

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: P521870

Luminaire Tested: **SQ4-WB-0U-050D-93050-1D-UNV-STD-W-4 (4000K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521870  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2009-966-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/5/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-WB-0U-050D-93050-1D-UNV-STD-W-4 (4000K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
DIRECT ONLY  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

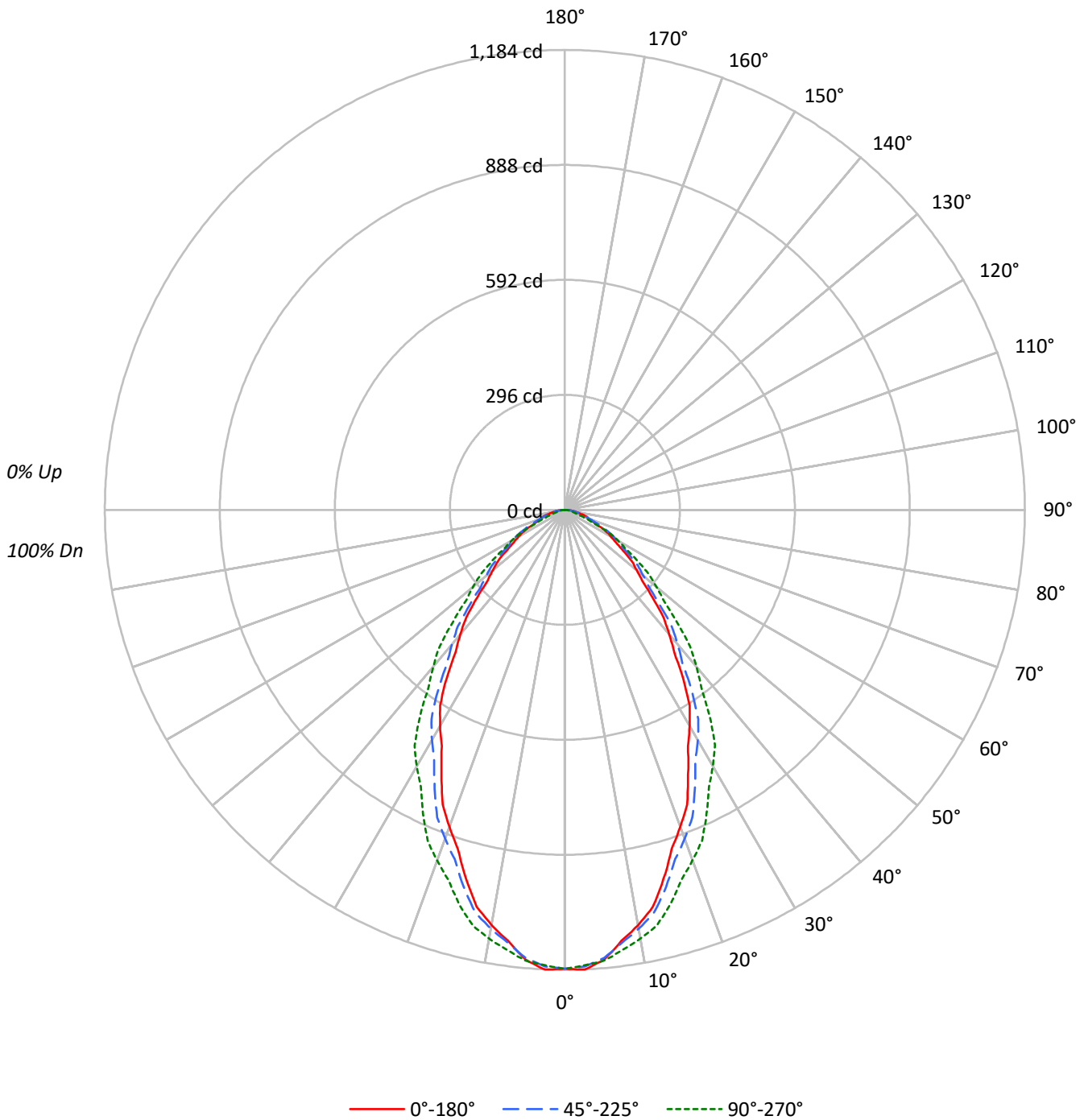
Lumens per Lamp: N/A  
Luminaire Lumens: 1721.8 lumens  
Efficiency: N/A  
Efficacy: 82.4 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Direct

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  | 0   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1   | 111 | 107 | 104 | 101 | 109 | 105 | 102 | 99  | 101 | 99  | 96  | 97  | 95  | 93  | 94  | 92  | 91  | 89  |
| 2   | 103 | 97  | 91  | 87  | 101 | 95  | 90  | 86  | 92  | 87  | 84  | 88  | 85  | 82  | 85  | 83  | 80  | 78  |
| 3   | 96  | 87  | 81  | 75  | 94  | 86  | 80  | 75  | 83  | 78  | 73  | 80  | 76  | 72  | 78  | 74  | 71  | 69  |
| 4   | 89  | 79  | 72  | 66  | 87  | 78  | 71  | 66  | 76  | 70  | 65  | 74  | 68  | 64  | 71  | 67  | 64  | 62  |
| 5   | 83  | 72  | 65  | 59  | 81  | 71  | 64  | 59  | 69  | 63  | 58  | 67  | 62  | 58  | 66  | 61  | 57  | 55  |
| 6   | 78  | 66  | 59  | 53  | 76  | 65  | 58  | 53  | 64  | 57  | 53  | 62  | 56  | 52  | 61  | 56  | 52  | 50  |
| 7   | 73  | 61  | 53  | 48  | 71  | 60  | 53  | 48  | 59  | 52  | 48  | 58  | 52  | 47  | 56  | 51  | 47  | 45  |
| 8   | 68  | 57  | 49  | 44  | 67  | 56  | 49  | 44  | 55  | 48  | 44  | 53  | 48  | 43  | 52  | 47  | 43  | 41  |
| 9   | 64  | 53  | 45  | 40  | 63  | 52  | 45  | 40  | 51  | 45  | 40  | 50  | 44  | 40  | 49  | 44  | 40  | 38  |
| 10  | 61  | 49  | 42  | 37  | 60  | 48  | 42  | 37  | 48  | 41  | 37  | 47  | 41  | 37  | 46  | 41  | 37  | 35  |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 10902 | 10902 | 10902 |
| 5°  | 10766 | 10728 | 10790 |
| 10° | 10171 | 10263 | 10502 |
| 15° | 9389  | 9608  | 10039 |
| 20° | 8527  | 8847  | 9432  |
| 25° | 7648  | 8065  | 8788  |
| 30° | 6838  | 7286  | 8120  |
| 35° | 5980  | 6412  | 7329  |
| 40° | 5033  | 5433  | 6345  |
| 45° | 4153  | 4512  | 5297  |
| 50° | 3468  | 3781  | 4414  |
| 55° | 2944  | 3244  | 3645  |
| 60° | 2517  | 2812  | 2908  |
| 65° | 2004  | 2366  | 1880  |
| 70° | 1775  | 1845  | 1146  |
| 75° | 1643  | 1497  | 702   |
| 80° | 1514  | 1376  | 606   |
| 85° | 1376  | 1260  | 498   |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 108.4  | 6.3       |
| 10°-20°   | 281.9  | 16.4      |
| 20°-30°   | 365.2  | 21.2      |
| 30°-40°   | 357.6  | 20.8      |
| 40°-50°   | 273.7  | 15.9      |
| 50°-60°   | 182.4  | 10.6      |
| 60°-70°   | 99.5   | 5.8       |
| 70°-80°   | 41.5   | 2.4       |
| 80°-90°   | 11.7   | 0.7       |
| 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°    | 755.4  | 43.9      |
| 0°-40°    | 1113.0 | 64.6      |
| 0°-60°    | 1569.1 | 91.1      |
| 0°-90°    | 1721.8 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1721.8 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1182 | 1182  | 1182 | 1182  | 1182 |      |
| 5°  | 1162 | 1151  | 1158 | 1161  | 1165 | 108  |
| 15° | 983  | 980   | 1006 | 1033  | 1051 | 275  |
| 25° | 751  | 753   | 792  | 827   | 863  | 346  |
| 35° | 531  | 534   | 569  | 608   | 651  | 330  |
| 45° | 318  | 324   | 346  | 372   | 406  | 248  |
| 55° | 183  | 191   | 202  | 209   | 227  | 166  |
| 65° | 92   | 99    | 108  | 95    | 86   | 95   |
| 75° | 46   | 46    | 42   | 29    | 20   | 49   |
| 85° | 13   | 13    | 12   | 8     | 5    | 15   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1181.6 | 1181.6 | 1181.6 | 1181.6 | 1181.6 |
| 2.5°  | 1184.5 | 1174.0 | 1176.6 | 1176.6 | 1173.3 |
| 5°    | 1162.4 | 1150.8 | 1158.3 | 1161.0 | 1165.0 |
| 7.5°  | 1119.3 | 1110.5 | 1124.2 | 1134.3 | 1142.5 |
| 10°   | 1085.7 | 1078.1 | 1095.5 | 1110.3 | 1121.0 |
| 12.5° | 1046.7 | 1040.3 | 1062.0 | 1081.8 | 1095.7 |
| 15°   | 983.0  | 979.5  | 1005.9 | 1033.2 | 1051.0 |
| 17.5° | 914.9  | 913.2  | 943.4  | 975.4  | 998.1  |
| 20°   | 868.5  | 867.9  | 901.1  | 934.4  | 960.7  |
| 22.5° | 821.6  | 822.7  | 857.6  | 892.2  | 922.2  |
| 25°   | 751.3  | 753.3  | 792.2  | 826.8  | 863.3  |
| 27.5° | 686.3  | 687.2  | 727.4  | 763.9  | 802.8  |
| 30°   | 641.9  | 644.4  | 683.9  | 721.6  | 762.2  |
| 32.5° | 597.5  | 600.4  | 639.1  | 678.1  | 719.4  |
| 35°   | 530.9  | 533.5  | 569.3  | 607.6  | 650.7  |
| 37.5° | 462.3  | 465.7  | 497.5  | 533.8  | 576.1  |
| 40°   | 417.9  | 423.0  | 451.1  | 485.2  | 526.8  |
| 42.5° | 375.2  | 381.5  | 407.5  | 439.9  | 477.4  |
| 45°   | 318.3  | 324.4  | 345.8  | 372.0  | 406.0  |
| 47.5° | 269.4  | 276.4  | 292.8  | 315.4  | 344.4  |
| 50°   | 241.6  | 248.2  | 263.4  | 280.1  | 307.5  |
| 52.5° | 217.1  | 223.7  | 237.3  | 250.1  | 273.4  |
| 55°   | 183.0  | 190.6  | 201.7  | 209.3  | 226.6  |
| 57.5° | 155.0  | 162.3  | 171.1  | 174.6  | 185.0  |
| 60°   | 136.4  | 144.5  | 152.4  | 152.0  | 157.6  |
| 62.5° | 119.4  | 126.2  | 134.2  | 128.7  | 129.0  |
| 65°   | 91.8   | 99.4   | 108.4  | 94.7   | 86.1   |
| 67.5° | 74.1   | 75.8   | 85.0   | 66.0   | 55.8   |
| 70°   | 65.8   | 65.8   | 68.4   | 51.1   | 42.5   |
| 72.5° | 58.0   | 58.0   | 55.6   | 41.6   | 32.6   |
| 75°   | 46.1   | 46.1   | 42.0   | 28.8   | 19.7   |
| 77.5° | 35.6   | 35.2   | 32.1   | 21.5   | 14.3   |
| 80°   | 28.5   | 28.5   | 25.9   | 17.0   | 11.4   |
| 82.5° | 22.3   | 22.3   | 20.1   | 13.3   | 8.5    |
| 85°   | 13.0   | 13.0   | 11.9   | 7.7    | 4.7    |
| 87.5° | 4.6    | 4.6    | 4.1    | 2.5    | 2.1    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)