



上海增信电子有限公司
Signal Plus Technology Co., Ltd.

规格承认书
SPECIFICATION FOR APPROVAL

日期
DATE: 2024.08.20

版本
REV.: A

客户
CUSTOMER: SingularXYZ Intelligent Technology Ltd.

客户料号
CUSTOMER P/N:

品名
PART NAME: 410-470MHZ flexible plastic radio antenna

供方料号
SUPPLIER P/N: 6306F00006

送样日期Date: 送样数量Q'TY: Pcs

客户确认CUSTOMER APPROVED BY		
核准 Approved by	审核 Checked by	确认 Confirmed by

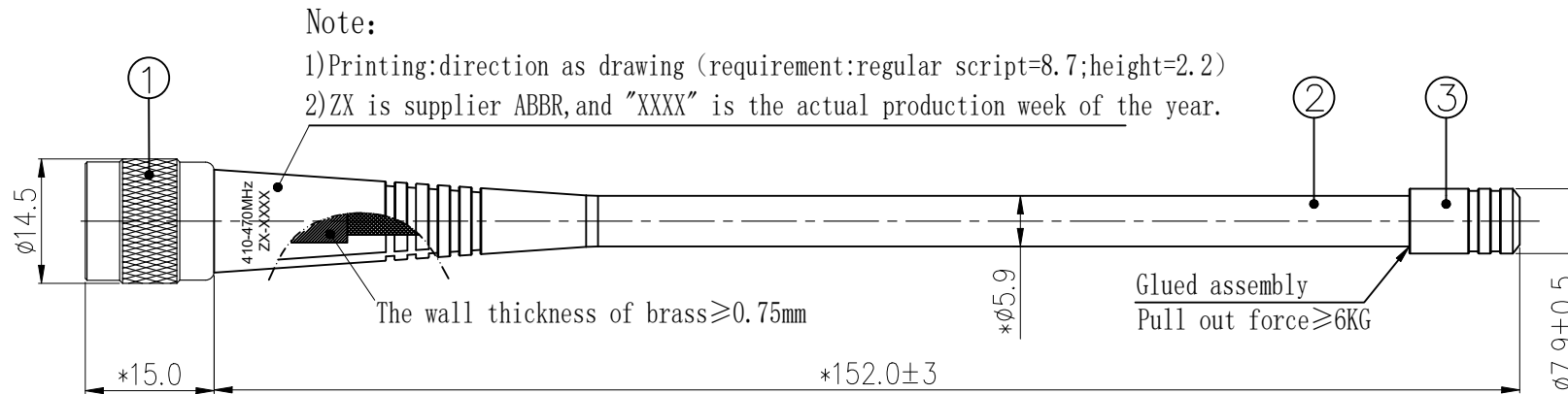
供方确认SUPPLIER SIGNATURE		
核准 Approved by	审核 Checked by	拟制 Prepared by
Andy		Cindy

ZX-QT-RD-0011-A1

Contents

<i>Item</i>	<i>Description</i>	<i>Page</i>
1.	Cover	 1
2.	Content	 2
3.	Drawing	 3
4.	Antenna Test Report	 4~8

REV	DATE	DESCRIPTION
X1	06/14-2022	New Issue
X2	08/02-2022	Add characters mark
X3	08/03-2022	Add packaged description



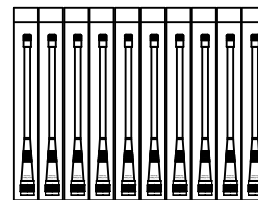
Packaging description:

1)Packing in lattice-bag

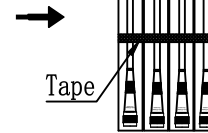
2)Fixed with tape

3)Packed with PE bag, and label

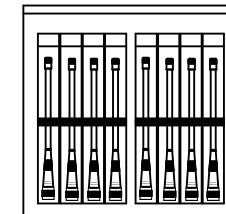
4)Packed in carton, and label



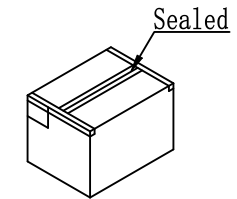
Quantity:10 pcs



Quantity:10 pcs



Quantity:50 pcs



Carton size:300*260*150mm
Quantity:300 pcs/carton

Specification:

Frequency Range:410~470MHZ

Impedance:50 Ω

VSWR:9.0MAX

Gain : -3.33dB

Add glued assembly between the cap and antenna shell, and the pull out force $\geq$ 6KG;

These Products are in conformity with ROHS 2.0;

Critical To Function Dimension Are Marked With *...

3	Cap	Plastic;Black		
2	Antenna shell	TPE;Black	1	
1	Connector	TNC, Male;Nickel-Plated	1	
NO	DESCRIPTION		Q'TY	REMARK

CUSTOMER'S SIGNATURE

XXX.	$\pm$ 2.0	APPROVED	CUSTOMER:
XX.	$\pm$ 1.0		
X.	$\pm$ 0.5	CHECKED	PART NO:
.X	$\pm$ 0.3		
.XX	$\pm$ 0.2	DRAWING	PART NAME: 410MHz-470MHz Antenna
		steven	Z&X P/NO: 6306F00006
			REV X3 UNIT mm FILE: SHEET: 1/1

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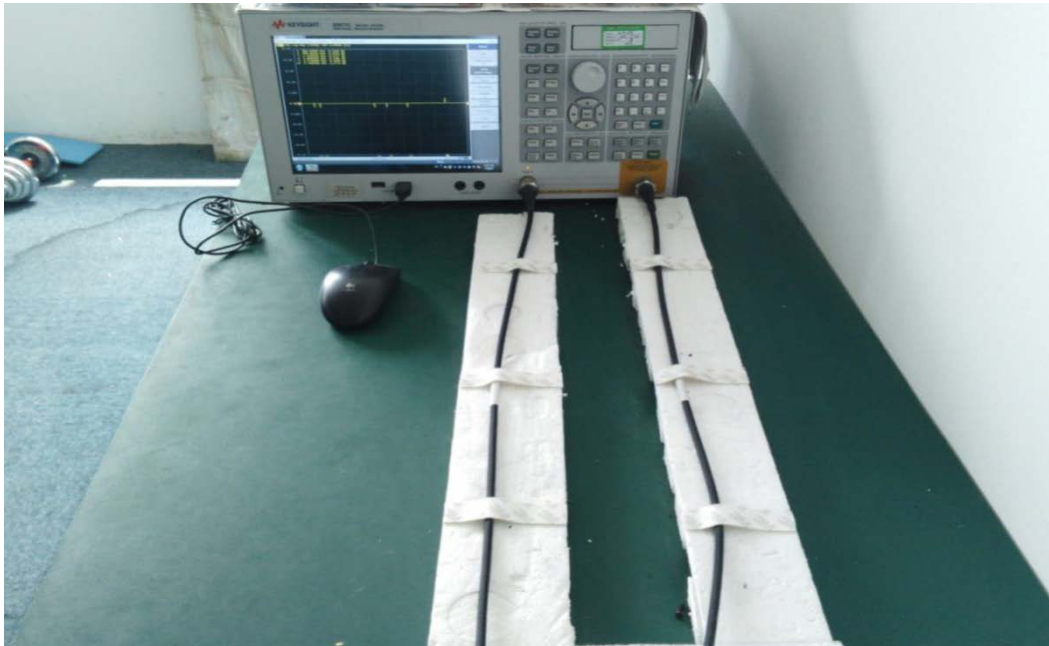
Antenna Test Report

1. RF Fixture Experiment

1.1 Test Setup

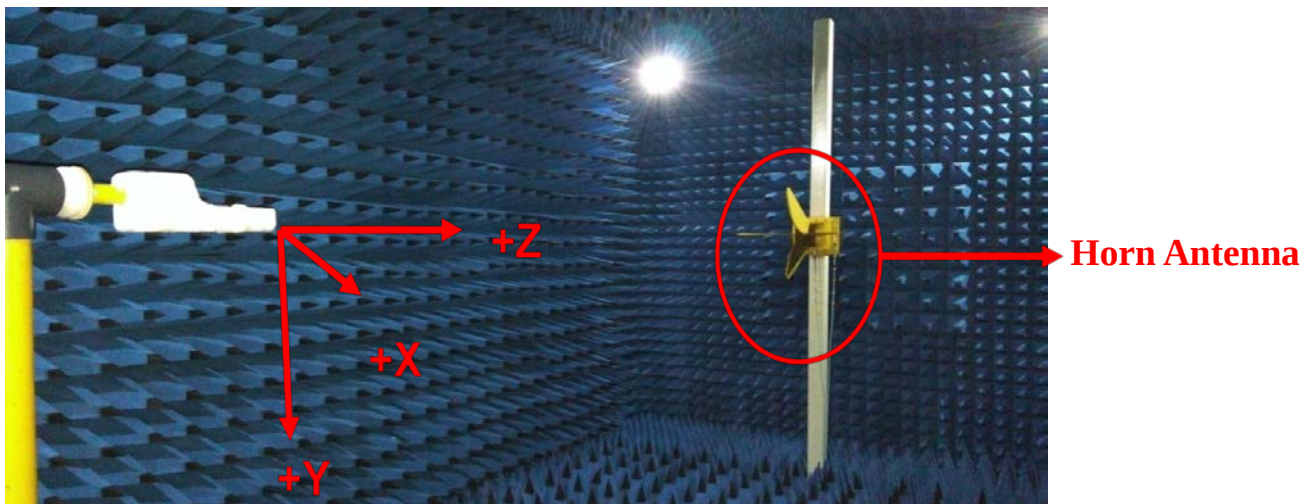
1.1.1 VNA Test Setup

VSWR and Return Loss measurements (S_{11}) were performed using an Keysight E5071C Network Analyzer. The isolation between antennas is also tested. The testing was performed with apparatus in free space.



1.1.2 Anechoic Chamber Test Setup

The gain of the antenna was measured in the anechoic chamber. The chamber provides less than -30 dB reflectivity from 400 MHz through 6 GHz. The chamber size is: 7m*4m*3m. The measurement results are calibrated using a leaky wave horn standard. We can measure the antenna gain and efficiency accurately.



2. Antenna Solution



3.Data Preview

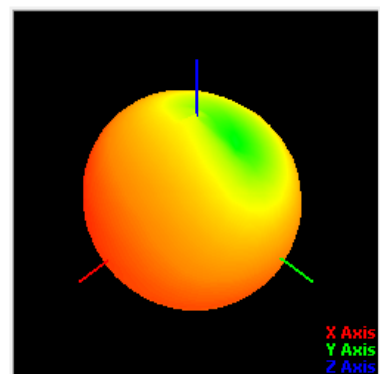
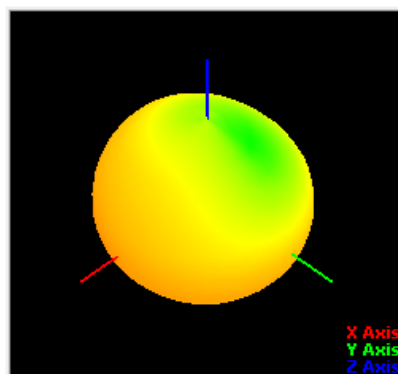
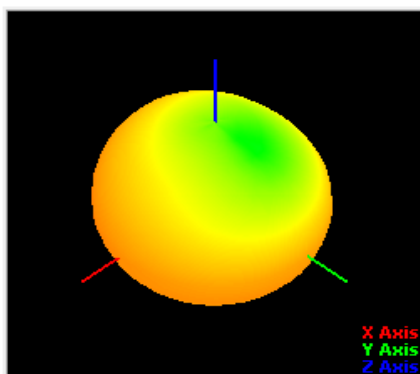
S11



Passive Data:

Freq.(MHz)	410	440	470
Gain(dBi)	-4.46	-4.80	-3.33
Eff.%	21.2	20.1	23.0

Radiation patterns:3D (410/440/470)



Radiation patterns:2D (440MHz)

