

FCC Antenna Summary

Tested	Ruckus Model	Manufacturer	Manufacturer Model	2GHz			MiMO	Location
				Freq. Band	Antenna Gain			
X	TBolt2	Ruckus	TBolt2	2400 - 2483.5 MHz	9	2x2	Internal	
	TBolt3	Ruckus	TBolt3	2400 - 2483.5 MHz	6	3x3	Internal	
X	AT-1901-DP	MARS	MA-WA25-DP19	2300 - 2700 MHz	19	2x2	External	
X	AT-0505-MP	MARS	ME-WE2458-3H	2300 - 2700 MHz	5	3x3	External	
	Corfu Omni	Ruckus	Corfu Omni	2402 - 2483.5 MHz	3	3x3	Internal	
X1	ZoneFlex 7982 Omni	Ruckus	ZoneFlex 7982 Omni	2402 - 2483.5 MHz	3	3x3	Internal	

X1 - Tested for initial FCC Grant

2.3-2.7 GHz Dual Polarized Antenna

MA-WA25-DP19

MARS 2.5 GHz Dual Polarized Antenna is a wide band antenna designed for Wi-Fi, LAN, MMDS, WLL and WiMAX applications.

Additional Features:



- dual slant if mounted diagonally
- exceptionally efficient performance
- high gain/size ratio
- aesthetic design
- weatherized and durable
- mount allows for 45deg. turn installation

Specifications:

Electrical

Frequency range	2.3 - 2.7 GHz
Gain,typ.	19 dBi \pm 1 dBi
VSWR, max.	1.7:1
3 dB Beam-Width, H-Plane, typ.	17 °
3 dB Beam-Width, E-Plane, typ.	17 °
Side Lobes, min.	-12 dB
Polarization	Dual Pole, Vertical and Horizontal
Cross Polarization, min.	-19 dB
Port to Port Isolation	- 25 dB
Front to Back Ratio, min.	-30 dB
Input power, max	10 Watt
Input Impedance	50 Ohm
Lightning Protection	DC Grounded

Mechanical

Dimensions (HxWxD)	370 x 370 x 40 mm (14.5" x14.5" x 1.6")
Weight	1.8 kg
Connector	2 x N-Type Female
Back Plane	Aluminum; protected through chemical passivation
Radome	UV Protected, Polycarbonate
Mount	MNT-22

Environmental

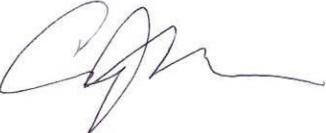
Operating Temperature Range	- 40°C to + 65°C
Vibration	According to IEC 60721-3-4
Wind Load	200 km/h (Survival)
Flammability	UL94
Water Proofing	IP-67
Humidity	ETS 300 019-1-4,EN 302 085 (Annex A.1.1)
Salt Fog	According to IEC 68-2-11

Ordering Options

Antenna Suited for MNT-22 (optional wall/pole adjustable mount)	MA-WA25-DP19
Antenna with mount	MA-WA25-DP19 B



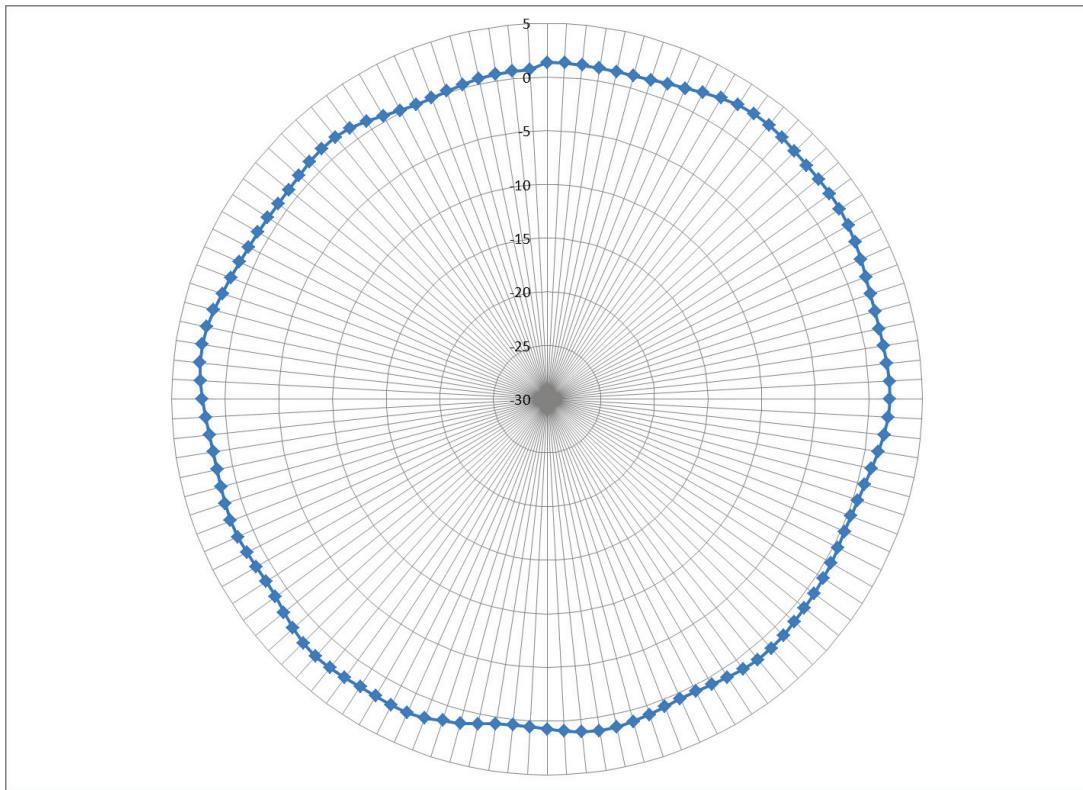
Corfu omni antenna patterns

Engineer	Manager
	
08/26/2012	08/26/2012

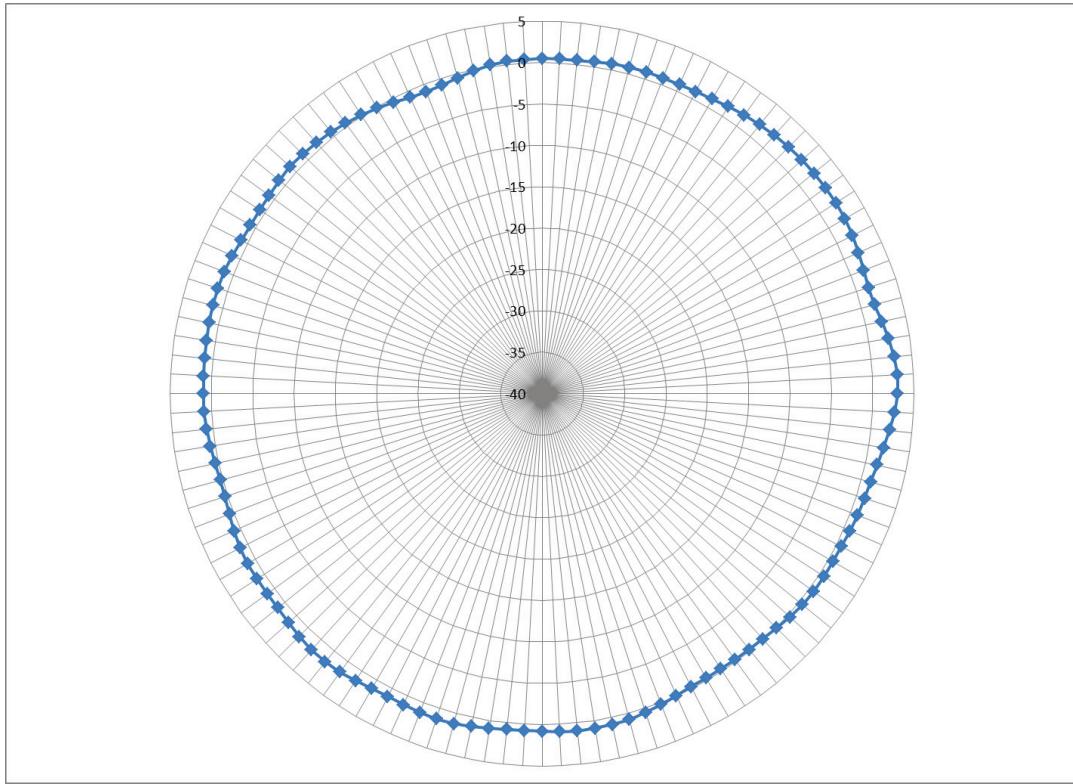
Ruckus Wireless Inc.

880 West Maude Ave.
Suite 101
Sunnyvale, CA 94085, USA
Tel: (650) 265-4200
Fax: (408) 738-2065

Patterns for 2.4GHz antenna:



Patterns for 5GHz antenna:



Conclusion: Antenna patterns were measured in an anechoic chamber and it was determined that the highest gain for 2.4GHz antenna is 3dBi and 5GHz antenna is 3dBi.



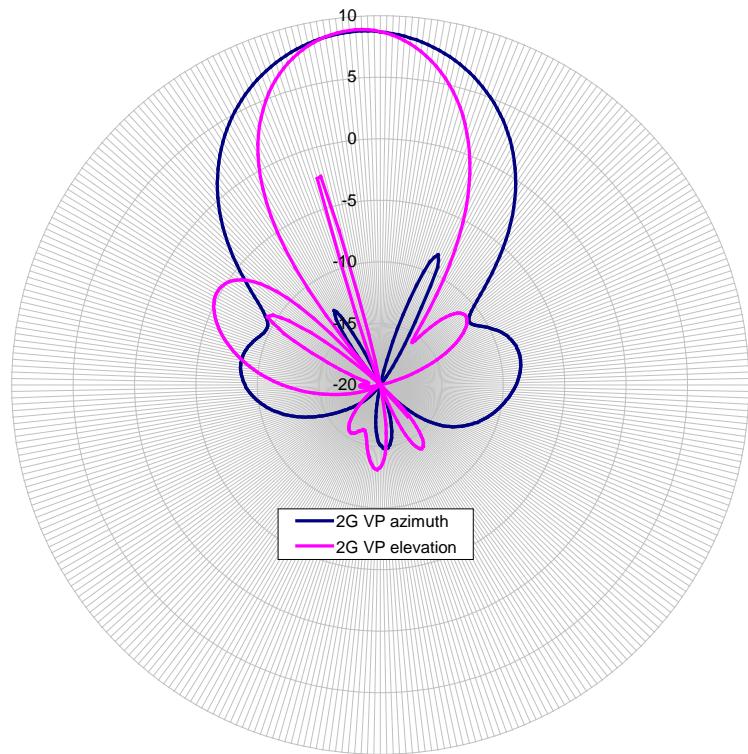
TBolt2 Antenna Patterns

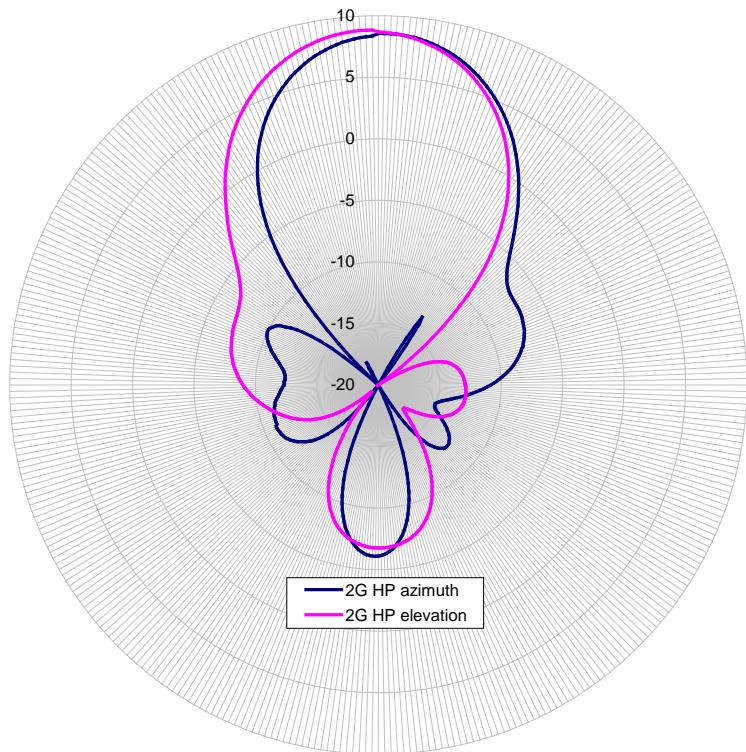
Engineer	Manager
	
04/06/2012	04/06/2012

Ruckus Wireless Inc.

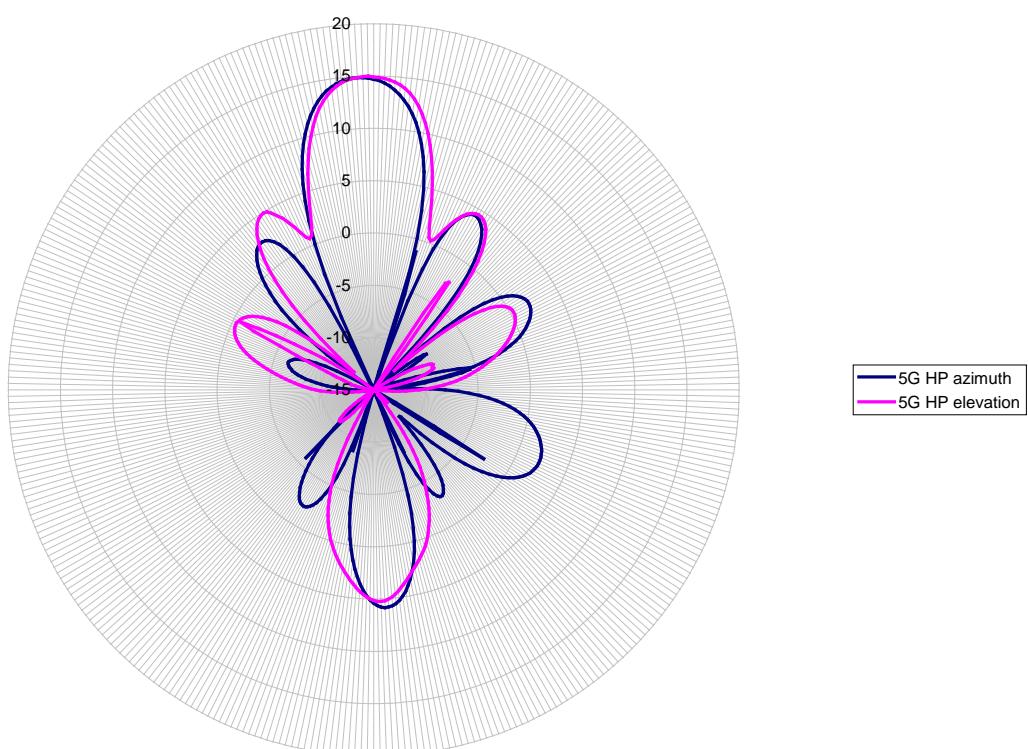
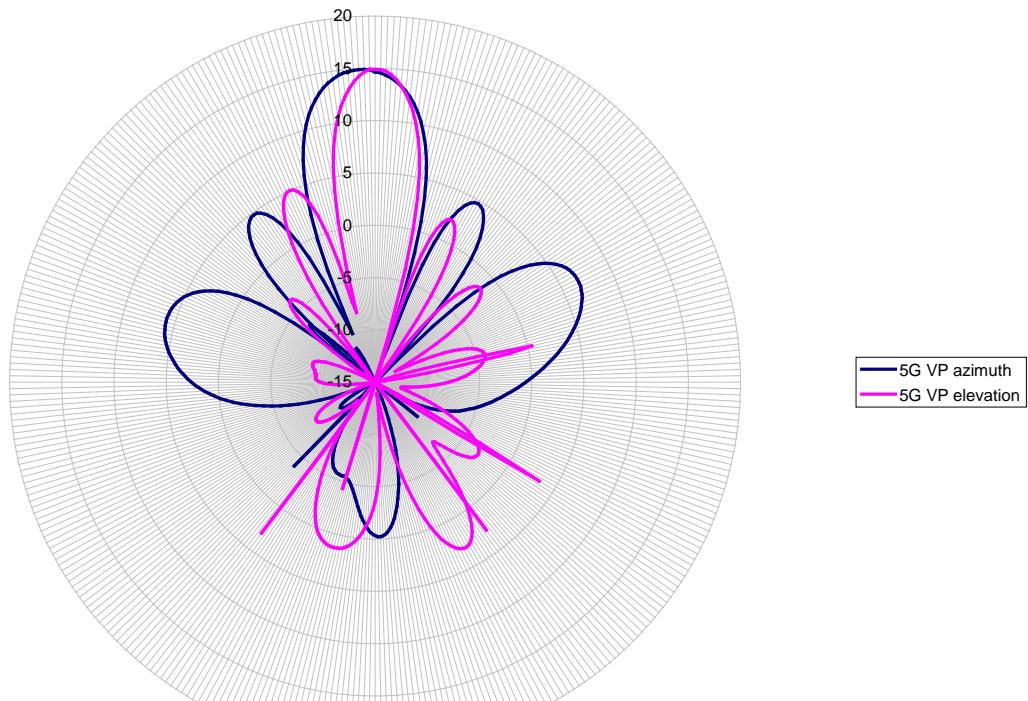
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Patterns for 2.4GHz antenna:





Patterns for 5GHz antenna:



Conclusion: Antenna patterns were measured in an anechoic chamber and it was determined that the highest gain for 2.4GHz antenna is 9dBi and 5GHz antenna is 15dBi.



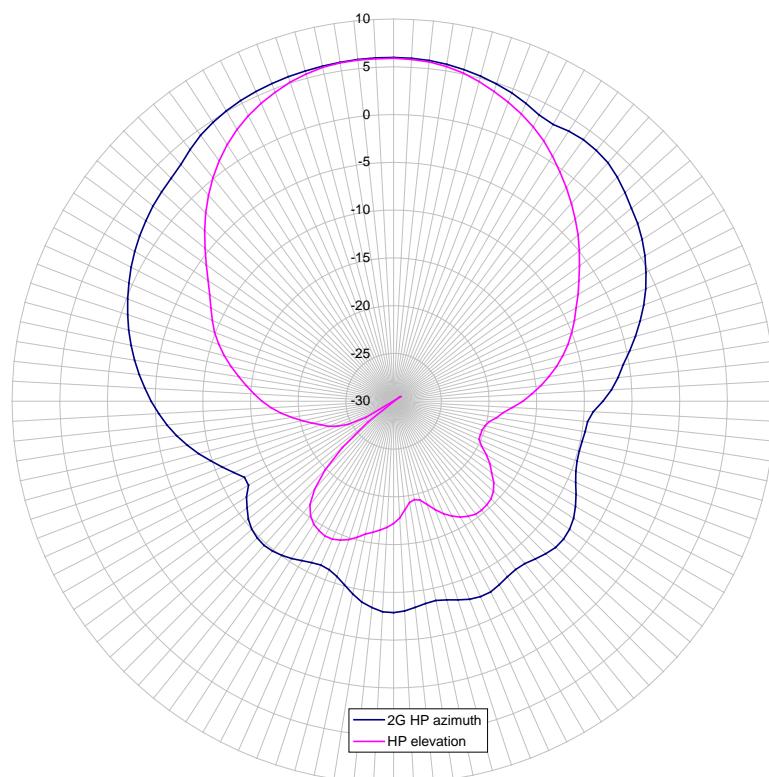
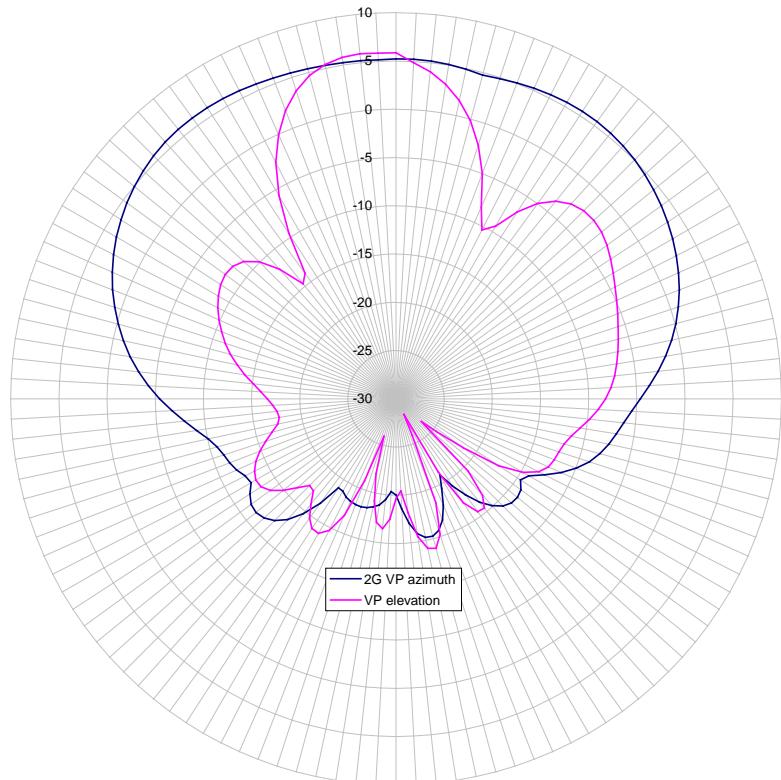
TBolt3 Antenna Patterns

Engineer	Manager
	
04/06/2012	04/06/2012

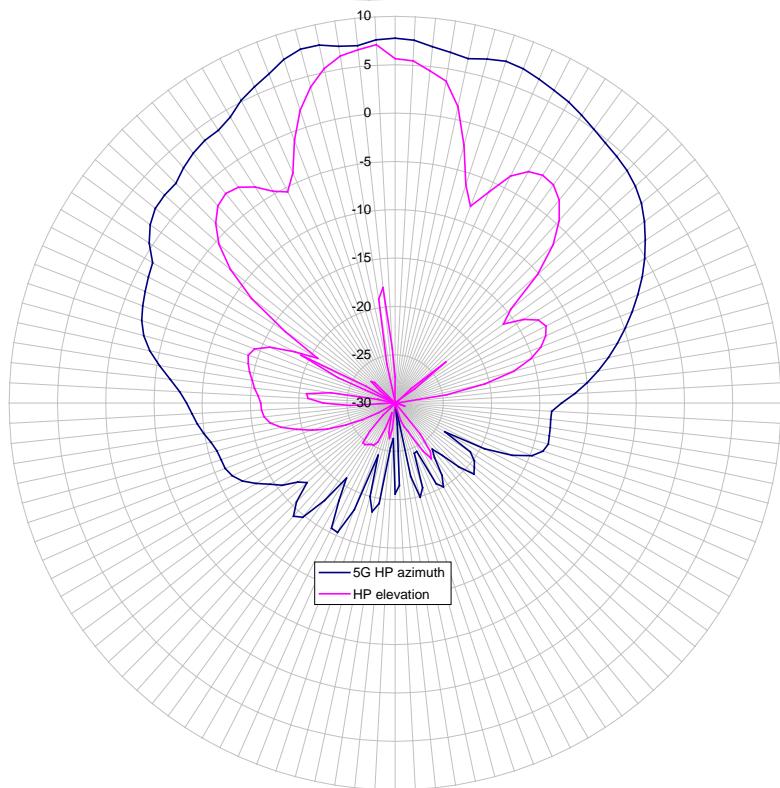
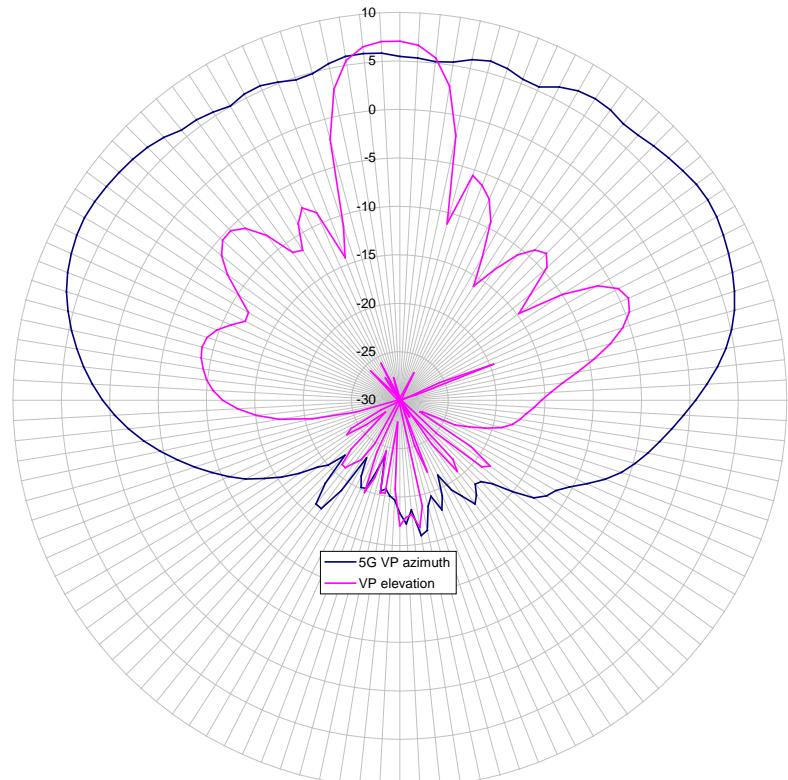
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Patterns for 2.4GHz antenna:



Patterns for 5GHz antenna:



Conclusion: Antenna patterns were measured in an anechoic chamber and it was determined that the highest gain for 2.4GHz antennas is 6dBi and 5GHz antennas is 8dBi.