

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: P295797

Luminaire Tested: **14RLN-LD5-35-RDP-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295797  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36061-R2)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14RLN-LD5-35-RDP-UNV-L92765-W2A1-U-3500K  
Description: RLN LED 1x4 TUNABLE WHITE TROFFER  
WITH RDP LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2587.0 lumens  
Efficiency: N/A  
Efficacy: 76.8 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.35 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

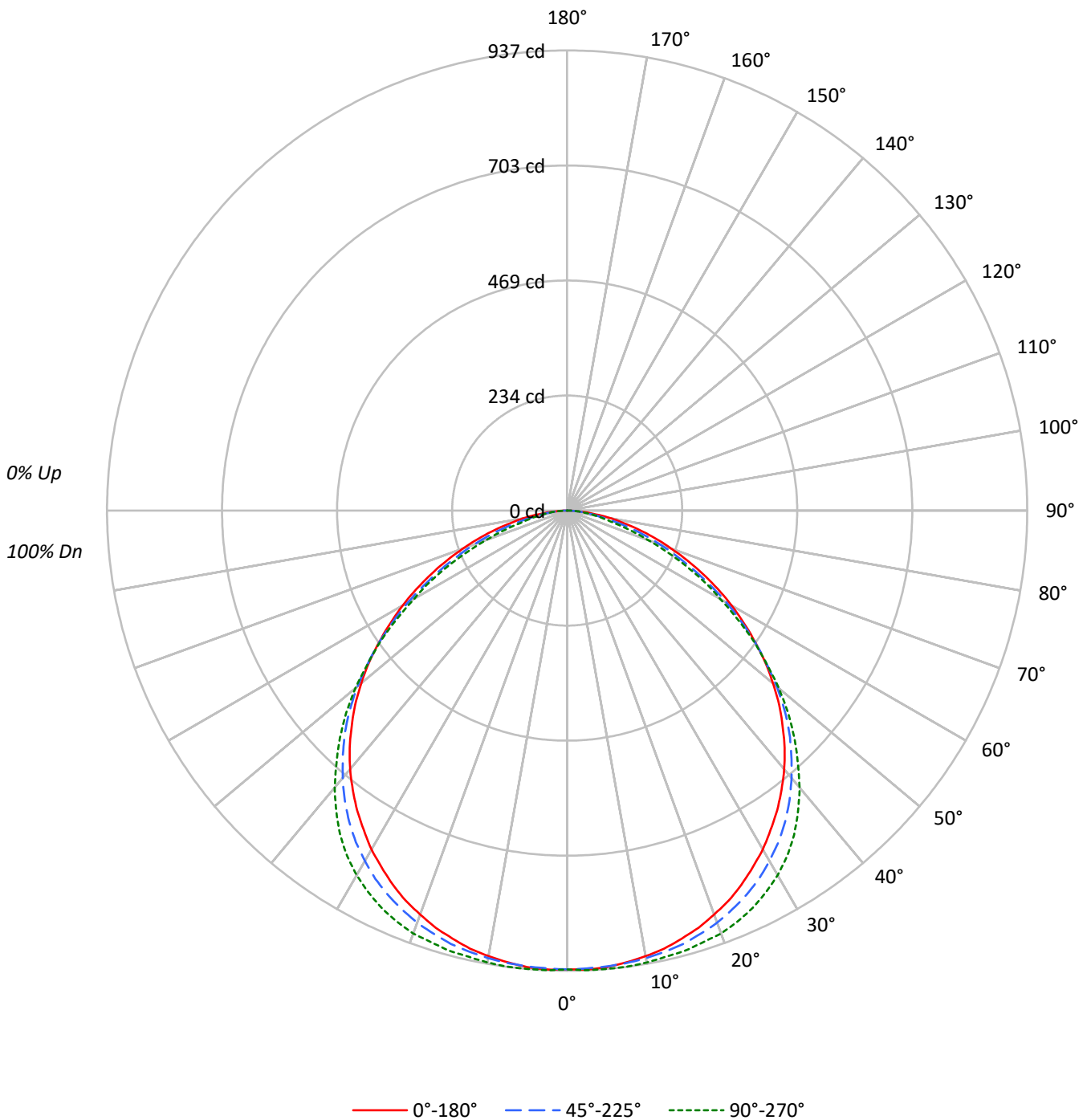
Input Watts (W): 33.666  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P295797

CATALOG NUMBER: 14RLN-LD5-35-RDP-UNV-L92765-W2A1-U-3500K

### Luminous Intensity Polar Plot





TEST NUMBER: P295797

CATALOG NUMBER: 14RLN-LD5-35-RDP-UNV-L92765-W2A1-U-3500K

**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  | 87  | 81  | 77  | 83  | 79  | 75  | 80  | 77  | 74  | 72  |
| 3   | 91  | 81  | 73  | 67  | 89  | 79  | 72  | 66  | 77  | 70  | 65  | 74  | 68  | 64  | 71  | 67  | 63  | 61  |
| 4   | 84  | 72  | 63  | 57  | 81  | 71  | 63  | 57  | 68  | 61  | 56  | 66  | 60  | 55  | 64  | 59  | 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  | 38  | 49  | 42  | 37  | 48  | 42  | 37  | 35  |
| 8   | 61  | 48  | 40  | 34  | 60  | 47  | 39  | 34  | 46  | 39  | 34  | 45  | 38  | 33  | 44  | 38  | 33  | 31  |
| 9   | 57  | 44  | 36  | 30  | 56  | 44  | 36  | 30  | 42  | 35  | 30  | 41  | 35  | 30  | 40  | 34  | 30  | 28  |
| 10  | 54  | 41  | 33  | 28  | 53  | 40  | 33  | 28  | 39  | 32  | 27  | 38  | 32  | 27  | 37  | 31  | 27  | 25  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 2514 | 2514 | 2514 |
| 5°  | 2520 | 2517 | 2531 |
| 10° | 2518 | 2528 | 2553 |
| 15° | 2513 | 2545 | 2585 |
| 20° | 2506 | 2558 | 2624 |
| 25° | 2495 | 2564 | 2652 |
| 30° | 2476 | 2559 | 2664 |
| 35° | 2449 | 2541 | 2647 |
| 40° | 2415 | 2497 | 2587 |
| 45° | 2362 | 2436 | 2489 |
| 50° | 2292 | 2335 | 2357 |
| 55° | 2195 | 2189 | 2176 |
| 60° | 2082 | 2013 | 1936 |
| 65° | 1940 | 1800 | 1702 |
| 70° | 1769 | 1578 | 1375 |
| 75° | 1590 | 1309 | 1029 |
| 80° | 1413 | 956  | 896  |
| 85° | 1112 | 794  | 794  |



TEST NUMBER: P295797

CATALOG NUMBER: 14RLN-LD5-35-RDP-UNV-L92765-W2A1-U-3500K

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 88.9   | 3.4       |
| 10°-20°   | 258.5  | 10.0      |
| 20°-30°   | 398.9  | 15.4      |
| 30°-40°   | 483.8  | 18.7      |
| 40°-50°   | 491.2  | 19.0      |
| 50°-60°   | 415.5  | 16.1      |
| 60°-70°   | 281.1  | 10.9      |
| 70°-80°   | 135.9  | 5.3       |
| 80°-90°   | 33.2   | 1.3       |
| 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°    | 746.3  | 28.8      |
| 0°-40°    | 1230.1 | 47.5      |
| 0°-60°    | 2136.8 | 82.6      |
| 0°-90°    | 2587.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2587.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 934 | 934   | 934 | 934   | 934 |      |
| 5°  | 933 | 933   | 932 | 936   | 937 | 89   |
| 15° | 902 | 907   | 914 | 924   | 928 | 255  |
| 25° | 840 | 847   | 864 | 885   | 893 | 387  |
| 35° | 745 | 753   | 774 | 798   | 806 | 466  |
| 45° | 621 | 622   | 640 | 653   | 654 | 479  |
| 55° | 468 | 464   | 466 | 466   | 464 | 418  |
| 65° | 305 | 292   | 283 | 271   | 267 | 302  |
| 75° | 153 | 141   | 126 | 109   | 99  | 163  |
| 85° | 36  | 28    | 26  | 26    | 26  | 42   |
| 90° | 0   | 0     | 0   | 0     | 0   |      |



TEST NUMBER: P295797

CATALOG NUMBER: 14RLN-LD5-35-RDP-UNV-L92765-W2A1-U-3500K

**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 934.3 | 934.3 | 934.3 | 934.3 | 934.3 |
| 2.5°  | 935.5 | 935.5 | 933.0 | 935.5 | 936.8 |
| 5°    | 933.0 | 933.0 | 931.7 | 935.5 | 936.8 |
| 7.5°  | 927.8 | 929.1 | 929.1 | 934.3 | 936.8 |
| 10°   | 921.4 | 924.0 | 925.3 | 933.0 | 934.3 |
| 12.5° | 913.7 | 916.3 | 920.1 | 929.1 | 930.4 |
| 15°   | 902.1 | 907.3 | 913.7 | 924.0 | 927.8 |
| 17.5° | 890.6 | 895.7 | 903.4 | 917.6 | 921.4 |
| 20°   | 875.1 | 881.6 | 893.1 | 909.8 | 916.3 |
| 22.5° | 859.7 | 864.9 | 879.0 | 899.6 | 906.0 |
| 25°   | 840.4 | 846.9 | 863.6 | 885.4 | 893.1 |
| 27.5° | 818.6 | 827.6 | 845.6 | 868.7 | 876.4 |
| 30°   | 796.8 | 804.5 | 823.7 | 849.4 | 857.2 |
| 32.5° | 771.1 | 778.8 | 800.6 | 825.0 | 834.0 |
| 35°   | 745.4 | 753.1 | 773.6 | 798.0 | 805.8 |
| 37.5° | 717.1 | 722.2 | 744.1 | 764.6 | 772.3 |
| 40°   | 687.5 | 691.4 | 710.7 | 731.2 | 736.4 |
| 42.5° | 655.4 | 658.0 | 676.0 | 693.9 | 695.2 |
| 45°   | 620.7 | 622.0 | 640.0 | 652.8 | 654.1 |
| 47.5° | 586.0 | 584.7 | 600.1 | 609.1 | 610.4 |
| 50°   | 547.4 | 547.4 | 557.7 | 562.9 | 562.9 |
| 52.5° | 508.9 | 506.3 | 511.5 | 515.3 | 511.5 |
| 55°   | 467.8 | 463.9 | 466.5 | 466.5 | 463.9 |
| 57.5° | 426.6 | 418.9 | 420.2 | 417.7 | 411.2 |
| 60°   | 386.8 | 377.8 | 374.0 | 365.0 | 359.8 |
| 62.5° | 345.7 | 335.4 | 327.7 | 317.4 | 316.1 |
| 65°   | 304.6 | 291.7 | 282.7 | 271.2 | 267.3 |
| 67.5° | 264.7 | 253.2 | 240.3 | 227.5 | 219.8 |
| 70°   | 224.9 | 212.0 | 200.5 | 183.8 | 174.8 |
| 72.5° | 188.9 | 177.3 | 163.2 | 143.9 | 137.5 |
| 75°   | 152.9 | 141.4 | 125.9 | 109.2 | 99.0  |
| 77.5° | 118.2 | 109.2 | 92.5  | 78.4  | 77.1  |
| 80°   | 91.2  | 81.0  | 61.7  | 57.8  | 57.8  |
| 82.5° | 59.1  | 52.7  | 43.7  | 41.1  | 41.1  |
| 85°   | 36.0  | 28.3  | 25.7  | 25.7  | 25.7  |
| 87.5° | 14.1  | 12.9  | 12.9  | 12.9  | 12.9  |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)