

SAMPLE SPECIFICATION FOR APPROVAL

SUPPLIER	Shenzhen Keridis Technology Co., Ltd
Model	Q15-BT
Product name	Antenna

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1. General Description

This report summarizes the electrical performance results of the proposed Internal antenna to support the Q15-BT (20MM) program. The antenna is an assembly BT 2.4G.



1. Electrical Specifications

2-1 Set-up

2-1-1 Frequency Band

	Frequency Band
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.

2-1-4 VSWR And GAIN

VSWR		GAIN	
Freq. Band	SPEC	Band Freq.	SPEC
2400-2500 MHz	≤ 3	2400MHz	$\leq 1.99\text{dBi}$

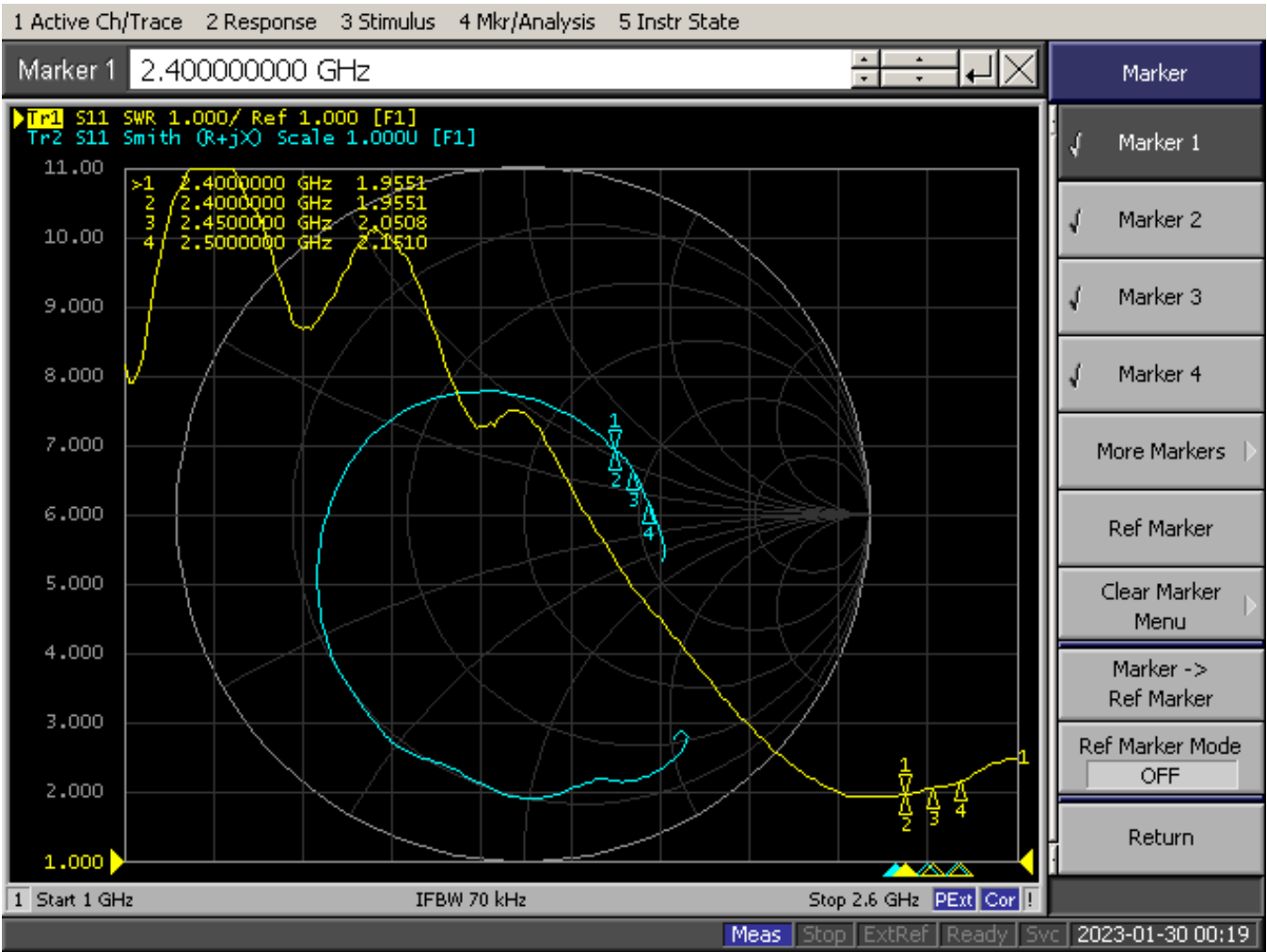
※Measuring a 50 Ω test jig is connected to a network analyzer to measure the VSWR

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

2-2 Test Data

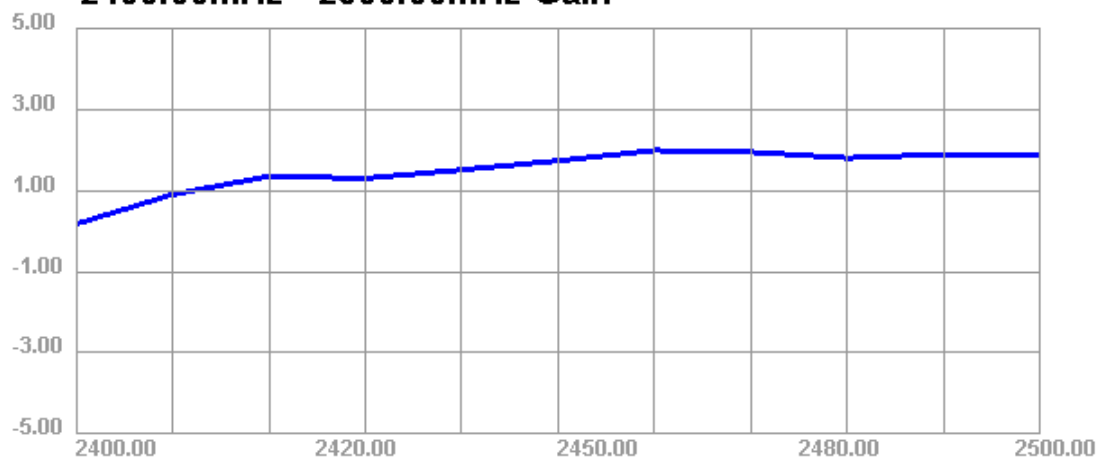
2-2-1 BT VSWR

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

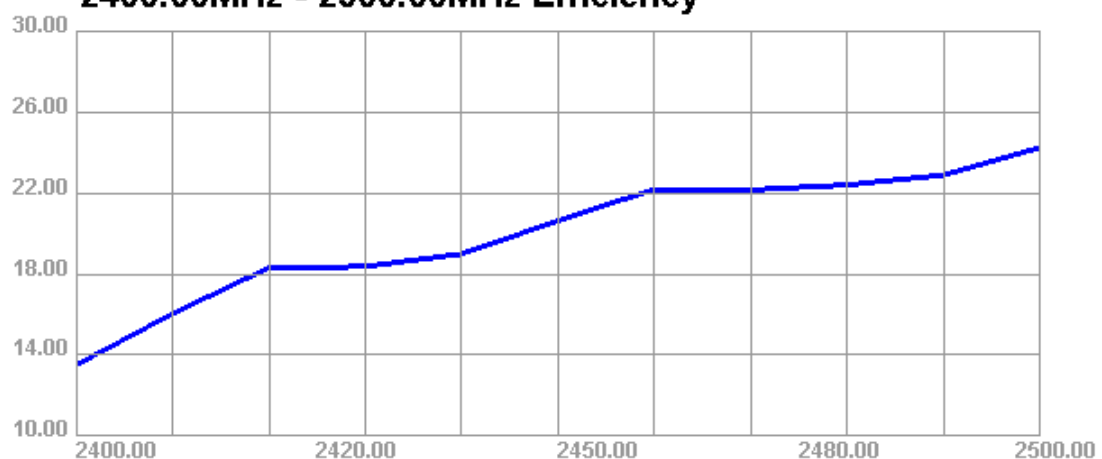


Passive Test For WIFI 2.4						
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	Max (dB)	Min (dB)
2400	19	-7.21	1.51	-0.64	1.51	-16.96
2410	20.63	-6.85	1.73	-0.42	1.73	-17.9
2420	22.19	-6.54	1.99	-0.16	1.99	-17.92
2430	22.16	-6.54	1.95	-0.2	1.95	-17.7
2440	22.41	-6.5	1.8	-0.35	1.8	-16.38
2450	22.89	-6.4	1.89	-0.26	1.89	-14.89
2460	24.25	-6.15	1.87	-0.28	1.87	-16.11
2470	25.57	-5.92	-0.42	-2.57	-0.42	-17.74
2480	21.89	-6.6	-0.84	-2.99	-0.84	-17.91
2490	21.78	-6.62	-0.39	-2.54	-0.39	-17.61
2500	23.2	-6.35	-0.2	-2.35	-0.2	-18.87

2400.00MHz - 2500.00MHz Gain



2400.00MHz - 2500.00MHz Efficiency



3. Mechanical Specification

3-1-1 Mechanical Configuration(Assembly Drawing)

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.