

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: P302315

Luminaire Tested: **ZX-WO-45H840-UNV-24-STD**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P302315  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1902-133-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: ZX-WO-45H840-UNV-24-STD  
Description: CORELITE CLASS RX 2X2 LED LUMINAIRE.  
FLAT LENS, HIGH PERFORMANCE LUMEN PACKAGE.  
Light Source: (252)4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

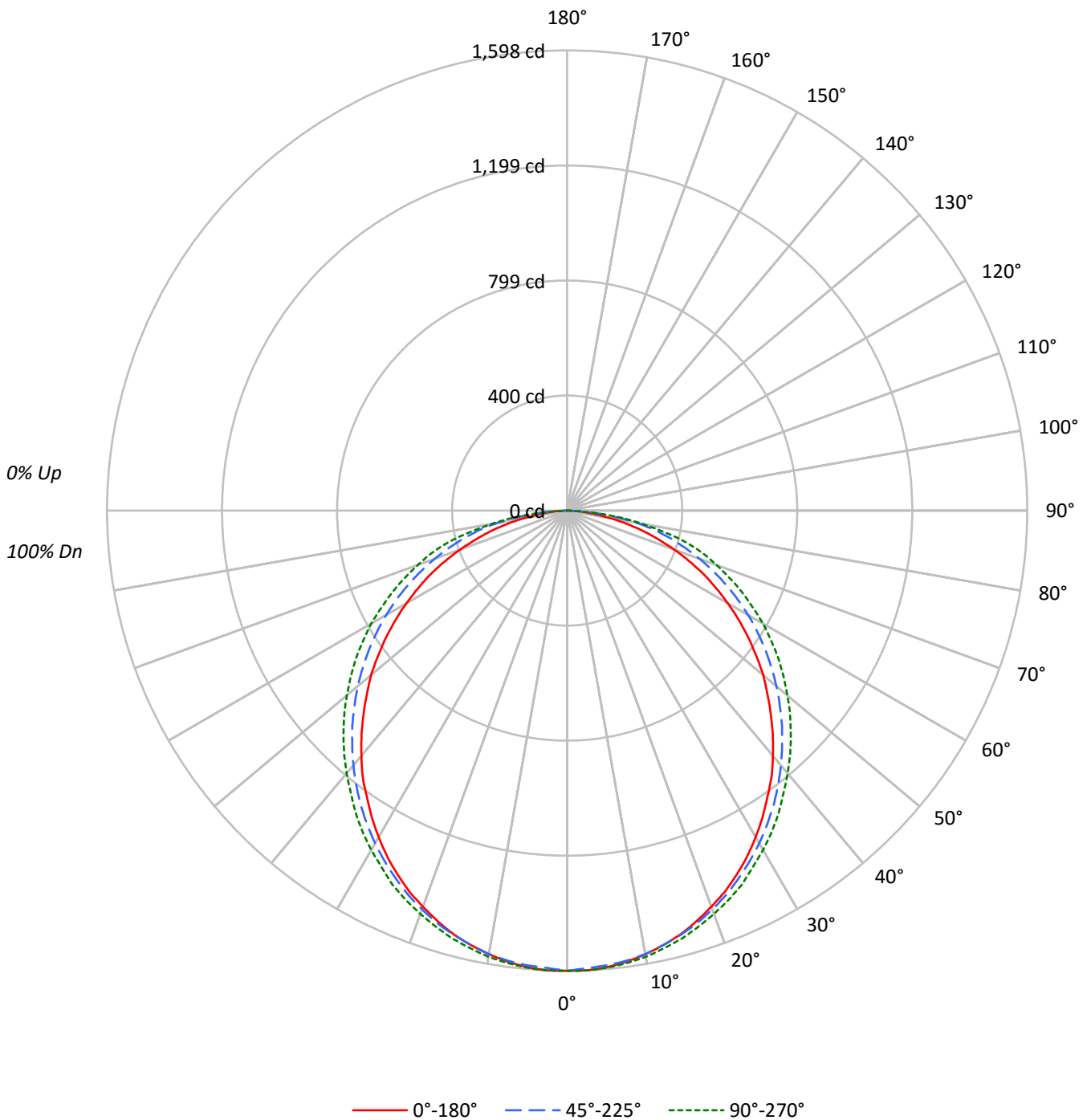
Lumens per Lamp: N/A  
Luminaire Lumens: 4652.5 lumens  
Efficiency: N/A  
Efficacy: 138.9 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 33.5  
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



TEST NUMBER: P302315  
CATALOG NUMBER: ZX-WO-45H840-UNV-24-STD

### Luminous Intensity Polar Plot





TEST NUMBER: P302315

CATALOG NUMBER: ZX-WO-45H840-UNV-24-STD

**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  | 93  | 90  | 93  | 90  | 88  | 89  | 87  | 85  | 83  |
| 2   | 98  | 90  | 83  | 77  | 96  | 88  | 81  | 76  | 84  | 79  | 74  | 81  | 76  | 72  | 78  | 74  | 71  | 68  |
| 3   | 89  | 78  | 70  | 63  | 87  | 77  | 69  | 63  | 74  | 67  | 62  | 71  | 65  | 61  | 68  | 64  | 60  | 57  |
| 4   | 82  | 69  | 60  | 54  | 79  | 68  | 60  | 53  | 65  | 58  | 52  | 63  | 57  | 52  | 61  | 55  | 51  | 49  |
| 5   | 75  | 62  | 53  | 46  | 73  | 61  | 52  | 46  | 59  | 51  | 45  | 57  | 50  | 45  | 55  | 49  | 44  | 42  |
| 6   | 69  | 56  | 47  | 40  | 67  | 55  | 46  | 40  | 53  | 45  | 39  | 51  | 44  | 39  | 50  | 44  | 39  | 37  |
| 7   | 64  | 50  | 42  | 35  | 62  | 50  | 41  | 35  | 48  | 40  | 35  | 47  | 40  | 35  | 45  | 39  | 34  | 32  |
| 8   | 60  | 46  | 37  | 31  | 58  | 45  | 37  | 31  | 44  | 36  | 31  | 43  | 36  | 31  | 42  | 35  | 31  | 29  |
| 9   | 56  | 42  | 34  | 28  | 54  | 42  | 34  | 28  | 40  | 33  | 28  | 39  | 33  | 28  | 38  | 32  | 28  | 26  |
| 10  | 52  | 39  | 31  | 26  | 51  | 38  | 31  | 26  | 37  | 30  | 25  | 36  | 30  | 25  | 36  | 30  | 25  | 23  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 2151 | 2151 | 2151 |
| 5°  | 2150 | 2141 | 2152 |
| 10° | 2138 | 2136 | 2150 |
| 15° | 2122 | 2125 | 2143 |
| 20° | 2096 | 2110 | 2134 |
| 25° | 2070 | 2092 | 2129 |
| 30° | 2034 | 2073 | 2114 |
| 35° | 1992 | 2052 | 2104 |
| 40° | 1952 | 2028 | 2092 |
| 45° | 1903 | 2008 | 2090 |
| 50° | 1861 | 1986 | 2090 |
| 55° | 1801 | 1968 | 2101 |
| 60° | 1735 | 1954 | 2115 |
| 65° | 1666 | 1936 | 2132 |
| 70° | 1555 | 1922 | 2170 |
| 75° | 1417 | 1926 | 2237 |
| 80° | 1172 | 1905 | 2060 |
| 85° | 898  | 1513 | 1462 |



TEST NUMBER: P302315

CATALOG NUMBER: ZX-WO-45H840-UNV-24-STD

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 151.1  | 3.2       |
| 10°-20°   | 431.5  | 9.3       |
| 20°-30°   | 651.0  | 14.0      |
| 30°-40°   | 781.5  | 16.8      |
| 40°-50°   | 812.8  | 17.5      |
| 50°-60°   | 747.5  | 16.1      |
| 60°-70°   | 595.7  | 12.8      |
| 70°-80°   | 377.5  | 8.1       |
| 80°-90°   | 103.8  | 2.2       |
| 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°    | 1233.6 | 26.5      |
| 0°-40°    | 2015.1 | 43.3      |
| 0°-60°    | 3575.4 | 76.8      |
| 0°-90°    | 4652.5 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 4652.5 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1598 | 1598  | 1598 | 1598  | 1598 |      |
| 5°  | 1592 | 1592  | 1585 | 1593  | 1593 | 151  |
| 15° | 1524 | 1524  | 1525 | 1537  | 1539 | 429  |
| 25° | 1394 | 1401  | 1409 | 1429  | 1434 | 642  |
| 35° | 1213 | 1226  | 1250 | 1273  | 1281 | 760  |
| 45° | 1000 | 1022  | 1055 | 1088  | 1098 | 772  |
| 55° | 768  | 792   | 839  | 881   | 896  | 686  |
| 65° | 523  | 550   | 608  | 655   | 670  | 516  |
| 75° | 272  | 307   | 370  | 417   | 430  | 287  |
| 85° | 58   | 83    | 98   | 96    | 95   | 69   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



TEST NUMBER: P302315

CATALOG NUMBER: ZX-WO-45H840-UNV-24-STD

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1598.4 | 1598.4 | 1598.4 | 1598.4 | 1598.4 |
| 2.5°  | 1598.4 | 1598.4 | 1590.1 | 1598.4 | 1598.4 |
| 5°    | 1591.7 | 1591.7 | 1585.1 | 1593.4 | 1593.4 |
| 7.5°  | 1580.1 | 1581.8 | 1576.8 | 1585.1 | 1585.1 |
| 10°   | 1565.1 | 1566.8 | 1563.5 | 1573.5 | 1573.5 |
| 12.5° | 1545.2 | 1546.9 | 1545.2 | 1556.8 | 1556.8 |
| 15°   | 1523.6 | 1523.6 | 1525.3 | 1536.9 | 1538.6 |
| 17.5° | 1495.4 | 1498.7 | 1502.0 | 1515.3 | 1515.3 |
| 20°   | 1463.8 | 1468.8 | 1473.8 | 1490.4 | 1490.4 |
| 22.5° | 1432.2 | 1437.2 | 1443.9 | 1460.5 | 1463.8 |
| 25°   | 1394.0 | 1400.7 | 1409.0 | 1428.9 | 1433.9 |
| 27.5° | 1354.1 | 1359.1 | 1372.4 | 1394.0 | 1395.7 |
| 30°   | 1309.3 | 1317.6 | 1334.2 | 1355.8 | 1360.8 |
| 32.5° | 1262.7 | 1274.4 | 1292.7 | 1317.6 | 1322.6 |
| 35°   | 1212.9 | 1226.2 | 1249.5 | 1272.7 | 1281.0 |
| 37.5° | 1166.4 | 1176.3 | 1202.9 | 1229.5 | 1234.5 |
| 40°   | 1111.6 | 1126.5 | 1154.8 | 1184.7 | 1191.3 |
| 42.5° | 1056.7 | 1073.3 | 1104.9 | 1134.8 | 1146.4 |
| 45°   | 1000.2 | 1021.8 | 1055.1 | 1088.3 | 1098.3 |
| 47.5° | 943.7  | 967.0  | 1001.9 | 1038.4 | 1050.1 |
| 50°   | 888.9  | 910.5  | 948.7  | 986.9  | 998.6  |
| 52.5° | 827.4  | 852.4  | 893.9  | 935.4  | 947.1  |
| 55°   | 767.6  | 792.5  | 839.1  | 880.6  | 895.6  |
| 57.5° | 706.1  | 734.4  | 782.6  | 825.8  | 839.1  |
| 60°   | 644.7  | 674.6  | 726.1  | 769.3  | 785.9  |
| 62.5° | 583.2  | 611.4  | 667.9  | 711.1  | 726.1  |
| 65°   | 523.4  | 550.0  | 608.1  | 654.6  | 669.6  |
| 67.5° | 458.6  | 488.5  | 548.3  | 596.5  | 609.8  |
| 70°   | 395.4  | 425.3  | 488.5  | 538.3  | 551.6  |
| 72.5° | 330.6  | 365.5  | 428.7  | 476.9  | 495.1  |
| 75°   | 272.5  | 307.4  | 370.5  | 417.0  | 430.3  |
| 77.5° | 211.0  | 245.9  | 310.7  | 343.9  | 345.6  |
| 80°   | 151.2  | 191.1  | 245.9  | 259.2  | 265.8  |
| 82.5° | 99.7   | 137.9  | 169.5  | 186.1  | 186.1  |
| 85°   | 58.2   | 83.1   | 98.0   | 96.4   | 94.7   |
| 87.5° | 21.6   | 28.2   | 23.3   | 16.6   | 11.6   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)