Advanced Technology & Communications

AONE_Antenna Report V4

2025.9.05

©2015 AT&C Corporation All Rights Reserved

Contents（目录）

1.Company Introduction---------- 3p

2.Antenna Information---------- 4p

3.Antenna Environmental Treatment---------- 5p

4.Antenna Impedance Matching---------- 6p

5.Antenna Passive ---------- 7-8p

6.Antenna Radiation Pattern ---------- 9-10p

9.Summary ---------- 11p

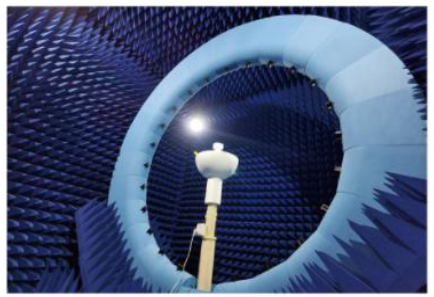
©2015 AT&C Corporation All Rights Reserved

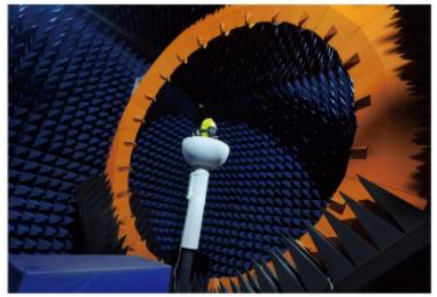
公司简介

爱特恩科技（深圳）有限公司成立于2016年，公司位于深圳市，是一家专业的通讯电子产品配件的解决方案提供商和制造商。集天线研发、生产、销售于一体的高新科技企业。

公司主要从事与开发安防类、智能家居类的电子产品。 目前拥有3座微波暗室、模拟人头手测试、网络分析仪等 。

我们致力与客户建立长期稳定的商业合作关系，始终坚持“顾客至上，锐意进取”的经营理念，为我们的客户提供最具竞争力的价格，最好的质量和优质的服务。





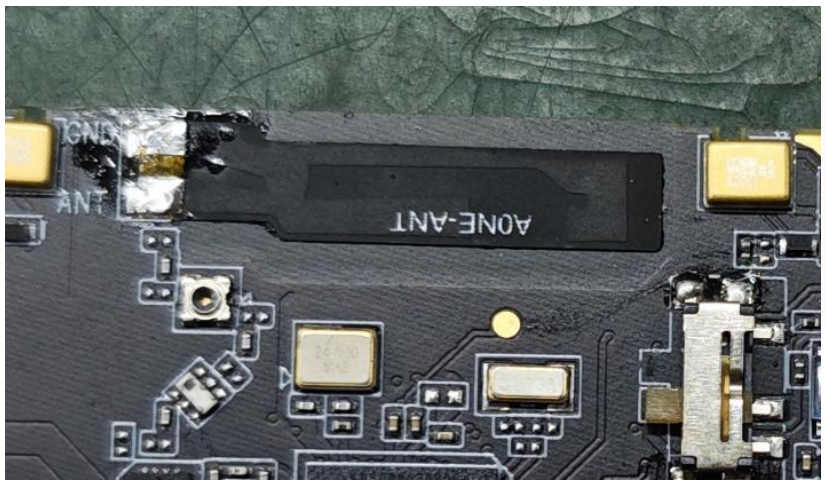
拥有SATIMO原装实验室7M*5M*5M的24探头一座
益麦3.5MX3.5MX3.5M的24探头一座
频率范围均为400MHZ-8.5GHZ
2/3/4/5G、
WIFI A/B/G/N/AC/AX
BT
GPS
NB-10T等有源测试，
拥有模拟人头手测试设备

拥有AGILENT5071系列网络分析仪、AGILENT8960、RS CMW500、4438C等终端测试设备,提供天线性能测试。

©2015 AT&C Corporation All Rights Reserved

● AONE_Antenna Info

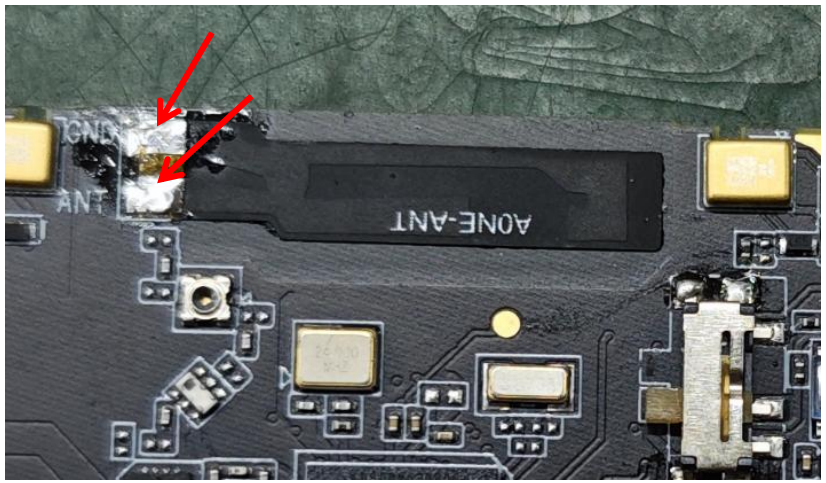
1. Type of the antenna : FPC, PIFA
2. Placement of the antenna : as shown below
3. Coverage : 2400 ~ 2500MHz,5100 ~ 5900MHz。



©2015 AT&C Corporation All Rights Reserved

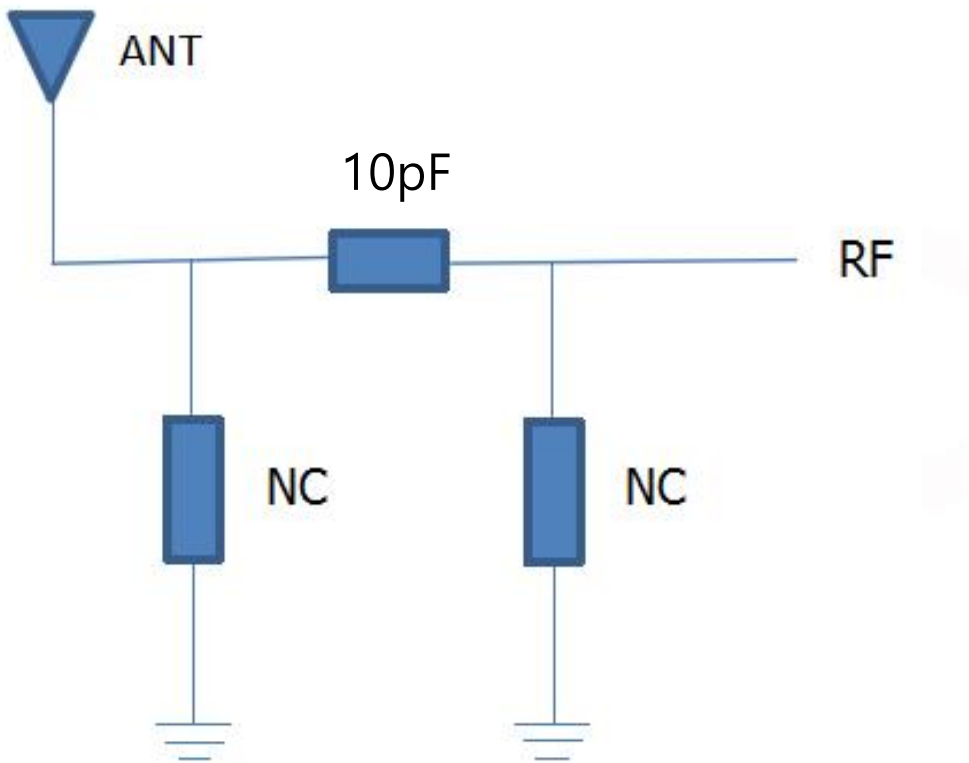
● AONE_Environmental Treatment

1.The space for antenna soldering points is insufficient, so care should be taken to ensure that the soldering height is not too high.



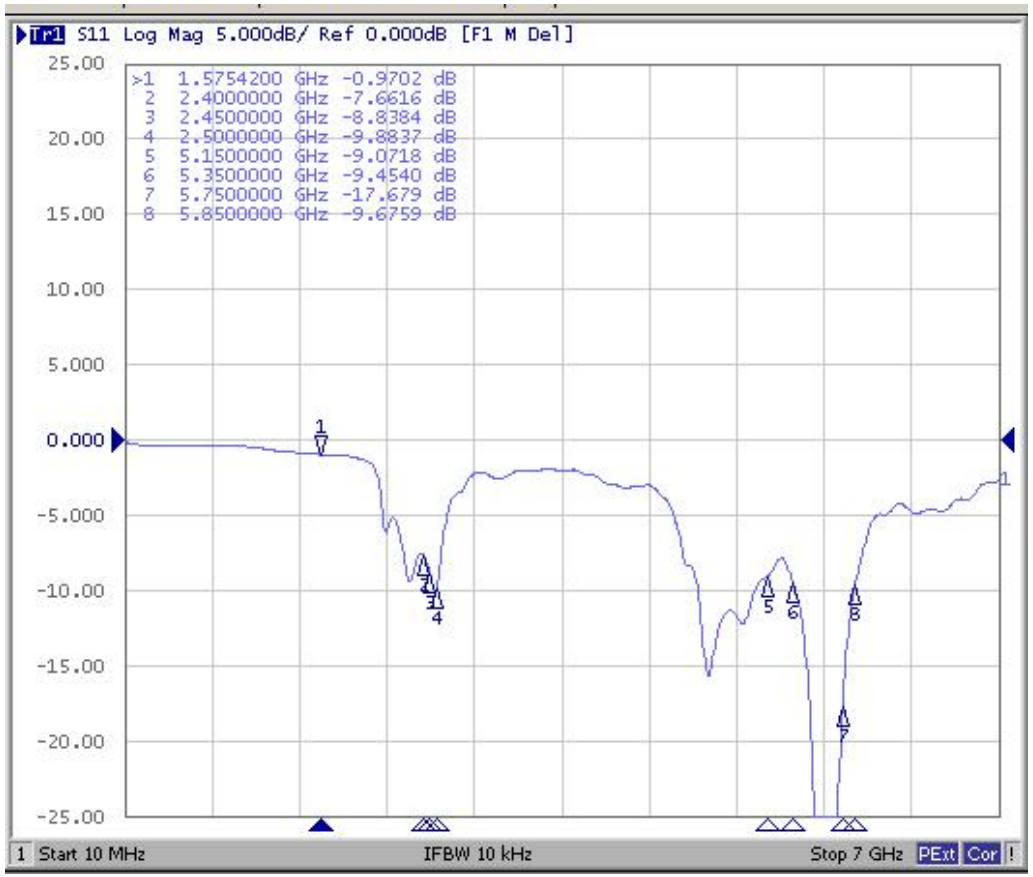
©2015 AT&C Corporation All Rights Reserved

Other matches are unchanged



©2015 AT&C Corporation All Rights Reserved

● AONE_S11/VSWR



©2015 AT&C Corporation All Rights Reserved

● AONE_Performance : Efficiency & Gain

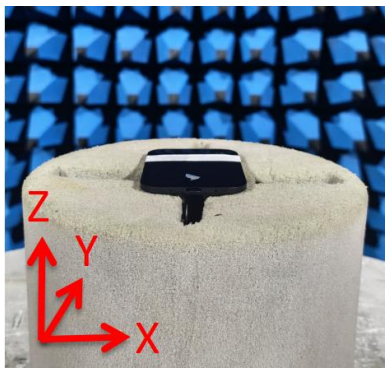
(2.4G) Passive Test Results(无源测试结果)		
Frequency(MHz)	Efficiency(%)	Max Gain(dBi)
2400	3.46%	-9.25
2420	3.69%	-8.57
2440	4.41%	-7.63
2450	5.08%	-7.08
2460	5.59%	-6.58
2480	6.93%	-5.50
2500	6.78%	-5.91

(5G) Passive Test Results(无源测试结果)		
Frequency(MHz)	Efficiency(%)	Max Gain(dBi)
5150	6.21%	-6.21
5200	6.66%	-6.76
5250	6.87%	-6.71
5300	6.79%	-6.75
5350	7.01%	-6.47
5400	7.38%	-6.28
5450	7.33%	-6.46
5500	7.58%	-6.80
5550	7.07%	-7.04
5600	7.05%	-6.46
5650	8.69%	-5.40
5700	9.73%	-4.57
5750	10.51%	-2.89
5800	8.91%	-3.66
5850	7.70%	-4.48

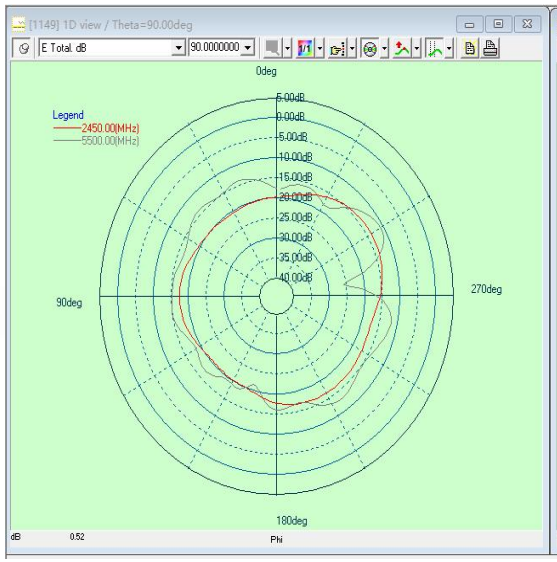
©2015 AT&C Corporation All Rights Reserved

● AONE_Performance : 2D Radiation Pattern

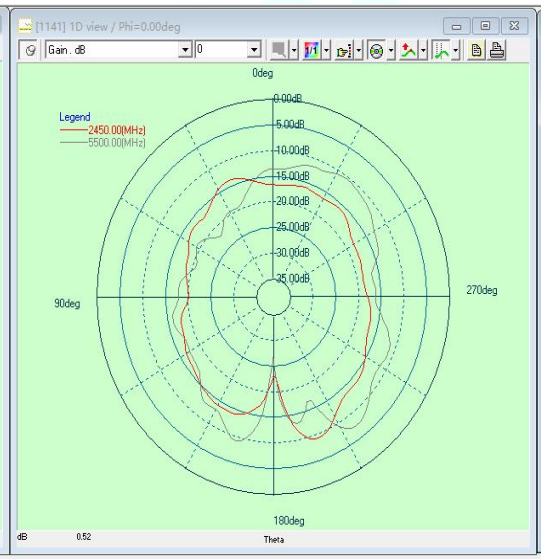
1. Azimuth Pattern H-Plane : “H”, X-Y plane
2. Elevation Pattern E1, E2-Plane : “E1”, “E2”, X-Z plane(E1), Y-Z plane(E2)
3. It is a structure that supplements the distortion of the horizontal plane in the vertical plane and has a gentle sphere shape in three d imensions.



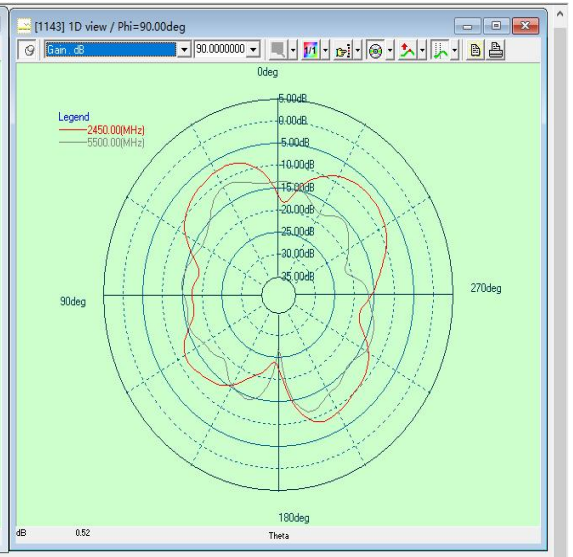
H



E1



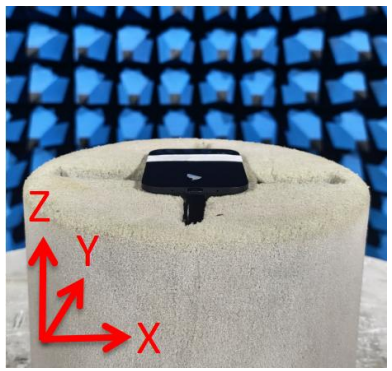
E2



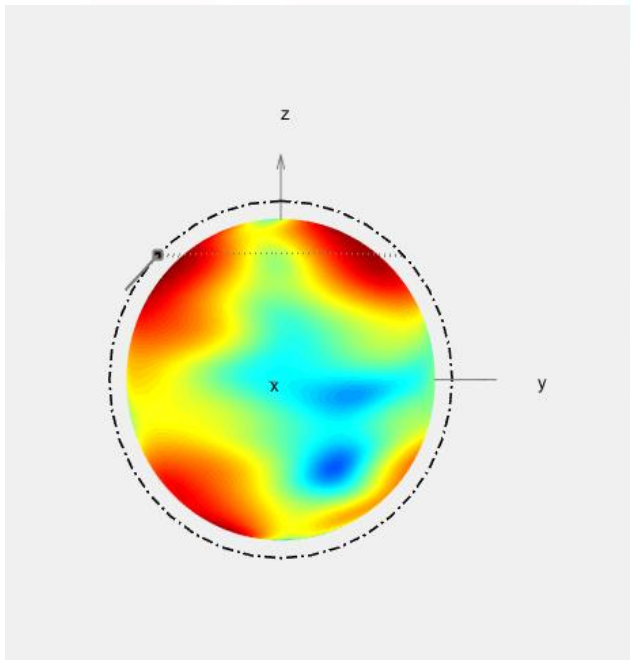
©2015 AT&C Corporation All Rights Reserved

● AONE_Performance : 3D Radiation Pattern

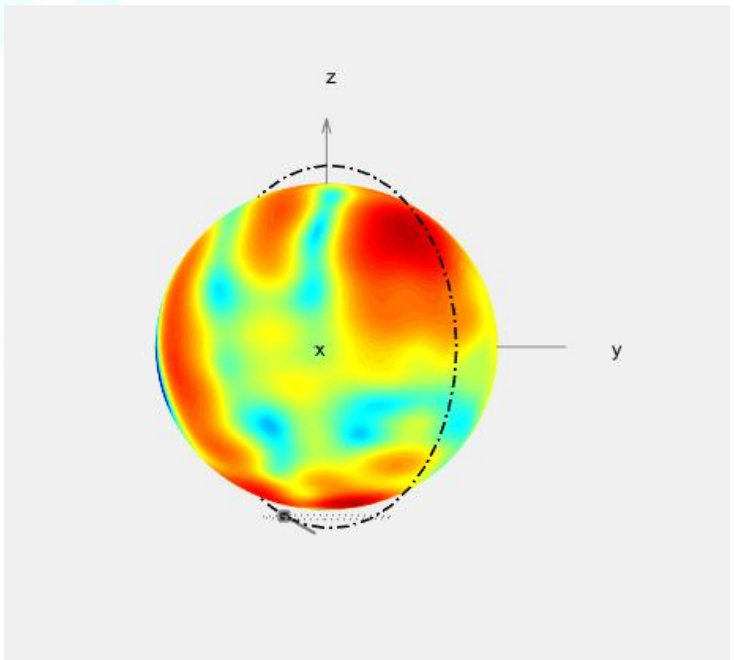
1. This 3D Radiation Pattern shows the response of each angle antenna gain on the sphere.
2. The objects corresponding to the X-Y-Z axes are shown in the left picture.



2450MHz



5500MHz



©2015 AT&C Corporation All Rights Reserved

● AONE Antenna Summary

1.The antenna design is completed.

*** Please let me know if there is a change in the device. And if have any questions, please communicate promptly***

Thank You!!

©2015 AT&C Corporation All Rights Reserved