

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: P563330

Luminaire Tested: **SQ4-PP3-050U-100D-840-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P563330
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2103-172-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PP3-050U-100D-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

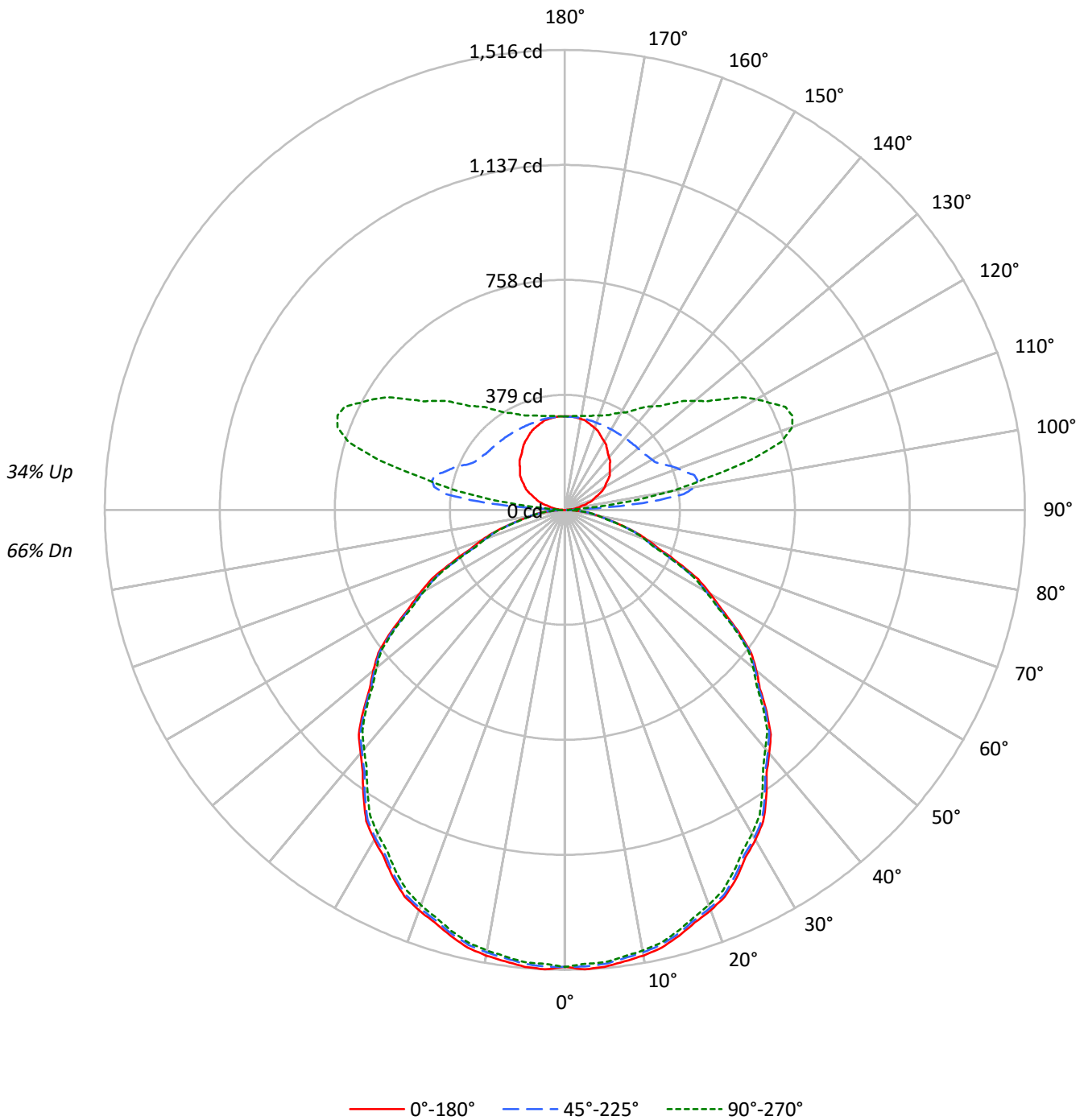
Lumens per Lamp: N/A
Luminaire Lumens: 5869.0 lumens
Efficiency: N/A
Efficacy: 130.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 45.1
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



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Luminous Intensity Polar Plot





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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 | 92 | 92 | 92 | 81 | 81 | 81 | 71 | 71 | 71 | 66 |
| 1 | 102 | 97 | 93 | 90 | 95 | 92 | 88 | 85 | 81 | 79 | 76 | 72 | 70 | 68 | 63 | 61 | 60 | 56 |
| 2 | 93 | 85 | 79 | 74 | 87 | 80 | 75 | 70 | 72 | 67 | 64 | 63 | 60 | 57 | 56 | 53 | 51 | 47 |
| 3 | 85 | 75 | 68 | 62 | 79 | 71 | 64 | 59 | 63 | 58 | 54 | 56 | 52 | 49 | 49 | 46 | 44 | 40 |
| 4 | 78 | 67 | 59 | 52 | 73 | 63 | 56 | 50 | 56 | 51 | 46 | 50 | 46 | 42 | 44 | 41 | 38 | 35 |
| 5 | 71 | 60 | 51 | 45 | 67 | 56 | 49 | 43 | 51 | 44 | 40 | 45 | 40 | 36 | 40 | 36 | 33 | 30 |
| 6 | 66 | 54 | 45 | 39 | 62 | 51 | 43 | 38 | 46 | 39 | 35 | 41 | 36 | 32 | 36 | 32 | 29 | 26 |
| 7 | 61 | 48 | 40 | 35 | 57 | 46 | 39 | 33 | 41 | 35 | 31 | 37 | 32 | 28 | 33 | 29 | 26 | 23 |
| 8 | 57 | 44 | 36 | 31 | 53 | 42 | 35 | 30 | 38 | 32 | 27 | 34 | 29 | 25 | 30 | 26 | 23 | 21 |
| 9 | 53 | 40 | 33 | 27 | 50 | 38 | 31 | 27 | 35 | 29 | 25 | 31 | 26 | 23 | 28 | 24 | 21 | 19 |
| 10 | 49 | 37 | 30 | 25 | 47 | 35 | 29 | 24 | 32 | 26 | 22 | 29 | 24 | 21 | 26 | 22 | 19 | 17 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 13899 | 13899 | 13899 |
| 5° | 14001 | 13916 | 13867 |
| 10° | 13978 | 13879 | 13818 |
| 15° | 13885 | 13810 | 13734 |
| 20° | 13794 | 13716 | 13612 |
| 25° | 13630 | 13535 | 13401 |
| 30° | 13378 | 13307 | 13138 |
| 35° | 13027 | 12938 | 12775 |
| 40° | 12611 | 12532 | 12388 |
| 45° | 12266 | 12180 | 12060 |
| 50° | 11826 | 11750 | 11636 |
| 55° | 11215 | 11065 | 10980 |
| 60° | 10208 | 9916 | 9868 |
| 65° | 8994 | 8619 | 8591 |
| 70° | 7764 | 7445 | 7445 |
| 75° | 6684 | 6591 | 6495 |
| 80° | 5892 | 5961 | 5823 |
| 85° | 4615 | 5028 | 5028 |



TEST NUMBER: P563330

CATALOG NUMBER: SQ4-PP3-050U-100D-840-1D-UNV-STD-W-4

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 142.5 | 2.4 |
| 10°-20° | 406.8 | 6.9 |
| 20°-30° | 609.3 | 10.4 |
| 30°-40° | 714.6 | 12.2 |
| 40°-50° | 716.9 | 12.2 |
| 50°-60° | 611.6 | 10.4 |
| 60°-70° | 398.8 | 6.8 |
| 70°-80° | 200.1 | 3.4 |
| 80°-90° | 56.5 | 1.0 |
| 90°-100° | 147.9 | 2.5 |
| 100°-110° | 401.8 | 6.8 |
| 110°-120° | 413.2 | 7.0 |
| 120°-130° | 330.3 | 5.6 |
| 130°-140° | 259.5 | 4.4 |
| 140°-150° | 199.0 | 3.4 |
| 150°-160° | 143.1 | 2.4 |
| 160°-170° | 87.5 | 1.5 |
| 170°-180° | 29.5 | 0.5 |
| 0°-30° | 1158.5 | 19.7 |
| 0°-40° | 1873.2 | 31.9 |
| 0°-60° | 3201.6 | 54.6 |
| 0°-90° | 3857.1 | 65.7 |
| 90°-120° | 962.9 | 16.4 |
| 90°-150° | 1751.8 | 29.8 |
| 90°-180° | 2012.0 | 34.3 |
| 0°-180° | 5869.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1506 | 1506 | 1506 | 1506 | 1506 | |
| 5° | 1512 | 1498 | 1503 | 1497 | 1497 | 144 |
| 15° | 1454 | 1440 | 1446 | 1440 | 1438 | 410 |
| 25° | 1339 | 1323 | 1330 | 1318 | 1316 | 616 |
| 35° | 1157 | 1145 | 1149 | 1136 | 1134 | 723 |
| 45° | 940 | 934 | 934 | 924 | 924 | 724 |
| 55° | 697 | 695 | 688 | 684 | 683 | 620 |
| 65° | 412 | 404 | 395 | 392 | 394 | 411 |
| 75° | 188 | 188 | 185 | 184 | 182 | 203 |
| 85° | 44 | 47 | 48 | 48 | 48 | 51 |
| 90° | 1 | 4 | 7 | 9 | 9 | 3 |
| 95° | 22 | 81 | 258 | 112 | 75 | 23 |
| 105° | 71 | 111 | 442 | 673 | 633 | 76 |
| 115° | 127 | 154 | 354 | 704 | 802 | 125 |
| 125° | 174 | 199 | 320 | 539 | 636 | 155 |
| 135° | 210 | 233 | 311 | 439 | 495 | 162 |
| 145° | 243 | 260 | 307 | 373 | 401 | 152 |
| 155° | 274 | 284 | 305 | 335 | 345 | 127 |
| 165° | 297 | 301 | 306 | 319 | 320 | 84 |
| 175° | 308 | 309 | 307 | 311 | 310 | 29 |
| 180° | 308 | 308 | 308 | 308 | 308 | |



TEST NUMBER: P563330

CATALOG NUMBER: SQ4-PP3-050U-100D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1506.5 | 1506.5 | 1506.5 | 1506.5 | 1506.5 |
| 2.5° | 1516.0 | 1503.7 | 1506.5 | 1504.3 | 1498.1 |
| 5° | 1511.8 | 1497.6 | 1502.6 | 1497.3 | 1497.3 |
| 7.5° | 1501.5 | 1486.0 | 1491.0 | 1485.7 | 1485.4 |
| 10° | 1492.0 | 1476.5 | 1481.5 | 1476.1 | 1474.9 |
| 12.5° | 1478.3 | 1462.8 | 1468.8 | 1462.4 | 1462.2 |
| 15° | 1453.7 | 1439.5 | 1445.8 | 1440.5 | 1437.9 |
| 17.5° | 1426.0 | 1410.5 | 1418.1 | 1410.7 | 1409.6 |
| 20° | 1404.9 | 1389.4 | 1397.0 | 1386.4 | 1386.4 |
| 22.5° | 1379.5 | 1364.0 | 1372.7 | 1358.9 | 1358.9 |
| 25° | 1338.9 | 1323.4 | 1329.6 | 1317.7 | 1316.4 |
| 27.5° | 1290.5 | 1275.3 | 1281.8 | 1268.3 | 1268.1 |
| 30° | 1255.7 | 1241.5 | 1249.1 | 1234.5 | 1233.2 |
| 32.5° | 1217.6 | 1204.5 | 1210.0 | 1195.4 | 1194.1 |
| 35° | 1156.6 | 1145.0 | 1148.7 | 1135.5 | 1134.2 |
| 37.5° | 1092.5 | 1080.6 | 1084.8 | 1073.4 | 1072.9 |
| 40° | 1047.1 | 1039.3 | 1040.5 | 1031.2 | 1028.6 |
| 42.5° | 1004.8 | 996.0 | 997.1 | 987.9 | 987.4 |
| 45° | 940.1 | 933.6 | 933.5 | 924.3 | 924.3 |
| 47.5° | 871.4 | 866.5 | 865.1 | 857.4 | 857.2 |
| 50° | 823.9 | 820.0 | 818.6 | 812.0 | 810.7 |
| 52.5° | 774.3 | 772.5 | 767.9 | 762.4 | 762.1 |
| 55° | 697.2 | 694.6 | 687.9 | 683.9 | 682.6 |
| 57.5° | 613.4 | 608.3 | 600.8 | 595.0 | 596.0 |
| 60° | 553.2 | 548.1 | 537.4 | 534.8 | 534.8 |
| 62.5° | 495.1 | 488.9 | 478.2 | 474.6 | 476.7 |
| 65° | 412.0 | 404.2 | 394.8 | 392.2 | 393.5 |
| 67.5° | 336.4 | 329.5 | 319.3 | 319.2 | 318.2 |
| 70° | 287.8 | 284.0 | 276.0 | 276.0 | 276.0 |
| 72.5° | 244.5 | 242.7 | 236.9 | 236.9 | 235.8 |
| 75° | 187.5 | 187.5 | 184.9 | 183.5 | 182.2 |
| 77.5° | 140.5 | 141.0 | 139.7 | 138.3 | 136.0 |
| 80° | 110.9 | 113.5 | 112.2 | 110.9 | 109.6 |
| 82.5° | 83.4 | 86.0 | 85.8 | 83.4 | 83.2 |
| 85° | 43.6 | 47.4 | 47.5 | 47.5 | 47.5 |
| 87.5° | 11.8 | 16.5 | 18.3 | 18.7 | 19.7 |
| 90° | 1.0 | 3.9 | 6.9 | 8.9 | 8.9 |
| 92.5° | 8.9 | 40.5 | 70.3 | 30.2 | 25.6 |
| 95° | 21.8 | 80.9 | 257.6 | 112.1 | 75.3 |
| 97.5° | 36.1 | 89.3 | 394.9 | 307.3 | 215.8 |
| 100° | 45.6 | 95.0 | 437.0 | 442.9 | 357.7 |
| 102.5° | 55.1 | 100.6 | 448.0 | 547.8 | 472.6 |
| 105° | 71.3 | 111.1 | 441.9 | 672.9 | 633.1 |
| 107.5° | 88.2 | 123.3 | 416.3 | 737.4 | 748.5 |
| 110° | 100.1 | 132.0 | 397.3 | 750.1 | 797.6 |



TEST NUMBER: P563330

CATALOG NUMBER: SQ4-PP3-050U-100D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 110.4 | 140.8 | 378.3 | 739.6 | 811.1 |
| 115° | 126.8 | 154.0 | 353.7 | 703.7 | 801.6 |
| 117.5° | 142.3 | 168.2 | 338.1 | 652.9 | 763.1 |
| 120° | 152.6 | 177.8 | 330.9 | 618.8 | 728.3 |
| 122.5° | 161.3 | 186.5 | 326.2 | 584.6 | 690.2 |
| 125° | 174.4 | 198.6 | 320.0 | 539.2 | 636.1 |
| 127.5° | 186.1 | 210.1 | 316.7 | 504.8 | 588.0 |
| 130° | 193.2 | 216.5 | 315.1 | 483.2 | 557.8 |
| 132.5° | 200.3 | 223.6 | 313.5 | 464.8 | 530.9 |
| 135° | 210.1 | 233.3 | 311.1 | 439.2 | 495.4 |
| 137.5° | 220.6 | 241.7 | 309.9 | 416.6 | 463.9 |
| 140° | 226.9 | 247.2 | 309.1 | 402.2 | 444.9 |
| 142.5° | 233.2 | 252.0 | 308.3 | 391.0 | 426.6 |
| 145° | 242.8 | 260.2 | 307.2 | 373.2 | 401.3 |
| 147.5° | 253.5 | 268.4 | 306.2 | 359.2 | 381.3 |
| 150° | 260.6 | 273.2 | 306.2 | 351.1 | 368.6 |
| 152.5° | 266.1 | 277.2 | 305.4 | 343.9 | 358.3 |
| 155° | 274.5 | 284.1 | 305.2 | 335.1 | 344.8 |
| 157.5° | 282.6 | 290.1 | 305.2 | 329.1 | 336.5 |
| 160° | 287.3 | 294.1 | 305.2 | 325.1 | 330.9 |
| 162.5° | 292.1 | 297.3 | 306.0 | 321.9 | 326.2 |
| 165° | 297.2 | 301.1 | 306.2 | 319.1 | 320.0 |
| 167.5° | 302.6 | 304.5 | 307.2 | 315.7 | 316.5 |
| 170° | 304.2 | 306.1 | 307.2 | 314.1 | 314.1 |
| 172.5° | 305.8 | 306.9 | 307.2 | 312.5 | 312.5 |
| 175° | 308.1 | 309.1 | 307.2 | 311.1 | 310.1 |
| 177.5° | 308.9 | 308.9 | 306.6 | 309.7 | 308.1 |
| 180° | 308.1 | 308.1 | 308.1 | 308.1 | 308.1 |

(END OF REPORT)