

Antenna Product Specification

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

Par Name : Built-in antenna -2.4G- gray 1.13 tin wire-1st
generation terminal-I = 55mm-FPC-40.68 X
18.75mm

Product Model : BAT-V411-BLE-AI

Customer PN : 0184000112

Antenna type : FPC Antenna

Vendor confirmation					
Department	Compilation	Verify	Approval		
Autograph	Qiucuiping	LvJie	Liulihua		
Date	2024.09.09	2024.09.09	2024.09.09		
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

Version	Date	Develop/revise content	Formulate	approval
A0	2024.09.09	First formulation	Qiucui ping	lvjie/liulihua

二、2D Drawings

		Version	Modification date	Revised content
		A0	24-9-10	

Technical requirements

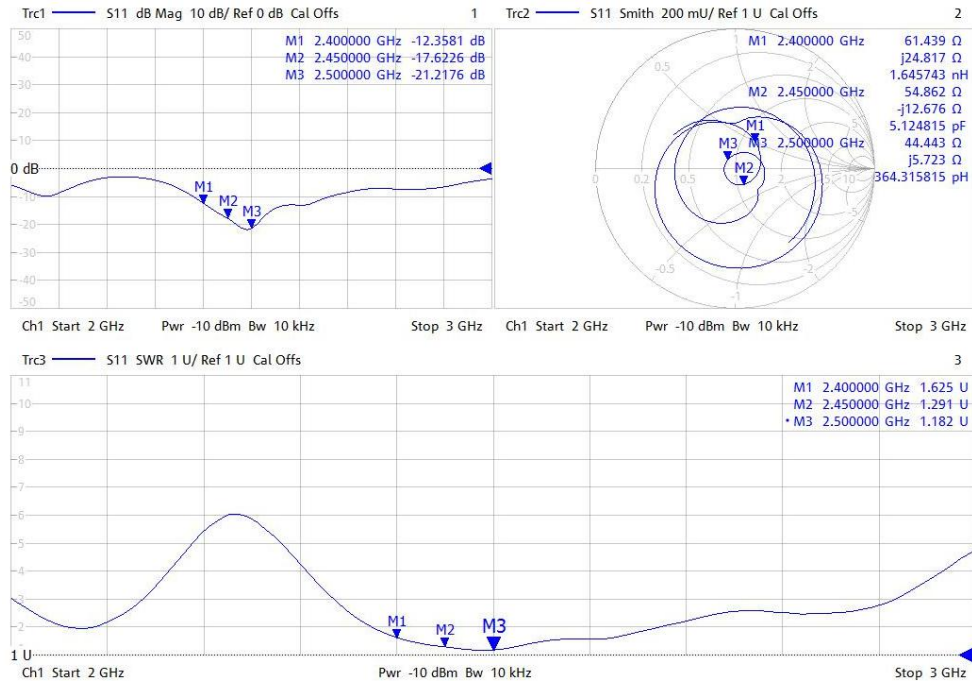
1. The antenna welding part is firm and the cable size is accurate (the holding force of the connector is $\geq 1\text{kgf}$).
2. The silk screen color is the original color of the substrate, and the font is clear and not easy to fall off.
3. "*" indicates the dimensions that are key to IQC inspection.
4. The packaging and quality standards refer to the Boantong Packaging Specifications and B&T Quality Standards respectively.
5. The materials comply with ROHS.
6. The connector port identification direction

Front view

Number	Part Name	Remarks	Design	Xie Meiquan			Name	Built-in antenna-2.4G-grey 1.13 tin wire-first generation terminal-L=55mm-FFC-40.68×18.75mm
①	1st connector		Toexamine				Project number	Y240614886
②	Coaxial line		Approval	Zeng Kang			Part number	74220515
③	FFC		1 > X	±0.05				
			1 ~ 9.99	±0.10				
			10 ~ 19.99	±0.15				
			20 ~ 39.99	±0.20				
			40 ~	±0.30				
					Page 1 of 1		B&T	

三、Electrical performance test report(Whole machine testing)

S11 Parameter



Standing wave ratio data

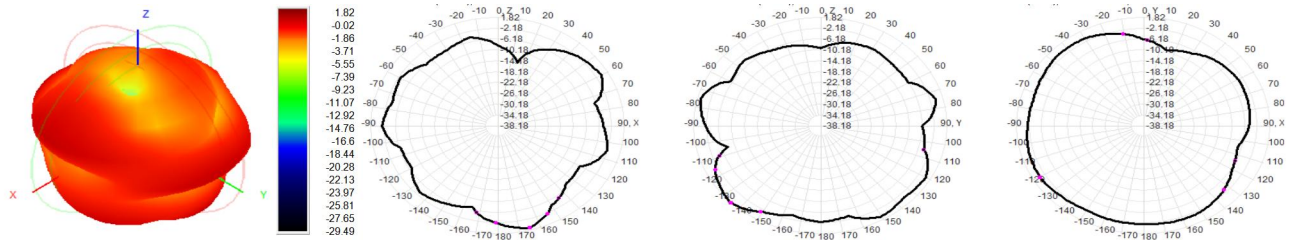
Freq/MHz	2400MHz	2450MHz	2500MHz
VSWR	1.62	1.29	1.18

Antenna darkroom test data

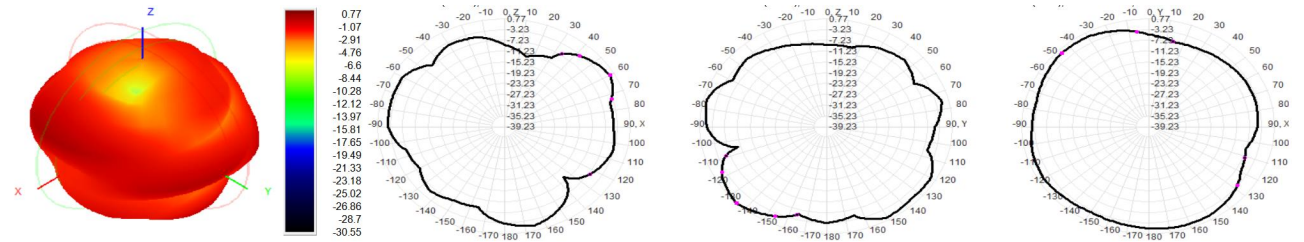
Frequency (MHz)	Efficiency (dBi)	Gain (dBi)	Efficiency (%)
2400.0	-3.59	1.82	43.78
2410.0	-3.61	1.73	43.59
2420.0	-3.91	1.33	40.69
2430.0	-3.91	1.23	40.64
2440.0	-3.92	1.04	40.57
2450.0	-3.96	0.77	40.18
2460.0	-3.99	0.52	39.95
2470.0	-3.93	0.30	40.43
2480.0	-3.65	0.30	43.16
2490.0	-3.62	0.08	43.44
2500.0	-3.49	0.08	44.81

Antenna direction diagram

2400M 3D-E1-E2-H



2450M 3D-E1-E2-H



2500M 3D-E1-E2-H

