



Shenzhen Tianweixun wireless technology co., ltd.

## Product performance and specification

CUSTOMER NAME: \_\_\_\_\_

3-WIFI-2450-05  
2. 4G+5G  
Antenna, BT+WIFI,  
FPC+0.18mm\*109mm

PRODUCT NAME: \_\_\_\_\_

NOTE: \_\_\_\_\_

Client	Admit manufacturing party		
<b>Customers confirmation</b>	<b>Quality department</b>	<b>R&amp;D</b>	<b>Approval</b>
		ME: RF:	
<b>Date:</b>	<b>Date: 2022-11-30</b>		

Shenzhen Tianweixun wireless technology co., ltd.

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Shenzhen Tianweixun wireless technology co., ltd.

Issuer	XianMing Liao	Product performance and specification	VER	V0
Design department	R&D center		DATE	2022-11-25

# Catalogue

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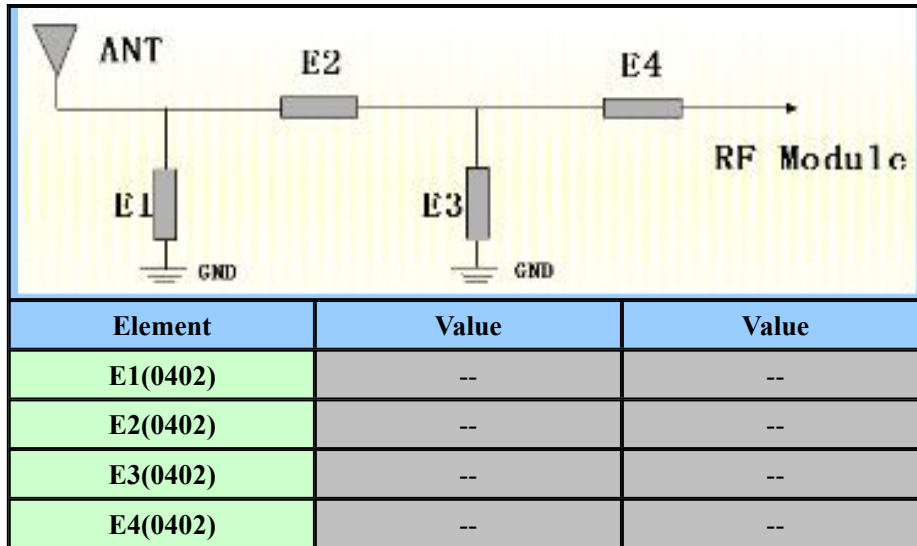
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## 1.1 Project photo

NO photo

OdinSmart

### 1.1.1 Antenna Matching Circuit



Matching mark: No change in matching circuit.

## 2.1 Product design purpose

To standardize the testing method of the product specification of communication

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terminal antenna produced by shenzhen tianweixun wireless technology co., LTD., to avoid errors caused by different testing conditions and method.

### 3. 1 Antenna

#### 3. 1. 1 Antenna electrical specification and material

This report mainly provides the test status of the structural performance parameters of OdinSmart antenna



Photo of antenna designed by tianweixun

#### 3.1.2 ANTENNA MOLD:

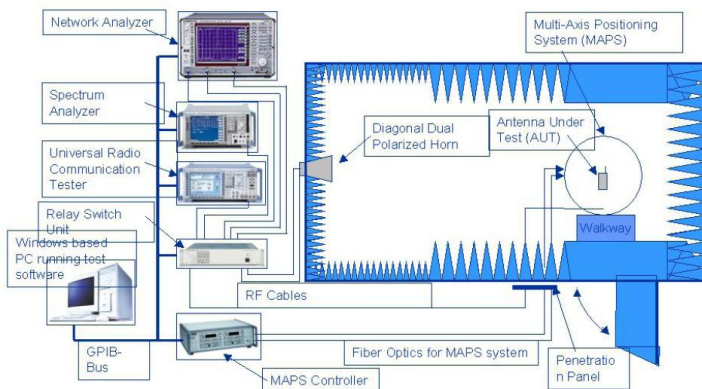
Antenna category: monopole

Antenna material: FPC

#### 3. 1. 3 ANTENNA DSINGN FREQUENCY BAND:

The antenna frequency band is 2400MHz~2500MHz , 5150mhz~5250mhz, 5700mhz~5800mhz

#### 3.1.4 THE ANTENNA IS TEST IN ETS-SG24 SYSTEM 3D CHAMBER



picture (1) ETS-SG24 SYSTEM



picture (2) The product is placed in the 3D test device

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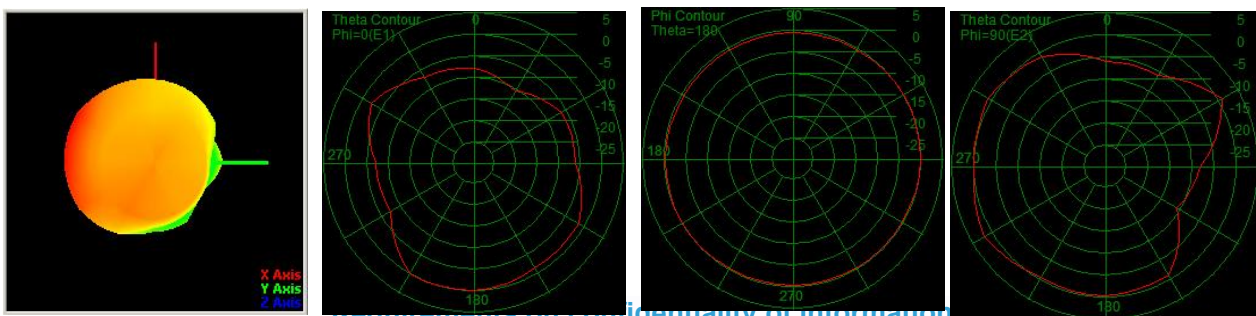
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3D data designed by tianweixun(Gain 、 Efficiency and pattern ):

Test Point ID	Freq. (MHz)	TRP (dBm)	Gain (dBi)	Directivity (dBi)	Efficiency (%)
1	2400.0	2400.00	2.37	5.76	45.8%
2	2410.0	2410.00	2.55	5.74	48.0%
3	2420.0	2420.00	2.55	5.78	47.6%
4	2430.0	2430.00	2.72	5.85	48.6%
5	2440.0	2440.00	2.80	5.92	48.8%
6	2450.0	2450.00	3.08	6.02	50.8%
7	2460.0	2460.00	3.14	6.09	50.7%
8	2470.0	2470.00	3.17	6.22	49.6%
9	2480.0	2480.00	3.24	6.25	50.0%
10	2490.0	2490.00	3.32	6.34	49.9%
11	2500.0	2500.00	3.35	6.36	50.0%
12	5150.0	5150.00	0.68	6.00	37.1%
13	5160.0	5160.00	0.49	6.27	41.9%
14	5170.0	5170.00	0.65	6.21	35.0%
15	5180.0	5180.00	0.63	6.29	34.2%
16	5190.0	5190.00	0.65	6.34	34.0%
17	5200.0	5200.00	0.56	6.15	34.7%
18	5210.0	5210.00	0.96	6.34	36.5%
19	5220.0	5220.00	0.88	6.49	34.6%
20	5230.0	5230.00	0.74	6.46	33.7%
21	5240.0	5240.00	0.58	6.21	34.4%
22	5250.0	5250.00	0.66	6.16	35.5%
23	5700.0	5700.00	0.47	4.44	40.1%
24	5710.0	5710.00	0.19	4.39	38.0%
25	5720.0	5720.00	0.50	4.62	38.8%
26	5730.0	5730.00	0.28	4.29	39.8%
27	5740.0	5740.00	0.38	4.45	39.2%
28	5750.0	5750.00	0.87	4.99	38.7%
29	5760.0	5760.00	-0.10	4.26	36.7%
30	5770.0	5770.00	-0.04	4.36	36.3%
31	5780.0	5780.00	0.46	4.43	40.0%
32	5790.0	5790.00	0.43	4.39	40.2%
33	5800.0	5800.00	0.49	4.55	39.3%

2400MHZ:

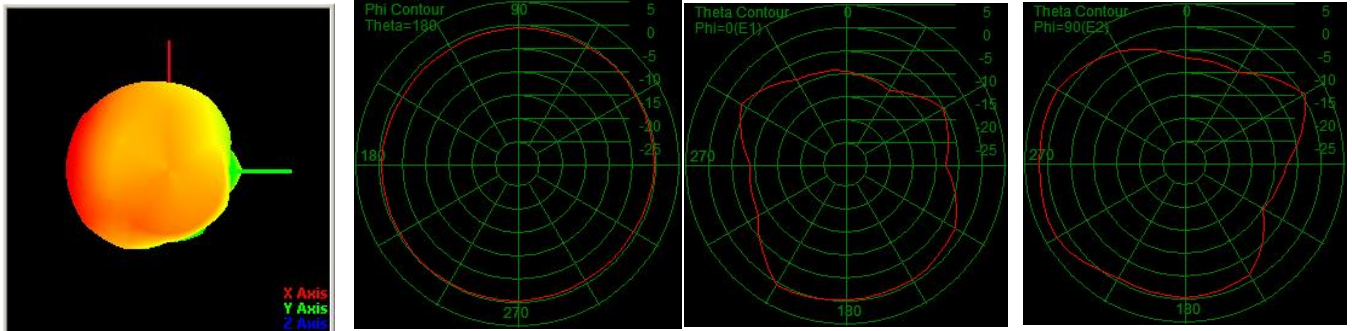


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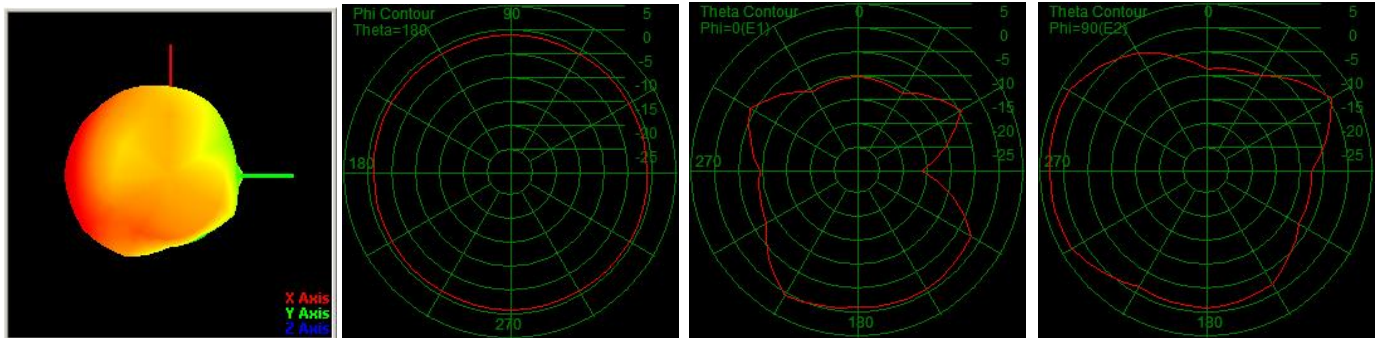
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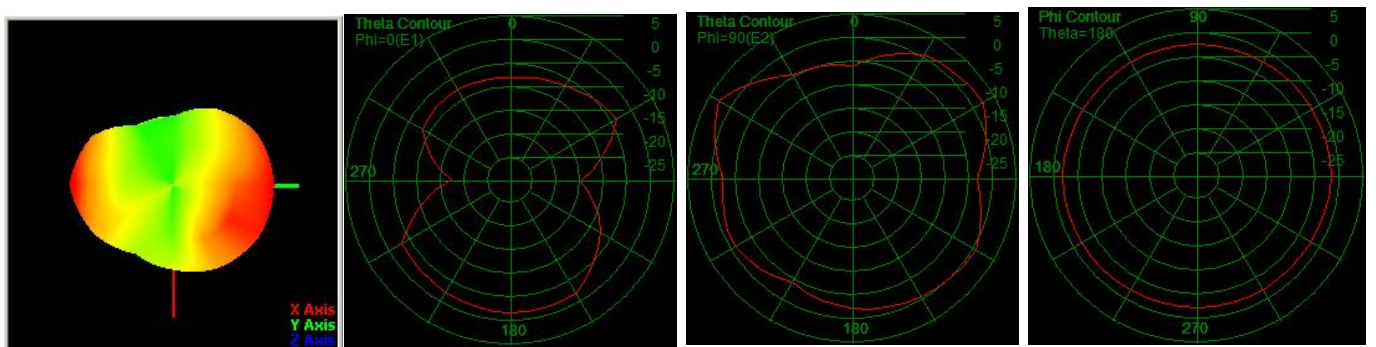
2450MHZ:



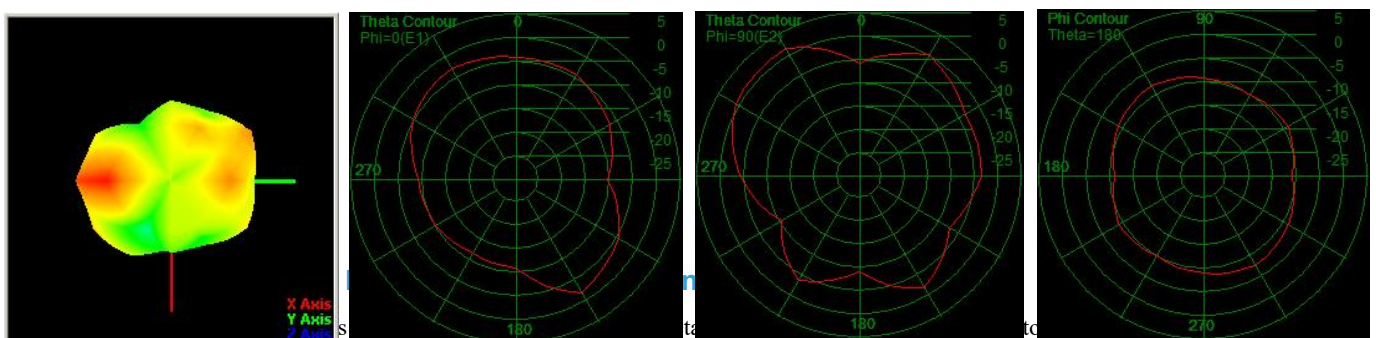
2500MHZ:



5150MHZ:



5250MHZ:

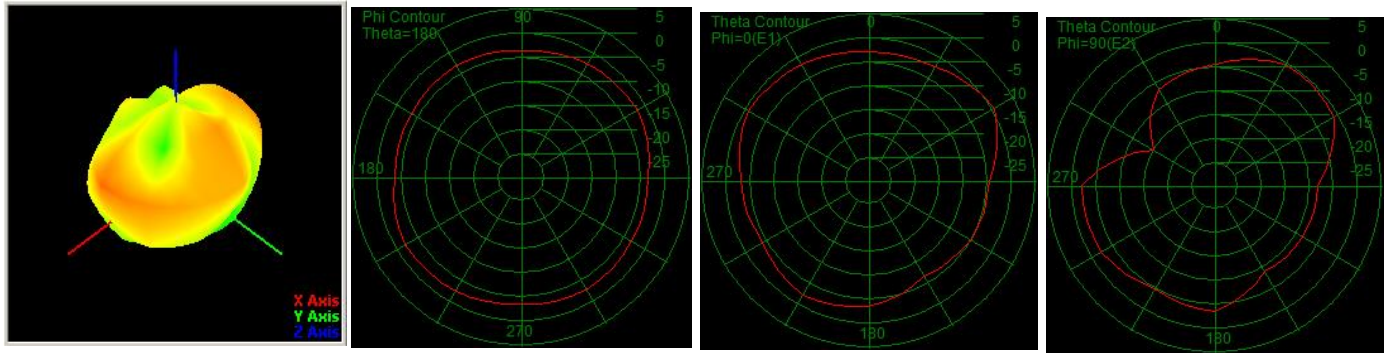


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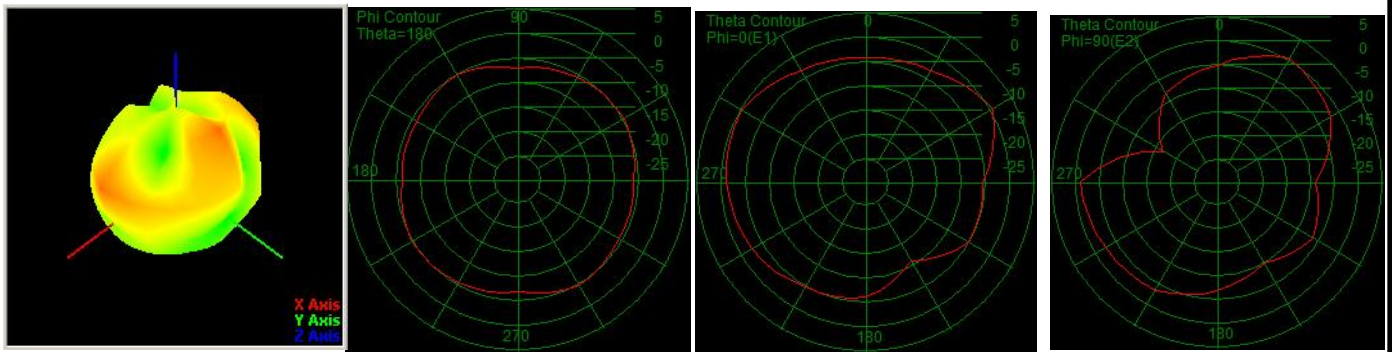
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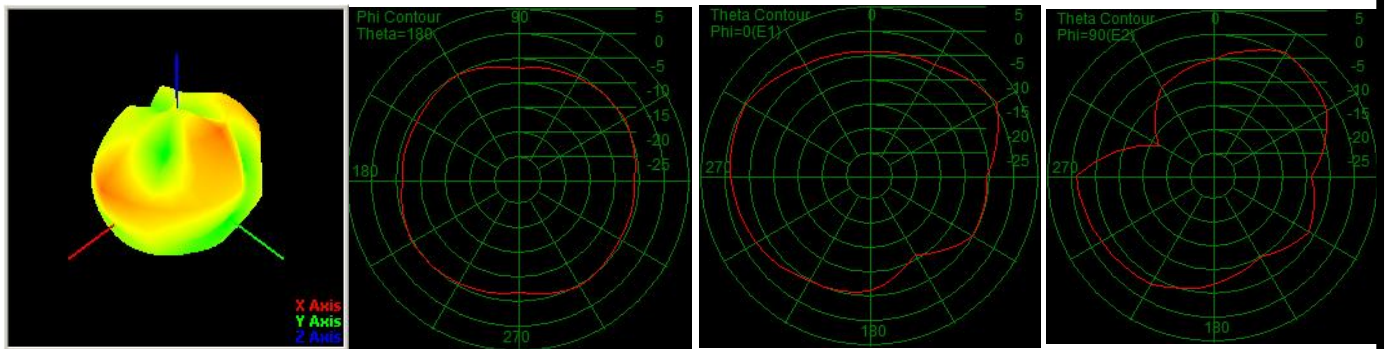
### 5700mhz:



### 5750mhz:



### 5800mhz:



## 3.1.5 ANTENNA PASSIVE VSWR AND RETURN LOSS

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(VSWR)



(Return loss)

### 3.1.6 ANTENNA ACTUAL TEST RESULTS (Active)

## 4.1 DRAWING OF PRODUCT DESING

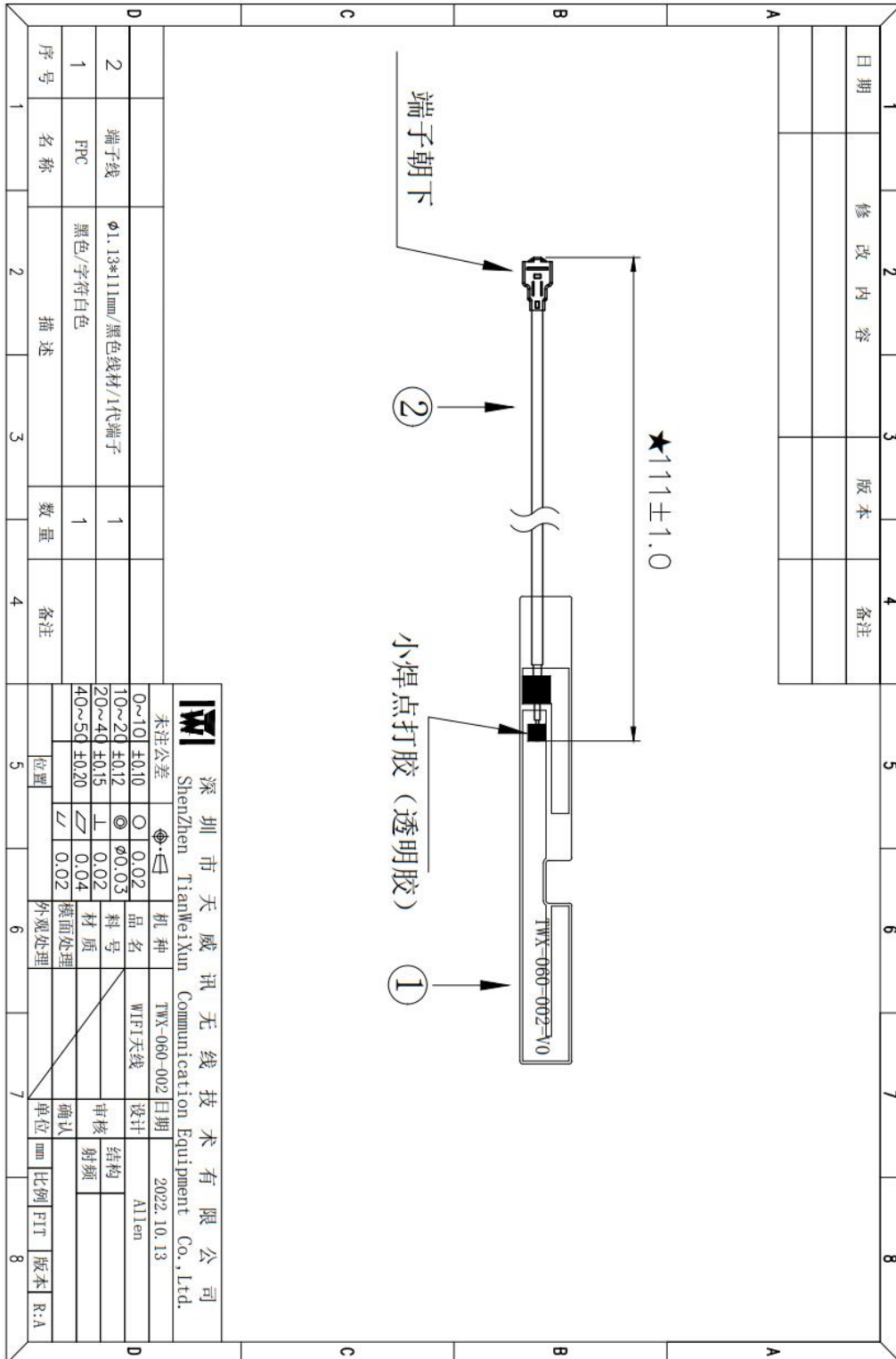
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