



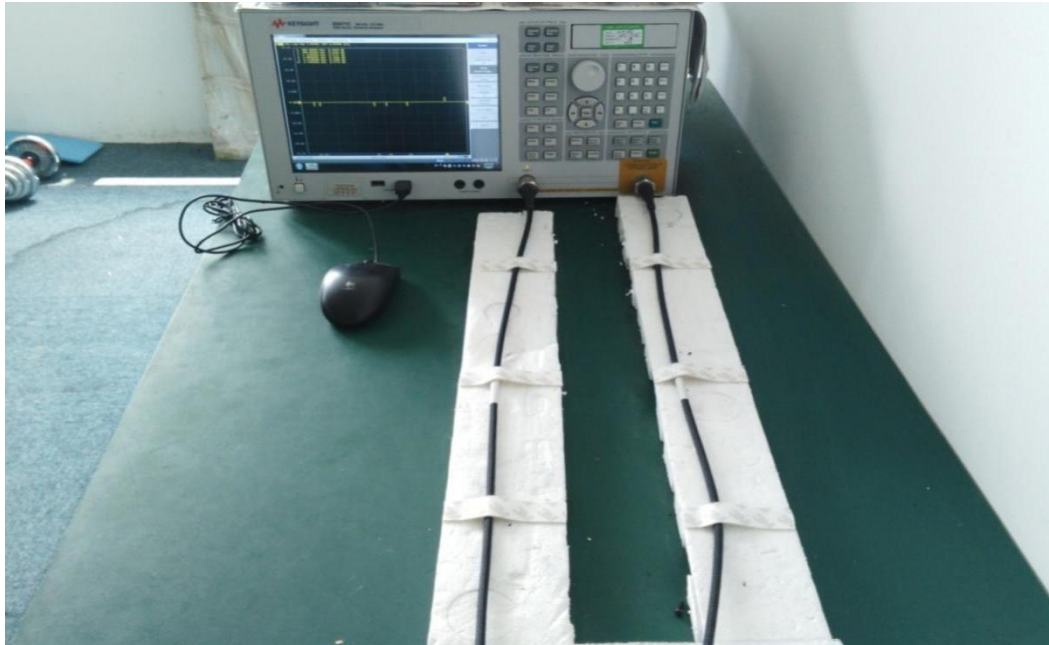
Antenna Test Report

1. RF Fixture Experiment

1.1 Test Setup

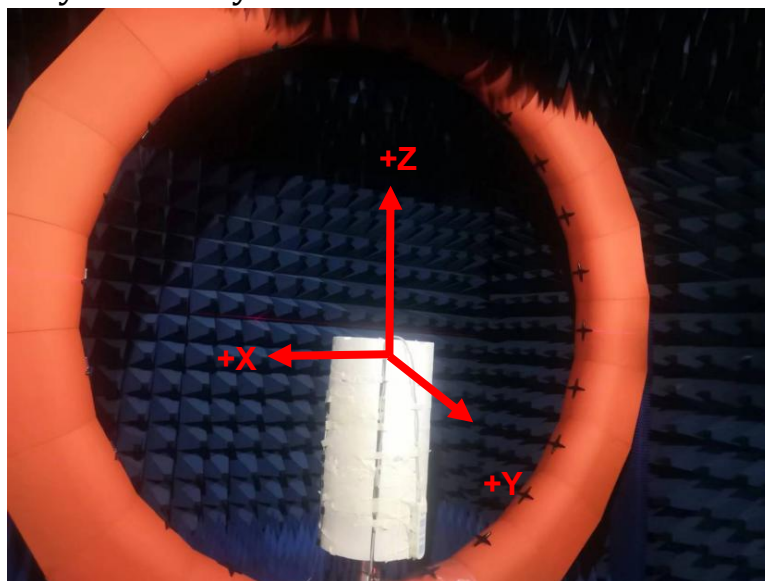
1.1.1 VNA Test Setup

VSWR and Return Loss measurements (S_{11}) were performed using an Keysight E5071C Network Analyzer. The isolation between antennas is also tested. The testing was performed with apparatus in free space.

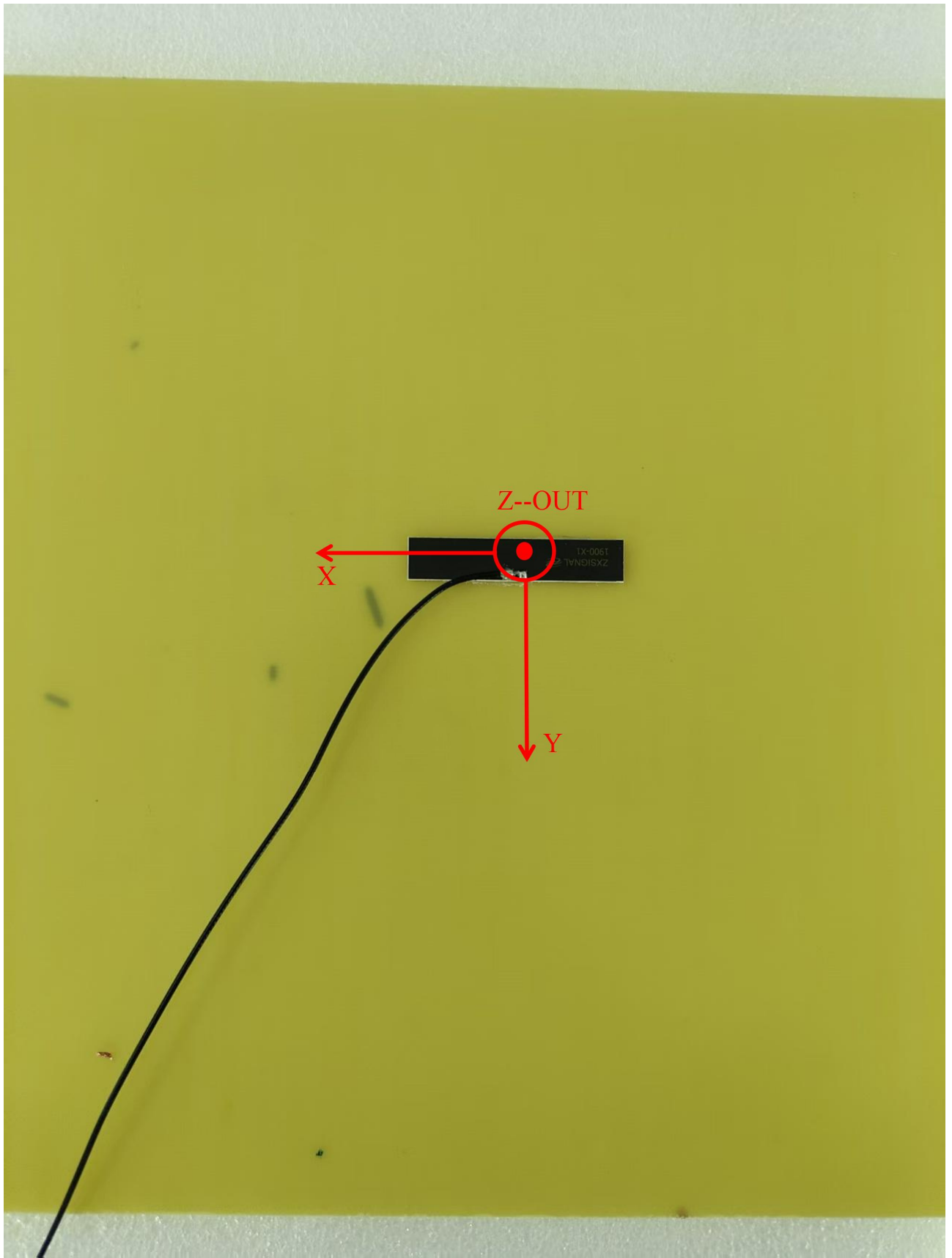


1.1.2 Anechoic Chamber Test Setup

The gain of the antenna was measured in the anechoic chamber. The chamber provides less than -30 dB reflectivity from 400 MHz through 6 GHz. The chamber size is: 7m*4m*3m. The measurement results are calibrated using a leaky wave horn standard. We can measure the antenna gain and efficiency accurately.



2. Antenna Solution

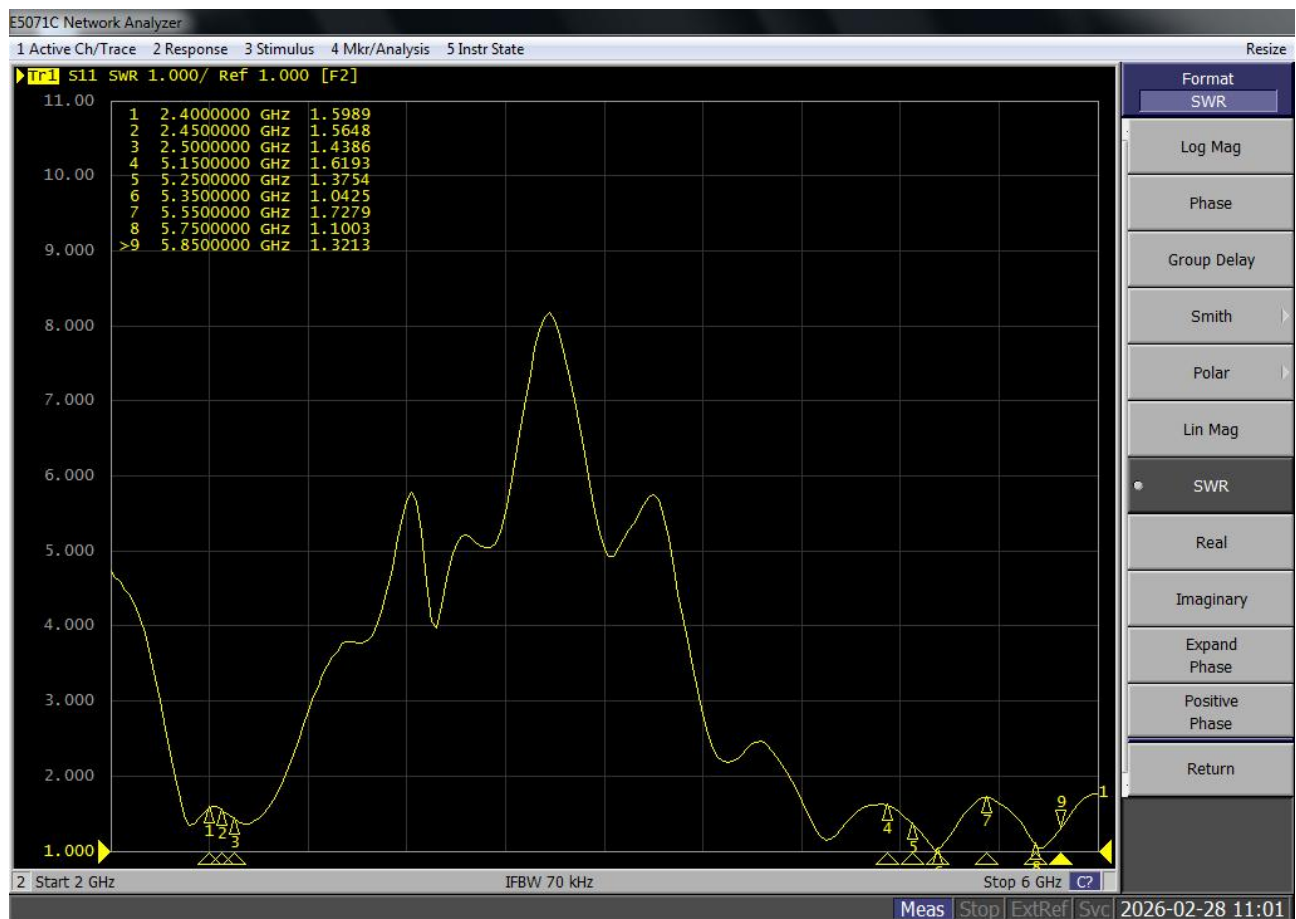


Data Preview

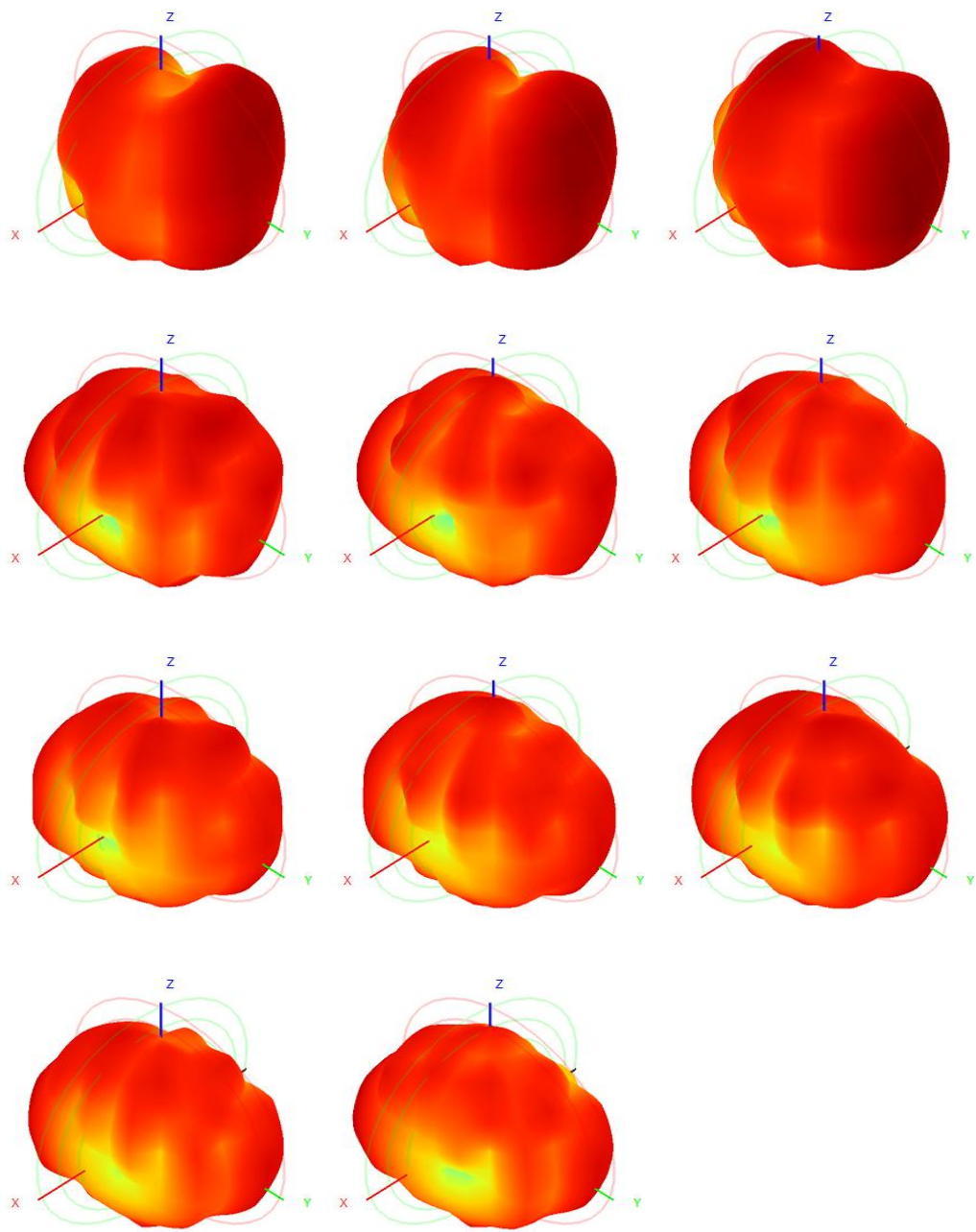
Freq.(MHz)	2400	2450	2500	5150	5250	5350	5450	5550	5650
VSWR	1.59	1.56	1.43	1.61	1.48	1.37	1.04	1.56	1.72
Gain(dBi)	3.51	3.52	3.16	2.73	3.58	3.86	3.64	3.00	3.45
Eff.%	57.19	62.14	64.13	58.31	66.39	67.59	60.67	56.78	63.16

Freq.(MHz)	5750	5850
VSWR	1.10	1.32
Gain(dBi)	3.91	3.90
Eff.%	58.92	57.87

S11

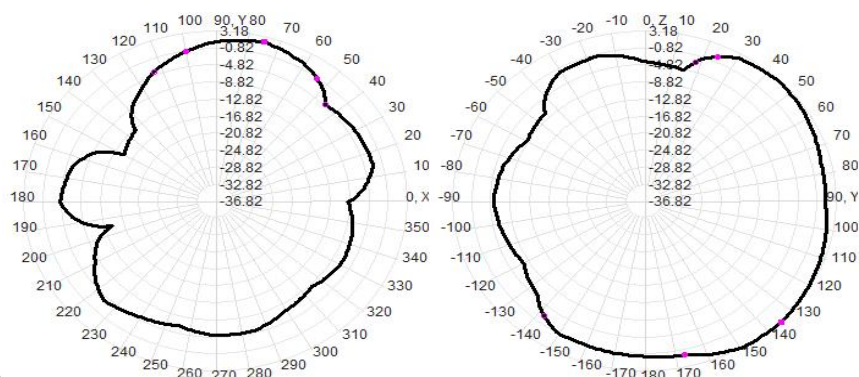


ANT-WIFI1-Radiationpatterns:3D(2400/2450/2500/5150/5250/5350/5425/5550/5650/5750/5850MHz)

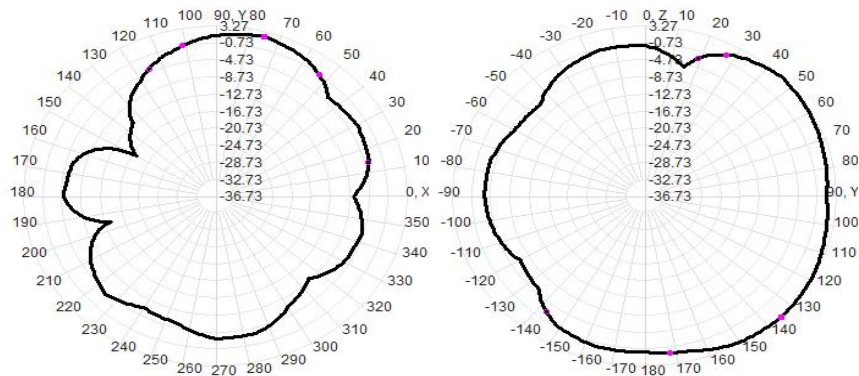


ANT-WIFI1-Radiationpatterns:2D(2400/2450/2500/5150/5250/5350/5425/5550/5650/5750/5850MHz)

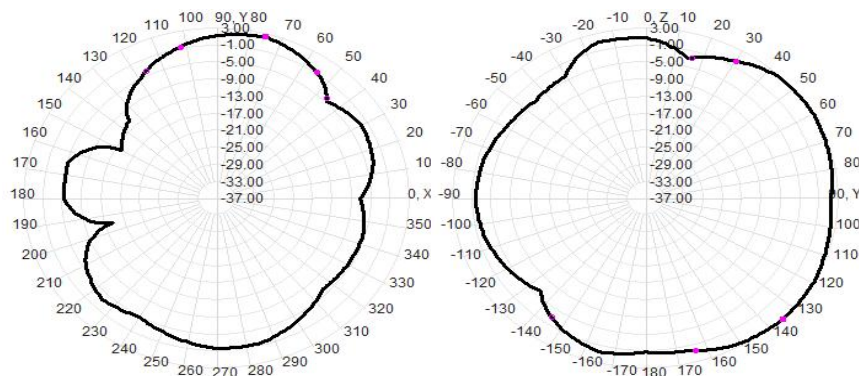
2400



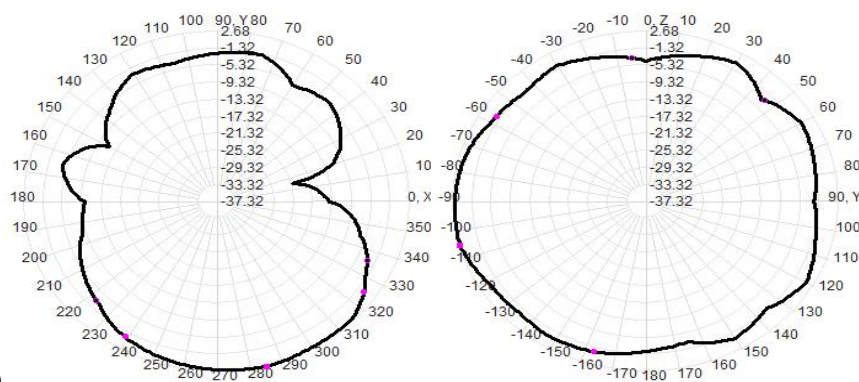
2450



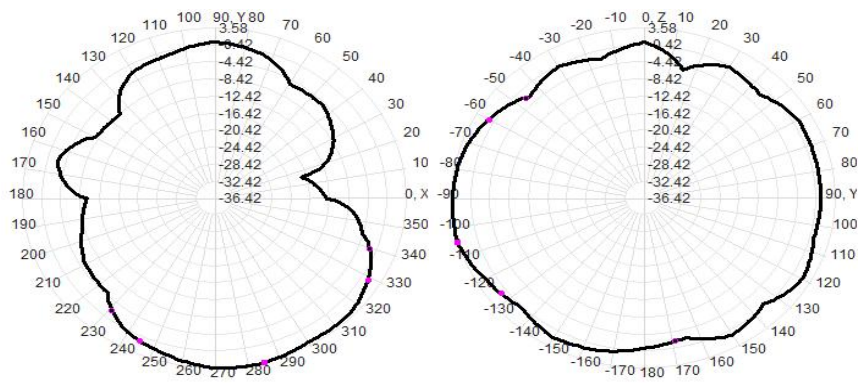
2500



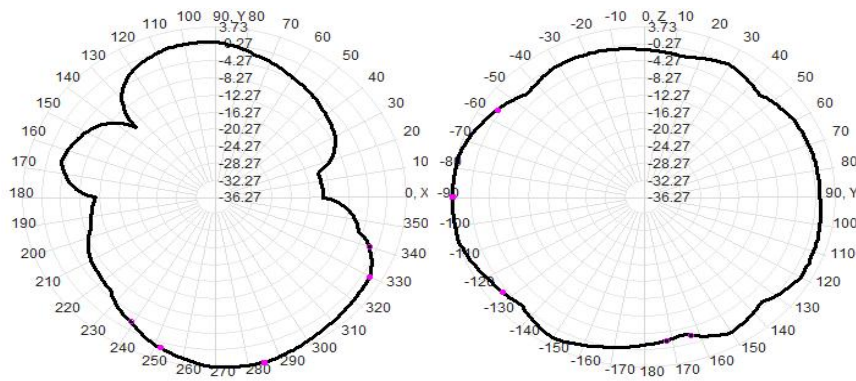
5150



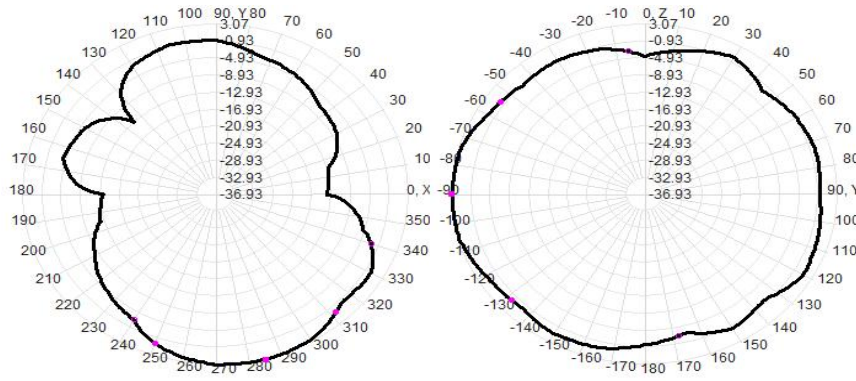
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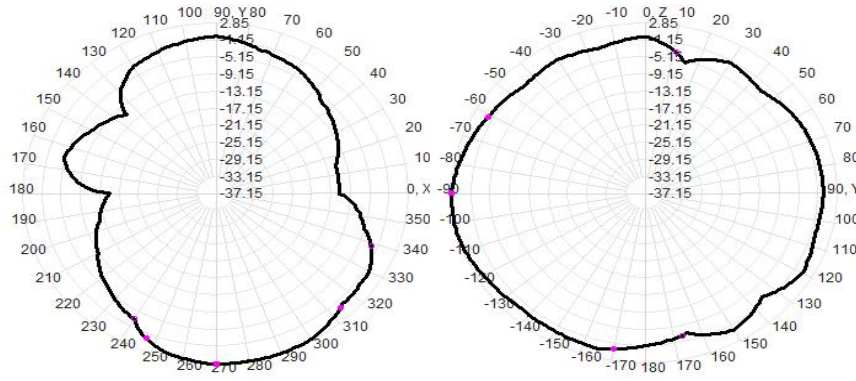
5350



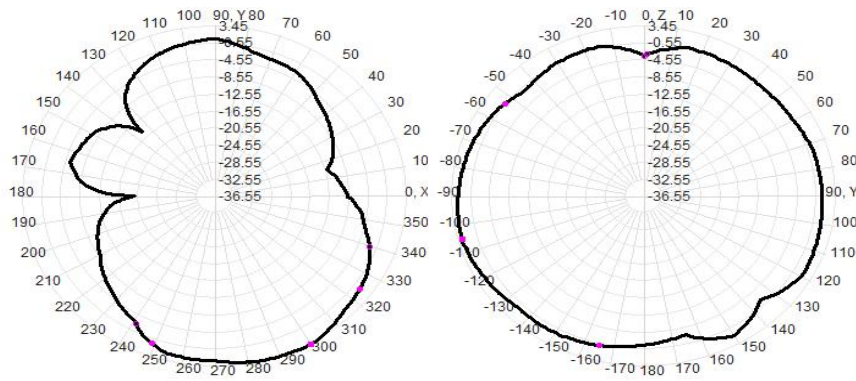
5450



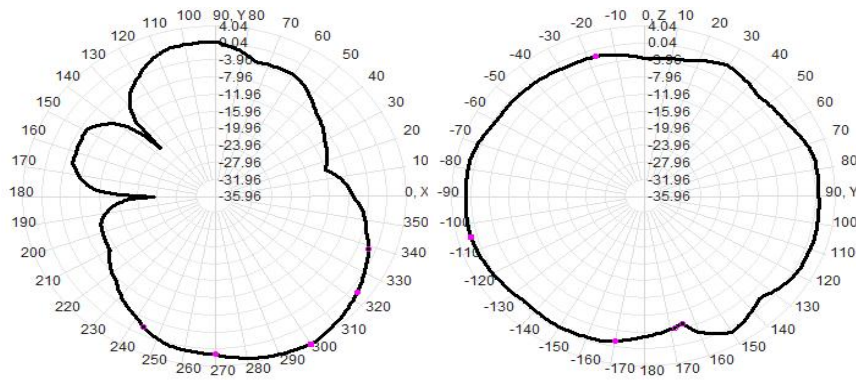
5550



5650



5750



5850

