

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521102

Luminaire Tested: **SQ4-BB-075U-075D-93050-1D-UNV-STD-W-4 (3500K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521102  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,  
Test Lab: INNOVATION CENTER  
Issue Date: 5/5/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-BB-075U-075D-93050-1D-UNV-STD-W-4 (3500K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

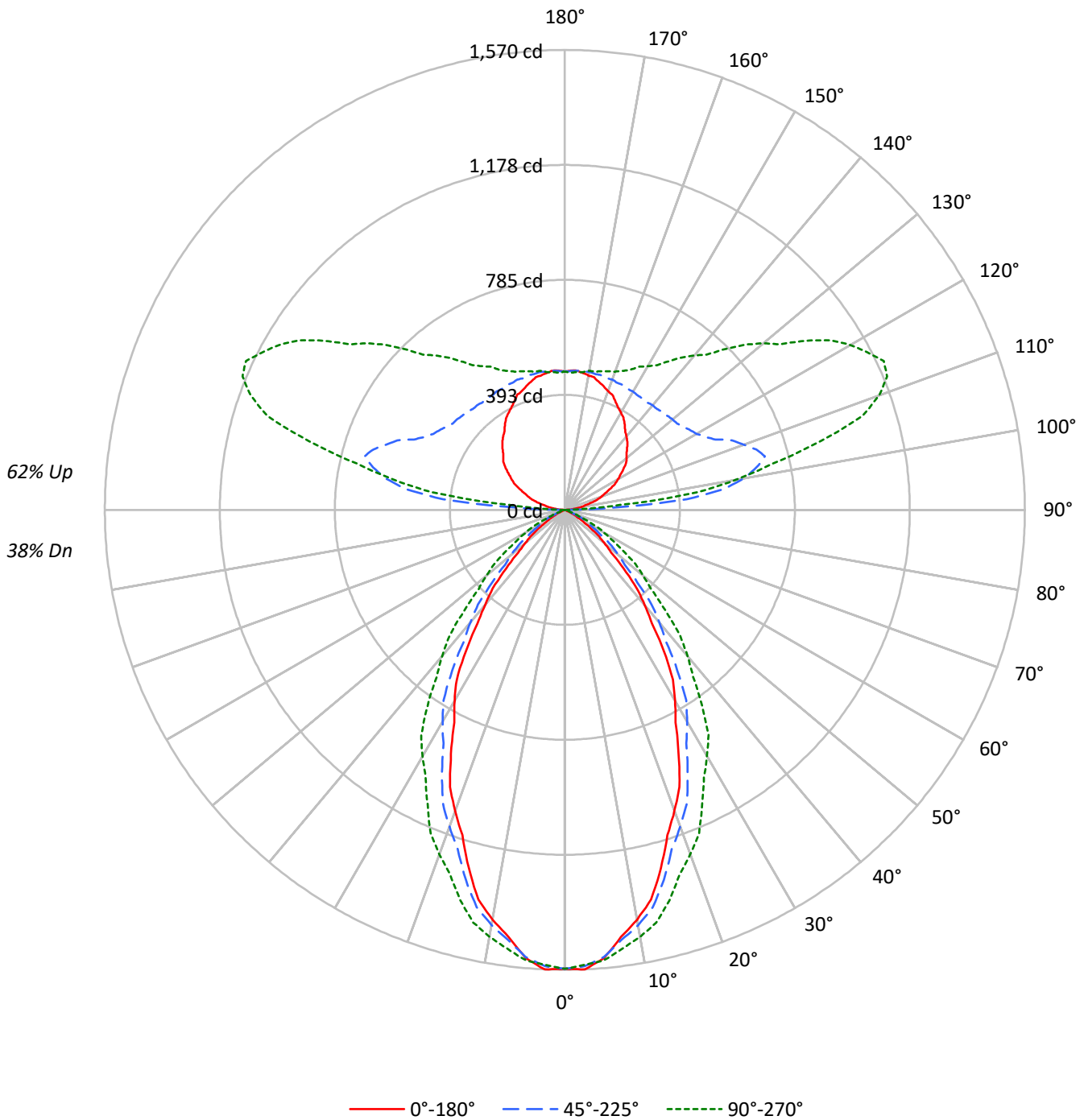
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4925.9 lumens  
Efficiency: N/A  
Efficacy: 89.2 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 55.2  
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 | 95 | 95 | 95 | 95 | 77 | 77 | 77 | 60 | 60 | 60 | 45 | 45 | 45 | 38 |
| 1   | 96  | 93  | 89  | 86  | 88 | 84 | 82 | 79 | 69 | 67 | 66 | 55 | 54 | 53 | 42 | 41 | 41 | 35 |
| 2   | 89  | 83  | 77  | 73  | 81 | 75 | 71 | 67 | 62 | 59 | 56 | 50 | 48 | 46 | 39 | 37 | 36 | 31 |
| 3   | 82  | 74  | 67  | 62  | 75 | 68 | 62 | 58 | 56 | 52 | 49 | 45 | 43 | 41 | 35 | 34 | 33 | 28 |
| 4   | 76  | 66  | 59  | 54  | 69 | 61 | 55 | 50 | 51 | 47 | 43 | 41 | 39 | 36 | 33 | 31 | 29 | 26 |
| 5   | 70  | 60  | 53  | 47  | 64 | 55 | 49 | 44 | 46 | 42 | 38 | 38 | 35 | 32 | 30 | 28 | 27 | 23 |
| 6   | 65  | 54  | 47  | 42  | 59 | 50 | 44 | 39 | 42 | 38 | 34 | 35 | 32 | 29 | 28 | 26 | 24 | 21 |
| 7   | 60  | 49  | 42  | 37  | 55 | 46 | 39 | 35 | 39 | 34 | 31 | 32 | 29 | 26 | 26 | 24 | 22 | 19 |
| 8   | 56  | 45  | 38  | 33  | 51 | 42 | 36 | 31 | 36 | 31 | 28 | 30 | 26 | 24 | 24 | 22 | 20 | 18 |
| 9   | 53  | 41  | 35  | 30  | 48 | 39 | 33 | 28 | 33 | 28 | 25 | 28 | 24 | 22 | 23 | 20 | 19 | 17 |
| 10  | 49  | 38  | 32  | 27  | 45 | 36 | 30 | 26 | 31 | 26 | 23 | 26 | 22 | 20 | 21 | 19 | 17 | 15 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 14454 | 14454 | 14454 |
| 5°  | 14222 | 14187 | 14291 |
| 10° | 13307 | 13484 | 13861 |
| 15° | 12097 | 12481 | 13176 |
| 20° | 10738 | 11296 | 12286 |
| 25° | 9351  | 10092 | 11289 |
| 30° | 8010  | 8890  | 10343 |
| 35° | 6642  | 7546  | 9202  |
| 40° | 5103  | 6034  | 7842  |
| 45° | 3689  | 4569  | 6310  |
| 50° | 2513  | 3405  | 5004  |
| 55° | 1634  | 2463  | 3889  |
| 60° | 937   | 1735  | 2810  |
| 65° | 249   | 1059  | 1423  |
| 70° | 121   | 326   | 410   |
| 75° | 53    | 29    | 0     |
| 80° | 43    | 0     | 0     |
| 85° | 0     | 0     | 0     |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 143.0  | 2.9       |
| 10°-20°   | 365.6  | 7.4       |
| 20°-30°   | 457.7  | 9.3       |
| 30°-40°   | 422.8  | 8.6       |
| 40°-50°   | 284.1  | 5.8       |
| 50°-60°   | 146.7  | 3.0       |
| 60°-70°   | 46.0   | 0.9       |
| 70°-80°   | 2.9    | 0.1       |
| 80°-90°   | 0.1    | 0.0       |
| 90°-100°  | 243.4  | 4.9       |
| 100°-110° | 588.2  | 11.9      |
| 110°-120° | 627.4  | 12.7      |
| 120°-130° | 508.1  | 10.3      |
| 130°-140° | 393.4  | 8.0       |
| 140°-150° | 300.1  | 6.1       |
| 150°-160° | 217.3  | 4.4       |
| 160°-170° | 133.8  | 2.7       |
| 170°-180° | 45.3   | 0.9       |
| 0°-30°    | 966.3  | 19.6      |
| 0°-40°    | 1389.1 | 28.2      |
| 0°-60°    | 1820.0 | 36.9      |
| 0°-90°    | 1868.9 | 37.9      |
| 90°-120°  | 1459.0 | 29.6      |
| 90°-150°  | 2660.7 | 54.0      |
| 90°-180°  | 3057.0 | 62.1      |
| 0°-180°   | 4925.9 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1567 | 1567  | 1567 | 1567  | 1567 |      |
| 5°   | 1536 | 1520  | 1532 | 1537  | 1543 | 142  |
| 15°  | 1266 | 1262  | 1307 | 1350  | 1379 | 353  |
| 25°  | 919  | 926   | 991  | 1059  | 1109 | 421  |
| 35°  | 590  | 604   | 670  | 749   | 817  | 365  |
| 45°  | 283  | 300   | 350  | 418   | 484  | 222  |
| 55°  | 102  | 119   | 153  | 197   | 242  | 95   |
| 65°  | 11   | 22    | 48   | 58    | 65   | 19   |
| 75°  | 2    | 2     | 1    | 0     | 0    | 2    |
| 85°  | 0    | 0     | 0    | 0     | 0    | 0    |
| 90°  | 0    | 0     | 0    | 0     | 0    | 1    |
| 95°  | 24   | 122   | 417  | 271   | 190  | 27   |
| 105° | 94   | 162   | 707  | 915   | 903  | 99   |
| 115° | 172  | 220   | 568  | 1077  | 1201 | 170  |
| 125° | 245  | 282   | 493  | 856   | 1006 | 219  |
| 135° | 301  | 336   | 473  | 675   | 777  | 232  |
| 145° | 356  | 382   | 464  | 574   | 619  | 223  |
| 155° | 408  | 426   | 470  | 508   | 527  | 188  |
| 165° | 451  | 458   | 476  | 483   | 490  | 127  |
| 175° | 477  | 475   | 477  | 473   | 472  | 45   |
| 180° | 472  | 472   | 472  | 472   | 472  |      |



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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1566.6 | 1566.6 | 1566.6 | 1566.6 | 1566.6 |
| 2.5°   | 1570.3 | 1555.5 | 1559.4 | 1559.3 | 1555.1 |
| 5°     | 1535.6 | 1520.0 | 1531.8 | 1537.2 | 1543.1 |
| 7.5°   | 1470.7 | 1458.5 | 1481.1 | 1498.1 | 1510.4 |
| 10°    | 1420.4 | 1410.0 | 1439.3 | 1462.4 | 1479.5 |
| 12.5°  | 1362.2 | 1354.1 | 1389.6 | 1421.3 | 1443.1 |
| 15°    | 1266.5 | 1262.1 | 1306.7 | 1350.5 | 1379.4 |
| 17.5°  | 1164.0 | 1163.9 | 1214.8 | 1269.3 | 1304.1 |
| 20°    | 1093.7 | 1095.9 | 1150.5 | 1210.6 | 1251.3 |
| 22.5°  | 1023.4 | 1028.5 | 1086.9 | 1149.5 | 1196.2 |
| 25°    | 918.6  | 926.0  | 991.4  | 1059.2 | 1108.9 |
| 27.5°  | 818.0  | 828.8  | 897.5  | 968.0  | 1028.5 |
| 30°    | 751.9  | 764.5  | 834.5  | 908.7  | 970.9  |
| 32.5°  | 687.0  | 702.0  | 770.2  | 848.7  | 912.1  |
| 35°    | 589.7  | 604.5  | 670.0  | 748.9  | 817.0  |
| 37.5°  | 489.2  | 503.7  | 567.7  | 645.3  | 719.0  |
| 40°    | 423.7  | 440.0  | 501.0  | 576.2  | 651.1  |
| 42.5°  | 364.3  | 380.6  | 437.9  | 511.8  | 582.5  |
| 45°    | 282.7  | 299.8  | 350.2  | 418.3  | 483.6  |
| 47.5°  | 215.1  | 233.6  | 277.9  | 339.5  | 399.0  |
| 50°    | 175.1  | 193.6  | 237.2  | 291.6  | 348.6  |
| 52.5°  | 142.9  | 160.9  | 200.2  | 251.5  | 303.8  |
| 55°    | 101.6  | 118.6  | 153.1  | 196.6  | 241.8  |
| 57.5°  | 70.2   | 84.9   | 115.8  | 152.1  | 187.5  |
| 60°    | 50.8   | 64.9   | 94.0   | 123.4  | 152.3  |
| 62.5°  | 33.8   | 46.7   | 75.2   | 97.8   | 117.2  |
| 65°    | 11.4   | 21.7   | 48.5   | 58.5   | 65.2   |
| 67.5°  | 5.8    | 6.9    | 25.5   | 26.9   | 29.1   |
| 70°    | 4.5    | 4.5    | 12.1   | 12.9   | 15.2   |
| 72.5°  | 3.3    | 3.3    | 4.9    | 6.2    | 6.7    |
| 75°    | 1.5    | 1.5    | 0.8    | 0.0    | 0.0    |
| 77.5°  | 0.8    | 0.8    | 0.6    | 0.0    | 0.0    |
| 80°    | 0.8    | 0.8    | 0.0    | 0.0    | 0.0    |
| 82.5°  | 0.2    | 0.2    | 0.0    | 0.0    | 0.0    |
| 85°    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5°  | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 90°    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 92.5°  | 8.0    | 65.9   | 155.2  | 75.4   | 51.2   |
| 95°    | 24.0   | 121.8  | 417.0  | 271.2  | 190.0  |
| 97.5°  | 42.6   | 134.9  | 549.2  | 529.1  | 454.2  |
| 100°   | 57.0   | 143.0  | 622.0  | 656.6  | 595.0  |
| 102.5° | 70.6   | 150.4  | 670.0  | 762.8  | 726.2  |
| 105°   | 94.0   | 162.4  | 707.0  | 914.7  | 903.0  |
| 107.5° | 117.0  | 176.6  | 685.2  | 1036.6 | 1064.2 |
| 110°   | 133.0  | 188.7  | 650.0  | 1089.2 | 1141.0 |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5°  | 90°    |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 149.0 | 200.8 | 618.8 | 1102.0 | 1190.6 |
| 115°   | 172.0 | 219.9 | 568.0 | 1076.8 | 1201.0 |
| 117.5° | 194.8 | 240.0 | 538.2 | 1018.9 | 1164.4 |
| 120°   | 210.0 | 252.0 | 519.0 | 973.5  | 1126.0 |
| 122.5° | 226.0 | 264.9 | 507.0 | 927.0  | 1077.2 |
| 125°   | 245.0 | 282.2 | 493.0 | 856.4  | 1006.0 |
| 127.5° | 263.8 | 298.8 | 483.2 | 796.6  | 928.0  |
| 130°   | 275.0 | 309.2 | 480.0 | 754.9  | 884.0  |
| 132.5° | 285.4 | 321.2 | 475.2 | 724.9  | 834.4  |
| 135°   | 301.0 | 336.2 | 473.0 | 675.3  | 777.0  |
| 137.5° | 315.8 | 351.2 | 466.0 | 641.7  | 718.4  |
| 140°   | 327.0 | 359.3 | 466.0 | 617.6  | 688.0  |
| 142.5° | 338.2 | 370.5 | 462.0 | 596.6  | 656.0  |
| 145°   | 356.0 | 382.4 | 464.0 | 574.0  | 619.0  |
| 147.5° | 372.6 | 398.2 | 462.8 | 548.0  | 585.2  |
| 150°   | 383.0 | 405.5 | 466.0 | 536.7  | 566.0  |
| 152.5° | 394.2 | 415.9 | 465.2 | 524.6  | 550.8  |
| 155°   | 408.0 | 425.6 | 470.0 | 508.4  | 527.0  |
| 157.5° | 424.6 | 439.7 | 469.0 | 502.2  | 513.2  |
| 160°   | 431.0 | 443.7 | 473.0 | 494.2  | 502.0  |
| 162.5° | 441.4 | 452.5 | 471.4 | 491.7  | 496.4  |
| 165°   | 451.0 | 457.8 | 476.0 | 483.2  | 490.0  |
| 167.5° | 462.8 | 467.3 | 474.8 | 482.6  | 482.8  |
| 170°   | 466.0 | 468.9 | 478.0 | 477.1  | 482.0  |
| 172.5° | 471.6 | 473.8 | 475.6 | 477.7  | 474.8  |
| 175°   | 477.0 | 475.0 | 477.0 | 473.0  | 472.0  |
| 177.5° | 476.0 | 476.0 | 474.4 | 472.7  | 468.8  |
| 180°   | 472.0 | 472.0 | 472.0 | 472.0  | 472.0  |

(END OF REPORT)