

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: P229635

Luminaire Tested: **22RLN-LD5-35-RDP-UNV-L935-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229635
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-LD5-35-RDP-UNV-L935-CD1-U
Description: METALUX 2X2 RLN LED TROFFER WITH RDP LENS
Light Source: (126)3500K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2484.0 lumens
Efficiency: N/A
Efficacy: 81.2 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

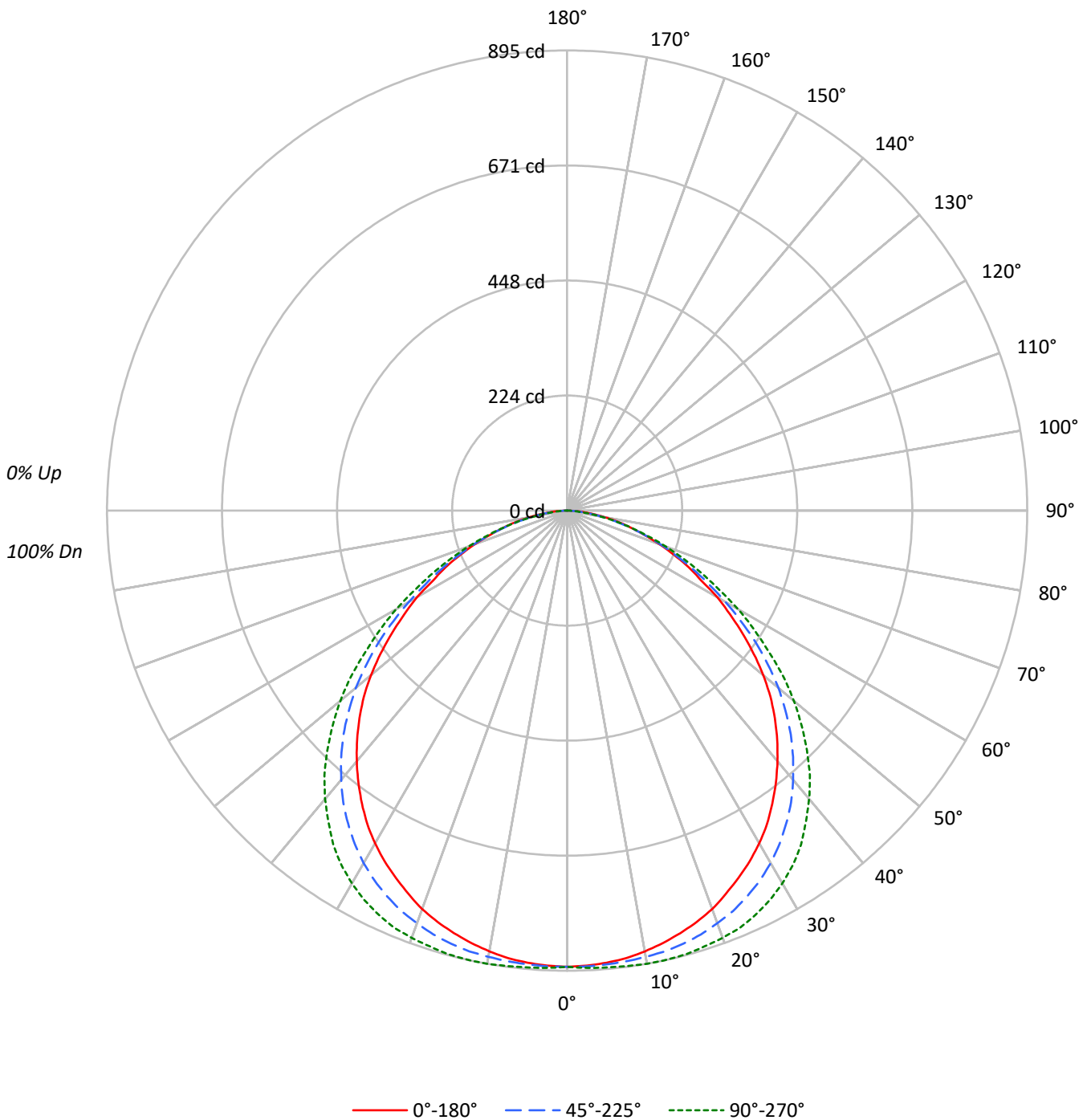
Input Watts (W): 30.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P229635

CATALOG NUMBER: 22RLN-LD5-35-RDP-UNV-L935-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P229635

CATALOG NUMBER: 22RLN-LD5-35-RDP-UNV-L935-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° | 2842 | 2842 | 2842 |
| 5° | 2838 | 2848 | 2867 |
| 10° | 2831 | 2866 | 2910 |
| 15° | 2821 | 2892 | 2962 |
| 20° | 2812 | 2910 | 3014 |
| 25° | 2786 | 2926 | 3065 |
| 30° | 2764 | 2927 | 3096 |
| 35° | 2721 | 2905 | 3101 |
| 40° | 2661 | 2858 | 3062 |
| 45° | 2588 | 2787 | 2987 |
| 50° | 2483 | 2672 | 2869 |
| 55° | 2324 | 2503 | 2672 |
| 60° | 2160 | 2277 | 2462 |
| 65° | 1980 | 2049 | 2188 |
| 70° | 1792 | 1821 | 1906 |
| 75° | 1579 | 1542 | 1597 |
| 80° | 1372 | 1262 | 1204 |
| 85° | 1117 | 838 | 728 |



TEST NUMBER: P229635

CATALOG NUMBER: 22RLN-LD5-35-RDP-UNV-L935-CD1-U

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 84.5 | 3.4 |
| 10°-20° | 246.4 | 9.9 |
| 20°-30° | 381.7 | 15.4 |
| 30°-40° | 464.5 | 18.7 |
| 40°-50° | 473.1 | 19.0 |
| 50°-60° | 399.0 | 16.1 |
| 60°-70° | 269.9 | 10.9 |
| 70°-80° | 134.9 | 5.4 |
| 80°-90° | 30.0 | 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° | 712.6 | 28.7 |
| 0°-40° | 1177.1 | 47.4 |
| 0°-60° | 2049.2 | 82.5 |
| 0°-90° | 2484.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2484.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 887 | 887 | 887 | 887 | 887 | |
| 5° | 883 | 884 | 886 | 890 | 892 | 84 |
| 15° | 851 | 857 | 872 | 887 | 893 | 240 |
| 25° | 788 | 801 | 828 | 855 | 868 | 364 |
| 35° | 696 | 711 | 743 | 778 | 793 | 435 |
| 45° | 571 | 582 | 615 | 647 | 659 | 440 |
| 55° | 416 | 422 | 448 | 470 | 479 | 372 |
| 65° | 261 | 257 | 270 | 283 | 289 | 258 |
| 75° | 128 | 123 | 125 | 126 | 129 | 137 |
| 85° | 30 | 26 | 23 | 20 | 20 | 35 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P229635

CATALOG NUMBER: 22RLN-LD5-35-RDP-UNV-L935-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 887.3 | 887.3 | 887.3 | 887.3 | 887.3 |
| 2.5° | 885.8 | 885.8 | 887.3 | 888.8 | 890.3 |
| 5° | 882.7 | 884.3 | 885.8 | 890.3 | 891.9 |
| 7.5° | 878.2 | 879.7 | 884.3 | 890.3 | 893.4 |
| 10° | 870.6 | 873.6 | 881.2 | 890.3 | 894.9 |
| 12.5° | 861.5 | 866.0 | 878.2 | 888.8 | 894.9 |
| 15° | 850.8 | 856.9 | 872.1 | 887.3 | 893.4 |
| 17.5° | 838.7 | 846.3 | 864.5 | 881.2 | 888.8 |
| 20° | 825.0 | 834.1 | 853.9 | 875.1 | 884.3 |
| 22.5° | 806.8 | 818.9 | 843.2 | 867.5 | 878.2 |
| 25° | 788.5 | 800.7 | 828.0 | 855.4 | 867.5 |
| 27.5° | 768.8 | 782.5 | 811.3 | 841.7 | 853.9 |
| 30° | 747.5 | 759.7 | 791.6 | 823.5 | 837.2 |
| 32.5° | 723.2 | 735.4 | 768.8 | 802.2 | 817.4 |
| 35° | 695.9 | 711.1 | 743.0 | 777.9 | 793.1 |
| 37.5° | 667.0 | 680.7 | 715.6 | 749.0 | 762.7 |
| 40° | 636.6 | 650.3 | 683.7 | 718.6 | 732.3 |
| 42.5° | 604.7 | 618.4 | 650.3 | 683.7 | 698.9 |
| 45° | 571.3 | 581.9 | 615.3 | 647.2 | 659.4 |
| 47.5° | 536.3 | 543.9 | 575.8 | 606.2 | 618.4 |
| 50° | 498.3 | 505.9 | 536.3 | 563.7 | 575.8 |
| 52.5° | 457.3 | 463.4 | 492.3 | 516.6 | 530.2 |
| 55° | 416.3 | 422.4 | 448.2 | 469.5 | 478.6 |
| 57.5° | 375.3 | 378.3 | 401.1 | 422.4 | 431.5 |
| 60° | 337.3 | 337.3 | 355.5 | 372.2 | 384.4 |
| 62.5° | 293.2 | 297.8 | 311.5 | 328.2 | 332.7 |
| 65° | 261.3 | 256.8 | 270.4 | 282.6 | 288.7 |
| 67.5° | 224.9 | 221.8 | 230.9 | 241.6 | 244.6 |
| 70° | 191.4 | 186.9 | 194.5 | 200.6 | 203.6 |
| 72.5° | 156.5 | 155.0 | 158.0 | 162.6 | 164.1 |
| 75° | 127.6 | 123.1 | 124.6 | 126.1 | 129.1 |
| 77.5° | 101.8 | 94.2 | 95.7 | 94.2 | 95.7 |
| 80° | 74.4 | 68.4 | 68.4 | 66.9 | 65.3 |
| 82.5° | 50.1 | 47.1 | 44.1 | 41.0 | 39.5 |
| 85° | 30.4 | 25.8 | 22.8 | 19.8 | 19.8 |
| 87.5° | 12.2 | 9.1 | 7.6 | 7.6 | 7.6 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)