

SPECIFICATION

SHEET FOR APPROVAL

(Revision:V1)

CUSTOMER (Customer Name)	Kaos
CS P/N (Customer)	Commercial washing machine
PART NAME	WIFI antenna
FREQUENCY (frequency)	2400-2500MHz
SUPPLIER PN.(Supplier Item Number)	2S023A
DATE (date)	2024-2-28

CUSTOMER SIGNED			
QA CHECK ED	ME CHECK ED	RFCHECKED	MANAGER CHECKED

Remark:

Sign (customer confirmation signature and seal):

SHANGHAI DEEPFAST TECHNOLOGY CO., LTD				
MANAGER CHECKED	MANAGER CHECKED	ME CHECK ED	RF CHECK ED	LISTER



Address: 2710 Fengxiang Road, Jiading District, Shanghai (Jiabao Industrial Park) Zip Code 201802
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Revised History

Date	Version	Revised history
2024.2.28	V1	Specification

Directory

SHEET FOR APPROVAL	
1	Summary
2	Test conditions
3	Test data
4	Match Description
5	Installation drawing and engineering drawing
6	Sample Test Report
7	Process Capability Index Assessment Report
8	Salt spray reliability test report

1. Summary

This report introduces the electrical performance parameters of this project, as follows: Model: WIFI

antenna

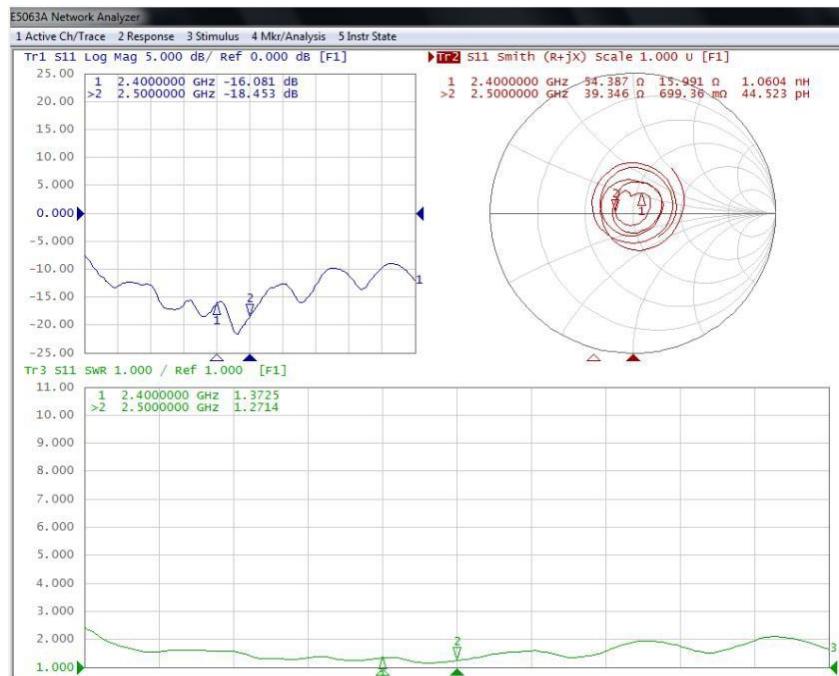
Description: This project is a **WIFI antenna** for a commercial washing machine project. The material is **PCB + CABLE**.

2. Test conditions

The active data of this project are all tested in the French SATIMO SG24 OTA test system, and the S1P data obtained in the debugging and verification experiment is based on the vector network analyzer: E5071C.

3. Test data

Passive data:

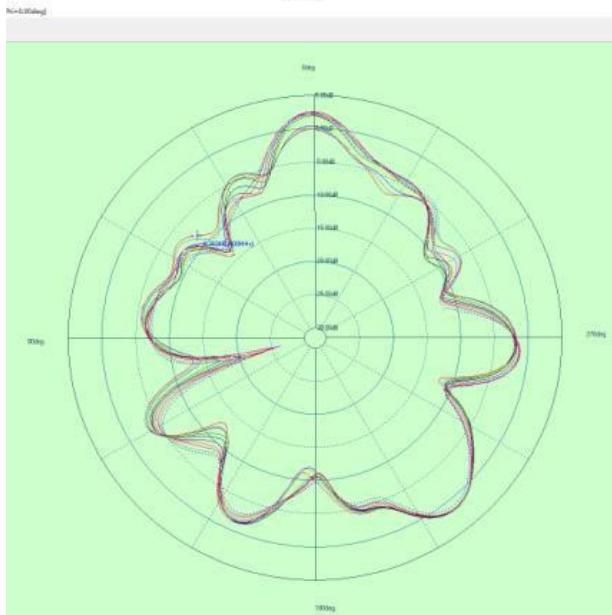


Frequenc y	Efficiency	Gain . dB
2400	67%	3.96
2410	69%	4.13
2420	66%	4.03
2430	66%	3.97
2440	66%	3.89
2450	66%	3.92
2460	67%	4.10
2470	68%	4.25
2480	67%	4.26

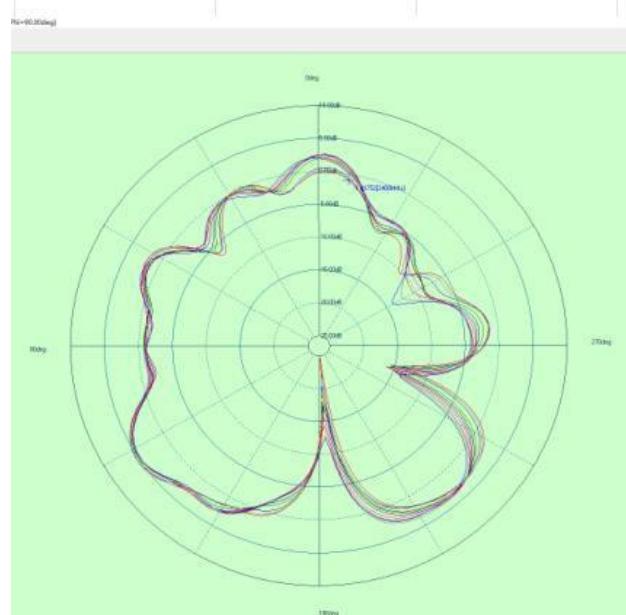
2490	69%	4.43
2500	66%	4.34

2D pattern:

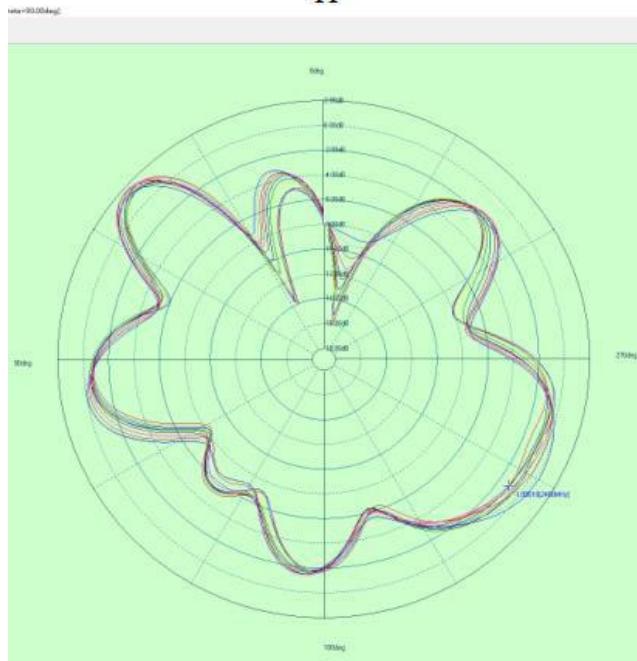
E1



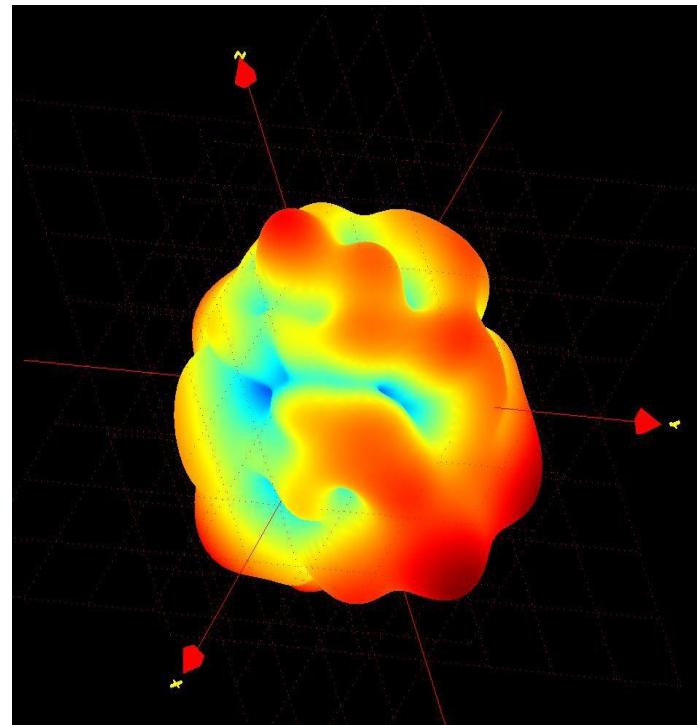
E2



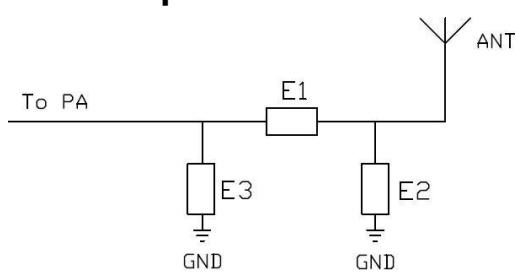
H



3D Apple Figure:



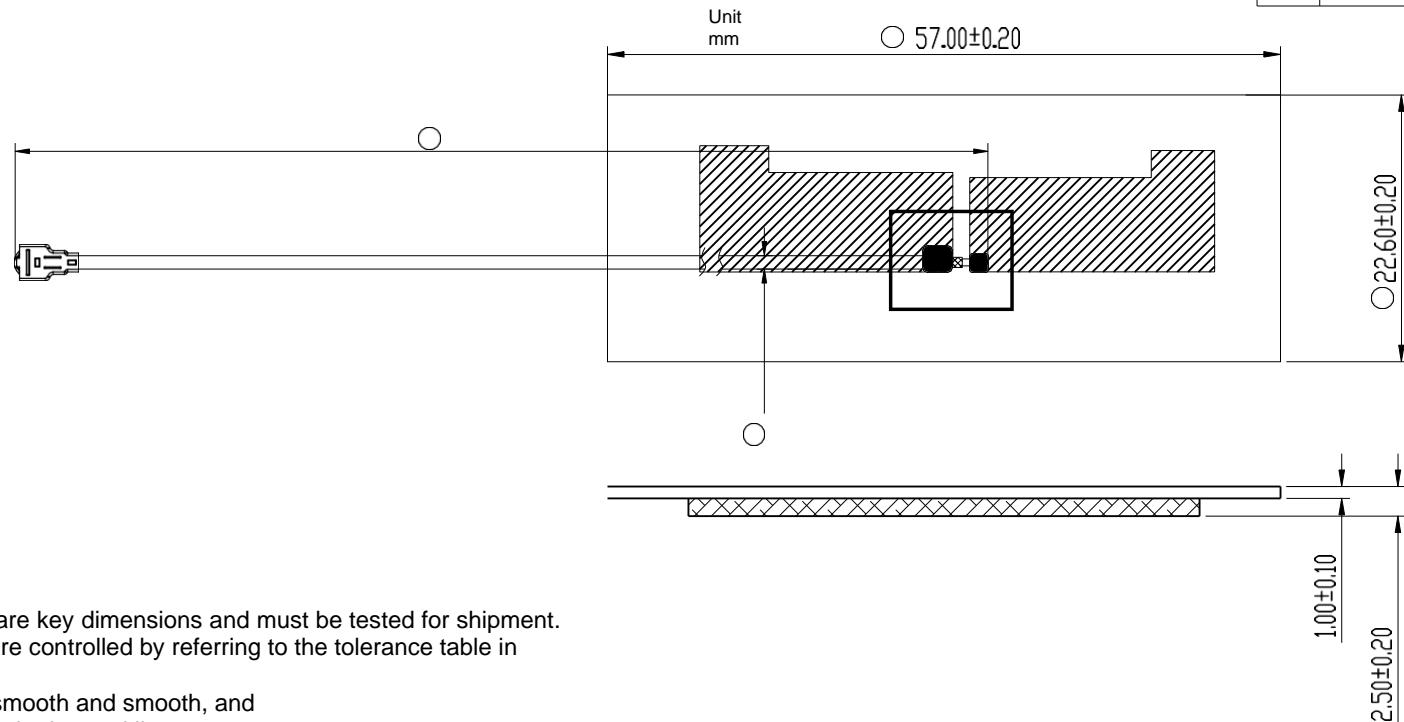
4. Match Description



Match Description	WIFI
E1	O&O meg a:

5. Engineering Drawing

1	2	3	4	5	6	7	8



1. Dimensions with "*" are key dimensions and must be tested for shipment.
 Unmarked tolerances are controlled by referring to the tolerance table in
 the drawing frame;

2. The shape shall be smooth and smooth, and
 shall not be punched to the internal line;

3. the product surface can not have stains,
 wrinkles, copper and other bad problems;

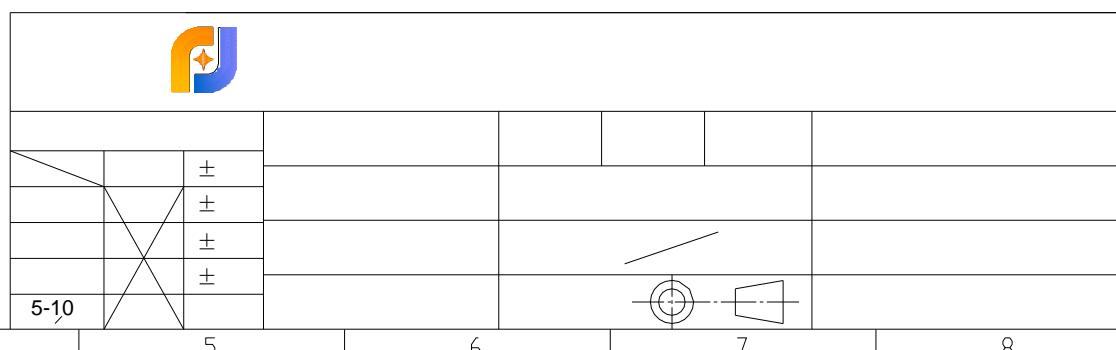
4. The ink surface shall pass the 100-grid test requirements;

5. All materials shall meet RoHS2.0 + REACH;

6. The product shall be packed in a fixed number according to the
 requirements, and there shall be no obvious extrusion deformation
 during transportation;

7. Without confirmation by DP company, materials cannot be
 changed at will;

○			
○			
○			
○			



1	2	3	4	5	6	7	8

6. Sample Test Report



Sample Test Report

Project Name	Commercial washing machine		Product Name			WIFI antenna		Quantity		10pcs			
Product material	PCB+CABLE		Material color			Green		Date		2024.2.28			
Product type: <input checked="" type="checkbox"/> new mold sample <input type="checkbox"/> modified mold sample <input type="checkbox"/> mass production <input type="checkbox"/> Other													
NO	Dimensions required by engineering drawings	Measured size										Judgment	Remarks
		1	2	3	4	5	6	7	8	9	10		
1	57±0.2	57.05	56.97	56.99	56.97	56.95	57.02	57.03	56.98	56.96	56.97	OK	
2	22.6±0.2	22.56	22.54	22.64	22.61	22.63	22.54	22.57	22.55	22.62	22.63	OK	
3	550±10	549	550	548	555	551	548	546	546	547	552	OK	
4	1±0.1	1.02	1.01	1.00	1.02	1.00	1.01	0.99	0.98	1.00	1.03	OK	
5	2.5±0.2	2.50	2.51	2.49	2.49	2.53	2.52	2.49	2.48	2.50	2.53	OK	
6													
7													
8													
9													
10													
Appearance: no bubbles, no dirt, no particles OK on the surface. Adhesion test OK.													
Other: 100-grid test OK													
Overall judgment: OK <input checked="" type="checkbox"/> NG													
Approved by: Wang Guojun Reviewed by: Yi Ailing made by: Wei Jinsu													
Remarks:													

7. Process Capability Index Assessment Report



Process Capability Index Assessment Report

Product model: commercial washing machine Product Type: WIFI Antenna (2S023A) Date: 2024.2.28							Acknowledgment	Confirm	made		
							Hu Chunmei		Yi Ailing		Wei Jinsu
Specific ations Sequence No.	57.00		22.60		550.00						Remarks
	0.20	0.20	0.20	0.20	10.00	10.00					
1	57.05	22.56	549.00								
2	56.97	22.54	550.00								
3	56.99	22.64	548.00								
4	56.97	22.61	555.00								
5	56.95	22.63	551.00								
6	57.02	22.54	548.00								
7	57.03	22.57	546.00								
8	56.98	22.55	546.00								
9	56.96	22.62	547.00								
10	56.97	22.63	552.00								
11	57.01	22.58	554.00								
12	57.06	22.56	553.00								
13	57.00	22.57	548.00								
14	56.96	22.61	550.00								
15	57.05	22.66	550.00								
16	56.95	22.60	553.00								
17	57.02	22.56	551.00								
18	57.04	22.65	550.00								
19	56.97	22.55	549.00								
20	57.03	22.62	548.00								
21	56.96	22.64	550.00								
22	57.02	22.57	552.00								
23	56.96	22.63	554.00								
24	56.94	22.56	551.00								
25	57.04	22.62	550.00								
26	57.01	22.64	547.00								
27	57.03	22.57	553.00								
28	56.94	22.64	550.00								
29	57.04	22.58	552.00								
30	56.96	22.65	550.00								
31	57.05	22.56	554.00								
32	56.98	22.59	549.00								
MAX	57.06	22.66	555.00								1. The CPK value can be mass-produced under the condition of "meeting", but the inspection needs to be strengthened. 2, CPK values are "very satisfied" in the case of mass production can be sampled. 3. If one of the
MIN	56.94	22.54	546.00								
X	57.00	22.60	550.31								
M	57.20	22.80	560.00								
CP	1.761	1.780	1.38								
SN-1	0.038	0.037	2.42								
K	0.0141	0.0156	0.03								

											CPK values fails to meet the requirements of "meeting", the reasons shall be analyzed and improved.
CPK/Decision	1.736	Very satisfying	1.752	Very satisfying	1.337	meet					
Overall judgment	The CPK value "very well meets" the production conditions and can be mass produced.										

8. Salt spray reliability test report



Salt Spray Test Report

Project Name	Commercial washing machine	Product Name	WIFI antenna	Date	2024.2.28
Product material	PCB+CABLE	Test time	48h	Quantity	3PCS
Time period	Test conditions	Test standard		Results	Remarks
0-6 hours	Salt spray tester: salt liquid: NaCl (anhydrous); concentration 5% $\pm 1\%$; pH value: 6.5~7.2; Laboratory temperature: 32-38 °C; Compressed air pressure: 1.0 ± 0.01 (KG/M ²) spray Quantity: 1.0~2.0ML/80CM ² /H. Phase Humidity: 85% $\pm 2\%$; Placement angle of test article: 30 degrees +/-10 degrees; Duration of salt spray: 48h,	The surface of the product is free of rust, oxidation, corrosion, plating (coating) layer falling off and other undesirable phenomena.	O K	2024.2.25 Starting at 15:00	
6-12 hours		The surface of the product is free of rust, oxidation, corrosion, plating (coating) layer falling off and other undesirable phenomena.	O K		
12-18 hours		The surface of the product is free of rust, oxidation, corrosion, plating (coating) layer falling off and other undesirable phenomena.	O K		
18-24 hours		The surface of the product is free of rust, oxidation, corrosion, plating (coating) layer falling off and other undesirable phenomena.	O K		
24-30 hours		The surface of the product is free of rust, oxidation, corrosion, plating (coating) layer falling off and other undesirable phenomena.	O K		
30-36 hours		The surface of the product is free of rust, oxidation, corrosion, plating (coating) layer falling off and other undesirable phenomena.	O K		
36-42 hours		The surface of the product is free of rust, oxidation, corrosion, plating (coating) layer falling off and other undesirable phenomena.	O K		

42-48 hours	The surface of the product is free of rust, oxidation, corrosion, plating (coating) layer falling off and other undesirable phenomena.	O K	2024.2.27 End of 18:00
More than 48 hours	The surface of the product shall be free of rust spots, oxidation, corrosion, and plating (coating) layer shedding ≤ 1% of the product area.		
Conclusion	Salt spray OK		
Tester	Wei Jinsu	Trial Nuclear	Yi Ailing Batch Quasi Hu Chunmei