

# C-BAND EXPONENTIALLY-TAPERED HORN ANTENNA

5.85 GHz TO 8.2 GHz

EHA-WR137

## KEY FEATURES

- C-band exponentially-tapered horn antenna with symmetric E-plane and H-plane radiation patterns
- Gain from 12 dBi to 15 dBi across the operating band (5.85 GHz to 8.2 GHz)
- Designed to minimize VSWR
- Durable all-metal body (aluminum)
- Professionally designed and hand-tested by engineers in the United States

## DESIGN SPECIFICATIONS

- Design: Exponentially-Tapered Horn Antenna
- Operating Frequency: 5.85 GHz to 8.2 GHz
- Polarization: Linear (horizontal/vertical based on orientation)
- Waveguide Size: WR-137
- Flange: UG-441/U
- Body Material and Plating: Aluminum Alloy, Paint
- Length: 3.5 in [88.9 mm]
- Width: 3.13 in [79.5 mm]
- Height: 4.5 in [114.3 mm]



EHA-WR137

## PERFORMANCE SPECIFICATIONS

Parameter		Frequency	Min.	Typ.	Max.	Unit
VSWR <sup>1</sup>		5.85 GHz – 8.2 GHz	–	1.3	2.0	–
Gain		5.85 GHz – 8.2 GHz	12.0	13.5	15.5	dBi
HPBW	E-Plane	5.85 GHz – 8.2 GHz	30	38	46	deg.
	H-Plane		30	38	46	
Impedance		–	50			Ω
Connector		–	WR-137 UG-441/U			–

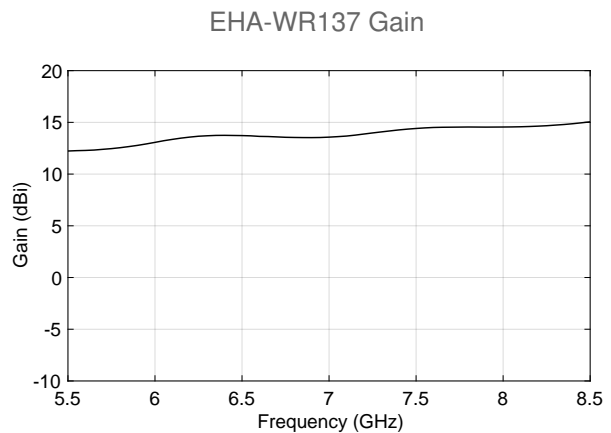
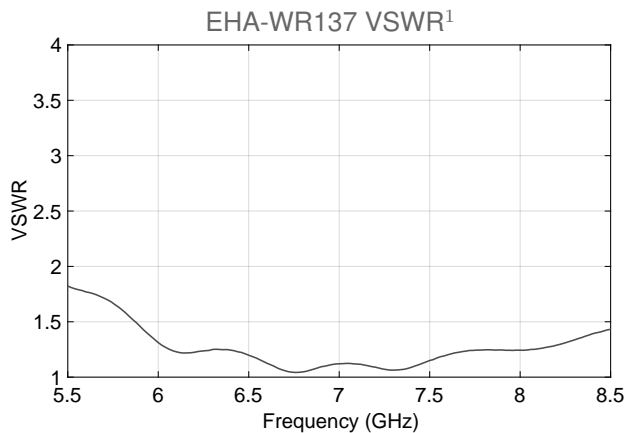
<sup>1</sup> Specification when using the AntenX SMA-WR137 coax to waveguide adapter.

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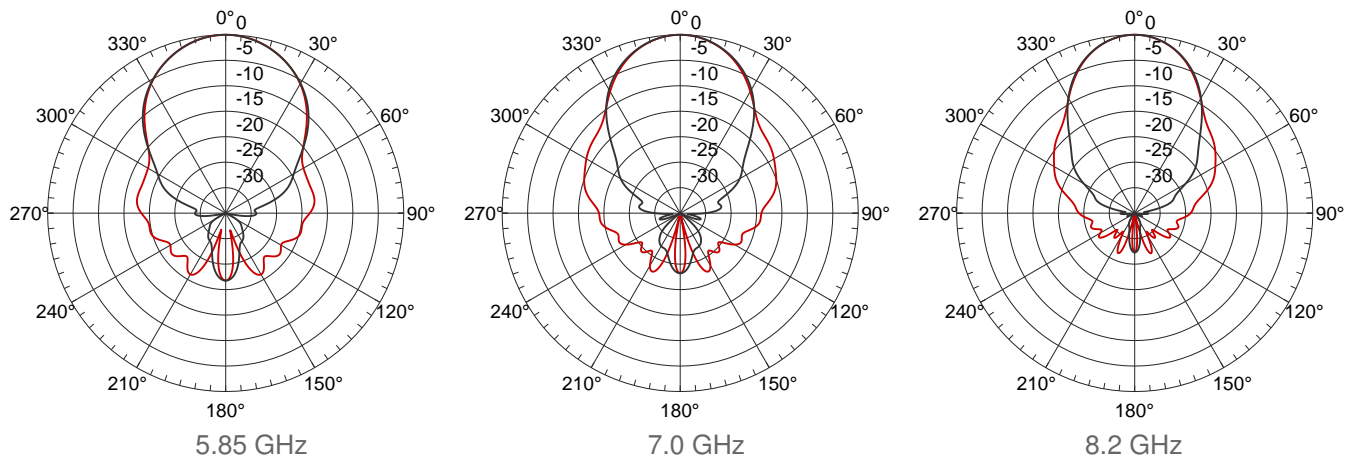
EHA-WR137

### TYPICAL PERFORMANCE

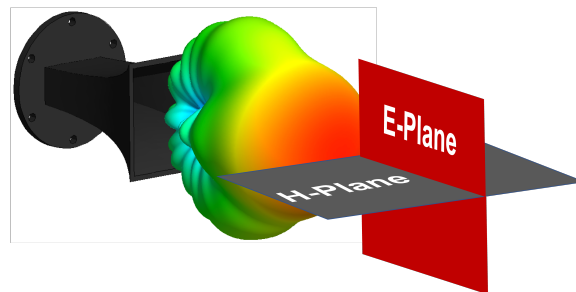


<sup>1</sup> Measured using an AntenX SMA-WR137 coax to waveguide adapter

### EHA-WR137 Normalized Radiation Patterns



— E-Plane      — H-Plane

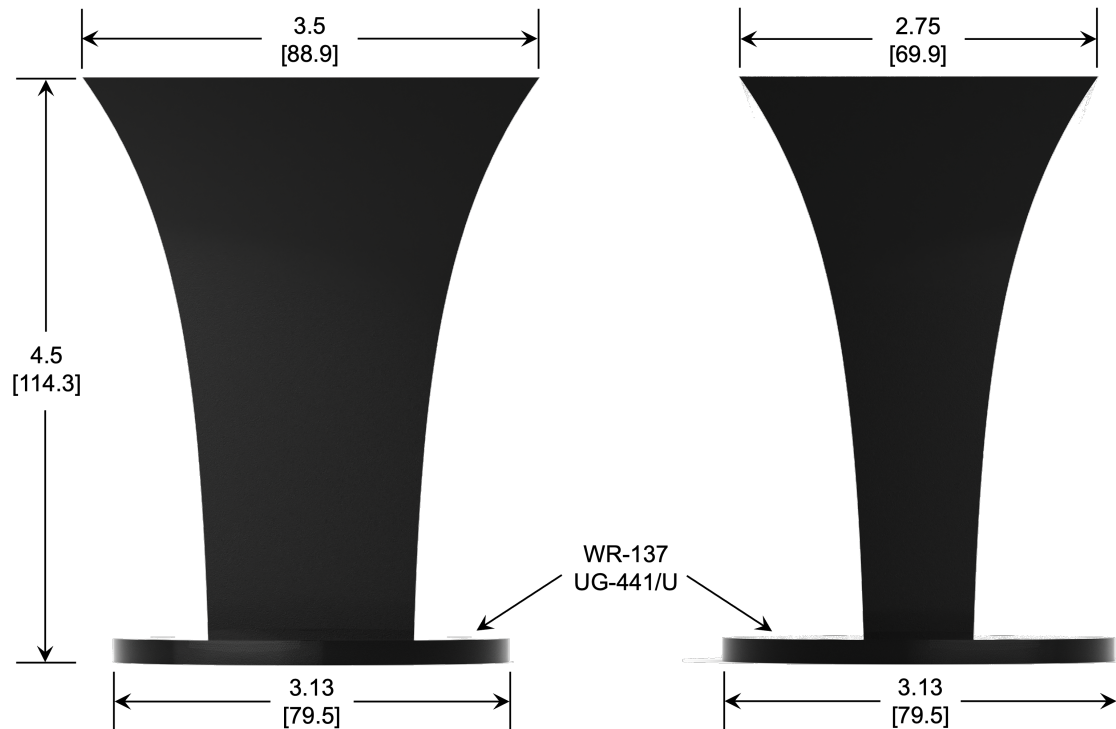


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### CAD DRAWING



#### NOTES:

1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL
2. DIMENSIONS ARE IN INCHES [mm]
3. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME