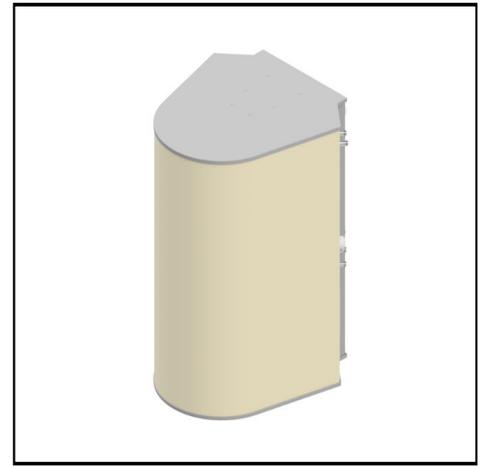


## MS-MBA-4.2-H2-L2

**Multi-Beam Dual Band Spherical Lens Antenna: 4 independent high-frequency (1695-2690MHz) cross-polarized beams and 2 independent low-frequency (698-960MHz) cross-polarized beams with 2X2 MIMO support. Each beam has independent tilt adjust, for high frequency 0°-20° and for low frequency 0°-40°.**

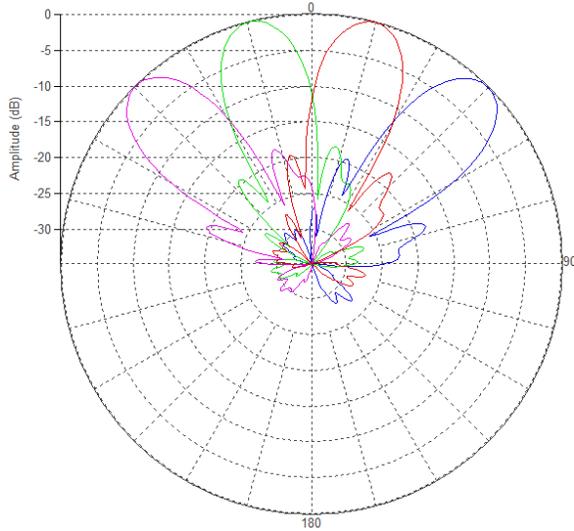
**Improved Design Offers;**

- 1. Superior Pattern Performance
- 2. Individual RET Capability per Beam

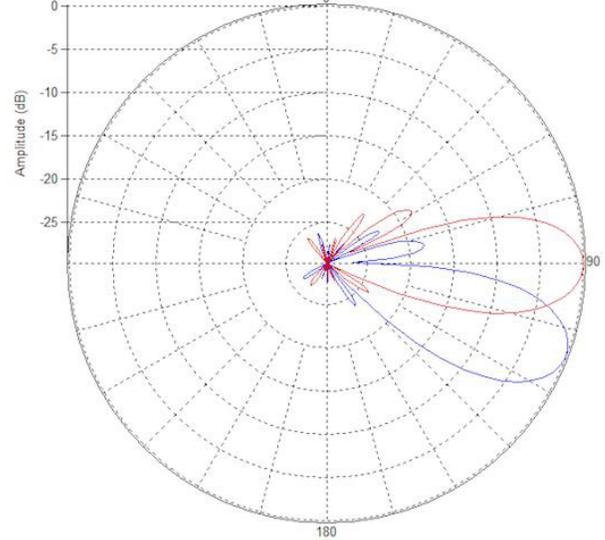


**PATTERN RESULTS:**

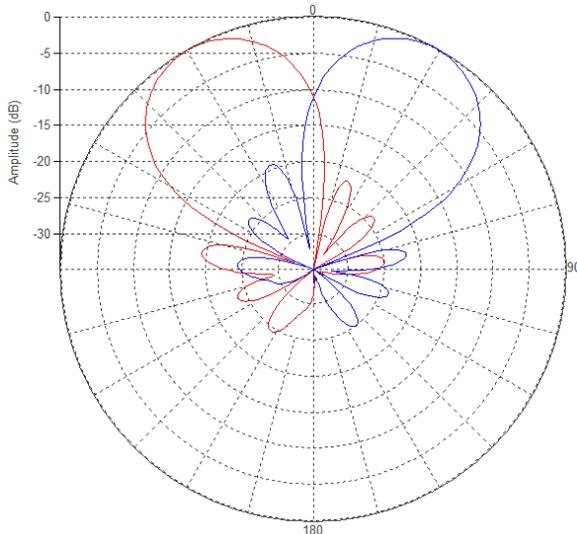
**High-band Horizontal Pattern (1.92GHz)**



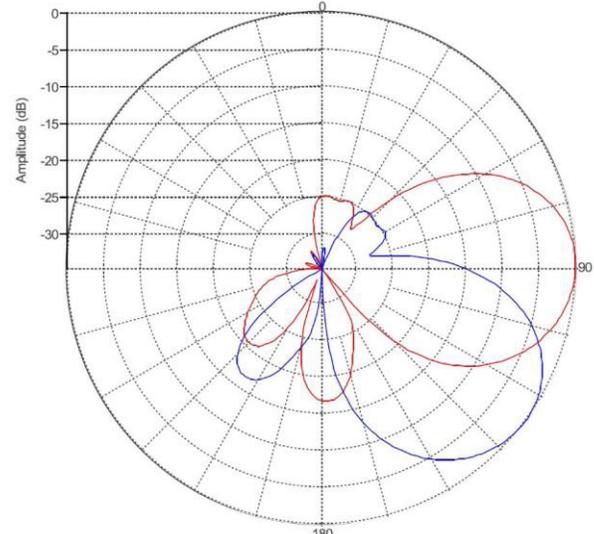
**High-band Vertical Pattern (1.92GHz) at tilt 0° and 20°**



**Low-band Horizontal Pattern (0.8GHz)**



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



### TECHNICAL SPECIFICATIONS PER BEAM

Frequency	698-960 MHz	1695-2690 MHz
Gain	13dBi	19dBi
VSWR	<1.5:1	<1.5:1
Polarization	Dual Slant ±45°	Dual Slant ±45°
Horizontal Coverage	120°	120°
Horizontal Beamwidth (10dB level)	74°	34°
Horizontal Beamwidth (3dB level)	42°	19°
Vertical Beamwidth (10dB level)	74°	34°
Vertical Beamwidth (3dB level)	42°	19°
Beam Cross-over	10dB typical	10dB typical
Total Number of Beams	2	4
Number of Ports Per Beam	2	2
Total Number of Ports	4	8
Tilt Per Cross-Pol	0° to 40°	0° to 20°
First 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	200W per port	250W per port
Intermodulation	<-153dBc	<-153dBc
Impedance	50 ohm	50 ohm
Connector Quantity and Type	4 x 4.3-10 female	8 x 4.3-10 female

### MECHANICAL DATA

Dimensions (H x W x D)	109.7 x 61.7 x 72.3 cm 43.2 x 24.3 x 28.5 inch
Antenna Weight	33.7kg/74.3lbs [w/o Bracket] 35.3kg/77.8/lbs [w/Bracket]
Radome Material	Fiber Glass
Mounting	Adjustable Clamps 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 loading @ 150km/hr	Frontal: 473 N / 106.3 lbf Lateral: 736 N / 165.5 lbf Rear: 679 N / 152.7 lbf

### CONNECTOR LAYOUT:

