

SPECIFICATION

SHEET FOR APPROVAL

CUSTOMER(客户名称)	高盛达
CS P/N(客户机种)	
PART NAME(品名)	WIFI Antenna
FREQUENCY(频率)	2400-2500MHz 5150-5850 MHz
GSD NO.(物料编号)	WC0D
DATE(日期)	2016-06-25

CUSTOMER	
CHECKE	APPROVAL

Remark(备注):

Sign(客户确认签字盖章): _____

DESIGN	CHECK	APPROVAL
	邹一麟	赵烽

惠州高盛达科技有限公司

HUIZHOU GAOSHENGDA TECHNOLOGY CO.,LTD

ANTENNA SPECIFICATION

Index

1.		General Description	1
2.		Electrical Specifications	2
	2-1	Set-up	2
	2-1-1	Frequency Band	2
	2-1-2	Impedance	2
	2-1-3	Matching Requirements	2
	2-1-4	VSWR	2
	2-2	Test Data	3
	2-2-1	VSWR	3
	2-2-2	Smith Chart	4
	2-2-3	GAIN Efficiency	4
	2-2-4	The direction of figure	5~6
	2-2-5	Testing equipment	6~7
3.		Mechanical Specification	8
	3-1	Mechanical Configuration	8
	3-1-1	Mechanical Configuration(WIFI 2.4G)	8
	3-1-2	Mechanical Configuration(天线组件)	9

ANTENNA SPECIFICATION

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

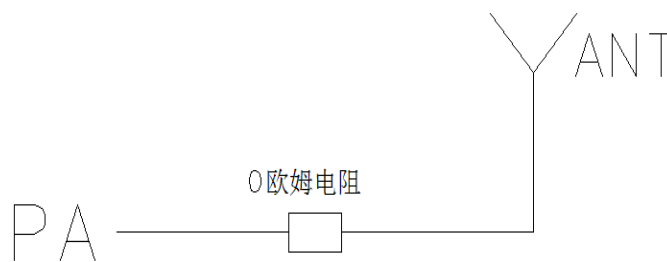
2-1 Set-up

2-1-1 Frequency Band

Frequency Band	Frequency
WIFI 2.4G	2400-2500MHZ
WIFI 5G	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.

ANTENNA SPECIFICATION

2-1-4 VSWR And GAIN

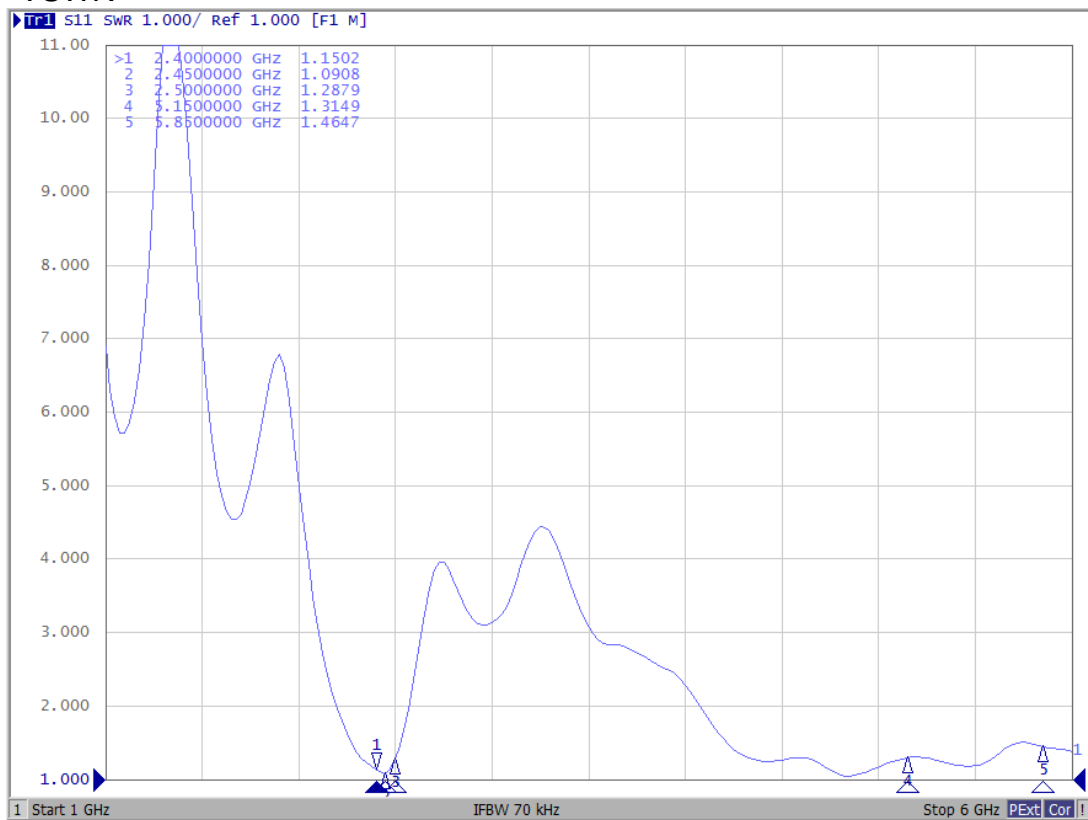
VSWR		GAIN	
Freq. Band	OPEN SPEC	Band Freq.	OPEN SPEC
2400MHz	$\cong 2.0$	2400MHz	$\cong -1.0\text{dBi}$
2500MHz	$\cong 2.0$	2500MHz	$\cong -1.0\text{dBi}$
5150MHz	$\cong 2.0$	5150MHz	$\cong -1.0\text{dBi}$
5850MHz	$\cong 2.0$	5850MHz	$\cong -1.0\text{dBi}$

※ 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

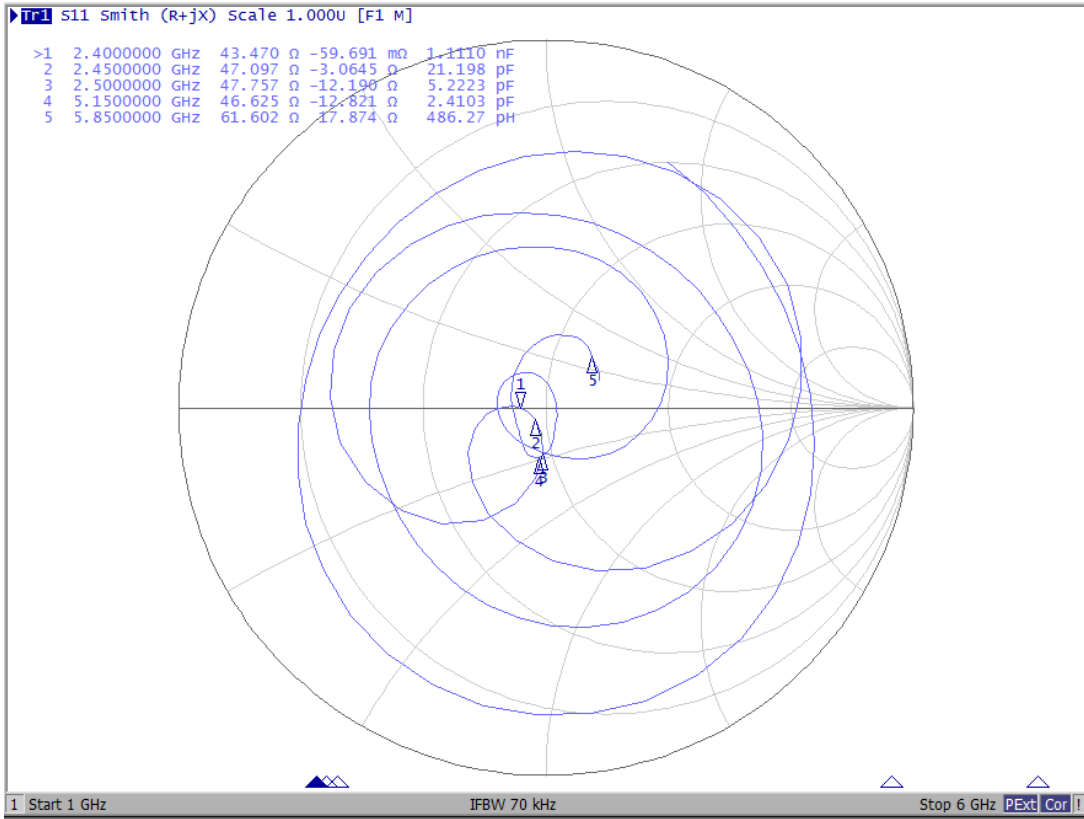
2-2-1 VSWR



Model No:WC0D	File:
GSD NO:WC0D Antenna	Note:
Sample No:yes	WIFI2.4G/5G
Test Condition: Free Space	

ANTENNA SPECIFICATION

2-2-2 Smith Chart



2-2-3 GAIN Efficiency

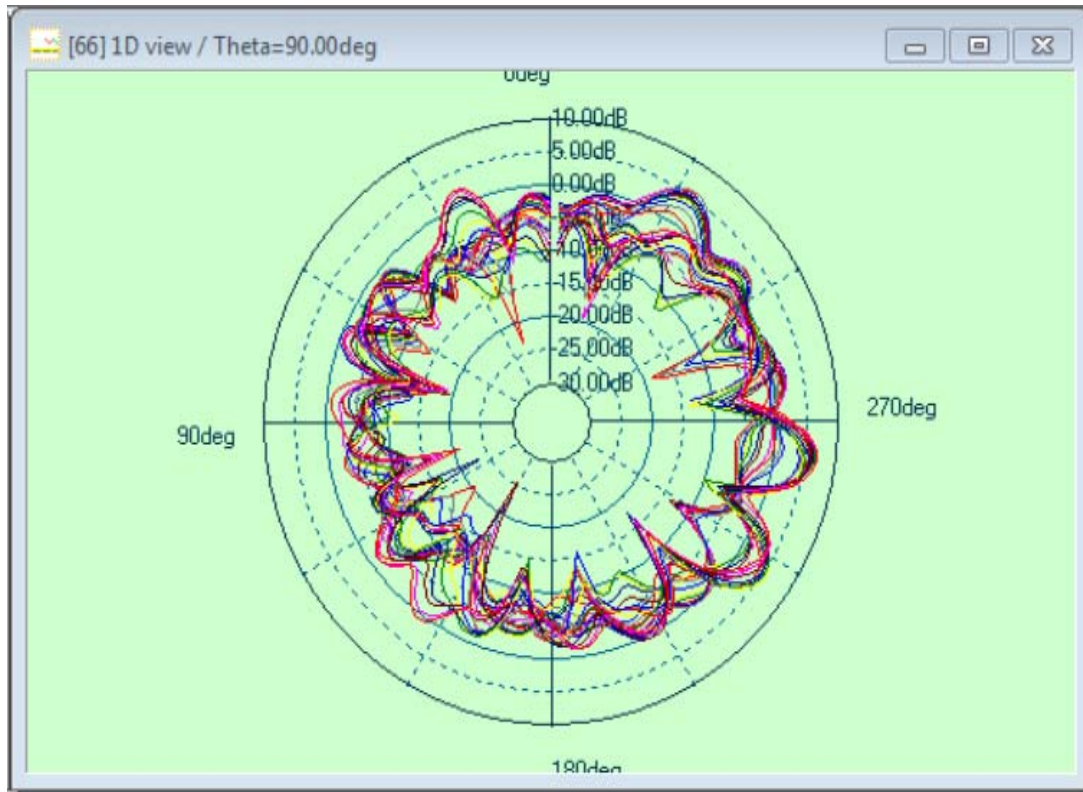
WIFI Gain:

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

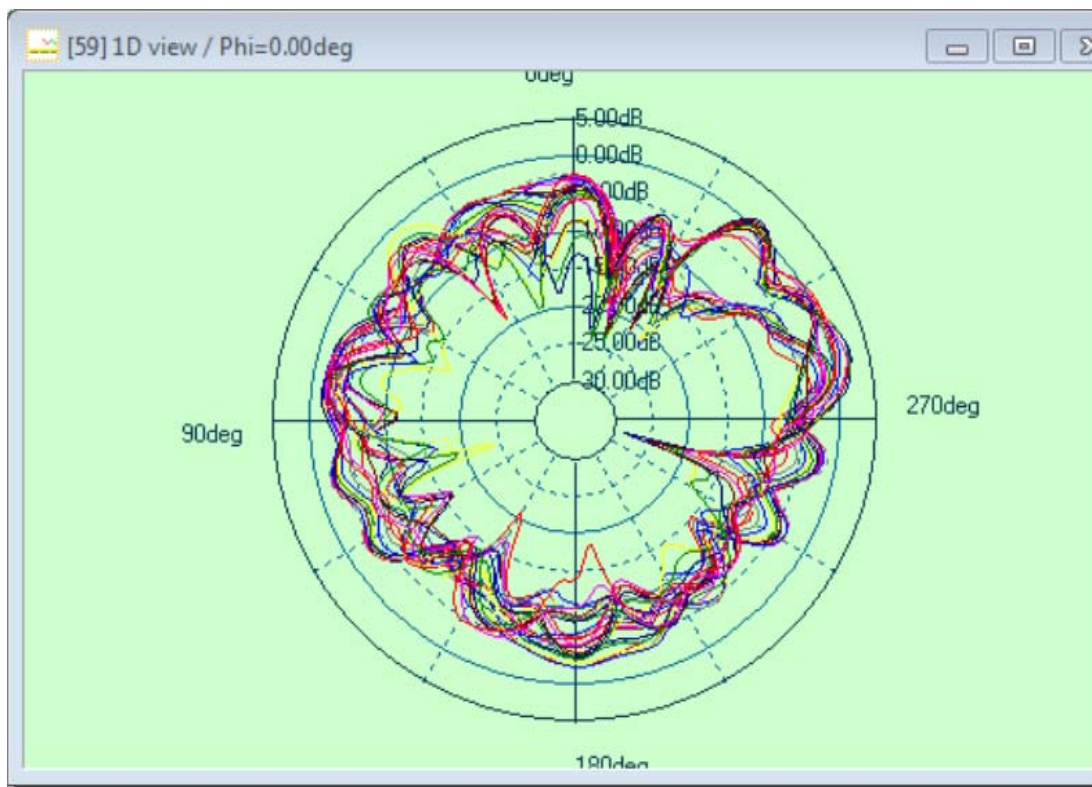
ANTENNA SPECIFICATION

2-2-4 The direction of figure

H

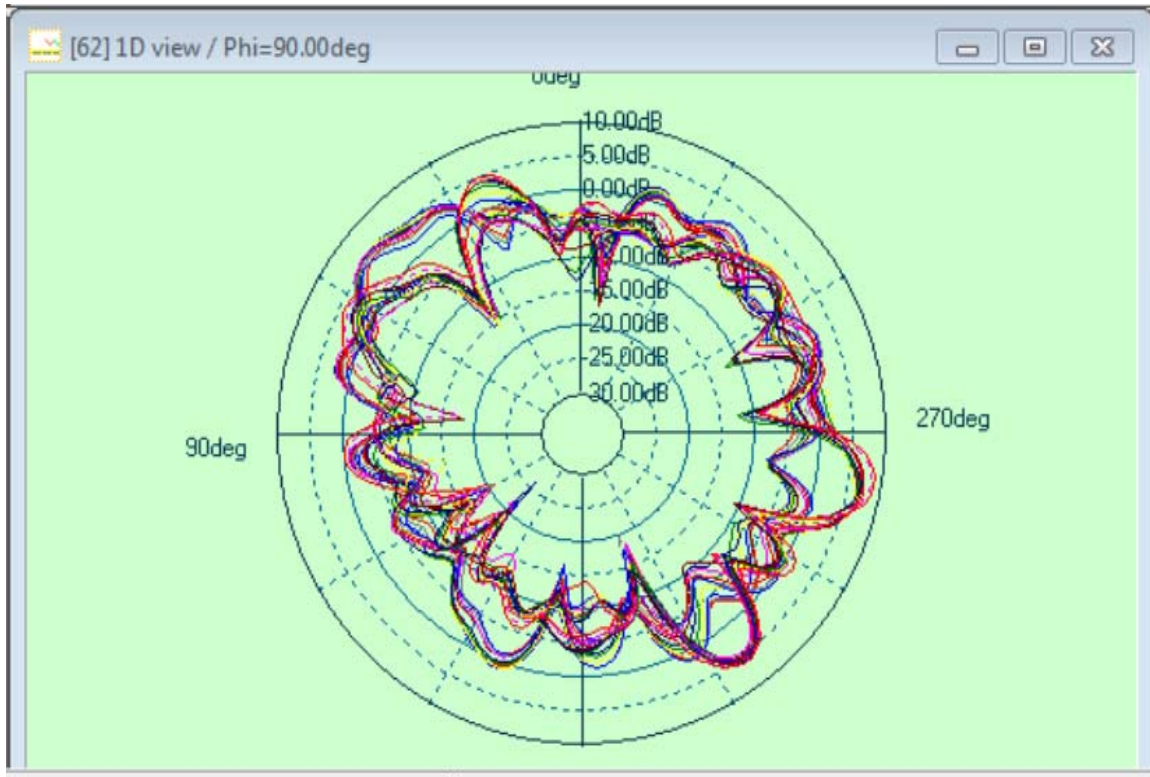


E1



ANTENNA SPECIFICATION

E2



2-2-5 Testing equipment

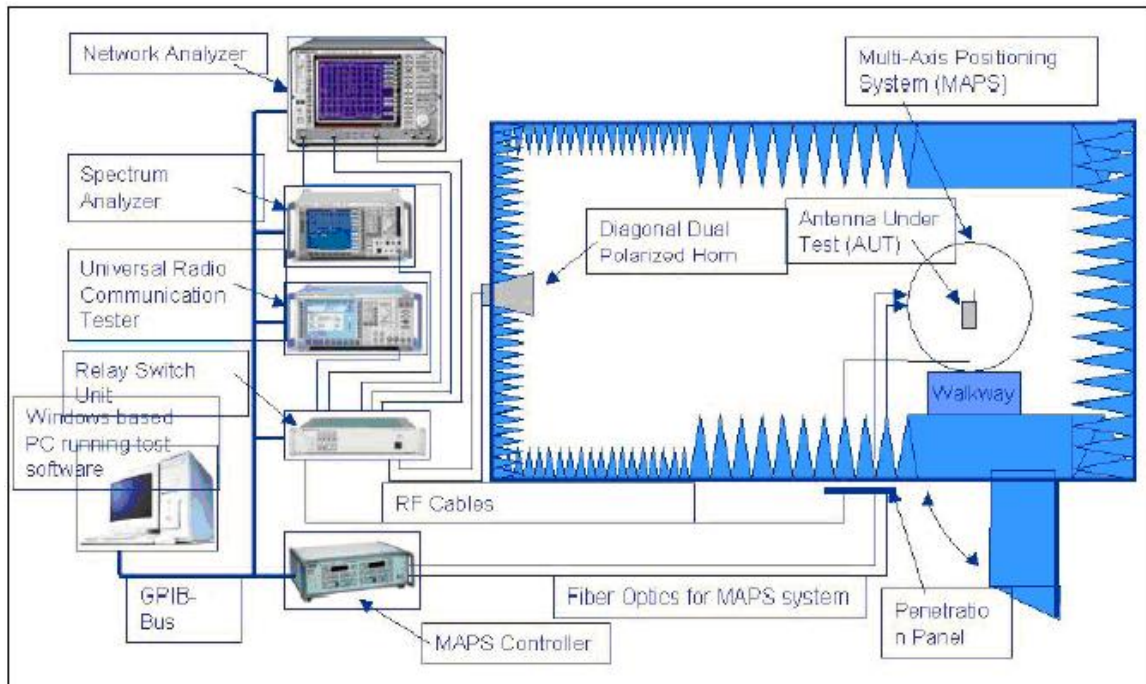


公司拥有通信行业最领先的法国 Satimo SG24 OTA测试系统1套, ETS OTA 标准测试系统2套, Bluetest 混响暗室1套, MicroPross NFC测试系统1套, 能快速稳定的给客户id提供精确的测试报告, 完全符合CITA标准, 支持 GSM/CDMA/WCDMA/TD/LTE/WIFI/BT/GPS/MIMO等各制式的有源无源测试。



MicroPross NFC系统能满足各运行商测试要求, 对NFC设备进行快速性能测试, 并输出正式认证测试报告

ANTENNA SPECIFICATION



ANTENNA SPECIFICATION

3. Mechanical Specification

3-1 Mechanical Configuration

3-1-1 Mechanical Configuration(WIFI2.4G/5G)

ANTENNA SPECIFICATION

GSD P/N : WC0D

Version 1.0 Page 9 of 10

版本	说明	审核	日期	批准	日期

展开图

粉红色线为折弯线

立体图

环保要求:

MATTER	RoHs (PPM)
Cd	≤100
Pb	≤1000
Hg	≤1000
Cr6+	≤1000
PBB	≤1000
PBDE	≤1000

备注:

1. 角度尺寸模具设计时依图纸尺寸作参照, 样品及量产实配即可;
2. 打"*"为严格控制尺寸 (IQC必测等级A) ;
3. 字符说明 (采用宋体, 要求字迹清晰, 弹片无变形) ;
4. 产品不能有油污、毛刺、利边、缺料、变形、压印过深等不良;
5. 需通过48小时盐雾测试;
6. 包装时需将吸塑盒摆放整齐, 运输过程中产品不能挤压碰撞等;
7. 未经过ZTX公司确认, 材料不能随意更改;

未注明公差	5 (ND	±0.08	10-35	±0.10	35-50	±0.12	50-100	±0.15	100 0VE	±0.20
制图	龙秋霖	比例	1:1	材料	AL	图例				
日期		日期		材料		日期				
审核		日期		材料		日期				
批准		日期		材料		日期				

中天迅通信技术有限公司

ZTX-QR-029

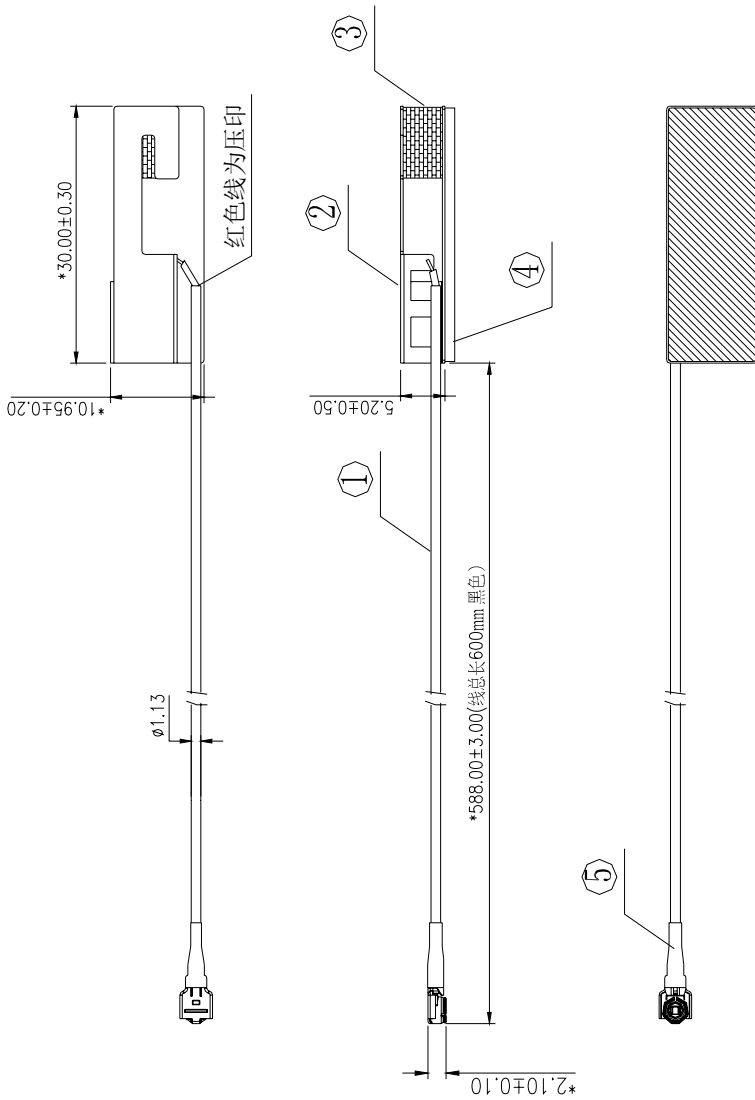
3-1-2 Mechanical Configuration(天线组件)

ANTENNA SPECIFICATION

GSD P/N : WC0D

Version 1.0 Page 10 of 10

版本	说明	审核	日期	批准	日期



材质说明:

序号	结构说明	材质	工艺
①	RF同轴线	FEP (F46) 一代高仿端子	
②	WiFi弹片	SUS304 T=0.30mm	镀镍
③	支撑泡棉	防火EVA 3M 9495	通过UL-94
④	固定泡棉胶	泡棉胶 3M RP45	通过UL-746C
⑤	护套	黑色热缩套管	

注: 带*号尺寸为CPK检测尺寸

中天迅通信技术有限公司		图号	规格	比例	比例	物料号	物料号
环保要求:	RoHS (PPM)	20160824	mm	A1	1:1	2.00000630	2.00000630
MATTER	≤100	制图	材料	SUS304	Fe=0.30mm (镀镍)	日期	1/1
Cd	≤1000	日期	工艺				
Pb	≤1000						
Hg	≤1000						
Cr6+	≤1000						
PBB	≤1000						
PBDE	≤1000						