

## MS-MBA-5-F4

Lens Technology Enabled™ Multi-Beam Base-Station Antenna utilizes a patented lens design with 5 isolated CBRS-frequency (3300 - 4200MHz) cross-polarized beams. Each beam has 4 cross-polarized ports for supporting 4X4 MIMO.

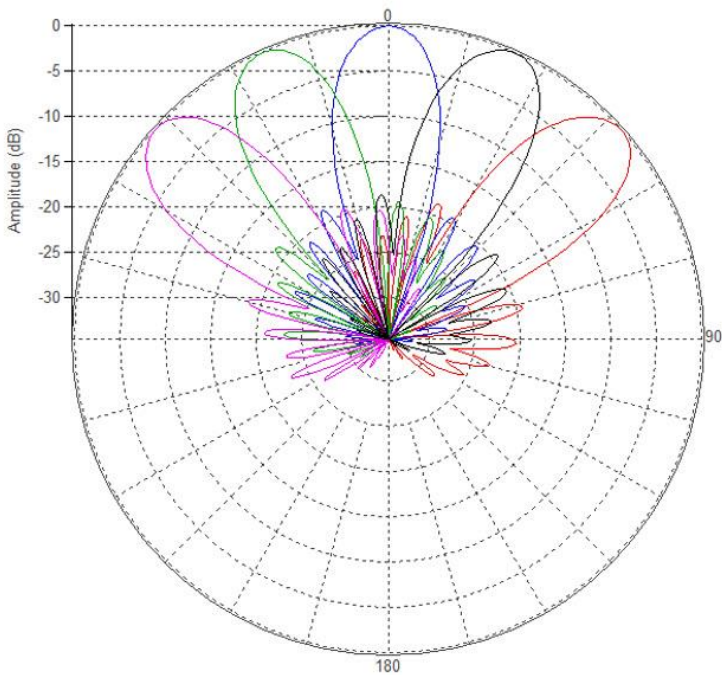
Tilt is adjustable from 0° to 30° for each beam.



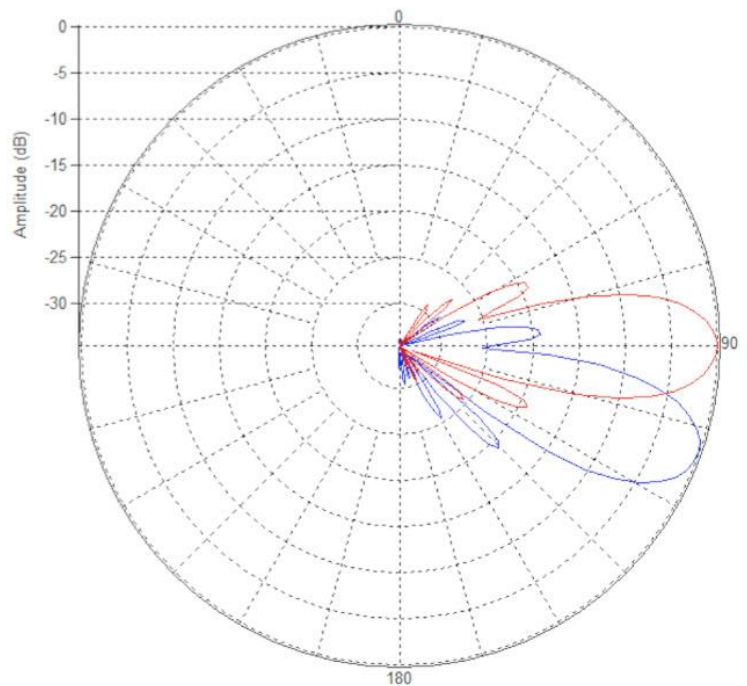
PRELIMINARY

### PATTERN RESULTS:

CBRS-Band Horizontal Beam Pattern (3.5GHz)



CBRS-Band Vertical Pattern at 0° and 20° Tilt (3.5GHz)





| TECHNICAL SPECIFICATIONS PER BEAM    |                           |
|--------------------------------------|---------------------------|
| Frequency                            | 3300 MHz – 4200 MHz       |
| Gain                                 | 20dBi                     |
| Return Loss                          | > 15dB                    |
| VSWR                                 | <1.5:1                    |
| Polarization                         | Dual Slant $\pm 45^\circ$ |
| Horizontal Coverage                  | 120°                      |
| Horizontal Beam-width (3dB/10dB)     | 15° / 27°                 |
| Vertical Beam-width (3dB/10dB)       | 15° / 27°                 |
| Beam Cross-over                      | 6 - 8 dB typical          |
| Total Number of Beams                | 5                         |
| Number of Ports per Beam             | 4                         |
| Total Number of Ports                | 20                        |
| Tilt per Cross-Pol                   | 0° - 30°                  |
| First Sidelobe Level                 | < -18dB                   |
| Front to Back Ratio                  | >28dB                     |
| Isolation Port to Port -Polarization | >28dB                     |
| Isolation Port to Port – Beam        | >28dB                     |
| Power Rating                         | 150W per port             |
| Intermodulation                      | <-153dBc                  |
| Impedance                            | 50 Ohm                    |
| Connector Quantity and Type          | 20 x 4.3-10 female        |

| MECHANICAL DATA        |   |
|------------------------|---|
| Dimensions (H x W x D) | 94 x 61 x 63 cm                         |
|                        | 37 x 24 x 25 inch                       |
| Antenna Weight         | 30kg                                    |
|                        | 66lbs                                   |
| Radome Material        | Fibre Glass                             |
| Mounting               | Standard 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 (Lateral)    | 119 lbf @ 150km/hr                      |
|                        | 530N @ 150km/hr                         |
| Wind Load (Frontal)    | 83 lbf @150km/hr                        |
|                        | 369 N @150km/hr                         |

PRELIMINARY