

Test Report for Antenna Specifications

Frequency range and operation

Antenna1:

- BT, BLE & Zigbee: 2.4 to 2.482 GHz

Antenna 2:

- Wi-Fi 2G: 2.4 to 2.482 GHz
- WiFi 5G: 5.15 to 5.85 GHz
- WiFi 6E: 5.925 to 7.125 GHz

Antenna 3:

- 5G: 5.725 to 5.875 GHz

Antenna type

Ant1: IFA antenna, Ant2: IFA antenna, Ant3: Loop antenna

Antenna Gain

Frequency	Peak Gain (dBi)		
	Ant1	Ant2	Ant3(RX only)
	IFA	IFA	Loop
2400-2500MHz	2.2	1.9	
5150-5250MHz	-	1.5	
5250-5350MHz	-	1.2	
5470-5725MHz	-	1.6	
5725-5850MHz	-	1.9	2.9
5850-5925MHz		2.2	2.5
5925-6425MHz		2.0	
6425-6525MHz		2.2	
6525-6875MHz		2.3	
6875-7125MHz		1.8	

Measurement Test method

Large circle cutting method

Test Equipment used

Test lab: Speed-SZ

Test equipment: Agilent E5071C

Test engineer:

王宇

Reviewer:

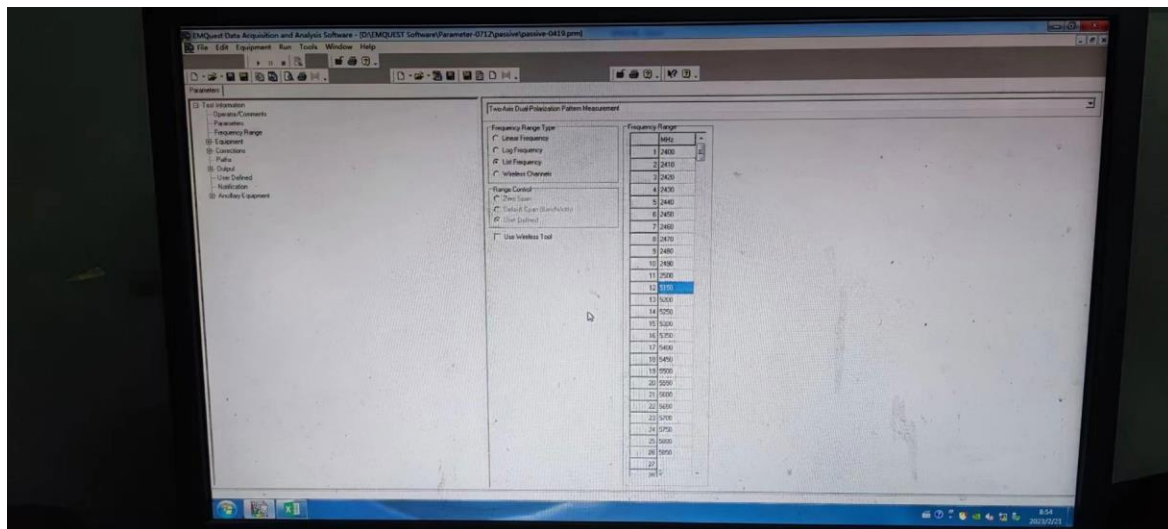
朱玉飞

Chamber info: ETS_AMS8500

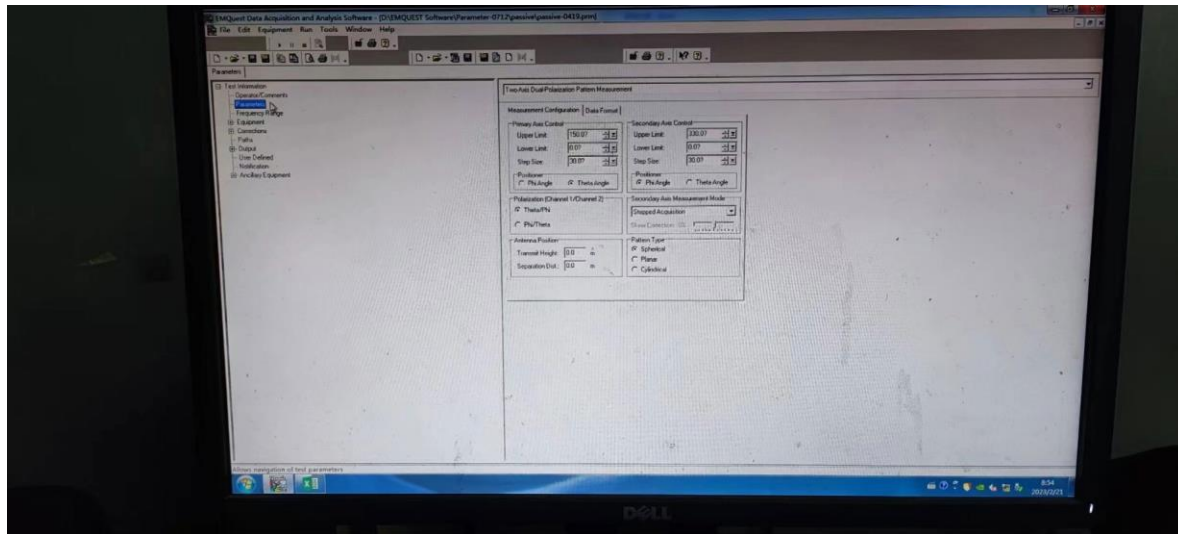
Gain measurement Lab info: ETS_AMS8500

Test set up and block diagram of test setup

Set frequency point



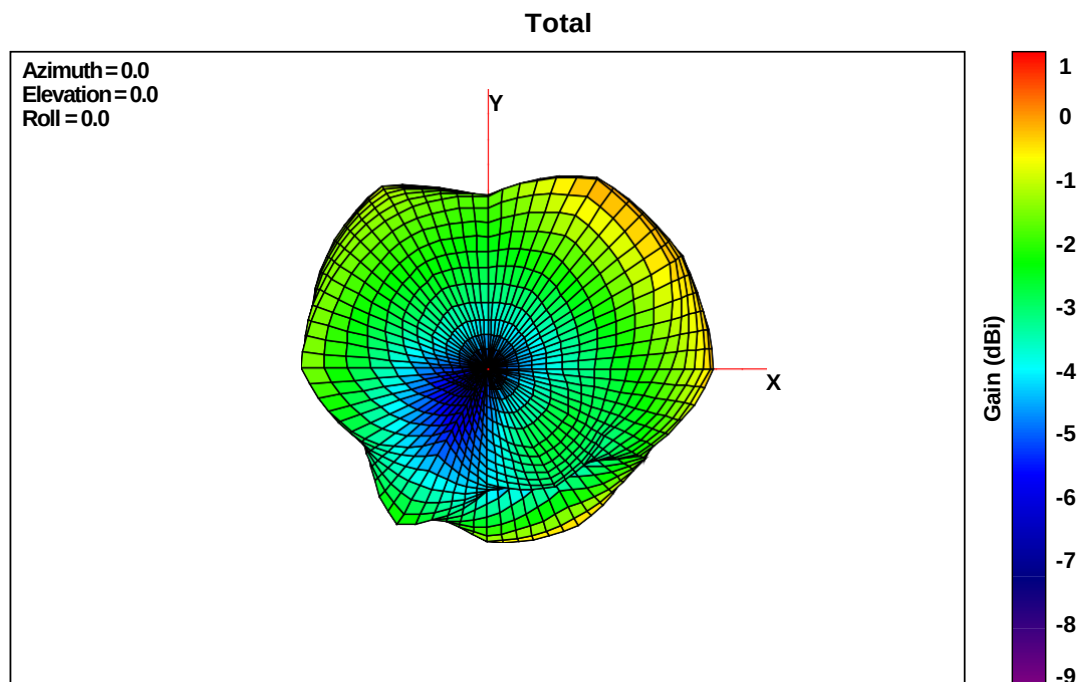
Set test angle

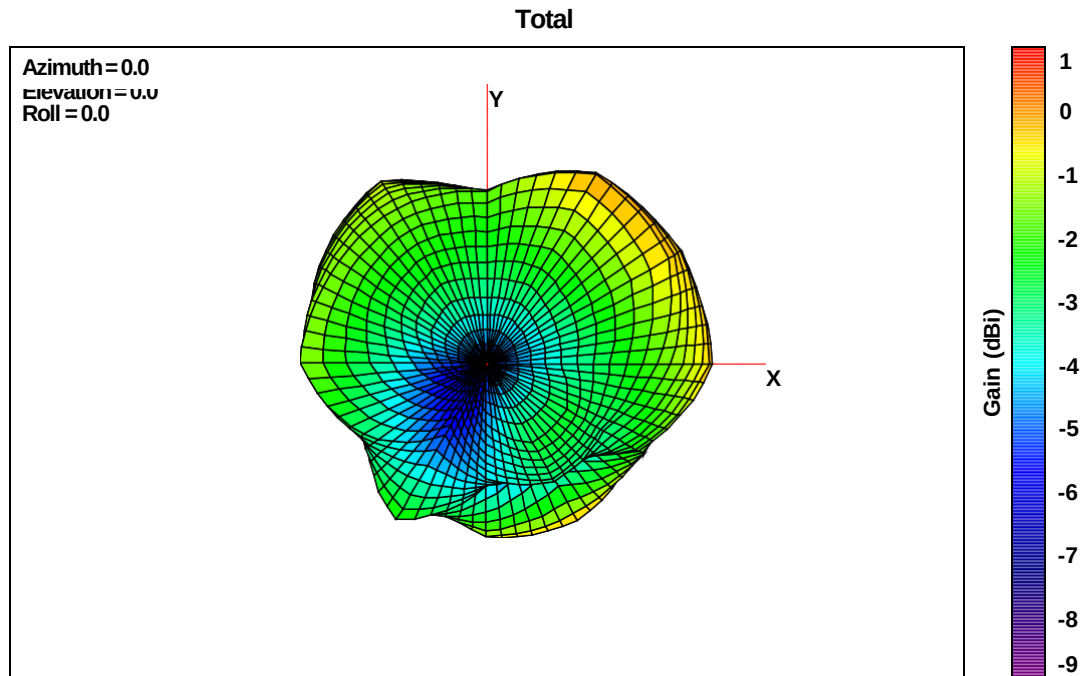


Antenna Radiation Pattern

BT/BLE Antenna

2440MHz

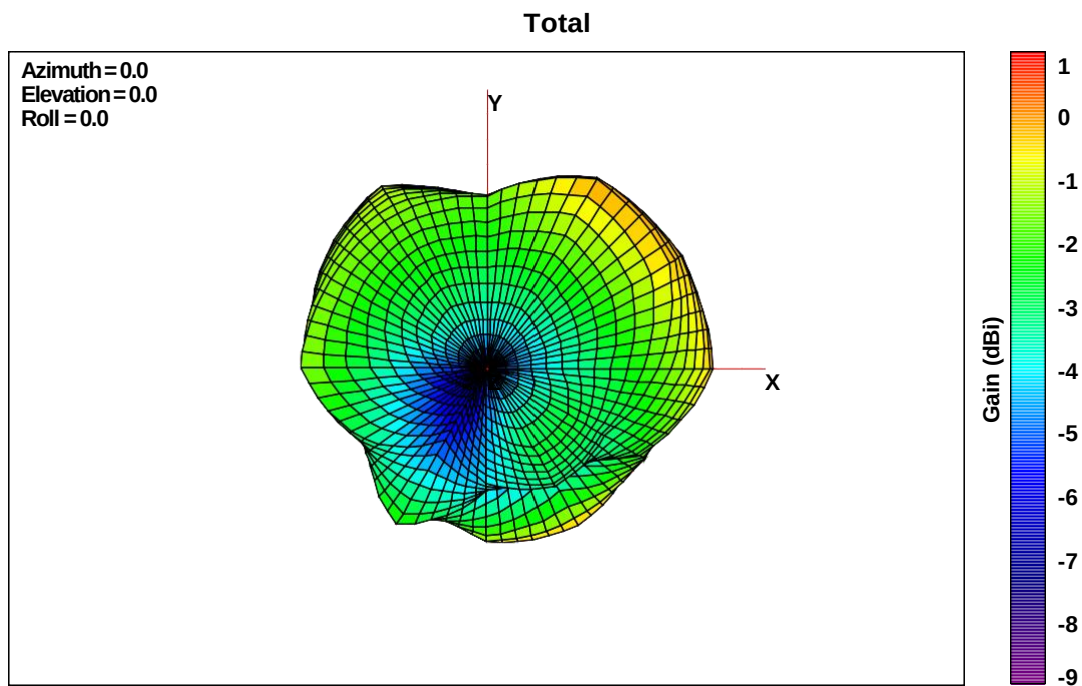


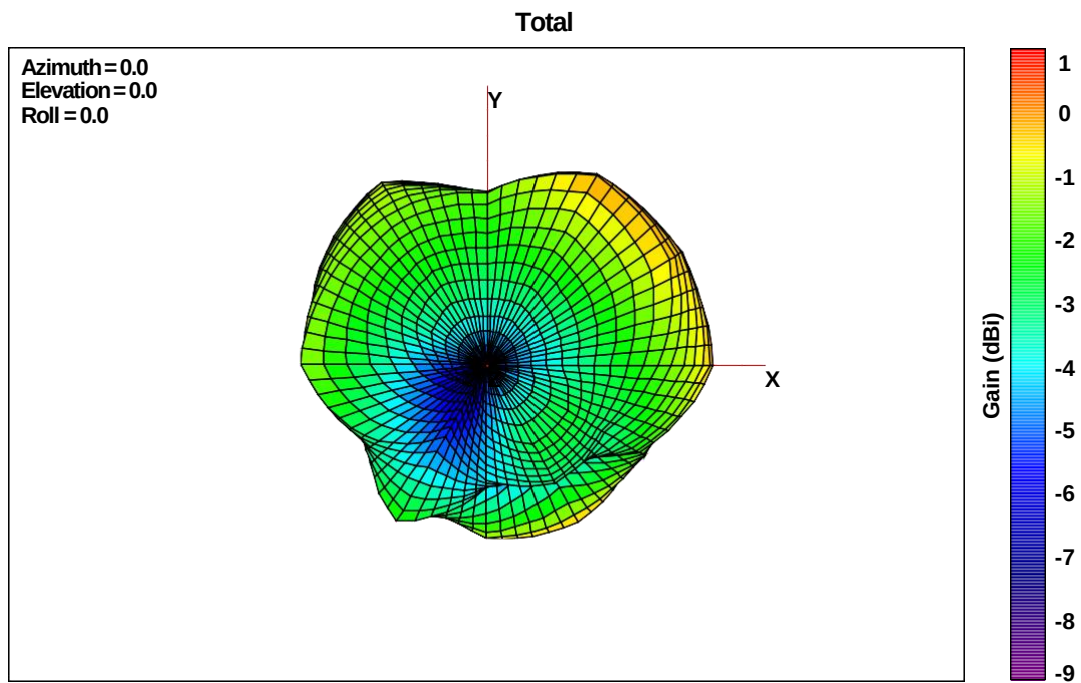


Zigbee Antenna

Using the same antenna as BT/BLE, Radiation Same to BT/BLE Antenna

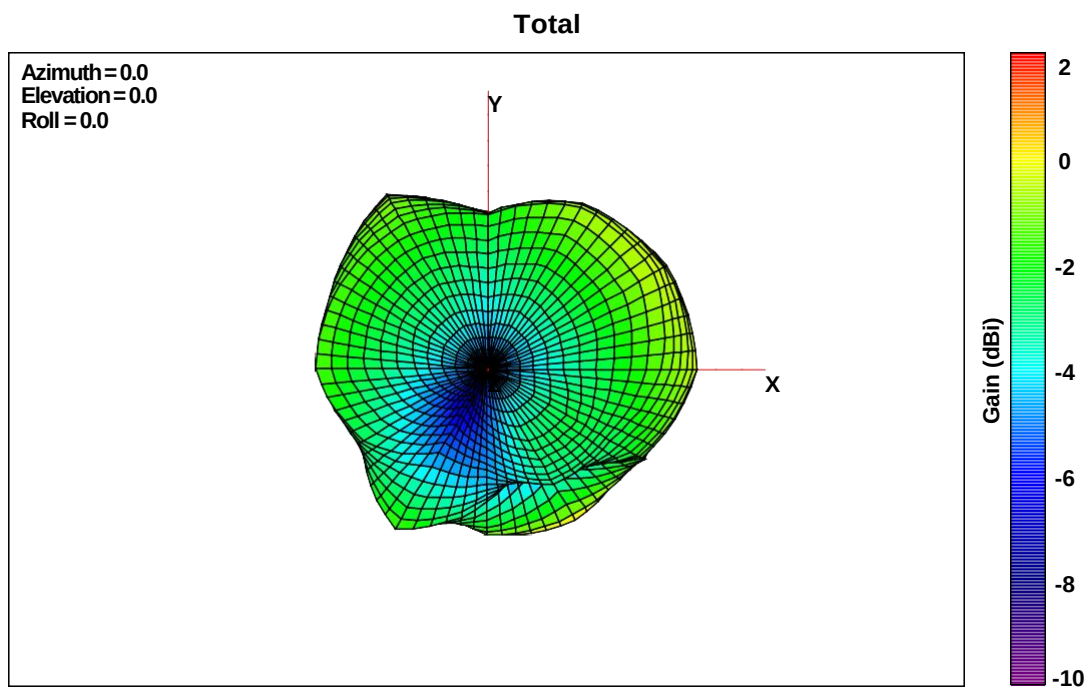
2440MHz

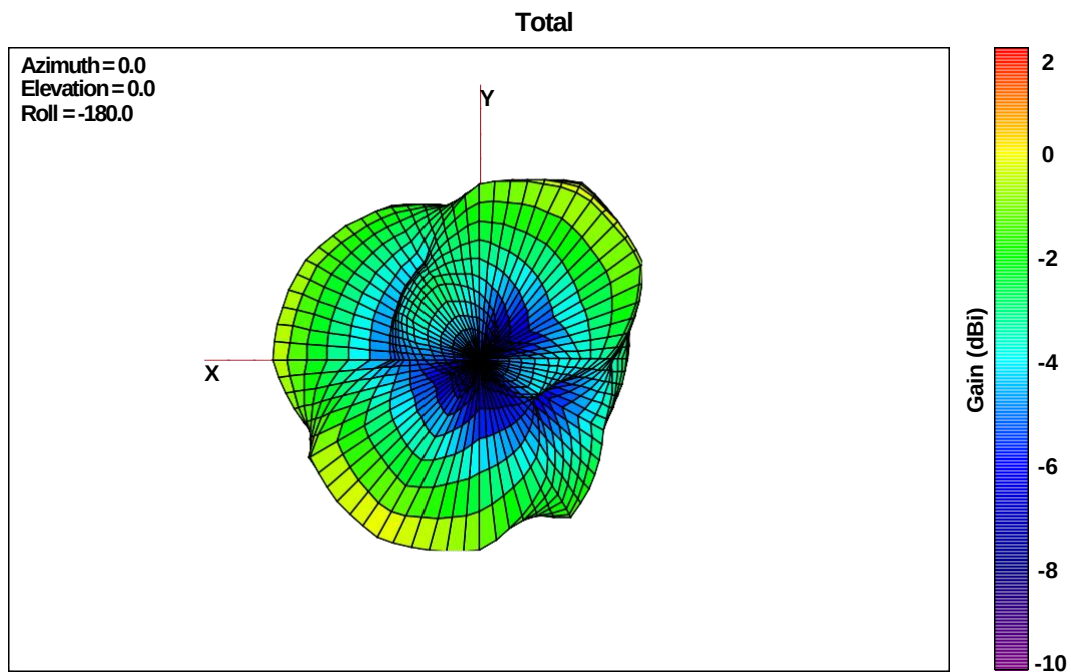




Wifi 2G Antenna

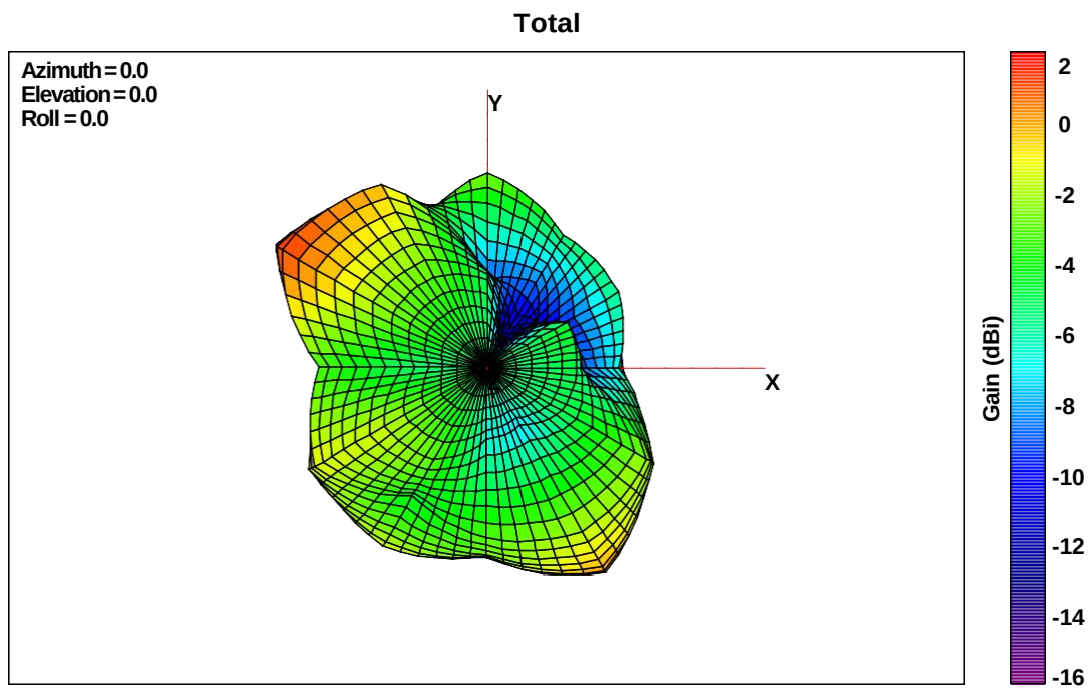
2440MHz

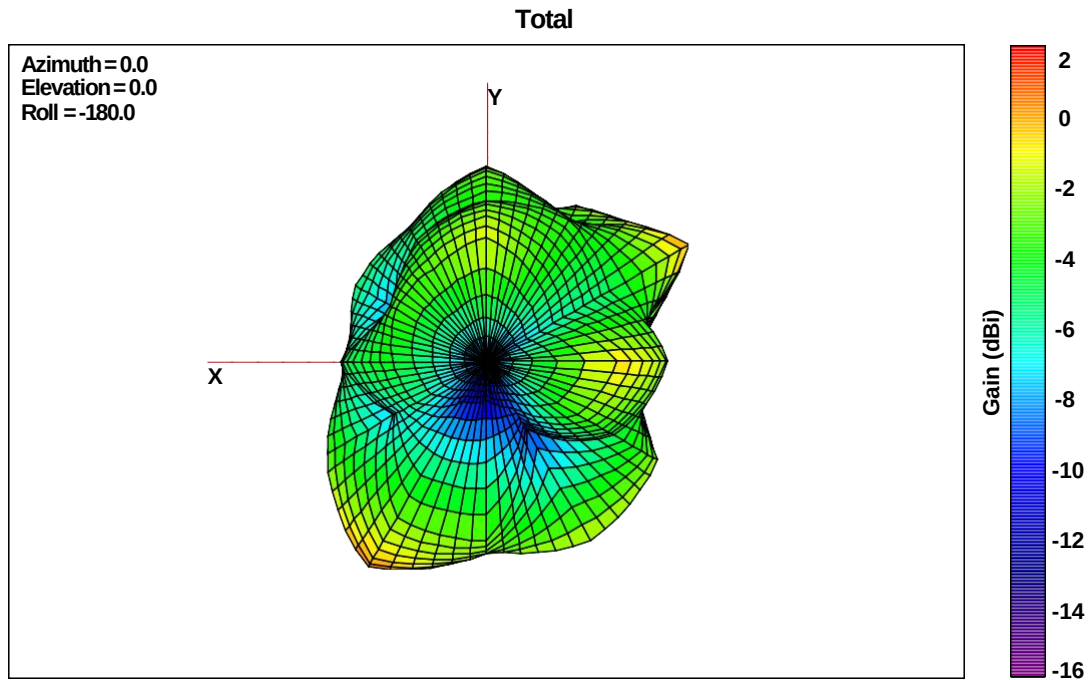




Wifi 5G Antenna

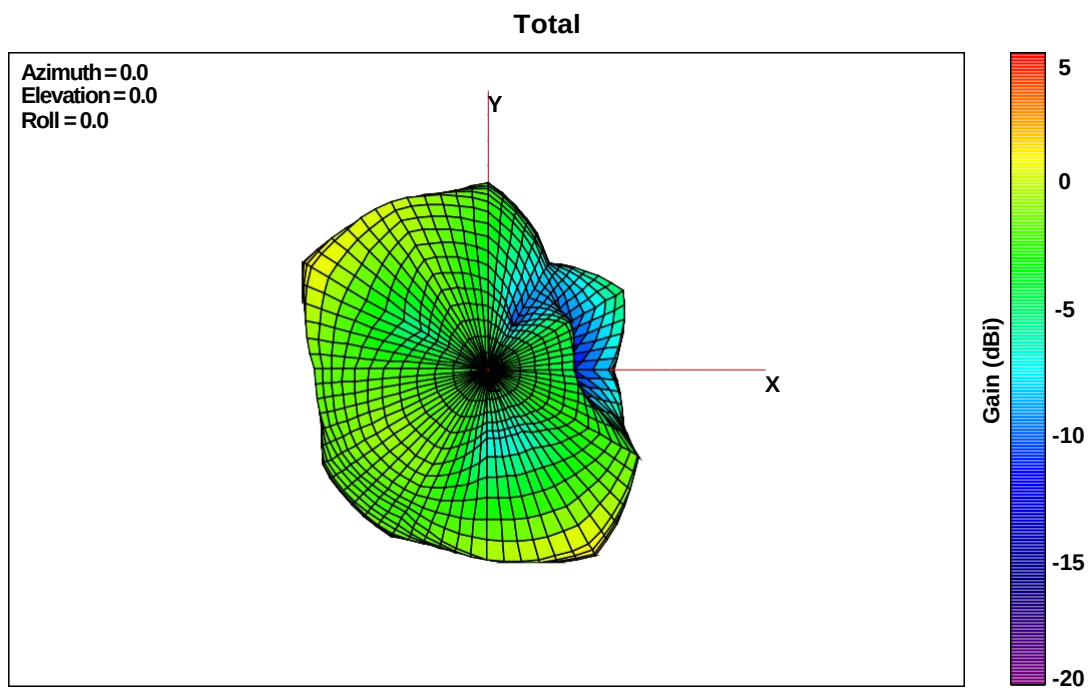
5500MHz

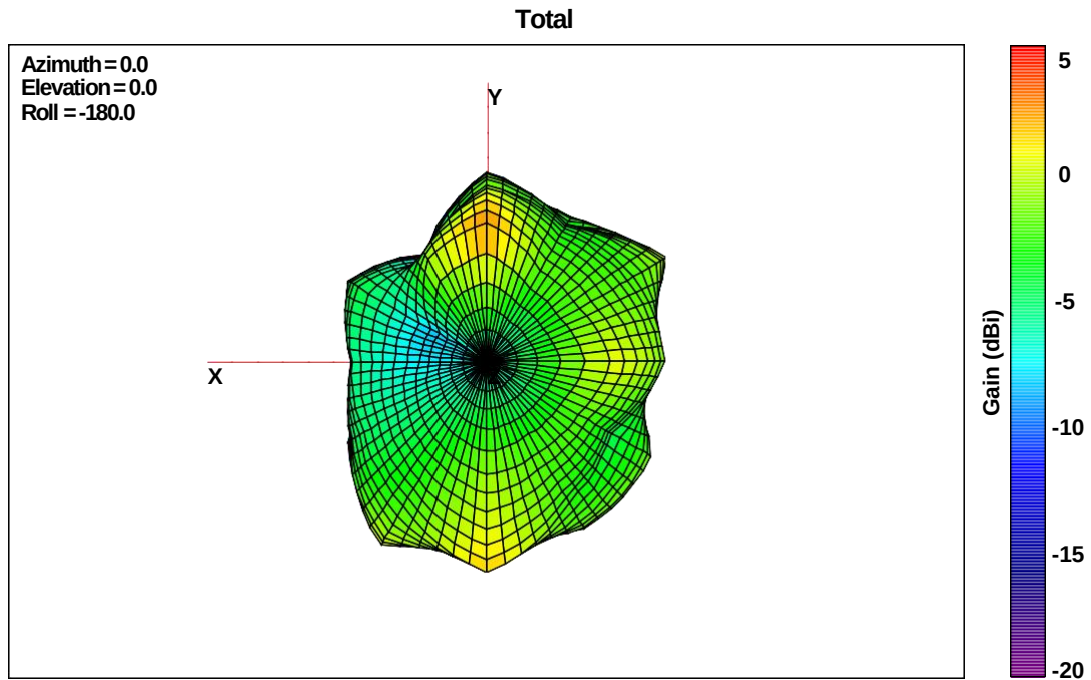




Wifi 6G Antenna

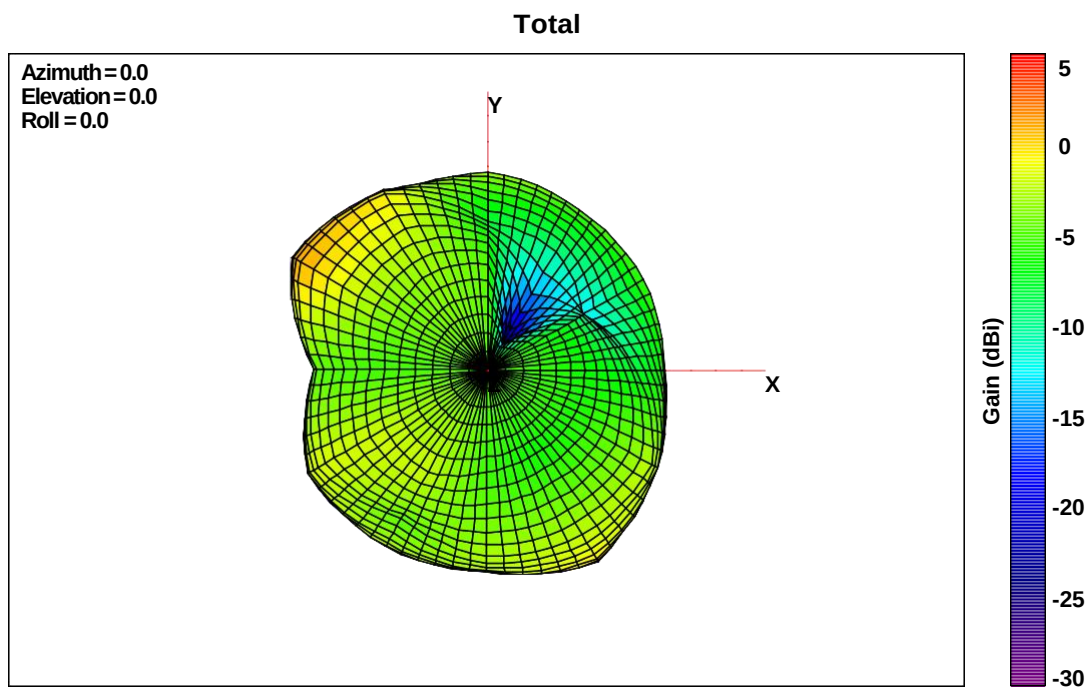
6500MHz





Low Power Wideband Radio in Wi-Fi 5GHz UNII - Band 3(NII)

5800MHz



Total

Azimuth=0.0
Elevation=0.0
Roll=-180.0

