

Antenna Test Report

Shenzhen Luomandi Electronic Technology Co., Ltd

Longhua Dist, Minzhi St, 810 Mintai Bldg, No. 241 Minzhi Ave, Shenzhen 518131, China

Product Name: Smart Watch

Model: B40

Customer	
Project	F 19DL
Antenna Revision	A0
Product Description	PCB
Product No	

Purpose

This report is to measure the performance of $p'c'b$ antenna for 德—BT256. All test data are shown as below.

Content

- 1: Product Overview & Dimension
- 2: Test Result
 - 2.1 Test System
 - 2.2 Antenna Matching Network
 - 2.3 VSWR
 - 2.4 Gain & Efficiency
 - 2.5 3D Data

3. Antenna Assembly Method

4. Conclusion

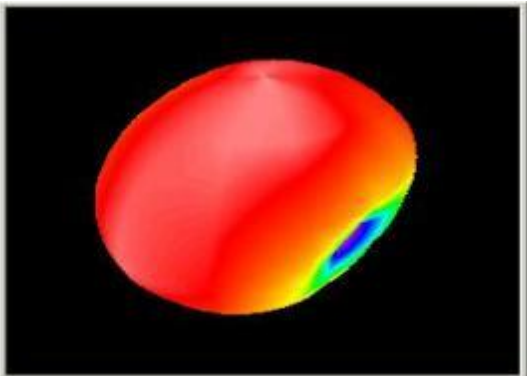
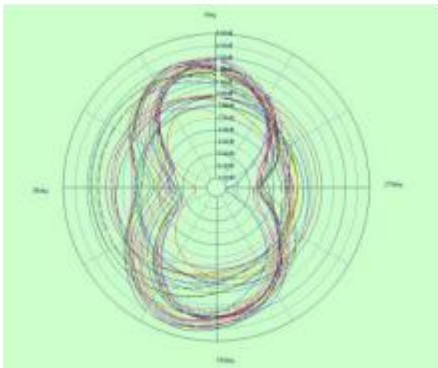
1. Product Overview & Dimension

Antenna

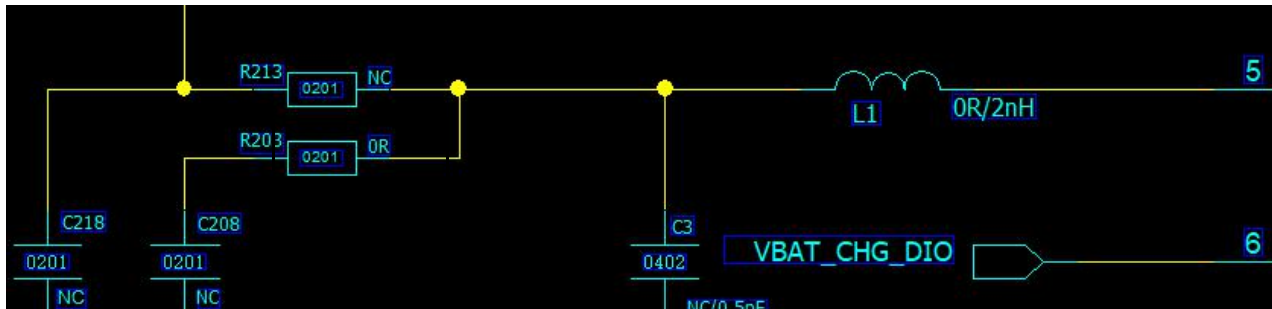


2. Test System

Sequence Number	Test Item	equipment
1. S parameter	VSWR	Agilent 5071C & Agilent 5062A
2. OTA Test	TRP&TIS	Agilent 8960 E5515C& Agilent 4438C&CMW500 &CMW270 ETS&SATIMO
3. Gain & Efficiency	Gain & Efficiency	ETS&SATIMO Agilent 5071C

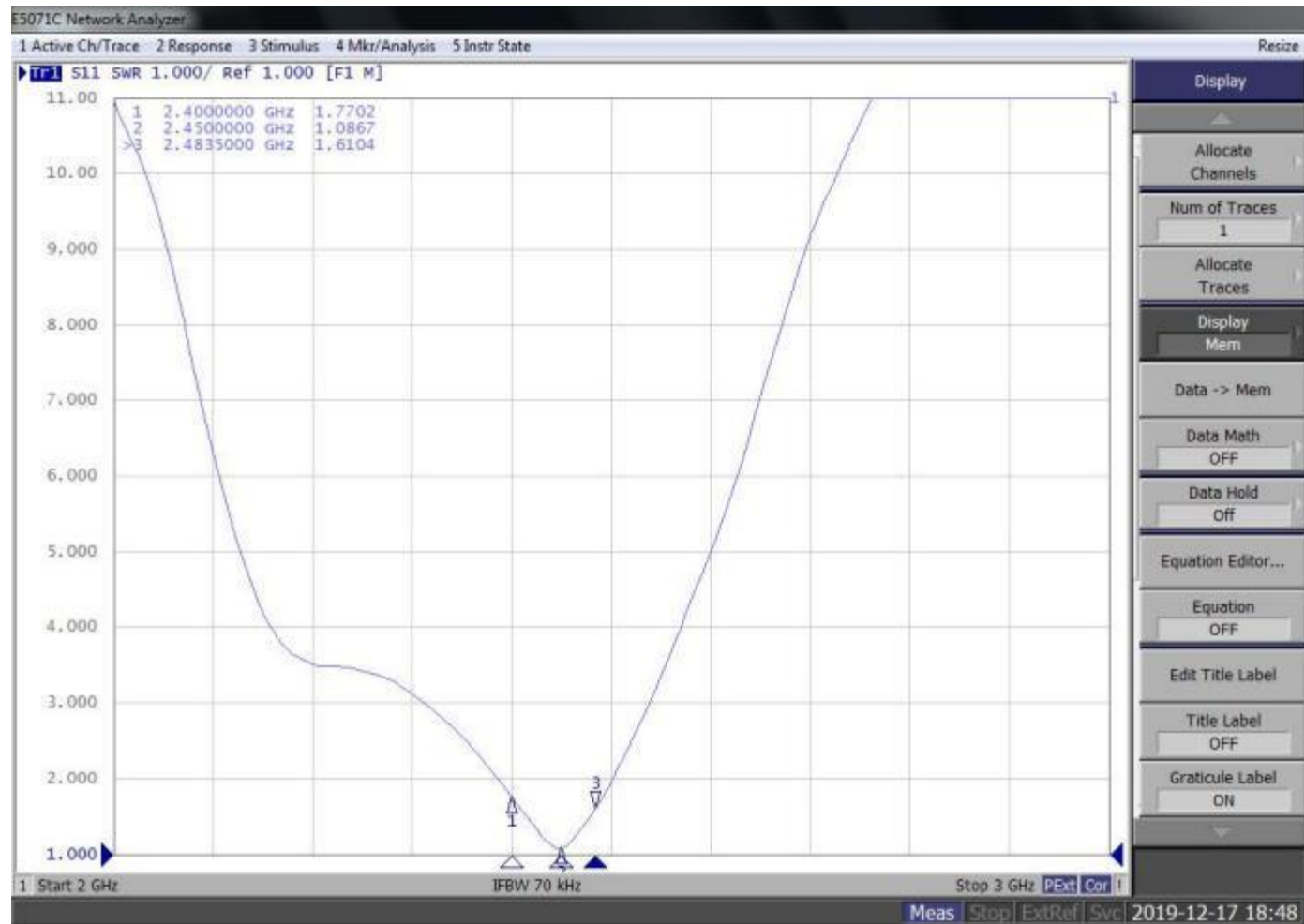


2.1 Antenna Matching Network

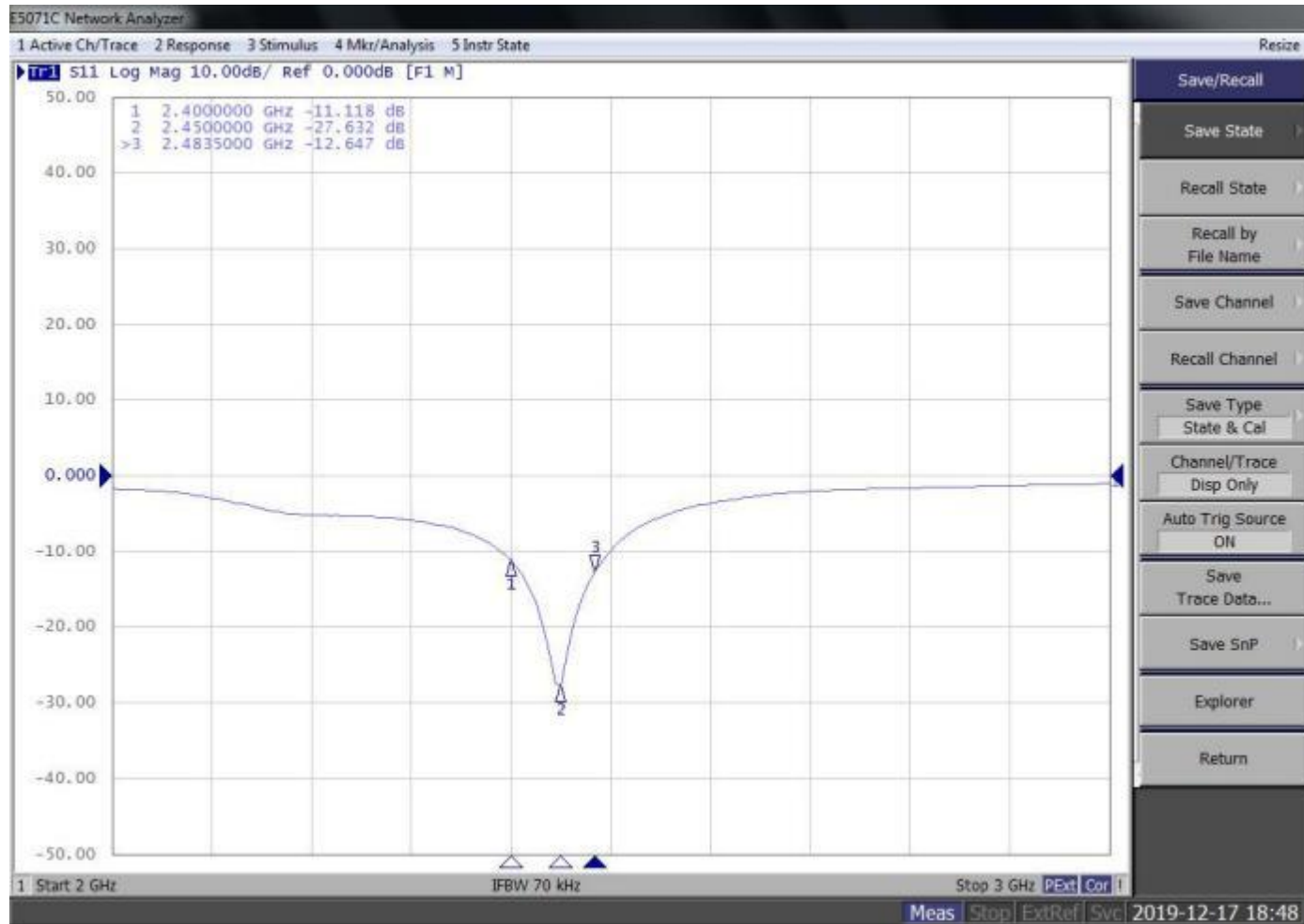


Element	Value
L1 (0402)	2nH
C3(0402)	NC
R 213(0201)	NC
R203(0201)	2.2nH
C 208(0201)	NC
C 218(0201)	NC

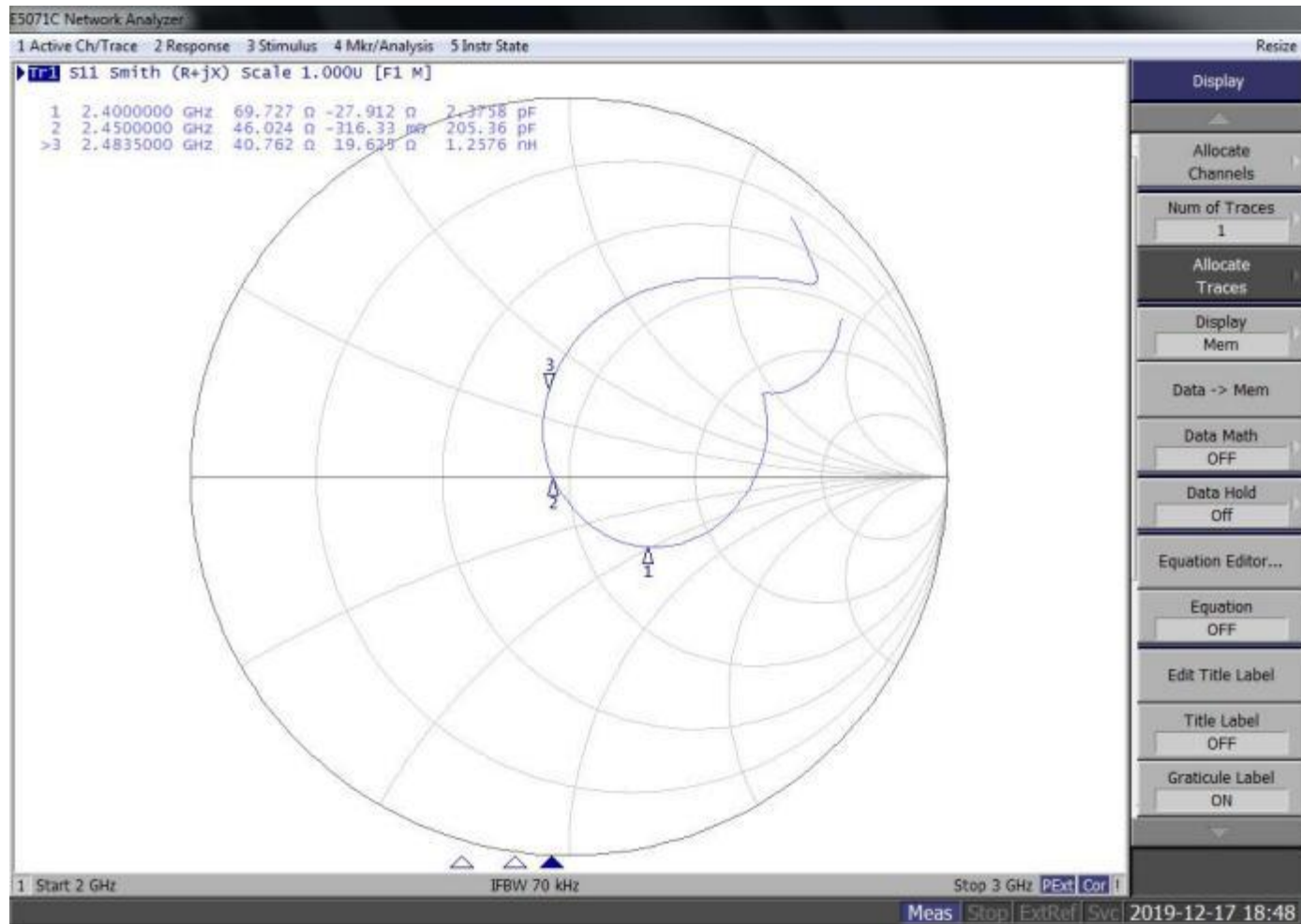
2.2 VSWR



2.3 RETURN LOSS



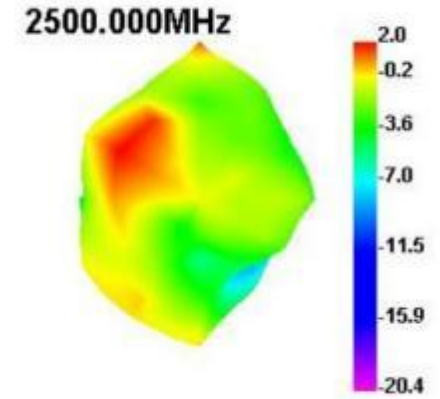
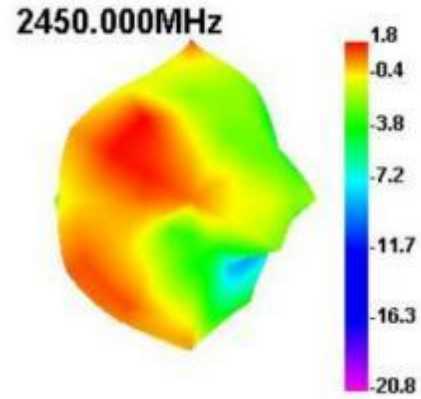
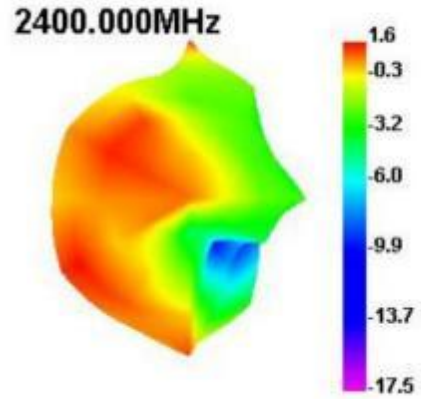
2.4 SMITH



2.5 *GAIN & Efficiency*

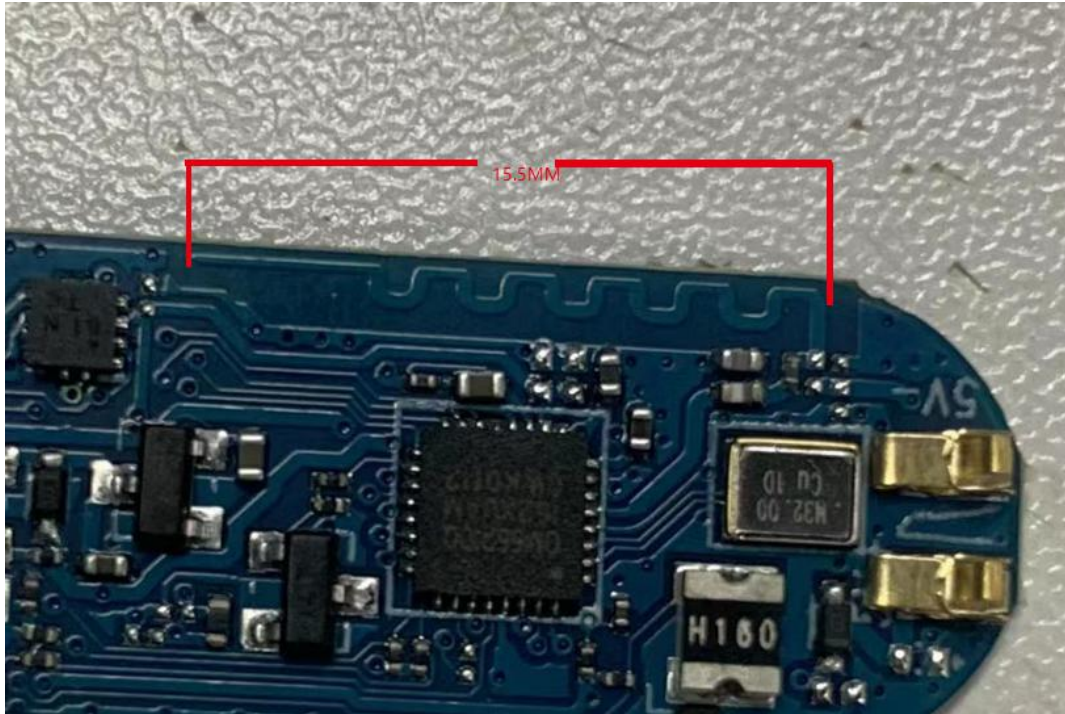
Passive Test For 2.4G				
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)
2400	51.96	-2.84	1.62	-0.53
2410	55.03	-2.59	1.99	-0.16
2420	54.81	-2.61	2.02	-0.13
2430	54.93	-2.6	2.03	-0.12
2440	52.84	-2.77	1.88	-0.27
2450	51.93	-2.85	1.83	-0.32
2460	51.63	-2.87	1.83	-0.32
2470	50.01	-3.01	1.87	-0.28
2480	53.08	-2.75	2.08	0.13
2490	50.18	-2.99	2.09	0.04
2500	45.45	-3.42	2.01	-0.14

2.6 2D/3D DATA



3. Conclusion

天线长度15.5MM



4. Conclusion

PCB板端匹配电路,E3串0 Ω 连接天线, 天线尺寸剪短, 现长度15.5mm, 宽度1.1mm.无源驻波调试到2.0以下, 初步判定合格。