

Antenna Test Report

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

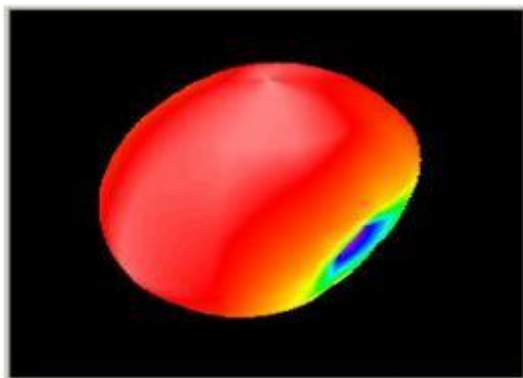
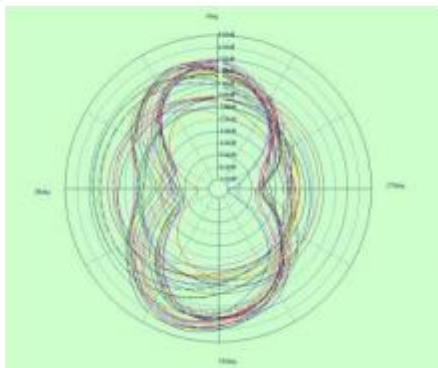
1. Product Overview & Dimension

Antenna

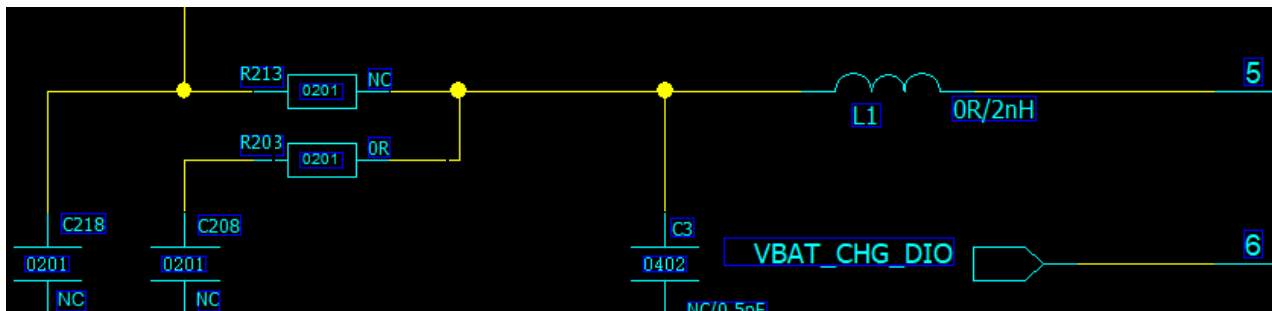


2. Test System

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

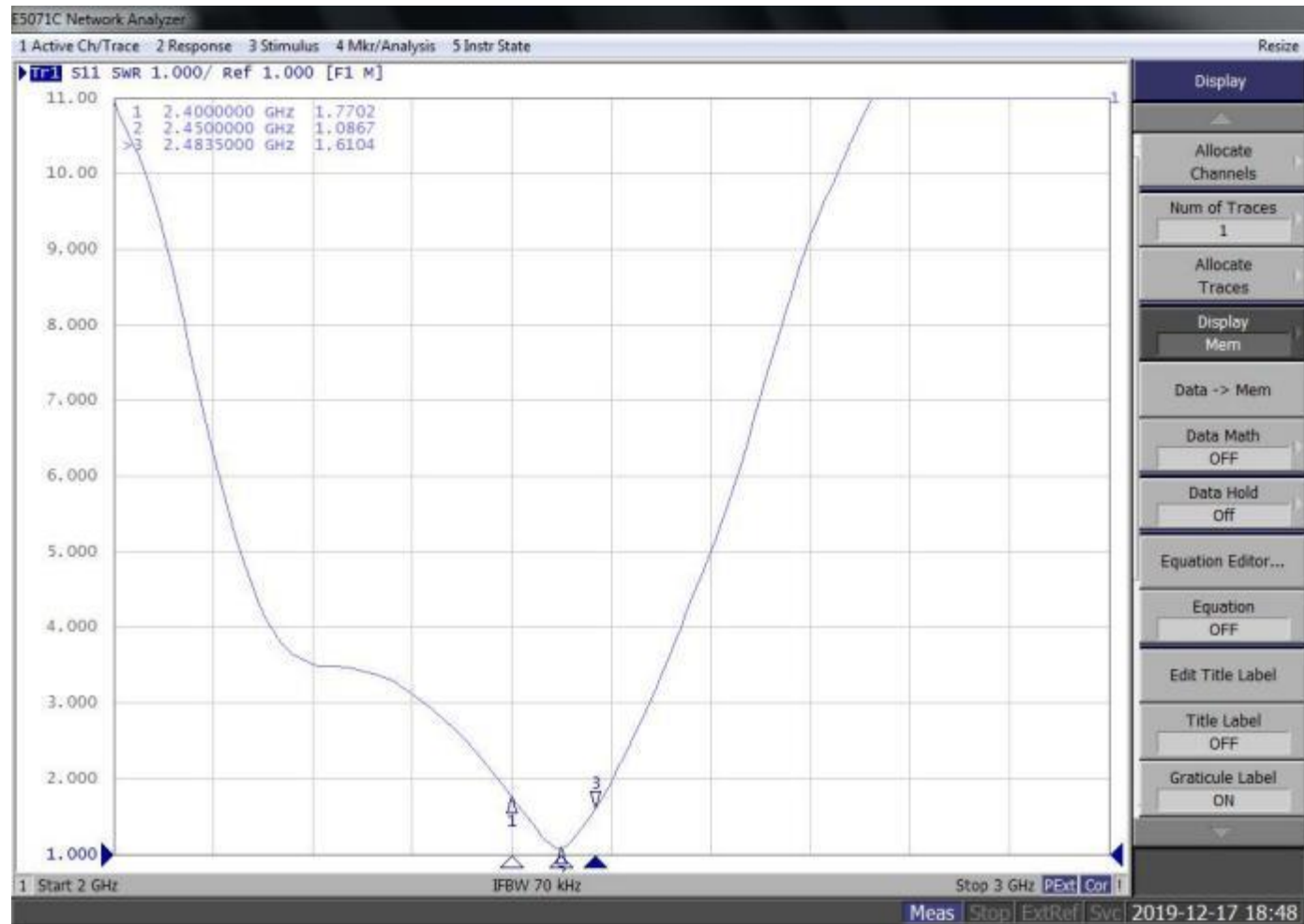


2.1 Antenna Matching Network

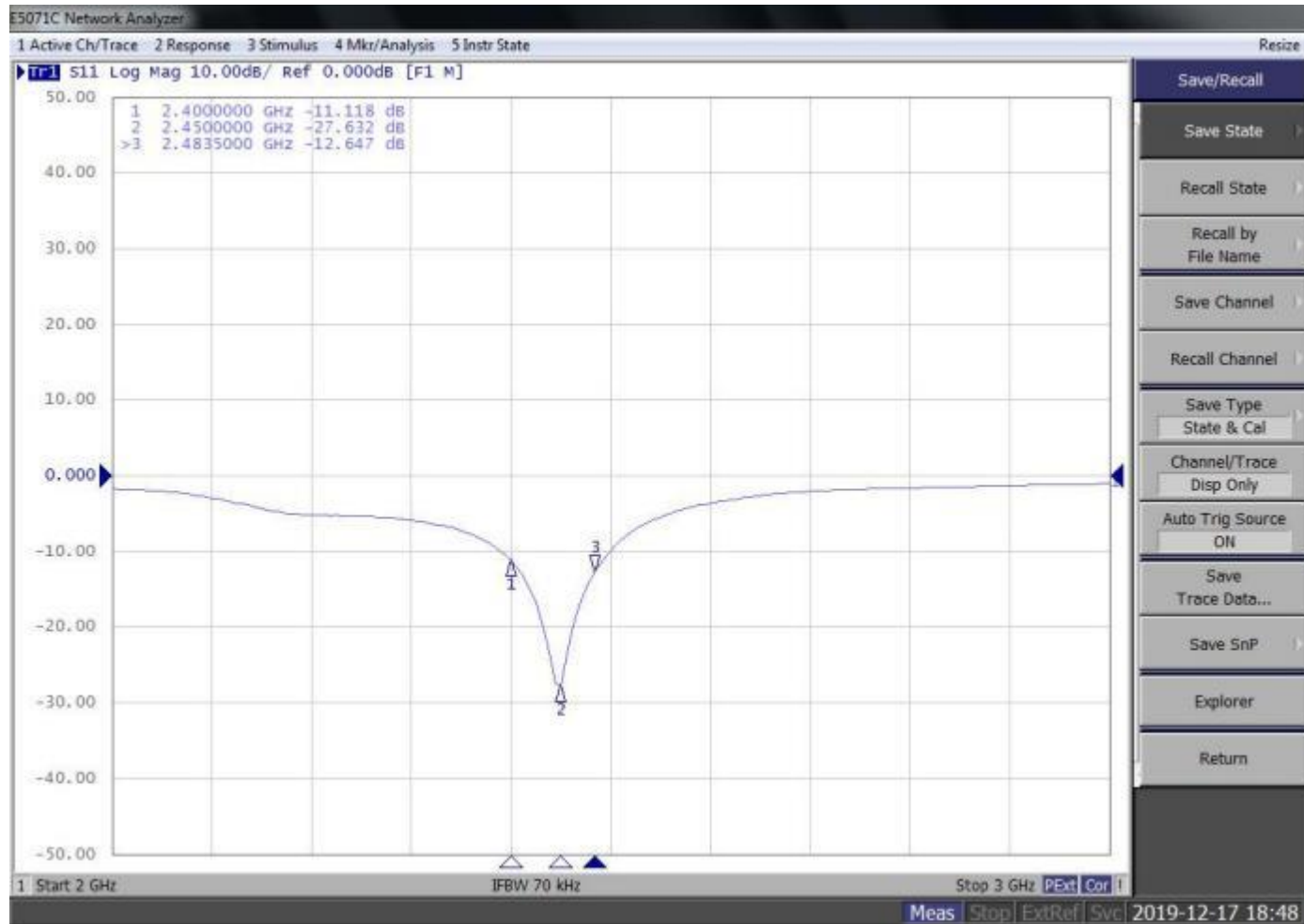


Element	Value
L1 (0402)	2nH
C3(0402)	NC
R 213(0201)	NC
R203(0201)	2.2nH
C 208(0201)	NC
C 218(0201)	NC

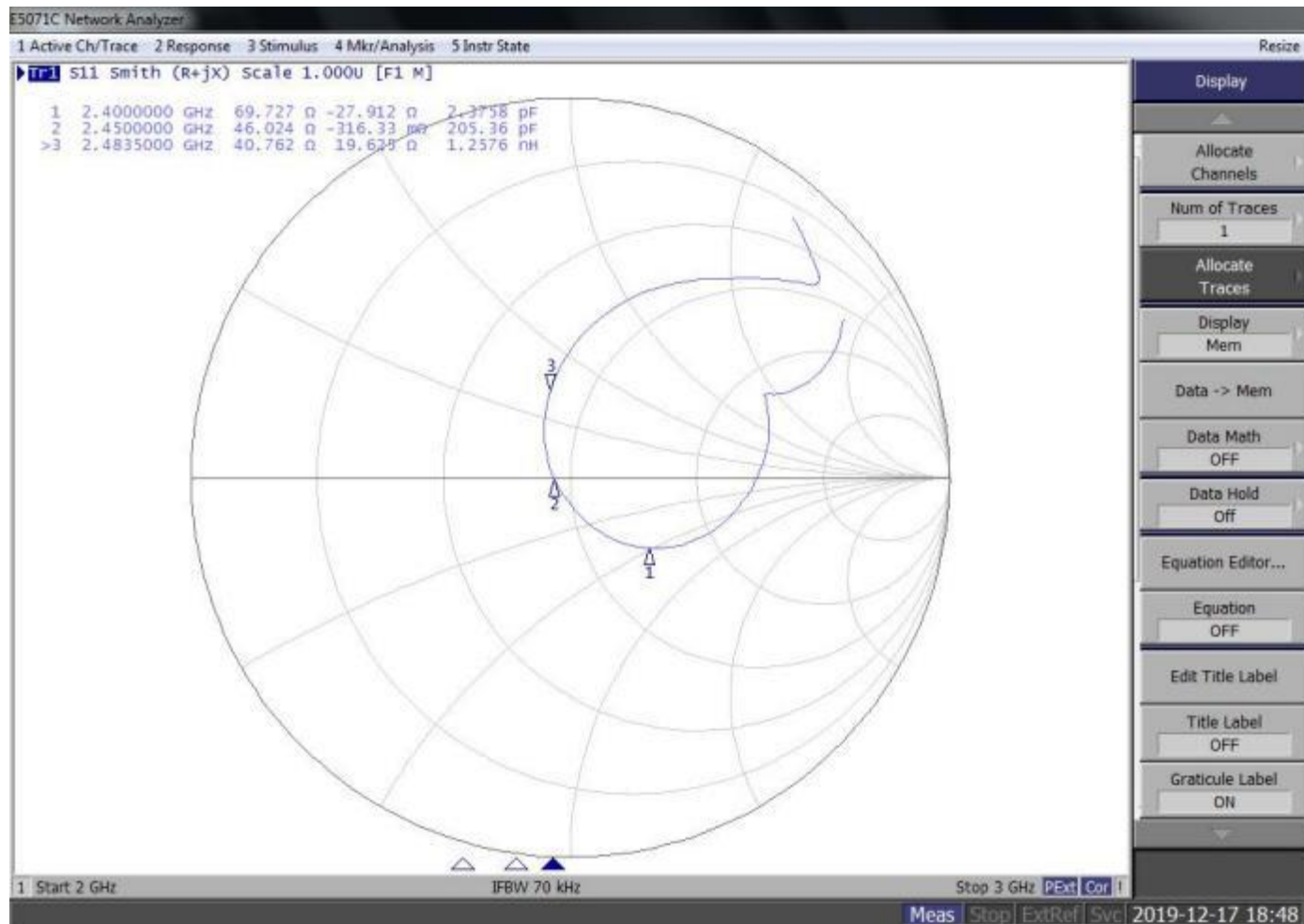
2.2 VSWR



2.3 RETURN LOSS



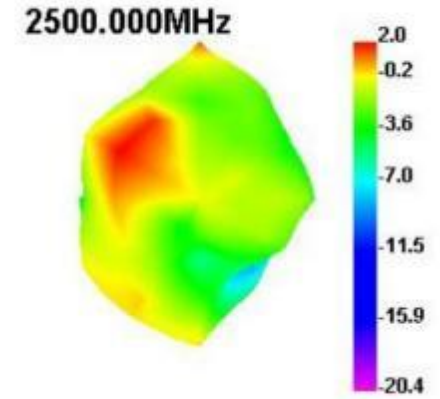
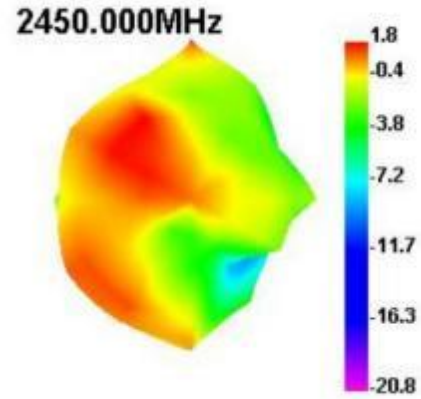
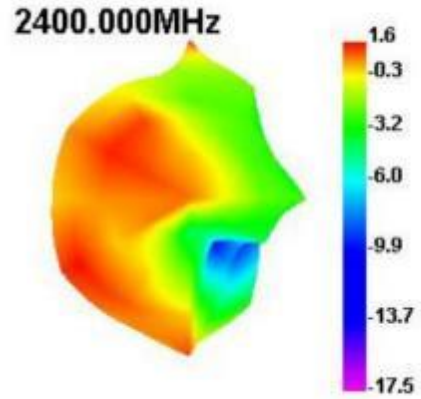
2.4 SMITH



2.5 *GAIN & Efficiency*

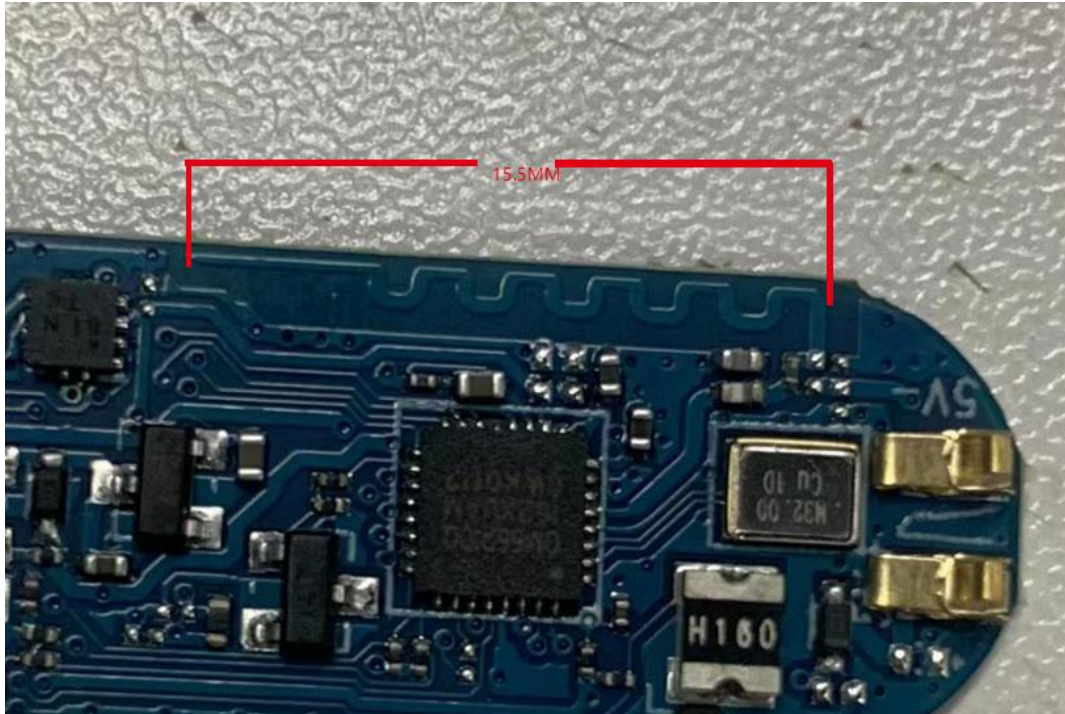
Passive Test For 2.4G				
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)
2400	51.96	-2.84	1.62	-0.53
2410	55.03	-2.59	1.99	-0.16
2420	54.81	-2.61	2.02	-0.13
2430	54.93	-2.6	2.03	-0.12
2440	52.84	-2.77	1.88	-0.27
2450	51.93	-2.85	1.83	-0.32
2460	51.63	-2.87	1.83	-0.32
2470	50.01	-3.01	1.87	-0.28
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 Board end matching circuit, E3 series 0Ω connected antenna, antenna size cut short, now length 15.5mm, width 1.1mm. Passive standing wave debugging below 2.0, preliminarily qualified.