Sample Acknowledgement

P/N		
Sample adaptability model		CR15Q05P
Sample description		WIFI Main-antenna/with four terminals line length 320mm/CR15Q05P
Development Department	**electronic**	
	structure	
Development approval		
Quality Department		
Purchasing Department		
Remark		

Form No.: QESP-023-F06C

Approval Sheet

Customer	Yanghua Digital	Data	2025/03/19
Product	WiFi Main antenna	Models	CR15Q05P
P/N	F414B-14LB-320	Customer P/N	
Specifications	Black FPC; RF0.81 fourth generation terminal black coaxial line; Length:L=320mm		

Vender Approved By	Customer Approved By
Checked By:	Checked By:
Audit By:	Audit By:
Approval By:	Approval By:

Document revision Resume

Version	Revise The Content	Revused	Approval	Date	Note

Address:1506, Tangwei Business Building, Fuhai Street, Fuyong Town, Baoan District, Shenzhen
Tel：0755-82103639 QQ：487580356 Email：Stephdeng_Vis@126.com

Content

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Specification

1.1 Electrical Properties

Characteristics	Specifications
Working Band	2.4GWiFi; 5GWiFi
Antenna From	PIFA
Impedance	50Ω
Polarization	Linear
Peak Effi	68%@2.4G; 52%@5G
Peak Gain	3.1dBi@2.4G; 4.2dBi@5G

1.2 Physical Properties

Characteristics	Specifications
Operating Temp	-10℃~+60℃
Storage Temp	-10℃~+70℃
Humidity	10~95%RH

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WiFi Ant Test Information

Frequency	2.4G(2402~2483)Mhz	5G(5150~5850)Mhz
Module information		
Driver version information		

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Antenna Placement

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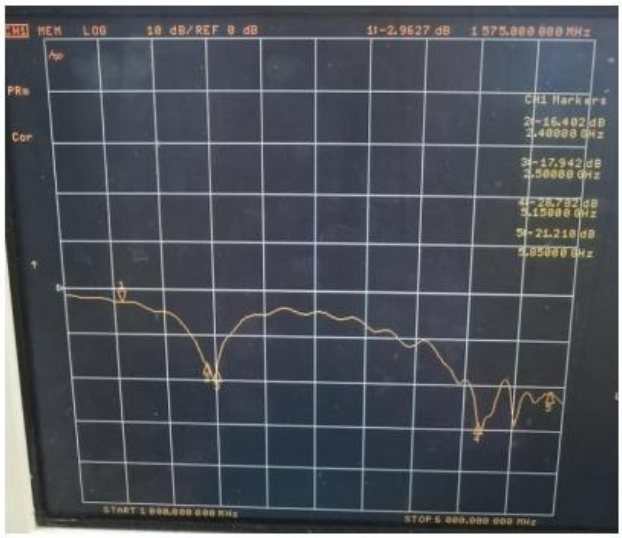
Test Data

S11 Parameter-VSWR



Frequency (MHZ)	2400	2500	5150	5850
VSWR	1.35	1.29	1.07	1.19
Return Loss (DB)	-16.40	-17.94	-28.70	-21.21

WiFi Active Test Data

	Frequency	TRP		TIS(LCD ON)	
802.11b	2412	CH1 11Mbps	11.58	CH1 11Mbps	-80.47
	2437	CH6 11Mbps	12.38	CH6 11Mbps	-80.52
	2467	CH11 11Mbps	12.46	CH11 11Mbps	-80.51
802.11a		TRP		TIS(LCD ON)	
	5180	CH36 6Mbps	10.38	CH36 54Mbps	-69.21
	5300	CH60 6Mbps	10.42	CH60 54Mbps	-69.44
	5700	CH140 6Mbps	10.54	CH140 54Mbps	-69.56

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Efficiency Table

Passive Test For WIFI2.4												
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHIS (%)	DHIS (%)	Max (dB)	Min (dB)	irectivit (dBi)	Beamwidth (3dB)	AttH (dB)	AttV (dB)
2400	56.94	-2.45	1.6	-0.55	34.678	22.261	1.6	-14.65	4.04	30	45.78	46.01
2410	54.56	-2.63	1.52	-0.63	33.726	20.831	1.52	-15.77	4.15	60	46.01	46.29
2420	58.86	-2.3	1.91	-0.24	36.769	22.091	1.91	-15.64	4.21	150	45.73	46
2430	60.97	-2.15	2.13	-0.02	38.446	22.522	2.13	-15.72	4.27	150	46.01	46.36
2440	62.13	-2.07	2.27	0.12	39.478	22.655	2.27	-16.16	4.33	150	46.12	46.48
2450	62.32	-2.05	2.33	0.18	39.826	22.494	2.33	-17.51	4.38	30	46.12	46.54
2460	63.16	-2	2.48	0.33	40.428	22.736	2.48	-18.51	4.47	30	46.14	46.52
2470	67.12	-1.73	2.87	0.72	42.921	24.198	2.87	-17.48	4.6	30	46.4	46.8
2480	68.48	-1.64	3.11	0.96	43.662	24.818	3.11	-15.49	4.75	30	46.26	46.64
2490	66.34	-1.78	3.13	0.98	42.026	24.314	3.13	-13.42	4.92	30	46.51	46.91
2500	62.16	-2.06	2.96	0.81	39.069	23.09	2.96	-12.24	5.02	30	46.47	46.86

Passive Test For WIFI5G												
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHIS (%)	DHIS (%)	Max (dB)	Min (dB)	irectivit (dBi)	Beamwidth (3dB)	AttH (dB)	AttV (dB)
5150	35.67	-4.48	1.51	-0.64	24.097	11.574	1.51	-17.13	5.98	0	49.82	49.4
5170	37.85	-4.22	1.85	-0.3	25.422	12.429	1.85	-15.1	6.07	0	50.13	49.77
5190	36.75	-4.35	1.69	-0.46	24.555	12.195	1.69	-14.73	6.04	0	50.42	49.95
5210	41.37	-3.83	2.32	0.17	27.468	13.905	2.32	-14.45	6.16	0	50.88	50.49
5230	38.38	-4.16	2.24	0.09	25.269	13.112	2.24	-14.9	6.4	0	50.42	50.08
5250	43.51	-3.61	2.87	0.72	28.27	15.24	2.87	-14.47	6.49	0	51.02	50.72
5270	42.95	-3.67	2.91	0.76	27.515	15.439	2.91	-14.12	6.58	0	50.85	50.6
5290	45.77	-3.39	3.38	1.23	29.075	16.696	3.38	-14.88	6.78	0	51.34	51.12
5310	43.19	-3.65	3.11	0.96	27.19	15.996	3.11	-18.16	6.76	0	50.44	50.36
5330	45.59	-3.41	3.13	0.98	28.556	17.034	3.13	-17.12	6.54	0	51.08	51.01
5350	48.32	-3.16	3.23	1.08	30.585	17.734	3.23	-18.51	6.39	0	51.02	51.01
5370	47.3	-3.25	3.15	1	30.376	16.92	3.15	-21.33	6.4	0	50.91	50.95
5390	43.41	-3.62	2.71	0.56	28.276	15.135	2.71	-21.86	6.33	0	50.46	50.43
5410	52.24	-2.82	3.39	1.24	34.606	17.631	3.39	-22.06	6.21	0	51.18	51.09
5430	46.02	-3.37	2.74	0.59	31.21	14.806	2.74	-27.28	6.11	0	50.69	50.7
5450	49.7	-3.04	3.16	1.01	34.262	15.437	3.16	-23.6	6.2	0	50.71	50.85
5470	45.57	-3.41	3.08	0.93	31.735	13.84	3.08	-20.69	6.5	0	50.93	50.83
5490	46.97	-3.28	3.42	1.27	32.813	14.159	3.42	-19.07	6.7	0	50.92	50.79
5510	47.64	-3.22	3.46	1.31	33.451	14.187	3.46	-21.06	6.68	0	51.18	51.16
5530	48.48	-3.14	3.8	1.65	34.032	14.444	3.8	-19.88	6.95	0	51.44	51.3
5550	50.25	-2.99	4.25	2.1	35.058	15.192	4.25	-18.78	7.24	0	51.89	51.76
5570	47.08	-3.27	3.97	1.82	32.464	14.616	3.97	-17.7	7.24	60	51.42	51.33
5590	49.33	-3.07	4.13	1.98	34.009	15.324	4.13	-17.65	7.19	60	51.71	51.76
5610	45.7	-3.4	3.83	1.68	31.575	14.13	3.83	-18.01	7.23	60	51.17	51.22
5630	49.58	-3.05	3.98	1.83	33.641	15.943	3.98	-17.61	7.03	60	51.78	51.77
5650	44.34	-3.53	3.15	1	29.402	14.934	3.15	-16.57	6.68	60	51.47	51.55
5670	49.8	-3.03	3.39	1.24	32.81	16.99	3.39	-17.5	6.42	90	52.12	52.28
5690	43.99	-3.57	2.64	0.49	28.962	15.027	2.64	-18.26	6.2	90	52.12	52.25
5710	48.41	-3.15	2.86	0.71	31.653	16.754	2.86	-18.02	6.01	90	51.95	52.05
5730	49.32	-3.07	2.94	0.79	31.848	17.472	2.94	-18.76	6.01	90	51.59	51.69
5750	46.16	-3.36	2.68	0.53	29.72	16.437	2.68	-21.18	6.04	90	51.12	51.15
5770	48.33	-3.16	2.95	0.8	31.362	16.969	2.95	-19.85	6.11	90	51.02	51.06
5790	45.12	-3.46	2.69	0.54	29.44	15.681	2.69	-18.49	6.15	90	51.08	51.16
5810	46.68	-3.31	2.86	0.71	30.318	16.358	2.86	-17.57	6.17	60	51.36	51.43
5830	46.33	-3.34	2.89	0.74	29.781	16.551	2.89	-16.45	6.23	90	51.65	51.66
5850	48.44	-3.15	3.21	1.06	31.082	17.356	3.21	-17.34	6.36	90	51.88	52.05

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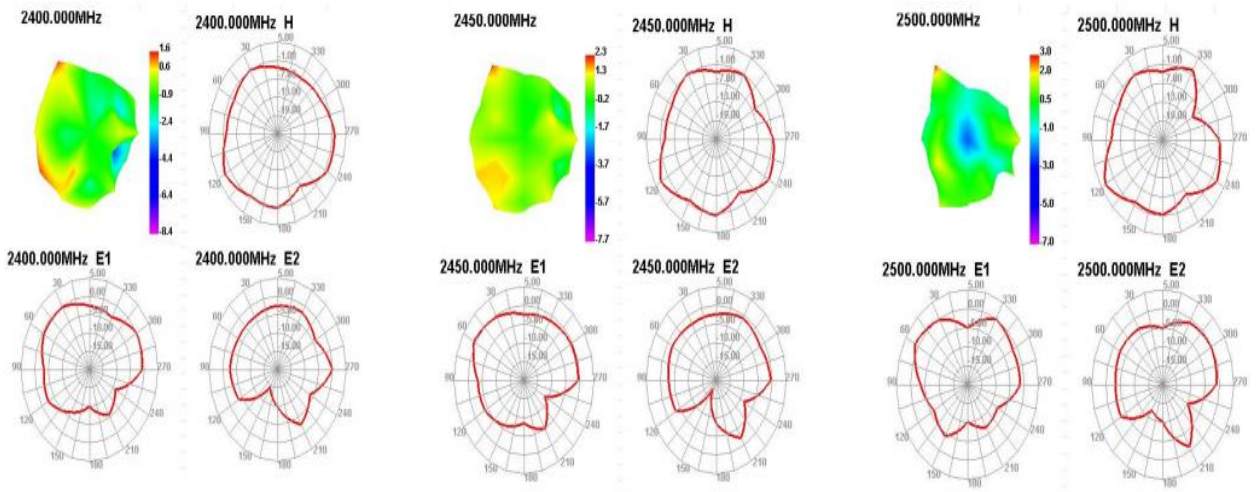
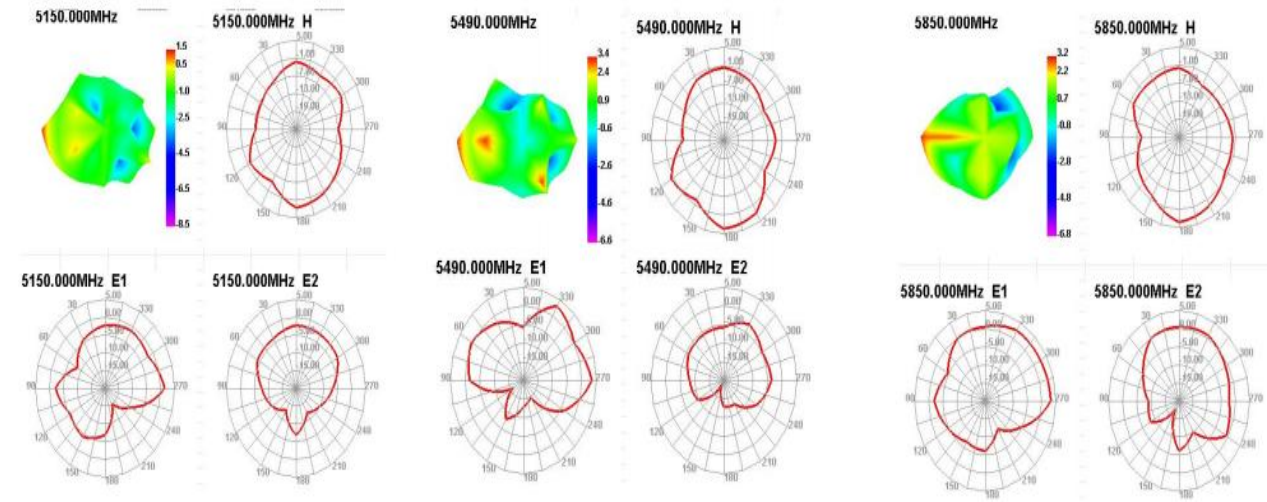
Radiation Pattern(2.4G)



Radiation Pattern(5G)



BT Test

Test environment: Corridor channel

Test tool: Bluetooth speaker

Test distance: 10+M (smooth music playback without stalling)

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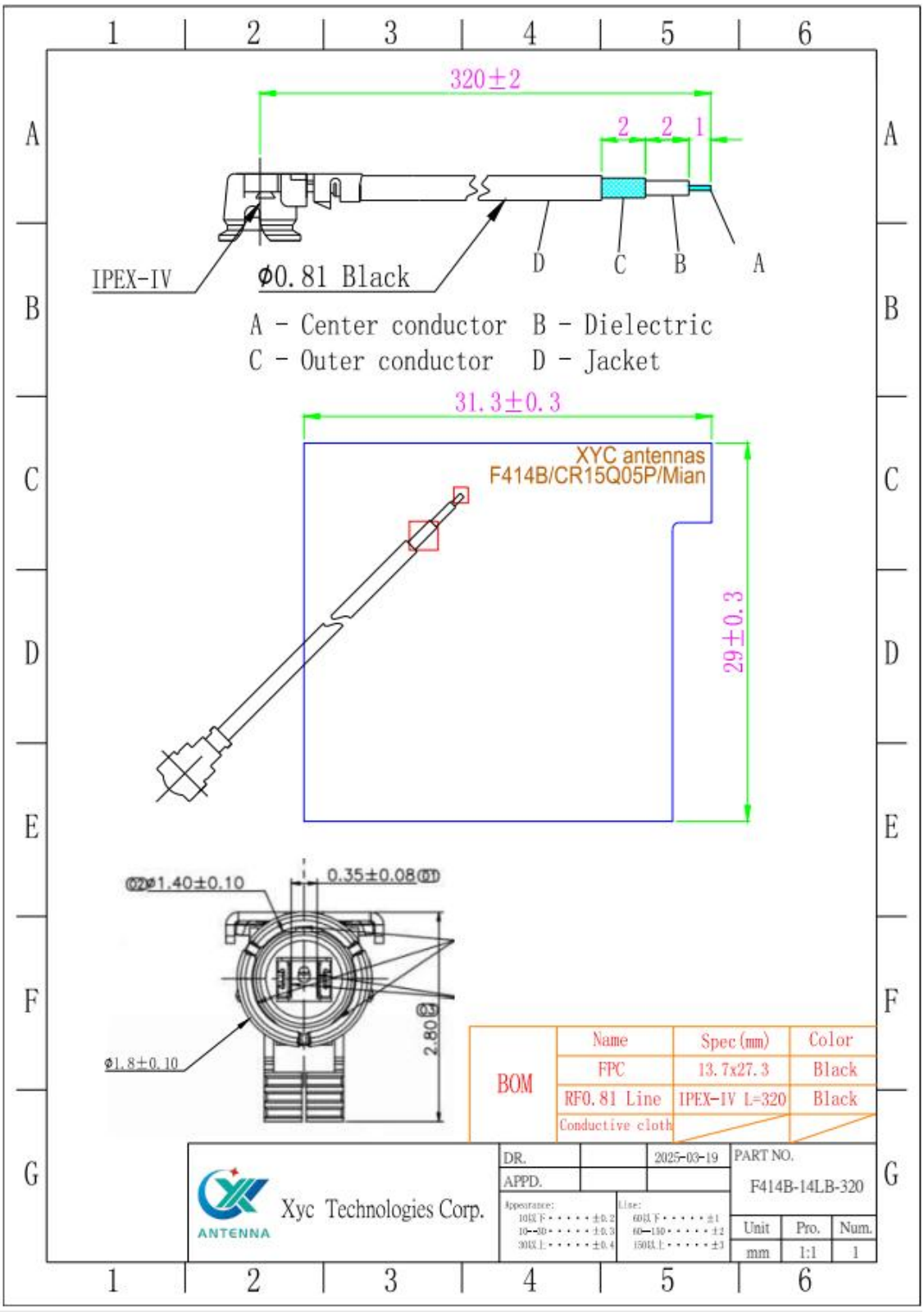
Antenna Assembly



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Inspection Standard

Xyc Technologies Corp.	File Cod.	XYC-WI-PZ-02	Page.
	File Vers.	A0	1 of 1
File Name	Sampling Plan		

Sampling Level Table

Special Check				General			Batch Scope	Sample Word	Sampling	0.65		1.0		1.5		2.5		4.0		6.0	
S-1	S-2	S-3	S-4	I	II	III				AC	RE	AC	RE	AC	RE	AC	RE	AC	RE	AC	RE
A	A	A	A	A	A	B	2--8	A	2	0	1	0	1	0	1	0	1	0	1	0	1
A	A	A	A	A	B	C	9--15	B	3	0	1	0	1	0	1	0	1	0	1	0	1
A	A	B	B	B	C	D	16--25	C	5	0	1	0	1	0	1	0	1	0	1	1	2
A	B	B	C	C	D	E	26--50	D	8	0	1	0	1	0	1	0	1	1	2	1	2
B	B	C	C	C	E	F	51--90	E	13	0	1	0	1	0	1	1	2	1	2	2	3
B	B	C	D	D	F	G	91--150	F	20	0	1	0	1	1	2	1	2	2	3	3	4
B	C	D	E	E	G	H	151--280	G	32	0	1	1	2	1	2	2	3	3	4	5	6
B	C	D	E	F	H	J	281--500	H	50	1	2	1	2	2	3	3	4	5	6	7	8
C	C	E	F	G	J	K	501--1200	J	80	1	2	2	3	3	4	5	6	7	8	10	11
C	D	E	G	H	K	L	1201--3200	K	125	2	3	3	4	5	6	7	8	10	11	14	15
C	D	F	G	J	L	M	3201--10000	L	200	3	4	5	6	7	8	10	11	14	15	21	22
C	D	F	H	K	M	N	10001-35000	M	315	5	6	7	8	10	11	14	15	21	22	21	22
D	E	G	J	L	N	P	35001-150000	N	500	7	8	10	11	14	15	21	22	21	22	21	22
D	E	G	J	M	P	Q	150001-500000	P	800	10	11	14	15	21	22	21	22	21	22	21	22
D	E	H	K	N	Q	R	500001and over	Q	1250	14	15	21	22	21	22	21	22	21	22	21	22
								R	2000	21	22	21	22	21	22	21	22	21	22	21	22

AC-Qualified RE-No Qualified

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List Of Raw Materials

Environmental protection parts test report statistical list

The company hereby guarantees that all the information recorded in and attached to this "Environmental Protection Parts Test Report" is true. If there is any inaccuracy (including but not limited to the error in the comparison between the part number and the original test report), the company will be fully liable for any damage caused to Shenzhen Yingzhongshi Intelligent Technology Co., LTD.

Material name: Main Antennas Supplier part: F414B-14LB-320

Part number : issuer:

fiction: Legal representative:

NO.	Name	Material supplier	Mfr Part Number	Hazardous Substances Concentration in Homogeneous Material(PPM)										HF		Test Lab, organization	Test Report Number	Test Date (YY-MM-DD)	Insert a third party test report
				Cd	Pb	Hg	Cr6+	PBBs	PBDEs	DBP	BBP	DEHP	DIBP	Cl	Br				
				<100	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<900	<900				
1	WIFI Main Ant	XYC	FPC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	Tongbiao standard technical service Co., Ltd.	CANEC2227194601 CANEC2227194602	2022-12-22	CAN22-271946-01_EC_F.PDF
			Rubber backing	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
			Text	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
			Solder shield	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
			Wire rod	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				

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Sample Inspection Report

Customer	Yang Hua	Product	WIFI Main Antennas	Quantity shipped	5	Sampling quantity	2
Models	CR15Q05P		P/N	F414B-14LB-320		Shipping date	2025/03/19
Sampling standard	☑Normal inspection		☐Tightened inspection		☐Decrement inspection		
Sampling mode	MIL-STD-105D（II）Single sampling		Acceptance limit AQL:CR: 0		Maj: 0.4	Min: 1.5	
Quality acceptance level		CR Acc	0	Maj ACC	0	Min ACC	0
		CR REJ	1	Maj REJ	1	Min REJ	1

project	program of tests	examination requirement	test method	inspection result 1	2	3	4	decide
Dimensional inspection	Line length	320±3	ruler	320	320			OK
	FPC shape	29±0.3	calliper	29	29			OK
	FPC shape	31.3±0.3	calliper	31.2	31.3			OK

project	program of tests	examination requirement	test method	Defect description	CR	Maj	Min	decide
visual inspectio	wire sheath	There is no scratching phenomenon on the outer cover	visual	No abnormality	0	0	0	OK
	Solder pad	No oxidation, tin point and other phenomena	visual	No abnormality	0	0	0	OK
	IPEX	No color difference, shrinkage, oxidation, deformation and other undesirable phenomena	visual	No abnormality	0	0	0	OK
electrical specification								
final judgment	☑OK		☐NG					

FORM ID NO：XYC-WF-PZ-001

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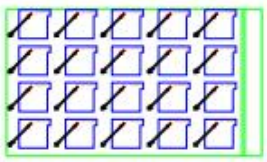
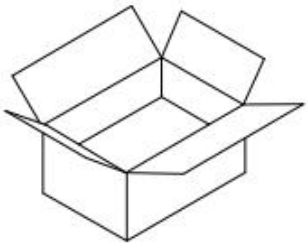
Packing Specification

1、 finished antenna

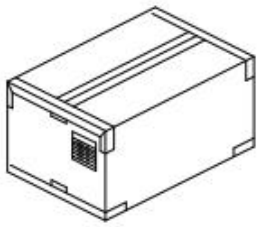
2、Bagging, minimum packing, 100 PCS per pack



3、Packing: the actual packing prevails



4、Seal the box and stick the outer box to our company Material labels and ROHS labels



Xyc Technologies Corp.	Customer	Yang Hua		PART NO.	
	Pro. Name	CR15Q05P		Product packaging specification	
	Mate. Name	WIFI Antennas			
	DR.		2025-03-19	Unit	Pro. Num.
	APPD.			mm	1

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