

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: P519022

Luminaire Tested: **SQ4-WB-025U-100D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519022
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-025U-100D-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

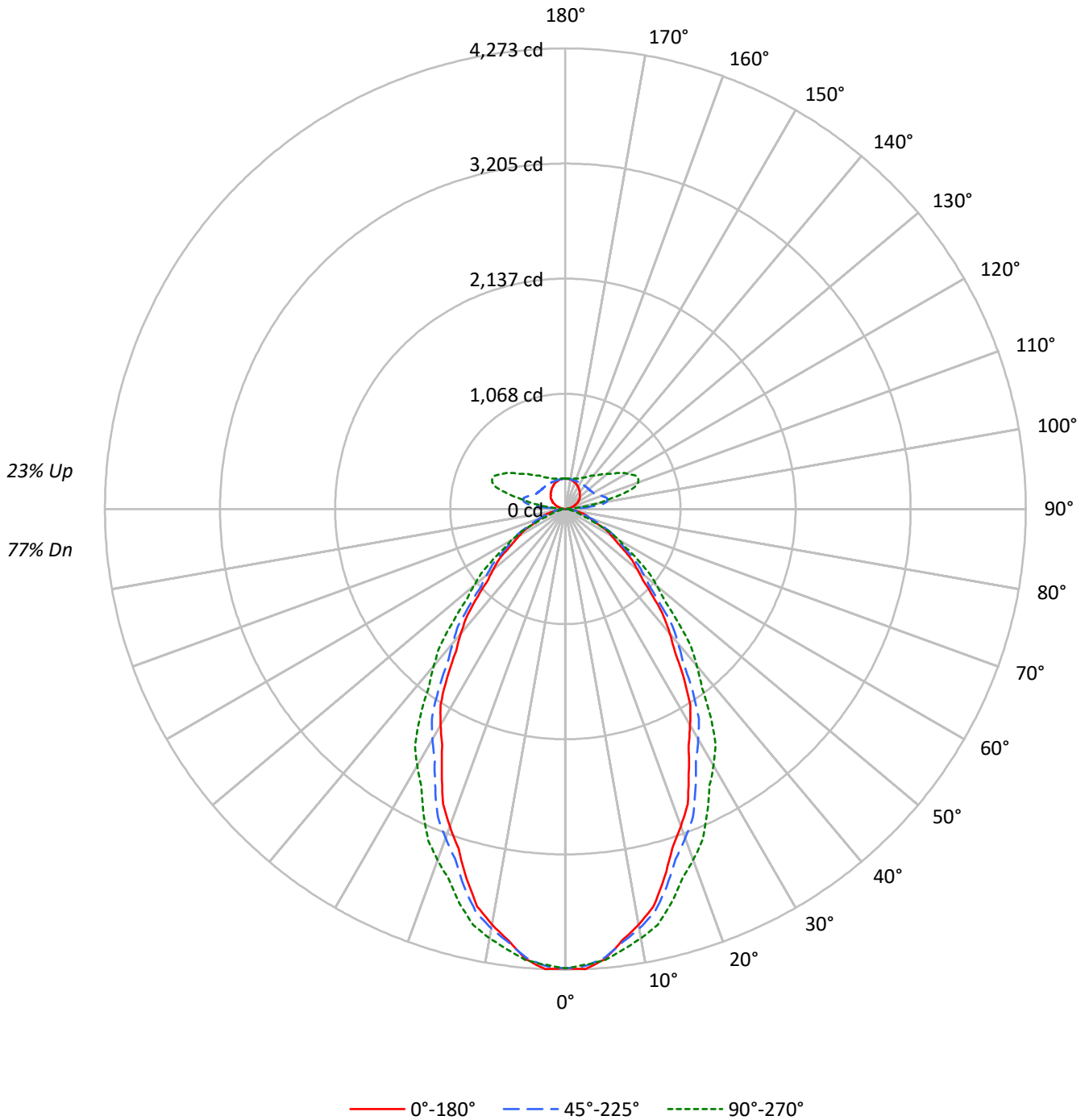
Lumens per Lamp: N/A
Luminaire Lumens: 8036.5 lumens
Efficiency: N/A
Efficacy: 97.8 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 82.2
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: P519022
CATALOG NUMBER: SQ4-WB-025U-100D-830-1D-UNV-STD-W-8

Luminous Intensity Polar Plot





TEST NUMBER: P519022

CATALOG NUMBER: SQ4-WB-025U-100D-830-1D-UNV-STD-W-8

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 | 50 | 30 | 10 | 0 | |
| RCR | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 114 | 114 | 114 | 114 | 108 | 108 | 108 | 108 | 99 | 99 | 99 | 89 | 89 | 89 | 81 | 81 | 81 | 77 | | | | |
| 1 | 106 | 102 | 98 | 95 | 101 | 97 | 94 | 92 | 89 | 87 | 85 | 82 | 80 | 78 | 75 | 73 | 72 | 69 | | | | |
| 2 | 98 | 91 | 86 | 81 | 93 | 87 | 82 | 78 | 80 | 76 | 73 | 74 | 71 | 68 | 68 | 66 | 64 | 60 | | | | |
| 3 | 90 | 82 | 75 | 70 | 86 | 79 | 73 | 68 | 73 | 68 | 64 | 67 | 63 | 60 | 62 | 59 | 56 | 53 | | | | |
| 4 | 84 | 74 | 67 | 61 | 80 | 71 | 65 | 59 | 66 | 61 | 56 | 61 | 57 | 53 | 57 | 53 | 50 | 48 | | | | |
| 5 | 78 | 67 | 60 | 54 | 74 | 65 | 58 | 53 | 60 | 54 | 50 | 56 | 51 | 48 | 52 | 48 | 45 | 43 | | | | |
| 6 | 73 | 61 | 54 | 48 | 69 | 59 | 52 | 47 | 55 | 49 | 45 | 51 | 47 | 43 | 48 | 44 | 41 | 39 | | | | |
| 7 | 68 | 56 | 49 | 43 | 65 | 54 | 47 | 42 | 51 | 45 | 41 | 48 | 43 | 39 | 45 | 40 | 37 | 35 | | | | |
| 8 | 63 | 52 | 44 | 39 | 61 | 50 | 43 | 38 | 47 | 41 | 37 | 44 | 39 | 35 | 41 | 37 | 34 | 32 | | | | |
| 9 | 60 | 48 | 41 | 36 | 57 | 46 | 40 | 35 | 44 | 38 | 34 | 41 | 36 | 33 | 39 | 34 | 31 | 29 | | | | |
| 10 | 56 | 44 | 37 | 33 | 54 | 43 | 37 | 32 | 41 | 35 | 31 | 38 | 33 | 30 | 36 | 32 | 29 | 27 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 19664 | 19664 | 19664 |
| 5° | 19419 | 19349 | 19462 |
| 10° | 18347 | 18513 | 18943 |
| 15° | 16937 | 17330 | 18107 |
| 20° | 15380 | 15959 | 17015 |
| 25° | 13795 | 14547 | 15852 |
| 30° | 12335 | 13142 | 14646 |
| 35° | 10786 | 11566 | 13220 |
| 40° | 9079 | 9800 | 11444 |
| 45° | 7492 | 8139 | 9554 |
| 50° | 6255 | 6819 | 7960 |
| 55° | 5311 | 5852 | 6574 |
| 60° | 4538 | 5073 | 5246 |
| 65° | 3614 | 4267 | 3389 |
| 70° | 3203 | 3330 | 2069 |
| 75° | 2968 | 2700 | 1267 |
| 80° | 2734 | 2484 | 1092 |
| 85° | 2477 | 2276 | 889 |



TEST NUMBER: P519022

CATALOG NUMBER: SQ4-WB-025U-100D-830-1D-UNV-STD-W-8

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 391.0 | 4.9 |
| 10°-20° | 1017.0 | 12.7 |
| 20°-30° | 1317.3 | 16.4 |
| 30°-40° | 1290.0 | 16.1 |
| 40°-50° | 987.4 | 12.3 |
| 50°-60° | 657.9 | 8.2 |
| 60°-70° | 359.0 | 4.5 |
| 70°-80° | 149.6 | 1.9 |
| 80°-90° | 43.9 | 0.5 |
| 90°-100° | 137.1 | 1.7 |
| 100°-110° | 360.4 | 4.5 |
| 110°-120° | 373.8 | 4.7 |
| 120°-130° | 299.8 | 3.7 |
| 130°-140° | 235.2 | 2.9 |
| 140°-150° | 180.5 | 2.2 |
| 150°-160° | 130.0 | 1.6 |
| 160°-170° | 79.6 | 1.0 |
| 170°-180° | 26.9 | 0.3 |
| 0°-30° | 2725.3 | 33.9 |
| 0°-40° | 4015.2 | 50.0 |
| 0°-60° | 5660.5 | 70.4 |
| 0°-90° | 6213.1 | 77.3 |
| 90°-120° | 871.3 | 10.8 |
| 90°-150° | 1586.9 | 19.7 |
| 90°-180° | 1823.0 | 22.7 |
| 0°-180° | 8036.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 4263 | 4263 | 4263 | 4263 | 4263 | |
| 5° | 4194 | 4151 | 4178 | 4188 | 4203 | 390 |
| 15° | 3546 | 3534 | 3629 | 3727 | 3791 | 990 |
| 25° | 2710 | 2718 | 2858 | 2983 | 3114 | 1246 |
| 35° | 1915 | 1924 | 2054 | 2192 | 2347 | 1191 |
| 45° | 1148 | 1170 | 1248 | 1342 | 1464 | 896 |
| 55° | 660 | 688 | 728 | 755 | 817 | 599 |
| 65° | 331 | 358 | 391 | 342 | 310 | 344 |
| 75° | 166 | 166 | 152 | 104 | 71 | 178 |
| 85° | 47 | 47 | 43 | 28 | 17 | 51 |
| 90° | 2 | 5 | 14 | 7 | 7 | 4 |
| 95° | 18 | 71 | 236 | 122 | 83 | 20 |
| 105° | 65 | 98 | 398 | 605 | 564 | 69 |
| 115° | 115 | 140 | 319 | 637 | 727 | 114 |
| 125° | 160 | 180 | 290 | 491 | 579 | 142 |
| 135° | 191 | 211 | 281 | 396 | 449 | 148 |
| 145° | 222 | 236 | 278 | 338 | 364 | 139 |
| 155° | 251 | 258 | 278 | 305 | 314 | 115 |
| 165° | 270 | 274 | 278 | 289 | 292 | 76 |
| 175° | 281 | 281 | 280 | 283 | 283 | 27 |
| 180° | 281 | 281 | 281 | 281 | 281 | |

TEST NUMBER: P519022

CATALOG NUMBER: SQ4-WB-025U-100D-830-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 4262.7 | 4262.7 | 4262.7 | 4262.7 | 4262.7 |
| 2.5° | 4273.2 | 4235.1 | 4244.8 | 4244.5 | 4232.8 |
| 5° | 4193.5 | 4151.4 | 4178.5 | 4188.2 | 4202.9 |
| 7.5° | 4037.9 | 4006.1 | 4055.5 | 4092.1 | 4121.7 |
| 10° | 3916.7 | 3889.2 | 3952.2 | 4005.5 | 4043.9 |
| 12.5° | 3776.0 | 3753.0 | 3831.0 | 3902.5 | 3952.6 |
| 15° | 3546.3 | 3533.5 | 3628.6 | 3727.4 | 3791.4 |
| 17.5° | 3300.6 | 3294.3 | 3403.4 | 3518.6 | 3600.6 |
| 20° | 3133.0 | 3131.1 | 3250.8 | 3370.8 | 3465.9 |
| 22.5° | 2963.9 | 2967.9 | 3093.7 | 3218.5 | 3326.7 |
| 25° | 2710.3 | 2717.6 | 2858.0 | 2982.6 | 3114.3 |
| 27.5° | 2475.7 | 2479.0 | 2624.2 | 2755.7 | 2896.2 |
| 30° | 2315.6 | 2324.7 | 2467.1 | 2603.2 | 2749.5 |
| 32.5° | 2155.5 | 2166.1 | 2305.5 | 2446.2 | 2595.4 |
| 35° | 1915.3 | 1924.5 | 2053.7 | 2191.9 | 2347.4 |
| 37.5° | 1667.7 | 1680.1 | 1794.9 | 1925.5 | 2078.4 |
| 40° | 1507.6 | 1525.9 | 1627.3 | 1750.4 | 1900.4 |
| 42.5° | 1353.4 | 1376.1 | 1470.2 | 1587.0 | 1722.3 |
| 45° | 1148.4 | 1170.4 | 1247.6 | 1342.0 | 1464.5 |
| 47.5° | 971.9 | 997.1 | 1056.4 | 1137.7 | 1242.3 |
| 50° | 871.6 | 895.4 | 950.2 | 1010.4 | 1109.2 |
| 52.5° | 783.3 | 807.1 | 855.9 | 902.3 | 986.5 |
| 55° | 660.3 | 687.7 | 727.6 | 755.2 | 817.4 |
| 57.5° | 559.3 | 585.6 | 617.2 | 629.7 | 667.4 |
| 60° | 491.9 | 521.2 | 549.9 | 548.5 | 568.6 |
| 62.5° | 430.6 | 455.4 | 484.1 | 464.3 | 465.4 |
| 65° | 331.1 | 358.5 | 390.9 | 341.6 | 310.5 |
| 67.5° | 267.5 | 273.3 | 306.8 | 238.2 | 201.3 |
| 70° | 237.5 | 237.5 | 246.9 | 184.5 | 153.4 |
| 72.5° | 209.1 | 209.1 | 200.5 | 150.0 | 117.5 |
| 75° | 166.5 | 166.5 | 151.5 | 104.0 | 71.1 |
| 77.5° | 128.3 | 126.8 | 116.0 | 77.6 | 51.6 |
| 80° | 102.9 | 102.9 | 93.5 | 61.3 | 41.1 |
| 82.5° | 80.4 | 80.4 | 72.6 | 47.9 | 30.7 |
| 85° | 46.8 | 46.8 | 43.0 | 27.8 | 16.8 |
| 87.5° | 16.8 | 17.5 | 17.8 | 10.4 | 8.9 |
| 90° | 1.8 | 5.3 | 14.4 | 7.2 | 7.2 |
| 92.5° | 7.6 | 36.5 | 80.8 | 35.8 | 23.1 |
| 95° | 18.0 | 70.9 | 236.2 | 121.7 | 83.0 |
| 97.5° | 31.4 | 77.9 | 353.5 | 281.1 | 207.0 |
| 100° | 41.5 | 83.8 | 389.5 | 394.7 | 306.6 |
| 102.5° | 50.1 | 89.6 | 399.6 | 491.7 | 416.2 |
| 105° | 64.9 | 98.4 | 398.5 | 605.0 | 564.5 |
| 107.5° | 80.1 | 111.1 | 375.8 | 663.9 | 673.7 |
| 110° | 90.2 | 118.4 | 357.1 | 679.0 | 721.4 |



TEST NUMBER: P519022

CATALOG NUMBER: SQ4-WB-025U-100D-830-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 100.3 | 127.1 | 339.8 | 669.4 | 734.3 |
| 115° | 115.4 | 140.1 | 319.2 | 636.8 | 726.8 |
| 117.5° | 130.2 | 152.8 | 305.1 | 591.6 | 691.4 |
| 120° | 138.9 | 160.0 | 299.4 | 561.3 | 658.2 |
| 122.5° | 147.5 | 168.7 | 295.0 | 530.9 | 626.5 |
| 125° | 160.5 | 179.9 | 290.3 | 490.7 | 578.9 |
| 127.5° | 171.0 | 190.7 | 286.4 | 458.3 | 532.7 |
| 130° | 176.7 | 197.9 | 284.9 | 438.0 | 506.7 |
| 132.5° | 182.5 | 203.7 | 283.5 | 420.5 | 482.2 |
| 135° | 191.2 | 210.6 | 281.3 | 396.1 | 449.0 |
| 137.5° | 200.2 | 219.2 | 281.0 | 377.9 | 421.3 |
| 140° | 207.4 | 225.0 | 279.5 | 363.4 | 404.0 |
| 142.5° | 213.2 | 229.4 | 279.5 | 353.2 | 388.1 |
| 145° | 221.8 | 235.9 | 277.7 | 337.8 | 364.3 |
| 147.5° | 230.5 | 244.2 | 277.7 | 325.1 | 347.0 |
| 150° | 236.2 | 248.6 | 277.7 | 317.8 | 335.4 |
| 152.5° | 242.0 | 251.5 | 277.7 | 311.9 | 325.3 |
| 155° | 250.7 | 257.7 | 277.7 | 305.0 | 313.8 |
| 157.5° | 257.2 | 263.9 | 277.7 | 298.8 | 305.1 |
| 160° | 261.5 | 266.8 | 277.7 | 295.8 | 299.4 |
| 162.5° | 265.8 | 269.7 | 277.7 | 292.9 | 296.5 |
| 165° | 270.5 | 274.0 | 277.7 | 288.6 | 292.1 |
| 167.5° | 274.8 | 276.6 | 279.5 | 286.8 | 288.2 |
| 170° | 277.7 | 279.5 | 279.5 | 286.7 | 286.7 |
| 172.5° | 279.2 | 279.5 | 279.5 | 285.3 | 283.9 |
| 175° | 281.3 | 281.3 | 279.5 | 283.1 | 283.1 |
| 177.5° | 281.3 | 281.3 | 279.9 | 282.7 | 281.3 |
| 180° | 281.3 | 281.3 | 281.3 | 281.3 | 281.3 |

(END OF REPORT)