

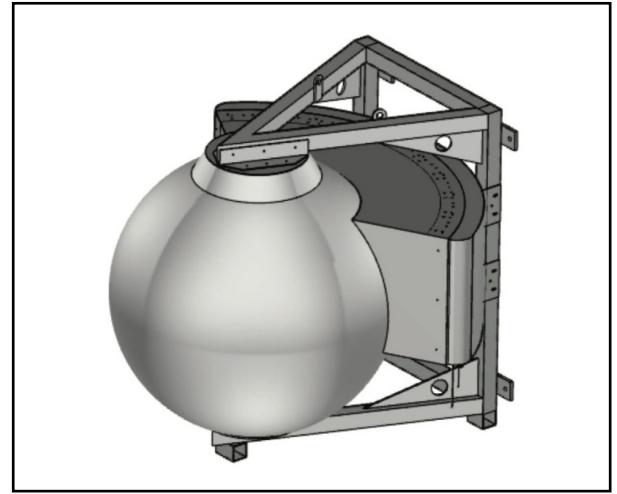
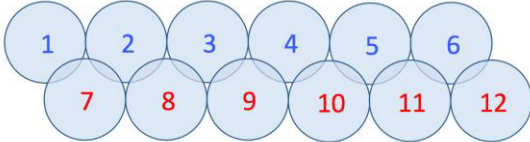
MATSING®

LENS TECHNOLOGY ENABLED

MS-12T180

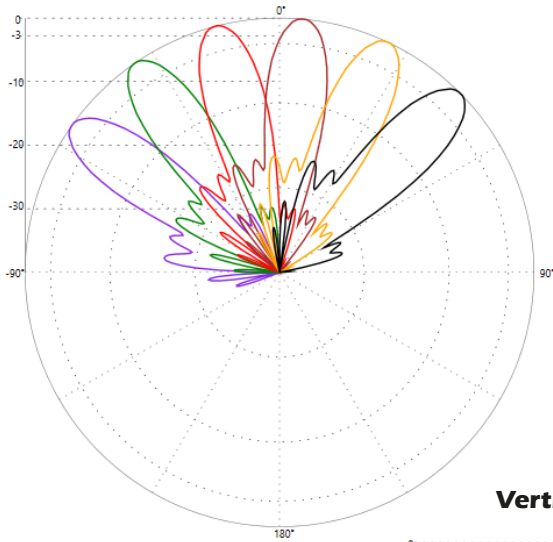
Multi-Beam Spherical Lens Antenna. Twelve independent low frequency (617-896MHz) cross-polarized beams.

BEAM LAYOUT:

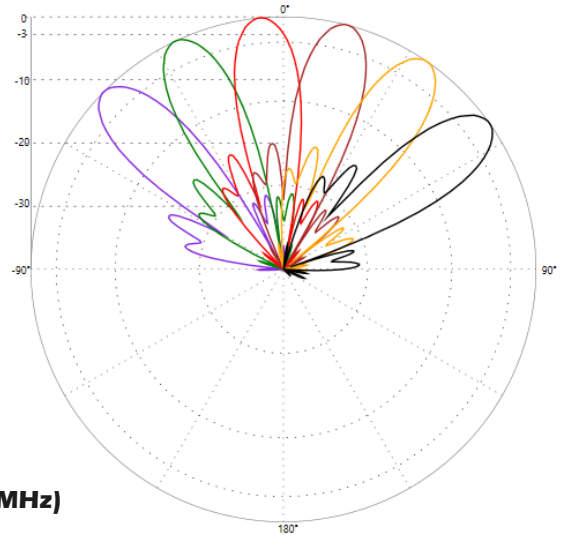


PATTERN RESULTS:

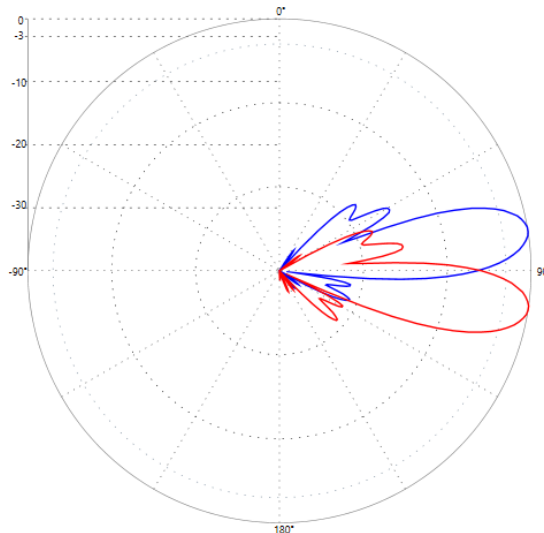
Horizontal Pattern Row 1 (850MHz)



Horizontal Pattern Row 2 (850MHz)



Vertical Pattern (850MHz)



TECHNICAL SPECIFICATIONS PER BEAM

Frequency	617 - 896 MHz
Gain	20.5dBi
VSWR	<1.5:1
Polarization	Dual Slant ±45°
Horizontal Coverage per row Total coverage	120° 130°
Horizontal Beamwidth (10dB level) Horizontal Beamwidth (3dB level)	20° 12°
Vertical Beamwidth (10dB level) Vertical Beamwidth (3dB level)	20° 12°
Beam Cross-over	10dB typical
Total Number of Beams	12
Tilt	Factory Set
First Sidelobe level	<-15dB
Front to Back Ratio	>28dB
Isolation Port to Port - Polarization	>28dB
Isolation Port to Port - Beam	>28dB
Power Rating	250W per port
Intermodulation	<-153dBc
Impedance	50 ohm
Connector Quantity and Type	24 x 4.3-10 female

MECHANICAL DATA

Dimensions (H x W x D)	Spherical Lens diameter: 180cm/70inch Antenna dimensions: 182 x 205 x 207 cm 71 x 80 x 81 inch
Antenna Weight	220 kg 485 lbs
Radome Material	Fiber Glass
Mounting	2 position 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 (Front)	2316 N @ 160km/hr 520 lbf @ 160km/hr

SAMPLE CONNECTOR LAYOUT:

