

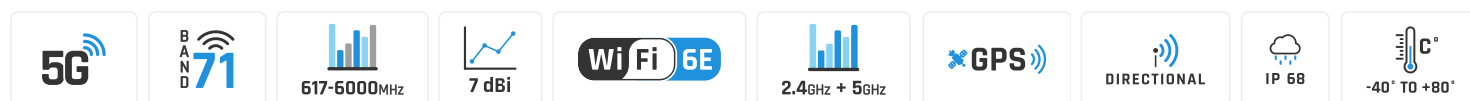
Thunder Integrated Directional for Semtech XR60

INTEGRATED MULTI-BAND LTE & 5G PANEL ANTENNA + WI-FI OMNI ANTENNA + GPS ACTIVE ANTENNA + PLACE TO INSTALL SEMTECH XR60 (ALL-IN-ONE)

Thunder Integrated Directional for Semtech XR60 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.

The set contains a [Passive PoE splitter](#), allowing you to split data and power from a single Ethernet cable and maintain gigabit transfer speeds while protecting the LAN port from damage caused by overvoltage, short circuit or improper connection.

Combining Thunder Integrated Directional antenna with XR60 inside gives you complete outdoor solution with multiple use scenarios such as transportation public, energy, mining IoT and more.



5G / LTE ANTENNA SPECIFICATION

FREQUENCY	0.617 - 0.96 GHz 1.7 - 2.7 GHz 3.3 - 4.6 GHz 4.7 - 6.0 GHz
GAIN	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
SUPPORTED LTE BANDS	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
SUPPORTED 5G BANDS	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
VSWR	<2.00, max <3.00
BEAMWIDTH	80°/80° ±15°
POLARIZATION	X (±45degrees)
IMPEDANCE	50 Ω
CONNECTOR	4x SMA
CABLE TYPE	RG316

WI-FI ANTENNA SPECIFICATION

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

GPS ACTIVE ANTENNA SPECIFICATION

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

CONNECTOR

1x SMA

CABLE TYPE

RG174

 **MECHANICAL SPECIFICATION****MATERIALS**

ABS, aluminum, PTFE, Fiberglass

CONNECTOR TYPE

RJ45

INGRESS PROTECTION

IP68

DIMENSIONS486.0 x 292.2 x 105.6 mm
19.13 x 11.50 x 4.16 inch**WEIGHT**2.8 kg
6.17 lbs**OPERATING TEMPERATURE**From -40°C to 80°C
From -40°F to 176°F**MAST DIAMETER**25-66mm
0.98-2.60 inch

FREQUENCY BANDS

LTE / 4G

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						

617 MHz 6000M Hz

5G

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			

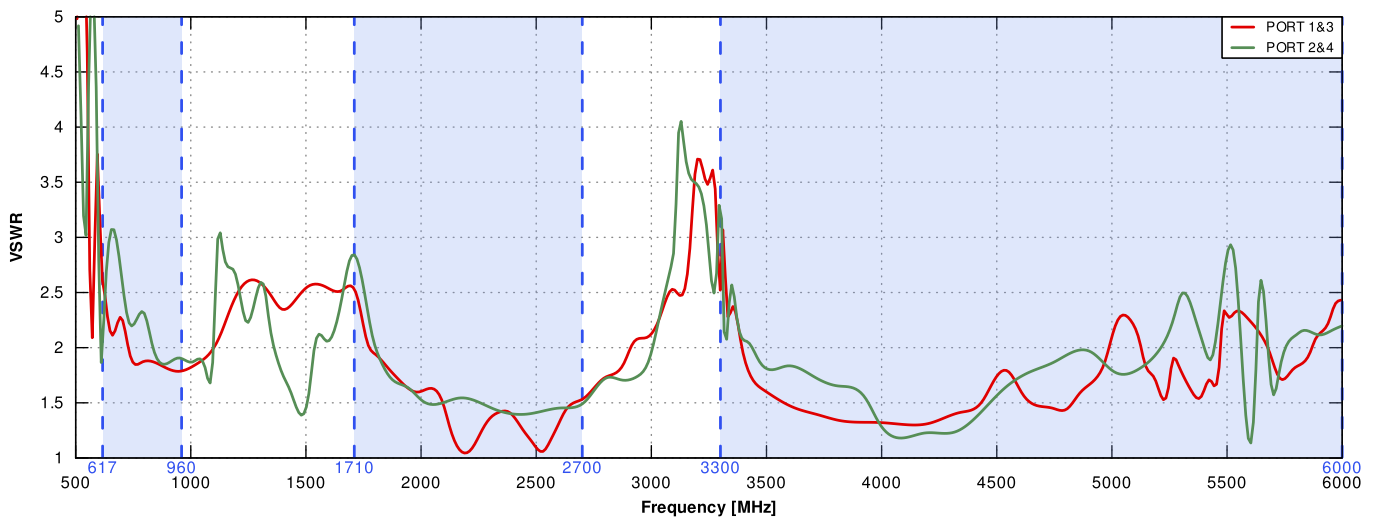
617 MHz 6000 MHz

COMPATIBLE ROUTERS

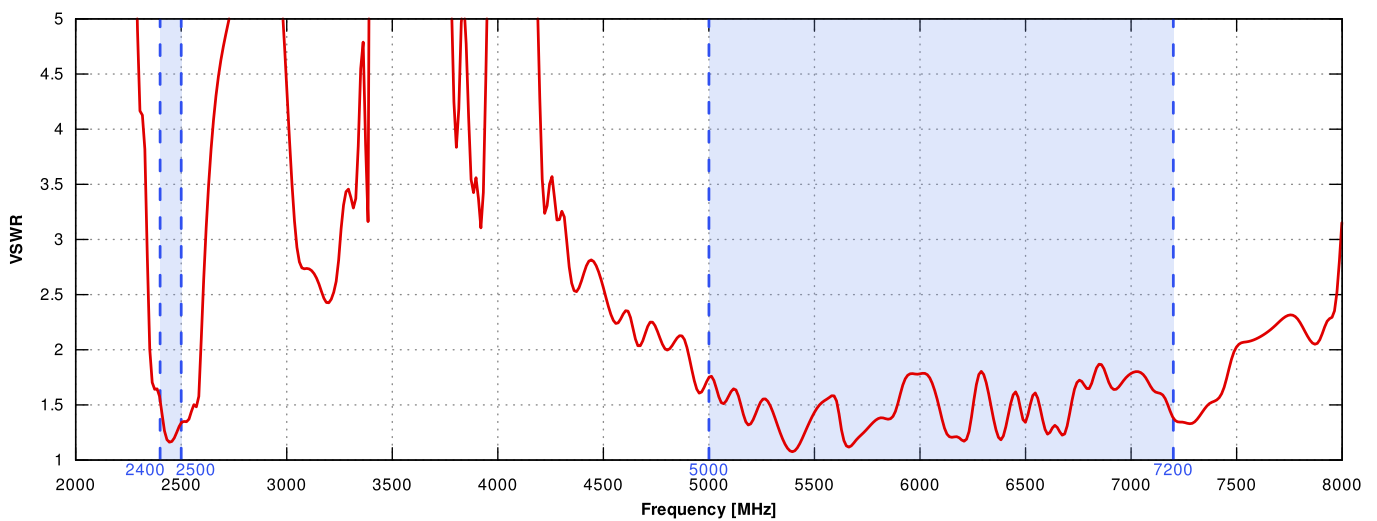
VARIANT: AXR60M

PLOTS

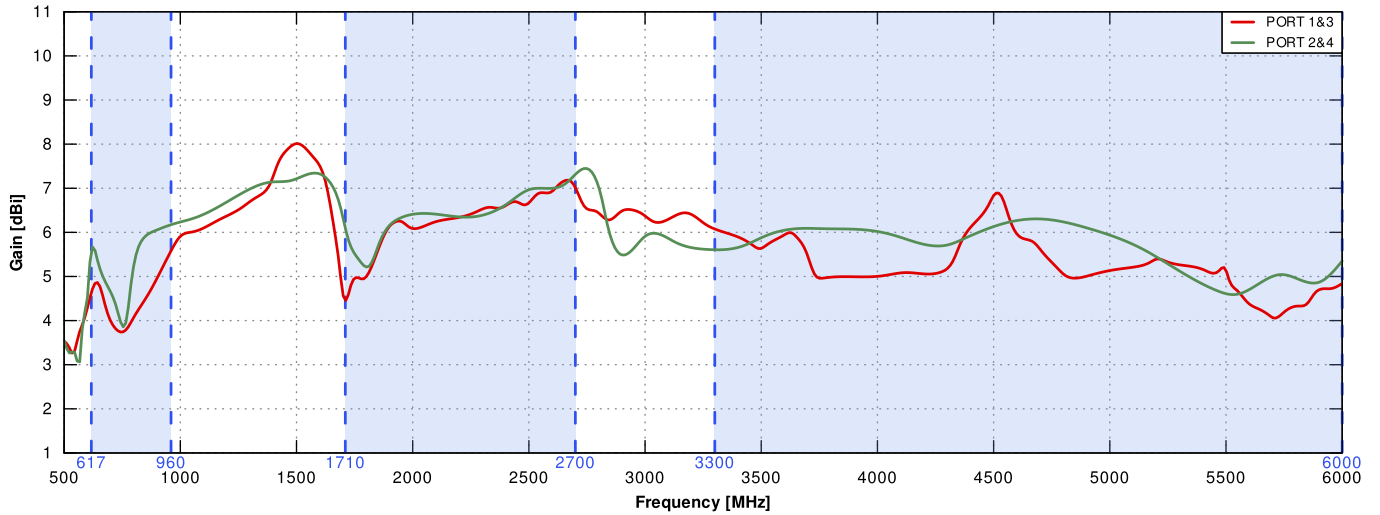
VSWR for 5G/LTE antenna



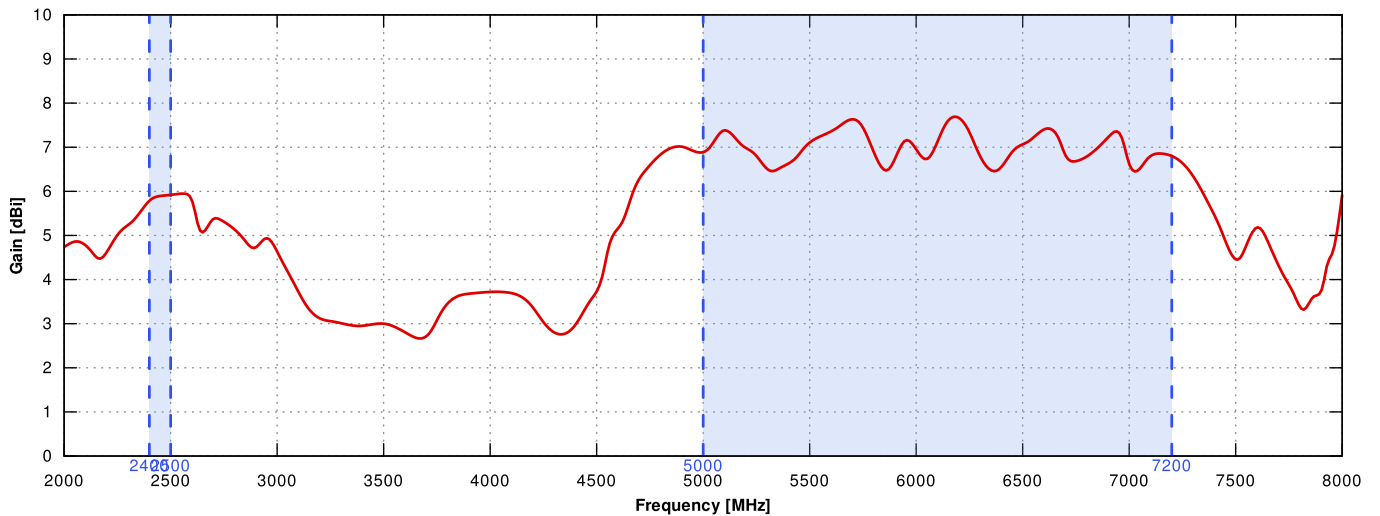
VSWR for Wi-Fi antenna



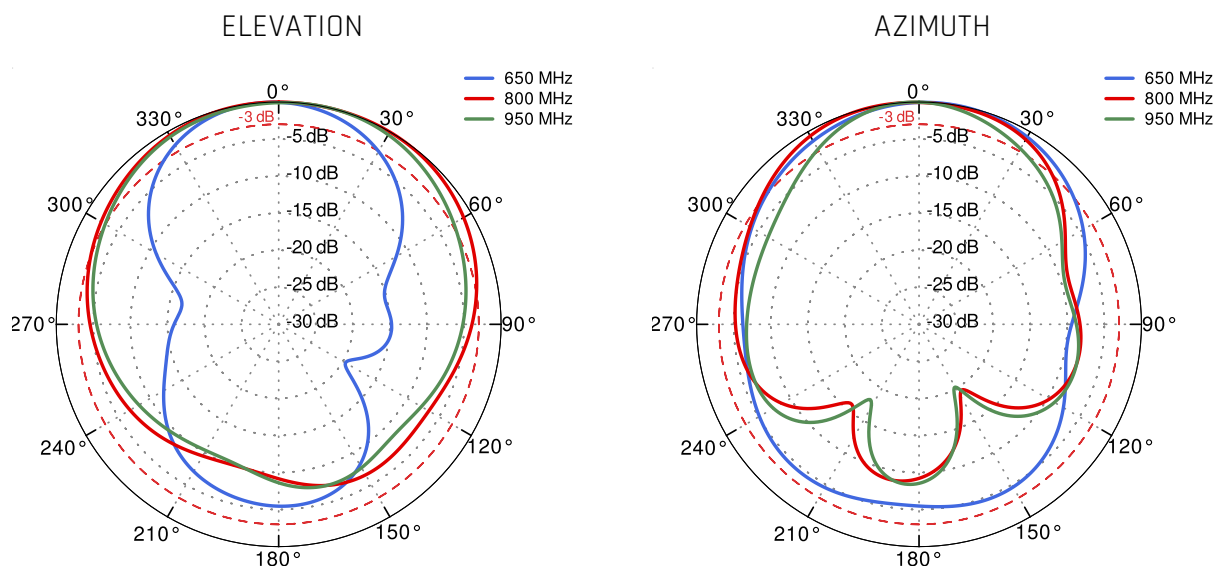
Gain for 5G/LTE antenna



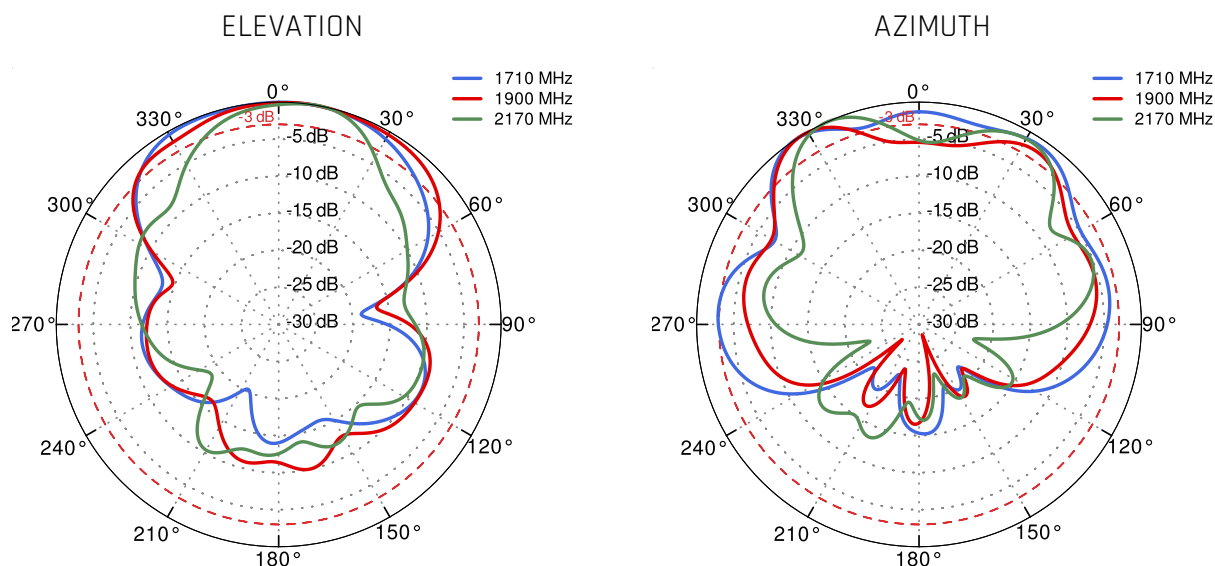
Gain for Wi-Fi antenna



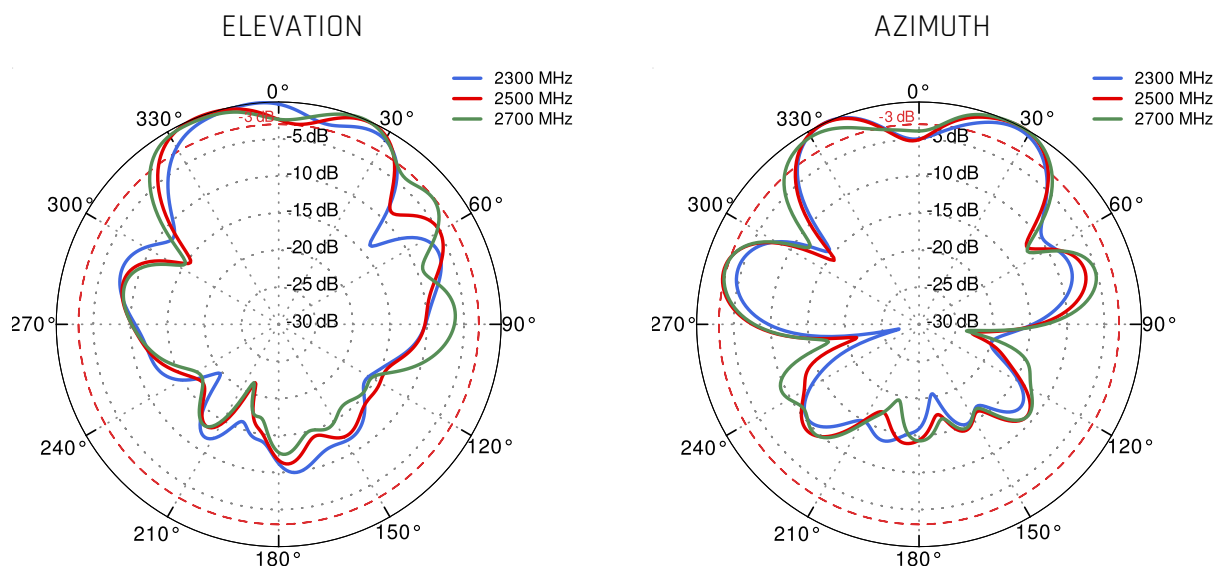
PORT 1&3 - 5G/LTE from 650MHz to 950MHz



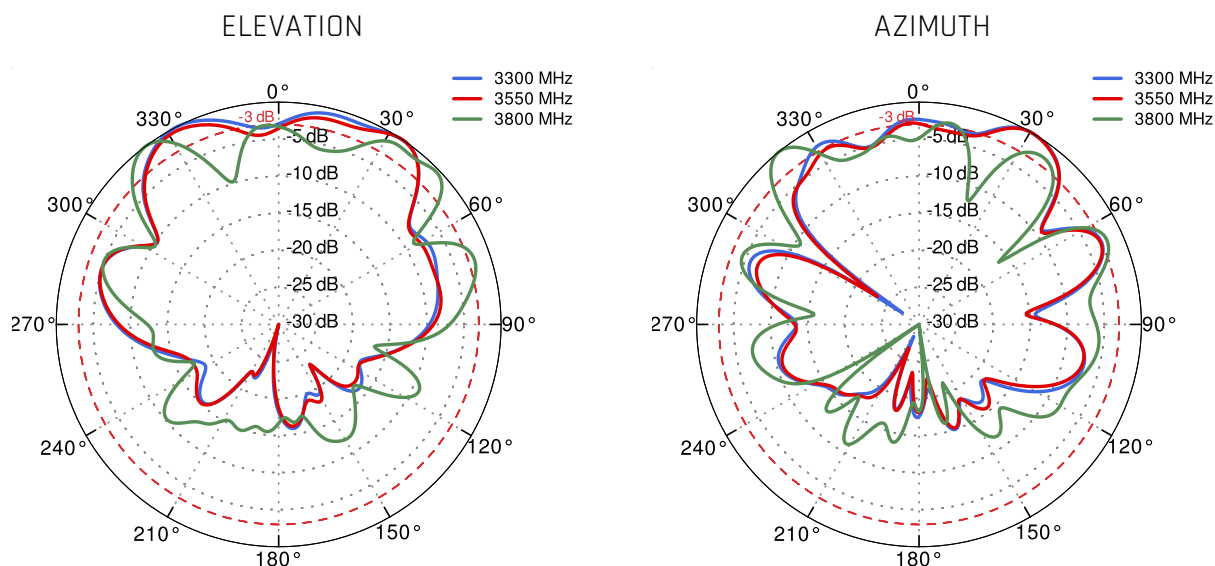
PORT 1&3 - 5G/LTE from 1.71GHz to 2.17GHz



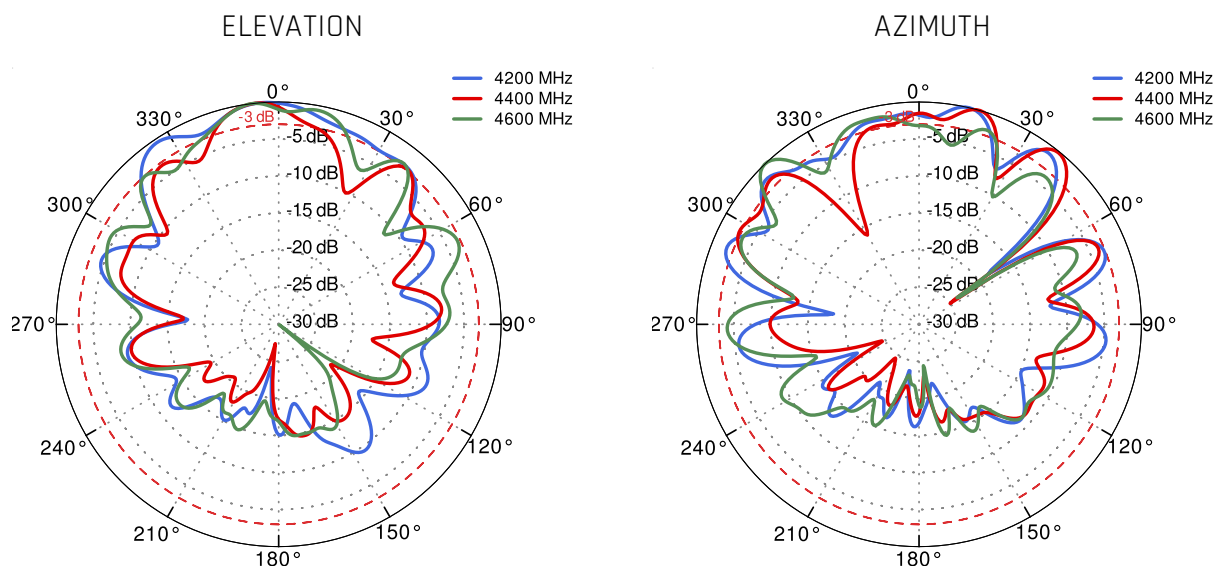
PORT 1&3 - 5G/LTE from 2.3GHz to 2.7GHz



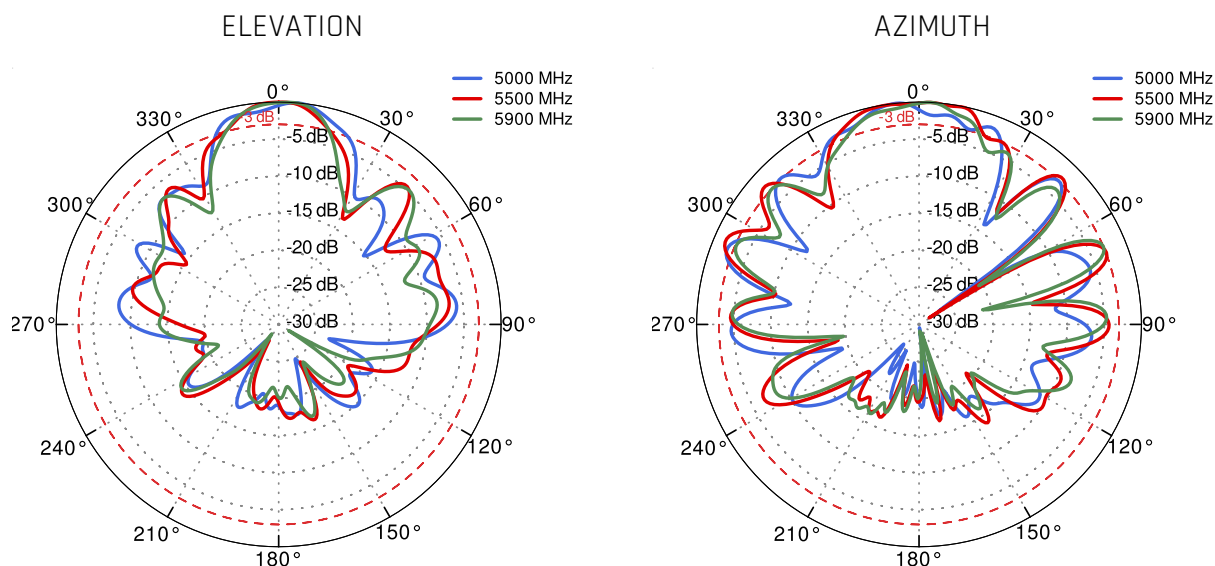
PORT 1&3 - 5G/LTE from 3.3GHz to 3.8GHz



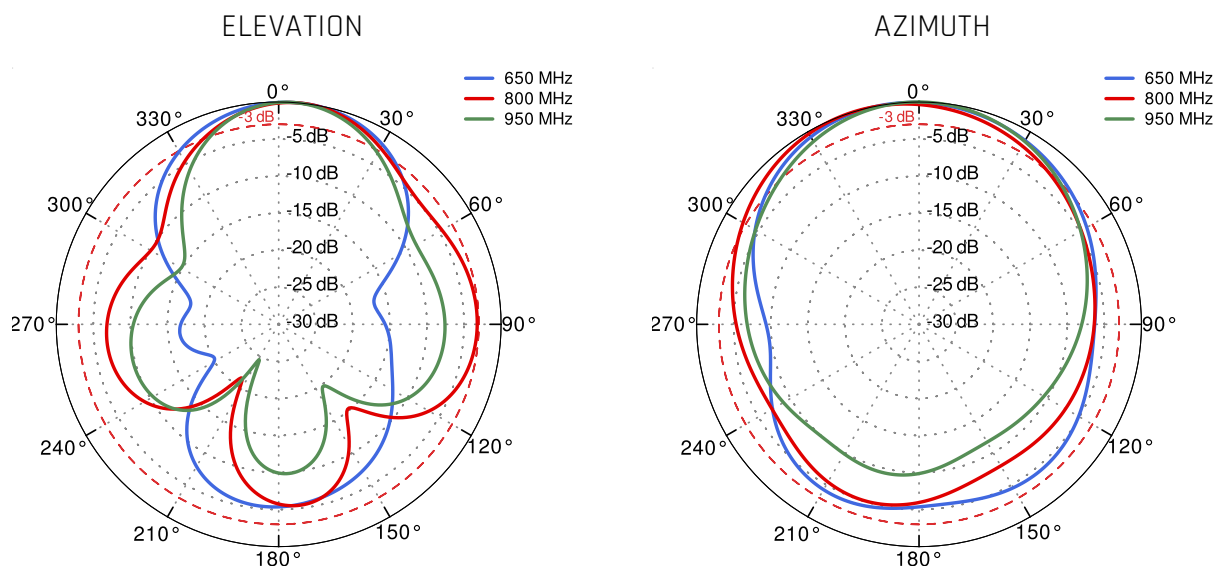
PORT 1&3 - 5G/LTE from 4.2GHz to 4.6GHz



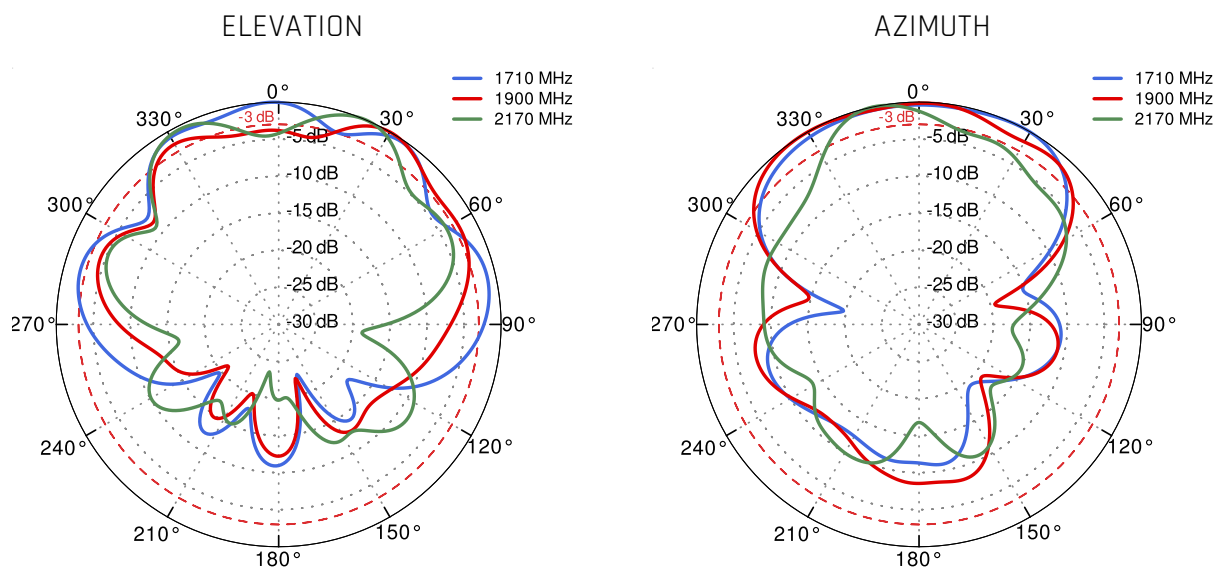
PORT 1&3 - 5G/LTE from 5.0GHz to 5.9GHz



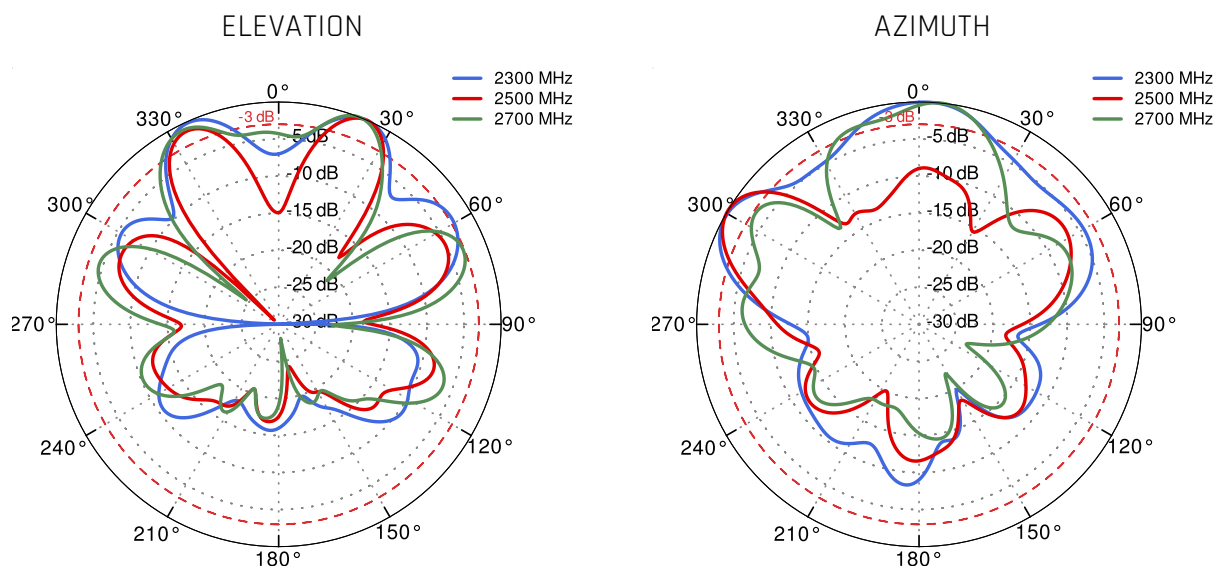
PORT 2&4 - 5G/LTE from 650MHz to 950MHz



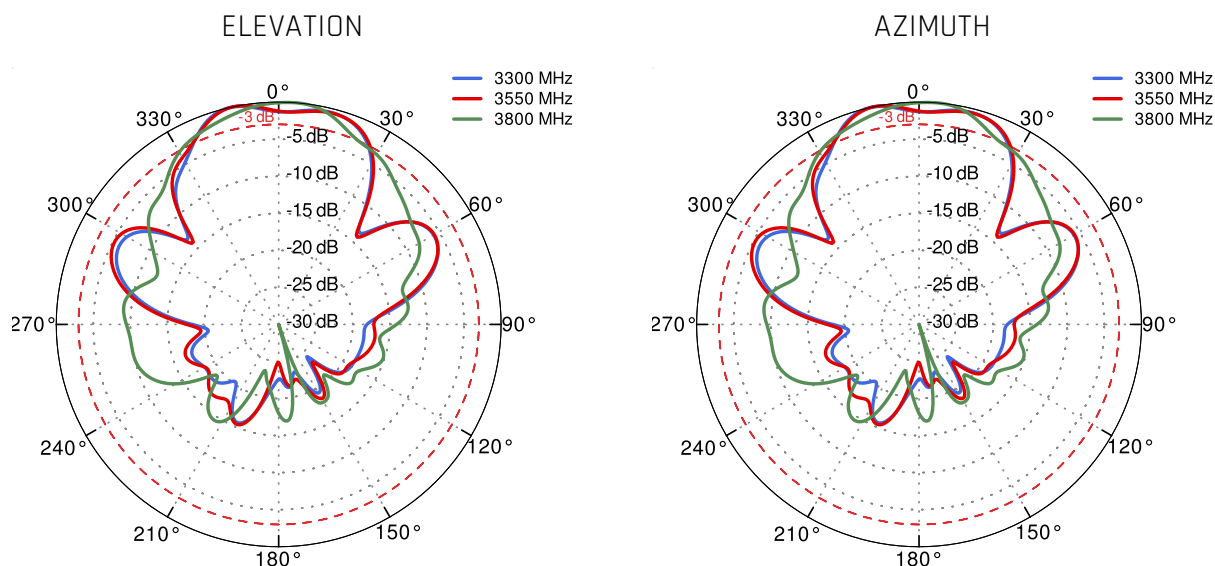
PORT 2&4 - 5G/LTE from 1.71GHz to 2.17GHz



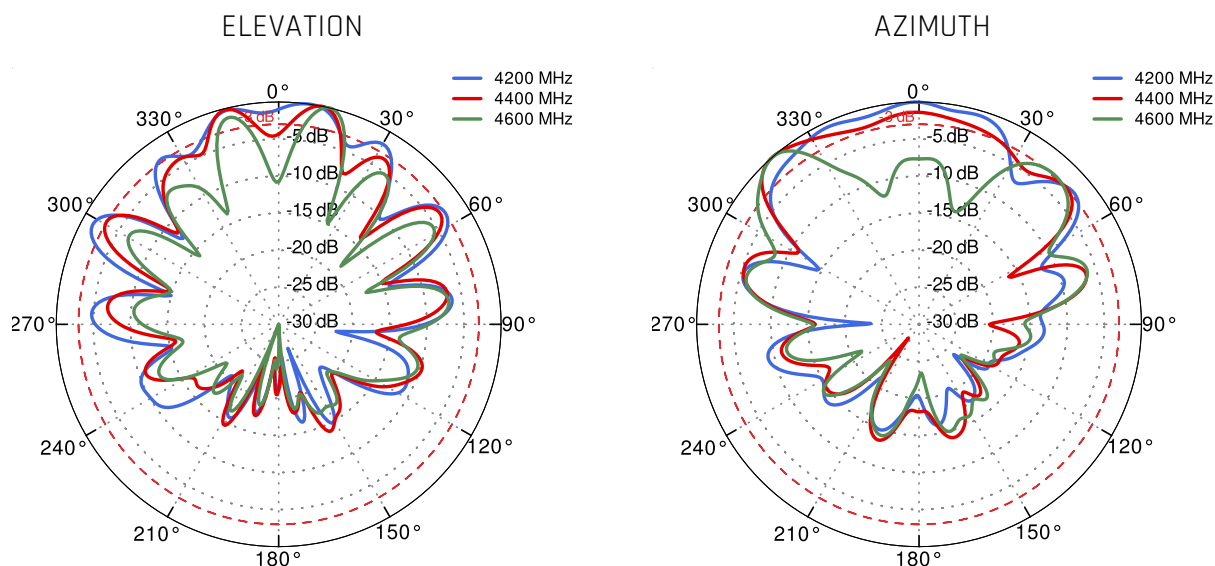
PORT 2&4 - 5G/LTE from 2.3GHz to 2.7GHz



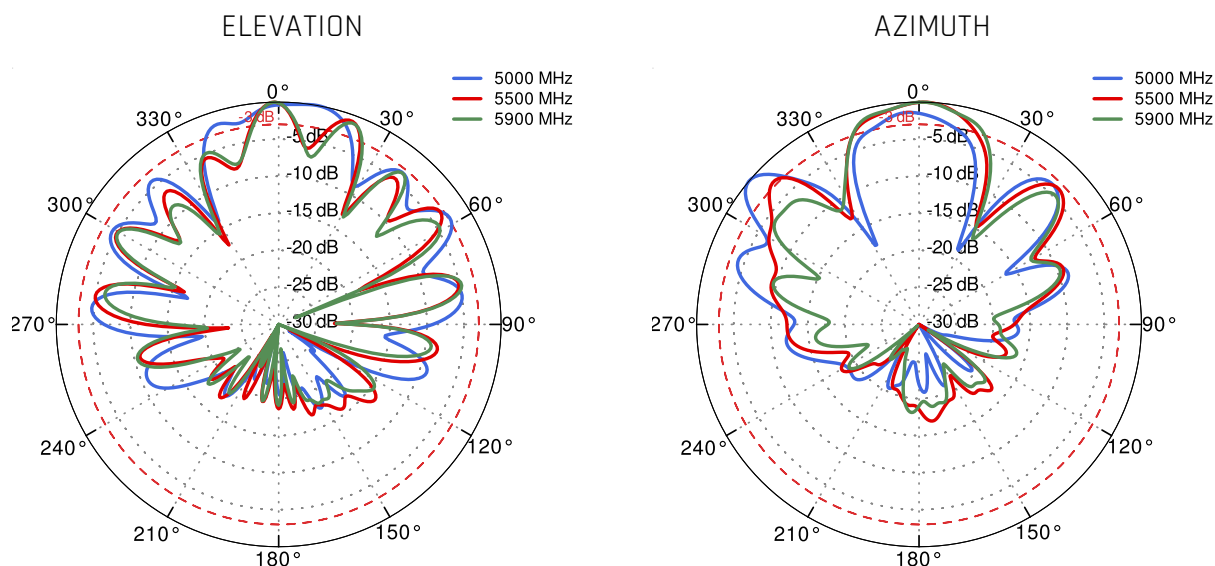
PORT 2&4 - 5G/LTE from 3.3GHz to 3.8GHz



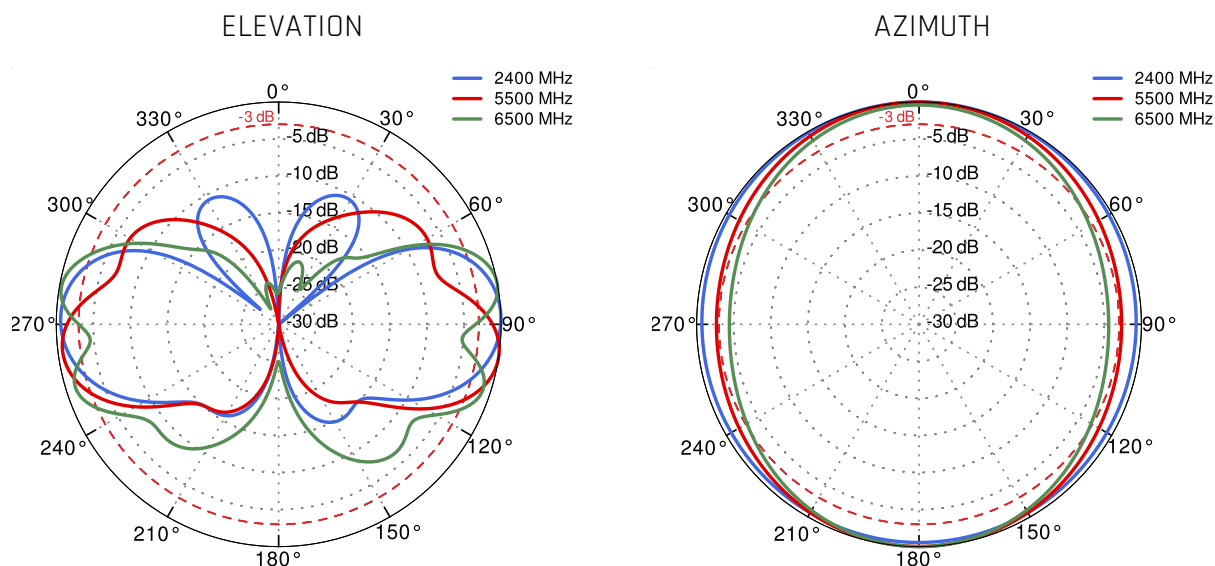
PORT 2 - 5G/LTE from 4.2GHz to 4.6GHz



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



Wi-Fi 2.4GHz and 5GHz and 6GHz



DIMENSIONS

