SAE-9039831315110-10-S1

WR-10 Sectoral Antenna, 13 dBi Gain

SAE-9039831315110-10-S1 is a WR-10 sectoral Horn antenna that covers the frequency range of 90 and 98 GHz. This vertically polarized antenna offers 110 degrees azimuth coverage with a 13 dBi typical gain and ±0.5 dB nominal gain flatness. The antenna features a half power beamwidth of 14 degrees in its vertical direction. The RF port of the antenna is equipped with WR-10 waveguide with UG-387/U-M Anticocking flange.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	90 GHz		98 GHz
Gain		13 dBi	
Azimuth Gain Variation		±0.5 dB	
Azimuth Beamwidth		110˚	
3 dB Vertical Beamwidth		14˚	
Return Loss		18 dB	
Specification Temperature		+25 ˚C	
Operating Temperature	-40 ˚C		+85 ˚C

Mechanical Specifications:

Item	Specification
Antenna Port	WR-10 Waveguide with UG-387/U-M Anticocking Flange
Body Material	Aluminum
Finish	Gold Plating
Weight	2.24 Oz
Outline	AE-W13-15-110

ECCN

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FEATURES

- 120˚ Azimuth Coverage
- 45° Vertical 3 dB Beamwidth
- Vertically Polarized
- Full Band Operation

APPLICATIONS

- 5G Systems
- Communication Links
- EW Systems
- Indoor Local Area Networks

SUPPLEMENTAL DETAILS

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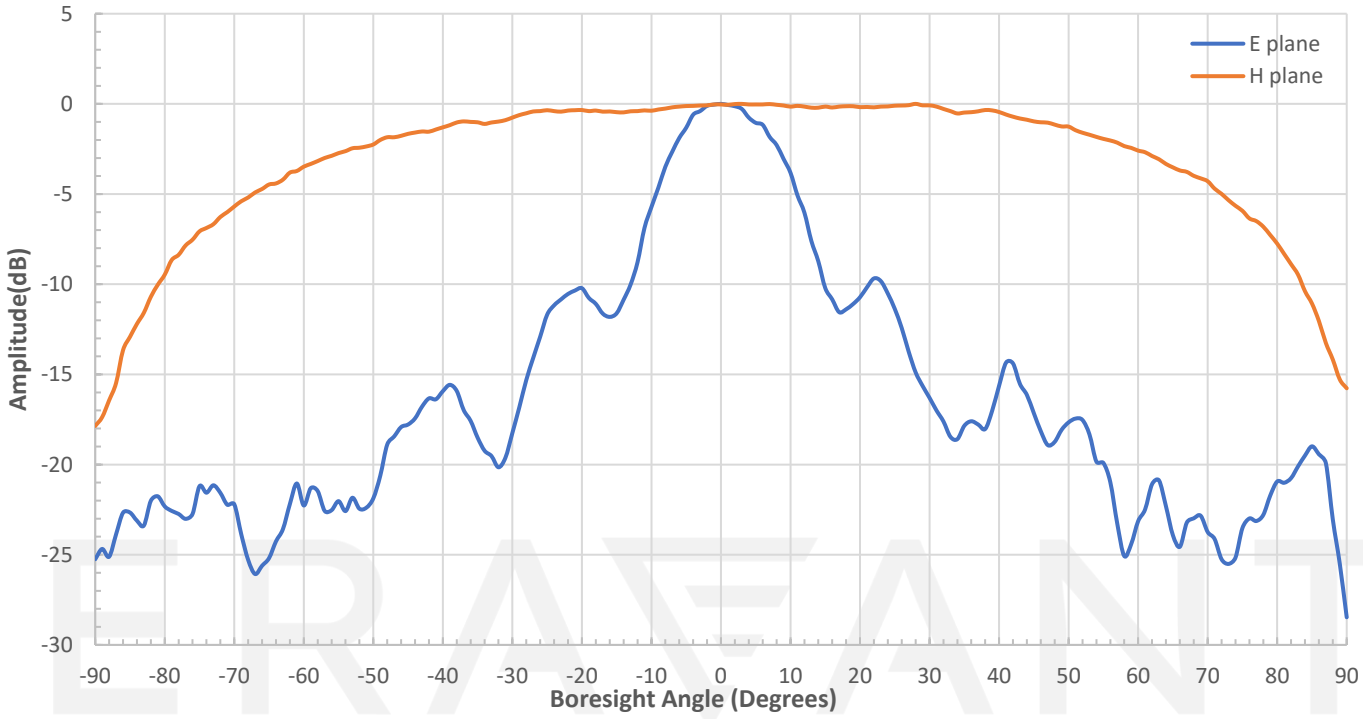
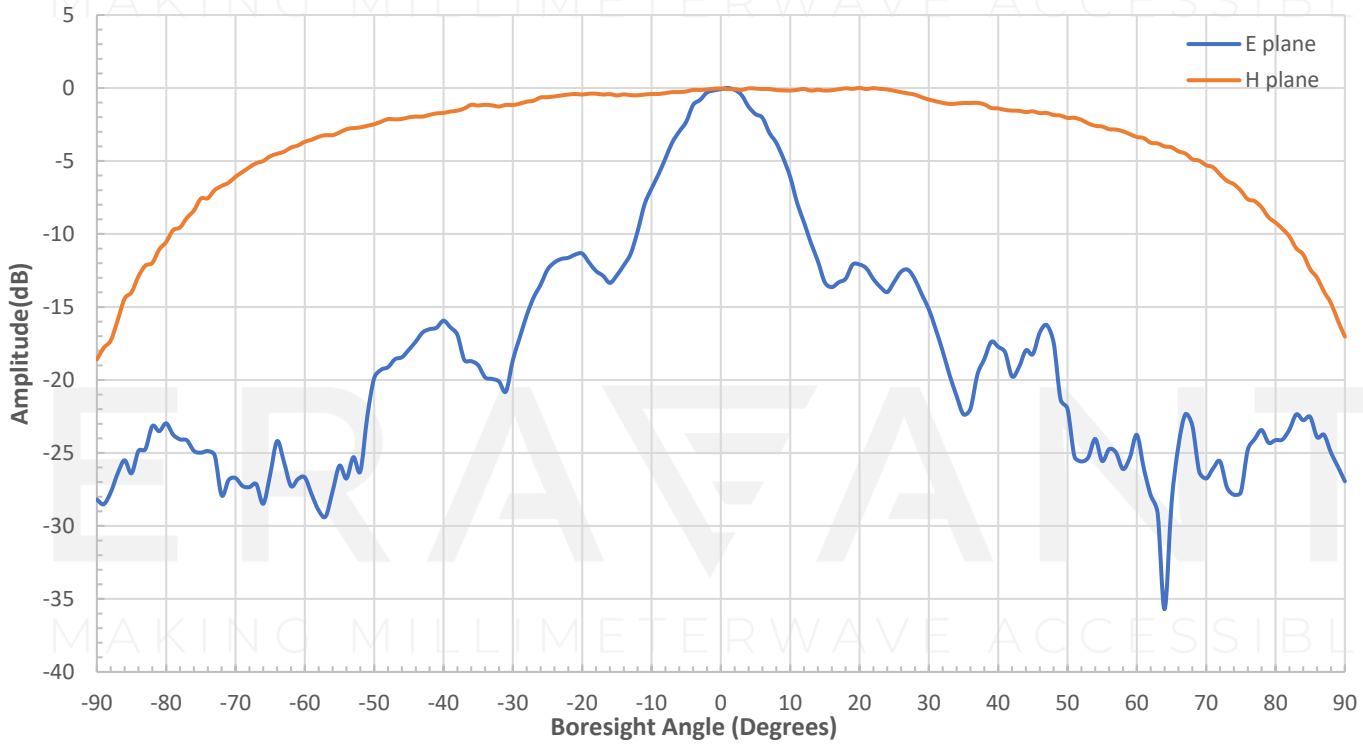
Measured Patterns at 90 GHz



Measured Patterns at 94 GHz



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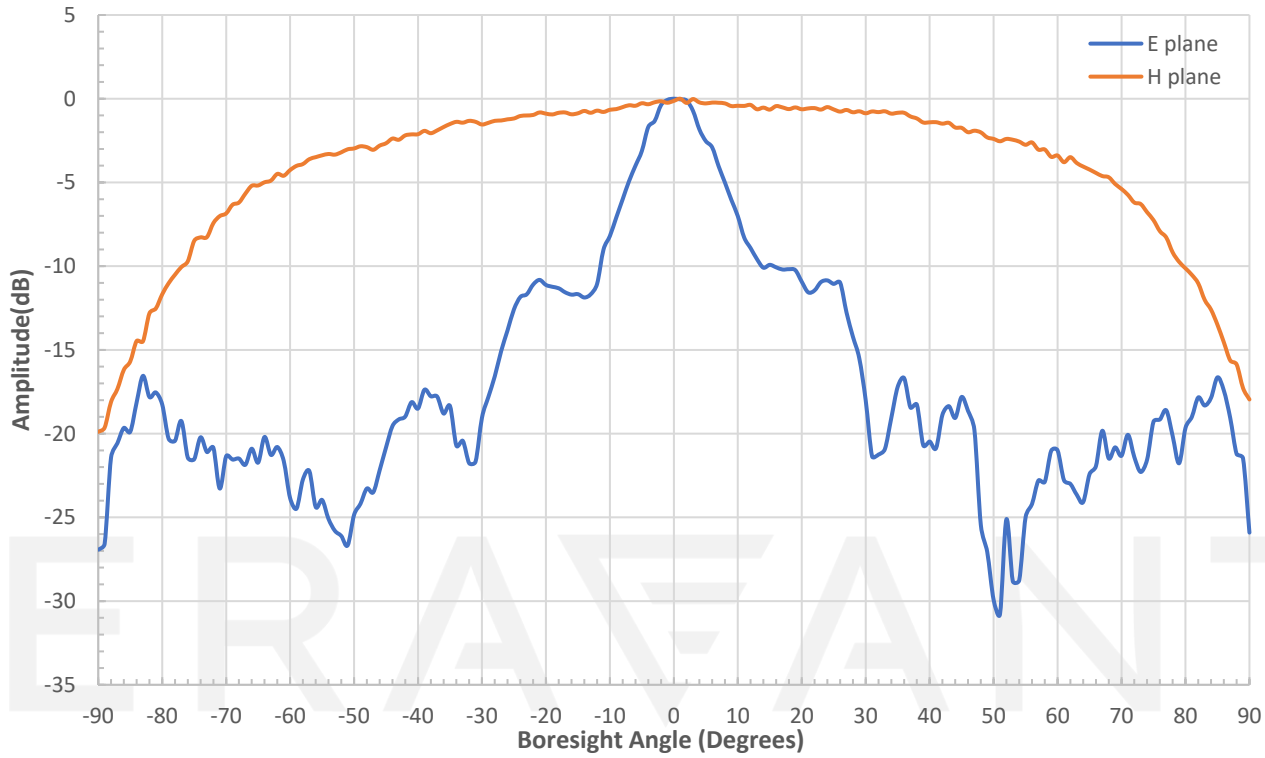
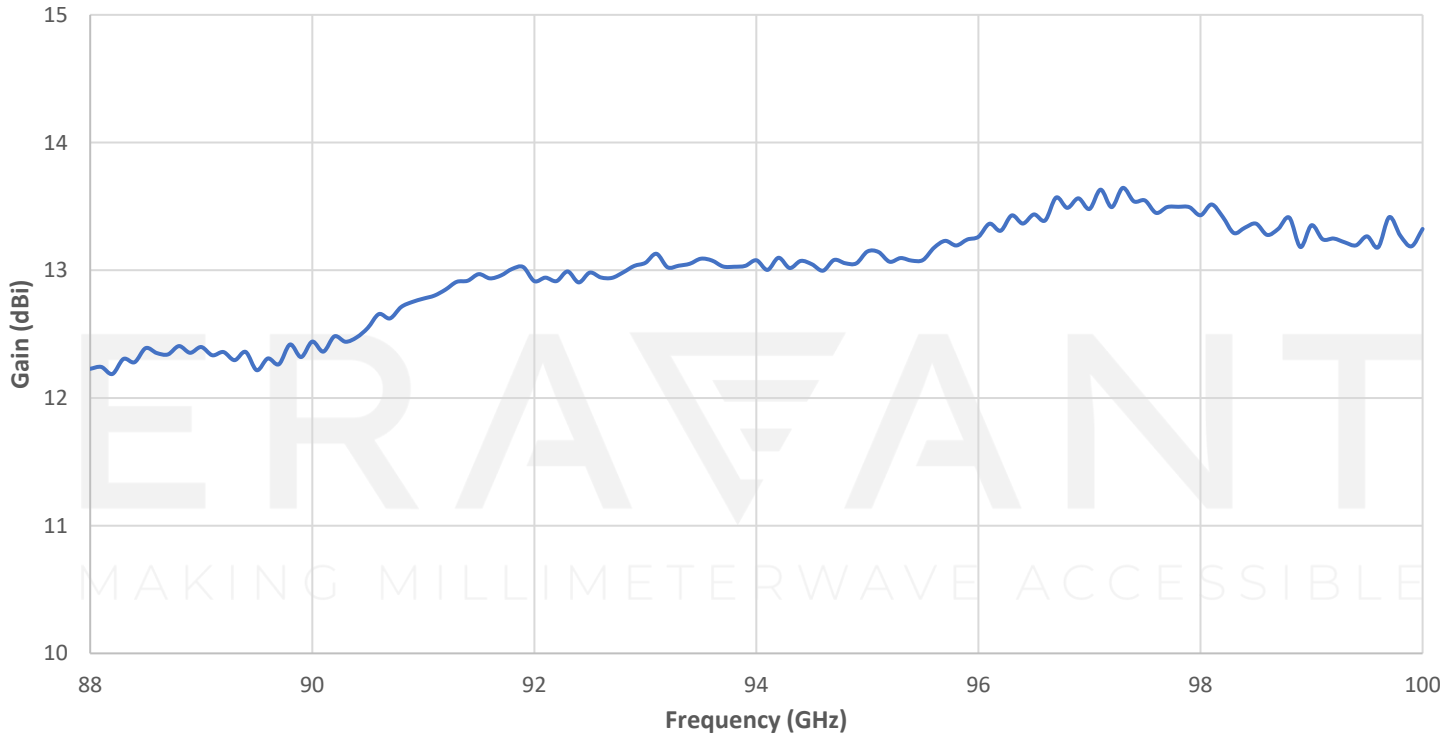
Measured Patterns at 98 GHz



Measured Gain vs Frequency



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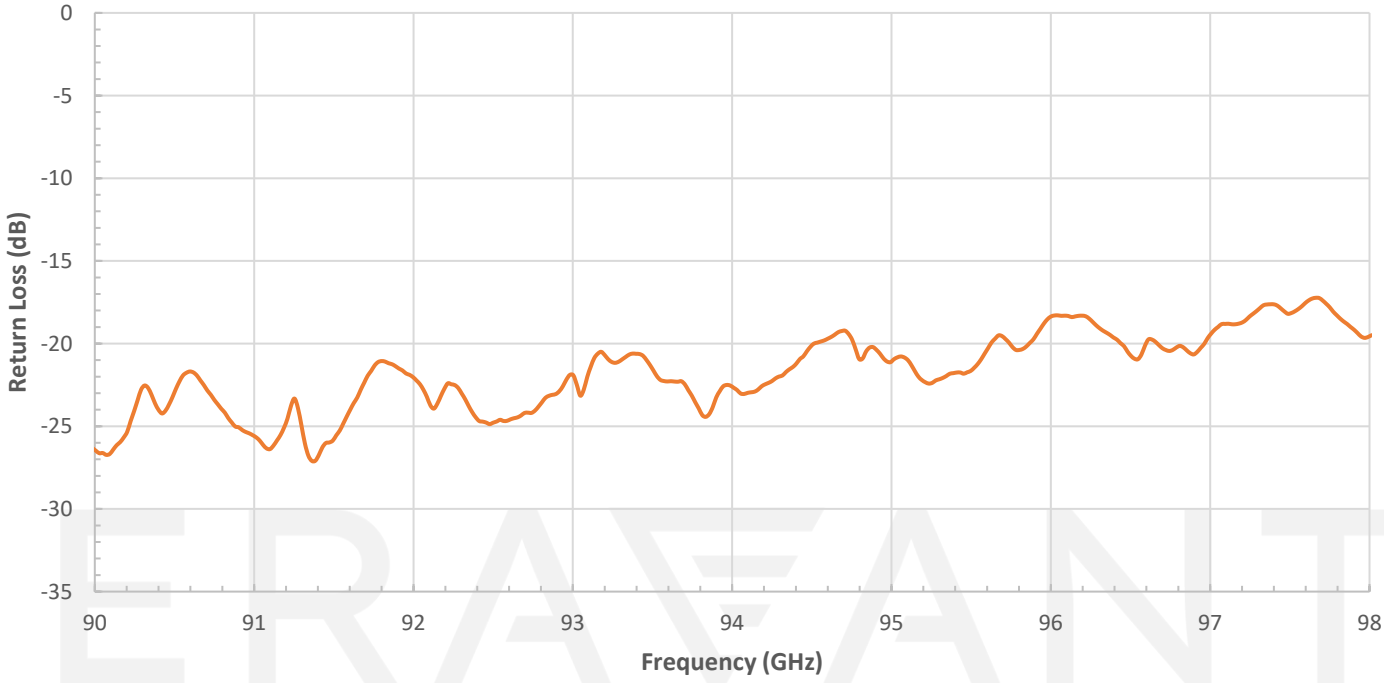
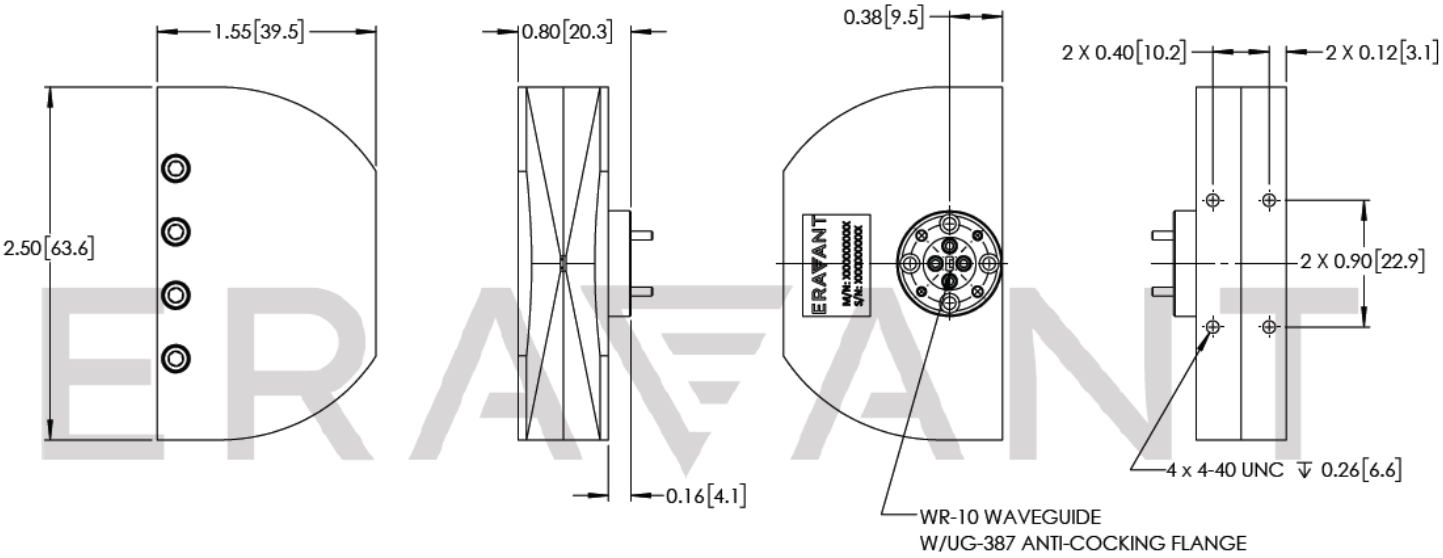
Measured Return Loss vs Frequency



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



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NOTE:

- Test data provided 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 waveguide will cause performance degradation and may damage or destroy the unit.

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