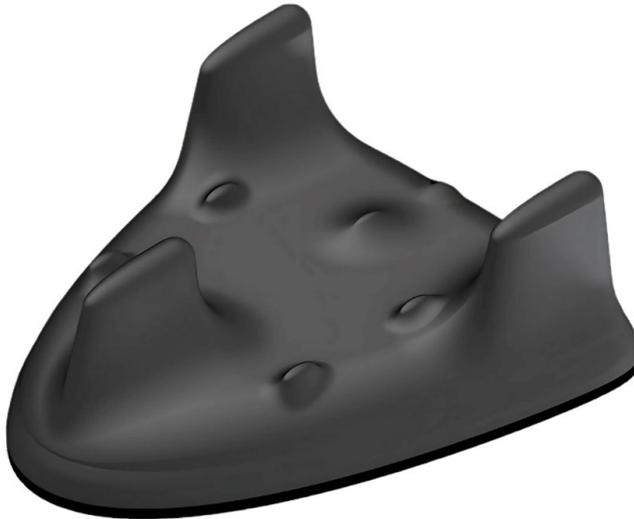


**5 YEARS WARRANTY**



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. This unit incorporates **11 functions**.

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.

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. 8000-213



Part No.

SK024701

Cable Kit Options

Product Kit : Sandcastle 11 in 1 Antenna : Black : 4x LTE 1x GPS 6x WiFi; - Complete with 5m Coax Extension Cables - 6x Cables

Additional options available upon request.

Technical Specifications

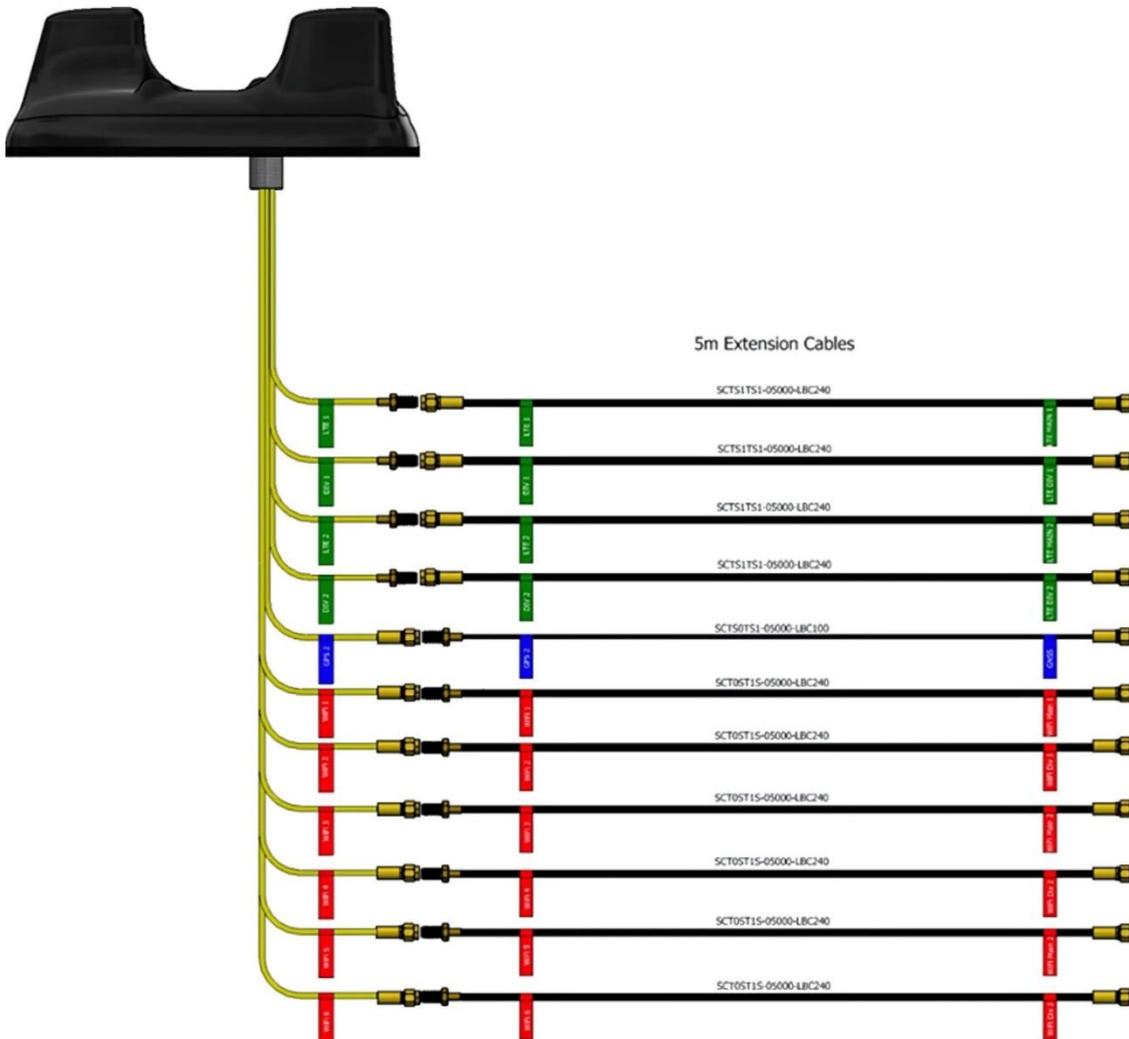
Part No.	8000-313	
<b>Electrical Data</b>		
	2G 3G 4G 5G	Wi-Fi
Frequency Range (MHz)	698-6000 MHz	2.4 GHz & 5.8GHz
Band	4x Wideband LTE 4x4 MiMo	4x Dual Band Wi-Fi 4x4 MiMo
VSWR	<2.1:1 TYPICALLY 1.5:1	<2.1:1 TYPICALLY 1.5:1
Gain	Minimum 4dBi	Minimum 4dBi
Isolation	<-25dB	<-25dB
Polarisation	Vertical	Vertical
Pattern	Omni-directional	Omni-directional
Impedance	50Ω	50Ω
Max Power Input (W)	10W	10W
<b>GPS/GLONASS</b>		
Frequency Range (MHz)	1562-1612	
VSWR	<2:1	
Gain	26dB	
Polarisation	Right Hand Circular	
Operating Voltage	3-5v DC (fed via coax, each port is DC isolated)	
Cable	2x RG316 Terminated to SMA (m)	
<b>Mechanical Data</b>		
Dimensions (mm)	H76xW197xL227	
Operating Temp (°C)	-40 / +80°C (-40° / 176°F)	
Material	ABS	
Colour	Black	
Weight (g)	600	
<b>Cable Data</b>		
Cable Type	RG316	RG316
length (mm)	300	300
Diameter	2.8	2.8
Termination	SMA (f)	SMA (m) Reverse Polarity
<b>Mounting Data</b>		
Mounting Type	Panel mount with adhesive pad	
Mounting Hole (mm)	19mm	

Subject to change without prior notice.

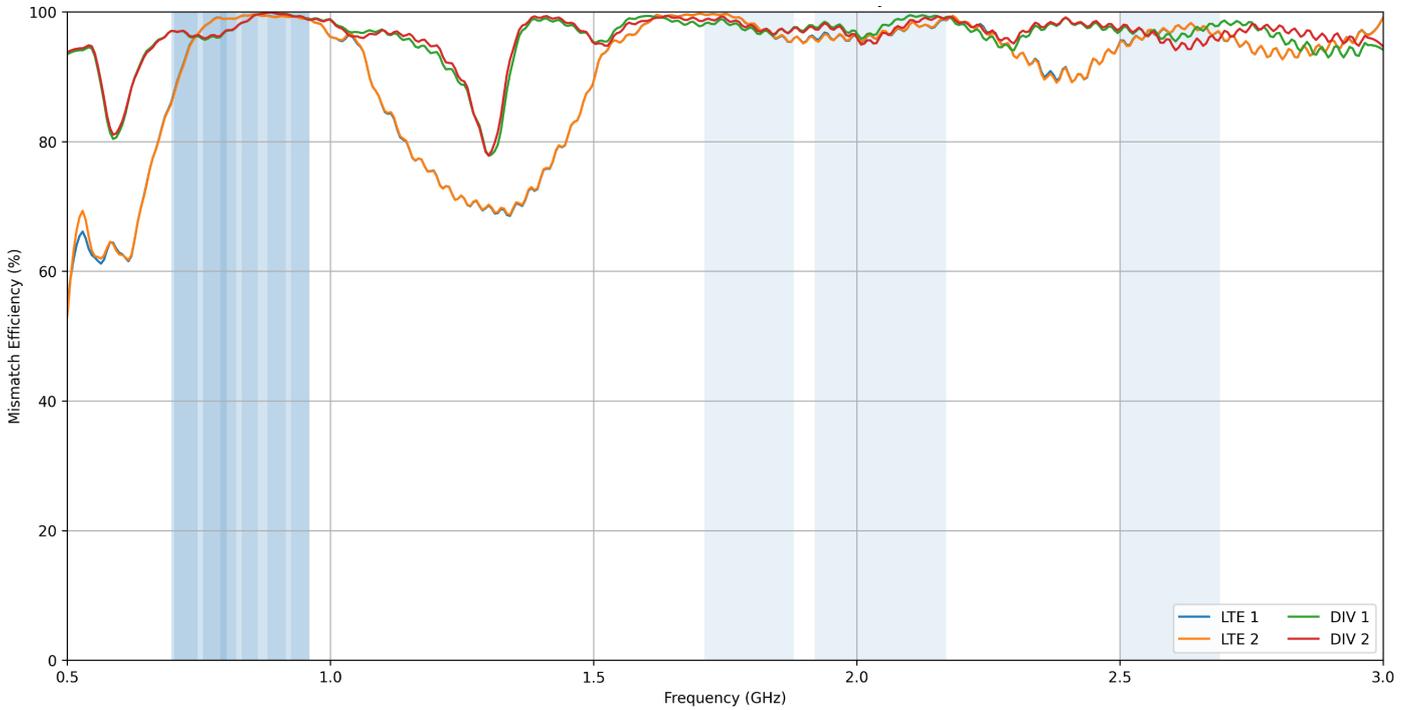
Supplied Coax Extension Cables

Coax Cables	4x LTE	6x Wi-Fi	1x GPS
Cable Type	SBC240	SBC240	SBC100
length	5m or 3m	5m or 3m	5m or 3m
Diameter (mm)	6.1	6.1	2.8
Min. Bend Radius (mm)	30	30	14
Operating Temp. °C	-40-80	-40-80	-40-80
Termination	SMA (m)	SMA Reverse Polarity (m)	SMA (m)
Labeling	LTE M & LTE A	WiFi M & WiFi A	GPS

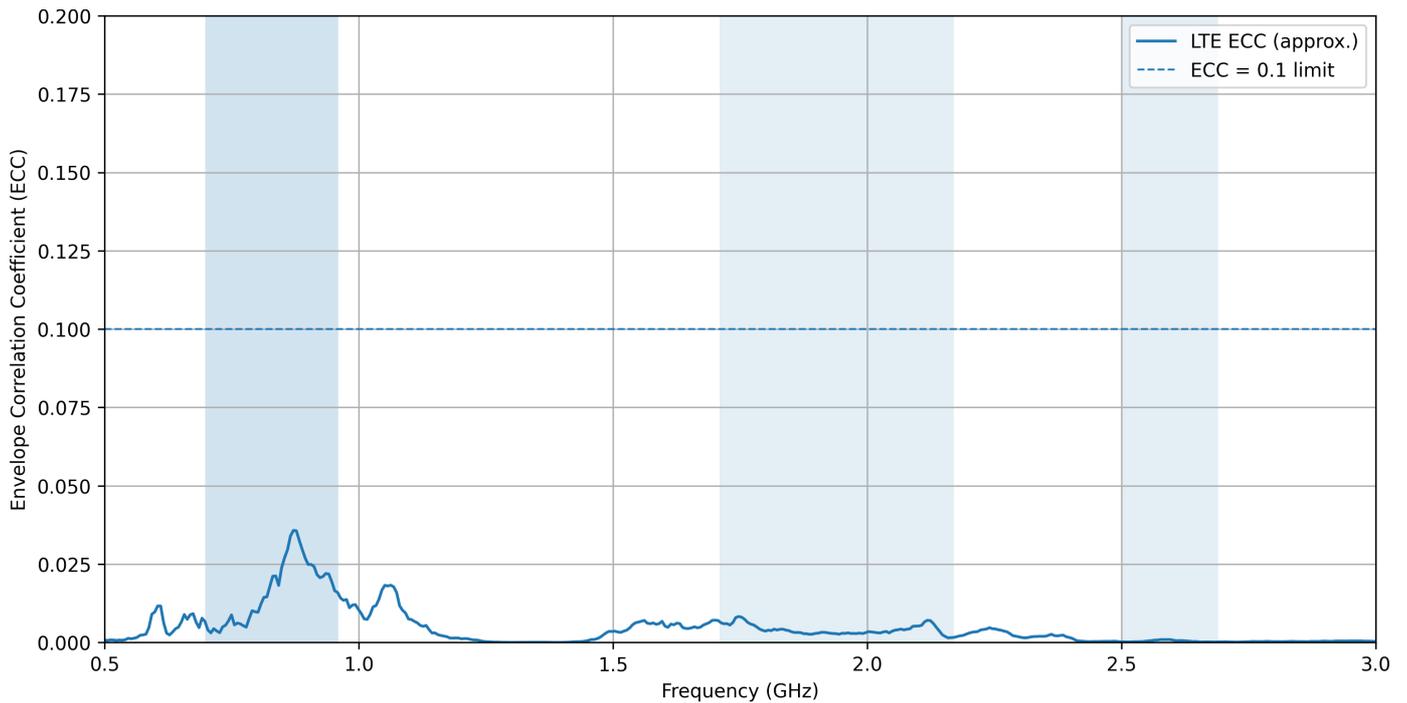
Cable Diagram



LTE / DIV Ports - Mismatch Efficiency

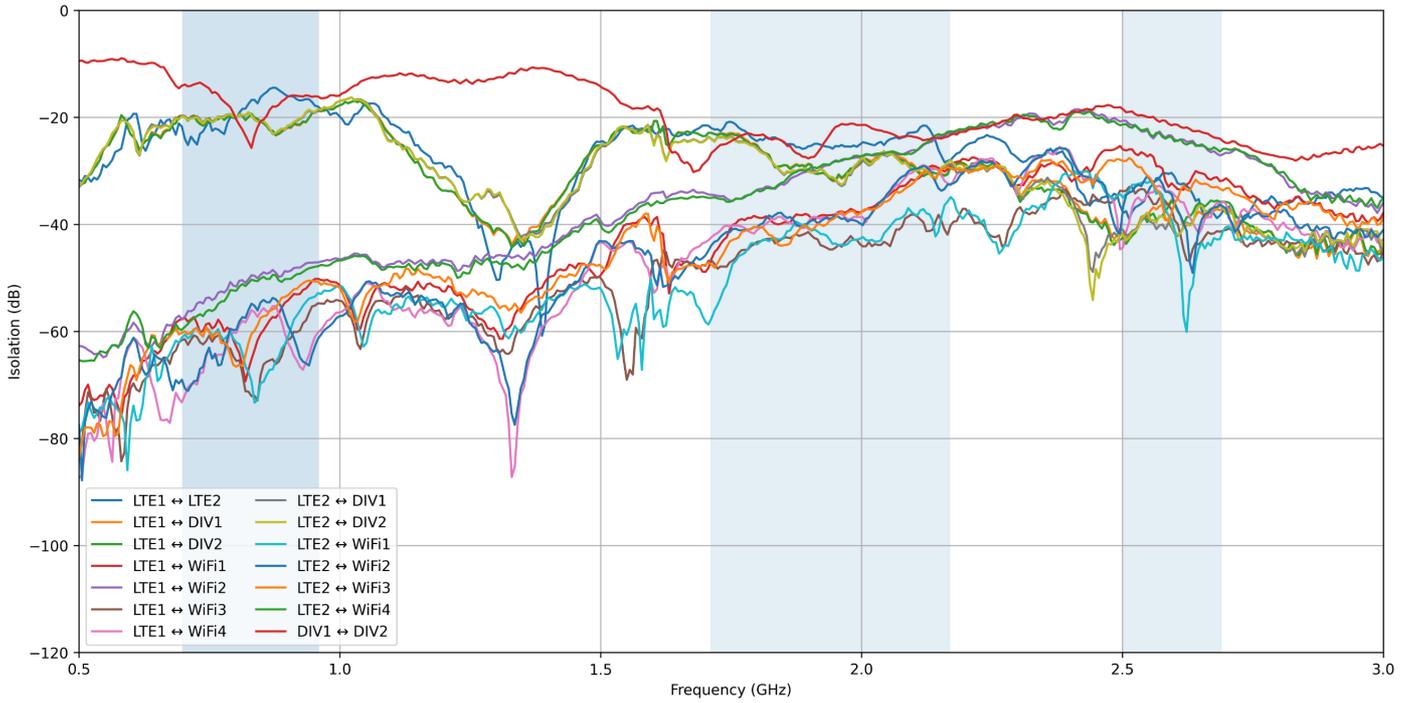


LTE ECC (Cut at 3 GHz)

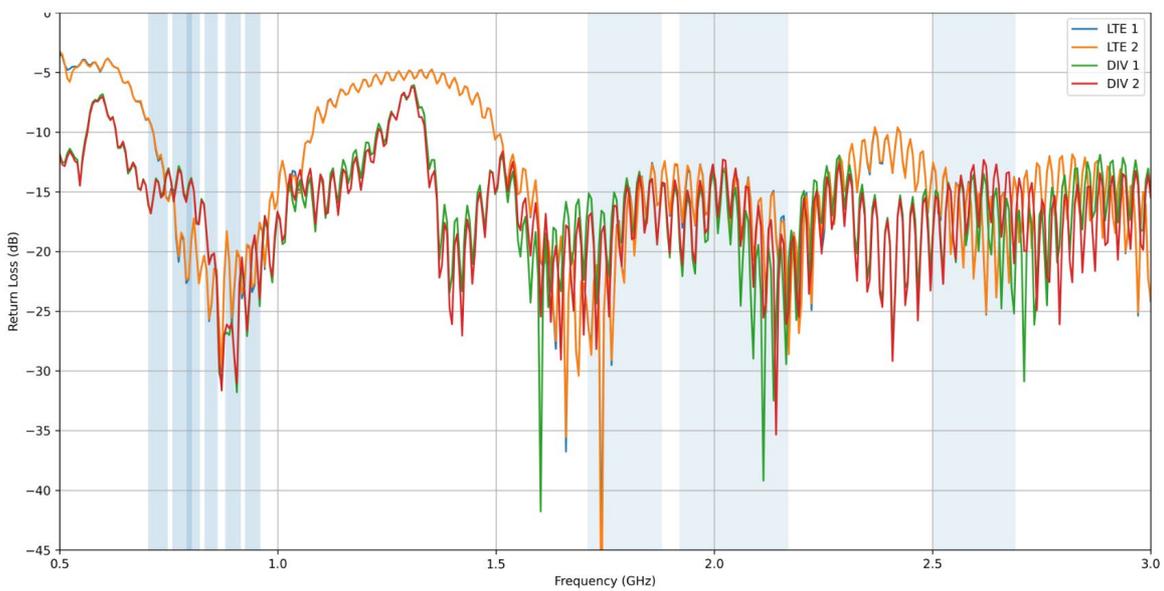


Subject to change without prior notice.

### LTE Port Isolation (Cut at 3 GHz)

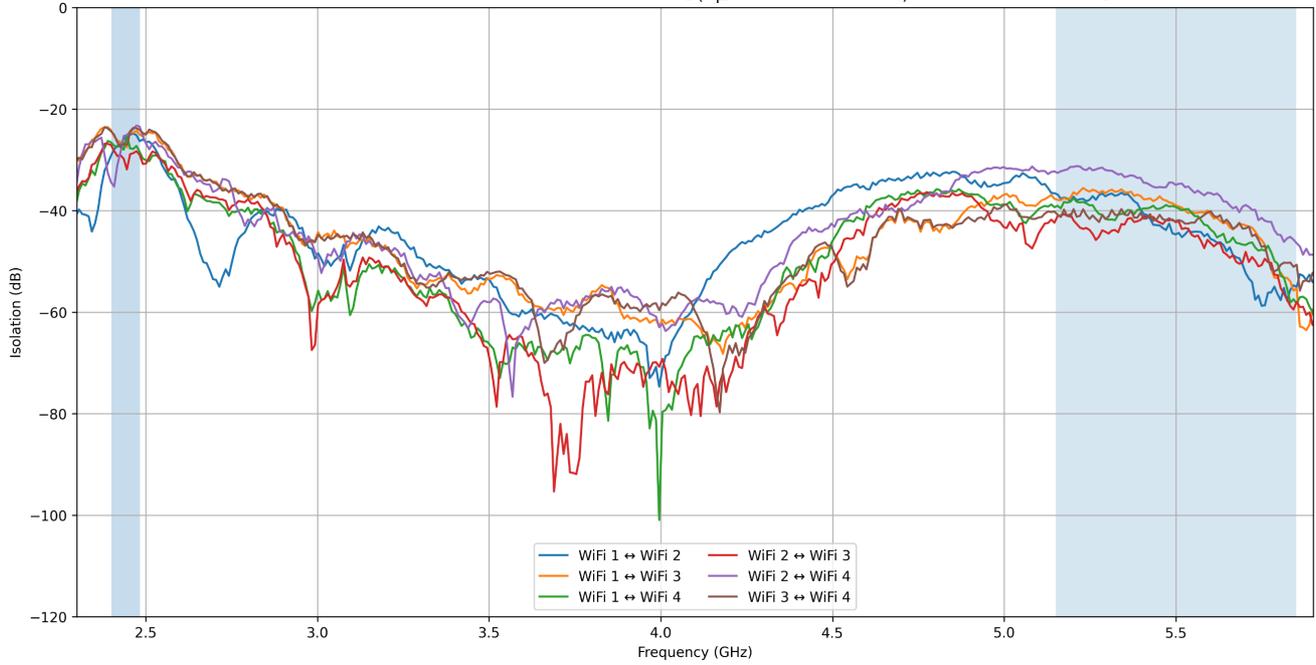


### LTE Return Loss

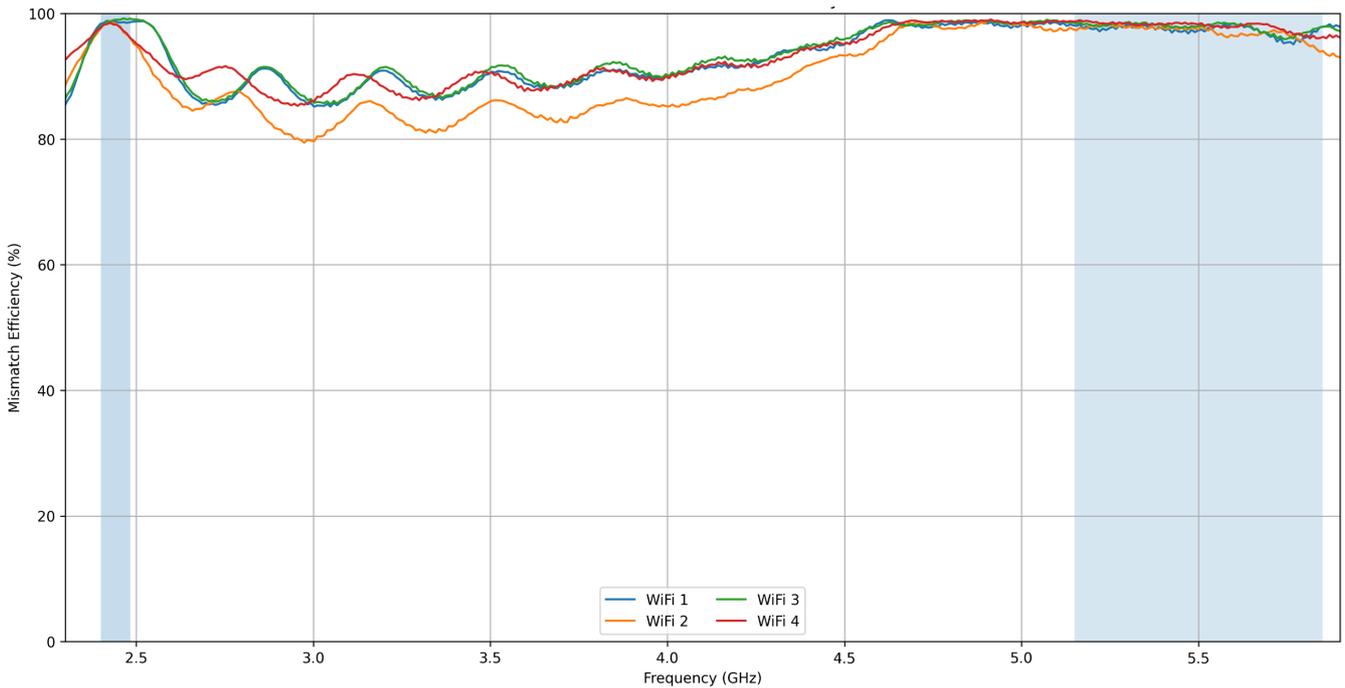


Subject to change without prior notice.

### WiFi Port-to-Port Isolation (Updated Measurements)

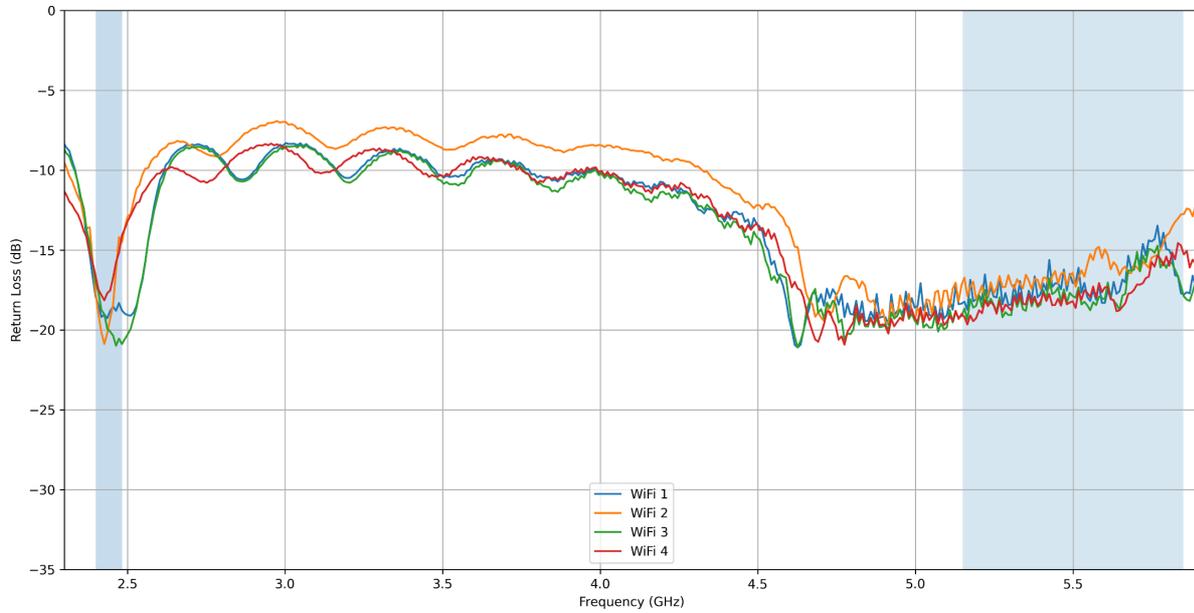


### WiFi Ports - Mismatch Efficiency



Subject to change without prior notice.

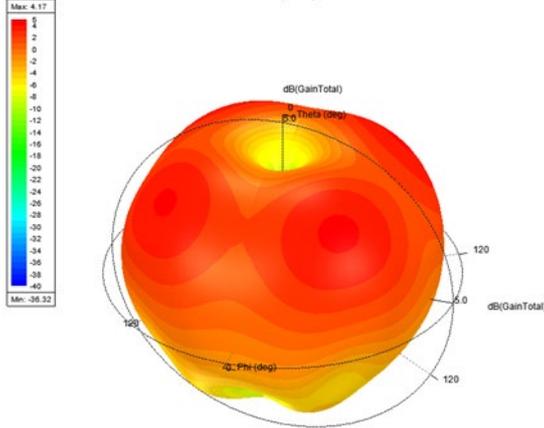
### WiFi Antenna - Dual-Band Return Loss



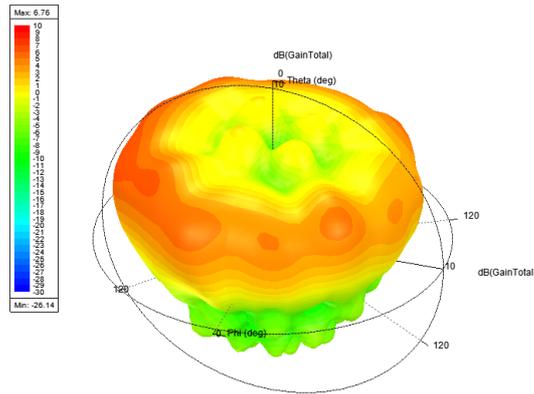
Subject to change without prior notice.

3D Radiation Pattern

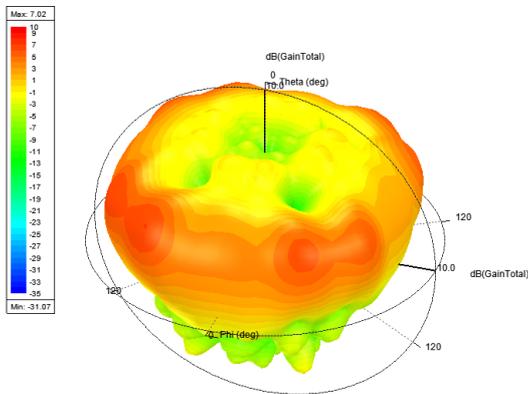
820Mhz



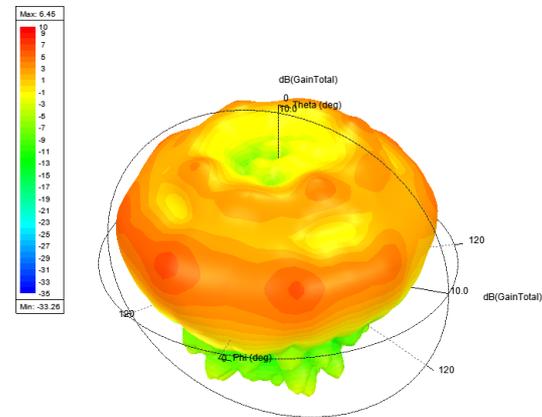
1820MHz



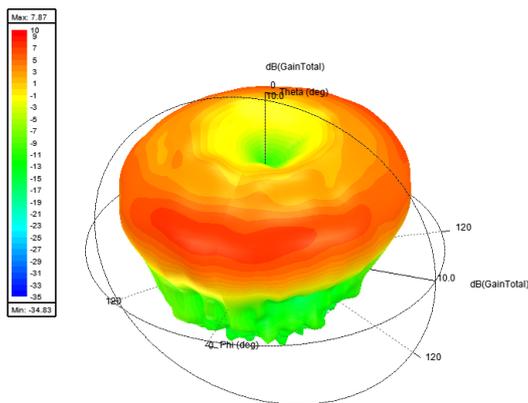
2140Mhz



2600Mhz



3600Mhz



Subject to change without prior notice.

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Schiphol Airport Tetra, Transpolis Park, Siriusdreef 17-27, 2132 WT Hoofddorp, Netherlands

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