

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: P220054

Luminaire Tested: **Z3-WN-3L40-LD5-UNV-14**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P220054
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35876)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: Z3-WN-3L40-LD5-UNV-14
Description: CLASS Z3 1X4 RECESSED LED LUMIANIRE
WITH A CLEAR SMOOTH ROUND LENS & NANO-PRISM INLAY
Light Source: (168) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4036.6 lumens
Efficiency: N/A
Efficacy: 121.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.23 / 1.33
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

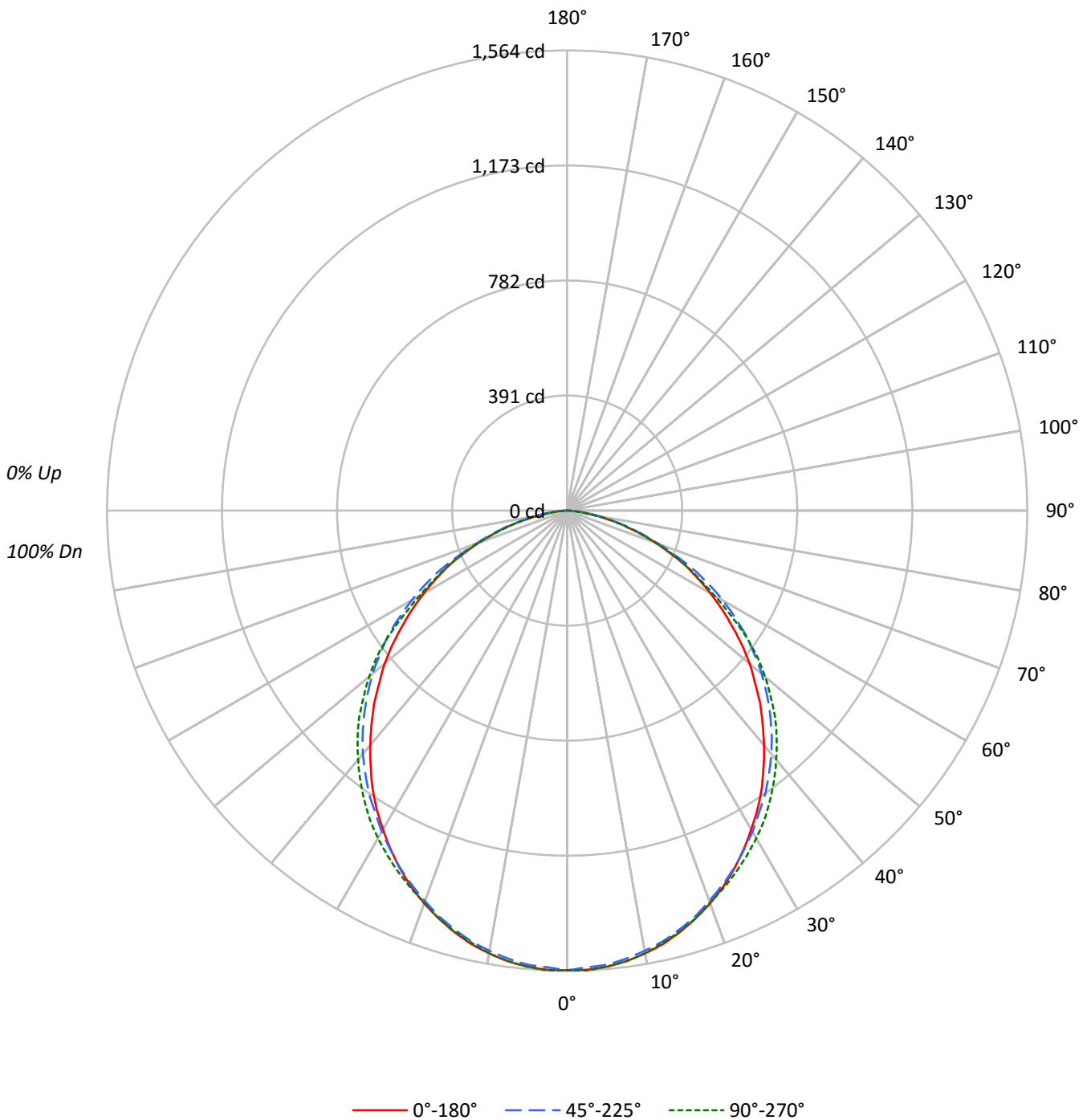
Input Watts (W): 33.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P220054

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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 | 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 | | | | | 100 | | | |
| 1 | 109 | 105 | 101 | 97 | 107 | 103 | 99 | 96 | 98 | 95 | 93 | 95 | 92 | 90 | 91 | 89 | 87 | 85 | | | | | 85 | | | |
| 2 | 100 | 92 | 85 | 80 | 97 | 90 | 84 | 79 | 87 | 81 | 77 | 83 | 79 | 75 | 80 | 77 | 74 | 72 | | | | | 72 | | | |
| 3 | 91 | 81 | 73 | 67 | 89 | 79 | 72 | 66 | 77 | 70 | 65 | 74 | 68 | 64 | 71 | 67 | 63 | 61 | | | | | 61 | | | |
| 4 | 84 | 72 | 63 | 57 | 81 | 71 | 63 | 57 | 68 | 61 | 56 | 66 | 60 | 55 | 64 | 59 | 54 | 52 | | | | | 52 | | | |
| 5 | 77 | 64 | 56 | 49 | 75 | 63 | 55 | 49 | 61 | 54 | 48 | 59 | 53 | 48 | 57 | 52 | 47 | 45 | | | | | 45 | | | |
| 6 | 71 | 58 | 49 | 43 | 69 | 57 | 49 | 43 | 55 | 48 | 42 | 54 | 47 | 42 | 52 | 46 | 42 | 40 | | | | | 40 | | | |
| 7 | 66 | 53 | 44 | 38 | 64 | 52 | 44 | 38 | 50 | 43 | 38 | 49 | 42 | 37 | 48 | 42 | 37 | 35 | | | | | 35 | | | |
| 8 | 62 | 48 | 40 | 34 | 60 | 48 | 40 | 34 | 46 | 39 | 34 | 45 | 38 | 34 | 44 | 38 | 33 | 31 | | | | | 31 | | | |
| 9 | 58 | 44 | 36 | 31 | 56 | 44 | 36 | 31 | 43 | 35 | 30 | 41 | 35 | 30 | 40 | 35 | 30 | 28 | | | | | 28 | | | |
| 10 | 54 | 41 | 33 | 28 | 53 | 40 | 33 | 28 | 39 | 32 | 28 | 38 | 32 | 28 | 38 | 32 | 27 | 26 | | | | | 26 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 4204 | 4204 | 4204 |
| 5° | 4202 | 4185 | 4202 |
| 10° | 4175 | 4151 | 4175 |
| 15° | 4131 | 4107 | 4125 |
| 20° | 4068 | 4044 | 4062 |
| 25° | 3989 | 3983 | 4027 |
| 30° | 3888 | 3915 | 3995 |
| 35° | 3787 | 3858 | 3949 |
| 40° | 3658 | 3794 | 3884 |
| 45° | 3531 | 3710 | 3808 |
| 50° | 3391 | 3615 | 3678 |
| 55° | 3207 | 3489 | 3468 |
| 60° | 3033 | 3287 | 3114 |
| 65° | 2838 | 3016 | 2852 |
| 70° | 2512 | 2596 | 2529 |
| 75° | 2117 | 2228 | 2117 |
| 80° | 1627 | 1694 | 1528 |
| 85° | 991 | 991 | 861 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 147.4 | 3.7 |
| 10°-20° | 417.1 | 10.3 |
| 20°-30° | 620.6 | 15.4 |
| 30°-40° | 735.1 | 18.2 |
| 40°-50° | 746.0 | 18.5 |
| 50°-60° | 649.2 | 16.1 |
| 60°-70° | 453.7 | 11.2 |
| 70°-80° | 224.2 | 5.6 |
| 80°-90° | 43.2 | 1.1 |
| 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° | 1185.1 | 29.4 |
| 0°-40° | 1920.2 | 47.6 |
| 0°-60° | 3315.5 | 82.1 |
| 0°-90° | 4036.6 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4036.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1562 | 1562 | 1562 | 1562 | 1562 | |
| 5° | 1556 | 1556 | 1549 | 1558 | 1556 | 148 |
| 15° | 1483 | 1483 | 1474 | 1483 | 1481 | 418 |
| 25° | 1344 | 1344 | 1341 | 1352 | 1356 | 618 |
| 35° | 1153 | 1155 | 1174 | 1198 | 1202 | 720 |
| 45° | 928 | 939 | 975 | 994 | 1001 | 714 |
| 55° | 684 | 714 | 744 | 746 | 739 | 613 |
| 65° | 446 | 465 | 474 | 452 | 448 | 437 |
| 75° | 204 | 219 | 214 | 204 | 204 | 217 |
| 85° | 32 | 36 | 32 | 30 | 28 | 43 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P220054

CATALOG NUMBER: Z3-WN-3L40-LD5-UNV-14

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1562.1 | 1562.1 | 1562.1 | 1562.1 | 1562.1 |
| 2.5° | 1562.1 | 1562.1 | 1553.6 | 1562.1 | 1564.3 |
| 5° | 1555.7 | 1555.7 | 1549.3 | 1557.9 | 1555.7 |
| 7.5° | 1545.0 | 1542.9 | 1536.4 | 1542.9 | 1545.0 |
| 10° | 1527.9 | 1525.7 | 1519.3 | 1527.9 | 1527.9 |
| 12.5° | 1508.6 | 1506.4 | 1500.0 | 1506.4 | 1504.3 |
| 15° | 1482.9 | 1482.9 | 1474.3 | 1482.9 | 1480.7 |
| 17.5° | 1452.9 | 1452.9 | 1446.4 | 1450.7 | 1452.9 |
| 20° | 1420.7 | 1420.7 | 1412.1 | 1422.9 | 1418.6 |
| 22.5° | 1384.3 | 1384.3 | 1377.9 | 1388.6 | 1388.6 |
| 25° | 1343.6 | 1343.6 | 1341.4 | 1352.1 | 1356.4 |
| 27.5° | 1298.6 | 1300.7 | 1300.7 | 1317.9 | 1322.1 |
| 30° | 1251.4 | 1253.6 | 1260.0 | 1281.4 | 1285.7 |
| 32.5° | 1204.3 | 1206.4 | 1215.0 | 1240.7 | 1247.1 |
| 35° | 1152.9 | 1155.0 | 1174.3 | 1197.9 | 1202.1 |
| 37.5° | 1097.1 | 1103.6 | 1127.1 | 1150.7 | 1155.0 |
| 40° | 1041.4 | 1047.9 | 1080.0 | 1099.3 | 1105.7 |
| 42.5° | 983.6 | 996.4 | 1028.6 | 1047.9 | 1054.3 |
| 45° | 927.9 | 938.6 | 975.0 | 994.3 | 1000.7 |
| 47.5° | 865.7 | 880.7 | 919.3 | 938.6 | 938.6 |
| 50° | 810.0 | 827.1 | 863.6 | 878.6 | 878.6 |
| 52.5° | 747.9 | 771.4 | 801.4 | 818.6 | 814.3 |
| 55° | 683.6 | 713.6 | 743.6 | 745.7 | 739.3 |
| 57.5° | 623.6 | 651.4 | 677.1 | 675.0 | 655.7 |
| 60° | 563.6 | 587.1 | 610.7 | 593.6 | 578.6 |
| 62.5° | 501.4 | 527.1 | 544.3 | 516.4 | 510.0 |
| 65° | 445.7 | 465.0 | 473.6 | 452.1 | 447.9 |
| 67.5° | 379.3 | 402.9 | 396.4 | 390.0 | 385.7 |
| 70° | 319.3 | 338.6 | 330.0 | 323.6 | 321.4 |
| 72.5° | 259.3 | 278.6 | 270.0 | 265.7 | 259.3 |
| 75° | 203.6 | 218.6 | 214.3 | 203.6 | 203.6 |
| 77.5° | 150.0 | 162.9 | 156.4 | 152.1 | 150.0 |
| 80° | 105.0 | 111.4 | 109.3 | 102.9 | 98.6 |
| 82.5° | 62.1 | 70.7 | 66.4 | 62.1 | 60.0 |
| 85° | 32.1 | 36.4 | 32.1 | 30.0 | 27.9 |
| 87.5° | 10.7 | 10.7 | 8.6 | 6.4 | 6.4 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)