

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: P563228

Luminaire Tested: **SQ4-PP3-025U-100D-830-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P563228  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, G2-2103-172-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PP3-025U-100D-830-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS.  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

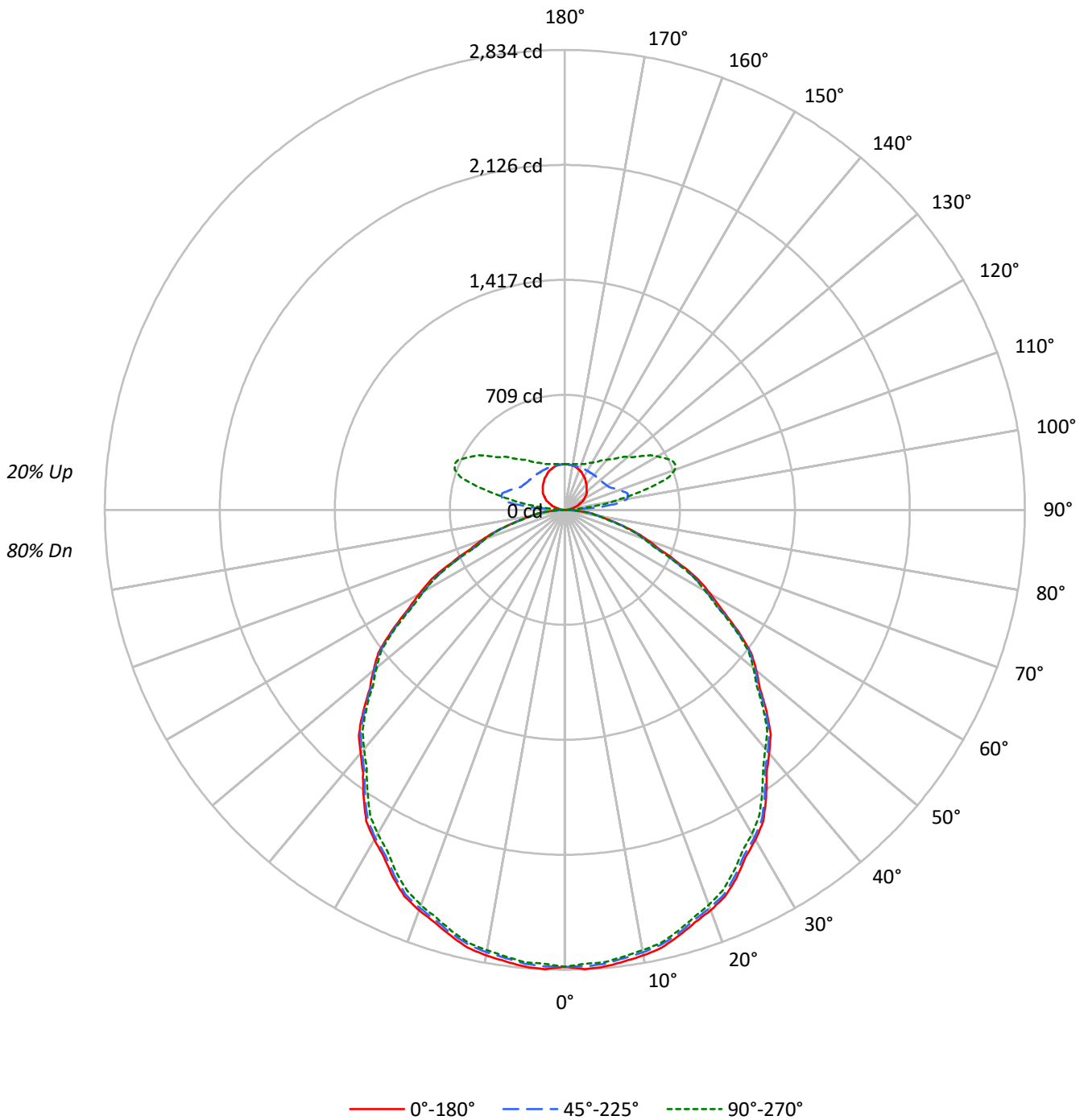
Lumens per Lamp: N/A  
Luminaire Lumens: 9031.5 lumens  
Efficiency: N/A  
Efficacy: 109.9 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 82.2  
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 | 50 | 30 | 10 | 0  |   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |    |    |    |    |    |    |   |
| 0   | 114 | 114 | 114 | 114 | 109 | 109 | 109 | 109 | 100 | 100 | 100 | 91 | 91 | 91 | 83 | 83 | 83 | 80 |    |    |    |   |
| 1   | 105 | 100 | 96  | 93  | 100 | 96  | 93  | 90  | 88  | 86  | 83  | 81 | 79 | 77 | 74 | 73 | 71 | 68 |    |    |    |   |
| 2   | 96  | 88  | 82  | 76  | 91  | 85  | 79  | 74  | 78  | 73  | 69  | 72 | 68 | 65 | 66 | 63 | 60 | 57 |    |    |    |   |
| 3   | 88  | 78  | 70  | 64  | 83  | 75  | 68  | 62  | 69  | 63  | 59  | 64 | 59 | 55 | 59 | 55 | 52 | 49 |    |    |    |   |
| 4   | 80  | 69  | 61  | 55  | 76  | 66  | 59  | 53  | 61  | 55  | 50  | 57 | 52 | 47 | 52 | 48 | 45 | 42 |    |    |    |   |
| 5   | 74  | 62  | 53  | 47  | 70  | 59  | 52  | 46  | 55  | 49  | 44  | 51 | 46 | 41 | 47 | 43 | 39 | 37 |    |    |    |   |
| 6   | 68  | 56  | 47  | 41  | 65  | 54  | 46  | 40  | 50  | 43  | 38  | 46 | 41 | 36 | 43 | 38 | 35 | 32 |    |    |    |   |
| 7   | 63  | 50  | 42  | 36  | 60  | 49  | 41  | 35  | 45  | 39  | 34  | 42 | 37 | 32 | 39 | 34 | 31 | 29 |    |    |    |   |
| 8   | 59  | 46  | 38  | 32  | 56  | 44  | 37  | 32  | 41  | 35  | 30  | 39 | 33 | 29 | 36 | 31 | 28 | 26 |    |    |    |   |
| 9   | 55  | 42  | 34  | 29  | 52  | 41  | 33  | 28  | 38  | 32  | 27  | 36 | 30 | 26 | 33 | 29 | 25 | 23 |    |    |    |   |
| 10  | 51  | 39  | 31  | 26  | 49  | 38  | 30  | 26  | 35  | 29  | 25  | 33 | 28 | 24 | 31 | 26 | 23 | 21 |    |    |    |   |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 12989 | 12989 | 12989 |
| 5°  | 13085 | 13004 | 12959 |
| 10° | 13062 | 12970 | 12912 |
| 15° | 12976 | 12905 | 12835 |
| 20° | 12890 | 12817 | 12720 |
| 25° | 12737 | 12649 | 12523 |
| 30° | 12501 | 12435 | 12278 |
| 35° | 12174 | 12090 | 11938 |
| 40° | 11784 | 11710 | 11577 |
| 45° | 11463 | 11382 | 11269 |
| 50° | 11051 | 10980 | 10874 |
| 55° | 10480 | 10340 | 10261 |
| 60° | 9540  | 9267  | 9221  |
| 65° | 8404  | 8055  | 8027  |
| 70° | 7256  | 6957  | 6957  |
| 75° | 6245  | 6158  | 6069  |
| 80° | 5507  | 5574  | 5441  |
| 85° | 4308  | 4700  | 4700  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 266.3  | 2.9       |
| 10°-20°   | 760.2  | 8.4       |
| 20°-30°   | 1138.7 | 12.6      |
| 30°-40°   | 1335.7 | 14.8      |
| 40°-50°   | 1339.8 | 14.8      |
| 50°-60°   | 1143.0 | 12.7      |
| 60°-70°   | 745.4  | 8.3       |
| 70°-80°   | 374.0  | 4.1       |
| 80°-90°   | 105.0  | 1.2       |
| 90°-100°  | 137.1  | 1.5       |
| 100°-110° | 360.4  | 4.0       |
| 110°-120° | 373.8  | 4.1       |
| 120°-130° | 299.8  | 3.3       |
| 130°-140° | 235.2  | 2.6       |
| 140°-150° | 180.5  | 2.0       |
| 150°-160° | 130.0  | 1.4       |
| 160°-170° | 79.6   | 0.9       |
| 170°-180° | 26.9   | 0.3       |
| 0°-30°    | 2165.2 | 24.0      |
| 0°-40°    | 3500.9 | 38.8      |
| 0°-60°    | 5983.7 | 66.3      |
| 0°-90°    | 7208.1 | 79.8      |
| 90°-120°  | 871.3  | 9.6       |
| 90°-150°  | 1586.9 | 17.6      |
| 90°-180°  | 1823.0 | 20.2      |
| 0°-180°   | 9031.5 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 2816 | 2816  | 2816 | 2816  | 2816 |      |
| 5°   | 2826 | 2799  | 2808 | 2798  | 2798 | 268  |
| 15°  | 2717 | 2690  | 2702 | 2692  | 2687 | 767  |
| 25°  | 2502 | 2473  | 2485 | 2463  | 2460 | 1151 |
| 35°  | 2162 | 2140  | 2147 | 2122  | 2120 | 1350 |
| 45°  | 1757 | 1745  | 1745 | 1727  | 1727 | 1353 |
| 55°  | 1303 | 1298  | 1286 | 1278  | 1276 | 1158 |
| 65°  | 770  | 756   | 738  | 733   | 735  | 768  |
| 75°  | 350  | 350   | 346  | 343   | 340  | 380  |
| 85°  | 81   | 89    | 89   | 89    | 89   | 96   |
| 90°  | 2    | 5     | 14   | 7     | 7    | 5    |
| 95°  | 18   | 71    | 236  | 122   | 83   | 20   |
| 105° | 65   | 98    | 398  | 605   | 564  | 69   |
| 115° | 115  | 140   | 319  | 637   | 727  | 114  |
| 125° | 160  | 180   | 290  | 491   | 579  | 142  |
| 135° | 191  | 211   | 281  | 396   | 449  | 148  |
| 145° | 222  | 236   | 278  | 338   | 364  | 139  |
| 155° | 251  | 258   | 278  | 305   | 314  | 115  |
| 165° | 270  | 274   | 278  | 289   | 292  | 76   |
| 175° | 281  | 281   | 280  | 283   | 283  | 27   |
| 180° | 281  | 281   | 281  | 281   | 281  |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 2815.7 | 2815.7 | 2815.7 | 2815.7 | 2815.7 |
| 2.5°   | 2833.5 | 2810.3 | 2815.7 | 2811.5 | 2799.9 |
| 5°     | 2825.6 | 2799.0 | 2808.3 | 2798.4 | 2798.4 |
| 7.5°   | 2806.3 | 2777.4 | 2786.6 | 2776.7 | 2776.2 |
| 10°    | 2788.5 | 2759.6 | 2768.8 | 2758.9 | 2756.5 |
| 12.5°  | 2762.9 | 2733.9 | 2745.1 | 2733.3 | 2732.8 |
| 15°    | 2717.0 | 2690.4 | 2702.2 | 2692.2 | 2687.4 |
| 17.5°  | 2665.2 | 2636.2 | 2650.4 | 2636.5 | 2634.6 |
| 20°    | 2625.7 | 2596.7 | 2610.9 | 2591.1 | 2591.1 |
| 22.5°  | 2578.3 | 2549.3 | 2565.5 | 2539.8 | 2539.8 |
| 25°    | 2502.3 | 2473.3 | 2485.0 | 2462.8 | 2460.3 |
| 27.5°  | 2412.0 | 2383.5 | 2395.7 | 2370.5 | 2370.0 |
| 30°    | 2346.8 | 2320.3 | 2334.5 | 2307.3 | 2304.9 |
| 32.5°  | 2275.8 | 2251.1 | 2261.4 | 2234.2 | 2231.8 |
| 35°    | 2161.7 | 2140.0 | 2146.9 | 2122.2 | 2119.8 |
| 37.5°  | 2041.8 | 2019.6 | 2027.5 | 2006.3 | 2005.3 |
| 40°    | 1956.9 | 1942.4 | 1944.6 | 1927.2 | 1922.4 |
| 42.5°  | 1878.0 | 1861.5 | 1863.6 | 1846.3 | 1845.4 |
| 45°    | 1757.0 | 1745.0 | 1744.7 | 1727.4 | 1727.4 |
| 47.5°  | 1628.7 | 1619.5 | 1616.9 | 1602.5 | 1602.1 |
| 50°    | 1539.9 | 1532.6 | 1530.0 | 1517.6 | 1515.2 |
| 52.5°  | 1447.1 | 1443.7 | 1435.2 | 1424.9 | 1424.4 |
| 55°    | 1303.0 | 1298.1 | 1285.7 | 1278.2 | 1275.8 |
| 57.5°  | 1146.5 | 1136.9 | 1122.8 | 1112.0 | 1113.9 |
| 60°    | 1034.0 | 1024.3 | 1004.4 | 999.4  | 999.4  |
| 62.5°  | 925.4  | 913.8  | 893.8  | 887.0  | 890.9  |
| 65°    | 769.9  | 755.5  | 737.9  | 733.0  | 735.4  |
| 67.5°  | 628.8  | 615.8  | 596.7  | 596.7  | 594.7  |
| 70°    | 538.0  | 530.7  | 515.8  | 515.8  | 515.8  |
| 72.5°  | 457.0  | 453.6  | 442.7  | 442.7  | 440.7  |
| 75°    | 350.4  | 350.4  | 345.5  | 343.0  | 340.5  |
| 77.5°  | 262.6  | 263.5  | 261.1  | 258.5  | 254.2  |
| 80°    | 207.3  | 212.1  | 209.8  | 207.2  | 204.8  |
| 82.5°  | 156.0  | 160.8  | 160.4  | 156.0  | 155.5  |
| 85°    | 81.4   | 88.7   | 88.8   | 88.8   | 88.8   |
| 87.5°  | 22.1   | 30.5   | 34.5   | 33.1   | 35.0   |
| 90°    | 1.8    | 5.3    | 14.4   | 7.2    | 7.2    |
| 92.5°  | 7.6    | 36.5   | 80.8   | 35.8   | 23.1   |
| 95°    | 18.0   | 70.9   | 236.2  | 121.7  | 83.0   |
| 97.5°  | 31.4   | 77.9   | 353.5  | 281.1  | 207.0  |
| 100°   | 41.5   | 83.8   | 389.5  | 394.7  | 306.6  |
| 102.5° | 50.1   | 89.6   | 399.6  | 491.7  | 416.2  |
| 105°   | 64.9   | 98.4   | 398.5  | 605.0  | 564.5  |
| 107.5° | 80.1   | 111.1  | 375.8  | 663.9  | 673.7  |
| 110°   | 90.2   | 118.4  | 357.1  | 679.0  | 721.4  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 100.3 | 127.1 | 339.8 | 669.4 | 734.3 |
| 115°   | 115.4 | 140.1 | 319.2 | 636.8 | 726.8 |
| 117.5° | 130.2 | 152.8 | 305.1 | 591.6 | 691.4 |
| 120°   | 138.9 | 160.0 | 299.4 | 561.3 | 658.2 |
| 122.5° | 147.5 | 168.7 | 295.0 | 530.9 | 626.5 |
| 125°   | 160.5 | 179.9 | 290.3 | 490.7 | 578.9 |
| 127.5° | 171.0 | 190.7 | 286.4 | 458.3 | 532.7 |
| 130°   | 176.7 | 197.9 | 284.9 | 438.0 | 506.7 |
| 132.5° | 182.5 | 203.7 | 283.5 | 420.5 | 482.2 |
| 135°   | 191.2 | 210.6 | 281.3 | 396.1 | 449.0 |
| 137.5° | 200.2 | 219.2 | 281.0 | 377.9 | 421.3 |
| 140°   | 207.4 | 225.0 | 279.5 | 363.4 | 404.0 |
| 142.5° | 213.2 | 229.4 | 279.5 | 353.2 | 388.1 |
| 145°   | 221.8 | 235.9 | 277.7 | 337.8 | 364.3 |
| 147.5° | 230.5 | 244.2 | 277.7 | 325.1 | 347.0 |
| 150°   | 236.2 | 248.6 | 277.7 | 317.8 | 335.4 |
| 152.5° | 242.0 | 251.5 | 277.7 | 311.9 | 325.3 |
| 155°   | 250.7 | 257.7 | 277.7 | 305.0 | 313.8 |
| 157.5° | 257.2 | 263.9 | 277.7 | 298.8 | 305.1 |
| 160°   | 261.5 | 266.8 | 277.7 | 295.8 | 299.4 |
| 162.5° | 265.8 | 269.7 | 277.7 | 292.9 | 296.5 |
| 165°   | 270.5 | 274.0 | 277.7 | 288.6 | 292.1 |
| 167.5° | 274.8 | 276.6 | 279.5 | 286.8 | 288.2 |
| 170°   | 277.7 | 279.5 | 279.5 | 286.7 | 286.7 |
| 172.5° | 279.2 | 279.5 | 279.5 | 285.3 | 283.9 |
| 175°   | 281.3 | 281.3 | 279.5 | 283.1 | 283.1 |
| 177.5° | 281.3 | 281.3 | 279.9 | 282.7 | 281.3 |
| 180°   | 281.3 | 281.3 | 281.3 | 281.3 | 281.3 |

(END OF REPORT)