

Sample acknowledgement

SPECIFICATION FOR APPROVAL

APPROVAL SHEET NO: 231100164

PRODUCTS:G300-N563 WIFIantenna

THREE GOLDS PART NO: V1.0

REVERSION: WIFI antenna, 2.4-2.5GHZ, Gain: 4.2dBi, Impedance: 50Ω, White Copper Metal Plug-in Antenna

DATE:2021.12.23

PROVIDER:Shenzhen Daxian Technology Co., Ltd.

APPROVED BY VENDOR

Recognize	Calibrate	Audits	License

APPROVED BY CUSTOMER

Recognize	Calibrate	Audits	License

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Confidential requirement

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— Project description

Customer name:	360
Whole machine type:	car recorder
Antenna band:	2400 ~ 2500MHz
Antenna form:	Copper shrapnel
Feed form:	alloy
Number of feed feet:	2 Feed
Hardware version:	motherboard:

一、WIFI antenna

This report provides a variety of measurements of the electrical performance of the G300-N563 antenna. Figure 1 shows the antenna designed by the display.



ole machine appearance chart

antenna appearing diagram

Figure 1

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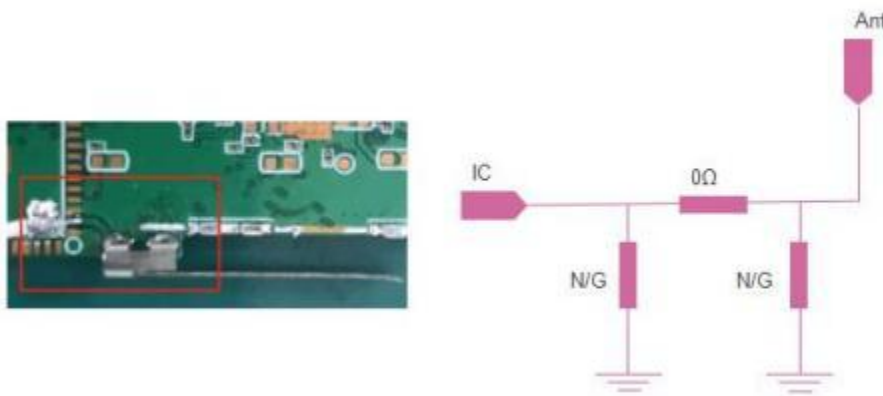
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1.1 Electrical specification standard

The frequency range of the antenna is 2400 ~ 2500 MHz. The following table indicates the electrical performance specifications of the antenna. The antenna is designed and manufactured by a large display.

Frequency Range	Frequency (MHz)	VSWR
WIFI	2400 ~ 2500	≤ 2

1.1.2、 Matching circuit:



1.1.3、 Antenna position picture:



1.2 Antenna composition

The antenna is mainly composed of Nickel-silver shrapnel.

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2、 The Equipment of Active Test

Satimo 3D Chamber $6 \times 4 \times 4$ (m)

Agilent 8960 E5515c

Network analyzer-R&S ZVL



Figure 2

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3 test

3.1 The Test of standing Wave (VSWR)

3.1.1 The Test of standing Wave (VSWR): In turn, the connection of the VSWR testing device is as follows: RES ZVL Network Analyzer / testing Line / testing tool

Actual measurement (with diagram)

3.2 Measurement of Efficiency, Power (TRP) and Sensitivity (TIS)

3.2.1 Test site:

Large-scale microwave darkroom. The test frequency range is 400MHz / 6GHz, the static range is 50cm circumferential and the reflectivity is less than-50 dB..

3.2.2 Test instrument:

Rs ZVL Network Analyzer, Agilent8960 E5515C, Standard Horn Antenna, French SATIMO-SG24SYSTEM system, Printer, etc.

3.2.3 test data : In microwave anechoic chambers, the power and sensitivity values measured are shown in the following table:

OTA active test:

	CH	TRP (dBm)	TIS (dBm)
802.11b	1	17.12	-79.66
	6	17.32	-80.12
	11	16.92	-80.03
802.11n	1	13.46	-62.23
	6	13.23	-63.66
	11	13.22	-62.89

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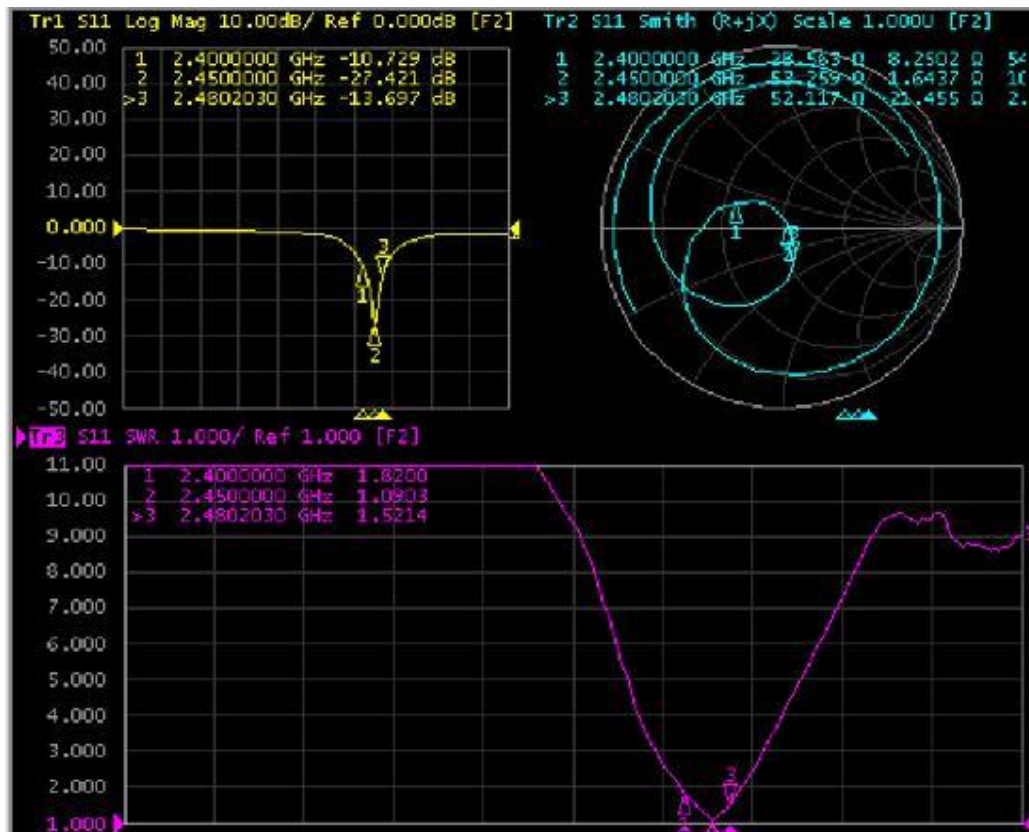
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Passive efficiency & gain test:

Freq (MHz)	Effi(%)	Gain (dBi)
2400	60.15	3.30
2410	60.37	3.57
2420	60.86	3.88
2430	59.52	3.97
2440	57.09	4.05
2450	57.41	4.17
2460	56.80	4.20
2470	53.52	3.87
2480	50.75	3.53
2490	48.65	3.27
2500	44.57	2.73

4、VSWR Parameter diagram:

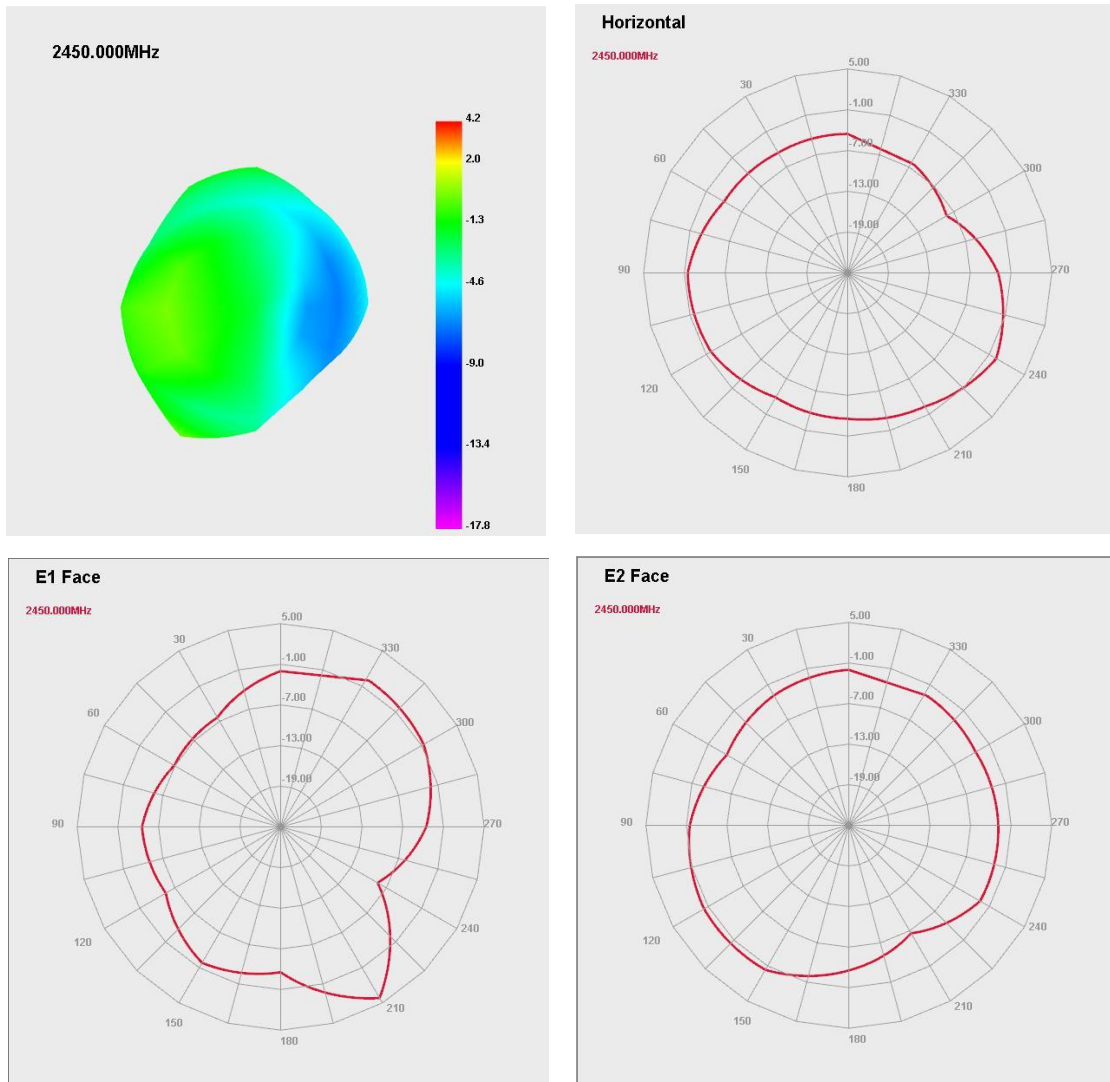


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5、2D & 3D Field Map - WIFI 2.4G:



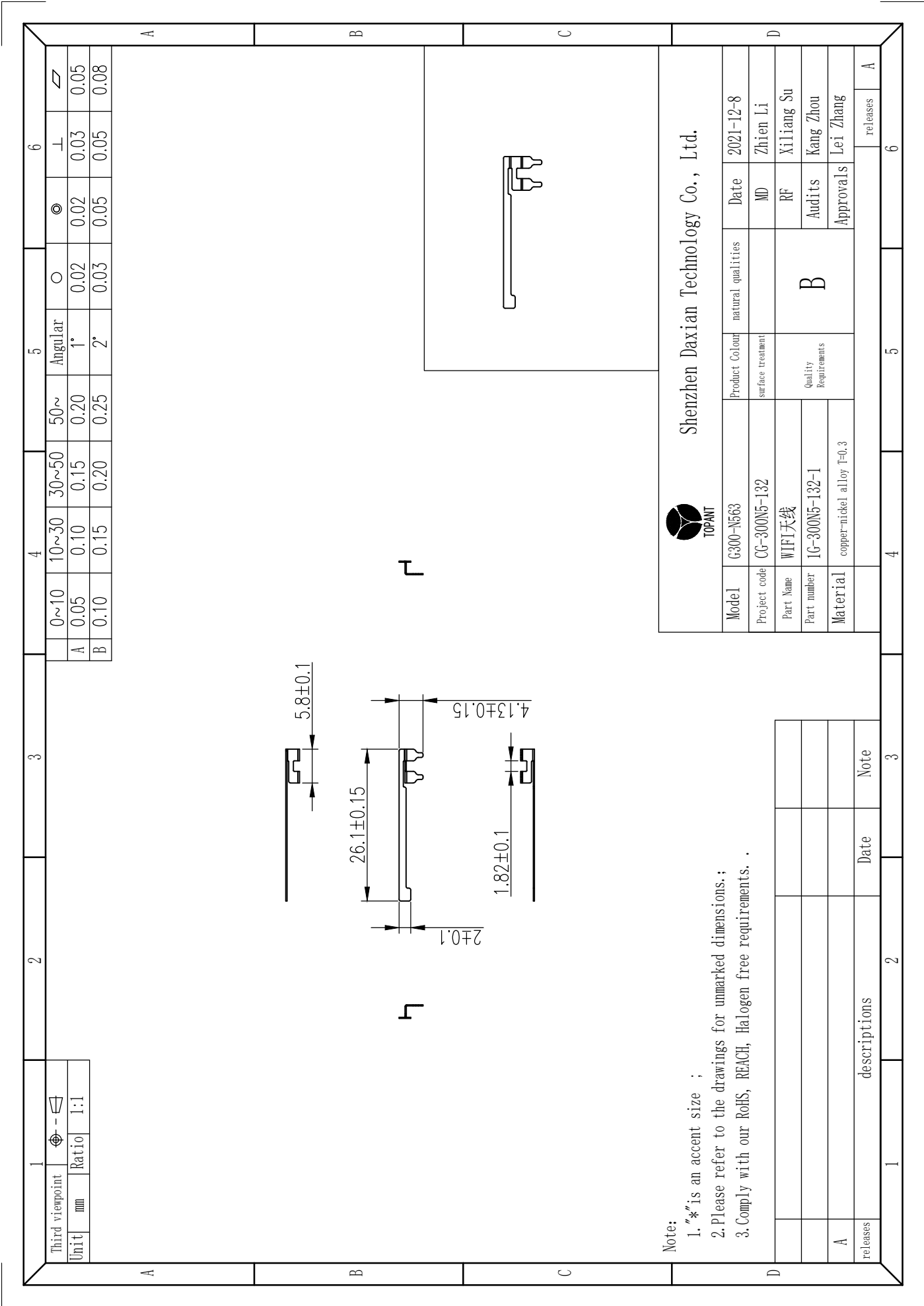
6、 conclusion:

This antenna is designed on the basis of the prototype provided by the customer, electrical parameters and structural performance have reached the technical requirements, please confirm!

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Shenzhen Daxian Technology Co. Ltd.

Sample test report

Sample sending unit:Engineering

2021-12-22

product name		G300-N563 WIFI antenna		Batch quantity		4pcs		Category		☐ Mould parts ☐ Material evaluation			
Material number		1G-300N5-132-1		Number of modules						☒ Sample evaluation ☐ Other			
Order No.	Picture specification	Gage	Test results								Super difference	Judge	
			One	Two	three	four	five	six	seven	eight		OK	NG
One	5.8±0.10	P	5.82	5.80	5.78	5.84					0	✓	
Two	26.1±0.15	P	26.15	26.10	26.14	26.09					0	✓	
three	2±0.10	P	2.02	2.00	1.98	2.04					0	✓	
four	1.82±0.10	P	1.82	1.85	1.80	1.82					0	✓	
five	4.13±0.15	P	4.15	4.13	4.10	4.17					0	✓	
six													
seven													
eight													
nine													
ten													
elevn													
twelve													
thirteen													
fourteen													
Gage	Visual (E) Calipers (C) Micrometer (M) Projector (P) Thread gauge (Pg)											Final decision	
Code	Network analyzer (Ne) Torsion meter (G) A multimeter (Me) Ruler (F)											☒ OK ☐ NG	
Remarks:	AppearanceOK.												

Form number: QR/RD-P01-08

Approved: Hu Zi yin

Made: LI Chao Hua

Shenzhen Topant Technology Co.,Ltd.

1. Basic information:

Product Name: G300-N563

Product no.: 1G-300N5-132-1

Sample size : 30 pcs

Control paramete SIZP

2. Data measurement:

Test date: 22/Dec/21

NO. ITEM	NO.1	NO.2	NO.3	NO.4	NO.5		
spec	5.8±0.10mm	26.1±0.15mm	2±0.10mm	1.82±0.10mm	4.13±0.15mm		
USL	5.90	26.25	2.1	1.92	4.28		
LSL	5.70	25.95	1.90	1.72	3.98		
μ	5.80	26.10	2.00	1.82	4.13		
MAX	5.840	26.170	2.040	1.850	4.170		
MIN	5.780	26.070	1.980	1.780	4.080		
1	5.82	26.12	2.00	1.85	4.17		
2	5.80	26.14	2.02	1.82	4.11		
3	5.78	26.08	2.04	1.80	4.10		
4	5.79	26.14	1.98	1.78	4.08		
5	5.84	26.13	1.99	1.84	4.15		
6	5.82	26.12	2.00	1.83	4.13		
7	5.80	26.10	2.01	1.80	4.11		
8	5.82	26.07	2.03	1.82	4.16		
9	5.80	26.09	2.00	1.84	4.17		
10	5.83	26.11	2.04	1.80	4.11		
11	5.82	26.17	2.00	1.85	4.17		
12	5.80	26.12	2.02	1.82	4.11		
13	5.78	26.14	2.04	1.80	4.10		
14	5.79	26.08	1.98	1.78	4.08		
15	5.84	26.14	1.99	1.84	4.15		
16	5.82	26.13	2.00	1.83	4.13		
17	5.80	26.12	2.01	1.80	4.11		
18	5.82	26.10	2.03	1.82	4.16		
19	5.80	26.07	2.00	1.84	4.17		
20	5.83	26.09	2.04	1.80	4.11		
21	5.82	26.11	2.00	1.85	4.17		
22	5.80	26.17	2.02	1.82	4.11		
23	5.78	26.14	2.04	1.80	4.10		
24	5.79	26.13	1.98	1.78	4.08		
25	5.84	26.12	1.99	1.84	4.15		
26	5.82	26.10	2.00	1.83	4.13		
27	5.80	26.07	2.01	1.80	4.11		
28	5.82	26.09	2.03	1.82	4.16		
29	5.80	26.10	2.00	1.84	4.17		
30	5.83	26.15	2.04	1.80	4.11		

3. Data calculation:

No.	No.1	No.2	No.3	No.4	No.5		
Average	5.810	26.115	2.011	1.818	4.129		
σ	0.02	0.03	0.02	0.02	0.03		
Ca	0.10	0.10	0.11	0.02	0.01		
Cp	1.83	1.79	1.66	1.53	1.63		
CPK	1.65	1.62	1.48	1.50	1.62		

4. Conclusion:

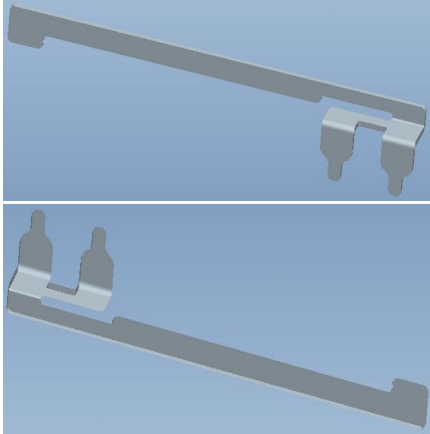
THE CAPABILITY OF PROCESS IS PERFECT STATE, MAINTAIN ACTUALITY.

Approved: Hu Zi yin

Made: LI Chao Hua

Salt spray test record

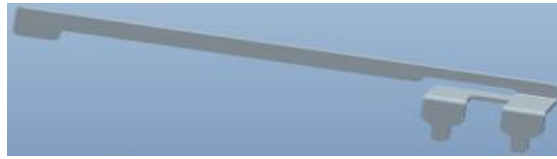
Number: QR/QC-WI09-01 version B

Test time in <u>2021-12-20 15:00</u> to <u>2021-12-22 15:00</u> total of 48 hours					
(spray time) if there is an interruption, the reason is:					
saline test: test room temperature 35 degrees Celsius, saturated air barrel temperature 47 DEG C] corrosion test: test room temperature 35 degrees Celsius, saturated air barrel temperature 47 DEG C					
1 sodium chloride quality	99.50%		2 pure water quality	Pure water	
3 spray to take the pH value	Pre atomization 6.5~7.2		4 test solution pH value	6.0	
5 gauge	1.0 Kg/cm		6 relative humidity in laboratory	30%	
7 test chamber temperature	35 °C		8 pressure barrel temperature	47 °C	
9 brine concentration	5±0.1 %		10 other		
Supplier name	Product name	Sample quantity	Test sample	Test result	Judging basis
<i>Daxian</i>	G300-N563 WIFI antenna	2pcs		<i>Qualified</i>	According to GB6461-2002 standard
Decision: 1 according to the standard sample 2 in accordance with GB6461-2002 standards 3 according to the determination of the sample of the bad limit 4 judging by other methods					
Remarks:					

QC Engineering Drawing					Client: order		brand name: cell phone antenna		Version	
					Type of machine: FPC		serial number:		A.0	
					Document number: DX/WI-QC-42				page: 1/1	
flow chart	Process name	Process name	Control items	Reference standards/guidance	Test Methods	Forms/records	take upon oneself		Warehouse Supervisor/IQC	
<pre>graph TD 1[1] --> 2{2} 2 --> 3[3] 3 --> 4[4] 4 --> 5((5)) 5 --> 6{6} 6 --> 7((7)) 7 --> 8((8)) 8 --> 9{9} 9 --> 10(((10)))</pre>	infeed	electronic weighing scale	Quantity, product name, specification identification、	Incoming Material Inspection Datasheets, Purchase Orders	Sampling (number)	an inventory of received goods			Warehouse Supervisor/IQC	
	Feed Inspection	Calipers, secondary elements, salt spray machine	Appearance, dimensions, reliability	Feed inspection reference book	sampling	IQC incoming material inspection report			IQC	
	store	electronic weighing scale	Quantity, product name, specification identification、	Operating instructions, specifications	full inspection	ledger	warehouse controller			
	receiving materials	electronic weighing scale	Quantity, product name	work instruction	full inspection	material requisition form	warehouse controller Production Leader			
	repackaging	manual work	Quantity, name, marking	work instruction	full inspection	production daily sheet	operator			
	FQC Inspection	visual	view sth from the outside	FQC, OQC operation specification	Sampling or full inspection	FQC Inspection Record	FQC			
	wrap	baler	Quantity, name, marking	work instruction	full inspection	production daily sheet	operator			
	store	carts	Quantity, name, marking	work instruction	work instruction	inventory list	Warehouse Clerk/Production			
	OQC Inspection	Calipers, secondary elements	Size, appearance,	Finished product inspection reference books, drawings, samples	Sampling or full inspection	OQC inspection report	OQC			
	extract	trucks	Quantity, name, marking	work instruction	work instruction	delivery note	Operations/Warehouse Clerk			
Remarks: With reference to the antenna structure design specification in the preliminary draft of the antenna structure type and our antenna products actual type, the QC engineering diagrams according to the antenna structure of the major categories of integration and differentiation for the general guidelines, single FPC, radiator as the structure of the antenna is relatively simple, only for the incoming inspection and after the packaging and shipment of the QC engineering diagrams are not used as QC engineering drawings. The QC engineering drawings as inspection and production guidance documents must be supported with engineering drawings, operation instructions, inspection instructions, samples and so on.										
Symbol Description	Quantity check	Quality Inspection	Date of revision		license	calibrate		compile		
	workstation operation	Preservation	2021.12.25		ZiYin.Hu	ZiYin.Hu		ChaoHua.Li		

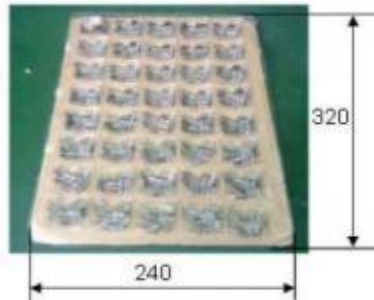
Packaging

1: Packaging Specifications1: WIFI Antenna;



2: Tray, 32 compartments per tray, 10pcs per compartment, total 320pcs/tray (other specifications of blister tray quantity can be adjusted)

Example diagram:



3: Packing, in units of 20 trays, with two layers of plywood on the top and bottom, with transparent adhesive.



4: Packed, sealed and ROSH labeled.



Transportation requirements:

When the product packaging pieces are transported, they should be moisture-proof, breakage-proof and pollution-proof.

Storage requirements:

Product packaging parts should be stacked in the warehouse, the warehouse should be dry, ventilated and clean.

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