

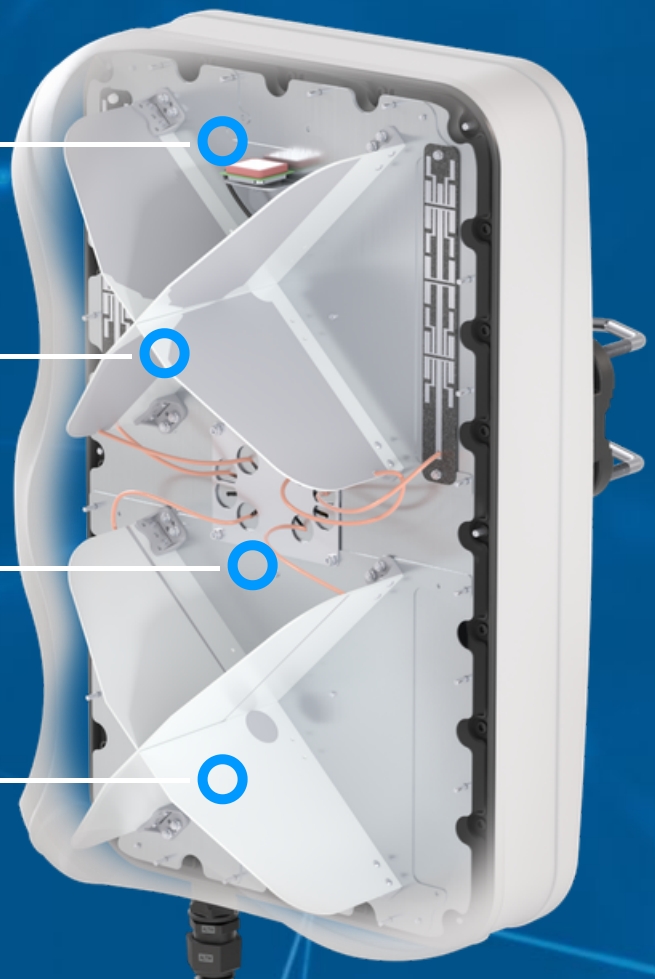
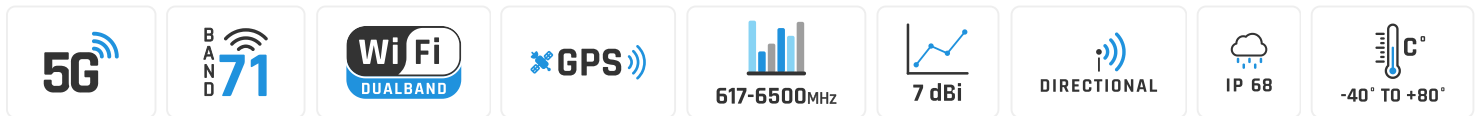
# QuMax for Teltonika RUTX50

**INTEGRATED MULTI-BAND LTE & 5G PANEL ANTENNA + WI-FI OMNI ANTENNA + GPS + PLACE TO INSTALL TELTONIKA RUTX50/RUTM51/RUTM54/RUTM55/RUTM16 (ALL-IN-ONE)**

QuMax for RUTX50 is a high performance directional antenna designed for use in a variety of wireless communication applications. This all-in-one product consists of multi-band 5G, Wi-Fi and GPS antennas integrated in IP68 (IP67) enclosure. It offers 7.5 dBi gain and wide beamwidth, which makes it suitable for use in both urban and rural environments.

It is also compatible with RUTM51, RUTM54, RUTM55 and RUTM16.

Combining QuMax with RUTX50, RUTM51, RUTM54, RUTM55 or RUTM16 inside the antenna housing gives you complete outdoor solution with multiple use scenarios such as transportation public, energy, mining IoT and more.



## 5G / LTE ANTENNA SPECIFICATION

<b>FREQUENCY</b>	0.617 - 1.0 GHz 1.0 - 3.08 GHz 3.3 - 5.0 GHz 5.0 - 6.5 GHz
<b>MAX. GAIN</b>	0.617 - 1.0 GHz : 6 dBi 1.0 - 3.08 GHz : 8 dBi 3.3 - 5.0 GHz : 6.8 dBi 5.0 - 6.5 GHz : 5.5 dBi
<b>SUPPORTED LTE BANDS</b>	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 65, 66, 67, 68, 69, 70, 71, 74, 75, 76, 85, 103, 106, 111, 252, 253, 254, 255, 256
<b>SUPPORTED 5G BANDS</b>	n1, n2, n3, n5, n7, n8, n12, n13, n14, n18, n20, n24, n25, n26, n28, n29, n30, n34, n38, n39, n40, n41, n46, n47, n48, n50, n51, n53, n54, n65, n66, n67, n68, n70, n71, n74, n75, n76, n77, n78, n79, n80, n81, n82, n83, n84, n85, n86, n89, n90, n91, n92, n93, n94, n95, n97, n98, n99, n100, n101, n102, n106, n109, n110, n250, n251, n252, n253, n254, n255, n256
<b>VSWR</b>	<2.00, max <3.00
<b>BEAMWIDTH</b>	80°/80° ±15°
<b>POLARIZATION</b>	X (+-45degrees)
<b>IMPEDANCE</b>	50 Ω
<b>CONNECTOR</b>	4x SMA
<b>CABLE TYPE</b>	RG316

## **WI-FI ANTENNA SPECIFICATION**

<b>FREQUENCY</b>	2.40 - 2.50 GHz 5.0 - 7.125 GHz
<b>MAX. GAIN</b>	2.40 - 2.50 GHz : 6 dBi 5.0 - 7.125 GHz : 7.5 dBi
<b>VSWR</b>	<1.70, max <2.00
<b>BEAMWIDTH</b>	360°/25° ±5°
<b>POLARIZATION</b>	Vertical
<b>IMPEDANCE</b>	50 Ω
<b>CONNECTOR</b>	2x RPSMA
<b>CABLE TYPE</b>	RG316

## **GPS ACTIVE ANTENNA SPECIFICATION**

<b>FREQUENCY</b>	1.56 - 1.61 GHz
<b>VSWR</b>	< 2
<b>GAIN</b>	3 dBi
<b>GAIN 3V</b>	28 dBi
<b>DC POWER INPUT</b>	2.5 V ~ 6.5 V
<b>POWER CONSUMPTION</b>	2.5-6.5mA
<b>IMPEDANCE</b>	50 Ω
<b>POLARIZATION</b>	RHCP (right hand circularly polarized)

**CONNECTOR**

1x SMA

**CABLE TYPE**

RG174

 **MECHANICAL SPECIFICATION****MATERIALS**

ABS, aluminum, PTFE, Fiberglass

**CONNECTOR TYPE**

RJ45

**INGRESS PROTECTION**

IP68

**DIMENSIONS**486 x 292 x 210 ± 10 mm  
19.13 x 11.49 x 8.23 ± 0.39 inch**NET WEIGHT**3,77 ± 0.2 kg  
8.31 ± 0.44 lbs**OPERATING TEMPERATURE**From -40°C to 80°C  
From -40°F to 176°F**ENCLOSURE RECOMMENDED  
TIGHTENING TORQUE**

0.6 - 0.8 Nm

 **MOUNTING KIT****DIMENSIONS**9.9 x 10.5 x 14.8 ± 0.5 cm  
3.9 x 4.13 x 5.83 ± 0.19 inch**REGULATION RANGE**

+/- 30°

**MAST DIAMETER RANGE**25 - 66mm  
0.98-2.60 inch**MATERIAL**

Polyamide with fiberglass + galvanized steel U-Bolts

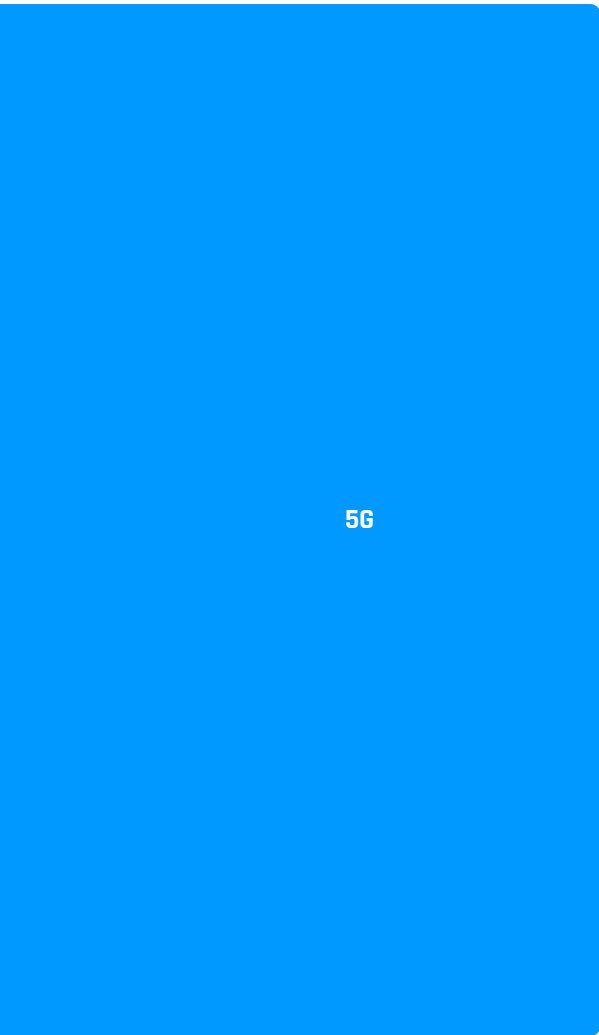
**MOUNTING PLACE**

Wall or ceiling or mast

## FREQUENCY BANDS

LTE / 4G

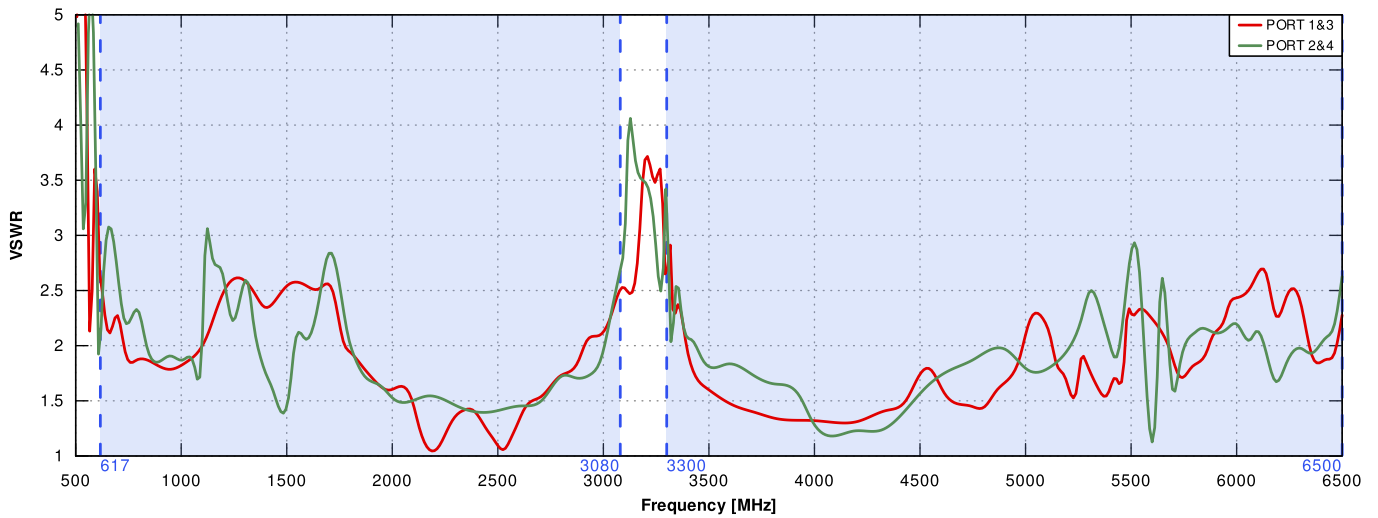
	1	2	3	4	5	6	7	
	8	9	10	11	12	13	14	
	17	18	19	20	21	22	23	
	24	25	26	27	28	29	30	
617	32	33	34	35	36	37	38	6500M
MHz	39	40	41	42	43	44	45	Hz
	46	47	48	49	50	51	52	
	53	54	65	66	67	68	69	
	70	71	74	75	76	85	103	
	106	111	252	253	254	255	256	



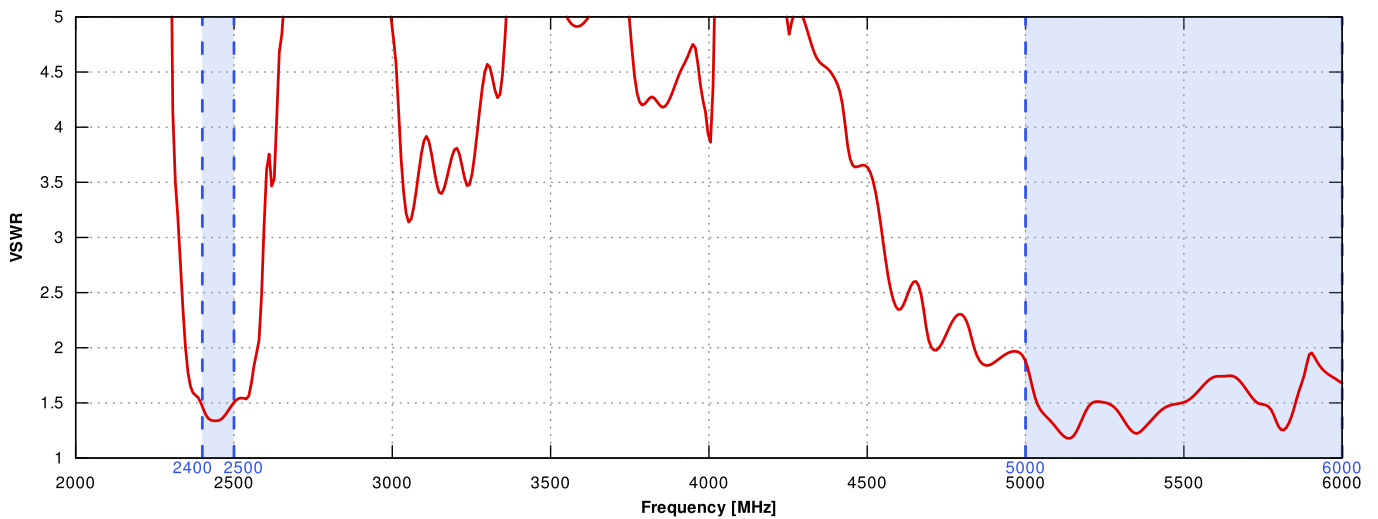
	n1	n2	n3	n5	n7	n8	n12	
	n13	n14	n18	n20	n24	n25	n26	
	n28	n29	n30	n34	n38	n39	n40	
	n41	n46	n47	n48	n50	n51	n53	
61	n54	n65	n66	n67	n68	n70	n71	65
7								00
M	n74	n75	n76	n77	n78	n79	n80	M
H								Hz
Z	n81	n82	n83	n84	n85	n86	n89	
	n90	n91	n92	n93	n94	n95	n97	
	n98	n99	n100	n101	n102	n106	n109	
	n110	n250	n251	n252	n253	n254	n255	
	n256							

# PLOTS

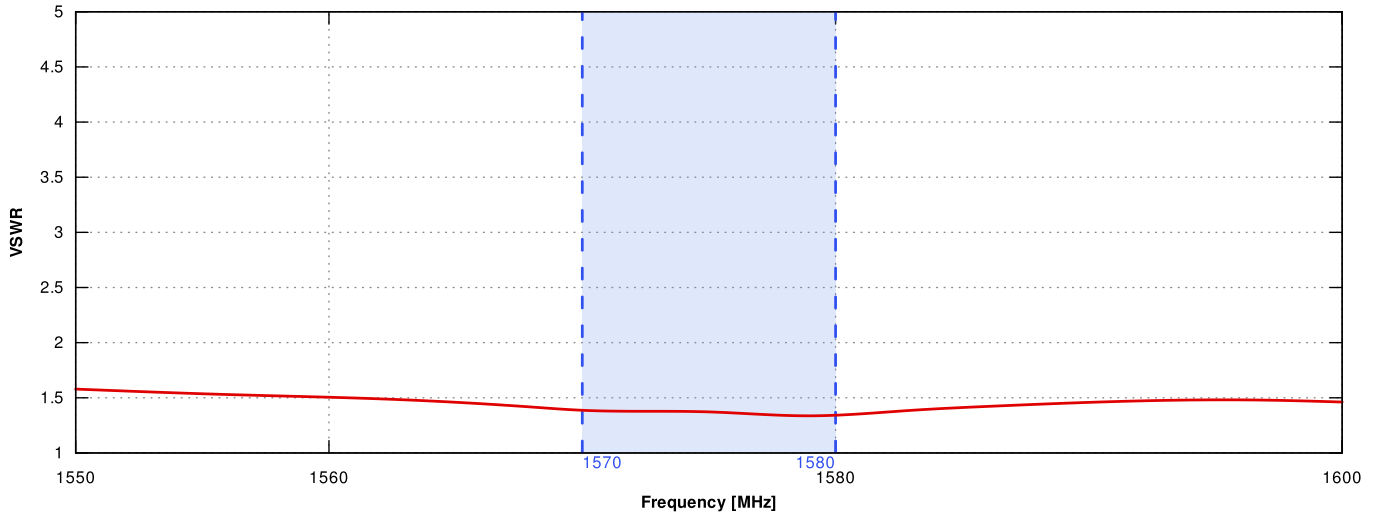
## VSWR for 5G/LTE antenna



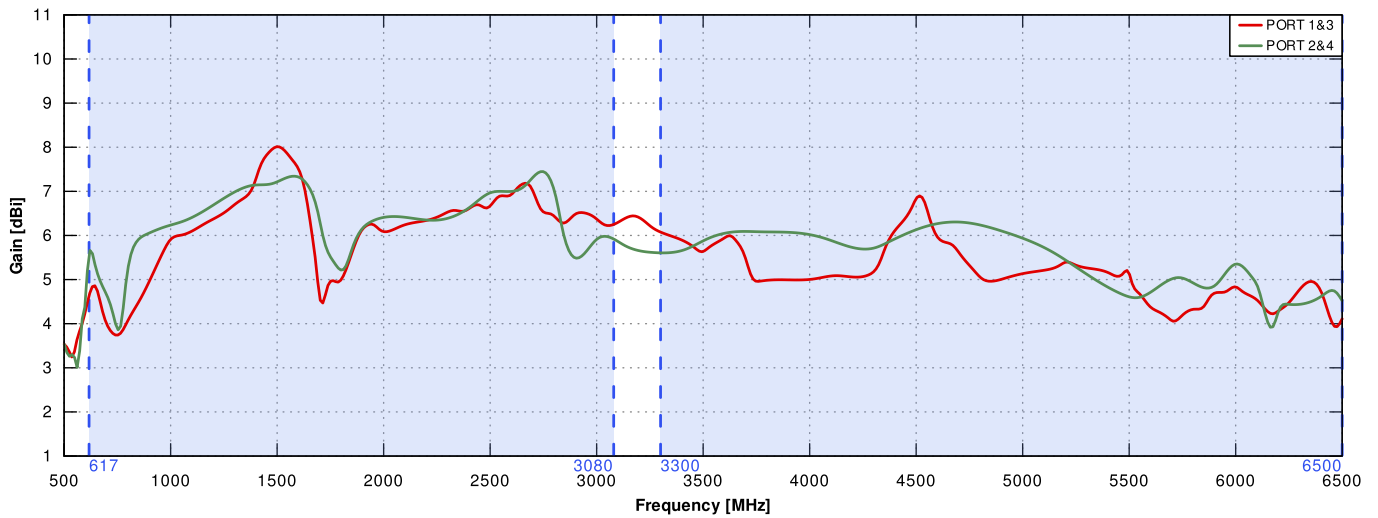
## VSWR for Wi-Fi antenna



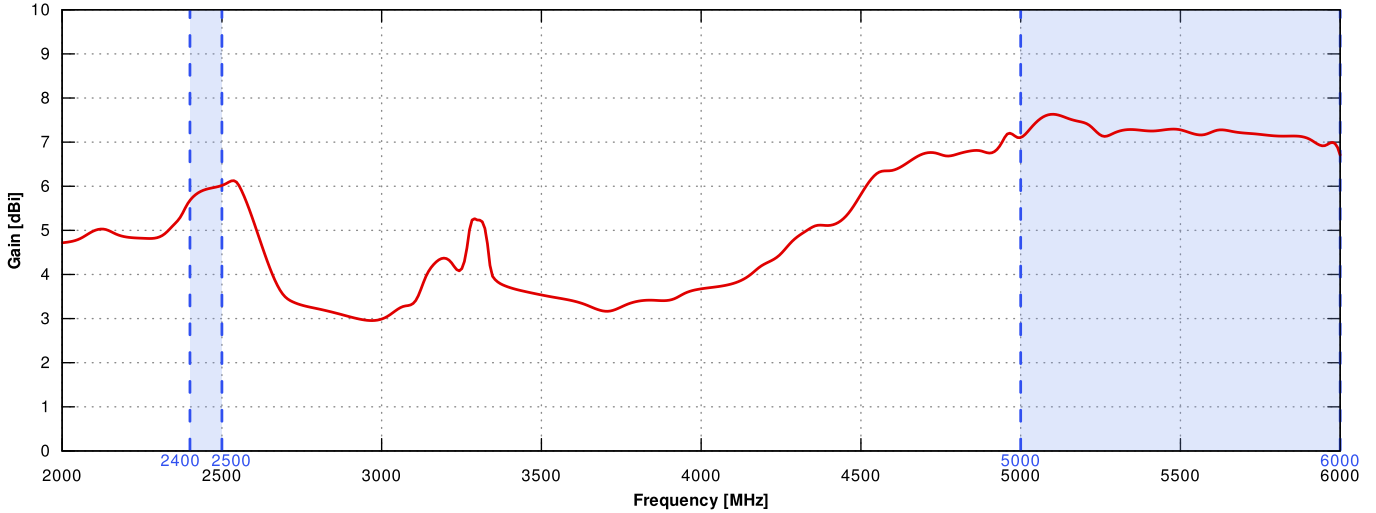
### VSWR for GPS antenna



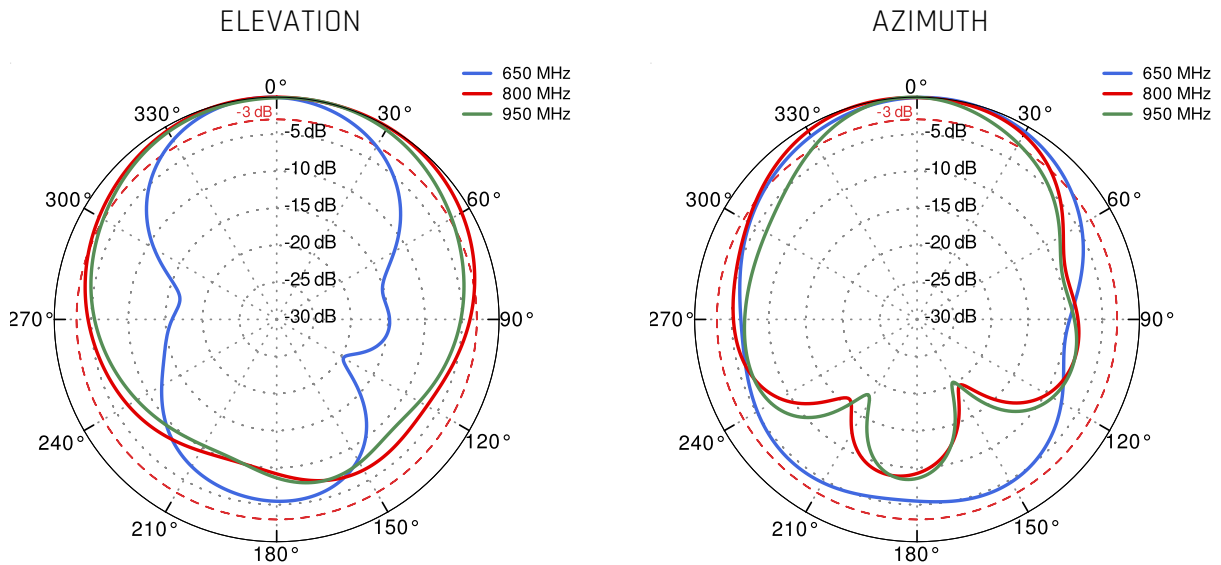
### Gain for 5G/LTE antenna



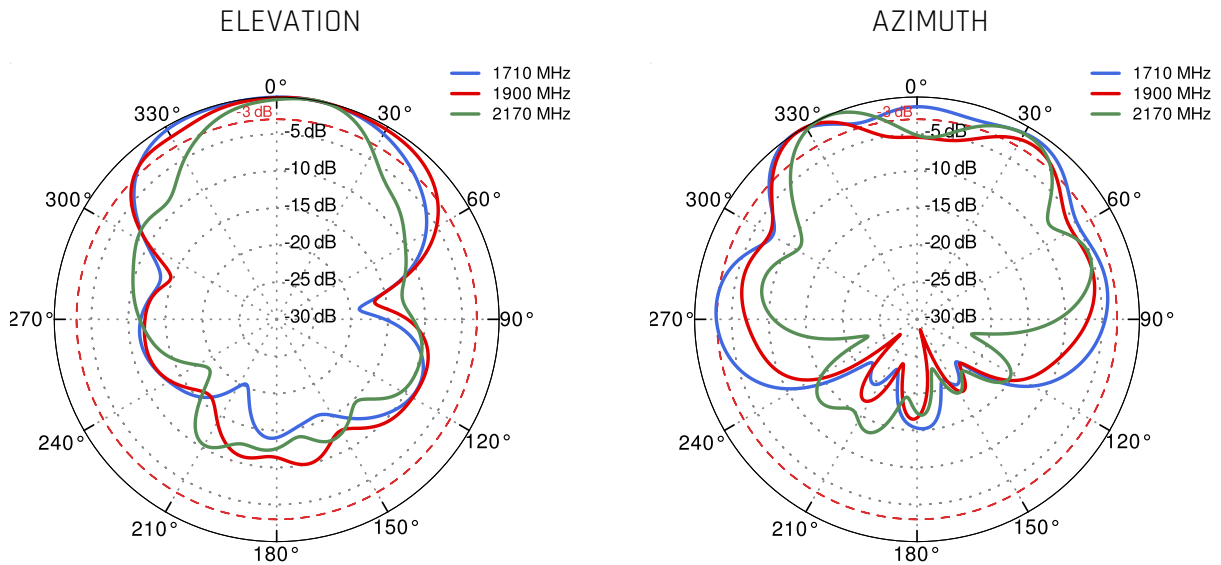
Gain for Wi-Fi antenna



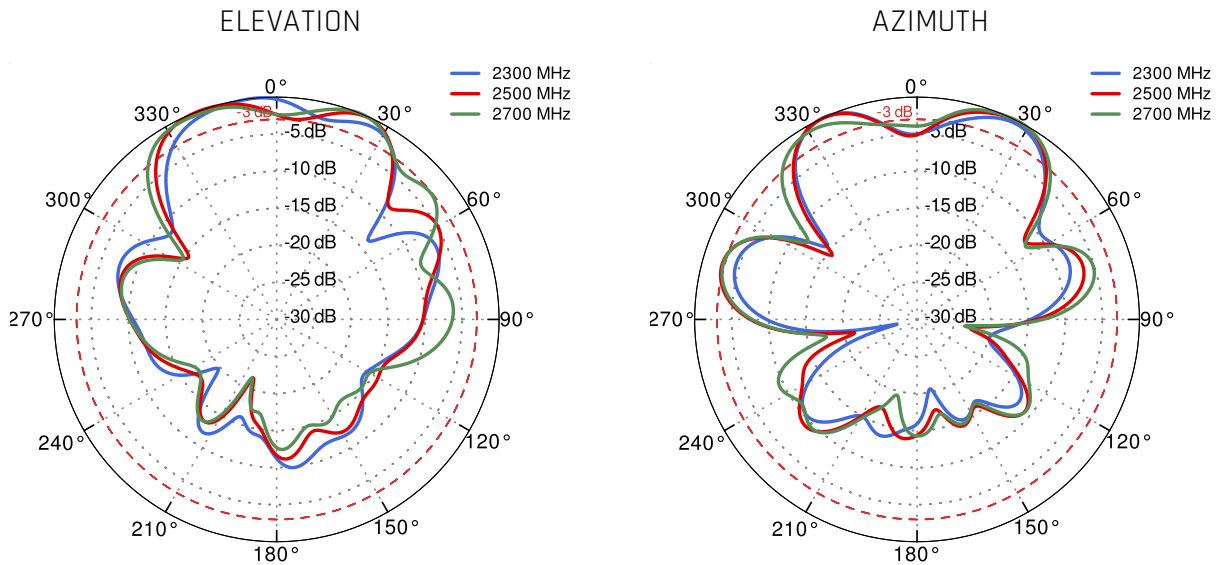
PORT 1&3 - 5G/LTE from 650MHz to 950MHz



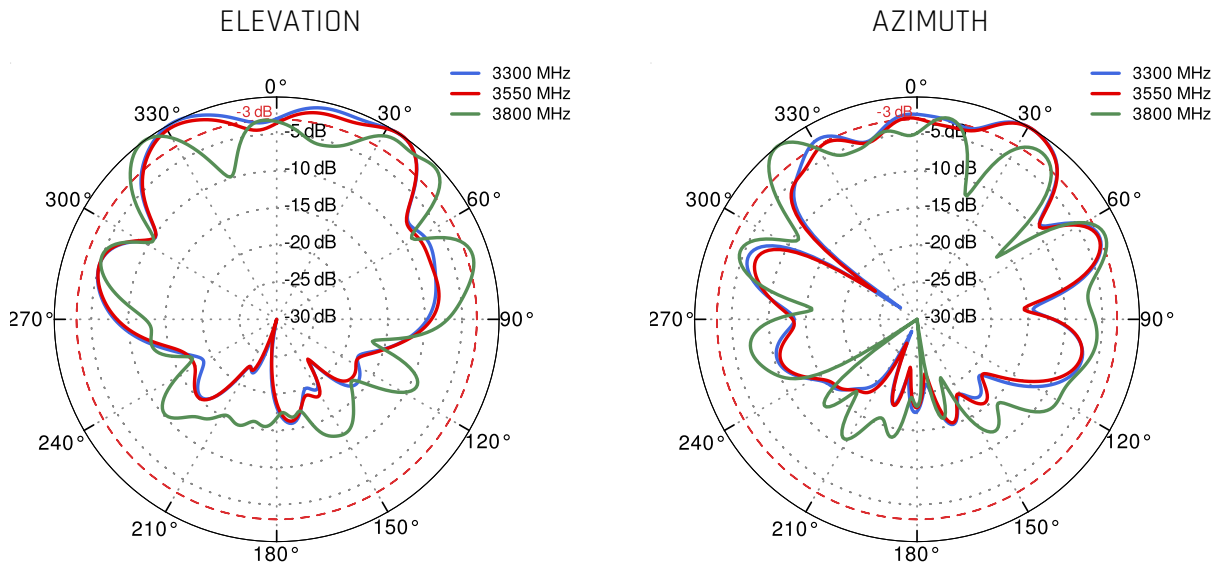
PORT 1&3 - 5G/LTE from 1.71GHz to 2.17GHz



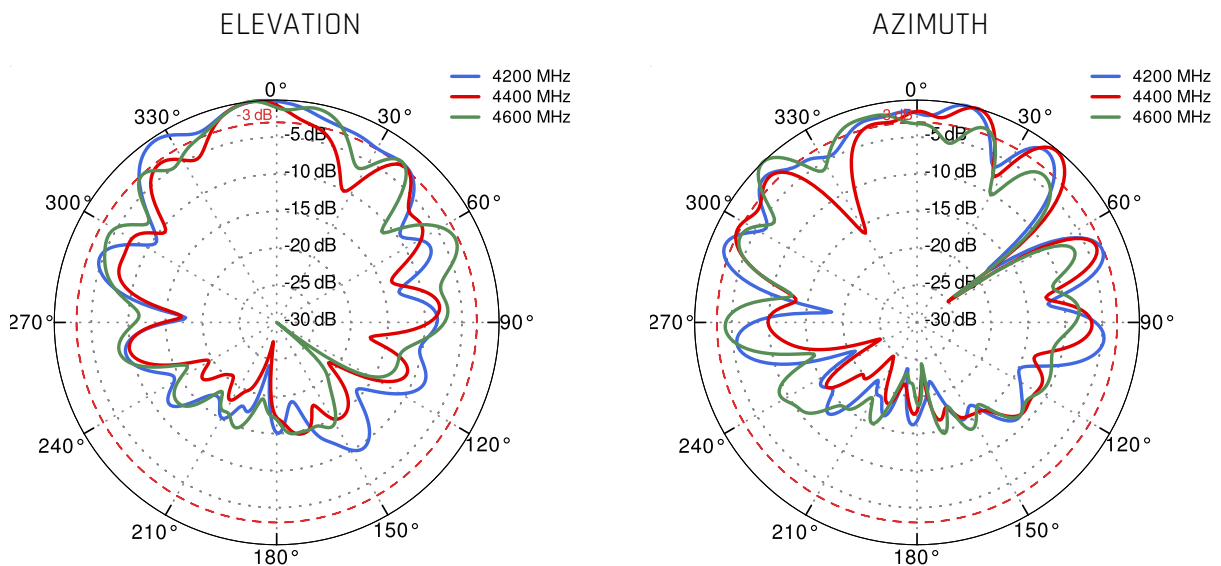
PORT 1&3 - 5G/LTE from 2.3GHz to 2.7GHz

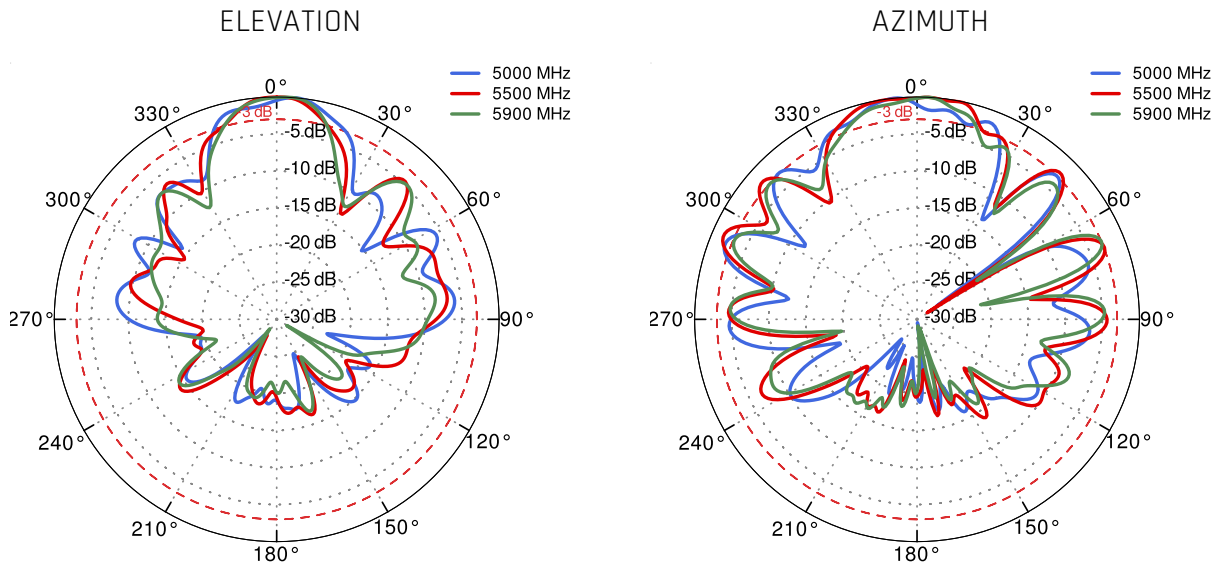
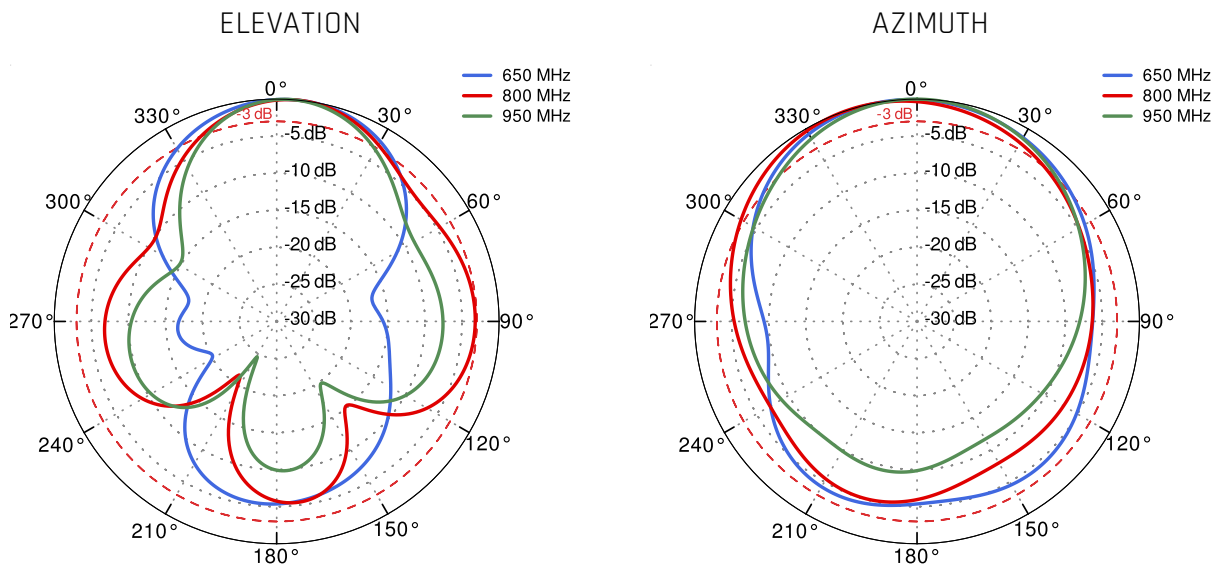


PORT 1&3 - 5G/LTE from 3.3GHz to 3.8GHz

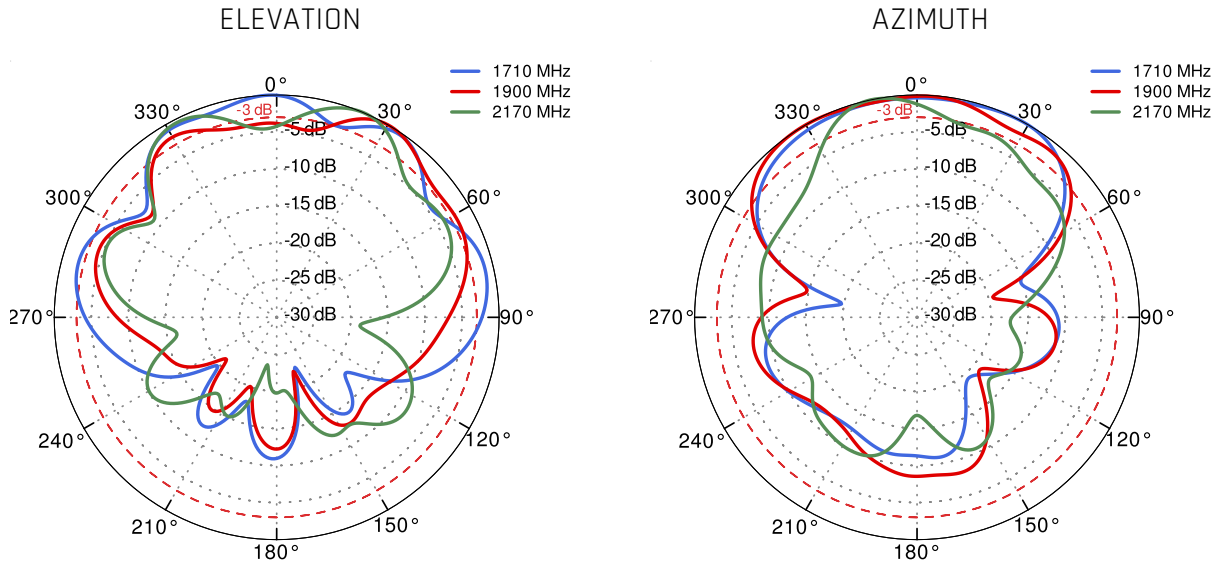


PORT 1&3 - 5G/LTE from 4.2GHz to 4.6GHz

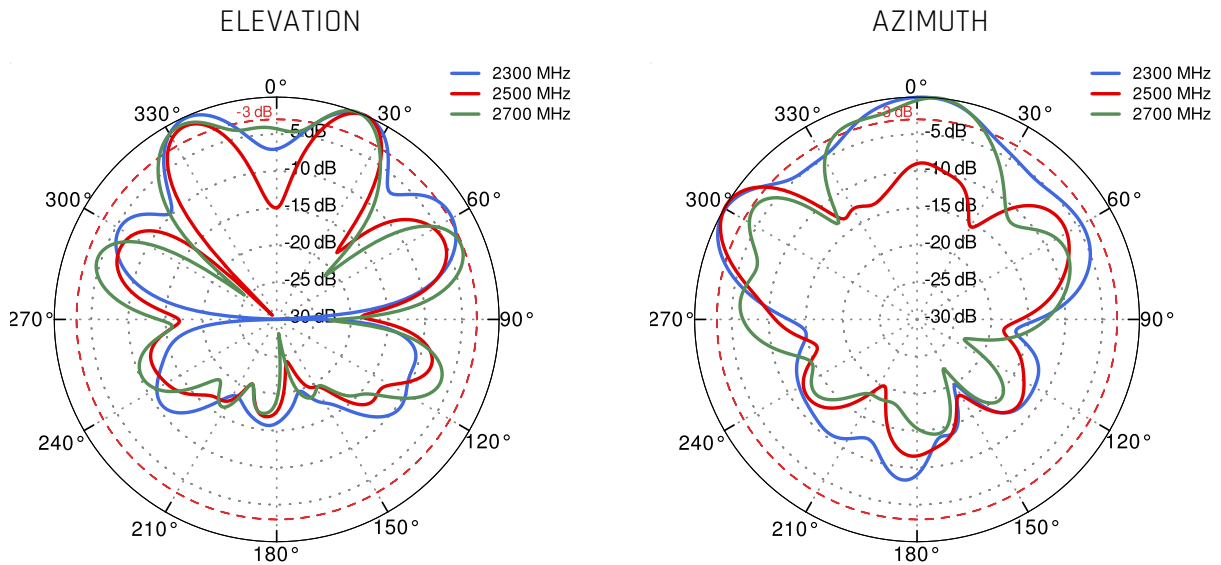


**PORT 1&3 - 5G/LTE from 5.0GHz to 5.9GHz**

**PORT 2&4 - 5G/LTE from 650MHz to 950MHz**


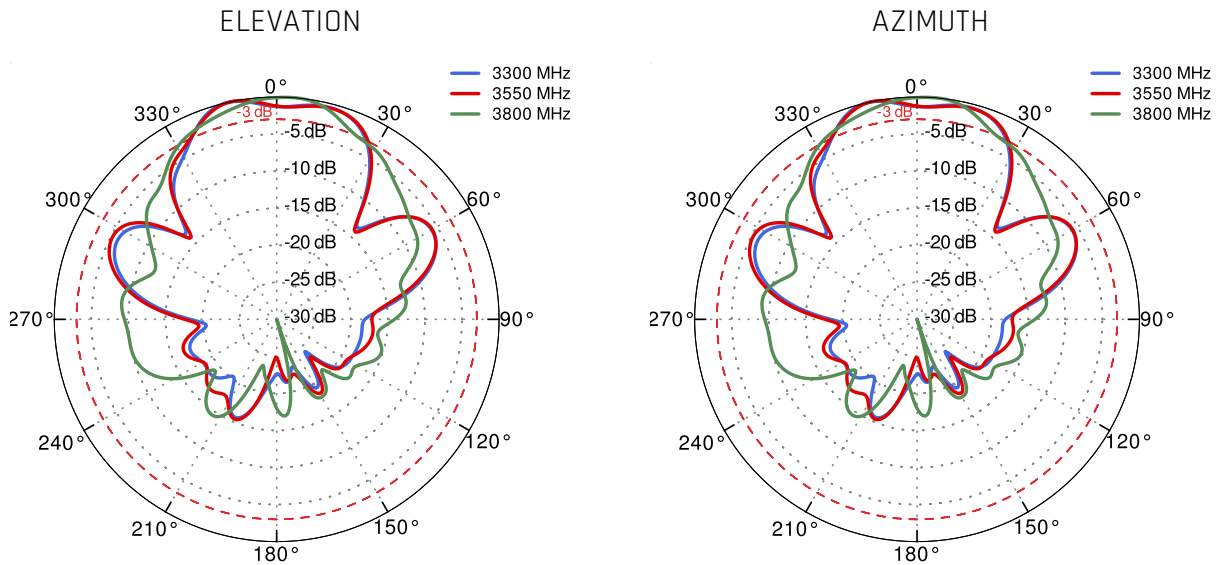
PORT 2&4 - 5G/LTE from 1.71GHz to 2.17GHz



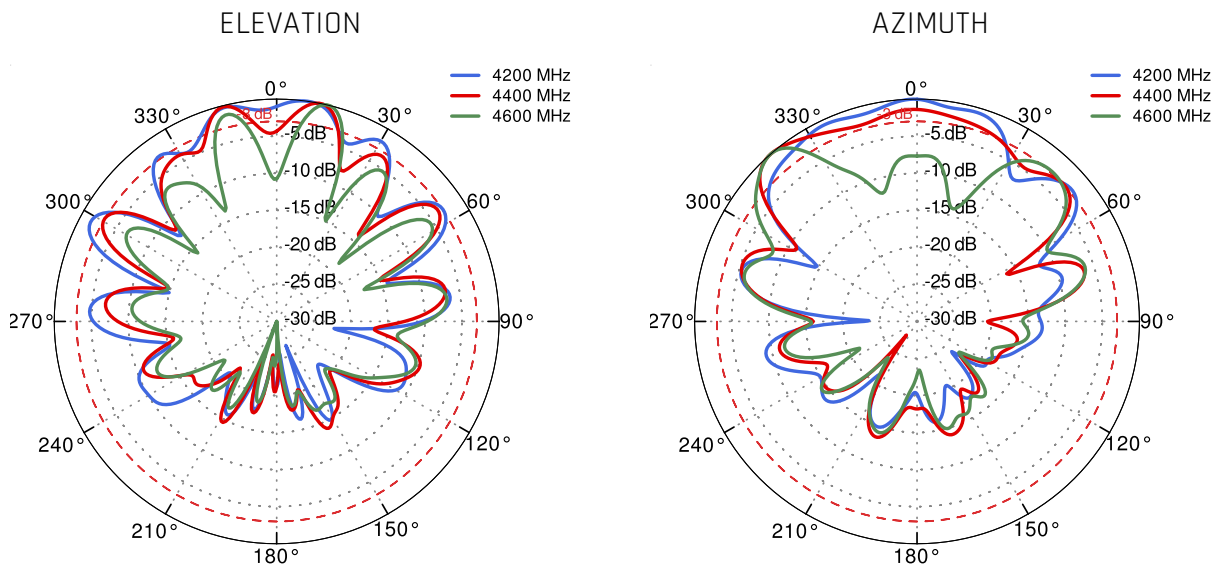
PORT 2&4 - 5G/LTE from 2.3GHz to 2.7GHz



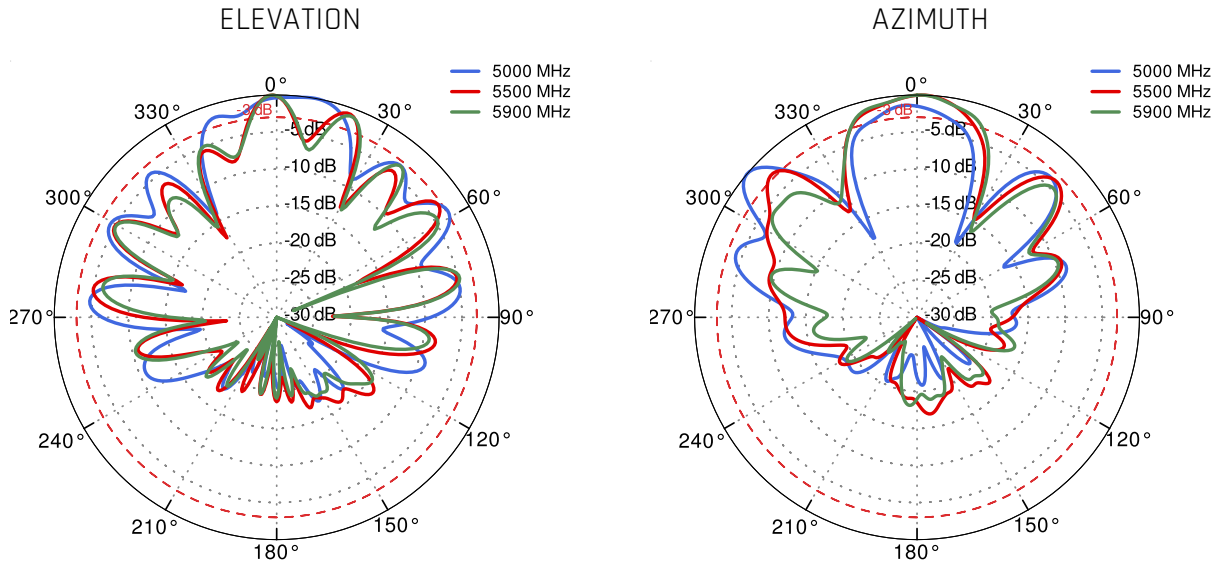
PORT 2&4 - 5G/LTE from 3.3GHz to 3.8GHz



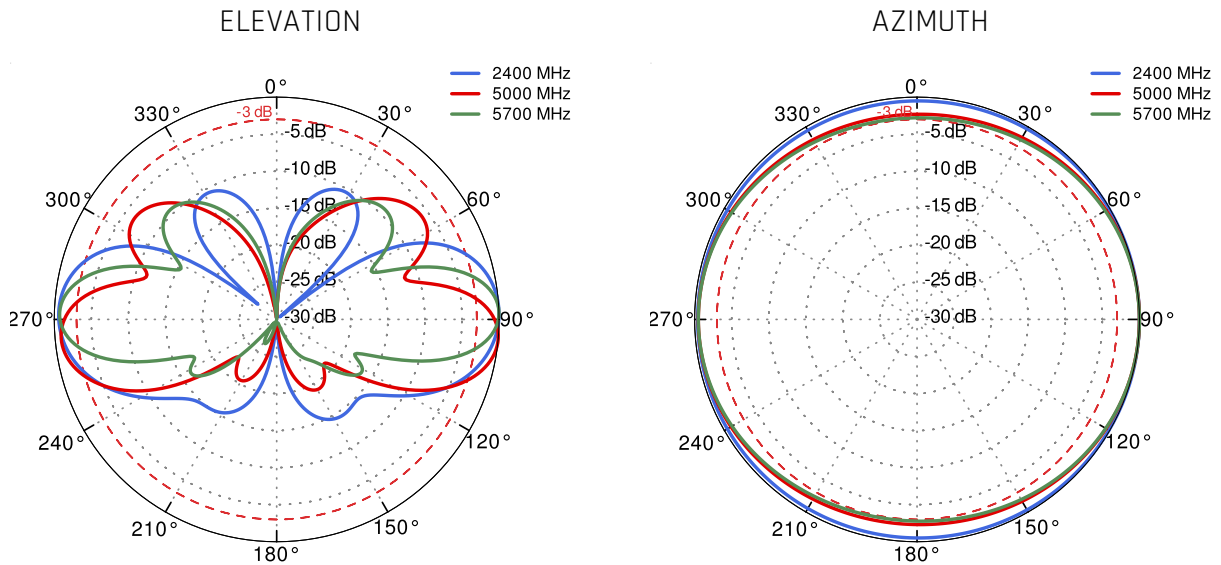
PORT 2 - 5G/LTE from 4.2GHz to 4.6GHz



PORT 2 - 5G/LTE from 5.0GHz to 5.9GHz



Wi-Fi 2.4GHz and 5GHz



## **DIMENSIONS**

