

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 (1710-2690MHz) cross-polarized beams, each beam has 4 ports for two independent antennas, or 4X4 MIMO. This antenna is also capable of 5 isolated FWB-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).

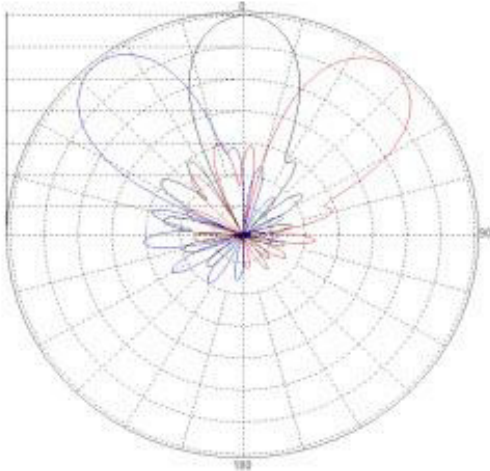
***Optional Packages:**

- 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

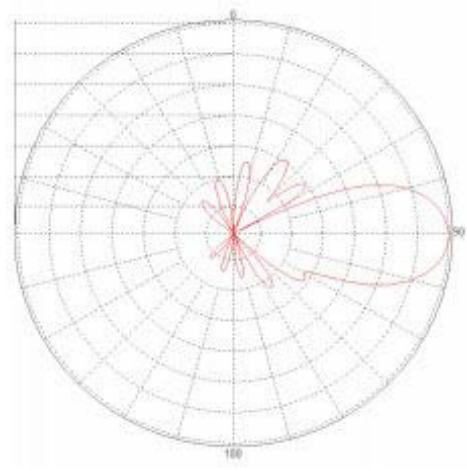


PATTERN RESULTS:

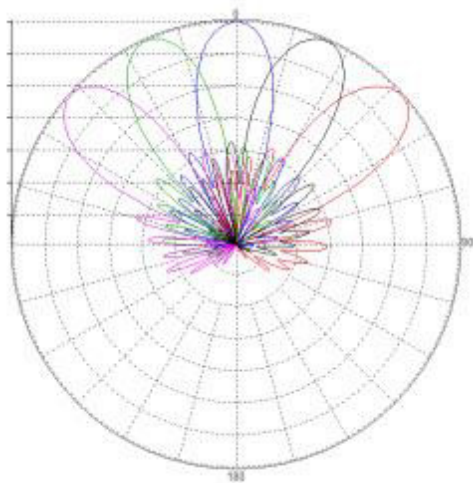
High-Band Horizontal Pattern (1.80GHz)



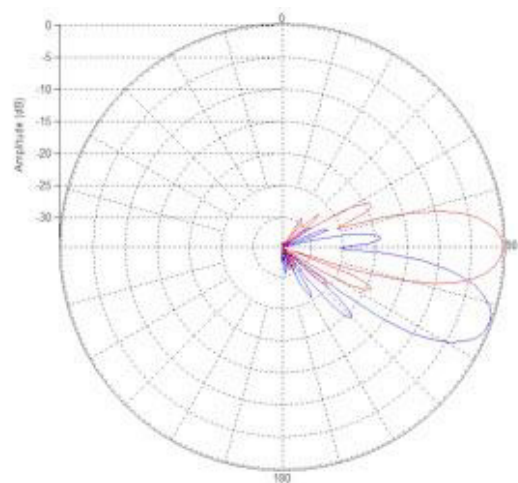
High-Band Vertical Pattern (1.80GHz)



CBRS-Band Horizontal Pattern (3.5GHz)



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



PRELIMINARY

TECHNICAL SPECIFICATIONS PER BEAM

Frequency	1710-2690 MHz	3300-4200 GHz
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)	40°	24°
Vertical Beamwidth (10dB)	40°	24°
Beam Cross-over	10dB typical	7dB typical
Total Number of Beams	3	5
Number of Ports per Beam	4	4
Number of Ports Total	12	20
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	>26dB	>28dB
Power Rating	200W per port	200W per port
Intermodulation	<-153dBc	<-153dBc
Impedance	50 ohm	50 ohm
Connector Quantity and Type	12 x 4.3-10 female	20 x 4.3-10 female

MECHANICAL DATA

Dimensions (H x W x D)	164 x 62 x 60 cm 64.5 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:

