

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: P621871

Luminaire Tested: VLT-FB-125U-075D-830-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621871  
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-125U-075D-830-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
LIGHT SHAPING LENS - BATWING  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

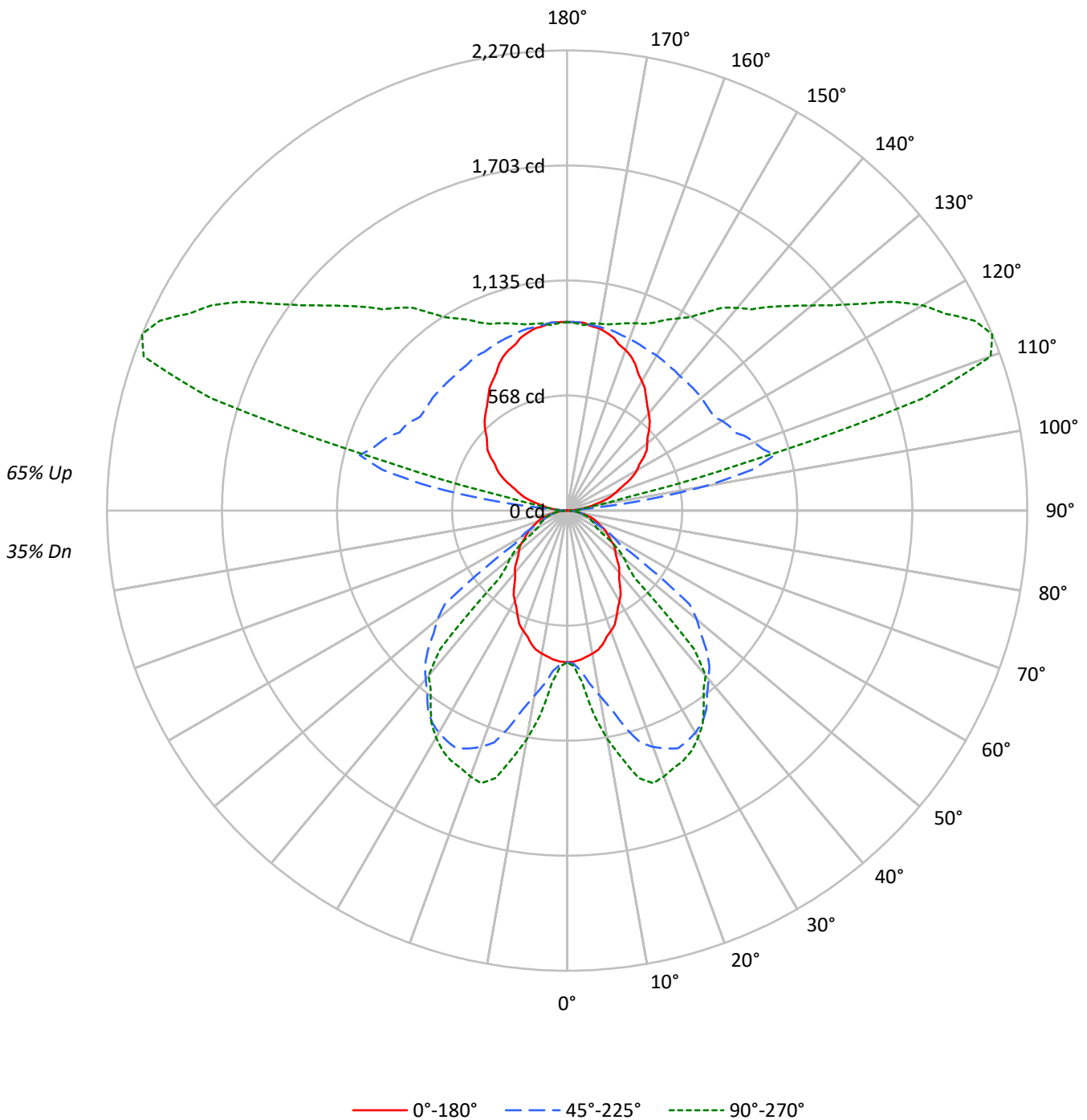
Lumens per Lamp: N/A  
Luminaire Lumens: 7680.4 lumens  
Efficiency: N/A  
Efficacy: 128.4 lumens/watt  
Spacing Criteria (0/90/45): 1.05 / 1.83 / 1.75  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 59.8  
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 |    |    |    | 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   | 104 | 104 | 104 | 104 | 94 | 94 | 94 | 94 | 75 | 75 | 75 | 58 | 58 | 58 | 42 | 42 | 42 | 35 |
| 1   | 95  | 91  | 87  | 84  | 86 | 82 | 79 | 76 | 66 | 64 | 62 | 52 | 50 | 49 | 38 | 37 | 36 | 30 |
| 2   | 87  | 80  | 74  | 69  | 78 | 72 | 67 | 63 | 59 | 55 | 52 | 46 | 44 | 42 | 34 | 33 | 31 | 26 |
| 3   | 79  | 70  | 63  | 58  | 71 | 64 | 58 | 53 | 52 | 48 | 44 | 41 | 38 | 36 | 30 | 29 | 27 | 23 |
| 4   | 73  | 62  | 55  | 49  | 65 | 57 | 50 | 45 | 46 | 42 | 38 | 37 | 33 | 31 | 27 | 25 | 24 | 20 |
| 5   | 67  | 56  | 48  | 42  | 60 | 51 | 44 | 39 | 41 | 37 | 33 | 33 | 29 | 27 | 25 | 23 | 21 | 17 |
| 6   | 61  | 50  | 42  | 37  | 55 | 46 | 39 | 34 | 37 | 32 | 29 | 30 | 26 | 23 | 23 | 20 | 18 | 15 |
| 7   | 57  | 45  | 37  | 32  | 51 | 41 | 34 | 30 | 34 | 29 | 25 | 27 | 23 | 21 | 21 | 18 | 16 | 14 |
| 8   | 53  | 41  | 33  | 28  | 48 | 37 | 31 | 26 | 31 | 26 | 22 | 25 | 21 | 18 | 19 | 16 | 15 | 12 |
| 9   | 49  | 37  | 30  | 25  | 44 | 34 | 28 | 23 | 28 | 23 | 20 | 23 | 19 | 17 | 17 | 15 | 13 | 11 |
| 10  | 46  | 34  | 27  | 22  | 41 | 31 | 25 | 21 | 26 | 21 | 18 | 21 | 17 | 15 | 16 | 14 | 12 | 10 |

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

|     | 0°   | 45°   | 90°   |
|-----|------|-------|-------|
| 0°  | 5370 | 5370  | 5370  |
| 5°  | 5324 | 5708  | 6113  |
| 10° | 5219 | 6749  | 8334  |
| 15° | 5061 | 8225  | 10146 |
| 20° | 4820 | 9477  | 10661 |
| 25° | 4564 | 10247 | 10765 |
| 30° | 4272 | 10484 | 10711 |
| 35° | 3983 | 10485 | 10285 |
| 40° | 3747 | 10158 | 9959  |
| 45° | 3565 | 9847  | 4769  |
| 50° | 3464 | 9321  | 4108  |
| 55° | 3368 | 6240  | 3254  |
| 60° | 3274 | 3798  | 2358  |
| 65° | 3202 | 2892  | 2454  |
| 70° | 3160 | 2520  | 2520  |
| 75° | 3078 | 2615  | 2531  |
| 80° | 2703 | 2641  | 2513  |
| 85° | 2001 | 2758  | 2379  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 9847 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 80.7   | 1.1       |
| 10°-20°   | 297.5  | 3.9       |
| 20°-30°   | 503.9  | 6.6       |
| 30°-40°   | 611.3  | 8.0       |
| 40°-50°   | 538.1  | 7.0       |
| 50°-60°   | 333.0  | 4.3       |
| 60°-70°   | 180.5  | 2.4       |
| 70°-80°   | 102.8  | 1.3       |
| 80°-90°   | 35.7   | 0.5       |
| 90°-100°  | 114.4  | 1.5       |
| 100°-110° | 815.0  | 10.6      |
| 110°-120° | 1106.4 | 14.4      |
| 120°-130° | 900.5  | 11.7      |
| 130°-140° | 724.3  | 9.4       |
| 140°-150° | 571.0  | 7.4       |
| 150°-160° | 417.5  | 5.4       |
| 160°-170° | 259.3  | 3.4       |
| 170°-180° | 88.4   | 1.2       |
| 0°-30°    | 882.1  | 11.5      |
| 0°-40°    | 1493.4 | 19.4      |
| 0°-60°    | 2364.4 | 30.8      |
| 0°-90°    | 2683.5 | 34.9      |
| 90°-120°  | 2035.8 | 26.5      |
| 90°-150°  | 4231.6 | 55.1      |
| 90°-180°  | 4997.0 | 65.1      |
| 0°-180°   | 7680.4 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|-----|-------|------|-------|------|------|
| 0°   | 748 | 748   | 748  | 748   | 748  |      |
| 5°   | 739 | 763   | 792  | 826   | 849  | 70   |
| 15°  | 681 | 785   | 1107 | 1309  | 1366 | 191  |
| 25°  | 576 | 789   | 1294 | 1333  | 1360 | 265  |
| 35°  | 455 | 731   | 1197 | 1180  | 1174 | 285  |
| 45°  | 351 | 601   | 970  | 822   | 470  | 273  |
| 55°  | 269 | 419   | 499  | 288   | 260  | 241  |
| 65°  | 189 | 236   | 170  | 146   | 144  | 187  |
| 75°  | 111 | 98    | 94   | 93    | 91   | 116  |
| 85°  | 24  | 33    | 34   | 30    | 29   | 30   |
| 90°  | 0   | 6     | 12   | 18    | 18   | 3    |
| 95°  | 47  | 87    | 47   | 53    | 64   | 52   |
| 105° | 181 | 279   | 1059 | 1353  | 895  | 191  |
| 115° | 322 | 390   | 913  | 1897  | 2217 | 319  |
| 125° | 462 | 525   | 860  | 1504  | 1778 | 411  |
| 135° | 573 | 636   | 866  | 1239  | 1422 | 441  |
| 145° | 679 | 736   | 872  | 1079  | 1194 | 426  |
| 155° | 796 | 824   | 889  | 978   | 1024 | 365  |
| 165° | 883 | 895   | 913  | 936   | 954  | 248  |
| 175° | 930 | 936   | 930  | 924   | 918  | 88   |
| 180° | 930 | 930   | 930  | 930   | 930  |      |



TEST NUMBER: P621871

CATALOG NUMBER: VLT-FB-125U-075D-830-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°    | 67.5°  | 90°    |
|--------|-------|-------|--------|--------|--------|
| 0°     | 748.3 | 748.3 | 748.3  | 748.3  | 748.3  |
| 2.5°   | 745.8 | 754.2 | 758.0  | 765.4  | 768.9  |
| 5°     | 739.1 | 762.9 | 792.4  | 826.3  | 848.6  |
| 7.5°   | 727.3 | 769.8 | 862.9  | 970.1  | 1015.9 |
| 10°    | 716.3 | 774.3 | 926.2  | 1081.2 | 1143.7 |
| 12.5°  | 704.2 | 778.8 | 1000.4 | 1188.3 | 1252.0 |
| 15°    | 681.3 | 785.4 | 1107.2 | 1309.2 | 1365.7 |
| 17.5°  | 651.8 | 789.5 | 1199.6 | 1373.2 | 1409.5 |
| 20°    | 631.2 | 790.3 | 1241.0 | 1381.3 | 1396.1 |
| 22.5°  | 611.7 | 791.0 | 1270.2 | 1361.7 | 1374.2 |
| 25°    | 576.4 | 789.1 | 1294.2 | 1332.9 | 1359.6 |
| 27.5°  | 541.1 | 780.2 | 1282.4 | 1313.5 | 1332.9 |
| 30°    | 515.6 | 771.3 | 1265.3 | 1291.2 | 1292.7 |
| 32.5°  | 491.2 | 756.5 | 1239.8 | 1247.4 | 1245.3 |
| 35°    | 454.7 | 731.3 | 1196.9 | 1180.0 | 1174.1 |
| 37.5°  | 420.7 | 697.9 | 1134.2 | 1107.1 | 1105.7 |
| 40°    | 400.0 | 673.6 | 1084.4 | 1058.6 | 1063.1 |
| 42.5°  | 380.5 | 645.8 | 1039.3 | 1009.2 | 925.6  |
| 45°    | 351.3 | 601.1 | 970.3  | 822.4  | 469.9  |
| 47.5°  | 326.1 | 550.3 | 892.1  | 440.5  | 404.5  |
| 50°    | 310.3 | 515.5 | 834.9  | 387.4  | 368.0  |
| 52.5°  | 294.4 | 483.0 | 760.7  | 348.3  | 323.0  |
| 55°    | 269.2 | 419.4 | 498.8  | 288.3  | 260.1  |
| 57.5°  | 245.2 | 352.5 | 304.8  | 224.1  | 193.5  |
| 60°    | 228.1 | 312.9 | 264.6  | 180.6  | 164.3  |
| 62.5°  | 212.3 | 280.4 | 225.7  | 160.2  | 157.0  |
| 65°    | 188.6 | 236.2 | 170.3  | 146.0  | 144.5  |
| 67.5°  | 166.4 | 194.0 | 129.9  | 131.4  | 129.9  |
| 70°    | 150.6 | 163.9 | 120.1  | 121.6  | 120.1  |
| 72.5°  | 136.0 | 135.1 | 110.4  | 109.5  | 108.0  |
| 75°    | 111.0 | 97.6  | 94.3   | 92.7   | 91.3   |
| 77.5°  | 84.9  | 72.1  | 76.0   | 74.5   | 73.0   |
| 80°    | 65.4  | 60.9  | 63.9   | 62.3   | 60.8   |
| 82.5°  | 48.4  | 49.9  | 51.7   | 48.9   | 47.5   |
| 85°    | 24.3  | 33.3  | 33.5   | 30.4   | 28.9   |
| 87.5°  | 7.3   | 15.6  | 15.7   | 14.4   | 13.2   |
| 90°    | 0.0   | 5.7   | 11.7   | 17.6   | 17.6   |
| 92.5°  | 14.0  | 19.8  | 25.7   | 36.4   | 41.0   |
| 95°    | 46.8  | 86.8  | 46.8   | 52.9   | 64.4   |
| 97.5°  | 83.1  | 166.6 | 344.0  | 101.5  | 87.8   |
| 100°   | 111.2 | 208.4 | 690.3  | 203.2  | 134.6  |
| 102.5° | 139.2 | 241.1 | 933.7  | 536.2  | 293.7  |
| 105°   | 181.4 | 278.6 | 1058.9 | 1352.7 | 895.1  |
| 107.5° | 223.5 | 296.7 | 1011.0 | 1968.8 | 1844.0 |
| 110°   | 251.6 | 320.2 | 982.9  | 2068.7 | 2223.2 |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5°  | 90°    |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 279.6 | 348.3 | 954.8 | 2010.3 | 2270.0 |
| 115°   | 321.8 | 390.4 | 912.7 | 1897.0 | 2217.3 |
| 117.5° | 365.1 | 432.6 | 902.1 | 1774.3 | 2103.8 |
| 120°   | 397.8 | 460.8 | 883.4 | 1681.0 | 2024.2 |
| 122.5° | 421.2 | 488.7 | 860.0 | 1600.8 | 1916.6 |
| 125°   | 462.2 | 525.1 | 860.0 | 1503.9 | 1778.5 |
| 127.5° | 496.1 | 560.2 | 861.2 | 1391.5 | 1662.7 |
| 130°   | 514.8 | 583.5 | 865.9 | 1316.3 | 1573.8 |
| 132.5° | 538.2 | 606.9 | 865.9 | 1282.5 | 1494.2 |
| 135°   | 573.3 | 636.3 | 865.9 | 1238.6 | 1421.7 |
| 137.5° | 602.6 | 670.1 | 865.9 | 1190.0 | 1346.8 |
| 140°   | 626.0 | 688.9 | 865.9 | 1161.6 | 1304.6 |
| 142.5° | 649.4 | 707.7 | 870.5 | 1128.7 | 1262.5 |
| 145°   | 678.6 | 735.9 | 871.7 | 1079.1 | 1193.5 |
| 147.5° | 713.8 | 764.1 | 878.7 | 1043.4 | 1131.5 |
| 150°   | 737.2 | 782.9 | 883.4 | 1019.7 | 1094.0 |
| 152.5° | 760.6 | 801.7 | 883.4 | 1000.6 | 1061.3 |
| 155°   | 795.7 | 824.3 | 889.3 | 978.1  | 1023.8 |
| 157.5° | 823.7 | 851.2 | 896.3 | 963.7  | 996.9  |
| 160°   | 842.5 | 865.3 | 901.0 | 954.3  | 982.9  |
| 162.5° | 856.5 | 879.4 | 905.6 | 949.4  | 968.8  |
| 165°   | 883.4 | 894.9 | 912.7 | 936.5  | 953.6  |
| 167.5° | 898.6 | 908.9 | 918.5 | 930.4  | 940.7  |
| 170°   | 912.7 | 918.4 | 918.5 | 930.3  | 936.1  |
| 172.5° | 917.3 | 927.6 | 923.2 | 925.7  | 931.4  |
| 175°   | 930.2 | 935.9 | 930.2 | 924.2  | 918.5  |
| 177.5° | 930.2 | 934.8 | 930.2 | 930.1  | 925.5  |
| 180°   | 930.2 | 930.2 | 930.2 | 930.2  | 930.2  |

(END OF REPORT)