

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-LD5-10-N-TWBWG-UNV-L850-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 (P34186)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8ILED-LD5-10-N-TWBWG-UNV-L850-CD1-U
Description: Metalux 8' ILED WITH NARROW WITH THIN WHITE BAFFLE AND WIREGUARD DISTRIBUTION

Light Source: (1) 5000 CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

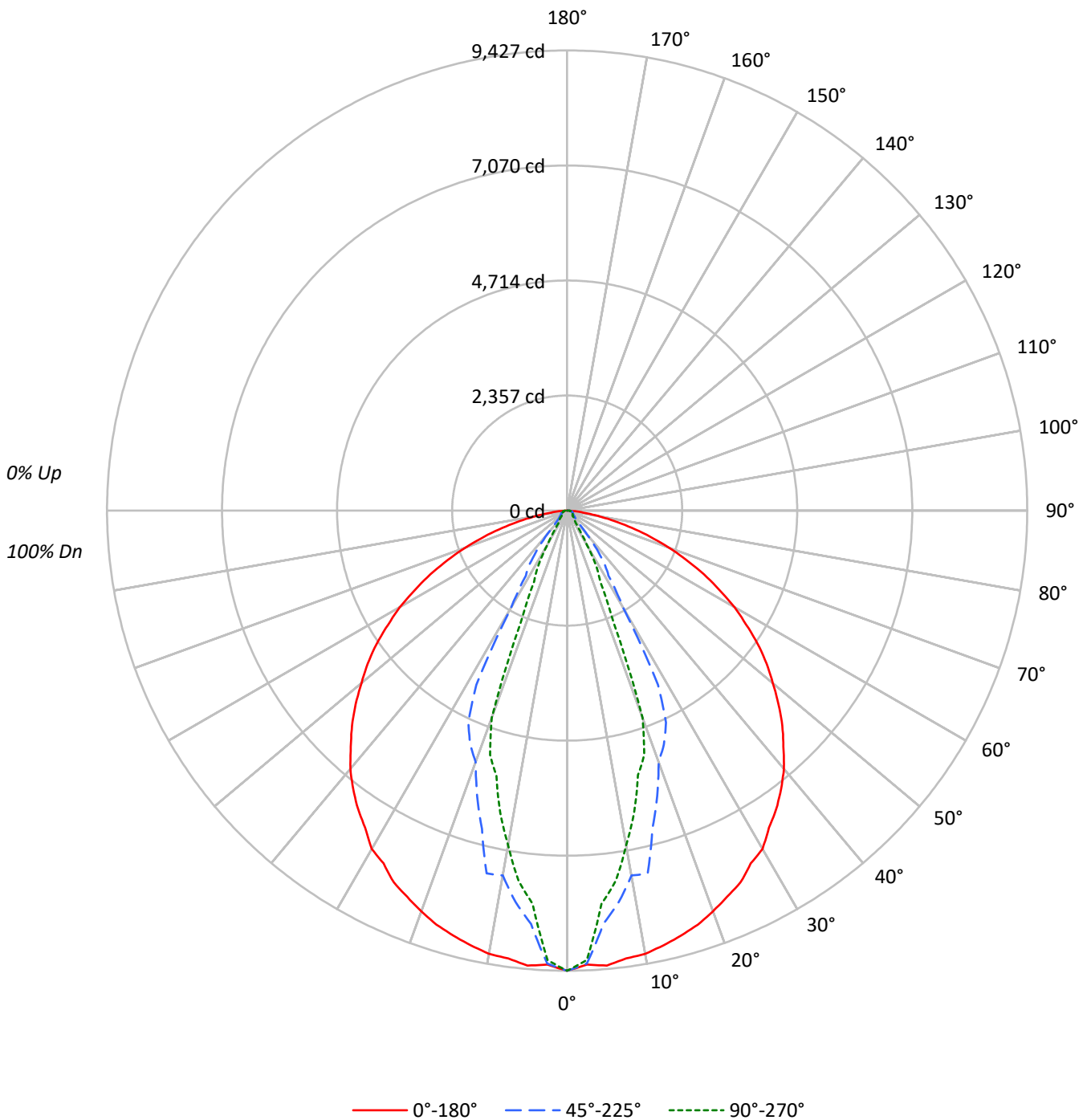
Lumens per Lamp: N/A
Luminaire Lumens: 9359.0 lumens
Efficiency: N/A
Efficacy: 139.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 0.6 / 0.75
Luminous Opening: Rectangular w/ Sides (W: 0.92' x L: 8' x H: 0.1')
CIE Type: Direct

Input Watts (W): 67
Input Voltage (V):
Input Current (A_{in}): 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#
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Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: 8ILED-LD5-10-N-TWBWG-UNV-L850-CD1-U

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° | 13837 | 13837 | 13837 |
| 5° | 13769 | 12434 | 11810 |
| 10° | 13711 | 11146 | 10191 |
| 15° | 13651 | 10025 | 8282 |
| 20° | 13584 | 8299 | 6784 |
| 25° | 13535 | 7461 | 2468 |
| 30° | 13470 | 3719 | 1287 |
| 35° | 13268 | 2251 | 490 |
| 40° | 13103 | 1126 | 427 |
| 45° | 12783 | 488 | 316 |
| 50° | 12377 | 414 | 288 |
| 55° | 11984 | 346 | 302 |
| 60° | 11378 | 360 | 294 |
| 65° | 10456 | 391 | 301 |
| 70° | 9189 | 409 | 312 |
| 75° | 7426 | 452 | 343 |
| 80° | 5109 | 537 | 380 |
| 85° | 2875 | 645 | 476 |



TEST NUMBER: P#

CATALOG NUMBER: 8ILED-LD5-10-N-TWBWG-UNV-L850-CD1-U

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 805.2 | 8.6 |
| 10°-20° | 1952.1 | 20.9 |
| 20°-30° | 2126.5 | 22.7 |
| 30°-40° | 1635.9 | 17.5 |
| 40°-50° | 1208.7 | 12.9 |
| 50°-60° | 760.5 | 8.1 |
| 60°-70° | 498.0 | 5.3 |
| 70°-80° | 278.8 | 3.0 |
| 80°-90° | 93.4 | 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° | 4883.8 | 52.2 |
| 0°-40° | 6519.7 | 69.7 |
| 0°-60° | 8488.9 | 90.7 |
| 0°-90° | 9359.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 9359.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 9427 | 9427 | 9427 | 9427 | 9427 | |
| 5° | 9356 | 9283 | 8502 | 8000 | 8092 | 886 |
| 15° | 9013 | 7836 | 6749 | 5859 | 5609 | 2545 |
| 25° | 8406 | 6281 | 4792 | 2134 | 1601 | 3864 |
| 35° | 7469 | 4629 | 1332 | 424 | 294 | 4671 |
| 45° | 6235 | 2466 | 256 | 215 | 169 | 4802 |
| 55° | 4767 | 632 | 152 | 160 | 136 | 4247 |
| 65° | 3091 | 156 | 133 | 119 | 107 | 3049 |
| 75° | 1371 | 118 | 105 | 94 | 85 | 1470 |
| 85° | 195 | 74 | 76 | 73 | 64 | 249 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P#

CATALOG NUMBER: 8ILED-LD5-10-N-TWBWG-UNV-L850-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 9426.7 | 9426.7 | 9426.7 | 9426.7 | 9426.7 |
| 2.5° | 9310.6 | 9313.7 | 9290.4 | 9244.0 | 9214.5 |
| 5° | 9355.5 | 9282.7 | 8502.2 | 8000.4 | 8091.8 |
| 7.5° | 9253.3 | 8876.9 | 8091.8 | 7717.0 | 7644.2 |
| 10° | 9219.2 | 8254.4 | 7591.5 | 7464.5 | 6969.0 |
| 12.5° | 9121.6 | 7876.5 | 7614.8 | 6814.1 | 6338.7 |
| 15° | 9013.2 | 7836.2 | 6749.1 | 5858.6 | 5609.3 |
| 17.5° | 8895.5 | 7483.1 | 6132.7 | 5369.2 | 5250.0 |
| 20° | 8736.0 | 7257.0 | 5479.2 | 4935.6 | 4515.9 |
| 22.5° | 8564.1 | 7148.6 | 5183.4 | 3216.6 | 2493.3 |
| 25° | 8406.1 | 6281.4 | 4791.6 | 2134.1 | 1601.3 |
| 27.5° | 8146.0 | 6211.7 | 4025.0 | 1562.6 | 1321.0 |
| 30° | 8005.0 | 5567.4 | 2302.9 | 1175.4 | 806.9 |
| 32.5° | 7699.9 | 5062.6 | 1576.5 | 713.9 | 481.6 |
| 35° | 7469.2 | 4628.9 | 1331.8 | 424.3 | 294.2 |
| 37.5° | 7198.2 | 4342.4 | 995.8 | 291.1 | 255.5 |
| 40° | 6910.1 | 4004.8 | 630.3 | 260.2 | 243.1 |
| 42.5° | 6560.1 | 3606.8 | 373.2 | 244.7 | 209.1 |
| 45° | 6234.9 | 2465.5 | 255.5 | 215.3 | 168.8 |
| 47.5° | 5875.6 | 1681.8 | 218.4 | 182.7 | 145.6 |
| 50° | 5500.8 | 1099.5 | 199.8 | 162.6 | 142.5 |
| 52.5° | 5149.3 | 901.3 | 173.5 | 162.6 | 142.5 |
| 55° | 4766.8 | 631.9 | 151.8 | 159.5 | 136.3 |
| 57.5° | 4347.1 | 393.4 | 142.5 | 154.9 | 131.6 |
| 60° | 3959.9 | 232.3 | 140.9 | 150.2 | 119.2 |
| 62.5° | 3507.7 | 176.5 | 137.8 | 133.2 | 113.1 |
| 65° | 3091.1 | 156.4 | 133.2 | 119.2 | 106.9 |
| 67.5° | 2643.6 | 140.9 | 123.9 | 114.6 | 103.8 |
| 70° | 2214.6 | 127.0 | 117.7 | 106.9 | 94.5 |
| 72.5° | 1784.1 | 122.3 | 111.5 | 100.7 | 89.8 |
| 75° | 1370.6 | 117.7 | 105.3 | 94.5 | 85.2 |
| 77.5° | 997.3 | 110.0 | 99.1 | 91.4 | 80.5 |
| 80° | 647.3 | 100.7 | 94.5 | 85.2 | 72.8 |
| 82.5° | 360.8 | 91.4 | 86.7 | 79.0 | 69.7 |
| 85° | 195.1 | 74.3 | 75.9 | 72.8 | 63.5 |
| 87.5° | 35.6 | 52.7 | 65.0 | 63.5 | 55.8 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)