

8000-321 'Sandcastle' Multifunction 18-in-1 Antenna

5 YEARS WARRANTY



The 'Sandcastle' is a multifunction antenna designed to **future-proof** blue-light and amber-light vehicle fleets, delivering **up to 18 functions** within a single, panel-mounted unit.

Equipped with six ultra-wideband cellular elements covering **700 MHz to 6 GHz**, the Sandcastle ensures reliable performance today while supporting future requirements for years to come. With a **minimum 4 dBi gain** across the band, it offers exceptional efficiency for all public safety applications.

This antenna is **ESN-ready** and fully compatible with **current Airwave systems**, making it ideal for agencies transitioning between networks. If the whip option is not required, the 'Sandcastle' can be installed as a **ground-plane-independent antenna**, simplifying installation.

Featuring integrated **GPS, MiMo dual-band Wi-Fi**, and an **optional TETRA whip**, the Sandcastle eliminates the need for multiple holes in the roof, requiring only a **single 19 mm mounting hole**. Additional variants are available, including low-loss coaxial cable fitting kits. **For more details, please contact us.**

Also Available in White: Part No. 8000-221



Part No.	Cable Kit Options
SK010035	Product Kit : Generic 18 in 1 Sandcastle Cable Kit 5m : Terminated
SK010033	Product Kit : Generic 18 in 1 Sandcastle Cable Kit 3m : Terminated

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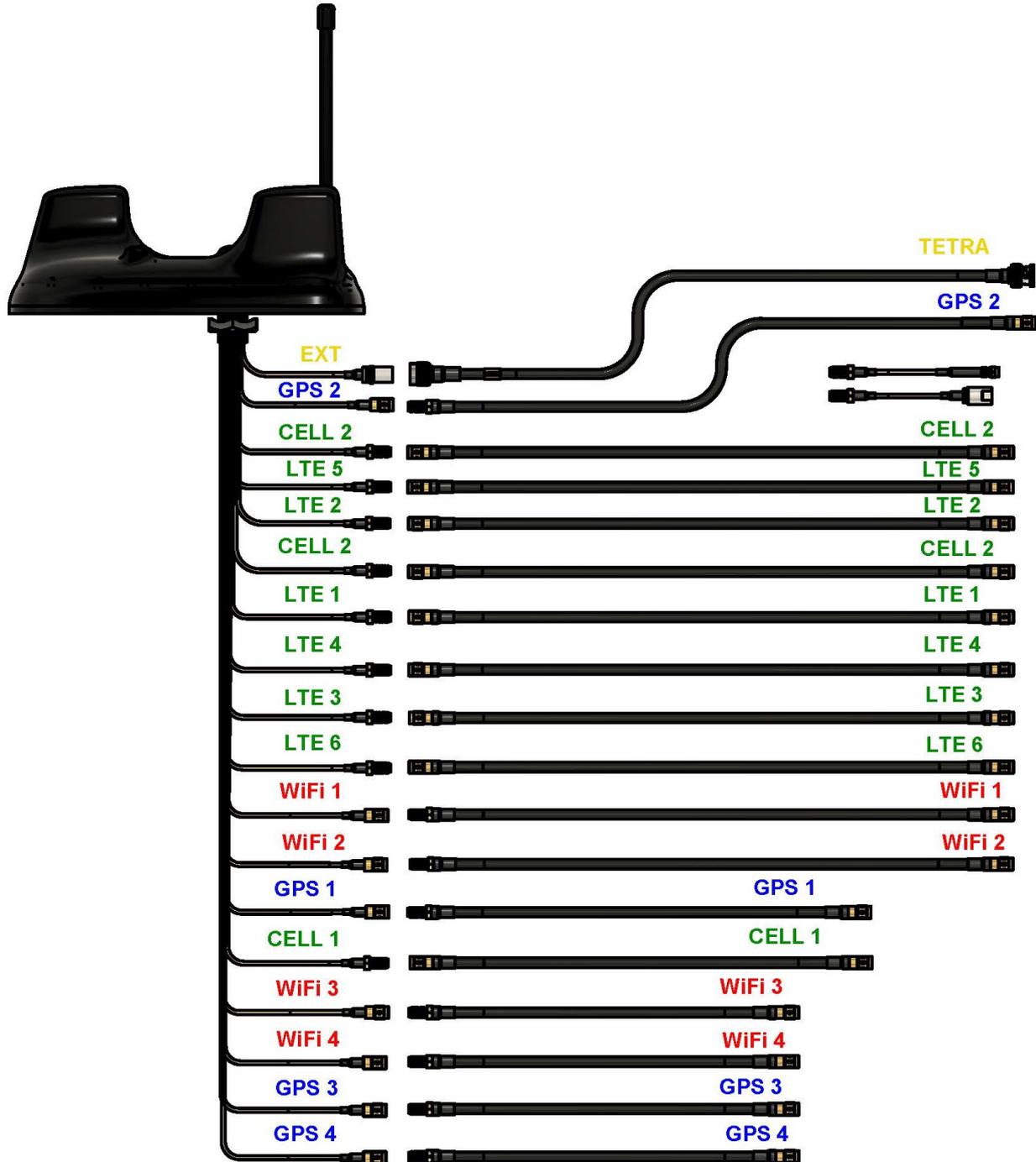
Technical Specifications

Part No.	8000-321		
Electrical Data	TETRA	Cellular	Dual Band Wi-Fi
Frequency Range (MHz)	380-430 MHz	698-960 MHz 1710-2700 MHz	2.4 GHz & 5.8 GHz
Input Power	10W	10W	10W
Gain	4dBi*	Minimum 4dBi*	Minimum 4dBi*
VSWR	< 2.5:1	< 2.5:1	< 2.5:1
Impedance	50Ω	50Ω	50Ω
Cable Type	RG316	RG316	RG316
Termination	TNC (f)	SMA (f)	SMA (m) Reverse Polarity
Electrical Data	GPS	LTE	
Frequency Range (MHz)	1562-1612 MHz	700-960 MHz 1700-6000 MHz	
Input Power	-	10W	
Gain	>26dB	Minimum 4dBi*	
VSWR	< 2.5:1	< 2.5:1	
Impedance	-	50Ω	
Cable Type	RG316	RG316	
Termination	SMA (m)	SMA (f)	
Mechanical Data			
Dimensions (mm)	H76 x W197 x L227 **		
Operating Temp (°C)	-40 / +80°C (-40° / 176°F)		
Material	ABS		
Colour	Black		
Weight (g)	600		
Cable Data			
Length (mm)	300	300	300
Diameter	2.8	2.8	2.8
Mounting Data			
Mounting Type	Panel Mount with Adhesive Pad		
Mounting Hole (mm)	19mm		

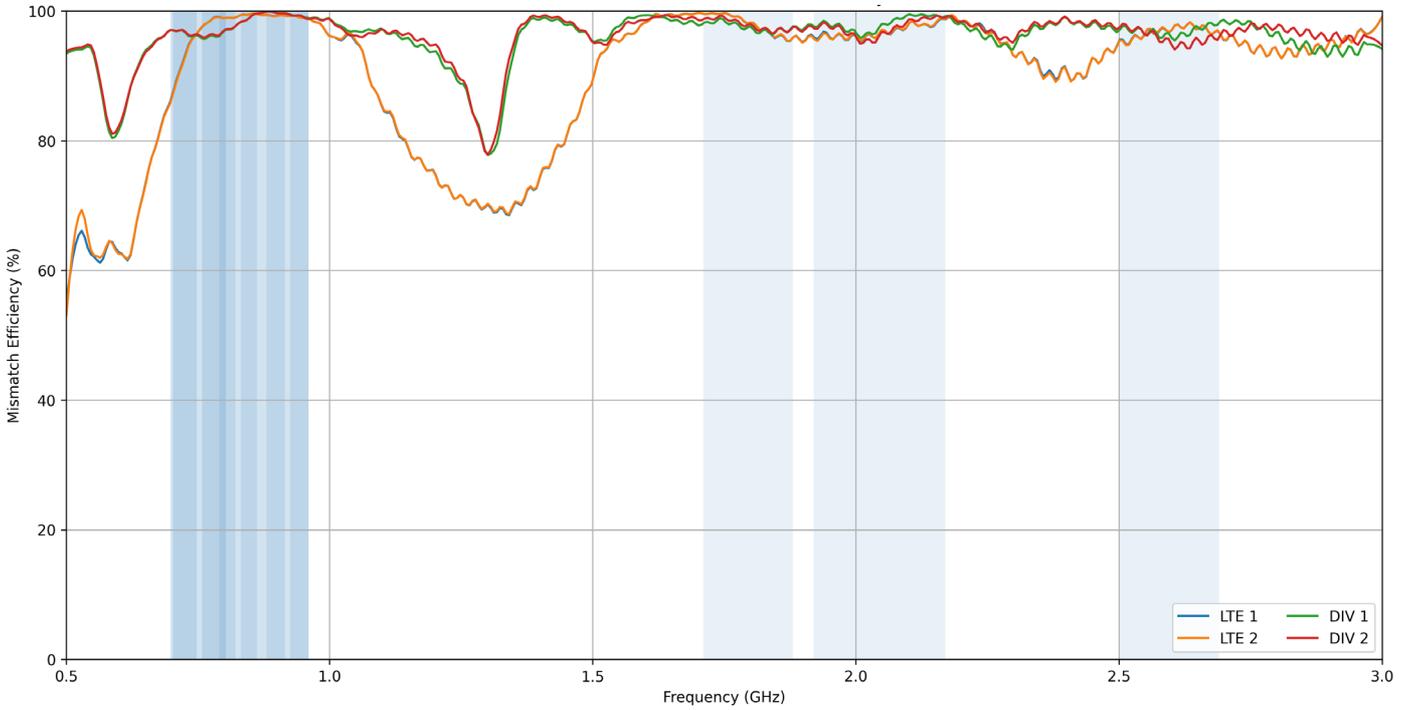
Subject to change. *Ground plane dependent

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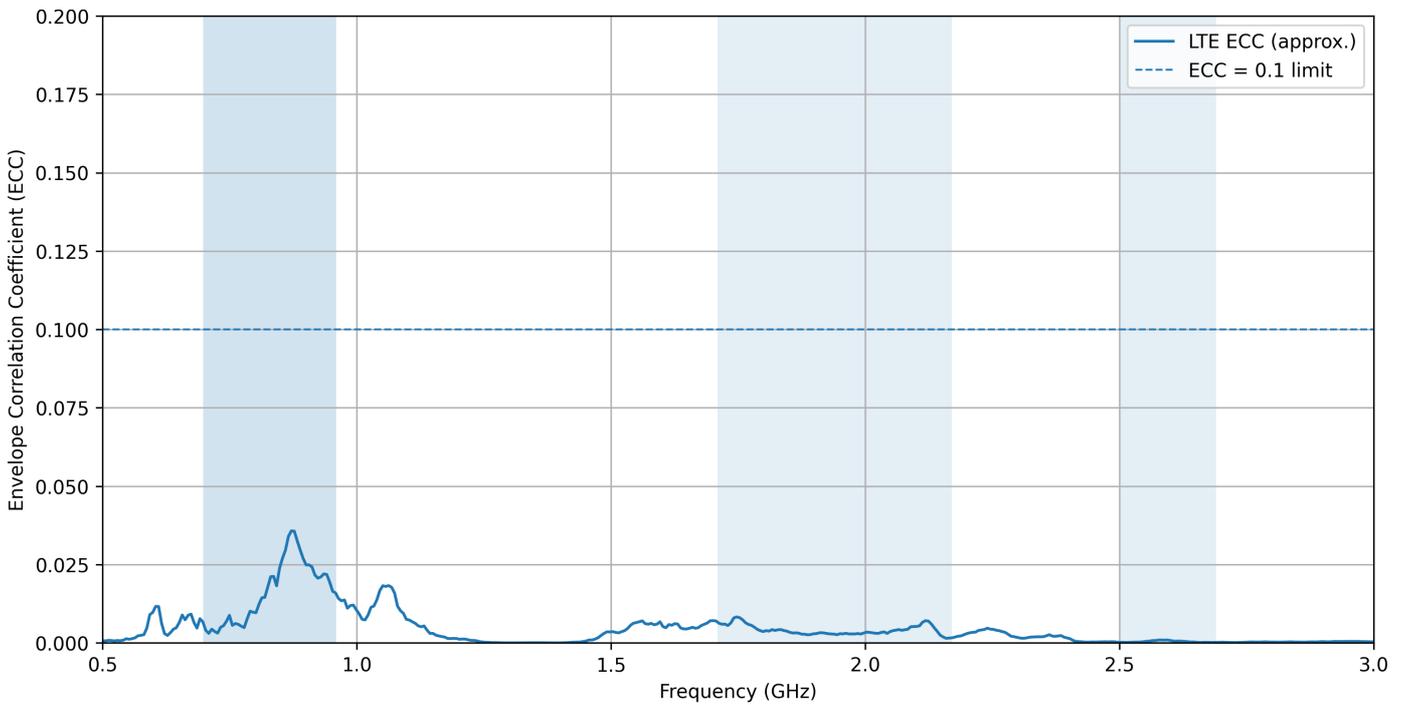
Cable Diagram



LTE / DIV Ports – Mismatch Efficiency



LTE ECC (Cut at 3 GHz)



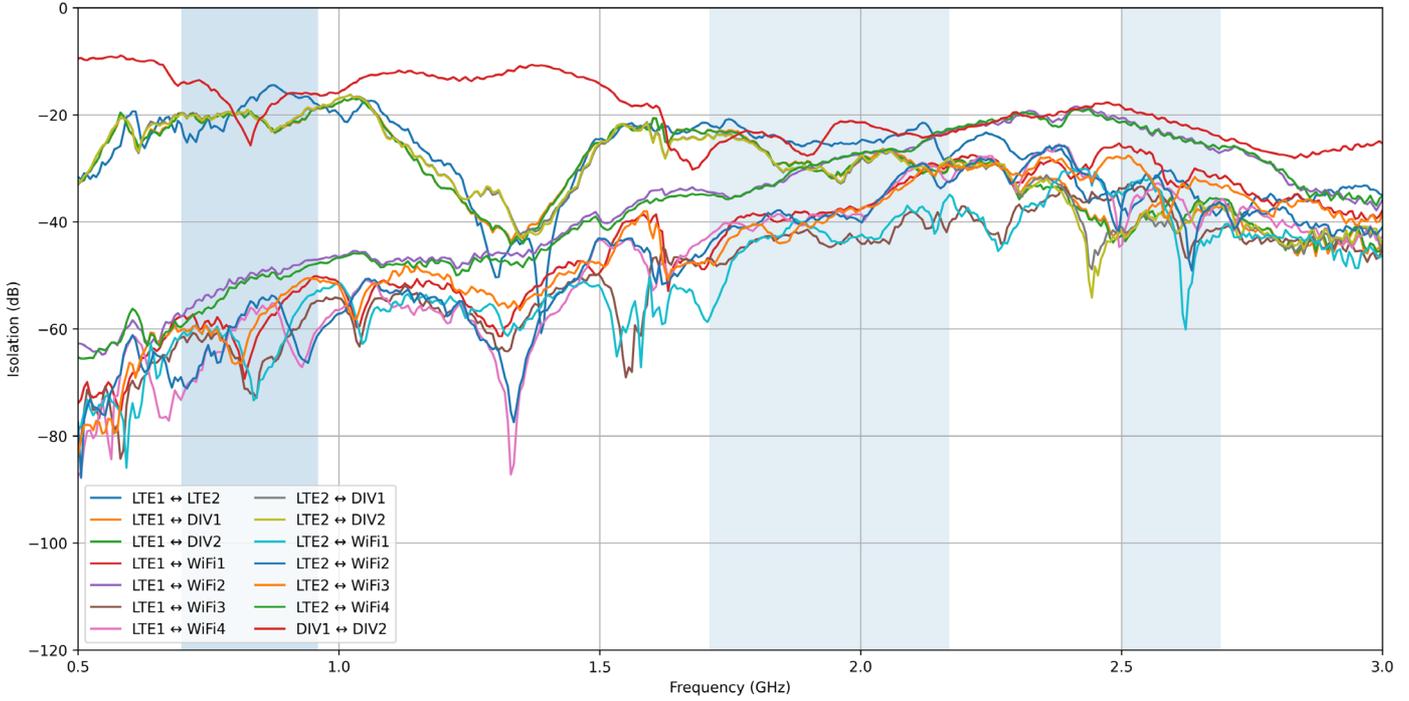
Subject to change without prior notice.

www.sure-antennas.com

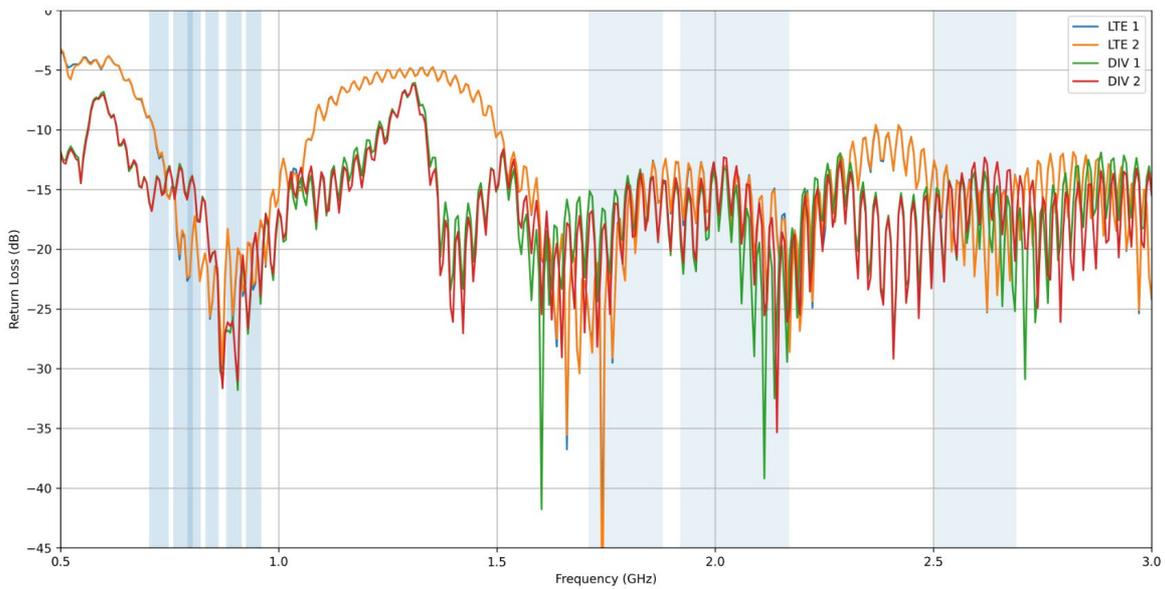
A brand of



LTE Port Isolation (Cut at 3 GHz)

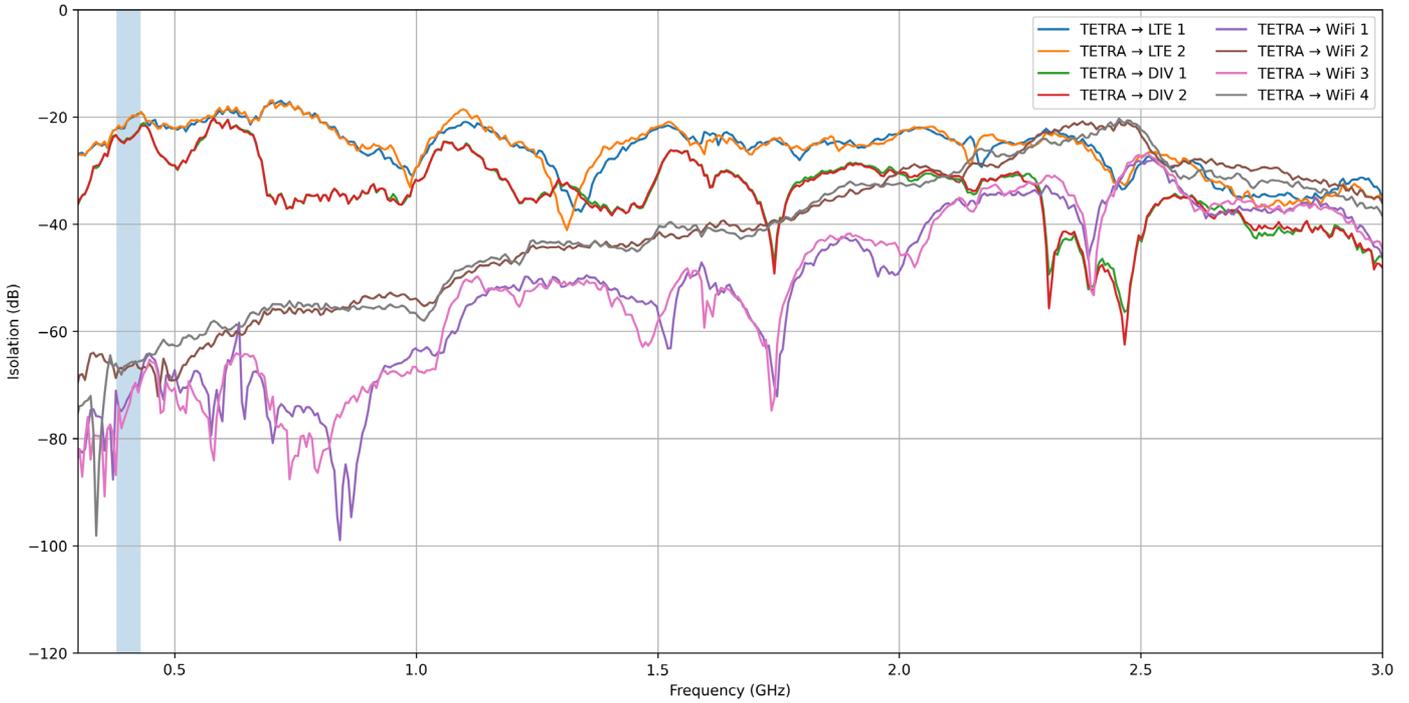


LTE Return Loss

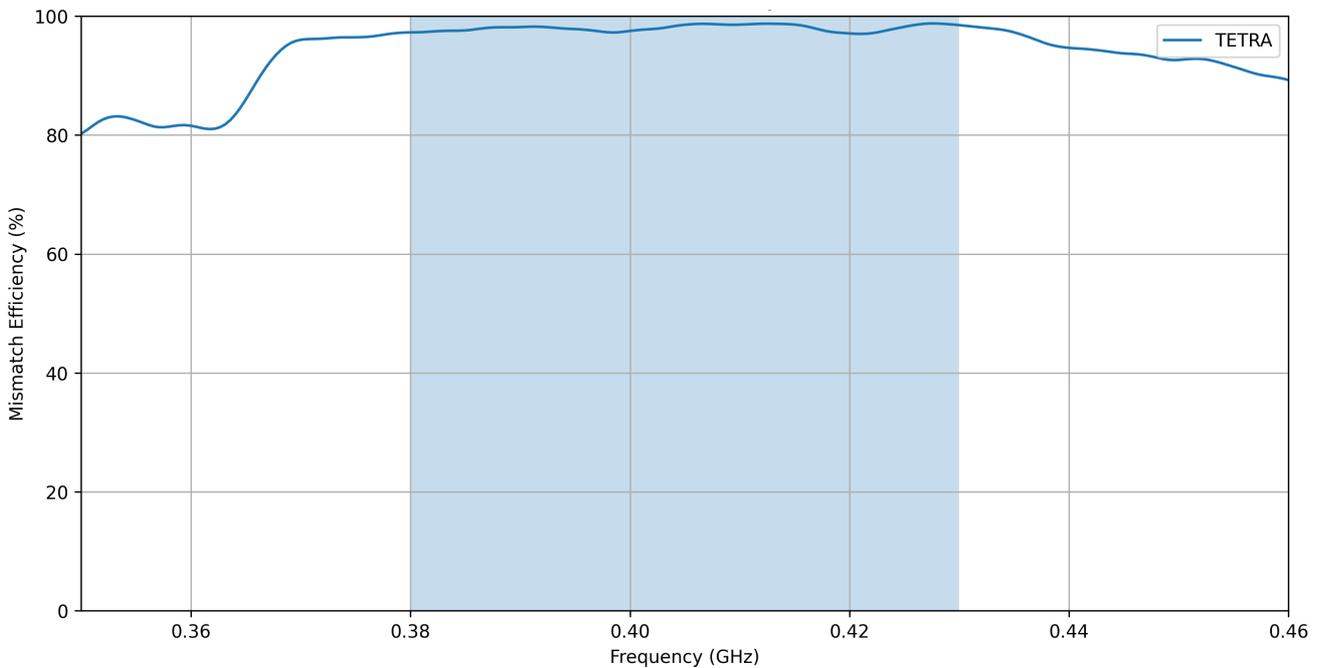


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TETRA Port Isolation to All Other Parts (S21)

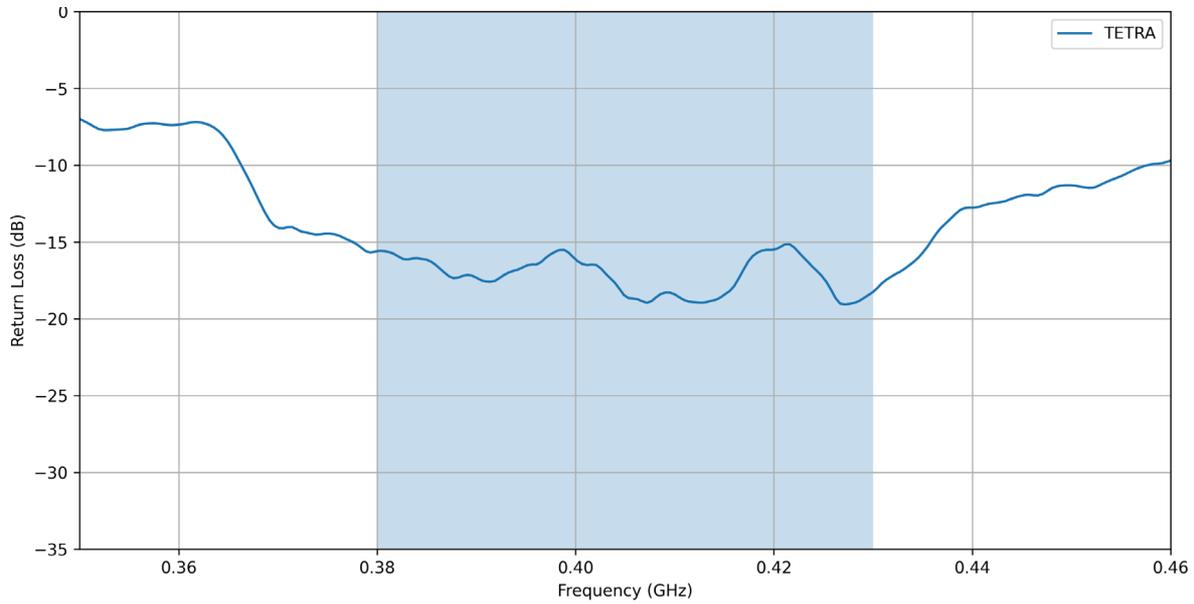


TETRA Port -Mismatch Efficiency (380-430 MHz)

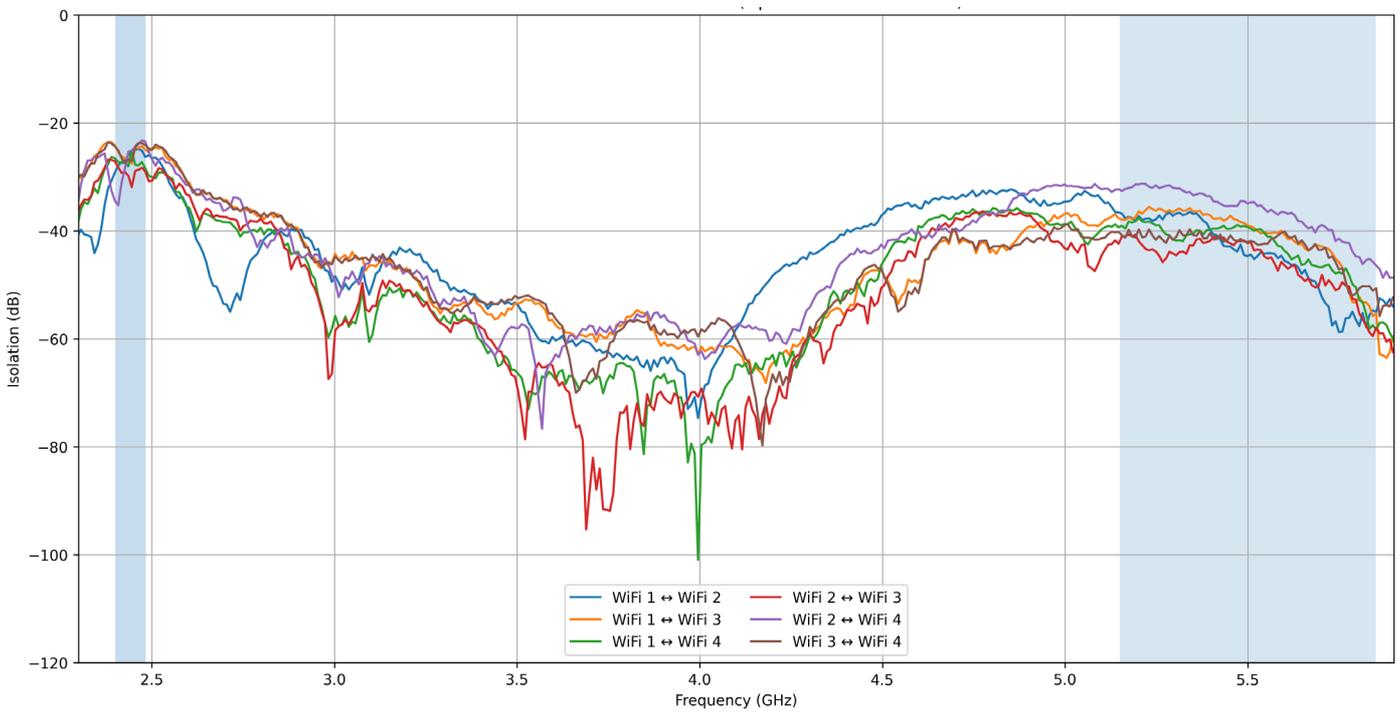


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TETRA Antenna – Return Loss (380-430 MHz)

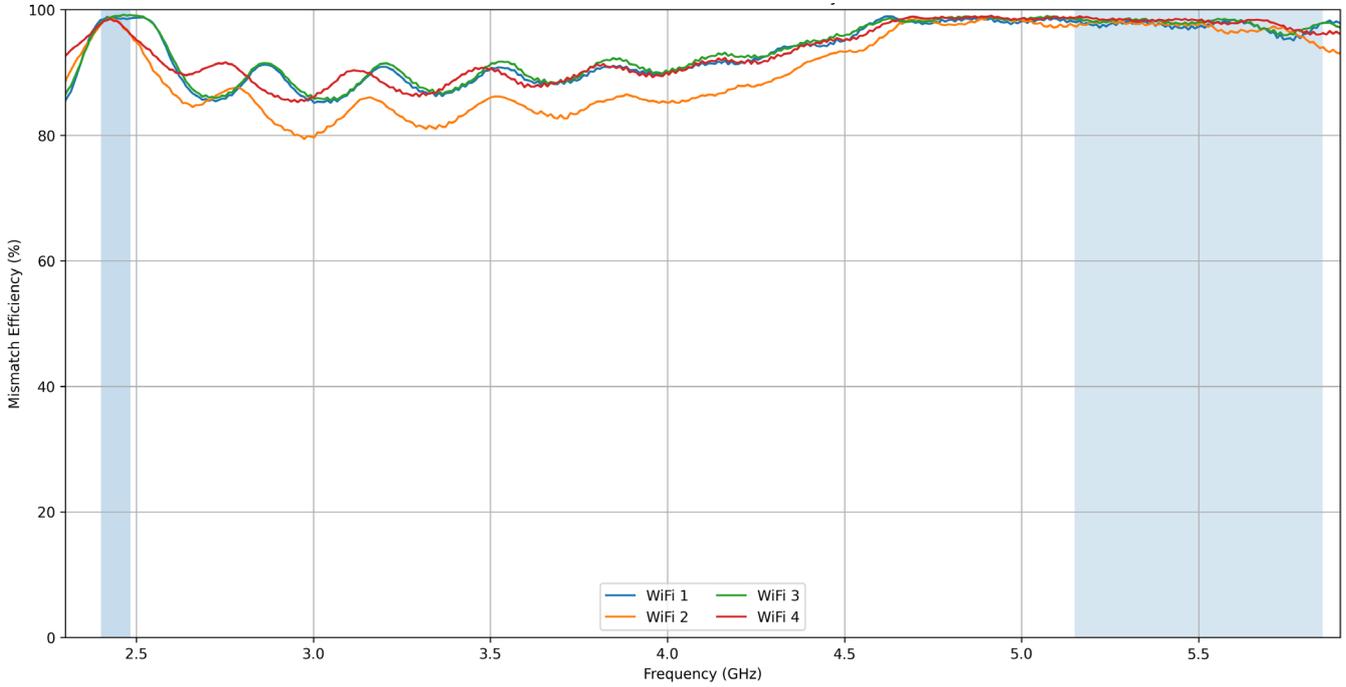


WiFi Port-to-Port Isolation (Updated Measurements)

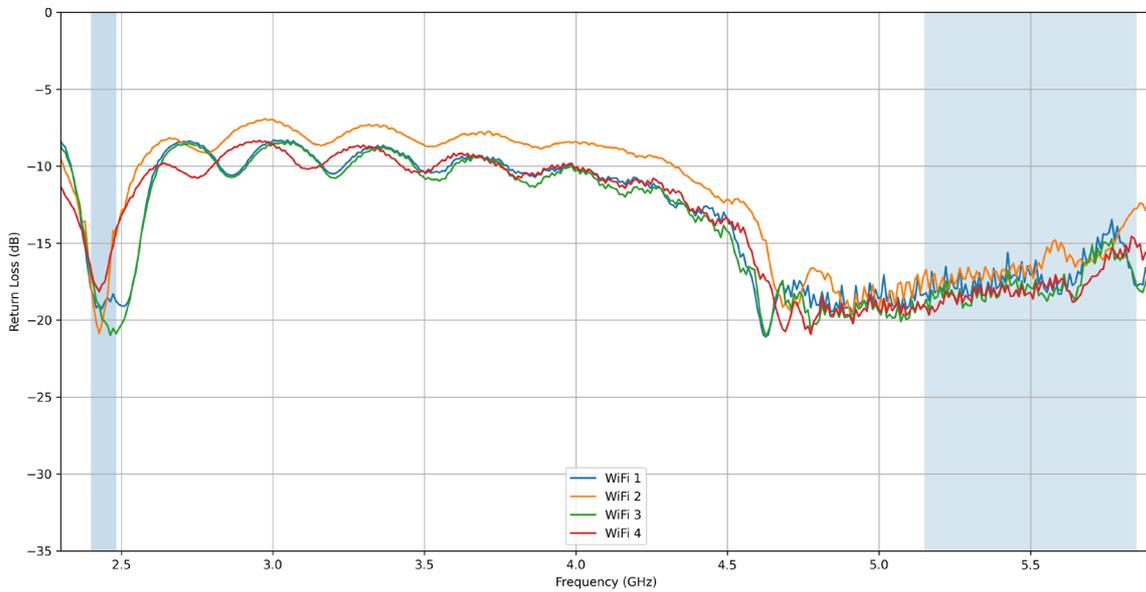


Subject to change without prior notice.

WiFi Ports -Mismatch Efficiency



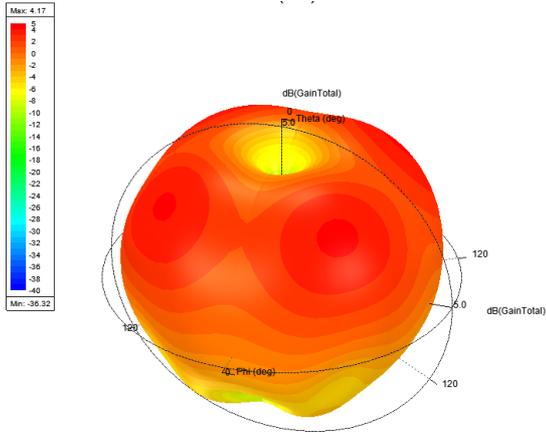
WiFi Antenna – Dual-Band Return Loss



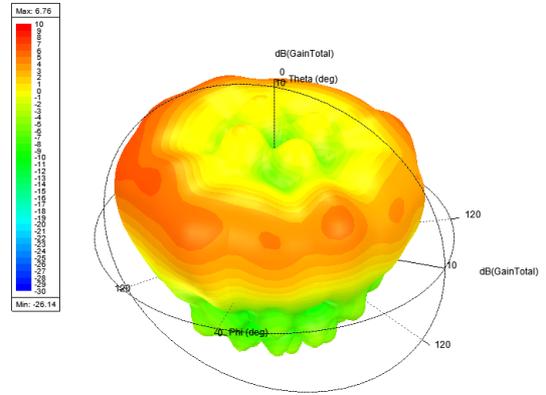
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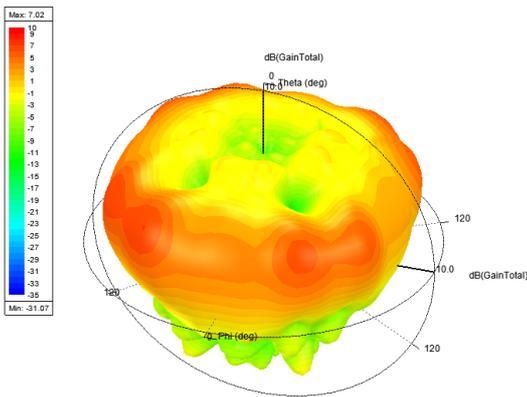
820MHz



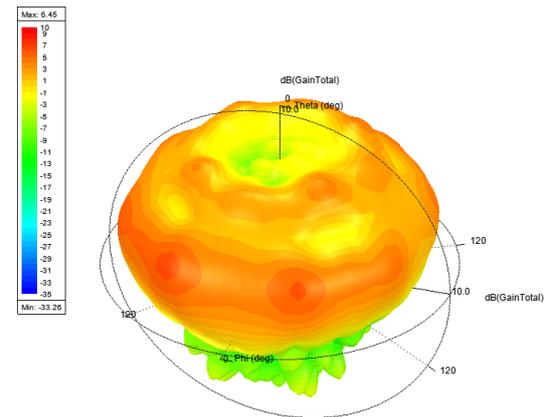
1820MHz



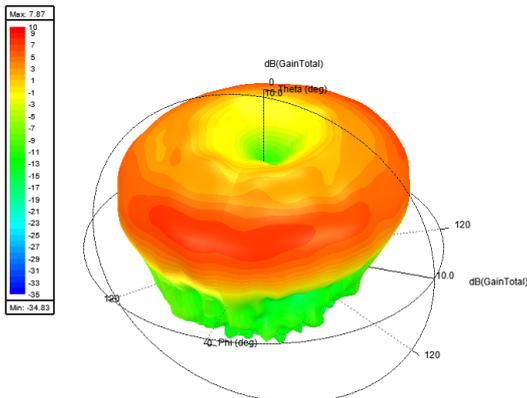
2140MHz



2600MHz



3600MHz



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