

X-BAND STANDARD GAIN HORN ANTENNA

8.2 GHz TO 12.4 GHz

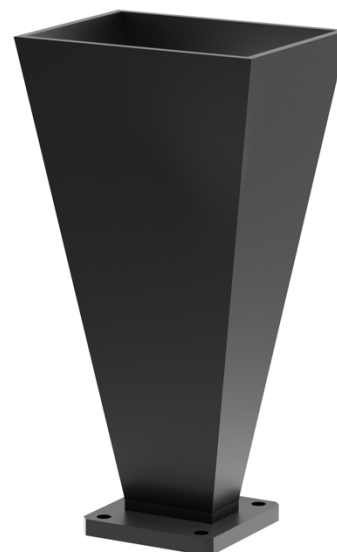
SGH-WR90

KEY FEATURES

- X-band standard gain horn antenna with symmetric E-plane and H-plane radiation patterns
- Durable all-metal body (aluminum)
- VSWR below 1.5:1 (typically below 1.3:1) with gain up to 17 dBi
- Professionally designed and hand-tested by engineers in the United States

SPECIFICATIONS

- Design: Pyramidal Waveguide Horn
- Operating Frequency: 8.2 GHz to 12.4 GHz
- Polarization: Linear (horizontal/vertical based on orientation)
- Waveguide Size: WR-90
- Flange: UG-135/U
- Body Material and Plating: Aluminum Alloy, Paint
- Length: 2.2 in [55 mm]
- Width: 2.9 in [73 mm]
- Height: 5.5 in [139 mm]



SGH-WR90

PERFORMANCE DATA

Parameter	Frequency	Min.	Typ.	Max.	Unit	
VSWR	8.2 GHz – 12.4 GHz	—	1.3	1.6	—	
Gain	8.2 GHz – 12.4 GHz	14.0	15.5	17.0	dBi	
HPBW	E-Plane H-Plane	8.2 GHz – 12.4 GHz	24 24	29 29	37 35	deg.
Impedance	—	50			Ω	
Connector	—	WR-90 UG-135/U			—	

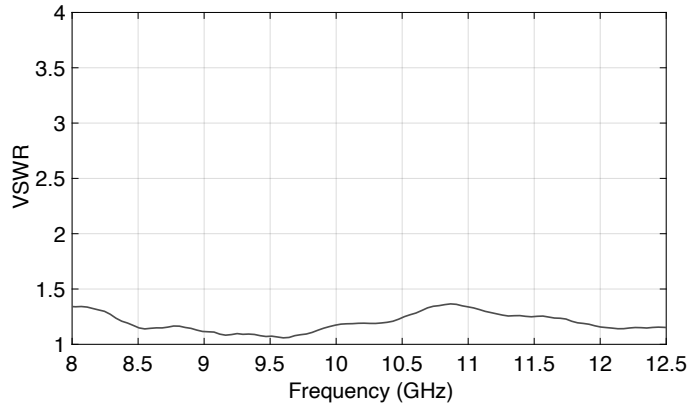
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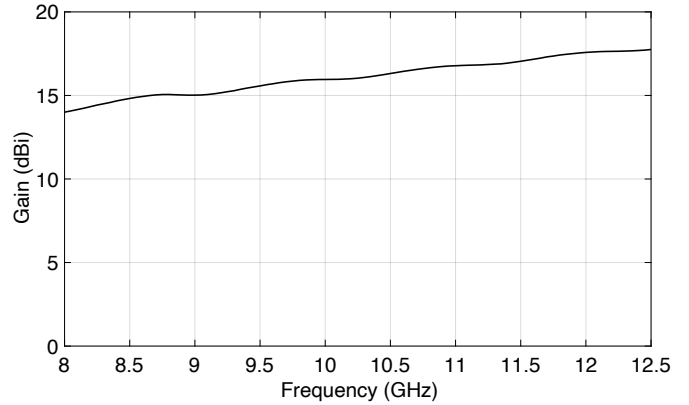
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PERFORMANCE DATA (CONT.)

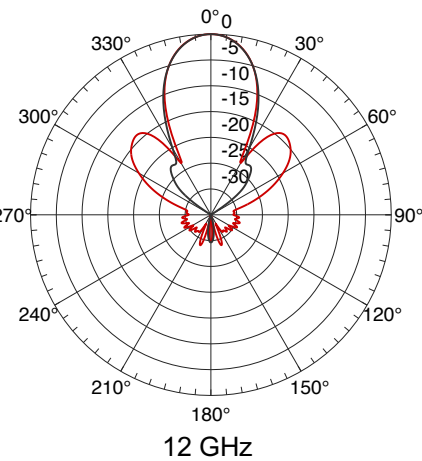
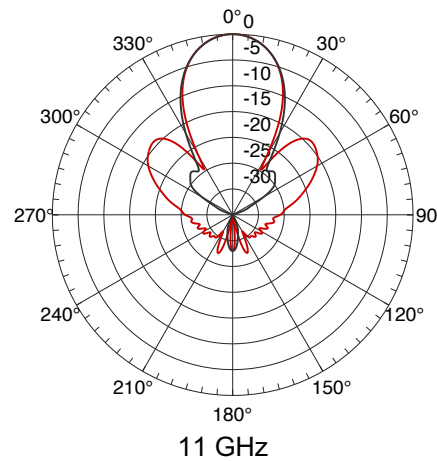
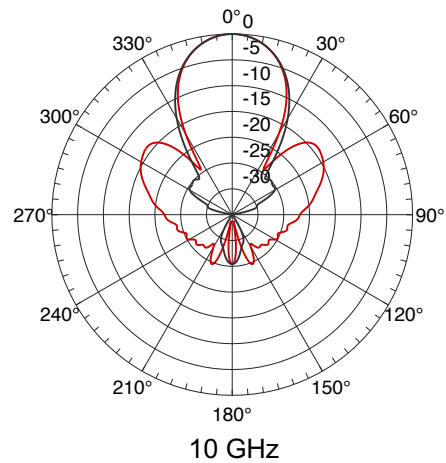
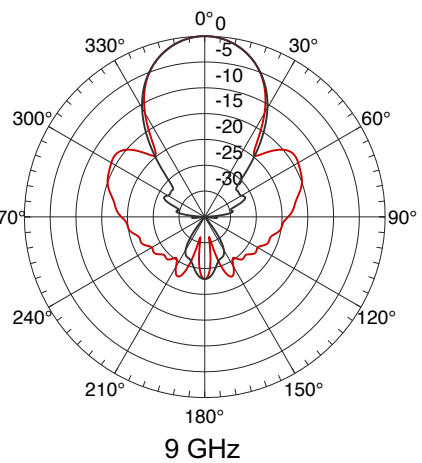
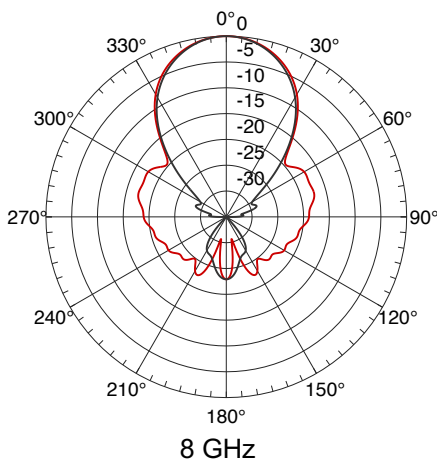
SGH-WR90 VSWR¹



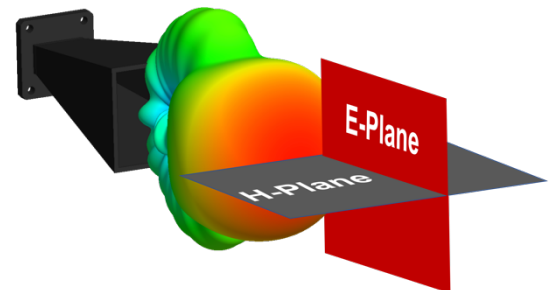
SGH-WR90 Gain



¹ Measured using appliedEM innovations SMA-WR90 coax to waveguide adapter



— E-Plane — H-Plane

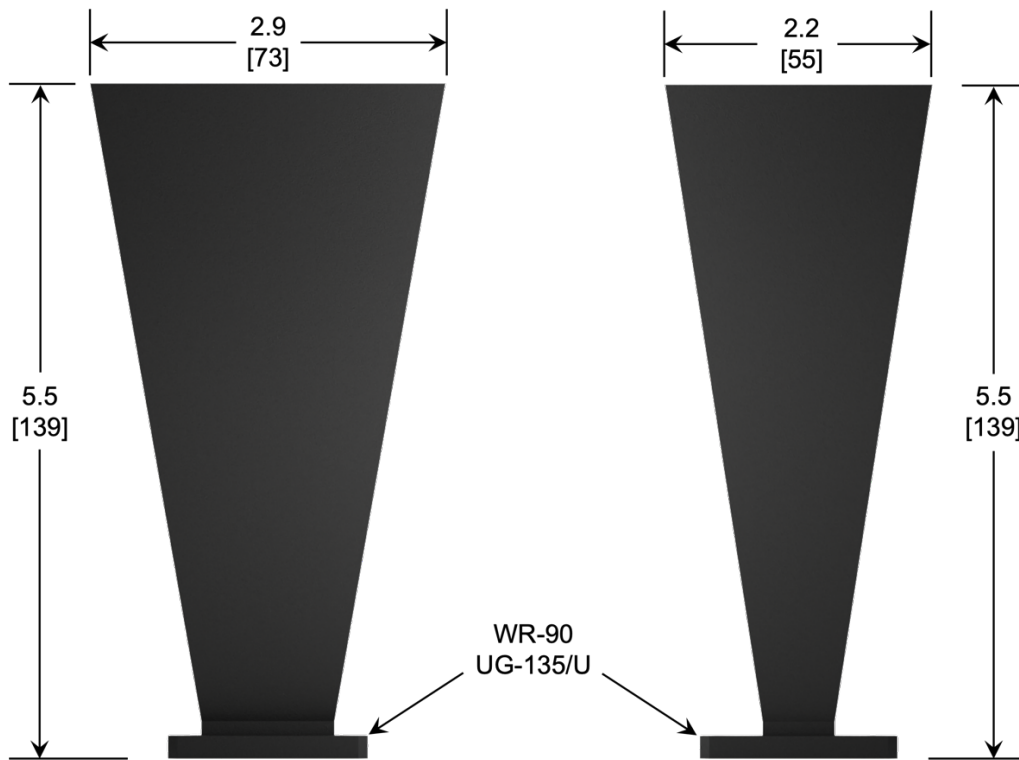


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CAD DRAWING



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