

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: P521833

Luminaire Tested: **SQ4-WB-075U-075D-93050-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521833
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-075U-075D-93050-1D-UNV-STD-W-4 (5000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

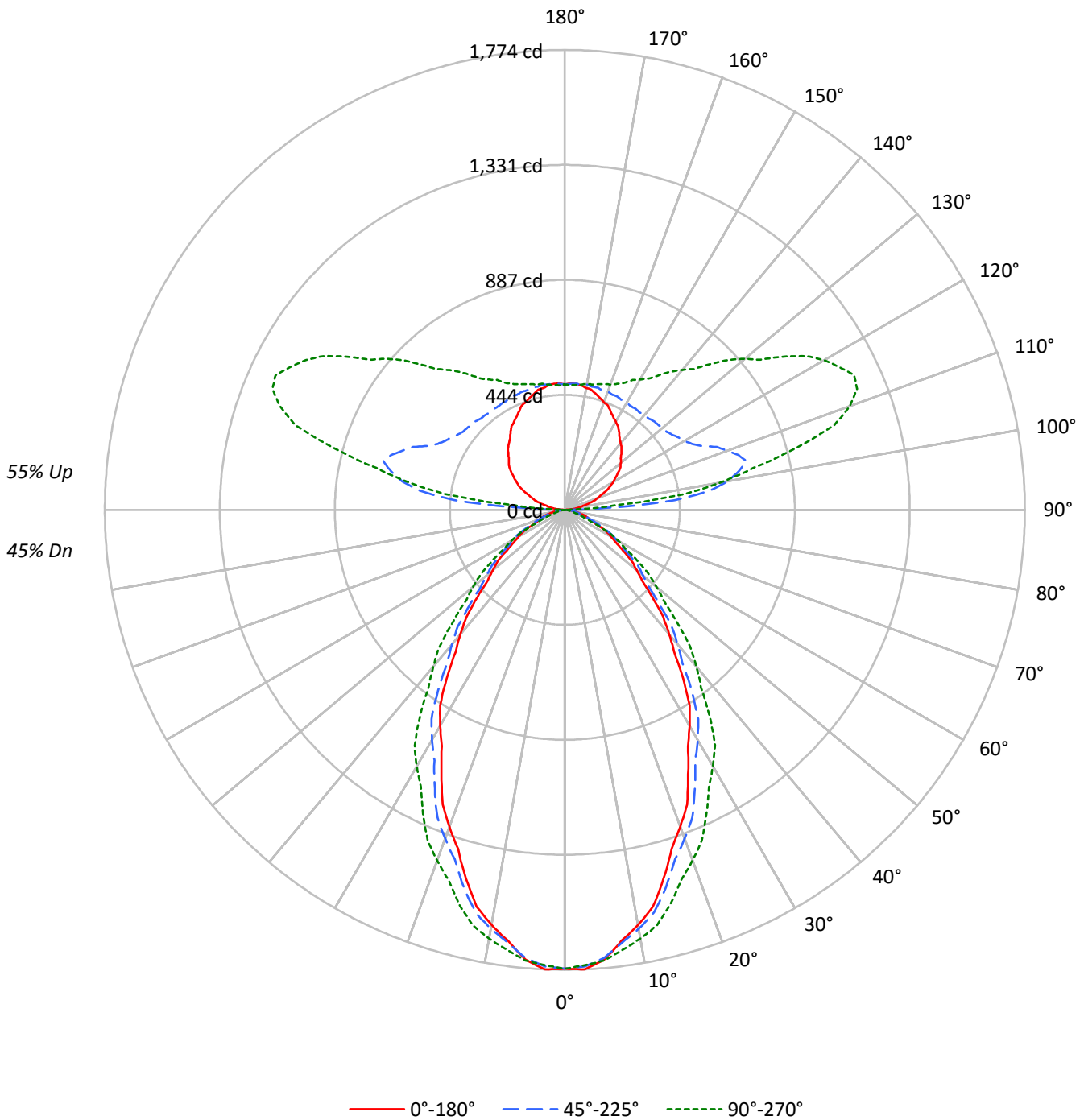
Lumens per Lamp: N/A
Luminaire Lumens: 5711.9 lumens
Efficiency: N/A
Efficacy: 103.9 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 55
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: P521833

CATALOG NUMBER: SQ4-WB-075U-075D-93050-1D-UNV-STD-W-4 (5000K)

Luminous Intensity Polar Plot





TEST NUMBER: P521833

CATALOG NUMBER: SQ4-WB-075U-075D-93050-1D-UNV-STD-W-4 (5000K)

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 | 106 | 106 | 106 | 106 | 97 | 97 | 97 | 97 | 81 | 81 | 81 | 66 | 66 | 66 | 52 | 52 | 52 | 45 |
| 1 | 98 | 94 | 90 | 87 | 90 | 86 | 83 | 81 | 72 | 70 | 68 | 59 | 58 | 57 | 47 | 46 | 46 | 40 |
| 2 | 90 | 83 | 78 | 73 | 82 | 77 | 72 | 68 | 65 | 61 | 58 | 53 | 51 | 49 | 43 | 41 | 40 | 35 |
| 3 | 83 | 74 | 67 | 62 | 76 | 68 | 63 | 58 | 58 | 54 | 50 | 48 | 45 | 43 | 39 | 37 | 35 | 31 |
| 4 | 76 | 66 | 59 | 54 | 70 | 61 | 55 | 50 | 52 | 48 | 44 | 44 | 40 | 38 | 36 | 33 | 31 | 28 |
| 5 | 70 | 60 | 52 | 47 | 65 | 55 | 49 | 44 | 47 | 42 | 39 | 40 | 36 | 33 | 33 | 30 | 28 | 25 |
| 6 | 65 | 54 | 46 | 41 | 60 | 50 | 44 | 39 | 43 | 38 | 34 | 36 | 33 | 30 | 30 | 27 | 25 | 23 |
| 7 | 61 | 49 | 42 | 36 | 56 | 46 | 39 | 35 | 39 | 34 | 31 | 33 | 30 | 27 | 28 | 25 | 23 | 20 |
| 8 | 56 | 45 | 38 | 33 | 52 | 42 | 35 | 31 | 36 | 31 | 28 | 31 | 27 | 24 | 26 | 23 | 21 | 19 |
| 9 | 53 | 41 | 34 | 29 | 49 | 39 | 32 | 28 | 33 | 28 | 25 | 29 | 25 | 22 | 24 | 21 | 19 | 17 |
| 10 | 49 | 38 | 31 | 27 | 46 | 36 | 29 | 25 | 31 | 26 | 23 | 27 | 23 | 20 | 23 | 20 | 18 | 16 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 16330 | 16330 | 16330 |
| 5° | 16127 | 16070 | 16163 |
| 10° | 15236 | 15375 | 15732 |
| 15° | 14066 | 14391 | 15037 |
| 20° | 12773 | 13253 | 14131 |
| 25° | 11457 | 12081 | 13165 |
| 30° | 10243 | 10913 | 12163 |
| 35° | 8958 | 9605 | 10978 |
| 40° | 7540 | 8138 | 9504 |
| 45° | 6223 | 6759 | 7934 |
| 50° | 5195 | 5662 | 6611 |
| 55° | 4411 | 4859 | 5459 |
| 60° | 3770 | 4213 | 4357 |
| 65° | 3002 | 3543 | 2814 |
| 70° | 2660 | 2765 | 1718 |
| 75° | 2463 | 2242 | 1052 |
| 80° | 2269 | 2062 | 909 |
| 85° | 2054 | 1895 | 741 |



TEST NUMBER: P521833

CATALOG NUMBER: SQ4-WB-075U-075D-93050-1D-UNV-STD-W-4 (5000K)

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 162.4 | 2.8 |
| 10°-20° | 422.3 | 7.4 |
| 20°-30° | 547.0 | 9.6 |
| 30°-40° | 535.6 | 9.4 |
| 40°-50° | 410.0 | 7.2 |
| 50°-60° | 273.2 | 4.8 |
| 60°-70° | 149.1 | 2.6 |
| 70°-80° | 62.1 | 1.1 |
| 80°-90° | 17.6 | 0.3 |
| 90°-100° | 249.4 | 4.4 |
| 100°-110° | 602.8 | 10.6 |
| 110°-120° | 642.9 | 11.3 |
| 120°-130° | 520.7 | 9.1 |
| 130°-140° | 403.1 | 7.1 |
| 140°-150° | 307.5 | 5.4 |
| 150°-160° | 222.6 | 3.9 |
| 160°-170° | 137.1 | 2.4 |
| 170°-180° | 46.4 | 0.8 |
| 0°-30° | 1131.6 | 19.8 |
| 0°-40° | 1667.3 | 29.2 |
| 0°-60° | 2350.5 | 41.2 |
| 0°-90° | 2579.2 | 45.2 |
| 90°-120° | 1495.1 | 26.2 |
| 90°-150° | 2726.5 | 47.7 |
| 90°-180° | 3133.0 | 54.9 |
| 0°-180° | 5711.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1770 | 1770 | 1770 | 1770 | 1770 | |
| 5° | 1741 | 1724 | 1735 | 1739 | 1745 | 162 |
| 15° | 1473 | 1467 | 1507 | 1548 | 1574 | 411 |
| 25° | 1125 | 1128 | 1187 | 1238 | 1293 | 518 |
| 35° | 795 | 799 | 853 | 910 | 975 | 494 |
| 45° | 477 | 486 | 518 | 557 | 608 | 372 |
| 55° | 274 | 286 | 302 | 314 | 339 | 249 |
| 65° | 138 | 149 | 162 | 142 | 129 | 143 |
| 75° | 69 | 69 | 63 | 43 | 30 | 74 |
| 85° | 19 | 19 | 18 | 12 | 7 | 21 |
| 90° | 0 | 0 | 0 | 0 | 0 | 2 |
| 95° | 25 | 125 | 427 | 278 | 195 | 28 |
| 105° | 96 | 166 | 724 | 937 | 925 | 102 |
| 115° | 176 | 225 | 582 | 1103 | 1231 | 174 |
| 125° | 251 | 289 | 505 | 878 | 1031 | 224 |
| 135° | 308 | 344 | 485 | 692 | 796 | 238 |
| 145° | 365 | 392 | 476 | 588 | 634 | 228 |
| 155° | 418 | 436 | 482 | 521 | 540 | 193 |
| 165° | 462 | 469 | 488 | 495 | 502 | 130 |
| 175° | 489 | 487 | 489 | 485 | 484 | 46 |
| 180° | 484 | 484 | 484 | 484 | 484 | |

TEST NUMBER: P521833

CATALOG NUMBER: SQ4-WB-075U-075D-93050-1D-UNV-STD-W-4 (5000K)

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1770.0 | 1770.0 | 1770.0 | 1770.0 | 1770.0 |
| 2.5° | 1774.4 | 1758.6 | 1762.6 | 1762.5 | 1757.6 |
| 5° | 1741.3 | 1723.8 | 1735.1 | 1739.1 | 1745.2 |
| 7.5° | 1676.7 | 1663.5 | 1684.0 | 1699.2 | 1711.5 |
| 10° | 1626.3 | 1615.0 | 1641.1 | 1663.2 | 1679.2 |
| 12.5° | 1567.9 | 1558.4 | 1590.8 | 1620.4 | 1641.3 |
| 15° | 1472.6 | 1467.2 | 1506.7 | 1547.7 | 1574.3 |
| 17.5° | 1370.5 | 1367.9 | 1413.2 | 1461.1 | 1495.1 |
| 20° | 1300.9 | 1300.2 | 1349.8 | 1399.7 | 1439.2 |
| 22.5° | 1230.7 | 1232.4 | 1284.6 | 1336.4 | 1381.4 |
| 25° | 1125.4 | 1128.4 | 1186.7 | 1238.5 | 1293.2 |
| 27.5° | 1028.0 | 1029.4 | 1089.7 | 1144.3 | 1202.6 |
| 30° | 961.5 | 965.3 | 1024.4 | 1080.9 | 1141.7 |
| 32.5° | 895.0 | 899.4 | 957.3 | 1015.7 | 1077.7 |
| 35° | 795.3 | 799.1 | 852.8 | 910.2 | 974.7 |
| 37.5° | 692.5 | 697.6 | 745.3 | 799.5 | 863.0 |
| 40° | 626.0 | 633.6 | 675.7 | 726.8 | 789.1 |
| 42.5° | 562.0 | 571.4 | 610.5 | 659.0 | 715.2 |
| 45° | 476.9 | 486.0 | 518.0 | 557.3 | 608.1 |
| 47.5° | 403.6 | 414.0 | 438.7 | 472.4 | 515.9 |
| 50° | 361.9 | 371.8 | 394.5 | 419.6 | 460.6 |
| 52.5° | 325.3 | 335.1 | 355.4 | 374.7 | 409.6 |
| 55° | 274.2 | 285.6 | 302.1 | 313.6 | 339.4 |
| 57.5° | 232.2 | 243.2 | 256.3 | 261.5 | 277.1 |
| 60° | 204.3 | 216.4 | 228.3 | 227.8 | 236.1 |
| 62.5° | 178.8 | 189.1 | 201.0 | 192.8 | 193.2 |
| 65° | 137.5 | 148.9 | 162.3 | 141.8 | 128.9 |
| 67.5° | 111.1 | 113.5 | 127.4 | 98.9 | 83.6 |
| 70° | 98.6 | 98.6 | 102.5 | 76.6 | 63.7 |
| 72.5° | 86.8 | 86.8 | 83.3 | 62.3 | 48.8 |
| 75° | 69.1 | 69.1 | 62.9 | 43.2 | 29.5 |
| 77.5° | 53.3 | 52.7 | 48.2 | 32.2 | 21.4 |
| 80° | 42.7 | 42.7 | 38.8 | 25.4 | 17.1 |
| 82.5° | 33.4 | 33.4 | 30.1 | 19.9 | 12.7 |
| 85° | 19.4 | 19.4 | 17.9 | 11.5 | 7.0 |
| 87.5° | 6.8 | 6.8 | 6.2 | 3.7 | 3.1 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 92.5° | 8.2 | 67.5 | 159.0 | 77.3 | 52.5 |
| 95° | 24.6 | 124.8 | 427.3 | 277.9 | 194.7 |
| 97.5° | 43.7 | 138.2 | 562.8 | 542.2 | 465.4 |
| 100° | 58.4 | 146.6 | 637.4 | 672.8 | 609.7 |
| 102.5° | 72.3 | 154.1 | 686.6 | 781.6 | 744.2 |
| 105° | 96.3 | 166.5 | 724.5 | 937.3 | 925.3 |
| 107.5° | 119.9 | 181.0 | 702.1 | 1062.3 | 1090.5 |
| 110° | 136.3 | 193.4 | 666.1 | 1116.1 | 1169.2 |

TEST NUMBER: P521833

CATALOG NUMBER: SQ4-WB-075U-075D-93050-1D-UNV-STD-W-4 (5000K)

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 152.7 | 205.8 | 634.1 | 1129.3 | 1220.0 |
| 115° | 176.3 | 225.3 | 582.0 | 1103.4 | 1230.7 |
| 117.5° | 199.6 | 245.9 | 551.5 | 1044.1 | 1193.2 |
| 120° | 215.2 | 258.3 | 531.8 | 997.5 | 1153.8 |
| 122.5° | 231.6 | 271.5 | 519.5 | 949.9 | 1103.8 |
| 125° | 251.1 | 289.1 | 505.2 | 877.6 | 1030.9 |
| 127.5° | 270.3 | 306.2 | 495.1 | 816.3 | 950.9 |
| 130° | 281.8 | 316.9 | 491.9 | 773.6 | 905.9 |
| 132.5° | 292.5 | 329.1 | 486.9 | 742.8 | 855.0 |
| 135° | 308.4 | 344.5 | 484.7 | 692.0 | 796.2 |
| 137.5° | 323.6 | 359.9 | 477.5 | 657.6 | 736.2 |
| 140° | 335.1 | 368.1 | 477.5 | 632.9 | 705.0 |
| 142.5° | 346.6 | 379.6 | 473.4 | 611.3 | 672.2 |
| 145° | 364.8 | 391.9 | 475.5 | 588.2 | 634.3 |
| 147.5° | 381.8 | 408.1 | 474.2 | 561.6 | 599.7 |
| 150° | 392.5 | 415.5 | 477.5 | 549.9 | 580.0 |
| 152.5° | 403.9 | 426.2 | 476.7 | 537.6 | 564.4 |
| 155° | 418.1 | 436.1 | 481.6 | 521.0 | 540.0 |
| 157.5° | 435.1 | 450.5 | 480.6 | 514.7 | 525.9 |
| 160° | 441.7 | 454.7 | 484.7 | 506.4 | 514.4 |
| 162.5° | 452.3 | 463.7 | 483.1 | 503.9 | 508.7 |
| 165° | 462.2 | 469.2 | 487.8 | 495.1 | 502.1 |
| 167.5° | 474.2 | 478.9 | 486.5 | 494.5 | 494.7 |
| 170° | 477.5 | 480.5 | 489.8 | 488.9 | 493.9 |
| 172.5° | 483.3 | 485.5 | 487.4 | 489.5 | 486.5 |
| 175° | 488.8 | 486.8 | 488.8 | 484.7 | 483.7 |
| 177.5° | 487.8 | 487.8 | 486.1 | 484.4 | 480.4 |
| 180° | 483.7 | 483.7 | 483.7 | 483.7 | 483.7 |

(END OF REPORT)