

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: P621909

Luminaire Tested: VLT-FB-150U-125D-840-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621909
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-125D-840-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - BATWING
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

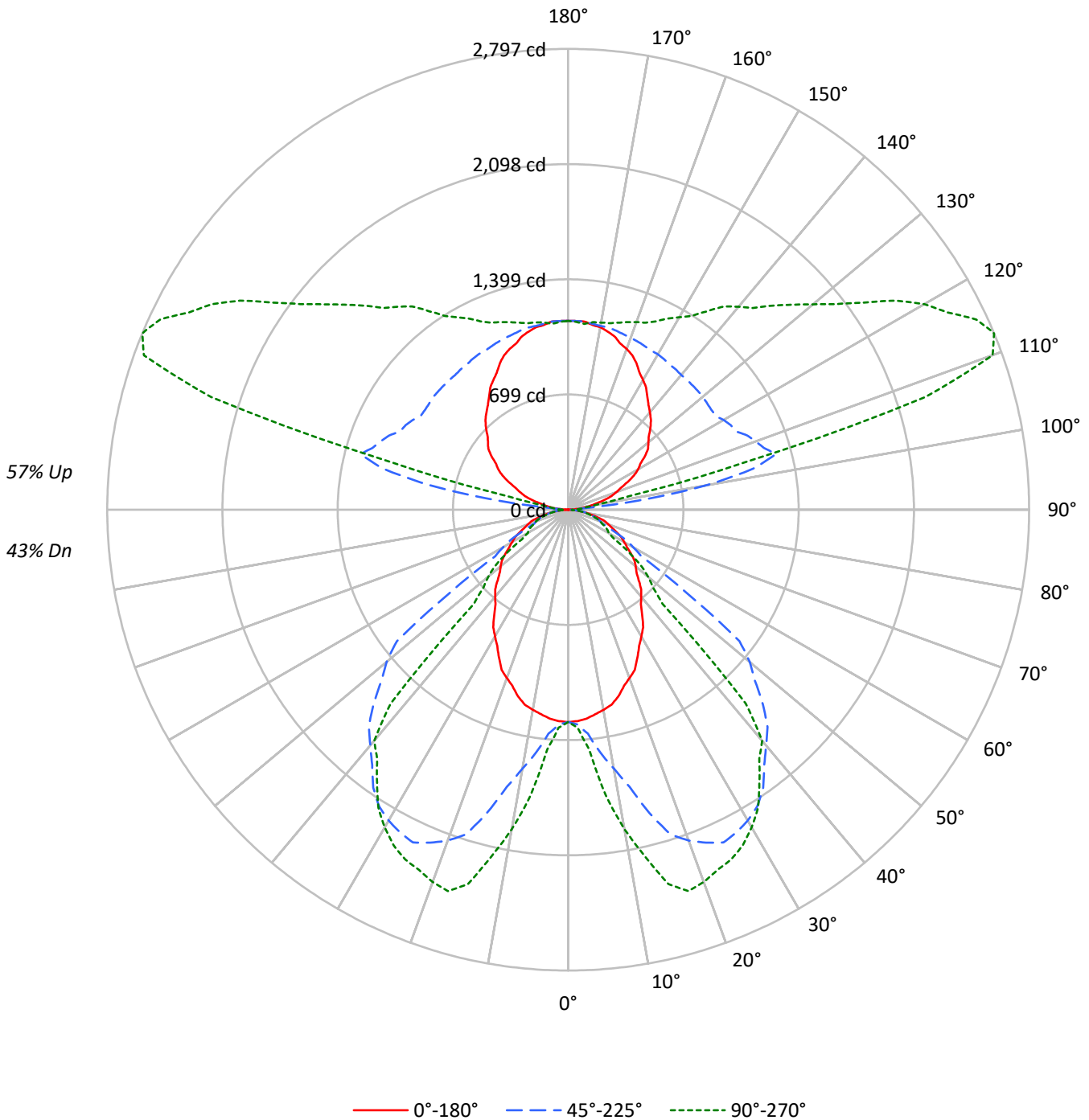
Lumens per Lamp: N/A
Luminaire Lumens: 10777.9 lumens
Efficiency: N/A
Efficacy: 123.5 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.83 / 1.75
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 87.3
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





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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 | 50 | 30 | 10 | 0 | |
| RCR | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 105 | 105 | 105 | 105 | 96 | 96 | 96 | 96 | 79 | 79 | 79 | 64 | 64 | 64 | 50 | 50 | 50 | 43 | | | | |
| 1 | 97 | 93 | 89 | 86 | 88 | 85 | 82 | 79 | 70 | 68 | 66 | 57 | 55 | 54 | 45 | 44 | 43 | 37 | | | | |
| 2 | 88 | 81 | 76 | 71 | 81 | 75 | 70 | 66 | 62 | 59 | 56 | 51 | 48 | 46 | 40 | 38 | 37 | 32 | | | | |
| 3 | 81 | 72 | 65 | 60 | 74 | 66 | 60 | 55 | 55 | 51 | 47 | 45 | 42 | 39 | 36 | 34 | 32 | 28 | | | | |
| 4 | 74 | 64 | 56 | 51 | 68 | 59 | 52 | 47 | 49 | 45 | 41 | 40 | 37 | 34 | 32 | 30 | 28 | 24 | | | | |
| 5 | 68 | 57 | 49 | 44 | 62 | 53 | 46 | 41 | 44 | 39 | 35 | 36 | 33 | 30 | 29 | 27 | 25 | 21 | | | | |
| 6 | 63 | 51 | 44 | 38 | 57 | 47 | 41 | 36 | 40 | 35 | 31 | 33 | 29 | 26 | 27 | 24 | 22 | 19 | | | | |
| 7 | 58 | 46 | 39 | 33 | 53 | 43 | 36 | 31 | 36 | 31 | 27 | 30 | 26 | 23 | 24 | 21 | 19 | 17 | | | | |
| 8 | 54 | 42 | 35 | 29 | 49 | 39 | 32 | 28 | 33 | 28 | 24 | 27 | 24 | 21 | 22 | 19 | 17 | 15 | | | | |
| 9 | 50 | 38 | 31 | 26 | 46 | 36 | 29 | 25 | 30 | 25 | 22 | 25 | 21 | 19 | 21 | 18 | 16 | 13 | | | | |
| 10 | 47 | 35 | 28 | 23 | 43 | 33 | 26 | 22 | 28 | 23 | 19 | 23 | 19 | 17 | 19 | 16 | 14 | 12 | | | | |

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 | 1.3 |
| 10°-20° | 512.4 | 4.8 |
| 20°-30° | 867.8 | 8.1 |
| 30°-40° | 1052.7 | 9.8 |
| 40°-50° | 926.6 | 8.6 |
| 50°-60° | 573.4 | 5.3 |
| 60°-70° | 310.9 | 2.9 |
| 70°-80° | 177.1 | 1.6 |
| 80°-90° | 60.5 | 0.6 |
| 90°-100° | 140.9 | 1.3 |
| 100°-110° | 1004.3 | 9.3 |
| 110°-120° | 1363.4 | 12.7 |
| 120°-130° | 1109.7 | 10.3 |
| 130°-140° | 892.5 | 8.3 |
| 140°-150° | 703.6 | 6.5 |
| 150°-160° | 514.5 | 4.8 |
| 160°-170° | 319.6 | 3.0 |
| 170°-180° | 109.0 | 1.0 |
| 0°-30° | 1519.1 | 14.1 |
| 0°-40° | 2571.9 | 23.9 |
| 0°-60° | 4071.9 | 37.8 |
| 0°-90° | 4620.3 | 42.9 |
| 90°-120° | 2508.7 | 23.3 |
| 90°-150° | 5214.5 | 48.4 |
| 90°-180° | 6158.0 | 57.1 |
| 0°-180° | 10777.9 | 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 | 7 | 14 | 22 | 22 | 4 |
| 95° | 58 | 107 | 58 | 65 | 79 | 65 |
| 105° | 224 | 343 | 1305 | 1667 | 1103 | 236 |
| 115° | 396 | 481 | 1125 | 2338 | 2732 | 394 |
| 125° | 570 | 647 | 1060 | 1853 | 2192 | 506 |
| 135° | 706 | 784 | 1067 | 1526 | 1752 | 544 |
| 145° | 836 | 907 | 1074 | 1330 | 1471 | 525 |
| 155° | 980 | 1016 | 1096 | 1205 | 1262 | 450 |
| 165° | 1089 | 1103 | 1125 | 1154 | 1175 | 306 |
| 175° | 1146 | 1153 | 1146 | 1139 | 1132 | 108 |
| 180° | 1146 | 1146 | 1146 | 1146 | 1146 | |



TEST NUMBER: P621909

CATALOG NUMBER: VLT-FB-150U-125D-840-UNV-STD-W-4

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 | 26.3 | 25.9 | 23.1 | 21.1 |
| 90° | 0.0 | 7.0 | 14.4 | 21.6 | 21.6 |
| 92.5° | 17.3 | 24.4 | 31.7 | 44.8 | 50.5 |
| 95° | 57.7 | 107.0 | 57.7 | 65.2 | 79.3 |
| 97.5° | 102.4 | 205.3 | 423.9 | 125.1 | 108.1 |
| 100° | 137.0 | 256.8 | 850.7 | 250.4 | 165.8 |
| 102.5° | 171.6 | 297.1 | 1150.6 | 660.8 | 361.9 |
| 105° | 223.5 | 343.3 | 1304.9 | 1667.0 | 1103.0 |
| 107.5° | 275.4 | 365.6 | 1245.8 | 2426.1 | 2272.4 |
| 110° | 310.0 | 394.6 | 1211.2 | 2549.2 | 2739.5 |



TEST NUMBER: P621909

CATALOG NUMBER: VLT-FB-150U-125D-840-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 344.6 | 429.2 | 1176.6 | 2477.2 | 2797.2 |
| 115° | 396.5 | 481.1 | 1124.7 | 2337.6 | 2732.3 |
| 117.5° | 449.9 | 533.0 | 1111.7 | 2186.4 | 2592.5 |
| 120° | 490.2 | 567.8 | 1088.6 | 2071.5 | 2494.4 |
| 122.5° | 519.1 | 602.3 | 1059.8 | 1972.7 | 2361.8 |
| 125° | 569.5 | 647.1 | 1059.8 | 1853.3 | 2191.6 |
| 127.5° | 611.4 | 690.3 | 1061.2 | 1714.8 | 2048.9 |
| 130° | 634.4 | 719.0 | 1067.0 | 1622.1 | 1939.3 |
| 132.5° | 663.3 | 747.8 | 1067.0 | 1580.4 | 1841.3 |
| 135° | 706.5 | 784.1 | 1067.0 | 1526.3 | 1751.9 |
| 137.5° | 742.6 | 825.7 | 1067.0 | 1466.4 | 1659.6 |
| 140° | 771.4 | 848.9 | 1067.0 | 1431.5 | 1607.7 |
| 142.5° | 800.2 | 872.1 | 1072.7 | 1390.8 | 1555.8 |
| 145° | 836.3 | 906.8 | 1074.2 | 1329.7 | 1470.7 |
| 147.5° | 879.5 | 941.6 | 1082.8 | 1285.7 | 1394.3 |
| 150° | 908.4 | 964.8 | 1088.6 | 1256.5 | 1348.1 |
| 152.5° | 937.2 | 988.0 | 1088.6 | 1233.1 | 1307.8 |
| 155° | 980.5 | 1015.7 | 1095.8 | 1205.2 | 1261.6 |
| 157.5° | 1015.1 | 1048.9 | 1104.5 | 1187.6 | 1228.5 |
| 160° | 1038.1 | 1066.3 | 1110.2 | 1175.9 | 1211.2 |
| 162.5° | 1055.4 | 1083.6 | 1116.0 | 1169.9 | 1193.9 |
| 165° | 1088.6 | 1102.7 | 1124.7 | 1154.0 | 1175.1 |
| 167.5° | 1107.4 | 1120.0 | 1131.9 | 1146.6 | 1159.3 |
| 170° | 1124.7 | 1131.7 | 1131.9 | 1146.4 | 1153.5 |
| 172.5° | 1130.4 | 1143.1 | 1137.6 | 1140.7 | 1147.7 |
| 175° | 1146.3 | 1153.3 | 1146.3 | 1138.9 | 1131.9 |
| 177.5° | 1146.3 | 1151.9 | 1146.3 | 1146.2 | 1140.5 |
| 180° | 1146.3 | 1146.3 | 1146.3 | 1146.3 | 1146.3 |

(END OF REPORT)