

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: P621892

Luminaire Tested: VLT-FB-150U-050D-930-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621892  
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-150U-050D-930-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
LIGHT SHAPING LENS - BATWING  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

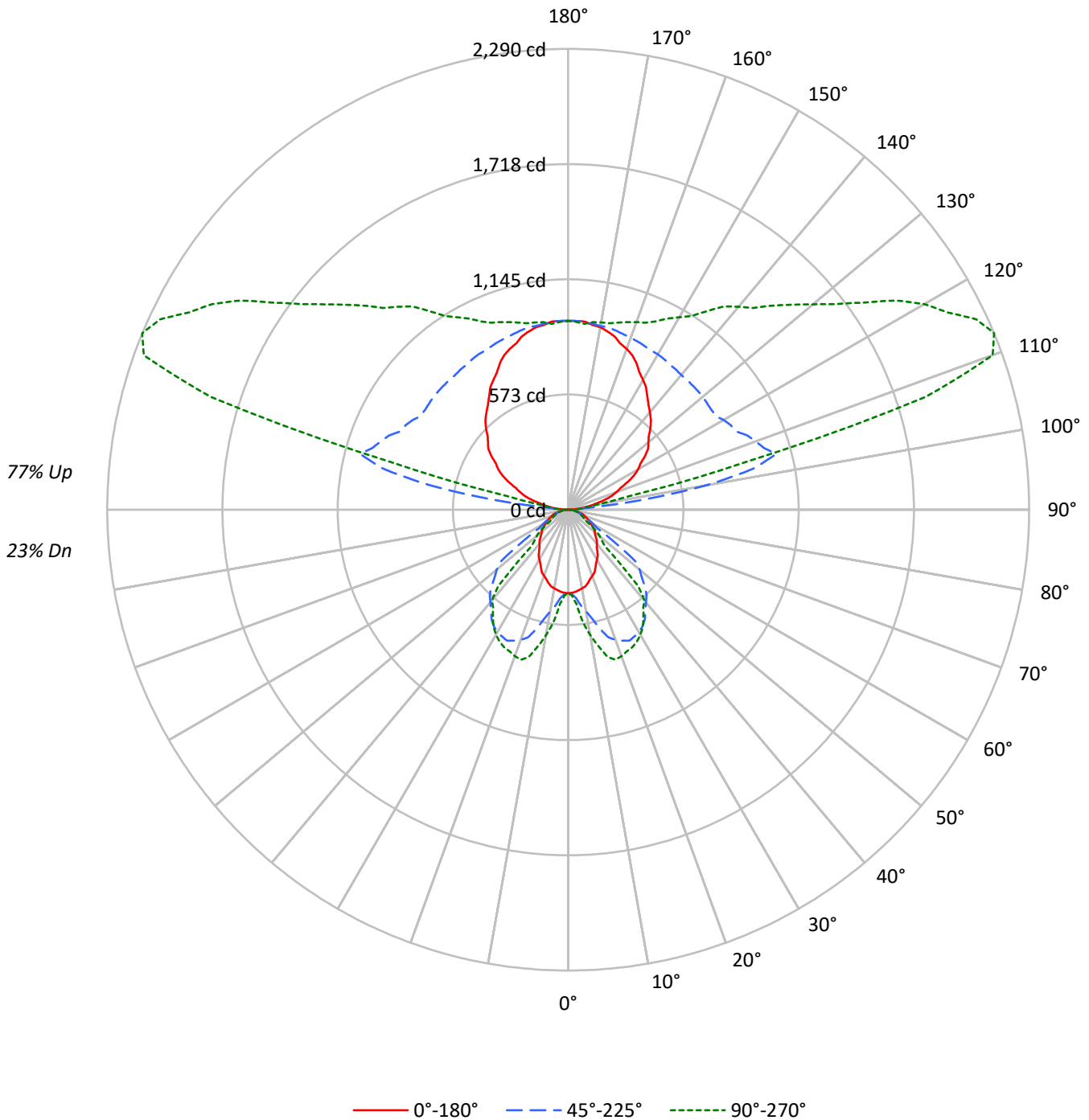
Lumens per Lamp: N/A  
Luminaire Lumens: 6530.4 lumens  
Efficiency: N/A  
Efficacy: 103.7 lumens/watt  
Spacing Criteria (0/90/45): 1.05 / 1.83 / 1.75  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 63  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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 |  |  |  |  |  |  |  |  |   |
| RC  | 80  |     |     |     |    |    |    |    |    | 70 |    |    |    |    |    |    |    |    | 30 |    |    |    |    |   |  |  |  | 10 |  |  |  |  |  |  |  |  | 0 |
| RW  | 70  | 50  | 30  | 10  | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |  |  |  |    |  |  |  |  |  |  |  |  |   |
| RCR |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 0   | 101 | 101 | 101 | 101 | 89 | 89 | 89 | 89 | 68 | 68 | 68 | 49 | 49 | 49 | 31 | 31 | 31 | 23 |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 1   | 92  | 88  | 84  | 81  | 82 | 78 | 75 | 73 | 60 | 58 | 56 | 43 | 42 | 41 | 28 | 27 | 27 | 20 |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 2   | 84  | 77  | 71  | 67  | 74 | 69 | 64 | 60 | 53 | 50 | 47 | 38 | 36 | 35 | 25 | 24 | 23 | 17 |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 3   | 77  | 68  | 61  | 56  | 68 | 61 | 55 | 50 | 47 | 43 | 40 | 34 | 32 | 30 | 22 | 21 | 20 | 15 |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 4   | 70  | 60  | 53  | 47  | 62 | 54 | 47 | 43 | 42 | 37 | 34 | 30 | 28 | 25 | 20 | 18 | 17 | 13 |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 5   | 64  | 53  | 46  | 40  | 57 | 48 | 41 | 36 | 37 | 33 | 29 | 27 | 24 | 22 | 18 | 16 | 15 | 11 |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 6   | 59  | 48  | 40  | 35  | 52 | 43 | 36 | 32 | 33 | 29 | 25 | 25 | 22 | 19 | 16 | 15 | 13 | 10 |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 7   | 55  | 43  | 35  | 30  | 48 | 39 | 32 | 28 | 30 | 26 | 22 | 22 | 19 | 17 | 15 | 13 | 12 | 9  |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 8   | 50  | 39  | 32  | 27  | 45 | 35 | 29 | 24 | 27 | 23 | 20 | 20 | 17 | 15 | 14 | 12 | 11 | 8  |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 9   | 47  | 35  | 28  | 23  | 42 | 32 | 26 | 21 | 25 | 21 | 17 | 19 | 16 | 13 | 13 | 11 | 9  | 7  |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 10  | 44  | 32  | 25  | 21  | 39 | 29 | 23 | 19 | 23 | 19 | 16 | 17 | 14 | 12 | 12 | 10 | 9  | 6  |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 2977 | 2977 | 2977 |
| 5°  | 2952 | 3164 | 3389 |
| 10° | 2894 | 3742 | 4620 |
| 15° | 2806 | 4560 | 5625 |
| 20° | 2672 | 5254 | 5911 |
| 25° | 2531 | 5682 | 5968 |
| 30° | 2368 | 5813 | 5939 |
| 35° | 2208 | 5813 | 5702 |
| 40° | 2078 | 5632 | 5521 |
| 45° | 1977 | 5460 | 2644 |
| 50° | 1920 | 5168 | 2279 |
| 55° | 1867 | 3461 | 1804 |
| 60° | 1816 | 2105 | 1307 |
| 65° | 1776 | 1603 | 1360 |
| 70° | 1752 | 1397 | 1397 |
| 75° | 1708 | 1450 | 1403 |
| 80° | 1500 | 1463 | 1393 |
| 85° | 1112 | 1531 | 1317 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 5460 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 44.7   | 0.7       |
| 10°-20°   | 165.0  | 2.5       |
| 20°-30°   | 279.4  | 4.3       |
| 30°-40°   | 338.9  | 5.2       |
| 40°-50°   | 298.3  | 4.6       |
| 50°-60°   | 184.6  | 2.8       |
| 60°-70°   | 100.1  | 1.5       |
| 70°-80°   | 57.0   | 0.9       |
| 80°-90°   | 20.8   | 0.3       |
| 90°-100°  | 115.4  | 1.8       |
| 100°-110° | 822.3  | 12.6      |
| 110°-120° | 1116.3 | 17.1      |
| 120°-130° | 908.6  | 13.9      |
| 130°-140° | 730.8  | 11.2      |
| 140°-150° | 576.1  | 8.8       |
| 150°-160° | 421.3  | 6.5       |
| 160°-170° | 261.7  | 4.0       |
| 170°-180° | 89.2   | 1.4       |
| 0°-30°    | 489.1  | 7.5       |
| 0°-40°    | 828.0  | 12.7      |
| 0°-60°    | 1310.9 | 20.1      |
| 0°-90°    | 1488.8 | 22.8      |
| 90°-120°  | 2054.0 | 31.5      |
| 90°-150°  | 4269.5 | 65.4      |
| 90°-180°  | 5042.0 | 77.2      |
| 0°-180°   | 6530.4 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|-----|-------|------|-------|------|------|
| 0°   | 415 | 415   | 415  | 415   | 415  |      |
| 5°   | 410 | 423   | 439  | 458   | 470  | 39   |
| 15°  | 378 | 436   | 614  | 726   | 757  | 106  |
| 25°  | 320 | 438   | 718  | 739   | 754  | 147  |
| 35°  | 252 | 406   | 664  | 654   | 651  | 158  |
| 45°  | 195 | 333   | 538  | 456   | 260  | 151  |
| 55°  | 149 | 232   | 277  | 160   | 144  | 134  |
| 65°  | 105 | 131   | 94   | 81    | 80   | 104  |
| 75°  | 62  | 54    | 52   | 51    | 51   | 64   |
| 85°  | 14  | 18    | 19   | 17    | 16   | 16   |
| 90°  | 0   | 6     | 12   | 18    | 18   | 2    |
| 95°  | 47  | 88    | 47   | 53    | 65   | 53   |
| 105° | 183 | 281   | 1068 | 1365  | 903  | 193  |
| 115° | 325 | 394   | 921  | 1914  | 2237 | 322  |
| 125° | 466 | 530   | 868  | 1517  | 1794 | 414  |
| 135° | 578 | 642   | 874  | 1250  | 1434 | 445  |
| 145° | 685 | 742   | 880  | 1089  | 1204 | 430  |
| 155° | 803 | 832   | 897  | 987   | 1033 | 369  |
| 165° | 891 | 903   | 921  | 945   | 962  | 250  |
| 175° | 939 | 944   | 939  | 932   | 927  | 89   |
| 180° | 939 | 939   | 939  | 939   | 939  |      |



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**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°    | 67.5°  | 90°    |
|--------|-------|-------|--------|--------|--------|
| 0°     | 414.8 | 414.8 | 414.8  | 414.8  | 414.8  |
| 2.5°   | 413.5 | 418.1 | 420.2  | 424.3  | 426.3  |
| 5°     | 409.8 | 423.0 | 439.3  | 458.1  | 470.5  |
| 7.5°   | 403.2 | 426.8 | 478.4  | 537.9  | 563.3  |
| 10°    | 397.1 | 429.3 | 513.5  | 599.5  | 634.1  |
| 12.5°  | 390.4 | 431.8 | 554.7  | 658.8  | 694.1  |
| 15°    | 377.7 | 435.5 | 613.8  | 725.9  | 757.2  |
| 17.5°  | 361.4 | 437.7 | 665.1  | 761.4  | 781.5  |
| 20°    | 349.9 | 438.1 | 688.0  | 765.8  | 774.0  |
| 22.5°  | 339.1 | 438.6 | 704.2  | 755.0  | 761.9  |
| 25°    | 319.6 | 437.5 | 717.6  | 739.0  | 753.8  |
| 27.5°  | 300.0 | 432.6 | 711.0  | 728.3  | 739.0  |
| 30°    | 285.8 | 427.6 | 701.5  | 715.9  | 716.7  |
| 32.5°  | 272.4 | 419.4 | 687.4  | 691.6  | 690.4  |
| 35°    | 252.1 | 405.5 | 663.6  | 654.2  | 650.9  |
| 37.5°  | 233.2 | 386.9 | 628.9  | 613.8  | 613.0  |
| 40°    | 221.8 | 373.5 | 601.2  | 586.9  | 589.4  |
| 42.5°  | 211.0 | 358.0 | 576.2  | 559.5  | 513.2  |
| 45°    | 194.8 | 333.3 | 538.0  | 455.9  | 260.5  |
| 47.5°  | 180.8 | 305.1 | 494.6  | 244.2  | 224.3  |
| 50°    | 172.0 | 285.8 | 462.9  | 214.8  | 204.1  |
| 52.5°  | 163.2 | 267.8 | 421.8  | 193.1  | 179.1  |
| 55°    | 149.2 | 232.5 | 276.6  | 159.9  | 144.2  |
| 57.5°  | 135.9 | 195.4 | 169.0  | 124.2  | 107.3  |
| 60°    | 126.5 | 173.5 | 146.7  | 100.1  | 91.1   |
| 62.5°  | 117.7 | 155.5 | 125.1  | 88.8   | 87.0   |
| 65°    | 104.6 | 130.9 | 94.4   | 80.9   | 80.1   |
| 67.5°  | 92.2  | 107.6 | 72.0   | 72.8   | 72.0   |
| 70°    | 83.5  | 90.9  | 66.6   | 67.4   | 66.6   |
| 72.5°  | 75.4  | 74.9  | 61.2   | 60.7   | 59.9   |
| 75°    | 61.6  | 54.1  | 52.3   | 51.4   | 50.6   |
| 77.5°  | 47.0  | 40.0  | 42.2   | 41.3   | 40.5   |
| 80°    | 36.3  | 33.8  | 35.4   | 34.6   | 33.7   |
| 82.5°  | 26.8  | 27.6  | 28.7   | 27.1   | 26.3   |
| 85°    | 13.5  | 18.4  | 18.6   | 16.8   | 16.0   |
| 87.5°  | 4.0   | 9.2   | 9.8    | 9.6    | 8.9    |
| 90°    | 0.0   | 5.8   | 11.8   | 17.7   | 17.7   |
| 92.5°  | 14.2  | 19.9  | 26.0   | 36.7   | 41.3   |
| 95°    | 47.2  | 87.6  | 47.2   | 53.4   | 64.9   |
| 97.5°  | 83.8  | 168.1 | 347.1  | 102.4  | 88.5   |
| 100°   | 112.2 | 210.3 | 696.5  | 205.0  | 135.8  |
| 102.5° | 140.5 | 243.2 | 942.1  | 541.0  | 296.3  |
| 105°   | 183.0 | 281.1 | 1068.4 | 1364.9 | 903.1  |
| 107.5° | 225.5 | 299.4 | 1020.0 | 1986.4 | 1860.6 |
| 110°   | 253.8 | 323.1 | 991.7  | 2087.3 | 2243.1 |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5°  | 90°    |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 282.2 | 351.4 | 963.3 | 2028.3 | 2290.3 |
| 115°   | 324.7 | 393.9 | 920.8 | 1914.0 | 2237.2 |
| 117.5° | 368.3 | 436.4 | 910.2 | 1790.2 | 2122.7 |
| 120°   | 401.4 | 464.9 | 891.3 | 1696.1 | 2042.4 |
| 122.5° | 425.0 | 493.1 | 867.7 | 1615.2 | 1933.8 |
| 125°   | 466.3 | 529.8 | 867.7 | 1517.4 | 1794.5 |
| 127.5° | 500.6 | 565.2 | 868.9 | 1404.0 | 1677.6 |
| 130°   | 519.5 | 588.7 | 873.6 | 1328.1 | 1587.9 |
| 132.5° | 543.1 | 612.3 | 873.6 | 1294.0 | 1507.6 |
| 135°   | 578.5 | 642.0 | 873.6 | 1249.7 | 1434.4 |
| 137.5° | 608.0 | 676.1 | 873.6 | 1200.7 | 1358.8 |
| 140°   | 631.6 | 695.1 | 873.6 | 1172.0 | 1316.3 |
| 142.5° | 655.2 | 714.1 | 878.3 | 1138.8 | 1273.8 |
| 145°   | 684.7 | 742.4 | 879.5 | 1088.8 | 1204.2 |
| 147.5° | 720.1 | 770.9 | 886.6 | 1052.7 | 1141.6 |
| 150°   | 743.8 | 789.9 | 891.3 | 1028.8 | 1103.8 |
| 152.5° | 767.4 | 808.9 | 891.3 | 1009.6 | 1070.8 |
| 155°   | 802.8 | 831.6 | 897.2 | 986.8  | 1033.0 |
| 157.5° | 831.1 | 858.8 | 904.3 | 972.4  | 1005.8 |
| 160°   | 850.0 | 873.1 | 909.0 | 962.8  | 991.7  |
| 162.5° | 864.2 | 887.3 | 913.8 | 957.9  | 977.5  |
| 165°   | 891.3 | 902.9 | 920.8 | 944.9  | 962.2  |
| 167.5° | 906.7 | 917.1 | 926.7 | 938.8  | 949.2  |
| 170°   | 920.8 | 926.6 | 926.7 | 938.7  | 944.5  |
| 172.5° | 925.6 | 936.0 | 931.5 | 934.0  | 939.7  |
| 175°   | 938.6 | 944.3 | 938.6 | 932.5  | 926.7  |
| 177.5° | 938.6 | 943.2 | 938.6 | 938.5  | 933.8  |
| 180°   | 938.6 | 938.6 | 938.6 | 938.6  | 938.6  |

(END OF REPORT)