

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: P621764

Luminaire Tested: VLT-FB-025U-125D-835-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621764
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-835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

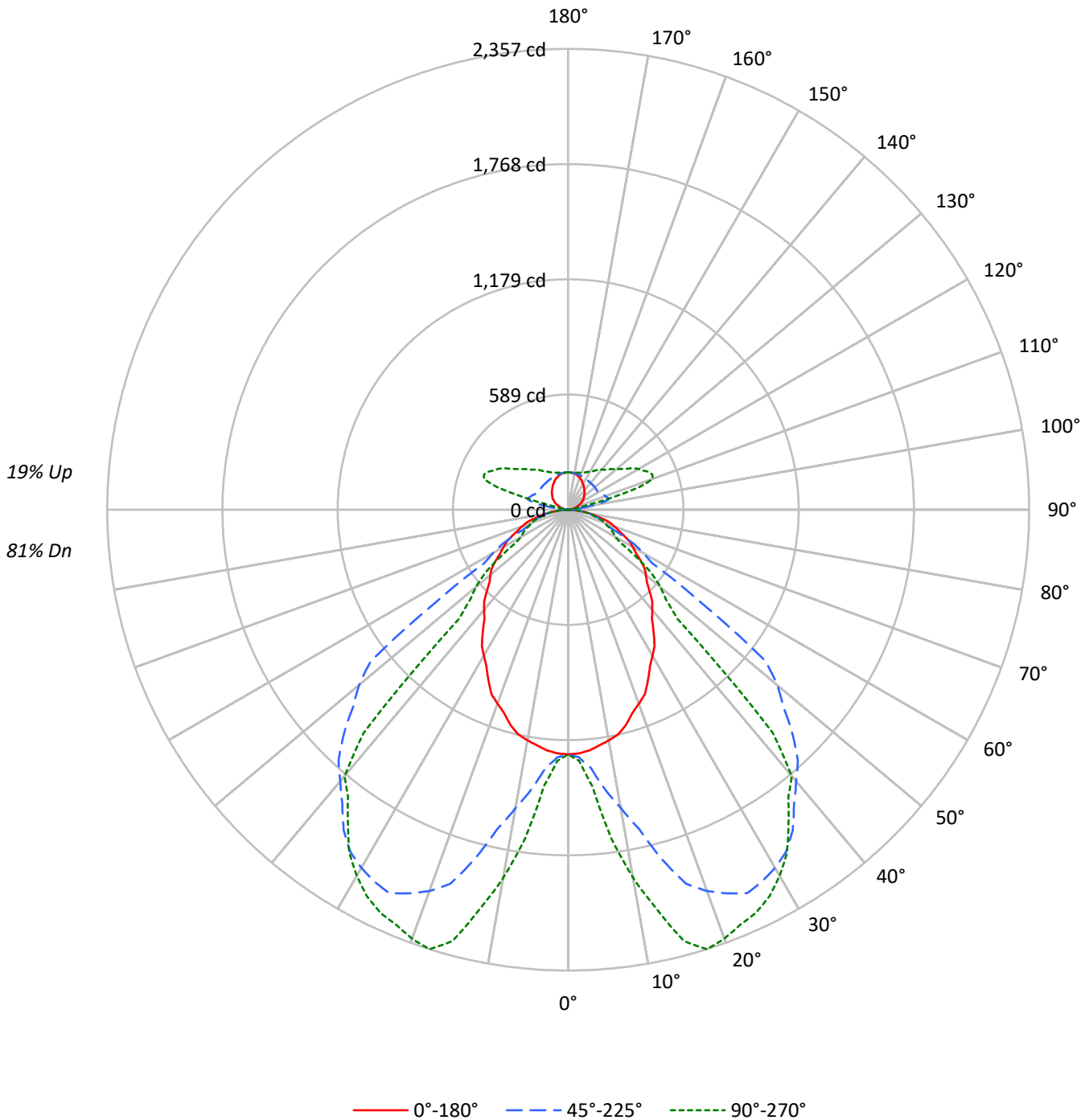
Lumens per Lamp: N/A
Luminaire Lumens: 5512.2 lumens
Efficiency: N/A
Efficacy: 117.3 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.83 / 1.75
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Direct

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° | 8979 | 8979 | 8979 |
| 5° | 8903 | 9544 | 10222 |
| 10° | 8729 | 11286 | 13936 |
| 15° | 8465 | 13755 | 16967 |
| 20° | 8060 | 15848 | 17829 |
| 25° | 7632 | 17136 | 18003 |
| 30° | 7144 | 17533 | 17913 |
| 35° | 6661 | 17534 | 17200 |
| 40° | 6266 | 16986 | 16653 |
| 45° | 5962 | 16467 | 7976 |
| 50° | 5792 | 15587 | 6871 |
| 55° | 5632 | 10437 | 5441 |
| 60° | 5475 | 6351 | 3942 |
| 65° | 5355 | 4836 | 4102 |
| 70° | 5283 | 4215 | 4215 |
| 75° | 5149 | 4372 | 4231 |
| 80° | 4521 | 4413 | 4203 |
| 85° | 3351 | 4611 | 3977 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 16467 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 134.9 | 2.4 |
| 10°-20° | 497.5 | 9.0 |
| 20°-30° | 842.7 | 15.3 |
| 30°-40° | 1022.3 | 18.5 |
| 40°-50° | 899.8 | 16.3 |
| 50°-60° | 556.8 | 10.1 |
| 60°-70° | 301.9 | 5.5 |
| 70°-80° | 172.0 | 3.1 |
| 80°-90° | 56.7 | 1.0 |
| 90°-100° | 23.5 | 0.4 |
| 100°-110° | 167.6 | 3.0 |
| 110°-120° | 227.5 | 4.1 |
| 120°-130° | 185.2 | 3.4 |
| 130°-140° | 149.0 | 2.7 |
| 140°-150° | 117.4 | 2.1 |
| 150°-160° | 85.9 | 1.6 |
| 160°-170° | 53.3 | 1.0 |
| 170°-180° | 18.2 | 0.3 |
| 0°-30° | 1475.2 | 26.8 |
| 0°-40° | 2497.4 | 45.3 |
| 0°-60° | 3954.0 | 71.7 |
| 0°-90° | 4484.5 | 81.4 |
| 90°-120° | 418.7 | 7.6 |
| 90°-150° | 870.3 | 15.8 |
| 90°-180° | 1028.0 | 18.6 |
| 0°-180° | 5512.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1251 | 1251 | 1251 | 1251 | 1251 | |
| 5° | 1236 | 1276 | 1325 | 1382 | 1419 | 117 |
| 15° | 1139 | 1313 | 1852 | 2189 | 2284 | 319 |
| 25° | 964 | 1320 | 2164 | 2229 | 2274 | 443 |
| 35° | 760 | 1223 | 2002 | 1973 | 1963 | 477 |
| 45° | 588 | 1005 | 1623 | 1375 | 786 | 456 |
| 55° | 450 | 701 | 834 | 482 | 435 | 403 |
| 65° | 315 | 395 | 285 | 244 | 242 | 313 |
| 75° | 186 | 163 | 158 | 155 | 153 | 194 |
| 85° | 41 | 56 | 56 | 51 | 48 | 50 |
| 90° | 0 | 1 | 2 | 4 | 4 | 2 |
| 95° | 10 | 18 | 10 | 11 | 13 | 11 |
| 105° | 37 | 57 | 218 | 278 | 184 | 39 |
| 115° | 66 | 80 | 188 | 390 | 456 | 66 |
| 125° | 95 | 108 | 177 | 309 | 366 | 84 |
| 135° | 118 | 131 | 178 | 255 | 292 | 91 |
| 145° | 140 | 151 | 179 | 222 | 245 | 88 |
| 155° | 164 | 170 | 183 | 201 | 211 | 75 |
| 165° | 182 | 184 | 188 | 193 | 196 | 51 |
| 175° | 191 | 192 | 191 | 190 | 189 | 18 |
| 180° | 191 | 191 | 191 | 191 | 191 | |

TEST NUMBER: P621764

CATALOG NUMBER: VLT-FB-025U-125D-835-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1251.3 | 1251.3 | 1251.3 | 1251.3 | 1251.3 |
| 2.5° | 1247.2 | 1261.1 | 1267.6 | 1279.9 | 1285.9 |
| 5° | 1236.0 | 1275.8 | 1325.0 | 1381.8 | 1419.1 |
| 7.5° | 1216.2 | 1287.3 | 1443.0 | 1622.3 | 1698.9 |
| 10° | 1197.9 | 1294.9 | 1548.8 | 1808.1 | 1912.5 |
| 12.5° | 1177.5 | 1302.4 | 1673.0 | 1987.2 | 2093.6 |
| 15° | 1139.4 | 1313.4 | 1851.5 | 2189.3 | 2283.8 |
| 17.5° | 1090.0 | 1320.3 | 2006.1 | 2296.4 | 2357.1 |
| 20° | 1055.4 | 1321.5 | 2075.3 | 2309.8 | 2334.7 |
| 22.5° | 1022.9 | 1322.8 | 2124.1 | 2277.2 | 2298.1 |
| 25° | 963.9 | 1319.5 | 2164.3 | 2228.9 | 2273.7 |
| 27.5° | 904.9 | 1304.8 | 2144.5 | 2196.6 | 2228.9 |
| 30° | 862.2 | 1289.9 | 2116.0 | 2159.3 | 2161.8 |
| 32.5° | 821.5 | 1265.1 | 2073.3 | 2085.9 | 2082.4 |
| 35° | 760.4 | 1223.0 | 2001.5 | 1973.3 | 1963.4 |
| 37.5° | 703.5 | 1167.0 | 1896.8 | 1851.4 | 1848.9 |
| 40° | 668.9 | 1126.4 | 1813.3 | 1770.3 | 1777.7 |
| 42.5° | 636.3 | 1080.0 | 1738.1 | 1687.6 | 1547.8 |
| 45° | 587.5 | 1005.3 | 1622.6 | 1375.2 | 785.9 |
| 47.5° | 545.3 | 920.3 | 1491.9 | 736.7 | 676.5 |
| 50° | 518.8 | 862.0 | 1396.2 | 647.8 | 615.5 |
| 52.5° | 492.4 | 807.7 | 1272.1 | 582.5 | 540.2 |
| 55° | 450.2 | 701.3 | 834.2 | 482.1 | 434.9 |
| 57.5° | 410.0 | 589.5 | 509.7 | 374.7 | 323.5 |
| 60° | 381.5 | 523.2 | 442.5 | 302.0 | 274.7 |
| 62.5° | 355.0 | 468.9 | 377.4 | 267.9 | 262.5 |
| 65° | 315.4 | 394.9 | 284.8 | 244.1 | 241.6 |
| 67.5° | 278.2 | 324.5 | 217.2 | 219.7 | 217.2 |
| 70° | 251.8 | 274.2 | 200.9 | 203.4 | 200.9 |
| 72.5° | 227.4 | 225.9 | 184.6 | 183.1 | 180.6 |
| 75° | 185.7 | 163.3 | 157.7 | 155.1 | 152.6 |
| 77.5° | 141.9 | 120.5 | 127.2 | 124.6 | 122.1 |
| 80° | 109.4 | 101.9 | 106.8 | 104.2 | 101.7 |
| 82.5° | 80.9 | 83.4 | 86.5 | 81.8 | 79.3 |
| 85° | 40.7 | 55.6 | 56.0 | 50.8 | 48.3 |
| 87.5° | 12.2 | 24.4 | 22.9 | 19.0 | 17.0 |
| 90° | 0.0 | 1.2 | 2.4 | 3.6 | 3.6 |
| 92.5° | 2.9 | 4.1 | 5.3 | 7.5 | 8.4 |
| 95° | 9.6 | 17.9 | 9.6 | 10.9 | 13.2 |
| 97.5° | 17.1 | 34.3 | 70.7 | 20.9 | 18.0 |
| 100° | 22.9 | 42.9 | 142.0 | 41.8 | 27.7 |
| 102.5° | 28.6 | 49.6 | 192.0 | 110.3 | 60.4 |
| 105° | 37.3 | 57.3 | 217.8 | 278.2 | 184.1 |
| 107.5° | 46.0 | 61.0 | 207.9 | 404.9 | 379.2 |
| 110° | 51.7 | 65.9 | 202.1 | 425.4 | 457.2 |



TEST NUMBER: P621764

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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 57.5 | 71.6 | 196.4 | 413.4 | 466.8 |
| 115° | 66.2 | 80.3 | 187.7 | 390.1 | 456.0 |
| 117.5° | 75.1 | 89.0 | 185.5 | 364.9 | 432.7 |
| 120° | 81.8 | 94.8 | 181.7 | 345.7 | 416.3 |
| 122.5° | 86.6 | 100.5 | 176.9 | 329.2 | 394.2 |
| 125° | 95.1 | 108.0 | 176.9 | 309.3 | 365.8 |
| 127.5° | 102.0 | 115.2 | 177.1 | 286.2 | 341.9 |
| 130° | 105.9 | 120.0 | 178.1 | 270.7 | 323.7 |
| 132.5° | 110.7 | 124.8 | 178.1 | 263.8 | 307.3 |
| 135° | 117.9 | 130.9 | 178.1 | 254.7 | 292.4 |
| 137.5° | 123.9 | 137.8 | 178.1 | 244.7 | 277.0 |
| 140° | 128.7 | 141.7 | 178.1 | 238.9 | 268.3 |
| 142.5° | 133.6 | 145.6 | 179.0 | 232.1 | 259.6 |
| 145° | 139.6 | 151.3 | 179.3 | 221.9 | 245.4 |
| 147.5° | 146.8 | 157.1 | 180.7 | 214.6 | 232.7 |
| 150° | 151.6 | 161.0 | 181.7 | 209.7 | 225.0 |
| 152.5° | 156.4 | 164.9 | 181.7 | 205.8 | 218.3 |
| 155° | 163.6 | 169.5 | 182.9 | 201.1 | 210.6 |
| 157.5° | 169.4 | 175.1 | 184.3 | 198.2 | 205.0 |
| 160° | 173.3 | 178.0 | 185.3 | 196.2 | 202.1 |
| 162.5° | 176.1 | 180.8 | 186.3 | 195.2 | 199.2 |
| 165° | 181.7 | 184.0 | 187.7 | 192.6 | 196.1 |
| 167.5° | 184.8 | 186.9 | 188.9 | 191.4 | 193.5 |
| 170° | 187.7 | 188.9 | 188.9 | 191.3 | 192.5 |
| 172.5° | 188.7 | 190.8 | 189.9 | 190.4 | 191.5 |
| 175° | 191.3 | 192.5 | 191.3 | 190.1 | 188.9 |
| 177.5° | 191.3 | 192.2 | 191.3 | 191.3 | 190.3 |
| 180° | 191.3 | 191.3 | 191.3 | 191.3 | 191.3 |

(END OF REPORT)