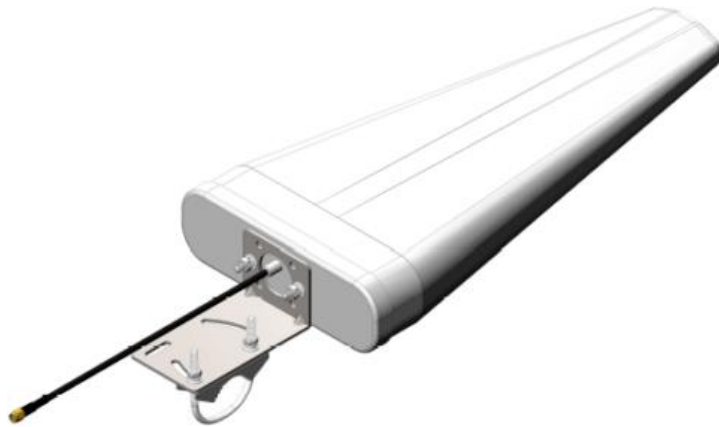
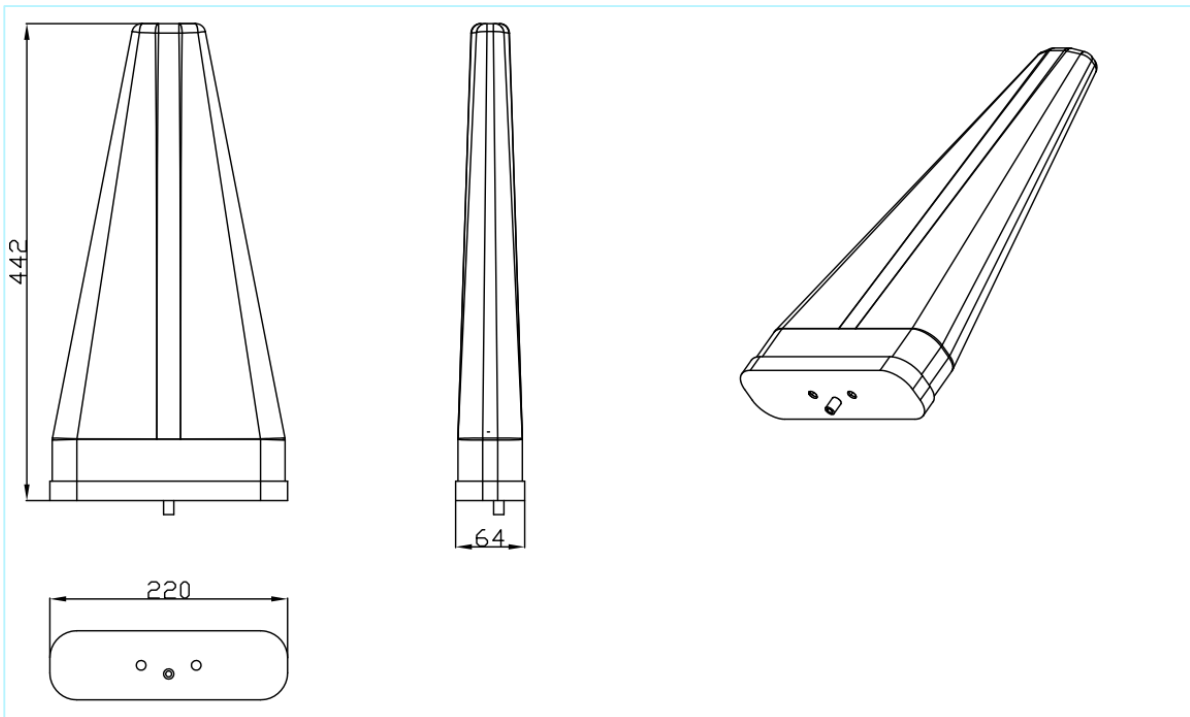


Maswell Ultra Wideband Log Periodic Antenna

AN_Master_004



Mechanical dimension



Maswell Ultra Wideband Log Periodic Antenna

AN_Master_004

Specifications

| Item | Specifications | |
|---------------|--------------------------|--|
| Antenna | Center Frequency | 600~6000 MHz |
| | Polarization | Linear |
| | Gain | 6.80dBi (Average) |
| | V.S.W.R | < 2.0 |
| | Impedance | 50Ω |
| | Mounting Method | U bolt |
| | Cable | Ultra Low loss cable 4 meters (LMR 600 equivalent) |
| | Connector | Both SMA male and N male supported |
| | Dimension | 442* 220*64mm |
| Environmental | Operating Temperature | -40°C~+85°C |
| | Vibration | 10 to 55Hz with 1.5mm amplitude 2hours |
| | Environmentally Friendly | ROHS Compliant |

Maswell Ultra Wideband Log Periodic Antenna

AN_Master_004

Product Configuration in Details



The AN_Master_004 comes with two boxes:

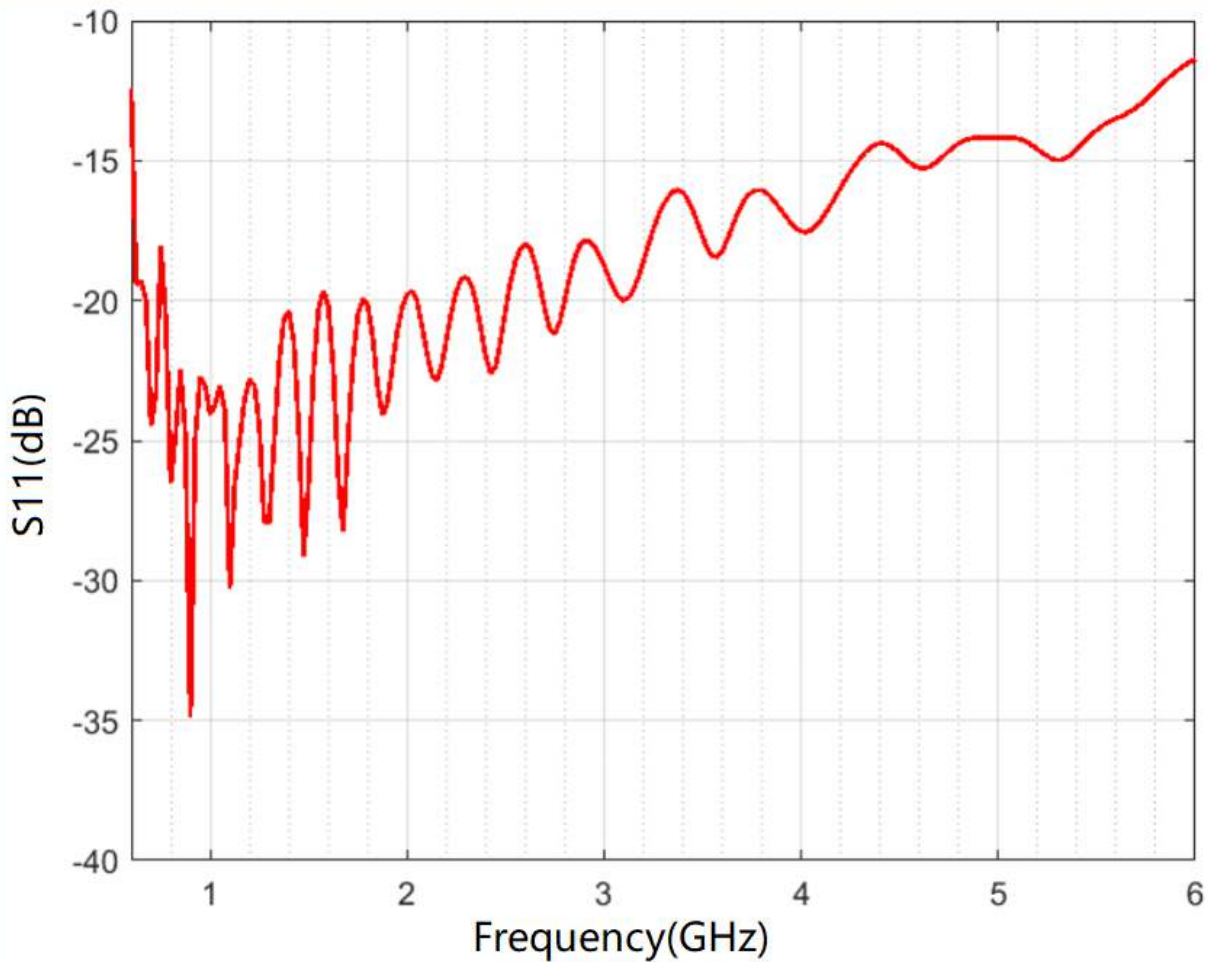
- ❖ **Box One:** AN_Master_004 with 10cm cable and N male connector
- ❖ **Box Two:** One unit of Ultra low loss 0.6 inch cable (LMR 600 equivalent) with N female to N male connector
One Unit of Interface cable 10cm N female to SMA male

No need to worry about the high cable loss above 5GHz!

Maswell Ultra Wideband Log Periodic Antenna

Simulation Results

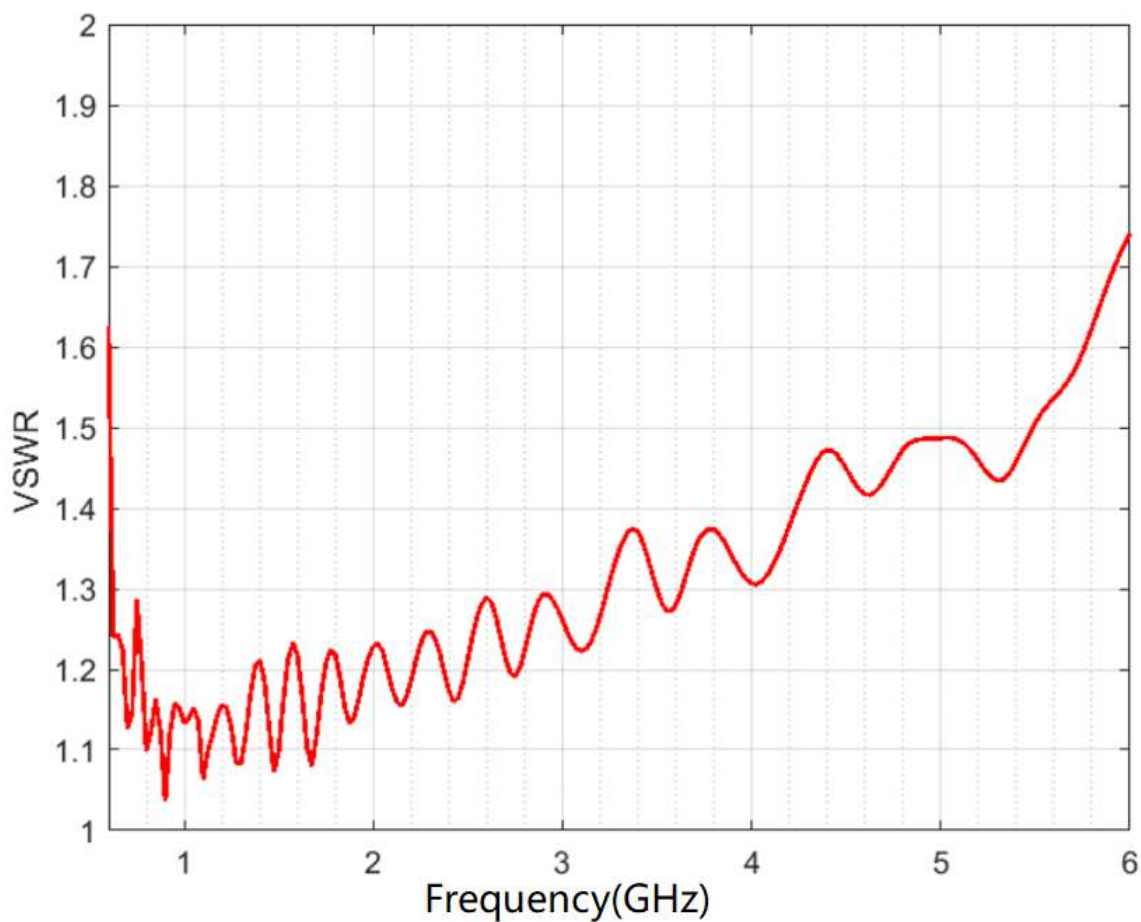
S11



Maswell Ultra Wideband Log Periodic Antenna

Simulation Results

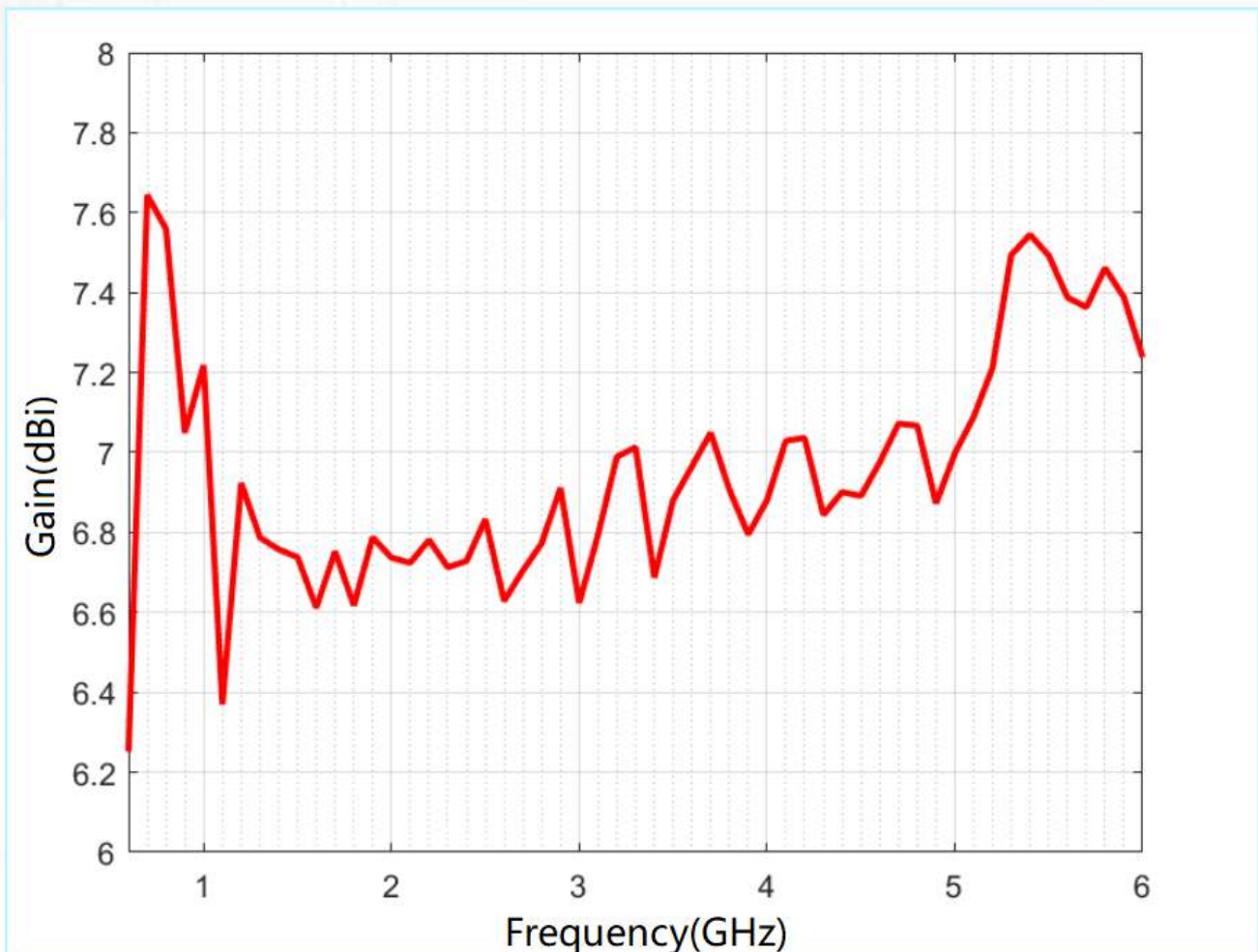
VSWR



Maswell Ultra Wideband Log Periodic Antenna

Simulation Results

Gain

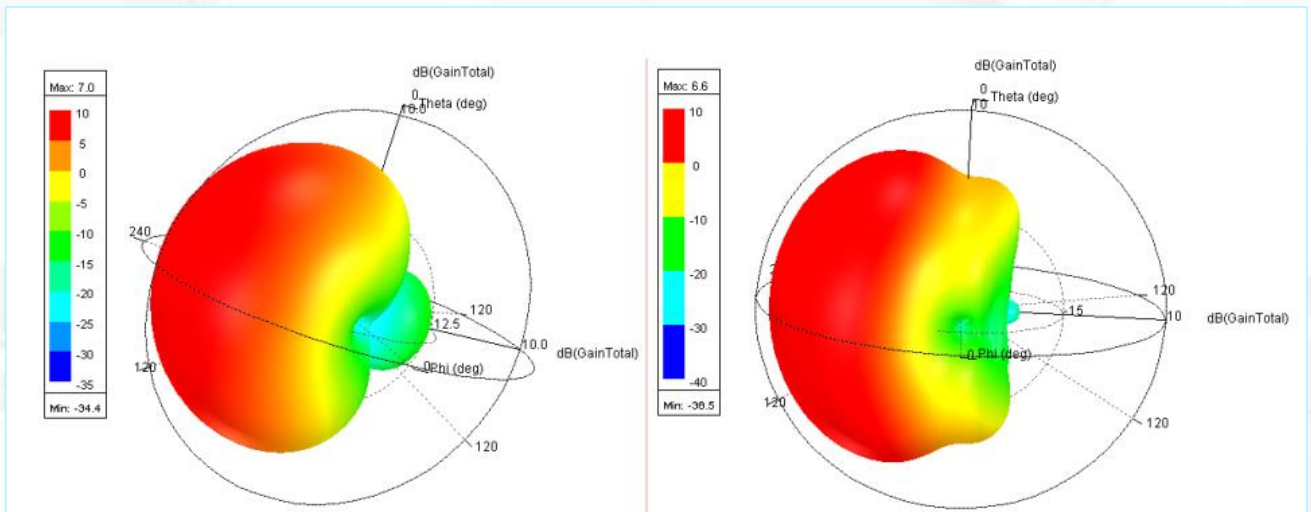


Maswell Ultra Wideband Log Periodic Antenna

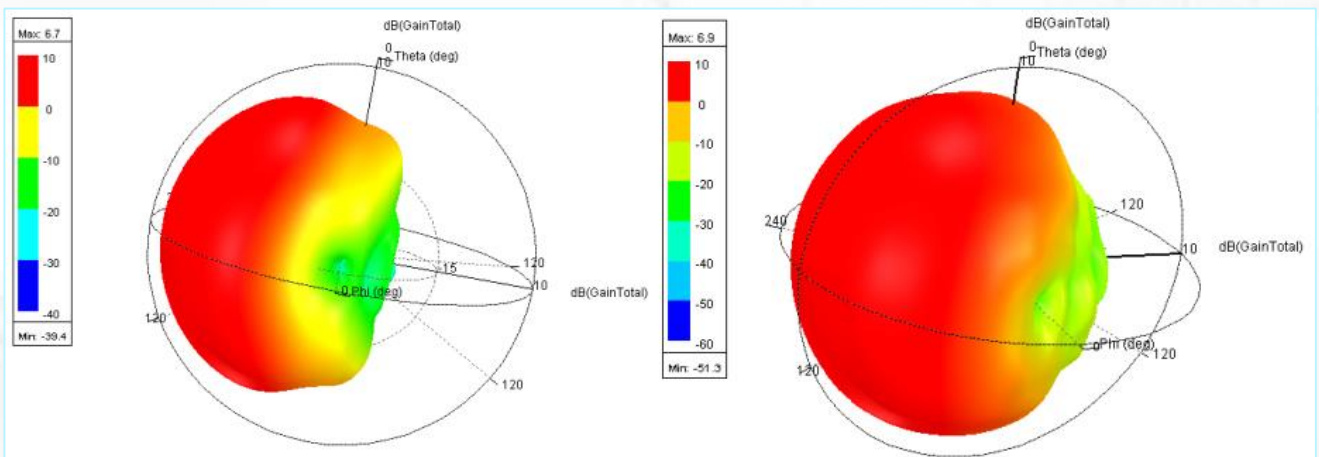
Simulation Results

Radiation Patterns

Low Frequency Band (900MHz, 1800MHz) Radiation Pattern



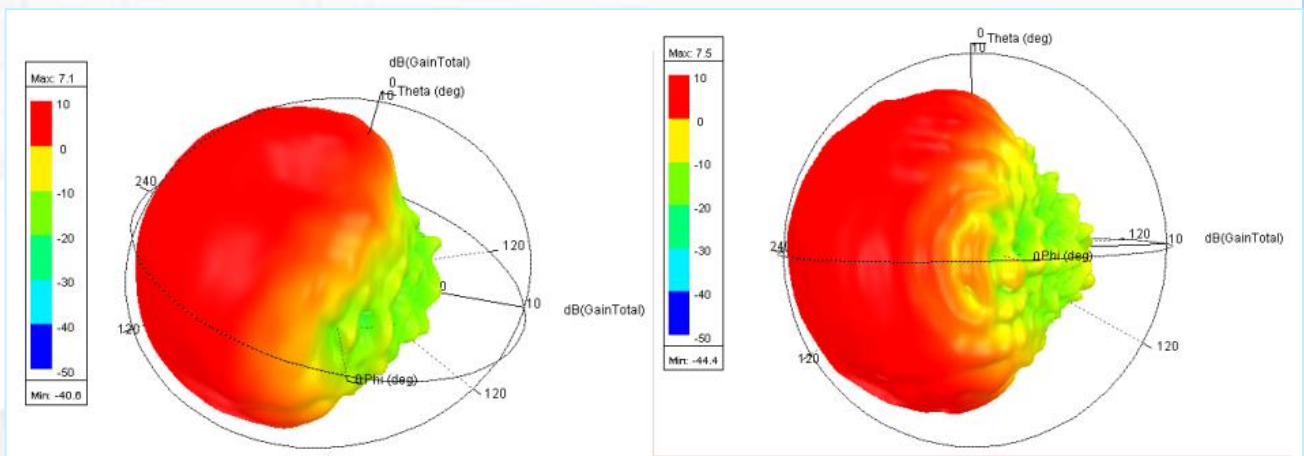
Intermediate Frequency Band (2400MHz, 3500MHz) Radiation Pattern



Maswell Ultra Wideband Log Periodic Antenna

Simulation Results

High Frequency Band (4800MHz, 5800MHz) Radiation Pattern



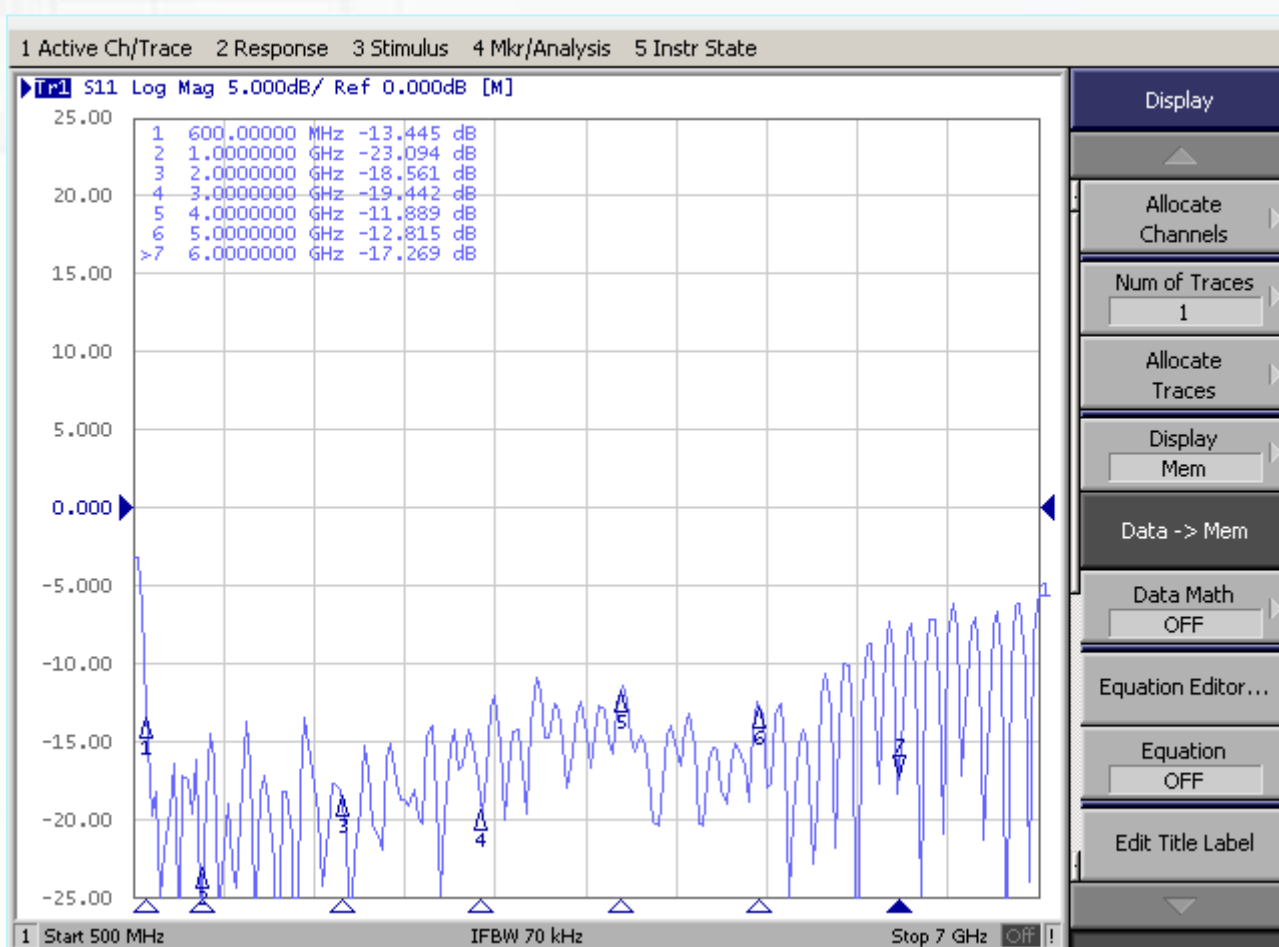
TECHNOLOGY
PROJECT



Maswell Ultra Wideband Log Periodic Antenna

Measured Results

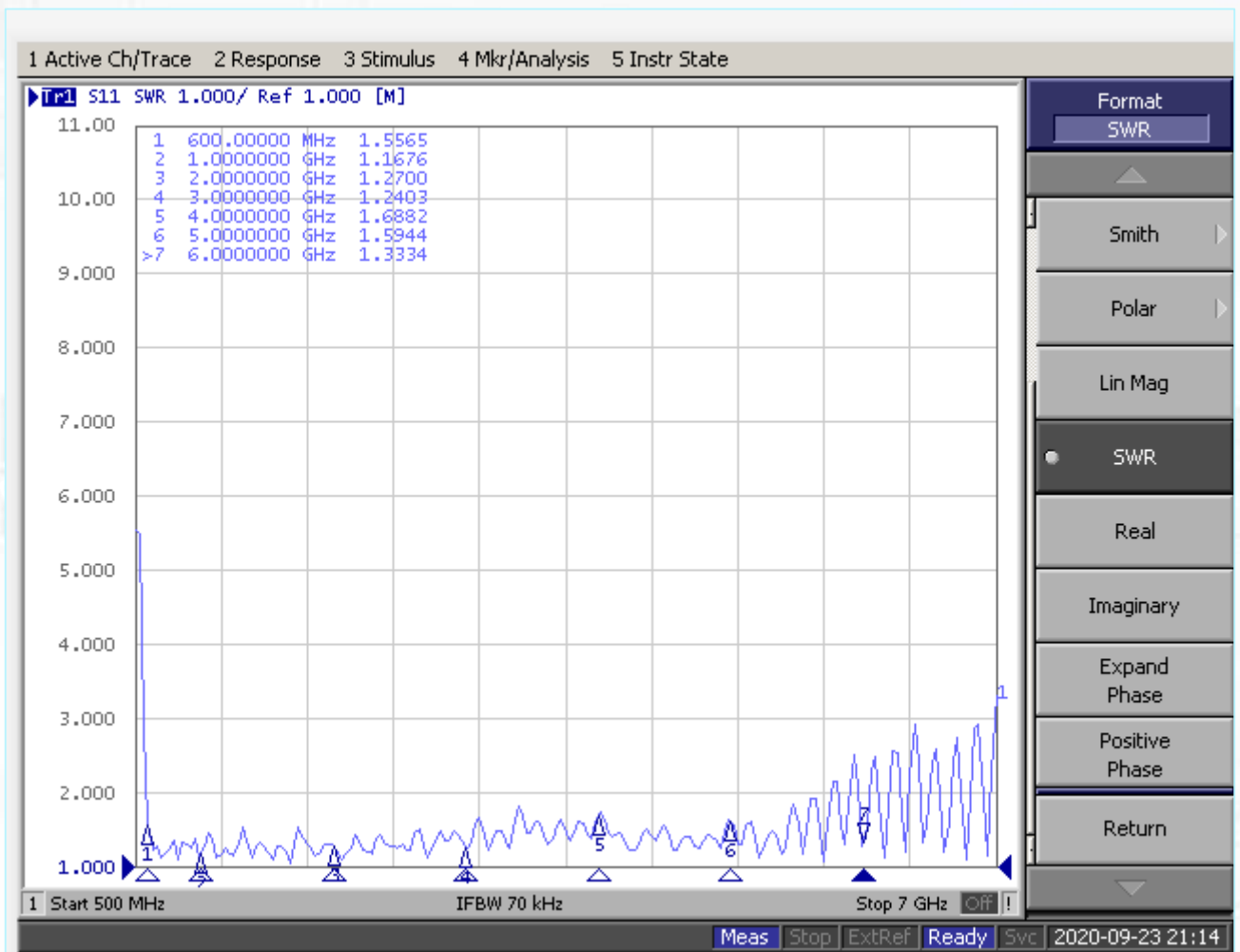
Measured S11 Result



Maswell Ultra Wideband Log Periodic Antenna

Measured Results

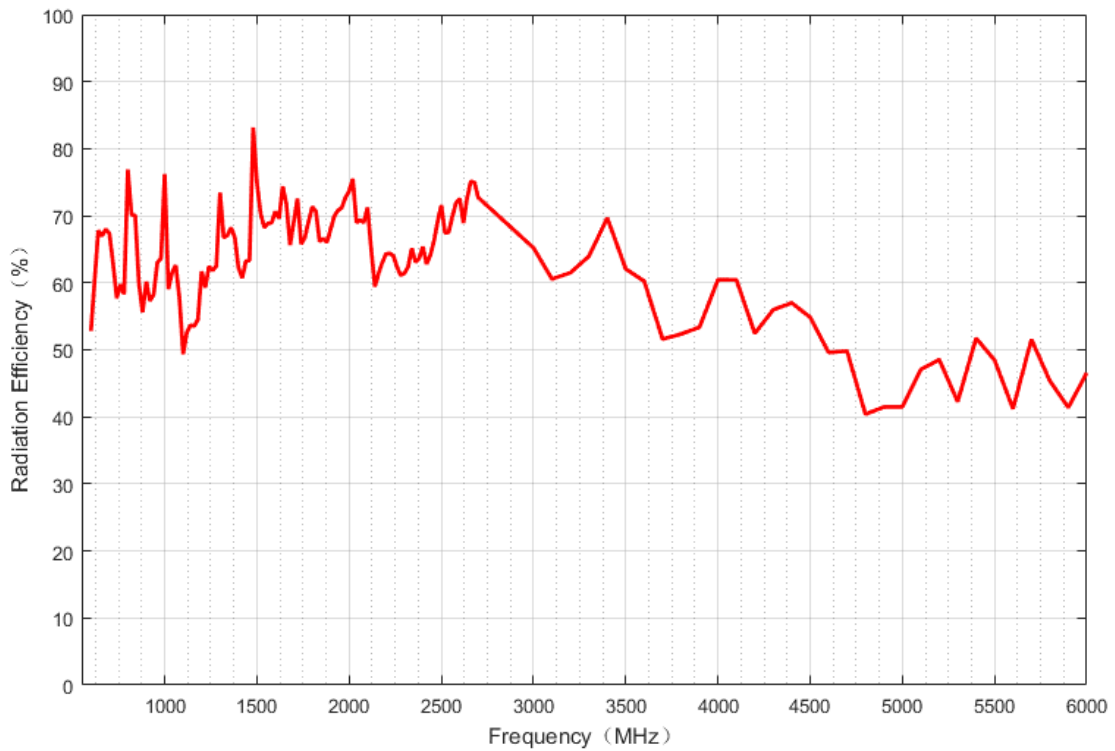
Measured VSWR Result



Maswell Ultra Wideband Log Periodic Antenna

Measured Results

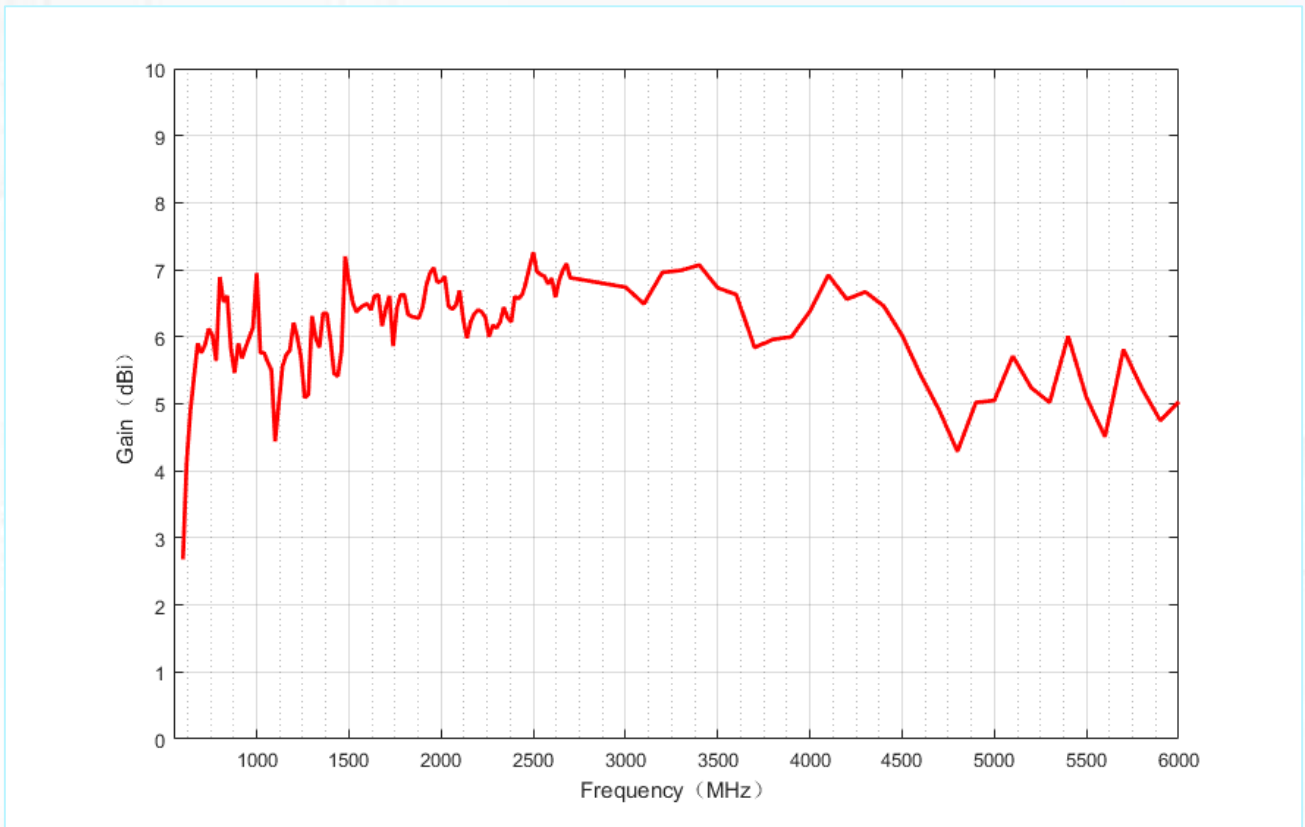
Measured Radiation efficiency



Maswell Ultra Wideband Log Periodic Antenna

Measured Results

Measured Gain Result

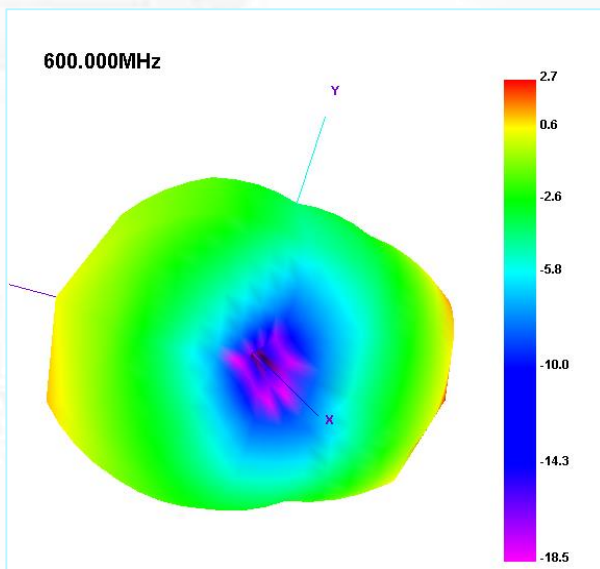


Maswell Ultra Wideband Log Periodic Antenna

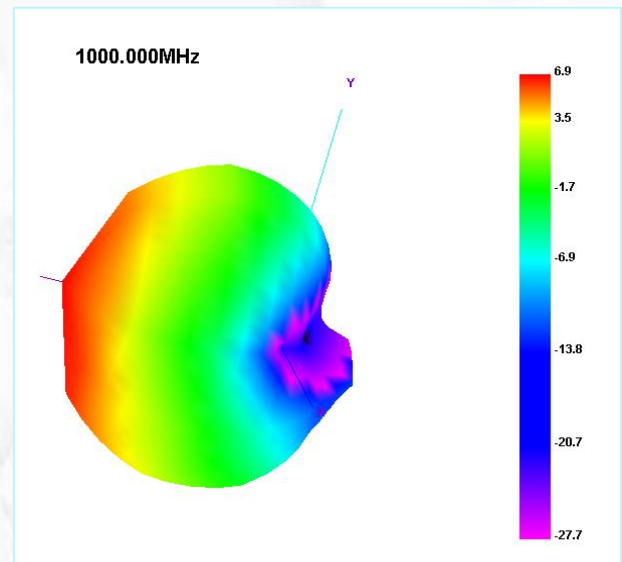
Measured Results

Measured Radiation Patterns

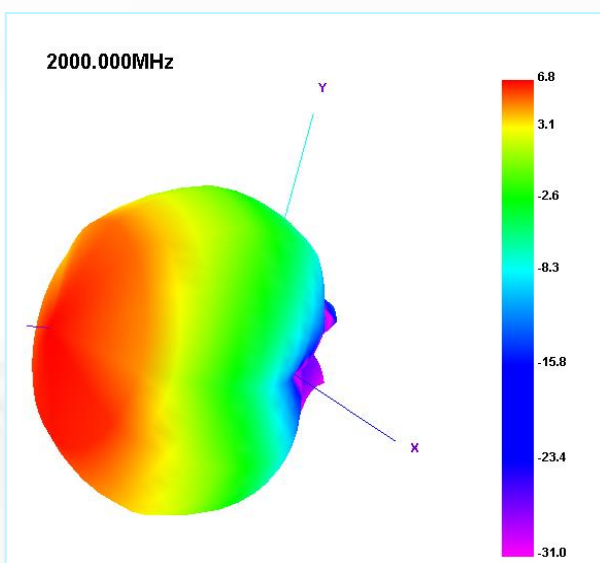
600MHz Radiation Pattern



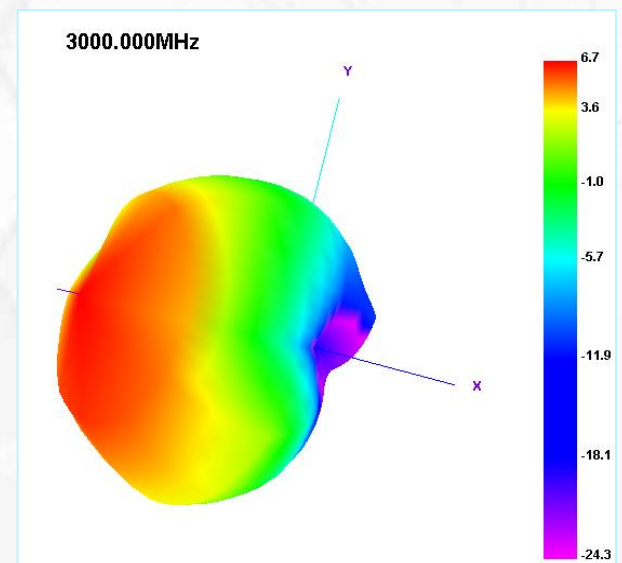
1000MHz Radiation Pattern



2000MHz Radiation Pattern



3000MHz Radiation Pattern

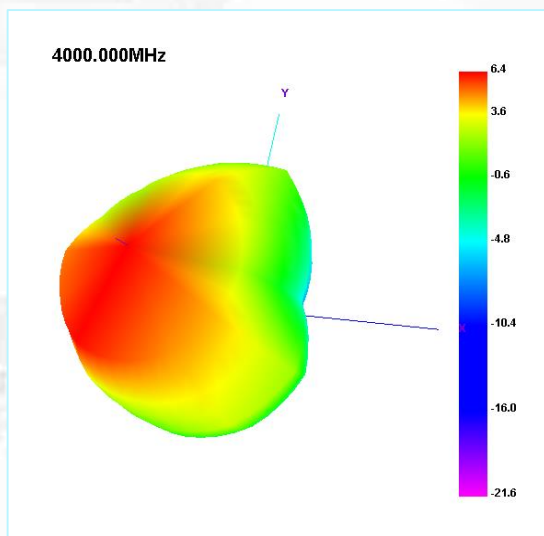


Maswell Ultra Wideband Log Periodic Antenna

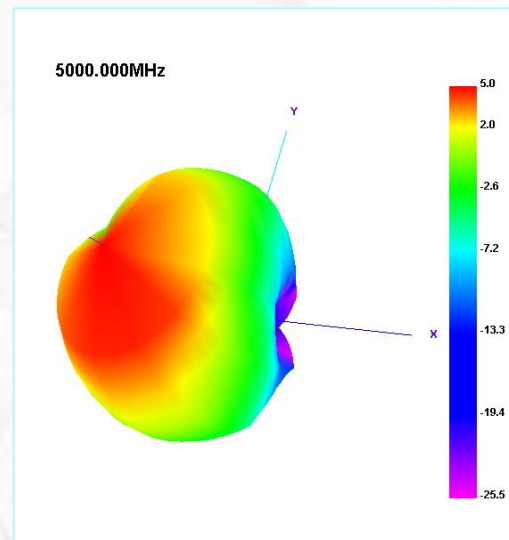
Measured Results

Measured Radiation Patterns

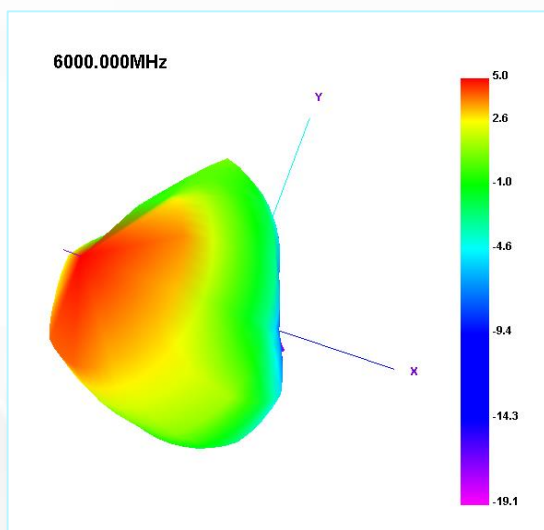
4000MHz Radiation Pattern



5000MHz Radiation Pattern



6000MHz Radiation Pattern



Maswell Ultra Wideband Log Periodic Antenna

Measured Results

(Gain and Radiation Efficiency under 30cm Lead)

| Freq (MHz) | Effi (%) | Effi (dB) | Gain (dBi) | Gain (dBd) |
|------------|----------|-----------|------------|------------|
| 600 | 71.58 | -1.45 | 4.69 | 2.54 |
| 700 | 63.85 | -1.95 | 5.74 | 3.59 |
| 800 | 77.4 | -1.11 | 6.9 | 4.75 |
| 900 | 57.31 | -2.42 | 5.74 | 3.59 |
| 1000 | 75.74 | -1.21 | 7.18 | 5.03 |
| 1100 | 46.92 | -3.29 | 4.07 | 1.92 |
| 1200 | 55.89 | -2.53 | 5.68 | 3.53 |
| 1300 | 64.01 | -1.94 | 6 | 3.85 |
| 1400 | 61.69 | -2.1 | 5.74 | 3.59 |
| 1500 | 70.98 | -1.49 | 6.45 | 4.3 |
| 1600 | 64.33 | -1.92 | 6.09 | 3.94 |
| 1700 | 62.76 | -2.02 | 6.23 | 4.08 |
| 1800 | 62.58 | -2.04 | 6.29 | 4.14 |
| 1900 | 55.06 | -2.59 | 6.29 | 4.14 |
| 2000 | 43.07 | -3.66 | 6.4 | 4.25 |
| 2100 | 49.17 | -3.08 | 5.94 | 3.79 |
| 2200 | 54.86 | -2.61 | 5.52 | 3.37 |
| 2300 | 55.19 | -2.58 | 6.1 | 3.95 |
| 2400 | 61.41 | -2.12 | 6.25 | 4.1 |
| 2500 | 63.54 | -1.97 | 6.88 | 4.73 |
| 2600 | 65.45 | -1.84 | 6.88 | 4.73 |
| 2700 | 64.79 | -1.88 | 6.93 | 4.78 |
| 2800 | 66.46 | -1.77 | 7.42 | 5.27 |
| 2900 | 65.37 | -1.85 | 7.53 | 5.38 |
| 3000 | 62.02 | -2.07 | 6.66 | 4.51 |
| 3100 | 65.88 | -1.81 | 6.57 | 4.42 |
| 3200 | 57.42 | -2.41 | 7.32 | 5.17 |

Maswell Ultra Wideband Log Periodic Antenna

Measured Results

(Gain and Radiation Efficiency under 30cm Lead)

| Freq (MHz) | Effi (%) | Effi (dB) | Gain (dBi) | Gain (dBd) |
|------------|----------|-----------|------------|------------|
| 3300 | 60.74 | -2.17 | 7.05 | 4.9 |
| 3400 | 63.54 | -1.97 | 7.13 | 4.98 |
| 3500 | 58.62 | -2.32 | 6.9 | 4.75 |
| 3600 | 56.02 | -2.52 | 7.09 | 4.94 |
| 3700 | 52.87 | -2.77 | 6.89 | 4.74 |
| 3800 | 51.69 | -2.87 | 6.23 | 4.08 |
| 3900 | 53.37 | -2.73 | 6.74 | 4.59 |
| 4000 | 60.6 | -2.18 | 7.18 | 5.03 |
| 4100 | 59.25 | -2.27 | 7.37 | 5.22 |
| 4200 | 54.17 | -2.66 | 6.95 | 4.8 |
| 4300 | 55.15 | -2.58 | 6.96 | 4.81 |
| 4400 | 56.24 | -2.5 | 6.9 | 4.75 |
| 4500 | 55 | -2.6 | 6.92 | 4.77 |
| 4600 | 49.63 | -3.04 | 6.56 | 4.41 |
| 4700 | 47.15 | -3.26 | 6.41 | 4.26 |
| 4800 | 47.17 | -3.26 | 6.31 | 4.16 |
| 4900 | 44.73 | -3.49 | 6.25 | 4.1 |
| 5000 | 44.37 | -3.53 | 6.12 | 3.97 |
| 5100 | 46.63 | -3.31 | 6.57 | 4.42 |
| 5200 | 45.75 | -3.4 | 6.28 | 4.13 |
| 5300 | 46.4 | -3.34 | 6.55 | 4.4 |
| 5400 | 49.82 | -3.03 | 6.77 | 4.62 |
| 5500 | 46.17 | -3.36 | 7.01 | 4.86 |
| 5600 | 46.68 | -3.31 | 6.74 | 4.59 |
| 5700 | 44.3 | -3.54 | 6.79 | 4.64 |
| 5800 | 48.92 | -3.11 | 6.99 | 4.84 |
| 5900 | 43.54 | -3.61 | 6.31 | 4.16 |
| 6000 | 37.35 | -4.28 | 5.55 | 3.4 |

Maswell Ultra Wideband Log Periodic Antenna Package

AN_Master_004

Package with two cartons:

1pc Low Loss Coaxial Cable per Carton

Cable Dimension : 340*60*340mm

Cable Gross Weight : 1150g

Cable Net Weight : 870g

unit : mm



1pc LPDA Antenna Medium Gain per Carton

Antenna Dimension : 230*85*590mm

Antenna Gross Weight : 1400g

Antenna Net Weight : 990g

unit : mm

