

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: CORELITE

Report Number: P298001

Luminaire Tested: **D3X-WD-20L82765-LD5-UNV-22-T1-W2A-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P298001  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1806-819-5)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: D3X-WD-20L82765-LD5-UNV-22-T1-W2A-3500K  
Description: D3X LED 2x2 TUNABLE WHITE TROFFER  
WITH ROUND PERF LENS  
Light Source: (252) 80 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1813.0 lumens  
Efficiency: N/A  
Efficacy: 117.0 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.32 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

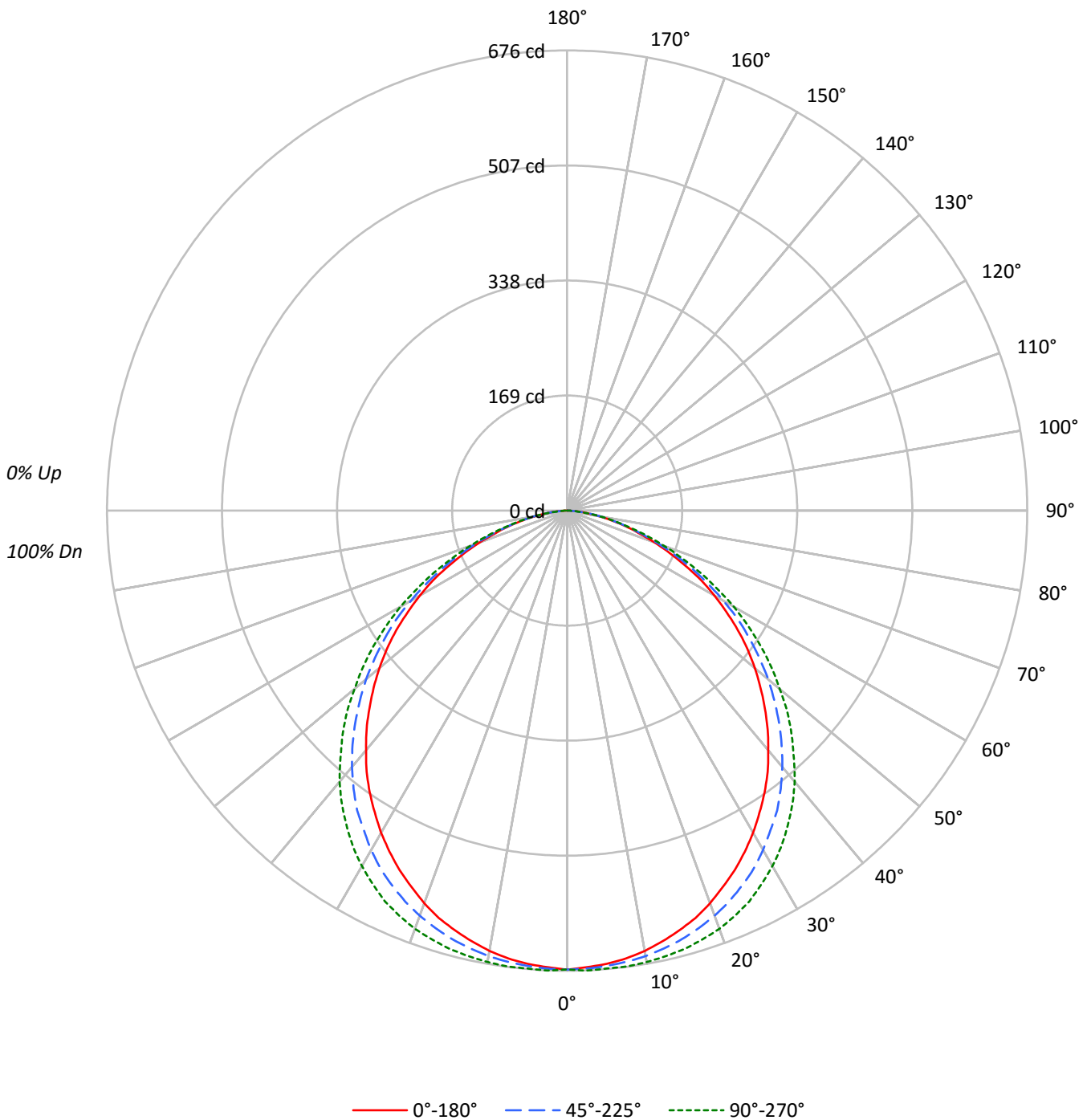
Input Watts (W): 15.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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 | 105 | 101 | 97  | 107 | 103 | 99  | 96  | 98  | 95  | 93  |  | 95  | 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  | 31  | 56  | 44  | 36  | 31  | 42  | 35  | 30  |  | 41  | 35  | 30  |  | 40  | 34  | 30  | 28  |
| 10  | 54  | 41  | 33  | 28  | 53  | 40  | 33  | 28  | 39  | 32  | 28  |  | 38  | 32  | 27  |  | 37  | 32  | 27  | 26  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 1815 | 1815 | 1815 |
| 5°  | 1806 | 1814 | 1824 |
| 10° | 1795 | 1816 | 1840 |
| 15° | 1778 | 1816 | 1857 |
| 20° | 1758 | 1814 | 1872 |
| 25° | 1730 | 1805 | 1880 |
| 30° | 1698 | 1789 | 1874 |
| 35° | 1661 | 1766 | 1856 |
| 40° | 1614 | 1728 | 1827 |
| 45° | 1563 | 1675 | 1775 |
| 50° | 1508 | 1614 | 1708 |
| 55° | 1437 | 1534 | 1630 |
| 60° | 1344 | 1428 | 1523 |
| 65° | 1218 | 1293 | 1373 |
| 70° | 1075 | 1129 | 1190 |
| 75° | 923  | 944  | 985  |
| 80° | 741  | 756  | 772  |
| 85° | 543  | 482  | 482  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 63.9   | 3.5       |
| 10°-20°   | 184.1  | 10.2      |
| 20°-30°   | 280.0  | 15.4      |
| 30°-40°   | 335.0  | 18.5      |
| 40°-50°   | 338.7  | 18.7      |
| 50°-60°   | 291.4  | 16.1      |
| 60°-70°   | 201.2  | 11.1      |
| 70°-80°   | 97.6   | 5.4       |
| 80°-90°   | 21.2   | 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°    | 528.0  | 29.1      |
| 0°-40°    | 863.0  | 47.6      |
| 0°-60°    | 1493.1 | 82.4      |
| 0°-90°    | 1813.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1813.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 674 | 674   | 674 | 674   | 674 |      |
| 5°  | 668 | 670   | 671 | 674   | 675 | 63   |
| 15° | 638 | 642   | 652 | 662   | 666 | 180  |
| 25° | 583 | 589   | 608 | 626   | 633 | 268  |
| 35° | 506 | 514   | 538 | 557   | 565 | 316  |
| 45° | 411 | 419   | 440 | 459   | 466 | 317  |
| 55° | 306 | 311   | 327 | 342   | 347 | 273  |
| 65° | 191 | 194   | 203 | 212   | 216 | 190  |
| 75° | 89  | 87    | 91  | 94    | 95  | 94   |
| 85° | 18  | 18    | 16  | 16    | 16  | 21   |
| 90° | 0   | 0     | 0   | 0     | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 674.3 | 674.3 | 674.3 | 674.3 | 674.3 |
| 2.5°  | 671.4 | 671.4 | 673.4 | 675.3 | 676.3 |
| 5°    | 668.5 | 669.5 | 671.4 | 674.3 | 675.3 |
| 7.5°  | 663.6 | 664.6 | 668.5 | 673.4 | 675.3 |
| 10°   | 656.8 | 658.7 | 664.6 | 670.4 | 673.4 |
| 12.5° | 648.0 | 651.9 | 658.7 | 666.5 | 670.4 |
| 15°   | 638.2 | 642.1 | 651.9 | 661.6 | 666.5 |
| 17.5° | 627.5 | 631.4 | 643.1 | 655.8 | 660.7 |
| 20°   | 613.8 | 619.7 | 633.3 | 648.0 | 653.8 |
| 22.5° | 598.2 | 606.0 | 621.6 | 637.2 | 644.1 |
| 25°   | 582.6 | 589.4 | 608.0 | 626.5 | 633.3 |
| 27.5° | 565.0 | 572.8 | 593.3 | 611.9 | 618.7 |
| 30°   | 546.5 | 554.3 | 575.8 | 596.3 | 603.1 |
| 32.5° | 526.0 | 535.8 | 556.2 | 577.7 | 585.5 |
| 35°   | 505.5 | 514.3 | 537.7 | 557.2 | 565.0 |
| 37.5° | 484.0 | 491.8 | 515.3 | 535.8 | 543.6 |
| 40°   | 459.6 | 468.4 | 491.8 | 512.3 | 520.1 |
| 42.5° | 436.2 | 445.0 | 466.5 | 486.0 | 492.8 |
| 45°   | 410.8 | 418.7 | 440.1 | 458.7 | 466.5 |
| 47.5° | 385.5 | 394.3 | 412.8 | 431.3 | 439.1 |
| 50°   | 360.1 | 366.9 | 385.5 | 403.0 | 407.9 |
| 52.5° | 333.7 | 339.6 | 356.2 | 371.8 | 378.6 |
| 55°   | 306.4 | 311.3 | 326.9 | 341.6 | 347.4 |
| 57.5° | 277.1 | 283.0 | 297.6 | 308.4 | 315.2 |
| 60°   | 249.8 | 252.8 | 265.4 | 276.2 | 283.0 |
| 62.5° | 222.5 | 223.5 | 233.2 | 244.0 | 247.9 |
| 65°   | 191.3 | 194.2 | 203.0 | 211.8 | 215.7 |
| 67.5° | 163.0 | 165.9 | 172.7 | 179.6 | 182.5 |
| 70°   | 136.6 | 136.6 | 143.5 | 148.3 | 151.3 |
| 72.5° | 110.3 | 111.2 | 116.1 | 119.1 | 122.0 |
| 75°   | 88.8  | 86.9  | 90.8  | 93.7  | 94.7  |
| 77.5° | 66.4  | 65.4  | 68.3  | 69.3  | 71.2  |
| 80°   | 47.8  | 47.8  | 48.8  | 49.8  | 49.8  |
| 82.5° | 31.2  | 31.2  | 32.2  | 30.3  | 29.3  |
| 85°   | 17.6  | 17.6  | 15.6  | 15.6  | 15.6  |
| 87.5° | 5.9   | 5.9   | 5.9   | 6.8   | 5.9   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)