

SAY-3433632750-28-U5-MP

Ka Band Monopulse Cassegrain Antenna, 34 to 36 GHz, 27 dBi

SAY-3433632750-28-U5-MP is a Monopulse Cassegrain antenna that operates from 34 to 36 GHz, and has a half power beamwidth of 5.0 degrees. The antenna offers a nominal gain of 27 dBi in the Sum Port, and 21 dBi in the H-Port and V-Port. The antenna has three WR-28 waveguides with UG-599/U compatible flanges, which are designated as Sum Port, V-Port, and H-Port. The antenna can support linear polarized waveforms and is designed and manufactured for indoor applications. The higher gain version is offered under the model **SAY-3433634310-28-U5-MP**.



Electrical Specifications:

| Parameter | Minimum | Typical | Maximum |
|---------------------------|---------|---------|---------|
| Frequency | 34 GHz | | 36 GHz |
| Gain, Sum Port | | 27 dBi | |
| Sum 3 dB Beamwidth | | 5.0° | |
| Gain, Difference V-Port | | 21 dBi | |
| Gain, Difference H-Port | | 21 dBi | |
| Null Depth | | 30 dB | |
| Polarization | | Linear | |
| Sidelobes, E-Plane | | 10 dB | |
| Sidelobes, H-Plane | | 10 dB | |
| Return Loss | | 10 dB | |
| Specification Temperature | | +25°C | |
| Operating Temperature | -40°C | | +85°C |

Mechanical Specifications:

| Item | Specification |
|-----------------------|---|
| RF Connectors | WR-28 Waveguide with UG-599/U Compatible Flange |
| RF Connector Material | Aluminum |
| RF Connector Finish | Black Painted |
| Reflector Material | Aluminum |
| Reflector Finish | Chem Film |
| Reflector Diameter | 4.02" |
| Outline | AY-RA27-04-MP-BX1 |

ECCN

EAR99

FEATURES

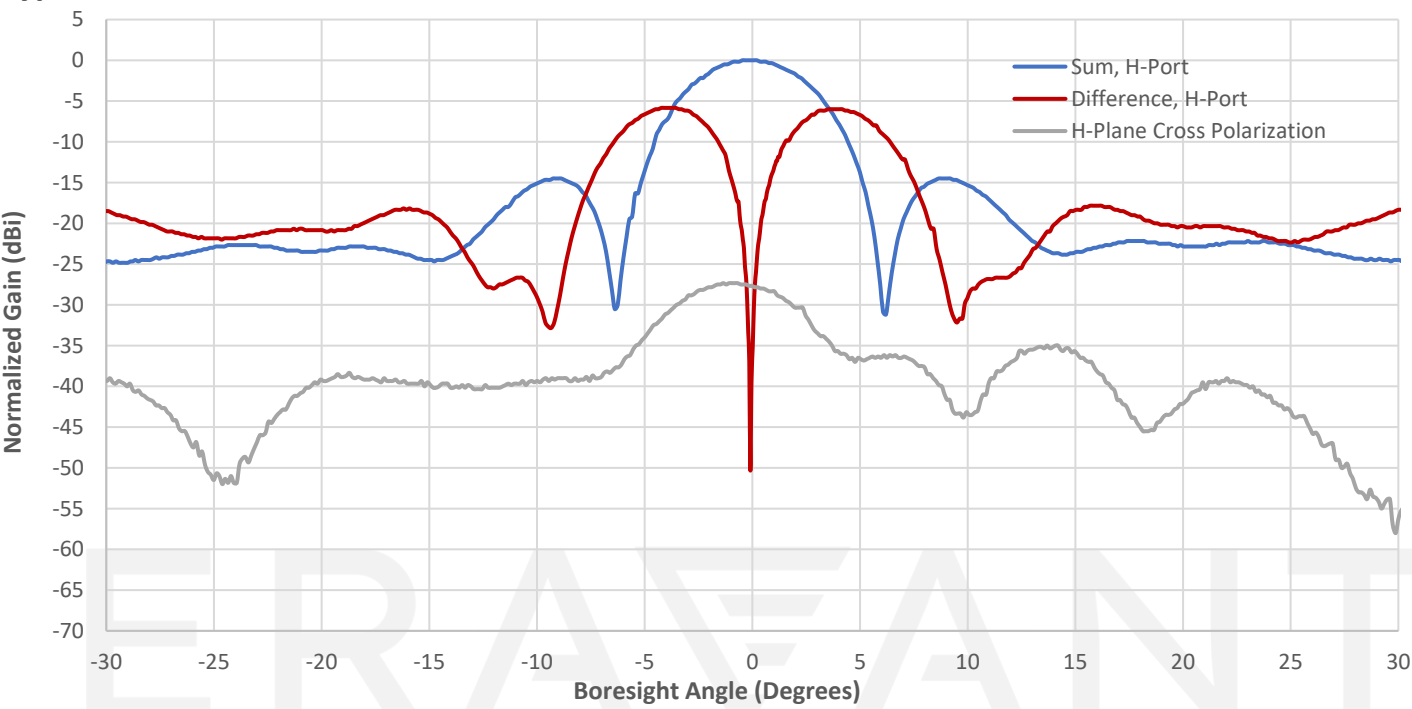
- Rugged Configuration
- Good Null Depth
- High Performance

APPLICATIONS

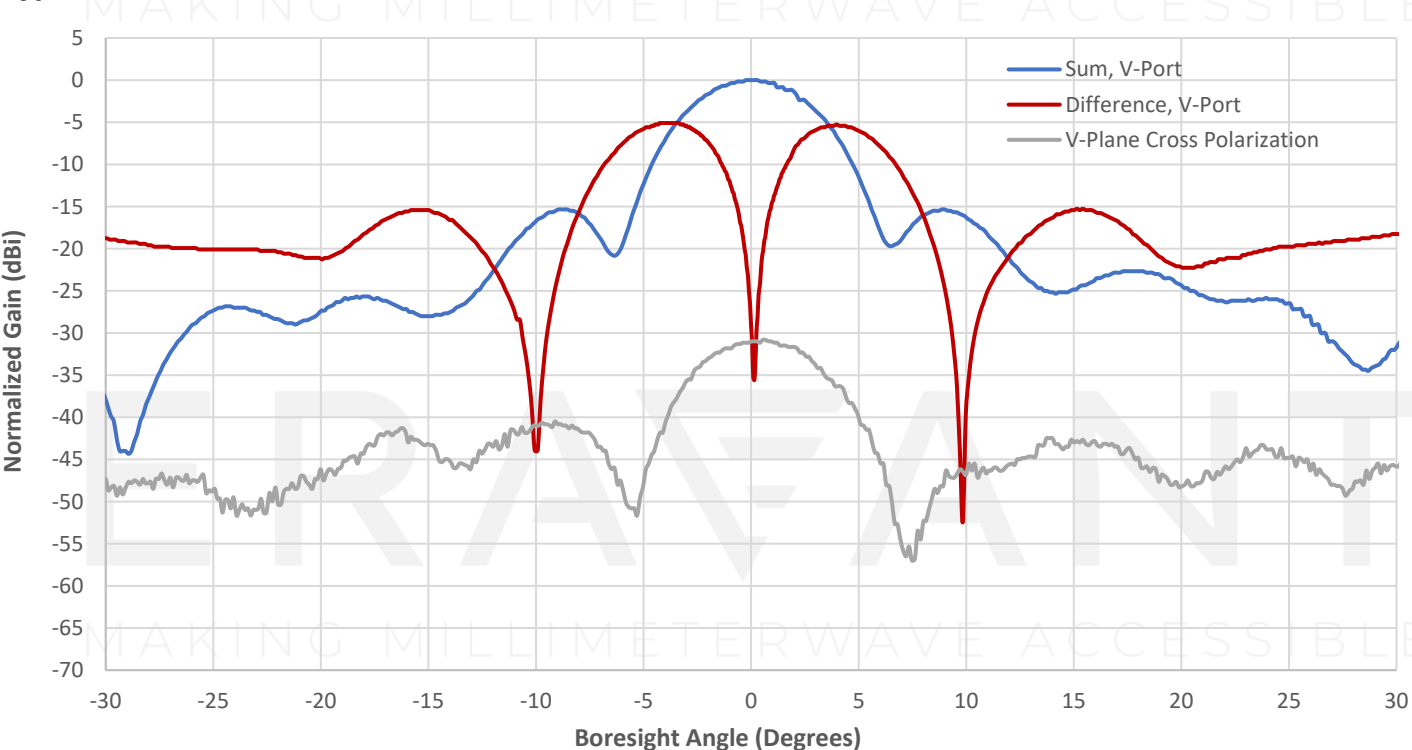
- 5G Systems
- Communication Systems
- Radar Systems

SUPPLEMENTAL DETAILS

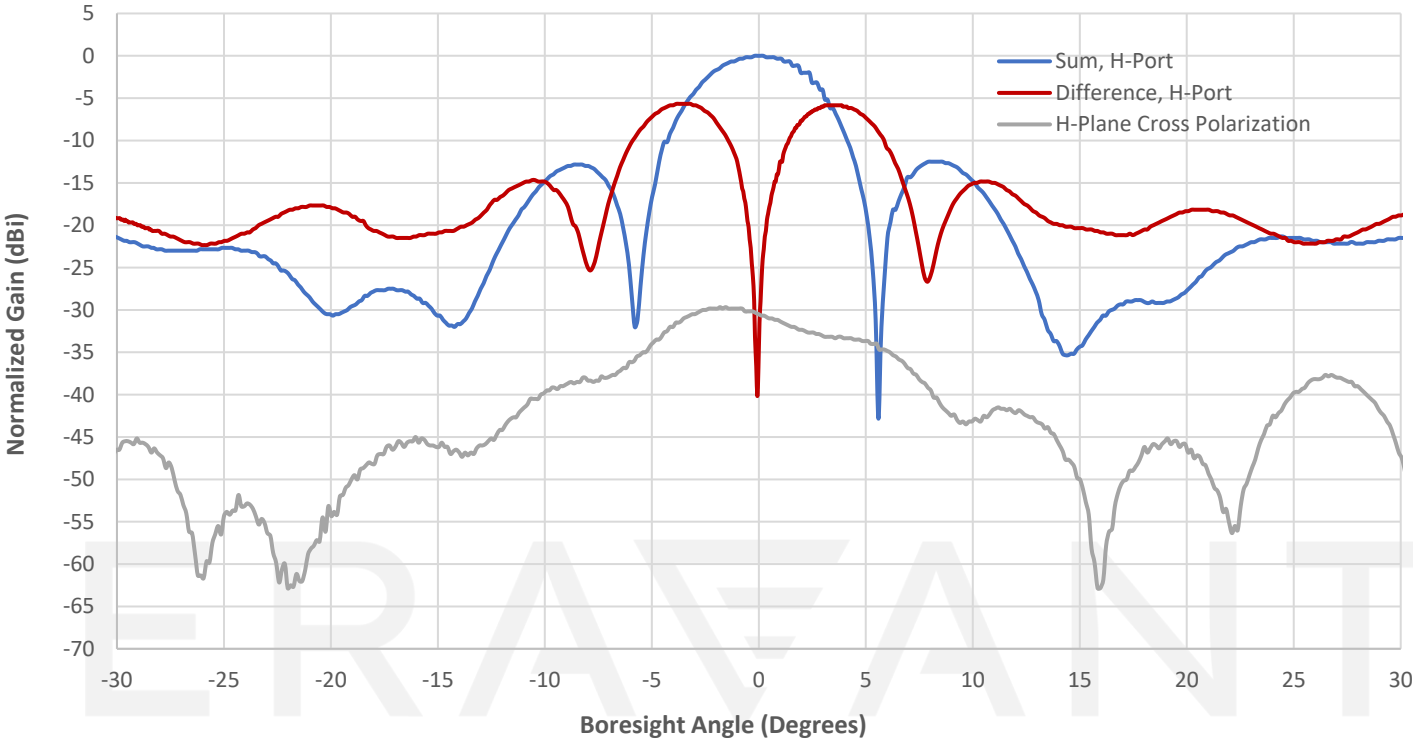
Typical Measured H-Plane @ 34 GHz



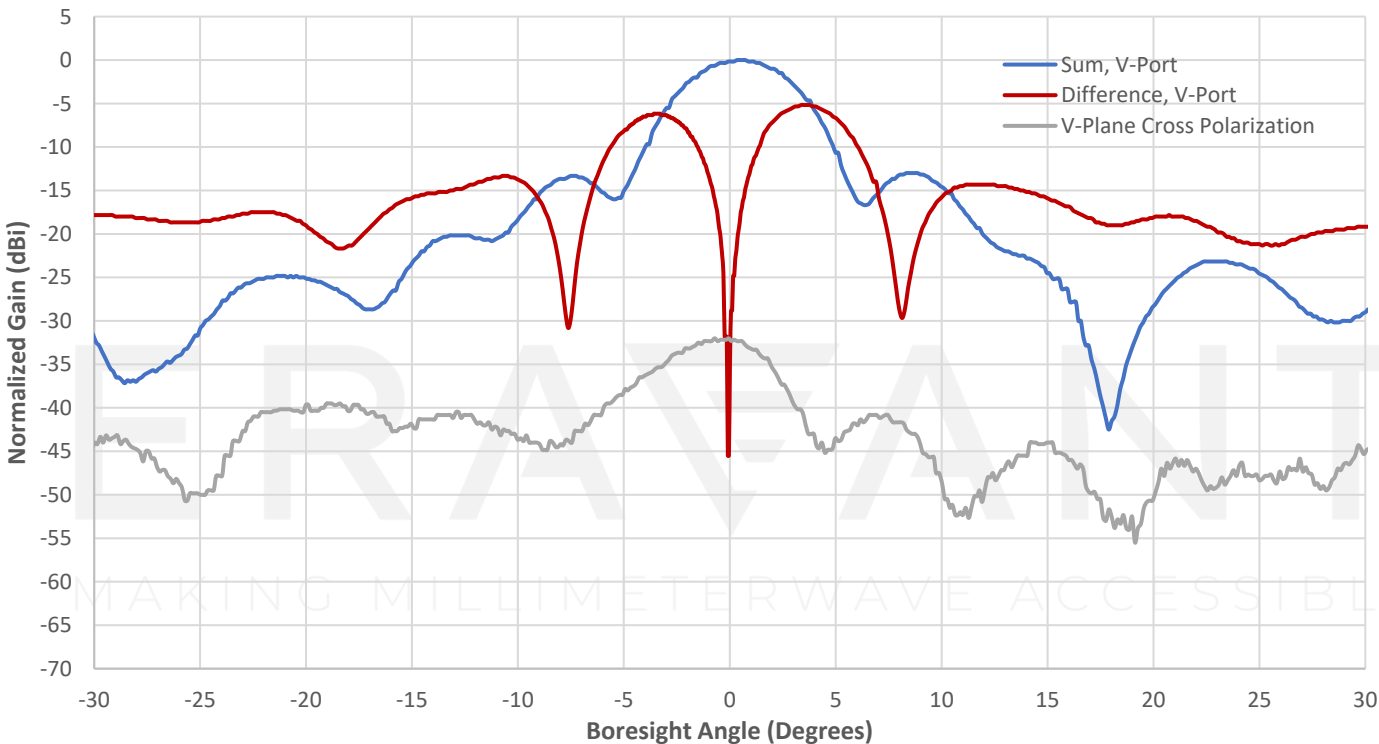
Typical Measured E-Plane @ 34 GHz



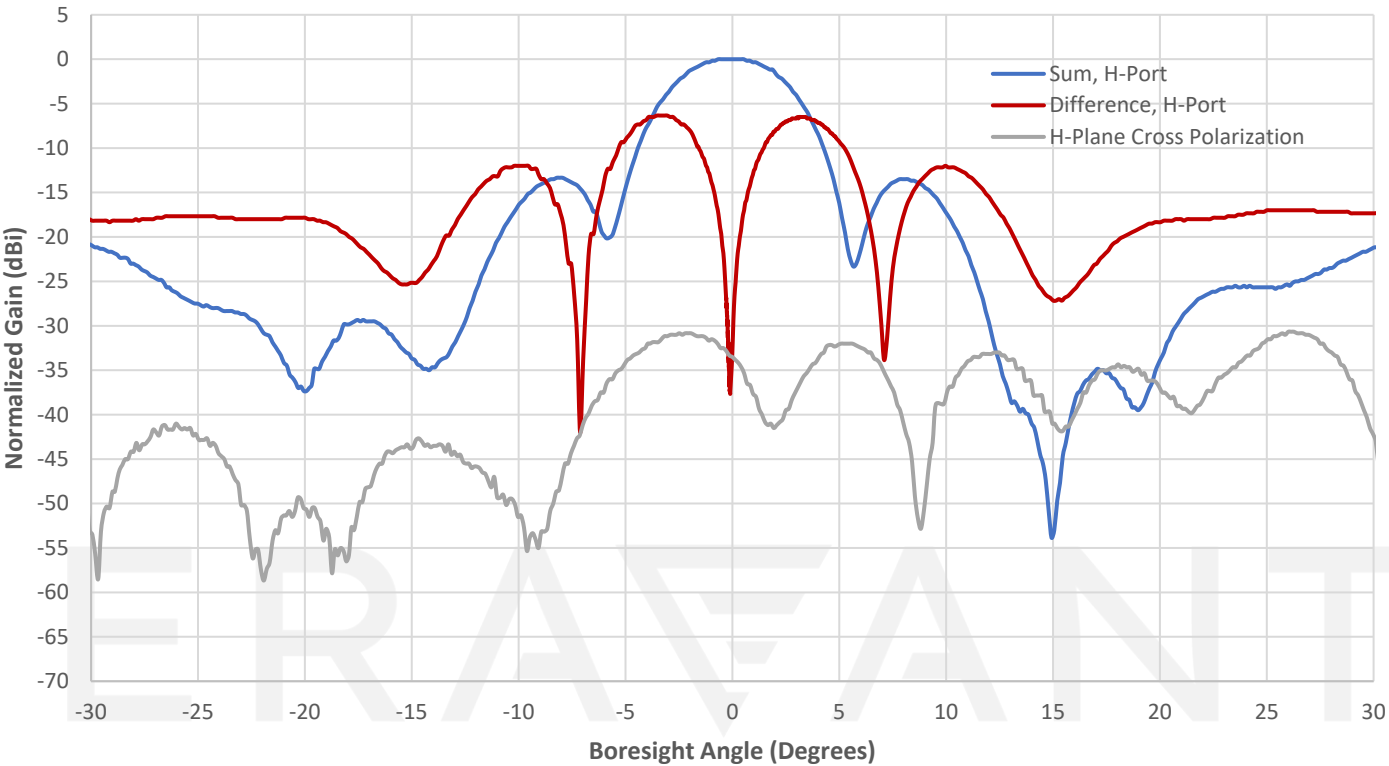
Typical Measured H-Plane @ 35 GHz



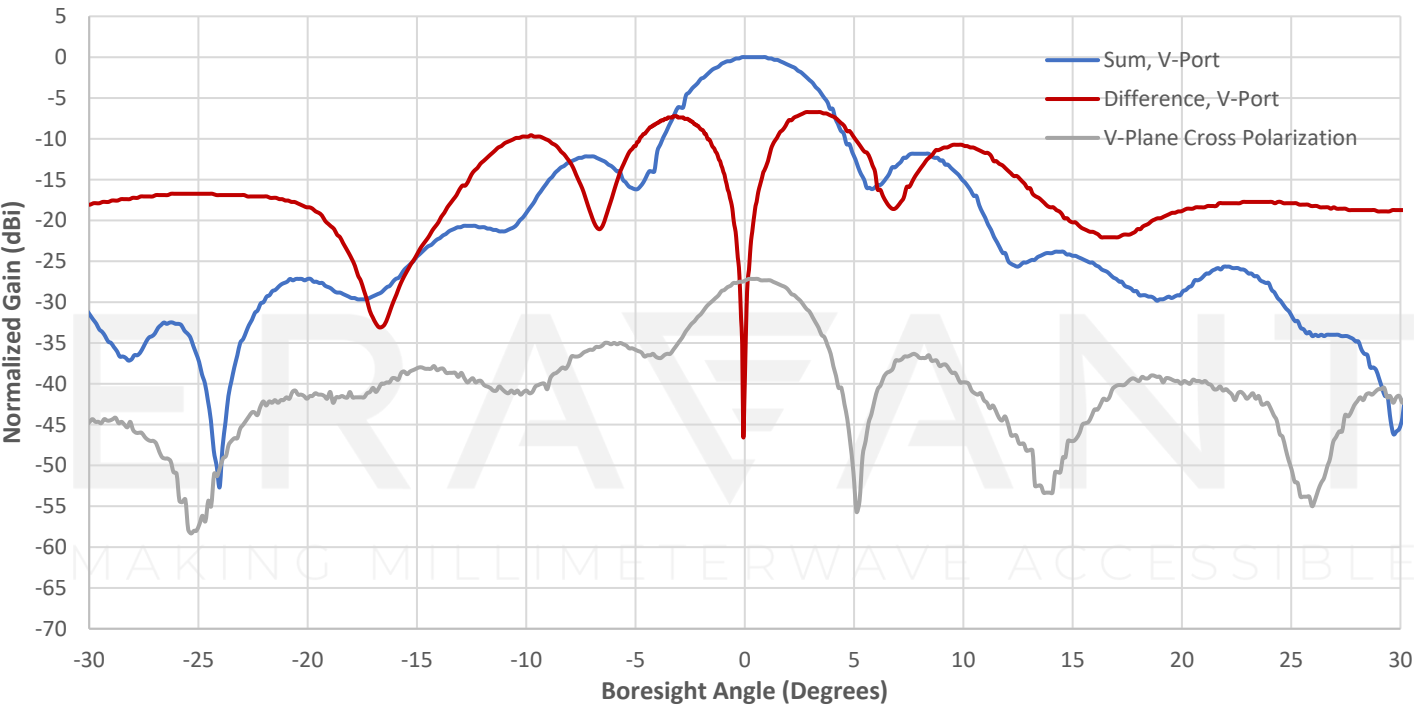
Typical Measured E-Plane @ 35 GHz



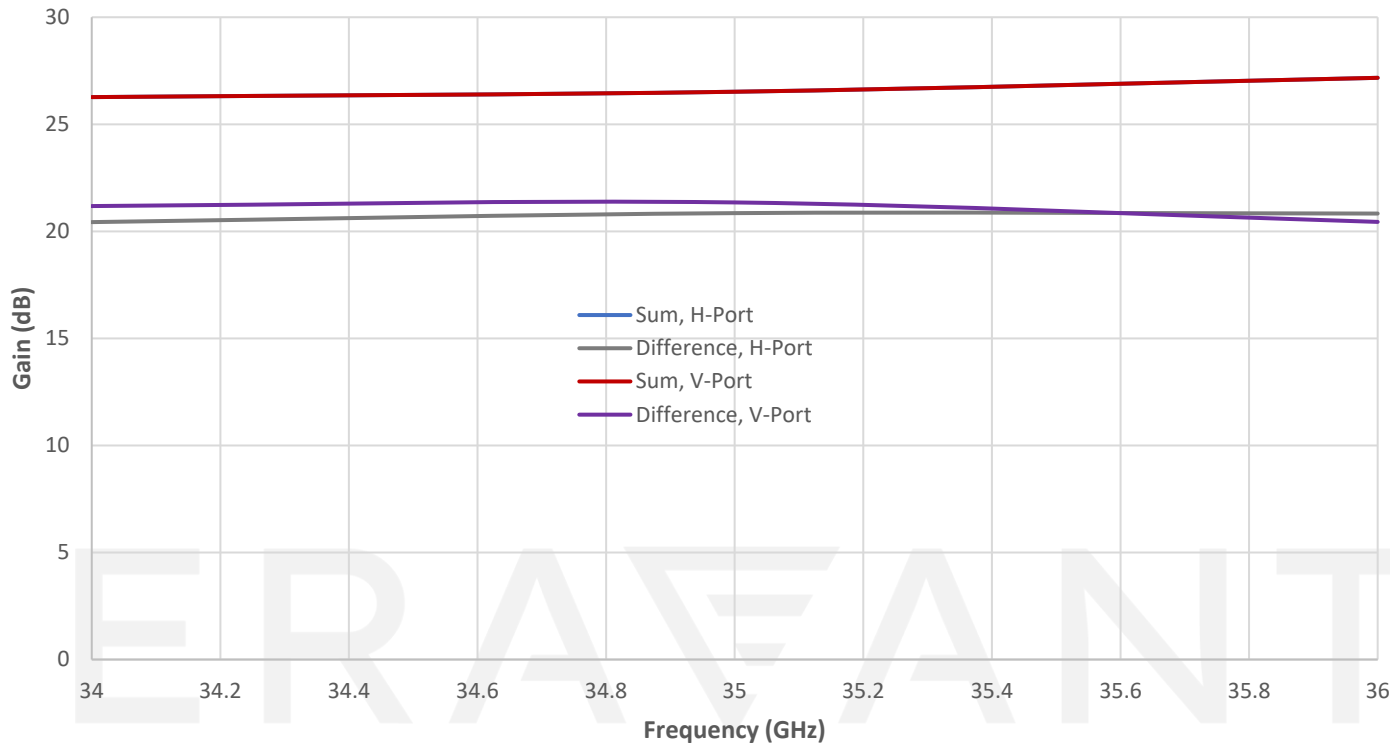
Typical Measured H-Plane @ 36 GHz



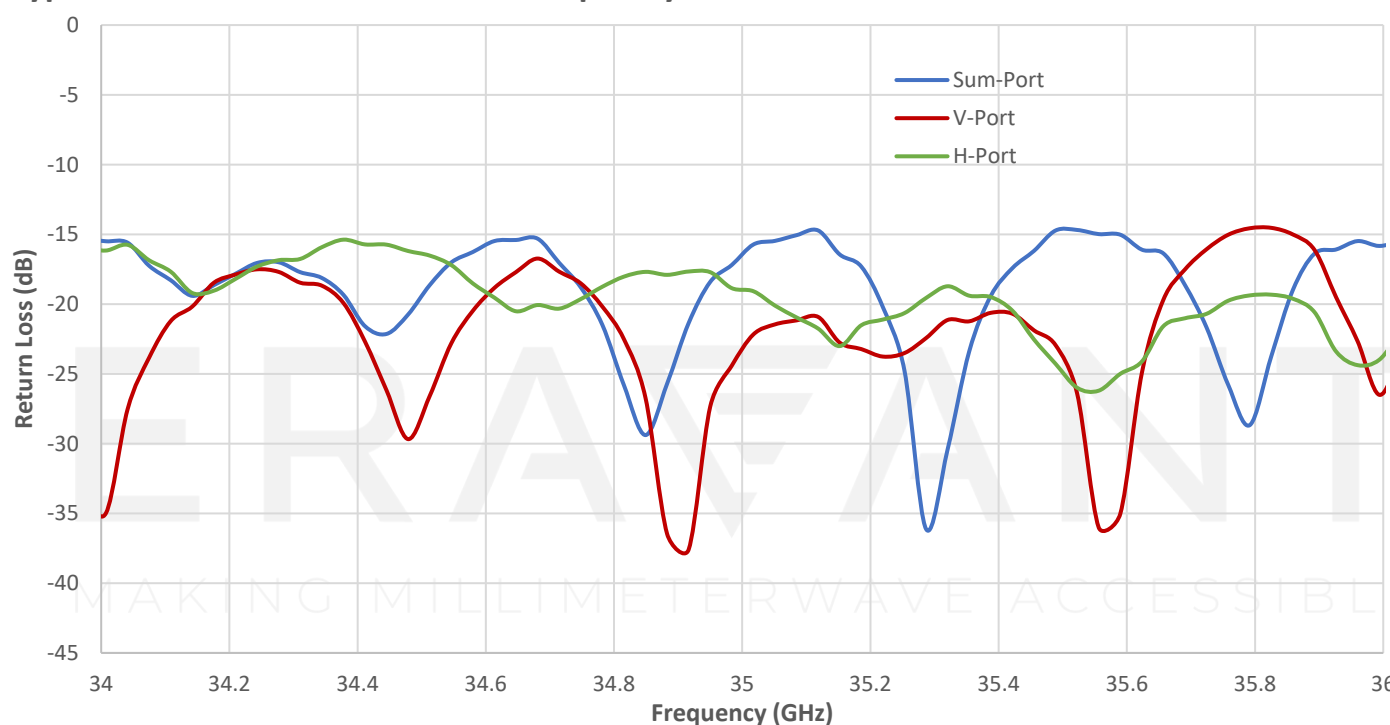
Typical Measured E-Plane @ 36 GHz



Typical Measured Gain vs Frequency

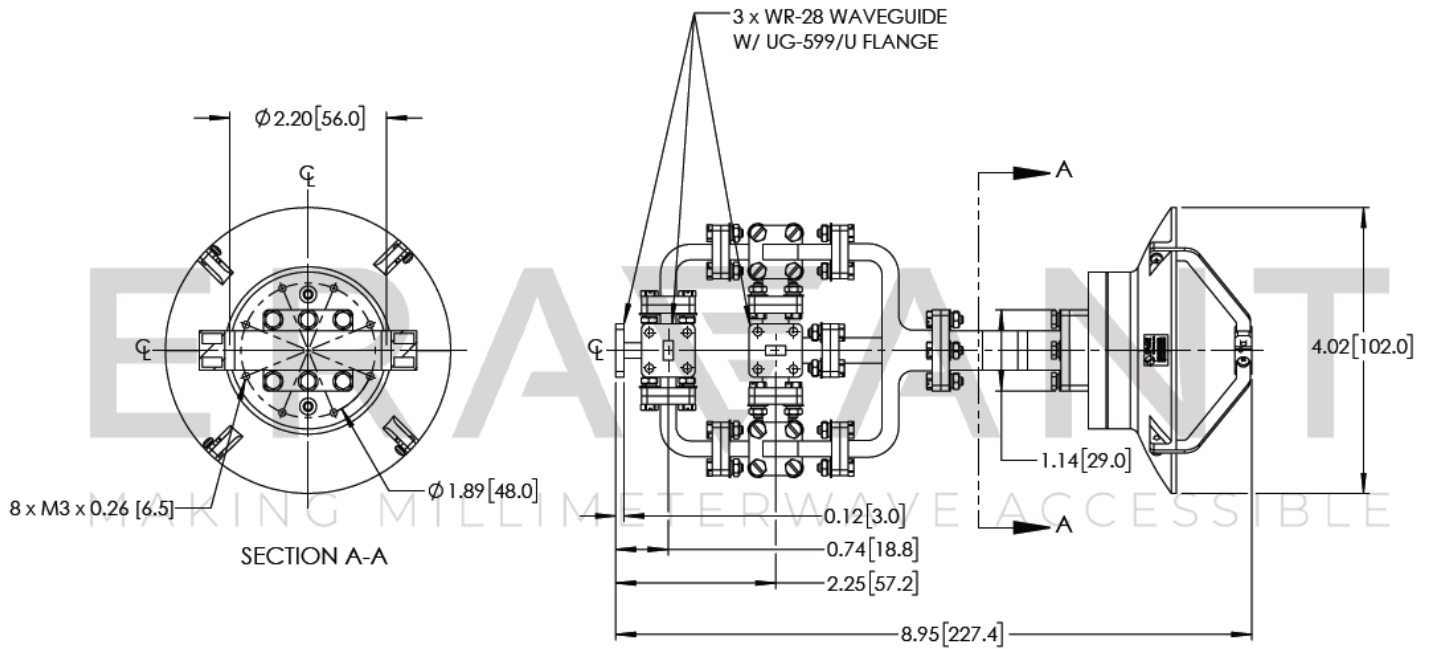


Typical Measured Return Loss vs Frequency



SAY-3433632750-28-U5-MP

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 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 antenna will cause performance degradation and possible device damage.
- For 1 mm connectors proper torque should be applied: 4.0 ± 0.15 inch-pounds (0.45 ± 0.02 Nm). Torque wrench model SCH-06004-S1 is highly recommended.
- For 1.35 mm, 1.85 mm, 2.4 mm, 2.92 mm, and SMA connectors proper torque should be applied: 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm). Torque wrench model SCH-08008-S1 is highly recommended.