

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P571963

Luminaire Tested: 22ID-45-L835-DBR

Issue Date: 10/5/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P571963  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2109-397-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/5/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: 22ID-45-L835-DBR  
Description: 4500 LUMEN, 2X2 INDEPTH TROFFER WITH 2IN REGRESSED DOUBLE BARRELL LENS AND 3500K, 80 CRI LEDS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4530.0 lumens  
Efficiency: N/A  
Efficacy: 121.8 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 1.21 / 1.35  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

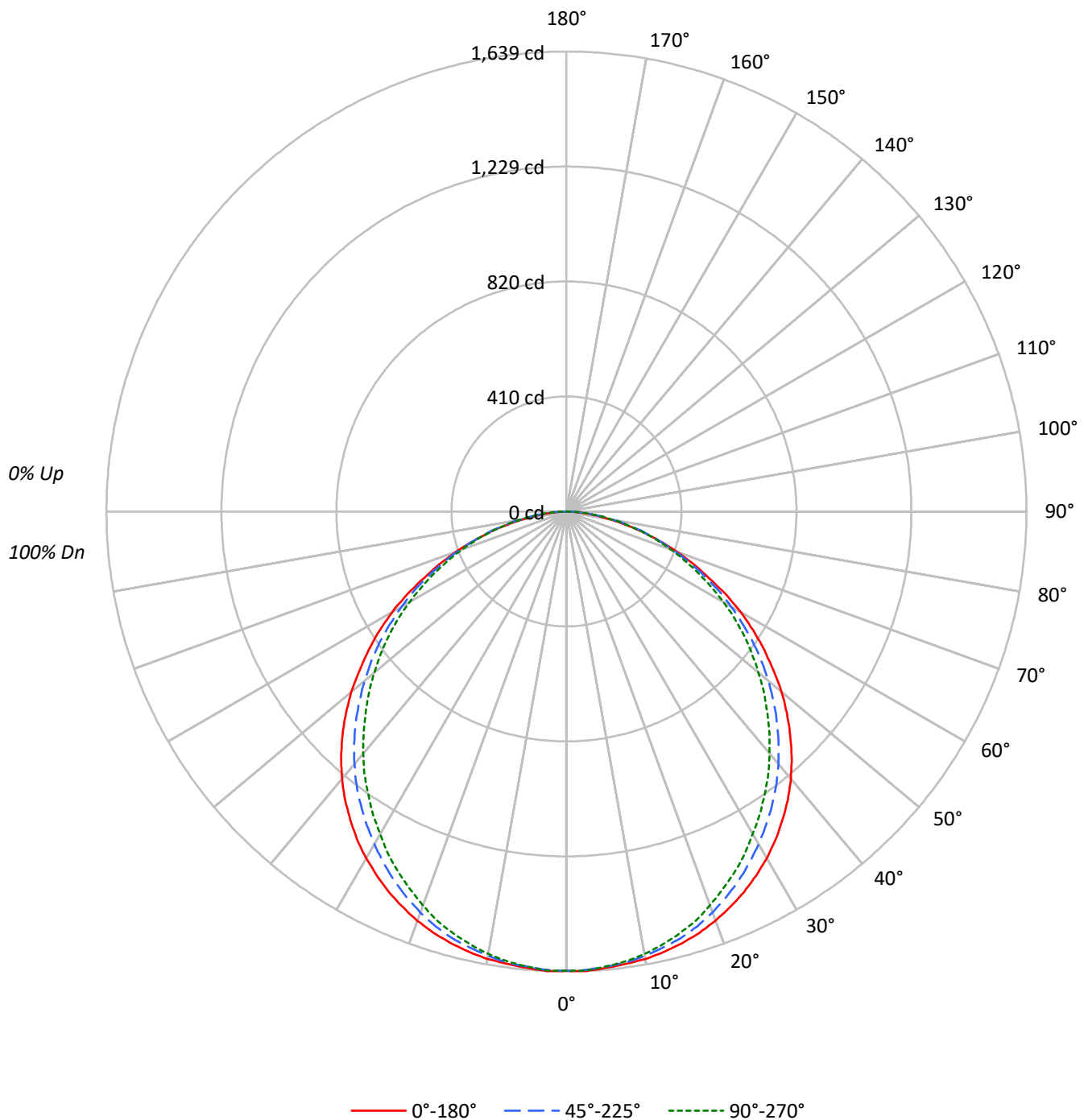
Input Watts (W): 37.2  
Input Voltage (V):  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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  |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  |  | 50  | 30  | 10  |  | 50  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 |  | 106 | 106 | 106 |  | 102 |
| 1   | 109 | 104 | 100 | 96  | 106 | 102 | 98  | 95  | 98  | 94  | 92  |  | 94  | 91  | 89  |  | 90  |
| 2   | 99  | 91  | 84  | 78  | 96  | 89  | 83  | 78  | 85  | 80  | 76  |  | 82  | 78  | 74  |  | 79  |
| 3   | 90  | 80  | 72  | 65  | 88  | 78  | 71  | 65  | 75  | 69  | 64  |  | 73  | 67  | 62  |  | 70  |
| 4   | 83  | 71  | 62  | 55  | 80  | 69  | 61  | 55  | 67  | 60  | 54  |  | 65  | 58  | 53  |  | 62  |
| 5   | 76  | 63  | 54  | 48  | 74  | 62  | 54  | 47  | 60  | 53  | 47  |  | 58  | 52  | 46  |  | 56  |
| 6   | 70  | 57  | 48  | 42  | 68  | 56  | 48  | 42  | 54  | 47  | 41  |  | 53  | 46  | 41  |  | 51  |
| 7   | 65  | 52  | 43  | 37  | 63  | 51  | 43  | 37  | 49  | 42  | 36  |  | 48  | 41  | 36  |  | 47  |
| 8   | 61  | 47  | 39  | 33  | 59  | 47  | 38  | 33  | 45  | 38  | 33  |  | 44  | 37  | 32  |  | 43  |
| 9   | 57  | 43  | 35  | 30  | 55  | 43  | 35  | 30  | 42  | 34  | 29  |  | 41  | 34  | 29  |  | 39  |
| 10  | 53  | 40  | 32  | 27  | 52  | 39  | 32  | 27  | 38  | 31  | 27  |  | 38  | 31  | 27  |  | 37  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 4405 | 4405 | 4405 |
| 5°  | 4410 | 4398 | 4398 |
| 10° | 4425 | 4394 | 4376 |
| 15° | 4436 | 4387 | 4337 |
| 20° | 4445 | 4356 | 4279 |
| 25° | 4443 | 4310 | 4211 |
| 30° | 4435 | 4254 | 4122 |
| 35° | 4410 | 4197 | 4043 |
| 40° | 4370 | 4127 | 3954 |
| 45° | 4292 | 4037 | 3851 |
| 50° | 4189 | 3927 | 3740 |
| 55° | 4034 | 3803 | 3626 |
| 60° | 3858 | 3642 | 3474 |
| 65° | 3556 | 3442 | 3285 |
| 70° | 3268 | 3216 | 3110 |
| 75° | 2879 | 2973 | 2879 |
| 80° | 2354 | 2596 | 2596 |
| 85° | 1448 | 2069 | 2069 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4292 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 154.9  | 3.4       |
| 10°-20°   | 444.0  | 9.8       |
| 20°-30°   | 670.1  | 14.8      |
| 30°-40°   | 801.7  | 17.7      |
| 40°-50°   | 821.0  | 18.1      |
| 50°-60°   | 725.9  | 16.0      |
| 60°-70°   | 536.2  | 11.8      |
| 70°-80°   | 299.7  | 6.6       |
| 80°-90°   | 76.6   | 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°    | 1268.9 | 28.0      |
| 0°-40°    | 2070.7 | 45.7      |
| 0°-60°    | 3617.6 | 79.9      |
| 0°-90°    | 4530.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 4530.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1637 | 1637  | 1637 | 1637  | 1637 |      |
| 5°  | 1633 | 1630  | 1628 | 1626  | 1628 | 155  |
| 15° | 1592 | 1586  | 1575 | 1561  | 1557 | 450  |
| 25° | 1496 | 1483  | 1452 | 1427  | 1418 | 690  |
| 35° | 1342 | 1322  | 1278 | 1242  | 1231 | 840  |
| 45° | 1128 | 1106  | 1061 | 1023  | 1012 | 869  |
| 55° | 860  | 844   | 811  | 782   | 773  | 768  |
| 65° | 558  | 558   | 540  | 523   | 516  | 557  |
| 75° | 277  | 288   | 286  | 281   | 277  | 295  |
| 85° | 47   | 60    | 67   | 69    | 67   | 64   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1637.1 | 1637.1 | 1637.1 | 1637.1 | 1637.1 |
| 2.5°  | 1639.4 | 1634.9 | 1634.9 | 1634.9 | 1637.1 |
| 5°    | 1632.7 | 1630.4 | 1628.2 | 1626.0 | 1628.2 |
| 7.5°  | 1626.0 | 1623.7 | 1621.5 | 1614.8 | 1617.0 |
| 10°   | 1619.3 | 1614.8 | 1608.1 | 1601.4 | 1601.4 |
| 12.5° | 1608.1 | 1601.4 | 1592.4 | 1583.5 | 1581.3 |
| 15°   | 1592.4 | 1585.7 | 1574.6 | 1561.2 | 1556.7 |
| 17.5° | 1574.6 | 1565.6 | 1550.0 | 1534.4 | 1529.9 |
| 20°   | 1552.2 | 1543.3 | 1521.0 | 1500.9 | 1494.2 |
| 22.5° | 1525.4 | 1514.3 | 1487.5 | 1465.1 | 1456.2 |
| 25°   | 1496.4 | 1483.0 | 1451.7 | 1427.2 | 1418.2 |
| 27.5° | 1462.9 | 1447.3 | 1411.5 | 1384.7 | 1375.8 |
| 30°   | 1427.2 | 1409.3 | 1369.1 | 1340.1 | 1326.7 |
| 32.5° | 1387.0 | 1366.9 | 1324.4 | 1290.9 | 1282.0 |
| 35°   | 1342.3 | 1322.2 | 1277.5 | 1241.8 | 1230.6 |
| 37.5° | 1295.4 | 1273.1 | 1228.4 | 1190.4 | 1181.5 |
| 40°   | 1244.0 | 1221.7 | 1174.8 | 1134.6 | 1125.7 |
| 42.5° | 1188.2 | 1163.6 | 1119.0 | 1081.0 | 1069.8 |
| 45°   | 1127.9 | 1105.6 | 1060.9 | 1022.9 | 1011.8 |
| 47.5° | 1065.4 | 1045.3 | 1000.6 | 964.8  | 953.7  |
| 50°   | 1000.6 | 980.5  | 938.0  | 902.3  | 893.4  |
| 52.5° | 929.1  | 913.5  | 875.5  | 839.8  | 833.1  |
| 55°   | 859.9  | 844.2  | 810.7  | 781.7  | 772.8  |
| 57.5° | 788.4  | 772.8  | 743.7  | 714.7  | 710.2  |
| 60°   | 716.9  | 703.5  | 676.7  | 654.4  | 645.5  |
| 62.5° | 638.8  | 634.3  | 612.0  | 587.4  | 580.7  |
| 65°   | 558.4  | 558.4  | 540.5  | 522.6  | 515.9  |
| 67.5° | 489.1  | 486.9  | 473.5  | 462.3  | 455.6  |
| 70°   | 415.4  | 419.9  | 408.7  | 397.6  | 395.3  |
| 72.5° | 346.2  | 350.7  | 346.2  | 339.5  | 335.0  |
| 75°   | 276.9  | 288.1  | 285.9  | 281.4  | 276.9  |
| 77.5° | 212.2  | 225.6  | 225.6  | 223.3  | 221.1  |
| 80°   | 151.9  | 165.3  | 167.5  | 167.5  | 167.5  |
| 82.5° | 96.0   | 109.4  | 116.1  | 116.1  | 116.1  |
| 85°   | 46.9   | 60.3   | 67.0   | 69.2   | 67.0   |
| 87.5° | 15.6   | 22.3   | 24.6   | 26.8   | 26.8   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

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**CIE UGR TABLE:**

| Reflectances:   |      |                  |       |       |       |       |                |       |       |       |       |
|-----------------|------|------------------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|
| Ceiling         |      | 0.7              | 0.7   | 0.5   | 0.5   | 0.3   | 0.7            | 0.7   | 0.5   | 0.5   | 0.3   |
| Wall            |      | 0.5              | 0.3   | 0.5   | 0.3   | 0.3   | 0.5            | 0.3   | 0.5   | 0.3   | 0.3   |
| Reference plane |      | 0.2              | 0.2   | 0.2   | 0.2   | 0.2   | 0.2            | 0.2   | 0.2   | 0.2   | 0.2   |
| Room dimensions |      | Viewed crosswise |       |       |       |       | Viewed endwise |       |       |       |       |
| X=2H            | Y=2H | 17.02            | 18.65 | 17.38 | 18.96 | 19.27 | 16.44          | 18.07 | 16.81 | 18.39 | 18.70 |
|                 | 3H   | 18.69            | 20.16 | 19.07 | 20.49 | 20.85 | 18.19          | 19.66 | 18.56 | 19.98 | 20.34 |
|                 | 4H   | 19.28            | 20.66 | 19.68 | 21.01 | 21.39 | 18.84          | 20.23 | 19.24 | 20.58 | 20.95 |
|                 | 6H   | 19.66            | 20.95 | 20.08 | 21.31 | 21.70 | 19.33          | 20.61 | 19.74 | 20.98 | 21.37 |
|                 | 8H   | 19.76            | 20.99 | 20.19 | 21.38 | 21.78 | 19.48          | 20.71 | 19.90 | 21.09 | 21.49 |
|                 | 12H  | 19.80            | 20.98 | 20.23 | 21.36 | 21.79 | 19.57          | 20.75 | 20.00 | 21.13 | 21.56 |
| 4H              | 2H   | 17.57            | 18.95 | 17.97 | 19.30 | 19.68 | 17.11          | 18.50 | 17.51 | 18.84 | 19.22 |
|                 | 3H   | 19.47            | 20.63 | 19.88 | 21.03 | 21.43 | 19.07          | 20.23 | 19.48 | 20.62 | 21.02 |
|                 | 4H   | 20.20            | 21.24 | 20.63 | 21.66 | 22.09 | 19.85          | 20.90 | 20.28 | 21.31 | 21.75 |
|                 | 6H   | 20.71            | 21.63 | 21.16 | 22.07 | 22.52 | 20.46          | 21.37 | 20.91 | 21.81 | 22.27 |
|                 | 8H   | 20.85            | 21.70 | 21.31 | 22.15 | 22.61 | 20.65          | 21.51 | 21.11 | 21.95 | 22.42 |
|                 | 12H  | 20.92            | 21.69 | 21.40 | 22.17 | 22.63 | 20.79          | 21.56 | 21.27 | 22.03 | 22.50 |
| 8H              | 4H   | 20.48            | 21.33 | 20.94 | 21.78 | 22.24 | 20.17          | 21.03 | 20.63 | 21.47 | 21.93 |
|                 | 6H   | 21.11            | 21.82 | 21.60 | 22.31 | 22.78 | 20.89          | 21.61 | 21.39 | 22.09 | 22.57 |
|                 | 8H   | 21.31            | 21.94 | 21.82 | 22.45 | 22.94 | 21.16          | 21.80 | 21.67 | 22.31 | 22.79 |
|                 | 12H  | 21.43            | 22.00 | 21.94 | 22.49 | 23.05 | 21.36          | 21.93 | 21.87 | 22.42 | 22.98 |
| 12H             | 4H   | 20.50            | 21.27 | 20.98 | 21.75 | 22.22 | 20.20          | 20.97 | 20.68 | 21.45 | 21.92 |
|                 | 6H   | 21.15            | 21.79 | 21.66 | 22.30 | 22.79 | 20.95          | 21.59 | 21.46 | 22.09 | 22.58 |
|                 | 8H   | 21.41            | 21.97 | 21.91 | 22.46 | 23.02 | 21.27          | 21.83 | 21.78 | 22.32 | 22.88 |