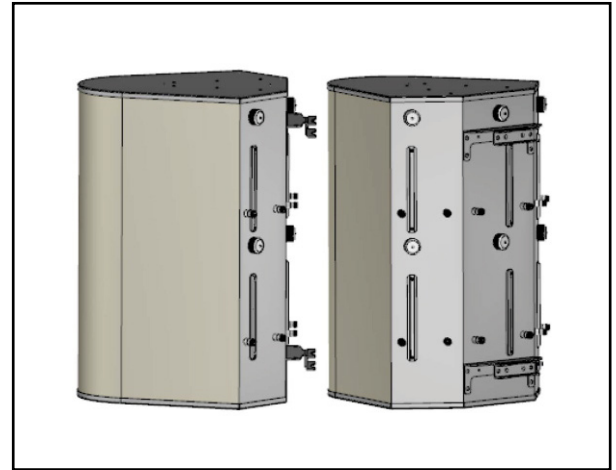


## MS-MBA-4.4-SH2-SH2

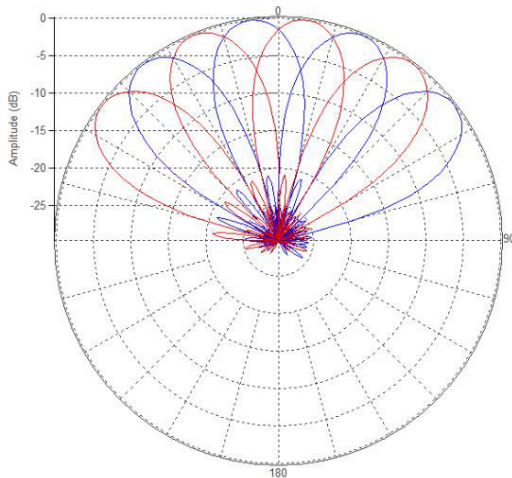
**Multi-Beam Dual Band Spherical Lens Antenna: 8 independent high-frequency (2.3 – 2.4GHz / 3.4 – 3.6GHz) cross-polarized beams with 2X2 MIMO support.**

**Each beam has independent tilt 0° to 15°.**

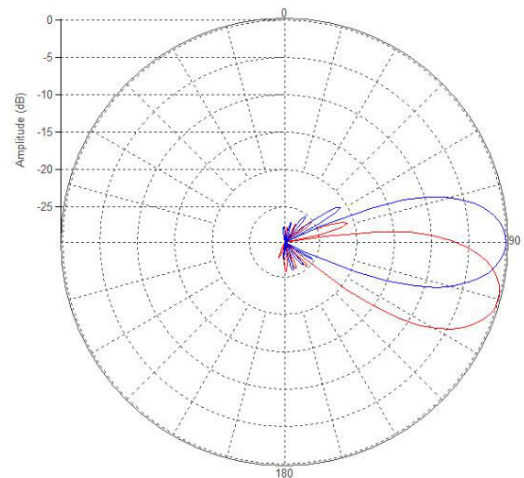


### PATTERN RESULTS:

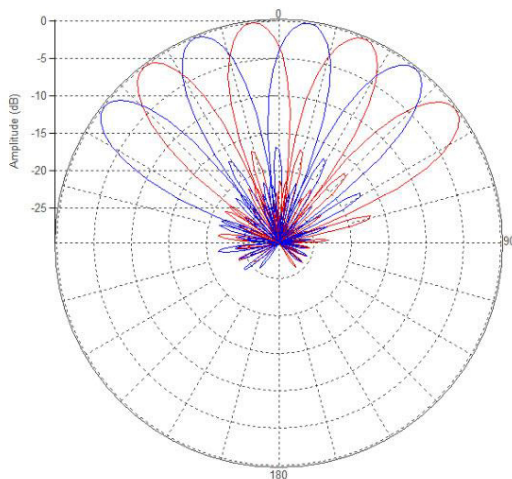
**Horizontal Pattern (2.35GHz)**



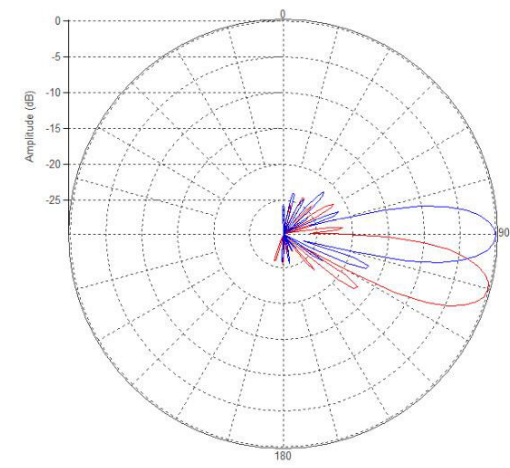
**Vertical Pattern (2.35GHz) at tilt 0° and 15°**



**Horizontal Pattern (3.5GHz)**



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



## TECHNICAL SPECIFICATIONS PER BEAM

|                                       |                           |                           |
|---------------------------------------|---------------------------|---------------------------|
| Frequency                             | 2.3 - 2.4GHz              | 3.4 - 3.6GHz              |
| Gain                                  | 18dBi                     | 21dBi                     |
| VSWR                                  | <1.5:1                    | <1.5:1                    |
| Polarization                          | Dual Slant $\pm 45^\circ$ | Dual Slant $\pm 45^\circ$ |
| Horizontal Coverage                   | 120°                      | 120°                      |
| Horizontal Beamwidth (10dB level)     | 35°                       | 23°                       |
| Horizontal Beamwidth (3dB level)      | 20°                       | 13°                       |
| Vertical Beamwidth (10dB level)       | 35°                       | 23°                       |
| Vertical Beamwidth (3dB level)        | 20°                       | 13°                       |
| Beam Cross-over                       | 2dB                       | 4dB                       |
| Total Number of Beams                 | 8                         |                           |
| Total Number of Ports                 | 16                        |                           |
| Tilt Per Cross-Pol                    | 0° to 15°                 |                           |
| Sidelobe Level                        | <-16dB                    | <-16dB                    |
| 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) | 90 x 62 x 60 cm<br>35 x 24 x 24 inch                                              |
| Antenna Weight         | 32kg<br>71lbs                                                                     |
| Radome Material        | Fiber Glass                                                                       |
| Mounting               | Adjustable Clamps<br>Compatible pipe diameter:<br>6.1 – 11.4 cm<br>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)<br>Frontal: 386 / 86.8<br>Lateral: 523 / 117.6<br>Rear: 452 / 101.6 |

