



### Wideband Dual-Polarization Horn Antenna 2 - 18GHz



#### Features

- Wideband Dual Polarization Horn Antenna
- High power operation up to 100W.

#### Typical Applications

- Wireless Infrastructure
- Military & Aerospace
- Test and Measurement

#### Electrical Specifications, $T_A=25\text{ }^\circ\text{C}$

Parameter	Min	Typ.	Max	Units
Frequency Range	2-18			GHz
Gain	9		21	dB
VSWR		2.5		: 1
Isolation	20			dB
Power (CW)			100	W
Impedance	50			$\Omega$
Connector Type	SMA-Female			
Material	Aluminum			
Finish	Painted			

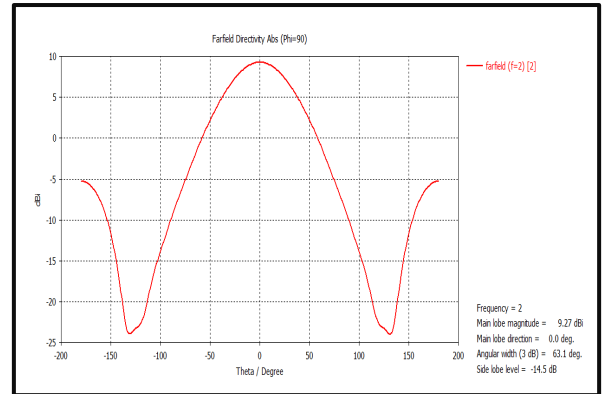
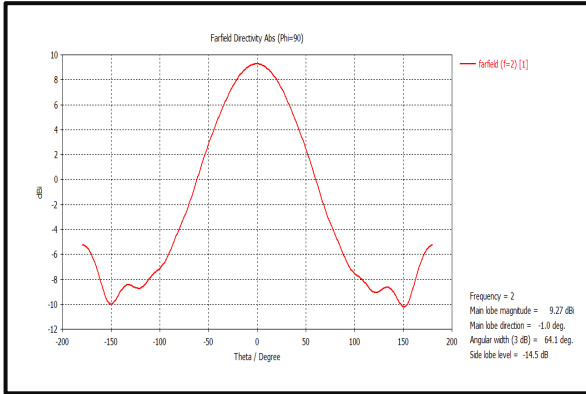
#### Environmental Specifications and Test Standards

Parameter	Standard	Description
Operational Temperature	MIL-STD-39016	-55°C~+85°C
Storage Temperature		-55°C~+105°C
Thermal Shock		1 Hour@ -55°C → 1 Hour @ +85°C (5 Cycles)
Random Vibration		Acceleration Spectral Density 6 (m/s) Total 92.6 RMS
Electrical & Temperature Burn In		Temperature +85°C for 72 Hours
Shock		1. Weight >20g, 50g half sine wave for 11ms, Speed variation 3.44m/s 2. Weight <=20g, 100g Half sine wave for 6ms, Speed variation 3.75m/s 3. Total 18 times (6 directions, 3 repetitions per direction).
Altitude		Standard: 30,000 Ft (Epoxy Sealed Controlled Environment) Optional: Hermetically Sealed (60,000 ft. 1.0 PSI min)
Hermetically Sealed (Optional)	MIL-STD-883	MIL-STD-883 (For Hermetically Sealed Units)

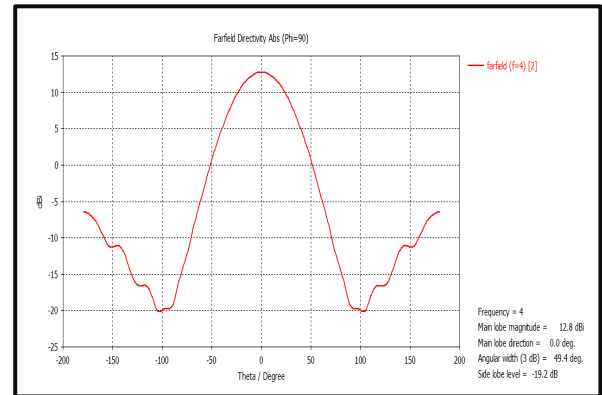
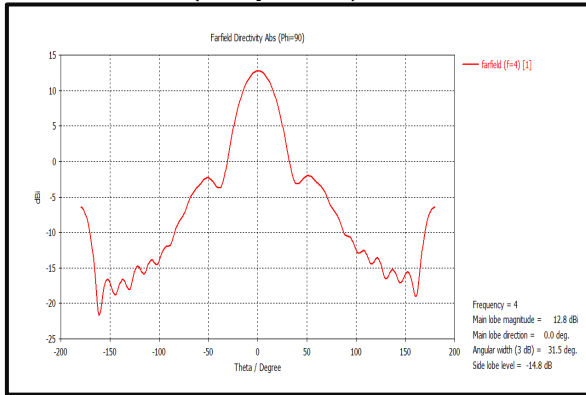
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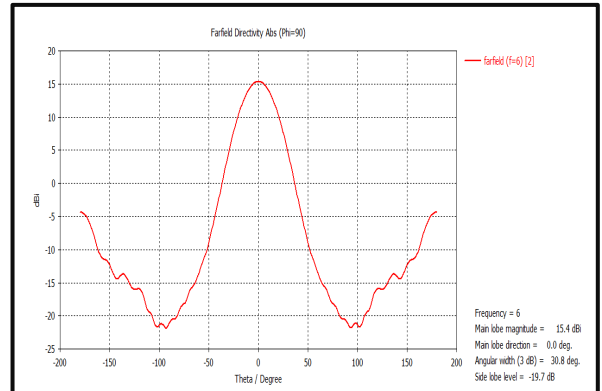
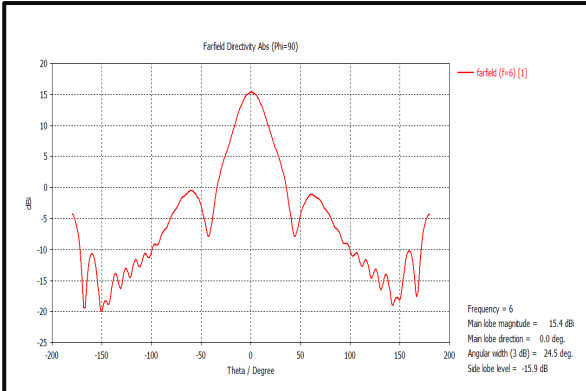
### Typical Performance Plots Gain Pattern (Freq=2GHz)



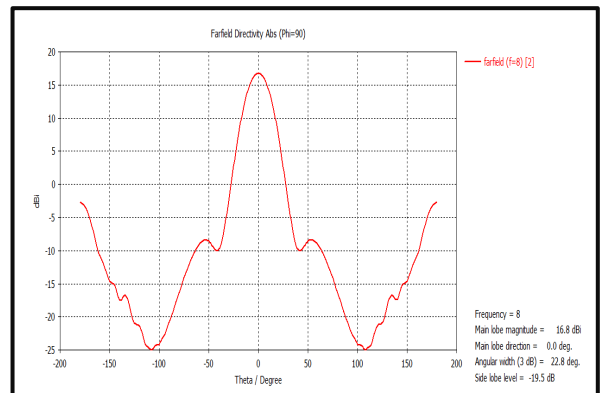
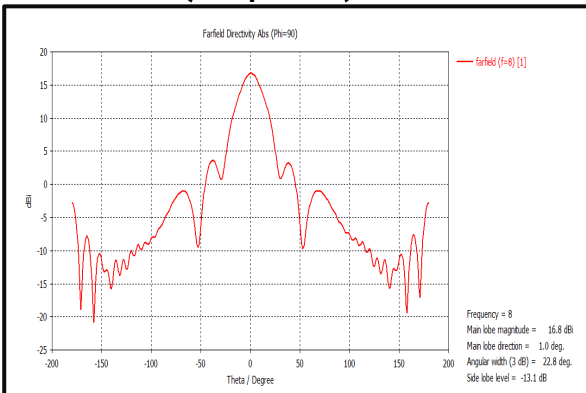
### Gain Pattern (Freq=4GHz)



### Gain Pattern (Freq=6GHz)

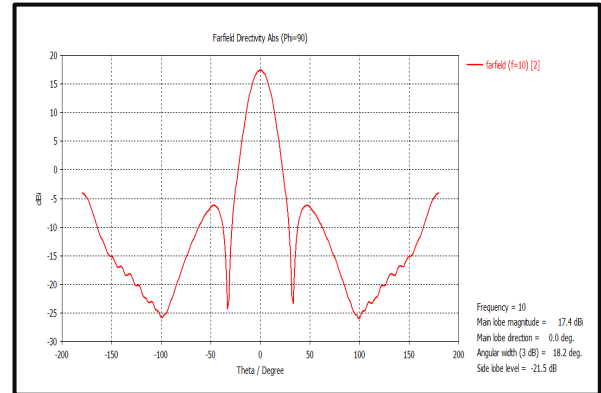
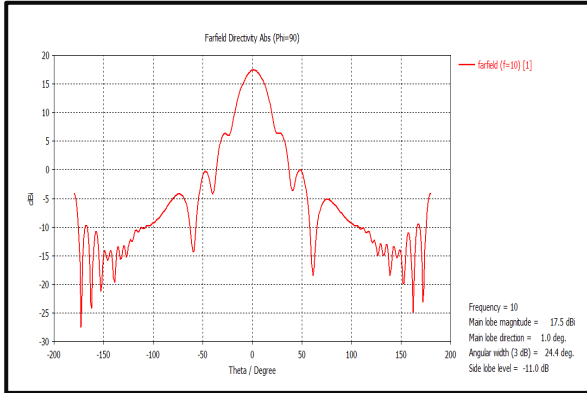


### Gain Pattern (Freq=8GHz)

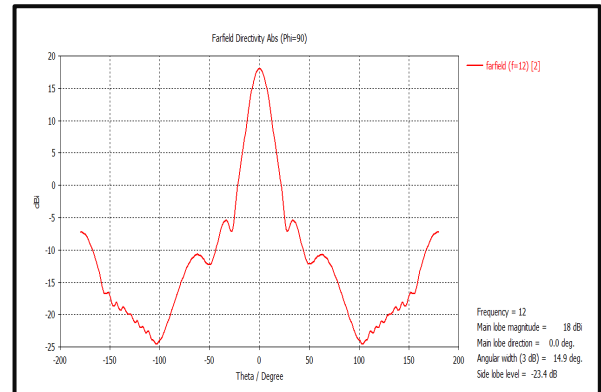
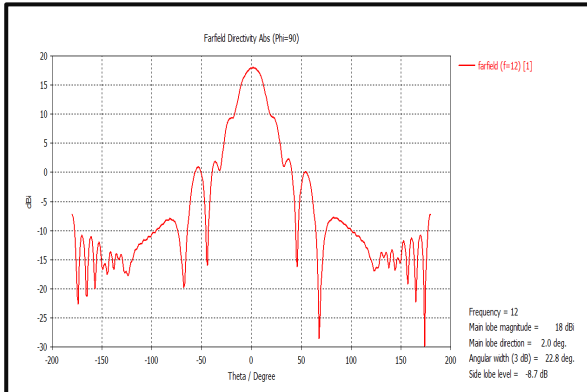




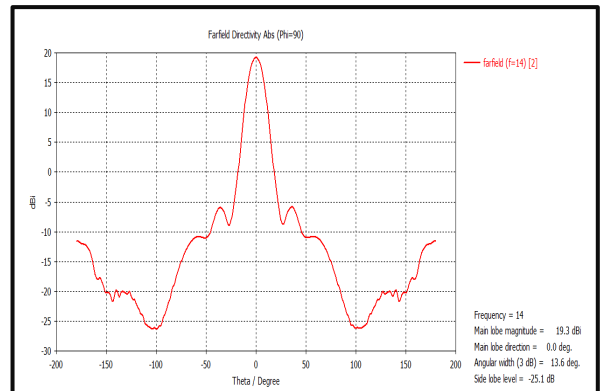
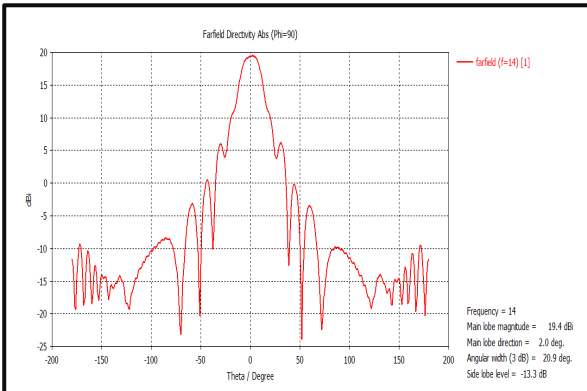
### Gain Pattern (Freq=10GHz)



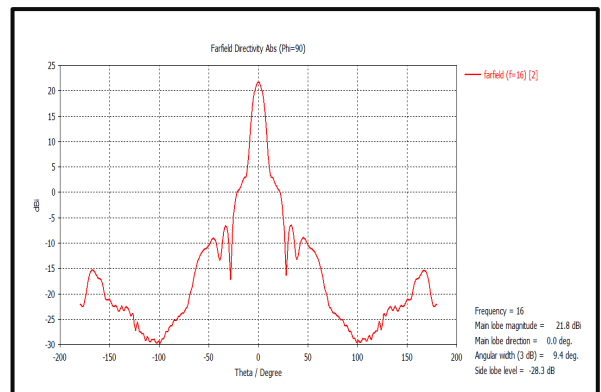
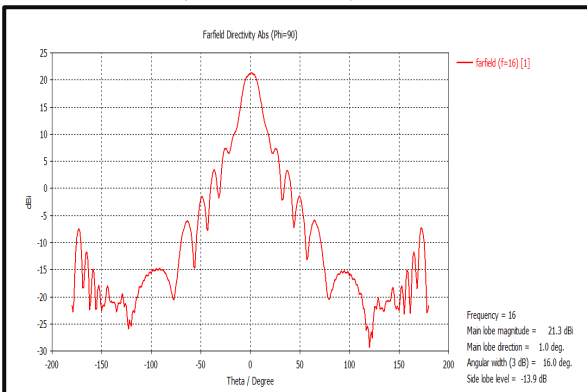
### Gain Pattern (Freq=12GHz)



### Gain Pattern (Freq=14GHz)

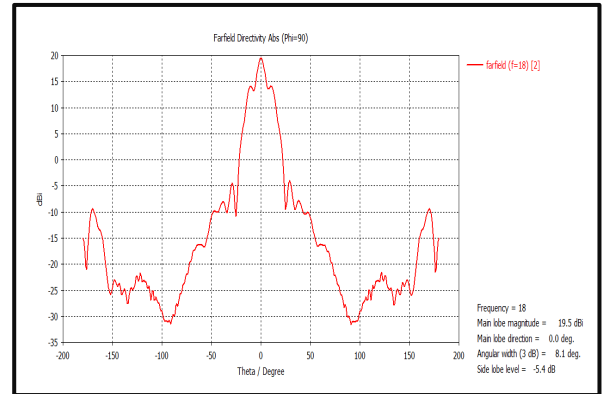
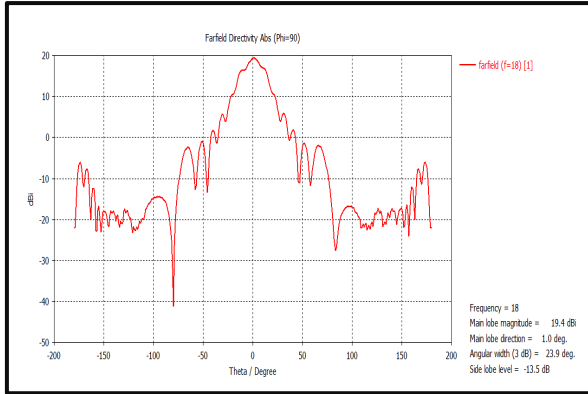


### Gain Pattern (Freq=16GHz)

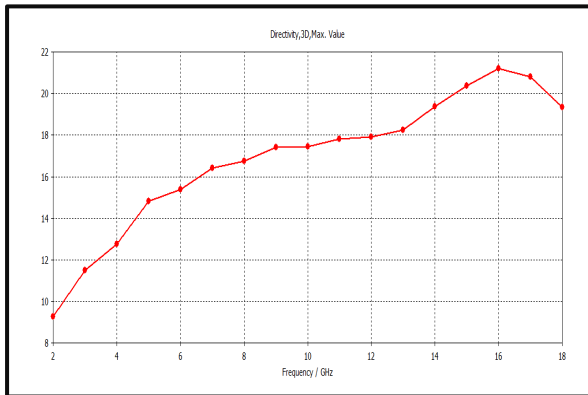




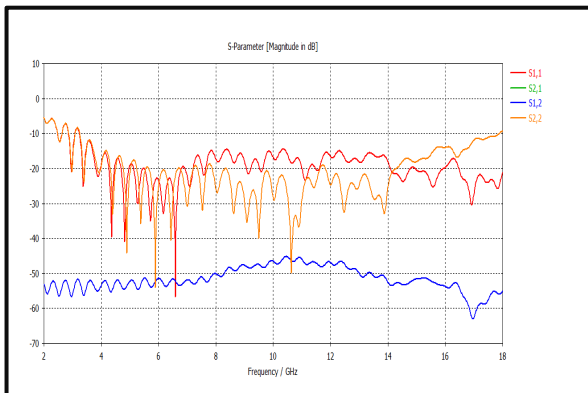
### Gain Pattern (Freq=18GHz)



### Gain



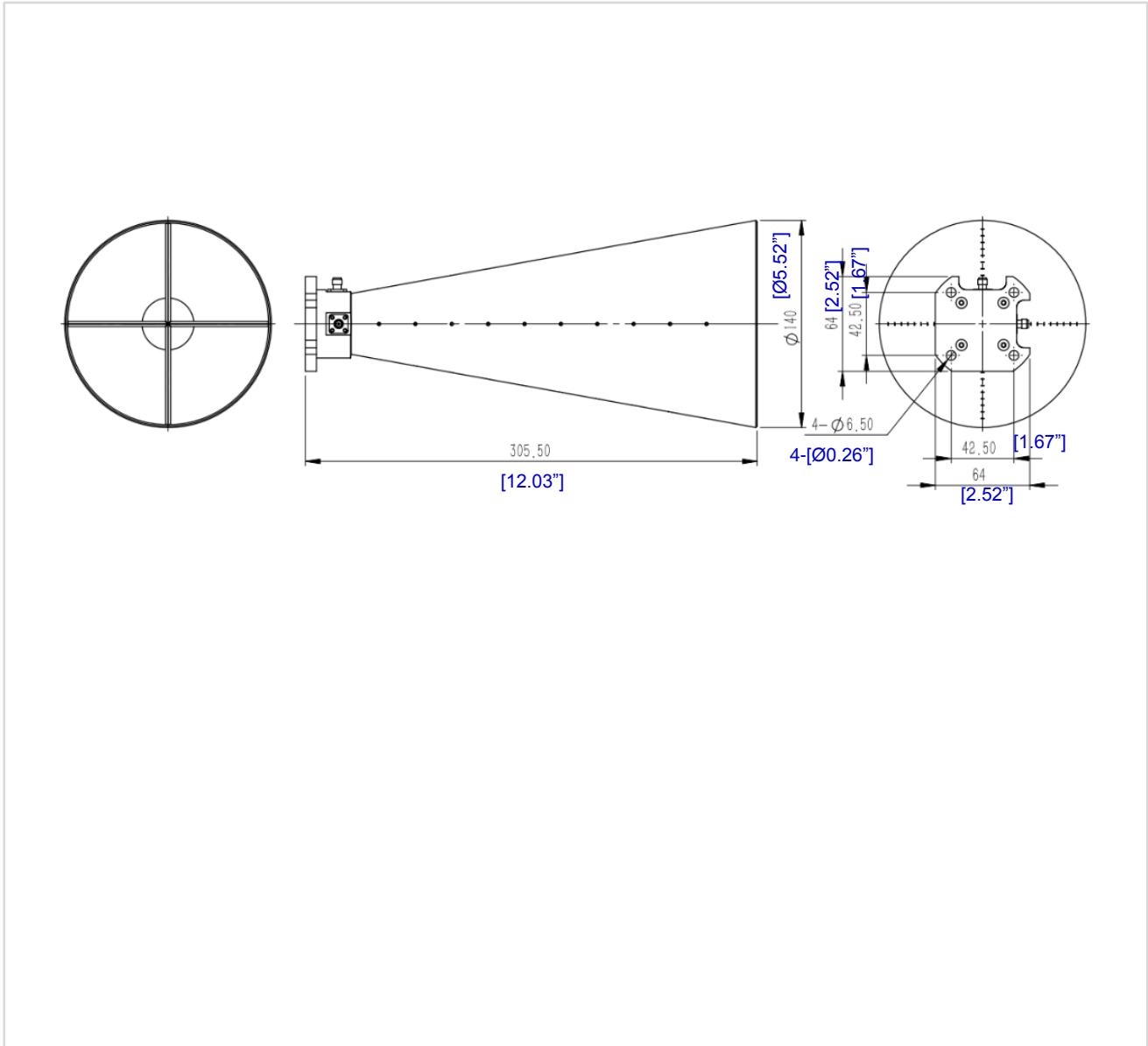
### S-Parameters





**Outline Drawing:**

All Dimensions in mm [inches]



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