

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: P521154

Luminaire Tested: **SQ4-BB-0U-075D-93050-1D-UNV-STD-W-4 (3500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521154
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-075D-93050-1D-UNV-STD-W-4 (3500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

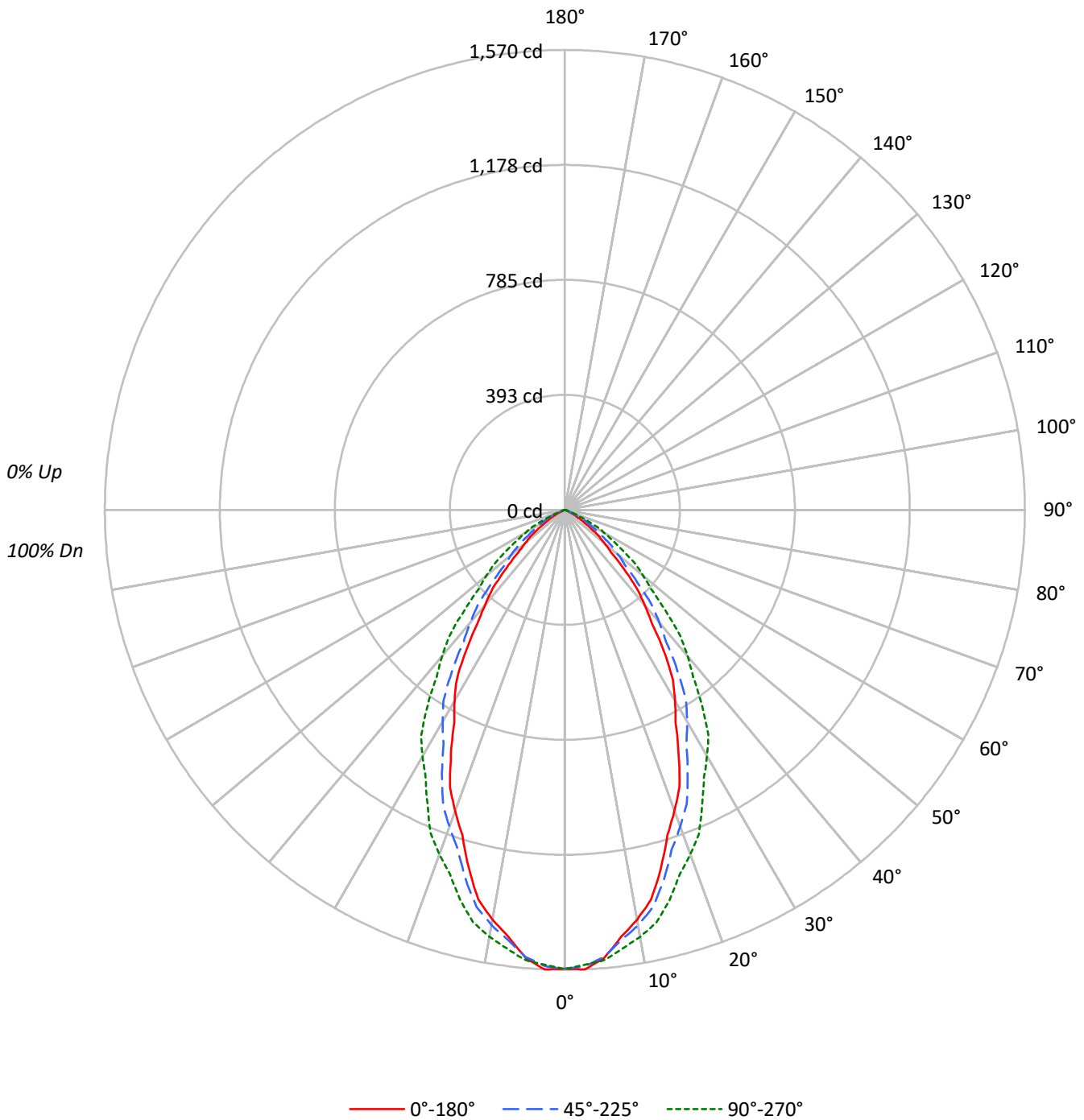
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1868.9 lumens
Efficiency: N/A
Efficacy: 59.1 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): 31.6
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





TEST NUMBER: P521154

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

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 | 7.7 |
| 10°-20° | 365.6 | 19.6 |
| 20°-30° | 457.7 | 24.5 |
| 30°-40° | 422.8 | 22.6 |
| 40°-50° | 284.1 | 15.2 |
| 50°-60° | 146.7 | 7.9 |
| 60°-70° | 46.0 | 2.5 |
| 70°-80° | 2.9 | 0.2 |
| 80°-90° | 0.1 | 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° | 966.3 | 51.7 |
| 0°-40° | 1389.1 | 74.3 |
| 0°-60° | 1820.0 | 97.4 |
| 0°-90° | 1868.9 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1868.9 | 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 | 0 |



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CATALOG NUMBER: SQ4-BB-0U-075D-93050-1D-UNV-STD-W-4 (3500K)

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 |

(END OF REPORT)