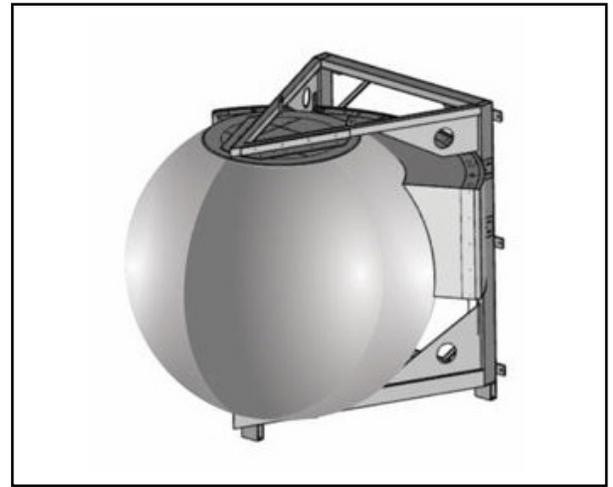


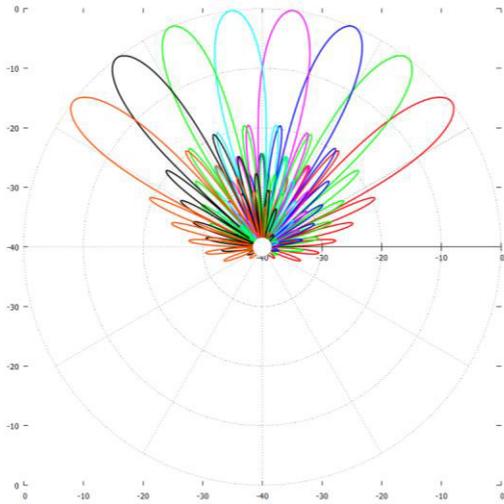
MS-8.4DB120-T

Multi-Beam Dual Band Spherical Lens Antenna: 4 independent low frequency (617 - 896MHz) cross-polarized beams and 8 independent high-frequency (1695 - 2690MHz) cross-polarized beams. High-band tilt range = 0 - 15° & Low-band tilt range = 7.5 - 22.5° for each sector. The sector consists of 1 low-band beam and 2 high band beams.

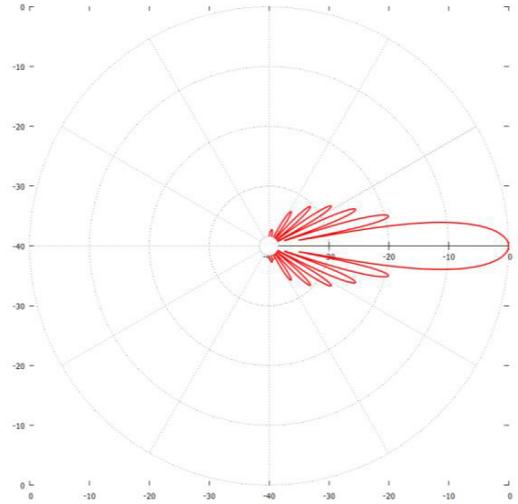


PATTERN RESULTS:

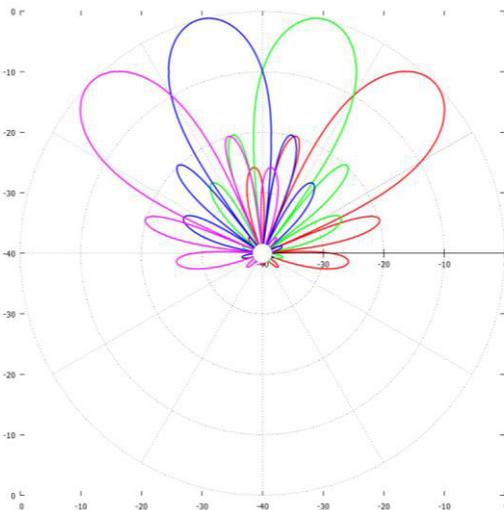
High-Band Horizontal Pattern (1.80GHz)



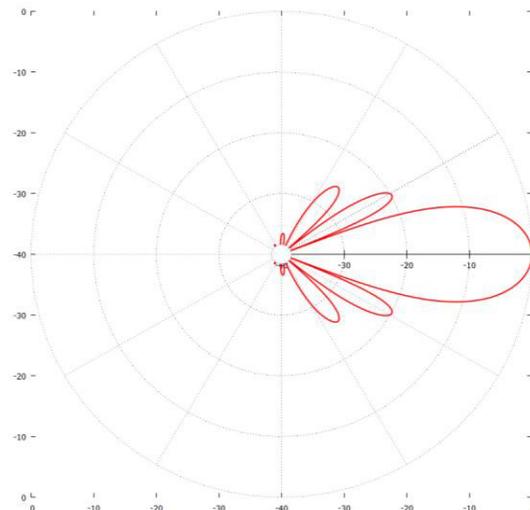
High-Band Vertical Pattern (1.80GHz)



Low-Band Horizontal Pattern (0.80GHz)



Low-Band Vertical Pattern (0.80GHz)



TECHNICAL SPECIFICATIONS PER BEAM

| | | |
|--|-------------------|--------------------|
| Frequency | 617-896 MHz | 1695-2690 MHz |
| Gain | 16dBi | 24dBi |
| VSWR | <1.5:1 | <1.5:1 |
| Polarization | Dual Slant ±45° | Dual Slant ±45° |
| Horizontal Coverage | 120° | 120° |
| Horizontal Beamwidth (10dB level) | 30° | 15° |
| Horizontal Beamwidth (3dB level) | 17° | 8.5° |
| Vertical Beamwidth (10dB level) | 30° | 15° |
| Vertical Beamwidth (3dB level) | 17° | 8.5° |
| Beam Cross-over | 10dB typical | 10dB typical |
| Total Number of Beams | 4 | 8 |
| Manual Adjustable Tilt per 30° sector (each sector having 2 high-band beams and 1 low-band beam) | 7.5° to 22.5° | 0° to 15° |
| Sidelobe level | <-15dB | <-16dB |
| Front to Back Ratio | >28dB | >28dB |
| Isolation Port to Port - Polarization | >28dB | >28dB |
| Isolation Port to Port - Beam | >26dB | >28dB |
| Power Rating | 250W per port | 250W per port |
| Intermodulation | <-153dBc | <-153dBc |
| Impedance | 50 ohm | 50 ohm |
| Connector Quantity and Type | 8 x 4.3-10 female | 16 x 4.3-10 female |

MECHANICAL DATA

| | |
|------------------------|---|
| Dimensions (H x W x D) | Spherical Lens diameter: 120cm/47inch Antenna dimensions: 128 x 145.6 x 143 cm 50.46 x 57.35 x 56.36 inch |
| Antenna Weight | 87.1 kg 192 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 @ 151 km/hr | N/lbf Frontal: 959/216 |

CONNECTOR LAYOUT:

