

Dongguan Lixinwei Electronics Co., Ltd

Antenna Specification for Approval

Customer Name: Shenzhen Tianzhiheng Electronic Technology Co., Ltd

address: F7-016, Hedong Building, Haoyunlai Square, Bao'an
District 80, Hedong Community, Xixiang Street, Bao'an
District, Shenzhen

Product Name: 2.4G copper tube antenna

Part NO.:

Write By: Zhou Min

Issued Date: 2022-10-31

customer:

R&D Dept	Business Dept	Approved By

supplier

R&D Dept	Engineer Dept	Approval



ϕ 1.13 single silver, gray, 50 Ω

50.7

55.0

 118 ± 1

A

A cross-sectional diagram of a tin-plated steel sheet. The diagram shows a central black rectangular core (steel) with a white rectangular layer (tin plating) on its top and bottom surfaces. The total thickness of the sheet is indicated as 5.0 ± 0.3 . The thickness of the steel core is 3.2 . The thickness of the tin plating on each side is 1.2 ± 0.3 . A label $\frac{A}{L \cdot l}$ tin-plating points to the white layer.

TITLE:		2.4.Gantenna		MATERIAL:		FINISH:	
PART/NO.:		C113H-BT50-30-118R		TOLERANCE ??			
UNIT IN		SCALE:		ANGULAR??			
mm		2.5:1		$L < 30$ $30 < L < 100$ $L > 100$		± 0.10 ± 0.15 ± 0.20	
				UNLESS OTHERWISE SPECIFIED			
DRAWING		DATE		CHECKING		REV	
孰		22-09-25				01	

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Product Specification

A. Electrical Characteristics

Frequency 2400MHz ~2500MHz

VSWR <2.0

Efficiency >75%

Impedance 50 Ohm

Polarization mode:linear polarization

Gain 2.97DBi

B. Material & Mechanical Characteristics

Material of Radiator Cu

Cable Type 1.13 black

Connector Type : NO

Dimension

C. Environmental

Operation Temperature - 30 °C ~ + 80 °C

Storage Temperature - 30 °C ~ + 85 °C

Test Equipment & Conditions

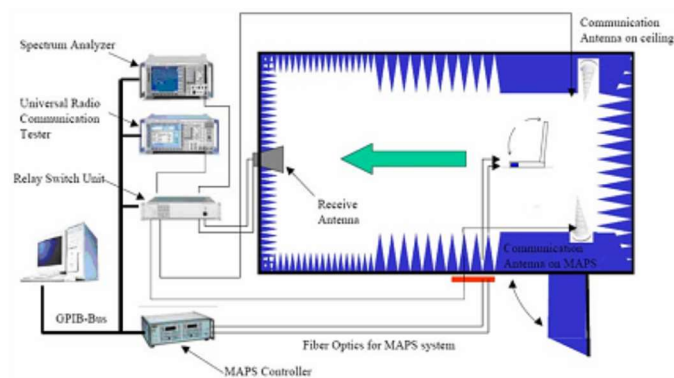
1. Network Analyzers :

Agilent 8753D 5071B

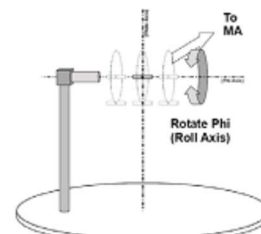
2. Communications Test Set:

Agilent E5515C

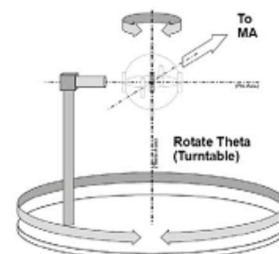
3. 3D Chamber Test System



(Testing by 3D anechoic chamber)



Phi axis test

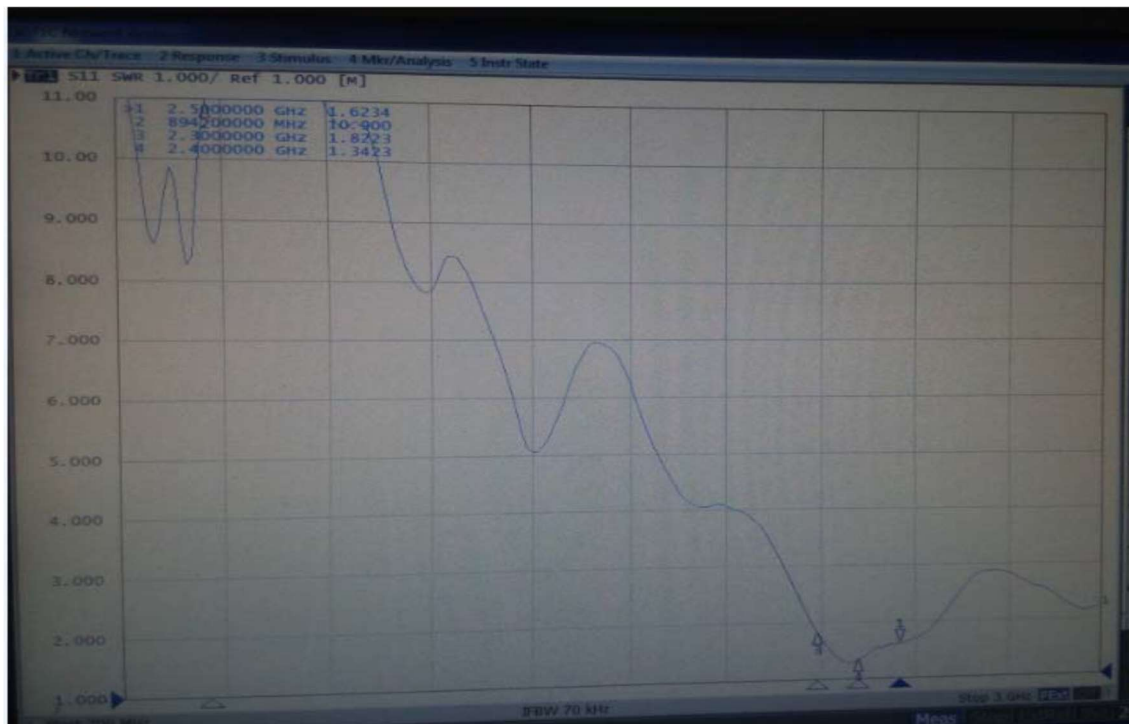


Theta axis test

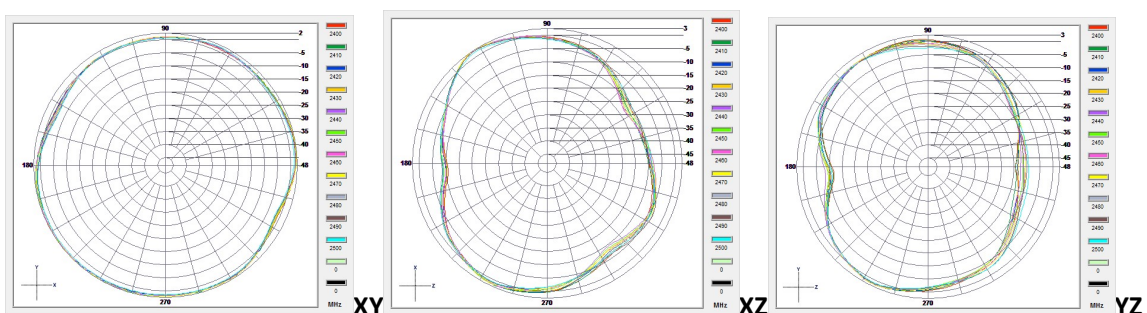
Efficiency & Gain

Freq (MHz)	Effi (%%)	Gain (dBi)
2400	74.95	2.4
2410	74.84	2.86
2420	74.68	2.8
2430	75.55	2.97
2440	73.66	2.51
2450	72.06	2.73
2460	72.87	2.86
2470	72.95	2.80
2480	72.43	2.78
2490	68.41	2.72
2500	67.46	2.33

S11



Radiation Pattern:



2400 2410 2420 2430 2440 2450 2460 2470 2480 2490 2500

