

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: P220128

Luminaire Tested: **Z3-WL-5L30-LD5-UNV-22**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P220128  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35857)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: Z3-WL-5L30-LD5-UNV-22  
Description: CLASS Z3 2X2 RECESSED LED LUMIANIRE  
WITH A FROSTED PRISMATIC ROUND LENS  
Light Source: (84) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3768.8 lumens  
Efficiency: N/A  
Efficacy: 105.9 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.23 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

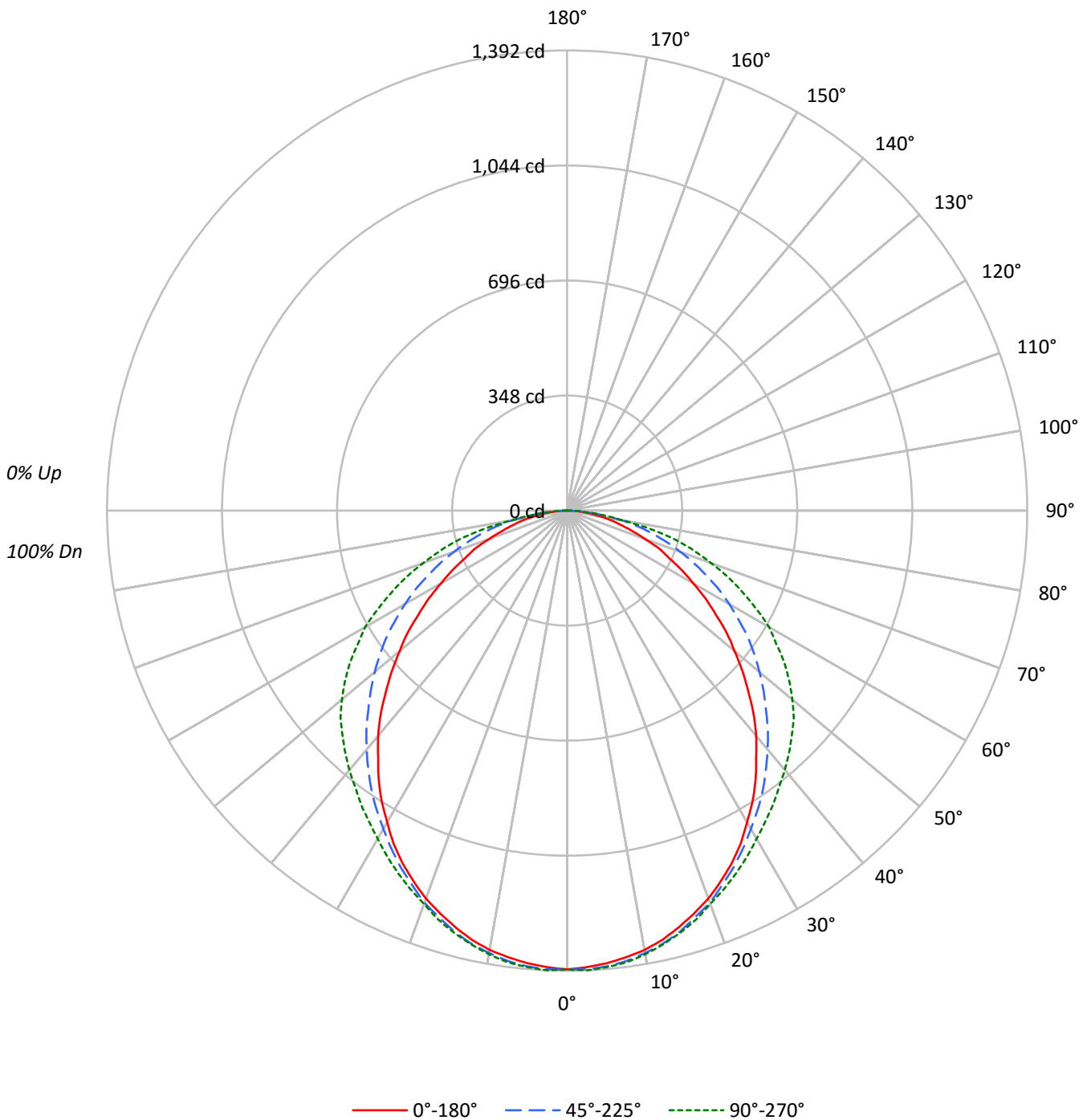
Input Watts (W): 35.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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   | 109 | 104 | 100 | 96  | 106 | 102 | 98  | 94  | 97  | 94  | 91  | 93  | 91  | 88  | 90  | 88  | 86  | 84  |
| 2   | 99  | 90  | 84  | 78  | 96  | 89  | 82  | 77  | 85  | 80  | 75  | 82  | 77  | 73  | 79  | 75  | 72  | 70  |
| 3   | 90  | 79  | 71  | 65  | 88  | 78  | 70  | 64  | 75  | 68  | 63  | 72  | 66  | 62  | 69  | 65  | 61  | 59  |
| 4   | 82  | 70  | 62  | 55  | 80  | 69  | 61  | 54  | 67  | 59  | 54  | 64  | 58  | 53  | 62  | 57  | 52  | 50  |
| 5   | 76  | 63  | 54  | 47  | 74  | 62  | 53  | 47  | 60  | 52  | 46  | 58  | 51  | 46  | 56  | 50  | 45  | 43  |
| 6   | 70  | 57  | 48  | 41  | 68  | 56  | 47  | 41  | 54  | 46  | 41  | 52  | 45  | 40  | 51  | 45  | 40  | 38  |
| 7   | 65  | 51  | 43  | 36  | 63  | 51  | 42  | 36  | 49  | 42  | 36  | 48  | 41  | 36  | 46  | 40  | 36  | 34  |
| 8   | 60  | 47  | 38  | 33  | 59  | 46  | 38  | 32  | 45  | 38  | 32  | 44  | 37  | 32  | 42  | 36  | 32  | 30  |
| 9   | 57  | 43  | 35  | 29  | 55  | 43  | 35  | 29  | 41  | 34  | 29  | 40  | 34  | 29  | 39  | 33  | 29  | 27  |
| 10  | 53  | 40  | 32  | 27  | 52  | 39  | 32  | 27  | 38  | 31  | 26  | 37  | 31  | 26  | 36  | 30  | 26  | 24  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 3735 | 3735 | 3735 |
| 5°  | 3713 | 3739 | 3744 |
| 10° | 3687 | 3713 | 3724 |
| 15° | 3635 | 3673 | 3684 |
| 20° | 3576 | 3615 | 3626 |
| 25° | 3496 | 3536 | 3593 |
| 30° | 3382 | 3454 | 3562 |
| 35° | 3264 | 3391 | 3569 |
| 40° | 3124 | 3314 | 3599 |
| 45° | 2950 | 3237 | 3656 |
| 50° | 2768 | 3180 | 3723 |
| 55° | 2576 | 3129 | 3764 |
| 60° | 2372 | 3048 | 3798 |
| 65° | 2166 | 2954 | 3730 |
| 70° | 1977 | 2859 | 3635 |
| 75° | 1769 | 2753 | 3517 |
| 80° | 1557 | 2577 | 2636 |
| 85° | 1374 | 2029 | 1970 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 131.1  | 3.5       |
| 10°-20°   | 370.8  | 9.8       |
| 20°-30°   | 549.2  | 14.6      |
| 30°-40°   | 647.4  | 17.2      |
| 40°-50°   | 663.9  | 17.6      |
| 50°-60°   | 600.2  | 15.9      |
| 60°-70°   | 461.5  | 12.2      |
| 70°-80°   | 273.5  | 7.3       |
| 80°-90°   | 71.1   | 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°    | 1051.1 | 27.9      |
| 0°-40°    | 1698.5 | 45.1      |
| 0°-60°    | 2962.6 | 78.6      |
| 0°-90°    | 3768.8 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 3768.8 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1388 | 1388  | 1388 | 1388  | 1388 |      |
| 5°  | 1374 | 1378  | 1384 | 1386  | 1386 | 130  |
| 15° | 1305 | 1309  | 1318 | 1322  | 1322 | 368  |
| 25° | 1177 | 1181  | 1191 | 1204  | 1210 | 541  |
| 35° | 994  | 1000  | 1032 | 1069  | 1086 | 620  |
| 45° | 775  | 791   | 851  | 928   | 961  | 599  |
| 55° | 549  | 588   | 667  | 760   | 802  | 493  |
| 65° | 340  | 383   | 464  | 553   | 586  | 341  |
| 75° | 170  | 203   | 265  | 321   | 338  | 182  |
| 85° | 44   | 54    | 66   | 70    | 64   | 51   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1388.0 | 1388.0 | 1388.0 | 1388.0 | 1388.0 |
| 2.5°  | 1382.2 | 1384.2 | 1388.0 | 1391.9 | 1391.9 |
| 5°    | 1374.5 | 1378.4 | 1384.2 | 1386.1 | 1386.1 |
| 7.5°  | 1362.9 | 1366.8 | 1374.5 | 1376.4 | 1378.4 |
| 10°   | 1349.4 | 1351.3 | 1359.0 | 1362.9 | 1362.9 |
| 12.5° | 1330.0 | 1333.9 | 1341.6 | 1345.5 | 1343.6 |
| 15°   | 1304.9 | 1308.8 | 1318.4 | 1322.3 | 1322.3 |
| 17.5° | 1277.8 | 1281.7 | 1289.4 | 1295.2 | 1297.2 |
| 20°   | 1248.8 | 1250.8 | 1262.4 | 1266.2 | 1266.2 |
| 22.5° | 1214.0 | 1219.8 | 1225.6 | 1237.2 | 1239.2 |
| 25°   | 1177.3 | 1181.2 | 1190.8 | 1204.4 | 1210.2 |
| 27.5° | 1136.7 | 1138.6 | 1152.2 | 1173.4 | 1179.2 |
| 30°   | 1088.4 | 1096.1 | 1111.6 | 1138.6 | 1146.4 |
| 32.5° | 1043.9 | 1049.7 | 1072.9 | 1103.8 | 1115.4 |
| 35°   | 993.7  | 999.5  | 1032.3 | 1069.0 | 1086.4 |
| 37.5° | 939.5  | 947.3  | 987.9  | 1032.3 | 1053.6 |
| 40°   | 889.3  | 898.9  | 943.4  | 999.5  | 1024.6 |
| 42.5° | 835.1  | 844.8  | 898.9  | 962.7  | 993.7  |
| 45°   | 775.2  | 790.7  | 850.6  | 927.9  | 960.8  |
| 47.5° | 719.1  | 738.5  | 806.1  | 891.2  | 929.9  |
| 50°   | 661.1  | 688.2  | 759.7  | 852.5  | 889.3  |
| 52.5° | 609.0  | 634.1  | 713.3  | 808.1  | 846.7  |
| 55°   | 549.0  | 587.7  | 666.9  | 759.7  | 802.3  |
| 57.5° | 496.8  | 531.6  | 614.8  | 713.3  | 750.1  |
| 60°   | 440.8  | 479.4  | 566.4  | 661.1  | 705.6  |
| 62.5° | 392.4  | 429.2  | 518.1  | 609.0  | 645.7  |
| 65°   | 340.2  | 382.8  | 464.0  | 552.9  | 585.8  |
| 67.5° | 301.6  | 330.6  | 415.6  | 498.8  | 527.8  |
| 70°   | 251.3  | 286.1  | 363.4  | 438.8  | 462.0  |
| 72.5° | 206.9  | 243.6  | 315.1  | 380.8  | 402.1  |
| 75°   | 170.1  | 203.0  | 264.8  | 320.9  | 338.3  |
| 77.5° | 137.3  | 164.3  | 218.4  | 257.1  | 261.0  |
| 80°   | 100.5  | 123.7  | 166.3  | 175.9  | 170.1  |
| 82.5° | 71.5   | 87.0   | 110.2  | 116.0  | 110.2  |
| 85°   | 44.5   | 54.1   | 65.7   | 69.6   | 63.8   |
| 87.5° | 21.3   | 21.3   | 27.1   | 27.1   | 23.2   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)