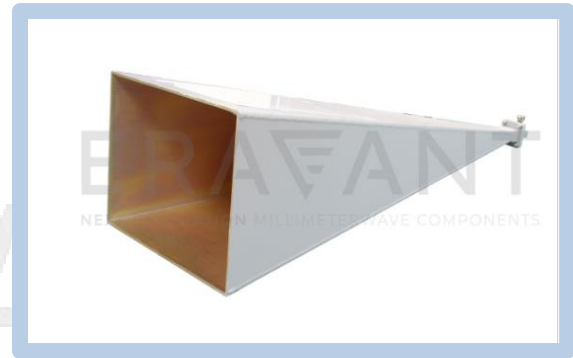




## WR-62 Pyramidal Horn Antenna, 25 dBi Gain with SMA Type Coax Input

### Description:

**Model SAR-2510-62SF-R3 & SAR-2510-62SM-R3** are Ku-band pyramidal horn antenna with a right angle (90°) SMA type coax connector to cover the frequency range of 11.9 GHz to 18.0 GHz. The antenna offers 25 dBi nominal gain and a typical half power beamwidth of 9 degrees on the E-plane and 11 degrees on the H-plane. The antenna supports linear polarized waveforms.



### Features:

- Inline Configuration
- Linear Polarization
- DC Short Circuit at Input

### Applications:

- Antenna Ranges
- Antenna Gain Measurements
- System Setups

### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	11.9 GHz		18 GHz
Gain		25 dBi	
Polarization		Linear	
3 dB Beamwidth, E-Plane		9°	
3 dB Beamwidth, H-Plane		11°	
Side Lobes, E-Plane		-13 dB	
Side Lobes, H-Plane		-36 dB	
Return Loss		18 dB	
Power Handling			50 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

### Mechanical Specifications:

Item	Specification
Antenna Port (F)	SMA Type Female for Model Number: SAR-2510-62SF-R3
Antenna Port (M)	SMA Type Male for Model Number: SAR-2510-62SM-R3
Material	Aluminum
Connector Material	Stainless Steel
Finish	Anti-Corrosion Paint
Weight	2.63 lbs
Size	21.54" (L) X 6.89" (W) X 4.72" (H)
Outline	AR-6C3-R-H1

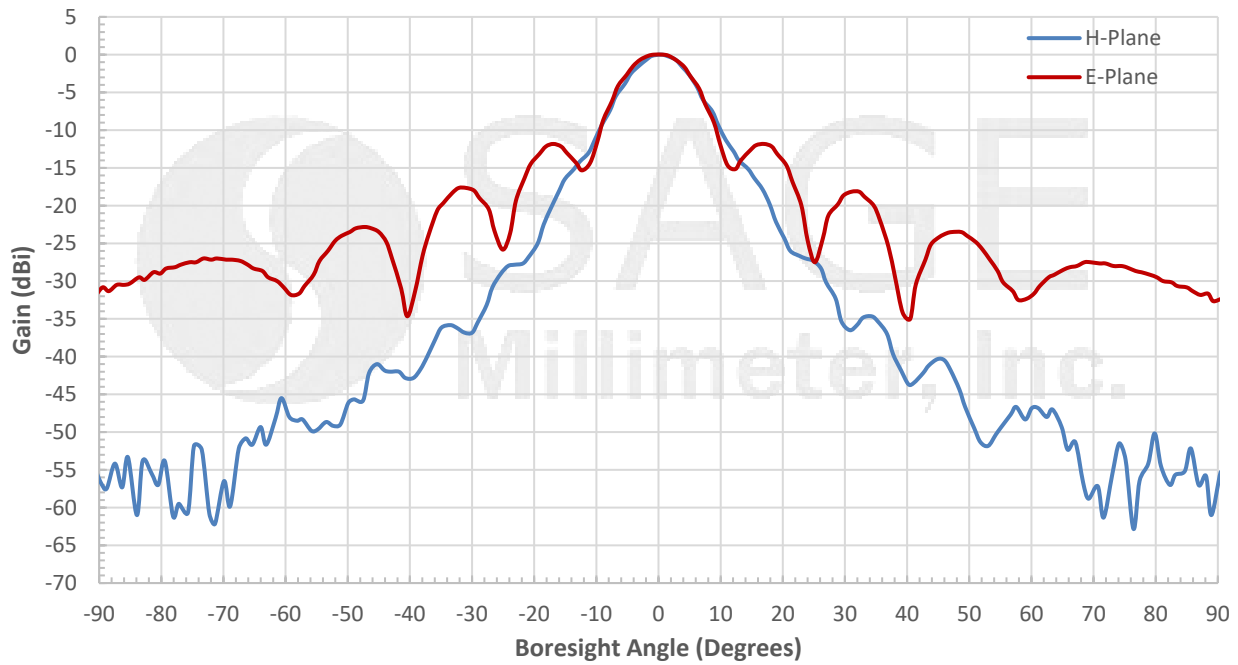


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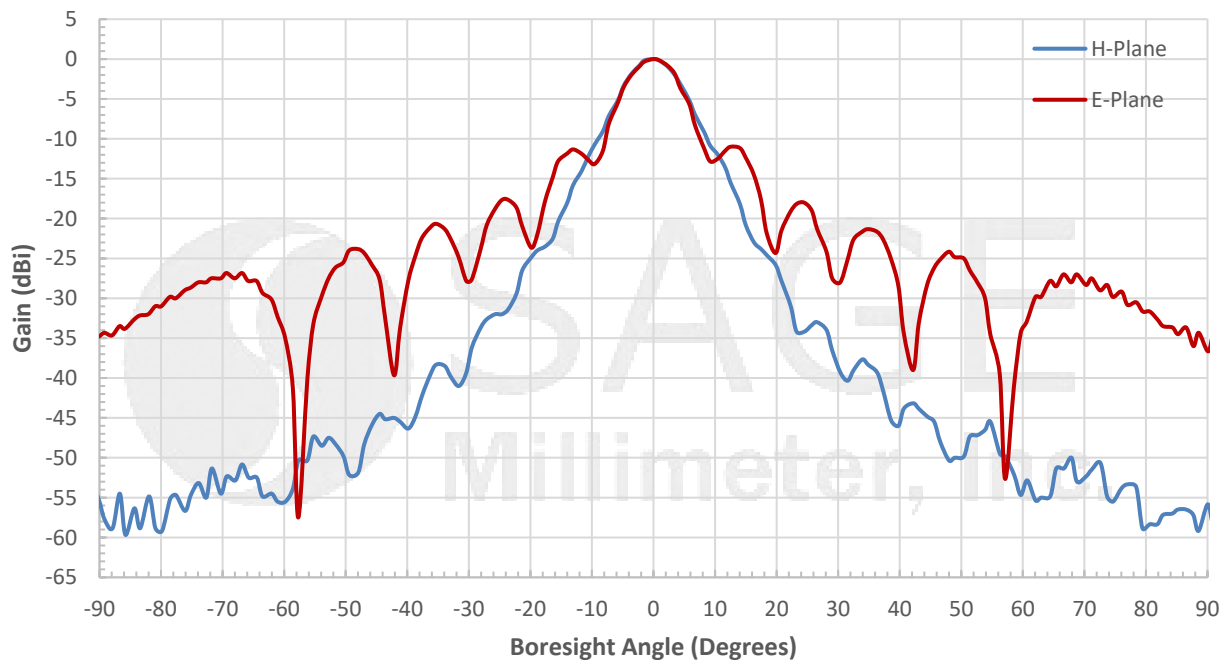


## WR-62 Pyramidal Horn Antenna, 25 dBi Gain with SMA Type Coax Input

### Simulated Antenna Patterns @ 11.9 GHz



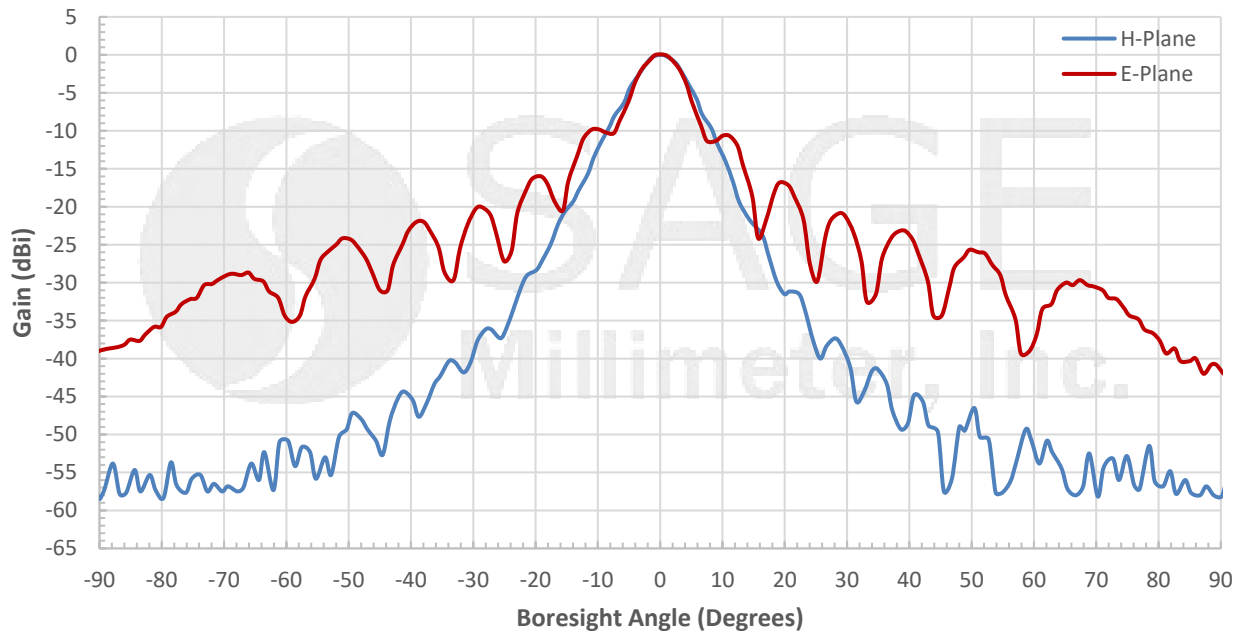
### Simulated Antenna Patterns @ 14.95 GHz



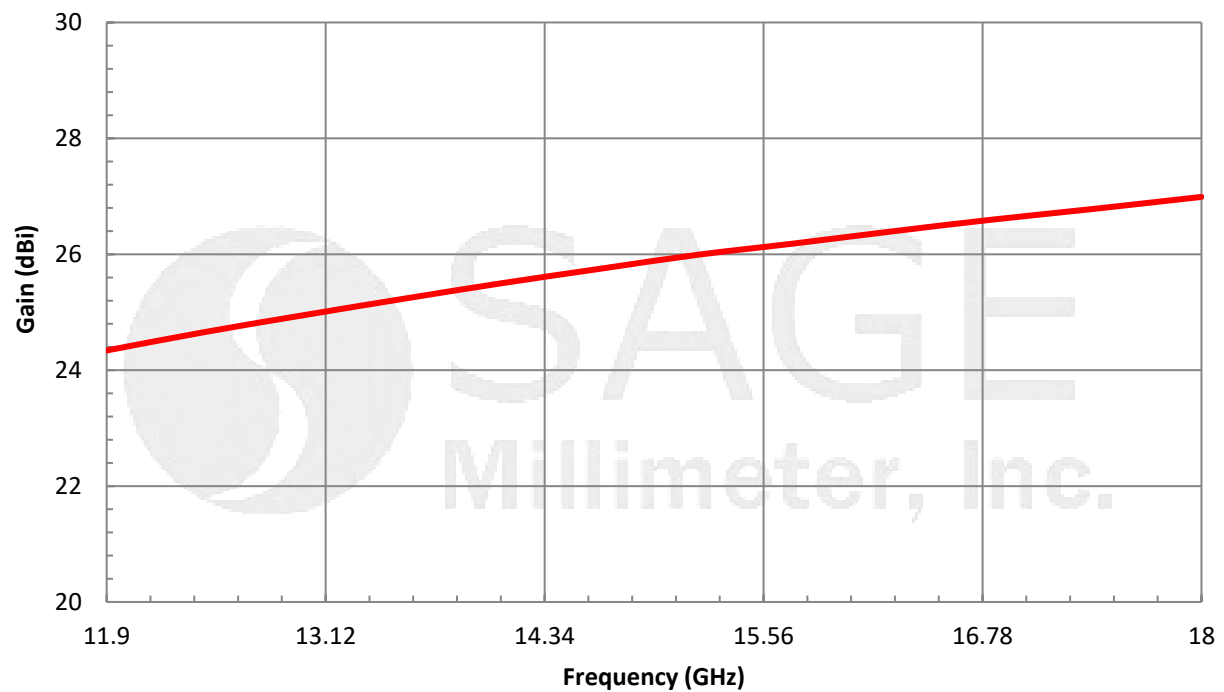


## WR-62 Pyramidal Horn Antenna, 25 dBi Gain with SMA Type Coax Input

### Simulated Antenna Patterns @ 18 GHz



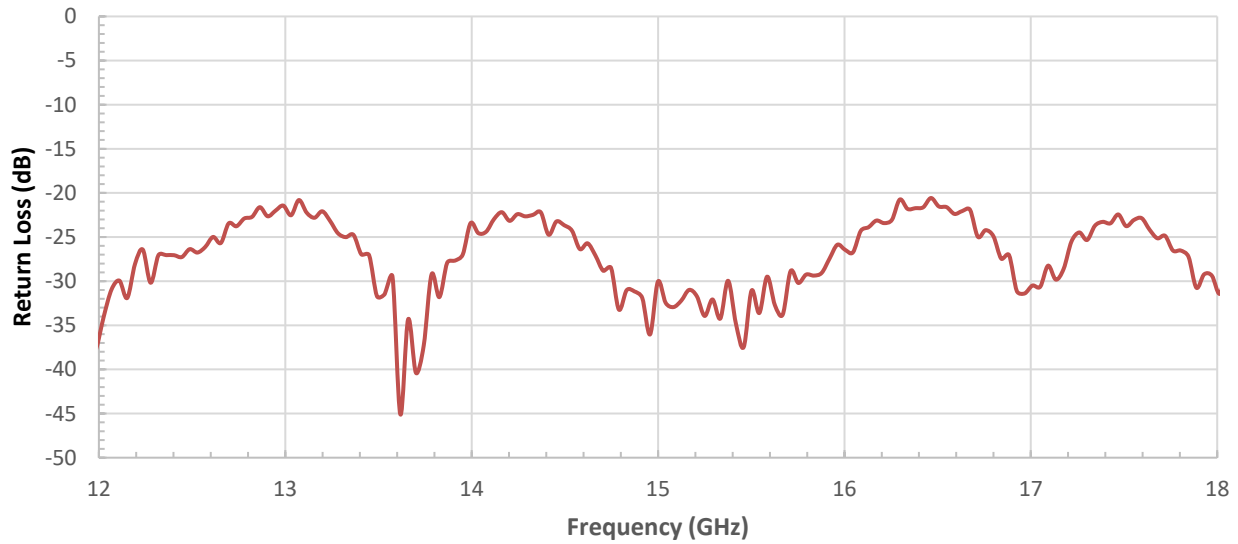
### Measured Gain vs. Frequency





## WR-62 Pyramidal Horn Antenna, 25 dBi Gain with SMA Type Coax Input

### Typical Measured Return Loss vs Frequency



### Measured Gain vs. Frequency in Tabular Format

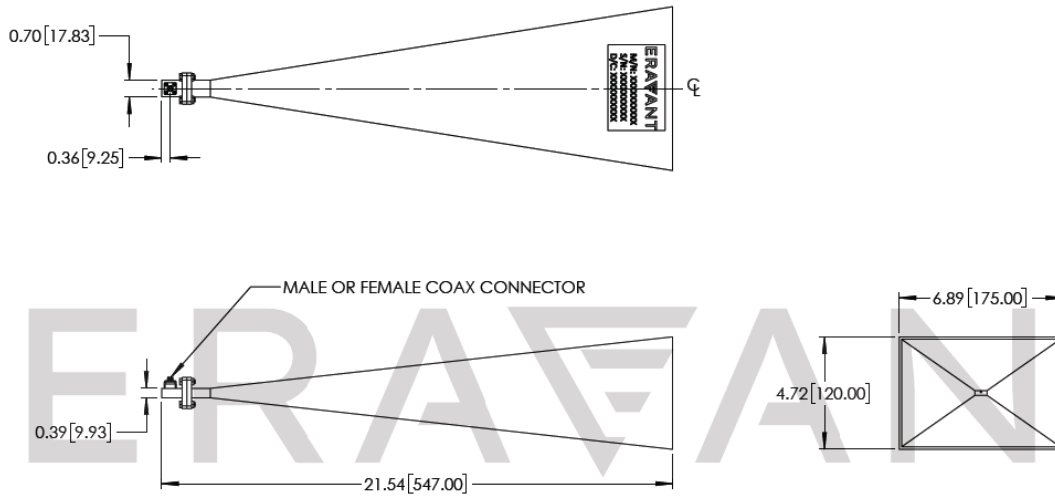
Frequency (GHz)	Gain (dBi)	Frequency (GHz)	Gain (dBi)
11.90	24.34	15.19	25.99
12.45	24.66	15.74	26.19
13.00	24.95	16.29	26.40
13.55	25.23	16.84	26.60
14.10	25.50	17.39	26.78
14.65	25.75	18.00	26.99





## WR-62 Pyramidal Horn Antenna, 25 dBi Gain with SMA Type Coax Input

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



### Note:

- All data presented is collected from a sample lot. Actual data may vary unit to unit, slightly.
- All testing was performed under +25 °C room temperature.
- Eravant reserves the right to change the information presented without notice.

### Caution:

- Proper torque,  $8.0 \pm 0.15$  inch-pounds ( $0.90 \pm 0.02$  Nm), should be applied. **SAGE Millimeter torque wrench, model SCH-08008-S1, is highly recommended.**
- Any foreign objects in the horn antenna will cause performance degradation and possible device damage.

