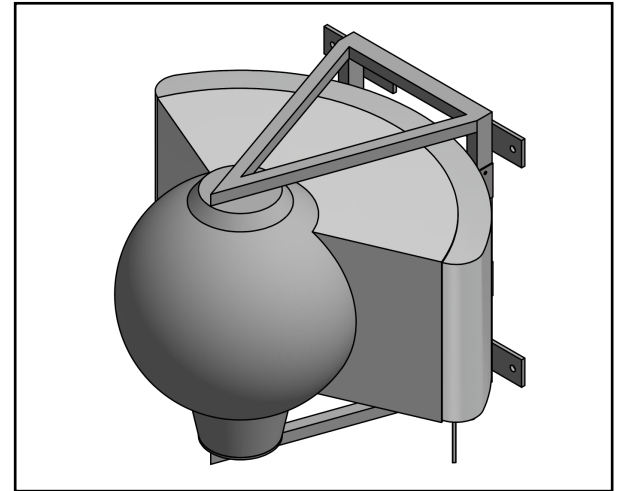
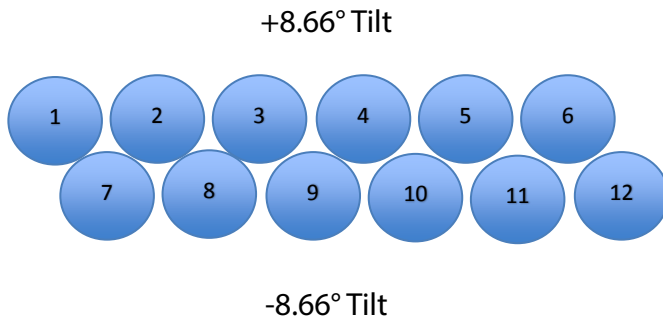


MS-12F45

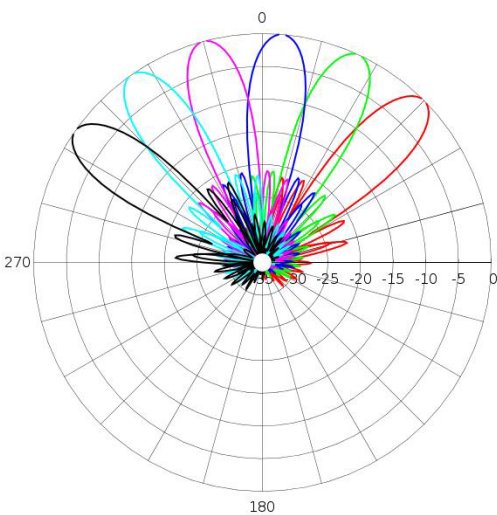
Multi-Beam Spherical Lens Antenna: Two rows of 6 independent F-Band frequency (3.3GHz – 4.2GHz) cross-polarized beams. Top and bottom rows have fixed tilt.

BEAM LAYOUT:

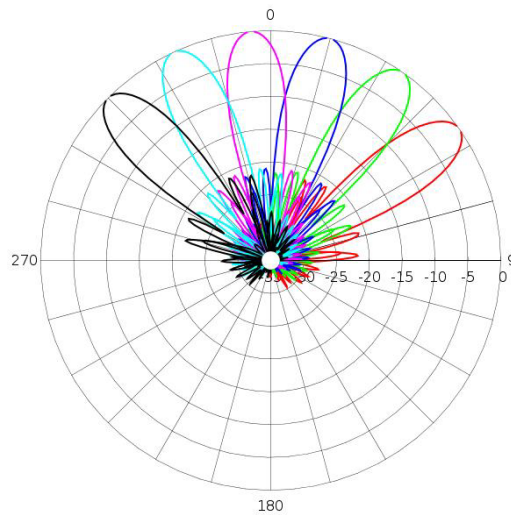


PATTERN RESULTS (3.6GHz):

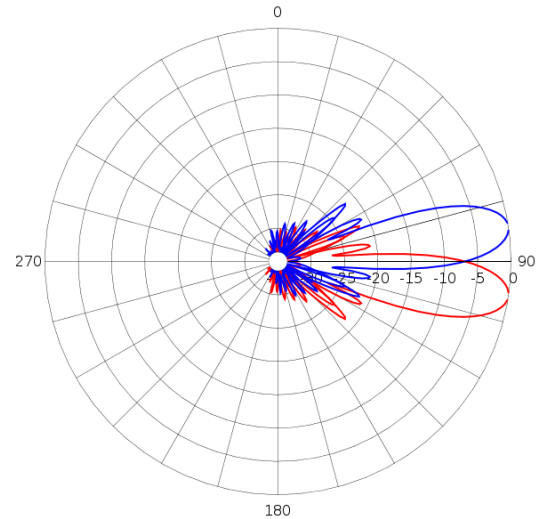
Horizontal Pattern top row



Horizontal Pattern bottom row



Vertical Pattern



TECHNICAL SPECIFICATIONS PER BEAM

Frequency	3.3GHz – 4.2GHz
Gain	22dBi
VSWR	<1.5:1
Polarization	Dual Slant $\pm 45^\circ$
Horizontal Coverage	120°
Horizontal Beamwidth (10dB level)	20°
Horizontal Beamwidth (3dB level)	12°
Vertical Beamwidth (10dB level)	20°
Vertical Beamwidth (3dB level)	12°
Beam Cross-over	10dB typical
Total Number of Beams	12
Tilt	Fixed Tilt Top Row: $+8.66^\circ$ Bottom Row: -8.66°
First Sidelobe level	<-16dB
Front to Back Ratio	>28dB
Isolation Port to Port - Polarization	>28dB
Isolation Port to Port - Beam	>28dB
Power Rating	100W per port
Intermodulation	<-153dBc
Impedance	50 ohm
Connector Quantity and Type	24 x 4.3-10 female

MECHANICAL DATA

Dimensions (H x W x D)	Spherical Lens diameter: 45 cm/18 inch Antenna dimensions: 61.7 x 78.9 x 69.3 cm 24.3 x 31.1 x 27.3 inch
Antenna Weight	22.28kg 49.1lbs
Radome Material	Fiber Glass
Mounting	2 position pipe mount Compatible pipe diameter: 6.1 – 11.4 cm 2.4 – 4.5 inch

ENVIRONMENTAL RATINGS

Humidity	95% RH @ $+30^\circ\text{C}$
Temperature	-40°C to $+70^\circ\text{C}$

CONNECTOR LAYOUT:

