Thorward antenna commissioning report

Customer name: ADS

Project name: E306WH WB800DCS module

Day period: 2024.03.07

Project contact information

Customer contact:
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Soward structure:

Mobile phone:

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Soward RF: Wende Yeung

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Project profile

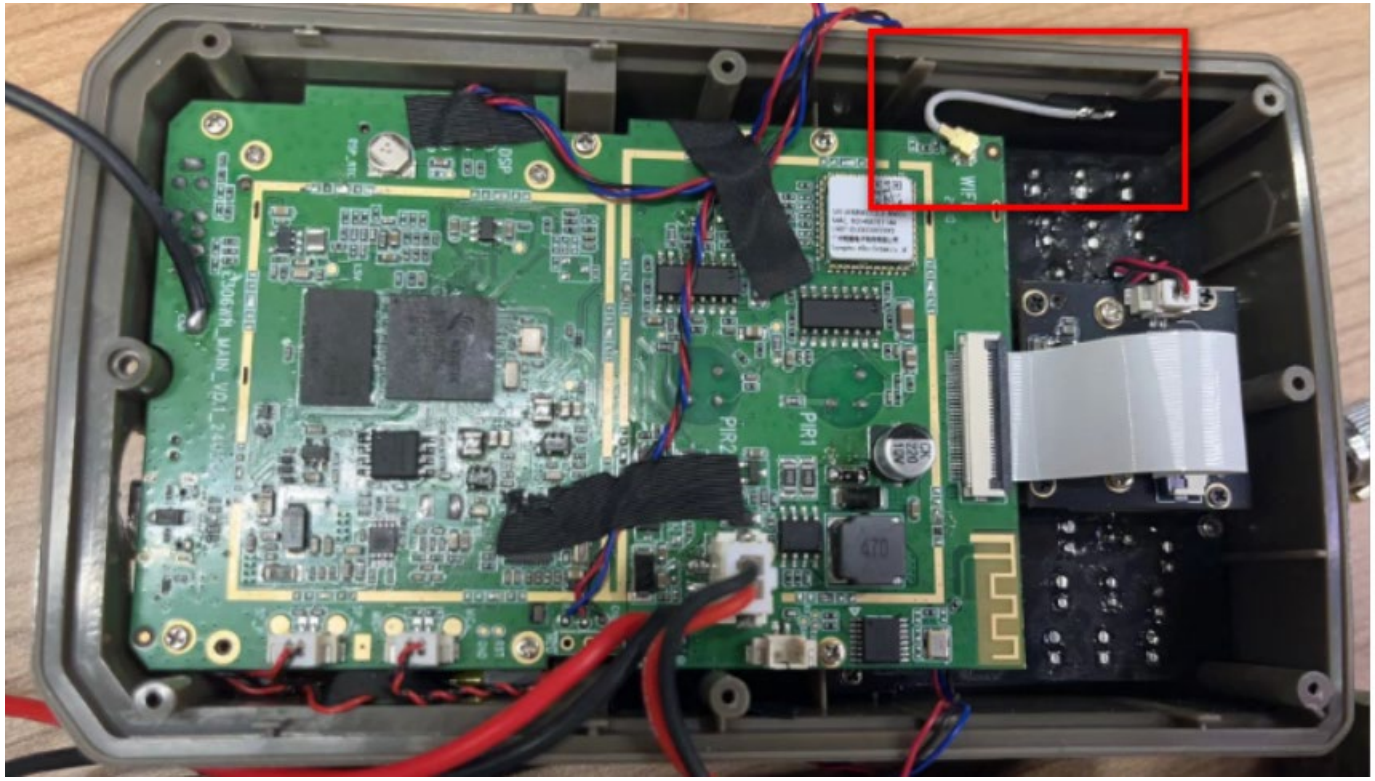
1. Project description

Item antenna number	Machine subtype
1	recorder
Machine shell material: plastic shell	

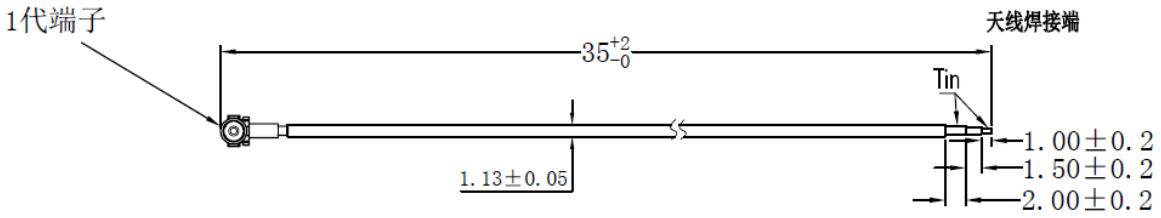
2. Antenna brief

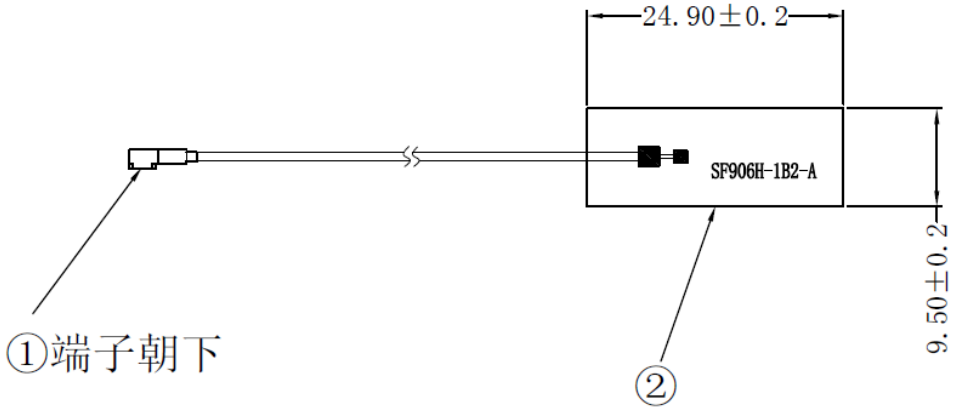
Antenna number	name	Operating frequency band/MHZ	Material/Structure
1	WIFI	2400MHz/2500MHz	FPC

Antenna layout

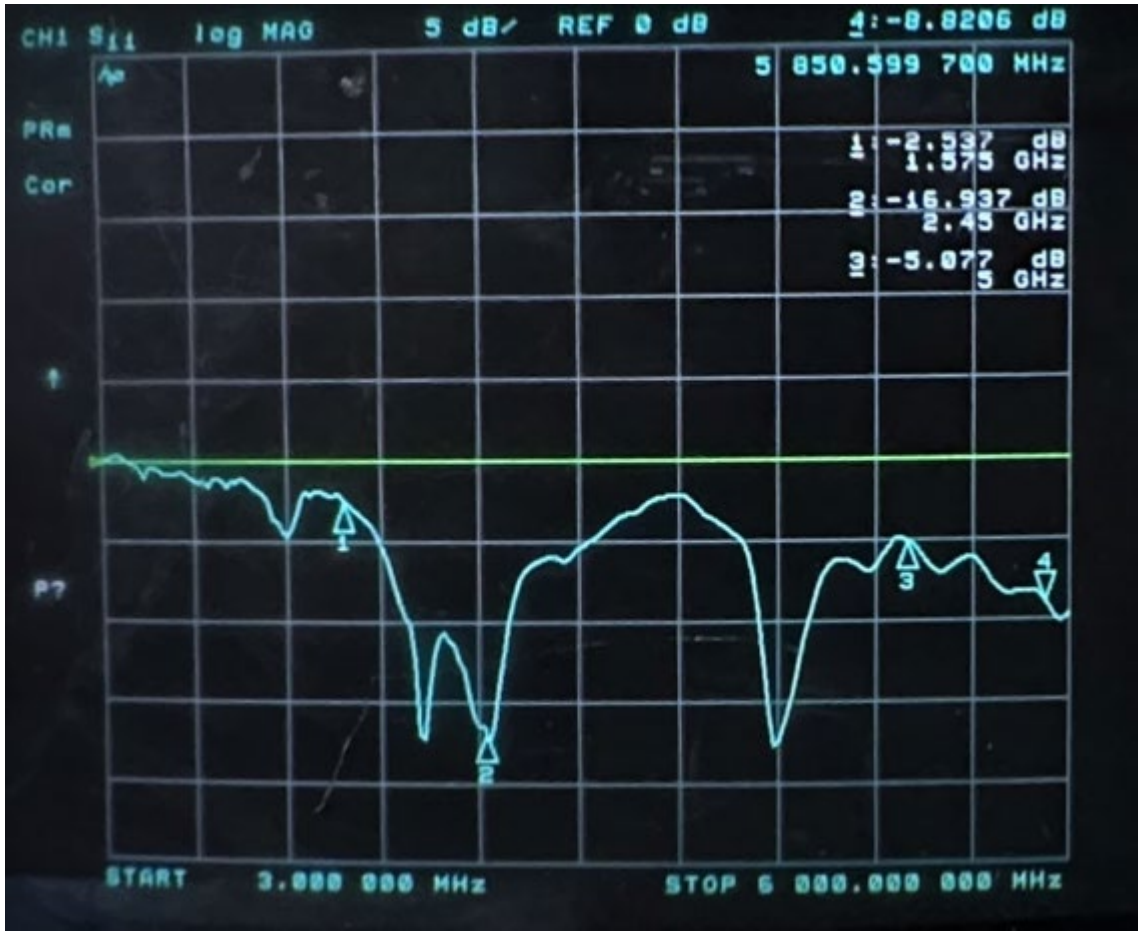


Antenna Size:



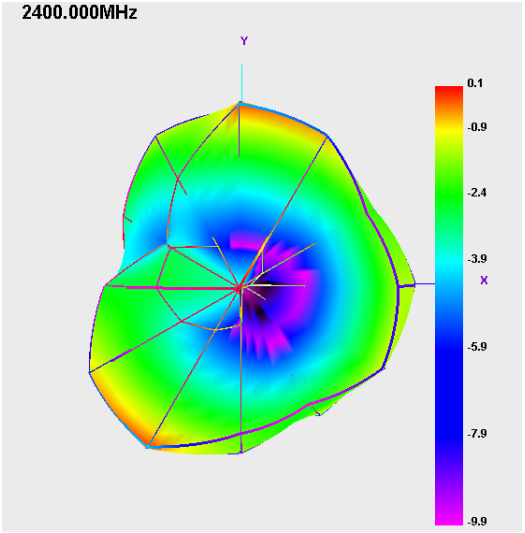


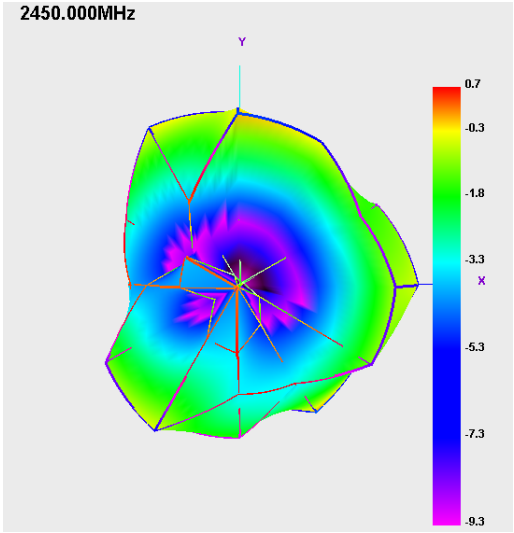
WIFI antenna S11

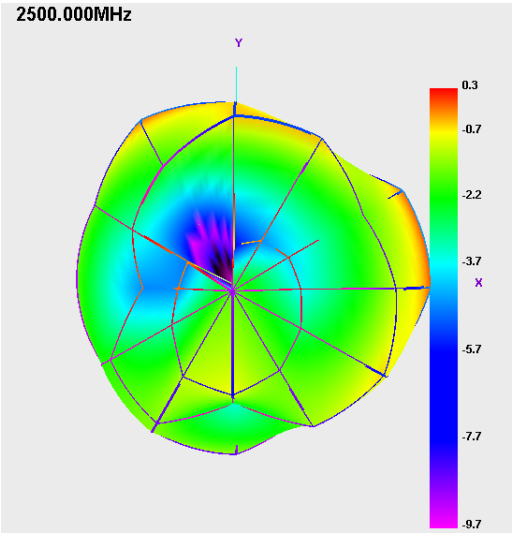


WIFI antenna efficiency

Passive Test For 2.4G			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	38.35	-4.16	0.12
2410	37.48	-4.26	-0.19
2420	35.99	-4.44	-0.37
2430	38.66	-4.13	0.12
2440	40.05	-3.97	0.46
2450	41.97	-3.77	0.71
2460	43.24	-3.64	0.75
2470	39.93	-3.99	0.35
2480	37.57	-4.25	0.02
2490	38.63	-4.13	0.19
2500	39.09	-4.08	0.34





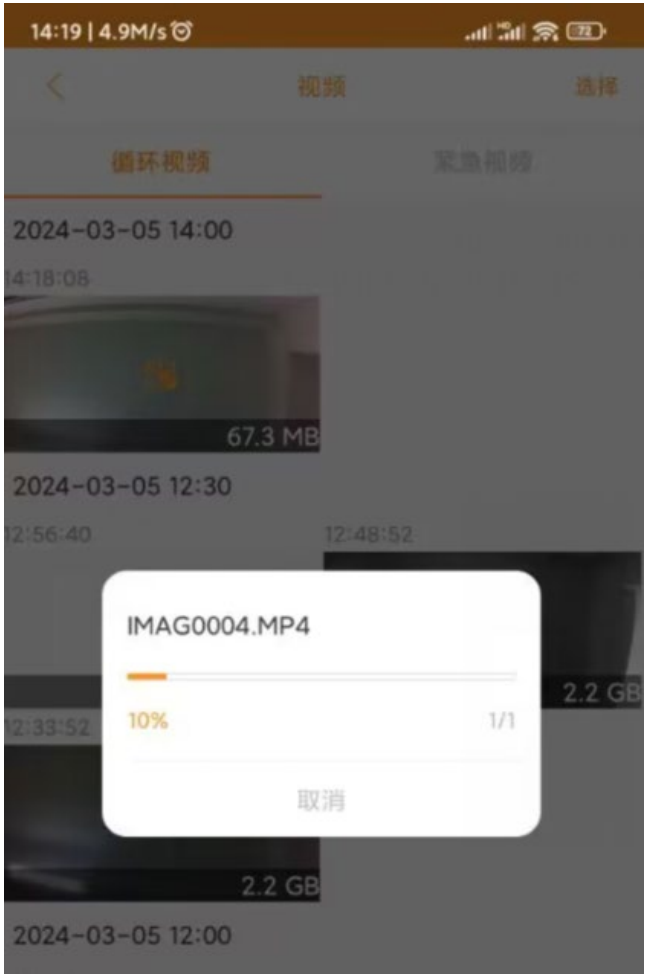


WIFI antenna measured distance & download rate

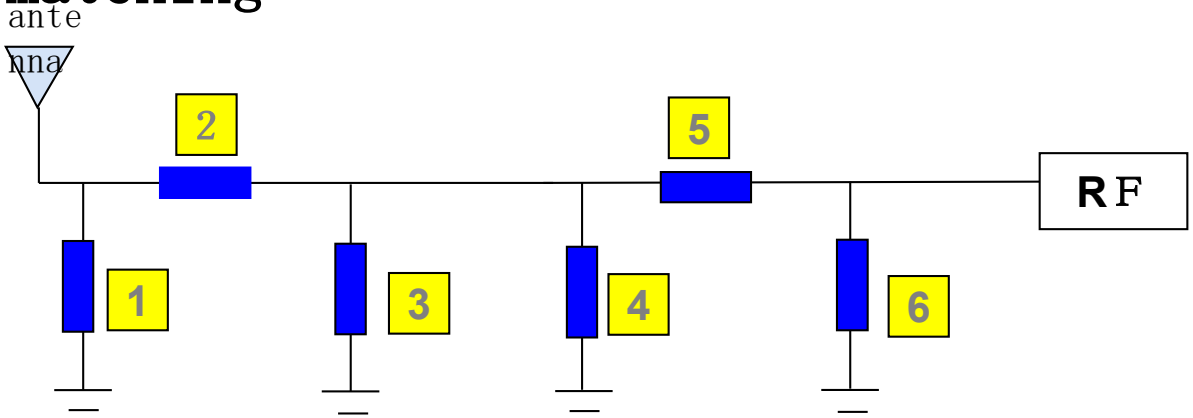
Measured effect	
Model number	1
Test environment	Soward Research and Development Center
Test equipment	Redmi K50pro
Test distance	10米≥

Download rate	
Model number	1
Test environment	Soward R&D Center -1 m
Test equipment	Redmi K50pro
Test Speed	4.6MBps~4.8MBps

WIFI antenna measurement picture



Antenna matching



Main antenna	1	2	3	4	5	6	Other
Original matching							
Change matching							

Note: Unchanged match

Note: 1. This report is based on the actual commissioning and testing of the commissioning prototype, including environmental treatment, antenna position and assembly position of each device
Cannot be changed at will;
2. If there is any change in the materials used by the prototype, please timely report to our company for re-verification;
3. List of sensitive devices:
TP (material, coating, wiring, etc.)
Screen (amplifier circuit, LED, wiring design, etc.)
Shell material (antenna assembly method, structural interference, shell material, antenna position height and area, etc.)
Motherboard (motherboard conduction, RF circuit matching, PA, dual power, filter, LNA, power circuit, etc.)
Camera, battery, motor, MIC, fingerprint recognition module, etc
4. Due to the small number of commissioning prototypes or only one, some probability problems can not be completely found, it is recommended to troubleshoot the problem points in small batches of trial production before mass production (such as flashing screen, loudspeaker noise, TP jump point, black screen death, signal diving, etc.)