

#### Percsson Communication Equipment Co., Ltd

# Antenna Test Report

## For

## **ESP-32**

Customer	深圳四博智联科技有限公司	Project	ESP-32
Band	2.4G	Color	黑色
PRS PN		Version	V1.0
Issued by	Jason	<b>Checked by</b>	Mem
<b>Confirmed by</b>	Zhang	Date	2018.06.27

#### —. TEST INSTRUMENTATION

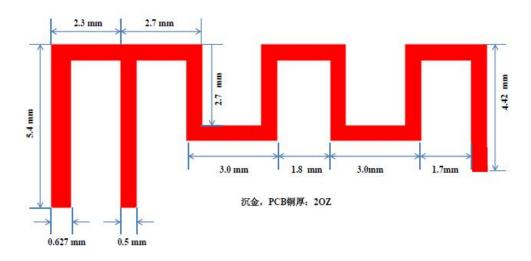
CHAMBER	SATIMO Chamber	
Wireless Networking Test Set	Agilent 8960 5515C	
NETWORK ANALYZER	Agilent 8753D	
TEMPERATURE	20±2℃	
HUMIDITY	50±20%rh	



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ESP-32 WiFi Module

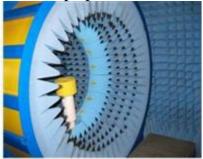


Antenna Dimension for ESP-32



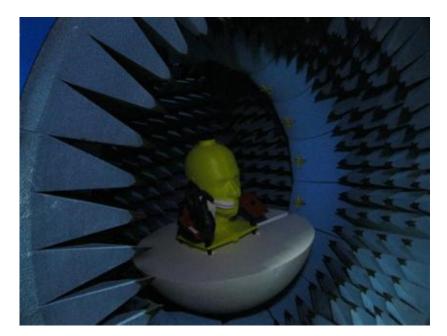
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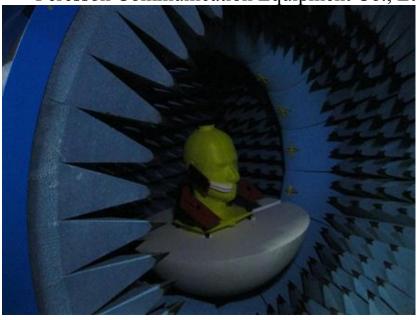




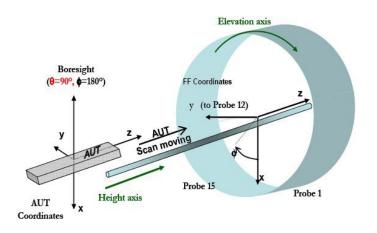




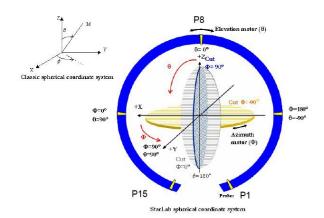
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#### Coordinate system - Cylindrical geometry



#### Coordinate system - Spherical geometry





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#### 二. Definitions

VSWR: Voltage Standing Wave Rate

TRP: total radiated power

TIS: total istropic sensitivity

	WIFI
VSWR	1.1

## 主天线驻波比:



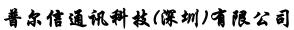


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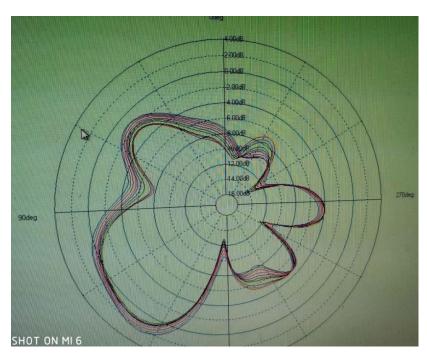
## 主天线无源效率测试

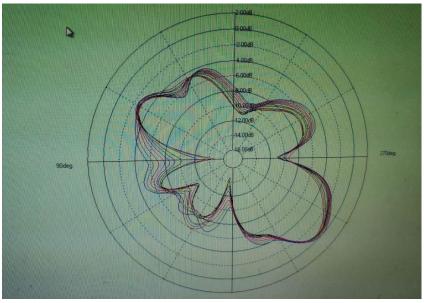
#### WIFI/BT:

Freq (MHz)	Effi (%)	Gain (dBi)
2400	30, 91	-1. 2
2400		1. 4
2410	30. 74	-2. 19
2420	31. 4	-2. 18
2430	32. 06	-2. 18
2440	32. 66	-1. 2
2450	33. 14	-1. 2
2460	33. 31	-2. 19
2470	33. 49	-2. 17
2480	33. 81	-2. 08
2490	33. 79	-2. 79
2500	33. 38	-2. 96



# Percsson Communication Equipment Co., Ltd 无源方向图:







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