

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: P845078

Luminaire Tested: **SQ4P-PP3-050U-100D-B35-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P845078
REPORT IS A COMBINATION OF REPORTS P700201 AND P700244
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-PP3-050U-100D-B35-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT
UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

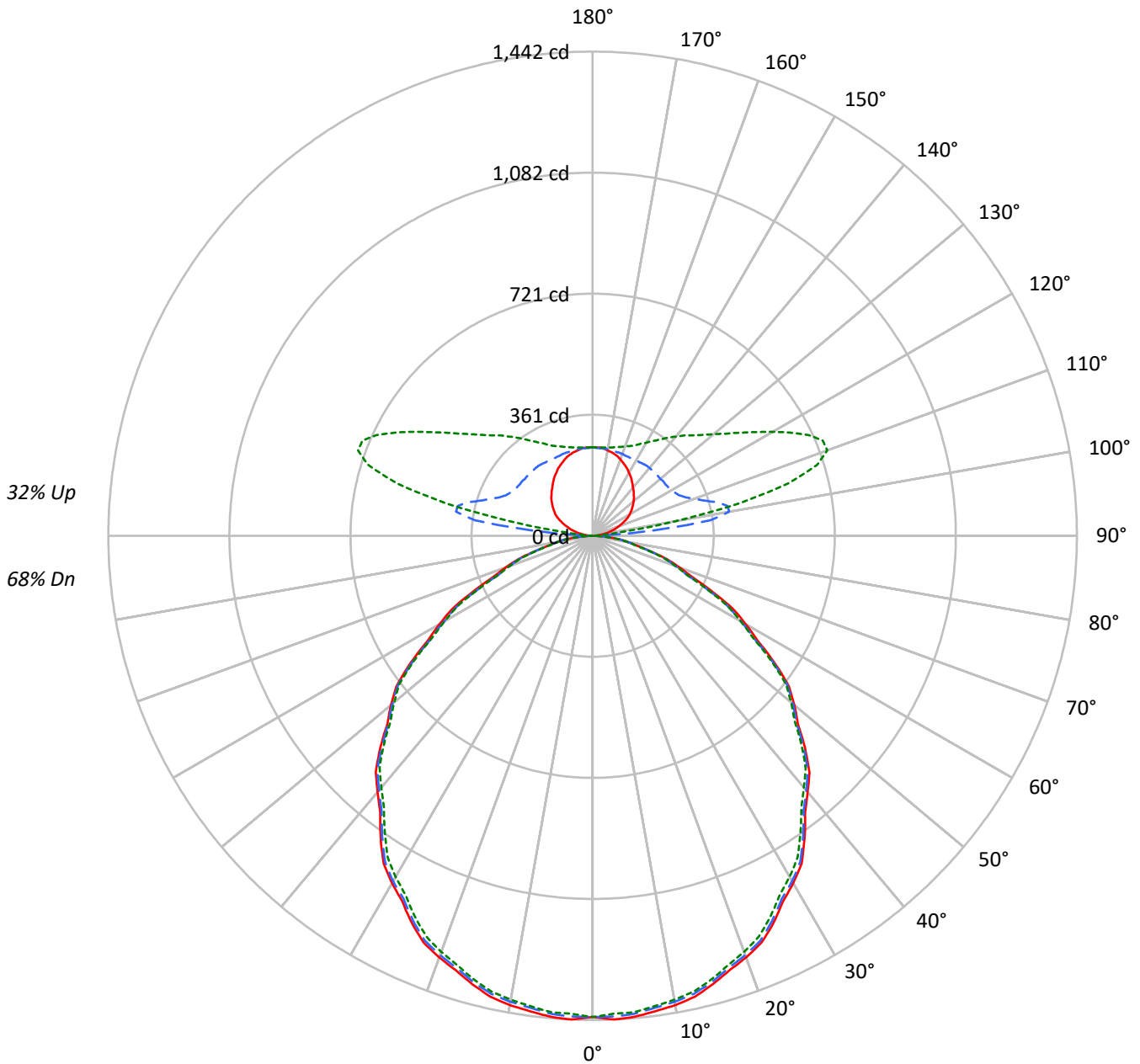
Lumens per Lamp: N/A
Luminaire Lumens: 5378.5 lumens
Efficiency: N/A
Efficacy: 112.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 47.9
Input Voltage (V): NR
Input Current (A_{in}): 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: 25 FT

TEST NUMBER: P845078

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Luminous Intensity Polar Plot





TEST NUMBER: P845078

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|---|--|--|--|--|--|--|----|--|--|--|--|--|--|--|--|---|
| RF | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | |
| RC | 80 | | | | | | | | | 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 | 111 | 111 | 111 | 111 | 105 | 105 | 105 | 105 | 93 | 93 | 93 | 83 | 83 | 83 | 73 | 73 | 73 | 68 | | | | | | | | | | | | | | | | | | | |
| 1 | 102 | 98 | 94 | 90 | 96 | 92 | 89 | 86 | 83 | 80 | 78 | 73 | 71 | 70 | 65 | 63 | 62 | 58 | | | | | | | | | | | | | | | | | | | |
| 2 | 93 | 86 | 80 | 74 | 88 | 81 | 76 | 71 | 73 | 68 | 65 | 65 | 61 | 59 | 57 | 55 | 53 | 49 | | | | | | | | | | | | | | | | | | | |
| 3 | 85 | 76 | 68 | 62 | 80 | 72 | 65 | 60 | 64 | 59 | 55 | 57 | 53 | 50 | 51 | 48 | 45 | 42 | | | | | | | | | | | | | | | | | | | |
| 4 | 78 | 67 | 59 | 53 | 73 | 64 | 56 | 51 | 57 | 51 | 47 | 51 | 47 | 43 | 46 | 42 | 39 | 36 | | | | | | | | | | | | | | | | | | | |
| 5 | 72 | 60 | 52 | 45 | 68 | 57 | 49 | 44 | 51 | 45 | 40 | 46 | 41 | 37 | 41 | 37 | 34 | 31 | | | | | | | | | | | | | | | | | | | |
| 6 | 66 | 54 | 46 | 40 | 62 | 51 | 44 | 38 | 46 | 40 | 35 | 42 | 37 | 33 | 37 | 33 | 30 | 27 | | | | | | | | | | | | | | | | | | | |
| 7 | 61 | 49 | 41 | 35 | 58 | 46 | 39 | 34 | 42 | 36 | 31 | 38 | 33 | 29 | 34 | 30 | 27 | 24 | | | | | | | | | | | | | | | | | | | |
| 8 | 57 | 44 | 36 | 31 | 54 | 42 | 35 | 30 | 38 | 32 | 28 | 35 | 30 | 26 | 31 | 27 | 24 | 22 | | | | | | | | | | | | | | | | | | | |
| 9 | 53 | 41 | 33 | 28 | 50 | 39 | 32 | 27 | 35 | 29 | 25 | 32 | 27 | 23 | 29 | 25 | 22 | 20 | | | | | | | | | | | | | | | | | | | |
| 10 | 50 | 37 | 30 | 25 | 47 | 36 | 29 | 24 | 33 | 27 | 23 | 30 | 25 | 21 | 27 | 23 | 20 | 18 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 13221 | 13221 | 13221 |
| 5° | 13318 | 13236 | 13190 |
| 10° | 13296 | 13202 | 13144 |
| 15° | 13208 | 13136 | 13063 |
| 20° | 13119 | 13046 | 12947 |
| 25° | 12964 | 12876 | 12748 |
| 30° | 12725 | 12658 | 12497 |
| 35° | 12392 | 12307 | 12151 |
| 40° | 11995 | 11919 | 11784 |
| 45° | 11669 | 11586 | 11470 |
| 50° | 11247 | 11176 | 11068 |
| 55° | 10666 | 10526 | 10446 |
| 60° | 9710 | 9433 | 9387 |
| 65° | 8556 | 8198 | 8169 |
| 70° | 7383 | 7081 | 7081 |
| 75° | 6359 | 6267 | 6174 |
| 80° | 5605 | 5674 | 5531 |
| 85° | 4383 | 4785 | 4785 |



TEST NUMBER: P845078

CATALOG NUMBER: SQ4P-PP3-050U-100D-B35-1D-UNV

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 135.5 | 2.5 |
| 10°-20° | 386.9 | 7.2 |
| 20°-30° | 579.5 | 10.8 |
| 30°-40° | 679.8 | 12.6 |
| 40°-50° | 681.8 | 12.7 |
| 50°-60° | 581.7 | 10.8 |
| 60°-70° | 379.4 | 7.1 |
| 70°-80° | 190.3 | 3.5 |
| 80°-90° | 53.3 | 1.0 |
| 90°-100° | 104.9 | 1.9 |
| 100°-110° | 364.9 | 6.8 |
| 110°-120° | 353.5 | 6.6 |
| 120°-130° | 277.3 | 5.2 |
| 130°-140° | 219.5 | 4.1 |
| 140°-150° | 169.4 | 3.1 |
| 150°-160° | 121.4 | 2.3 |
| 160°-170° | 74.3 | 1.4 |
| 170°-180° | 25.1 | 0.5 |
| 0°-30° | 1102.0 | 20.5 |
| 0°-40° | 1781.7 | 33.1 |
| 0°-60° | 3045.3 | 56.6 |
| 0°-90° | 3668.3 | 68.2 |
| 90°-120° | 823.3 | 15.3 |
| 90°-150° | 1489.4 | 27.7 |
| 90°-180° | 1710.0 | 31.8 |
| 0°-180° | 5378.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1433 | 1433 | 1433 | 1433 | 1433 | |
| 5° | 1438 | 1425 | 1429 | 1424 | 1424 | 137 |
| 15° | 1383 | 1369 | 1375 | 1370 | 1368 | 390 |
| 25° | 1274 | 1259 | 1265 | 1253 | 1252 | 586 |
| 35° | 1100 | 1089 | 1093 | 1080 | 1079 | 687 |
| 45° | 894 | 888 | 888 | 879 | 879 | 689 |
| 55° | 663 | 661 | 654 | 650 | 649 | 589 |
| 65° | 392 | 385 | 376 | 373 | 374 | 391 |
| 75° | 178 | 178 | 176 | 175 | 173 | 193 |
| 85° | 41 | 45 | 45 | 45 | 45 | 49 |
| 90° | 4 | 6 | 6 | 4 | 2 | 4 |
| 95° | 18 | 61 | 177 | 45 | 28 | 19 |
| 105° | 61 | 86 | 384 | 647 | 602 | 64 |
| 115° | 106 | 128 | 285 | 602 | 710 | 105 |
| 125° | 144 | 177 | 266 | 448 | 535 | 129 |
| 135° | 173 | 195 | 264 | 374 | 423 | 134 |
| 145° | 203 | 216 | 262 | 322 | 350 | 127 |
| 155° | 230 | 238 | 258 | 287 | 297 | 106 |
| 165° | 252 | 254 | 260 | 271 | 273 | 71 |
| 175° | 264 | 264 | 262 | 266 | 264 | 25 |
| 180° | 264 | 264 | 264 | 264 | 264 | |



TEST NUMBER: P845078

CATALOG NUMBER: SQ4P-PP3-050U-100D-B35-1D-UNV

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1433.0 | 1433.0 | 1433.0 | 1433.0 | 1433.0 |
| 2.5° | 1441.9 | 1430.3 | 1433.0 | 1430.9 | 1425.1 |
| 5° | 1438.0 | 1424.6 | 1429.2 | 1424.2 | 1424.2 |
| 7.5° | 1428.3 | 1413.5 | 1418.1 | 1413.1 | 1413.0 |
| 10° | 1419.2 | 1404.4 | 1409.2 | 1404.0 | 1403.0 |
| 12.5° | 1406.2 | 1391.5 | 1397.1 | 1391.0 | 1390.8 |
| 15° | 1382.8 | 1369.2 | 1375.3 | 1370.1 | 1367.6 |
| 17.5° | 1356.4 | 1341.7 | 1348.9 | 1341.9 | 1340.8 |
| 20° | 1336.2 | 1321.6 | 1328.7 | 1318.7 | 1318.7 |
| 22.5° | 1312.3 | 1297.5 | 1305.7 | 1292.5 | 1292.5 |
| 25° | 1273.5 | 1258.7 | 1264.8 | 1253.3 | 1252.3 |
| 27.5° | 1227.5 | 1213.0 | 1219.3 | 1206.4 | 1206.1 |
| 30° | 1194.4 | 1180.8 | 1188.2 | 1174.3 | 1173.0 |
| 32.5° | 1158.2 | 1145.7 | 1150.9 | 1137.1 | 1135.7 |
| 35° | 1100.2 | 1089.1 | 1092.7 | 1080.1 | 1078.8 |
| 37.5° | 1039.1 | 1027.9 | 1031.8 | 1020.9 | 1020.5 |
| 40° | 995.9 | 988.5 | 989.6 | 980.7 | 978.4 |
| 42.5° | 955.8 | 947.3 | 948.4 | 939.5 | 939.1 |
| 45° | 894.3 | 888.0 | 888.0 | 879.1 | 879.1 |
| 47.5° | 828.9 | 824.1 | 822.9 | 815.4 | 815.2 |
| 50° | 783.6 | 780.0 | 778.6 | 772.4 | 771.1 |
| 52.5° | 736.5 | 734.7 | 730.4 | 725.2 | 725.0 |
| 55° | 663.1 | 660.6 | 654.4 | 650.5 | 649.4 |
| 57.5° | 583.6 | 578.6 | 571.5 | 566.0 | 566.9 |
| 60° | 526.2 | 521.2 | 511.2 | 508.7 | 508.7 |
| 62.5° | 471.0 | 465.1 | 454.9 | 451.5 | 453.5 |
| 65° | 391.9 | 384.6 | 375.5 | 373.1 | 374.2 |
| 67.5° | 320.1 | 313.3 | 303.6 | 303.6 | 302.8 |
| 70° | 273.7 | 270.0 | 262.5 | 262.5 | 262.5 |
| 72.5° | 232.6 | 230.8 | 225.5 | 225.2 | 224.3 |
| 75° | 178.4 | 178.4 | 175.8 | 174.6 | 173.2 |
| 77.5° | 133.6 | 134.1 | 133.0 | 131.6 | 129.3 |
| 80° | 105.5 | 108.0 | 106.8 | 105.5 | 104.1 |
| 82.5° | 79.5 | 81.8 | 81.6 | 79.5 | 79.1 |
| 85° | 41.4 | 45.0 | 45.2 | 45.2 | 45.2 |
| 87.5° | 11.1 | 15.0 | 16.0 | 16.0 | 17.1 |
| 90° | 3.9 | 5.9 | 5.9 | 3.9 | 2.0 |
| 92.5° | 9.8 | 29.5 | 27.5 | 11.8 | 9.8 |
| 95° | 17.7 | 61.0 | 177.0 | 45.2 | 27.5 |
| 97.5° | 27.5 | 68.8 | 353.9 | 161.3 | 86.5 |
| 100° | 37.4 | 72.8 | 413.0 | 387.4 | 249.7 |
| 102.5° | 49.1 | 78.7 | 411.0 | 544.7 | 448.4 |
| 105° | 61.0 | 86.5 | 383.5 | 646.9 | 601.7 |



TEST NUMBER: P845078

CATALOG NUMBER: SQ4P-PP3-050U-100D-B35-1D-UNV

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 94.4 | 116.1 | 299.0 | 650.9 | 741.4 |
| 115° | 106.2 | 127.8 | 285.2 | 601.7 | 709.9 |
| 117.5° | 118.0 | 141.6 | 277.2 | 556.5 | 664.6 |
| 120° | 127.8 | 153.3 | 271.4 | 513.3 | 619.4 |
| 122.5° | 135.7 | 165.2 | 267.4 | 477.8 | 574.2 |
| 125° | 143.6 | 177.0 | 265.5 | 448.4 | 534.9 |
| 127.5° | 151.4 | 184.9 | 265.5 | 426.8 | 499.5 |
| 130° | 159.3 | 188.8 | 263.5 | 405.1 | 470.0 |
| 132.5° | 167.1 | 190.7 | 263.5 | 389.4 | 444.5 |
| 135° | 173.0 | 194.6 | 263.5 | 373.6 | 422.8 |
| 137.5° | 180.9 | 198.6 | 263.5 | 359.8 | 405.1 |
| 140° | 186.8 | 204.5 | 263.5 | 346.1 | 385.5 |
| 142.5° | 194.6 | 210.4 | 263.5 | 332.3 | 367.7 |
| 145° | 202.6 | 216.4 | 261.6 | 322.5 | 350.0 |
| 147.5° | 210.4 | 222.2 | 259.6 | 312.7 | 334.3 |
| 150° | 216.4 | 228.1 | 259.6 | 302.9 | 320.6 |
| 152.5° | 224.2 | 234.0 | 257.7 | 293.0 | 308.7 |
| 155° | 230.1 | 238.0 | 257.7 | 287.1 | 296.9 |
| 157.5° | 235.9 | 243.9 | 257.7 | 281.2 | 289.1 |
| 160° | 241.9 | 247.8 | 259.6 | 277.2 | 283.2 |
| 162.5° | 247.8 | 251.7 | 259.6 | 273.3 | 277.2 |
| 165° | 251.7 | 253.6 | 259.6 | 271.4 | 273.3 |
| 167.5° | 255.6 | 257.7 | 259.6 | 269.4 | 269.4 |
| 170° | 257.7 | 259.6 | 261.6 | 267.4 | 267.4 |
| 172.5° | 261.6 | 261.6 | 261.6 | 265.5 | 265.5 |
| 175° | 263.5 | 263.5 | 261.6 | 265.5 | 263.5 |
| 177.5° | 263.5 | 263.5 | 261.6 | 265.5 | 263.5 |
| 180° | 263.5 | 263.5 | 263.5 | 263.5 | 263.5 |



Report Generated By 670246072 / DESKTOP-50001EG





— 0°-180° - - 45°-225° - - - - 90°-270°







| | | | | | |
|--------|------|-------|-------|-------|-------|
| 107.5° | 72.8 | 96.4 | 348.1 | 692.2 | 700.1 |
| 110° | 82.6 | 106.2 | 320.6 | 686.3 | 743.3 |



(END OF REPORT)