

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: P561497

Luminaire Tested: **SQ4-PC3-050U-100D-92765-1D-UNV-STD-W-4 (5700K)**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P561497
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2106-289-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PC3-050U-100D-92765-1D-UNV-STD-W-4 (5700K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE PYRAMID CONTINUOUS LENS
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K/65000K CCT, 90 CRI LEDS, TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6551.9 lumens
Efficiency: N/A
Efficacy: 112.8 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

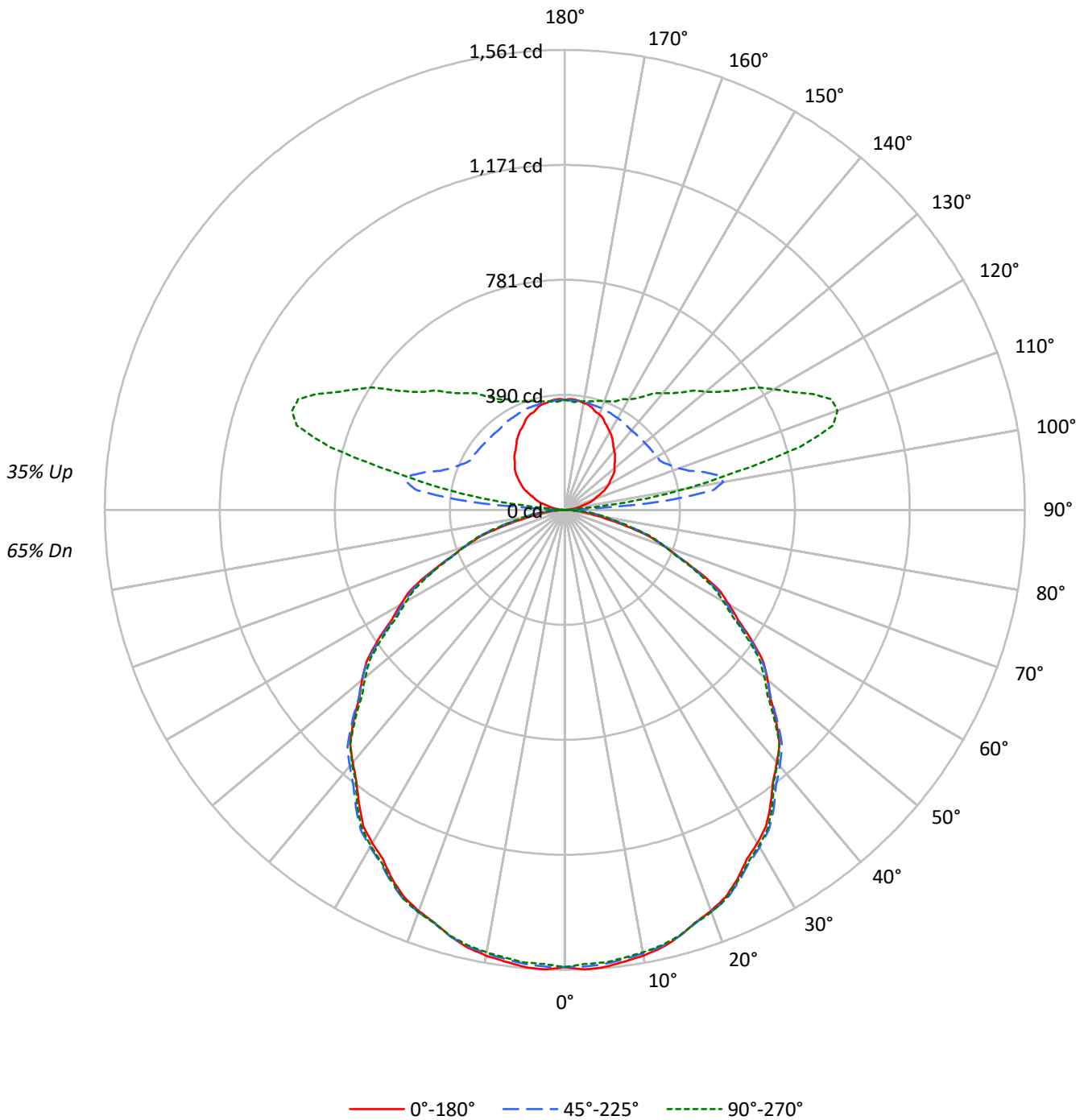
Input Watts (W): 58.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P561497

CATALOG NUMBER: SQ4-PC3-050U-100D-92765-1D-UNV-STD-W-4 (5700K)

Luminous Intensity Polar Plot





TEST NUMBER: P561497

CATALOG NUMBER: SQ4-PC3-050U-100D-92765-1D-UNV-STD-W-4 (5700K)

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 | 111 | 111 | 111 | 111 | 104 | 104 | 104 | 104 | 91 | 91 | 91 | 80 | 80 | 80 | 70 | 70 | 70 | 65 |
| 1 | 101 | 97 | 93 | 89 | 95 | 91 | 88 | 85 | 80 | 78 | 75 | 71 | 69 | 67 | 62 | 60 | 59 | 55 |
| 2 | 92 | 85 | 78 | 73 | 86 | 80 | 74 | 69 | 71 | 66 | 63 | 62 | 59 | 56 | 54 | 52 | 50 | 46 |
| 3 | 84 | 74 | 67 | 61 | 79 | 70 | 63 | 58 | 62 | 57 | 53 | 55 | 51 | 47 | 48 | 45 | 42 | 39 |
| 4 | 77 | 66 | 58 | 51 | 72 | 62 | 55 | 49 | 55 | 49 | 45 | 49 | 44 | 41 | 43 | 39 | 36 | 33 |
| 5 | 71 | 59 | 50 | 44 | 66 | 55 | 48 | 42 | 49 | 43 | 39 | 44 | 39 | 35 | 39 | 35 | 32 | 29 |
| 6 | 65 | 53 | 44 | 38 | 61 | 50 | 42 | 37 | 45 | 38 | 34 | 40 | 35 | 31 | 35 | 31 | 28 | 25 |
| 7 | 60 | 48 | 39 | 34 | 56 | 45 | 38 | 32 | 40 | 34 | 30 | 36 | 31 | 27 | 32 | 28 | 25 | 22 |
| 8 | 56 | 43 | 35 | 30 | 52 | 41 | 34 | 29 | 37 | 31 | 26 | 33 | 28 | 24 | 29 | 25 | 22 | 20 |
| 9 | 52 | 40 | 32 | 27 | 49 | 38 | 31 | 26 | 34 | 28 | 24 | 30 | 25 | 22 | 27 | 23 | 20 | 18 |
| 10 | 49 | 36 | 29 | 24 | 46 | 35 | 28 | 23 | 31 | 25 | 21 | 28 | 23 | 20 | 25 | 21 | 18 | 16 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 14319 | 14319 | 14319 |
| 5° | 14427 | 14334 | 14281 |
| 10° | 14392 | 14324 | 14284 |
| 15° | 14317 | 14317 | 14303 |
| 20° | 14223 | 14265 | 14265 |
| 25° | 14088 | 14191 | 14146 |
| 30° | 13917 | 14085 | 14024 |
| 35° | 13709 | 13920 | 13823 |
| 40° | 13483 | 13673 | 13535 |
| 45° | 13238 | 13332 | 13125 |
| 50° | 12892 | 12892 | 12686 |
| 55° | 12482 | 12321 | 12136 |
| 60° | 11880 | 11642 | 11455 |
| 65° | 10981 | 10761 | 10667 |
| 70° | 9614 | 9692 | 9652 |
| 75° | 7735 | 8555 | 8605 |
| 80° | 5499 | 7252 | 7332 |
| 85° | 3345 | 6087 | 6087 |



TEST NUMBER: P561497

CATALOG NUMBER: SQ4-PC3-050U-100D-92765-1D-UNV-STD-W-4 (5700K)

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 146.9 | 2.2 |
| 10°-20° | 421.5 | 6.4 |
| 20°-30° | 638.3 | 9.7 |
| 30°-40° | 765.3 | 11.7 |
| 40°-50° | 780.3 | 11.9 |
| 50°-60° | 681.2 | 10.4 |
| 60°-70° | 487.7 | 7.4 |
| 70°-80° | 251.2 | 3.8 |
| 80°-90° | 63.5 | 1.0 |
| 90°-100° | 169.9 | 2.6 |
| 100°-110° | 483.4 | 7.4 |
| 110°-120° | 463.2 | 7.1 |
| 120°-130° | 366.6 | 5.6 |
| 130°-140° | 294.2 | 4.5 |
| 140°-150° | 230.4 | 3.5 |
| 150°-160° | 168.5 | 2.6 |
| 160°-170° | 104.4 | 1.6 |
| 170°-180° | 35.4 | 0.5 |
| 0°-30° | 1206.7 | 18.4 |
| 0°-40° | 1972.0 | 30.1 |
| 0°-60° | 3433.5 | 52.4 |
| 0°-90° | 4235.8 | 64.7 |
| 90°-120° | 1116.5 | 17.0 |
| 90°-150° | 2007.7 | 30.6 |
| 90°-180° | 2316.0 | 35.3 |
| 0°-180° | 6551.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1552 | 1552 | 1552 | 1552 | 1552 | |
| 5° | 1558 | 1542 | 1548 | 1543 | 1542 | 148 |
| 15° | 1499 | 1486 | 1499 | 1499 | 1497 | 423 |
| 25° | 1384 | 1374 | 1394 | 1390 | 1390 | 637 |
| 35° | 1217 | 1214 | 1236 | 1227 | 1227 | 761 |
| 45° | 1015 | 1012 | 1022 | 1009 | 1006 | 781 |
| 55° | 776 | 766 | 766 | 754 | 754 | 692 |
| 65° | 503 | 492 | 493 | 489 | 489 | 497 |
| 75° | 217 | 227 | 240 | 241 | 241 | 235 |
| 85° | 32 | 48 | 58 | 59 | 58 | 43 |
| 90° | 0 | 0 | 0 | 0 | 0 | 2 |
| 95° | 18 | 73 | 329 | 114 | 70 | 21 |
| 105° | 75 | 114 | 493 | 870 | 827 | 79 |
| 115° | 140 | 169 | 374 | 791 | 929 | 137 |
| 125° | 197 | 218 | 356 | 592 | 707 | 176 |
| 135° | 241 | 261 | 352 | 500 | 565 | 186 |
| 145° | 284 | 299 | 355 | 433 | 471 | 178 |
| 155° | 325 | 332 | 364 | 391 | 407 | 150 |
| 165° | 359 | 360 | 368 | 376 | 381 | 101 |
| 175° | 376 | 374 | 372 | 370 | 367 | 36 |
| 180° | 373 | 373 | 373 | 373 | 373 | |

TEST NUMBER: P561497

CATALOG NUMBER: SQ4-PC3-050U-100D-92765-1D-UNV-STD-W-4 (5700K)

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1552.0 | 1552.0 | 1552.0 | 1552.0 | 1552.0 |
| 2.5° | 1561.2 | 1547.7 | 1552.0 | 1548.5 | 1542.8 |
| 5° | 1557.8 | 1542.3 | 1547.7 | 1543.4 | 1542.0 |
| 7.5° | 1546.6 | 1531.1 | 1538.2 | 1535.3 | 1533.9 |
| 10° | 1536.2 | 1520.8 | 1529.0 | 1526.1 | 1524.7 |
| 12.5° | 1522.4 | 1508.1 | 1517.5 | 1514.7 | 1514.4 |
| 15° | 1498.9 | 1486.2 | 1498.9 | 1498.8 | 1497.4 |
| 17.5° | 1469.3 | 1457.7 | 1471.3 | 1472.1 | 1471.3 |
| 20° | 1448.6 | 1435.9 | 1452.9 | 1451.5 | 1452.9 |
| 22.5° | 1423.3 | 1412.9 | 1431.0 | 1427.3 | 1428.7 |
| 25° | 1383.9 | 1374.1 | 1394.0 | 1389.6 | 1389.6 |
| 27.5° | 1337.3 | 1330.3 | 1352.0 | 1347.4 | 1347.4 |
| 30° | 1306.3 | 1299.3 | 1322.1 | 1316.4 | 1316.4 |
| 32.5° | 1271.8 | 1267.0 | 1288.8 | 1281.9 | 1281.9 |
| 35° | 1217.2 | 1214.4 | 1235.9 | 1227.3 | 1227.3 |
| 37.5° | 1160.9 | 1158.3 | 1177.8 | 1167.4 | 1164.0 |
| 40° | 1119.5 | 1118.1 | 1135.3 | 1123.8 | 1123.8 |
| 42.5° | 1078.1 | 1076.7 | 1091.6 | 1077.8 | 1077.8 |
| 45° | 1014.6 | 1011.8 | 1021.8 | 1008.8 | 1005.9 |
| 47.5° | 945.3 | 942.5 | 948.8 | 934.6 | 933.2 |
| 50° | 898.2 | 895.4 | 898.2 | 885.2 | 883.8 |
| 52.5° | 849.9 | 844.8 | 845.3 | 832.3 | 832.1 |
| 55° | 776.0 | 766.2 | 766.0 | 754.5 | 754.5 |
| 57.5° | 697.8 | 684.9 | 686.1 | 676.3 | 674.8 |
| 60° | 643.8 | 629.8 | 630.9 | 622.2 | 620.8 |
| 62.5° | 590.9 | 574.6 | 578.0 | 568.2 | 567.9 |
| 65° | 503.0 | 491.7 | 492.9 | 488.6 | 488.6 |
| 67.5° | 418.5 | 408.1 | 415.6 | 412.1 | 411.9 |
| 70° | 356.4 | 349.4 | 359.3 | 359.2 | 357.8 |
| 72.5° | 298.9 | 298.6 | 311.0 | 311.0 | 311.8 |
| 75° | 217.0 | 226.8 | 240.0 | 241.4 | 241.4 |
| 77.5° | 144.9 | 162.3 | 176.8 | 177.3 | 177.0 |
| 80° | 103.5 | 123.1 | 136.5 | 139.4 | 138.0 |
| 82.5° | 70.1 | 90.9 | 102.0 | 104.9 | 103.5 |
| 85° | 31.6 | 48.5 | 57.5 | 58.9 | 57.5 |
| 87.5° | 9.2 | 19.3 | 23.0 | 22.9 | 20.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 92.5° | 5.7 | 30.1 | 69.8 | 20.3 | 15.3 |
| 95° | 18.4 | 73.2 | 328.9 | 113.8 | 70.2 |
| 97.5° | 33.9 | 85.7 | 506.5 | 362.5 | 248.4 |
| 100° | 44.7 | 93.2 | 545.1 | 552.1 | 425.3 |
| 102.5° | 56.6 | 101.2 | 536.6 | 706.7 | 596.0 |
| 105° | 75.1 | 114.0 | 492.6 | 870.2 | 827.2 |
| 107.5° | 94.0 | 128.8 | 441.3 | 916.3 | 954.5 |
| 110° | 107.0 | 139.6 | 411.8 | 898.6 | 984.6 |

TEST NUMBER: P561497

CATALOG NUMBER: SQ4-PC3-050U-100D-92765-1D-UNV-STD-W-4 (5700K)

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 119.5 | 150.4 | 392.0 | 856.9 | 979.5 |
| 115° | 139.6 | 168.8 | 373.6 | 791.4 | 929.3 |
| 117.5° | 157.4 | 184.7 | 362.6 | 719.7 | 865.8 |
| 120° | 171.5 | 194.4 | 361.5 | 678.7 | 818.7 |
| 122.5° | 182.9 | 205.8 | 358.7 | 642.8 | 772.8 |
| 125° | 197.1 | 218.5 | 356.5 | 591.7 | 707.4 |
| 127.5° | 212.5 | 232.6 | 355.4 | 561.2 | 656.5 |
| 130° | 220.4 | 240.5 | 353.7 | 539.9 | 623.1 |
| 132.5° | 229.0 | 248.5 | 353.7 | 523.3 | 599.8 |
| 135° | 241.0 | 261.1 | 352.3 | 499.8 | 564.9 |
| 137.5° | 252.3 | 271.9 | 352.2 | 479.9 | 536.2 |
| 140° | 260.9 | 281.0 | 351.6 | 463.4 | 517.5 |
| 142.5° | 270.5 | 287.3 | 353.3 | 450.2 | 498.7 |
| 145° | 284.2 | 298.8 | 355.1 | 432.6 | 471.4 |
| 147.5° | 296.0 | 310.2 | 358.2 | 414.7 | 448.3 |
| 150° | 306.2 | 315.9 | 359.4 | 408.8 | 432.4 |
| 152.5° | 314.2 | 324.4 | 360.5 | 400.9 | 422.8 |
| 155° | 324.6 | 332.3 | 363.6 | 390.9 | 406.9 |
| 157.5° | 337.7 | 342.3 | 364.3 | 386.4 | 397.8 |
| 160° | 344.5 | 348.0 | 367.2 | 383.0 | 392.7 |
| 162.5° | 348.5 | 352.5 | 367.7 | 380.1 | 387.6 |
| 165° | 358.7 | 360.1 | 367.9 | 375.8 | 381.4 |
| 167.5° | 365.6 | 364.4 | 371.1 | 374.7 | 377.0 |
| 170° | 367.9 | 367.2 | 370.0 | 370.8 | 373.6 |
| 172.5° | 373.0 | 370.6 | 371.7 | 369.6 | 371.9 |
| 175° | 375.7 | 373.6 | 372.1 | 370.0 | 367.2 |
| 177.5° | 376.8 | 373.5 | 371.7 | 369.5 | 370.0 |
| 180° | 372.9 | 372.9 | 372.9 | 372.9 | 372.9 |

(END OF REPORT)