产品名称	WiFi 双频胶棒天线	产品编码	AR2458-109SMA

天线技术规格书

一、概述

本本天线是 WiFi 双频终端胶棒天线，工作频率为 2400-2500MHz/5150-5850MHz，广泛用于 WIFi 产品、蓝牙耳机和音响、PAD、手机多频天线各种终端设备上，采用小体积可折弯式设计，能提供良好的数据传输和通信功能。

二、技术要求

2.1 天线指标

	技术要求	技术指标
1	工作频率范围	2400-2500MHz/515-5850MHz
2	天线增益	≥3.0±0.5dBi
3	极化方式	线极化(LP)
4	输出驻波比 VSWR	＜2.0
5	输出阻抗	50Ω

2.2 环境适应性

1	工作温度	-40°C ~ +65°C
2	存储温度	-55°C~ +85°C
3	相对湿度	10%~95%

2.3 机械特性

1	天线尺寸	Φ10*109mm，见图 1 天线参考尺寸图
2	天线重量	10g
3	输出接头	SMA-J
4	外壳颜色	ABS，黑色

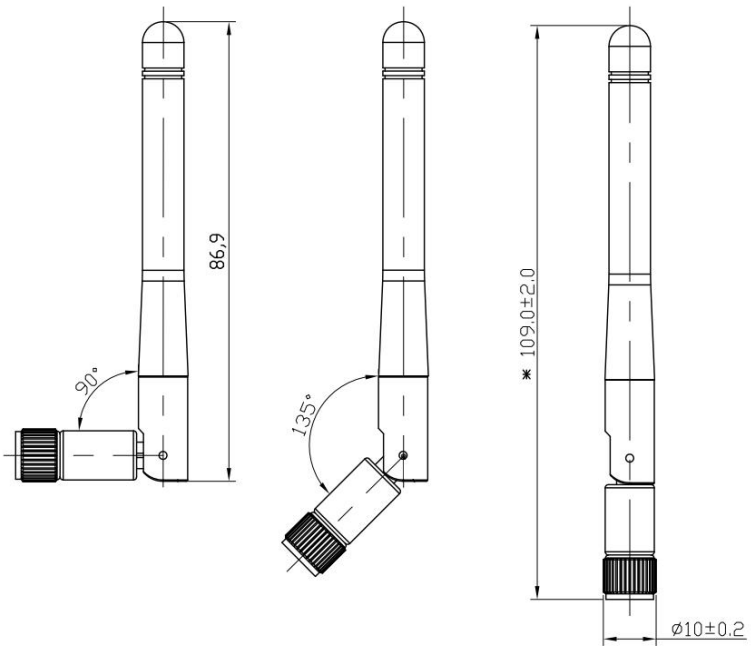
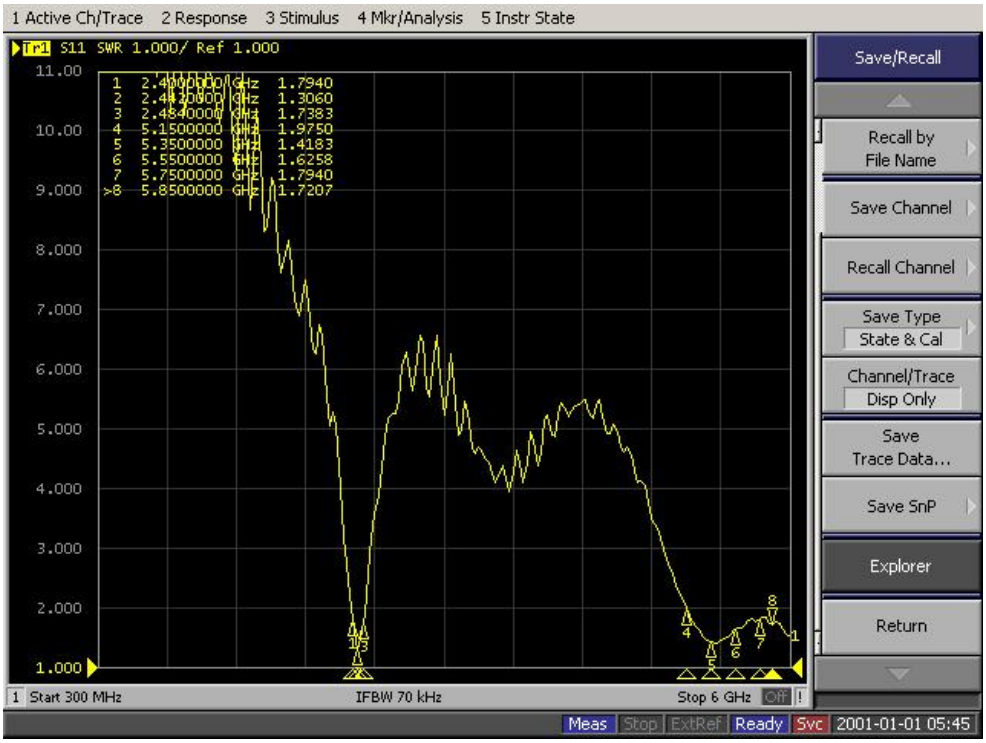


图 1 天线外形尺寸图

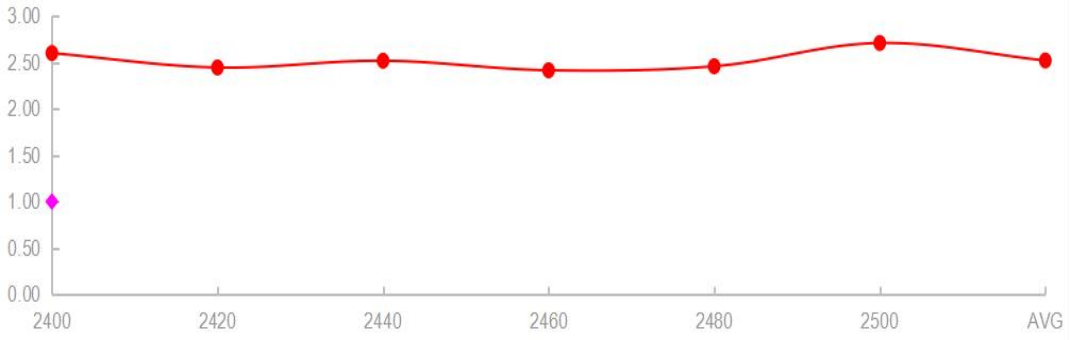
三、测试数据

3.1 VSWR

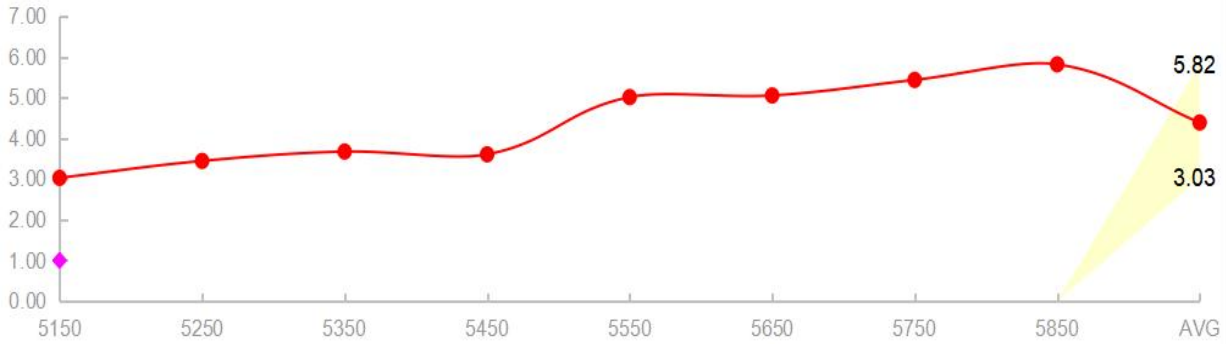


3.1 天线增益和方向图

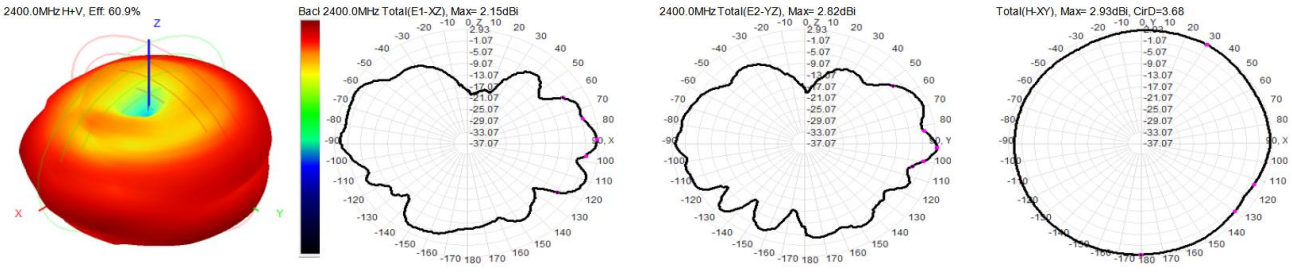
Frequency ID	1	2	3	4	5	6	7
Frequency (MHz)	2400	2420	2440	2460	2480	2500	AVG
Gain (dBi)	2.60	2.44	2.52	2.41	2.46	2.71	2.52
Efficiency (%)	60.95	56.53	56.15	52.82	52.09	57.64	56.02

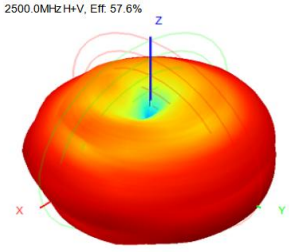


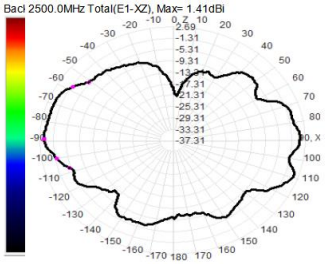
Frequency ID	1	2	3	4	5	6	7	8	9
Frequency (MHz)	5150	5250	5350	5450	5550	5650	5750	5850	AVG
Gain (dBi)	3.03	3.45	3.68	3.61	5.01	5.06	5.44	5.82	4.39
Efficiency (%)	45.34	46.10	46.34	46.28	57.73	66.85	75.97	75.09	57.46

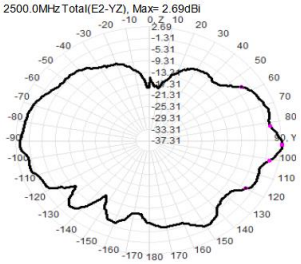


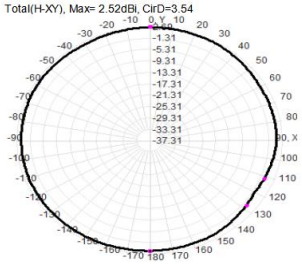
天线方向图（3D）：

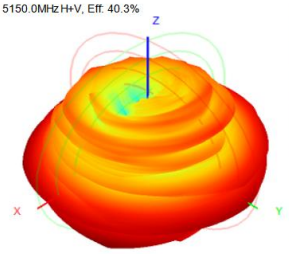


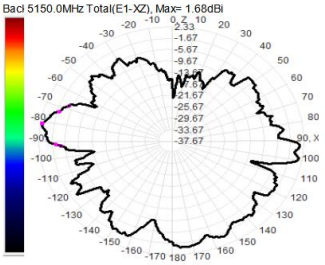

2500.0MHz H+V, Eff: 57.6%
Z
X
Y

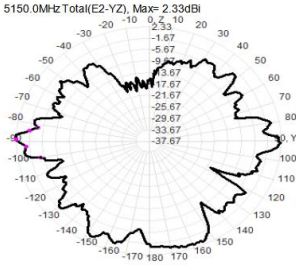

Bacl 2500.0MHz Total(E1-XZ), Max= 1.41dBi

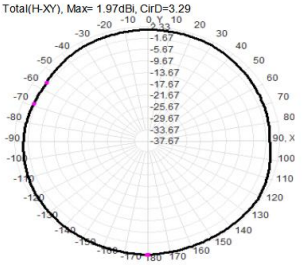

2500.0MHz Total(E2-YZ), Max= 2.69dBi

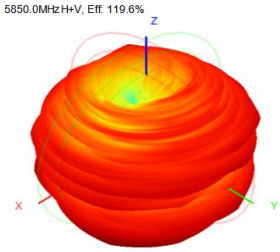

Total(H-XY), Max= 2.52dBi, CirD=3.54

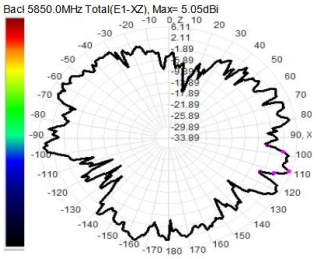

5150.0MHz H+V, Eff: 40.3%
Z
X
Y

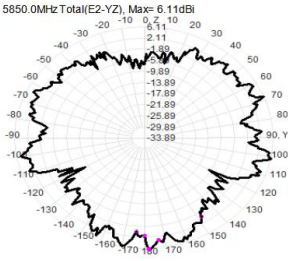

Bacl 5150.0MHz Total(E1-XZ), Max= 1.68dBi

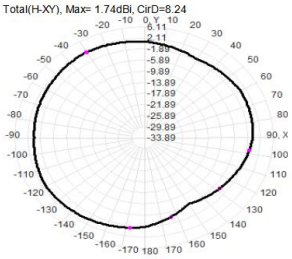

5150.0MHz Total(E2-YZ), Max= 2.33dBi


Total(H-XY), Max= 1.97dBi, CirD=3.29


5850.0MHz H+V, Eff: 119.6%
Z
X
Y


Bacl 5850.0MHz Total(E1-XZ), Max= 5.05dBi


5850.0MHz Total(E2-YZ), Max= 6.11dBi


Total(H-XY), Max= 1.74dBi, CirD=8.24