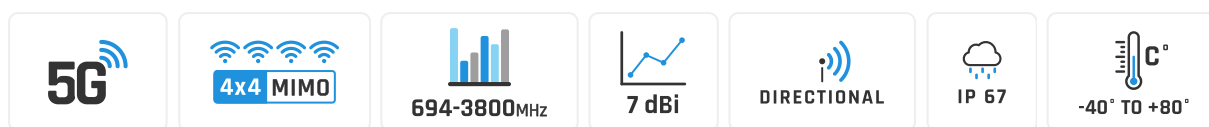


# QuPanel 5G/LTE MIMO 4x4 Nf

## Directional High Power multiband 5G/LTE MIMO 4x4 antenna

QuPanel 5G/LTE directional MIMO 4x4 high gain antenna is predicted for 5G and 4G LTE mainly, but is compatible with 3G and 2G as well. The antenna improves the signal in rural/suburban and locations where the mobile signal is weak. That antenna is predicted to be installed on the buildings (on the pole or on the wall). Due to very wide working frequency range, the antenna is universal client for 5G bands n77, n78 and LTE bands like LTE700 / 800 / 1800 / 1900 / 2100 / 2300 / 2600 / 3400 / 3800. It's compatible with Teltonika and other MIMO 4x4 5G / LTE / 3G / 2G modems and routers.



## 5G / LTE ANTENNA SPECIFICATION

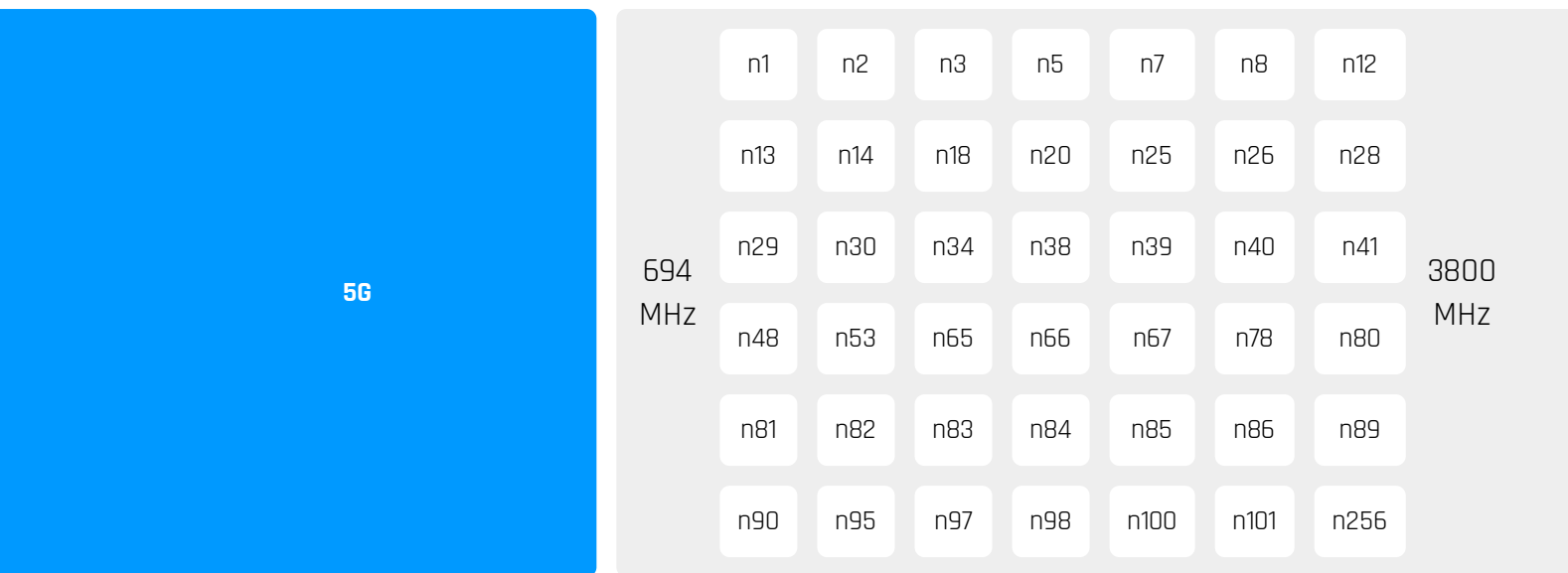
FREQUENCY	694 - 960 MHz 1.7 - 2.2 GHz 2.2 - 2.7 GHz 3.3 - 3.8 GHz
GAIN	694 - 960 MHz : 7 dBi 1.7 - 2.2 GHz : 7 dBi 2.2 - 2.7 GHz : 7.5 dBi 3.3 - 3.8 GHz : 5.5 dBi
SUPPORTED LTE BANDS	1, 2, 3, 4, 5, 7, 8, 9, 10, 12, 13, 14, 17, 18, 19, 20, 22, 25, 26, 27, 28, 29, 30, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 48, 49, 52, 53, 65, 66, 67, 68, 69, 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, n48, n53, n65, n66, n67, n78, n80, n81, n82, n83, n84, n85, n86, n89, n90, n95, n97, n98, n100, n101, n256
VSWR	<1.70, max <2.00
BEAMWIDTH	70°/70° ±15°
POLARIZATION	Dual polarized X-Pol
IMPEDANCE	50 $\Omega$
FRONT-TO-BACK	694 - 960 MHz : >10 dB 1.7 - 2.2 GHz : >12 dB 2.2 - 2.7 GHz : >14 dB 3.3 - 3.8 GHz : >17 dB

## MECHANICAL SPECIFICATION

MATERIALS	ABS, aluminum, PTFE, Fiberglass
CONNECTOR TYPE	4x Nf
INGRESS PROTECTION	IP67
DIMENSIONS	392 x 392 x 99 mm 15.43 x 15.43 x 3.90 inch
WEIGHT	3.7 kg 8.16 lbs
OPERATING TEMPERATURE	From -40°C to 80°C From -40°F to 176°F
MAST DIAMETER	25-60mm 0.98-2.36 inch

## FREQUENCY BANDS

LTE / 4G	1	2	3	4	5	7	8	694 MHz	3800 MHz
	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		
	48	49	52	53	65	66	67		
	68	69	85	103	106				



## COMPATIBLE ROUTERS

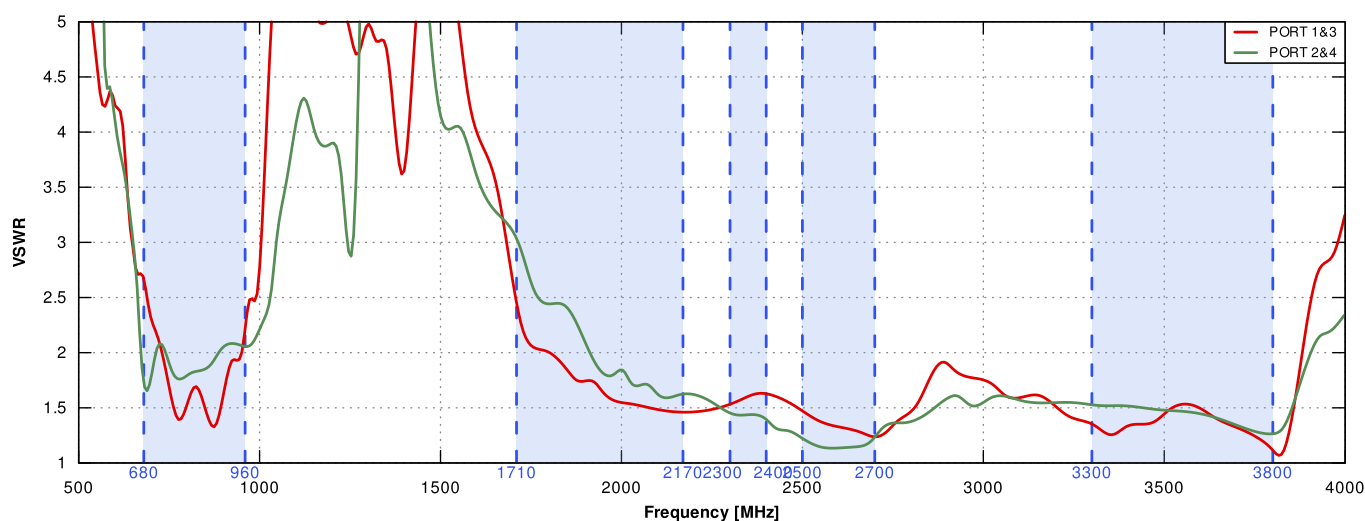
VARIANT: AP5G4-N

TELTONIKA	RUTX12, RUTX14, RUTX50, TRB500
DIGI	EX50, IX40, TX54 LTE-Advanced, TX64
ROBUSTEL	EG5120, EG5200, R2000, R5010, R5020, R5020 Lite
COMSET	CM550W, CM580W, CM685VX, CM770W-6, CM950W
CRADLEPOINT	E300, E3000, IBR1700, R1900, W1850, W2005, W4005
DIGI	EX50, IX40, TX54 LTE-Advanced, TX64
EE 5G (5GEE)	Smart 5G Hub
FIBOCOM	FM150-AE, FM150-NA, FM160-EAU, FM160-JK, FM160-NA, FM160-PN, FM190-GL, FM190W-GL, NL952-EAU, NL952-NA
FORTINET	FEX-311F, FEX-311F

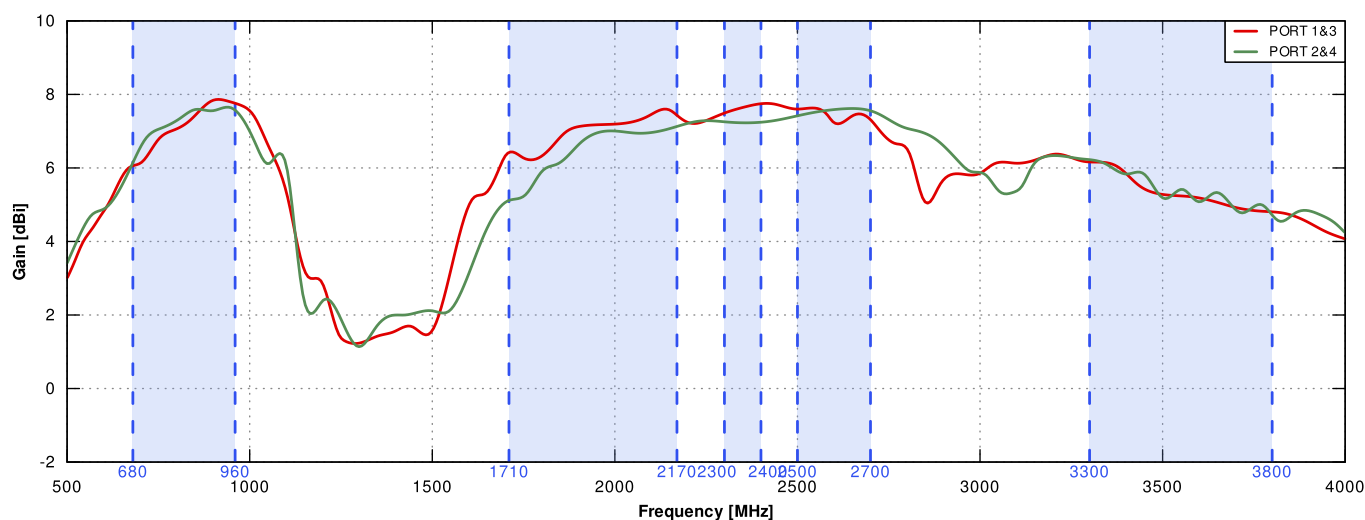
FOUR-FAITH	5G Industrial CPE F-NR200, 5G Industrial Router F-NR100, 5G SIM WiFi Router F-NR120, 5G Smart Light Pole Gateway F-G300, 5G WiFi Router with SIM Card Slot F-NR130, Smart Light Pole Gateway F-G310
MILESIGHT	UF31, UR75
PEPLINK	Balance 310 5G, Balance 310 fiber 5G, BR1 Mini 5G, BR1 Pro (CAT-20), BR1 Pro CAT-20, BR2 PRO, MAX BR1 Pro 5G, MAX HD2, MAX HD2 Mini, MAX Transit, MAX Transit Duo Pro, UBR Plus
PROROUTE	H685 WRT M2M 5G Router, H900 5G Router
QUECTEL	5G RM500Q-AE, 5G RM500Q-GL, 5G RM502Q-GL, 5G RM505Q-AE, 5G RM510Q-GL, 5G RM520N-EU, 5G RM520N-GL, 5G RM521F-GL, 5G RM530N-GL, LTE-A EM160R-GL
ROBUSTEL	EG5120, EG5200, R2000, R5010, R5020, R5020 Lite
SIEMENS	6GK5853-2EA00-2DA1, 6GK5856-2EA00-3AA1, 6GK5856-2EA00-3DA1
SIERRA WIRELESS	AirLink MG90 5G, EM9190, EM9191, EM9291
SIMCOM	SIM8202X-M2, SIM8260G-M2, SIM8262X-M2 Series, SIM8380G-M2
TELIT CINTERION	FN980/FN980m, FN990A40/A28, LM960A18 Series, MV31, MV32
TELTONIKA	RUTX12, RUTX14, RUTX50, TRB500
WAVETEL	W4600-NR 5G, W4A00 5G, WNR320 5G, WNR340 5G
WLINK	G230, G530, G530
ZTE	ZM9020
ZYXEL	Nebula FWA510, NR5103
OTHER	4 * SMA

## PLOTS

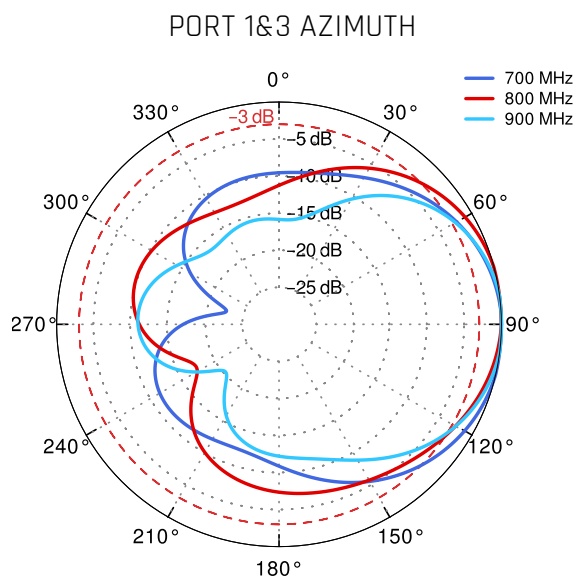
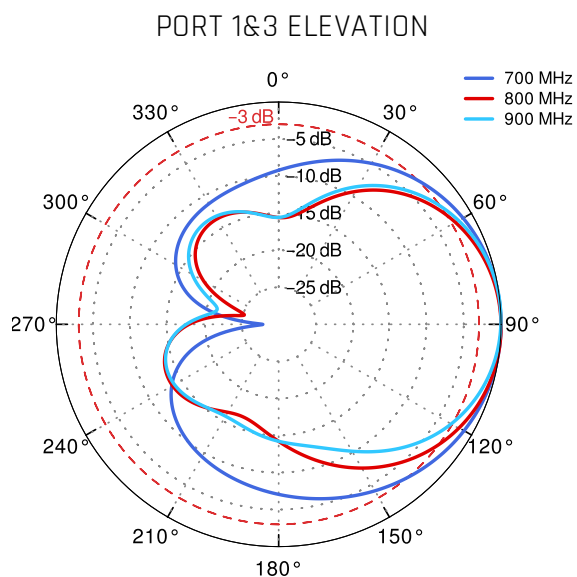
VSWR



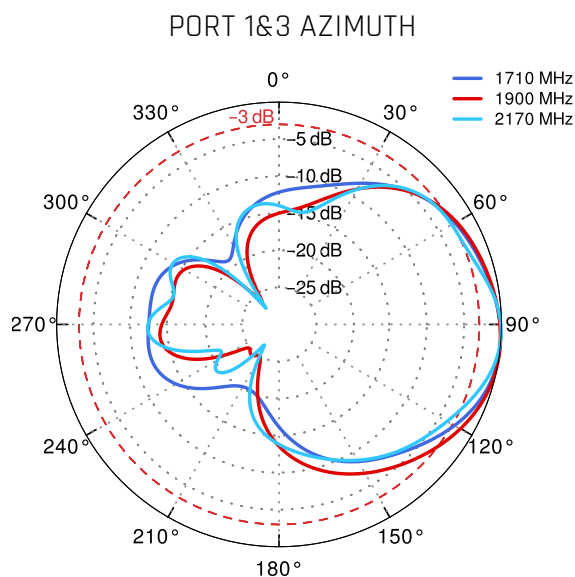
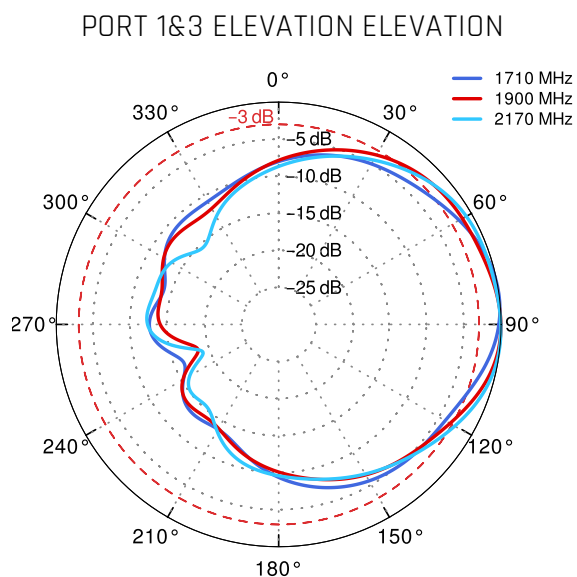
Gain



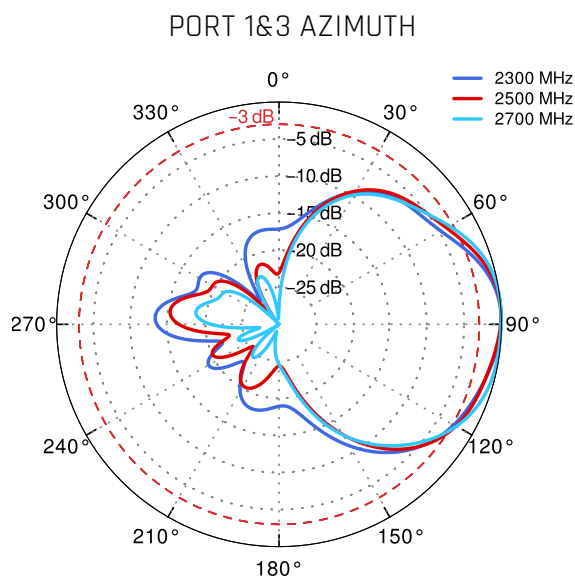
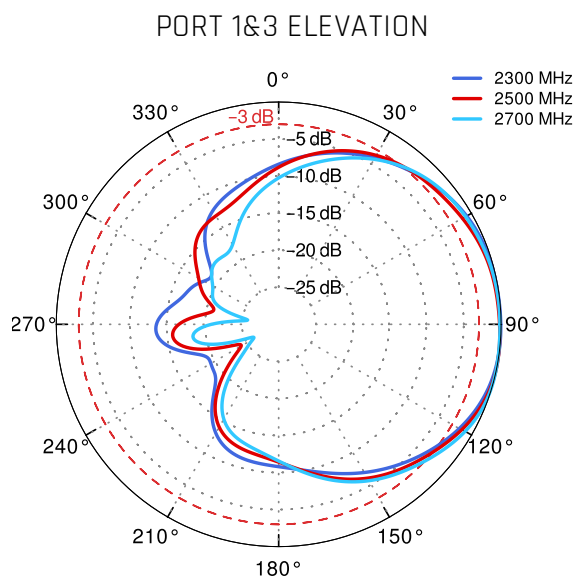
From 700MHz to 900MHz



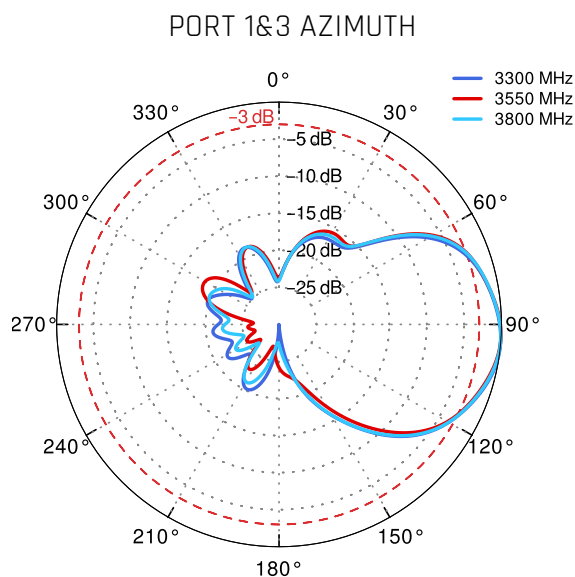
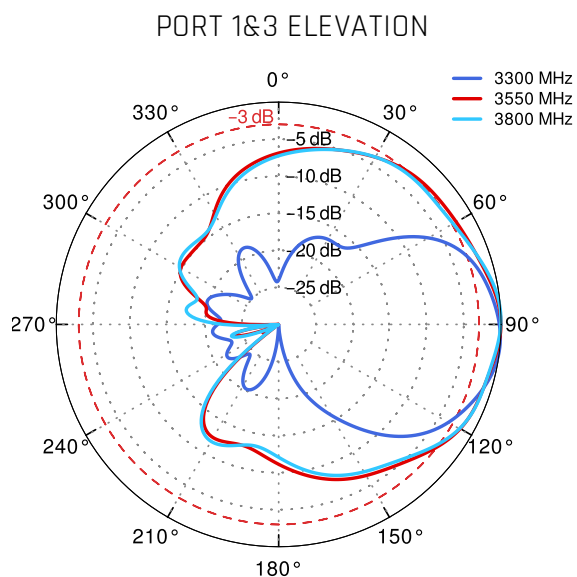
From 1.71GHz to 2.17GHz



From 2.3GHz to 2.7GHz

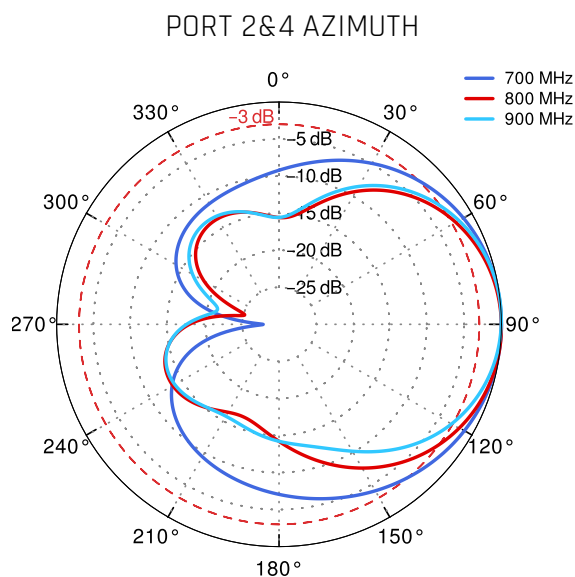
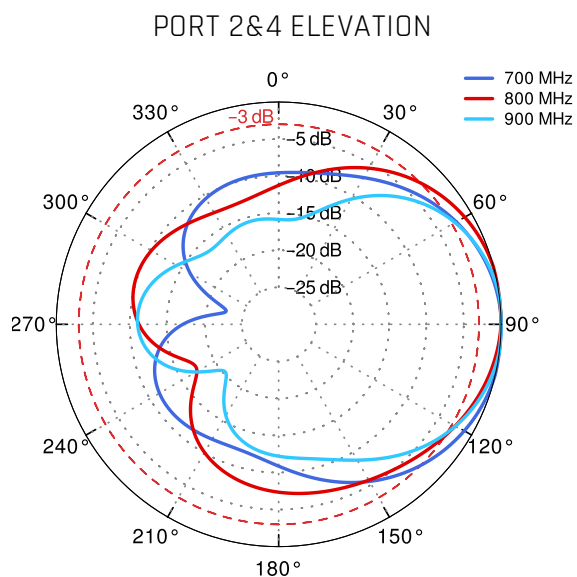


From 3.3GHz to 3.8GHz

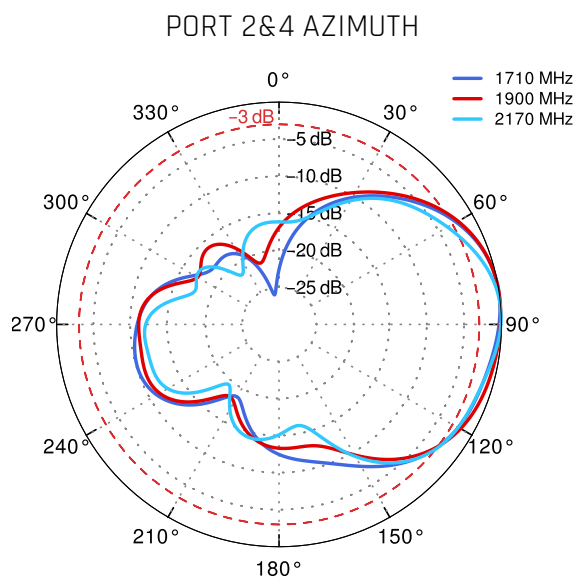
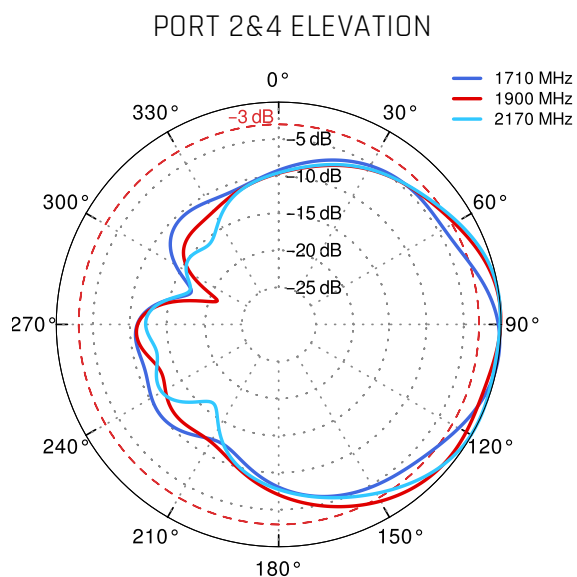




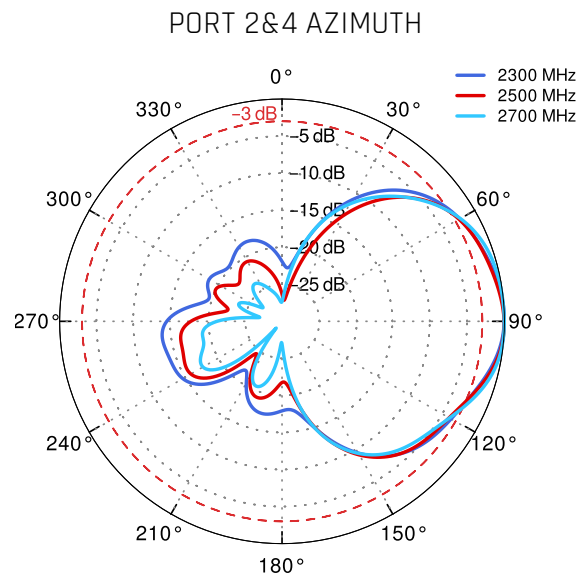
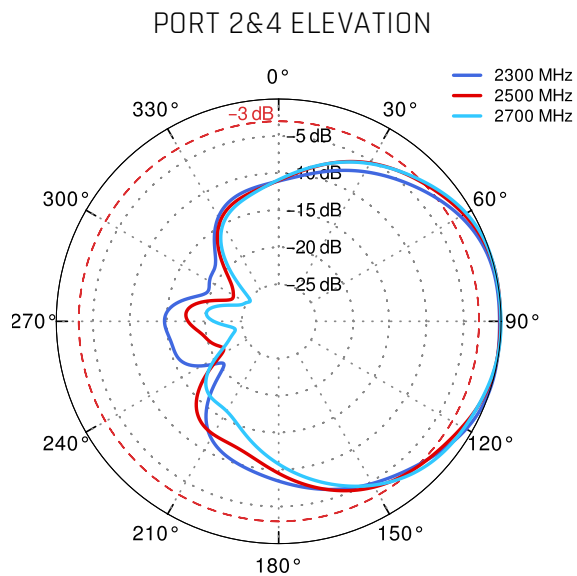
From 700MHz to 900MHz



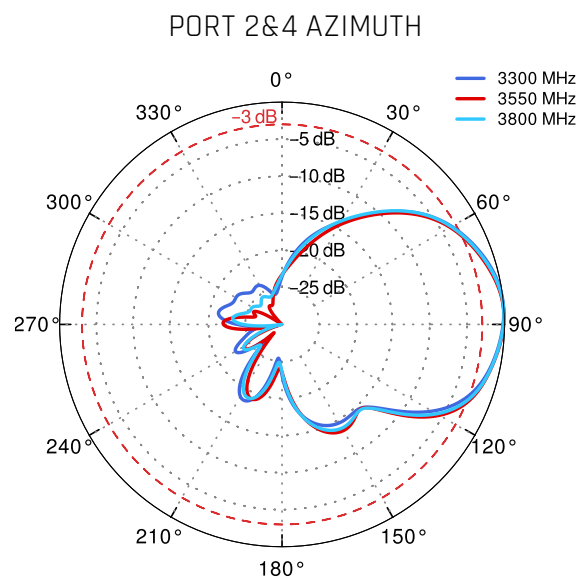
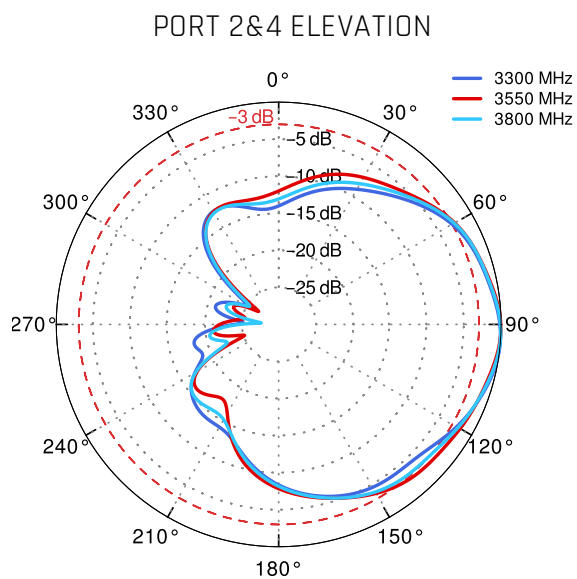
From 1.71GHz to 2.17GHz



From 2.3GHz to 2.7GHz



From 3.3GHz to 3.8GHz



## DIMENSIONS

