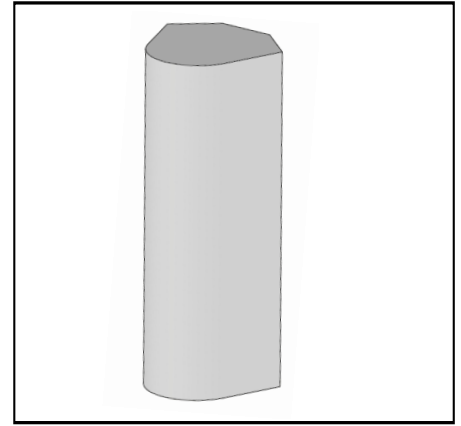


## MS-MBC-4.2-H4-12-L4-20

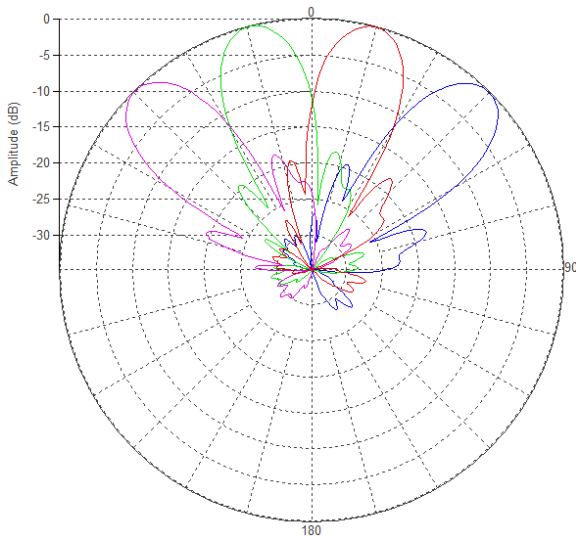
**Multi-Beam Dual Band Cylindrical Lens Antenna:**

**4 independent high-frequency (1695-2690 MHz) dual-polarized beams and 2 independent low-frequency (698-960 MHz) dual-polarized beams with 4X4 MIMO support. Each beam has independent RET, for high frequency 2°-15° and for low frequency 2°-20°.**

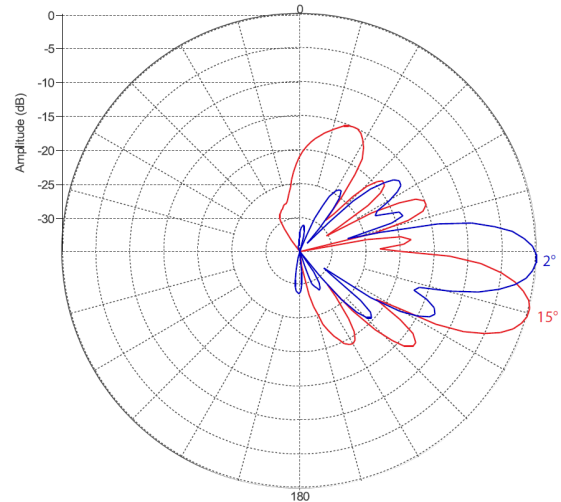


### PATTERN RESULTS:

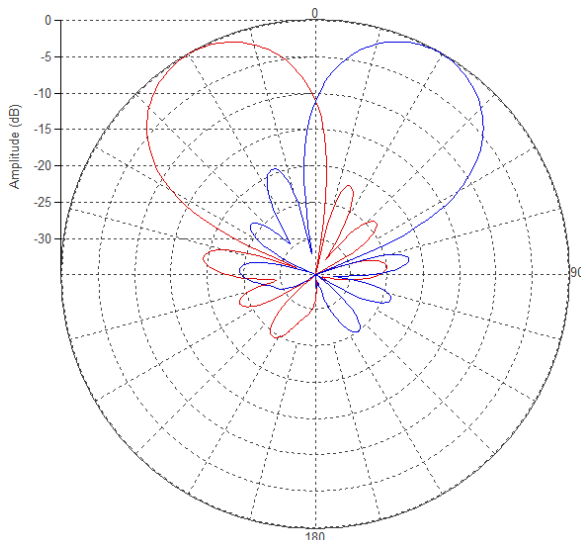
**High-band Horizontal Pattern (1.92GHz)**



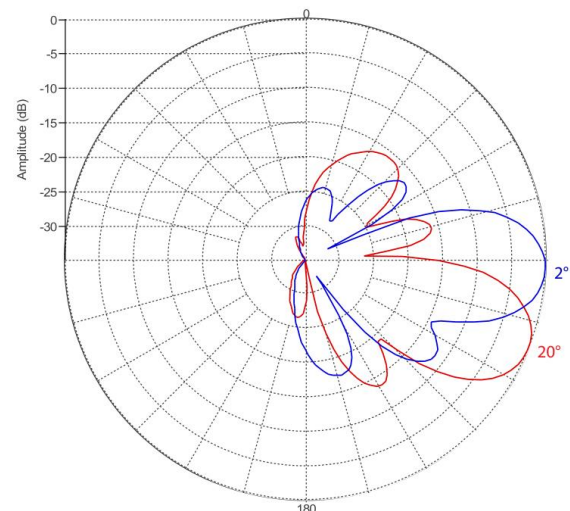
**High-band Vertical Pattern (1.92GHz) at tilt 2° and 15°**



**Low-band Horizontal Pattern (0.8GHz)**



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



PRELIMINARY

### TECHNICAL SPECIFICATIONS PER BEAM

Frequency	698-960 MHz	1695-2690 MHz
Gain	15dBi	20.5dBi
VSWR	<1.5:1	<1.5:1
Polarization	Dual Slant ±45°	Dual Slant ±45°
Horizontal Coverage	120°	120°
Horizontal Beamwidth (10dB level)	60°	31°
Horizontal Beamwidth (3dB level)	34°	18°
Vertical Beamwidth (3dB level)	20°	12°
Beam Cross-over	10dB typical	10dB typical
Total Number of Beams	2	4
Total Number of Ports	8	16
Beam Tilt	2° to 20°	2° to 15°
First Sidelobe Level	<-15dB	<-15dB
Front to Back Ratio	>28dB	>28dB
Isolation Port to Port - Polarization	>26dB	>26dB
Isolation Port to Port - Beam	>26dB	>26dB
Power Rating	250W per port	200W per port
Intermodulation	<-153dBc	<-153dBc
Impedance	50 ohm	50 ohm
Connector Quantity and Type	8 x 4.3-10 female	16 x 4.3-10 female

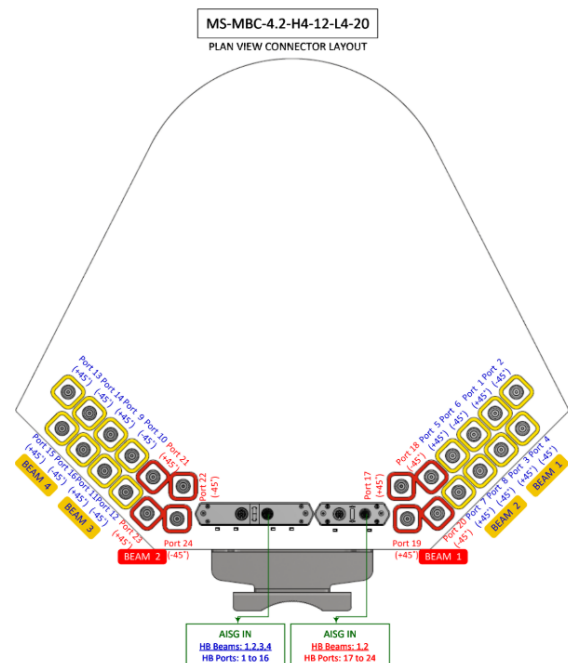
### MECHANICAL DATA

Dimensions (H x W x D)	173.4 x 77.2 x 77.2 cm 68.3 x 30.4 x 30.4 inch
Antenna Weight	50 kg 110.2lbs
Radome Material	Fiber Glass
Mounting	Adjustable Clamps 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 loading @ 150km/hr	TBD

### CONNECTOR LAYOUT:



PRELIMINARY