

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: P601112

Luminaire Tested: 22D3X-LP-45-L840

Issue Date: 10/5/2023

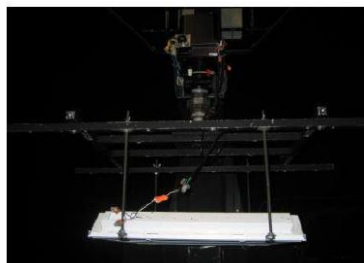
Test Information

Test Method: LM-79-2019
Report Number: P601112
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2307-104-1)
Test Lab: INNOVATION CENTER
Issue Date: 10/5/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: 22D3X-LP-45-L840
Description: 2x2 D3X-LP AT 4500LM 4000K 80CRI
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

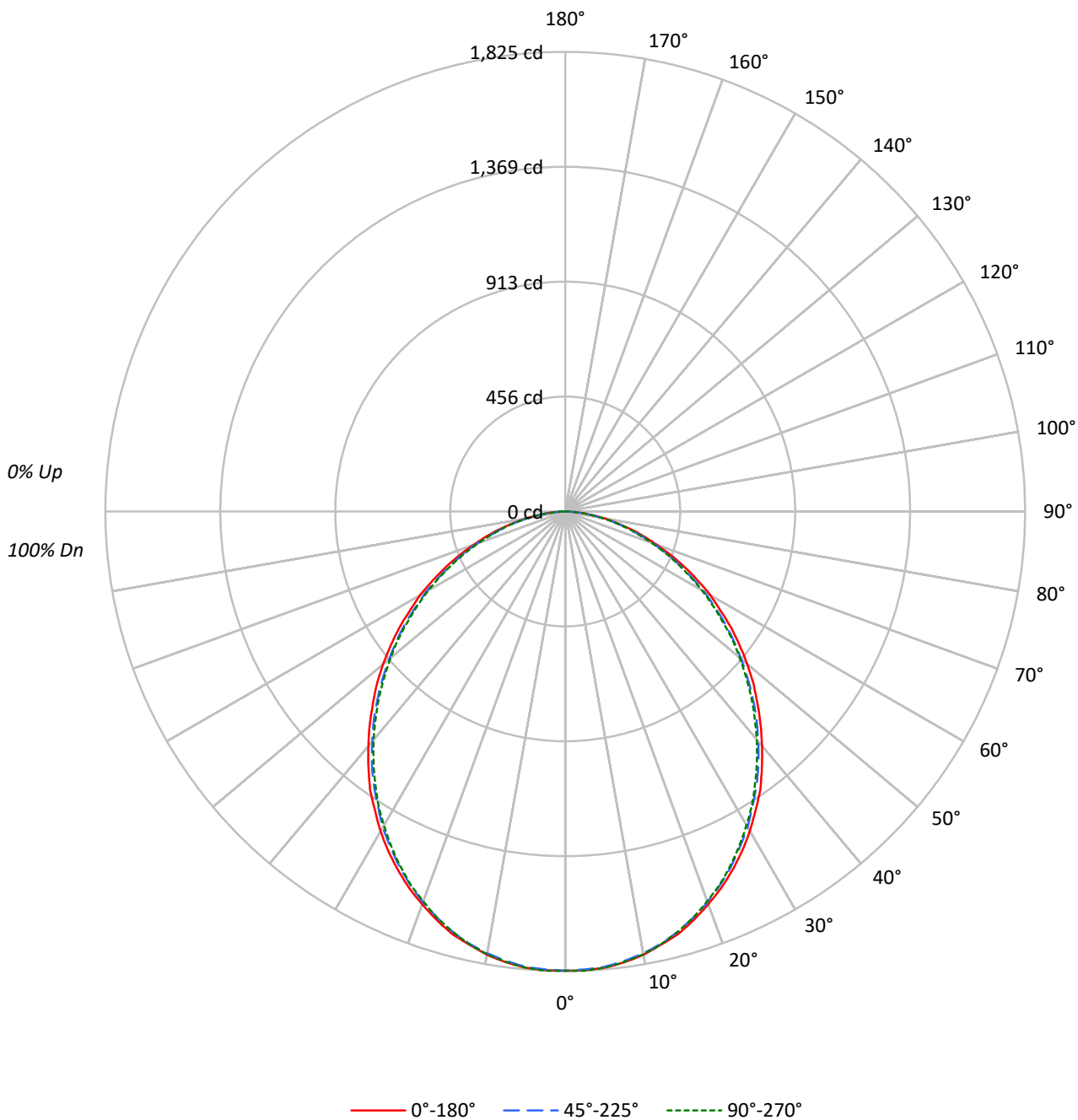
Lumens per Lamp: N/A
Luminaire Lumens: 4557.0 lumens
Efficiency: N/A
Efficacy: 120.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.29
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 37.8
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: P601112
CATALOG NUMBER: 22D3X-LP-45-L840

Luminous Intensity Polar Plot





TEST NUMBER: P601112
 CATALOG NUMBER: 22D3X-LP-45-L840

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 | 102 | 99 | 95 | 98 | 95 | 92 | 94 | 92 | 89 | 91 | 89 | 87 | 85 |
| 2 | 100 | 92 | 85 | 80 | 97 | 90 | 84 | 79 | 86 | 81 | 77 | 83 | 79 | 75 | 80 | 77 | 73 | 71 |
| 3 | 91 | 81 | 73 | 67 | 89 | 79 | 72 | 66 | 76 | 70 | 65 | 74 | 68 | 64 | 71 | 67 | 63 | 61 |
| 4 | 84 | 72 | 64 | 57 | 81 | 71 | 63 | 57 | 68 | 61 | 56 | 66 | 60 | 55 | 64 | 59 | 54 | 52 |
| 5 | 77 | 65 | 56 | 49 | 75 | 64 | 55 | 49 | 61 | 54 | 49 | 59 | 53 | 48 | 58 | 52 | 48 | 45 |
| 6 | 71 | 58 | 50 | 43 | 69 | 57 | 49 | 43 | 56 | 48 | 43 | 54 | 47 | 42 | 52 | 47 | 42 | 40 |
| 7 | 66 | 53 | 44 | 38 | 65 | 52 | 44 | 38 | 51 | 43 | 38 | 49 | 43 | 38 | 48 | 42 | 37 | 36 |
| 8 | 62 | 49 | 40 | 34 | 60 | 48 | 40 | 34 | 47 | 39 | 34 | 45 | 39 | 34 | 44 | 38 | 34 | 32 |
| 9 | 58 | 45 | 37 | 31 | 56 | 44 | 36 | 31 | 43 | 36 | 31 | 42 | 35 | 31 | 41 | 35 | 31 | 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° | 4907 | 4907 | 4907 |
| 5° | 4911 | 4901 | 4911 |
| 10° | 4884 | 4869 | 4879 |
| 15° | 4837 | 4812 | 4812 |
| 20° | 4754 | 4728 | 4718 |
| 25° | 4665 | 4622 | 4605 |
| 30° | 4555 | 4498 | 4470 |
| 35° | 4433 | 4350 | 4320 |
| 40° | 4268 | 4186 | 4154 |
| 45° | 4106 | 4009 | 3975 |
| 50° | 3947 | 3817 | 3787 |
| 55° | 3766 | 3630 | 3579 |
| 60° | 3578 | 3421 | 3372 |
| 65° | 3331 | 3169 | 3134 |
| 70° | 3044 | 2929 | 2858 |
| 75° | 2776 | 2607 | 2625 |
| 80° | 2393 | 2252 | 2280 |
| 85° | 1849 | 1794 | 1683 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4106 cd/sqm



TEST NUMBER: P601112
 CATALOG NUMBER: 22D3X-LP-45-L840

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 172.3 | 3.8 |
| 10°-20° | 487.1 | 10.7 |
| 20°-30° | 717.4 | 15.7 |
| 30°-40° | 829.8 | 18.2 |
| 40°-50° | 815.8 | 17.9 |
| 50°-60° | 695.3 | 15.3 |
| 60°-70° | 498.2 | 10.9 |
| 70°-80° | 270.6 | 5.9 |
| 80°-90° | 70.6 | 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° | 1376.7 | 30.2 |
| 0°-40° | 2206.5 | 48.4 |
| 0°-60° | 3717.6 | 81.6 |
| 0°-90° | 4557.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4557.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1824 | 1824 | 1824 | 1824 | 1824 | |
| 5° | 1818 | 1814 | 1814 | 1814 | 1818 | 173 |
| 15° | 1736 | 1729 | 1727 | 1726 | 1727 | 489 |
| 25° | 1571 | 1564 | 1557 | 1553 | 1551 | 723 |
| 35° | 1350 | 1339 | 1324 | 1317 | 1315 | 842 |
| 45° | 1079 | 1072 | 1054 | 1044 | 1044 | 833 |
| 55° | 803 | 788 | 774 | 765 | 763 | 717 |
| 65° | 523 | 512 | 498 | 492 | 492 | 518 |
| 75° | 267 | 258 | 251 | 247 | 252 | 282 |
| 85° | 60 | 60 | 58 | 56 | 54 | 73 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P601112
 CATALOG NUMBER: 22D3X-LP-45-L840

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1823.6 | 1823.6 | 1823.6 | 1823.6 | 1823.6 |
| 2.5° | 1823.6 | 1821.8 | 1820.0 | 1821.8 | 1825.4 |
| 5° | 1818.1 | 1814.5 | 1814.5 | 1814.5 | 1818.1 |
| 7.5° | 1805.4 | 1801.8 | 1800.0 | 1801.8 | 1803.6 |
| 10° | 1787.3 | 1783.6 | 1781.8 | 1783.6 | 1785.5 |
| 12.5° | 1761.8 | 1760.0 | 1758.2 | 1758.2 | 1760.0 |
| 15° | 1736.4 | 1729.1 | 1727.3 | 1725.5 | 1727.3 |
| 17.5° | 1700.1 | 1698.3 | 1691.0 | 1691.0 | 1691.0 |
| 20° | 1660.1 | 1656.5 | 1651.0 | 1647.4 | 1647.4 |
| 22.5° | 1618.4 | 1614.7 | 1605.6 | 1602.0 | 1603.8 |
| 25° | 1571.1 | 1563.9 | 1556.6 | 1553.0 | 1551.1 |
| 27.5° | 1520.3 | 1513.0 | 1502.1 | 1496.7 | 1496.7 |
| 30° | 1465.8 | 1460.3 | 1447.6 | 1440.4 | 1438.5 |
| 32.5° | 1405.8 | 1402.2 | 1384.0 | 1380.4 | 1380.4 |
| 35° | 1349.5 | 1338.6 | 1324.1 | 1316.8 | 1315.0 |
| 37.5° | 1282.3 | 1275.1 | 1260.5 | 1251.5 | 1249.6 |
| 40° | 1215.1 | 1206.0 | 1191.5 | 1184.2 | 1182.4 |
| 42.5° | 1147.9 | 1138.8 | 1124.3 | 1115.2 | 1113.4 |
| 45° | 1078.9 | 1071.6 | 1053.5 | 1044.4 | 1044.4 |
| 47.5° | 1013.5 | 999.0 | 982.6 | 975.4 | 973.6 |
| 50° | 942.7 | 930.0 | 911.8 | 904.5 | 904.5 |
| 52.5° | 871.8 | 862.8 | 842.8 | 839.1 | 835.5 |
| 55° | 802.8 | 788.3 | 773.8 | 764.7 | 762.9 |
| 57.5° | 728.3 | 715.6 | 701.1 | 693.8 | 693.8 |
| 60° | 664.8 | 648.4 | 635.7 | 626.6 | 626.6 |
| 62.5° | 592.1 | 577.6 | 564.9 | 559.4 | 557.6 |
| 65° | 523.1 | 512.2 | 497.7 | 492.2 | 492.2 |
| 67.5° | 454.1 | 445.0 | 432.3 | 426.8 | 428.7 |
| 70° | 386.9 | 381.4 | 372.3 | 365.1 | 363.3 |
| 72.5° | 325.1 | 317.9 | 308.8 | 307.0 | 307.0 |
| 75° | 267.0 | 257.9 | 250.7 | 247.0 | 252.5 |
| 77.5° | 207.1 | 201.6 | 198.0 | 196.2 | 198.0 |
| 80° | 154.4 | 147.1 | 145.3 | 147.1 | 147.1 |
| 82.5° | 107.2 | 103.5 | 101.7 | 101.7 | 101.7 |
| 85° | 59.9 | 59.9 | 58.1 | 56.3 | 54.5 |
| 87.5° | 23.6 | 23.6 | 25.4 | 25.4 | 27.2 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)