

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: P621768

Luminaire Tested: VLT-FB-025U-125D-940-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621768
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-025U-125D-940-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - BATWING
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

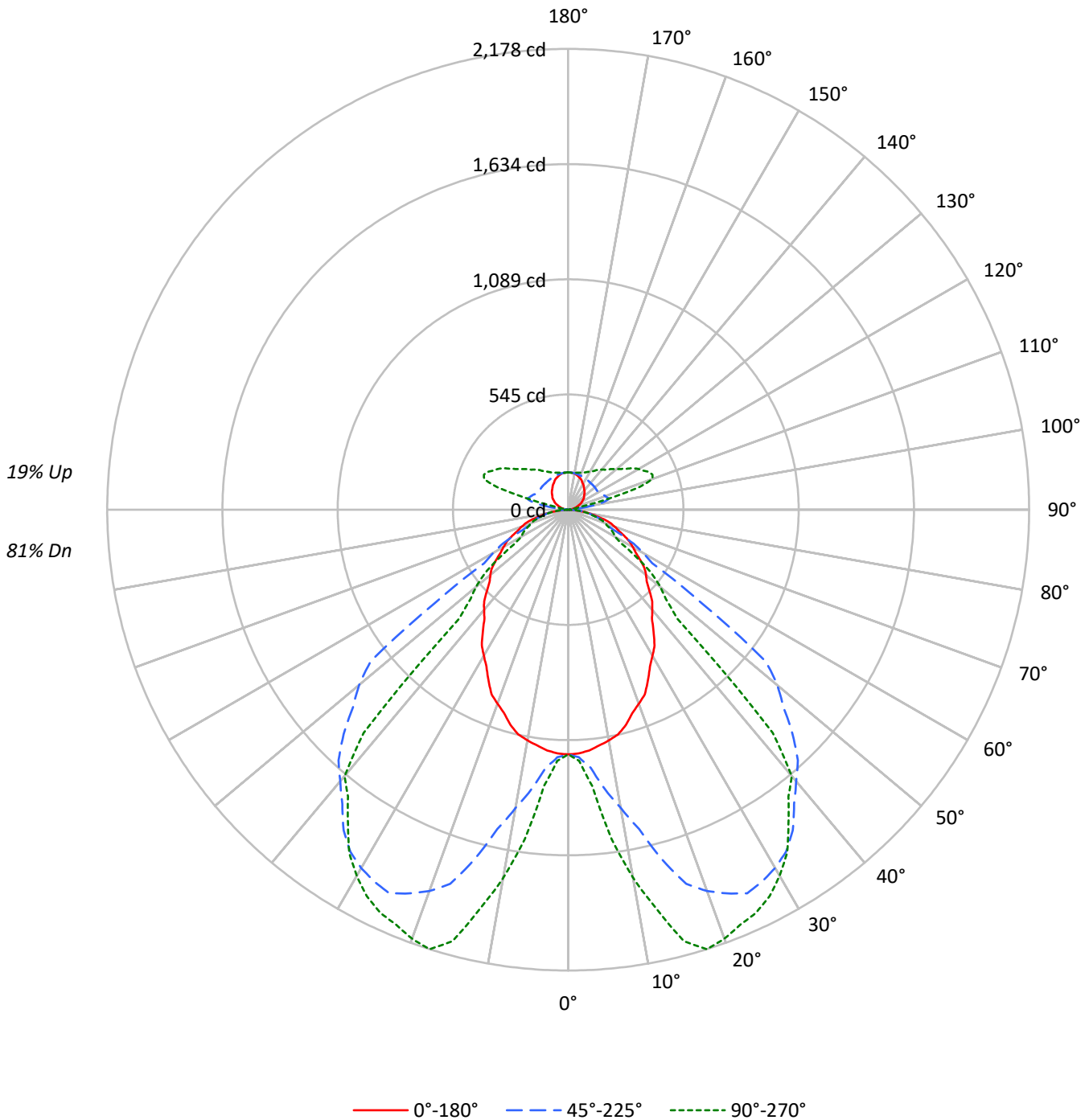
Lumens per Lamp: N/A
Luminaire Lumens: 5094.2 lumens
Efficiency: N/A
Efficacy: 108.4 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.83 / 1.75
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 47
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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | | | |
| 0 | 115 | 115 | 115 | 115 | 110 | 110 | 110 | 110 | 101 | 101 | 101 | | 92 | 92 | 92 | | 85 | 85 | 85 | 81 |
| 1 | 106 | 102 | 98 | 95 | 101 | 98 | 94 | 91 | 90 | 87 | 85 | | 83 | 81 | 79 | | 77 | 75 | 74 | 71 |
| 2 | 97 | 90 | 84 | 79 | 93 | 87 | 81 | 77 | 80 | 76 | 72 | | 74 | 71 | 68 | | 69 | 66 | 64 | 61 |
| 3 | 89 | 80 | 73 | 67 | 85 | 77 | 71 | 65 | 72 | 66 | 62 | | 66 | 62 | 59 | | 62 | 58 | 55 | 53 |
| 4 | 82 | 72 | 64 | 58 | 79 | 69 | 62 | 56 | 64 | 58 | 54 | | 60 | 55 | 51 | | 56 | 52 | 48 | 46 |
| 5 | 76 | 64 | 56 | 50 | 73 | 62 | 55 | 49 | 58 | 52 | 47 | | 54 | 49 | 45 | | 51 | 46 | 43 | 40 |
| 6 | 70 | 58 | 50 | 44 | 67 | 56 | 49 | 43 | 53 | 46 | 41 | | 49 | 44 | 40 | | 46 | 41 | 38 | 36 |
| 7 | 65 | 53 | 45 | 39 | 62 | 51 | 44 | 38 | 48 | 41 | 37 | | 45 | 39 | 35 | | 42 | 37 | 34 | 32 |
| 8 | 61 | 48 | 40 | 35 | 58 | 47 | 39 | 34 | 44 | 37 | 33 | | 41 | 36 | 32 | | 39 | 34 | 30 | 28 |
| 9 | 57 | 44 | 36 | 31 | 54 | 43 | 36 | 31 | 40 | 34 | 30 | | 38 | 32 | 28 | | 36 | 31 | 27 | 26 |
| 10 | 53 | 41 | 33 | 28 | 51 | 39 | 32 | 28 | 37 | 31 | 27 | | 35 | 30 | 26 | | 33 | 28 | 25 | 23 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|-------|-------|
| 0° | 8298 | 8298 | 8298 |
| 5° | 8228 | 8821 | 9447 |
| 10° | 8066 | 10430 | 12879 |
| 15° | 7823 | 12712 | 15681 |
| 20° | 7449 | 14646 | 16477 |
| 25° | 7053 | 15837 | 16638 |
| 30° | 6602 | 16203 | 16554 |
| 35° | 6157 | 16205 | 15895 |
| 40° | 5791 | 15698 | 15390 |
| 45° | 5510 | 15218 | 7371 |
| 50° | 5353 | 14406 | 6350 |
| 55° | 5205 | 9645 | 5028 |
| 60° | 5060 | 5870 | 3643 |
| 65° | 4948 | 4469 | 3792 |
| 70° | 4882 | 3896 | 3896 |
| 75° | 4758 | 4040 | 3909 |
| 80° | 4178 | 4079 | 3885 |
| 85° | 3096 | 4257 | 3680 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 15218 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 124.7 | 2.4 |
| 10°-20° | 459.8 | 9.0 |
| 20°-30° | 778.8 | 15.3 |
| 30°-40° | 944.7 | 18.5 |
| 40°-50° | 831.6 | 16.3 |
| 50°-60° | 514.6 | 10.1 |
| 60°-70° | 279.0 | 5.5 |
| 70°-80° | 158.9 | 3.1 |
| 80°-90° | 52.4 | 1.0 |
| 90°-100° | 21.7 | 0.4 |
| 100°-110° | 154.9 | 3.0 |
| 110°-120° | 210.3 | 4.1 |
| 120°-130° | 171.2 | 3.4 |
| 130°-140° | 137.7 | 2.7 |
| 140°-150° | 108.5 | 2.1 |
| 150°-160° | 79.4 | 1.6 |
| 160°-170° | 49.3 | 1.0 |
| 170°-180° | 16.8 | 0.3 |
| 0°-30° | 1363.3 | 26.8 |
| 0°-40° | 2308.0 | 45.3 |
| 0°-60° | 3654.2 | 71.7 |
| 0°-90° | 4144.4 | 81.4 |
| 90°-120° | 386.9 | 7.6 |
| 90°-150° | 804.3 | 15.8 |
| 90°-180° | 950.0 | 18.6 |
| 0°-180° | 5094.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1156 | 1156 | 1156 | 1156 | 1156 | |
| 5° | 1142 | 1179 | 1225 | 1277 | 1312 | 108 |
| 15° | 1053 | 1214 | 1711 | 2023 | 2111 | 295 |
| 25° | 891 | 1219 | 2000 | 2060 | 2101 | 409 |
| 35° | 703 | 1130 | 1850 | 1824 | 1814 | 440 |
| 45° | 543 | 929 | 1500 | 1271 | 726 | 421 |
| 55° | 416 | 648 | 771 | 446 | 402 | 372 |
| 65° | 291 | 365 | 263 | 226 | 223 | 289 |
| 75° | 172 | 151 | 146 | 143 | 141 | 179 |
| 85° | 38 | 51 | 52 | 47 | 45 | 46 |
| 90° | 0 | 1 | 2 | 3 | 3 | 2 |
| 95° | 9 | 16 | 9 | 10 | 12 | 10 |
| 105° | 34 | 53 | 201 | 257 | 170 | 36 |
| 115° | 61 | 74 | 174 | 360 | 421 | 61 |
| 125° | 88 | 100 | 164 | 286 | 338 | 78 |
| 135° | 109 | 121 | 165 | 235 | 270 | 84 |
| 145° | 129 | 140 | 166 | 205 | 227 | 81 |
| 155° | 151 | 157 | 169 | 186 | 195 | 69 |
| 165° | 168 | 170 | 174 | 178 | 181 | 47 |
| 175° | 177 | 178 | 177 | 176 | 175 | 17 |
| 180° | 177 | 177 | 177 | 177 | 177 | |

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1156.4 | 1156.4 | 1156.4 | 1156.4 | 1156.4 |
| 2.5° | 1152.6 | 1165.5 | 1171.4 | 1182.8 | 1188.4 |
| 5° | 1142.3 | 1179.1 | 1224.6 | 1277.0 | 1311.5 |
| 7.5° | 1124.0 | 1189.7 | 1333.6 | 1499.3 | 1570.1 |
| 10° | 1107.0 | 1196.7 | 1431.4 | 1671.0 | 1767.5 |
| 12.5° | 1088.2 | 1203.6 | 1546.1 | 1836.5 | 1934.8 |
| 15° | 1053.0 | 1213.8 | 1711.1 | 2023.3 | 2110.7 |
| 17.5° | 1007.4 | 1220.2 | 1854.0 | 2122.3 | 2178.3 |
| 20° | 975.4 | 1221.3 | 1917.9 | 2134.7 | 2157.7 |
| 22.5° | 945.3 | 1222.5 | 1963.1 | 2104.5 | 2123.8 |
| 25° | 890.8 | 1219.4 | 2000.2 | 2059.9 | 2101.3 |
| 27.5° | 836.3 | 1205.8 | 1981.9 | 2030.0 | 2059.9 |
| 30° | 796.8 | 1192.1 | 1955.5 | 1995.5 | 1997.8 |
| 32.5° | 759.2 | 1169.2 | 1916.0 | 1927.7 | 1924.5 |
| 35° | 702.8 | 1130.2 | 1849.8 | 1823.7 | 1814.5 |
| 37.5° | 650.1 | 1078.5 | 1752.9 | 1711.0 | 1708.7 |
| 40° | 618.2 | 1041.0 | 1675.8 | 1636.0 | 1642.9 |
| 42.5° | 588.1 | 998.1 | 1606.3 | 1559.6 | 1430.5 |
| 45° | 542.9 | 929.0 | 1499.6 | 1270.9 | 726.3 |
| 47.5° | 503.9 | 850.5 | 1378.7 | 680.8 | 625.2 |
| 50° | 479.5 | 796.6 | 1290.4 | 598.7 | 568.8 |
| 52.5° | 455.0 | 746.4 | 1175.7 | 538.3 | 499.2 |
| 55° | 416.0 | 648.1 | 770.9 | 445.6 | 401.9 |
| 57.5° | 378.9 | 544.8 | 471.0 | 346.3 | 299.0 |
| 60° | 352.6 | 483.6 | 409.0 | 279.1 | 253.8 |
| 62.5° | 328.1 | 433.4 | 348.8 | 247.6 | 242.6 |
| 65° | 291.4 | 365.0 | 263.2 | 225.6 | 223.3 |
| 67.5° | 257.1 | 299.9 | 200.7 | 203.0 | 200.7 |
| 70° | 232.7 | 253.4 | 185.7 | 188.0 | 185.7 |
| 72.5° | 210.1 | 208.7 | 170.6 | 169.2 | 166.9 |
| 75° | 171.6 | 150.9 | 145.7 | 143.3 | 141.0 |
| 77.5° | 131.2 | 111.4 | 117.5 | 115.1 | 112.8 |
| 80° | 101.1 | 94.2 | 98.7 | 96.3 | 94.0 |
| 82.5° | 74.7 | 77.0 | 79.9 | 75.6 | 73.3 |
| 85° | 37.6 | 51.4 | 51.7 | 47.0 | 44.7 |
| 87.5° | 11.3 | 22.5 | 21.1 | 17.5 | 15.7 |
| 90° | 0.0 | 1.1 | 2.2 | 3.3 | 3.3 |
| 92.5° | 2.7 | 3.8 | 4.9 | 6.9 | 7.8 |
| 95° | 8.9 | 16.5 | 8.9 | 10.1 | 12.2 |
| 97.5° | 15.8 | 31.7 | 65.4 | 19.3 | 16.7 |
| 100° | 21.1 | 39.6 | 131.2 | 38.6 | 25.6 |
| 102.5° | 26.5 | 45.8 | 177.5 | 101.9 | 55.8 |
| 105° | 34.5 | 53.0 | 201.3 | 257.1 | 170.1 |
| 107.5° | 42.5 | 56.4 | 192.1 | 374.2 | 350.5 |
| 110° | 47.8 | 60.9 | 186.8 | 393.2 | 422.5 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 53.2 | 66.2 | 181.5 | 382.1 | 431.4 |
| 115° | 61.2 | 74.2 | 173.5 | 360.5 | 421.4 |
| 117.5° | 69.4 | 82.2 | 171.5 | 337.2 | 399.9 |
| 120° | 75.6 | 87.6 | 167.9 | 319.5 | 384.7 |
| 122.5° | 80.1 | 92.9 | 163.5 | 304.3 | 364.3 |
| 125° | 87.8 | 99.8 | 163.5 | 285.8 | 338.0 |
| 127.5° | 94.3 | 106.5 | 163.7 | 264.5 | 316.0 |
| 130° | 97.8 | 110.9 | 164.6 | 250.2 | 299.1 |
| 132.5° | 102.3 | 115.3 | 164.6 | 243.8 | 284.0 |
| 135° | 109.0 | 120.9 | 164.6 | 235.4 | 270.2 |
| 137.5° | 114.5 | 127.4 | 164.6 | 226.2 | 256.0 |
| 140° | 119.0 | 130.9 | 164.6 | 220.8 | 248.0 |
| 142.5° | 123.4 | 134.5 | 165.5 | 214.5 | 240.0 |
| 145° | 129.0 | 139.9 | 165.7 | 205.1 | 226.8 |
| 147.5° | 135.7 | 145.2 | 167.0 | 198.3 | 215.0 |
| 150° | 140.1 | 148.8 | 167.9 | 193.8 | 207.9 |
| 152.5° | 144.6 | 152.4 | 167.9 | 190.2 | 201.7 |
| 155° | 151.2 | 156.7 | 169.0 | 185.9 | 194.6 |
| 157.5° | 156.6 | 161.8 | 170.3 | 183.2 | 189.5 |
| 160° | 160.1 | 164.5 | 171.2 | 181.4 | 186.8 |
| 162.5° | 162.8 | 167.1 | 172.1 | 180.4 | 184.1 |
| 165° | 167.9 | 170.1 | 173.5 | 178.0 | 181.2 |
| 167.5° | 170.8 | 172.7 | 174.6 | 176.8 | 178.8 |
| 170° | 173.5 | 174.5 | 174.6 | 176.8 | 177.9 |
| 172.5° | 174.4 | 176.3 | 175.5 | 175.9 | 177.0 |
| 175° | 176.8 | 177.9 | 176.8 | 175.7 | 174.6 |
| 177.5° | 176.8 | 177.7 | 176.8 | 176.8 | 175.9 |
| 180° | 176.8 | 176.8 | 176.8 | 176.8 | 176.8 |

(END OF REPORT)