SAW-3533532716-28-L2-WR

Ka Band Slotted Waveguide Array Antenna, 35 GHz, 27 dBi, 16° x 2°

SAW-3533532716-28-L2-WR is a weather resistant Ka-band slotted waveguide array antenna that operates from 34.75 to 35.25 GHz. The antenna offers 27 dBi nominal gain and a typical half power beamwidth of 16 degrees on the E-plane and 2 degrees on the H-plane, respectively. Compared to microstrip antennas, the slotted waveguide array antenna offers higher aperture efficiency. The antenna also offers typical side lobes of -15 dB or better and supports linear, vertical polarized waveforms. The input of this antenna is a WR-28 waveguide with UG-599/U flange.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	34.75 GHz		35.25 GHz
Gain		27 dBi	
Polarization		Linear, Vertical	
3 dB Beamwidth, Vertical		16°	
3 dB Beamwidth, Horizontal		2°	
Side Lobe Level		-15 dB	
Return Loss		13 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

Mechanical Specifications:

Item	Specification
Antenna Ports	WR-28 Waveguide
Flange Type	UG-599/U Grooved Compatible Flange
Body Material	Aluminum
Body Surface Finish	Gold Plated
Radome Material	Clear LEXAN
Weight	10.0 lb
Size	11.84” (L) x 3.85” (W) x 0.93” (H)
Outline	AW-RA-0216

ECCN

EAR99

FEATURES

- Rectangular Waveguide Interface
- High Aperture Efficiency
- Flat and Low Profile
- Linear Polarization
- High Return Loss
- Weather Resistance

APPLICATIONS

- Communication Systems
- Radar Systems

SUPPLEMENTAL DETAILS

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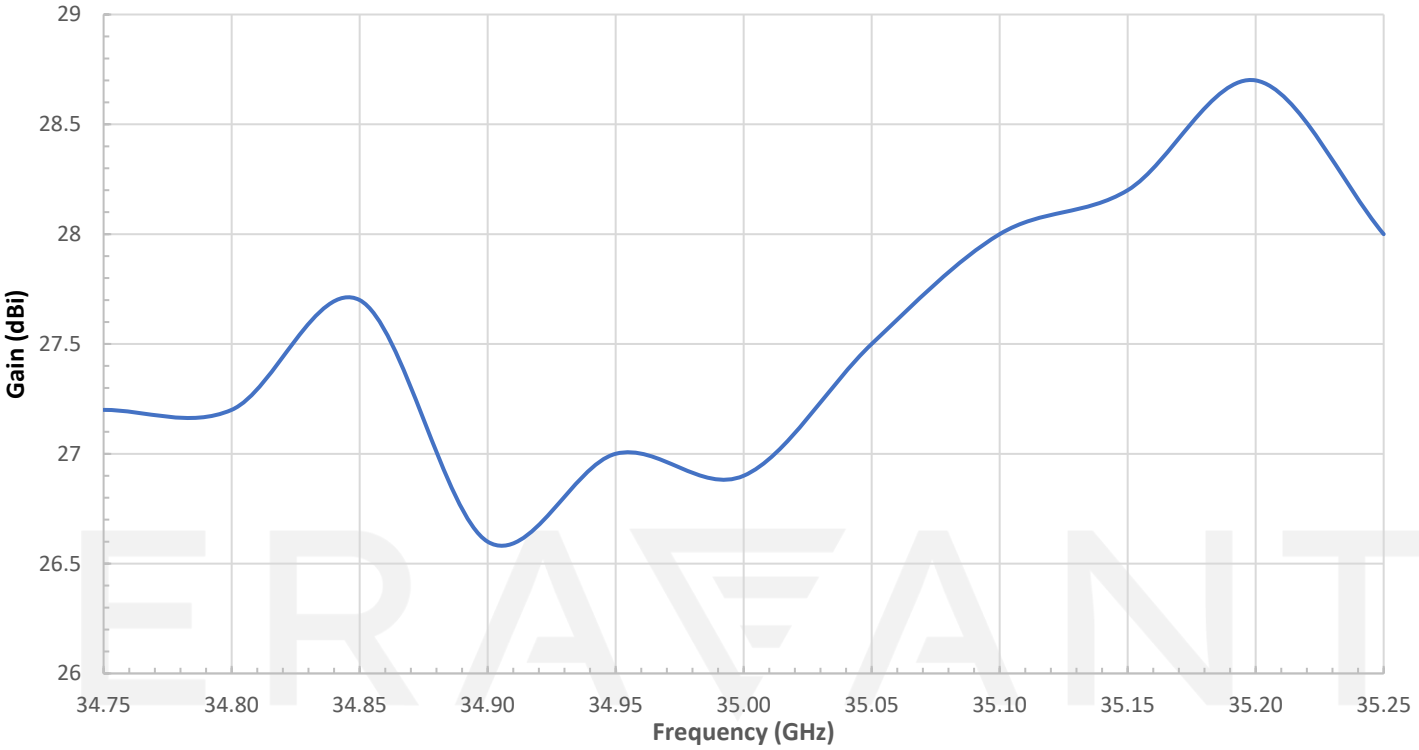
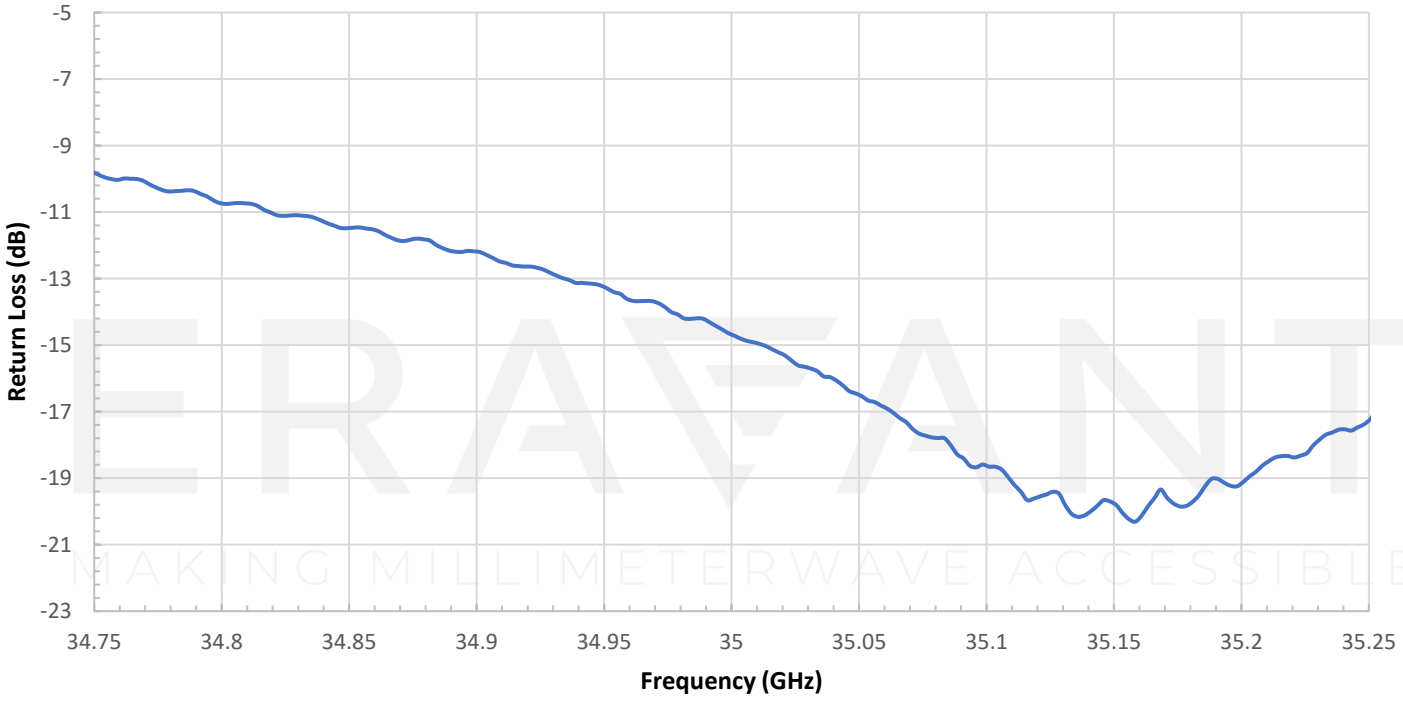
Gain vs. Frequency for SAW-3533532716-28-L2-WR



Return Loss vs. Frequency for SAW-3533532716-28-L2-WR



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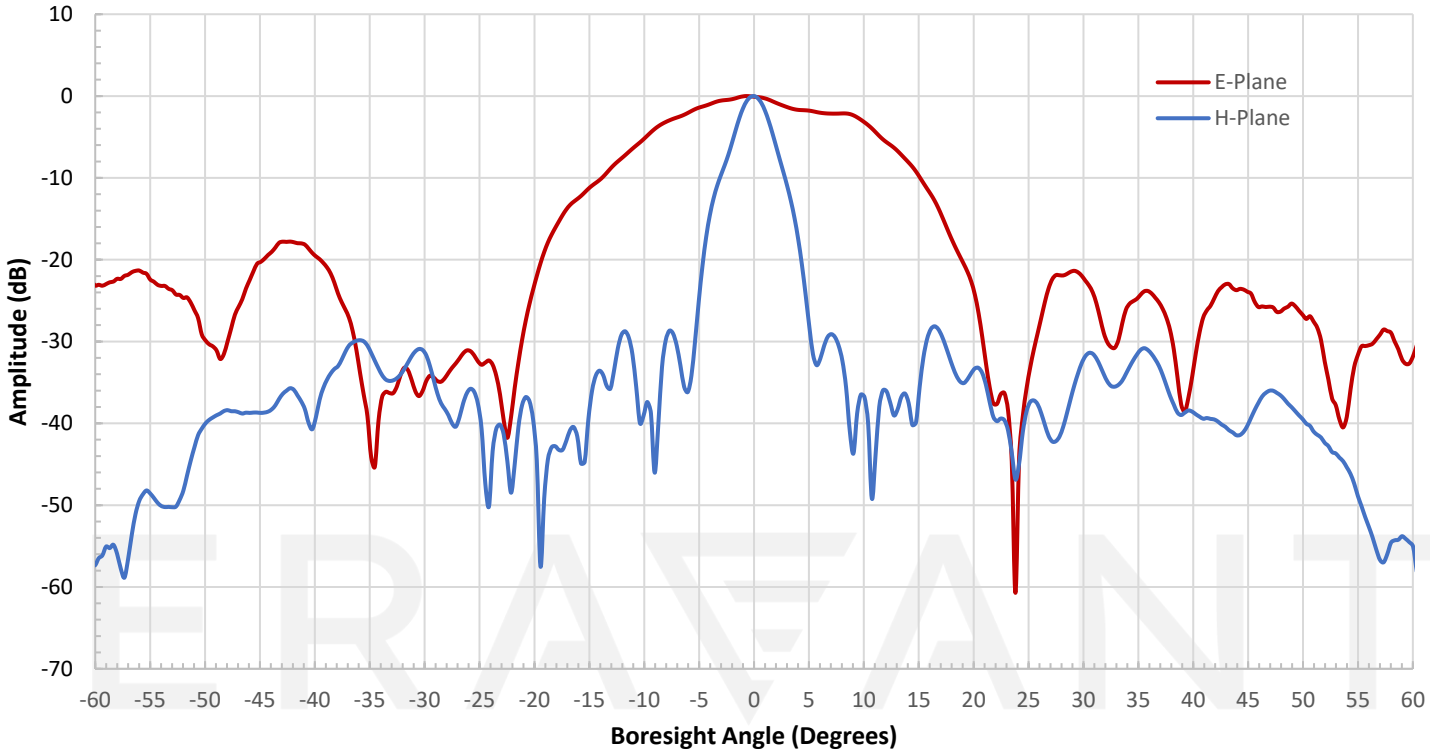
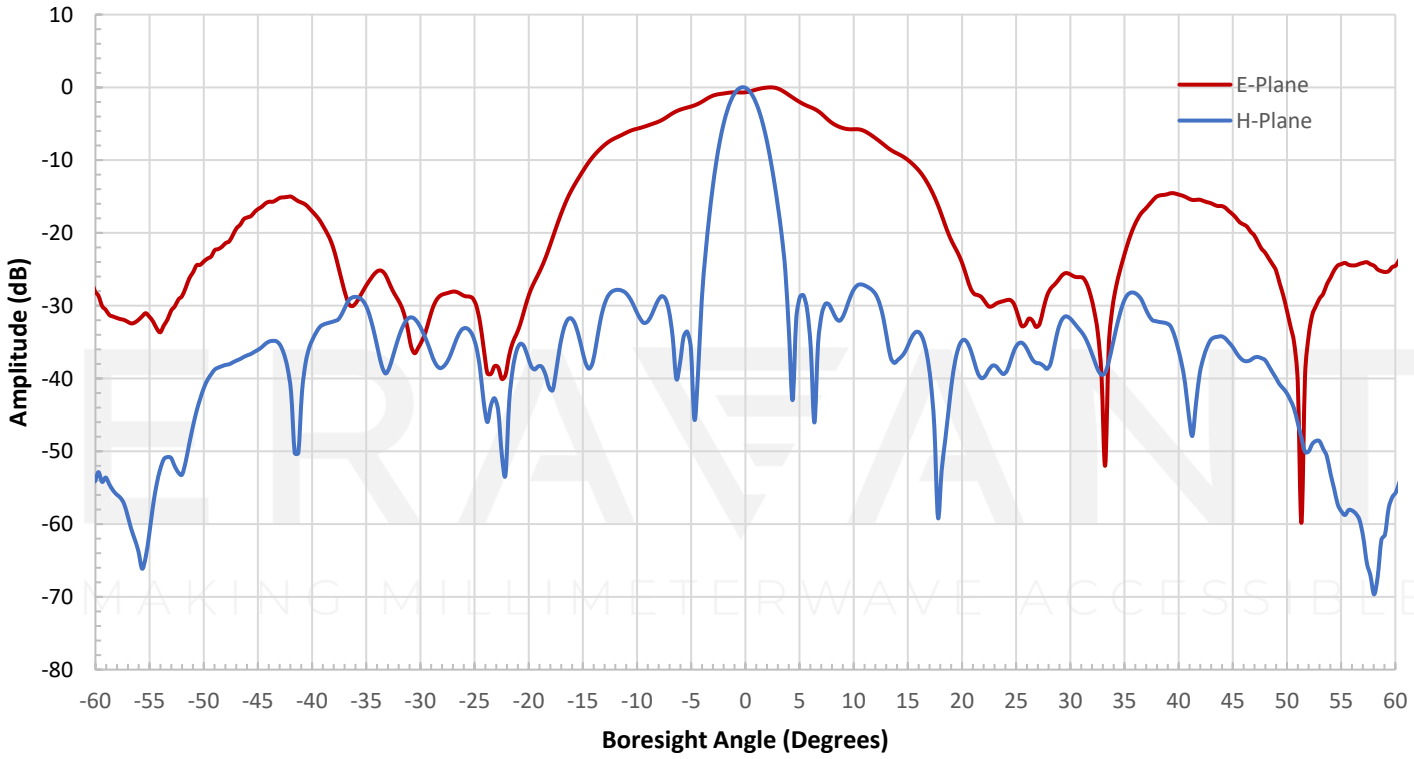
Measured Antenna Patterns @ 34.75 GHz



Measured Antenna Patterns @ 35.0 GHz



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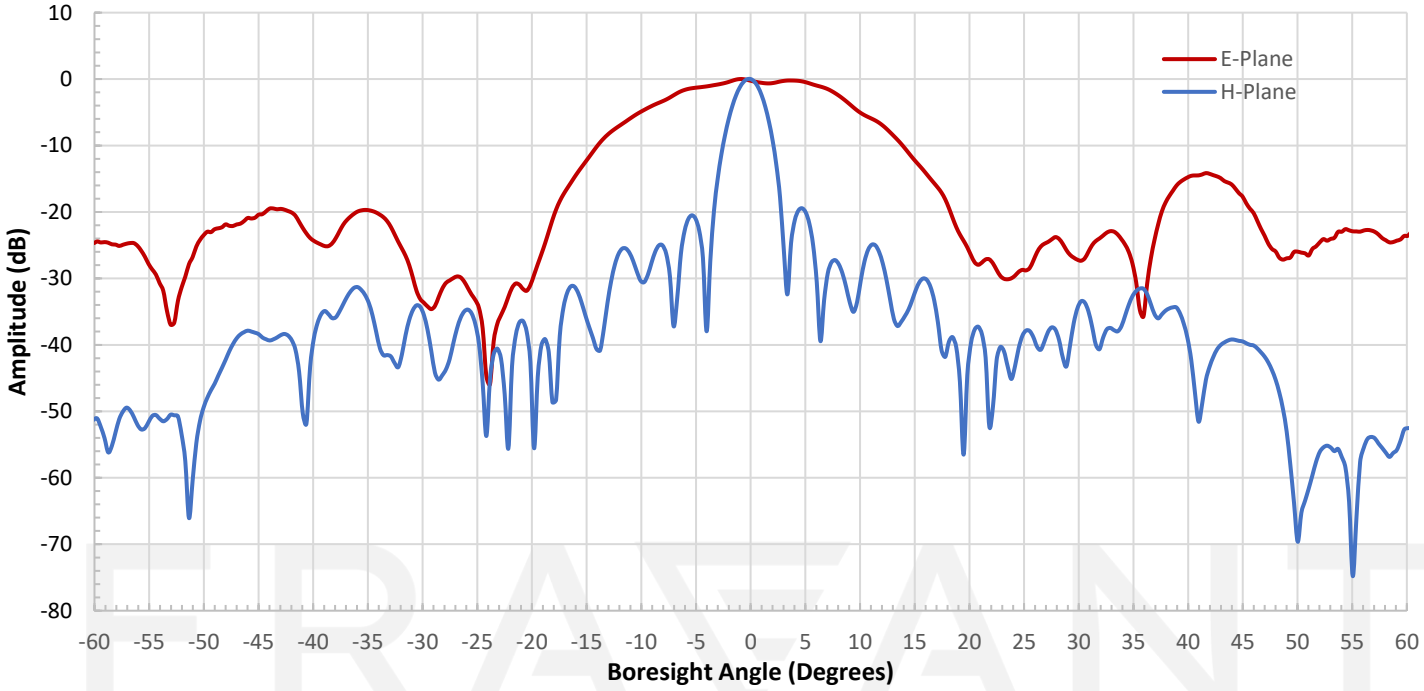
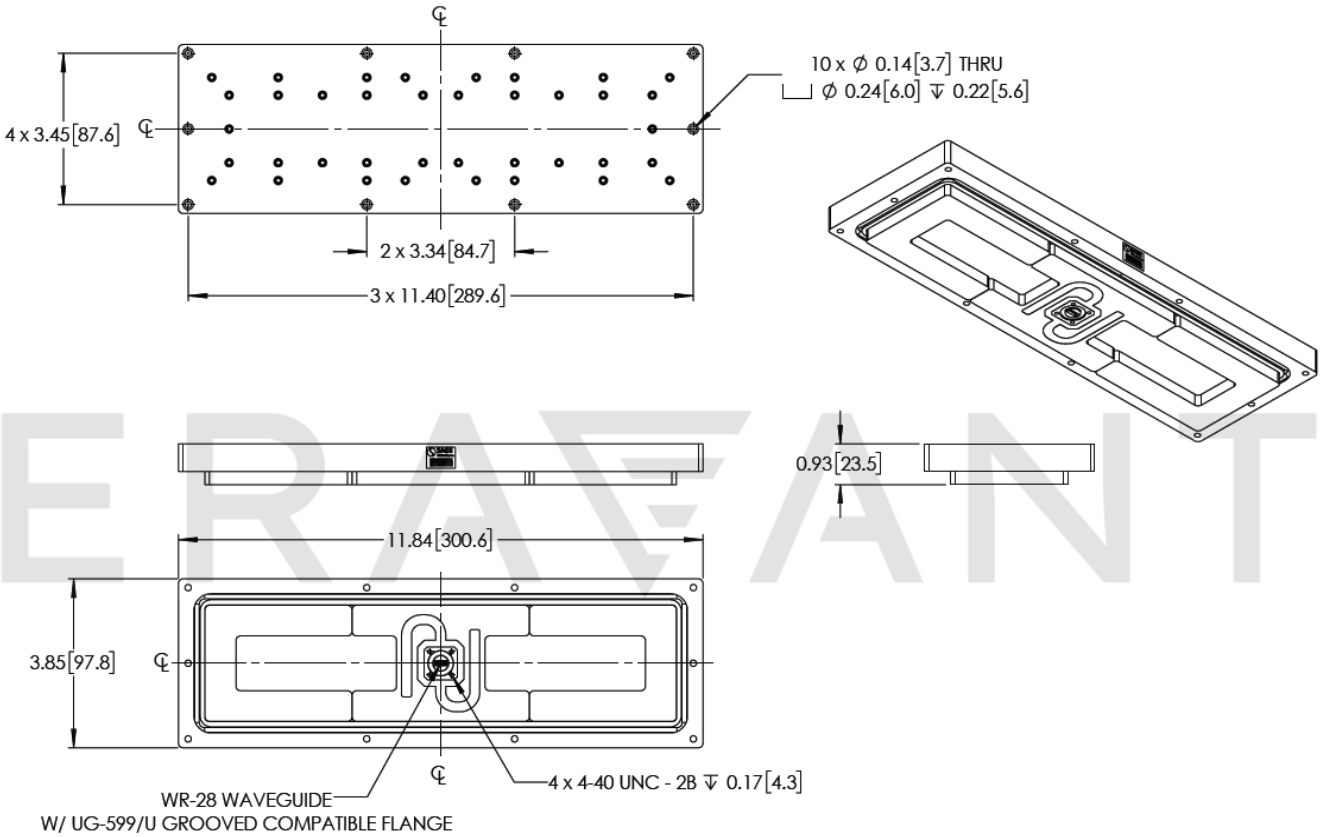
Measured Antenna Patterns @ 35.25 GHz



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



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NOTE:

- On condition that test data is provided it 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:

- If a waveguide is present, any foreign objects in the waveguide will cause performance degradation and may damage or destroy the unit.

MAKING MILLIMETERWAVE ACCESSIBLE

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