

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

(formerly Eaton)

Brand: CORELITE

Report Number: P520072

Luminaire Tested: **SQ4-F-075U-125D-940-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520072
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, G3-1910-536-20)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-075U-125D-940-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

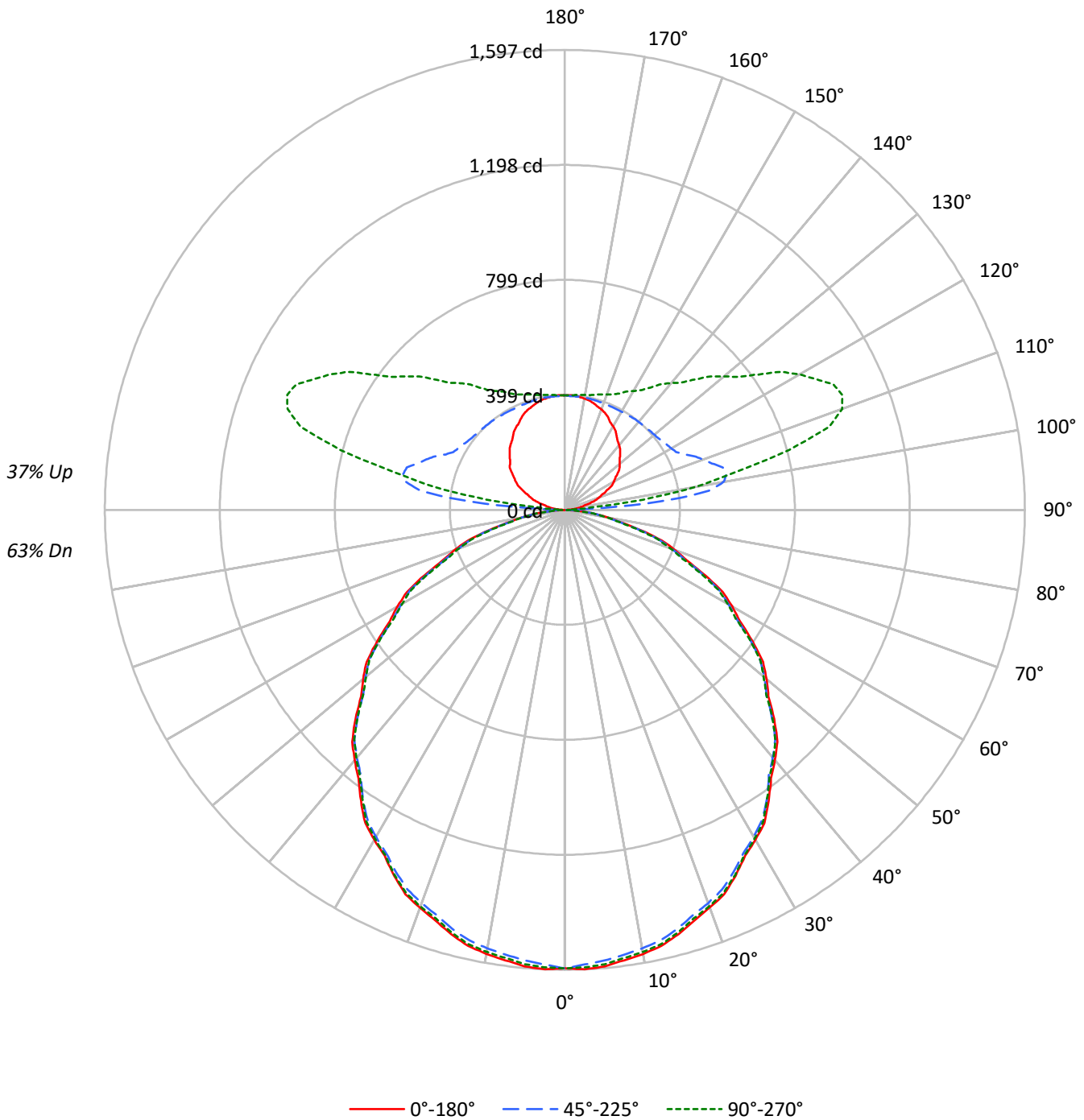
Lumens per Lamp: N/A
Luminaire Lumens: 6932.6 lumens
Efficiency: N/A
Efficacy: 111.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 62.1
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



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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 | 110 | 110 | 110 | 110 | 103 | 103 | 103 | 103 | 90 | 90 | 90 | 79 | 79 | 79 | 68 | 68 | 68 | 63 |
| 1 | 101 | 96 | 92 | 89 | 94 | 90 | 87 | 84 | 79 | 77 | 74 | 69 | 67 | 66 | 60 | 59 | 57 | 53 |
| 2 | 92 | 84 | 78 | 72 | 86 | 79 | 73 | 69 | 69 | 65 | 61 | 61 | 57 | 55 | 53 | 50 | 48 | 44 |
| 3 | 83 | 74 | 66 | 60 | 78 | 69 | 63 | 57 | 61 | 56 | 52 | 54 | 49 | 46 | 47 | 43 | 41 | 37 |
| 4 | 76 | 65 | 57 | 51 | 71 | 61 | 54 | 48 | 54 | 48 | 44 | 48 | 43 | 39 | 41 | 38 | 35 | 32 |
| 5 | 70 | 58 | 50 | 44 | 65 | 55 | 47 | 42 | 49 | 42 | 38 | 43 | 38 | 34 | 37 | 34 | 30 | 27 |
| 6 | 65 | 52 | 44 | 38 | 60 | 49 | 42 | 36 | 44 | 38 | 33 | 39 | 34 | 30 | 34 | 30 | 27 | 24 |
| 7 | 60 | 47 | 39 | 33 | 56 | 45 | 37 | 32 | 40 | 34 | 29 | 35 | 30 | 26 | 31 | 27 | 24 | 21 |
| 8 | 55 | 43 | 35 | 29 | 52 | 41 | 33 | 28 | 36 | 30 | 26 | 32 | 27 | 24 | 28 | 24 | 21 | 19 |
| 9 | 52 | 39 | 31 | 26 | 48 | 37 | 30 | 25 | 33 | 27 | 23 | 30 | 25 | 21 | 26 | 22 | 19 | 17 |
| 10 | 48 | 36 | 28 | 24 | 45 | 34 | 27 | 23 | 31 | 25 | 21 | 27 | 23 | 19 | 24 | 20 | 17 | 15 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 14688 | 14688 | 14688 |
| 5° | 14736 | 14550 | 14671 |
| 10° | 14668 | 14487 | 14603 |
| 15° | 14570 | 14394 | 14512 |
| 20° | 14435 | 14272 | 14383 |
| 25° | 14271 | 14120 | 14236 |
| 30° | 14095 | 13973 | 14048 |
| 35° | 13895 | 13776 | 13786 |
| 40° | 13665 | 13518 | 13560 |
| 45° | 13409 | 13262 | 13284 |
| 50° | 13118 | 12965 | 12928 |
| 55° | 12783 | 12598 | 12571 |
| 60° | 12367 | 12092 | 12029 |
| 65° | 11725 | 11477 | 11324 |
| 70° | 10920 | 10636 | 10494 |
| 75° | 9714 | 9496 | 9211 |
| 80° | 7917 | 7678 | 7635 |
| 85° | 4732 | 5378 | 5378 |



TEST NUMBER: P520072

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 150.2 | 2.2 |
| 10°-20° | 427.8 | 6.2 |
| 20°-30° | 642.7 | 9.3 |
| 30°-40° | 766.9 | 11.1 |
| 40°-50° | 786.1 | 11.3 |
| 50°-60° | 700.7 | 10.1 |
| 60°-70° | 521.6 | 7.5 |
| 70°-80° | 282.6 | 4.1 |
| 80°-90° | 65.9 | 1.0 |
| 90°-100° | 187.4 | 2.7 |
| 100°-110° | 515.5 | 7.4 |
| 110°-120° | 532.1 | 7.7 |
| 120°-130° | 426.3 | 6.1 |
| 130°-140° | 334.8 | 4.8 |
| 140°-150° | 256.6 | 3.7 |
| 150°-160° | 184.5 | 2.7 |
| 160°-170° | 112.8 | 1.6 |
| 170°-180° | 38.0 | 0.5 |
| 0°-30° | 1220.7 | 17.6 |
| 0°-40° | 1987.6 | 28.7 |
| 0°-60° | 3474.4 | 50.1 |
| 0°-90° | 4344.5 | 62.7 |
| 90°-120° | 1235.0 | 17.8 |
| 90°-150° | 2252.8 | 32.5 |
| 90°-180° | 2588.0 | 37.3 |
| 0°-180° | 6932.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1592 | 1592 | 1592 | 1592 | 1592 | |
| 5° | 1591 | 1589 | 1571 | 1585 | 1584 | 151 |
| 15° | 1525 | 1522 | 1507 | 1520 | 1519 | 430 |
| 25° | 1402 | 1399 | 1387 | 1395 | 1398 | 646 |
| 35° | 1234 | 1233 | 1223 | 1223 | 1224 | 771 |
| 45° | 1028 | 1025 | 1016 | 1015 | 1018 | 792 |
| 55° | 795 | 792 | 783 | 777 | 782 | 710 |
| 65° | 537 | 534 | 526 | 522 | 519 | 532 |
| 75° | 272 | 272 | 266 | 261 | 258 | 289 |
| 85° | 45 | 51 | 51 | 52 | 51 | 62 |
| 90° | 1 | 3 | 6 | 8 | 8 | 3 |
| 95° | 28 | 102 | 331 | 142 | 90 | 29 |
| 105° | 92 | 142 | 568 | 865 | 807 | 97 |
| 115° | 163 | 199 | 456 | 907 | 1030 | 161 |
| 125° | 225 | 256 | 413 | 699 | 819 | 201 |
| 135° | 271 | 301 | 402 | 566 | 640 | 209 |
| 145° | 314 | 335 | 396 | 482 | 519 | 197 |
| 155° | 355 | 367 | 393 | 433 | 445 | 163 |
| 165° | 384 | 389 | 395 | 411 | 413 | 108 |
| 175° | 397 | 398 | 396 | 401 | 400 | 38 |
| 180° | 397 | 397 | 397 | 397 | 397 | |



TEST NUMBER: P520072

CATALOG NUMBER: SQ4-F-075U-125D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1592.0 | 1592.0 | 1592.0 | 1592.0 | 1592.0 |
| 2.5° | 1596.9 | 1594.2 | 1580.1 | 1591.9 | 1589.9 |
| 5° | 1591.1 | 1588.6 | 1571.0 | 1584.9 | 1584.1 |
| 7.5° | 1577.6 | 1574.4 | 1558.4 | 1571.5 | 1569.9 |
| 10° | 1565.7 | 1563.1 | 1546.4 | 1559.6 | 1558.7 |
| 12.5° | 1551.0 | 1548.5 | 1531.7 | 1544.8 | 1544.7 |
| 15° | 1525.4 | 1522.0 | 1507.0 | 1520.2 | 1519.3 |
| 17.5° | 1494.7 | 1490.8 | 1476.0 | 1486.3 | 1488.0 |
| 20° | 1470.2 | 1467.7 | 1453.6 | 1463.2 | 1464.9 |
| 22.5° | 1445.0 | 1441.7 | 1426.9 | 1438.0 | 1439.7 |
| 25° | 1401.9 | 1399.3 | 1387.0 | 1394.9 | 1398.4 |
| 27.5° | 1354.6 | 1354.6 | 1343.1 | 1348.8 | 1350.9 |
| 30° | 1323.0 | 1323.0 | 1311.6 | 1315.2 | 1318.6 |
| 32.5° | 1289.4 | 1286.7 | 1275.9 | 1278.8 | 1282.2 |
| 35° | 1233.7 | 1232.7 | 1223.1 | 1223.1 | 1224.0 |
| 37.5° | 1176.0 | 1173.6 | 1163.0 | 1163.8 | 1168.0 |
| 40° | 1134.6 | 1132.9 | 1122.4 | 1122.5 | 1125.9 |
| 42.5° | 1092.6 | 1090.8 | 1081.7 | 1080.3 | 1081.7 |
| 45° | 1027.7 | 1025.2 | 1016.4 | 1014.6 | 1018.1 |
| 47.5° | 958.7 | 959.4 | 948.9 | 946.5 | 948.3 |
| 50° | 913.9 | 913.9 | 903.3 | 898.1 | 900.7 |
| 52.5° | 866.9 | 865.5 | 855.0 | 849.1 | 855.1 |
| 55° | 794.7 | 792.1 | 783.2 | 777.3 | 781.5 |
| 57.5° | 720.7 | 716.8 | 707.9 | 701.4 | 703.8 |
| 60° | 670.2 | 664.3 | 655.3 | 650.2 | 651.9 |
| 62.5° | 617.7 | 614.4 | 604.9 | 597.0 | 600.7 |
| 65° | 537.1 | 533.6 | 525.7 | 522.2 | 518.7 |
| 67.5° | 458.1 | 455.9 | 446.9 | 443.1 | 440.9 |
| 70° | 404.8 | 400.5 | 394.3 | 389.9 | 389.0 |
| 72.5° | 352.9 | 347.9 | 341.7 | 338.0 | 335.8 |
| 75° | 272.5 | 272.5 | 266.4 | 261.1 | 258.4 |
| 77.5° | 195.9 | 196.6 | 191.6 | 189.7 | 188.5 |
| 80° | 149.0 | 149.0 | 144.5 | 142.8 | 143.7 |
| 82.5° | 104.1 | 106.1 | 104.6 | 102.2 | 100.9 |
| 85° | 44.7 | 50.7 | 50.8 | 51.7 | 50.8 |
| 87.5° | 7.9 | 13.2 | 14.5 | 13.5 | 12.1 |
| 90° | 0.9 | 3.3 | 5.9 | 7.6 | 7.6 |
| 92.5° | 11.6 | 49.9 | 86.4 | 33.2 | 27.2 |
| 95° | 27.9 | 102.3 | 331.4 | 141.7 | 90.5 |
| 97.5° | 45.5 | 113.4 | 505.6 | 389.6 | 274.9 |
| 100° | 58.3 | 120.3 | 560.4 | 565.6 | 461.5 |
| 102.5° | 70.5 | 128.5 | 574.6 | 701.8 | 606.2 |
| 105° | 92.1 | 141.7 | 568.0 | 865.0 | 807.2 |
| 107.5° | 112.8 | 158.1 | 535.7 | 945.1 | 962.3 |
| 110° | 127.6 | 168.9 | 511.4 | 964.9 | 1024.5 |

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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|--------|
| 112.5° | 141.1 | 181.1 | 487.0 | 952.1 | 1042.7 |
| 115° | 163.2 | 198.7 | 455.6 | 907.2 | 1029.6 |
| 117.5° | 184.1 | 216.8 | 435.7 | 844.2 | 982.5 |
| 120° | 197.0 | 228.4 | 426.9 | 797.0 | 940.0 |
| 122.5° | 208.4 | 239.8 | 420.8 | 755.5 | 891.3 |
| 125° | 224.9 | 256.3 | 413.4 | 699.3 | 819.1 |
| 127.5° | 240.4 | 270.4 | 408.5 | 652.2 | 757.4 |
| 130° | 248.5 | 279.1 | 405.7 | 624.3 | 720.2 |
| 132.5° | 257.9 | 288.5 | 403.7 | 599.8 | 686.3 |
| 135° | 271.3 | 301.1 | 401.5 | 565.5 | 639.9 |
| 137.5° | 283.9 | 311.4 | 399.7 | 537.8 | 599.1 |
| 140° | 293.3 | 319.0 | 399.0 | 519.4 | 574.7 |
| 142.5° | 301.5 | 325.0 | 397.6 | 502.9 | 550.4 |
| 145° | 313.6 | 335.1 | 395.6 | 481.8 | 519.0 |
| 147.5° | 326.6 | 345.1 | 394.6 | 463.0 | 492.8 |
| 150° | 334.7 | 351.2 | 393.9 | 452.8 | 475.9 |
| 152.5° | 342.1 | 357.4 | 393.2 | 443.9 | 463.0 |
| 155° | 355.1 | 366.6 | 393.0 | 433.0 | 445.4 |
| 157.5° | 364.3 | 373.7 | 393.0 | 424.2 | 432.8 |
| 160° | 371.1 | 378.5 | 393.0 | 419.4 | 426.0 |
| 162.5° | 376.5 | 382.6 | 393.7 | 415.3 | 420.6 |
| 165° | 383.7 | 388.7 | 394.8 | 410.8 | 413.4 |
| 167.5° | 388.8 | 392.6 | 395.6 | 407.1 | 407.8 |
| 170° | 392.2 | 394.7 | 395.6 | 405.7 | 405.7 |
| 172.5° | 394.9 | 396.0 | 395.6 | 403.7 | 403.0 |
| 175° | 397.3 | 398.1 | 395.6 | 400.6 | 399.9 |
| 177.5° | 398.0 | 398.0 | 395.3 | 399.3 | 398.0 |
| 180° | 397.3 | 397.3 | 397.3 | 397.3 | 397.3 |

(END OF REPORT)