

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: P519163

Luminaire Tested: **SQ4-WB-075U-050D-830-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519163  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, G2-2009-966-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-WB-075U-050D-830-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

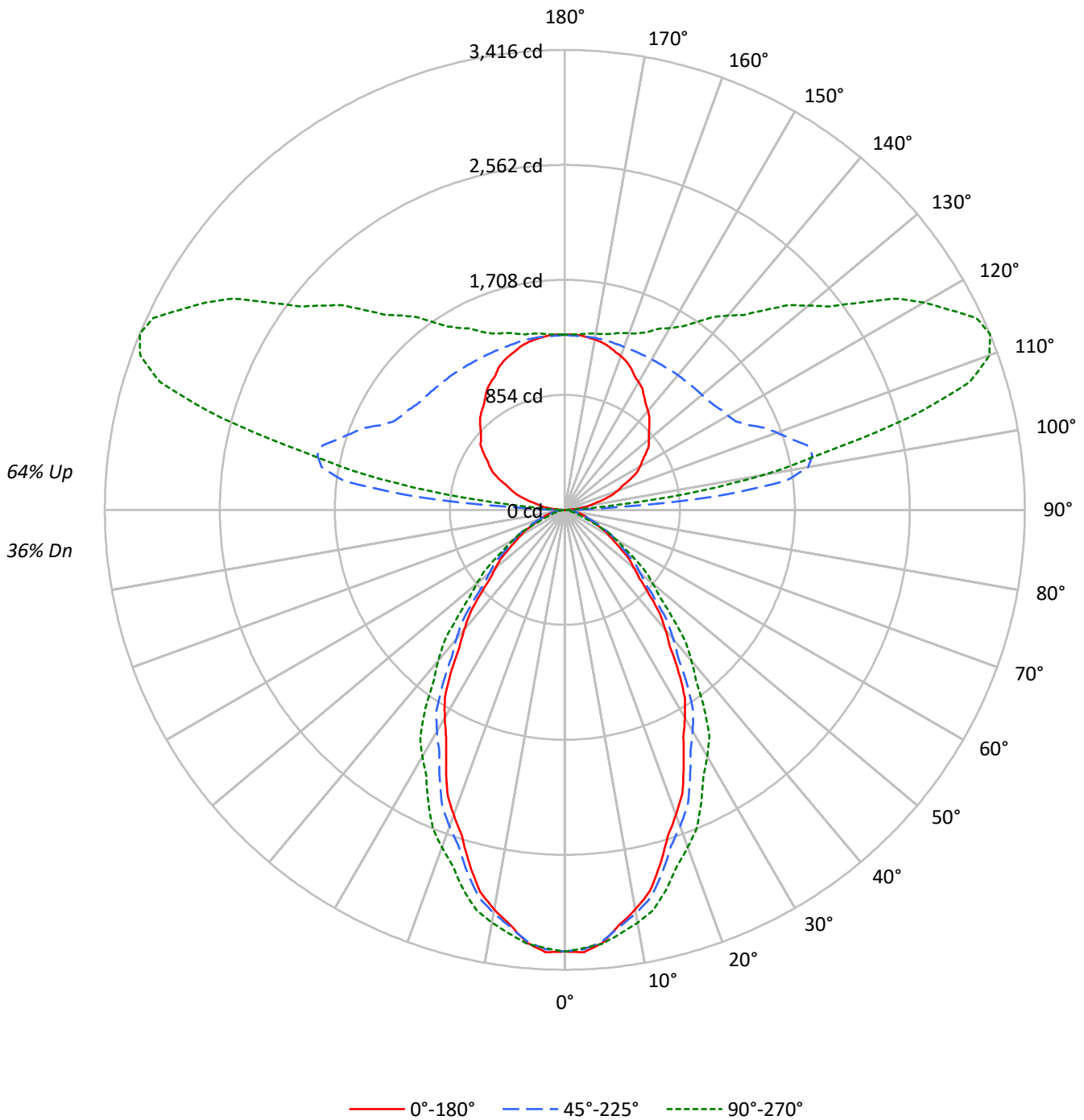
Lumens per Lamp: N/A  
Luminaire Lumens: 13261.5 lumens  
Efficiency: N/A  
Efficacy: 123.5 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 107.4  
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 | 0  |
| RCR |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 0   | 104 | 104 | 104 | 104 | 94 | 94 | 94 | 94 | 76 | 76 | 76 | 59 | 59 | 59 | 43 | 43 | 43 | 36 |
| 1   | 95  | 92  | 88  | 85  | 86 | 83 | 80 | 78 | 67 | 65 | 64 | 53 | 52 | 50 | 40 | 39 | 38 | 32 |
| 2   | 88  | 81  | 75  | 71  | 79 | 74 | 69 | 65 | 60 | 57 | 54 | 47 | 45 | 43 | 36 | 35 | 33 | 28 |
| 3   | 80  | 72  | 65  | 60  | 73 | 66 | 60 | 55 | 54 | 50 | 46 | 43 | 40 | 38 | 33 | 31 | 29 | 25 |
| 4   | 74  | 64  | 57  | 51  | 67 | 59 | 52 | 48 | 48 | 44 | 40 | 39 | 36 | 33 | 30 | 28 | 26 | 22 |
| 5   | 68  | 58  | 50  | 45  | 62 | 53 | 46 | 41 | 44 | 39 | 35 | 35 | 32 | 29 | 27 | 25 | 23 | 20 |
| 6   | 63  | 52  | 44  | 39  | 57 | 48 | 41 | 36 | 40 | 35 | 31 | 32 | 29 | 26 | 25 | 23 | 21 | 18 |
| 7   | 58  | 47  | 40  | 35  | 53 | 43 | 37 | 32 | 36 | 31 | 28 | 29 | 26 | 23 | 23 | 21 | 19 | 16 |
| 8   | 54  | 43  | 36  | 31  | 49 | 40 | 33 | 29 | 33 | 28 | 25 | 27 | 24 | 21 | 21 | 19 | 17 | 15 |
| 9   | 51  | 39  | 32  | 28  | 46 | 36 | 30 | 26 | 31 | 26 | 23 | 25 | 22 | 19 | 20 | 18 | 16 | 14 |
| 10  | 47  | 36  | 29  | 25  | 43 | 33 | 27 | 23 | 28 | 24 | 20 | 23 | 20 | 18 | 19 | 16 | 15 | 13 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 10090 | 10090 | 10090 |
| 5°  | 9964  | 9928  | 9986  |
| 10° | 9414  | 9499  | 9720  |
| 15° | 8690  | 8892  | 9291  |
| 20° | 7892  | 8188  | 8730  |
| 25° | 7078  | 7464  | 8133  |
| 30° | 6329  | 6743  | 7515  |
| 35° | 5534  | 5935  | 6783  |
| 40° | 4658  | 5028  | 5872  |
| 45° | 3844  | 4176  | 4903  |
| 50° | 3209  | 3499  | 4085  |
| 55° | 2725  | 3003  | 3373  |
| 60° | 2329  | 2603  | 2692  |
| 65° | 1854  | 2190  | 1739  |
| 70° | 1644  | 1708  | 1061  |
| 75° | 1522  | 1385  | 650   |
| 80° | 1403  | 1275  | 561   |
| 85° | 1270  | 1168  | 459   |



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**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 300.9   | 2.3       |
| 10°-20°   | 782.7   | 5.9       |
| 20°-30°   | 1013.9  | 7.6       |
| 30°-40°   | 992.8   | 7.5       |
| 40°-50°   | 759.9   | 5.7       |
| 50°-60°   | 506.4   | 3.8       |
| 60°-70°   | 276.3   | 2.1       |
| 70°-80°   | 115.1   | 0.9       |
| 80°-90°   | 35.9    | 0.3       |
| 90°-100°  | 613.7   | 4.6       |
| 100°-110° | 1688.6  | 12.7      |
| 110°-120° | 1742.9  | 13.1      |
| 120°-130° | 1396.4  | 10.5      |
| 130°-140° | 1096.8  | 8.3       |
| 140°-150° | 840.5   | 6.3       |
| 150°-160° | 604.3   | 4.6       |
| 160°-170° | 369.5   | 2.8       |
| 170°-180° | 124.6   | 0.9       |
| 0°-30°    | 2097.5  | 15.8      |
| 0°-40°    | 3090.3  | 23.3      |
| 0°-60°    | 4356.6  | 32.9      |
| 0°-90°    | 4784.0  | 36.1      |
| 90°-120°  | 4045.3  | 30.5      |
| 90°-150°  | 7379.0  | 55.6      |
| 90°-180°  | 8477.0  | 63.9      |
| 0°-180°   | 13261.5 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 3281 | 3281  | 3281 | 3281  | 3281 |      |
| 5°   | 3228 | 3195  | 3216 | 3224  | 3235 | 300  |
| 15°  | 2729 | 2720  | 2793 | 2869  | 2918 | 762  |
| 25°  | 2086 | 2092  | 2200 | 2296  | 2397 | 959  |
| 35°  | 1474 | 1481  | 1581 | 1687  | 1807 | 916  |
| 45°  | 884  | 901   | 960  | 1033  | 1127 | 689  |
| 55°  | 508  | 529   | 560  | 581   | 629  | 461  |
| 65°  | 255  | 276   | 301  | 263   | 239  | 265  |
| 75°  | 128  | 128   | 117  | 80    | 55   | 137  |
| 85°  | 36   | 36    | 33   | 21    | 13   | 39   |
| 90°  | 3    | 11    | 19   | 25    | 25   | 8    |
| 95°  | 91   | 335   | 1085 | 464   | 296  | 97   |
| 105° | 302  | 464   | 1861 | 2834  | 2644 | 318  |
| 115° | 534  | 651   | 1492 | 2972  | 3372 | 527  |
| 125° | 736  | 839   | 1354 | 2290  | 2683 | 657  |
| 135° | 889  | 986   | 1315 | 1852  | 2096 | 686  |
| 145° | 1027 | 1098  | 1296 | 1578  | 1700 | 644  |
| 155° | 1163 | 1201  | 1288 | 1418  | 1459 | 534  |
| 165° | 1257 | 1273  | 1293 | 1346  | 1354 | 354  |
| 175° | 1301 | 1304  | 1296 | 1312  | 1310 | 124  |
| 180° | 1301 | 1301  | 1301 | 1301  | 1301 |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 3280.8 | 3280.8 | 3280.8 | 3280.8 | 3280.8 |
| 2.5°   | 3288.9 | 3259.6 | 3267.0 | 3266.8 | 3257.8 |
| 5°     | 3227.5 | 3195.2 | 3216.0 | 3223.5 | 3234.7 |
| 7.5°   | 3107.8 | 3083.3 | 3121.3 | 3149.5 | 3172.3 |
| 10°    | 3014.5 | 2993.4 | 3041.8 | 3082.8 | 3112.4 |
| 12.5°  | 2906.2 | 2888.5 | 2948.5 | 3003.5 | 3042.1 |
| 15°    | 2729.4 | 2719.6 | 2792.8 | 2868.8 | 2918.0 |
| 17.5°  | 2540.3 | 2535.5 | 2619.5 | 2708.1 | 2771.2 |
| 20°    | 2411.3 | 2409.9 | 2502.0 | 2594.3 | 2667.5 |
| 22.5°  | 2281.2 | 2284.3 | 2381.1 | 2477.1 | 2560.4 |
| 25°    | 2085.9 | 2091.6 | 2199.7 | 2295.6 | 2396.9 |
| 27.5°  | 1905.4 | 1908.0 | 2019.7 | 2120.9 | 2229.0 |
| 30°    | 1782.2 | 1789.2 | 1898.8 | 2003.6 | 2116.2 |
| 32.5°  | 1659.0 | 1667.1 | 1774.4 | 1882.7 | 1997.6 |
| 35°    | 1474.1 | 1481.2 | 1580.7 | 1687.0 | 1806.7 |
| 37.5°  | 1283.5 | 1293.1 | 1381.4 | 1482.0 | 1599.7 |
| 40°    | 1160.3 | 1174.4 | 1252.4 | 1347.2 | 1462.6 |
| 42.5°  | 1041.7 | 1059.1 | 1131.5 | 1221.4 | 1325.6 |
| 45°    | 883.9  | 900.8  | 960.2  | 1032.9 | 1127.2 |
| 47.5°  | 748.0  | 767.4  | 813.1  | 875.7  | 956.2  |
| 50°    | 670.8  | 689.1  | 731.3  | 777.7  | 853.7  |
| 52.5°  | 602.9  | 621.2  | 658.8  | 694.5  | 759.2  |
| 55°    | 508.2  | 529.3  | 560.0  | 581.2  | 629.1  |
| 57.5°  | 430.4  | 450.7  | 475.1  | 484.6  | 513.6  |
| 60°    | 378.6  | 401.1  | 423.2  | 422.1  | 437.6  |
| 62.5°  | 331.4  | 350.5  | 372.6  | 357.3  | 358.2  |
| 65°    | 254.8  | 275.9  | 300.9  | 262.9  | 239.0  |
| 67.5°  | 205.9  | 210.4  | 236.1  | 183.3  | 154.9  |
| 70°    | 182.8  | 182.8  | 190.0  | 142.0  | 118.0  |
| 72.5°  | 160.9  | 160.9  | 154.3  | 115.5  | 90.4   |
| 75°    | 128.1  | 128.1  | 116.6  | 80.0   | 54.7   |
| 77.5°  | 98.8   | 97.6   | 89.3   | 59.7   | 39.7   |
| 80°    | 79.2   | 79.2   | 72.0   | 47.2   | 31.7   |
| 82.5°  | 61.9   | 61.9   | 55.9   | 36.8   | 23.6   |
| 85°    | 36.0   | 36.0   | 33.1   | 21.4   | 13.0   |
| 87.5°  | 13.2   | 14.8   | 15.4   | 11.9   | 10.7   |
| 90°    | 2.8    | 10.9   | 19.4   | 24.9   | 24.9   |
| 92.5°  | 38.2   | 163.3  | 283.0  | 108.6  | 89.2   |
| 95°    | 91.4   | 335.0  | 1085.3 | 464.1  | 296.3  |
| 97.5°  | 149.0  | 371.5  | 1656.2 | 1276.1 | 900.4  |
| 100°   | 191.0  | 394.1  | 1835.7 | 1852.8 | 1511.7 |
| 102.5° | 230.9  | 421.0  | 1882.2 | 2298.7 | 1985.7 |
| 105°   | 301.8  | 464.2  | 1860.6 | 2833.6 | 2644.1 |
| 107.5° | 369.3  | 517.7  | 1754.8 | 3095.6 | 3151.9 |
| 110°   | 418.1  | 553.4  | 1675.1 | 3160.8 | 3355.7 |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 462.4  | 593.4  | 1595.3 | 3118.8 | 3415.5 |
| 115°   | 534.4  | 650.8  | 1492.3 | 2971.6 | 3372.3 |
| 117.5° | 603.0  | 710.2  | 1427.0 | 2765.2 | 3218.4 |
| 120°   | 645.1  | 748.0  | 1398.2 | 2610.5 | 3078.8 |
| 122.5° | 682.8  | 785.6  | 1378.3 | 2474.8 | 2919.3 |
| 125°   | 736.5  | 839.4  | 1353.9 | 2290.3 | 2682.9 |
| 127.5° | 787.4  | 885.4  | 1337.8 | 2136.4 | 2480.8 |
| 130°   | 814.0  | 914.2  | 1329.0 | 2044.9 | 2358.9 |
| 132.5° | 845.0  | 945.2  | 1322.3 | 1964.5 | 2248.2 |
| 135°   | 888.8  | 986.2  | 1315.1 | 1852.3 | 2095.9 |
| 137.5° | 929.7  | 1020.2 | 1309.0 | 1761.6 | 1962.5 |
| 140°   | 960.7  | 1044.7 | 1306.8 | 1701.3 | 1882.7 |
| 142.5° | 987.3  | 1064.7 | 1302.4 | 1647.6 | 1803.0 |
| 145°   | 1027.2 | 1097.6 | 1295.8 | 1578.2 | 1700.0 |
| 147.5° | 1069.8 | 1130.5 | 1292.4 | 1516.7 | 1614.2 |
| 150°   | 1096.4 | 1150.6 | 1290.2 | 1483.0 | 1558.8 |
| 152.5° | 1120.8 | 1170.6 | 1288.0 | 1453.9 | 1516.7 |
| 155°   | 1162.9 | 1200.8 | 1287.5 | 1418.5 | 1459.1 |
| 157.5° | 1193.3 | 1224.2 | 1287.5 | 1389.4 | 1417.6 |
| 160°   | 1215.5 | 1239.8 | 1287.5 | 1373.8 | 1395.4 |
| 162.5° | 1233.2 | 1253.2 | 1289.7 | 1360.4 | 1377.7 |
| 165°   | 1257.0 | 1273.2 | 1293.0 | 1345.8 | 1353.9 |
| 167.5° | 1273.6 | 1286.1 | 1295.8 | 1333.5 | 1335.6 |
| 170°   | 1284.7 | 1292.8 | 1295.8 | 1329.0 | 1329.0 |
| 172.5° | 1293.5 | 1297.3 | 1295.8 | 1322.3 | 1320.1 |
| 175°   | 1301.3 | 1304.0 | 1295.8 | 1312.3 | 1309.6 |
| 177.5° | 1303.5 | 1303.5 | 1294.7 | 1307.8 | 1303.5 |
| 180°   | 1301.3 | 1301.3 | 1301.3 | 1301.3 | 1301.3 |

(END OF REPORT)