



Shenzhen DEWEIMA Communication Equipment Co.,Ltd

SPECIFICATION SHEET FOR APPROVAL

CUSTOMER NAME	Shenzhen unique Scales Co.,Ltd
CUSTOMER P/N	CK829
PART NAME	BT Antenna
DWM NO.	
APPROVAL REV.	DWM-V1.0

CONTRACTOR			DATE : 2023-07-19
QA CHECKED	ME CHECKED	RF CHECKED	MANAGER CHECKED

CUSTOMER		DATE :
Approved By	Checked By	Prepared By

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Product Specification

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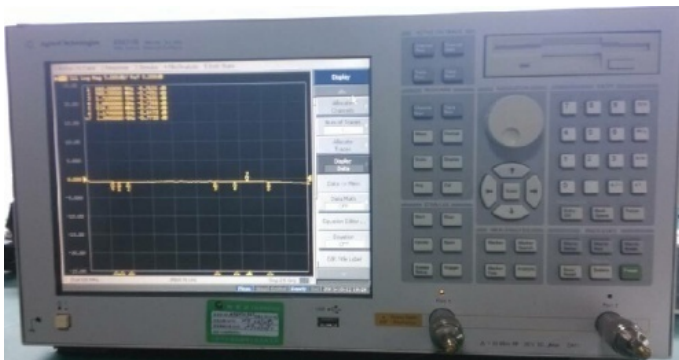
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1. Product Application

Terminal of the antenna products can only be used for BT antenna.

2. The test environment, equipment

Item	Description	Test Condition	Requirement
2.1	Passive testing	The VSWR measurement devices are connected in sequence: Agilent 5071B Network Analyzer → measurement Cable → Customer-providing Devices.	VSWR: 2400-2500MHz ≤ 2
		Test equipment	
			
Item	Description	Test Condition	
2.2	Active test	The antenna is tested within the cell mainboard provided by clients. Follow picture shows the measurement condition of the antenna been put on the measurement device, which is used for all measurement of electric performances.	
2.3	Microwave	Test equipment	



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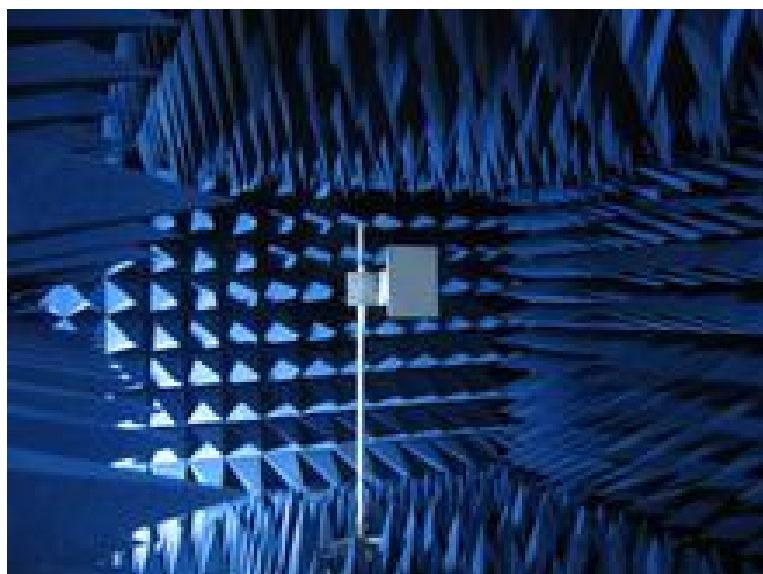
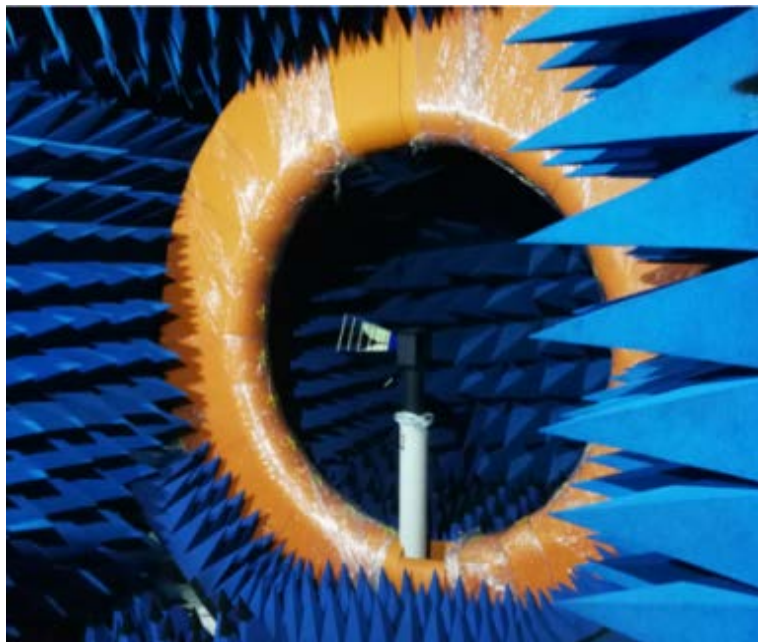
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Anechoic
chamber
(Satimo&ETS
)





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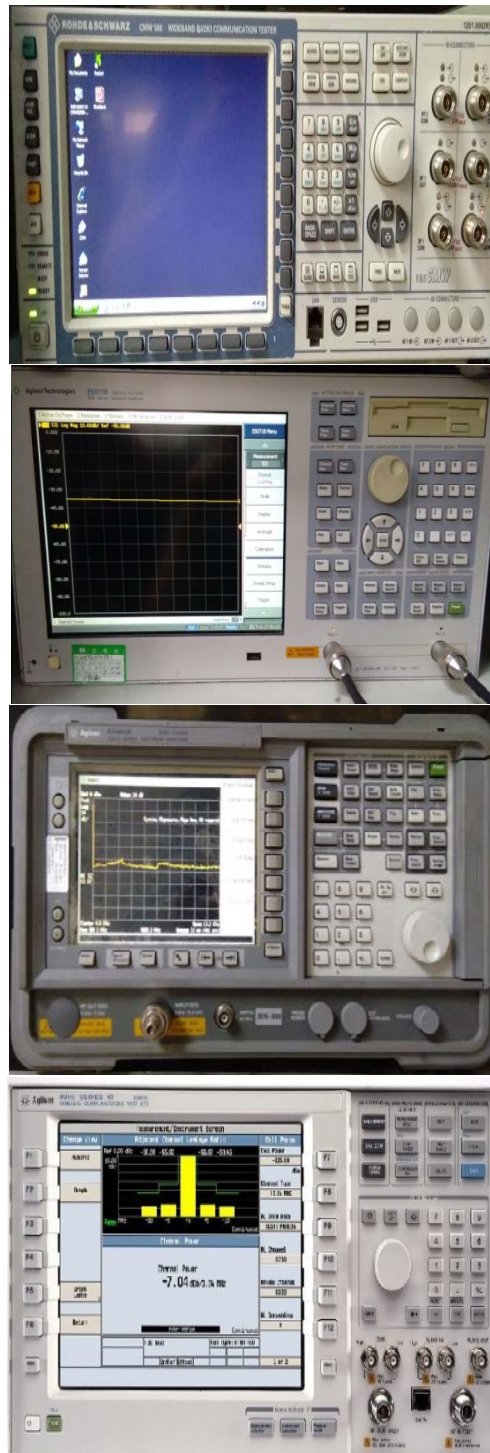
CMW500

Agilent5071B

AgilentE4405B

Agilent8960

2.4





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3. BT Antenna description

3.1 BT Technology Parameters

BT Frequency Range: 2400MHz-2500MHz

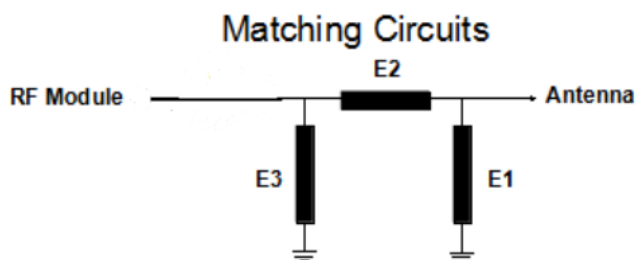
BT antenna type: IFA Antenna (PCB Antenna)

Operating Humidity: 90% R.H.MAX

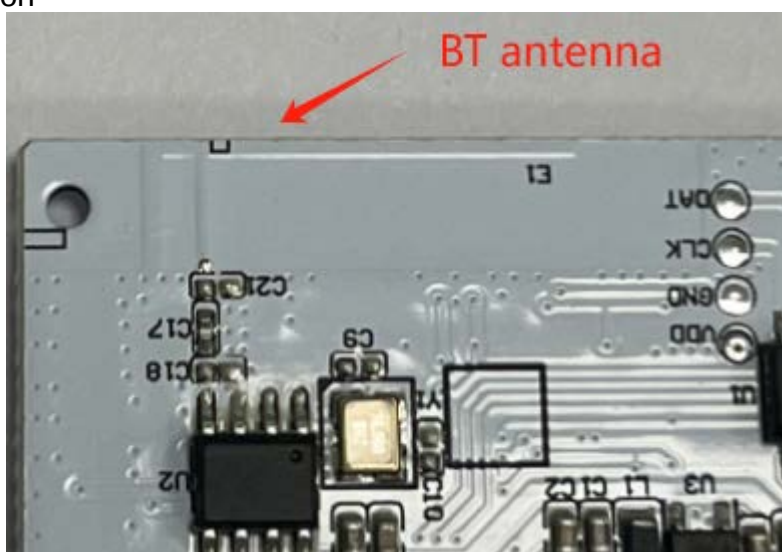
Temperature Rating: 0°C~+40°C

3.2 BT matching circuit

Element	Value
E1(0402)	NC
E2(0402)	1.2nH
E3(0402)	NC
Parameter not changed	



3.3 BT antenna position





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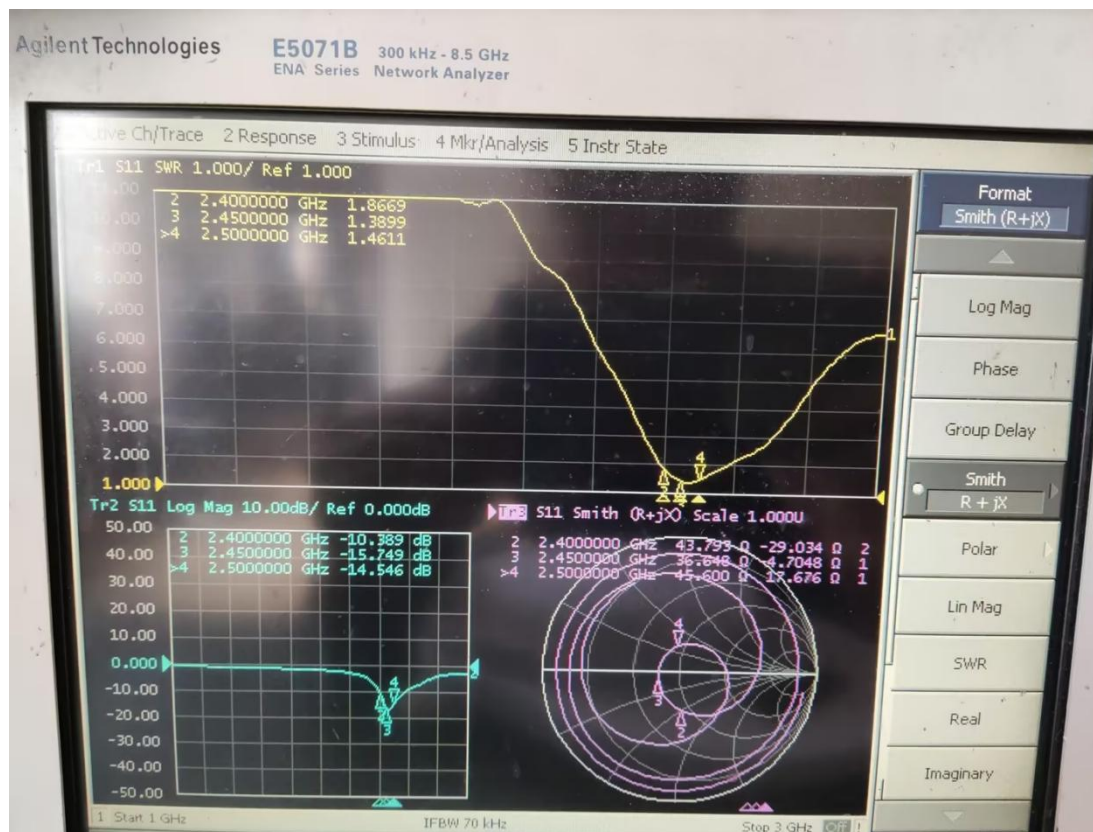
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3.4 BT VSWR/Return Loss/Smith:



3.5 BT Efficiency And Gain:

Frequency / Mhz	Efficiency / %	Max Gain / dBi
2400	40.27	2.12
2410	38.9	1.98
2420	41.02	2.59
2430	41.98	2.81
2440	41.11	2.08
2450	43.35	2.18
2460	44.36	2.26
2470	43.25	1.89
2480	43.85	1.89
2490	44.67	2.35
2500	41.59	1.87



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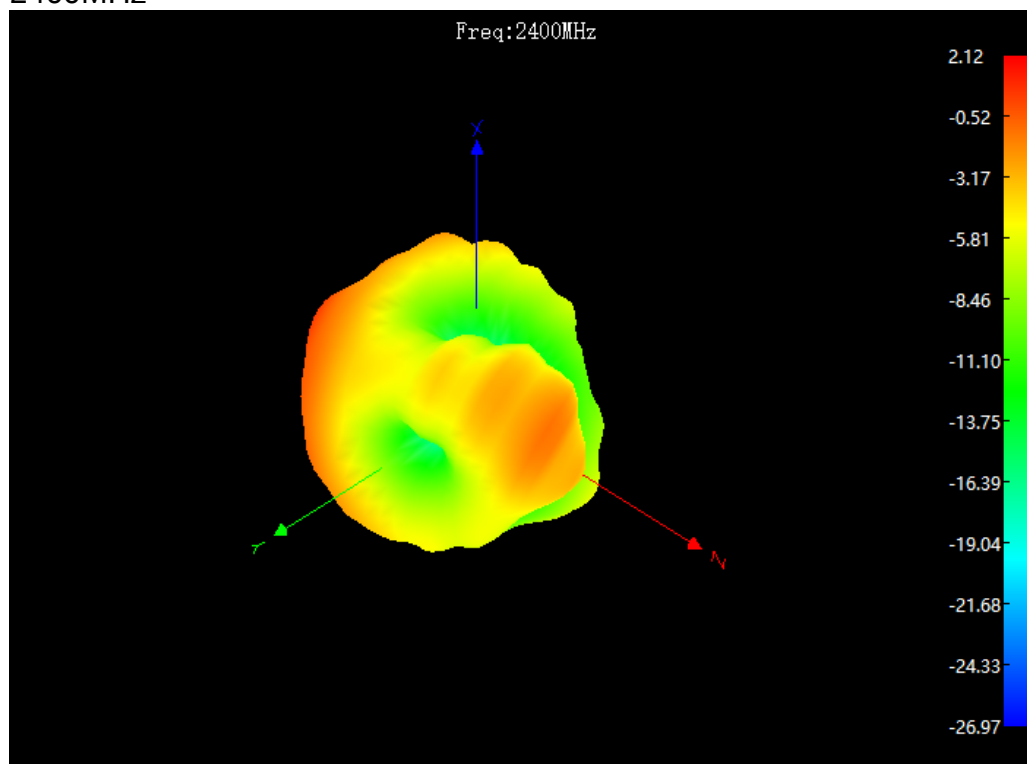
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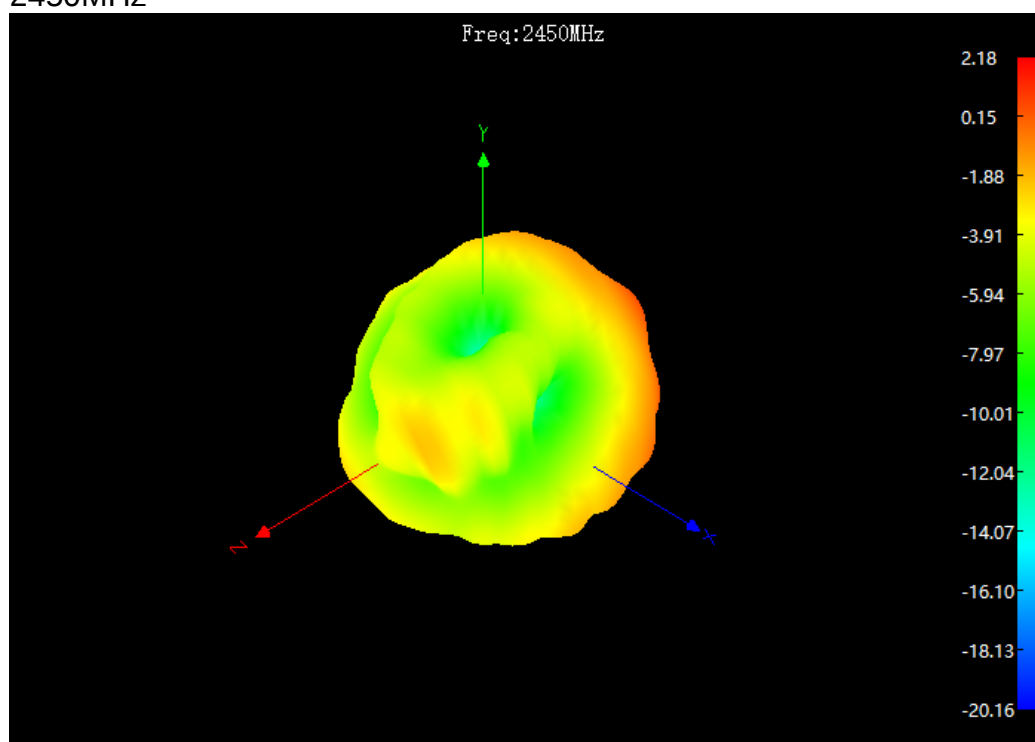
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3.6. BT 3D Pattern 2400MHz



2450MHz





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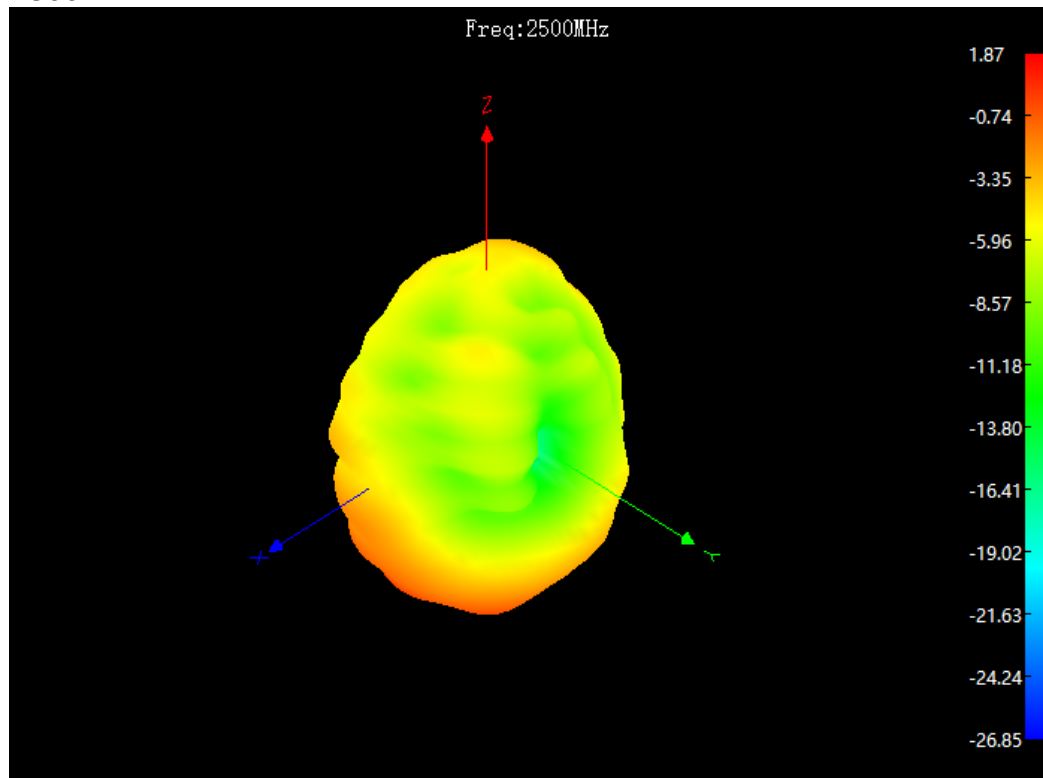
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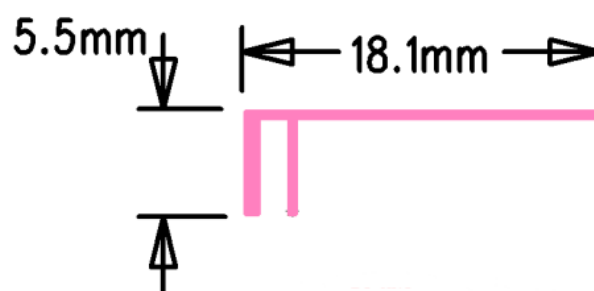
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2500MHz

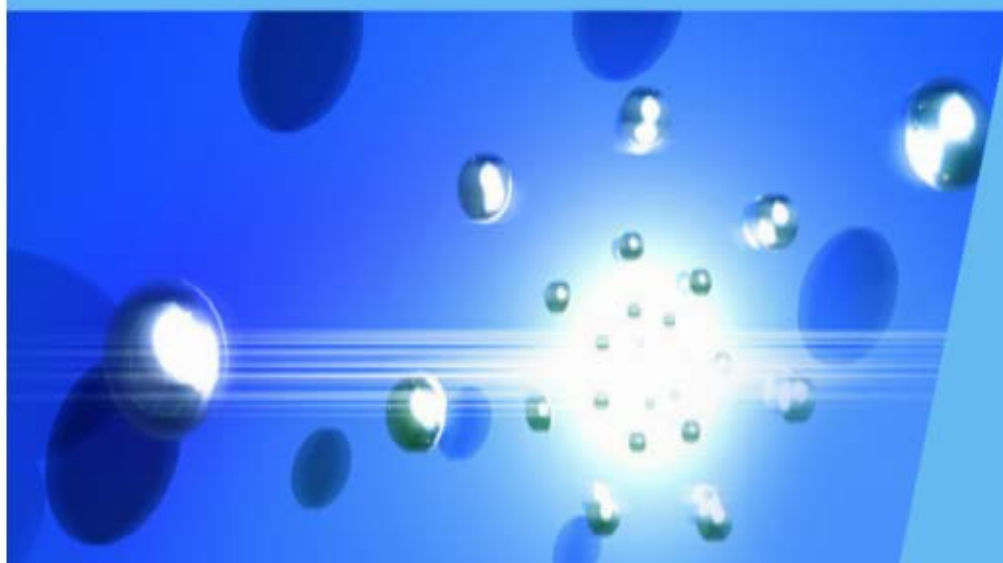


3.7 BT Engineering drawings:



PCB on-board antenna

Professional RF R&D institutions



Thank You !

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