

CREDITS TECHNOLOGY

SHEET FOR APPROVAL

(Revision : R : A0)

CUSTOMER(客户名称)	艾捷莫
CS P/N(客户机种)	Q16-BT
PART NAME(品名)	Internal Antennal
FREQUENCY(频率)	BT
CREDITS NO.(物料编号)	
DATE(日期)	2023-10-24

CUSTOMER (客户确认)			
QA (品质)	ME (结构)	RF (射频)	MANAGER (经理)

Remark(备注):

SHENZHEN CREDITS TECHNOLOGY CO., LTD (深圳市科瑞迪斯科技有限公司)			
QA (品质)	ME (结构)	RF (射频)	MANAGER (经理)

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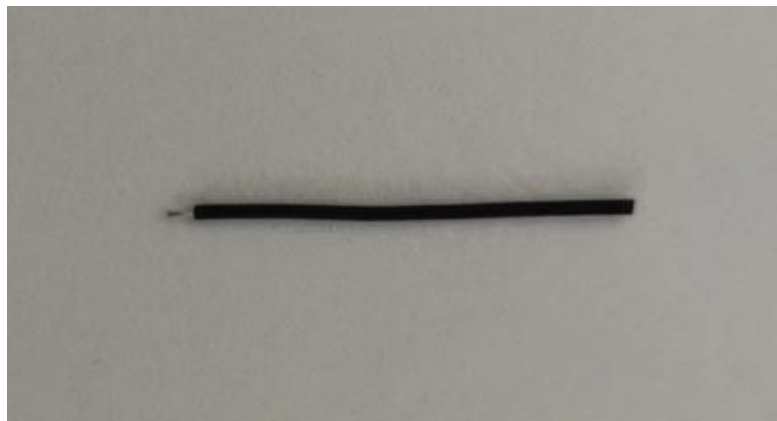
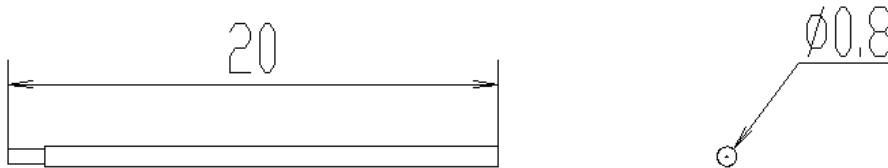
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1. General Description

This report summarizes the electrical performance results of the proposed Internal antenna to support the Q16, program. The antenna is an assembly BT

BT Length Dimension:L=20mm;



2. Electrical Specifications

2-1 Set-up

2-1-1 Frequency Band

Frequency Band	Tx(MHz)	Rx(MHz)
BT	2400 ~ 2500	

2-1-2 Impedance

Nominal Impedance(including matching circuit) : **50** ohms

2-1-3 Matching Requirements

The matching circuit on the PCB of the handset is according to Figure 1
Optimum matching circuit is highly dependent on the handset and thus.

Final matching circuit layout and values will be defined when handset is available.

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2-1-4 VSWR And GAIN

VSWR		GAIN	
Freq. Band	OPEN SPEC	Band Freq.	OPEN SPEC
2400MHz	≤ 3.0	2400MHz	$\geq -1.0\text{dBi}$
2500MHz	≤ 3.0	2500MHz	$\geq -1.0\text{dBi}$

※Measuring a 50Ω test jig is connected to a network analyzer to measure the VSWR

※※All test value is done in customer approval fixture.

2-2 Test Data

2-2-1 LTE VSWR

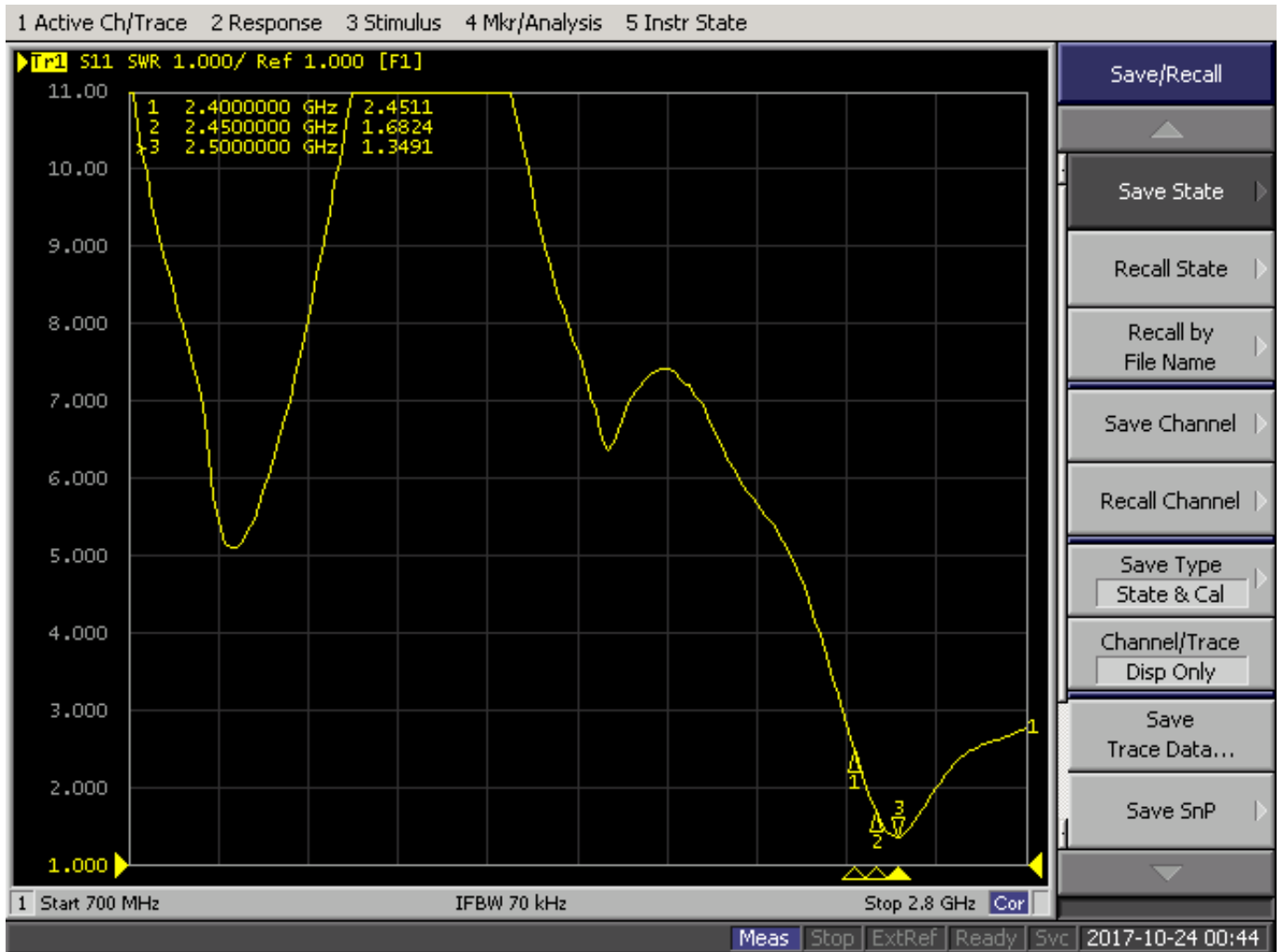
Model No:Q16	File:
CREDITS NO:	Note:
Sample No:	BT-VSWR
Test Condition: Free Space	Matching:
Confirmation:	Engineer:

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2-3-1 增益(GAIN)/ 效率(EFFICIENCY)

Passive Test For D7						
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	Max (dB)	Min (dB)
2400	27.46	-5.61	1.32	-0.83	1.32	-14.72
2410	25.63	-5.91	1.18	-0.97	1.18	-16.97
2420	25.72	-5.9	1.3	-0.85	1.3	-15.12
2430	28.04	-5.52	1.54	-0.61	1.54	-15.46
2440	29.41	-5.32	1.84	-0.31	1.84	-15.14
2450	28.99	-5.38	1.86	-0.29	1.86	-14.46

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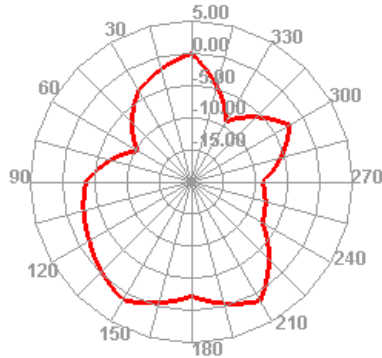
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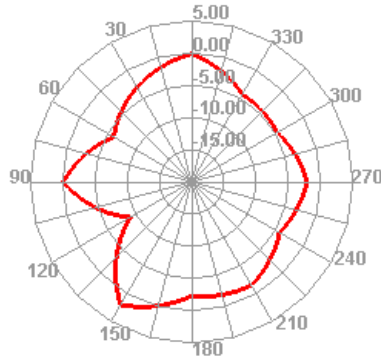
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2460	28.41	-5.46	2.1	-0.05	2.1	-14.65
2470	30.95	-5.09	2.28	0.13	2.28	-15.67
2480	30.93	-5.1	2.39	0.24	2.39	-15.54
2490	29.71	-5.27	2.22	0.07	2.22	-15.88
2500	31.37	-5.03	2.57	0.42	2.57	-15.74

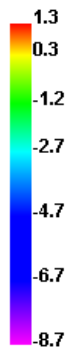
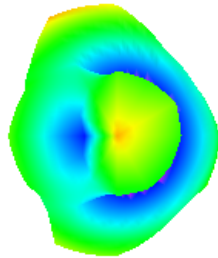
2400.000MHz E1



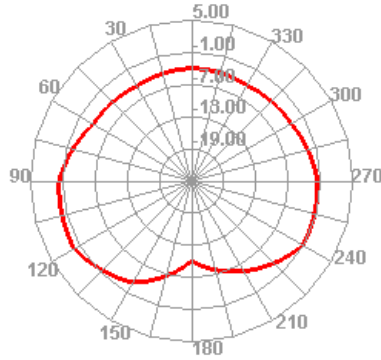
2400.000MHz E2



2450.000MHz



2450.000MHz H



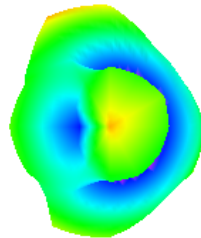
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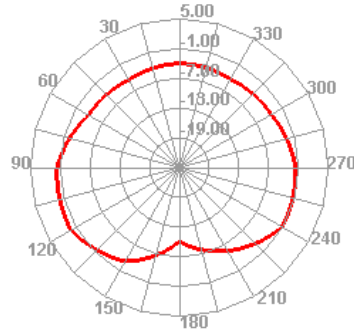
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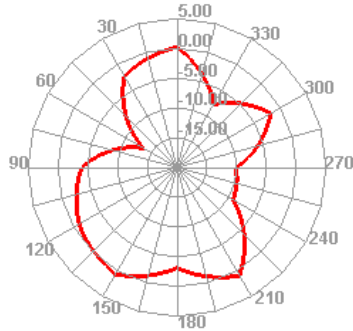
2450.000MHz



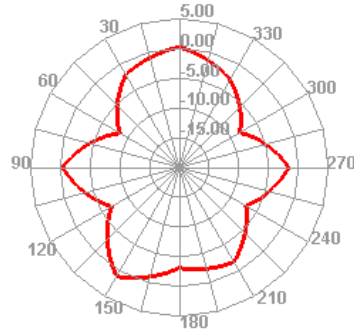
2450.000MHz H



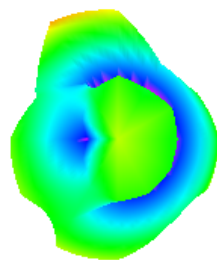
2450.000MHz E1



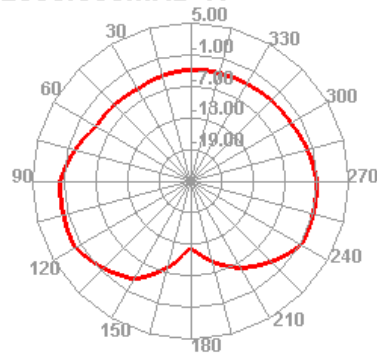
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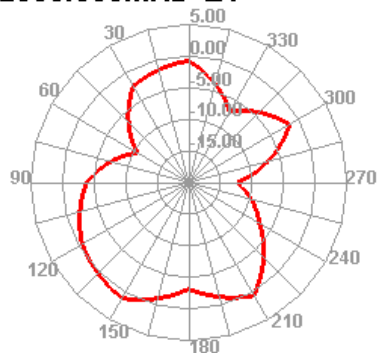
2500.000MHz



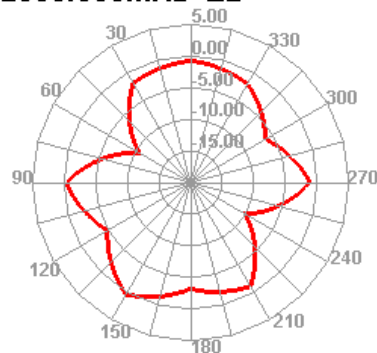
2500.000MHz H



2500.000MHz E1



2500.000MHz E2



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3. Mechanical Specification

3-1-1 Mechanical Configuration(组装图)

3-2 Measurement Data

3-3 Salt-Spray test

35°C, 85%RH, 48Hours(According to MIL-STD-810E)The salt-spray is generated from a 5% salt solution., The VSWR, Gain, Radiation Pattern must be met specifications after the salt-spray test.

4. Environment Characteristic

NO.	ITEM	TEST CONDITION	SPECIFICATION
4-1	High Temperature/Humidity Storage Test(non operating)	1.Temperature: +70 ±2°C 2.Humidity: 90~95%RH 3.Time: 48hrs	No material deformation is allowed.
4-2	Low Temperature/Humidity Storage Test(non operating)	1.Temperature: -30±2°C 2.Humidity: 0%RH 3.Time:48hrs	The VSWR, Gain, Radiation Pattern must be met specifications after these test.