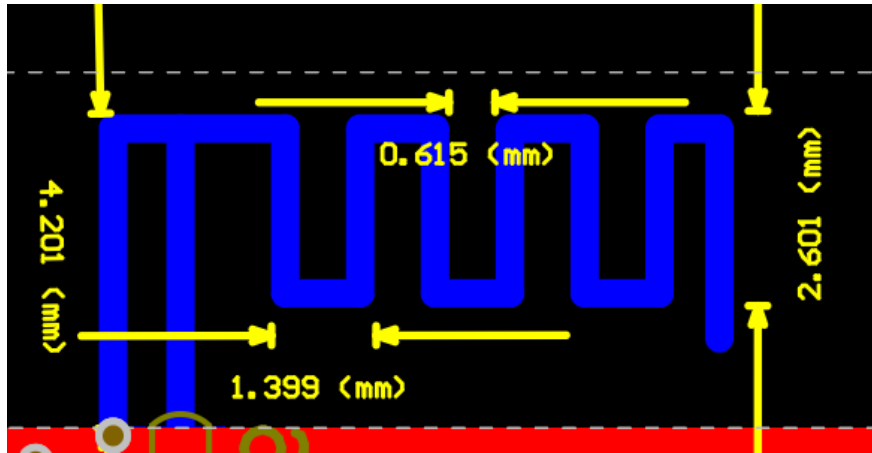


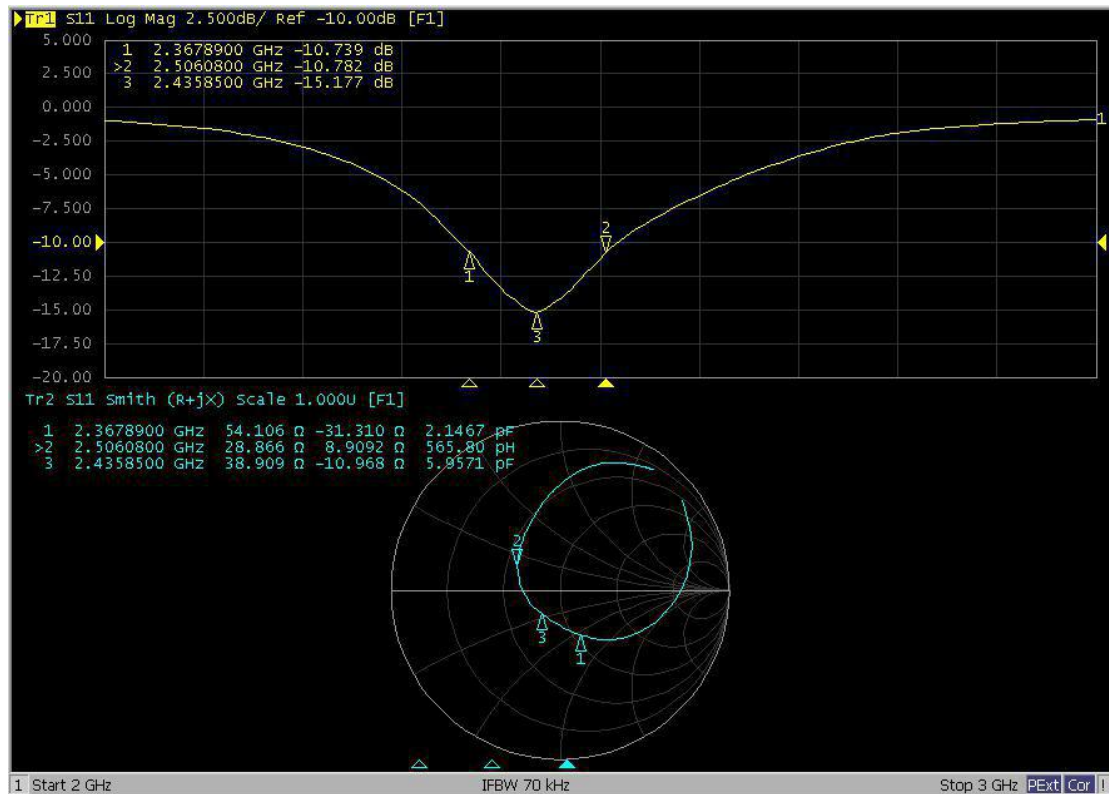
- Normal Dongle PCB antenna design specification:

This PCB antenna is used in normal dongle with whole layout board which size is 15mm*18mm and thickness is 1.0mm (FR4)



2-1 Normal Dongle PCB Antenna

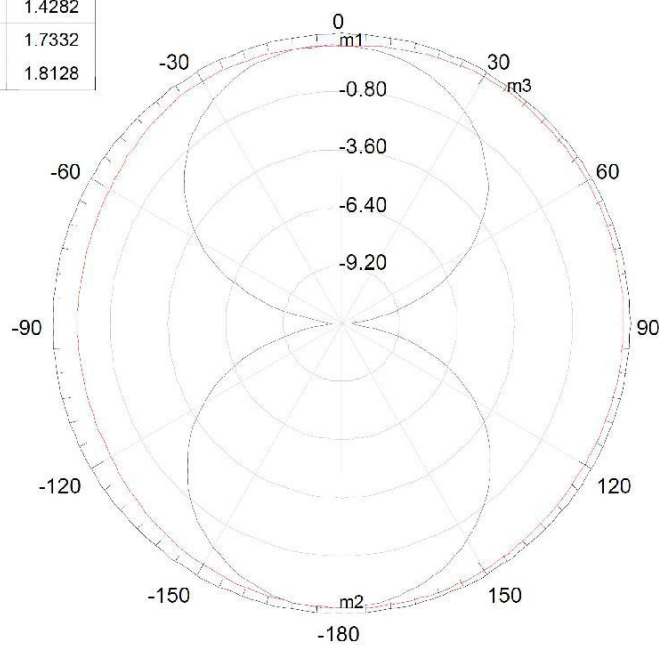
The performance of S11 as blow show and the working frequency band cover 2.4G ISM and bandwidth is wider than nano dongle.



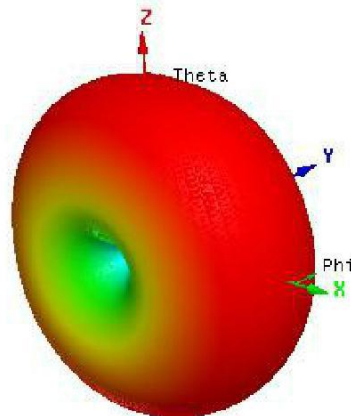
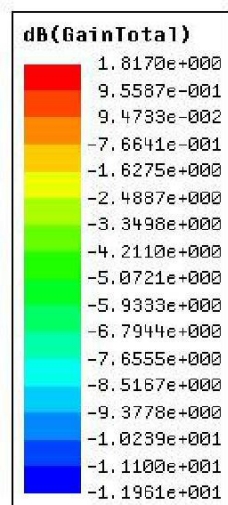
2-2 Normal Dongle PCB S11 performance

The gain of this antenna 2D and 3D as blow show and the maximum gain is about 1.5dB.

Name	Theta	Ang	Mag
m1	0.0000	0.0000	1.4282
m2	180.0000	180.0000	1.7332
m3	36.0000	36.0000	1.8128



Curve Info	
dB(GainTotal)	
Setup1 : Sweep1	
Phi='0deg'	
dB(GainTotal)	
Setup1 : Sweep1	
Phi='90.0000000000002deg'	



Radiation Patterns(GAIN @ 2440MHz)

Plane	XY			XZ			YZ		
Frequency(MHz)	2400	2440	2480	2400	2440	2480	2400	2440	2480
Peak Gain(dBi)	1.70	1.73	1.71	1.79	1.81	1.78	1.71	1.73	1.72

2-3 Normal Dongle PCB gain

Manufacturer: Hongtian Circuit Technology Co., Ltd.

Address: 38 districts of Development 2 District, Wan'an County, Ji'an City, Jiangxi Province , Hongtian circuit