

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: P275800

Luminaire Tested: **14CZ2-25-RDP-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275800  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-25-RDP-UNV-L82765-W2A1-U-5700K  
Description: CRUZE 2.0 1x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1623.0 lumens  
Efficiency: N/A  
Efficacy: 86.4 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

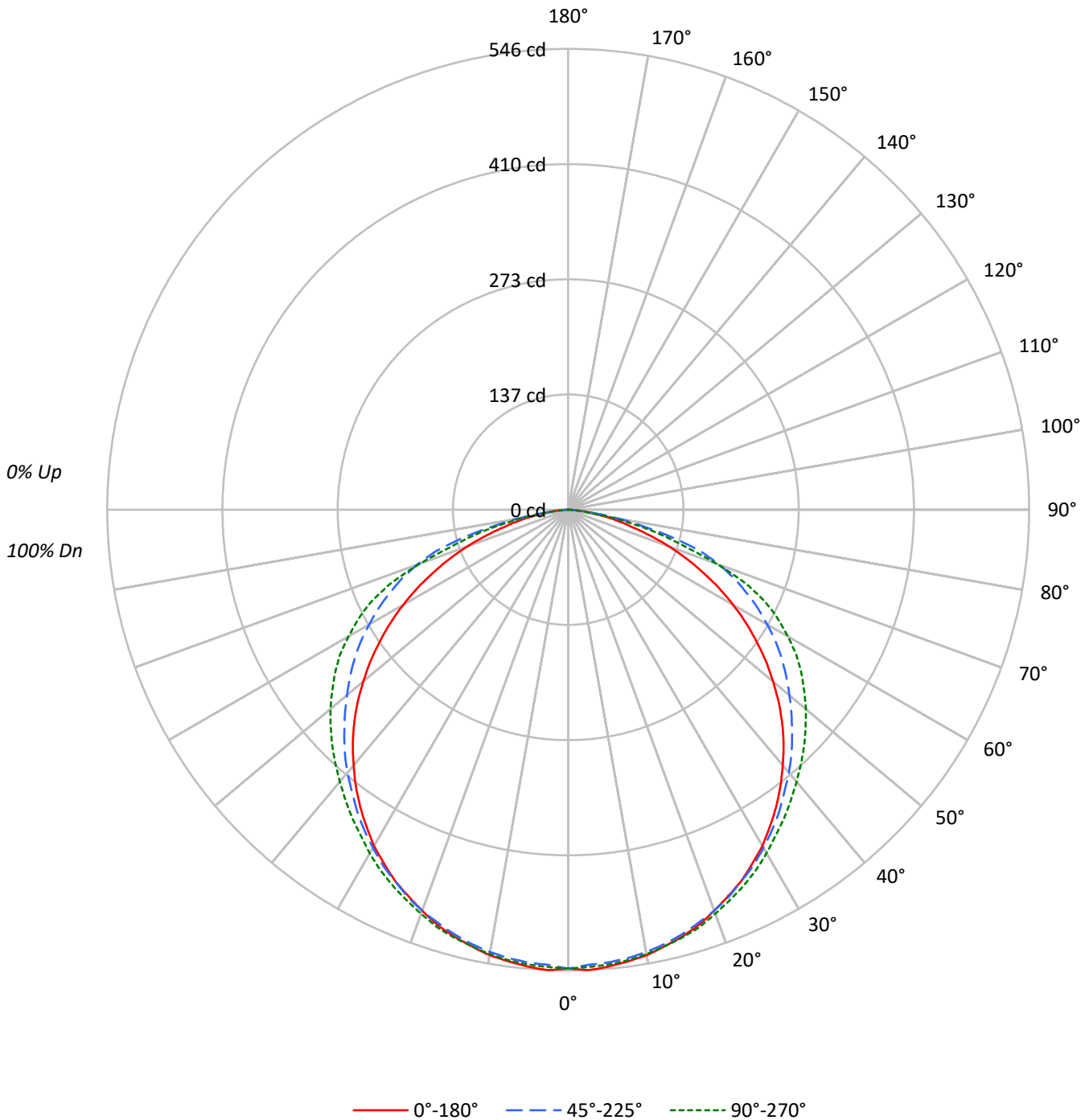
Input Watts (W): 18.786  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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  | 0   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1   | 109 | 104 | 100 | 96  | 106 | 102 | 98  | 94  | 97  | 94  | 91  | 93  | 91  | 88  | 90  | 88  | 86  | 84  |
| 2   | 99  | 90  | 83  | 77  | 96  | 88  | 82  | 76  | 85  | 79  | 75  | 81  | 77  | 73  | 78  | 75  | 71  | 69  |
| 3   | 90  | 79  | 71  | 64  | 87  | 77  | 70  | 63  | 74  | 68  | 62  | 71  | 66  | 61  | 69  | 64  | 60  | 58  |
| 4   | 82  | 70  | 61  | 54  | 80  | 68  | 60  | 53  | 66  | 58  | 53  | 63  | 57  | 52  | 61  | 56  | 51  | 49  |
| 5   | 75  | 62  | 53  | 46  | 73  | 61  | 52  | 46  | 59  | 51  | 45  | 57  | 50  | 45  | 55  | 49  | 44  | 42  |
| 6   | 69  | 56  | 47  | 40  | 67  | 55  | 46  | 40  | 53  | 45  | 40  | 51  | 44  | 39  | 50  | 44  | 39  | 37  |
| 7   | 64  | 50  | 42  | 35  | 62  | 50  | 41  | 35  | 48  | 40  | 35  | 47  | 40  | 35  | 45  | 39  | 34  | 32  |
| 8   | 60  | 46  | 37  | 31  | 58  | 45  | 37  | 31  | 44  | 36  | 31  | 43  | 36  | 31  | 41  | 35  | 31  | 29  |
| 9   | 56  | 42  | 34  | 28  | 54  | 42  | 34  | 28  | 40  | 33  | 28  | 39  | 33  | 28  | 38  | 32  | 28  | 26  |
| 10  | 52  | 39  | 31  | 25  | 51  | 38  | 31  | 25  | 37  | 30  | 25  | 36  | 30  | 25  | 35  | 29  | 25  | 23  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 1463 | 1463 | 1463 |
| 5°  | 1468 | 1455 | 1461 |
| 10° | 1465 | 1454 | 1461 |
| 15° | 1458 | 1451 | 1461 |
| 20° | 1448 | 1448 | 1459 |
| 25° | 1441 | 1441 | 1460 |
| 30° | 1429 | 1437 | 1461 |
| 35° | 1411 | 1432 | 1465 |
| 40° | 1389 | 1429 | 1478 |
| 45° | 1365 | 1427 | 1504 |
| 50° | 1326 | 1432 | 1539 |
| 55° | 1278 | 1451 | 1581 |
| 60° | 1214 | 1466 | 1616 |
| 65° | 1121 | 1484 | 1638 |
| 70° | 997  | 1496 | 1466 |
| 75° | 804  | 1343 | 1173 |
| 80° | 628  | 942  | 766  |
| 85° | 429  | 275  | 195  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 51.5   | 3.2       |
| 10°-20°   | 147.6  | 9.1       |
| 20°-30°   | 224.8  | 13.8      |
| 30°-40°   | 273.8  | 16.9      |
| 40°-50°   | 290.5  | 17.9      |
| 50°-60°   | 274.1  | 16.9      |
| 60°-70°   | 221.3  | 13.6      |
| 70°-80°   | 120.1  | 7.4       |
| 80°-90°   | 19.4   | 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°    | 423.8  | 26.1      |
| 0°-40°    | 697.6  | 43.0      |
| 0°-60°    | 1262.2 | 77.8      |
| 0°-90°    | 1623.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1623.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 544 | 544   | 544 | 544   | 544 |      |
| 5°  | 544 | 542   | 538 | 542   | 541 | 52   |
| 15° | 523 | 522   | 521 | 525   | 525 | 148  |
| 25° | 485 | 484   | 485 | 490   | 492 | 223  |
| 35° | 430 | 432   | 436 | 445   | 446 | 269  |
| 45° | 359 | 364   | 375 | 389   | 395 | 276  |
| 55° | 272 | 284   | 309 | 329   | 337 | 243  |
| 65° | 176 | 198   | 233 | 252   | 257 | 175  |
| 75° | 77  | 113   | 129 | 117   | 113 | 84   |
| 85° | 14  | 15    | 9   | 8     | 6   | 18   |
| 90° | 0   | 0     | 0   | 0     | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 543.6 | 543.6 | 543.6 | 543.6 | 543.6 |
| 2.5°  | 546.1 | 543.6 | 539.8 | 543.6 | 542.3 |
| 5°    | 543.6 | 542.3 | 538.5 | 542.3 | 541.0 |
| 7.5°  | 539.8 | 539.8 | 536.0 | 538.5 | 538.5 |
| 10°   | 536.0 | 534.7 | 532.2 | 536.0 | 534.7 |
| 12.5° | 529.6 | 528.4 | 527.1 | 530.9 | 529.6 |
| 15°   | 523.3 | 522.0 | 520.8 | 524.6 | 524.6 |
| 17.5° | 515.7 | 514.4 | 513.2 | 518.2 | 518.2 |
| 20°   | 505.6 | 505.6 | 505.6 | 510.6 | 509.4 |
| 22.5° | 495.4 | 495.4 | 496.7 | 501.8 | 500.5 |
| 25°   | 485.3 | 484.0 | 485.3 | 490.4 | 491.6 |
| 27.5° | 472.6 | 473.9 | 475.2 | 480.2 | 481.5 |
| 30°   | 460.0 | 461.2 | 462.5 | 468.8 | 470.1 |
| 32.5° | 444.8 | 447.3 | 449.8 | 457.4 | 457.4 |
| 35°   | 429.5 | 432.1 | 435.9 | 444.8 | 446.0 |
| 37.5° | 413.1 | 415.6 | 420.7 | 430.8 | 433.3 |
| 40°   | 395.3 | 399.1 | 406.7 | 416.9 | 420.7 |
| 42.5° | 377.6 | 382.7 | 391.5 | 402.9 | 408.0 |
| 45°   | 358.6 | 363.7 | 375.1 | 389.0 | 395.3 |
| 47.5° | 338.3 | 344.7 | 358.6 | 376.3 | 381.4 |
| 50°   | 316.8 | 325.6 | 342.1 | 361.1 | 367.5 |
| 52.5° | 295.2 | 305.4 | 325.6 | 345.9 | 352.3 |
| 55°   | 272.4 | 283.8 | 309.2 | 329.4 | 337.0 |
| 57.5° | 249.6 | 262.3 | 291.4 | 313.0 | 320.6 |
| 60°   | 225.5 | 240.7 | 272.4 | 294.0 | 300.3 |
| 62.5° | 201.5 | 219.2 | 253.4 | 275.0 | 280.0 |
| 65°   | 176.1 | 197.7 | 233.1 | 252.2 | 257.2 |
| 67.5° | 152.1 | 177.4 | 212.9 | 226.8 | 226.8 |
| 70°   | 126.7 | 154.6 | 190.1 | 193.9 | 186.3 |
| 72.5° | 101.4 | 133.0 | 164.7 | 150.8 | 144.4 |
| 75°   | 77.3  | 112.8 | 129.2 | 116.6 | 112.8 |
| 77.5° | 58.3  | 91.2  | 91.2  | 83.6  | 81.1  |
| 80°   | 40.5  | 69.7  | 60.8  | 53.2  | 49.4  |
| 82.5° | 26.6  | 39.3  | 31.7  | 25.3  | 21.5  |
| 85°   | 13.9  | 15.2  | 8.9   | 7.6   | 6.3   |
| 87.5° | 5.1   | 2.5   | 1.3   | 2.5   | 1.3   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)