

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: P383847

Luminaire Tested: **24ID-45-L835-CFR1**

Issue Date: 2/25/2020

Test Information

Test Method: LM-79-08
Report Number: P383847
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-45-L835-CFR1
Description: 2X4 IN DEPTH TROFFER WITH 1INCH RECESSED COFFER LENS

Light Source: -
Ballast/Driver: -

Summary

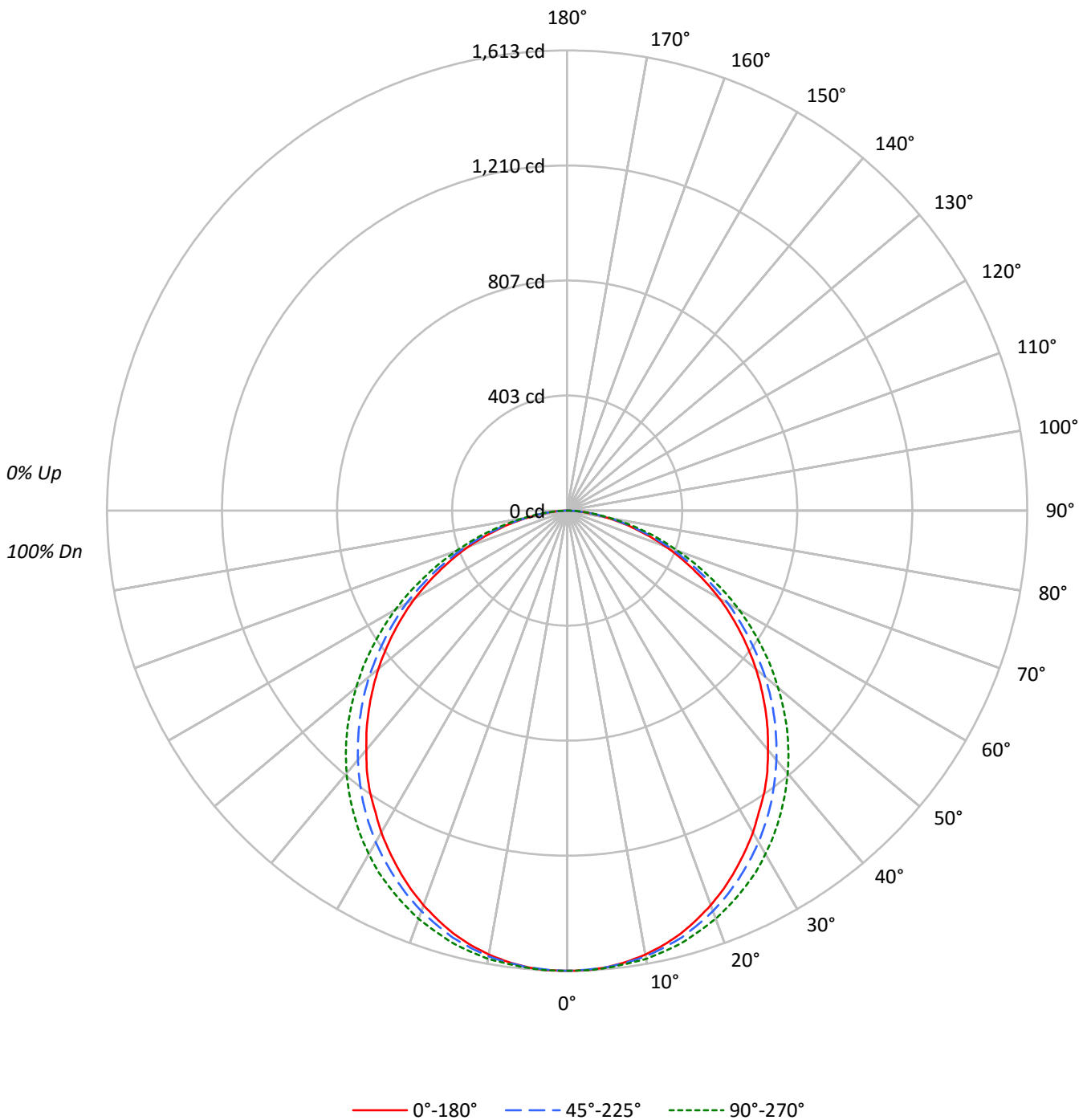
Lumens per Lamp: N/A
Luminaire Lumens: 4380.9 lumens
Efficiency: N/A
Efficacy: 109.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 40
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 | 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° | 2170 | 2170 | 2170 |
| 5° | 2170 | 2170 | 2173 |
| 10° | 2159 | 2168 | 2180 |
| 15° | 2140 | 2158 | 2182 |
| 20° | 2108 | 2139 | 2180 |
| 25° | 2068 | 2113 | 2172 |
| 30° | 2023 | 2085 | 2160 |
| 35° | 1980 | 2049 | 2139 |
| 40° | 1924 | 2005 | 2113 |
| 45° | 1870 | 1954 | 2076 |
| 50° | 1808 | 1896 | 2020 |
| 55° | 1737 | 1825 | 1954 |
| 60° | 1660 | 1749 | 1874 |
| 65° | 1550 | 1642 | 1754 |
| 70° | 1439 | 1517 | 1621 |
| 75° | 1283 | 1352 | 1467 |
| 80° | 1075 | 1127 | 1230 |
| 85° | 817 | 817 | 919 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 152.7 | 3.5 |
| 10°-20° | 436.8 | 10.0 |
| 20°-30° | 656.8 | 15.0 |
| 30°-40° | 781.4 | 17.8 |
| 40°-50° | 795.1 | 18.1 |
| 50°-60° | 699.7 | 16.0 |
| 60°-70° | 513.3 | 11.7 |
| 70°-80° | 278.6 | 6.4 |
| 80°-90° | 66.5 | 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° | 1246.4 | 28.4 |
| 0°-40° | 2027.7 | 46.3 |
| 0°-60° | 3522.5 | 80.4 |
| 0°-90° | 4380.9 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4380.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1613 | 1613 | 1613 | 1613 | 1613 | |
| 5° | 1606 | 1604 | 1606 | 1606 | 1609 | 153 |
| 15° | 1536 | 1538 | 1549 | 1558 | 1567 | 433 |
| 25° | 1393 | 1402 | 1424 | 1448 | 1463 | 641 |
| 35° | 1205 | 1214 | 1247 | 1285 | 1302 | 753 |
| 45° | 983 | 992 | 1027 | 1071 | 1091 | 758 |
| 55° | 740 | 752 | 778 | 815 | 833 | 662 |
| 65° | 487 | 496 | 516 | 538 | 551 | 484 |
| 75° | 247 | 251 | 260 | 273 | 282 | 262 |
| 85° | 53 | 53 | 53 | 57 | 60 | 64 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1613.1 | 1613.1 | 1613.1 | 1613.1 | 1613.1 |
| 2.5° | 1613.1 | 1610.9 | 1610.9 | 1610.9 | 1613.1 |
| 5° | 1606.5 | 1604.3 | 1606.5 | 1606.5 | 1608.7 |
| 7.5° | 1595.5 | 1593.3 | 1597.7 | 1599.9 | 1602.1 |
| 10° | 1580.0 | 1580.0 | 1586.6 | 1591.0 | 1595.5 |
| 12.5° | 1560.2 | 1562.4 | 1569.0 | 1575.6 | 1582.2 |
| 15° | 1536.0 | 1538.2 | 1549.2 | 1558.0 | 1566.8 |
| 17.5° | 1505.1 | 1509.5 | 1522.7 | 1536.0 | 1544.8 |
| 20° | 1472.0 | 1478.7 | 1494.1 | 1511.7 | 1522.7 |
| 22.5° | 1434.6 | 1443.4 | 1461.0 | 1483.1 | 1494.1 |
| 25° | 1392.7 | 1401.5 | 1423.6 | 1447.8 | 1463.2 |
| 27.5° | 1348.6 | 1359.7 | 1383.9 | 1412.5 | 1430.2 |
| 30° | 1302.4 | 1313.4 | 1342.0 | 1372.9 | 1390.5 |
| 32.5° | 1251.7 | 1264.9 | 1295.8 | 1331.0 | 1348.6 |
| 35° | 1205.4 | 1214.2 | 1247.3 | 1284.7 | 1302.4 |
| 37.5° | 1152.5 | 1163.5 | 1194.4 | 1234.1 | 1253.9 |
| 40° | 1095.2 | 1106.2 | 1141.5 | 1181.2 | 1203.2 |
| 42.5° | 1040.1 | 1048.9 | 1084.2 | 1128.3 | 1148.1 |
| 45° | 982.8 | 991.6 | 1026.9 | 1071.0 | 1090.8 |
| 47.5° | 923.3 | 934.4 | 967.4 | 1009.3 | 1029.1 |
| 50° | 863.8 | 872.7 | 905.7 | 945.4 | 965.2 |
| 52.5° | 802.1 | 810.9 | 841.8 | 881.5 | 901.3 |
| 55° | 740.4 | 751.5 | 777.9 | 815.4 | 833.0 |
| 57.5° | 678.7 | 689.7 | 714.0 | 749.2 | 764.7 |
| 60° | 617.0 | 625.8 | 650.1 | 680.9 | 696.4 |
| 62.5° | 550.9 | 557.5 | 581.8 | 612.6 | 625.8 |
| 65° | 487.0 | 495.8 | 515.7 | 537.7 | 550.9 |
| 67.5° | 427.5 | 431.9 | 449.5 | 473.8 | 482.6 |
| 70° | 365.8 | 370.2 | 385.6 | 405.5 | 412.1 |
| 72.5° | 304.1 | 310.7 | 321.7 | 339.4 | 348.2 |
| 75° | 246.8 | 251.2 | 260.0 | 273.3 | 282.1 |
| 77.5° | 191.7 | 193.9 | 200.5 | 211.6 | 218.2 |
| 80° | 138.8 | 141.0 | 145.4 | 154.3 | 158.7 |
| 82.5° | 92.6 | 94.8 | 97.0 | 101.4 | 105.8 |
| 85° | 52.9 | 52.9 | 52.9 | 57.3 | 59.5 |
| 87.5° | 19.8 | 17.6 | 17.6 | 17.6 | 17.6 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)