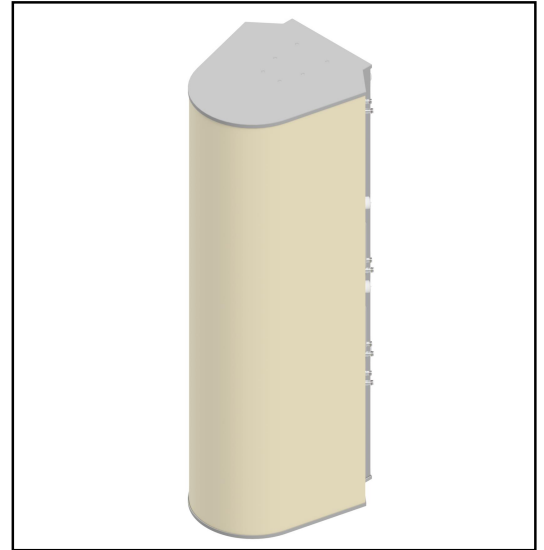


## MS-MBA-3.2-H4-T4

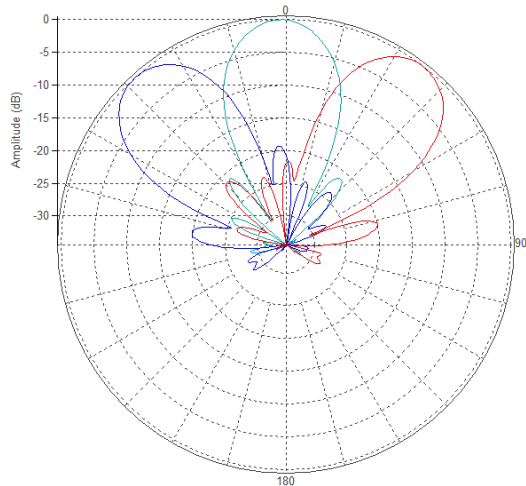
### Multi-beam Base-Station Antenna (MBA)

**Lens Technology Enabled™ Multi-Beam Base-Station Antenna** perfect for 6 to 9 high-band sector LTE cell site deployments and 3 to 6 low-band sector LTE cell site deployments for best CINR results. Utilizes a patented spherical lens design with 3 isolated high-frequency (1695-2690MHz) cross-polarized beams and 2 isolated low-frequency (617-896MHz) cross-polarized beams. Each beam is made of two independent antennas and has 4 ports. There are two independent tilt settings per beam (0-30° for HB and 0-40° for LB) tilt for each pair of cross-polarized elements.

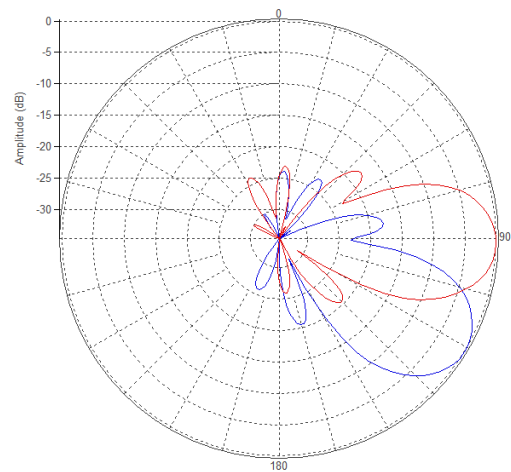


#### PATTERN RESULTS:

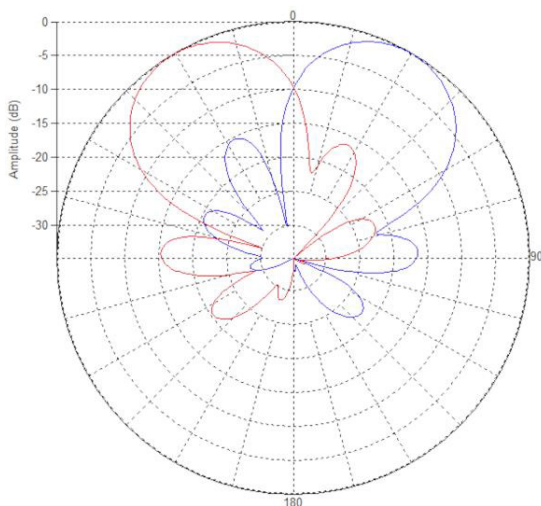
**High-Band Horizontal Pattern (1.80GHz)**



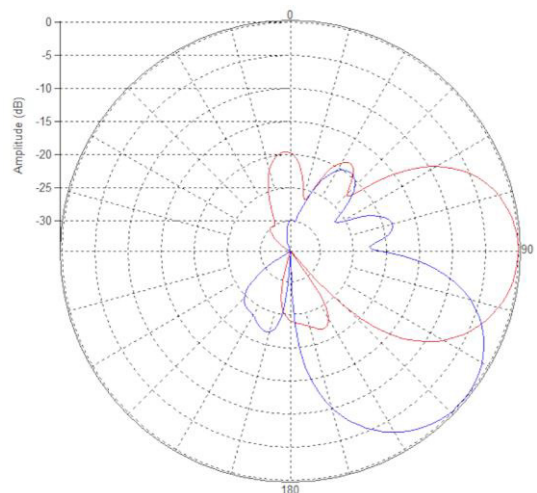
**High-Band Vertical pattern 0° tilt and 30° tilt (1.80GHz)**



**Low-Band Horizontal Pattern (750MHz)**



**Low-Band Vertical Pattern 0° tilt and 40° tilt (750MHz)**



### TECHNICAL SPECIFICATIONS PER BEAM

|                                                   |                           |                           |
|---------------------------------------------------|---------------------------|---------------------------|
| Frequency                                         | 1695-2690 MHz             | 617-896MHz                |
| Gain                                              | 17.5dBi                   | 14.0dBi                   |
| Polarization                                      | Dual Slant $\pm 45^\circ$ | Dual Slant $\pm 45^\circ$ |
| Horizontal Coverage                               | 120°                      | 120°                      |
| Horizontal Beamwidth (10dB)                       | 40°                       | 64°                       |
| Horizontal Beamwidth (3dB)                        | 23°                       | 36°                       |
| Vertical Beamwidth (10dB)                         | 40°                       | 64°                       |
| Vertical Beamwidth (3dB)                          | 23°                       | 36°                       |
| Beam Cross-over                                   | 10dB typical              | 8.5dB typical             |
| Total Number of Beams                             | 3                         | 2                         |
| Number of Ports per Beam                          | 4                         | 4                         |
| Number of Ports Total                             | 12                        | 8                         |
| Tilt Per Cross-Pol;<br>(Two adjustments per beam) | 0° to 30°                 | 0° to 40°                 |
| First Sidelobe Level                              | <-16dB                    | <-15dB                    |
| Front to Back Ratio                               | >28dB                     | >25dB                     |
| Isolation Port to Port - Polarization             | >28dB                     | >28dB                     |
| Isolation Port to Port - Beam                     | >26dB                     | >24dB                     |
| Power Rating                                      | 200W per port             | 250W per port             |
| Intermodulation                                   | <-153dBc                  | <-153dBc                  |
| Impedance                                         | 50 ohm                    | 50 ohm                    |
| Connector Quantity and Type                       | 12 x 4.3-10 female        | 8 x 4.3-10 female         |

### MECHANICAL DATA

|                        |                                                                                     |
|------------------------|-------------------------------------------------------------------------------------|
| Dimensions (H x W x D) | 182.8 x 61.7 x 72.1cm<br>72 x 24.3 x 28.4 inch                                      |
| Antenna Weight         | 58kg/127.9lbs [w/o Bracket]<br>59.6kg/131.4lbs [w/Bracket]                          |
| Radome Material        | Fiber Glass                                                                         |
| Mounting               | Standard Pipe Mount<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/h | Frontal: 701 N/157 lbf<br>Lateral: 1007 N/226 lbf |

### CONNECTOR LAYOUT:

