SAY-2243345303-03-S1

WR-03 Cassegrain Antenna, 220 to 330 GHz, 9”, 53 dBi Gain

SAY-2243345303-03-S1 is a WR-03 Cassegrain antenna that offers a nominal gain of 53 dBi and a typical half power beamwidth of 0.3 degrees from 220 to 330 GHz. The aluminum reflector offers a lightweight and rugged mechanical structure and is treated with a chem film conversion coating for corrosion resistance. A diagonal horn is used to provide optimal feed efficiency, low side lobes, high cross-pol rejection, and uniform illumination. The antenna port is a WR-03 waveguide with UG-387/U-M anti-cocking flange and can support linear polarized waveforms.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	220 GHz		330 GHz
Gain		53 dBi	
3 dB Beamwidth		0.3°	
Sidelobes		-15 dB	
Return Loss		15 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

Mechanical Specifications:

Item	Specification
Antenna Port	WR-03 Waveguide with UG 387/U-M Anti-Cocking Flange
Diameter	9”
Material	Aluminum
Finish	Chem Film
Weight	13.5 oz
Outline	AY-R0353-09-A

ECCN

EAR99

FEATURES

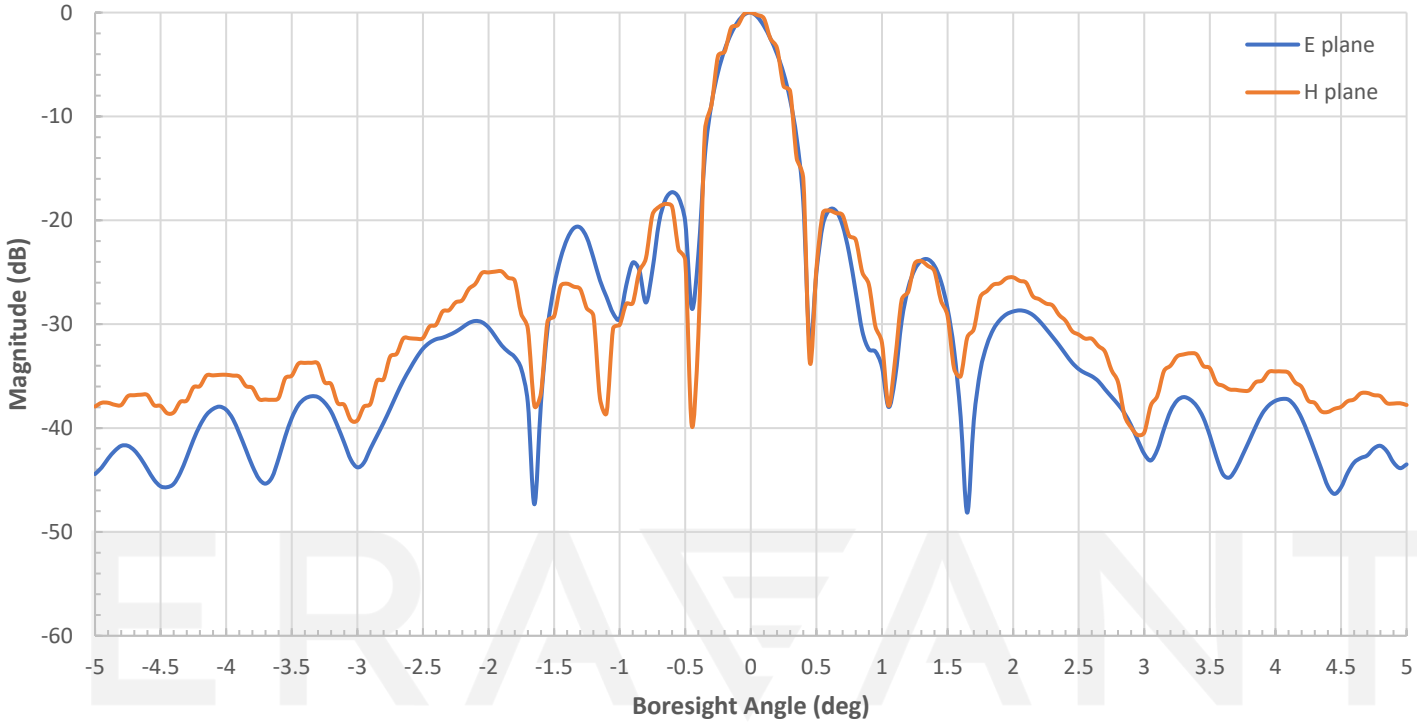
- Linear Polarization
- Low Side Lobe Levels
- High Cross-Polarization

APPLICATIONS

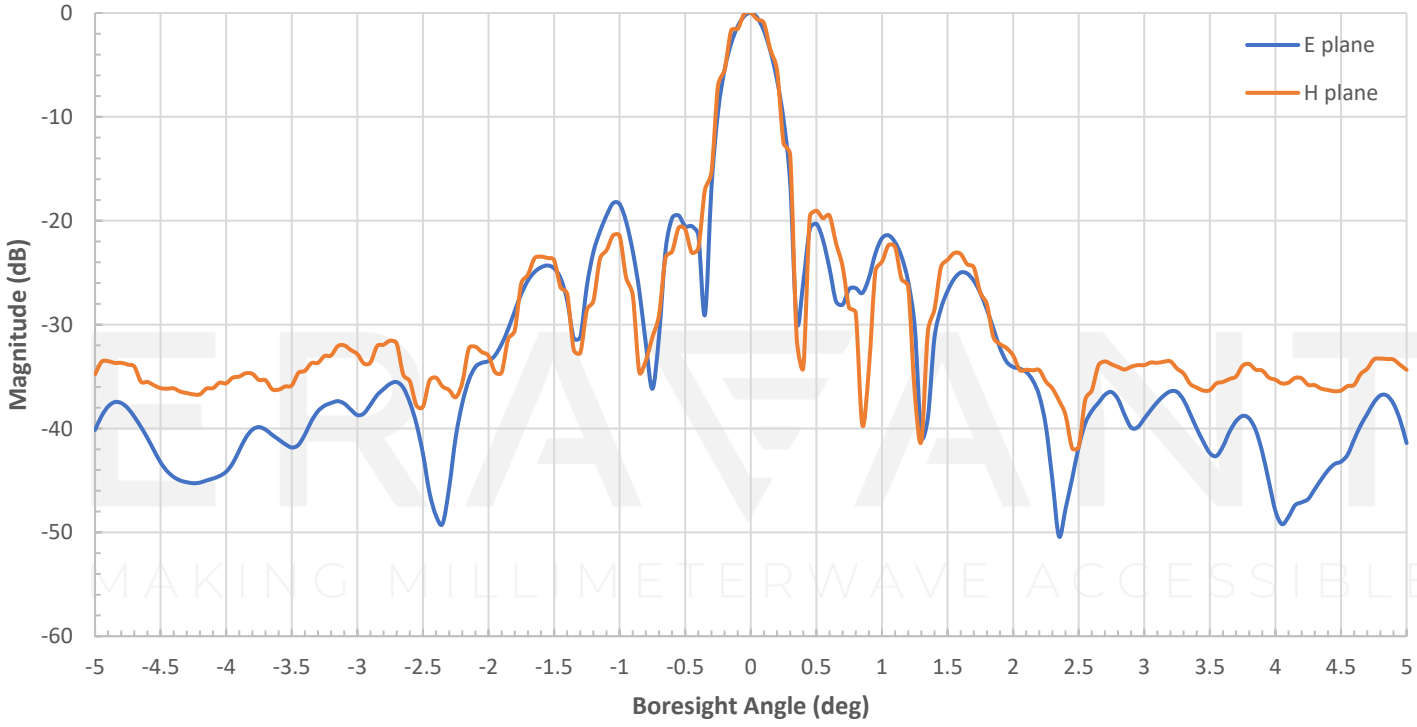
- Sub-THz R&D
- 6G Communications

SUPPLEMENTAL DETAILS

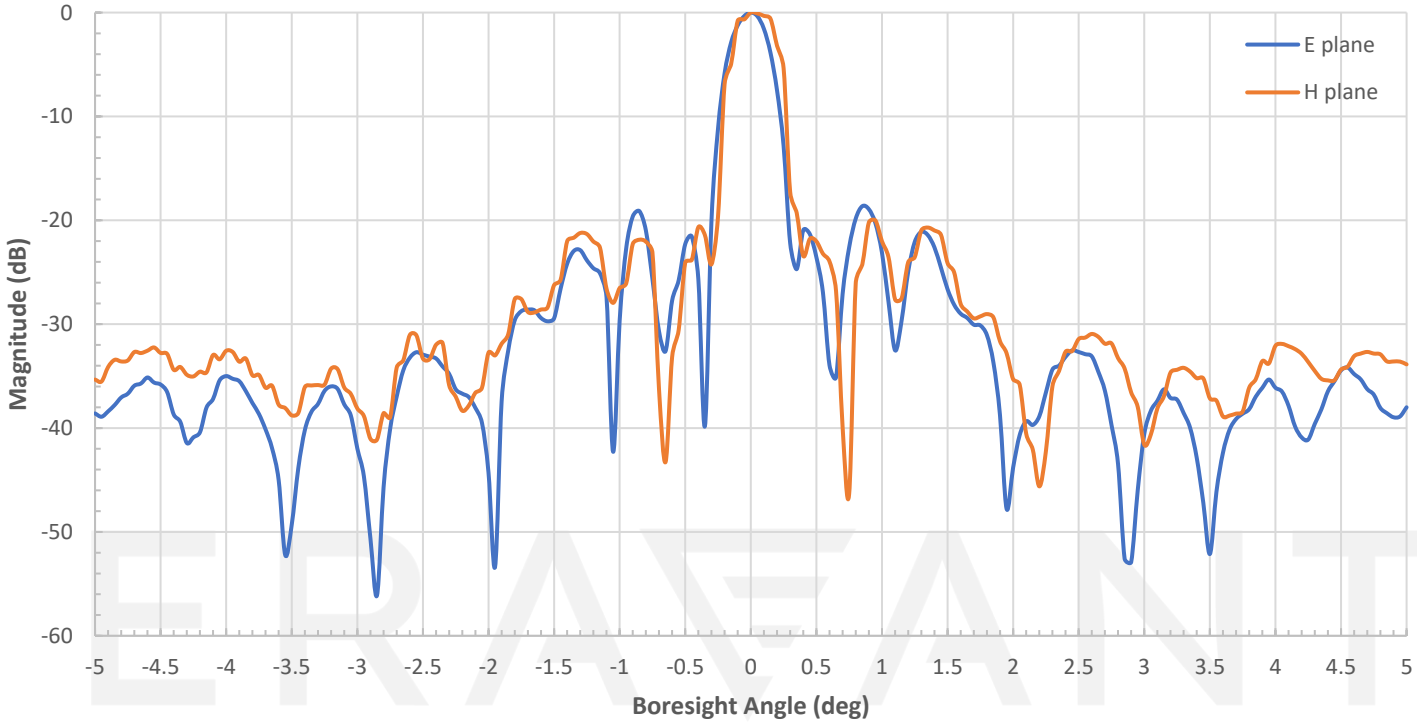
Measured Antenna Patterns @ 220 GHz



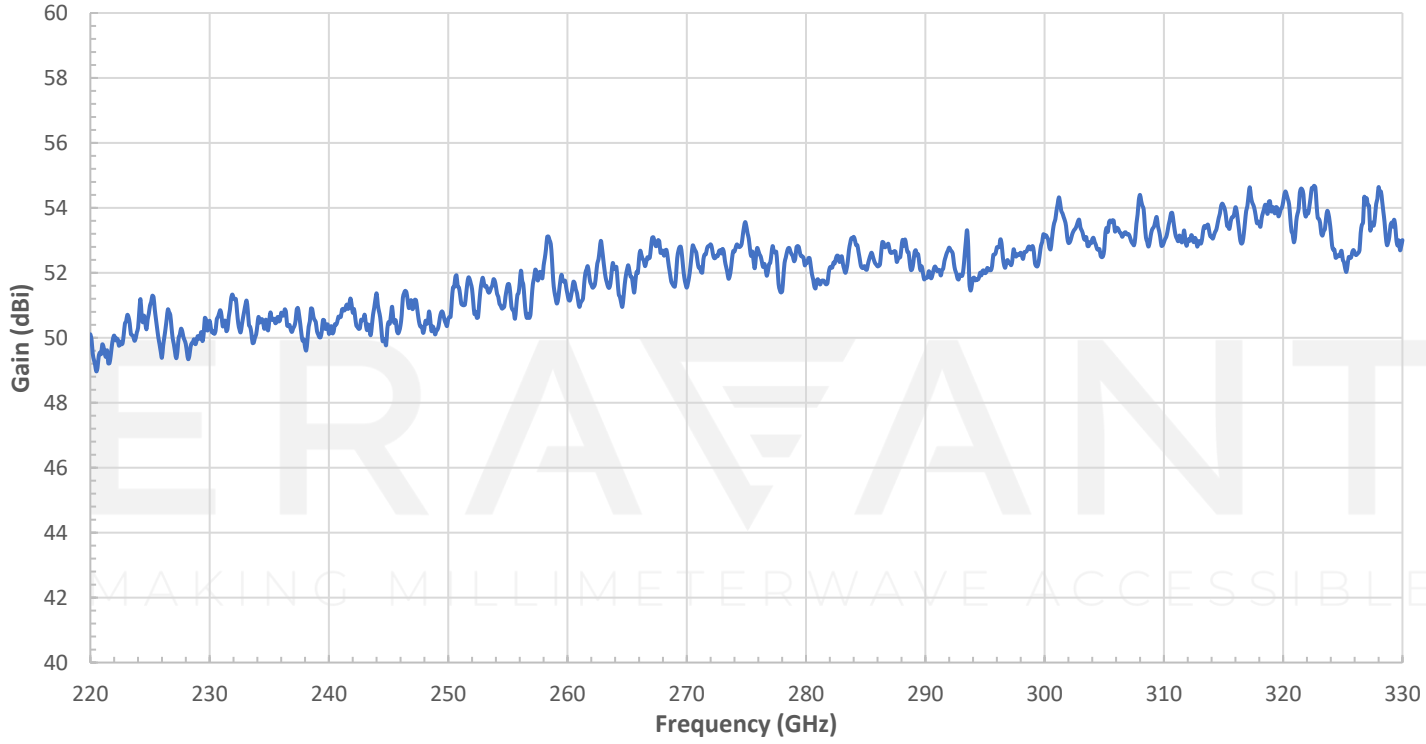
Measured Antenna Patterns @ 275 GHz

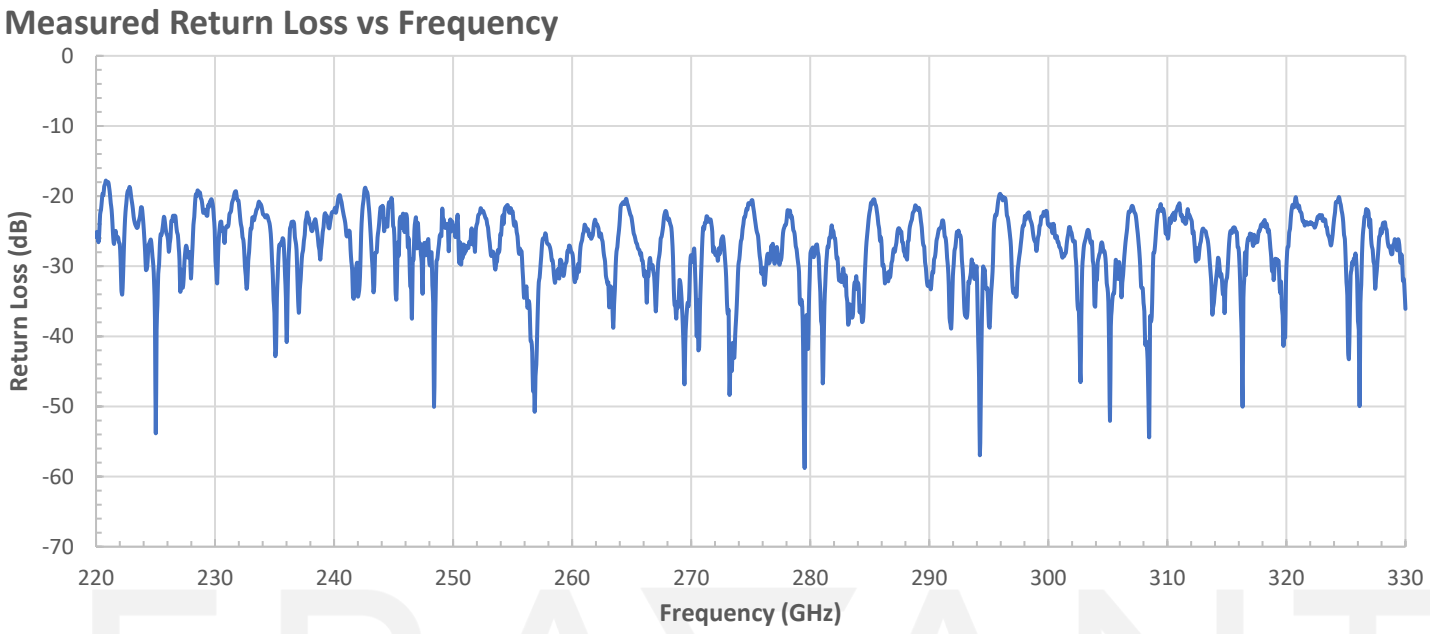


Measured Antenna Patterns @ 330 GHz

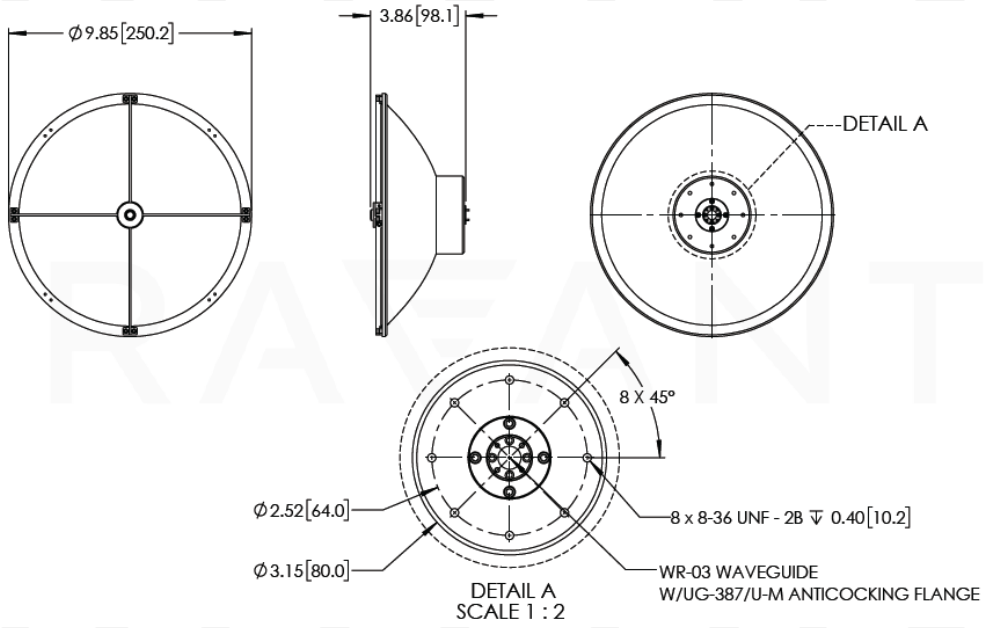


Measured Gain vs Frequency





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



NOTE:

- Data is collected from a sample lot. Actual measured data may slightly vary from unit to unit.
- 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.