



Customer Name & Project: Slimca2

Prepared By: Chris

Date: 22nd Aug 2023

Airgain Project Code:

- Airgain proposes a FPC antenna solution¹ for Slimca²

- Total 1 antenna need to be integrated into limited housing space:
 - **2.4GHz Signal Band Antenna *1**
Ant1 Frequency Range : 2400-2490 (MHz)

- Passive measurement results are presented

Summary of Requirements



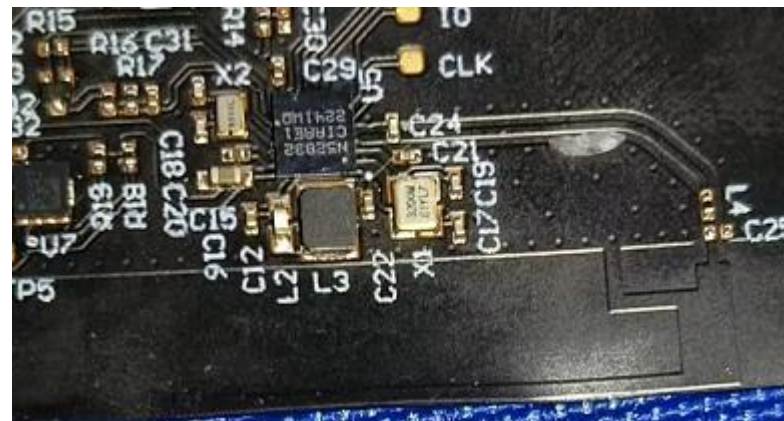
- Return Loss:
<-10dB

Airgain Antenna System Proposal

Antenna System Proposal

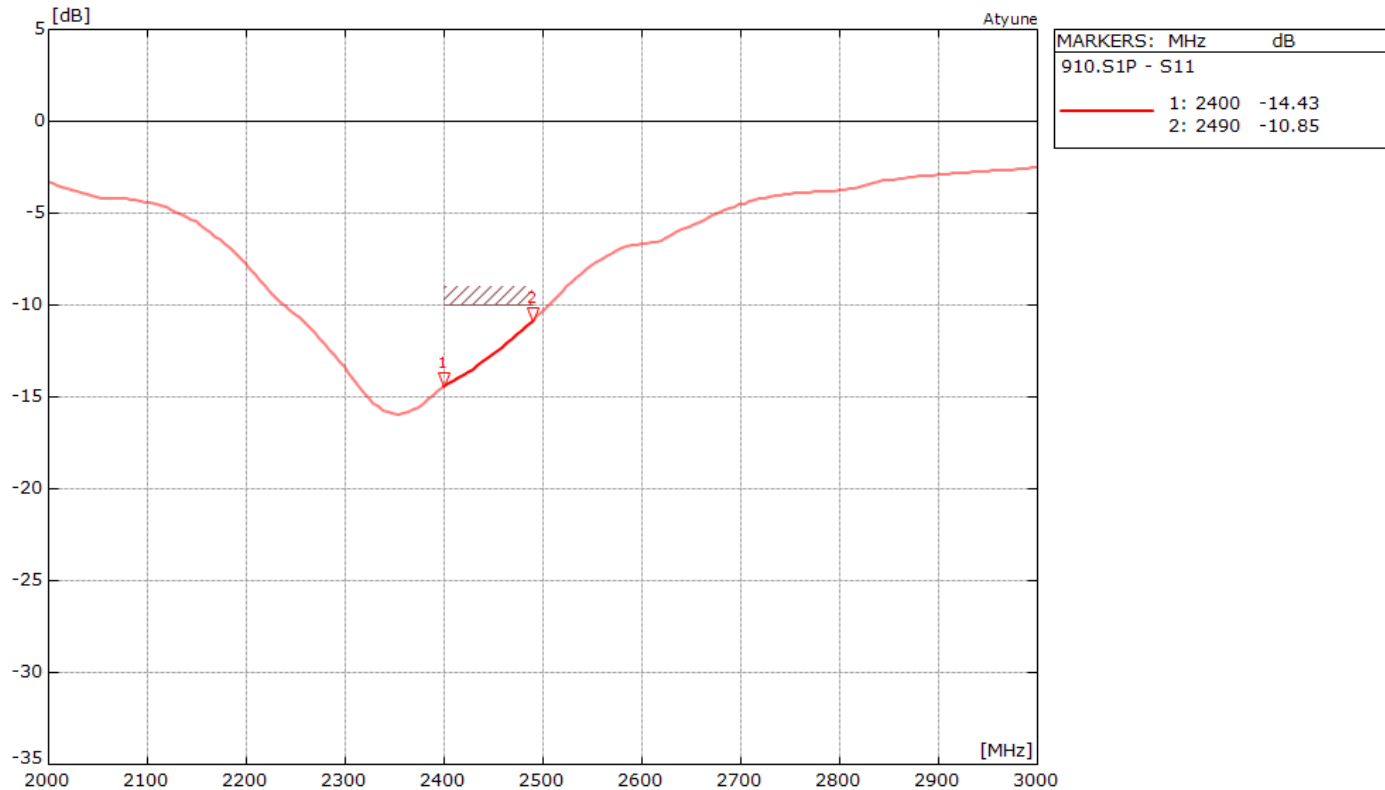


Antenna #	Part Number
ANT_2.4G	TBD



S-Parameters

Reflection Coefficient for 2.4GHz Signal Band Antennas



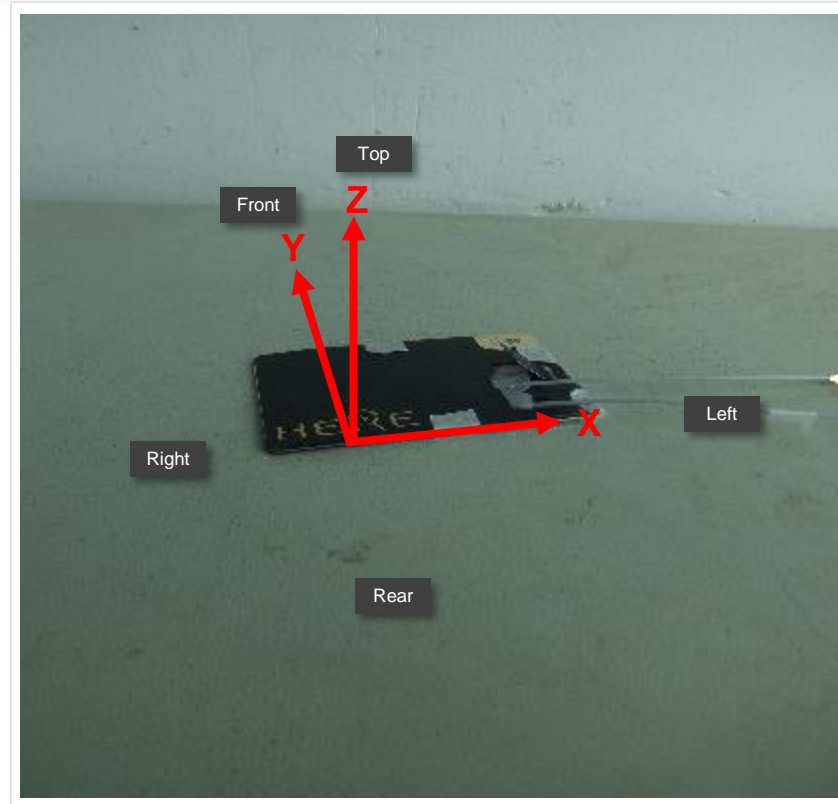
Radiated Measurements

Antenna Peak Gain & Efficiency– 2.4 GHz Wi-Fi Antennas



Frequency (MHz)	Peak Gain (dBi)	Efficiency (%)
2400	0.8	26.1
2410	1.0	27.1
2420	0.9	27.1
2430	0.9	27.3
2440	1.1	27.9
2450	1.1	27.8
2460	1.0	27.7
2470	1.1	28.2
2480	1.1	28.1
2490	1.1	27.9
Average	-	27.5

Radiation Patterns

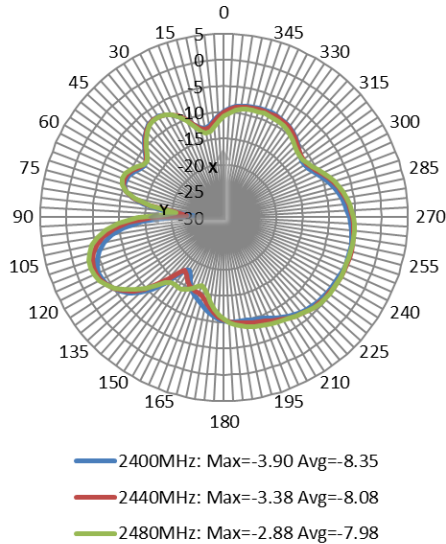


Orientation of Slimca2

Total Gain Patterns: Antenna_2G4

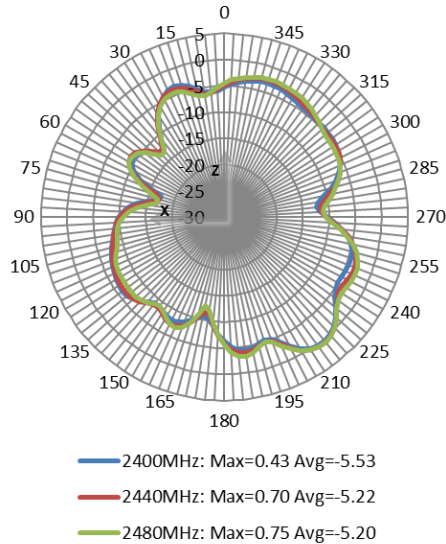


Antenna_2G4 Azimuth XY



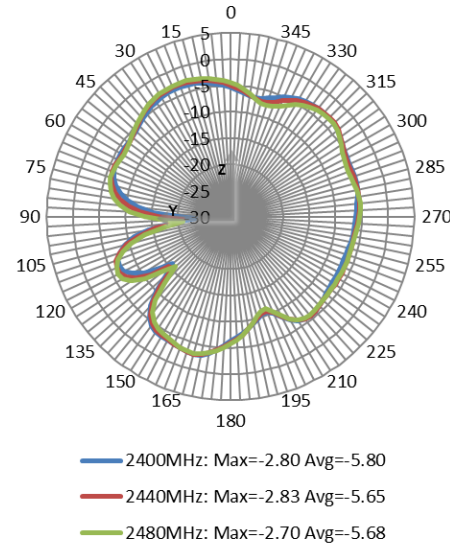
Azimuth (XY)

Antenna_2G4 Elevation XZ

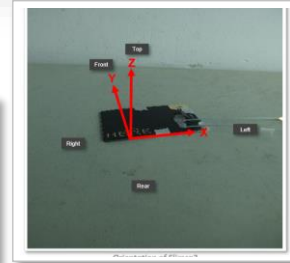


Side to Side (XZ)

Antenna_2G4 Elevation YZ



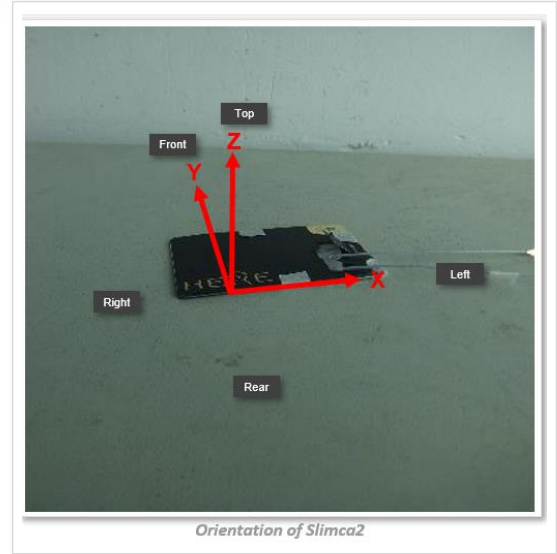
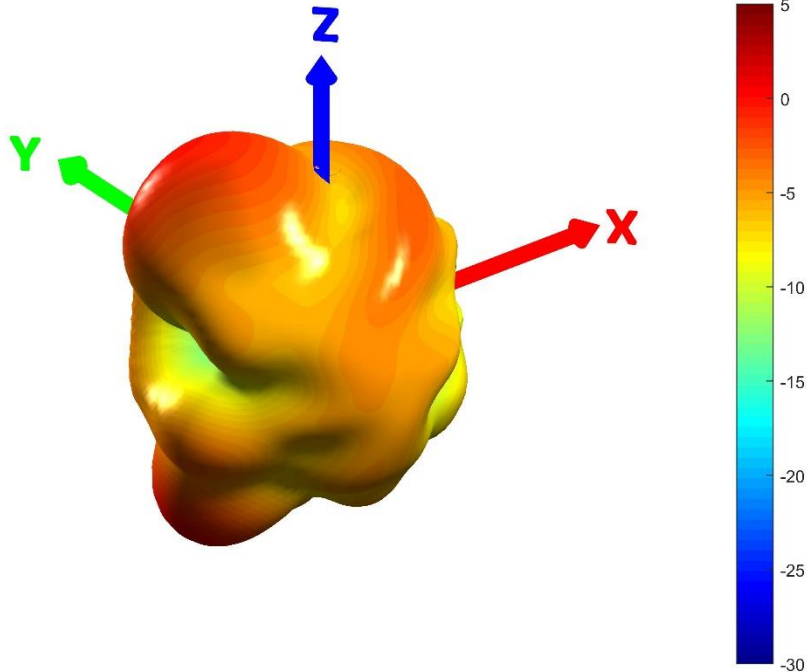
Front to Back (YZ)



Total Gain 3D Pattern: Antenna_2G4 at 2440MHz



Slimca2 Antenna_2G4: Frequency = 2440 MHz Max Gain= 1.1 dBi



- Return Loss :
2.4G antenna < -10dB
- Average efficiency > -27.5%