

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
(formerly Eaton)

Brand: CORELITE

Report Number: P561849

Luminaire Tested: **SQ4-PR1-050U-075D-92765-1D-UNV-STD-W-4 (6500K)**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P561849
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2106-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PR1-050U-075D-92765-1D-UNV-STD-W-4 (6500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K/65000K CCT, 90 CRI LEDS, TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5540.9 lumens
Efficiency: N/A
Efficacy: 116.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

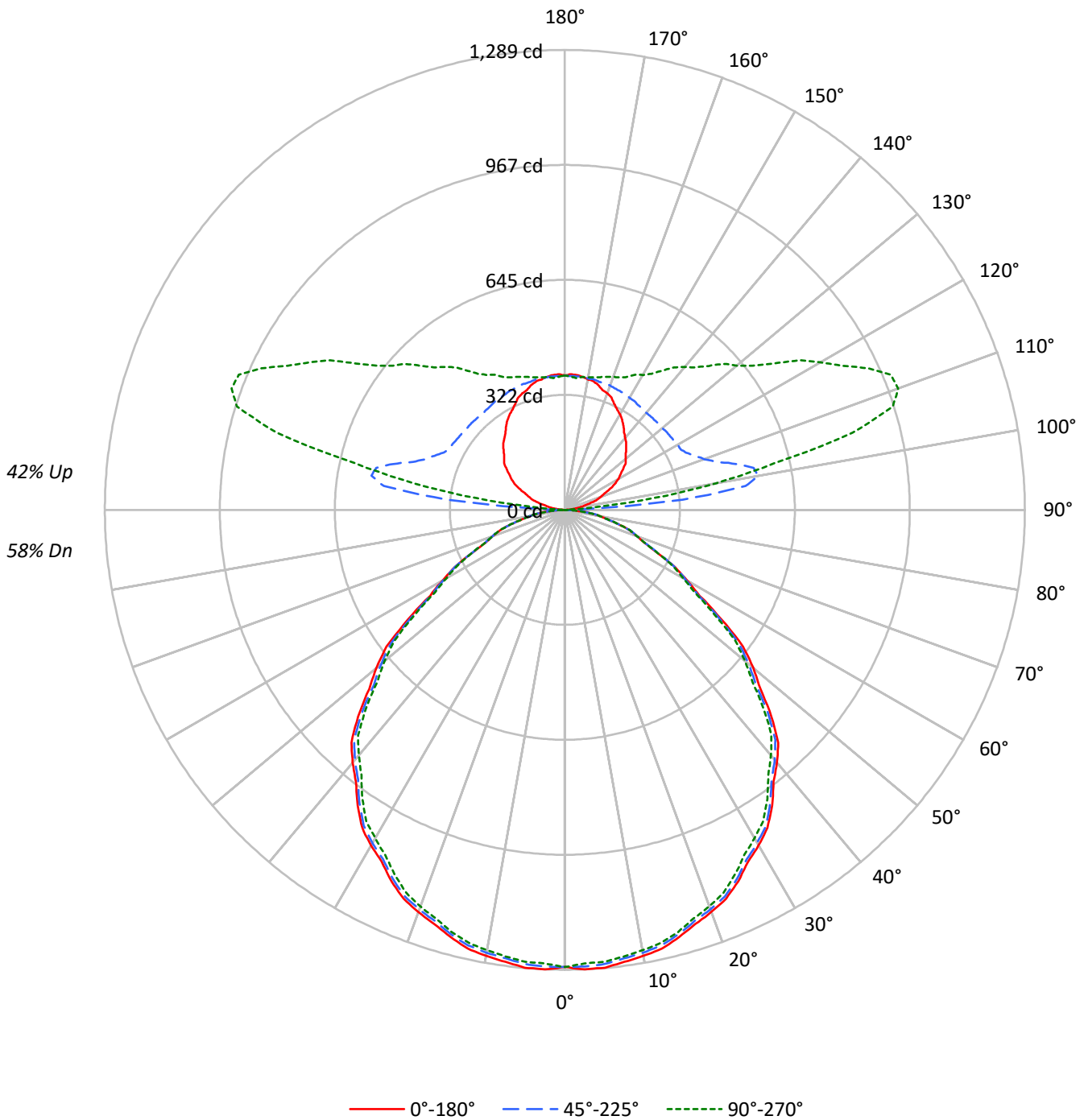
Input Watts (W): 47.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P561849

CATALOG NUMBER: SQ4-PR1-050U-075D-92765-1D-UNV-STD-W-4 (6500K)

Luminous Intensity Polar Plot





TEST NUMBER: P561849

CATALOG NUMBER: SQ4-PR1-050U-075D-92765-1D-UNV-STD-W-4 (6500K)

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 | 109 | 109 | 109 | 109 | 102 | 102 | 102 | 102 | 88 | 88 | 88 | 75 | 75 | 75 | 63 | 63 | 63 | 58 |
| 1 | 100 | 96 | 92 | 88 | 93 | 89 | 86 | 83 | 77 | 75 | 73 | 67 | 65 | 63 | 56 | 55 | 54 | 49 |
| 2 | 91 | 84 | 78 | 73 | 85 | 78 | 73 | 69 | 68 | 64 | 61 | 59 | 56 | 53 | 50 | 48 | 46 | 42 |
| 3 | 83 | 74 | 67 | 61 | 78 | 69 | 63 | 58 | 60 | 56 | 52 | 52 | 49 | 45 | 45 | 42 | 40 | 36 |
| 4 | 76 | 66 | 58 | 52 | 71 | 62 | 55 | 49 | 54 | 48 | 44 | 47 | 43 | 39 | 40 | 37 | 34 | 31 |
| 5 | 70 | 59 | 51 | 45 | 65 | 55 | 48 | 43 | 48 | 43 | 38 | 42 | 38 | 34 | 36 | 33 | 30 | 27 |
| 6 | 65 | 53 | 45 | 39 | 60 | 50 | 42 | 37 | 44 | 38 | 34 | 38 | 34 | 30 | 33 | 29 | 27 | 24 |
| 7 | 60 | 48 | 40 | 34 | 56 | 45 | 38 | 33 | 40 | 34 | 30 | 35 | 30 | 27 | 30 | 26 | 24 | 21 |
| 8 | 56 | 43 | 36 | 30 | 52 | 41 | 34 | 29 | 36 | 31 | 26 | 32 | 27 | 24 | 28 | 24 | 21 | 19 |
| 9 | 52 | 40 | 32 | 27 | 48 | 38 | 31 | 26 | 33 | 28 | 24 | 29 | 25 | 21 | 26 | 22 | 19 | 17 |
| 10 | 49 | 36 | 29 | 24 | 45 | 34 | 28 | 23 | 31 | 25 | 21 | 27 | 23 | 19 | 24 | 20 | 18 | 16 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 11821 | 11821 | 11821 |
| 5° | 11927 | 11835 | 11774 |
| 10° | 11890 | 11806 | 11744 |
| 15° | 11837 | 11764 | 11700 |
| 20° | 11778 | 11701 | 11615 |
| 25° | 11695 | 11616 | 11481 |
| 30° | 11569 | 11487 | 11321 |
| 35° | 11398 | 11298 | 11137 |
| 40° | 11138 | 11018 | 10819 |
| 45° | 10684 | 10497 | 10280 |
| 50° | 9884 | 9647 | 9456 |
| 55° | 8627 | 8432 | 8253 |
| 60° | 7270 | 7209 | 7065 |
| 65° | 6287 | 6311 | 6263 |
| 70° | 5775 | 5805 | 5805 |
| 75° | 5547 | 5547 | 5586 |
| 80° | 5218 | 5276 | 5218 |
| 85° | 4203 | 4668 | 4668 |



TEST NUMBER: P561849

CATALOG NUMBER: SQ4-PR1-050U-075D-92765-1D-UNV-STD-W-4 (6500K)

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 121.2 | 2.2 |
| 10°-20° | 346.6 | 6.3 |
| 20°-30° | 522.9 | 9.4 |
| 30°-40° | 623.0 | 11.2 |
| 40°-50° | 614.2 | 11.1 |
| 50°-60° | 469.4 | 8.5 |
| 60°-70° | 290.5 | 5.2 |
| 70°-80° | 165.0 | 3.0 |
| 80°-90° | 50.2 | 0.9 |
| 90°-100° | 171.5 | 3.1 |
| 100°-110° | 488.0 | 8.8 |
| 110°-120° | 467.6 | 8.4 |
| 120°-130° | 370.1 | 6.7 |
| 130°-140° | 297.0 | 5.4 |
| 140°-150° | 232.5 | 4.2 |
| 150°-160° | 170.1 | 3.1 |
| 160°-170° | 105.4 | 1.9 |
| 170°-180° | 35.8 | 0.6 |
| 0°-30° | 990.7 | 17.9 |
| 0°-40° | 1613.6 | 29.1 |
| 0°-60° | 2697.3 | 48.7 |
| 0°-90° | 3202.9 | 57.8 |
| 90°-120° | 1127.1 | 20.3 |
| 90°-150° | 2026.7 | 36.6 |
| 90°-180° | 2338.0 | 42.2 |
| 0°-180° | 5540.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1281 | 1281 | 1281 | 1281 | 1281 | |
| 5° | 1288 | 1274 | 1278 | 1273 | 1271 | 122 |
| 15° | 1239 | 1226 | 1232 | 1227 | 1225 | 350 |
| 25° | 1149 | 1135 | 1141 | 1129 | 1128 | 529 |
| 35° | 1012 | 1000 | 1003 | 990 | 989 | 632 |
| 45° | 819 | 808 | 804 | 790 | 788 | 627 |
| 55° | 536 | 528 | 524 | 515 | 513 | 481 |
| 65° | 288 | 286 | 289 | 287 | 287 | 292 |
| 75° | 156 | 156 | 156 | 157 | 157 | 164 |
| 85° | 40 | 42 | 44 | 44 | 44 | 46 |
| 90° | 0 | 0 | 0 | 0 | 0 | 2 |
| 95° | 19 | 74 | 332 | 115 | 71 | 21 |
| 105° | 76 | 115 | 497 | 878 | 835 | 80 |
| 115° | 141 | 170 | 377 | 799 | 938 | 139 |
| 125° | 199 | 221 | 360 | 597 | 714 | 178 |
| 135° | 243 | 264 | 356 | 504 | 570 | 188 |
| 145° | 287 | 302 | 358 | 437 | 476 | 179 |
| 155° | 328 | 335 | 367 | 395 | 411 | 151 |
| 165° | 362 | 364 | 371 | 379 | 385 | 102 |
| 175° | 379 | 377 | 376 | 374 | 371 | 36 |
| 180° | 376 | 376 | 376 | 376 | 376 | |

TEST NUMBER: P561849

CATALOG NUMBER: SQ4-PR1-050U-075D-92765-1D-UNV-STD-W-4 (6500K)

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1281.2 | 1281.2 | 1281.2 | 1281.2 | 1281.2 |
| 2.5° | 1289.2 | 1277.9 | 1281.2 | 1278.4 | 1272.4 |
| 5° | 1287.8 | 1273.8 | 1277.9 | 1273.4 | 1271.3 |
| 7.5° | 1277.9 | 1264.1 | 1268.2 | 1263.8 | 1262.5 |
| 10° | 1269.1 | 1256.1 | 1260.2 | 1255.8 | 1253.6 |
| 12.5° | 1259.4 | 1245.6 | 1250.5 | 1245.2 | 1243.0 |
| 15° | 1239.3 | 1226.3 | 1231.6 | 1227.1 | 1224.9 |
| 17.5° | 1217.2 | 1203.4 | 1208.6 | 1203.5 | 1200.7 |
| 20° | 1199.6 | 1186.6 | 1191.8 | 1184.1 | 1183.0 |
| 22.5° | 1180.1 | 1167.2 | 1172.4 | 1162.0 | 1161.8 |
| 25° | 1148.8 | 1134.8 | 1141.1 | 1128.9 | 1127.8 |
| 27.5° | 1111.5 | 1098.5 | 1103.8 | 1091.4 | 1090.1 |
| 30° | 1085.9 | 1072.9 | 1078.2 | 1064.9 | 1062.7 |
| 32.5° | 1056.8 | 1044.7 | 1049.0 | 1035.8 | 1034.5 |
| 35° | 1012.0 | 1000.1 | 1003.1 | 989.9 | 988.8 |
| 37.5° | 961.0 | 950.2 | 951.9 | 937.3 | 936.2 |
| 40° | 924.8 | 914.0 | 914.8 | 899.4 | 898.3 |
| 42.5° | 885.0 | 874.3 | 873.3 | 857.9 | 856.8 |
| 45° | 818.8 | 808.0 | 804.5 | 790.1 | 787.9 |
| 47.5° | 743.3 | 732.6 | 725.9 | 714.2 | 712.7 |
| 50° | 688.6 | 677.8 | 672.1 | 662.1 | 658.8 |
| 52.5° | 629.5 | 618.7 | 613.8 | 604.7 | 601.4 |
| 55° | 536.3 | 527.7 | 524.2 | 515.3 | 513.1 |
| 57.5° | 447.8 | 442.0 | 441.0 | 432.3 | 431.5 |
| 60° | 394.0 | 390.7 | 390.7 | 382.9 | 382.9 |
| 62.5° | 348.1 | 345.7 | 347.4 | 342.3 | 341.4 |
| 65° | 288.0 | 285.9 | 289.1 | 286.9 | 286.9 |
| 67.5° | 240.6 | 240.6 | 242.6 | 241.7 | 241.7 |
| 70° | 214.1 | 214.1 | 215.2 | 215.2 | 215.2 |
| 72.5° | 190.3 | 189.4 | 192.2 | 192.2 | 191.4 |
| 75° | 155.6 | 155.6 | 155.6 | 156.7 | 156.7 |
| 77.5° | 121.2 | 121.4 | 122.3 | 122.0 | 121.2 |
| 80° | 98.2 | 99.3 | 99.3 | 98.2 | 98.2 |
| 82.5° | 75.3 | 76.3 | 76.4 | 76.1 | 75.3 |
| 85° | 39.7 | 41.9 | 44.1 | 44.1 | 44.1 |
| 87.5° | 11.5 | 14.9 | 17.7 | 17.6 | 16.8 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 92.5° | 5.7 | 30.4 | 70.4 | 20.5 | 15.5 |
| 95° | 18.6 | 73.9 | 332.0 | 114.9 | 70.8 |
| 97.5° | 34.2 | 86.5 | 511.3 | 365.9 | 250.7 |
| 100° | 45.1 | 94.1 | 550.3 | 557.4 | 429.3 |
| 102.5° | 57.1 | 102.2 | 541.7 | 713.5 | 601.6 |
| 105° | 75.8 | 115.0 | 497.3 | 878.4 | 835.1 |
| 107.5° | 94.9 | 130.0 | 445.5 | 925.0 | 963.6 |
| 110° | 108.1 | 140.9 | 415.7 | 907.2 | 993.9 |

TEST NUMBER: P561849

CATALOG NUMBER: SQ4-PR1-050U-075D-92765-1D-UNV-STD-W-4 (6500K)

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 120.6 | 151.8 | 395.7 | 865.1 | 988.8 |
| 115° | 141.0 | 170.4 | 377.1 | 798.9 | 938.1 |
| 117.5° | 158.9 | 186.4 | 366.1 | 726.5 | 874.0 |
| 120° | 173.2 | 196.3 | 364.9 | 685.1 | 826.5 |
| 122.5° | 184.6 | 207.7 | 362.1 | 648.9 | 780.1 |
| 125° | 198.9 | 220.6 | 359.9 | 597.3 | 714.1 |
| 127.5° | 214.5 | 234.8 | 358.8 | 566.5 | 662.8 |
| 130° | 222.5 | 242.8 | 357.1 | 545.0 | 629.0 |
| 132.5° | 231.1 | 250.9 | 357.1 | 528.3 | 605.5 |
| 135° | 243.3 | 263.6 | 355.6 | 504.5 | 570.3 |
| 137.5° | 254.7 | 274.5 | 355.5 | 484.4 | 541.3 |
| 140° | 263.3 | 283.6 | 354.9 | 467.8 | 522.4 |
| 142.5° | 273.1 | 290.0 | 356.6 | 454.5 | 503.5 |
| 145° | 286.9 | 301.6 | 358.5 | 436.7 | 475.8 |
| 147.5° | 298.8 | 313.1 | 361.6 | 418.7 | 452.5 |
| 150° | 309.1 | 318.9 | 362.8 | 412.7 | 436.5 |
| 152.5° | 317.1 | 327.5 | 363.9 | 404.7 | 426.8 |
| 155° | 327.7 | 335.4 | 367.1 | 394.6 | 410.7 |
| 157.5° | 340.9 | 345.5 | 367.8 | 390.1 | 401.6 |
| 160° | 347.8 | 351.3 | 370.7 | 386.6 | 396.4 |
| 162.5° | 351.8 | 355.8 | 371.2 | 383.7 | 391.3 |
| 165° | 362.1 | 363.5 | 371.4 | 379.4 | 385.0 |
| 167.5° | 369.1 | 367.8 | 374.7 | 378.3 | 380.5 |
| 170° | 371.4 | 370.7 | 373.5 | 374.3 | 377.1 |
| 172.5° | 376.5 | 374.2 | 375.2 | 373.1 | 375.4 |
| 175° | 379.2 | 377.1 | 375.7 | 373.5 | 370.7 |
| 177.5° | 380.4 | 377.0 | 375.2 | 373.0 | 373.5 |
| 180° | 376.4 | 376.4 | 376.4 | 376.4 | 376.4 |

(END OF REPORT)