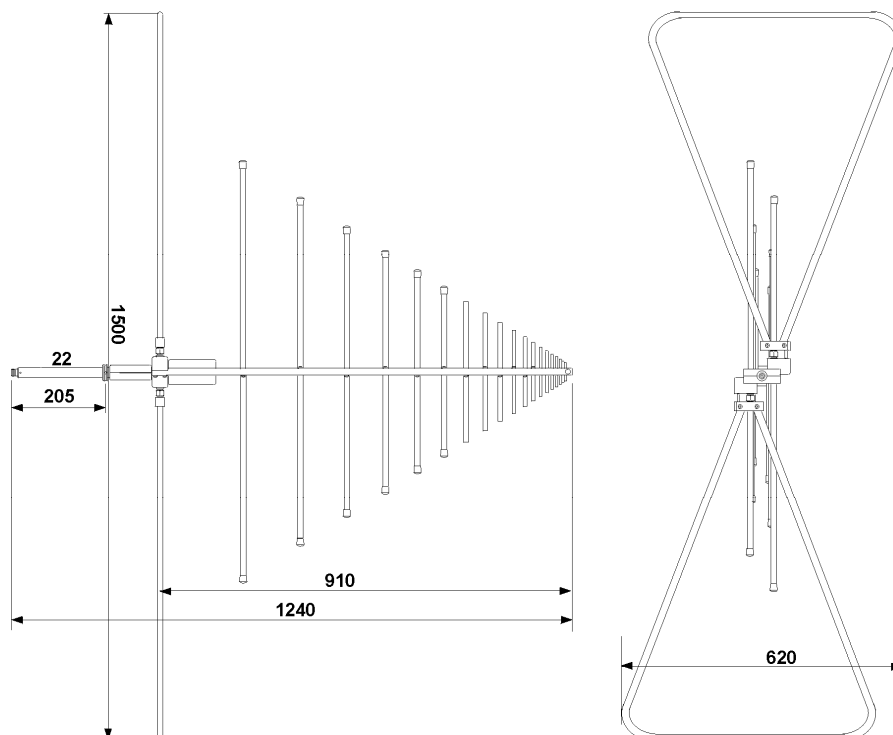


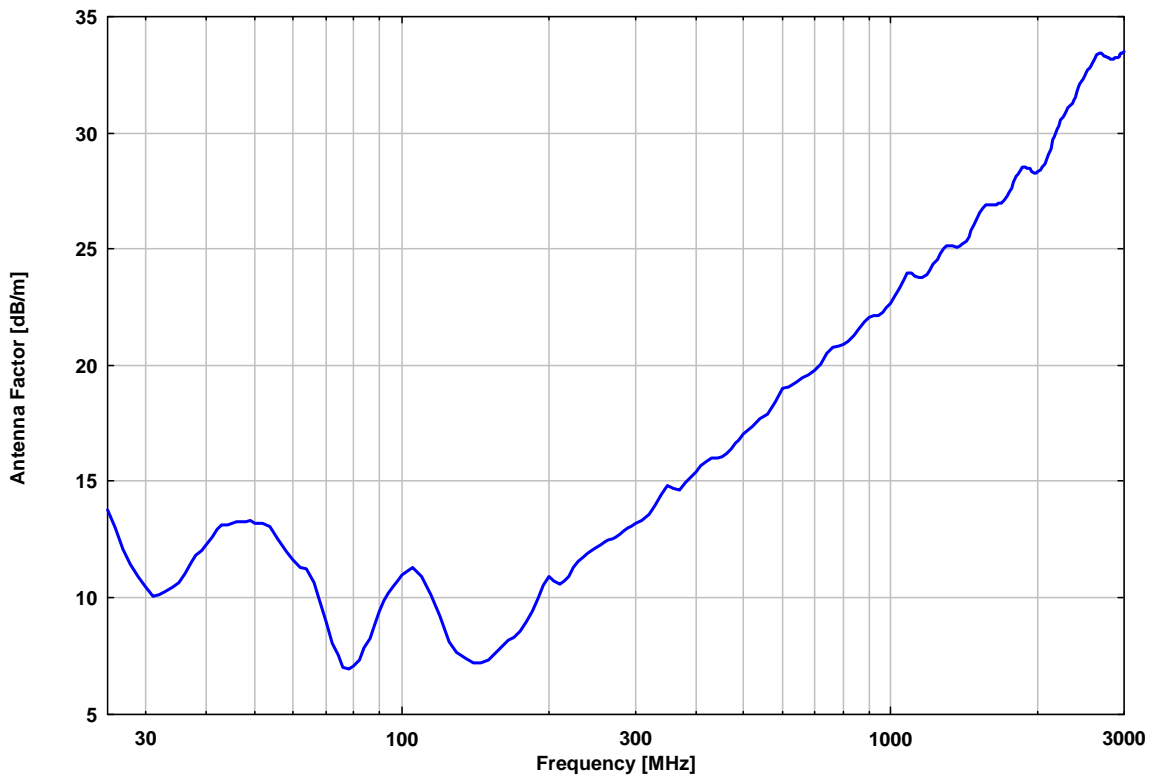
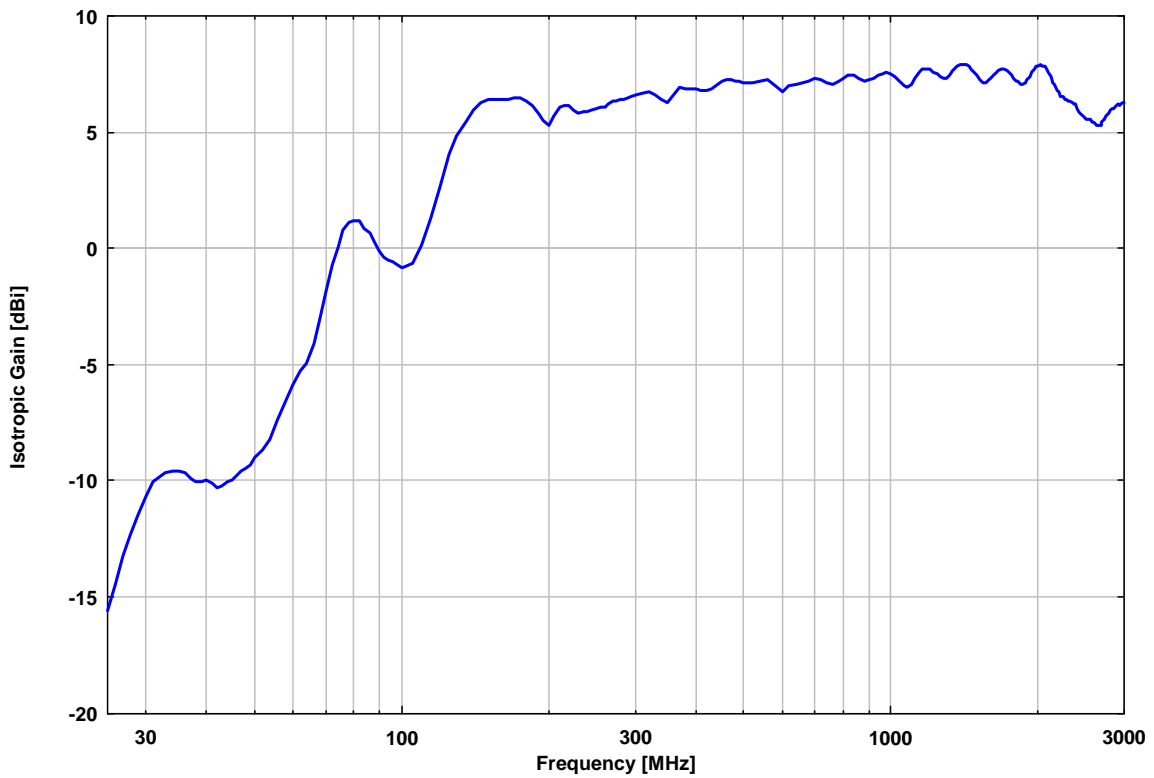
VULB 9163 TRILOG Breitband Antenne 30 - 3000 MHz
VULB 9163 TRILOG Broadband Antenna 30 - 3000 MHz

Bauart:

Linear polarisierte Logarithmisch Periodische Breitbandantenne mit 4:1 Breitbanddipol in Aluminiumausführung für Empfangs- und Sendeanwendungen

Type:

Linear polarized Logarithmic Periodic Broadband Antenna combined with a 4:1 Broadband Dipole (Aluminium tubing) for Receive and Transmit Applications

| Technische Daten: | | Specifications: |
|------------------------------------|-------------------------------------|----------------------------------|
| Frequenzbereich, nominell: | 30 MHz...3 GHz | Nominal Frequency Range: |
| Nutzbarer Frequenzbereich: | 25 MHz ... 4 GHz | Usable Frequency Range: |
| Isotropgewinn im LP-Bereich: | 6.4+/- 1.2 dBi | Isotropic Gain (LP-Section): |
| Antennenfaktor: | 7 ... 34 dB/m | Antenna Factor: |
| Impedanz, nominell: | 50 Ω | Nominal Impedance: |
| Stehwellenverhältnis SWR typisch: | <1.5 | Standing Wave Ratio SWR typical: |
| Vor- Rückverhältnis: | 20 dB (f > 150 MHz) | Front to Back Ratio: |
| Polarisationsentkopplung: | >20 dB (30 MHz...1 GHz) | Cross Polarisation: |
| 3 dB Öffnungswinkel typ.(E-Ebene): | 45°-65° (f > 150 MHz) | 3 dB Beamwidth typ. (E-Plane): |
| 3 dB Öffnungswinkel typ.(E-Ebene): | ≈78° (f < 150 MHz) | 3 dB Beamwidth typ. (E-Plane): |
| 3 dB Öffnungswinkel typ.(H-Ebene): | 90°-120° (f > 150 MHz) | 3 dB Beamwidth typ. (H-Plane): |
| Max. Eingangsleistung: | 200 W (intermitt.) 100 W (cont.) | Max. Input Power: |
| Anschlußart: N-Buchse | | N-Connector female |
| Halterung: 22 mm Rohr, Rastring | | Mount: 22 mm Tube, Indexing Ring |
| Breite x Länge x Dicke: | 1500 x 910 (1240) x 620 mm | Width x Length x Thickness: |
| Gewicht: | 3.1 kg | Weight: |



| Frequency MHz | Gain(Isotr.) dBi | Ant.-Factor dB/m |
|------------------|---------------------|---------------------|
| 25.00 | -15.60 | 13.78 |
| 26.00 | -14.46 | 12.97 |
| 27.00 | -13.25 | 12.10 |
| 28.00 | -12.31 | 11.47 |
| 29.00 | -11.45 | 10.92 |
| 30.00 | -10.68 | 10.45 |
| 31.00 | -10.04 | 10.09 |
| 32.00 | -9.81 | 10.13 |
| 33.00 | -9.66 | 10.25 |
| 34.00 | -9.58 | 10.43 |
| 35.00 | -9.57 | 10.67 |
| 36.00 | -9.67 | 11.02 |
| 37.00 | -9.92 | 11.50 |
| 38.00 | -10.04 | 11.86 |
| 39.00 | -10.02 | 12.06 |
| 40.00 | -10.00 | 12.26 |
| 41.00 | -10.13 | 12.61 |
| 42.00 | -10.28 | 12.96 |
| 43.00 | -10.22 | 13.11 |
| 44.00 | -10.05 | 13.14 |
| 45.00 | -9.93 | 13.22 |
| 46.00 | -9.78 | 13.26 |
| 47.00 | -9.59 | 13.25 |
| 48.00 | -9.44 | 13.28 |
| 49.00 | -9.32 | 13.34 |
| 50.00 | -9.01 | 13.21 |
| 52.00 | -8.66 | 13.20 |
| 54.00 | -8.19 | 13.06 |
| 56.00 | -7.35 | 12.54 |
| 58.00 | -6.45 | 11.94 |
| 60.00 | -5.83 | 11.61 |
| 62.00 | -5.24 | 11.31 |
| 64.00 | -4.90 | 11.24 |
| 66.00 | -4.06 | 10.67 |
| 68.00 | -2.95 | 9.82 |
| 70.00 | -1.83 | 8.95 |
| 72.00 | -0.71 | 8.07 |
| 74.00 | 0.11 | 7.50 |
| 76.00 | 0.82 | 7.02 |
| 78.00 | 1.10 | 6.96 |
| 80.00 | 1.22 | 7.07 |
| 82.00 | 1.19 | 7.30 |
| 84.00 | 0.89 | 7.82 |
| 86.00 | 0.65 | 8.26 |
| 88.00 | 0.26 | 8.85 |
| 90.00 | -0.11 | 9.41 |
| 92.00 | -0.35 | 9.85 |
| 94.00 | -0.49 | 10.18 |
| 96.00 | -0.60 | 10.46 |
| 98.00 | -0.71 | 10.75 |
| 100.00 | -0.79 | 11.01 |
| 105.00 | -0.65 | 11.29 |
| 110.00 | 0.13 | 10.92 |

| Frequency MHz | Gain(Isotr.) dBi | Ant.-Factor dB/m |
|------------------|---------------------|---------------------|
| 115.00 | 1.31 | 10.12 |
| 120.00 | 2.61 | 9.20 |
| 125.00 | 4.06 | 8.10 |
| 130.00 | 4.83 | 7.67 |
| 135.00 | 5.46 | 7.37 |
| 140.00 | 5.94 | 7.20 |
| 145.00 | 6.27 | 7.17 |
| 150.00 | 6.38 | 7.36 |
| 155.00 | 6.41 | 7.61 |
| 160.00 | 6.40 | 7.90 |
| 165.00 | 6.41 | 8.16 |
| 170.00 | 6.49 | 8.34 |
| 175.00 | 6.52 | 8.56 |
| 180.00 | 6.37 | 8.96 |
| 185.00 | 6.17 | 9.40 |
| 190.00 | 5.81 | 9.99 |
| 195.00 | 5.48 | 10.54 |
| 200.00 | 5.33 | 10.91 |
| 205.00 | 5.73 | 10.72 |
| 210.00 | 6.10 | 10.56 |
| 215.00 | 6.16 | 10.71 |
| 220.00 | 6.14 | 10.93 |
| 225.00 | 5.98 | 11.28 |
| 230.00 | 5.86 | 11.59 |
| 235.00 | 5.87 | 11.78 |
| 240.00 | 5.89 | 11.93 |
| 245.00 | 5.96 | 12.05 |
| 250.00 | 6.02 | 12.16 |
| 255.00 | 6.07 | 12.29 |
| 260.00 | 6.12 | 12.40 |
| 265.00 | 6.22 | 12.47 |
| 270.00 | 6.33 | 12.52 |
| 275.00 | 6.37 | 12.64 |
| 280.00 | 6.40 | 12.77 |
| 285.00 | 6.41 | 12.91 |
| 290.00 | 6.46 | 13.01 |
| 295.00 | 6.53 | 13.09 |
| 300.00 | 6.59 | 13.18 |
| 310.00 | 6.68 | 13.37 |
| 320.00 | 6.72 | 13.61 |
| 330.00 | 6.60 | 13.99 |
| 340.00 | 6.38 | 14.47 |
| 350.00 | 6.27 | 14.83 |
| 360.00 | 6.65 | 14.69 |
| 370.00 | 6.93 | 14.66 |
| 380.00 | 6.86 | 14.96 |
| 390.00 | 6.87 | 15.17 |
| 400.00 | 6.84 | 15.42 |
| 410.00 | 6.80 | 15.68 |
| 420.00 | 6.81 | 15.87 |
| 430.00 | 6.89 | 16.00 |
| 440.00 | 7.05 | 16.04 |
| 450.00 | 7.20 | 16.08 |



| Frequency MHz | Gain(Isotr.) dBi | Ant.-Factor dB/m |
|------------------|---------------------|---------------------|
| 460.00 | 7.26 | 16.22 |
| 470.00 | 7.25 | 16.41 |
| 480.00 | 7.19 | 16.65 |
| 490.00 | 7.20 | 16.82 |
| 500.00 | 7.17 | 17.03 |
| 520.00 | 7.16 | 17.38 |
| 540.00 | 7.19 | 17.67 |
| 560.00 | 7.30 | 17.89 |
| 580.00 | 7.03 | 18.45 |
| 600.00 | 6.74 | 19.04 |
| 620.00 | 6.98 | 19.09 |
| 640.00 | 7.08 | 19.26 |
| 660.00 | 7.12 | 19.49 |
| 680.00 | 7.23 | 19.64 |
| 700.00 | 7.33 | 19.79 |
| 720.00 | 7.27 | 20.10 |
| 740.00 | 7.10 | 20.51 |
| 760.00 | 7.07 | 20.77 |
| 780.00 | 7.23 | 20.83 |
| 800.00 | 7.36 | 20.92 |
| 820.00 | 7.43 | 21.06 |
| 840.00 | 7.43 | 21.28 |
| 860.00 | 7.33 | 21.58 |
| 880.00 | 7.22 | 21.89 |
| 900.00 | 7.25 | 22.06 |
| 920.00 | 7.36 | 22.14 |
| 940.00 | 7.50 | 22.18 |
| 960.00 | 7.55 | 22.31 |
| 980.00 | 7.56 | 22.48 |
| 1000.00 | 7.54 | 22.68 |
| 1020.00 | 7.42 | 22.97 |
| 1040.00 | 7.23 | 23.33 |
| 1060.00 | 7.00 | 23.72 |
| 1080.00 | 6.92 | 23.97 |
| 1100.00 | 7.07 | 23.98 |
| 1120.00 | 7.36 | 23.84 |
| 1140.00 | 7.60 | 23.76 |
| 1160.00 | 7.72 | 23.79 |
| 1180.00 | 7.74 | 23.92 |
| 1200.00 | 7.69 | 24.12 |
| 1220.00 | 7.59 | 24.36 |
| 1240.00 | 7.53 | 24.56 |
| 1260.00 | 7.41 | 24.82 |
| 1280.00 | 7.32 | 25.04 |
| 1300.00 | 7.35 | 25.15 |
| 1320.00 | 7.48 | 25.15 |
| 1340.00 | 7.64 | 25.12 |
| 1360.00 | 7.82 | 25.07 |
| 1380.00 | 7.90 | 25.12 |
| 1400.00 | 7.92 | 25.23 |
| 1420.00 | 7.90 | 25.37 |
| 1440.00 | 7.86 | 25.52 |
| 1460.00 | 7.70 | 25.80 |

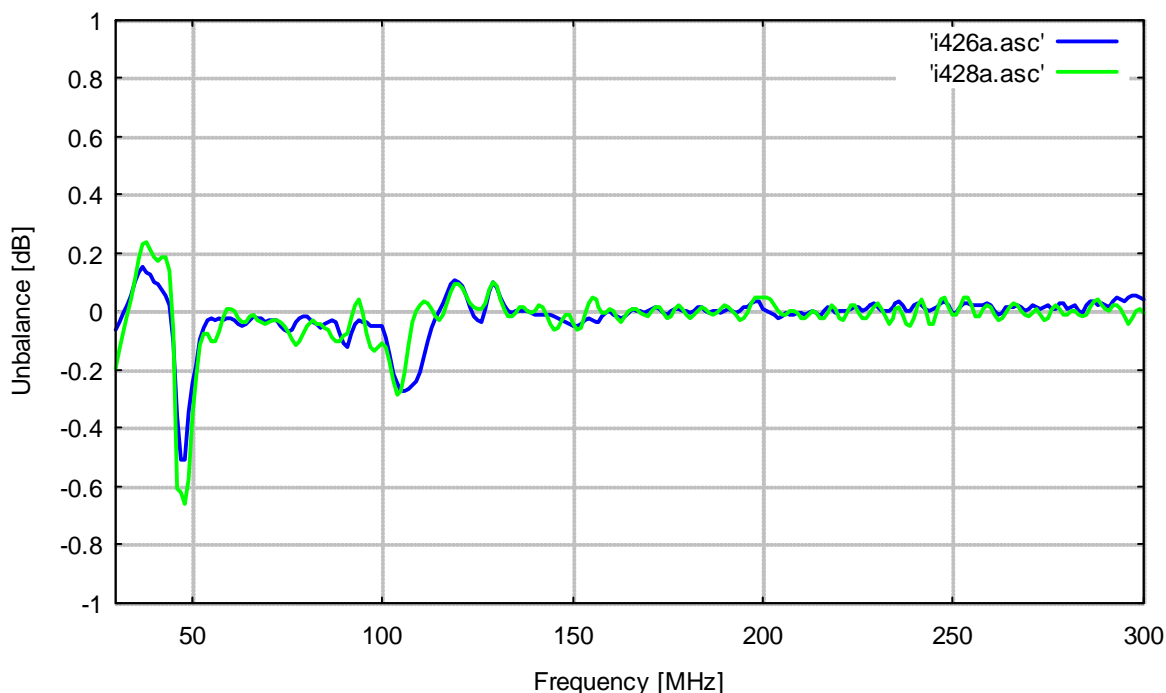
| Frequency MHz | Gain(Isotr.) dBi | Ant.-Factor dB/m |
|------------------|---------------------|---------------------|
| 1480.00 | 7.58 | 26.04 |
| 1500.00 | 7.43 | 26.31 |
| 1520.00 | 7.30 | 26.56 |
| 1540.00 | 7.17 | 26.80 |
| 1560.00 | 7.17 | 26.91 |
| 1580.00 | 7.25 | 26.95 |
| 1600.00 | 7.37 | 26.93 |
| 1620.00 | 7.49 | 26.92 |
| 1640.00 | 7.58 | 26.94 |
| 1660.00 | 7.66 | 26.96 |
| 1680.00 | 7.71 | 27.01 |
| 1700.00 | 7.70 | 27.13 |
| 1720.00 | 7.65 | 27.28 |
| 1740.00 | 7.58 | 27.45 |
| 1760.00 | 7.46 | 27.67 |
| 1780.00 | 7.31 | 27.91 |
| 1800.00 | 7.21 | 28.12 |
| 1820.00 | 7.18 | 28.24 |
| 1840.00 | 7.09 | 28.42 |
| 1860.00 | 7.06 | 28.55 |
| 1880.00 | 7.15 | 28.55 |
| 1900.00 | 7.29 | 28.51 |
| 1920.00 | 7.39 | 28.50 |
| 1940.00 | 7.59 | 28.39 |
| 1960.00 | 7.76 | 28.31 |
| 1980.00 | 7.84 | 28.32 |
| 2000.00 | 7.89 | 28.36 |
| 2020.00 | 7.92 | 28.41 |
| 2040.00 | 7.86 | 28.55 |
| 2060.00 | 7.83 | 28.66 |
| 2080.00 | 7.69 | 28.89 |
| 2100.00 | 7.62 | 29.04 |
| 2120.00 | 7.38 | 29.37 |
| 2140.00 | 7.14 | 29.69 |
| 2160.00 | 7.05 | 29.86 |
| 2180.00 | 6.83 | 30.16 |
| 2200.00 | 6.75 | 30.32 |
| 2220.00 | 6.58 | 30.56 |
| 2240.00 | 6.55 | 30.68 |
| 2260.00 | 6.45 | 30.85 |
| 2280.00 | 6.42 | 30.95 |
| 2300.00 | 6.35 | 31.10 |
| 2320.00 | 6.34 | 31.19 |
| 2340.00 | 6.32 | 31.28 |
| 2360.00 | 6.25 | 31.43 |
| 2380.00 | 6.20 | 31.55 |
| 2400.00 | 6.00 | 31.82 |
| 2420.00 | 5.92 | 31.98 |
| 2440.00 | 5.86 | 32.11 |
| 2460.00 | 5.69 | 32.35 |
| 2480.00 | 5.63 | 32.48 |
| 2500.00 | 5.56 | 32.62 |
| 2520.00 | 5.56 | 32.69 |

| Frequency MHz | Gain(Isotr.) dBi | Ant.-Factor dB/m |
|------------------|---------------------|---------------------|
| 2540.00 | 5.55 | 32.77 |
| 2560.00 | 5.55 | 32.84 |
| 2580.00 | 5.46 | 32.99 |
| 2600.00 | 5.41 | 33.11 |
| 2620.00 | 5.36 | 33.23 |
| 2640.00 | 5.28 | 33.37 |
| 2660.00 | 5.29 | 33.42 |
| 2680.00 | 5.34 | 33.44 |
| 2700.00 | 5.41 | 33.44 |
| 2720.00 | 5.59 | 33.33 |
| 2740.00 | 5.68 | 33.29 |
| 2760.00 | 5.78 | 33.26 |

| Frequency MHz | Gain(Isotr.) dBi | Ant.-Factor dB/m |
|------------------|---------------------|---------------------|
| 2780.00 | 5.86 | 33.24 |
| 2800.00 | 5.95 | 33.21 |
| 2820.00 | 6.02 | 33.21 |
| 2840.00 | 6.06 | 33.22 |
| 2860.00 | 6.10 | 33.25 |
| 2880.00 | 6.15 | 33.26 |
| 2900.00 | 6.20 | 33.27 |
| 2920.00 | 6.19 | 33.33 |
| 2940.00 | 6.19 | 33.39 |
| 2960.00 | 6.23 | 33.42 |
| 2980.00 | 6.26 | 33.44 |
| 3000.00 | 6.27 | 33.49 |

Symmetrietest VULB 9163
Unbalance Test VULB 9163

VULB 9163



Measured Balance data according to CISPR 16-1-4 DM/CM conversion check

SWR-Plot VULB 9163

