

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P511820

Luminaire Tested: **SQW-F-0U-050D-940-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511820
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-6)
Test Lab: INNOVATION CENTER
Issue Date: 4/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQW-F-0U-050D-940-1D-UNV-STD-W-4
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

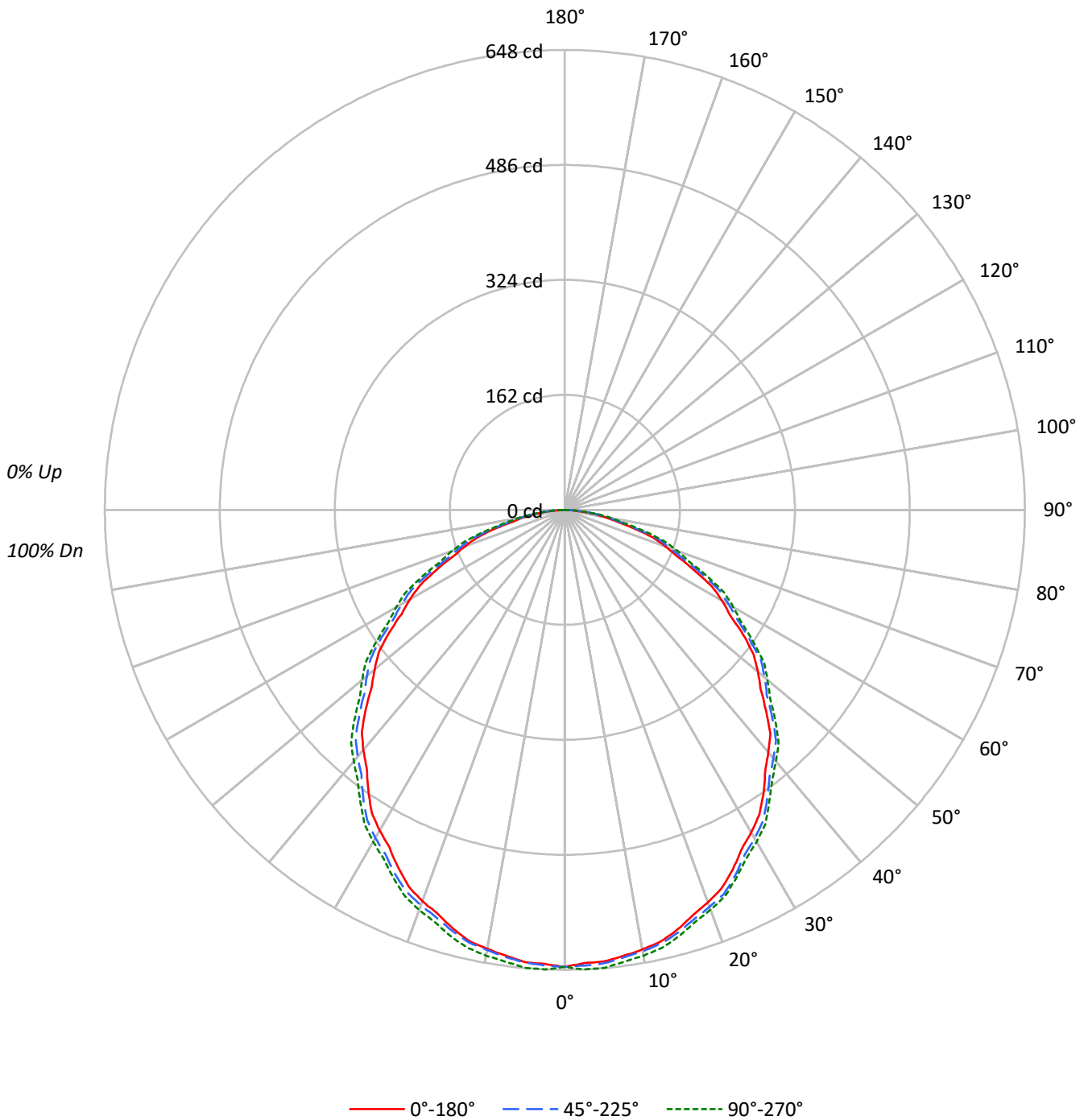
Lumens per Lamp: N/A
Luminaire Lumens: 1750.1 lumens
Efficiency: N/A
Efficacy: 101.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: Direct

Input Watts (W): 17.2
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





TEST NUMBER: P511820

CATALOG NUMBER: SQW-F-0U-050D-940-1D-UNV-STD-W-4

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 | 95 | 92 | 94 | 91 | 89 | 90 | 88 | 86 | 84 | | | 84 | |
| 2 | 99 | 91 | 84 | 79 | 97 | 89 | 83 | 78 | 86 | 80 | 76 | 82 | 78 | 74 | 79 | 76 | 72 | 70 | | | 70 | |
| 3 | 90 | 80 | 72 | 65 | 88 | 78 | 71 | 65 | 75 | 69 | 64 | 73 | 67 | 63 | 70 | 65 | 62 | 59 | | | 59 | |
| 4 | 83 | 71 | 62 | 56 | 81 | 70 | 61 | 55 | 67 | 60 | 54 | 65 | 59 | 54 | 63 | 57 | 53 | 51 | | | 51 | |
| 5 | 76 | 63 | 54 | 48 | 74 | 62 | 54 | 48 | 60 | 53 | 47 | 58 | 52 | 47 | 56 | 51 | 46 | 44 | | | 44 | |
| 6 | 70 | 57 | 48 | 42 | 68 | 56 | 48 | 42 | 54 | 47 | 41 | 53 | 46 | 41 | 51 | 45 | 41 | 38 | | | 38 | |
| 7 | 65 | 52 | 43 | 37 | 64 | 51 | 43 | 37 | 49 | 42 | 37 | 48 | 41 | 36 | 47 | 41 | 36 | 34 | | | 34 | |
| 8 | 61 | 47 | 39 | 33 | 59 | 47 | 39 | 33 | 45 | 38 | 33 | 44 | 37 | 32 | 43 | 37 | 32 | 30 | | | 30 | |
| 9 | 57 | 43 | 35 | 30 | 55 | 43 | 35 | 30 | 42 | 35 | 29 | 41 | 34 | 29 | 40 | 34 | 29 | 27 | | | 27 | |
| 10 | 53 | 40 | 32 | 27 | 52 | 40 | 32 | 27 | 39 | 32 | 27 | 38 | 31 | 27 | 37 | 31 | 27 | 25 | | | 25 | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|-------|-------|-------|
| 0° | 20796 | 20796 | 20796 |
| 5° | 20704 | 20989 | 20733 |
| 10° | 20625 | 20913 | 20595 |
| 15° | 20470 | 20791 | 20410 |
| 20° | 20223 | 20615 | 20162 |
| 25° | 19932 | 20370 | 19807 |
| 30° | 19576 | 20135 | 19445 |
| 35° | 19237 | 19793 | 19033 |
| 40° | 18792 | 19496 | 18607 |
| 45° | 18304 | 19148 | 18103 |
| 50° | 17834 | 18718 | 17568 |
| 55° | 17261 | 18252 | 17014 |
| 60° | 16501 | 17696 | 16269 |
| 65° | 15412 | 16825 | 15213 |
| 70° | 14219 | 15890 | 14058 |
| 75° | 12527 | 14398 | 12414 |
| 80° | 10153 | 12125 | 10321 |
| 85° | 5891 | 8151 | 6854 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 60.8 | 3.5 |
| 10°-20° | 173.3 | 9.9 |
| 20°-30° | 259.6 | 14.8 |
| 30°-40° | 308.6 | 17.6 |
| 40°-50° | 315.8 | 18.0 |
| 50°-60° | 281.6 | 16.1 |
| 60°-70° | 208.9 | 11.9 |
| 70°-80° | 114.4 | 6.5 |
| 80°-90° | 27.1 | 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° | 493.7 | 28.2 |
| 0°-40° | 802.3 | 45.8 |
| 0°-60° | 1399.7 | 80.0 |
| 0°-90° | 1750.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1750.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|-----|-----|-----|-----|------|------|------|
| 0° | 644 | 644 | 644 | 644 | 644 | |
| 5° | 639 | 641 | 648 | 640 | 640 | 61 |
| 15° | 612 | 617 | 622 | 614 | 610 | 173 |
| 25° | 559 | 568 | 572 | 566 | 556 | 257 |
| 35° | 488 | 497 | 502 | 495 | 483 | 305 |
| 45° | 401 | 413 | 419 | 410 | 396 | 310 |
| 55° | 307 | 317 | 324 | 316 | 302 | 273 |
| 65° | 202 | 211 | 220 | 210 | 199 | 200 |
| 75° | 100 | 108 | 115 | 108 | 100 | 107 |
| 85° | 16 | 21 | 22 | 23 | 18 | 23 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P511820

CATALOG NUMBER: SQW-F-OU-050D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|-------|-------|-------|-------|-------|-------|--------|-------|--------|-------|
| 0° | 644.0 | 644.0 | 644.0 | 644.0 | 644.0 | 644.0 | 644.0 | 644.0 | 644.0 |
| 2.5° | 639.0 | 641.8 | 642.6 | 642.0 | 648.2 | 642.7 | 642.6 | 641.8 | 640.4 |
| 5° | 638.7 | 639.5 | 641.3 | 639.7 | 647.5 | 639.7 | 640.4 | 638.7 | 639.6 |
| 7.5° | 633.9 | 634.8 | 635.9 | 635.0 | 642.0 | 635.0 | 635.5 | 633.7 | 633.7 |
| 10° | 629.0 | 629.9 | 631.6 | 630.0 | 637.8 | 630.0 | 629.9 | 628.1 | 628.1 |
| 12.5° | 623.4 | 624.2 | 626.0 | 624.4 | 632.2 | 624.4 | 624.2 | 621.8 | 622.5 |
| 15° | 612.3 | 614.8 | 616.7 | 614.2 | 621.9 | 614.2 | 614.0 | 612.2 | 610.5 |
| 17.5° | 599.0 | 601.6 | 604.7 | 602.0 | 609.1 | 601.2 | 602.0 | 598.1 | 596.6 |
| 20° | 588.5 | 591.1 | 595.5 | 592.2 | 599.9 | 591.3 | 592.9 | 587.6 | 586.7 |
| 22.5° | 577.2 | 579.1 | 585.6 | 582.3 | 589.3 | 581.4 | 582.3 | 575.6 | 574.7 |
| 25° | 559.4 | 561.1 | 568.2 | 565.7 | 571.7 | 564.0 | 566.4 | 556.7 | 555.9 |
| 27.5° | 539.1 | 541.7 | 548.1 | 546.5 | 553.4 | 544.8 | 547.2 | 537.2 | 535.6 |
| 30° | 525.0 | 527.6 | 534.7 | 533.1 | 540.0 | 531.4 | 533.8 | 522.4 | 521.5 |
| 32.5° | 509.5 | 513.5 | 519.9 | 519.7 | 525.2 | 517.3 | 518.3 | 507.6 | 506.0 |
| 35° | 488.0 | 490.6 | 496.8 | 497.0 | 502.1 | 495.2 | 495.1 | 484.5 | 482.8 |
| 37.5° | 463.4 | 466.8 | 473.4 | 474.4 | 479.4 | 471.8 | 470.6 | 461.0 | 458.3 |
| 40° | 445.8 | 449.2 | 457.2 | 458.2 | 462.5 | 455.6 | 453.7 | 444.8 | 441.4 |
| 42.5° | 428.8 | 432.3 | 440.3 | 441.3 | 445.6 | 439.4 | 436.1 | 427.9 | 423.0 |
| 45° | 400.8 | 405.1 | 413.2 | 415.9 | 419.3 | 413.3 | 409.6 | 399.9 | 396.4 |
| 47.5° | 374.0 | 377.5 | 385.7 | 390.1 | 391.7 | 387.5 | 382.9 | 372.4 | 368.8 |
| 50° | 355.0 | 358.5 | 367.4 | 371.8 | 372.6 | 369.2 | 363.8 | 354.0 | 349.7 |
| 52.5° | 335.3 | 338.7 | 348.3 | 352.7 | 353.6 | 350.2 | 344.8 | 335.0 | 330.7 |
| 55° | 306.6 | 310.0 | 317.1 | 324.2 | 324.2 | 322.5 | 316.3 | 305.6 | 302.2 |
| 57.5° | 275.9 | 279.2 | 288.1 | 294.2 | 294.4 | 292.0 | 285.6 | 275.8 | 272.4 |
| 60° | 255.5 | 258.1 | 266.9 | 273.1 | 274.0 | 272.2 | 265.2 | 255.4 | 251.9 |
| 62.5° | 232.9 | 236.2 | 245.1 | 252.0 | 253.5 | 251.1 | 243.3 | 234.2 | 229.4 |
| 65° | 201.7 | 203.5 | 211.4 | 218.5 | 220.2 | 217.7 | 210.5 | 201.7 | 199.1 |
| 67.5° | 171.1 | 172.1 | 179.7 | 186.8 | 188.7 | 185.9 | 178.8 | 172.7 | 168.6 |
| 70° | 150.6 | 152.4 | 158.6 | 165.7 | 168.3 | 164.8 | 157.7 | 152.3 | 148.9 |
| 72.5° | 130.2 | 131.9 | 138.1 | 144.5 | 147.1 | 144.4 | 138.0 | 132.6 | 129.1 |
| 75° | 100.4 | 101.3 | 107.5 | 113.7 | 115.4 | 112.8 | 107.5 | 103.0 | 99.5 |
| 77.5° | 72.2 | 73.1 | 79.6 | 83.4 | 84.9 | 83.4 | 79.1 | 74.8 | 72.4 |
| 80° | 54.6 | 55.5 | 59.9 | 64.3 | 65.2 | 64.3 | 60.8 | 57.2 | 55.5 |
| 82.5° | 37.7 | 38.6 | 43.7 | 46.7 | 46.9 | 47.4 | 44.6 | 41.7 | 39.3 |
| 85° | 15.9 | 16.7 | 21.1 | 23.7 | 22.0 | 24.6 | 22.9 | 20.2 | 18.5 |
| 87.5° | 2.1 | 2.1 | 4.2 | 6.3 | 6.3 | 7.0 | 5.6 | 4.9 | 3.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)