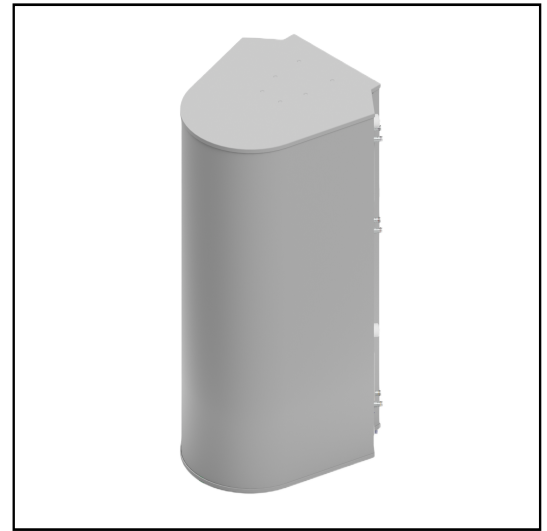


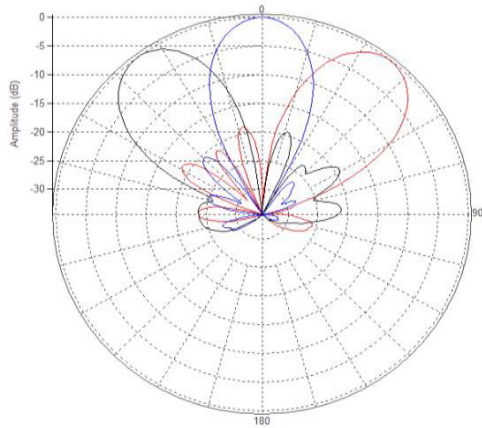
MS-MBA-3.3-F4-H2

Lens Technology Enabled™ Multi-Beam Dual-Band Base-Station Antenna utilizes a patented spherical lens design with 3 isolated F-Band frequency (3300-4200 MHz) cross-polarized beams, 3 isolated H-Band frequency (1695 - 2690 MHz) cross-polarized beams. Each F-Band beam has 4 ports to support 4x4 MIMO. Each H-Band Beam has 2 ports to support 2x2 MIMO. The antenna offers two independent tilt settings (0-30°) per beam for both F-Band and H-Band cross-polarized element pairs.

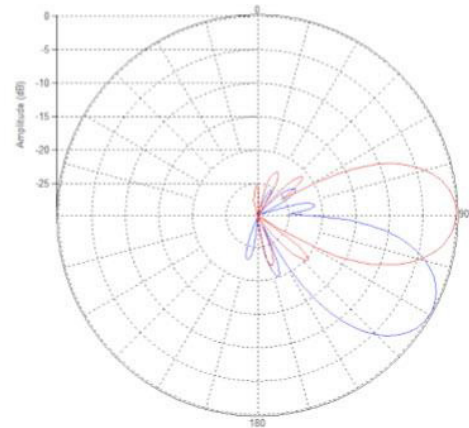


PATTERN RESULTS:

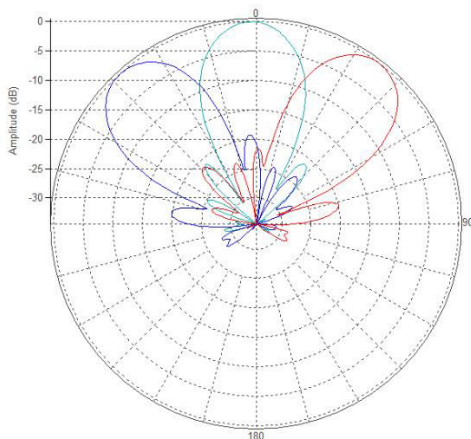
F-Band Horizontal Pattern (3.6GHz)



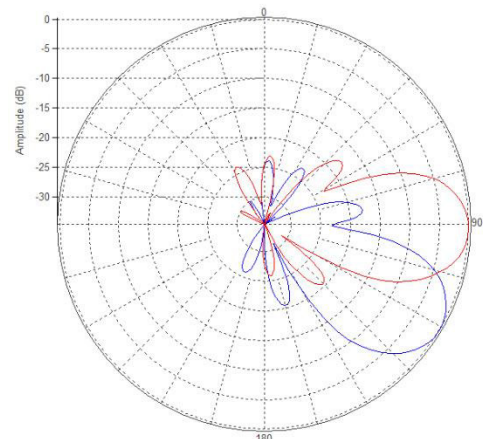
F-Band Vertical Pattern at 0° and 30° Tilt (3.6GHz)



High-Band Horizontal Pattern (1.92GHz)



High-Band Vertical Pattern 0° tilt and 30° tilt (1.92GHz)



PRELIMINARY

TECHNICAL SPECIFICATIONS PER BEAM

Frequency	3300-4200MHz	1695-2690MHz
Gain	16dBi	17.8dBi
VSWR	<1.5:1	<1.5:1
Polarization	Dual Slant $\pm 45^\circ$	Dual Slant $\pm 45^\circ$
Horizontal Coverage	120°	120°
Horizontal Beamwidth (10dB) Horizontal Beamwidth (3dB)	45° 25°	40° 23°
Vertical Beamwidth (10dB) Vertical Beamwidth (3dB)	45° 25°	40° 23°
Beam Cross-over	8dB typical	10dB typical
Total Number of Beams	3	3
Number of Ports per Beam	4	2
Number of Ports Total	12	6
RET Per Cross-Pol;	0°- 30°	0°- 30°
First Sidelobe Level	< -18dB	<-16dB
Front to Back Ratio	28dB	>28dB
Isolation Port to Port - Polarization	28dB	>28dB
Isolation Port to Port - Beam	28dB	>28dB
Power Rating	150W per port	200W per port
Intermodulation	<-153dBc	<-153dBc
Impedance	50 ohm	50 ohm
Connector Quantity and Type	12 x 4.3-10 female	6 x 4.3-10 female

MECHANICAL DATA

Dimensions (H x W x D)	95 x 61.7 x 60 cm 37.4 x 24.3 x 23.6 inch
Antenna Weight	28kg/61.7lbs
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 / hr	N/lbf Frontal: 419 / 94.2 Lateral: 651/ 146.4 Rear: 602/135.3

CONNECTOR LAYOUT:

