

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: P562457

Luminaire Tested: **SQ4-PW1-150U-050D-92765-1D-UNV-STD-W-4 (4500K)**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P562457  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, 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-PW1-150U-050D-92765-1D-UNV-STD-W-4 (4500K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 2700K/65000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8903.8 lumens  
Efficiency: N/A  
Efficacy: 124.0 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

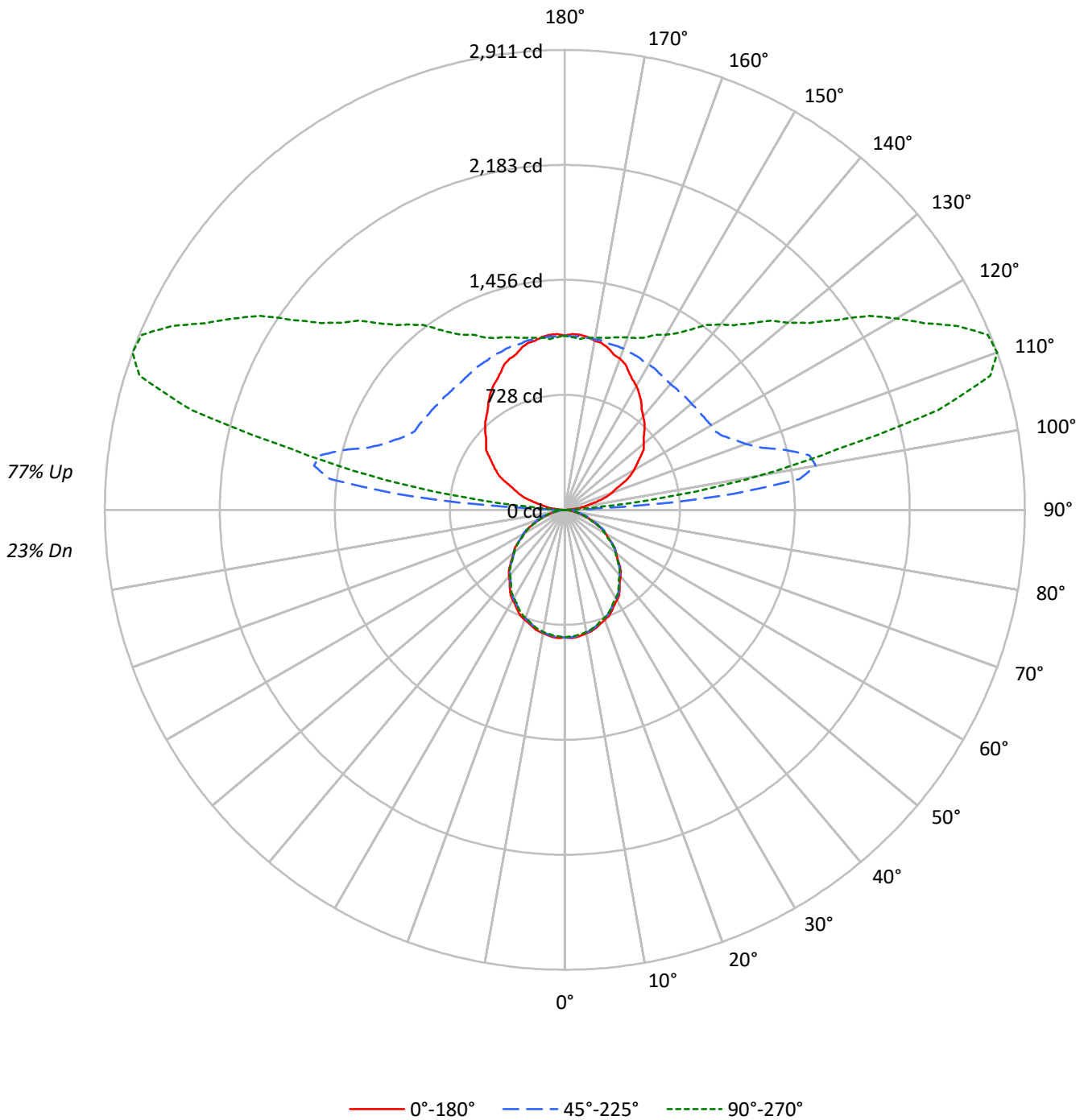
Input Watts (W): 71.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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   | 101 | 101 | 101 | 101 | 89 | 89 | 89 | 89 | 68 | 68 | 68 | 49 | 49 | 49 | 31 | 31 | 31 | 23 |
| 1   | 92  | 88  | 84  | 81  | 81 | 78 | 75 | 72 | 60 | 58 | 56 | 43 | 42 | 41 | 28 | 27 | 27 | 20 |
| 2   | 84  | 77  | 71  | 66  | 74 | 68 | 63 | 59 | 52 | 49 | 46 | 38 | 36 | 34 | 24 | 23 | 22 | 16 |
| 3   | 76  | 67  | 60  | 55  | 67 | 60 | 54 | 49 | 46 | 42 | 39 | 33 | 31 | 29 | 22 | 20 | 19 | 14 |
| 4   | 70  | 59  | 52  | 46  | 62 | 53 | 47 | 42 | 41 | 37 | 33 | 30 | 27 | 25 | 19 | 18 | 16 | 12 |
| 5   | 64  | 53  | 45  | 39  | 56 | 47 | 41 | 36 | 37 | 32 | 28 | 27 | 24 | 21 | 17 | 16 | 14 | 10 |
| 6   | 59  | 47  | 39  | 34  | 52 | 42 | 36 | 31 | 33 | 28 | 25 | 24 | 21 | 18 | 16 | 14 | 13 | 9  |
| 7   | 54  | 42  | 35  | 29  | 48 | 38 | 31 | 27 | 30 | 25 | 21 | 22 | 19 | 16 | 14 | 13 | 11 | 8  |
| 8   | 50  | 38  | 31  | 26  | 44 | 34 | 28 | 24 | 27 | 22 | 19 | 20 | 17 | 14 | 13 | 11 | 10 | 7  |
| 9   | 46  | 35  | 28  | 23  | 41 | 31 | 25 | 21 | 24 | 20 | 17 | 18 | 15 | 13 | 12 | 10 | 9  | 7  |
| 10  | 43  | 32  | 25  | 20  | 38 | 29 | 23 | 18 | 22 | 18 | 15 | 17 | 14 | 11 | 11 | 9  | 8  | 6  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 7454 | 7454 | 7454 |
| 5°  | 7502 | 7442 | 7410 |
| 10° | 7442 | 7382 | 7342 |
| 15° | 7363 | 7282 | 7254 |
| 20° | 7275 | 7163 | 7150 |
| 25° | 7174 | 7044 | 7021 |
| 30° | 7022 | 6916 | 6870 |
| 35° | 6823 | 6726 | 6687 |
| 40° | 6610 | 6507 | 6481 |
| 45° | 6353 | 6269 | 6241 |
| 50° | 6089 | 6038 | 5997 |
| 55° | 5805 | 5805 | 5714 |
| 60° | 5451 | 5556 | 5359 |
| 65° | 4988 | 5237 | 4864 |
| 70° | 4397 | 4821 | 4281 |
| 75° | 3754 | 4313 | 3654 |
| 80° | 2912 | 3629 | 2949 |
| 85° | 1884 | 2784 | 2488 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 76.1   | 0.9       |
| 10°-20°   | 214.8  | 2.4       |
| 20°-30°   | 318.6  | 3.6       |
| 30°-40°   | 372.8  | 4.2       |
| 40°-50°   | 371.1  | 4.2       |
| 50°-60°   | 320.5  | 3.6       |
| 60°-70°   | 230.7  | 2.6       |
| 70°-80°   | 121.0  | 1.4       |
| 80°-90°   | 30.0   | 0.3       |
| 90°-100°  | 502.4  | 5.6       |
| 100°-110° | 1429.4 | 16.1      |
| 110°-120° | 1369.6 | 15.4      |
| 120°-130° | 1083.9 | 12.2      |
| 130°-140° | 870.0  | 9.8       |
| 140°-150° | 681.1  | 7.6       |
| 150°-160° | 498.4  | 5.6       |
| 160°-170° | 308.7  | 3.5       |
| 170°-180° | 104.8  | 1.2       |
| 0°-30°    | 609.5  | 6.8       |
| 0°-40°    | 982.3  | 11.0      |
| 0°-60°    | 1673.9 | 18.8      |
| 0°-90°    | 2055.5 | 23.1      |
| 90°-120°  | 3301.4 | 37.1      |
| 90°-150°  | 5936.5 | 66.7      |
| 90°-180°  | 6848.0 | 76.9      |
| 0°-180°   | 8903.8 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 808  | 808   | 808  | 808   | 808  |      |
| 5°   | 810  | 801   | 804  | 802   | 800  | 77   |
| 15°  | 771  | 761   | 762  | 761   | 760  | 217  |
| 25°  | 705  | 693   | 692  | 688   | 690  | 324  |
| 35°  | 606  | 597   | 597  | 592   | 594  | 379  |
| 45°  | 487  | 483   | 480  | 479   | 478  | 376  |
| 55°  | 361  | 360   | 361  | 356   | 355  | 322  |
| 65°  | 228  | 236   | 240  | 230   | 223  | 226  |
| 75°  | 105  | 115   | 121  | 113   | 102  | 113  |
| 85°  | 18   | 23    | 26   | 25    | 24   | 23   |
| 90°  | 0    | 0     | 0    | 0     | 0    | 3    |
| 95°  | 54   | 216   | 972  | 337   | 208  | 62   |
| 105° | 222  | 337   | 1457 | 2573  | 2446 | 235  |
| 115° | 413  | 499   | 1105 | 2340  | 2748 | 407  |
| 125° | 583  | 646   | 1054 | 1750  | 2092 | 522  |
| 135° | 713  | 772   | 1042 | 1478  | 1670 | 550  |
| 145° | 840  | 884   | 1050 | 1279  | 1394 | 525  |
| 155° | 960  | 982   | 1075 | 1156  | 1203 | 444  |
| 165° | 1061 | 1065  | 1088 | 1111  | 1128 | 298  |
| 175° | 1111 | 1105  | 1100 | 1094  | 1086 | 105  |
| 180° | 1102 | 1102  | 1102 | 1102  | 1102 |      |



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**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°    | 67.5°  | 90°    |
|--------|-------|-------|--------|--------|--------|
| 0°     | 807.9 | 807.9 | 807.9  | 807.9  | 807.9  |
| 2.5°   | 812.5 | 805.8 | 807.9  | 806.1  | 802.2  |
| 5°     | 810.0 | 801.0 | 803.6  | 801.5  | 800.1  |
| 7.5°   | 801.8 | 793.4 | 795.4  | 793.1  | 792.2  |
| 10°    | 794.4 | 786.0 | 788.0  | 785.1  | 783.7  |
| 12.5°  | 785.8 | 776.9 | 778.9  | 776.0  | 775.2  |
| 15°    | 770.9 | 761.2 | 762.4  | 760.9  | 759.5  |
| 17.5°  | 753.5 | 743.6 | 743.8  | 741.6  | 741.3  |
| 20°    | 741.0 | 730.6 | 729.6  | 726.8  | 728.2  |
| 22.5°  | 727.3 | 716.3 | 715.4  | 711.4  | 713.4  |
| 25°    | 704.7 | 692.9 | 691.9  | 687.7  | 689.7  |
| 27.5°  | 678.5 | 666.8 | 666.8  | 660.9  | 663.1  |
| 30°    | 659.1 | 648.0 | 649.2  | 642.1  | 644.9  |
| 32.5°  | 638.6 | 628.6 | 629.2  | 622.2  | 625.0  |
| 35°    | 605.8 | 597.4 | 597.2  | 591.6  | 593.7  |
| 37.5°  | 572.2 | 564.8 | 563.6  | 560.4  | 560.9  |
| 40°    | 548.8 | 542.5 | 540.3  | 538.1  | 538.1  |
| 42.5°  | 524.3 | 518.6 | 516.3  | 514.8  | 514.2  |
| 45°    | 486.9 | 482.7 | 480.5  | 479.0  | 478.3  |
| 47.5°  | 449.9 | 446.0 | 444.0  | 443.0  | 442.3  |
| 50°    | 424.2 | 421.5 | 420.7  | 418.5  | 417.8  |
| 52.5°  | 398.6 | 396.9 | 396.2  | 393.5  | 392.8  |
| 55°    | 360.9 | 360.2 | 360.9  | 355.9  | 355.2  |
| 57.5°  | 321.6 | 322.7 | 325.0  | 318.3  | 316.6  |
| 60°    | 295.4 | 298.2 | 301.1  | 293.2  | 290.4  |
| 62.5°  | 268.6 | 273.1 | 277.2  | 268.1  | 264.2  |
| 65°    | 228.5 | 235.5 | 239.9  | 230.5  | 222.8  |
| 67.5°  | 189.8 | 198.4 | 203.7  | 193.6  | 184.9  |
| 70°    | 163.0 | 172.7 | 178.7  | 168.5  | 158.7  |
| 72.5°  | 139.7 | 150.5 | 155.3  | 145.7  | 136.0  |
| 75°    | 105.3 | 115.1 | 121.0  | 112.9  | 102.5  |
| 77.5°  | 74.7  | 83.9  | 88.8   | 81.8   | 73.2   |
| 80°    | 54.8  | 64.6  | 68.3   | 62.5   | 55.5   |
| 82.5°  | 38.9  | 46.9  | 49.5   | 46.0   | 41.3   |
| 85°    | 17.8  | 23.4  | 26.3   | 24.9   | 23.5   |
| 87.5°  | 4.6   | 8.5   | 10.8   | 10.8   | 11.4   |
| 90°    | 0.0   | 0.0   | 0.0    | 0.0    | 0.0    |
| 92.5°  | 16.8  | 88.9  | 206.2  | 60.0   | 45.3   |
| 95°    | 54.5  | 216.4 | 972.5  | 336.6  | 207.5  |
| 97.5°  | 100.2 | 253.5 | 1497.8 | 1071.8 | 734.4  |
| 100°   | 132.0 | 275.5 | 1611.8 | 1632.6 | 1257.6 |
| 102.5° | 167.3 | 299.2 | 1586.6 | 2089.8 | 1762.3 |
| 105°   | 222.2 | 336.9 | 1456.7 | 2573.1 | 2446.0 |
| 107.5° | 277.9 | 380.8 | 1305.0 | 2709.3 | 2822.4 |
| 110°   | 316.5 | 412.8 | 1217.8 | 2657.2 | 2911.3 |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 353.4  | 444.8  | 1159.1 | 2533.9 | 2896.2 |
| 115°   | 412.9  | 499.0  | 1104.6 | 2340.0 | 2747.8 |
| 117.5° | 465.3  | 546.1  | 1072.3 | 2128.0 | 2560.0 |
| 120°   | 507.2  | 574.9  | 1068.9 | 2006.9 | 2420.8 |
| 122.5° | 540.8  | 608.4  | 1060.6 | 1900.6 | 2285.0 |
| 125°   | 582.7  | 646.2  | 1054.3 | 1749.5 | 2091.8 |
| 127.5° | 628.4  | 687.8  | 1050.9 | 1659.3 | 1941.3 |
| 130°   | 651.8  | 711.3  | 1045.9 | 1596.4 | 1842.4 |
| 132.5° | 677.0  | 734.8  | 1045.9 | 1547.4 | 1773.6 |
| 135°   | 712.6  | 772.1  | 1041.7 | 1477.8 | 1670.5 |
| 137.5° | 746.2  | 804.0  | 1041.3 | 1419.0 | 1585.4 |
| 140°   | 771.3  | 830.7  | 1039.6 | 1370.2 | 1530.1 |
| 142.5° | 799.8  | 849.4  | 1044.6 | 1331.3 | 1474.7 |
| 145°   | 840.5  | 883.5  | 1050.1 | 1279.1 | 1393.8 |
| 147.5° | 875.3  | 917.1  | 1059.3 | 1226.3 | 1325.5 |
| 150°   | 905.5  | 934.2  | 1062.7 | 1208.9 | 1278.5 |
| 152.5° | 928.9  | 959.3  | 1066.0 | 1185.3 | 1250.0 |
| 155°   | 960.0  | 982.5  | 1075.2 | 1156.0 | 1203.1 |
| 157.5° | 998.5  | 1012.0 | 1077.3 | 1142.6 | 1176.3 |
| 160°   | 1018.6 | 1028.9 | 1085.7 | 1132.5 | 1161.2 |
| 162.5° | 1030.4 | 1042.3 | 1087.4 | 1123.9 | 1146.1 |
| 165°   | 1060.6 | 1064.7 | 1087.8 | 1111.2 | 1127.6 |
| 167.5° | 1081.1 | 1077.4 | 1097.4 | 1108.1 | 1114.6 |
| 170°   | 1087.8 | 1085.8 | 1094.1 | 1096.4 | 1104.6 |
| 172.5° | 1102.9 | 1095.9 | 1099.1 | 1093.0 | 1099.5 |
| 175°   | 1110.9 | 1104.7 | 1100.4 | 1093.9 | 1085.7 |
| 177.5° | 1114.2 | 1104.4 | 1099.1 | 1092.5 | 1094.1 |
| 180°   | 1102.5 | 1102.5 | 1102.5 | 1102.5 | 1102.5 |

(END OF REPORT)