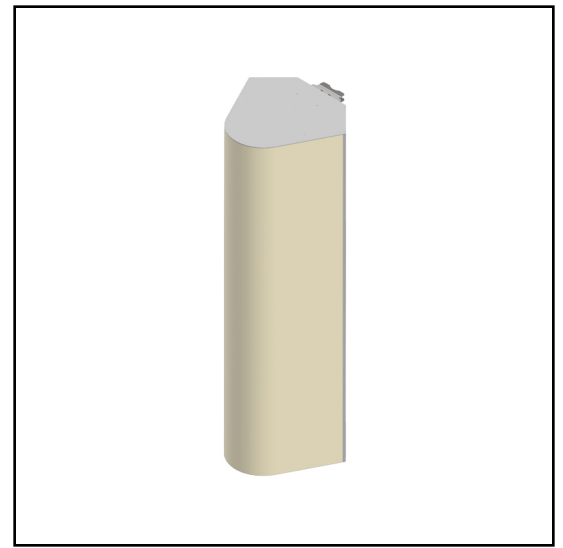


MS-MBC-4.4.2-C2-6-H2-12-L2-20

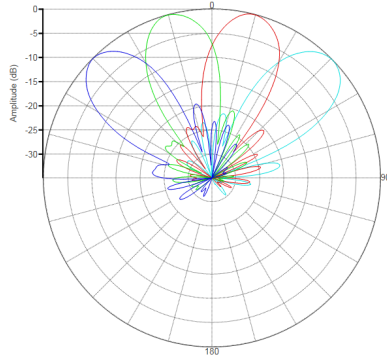
Lens Technology Enabled™ Multi-Beam Tri Band Base-Station Antenna utilizes a patented spherical lens design with 4 isolated C Band (3.7GHz – 4.2GHz) cross-polarized beams, 4 isolated High Band (1695MHz – 2690MHz) cross-polarized beams and 2 isolated Low Band (698MHz – 960MHz) beams, each beam has 2 ports to support 2x2 MIMO.

RET for C Band 2°-10°, High Band Beams 2°-15° and Low Band Beams 0°-20°.

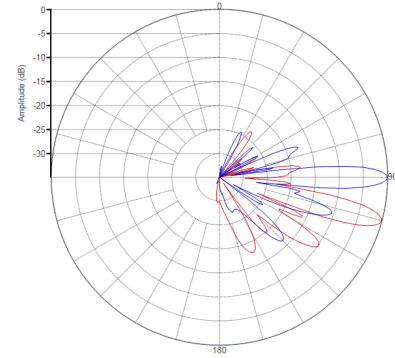


PATTERN RESULTS:

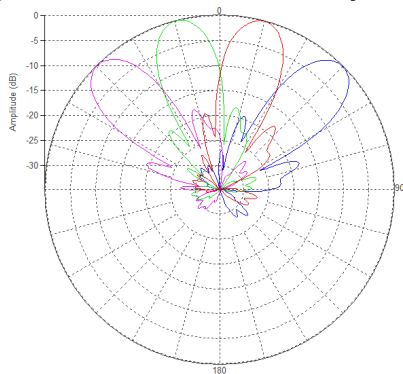
C-Band Horizontal Pattern (3.7GHz)



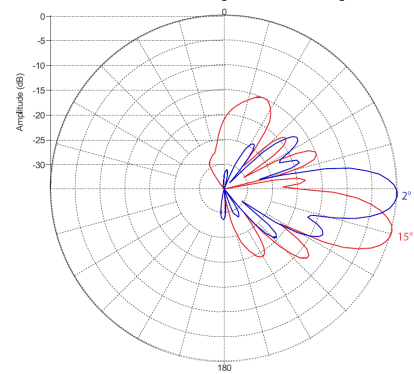
C-Band Vertical Pattern (3.7GHz) at tilt 2° and 10°



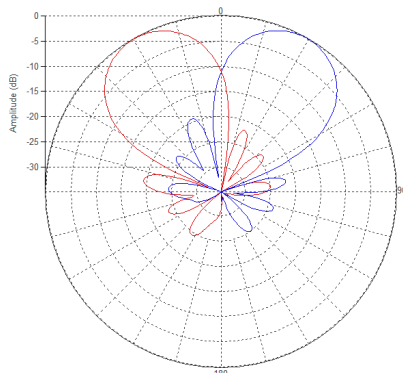
High-band Horizontal Pattern (1.92GHz)



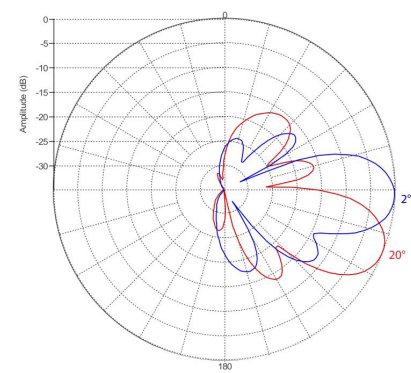
High-band Vertical Pattern (1.92GHz) at tilt 2° and 15°



Low-band Horizontal Pattern (0.8GHz)



Low-band Vertical Pattern (0.8GHz) at tilt 2° and 20°



TECHNICAL SPECIFICATIONS PER BEAM

Frequency	3700 - 4200 MHz	1695 - 2690 MHz	698 - 960 MHz
Gain	22dBi	20.5dBi	15dBi
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)	30°	31°	60°
Horizontal Beamwidth (3dB)	18°	18°	34°
Vertical Beamwidth (3dB)	6.5°	12°	20°
Beam Cross-over	8dB typical	10dB typical	10dB typical
Total Number of Beams	4	4	2
Number of Ports per Beam	2	2	2
Number of Ports Total	8	8	4
RET	2° - 10°	2° - 15°	2° - 20°
First Sidelobe Level	-15dB	-15dB	-15dB
Front to Back Ratio at 180°	>28dB	>28dB	>28dB
Isolation Port to Port - Polarization	26dB	26dB	26dB
Isolation Port to Port - Beam	26dB	26dB	26dB
Power Rating	150W per port	200W per port	250W per port
PIM 3rd order, 2x20w	-153dBc	-153dBc	-153dBc
Impedance	50 ohm	50 ohm	50 ohm
Connector Quantity and Type	8 x 4.3-10 female	8 x 4.3-10 female	4 x 4.3-10 female

MECHANICAL DATA

Dimensions (H x W x D)	165 x 77.2 x 78.4 cm 65 x 30.4 x 30.9 inch
Antenna Weight	64 kg 141 lbs
Radome Material	Fiber Glass
Mounting	Adjustable Clamps Compatible pipe diameter: 10.1 – 15.2 cm 4 – 6 inch

ENVIRONMENTAL RATINGS

Humidity	95% RH @ +30°C		
Temperature	-40°C to +70°C		
Wind load @ 150km/hr		N	lbf
	Frontal:	901	202.6
	Lateral:	1113	250.2
	Rear:	1042	234.3

CONNECTOR LAYOUT:

