

## MS-MBA-5.3-F4-H4

**Lens Technology Enabled™ Multi-Beam Base-Station Antenna** perfect for six to nine sector LTE cell site deployment, utilizes a patented spherical lens design with 3 isolated high frequency high-frequency (1695-2690MHz) cross-polarized beams, each beam has 4 ports for two independent antennas, or 4X4 MIMO. This antenna is also capable of 5 isolated F-Band Frequency (3300- 4200MHz) cross polarized beams, each beam has 4 ports for two independent antennas, or 4X4MIMO. There are two independent tilt settings per beam (0-30° tilt for each cross-polarized beam).

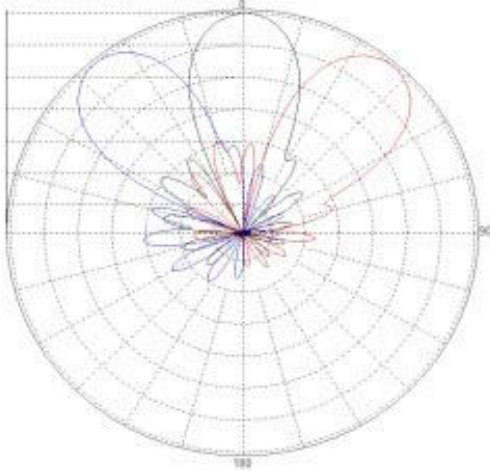
**\*Optional Packages:**

- a) MS-MBA-5.3-F4-H4-M: AISG 2.0 Remote Electrical Tilt, multi RET configuration
- b) MS-MBA-5.3-F4-H4-S: AISG 2.0 Remote Electrical Tilt, single RET configuration

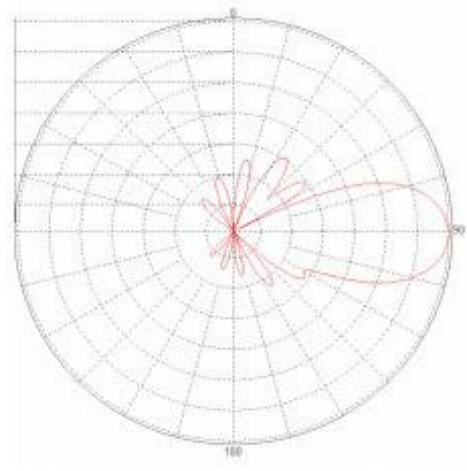


**PATTERN RESULTS:**

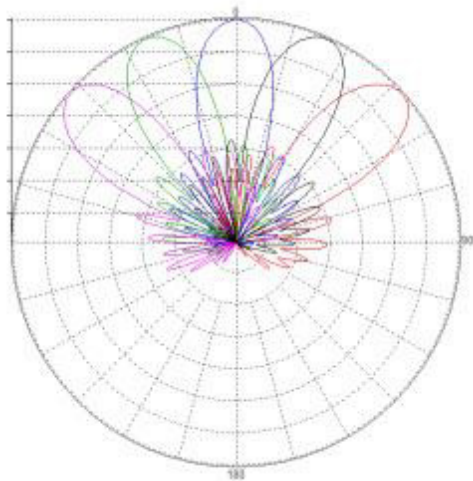
**High-Band Horizontal Pattern (1.80GHz)**



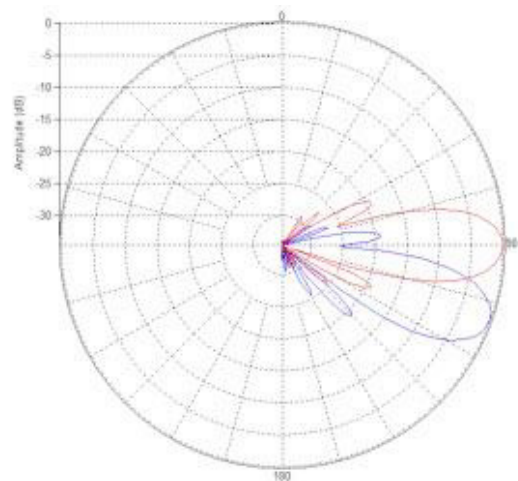
**High-Band Vertical Pattern (1.80GHz)**



**CBRS-Band Horizontal Pattern (3.5GHz)**



**CBRS-Band Vertical Pattern 0° tilt to 20° tilt (3.5GHz)**



PRELIMINARY

### TECHNICAL SPECIFICATIONS PER BEAM

Frequency	3300-4200 GHz	1695-2690 MHz
Gain	17.5dBi	21dBi
VSWR	<1.5:1	<1.5:1
Return Loss	>15dB	>15dB
Polarization	Dual Slant ±45°	Dual Slant ±45°
Horizontal Coverage	120°	120°
Horizontal Beamwidth (10dB)	24°	40°
Vertical Beamwidth (10dB)	24°	40°
Beam Cross-over	7dB typical	10dB typical
Total Number of Beams	5	3
Number of Ports per Beam	4	4
Number of Ports Total	20	12
Tilt Per Cross-Pol; (Two adjustments per beam)	0° to 30°	0° to 30°
First Sidelobe Level	<-16dB	<-16dB
Front to Back Ratio	>28dB	>28dB
Isolation Port to Port - Polarization	>28dB	>28dB
Isolation Port to Port - Beam	>28dB	>26dB
Power Rating	200W per port	200W per port
Intermodulation	<-153dBc	<-153dBc
Impedance	50 ohm	50 ohm
Connector Quantity and Type	20 x 4.3-10 female	12 x 4.3-10 female

### MECHANICAL DATA

Dimensions (H x W x D) 165 x 61 x 61 cm  
65 x 24 x 24 inch

Antenna Weight 55 kg  
121 lbs

Radome Material Fiber 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 @ 150km/h Frontal: 701 N/157 lbf  
Lateral: 1007 N/226 lbf

### CONNECTOR LAYOUT:

