

# Antenna Specification

Model:BM16

Version: V1.1

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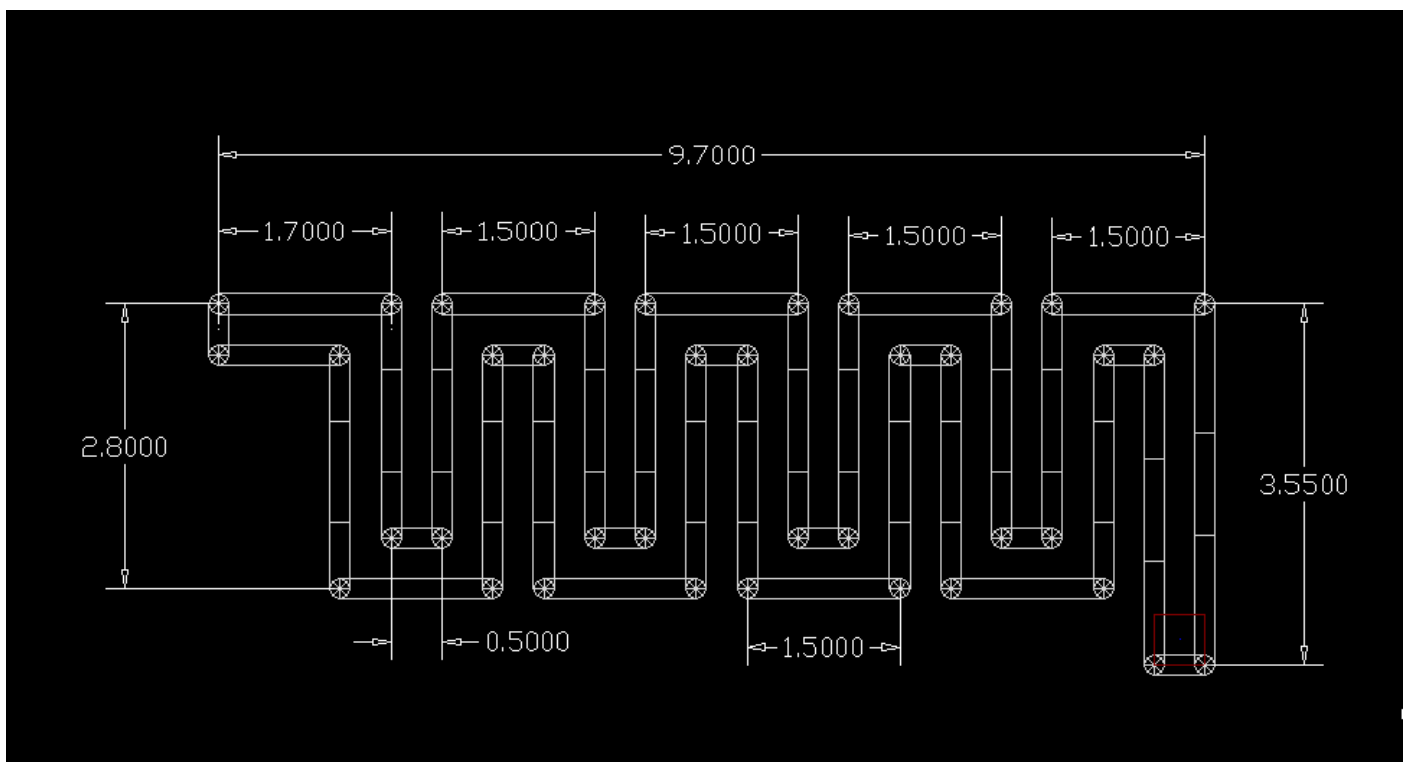
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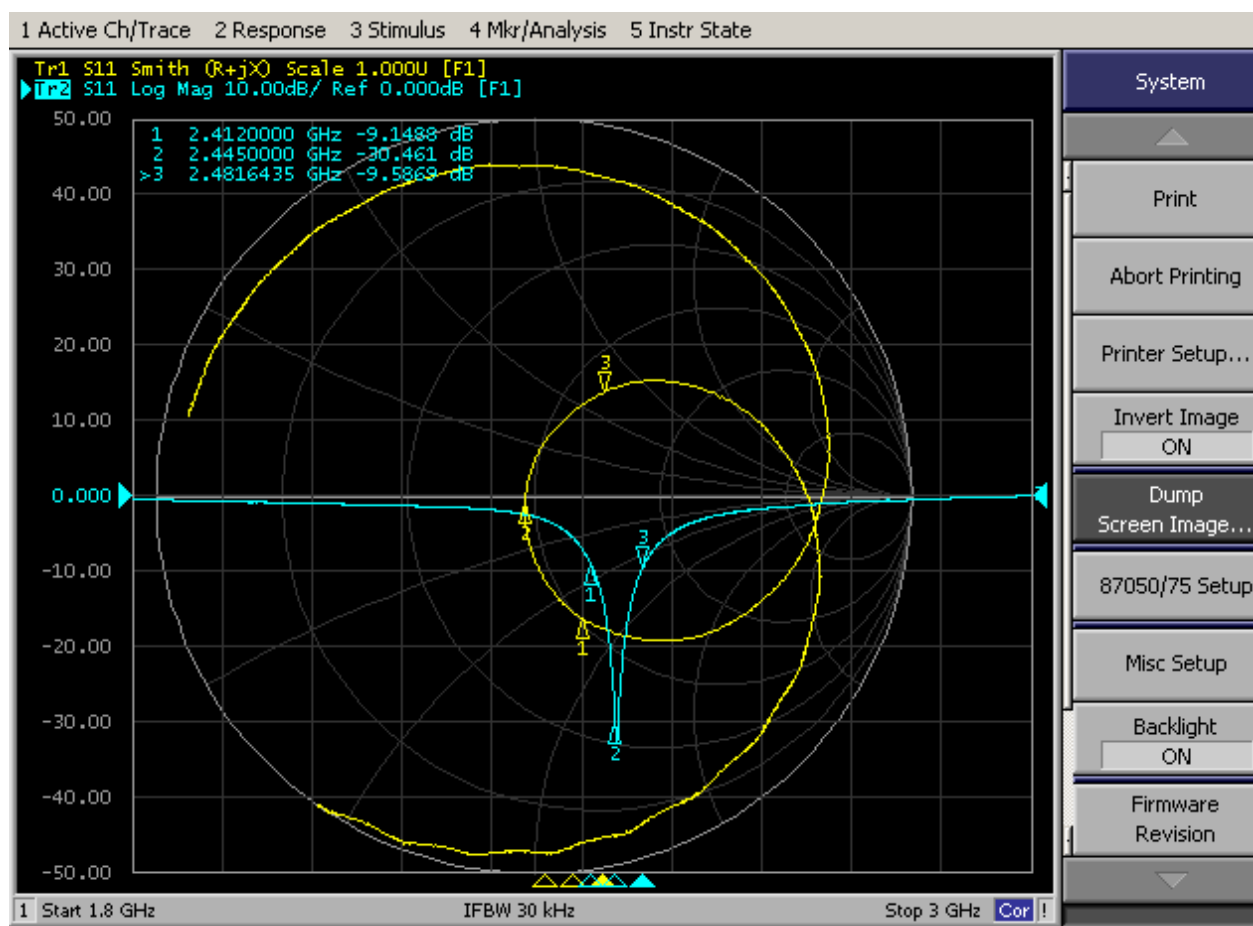
## 1 Antenna size (Unit: mm)



## 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



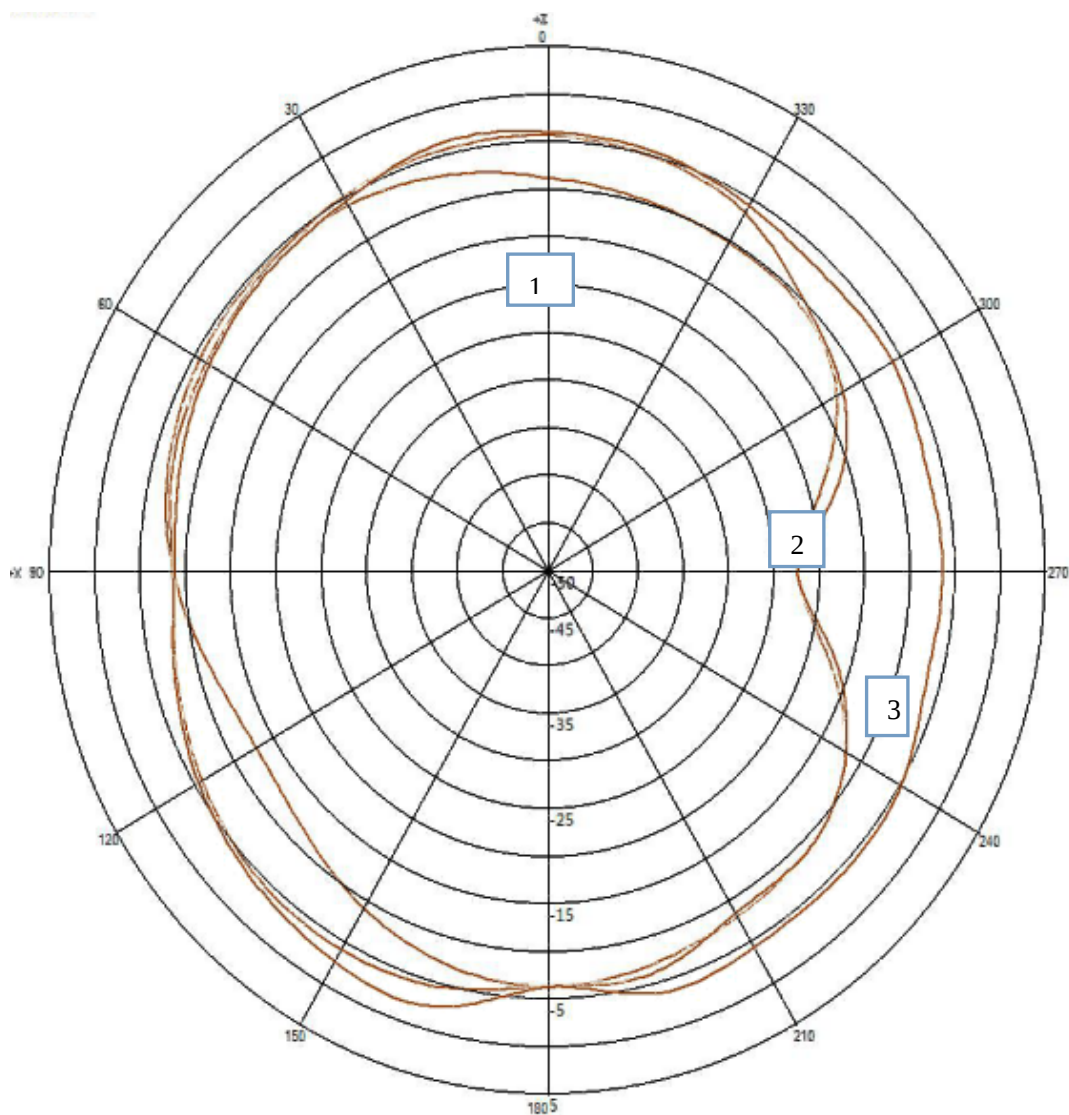
The return loss of the antenna at 2.445ghz is - 30dB and the impedance is about 50. Bandwidth 80m  
Experimental environment: Elink laboratory

## 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

