

SPECIFICATION FOR APPROVED

CUSTOMER: Shenzhen Yipinqi Technology Co. LTD

PRODUCTS: Built-in FPC antenna

PART NO: ETWS100-FPC antenna

Spec. : ETWS100-A1

Data: 2022. 7. 30

SUPPLIER		
PREPARED BY	CHECKED BY	APPROVED BY

CUSTOMER		
ACCEPTED BY	CHECKED BY	APPROVED BY

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ANTENNASPECIFICATION

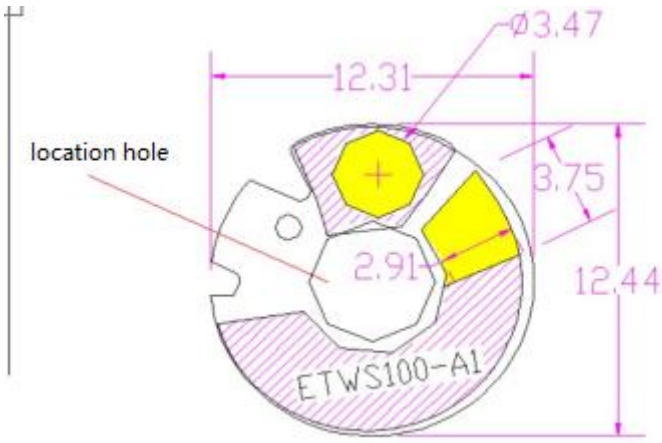
Revision history

versions	Date	State
A1	2022-07-30	First edition

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1. Project Information

1.1. Appearance and Dimensions

Test point	Specification	Test result
Boundary dimension	12.31mm*12.44mm	OK
Goldfinger	3.47mm, 3.75*2.91mm	OK
Blueprint	 The blueprint shows a circular antenna component with a central octagonal hole. Dimensions are indicated in millimeters: the overall width is 12.31mm, the overall height is 12.44mm, and the central hole has a diameter of 3.47mm. A yellow-shaded octagonal area is labeled 'location hole'. A yellow-shaded rectangular area is labeled '2.91' and '3.75'. The component is labeled 'ETWS100-A1'.	

Inspection items		Inspection result
(S.W.P)	25um +12.5um +12.5umPI	OK
Texture	Half and half (electrolytic copper)	OK
Texture	Gummed paper (3M300LSE)	OK
Electroplating	Gold plating	OK
Exterior	Surface matte black, silk screen white characters	OK

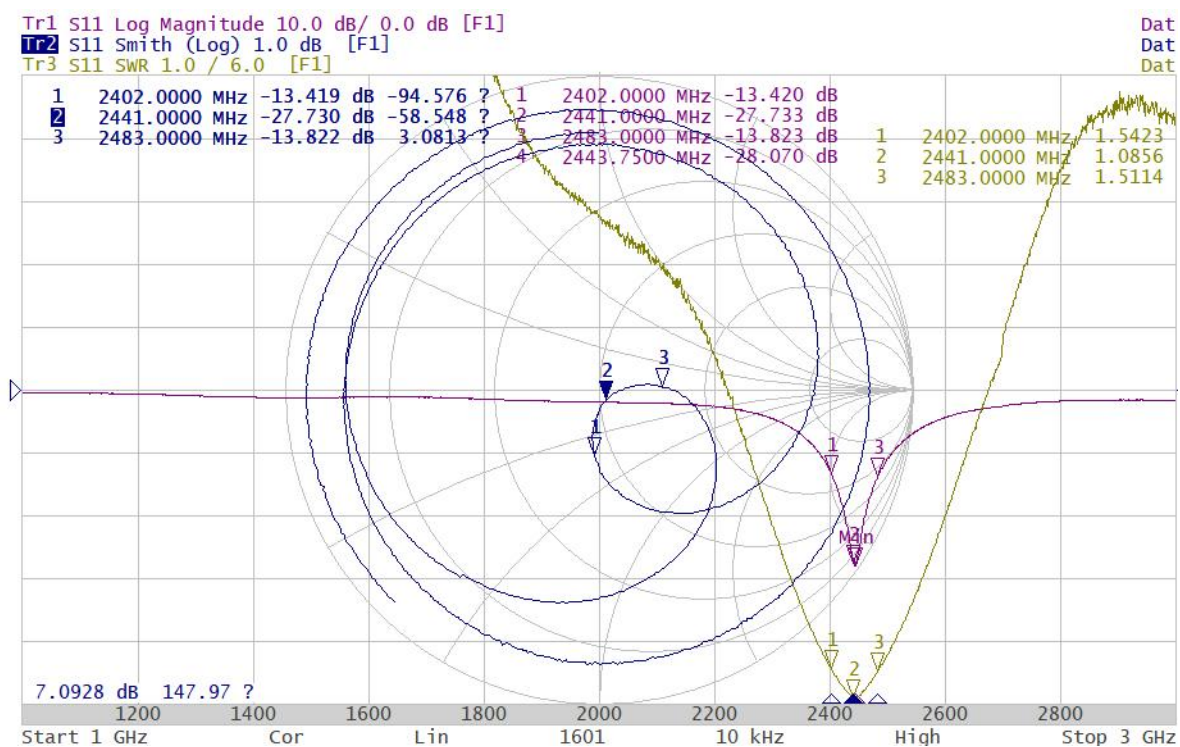
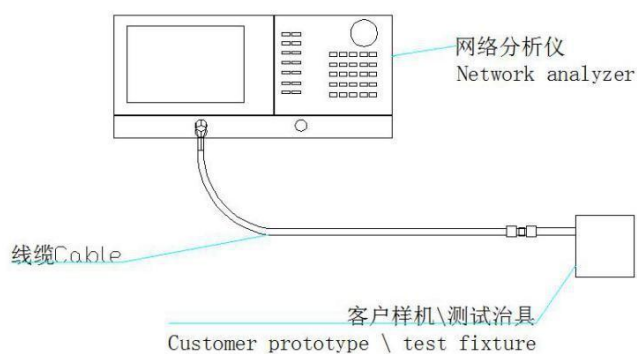
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2. Electrical Characteristics

2.1. Test Environment Conditions

Temperature	Ordinary Temperature (5 to 35℃)
Humidity	Ordinary Humidity (25 to 85% RH)

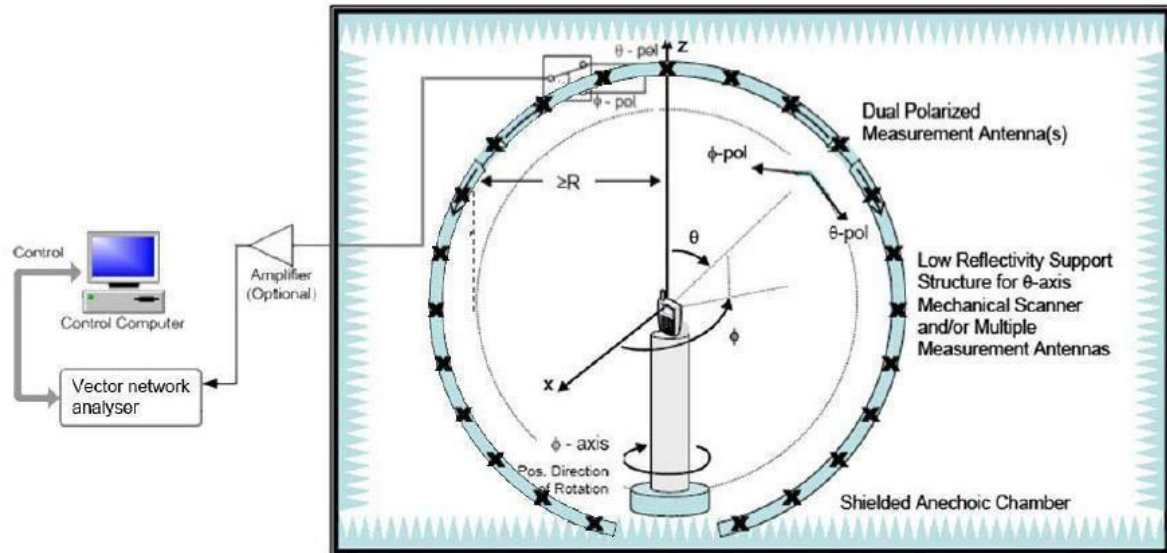
2.2. Measurement method



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2.3. Efficiency and Gain

2.3.1. Test system

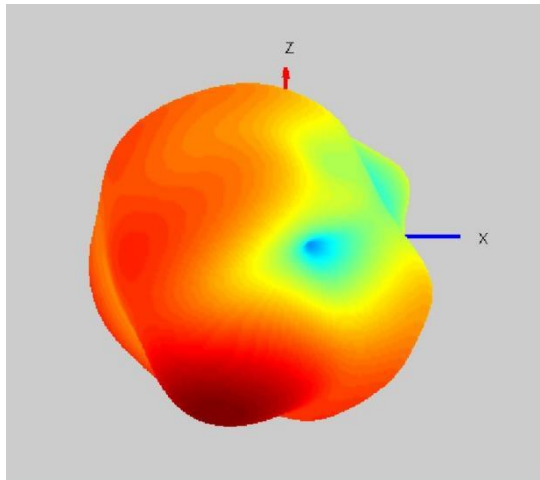


2.3.2. No-source test data

frequency	gain	efficiency
频率(MHz)	增益(dB)	效率
2400	1.18	40.52%
2410	1.15	37.87%
2420	1.66	40.81%
2430	1.69	39.48%
2440	1.83	38.87%
2450	2.12	39.64%
2460	2.12	38.40%
2470	2.29	38.87%
2480	2.6	40.46%
2490	2.23	35.96%
2500	2.59	37.91%

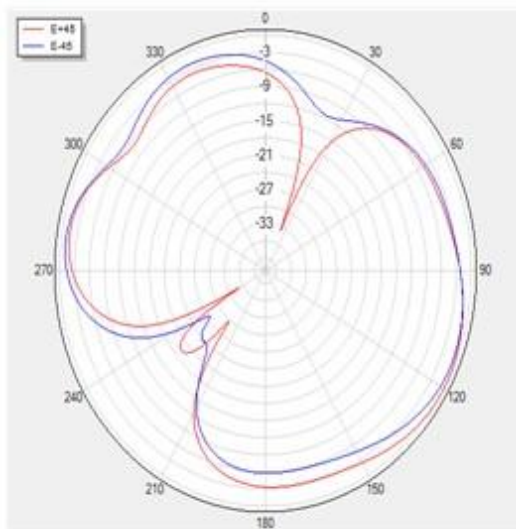
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2.3.3. 3D Radiation Drawing

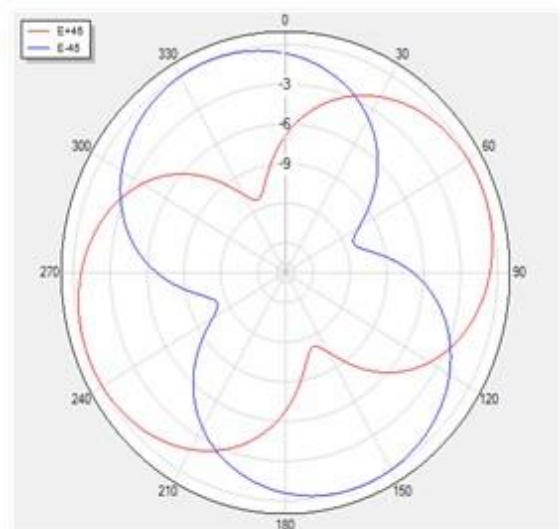


2.3.4. directional drawing of horizontal plane

H Theta=90 freq=2400MHz

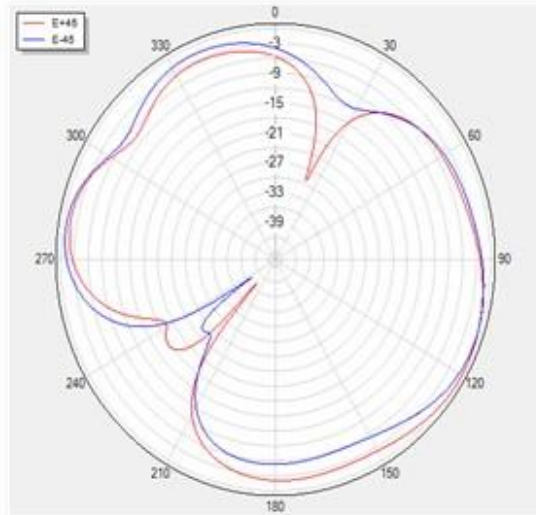


H Theta=0 freq=2400MHz

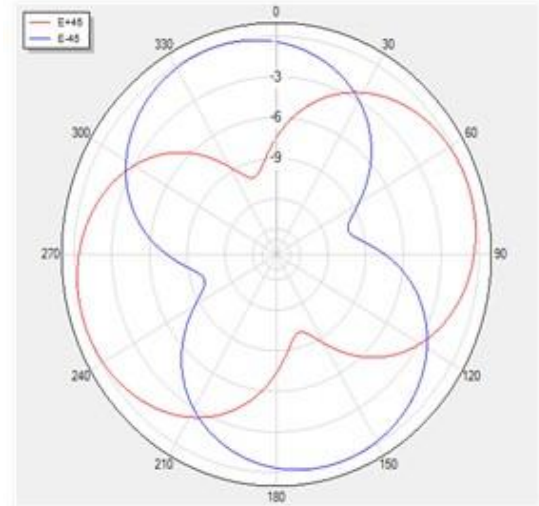


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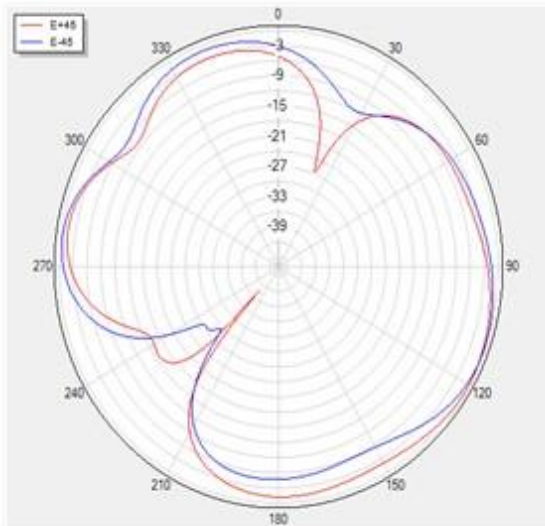
H Theta=90 freq=2450MHz



H Theta=0 freq=2450MHz



H Theta=90 freq=2480MHz



H Theta=0 freq=2480MHz

