

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: P621485

Luminaire Tested: VLT-F-0U-050D-935-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621485
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-1)
Test Lab: INNOVATION CENTER
Issue Date: 9/2/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: VLT-F-0U-050D-935-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
FROSTED LENS
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

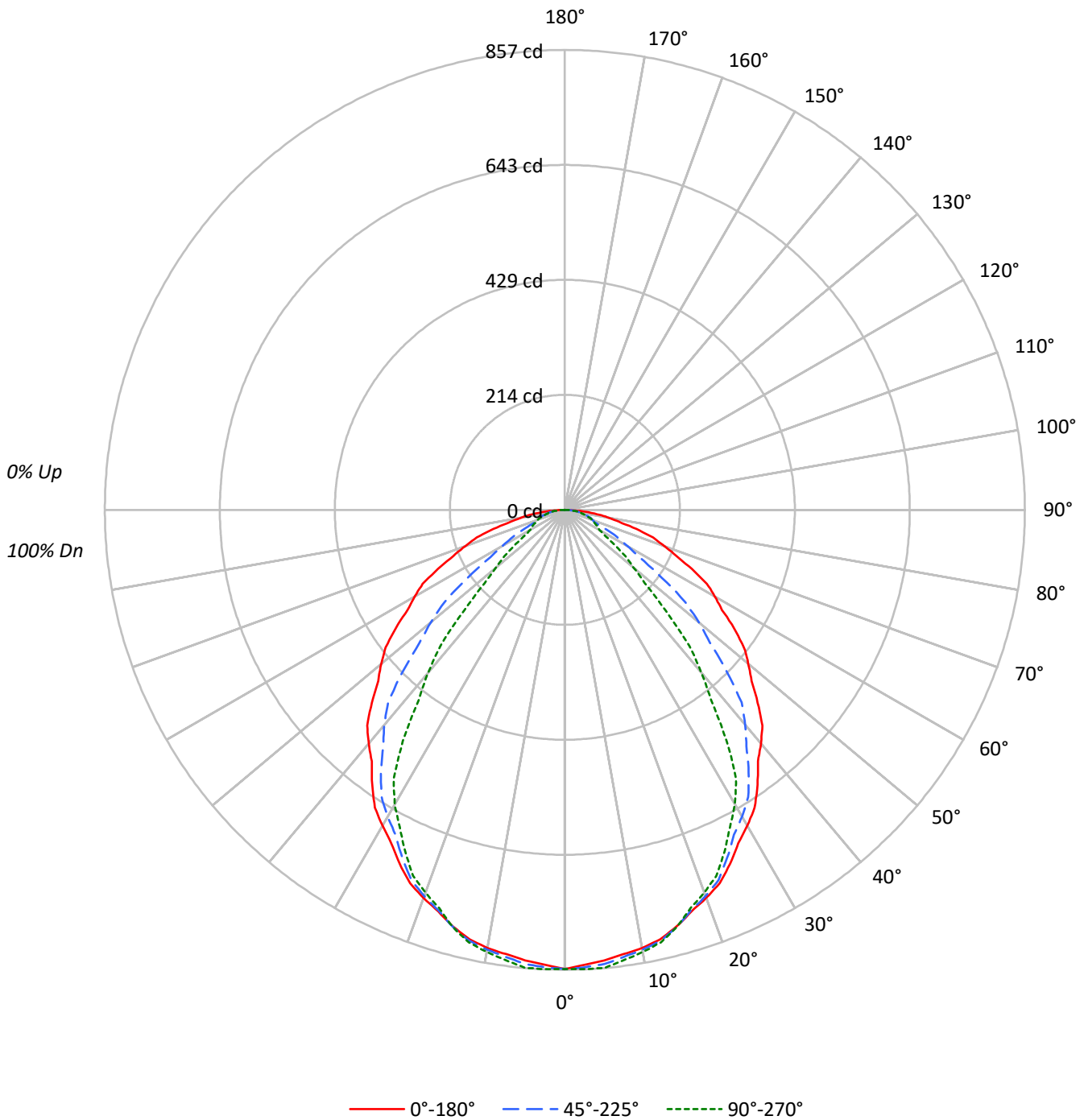
Lumens per Lamp: N/A
Luminaire Lumens: 1744.2 lumens
Efficiency: N/A
Efficacy: 121.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 14.4
Input Voltage (V): 120
Input Current (Ain): 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 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 110 | 106 | 103 | 99 | 108 | 104 | 101 | 98 | 100 | 97 | 95 | 96 | 94 | 92 | 92 | 91 | 89 | 87 |
| 2 | 102 | 95 | 89 | 84 | 99 | 93 | 87 | 83 | 89 | 85 | 81 | 86 | 82 | 79 | 83 | 80 | 77 | 75 |
| 3 | 94 | 85 | 77 | 72 | 92 | 83 | 76 | 71 | 80 | 74 | 70 | 78 | 73 | 69 | 75 | 71 | 67 | 65 |
| 4 | 87 | 76 | 68 | 62 | 85 | 75 | 67 | 62 | 72 | 66 | 61 | 70 | 65 | 60 | 68 | 63 | 59 | 57 |
| 5 | 80 | 69 | 61 | 55 | 78 | 68 | 60 | 54 | 66 | 59 | 54 | 64 | 58 | 53 | 62 | 57 | 53 | 51 |
| 6 | 75 | 63 | 54 | 49 | 73 | 62 | 54 | 48 | 60 | 53 | 48 | 58 | 52 | 48 | 57 | 51 | 47 | 45 |
| 7 | 70 | 57 | 49 | 44 | 68 | 56 | 49 | 43 | 55 | 48 | 43 | 54 | 47 | 43 | 52 | 47 | 43 | 41 |
| 8 | 65 | 53 | 45 | 39 | 64 | 52 | 44 | 39 | 51 | 44 | 39 | 49 | 43 | 39 | 48 | 43 | 39 | 37 |
| 9 | 61 | 49 | 41 | 36 | 60 | 48 | 41 | 36 | 47 | 40 | 35 | 46 | 40 | 35 | 45 | 39 | 35 | 33 |
| 10 | 57 | 45 | 38 | 33 | 56 | 45 | 37 | 33 | 44 | 37 | 32 | 43 | 37 | 32 | 42 | 36 | 32 | 31 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 6138 | 6138 | 6138 |
| 5° | 6072 | 6117 | 6168 |
| 10° | 6040 | 6065 | 6097 |
| 15° | 5974 | 5980 | 5980 |
| 20° | 5878 | 5850 | 5797 |
| 25° | 5765 | 5668 | 5569 |
| 30° | 5630 | 5470 | 5250 |
| 35° | 5480 | 5233 | 4606 |
| 40° | 5323 | 4900 | 3709 |
| 45° | 5156 | 4340 | 2690 |
| 50° | 4981 | 3630 | 1864 |
| 55° | 4809 | 2764 | 1392 |
| 60° | 4628 | 1915 | 1052 |
| 65° | 4427 | 1365 | 1080 |
| 70° | 4135 | 1150 | 1112 |
| 75° | 3823 | 1176 | 1126 |
| 80° | 3322 | 1240 | 1169 |
| 85° | 2692 | 1383 | 1161 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5156 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 80.6 | 4.6 |
| 10°-20° | 226.7 | 13.0 |
| 20°-30° | 329.7 | 18.9 |
| 30°-40° | 364.8 | 20.9 |
| 40°-50° | 313.2 | 18.0 |
| 50°-60° | 216.8 | 12.4 |
| 60°-70° | 129.2 | 7.4 |
| 70°-80° | 63.7 | 3.6 |
| 80°-90° | 19.7 | 1.1 |
| 90°-100° | 0.0 | 0.0 |
| 100°-110° | 0.0 | 0.0 |
| 110°-120° | 0.0 | 0.0 |
| 120°-130° | 0.0 | 0.0 |
| 130°-140° | 0.0 | 0.0 |
| 140°-150° | 0.0 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 637.0 | 36.5 |
| 0°-40° | 1001.7 | 57.4 |
| 0°-60° | 1531.7 | 87.8 |
| 0°-90° | 1744.2 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1744.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 855 | 855 | 855 | 855 | 855 | |
| 5° | 843 | 856 | 849 | 848 | 856 | 80 |
| 15° | 804 | 814 | 805 | 801 | 805 | 226 |
| 25° | 728 | 733 | 716 | 703 | 703 | 335 |
| 35° | 626 | 624 | 597 | 549 | 526 | 391 |
| 45° | 508 | 500 | 428 | 309 | 265 | 392 |
| 55° | 384 | 368 | 221 | 127 | 111 | 344 |
| 65° | 261 | 210 | 80 | 64 | 64 | 258 |
| 75° | 138 | 60 | 42 | 42 | 41 | 145 |
| 85° | 33 | 16 | 17 | 15 | 14 | 39 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P621485

CATALOG NUMBER: VLT-F-OU-050D-935-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 855.4 | 855.4 | 855.4 | 855.4 | 855.4 |
| 2.5° | 848.3 | 858.0 | 853.3 | 853.3 | 856.8 |
| 5° | 843.0 | 856.0 | 849.2 | 848.5 | 856.3 |
| 7.5° | 835.2 | 847.2 | 840.2 | 839.3 | 846.0 |
| 10° | 828.9 | 840.1 | 832.4 | 830.8 | 836.8 |
| 12.5° | 819.7 | 830.9 | 822.5 | 819.5 | 825.5 |
| 15° | 804.1 | 814.5 | 805.0 | 800.7 | 805.0 |
| 17.5° | 784.5 | 793.2 | 782.4 | 775.6 | 778.1 |
| 20° | 769.7 | 778.3 | 766.1 | 756.5 | 759.1 |
| 22.5° | 753.4 | 760.7 | 747.0 | 736.0 | 737.9 |
| 25° | 728.1 | 733.3 | 715.8 | 703.4 | 703.4 |
| 27.5° | 700.0 | 703.1 | 682.7 | 669.7 | 666.1 |
| 30° | 679.5 | 681.3 | 660.1 | 644.8 | 633.6 |
| 32.5° | 658.3 | 659.4 | 635.3 | 610.7 | 593.3 |
| 35° | 625.6 | 623.9 | 597.4 | 549.1 | 525.8 |
| 37.5° | 590.8 | 587.0 | 555.6 | 482.2 | 447.5 |
| 40° | 568.2 | 563.0 | 523.1 | 434.8 | 395.9 |
| 42.5° | 544.9 | 537.6 | 487.1 | 385.9 | 342.9 |
| 45° | 508.1 | 499.5 | 427.7 | 309.2 | 265.1 |
| 47.5° | 471.7 | 460.3 | 366.9 | 239.5 | 201.7 |
| 50° | 446.2 | 434.2 | 325.2 | 197.3 | 167.0 |
| 52.5° | 420.8 | 408.7 | 282.8 | 165.6 | 141.6 |
| 55° | 384.4 | 368.0 | 220.9 | 126.9 | 111.3 |
| 57.5° | 347.3 | 323.8 | 164.5 | 98.9 | 86.8 |
| 60° | 322.5 | 291.4 | 133.4 | 82.0 | 73.3 |
| 62.5° | 298.5 | 259.1 | 109.4 | 71.5 | 69.8 |
| 65° | 260.7 | 209.7 | 80.4 | 64.5 | 63.6 |
| 67.5° | 224.6 | 160.0 | 59.7 | 58.1 | 57.3 |
| 70° | 197.1 | 126.2 | 54.8 | 53.9 | 53.0 |
| 72.5° | 172.3 | 96.6 | 49.8 | 48.9 | 48.1 |
| 75° | 137.9 | 60.1 | 42.4 | 41.5 | 40.6 |
| 77.5° | 103.0 | 37.9 | 35.0 | 34.1 | 33.2 |
| 80° | 80.4 | 31.2 | 30.0 | 29.1 | 28.3 |
| 82.5° | 60.6 | 25.2 | 24.4 | 23.5 | 22.6 |
| 85° | 32.7 | 16.3 | 16.8 | 15.0 | 14.1 |
| 87.5° | 11.3 | 7.9 | 7.8 | 6.3 | 5.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



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CIE UGR TABLE:

| Reflectances: | | | | | | | | | | | |
|-----------------|------|------------------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|
| Ceiling | | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 |
| Wall | | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 |
| Reference plane | | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Room dimensions | | Viewed crosswise | | | | | Viewed endwise | | | | |
| X=2H | Y=2H | 17.87 | 19.34 | 18.24 | 19.65 | 19.97 | 10.10 | 11.57 | 10.47 | 11.89 | 12.20 |
| | 3H | 19.41 | 20.72 | 19.79 | 21.05 | 21.41 | 11.50 | 12.82 | 11.88 | 13.14 | 13.51 |
| | 4H | 19.95 | 21.18 | 20.35 | 21.53 | 21.91 | 12.18 | 13.41 | 12.58 | 13.76 | 14.14 |
| | 6H | 20.37 | 21.51 | 20.79 | 21.88 | 22.27 | 12.80 | 13.93 | 13.21 | 14.30 | 14.69 |
| | 8H | 20.52 | 21.60 | 20.95 | 21.99 | 22.39 | 13.04 | 14.12 | 13.47 | 14.51 | 14.91 |
| | 12H | 20.62 | 21.65 | 21.05 | 22.04 | 22.46 | 13.22 | 14.26 | 13.65 | 14.64 | 15.07 |
| 4H | 2H | 17.77 | 19.00 | 18.17 | 19.35 | 19.73 | 10.79 | 12.02 | 11.19 | 12.37 | 12.75 |
| | 3H | 19.46 | 20.48 | 19.87 | 20.88 | 21.28 | 12.40 | 13.41 | 12.81 | 13.81 | 14.21 |
| | 4H | 20.07 | 20.98 | 20.50 | 21.40 | 21.84 | 13.21 | 14.12 | 13.64 | 14.54 | 14.98 |
| | 6H | 20.59 | 21.39 | 21.05 | 21.83 | 22.29 | 13.98 | 14.77 | 14.44 | 15.22 | 15.68 |
| | 8H | 20.79 | 21.53 | 21.26 | 21.98 | 22.44 | 14.28 | 15.02 | 14.75 | 15.47 | 15.94 |
| | 12H | 20.95 | 21.61 | 21.43 | 22.09 | 22.56 | 14.52 | 15.18 | 15.01 | 15.66 | 16.14 |
| 8H | 4H | 20.03 | 20.77 | 20.49 | 21.21 | 21.68 | 13.70 | 14.45 | 14.17 | 14.89 | 15.36 |
| | 6H | 20.58 | 21.19 | 21.08 | 21.69 | 22.16 | 14.60 | 15.22 | 15.10 | 15.71 | 16.19 |
| | 8H | 20.82 | 21.37 | 21.33 | 21.88 | 22.37 | 15.00 | 15.55 | 15.51 | 16.06 | 16.55 |
| | 12H | 21.03 | 21.52 | 21.54 | 22.01 | 22.58 | 15.34 | 15.83 | 15.85 | 16.32 | 16.89 |
| 12H | 4H | 20.00 | 20.66 | 20.49 | 21.14 | 21.62 | 13.78 | 14.44 | 14.26 | 14.92 | 15.39 |
| | 6H | 20.55 | 21.10 | 21.07 | 21.61 | 22.10 | 14.72 | 15.27 | 15.23 | 15.78 | 16.27 |
| | 8H | 20.82 | 21.31 | 21.33 | 21.80 | 22.37 | 15.19 | 15.67 | 15.70 | 16.17 | 16.73 |