

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: P220172

Luminaire Tested: **Z3-WD-3L40-LD5-UNV-22**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P220172  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35859)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: Z3-WD-3L40-LD5-UNV-22  
Description: CLASS Z3 2X2 RECESSED LED LUMIANIRE  
WITH A CLEAR SMOOTH ROUND LENS & ROUND PERF INLAY  
Light Source: (84) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2892.7 lumens  
Efficiency: N/A  
Efficacy: 113.0 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.4 / 1.45  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

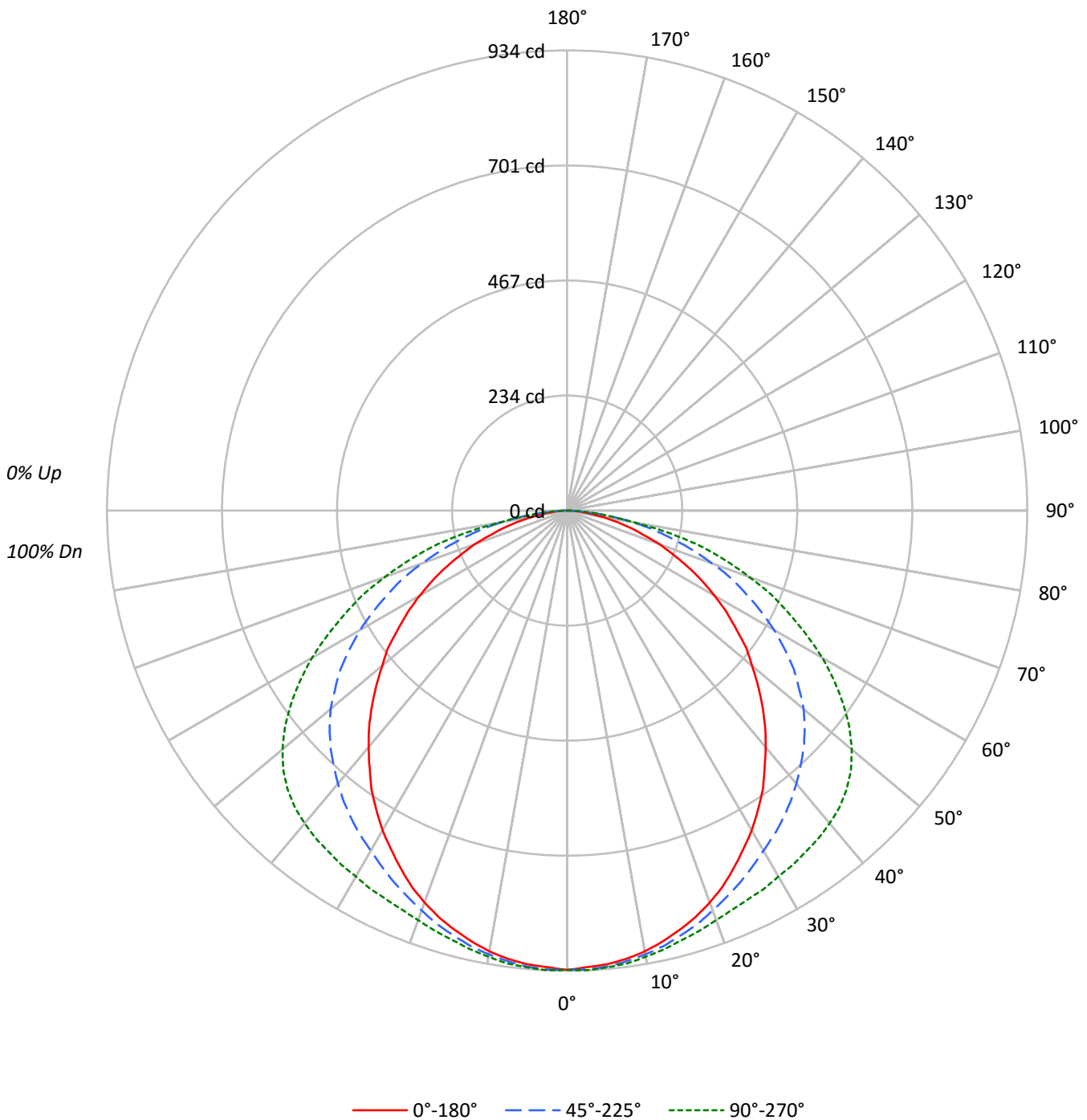
Input Watts (W): 25.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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   | 108 | 103 | 99  | 95  | 106 | 101 | 97  | 93  | 97  | 94  | 91  | 93  | 90  | 88  | 89  | 87  | 85  | 83  |
| 2   | 98  | 90  | 83  | 77  | 95  | 88  | 81  | 76  | 84  | 79  | 74  | 81  | 76  | 72  | 78  | 74  | 71  | 68  |
| 3   | 89  | 78  | 70  | 63  | 87  | 77  | 69  | 62  | 74  | 67  | 61  | 71  | 65  | 60  | 68  | 63  | 59  | 57  |
| 4   | 81  | 69  | 60  | 53  | 79  | 68  | 59  | 53  | 65  | 58  | 52  | 63  | 56  | 51  | 61  | 55  | 50  | 48  |
| 5   | 75  | 61  | 52  | 45  | 72  | 60  | 52  | 45  | 58  | 50  | 45  | 56  | 49  | 44  | 54  | 48  | 44  | 41  |
| 6   | 69  | 55  | 46  | 39  | 67  | 54  | 45  | 39  | 52  | 45  | 39  | 51  | 44  | 38  | 49  | 43  | 38  | 36  |
| 7   | 64  | 50  | 41  | 35  | 62  | 49  | 40  | 34  | 47  | 40  | 34  | 46  | 39  | 34  | 45  | 38  | 34  | 32  |
| 8   | 59  | 45  | 37  | 31  | 58  | 45  | 36  | 31  | 43  | 36  | 30  | 42  | 35  | 30  | 41  | 35  | 30  | 28  |
| 9   | 55  | 42  | 33  | 27  | 54  | 41  | 33  | 27  | 40  | 32  | 27  | 39  | 32  | 27  | 38  | 31  | 27  | 25  |
| 10  | 52  | 38  | 30  | 25  | 50  | 38  | 30  | 25  | 37  | 30  | 25  | 36  | 29  | 25  | 35  | 29  | 24  | 23  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 2509 | 2509 | 2509 |
| 5°  | 2497 | 2510 | 2514 |
| 10° | 2482 | 2499 | 2513 |
| 15° | 2455 | 2486 | 2513 |
| 20° | 2424 | 2474 | 2533 |
| 25° | 2376 | 2470 | 2584 |
| 30° | 2328 | 2476 | 2664 |
| 35° | 2273 | 2508 | 2775 |
| 40° | 2202 | 2543 | 2911 |
| 45° | 2131 | 2585 | 3051 |
| 50° | 2051 | 2624 | 3157 |
| 55° | 1963 | 2635 | 3210 |
| 60° | 1858 | 2611 | 3219 |
| 65° | 1722 | 2553 | 3170 |
| 70° | 1565 | 2466 | 3091 |
| 75° | 1356 | 2299 | 2944 |
| 80° | 1060 | 2070 | 2145 |
| 85° | 787  | 1423 | 1522 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 88.2   | 3.0       |
| 10°-20°   | 252.0  | 8.7       |
| 20°-30°   | 384.9  | 13.3      |
| 30°-40°   | 479.3  | 16.6      |
| 40°-50°   | 524.1  | 18.1      |
| 50°-60°   | 497.0  | 17.2      |
| 60°-70°   | 389.4  | 13.5      |
| 70°-80°   | 225.1  | 7.8       |
| 80°-90°   | 52.8   | 1.8       |
| 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°    | 725.0  | 25.1      |
| 0°-40°    | 1204.3 | 41.6      |
| 0°-60°    | 2225.4 | 76.9      |
| 0°-90°    | 2892.7 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2892.7 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 932 | 932   | 932 | 932   | 932 |      |
| 5°  | 924 | 926   | 929 | 931   | 931 | 88   |
| 15° | 881 | 884   | 892 | 900   | 902 | 249  |
| 25° | 800 | 808   | 832 | 859   | 870 | 369  |
| 35° | 692 | 708   | 764 | 822   | 845 | 432  |
| 45° | 560 | 593   | 679 | 767   | 802 | 432  |
| 55° | 418 | 469   | 562 | 651   | 684 | 375  |
| 65° | 270 | 318   | 401 | 472   | 498 | 268  |
| 75° | 130 | 165   | 221 | 264   | 283 | 138  |
| 85° | 26  | 37    | 46  | 49    | 49  | 31   |
| 90° | 0   | 0     | 0   | 0     | 0   |      |



TEST NUMBER: P220172

CATALOG NUMBER: Z3-WD-3L40-LD5-UNV-22

**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 932.2 | 932.2 | 932.2 | 932.2 | 932.2 |
| 2.5°  | 927.5 | 929.1 | 932.2 | 933.8 | 933.8 |
| 5°    | 924.3 | 925.9 | 929.1 | 930.6 | 930.6 |
| 7.5°  | 917.9 | 919.5 | 922.7 | 925.9 | 927.5 |
| 10°   | 908.4 | 910.0 | 914.7 | 919.5 | 919.5 |
| 12.5° | 895.6 | 898.8 | 905.2 | 910.0 | 911.6 |
| 15°   | 881.3 | 884.5 | 892.5 | 900.4 | 902.0 |
| 17.5° | 865.4 | 870.2 | 879.7 | 889.3 | 894.1 |
| 20°   | 846.3 | 849.5 | 863.8 | 878.1 | 884.5 |
| 22.5° | 825.7 | 830.4 | 847.9 | 868.6 | 876.6 |
| 25°   | 800.2 | 808.2 | 832.0 | 859.1 | 870.2 |
| 27.5° | 774.7 | 785.9 | 814.5 | 851.1 | 865.4 |
| 30°   | 749.3 | 760.4 | 797.0 | 841.6 | 857.5 |
| 32.5° | 720.7 | 735.0 | 781.1 | 832.0 | 852.7 |
| 35°   | 692.0 | 707.9 | 763.6 | 822.5 | 844.7 |
| 37.5° | 658.6 | 679.3 | 744.5 | 811.3 | 838.4 |
| 40°   | 626.8 | 649.1 | 723.8 | 798.6 | 828.8 |
| 42.5° | 595.0 | 620.4 | 701.6 | 784.3 | 817.7 |
| 45°   | 560.0 | 593.4 | 679.3 | 766.8 | 801.8 |
| 47.5° | 525.0 | 563.2 | 653.8 | 746.1 | 781.1 |
| 50°   | 490.0 | 529.8 | 626.8 | 720.7 | 754.1 |
| 52.5° | 458.2 | 497.9 | 593.4 | 687.2 | 722.2 |
| 55°   | 418.4 | 469.3 | 561.6 | 650.7 | 684.1 |
| 57.5° | 383.4 | 429.5 | 523.4 | 610.9 | 642.7 |
| 60°   | 345.2 | 391.3 | 485.2 | 567.9 | 598.2 |
| 62.5° | 308.6 | 353.2 | 443.8 | 521.8 | 548.8 |
| 65°   | 270.4 | 318.2 | 400.9 | 472.5 | 497.9 |
| 67.5° | 232.3 | 276.8 | 361.1 | 423.2 | 450.2 |
| 70°   | 198.9 | 240.2 | 313.4 | 370.7 | 392.9 |
| 72.5° | 160.7 | 200.4 | 267.3 | 318.2 | 337.3 |
| 75°   | 130.4 | 165.4 | 221.1 | 264.1 | 283.2 |
| 77.5° | 98.6  | 132.0 | 178.2 | 206.8 | 214.8 |
| 80°   | 68.4  | 97.0  | 133.6 | 144.8 | 138.4 |
| 82.5° | 44.5  | 66.8  | 85.9  | 89.1  | 87.5  |
| 85°   | 25.5  | 36.6  | 46.1  | 49.3  | 49.3  |
| 87.5° | 11.1  | 14.3  | 15.9  | 15.9  | 15.9  |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)