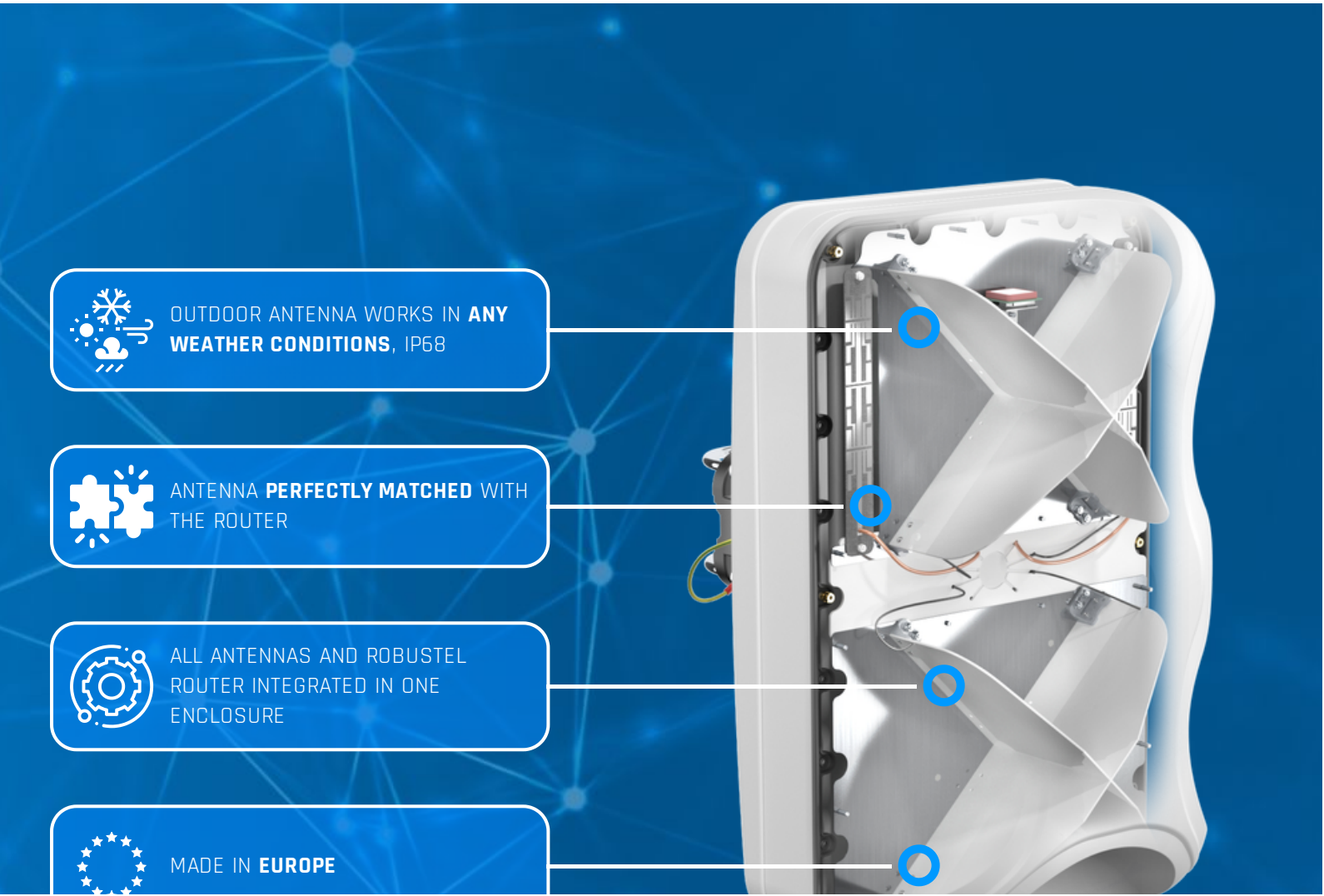
QuMax for Robustel R5020

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 8 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 mulitple use scenatios 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.





5G / LTE ANTENNA SPECIFICATION

FREQUENCY	0.617 - 1.0 GHz 1.0 - 3.08 GHz 3.3 - 5.0 GHz 5.0 - 6.5 GHz
MAX. GAIN	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
SUPPORTED LTE BANDS	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
SUPPORTED 5G BANDS	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
VSWR	<2.00, max <3.00
BEAMWIDTH	80°/80° ±15°
POLARIZATION	X (+-45degrees)
IMPEDANCE	50 Ω

Copyright © 2023, Wireless Instruments. Specifications and information given in this document are subject to change without prior notice.

WI-FI ANTENNA SPECIFICATION

FREQUENCY	2.40 - 2.50 GHz 5.0 - 7.2 GHz
MAX. GAIN	2.4 - 2.5 GHz: 6dBi 5 GHz: 7.5dBi 7 GHz: 7.5dBi
VSWR	<1.50, max <2.00
BEAMWIDTH	360°/25° ±5°
POLARIZATION	Vertical
IMPEDANCE	50 Ω

MECHANICAL SPECIFICATION

MATERIALS	ASA, aluminum, PTFE, Fiberglass
CONNECTOR TYPE	RJ45
INGRESS PROTECTION	IP68
DIMENSIONS	486.0 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
ENCLOSURE RECOMMENDED TIGHTENING TORQUE	0.6 - 0.8 Nm

Copyright © 2023, Wireless Instruments. Specifications and information given in this document are subject to change without prior notice.

MAST DIAMETER	25-66mm 0.98-2.60 inch

FREQUENCY BANDS

LTE / 4G

617 MHz – 6000MHz

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						

5G

617 MHz – 6000 MHz

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	n256			

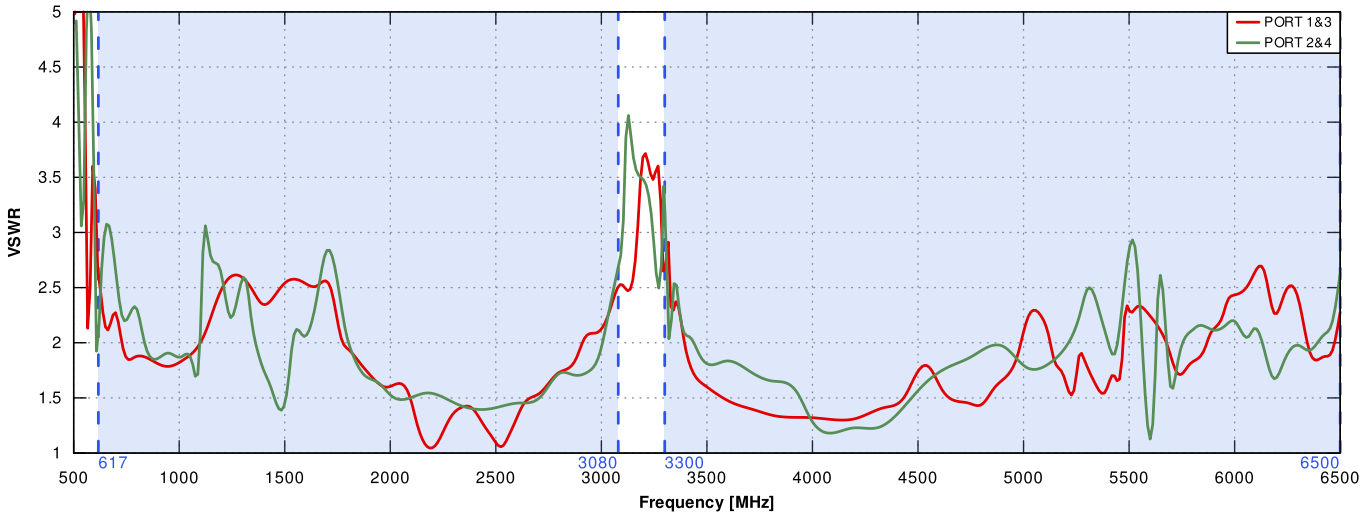
Copyright © 2023, Wireless Instruments. Specifications and information given in this document are subject to change without prior notice.

COMPATIBLE PART NUMBERS

NO POE SPLITTER	R5020-5G-A09GL-B	B064802
POE SPLITTER	R5020-5G-A09GL-A	B064803

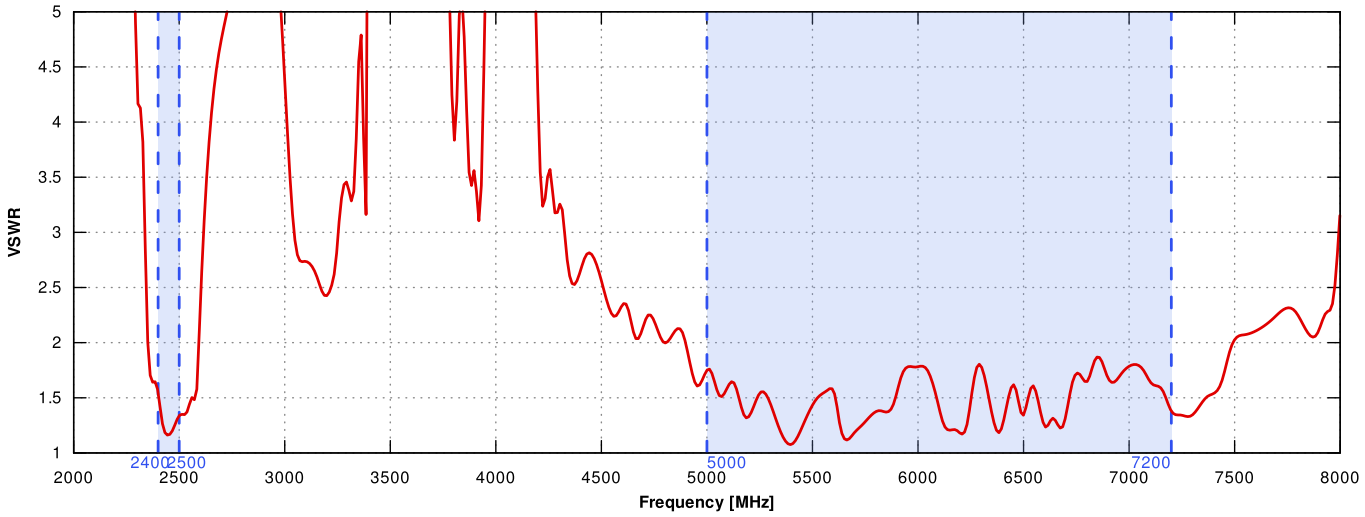
PLOTS

VSWR for 5G/LTE antenna

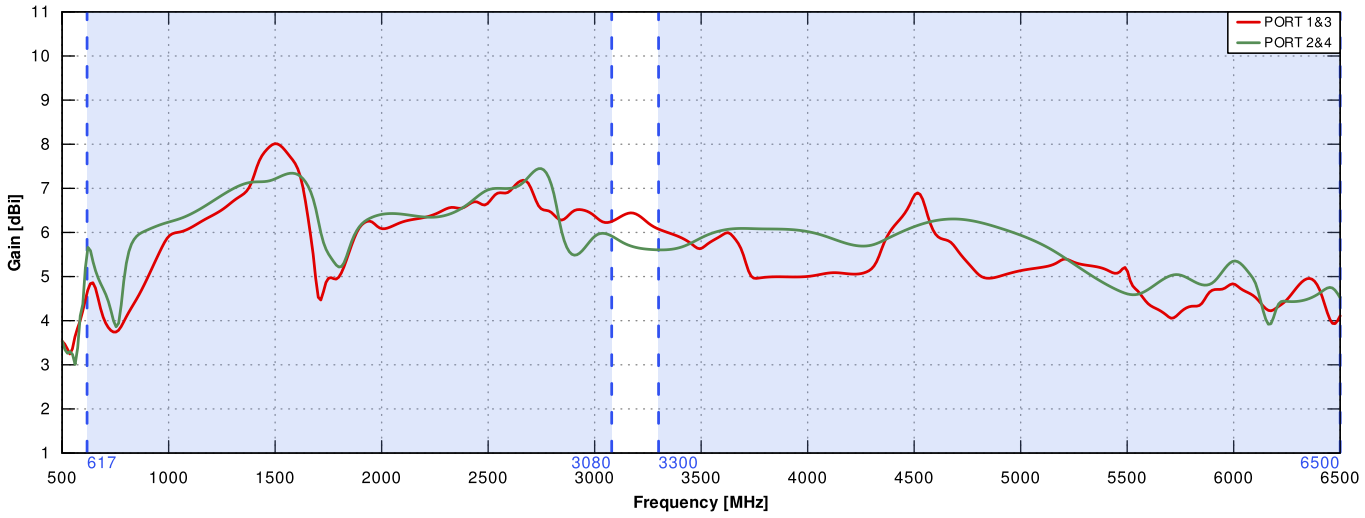


Copyright © 2023, Wireless Instruments. Specifications and information given in this document are subject to change without prior notice.

VSWR for Wi-Fi antenna

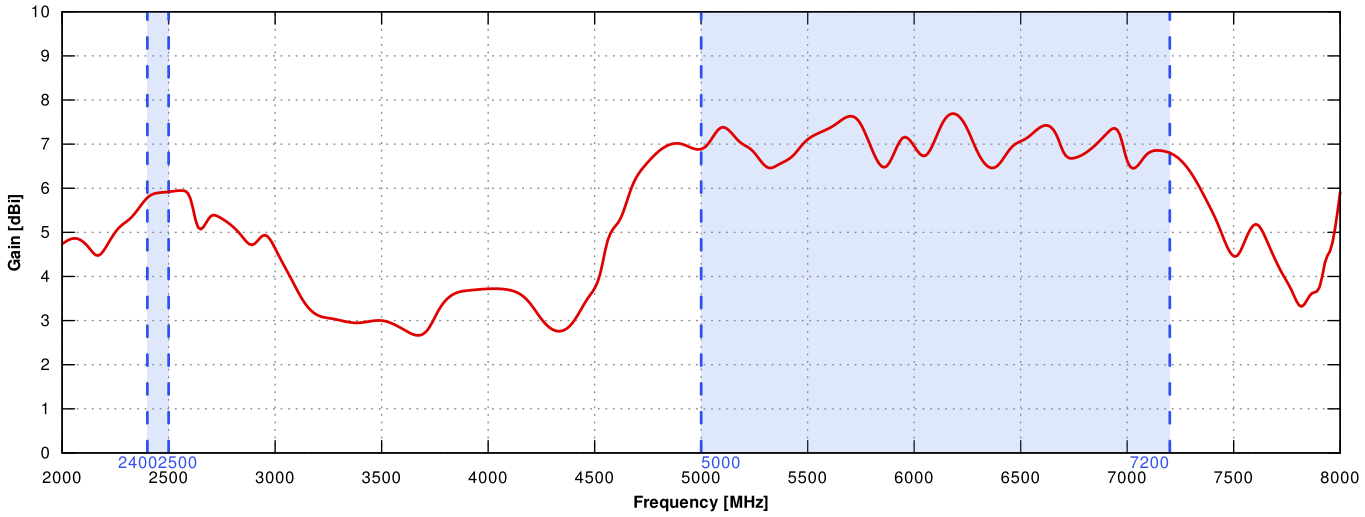


Gain for 5G/LTE antenna



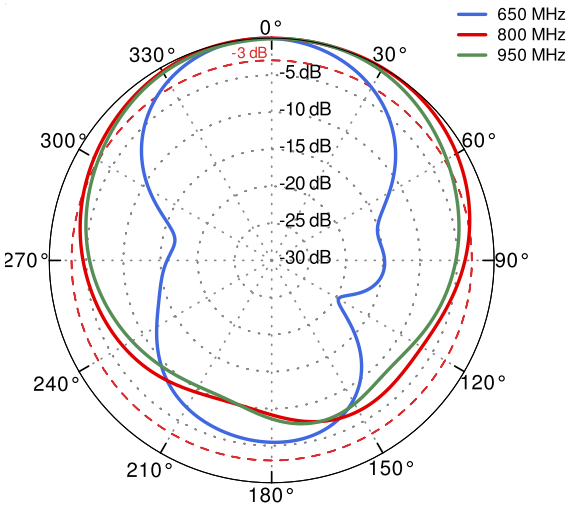
Copyright © 2023, Wireless Instruments. Specifications and information given in this document are subject to change without prior notice.

Gain for Wi-Fi antenna

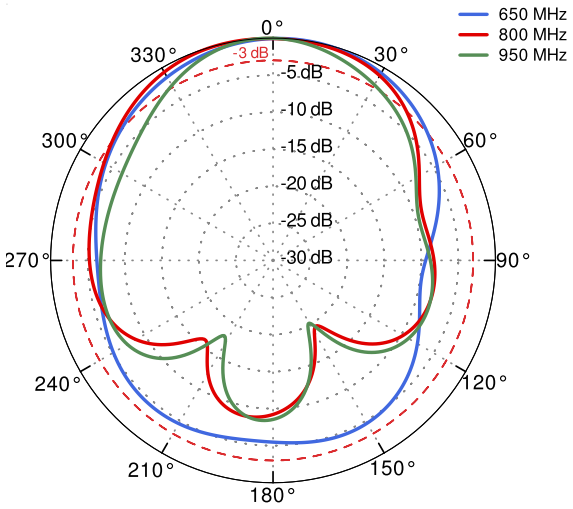


PORT 1&3 - 5G/LTE From 650MHz to 950MHz

ELEVATION



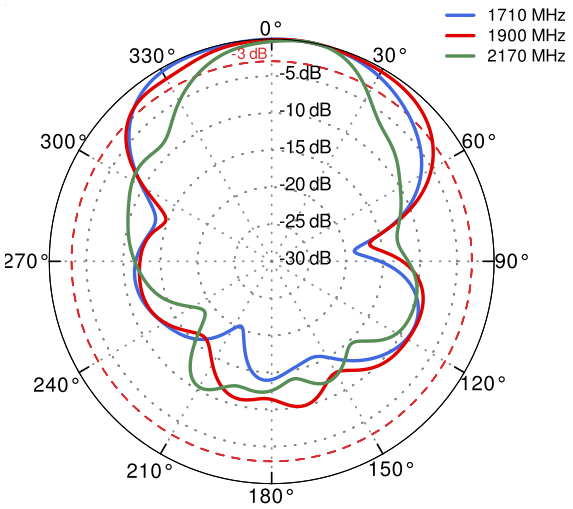
AZIMUTH



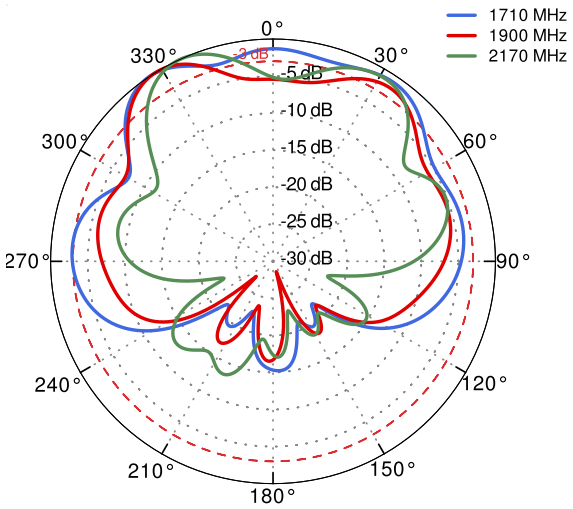
Copyright © 2023, Wireless Instruments. Specifications and information given in this document are subject to change without prior notice.

PORT 1&3 - 5G/LTE From 1710MHz to 2170MHz

ELEVATION

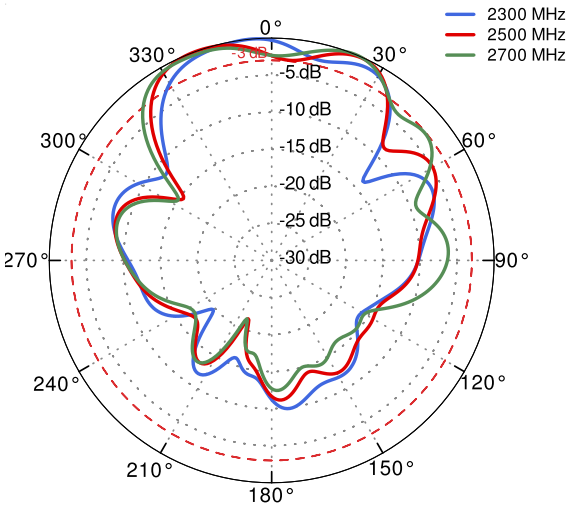


AZIMUTH

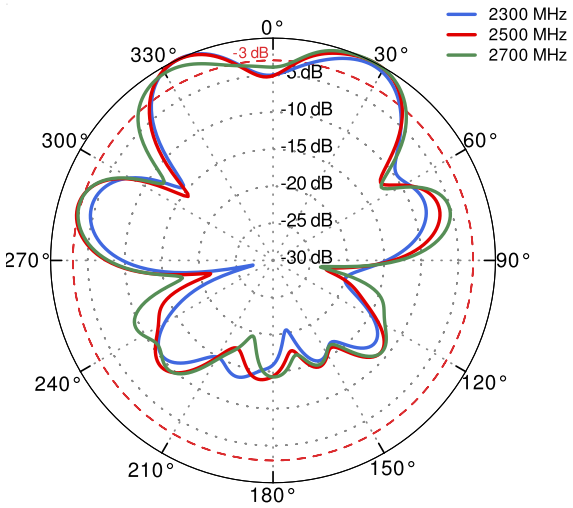


PORT 1&3 - 5G/LTE From 2300MHz to 2700MHz

ELEVATION



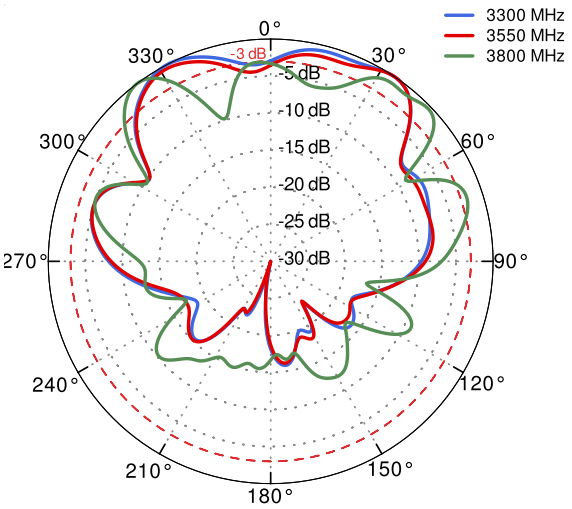
AZIMUTH



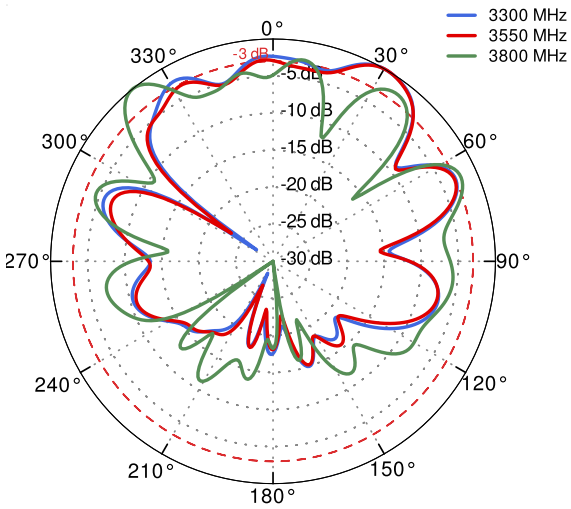
Copyright © 2023, Wireless Instruments. Specifications and information given in this document are subject to change without prior notice.

PORT 1&3 - 5G/LTE From 3300MHz to 3800MHz

ELEVATION

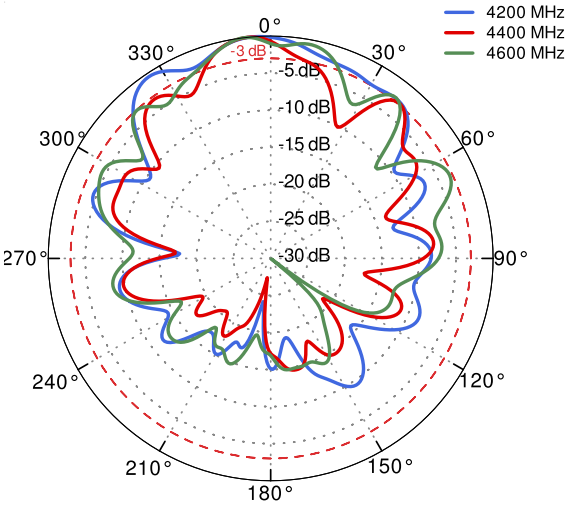


AZIMUTH

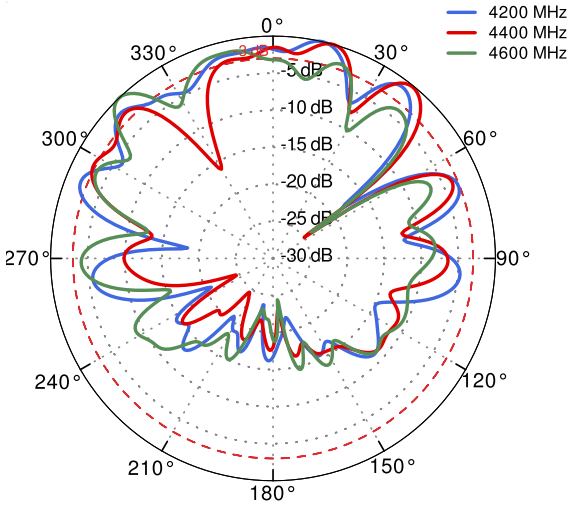


PORT 1&3 - 5G/LTE From 4200MHz to 4600MHz

ELEVATION



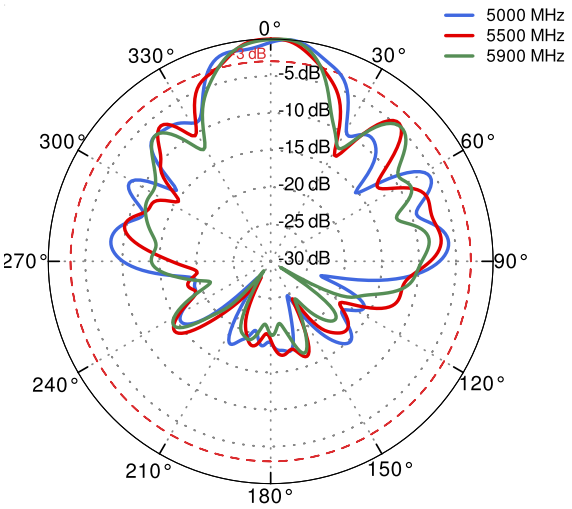
AZIMUTH



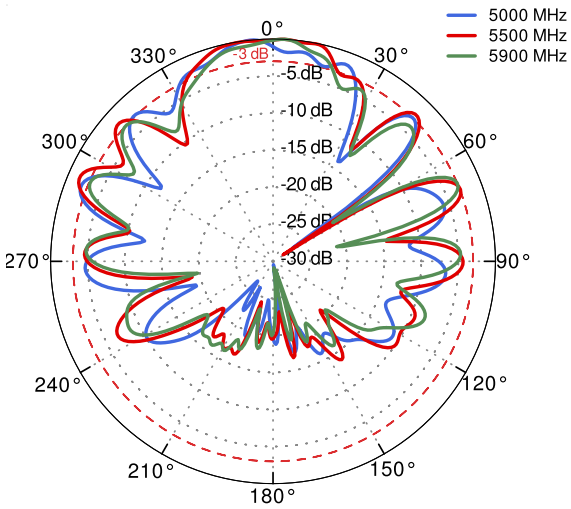
Copyright © 2023, Wireless Instruments. Specifications and information given in this document are subject to change without prior notice.

PORT 1&3 - 5G/LTE From 5000MHz to 5900MHz

ELEVATION

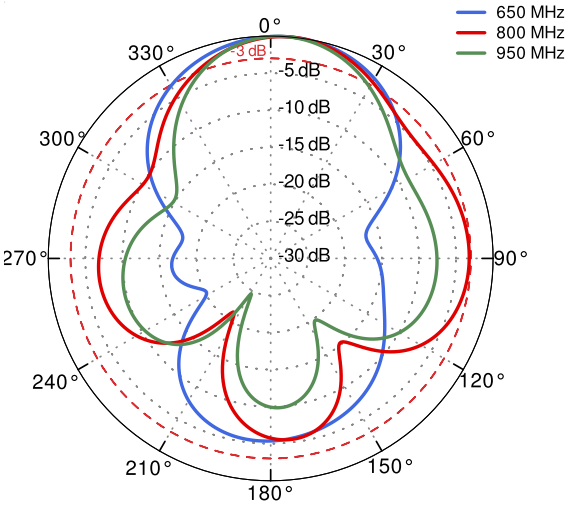


AZIMUTH

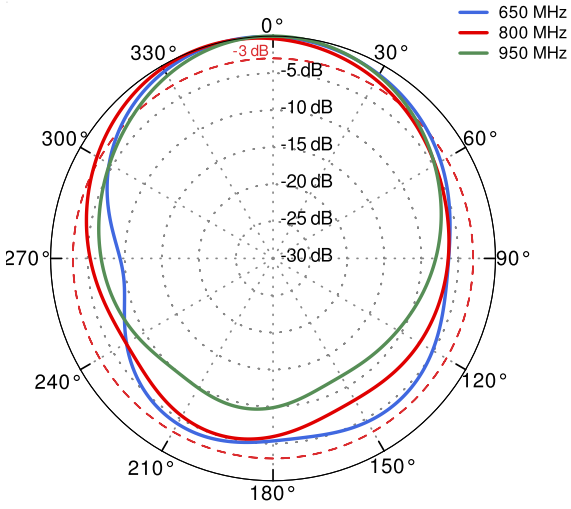


PORT 2&4 - 5G/LTE From 650MHz to 950MHz

ELEVATION



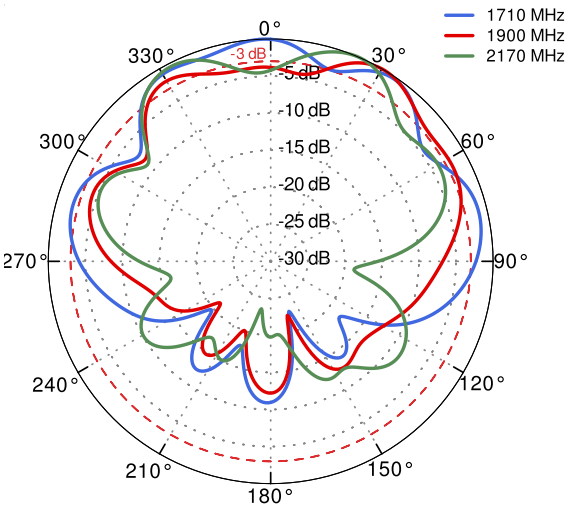
AZIMUTH



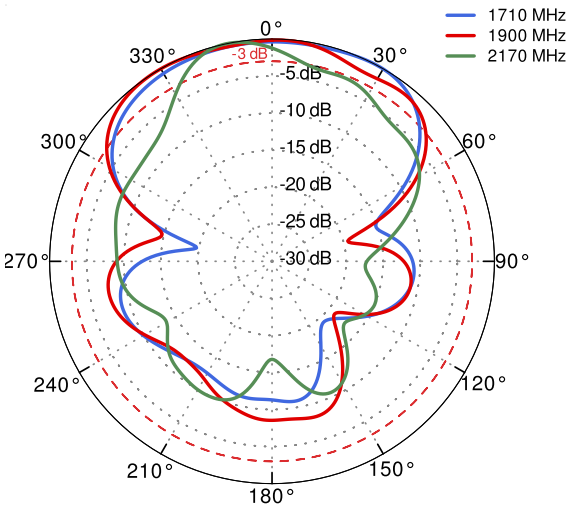
Copyright © 2023, Wireless Instruments. Specifications and information given in this document are subject to change without prior notice.

PORT 2&4 - 5G/LTE From 1710MHz to 2170MHz

ELEVATION

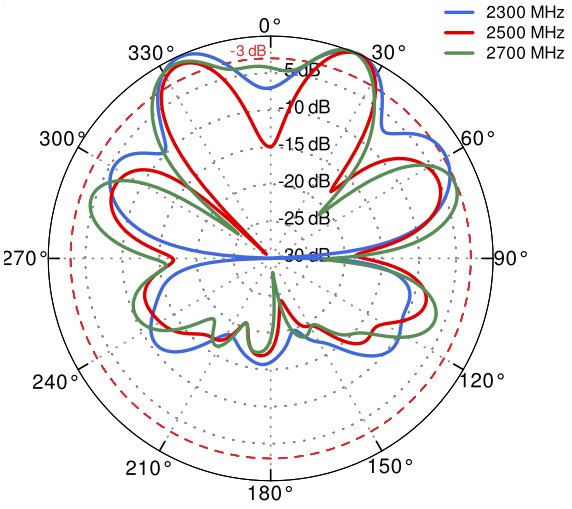


AZIMUTH

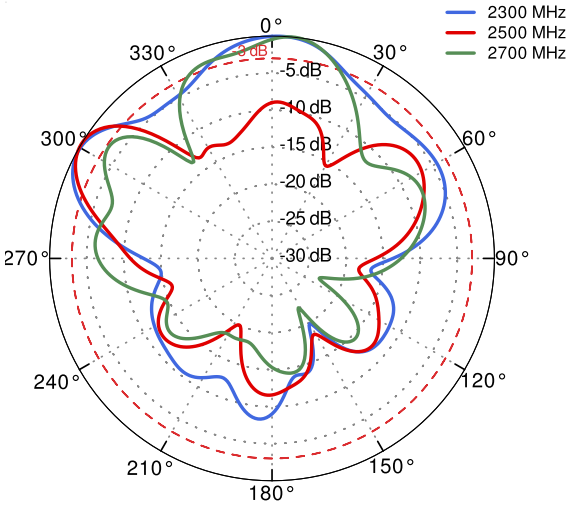


PORT 2&4 - 5G/LTE From 2300MHz to 2700MHz

ELEVATION



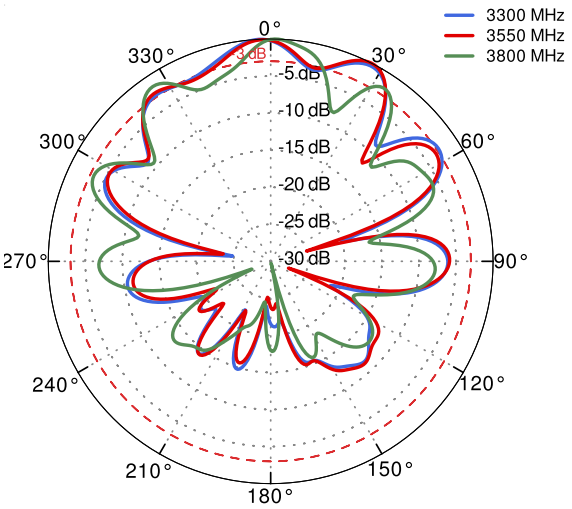
AZIMUTH



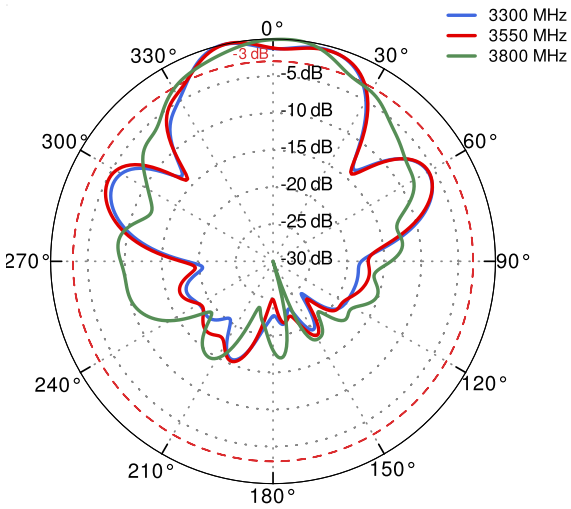
Copyright © 2023, Wireless Instruments. Specifications and information given in this document are subject to change without prior notice.

PORT 2&4 - 5G/LTE From 3300MHz to 3800MHz

ELEVATION

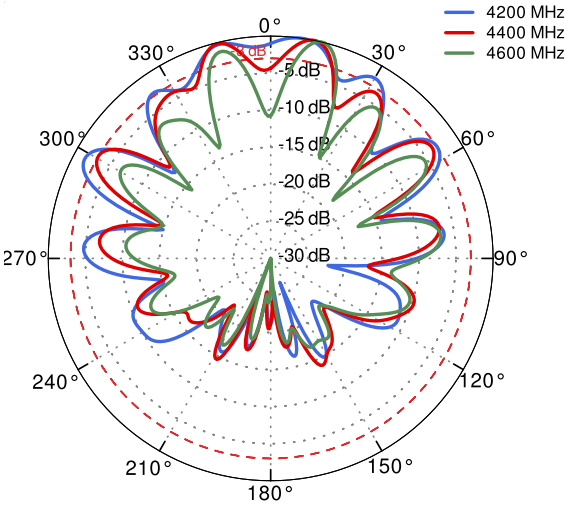


AZIMUTH

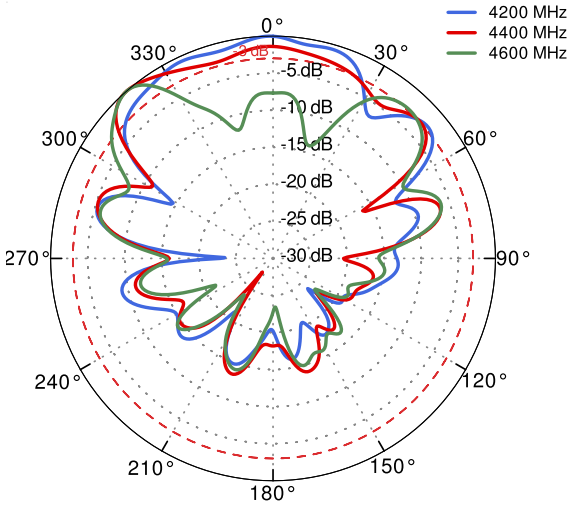


PORT 2&4 - 5G/LTE From 4200MHz to 4600MHz

ELEVATION



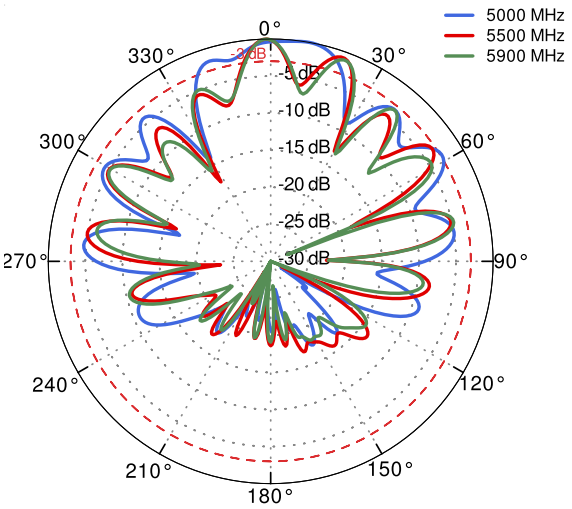
AZIMUTH



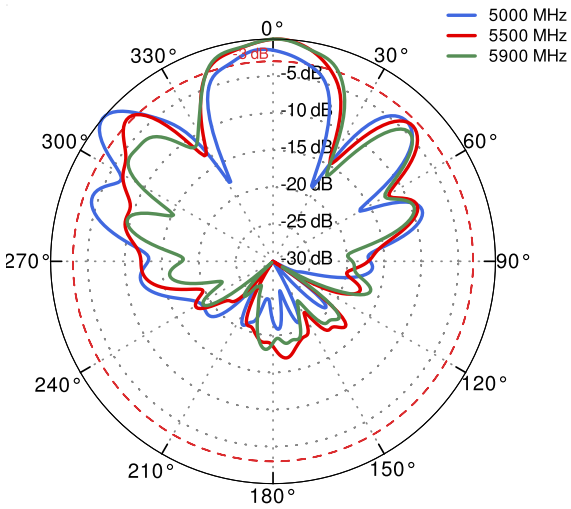
Copyright © 2023, Wireless Instruments. Specifications and information given in this document are subject to change without prior notice.

PORT 2&4 - 5G/LTE From 5000MHz to 5900MHz

ELEVATION

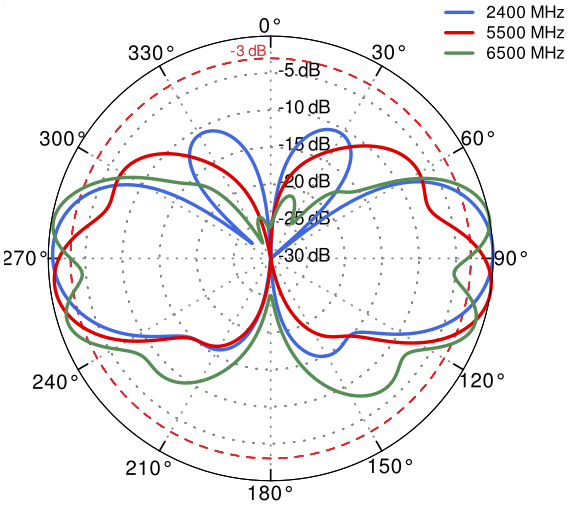


AZIMUTH

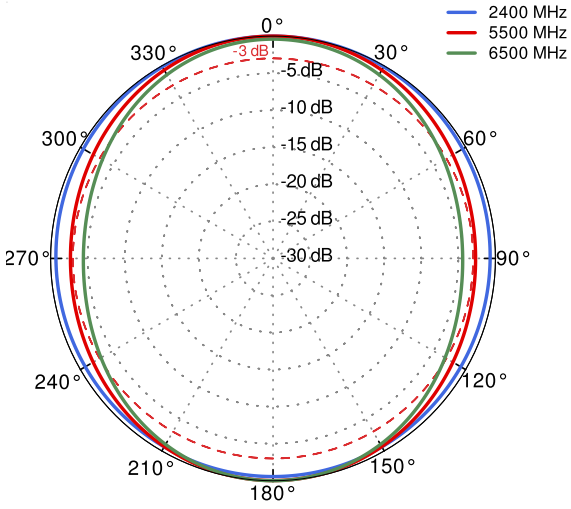


Wi-Fi From 2400MHz to 6500MHz

ELEVATION



AZIMUTH



Copyright © 2023, Wireless Instruments. Specifications and information given in this document are subject to change without prior notice.

DIMENSIONS



WWW.QUWIRELESS.COM

Sales email: sales@quwireless.com **Tel:** +48 513 900 416

Support email: support@quwireless.com **Website:** www.quwireless.com

Address: Wireless Instruments Sp. z o.o., ul. Kościuszki 27, 52-116 Iwiny, Poland

Copyright © 2023, Wireless Instruments. Specifications and information given in this document are subject to change without prior notice.