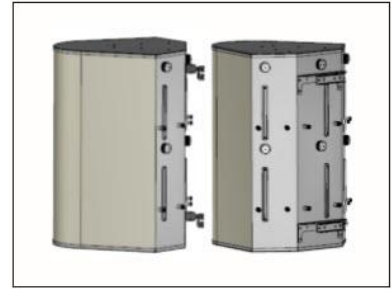


## MS-MBA-4.4-SH2-SH2-45

Multi-Beam Dual Band Spherical Lens Antenna: 8 independent high-frequency (2.3 – 2.4GHz / 3.4 – 3.6GHz) cross-polarized beams with 2X2 MIMO support.

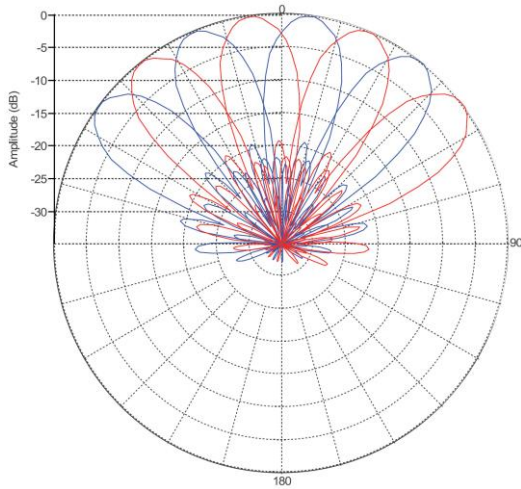
Each beam has independent tilt 0° to 15°.



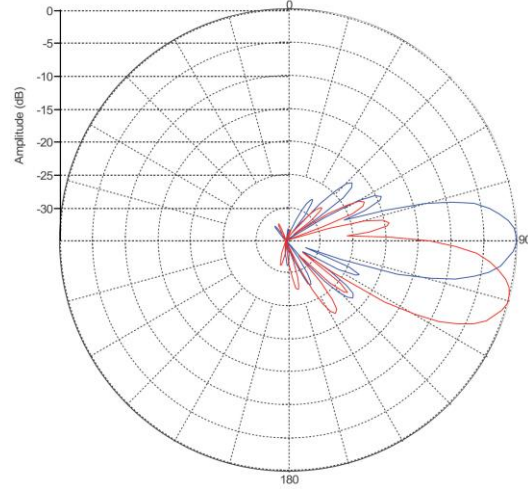
PRELIMINARY

### PATTERN RESULTS:

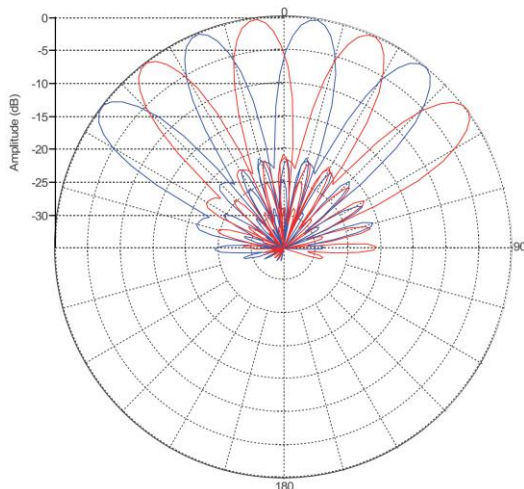
**Horizontal Pattern (2.35GHz)**



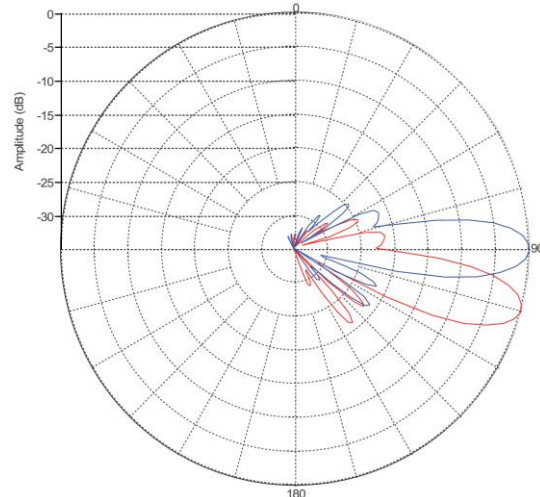
**Vertical Pattern (2.35GHz) at tilt 0° and 15°**



**Horizontal Pattern (3.5GHz)**



**Vertical Pattern (3.5GHz) at tilt 0° and 15°**





## TECHNICAL SPECIFICATIONS PER BEAM

TECHNICAL SPECIFICATIONS PER BEAM		
Frequency	2.3 - 2.4GHz	3.4 - 3.6GHz
Gain	19.5dBi	22.0dBi
VSWR	<1.5:1	<1.5:1
Polarization	Dual Slant ±45°	Dual Slant ±45°
Horizontal Coverage	120°	120°
Horizontal Beamwidth (10dB level)	28°	19°
Horizontal Beamwidth (3dB level)	16°	11°
Vertical Beamwidth (10dB level)	28°	19°
Vertical Beamwidth (3dB level)	16°	11°
Beam Cross-over	3dB	5.5dB
Total Number of Beams	8	
Total Number of Ports	16	
Tilt Per Cross Pol	0° to 15°	
Sidelobe Level	-20dB typical	-20dB typical
Front to Back Ratio	>28dB	>28dB
Isolation Port to Port -Polarization	>28dB	>28dB
Isolation Port to Port – Beam	>28dB	>28dB
Power Rating	150W per port	150W per port
Intermodulation	<-153dBc	<-153dBc
Impedance	50 Ohm	50 Ohm
Connector Quantity and Type	16 x 4.3-10 female	

## MECHANICAL DATA

Dimensions (H x W x D)	110 x 61 x 71 cm
	43 x 24 x 28 inch
Antenna Weight	38kg/84lbs
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 load @ 150km / hr	Units (N / lbf)
	Frontal: 473 / 106.3
	Lateral: 638 / 143.4 Rear: 555 / 124.8

PRELIMINARY