

## Antenna Sample Datasheet

customer:	Dongguan Hele Electronics Co., LTD
entry name:	QT31
Material category:	BT antenna
Antenna Type	Monopole
Antenna Material	FPC
edition:	A0
Date:	2024. 4. 8

# Contents

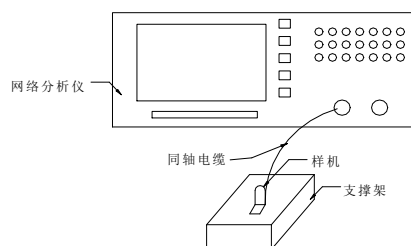
1: Antenna test equipment.....	1
2: Passive test report.....	3
3: Matching circuit.....	5
4: Structural drawing.....	6
5: Antenna diagram.....	7

## 1: Antenna test equipment

List of meters: Agilent 5071B;

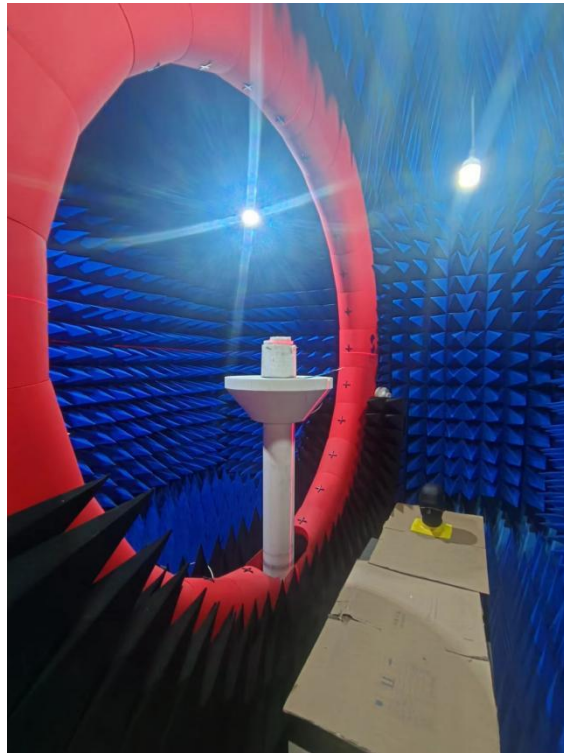


### 1.1 The principle diagram of the ETS anechoic chamber



Picture1. Antenna static test connection method

## 1.2 Pictures of the ETS anechoic chamber



Inside the ETS anechoic chamber

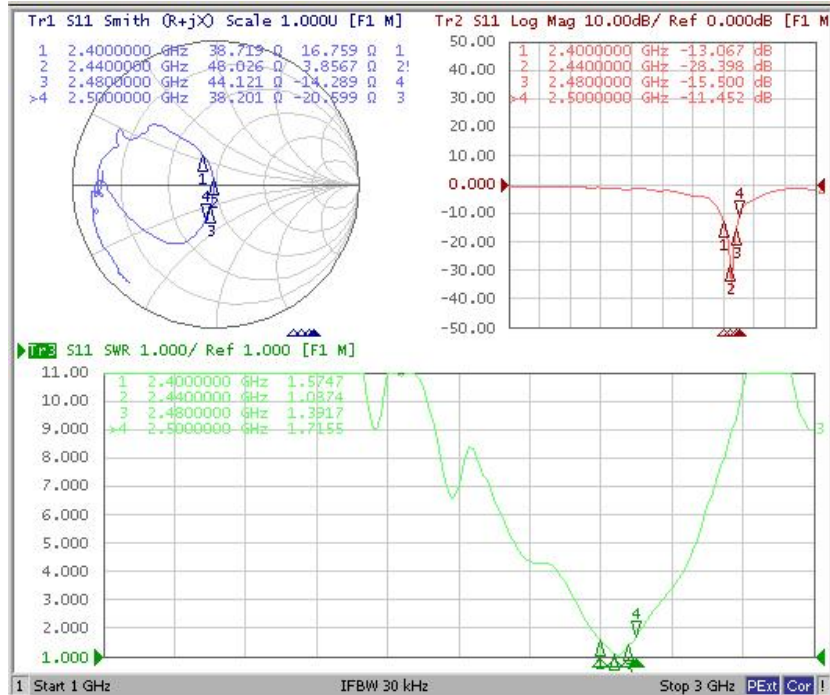


Test Machine

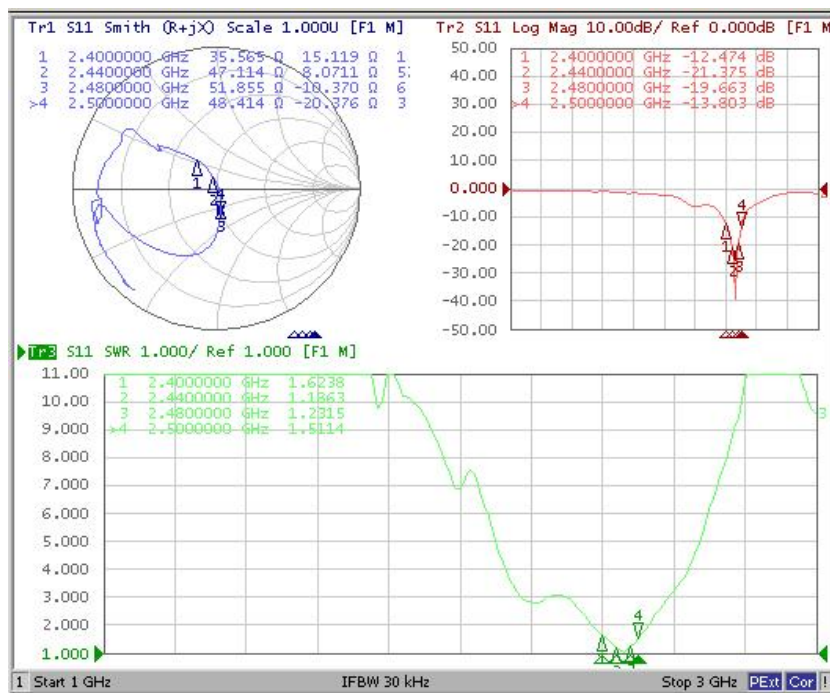
## 2: Passive test report

### 2.1: BT antenna S11 parameters

Left:



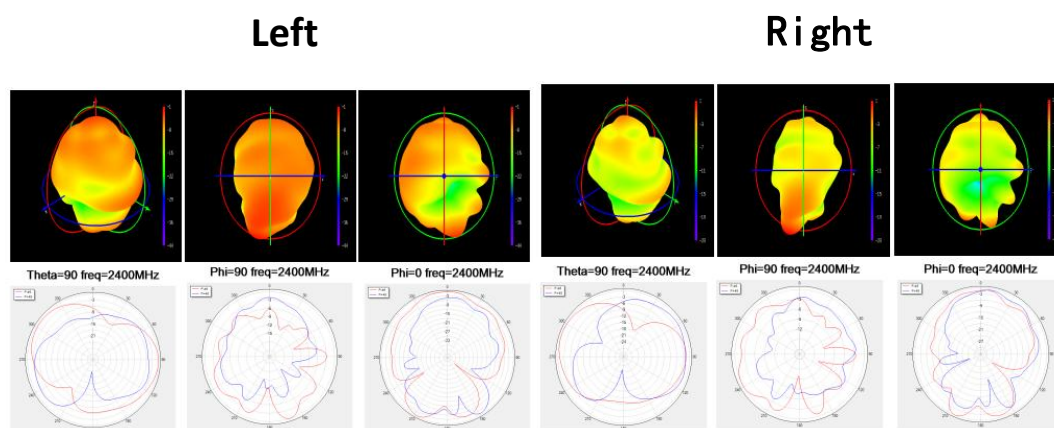
Right:



## 2.2: Passive efficiency of antenna

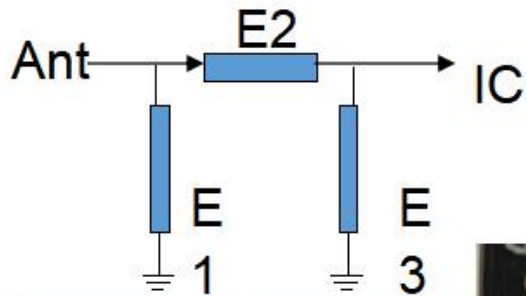
2400-2480MHz				
Freq(MHz)	Gain(dBi)	Efficiency(%)	Gain(dBi)	Efficiency(%)
	free space-Left	free space-Left	free space-Right	free space-Right
2400	0.31	28.27	0.5	30.15
2410	0.29	28.24	0.36	29.43
2420	0.26	28.24	0.35	29.01
2430	-0.05	27.92	0.4	28.63
2440	-0.01	27.68	0.38	27.97
2450	-0.96	27.51	0.32	27.1
2460	-0.82	26.6	0.41	26.27
2470	-0.6	26.23	0.26	25.48
2480	-0.33	25.89	0.39	25.04
Mean value	0.85	16.78	0.04	16.62

## 2.3: Passive pattern of BT antenna

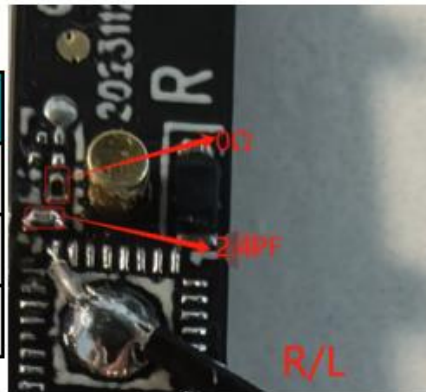


### 3: Matching circuit

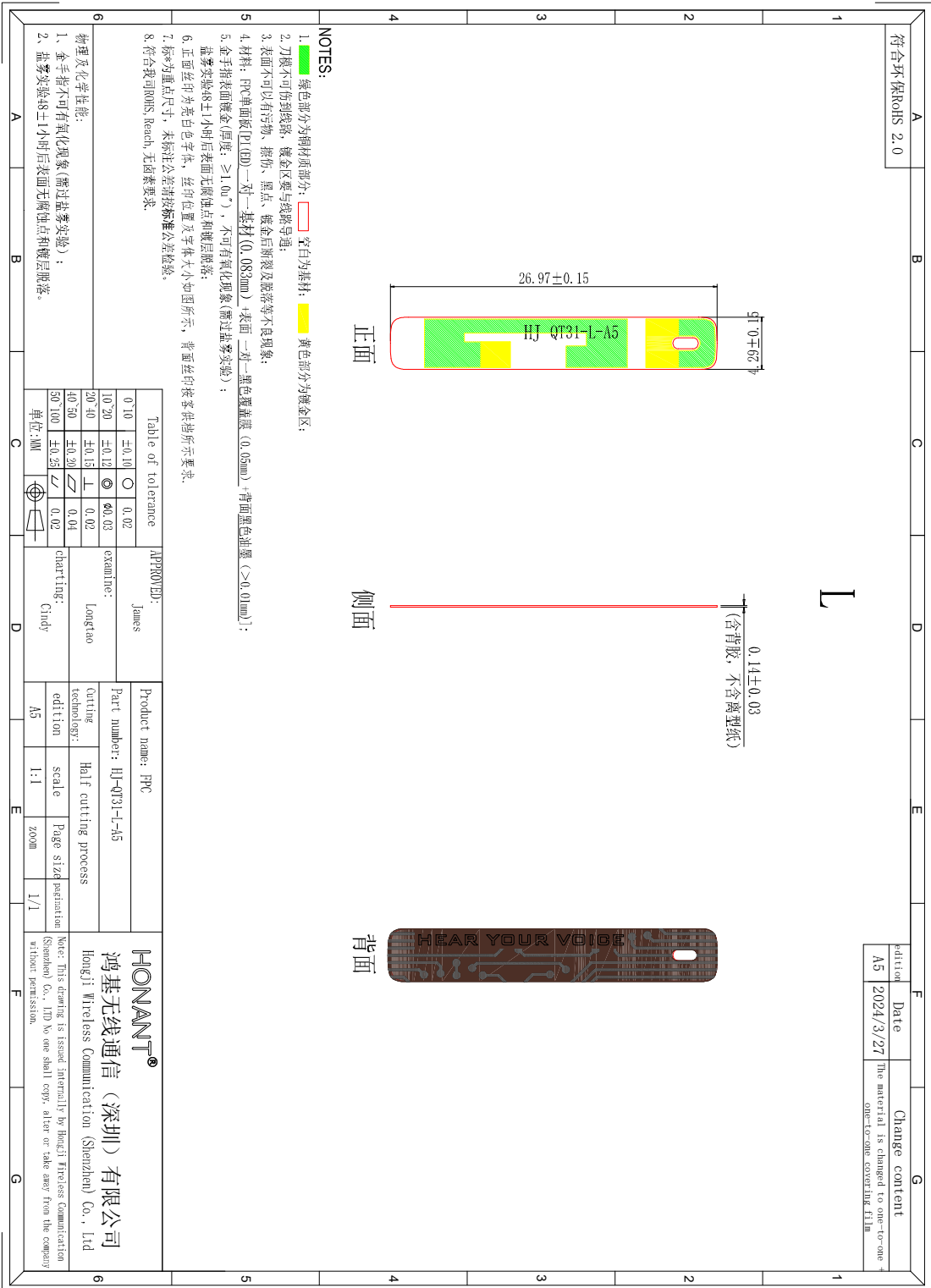
Left/Right



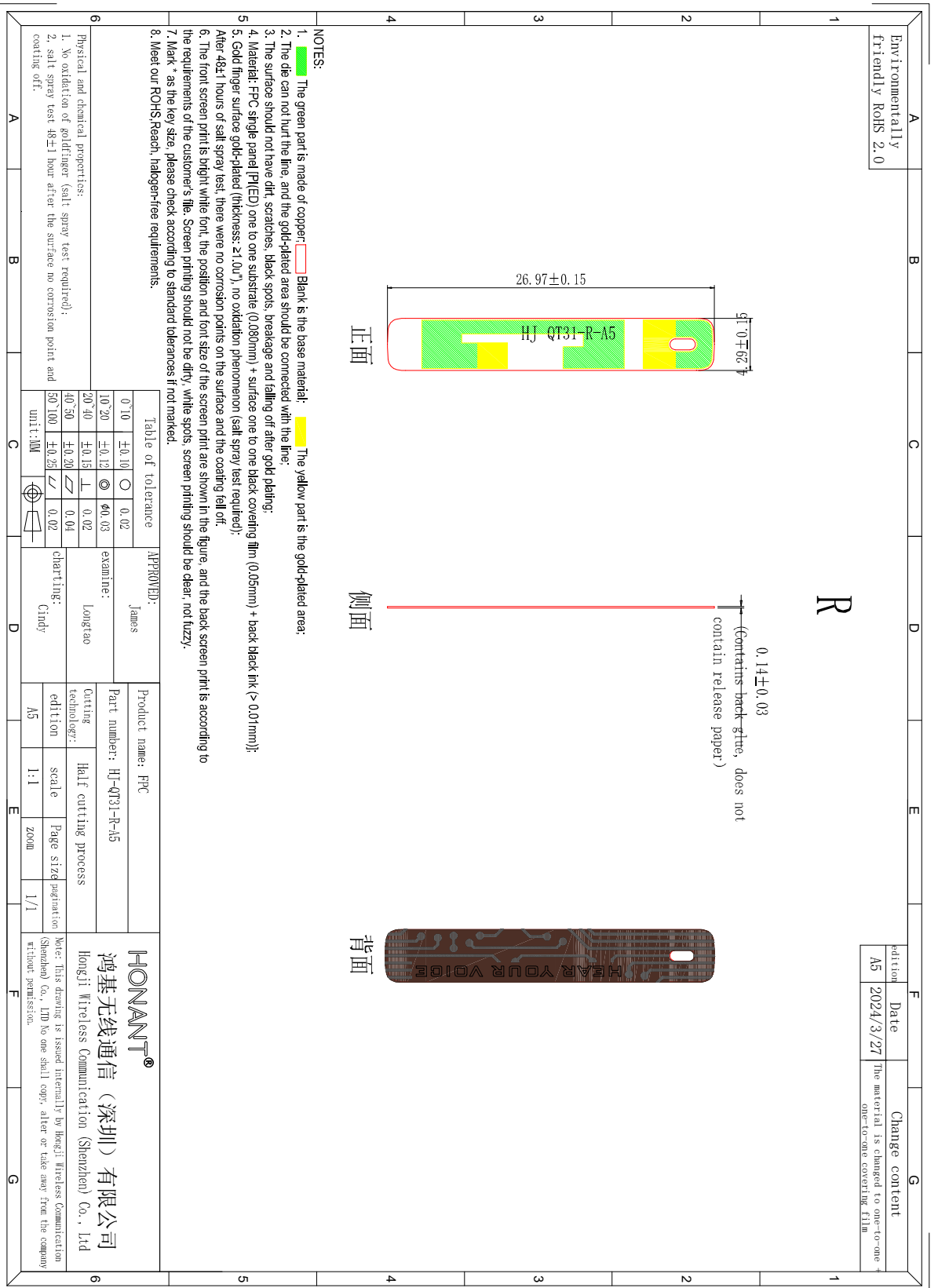
Element	Value
E1	N/A
E2	0Ω
E3	2.4PF



## 4: Structural drawing







## 5: Antenna diagram

