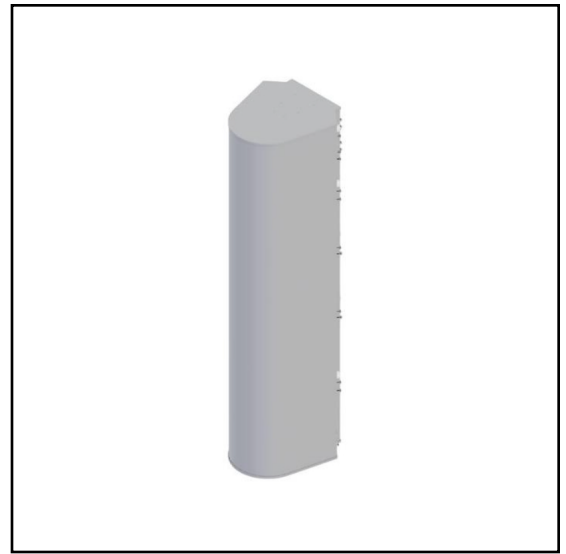


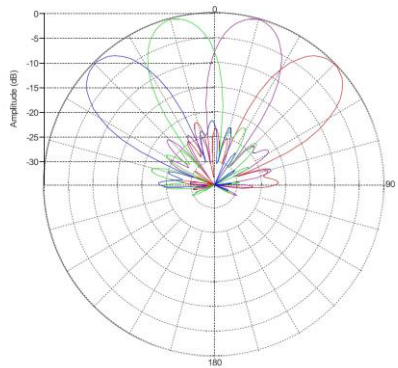
MS-MBA-4.4.2-F4-H4-T4

Lens Technology Enabled™ Multi-Beam Tri Band Base-Station Antenna utilizes a patented spherical lens design with 4 isolated F Band (3300MHz –4200MHz) cross-polarized beams, 4 isolated High Band (1695MHz–2690 MHz) cross-polarized beams, and 2 isolated Low Band (617MHz–896MHz) beams. Each beam has 4 ports to support 4x4 MIMO. RET for F Band & High Band beams: 0°–20°. RET for Low Band beams: 0°–40°.

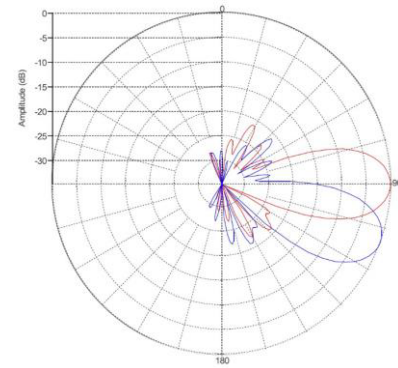


PATTERN RESULTS:

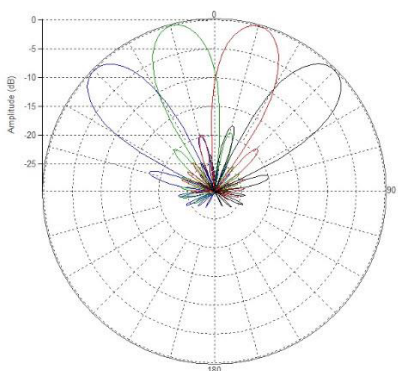
F-Band Horizontal Pattern (3.6GHz)



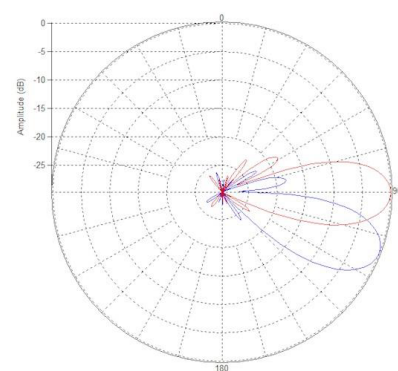
F-Band Vertical pattern (3.6GHz) at tilt 0° and 20°



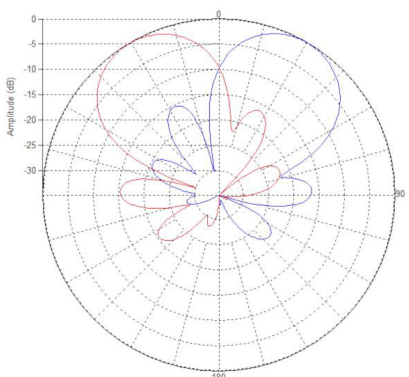
High-Band Horizontal Pattern (1.92GHz)



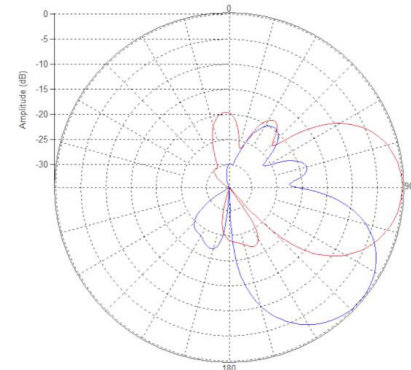
High-band Vertical Pattern (1.92GHz) at tilt 0° and 20°



Low-Band Horizontal Pattern (750MHz)



Low-Band Vertical Pattern 0° tilt and 40° tilt (750MHz)



TECHNICAL SPECIFICATIONS PER BEAM

Frequency	3300-4200 MHz	1695-2690 MHz	617-896 MHz
Gain	19dBi	19.5dBi	13.5dBi
VSWR	<1.5:1	<1.5:1	<1.5:1
Polarization	Dual Slant $\pm 45^\circ$	Dual Slant $\pm 45^\circ$	Dual Slant $\pm 45^\circ$
Horizontal Coverage	120°	120°	120°
Horizontal Beamwidth (10dB)	34°	30°	60°
Horizontal Beamwidth (3dB)	19°	17°	34°
Vertical Beamwidth (10dB)	34°	30°	60°
Vertical Beamwidth (3dB)	19°	17°	34°
Beam Cross-over	7dB typical	10dB typical	10dB typical
Total Number of Beams	4	4	2
Number of Ports per Beam	4	4	4
Number of Ports Total	16	16	8
Tilt Per Cross-Pol; Remote Electrical Tilt (AISG 2.0)	0° - 20°	0° - 20°	0° - 40°
First Sidelobe Level	<-16dB	<-16dB	<-16dB
Front to Back Ratio	>28dB	>28dB	>28dB
Isolation Port to Port - Polarization	>28dB	>28dB	>28dB
Isolation Port to Port - Beam	>28dB	>28dB	>28dB
Power Rating	150W per port	150W per port	150W per port
Intermodulation	<-153dBc	<-153dBc	<-153dBc
Impedance	50 ohm	50 ohm	50 ohm
Connector Quantity and Type	16 x 4.3-10 female	16 x 4.3-10 female	8 x 4.3-10 female

MECHANICAL DATA

Dimensions (H x W x D)

241.8 x 61.7 x 72 cm
95.2 x 24.3 x 28.4 inch

Antenna Weight

72kg/158.7lbs [w/o Bracket]
73.6kg/162.3lbs [w/Bracket]

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: 1050 / 236.1
Lateral: 1631 / 366.7
Rear: 1232 / 277

CONNECTOR LAYOUT

