SAK-AL773773-12-C2

Rev 1.1

WR-12 Lens Corrected Antenna, 33 dBi Gain

Description:

Model SAK-AL773773-12-C2 is a E-band lens corrected antenna that operates from 76.9 GHz to 77.1 GHz. The antenna offers 33 dBi nominal gain and a typical half power beamwidth of 1.3 degrees on the E-plane and 10.4 degrees on the H-plane. The antenna supports linear polarized waveforms. The input of this antenna is a WR-12 waveguide with UG-387/U flange.

Features:

- Rectangular Waveguide Interface
- Precisely Machined and Gold Plated
- Linear Polarization
- High Return Loss

Applications:

- Antenna Ranges
- Antenna Gain Measurements
- System Setups

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	76.9 GHz	77 GHz	77.1 GHz
Gain		33 dBi	
Polarization		Linear	
3 dB Beamwidth, E-Plane		1.3°	
3 dB Beamwidth, H-Plane		10.4°	
Sidelobes, E-Plane		-13 dB	
Sidelobes, H-Plane		-25 dB	
Return Loss		14 dB	
Specification Temperature		+25 °C	
Operation Temperature	-40 °C		+85 °C

Mechanical Specifications:

Item	Specification
Antenna Port	WR-12 Waveguide
Flange Type	UG-387/U Flange
Material	Aluminum
Finish	Black Painted
Weight	1.25 lbs
Size	8.48” (L) X 8.42” (W) X 1.72” (H)
Outline	AK-AL-RE33-VP-C1

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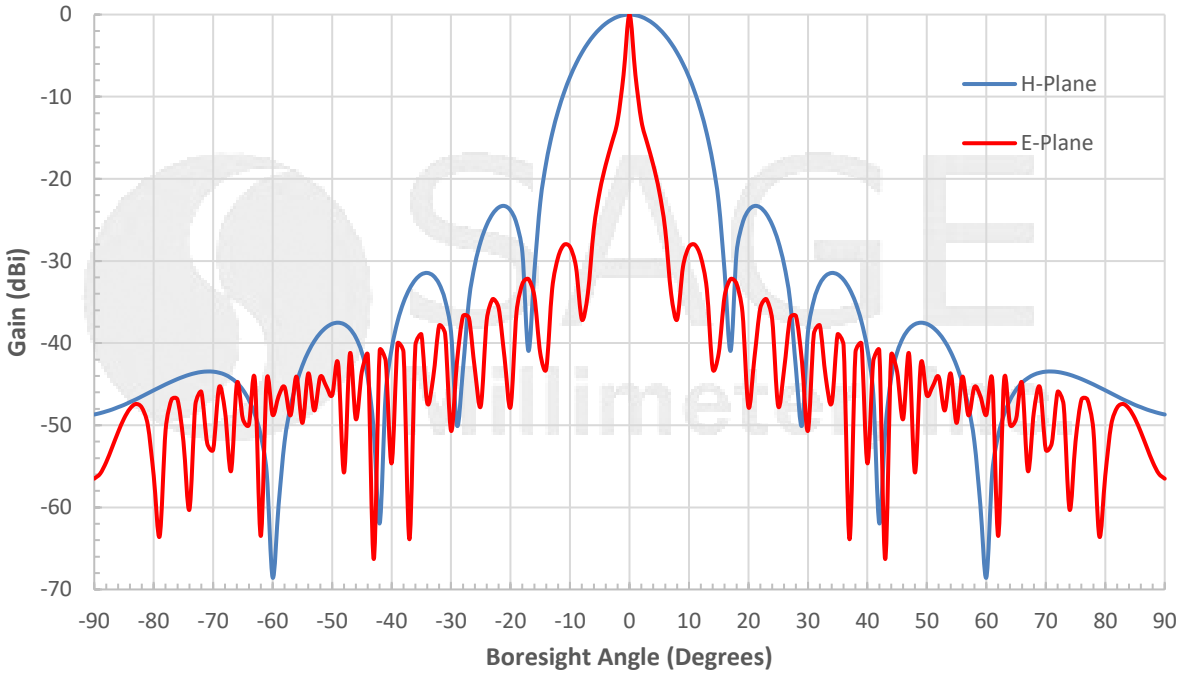
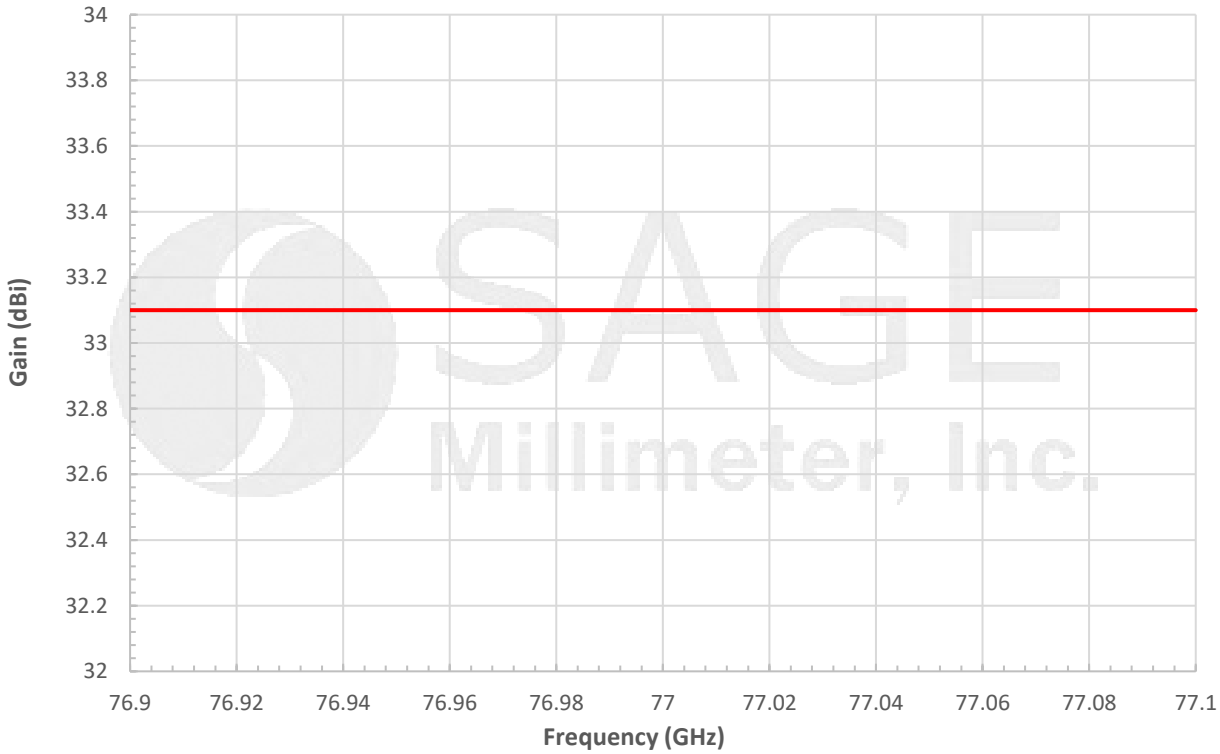
Simulated Antenna Pattern @ 77 GHz



Simulated Gain vs. Frequency



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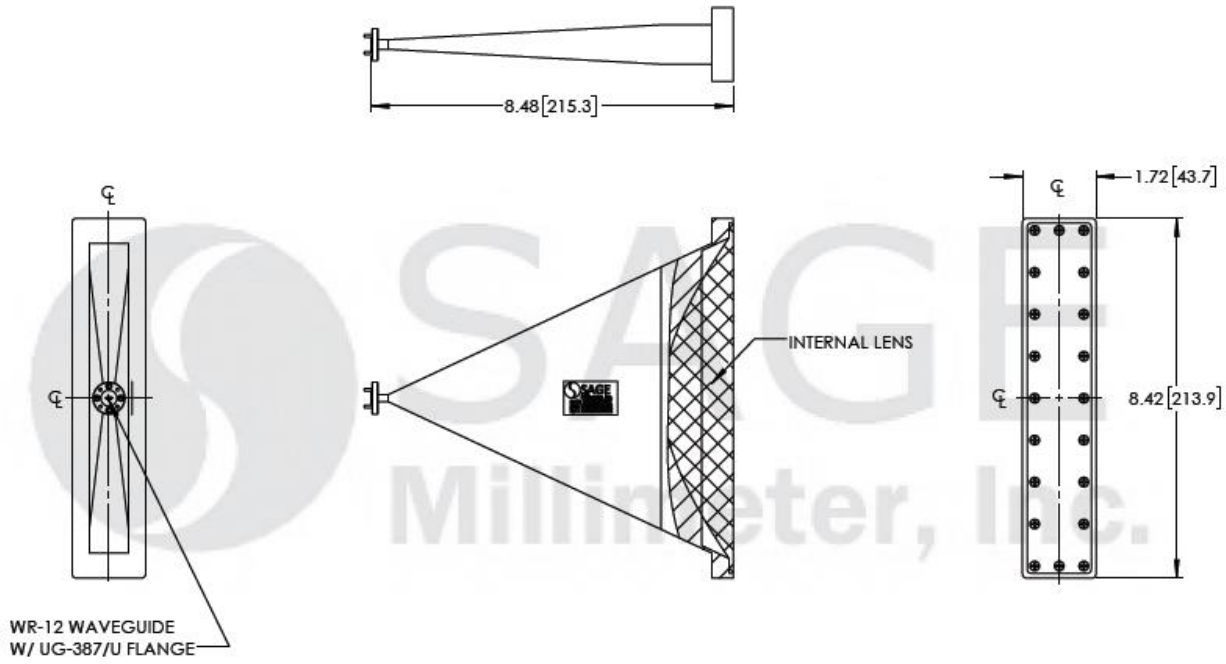
Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])



Note:

- All data presented is simulated. Actual data may vary, slightly.
- All testing was performed under +25°C room temperature.
- SAGE Millimeter, Inc. 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.

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