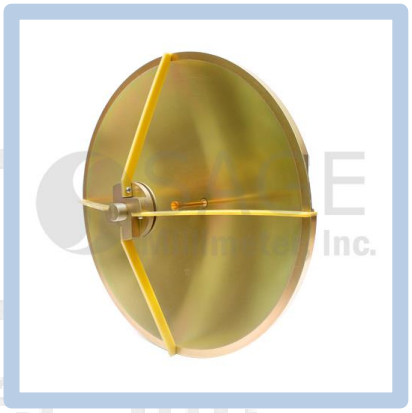
SAY-7138634212-10-X1

Advanced

W Band Cassegrain Antenna, 71 to 86 GHz, 9” Dish

Descriptions:



Model SAY-7138634212-10-X1 is a W band Cassegrain antenna that offers a nominal gain of 42 dB and a half power beamwidth of 1.3 degrees typically across the frequency range of 71 to 86 GHz. The main reflector is fabricated with aluminum to offer a light weight and rugged mechanical structure. The corrugated horn is used to provide the best feed efficiency and the most uniform illumination. The input port is a WR-10 waveguide with a UG-387/U flange. The antenna can support linear polarized waveforms and is designed and manufactured for indoor and outdoor applications. By removing the mode transition, SAGE Millimeter model **SWT-10094-SB**, the input port becomes a 0.094” diameter circular waveguide that can support both linear and circular polarized waveforms.

Features:

- Rugged Configuration and Low Profile
- Low Loss and High Gain
- High Return Loss

Applications:

- Communication Systems
- Radar Systems
- EW Systems

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency*	71 GHz		86 GHz
Gain		42 dBi	
3 dB Beamwidth		1.3°	
Sidelobes		-16 dB	-15 dB
Return Loss		15 dB	14 dB
Specification Temperature		+25 °C	
Operating Temperature	0 °C		+50 °C

*The antenna will cover a broader frequency range with some performance degradations.

Mechanical Specifications:

Parameter	Specification
Connector	WR-10 Waveguide with UG-387/U Flange
Reflector Material	Aluminum
Finish	Chem Film
Weight	22 oz
Reflector Diameter	9”
Outline	AY-RW40-09-BX1

www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505
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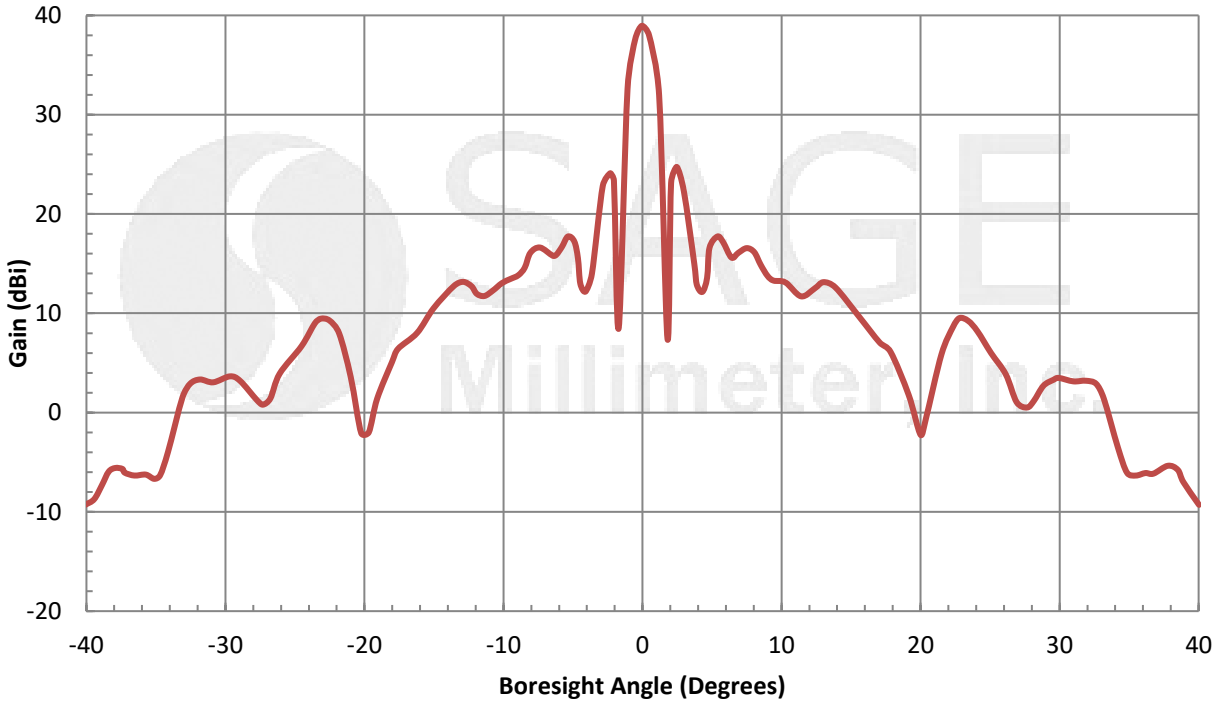
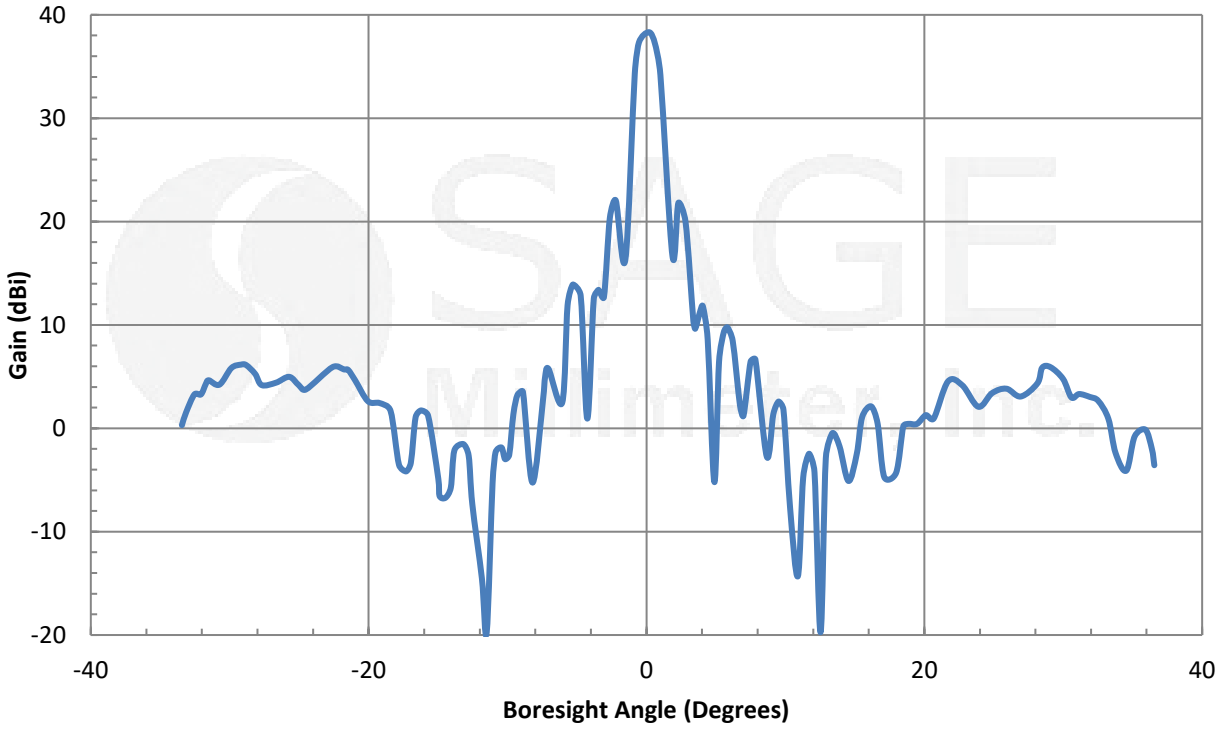
Typical E-Plane Pattern @ 78.5 GHz



Typical H-Plane Pattern @ 78.5 GHz



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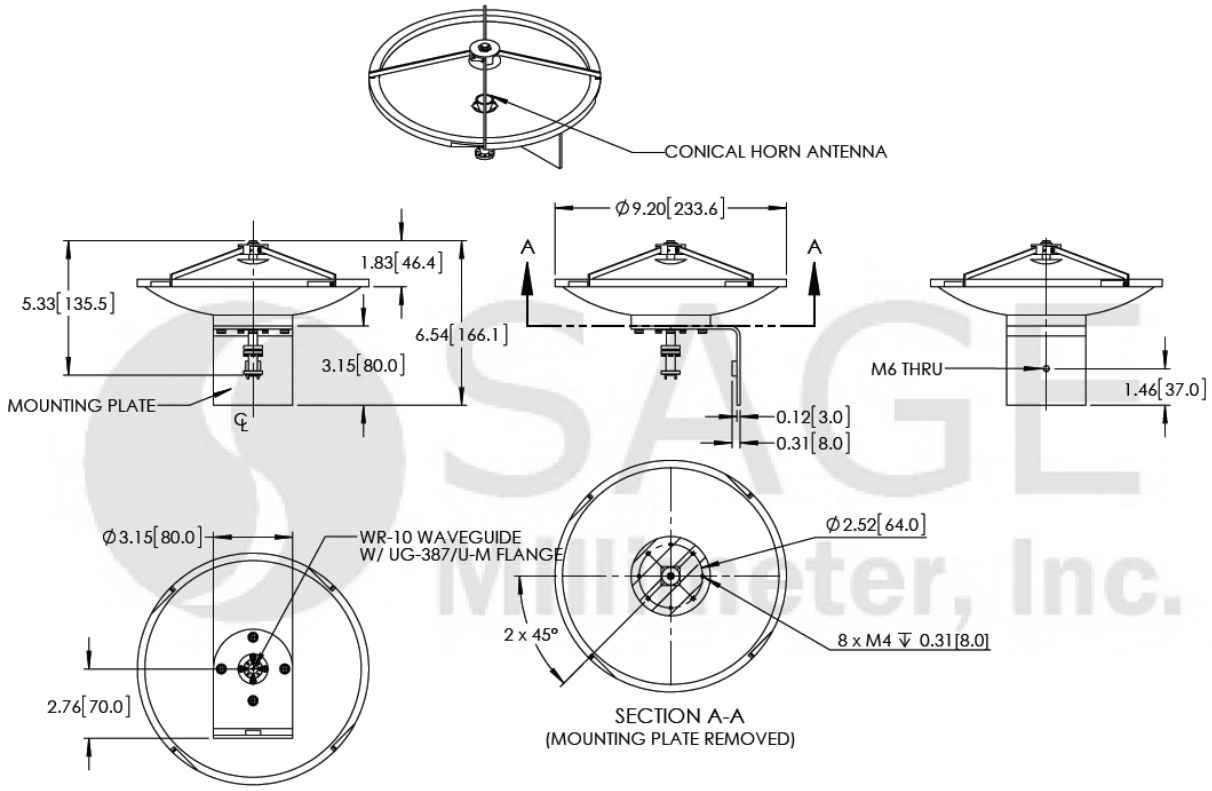
Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])



Note:

- All data presented is simulated. Actual data may vary, slightly.
- 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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