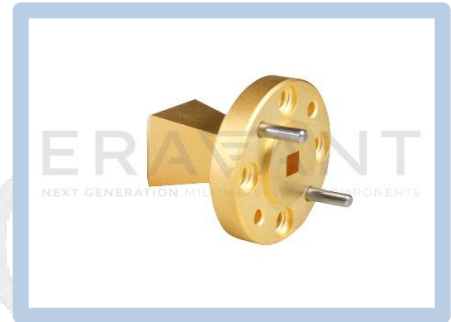




WR-15 Square Horn Antenna, 15 dBi Gain

Description:

Model SAR-1532-15-S2-148 is a square horn antenna operates from 50 GHz to 75 GHz. The antenna offers 15 dBi nominal gain and a typical half power beamwidth of 28 degrees on the E-plane and 33 degrees on the H-plane. The antenna supports linear polarized waveforms. The input of this antenna is a 0.148" x 0.148" square waveguide with UG-385/U-M flange.



Features:

- Square Waveguide Interface
- Precisely Machined and Gold Plated
- Linear Polarization
- High Return Loss
- Compact Size

Applications:

- Antenna Ranges
- Antenna Gain Measurements
- System Setups

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	50 GHz		75 GHz
Gain	13.6 dBi	15 dBi	17 dBi
Polarization		Linear	
3 dB Beamwidth, E-Plane		28°	
3 dB Beamwidth, H-Plane		33°	
Sidelobes, E-Plane		-13 dB	
Sidelobes, H-Plane		-36 dB	
Return Loss		9 dB	
Specification Temperature		+25 °C	
Operation Temperature	-40 °C		+85 °C

Mechanical Specifications:

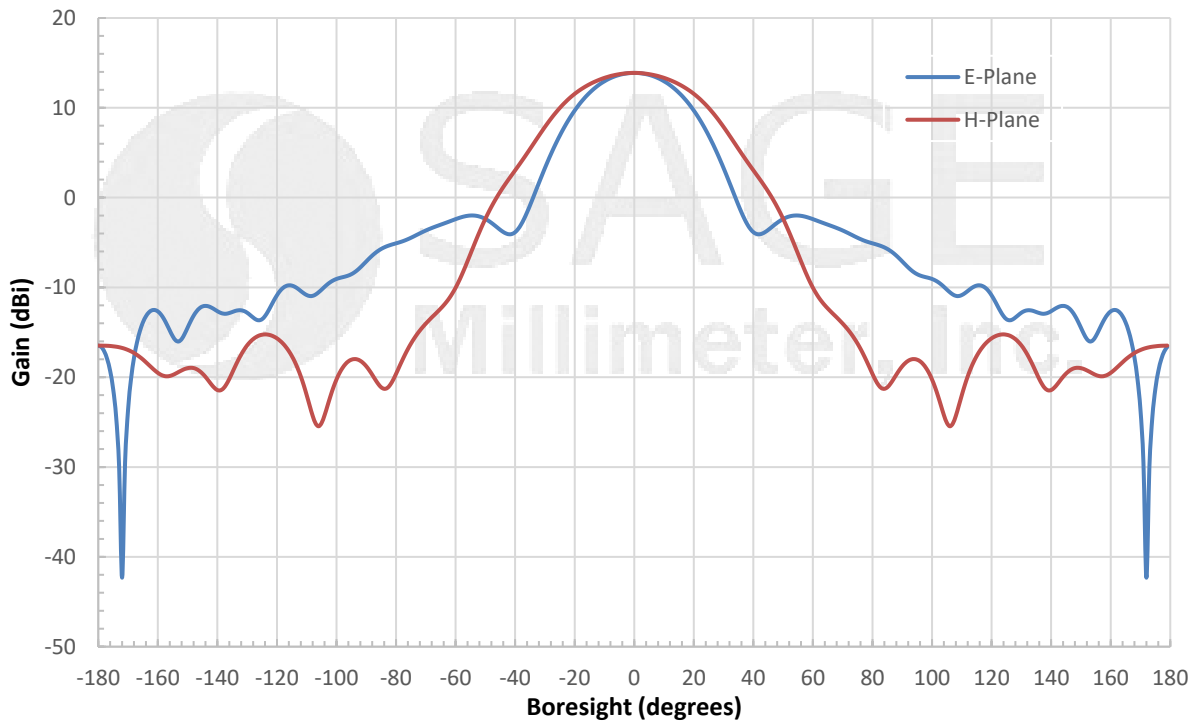
Item	Specification
Antenna Port	0.148" x 0.148" Square Waveguide
Flange Type	UG-385/U-M Flange
Size	0.75" (L) X 0.75" (Ø)
Material	Brass
Finish	Gold Plated
Outline	AR-V15-148
Weight	0.4 Oz



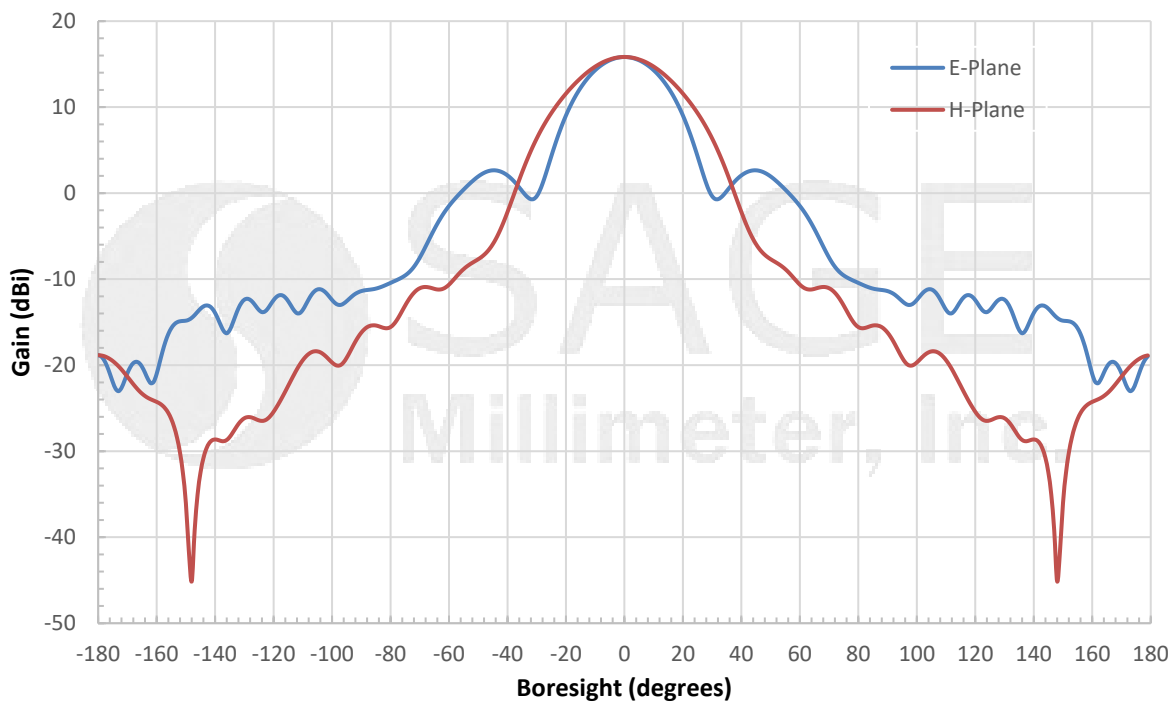


WR-15 Square Horn Antenna, 15 dBi Gain

Simulated Antenna Patterns @ 50 GHz



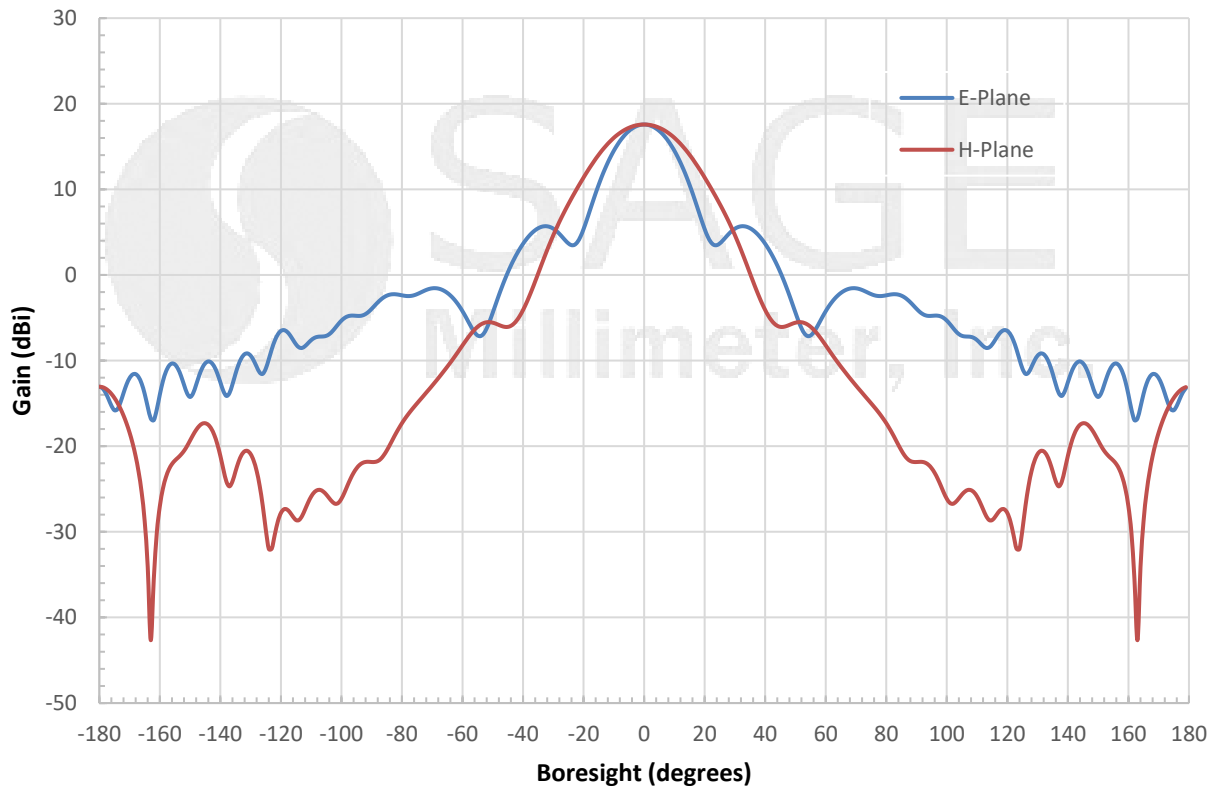
Simulated Antenna Patterns @ 62.5GHz



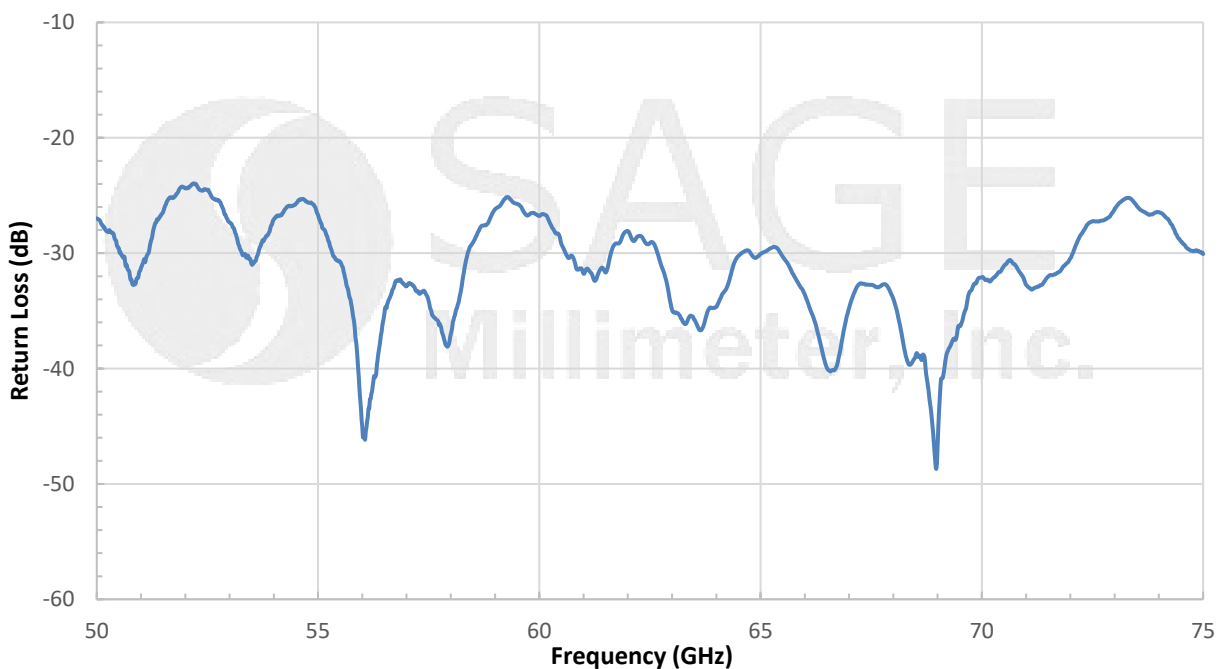


WR-15 Square Horn Antenna, 15 dBi Gain

Simulated Antenna Patterns @ 75 GHz



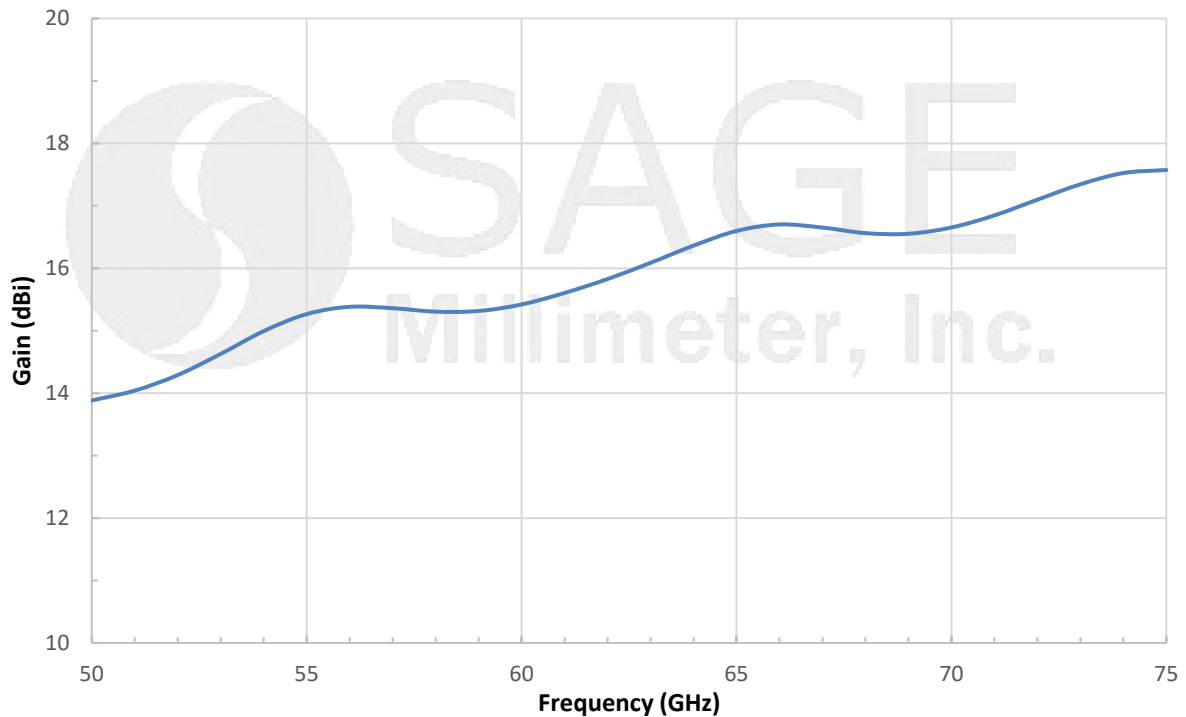
Measured Return Loss vs. Frequency



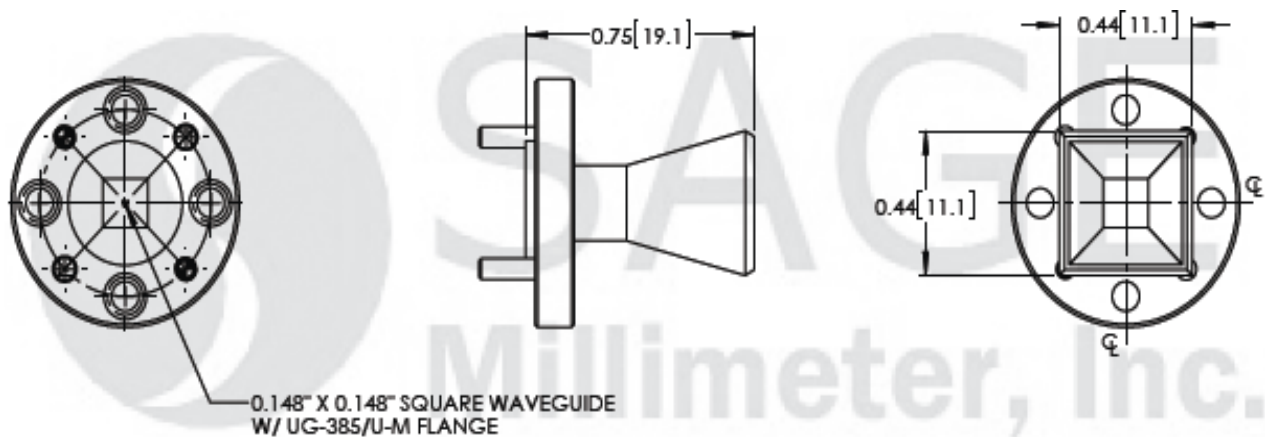


WR-15 Square Horn Antenna, 15 dBi Gain

Simulated Gain vs. Frequency



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



Note:

- Return loss is measured from a sample lot. Actual, data may vary unit to unit, slightly.
- Antenna pattern and gain data presented are simulated. Actual data may vary, slightly.
- Eravant reserves the right to change the information presented without notice.

Caution:

- Any foreign objects in the waveguide will cause performance degradation and possible device damage.

