#### Full V-Band Omnidirectional Antenna, 360 Degree, 2.0 dBi Gain

SAO-5037530230-15-S1 is a full band, WR-15 omnidirectional antenna that operates between 50 and 75 GHz. This vertically polarized antenna offers 360 degrees azimuth coverage with a 2 dBi typical gain and ±2.0 dB nominal gain flatness. The antenna features a half power beamwidth of 30 degrees in the vertical direction. The antenna port is with WR-15 waveguide and standard UG385/U flange.

#### **Electrical Specifications:**

Parameter	Minimum	Typical	Maximum
Frequency	50 GHz		75 GHz
Gain		2.0 dBi	
Azimuth Gain Variation		±2.0 dB	
Azimuth Beamwidth		360°	
3 dB Vertical Beamwidth		30°	
Return Loss		10 dB	
Power Handling		50 W (CW)	
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

#### **Mechanical Specifications:**

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Item	Specification
Antenna Port	WR-15 Waveguide with UG-385/U Flange
Housing Material	Aluminum
Radome Material	PTFE
Finish	Gold Plated
Weight	0.2 Oz
Outline	AO-V02-030

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

#### **APPLICATIONS**

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

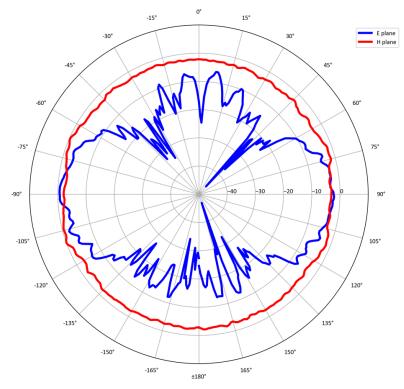
#### SUPPLEMENTAL DETAILS



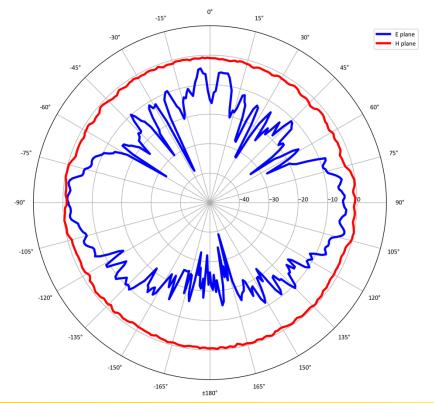


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Measured Antenna Patterns @ 50 GHz



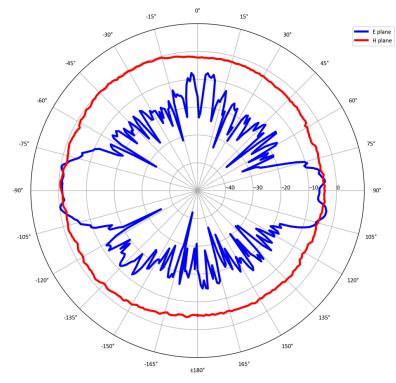
Measured Antenna Patterns @ 62.5 GHz

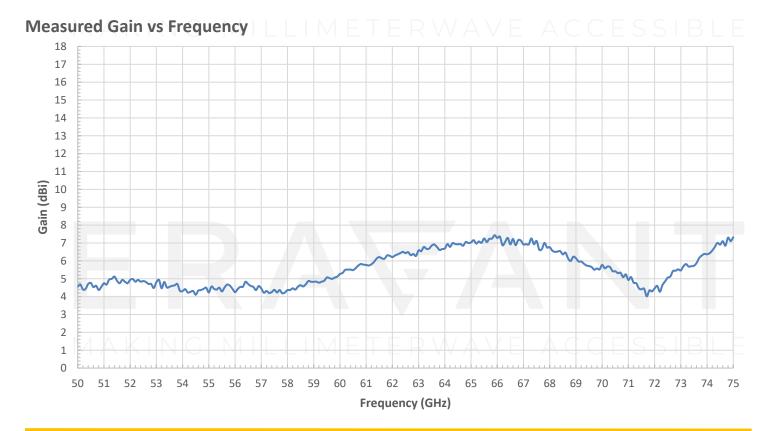


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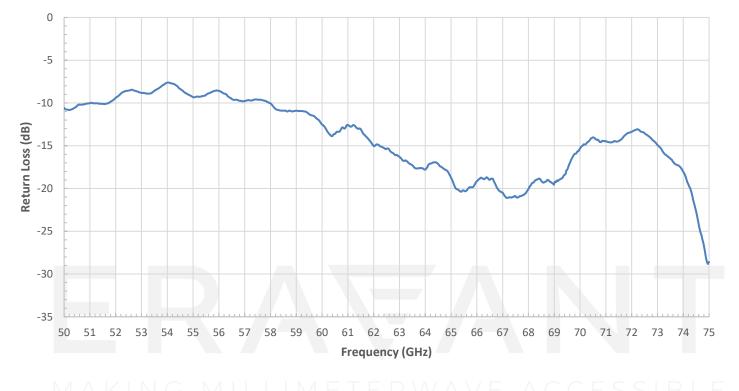




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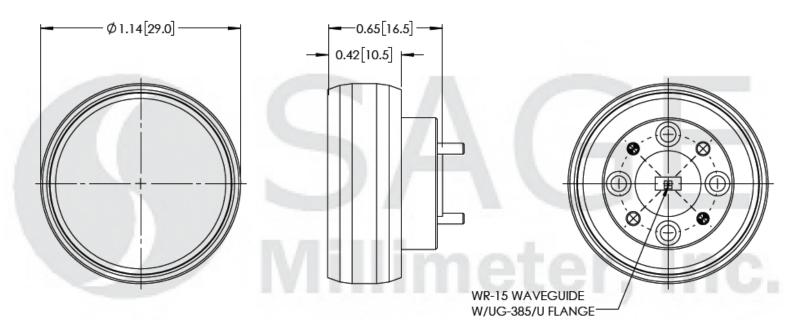
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## SAO-5037530230-15-S1



#### **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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