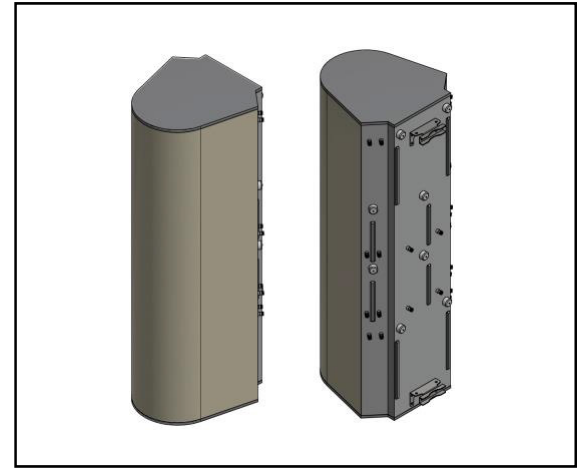


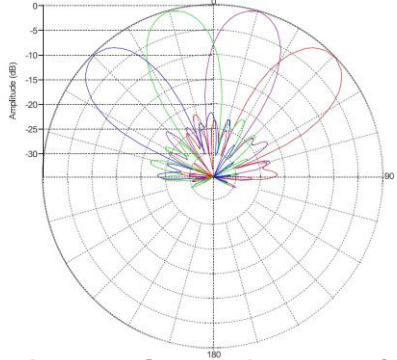
MS-MBA-4.4.2-C4-H4-L4

Lens Technology Enabled™ Multi-Beam Tri Band Base-Station Antenna utilizes a patented spherical lens design with 4 isolated C-Band (3700MHz – 4200MHz) cross-polarized beams, 4 isolated High Band (1695MHz – 2690MHz) cross-polarized beams and 2 isolated Low Band (698MHz – 960MHz) beams, each beam has 4 ports to support 4X4 MIMO. RET for C Band & High Band Beams 0°-20°. RET for Low Band Beams 0°-40°.

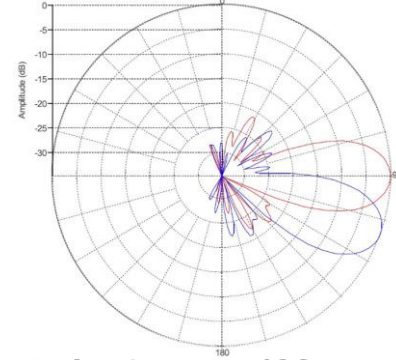


PATTERN RESULTS:

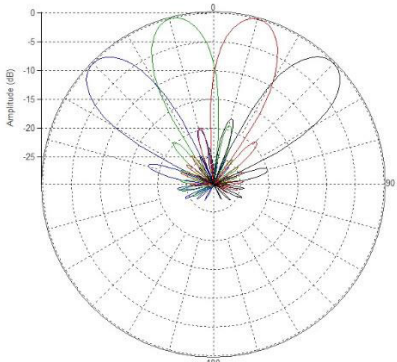
C-Band Horizontal Pattern (3.7GHz)



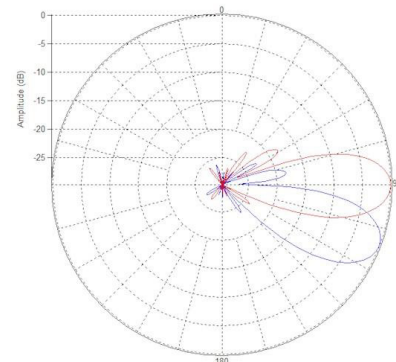
C-Band Vertical pattern (3.7GHz) at tilt 0° and 20°



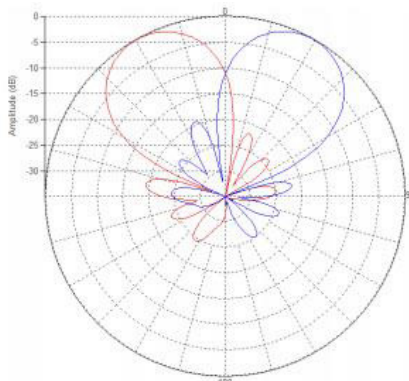
High-Band Horizontal Pattern (1.92GHz)



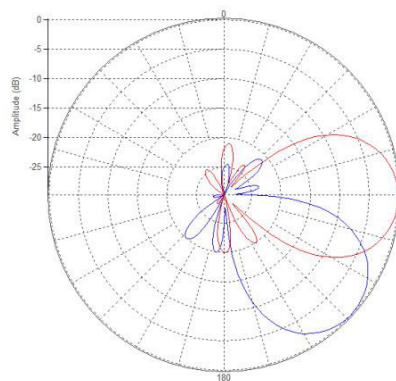
High-band Vertical Pattern (1.92GHz) at tilt 0° and 20°



Low-Band Horizontal Pattern (0.8GHz)



Low-band Vertical Pattern (0.8GHz) at tilt 0° and 40°



TECHNICAL SPECIFICATIONS PER BEAM

| | | | |
|--|-----------------------|-----------------------|----------------------|
| Frequency | 3700-4200 MHz | 1695-2690 MHz | 698-960 MHz |
| Gain | 19dBi | 19.5dBi | 13.5dBi |
| VSWR | <1.5:1 | <1.5:1 | <1.5:1 |
| Polarization | Dual Slant ±45° | Dual Slant ±45° | Dual Slant ±45° |
| Horizontal Coverage | 120° | 120° | 120° |
| Horizontal Beamwidth (10dB) | 34° | 30° | 60° |
| Horizontal Beamwidth (3dB) | 19° | 17° | 34° |
| Vertical Beamwidth (10dB) | 34° | 30° | 60° |
| Vertical Beamwidth (3dB) | 19° | 17° | 34° |
| Beam Cross-over | 7dB typical | 10dB typical | 10dB typical |
| Total Number of Beams | 4 | 4 | 2 |
| Number of Ports per Beam | 4 | 4 | 4 |
| Number of Ports Total | 16 | 16 | 8 |
| Tilt Per Cross-Pol; Remote Electrical Tilt (AISG 2.0) | 0° - 20° | 0° - 20° | 0° - 40° |
| First Sidelobe Level | <-16dB | <-16dB | <-16dB |
| Front to Back Ratio | >28dB | >28dB | >28dB |
| Isolation Port to Port - Polarization | >28dB | >28dB | >28dB |
| Isolation Port to Port - Beam | >28dB | >28dB | >28dB |
| Power Rating | 150W per port | 150W per port | 150W per port |
| Intermodulation | <-153dBc | <-153dBc | <-153dBc |
| Impedance | 50 ohm | 50 ohm | 50 ohm |
| Connector Quantity and Type | 16 x 4.3-10 female | 16 x 4.3-10 female | 8 x 4.3-10 female |

MECHANICAL DATA

| | |
|------------------------|---|
| Dimensions (H x W x D) | 270 x 61 x 66 cm 106 x 24 x 26 inch |
| Antenna Weight | 70 kg 154 lbs |
| Radome Material | Fiber Glass |
| Mounting | Standard pipe mount Compatible pipe diameter: 6.1 – 11.4 cm 2.4 – 4.5 inch |

ENVIRONMENTAL RATINGS

| | |
|---------------------|---|
| Humidity | 95% RH @ +30°C |
| Temperature | -40°C to +70°C |
| Wind load @150km/hr | Frontal: 1177N/264.6lbf Lateral: 1583/355.9lbf |