

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-W-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 (P34174)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4ILED-LD5-16-W-WG-UNV-L840-CD2-U
Description: Metalux 4' ILED WITH OPEN WIDE-HEAVY DUTY WIREGUARD DISTRIBUTION

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

Summary

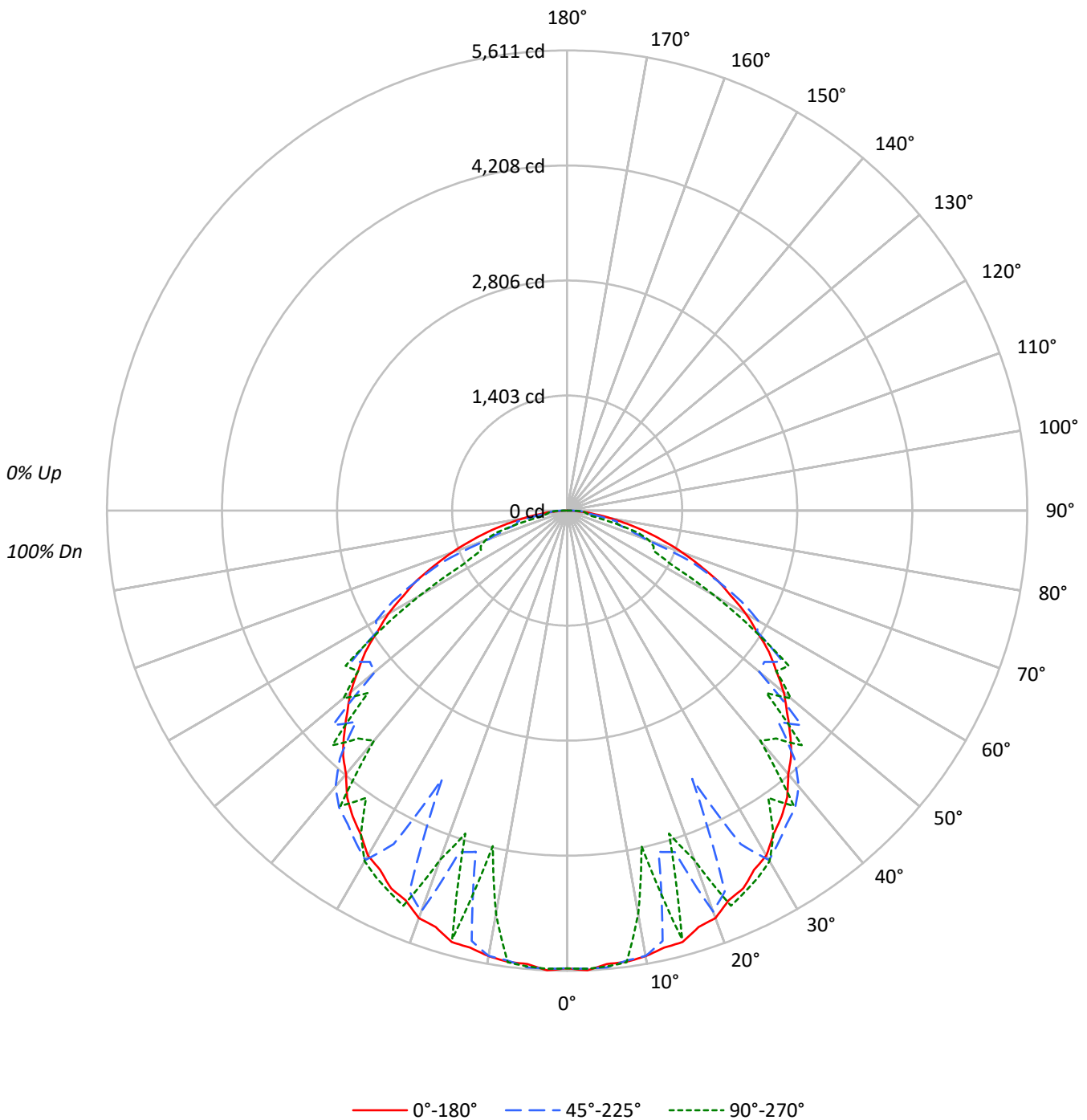
Lumens per Lamp: N/A
Luminaire Lumens: 15348.0 lumens
Efficiency: N/A
Efficacy: 121.2 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.28 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.92' x L: 4' x H: 0.1')
CIE Type: Direct

Input Watts (W): 126.6
Input Voltage (V):
Input Current (A_{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



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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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 109 | 105 | 100 | 97 | 106 | 102 | 98 | 95 | 98 | 95 | 92 | 94 | 92 | 89 | 91 | 89 | 87 | 85 |
| 2 | 99 | 91 | 85 | 79 | 97 | 89 | 83 | 78 | 86 | 81 | 76 | 83 | 78 | 75 | 80 | 76 | 73 | 71 |
| 3 | 91 | 80 | 72 | 66 | 88 | 79 | 71 | 65 | 76 | 69 | 64 | 73 | 67 | 63 | 70 | 66 | 62 | 60 |
| 4 | 83 | 71 | 62 | 56 | 81 | 70 | 62 | 55 | 67 | 60 | 55 | 65 | 59 | 54 | 63 | 57 | 53 | 51 |
| 5 | 76 | 63 | 54 | 48 | 74 | 62 | 54 | 48 | 60 | 53 | 47 | 58 | 52 | 47 | 56 | 51 | 46 | 44 |
| 6 | 70 | 57 | 48 | 42 | 68 | 56 | 48 | 41 | 54 | 47 | 41 | 53 | 46 | 41 | 51 | 45 | 40 | 38 |
| 7 | 65 | 52 | 43 | 37 | 63 | 51 | 42 | 37 | 49 | 42 | 36 | 48 | 41 | 36 | 46 | 40 | 36 | 34 |
| 8 | 61 | 47 | 39 | 33 | 59 | 46 | 38 | 33 | 45 | 38 | 32 | 44 | 37 | 32 | 43 | 36 | 32 | 30 |
| 9 | 57 | 43 | 35 | 29 | 55 | 42 | 35 | 29 | 41 | 34 | 29 | 40 | 34 | 29 | 39 | 33 | 29 | 27 |
| 10 | 53 | 40 | 32 | 27 | 52 | 39 | 32 | 26 | 38 | 31 | 26 | 37 | 31 | 26 | 36 | 30 | 26 | 24 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 16386 | 16386 | 16386 |
| 5° | 16320 | 16339 | 16286 |
| 10° | 16373 | 16168 | 14603 |
| 15° | 16438 | 12769 | 15980 |
| 20° | 16365 | 15713 | 13617 |
| 25° | 16273 | 11191 | 15811 |
| 30° | 16228 | 15816 | 15744 |
| 35° | 16049 | 15682 | 14232 |
| 40° | 15742 | 15595 | 12854 |
| 45° | 15573 | 13808 | 15147 |
| 50° | 15295 | 12545 | 14391 |
| 55° | 14853 | 14457 | 14608 |
| 60° | 14169 | 13578 | 10278 |
| 65° | 13368 | 11576 | 6526 |
| 70° | 11971 | 6903 | 7021 |
| 75° | 10309 | 5306 | 4817 |
| 80° | 7986 | 4380 | 2781 |
| 85° | 5745 | 3364 | 3221 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 528.7 | 3.4 |
| 10°-20° | 1411.7 | 9.2 |
| 20°-30° | 2189.0 | 14.3 |
| 30°-40° | 2806.4 | 18.3 |
| 40°-50° | 2874.0 | 18.7 |
| 50°-60° | 2725.3 | 17.8 |
| 60°-70° | 1745.6 | 11.4 |
| 70°-80° | 848.2 | 5.5 |
| 80°-90° | 219.0 | 1.4 |
| 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° | 4129.4 | 26.9 |
| 0°-40° | 6935.8 | 45.2 |
| 0°-60° | 12535.1 | 81.7 |
| 0°-90° | 15348.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 15348.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 5582 | 5582 | 5582 | 5582 | 5582 | |
| 5° | 5550 | 5566 | 5591 | 5604 | 5579 | 530 |
| 15° | 5445 | 5445 | 4308 | 5067 | 5412 | 1529 |
| 25° | 5083 | 4391 | 3608 | 5161 | 5130 | 2336 |
| 35° | 4557 | 4586 | 4666 | 4546 | 4275 | 2846 |
| 45° | 3845 | 3852 | 3641 | 3666 | 4046 | 2963 |
| 55° | 3006 | 3100 | 3207 | 3093 | 3299 | 2670 |
| 65° | 2028 | 1981 | 2005 | 1302 | 1159 | 1987 |
| 75° | 994 | 1110 | 633 | 768 | 598 | 1051 |
| 85° | 219 | 192 | 208 | 219 | 215 | 249 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P#

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

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 5581.7 | 5581.7 | 5581.7 | 5581.7 | 5581.7 |
| 2.5° | 5610.8 | 5615.2 | 5590.6 | 5581.7 | 5592.9 |
| 5° | 5550.3 | 5566.0 | 5590.6 | 5604.0 | 5579.4 |
| 7.5° | 5548.1 | 5554.8 | 5534.7 | 5608.5 | 5554.8 |
| 10° | 5516.8 | 5554.8 | 5514.5 | 5319.8 | 4993.1 |
| 12.5° | 5458.6 | 5465.3 | 5373.5 | 3871.8 | 4189.6 |
| 15° | 5445.1 | 5445.1 | 4308.2 | 5066.9 | 5411.6 |
| 17.5° | 5324.3 | 5353.4 | 4366.4 | 5322.0 | 4129.2 |
| 20° | 5286.2 | 5268.3 | 5203.4 | 3768.9 | 4532.0 |
| 22.5° | 5143.0 | 5019.9 | 5024.4 | 5237.0 | 5216.9 |
| 25° | 5082.6 | 4391.0 | 3607.7 | 5160.9 | 5129.6 |
| 27.5° | 4939.3 | 3681.6 | 4583.5 | 5049.0 | 5042.3 |
| 30° | 4856.5 | 3829.3 | 4921.4 | 4957.2 | 4937.1 |
| 32.5° | 4682.0 | 4395.5 | 4798.3 | 4874.4 | 4679.7 |
| 35° | 4556.6 | 4585.7 | 4666.3 | 4545.5 | 4274.6 |
| 37.5° | 4406.7 | 4207.5 | 4565.6 | 4144.8 | 4543.2 |
| 40° | 4194.1 | 3278.7 | 4393.3 | 4447.0 | 3661.4 |
| 42.5° | 4044.1 | 3209.3 | 4102.3 | 3451.1 | 3771.1 |
| 45° | 3844.9 | 3851.7 | 3641.3 | 3665.9 | 4046.4 |
| 47.5° | 3636.8 | 3721.9 | 3874.0 | 3894.2 | 3294.4 |
| 50° | 3448.8 | 3531.6 | 3057.2 | 3301.1 | 3560.7 |
| 52.5° | 3213.8 | 3330.2 | 3032.5 | 3408.5 | 3213.8 |
| 55° | 3005.7 | 3099.7 | 3207.1 | 3093.0 | 3298.9 |
| 57.5° | 2739.4 | 2889.3 | 2746.1 | 3037.0 | 2681.2 |
| 60° | 2517.8 | 2515.6 | 2692.4 | 2705.8 | 2081.4 |
| 62.5° | 2251.5 | 2233.6 | 2394.7 | 1815.0 | 1441.3 |
| 65° | 2027.7 | 1980.7 | 2005.3 | 1302.5 | 1159.3 |
| 67.5° | 1747.9 | 1551.0 | 1651.7 | 1087.7 | 1141.4 |
| 70° | 1490.5 | 1481.6 | 1013.8 | 754.2 | 1063.1 |
| 72.5° | 1235.4 | 1345.1 | 799.0 | 942.2 | 919.8 |
| 75° | 993.7 | 1110.1 | 633.4 | 767.6 | 597.6 |
| 77.5° | 745.3 | 805.7 | 624.4 | 470.0 | 290.9 |
| 80° | 539.4 | 380.5 | 398.4 | 266.3 | 266.3 |
| 82.5° | 349.1 | 313.3 | 232.8 | 248.4 | 235.0 |
| 85° | 219.3 | 192.5 | 208.1 | 219.3 | 214.9 |
| 87.5° | 76.1 | 132.0 | 165.6 | 161.1 | 147.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)