

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: P824229

Luminaire Tested: CB2-120D-830-1D-UNV-STD-W-4

Issue Date: 4/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P824229
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: CB2-120D-830-1D-UNV-STD-W-4
Description: CORELITE BRYX SLOT LED LUMINAIRE
2-INCH APERTURE
DOWNLIGHT 1200 LUMENS PER FOOT
DIRECT ONLY
Light Source: 80 CRI, 3000K CCT LEDS
Ballast/Driver: -

Summary

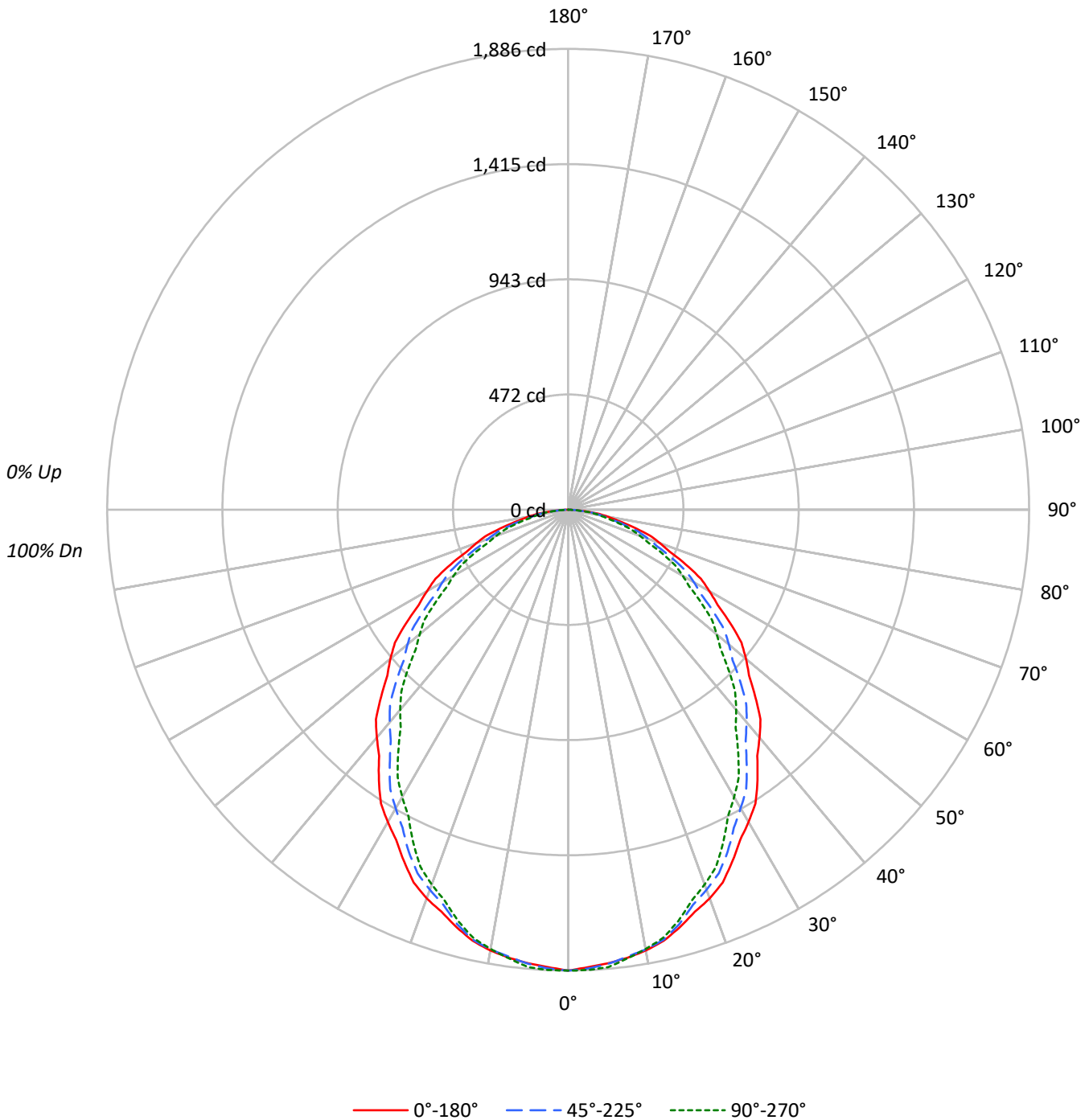
Lumens per Lamp: N/A
Luminaire Lumens: 4398.7 lumens
Efficiency: N/A
Efficacy: 101.4 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.09 / 1.24
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 43.4
Input Voltage (V): 120
Input Current (A_{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: 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 | 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 | 105 | 101 | 97 | 107 | 103 | 99 | 95 | 98 | 95 | 92 | 94 | 92 | 90 | 91 | 89 | 87 | 85 |
| 2 | 100 | 92 | 86 | 80 | 97 | 90 | 84 | 79 | 87 | 82 | 77 | 83 | 79 | 76 | 80 | 77 | 74 | 72 |
| 3 | 91 | 81 | 74 | 67 | 89 | 80 | 73 | 67 | 77 | 71 | 66 | 74 | 69 | 64 | 72 | 67 | 63 | 61 |
| 4 | 84 | 73 | 64 | 58 | 82 | 71 | 63 | 57 | 69 | 62 | 56 | 66 | 60 | 56 | 64 | 59 | 55 | 53 |
| 5 | 78 | 65 | 56 | 50 | 76 | 64 | 56 | 50 | 62 | 55 | 49 | 60 | 54 | 49 | 58 | 53 | 48 | 46 |
| 6 | 72 | 59 | 50 | 44 | 70 | 58 | 50 | 44 | 56 | 49 | 43 | 55 | 48 | 43 | 53 | 47 | 43 | 41 |
| 7 | 67 | 54 | 45 | 39 | 65 | 53 | 45 | 39 | 51 | 44 | 39 | 50 | 43 | 38 | 49 | 43 | 38 | 36 |
| 8 | 62 | 49 | 41 | 35 | 61 | 48 | 41 | 35 | 47 | 40 | 35 | 46 | 39 | 35 | 45 | 39 | 34 | 33 |
| 9 | 58 | 45 | 37 | 32 | 57 | 45 | 37 | 32 | 44 | 37 | 32 | 42 | 36 | 31 | 41 | 36 | 31 | 29 |
| 10 | 55 | 42 | 34 | 29 | 54 | 41 | 34 | 29 | 40 | 34 | 29 | 39 | 33 | 29 | 39 | 33 | 29 | 27 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 32854 | 32854 | 32854 |
| 5° | 32576 | 32627 | 32854 |
| 10° | 32390 | 32314 | 32289 |
| 15° | 31878 | 31669 | 31410 |
| 20° | 31376 | 30679 | 30251 |
| 25° | 30533 | 29672 | 28840 |
| 30° | 29687 | 28380 | 27306 |
| 35° | 28715 | 27057 | 25766 |
| 40° | 27684 | 25813 | 24301 |
| 45° | 26647 | 24514 | 22876 |
| 50° | 25712 | 23246 | 21485 |
| 55° | 24560 | 21930 | 20175 |
| 60° | 23245 | 20678 | 18866 |
| 65° | 21847 | 19288 | 17561 |
| 70° | 20299 | 17727 | 15889 |
| 75° | 18466 | 16037 | 14388 |
| 80° | 16520 | 14052 | 13039 |
| 85° | 12710 | 11551 | 9532 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 26647 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 177.4 | 4.0 |
| 10°-20° | 494.5 | 11.2 |
| 20°-30° | 711.0 | 16.2 |
| 30°-40° | 799.1 | 18.2 |
| 40°-50° | 771.9 | 17.5 |
| 50°-60° | 652.2 | 14.8 |
| 60°-70° | 468.5 | 10.7 |
| 70°-80° | 256.1 | 5.8 |
| 80°-90° | 68.0 | 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° | 1382.8 | 31.4 |
| 0°-40° | 2182.0 | 49.6 |
| 0°-60° | 3606.1 | 82.0 |
| 0°-90° | 4398.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4398.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1886 | 1886 | 1886 | 1886 | 1886 | |
| 5° | 1863 | 1889 | 1866 | 1866 | 1879 | 177 |
| 15° | 1768 | 1783 | 1756 | 1739 | 1742 | 498 |
| 25° | 1589 | 1590 | 1544 | 1509 | 1501 | 731 |
| 35° | 1350 | 1335 | 1272 | 1223 | 1212 | 844 |
| 45° | 1082 | 1059 | 995 | 943 | 929 | 836 |
| 55° | 809 | 779 | 722 | 677 | 664 | 723 |
| 65° | 530 | 510 | 468 | 435 | 426 | 526 |
| 75° | 274 | 258 | 238 | 219 | 214 | 294 |
| 85° | 64 | 59 | 58 | 50 | 48 | 78 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P824229

CATALOG NUMBER: CB2-120D-830-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1886.3 | 1886.3 | 1886.3 | 1886.3 | 1886.3 |
| 2.5° | 1873.6 | 1896.2 | 1879.4 | 1881.8 | 1885.2 |
| 5° | 1863.2 | 1888.6 | 1866.1 | 1866.4 | 1879.1 |
| 7.5° | 1849.9 | 1873.9 | 1845.6 | 1840.4 | 1852.2 |
| 10° | 1831.4 | 1855.4 | 1827.1 | 1817.2 | 1825.7 |
| 12.5° | 1807.2 | 1830.0 | 1802.8 | 1787.1 | 1794.5 |
| 15° | 1767.9 | 1783.4 | 1756.3 | 1739.1 | 1741.9 |
| 17.5° | 1725.1 | 1734.7 | 1695.7 | 1681.2 | 1678.3 |
| 20° | 1692.8 | 1701.2 | 1655.2 | 1634.9 | 1632.1 |
| 22.5° | 1651.2 | 1658.5 | 1610.2 | 1585.2 | 1581.3 |
| 25° | 1588.8 | 1590.2 | 1544.0 | 1509.1 | 1500.7 |
| 27.5° | 1523.5 | 1519.0 | 1467.7 | 1426.5 | 1415.5 |
| 30° | 1476.1 | 1470.5 | 1411.1 | 1367.6 | 1357.7 |
| 32.5° | 1425.3 | 1415.1 | 1355.7 | 1308.6 | 1298.8 |
| 35° | 1350.5 | 1334.9 | 1272.5 | 1223.1 | 1211.8 |
| 37.5° | 1270.7 | 1253.2 | 1191.9 | 1138.1 | 1125.4 |
| 40° | 1217.6 | 1197.8 | 1135.3 | 1081.5 | 1068.8 |
| 42.5° | 1164.4 | 1142.4 | 1078.6 | 1024.9 | 1011.0 |
| 45° | 1081.8 | 1059.2 | 995.2 | 942.8 | 928.7 |
| 47.5° | 1003.2 | 974.4 | 912.2 | 860.2 | 846.1 |
| 50° | 948.9 | 917.9 | 857.9 | 807.1 | 792.9 |
| 52.5° | 893.5 | 861.3 | 803.6 | 755.1 | 740.9 |
| 55° | 808.8 | 779.2 | 722.2 | 677.1 | 664.4 |
| 57.5° | 725.1 | 696.5 | 644.5 | 601.4 | 589.0 |
| 60° | 667.3 | 643.3 | 593.6 | 552.9 | 541.6 |
| 62.5° | 611.8 | 590.1 | 542.8 | 505.6 | 494.3 |
| 65° | 530.1 | 510.3 | 468.0 | 434.6 | 426.1 |
| 67.5° | 450.6 | 430.9 | 396.6 | 366.6 | 357.0 |
| 70° | 398.6 | 378.9 | 348.1 | 320.5 | 312.0 |
| 72.5° | 349.0 | 328.1 | 303.0 | 277.8 | 271.5 |
| 75° | 274.4 | 257.5 | 238.3 | 219.4 | 213.8 |
| 77.5° | 208.6 | 192.2 | 178.2 | 164.9 | 163.5 |
| 80° | 164.7 | 150.5 | 140.1 | 131.4 | 130.0 |
| 82.5° | 123.1 | 112.3 | 105.4 | 99.1 | 98.8 |
| 85° | 63.6 | 59.3 | 57.8 | 50.5 | 47.7 |
| 87.5° | 18.5 | 18.5 | 16.2 | 13.9 | 13.9 |
| 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 | 22.98 | 24.56 | 23.35 | 24.88 | 25.19 | 21.88 | 23.46 | 22.25 | 23.78 | 24.09 |
| | 3H | 24.68 | 26.10 | 25.05 | 26.43 | 26.79 | 23.46 | 24.88 | 23.84 | 25.21 | 25.57 |
| | 4H | 25.34 | 26.67 | 25.74 | 27.02 | 27.40 | 24.06 | 25.40 | 24.46 | 25.75 | 26.13 |
| | 6H | 25.77 | 27.01 | 26.19 | 27.38 | 27.77 | 24.47 | 25.71 | 24.88 | 26.07 | 26.47 |
| | 8H | 25.94 | 27.12 | 26.37 | 27.51 | 27.91 | 24.63 | 25.81 | 25.06 | 26.20 | 26.60 |
| | 12H | 26.04 | 27.17 | 26.47 | 27.55 | 27.98 | 24.72 | 25.85 | 25.15 | 26.23 | 26.66 |
| 4H | 2H | 23.47 | 24.81 | 23.87 | 25.16 | 25.54 | 22.60 | 23.94 | 23.00 | 24.28 | 24.66 |
| | 3H | 25.40 | 26.52 | 25.81 | 26.92 | 27.32 | 24.39 | 25.51 | 24.80 | 25.91 | 26.31 |
| | 4H | 26.18 | 27.18 | 26.61 | 27.60 | 28.04 | 25.09 | 26.10 | 25.53 | 26.52 | 26.95 |
| | 6H | 26.73 | 27.61 | 27.19 | 28.05 | 28.51 | 25.61 | 26.49 | 26.06 | 26.93 | 27.39 |
| | 8H | 26.95 | 27.78 | 27.42 | 28.22 | 28.69 | 25.81 | 26.64 | 26.28 | 27.08 | 27.55 |
| | 12H | 27.09 | 27.83 | 27.57 | 28.31 | 28.78 | 25.93 | 26.67 | 26.42 | 27.15 | 27.62 |
| 8H | 4H | 26.39 | 27.21 | 26.85 | 27.65 | 28.12 | 25.42 | 26.24 | 25.88 | 26.69 | 27.15 |
| | 6H | 27.06 | 27.74 | 27.55 | 28.23 | 28.70 | 26.05 | 26.74 | 26.55 | 27.23 | 27.70 |
| | 8H | 27.35 | 27.96 | 27.86 | 28.47 | 28.96 | 26.33 | 26.95 | 26.85 | 27.45 | 27.94 |
| | 12H | 27.56 | 28.10 | 28.07 | 28.59 | 29.15 | 26.52 | 27.06 | 27.02 | 27.55 | 28.11 |
| 12H | 4H | 26.40 | 27.14 | 26.88 | 27.61 | 28.08 | 25.46 | 26.20 | 25.94 | 26.67 | 27.14 |
| | 6H | 27.09 | 27.70 | 27.60 | 28.21 | 28.70 | 26.12 | 26.73 | 26.63 | 27.24 | 27.73 |
| | 8H | 27.44 | 27.98 | 27.95 | 28.47 | 29.03 | 26.46 | 27.00 | 26.97 | 27.49 | 28.06 |