

Test Report for Antenna Specifications for GA5Z9L

Tuesday, August 2, 2022

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Frequency range and operation

WiFi-0 Antenna: 2.412 to 2.472 GHz and 5.18 to 7.115 GHz

WiFi-1 Antenna: 2.412 to 2.472 GHz and 5.18 to 7.115 GHz

Bluetooth Antenna: 2.402 to 2.484 GHz

Antenna type

WiFi-0 Antenna ,WiFi-1 Antenna ,Bluetooth Antenna: PCB Inv F type

Antenna Gain

Band	Peak Gain (dBi)		
	Wi-Fi ANT 1	Wi-Fi ANT 2	BT ANT
2.4GHz	2.05 dBi	3.01 dBi	3.34 dBi
5GHz Band I (5150-5250MHz)	4.69 dBi	5.75 dBi	
5GHz Band II (5250-5350MHz)	4.72 dBi	5.14 dBi	
5GHz Band III (5470-5725MHz)	5.45 dBi	5.58 dBi	
5GHz Band IV (5725-5850MHz)	5.72 dBi	5.62 dBi	
UNII 5	6.64 dBi	6.59 dBi	
UNII 6	5.19 dBi	5.26 dBi	
UNII 7	5.09 dBi	5.18 dBi	
UNII 8	5.28 dBi	4.04 dBi	

Measurement Test method

Solder pigtailed on feeding point of antennas and measure passive antenna performance by VNA and OTA chamber system. And the measurement was done in devices level.

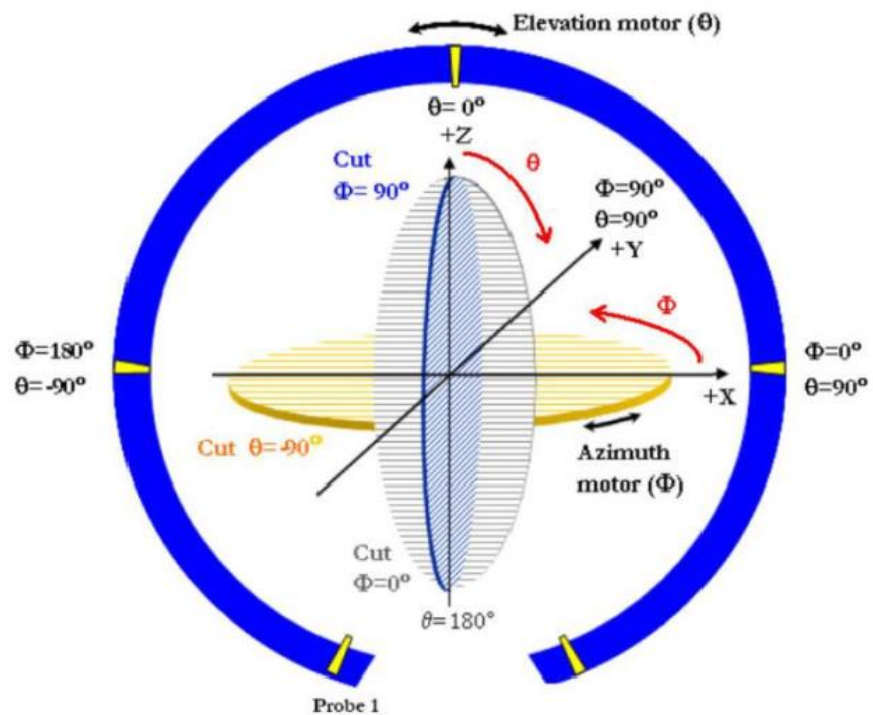
Test Equipment used:

1. VNA: KEYGIGHT_E5071C
2. OTA chamber: ETS_AMS-8923-142-G Antenna Measurement System

Test set up

Refer to document – ‘Operation Description’

FII CHAMBER AXIS

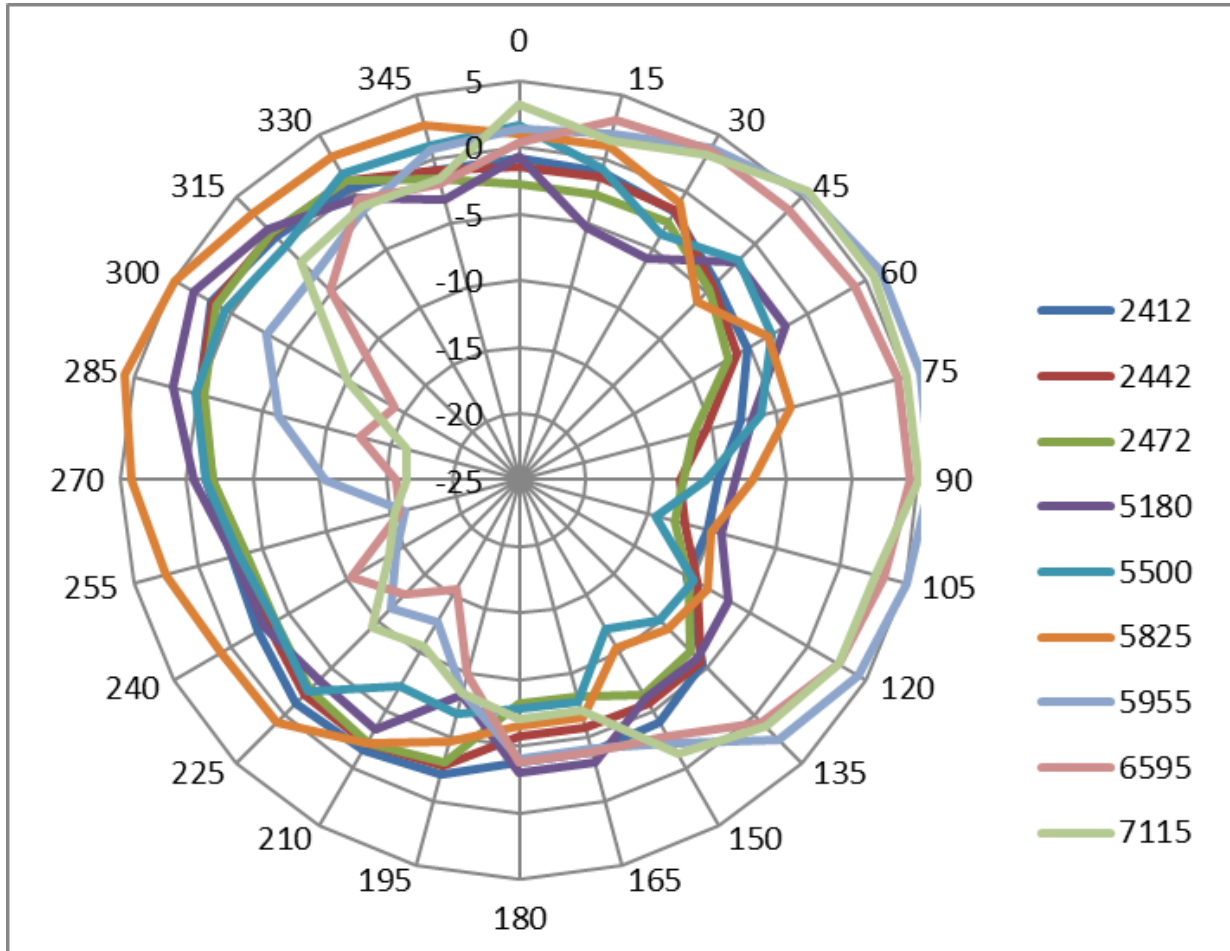


Device Image and Antenna locations – Refer to document – ‘GA5Z9L_Antenna Report_Photos’

2D RADIATION PATTERN

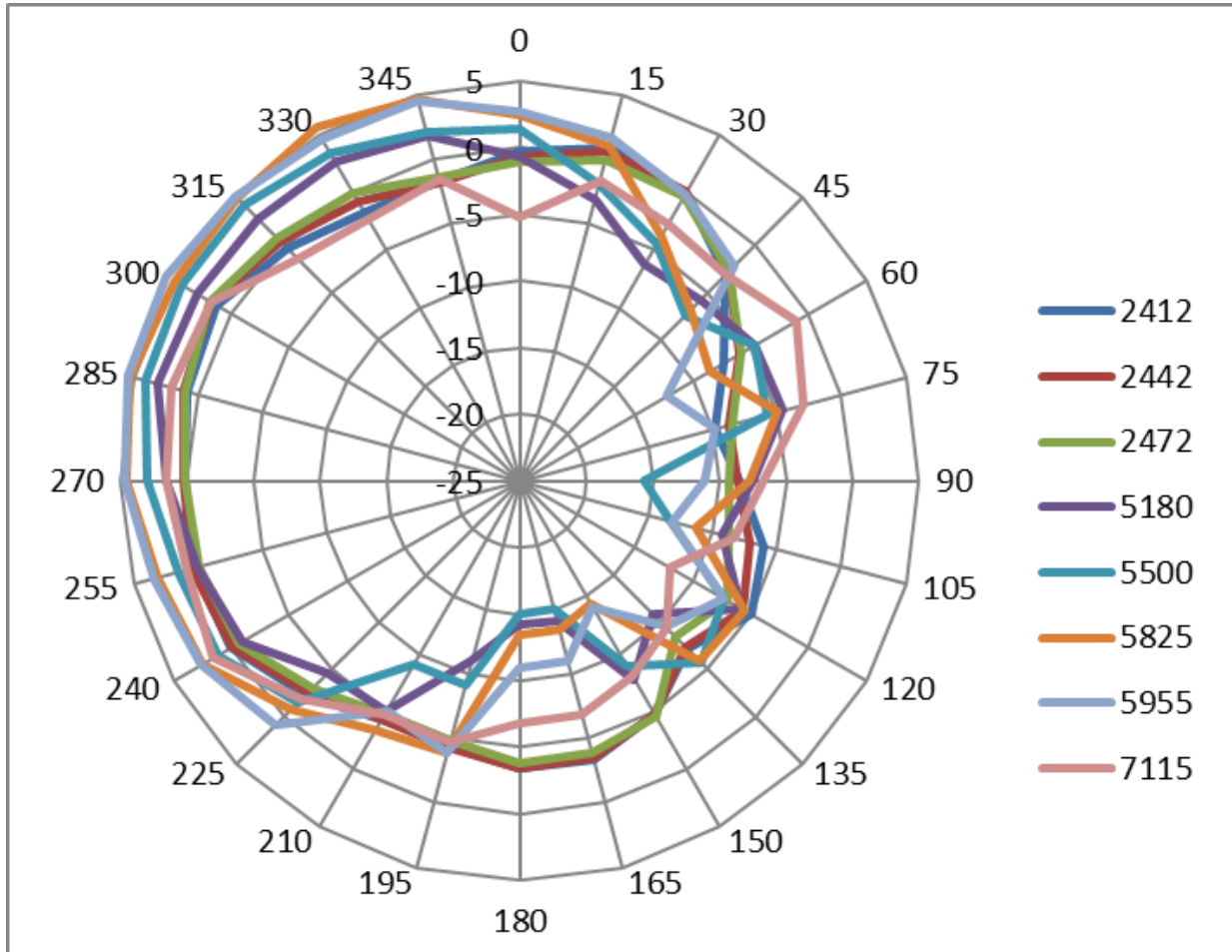
WiFi-0 Antenna

Phi=0

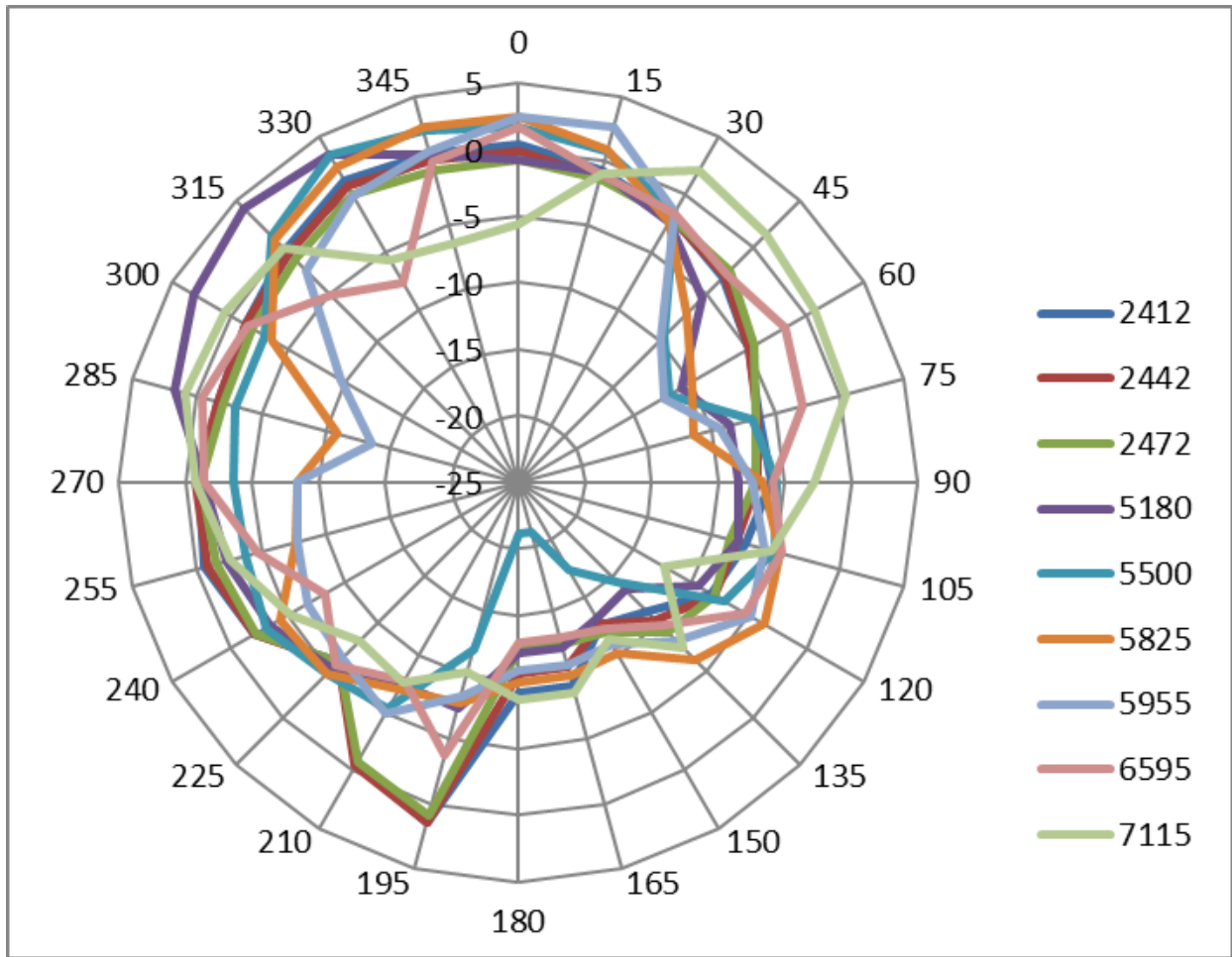


WiFi-1 Antenna

Phi=0

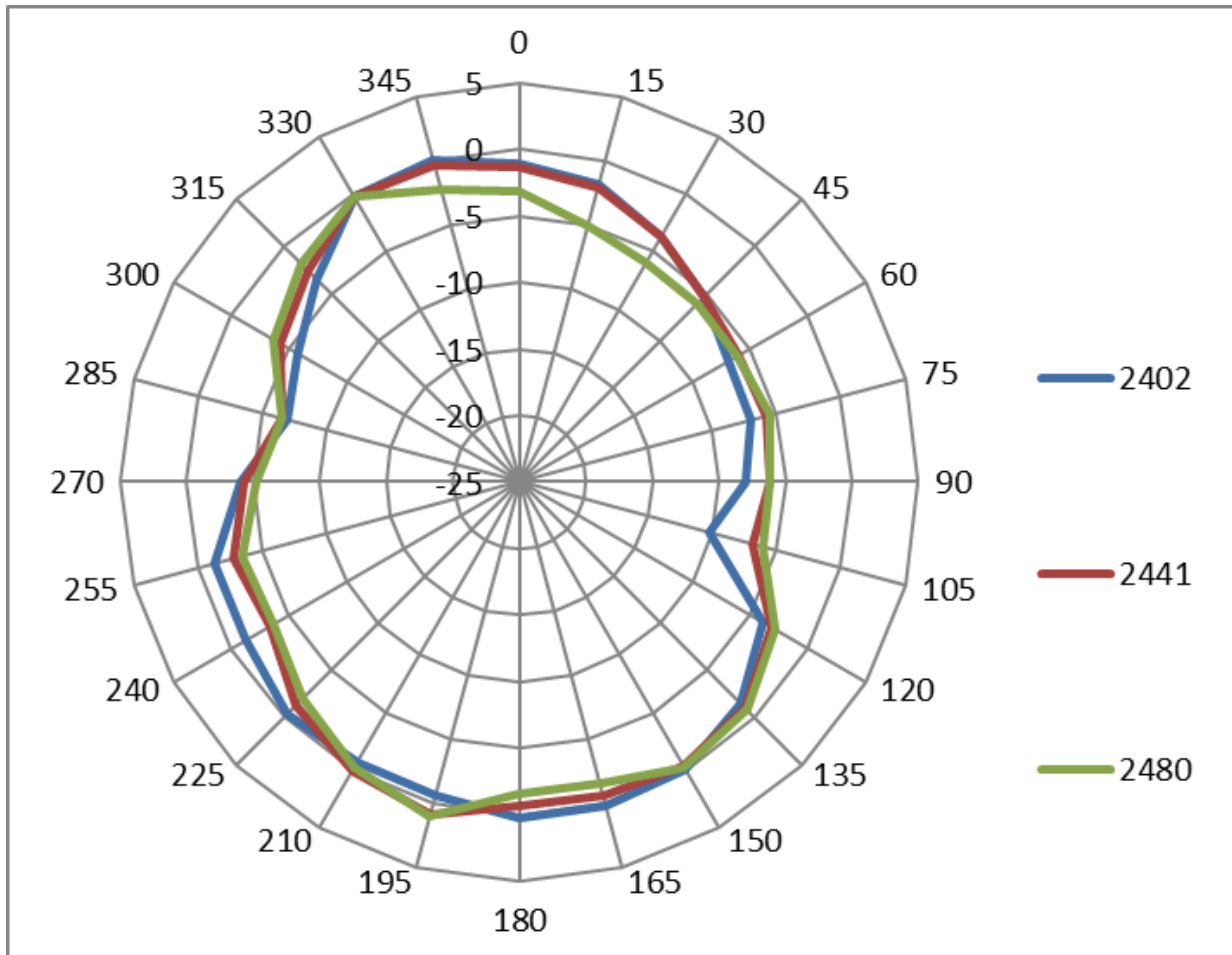


Phi=90

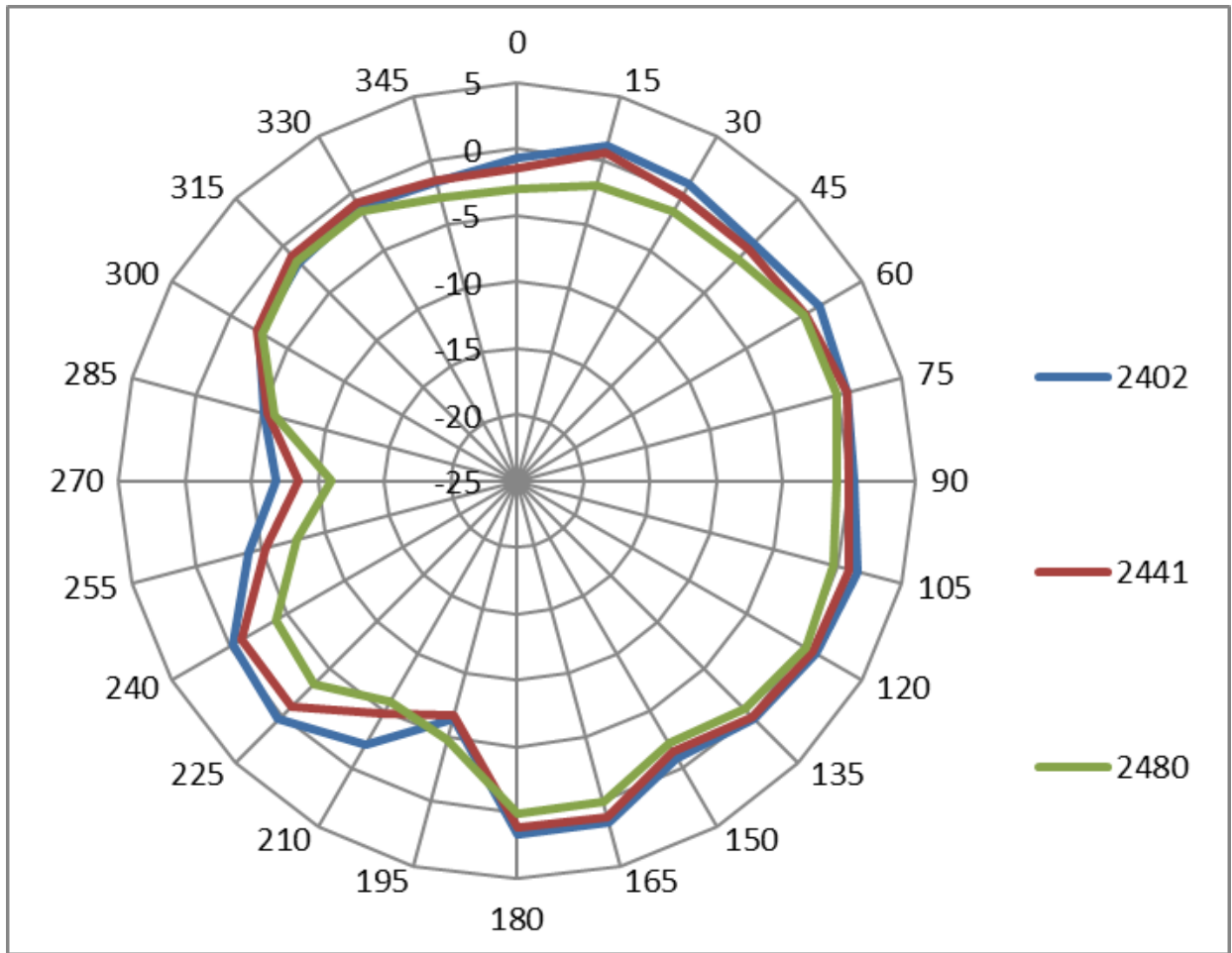


BT Antenna

Phi=0



Phi=90



Theta 90

