

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: P519882

Luminaire Tested: **SQ4-F-025U-125D-940-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519882
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, 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-025U-125D-940-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

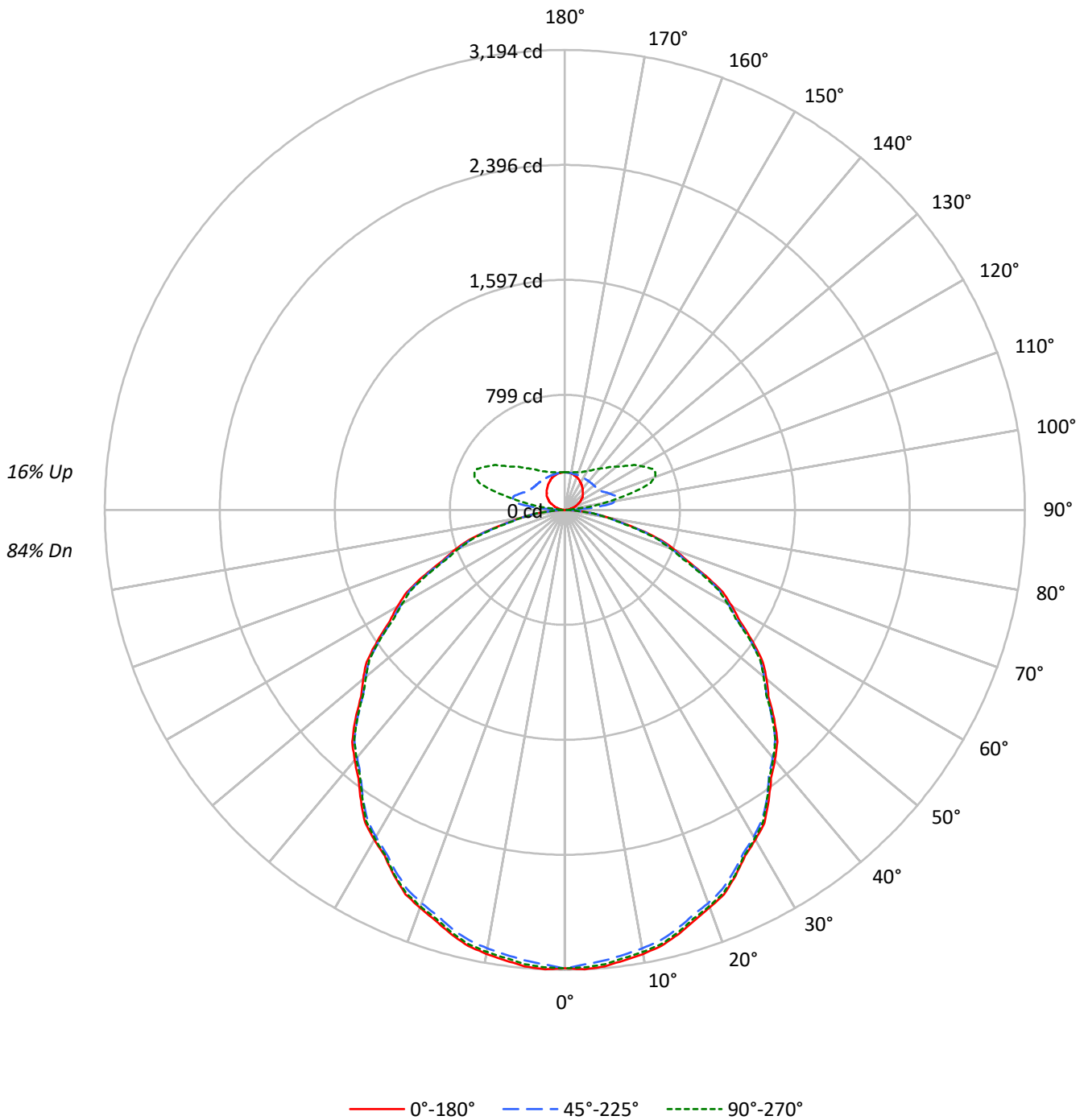
Lumens per Lamp: N/A
Luminaire Lumens: 10375.1 lumens
Efficiency: N/A
Efficacy: 105.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 98.1
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 | 115 | 115 | 115 | 115 | 111 | 111 | 111 | 111 | 102 | 102 | 102 | 94 | 94 | 94 | 87 | 87 | 87 | 84 |
| 1 | 105 | 101 | 97 | 93 | 101 | 97 | 93 | 90 | 90 | 87 | 84 | 83 | 81 | 79 | 77 | 75 | 74 | 71 |
| 2 | 96 | 88 | 81 | 76 | 92 | 85 | 79 | 74 | 79 | 74 | 70 | 73 | 69 | 66 | 68 | 65 | 62 | 59 |
| 3 | 87 | 77 | 69 | 63 | 84 | 74 | 67 | 62 | 69 | 63 | 58 | 64 | 59 | 55 | 60 | 56 | 52 | 50 |
| 4 | 80 | 68 | 60 | 53 | 76 | 66 | 58 | 52 | 61 | 55 | 50 | 57 | 52 | 47 | 53 | 49 | 45 | 42 |
| 5 | 74 | 61 | 52 | 46 | 70 | 59 | 51 | 45 | 55 | 48 | 43 | 51 | 46 | 41 | 48 | 43 | 39 | 37 |
| 6 | 68 | 55 | 46 | 40 | 65 | 53 | 45 | 39 | 50 | 43 | 38 | 47 | 41 | 36 | 44 | 38 | 35 | 32 |
| 7 | 63 | 50 | 41 | 35 | 60 | 48 | 40 | 35 | 45 | 38 | 33 | 42 | 36 | 32 | 40 | 35 | 31 | 28 |
| 8 | 58 | 45 | 37 | 31 | 56 | 44 | 36 | 31 | 41 | 35 | 30 | 39 | 33 | 29 | 36 | 31 | 27 | 25 |
| 9 | 55 | 42 | 34 | 28 | 52 | 40 | 33 | 28 | 38 | 31 | 27 | 36 | 30 | 26 | 34 | 29 | 25 | 23 |
| 10 | 51 | 38 | 31 | 25 | 49 | 37 | 30 | 25 | 35 | 29 | 24 | 33 | 27 | 23 | 31 | 26 | 23 | 21 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 14688 | 14688 | 14688 |
| 5° | 14736 | 14549 | 14672 |
| 10° | 14669 | 14488 | 14603 |
| 15° | 14570 | 14394 | 14511 |
| 20° | 14435 | 14271 | 14383 |
| 25° | 14271 | 14119 | 14235 |
| 30° | 14095 | 13974 | 14048 |
| 35° | 13895 | 13776 | 13787 |
| 40° | 13666 | 13518 | 13560 |
| 45° | 13410 | 13261 | 13285 |
| 50° | 13117 | 12966 | 12928 |
| 55° | 12783 | 12600 | 12571 |
| 60° | 12369 | 12094 | 12028 |
| 65° | 11725 | 11477 | 11323 |
| 70° | 10920 | 10635 | 10495 |
| 75° | 9714 | 9495 | 9213 |
| 80° | 7914 | 7683 | 7632 |
| 85° | 4732 | 5383 | 5383 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 300.4 | 2.9 |
| 10°-20° | 855.6 | 8.2 |
| 20°-30° | 1285.5 | 12.4 |
| 30°-40° | 1533.8 | 14.8 |
| 40°-50° | 1572.2 | 15.2 |
| 50°-60° | 1401.3 | 13.5 |
| 60°-70° | 1043.2 | 10.1 |
| 70°-80° | 565.1 | 5.4 |
| 80°-90° | 131.2 | 1.3 |
| 90°-100° | 126.8 | 1.2 |
| 100°-110° | 333.4 | 3.2 |
| 110°-120° | 345.8 | 3.3 |
| 120°-130° | 277.3 | 2.7 |
| 130°-140° | 217.6 | 2.1 |
| 140°-150° | 167.0 | 1.6 |
| 150°-160° | 120.3 | 1.2 |
| 160°-170° | 73.6 | 0.7 |
| 170°-180° | 24.9 | 0.2 |
| 0°-30° | 2441.5 | 23.5 |
| 0°-40° | 3975.3 | 38.3 |
| 0°-60° | 6948.8 | 67.0 |
| 0°-90° | 8688.3 | 83.7 |
| 90°-120° | 806.1 | 7.8 |
| 90°-150° | 1468.1 | 14.2 |
| 90°-180° | 1687.0 | 16.3 |
| 0°-180° | 10375.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 3184 | 3184 | 3184 | 3184 | 3184 | |
| 5° | 3182 | 3177 | 3142 | 3170 | 3168 | 302 |
| 15° | 3051 | 3044 | 3014 | 3040 | 3038 | 860 |
| 25° | 2804 | 2799 | 2774 | 2790 | 2797 | 1291 |
| 35° | 2467 | 2466 | 2446 | 2446 | 2448 | 1543 |
| 45° | 2056 | 2050 | 2033 | 2029 | 2036 | 1584 |
| 55° | 1589 | 1584 | 1567 | 1554 | 1563 | 1419 |
| 65° | 1074 | 1067 | 1051 | 1044 | 1037 | 1064 |
| 75° | 545 | 545 | 533 | 522 | 517 | 579 |
| 85° | 89 | 101 | 102 | 103 | 102 | 123 |
| 90° | 2 | 5 | 13 | 7 | 7 | 4 |
| 95° | 17 | 66 | 218 | 113 | 77 | 19 |
| 105° | 60 | 91 | 369 | 560 | 522 | 64 |
| 115° | 107 | 130 | 295 | 589 | 672 | 105 |
| 125° | 148 | 166 | 269 | 454 | 536 | 132 |
| 135° | 177 | 195 | 260 | 366 | 415 | 137 |
| 145° | 205 | 218 | 257 | 313 | 337 | 129 |
| 155° | 232 | 238 | 257 | 282 | 290 | 107 |
| 165° | 250 | 254 | 257 | 267 | 270 | 71 |
| 175° | 260 | 260 | 259 | 262 | 262 | 25 |
| 180° | 260 | 260 | 260 | 260 | 260 | |

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 3184.0 | 3184.0 | 3184.0 | 3184.0 | 3184.0 |
| 2.5° | 3193.8 | 3188.3 | 3160.1 | 3183.9 | 3179.8 |
| 5° | 3182.2 | 3177.1 | 3141.9 | 3170.0 | 3168.3 |
| 7.5° | 3155.3 | 3148.7 | 3116.7 | 3142.9 | 3139.9 |
| 10° | 3131.5 | 3126.3 | 3092.9 | 3119.1 | 3117.4 |
| 12.5° | 3102.0 | 3096.8 | 3063.5 | 3089.7 | 3089.4 |
| 15° | 3050.8 | 3044.0 | 3014.0 | 3040.2 | 3038.5 |
| 17.5° | 2989.5 | 2981.6 | 2952.0 | 2972.7 | 2976.2 |
| 20° | 2940.4 | 2935.2 | 2907.1 | 2926.4 | 2929.9 |
| 22.5° | 2889.9 | 2883.5 | 2853.9 | 2876.0 | 2879.4 |
| 25° | 2803.7 | 2798.6 | 2773.9 | 2789.9 | 2796.7 |
| 27.5° | 2709.1 | 2709.1 | 2686.3 | 2697.7 | 2701.7 |
| 30° | 2646.0 | 2646.0 | 2623.3 | 2630.4 | 2637.3 |
| 32.5° | 2578.7 | 2573.2 | 2551.7 | 2557.5 | 2564.4 |
| 35° | 2467.3 | 2465.6 | 2446.2 | 2446.3 | 2448.1 |
| 37.5° | 2352.0 | 2347.2 | 2326.0 | 2327.6 | 2335.9 |
| 40° | 2269.3 | 2265.8 | 2244.7 | 2244.9 | 2251.7 |
| 42.5° | 2185.1 | 2181.7 | 2163.5 | 2160.7 | 2163.5 |
| 45° | 2055.5 | 2050.3 | 2032.7 | 2029.4 | 2036.3 |
| 47.5° | 1917.4 | 1918.8 | 1897.8 | 1892.9 | 1896.7 |
| 50° | 1827.7 | 1827.7 | 1806.7 | 1796.3 | 1801.4 |
| 52.5° | 1733.7 | 1731.0 | 1709.9 | 1698.3 | 1710.3 |
| 55° | 1589.4 | 1584.2 | 1566.6 | 1554.5 | 1563.0 |
| 57.5° | 1441.4 | 1433.6 | 1415.9 | 1402.7 | 1407.5 |
| 60° | 1340.6 | 1328.5 | 1310.8 | 1300.3 | 1303.7 |
| 62.5° | 1235.4 | 1228.9 | 1209.8 | 1193.8 | 1201.4 |
| 65° | 1074.2 | 1067.3 | 1051.4 | 1044.2 | 1037.3 |
| 67.5° | 916.1 | 911.7 | 893.7 | 886.2 | 881.8 |
| 70° | 809.6 | 801.0 | 788.5 | 779.7 | 778.1 |
| 72.5° | 705.8 | 695.9 | 683.4 | 675.9 | 671.5 |
| 75° | 545.0 | 545.0 | 532.7 | 522.1 | 516.9 |
| 77.5° | 391.8 | 393.1 | 383.1 | 379.5 | 377.1 |
| 80° | 297.9 | 297.9 | 289.2 | 285.7 | 287.3 |
| 82.5° | 208.2 | 212.3 | 209.2 | 204.2 | 201.9 |
| 85° | 89.4 | 101.4 | 101.7 | 103.4 | 101.7 |
| 87.5° | 15.8 | 26.0 | 29.5 | 25.1 | 22.4 |
| 90° | 1.6 | 5.0 | 13.4 | 6.7 | 6.7 |
| 92.5° | 7.0 | 33.7 | 74.7 | 33.1 | 21.3 |
| 95° | 16.7 | 65.6 | 218.5 | 112.6 | 76.8 |
| 97.5° | 29.1 | 72.1 | 327.0 | 260.0 | 191.6 |
| 100° | 38.3 | 77.5 | 360.4 | 365.1 | 283.6 |
| 102.5° | 46.4 | 82.9 | 369.7 | 454.9 | 385.0 |
| 105° | 60.0 | 91.1 | 368.7 | 559.7 | 522.2 |
| 107.5° | 74.1 | 102.8 | 347.6 | 614.1 | 623.2 |
| 110° | 83.4 | 109.5 | 330.3 | 628.2 | 667.3 |

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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 92.7 | 117.6 | 314.3 | 619.3 | 679.3 |
| 115° | 106.8 | 129.6 | 295.3 | 589.1 | 672.4 |
| 117.5° | 120.4 | 141.4 | 282.3 | 547.3 | 639.7 |
| 120° | 128.5 | 148.1 | 276.9 | 519.2 | 608.9 |
| 122.5° | 136.5 | 156.0 | 272.9 | 491.1 | 579.5 |
| 125° | 148.4 | 166.4 | 268.6 | 453.9 | 535.5 |
| 127.5° | 158.2 | 176.5 | 265.0 | 424.0 | 492.8 |
| 130° | 163.5 | 183.0 | 263.6 | 405.2 | 468.8 |
| 132.5° | 168.8 | 188.4 | 262.3 | 389.0 | 446.1 |
| 135° | 176.8 | 194.8 | 260.3 | 366.5 | 415.4 |
| 137.5° | 185.1 | 202.8 | 259.9 | 349.6 | 389.7 |
| 140° | 191.8 | 208.2 | 258.6 | 336.2 | 373.7 |
| 142.5° | 197.2 | 212.2 | 258.6 | 326.7 | 359.0 |
| 145° | 205.2 | 218.2 | 256.9 | 312.6 | 337.0 |
| 147.5° | 213.3 | 226.0 | 256.9 | 300.7 | 321.0 |
| 150° | 218.5 | 230.0 | 256.9 | 294.0 | 310.3 |
| 152.5° | 223.9 | 232.7 | 256.9 | 288.6 | 301.0 |
| 155° | 231.9 | 238.4 | 256.9 | 282.2 | 290.3 |
| 157.5° | 237.9 | 244.1 | 256.9 | 276.4 | 282.3 |
| 160° | 241.9 | 246.8 | 256.9 | 273.7 | 276.9 |
| 162.5° | 245.9 | 249.5 | 256.9 | 271.0 | 274.2 |
| 165° | 250.2 | 253.5 | 256.9 | 267.0 | 270.2 |
| 167.5° | 254.3 | 255.9 | 258.6 | 265.3 | 266.6 |
| 170° | 256.9 | 258.6 | 258.6 | 265.3 | 265.3 |
| 172.5° | 258.3 | 258.6 | 258.6 | 263.9 | 262.6 |
| 175° | 260.3 | 260.3 | 258.6 | 261.9 | 261.9 |
| 177.5° | 260.3 | 260.3 | 258.9 | 261.5 | 260.3 |
| 180° | 260.3 | 260.3 | 260.3 | 260.3 | 260.3 |

(END OF REPORT)