



深圳市天逸源电子科技有限公司  
Shenzhen Tianyiyuan Elec&Technology CO.,Ltd

# 承 认 书

SPECIFICATION FOR APPROVAL

Name: WIFI/BT 2.4G Antenna .

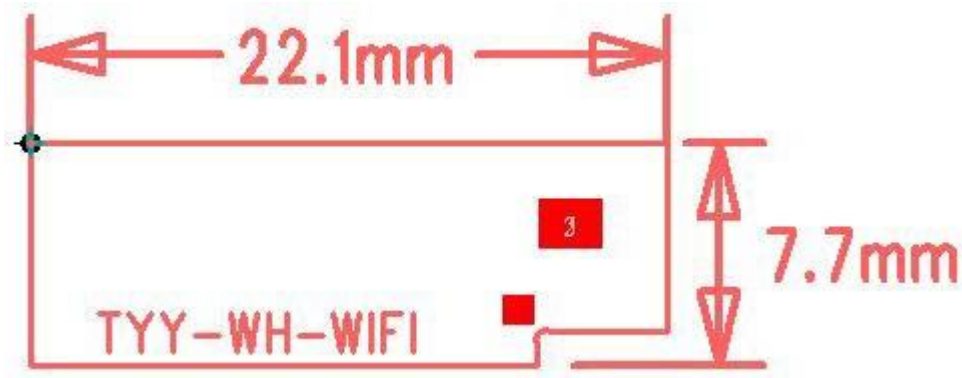
Item No: TYY-WH-WIFI .

drawing			Customer approve
MADE	CHECKED	APPROVED	
QIU	Zhiyuan Jiang	Xiaohong Tang	
DATE: 2022.10.14			DATE

## WIFI Specification

### 1. Specification

View 1 TYY-WH-WIFI 天线 WIFI 天线



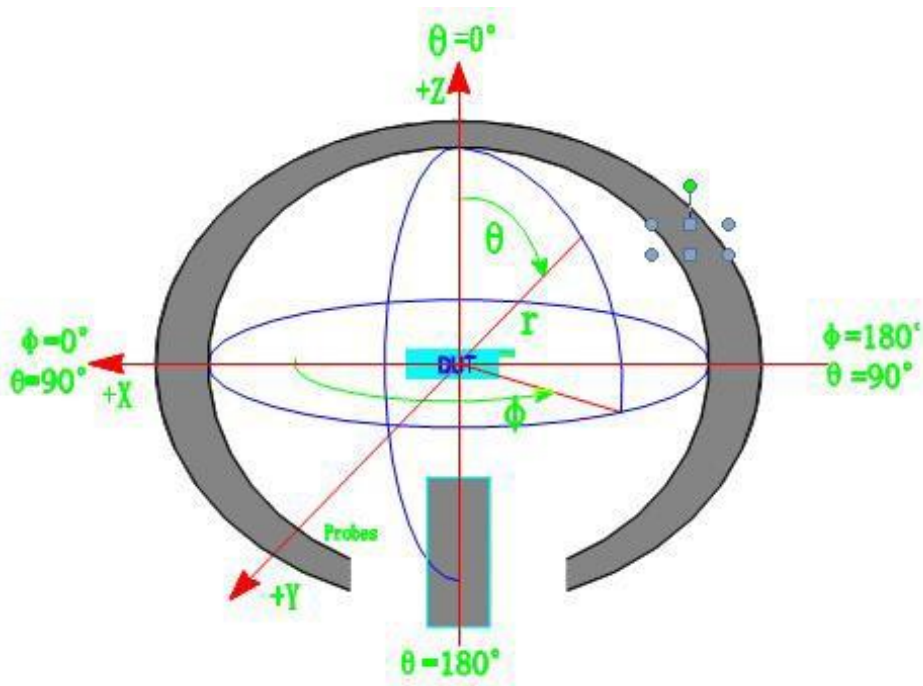
View 2 TYY-WH-WIFI Antenna ( length 85+/-2mm)



View 3 Drawing of site

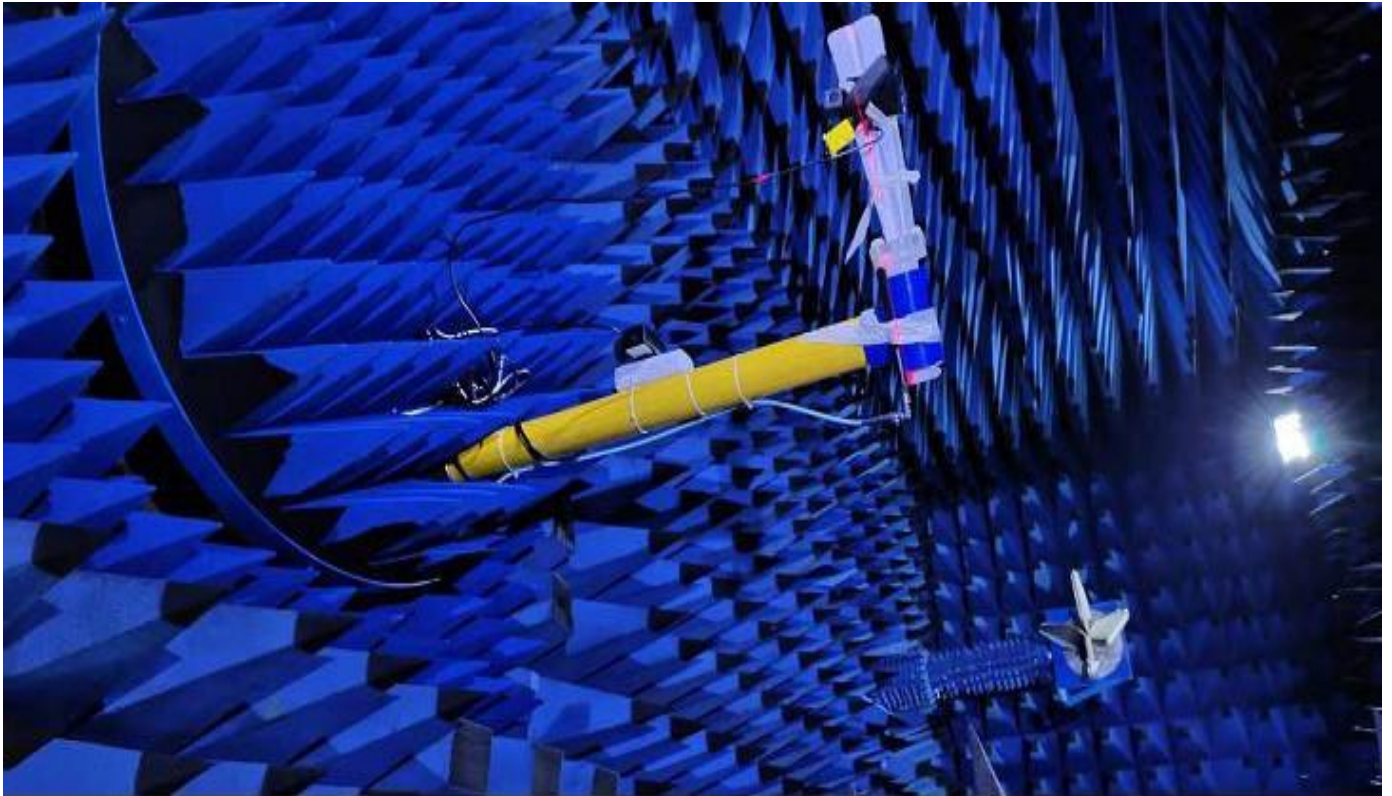


View 4 WIFI Return Loss

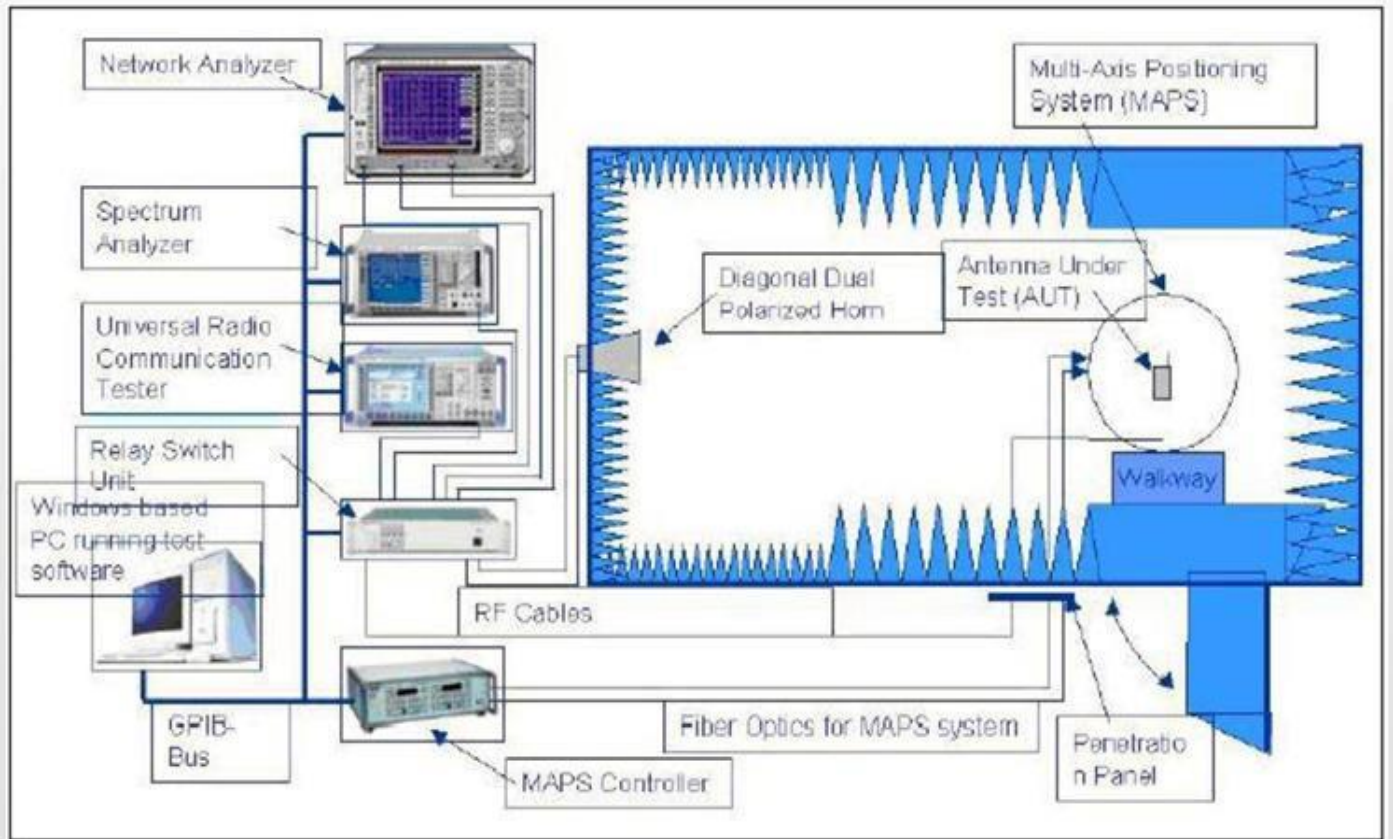


View 5 O T A Microwave dark chamber test instrument





**View 6 Testing environment**



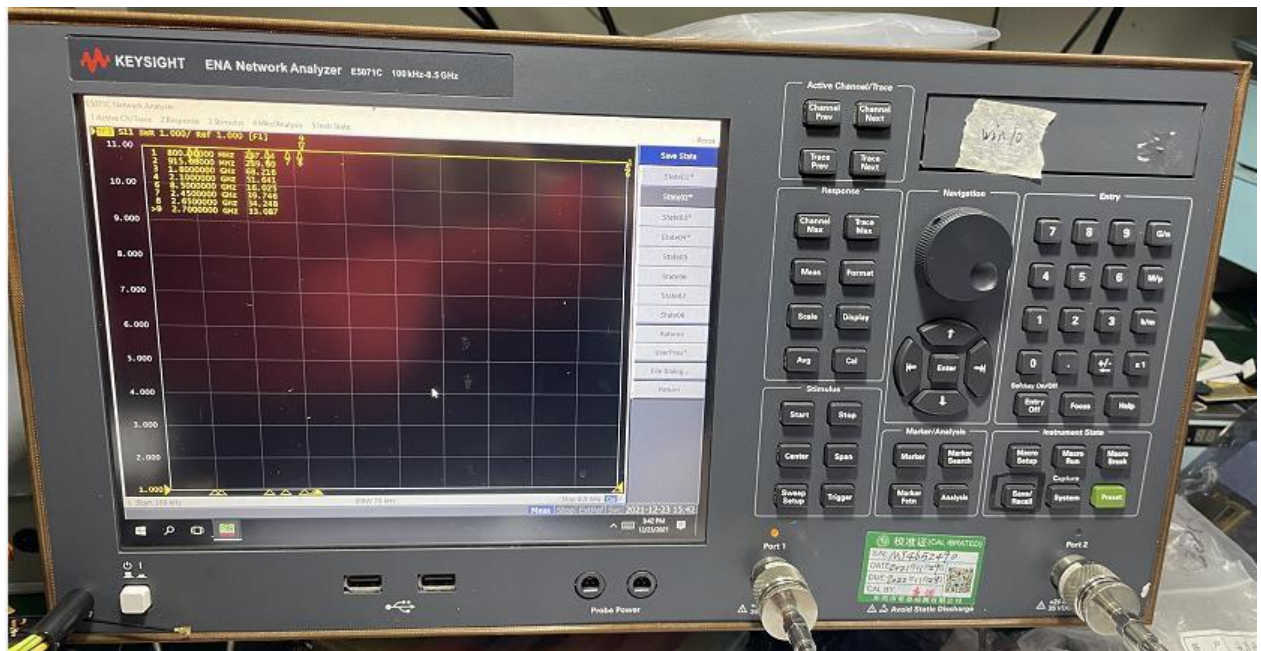
## 2.3 VSWR Test

### 2.3.1. Setup of test

VSWR The test device in turn is connected to: Agilent E5071B network analyzer @50 ohm coaxial Cable@120mm long copper tube @ test fixture

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

View 7 Network analyzer **5071C**



View 8 WIFI VSWR



frequency (MHz)	2400	2500	5700	5800	
VSWR	1.4	1.1	1.4	1.9	

### View 9 Gain

FEITUKEJI											
Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Efficiency (dBi)	-1.72	-1.68	-1.52	-1.25	-1.06	-0.83	-0.61	-0.47	-0.64	-0.87	-1.04
Gain (dBi)	2.04	2.10	2.26	2.72	2.68	2.94	3.01	2.88	2.20	1.68	1.56
Efficiency (%)	67.32	67.94	70.50	75.01	78.27	82.59	86.95	89.83	86.21	81.78	78.67
Directivity (dB)	3.76	3.78	3.78	3.97	3.75	3.77	3.62	3.34	2.85	2.55	2.60
Peak Gain Position (Theta)	83.00	82.00	83.00	85.00	88.00	92.00	88.00	93.00	97.00	73.00	75.00
Peak Gain Position (Phi)	30.00	30.00	30.00	360.00	360.00	360.00	360.00	360.00	360.00	360.00	360.00
Efficiency ThetaPol (%)	65.57	66.34	69.10	73.67	76.99	81.33	85.58	88.35	84.69	80.22	77.04
Efficiency PhiPol (%)	1.75	1.60	1.40	1.35	1.28	1.26	1.37	1.49	1.51	1.57	1.63
Upper Hem. Efficiency (%)	41.71	41.72	42.46	44.27	45.34	47.06	48.83	50.02	47.88	45.34	43.58
Lower Hem. Efficiency (%)	25.61	26.22	28.05	30.74	32.93	35.53	38.13	39.81	38.33	36.45	35.08

