



**Advanced Technology & Communications**

**A2345\_Antenna Report**

**2024.06.07**



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# 公司简介

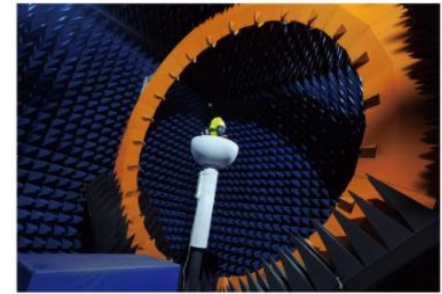
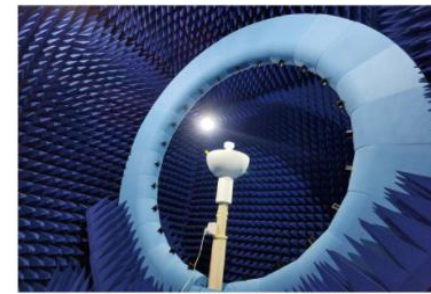
爱特恩科技（深圳）有限公司成立于2016年，公司位于深圳市，是一家专业的通讯电子产品配件的解决方案提供商和制造商。集天线研发、生产、销售于一体的高新科技企业。

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。

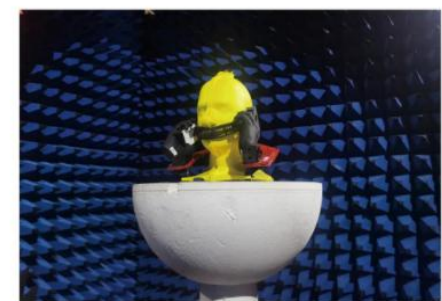
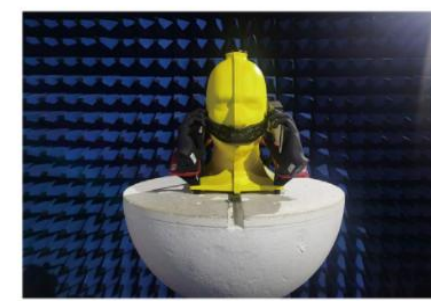
我们致力与客户建立长期稳定的商业合作关系，始终坚持“顾客至上，锐意进取”的经营理念，为我们的客户提供最具竞争力的价格，最好的质量和优质的服务。



专注品质 | 质量第一 | 共赢未来



拥有SATIMO原装实验室7M\*5M\*5M的24探头一座  
 盖表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

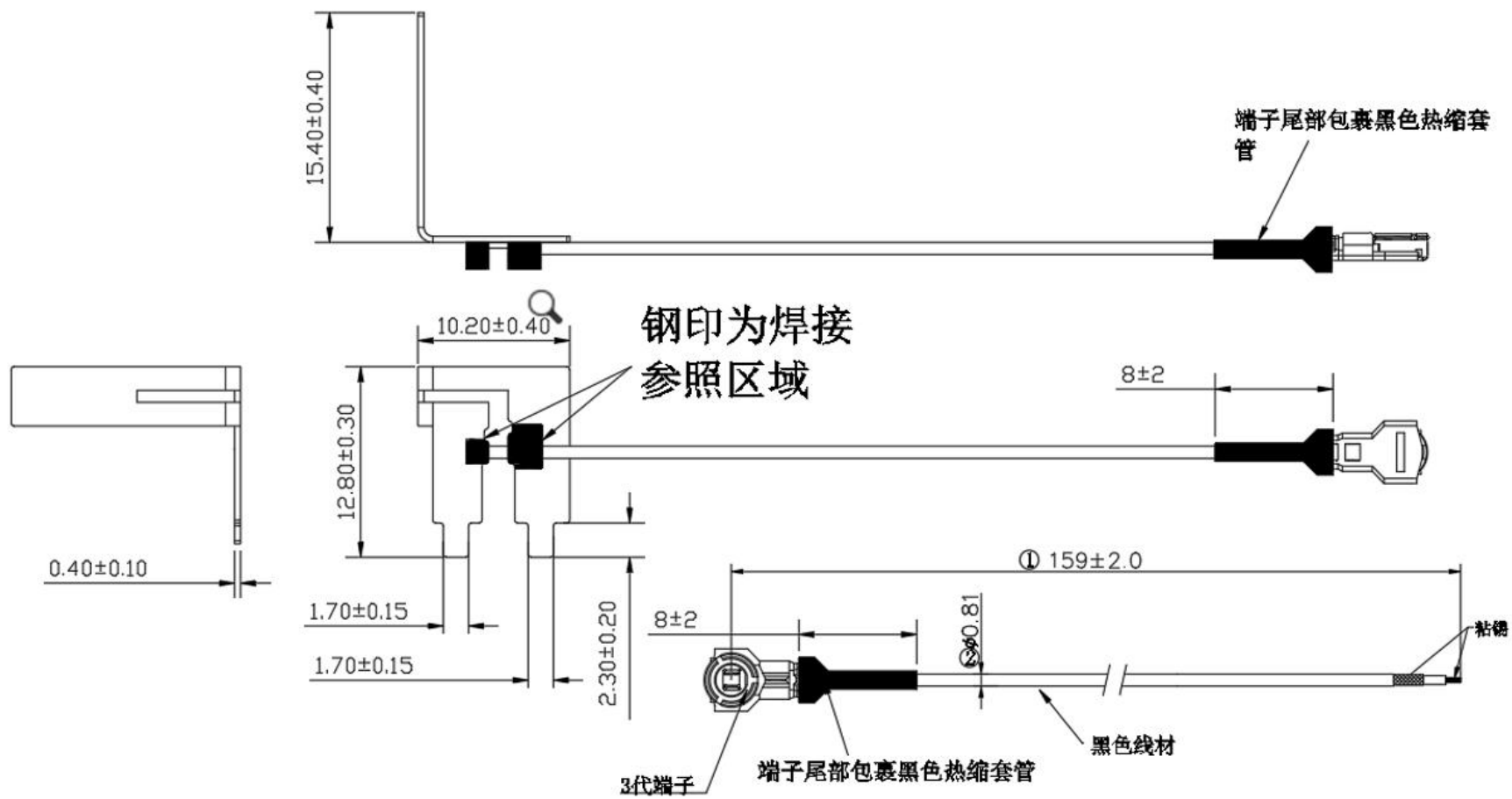


拥有AGILENT5071系列网络分析仪、AGILENT8960、RS CM W500、4438C等终端测试设备,提供天线性能测试。



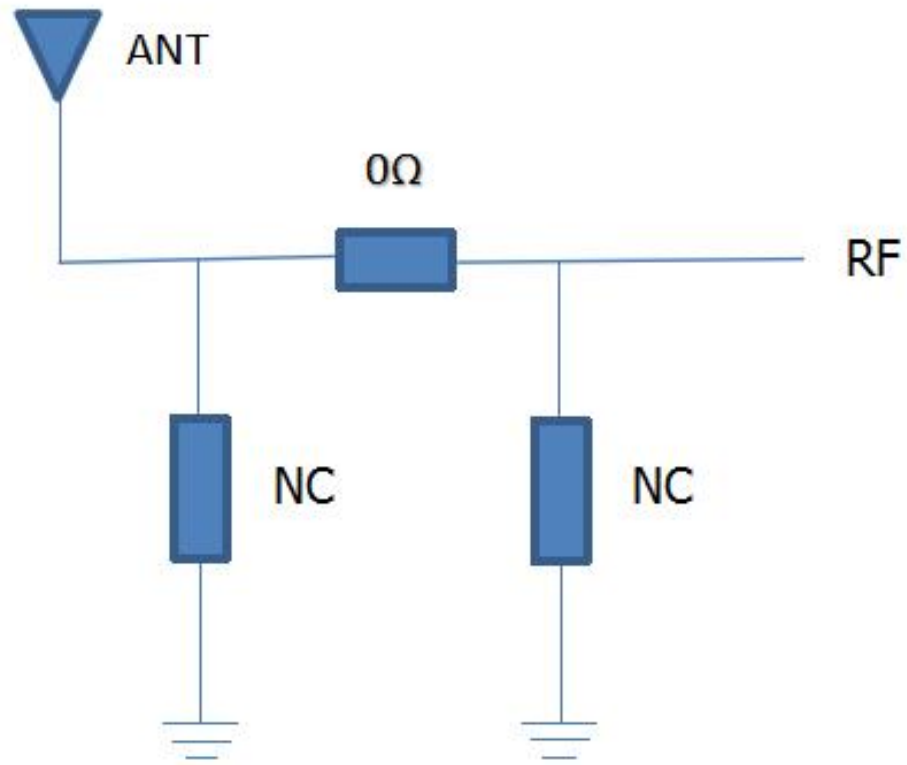
# ● A2345\_ Antenna Information (天线信息)

- 1. Type of the antenna (天线类型) : Steel+CABLE
- 2. The name of the antenna (天线名字) : ATC1437-HY073B70RA
- 3. Coverage (覆盖范围) : 2400 ~ 2500MHz(WIFI2.4G).

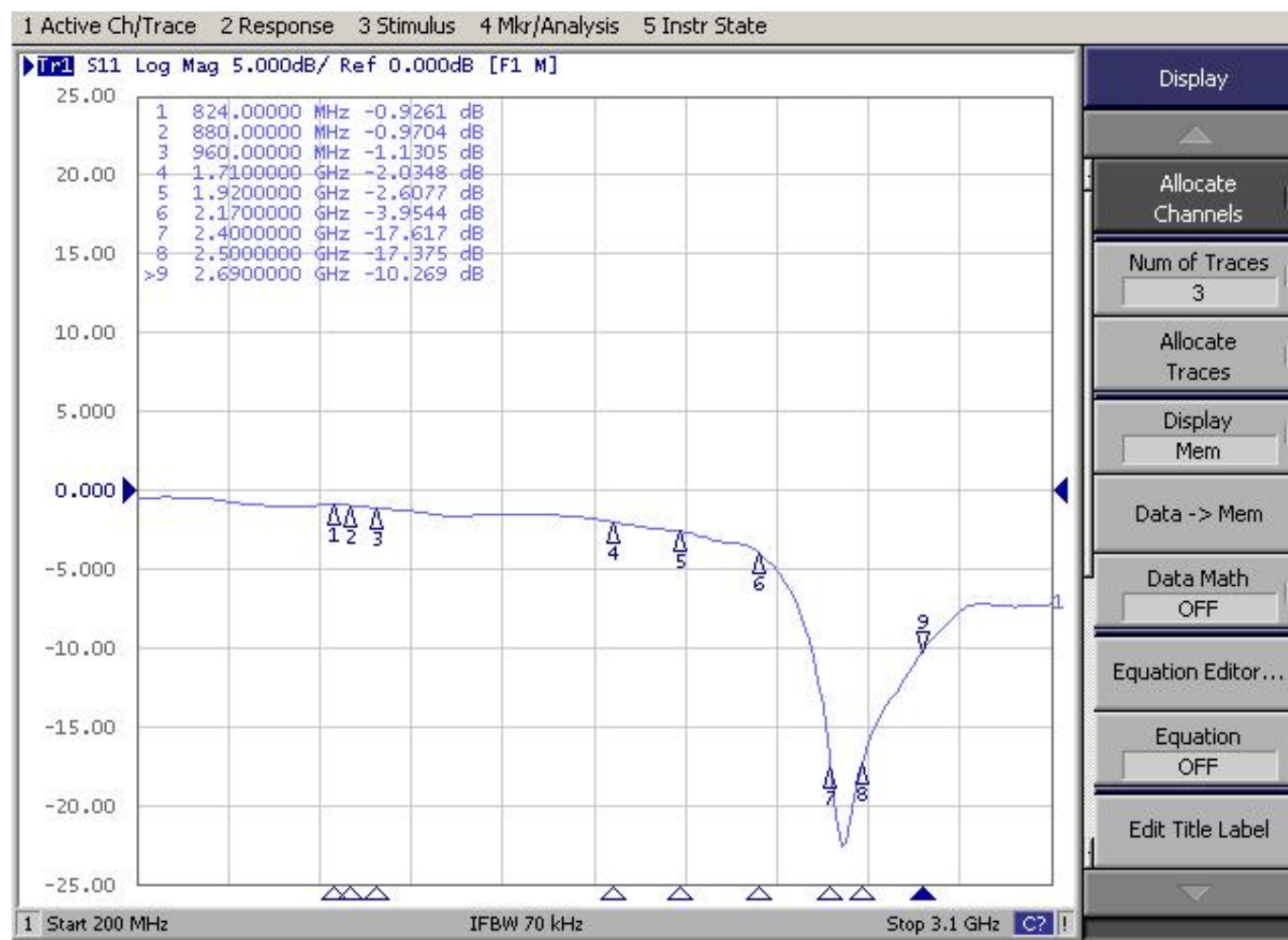


# ● A2345\_ Impedance Matching (天线阻抗匹配)

matches are unchanged



# ● A2345\_ S11/VSWR (天线网分图)



## ● A2345\_ Efficiency & Gain (效率和增益)

1. 无源效率: 超过40%, 天线性能基本达标。(Passive efficiency: over 40%, antenna performance basically meets the standard)

(2.4G) Passive Test Results(无源测试结果)			
Frequency (MHz)	Efficiency (%)	Efficiency (dB)	Max Gain (dBi)
2400	40.90%	-3.88	1.80
2410	41.38%	-3.83	1.95
2420	41.35%	-3.84	1.97
2430	40.81%	-3.89	1.96
2440	40.02%	-3.98	1.84
2450	40.21%	-3.96	1.80
2460	40.32%	-3.95	1.80
2470	40.92%	-3.88	1.83
2480	41.42%	-3.83	1.84
2490	42.12%	-3.76	1.98
2500	41.52%	-3.82	1.97
<b>AVG:</b>	<b>41.00%</b>	<b>-3.87</b>	<b>1.89</b>

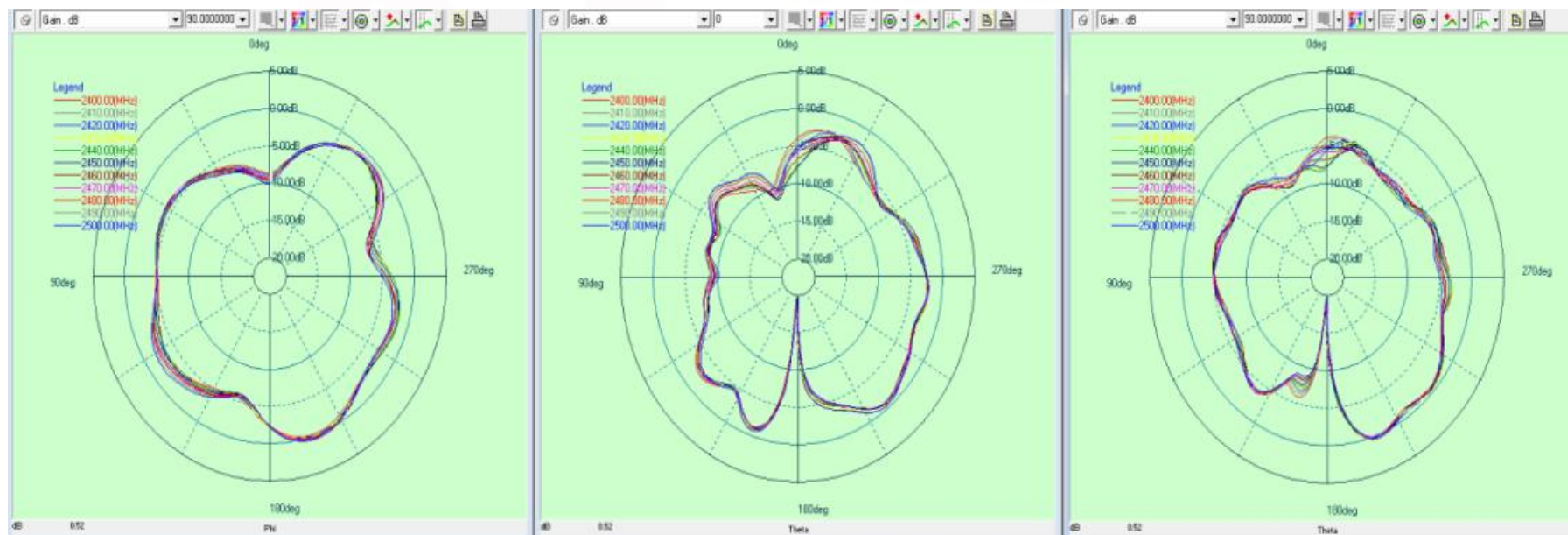
# ● A2345\_ 2D Radiation Pattern (2D辐射方向图)

- 1. Azimuth Pattern H-Plane (水平方向图为H平面) : "H", X-Y plane
- 2. Elevation Pattern E1, E2-Plane (垂直方向图为E1, E2-平面) : "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 dimensions. (它是三维球面方向图, 在二维水平和垂直的剖面)

H

E1

E2

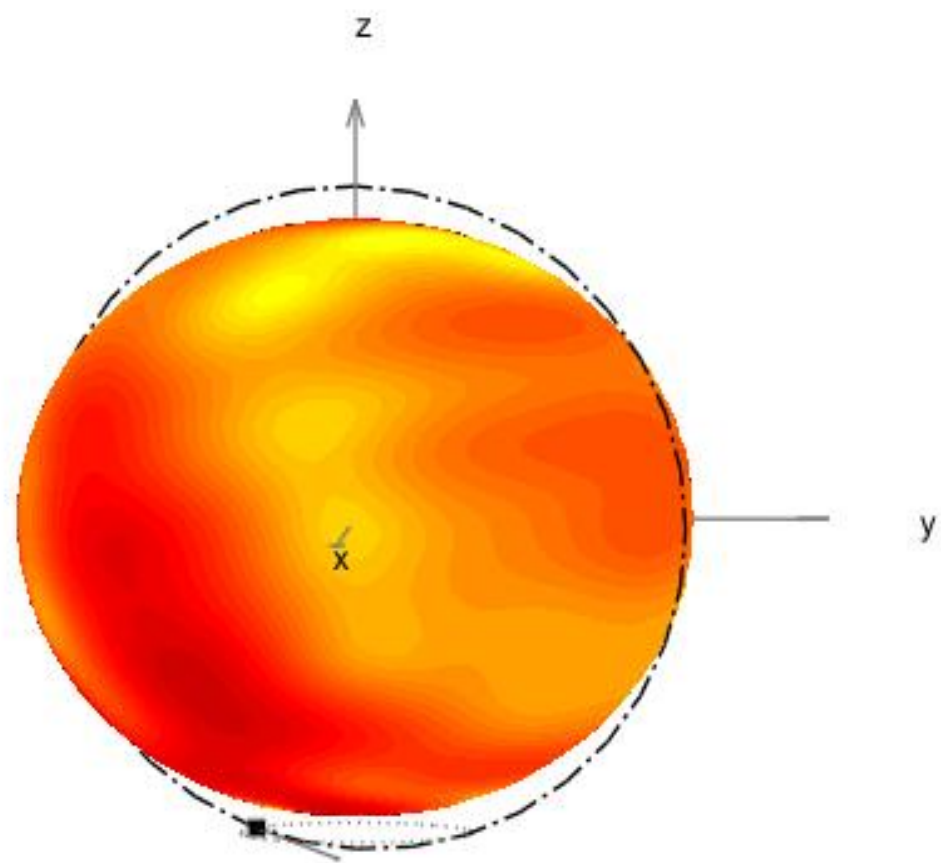




# ● A2345\_ Performance : 3D Radiation Pattern (3D辐射方向图)

- 1. This 3D Radiation Pattern shows the response of each angle antenna gain on the sphere. (此3D辐射图显示了每个角度天线增益在球体上的反应)
- 2. The objects corresponding to the X-Y-Z axes are shown in the left picture. (与X-Y-Z轴相对应的方向如左图所示)

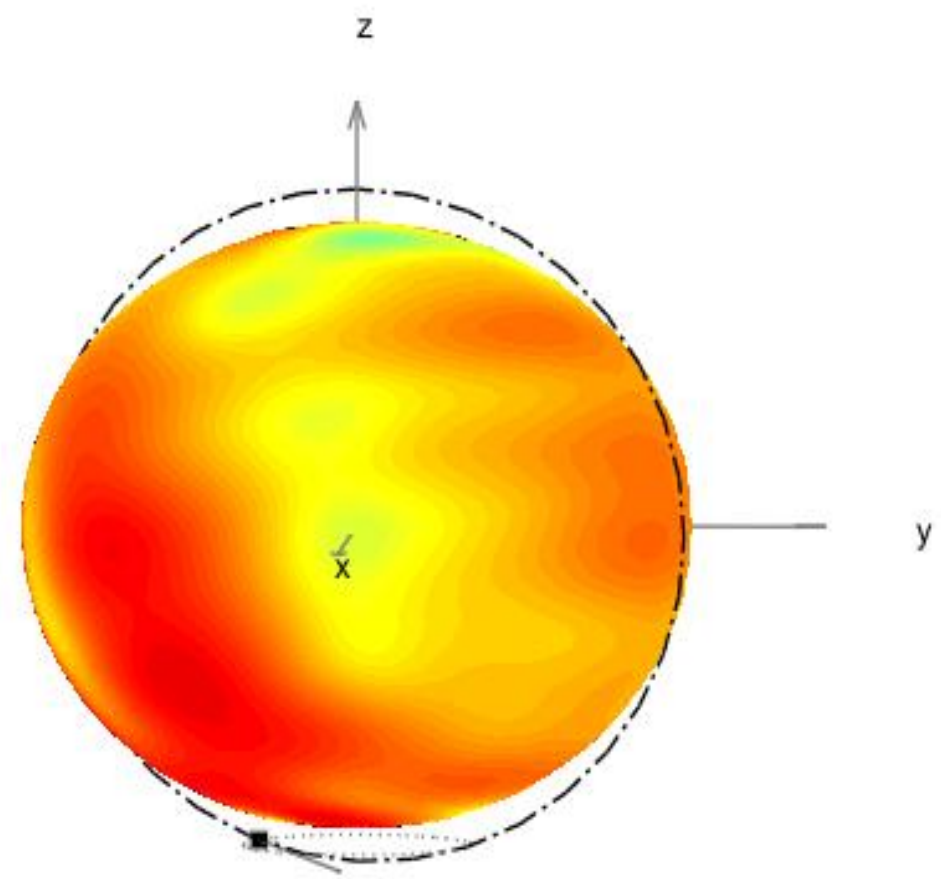
2400MHz



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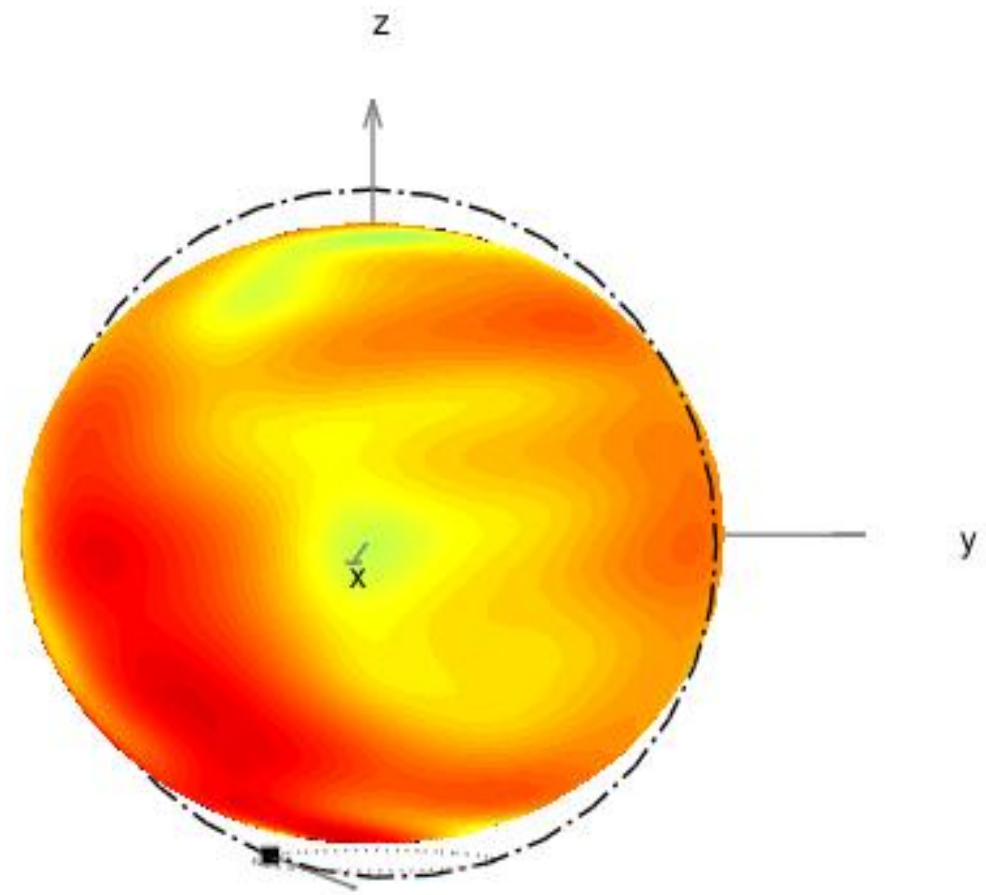
2450MHz



# ● A2345\_ Performance : 3D Radiation Pattern (3D辐射方向图)

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2500MHz



# ● A2345\_ Antenna Summary (天线总结)

1. The antenna meets the basic performance requirements. (天线满足基本的性能要求)

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

\*\*\* (如果机器有变化, 请通知我司; 如果有任何问题, 请及时沟通) \*\*\*

## Thank You!!