

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: P572007

Luminaire Tested: 22ID-60-L830-DBR

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572007
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: 221D-60-L830-DBR
Description: 6000 LUMEN, 2X2 INDEPTH TROFFER WITH 2IN REGRESSED DOUBLE BARRELL LENS AND 3000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

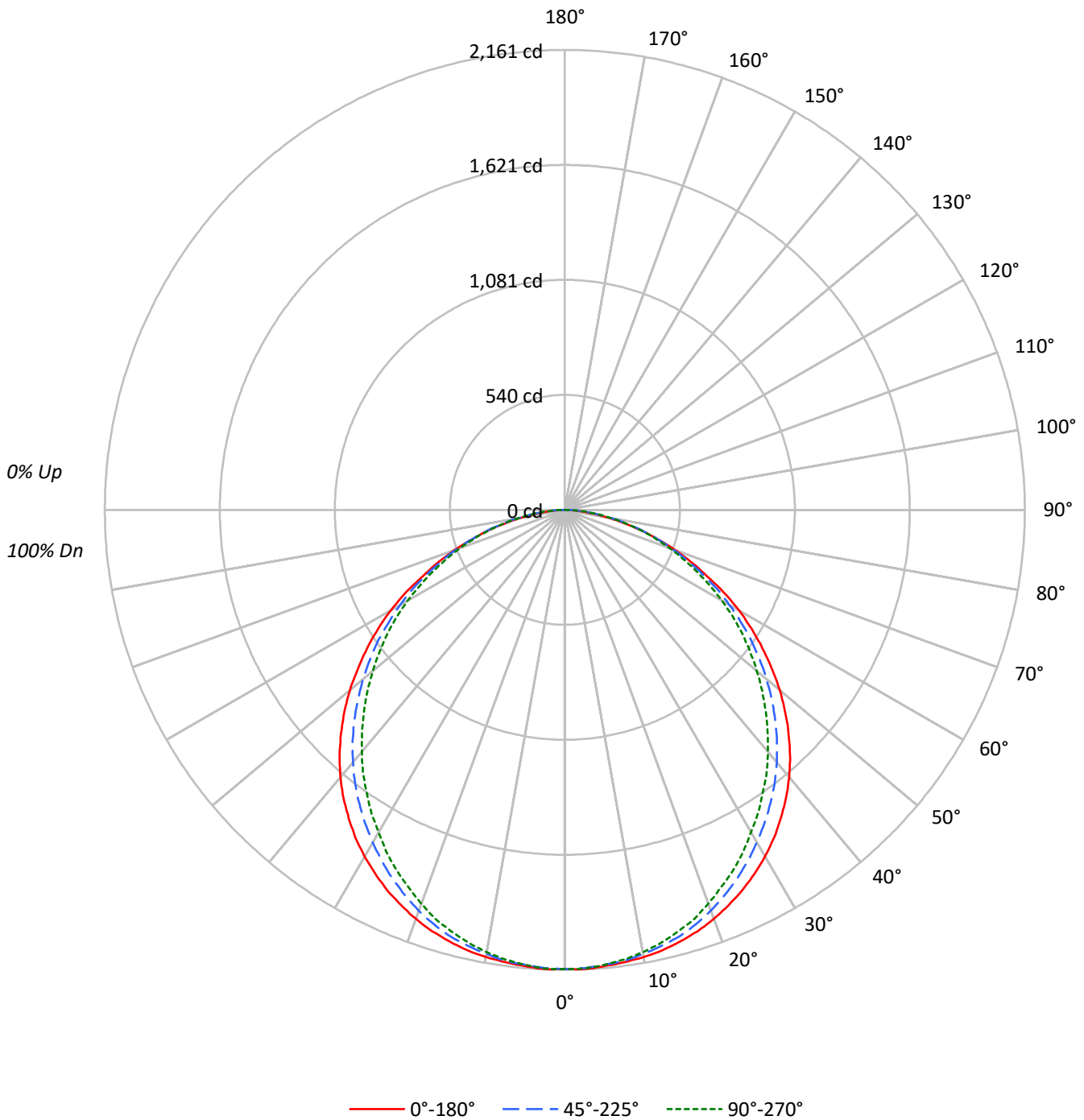
Lumens per Lamp: N/A
Luminaire Lumens: 5971.0 lumens
Efficiency: N/A
Efficacy: 117.3 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.21 / 1.35
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 50.9
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



TEST NUMBER: P572007
CATALOG NUMBER: 22ID-60-L830-DBR

Luminous Intensity Polar Plot





TEST NUMBER: P572007

CATALOG NUMBER: 22ID-60-L830-DBR

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 | 0 | |
| RCR | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | 100 | |
| 1 | 109 | 104 | 100 | 96 | 106 | 102 | 98 | 95 | 98 | 94 | 92 | 94 | 91 | 89 | 90 | 88 | 86 | 84 | | | 84 | |
| 2 | 99 | 91 | 84 | 78 | 96 | 89 | 83 | 78 | 85 | 80 | 76 | 82 | 78 | 74 | 79 | 76 | 72 | 70 | | | 70 | |
| 3 | 90 | 80 | 72 | 65 | 88 | 78 | 71 | 65 | 75 | 69 | 64 | 73 | 67 | 62 | 70 | 65 | 61 | 59 | | | 59 | |
| 4 | 83 | 71 | 62 | 55 | 80 | 69 | 61 | 55 | 67 | 60 | 54 | 65 | 58 | 53 | 62 | 57 | 53 | 51 | | | 51 | |
| 5 | 76 | 63 | 54 | 48 | 74 | 62 | 54 | 47 | 60 | 53 | 47 | 58 | 52 | 46 | 56 | 51 | 46 | 44 | | | 44 | |
| 6 | 70 | 57 | 48 | 42 | 68 | 56 | 48 | 42 | 54 | 47 | 41 | 53 | 46 | 41 | 51 | 45 | 40 | 38 | | | 38 | |
| 7 | 65 | 52 | 43 | 37 | 63 | 51 | 43 | 37 | 49 | 42 | 36 | 48 | 41 | 36 | 47 | 41 | 36 | 34 | | | 34 | |
| 8 | 61 | 47 | 39 | 33 | 59 | 47 | 38 | 33 | 45 | 38 | 33 | 44 | 37 | 32 | 43 | 37 | 32 | 30 | | | 30 | |
| 9 | 57 | 43 | 35 | 30 | 55 | 43 | 35 | 30 | 42 | 34 | 29 | 41 | 34 | 29 | 39 | 33 | 29 | 27 | | | 27 | |
| 10 | 53 | 40 | 32 | 27 | 52 | 39 | 32 | 27 | 38 | 31 | 27 | 38 | 31 | 27 | 37 | 31 | 26 | 25 | | | 25 | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 5807 | 5807 | 5807 |
| 5° | 5813 | 5797 | 5797 |
| 10° | 5832 | 5792 | 5768 |
| 15° | 5848 | 5782 | 5716 |
| 20° | 5859 | 5741 | 5640 |
| 25° | 5856 | 5682 | 5551 |
| 30° | 5845 | 5607 | 5434 |
| 35° | 5812 | 5532 | 5329 |
| 40° | 5760 | 5440 | 5212 |
| 45° | 5658 | 5322 | 5075 |
| 50° | 5521 | 5176 | 4930 |
| 55° | 5317 | 5013 | 4779 |
| 60° | 5086 | 4801 | 4579 |
| 65° | 4686 | 4536 | 4330 |
| 70° | 4308 | 4238 | 4100 |
| 75° | 3795 | 3918 | 3795 |
| 80° | 3102 | 3422 | 3422 |
| 85° | 1908 | 2726 | 2726 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5658 cd/sqm

TEST NUMBER: P572007

CATALOG NUMBER: 22ID-60-L830-DBR

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 204.1 | 3.4 |
| 10°-20° | 585.3 | 9.8 |
| 20°-30° | 883.2 | 14.8 |
| 30°-40° | 1056.8 | 17.7 |
| 40°-50° | 1082.2 | 18.1 |
| 50°-60° | 956.8 | 16.0 |
| 60°-70° | 706.8 | 11.8 |
| 70°-80° | 395.0 | 6.6 |
| 80°-90° | 100.9 | 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° | 1672.6 | 28.0 |
| 0°-40° | 2729.4 | 45.7 |
| 0°-60° | 4768.3 | 79.9 |
| 0°-90° | 5971.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 5971.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 2158 | 2158 | 2158 | 2158 | 2158 | |
| 5° | 2152 | 2149 | 2146 | 2143 | 2146 | 205 |
| 15° | 2099 | 2090 | 2076 | 2058 | 2052 | 593 |
| 25° | 1972 | 1955 | 1914 | 1881 | 1869 | 909 |
| 35° | 1769 | 1743 | 1684 | 1637 | 1622 | 1107 |
| 45° | 1487 | 1457 | 1398 | 1348 | 1334 | 1146 |
| 55° | 1133 | 1113 | 1069 | 1030 | 1019 | 1013 |
| 65° | 736 | 736 | 712 | 689 | 680 | 734 |
| 75° | 365 | 380 | 377 | 371 | 365 | 389 |
| 85° | 62 | 80 | 88 | 91 | 88 | 84 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P572007

CATALOG NUMBER: 22ID-60-L830-DBR

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 2157.9 | 2157.9 | 2157.9 | 2157.9 | 2157.9 |
| 2.5° | 2160.8 | 2154.9 | 2154.9 | 2154.9 | 2157.9 |
| 5° | 2152.0 | 2149.1 | 2146.1 | 2143.2 | 2146.1 |
| 7.5° | 2143.2 | 2140.2 | 2137.3 | 2128.4 | 2131.4 |
| 10° | 2134.3 | 2128.4 | 2119.6 | 2110.8 | 2110.8 |
| 12.5° | 2119.6 | 2110.8 | 2099.0 | 2087.2 | 2084.3 |
| 15° | 2099.0 | 2090.2 | 2075.5 | 2057.8 | 2051.9 |
| 17.5° | 2075.5 | 2063.7 | 2043.1 | 2022.5 | 2016.6 |
| 20° | 2046.0 | 2034.2 | 2004.8 | 1978.3 | 1969.5 |
| 22.5° | 2010.7 | 1996.0 | 1960.6 | 1931.2 | 1919.4 |
| 25° | 1972.4 | 1954.8 | 1913.5 | 1881.2 | 1869.4 |
| 27.5° | 1928.3 | 1907.7 | 1860.6 | 1825.2 | 1813.4 |
| 30° | 1881.2 | 1857.6 | 1804.6 | 1766.3 | 1748.7 |
| 32.5° | 1828.2 | 1801.7 | 1745.7 | 1701.6 | 1689.8 |
| 35° | 1769.3 | 1742.8 | 1683.9 | 1636.8 | 1622.1 |
| 37.5° | 1707.5 | 1678.0 | 1619.2 | 1569.1 | 1557.3 |
| 40° | 1639.8 | 1610.3 | 1548.5 | 1495.5 | 1483.7 |
| 42.5° | 1566.2 | 1533.8 | 1474.9 | 1424.9 | 1410.1 |
| 45° | 1486.7 | 1457.2 | 1398.4 | 1348.3 | 1333.6 |
| 47.5° | 1404.2 | 1377.8 | 1318.9 | 1271.8 | 1257.1 |
| 50° | 1318.9 | 1292.4 | 1236.4 | 1189.3 | 1177.6 |
| 52.5° | 1224.7 | 1204.1 | 1154.0 | 1106.9 | 1098.1 |
| 55° | 1133.4 | 1112.8 | 1068.6 | 1030.4 | 1018.6 |
| 57.5° | 1039.2 | 1018.6 | 980.3 | 942.1 | 936.2 |
| 60° | 945.0 | 927.3 | 892.0 | 862.6 | 850.8 |
| 62.5° | 842.0 | 836.1 | 806.6 | 774.2 | 765.4 |
| 65° | 736.0 | 736.0 | 712.4 | 688.9 | 680.0 |
| 67.5° | 644.7 | 641.8 | 624.1 | 609.4 | 600.6 |
| 70° | 547.6 | 553.5 | 538.7 | 524.0 | 521.1 |
| 72.5° | 456.3 | 462.2 | 456.3 | 447.5 | 441.6 |
| 75° | 365.0 | 379.8 | 376.8 | 370.9 | 365.0 |
| 77.5° | 279.7 | 297.3 | 297.3 | 294.4 | 291.4 |
| 80° | 200.2 | 217.8 | 220.8 | 220.8 | 220.8 |
| 82.5° | 126.6 | 144.3 | 153.1 | 153.1 | 153.1 |
| 85° | 61.8 | 79.5 | 88.3 | 91.3 | 88.3 |
| 87.5° | 20.6 | 29.4 | 32.4 | 35.3 | 35.3 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



TEST NUMBER: P572007
 CATALOG NUMBER: 22ID-60-L830-DBR

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 | 17.98 | 19.61 | 18.34 | 19.92 | 20.23 | 17.40 | 19.03 | 17.77 | 19.35 | 19.66 |
| | 3H | 19.65 | 21.12 | 20.03 | 21.45 | 21.81 | 19.15 | 20.62 | 19.52 | 20.94 | 21.30 |
| | 4H | 20.24 | 21.62 | 20.64 | 21.97 | 22.35 | 19.80 | 21.19 | 20.20 | 21.54 | 21.91 |
| | 6H | 20.62 | 21.91 | 21.03 | 22.27 | 22.66 | 20.29 | 21.57 | 20.70 | 21.94 | 22.33 |
| | 8H | 20.72 | 21.95 | 21.15 | 22.34 | 22.73 | 20.44 | 21.67 | 20.86 | 22.05 | 22.45 |
| | 12H | 20.76 | 21.94 | 21.19 | 22.32 | 22.75 | 20.53 | 21.71 | 20.96 | 22.09 | 22.52 |
| 4H | 2H | 18.53 | 19.91 | 18.93 | 20.26 | 20.64 | 18.07 | 19.46 | 18.47 | 19.80 | 20.18 |
| | 3H | 20.43 | 21.59 | 20.84 | 21.99 | 22.39 | 20.03 | 21.19 | 20.44 | 21.58 | 21.98 |
| | 4H | 21.16 | 22.20 | 21.59 | 22.62 | 23.05 | 20.81 | 21.86 | 21.24 | 22.27 | 22.71 |
| | 6H | 21.67 | 22.59 | 22.12 | 23.03 | 23.48 | 21.42 | 22.33 | 21.87 | 22.77 | 23.23 |
| | 8H | 21.81 | 22.66 | 22.27 | 23.11 | 23.57 | 21.61 | 22.47 | 22.07 | 22.91 | 23.38 |
| | 12H | 21.88 | 22.65 | 22.36 | 23.13 | 23.59 | 21.75 | 22.52 | 22.23 | 22.99 | 23.46 |
| 8H | 4H | 21.44 | 22.29 | 21.90 | 22.74 | 23.20 | 21.13 | 21.99 | 21.59 | 22.43 | 22.89 |
| | 6H | 22.07 | 22.78 | 22.56 | 23.27 | 23.74 | 21.85 | 22.57 | 22.35 | 23.05 | 23.53 |
| | 8H | 22.27 | 22.90 | 22.78 | 23.41 | 23.90 | 22.12 | 22.76 | 22.63 | 23.27 | 23.75 |
| | 12H | 22.39 | 22.96 | 22.90 | 23.45 | 24.01 | 22.32 | 22.89 | 22.83 | 23.38 | 23.94 |
| 12H | 4H | 21.46 | 22.23 | 21.94 | 22.71 | 23.18 | 21.16 | 21.93 | 21.64 | 22.41 | 22.88 |
| | 6H | 22.11 | 22.75 | 22.62 | 23.26 | 23.74 | 21.91 | 22.55 | 22.42 | 23.05 | 23.54 |
| | 8H | 22.37 | 22.93 | 22.87 | 23.42 | 23.98 | 22.23 | 22.79 | 22.74 | 23.28 | 23.84 |