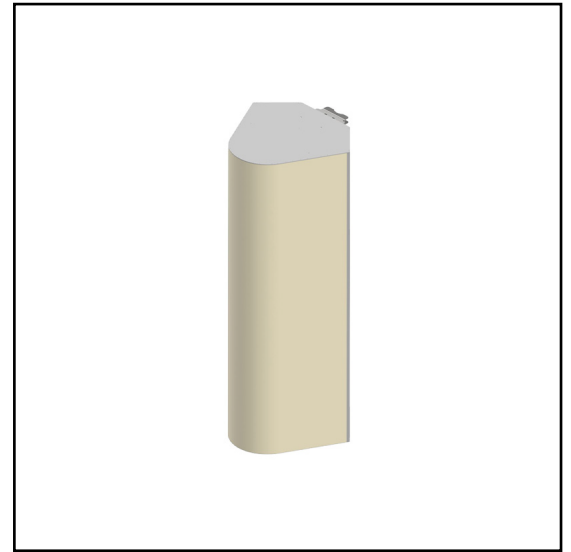


MS-MBC-4.2-H4-12-T4-20

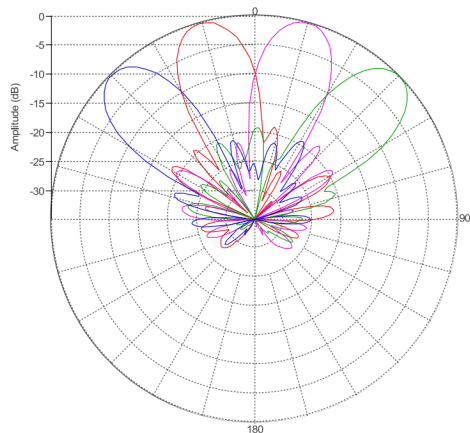
Multi-Beam Dual Band Cylindrical Lens Antenna:

4 independent high-frequency (1695 – 2690 MHz) dual-polarized beams and 2 independent low-frequency (617 – 896 MHz) dual-polarized beams with 4x4 MIMO support. Each beam has independent RET, for high frequency 2°-15° and for low frequency 2°-20°. Exceptional beam stability and isolation.

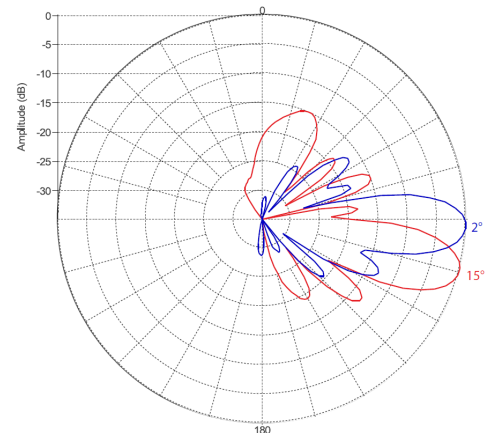


PATTERN RESULTS:

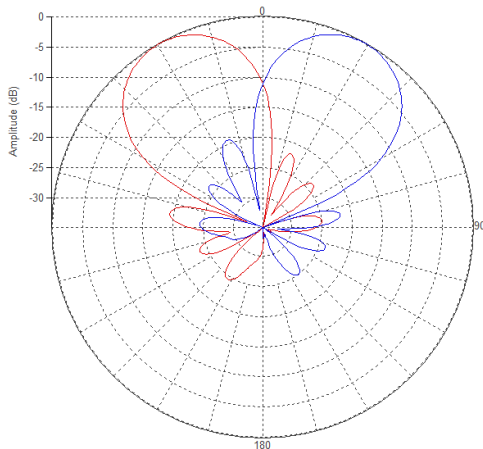
High-band Horizontal Pattern (1.92GHz)



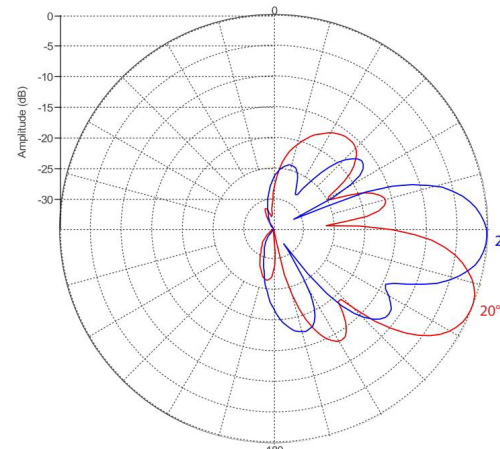
High-band Vertical Pattern (1.92GHz) at tilt 2° and 15°



Low-band Horizontal Pattern (0.8GHz)



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



PRELIMINARY

TECHNICAL SPECIFICATIONS PER BEAM

Frequency, MHz	617-896	1695-2360	2490-2690
Gain (all tilts/ports), dBi	14.5±1.5	20.5±1.3	21.5±0.5
VSWR	1.5:1	1.5:1	1.5:1
Polarization	±45°	±45°	±45°
Beam Centers, deg	±30	±15, ±45°	±15, ±45°
Horizontal Coverage	120°	120°	120°
Horizontal Beamwidth (10dB level), deg	60±10	30±3	28±1
Horizontal Beamwidth (3dB level), deg	35±6	17±1.5	16±0.7
Vertical Beamwidth (3dB level)	25	12	10
Beam Cross-over, dB	10	10	10
Total Number of Beams	2	4	4
Number of Ports per Beam	4	4	4
Horizontal Beam Squint, all Tilts/ports	<±2°	<±1.5°	<±1°
Beam Tilt, deg	2 to 20	2 to 15	2 to 15
First Upper Sidelobes level, dB	-15	-15	-16
Front to Back Ratio at 180, dB	28	33	35
Isolation same beam, dB	26	26	26
Isolation Beam to beam, dB	26	26	26
Power Rating, per port max, W	250	200	200
PIM, 3rd Order, 2x20W, dBc	<-153	<-153	<-153
Impedance, Ohm	50		
Connector Quantity and Type	24 x 4.3-10 female		
Total power, max, W	2800		

MECHANICAL DATA

Dimensions (H x W x D)	170 x 61.7 x 72.3 cm 67 x 24.3 x 28.5 inch
Antenna Weight	67kg 147.7 lbs
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/h	TBD