# Hidizs Technology Company Limited 8th Floor, Weisheng Business Building,No.18,Yanhedongsan Road,Changping Town,Dongguan City,Guangdong Province,China

### Declaration concerning Antenna Specification

It is hereby declared that the product

Model No.: AP200

FCC ID: 2ANW4-AP200

fulfills the requirement in FCC test relating to the antenna type.

The device specified above confirms to the FCC recommendations for integral antenna type(s) described below:

Model No. of antenna:	N/A
Type of antenna:	Integral Antenna
Gain of the antenna:	Maximum -0.53 dBi
Frequency range:	BT:2402 MHz to 2480 MHz , WIFI :2412 MHz to 2462 MHz(HT20),
_2422 MHz to 2452 MH	z(HT40)

The mounting of the antenna is fixed to the radio module and no other antenna should be used.

Company name: <u>Hidizs Technology Company Limited</u> Address: <u>8th Floor, Weisheng Business Building,No.18,Yanhedongsan Road,Changping</u>

Town, Dongguan City, Guangdong Province, China

City: Dongg	uan	
ZIP / Postal cod	e: <u>523658</u>	
Country:	China	

Place:	China	Date: 2018/05/24_
Signature:		Jan xinwri



深圳市盛邦尔科技有限公司

 Shenzhen Surbaner Technology Co., Ltd.

 地址: 深圳市宝安区西乡街道鹤洲恒丰工业城 B25 栋 2 楼

 TEL: 0755-82790675

 FAX: 0755-82809726

•

SPECIFICATION FOR APPROVAL

i and the second s	
客户 <u>Customer</u>	敏动
项目名 Project	AP200
频段 Band	2.4-2.5GHz
-SBR 料号 Part number	FIWF83L1978AA045
版本 <u>Version</u>	AO
射频 <u>RF</u>	林福族
结构 <u>ME</u>	防燈
业务 <u>Sale</u>	余献杰
日期 Date	2017-08-18
客户项目名称 Customer project name	AP200
客户料号 Customer part number	

受控技术文件/	承认人签章	
	Signature	
制定 Responsible	审核 Approve	客户确认 Confirm
the the	experience	
ANZ	77112018	

## www.surbaner.com.cn

SBR Communication has possession of proprietary information provided in this report and this proprietary information shall be kept in strict confidence and not disclosed to any person or firm without the prior written consent of SBR Communication Technology.

Page 1

# 深圳市盛邦尔科技有限公司

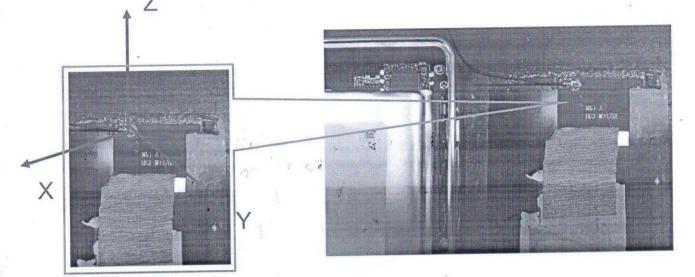
项次	日期	版次	修订说明	备注
1	2017-08-18	AO	首次发行	
				r
		2	the law for the	
		,	and the first of the second	
	4. 4		· · ·	
			· · · · · ·	
				. *.
			e e	
				Ś.,
	•			

			•	N.
	, e	-		ų
7		**		

#### Confidential Information

# 1. Antenna picture

The report mainly provides the test status of the electrical properties parameters of AP200. The AP200 antenna is <u>a</u> 2.4-2.5GHz Band . The antenna Picture and assembly are shown below.



Antenna picture & assembly picture

# 2.Antenna Test Equipment Introduction

Test of antenna input characteristics using Agilent E5071C and Agilent 5062A vector network analyzer; The radiation pattern of the antenna are tested using the Satimo starlab 3D near field Anechoic Chamber, and the instrument is used to agilent8960 E5515 and Agilent E4438C. The test coordinates of the darkroom are as follows:

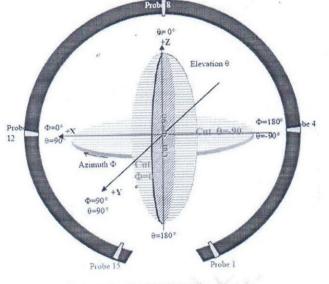


图 4 3D 微波暗室测试坐标系(back view)

## www.surbaner.com.cn

SBR Communication has possession of proprietary information provided in this report and this proprietary information shall be kept in strict confidence and not disclosed to any person or firm without the prior written consent of SBR Communication Technology.

Page 2

### Confidential Information

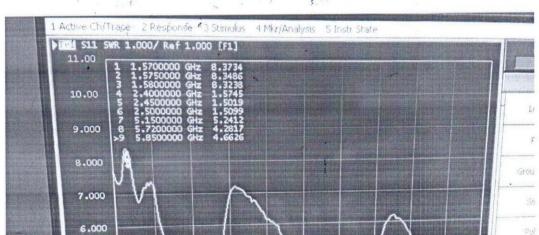
# **3. Electrical Specification**

## 3-1 Frequency Requirements

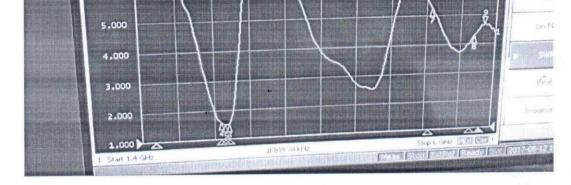
AP200 Antenna working band at 2.4-2.5GHz ; Resonate in this frequency band.

## 3-2 Passive S11 parameter

Measuring Method is a  $50 \Omega$  coaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the S11 parameter, Keeping this fixture away from metal at least 20cm.



-01



VSWR

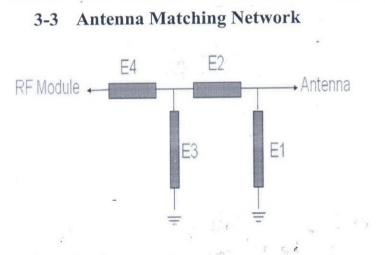
Frequency(MHz)	2400	2450	2500
VSWR	1.57	1.50	1.50

#### www.surbaner.com.cn

SBR Communication has possession of proprietary information provided in this report and this proprietary information shall be kept in strict confidence and not disclosed to any person or firm without the prior written consent of SBR Communication Technology.

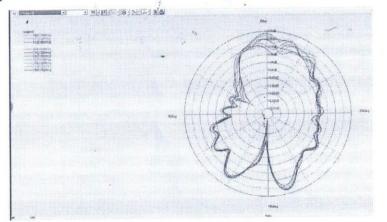
Page 3

### Confidential Information

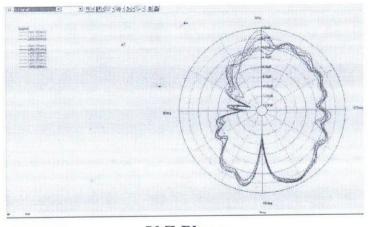


Element	Capacitor	Inductor
E1	N/A	N/A
E2	N/A	. N/A
E3	N/A	N/A
<b>E4</b>	N/A	N/A

3-4 2D Pattern



**X-Z** Plane



Y-Z Plane

## www.surbaner.com.cn

SBR Communication has possession of proprietary information provided in this report and this proprietary information shall be kept in strict confidence and not disclosed to any person or firm without the prior written consent of SBR Communication Technology.

Page 4



NEMOTION STATES NO

X-Y Plane

3-5 Efficiency and Gain Value

Frequency (MHz)	Efficiency (%)	Peak GAIN (dBi)
2400	42.93	-0.72
2450	43.46	-0.53
2500	42.83	-0.60

# 4. Mechanical Specification:

Mechanical Configuration (Unit: mm) The appearance of the antenna is according to drawing Figure 6

## www.surbaner.com.cn

SBR Communication has possession of proprietary information provided in this report and this proprietary information shall be kept in strict confidence and not disclosed to any person or firm without the prior written consent of SBR Communication Technology.

### Page 5

