

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P853699

Luminaire Tested: SQ2-F-100D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853699
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2308-131-13)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-F-100D-935-UNV-STD-W-4
Description: CORELITE SQ2 SURFACE LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: -
Ballast/Driver: -

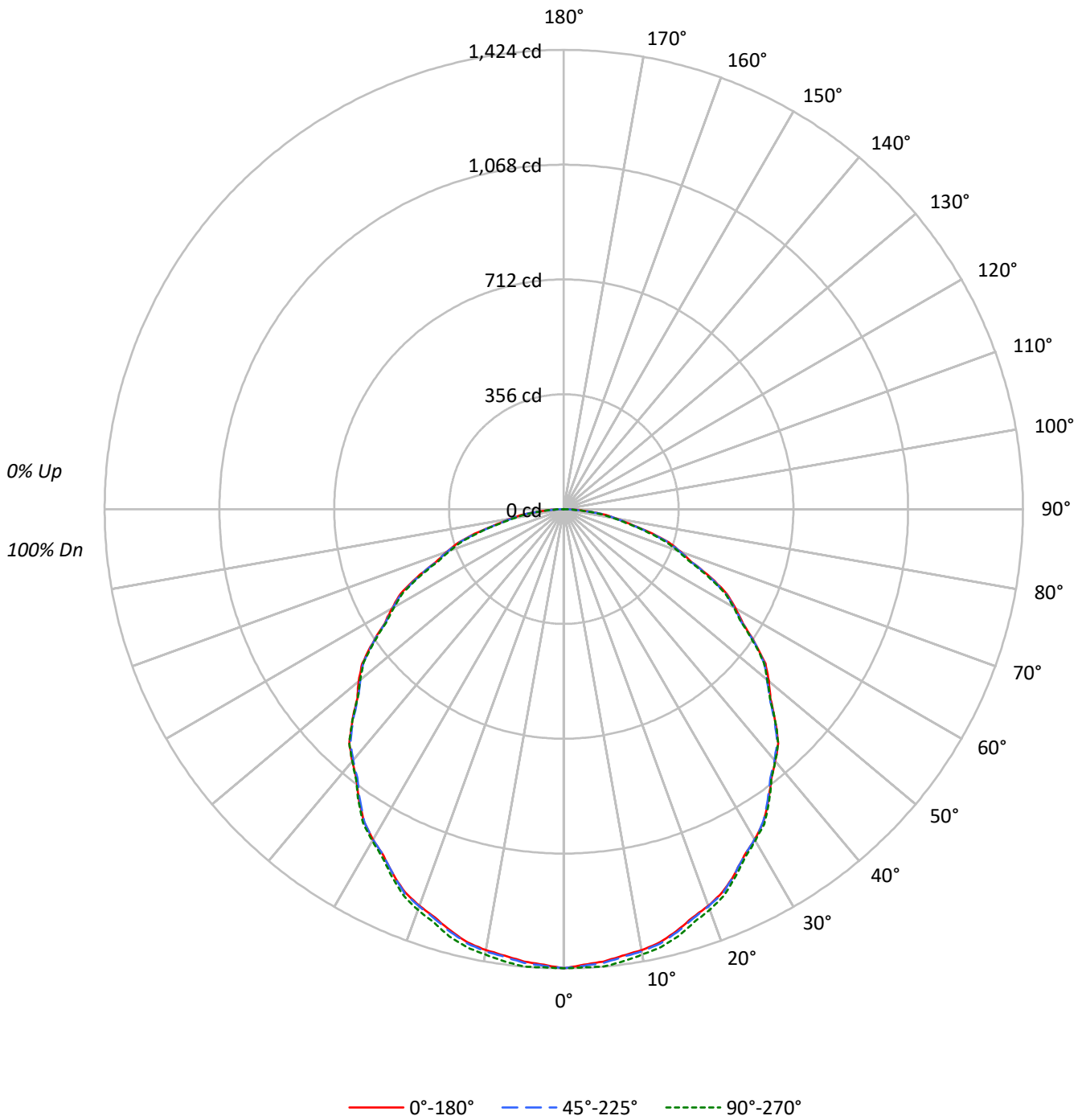
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3996.4 lumens
Efficiency: N/A
Efficacy: 106.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.25 / 1.36
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 37.6
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

TEST NUMBER: P853699
CATALOG NUMBER: SQ2-F-100D-935-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P853699

CATALOG NUMBER: SQ2-F-100D-935-UNV-STD-W-4

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 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | | | | | | | | | | | | | | | | | |
| 1 | 109 | 104 | 100 | 96 | 106 | 102 | 98 | 94 | 97 | 94 | 91 | 93 | 91 | 88 | 90 | 88 | 86 | 84 | | | | | | | | | | | | | | | | | | | |
| 2 | 99 | 90 | 84 | 78 | 96 | 89 | 82 | 77 | 85 | 80 | 75 | 82 | 77 | 73 | 79 | 75 | 72 | 70 | | | | | | | | | | | | | | | | | | | |
| 3 | 90 | 79 | 71 | 65 | 88 | 78 | 70 | 64 | 75 | 68 | 63 | 72 | 66 | 62 | 69 | 65 | 61 | 59 | | | | | | | | | | | | | | | | | | | |
| 4 | 82 | 70 | 61 | 55 | 80 | 69 | 61 | 54 | 66 | 59 | 54 | 64 | 58 | 53 | 62 | 57 | 52 | 50 | | | | | | | | | | | | | | | | | | | |
| 5 | 76 | 63 | 54 | 47 | 74 | 62 | 53 | 47 | 60 | 52 | 46 | 58 | 51 | 46 | 56 | 50 | 45 | 43 | | | | | | | | | | | | | | | | | | | |
| 6 | 70 | 57 | 48 | 41 | 68 | 56 | 47 | 41 | 54 | 46 | 41 | 52 | 45 | 40 | 50 | 44 | 40 | 38 | | | | | | | | | | | | | | | | | | | |
| 7 | 65 | 51 | 42 | 36 | 63 | 50 | 42 | 36 | 49 | 41 | 36 | 47 | 41 | 36 | 46 | 40 | 35 | 33 | | | | | | | | | | | | | | | | | | | |
| 8 | 60 | 47 | 38 | 32 | 59 | 46 | 38 | 32 | 45 | 37 | 32 | 43 | 37 | 32 | 42 | 36 | 32 | 30 | | | | | | | | | | | | | | | | | | | |
| 9 | 56 | 43 | 35 | 29 | 55 | 42 | 34 | 29 | 41 | 34 | 29 | 40 | 33 | 29 | 39 | 33 | 29 | 27 | | | | | | | | | | | | | | | | | | | |
| 10 | 53 | 40 | 32 | 26 | 52 | 39 | 31 | 26 | 38 | 31 | 26 | 37 | 31 | 26 | 36 | 30 | 26 | 24 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 22985 | 22985 | 22985 |
| 5° | 22822 | 22885 | 23073 |
| 10° | 22768 | 22832 | 22991 |
| 15° | 22629 | 22695 | 22922 |
| 20° | 22495 | 22527 | 22728 |
| 25° | 22287 | 22287 | 22425 |
| 30° | 22057 | 22057 | 22130 |
| 35° | 21790 | 21715 | 21867 |
| 40° | 21503 | 21420 | 21503 |
| 45° | 21169 | 21080 | 21169 |
| 50° | 20851 | 20657 | 20705 |
| 55° | 20366 | 20310 | 20200 |
| 60° | 19853 | 19730 | 19604 |
| 65° | 19266 | 19045 | 18819 |
| 70° | 18128 | 18038 | 17670 |
| 75° | 17062 | 16700 | 16213 |
| 80° | 15146 | 14784 | 14245 |
| 85° | 12208 | 11134 | 10411 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 21299 cd/sqm

TEST NUMBER: P853699

CATALOG NUMBER: SQ2-F-100D-935-UNV-STD-W-4

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 134.6 | 3.4 |
| 10°-20° | 384.5 | 9.6 |
| 20°-30° | 578.5 | 14.5 |
| 30°-40° | 692.2 | 17.3 |
| 40°-50° | 714.2 | 17.9 |
| 50°-60° | 644.3 | 16.1 |
| 60°-70° | 491.7 | 12.3 |
| 70°-80° | 282.7 | 7.1 |
| 80°-90° | 73.7 | 1.8 |
| 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° | 1097.6 | 27.5 |
| 0°-40° | 1789.8 | 44.8 |
| 0°-60° | 3148.3 | 78.8 |
| 0°-90° | 3996.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3996.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1424 | 1424 | 1424 | 1424 | 1424 | |
| 5° | 1408 | 1427 | 1412 | 1414 | 1424 | 134 |
| 15° | 1354 | 1371 | 1358 | 1364 | 1371 | 382 |
| 25° | 1251 | 1264 | 1251 | 1253 | 1259 | 576 |
| 35° | 1106 | 1113 | 1102 | 1106 | 1109 | 691 |
| 45° | 927 | 933 | 923 | 925 | 927 | 715 |
| 55° | 724 | 727 | 722 | 718 | 718 | 647 |
| 65° | 504 | 502 | 498 | 494 | 493 | 496 |
| 75° | 274 | 272 | 268 | 262 | 260 | 288 |
| 85° | 66 | 62 | 60 | 54 | 56 | 79 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P853699

CATALOG NUMBER: SQ2-F-100D-935-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1423.6 | 1423.6 | 1423.6 | 1423.6 | 1423.6 |
| 2.5° | 1414.3 | 1431.0 | 1417.4 | 1420.6 | 1422.1 |
| 5° | 1408.1 | 1427.1 | 1412.0 | 1414.1 | 1423.6 |
| 7.5° | 1396.5 | 1417.0 | 1400.4 | 1404.1 | 1414.7 |
| 10° | 1388.7 | 1407.7 | 1392.6 | 1394.7 | 1402.3 |
| 12.5° | 1376.3 | 1395.3 | 1380.2 | 1383.8 | 1391.4 |
| 15° | 1353.8 | 1370.9 | 1357.7 | 1363.7 | 1371.3 |
| 17.5° | 1327.8 | 1346.0 | 1331.3 | 1336.5 | 1342.9 |
| 20° | 1309.2 | 1324.4 | 1311.1 | 1313.3 | 1322.8 |
| 22.5° | 1285.9 | 1301.1 | 1289.4 | 1290.0 | 1297.9 |
| 25° | 1251.0 | 1264.3 | 1251.0 | 1253.1 | 1258.8 |
| 27.5° | 1211.1 | 1222.4 | 1211.1 | 1213.1 | 1218.0 |
| 30° | 1183.1 | 1194.5 | 1183.1 | 1185.1 | 1187.0 |
| 32.5° | 1152.1 | 1162.0 | 1150.5 | 1152.6 | 1157.5 |
| 35° | 1105.5 | 1113.1 | 1101.7 | 1105.6 | 1109.4 |
| 37.5° | 1055.9 | 1061.6 | 1052.0 | 1054.0 | 1057.4 |
| 40° | 1020.2 | 1025.9 | 1016.3 | 1018.3 | 1020.2 |
| 42.5° | 984.5 | 988.7 | 979.1 | 981.1 | 984.5 |
| 45° | 927.1 | 932.8 | 923.2 | 925.2 | 927.1 |
| 47.5° | 868.9 | 872.3 | 864.3 | 862.8 | 866.2 |
| 50° | 830.1 | 832.0 | 822.4 | 822.4 | 824.3 |
| 52.5° | 788.2 | 790.1 | 783.6 | 780.5 | 782.4 |
| 55° | 723.5 | 727.2 | 721.5 | 717.6 | 717.6 |
| 57.5° | 658.3 | 661.7 | 654.4 | 652.5 | 652.1 |
| 60° | 614.8 | 616.7 | 611.0 | 609.0 | 607.1 |
| 62.5° | 571.4 | 571.8 | 566.0 | 564.0 | 562.1 |
| 65° | 504.3 | 502.4 | 498.5 | 494.5 | 492.6 |
| 67.5° | 429.0 | 430.9 | 427.1 | 420.9 | 420.9 |
| 70° | 384.0 | 385.9 | 382.1 | 374.3 | 374.3 |
| 72.5° | 340.6 | 339.4 | 337.1 | 330.8 | 327.8 |
| 75° | 273.5 | 271.6 | 267.7 | 261.8 | 259.9 |
| 77.5° | 206.4 | 204.5 | 202.5 | 195.2 | 196.7 |
| 80° | 162.9 | 161.0 | 159.0 | 153.2 | 153.2 |
| 82.5° | 124.1 | 120.7 | 118.7 | 112.9 | 112.9 |
| 85° | 65.9 | 62.2 | 60.1 | 54.4 | 56.2 |
| 87.5° | 18.6 | 17.1 | 15.5 | 12.4 | 12.4 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



TEST NUMBER: P853699

CATALOG NUMBER: SQ2-F-100D-935-UNV-STD-W-4

CIE UGR TABLE:

| Reflectances: | | | | | | | | | | | |
|-----------------|------|------------------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|
| Ceiling | | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 |
| Wall | | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 |
| Reference plane | | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Room dimensions | | Viewed crosswise | | | | | Viewed endwise | | | | |
| X=2H | Y=2H | 22.66 | 24.30 | 23.02 | 24.61 | 24.93 | 22.58 | 24.22 | 22.94 | 24.53 | 24.85 |
| | 3H | 24.49 | 25.97 | 24.87 | 26.30 | 26.66 | 24.37 | 25.85 | 24.75 | 26.18 | 26.54 |
| | 4H | 25.18 | 26.58 | 25.58 | 26.93 | 27.30 | 25.03 | 26.43 | 25.43 | 26.78 | 27.15 |
| | 6H | 25.69 | 26.99 | 26.10 | 27.35 | 27.74 | 25.50 | 26.80 | 25.91 | 27.17 | 27.56 |
| | 8H | 25.85 | 27.09 | 26.27 | 27.48 | 27.88 | 25.65 | 26.89 | 26.07 | 27.27 | 27.67 |
| | 12H | 25.95 | 27.14 | 26.38 | 27.52 | 27.95 | 25.72 | 26.91 | 26.15 | 27.29 | 27.72 |
| 4H | 2H | 23.29 | 24.69 | 23.69 | 25.04 | 25.42 | 23.23 | 24.63 | 23.63 | 24.98 | 25.35 |
| | 3H | 25.35 | 26.52 | 25.76 | 26.92 | 27.32 | 25.24 | 26.41 | 25.65 | 26.81 | 27.21 |
| | 4H | 26.17 | 27.23 | 26.60 | 27.64 | 28.08 | 26.02 | 27.09 | 26.46 | 27.50 | 27.94 |
| | 6H | 26.80 | 27.73 | 27.25 | 28.17 | 28.62 | 26.62 | 27.55 | 27.07 | 27.99 | 28.44 |
| | 8H | 27.01 | 27.88 | 27.47 | 28.32 | 28.78 | 26.80 | 27.67 | 27.26 | 28.12 | 28.58 |
| | 12H | 27.15 | 27.93 | 27.63 | 28.40 | 28.87 | 26.92 | 27.70 | 27.40 | 28.18 | 28.64 |
| 8H | 4H | 26.48 | 27.35 | 26.94 | 27.79 | 28.25 | 26.35 | 27.22 | 26.81 | 27.66 | 28.13 |
| | 6H | 27.23 | 27.95 | 27.72 | 28.44 | 28.91 | 27.06 | 27.78 | 27.55 | 28.27 | 28.75 |
| | 8H | 27.50 | 28.15 | 28.01 | 28.66 | 29.14 | 27.31 | 27.96 | 27.82 | 28.47 | 28.95 |
| | 12H | 27.71 | 28.28 | 28.21 | 28.77 | 29.33 | 27.48 | 28.05 | 27.99 | 28.54 | 29.10 |
| 12H | 4H | 26.51 | 27.29 | 26.99 | 27.76 | 28.23 | 26.39 | 27.17 | 26.87 | 27.64 | 28.11 |
| | 6H | 27.28 | 27.93 | 27.79 | 28.43 | 28.92 | 27.12 | 27.77 | 27.63 | 28.27 | 28.76 |
| | 8H | 27.61 | 28.18 | 28.12 | 28.67 | 29.23 | 27.42 | 28.00 | 27.93 | 28.49 | 29.05 |