



Chihuahua PRO ST Series

MIMO LTE and MIMO Wi-Fi/Bluetooth/Zigbee

External IP67 Antenna

Product Description

Parsec's Chihuahua PRO ST Series PTA PRO4ST 2LTE 2WIFI is a small footprint four-in-one MIMO LTE, and MIMO Wi-Fi/Bluetooth/Zigbee external waterproof antenna. This compact rugged omni-directional antenna works on all the common worldwide LTE bands with high efficiency. The PTA PRO4ST 2LTE 2WIFI is optimized for small footprint to fit the top of common metal electrical equipment boxes. The strong tamper resistant housing with no exposed connections or mounting hardware is ideally suited for use with self-service kiosks in public areas. The antenna requires a single 1 inch mounting hole.

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

Features

- **LTE frequency range: 698 – 960 MHz
1710 – 2700 MHz**
- **Wi-Fi frequency range: 2400 – 2483.5 MHz
4900 – 5900 MHz**
- **Omni-directional**
- **MIMO LTE and MIMO Wi-Fi**
- **High Efficiency: 70%**
- **Small footprint**

Applications

- **External M2M, IoT Applications**
- **SCADA, Industrial monitoring**
- **Oil and natural gas fields**
- **Self-service kiosks**

Electrical Specifications

ID	Port	Parameters	Units	Typ.
Radiated Efficiency	LTE-1,2	698 – 960 MHz	%	70
	LTE-1,2	1710 – 2700 MHz		70
	WiFi-1,2	2400 – 2483.5 MHz		70
	WiFi-1,2	4900 – 5900 MHz		70
Peak Gain	LTE-1,2	698 – 960 MHz	dBi	3.7
	LTE-1,2	1710 – 2700 MHz		4.9
	WiFi-1,2	2400 – 2483.5 MHz		2.2
	WiFi-1,2	4900 – 5900 MHz		4.5
Return Loss (50 Ω)	LTE-1,2	698 – 960 MHz	dB	8
	LTE-1,2	1710 – 2700 MHz		8
	WiFi-1,2	2400 – 2483.5 MHz		16
	WiFi-1,2	4900 – 5900 MHz		8
Isolation	LTE-1 to 2	698 – 960 MHz	dB	8.5
	LTE-1 to 2	1710 – 2700 MHz		11
	WiFi-1 to 2	2400 – 2483.5 MHz		15
	WiFi-1 to 2	4900 – 5900 MHz		15
Polarization	LTE, WiFi			Linear
Max Input Power	LTE, WiFi		Watts	5
RF Connector	LTE			SMA(M)
	WiFi			RP-SMA
RF Cable Type	LTE, WiFi			LMR200

PTA PRO4ST 2LTE 2WIFI

Notes:

1. Electrical specifications based on antenna with a 5 in. x 8 in. external ground plane.
2. Isolation does not include cable loss.

LTE Bands Covered for US Carriers

AT&T	2, 4, 5, 14, 17, 29, 30, 66
Verizon	2, 4, 5, 13, 66
T-Mobile	2, 4, 12, 66
Sprint	2, 25, 26, 41

Mechanical

Dimensions	3.75 inch diameter x 3.26 inch height
Mounting Hole	Single 1 inch
RF Cable Length	Choice of 1, 2, or 6 foot cables

Environmental

Operating Temperature	-40°C to 85°C
Ingress Protection	IP67 waterproof

PTA PRO4ST 2LTE 2WIFI

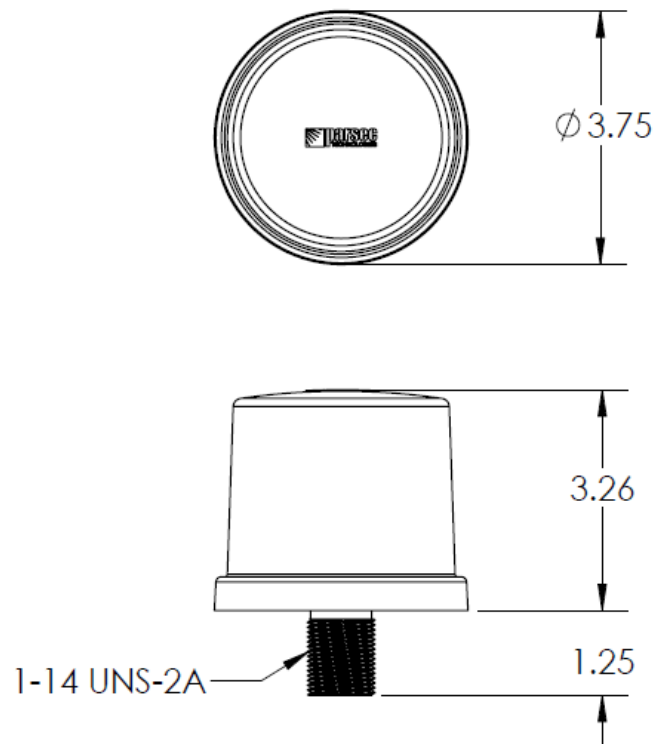


Figure 1. Product Dimensions



Figure 2. Product Picture

Typical Performance

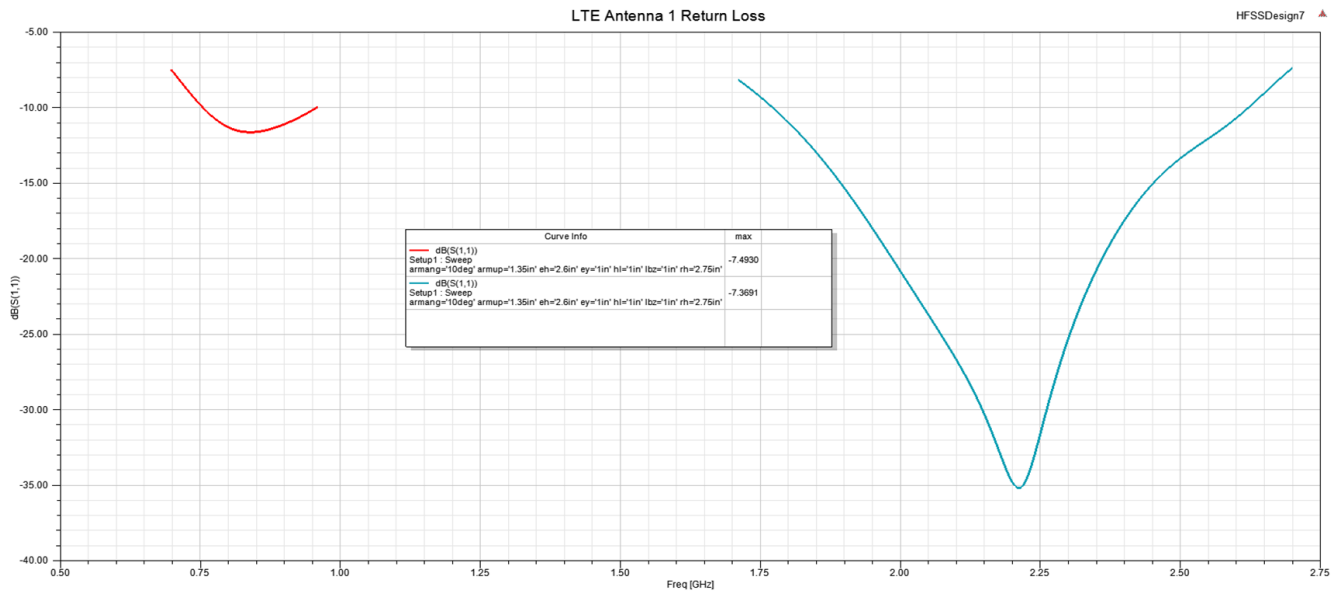


Figure 3. LTE Antenna 1 Return Loss

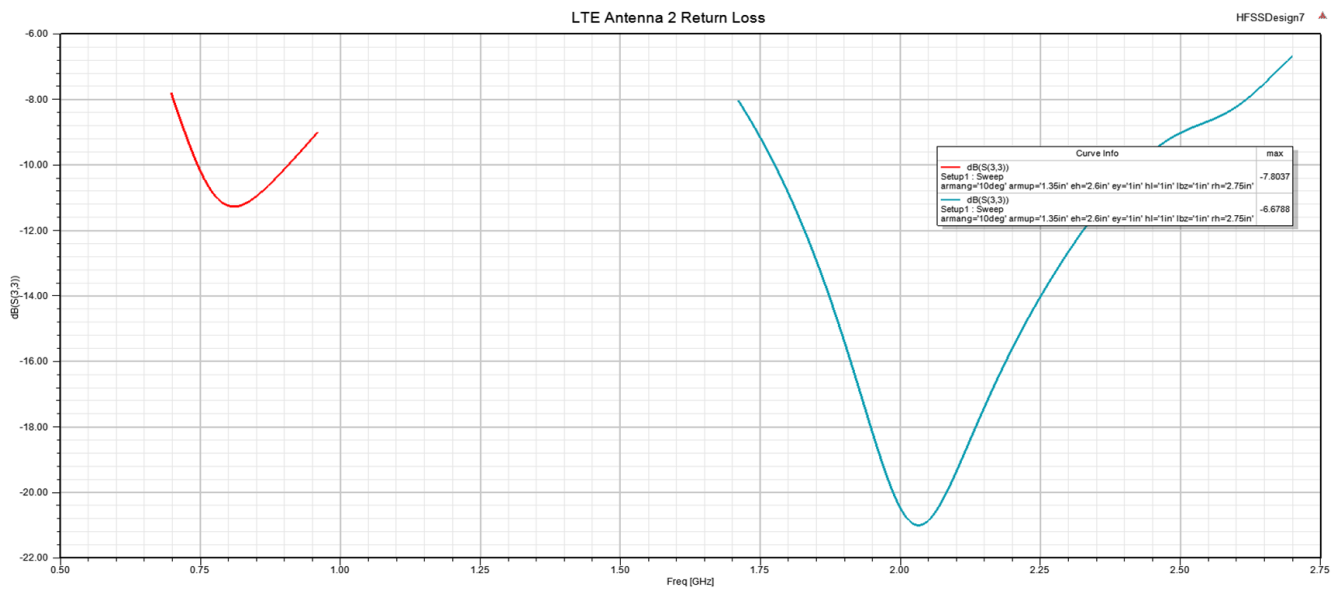


Figure 4. LTE Antenna 2 Return Loss

PTA PRO4ST 2LTE 2WIFI

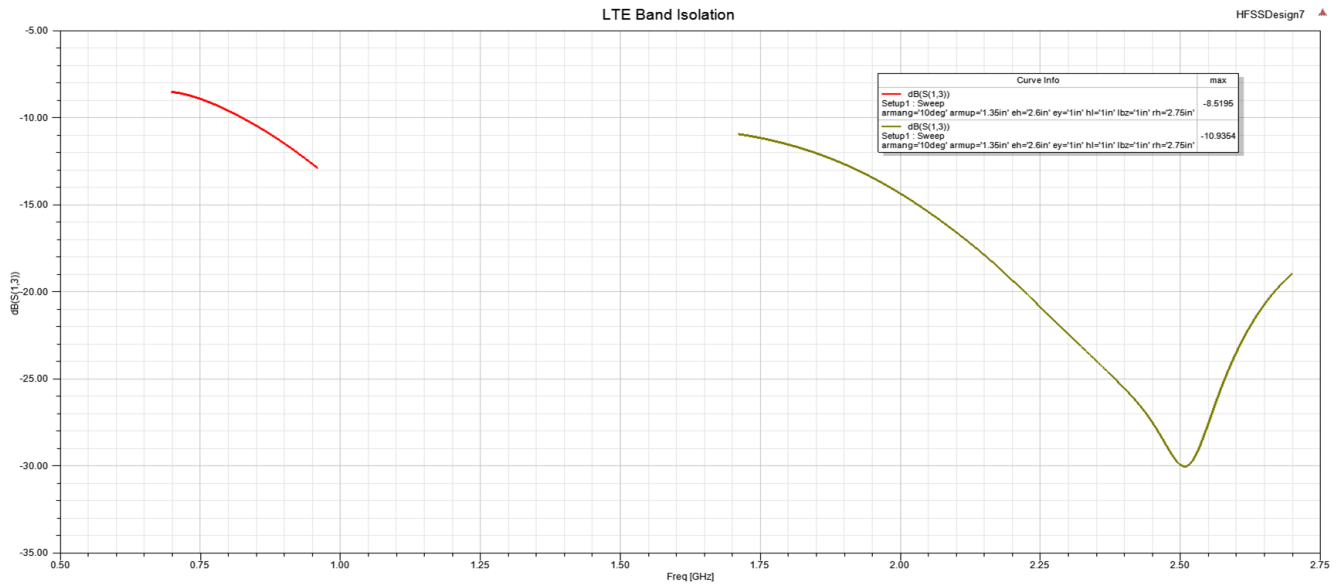


Figure 5. LTE Antenna Isolation

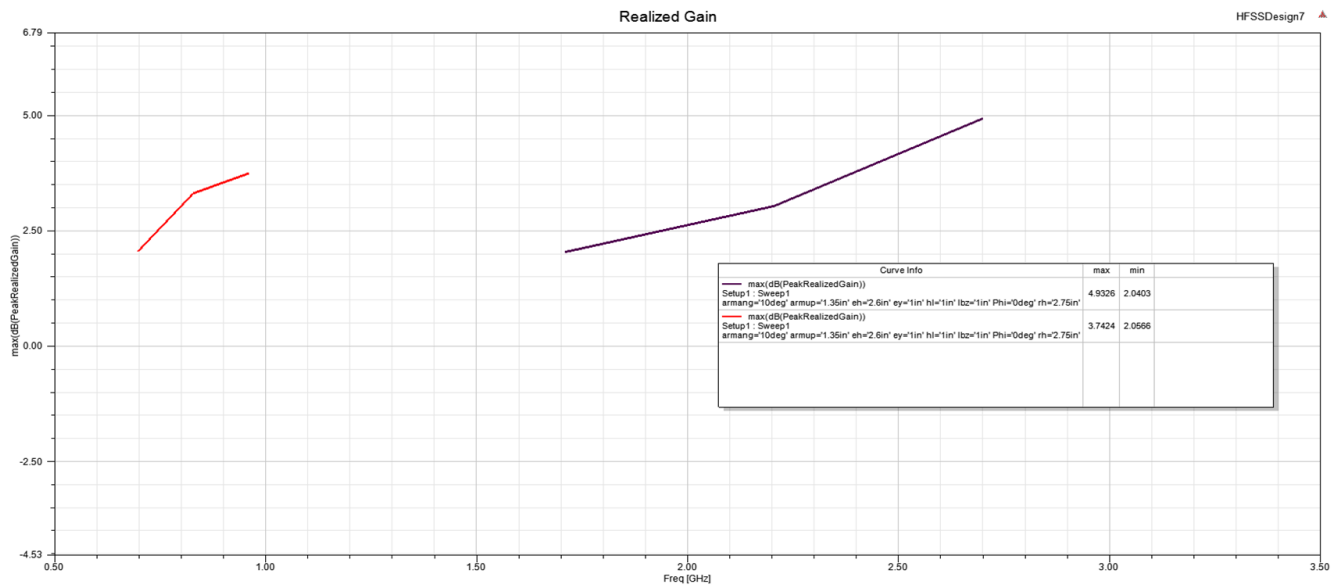
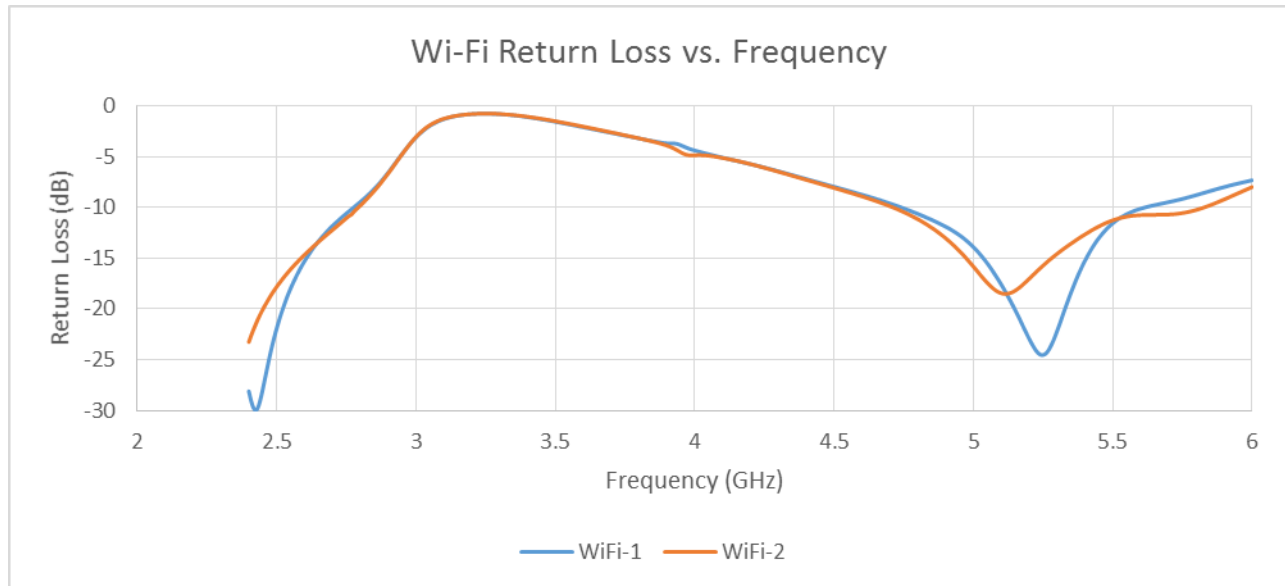
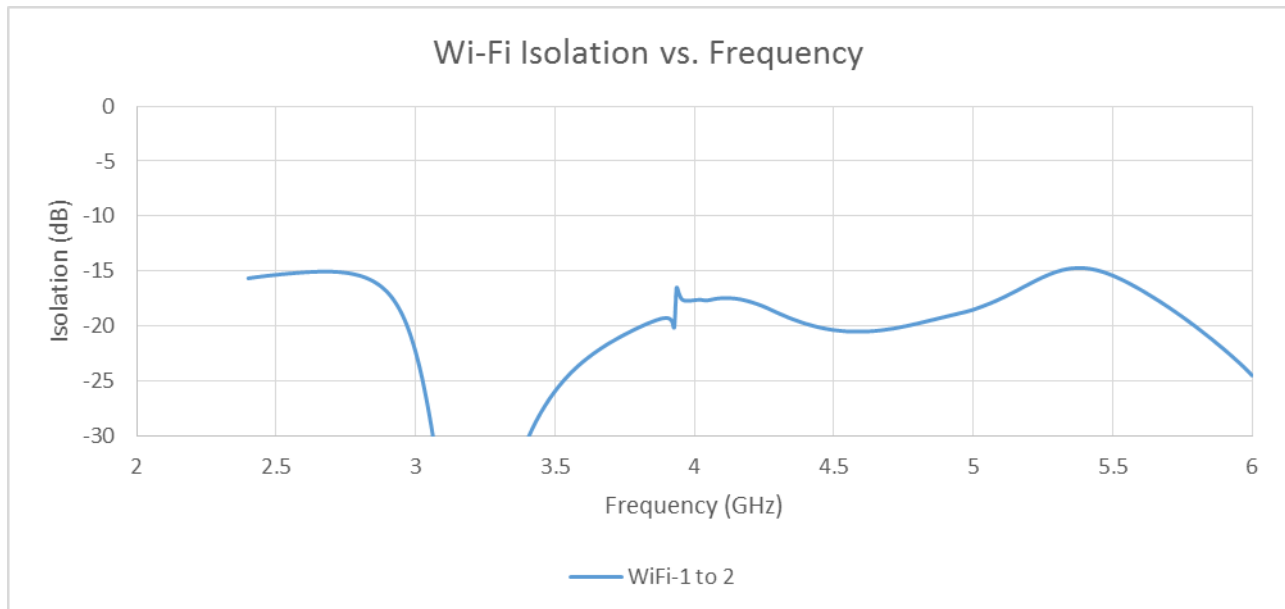


Figure 6. LTE Antenna Gain

**Figure 7. Wi-Fi Return Loss****Figure 8. Wi-Fi Isolation**

PTA PRO4ST 2LTE 2WIFI

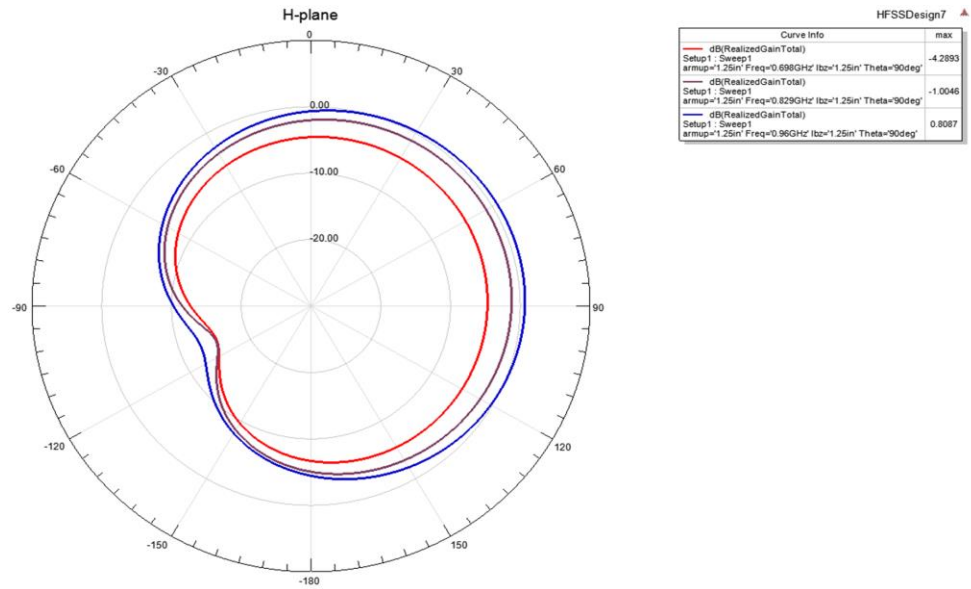


Figure 9. LTE, Azimuth, Low Band, Phi/Deg, Theta = 90

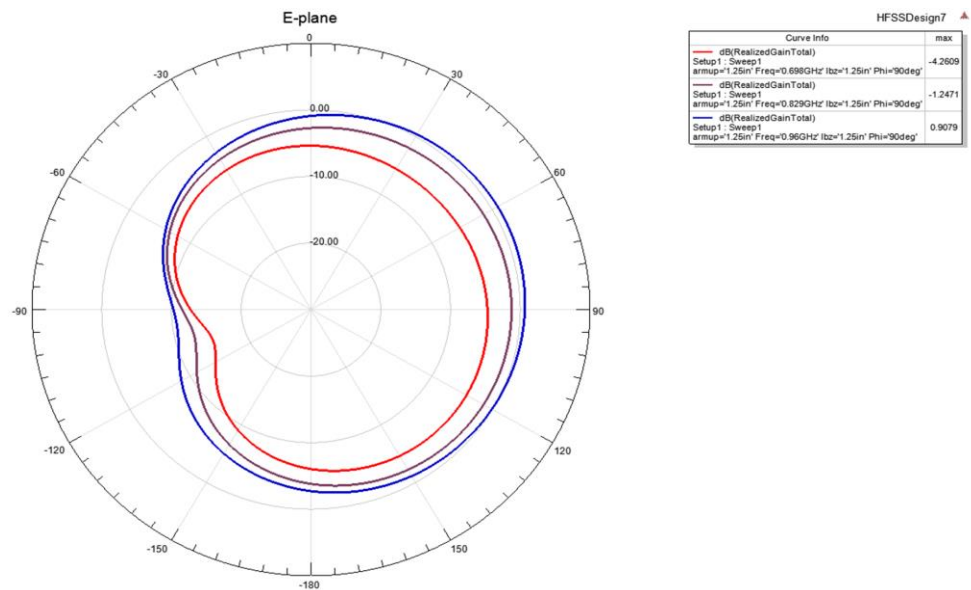


Figure 10. LTE, Elevation, Low Band, Theta/Deg, Phi = 90

PTA PRO4ST 2LTE 2WIFI

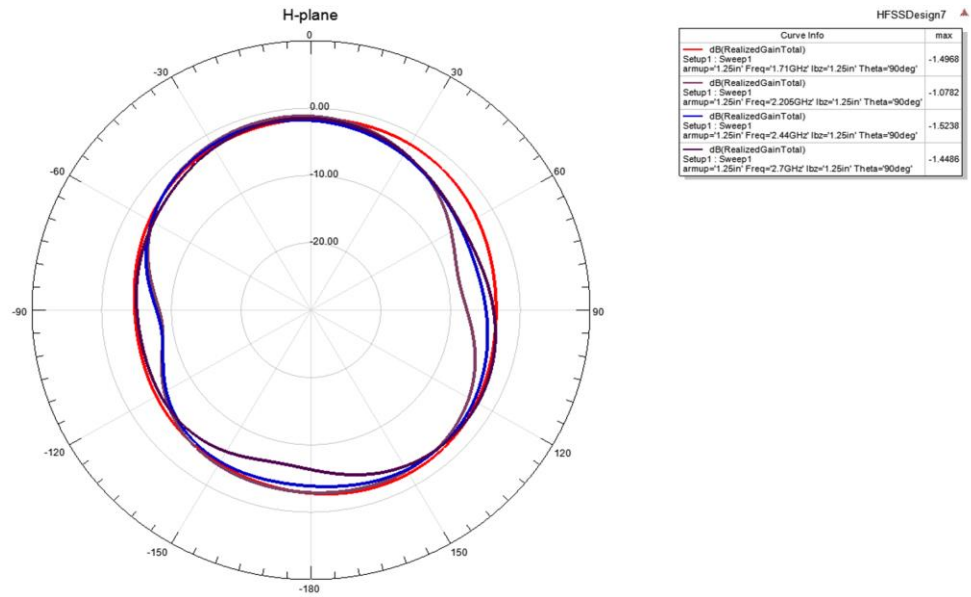


Figure 11. LTE, Azimuth, High Band, Phi/Deg, Theta = 90

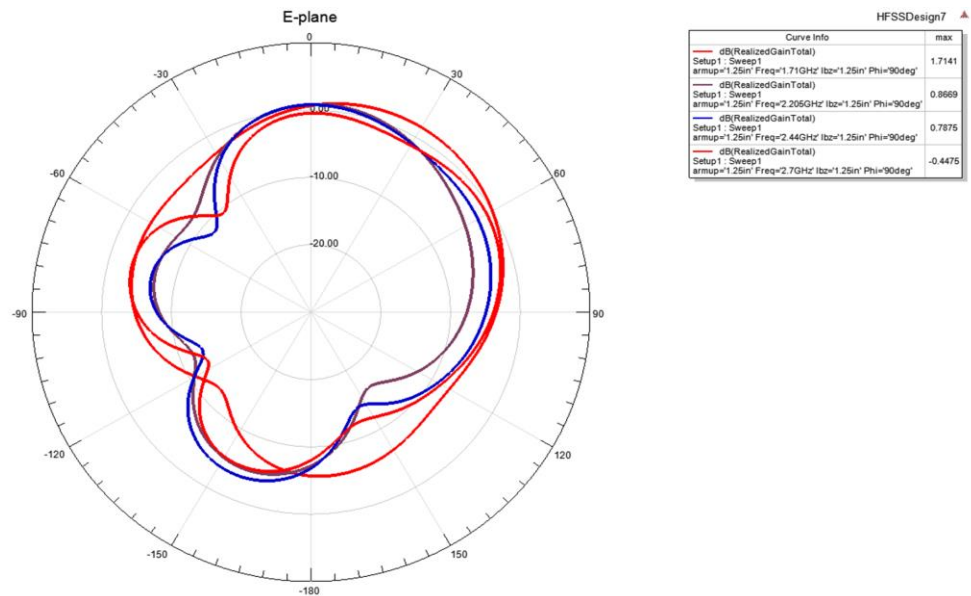


Figure 12. LTE, Elevation, High Band, Theta/Deg, Phi = 90

PTA PRO4ST 2LTE 2WIFI

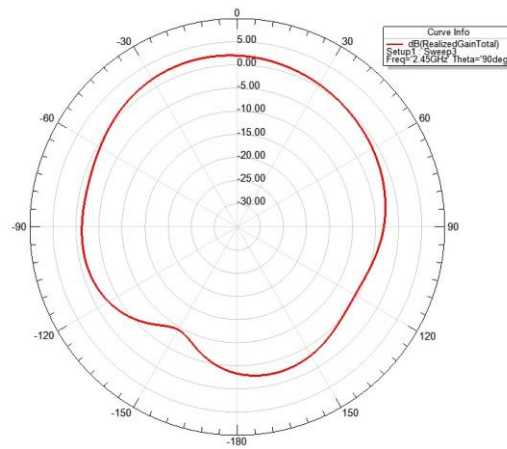


Figure 13. Wi-Fi, Azimuth, 2.45 GHz, Phi/Deg, Theta = 90

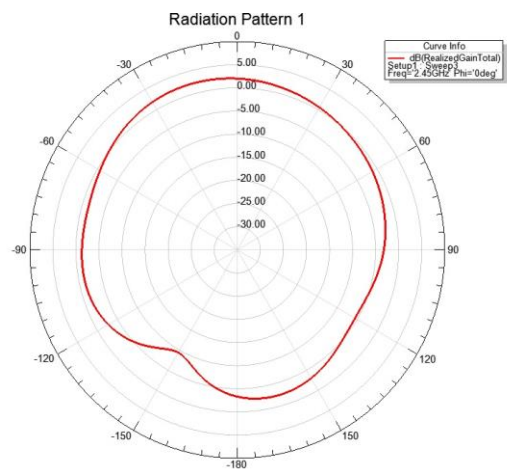


Figure 14. Wi-Fi, Elevation, 2.45 GHz, Theta/Deg, Phi = 0

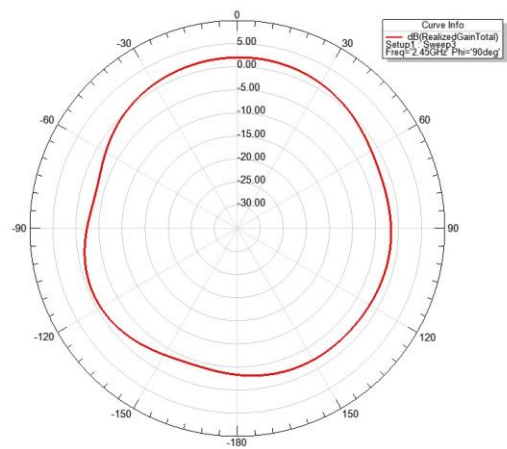


Figure 15. Wi-Fi, Elevation, 2.45 GHz, Theta/Deg, Phi = 90

PTA PRO4ST 2LTE 2WIFI

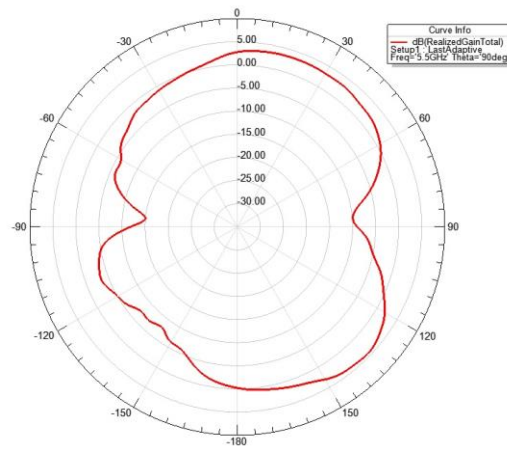


Figure 16. Wi-Fi, Azimuth, 5.5GHz Phi/Deg, Theta = 90

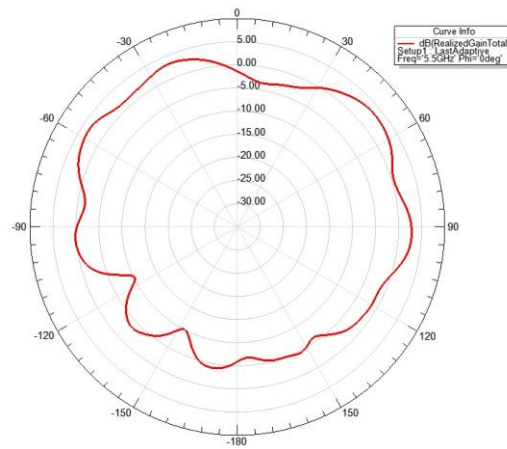


Figure 17. Wi-Fi, Elevation, 5.5 GHz, Theta/Deg, Phi = 0

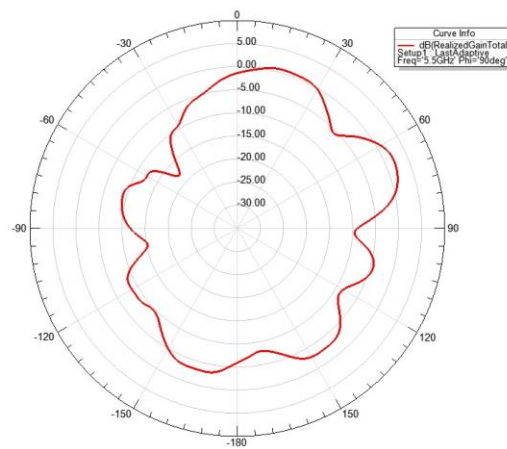


Figure 18. Wi-Fi, Elevation, 5.5 GHz, Theta/Deg, Phi = 90

Contact Information

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Ordering Information

Part Number	PTA PRO4ST 2LTE 2WIFI 001	1 foot long cables
	PTA PRO4ST 2LTE 2WIFI 002	2 foot long cables
	PTA PRO4ST 2LTE 2WIFI 006	6 foot long cables

Add B for Black Radome, W for White Radome

Custom cable lengths available

Packing for Shipment Protective box, qty. 1 per box.