

ANTENNA SPECIFICATION

GSD P/N :WC0D-20

ApplicationDate:JAN,18,2017

Rev: R:A1

Editor:

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1. General Description

Dbi	Decibel relative isotropic antenna
Tx	Transmit frequency
Rx	Receive frequency
VSWR	Voltage Standing Wave Ratio
GSM	Global Service for Mobile communication
DCS	Digital Communication System
PCS	Personal Communication System
PHS	Personal Handy-phone System
SAR	Specific Absorption Rate
PCB	Printed Circuit Board

2. Electrical Specifications

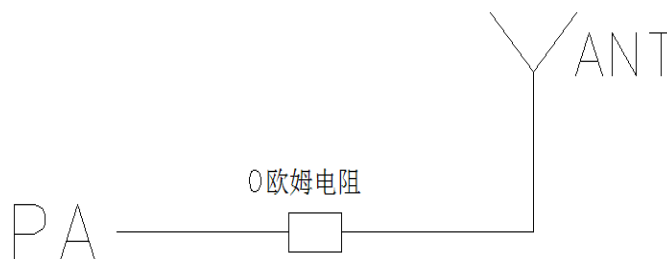
2-1 Set-up

2-1-1 Frequency Band

Frequency Band	Frequency
WIFI 2.4G	2400-2500MHZ
WIFI 5.8G	5150-5850MHZ

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

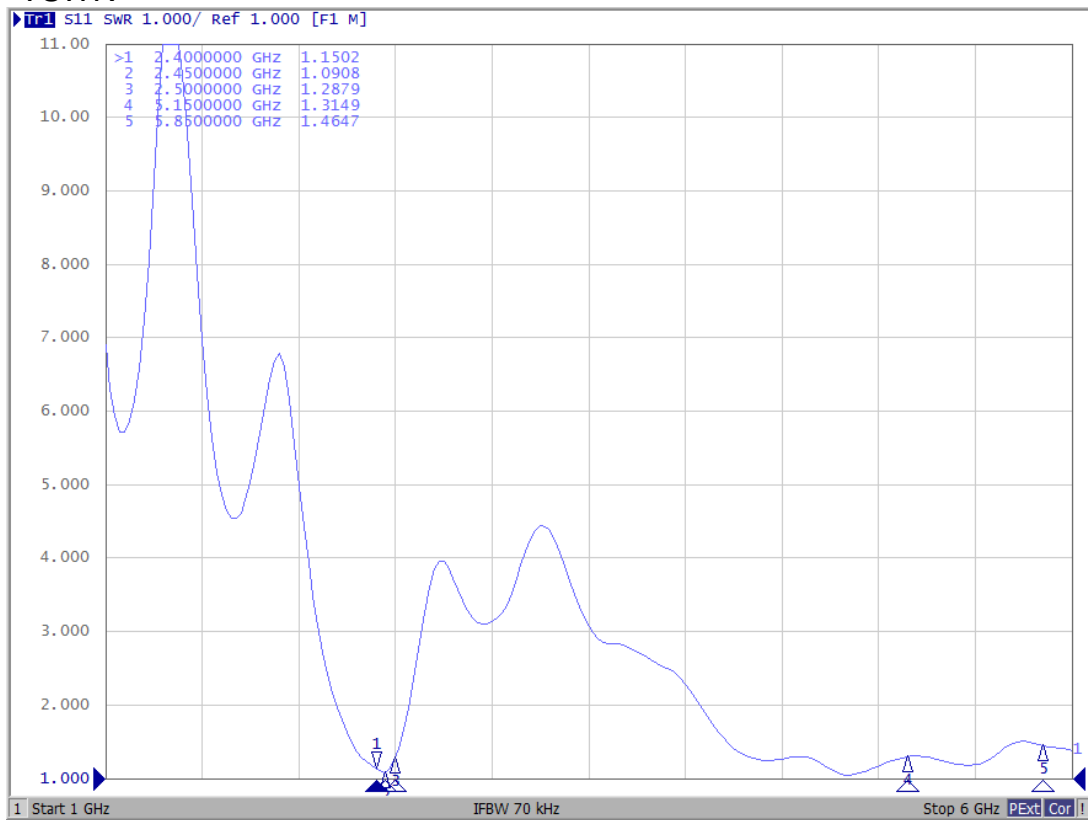
VSWR		GAIN	
Freq. Band	OPEN SPEC	Band Freq.	OPEN SPEC
2400MHz	$\cong 2.0$	2400MHz	$\cong -1.0\text{dBi}$
2500MHz	$\cong 2.0$	2500MHz	$\cong -1.0\text{dBi}$
5150MHz	$\cong 2.0$	5150MHz	$\cong -1.0\text{dBi}$
5850MHz	$\cong 2.0$	5850MHz	$\cong -1.0\text{dBi}$

※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 VSWR



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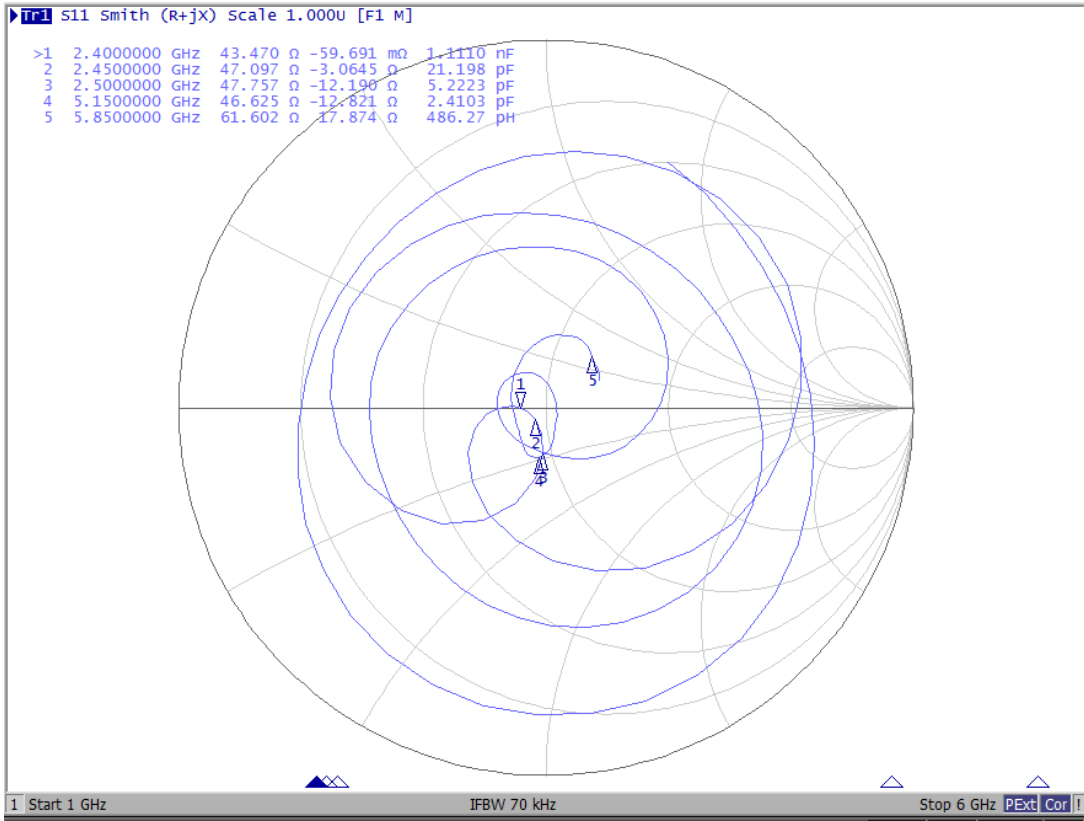
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2-2-2 Smith Chart



2-2-3 GAIN Efficiency

WIFI 增益:

Frequency (MHz)	2400	2450	2500	5150	5850
Average Gain	1.42	1.72	1.65	2.34	2.57
Efficiency (dB)	(44%)	(48%)	(45%)	(61%)	(66%)



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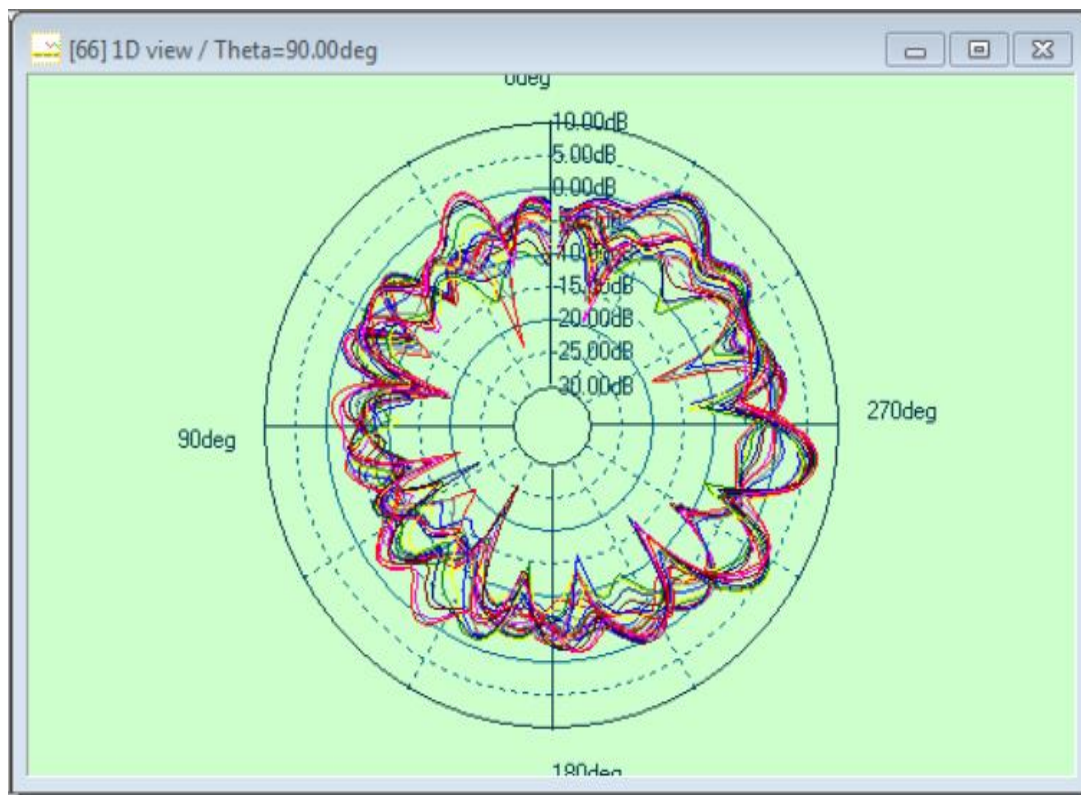
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2-2-4 The direction of figure

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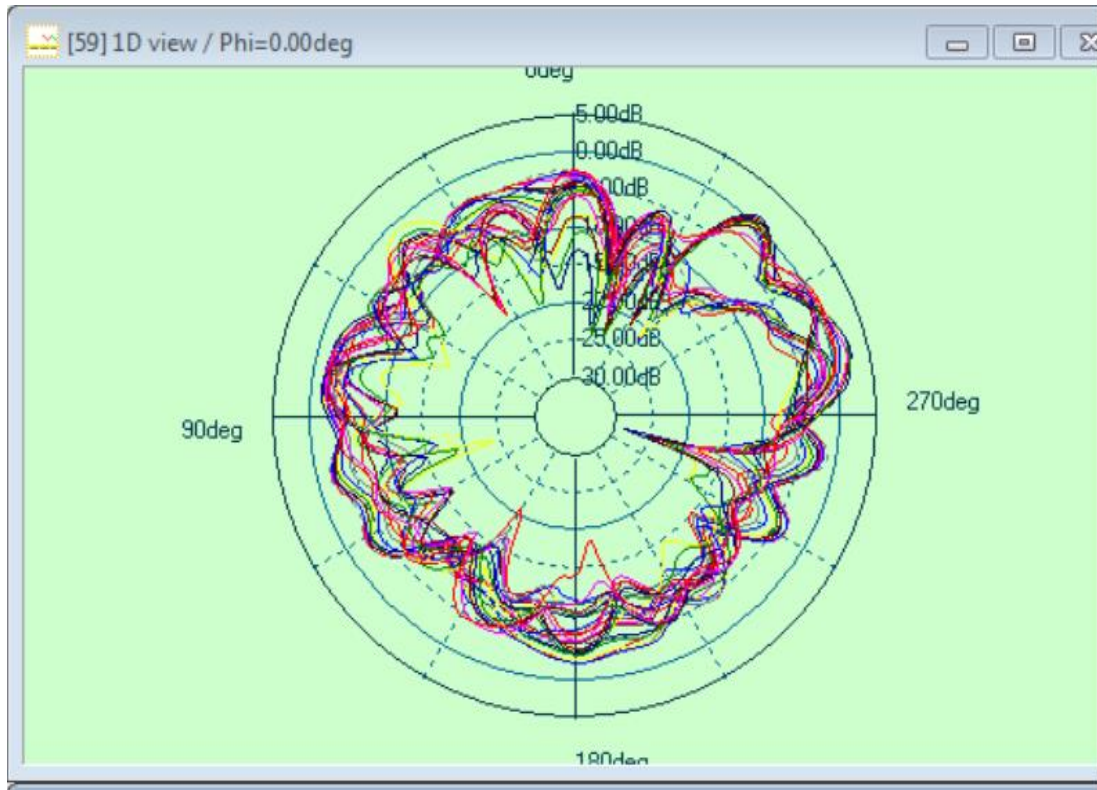
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