

Shenzhen Eastong Electronic
Technology Co., Ltd
Sample approve sheet

Customer: Leqi

Item name: 4297

Sample name: zigbee aerial -2

Description/color: black

Release Date: 2022/6/23

Supplier confirmed	Make	R&D	Structure	Quality
	Liu Xiao meng 2022-07-22			

Customer confirmed	Item	Appearance	Structure	Quality

Conclusion	☐ MP use ☐ Limited use () K
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☐ ROHS

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Supplier address: 2nd Floor, Building 1, Yulong Building, Longcheng Industrial Zone, No.440, Longguan Avenue, Longhua District, Shenzhen

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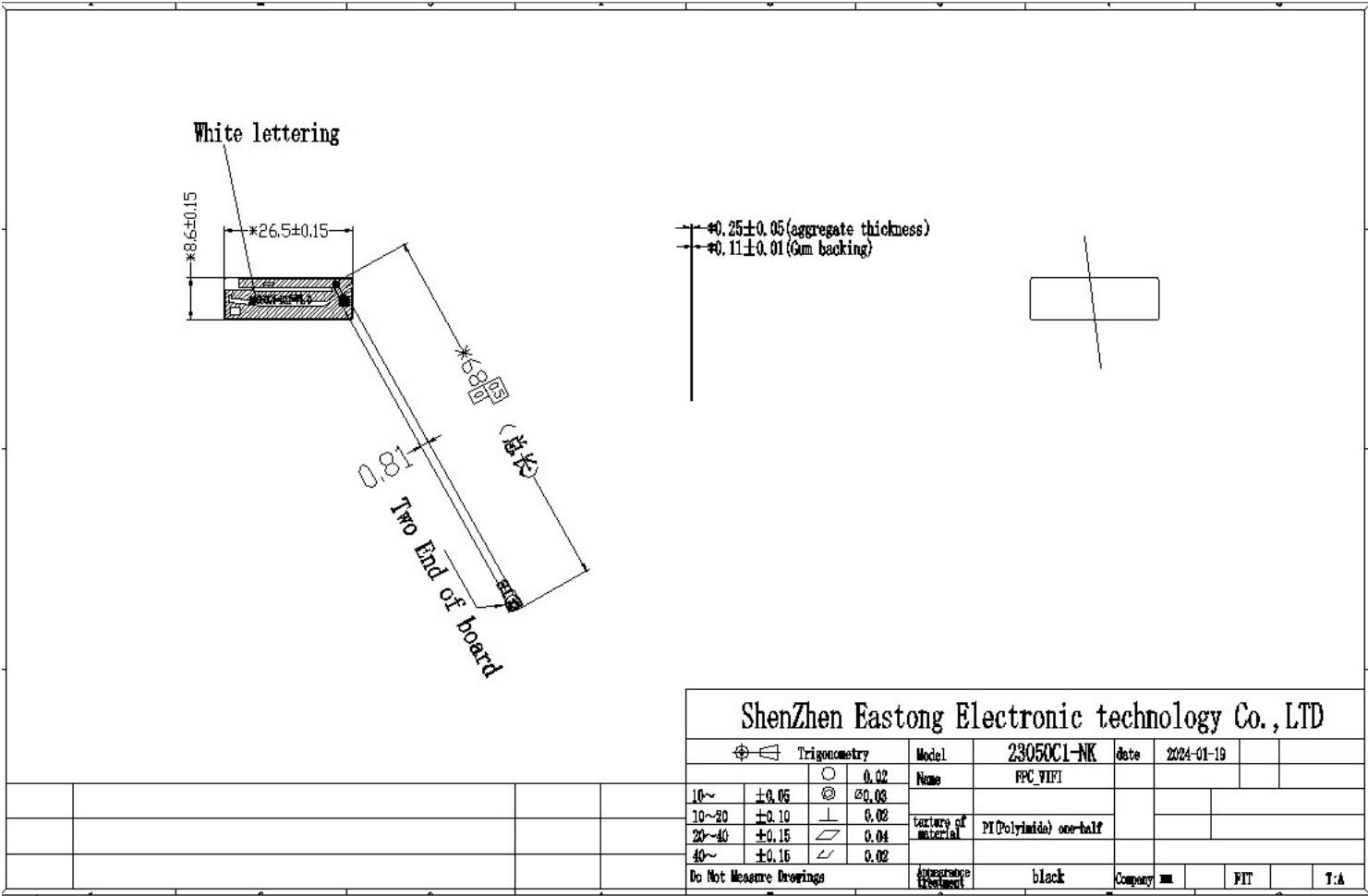
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3. ICD Drawing



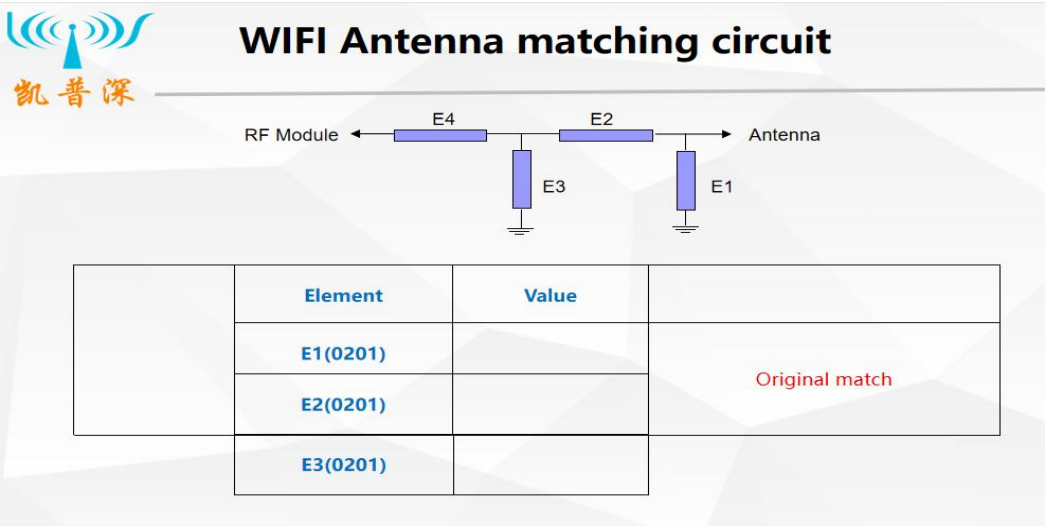
4.1 Aerial function

4.1-1 Specificatin standard

The working frequency band of wifi antenna produces resonance at 2400m-2500m

4.1-2 Matching circuit of antenna.

The antenna matching circuit is as follows:



4.2 Standing wave ratio test (VSWR) :

4.2-1 Test settings

The standing wave ratio test device is connected in turn: E571BNetwork analyzer→50Coaxial line of OhmCable→150mmlong copper pipe→test fixture.
Treatment of test fixture: Use a hard cable to lead out from the 50 ohm test point of the antenna on the PCB of the machine u...SMA-JThe joint is connected with the copper pipe with choke ring, and then connected with other devices.

4.2-2 Voltage standing wave ratio test :

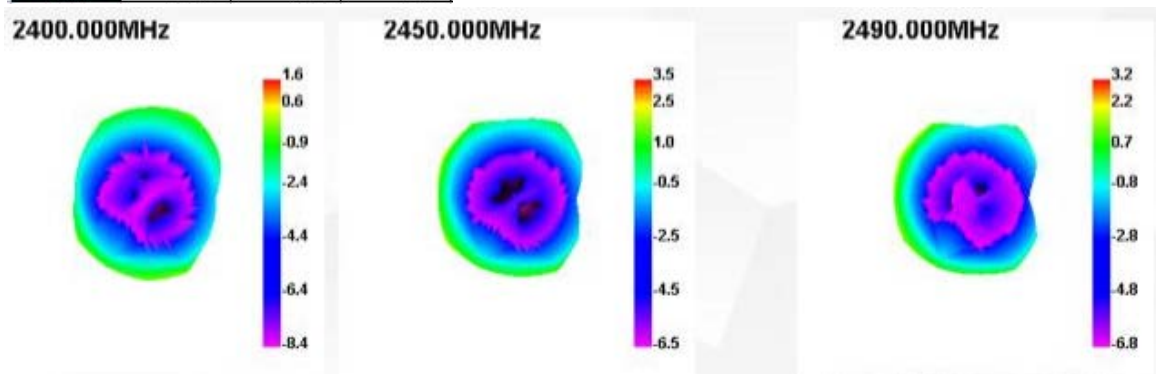
The following table shows: WIFIStanding wave ratio of edge frequency points of antenna operating frequency band:

Fre (MHZ)		2400	2450	2500
VSWR		1.5	1.3	1.6



4.2-3 Passive test results

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	30.07	-5.22	-0.17
2410	29.3	-5.33	-0.22
2420	30.19	-5.2	0.05
2430	32.07	-4.94	0.31
2440	31.38	-5.03	0.23
2450	32.1	-4.93	-0.34
2460	32.76	-4.85	-0.01
2470	32.05	-4.94	-0.07
2480	30.06	-5.22	0.76
2490	32.73	-4.85	1.3
2500	36.92	-4.33	1.92



4.3 Environmental manipulation:

Environmental treatment of the whole machine

The original environment of the whole machine remains unchanged

Full dimensional measurement report

	Customer	Leqi		Item name		3262							Material	Electrolytic copper
	Supplier	Kaipushen		Measure tools		Quadratic		Measure unit		MM			Measure date	2022/7/28
NO	dim	URL	+ TOL.	- TOL.	LR	actual 1	actual 2	actual 3	actual 4	actual 5	actual 6	actual 7	UPPER ≤ 100%	LOWER ≤ 100%
1	17.40	17.50	0.10	0.10	17.30	17.41	17.38	17.38	17.37	17.42	17.42	17.42	20%	30%
2	14.11	14.21	0.10	0.10	14.01	14.09	14.13	14.13	14.13	14.09	14.08	14.09	20%	30%
3														
4														
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11														

Tabulation: Jian Chen

Examine and Verify :Wu Xingtuo

Salt spray test report

Date: 2022 年 07 月 28日

Item	4297-FPC aerial	Customer	Leqi			
Supplier	Shenzhen Eastong Electronic Technology Co., Ltd	National Test standard	GB/T 2423.2-2008			
Sample situation	Sample qty: 5PCS					
	Base material:Half to one-third electrolytic copper with glue					
Test time	Total 24H					
Test type:	☒ NSS	☐ ASS	☐ CASS			
Test condition	Salt solution: 5%		PH:7.0			
	Chamber temp: 35° C		Relative humidity: 85%			
	Spray way: ☒ continuation ☐ intermittence		Compressed air pressure: 1kg/cm²			
	Salt spray sedimentation rate: 1-2ml/80cm2/h		Fog fluid collection: 1.4ml/80cm2/h			
	Test cycle: __1__cycle		Spray time: 24 h			
Test results	Appearance after test:appearance intact, without obvious change					
	Coating: no spalling, no rust					
	Surface spraying, silk screen: no falling off, no bubbles.					
Explanation: 1、 Salt spray test operating standards in accordance with the People's Republic of China national standard GB/T2423.17-2008 implementation. 2、 The test piece results are determined according to the national standard GB/ T6451-02 of the People's Republic of China.						
Operator by/date: Jian Chen Approved by/date: Wu Xingtuo 2022.07.29						

High-low temperature test record

Product name	4297	Customer name	Leqi	
Test qtu	5 pcs	Test date	2022年8月18日	
Cycle number	1	Time	24H	
Test Condition: High temp: + <u>65</u> degrees Humidity: <u>90</u> % RH Low temp: - <u> </u> / <u> </u> degree Test time: high temp: <u>24</u> H low temp: <u>24</u> H				
Test item	Uncycled test		Cycled test	
No	After high temp	After low temp	After high temp	After low temp
1	OK	OK		
2	OK	OK		
3	OK	OK		
4	OK	OK		
5	OK	OK		
6	OK	OK		
After test deficiency::				
Reason analysis:				
Improvement measures:				
Test results: ✓ Pass Fail				

Packing

Customer:	Leqi	Material name:	4297-FPC aerial
packing qty:	one carton	Packing material:	Carton
Qty/carton:		Packing way:	Ziplock bag



Picture 1:Single package



Picture 2: Packing way



Picture 3: Packing view (front, side, top)



Picture 4:packing

Fiction: LiMinghui

auditing: Wu Xingtuo