

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: P521367

Luminaire Tested: SQ4-F-025U-100D-92765-1D-UNV-STD-W-4_3000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521367
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-38)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-025U-100D-92765-1D-UNV-STD-W-4_3000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5900.4 lumens
Efficiency: N/A
Efficacy: 104.6 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

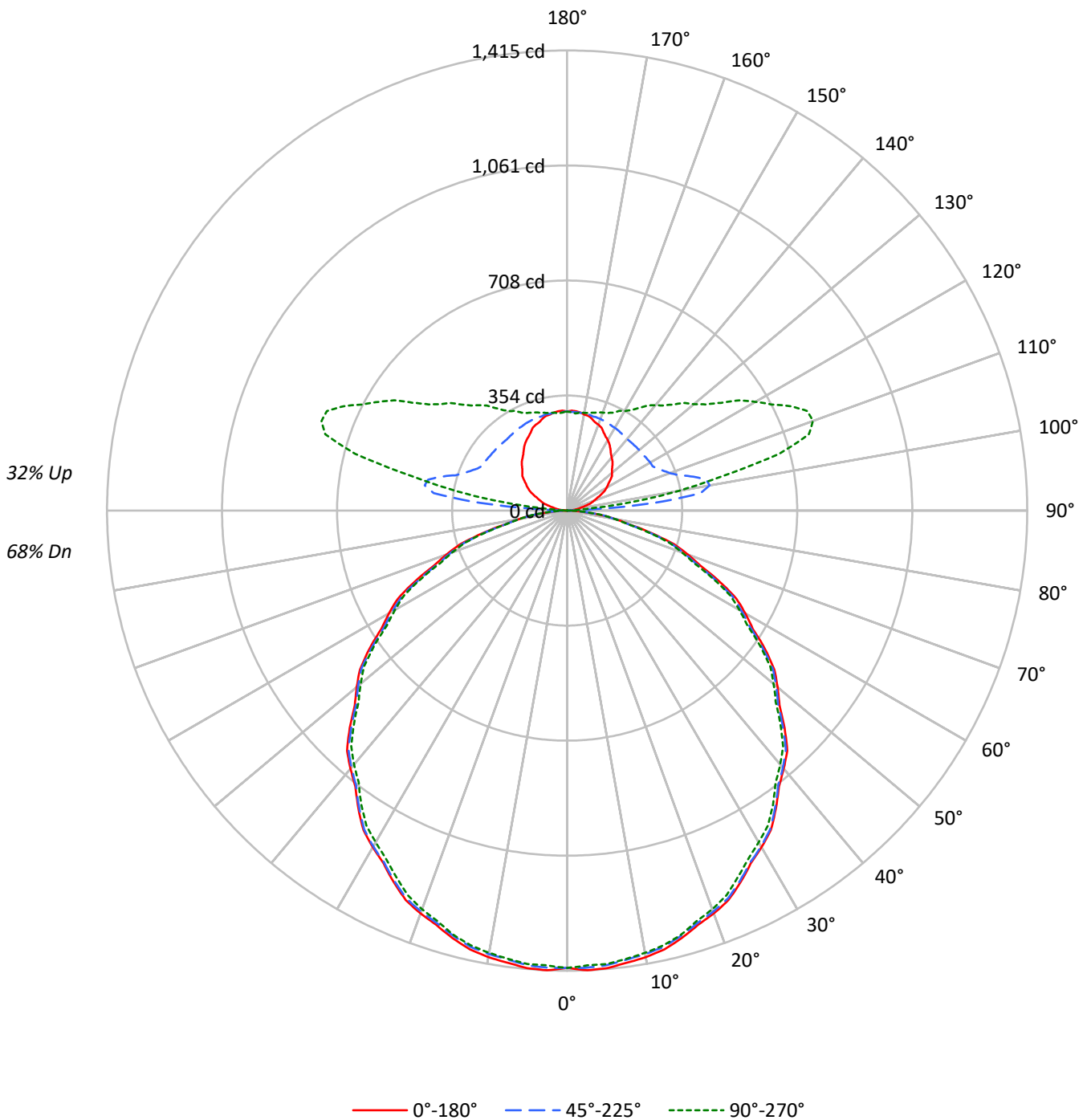
Input Watts (W): 56.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P521367

CATALOG NUMBER: SQ4-F-025U-100D-92765-1D-UNV-STD-W-4_3000K

Luminous Intensity Polar Plot



TEST NUMBER: P521367

CATALOG NUMBER: SQ4-F-025U-100D-92765-1D-UNV-STD-W-4_3000K

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 | 111 | 111 | 111 | 111 | 105 | 105 | 105 | 105 | 93 | 93 | 93 | 83 | 83 | 83 | 73 | 73 | 73 | 68 | | | | |
| 1 | 102 | 97 | 93 | 89 | 96 | 92 | 88 | 85 | 82 | 79 | 76 | 72 | 70 | 68 | 64 | 62 | 61 | 57 | | | | |
| 2 | 92 | 85 | 78 | 73 | 87 | 80 | 74 | 69 | 71 | 67 | 63 | 63 | 60 | 57 | 56 | 53 | 51 | 47 | | | | |
| 3 | 84 | 74 | 66 | 60 | 79 | 70 | 63 | 58 | 63 | 57 | 53 | 56 | 51 | 48 | 49 | 46 | 43 | 40 | | | | |
| 4 | 77 | 66 | 57 | 51 | 72 | 62 | 55 | 49 | 56 | 50 | 45 | 50 | 45 | 41 | 44 | 40 | 37 | 34 | | | | |
| 5 | 71 | 58 | 50 | 44 | 66 | 55 | 48 | 42 | 50 | 43 | 39 | 44 | 39 | 35 | 40 | 35 | 32 | 29 | | | | |
| 6 | 65 | 52 | 44 | 38 | 61 | 50 | 42 | 36 | 45 | 38 | 34 | 40 | 35 | 31 | 36 | 32 | 28 | 26 | | | | |
| 7 | 60 | 47 | 39 | 33 | 57 | 45 | 37 | 32 | 41 | 34 | 30 | 37 | 31 | 27 | 33 | 28 | 25 | 23 | | | | |
| 8 | 56 | 43 | 35 | 29 | 53 | 41 | 34 | 28 | 37 | 31 | 26 | 33 | 28 | 24 | 30 | 26 | 22 | 20 | | | | |
| 9 | 52 | 39 | 32 | 26 | 49 | 37 | 30 | 25 | 34 | 28 | 24 | 31 | 26 | 22 | 28 | 23 | 20 | 18 | | | | |
| 10 | 49 | 36 | 29 | 24 | 46 | 34 | 28 | 23 | 31 | 25 | 21 | 28 | 23 | 20 | 26 | 21 | 18 | 16 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 12975 | 12975 | 12975 |
| 5° | 13078 | 12997 | 12960 |
| 10° | 13064 | 12974 | 12937 |
| 15° | 13003 | 12928 | 12900 |
| 20° | 12944 | 12887 | 12810 |
| 25° | 12844 | 12794 | 12656 |
| 30° | 12734 | 12703 | 12547 |
| 35° | 12605 | 12561 | 12429 |
| 40° | 12479 | 12432 | 12279 |
| 45° | 12334 | 12232 | 12093 |
| 50° | 12124 | 12041 | 11900 |
| 55° | 11955 | 11781 | 11639 |
| 60° | 11677 | 11442 | 11280 |
| 65° | 11300 | 10979 | 10809 |
| 70° | 10642 | 10299 | 10116 |
| 75° | 9607 | 9365 | 9226 |
| 80° | 7938 | 7938 | 7837 |
| 85° | 5579 | 6404 | 6616 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12334 cd/sqm

TEST NUMBER: P521367

CATALOG NUMBER: SQ4-F-025U-100D-92765-1D-UNV-STD-W-4_3000K

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 133.1 | 2.3 |
| 10°-20° | 381.4 | 6.5 |
| 20°-30° | 576.7 | 9.8 |
| 30°-40° | 694.5 | 11.8 |
| 40°-50° | 721.2 | 12.2 |
| 50°-60° | 653.8 | 11.1 |
| 60°-70° | 497.9 | 8.4 |
| 70°-80° | 278.2 | 4.7 |
| 80°-90° | 72.2 | 1.2 |
| 90°-100° | 138.8 | 2.4 |
| 100°-110° | 394.8 | 6.7 |
| 110°-120° | 378.2 | 6.4 |
| 120°-130° | 299.4 | 5.1 |
| 130°-140° | 240.3 | 4.1 |
| 140°-150° | 188.1 | 3.2 |
| 150°-160° | 137.6 | 2.3 |
| 160°-170° | 85.3 | 1.4 |
| 170°-180° | 28.9 | 0.5 |
| 0°-30° | 1091.2 | 18.5 |
| 0°-40° | 1785.7 | 30.3 |
| 0°-60° | 3160.8 | 53.6 |
| 0°-90° | 4009.1 | 67.9 |
| 90°-120° | 911.8 | 15.5 |
| 90°-150° | 1639.5 | 27.8 |
| 90°-180° | 1891.0 | 32.0 |
| 0°-180° | 5900.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1406 | 1406 | 1406 | 1406 | 1406 | |
| 5° | 1412 | 1399 | 1403 | 1399 | 1399 | 134 |
| 15° | 1361 | 1349 | 1354 | 1351 | 1351 | 384 |
| 25° | 1262 | 1251 | 1257 | 1247 | 1243 | 581 |
| 35° | 1119 | 1112 | 1115 | 1104 | 1104 | 700 |
| 45° | 945 | 940 | 938 | 928 | 927 | 728 |
| 55° | 743 | 740 | 732 | 724 | 724 | 663 |
| 65° | 518 | 512 | 503 | 496 | 495 | 510 |
| 75° | 270 | 266 | 263 | 259 | 259 | 285 |
| 85° | 53 | 57 | 60 | 62 | 62 | 66 |
| 90° | 0 | 0 | 0 | 0 | 0 | 3 |
| 95° | 15 | 60 | 269 | 93 | 57 | 17 |
| 105° | 61 | 93 | 402 | 711 | 676 | 65 |
| 115° | 114 | 138 | 305 | 646 | 759 | 112 |
| 125° | 161 | 178 | 291 | 483 | 578 | 144 |
| 135° | 197 | 213 | 288 | 408 | 461 | 152 |
| 145° | 232 | 244 | 290 | 353 | 385 | 145 |
| 155° | 265 | 271 | 297 | 319 | 332 | 123 |
| 165° | 293 | 294 | 300 | 307 | 311 | 82 |
| 175° | 307 | 305 | 304 | 302 | 300 | 29 |
| 180° | 304 | 304 | 304 | 304 | 304 | |

TEST NUMBER: P521367

CATALOG NUMBER: SQ4-F-025U-100D-92765-1D-UNV-STD-W-4_3000K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1406.3 | 1406.3 | 1406.3 | 1406.3 | 1406.3 |
| 2.5° | 1414.8 | 1403.4 | 1407.0 | 1404.6 | 1400.0 |
| 5° | 1412.1 | 1398.7 | 1403.3 | 1399.4 | 1399.4 |
| 7.5° | 1402.3 | 1389.6 | 1392.6 | 1390.2 | 1390.2 |
| 10° | 1394.5 | 1380.2 | 1384.8 | 1380.9 | 1380.9 |
| 12.5° | 1382.0 | 1369.2 | 1373.8 | 1369.9 | 1369.1 |
| 15° | 1361.3 | 1348.9 | 1353.5 | 1350.6 | 1350.6 |
| 17.5° | 1336.3 | 1324.5 | 1330.5 | 1325.8 | 1324.2 |
| 20° | 1318.4 | 1305.0 | 1312.5 | 1304.7 | 1304.7 |
| 22.5° | 1296.5 | 1284.6 | 1291.4 | 1282.0 | 1280.5 |
| 25° | 1261.7 | 1251.2 | 1256.8 | 1247.0 | 1243.2 |
| 27.5° | 1222.7 | 1211.4 | 1219.7 | 1208.7 | 1206.6 |
| 30° | 1195.3 | 1184.8 | 1192.4 | 1180.6 | 1177.7 |
| 32.5° | 1165.6 | 1156.7 | 1161.9 | 1150.9 | 1148.8 |
| 35° | 1119.1 | 1112.5 | 1115.2 | 1104.5 | 1103.5 |
| 37.5° | 1069.7 | 1063.2 | 1065.8 | 1053.9 | 1053.1 |
| 40° | 1036.1 | 1030.4 | 1032.2 | 1019.5 | 1019.5 |
| 42.5° | 1001.8 | 995.3 | 995.5 | 983.6 | 982.8 |
| 45° | 945.3 | 939.6 | 937.5 | 927.7 | 926.8 |
| 47.5° | 885.4 | 882.7 | 879.5 | 869.7 | 869.7 |
| 50° | 844.7 | 842.8 | 838.9 | 829.1 | 829.1 |
| 52.5° | 803.3 | 802.2 | 796.7 | 788.4 | 786.9 |
| 55° | 743.2 | 740.3 | 732.4 | 723.6 | 723.6 |
| 57.5° | 677.3 | 675.1 | 666.2 | 659.1 | 657.4 |
| 60° | 632.8 | 629.0 | 620.1 | 612.3 | 611.3 |
| 62.5° | 586.7 | 583.7 | 574.0 | 567.0 | 565.2 |
| 65° | 517.6 | 511.9 | 502.9 | 496.1 | 495.1 |
| 67.5° | 444.5 | 438.0 | 430.3 | 424.6 | 422.7 |
| 70° | 394.5 | 388.8 | 381.8 | 376.9 | 375.0 |
| 72.5° | 345.3 | 339.6 | 333.4 | 330.1 | 329.7 |
| 75° | 269.5 | 265.7 | 262.7 | 258.8 | 258.8 |
| 77.5° | 195.5 | 193.2 | 191.6 | 189.6 | 189.6 |
| 80° | 149.4 | 149.4 | 149.4 | 147.5 | 147.5 |
| 82.5° | 107.2 | 109.5 | 111.1 | 110.0 | 110.0 |
| 85° | 52.7 | 56.6 | 60.5 | 61.5 | 62.5 |
| 87.5° | 14.8 | 19.4 | 24.2 | 25.0 | 25.8 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 92.5° | 4.6 | 24.6 | 57.0 | 16.6 | 12.5 |
| 95° | 15.1 | 59.8 | 268.6 | 93.0 | 57.3 |
| 97.5° | 27.7 | 70.0 | 413.7 | 296.0 | 202.8 |
| 100° | 36.5 | 76.1 | 445.1 | 450.9 | 347.3 |
| 102.5° | 46.2 | 82.6 | 438.2 | 577.2 | 486.7 |
| 105° | 61.4 | 93.1 | 402.3 | 710.6 | 675.5 |
| 107.5° | 76.8 | 105.2 | 360.4 | 748.3 | 779.5 |
| 110° | 87.4 | 114.0 | 336.3 | 733.9 | 804.0 |

TEST NUMBER: P521367

CATALOG NUMBER: SQ4-F-025U-100D-92765-1D-UNV-STD-W-4_3000K

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 97.6 | 122.8 | 320.1 | 699.8 | 799.9 |
| 115° | 114.0 | 137.8 | 305.1 | 646.3 | 758.9 |
| 117.5° | 128.5 | 150.8 | 296.1 | 587.7 | 707.0 |
| 120° | 140.1 | 158.8 | 295.2 | 554.3 | 668.6 |
| 122.5° | 149.3 | 168.0 | 292.9 | 524.9 | 631.1 |
| 125° | 160.9 | 178.5 | 291.2 | 483.2 | 577.7 |
| 127.5° | 173.5 | 190.0 | 290.2 | 458.3 | 536.1 |
| 130° | 180.0 | 196.4 | 288.9 | 440.9 | 508.8 |
| 132.5° | 187.0 | 202.9 | 288.9 | 427.3 | 489.8 |
| 135° | 196.8 | 213.2 | 287.7 | 408.2 | 461.4 |
| 137.5° | 206.1 | 222.0 | 287.6 | 391.9 | 437.9 |
| 140° | 213.0 | 229.4 | 287.1 | 378.4 | 422.6 |
| 142.5° | 220.9 | 234.6 | 288.5 | 367.7 | 407.3 |
| 145° | 232.1 | 244.0 | 290.0 | 353.2 | 384.9 |
| 147.5° | 241.7 | 253.3 | 292.6 | 338.7 | 366.1 |
| 150° | 250.1 | 258.0 | 293.5 | 333.9 | 353.1 |
| 152.5° | 256.6 | 264.9 | 294.4 | 327.3 | 345.2 |
| 155° | 265.1 | 271.3 | 297.0 | 319.3 | 332.3 |
| 157.5° | 275.8 | 279.5 | 297.5 | 315.6 | 324.9 |
| 160° | 281.3 | 284.2 | 299.9 | 312.8 | 320.7 |
| 162.5° | 284.6 | 287.9 | 300.3 | 310.4 | 316.5 |
| 165° | 292.9 | 294.0 | 300.4 | 306.9 | 311.4 |
| 167.5° | 298.6 | 297.6 | 303.1 | 306.0 | 307.8 |
| 170° | 300.4 | 299.9 | 302.2 | 302.8 | 305.1 |
| 172.5° | 304.6 | 302.7 | 303.6 | 301.9 | 303.7 |
| 175° | 306.8 | 305.1 | 303.9 | 302.1 | 299.9 |
| 177.5° | 307.7 | 305.0 | 303.6 | 301.7 | 302.2 |
| 180° | 304.5 | 304.5 | 304.5 | 304.5 | 304.5 |

(END OF REPORT)