

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-LD5-16-N-WG-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 (P34186)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4ILED-LD5-16-N-WG-UNV-L840-CD2-U  
Description: Metalux 4' ILED WITH OPEN NARROW-HEAVY DUTY WIREGUARD DISTRIBUTION

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

**Summary**

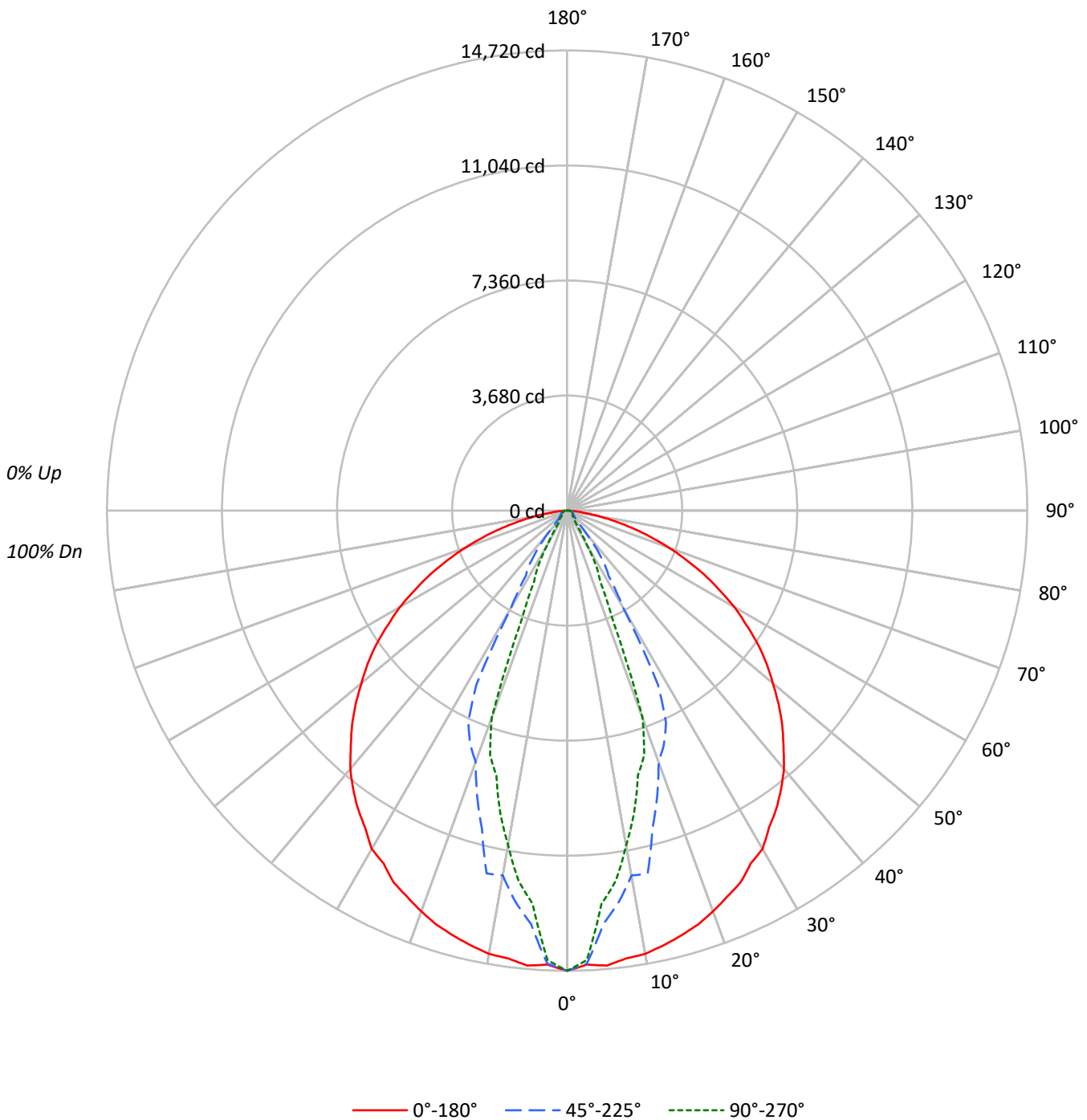
Lumens per Lamp: N/A  
Luminaire Lumens: 14614.0 lumens  
Efficiency: N/A  
Efficacy: 115.4 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 0.6 / 0.75  
Luminous Opening: Rectangular w/ Sides (W: 0.92' x L: 4' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 126.6  
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





TEST NUMBER: P#

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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  | 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 |    |    |    |    | 100 |   |  |   |
| 1   | 111 | 108 | 104 | 102 | 109 | 106 | 103 | 100 | 101 | 99  | 97  | 98  | 96  | 94  | 94  | 93  | 91  | 89  |    |    |    |    | 89  |   |  |   |
| 2   | 104 | 98  | 92  | 88  | 102 | 96  | 91  | 87  | 92  | 88  | 85  | 89  | 86  | 83  | 86  | 84  | 81  | 79  |    |    |    |    | 79  |   |  |   |
| 3   | 97  | 89  | 83  | 77  | 95  | 87  | 82  | 77  | 85  | 80  | 76  | 82  | 78  | 74  | 80  | 76  | 73  | 71  |    |    |    |    | 71  |   |  |   |
| 4   | 91  | 81  | 74  | 69  | 89  | 80  | 74  | 69  | 78  | 72  | 68  | 76  | 71  | 67  | 74  | 70  | 66  | 64  |    |    |    |    | 64  |   |  |   |
| 5   | 85  | 75  | 68  | 62  | 83  | 74  | 67  | 62  | 72  | 66  | 62  | 70  | 65  | 61  | 69  | 64  | 60  | 59  |    |    |    |    | 59  |   |  |   |
| 6   | 80  | 69  | 62  | 57  | 79  | 69  | 62  | 57  | 67  | 61  | 56  | 65  | 60  | 56  | 64  | 59  | 55  | 54  |    |    |    |    | 54  |   |  |   |
| 7   | 76  | 64  | 57  | 52  | 74  | 64  | 57  | 52  | 62  | 56  | 52  | 61  | 56  | 51  | 60  | 55  | 51  | 49  |    |    |    |    | 49  |   |  |   |
| 8   | 71  | 60  | 53  | 48  | 70  | 60  | 53  | 48  | 58  | 52  | 48  | 57  | 52  | 48  | 56  | 51  | 47  | 46  |    |    |    |    | 46  |   |  |   |
| 9   | 68  | 56  | 49  | 45  | 66  | 56  | 49  | 45  | 55  | 49  | 45  | 54  | 48  | 44  | 53  | 48  | 44  | 43  |    |    |    |    | 43  |   |  |   |
| 10  | 64  | 53  | 46  | 42  | 63  | 52  | 46  | 42  | 52  | 46  | 42  | 51  | 45  | 41  | 50  | 45  | 41  | 40  |    |    |    |    | 40  |   |  |   |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 43211 | 43211 | 43211 |
| 5°  | 42955 | 38800 | 36882 |
| 10° | 42724 | 34755 | 31826 |
| 15° | 42489 | 31235 | 25863 |
| 20° | 42231 | 25836 | 21188 |
| 25° | 42027 | 23209 | 7707  |
| 30° | 41768 | 11557 | 4018  |
| 35° | 41078 | 6989  | 1530  |
| 40° | 40500 | 3494  | 1333  |
| 45° | 39433 | 1513  | 987   |
| 50° | 38093 | 1280  | 899   |
| 55° | 36782 | 1068  | 942   |
| 60° | 34797 | 1110  | 919   |
| 65° | 31822 | 1201  | 940   |
| 70° | 27774 | 1252  | 974   |
| 75° | 22202 | 1377  | 1072  |
| 80° | 14966 | 1622  | 1187  |
| 85° | 7982  | 1915  | 1486  |



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**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 1257.3  | 8.6       |
| 10°-20°   | 3048.1  | 20.9      |
| 20°-30°   | 3320.5  | 22.7      |
| 30°-40°   | 2554.4  | 17.5      |
| 40°-50°   | 1887.4  | 12.9      |
| 50°-60°   | 1187.5  | 8.1       |
| 60°-70°   | 777.6   | 5.3       |
| 70°-80°   | 435.4   | 3.0       |
| 80°-90°   | 145.8   | 1.0       |
| 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°    | 7626.0  | 52.2      |
| 0°-40°    | 10180.4 | 69.7      |
| 0°-60°    | 13255.3 | 90.7      |
| 0°-90°    | 14614.0 | 100.0     |
| 90°-120°  | 0.0     | 0.0       |
| 90°-150°  | 0.0     | 0.0       |
| 90°-180°  | 0.0     | 0.0       |
| 0°-180°   | 14614.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°    | 22.5° | 45°   | 67.5° | 90°   | Flux |
|-----|-------|-------|-------|-------|-------|------|
| 0°  | 14720 | 14720 | 14720 | 14720 | 14720 |      |
| 5°  | 14608 | 14495 | 13276 | 12492 | 12635 | ###  |
| 15° | 14074 | 12236 | 10539 | 9148  | 8759  | 3974 |
| 25° | 13126 | 9808  | 7482  | 3332  | 2500  | 6034 |
| 35° | 11663 | 7228  | 2080  | 663   | 460   | 7294 |
| 45° | 9736  | 3850  | 399   | 336   | 264   | 7498 |
| 55° | 7443  | 987   | 237   | 249   | 213   | 6631 |
| 65° | 4827  | 244   | 208   | 186   | 167   | 4761 |
| 75° | 2140  | 184   | 164   | 148   | 133   | 2296 |
| 85° | 305   | 116   | 118   | 114   | 99    | 388  |
| 90° | 0     | 0     | 0     | 0     | 0     |      |



TEST NUMBER: P#

CATALOG NUMBER: 4ILED-LD5-16-N-WG-UNV-L840-CD2-U

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 22.5°   | 45°     | 67.5°   | 90°     |
|-------|---------|---------|---------|---------|---------|
| 0°    | 14719.7 | 14719.7 | 14719.7 | 14719.7 | 14719.7 |
| 2.5°  | 14538.4 | 14543.2 | 14506.9 | 14434.4 | 14388.4 |
| 5°    | 14608.5 | 14494.8 | 13276.0 | 12492.5 | 12635.2 |
| 7.5°  | 14448.9 | 13861.2 | 12635.2 | 12050.0 | 11936.3 |
| 10°   | 14395.7 | 12889.1 | 11854.1 | 11655.8 | 10882.0 |
| 12.5° | 14243.3 | 12299.1 | 11890.4 | 10640.2 | 9897.8  |
| 15°   | 14074.1 | 12236.2 | 10538.6 | 9148.1  | 8758.8  |
| 17.5° | 13890.3 | 11684.8 | 9576.2  | 8384.0  | 8197.8  |
| 20°   | 13641.2 | 11331.8 | 8555.7  | 7706.9  | 7051.5  |
| 22.5° | 13372.8 | 11162.5 | 8093.8  | 5022.6  | 3893.3  |
| 25°   | 13126.1 | 9808.3  | 7482.0  | 3332.3  | 2500.4  |
| 27.5° | 12719.8 | 9699.5  | 6285.0  | 2440.0  | 2062.7  |
| 30°   | 12499.8 | 8693.5  | 3595.9  | 1835.4  | 1259.9  |
| 32.5° | 12023.4 | 7905.2  | 2461.8  | 1114.8  | 752.1   |
| 35°   | 11663.1 | 7228.1  | 2079.7  | 662.6   | 459.5   |
| 37.5° | 11239.9 | 6780.7  | 1554.9  | 454.6   | 399.0   |
| 40°   | 10790.1 | 6253.5  | 984.2   | 406.3   | 379.7   |
| 42.5° | 10243.6 | 5632.0  | 582.8   | 382.1   | 326.5   |
| 45°   | 9735.8  | 3849.8  | 399.0   | 336.1   | 263.6   |
| 47.5° | 9174.7  | 2626.2  | 341.0   | 285.4   | 227.3   |
| 50°   | 8589.5  | 1716.9  | 312.0   | 253.9   | 222.5   |
| 52.5° | 8040.6  | 1407.4  | 270.8   | 253.9   | 222.5   |
| 55°   | 7443.3  | 986.6   | 237.0   | 249.1   | 212.8   |
| 57.5° | 6787.9  | 614.2   | 222.5   | 241.8   | 205.5   |
| 60°   | 6183.4  | 362.7   | 220.1   | 234.6   | 186.2   |
| 62.5° | 5477.3  | 275.7   | 215.2   | 208.0   | 176.5   |
| 65°   | 4826.8  | 244.2   | 208.0   | 186.2   | 166.9   |
| 67.5° | 4127.9  | 220.1   | 193.5   | 178.9   | 162.0   |
| 70°   | 3458.1  | 198.3   | 183.8   | 166.9   | 147.5   |
| 72.5° | 2785.8  | 191.0   | 174.1   | 157.2   | 140.3   |
| 75°   | 2140.1  | 183.8   | 164.4   | 147.5   | 133.0   |
| 77.5° | 1557.3  | 171.7   | 154.8   | 142.7   | 125.7   |
| 80°   | 1010.8  | 157.2   | 147.5   | 133.0   | 113.7   |
| 82.5° | 563.4   | 142.7   | 135.4   | 123.3   | 108.8   |
| 85°   | 304.7   | 116.1   | 118.5   | 113.7   | 99.1    |
| 87.5° | 55.6    | 82.2    | 101.6   | 99.1    | 87.1    |
| 90°   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |

(END OF REPORT)