



Specification Acknowledgement

(Customer Name) Shenzhen Haoyiyuan Technology Co., Ltd

(Specification) External antenna

(Customer P/N) R35-D5000Z5-OBM

Product quantity : 5.8G External Antenna
3DBI-5000-6000MHZ-SMA-J-Mushroom Antenna-Black

(Date) 2022-05-27

Band	WIFI-5G		
Version	A		
rf	Chen Mei team	Confirm	
structure	YangXuezhong		
Customer confirmation			
date			

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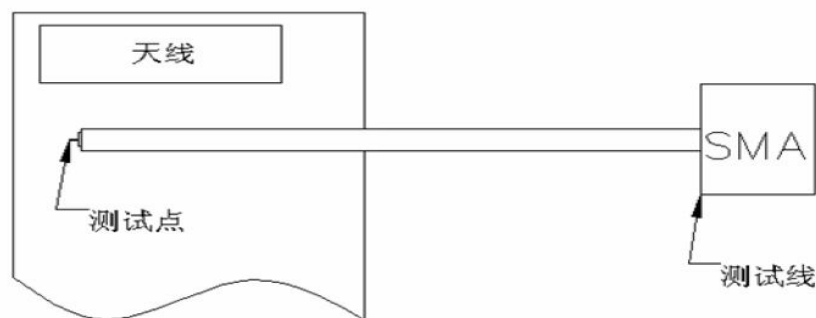


WiFi antenna

2. Passive testing

Purpose: To test the passive parameters of the antenna as accurately as possible.

Method: This fixture is connected to the test point at the back end of the matching circuit of the mobile phone motherboard (the front section of the RF test hole) with a 50 ohm coaxial cable, and the other section is connected to the SMA connector. The details are as

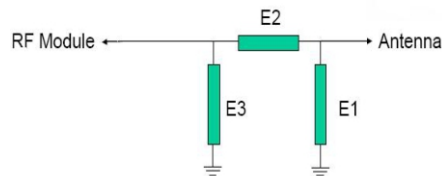


follows:

The following table is a test indicator for the performance of Lollipop 3 generation mass production antennas:

Band	频率 (MHz)	VSWR	频率 (MHz)	VSWR
	Transmitter		Receiver side	
WIFI-5G	5150-5350	≤ 3.5	5500-5850	≤ 3

3. Matching circuits



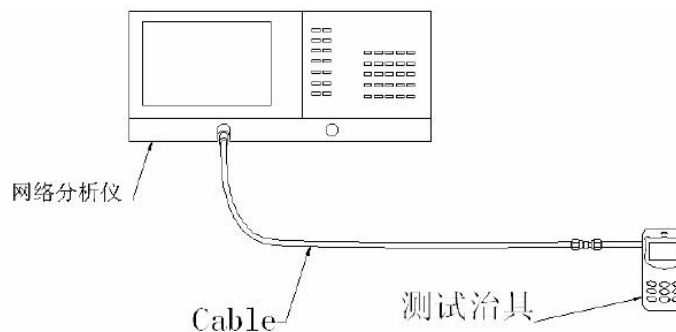
Element	Match value
E1 (0402)	
E2 (0402)	0 ohms
E3 (0402)	

Concentrate:

5. S11 test

6.4.1 S11 Test Method Specification Standard VSWR The test devices are connected in turn as follows: HXB10F753ES Network Analyzer → 50 ohm coaxial Cable → 120mm Long copper tubes → Test fixtures.

Processing of the test fixture: A hard cable is used from the antenna 50 ohm test point on the PCB of the mobile phone to lead out the SMA-J connector, connect it with a copper tube with a choke, and then connect other devices in turn.



Test the schematic

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4.2 S11 parameters

The following table shows the vsWR values at the edge of the operating band of the Lollipop 3 antenna. The tested Return Loss, VSWR related waveform diagram is shown in the annex.

	3rd generation antenna				
Frequency (MHz)	5150	5350	5550	5850	
Free space	3.0	3.5	3.0	2.5	

4.3 S11



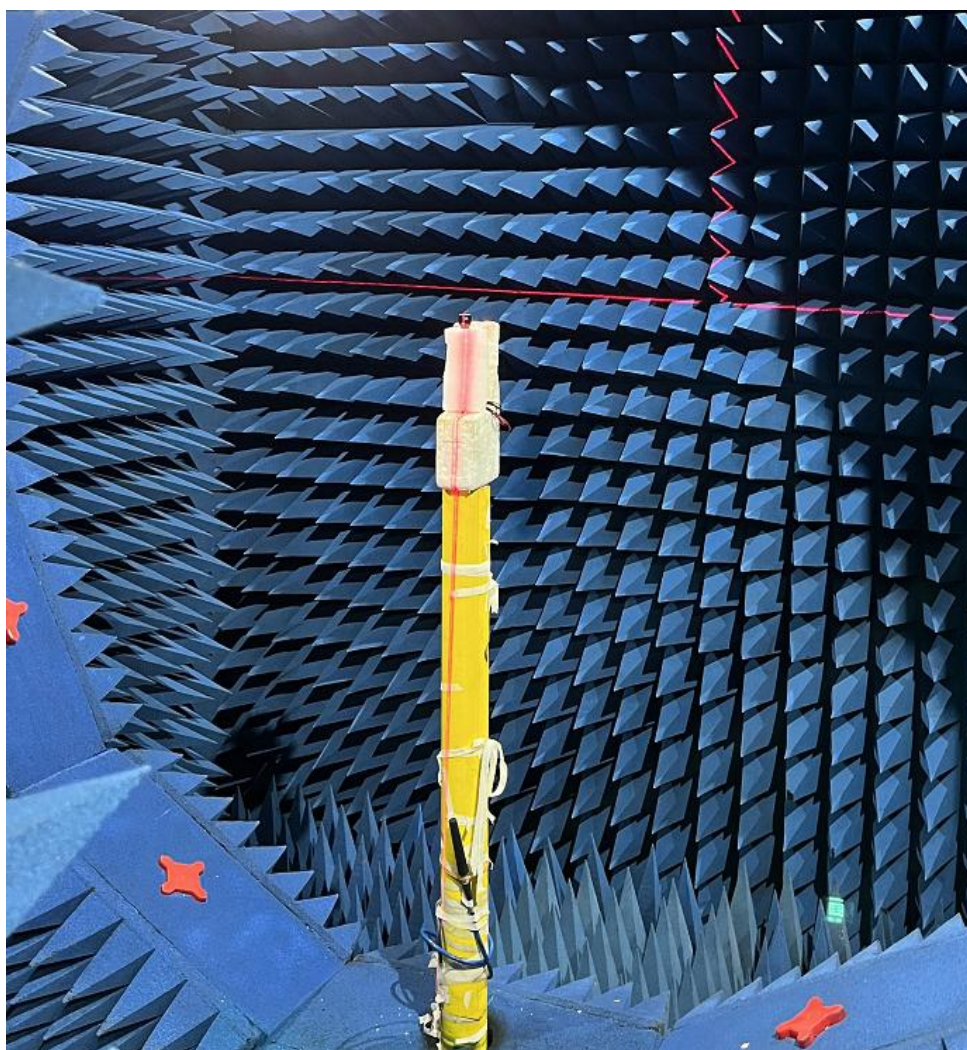
Standing Wavebie

5Electrical properties

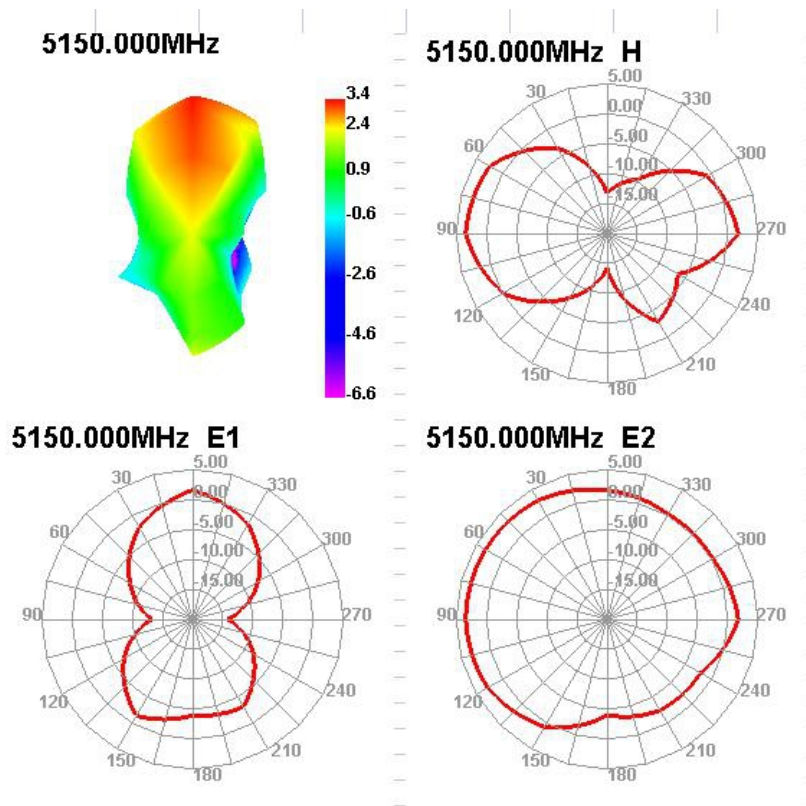
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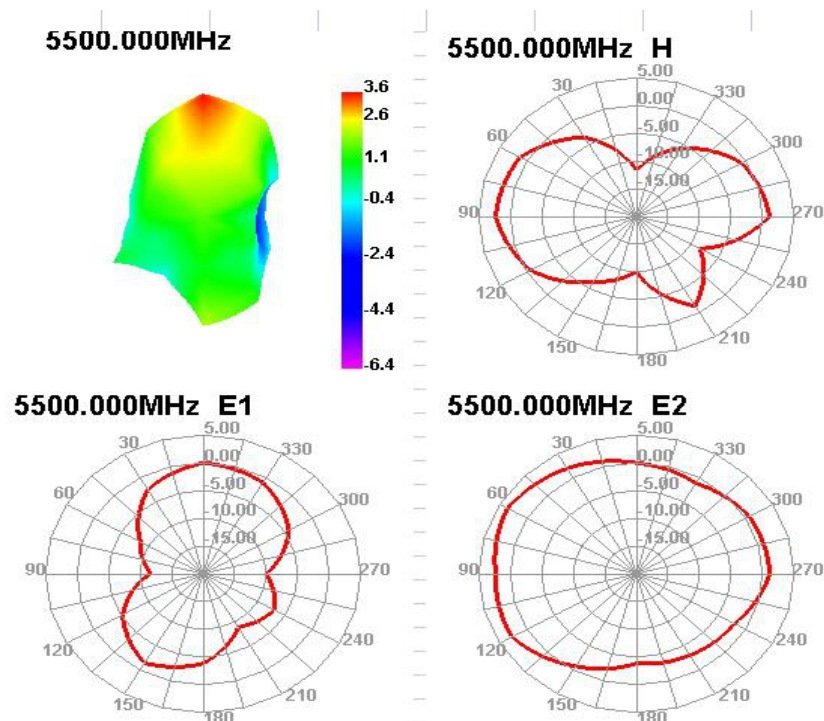
Lollipop 3 generation	
Electrical Specifications	
频率范围 Frequency range (MHz)	5150-5850
极化方式 Polarization	Vertical polarization
增益 Gain (dBi)	3dBi
输入阻抗 Input Impedance (Ω)	50 Ω
电压驻波比 VSWR (5800MHZ)	≤ 3.5
最大功率 Maximum input power (W)	10W
机械参数 Mechanical Specifications	
接头类型 Input connector type	SMA-J
天线尺寸 Dimensions-mm (Height/Width/Depth)	$\Phi 17.5*22$ mm
包装尺寸 Packing size (mm)	Customer specified
天线重量 Antenna weight (SMA)	5.2 tiles
天线罩材料 Radome material	ABS
天线罩颜色 Radome color	Black
工作温度 Operating temperature ($^{\circ}$ c)	-30 ~ 60
极限风速 Rated Wind Velocity (m/s)	60



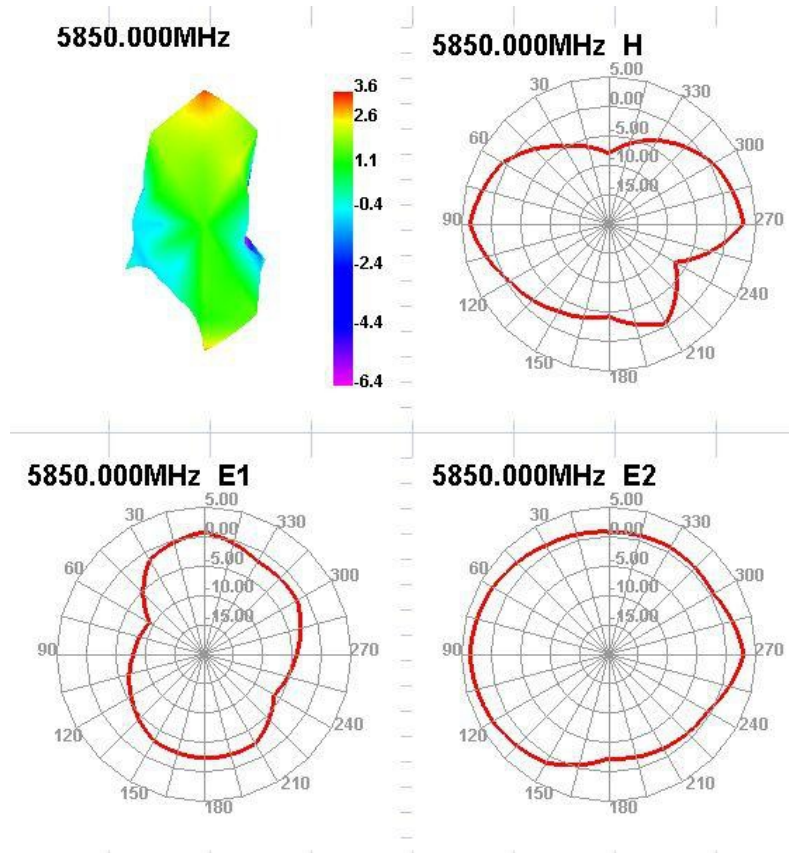
5150MHZ



5.3 方向图 5500MHZ



5.4 方向图 5850MHZ



6Dimensional drawings:

