

SHENZHEN XIN LINGKE TECHNOLOGY CO.,LTD

SPECIFICATION FOR APPROVAL

Customer:ChenZhan

Description: IEC22 RK3568

Company address	5th Floor, Shenzhen Flour Company Office Building, North District of High-tech Park, Nanshan District, Shenzhen	SENDING DATE	2026.09.16
SUPPLIERS P/N	Xin Lingke	APPROVED NO.	
Customer hardware		Client project	IEC22 RK3568
customer structure		Customer quality	
RF Engineer	Yang Hai	Structural engineer	Zhang Haidong

SHENZHEN XIN LINGKE TECHNOLOGY CO.,LTD

Project: IEC22 RK3568		Writed by: Zhang_hai dong	IEC22 RK3568-antenna Specification for Approval
Date:: 20260916			
Revision		Supervised by: LI peng	
Mould			
CONFIDENTIAL Brotone.com			

1 Summary

This report describes the characteristics of antenna for the ChenZhan by Shenzhen xin lingke Technology Co., Ltd. The phablet model is IEC22 RK3568and the range of frequency is frequency/2.4GWIFI, 5GWIFI+BT, The Antenna gain:2.4G:1.1dbi ,5G:1.76dbi.The antenna model is PIFA and located inside the handset.

1.1 Match circuit

No change.

2 Configuring settings

TX Power and RX Sensitivity The data of TX Power and Rx Sensitivity is 3D result measured in microwave eanechoic chamber by the Agilent8960.

3.1 TRP、TIS

WIFI active data

Wifi 2G TRP		
1	6	11
2412	2442	2472
13.39	14.84	14.27
Wifi 2G TIS		
1	6	11
2412	2442	2472
-78.47	-77.44	-74.76

Wifi 5G TRP		
36	149	165
5180	5745	5825
12.92	12.88	14.17
Wifi 5G TIS		
36	149	165
5180	5745	5825
-72.54	-73.06	-73.03

Antenna passive data



WiFi-2 antenna efficiency



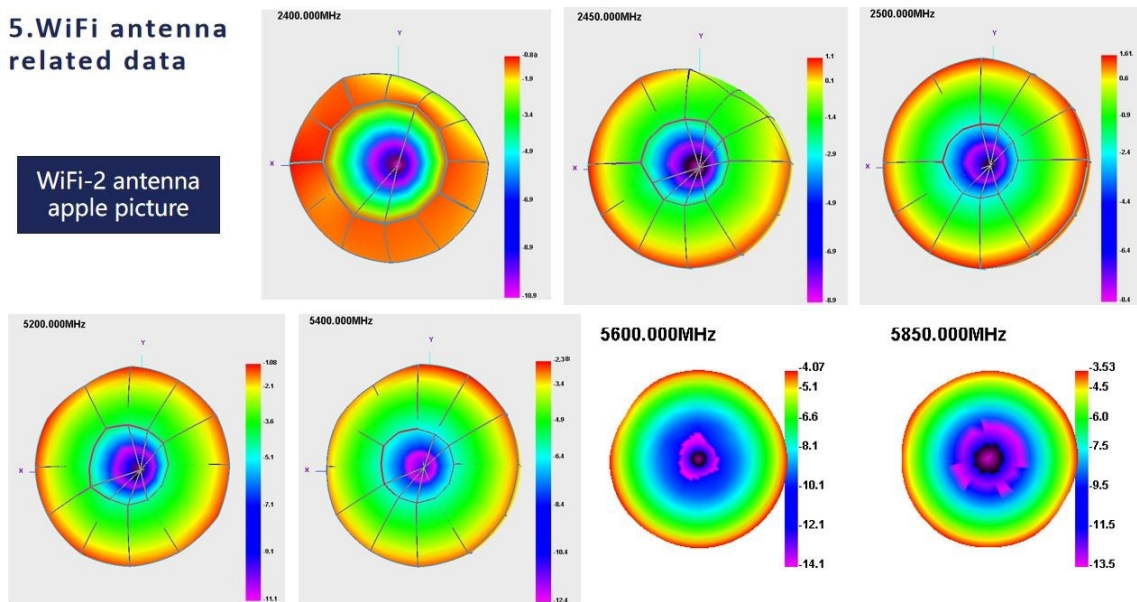
Passive Test For WIFI2.4		
Freq (MHz)	Effi (%)	Gain (dBi)
2400	47.64	-0.86
2410	44.17	-0.35
2420	51.9	-0.47
2430	52.8	-0.33
2440	56.52	0.57
2450	56.59	1.1
2460	57.23	1.07
2470	49.27	0.71
2480	48.16	0.83
2490	53.94	0.6
2500	52.08	1.61

Passive Test For WIFI5.8		
Freq (MHz)	Effi (%)	Gain (dBi)
5150	40.63	0.69
5200	35.8	-1.08
5250	32.67	-1.01
5300	34.54	-1.64
5350	34.47	-1.82
5400	30.09	-2.38
5450	26.01	-3.39
5500	30.8	-3.22
5550	23.13	-4.43
5600	23.57	-4.07
5650	20.52	-4.11
5700	22.91	-3.71
5750	20.88	-3.92
5800	19.01	-4.79
5850	22.49	-3.53

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5.WiFi antenna related data

WiFi-2 antenna apple picture



WiFi-1 antenna standing wave return loss



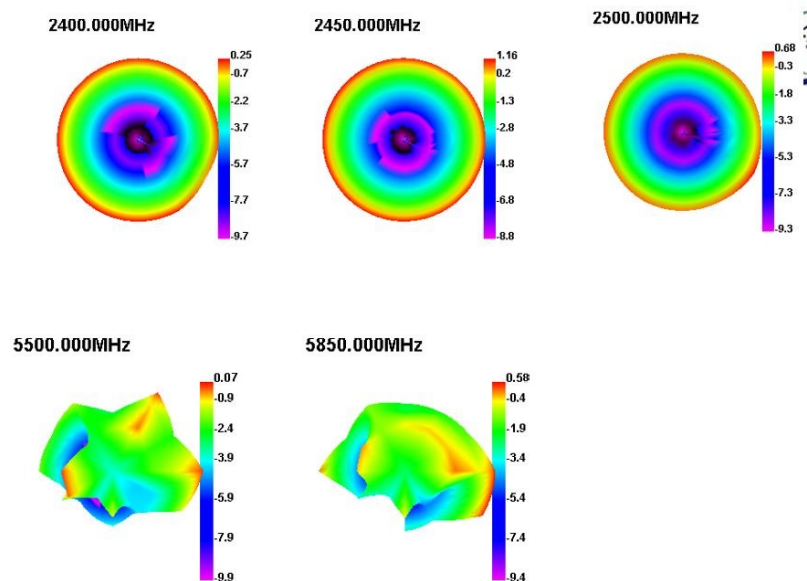
WiFi-1 antenna efficiency



Passive Test For WIFI2.4			Passive Test For WIFI5.8		
Freq (MHz)	Effi (%)	Gain (dBi)	Freq (MHz)	Effi (%)	Gain (dBi)
2400	42.4	0.25	5150	30.79	2.19
2410	46.46	0.67	5200	30.83	2.16
2420	45.05	0.54	5250	36.81	1.76
2430	45.05	0.55	5300	29.62	0.56
2440	50.13	1.09	5350	32.8	0.85
2450	50.24	1.16	5400	26.7	0.14
2460	48.15	0.98	5450	27.57	0.23
2470	42.86	0.46	5500	30.03	0.07
2480	40.36	0.21	5550	24.51	-0.86
2490	37.19	-0.2	5600	22.66	-1.37
2500	46.28	0.68	5650	21.77	-1.29
			5700	33.57	0.57
			5750	29.04	-0.43
			5800	27.95	-0.44
			5850	32.71	0.58

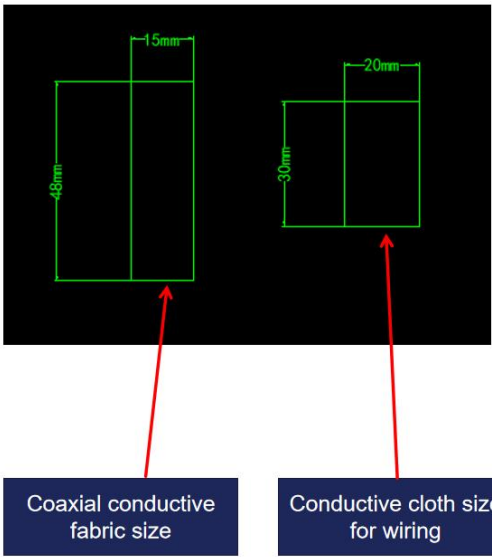
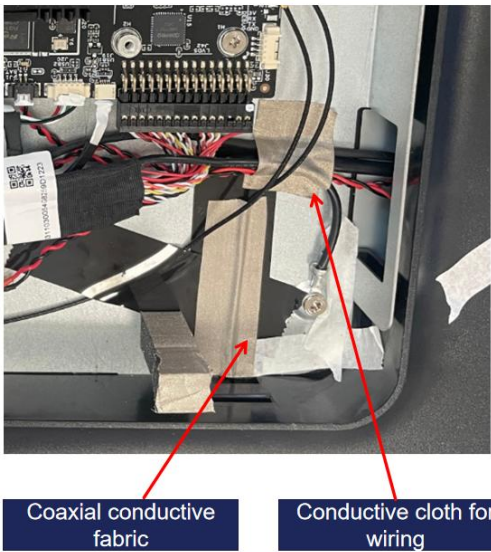
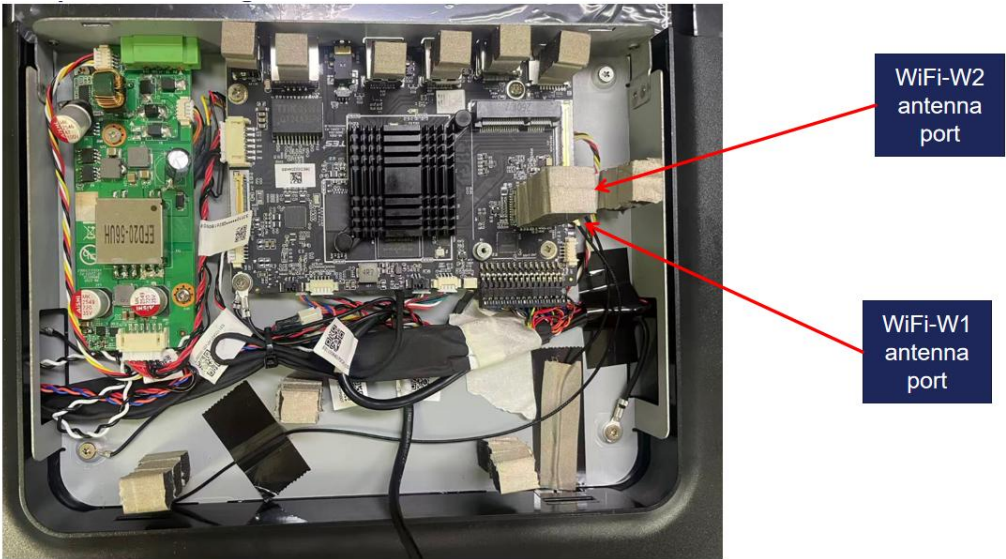
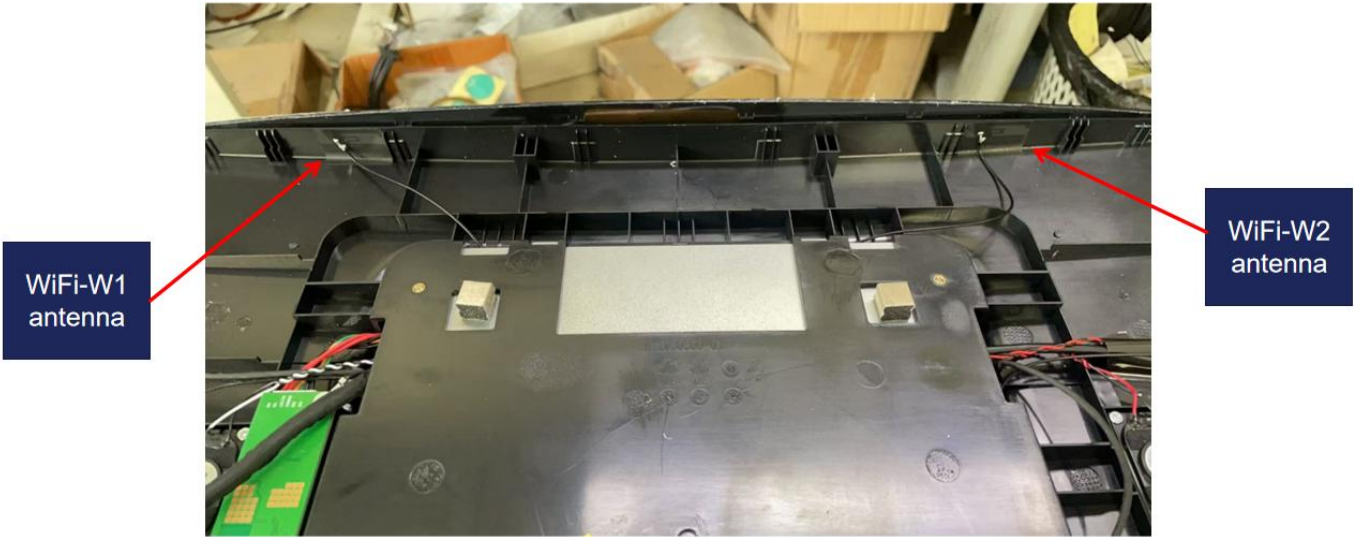
5.WiFi antenna related data

WiFi-1 antenna apple picture



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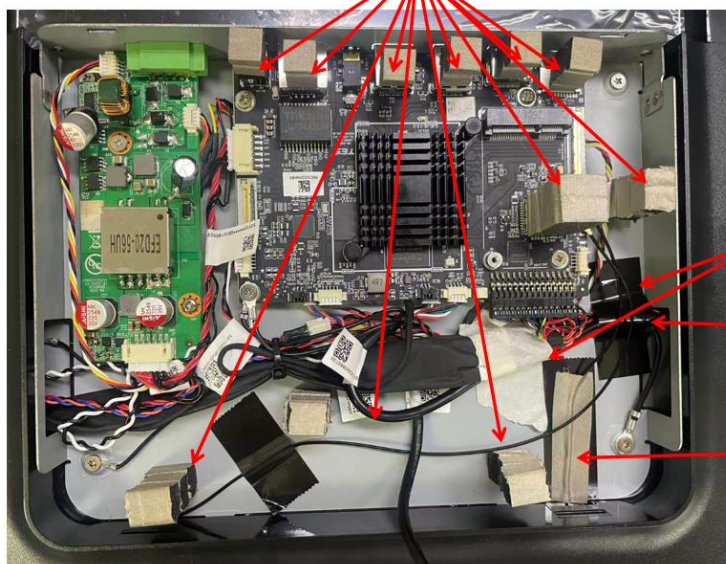
5. Antenna structure diagram



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07.Environmental treatment

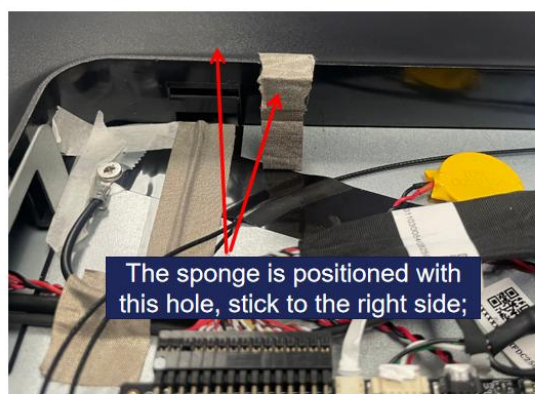
Conductive foam attached to the iron frame and the back shell grounded



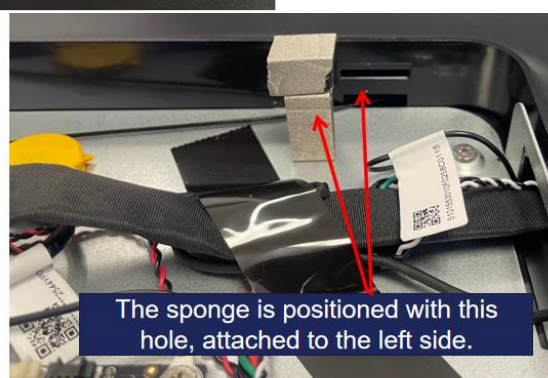
Apply insulation cloth to the ribbon cable, tie the ribbon cable as tightly as possible, and keep it away from the coaxial cable's conductive cloth avoid contact.

Tighten the ribbon cable

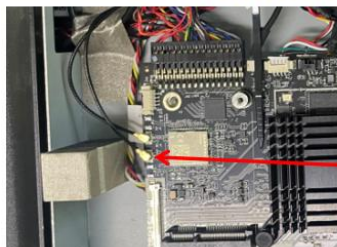
Insulation tape on the bottom of the coaxial line and conductive fabric on top.



The sponge is positioned with this hole, stick to the right side;

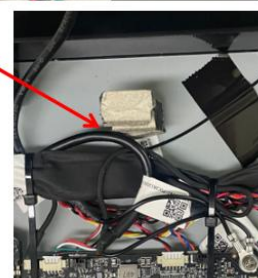


The sponge is positioned with this hole, attached to the left side.



The sponge is positioned next to the WIFI port.

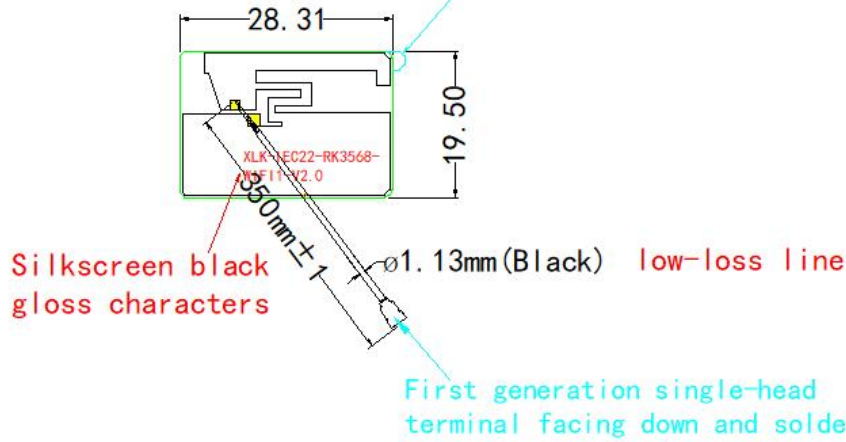
Foam for middle positioning of cable



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WiFiSub-antenna part number: 3900900036F0

Release paper hand tear position



technical requirements:

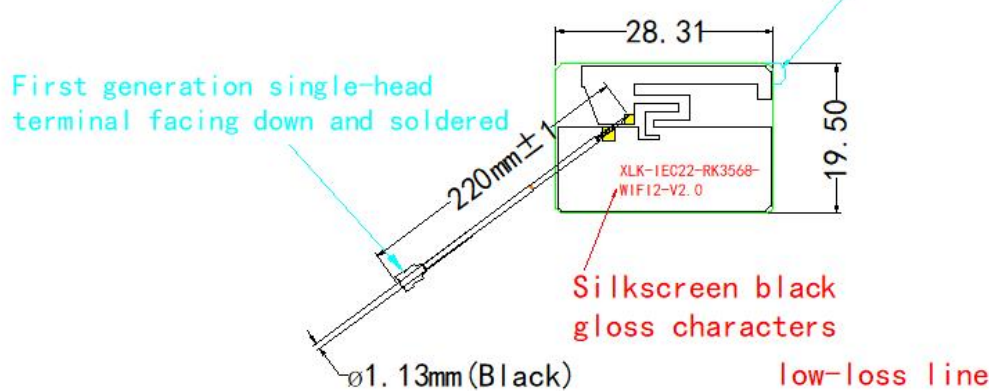
- 1.The material is electrolytic copper with a thickness of 0.05mm;
- 2.Back glue : 3M9471;
- 3.Anti oxidation treatment for gold finger surface;
- 4.Protective film for:Black oil;
- 5.Overall thickness should be less than or equal to0.15mm;
- 6.Accurate tolerance range:0.1mm;
- 7.Only the product diagram is allowed to conduct electricity;
- 8.Where A stands for adhesive and B is FPC;
- 9.Please refer to the drawing for dimensions not specified.

Shenzhen NEW LINKE Technology Co., Ltd

Third perspective	entry name:	Date	2026-09-11
	IEC22-RK3568	Design	Zsb
	Product name:	examine	MD
	WIFI	RF	
	Material code:	approval	
	Material Science:	unit:mm	ratio:FIT
	FPC+IPEX 1 Coaxial line		

WiFiMain antenna part number: 3900900037F0

Release paper hand tear position



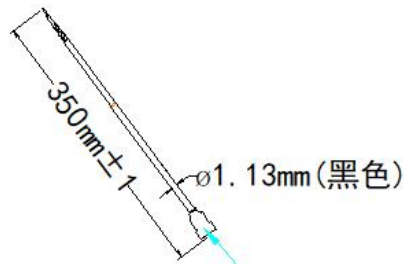
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- 2.Back glue : 3M9471;
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	Product name:	examine	MD
	WIFI	RF	
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	Material Science:	unit:mm	ratio:FIT
	FPC+IPEX 1 Coaxial line		

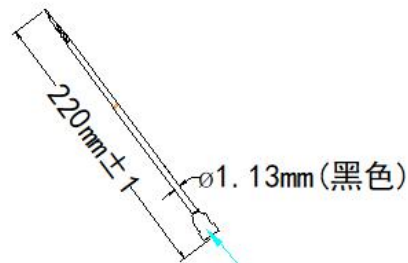
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First generation single-head
terminal facing down and soldered

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Third perspective 0.03 0.03 0.02 0.02 0.05	entry name:	Date	2029-09-16
	Product name:	Design	Zsb
	Material code:	examine	MD
	Material Science:	approval	RF
	FPC+IPEX 1 Coaxial line	unit:mm	ratio:FIT



First generation single-head
terminal facing down and soldered

Shenzhen NEW LINKE Technology Co., Ltd

Third perspective 0.03 0.03 0.02 0.02 0.05	entry name:	Date	2029-09-16
	Product name:	Design	Zsb
	Material code:	examine	MD
	Material Science:	approval	RF
	FPC+IPEX 1 Coaxial line	unit:mm	ratio:FIT

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Salt Fog Test Report

Handset Model	IEC22 RK3568			Tested Quantity	5PCS		
Standard	GB2423. 18			Product material	FPC		
Tested Items	Required Standard	Actual value	Result	Tested Items	Required Standard	Actual value	Result
Tester Model	KD-60	KD-60	OK	Tested Period	24H	24H	OK
Salt Fog Test Type	NSS Neutral NSS	NSS Neutral NSS	OK	Salt Fog Box Temperature	35° C	35℃	OK
Salt PH	6.5-7.2	6.8	OK	amount of precipitation of Salt fog (H. 80C)	1-2ml	1.8ml	OK
Fog spit type	Continued fog	Continued fog	OK	Material	FPC	FPC	OK
Volume of salt	5%/NaCL	5%/NaCL	OK	Compressed air pressure	1±0.1KG/CM ²	1	OK
saturated temperature	47° C	47℃	OK	Sample location angel	90°	90°	OK
Observed Period	Observed phenomenon						
4H	NA						
12H	NA						
24H	NA						
Judged Standard: Judged by the method of GB5944-86, over Level 9 is qualified.							
Final Tested Result	Qualified ✓				Unqualified		
Tested by	Benyuan He	Supervised by	Aibing Wang	Approved by			
Remark: normal salt fog tested methods is NSS,AASS and CASS.							

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7. Shipment Mode

Material Type	Package Mode	
FPC	1、 full page package for shipment 2、 Release paper+ PET plastics bags packed 3、 100sheets/bag	

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