

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: P220246

Luminaire Tested: **R3-WN-3L40-LD5-UNV-24**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P220246
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35864)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: R3-WN-3L40-LD5-UNV-24
Description: CLASS R3 2X4 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: 5187.7 lumens
Efficiency: N/A
Efficacy: 128.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.36 / 1.43
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

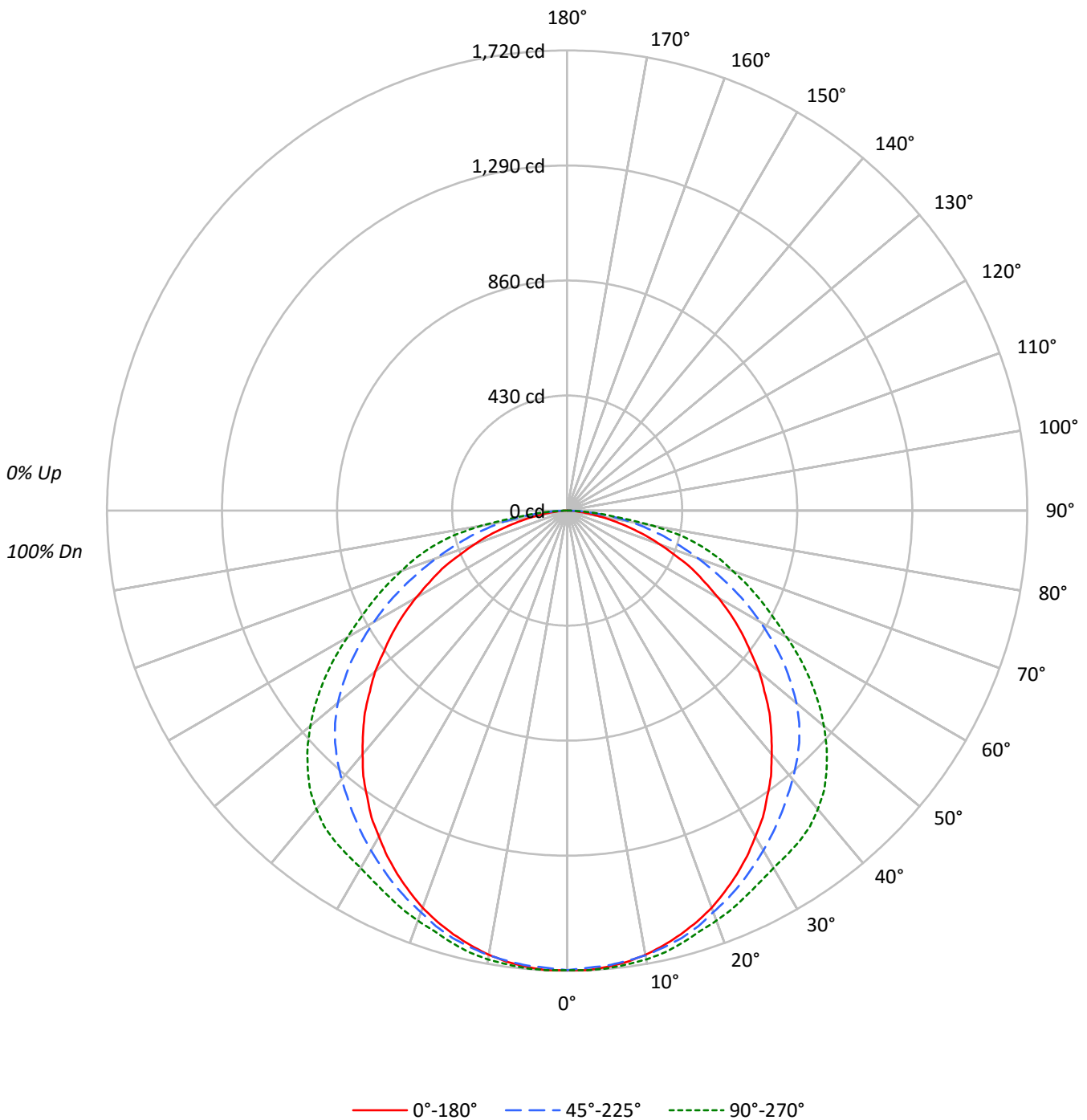
Input Watts (W): 40.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 104 | 99 | 95 | 106 | 101 | 97 | 94 | 97 | 94 | 91 | 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 | 69 |
| 3 | 89 | 79 | 70 | 64 | 87 | 77 | 69 | 63 | 74 | 67 | 62 | 71 | 66 | 61 | 69 | 64 | 60 | 57 |
| 4 | 82 | 69 | 60 | 54 | 79 | 68 | 60 | 53 | 66 | 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 | 46 | 40 | 67 | 55 | 46 | 40 | 53 | 45 | 39 | 51 | 44 | 39 | 49 | 43 | 39 | 37 |
| 7 | 64 | 50 | 41 | 35 | 62 | 49 | 41 | 35 | 48 | 40 | 35 | 46 | 40 | 34 | 45 | 39 | 34 | 32 |
| 8 | 60 | 46 | 37 | 31 | 58 | 45 | 37 | 31 | 44 | 36 | 31 | 43 | 36 | 31 | 41 | 35 | 31 | 29 |
| 9 | 56 | 42 | 34 | 28 | 54 | 41 | 33 | 28 | 40 | 33 | 28 | 39 | 32 | 28 | 38 | 32 | 27 | 26 |
| 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° | 2311 | 2311 | 2311 |
| 5° | 2313 | 2306 | 2320 |
| 10° | 2303 | 2306 | 2328 |
| 15° | 2284 | 2304 | 2329 |
| 20° | 2262 | 2288 | 2336 |
| 25° | 2227 | 2283 | 2356 |
| 30° | 2186 | 2279 | 2397 |
| 35° | 2142 | 2284 | 2482 |
| 40° | 2089 | 2303 | 2561 |
| 45° | 2034 | 2334 | 2610 |
| 50° | 1961 | 2342 | 2623 |
| 55° | 1870 | 2313 | 2608 |
| 60° | 1755 | 2245 | 2554 |
| 65° | 1643 | 2155 | 2549 |
| 70° | 1453 | 2044 | 2593 |
| 75° | 1222 | 1957 | 2719 |
| 80° | 931 | 1862 | 2506 |
| 85° | 627 | 1365 | 1664 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 162.8 | 3.1 |
| 10°-20° | 467.3 | 9.0 |
| 20°-30° | 711.4 | 13.7 |
| 30°-40° | 876.7 | 16.9 |
| 40°-50° | 941.1 | 18.1 |
| 50°-60° | 864.0 | 16.7 |
| 60°-70° | 660.9 | 12.7 |
| 70°-80° | 400.7 | 7.7 |
| 80°-90° | 102.9 | 2.0 |
| 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° | 1341.5 | 25.9 |
| 0°-40° | 2218.2 | 42.8 |
| 0°-60° | 4023.3 | 77.6 |
| 0°-90° | 5187.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 5187.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1718 | 1718 | 1718 | 1718 | 1718 | |
| 5° | 1712 | 1711 | 1707 | 1716 | 1718 | 163 |
| 15° | 1640 | 1645 | 1654 | 1670 | 1672 | 463 |
| 25° | 1500 | 1514 | 1538 | 1576 | 1587 | 691 |
| 35° | 1304 | 1325 | 1391 | 1476 | 1511 | 816 |
| 45° | 1069 | 1103 | 1226 | 1338 | 1371 | 822 |
| 55° | 797 | 850 | 986 | 1082 | 1112 | 711 |
| 65° | 516 | 567 | 677 | 767 | 801 | 506 |
| 75° | 235 | 286 | 376 | 481 | 523 | 253 |
| 85° | 41 | 69 | 88 | 101 | 108 | 52 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P220246

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1717.8 | 1717.8 | 1717.8 | 1717.8 | 1717.8 |
| 2.5° | 1719.5 | 1717.8 | 1710.7 | 1717.8 | 1719.5 |
| 5° | 1712.5 | 1710.7 | 1707.1 | 1716.0 | 1717.8 |
| 7.5° | 1701.8 | 1701.8 | 1698.3 | 1710.7 | 1710.7 |
| 10° | 1685.9 | 1685.9 | 1687.7 | 1700.1 | 1703.6 |
| 12.5° | 1664.7 | 1668.3 | 1671.8 | 1689.5 | 1691.2 |
| 15° | 1640.0 | 1645.3 | 1654.1 | 1670.0 | 1671.8 |
| 17.5° | 1611.7 | 1618.8 | 1629.4 | 1645.3 | 1648.8 |
| 20° | 1579.9 | 1587.0 | 1597.6 | 1624.1 | 1631.2 |
| 22.5° | 1541.0 | 1555.2 | 1569.3 | 1601.1 | 1611.7 |
| 25° | 1500.4 | 1514.5 | 1537.5 | 1576.4 | 1587.0 |
| 27.5° | 1456.2 | 1470.3 | 1502.1 | 1548.1 | 1564.0 |
| 30° | 1406.7 | 1424.4 | 1466.8 | 1519.8 | 1542.8 |
| 32.5° | 1360.8 | 1376.7 | 1429.7 | 1496.8 | 1526.9 |
| 35° | 1304.2 | 1325.4 | 1390.8 | 1475.6 | 1511.0 |
| 37.5° | 1251.2 | 1272.4 | 1350.2 | 1454.4 | 1489.8 |
| 40° | 1189.3 | 1217.6 | 1311.3 | 1424.4 | 1458.0 |
| 42.5° | 1129.3 | 1161.1 | 1270.6 | 1385.5 | 1420.9 |
| 45° | 1069.2 | 1102.8 | 1226.5 | 1337.8 | 1371.4 |
| 47.5° | 1000.3 | 1040.9 | 1177.0 | 1286.5 | 1316.6 |
| 50° | 936.6 | 980.8 | 1118.7 | 1224.7 | 1253.0 |
| 52.5° | 862.4 | 917.2 | 1053.3 | 1159.3 | 1185.8 |
| 55° | 797.0 | 850.0 | 986.1 | 1081.5 | 1111.6 |
| 57.5° | 726.3 | 784.7 | 911.9 | 1003.8 | 1033.8 |
| 60° | 652.1 | 712.2 | 834.1 | 926.0 | 949.0 |
| 62.5° | 579.7 | 648.6 | 758.1 | 843.0 | 871.2 |
| 65° | 516.0 | 567.3 | 676.9 | 767.0 | 800.6 |
| 67.5° | 438.3 | 494.8 | 595.6 | 689.2 | 729.9 |
| 70° | 369.4 | 424.1 | 519.6 | 618.5 | 659.2 |
| 72.5° | 304.0 | 351.7 | 445.3 | 549.6 | 595.6 |
| 75° | 235.0 | 286.3 | 376.4 | 480.7 | 523.1 |
| 77.5° | 176.7 | 224.4 | 305.7 | 410.0 | 440.0 |
| 80° | 120.2 | 166.1 | 240.3 | 312.8 | 323.4 |
| 82.5° | 76.0 | 114.9 | 164.4 | 185.6 | 185.6 |
| 85° | 40.6 | 68.9 | 88.4 | 100.7 | 107.8 |
| 87.5° | 15.9 | 23.0 | 33.6 | 33.6 | 35.3 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)