

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: P229615

Luminaire Tested: **22RLN-LD5-25-RDP-UNV-L835-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229615
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36060)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22RLN-LD5-25-RDP-UNV-L835-CD1-U
Description: METALUX 2X2 RLN LED TROFFER WITH RDP LENS
Light Source: (126)3500K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2062.0 lumens
Efficiency: N/A
Efficacy: 98.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.38 / 1.41
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')
CIE Type: Direct

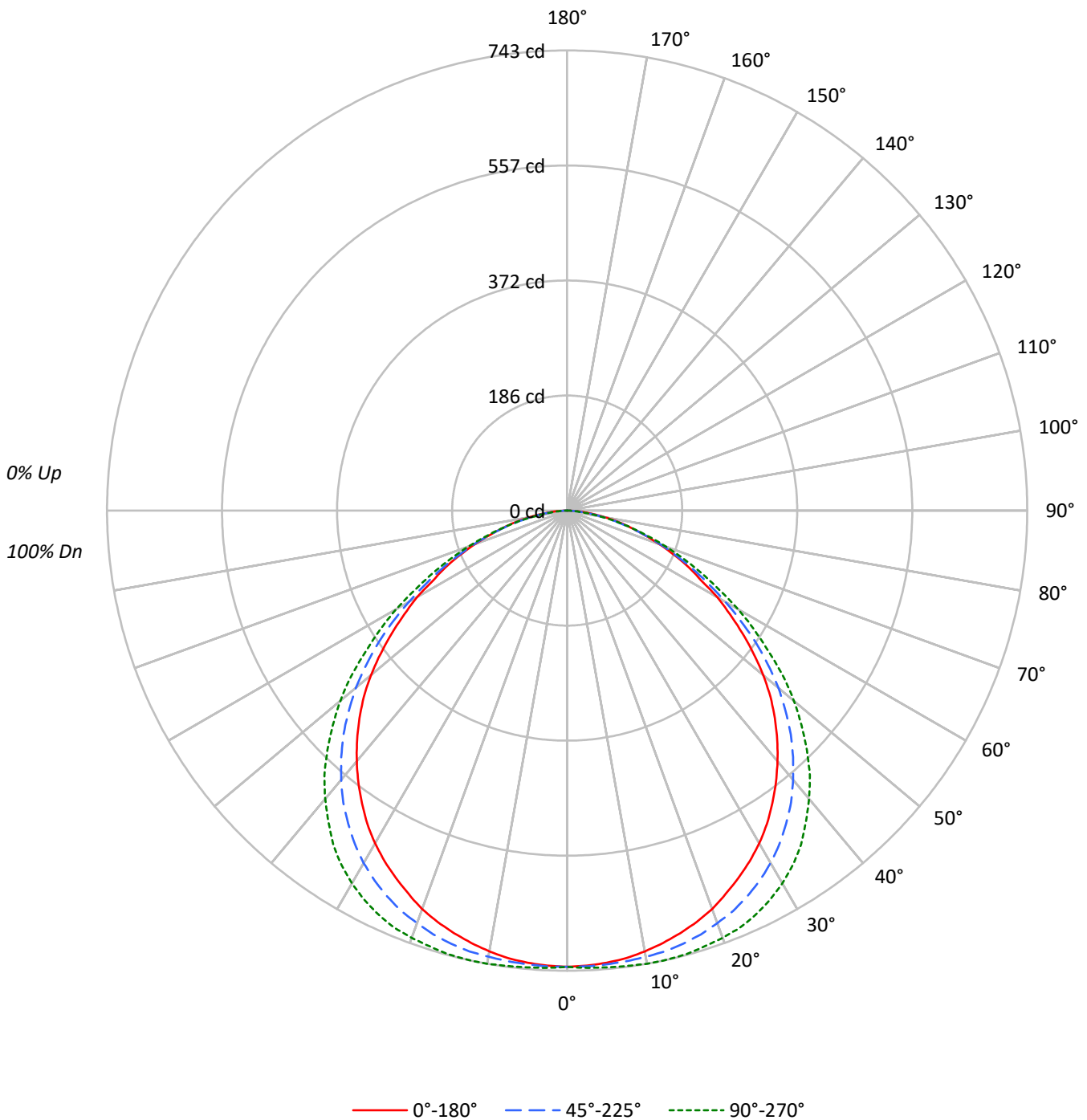
Input Watts (W): 20.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P229615

CATALOG NUMBER: 22RLN-LD5-25-RDP-UNV-L835-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 | 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 | 103 | 99 | 96 | 98 | 95 | 93 | 94 | 92 | 90 | 91 | 89 | 87 | 85 |
| 2 | 100 | 92 | 85 | 80 | 97 | 90 | 84 | 79 | 86 | 81 | 77 | 83 | 79 | 75 | 80 | 77 | 74 | 72 |
| 3 | 91 | 81 | 73 | 67 | 89 | 79 | 72 | 66 | 76 | 70 | 65 | 74 | 68 | 64 | 71 | 67 | 63 | 61 |
| 4 | 84 | 72 | 63 | 57 | 81 | 71 | 63 | 56 | 68 | 61 | 56 | 66 | 60 | 55 | 64 | 58 | 54 | 52 |
| 5 | 77 | 64 | 56 | 49 | 75 | 63 | 55 | 49 | 61 | 54 | 48 | 59 | 53 | 48 | 57 | 52 | 47 | 45 |
| 6 | 71 | 58 | 49 | 43 | 69 | 57 | 49 | 43 | 55 | 48 | 42 | 54 | 47 | 42 | 52 | 46 | 42 | 40 |
| 7 | 66 | 53 | 44 | 38 | 64 | 52 | 44 | 38 | 50 | 43 | 37 | 49 | 42 | 37 | 47 | 41 | 37 | 35 |
| 8 | 61 | 48 | 40 | 34 | 60 | 47 | 39 | 34 | 46 | 39 | 33 | 45 | 38 | 33 | 44 | 38 | 33 | 31 |
| 9 | 57 | 44 | 36 | 30 | 56 | 43 | 36 | 30 | 42 | 35 | 30 | 41 | 35 | 30 | 40 | 34 | 30 | 28 |
| 10 | 54 | 41 | 33 | 28 | 52 | 40 | 33 | 27 | 39 | 32 | 27 | 38 | 32 | 27 | 37 | 31 | 27 | 25 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 2359 | 2359 | 2359 |
| 5° | 2356 | 2364 | 2380 |
| 10° | 2350 | 2379 | 2416 |
| 15° | 2342 | 2400 | 2459 |
| 20° | 2334 | 2416 | 2502 |
| 25° | 2313 | 2429 | 2545 |
| 30° | 2295 | 2430 | 2570 |
| 35° | 2258 | 2411 | 2574 |
| 40° | 2210 | 2373 | 2541 |
| 45° | 2148 | 2313 | 2479 |
| 50° | 2061 | 2218 | 2382 |
| 55° | 1930 | 2078 | 2218 |
| 60° | 1793 | 1890 | 2044 |
| 65° | 1644 | 1701 | 1816 |
| 70° | 1488 | 1511 | 1582 |
| 75° | 1310 | 1279 | 1326 |
| 80° | 1140 | 1048 | 1000 |
| 85° | 926 | 694 | 603 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 70.1 | 3.4 |
| 10°-20° | 204.5 | 9.9 |
| 20°-30° | 316.9 | 15.4 |
| 30°-40° | 385.6 | 18.7 |
| 40°-50° | 392.7 | 19.0 |
| 50°-60° | 331.2 | 16.1 |
| 60°-70° | 224.0 | 10.9 |
| 70°-80° | 112.0 | 5.4 |
| 80°-90° | 24.9 | 1.2 |
| 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° | 591.5 | 28.7 |
| 0°-40° | 977.1 | 47.4 |
| 0°-60° | 1701.1 | 82.5 |
| 0°-90° | 2062.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2062.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 737 | 737 | 737 | 737 | 737 | |
| 5° | 733 | 734 | 735 | 739 | 740 | 70 |
| 15° | 706 | 711 | 724 | 737 | 742 | 199 |
| 25° | 655 | 665 | 687 | 710 | 720 | 302 |
| 35° | 578 | 590 | 617 | 646 | 658 | 361 |
| 45° | 474 | 483 | 511 | 537 | 547 | 365 |
| 55° | 346 | 351 | 372 | 390 | 397 | 309 |
| 65° | 217 | 213 | 224 | 235 | 240 | 214 |
| 75° | 106 | 102 | 103 | 105 | 107 | 114 |
| 85° | 25 | 21 | 19 | 16 | 16 | 29 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 736.6 | 736.6 | 736.6 | 736.6 | 736.6 |
| 2.5° | 735.3 | 735.3 | 736.6 | 737.8 | 739.1 |
| 5° | 732.8 | 734.0 | 735.3 | 739.1 | 740.3 |
| 7.5° | 729.0 | 730.2 | 734.0 | 739.1 | 741.6 |
| 10° | 722.7 | 725.2 | 731.5 | 739.1 | 742.9 |
| 12.5° | 715.1 | 718.9 | 729.0 | 737.8 | 742.9 |
| 15° | 706.3 | 711.3 | 723.9 | 736.6 | 741.6 |
| 17.5° | 696.2 | 702.5 | 717.6 | 731.5 | 737.8 |
| 20° | 684.8 | 692.4 | 708.8 | 726.5 | 734.0 |
| 22.5° | 669.7 | 679.8 | 700.0 | 720.2 | 729.0 |
| 25° | 654.6 | 664.7 | 687.4 | 710.1 | 720.2 |
| 27.5° | 638.2 | 649.5 | 673.5 | 698.7 | 708.8 |
| 30° | 620.5 | 630.6 | 657.1 | 683.6 | 694.9 |
| 32.5° | 600.3 | 610.4 | 638.2 | 665.9 | 678.5 |
| 35° | 577.6 | 590.3 | 616.7 | 645.7 | 658.4 |
| 37.5° | 553.7 | 565.0 | 594.0 | 621.8 | 633.1 |
| 40° | 528.5 | 539.8 | 567.5 | 596.6 | 607.9 |
| 42.5° | 502.0 | 513.3 | 539.8 | 567.5 | 580.2 |
| 45° | 474.2 | 483.0 | 510.8 | 537.3 | 547.4 |
| 47.5° | 445.2 | 451.5 | 478.0 | 503.2 | 513.3 |
| 50° | 413.7 | 420.0 | 445.2 | 467.9 | 478.0 |
| 52.5° | 379.6 | 384.7 | 408.6 | 428.8 | 440.2 |
| 55° | 345.6 | 350.6 | 372.1 | 389.7 | 397.3 |
| 57.5° | 311.5 | 314.0 | 333.0 | 350.6 | 358.2 |
| 60° | 280.0 | 280.0 | 295.1 | 309.0 | 319.1 |
| 62.5° | 243.4 | 247.2 | 258.6 | 272.4 | 276.2 |
| 65° | 216.9 | 213.1 | 224.5 | 234.6 | 239.6 |
| 67.5° | 186.7 | 184.1 | 191.7 | 200.5 | 203.1 |
| 70° | 158.9 | 155.1 | 161.4 | 166.5 | 169.0 |
| 72.5° | 129.9 | 128.6 | 131.2 | 135.0 | 136.2 |
| 75° | 105.9 | 102.2 | 103.4 | 104.7 | 107.2 |
| 77.5° | 84.5 | 78.2 | 79.5 | 78.2 | 79.5 |
| 80° | 61.8 | 56.8 | 56.8 | 55.5 | 54.2 |
| 82.5° | 41.6 | 39.1 | 36.6 | 34.1 | 32.8 |
| 85° | 25.2 | 21.4 | 18.9 | 16.4 | 16.4 |
| 87.5° | 10.1 | 7.6 | 6.3 | 6.3 | 6.3 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)