

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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

Brand: CORELITE

Report Number: P621848

Luminaire Tested: VLT-FB-100U-075D-835-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621848
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2203-563-19)
Test Lab: INNOVATION CENTER
Issue Date: 9/2/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: VLT-FB-100U-075D-835-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - BATWING
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

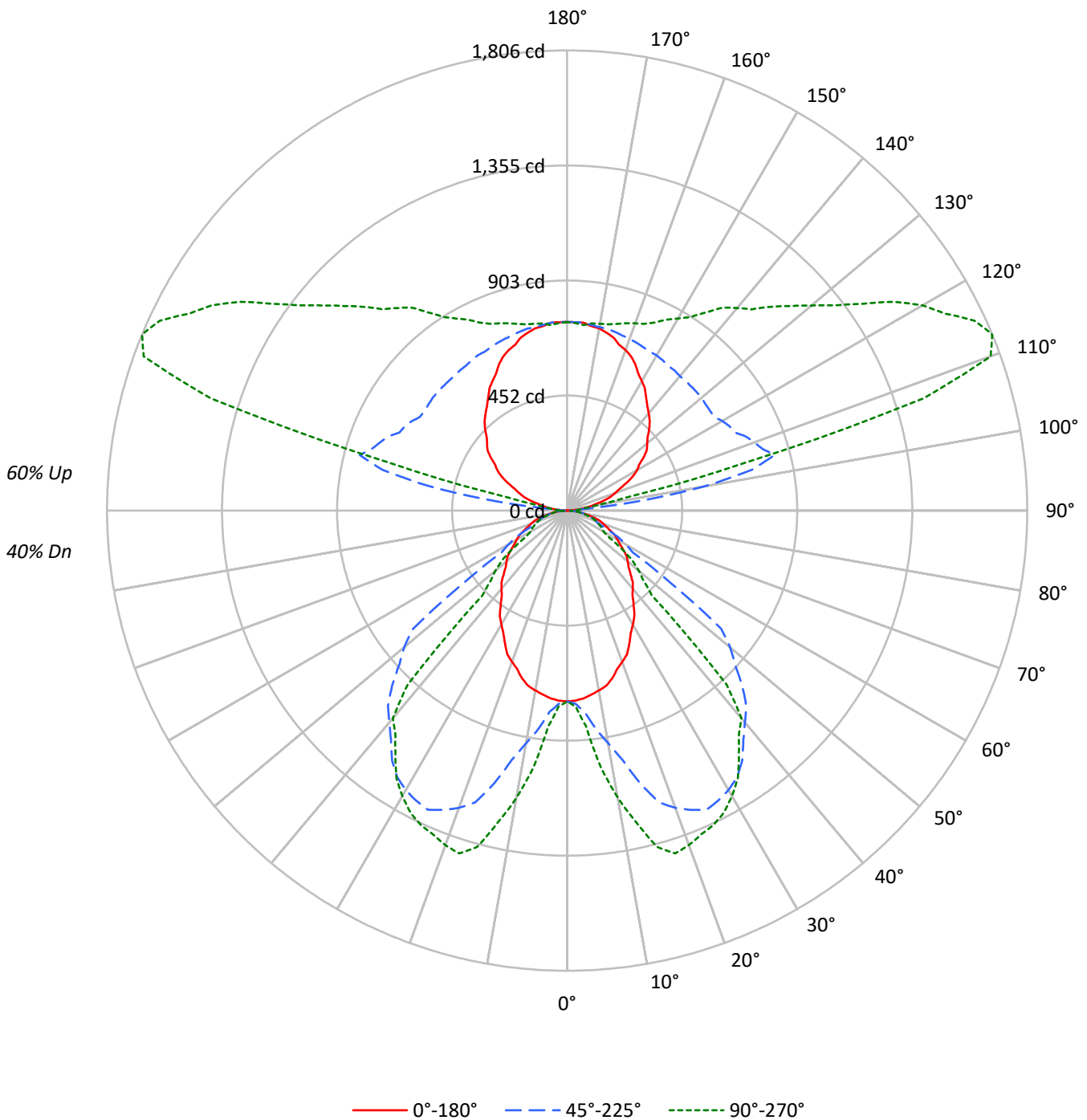
Lumens per Lamp: N/A
Luminaire Lumens: 6660.6 lumens
Efficiency: N/A
Efficacy: 131.6 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.83 / 1.75
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 50.6
Input Voltage (V): 120
Input Current (A_{in}): 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





TEST NUMBER: P621848

CATALOG NUMBER: VLT-FB-100U-075D-835-UNV-STD-W-4

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 | 105 | 105 | 105 | 105 | 95 | 95 | 95 | 95 | 78 | 78 | 78 | 62 | 62 | 62 | 47 | 47 | 47 | 40 | | | | |
| 1 | 96 | 92 | 88 | 85 | 87 | 84 | 81 | 78 | 69 | 67 | 65 | 55 | 54 | 52 | 42 | 42 | 41 | 35 | | | | |
| 2 | 88 | 81 | 75 | 70 | 80 | 74 | 69 | 65 | 61 | 58 | 55 | 49 | 47 | 45 | 38 | 36 | 35 | 30 | | | | |
| 3 | 80 | 71 | 65 | 59 | 73 | 66 | 60 | 55 | 54 | 50 | 46 | 44 | 41 | 38 | 34 | 32 | 30 | 26 | | | | |
| 4 | 74 | 63 | 56 | 50 | 67 | 58 | 52 | 47 | 48 | 44 | 40 | 39 | 36 | 33 | 31 | 28 | 27 | 23 | | | | |
| 5 | 68 | 57 | 49 | 43 | 62 | 52 | 45 | 40 | 43 | 38 | 34 | 35 | 32 | 29 | 28 | 25 | 23 | 20 | | | | |
| 6 | 62 | 51 | 43 | 37 | 57 | 47 | 40 | 35 | 39 | 34 | 30 | 32 | 28 | 25 | 25 | 23 | 21 | 18 | | | | |
| 7 | 58 | 46 | 38 | 33 | 53 | 42 | 36 | 31 | 35 | 30 | 27 | 29 | 25 | 22 | 23 | 20 | 18 | 16 | | | | |
| 8 | 54 | 42 | 34 | 29 | 49 | 38 | 32 | 27 | 32 | 27 | 24 | 27 | 23 | 20 | 21 | 18 | 16 | 14 | | | | |
| 9 | 50 | 38 | 31 | 26 | 45 | 35 | 29 | 24 | 30 | 25 | 21 | 24 | 21 | 18 | 20 | 17 | 15 | 13 | | | | |
| 10 | 46 | 35 | 28 | 23 | 42 | 32 | 26 | 22 | 27 | 22 | 19 | 22 | 19 | 16 | 18 | 15 | 13 | 11 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|-------|-------|
| 0° | 5374 | 5374 | 5374 |
| 5° | 5329 | 5713 | 6119 |
| 10° | 5225 | 6755 | 8341 |
| 15° | 5067 | 8233 | 10156 |
| 20° | 4824 | 9485 | 10671 |
| 25° | 4568 | 10257 | 10775 |
| 30° | 4276 | 10494 | 10721 |
| 35° | 3987 | 10495 | 10295 |
| 40° | 3750 | 10167 | 9967 |
| 45° | 3568 | 9856 | 4774 |
| 50° | 3466 | 9330 | 4113 |
| 55° | 3370 | 6247 | 3257 |
| 60° | 3277 | 3802 | 2359 |
| 65° | 3206 | 2895 | 2455 |
| 70° | 3162 | 2524 | 2524 |
| 75° | 3080 | 2617 | 2531 |
| 80° | 2707 | 2641 | 2517 |
| 85° | 2009 | 2758 | 2379 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 9856 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 80.8 | 1.2 |
| 10°-20° | 297.8 | 4.5 |
| 20°-30° | 504.4 | 7.6 |
| 30°-40° | 611.9 | 9.2 |
| 40°-50° | 538.6 | 8.1 |
| 50°-60° | 333.3 | 5.0 |
| 60°-70° | 180.7 | 2.7 |
| 70°-80° | 102.9 | 1.5 |
| 80°-90° | 35.3 | 0.5 |
| 90°-100° | 91.0 | 1.4 |
| 100°-110° | 648.3 | 9.7 |
| 110°-120° | 880.2 | 13.2 |
| 120°-130° | 716.4 | 10.8 |
| 130°-140° | 576.2 | 8.7 |
| 140°-150° | 454.2 | 6.8 |
| 150°-160° | 332.1 | 5.0 |
| 160°-170° | 206.3 | 3.1 |
| 170°-180° | 70.3 | 1.1 |
| 0°-30° | 882.9 | 13.3 |
| 0°-40° | 1494.8 | 22.4 |
| 0°-60° | 2366.6 | 35.5 |
| 0°-90° | 2685.6 | 40.3 |
| 90°-120° | 1619.5 | 24.3 |
| 90°-150° | 3366.3 | 50.5 |
| 90°-180° | 3975.0 | 59.7 |
| 0°-180° | 6660.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|------|-------|------|------|
| 0° | 749 | 749 | 749 | 749 | 749 | |
| 5° | 740 | 764 | 793 | 827 | 849 | 70 |
| 15° | 682 | 786 | 1108 | 1310 | 1367 | 191 |
| 25° | 577 | 790 | 1295 | 1334 | 1361 | 265 |
| 35° | 455 | 732 | 1198 | 1181 | 1175 | 285 |
| 45° | 352 | 602 | 971 | 823 | 470 | 273 |
| 55° | 269 | 420 | 499 | 289 | 260 | 241 |
| 65° | 189 | 236 | 170 | 146 | 145 | 187 |
| 75° | 111 | 98 | 94 | 93 | 91 | 116 |
| 85° | 24 | 33 | 34 | 30 | 29 | 30 |
| 90° | 0 | 5 | 9 | 14 | 14 | 3 |
| 95° | 37 | 69 | 37 | 42 | 51 | 42 |
| 105° | 144 | 222 | 842 | 1076 | 712 | 152 |
| 115° | 256 | 311 | 726 | 1509 | 1764 | 254 |
| 125° | 368 | 418 | 684 | 1196 | 1415 | 327 |
| 135° | 456 | 506 | 689 | 985 | 1131 | 351 |
| 145° | 540 | 585 | 693 | 858 | 949 | 339 |
| 155° | 633 | 656 | 707 | 778 | 814 | 291 |
| 165° | 703 | 712 | 726 | 745 | 759 | 197 |
| 175° | 740 | 744 | 740 | 735 | 731 | 70 |
| 180° | 740 | 740 | 740 | 740 | 740 | |



TEST NUMBER: P621848

CATALOG NUMBER: VLT-FB-100U-075D-835-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|--------|--------|--------|
| 0° | 748.9 | 748.9 | 748.9 | 748.9 | 748.9 |
| 2.5° | 746.5 | 754.8 | 758.7 | 766.1 | 769.6 |
| 5° | 739.8 | 763.6 | 793.1 | 827.1 | 849.4 |
| 7.5° | 727.9 | 770.5 | 863.7 | 971.0 | 1016.8 |
| 10° | 717.0 | 775.0 | 927.0 | 1082.2 | 1144.7 |
| 12.5° | 704.8 | 779.5 | 1001.3 | 1189.4 | 1253.1 |
| 15° | 682.0 | 786.1 | 1108.2 | 1310.4 | 1367.0 |
| 17.5° | 652.4 | 790.2 | 1200.7 | 1374.5 | 1410.8 |
| 20° | 631.7 | 791.0 | 1242.1 | 1382.5 | 1397.4 |
| 22.5° | 612.2 | 791.7 | 1271.4 | 1363.0 | 1375.5 |
| 25° | 576.9 | 789.8 | 1295.4 | 1334.1 | 1360.9 |
| 27.5° | 541.6 | 780.9 | 1283.5 | 1314.7 | 1334.1 |
| 30° | 516.0 | 772.0 | 1266.5 | 1292.4 | 1293.9 |
| 32.5° | 491.7 | 757.2 | 1240.9 | 1248.5 | 1246.4 |
| 35° | 455.1 | 732.0 | 1198.0 | 1181.1 | 1175.2 |
| 37.5° | 421.0 | 698.5 | 1135.3 | 1108.1 | 1106.7 |
| 40° | 400.3 | 674.2 | 1085.3 | 1059.6 | 1064.0 |
| 42.5° | 380.9 | 646.4 | 1040.3 | 1010.1 | 926.4 |
| 45° | 351.6 | 601.7 | 971.2 | 823.1 | 470.4 |
| 47.5° | 326.4 | 550.8 | 892.9 | 440.9 | 404.9 |
| 50° | 310.5 | 515.9 | 835.7 | 387.7 | 368.4 |
| 52.5° | 294.7 | 483.4 | 761.4 | 348.6 | 323.3 |
| 55° | 269.4 | 419.8 | 499.3 | 288.6 | 260.3 |
| 57.5° | 245.4 | 352.8 | 305.1 | 224.3 | 193.6 |
| 60° | 228.3 | 313.2 | 264.9 | 180.8 | 164.4 |
| 62.5° | 212.5 | 280.7 | 225.9 | 160.4 | 157.1 |
| 65° | 188.8 | 236.4 | 170.5 | 146.1 | 144.6 |
| 67.5° | 166.5 | 194.2 | 130.0 | 131.5 | 130.0 |
| 70° | 150.7 | 164.1 | 120.3 | 121.7 | 120.3 |
| 72.5° | 136.1 | 135.2 | 110.5 | 109.6 | 108.1 |
| 75° | 111.1 | 97.7 | 94.4 | 92.8 | 91.3 |
| 77.5° | 84.9 | 72.1 | 76.1 | 74.6 | 73.1 |
| 80° | 65.5 | 61.0 | 63.9 | 62.4 | 60.9 |
| 82.5° | 48.4 | 49.9 | 51.8 | 49.0 | 47.5 |
| 85° | 24.4 | 33.3 | 33.5 | 30.4 | 28.9 |
| 87.5° | 7.3 | 15.4 | 15.3 | 13.7 | 12.5 |
| 90° | 0.0 | 4.6 | 9.3 | 14.0 | 14.0 |
| 92.5° | 11.2 | 15.7 | 20.5 | 28.9 | 32.6 |
| 95° | 37.2 | 69.1 | 37.2 | 42.1 | 51.2 |
| 97.5° | 66.1 | 132.5 | 273.7 | 80.7 | 69.8 |
| 100° | 88.4 | 165.8 | 549.2 | 161.6 | 107.0 |
| 102.5° | 110.8 | 191.8 | 742.8 | 426.6 | 233.6 |
| 105° | 144.3 | 221.6 | 842.4 | 1076.1 | 712.1 |
| 107.5° | 177.8 | 236.0 | 804.2 | 1566.2 | 1466.9 |
| 110° | 200.1 | 254.7 | 781.9 | 1645.7 | 1768.5 |



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CATALOG NUMBER: VLT-FB-100U-075D-835-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 222.5 | 277.1 | 759.5 | 1599.2 | 1805.8 |
| 115° | 256.0 | 310.6 | 726.0 | 1509.0 | 1763.9 |
| 117.5° | 290.4 | 344.1 | 717.7 | 1411.5 | 1673.6 |
| 120° | 316.5 | 366.5 | 702.8 | 1337.3 | 1610.3 |
| 122.5° | 335.1 | 388.8 | 684.1 | 1273.5 | 1524.7 |
| 125° | 367.7 | 417.7 | 684.1 | 1196.4 | 1414.8 |
| 127.5° | 394.7 | 445.6 | 685.1 | 1107.0 | 1322.7 |
| 130° | 409.6 | 464.2 | 688.8 | 1047.2 | 1251.9 |
| 132.5° | 428.2 | 482.8 | 688.8 | 1020.3 | 1188.6 |
| 135° | 456.1 | 506.2 | 688.8 | 985.3 | 1130.9 |
| 137.5° | 479.4 | 533.1 | 688.8 | 946.7 | 1071.4 |
| 140° | 498.0 | 548.0 | 688.8 | 924.1 | 1037.8 |
| 142.5° | 516.6 | 563.0 | 692.5 | 897.9 | 1004.3 |
| 145° | 539.9 | 585.4 | 693.4 | 858.4 | 949.4 |
| 147.5° | 567.8 | 607.8 | 699.0 | 830.0 | 900.1 |
| 150° | 586.4 | 622.8 | 702.8 | 811.1 | 870.3 |
| 152.5° | 605.0 | 637.8 | 702.8 | 796.0 | 844.2 |
| 155° | 632.9 | 655.7 | 707.4 | 778.0 | 814.5 |
| 157.5° | 655.3 | 677.1 | 713.0 | 766.7 | 793.0 |
| 160° | 670.2 | 688.4 | 716.7 | 759.1 | 781.9 |
| 162.5° | 681.3 | 699.6 | 720.4 | 755.2 | 770.7 |
| 165° | 702.8 | 711.9 | 726.0 | 745.0 | 758.6 |
| 167.5° | 714.9 | 723.0 | 730.7 | 740.2 | 748.4 |
| 170° | 726.0 | 730.6 | 730.7 | 740.1 | 744.6 |
| 172.5° | 729.8 | 737.9 | 734.4 | 736.4 | 740.9 |
| 175° | 740.0 | 744.5 | 740.0 | 735.2 | 730.7 |
| 177.5° | 740.0 | 743.6 | 740.0 | 739.9 | 736.3 |
| 180° | 740.0 | 740.0 | 740.0 | 740.0 | 740.0 |

(END OF REPORT)