

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: P383856

Luminaire Tested: **24ID-55-L840-CFR1**

Issue Date: 2/25/2020

Test Information

Test Method: LM-79-08
Report Number: P383856
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1911-572-65)
Test Lab: INNOVATION CENTER (G2)
Issue Date: 2/25/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: 24ID-55-L840-CFR1
Description: 2X4 IN DEPTH TROFFER WITH 1INCH RECESSED COFFER LENS

Light Source: -
Ballast/Driver: -

Summary

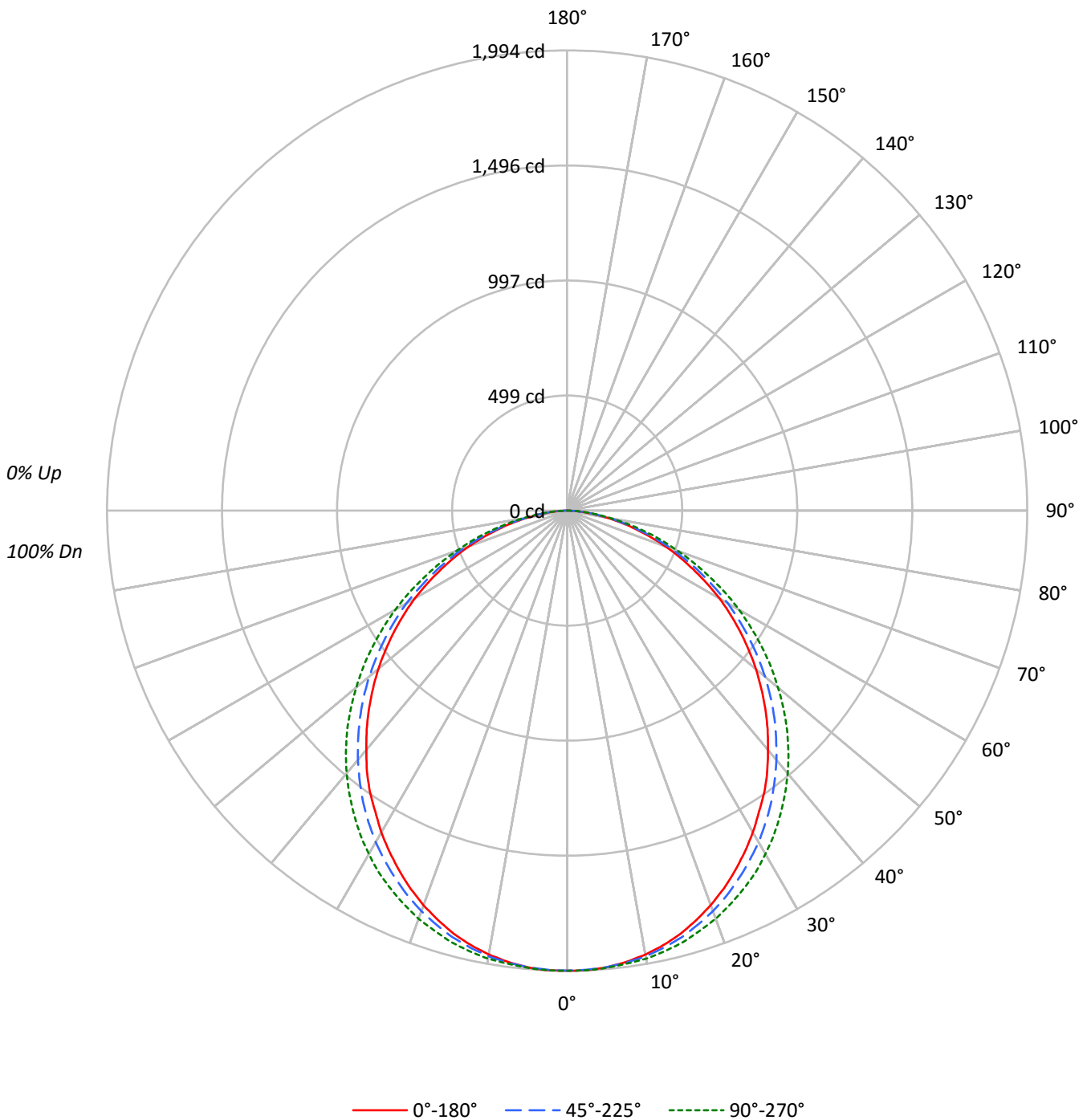
Lumens per Lamp: N/A
Luminaire Lumens: 5415.2 lumens
Efficiency: N/A
Efficacy: 107.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 50.2
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



TEST NUMBER: P383856
CATALOG NUMBER: 24ID-55-L840-CFR1

Luminous Intensity Polar Plot





TEST NUMBER: P383856

CATALOG NUMBER: 24ID-55-L840-CFR1

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 | 95 | 98 | 95 | 92 | 94 | 91 | 89 | 90 | 88 | 86 | 84 |
| 2 | 99 | 91 | 84 | 79 | 97 | 89 | 83 | 78 | 86 | 81 | 76 | 82 | 78 | 74 | 79 | 76 | 73 | 71 |
| 3 | 91 | 80 | 72 | 66 | 88 | 79 | 71 | 65 | 76 | 69 | 64 | 73 | 67 | 63 | 70 | 66 | 62 | 60 |
| 4 | 83 | 71 | 62 | 56 | 81 | 70 | 62 | 55 | 67 | 60 | 55 | 65 | 59 | 54 | 63 | 58 | 53 | 51 |
| 5 | 76 | 64 | 55 | 48 | 74 | 63 | 54 | 48 | 60 | 53 | 47 | 58 | 52 | 47 | 57 | 51 | 46 | 44 |
| 6 | 71 | 57 | 48 | 42 | 69 | 56 | 48 | 42 | 55 | 47 | 42 | 53 | 46 | 41 | 51 | 45 | 41 | 39 |
| 7 | 65 | 52 | 43 | 37 | 64 | 51 | 43 | 37 | 50 | 42 | 37 | 48 | 42 | 37 | 47 | 41 | 36 | 34 |
| 8 | 61 | 47 | 39 | 33 | 59 | 47 | 39 | 33 | 45 | 38 | 33 | 44 | 38 | 33 | 43 | 37 | 32 | 31 |
| 9 | 57 | 44 | 35 | 30 | 56 | 43 | 35 | 30 | 42 | 35 | 30 | 41 | 34 | 30 | 40 | 34 | 29 | 28 |
| 10 | 53 | 40 | 32 | 27 | 52 | 40 | 32 | 27 | 39 | 32 | 27 | 38 | 31 | 27 | 37 | 31 | 27 | 25 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 2683 | 2683 | 2683 |
| 5° | 2682 | 2682 | 2686 |
| 10° | 2668 | 2679 | 2694 |
| 15° | 2645 | 2667 | 2698 |
| 20° | 2605 | 2644 | 2695 |
| 25° | 2556 | 2612 | 2685 |
| 30° | 2501 | 2577 | 2670 |
| 35° | 2447 | 2532 | 2644 |
| 40° | 2378 | 2478 | 2612 |
| 45° | 2312 | 2415 | 2566 |
| 50° | 2235 | 2343 | 2497 |
| 55° | 2147 | 2255 | 2415 |
| 60° | 2052 | 2162 | 2316 |
| 65° | 1917 | 2029 | 2168 |
| 70° | 1779 | 1875 | 2004 |
| 75° | 1586 | 1671 | 1813 |
| 80° | 1330 | 1393 | 1519 |
| 85° | 1010 | 1010 | 1135 |



TEST NUMBER: P383856

CATALOG NUMBER: 24ID-55-L840-CFR1

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 188.7 | 3.5 |
| 10°-20° | 540.0 | 10.0 |
| 20°-30° | 811.9 | 15.0 |
| 30°-40° | 965.9 | 17.8 |
| 40°-50° | 982.8 | 18.1 |
| 50°-60° | 864.9 | 16.0 |
| 60°-70° | 634.5 | 11.7 |
| 70°-80° | 344.4 | 6.4 |
| 80°-90° | 82.2 | 1.5 |
| 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° | 1540.6 | 28.4 |
| 0°-40° | 2506.5 | 46.3 |
| 0°-60° | 4354.2 | 80.4 |
| 0°-90° | 5415.2 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 5415.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1994 | 1994 | 1994 | 1994 | 1994 | |
| 5° | 1986 | 1983 | 1986 | 1986 | 1988 | 189 |
| 15° | 1899 | 1901 | 1915 | 1926 | 1937 | 535 |
| 25° | 1722 | 1732 | 1760 | 1790 | 1809 | 793 |
| 35° | 1490 | 1501 | 1542 | 1588 | 1610 | 930 |
| 45° | 1215 | 1226 | 1269 | 1324 | 1348 | 937 |
| 55° | 915 | 929 | 962 | 1008 | 1030 | 819 |
| 65° | 602 | 613 | 637 | 665 | 681 | 598 |
| 75° | 305 | 310 | 321 | 338 | 349 | 324 |
| 85° | 65 | 65 | 65 | 71 | 74 | 79 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P383856

CATALOG NUMBER: 24ID-55-L840-CFR1

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1993.9 | 1993.9 | 1993.9 | 1993.9 | 1993.9 |
| 2.5° | 1993.9 | 1991.2 | 1991.2 | 1991.2 | 1993.9 |
| 5° | 1985.7 | 1983.0 | 1985.7 | 1985.7 | 1988.5 |
| 7.5° | 1972.1 | 1969.4 | 1974.9 | 1977.6 | 1980.3 |
| 10° | 1953.1 | 1953.1 | 1961.2 | 1966.7 | 1972.1 |
| 12.5° | 1928.5 | 1931.3 | 1939.4 | 1947.6 | 1955.8 |
| 15° | 1898.6 | 1901.3 | 1914.9 | 1925.8 | 1936.7 |
| 17.5° | 1860.4 | 1865.9 | 1882.2 | 1898.6 | 1909.5 |
| 20° | 1819.6 | 1827.8 | 1846.8 | 1868.6 | 1882.2 |
| 22.5° | 1773.3 | 1784.2 | 1806.0 | 1833.2 | 1846.8 |
| 25° | 1721.5 | 1732.4 | 1759.7 | 1789.6 | 1808.7 |
| 27.5° | 1667.0 | 1680.7 | 1710.6 | 1746.0 | 1767.8 |
| 30° | 1609.8 | 1623.5 | 1658.9 | 1697.0 | 1718.8 |
| 32.5° | 1547.2 | 1563.5 | 1601.7 | 1645.3 | 1667.0 |
| 35° | 1490.0 | 1500.9 | 1541.7 | 1588.1 | 1609.8 |
| 37.5° | 1424.6 | 1438.2 | 1476.4 | 1525.4 | 1549.9 |
| 40° | 1353.8 | 1367.4 | 1411.0 | 1460.0 | 1487.3 |
| 42.5° | 1285.7 | 1296.6 | 1340.2 | 1394.7 | 1419.2 |
| 45° | 1214.9 | 1225.8 | 1269.4 | 1323.8 | 1348.3 |
| 47.5° | 1141.3 | 1154.9 | 1195.8 | 1247.6 | 1272.1 |
| 50° | 1067.8 | 1078.7 | 1119.5 | 1168.6 | 1193.1 |
| 52.5° | 991.5 | 1002.4 | 1040.5 | 1089.6 | 1114.1 |
| 55° | 915.2 | 928.9 | 961.5 | 1007.9 | 1029.6 |
| 57.5° | 839.0 | 852.6 | 882.6 | 926.1 | 945.2 |
| 60° | 762.7 | 773.6 | 803.6 | 841.7 | 860.8 |
| 62.5° | 681.0 | 689.2 | 719.1 | 757.3 | 773.6 |
| 65° | 602.0 | 612.9 | 637.4 | 664.6 | 681.0 |
| 67.5° | 528.4 | 533.9 | 555.7 | 585.6 | 596.5 |
| 70° | 452.2 | 457.6 | 476.7 | 501.2 | 509.4 |
| 72.5° | 375.9 | 384.1 | 397.7 | 419.5 | 430.4 |
| 75° | 305.1 | 310.5 | 321.4 | 337.8 | 348.7 |
| 77.5° | 237.0 | 239.7 | 247.9 | 261.5 | 269.7 |
| 80° | 171.6 | 174.3 | 179.8 | 190.7 | 196.1 |
| 82.5° | 114.4 | 117.1 | 119.9 | 125.3 | 130.7 |
| 85° | 65.4 | 65.4 | 65.4 | 70.8 | 73.5 |
| 87.5° | 24.5 | 21.8 | 21.8 | 21.8 | 21.8 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)