

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: P845258

Luminaire Tested: **SQ4P-PW1-075U-100D-B35-1D-UNV**

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P845258
REPORT IS A COMBINATION OF REPORTS P700237 AND P700245
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-PW1-075U-100D-B35-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 750 LUMENS PER FOOT
UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

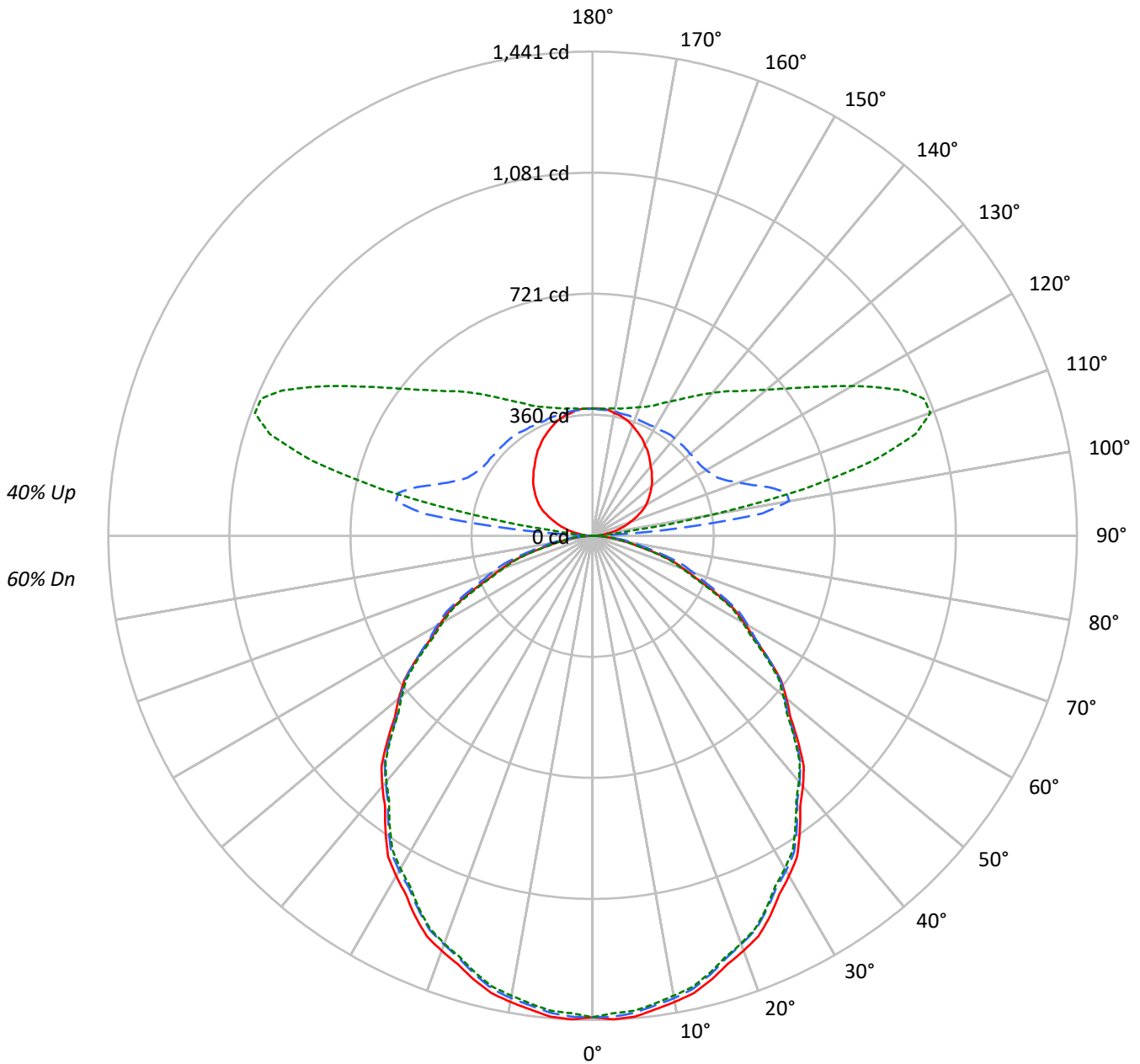
Lumens per Lamp: N/A
Luminaire Lumens: 6106.5 lumens
Efficiency: N/A
Efficacy: 113.3 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 53.9
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: P845258

CATALOG NUMBER: SQ4P-PW1-075U-100D-B35-1D-UNV

Luminous Intensity Polar Plot





TEST NUMBER: P845258

CATALOG NUMBER: SQ4P-PW1-075U-100D-B35-1D-UNV

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 | 89 | 89 | 89 | 76 | 76 | 76 | 65 | 65 | 65 | 60 | | | | | | | | | | | | | | | | | | | |
| 1 | 100 | 96 | 92 | 88 | 93 | 90 | 86 | 83 | 78 | 76 | 73 | 67 | 66 | 64 | 58 | 56 | 55 | 51 | | | | | | | | | | | | | | | | | | | |
| 2 | 91 | 84 | 78 | 72 | 85 | 78 | 73 | 68 | 69 | 64 | 61 | 59 | 56 | 54 | 51 | 49 | 47 | 43 | | | | | | | | | | | | | | | | | | | |
| 3 | 83 | 74 | 66 | 60 | 77 | 69 | 63 | 57 | 61 | 55 | 51 | 53 | 49 | 45 | 45 | 42 | 40 | 36 | | | | | | | | | | | | | | | | | | | |
| 4 | 76 | 65 | 57 | 51 | 71 | 61 | 54 | 49 | 54 | 48 | 44 | 47 | 43 | 39 | 40 | 37 | 34 | 31 | | | | | | | | | | | | | | | | | | | |
| 5 | 70 | 58 | 50 | 44 | 65 | 55 | 47 | 42 | 48 | 42 | 38 | 42 | 37 | 34 | 36 | 33 | 30 | 27 | | | | | | | | | | | | | | | | | | | |
| 6 | 65 | 52 | 44 | 38 | 60 | 49 | 42 | 36 | 44 | 38 | 33 | 38 | 33 | 30 | 33 | 29 | 26 | 24 | | | | | | | | | | | | | | | | | | | |
| 7 | 60 | 47 | 39 | 34 | 56 | 45 | 37 | 32 | 39 | 34 | 29 | 35 | 30 | 26 | 30 | 26 | 23 | 21 | | | | | | | | | | | | | | | | | | | |
| 8 | 56 | 43 | 35 | 30 | 52 | 41 | 33 | 28 | 36 | 30 | 26 | 32 | 27 | 24 | 28 | 24 | 21 | 19 | | | | | | | | | | | | | | | | | | | |
| 9 | 52 | 39 | 32 | 27 | 48 | 37 | 30 | 25 | 33 | 27 | 23 | 29 | 25 | 21 | 26 | 22 | 19 | 17 | | | | | | | | | | | | | | | | | | | |
| 10 | 48 | 36 | 29 | 24 | 45 | 34 | 27 | 23 | 31 | 25 | 21 | 27 | 22 | 19 | 24 | 20 | 17 | 15 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 13217 | 13217 | 13217 |
| 5° | 13304 | 13199 | 13141 |
| 10° | 13197 | 13092 | 13020 |
| 15° | 13058 | 12913 | 12865 |
| 20° | 12901 | 12703 | 12679 |
| 25° | 12721 | 12491 | 12451 |
| 30° | 12453 | 12265 | 12184 |
| 35° | 12100 | 11928 | 11856 |
| 40° | 11722 | 11538 | 11494 |
| 45° | 11265 | 11117 | 11066 |
| 50° | 10800 | 10711 | 10634 |
| 55° | 10293 | 10293 | 10132 |
| 60° | 9667 | 9854 | 9503 |
| 65° | 8844 | 9287 | 8625 |
| 70° | 7796 | 8546 | 7594 |
| 75° | 6662 | 7646 | 6477 |
| 80° | 5170 | 6440 | 5233 |
| 85° | 3335 | 4954 | 4404 |



TEST NUMBER: P845258

CATALOG NUMBER: SQ4P-PW1-075U-100D-B35-1D-UNV

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 134.9 | 2.2 |
| 10°-20° | 380.9 | 6.2 |
| 20°-30° | 565.0 | 9.3 |
| 30°-40° | 661.1 | 10.8 |
| 40°-50° | 658.1 | 10.8 |
| 50°-60° | 568.3 | 9.3 |
| 60°-70° | 409.1 | 6.7 |
| 70°-80° | 214.5 | 3.5 |
| 80°-90° | 54.1 | 0.9 |
| 90°-100° | 150.9 | 2.5 |
| 100°-110° | 525.0 | 8.6 |
| 110°-120° | 508.6 | 8.3 |
| 120°-130° | 398.9 | 6.5 |
| 130°-140° | 315.7 | 5.2 |
| 140°-150° | 243.7 | 4.0 |
| 150°-160° | 174.7 | 2.9 |
| 160°-170° | 106.8 | 1.7 |
| 170°-180° | 36.1 | 0.6 |
| 0°-30° | 1080.8 | 17.7 |
| 0°-40° | 1741.9 | 28.5 |
| 0°-60° | 2968.3 | 48.6 |
| 0°-90° | 3646.1 | 59.7 |
| 90°-120° | 1184.4 | 19.4 |
| 90°-150° | 2142.8 | 35.1 |
| 90°-180° | 2460.0 | 40.3 |
| 0°-180° | 6106.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1433 | 1433 | 1433 | 1433 | 1433 | |
| 5° | 1436 | 1420 | 1425 | 1421 | 1419 | 136 |
| 15° | 1367 | 1350 | 1352 | 1349 | 1347 | 385 |
| 25° | 1250 | 1229 | 1227 | 1219 | 1223 | 575 |
| 35° | 1074 | 1059 | 1059 | 1049 | 1053 | 672 |
| 45° | 863 | 856 | 852 | 850 | 848 | 666 |
| 55° | 640 | 639 | 640 | 631 | 630 | 571 |
| 65° | 405 | 418 | 425 | 409 | 395 | 402 |
| 75° | 187 | 204 | 214 | 200 | 182 | 200 |
| 85° | 32 | 41 | 47 | 44 | 42 | 42 |
| 90° | 6 | 8 | 8 | 6 | 3 | 5 |
| 95° | 25 | 88 | 255 | 65 | 40 | 27 |
| 105° | 88 | 124 | 552 | 931 | 866 | 92 |
| 115° | 153 | 184 | 410 | 866 | 1021 | 151 |
| 125° | 207 | 255 | 382 | 645 | 770 | 185 |
| 135° | 249 | 280 | 379 | 538 | 608 | 193 |
| 145° | 291 | 311 | 376 | 464 | 504 | 182 |
| 155° | 331 | 342 | 371 | 413 | 427 | 153 |
| 165° | 362 | 365 | 373 | 390 | 393 | 102 |
| 175° | 379 | 379 | 376 | 382 | 379 | 36 |
| 180° | 379 | 379 | 379 | 379 | 379 | |



TEST NUMBER: P845258

CATALOG NUMBER: SQ4P-PW1-075U-100D-B35-1D-UNV

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1432.6 | 1432.6 | 1432.6 | 1432.6 | 1432.6 |
| 2.5° | 1440.8 | 1428.9 | 1432.6 | 1429.6 | 1422.5 |
| 5° | 1436.5 | 1420.4 | 1425.2 | 1421.3 | 1418.9 |
| 7.5° | 1422.0 | 1407.2 | 1410.4 | 1406.5 | 1404.9 |
| 10° | 1408.6 | 1393.9 | 1397.4 | 1392.3 | 1389.8 |
| 12.5° | 1393.7 | 1377.7 | 1381.2 | 1376.1 | 1374.7 |
| 15° | 1367.1 | 1349.7 | 1351.9 | 1349.2 | 1346.9 |
| 17.5° | 1336.2 | 1318.8 | 1319.0 | 1315.1 | 1314.4 |
| 20° | 1314.0 | 1295.5 | 1293.8 | 1288.8 | 1291.4 |
| 22.5° | 1289.8 | 1270.3 | 1268.5 | 1261.6 | 1265.1 |
| 25° | 1249.6 | 1228.7 | 1227.0 | 1219.4 | 1223.1 |
| 27.5° | 1203.2 | 1182.6 | 1182.6 | 1171.9 | 1175.8 |
| 30° | 1168.9 | 1149.1 | 1151.3 | 1138.7 | 1143.7 |
| 32.5° | 1132.6 | 1114.7 | 1115.8 | 1103.4 | 1108.4 |
| 35° | 1074.3 | 1059.4 | 1059.0 | 1049.0 | 1052.6 |
| 37.5° | 1014.6 | 1001.6 | 999.4 | 993.7 | 994.6 |
| 40° | 973.3 | 962.1 | 958.0 | 954.3 | 954.3 |
| 42.5° | 929.7 | 919.8 | 915.6 | 912.8 | 911.9 |
| 45° | 863.4 | 856.0 | 852.0 | 849.5 | 848.1 |
| 47.5° | 797.6 | 791.0 | 787.5 | 785.7 | 784.4 |
| 50° | 752.4 | 747.4 | 746.2 | 742.1 | 740.9 |
| 52.5° | 706.9 | 703.9 | 702.6 | 697.8 | 696.5 |
| 55° | 639.9 | 638.8 | 639.9 | 631.2 | 629.9 |
| 57.5° | 570.3 | 572.3 | 576.4 | 564.4 | 561.4 |
| 60° | 523.9 | 528.7 | 534.0 | 520.0 | 515.0 |
| 62.5° | 476.3 | 484.4 | 491.5 | 475.4 | 468.4 |
| 65° | 405.1 | 417.6 | 425.4 | 408.6 | 395.1 |
| 67.5° | 336.6 | 351.8 | 361.2 | 343.4 | 327.9 |
| 70° | 289.0 | 306.4 | 316.8 | 298.8 | 281.5 |
| 72.5° | 247.6 | 267.0 | 275.5 | 258.2 | 241.1 |
| 75° | 186.9 | 204.1 | 214.5 | 200.2 | 181.7 |
| 77.5° | 132.5 | 148.8 | 157.5 | 145.1 | 129.7 |
| 80° | 97.3 | 114.5 | 121.2 | 110.8 | 98.5 |
| 82.5° | 69.0 | 83.4 | 87.9 | 81.6 | 73.1 |
| 85° | 31.5 | 41.3 | 46.8 | 44.1 | 41.6 |
| 87.5° | 8.0 | 15.0 | 19.2 | 19.2 | 20.3 |
| 90° | 5.7 | 8.5 | 8.5 | 5.7 | 2.8 |
| 92.5° | 14.2 | 42.5 | 39.6 | 16.9 | 14.2 |
| 95° | 25.4 | 87.7 | 254.6 | 65.1 | 39.6 |
| 97.5° | 39.6 | 99.0 | 509.2 | 232.0 | 124.5 |
| 100° | 53.7 | 104.7 | 594.1 | 557.4 | 359.3 |
| 102.5° | 70.8 | 113.1 | 591.3 | 783.7 | 645.1 |
| 105° | 87.7 | 124.5 | 551.7 | 930.8 | 865.7 |



TEST NUMBER: P845258

CATALOG NUMBER: SQ4P-PW1-075U-100D-B35-1D-UNV

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|--------|
| 112.5° | 135.8 | 166.9 | 430.1 | 936.5 | 1066.6 |
| 115° | 152.8 | 183.9 | 410.2 | 865.7 | 1021.3 |
| 117.5° | 169.8 | 203.7 | 399.0 | 800.7 | 956.3 |
| 120° | 183.9 | 220.7 | 390.4 | 738.4 | 891.2 |
| 122.5° | 195.2 | 237.7 | 384.8 | 687.5 | 826.1 |
| 125° | 206.6 | 254.6 | 381.9 | 645.1 | 769.5 |
| 127.5° | 217.8 | 266.0 | 381.9 | 614.0 | 718.7 |
| 130° | 229.2 | 271.6 | 379.1 | 582.8 | 676.2 |
| 132.5° | 240.4 | 274.4 | 379.1 | 560.2 | 639.4 |
| 135° | 248.9 | 280.1 | 379.1 | 537.5 | 608.3 |
| 137.5° | 260.3 | 285.7 | 379.1 | 517.8 | 582.8 |
| 140° | 268.8 | 294.3 | 379.1 | 497.9 | 554.6 |
| 142.5° | 280.1 | 302.8 | 379.1 | 478.1 | 529.0 |
| 145° | 291.4 | 311.2 | 376.3 | 464.0 | 503.6 |
| 147.5° | 302.8 | 319.7 | 373.4 | 449.8 | 481.0 |
| 150° | 311.2 | 328.2 | 373.4 | 435.7 | 461.2 |
| 152.5° | 322.5 | 336.6 | 370.6 | 421.6 | 444.2 |
| 155° | 331.0 | 342.3 | 370.6 | 413.1 | 427.2 |
| 157.5° | 339.5 | 350.8 | 370.6 | 404.5 | 415.9 |
| 160° | 348.0 | 356.5 | 373.4 | 399.0 | 407.4 |
| 162.5° | 356.5 | 362.2 | 373.4 | 393.3 | 399.0 |
| 165° | 362.2 | 365.0 | 373.4 | 390.4 | 393.3 |
| 167.5° | 367.8 | 370.6 | 373.4 | 387.6 | 387.6 |
| 170° | 370.6 | 373.4 | 376.3 | 384.8 | 384.8 |
| 172.5° | 376.3 | 376.3 | 376.3 | 381.9 | 381.9 |
| 175° | 379.1 | 379.1 | 376.3 | 381.9 | 379.1 |
| 177.5° | 379.1 | 379.1 | 376.3 | 381.9 | 379.1 |
| 180° | 379.1 | 379.1 | 379.1 | 379.1 | 379.1 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|-------|-------|-------|-------|--------|
| 107.5° | 104.7 | 138.7 | 500.7 | 995.9 | 1007.2 |
| 110° | 118.8 | 152.8 | 461.2 | 987.4 | 1069.5 |



(END OF REPORT)