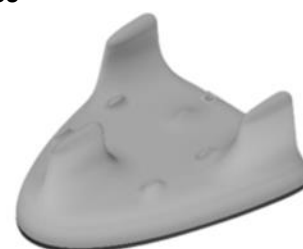


- 7 Functions in 1 Antenna
- 4x4 MiMo Wideband 2G 3G 4G 5G
- Ultra-Wide Bandwidth 698MHz – 6000Mhz
- 2x2 MiMo Dual Band Wi-Fi/WiMAX
- Low Profile
- Simple, Single Hole Installation
- GPS/GNSS Port DC Isolated
- CE Directive 2014/53/EU Compliant

Available in white: SK0200680



The 'Sandcastle' is a multifunction antenna designed to future-proof blue and amber light vehicle fleets. It integrates 7 functions into a single, panel-mounted unit, making it an efficient choice for public safety and emergency services.

The Sandcastle features 4 ultra-wideband cellular antenna elements that cover frequencies from 698MHz to 6GHz, offering a minimum gain of 4dBi across the band. This ensures robust, reliable communication for various applications. The antenna can also be installed as a ground plane-independent unit, simplifying the installation process.

In addition to cellular coverage, the Sandcastle includes GPS and 2x2 MiMo dual-band Wi-Fi, all accessible through a single 19mm hole in the vehicle's roof, eliminating the need for multiple installations. This design reduces installation time and maintains vehicle integrity.

Custom options, such as low-loss coax cable fitting kits, are also available. Contact us for more details on how the Sandcastle can meet your fleet's needs.

Additional Part Number Options

| | |
|-----------|------------------------------------------------------|
| SK0200680 | Sandcastle Antenna 7-in-1 White incl. 5m Coax Cables |
| SK0200632 | Sandcastle Antenna 7-in-1 Black incl. 3m Coax Cables |
| SK0200682 | Sandcastle Antenna 7-in-1 White incl. 3m Coax Cables |

Technical Specifications

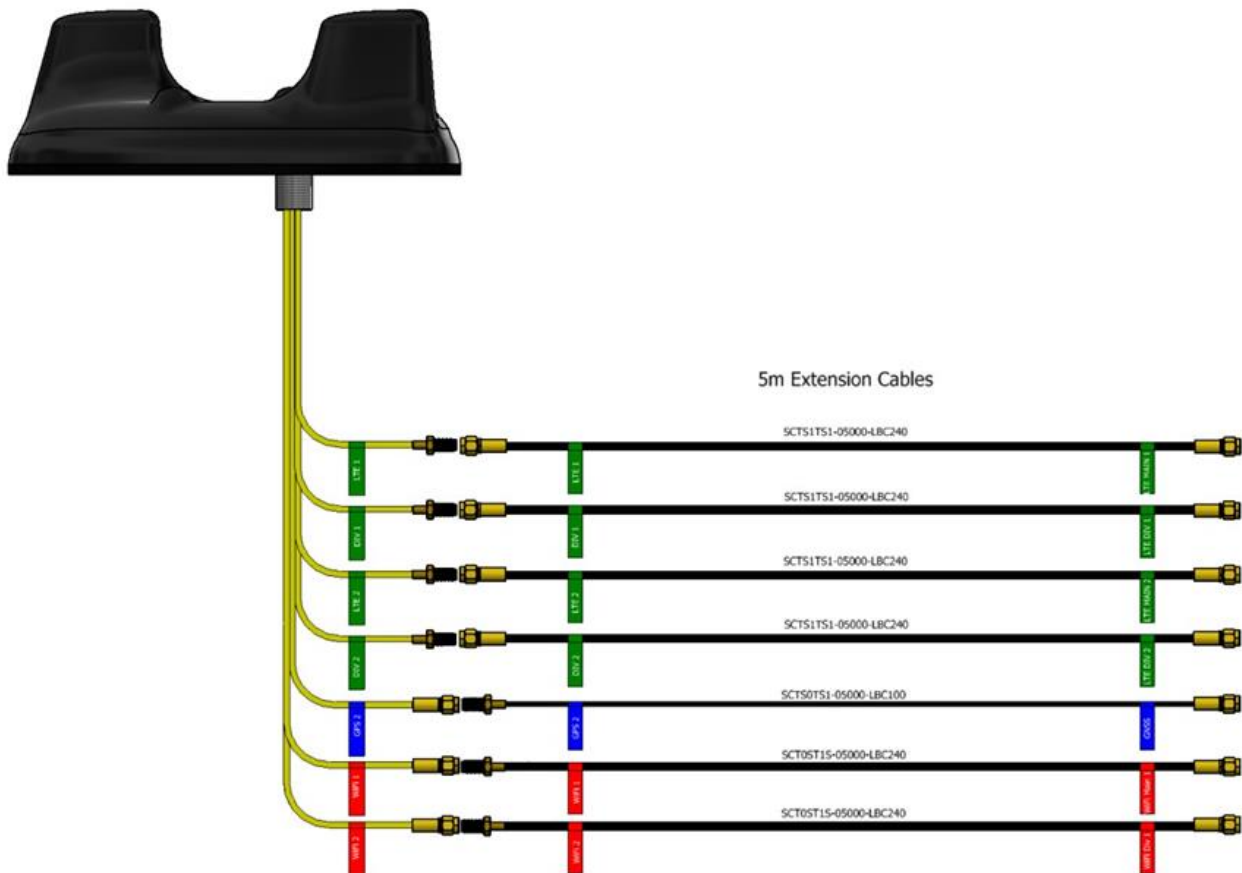
| Electrical Data | 2G 3G 4G 5G | WiFi |
|------------------------|--------------------------------------------------|-----------------------------|
| Frequency Range (MHz) | 698-6000 MHz | 2.4 GHz & 5.8GHz |
| Band | 4x Wideband LTE 4x4 MiMo | 2x Dual Band Wi-Fi 2x2 MiMo |
| VSWR | <2.1:1 TYPICALLY 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 |
| GPS/GLONASS | | |
| 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) | |
| Mechanical Data | | |
| Dimensions (mm) | H76xW197xL227 | |
| Operating Temp (°C) | -40 / +80°C (-40° / 176°F) | |
| Material | ABS | |
| Colour | Black | |
| Weight (g) | 600 | |
| Cable Data | | |
| Cable Type | RG316 | RG316 |
| length (mm) | 300 | 300 |
| Diameter | 2.8 | 2.8 |
| Termination | SMA (f) | SMA (m) Reverse Polarity |
| Mounting Data | | |
| Mounting Type | Panel mount with adhesive pad | |
| Mounting Hole (mm) | 19mm | |

Subject to change without prior notice.

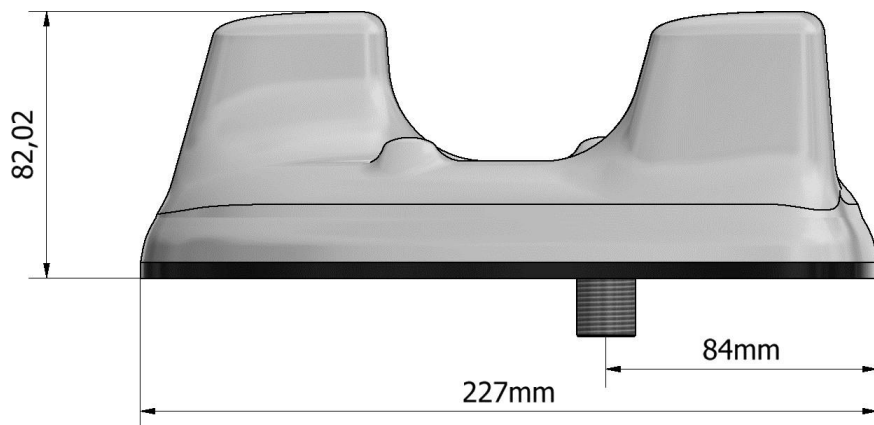
Supplied Coax Extension Cables

| Coax Cables | 4x LTE | 2x 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) |
| Labeling | LTE M & LTE A | WiFi M & WiFi A | GPS |

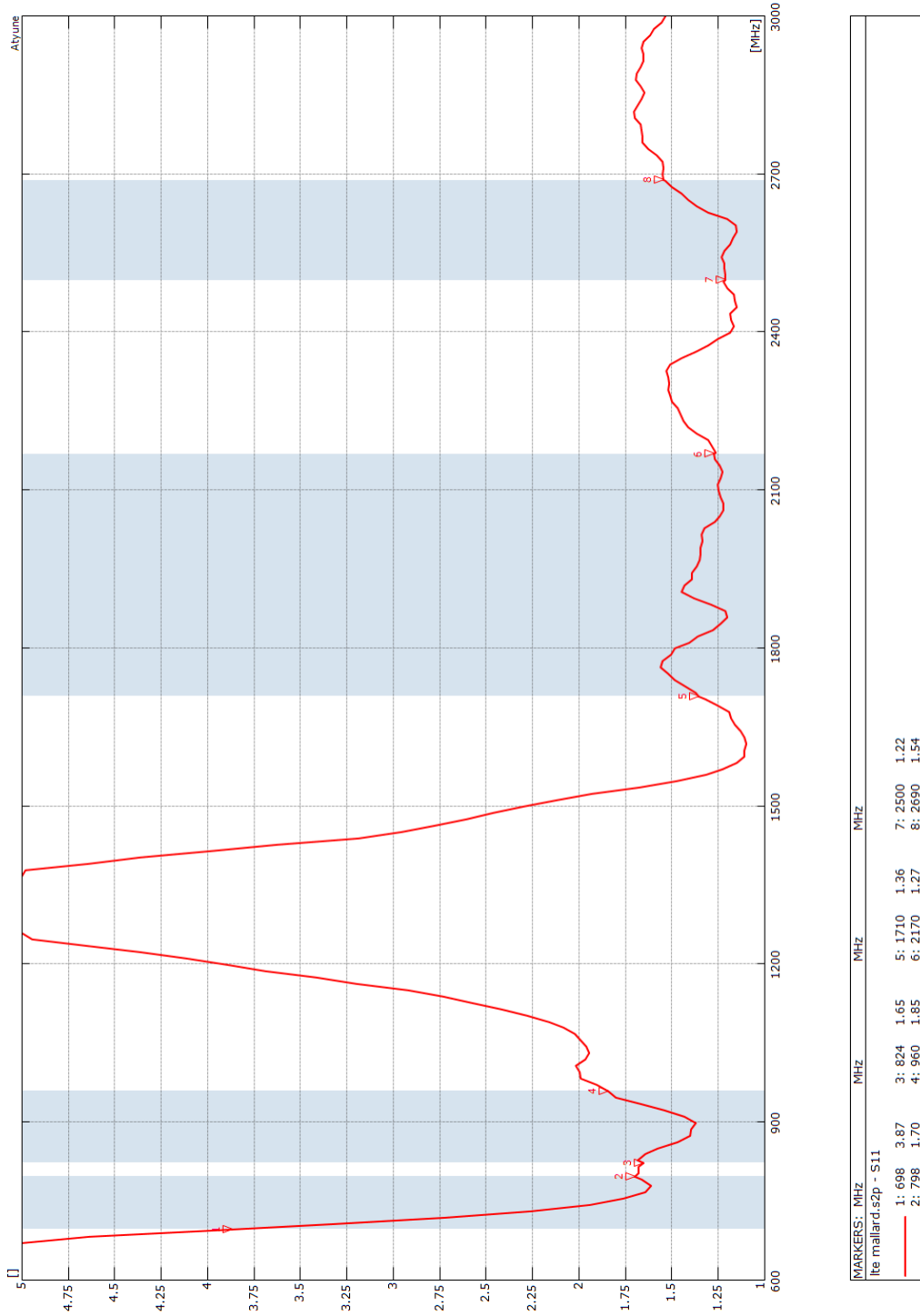
Technical Drawings



Technical Drawing

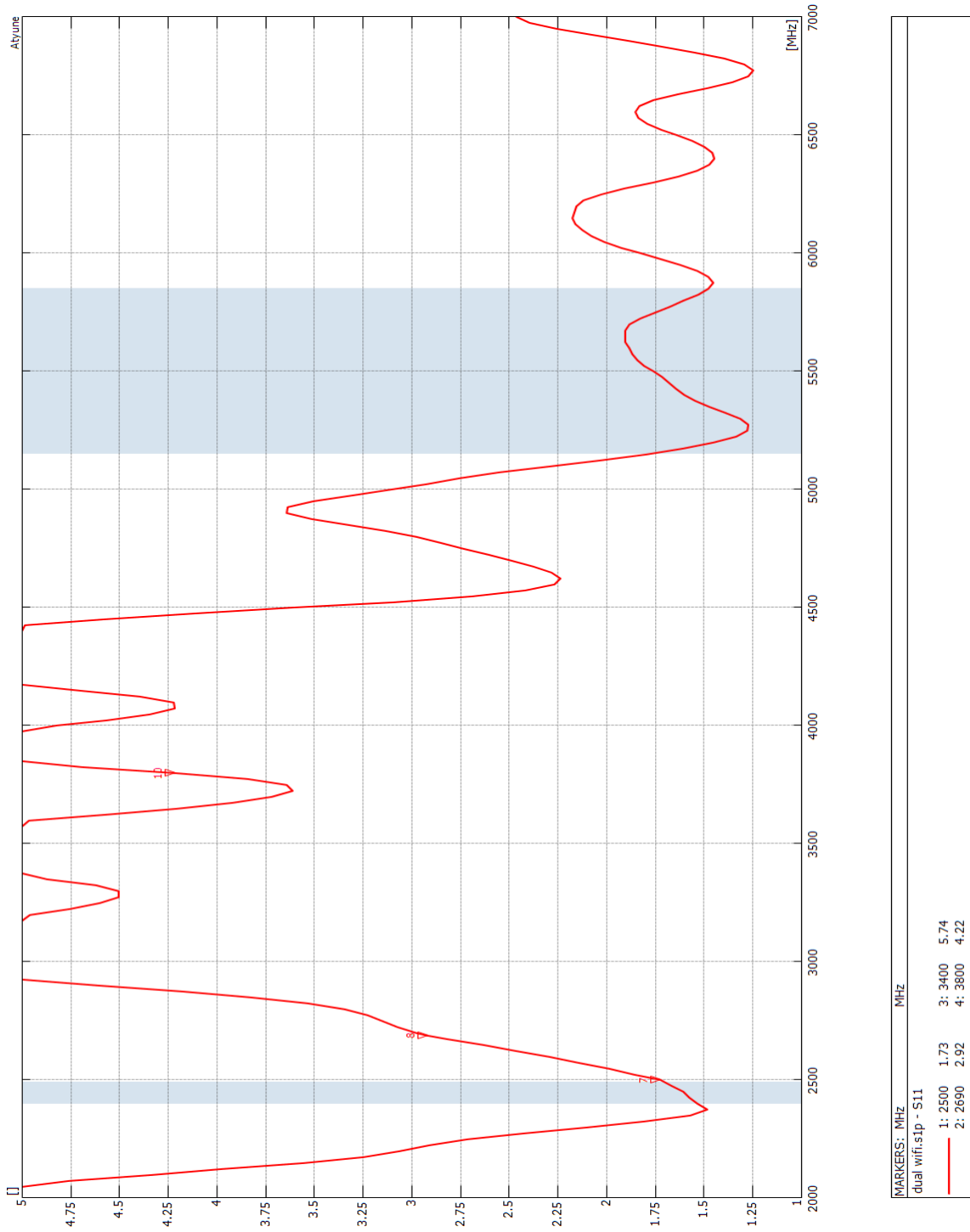


LTE VSWR Plot



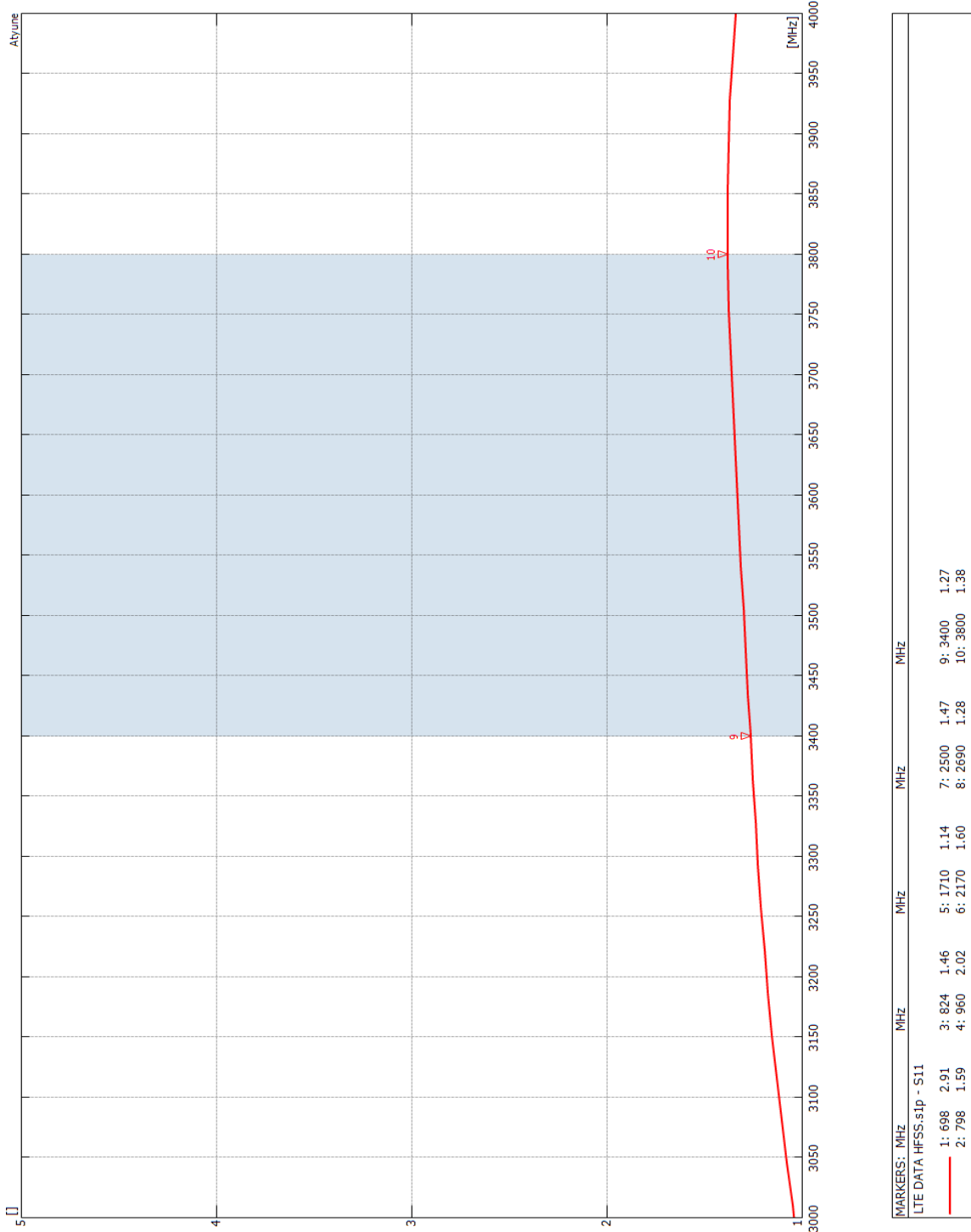
Subject to change without prior notice.

WiFi VSWR Plot



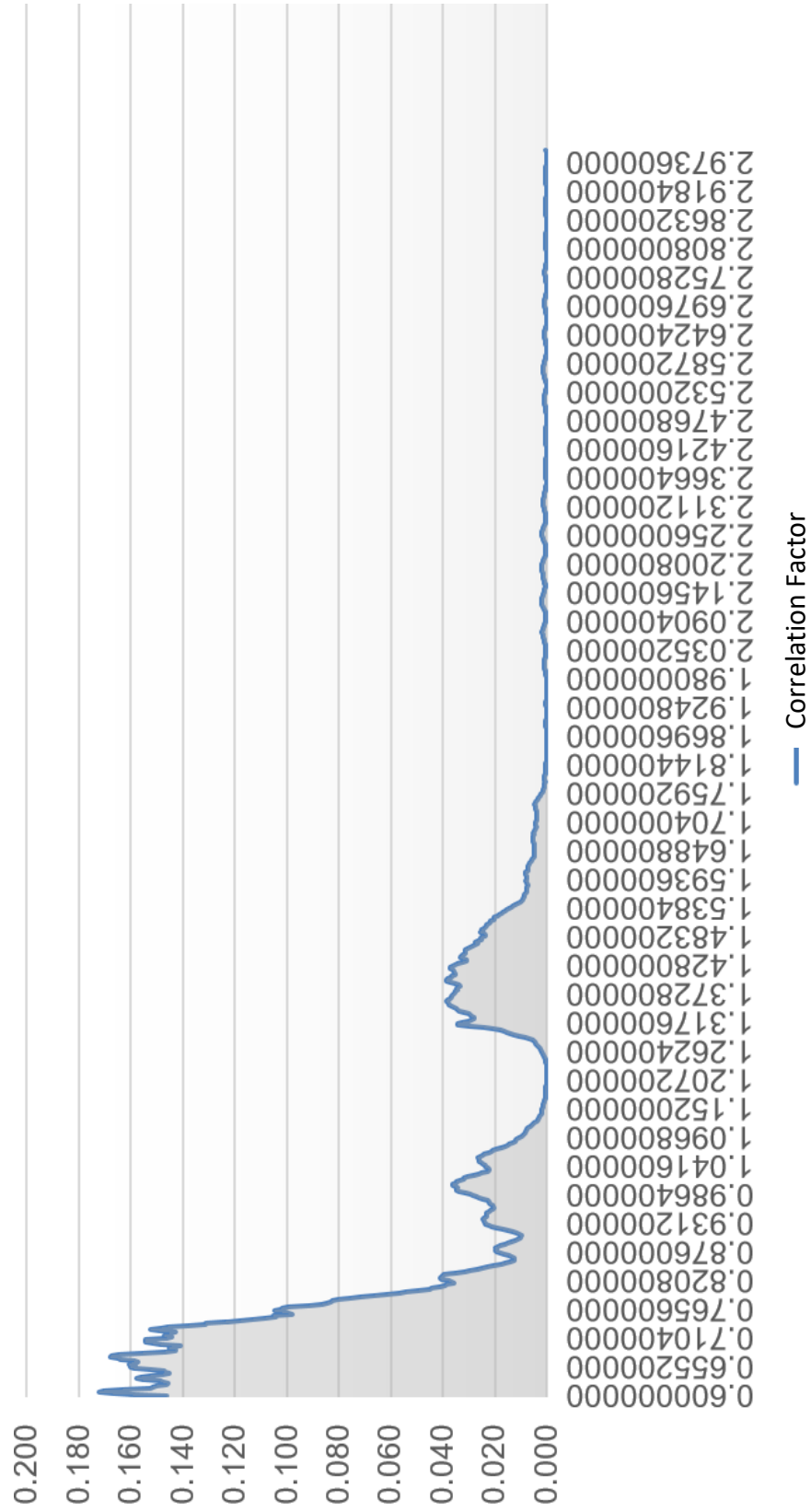
Subject to change without prior notice.

5G VSWR Plot



Subject to change without prior notice.

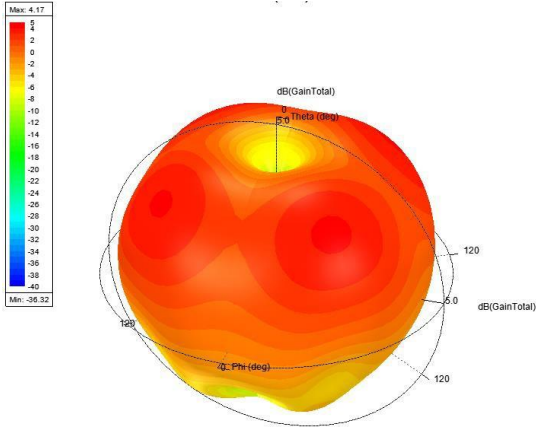
LTE Correlation Coefficient



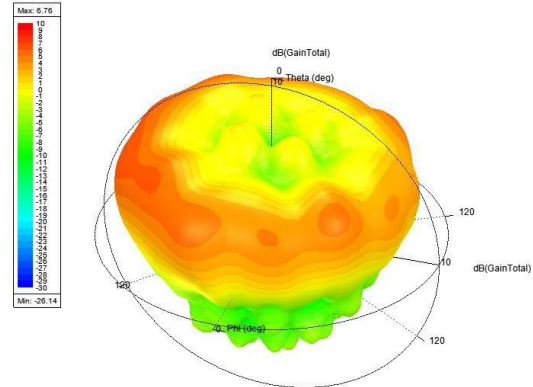
Subject to change without prior notice.

3D Radiation Pattern

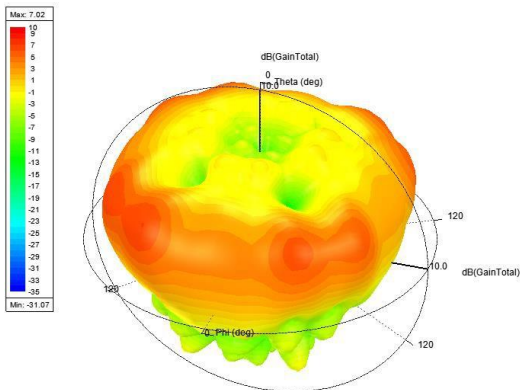
820Mhz



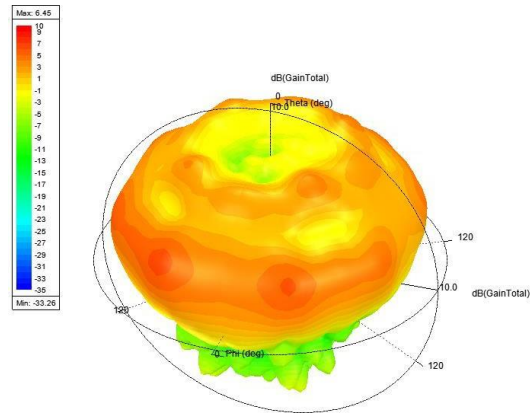
1820MHz



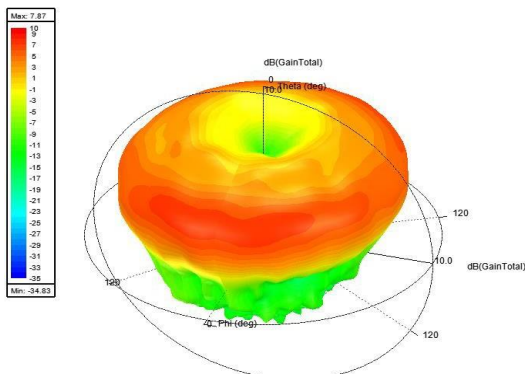
2140Mhz



2600Mhz












3600Mhz



Subject to change without prior notice.

Optional Installation Accessories

| | | |
|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 0250-MP074.02 | Sandcastle Thread Extender M20 x 1.5 |  |
| 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. | | |