

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: P824231

Luminaire Tested: CB2R-120D-840-1D-UNV-STD-W-4

Issue Date: 4/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P824231  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2312-242-13, G2-2312-242-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: CB2R-120D-840-1D-UNV-STD-W-4  
Description: CORELITE BRYX SLOT LED LUMINAIRE  
2-INCH APERTURE  
DOWNLIGHT 1200 LUMENS PER FOOT  
DIRECT ONLY  
Light Source: 80 CRI, 4000K CCT LEDS  
Ballast/Driver: -

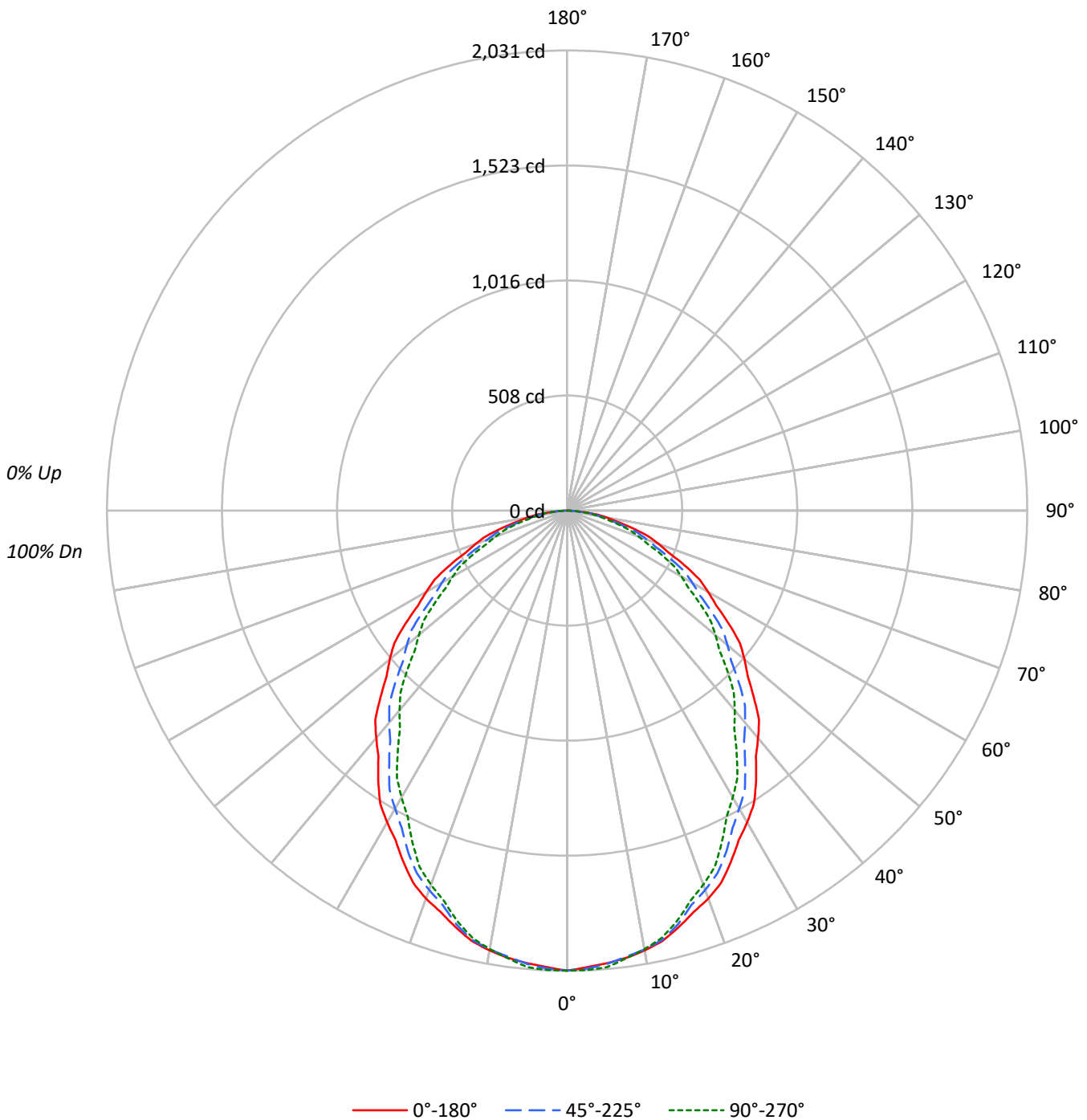
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4735.1 lumens  
Efficiency: N/A  
Efficacy: 109.1 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.09 / 1.24  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 43.4  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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

TEST NUMBER: P824231

CATALOG NUMBER: CB2R-120D-840-1D-UNV-STD-W-4

### Luminous Intensity Polar Plot





TEST NUMBER: P824231

CATALOG NUMBER: CB2R-120D-840-1D-UNV-STD-W-4

**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  | 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 |    |    |    |    | 100 |   |  |   |
| 1   | 109 | 105 | 101 | 97  | 107 | 103 | 99  | 95  | 98  | 95  | 92  | 94  | 92  | 90  | 91  | 89  | 87  | 85  |    |    |    |    | 85  |   |  |   |
| 2   | 100 | 92  | 86  | 80  | 97  | 90  | 84  | 79  | 87  | 82  | 77  | 83  | 79  | 76  | 80  | 77  | 74  | 72  |    |    |    |    | 72  |   |  |   |
| 3   | 91  | 81  | 74  | 67  | 89  | 80  | 73  | 67  | 77  | 71  | 66  | 74  | 69  | 64  | 72  | 67  | 63  | 61  |    |    |    |    | 61  |   |  |   |
| 4   | 84  | 73  | 64  | 58  | 82  | 71  | 63  | 57  | 69  | 62  | 56  | 66  | 60  | 56  | 64  | 59  | 55  | 53  |    |    |    |    | 53  |   |  |   |
| 5   | 78  | 65  | 56  | 50  | 76  | 64  | 56  | 50  | 62  | 55  | 49  | 60  | 54  | 49  | 58  | 53  | 48  | 46  |    |    |    |    | 46  |   |  |   |
| 6   | 72  | 59  | 50  | 44  | 70  | 58  | 50  | 44  | 56  | 49  | 43  | 55  | 48  | 43  | 53  | 47  | 43  | 41  |    |    |    |    | 41  |   |  |   |
| 7   | 67  | 54  | 45  | 39  | 65  | 53  | 45  | 39  | 51  | 44  | 39  | 50  | 43  | 38  | 49  | 43  | 38  | 36  |    |    |    |    | 36  |   |  |   |
| 8   | 62  | 49  | 41  | 35  | 61  | 48  | 41  | 35  | 47  | 40  | 35  | 46  | 39  | 35  | 45  | 39  | 34  | 33  |    |    |    |    | 33  |   |  |   |
| 9   | 58  | 45  | 37  | 32  | 57  | 45  | 37  | 32  | 44  | 37  | 32  | 42  | 36  | 31  | 41  | 36  | 31  | 29  |    |    |    |    | 29  |   |  |   |
| 10  | 55  | 42  | 34  | 29  | 54  | 41  | 34  | 29  | 40  | 34  | 29  | 39  | 33  | 29  | 39  | 33  | 29  | 27  |    |    |    |    | 27  |   |  |   |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 35368 | 35368 | 35368 |
| 5°  | 35067 | 35122 | 35366 |
| 10° | 34868 | 34785 | 34758 |
| 15° | 34316 | 34091 | 33811 |
| 20° | 33775 | 33026 | 32564 |
| 25° | 32868 | 31942 | 31045 |
| 30° | 31958 | 30550 | 29393 |
| 35° | 30910 | 29126 | 27737 |
| 40° | 29801 | 27787 | 26161 |
| 45° | 28686 | 26388 | 24624 |
| 50° | 27679 | 25026 | 23130 |
| 55° | 26440 | 23607 | 21718 |
| 60° | 25022 | 22259 | 20312 |
| 65° | 23516 | 20763 | 18904 |
| 70° | 21852 | 19082 | 17101 |
| 75° | 19879 | 17261 | 15485 |
| 80° | 17774 | 15126 | 14032 |
| 85° | 13669 | 12430 | 10252 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 28686 cd/sqm

TEST NUMBER: P824231

CATALOG NUMBER: CB2R-120D-840-1D-UNV-STD-W-4

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 191.0  | 4.0       |
| 10°-20°   | 532.3  | 11.2      |
| 20°-30°   | 765.4  | 16.2      |
| 30°-40°   | 860.2  | 18.2      |
| 40°-50°   | 831.0  | 17.5      |
| 50°-60°   | 702.1  | 14.8      |
| 60°-70°   | 504.3  | 10.7      |
| 70°-80°   | 275.6  | 5.8       |
| 80°-90°   | 73.2   | 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°    | 1488.6 | 31.4      |
| 0°-40°    | 2348.8 | 49.6      |
| 0°-60°    | 3881.9 | 82.0      |
| 0°-90°    | 4735.1 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 4735.1 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 2031 | 2031  | 2031 | 2031  | 2031 |      |
| 5°  | 2006 | 2033  | 2009 | 2009  | 2023 | 190  |
| 15° | 1903 | 1920  | 1891 | 1872  | 1875 | 536  |
| 25° | 1710 | 1712  | 1662 | 1625  | 1615 | 787  |
| 35° | 1454 | 1437  | 1370 | 1317  | 1304 | 908  |
| 45° | 1165 | 1140  | 1071 | 1015  | 1000 | 900  |
| 55° | 871  | 839   | 777  | 729   | 715  | 778  |
| 65° | 571  | 549   | 504  | 468   | 459  | 566  |
| 75° | 295  | 277   | 256  | 236   | 230  | 316  |
| 85° | 68   | 64    | 62   | 54    | 51   | 84   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



TEST NUMBER: P824231

CATALOG NUMBER: CB2R-120D-840-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 2030.6 | 2030.6 | 2030.6 | 2030.6 | 2030.6 |
| 2.5°  | 2016.9 | 2041.2 | 2023.1 | 2025.7 | 2029.3 |
| 5°    | 2005.7 | 2033.1 | 2008.8 | 2009.1 | 2022.8 |
| 7.5°  | 1991.4 | 2017.2 | 1986.7 | 1981.1 | 1993.9 |
| 10°   | 1971.5 | 1997.3 | 1966.8 | 1956.2 | 1965.3 |
| 12.5° | 1945.4 | 1970.0 | 1940.7 | 1923.8 | 1931.7 |
| 15°   | 1903.1 | 1919.8 | 1890.6 | 1872.1 | 1875.1 |
| 17.5° | 1857.1 | 1867.4 | 1825.3 | 1809.7 | 1806.7 |
| 20°   | 1822.2 | 1831.4 | 1781.8 | 1760.0 | 1756.9 |
| 22.5° | 1777.5 | 1785.4 | 1733.3 | 1706.5 | 1702.2 |
| 25°   | 1710.3 | 1711.8 | 1662.1 | 1624.6 | 1615.4 |
| 27.5° | 1640.0 | 1635.1 | 1580.0 | 1535.6 | 1523.7 |
| 30°   | 1589.0 | 1582.9 | 1519.0 | 1472.2 | 1461.5 |
| 32.5° | 1534.3 | 1523.3 | 1459.3 | 1408.7 | 1398.1 |
| 35°   | 1453.7 | 1437.0 | 1369.8 | 1316.6 | 1304.5 |
| 37.5° | 1367.9 | 1349.1 | 1283.0 | 1225.2 | 1211.5 |
| 40°   | 1310.7 | 1289.4 | 1222.1 | 1164.2 | 1150.6 |
| 42.5° | 1253.5 | 1229.8 | 1161.1 | 1103.3 | 1088.4 |
| 45°   | 1164.6 | 1140.2 | 1071.3 | 1014.9 | 999.7  |
| 47.5° | 1080.0 | 1049.0 | 982.0  | 926.0  | 910.8  |
| 50°   | 1021.5 | 988.1  | 923.6  | 868.8  | 853.6  |
| 52.5° | 961.8  | 927.1  | 865.1  | 812.8  | 797.6  |
| 55°   | 870.7  | 838.8  | 777.4  | 728.9  | 715.2  |
| 57.5° | 780.5  | 749.8  | 693.8  | 647.4  | 634.1  |
| 60°   | 718.3  | 692.5  | 639.0  | 595.2  | 583.1  |
| 62.5° | 658.6  | 635.2  | 584.3  | 544.2  | 532.1  |
| 65°   | 570.6  | 549.3  | 503.8  | 467.8  | 458.7  |
| 67.5° | 485.1  | 463.8  | 427.0  | 394.7  | 384.3  |
| 70°   | 429.1  | 407.8  | 374.7  | 345.0  | 335.8  |
| 72.5° | 375.6  | 353.1  | 326.2  | 299.0  | 292.3  |
| 75°   | 295.4  | 277.2  | 256.5  | 236.2  | 230.1  |
| 77.5° | 224.5  | 206.9  | 191.9  | 177.5  | 176.0  |
| 80°   | 177.2  | 162.0  | 150.8  | 141.5  | 139.9  |
| 82.5° | 132.5  | 120.9  | 113.5  | 106.7  | 106.3  |
| 85°   | 68.4   | 63.9   | 62.2   | 54.3   | 51.3   |
| 87.5° | 19.9   | 19.9   | 17.4   | 14.9   | 14.9   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



TEST NUMBER: P824231  
 CATALOG NUMBER: CB2R-120D-840-1D-UNV-STD-W-4

**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 | 23.24            | 24.82 | 23.60 | 25.13 | 25.45 | 22.14          | 23.72 | 22.50 | 24.03 | 24.35 |
|                 | 3H   | 24.93            | 26.36 | 25.31 | 26.68 | 27.04 | 23.72          | 25.14 | 24.09 | 25.47 | 25.83 |
|                 | 4H   | 25.59            | 26.93 | 25.99 | 27.28 | 27.66 | 24.32          | 25.66 | 24.72 | 26.01 | 26.38 |
|                 | 6H   | 26.03            | 27.27 | 26.44 | 27.63 | 28.02 | 24.73          | 25.96 | 25.14 | 26.33 | 26.72 |
|                 | 8H   | 26.20            | 27.38 | 26.62 | 27.77 | 28.17 | 24.89          | 26.07 | 25.31 | 26.46 | 26.86 |
|                 | 12H  | 26.29            | 27.43 | 26.72 | 27.81 | 28.24 | 24.97          | 26.10 | 25.40 | 26.48 | 26.91 |
| 4H              | 2H   | 23.73            | 25.07 | 24.13 | 25.41 | 25.79 | 22.85          | 24.19 | 23.25 | 24.54 | 24.92 |
|                 | 3H   | 25.66            | 26.78 | 26.07 | 27.17 | 27.57 | 24.65          | 25.77 | 25.06 | 26.17 | 26.57 |
|                 | 4H   | 26.43            | 27.44 | 26.86 | 27.85 | 28.29 | 25.35          | 26.36 | 25.78 | 26.77 | 27.21 |
|                 | 6H   | 26.99            | 27.87 | 27.44 | 28.31 | 28.77 | 25.86          | 26.74 | 26.32 | 27.19 | 27.64 |
|                 | 8H   | 27.21            | 28.03 | 27.67 | 28.48 | 28.94 | 26.07          | 26.89 | 26.53 | 27.33 | 27.80 |
|                 | 12H  | 27.35            | 28.09 | 27.83 | 28.56 | 29.03 | 26.19          | 26.93 | 26.67 | 27.40 | 27.87 |
| 8H              | 4H   | 26.64            | 27.46 | 27.10 | 27.91 | 28.37 | 25.68          | 26.50 | 26.14 | 26.94 | 27.41 |
|                 | 6H   | 27.31            | 27.99 | 27.81 | 28.48 | 28.96 | 26.31          | 26.99 | 26.81 | 27.48 | 27.96 |
|                 | 8H   | 27.61            | 28.22 | 28.12 | 28.73 | 29.21 | 26.59          | 27.20 | 27.10 | 27.71 | 28.20 |
|                 | 12H  | 27.81            | 28.35 | 28.32 | 28.85 | 29.41 | 26.77          | 27.31 | 27.28 | 27.80 | 28.37 |
| 12H             | 4H   | 26.66            | 27.39 | 27.14 | 27.87 | 28.34 | 25.71          | 26.45 | 26.20 | 26.93 | 27.40 |
|                 | 6H   | 27.34            | 27.96 | 27.86 | 28.47 | 28.95 | 26.38          | 26.99 | 26.89 | 27.50 | 27.98 |
|                 | 8H   | 27.70            | 28.24 | 28.20 | 28.73 | 29.29 | 26.72          | 27.26 | 27.23 | 27.75 | 28.31 |