

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: P220269

Luminaire Tested: **Z3-WG-3L35-LD5-UNV-24**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P220269  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35866)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: Z3-WG-3L35-LD5-UNV-24  
Description: CLASS Z3 2X4 RECESSED LED LUMIANIRE  
WITH A CLEAR SMOOTH ROUND LENS & RECTANGULAR PERF INLAY  
Light Source: (168) 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4756.9 lumens  
Efficiency: N/A  
Efficacy: 117.7 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.44 / 1.48  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

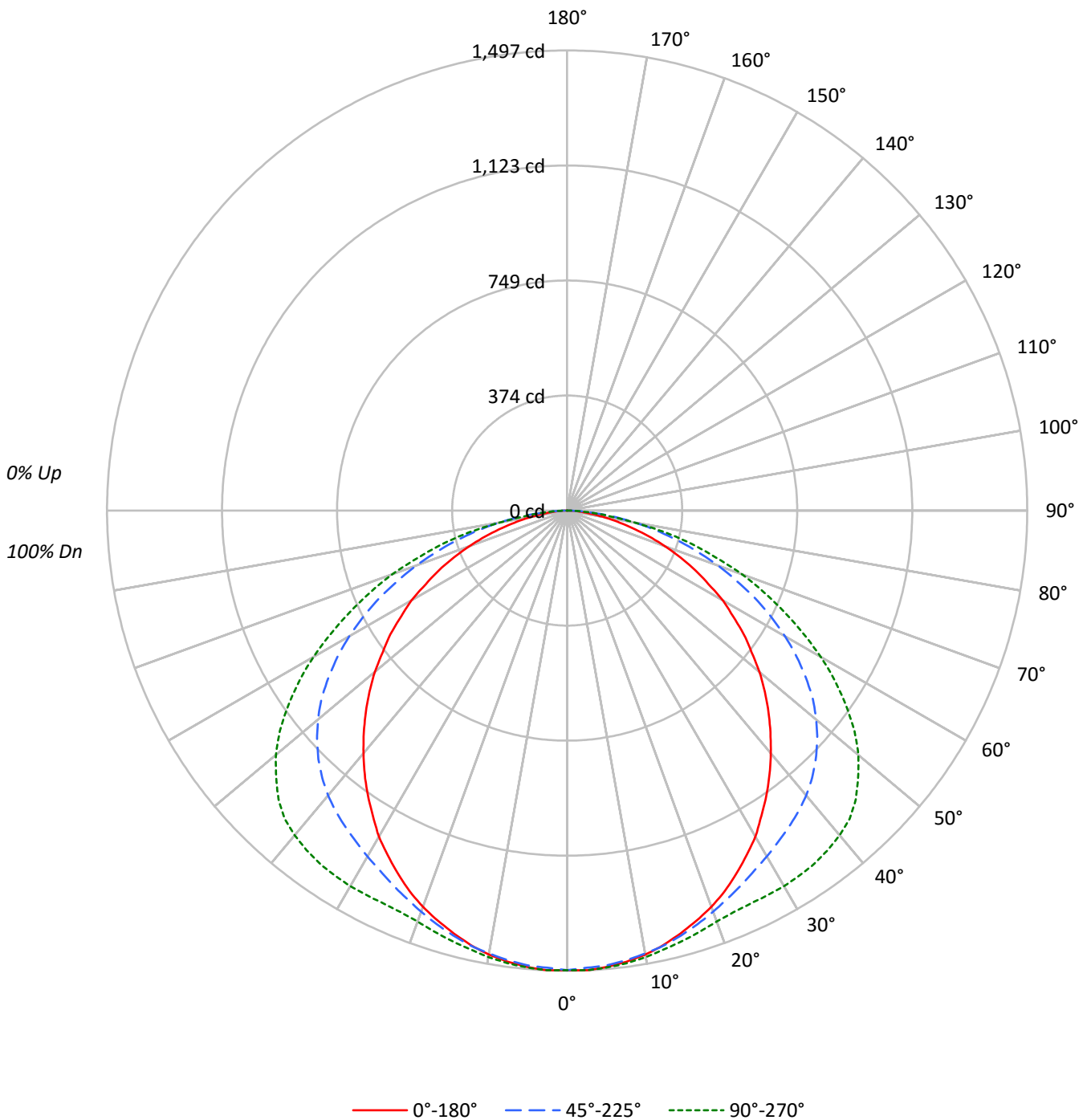
Input Watts (W): 40.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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  | 90  | 93  | 90  | 88  | 89  | 87  | 85  | 83  |
| 2   | 98  | 90  | 82  | 77  | 95  | 88  | 81  | 76  | 84  | 79  | 74  | 81  | 76  | 72  | 78  | 74  | 70  | 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  | 52  | 65  | 58  | 52  | 63  | 56  | 51  | 60  | 55  | 50  | 48  |
| 5   | 75  | 61  | 52  | 45  | 72  | 60  | 51  | 45  | 58  | 50  | 44  | 56  | 49  | 44  | 54  | 48  | 43  | 41  |
| 6   | 69  | 55  | 46  | 39  | 67  | 54  | 45  | 39  | 52  | 44  | 39  | 50  | 43  | 38  | 49  | 43  | 38  | 36  |
| 7   | 64  | 50  | 41  | 34  | 62  | 49  | 40  | 34  | 47  | 40  | 34  | 46  | 39  | 34  | 44  | 38  | 33  | 31  |
| 8   | 59  | 45  | 36  | 30  | 57  | 44  | 36  | 30  | 43  | 36  | 30  | 42  | 35  | 30  | 41  | 34  | 30  | 28  |
| 9   | 55  | 41  | 33  | 27  | 54  | 41  | 33  | 27  | 40  | 32  | 27  | 38  | 32  | 27  | 37  | 31  | 27  | 25  |
| 10  | 52  | 38  | 30  | 25  | 50  | 38  | 30  | 25  | 37  | 29  | 24  | 36  | 29  | 24  | 35  | 29  | 24  | 22  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 2012 | 2012 | 2012 |
| 5°  | 2013 | 2006 | 2015 |
| 10° | 2004 | 1999 | 2015 |
| 15° | 1984 | 1993 | 2019 |
| 20° | 1964 | 1989 | 2037 |
| 25° | 1934 | 1994 | 2094 |
| 30° | 1904 | 2019 | 2192 |
| 35° | 1857 | 2065 | 2303 |
| 40° | 1811 | 2125 | 2422 |
| 45° | 1763 | 2177 | 2527 |
| 50° | 1710 | 2215 | 2589 |
| 55° | 1647 | 2225 | 2601 |
| 60° | 1576 | 2203 | 2566 |
| 65° | 1467 | 2144 | 2477 |
| 70° | 1328 | 2052 | 2377 |
| 75° | 1132 | 1913 | 2184 |
| 80° | 915  | 1726 | 1687 |
| 85° | 625  | 1224 | 1198 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 141.4  | 3.0       |
| 10°-20°   | 405.3  | 8.5       |
| 20°-30°   | 624.2  | 13.1      |
| 30°-40°   | 790.2  | 16.6      |
| 40°-50°   | 873.6  | 18.4      |
| 50°-60°   | 827.5  | 17.4      |
| 60°-70°   | 641.0  | 13.5      |
| 70°-80°   | 365.3  | 7.7       |
| 80°-90°   | 88.5   | 1.9       |
| 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°    | 1170.9 | 24.6      |
| 0°-40°    | 1961.1 | 41.2      |
| 0°-60°    | 3662.2 | 77.0      |
| 0°-90°    | 4756.9 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 4756.9 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1495 | 1495  | 1495 | 1495  | 1495 |      |
| 5°  | 1490 | 1488  | 1485 | 1490  | 1492 | 141  |
| 15° | 1424 | 1428  | 1431 | 1445  | 1450 | 402  |
| 25° | 1303 | 1313  | 1343 | 1392  | 1411 | 600  |
| 35° | 1131 | 1159  | 1257 | 1364  | 1402 | 707  |
| 45° | 926  | 986   | 1144 | 1279  | 1328 | 714  |
| 55° | 702  | 786   | 948  | 1070  | 1109 | 626  |
| 65° | 461  | 542   | 673  | 759   | 778  | 455  |
| 75° | 218  | 287   | 368  | 408   | 420  | 235  |
| 85° | 40   | 74    | 79   | 78    | 78   | 52   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1495.2 | 1495.2 | 1495.2 | 1495.2 | 1495.2 |
| 2.5°  | 1496.9 | 1493.5 | 1488.5 | 1495.2 | 1496.9 |
| 5°    | 1490.2 | 1488.5 | 1485.1 | 1490.2 | 1491.9 |
| 7.5°  | 1480.0 | 1478.4 | 1475.0 | 1483.4 | 1485.1 |
| 10°   | 1466.5 | 1466.5 | 1463.2 | 1471.6 | 1475.0 |
| 12.5° | 1448.0 | 1449.7 | 1449.7 | 1458.1 | 1461.5 |
| 15°   | 1424.3 | 1427.7 | 1431.1 | 1444.6 | 1449.7 |
| 17.5° | 1399.0 | 1404.1 | 1410.8 | 1427.7 | 1436.2 |
| 20°   | 1372.0 | 1375.4 | 1388.9 | 1414.2 | 1422.7 |
| 22.5° | 1340.0 | 1345.0 | 1365.3 | 1400.7 | 1414.2 |
| 25°   | 1302.8 | 1313.0 | 1343.3 | 1392.3 | 1410.8 |
| 27.5° | 1264.0 | 1275.8 | 1319.7 | 1383.8 | 1410.8 |
| 30°   | 1225.2 | 1238.7 | 1299.5 | 1378.8 | 1410.8 |
| 32.5° | 1176.3 | 1199.9 | 1277.5 | 1373.7 | 1407.5 |
| 35°   | 1130.7 | 1159.4 | 1257.3 | 1363.6 | 1402.4 |
| 37.5° | 1081.8 | 1117.2 | 1235.3 | 1350.1 | 1392.3 |
| 40°   | 1031.1 | 1075.0 | 1210.0 | 1333.2 | 1378.8 |
| 42.5° | 978.8  | 1031.1 | 1179.6 | 1311.3 | 1360.2 |
| 45°   | 926.5  | 985.6  | 1144.2 | 1279.2 | 1328.2 |
| 47.5° | 872.5  | 938.3  | 1103.7 | 1240.4 | 1284.3 |
| 50°   | 816.8  | 889.4  | 1058.1 | 1193.1 | 1237.0 |
| 52.5° | 756.1  | 840.4  | 1007.5 | 1135.8 | 1178.0 |
| 55°   | 702.0  | 786.4  | 948.4  | 1069.9 | 1108.8 |
| 57.5° | 639.6  | 734.1  | 886.0  | 1002.4 | 1034.5 |
| 60°   | 585.6  | 668.3  | 818.5  | 924.8  | 953.5  |
| 62.5° | 518.1  | 612.6  | 747.6  | 843.8  | 865.7  |
| 65°   | 460.7  | 541.7  | 673.4  | 759.4  | 778.0  |
| 67.5° | 398.3  | 477.6  | 595.7  | 671.7  | 691.9  |
| 70°   | 337.5  | 410.1  | 521.5  | 582.2  | 604.2  |
| 72.5° | 278.5  | 347.6  | 443.8  | 496.2  | 506.3  |
| 75°   | 217.7  | 286.9  | 367.9  | 408.4  | 420.2  |
| 77.5° | 167.1  | 224.5  | 295.3  | 327.4  | 325.7  |
| 80°   | 118.1  | 168.8  | 222.8  | 227.8  | 217.7  |
| 82.5° | 75.9   | 119.8  | 150.2  | 138.4  | 138.4  |
| 85°   | 40.5   | 74.3   | 79.3   | 77.6   | 77.6   |
| 87.5° | 15.2   | 27.0   | 27.0   | 27.0   | 27.0   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)