

SAV-0632531435-SF-S1-QR

Quad-Ridged, Dual Polarized Horn Antenna, 6 to 24.5 GHz, Weather Resistant

SAV-0632531435-SF-S1-QR is a weather resistant, quad-ridged horn antenna that operates from 6 to 24.5 GHz. The antenna offers a typical gain of 14 dBi and a nominal 3 dB beamwidth of 30° for the E-plane and 40° for the H-plane, respectively. The antenna supports both circular and linear polarized waveforms. The antenna features eight M3 threaded holes and one 1/4-20 threaded hole for mounting. The antenna ports are two female SMA connectors.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	6.0 GHz		24.5 GHz
Gain		14 dBi	
Polarization	Circular & Linear		
3 dB Beamwidth, E-Plane		30°	
3 dB Beamwidth, H-Plane		40°	
Sidelobes, E-Plane		-17 dB	
Sidelobes, H-Plane		-20 dB	
V and H Port Isolation		35 dB	
Cross Polarization		25 dB	
Port Return Loss		8 dB	
Power Handling			25 W (CW)
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

Mechanical Specifications:

Item	Specification
Antenna Ports	SMA (F)
Body Material	Aluminum
Radome Material	Fabric PTFE
Finish	Chem Film & Black Paint
Outline	AV-C14-QR-RD



ECCN

EAR99

FEATURES

- Coaxial Connectors for RF ports
- Linear and Circular Polarizations
- Good Impedance Match

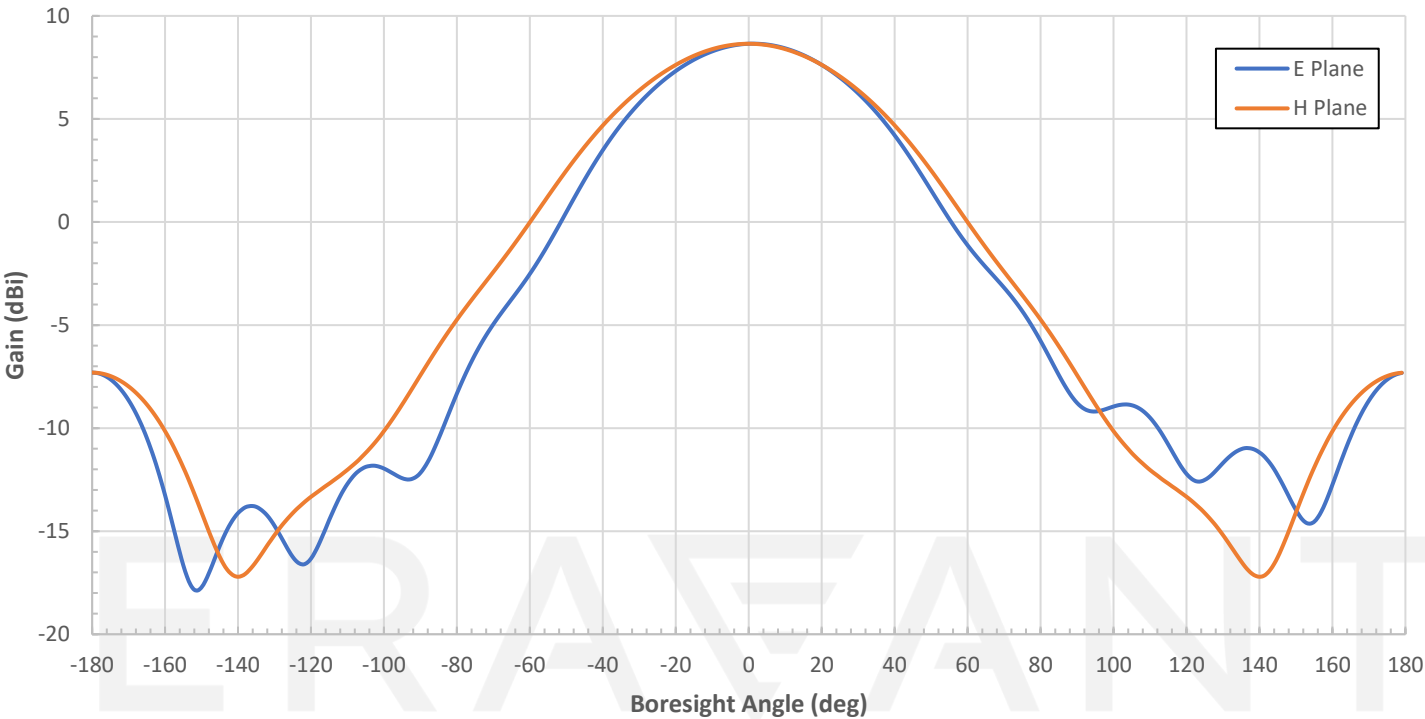
APPLICATIONS

- Antenna Ranges
- Antenna Gain Measurements
- System Setups

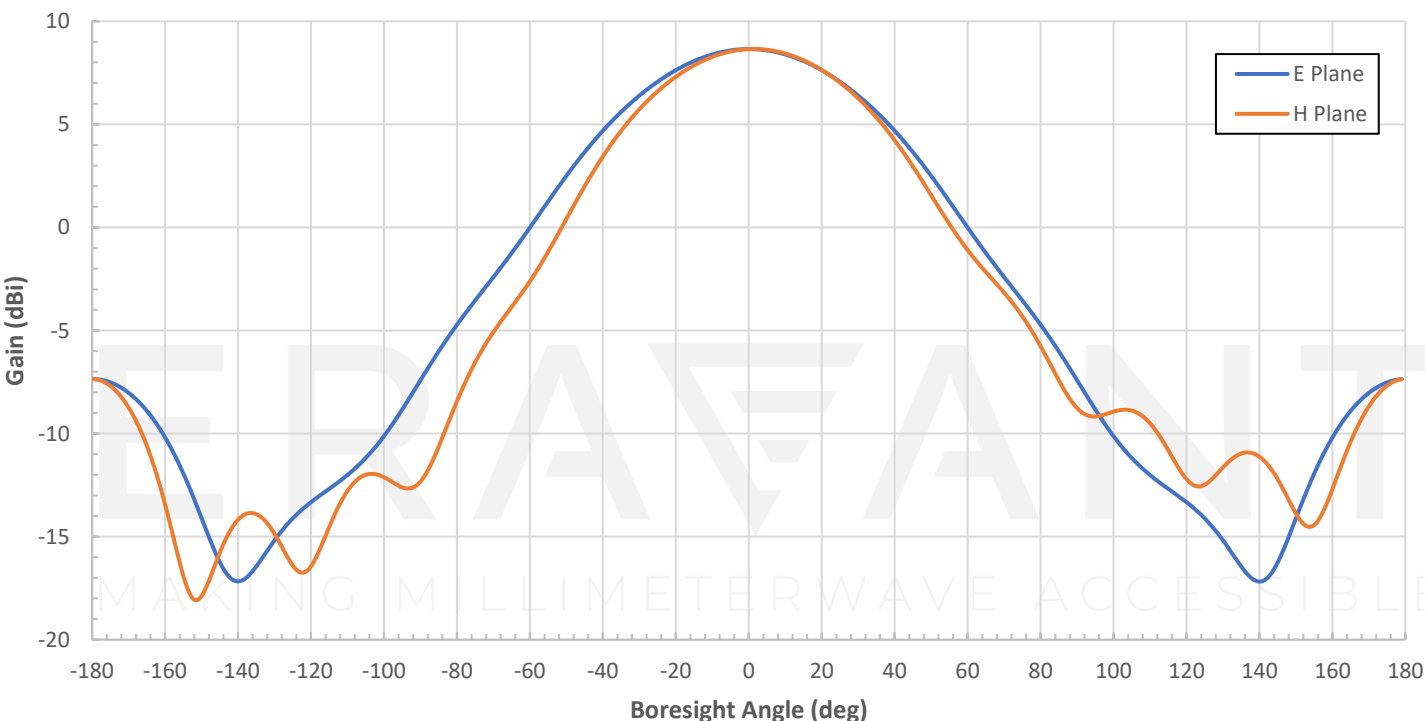
SUPPLEMENTAL DETAILS



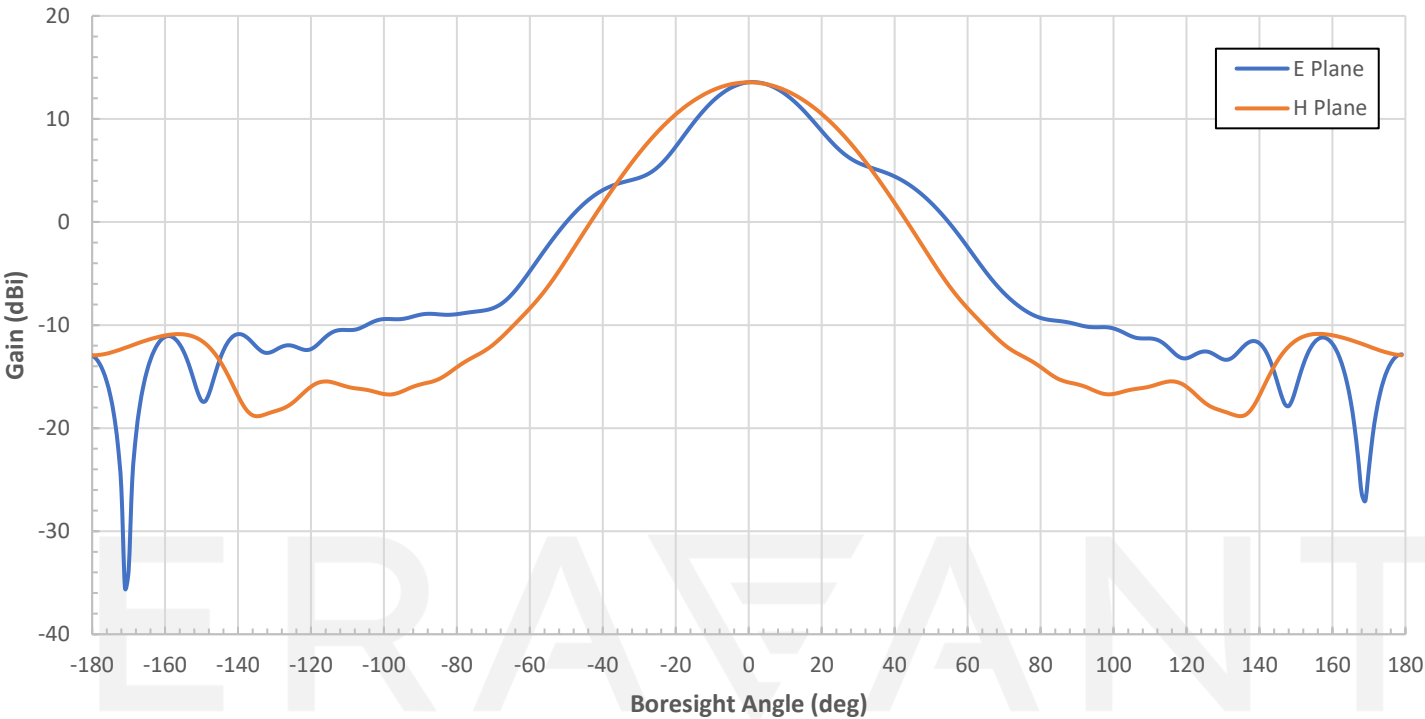
Simulated Antenna Patterns @ 6 GHz, Port 1



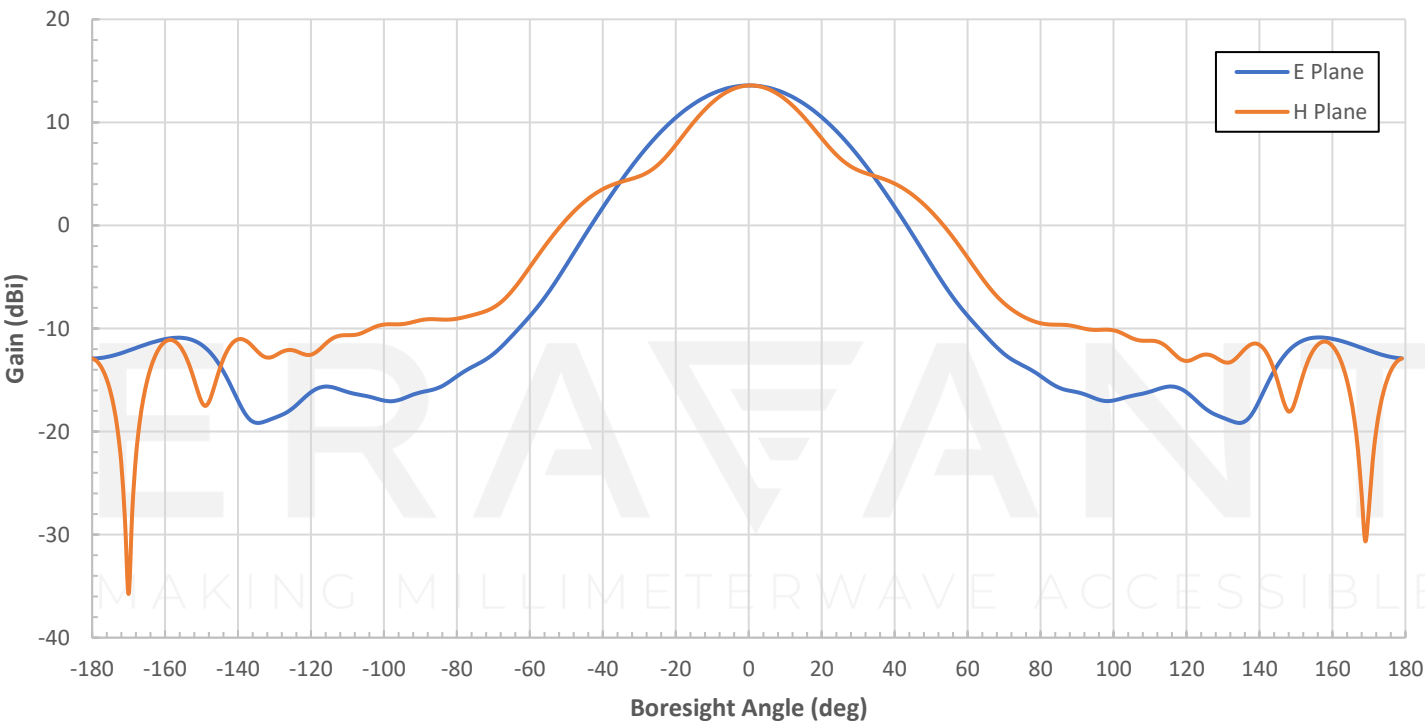
Simulated Antenna Patterns @ 6 GHz, Port 2



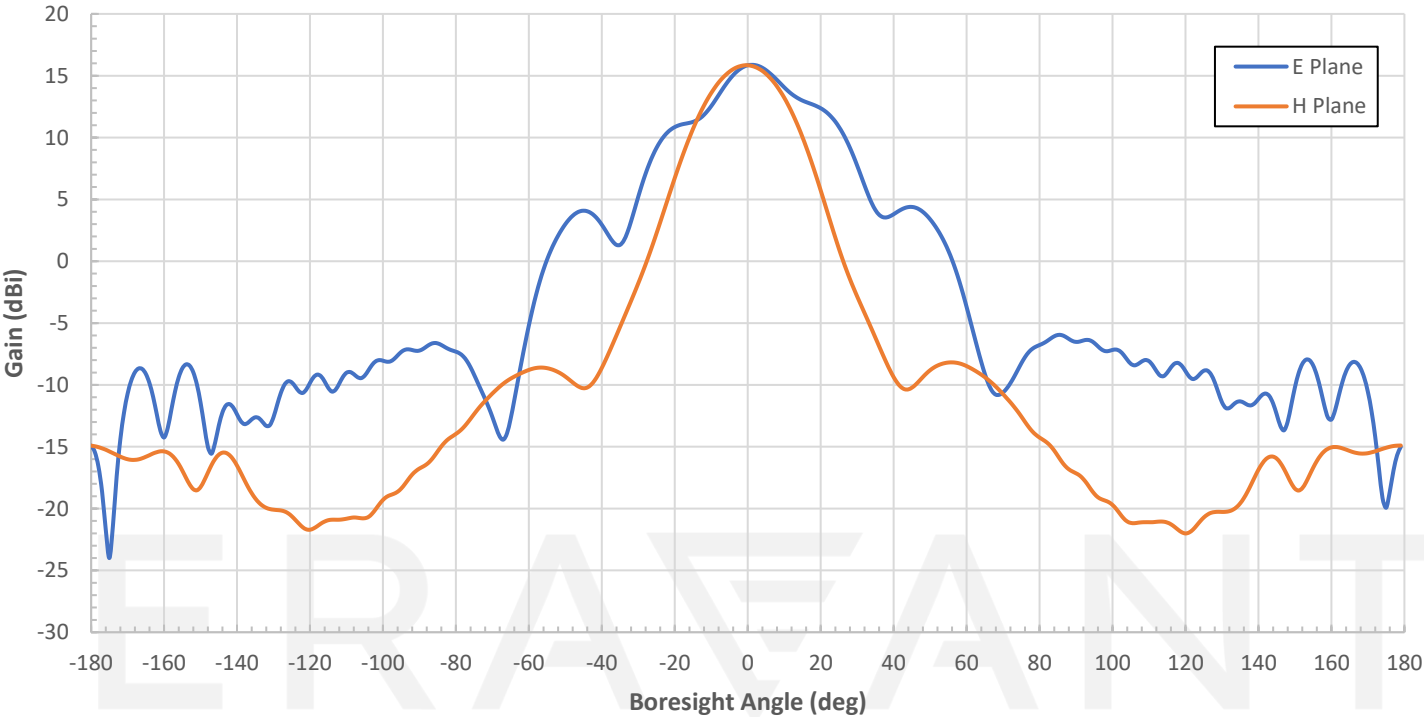
Simulated Antenna Patterns @ 15.3 GHz, Port 1



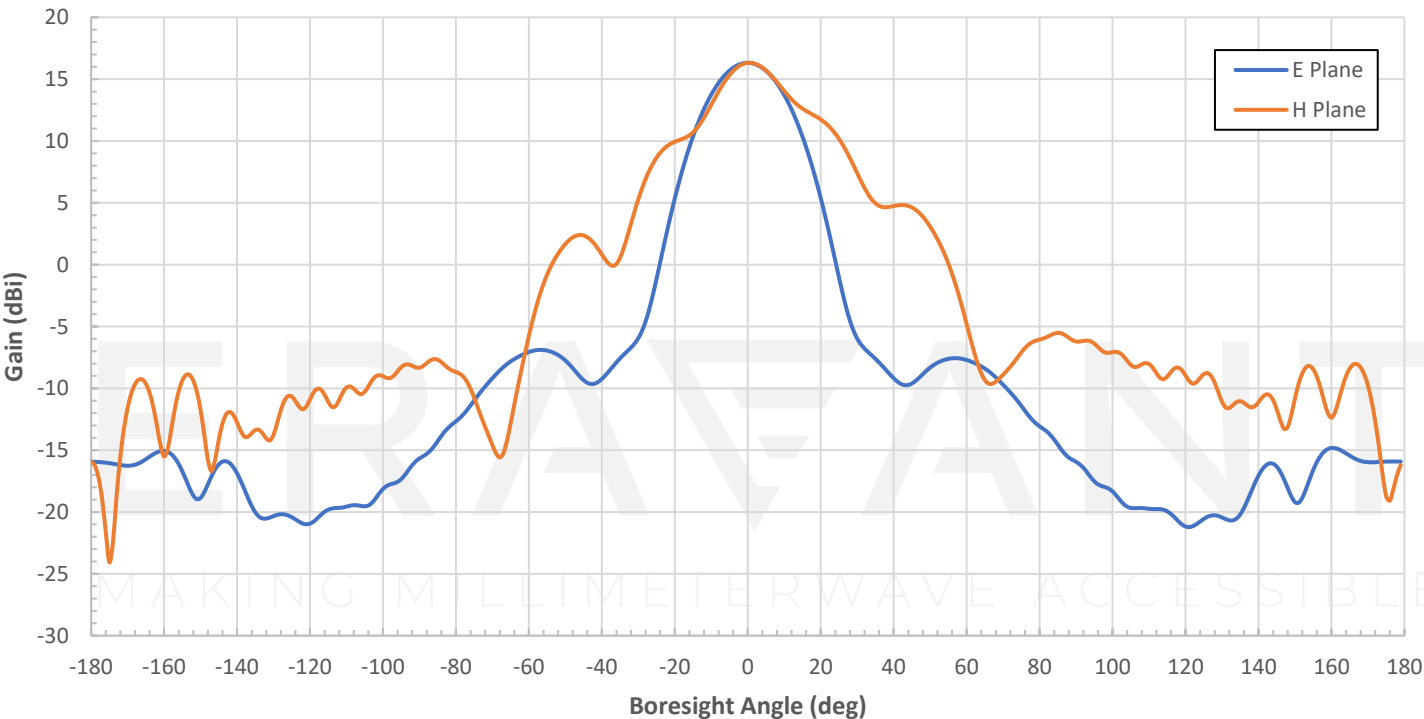
Simulated Antenna Patterns @ 15.3 GHz, Port 2



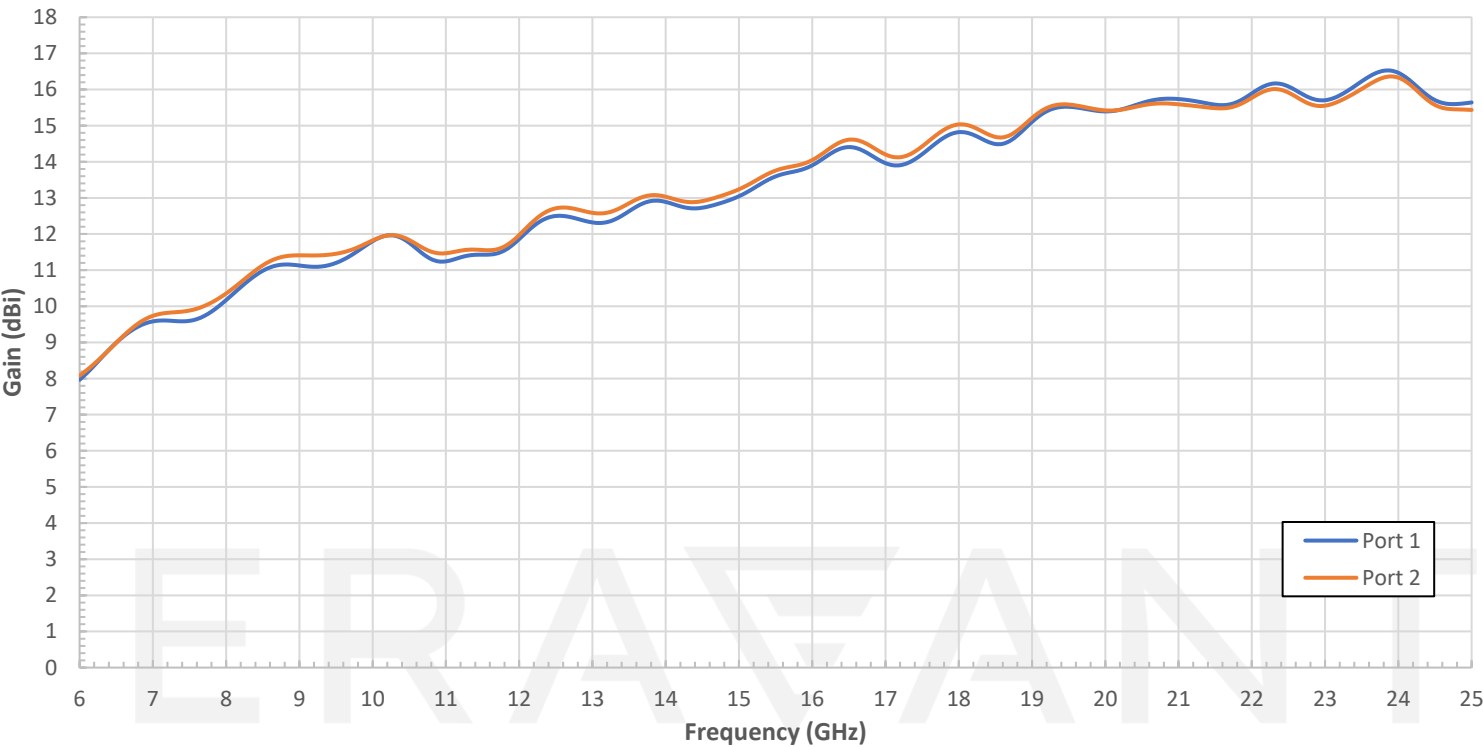
Simulated Antenna Patterns @ 24.5 GHz, Port 1



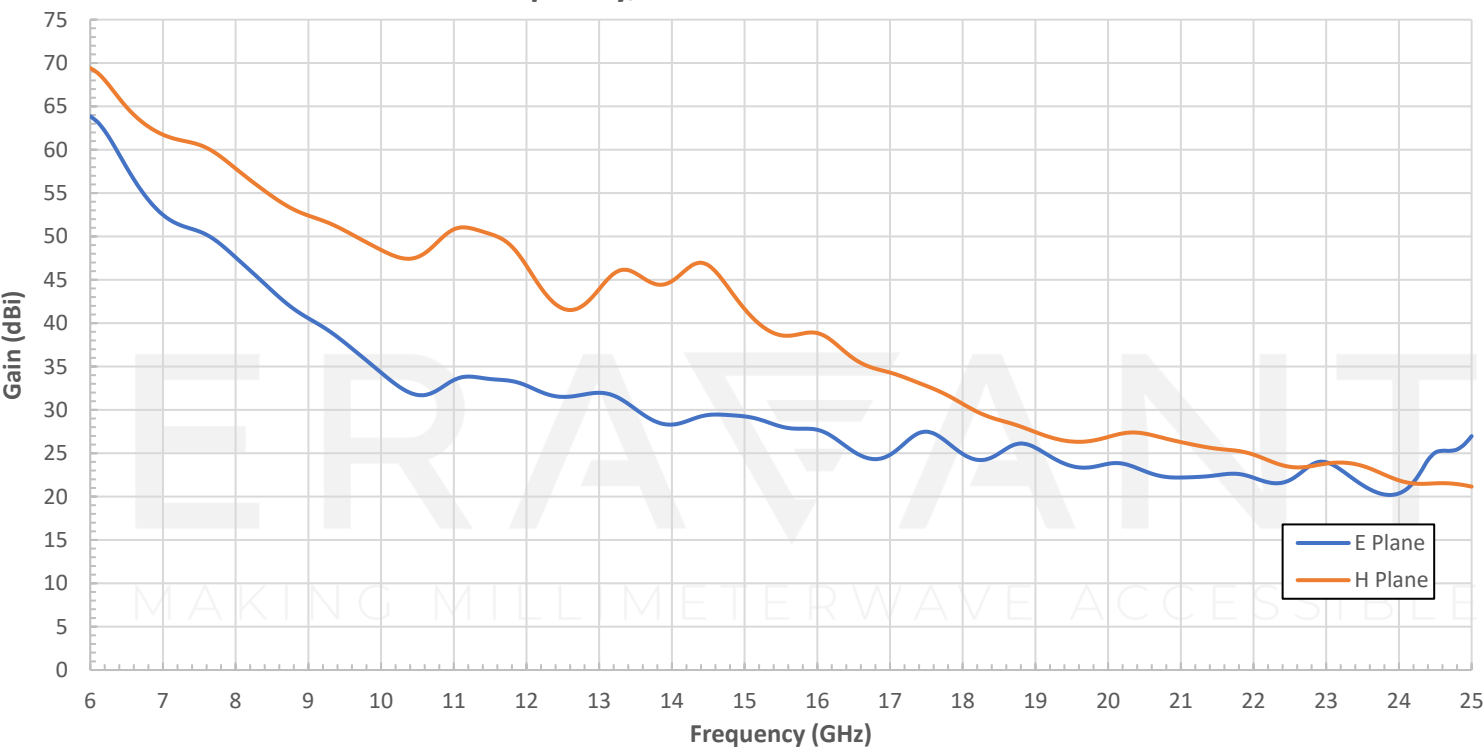
Simulated Antenna Patterns @ 24.5 GHz, Port 2



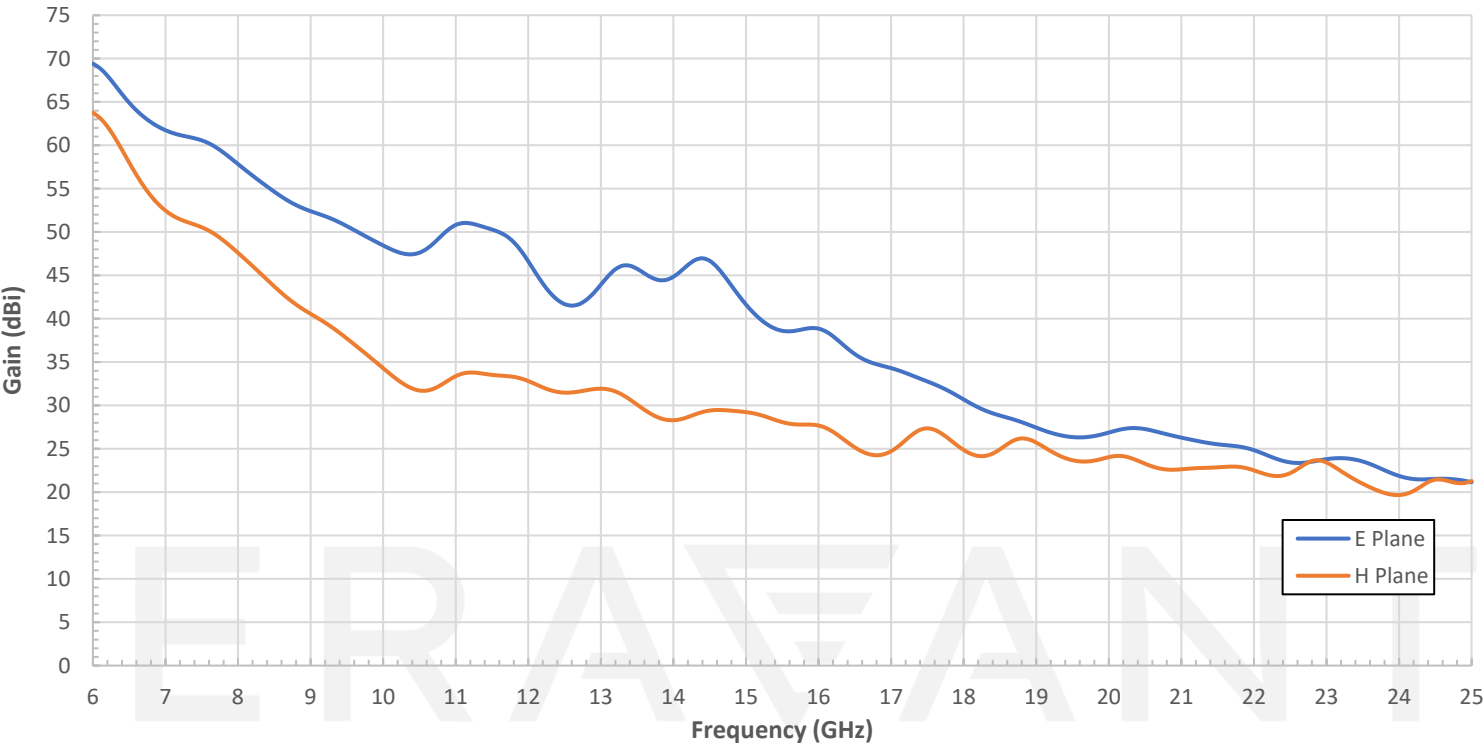
Simulated Gain vs Frequency



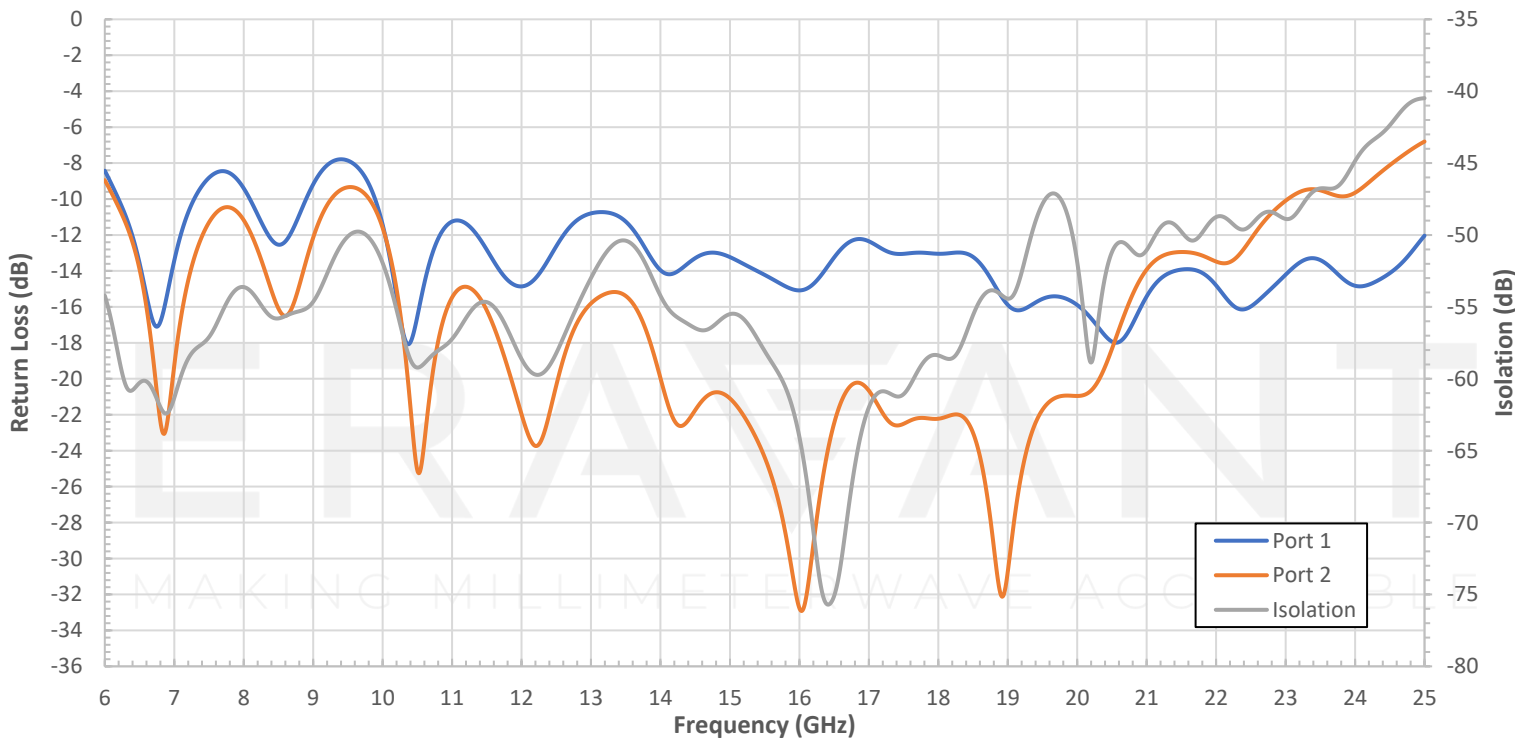
Simulated 3 dB Beamwidth vs Frequency, Port 1



Simulated 3 dB Beamwidth vs Frequency, Port 2

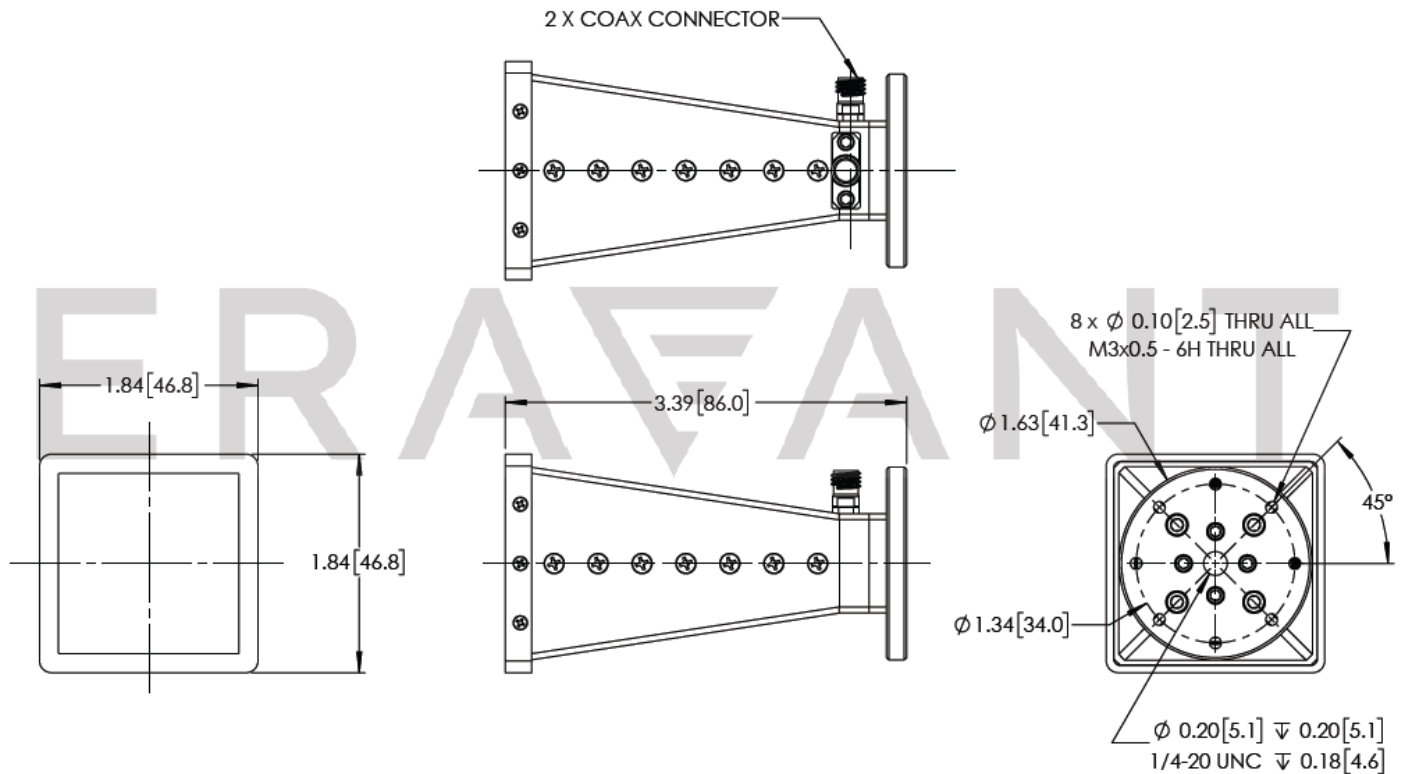


Measured Return Loss & Isolation vs Frequency



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Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])



NOTE:

- All data provided is simulated. Actual results may vary.
- Eravant reserves the right to change the information presented without notice.

CAUTION:

- Any foreign objects in the antenna will cause performance degradation and possible device damage.

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