

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: P564745

Luminaire Tested: **SQ4-PW1-075U-075D-840-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564745  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, G2-2106-289-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PW1-075U-075D-840-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

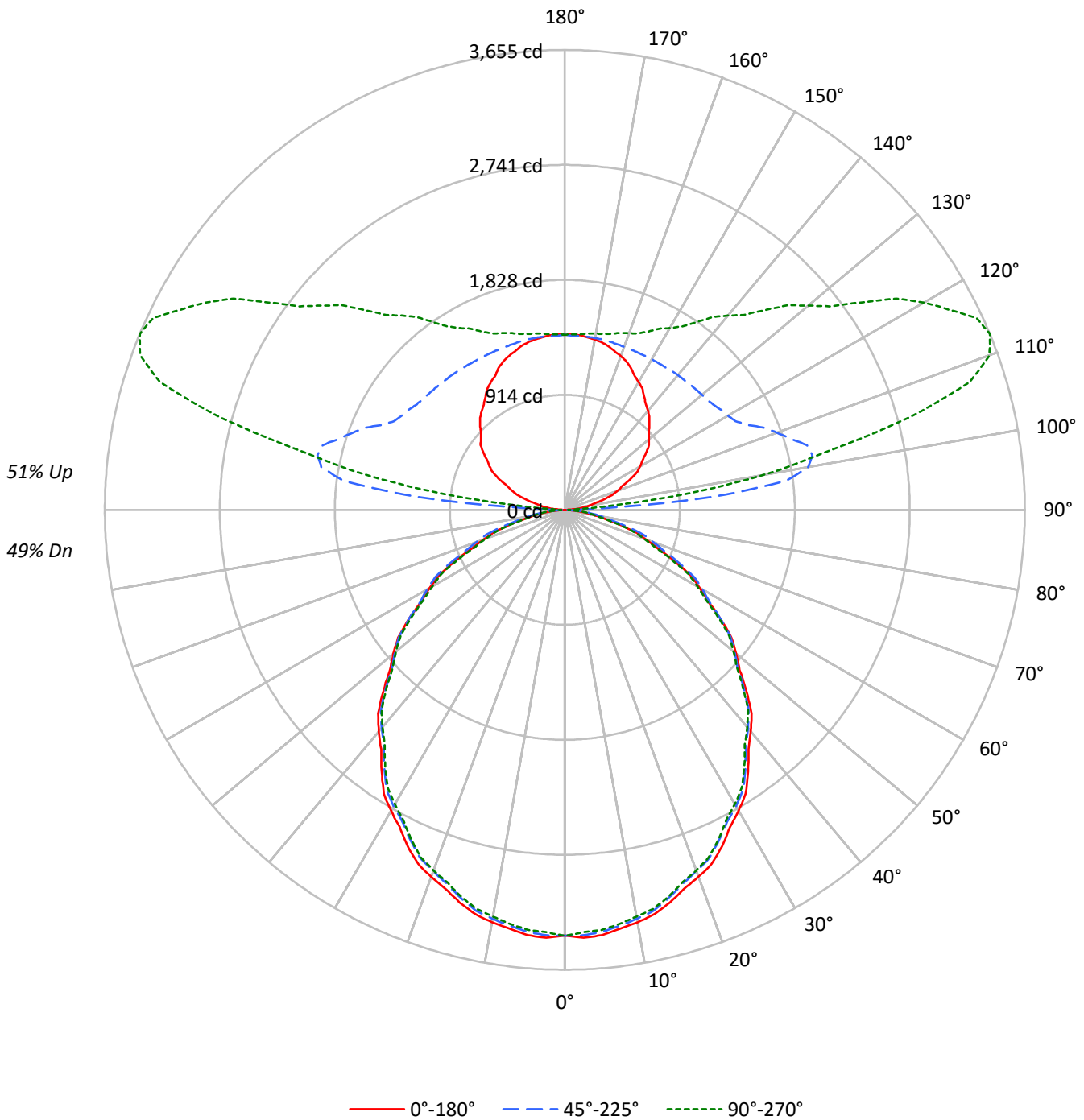
Lumens per Lamp: N/A  
Luminaire Lumens: 17686.1 lumens  
Efficiency: N/A  
Efficacy: 132.6 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 133.4  
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



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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 | 50 | 30 | 10 | 0  |   |
| RCR |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |
| 0   | 107 | 107 | 107 | 107 | 98 | 98 | 98 | 98 | 83 | 83 | 83 | 68 | 68 | 68 | 55 | 55 | 55 | 49 |    |    |    |   |
| 1   | 98  | 93  | 89  | 86  | 90 | 86 | 83 | 80 | 73 | 70 | 68 | 60 | 59 | 57 | 49 | 48 | 47 | 41 |    |    |    |   |
| 2   | 89  | 82  | 75  | 70  | 82 | 75 | 70 | 66 | 64 | 60 | 56 | 53 | 50 | 48 | 43 | 41 | 39 | 35 |    |    |    |   |
| 3   | 81  | 72  | 64  | 59  | 74 | 66 | 60 | 55 | 56 | 51 | 48 | 47 | 43 | 40 | 38 | 36 | 34 | 29 |    |    |    |   |
| 4   | 74  | 64  | 56  | 50  | 68 | 59 | 52 | 47 | 50 | 45 | 41 | 42 | 38 | 35 | 34 | 31 | 29 | 25 |    |    |    |   |
| 5   | 68  | 57  | 49  | 43  | 63 | 52 | 45 | 40 | 45 | 39 | 35 | 37 | 33 | 30 | 31 | 28 | 25 | 22 |    |    |    |   |
| 6   | 63  | 51  | 43  | 37  | 58 | 47 | 40 | 35 | 40 | 35 | 30 | 34 | 30 | 26 | 28 | 25 | 22 | 19 |    |    |    |   |
| 7   | 58  | 46  | 38  | 32  | 53 | 43 | 36 | 30 | 37 | 31 | 27 | 31 | 26 | 23 | 25 | 22 | 20 | 17 |    |    |    |   |
| 8   | 54  | 42  | 34  | 29  | 50 | 39 | 32 | 27 | 33 | 28 | 24 | 28 | 24 | 21 | 23 | 20 | 18 | 15 |    |    |    |   |
| 9   | 50  | 38  | 30  | 25  | 46 | 35 | 29 | 24 | 31 | 25 | 21 | 26 | 22 | 19 | 22 | 18 | 16 | 14 |    |    |    |   |
| 10  | 47  | 35  | 28  | 23  | 43 | 33 | 26 | 22 | 28 | 23 | 19 | 24 | 20 | 17 | 20 | 17 | 15 | 13 |    |    |    |   |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 10409 | 10409 | 10409 |
| 5°  | 10476 | 10393 | 10347 |
| 10° | 10392 | 10309 | 10253 |
| 15° | 10282 | 10168 | 10130 |
| 20° | 10159 | 10003 | 9984  |
| 25° | 10017 | 9835  | 9805  |
| 30° | 9805  | 9657  | 9594  |
| 35° | 9527  | 9393  | 9337  |
| 40° | 9230  | 9086  | 9050  |
| 45° | 8871  | 8754  | 8715  |
| 50° | 8503  | 8432  | 8375  |
| 55° | 8106  | 8106  | 7978  |
| 60° | 7612  | 7758  | 7483  |
| 65° | 6966  | 7313  | 6792  |
| 70° | 6141  | 6730  | 5980  |
| 75° | 5244  | 6023  | 5102  |
| 80° | 4066  | 5071  | 4119  |
| 85° | 2629  | 3892  | 3472  |



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**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 318.7   | 1.8       |
| 10°-20°   | 899.8   | 5.1       |
| 20°-30°   | 1334.7  | 7.5       |
| 30°-40°   | 1561.7  | 8.8       |
| 40°-50°   | 1554.7  | 8.8       |
| 50°-60°   | 1342.6  | 7.6       |
| 60°-70°   | 966.4   | 5.5       |
| 70°-80°   | 506.8   | 2.9       |
| 80°-90°   | 129.2   | 0.7       |
| 90°-100°  | 656.8   | 3.7       |
| 100°-110° | 1807.0  | 10.2      |
| 110°-120° | 1865.1  | 10.5      |
| 120°-130° | 1494.3  | 8.4       |
| 130°-140° | 1173.7  | 6.6       |
| 140°-150° | 899.4   | 5.1       |
| 150°-160° | 646.7   | 3.7       |
| 160°-170° | 395.4   | 2.2       |
| 170°-180° | 133.3   | 0.8       |
| 0°-30°    | 2553.1  | 14.4      |
| 0°-40°    | 4114.8  | 23.3      |
| 0°-60°    | 7012.1  | 39.6      |
| 0°-90°    | 8614.5  | 48.7      |
| 90°-120°  | 4328.8  | 24.5      |
| 90°-150°  | 7896.3  | 44.6      |
| 90°-180°  | 9072.0  | 51.3      |
| 0°-180°   | 17686.1 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 3384 | 3384  | 3384 | 3384  | 3384 |      |
| 5°   | 3393 | 3356  | 3367 | 3358  | 3352 | 321  |
| 15°  | 3229 | 3189  | 3194 | 3188  | 3182 | 910  |
| 25°  | 2952 | 2902  | 2898 | 2881  | 2890 | 1357 |
| 35°  | 2538 | 2503  | 2502 | 2478  | 2487 | 1586 |
| 45°  | 2040 | 2022  | 2013 | 2007  | 2004 | 1574 |
| 55°  | 1512 | 1509  | 1512 | 1491  | 1488 | 1349 |
| 65°  | 957  | 986   | 1005 | 965   | 933  | 949  |
| 75°  | 441  | 482   | 507  | 473   | 429  | 473  |
| 85°  | 74   | 98    | 110  | 104   | 98   | 98   |
| 90°  | 3    | 12    | 21   | 27    | 27   | 9    |
| 95°  | 98   | 358   | 1161 | 497   | 317  | 103  |
| 105° | 323  | 497   | 1991 | 3032  | 2830 | 340  |
| 115° | 572  | 696   | 1597 | 3180  | 3609 | 564  |
| 125° | 788  | 898   | 1449 | 2451  | 2871 | 703  |
| 135° | 951  | 1055  | 1407 | 1982  | 2243 | 734  |
| 145° | 1099 | 1174  | 1387 | 1689  | 1819 | 689  |
| 155° | 1244 | 1285  | 1378 | 1518  | 1561 | 572  |
| 165° | 1345 | 1362  | 1384 | 1440  | 1449 | 379  |
| 175° | 1392 | 1395  | 1387 | 1404  | 1401 | 132  |
| 180° | 1392 | 1392  | 1392 | 1392  | 1392 |      |



TEST NUMBER: P564745

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 3384.5 | 3384.5 | 3384.5 | 3384.5 | 3384.5 |
| 2.5°   | 3403.5 | 3375.5 | 3384.5 | 3376.9 | 3360.6 |
| 5°     | 3393.4 | 3355.5 | 3366.6 | 3357.5 | 3351.7 |
| 7.5°   | 3358.8 | 3323.8 | 3332.0 | 3322.3 | 3318.8 |
| 10°    | 3327.8 | 3292.8 | 3301.0 | 3288.9 | 3283.1 |
| 12.5°  | 3292.0 | 3254.7 | 3262.8 | 3250.8 | 3247.3 |
| 15°    | 3229.4 | 3188.6 | 3193.6 | 3187.5 | 3181.7 |
| 17.5°  | 3156.6 | 3115.2 | 3116.1 | 3106.5 | 3105.3 |
| 20°    | 3104.2 | 3060.4 | 3056.4 | 3044.6 | 3050.5 |
| 22.5°  | 3046.9 | 3000.8 | 2996.8 | 2980.3 | 2988.5 |
| 25°    | 2952.1 | 2902.5 | 2898.4 | 2880.7 | 2889.5 |
| 27.5°  | 2842.3 | 2793.4 | 2793.4 | 2768.6 | 2777.9 |
| 30°    | 2761.2 | 2714.6 | 2719.5 | 2689.9 | 2701.6 |
| 32.5°  | 2675.4 | 2633.4 | 2636.0 | 2606.4 | 2618.1 |
| 35°    | 2537.6 | 2502.6 | 2501.8 | 2478.2 | 2486.9 |
| 37.5°  | 2396.8 | 2365.9 | 2361.1 | 2347.4 | 2349.7 |
| 40°    | 2299.0 | 2272.8 | 2263.3 | 2254.3 | 2254.3 |
| 42.5°  | 2196.5 | 2172.6 | 2163.1 | 2156.5 | 2154.1 |
| 45°    | 2039.6 | 2022.1 | 2012.8 | 2006.7 | 2003.8 |
| 47.5°  | 1884.6 | 1868.2 | 1860.1 | 1855.9 | 1852.9 |
| 50°    | 1777.2 | 1765.5 | 1762.3 | 1753.3 | 1750.4 |
| 52.5°  | 1669.9 | 1662.9 | 1659.7 | 1648.3 | 1645.4 |
| 55°    | 1511.8 | 1508.9 | 1511.8 | 1490.9 | 1488.0 |
| 57.5°  | 1347.2 | 1351.9 | 1361.5 | 1333.3 | 1326.3 |
| 60°    | 1237.5 | 1249.1 | 1261.3 | 1228.3 | 1216.6 |
| 62.5°  | 1125.4 | 1144.0 | 1161.2 | 1123.2 | 1106.9 |
| 65°    | 957.2  | 986.3  | 1004.9 | 965.4  | 933.3  |
| 67.5°  | 795.0  | 831.1  | 853.4  | 810.9  | 774.7  |
| 70°    | 682.9  | 723.7  | 748.5  | 705.8  | 665.0  |
| 72.5°  | 585.0  | 630.5  | 650.6  | 610.4  | 569.5  |
| 75°    | 441.3  | 482.1  | 506.9  | 473.1  | 429.4  |
| 77.5°  | 313.1  | 351.6  | 372.1  | 342.7  | 306.5  |
| 80°    | 229.6  | 270.4  | 286.3  | 261.7  | 232.6  |
| 82.5°  | 162.8  | 196.6  | 207.5  | 192.8  | 172.9  |
| 85°    | 74.5   | 97.9   | 110.3  | 104.2  | 98.4   |
| 87.5°  | 19.7   | 37.7   | 49.5   | 50.7   | 53.0   |
| 90°    | 3.0    | 11.7   | 20.7   | 26.7   | 26.7   |
| 92.5°  | 40.9   | 174.7  | 302.8  | 116.3  | 95.4   |
| 95°    | 97.8   | 358.5  | 1161.4 | 496.6  | 317.0  |
| 97.5°  | 159.4  | 397.5  | 1772.4 | 1365.6 | 963.5  |
| 100°   | 204.4  | 421.7  | 1964.3 | 1982.7 | 1617.7 |
| 102.5° | 247.1  | 450.5  | 2014.1 | 2459.8 | 2124.9 |
| 105°   | 322.9  | 496.8  | 1991.0 | 3032.3 | 2829.5 |
| 107.5° | 395.2  | 554.0  | 1877.8 | 3312.6 | 3372.9 |
| 110°   | 447.4  | 592.2  | 1792.5 | 3382.3 | 3590.9 |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 494.8  | 635.0  | 1707.2 | 3337.4 | 3654.9 |
| 115°   | 571.8  | 696.4  | 1597.0 | 3180.0 | 3608.7 |
| 117.5° | 645.3  | 760.0  | 1527.0 | 2959.0 | 3444.0 |
| 120°   | 690.3  | 800.4  | 1496.2 | 2793.5 | 3294.6 |
| 122.5° | 730.6  | 840.7  | 1474.9 | 2648.3 | 3124.0 |
| 125°   | 788.1  | 898.2  | 1448.8 | 2450.9 | 2871.0 |
| 127.5° | 842.6  | 947.5  | 1431.6 | 2286.2 | 2654.7 |
| 130°   | 871.1  | 978.3  | 1422.2 | 2188.3 | 2524.3 |
| 132.5° | 904.3  | 1011.4 | 1415.0 | 2102.2 | 2405.8 |
| 135°   | 951.1  | 1055.4 | 1407.3 | 1982.1 | 2242.8 |
| 137.5° | 994.9  | 1091.7 | 1400.8 | 1885.1 | 2100.0 |
| 140°   | 1028.1 | 1117.9 | 1398.4 | 1820.6 | 2014.7 |
| 142.5° | 1056.5 | 1139.4 | 1393.7 | 1763.1 | 1929.4 |
| 145°   | 1099.2 | 1174.5 | 1386.6 | 1688.8 | 1819.2 |
| 147.5° | 1144.8 | 1209.7 | 1383.0 | 1623.0 | 1727.3 |
| 150°   | 1173.3 | 1231.2 | 1380.7 | 1586.9 | 1668.1 |
| 152.5° | 1199.3 | 1252.7 | 1378.3 | 1555.8 | 1623.0 |
| 155°   | 1244.4 | 1284.9 | 1377.7 | 1517.9 | 1561.4 |
| 157.5° | 1277.0 | 1310.0 | 1377.7 | 1486.8 | 1517.0 |
| 160°   | 1300.7 | 1326.7 | 1377.7 | 1470.1 | 1493.3 |
| 162.5° | 1319.6 | 1341.1 | 1380.1 | 1455.8 | 1474.3 |
| 165°   | 1345.1 | 1362.5 | 1383.6 | 1440.1 | 1448.8 |
| 167.5° | 1362.9 | 1376.2 | 1386.6 | 1426.9 | 1429.3 |
| 170°   | 1374.7 | 1383.4 | 1386.6 | 1422.2 | 1422.2 |
| 172.5° | 1384.2 | 1388.3 | 1386.6 | 1415.0 | 1412.7 |
| 175°   | 1392.5 | 1395.4 | 1386.6 | 1404.3 | 1401.4 |
| 177.5° | 1394.9 | 1394.9 | 1385.4 | 1399.5 | 1394.9 |
| 180°   | 1392.5 | 1392.5 | 1392.5 | 1392.5 | 1392.5 |

(END OF REPORT)