

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: P384354

Luminaire Tested: **24ID-50-L830-CFD2**

Issue Date: 2/25/2020

Test Information

Test Method: LM-79-08
Report Number: P384354
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1911-572-68)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 2/25/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: 24ID-50-L830-CFD2
Description: 2X4 IN DEPTH TROFFER WITH 2INCH DROP CUBE LENS

Light Source: -
Ballast/Driver: -

Summary

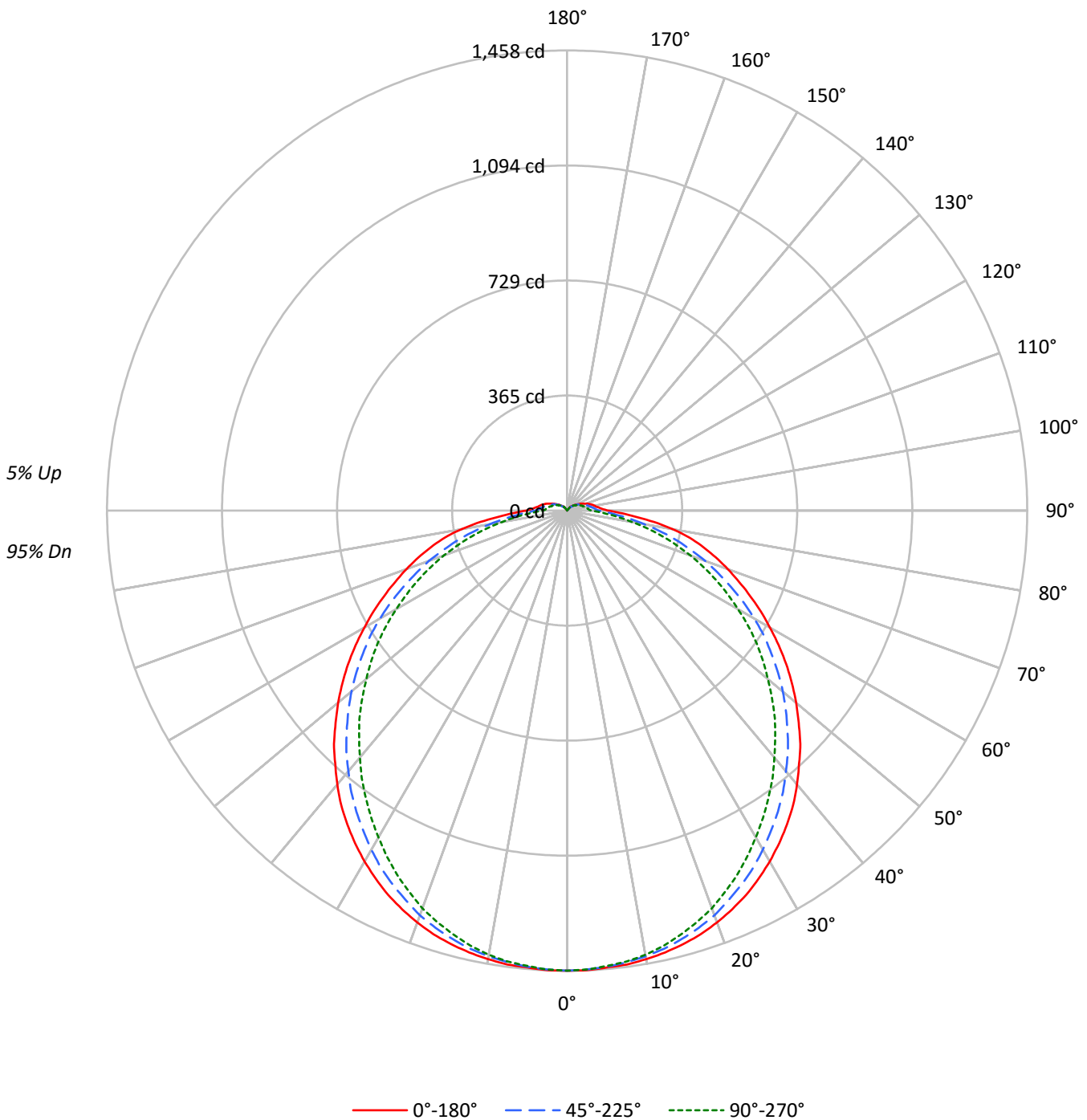
Lumens per Lamp: N/A
Luminaire Lumens: 4728.1 lumens
Efficiency: N/A
Efficacy: 107.2 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.22 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.17')
CIE Type: Direct

Input Watts (W): 44.1
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 | 118 | 118 | 118 | 118 | 114 | 114 | 114 | 114 | 108 | 108 | 108 | 102 | 102 | 102 | 97 | 97 | 97 | 95 |
| 1 | 106 | 101 | 96 | 92 | 103 | 98 | 94 | 90 | 93 | 90 | 86 | 88 | 85 | 83 | 84 | 81 | 79 | 77 |
| 2 | 96 | 87 | 80 | 74 | 93 | 85 | 78 | 73 | 81 | 75 | 70 | 77 | 72 | 68 | 73 | 69 | 66 | 63 |
| 3 | 87 | 76 | 68 | 61 | 84 | 74 | 67 | 60 | 71 | 64 | 58 | 67 | 62 | 57 | 64 | 59 | 55 | 53 |
| 4 | 80 | 68 | 58 | 51 | 77 | 66 | 57 | 51 | 63 | 55 | 50 | 60 | 53 | 48 | 57 | 51 | 47 | 45 |
| 5 | 73 | 60 | 51 | 44 | 71 | 59 | 50 | 44 | 56 | 48 | 43 | 53 | 47 | 42 | 51 | 45 | 41 | 38 |
| 6 | 68 | 54 | 45 | 38 | 65 | 53 | 44 | 38 | 50 | 43 | 37 | 48 | 42 | 36 | 46 | 40 | 36 | 33 |
| 7 | 63 | 49 | 40 | 34 | 61 | 48 | 39 | 33 | 46 | 38 | 33 | 44 | 37 | 32 | 42 | 36 | 32 | 30 |
| 8 | 58 | 45 | 36 | 30 | 56 | 44 | 35 | 30 | 42 | 35 | 29 | 40 | 34 | 29 | 39 | 33 | 28 | 26 |
| 9 | 54 | 41 | 33 | 27 | 53 | 40 | 32 | 27 | 39 | 31 | 26 | 37 | 31 | 26 | 36 | 30 | 25 | 24 |
| 10 | 51 | 38 | 30 | 24 | 50 | 37 | 29 | 24 | 36 | 29 | 24 | 34 | 28 | 23 | 33 | 27 | 23 | 21 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 1961 | 1961 | 1961 |
| 5° | 1955 | 1944 | 1942 |
| 10° | 1958 | 1929 | 1924 |
| 15° | 1959 | 1912 | 1895 |
| 20° | 1959 | 1893 | 1863 |
| 25° | 1956 | 1864 | 1821 |
| 30° | 1947 | 1834 | 1772 |
| 35° | 1938 | 1801 | 1725 |
| 40° | 1923 | 1763 | 1676 |
| 45° | 1909 | 1727 | 1634 |
| 50° | 1889 | 1690 | 1581 |
| 55° | 1875 | 1645 | 1536 |
| 60° | 1862 | 1598 | 1470 |
| 65° | 1869 | 1532 | 1405 |
| 70° | 1912 | 1472 | 1329 |
| 75° | 2007 | 1390 | 1230 |
| 80° | 2138 | 1280 | 1105 |
| 85° | 2245 | 1209 | 1018 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 138.0 | 2.9 |
| 10°-20° | 396.7 | 8.4 |
| 20°-30° | 602.6 | 12.7 |
| 30°-40° | 727.9 | 15.4 |
| 40°-50° | 761.8 | 16.1 |
| 50°-60° | 706.9 | 15.0 |
| 60°-70° | 572.6 | 12.1 |
| 70°-80° | 386.4 | 8.2 |
| 80°-90° | 186.7 | 3.9 |
| 90°-100° | 93.9 | 2.0 |
| 100°-110° | 68.3 | 1.4 |
| 110°-120° | 45.6 | 1.0 |
| 120°-130° | 26.4 | 0.6 |
| 130°-140° | 13.3 | 0.3 |
| 140°-150° | 1.0 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 1137.3 | 24.1 |
| 0°-40° | 1865.2 | 39.4 |
| 0°-60° | 3333.9 | 70.5 |
| 0°-90° | 4479.5 | 94.7 |
| 90°-120° | 207.8 | 4.4 |
| 90°-150° | 248.6 | 5.3 |
| 90°-180° | 249.0 | 5.3 |
| 0°-180° | 4728.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1458 | 1458 | 1458 | 1458 | 1458 | |
| 5° | 1453 | 1451 | 1451 | 1448 | 1448 | 138 |
| 15° | 1422 | 1415 | 1405 | 1396 | 1391 | 402 |
| 25° | 1343 | 1331 | 1308 | 1284 | 1274 | 619 |
| 35° | 1214 | 1198 | 1164 | 1128 | 1112 | 760 |
| 45° | 1045 | 1026 | 988 | 947 | 930 | 805 |
| 55° | 847 | 828 | 790 | 752 | 732 | 757 |
| 65° | 639 | 616 | 573 | 542 | 520 | 635 |
| 75° | 446 | 401 | 356 | 329 | 310 | 470 |
| 85° | 215 | 186 | 158 | 143 | 129 | 203 |
| 90° | 129 | 117 | 100 | 91 | 76 | 74 |
| 95° | 103 | 95 | 86 | 76 | 67 | 81 |
| 105° | 76 | 72 | 64 | 57 | 52 | 81 |
| 115° | 52 | 48 | 48 | 41 | 41 | 52 |
| 125° | 33 | 29 | 31 | 26 | 29 | 29 |
| 135° | 19 | 17 | 17 | 17 | 19 | 15 |
| 145° | 0 | 0 | 0 | 0 | 0 | 1 |
| 155° | 0 | 0 | 0 | 0 | 0 | 0 |
| 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° | 1457.8 | 1457.8 | 1457.8 | 1457.8 | 1457.8 |
| 2.5° | 1457.8 | 1455.4 | 1455.4 | 1455.4 | 1455.4 |
| 5° | 1453.0 | 1450.6 | 1450.6 | 1448.2 | 1448.2 |
| 7.5° | 1450.6 | 1445.8 | 1443.4 | 1441.1 | 1441.1 |
| 10° | 1443.4 | 1438.7 | 1433.9 | 1429.1 | 1429.1 |
| 12.5° | 1433.9 | 1429.1 | 1422.0 | 1412.4 | 1412.4 |
| 15° | 1422.0 | 1414.8 | 1405.3 | 1395.7 | 1391.0 |
| 17.5° | 1407.7 | 1400.5 | 1386.2 | 1371.9 | 1367.1 |
| 20° | 1388.6 | 1379.0 | 1364.7 | 1345.6 | 1340.9 |
| 22.5° | 1367.1 | 1357.6 | 1336.1 | 1317.0 | 1307.5 |
| 25° | 1343.2 | 1331.3 | 1307.5 | 1283.6 | 1274.1 |
| 27.5° | 1314.6 | 1302.7 | 1276.4 | 1247.8 | 1235.9 |
| 30° | 1283.6 | 1269.3 | 1240.6 | 1209.6 | 1195.3 |
| 32.5° | 1250.2 | 1233.5 | 1202.5 | 1169.1 | 1154.8 |
| 35° | 1214.4 | 1197.7 | 1164.3 | 1128.5 | 1111.8 |
| 37.5° | 1176.2 | 1159.5 | 1123.7 | 1085.6 | 1068.9 |
| 40° | 1133.3 | 1116.6 | 1078.4 | 1040.2 | 1021.1 |
| 42.5° | 1088.0 | 1073.6 | 1035.5 | 994.9 | 975.8 |
| 45° | 1045.0 | 1025.9 | 987.7 | 947.2 | 930.5 |
| 47.5° | 994.9 | 980.6 | 940.0 | 899.5 | 880.4 |
| 50° | 947.2 | 930.5 | 892.3 | 851.8 | 830.3 |
| 52.5° | 897.1 | 882.8 | 842.2 | 801.6 | 782.6 |
| 55° | 847.0 | 827.9 | 789.7 | 751.5 | 732.5 |
| 57.5° | 794.5 | 777.8 | 739.6 | 703.8 | 680.0 |
| 60° | 742.0 | 725.3 | 684.7 | 651.3 | 625.1 |
| 62.5° | 691.9 | 672.8 | 629.9 | 594.1 | 572.6 |
| 65° | 639.4 | 615.6 | 572.6 | 541.6 | 520.1 |
| 67.5° | 589.3 | 560.7 | 517.7 | 489.1 | 467.6 |
| 70° | 541.6 | 508.2 | 465.2 | 436.6 | 415.1 |
| 72.5° | 493.9 | 453.3 | 408.0 | 381.7 | 362.7 |
| 75° | 446.2 | 400.8 | 355.5 | 329.2 | 310.2 |
| 77.5° | 398.4 | 346.0 | 300.6 | 279.1 | 260.1 |
| 80° | 341.2 | 291.1 | 248.1 | 229.0 | 210.0 |
| 82.5° | 276.8 | 236.2 | 200.4 | 181.3 | 167.0 |
| 85° | 214.7 | 186.1 | 157.5 | 143.2 | 128.8 |
| 87.5° | 167.0 | 145.5 | 124.1 | 112.1 | 100.2 |
| 90° | 128.8 | 116.9 | 100.2 | 90.7 | 76.3 |
| 92.5° | 112.1 | 102.6 | 90.7 | 81.1 | 69.2 |
| 95° | 102.6 | 95.4 | 85.9 | 76.3 | 66.8 |
| 97.5° | 93.0 | 88.3 | 78.7 | 71.6 | 62.0 |
| 100° | 88.3 | 81.1 | 74.0 | 66.8 | 59.6 |
| 102.5° | 83.5 | 76.3 | 69.2 | 62.0 | 57.3 |
| 105° | 76.3 | 71.6 | 64.4 | 57.3 | 52.5 |
| 107.5° | 71.6 | 64.4 | 59.6 | 52.5 | 50.1 |
| 110° | 64.4 | 59.6 | 54.9 | 50.1 | 47.7 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|------|-------|------|-------|------|
| 112.5° | 57.3 | 54.9 | 50.1 | 45.3 | 42.9 |
| 115° | 52.5 | 47.7 | 47.7 | 40.6 | 40.6 |
| 117.5° | 47.7 | 42.9 | 42.9 | 38.2 | 38.2 |
| 120° | 40.6 | 38.2 | 38.2 | 33.4 | 33.4 |
| 122.5° | 35.8 | 33.4 | 33.4 | 31.0 | 31.0 |
| 125° | 33.4 | 28.6 | 31.0 | 26.2 | 28.6 |
| 127.5° | 28.6 | 26.2 | 26.2 | 23.9 | 26.2 |
| 130° | 23.9 | 21.5 | 21.5 | 21.5 | 23.9 |
| 132.5° | 21.5 | 19.1 | 19.1 | 19.1 | 21.5 |
| 135° | 19.1 | 16.7 | 16.7 | 16.7 | 19.1 |
| 137.5° | 16.7 | 14.3 | 11.9 | 14.3 | 16.7 |
| 140° | 14.3 | 11.9 | 9.5 | 11.9 | 14.3 |
| 142.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 145° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 147.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 150° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 152.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 155° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 157.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 160° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 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)