

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: P601146

Luminaire Tested: 24D3X-LP-30-L830

Issue Date: 10/6/2023

Test Information

Test Method: LM-79-2019
Report Number: P601146
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2305-008-4)
Test Lab: INNOVATION CENTER
Issue Date: 10/6/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: 24D3X-LP-30-L830
Description: 2x4 D3X-LP AT 3000LM 3000K 80CRI
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

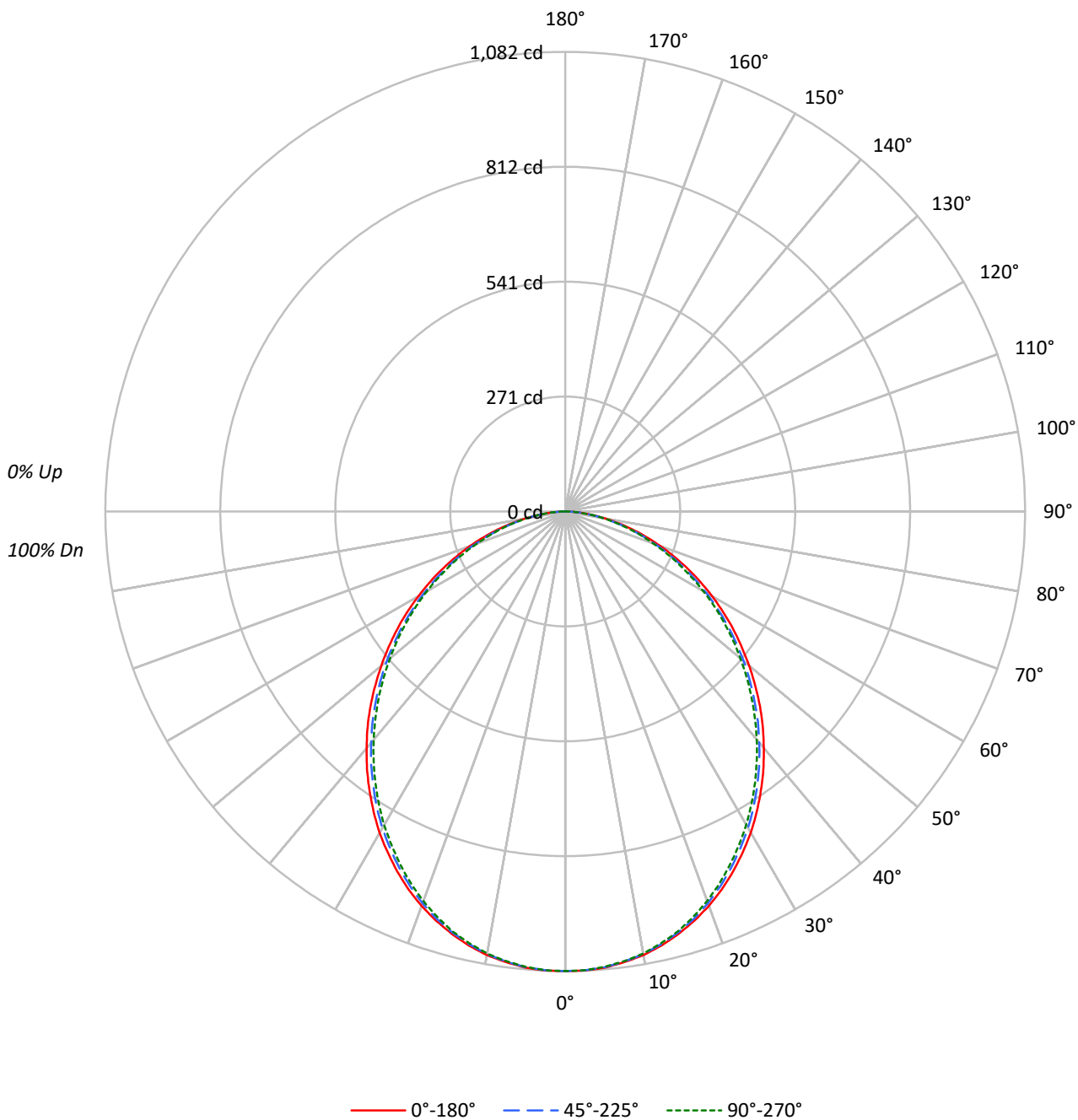
Lumens per Lamp: N/A
Luminaire Lumens: 2728.0 lumens
Efficiency: N/A
Efficacy: 128.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.29
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 21.3
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: 24 FT



TEST NUMBER: P601146
CATALOG NUMBER: 24D3X-LP-30-L830

Luminous Intensity Polar Plot





TEST NUMBER: P601146
 CATALOG NUMBER: 24D3X-LP-30-L830

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 | 100 | 97 | 106 | 102 | 99 | 95 | 98 | 95 | 92 | 94 | 92 | 89 | 91 | 89 | 87 | 85 |
| 2 | 100 | 92 | 85 | 79 | 97 | 90 | 84 | 78 | 86 | 81 | 77 | 83 | 79 | 75 | 80 | 76 | 73 | 71 |
| 3 | 91 | 81 | 73 | 67 | 89 | 79 | 72 | 66 | 76 | 70 | 65 | 74 | 68 | 64 | 71 | 66 | 63 | 60 |
| 4 | 84 | 72 | 63 | 57 | 81 | 71 | 63 | 56 | 68 | 61 | 56 | 66 | 60 | 55 | 64 | 58 | 54 | 52 |
| 5 | 77 | 64 | 56 | 49 | 75 | 63 | 55 | 49 | 61 | 54 | 48 | 59 | 53 | 48 | 57 | 52 | 47 | 45 |
| 6 | 71 | 58 | 49 | 43 | 69 | 57 | 49 | 43 | 55 | 48 | 43 | 54 | 47 | 42 | 52 | 46 | 42 | 40 |
| 7 | 66 | 53 | 44 | 38 | 64 | 52 | 44 | 38 | 51 | 43 | 38 | 49 | 42 | 38 | 48 | 42 | 37 | 35 |
| 8 | 62 | 48 | 40 | 34 | 60 | 48 | 40 | 34 | 46 | 39 | 34 | 45 | 39 | 34 | 44 | 38 | 33 | 32 |
| 9 | 58 | 44 | 36 | 31 | 56 | 44 | 36 | 31 | 43 | 36 | 31 | 42 | 35 | 31 | 41 | 35 | 30 | 29 |
| 10 | 54 | 41 | 33 | 28 | 53 | 41 | 33 | 28 | 40 | 33 | 28 | 39 | 32 | 28 | 38 | 32 | 28 | 26 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 1456 | 1456 | 1456 |
| 5° | 1456 | 1454 | 1453 |
| 10° | 1449 | 1445 | 1444 |
| 15° | 1434 | 1429 | 1426 |
| 20° | 1415 | 1405 | 1397 |
| 25° | 1388 | 1373 | 1362 |
| 30° | 1357 | 1336 | 1324 |
| 35° | 1318 | 1293 | 1279 |
| 40° | 1277 | 1247 | 1232 |
| 45° | 1233 | 1198 | 1181 |
| 50° | 1183 | 1146 | 1126 |
| 55° | 1131 | 1091 | 1071 |
| 60° | 1073 | 1030 | 1010 |
| 65° | 1010 | 962 | 943 |
| 70° | 939 | 889 | 867 |
| 75° | 852 | 804 | 791 |
| 80° | 738 | 699 | 703 |
| 85° | 608 | 601 | 562 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1233 cd/sqm



TEST NUMBER: P601146
 CATALOG NUMBER: 24D3X-LP-30-L830

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 102.2 | 3.7 |
| 10°-20° | 289.2 | 10.6 |
| 20°-30° | 426.2 | 15.6 |
| 30°-40° | 493.4 | 18.1 |
| 40°-50° | 487.1 | 17.9 |
| 50°-60° | 417.2 | 15.3 |
| 60°-70° | 301.6 | 11.1 |
| 70°-80° | 166.3 | 6.1 |
| 80°-90° | 44.8 | 1.6 |
| 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° | 817.6 | 30.0 |
| 0°-40° | 1311.0 | 48.1 |
| 0°-60° | 2215.3 | 81.2 |
| 0°-90° | 2728.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2728.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1082 | 1082 | 1082 | 1082 | 1082 | |
| 5° | 1078 | 1077 | 1077 | 1076 | 1076 | 102 |
| 15° | 1030 | 1029 | 1026 | 1025 | 1024 | 290 |
| 25° | 935 | 932 | 925 | 920 | 918 | 430 |
| 35° | 803 | 798 | 787 | 781 | 779 | 502 |
| 45° | 648 | 639 | 630 | 623 | 620 | 499 |
| 55° | 482 | 473 | 465 | 458 | 456 | 431 |
| 65° | 317 | 310 | 302 | 298 | 296 | 314 |
| 75° | 164 | 159 | 155 | 154 | 152 | 174 |
| 85° | 39 | 39 | 39 | 36 | 36 | 46 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P601146
 CATALOG NUMBER: 24D3X-LP-30-L830

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1081.9 | 1081.9 | 1081.9 | 1081.9 | 1081.9 |
| 2.5° | 1081.9 | 1081.9 | 1080.9 | 1080.9 | 1080.9 |
| 5° | 1077.8 | 1077.3 | 1076.8 | 1075.8 | 1075.8 |
| 7.5° | 1070.1 | 1070.1 | 1068.6 | 1068.6 | 1067.6 |
| 10° | 1060.4 | 1059.4 | 1057.8 | 1057.8 | 1056.8 |
| 12.5° | 1046.6 | 1045.6 | 1043.5 | 1043.0 | 1041.5 |
| 15° | 1029.7 | 1028.6 | 1026.1 | 1024.6 | 1023.5 |
| 17.5° | 1010.2 | 1008.7 | 1005.6 | 1003.0 | 1001.0 |
| 20° | 988.2 | 986.1 | 981.5 | 978.4 | 975.9 |
| 22.5° | 963.1 | 961.0 | 954.4 | 950.8 | 948.2 |
| 25° | 934.9 | 932.3 | 924.7 | 920.0 | 917.5 |
| 27.5° | 904.7 | 901.6 | 892.9 | 887.8 | 885.2 |
| 30° | 873.4 | 868.8 | 860.1 | 854.0 | 851.9 |
| 32.5° | 838.6 | 834.0 | 825.3 | 818.1 | 816.1 |
| 35° | 802.7 | 797.6 | 787.4 | 780.7 | 778.7 |
| 37.5° | 765.9 | 759.2 | 750.0 | 743.3 | 740.2 |
| 40° | 726.9 | 720.3 | 710.0 | 702.8 | 701.3 |
| 42.5° | 688.0 | 679.8 | 671.1 | 663.9 | 660.8 |
| 45° | 648.0 | 639.3 | 629.6 | 623.4 | 620.4 |
| 47.5° | 606.0 | 597.8 | 589.1 | 581.9 | 579.4 |
| 50° | 565.0 | 556.3 | 547.6 | 541.0 | 537.9 |
| 52.5° | 523.0 | 514.3 | 506.1 | 500.5 | 497.4 |
| 55° | 482.1 | 472.8 | 465.1 | 458.5 | 456.4 |
| 57.5° | 440.6 | 432.4 | 423.7 | 417.5 | 416.0 |
| 60° | 398.6 | 391.4 | 382.7 | 377.0 | 375.5 |
| 62.5° | 358.1 | 350.9 | 342.7 | 337.1 | 334.5 |
| 65° | 317.1 | 309.9 | 302.2 | 297.6 | 296.1 |
| 67.5° | 277.1 | 270.5 | 263.8 | 259.2 | 258.2 |
| 70° | 238.7 | 232.1 | 225.9 | 221.8 | 220.3 |
| 72.5° | 200.3 | 195.7 | 189.5 | 187.0 | 185.4 |
| 75° | 163.9 | 158.8 | 154.7 | 154.2 | 152.1 |
| 77.5° | 128.6 | 128.1 | 121.4 | 120.4 | 120.4 |
| 80° | 95.3 | 93.7 | 90.2 | 89.1 | 90.7 |
| 82.5° | 65.6 | 64.5 | 62.5 | 62.0 | 61.5 |
| 85° | 39.4 | 39.4 | 38.9 | 36.4 | 36.4 |
| 87.5° | 17.9 | 17.4 | 16.9 | 17.4 | 19.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)