

Antenna Specification

Model:BM16

Version: V1.1

Update Date: October 07,2021

Shenzhen Yilian Internet of Things Co., Ltd. All rights reserved

The specifications of this product are subject to change without notice.

Shenzhen Yilian Internet of Things Co., Ltd. reserves the right to make changes to the specifications and materials contained in it without prior notice, and at the same time damage (including consequential damage) caused by trust in the materials cited, including But not limited to errors in printing and other errors related to this publication, Yilian Internet of Things will not be held responsible.

Contents

Contents..... - 1 -

1 Antenna size (Unit: mm) - 1 -

2 Antenna specification parameters..... - 2 -

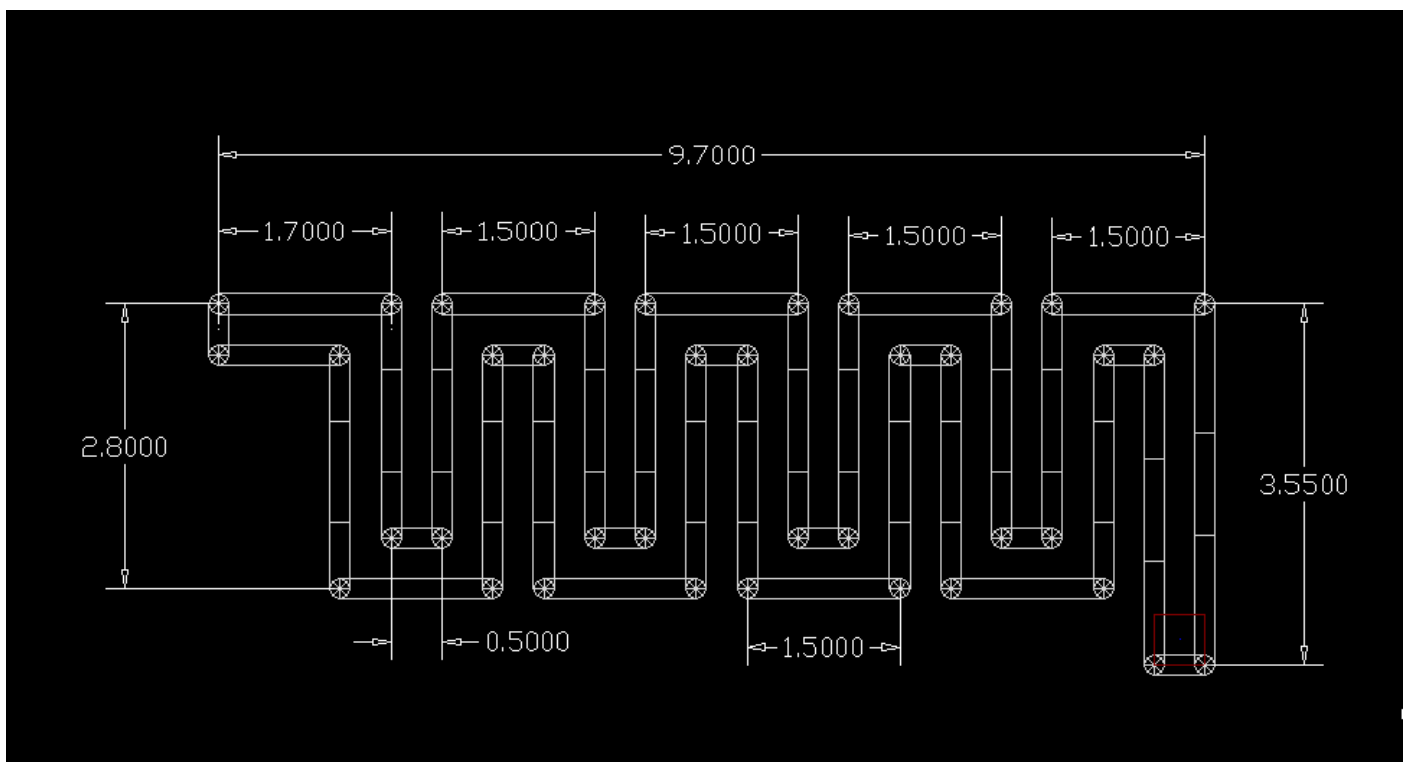
3 Deoning frequency of antenna network..... - 2 -

4 Antenna test efficiency..... - 3 -

5 2D fig..... - 4 -

6 3D fig..... - 5 -

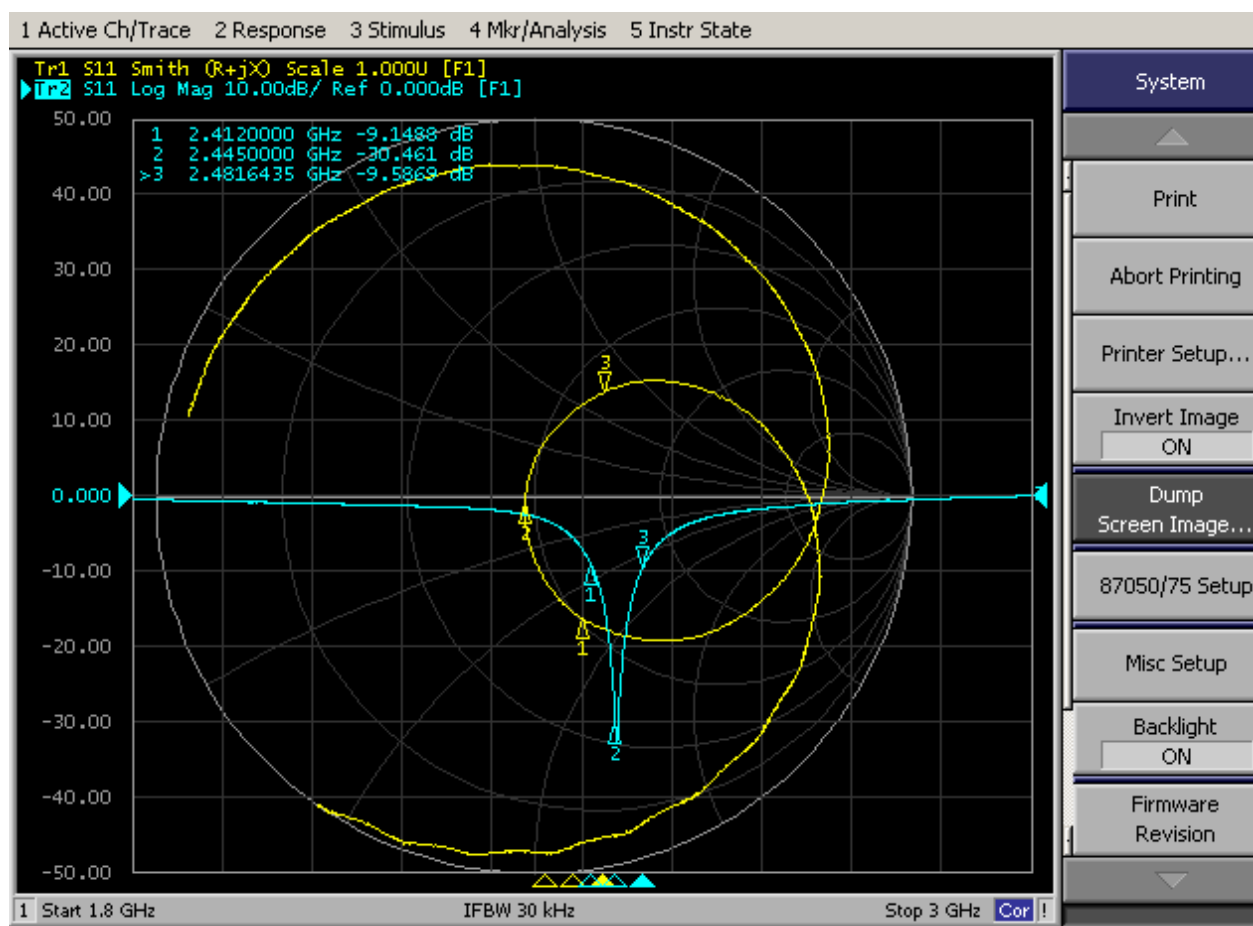
1 Antenna size (Unit: mm)



2 Antenna specification parameters

number	Parameter item	Description
1	Center operating frequency	2441MHz
2	Work bandwidth	2402---2480Mhz
3	Rate of data signalling	1Mbps
4	Antenna type	On-board PCB antenna (default)
5	Antenna gain	-1.088dBi
6	Impedance	50ohm
7	Modem type	GFSK

3 Deoning frequency of antenna network



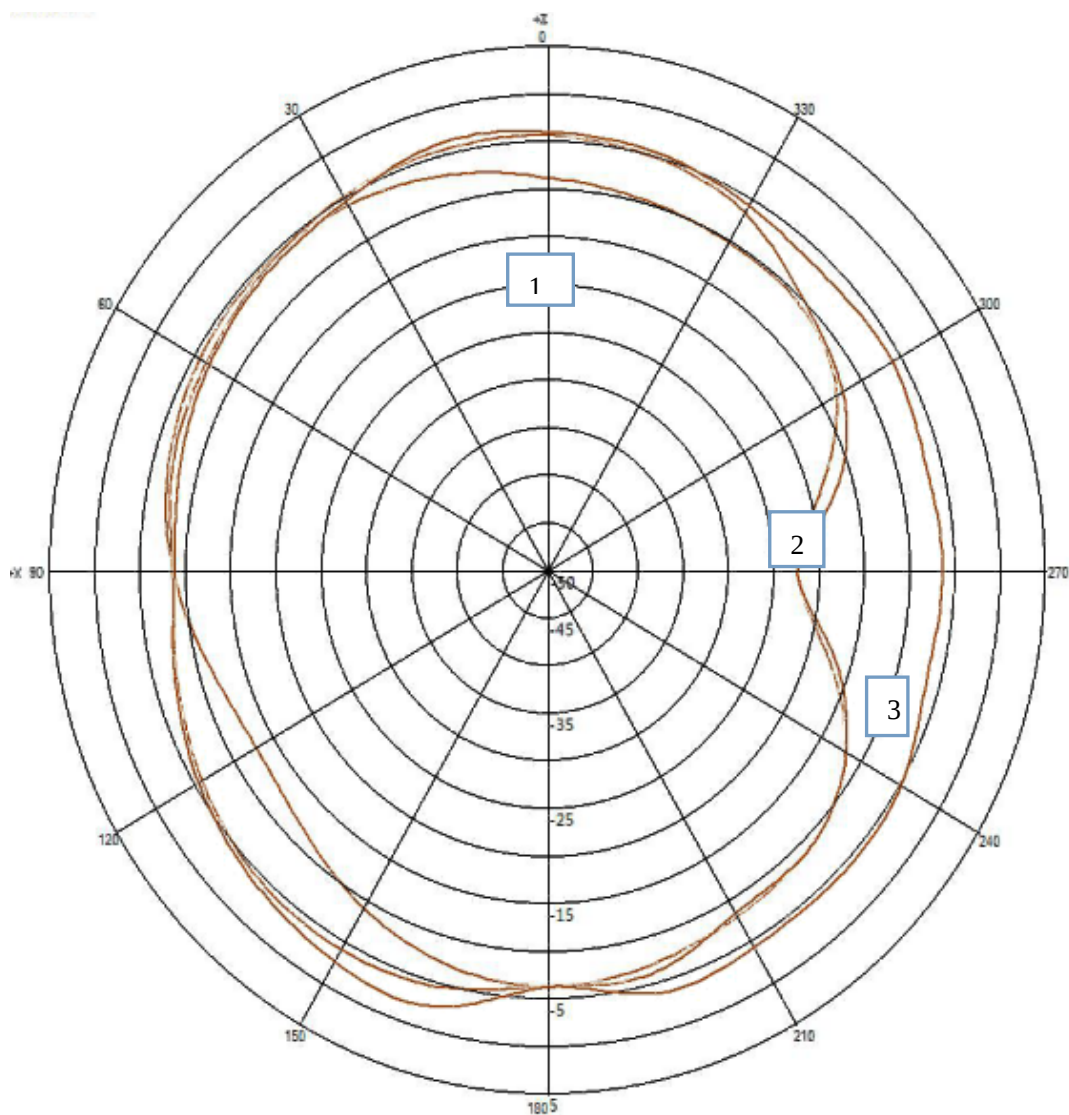
The return loss of the antenna at 2.445ghz is - 30dB and the impedance is about 50. Bandwidth 80m
Experimental environment: Elink laboratory

4 Antenna test efficiency

The return loss of the antenna at 2.445ghz is - 30dBi and the impedance is about 50. Bandwidth 80mpassive test for 2.4g			
Freq (MHz)	Gain(dBi)	Efficiency(dBi)	Efficiency (%)
2400	-2.125670268	-6.512982178	22.32039018
2410	-1.839793728	-6.350555158	23.17098436
2420	-1.64029678	-6.246810655	23.7311582
2430	-1.328848956	-5.925152964	25.5555189
2440	-1.132319256	-1.088	26.30538676
2450	-1.087960046	-5.849299265	26.00579133
2460	-1.316358881	-6.006721723	25.08001707
2470	-1.579335991	-6.245067499	23.74068524
2480	-1.962892418	-6.454212193	22.62448909
2490	-2.50538583	-6.753449407	21.11811056
2500	-3.031894388	-7.252236224	18.8267943

5 2D fig

- (1) XY-Plane
- (2) ZY-Plane
- (3) ZX-Plane



6 3D fig

