° | 501.3   | 613.2   | 756.4   | 778.8   | 595.3   |
| 85°   | 340.2   | 452.0   | 599.7   | 689.3   | 447.6   |
| 87.5° | 156.6   | 308.8   | 487.8   | 617.6   | 407.3   |
| 90°   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |

(END OF REPORT)