

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: P519929

Luminaire Tested: **SQ4-F-050U-075D-940-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519929
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G3-1910-536-18)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-050U-075D-940-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

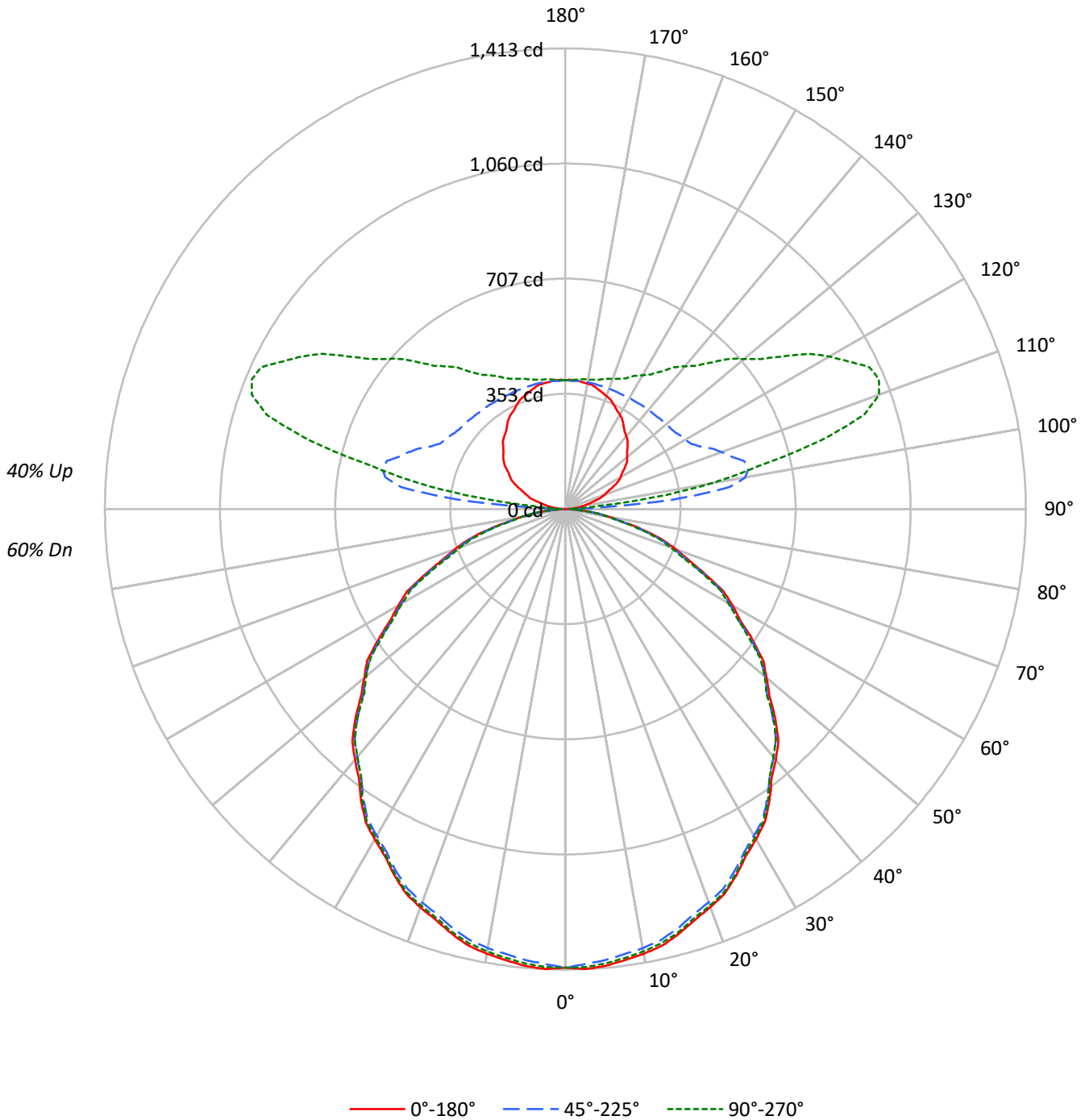
Lumens per Lamp: N/A
Luminaire Lumens: 6426.8 lumens
Efficiency: N/A
Efficacy: 114.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 56.3
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



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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 | 109 | 109 | 109 | 109 | 102 | 102 | 102 | 102 | 89 | 89 | 89 | 76 | 76 | 76 | 65 | 65 | 65 | 60 |
| 1 | 100 | 96 | 92 | 88 | 93 | 89 | 86 | 83 | 78 | 75 | 73 | 67 | 65 | 64 | 58 | 56 | 55 | 50 |
| 2 | 91 | 83 | 77 | 72 | 85 | 78 | 73 | 68 | 68 | 64 | 60 | 59 | 56 | 53 | 51 | 48 | 46 | 42 |
| 3 | 83 | 73 | 66 | 60 | 77 | 69 | 62 | 57 | 60 | 55 | 51 | 52 | 48 | 45 | 45 | 42 | 39 | 35 |
| 4 | 76 | 65 | 57 | 50 | 71 | 61 | 54 | 48 | 53 | 48 | 43 | 46 | 42 | 38 | 40 | 36 | 34 | 30 |
| 5 | 70 | 58 | 49 | 43 | 65 | 54 | 47 | 41 | 48 | 42 | 37 | 42 | 37 | 33 | 36 | 32 | 29 | 26 |
| 6 | 64 | 52 | 43 | 37 | 60 | 49 | 41 | 36 | 43 | 37 | 32 | 38 | 33 | 29 | 32 | 29 | 26 | 23 |
| 7 | 59 | 47 | 39 | 33 | 55 | 44 | 37 | 31 | 39 | 33 | 28 | 34 | 29 | 26 | 30 | 26 | 23 | 20 |
| 8 | 55 | 42 | 35 | 29 | 51 | 40 | 33 | 28 | 35 | 30 | 25 | 31 | 26 | 23 | 27 | 23 | 20 | 18 |
| 9 | 51 | 39 | 31 | 26 | 48 | 37 | 30 | 25 | 33 | 27 | 23 | 29 | 24 | 21 | 25 | 21 | 18 | 16 |
| 10 | 48 | 36 | 28 | 23 | 45 | 34 | 27 | 22 | 30 | 24 | 20 | 27 | 22 | 19 | 23 | 19 | 17 | 15 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 8657 | 8657 | 8657 |
| 5° | 8690 | 8580 | 8643 |
| 10° | 8655 | 8543 | 8608 |
| 15° | 8589 | 8483 | 8556 |
| 20° | 8511 | 8411 | 8478 |
| 25° | 8417 | 8331 | 8392 |
| 30° | 8310 | 8220 | 8266 |
| 35° | 8202 | 8115 | 8154 |
| 40° | 8063 | 7981 | 7971 |
| 45° | 7925 | 7825 | 7848 |
| 50° | 7705 | 7644 | 7644 |
| 55° | 7526 | 7430 | 7362 |
| 60° | 7284 | 7158 | 7096 |
| 65° | 6890 | 6760 | 6667 |
| 70° | 6472 | 6310 | 6150 |
| 75° | 5822 | 5611 | 5490 |
| 80° | 4658 | 4566 | 4520 |
| 85° | 2795 | 3155 | 3246 |



TEST NUMBER: P519929

CATALOG NUMBER: SQ4-F-050U-075D-940-1D-UNV-STD-W-6

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 132.9 | 2.1 |
| 10°-20° | 378.2 | 5.9 |
| 20°-30° | 568.2 | 8.8 |
| 30°-40° | 678.0 | 10.5 |
| 40°-50° | 695.3 | 10.8 |
| 50°-60° | 619.6 | 9.6 |
| 60°-70° | 462.0 | 7.2 |
| 70°-80° | 250.5 | 3.9 |
| 80°-90° | 59.1 | 0.9 |
| 90°-100° | 189.9 | 3.0 |
| 100°-110° | 515.9 | 8.0 |
| 110°-120° | 530.4 | 8.3 |
| 120°-130° | 424.1 | 6.6 |
| 130°-140° | 333.2 | 5.2 |
| 140°-150° | 255.5 | 4.0 |
| 150°-160° | 183.7 | 2.9 |
| 160°-170° | 112.4 | 1.7 |
| 170°-180° | 37.9 | 0.6 |
| 0°-30° | 1079.3 | 16.8 |
| 0°-40° | 1757.3 | 27.3 |
| 0°-60° | 3072.2 | 47.8 |
| 0°-90° | 3843.9 | 59.8 |
| 90°-120° | 1236.2 | 19.2 |
| 90°-150° | 2249.0 | 35.0 |
| 90°-180° | 2583.0 | 40.2 |
| 0°-180° | 6426.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1408 | 1408 | 1408 | 1408 | 1408 | |
| 5° | 1408 | 1405 | 1390 | 1401 | 1400 | 134 |
| 15° | 1349 | 1346 | 1332 | 1342 | 1344 | 380 |
| 25° | 1240 | 1239 | 1228 | 1234 | 1236 | 571 |
| 35° | 1092 | 1090 | 1081 | 1081 | 1086 | 682 |
| 45° | 911 | 907 | 900 | 900 | 902 | 701 |
| 55° | 702 | 701 | 693 | 686 | 686 | 627 |
| 65° | 473 | 473 | 464 | 459 | 458 | 471 |
| 75° | 245 | 240 | 236 | 232 | 231 | 257 |
| 85° | 40 | 42 | 45 | 45 | 46 | 55 |
| 90° | 1 | 5 | 9 | 12 | 12 | 3 |
| 95° | 28 | 104 | 331 | 144 | 97 | 30 |
| 105° | 92 | 143 | 567 | 864 | 813 | 97 |
| 115° | 163 | 198 | 454 | 904 | 1029 | 161 |
| 125° | 224 | 255 | 411 | 692 | 817 | 200 |
| 135° | 270 | 300 | 399 | 564 | 636 | 209 |
| 145° | 312 | 334 | 394 | 479 | 515 | 196 |
| 155° | 352 | 365 | 392 | 430 | 443 | 162 |
| 165° | 382 | 387 | 393 | 410 | 411 | 108 |
| 175° | 396 | 397 | 394 | 399 | 398 | 38 |
| 180° | 396 | 396 | 396 | 396 | 396 | |

TEST NUMBER: P519929

CATALOG NUMBER: SQ4-F-050U-075D-940-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1407.5 | 1407.5 | 1407.5 | 1407.5 | 1407.5 |
| 2.5° | 1412.6 | 1409.6 | 1397.3 | 1407.5 | 1406.4 |
| 5° | 1407.5 | 1404.9 | 1389.6 | 1401.1 | 1399.8 |
| 7.5° | 1396.0 | 1393.2 | 1378.2 | 1389.6 | 1389.4 |
| 10° | 1385.8 | 1382.0 | 1367.9 | 1379.4 | 1378.2 |
| 12.5° | 1372.6 | 1368.8 | 1354.7 | 1366.1 | 1364.9 |
| 15° | 1348.8 | 1346.3 | 1332.2 | 1342.5 | 1343.6 |
| 17.5° | 1321.7 | 1317.0 | 1304.4 | 1314.4 | 1315.6 |
| 20° | 1300.3 | 1296.6 | 1285.0 | 1293.9 | 1295.2 |
| 22.5° | 1277.8 | 1274.1 | 1262.6 | 1271.5 | 1272.8 |
| 25° | 1240.3 | 1239.0 | 1227.5 | 1234.0 | 1236.5 |
| 27.5° | 1199.8 | 1196.2 | 1187.0 | 1191.9 | 1194.4 |
| 30° | 1170.1 | 1167.7 | 1157.4 | 1161.3 | 1163.8 |
| 32.5° | 1139.5 | 1138.1 | 1128.8 | 1130.7 | 1134.1 |
| 35° | 1092.3 | 1089.8 | 1080.8 | 1080.9 | 1085.9 |
| 37.5° | 1040.0 | 1037.2 | 1029.8 | 1028.5 | 1030.5 |
| 40° | 1004.2 | 1000.5 | 994.0 | 992.8 | 992.8 |
| 42.5° | 967.5 | 964.8 | 956.3 | 954.0 | 957.0 |
| 45° | 911.1 | 907.4 | 899.6 | 899.6 | 902.2 |
| 47.5° | 850.1 | 848.7 | 839.6 | 835.6 | 836.6 |
| 50° | 805.2 | 807.7 | 798.8 | 793.8 | 798.8 |
| 52.5° | 766.4 | 764.9 | 756.9 | 751.9 | 753.9 |
| 55° | 701.8 | 700.6 | 692.9 | 686.5 | 686.5 |
| 57.5° | 637.0 | 633.7 | 625.8 | 621.0 | 624.8 |
| 60° | 592.1 | 590.8 | 581.9 | 573.0 | 576.8 |
| 62.5° | 547.1 | 545.0 | 535.9 | 530.1 | 532.9 |
| 65° | 473.4 | 473.4 | 464.5 | 459.4 | 458.1 |
| 67.5° | 408.9 | 402.9 | 397.9 | 391.8 | 390.0 |
| 70° | 359.9 | 354.9 | 350.9 | 345.7 | 342.0 |
| 72.5° | 311.8 | 308.9 | 302.9 | 297.8 | 297.1 |
| 75° | 245.0 | 240.0 | 236.1 | 232.2 | 231.0 |
| 77.5° | 174.3 | 173.3 | 169.8 | 167.7 | 168.5 |
| 80° | 131.5 | 131.5 | 128.9 | 128.8 | 127.6 |
| 82.5° | 92.6 | 93.7 | 93.2 | 91.1 | 90.8 |
| 85° | 39.6 | 42.0 | 44.7 | 44.7 | 46.0 |
| 87.5° | 7.4 | 13.2 | 13.0 | 13.5 | 13.5 |
| 90° | 1.3 | 5.0 | 8.9 | 11.5 | 11.5 |
| 92.5° | 11.5 | 52.0 | 90.3 | 38.8 | 32.8 |
| 95° | 28.0 | 103.8 | 330.7 | 144.0 | 96.7 |
| 97.5° | 46.3 | 114.7 | 507.0 | 394.5 | 277.0 |
| 100° | 58.5 | 122.0 | 561.0 | 568.7 | 459.2 |
| 102.5° | 70.8 | 129.1 | 575.2 | 703.3 | 606.7 |
| 105° | 91.6 | 142.6 | 567.3 | 863.8 | 812.8 |
| 107.5° | 113.2 | 158.3 | 534.5 | 946.7 | 960.9 |
| 110° | 128.5 | 169.5 | 510.1 | 963.0 | 1024.0 |

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CATALOG NUMBER: SQ4-F-050U-075D-940-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|--------|
| 112.5° | 141.7 | 180.8 | 485.6 | 949.5 | 1041.2 |
| 115° | 162.8 | 197.6 | 454.1 | 903.5 | 1029.1 |
| 117.5° | 182.6 | 216.0 | 434.0 | 838.2 | 979.7 |
| 120° | 195.9 | 228.2 | 424.9 | 794.4 | 935.0 |
| 122.5° | 207.1 | 239.4 | 418.7 | 750.5 | 886.1 |
| 125° | 223.8 | 254.9 | 410.9 | 692.3 | 816.6 |
| 127.5° | 238.8 | 269.8 | 406.5 | 648.1 | 754.8 |
| 130° | 248.1 | 277.9 | 404.5 | 620.4 | 716.1 |
| 132.5° | 257.2 | 287.0 | 402.4 | 596.7 | 681.5 |
| 135° | 269.7 | 299.5 | 399.4 | 563.8 | 636.0 |
| 137.5° | 283.2 | 310.3 | 397.9 | 534.9 | 595.5 |
| 140° | 291.2 | 317.4 | 396.8 | 516.5 | 571.1 |
| 142.5° | 299.4 | 323.5 | 395.9 | 501.9 | 547.8 |
| 145° | 311.7 | 334.0 | 394.3 | 479.1 | 515.2 |
| 147.5° | 325.4 | 344.5 | 393.0 | 461.1 | 489.5 |
| 150° | 334.5 | 350.7 | 393.0 | 450.8 | 473.2 |
| 152.5° | 341.7 | 355.8 | 392.0 | 441.6 | 459.9 |
| 155° | 352.4 | 364.7 | 391.8 | 430.2 | 442.7 |
| 157.5° | 362.8 | 372.5 | 391.8 | 422.5 | 432.0 |
| 160° | 368.9 | 377.6 | 391.8 | 417.4 | 424.9 |
| 162.5° | 374.9 | 381.7 | 392.8 | 413.3 | 418.7 |
| 165° | 381.6 | 386.6 | 393.0 | 409.6 | 410.9 |
| 167.5° | 388.5 | 390.9 | 394.3 | 405.3 | 406.3 |
| 170° | 390.6 | 393.0 | 394.3 | 403.2 | 403.2 |
| 172.5° | 392.5 | 394.1 | 394.3 | 401.1 | 401.1 |
| 175° | 395.6 | 396.8 | 394.3 | 399.4 | 398.1 |
| 177.5° | 396.6 | 396.6 | 393.6 | 397.6 | 395.6 |
| 180° | 395.6 | 395.6 | 395.6 | 395.6 | 395.6 |

(END OF REPORT)