

Specification for Approval

Customer Name : Lockin Technology (Beijing) Co., Ltd.
LOCKIN (U.S.) INC.

Part Name : Built-in antenna -2.4G- black RG178 silver-tin wire -SMA-J
straight head -L=190mm-FPC-30×20mm

Customer PN : 0184000087

Vendor PN : 74220121

Antenna type : FPC

Vendor confirmation					
department	compilation	verify	approval		
autograph	Qiucuping	Huchong	Liulihua		
date	2023.11.03	2023.11.03	2023.11.03		
Customer confirmation					
department					
autograph					
date					

Name of contractor: Sichuan B&T Technology Co., Ltd.

address: Room No. 2 and 3, 5F, Building 8, No. 218, Wenwu Middle Road, Tangxun Street, Economic Development Zone, Mianyang City, Sichuan Province

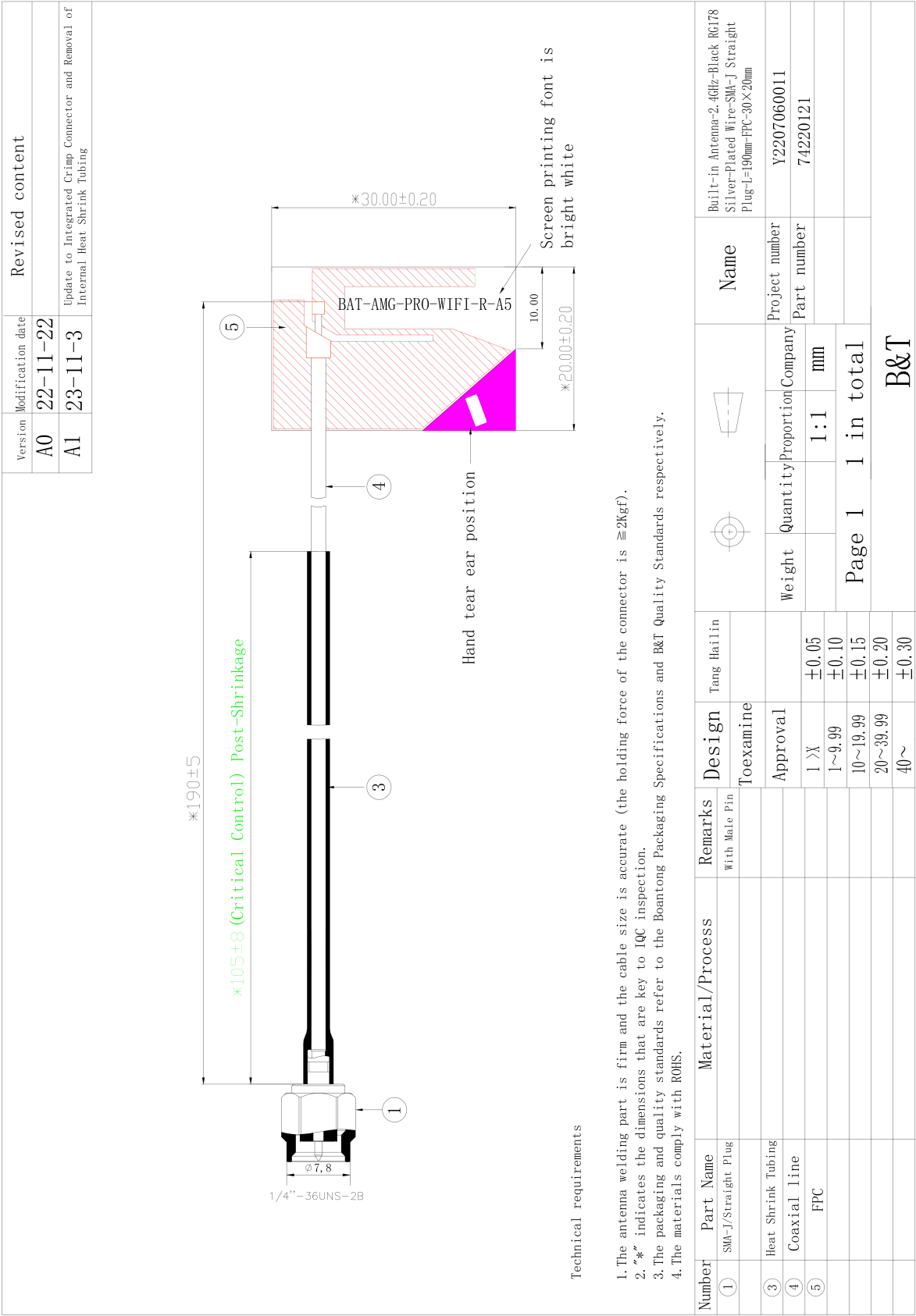
Contents

- 一、 Revision History
- 二、 2D Drawings
- 三、 Electrical performance test report

revision History

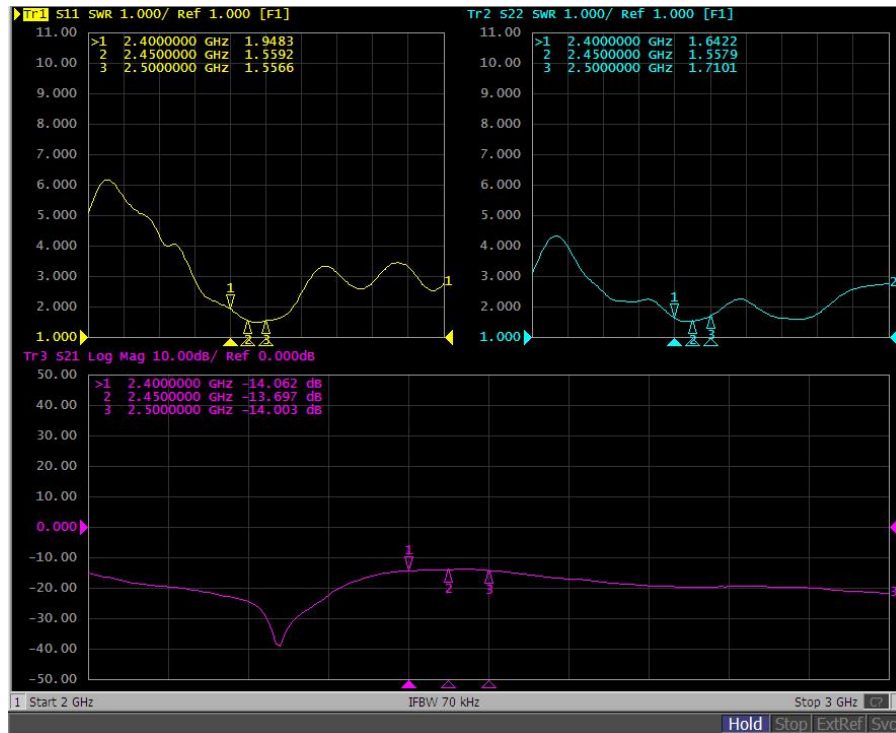
[illegible]

二、2D Drawings



三、Electrical performance test report(Whole machine testing)

S11 Parameter



Standing wave ratio data

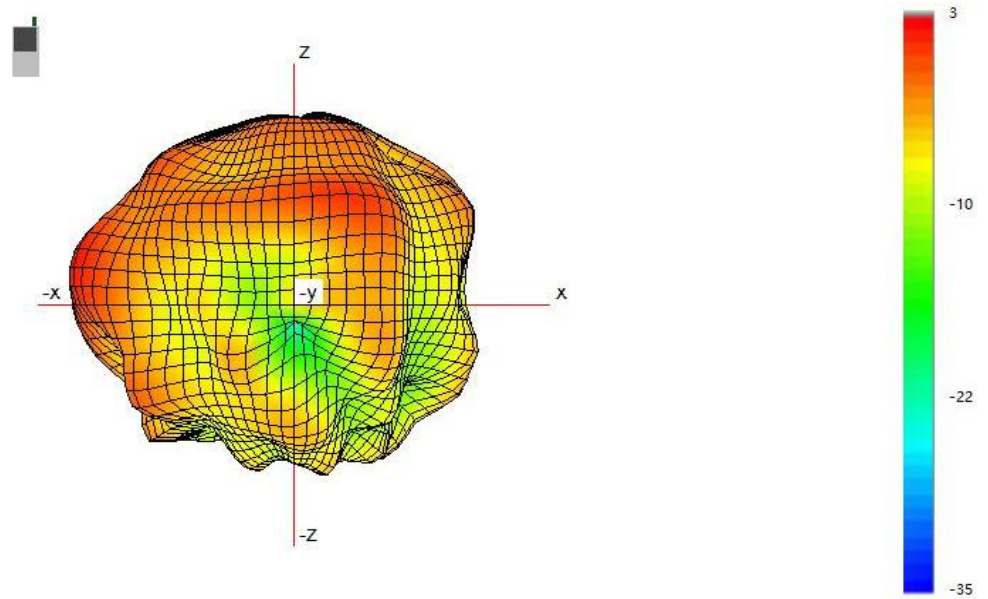
Freq	2400MHz	2450MHz	2500MHz
VSWR	1.64	1.55	1.71
Isolation(dB)	-14	-13	-14

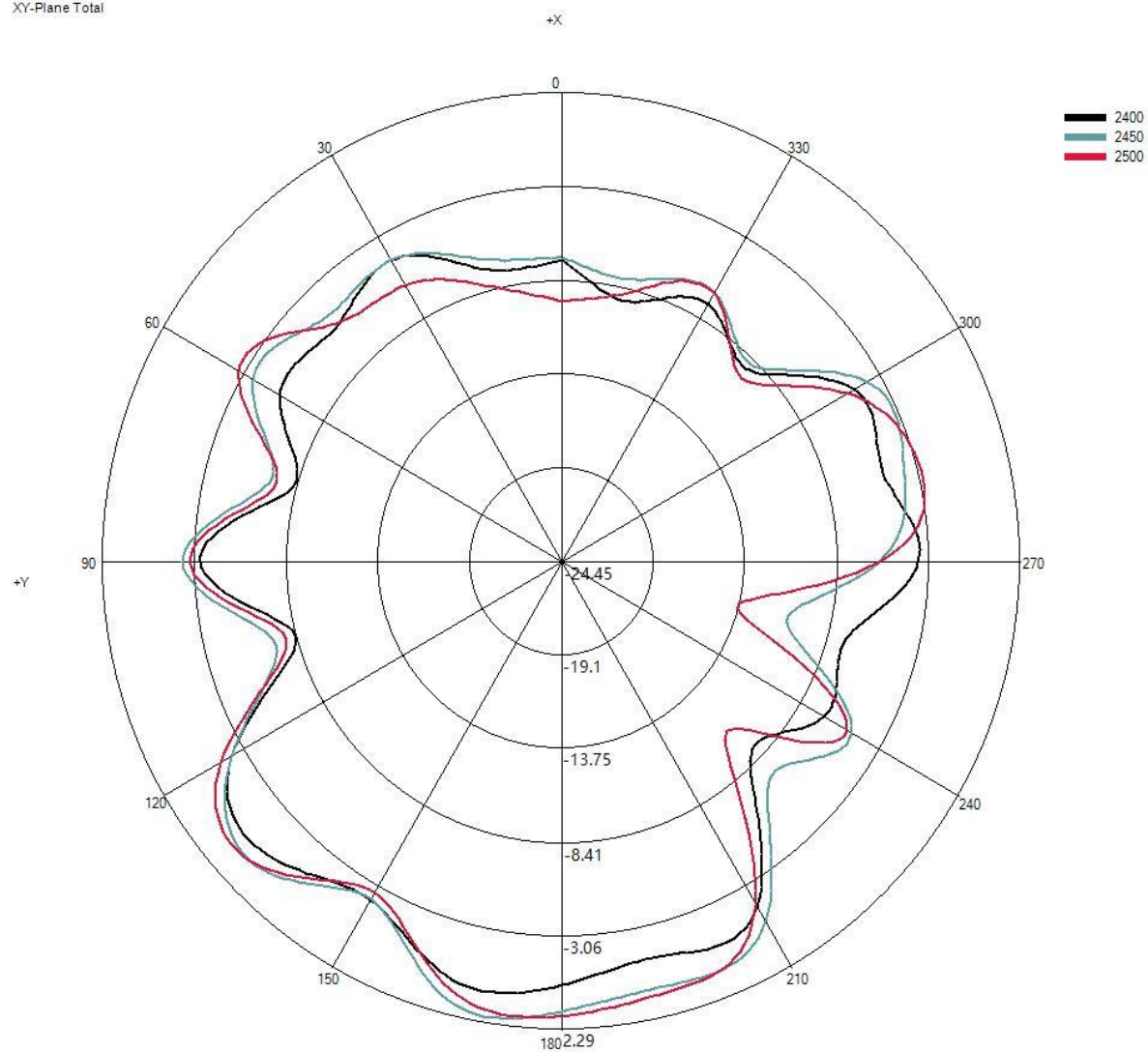
Antenna darkroom test data

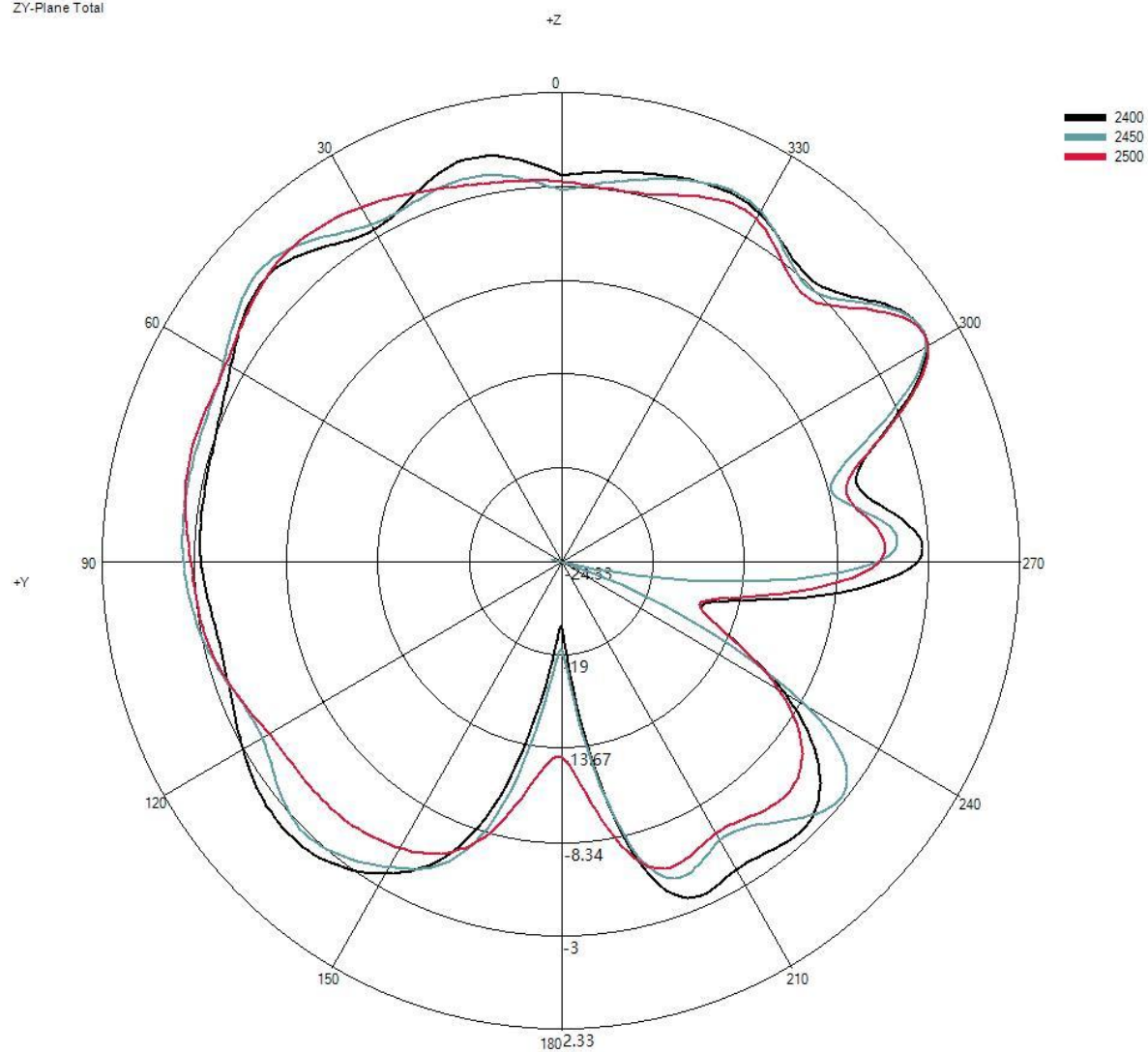
Frequency (MHz)	WiFi	
	Gain (dBi)	Efficiency (%)
2400	1.12	39.92
2410	1.34	40.29
2420	1.62	40.63
2430	1.95	42.03
2440	2.10	42.97
2450	2.17	43.81
2460	2.13	44.46
2470	1.99	44.49
2480	1.75	43.53
2490	1.58	42.55
2500	1.49	41.47

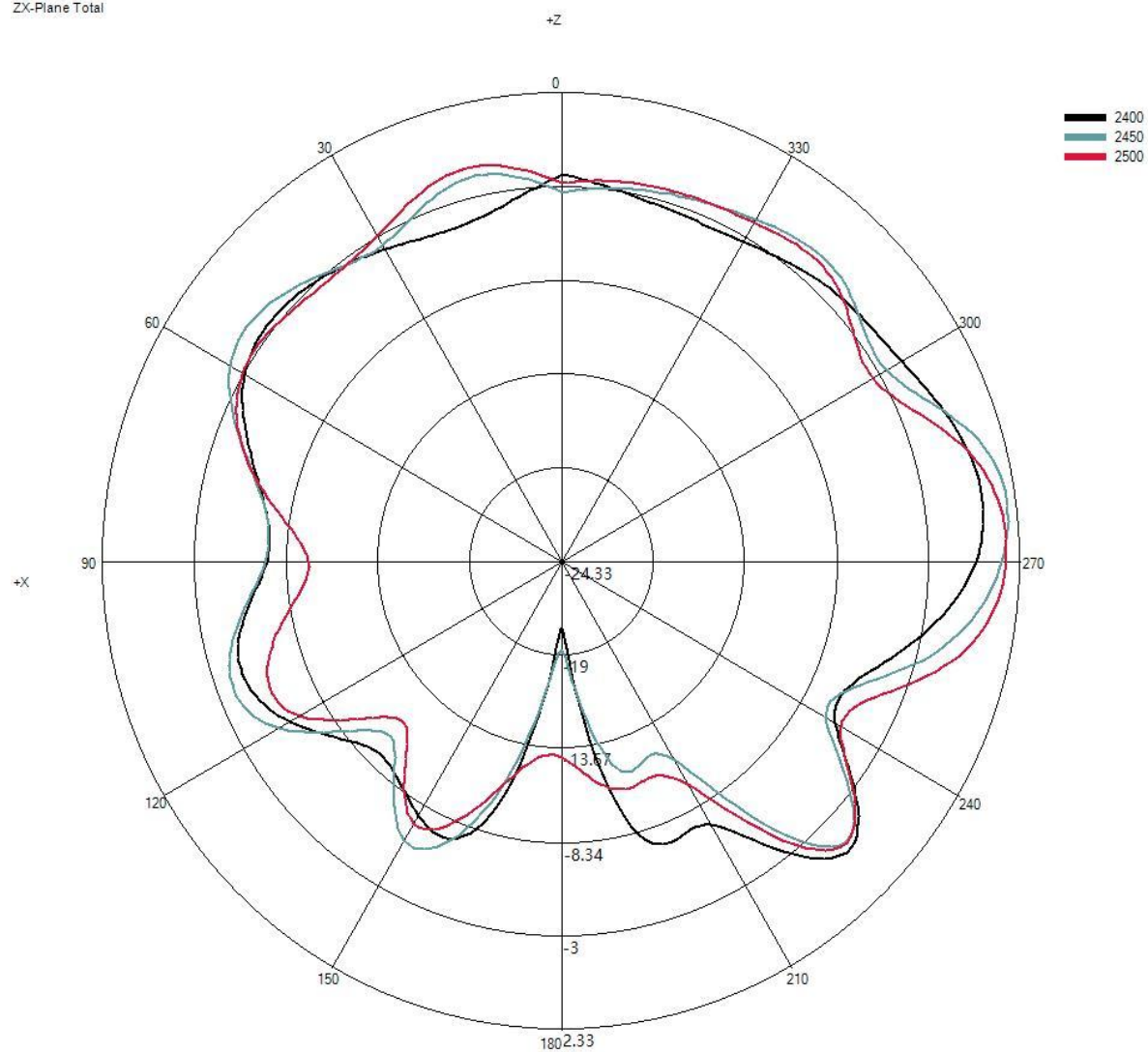
Antenna direction diagram

2450MHz









Specification for Approval

Customer Name : Lockin Technology (Beijing) Co., Ltd.
LOCKIN (U.S.) INC.

Part Name : Built-in antenna -2.4G- black RG178 silver-tin wire -SMA-J
straight head-L = 185mm-FPC-26x22.5mm

Customer PN : 0184000089

Vendor PN : 74220123

Antenna type : FPC

Vendor confirmation					
department	compilation	verify	approval		
autograph	Qiucui ping	Huchong	Liulihua		
date	2023.11.03	2023.11.03	2023.11.03		
Customer confirmation					
department					
autograph					
date					

Name of contractor: Sichuan B&T Technology Co., Ltd.

address: Room No. 2 and 3, 5F, Building 8, No. 218, Wenwu Middle Road, Tangxun Street, Economic Development Zone, Mianyang City, Sichuan Province

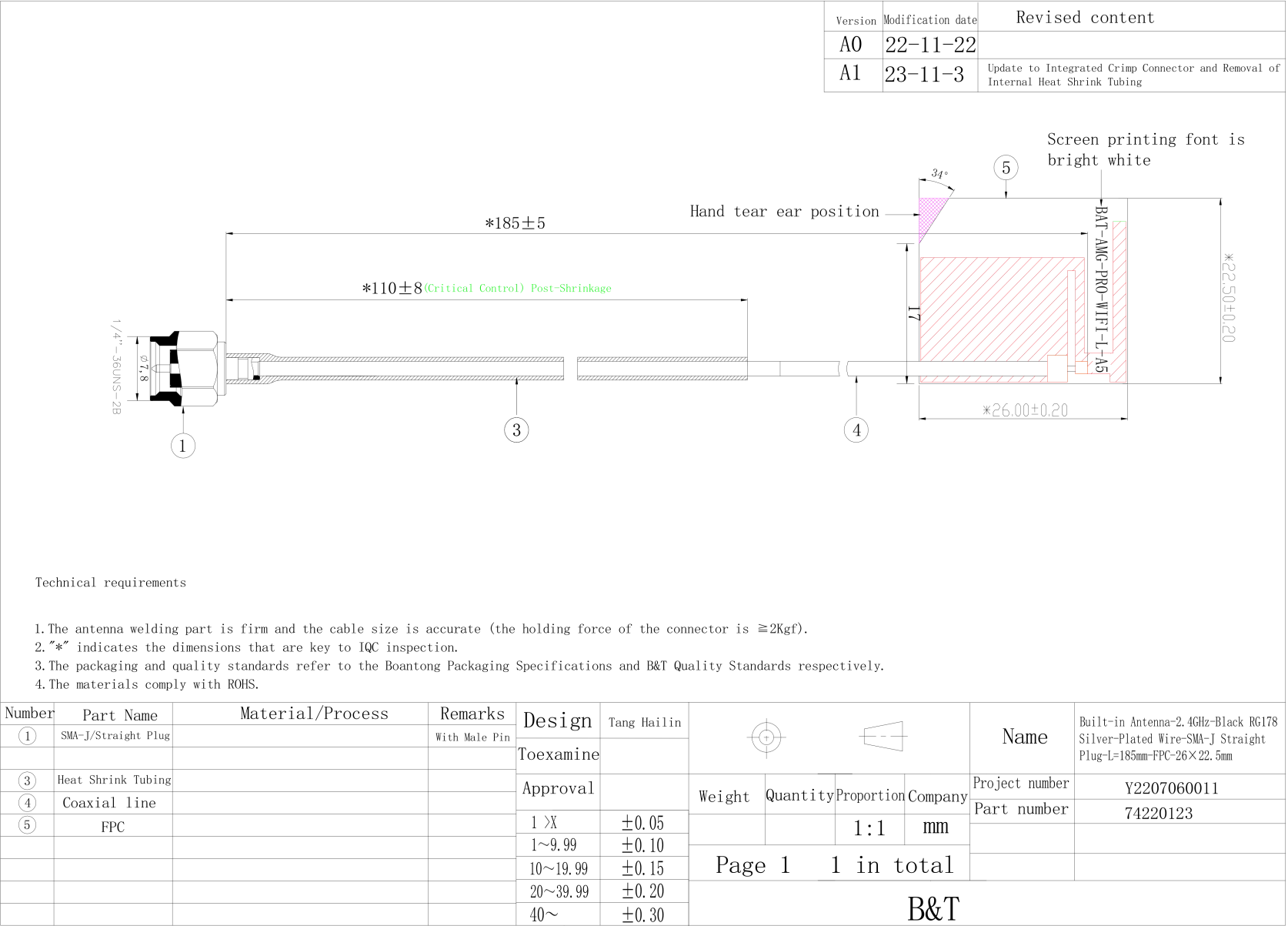
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revision History

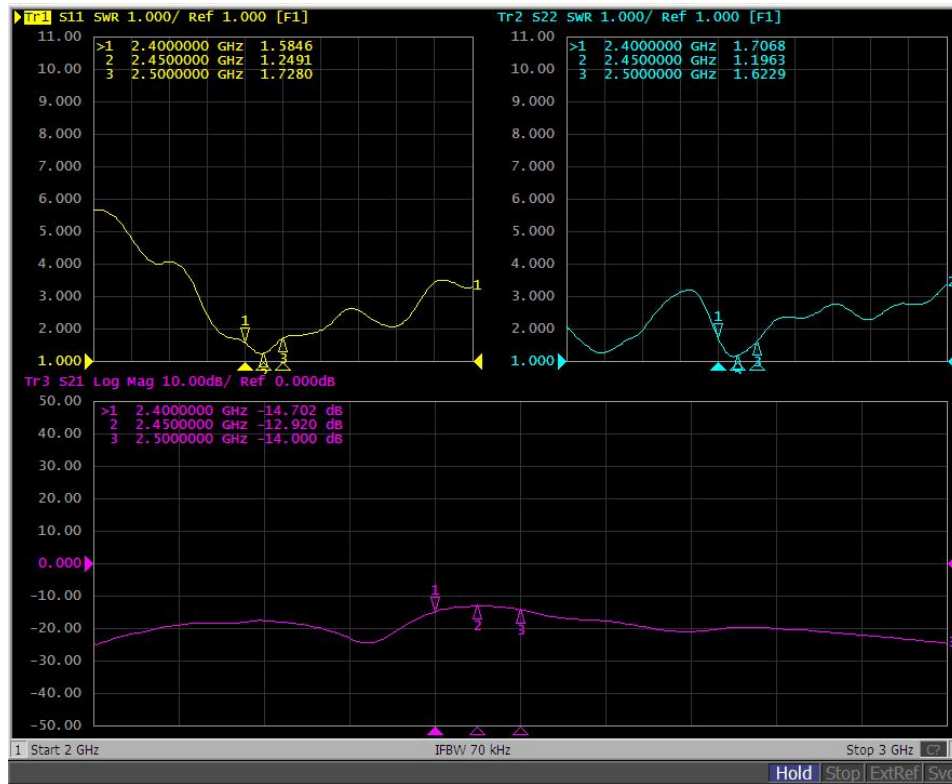
Version	Date	Develop/revise content	Formulate	approval
A0	2022.10.18	First formulation	Huang feihui	Huchong/Liulihua
A0-1101	2022.11.01	Change hand and tear ear position	Huang feihui	Huchong/Liulihua
A0-1114	2022.11.14	Optimize the circuit, update the wire length and heat shrinkable tube tolerance	Huang feihui	Huchong/Liulihua
A0-1117	2022.11.17	Update electrical performance report	Huang feihui	Huchong/Liulihua
A0-1124	2022.11.24	Update heat shrinkable tube, wire length and screen printing	Huang feihui	Huchong/Liulihua
A1	2023.11.03	Update connector and cancel internal heat shrink sleeve	Huang feihui	Huchong/Liulihua

二、2D Drawings



三、Electrical performance test report(Whole machine testing)

S11 Parameter



Standing wave ratio data

Freq	2400MHz	2450MHz	2500MHz
VSWR	1.70	1.19	1.62
Isolation(dB)	-14	-12	-14

Antenna darkroom test data

Frequency (MHz)	WiFi	
	Gain (dBi)	Efficiency (%)
2400	2.27	44.89
2410	2.43	44.31
2420	2.45	42.84
2430	2.44	42.13
2440	2.47	41.59
2450	2.63	41.83
2460	2.71	42.56
2470	2.70	42.71
2480	2.45	41.92
2490	2.12	41.56
2500	2.03	41.14

Antenna direction diagram

2450MHz

