

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: P384708

Luminaire Tested: **24ID-70-L840-CFD3**

Issue Date: 2/25/2020

Test Information

Test Method: LM-79-08
Report Number: P384708
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1911-572-69)
Test Lab: INNOVATION CENTER (G2)
Issue Date: 2/25/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: 24ID-70-L840-CFD3
Description: 2X4 IN DEPTH TROFFER WITH 3INCH DROP CUBE LENS

Light Source: -
Ballast/Driver: -

Summary

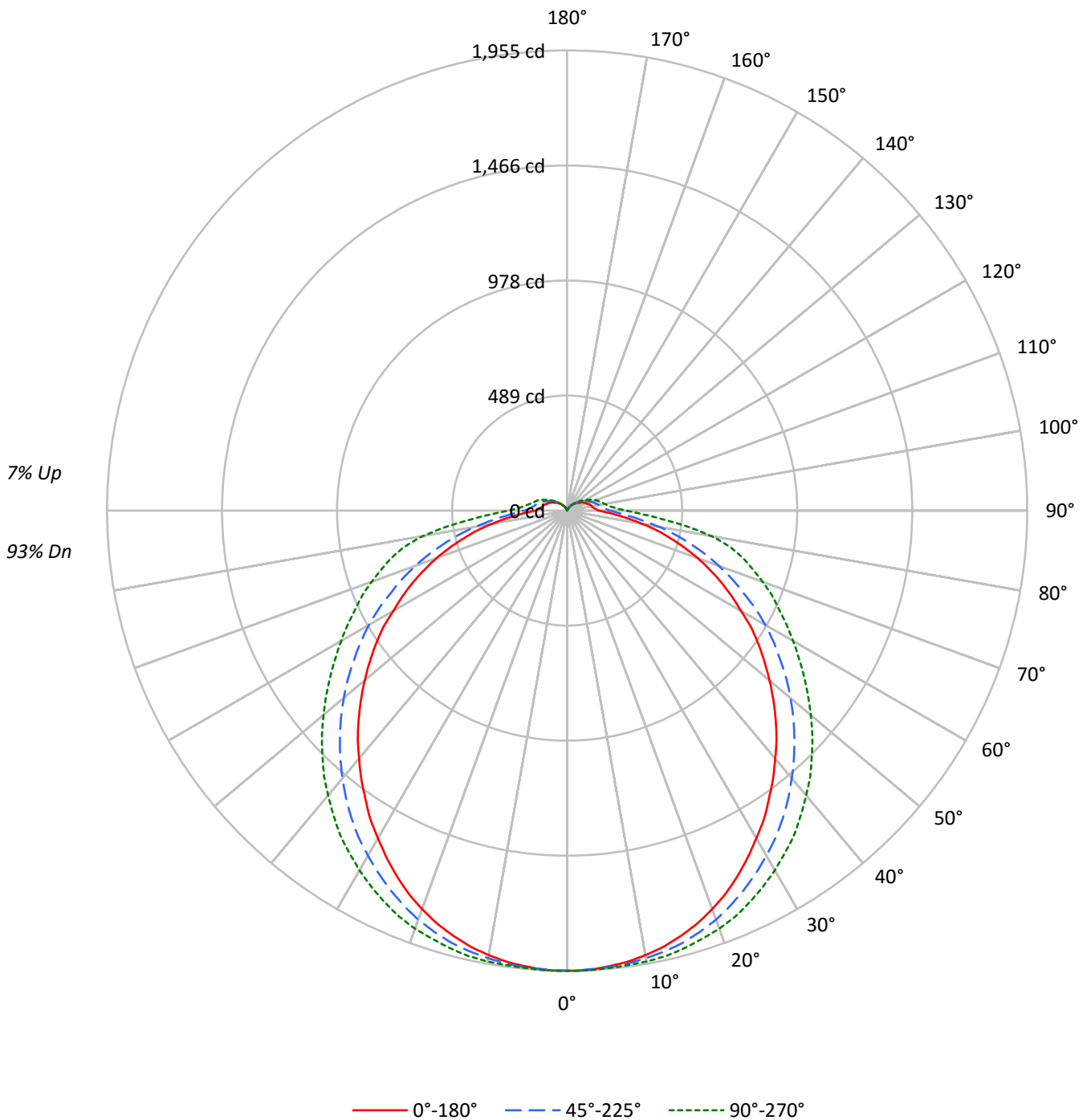
Lumens per Lamp: N/A
Luminaire Lumens: 6842.1 lumens
Efficiency: N/A
Efficacy: 104.1 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.34 / 1.41
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.25')
CIE Type: Direct

Input Watts (W): 65.7
Input Voltage (V): NR
Input Current (A_{in}): 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 | 117 | 117 | 117 | 117 | 114 | 114 | 114 | 114 | 107 | 107 | 107 | 101 | 101 | 101 | 95 | 95 | 95 | 93 |
| 1 | 105 | 100 | 95 | 91 | 102 | 97 | 93 | 89 | 91 | 88 | 84 | 86 | 83 | 80 | 81 | 79 | 77 | 74 |
| 2 | 95 | 86 | 79 | 73 | 92 | 84 | 77 | 71 | 79 | 73 | 68 | 74 | 70 | 66 | 70 | 67 | 63 | 60 |
| 3 | 86 | 75 | 66 | 60 | 83 | 73 | 65 | 59 | 69 | 62 | 57 | 65 | 59 | 55 | 62 | 57 | 53 | 50 |
| 4 | 79 | 66 | 57 | 50 | 76 | 64 | 56 | 49 | 61 | 54 | 48 | 58 | 51 | 46 | 55 | 49 | 45 | 42 |
| 5 | 72 | 59 | 50 | 43 | 70 | 57 | 49 | 42 | 54 | 47 | 41 | 52 | 45 | 40 | 49 | 43 | 39 | 36 |
| 6 | 67 | 53 | 44 | 37 | 64 | 52 | 43 | 37 | 49 | 41 | 36 | 47 | 40 | 35 | 44 | 39 | 34 | 32 |
| 7 | 62 | 48 | 39 | 33 | 60 | 47 | 38 | 32 | 44 | 37 | 31 | 42 | 36 | 31 | 40 | 35 | 30 | 28 |
| 8 | 57 | 44 | 35 | 29 | 55 | 43 | 34 | 29 | 41 | 33 | 28 | 39 | 32 | 27 | 37 | 31 | 27 | 25 |
| 9 | 54 | 40 | 32 | 26 | 52 | 39 | 31 | 26 | 37 | 30 | 25 | 36 | 29 | 25 | 34 | 28 | 24 | 22 |
| 10 | 50 | 37 | 29 | 23 | 49 | 36 | 28 | 23 | 35 | 28 | 23 | 33 | 27 | 22 | 32 | 26 | 22 | 20 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 2631 | 2631 | 2631 |
| 5° | 2613 | 2601 | 2608 |
| 10° | 2591 | 2578 | 2600 |
| 15° | 2562 | 2557 | 2594 |
| 20° | 2522 | 2526 | 2589 |
| 25° | 2471 | 2486 | 2575 |
| 30° | 2410 | 2443 | 2556 |
| 35° | 2352 | 2400 | 2541 |
| 40° | 2295 | 2346 | 2512 |
| 45° | 2243 | 2293 | 2488 |
| 50° | 2187 | 2239 | 2462 |
| 55° | 2138 | 2181 | 2445 |
| 60° | 2071 | 2128 | 2453 |
| 65° | 2031 | 2047 | 2493 |
| 70° | 1982 | 1978 | 2588 |
| 75° | 1913 | 1875 | 2734 |
| 80° | 1855 | 1751 | 2816 |
| 85° | 1874 | 1612 | 2537 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 185.4 | 2.7 |
| 10°-20° | 535.7 | 7.8 |
| 20°-30° | 818.5 | 12.0 |
| 30°-40° | 996.4 | 14.6 |
| 40°-50° | 1053.1 | 15.4 |
| 50°-60° | 994.1 | 14.5 |
| 60°-70° | 836.3 | 12.2 |
| 70°-80° | 603.0 | 8.8 |
| 80°-90° | 318.0 | 4.6 |
| 90°-100° | 170.2 | 2.5 |
| 100°-110° | 129.3 | 1.9 |
| 110°-120° | 93.8 | 1.4 |
| 120°-130° | 58.9 | 0.9 |
| 130°-140° | 31.8 | 0.5 |
| 140°-150° | 13.9 | 0.2 |
| 150°-160° | 3.7 | 0.1 |
| 160°-170° | 0.1 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 1539.6 | 22.5 |
| 0°-40° | 2536.0 | 37.1 |
| 0°-60° | 4583.2 | 67.0 |
| 0°-90° | 6340.4 | 92.7 |
| 90°-120° | 393.3 | 5.7 |
| 90°-150° | 497.8 | 7.3 |
| 90°-180° | 502.0 | 7.3 |
| 0°-180° | 6842.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1955 | 1955 | 1955 | 1955 | 1955 | |
| 5° | 1945 | 1945 | 1948 | 1948 | 1952 | 185 |
| 15° | 1870 | 1877 | 1901 | 1914 | 1924 | 527 |
| 25° | 1713 | 1733 | 1778 | 1819 | 1836 | 789 |
| 35° | 1495 | 1529 | 1597 | 1658 | 1682 | 936 |
| 45° | 1252 | 1290 | 1365 | 1440 | 1471 | 966 |
| 55° | 993 | 1037 | 1106 | 1188 | 1228 | 887 |
| 65° | 723 | 764 | 826 | 928 | 993 | 715 |
| 75° | 454 | 491 | 539 | 645 | 771 | 482 |
| 85° | 208 | 235 | 263 | 328 | 399 | 195 |
| 90° | 133 | 157 | 181 | 215 | 246 | 76 |
| 95° | 116 | 133 | 154 | 174 | 188 | 92 |
| 105° | 99 | 109 | 123 | 136 | 143 | 103 |
| 115° | 78 | 85 | 96 | 102 | 109 | 79 |
| 125° | 58 | 58 | 68 | 68 | 72 | 52 |
| 135° | 41 | 38 | 41 | 41 | 44 | 31 |
| 145° | 24 | 20 | 20 | 20 | 24 | 15 |
| 155° | 10 | 10 | 3 | 7 | 10 | 5 |
| 165° | 0 | 0 | 0 | 0 | 0 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | 0 |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1955.2 | 1955.2 | 1955.2 | 1955.2 | 1955.2 |
| 2.5° | 1955.2 | 1951.8 | 1951.8 | 1951.8 | 1955.2 |
| 5° | 1945.0 | 1945.0 | 1948.4 | 1948.4 | 1951.8 |
| 7.5° | 1934.8 | 1934.8 | 1941.6 | 1945.0 | 1948.4 |
| 10° | 1917.7 | 1921.1 | 1931.3 | 1938.2 | 1945.0 |
| 12.5° | 1897.2 | 1900.6 | 1917.7 | 1931.3 | 1938.2 |
| 15° | 1869.9 | 1876.7 | 1900.6 | 1914.3 | 1924.5 |
| 17.5° | 1839.2 | 1849.4 | 1876.7 | 1897.2 | 1907.5 |
| 20° | 1801.7 | 1815.3 | 1849.4 | 1876.7 | 1890.4 |
| 22.5° | 1760.7 | 1774.4 | 1815.3 | 1849.4 | 1866.5 |
| 25° | 1713.0 | 1733.4 | 1777.8 | 1818.7 | 1835.8 |
| 27.5° | 1661.8 | 1685.7 | 1736.8 | 1784.6 | 1801.7 |
| 30° | 1607.2 | 1634.5 | 1692.5 | 1743.7 | 1764.1 |
| 32.5° | 1556.0 | 1583.3 | 1648.1 | 1702.7 | 1723.2 |
| 35° | 1494.6 | 1528.7 | 1596.9 | 1658.4 | 1682.2 |
| 37.5° | 1436.6 | 1470.7 | 1542.3 | 1607.2 | 1631.1 |
| 40° | 1375.1 | 1409.3 | 1484.3 | 1556.0 | 1579.9 |
| 42.5° | 1317.1 | 1351.3 | 1426.3 | 1501.4 | 1528.7 |
| 45° | 1252.3 | 1289.8 | 1364.9 | 1440.0 | 1470.7 |
| 47.5° | 1187.5 | 1225.0 | 1303.5 | 1382.0 | 1412.7 |
| 50° | 1122.6 | 1163.6 | 1238.7 | 1317.1 | 1351.3 |
| 52.5° | 1057.8 | 1098.8 | 1173.8 | 1255.7 | 1289.8 |
| 55° | 993.0 | 1037.3 | 1105.6 | 1187.5 | 1228.4 |
| 57.5° | 928.1 | 972.5 | 1040.7 | 1126.0 | 1167.0 |
| 60° | 853.1 | 904.3 | 972.5 | 1061.2 | 1109.0 |
| 62.5° | 788.2 | 832.6 | 900.8 | 993.0 | 1051.0 |
| 65° | 723.4 | 764.3 | 825.8 | 928.1 | 993.0 |
| 67.5° | 655.2 | 699.5 | 757.5 | 853.1 | 941.8 |
| 70° | 590.3 | 627.9 | 685.9 | 784.8 | 883.8 |
| 72.5° | 522.1 | 559.6 | 614.2 | 716.6 | 825.8 |
| 75° | 453.8 | 491.4 | 539.1 | 644.9 | 771.2 |
| 77.5° | 392.4 | 423.1 | 467.5 | 569.8 | 706.3 |
| 80° | 324.2 | 354.9 | 395.8 | 488.0 | 621.0 |
| 82.5° | 262.7 | 290.0 | 324.2 | 406.1 | 511.8 |
| 85° | 208.1 | 235.4 | 262.7 | 327.6 | 399.2 |
| 87.5° | 167.2 | 187.7 | 215.0 | 262.7 | 310.5 |
| 90° | 133.1 | 157.0 | 180.9 | 215.0 | 245.7 |
| 92.5° | 122.8 | 143.3 | 163.8 | 191.1 | 211.6 |
| 95° | 116.0 | 133.1 | 153.6 | 174.0 | 187.7 |
| 97.5° | 109.2 | 126.3 | 143.3 | 163.8 | 174.0 |
| 100° | 105.8 | 119.4 | 136.5 | 153.6 | 160.4 |
| 102.5° | 102.4 | 112.6 | 129.7 | 143.3 | 153.6 |
| 105° | 99.0 | 109.2 | 122.8 | 136.5 | 143.3 |
| 107.5° | 92.1 | 102.4 | 116.0 | 129.7 | 136.5 |
| 110° | 88.7 | 95.5 | 109.2 | 119.4 | 129.7 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|------|-------|-------|-------|-------|
| 112.5° | 85.3 | 92.1 | 102.4 | 112.6 | 119.4 |
| 115° | 78.5 | 85.3 | 95.5 | 102.4 | 109.2 |
| 117.5° | 75.1 | 78.5 | 88.7 | 92.1 | 99.0 |
| 120° | 68.2 | 71.7 | 81.9 | 85.3 | 88.7 |
| 122.5° | 61.4 | 64.8 | 75.1 | 75.1 | 81.9 |
| 125° | 58.0 | 58.0 | 68.2 | 68.2 | 71.7 |
| 127.5° | 54.6 | 54.6 | 61.4 | 61.4 | 64.8 |
| 130° | 47.8 | 47.8 | 54.6 | 54.6 | 54.6 |
| 132.5° | 44.4 | 40.9 | 47.8 | 47.8 | 51.2 |
| 135° | 40.9 | 37.5 | 40.9 | 40.9 | 44.4 |
| 137.5° | 34.1 | 34.1 | 37.5 | 34.1 | 37.5 |
| 140° | 30.7 | 27.3 | 30.7 | 30.7 | 34.1 |
| 142.5° | 27.3 | 23.9 | 27.3 | 23.9 | 27.3 |
| 145° | 23.9 | 20.5 | 20.5 | 20.5 | 23.9 |
| 147.5° | 20.5 | 17.1 | 17.1 | 17.1 | 20.5 |
| 150° | 17.1 | 13.6 | 13.6 | 13.6 | 17.1 |
| 152.5° | 13.6 | 10.2 | 6.8 | 10.2 | 13.6 |
| 155° | 10.2 | 10.2 | 3.4 | 6.8 | 10.2 |
| 157.5° | 6.8 | 6.8 | 0.0 | 3.4 | 6.8 |
| 160° | 3.4 | 3.4 | 0.0 | 3.4 | 3.4 |
| 162.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 165° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 167.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 170° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 172.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 175° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 180° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)