皇捷通讯科技
iphone-line.com

规 格 书
specification

客　户 Customer :	比赛得
客户料号 Customer P/N:	
产品名称 Part Name:	built-in aerial
皇捷料号 HJ P/N:	3N0101GY-001
规格描述 Spec Description :	1.13 Silver tin gray,P1 Sweat copper tubing,P2 MHF-1 PLUG ,L=140mm
编制日期 Prepared Date:	6月21日

签署Signature			
客户Customer		供应商Supplier	
承认 Confirmed by		编制 Prepared by	S.He
批准 Approved by		审核 Checked by	何修明
		批准 Approved by	

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电话Tel ：0769-83328111
工厂地址Address：No. 3 Taihe Road, Daxiandi Industrial Zone, Quantang Village, Liaobu Town, Dongguan City
传真Fax：0769-83327688

DONGGUAN HUANGJIE COMMUNICATION TECHNOLOGY CO., LTD.

东莞市皇捷通讯科技有限公司

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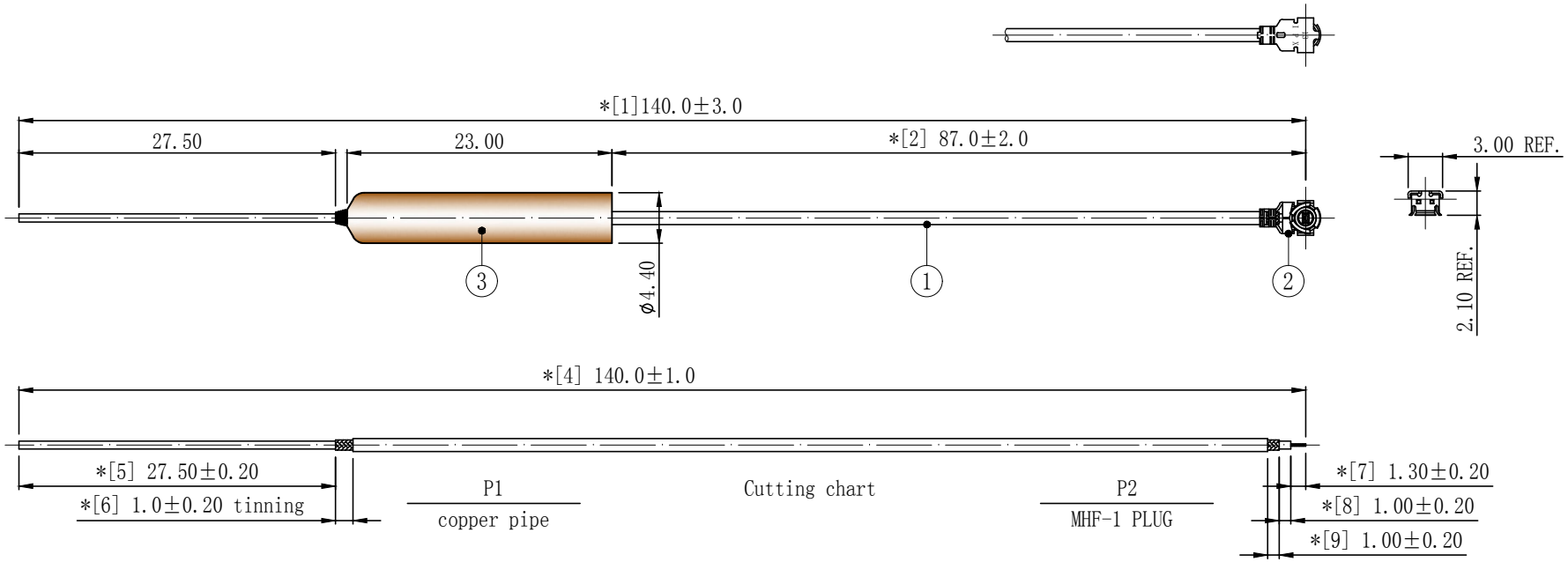
REVISION	DESCRIPTION	DATE	DRAFTER
A0	initial issue	21.02.23	S.He



Technical requirements:

1 Electrical characteristics: characteristic impedance :50Ω; Frequency range :2.4GHz-2.5GHz;
Inspection method: Naked antenna test, using network analyzer 100% comparison waveform test.

2 Pull-out test: minimum 1.30kgf.
Test method: The 1.30kg weight was lifted vertically from the table along the central axis of the cable at a speed of about 25±3 mm/min.

3 Dimensional inspection: [*] is the FAI inspection item; * is the key detection item; ■ For CPK control projects.

4 Appearance inspection: the surface of the product shall not be scratched, damaged and dirty; The color of the coating is bright and uniform, and there shall be no oxidation.
Inspection method: Complete visual inspection.

5 Packing specification: 50PCS/ bundle, 2 bundles/pack, i.e. 100PCS/ pack.

6 Environmental requirements: The products and the materials used shall meet the requirements of RoHS.

H551

COMPLIANCE WITH THE REQUIREMENT: ■RoHS; □HF; □SONY SS-00259; □OTHERS
*NO USING ESTRICTED AND BANNED SUBSTANCE

No.	PART NUMBER	PART NAME & DESCRIPTION	Q'TY	REMARKS
			1	---
3	2YG067	OD4.4*L24.5*OD1.30mm,copper pipe	1	---
2	2LM10P113210	MHF-1 PLUG FOR OD1.13mm CABLE	1	---
1	2C5M11311GY1	coaxial-cable,OD1.13mm,Silver tin,gray	1	---

GENERAL TOLERANCE:

LINEAR:	
X	±3.00
X.X	±1.00
X.XX	±0.50
X.XXX	±0.01
ANGLE:	
X°	±4.00°
X.X°	±3.00°
X.XX°	±2.00°
X.XXX°	±1.00°

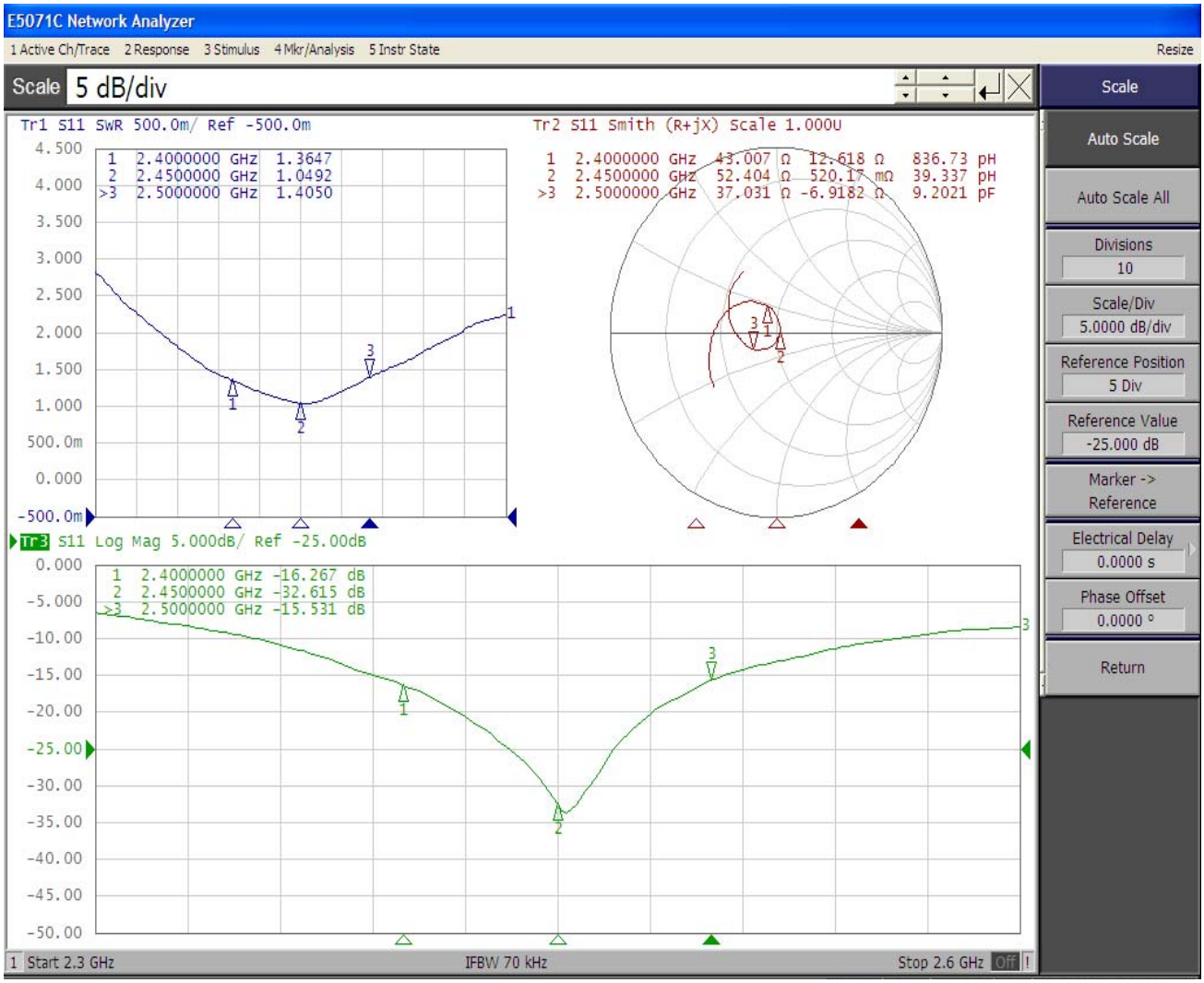
HJ-Tech 东莞市皇捷通讯科技有限公司

FILE NAME: product drawing	TITLE: Radio frequency antenna module built-in aerial,1.13 Silver tin gray, P1 Sweat copper tubing,P2 MHF-1 PLUG ,L=140mm				
ENG/DATE: XIU HE/20.10.20					
CHE/DATE: .	P/N: 3N0101GY-001				
APP/DATE: .	UNIT: mm		SCALE: 1:1	REVISION: A0	SHEET: 1/1

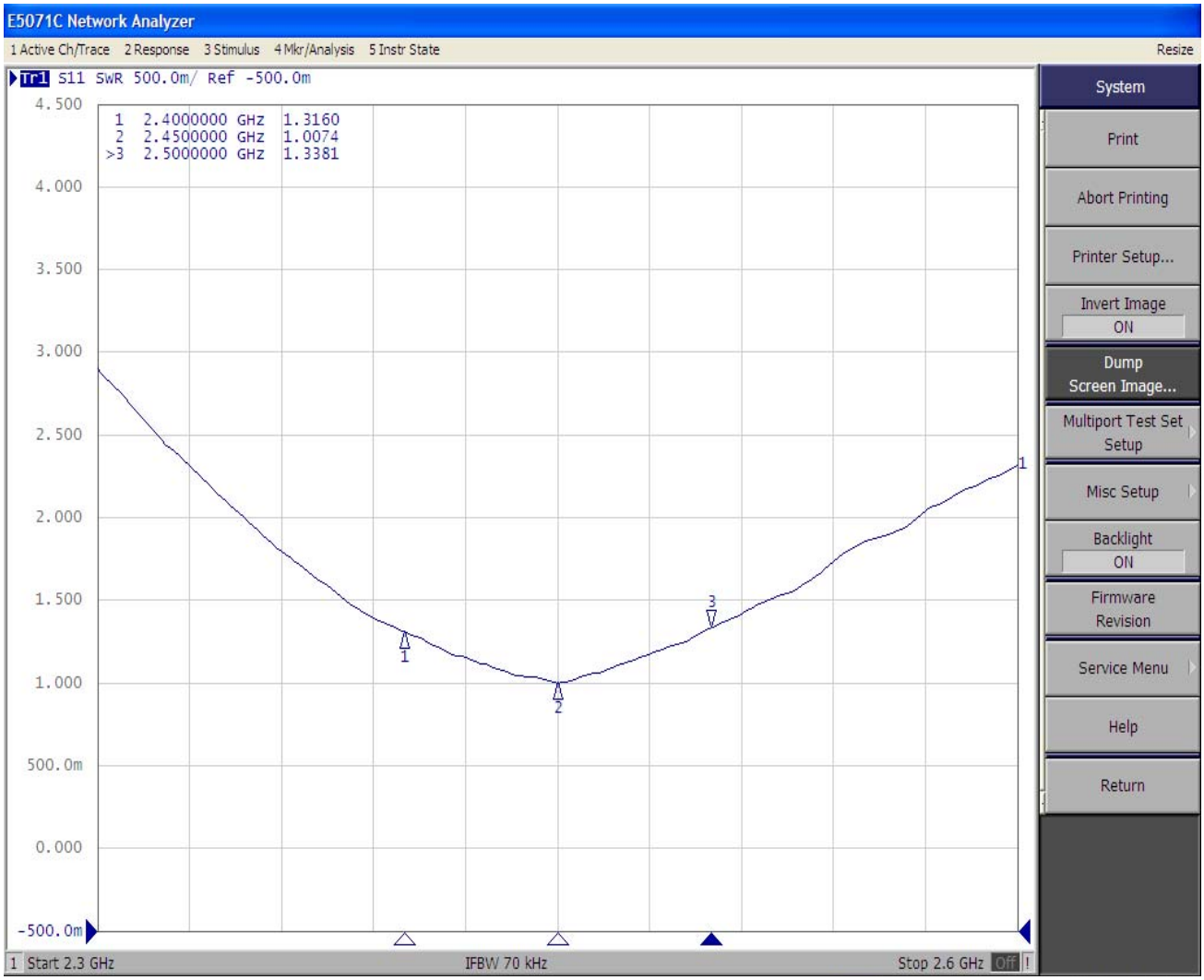
DONGGUAN HUANGJIE COMMUNICATION TECHNOLOGY CO., LTD.

东莞市皇捷通讯科技有限公司

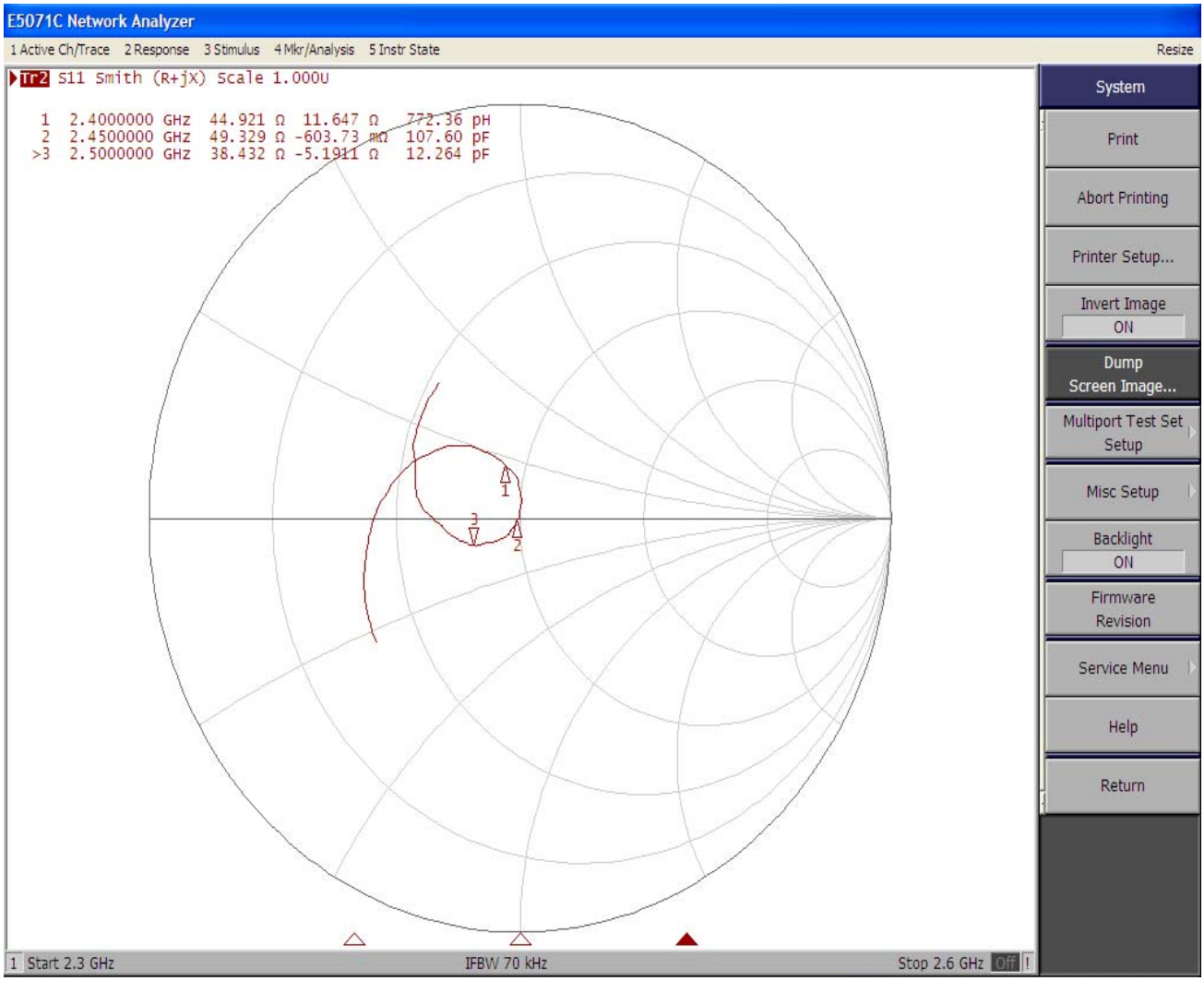
1 Electrical characteristics test report



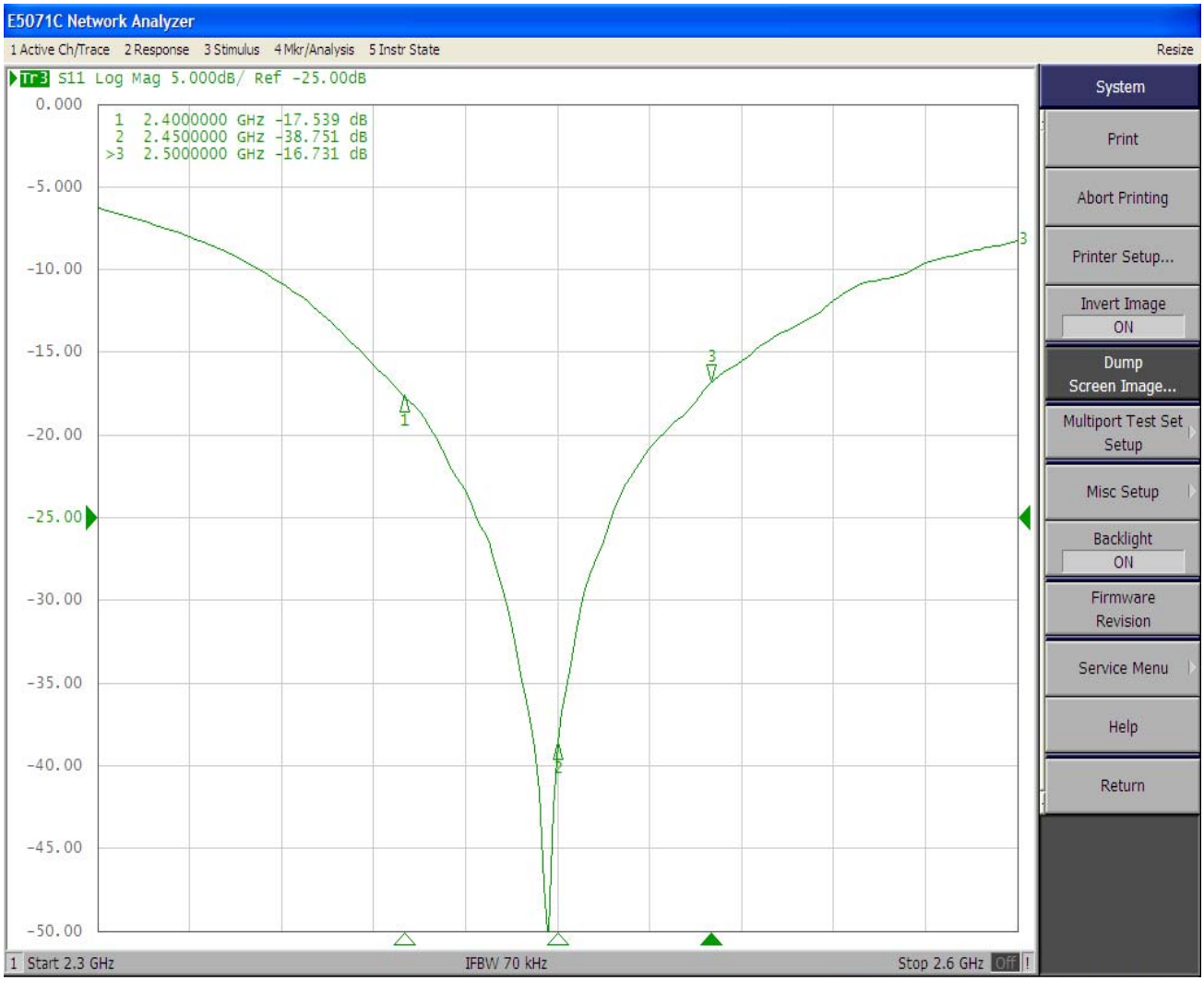
2 VSWR


E5071C Network Analyzer
1 Active Ch/Trace 2 Response 3 Stimulus 4 Mkr/Analysis 5 Instr State
Resize
Tr1 S11 SWR 500.0m/ Ref -500.0m
1 2.4000000 GHz 1.3160
2 2.4500000 GHz 1.0074
>3 2.5000000 GHz 1.3381
4.500
4.000
3.500
3.000
2.500
2.000
1.500
1.000
500.0m
0.000
-500.0m
System
Print
Abort Printing
Printer Setup...
Invert Image
ON
Dump
Screen Image...
Multiport Test Set
Setup
Misc Setup
Backlight
ON
Firmware
Revision
Service Menu
Help
Return
1 Start 2.3 GHz
IFBW 70 kHz
Stop 2.6 GHz

3 SMITH CHART



4 RETURN LOSS



Antenna Test Report (Passive)

2.4G	
v1.3	
Eric	

Date: 6月10日

Comments:
This antenna is good. Yeah!

Test Point ID	Freq. (MHz)	TRP (dBm)	Gain (dBi)	Directivity (dBi)	Efficiency (%)	Efficiency (dB)	Max (dBm)	Theta of Max	Phi of Max	Min (dBm)	Theta of Min	Phi of Min	AVG (dBm)	Max/Min (dB)	Max/AVG (dB)	Min/AVG (dB)
1	2400.0	2400.00	3.49	4.59	77.5%	-1.11	3.49	150	60	-9.47	90	90	-1.12	12.96	4.60	-8.36
2	2410.0	2410.00	3.38	4.42	78.6%	-1.04	3.38	150	60	-9.01	90	270	-1.02	12.39	4.40	-7.99
3	2420.0	2420.00	3.48	4.33	82.1%	-0.86	3.48	150	60	-9.10	90	270	-0.75	12.58	4.22	-8.35
4	2430.0	2430.00	3.49	4.27	83.7%	-0.77	3.49	150	60	-9.16	90	270	-0.60	12.65	4.09	-8.56
5	2440.0	2440.00	3.42	4.17	84.1%	-0.75	3.42	150	60	-9.19	90	270	-0.63	12.61	4.05	-8.56
6	2450.0	2450.00	3.32	3.95	86.4%	-0.64	3.32	150	60	-9.24	90	270	-0.71	12.55	4.03	-8.52
7	2460.0	2460.00	3.08	3.81	84.6%	-0.72	3.08	150	60	-9.65	90	270	-1.00	12.74	4.08	-8.65
8	2470.0	2470.00	3.04	3.73	85.2%	-0.69	3.04	150	60	-10.14	90	270	-1.11	13.17	4.15	-9.02
9	2480.0	2480.00	2.84	3.64	83.3%	-0.79	2.84	150	60	-10.71	90	270	-1.30	13.55	4.14	-9.41
10	2490.0	2490.00	2.89	3.68	83.4%	-0.79	2.89	150	60	-11.28	90	270	-1.29	14.17	4.18	-9.99
11	2500.0	2500.00	2.91	3.78	81.8%	-0.87	2.91	150	60	-11.77	90	270	-1.24	14.68	4.14	-10.54
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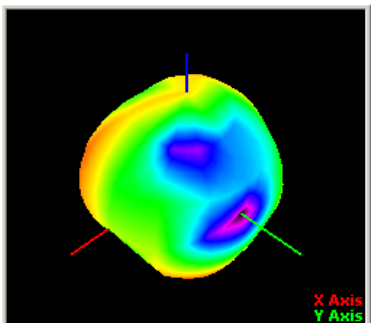
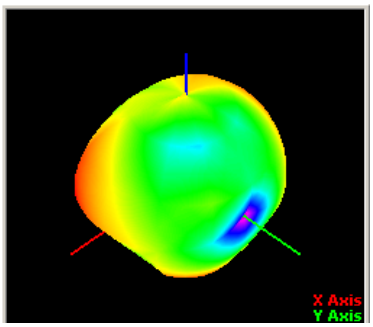
2400MHZ



2450MHZ



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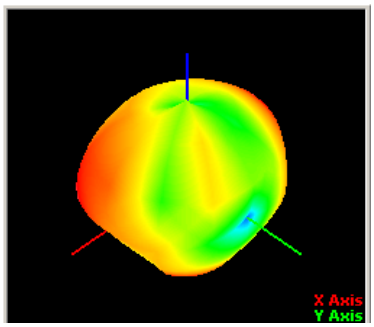
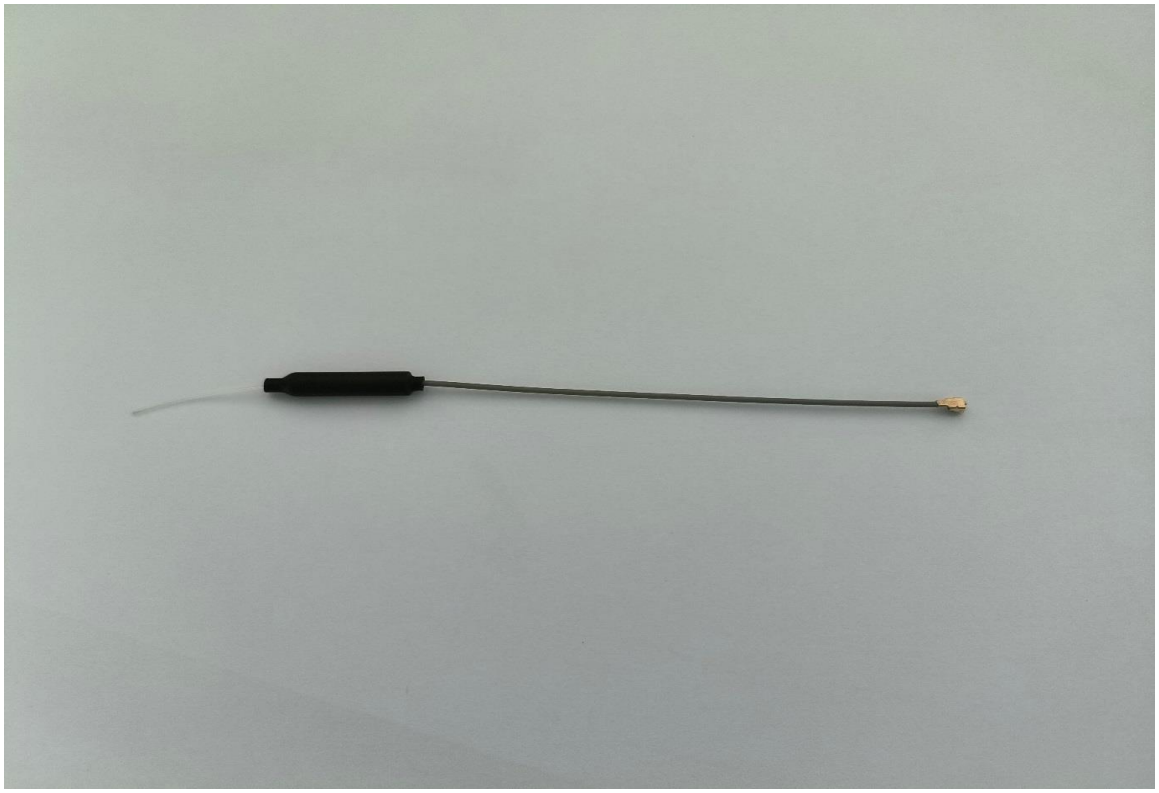


P/N： 3N0101GY-001

DESCRIPTION： BUILT IN ANTENNA, 1.13 GRAY SILVER TIN WIRE, P1 END WELDED COPPER TUBE, P2 END CONNECTED WITH FIRST GENERATION TERMINALS, L=140MM



ELECTRICAL PERFORMANCE

1	NOMINAL IMPEDANCE：	50Ω
2	FREQUENCY RANGE：	2.4~2.5GHz
3	VSWR：	2.0 MAX. （COMPLETE MACHINE TESTING）
4	GAIN：	3dbi
5	POLARIZATION MODE：	VERTICAL
6	RADIATION DIRECTION：	OMNIDIRECTIONAL

MECHANICAL SPECIFICATION

1	UN-MATING FORCE：	MHF PLGU: INITIAL: 5N MIN.; AFTER 30 CYCLES: 3N MIN..
2	CABLE CRIMP STRENGTH：	10N MIN. @ OD1.37 COAXIAL CABLE..

ENVIRONMENTAL SPECIFICATION

1	OPERATION TEMPERATURE：	-40C° ~ +85C°
2	CORROSION：	SALT WATER DENSITY:(5±1)%,TEMPERATUR:(35±3)°C,48HRS.
3	STORAGE ENVIRONMENT:	TEMPERATURE: -40C° ~ +85C°; HUMIDITY: 20% ~ 75%
4	MEMORY CYCLE：	AT LEAST 6 MONTHS IF CONDITIONS ARE MET.
5	ENVIRONMENTAL：	RoHS COMPLIANT.

DURABILITY SPECIFICATION

1	DURABILITY：	MHF PLGU: 30 CYCLES
2	SERVICE LIFE：	UNDER THE ABOVE ELECTRICAL, MECHANICAL, AND ENVIRONMENTAL PERFORMANCE CONDITIONS, THE SERVICE LIFE IS 10 YEARS