

CUSTOMER NAME	Shenzhen Aoni Electronic Co.,Ltd
CUSTOMER P/N	B405JL
PART NAME	Bluetooth Antenna
DWM NO.	
APPROVAL REV.	R:A

CONTRACTOR			DATE : 2023-06-05
QA CHECKED	ME CHECKED	RF CHECKED	MANAGER CHECKED

CUSTOMER		DATE :
Approved By	Checked By	Prepared By

Aoni	ProductSpecification		
	P/N:	Rev.: A	Page:

Content

Content	2
1. Product Application	3
2. The test environment, equipment	3
3. Technology Parameters	

Aoni	Product Specification		
	P/N:	Rev.: A	Page:

1. Product Application

Terminal of the antenna products can only be used for Bluetooth 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 Anechoic chamber (Satimo&ETS)	Test equipment	

ProductSpecification

P/N:

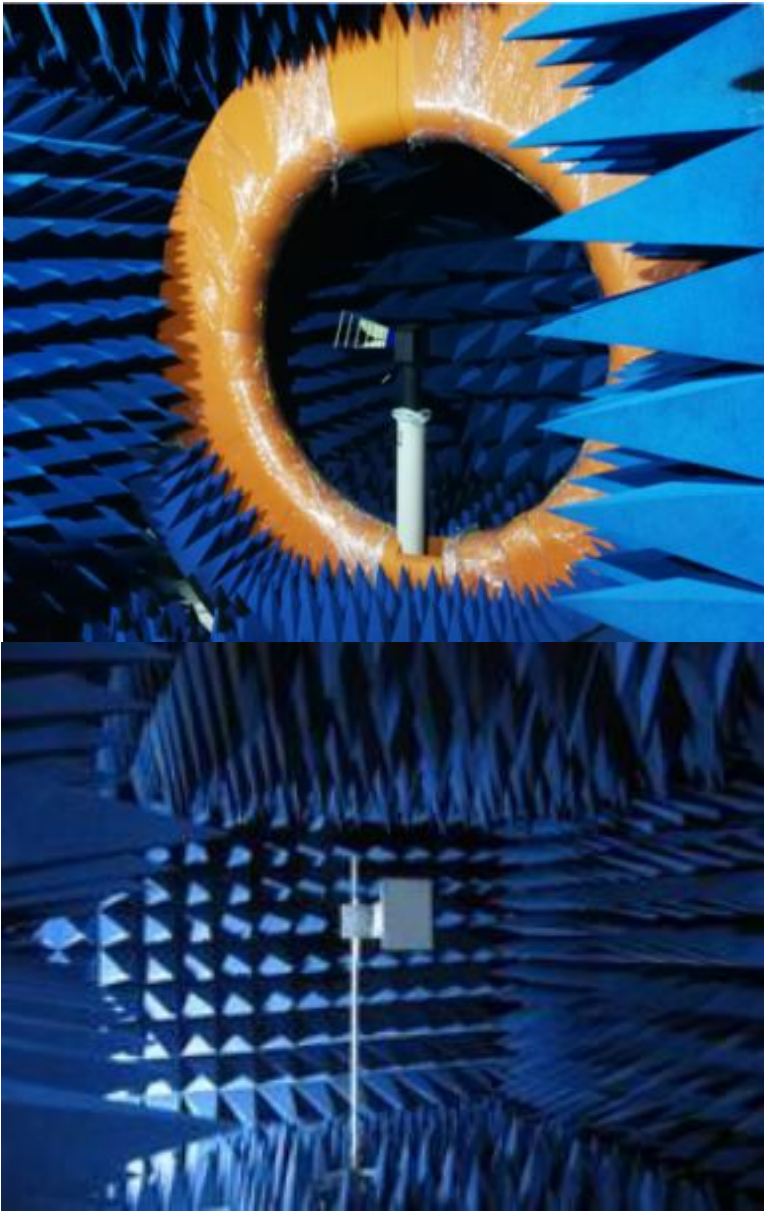
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Page:

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ProductSpecification

P/N:

Rev.:

Page:

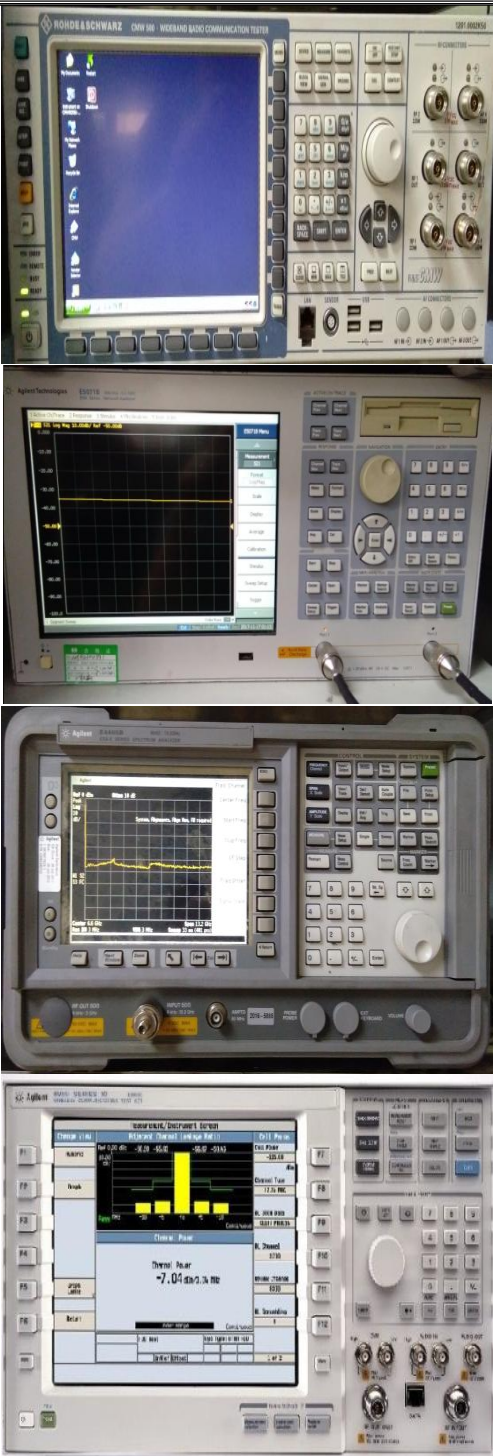
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CMW500

Agilent5071B
AgilentE4405B

Agilent8960



ProductSpecification

P/N:

Rev.:

Page:

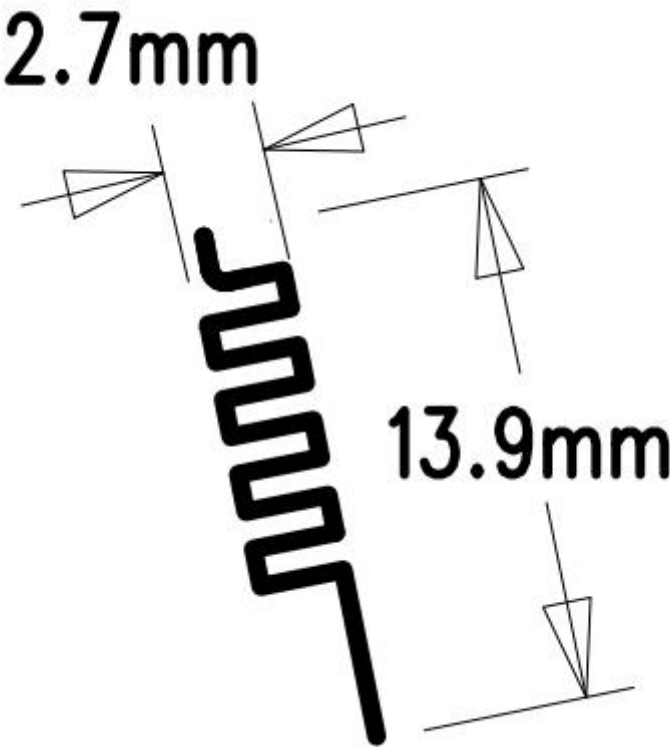
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3.Technology Parameters

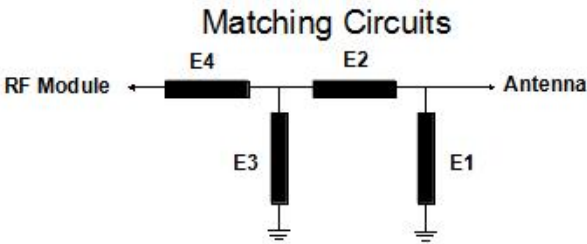
Frequency Range: 2400MHz-2500MHz
Operating Humidity: 85%R.H.MAX
Temperature Rating: -40℃~+85℃

3.1 antenna size



3.2 The matching test value

Element	Value
E1(0402)	2.7nH
E2(0402)	0Ω
E3(0402)	N/A
E4(0402)	0Ω



3.3 VSWR:

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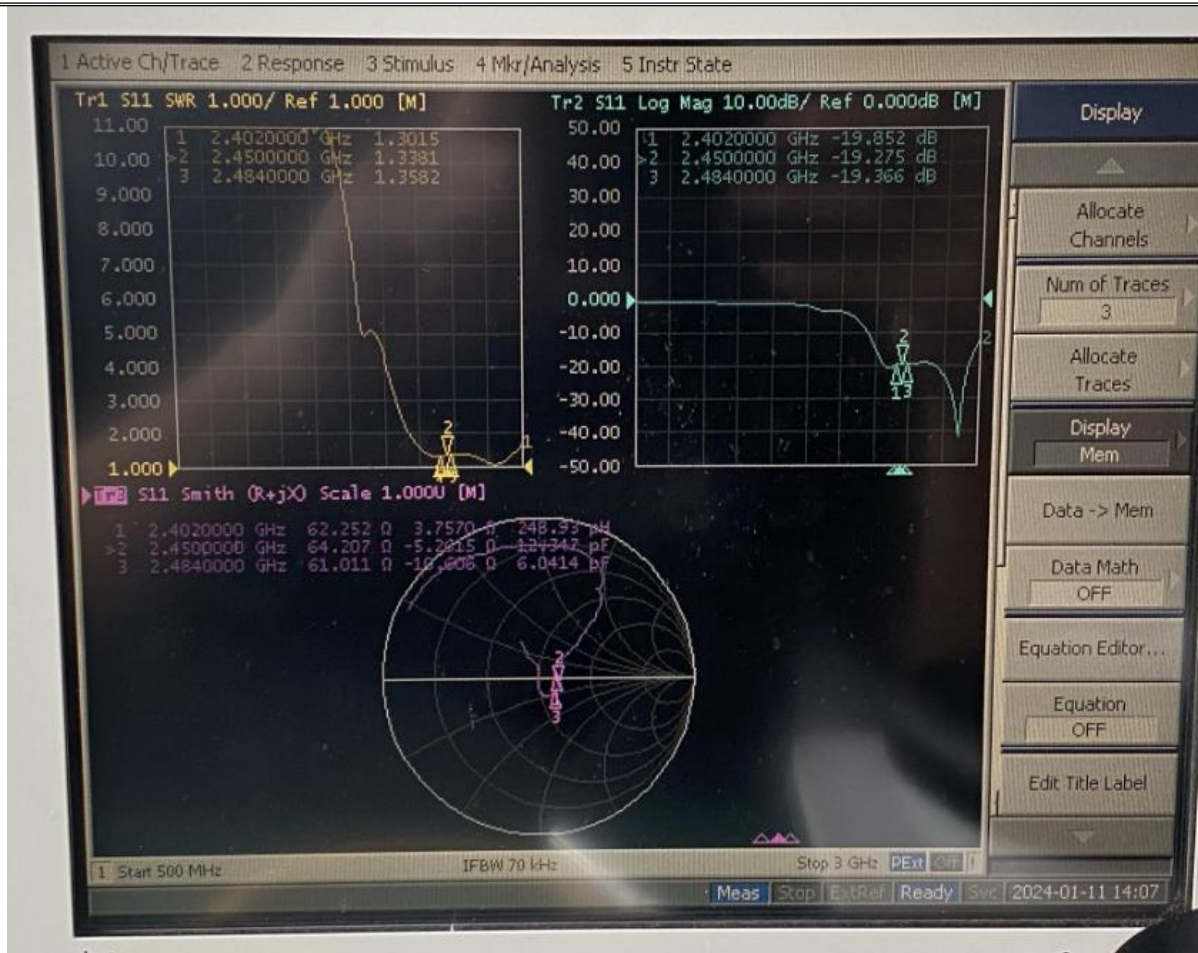
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Rev.:

Page:

Aoni

A



3.4 Efficiency And Gain:

Fre	Effi	Gain.dB
2400	46. 7%	0. 70
2410	46. 9%	0. 83
2420	45. 2%	0. 86
2430	47. 0%	0. 93
2440	46. 6%	1. 00
2450	49. 3%	1. 06
2460	50. 1%	1. 41
2470	48. 8%	1. 29
2480	46. 0%	1. 65
2490	45. 0%	1. 85
2500	43. 8%	1. 46

ProductSpecification

P/N:

Rev.:

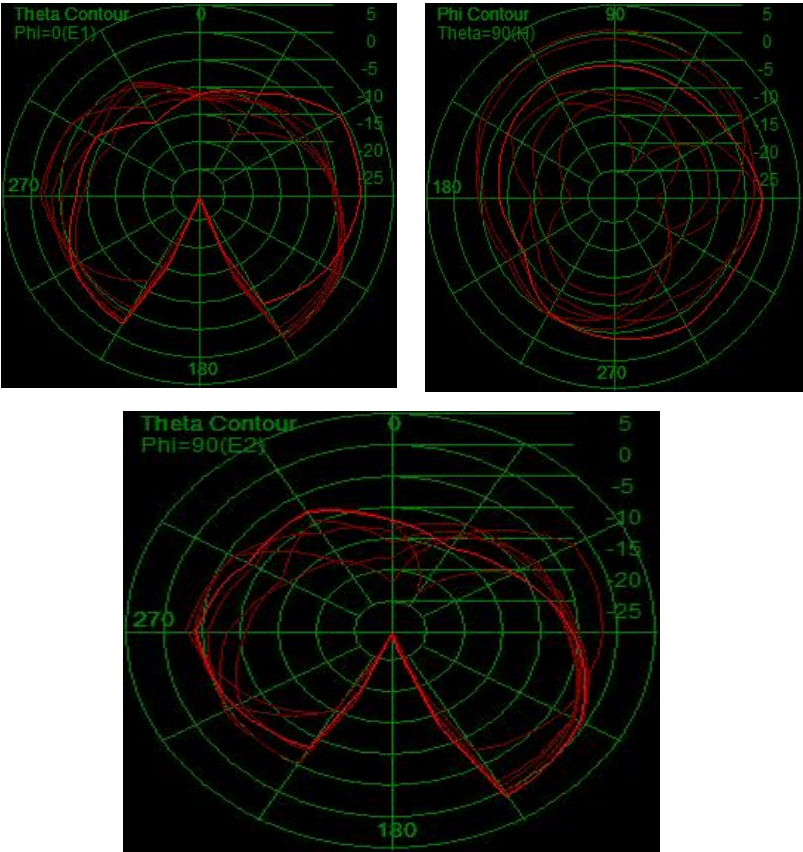
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Aoni

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3.5 2D and 3D field patterns:

2D:



3D:

ProductSpecification

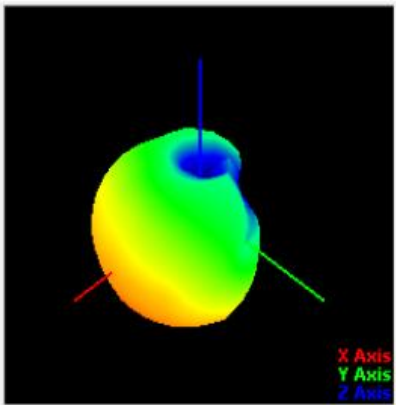
P/N:

Rev.:

Page:

A

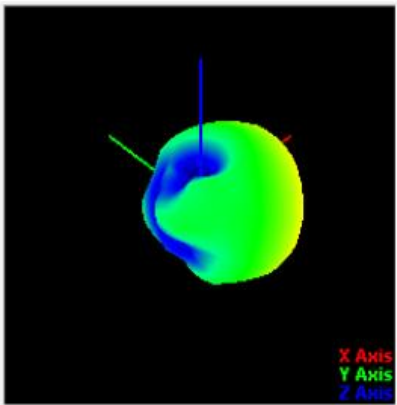
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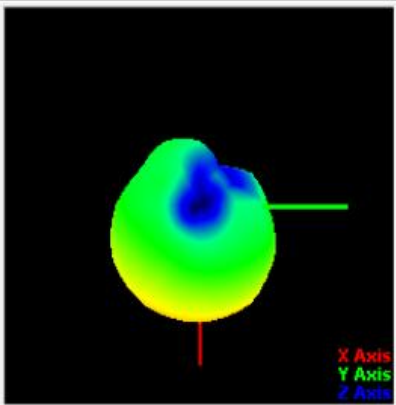
T45-P45



0.98
-2.84
-6.66
-10.48
-14.3
-18.12
-21.94
-25.76
-29.57
-33.39
-37.21
-41.03
-44.85
-48.67
-52.49
-56.31
-60.13
-63.95



T45-P225



0.98
-2.84
-6.66
-10.48
-14.3
-18.12
-21.94
-25.76
-29.57
-33.39
-37.21
-41.03
-44.85
-48.67
-52.49
-56.31
-60.13
-63.95

Coordination System Description:
Line Colr XYZ Theta-Phi
Red L. Axis X Theta90-Phi0
Green L. Axis Y Theta90-Phi90
Blue L. Axis Z Theta0