

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: P621861

Luminaire Tested: VLT-FB-100U-125D-840-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621861  
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-125D-840-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
LIGHT SHAPING LENS - BATWING  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8713.0 lumens  
Efficiency: N/A  
Efficacy: 128.7 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

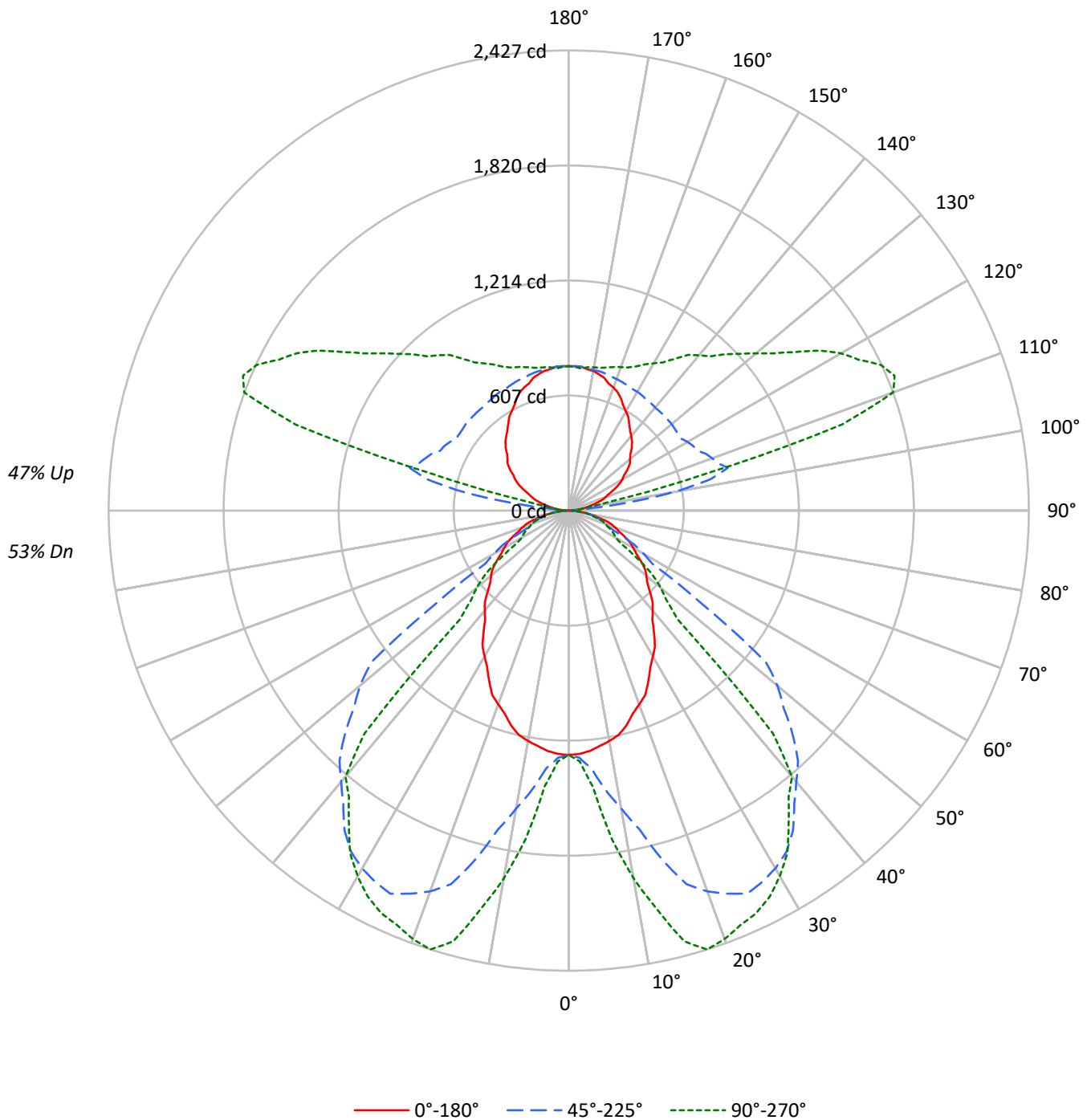
Input Watts (W): 67.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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 |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50 | 30 | 10 |  | 50 | 30 | 10 |  | 50 |
| RCR |     |     |     |     |     |     |     |     |    |    |    |  |    |    |    |  |    |
| 0   | 108 | 108 | 108 | 108 | 100 | 100 | 100 | 100 | 85 | 85 | 85 |  | 71 | 71 | 71 |  | 59 |
| 1   | 99  | 95  | 91  | 88  | 92  | 88  | 85  | 82  | 75 | 73 | 71 |  | 64 | 62 | 61 |  | 53 |
| 2   | 91  | 84  | 78  | 73  | 84  | 78  | 73  | 69  | 67 | 63 | 60 |  | 57 | 54 | 52 |  | 47 |
| 3   | 83  | 74  | 67  | 62  | 77  | 69  | 63  | 58  | 60 | 55 | 51 |  | 51 | 47 | 45 |  | 43 |
| 4   | 76  | 66  | 58  | 53  | 71  | 62  | 55  | 50  | 53 | 48 | 44 |  | 46 | 42 | 39 |  | 38 |
| 5   | 70  | 59  | 51  | 45  | 65  | 55  | 48  | 43  | 48 | 42 | 38 |  | 41 | 37 | 34 |  | 35 |
| 6   | 65  | 53  | 45  | 40  | 60  | 50  | 43  | 38  | 43 | 38 | 34 |  | 37 | 33 | 30 |  | 32 |
| 7   | 60  | 48  | 40  | 35  | 56  | 45  | 38  | 33  | 39 | 34 | 30 |  | 34 | 30 | 26 |  | 29 |
| 8   | 56  | 44  | 36  | 31  | 52  | 41  | 34  | 29  | 36 | 30 | 26 |  | 31 | 27 | 24 |  | 27 |
| 9   | 52  | 40  | 32  | 27  | 48  | 37  | 31  | 26  | 33 | 27 | 24 |  | 29 | 24 | 21 |  | 25 |
| 10  | 48  | 37  | 29  | 25  | 45  | 34  | 28  | 24  | 30 | 25 | 21 |  | 26 | 22 | 19 |  | 23 |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°   | 45°   | 90°   |
|-----|------|-------|-------|
| 0°  | 9247 | 9247  | 9247  |
| 5°  | 9169 | 9829  | 10527 |
| 10° | 8989 | 11622 | 14351 |
| 15° | 8717 | 14165 | 17472 |
| 20° | 8300 | 16321 | 18360 |
| 25° | 7859 | 17647 | 18539 |
| 30° | 7357 | 18056 | 18446 |
| 35° | 6860 | 18057 | 17712 |
| 40° | 6452 | 17493 | 17149 |
| 45° | 6140 | 16958 | 8213  |
| 50° | 5965 | 16052 | 7076  |
| 55° | 5800 | 10748 | 5604  |
| 60° | 5639 | 6540  | 4060  |
| 65° | 5515 | 4980  | 4225  |
| 70° | 5440 | 4341  | 4341  |
| 75° | 5301 | 4503  | 4356  |
| 80° | 4653 | 4546  | 4331  |
| 85° | 3450 | 4742  | 4100  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 16958 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 139.0  | 1.6       |
| 10°-20°   | 512.4  | 5.9       |
| 20°-30°   | 867.8  | 10.0      |
| 30°-40°   | 1052.7 | 12.1      |
| 40°-50°   | 926.6  | 10.6      |
| 50°-60°   | 573.4  | 6.6       |
| 60°-70°   | 310.9  | 3.6       |
| 70°-80°   | 177.1  | 2.0       |
| 80°-90°   | 59.6   | 0.7       |
| 90°-100°  | 93.7   | 1.1       |
| 100°-110° | 667.6  | 7.7       |
| 110°-120° | 906.4  | 10.4      |
| 120°-130° | 737.7  | 8.5       |
| 130°-140° | 593.3  | 6.8       |
| 140°-150° | 467.8  | 5.4       |
| 150°-160° | 342.0  | 3.9       |
| 160°-170° | 212.4  | 2.4       |
| 170°-180° | 72.4   | 0.8       |
| 0°-30°    | 1519.1 | 17.4      |
| 0°-40°    | 2571.9 | 29.5      |
| 0°-60°    | 4071.9 | 46.7      |
| 0°-90°    | 4619.5 | 53.0      |
| 90°-120°  | 1667.7 | 19.1      |
| 90°-150°  | 3466.6 | 39.8      |
| 90°-180°  | 4094.0 | 47.0      |
| 0°-180°   | 8713.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1289 | 1289  | 1289 | 1289  | 1289 |      |
| 5°   | 1273 | 1314  | 1364 | 1423  | 1461 | 120  |
| 15°  | 1173 | 1353  | 1907 | 2255  | 2352 | 329  |
| 25°  | 993  | 1359  | 2229 | 2295  | 2342 | 456  |
| 35°  | 783  | 1259  | 2061 | 2032  | 2022 | 491  |
| 45°  | 605  | 1035  | 1671 | 1416  | 809  | 469  |
| 55°  | 464  | 722   | 859  | 496   | 448  | 415  |
| 65°  | 325  | 407   | 293  | 251   | 249  | 322  |
| 75°  | 191  | 168   | 162  | 160   | 157  | 200  |
| 85°  | 42   | 57    | 58   | 52    | 50   | 51   |
| 90°  | 0    | 5     | 10   | 14    | 14   | 3    |
| 95°  | 38   | 71    | 38   | 43    | 53   | 43   |
| 105° | 149  | 228   | 868  | 1108  | 733  | 157  |
| 115° | 264  | 320   | 748  | 1554  | 1816 | 262  |
| 125° | 379  | 430   | 704  | 1232  | 1457 | 336  |
| 135° | 470  | 521   | 709  | 1015  | 1165 | 361  |
| 145° | 556  | 603   | 714  | 884   | 978  | 349  |
| 155° | 652  | 675   | 728  | 801   | 839  | 299  |
| 165° | 724  | 733   | 748  | 767   | 781  | 203  |
| 175° | 762  | 767   | 762  | 757   | 752  | 72   |
| 180° | 762  | 762   | 762  | 762   | 762  |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1288.6 | 1288.6 | 1288.6 | 1288.6 | 1288.6 |
| 2.5°   | 1284.4 | 1298.7 | 1305.3 | 1318.1 | 1324.2 |
| 5°     | 1272.9 | 1313.8 | 1364.5 | 1423.0 | 1461.4 |
| 7.5°   | 1252.4 | 1325.7 | 1486.1 | 1670.7 | 1749.5 |
| 10°    | 1233.6 | 1333.5 | 1595.0 | 1862.0 | 1969.5 |
| 12.5°  | 1212.6 | 1341.2 | 1722.8 | 2046.4 | 2156.0 |
| 15°    | 1173.3 | 1352.6 | 1906.7 | 2254.6 | 2351.9 |
| 17.5°  | 1122.5 | 1359.7 | 2065.9 | 2364.9 | 2427.4 |
| 20°    | 1086.9 | 1360.9 | 2137.2 | 2378.7 | 2404.3 |
| 22.5°  | 1053.4 | 1362.2 | 2187.4 | 2345.1 | 2366.6 |
| 25°    | 992.6  | 1358.8 | 2228.8 | 2295.4 | 2341.5 |
| 27.5°  | 931.9  | 1343.7 | 2208.4 | 2262.1 | 2295.4 |
| 30°    | 887.9  | 1328.3 | 2179.1 | 2223.7 | 2226.2 |
| 32.5°  | 846.0  | 1302.8 | 2135.1 | 2148.1 | 2144.5 |
| 35°    | 783.1  | 1259.4 | 2061.2 | 2032.2 | 2021.9 |
| 37.5°  | 724.4  | 1201.8 | 1953.3 | 1906.6 | 1904.1 |
| 40°    | 688.8  | 1160.0 | 1867.4 | 1823.0 | 1830.7 |
| 42.5°  | 655.3  | 1112.2 | 1789.9 | 1737.9 | 1594.0 |
| 45°    | 605.0  | 1035.2 | 1671.0 | 1416.2 | 809.3  |
| 47.5°  | 561.5  | 947.7  | 1536.3 | 758.6  | 696.7  |
| 50°    | 534.3  | 887.7  | 1437.9 | 667.1  | 633.8  |
| 52.5°  | 507.1  | 831.8  | 1310.1 | 599.8  | 556.3  |
| 55°    | 463.6  | 722.2  | 859.1  | 496.5  | 447.9  |
| 57.5°  | 422.2  | 607.1  | 524.9  | 385.9  | 333.1  |
| 60°    | 392.9  | 538.8  | 455.7  | 311.0  | 282.9  |
| 62.5°  | 365.6  | 482.9  | 388.7  | 275.9  | 270.3  |
| 65°    | 324.8  | 406.7  | 293.3  | 251.4  | 248.8  |
| 67.5°  | 286.5  | 334.2  | 223.7  | 226.2  | 223.7  |
| 70°    | 259.3  | 282.3  | 206.9  | 209.5  | 206.9  |
| 72.5°  | 234.1  | 232.6  | 190.1  | 188.5  | 186.0  |
| 75°    | 191.2  | 168.1  | 162.4  | 159.7  | 157.1  |
| 77.5°  | 146.1  | 124.1  | 131.0  | 128.3  | 125.7  |
| 80°    | 112.6  | 104.9  | 110.0  | 107.3  | 104.8  |
| 82.5°  | 83.3   | 85.8   | 89.0   | 84.3   | 81.7   |
| 85°    | 41.9   | 57.3   | 57.6   | 52.3   | 49.8   |
| 87.5°  | 12.6   | 25.8   | 25.0   | 21.7   | 19.6   |
| 90°    | 0.0    | 4.7    | 9.6    | 14.4   | 14.4   |
| 92.5°  | 11.5   | 16.2   | 21.1   | 29.8   | 33.5   |
| 95°    | 38.3   | 71.1   | 38.3   | 43.3   | 52.7   |
| 97.5°  | 68.1   | 136.5  | 281.8  | 83.1   | 71.9   |
| 100°   | 91.1   | 170.7  | 565.5  | 166.5  | 110.2  |
| 102.5° | 114.1  | 197.5  | 764.9  | 439.3  | 240.6  |
| 105°   | 148.6  | 228.2  | 867.5  | 1108.2 | 733.3  |
| 107.5° | 183.1  | 243.1  | 828.2  | 1612.8 | 1510.7 |
| 110°   | 206.1  | 262.3  | 805.2  | 1694.7 | 1821.3 |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5°  | 90°    |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 229.1 | 285.3 | 782.2 | 1646.8 | 1859.6 |
| 115°   | 263.6 | 319.8 | 747.7 | 1554.0 | 1816.5 |
| 117.5° | 299.1 | 354.4 | 739.0 | 1453.6 | 1723.5 |
| 120°   | 325.9 | 377.5 | 723.7 | 1377.1 | 1658.3 |
| 122.5° | 345.1 | 400.4 | 704.5 | 1311.4 | 1570.1 |
| 125°   | 378.6 | 430.2 | 704.5 | 1232.1 | 1457.0 |
| 127.5° | 406.4 | 458.9 | 705.5 | 1140.0 | 1362.1 |
| 130°   | 421.8 | 478.0 | 709.3 | 1078.4 | 1289.3 |
| 132.5° | 440.9 | 497.2 | 709.3 | 1050.7 | 1224.1 |
| 135°   | 469.7 | 521.2 | 709.3 | 1014.7 | 1164.6 |
| 137.5° | 493.7 | 549.0 | 709.3 | 974.9  | 1103.3 |
| 140°   | 512.8 | 564.4 | 709.3 | 951.6  | 1068.8 |
| 142.5° | 532.0 | 579.8 | 713.2 | 924.6  | 1034.3 |
| 145°   | 556.0 | 602.8 | 714.1 | 884.0  | 977.7  |
| 147.5° | 584.7 | 626.0 | 719.9 | 854.8  | 926.9  |
| 150°   | 603.9 | 641.4 | 723.7 | 835.3  | 896.2  |
| 152.5° | 623.1 | 656.8 | 723.7 | 819.7  | 869.4  |
| 155°   | 651.8 | 675.2 | 728.5 | 801.2  | 838.7  |
| 157.5° | 674.8 | 697.3 | 734.3 | 789.5  | 816.7  |
| 160°   | 690.2 | 708.9 | 738.1 | 781.8  | 805.2  |
| 162.5° | 701.7 | 720.4 | 741.9 | 777.7  | 793.7  |
| 165°   | 723.7 | 733.1 | 747.7 | 767.2  | 781.2  |
| 167.5° | 736.2 | 744.6 | 752.5 | 762.2  | 770.7  |
| 170°   | 747.7 | 752.4 | 752.5 | 762.2  | 766.8  |
| 172.5° | 751.5 | 759.9 | 756.3 | 758.3  | 763.0  |
| 175°   | 762.1 | 766.7 | 762.1 | 757.2  | 752.5  |
| 177.5° | 762.1 | 765.8 | 762.1 | 762.0  | 758.2  |
| 180°   | 762.1 | 762.1 | 762.1 | 762.1  | 762.1  |

(END OF REPORT)