

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: P519561

Luminaire Tested: **SQ4-WB-150U-050D-930-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519561  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-050D-930-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

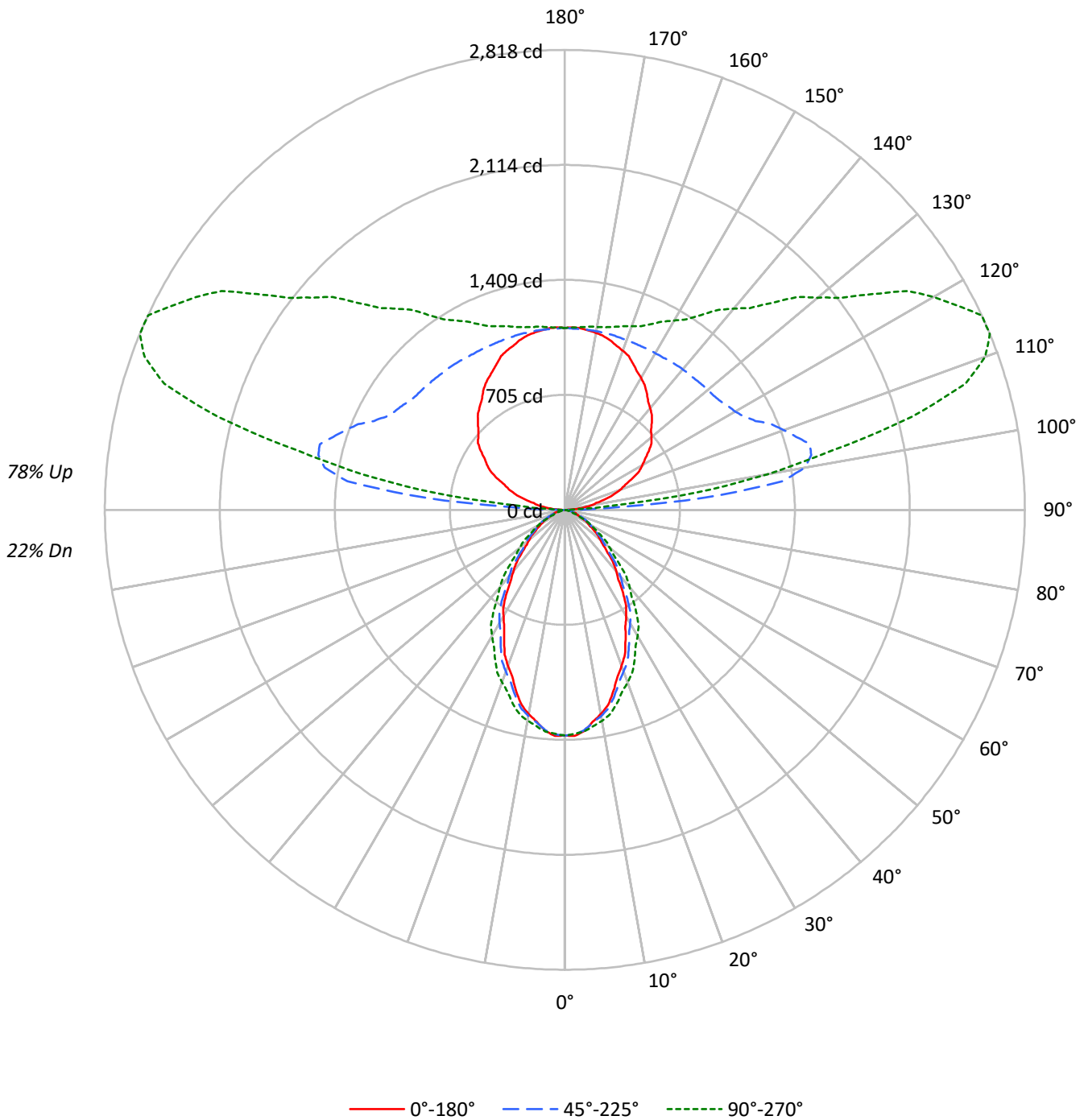
Lumens per Lamp: N/A  
Luminaire Lumens: 9207.9 lumens  
Efficiency: N/A  
Efficacy: 109.5 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 84.1  
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   | 100 | 100 | 100 | 100 | 89 | 89 | 89 | 89 | 68 | 68 | 68 | 48 | 48 | 48 | 30 | 30 | 30 | 22 |
| 1   | 92  | 88  | 84  | 81  | 81 | 78 | 75 | 73 | 60 | 58 | 56 | 43 | 42 | 41 | 27 | 27 | 26 | 19 |
| 2   | 84  | 77  | 72  | 67  | 74 | 69 | 64 | 60 | 53 | 50 | 47 | 38 | 37 | 35 | 25 | 24 | 23 | 17 |
| 3   | 77  | 68  | 62  | 56  | 68 | 61 | 56 | 51 | 47 | 43 | 40 | 34 | 32 | 30 | 22 | 21 | 20 | 15 |
| 4   | 71  | 61  | 54  | 48  | 63 | 54 | 48 | 44 | 42 | 38 | 35 | 31 | 28 | 26 | 20 | 19 | 18 | 13 |
| 5   | 65  | 54  | 47  | 41  | 57 | 49 | 42 | 38 | 38 | 34 | 30 | 28 | 25 | 23 | 19 | 17 | 16 | 12 |
| 6   | 60  | 49  | 41  | 36  | 53 | 44 | 37 | 33 | 34 | 30 | 26 | 25 | 23 | 20 | 17 | 16 | 14 | 11 |
| 7   | 55  | 44  | 37  | 32  | 49 | 40 | 33 | 29 | 31 | 27 | 23 | 23 | 20 | 18 | 16 | 14 | 13 | 10 |
| 8   | 51  | 40  | 33  | 28  | 46 | 36 | 30 | 25 | 28 | 24 | 21 | 21 | 18 | 16 | 15 | 13 | 12 | 9  |
| 9   | 48  | 36  | 29  | 25  | 42 | 33 | 27 | 23 | 26 | 22 | 19 | 20 | 17 | 15 | 14 | 12 | 11 | 8  |
| 10  | 45  | 33  | 27  | 22  | 40 | 30 | 24 | 20 | 24 | 20 | 17 | 18 | 15 | 13 | 13 | 11 | 10 | 8  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 8507 | 8507 | 8507 |
| 5°  | 8400 | 8370 | 8419 |
| 10° | 7936 | 8008 | 8194 |
| 15° | 7326 | 7496 | 7832 |
| 20° | 6653 | 6904 | 7360 |
| 25° | 5968 | 6293 | 6857 |
| 30° | 5335 | 5685 | 6335 |
| 35° | 4666 | 5003 | 5719 |
| 40° | 3927 | 4239 | 4950 |
| 45° | 3241 | 3521 | 4133 |
| 50° | 2706 | 2950 | 3443 |
| 55° | 2297 | 2532 | 2844 |
| 60° | 1963 | 2195 | 2270 |
| 65° | 1563 | 1845 | 1466 |
| 70° | 1387 | 1440 | 896  |
| 75° | 1283 | 1169 | 549  |
| 80° | 1183 | 1073 | 475  |
| 85° | 1073 | 988  | 388  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 126.9  | 1.4       |
| 10°-20°   | 329.9  | 3.6       |
| 20°-30°   | 427.4  | 4.6       |
| 30°-40°   | 418.5  | 4.5       |
| 40°-50°   | 320.3  | 3.5       |
| 50°-60°   | 213.5  | 2.3       |
| 60°-70°   | 116.5  | 1.3       |
| 70°-80°   | 48.5   | 0.5       |
| 80°-90°   | 16.1   | 0.2       |
| 90°-100°  | 518.3  | 5.6       |
| 100°-110° | 1401.4 | 15.2      |
| 110°-120° | 1473.3 | 16.0      |
| 120°-130° | 1196.7 | 13.0      |
| 130°-140° | 938.7  | 10.2      |
| 140°-150° | 720.5  | 7.8       |
| 150°-160° | 518.2  | 5.6       |
| 160°-170° | 316.5  | 3.4       |
| 170°-180° | 106.7  | 1.2       |
| 0°-30°    | 884.2  | 9.6       |
| 0°-40°    | 1302.7 | 14.1      |
| 0°-60°    | 1836.5 | 19.9      |
| 0°-90°    | 2017.6 | 21.9      |
| 90°-120°  | 3393.0 | 36.8      |
| 90°-150°  | 6249.0 | 67.9      |
| 90°-180°  | 7190.0 | 78.1      |
| 0°-180°   | 9207.9 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1383 | 1383  | 1383 | 1383  | 1383 |      |
| 5°   | 1360 | 1347  | 1356 | 1359  | 1364 | 127  |
| 15°  | 1150 | 1146  | 1177 | 1209  | 1230 | 321  |
| 25°  | 879  | 882   | 927  | 968   | 1010 | 404  |
| 35°  | 621  | 624   | 666  | 711   | 762  | 386  |
| 45°  | 373  | 380   | 405  | 435   | 475  | 291  |
| 55°  | 214  | 223   | 236  | 245   | 265  | 194  |
| 65°  | 107  | 116   | 127  | 111   | 101  | 112  |
| 75°  | 54   | 54    | 49   | 34    | 23   | 58   |
| 85°  | 15   | 15    | 14   | 9     | 6    | 17   |
| 90°  | 2    | 7     | 16   | 17    | 16   | 6    |
| 95°  | 80   | 282   | 862  | 446   | 265  | 84   |
| 105° | 260  | 402   | 1555 | 2293  | 2199 | 274  |
| 115° | 459  | 561   | 1289 | 2496  | 2818 | 453  |
| 125° | 628  | 719   | 1162 | 1961  | 2304 | 560  |
| 135° | 753  | 842   | 1131 | 1583  | 1792 | 582  |
| 145° | 875  | 941   | 1115 | 1355  | 1459 | 547  |
| 155° | 988  | 1027  | 1106 | 1216  | 1256 | 456  |
| 165° | 1076 | 1086  | 1110 | 1154  | 1160 | 303  |
| 175° | 1116 | 1115  | 1112 | 1126  | 1124 | 106  |
| 180° | 1115 | 1115  | 1115 | 1115  | 1115 |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1383.0 | 1383.0 | 1383.0 | 1383.0 | 1383.0 |
| 2.5°   | 1386.3 | 1374.0 | 1377.1 | 1377.0 | 1373.2 |
| 5°     | 1360.5 | 1346.9 | 1355.6 | 1358.8 | 1363.5 |
| 7.5°   | 1310.0 | 1299.7 | 1315.7 | 1327.6 | 1337.2 |
| 10°    | 1270.7 | 1261.8 | 1282.2 | 1299.5 | 1312.0 |
| 12.5°  | 1225.1 | 1217.6 | 1242.9 | 1266.1 | 1282.3 |
| 15°    | 1150.5 | 1146.4 | 1177.2 | 1209.3 | 1230.0 |
| 17.5°  | 1070.8 | 1068.8 | 1104.2 | 1141.6 | 1168.1 |
| 20°    | 1016.4 | 1015.8 | 1054.7 | 1093.6 | 1124.4 |
| 22.5°  | 961.6  | 962.9  | 1003.7 | 1044.2 | 1079.3 |
| 25°    | 879.3  | 881.7  | 927.2  | 967.6  | 1010.4 |
| 27.5°  | 803.2  | 804.3  | 851.4  | 894.0  | 939.6  |
| 30°    | 751.2  | 754.2  | 800.4  | 844.6  | 892.0  |
| 32.5°  | 699.3  | 702.7  | 748.0  | 793.6  | 842.0  |
| 35°    | 621.4  | 624.4  | 666.3  | 711.1  | 761.6  |
| 37.5°  | 541.0  | 545.1  | 582.3  | 624.7  | 674.3  |
| 40°    | 489.1  | 495.0  | 527.9  | 567.9  | 616.5  |
| 42.5°  | 439.1  | 446.5  | 477.0  | 514.9  | 558.8  |
| 45°    | 372.6  | 379.7  | 404.8  | 435.4  | 475.1  |
| 47.5°  | 315.3  | 323.5  | 342.7  | 369.1  | 403.1  |
| 50°    | 282.8  | 290.5  | 308.3  | 327.8  | 359.8  |
| 52.5°  | 254.1  | 261.9  | 277.7  | 292.7  | 320.0  |
| 55°    | 214.2  | 223.1  | 236.1  | 245.0  | 265.2  |
| 57.5°  | 181.4  | 190.0  | 200.3  | 204.3  | 216.5  |
| 60°    | 159.6  | 169.1  | 178.4  | 177.9  | 184.5  |
| 62.5°  | 139.7  | 147.8  | 157.0  | 150.6  | 151.0  |
| 65°    | 107.4  | 116.3  | 126.8  | 110.8  | 100.7  |
| 67.5°  | 86.8   | 88.7   | 99.5   | 77.3   | 65.3   |
| 70°    | 77.1   | 77.1   | 80.1   | 59.8   | 49.8   |
| 72.5°  | 67.8   | 67.8   | 65.1   | 48.7   | 38.1   |
| 75°    | 54.0   | 54.0   | 49.2   | 33.7   | 23.1   |
| 77.5°  | 41.6   | 41.2   | 37.6   | 25.2   | 16.7   |
| 80°    | 33.4   | 33.4   | 30.3   | 19.9   | 13.4   |
| 82.5°  | 26.1   | 26.1   | 23.5   | 15.5   | 10.0   |
| 85°    | 15.2   | 15.2   | 14.0   | 9.0    | 5.5    |
| 87.5°  | 5.8    | 6.8    | 8.0    | 6.3    | 5.5    |
| 90°    | 2.4    | 7.1    | 15.6   | 16.8   | 15.6   |
| 92.5°  | 34.1   | 124.2  | 245.1  | 106.4  | 77.1   |
| 95°    | 80.4   | 282.3  | 861.9  | 446.1  | 265.3  |
| 97.5°  | 129.2  | 323.8  | 1343.6 | 1111.9 | 816.6  |
| 100°   | 165.7  | 340.6  | 1493.4 | 1557.4 | 1259.3 |
| 102.5° | 199.3  | 363.8  | 1546.2 | 1895.3 | 1672.3 |
| 105°   | 260.5  | 402.5  | 1554.6 | 2293.2 | 2199.3 |
| 107.5° | 317.2  | 446.8  | 1486.7 | 2541.4 | 2572.6 |
| 110°   | 361.3  | 478.7  | 1426.2 | 2608.0 | 2740.7 |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 400.7  | 510.6  | 1370.5 | 2594.7 | 2817.5 |
| 115°   | 458.6  | 560.7  | 1289.3 | 2495.9 | 2817.5 |
| 117.5° | 515.2  | 611.0  | 1235.8 | 2344.9 | 2709.5 |
| 120°   | 549.8  | 643.7  | 1204.1 | 2236.5 | 2608.6 |
| 122.5° | 582.5  | 674.5  | 1184.9 | 2120.4 | 2495.3 |
| 125°   | 627.8  | 719.4  | 1162.1 | 1961.0 | 2303.7 |
| 127.5° | 669.6  | 759.5  | 1148.6 | 1830.9 | 2132.3 |
| 130°   | 692.7  | 785.4  | 1142.9 | 1750.5 | 2022.8 |
| 132.5° | 716.7  | 808.5  | 1137.1 | 1678.0 | 1928.7 |
| 135°   | 752.7  | 841.9  | 1130.8 | 1583.4 | 1792.3 |
| 137.5° | 789.0  | 873.2  | 1125.6 | 1506.6 | 1676.8 |
| 140°   | 813.9  | 892.6  | 1123.6 | 1457.2 | 1608.6 |
| 142.5° | 837.9  | 911.9  | 1119.8 | 1412.6 | 1545.3 |
| 145°   | 875.1  | 940.9  | 1115.2 | 1355.3 | 1458.6 |
| 147.5° | 909.0  | 967.2  | 1110.0 | 1303.4 | 1382.7 |
| 150°   | 934.0  | 985.6  | 1108.0 | 1275.1 | 1338.5 |
| 152.5° | 957.0  | 1002.1 | 1107.1 | 1249.0 | 1301.1 |
| 155°   | 988.0  | 1026.7 | 1105.6 | 1215.8 | 1255.7 |
| 157.5° | 1020.2 | 1047.2 | 1105.9 | 1192.7 | 1219.0 |
| 160°   | 1038.4 | 1060.7 | 1106.8 | 1178.1 | 1196.9 |
| 162.5° | 1052.8 | 1071.4 | 1107.8 | 1166.5 | 1180.5 |
| 165°   | 1075.6 | 1086.2 | 1110.4 | 1153.8 | 1159.7 |
| 167.5° | 1091.2 | 1098.5 | 1110.7 | 1142.9 | 1145.7 |
| 170°   | 1100.8 | 1104.4 | 1111.6 | 1138.1 | 1138.1 |
| 172.5° | 1108.5 | 1109.2 | 1111.6 | 1132.3 | 1131.3 |
| 175°   | 1116.4 | 1115.3 | 1111.6 | 1126.0 | 1123.6 |
| 177.5° | 1119.1 | 1116.3 | 1111.4 | 1120.9 | 1118.1 |
| 180°   | 1115.2 | 1115.2 | 1115.2 | 1115.2 | 1115.2 |

(END OF REPORT)