Model:N/A

Ant Type:PCB Antenna

1、规格 Specification

报告主要提供 BT\WIFI 天线的无源性能参数的测试。

The report focuses on the passive performance parameters of BT\WIFI antennas.

2、电器性 Electrical

2-1 规格标准 Specification standards

WIFI 天线工作频段为 2400MHz-2500MHz 在此频段产生谐振。下表是海磁通为设计 L5-WIFI 天线的量产性能测试指标.

The WIFI antenna operates in the 2400MHz-2500MHz frequency band and resonates in this band.

The following table shows the production performance of L5-WIFI antenna designed by Magnetron.

天线 Ant	频率 (MHz)	VSWR
WIFI	2400-2500	≤ 2.0

2-2 天线的匹配电路 Matching circuit for antenna

无匹配 NC

3、驻波比（VSWR）的测试 Testing of VSWR

3-1 测试的设置 Test setup

VSWR 测试装置依次的连接为：E5071B 网络分析仪→50 欧姆的同轴 Cable→170mm 长的铜管→测试治具。

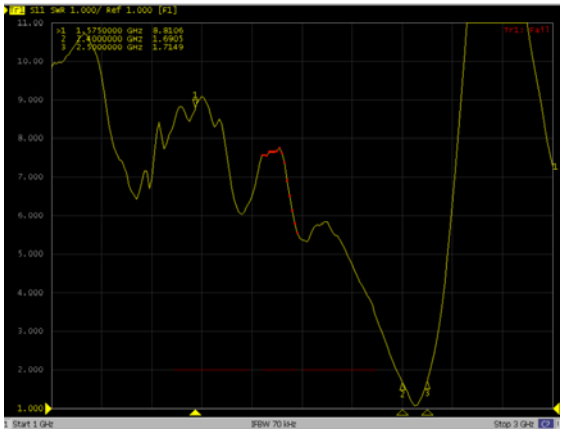
The connections of the VSWR test set in sequence are E5071B → 50 Ω Cable → 170mm Copper tube → DUT

测试治具的处理：从手机 PCB 上天线 50 欧姆测试点处用一根硬质电缆引出 SMA-J 接头，与套有扼流圈的铜管连接，再依次连接其他装置。

Handling of the DUT: From the antenna test point on the PCB, a rigid cable leads to the SMA-J connector, which is connected to a copper tube sleeved with a choke, and then to the other devices in turn.

3-2 测试结果 Test Result

WIFI



4 有源测试的设置 Setup of active tests

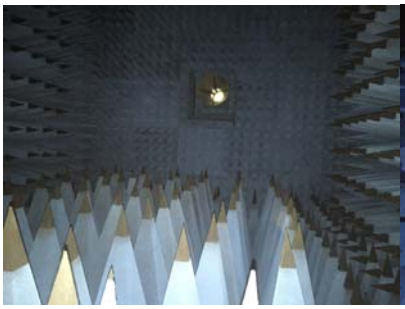
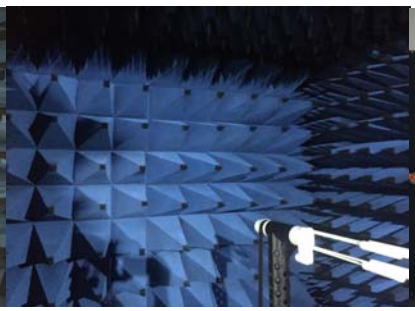
有源测试装置依次的连接为：Agilent E5062A→50 欧姆的同轴 Cable→EST 远场测试系统→待测试手机。

The active test set is connected sequentially as Agilent E5062A→50 ΩCable →EST → DUT

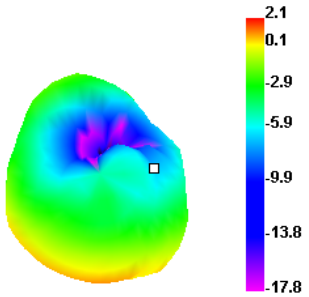
4-1 测试的场地 Site of the test

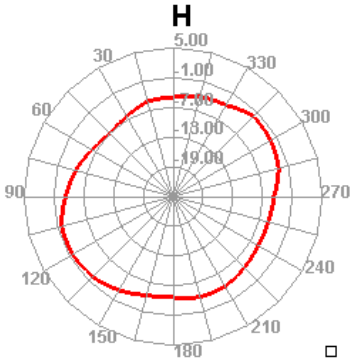
海磁通采用国内最先进的 3D/2D ETS 微波暗室测试系统，测试方式属于远场测试，频率范围为 600MHz—6GHz，暗室屏蔽衰减在-120dBm，

Haicitonge adopts the most advanced 3D/2D ETS test system in China, which belongs to the far-field test, the frequency range is 600MHz-16GHz, and the shielding attenuation of the darkroom is -120dBm.

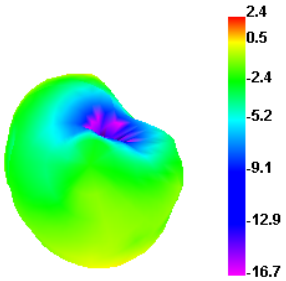



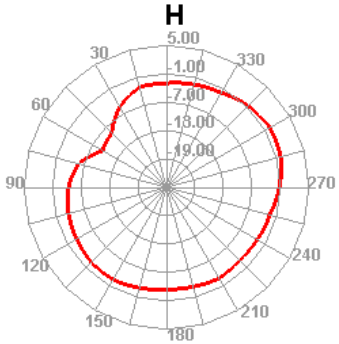
4-2 测试结果 Test Result



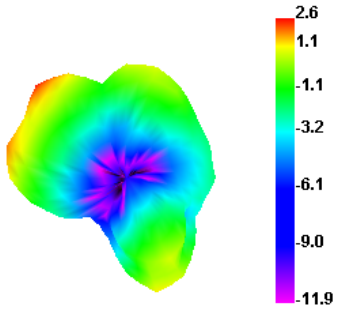


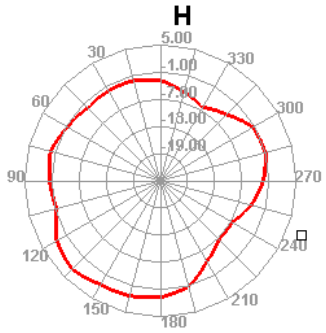
2400MHz Gain:2.17dBi Efficiency: 44.68%



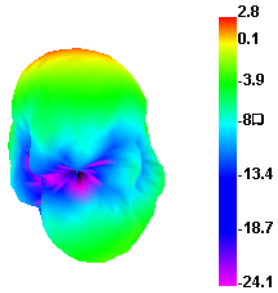


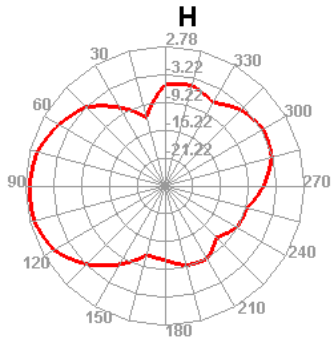
2410MHz Gain:2.45dBi Efficiency: 41.70%



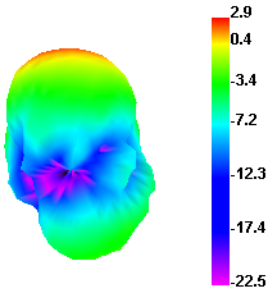


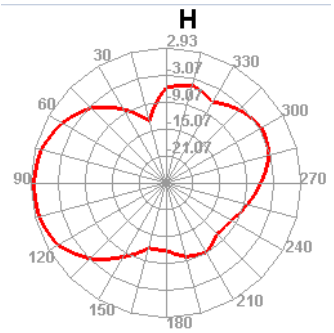
2420MHz Gain:2.61dBi Efficiency: 41.56%



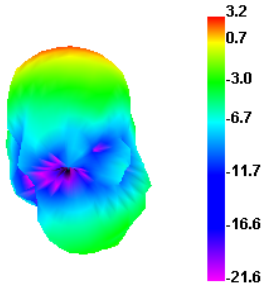


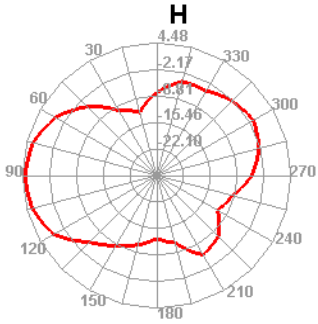
2430MHz Gain:2.8dBi Efficiency: 46.70%



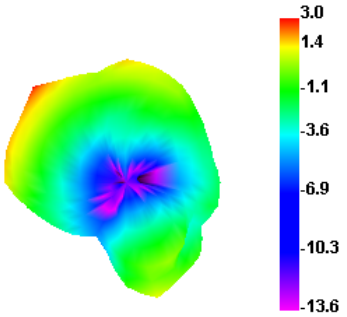


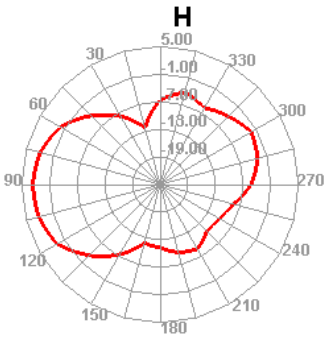
2440MHz Gain:2.93dBi Efficiency: 46.34%



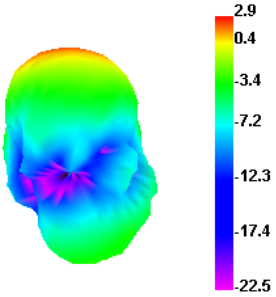


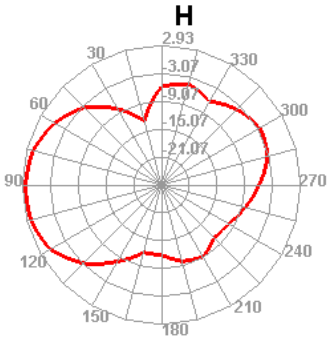
2450MHz Gain:3.24dBi Efficiency: 44.88%



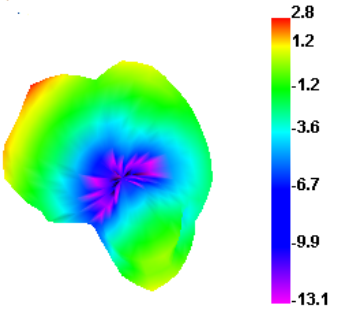


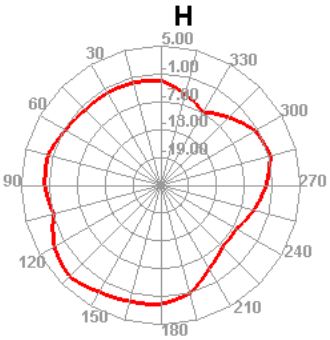
2460MHz Gain:3.18dBi Efficiency: 46.96%



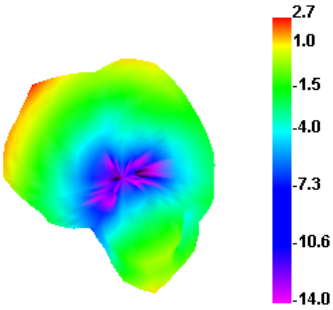


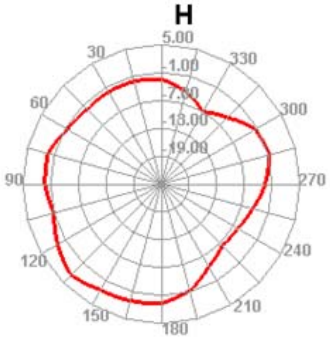
2470MHz Gain:2.95dBi Efficiency: 46.37%



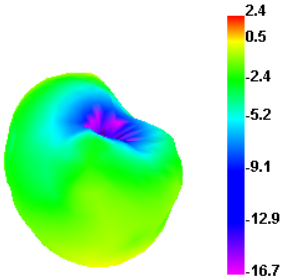


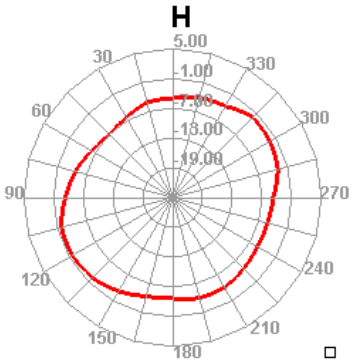
2480MHz Gain:2.84dBi Efficiency: 45.51%

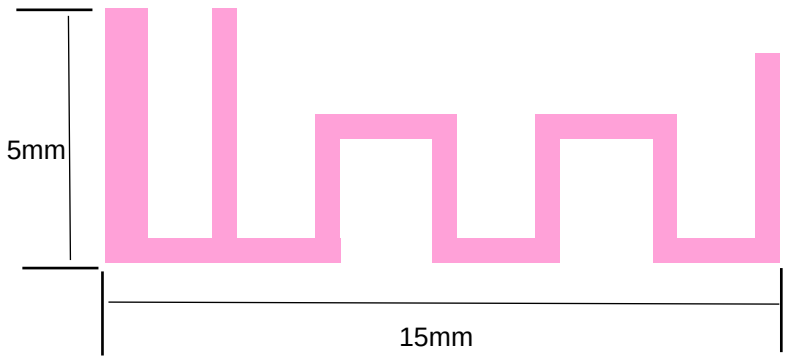




2490MHz Gain:2.71dBi Efficiency: 47.79%





2500MHz Gain:2.41dBi Efficiency:44.69%

天线尺寸 Size （Unit mm）