

SAC-0231831225-SF-S4-DP

Quad Ridged, Dual Polarized Horn Antenna, 2 to 18 GHz, 12 dBi Gain

SAC-0231831225-SF-S4-DP is a quad ridged, dual polarized horn antenna that operates from 2 to 18 GHz. The antenna offers 12 dBi nominal gain and a half power beamwidth of 25 degrees on the E-plane and 22 degrees on the H-plane. The antenna also offers -15 dB typical sidelobe levels across the entire operating frequency. The antenna RF ports are female SMA connectors.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	2 GHz	12 GHz	18 GHz
Gain		12 dBi	
3 dB Beamwidth, E-Plane		25°	
3 dB Beamwidth, H-Plane		22°	
Sidelobe Levels		-15 dB	
Port Isolation		20 dB	
Return Loss		7 dB	
Power Handling			150 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

Mechanical Specifications:

Item	Specification
Antenna Ports	SMA (F)
Mounting Options	Ø 0.24" Thru Holes
Material	Aluminum
Finish	Black Paint
Weight	2.42 lbs
Size	11.52" (L) x 5.51" (Ø)
Outline	AC-TS12-DP-BX1

ECCN

EAR99

FEATURES

- Coaxial Connectors for RF Inputs
- Broadband Width
- Dual Polarization
- Moderate Gain

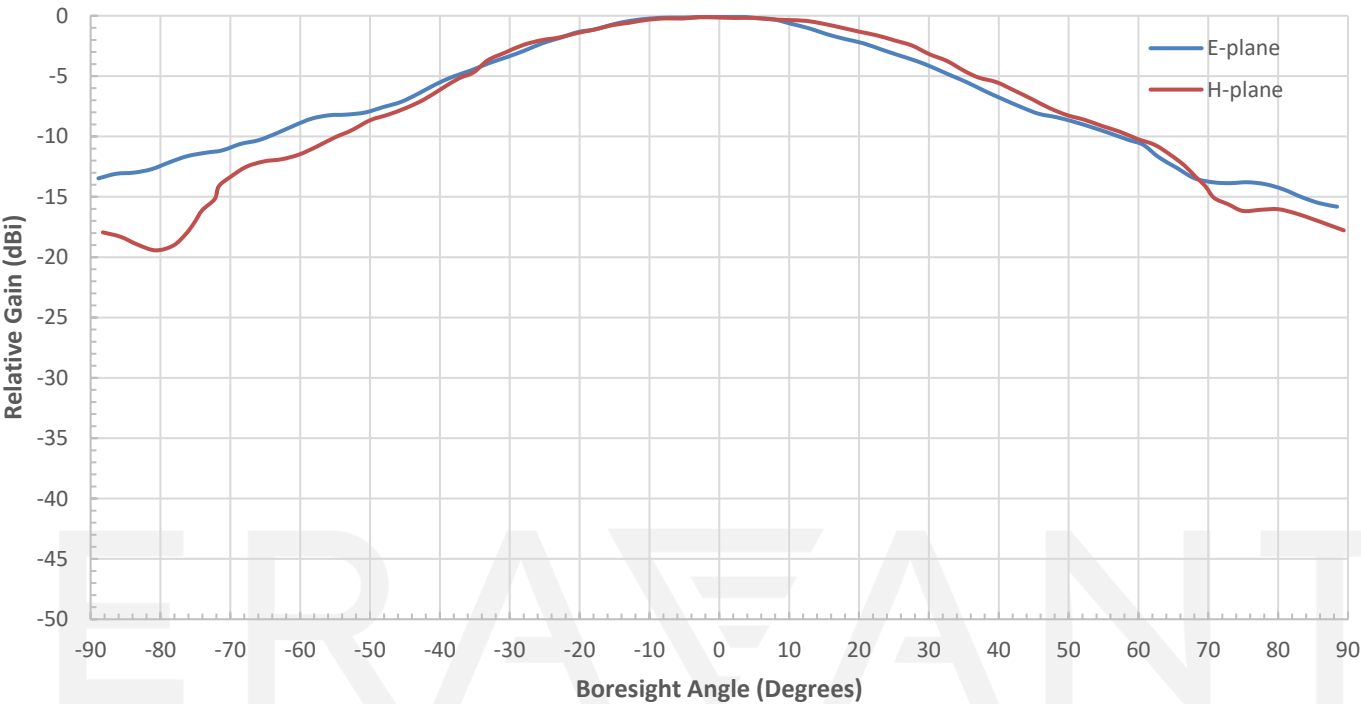
APPLICATIONS

- Communication Systems
- Radar Systems
- Antenna Ranges
- System Setups

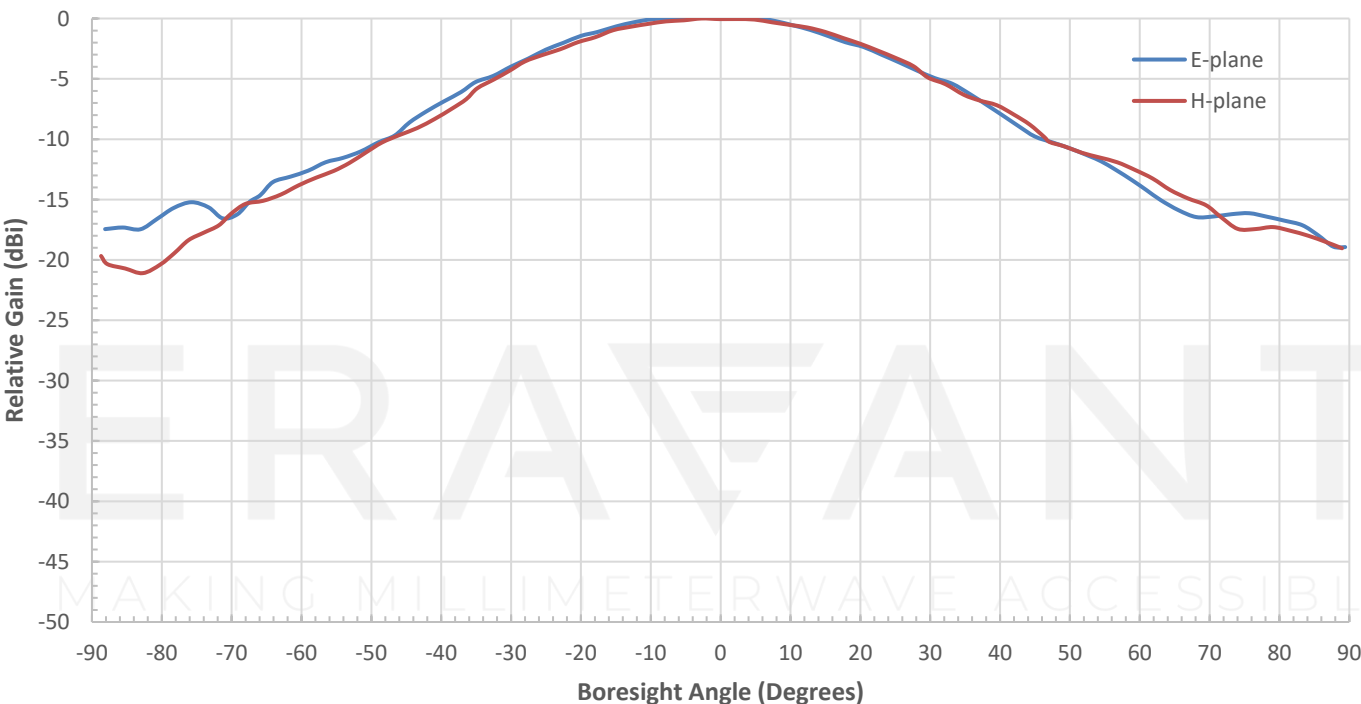
SUPPLEMENTAL DETAILS



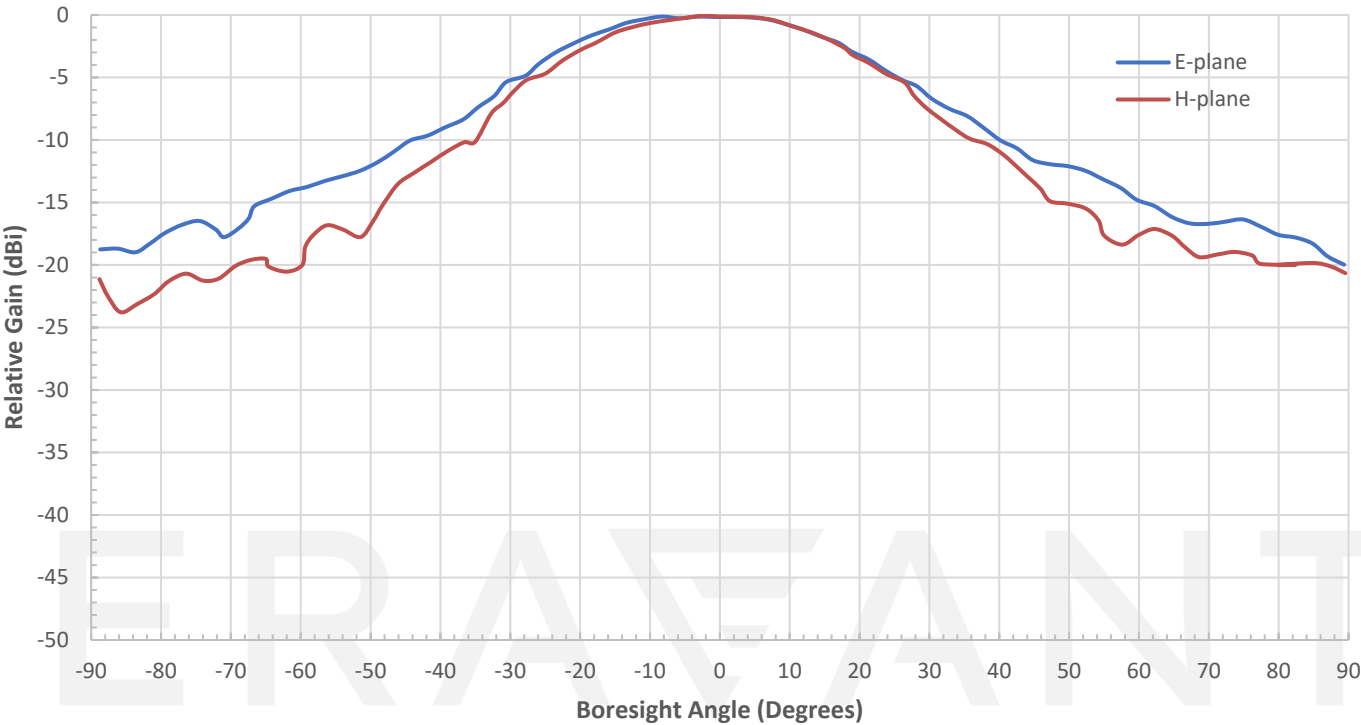
Typical Antenna Pattern @ 2 GHz



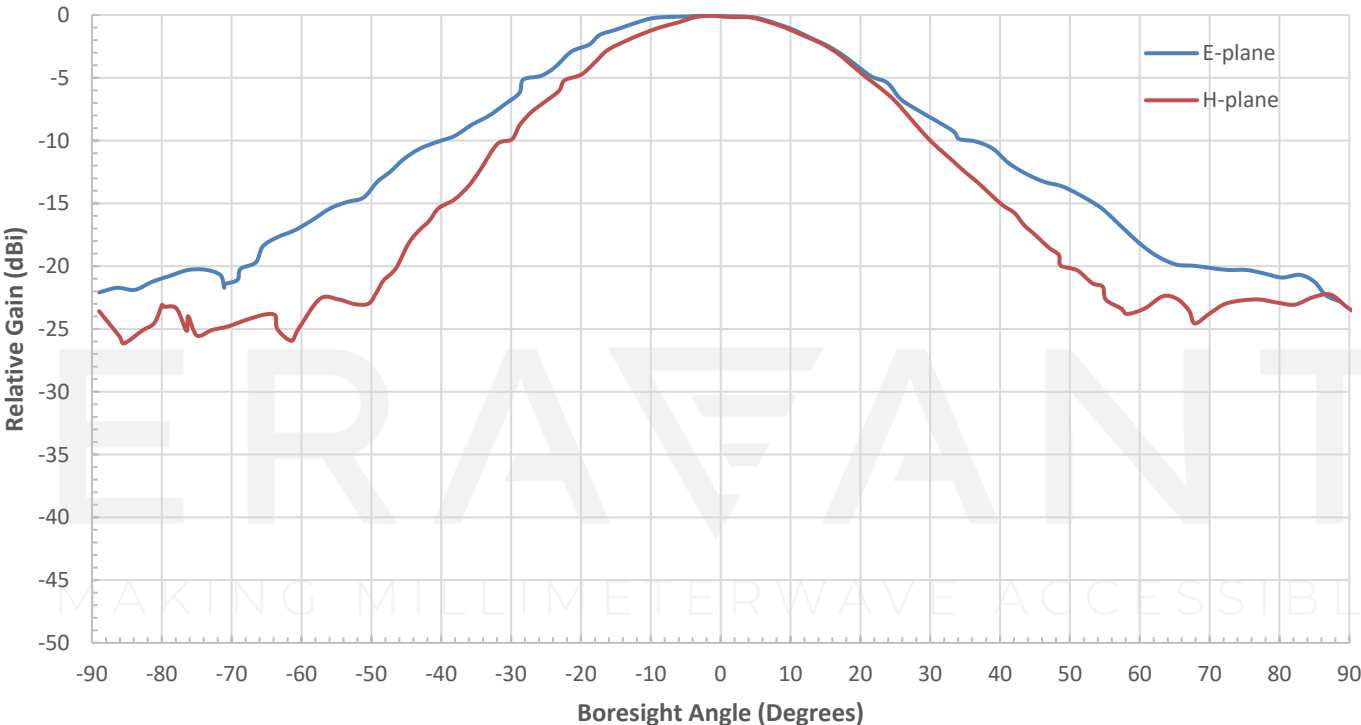
Typical Antenna Pattern @ 3 GHz



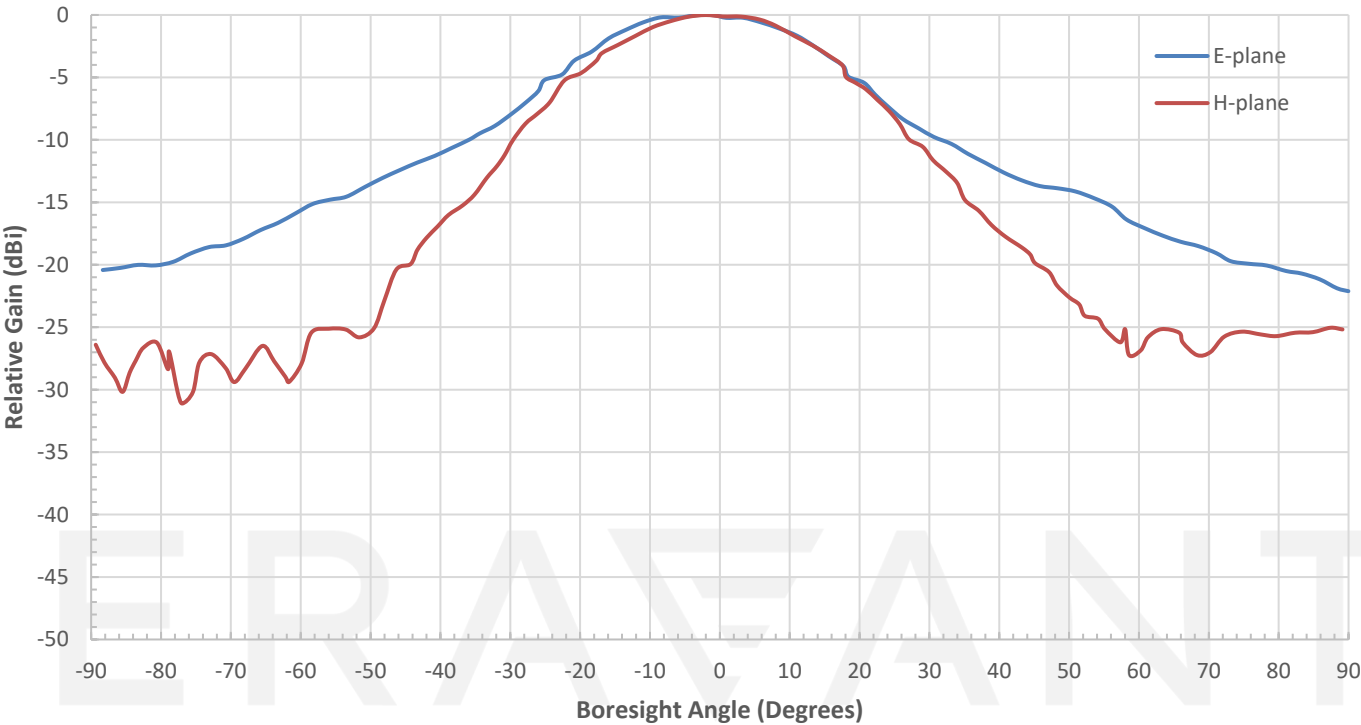
Typical Antenna Pattern @ 4 GHz



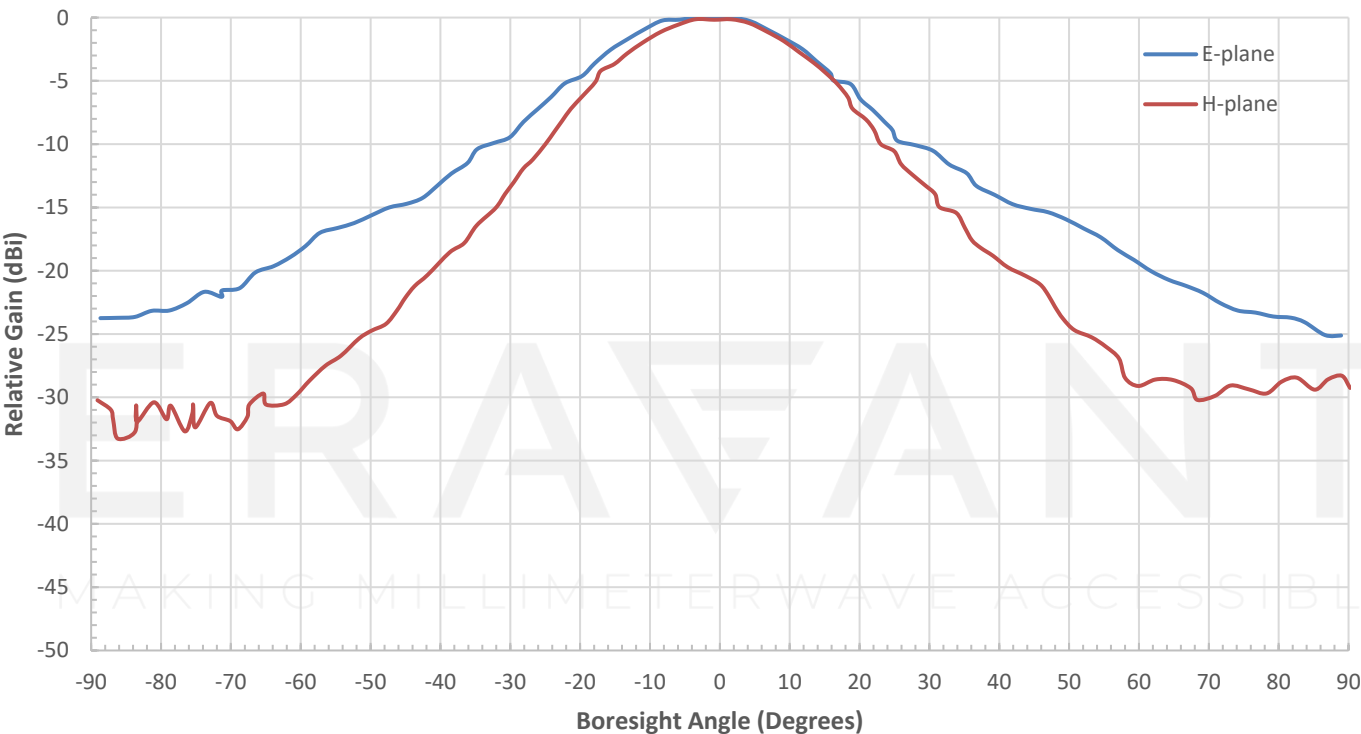
Typical Antenna Pattern @ 5 GHz



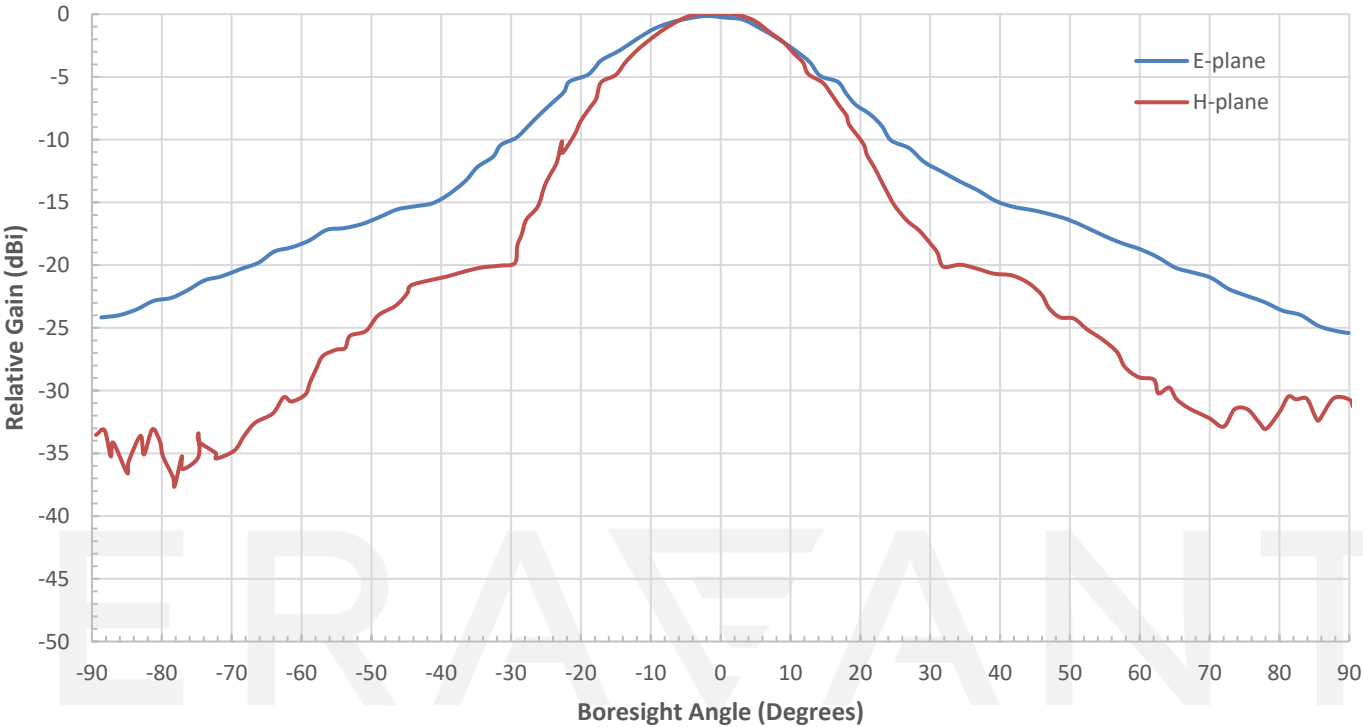
Typical Antenna Pattern @ 6 GHz



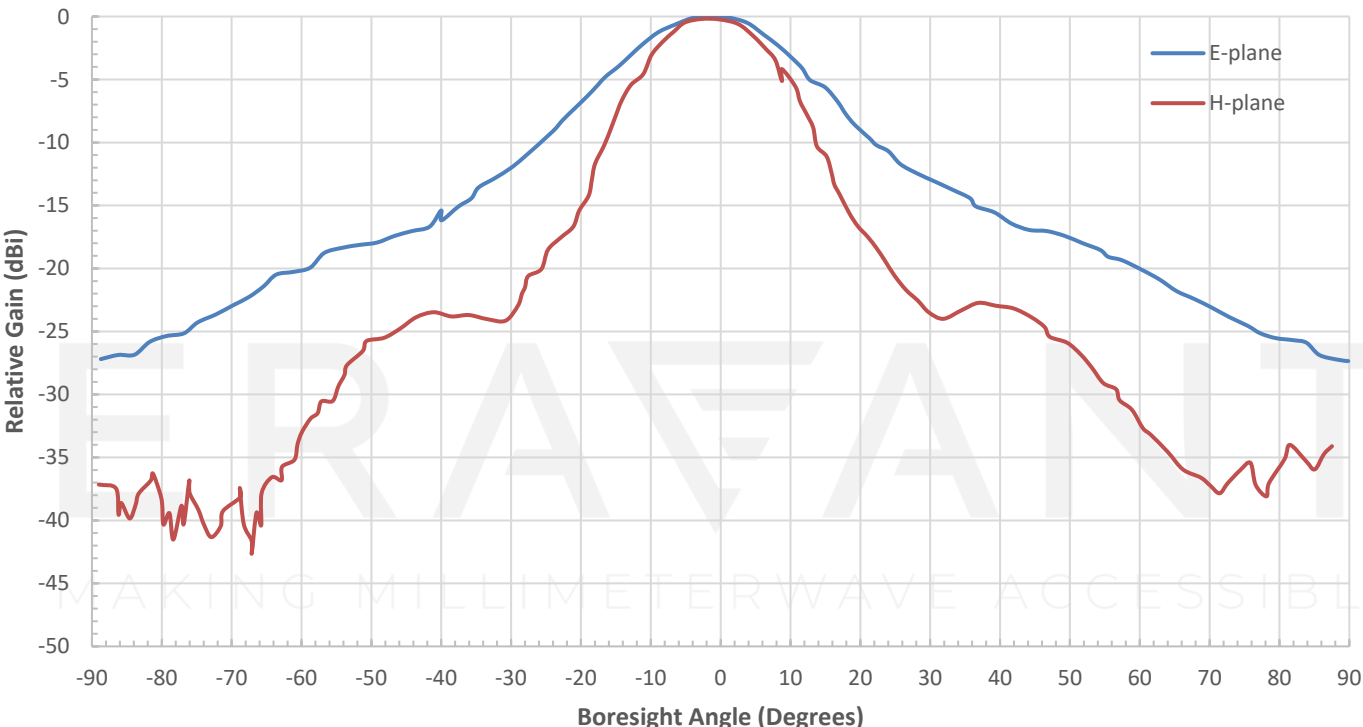
Typical Antenna Pattern @ 7 GHz



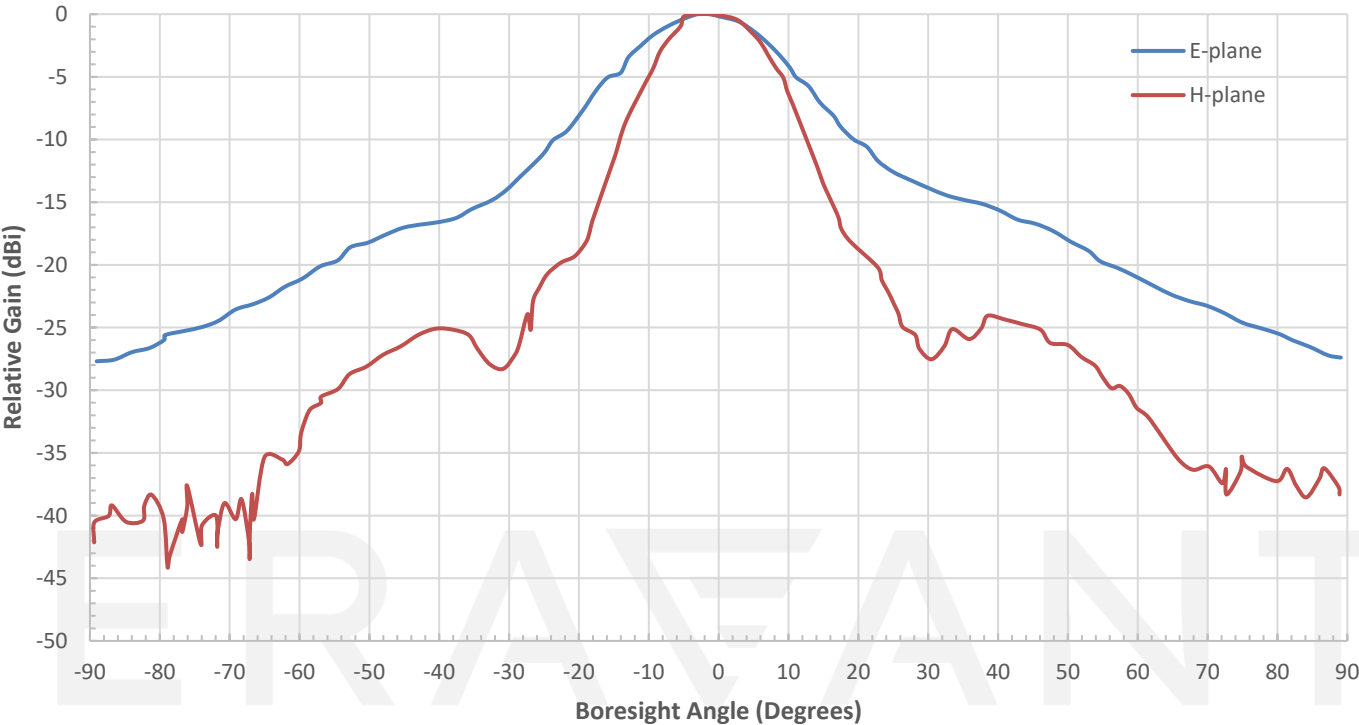
Typical Antenna Pattern @ 8 GHz



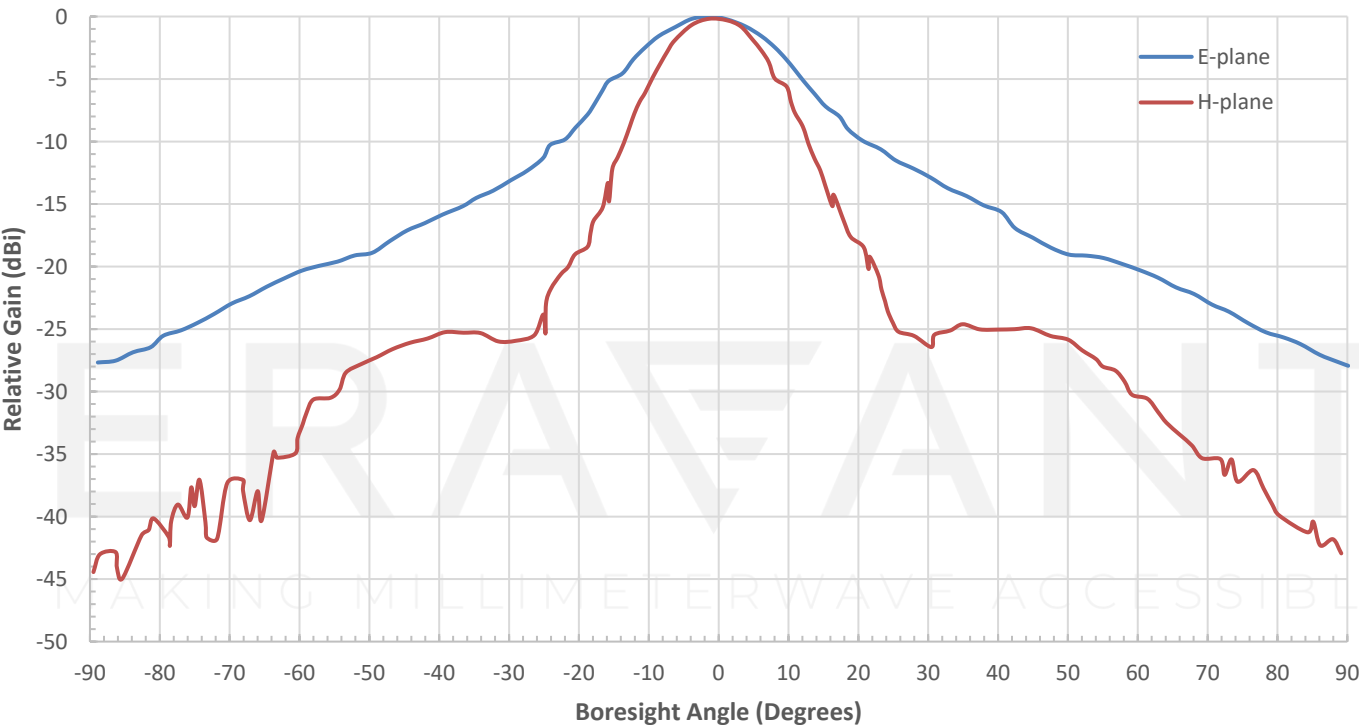
Typical Antenna Pattern @ 9 GHz



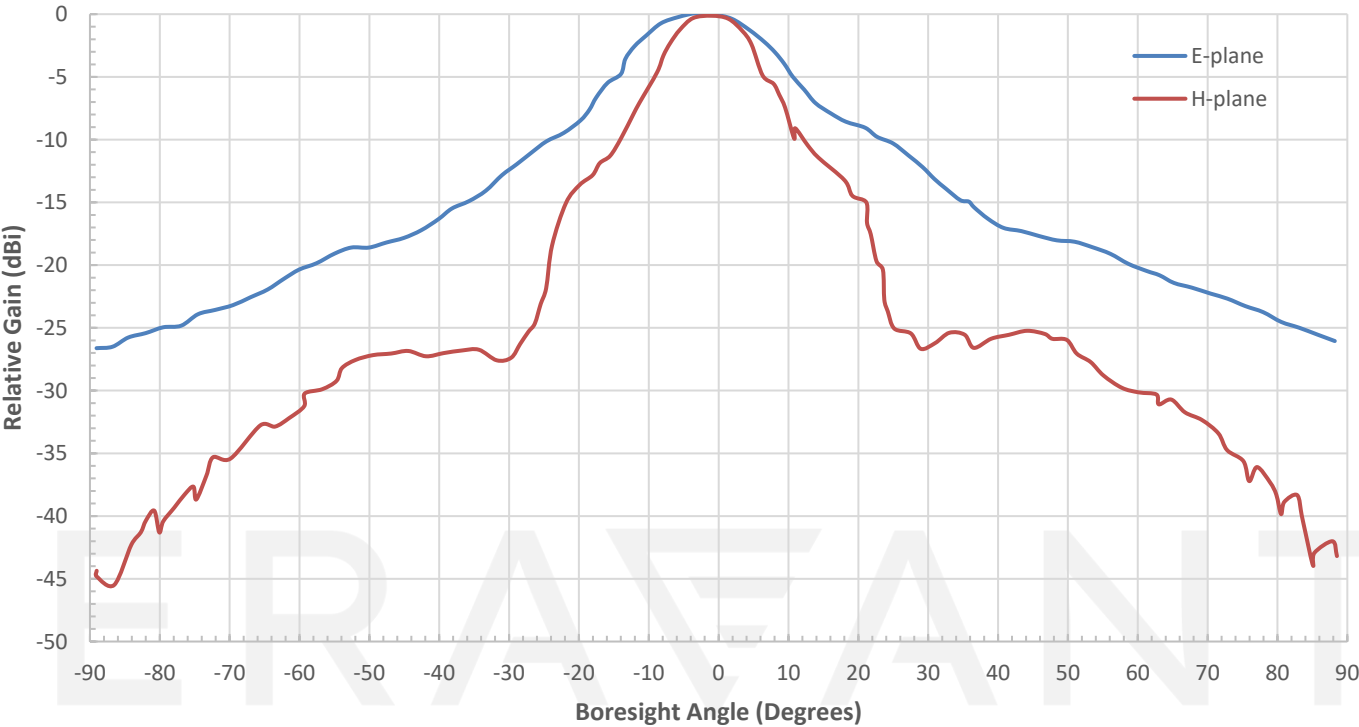
Typical Antenna Pattern @ 10 GHz



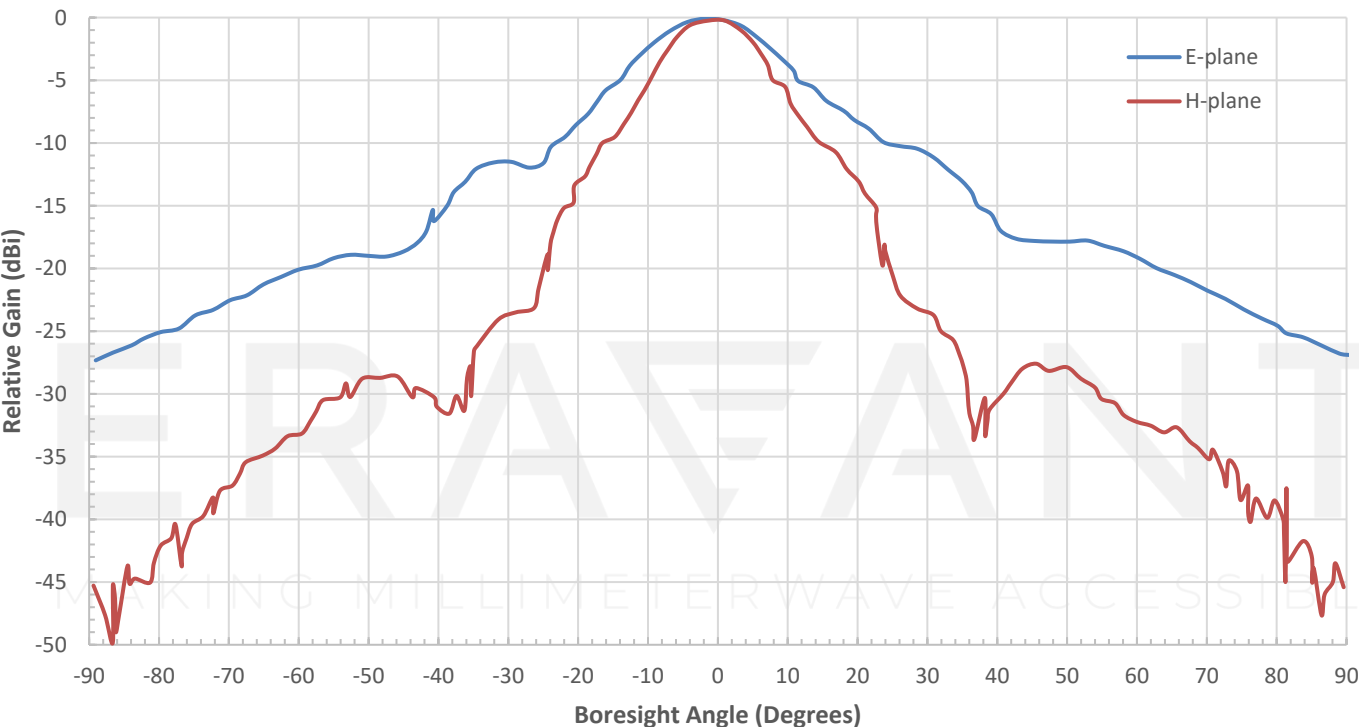
Typical Antenna Pattern @ 11 GHz



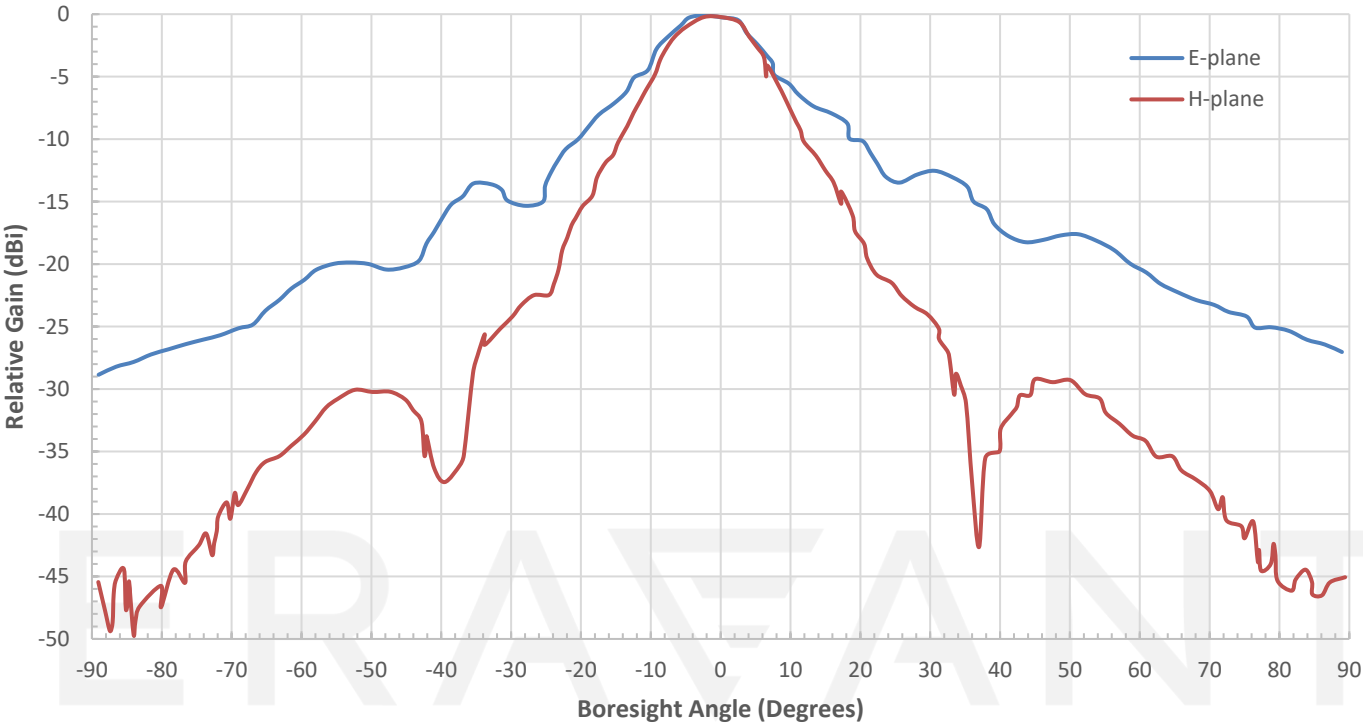
Typical Antenna Pattern @ 12 GHz



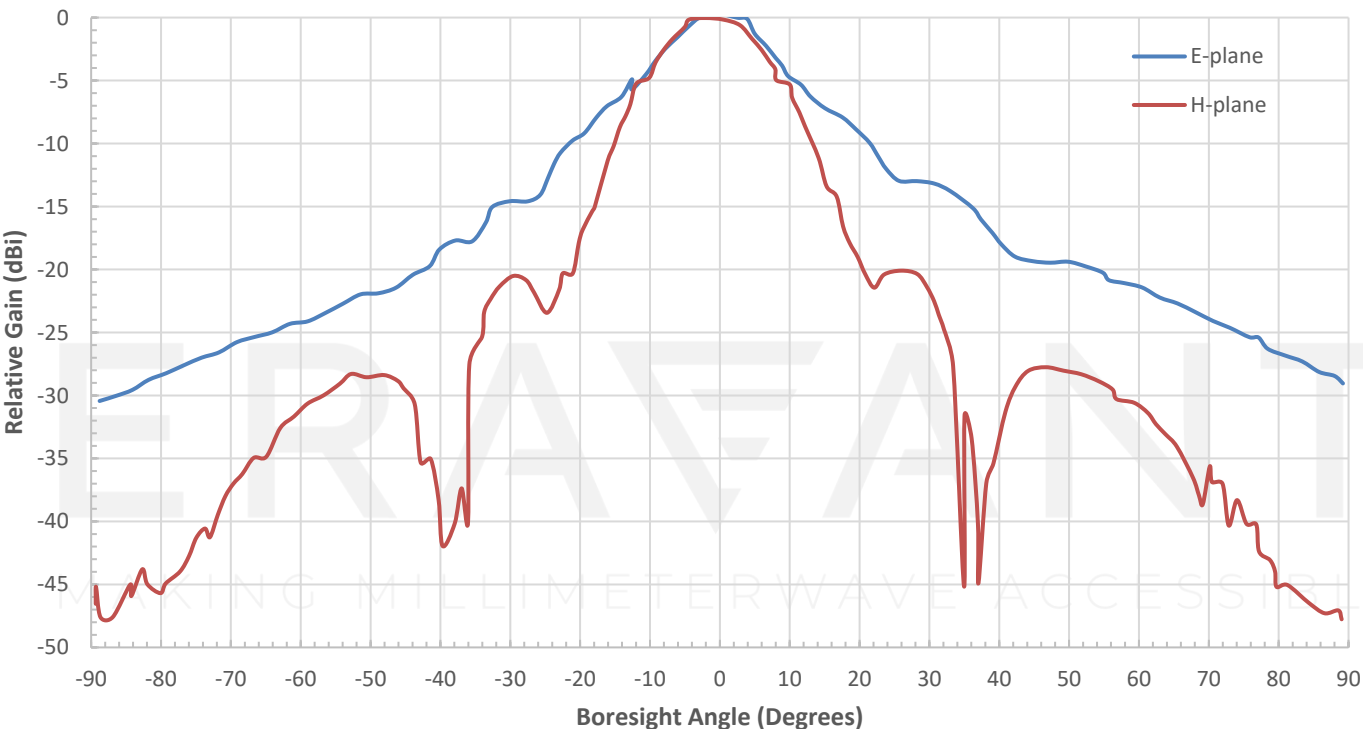
Typical Antenna Pattern @ 13 GHz



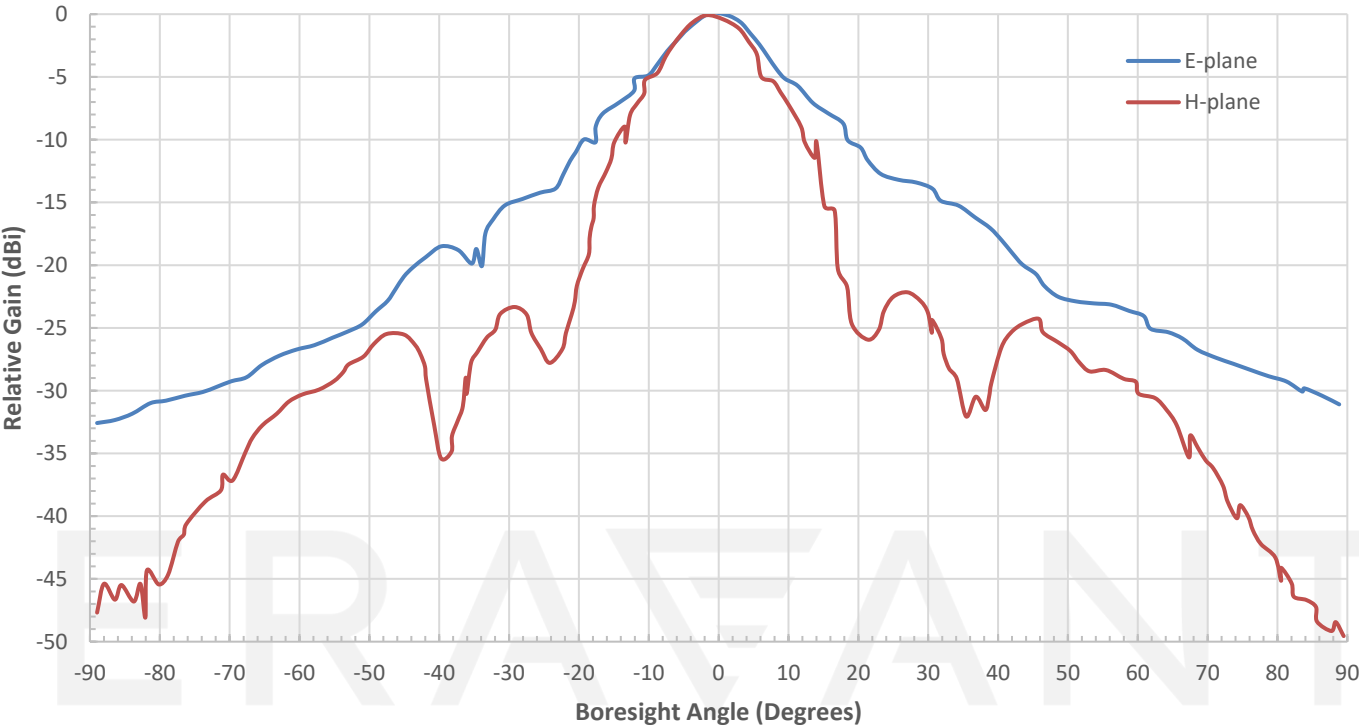
Typical Antenna Pattern @ 14 GHz



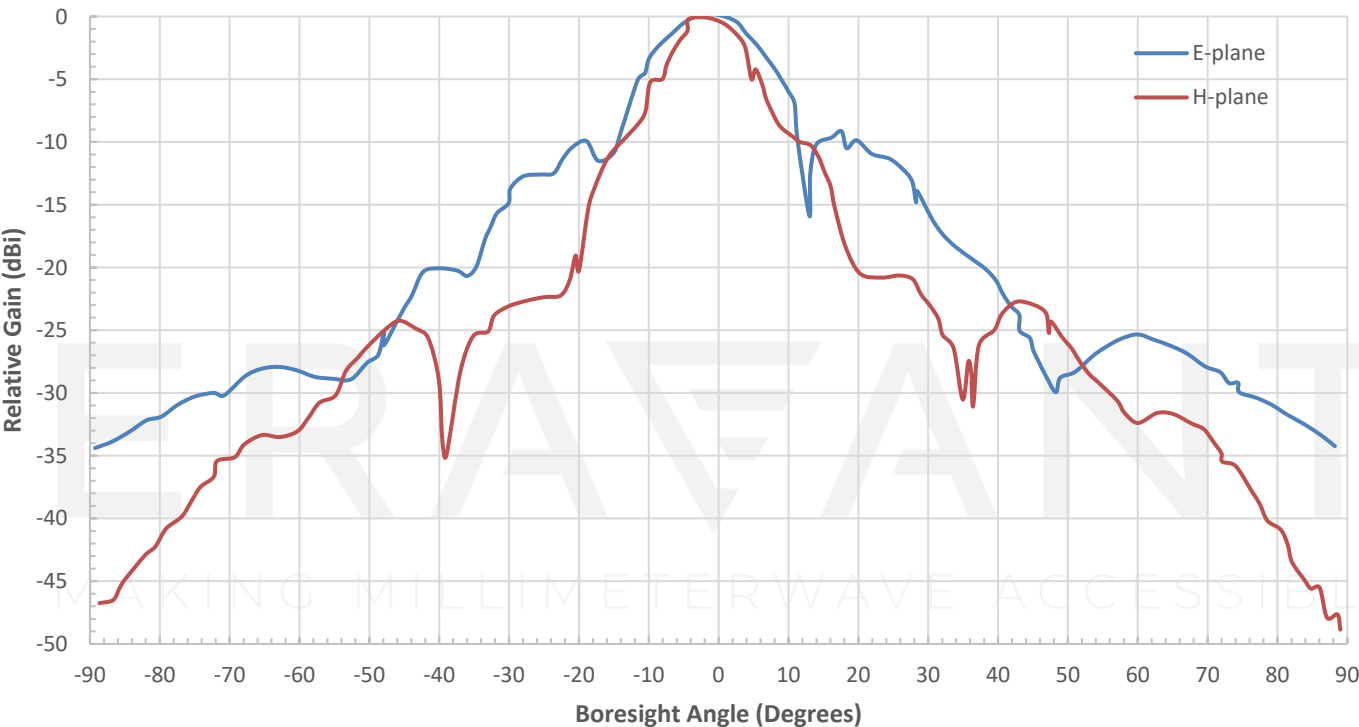
Typical Antenna Pattern @ 15 GHz



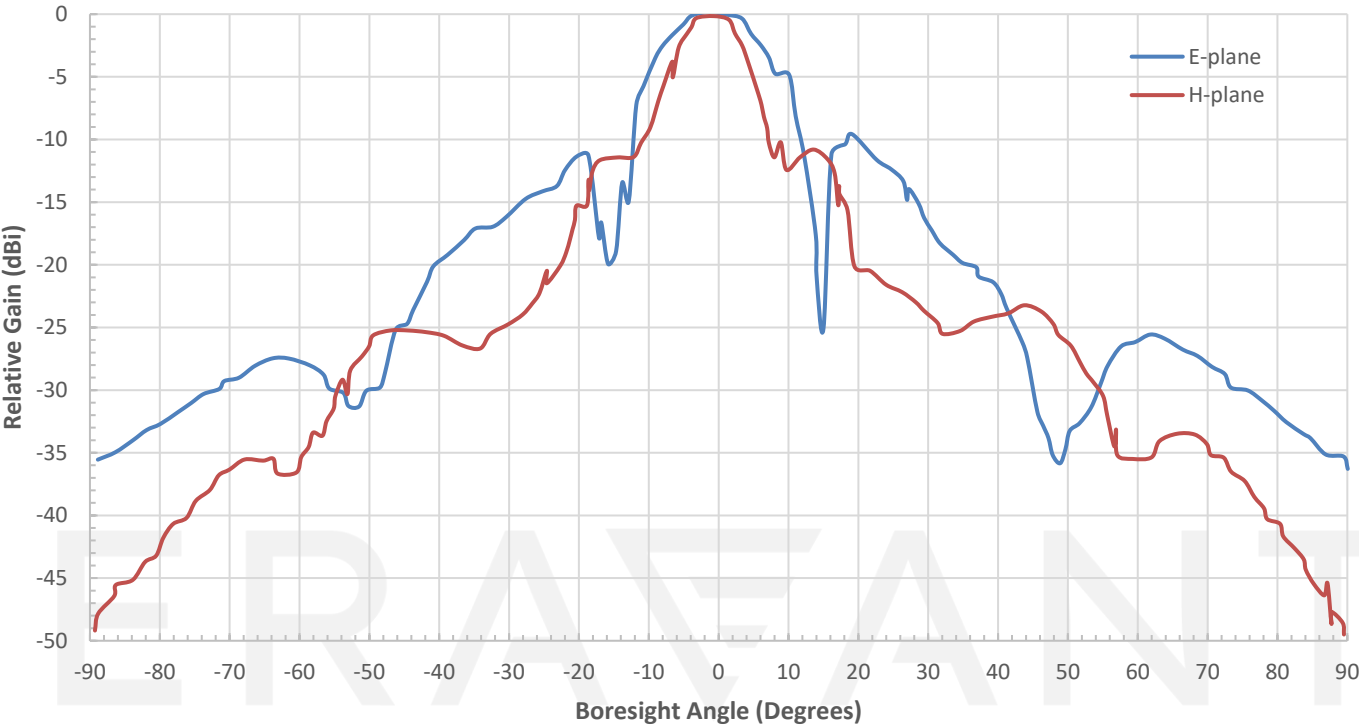
Typical Antenna Pattern @ 16 GHz



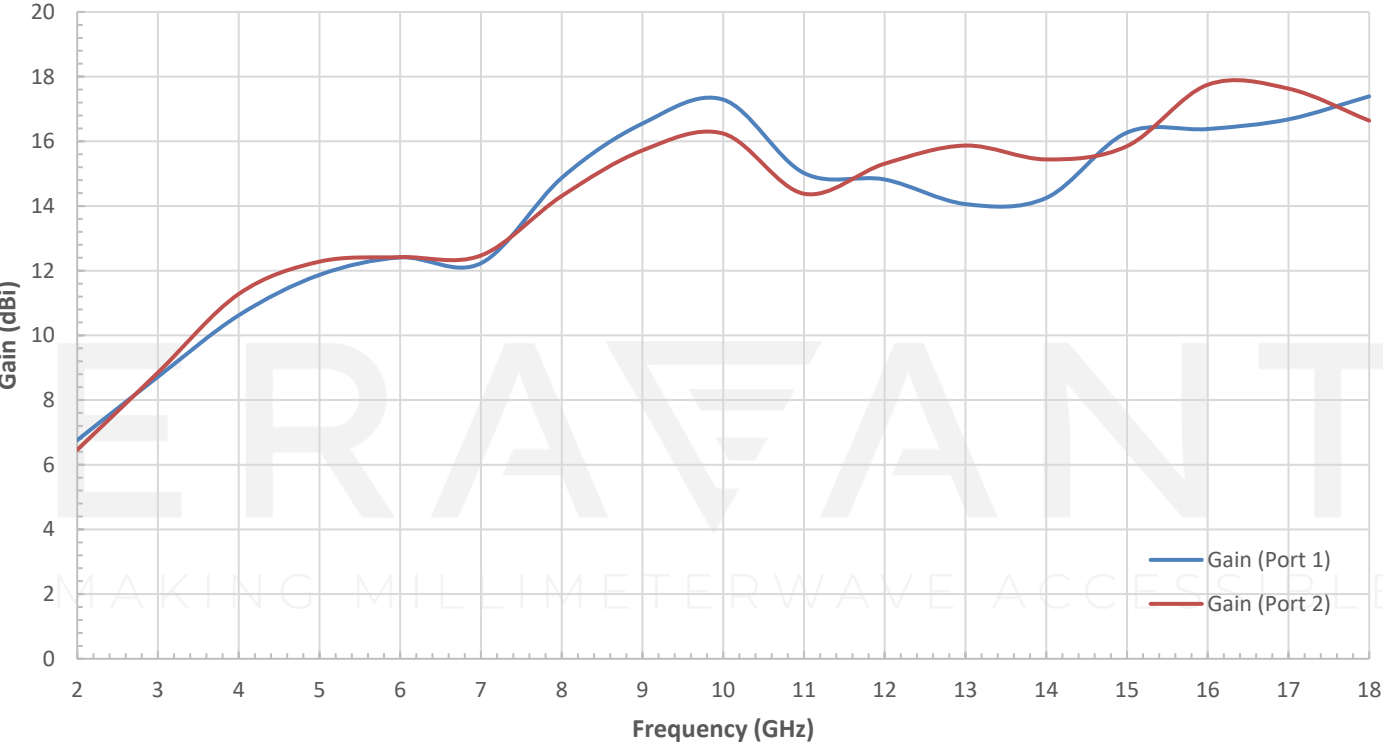
Typical Antenna Pattern @ 17 GHz



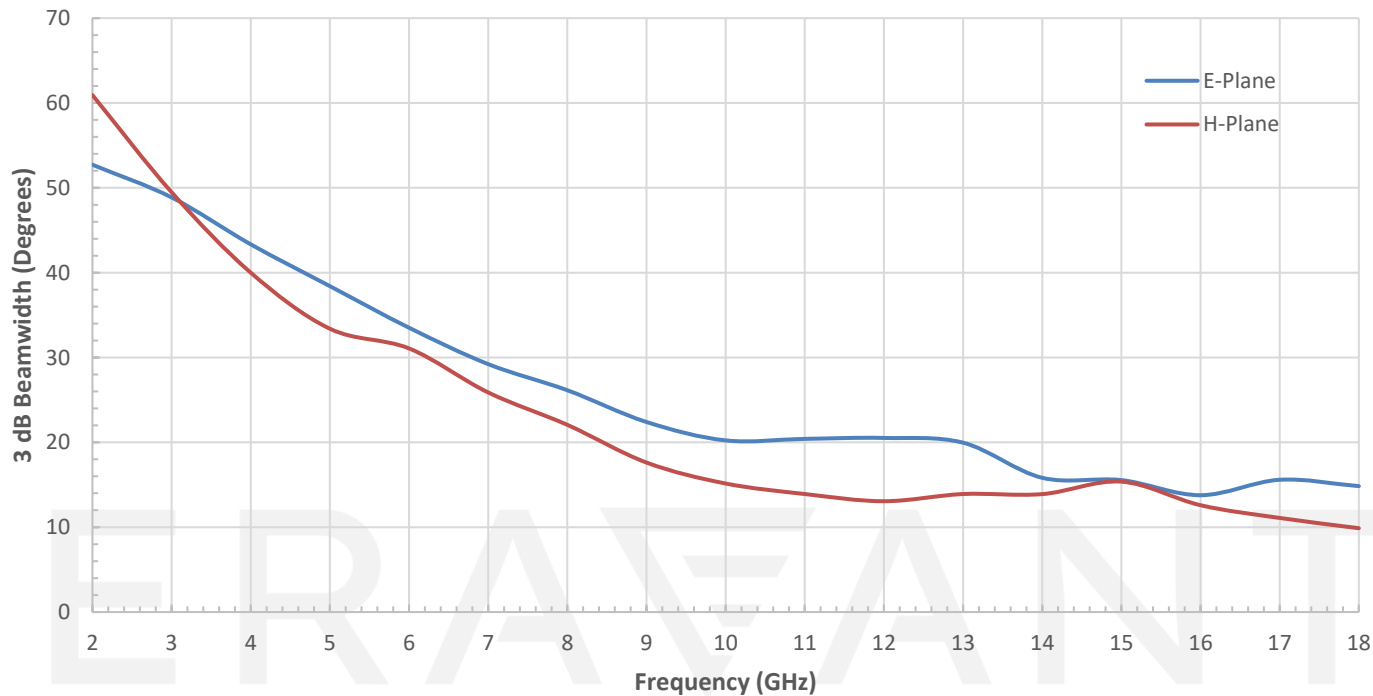
Typical Antenna Pattern @ 18 GHz



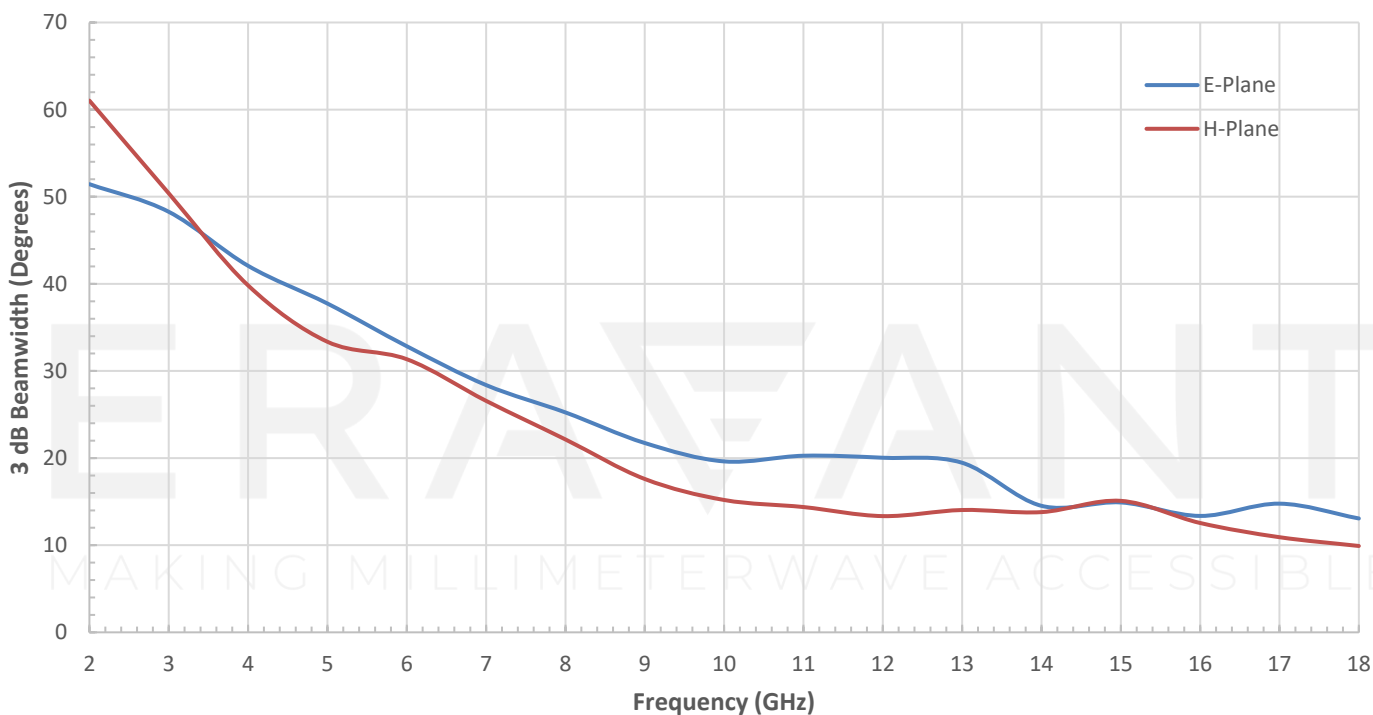
Typical Gain vs Frequency



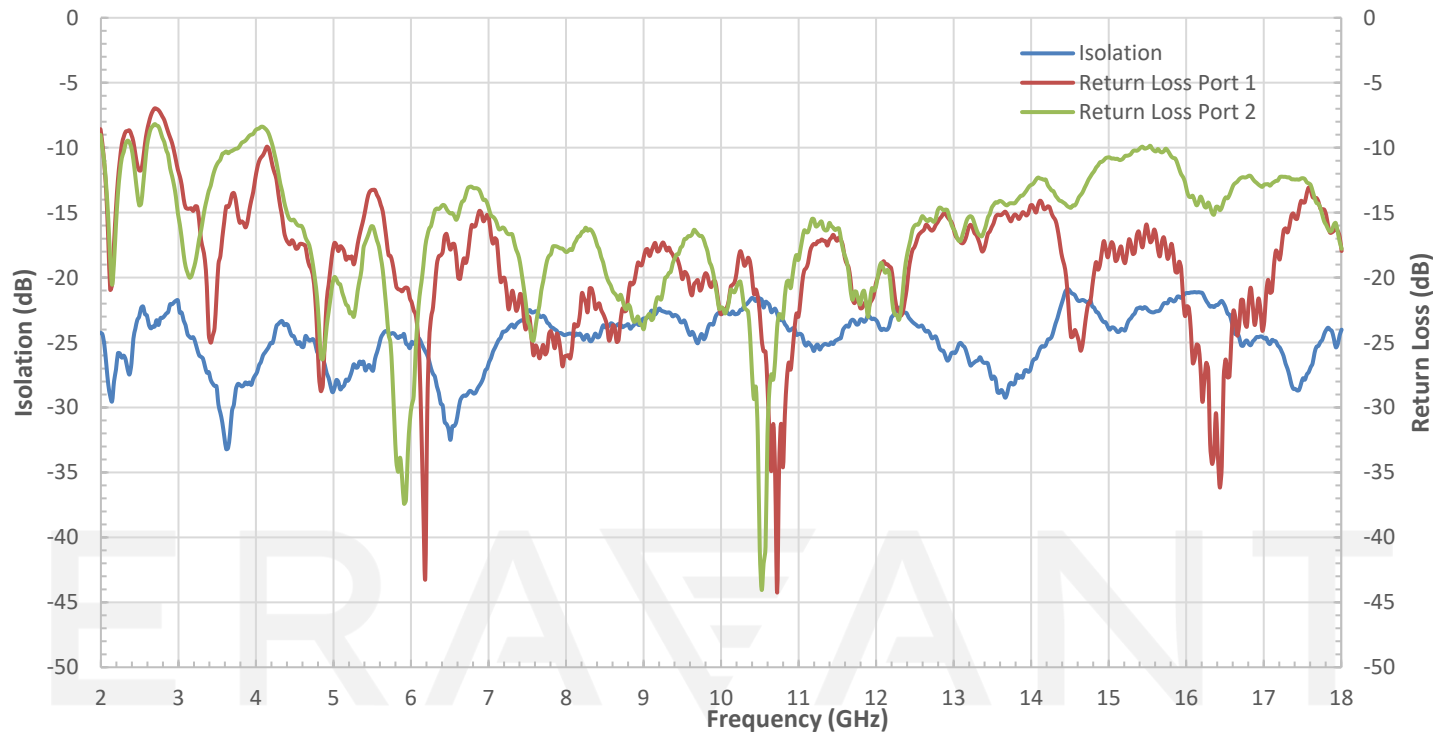
Typical 3 dB Beamwidth vs Frequency (Port 1)



Typical 3 dB Beamwidth vs Frequency (Port 2)

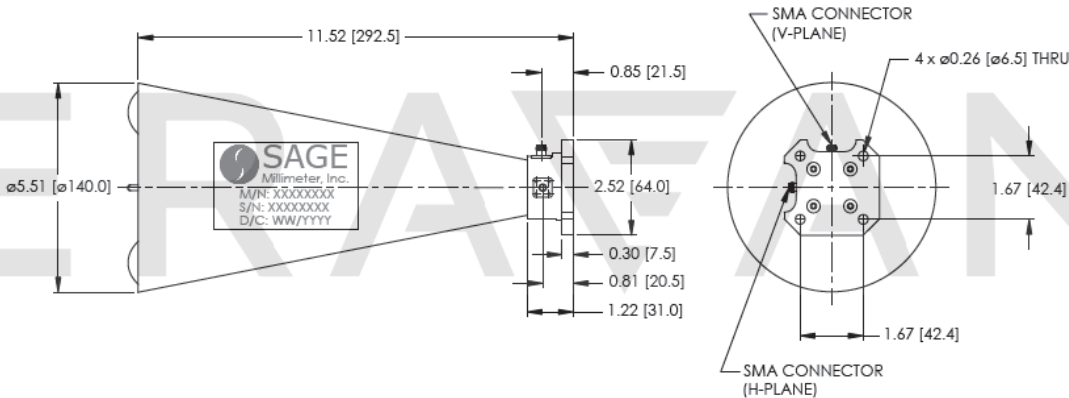


Measured Isolation and Return loss vs Frequency



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



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NOTE:

- On condition that test data is provided it is collected from a sample lot. Actual data may vary slightly from unit to unit. All testing is performed under +25 °C room temperature.
- 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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