

# QuMax for Robustel R5020

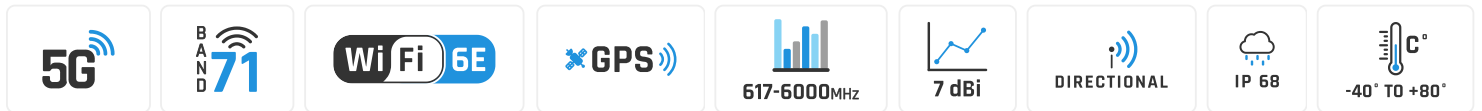
## INTEGRATED MULTI-BAND LTE & 5G PANEL ANTENNA + WI-FI OMNI ANTENNA + GPS + PLACE TO INSTALL Robustel R5020 (ALL-IN-ONE)


QuMax for Robustel R5020 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 enclosure. It offers 7.5 dBi gain and wide beam width, which makes it suitable for use in both urban and rural environments.

Combining QuMax with R5020 inside the antenna housing gives you complete outdoor solution with multiple use scenarios such as transportation public, energy, mining IoT and more.

Wi-Fi 6E support!

**Note!** This antenna comes in two different versions, depending on your router configuration. When you use R5020 supporting Power over Ethernet (PoE) please choose version "no PoE splitter". For R5020 without PoE support, please choose "PoE splitter" version. Compatible Robustel part numbers available in the specification below.



 ALL ANTENNAS AND ROBUSTEL ROUTER INTEGRATED IN ONE ENCLOSURE

 ANTENNA **PERFECTLY MATCHED** WITH THE ROUTER

 OUTDOOR ANTENNA WORKS IN **ANY WEATHER CONDITIONS**, IP68

 MADE IN **EUROPE**



## 5G / LTE ANTENNA SPECIFICATION

<b>FREQUENCY</b>	0.617 - 0.96 GHz 1.7 - 2.7 GHz 3.3 - 4.6 GHz 4.7 - 6.0 GHz
<b>GAIN</b>	0.617 - 0.96 GHz: 6 dBi 1.7 - 2.7 GHz: 7 dBi 3.3 - 4.6 GHz: 7 dBi 4.7 - 6.0 GHz: 5.5 dBi
<b>SUPPORTED LTE BANDS</b>	1, 2, 3, 4, 5, 7, 8, 9, 10, 12, 13, 14, 17, 18, 19, 20, 22, 25, 26, 27, 28, 29, 30, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 46, 47, 48, 49, 52, 53, 65, 66, 67, 68, 69, 71, 85, 103, 106
<b>SUPPORTED 5G BANDS</b>	n1, n2, n3, n5, n7, n8, n12, n13, n14, n18, n20, n25, n26, n28, n29, n30, n34, n38, n39, n40, n41, n46, n47, n48, n53, n65, n66, n67, n71, n77, n78, n80, n81, n82, n83, n84, n85, n86, n89, n90, n95, n97, n98, n100, n101, n255
<b>VSWR</b>	<2.00, max <3.00
<b>BEAMWIDTH</b>	80°/80° ±15°
<b>POLARIZATION</b>	X (±45degrees)
<b>IMPEDANCE</b>	50 Ω

## WI-FI ANTENNA SPECIFICATION

<b>FREQUENCY</b>	2.40 - 2.50 GHz 5.0 - 7.125 GHz
<b>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

## MECHANICAL SPECIFICATION

<b>MATERIALS</b>	ABS, aluminum, PTFE, Fiberglass
<b>CONNECTOR TYPE</b>	RJ45
<b>INGRESS PROTECTION</b>	IP68
<b>DIMENSIONS</b>	486.0 x 292.2 x 105.6 mm 19.13 x 11.50 x 4.16 inch
<b>WEIGHT</b>	2.8 kg 6.17 lbs
<b>OPERATING TEMPERATURE</b>	From -40°C to 80°C From -40°F to 176°F
<b>ENCLOSURE RECOMMENDED TIGHTENING TORQUE</b>	0.6 - 0.8 Nm
<b>MAST DIAMETER</b>	25-66mm 0.98-2.60 inch

# FREQUENCY BANDS

LTE / 4G

617 MHz	1	2	3	4	5	7	8	6000M Hz
	9	10	12	13	14	17	18	
	19	20	22	25	26	27	28	
	29	30	33	34	35	36	37	
	38	39	40	41	42	43	44	
	46	47	48	49	52	53	65	
	66	67	68	69	71	85	103	
	106							

5G

617 MHz	n1	n2	n3	n5	n7	n8	n12	6000 MHz
	n13	n14	n18	n20	n25	n26	n28	
	n29	n30	n34	n38	n39	n40	n41	
	n46	n47	n48	n53	n65	n66	n67	
	n71	n77	n78	n80	n81	n82	n83	
	n84	n85	n86	n89	n90	n95	n97	
	n98	n100	n101	n255				

## COMPATIBLE PART NUMBERS

**NO POE SPLITTER**

R5020-  
5G-  
A09GL-  
B

B064802

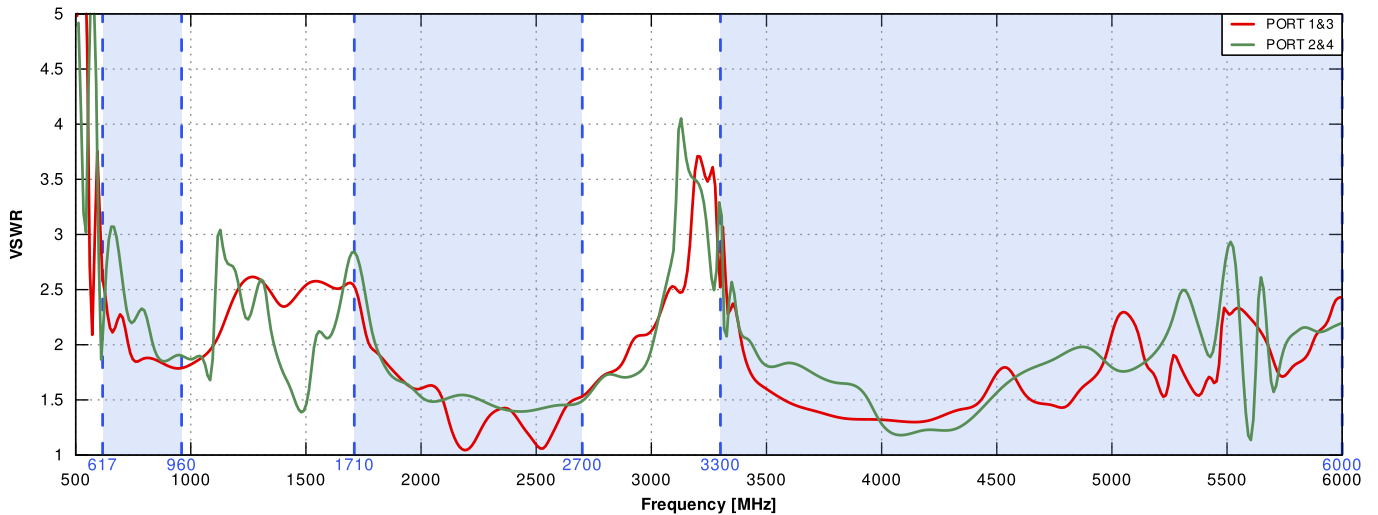
**POE SPLITTER**

R5020-  
5G-  
A09GL-  
A

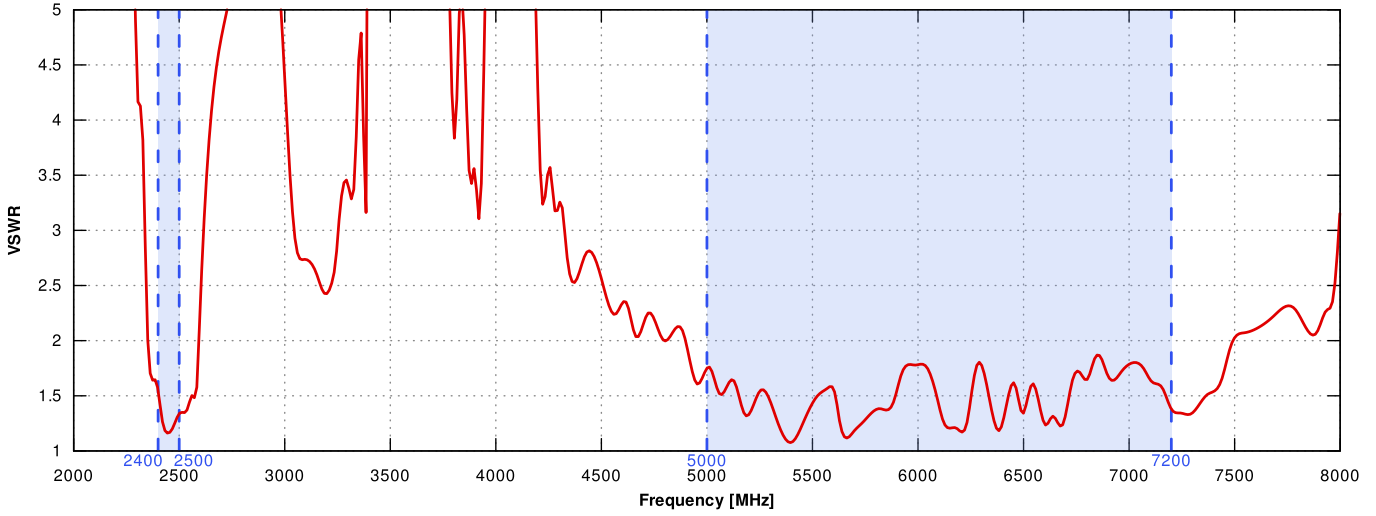
B064803

## PLOTS

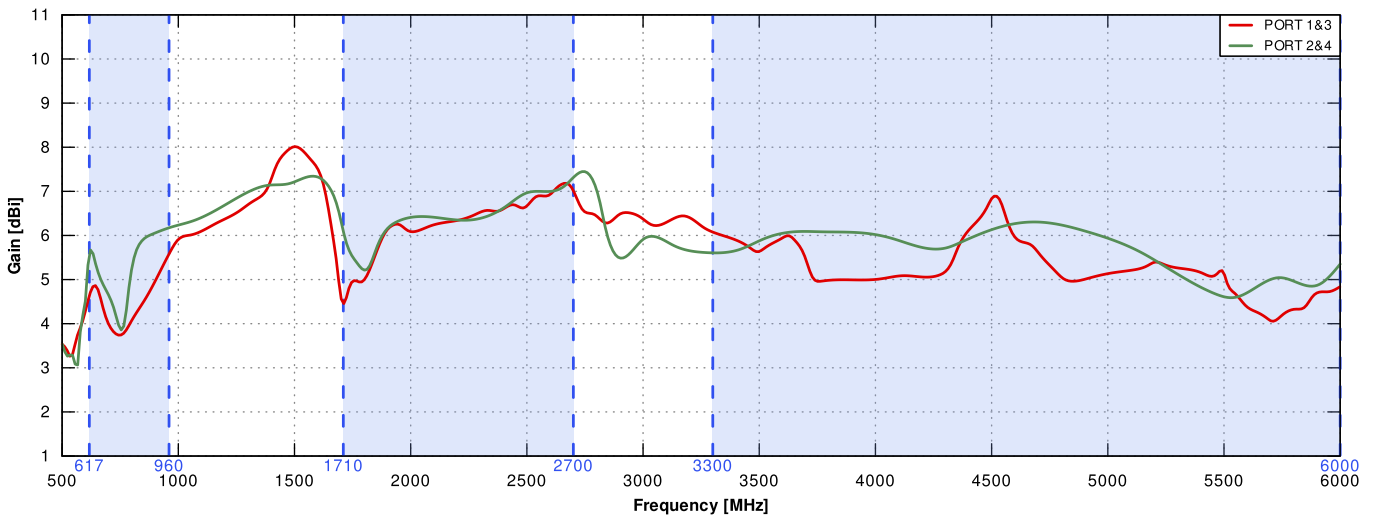
VSWR for 5G/LTE antenna



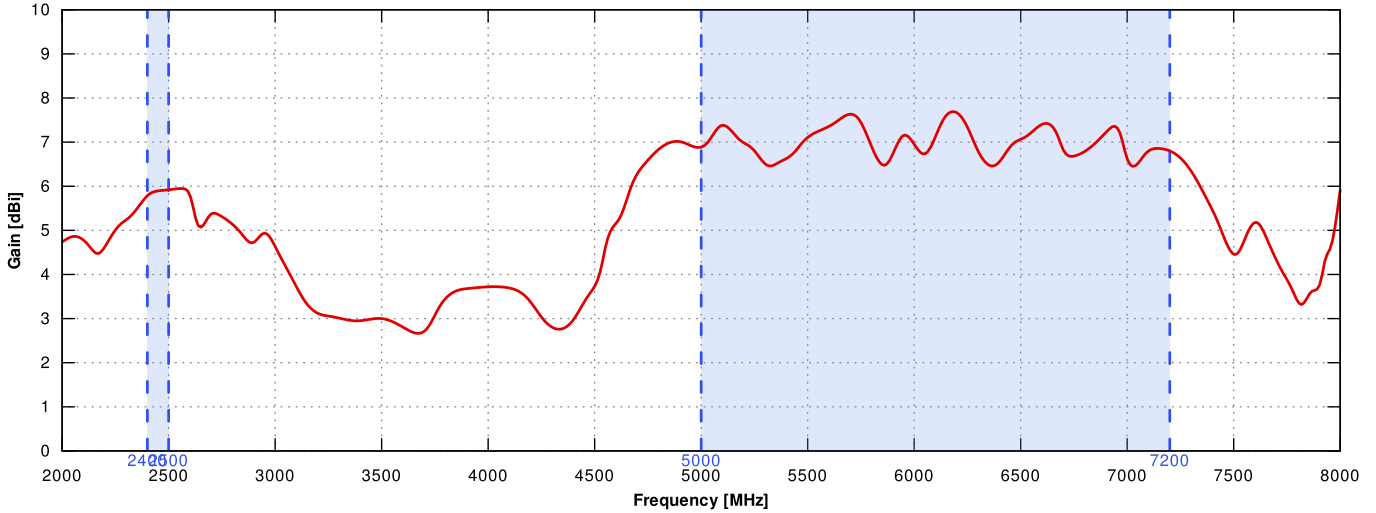
VSWR for Wi-Fi antenna



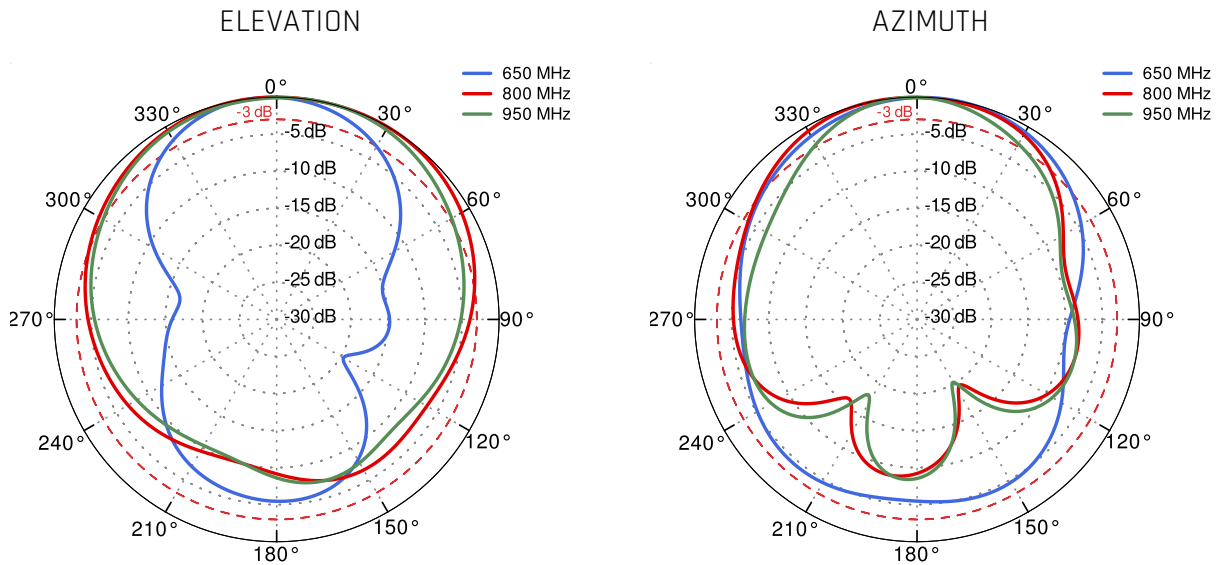
Gain for 5G/LTE antenna



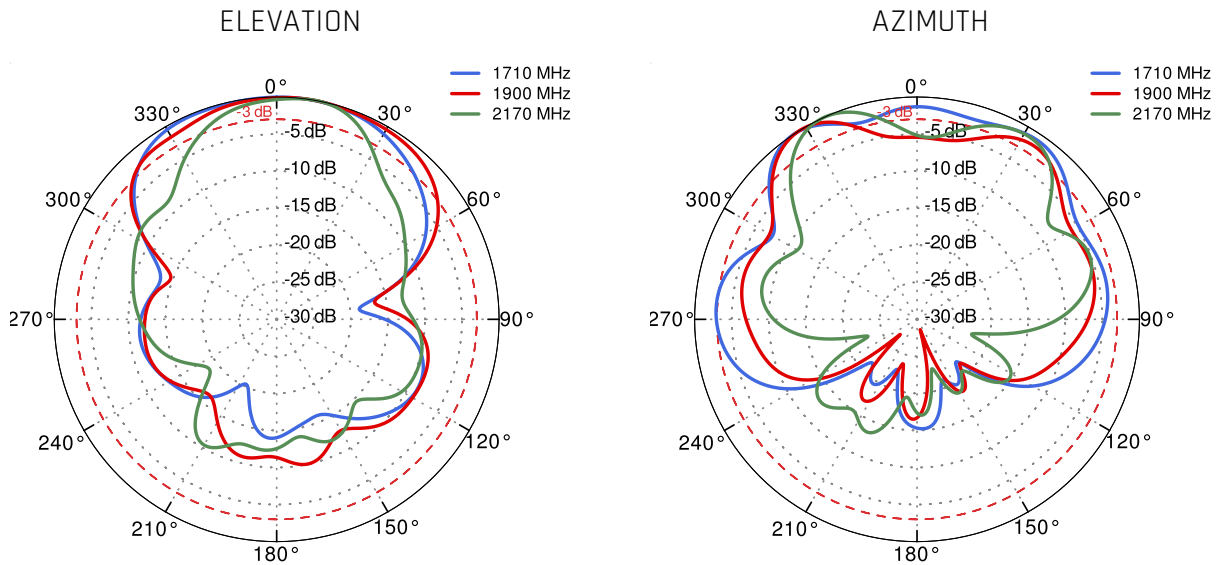
Gain for Wi-Fi antenna



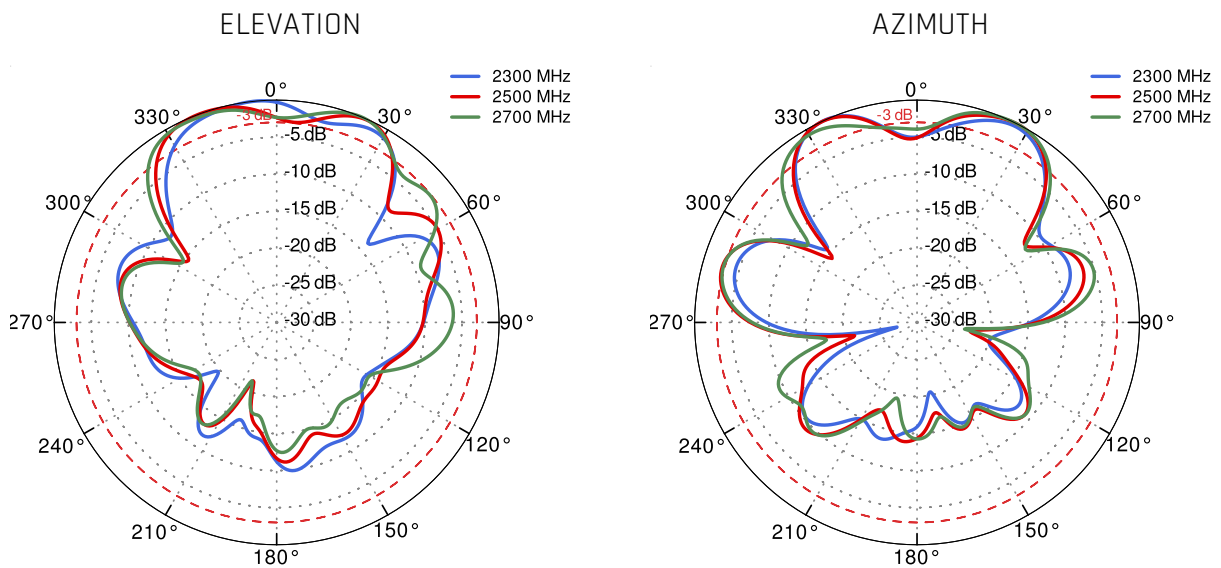
PORT 1&3 - 5G/LTE from 650MHz to 950MHz



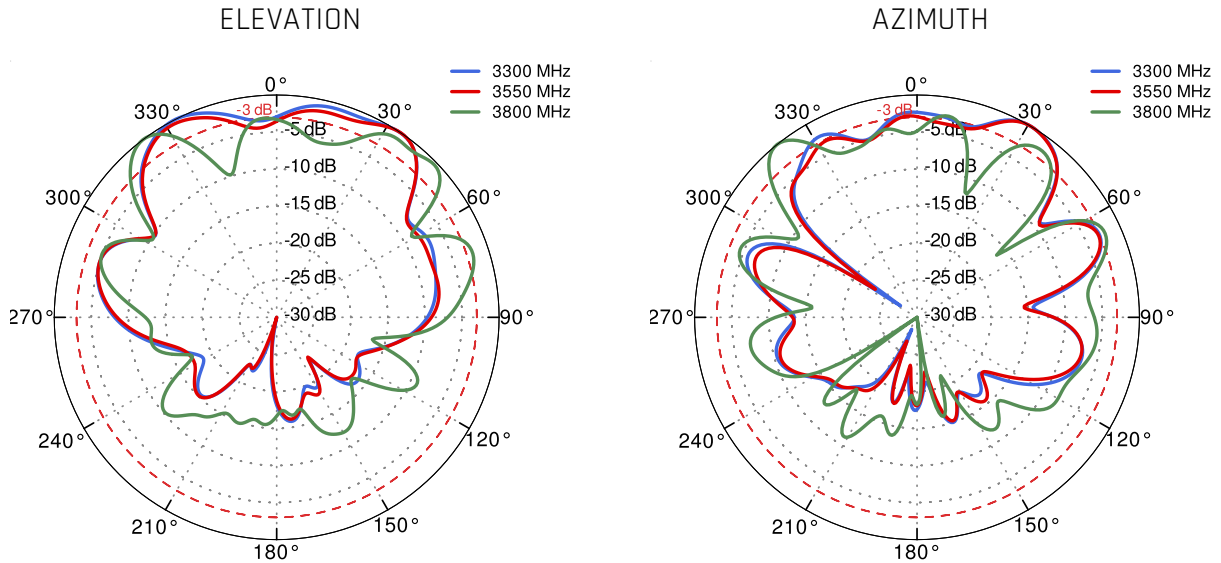
PORT 1&3 - 5G/LTE from 1.71GHz to 2.17GHz



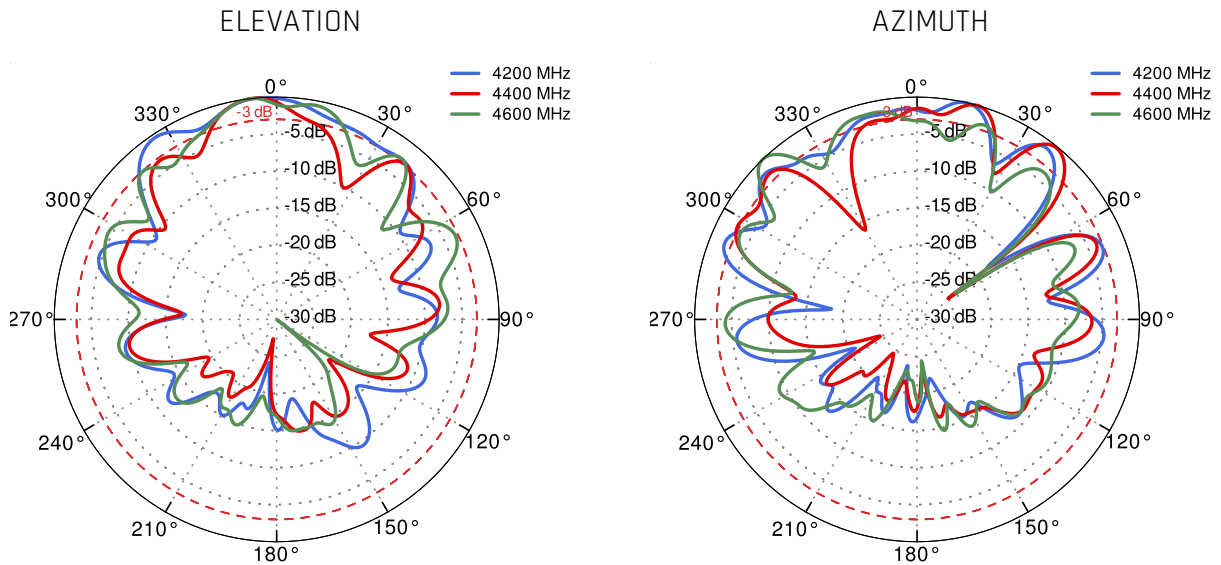
PORT 1&3 - 5G/LTE from 2.3GHz to 2.7GHz

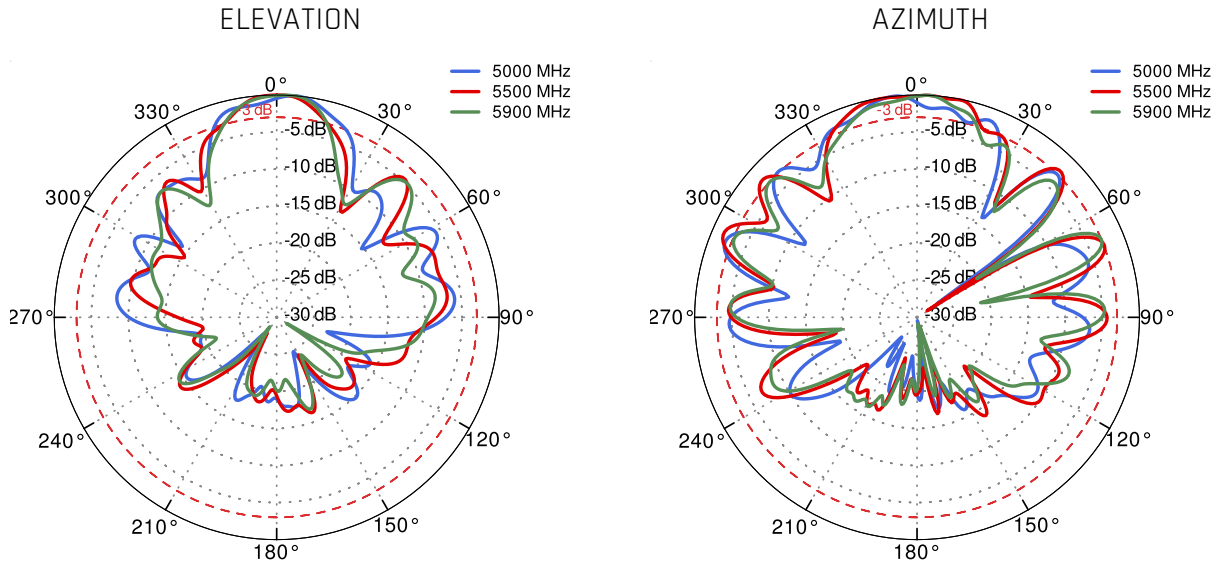
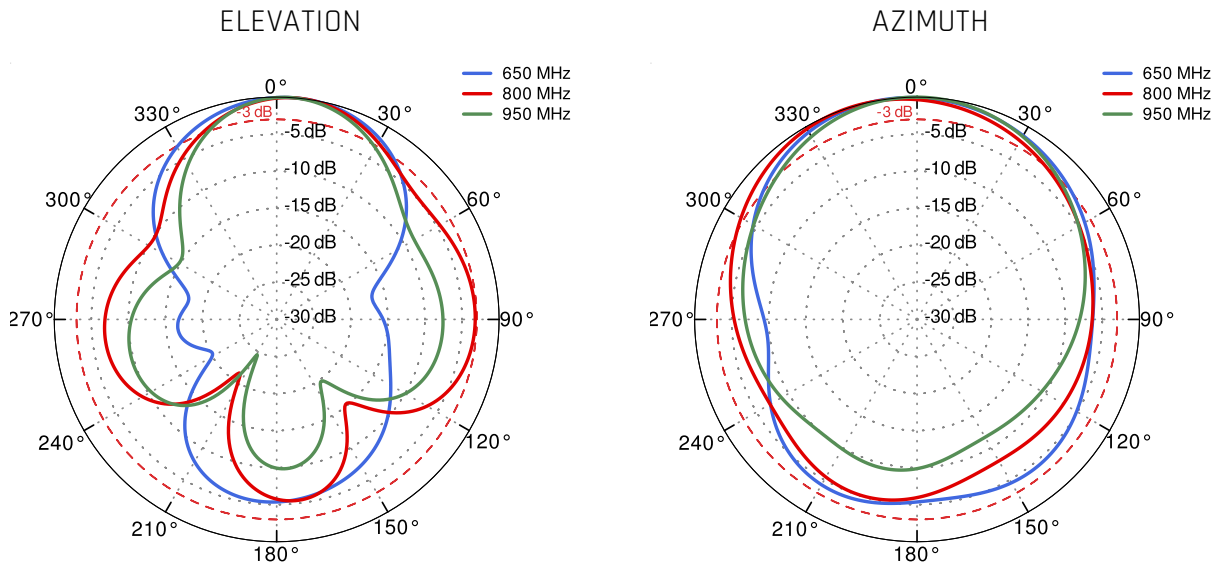


PORT 1&3 - 5G/LTE from 3.3GHz to 3.8GHz

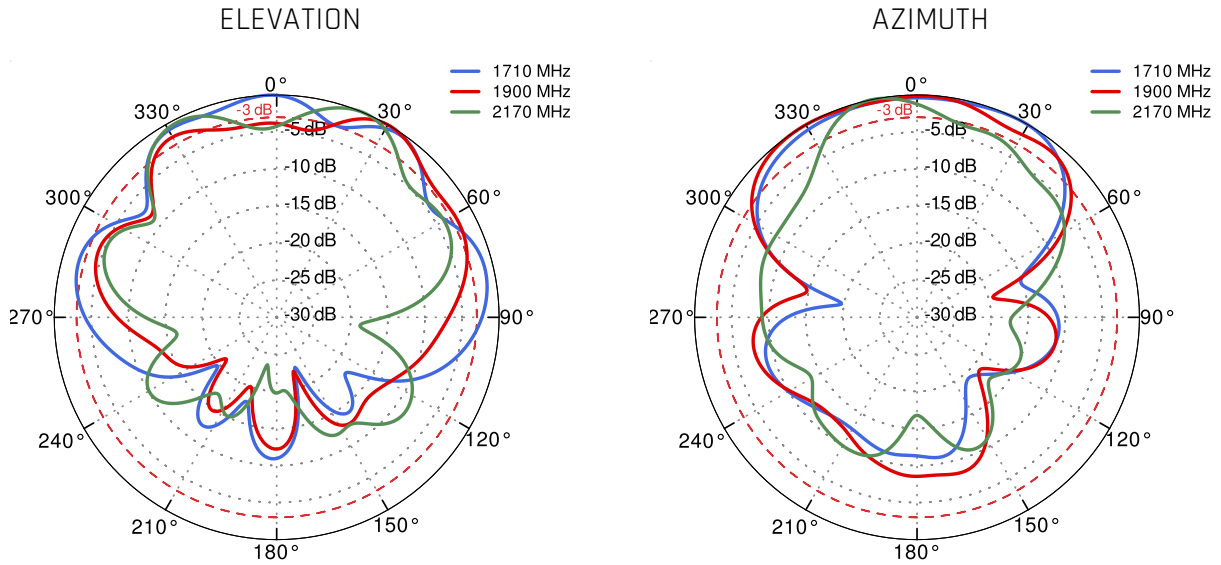


PORT 1&3 - 5G/LTE from 4.2GHz to 4.6GHz

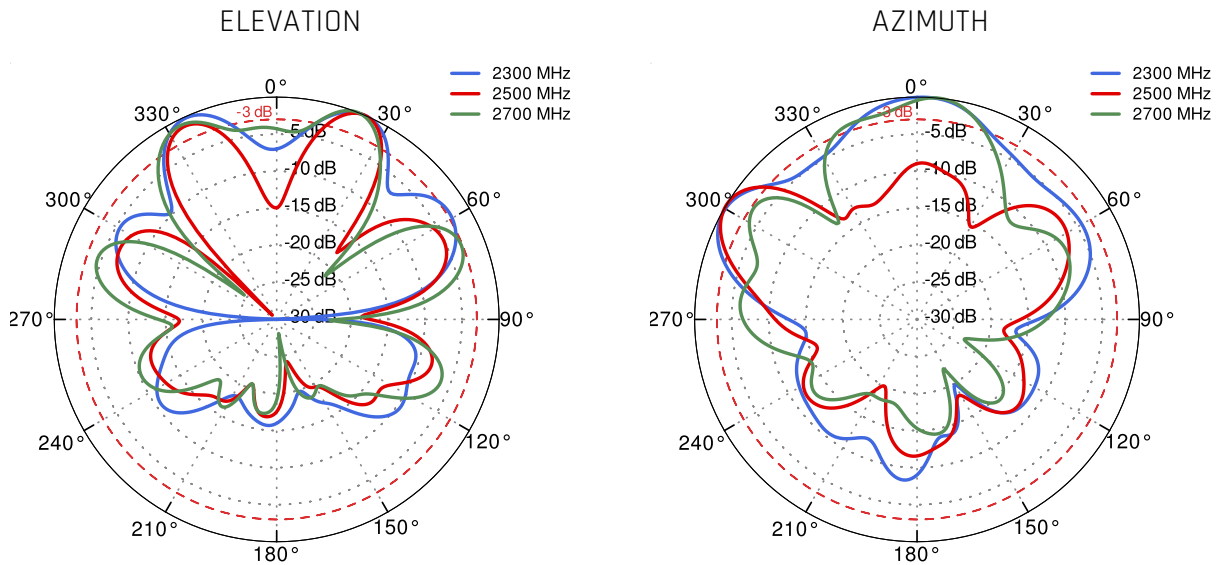


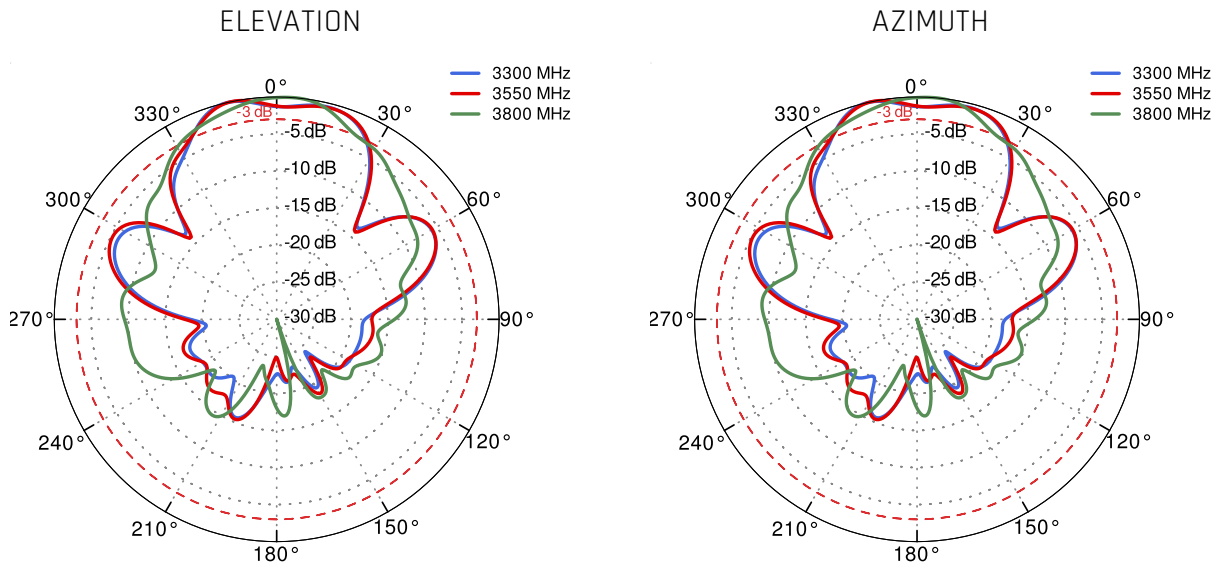
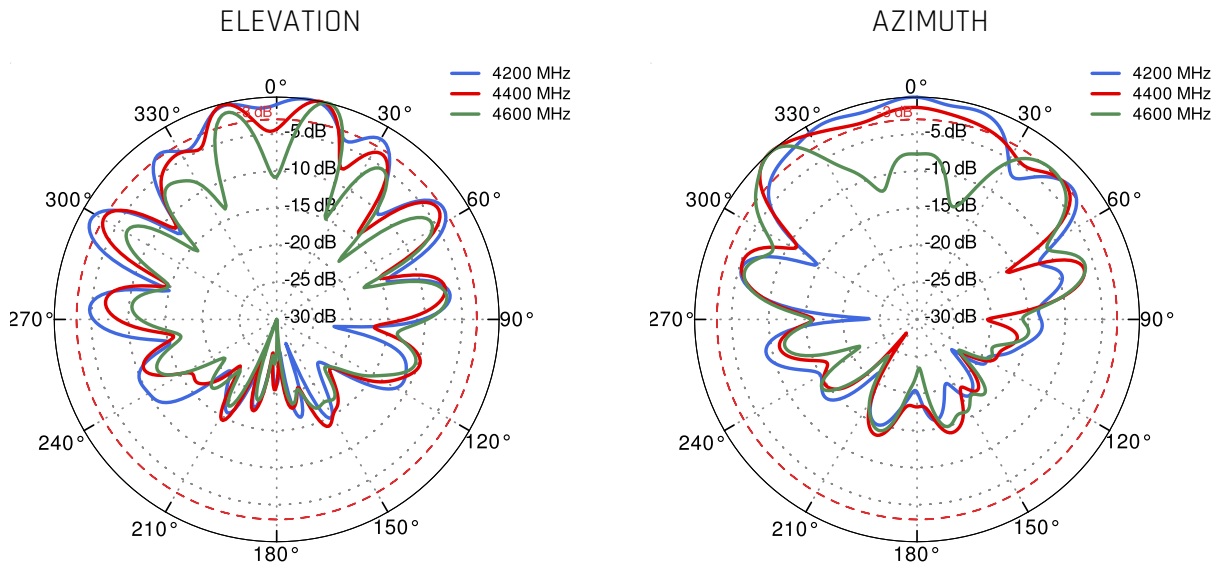
**PORT 1&3 - 5G/LTE from 5.0GHz to 5.9GHz**

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


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

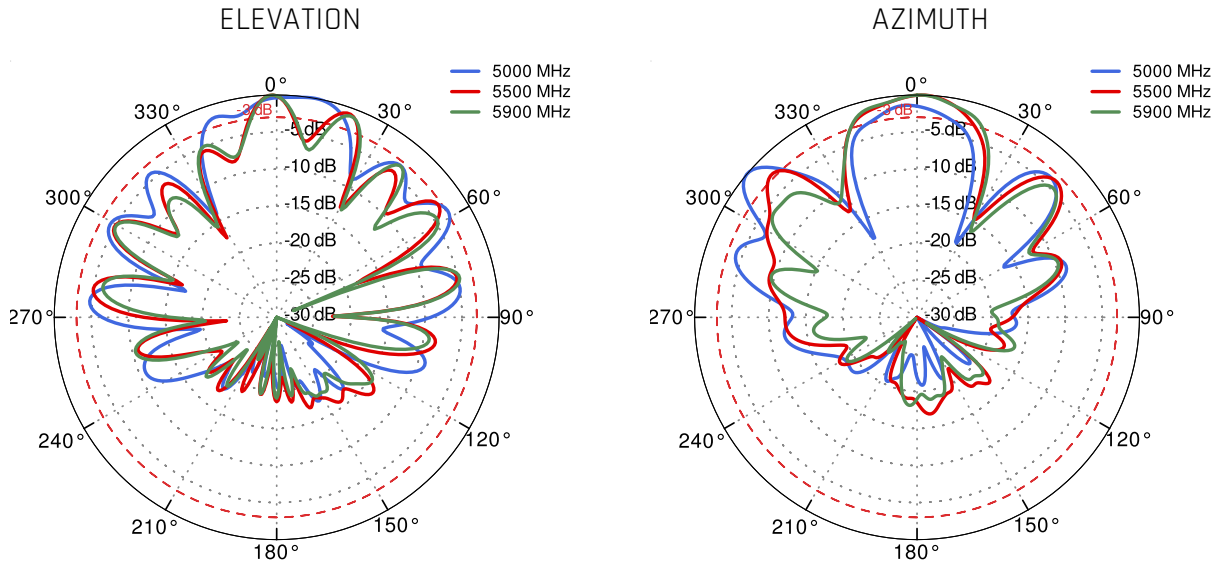


PORT 2&4 - 5G/LTE from 2.3GHz to 2.7GHz

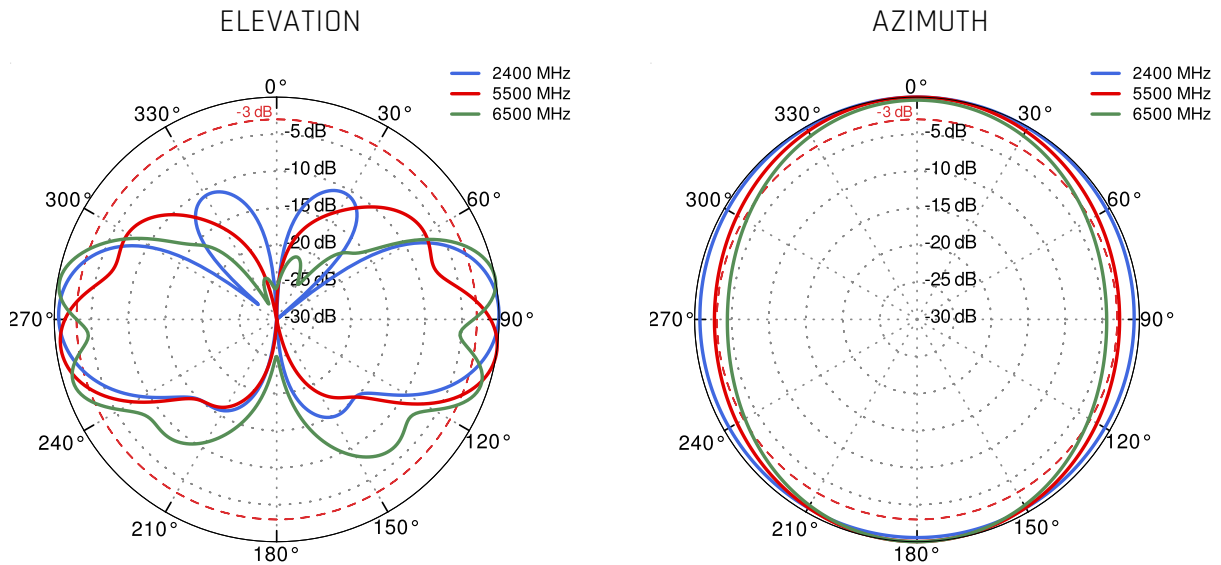


**PORT 2&4 - 5G/LTE from 3.3GHz to 3.8GHz**

**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 and 6GHz



## **DIMENSIONS**

