

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: P521141

Luminaire Tested: **SQ4-BB-0U-050D-93050-1D-UNV-STD-W-4 (3500K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521141  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2009-966-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/5/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-BB-0U-050D-93050-1D-UNV-STD-W-4 (3500K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
DIRECT ONLY  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

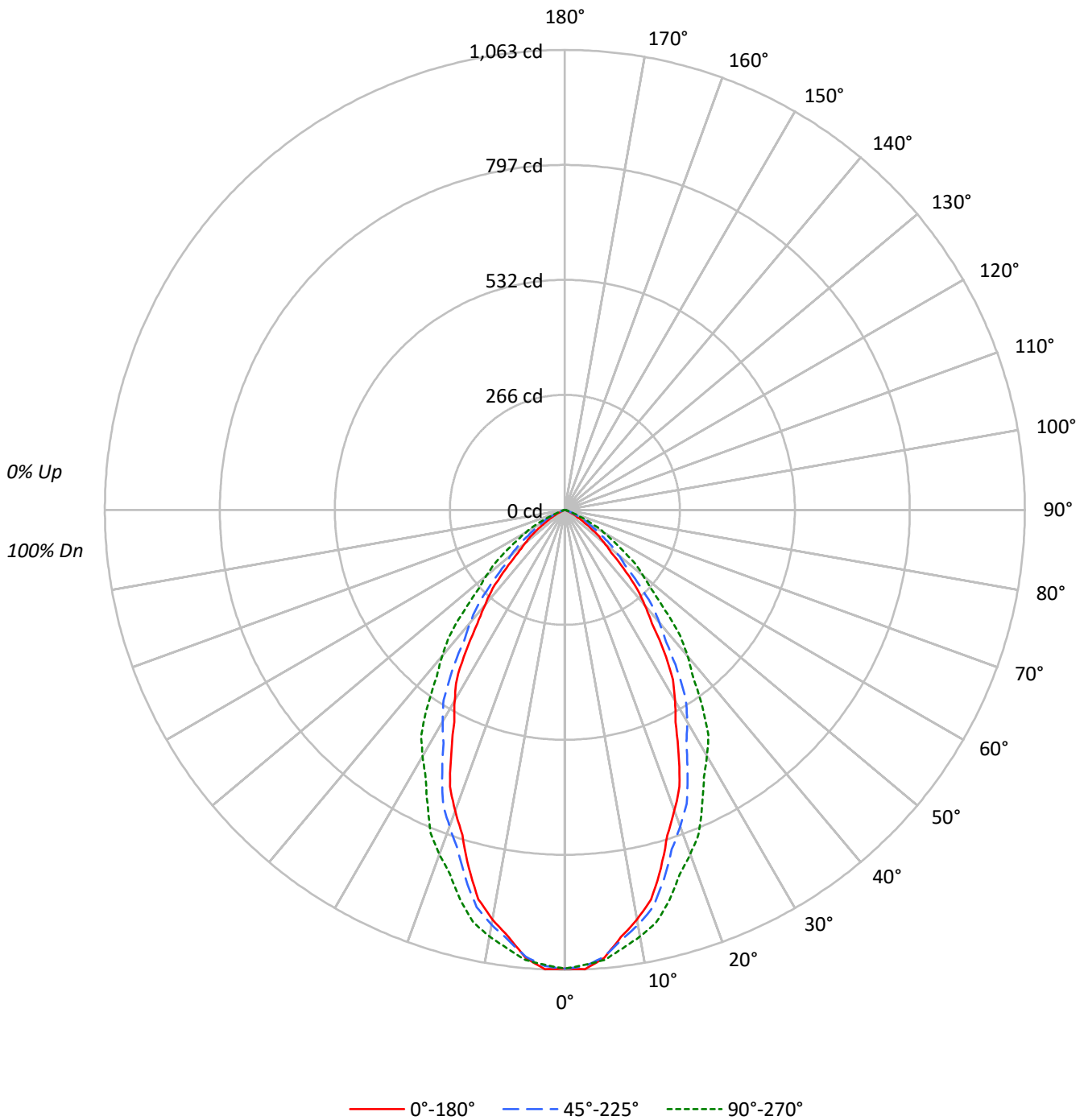
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1265.0 lumens  
Efficiency: N/A  
Efficacy: 60.5 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: Direct

Input Watts (W): 20.9  
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   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |    |    |    | 100 |
| 1   | 112 | 109 | 106 | 104 | 110 | 107 | 104 | 102 | 103 | 101 | 99  | 99  | 98  | 96  | 96  | 94  | 93  | 91  |    |    |    | 91  |
| 2   | 106 | 100 | 95  | 91  | 103 | 98  | 94  | 90  | 95  | 91  | 88  | 92  | 89  | 86  | 89  | 86  | 84  | 82  |    |    |    | 82  |
| 3   | 99  | 91  | 85  | 81  | 97  | 90  | 84  | 80  | 87  | 82  | 79  | 85  | 81  | 77  | 82  | 79  | 76  | 74  |    |    |    | 74  |
| 4   | 93  | 84  | 77  | 72  | 91  | 83  | 76  | 72  | 80  | 75  | 71  | 78  | 74  | 70  | 76  | 72  | 69  | 67  |    |    |    | 67  |
| 5   | 87  | 77  | 70  | 65  | 85  | 76  | 70  | 65  | 74  | 68  | 64  | 72  | 67  | 64  | 71  | 66  | 63  | 61  |    |    |    | 61  |
| 6   | 82  | 71  | 64  | 59  | 80  | 70  | 64  | 59  | 69  | 63  | 58  | 67  | 62  | 58  | 66  | 61  | 58  | 56  |    |    |    | 56  |
| 7   | 77  | 66  | 59  | 54  | 75  | 65  | 59  | 54  | 64  | 58  | 53  | 62  | 57  | 53  | 61  | 56  | 53  | 51  |    |    |    | 51  |
| 8   | 72  | 61  | 54  | 50  | 71  | 61  | 54  | 49  | 59  | 53  | 49  | 58  | 53  | 49  | 57  | 52  | 49  | 47  |    |    |    | 47  |
| 9   | 68  | 57  | 50  | 46  | 67  | 57  | 50  | 46  | 56  | 50  | 46  | 55  | 49  | 45  | 54  | 49  | 45  | 44  |    |    |    | 44  |
| 10  | 65  | 54  | 47  | 42  | 63  | 53  | 47  | 42  | 52  | 46  | 42  | 51  | 46  | 42  | 51  | 46  | 42  | 41  |    |    |    | 41  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 9783 | 9783 | 9783 |
| 5°  | 9626 | 9602 | 9674 |
| 10° | 9007 | 9127 | 9382 |
| 15° | 8189 | 8447 | 8918 |
| 20° | 7269 | 7647 | 8316 |
| 25° | 6330 | 6831 | 7640 |
| 30° | 5422 | 6017 | 7001 |
| 35° | 4495 | 5108 | 6229 |
| 40° | 3454 | 4084 | 5308 |
| 45° | 2497 | 3092 | 4271 |
| 50° | 1701 | 2305 | 3387 |
| 55° | 1105 | 1666 | 2633 |
| 60° | 635  | 1174 | 1902 |
| 65° | 168  | 716  | 963  |
| 70° | 84   | 221  | 278  |
| 75° | 36   | 18   | 0    |
| 80° | 27   | 0    | 0    |
| 85° | 0    | 0    | 0    |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 96.8   | 7.7       |
| 10°-20°   | 247.5  | 19.6      |
| 20°-30°   | 309.8  | 24.5      |
| 30°-40°   | 286.2  | 22.6      |
| 40°-50°   | 192.3  | 15.2      |
| 50°-60°   | 99.3   | 7.9       |
| 60°-70°   | 31.1   | 2.5       |
| 70°-80°   | 2.0    | 0.2       |
| 80°-90°   | 0.0    | 0.0       |
| 90°-100°  | 0.0    | 0.0       |
| 100°-110° | 0.0    | 0.0       |
| 110°-120° | 0.0    | 0.0       |
| 120°-130° | 0.0    | 0.0       |
| 130°-140° | 0.0    | 0.0       |
| 140°-150° | 0.0    | 0.0       |
| 150°-160° | 0.0    | 0.0       |
| 160°-170° | 0.0    | 0.0       |
| 170°-180° | 0.0    | 0.0       |
| 0°-30°    | 654.1  | 51.7      |
| 0°-40°    | 940.2  | 74.3      |
| 0°-60°    | 1231.9 | 97.4      |
| 0°-90°    | 1265.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1265.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1060 | 1060  | 1060 | 1060  | 1060 |      |
| 5°  | 1039 | 1029  | 1037 | 1040  | 1044 | 96   |
| 15° | 857  | 854   | 884  | 914   | 934  | 239  |
| 25° | 622  | 627   | 671  | 717   | 750  | 285  |
| 35° | 399  | 409   | 454  | 507   | 553  | 247  |
| 45° | 191  | 203   | 237  | 283   | 327  | 150  |
| 55° | 69   | 80    | 104  | 133   | 164  | 64   |
| 65° | 8    | 15    | 33   | 40    | 44   | 13   |
| 75° | 1    | 1     | 0    | 0     | 0    | 1    |
| 85° | 0    | 0     | 0    | 0     | 0    | 0    |
| 90° | 0    | 0     | 0    | 0     | 0    | 0    |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1060.4 | 1060.4 | 1060.4 | 1060.4 | 1060.4 |
| 2.5°  | 1062.9 | 1052.8 | 1055.5 | 1055.4 | 1052.6 |
| 5°    | 1039.4 | 1028.8 | 1036.8 | 1040.5 | 1044.5 |
| 7.5°  | 995.5  | 987.2  | 1002.5 | 1014.0 | 1022.3 |
| 10°   | 961.4  | 954.4  | 974.2  | 989.9  | 1001.4 |
| 12.5° | 922.0  | 916.6  | 940.6  | 962.0  | 976.8  |
| 15°   | 857.3  | 854.2  | 884.4  | 914.1  | 933.7  |
| 17.5° | 787.9  | 787.8  | 822.3  | 859.1  | 882.7  |
| 20°   | 740.3  | 741.8  | 778.8  | 819.4  | 847.0  |
| 22.5° | 692.7  | 696.2  | 735.7  | 778.0  | 809.6  |
| 25°   | 621.8  | 626.8  | 671.0  | 716.9  | 750.5  |
| 27.5° | 553.7  | 561.0  | 607.5  | 655.2  | 696.2  |
| 30°   | 508.9  | 517.4  | 564.8  | 615.0  | 657.2  |
| 32.5° | 465.0  | 475.1  | 521.3  | 574.4  | 617.4  |
| 35°   | 399.1  | 409.2  | 453.5  | 506.9  | 553.0  |
| 37.5° | 331.1  | 340.9  | 384.3  | 436.8  | 486.7  |
| 40°   | 286.8  | 297.8  | 339.1  | 390.0  | 440.7  |
| 42.5° | 246.6  | 257.6  | 296.4  | 346.5  | 394.3  |
| 45°   | 191.4  | 202.9  | 237.0  | 283.2  | 327.3  |
| 47.5° | 145.6  | 158.1  | 188.1  | 229.8  | 270.1  |
| 50°   | 118.5  | 131.0  | 160.6  | 197.4  | 236.0  |
| 52.5° | 96.8   | 108.9  | 135.5  | 170.2  | 205.6  |
| 55°   | 68.7   | 80.3   | 103.6  | 133.1  | 163.7  |
| 57.5° | 47.5   | 57.4   | 78.4   | 102.9  | 126.9  |
| 60°   | 34.4   | 43.9   | 63.6   | 83.6   | 103.1  |
| 62.5° | 22.9   | 31.6   | 50.9   | 66.2   | 79.3   |
| 65°   | 7.7    | 14.7   | 32.8   | 39.6   | 44.1   |
| 67.5° | 3.9    | 4.7    | 17.2   | 18.2   | 19.7   |
| 70°   | 3.1    | 3.1    | 8.2    | 8.8    | 10.3   |
| 72.5° | 2.3    | 2.3    | 3.3    | 4.2    | 4.5    |
| 75°   | 1.0    | 1.0    | 0.5    | 0.0    | 0.0    |
| 77.5° | 0.5    | 0.5    | 0.4    | 0.0    | 0.0    |
| 80°   | 0.5    | 0.5    | 0.0    | 0.0    | 0.0    |
| 82.5° | 0.1    | 0.1    | 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    |

(END OF REPORT)