



中国认可  
国际互认  
检测  
TESTING  
CNAS L6791

# TEST REPORT

**Applicant:** Shenzhen Zhongxin Applied Electronic Technology Co., Ltd  
**Address:** No. 268, Floor 2, Building A9, Xinghuaxiong Science Park, Baihua Community, Guangming Street, Guangming District, Shenzhen  
**Equipment Type:** BC062-TX  
**Model Name:** BC062-TX  
**Brand Name:** N/A  
**Test Standard:** ANSI/IEEE Std 149-1979  
**Sample Arrival Date:** Dec. 05, 2022  
**Test Date:** Dec. 05, 2022  
**Date of Issue:** Dec. 09, 2022

**ISSUED BY:**

Shenzhen BALUN Technology Co., Ltd.

**Tested by:** Mai Jintian

**Checked by:** Zou Liu

**Approved by:** Wei Yanquan  
(Chief Engineer)

*Mai Jintian*

*Zou Liu*

*Wei Yanquan*

<b>Revision History</b>		
Version	Issue Date	Revisions
<u>Rev. 01</u>	<u>Dec. 09, 2022</u>	<u>Initial Issue</u>

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# 1 GENERAL INFORMATION

## 1.1 Test Laboratory

Name	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Phone Number	+86 755 6685 0100

## 1.2 Test Location

Name	Shenzhen BALUN Technology Co., Ltd.
Location	<input checked="" type="checkbox"/> Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
	<input type="checkbox"/> 1/F, Building B, Ganghongji High-tech Intelligent Industrial Park, No. 1008, Songbai Road, Yangguang Community, Xili Sub-district, Nanshan District, Shenzhen, Guangdong Province, P. R. China

## 2 PRODUCT INFORMATION

### 2.1 Applicant Information

Applicant	Shenzhen Zhongxin Applied Electronic Technology Co., Ltd
Address	No. 268, Floor 2, Building A9, Xinghuaxiong Science Park, Baihua Community, Guangming Street, Guangming District, Shenzhen
Contact Person	denny
Telephone Number	15302685236
E-mail Address	511325859@qq.com

### 2.2 Manufacturer Information

Manufacturer	N/A
Address	N/A

### 2.3 Factory Information

Factory	N/A
Address	N/A

### 2.4 General Description for Equipment under Test (EUT)

EUT Name	BC062-TX
Model Name Under Test	BC062-TX
Antenna Type	PCB Antenna
Dimensions	24.5*23.5 mm

### 2.5 Ancillary Equipment

Note: Not applicable.

### 2.6 Technical Information

Test Frequencies	433.92MHz
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### 3 SUMMARY OF TEST RESULTS

#### 3.1 Test Standards

No.	Identity	Document Title
1	ANSI/IEEE Std 149-1979	IEEE Standard Test Procedures for Antennas

#### 3.2 Test Verdict

Report Section	Description	Remark
ANNEX A.1	Gain and Efficiency	--
ANNEX B	Radiation Pattern	--

#### 3.3 Test Uncertainty

The uncertainty is calculated using the methods suggested in the "Guide to the Expression of Uncertainty in Measurement" (GUM) published by ISO.

Item	Uncertainty
VSWR(S11)	$\pm 0.61$
Gain	$\pm 1.92\text{dB}$

## 4 GENERAL TEST CONFIGURATIONS

### 4.1 Test Condition

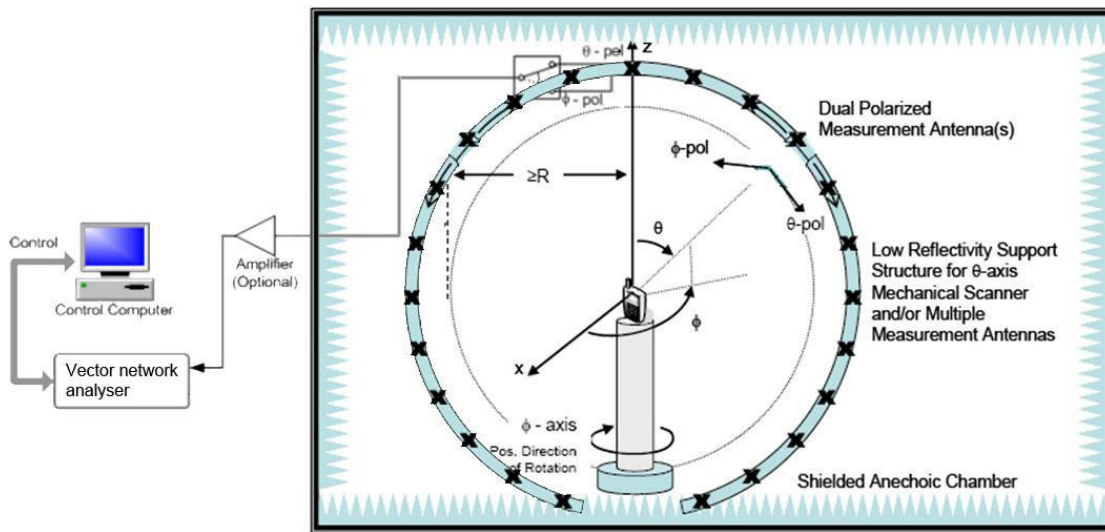
Environment Parameter	Selected Values During Tests			
	Ambient Pressure(KPa)	Temperature(°C)	Voltage	Relative Humidity (%)
Normal Temperature, Normal Voltage (NTNV)	101	21.7	N/A	57

### 4.2 Test Equipment List

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
SG24 Multi-probe Antenna Measurement System	SATIMO	SG24-L	1101855-0001	2021.11.12	2024.11.11
Vector Network Analyzer	Agilent	E5071B	MY42404001	2022.04.02	2023.04.01
Description	Manufacturer	Name		Version	
Test Software	MVG	SPM		V 1.8	

### 4.3 Test Setup

#### 4.3.1 Antenna gain, efficiency and radiation pattern test setup



## ANNEX A TEST RESULTS

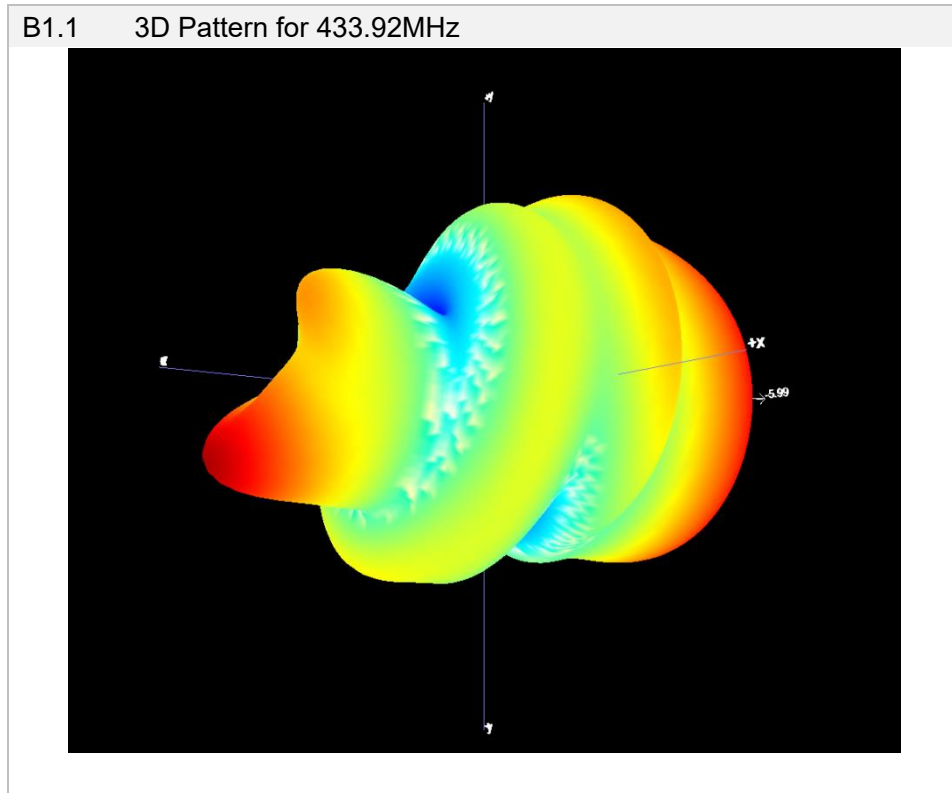
### A.1 Gain and Efficiency

Frequency	Gain (dBi)	Efficiency (%)
433.92MHz	-5.99	7



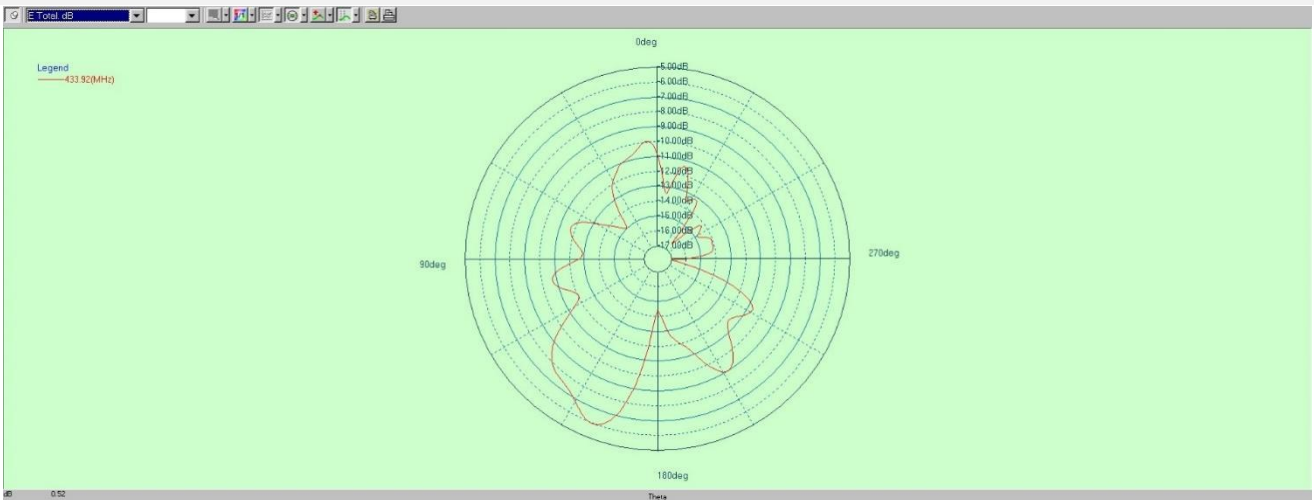
## ANNEX B RADIATION PATTERN

### B.1 3D Pattern

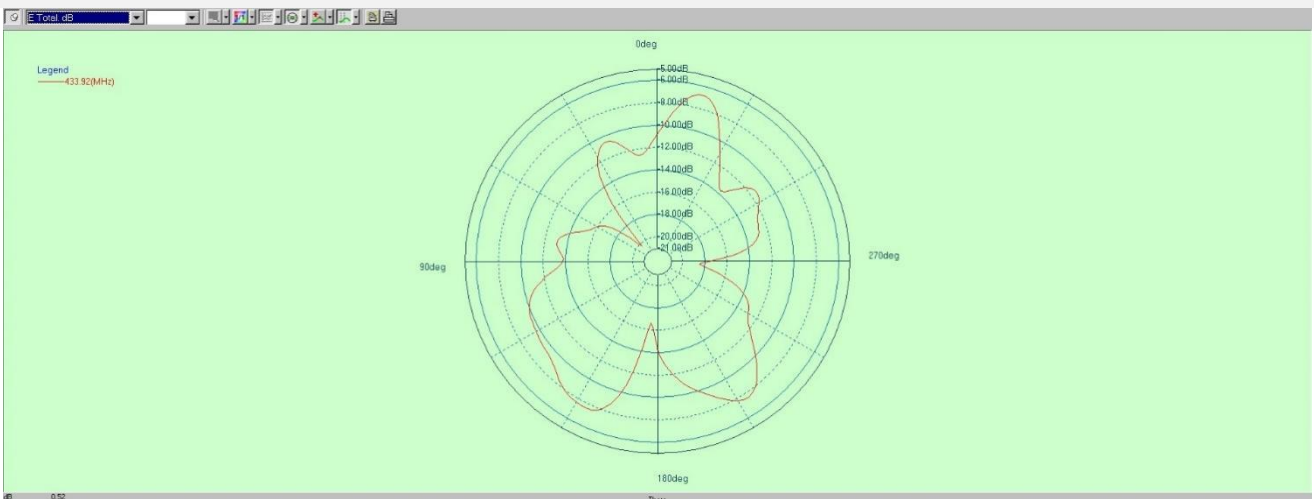


## B.2 1D Radiation Pattern

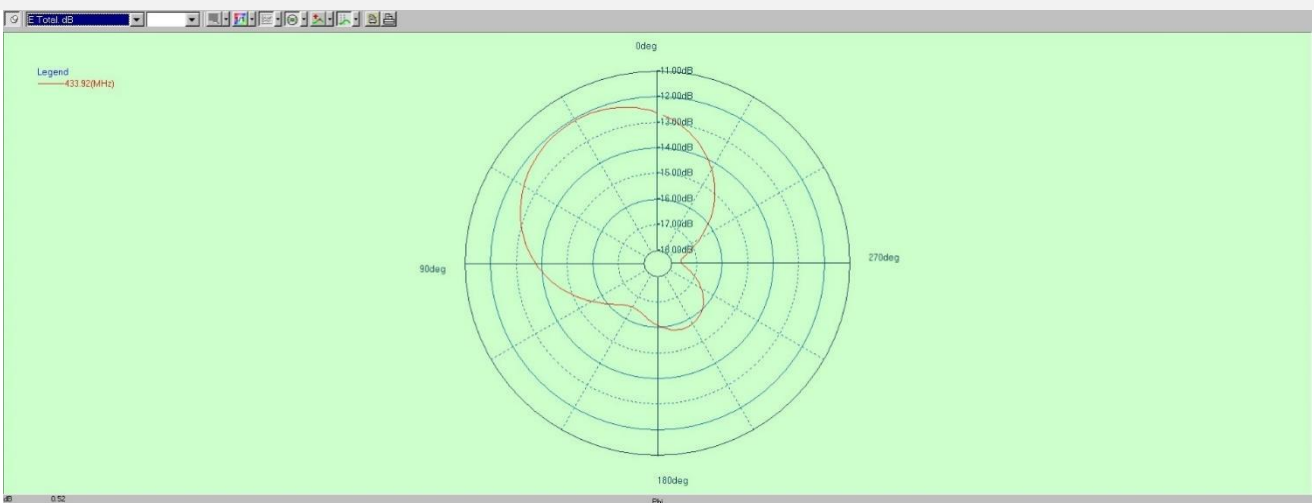
### B2.1 PHI=0



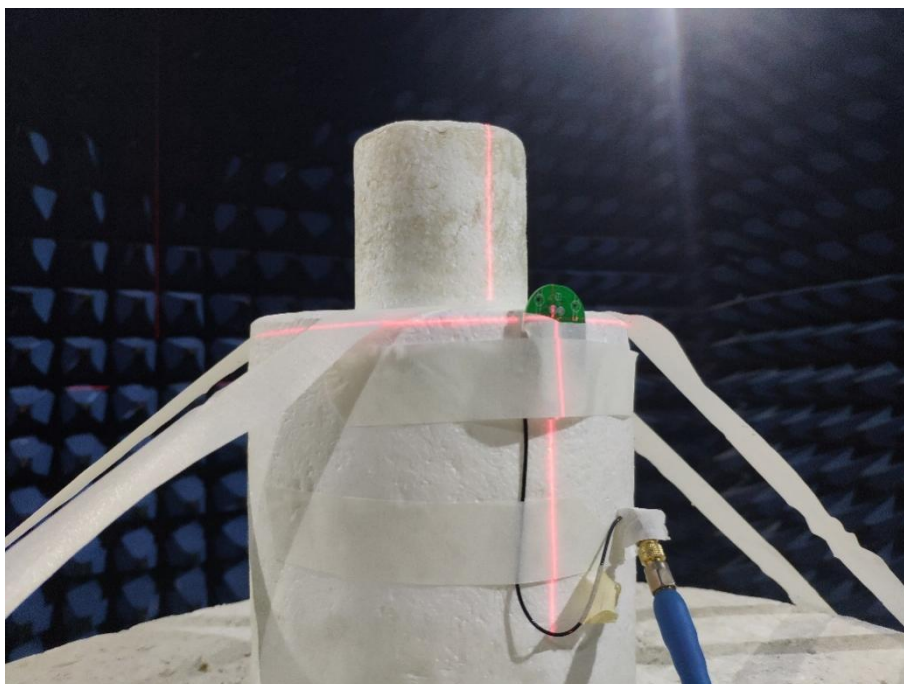
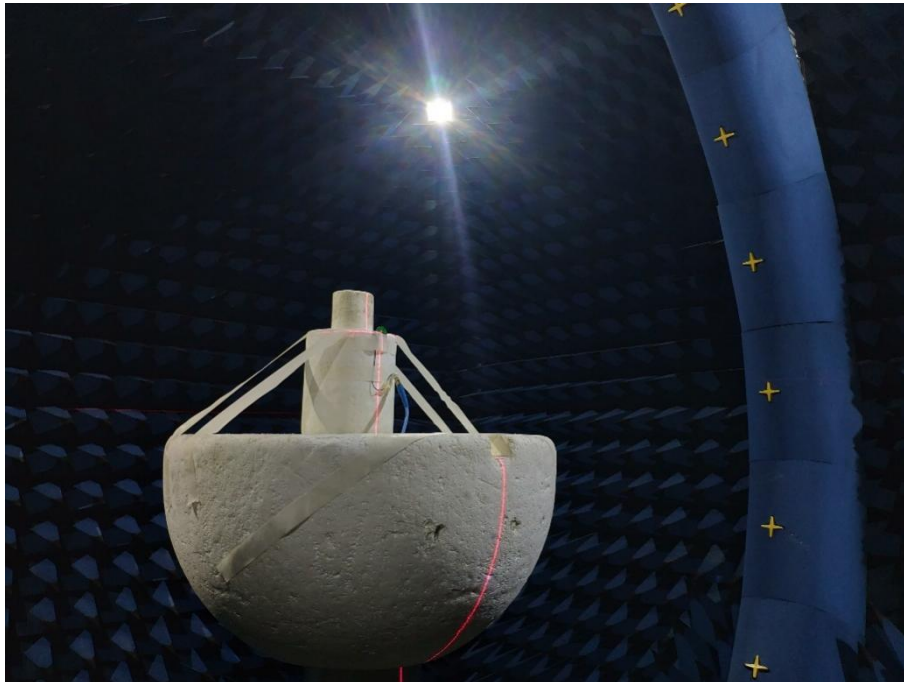
### B2.2 PHI=90



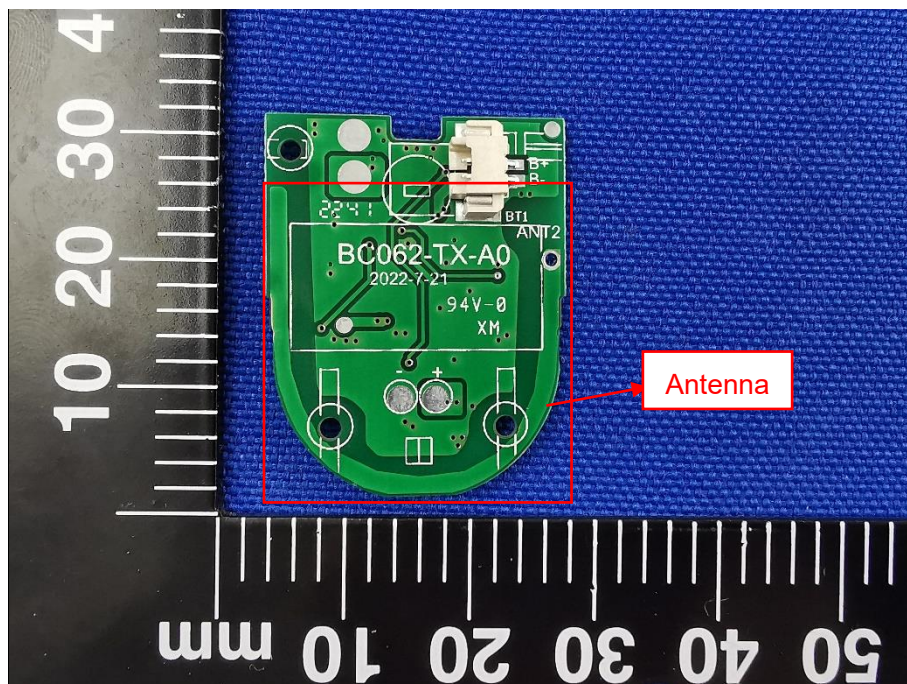
### B2.3 THETA=90



## ANNEX C TEST SETUP PHOTO



## ANNEX D EUT PHOTO



## Statement

1. The laboratory guarantees the scientificity, accuracy and impartiality of the test, and is responsible for all the information in the report, except the information provided by the customer. The customer is responsible for the impact of the information provided on the validity of the results.
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7. Any objection shall be raised to the laboratory within 30 days after receiving the report.

--END OF REPORT--