

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: P275537

Luminaire Tested: **14CZ2-35-UNV-L92765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275537  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-35-UNV-L92765-W2A1-U-6500K  
Description: CRUZE 2.0 1x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3308.0 lumens  
Efficiency: N/A  
Efficacy: 115.1 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

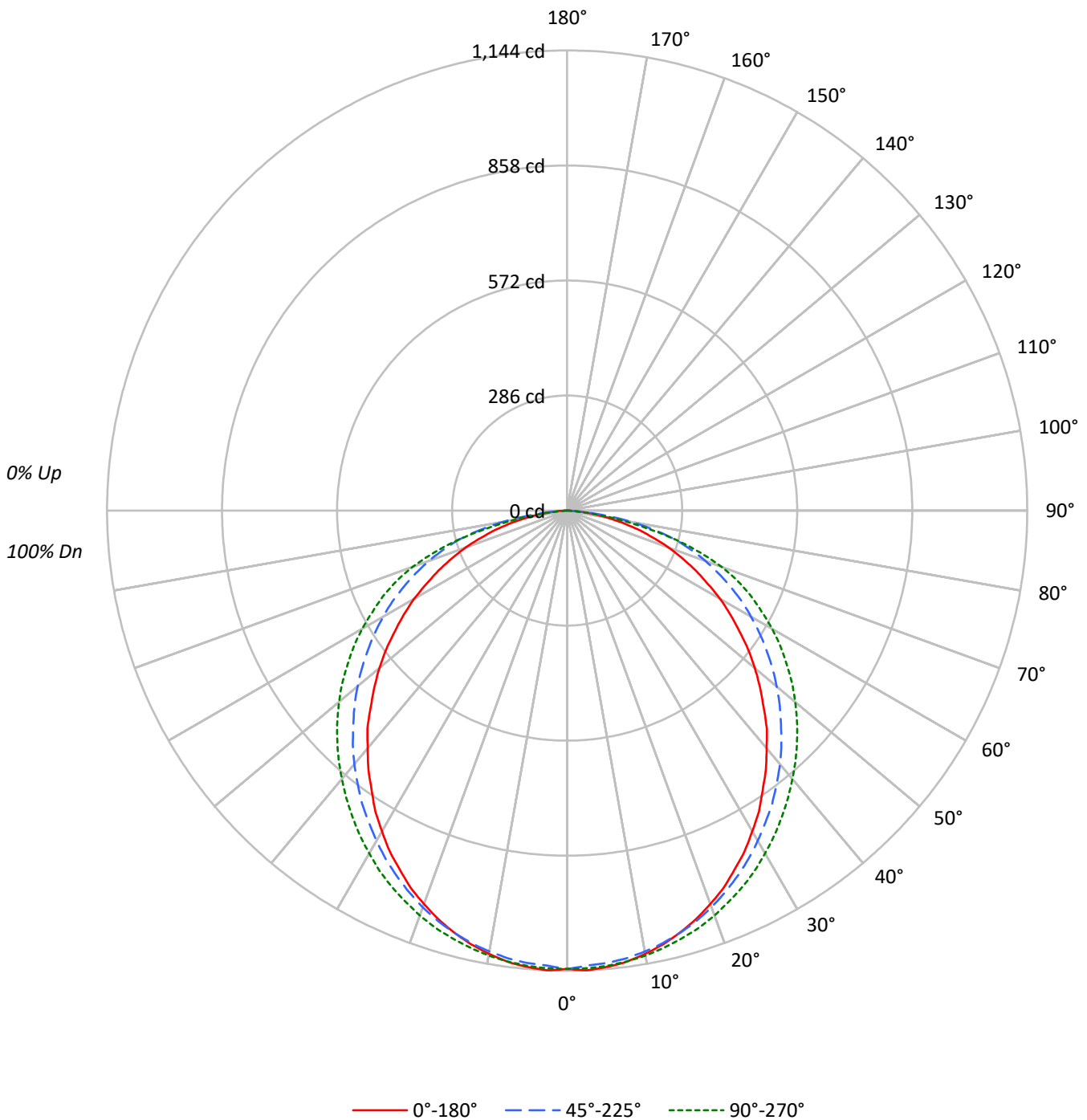
Input Watts (W): 28.737  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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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  | 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   | 109 | 104 | 99  | 95  | 106 | 101 | 97  | 94  | 97  | 94  | 91  | 93  | 90  | 88  | 90  | 87  | 85  | 83  |    |    |    |    | 83  |   |  |   |
| 2   | 98  | 90  | 83  | 77  | 96  | 88  | 82  | 76  | 84  | 79  | 74  | 81  | 77  | 73  | 78  | 74  | 71  | 69  |    |    |    |    | 69  |   |  |   |
| 3   | 89  | 79  | 70  | 64  | 87  | 77  | 69  | 63  | 74  | 67  | 62  | 71  | 66  | 61  | 69  | 64  | 60  | 58  |    |    |    |    | 58  |   |  |   |
| 4   | 82  | 70  | 61  | 54  | 79  | 68  | 60  | 53  | 66  | 58  | 53  | 63  | 57  | 52  | 61  | 56  | 51  | 49  |    |    |    |    | 49  |   |  |   |
| 5   | 75  | 62  | 53  | 46  | 73  | 61  | 52  | 46  | 59  | 51  | 45  | 57  | 50  | 45  | 55  | 49  | 44  | 42  |    |    |    |    | 42  |   |  |   |
| 6   | 69  | 56  | 47  | 40  | 67  | 55  | 46  | 40  | 53  | 45  | 40  | 51  | 44  | 39  | 50  | 44  | 39  | 37  |    |    |    |    | 37  |   |  |   |
| 7   | 64  | 51  | 42  | 35  | 63  | 50  | 41  | 35  | 48  | 41  | 35  | 47  | 40  | 35  | 45  | 39  | 34  | 32  |    |    |    |    | 32  |   |  |   |
| 8   | 60  | 46  | 37  | 32  | 58  | 45  | 37  | 31  | 44  | 37  | 31  | 43  | 36  | 31  | 42  | 35  | 31  | 29  |    |    |    |    | 29  |   |  |   |
| 9   | 56  | 42  | 34  | 28  | 54  | 42  | 34  | 28  | 41  | 33  | 28  | 39  | 33  | 28  | 38  | 32  | 28  | 26  |    |    |    |    | 26  |   |  |   |
| 10  | 52  | 39  | 31  | 26  | 51  | 39  | 31  | 26  | 37  | 30  | 26  | 37  | 30  | 25  | 36  | 30  | 25  | 24  |    |    |    |    | 24  |   |  |   |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 3067 | 3067 | 3067 |
| 5°  | 3076 | 3051 | 3068 |
| 10° | 3058 | 3042 | 3070 |
| 15° | 3025 | 3027 | 3068 |
| 20° | 2981 | 3006 | 3067 |
| 25° | 2924 | 2976 | 3064 |
| 30° | 2860 | 2945 | 3058 |
| 35° | 2784 | 2920 | 3055 |
| 40° | 2710 | 2892 | 3060 |
| 45° | 2627 | 2860 | 3076 |
| 50° | 2551 | 2847 | 3097 |
| 55° | 2454 | 2837 | 3125 |
| 60° | 2366 | 2842 | 3168 |
| 65° | 2245 | 2851 | 3217 |
| 70° | 2107 | 2873 | 3215 |
| 75° | 1910 | 2899 | 2907 |
| 80° | 1567 | 2503 | 2069 |
| 85° | 1161 | 1186 | 479  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 107.8  | 3.3       |
| 10°-20°   | 308.1  | 9.3       |
| 20°-30°   | 464.0  | 14.0      |
| 30°-40°   | 556.9  | 16.8      |
| 40°-50°   | 580.4  | 17.5      |
| 50°-60°   | 537.3  | 16.2      |
| 60°-70°   | 434.1  | 13.1      |
| 70°-80°   | 264.7  | 8.0       |
| 80°-90°   | 54.7   | 1.7       |
| 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°    | 879.9  | 26.6      |
| 0°-40°    | 1436.8 | 43.4      |
| 0°-60°    | 2554.5 | 77.2      |
| 0°-90°    | 3308.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 3308.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1140 | 1140  | 1140 | 1140  | 1140 |      |
| 5°  | 1139 | 1136  | 1129 | 1137  | 1136 | 108  |
| 15° | 1086 | 1086  | 1086 | 1101  | 1101 | 306  |
| 25° | 985  | 991   | 1002 | 1028  | 1032 | 454  |
| 35° | 848  | 861   | 889  | 921   | 930  | 531  |
| 45° | 690  | 711   | 752  | 794   | 808  | 534  |
| 55° | 523  | 550   | 605  | 652   | 666  | 469  |
| 65° | 353  | 387   | 448  | 493   | 505  | 349  |
| 75° | 184  | 224   | 279  | 283   | 280  | 193  |
| 85° | 38   | 56    | 38   | 21    | 16   | 46   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1139.6 | 1139.6 | 1139.6 | 1139.6 | 1139.6 |
| 2.5°  | 1144.0 | 1140.4 | 1132.2 | 1140.4 | 1138.9 |
| 5°    | 1138.9 | 1135.9 | 1129.3 | 1137.4 | 1135.9 |
| 7.5°  | 1131.5 | 1128.6 | 1122.7 | 1132.2 | 1130.8 |
| 10°   | 1119.0 | 1117.5 | 1113.1 | 1124.1 | 1123.4 |
| 12.5° | 1104.2 | 1103.5 | 1101.3 | 1113.8 | 1113.1 |
| 15°   | 1085.8 | 1086.5 | 1086.5 | 1101.3 | 1101.3 |
| 17.5° | 1065.1 | 1066.6 | 1069.5 | 1085.8 | 1088.0 |
| 20°   | 1040.8 | 1043.7 | 1049.6 | 1068.1 | 1071.0 |
| 22.5° | 1015.7 | 1017.9 | 1026.8 | 1048.9 | 1051.8 |
| 25°   | 984.7  | 990.6  | 1002.4 | 1027.5 | 1031.9 |
| 27.5° | 955.2  | 960.4  | 976.6  | 1002.4 | 1009.8 |
| 30°   | 920.5  | 928.7  | 947.8  | 975.9  | 984.0  |
| 32.5° | 887.4  | 896.2  | 918.3  | 950.8  | 958.2  |
| 35°   | 847.5  | 860.8  | 888.8  | 921.3  | 930.1  |
| 37.5° | 811.4  | 823.9  | 855.6  | 891.0  | 901.4  |
| 40°   | 771.5  | 787.0  | 823.2  | 860.8  | 871.1  |
| 42.5° | 734.7  | 749.4  | 788.5  | 826.9  | 840.9  |
| 45°   | 690.4  | 711.1  | 751.6  | 793.7  | 808.4  |
| 47.5° | 649.8  | 670.5  | 717.0  | 762.0  | 775.2  |
| 50°   | 609.3  | 631.4  | 680.1  | 726.6  | 739.8  |
| 52.5° | 567.2  | 590.8  | 643.2  | 689.7  | 705.2  |
| 55°   | 523.0  | 550.3  | 604.8  | 652.1  | 666.1  |
| 57.5° | 480.9  | 509.0  | 567.2  | 615.2  | 629.2  |
| 60°   | 439.6  | 468.4  | 528.1  | 573.9  | 588.6  |
| 62.5° | 393.9  | 427.8  | 489.8  | 534.8  | 545.8  |
| 65°   | 352.6  | 387.2  | 447.7  | 492.7  | 505.3  |
| 67.5° | 309.1  | 346.7  | 407.2  | 448.5  | 460.3  |
| 70°   | 267.8  | 306.8  | 365.1  | 403.5  | 408.6  |
| 72.5° | 223.5  | 263.3  | 322.3  | 346.7  | 346.7  |
| 75°   | 183.7  | 224.2  | 278.8  | 283.2  | 279.6  |
| 77.5° | 140.1  | 185.1  | 220.5  | 211.7  | 202.8  |
| 80°   | 101.1  | 145.3  | 161.5  | 145.3  | 133.5  |
| 82.5° | 67.9   | 105.5  | 97.4   | 77.4   | 68.6   |
| 85°   | 37.6   | 56.1   | 38.4   | 21.4   | 15.5   |
| 87.5° | 14.0   | 12.5   | 3.7    | 3.7    | 3.7    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)