



Wi-Fi 2.4-2.48 and 4.9-5.9 GHz Antenna

## Product Description

Parsec's PTA-WIFI-Paddle-XXX Antenna is a high-gain, omnidirectional, external antenna that provides extended range for Wi-Fi applications. This high quality antenna uses a center-fed array to provide a consistent elevation pattern across both the 2.4-2.48 and 4.9-5.9 GHz bands. The PTA-WIFI-Paddle-XXX is a ground independent design that provides consistent performance independent of the size and shape of the Wi-Fi product it is mounted on.

Detailed product information and options are available under NDA. Patent pending.

### Features

- Frequency range: 2.4 – 2.48 and 4.9 – 5.9 GHz
- Omni-directional
- High Gain: 4.7 dB @ 2.44 GHz , 7.6 dB @ 5.5 GHz
- Ground independent
- Consistent performance in diverse applications
- Rugged ABS radome
- Reverse Polarity SMA connector

### Applications

- Wi-Fi

## Electrical Specifications

ID	Parameters	Units	Typ.
Peak Gain	2.4 – 2.48 GHz	dBi	4.7
	4.9 – 5.9 GHz		7.6
Return Loss (50 $\Omega$ )	2.4 – 2.48 GHz	dB	10
	4.9 – 5.9 GHz		8
Polarization			Vertical
Max Input Power	2.4 – 2.48 GHz	Watts	5
	4.9 – 5.9 GHz		
RF Connector			RP-SMA(F)

## Mechanical

Dimensions	7.75 in length x 1.55 in width
Mounting	Connector

## Environmental

Operating Temperature	-40°C to 85°C
Classification	Indoor
Relative Humidity	95% RH, non-condensing at 65°C



Figure 1. PTA-WIFI-Paddle-XXX 3D Product Picture

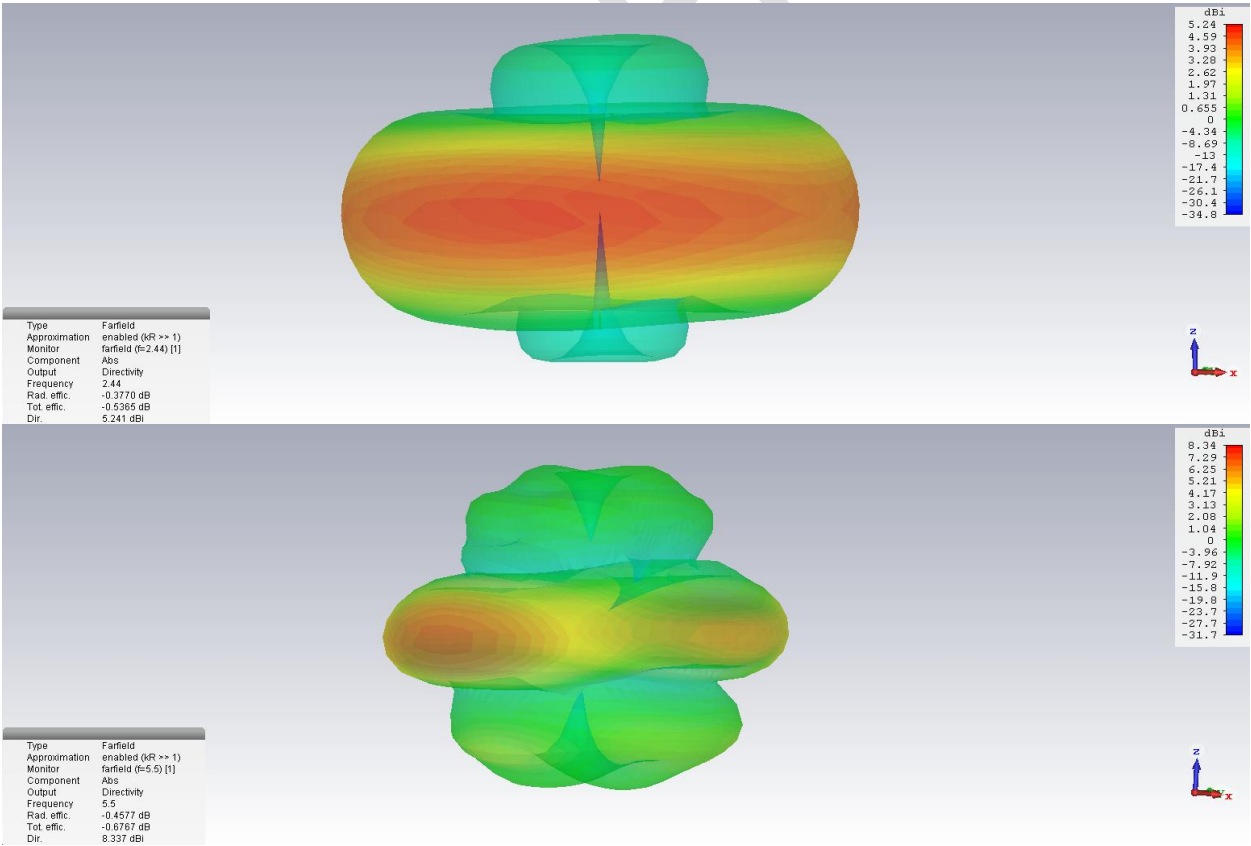


Figure 2. PTA-WIFI-Paddle-XXX 3D Radiation Patterns

Typical Performance

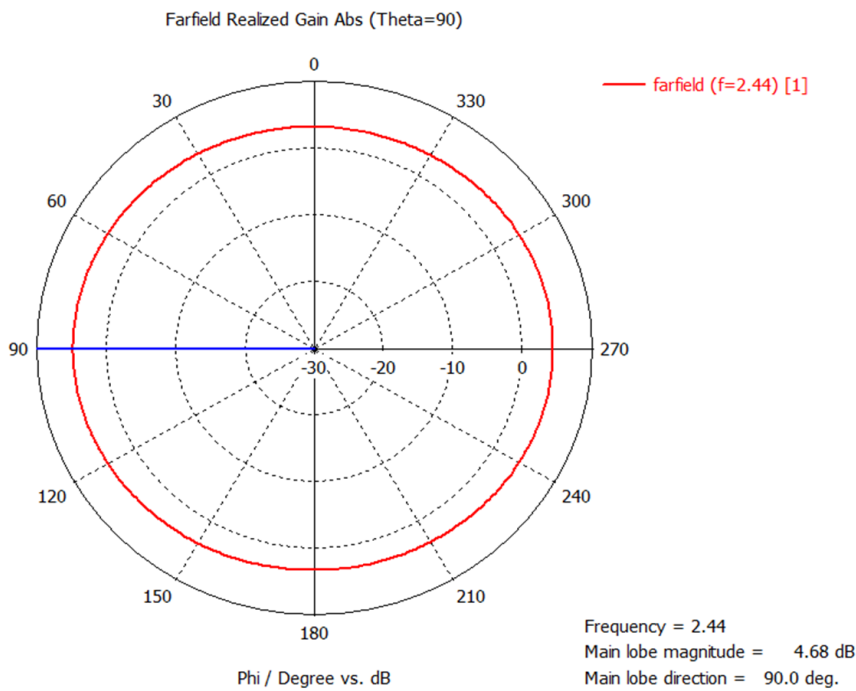


Figure 3. Typical Azimuth Pattern (2.44 GHz)

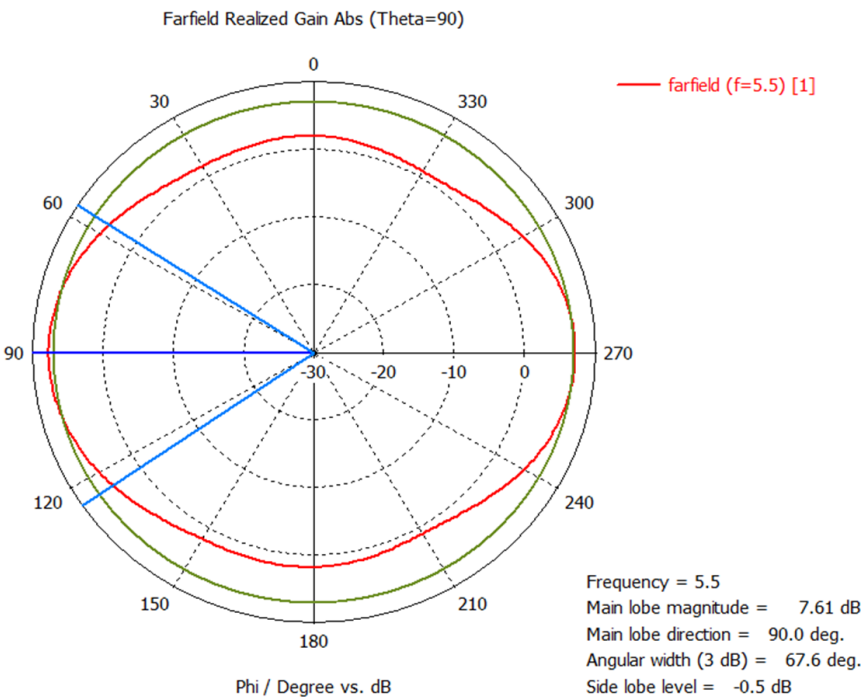
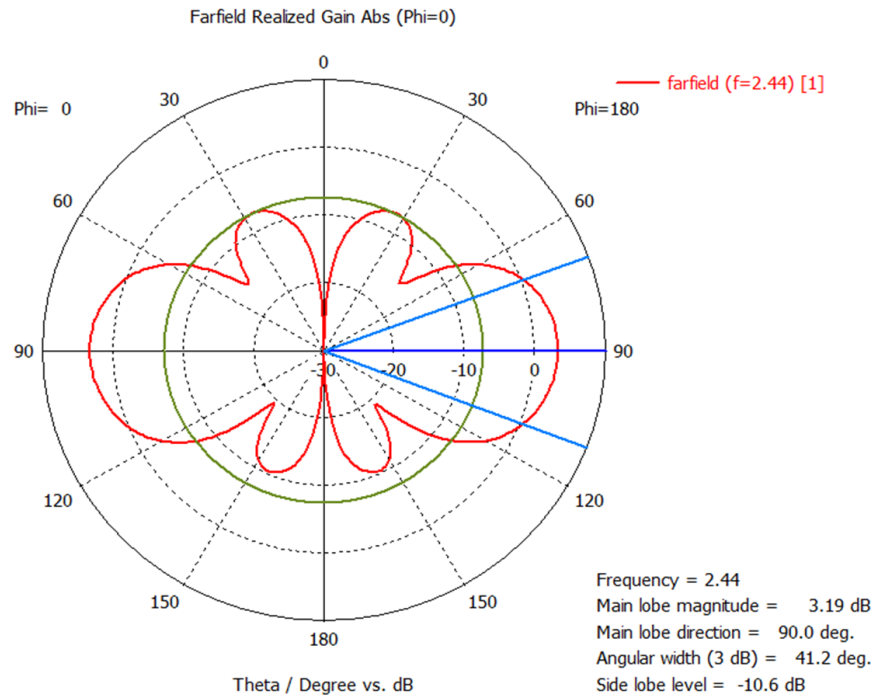
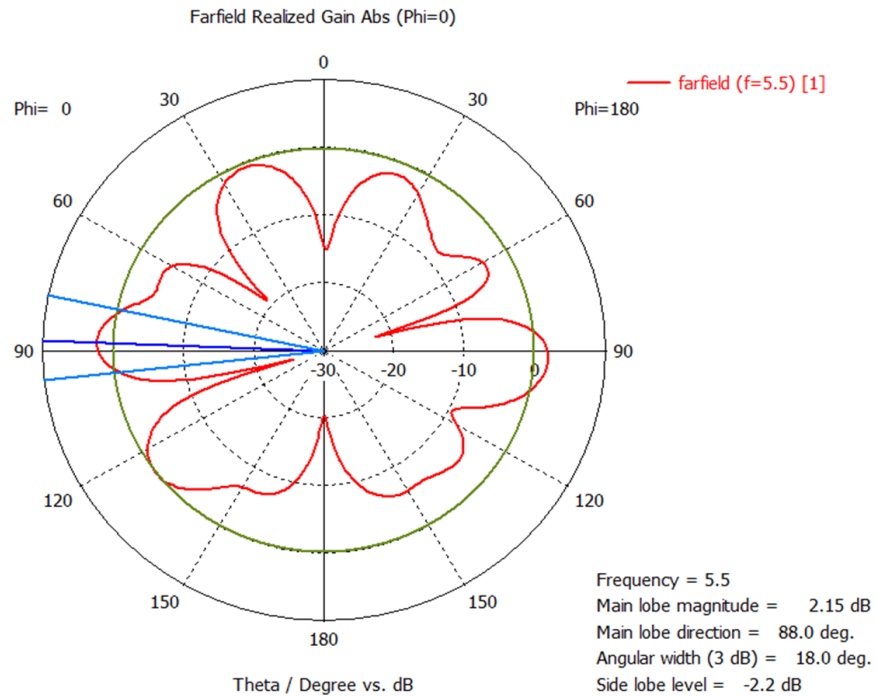


Figure 4. Typical Azimuth Pattern (5.5 GHz)



**Figure 5. Typical Elevation Pattern, Phi=0 (2.44 GHz)**



**Figure 6. Typical Elevation Pattern, Phi=0 (5.5 GHz)**

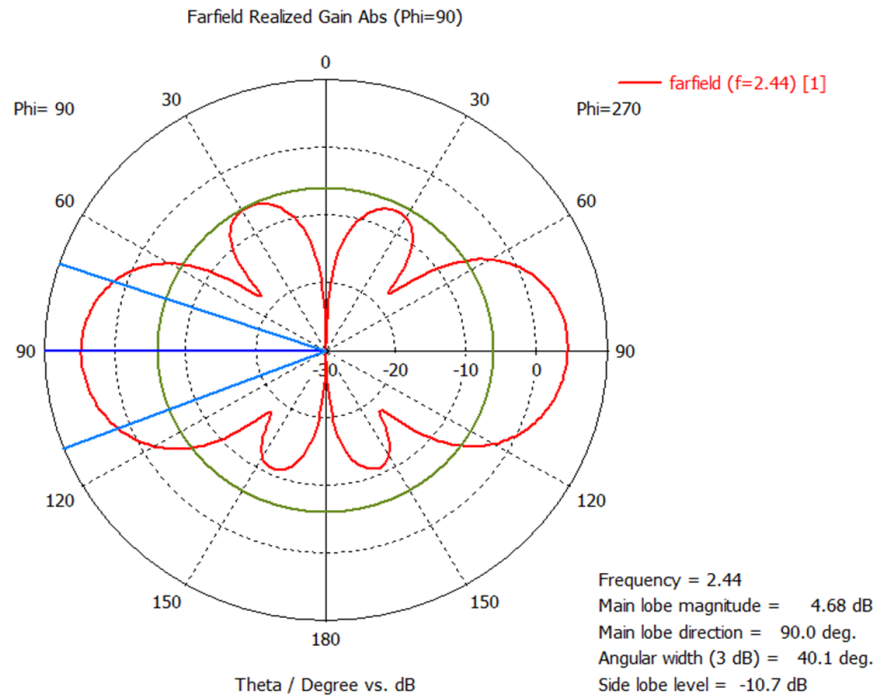


Figure 7. Typical Elevation Pattern, Phi=90 (2.44 GHz)

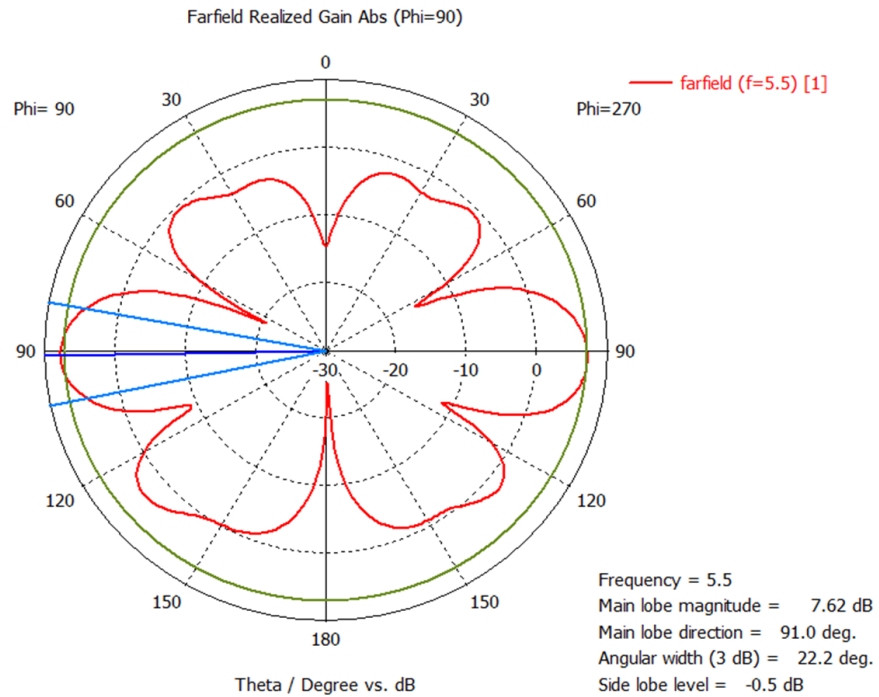
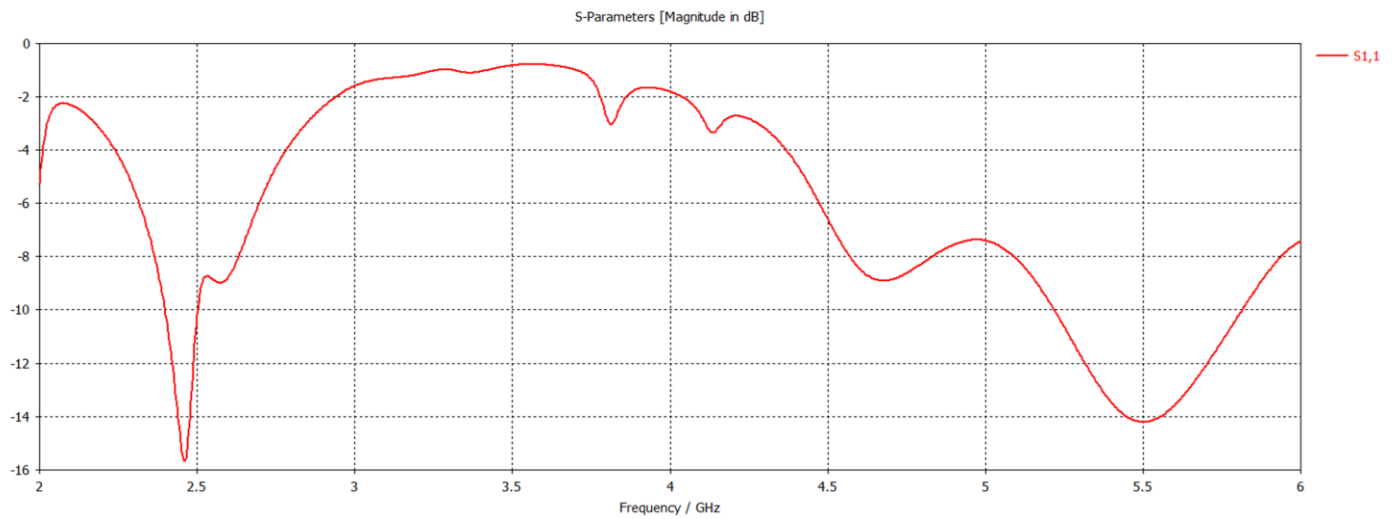


Figure 8. Typical Elevation Pattern, Phi=90 (5.5 GHz)



**Figure 9. Typical Return Loss vs. Frequency**

## Contact Information

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## Ordering Information

Part Number	PTA-WIFI-Paddle-001	RP-SMA(F) connector
Packing for Shipment	Protective box, qty. TBD per box.	