

## SAO-3335030530-22-S1

### Q-Band Omnidirectional Antenna, 30 Degree, 5 dBi Gain

**SAO-3335030530-22-S1** is a full band, Q band omnidirectional antenna that covers the frequency range of 33 and 50 GHz. This vertically polarized antenna offers 360 degrees azimuth coverage with a 5 dBi typical gain and  $\pm 1$  dB nominal gain flatness. The antenna features a half power beamwidth of 30 degrees in its vertical direction. The RF port of the antenna is equipped with WR-22 waveguide interface.



#### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	33 GHz		50.0 GHz
Gain		5 dBi	
Azimuth Gain Variation		$\pm 1$ dB	
Azimuth Beamwidth		360°	
3 dB Vertical Beamwidth		30°	
Return Loss		10 dB	
Power Handling			30 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

#### Mechanical Specifications:

Item	Specification
Antenna Port	WR-22 Waveguide with UG-383/U Anti-Cocking Flange
Body Material	Aluminum
Radome Material	HDPE
Finish	Gold Plating
Weight	2.48 oz
Outline	AO-Q05-030

#### ECCN

EAR99

#### FEATURES

- 360° Azimuth Coverage
- 30° Vertical 3 dB Beamwidth
- Vertically Polarized
- Full Band Operation

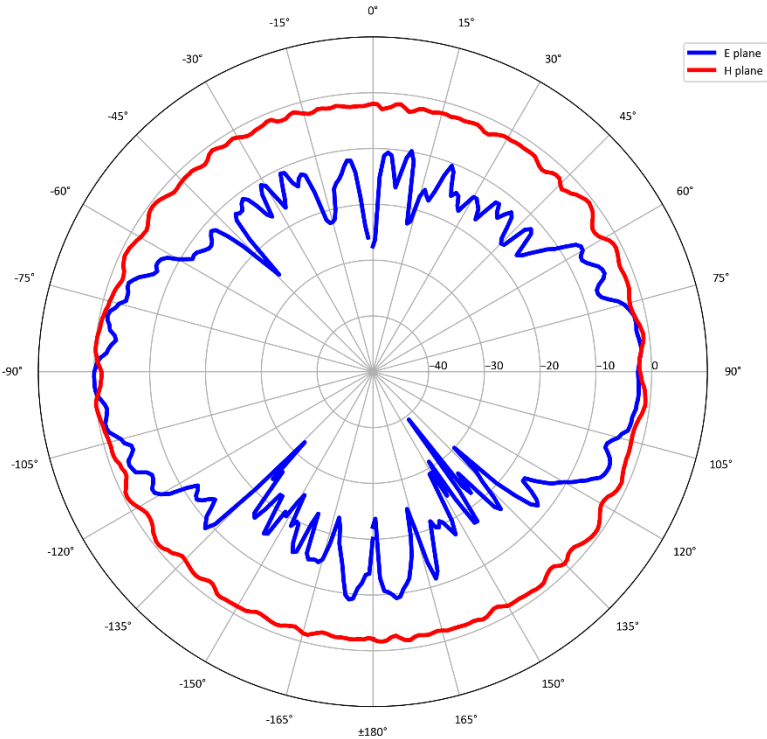
#### APPLICATIONS

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

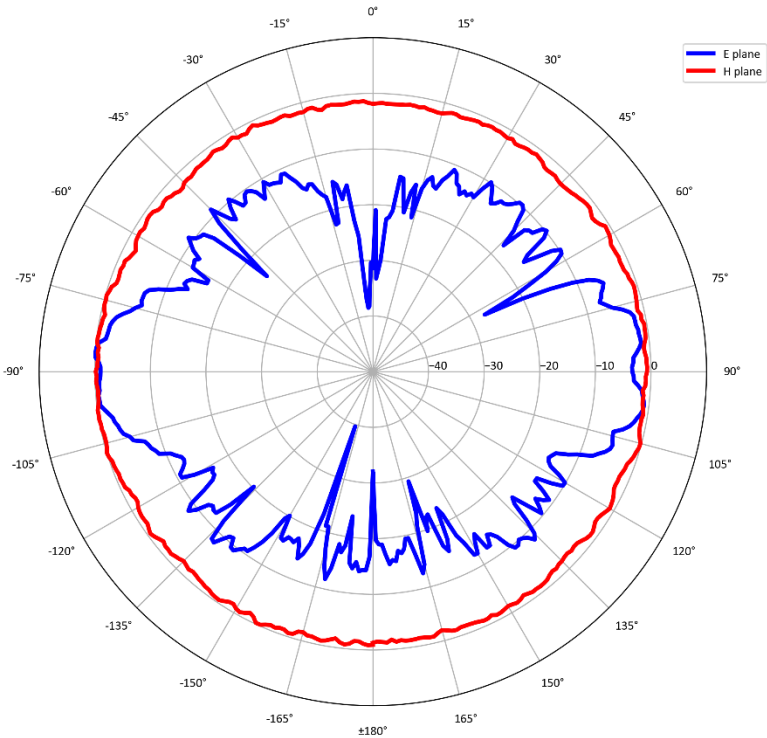
#### SUPPLEMENTAL DETAILS

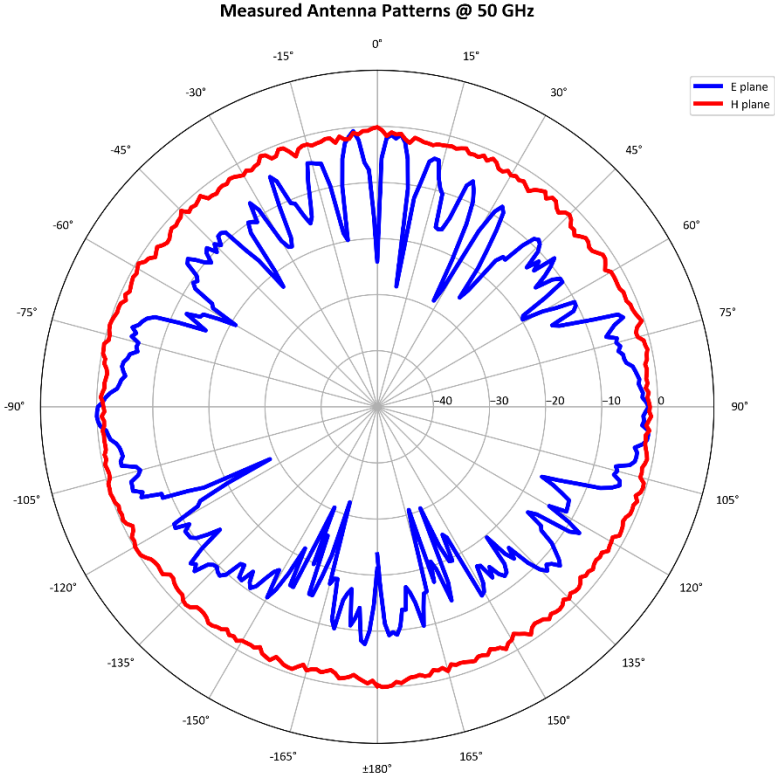


Measured Antenna Patterns @ 33 GHz

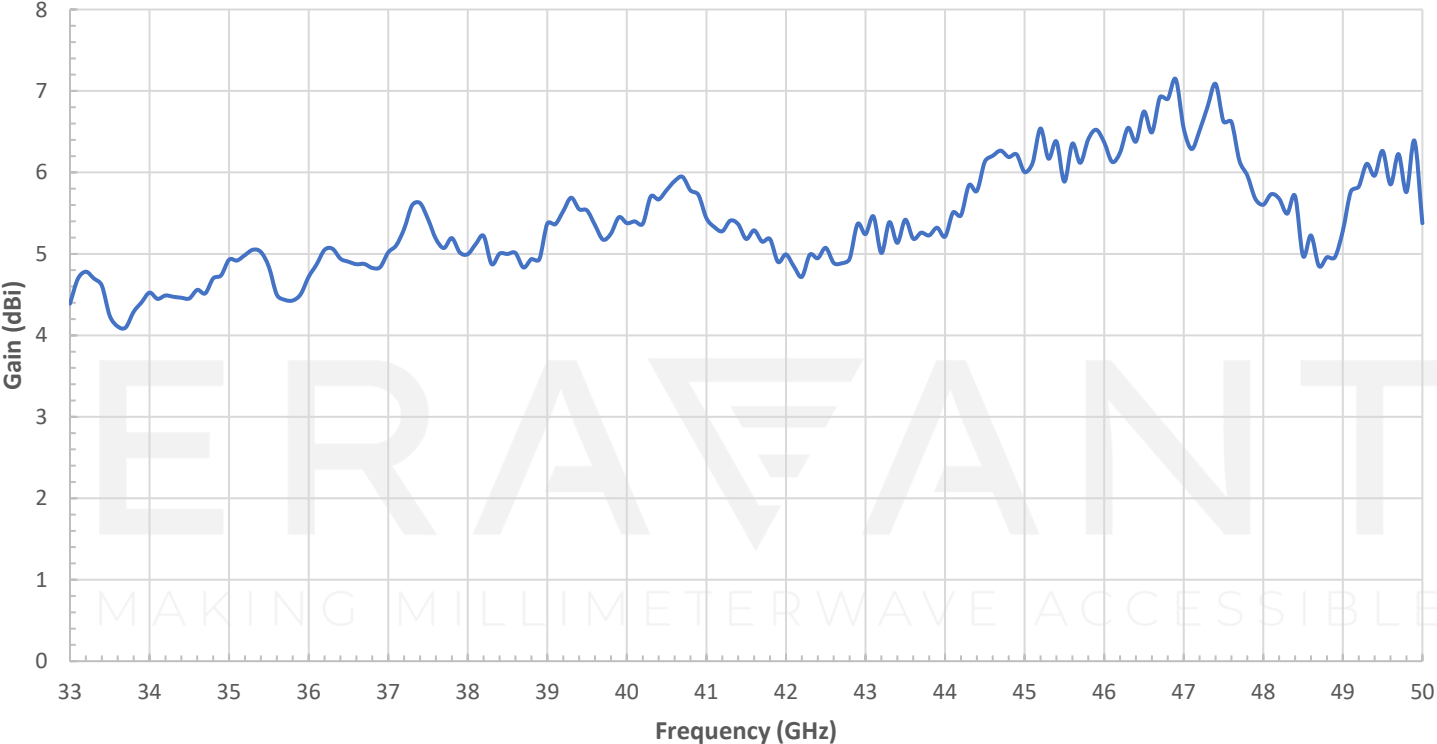


Measured Antenna Patterns @ 41.5 GHz



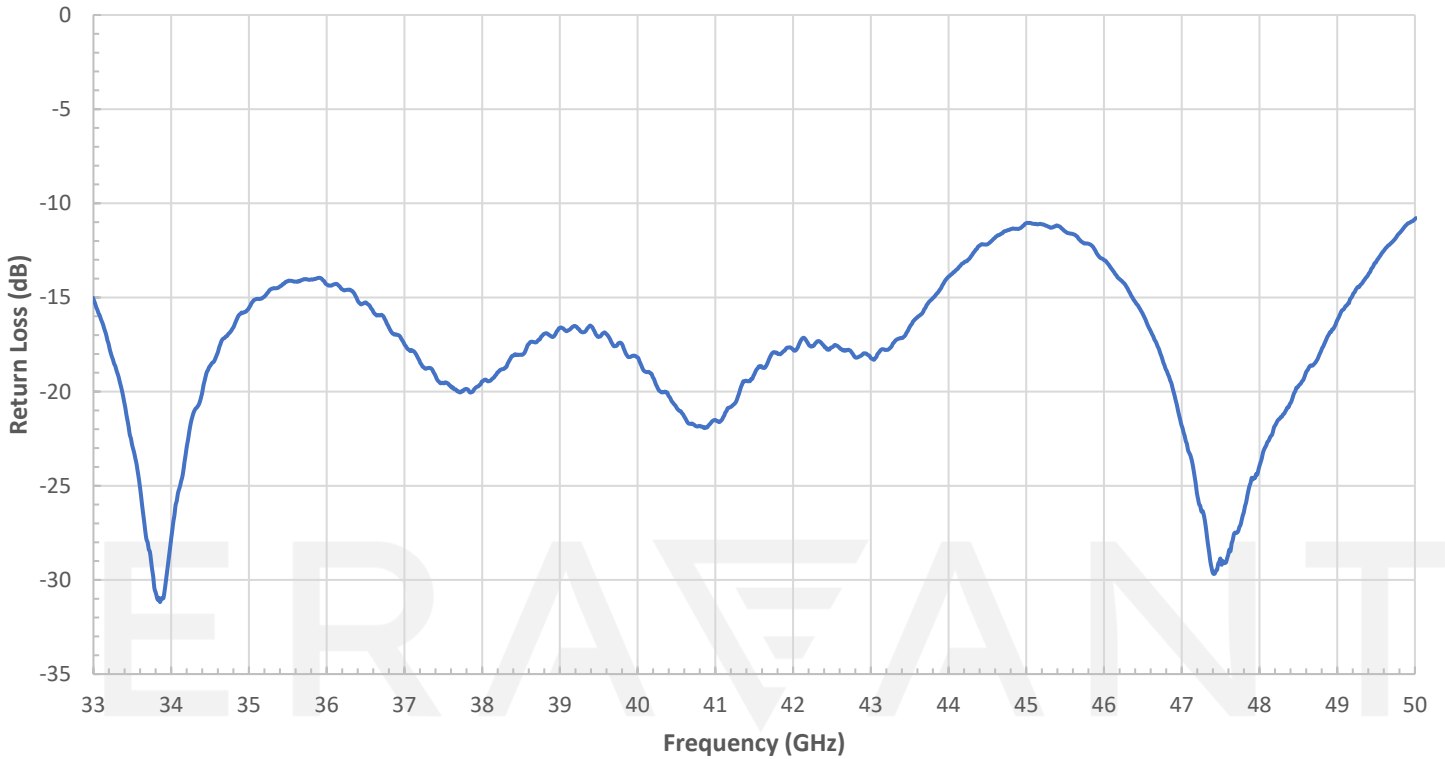


Measured Gain vs Frequency



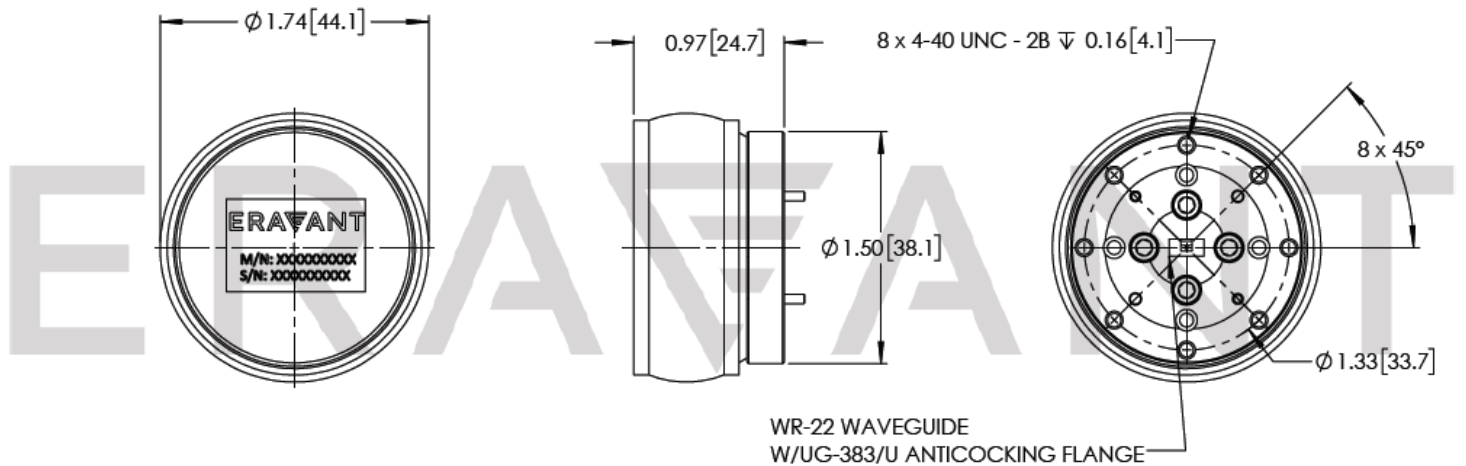
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## Measured Return Loss vs Frequency



MAKING MILLIMETERWAVE ACCESSIBLE

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



**NOTE:**

- All data presented is from a sample lot. Actual data may 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.

