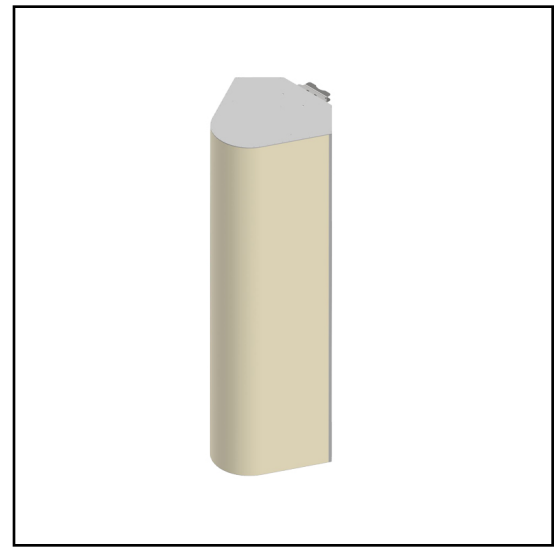


MS-MBC-442-F2H2L2

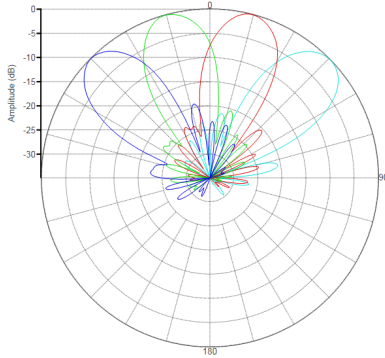
Multi-Beam Cylindrical Base Station Lens Antenna;

- Four isolated F-Band (3300-4200MHz) cross-polarized beams.
- Four isolated H-Band (1695-2690MHz) cross-polarized beams.
- Two isolated L-Band (698-960MHz) cross-polarized beams.
- Each F, H & L-Band beam has 2 ports per beam to support 2x2 MIMO.
- Independent RET available per beam, F Band 2°-10°, High Band 2°-15° and Low Band 2°-20°.

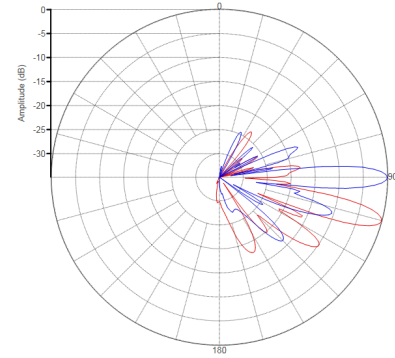
PATTERN RESULTS:



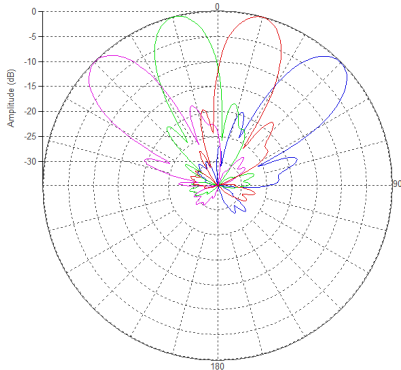
F-Band Horizontal Pattern (3.7GHz)



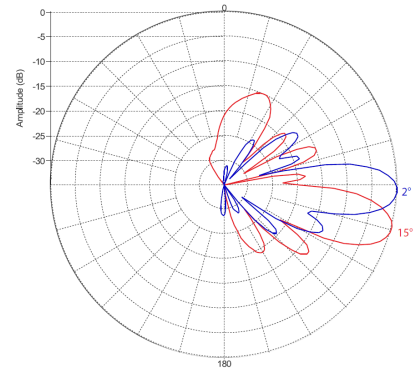
F-Band Vertical Pattern (3.7GHz) at tilt 0° and 10°



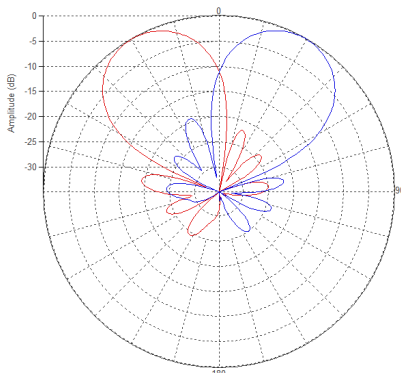
High-band Horizontal Pattern (1.92GHz)



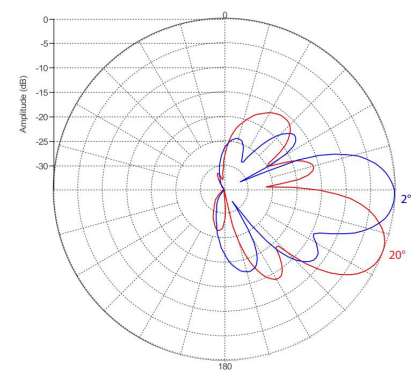
High-band Vertical Pattern (1.92GHz) at tilt 2° and 15°



Low-band Horizontal Pattern (0.8GHz)



Low-band Vertical Pattern (0.8GHz) at tilt 2° and 20°



TECHNICAL SPECIFICATIONS PER BEAM

| | 3300 - 4200 MHz | 1695 - 2690 MHz | 698 - 960 MHz |
|---------------------------------------|-------------------|-------------------|-------------------|
| Frequency | 3300 - 4200 MHz | 1695 - 2690 MHz | 698 - 960 MHz |
| Gain | 22dBi | 20.5dBi | 15dBi |
| 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) | 30° | 31° | 60° |
| Horizontal Beamwidth (3dB) | 18° | 18° | 34° |
| Vertical Beamwidth (3dB) | 6.5° | 12° | 20° |
| Beam Cross-over | 8dB typical | 10dB typical | 10dB typical |
| Total Number of Beams | 4 | 4 | 2 |
| Number of Ports per Beam | 2 | 2 | 2 |
| Number of Ports Total | 8 | 8 | 4 |
| RET | 2° - 10° | 2° - 15° | 2° - 20° |
| First Sidelobe Level | -15dB | -15dB | -15dB |
| Front to Back Ratio at 180° | >28dB | >28dB | >28dB |
| Isolation Port to Port - Polarization | 26dB | 26dB | 26dB </td |
| Isolation Port to Port - Beam | 26dB | 26dB | 26dB |
| Power Rating | 150W per port | 200W per port | 250W per port |
| PIM 3rd order, 2x20w | -153dBc | -153dBc | -153dBc |
| Impedance | 50 ohm | 50 ohm | 50 ohm |
| Connector Quantity and Type | 8 x 4.3-10 female | 8 x 4.3-10 female | 4 x 4.3-10 female |

MECHANICAL DATA

| | |
|------------------------|--|
| Dimensions (H x W x D) | 165 x 77.2 x 78.4 cm 65 x 30.4 x 30.9 inch |
| Antenna Weight | 64 kg 141 lbs |
| Radome Material | Fiber Glass |
| Mounting | Adjustable Clamps Compatible pipe diameter: 10.1 – 15.2 cm 4 – 6 inch |

ENVIRONMENTAL RATINGS

| | |
|----------------------|--|
| Humidity | 95% RH @ +30°C |
| Temperature | -40°C to +70°C |
| Wind load @ 150km/hr | N/lbf Frontal: 901/202.6 Lateral: 1114/250.4 Rear: 1042/234.3 |

CONNECTOR LAYOUT:

