

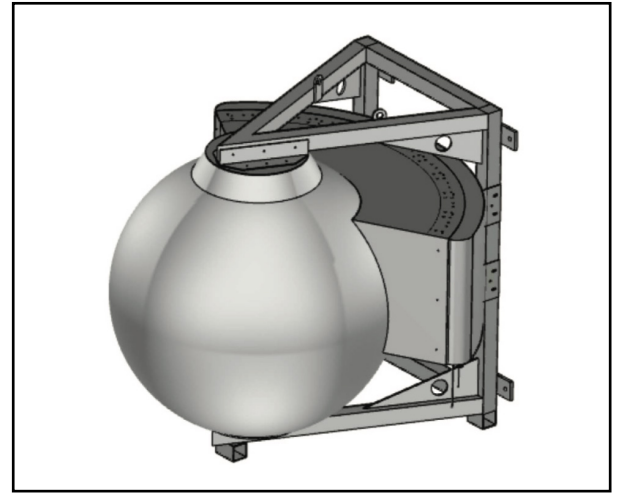
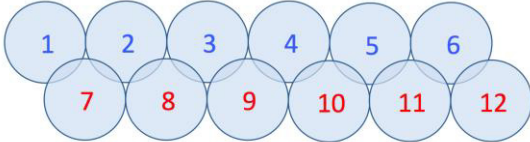
MATSING®

LENS TECHNOLOGY ENABLED

MS-12L180

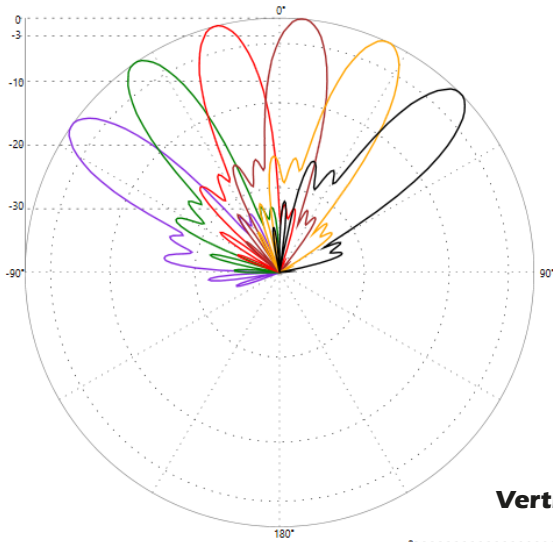
Multi-Beam Wide Band Spherical Lens Antenna: 12 independent low frequency (698-960MHz) cross-polarized beams.

BEAM LAYOUT:

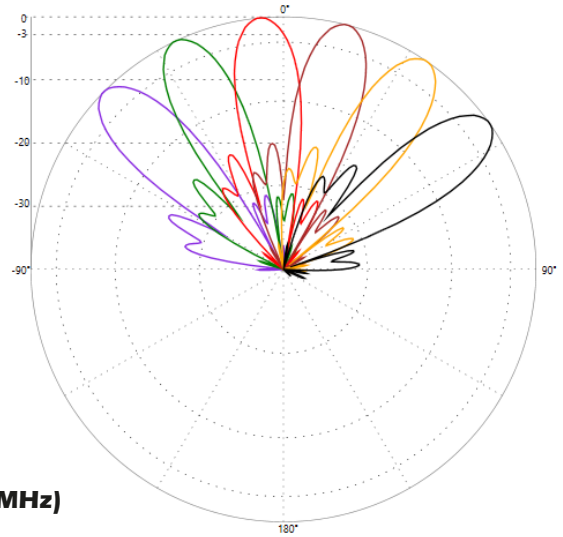


PATTERN RESULTS:

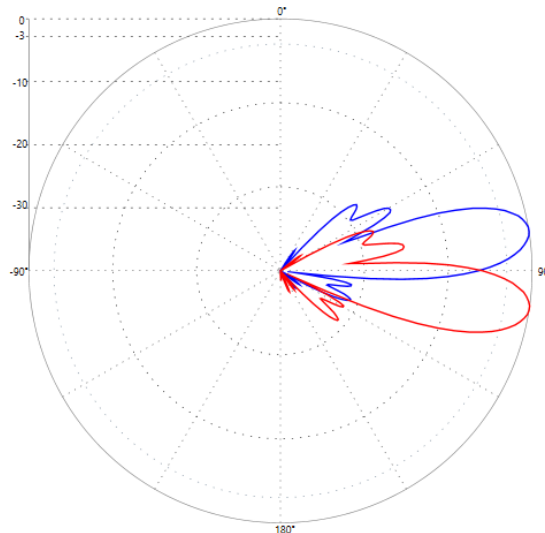
Horizontal Pattern Row 1 (850MHz)



Horizontal Pattern Row 2 (850MHz)



Vertical Pattern (850MHz)



TECHNICAL SPECIFICATIONS PER BEAM

Frequency	698 - 960 MHz
Gain	20.5dBi
VSWR	<1.5:1
Polarization	Dual Slant ±45°
Horizontal Coverage per row	120°
Total coverage	130°
Horizontal Beamwidth (10dB level)	20°
Horizontal Beamwidth (3dB level)	12°
Vertical Beamwidth (10dB level)	20°
Vertical Beamwidth (3dB level)	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: 187.1 X 213.6 X 201.9 cm 73.7 X 84.1 X 79.5 inch
Antenna Weight	240 kg 529 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)	N/lbf 2046 /459 @ 150 km/hr
Wind load (Lateral)	2321/522 @ 150 km/hr

SAMPLE CONNECTOR LAYOUT:

