



Shenzhen DEWEIMA Communication Equipment Co.,Ltd

SPECIFICATION SHEET FOR APPROVAL

CUSTOMER NAME	idata
CUSTOMER P/N	M113
PART NAME	WIFI/BT Antenna
Type	FPC antenna
APPROVAL REV.	DWM-V1.0

CONTRACTOR			DATE : 2023-10-27
QA CHECKED	ME CHECKED	RF CHECKED	MANAGER CHECKED

CUSTOMER		DATE :
Approved By	Checked By	Prepared By

	Product Specification		
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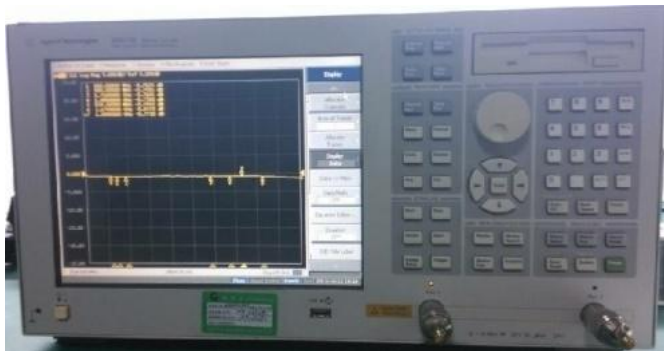
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1. Product Application

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

2. The test environment, equipment

Item	Description	Test Condition	Requirement
2.1	Passive testing	The VSWR measurement devices are connected in sequence: Agilent5071B Network Analyzer → measurement Cable → Customer-providing Devices.	VSWR: 2400-2500MHz $\leq$ 3.0 5150-5850MHz $\leq$ 3.5
		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.	



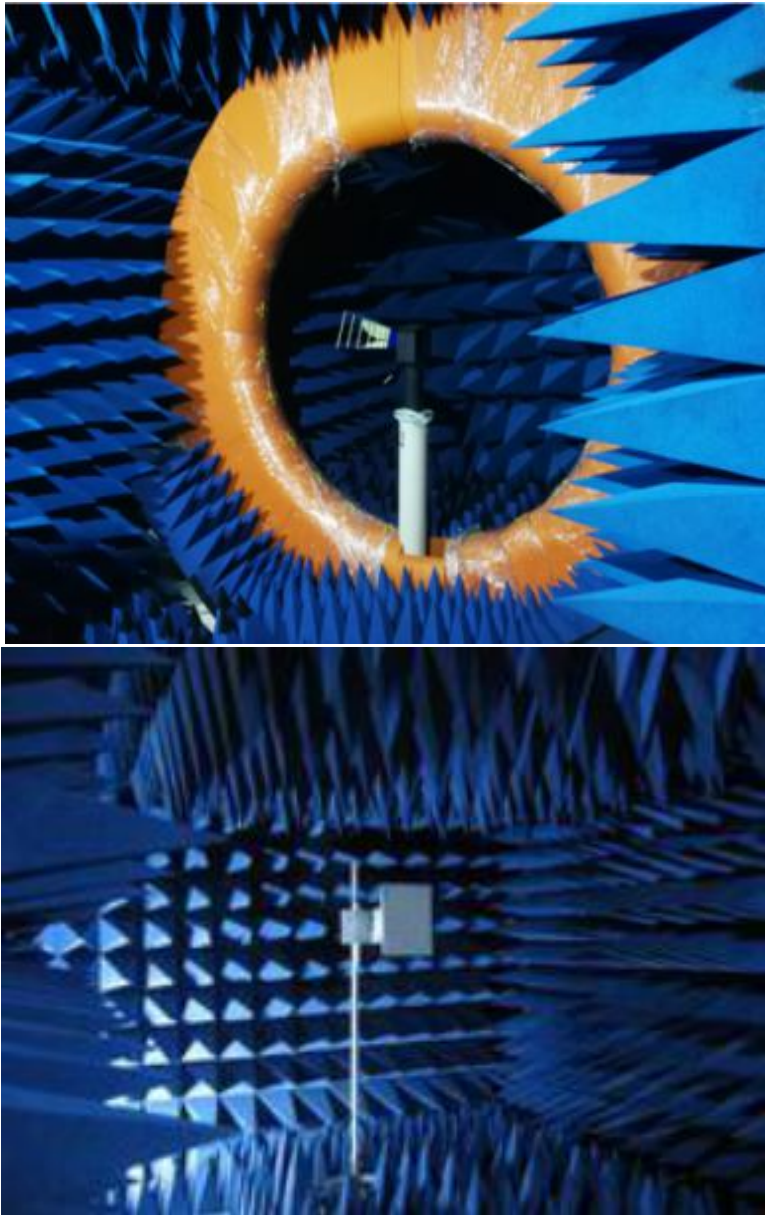
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Test equipment

2.3

Microwave
Anechoic
chamber
(Satimo&ETS
)





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2.4

CMW500

Agilent5071B

AgilentE4405B

Agilent8960





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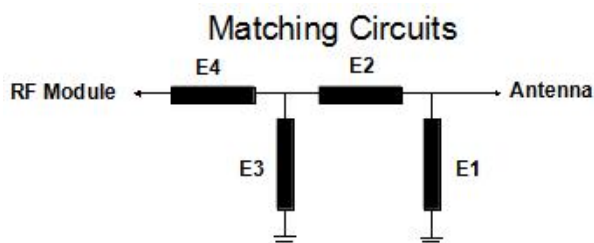
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3. Technology Parameters

Frequency Range: 2400MHz~2500MHz&5150MHz~5850MHz
 Operating Humidity: 85% R.H.MAX
 Temperature Rating: -40℃~+85℃

3.1 The matching test value

Element	Value
E1(0402)	
E2(0402)	
E3(0402)	
E4(0402)	



3.2 WIFI OTA Test Report

2.4G WIFI	802.11b		
Channel	1	6	13
TRP	15.36	15.87	16.15
TIS	-80.89	-81.05	-81.26

5G WIFI	802.11a					
Channel	36	44	64	149	157	165
TRP	14.33	14.14	12.69	10.02	11.07	11.26
TIS	-70.8	-71.23	-70.31	-70.16	-70.5	-70.97



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3.3 Efficiency And Gain:

Frequency/Mhz	Efficiency / dB	Efficiency / %	MaxGain/dBi	Avg Gain/dBi
2400	-3.7	42.66	1.65	-4.7
2410	-3.76	42.07	1.83	-4.76
2420	-3.59	43.75	1.81	-4.59
2430	-3.54	44.26	1.53	-4.54
2440	-3.65	43.15	1.19	-4.65
2450	-3.62	43.45	1.14	-4.62
2460	-3.69	42.76	1.02	-4.69
2470	-3.92	40.55	1.08	-4.92
2480	-3.99	39.9	1.09	-4.99
2490	-4.08	39.08	1.21	-4.88
2500	-4.5	35.48	0.92	-5.2

Frequency/Mhz	Efficiency / dB	Efficiency / %	MaxGain/dBi	AvgGain/dBi
5150	-3.38	45.92	2.95	-4.38
5200	-3.44	45.29	2.18	-4.44
5250	-3.51	44.57	2.42	-4.51
5300	-3.62	43.45	2.27	-4.62
5350	-3.6	43.65	2.01	-4.6
5400	-3.72	42.46	1.85	-4.72
5450	-3.69	42.76	2.24	-4.69
5500	-3.46	45.08	2.34	-4.46
5550	-3.5	44.67	1.52	-4.5
5600	-3.55	44.16	1.98	-4.55
5650	-3.33	46.45	2.14	-4.33
5700	-3.13	48.64	2.61	-4.13
5750	-3.17	48.19	2.29	-4.17
5800	-3.12	48.75	2.8	-4.12
5850	-3.14	48.53	2.26	-4.14



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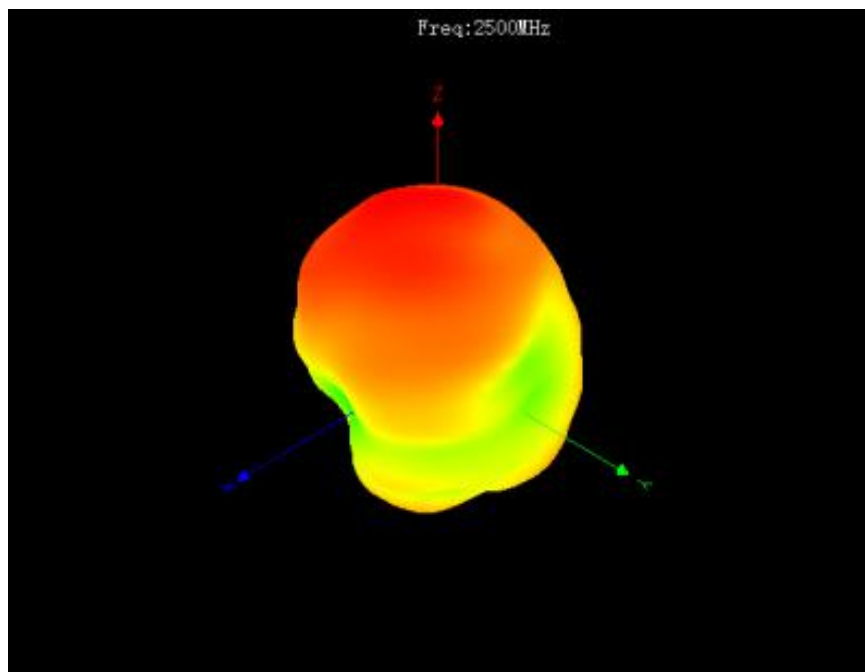
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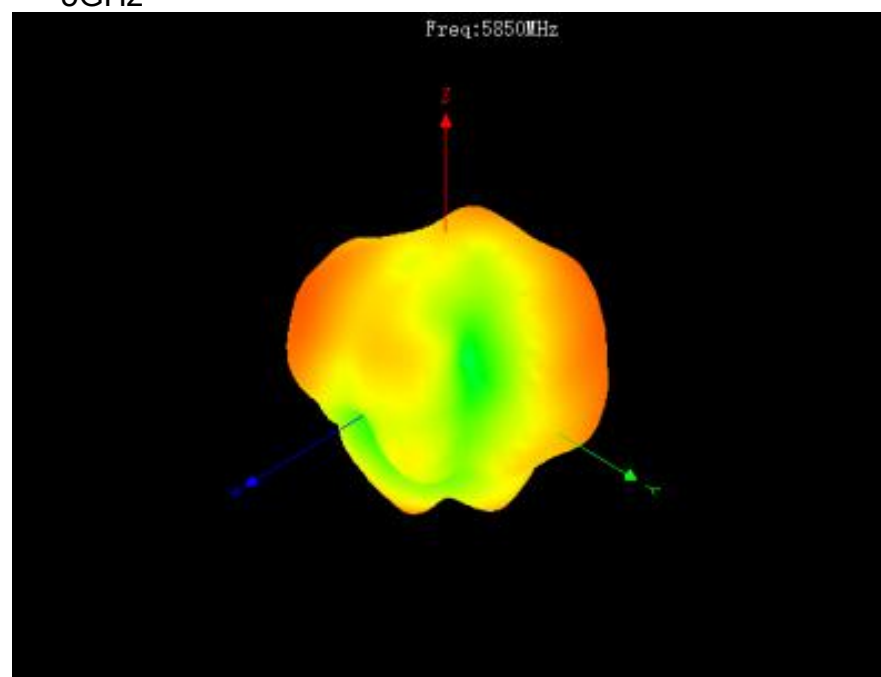
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3.4. 3D Pattern

2.4GHz:



5GHz







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5.Environmental Performance

Item	Description	Test Condition	Requirement
5.1	High and low temperature test	Temp.: -40 °C Time: 48 hours Temp.: 85°C Time: 48 hours	1. No visible damage. 2. The electric performances reach the standard.
Item	Description	Test Condition	Requirement
5.2	Salt Spray	5±0.1% Nad salt fog PH Value: 6.5-7.2 Temp: 35±1 °C Time:24 hours	1. No color change. 2. the appearance of the antenna does not flake off.



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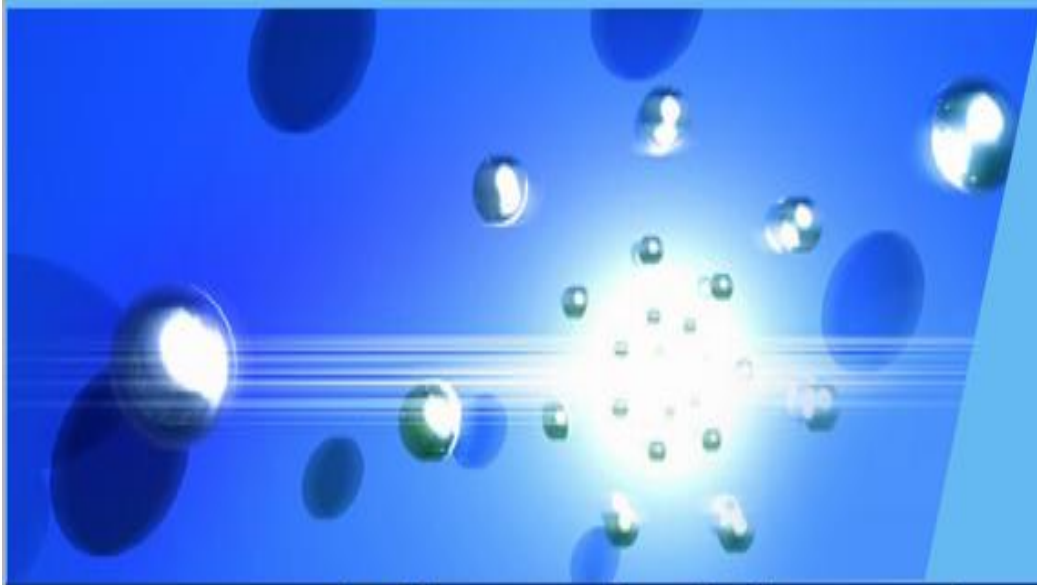
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6.Usage Precaution

No	Items	Matter
6.1	Precautions	a)Please avoid the cleaning of this product
No	Items	Matter
6.2	Stockpile condition	Use this product within 6 months after receipt Condition : Temp: 5~30℃ Humidity:≤70%

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Thank You !

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