

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: P220294

Luminaire Tested: **Z3-WN-5L30-LD5-UNV-24**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P220294  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35868)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: Z3-WN-5L30-LD5-UNV-24  
Description: CLASS Z3 2X4 RECESSED LED LUMIANIRE  
WITH A CLEAR SMOOTH ROUND LENS & NANO-PRISM INLAY  
Light Source: (168) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6453.6 lumens  
Efficiency: N/A  
Efficacy: 110.1 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.37 / 1.44  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

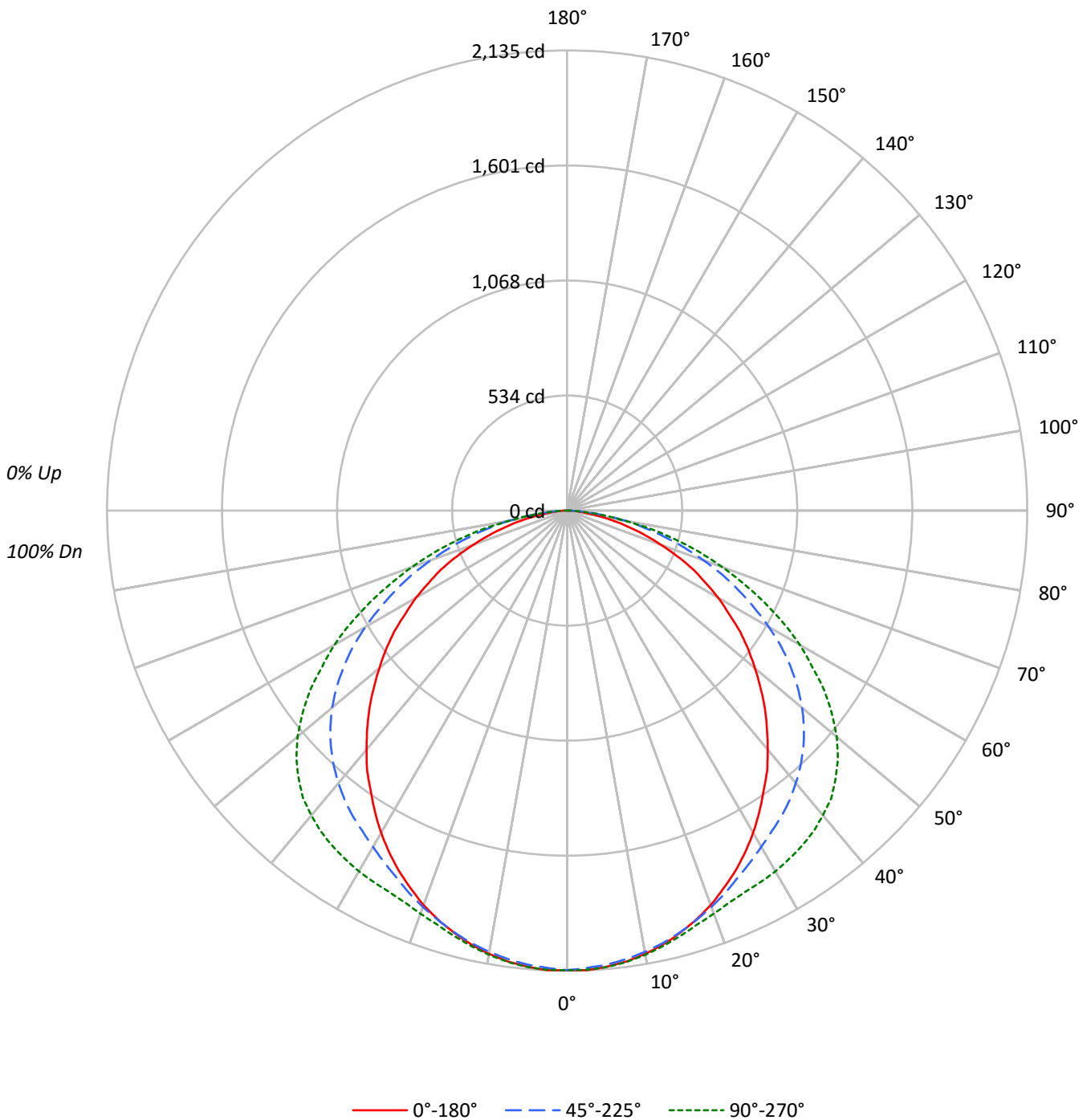
Input Watts (W): 58.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P220294

CATALOG NUMBER: Z3-WN-5L30-LD5-UNV-24

### Luminous Intensity Polar Plot





TEST NUMBER: P220294

CATALOG NUMBER: Z3-WN-5L30-LD5-UNV-24

**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 | 99  | 95  | 106 | 101 | 97  | 94  | 97  | 94  | 91  | 93  | 91  | 88  | 90  | 87  | 85  | 83  |
| 2   | 98  | 90  | 83  | 77  | 96  | 88  | 82  | 76  | 85  | 79  | 74  | 81  | 77  | 73  | 78  | 74  | 71  | 69  |
| 3   | 89  | 79  | 70  | 64  | 87  | 77  | 69  | 63  | 74  | 67  | 62  | 71  | 66  | 61  | 69  | 64  | 60  | 58  |
| 4   | 82  | 69  | 60  | 54  | 79  | 68  | 60  | 53  | 66  | 58  | 52  | 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  | 46  | 40  | 67  | 55  | 46  | 40  | 53  | 45  | 39  | 51  | 44  | 39  | 49  | 43  | 39  | 36  |
| 7   | 64  | 50  | 41  | 35  | 62  | 49  | 41  | 35  | 48  | 40  | 35  | 46  | 39  | 34  | 45  | 39  | 34  | 32  |
| 8   | 60  | 46  | 37  | 31  | 58  | 45  | 37  | 31  | 44  | 36  | 31  | 42  | 36  | 31  | 41  | 35  | 30  | 28  |
| 9   | 56  | 42  | 34  | 28  | 54  | 41  | 33  | 28  | 40  | 33  | 28  | 39  | 32  | 28  | 38  | 32  | 27  | 25  |
| 10  | 52  | 39  | 31  | 25  | 51  | 38  | 30  | 25  | 37  | 30  | 25  | 36  | 30  | 25  | 35  | 29  | 25  | 23  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 2869 | 2869 | 2869 |
| 5°  | 2868 | 2856 | 2871 |
| 10° | 2853 | 2841 | 2859 |
| 15° | 2825 | 2822 | 2843 |
| 20° | 2789 | 2802 | 2850 |
| 25° | 2740 | 2786 | 2899 |
| 30° | 2681 | 2799 | 3002 |
| 35° | 2609 | 2846 | 3120 |
| 40° | 2544 | 2899 | 3242 |
| 45° | 2468 | 2950 | 3352 |
| 50° | 2381 | 2980 | 3417 |
| 55° | 2298 | 2970 | 3418 |
| 60° | 2182 | 2911 | 3359 |
| 65° | 2051 | 2800 | 3218 |
| 70° | 1817 | 2639 | 3015 |
| 75° | 1536 | 2413 | 2714 |
| 80° | 1188 | 2152 | 2083 |
| 85° | 823  | 1474 | 1406 |



TEST NUMBER: P220294

CATALOG NUMBER: Z3-WN-5L30-LD5-UNV-24

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 201.4  | 3.1       |
| 10°-20°   | 573.4  | 8.9       |
| 20°-30°   | 872.9  | 13.5      |
| 30°-40°   | 1088.6 | 16.9      |
| 40°-50°   | 1185.2 | 18.4      |
| 50°-60°   | 1108.3 | 17.2      |
| 60°-70°   | 845.1  | 13.1      |
| 70°-80°   | 468.8  | 7.3       |
| 80°-90°   | 109.9  | 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°    | 1647.7 | 25.5      |
| 0°-40°    | 2736.2 | 42.4      |
| 0°-60°    | 5029.8 | 77.9      |
| 0°-90°    | 6453.6 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 6453.6 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 2132 | 2132  | 2132 | 2132  | 2132 |      |
| 5°  | 2124 | 2124  | 2115 | 2124  | 2126 | 202  |
| 15° | 2028 | 2028  | 2026 | 2039  | 2041 | 572  |
| 25° | 1846 | 1852  | 1877 | 1930  | 1952 | 850  |
| 35° | 1588 | 1624  | 1733 | 1855  | 1899 | 995  |
| 45° | 1297 | 1366  | 1550 | 1708  | 1761 | 1000 |
| 55° | 980  | 1075  | 1266 | 1413  | 1457 | 872  |
| 65° | 644  | 729   | 880  | 984   | 1011 | 632  |
| 75° | 295  | 375   | 464  | 518   | 522  | 318  |
| 85° | 53   | 91    | 96   | 96    | 91   | 68   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



TEST NUMBER: P220294

CATALOG NUMBER: Z3-WN-5L30-LD5-UNV-24

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 2132.4 | 2132.4 | 2132.4 | 2132.4 | 2132.4 |
| 2.5°  | 2134.6 | 2130.2 | 2123.5 | 2130.2 | 2132.4 |
| 5°    | 2123.5 | 2123.5 | 2114.6 | 2123.5 | 2125.7 |
| 7.5°  | 2110.2 | 2107.9 | 2099.1 | 2110.2 | 2112.4 |
| 10°   | 2088.0 | 2085.7 | 2079.1 | 2088.0 | 2092.4 |
| 12.5° | 2061.3 | 2059.1 | 2054.6 | 2068.0 | 2068.0 |
| 15°   | 2028.0 | 2028.0 | 2025.8 | 2039.1 | 2041.3 |
| 17.5° | 1990.2 | 1990.2 | 1992.4 | 2008.0 | 2012.4 |
| 20°   | 1948.0 | 1948.0 | 1956.9 | 1981.3 | 1990.2 |
| 22.5° | 1896.9 | 1901.4 | 1919.1 | 1952.5 | 1968.0 |
| 25°   | 1845.8 | 1852.5 | 1876.9 | 1930.2 | 1952.5 |
| 27.5° | 1788.1 | 1799.2 | 1839.2 | 1912.5 | 1943.6 |
| 30°   | 1725.9 | 1741.4 | 1801.4 | 1896.9 | 1932.5 |
| 32.5° | 1659.3 | 1681.5 | 1765.9 | 1876.9 | 1916.9 |
| 35°   | 1588.2 | 1623.7 | 1732.6 | 1854.7 | 1899.2 |
| 37.5° | 1523.8 | 1559.3 | 1694.8 | 1828.1 | 1876.9 |
| 40°   | 1448.2 | 1492.7 | 1650.4 | 1797.0 | 1845.8 |
| 42.5° | 1372.7 | 1432.7 | 1603.7 | 1757.0 | 1812.5 |
| 45°   | 1297.2 | 1366.1 | 1550.4 | 1708.1 | 1761.4 |
| 47.5° | 1217.2 | 1295.0 | 1490.4 | 1650.4 | 1703.7 |
| 50°   | 1137.3 | 1228.3 | 1423.8 | 1583.7 | 1632.6 |
| 52.5° | 1059.5 | 1155.0 | 1348.3 | 1503.8 | 1548.2 |
| 55°   | 979.6  | 1075.1 | 1266.1 | 1412.7 | 1457.1 |
| 57.5° | 888.5  | 1001.8 | 1179.5 | 1312.7 | 1348.3 |
| 60°   | 810.7  | 908.5  | 1081.7 | 1206.1 | 1248.3 |
| 62.5° | 721.9  | 824.1  | 979.6  | 1101.7 | 1132.8 |
| 65°   | 644.2  | 728.6  | 879.6  | 984.0  | 1010.7 |
| 67.5° | 553.1  | 639.7  | 779.7  | 866.3  | 886.3  |
| 70°   | 462.0  | 548.6  | 670.8  | 753.0  | 766.3  |
| 72.5° | 379.8  | 462.0  | 568.6  | 635.3  | 646.4  |
| 75°   | 295.4  | 375.4  | 464.2  | 517.5  | 522.0  |
| 77.5° | 224.3  | 295.4  | 366.5  | 404.3  | 406.5  |
| 80°   | 153.3  | 215.5  | 277.7  | 282.1  | 268.8  |
| 82.5° | 97.7   | 148.8  | 179.9  | 173.3  | 173.3  |
| 85°   | 53.3   | 91.1   | 95.5   | 95.5   | 91.1   |
| 87.5° | 22.2   | 35.5   | 35.5   | 33.3   | 33.3   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)