

MS-MBA-3.3-LAA2-F4

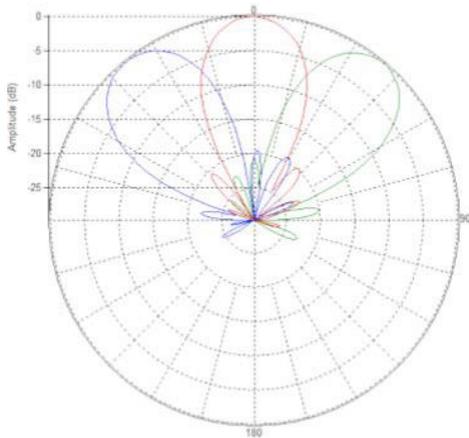
Multi-beam Base-Station Antenna (MBA)

Lens Technology Enabled™ Multi-Beam Dual Band Base-Station Antenna utilizes a patented spherical lens design with 3 isolated LAA- frequency (5.0GHz – 6.0GHz) cross-polarized beams and 3 isolated F- Band (3.3GHz – 4.2GHz) cross-polarized beams. Each LAA beam has 2 ports to support 2x2 MIMO. Each F-Band beam has 4 ports to support 4x4 MIMO. There are two independent tilt settings per beam (0-30° for F-Band and 0-30° for LAA).

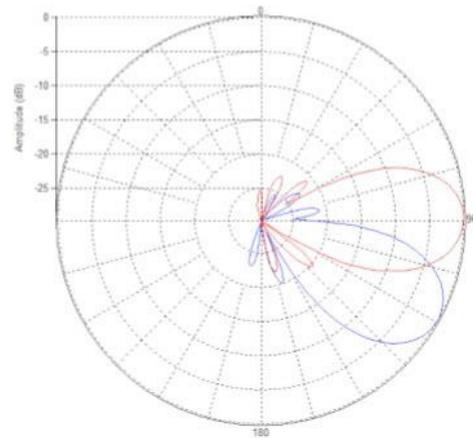


PATTERN RESULTS:

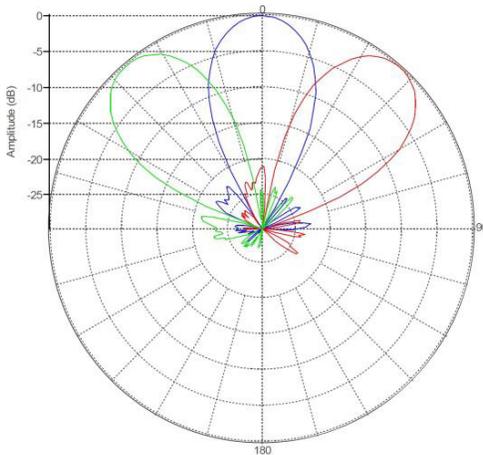
F-Band Horizontal Pattern (3.5GHz)



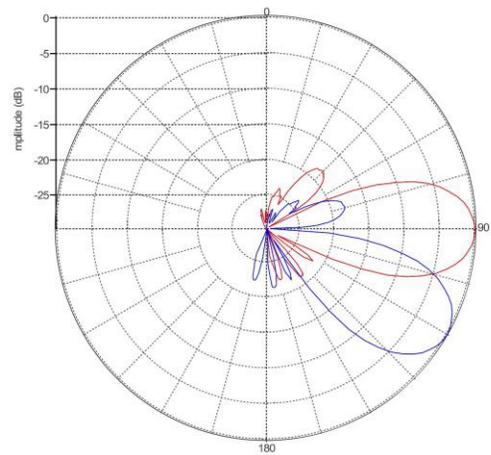
F-Band Vertical Pattern 0° tilt and 30° tilt (3.5GHz)



LAA-Band Horizontal Pattern (5.5GHz)



LAA-Band Vertical Pattern at 0° and 30° Tilt (5.5GHz)



TECHNICAL SPECIFICATIONS PER BEAM

Frequency	5.0 – 6.0 GHz	3.3 – 4.2 GHz
Gain	6dBi	16.5dBi
VSWR	<1.5:1	<1.5:1
Polarization	Dual Slant ±45°	Dual Slant ±45°
Horizontal Coverage	120°	120°
Horizontal Beamwidth (10dB level)	44°	45°
Horizontal Beamwidth (3dB level)	25°	25°
Vertical Beamwidth (10dB level)	44°	45°
Vertical Beamwidth (3dB level)	25°	25°
Beam Cross-over	7-9dB typical	6-8dB typical
Total Number of Beams	3	3
Number of Ports per Beam	2	4
Number of Ports Total	6	12
Tilt Per Cross-Pol; Remote Electrical Tilt (AISG 2.0)	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	>28dB
Power Rating	20W per port	150W per port
Intermodulation	<-153dBc	<-153dBc
Impedance	50 ohm	50 ohm
Connector Quantity and Type	6 x 4.3-10 female	12 x 4.3-10 female

MECHANICAL DATA

Dimensions (H x W x D)	121.1 x 42.6 x 44.4 cm 47.7 x 16.8 x 17.5 inch
Antenna Weight	20.6kg/45.4lbs [w/o Bracket] 22.6kg/49.8 lbs [w/Bracket]
Radome Material	Fiber Glass
Mounting	1 position 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: 318 N / 71 lbf Lateral: 402 N / 90 lbf

CONNECTOR LAYOUT:

