## 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	Checked by	Mem
<b>Confirmed by</b>	Zhang	Date	2018.06.27

#### —. TEST INSTRUMENTATION

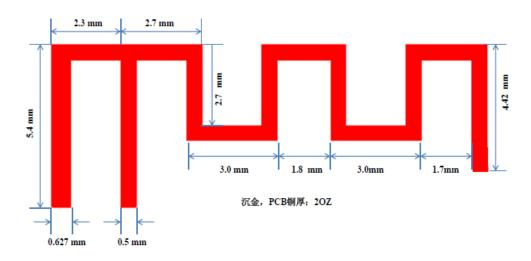
CHAMBER	SATIMO Chamber	
Wireless Networking Test Set	Agilent 8960 5515C	
NETWORK ANALYZER	Agilent 8753D	
TEMPERATURE	20±2℃	
HUMIDITY	50±20%rh	



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ESP-32 WiFi Module

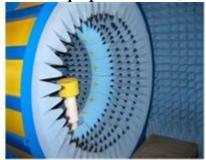


Antenna Dimension for ESP-32



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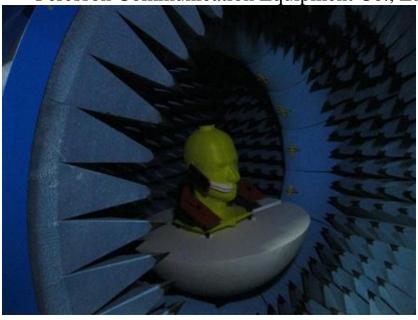




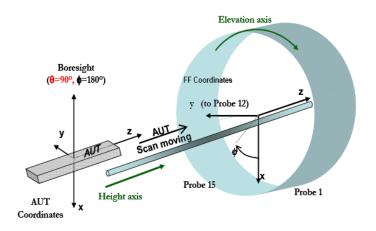




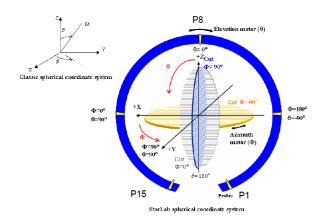
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#### Coordinate system - Cylindrical geometry



#### Coordinate system - Spherical geometry





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#### 二. Definitions

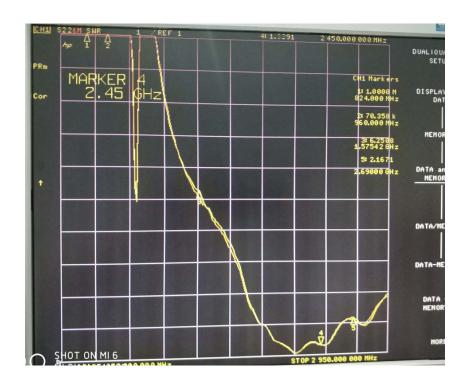
VSWR: Voltage Standing Wave Rate

TRP: total radiated power

TIS: total istropic sensitivity

	WIFI	
VSWR	1.1	

### 主天线驻波比:





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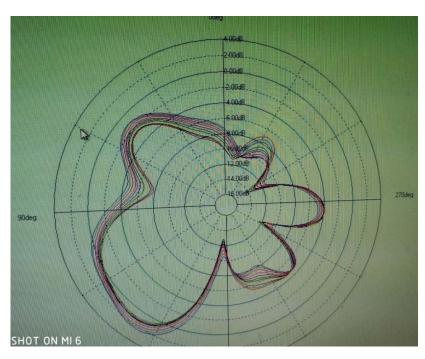
### 主天线无源效率测试

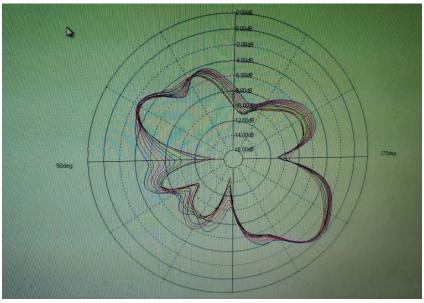
#### WIFI/BT:

Freq	Effi	Gain
(MHz)	(%)	(dBi)
2400	30. 91	<b>2</b> . 20
2410	30. 74	<b>2.</b> 21
2420	31. 4	<b>2.</b> 18
2430	32.06	<b>2.</b> 10
2440	32. 66	1. 89
2450	33. 14	1. 87
2460	33. 31	1. 87
2470	33. 49	1. 94
2480	33. 81	1. 80
2490	33. 79	1. 79
2500	33. 38	1. 96



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







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