

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: P242283

Luminaire Tested: **CL2DR-F-100D940-UNV-STD-W-4**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P242283  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: CL2DR-F-100D940-UNV-STD-W-4  
Description: CL 2" DIRECT RECESSED WITH FROSTED FLUSH DIFFUSER  
STANDARD LIGHT ENGINE  
Light Source: (92) 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

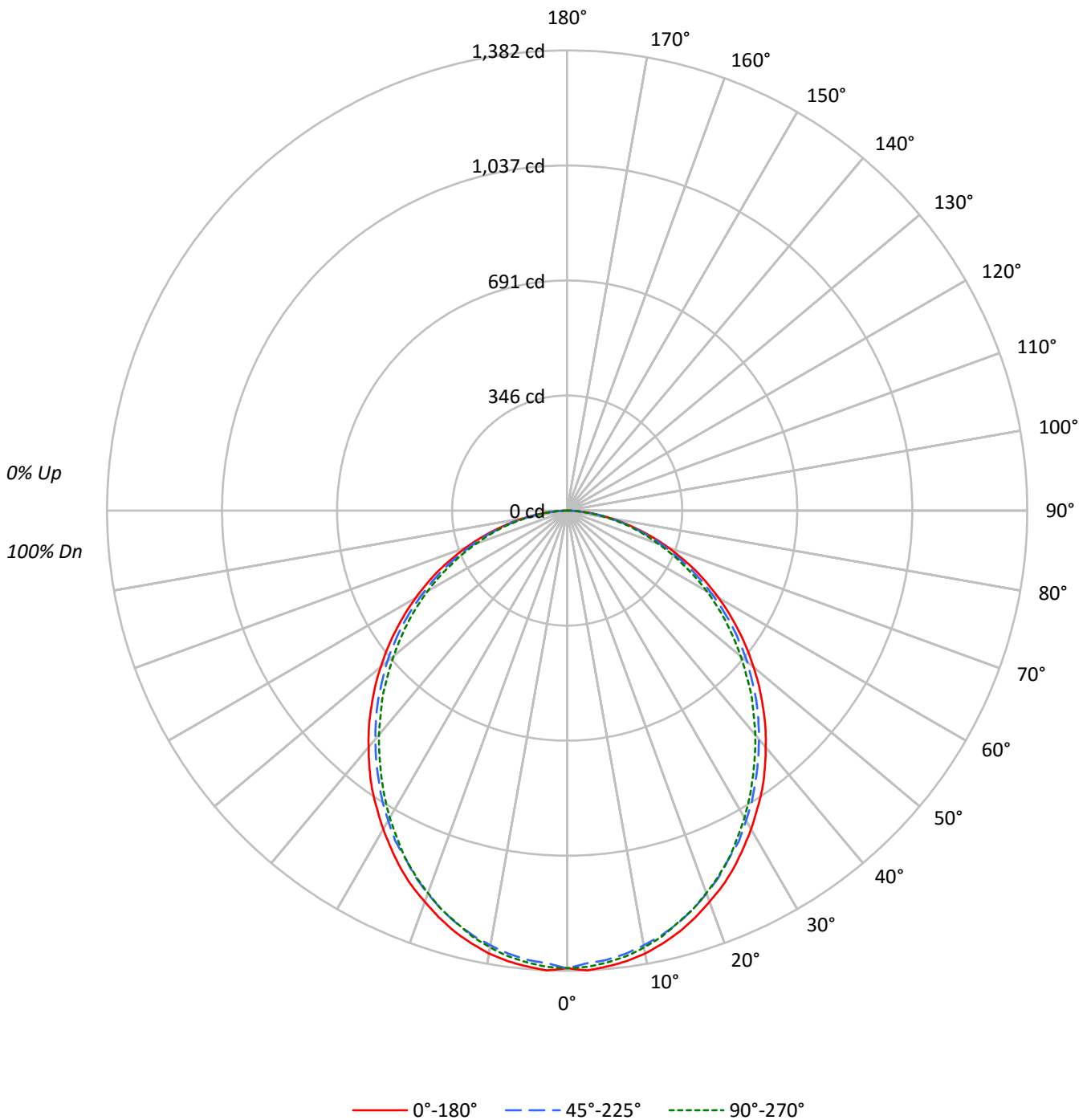
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3496.8 lumens  
Efficiency: N/A  
Efficacy: 85.1 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29  
Luminous Opening: Rectangular (W 0.15' x L: 3.88' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 41.1  
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   | 109 | 104 | 100 | 96  | 106 | 102 | 98  | 95  | 98  | 95  | 92  | 94  | 91  | 89  | 90  | 88  | 86  | 84  |
| 2   | 99  | 91  | 85  | 79  | 97  | 89  | 83  | 78  | 86  | 81  | 76  | 83  | 78  | 74  | 80  | 76  | 73  | 71  |
| 3   | 91  | 80  | 72  | 66  | 88  | 79  | 71  | 65  | 76  | 69  | 64  | 73  | 68  | 63  | 71  | 66  | 62  | 60  |
| 4   | 83  | 71  | 63  | 56  | 81  | 70  | 62  | 56  | 68  | 61  | 55  | 65  | 59  | 54  | 63  | 58  | 54  | 51  |
| 5   | 77  | 64  | 55  | 49  | 75  | 63  | 55  | 48  | 61  | 53  | 48  | 59  | 52  | 47  | 57  | 51  | 47  | 45  |
| 6   | 71  | 58  | 49  | 43  | 69  | 57  | 48  | 42  | 55  | 48  | 42  | 53  | 47  | 42  | 52  | 46  | 41  | 39  |
| 7   | 66  | 52  | 44  | 38  | 64  | 52  | 43  | 38  | 50  | 43  | 37  | 49  | 42  | 37  | 47  | 41  | 37  | 35  |
| 8   | 61  | 48  | 40  | 34  | 60  | 47  | 39  | 34  | 46  | 39  | 33  | 45  | 38  | 33  | 44  | 38  | 33  | 31  |
| 9   | 57  | 44  | 36  | 30  | 56  | 43  | 36  | 30  | 42  | 35  | 30  | 41  | 35  | 30  | 40  | 34  | 30  | 28  |
| 10  | 54  | 41  | 33  | 28  | 53  | 40  | 33  | 28  | 39  | 32  | 27  | 38  | 32  | 27  | 37  | 32  | 27  | 26  |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 26179 | 26179 | 26179 |
| 5°  | 26279 | 25901 | 26054 |
| 10° | 26125 | 25639 | 25767 |
| 15° | 25801 | 25306 | 25279 |
| 20° | 25342 | 24807 | 24780 |
| 25° | 24886 | 24192 | 24192 |
| 30° | 24299 | 23631 | 23428 |
| 35° | 23755 | 22955 | 22618 |
| 40° | 23070 | 22279 | 21854 |
| 45° | 22393 | 21609 | 21076 |
| 50° | 21656 | 20912 | 20168 |
| 55° | 20892 | 20101 | 19354 |
| 60° | 20038 | 19132 | 18427 |
| 65° | 19119 | 18168 | 17334 |
| 70° | 17961 | 17003 | 16190 |
| 75° | 16338 | 15661 | 15271 |
| 80° | 14501 | 14062 | 13338 |
| 85° | 11845 | 11255 | 10119 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 129.4  | 3.7       |
| 10°-20°   | 364.0  | 10.4      |
| 20°-30°   | 534.9  | 15.3      |
| 30°-40°   | 621.2  | 17.8      |
| 40°-50°   | 620.5  | 17.7      |
| 50°-60°   | 541.0  | 15.5      |
| 60°-70°   | 399.9  | 11.4      |
| 70°-80°   | 226.3  | 6.5       |
| 80°-90°   | 59.7   | 1.7       |
| 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°    | 1028.2 | 29.4      |
| 0°-40°    | 1649.4 | 47.2      |
| 0°-60°    | 2810.9 | 80.4      |
| 0°-90°    | 3496.8 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 3496.8 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1374 | 1374  | 1374 | 1374  | 1374 |      |
| 5°  | 1374 | 1369  | 1355 | 1365  | 1363 | 130  |
| 15° | 1308 | 1300  | 1283 | 1288  | 1282 | 368  |
| 25° | 1184 | 1174  | 1151 | 1154  | 1151 | 545  |
| 35° | 1022 | 1008  | 987  | 979   | 973  | 638  |
| 45° | 831  | 822   | 802  | 788   | 782  | 642  |
| 55° | 629  | 621   | 605  | 589   | 583  | 562  |
| 65° | 424  | 416   | 403  | 391   | 385  | 419  |
| 75° | 222  | 219   | 213  | 205   | 208  | 237  |
| 85° | 54   | 53    | 52   | 48    | 46   | 64   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1374.4 | 1374.4 | 1374.4 | 1374.4 | 1374.4 |
| 2.5°  | 1382.4 | 1375.8 | 1361.2 | 1374.4 | 1371.8 |
| 5°    | 1374.4 | 1369.2 | 1354.6 | 1365.2 | 1362.6 |
| 7.5°  | 1365.2 | 1357.3 | 1342.7 | 1353.3 | 1350.7 |
| 10°   | 1350.7 | 1341.4 | 1325.6 | 1336.1 | 1332.2 |
| 12.5° | 1330.8 | 1322.9 | 1307.0 | 1313.7 | 1311.0 |
| 15°   | 1308.4 | 1300.4 | 1283.3 | 1288.5 | 1281.9 |
| 17.5° | 1280.6 | 1272.7 | 1255.5 | 1262.1 | 1255.5 |
| 20°   | 1250.2 | 1242.3 | 1223.8 | 1227.8 | 1222.5 |
| 22.5° | 1219.8 | 1207.9 | 1190.7 | 1190.7 | 1188.1 |
| 25°   | 1184.1 | 1173.6 | 1151.1 | 1153.7 | 1151.1 |
| 27.5° | 1144.5 | 1135.2 | 1118.1 | 1114.1 | 1107.5 |
| 30°   | 1104.8 | 1094.3 | 1074.4 | 1070.5 | 1065.2 |
| 32.5° | 1062.6 | 1054.6 | 1033.5 | 1025.6 | 1020.3 |
| 35°   | 1021.6 | 1008.4 | 987.2  | 979.3  | 972.7  |
| 37.5° | 975.3  | 963.4  | 942.3  | 933.0  | 926.4  |
| 40°   | 927.8  | 917.2  | 896.0  | 884.1  | 878.9  |
| 42.5° | 881.5  | 870.9  | 849.8  | 836.6  | 828.6  |
| 45°   | 831.3  | 822.0  | 802.2  | 787.7  | 782.4  |
| 47.5° | 782.4  | 773.1  | 752.0  | 737.4  | 729.5  |
| 50°   | 730.8  | 724.2  | 705.7  | 687.2  | 680.6  |
| 52.5° | 680.6  | 671.4  | 654.2  | 639.6  | 630.4  |
| 55°   | 629.1  | 621.1  | 605.3  | 589.4  | 582.8  |
| 57.5° | 577.5  | 570.9  | 553.7  | 537.9  | 532.6  |
| 60°   | 526.0  | 520.7  | 502.2  | 487.7  | 483.7  |
| 62.5° | 475.8  | 466.5  | 453.3  | 440.1  | 434.8  |
| 65°   | 424.2  | 416.3  | 403.1  | 391.2  | 384.6  |
| 67.5° | 371.4  | 364.8  | 352.9  | 343.6  | 338.3  |
| 70°   | 322.5  | 317.2  | 305.3  | 296.0  | 290.7  |
| 72.5° | 272.2  | 267.0  | 260.4  | 251.1  | 247.1  |
| 75°   | 222.0  | 219.4  | 212.8  | 204.8  | 207.5  |
| 77.5° | 177.1  | 171.8  | 169.2  | 165.2  | 161.2  |
| 80°   | 132.2  | 130.8  | 128.2  | 124.2  | 121.6  |
| 82.5° | 89.9   | 89.9   | 88.5   | 83.3   | 83.3   |
| 85°   | 54.2   | 52.9   | 51.5   | 47.6   | 46.3   |
| 87.5° | 23.8   | 21.1   | 18.5   | 14.5   | 13.2   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)