



深圳市昱晟通讯设备有限公司

Yusheng Communications-equipment Co.,LTD

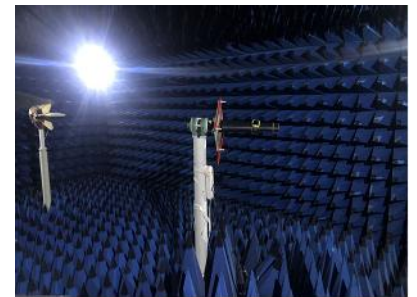
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# HS08 Antenna Report

RF Engineer: Chen Kehong

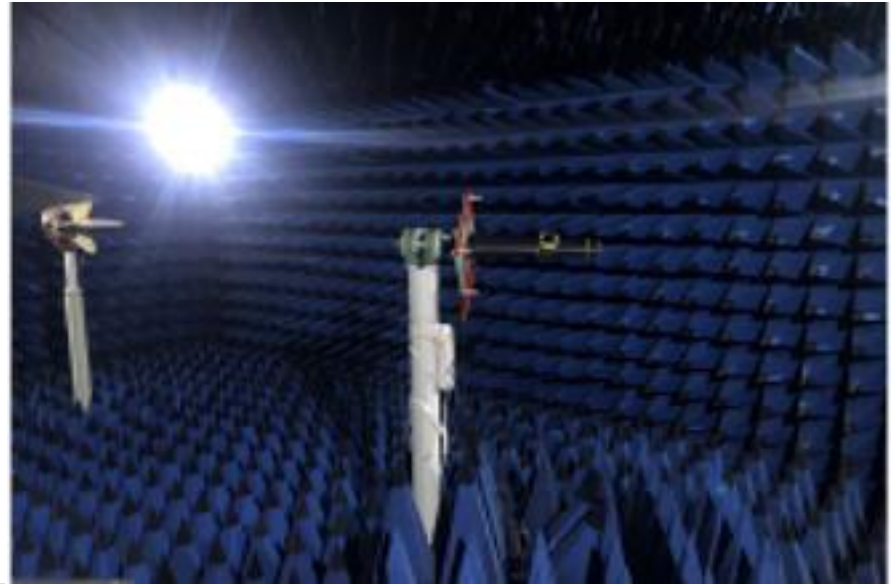
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## Project Introduction

We are transitioning from the internet era to the intelligent era, with nations building digital societies and smart cities. Over the next 5-10 years, both consumer electronics and IoT markets will offer immense growth potential. The wireless communication field is highly diversified. Leveraging our expertise in antennas and integrated capabilities, Yusheng aims to provide competitive professional-grade product solutions



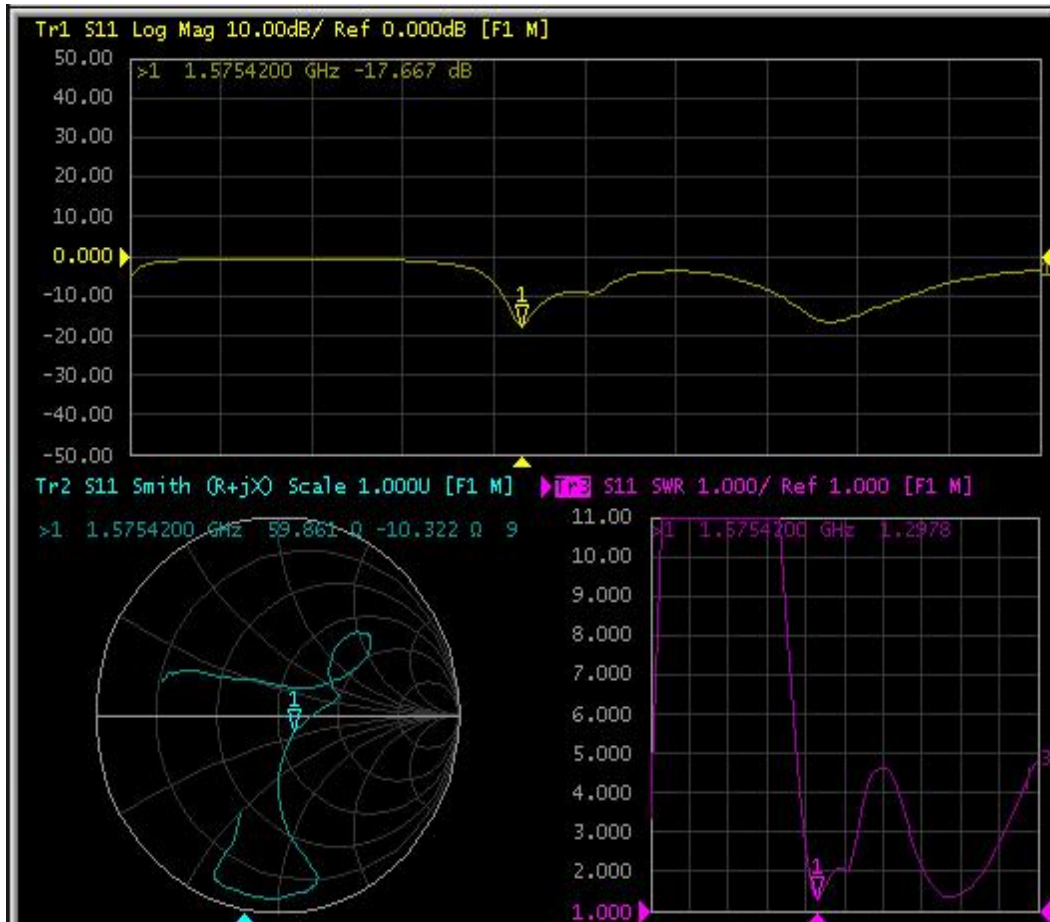
Yusheng' s antennas cover nearly all wireless terminal applications, including:

- Automotive antennas
- High-precision measurement/mapping antennas
- Drone ground/satellite navigation & positioning antennas
- Medical device wireless transmission
- Consumer antennas (smartphones, tablets, laptops)
- Base station/indoor distribution antennas
- Wearable antennas (smartwatches, TWS earphones)
- Smart home/security antennas
- IoT wireless data transmission/control antennas

Debugging Overview

Parameter				
Frequency & Material	ANT	Frequency band		Material
		L1	1575. 42Mhz	metal frame
		BT	2. 4G-2. 5G	
Performance	Compliant with client specifications			

## VSWR (L1)



## Antenna efficiency and gain

Arm、Passive Test For 1575MHz			
Freq	Effi	Gain	
(MHz)	(%)	(dBi)	
1550	3.5%	-5.4	
1555	4.6%	-5.3	
1560	4.9%	-5.1	
1565	5.8%	-4.9	
1570	6.5%	-4.8	
1575	6.3%	-4.9	
1580	5.8%	-5.0	
1585	5.2%	-5.2	
1590	4.1%	-5.1	

Arm、Passive Test For 2400MHz~2500MHz		
Freq	Effi	Gain
(MHz)	(%)	(dBi)
2400	2.3%	-6.2
2410	2.9%	-5.6
2420	3.0%	-5.5
2430	4.1%	-4.8
2440	4.8%	-4.9
2450	5.4%	-5.1
2460	5.9%	-5.3
2470	5.2%	-5.4
2480	4.5%	-5.9
2490	3.6%	-5.5
2500	3.5%	-5.8

[illegible]



Bluetooth Matching

