

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: P297842

Luminaire Tested: **D3X-WO-31L83050-LD5-UNV-14-T1-W2A-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P297842  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1806-819-1)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: D3X-WO-31L83050-LD5-UNV-14-T1-W2A-4500K  
Description: D3X LED 1x4 TUNABLE WHITE TROFFER  
WITH OPAL LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3307.0 lumens  
Efficiency: N/A  
Efficacy: 111.3 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.24 / 1.33  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

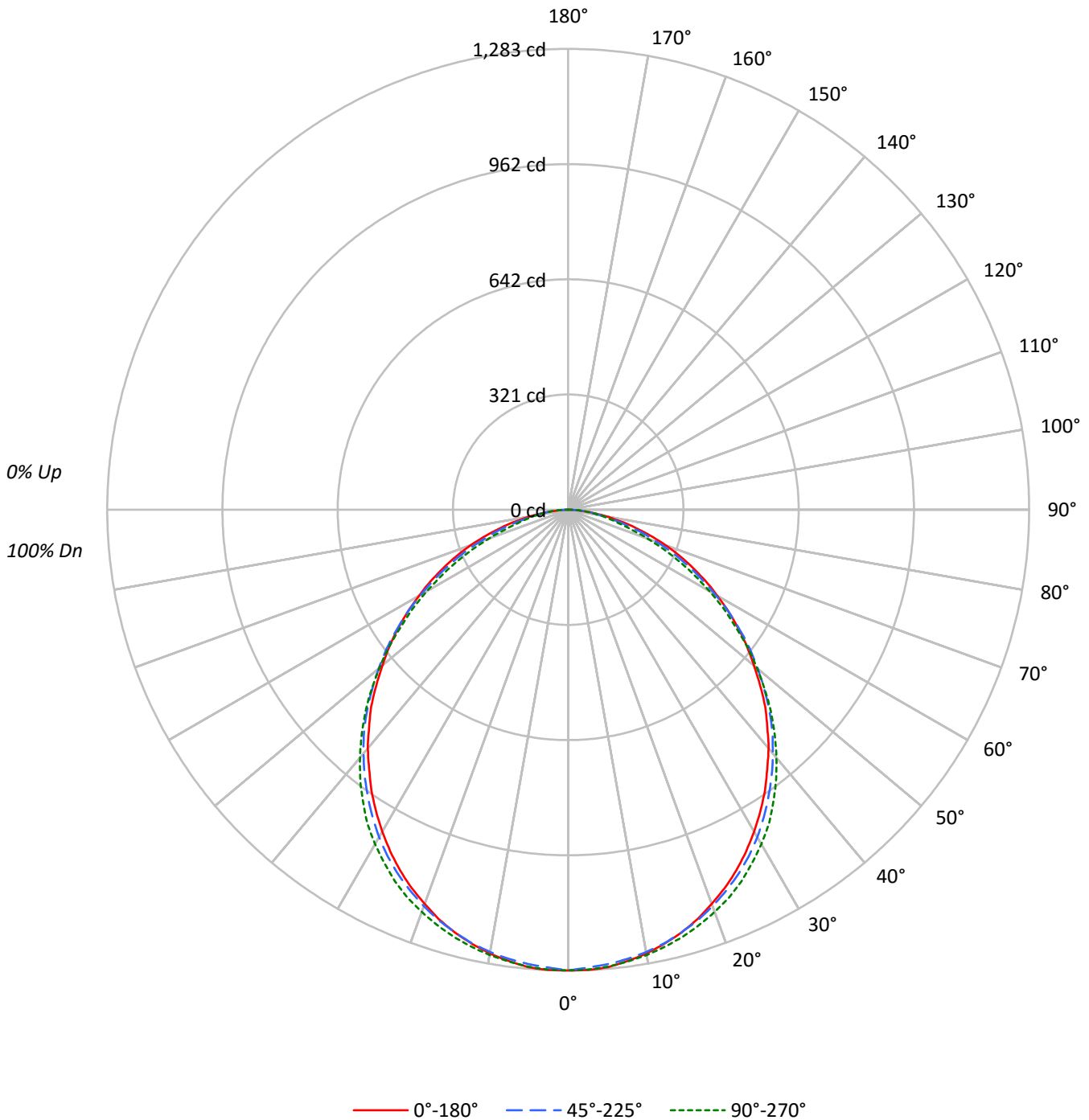
Input Watts (W): 29.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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  |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 |
| 1   | 109 | 105 | 101 | 97  | 107 | 103 | 99  | 95  | 98  | 95  | 92  | 94  | 92  | 90  | 91  | 89  | 87  |
| 2   | 100 | 92  | 85  | 80  | 97  | 90  | 84  | 79  | 86  | 81  | 77  | 83  | 79  | 75  | 80  | 77  | 74  |
| 3   | 91  | 81  | 73  | 67  | 89  | 79  | 72  | 66  | 77  | 70  | 65  | 74  | 68  | 64  | 71  | 67  | 63  |
| 4   | 84  | 72  | 64  | 57  | 81  | 71  | 63  | 57  | 68  | 61  | 56  | 66  | 60  | 55  | 64  | 59  | 54  |
| 5   | 77  | 65  | 56  | 49  | 75  | 63  | 55  | 49  | 61  | 54  | 49  | 59  | 53  | 48  | 58  | 52  | 48  |
| 6   | 71  | 58  | 50  | 43  | 69  | 57  | 49  | 43  | 56  | 48  | 43  | 54  | 47  | 42  | 52  | 46  | 42  |
| 7   | 66  | 53  | 44  | 38  | 64  | 52  | 44  | 38  | 51  | 43  | 38  | 49  | 43  | 38  | 48  | 42  | 37  |
| 8   | 62  | 48  | 40  | 34  | 60  | 48  | 40  | 34  | 46  | 39  | 34  | 45  | 39  | 34  | 44  | 38  | 34  |
| 9   | 58  | 44  | 36  | 31  | 56  | 44  | 36  | 31  | 43  | 36  | 31  | 42  | 35  | 30  | 41  | 35  | 30  |
| 10  | 54  | 41  | 33  | 28  | 53  | 41  | 33  | 28  | 40  | 33  | 28  | 39  | 32  | 28  | 38  | 32  | 28  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 3452 | 3452 | 3452 |
| 5°  | 3454 | 3431 | 3450 |
| 10° | 3428 | 3417 | 3440 |
| 15° | 3394 | 3394 | 3429 |
| 20° | 3344 | 3364 | 3412 |
| 25° | 3288 | 3326 | 3388 |
| 30° | 3214 | 3271 | 3341 |
| 35° | 3136 | 3196 | 3270 |
| 40° | 3048 | 3112 | 3166 |
| 45° | 2950 | 3014 | 3041 |
| 50° | 2823 | 2882 | 2870 |
| 55° | 2716 | 2736 | 2663 |
| 60° | 2580 | 2542 | 2444 |
| 65° | 2437 | 2339 | 2178 |
| 70° | 2261 | 2073 | 1842 |
| 75° | 2012 | 1778 | 1516 |
| 80° | 1672 | 1455 | 1412 |
| 85° | 1213 | 1300 | 1300 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 121.1  | 3.7       |
| 10°-20°   | 344.8  | 10.4      |
| 20°-30°   | 516.8  | 15.6      |
| 30°-40°   | 608.9  | 18.4      |
| 40°-50°   | 607.3  | 18.4      |
| 50°-60°   | 516.6  | 15.6      |
| 60°-70°   | 360.5  | 10.9      |
| 70°-80°   | 183.3  | 5.5       |
| 80°-90°   | 47.9   | 1.4       |
| 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°    | 982.7  | 29.7      |
| 0°-40°    | 1591.5 | 48.1      |
| 0°-60°    | 2715.4 | 82.1      |
| 0°-90°    | 3307.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 3307.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1283 | 1283  | 1283 | 1283  | 1283 |      |
| 5°  | 1278 | 1276  | 1270 | 1277  | 1277 | 121  |
| 15° | 1218 | 1218  | 1218 | 1229  | 1231 | 343  |
| 25° | 1107 | 1109  | 1120 | 1137  | 1141 | 510  |
| 35° | 955  | 956   | 973  | 992   | 995  | 596  |
| 45° | 775  | 778   | 792  | 798   | 799  | 596  |
| 55° | 579  | 579   | 583  | 575   | 568  | 517  |
| 65° | 383  | 377   | 367  | 348   | 342  | 380  |
| 75° | 194  | 186   | 171  | 150   | 146  | 205  |
| 85° | 39   | 41    | 42   | 42    | 42   | 49   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1282.7 | 1282.7 | 1282.7 | 1282.7 | 1282.7 |
| 2.5°  | 1282.7 | 1281.3 | 1275.7 | 1281.3 | 1281.3 |
| 5°    | 1278.5 | 1275.7 | 1270.1 | 1277.1 | 1277.1 |
| 7.5°  | 1267.3 | 1265.8 | 1261.6 | 1268.7 | 1268.7 |
| 10°   | 1254.6 | 1253.2 | 1250.4 | 1258.8 | 1258.8 |
| 12.5° | 1237.8 | 1237.8 | 1236.4 | 1244.8 | 1246.2 |
| 15°   | 1218.2 | 1218.2 | 1218.2 | 1229.4 | 1230.8 |
| 17.5° | 1195.8 | 1194.4 | 1198.6 | 1211.2 | 1212.6 |
| 20°   | 1167.7 | 1169.1 | 1174.7 | 1188.7 | 1191.6 |
| 22.5° | 1139.7 | 1141.1 | 1148.1 | 1164.9 | 1169.1 |
| 25°   | 1107.4 | 1108.8 | 1120.1 | 1136.9 | 1141.1 |
| 27.5° | 1072.4 | 1075.2 | 1087.8 | 1106.0 | 1108.8 |
| 30°   | 1034.5 | 1037.4 | 1052.8 | 1071.0 | 1075.2 |
| 32.5° | 995.3  | 999.5  | 1013.5 | 1033.1 | 1038.8 |
| 35°   | 954.6  | 956.0  | 972.9  | 992.5  | 995.3  |
| 37.5° | 909.8  | 914.0  | 930.8  | 947.6  | 950.4  |
| 40°   | 867.7  | 870.5  | 886.0  | 900.0  | 901.4  |
| 42.5° | 820.1  | 824.3  | 841.1  | 850.9  | 850.9  |
| 45°   | 775.2  | 778.0  | 792.0  | 797.6  | 799.0  |
| 47.5° | 724.7  | 727.5  | 740.2  | 743.0  | 743.0  |
| 50°   | 674.3  | 681.3  | 688.3  | 688.3  | 685.5  |
| 52.5° | 628.0  | 629.4  | 637.8  | 632.2  | 629.4  |
| 55°   | 579.0  | 579.0  | 583.2  | 574.7  | 567.7  |
| 57.5° | 529.9  | 529.9  | 529.9  | 518.7  | 513.1  |
| 60°   | 479.4  | 478.0  | 472.4  | 458.4  | 454.2  |
| 62.5° | 431.8  | 427.6  | 419.1  | 405.1  | 396.7  |
| 65°   | 382.7  | 377.1  | 367.3  | 347.7  | 342.0  |
| 67.5° | 336.4  | 326.6  | 315.4  | 297.2  | 287.4  |
| 70°   | 287.4  | 279.0  | 263.5  | 242.5  | 234.1  |
| 72.5° | 239.7  | 231.3  | 218.7  | 197.7  | 185.0  |
| 75°   | 193.5  | 186.4  | 171.0  | 150.0  | 145.8  |
| 77.5° | 148.6  | 144.4  | 129.0  | 119.2  | 117.8  |
| 80°   | 107.9  | 106.5  | 93.9   | 91.1   | 91.1   |
| 82.5° | 71.5   | 70.1   | 65.9   | 65.9   | 64.5   |
| 85°   | 39.3   | 40.7   | 42.1   | 42.1   | 42.1   |
| 87.5° | 14.0   | 16.8   | 19.6   | 19.6   | 19.6   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)