

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: P845329

Luminaire Tested: **SQ4P-WB-050U-075D-B50-1D-UNV**

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P845329
REPORT IS A COMBINATION OF REPORTS P700212 AND P700244
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-WB-050U-075D-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT
UPLIGHT, 750 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

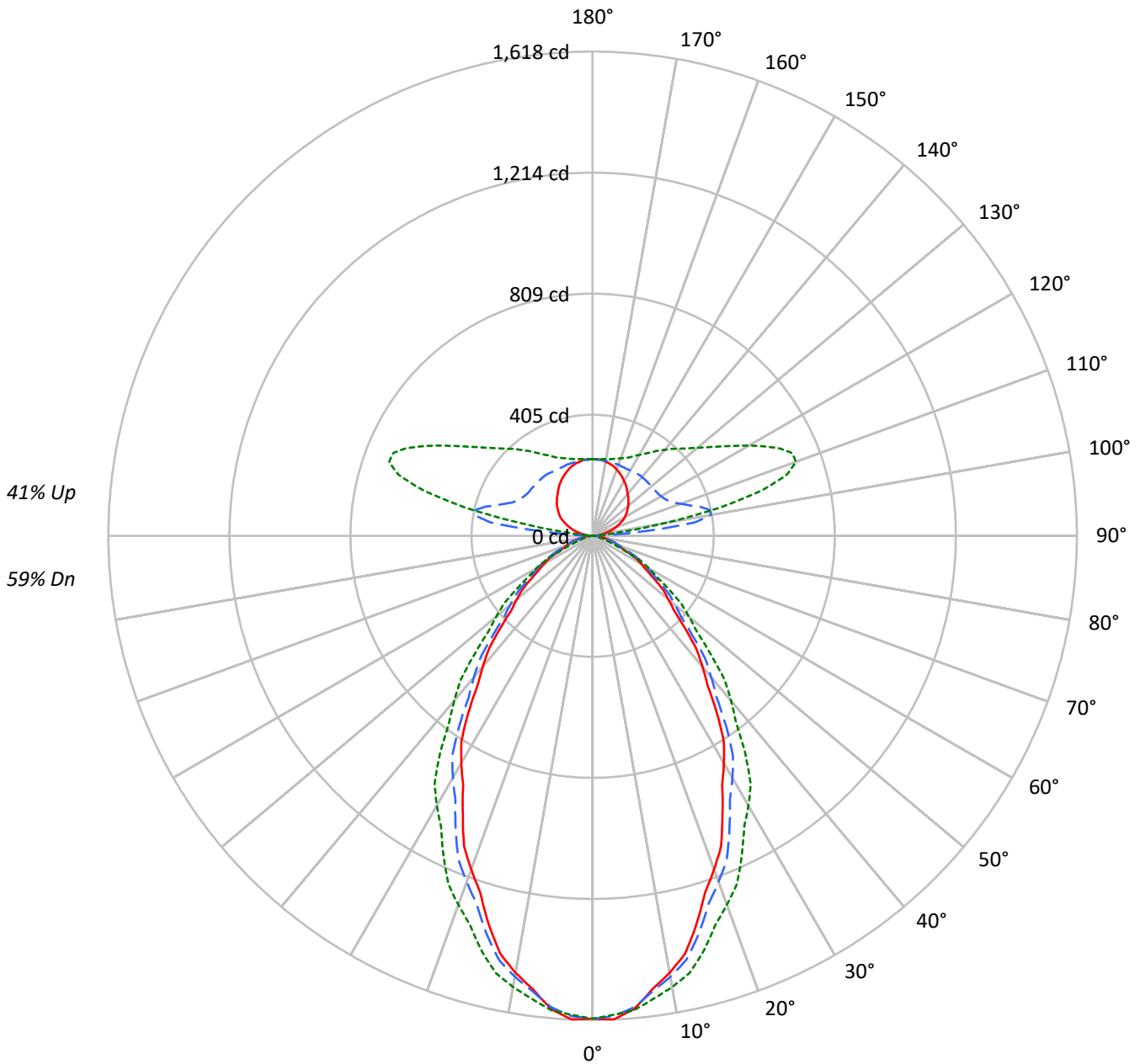
Lumens per Lamp: N/A
Luminaire Lumens: 4015.9 lumens
Efficiency: N/A
Efficacy: 104.0 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 38.6
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: P845329

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Luminous Intensity Polar Plot





TEST NUMBER: P845329

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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 | 109 | 109 | 109 | 109 | 102 | 102 | 102 | 102 | 88 | 88 | 88 | 76 | 76 | 76 | 64 | 64 | 64 | 59 | | | | | | | | | | | | | | | | | | | |
| 1 | 101 | 97 | 94 | 91 | 94 | 91 | 88 | 85 | 79 | 77 | 75 | 69 | 67 | 66 | 59 | 58 | 57 | 52 | | | | | | | | | | | | | | | | | | | |
| 2 | 93 | 86 | 81 | 76 | 87 | 81 | 76 | 72 | 71 | 68 | 64 | 62 | 59 | 57 | 53 | 51 | 50 | 46 | | | | | | | | | | | | | | | | | | | |
| 3 | 86 | 77 | 71 | 65 | 80 | 73 | 67 | 62 | 64 | 60 | 56 | 56 | 53 | 50 | 49 | 46 | 44 | 41 | | | | | | | | | | | | | | | | | | | |
| 4 | 79 | 69 | 62 | 57 | 74 | 65 | 59 | 54 | 58 | 53 | 49 | 51 | 47 | 44 | 44 | 42 | 39 | 36 | | | | | | | | | | | | | | | | | | | |
| 5 | 73 | 63 | 55 | 50 | 69 | 59 | 53 | 48 | 53 | 47 | 43 | 46 | 42 | 39 | 41 | 38 | 35 | 32 | | | | | | | | | | | | | | | | | | | |
| 6 | 68 | 57 | 49 | 44 | 64 | 54 | 47 | 42 | 48 | 43 | 39 | 43 | 38 | 35 | 38 | 34 | 32 | 29 | | | | | | | | | | | | | | | | | | | |
| 7 | 64 | 52 | 45 | 39 | 59 | 49 | 43 | 38 | 44 | 39 | 35 | 39 | 35 | 32 | 35 | 31 | 29 | 27 | | | | | | | | | | | | | | | | | | | |
| 8 | 59 | 48 | 40 | 35 | 56 | 45 | 39 | 34 | 41 | 35 | 32 | 36 | 32 | 29 | 32 | 29 | 26 | 24 | | | | | | | | | | | | | | | | | | | |
| 9 | 56 | 44 | 37 | 32 | 52 | 42 | 35 | 31 | 38 | 32 | 29 | 34 | 30 | 26 | 30 | 27 | 24 | 22 | | | | | | | | | | | | | | | | | | | |
| 10 | 52 | 41 | 34 | 29 | 49 | 39 | 32 | 28 | 35 | 30 | 26 | 32 | 27 | 24 | 28 | 25 | 22 | 21 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 14888 | 14888 | 14888 |
| 5° | 14703 | 14650 | 14736 |
| 10° | 13892 | 14017 | 14342 |
| 15° | 12823 | 13122 | 13710 |
| 20° | 11645 | 12082 | 12882 |
| 25° | 10446 | 11015 | 12002 |
| 30° | 9339 | 9949 | 11088 |
| 35° | 8167 | 8756 | 10010 |
| 40° | 6872 | 7420 | 8664 |
| 45° | 5672 | 6161 | 7235 |
| 50° | 4735 | 5163 | 6026 |
| 55° | 4020 | 4430 | 4977 |
| 60° | 3438 | 3842 | 3973 |
| 65° | 2738 | 3229 | 2565 |
| 70° | 2428 | 2522 | 1567 |
| 75° | 2246 | 2046 | 959 |
| 80° | 2067 | 1881 | 824 |
| 85° | 1863 | 1736 | 677 |



TEST NUMBER: P845329

CATALOG NUMBER: SQ4P-WB-050U-075D-B50-1D-UNV

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 148.0 | 3.7 |
| 10°-20° | 385.0 | 9.6 |
| 20°-30° | 498.7 | 12.4 |
| 30°-40° | 488.3 | 12.2 |
| 40°-50° | 373.8 | 9.3 |
| 50°-60° | 249.1 | 6.2 |
| 60°-70° | 135.9 | 3.4 |
| 70°-80° | 56.6 | 1.4 |
| 80°-90° | 16.6 | 0.4 |
| 90°-100° | 102.0 | 2.5 |
| 100°-110° | 355.0 | 8.8 |
| 110°-120° | 343.9 | 8.6 |
| 120°-130° | 269.8 | 6.7 |
| 130°-140° | 213.5 | 5.3 |
| 140°-150° | 164.8 | 4.1 |
| 150°-160° | 118.1 | 2.9 |
| 160°-170° | 72.3 | 1.8 |
| 170°-180° | 24.4 | 0.6 |
| 0°-30° | 1031.7 | 25.7 |
| 0°-40° | 1520.0 | 37.9 |
| 0°-60° | 2142.9 | 53.4 |
| 0°-90° | 2352.1 | 58.6 |
| 90°-120° | 800.9 | 19.9 |
| 90°-150° | 1449.0 | 36.1 |
| 90°-180° | 1664.0 | 41.4 |
| 0°-180° | 4015.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1614 | 1614 | 1614 | 1614 | 1614 | |
| 5° | 1588 | 1572 | 1582 | 1586 | 1591 | 148 |
| 15° | 1342 | 1338 | 1374 | 1411 | 1435 | 375 |
| 25° | 1026 | 1029 | 1082 | 1129 | 1179 | 472 |
| 35° | 725 | 729 | 777 | 830 | 889 | 451 |
| 45° | 435 | 443 | 472 | 508 | 554 | 339 |
| 55° | 250 | 260 | 275 | 286 | 309 | 227 |
| 65° | 125 | 136 | 148 | 129 | 118 | 130 |
| 75° | 63 | 63 | 57 | 39 | 27 | 67 |
| 85° | 18 | 18 | 16 | 11 | 6 | 19 |
| 90° | 4 | 6 | 6 | 4 | 2 | 3 |
| 95° | 17 | 59 | 172 | 44 | 27 | 18 |
| 105° | 59 | 84 | 373 | 629 | 585 | 62 |
| 115° | 103 | 124 | 277 | 585 | 691 | 102 |
| 125° | 140 | 172 | 258 | 436 | 520 | 125 |
| 135° | 168 | 189 | 256 | 364 | 411 | 130 |
| 145° | 197 | 210 | 254 | 314 | 340 | 123 |
| 155° | 224 | 232 | 251 | 279 | 289 | 103 |
| 165° | 245 | 247 | 253 | 264 | 266 | 69 |
| 175° | 256 | 256 | 254 | 258 | 256 | 24 |
| 180° | 256 | 256 | 256 | 256 | 256 | |



TEST NUMBER: P845329

CATALOG NUMBER: SQ4P-WB-050U-075D-B50-1D-UNV

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1613.7 | 1613.7 | 1613.7 | 1613.7 | 1613.7 |
| 2.5° | 1617.7 | 1603.3 | 1607.0 | 1606.8 | 1602.4 |
| 5° | 1587.6 | 1571.5 | 1581.8 | 1585.5 | 1591.1 |
| 7.5° | 1528.6 | 1516.6 | 1535.3 | 1549.1 | 1560.4 |
| 10° | 1482.8 | 1472.3 | 1496.2 | 1516.4 | 1530.9 |
| 12.5° | 1429.6 | 1420.7 | 1450.4 | 1477.3 | 1496.4 |
| 15° | 1342.5 | 1337.7 | 1373.8 | 1411.1 | 1435.3 |
| 17.5° | 1249.5 | 1247.2 | 1288.5 | 1332.1 | 1363.0 |
| 20° | 1186.0 | 1185.4 | 1230.6 | 1276.1 | 1312.0 |
| 22.5° | 1122.1 | 1123.5 | 1171.1 | 1218.4 | 1259.4 |
| 25° | 1026.1 | 1028.8 | 1082.0 | 1129.1 | 1179.0 |
| 27.5° | 937.3 | 938.5 | 993.3 | 1043.2 | 1096.4 |
| 30° | 876.6 | 880.1 | 933.9 | 985.5 | 1040.8 |
| 32.5° | 816.1 | 820.1 | 872.8 | 926.0 | 982.5 |
| 35° | 725.1 | 728.6 | 777.4 | 829.9 | 888.7 |
| 37.5° | 631.3 | 636.0 | 679.5 | 728.9 | 786.9 |
| 40° | 570.6 | 577.7 | 616.1 | 662.7 | 719.4 |
| 42.5° | 512.3 | 520.9 | 556.6 | 600.8 | 651.9 |
| 45° | 434.7 | 443.1 | 472.2 | 508.0 | 554.5 |
| 47.5° | 367.9 | 377.5 | 399.9 | 430.7 | 470.3 |
| 50° | 329.9 | 339.0 | 359.7 | 382.4 | 419.8 |
| 52.5° | 296.6 | 305.5 | 324.0 | 341.6 | 373.5 |
| 55° | 249.9 | 260.3 | 275.4 | 286.0 | 309.4 |
| 57.5° | 211.7 | 221.7 | 233.7 | 238.4 | 252.7 |
| 60° | 186.3 | 197.4 | 208.2 | 207.5 | 215.3 |
| 62.5° | 163.0 | 172.5 | 183.3 | 175.6 | 176.1 |
| 65° | 125.4 | 135.8 | 147.9 | 129.4 | 117.5 |
| 67.5° | 101.3 | 103.4 | 116.1 | 90.3 | 76.2 |
| 70° | 90.0 | 90.0 | 93.5 | 69.9 | 58.1 |
| 72.5° | 79.2 | 79.2 | 76.0 | 56.7 | 44.4 |
| 75° | 63.0 | 63.0 | 57.4 | 39.4 | 26.9 |
| 77.5° | 48.6 | 48.1 | 43.9 | 29.3 | 19.5 |
| 80° | 38.9 | 38.9 | 35.4 | 23.2 | 15.5 |
| 82.5° | 30.5 | 30.5 | 27.4 | 18.1 | 11.5 |
| 85° | 17.6 | 17.6 | 16.4 | 10.6 | 6.4 |
| 87.5° | 6.3 | 6.3 | 5.6 | 3.3 | 2.9 |
| 90° | 3.8 | 5.7 | 5.7 | 3.8 | 1.9 |
| 92.5° | 9.5 | 28.7 | 26.8 | 11.5 | 9.5 |
| 95° | 17.2 | 59.3 | 172.2 | 44.0 | 26.8 |
| 97.5° | 26.8 | 66.9 | 344.3 | 156.9 | 84.2 |
| 100° | 36.4 | 70.8 | 401.8 | 376.9 | 243.0 |
| 102.5° | 47.8 | 76.5 | 399.9 | 529.9 | 436.2 |
| 105° | 59.3 | 84.2 | 373.1 | 629.4 | 585.4 |



TEST NUMBER: P845329

CATALOG NUMBER: SQ4P-WB-050U-075D-B50-1D-UNV

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 91.9 | 112.9 | 290.8 | 633.3 | 721.3 |
| 115° | 103.3 | 124.3 | 277.4 | 585.4 | 690.6 |
| 117.5° | 114.8 | 137.8 | 269.7 | 541.4 | 646.6 |
| 120° | 124.3 | 149.2 | 264.0 | 499.3 | 602.6 |
| 122.5° | 132.0 | 160.7 | 260.2 | 464.9 | 558.6 |
| 125° | 139.7 | 172.2 | 258.3 | 436.2 | 520.4 |
| 127.5° | 147.3 | 179.8 | 258.3 | 415.2 | 485.9 |
| 130° | 155.0 | 183.6 | 256.4 | 394.1 | 457.3 |
| 132.5° | 162.6 | 185.5 | 256.4 | 378.8 | 432.4 |
| 135° | 168.3 | 189.4 | 256.4 | 363.5 | 411.4 |
| 137.5° | 176.0 | 193.3 | 256.4 | 350.1 | 394.1 |
| 140° | 181.7 | 199.0 | 256.4 | 336.7 | 375.0 |
| 142.5° | 189.4 | 204.7 | 256.4 | 323.3 | 357.8 |
| 145° | 197.1 | 210.5 | 254.5 | 313.8 | 340.5 |
| 147.5° | 204.7 | 216.2 | 252.6 | 304.2 | 325.2 |
| 150° | 210.5 | 221.9 | 252.6 | 294.7 | 311.9 |
| 152.5° | 218.1 | 227.6 | 250.7 | 285.0 | 300.4 |
| 155° | 223.8 | 231.5 | 250.7 | 279.3 | 288.8 |
| 157.5° | 229.5 | 237.2 | 250.7 | 273.6 | 281.2 |
| 160° | 235.3 | 241.1 | 252.6 | 269.7 | 275.5 |
| 162.5° | 241.1 | 244.9 | 252.6 | 265.9 | 269.7 |
| 165° | 244.9 | 246.8 | 252.6 | 264.0 | 265.9 |
| 167.5° | 248.7 | 250.7 | 252.6 | 262.1 | 262.1 |
| 170° | 250.7 | 252.6 | 254.5 | 260.2 | 260.2 |
| 172.5° | 254.5 | 254.5 | 254.5 | 258.3 | 258.3 |
| 175° | 256.4 | 256.4 | 254.5 | 258.3 | 256.4 |
| 177.5° | 256.4 | 256.4 | 254.5 | 258.3 | 256.4 |
| 180° | 256.4 | 256.4 | 256.4 | 256.4 | 256.4 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|------|-------|-------|-------|-------|
| 107.5° | 70.8 | 93.8 | 338.6 | 673.5 | 681.1 |
| 110° | 80.4 | 103.3 | 311.9 | 667.7 | 723.2 |



(END OF REPORT)