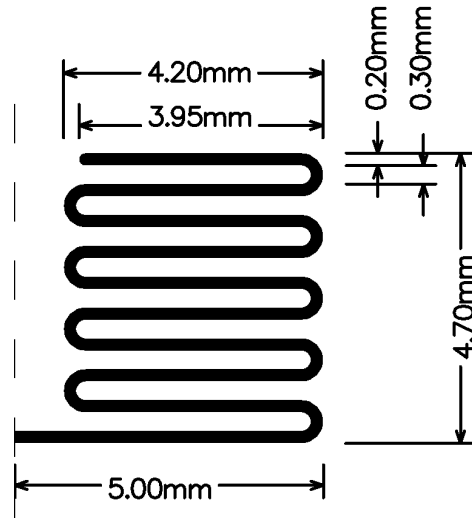


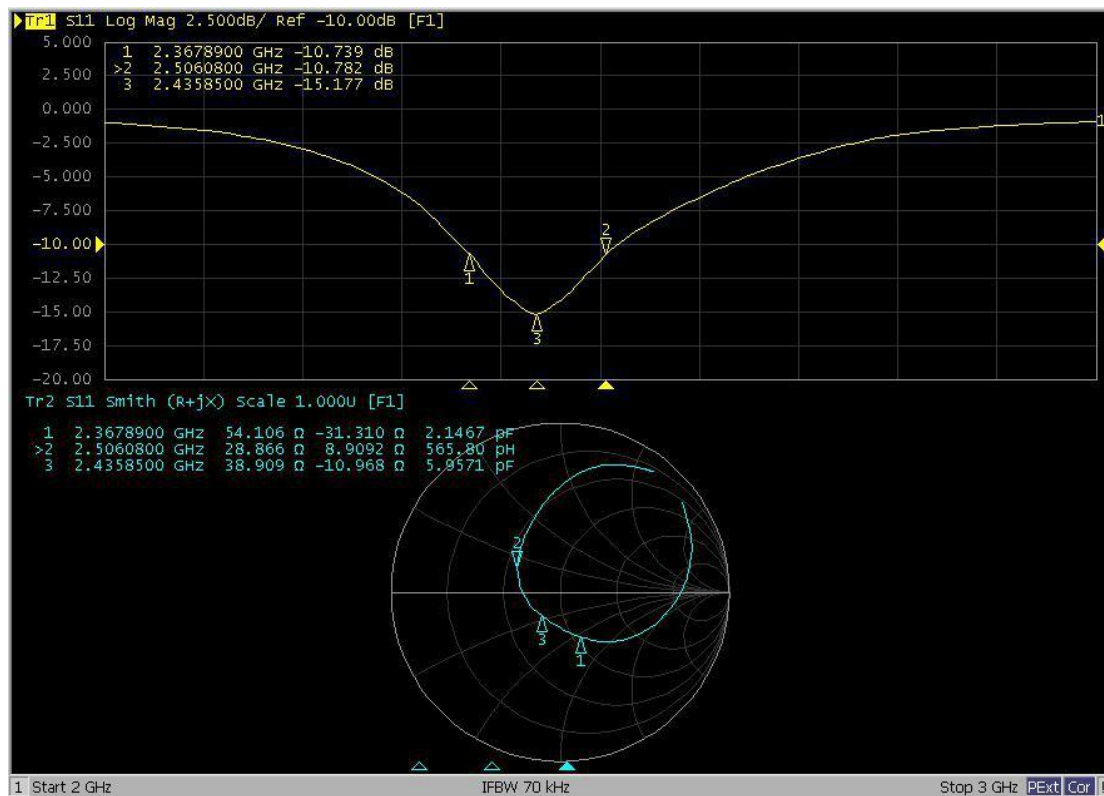
- CDB13 PIFA antenna design specification:

This PIFA antenna is used in HW-B01 modules with whole layout board which size is 4.2mm*8.5mm and thickness is 0.4mm (FR4)



1 1 Normal Dongle PIFA Antenna

The performance of S11 HW-B01 as blow show and the working frequency band cover 2.4G ISM and bandwidth is wider than normal antenna.

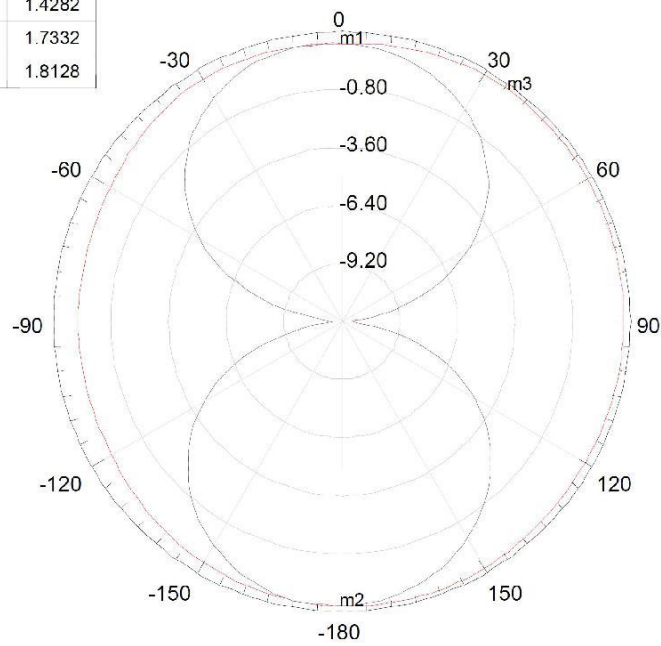


1-2 Normal Dongle PIFA S11 performance

Manufacture's Name : Dongguan City fifty-five degrees intelligent technology LTD
 Address : Jiangrui High Salary Science Park, Liangping West Road, Liaobu Town, Dongguan City, Guangdong Province

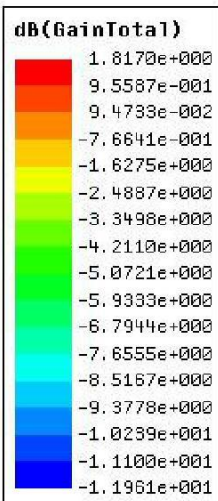
The gain of this antenna 2D and 3D as blow show and the maximum gain is about 1.5dB.

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'	

2440MHz



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

1-3 Normal Dongle PIFA gain