QuWireless Solar Connectivity Hub

INTEGRATED MULTI-BAND LTE OMNI ANTENNA + WI-FI 6E OMNI ANTENNA + GPS ANTENNA + 40W SOLAR PANEL + 10AH BATTERY + TELTONIKA 955 (ALL-IN-ONE)

QuWireless Solar Connectivity Hub is a self-sustained, off-grid networking solution for remote or tactical deployments. It combines the Teltonika **RUT955** router with a **40W solar panel**, **10Ah battery**, and **solar charge controller** in a compact, weatherproof enclosure. With an average router consumption of 4W, it can **run continuously on solar energy**, while the battery provides around **22 hours at 4W** or 9 hours of backup at 10W peak load. The Solar Hub turns the RUT955 into a robust, autonomous communication node, providing reliable connectivity and situational awareness wherever power is unavailable.

4G LTE | 617-6000MHz | 4 dBi | OMNI DIRECTIONAL | Wi Fi 6E | GPS | IP 68 | -40° TO +80°



LTE ANTENNA SPECIFICATION

FREQUENCY	617 - 960 MHz 1.7 - 2.7 GHz 3.3 - 4.7 GHz 5.2 - 6.0 GHz
GAIN	617 - 960 MHz : 3 dBi 1.7 - 2.2 GHz : 4 dBi 3.3 - 4.7 GHz : 4.5 dBi 5.2 - 6.0 GHz : 2.5dBi
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, 47, 48, 49, 52, 53, 65, 66, 67, 68, 69, 71, 85, 103, 106
VSWR	<1.80, max <2.00
BEAMWIDTH	360°/35° ±5°
POLARIZATION	Vertical
IMPEDANCE	50 Ω

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LTE ANTENNA FREQUENCY BANDS

LTE / 4G	617 MHz: 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; 47, 48, 49, 52, 53, 65, 66; 67, 68, 69, 71, 85, 103, 106 — 6000 MHz

WI-FI ANTENNA SPECIFICATION

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

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SOLAR AND BATTERY SPECIFICATION

SOLAR PANEL POWER	40W
BATTERY CAPACITY	10 Ah
BATTERY BACKUP TIME	22 hours at 4W 9 hours at 10W peak load

MECHANICAL SPECIFICATION

MATERIALS	ASA, aluminum, PTFE
CONNECTOR TYPE	1x QuRJ45
INGRESS PROTECTION	IP68
OPERATING TEMPERATURE	From -40°C to 80°C From -40°F to 176°F

RUT955 SUPPORTED BANDS

SUPPORTED 4G (LTE-FDD) BANDS	B1, B3, B5, B7, B8, B20
SUPPORTED 4G (LTE-TDD) BANDS	B38, B40, B41
SUPPORTED 3G BANDS	B1, B6, B8, B19

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RUT955 MOBILE SPECIFICATION

MOBILE MODULE	4G LTE Cat 4 up to 150 DL/50 UL Mbps; 3G up to 21 DL/5.76 UL Mbps; 2G up to 236.8 DL/236.8 UL kbps
SIM SWITCH	2 SIM cards, auto-switch cases: weak signal, data limit, SMS limit, roaming, no network, network denied, data connection fail, SIM idle protection
STATUS	IMSI, ICCID, operator, operator state, data connection state, network type, bandwidth, connected band, signal strength (RSSI), SINR, RSRP, RSRQ, EC/IO, RSCP, data sent/received, LAC, TAC, cell ID, ARFCN, UARFCN, EARFCN, MCC, and MNC
SMS	SMS status, SMS configuration, EMAIL to SMS, SMS to EMAIL, SMS to HTTP, SMS to SMS, scheduled SMS, SMS autoreply, SMPP
USSD	Supports sending and reading Unstructured Supplementary Service Data messages
BLOCK/ALLOW LIST	Operator block/allow list (by country or separate operators)
MULTIPLE PDN	Possibility to use different PDNs for multiple network access and services
BAND MANAGEMENT	Band lock, Used band status display
SIM IDLE PROTECTION SERVICE	Provides the possibility to configure the router to periodically switch to the unused SIM card and establish a data connection in order to prevent the SIM card from being blocked
APN	Auto APN
BRIDGE	Direct connection (bridge) between mobile ISP and device on LAN
PASSTHROUGH	Router assigns its mobile WAN IP address to another device on LAN

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RUT955 WIRELESS SPECIFICATION

WIRELESS MODE	802.11b/g/n (Wi-Fi 4), Access Point (AP), Station (STA)
WI-FI SECURITY	WPA2-Enterprise: PEAP, WPA2-PSK, WPA-EAP, WPA-PSK, WPA3-SAE, WPA3-EAP, OWE; AES-CCMP, TKIP, Auto-cipher modes, client separation, EAP-TLS with PKCS#12 certificates, disable auto-reconnect, 802.11w Protected Management Frames (PMF)
SSID/ESSID	SSID stealth mode and access control based on MAC address
WI-FI USERS	Up to 100 simultaneous connections
WIRELESS CONNECTIVITY FEATURES	Wireless mesh (802.11s), fast roaming (802.11r), Relayd, BSS transition management (802.11v), radio resource measurement (802.11k)
WIRELESS MAC FILTER	Allowlist, blocklist

RUT955 OTHER SPECIFICATION

RUT955 VERSION	RUT955T7V417 – dedicated to: Europe, the Middle East, Africa, Thailand, India
MORE INFORMATION	Detailed information about the router can be found in its separate datasheet.

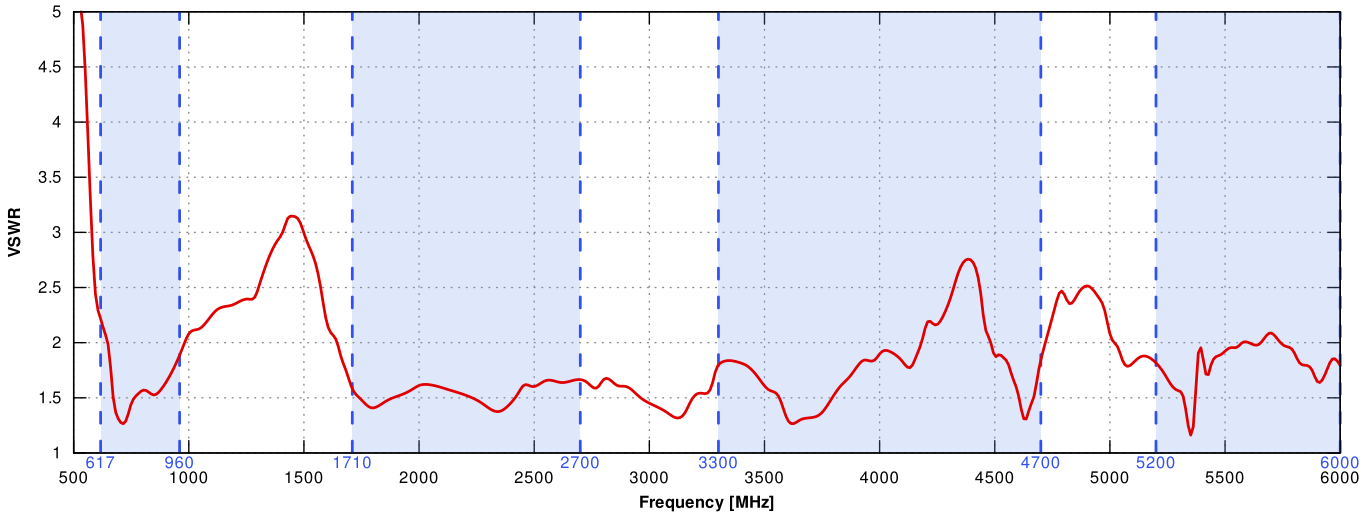
COMPATIBLE ROUTERS

VARIANT: -

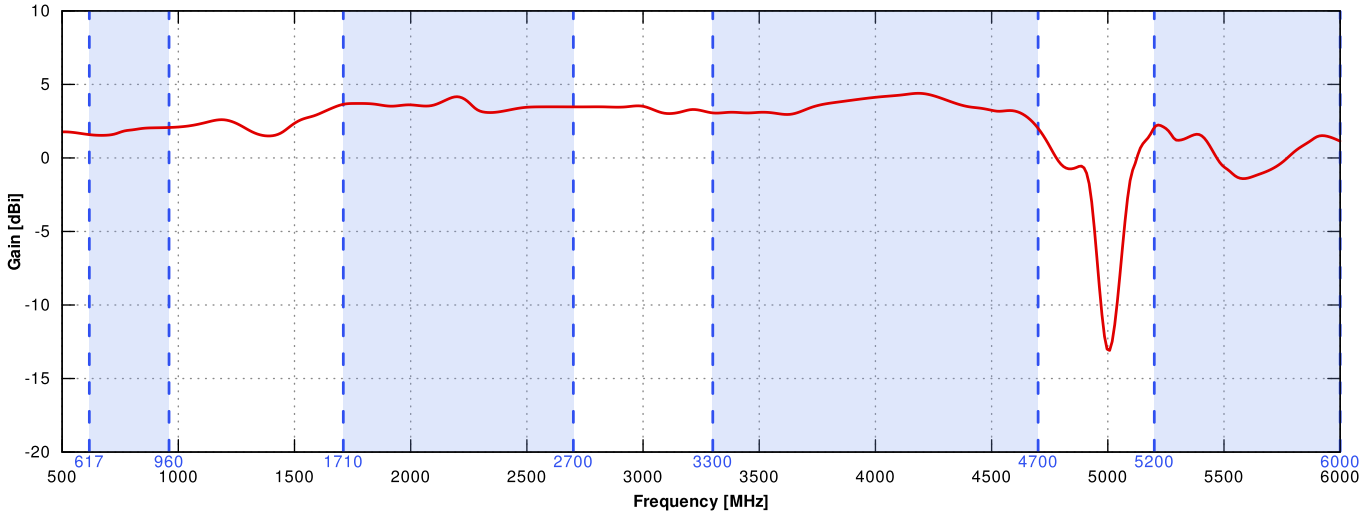
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PLOTS

LTE VSWR

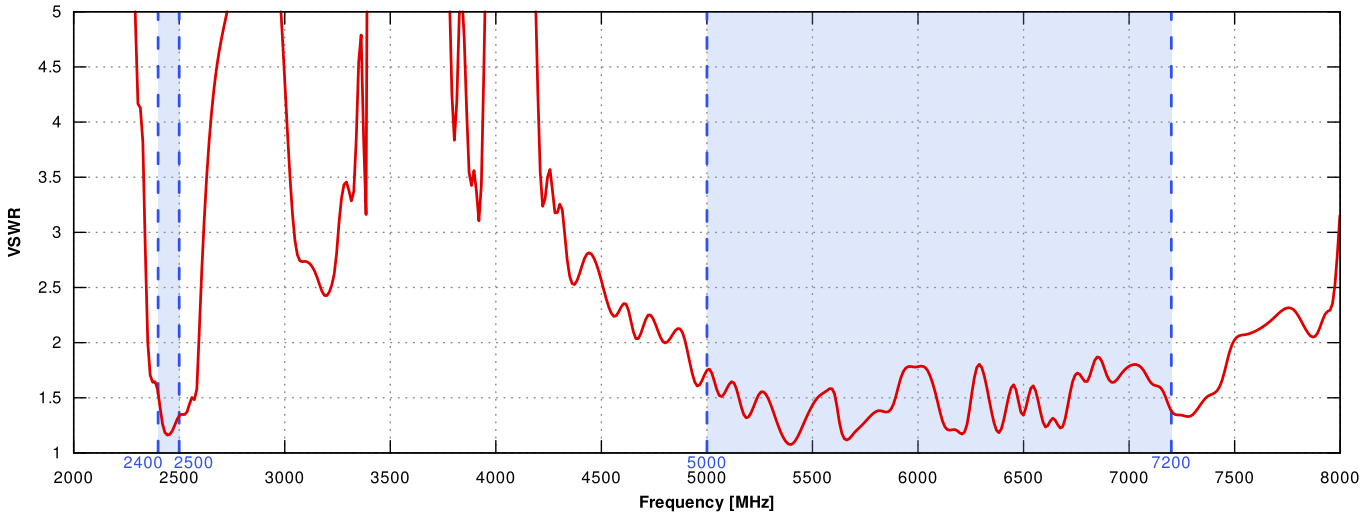


LTE Gain

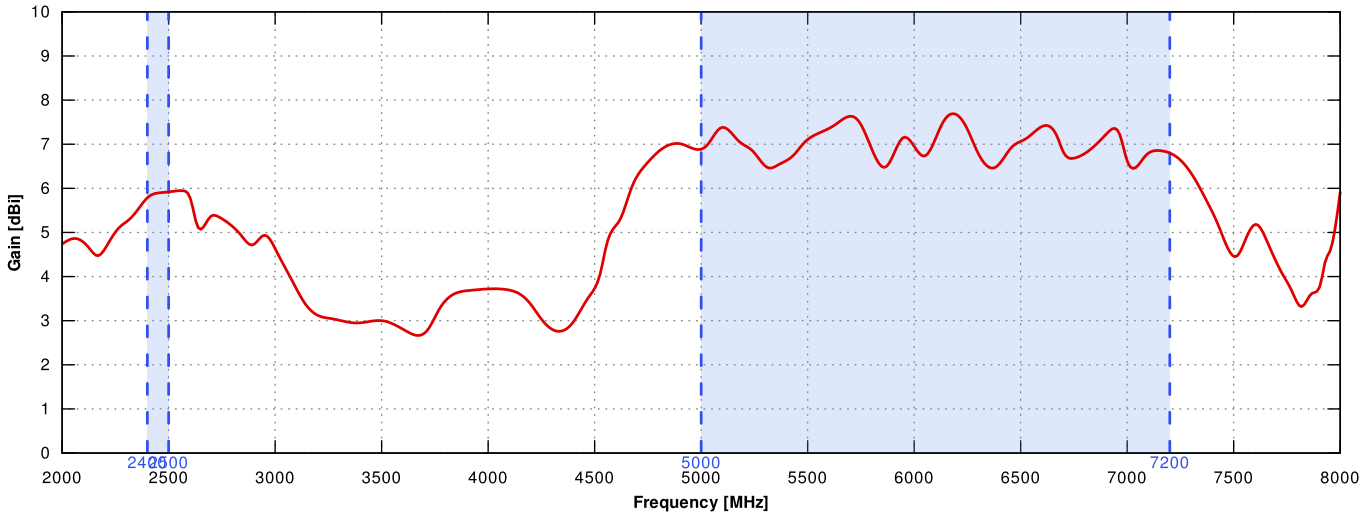


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WI-FI VSWR



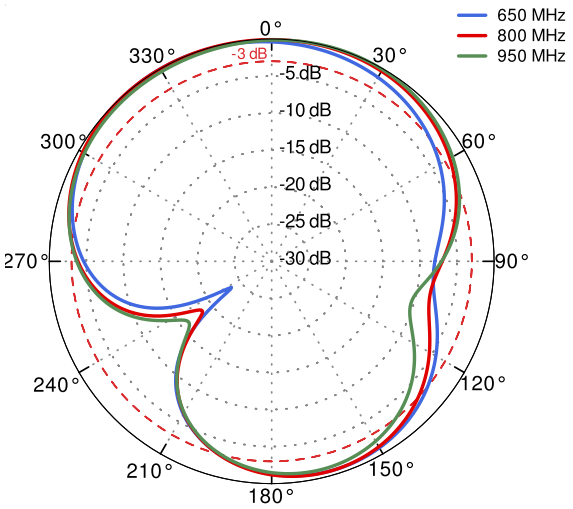
WI-FI Gain



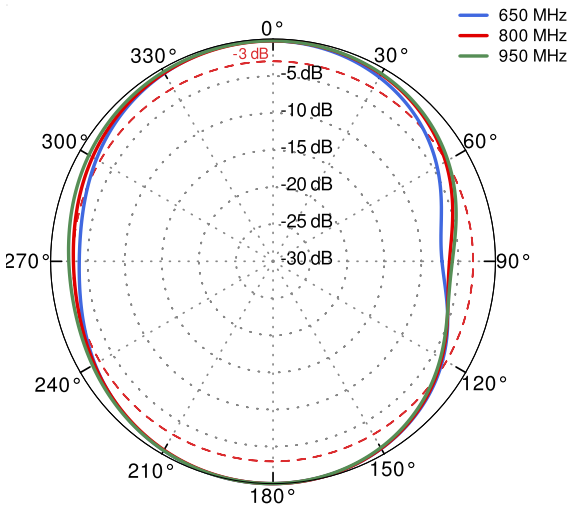
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LTE From 650MHz to 950MHz

ELEVATION

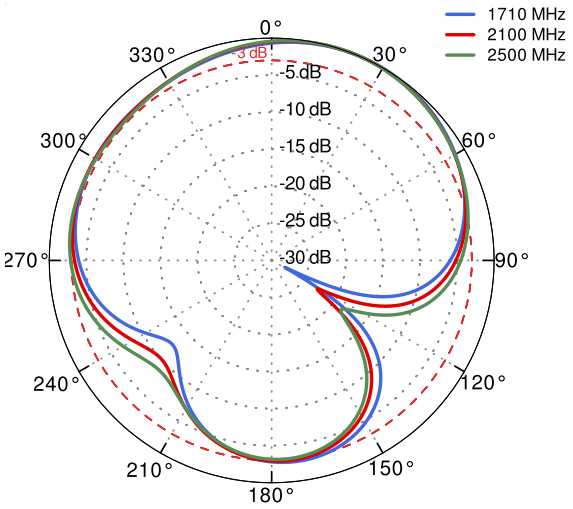


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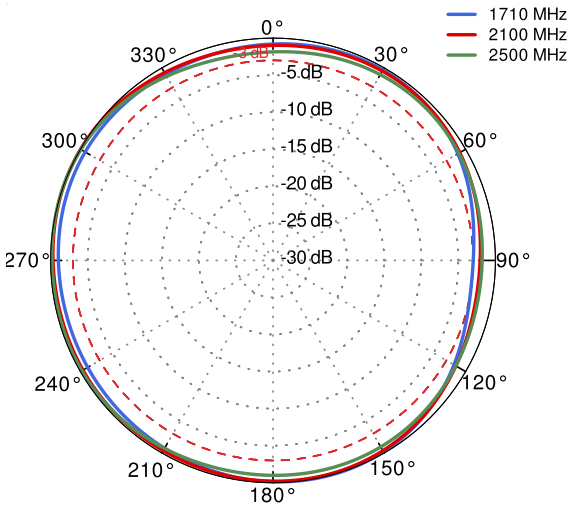


LTE From 1.71GHz to 2.5GHz

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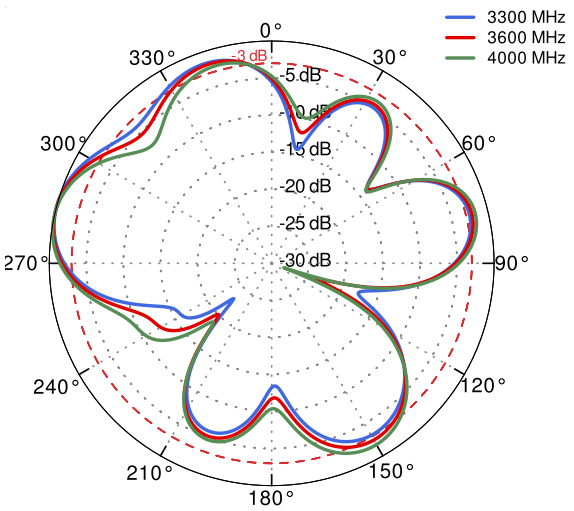
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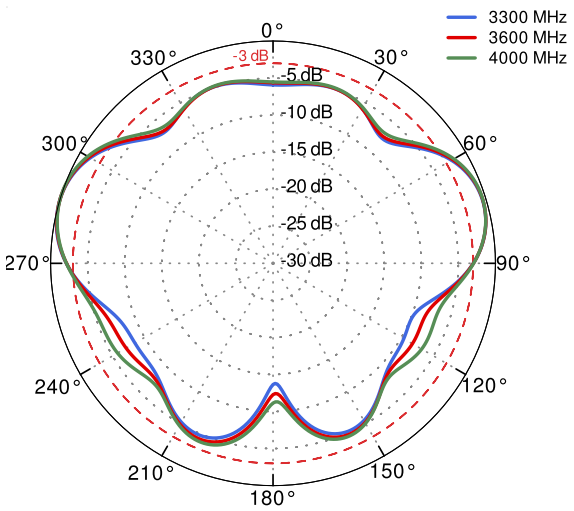
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LTE From 3.3GHz to 4.0GHz

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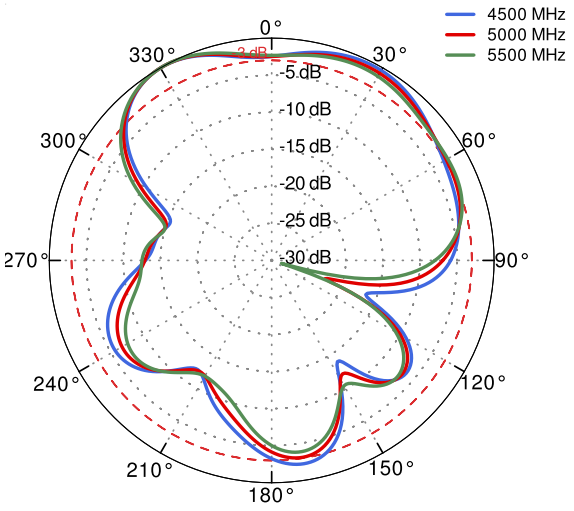


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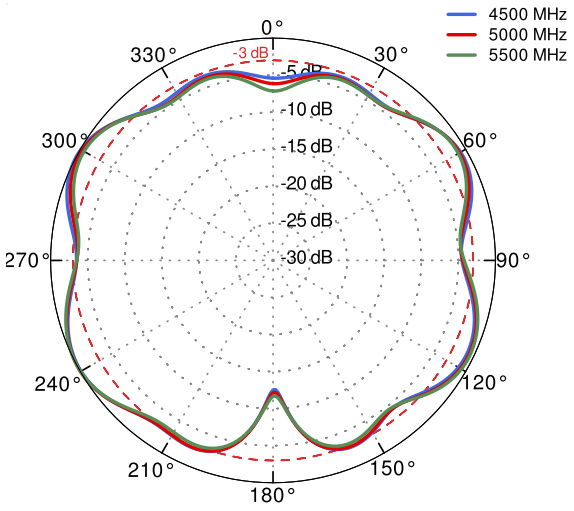


LTE From 4.6GHz to 5.5GHz

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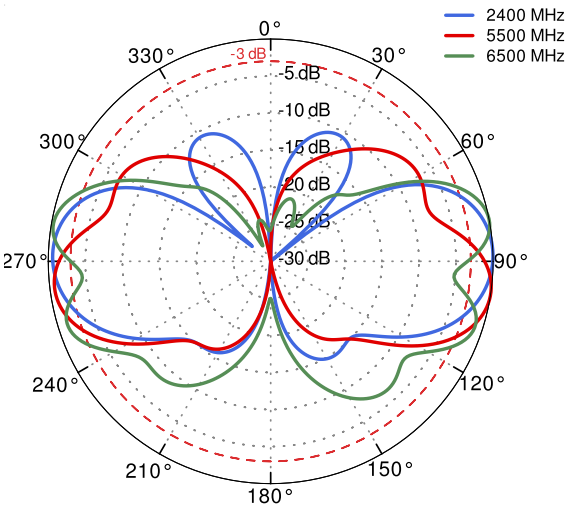
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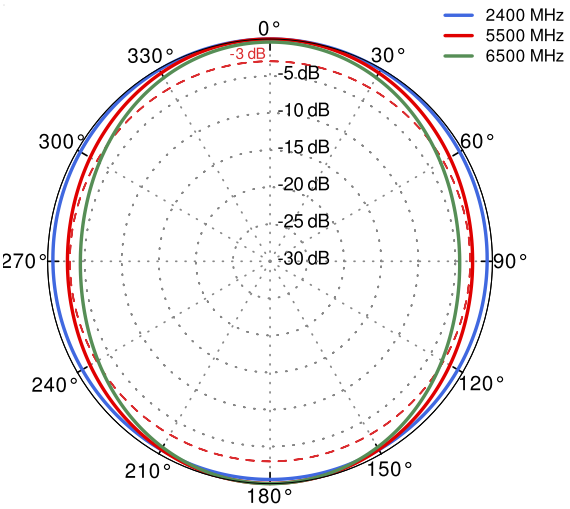
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Wi-Fi From 2.4 GHz to 6.5 GHz

ELEVATION



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