



- 7 Functions In 1 Antenna
- ESN Transition Antenna
- 2x2 MiMo Wideband 2G 3G 4G 5G
- Ultra-Wide Bandwidth 698MHz – 6000Mhz
- 4x4 MiMo Dual Band WiFi
- Low Profile OEM Styled Sharkfin
- Simple Single Hole Installation
- GPS/GNSS Port DC Isolated
- CE Directive 2014/53/EU Compliant

This 'Mallard' is supplied as a kit with all coax cables with market leading isolation to support ESN, there is no need to fit two antennas to your vehicle. With many fitting kit options available there is no reason to drill unwanted holes to the roof of your car. Contact Sure Antennas for many optional fitting accessories.

Designed as a multi-function antenna the Mallard supports 2x2 MiMo from 698MHz to 6GHz with a minimum 4dBi gain across the whole band. With the additional functionality of 4x4 MiMo 2.4/5.8GHz WiFi function, GPS/GNSS Port, this antenna would be an ideal solution for future proofing your new vehicle installations for ESN.

With a single hole installation, and so many potential frequency functions on offer, this antenna would help reduce installation costs and protect your vehicles resale value. Available with an option of 3m or 5m low loss coax extension cables all terminated and labeled for ease of installation.

Additional Part Number Options	
SK0200130	Mallard Antenna 7 in 1 Black incl 5m Coax Cables Black
SK0200132	Mallard Antenna 7 in 1 Black incl 3m Coax Cables Black
SK0200192	Mallard Antenna 7 in 1 White incl 3m Coax Cables White



Technical Specifications

Subject to change without prior notice. *excluding external antenna

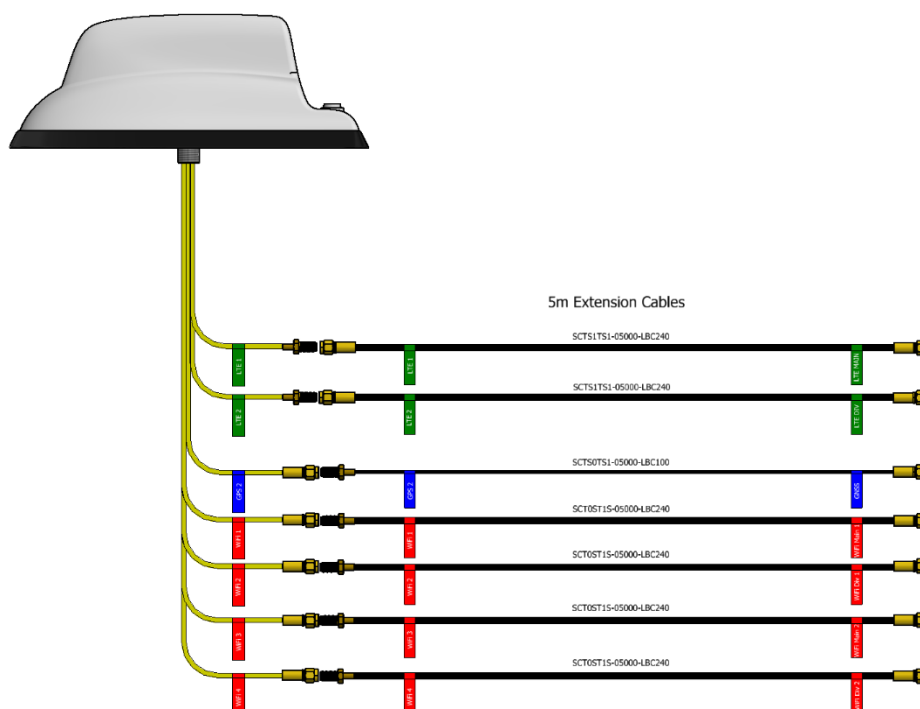
Electrical Data	2G 3G 4G 5G	WiFi
Frequency Range (MHz)	698-6000 MHz	2.4 GHz & 5.8GHz
Band	2x2 MiMo 2G 3G 4G 5G	2x2 MiMo Dual Band WiFi
VSWR	<2.1:1 TYPICALY 1.5:1	<2.1:1 TYPICALY 1.5:1
Gain	Minimum 4dBi	Minimum 4dBi
Isolation	<-25dB	<-25dB
Polarisation	Vertical	Vertical
Pattern	Omni-directional	Omni-directional
Impedance	50Ω	50Ω
Max Power Input (W)	10W	10W
GPS/GLONASS		
Frequency Range (MHz)	1562-1612	
VSWR	<2:1	
Gain	26dB	
Polarisation	Right Hand Circular	
Operating Voltage	3-5v DC (fed via coax)	
Cable	2x 230mm RG316 Terminated to SMA (m)	
Mechanical Data		
Dimensions (mm)	H80xW70xL230 *	
Operating Temp (°C)	-40 / +80°C (-40° / 176°F)	
Material	ABS	
Colour	Black	
Weight (g)	310	
Ingress Protection	IP66	
Cable Data		
Cable Type	RG316	RG316
length	160mm	200mm
Diameter	2.8	2.8
Termination	SMA (f)	SMA (m) Reverse Polarity
Mounting Data		
Mounting Type	Panel mount	
Mounting Hole (mm)	15mm	
Max Panel Thickness (mm)	10mm	



Supplied Coax Extension Cables

Coax Cables	2x LTE	4x WiFi	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) – Motorola and Sepura adaptors supplied.
Labeling	LTE M & LTE A	WiFi M & WiFi A	GPS

Technical Drawing



SK0200190

'Mallard' Antenna 7 in 1 White
incl 5m Coax Cables

SureAntennas®

Mallard Antenna Dimensions



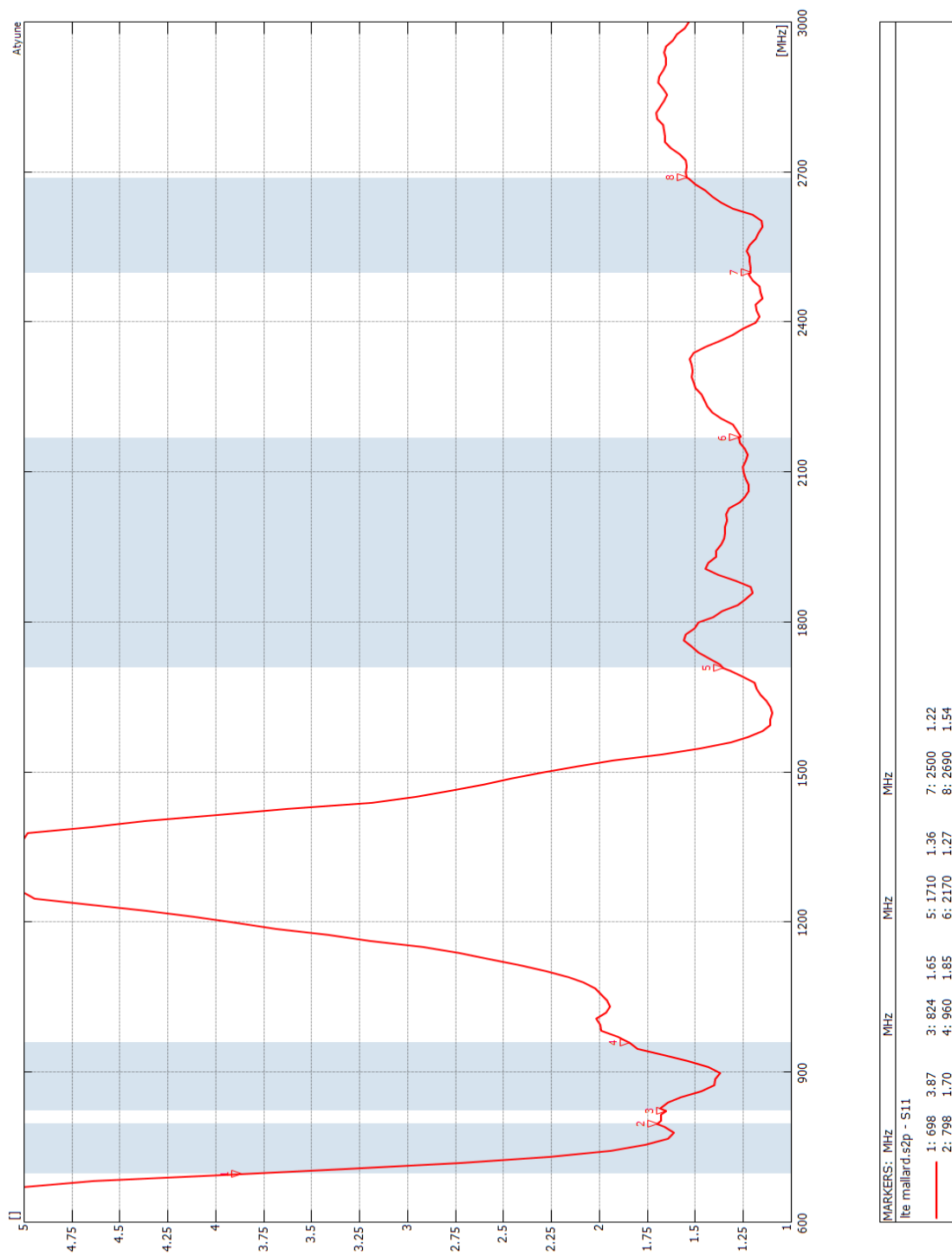
www.sure-antennas.com



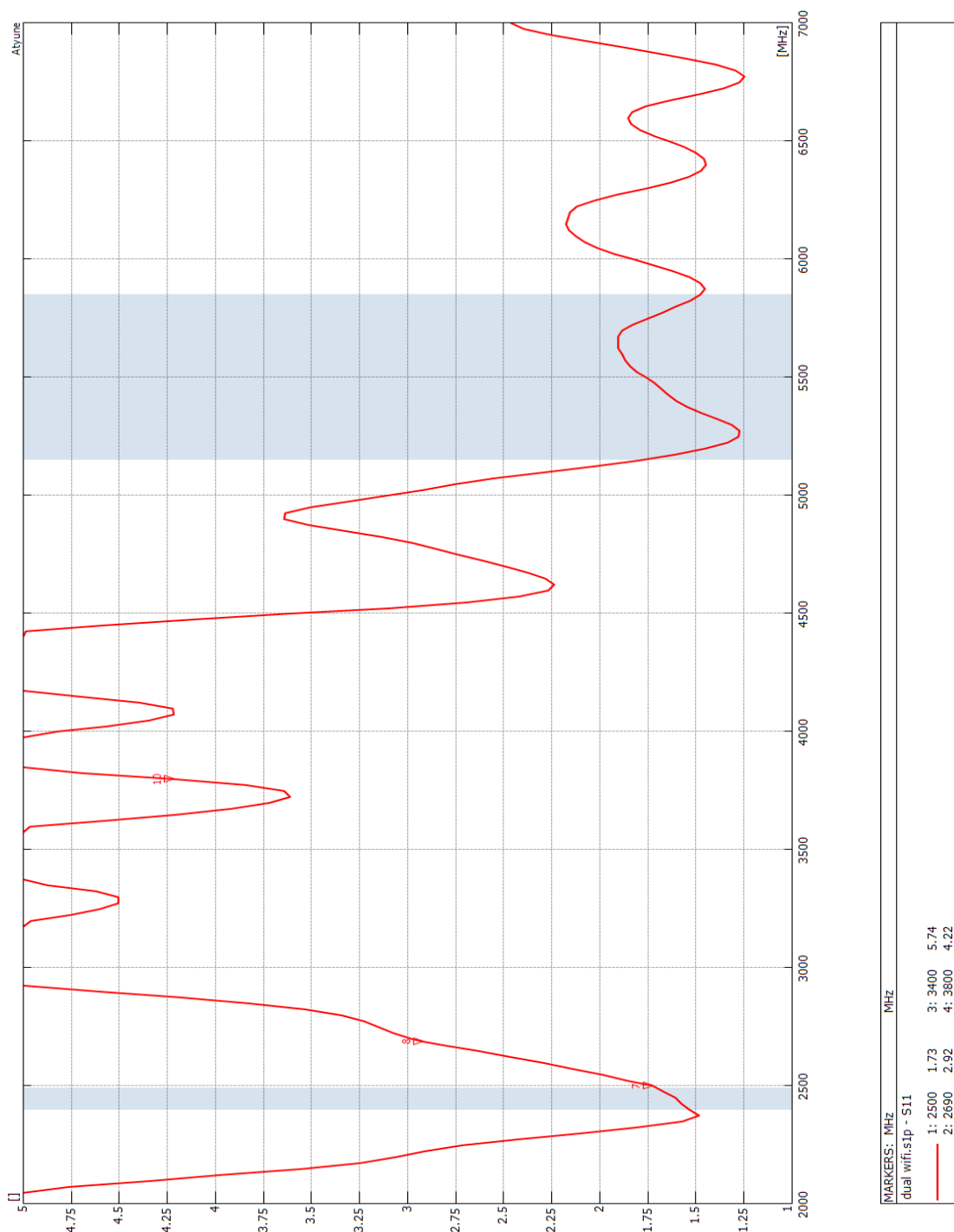
SureAntennas®



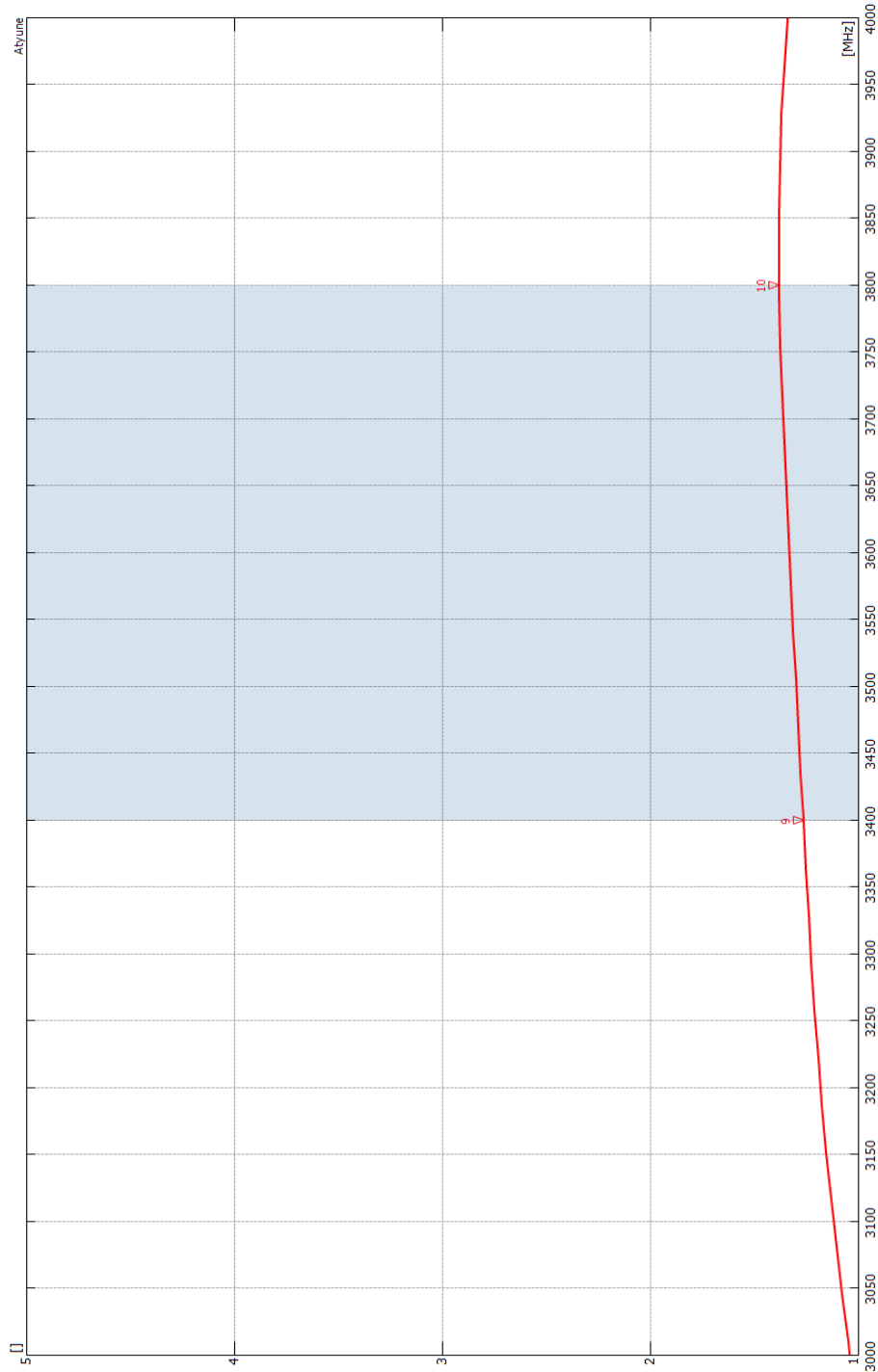
LTE VSWR Plot



WiFi VSWR Plot



5G VSWR Plot

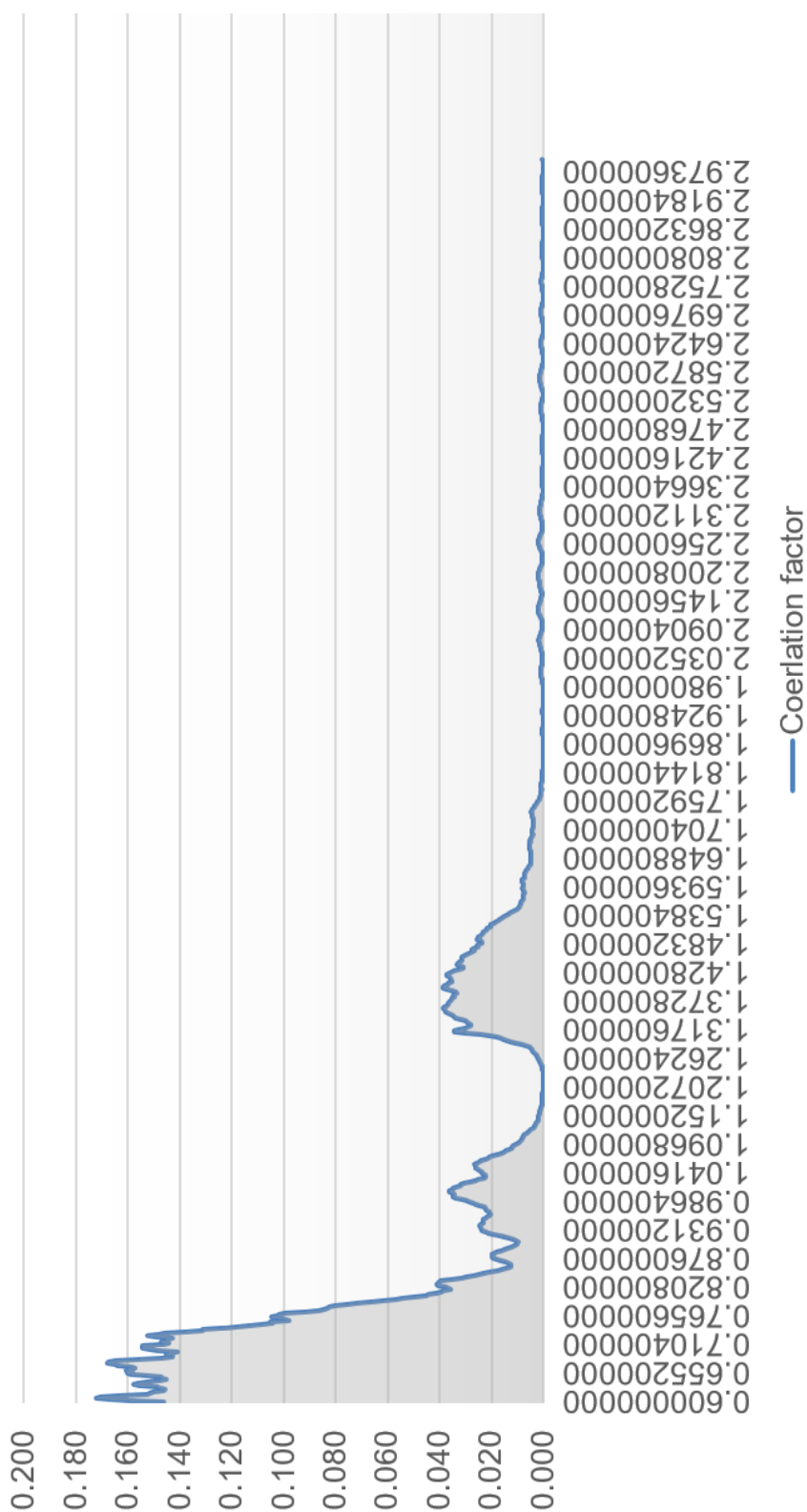


MARKERS: MHz		MHz		MHz		MHz	
LTE DATA HFSS.s1p - S11							
1: 698		2: 798		3: 824		4: 960	
2: 798		3: 824		5: 1710		6: 2170	
		4: 960		6: 2170		7: 2500	
				7: 2500		8: 2690	
				8: 2690		9: 3400	
				9: 3400		10: 3800	
				10: 3800			

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LTE Correlation Coefficient

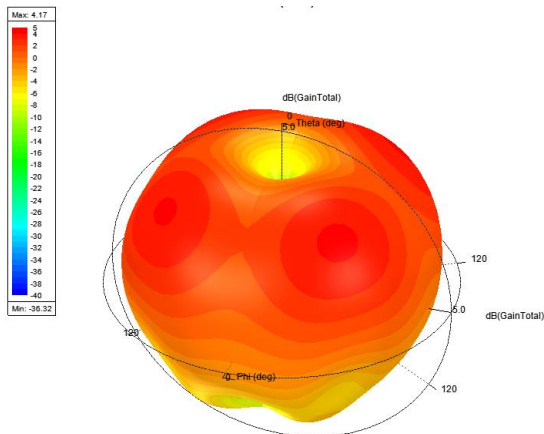


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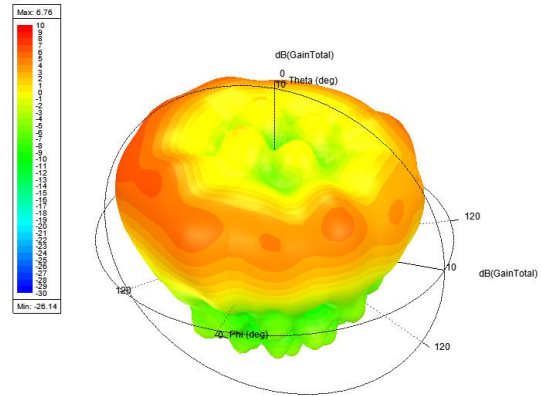


Antenna 3D Gain Plots

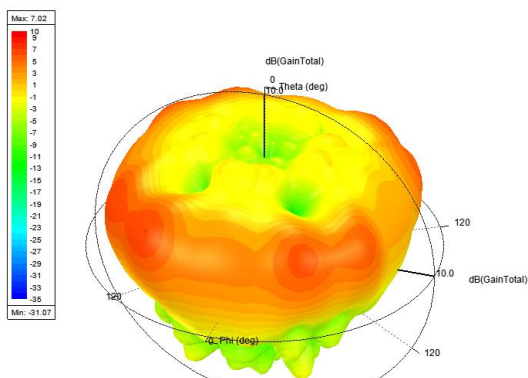
0.82 GHz



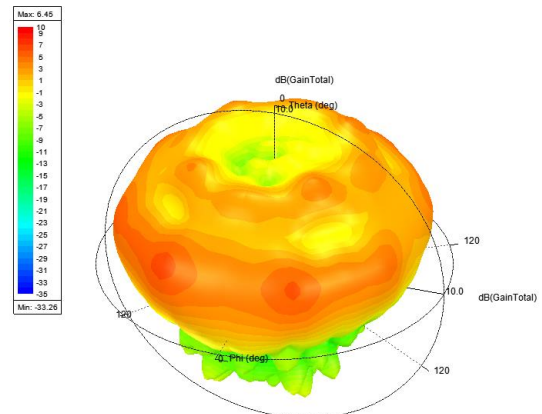
1.82 GHz



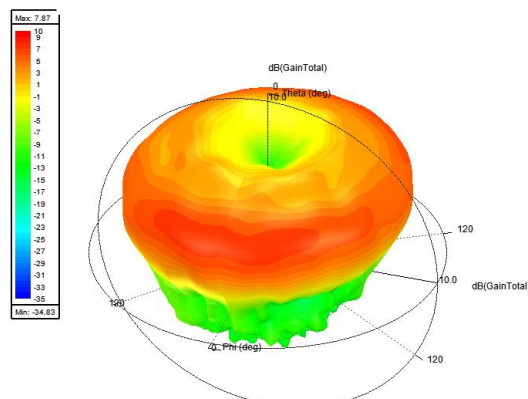
2.14 GHz



2.6 GHz



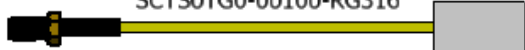
3.6 GHz



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Optional Installation Accessories

0250-MP074.01	Mallard Thread Extender M14x1.5	
SK0229200	WiFi Adaptor Cable 500mm Panasonic CF33 Havis Dock RP SMA - TNC	
SK0229201	LTE Adaptor Cable 500mm Panasonic CF33 Havis Dock SMA - TNC	
SK0229202	GPS Adaptor Cable 500mm Panasonic CF33 Havis Dock SMA - TNC	
SK0125500	GPS Adaptor Cable 10mm Handsfree R5 SMA - Blue Fakra	
SK0125501	WiFi/Bluetooth Adaptor Cable 10mm Handsfree R5 RP SMA - Water Blue Fakra	
SCTS0TG0-00100-RG316	GPS Adaptor Cable 10mm Cleartone SMA – GT5	
ST50S0	GPS or LTE 50 ohm Terminations : SMA Female	
ST500S	WiFi 50 ohm Terminations : SMA Female RP	
Other optional custom coax cables are available, please contact us for more information.		