

Antenna Test Report

Project name:DR1103

Date:2025.04.29

Project Introduction

1.Brief description of the project

Number of project antennas	Machine type
1	Lipstick car machine
Shell material: plastic shell	

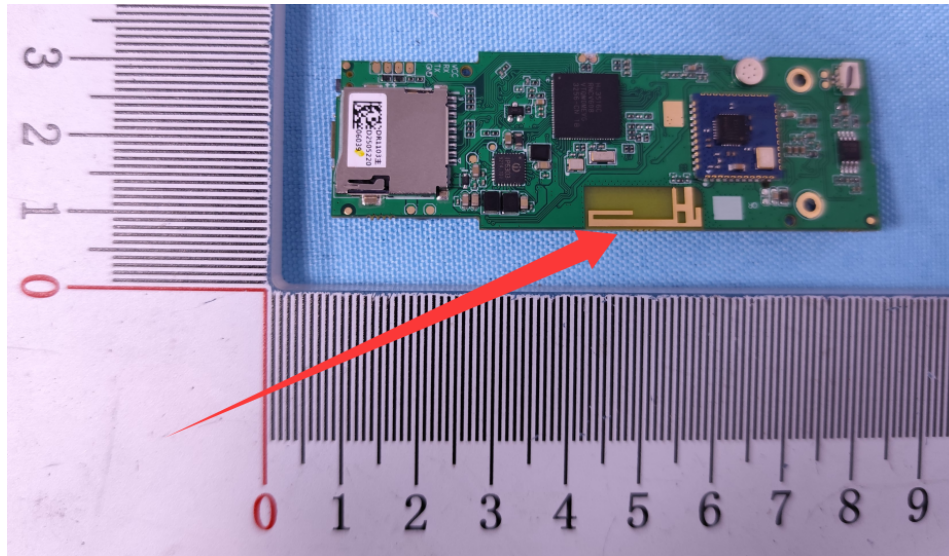
2.Antenna brief description

Antenna number	name	Operating frequency band/MHZ	Material/Construction
1	WIFI&BT	2400MHz/2500MHz	PCB/Onboard Antenna

Manufacturer : DDPAI Technology Co., Ltd.

Address : 28F, Building 8A International Innovation Valley, Nanshan District, Shenzhen, China

Antenna layout



WIFI&BT Antenna S11



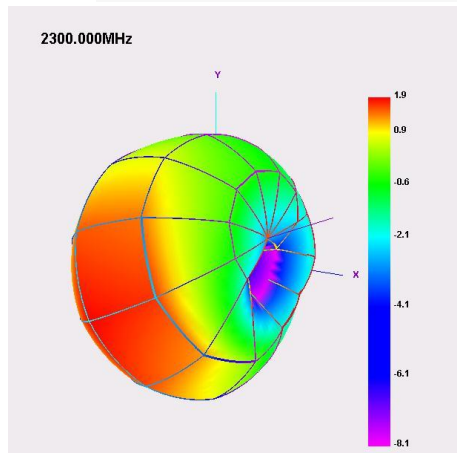
WIFI antenna active data

Model number	channel	B-mode (11MHz)		B-mode (11MHz)		B-mode (11MHz)	
		TRP	TIS	TRP	TIS	TRP	TIS
#1	1	12.73	-77.62	9.4	-64.65	11.19	-61.1
	7	13.93	-77.59	10.45	-63.13	11.64	-59.51
	11	13.84	-77.22	10.52	-61.62	11.72	-59.1
#2	1	11.55	-76.61	9.6	-64.43	10.53	-60.09
	7	13.08	-77.21	10.75	-63.48	10.92	-58.12
	11	12.84	-76.36	10.61	-61.42	10.71	-57.31

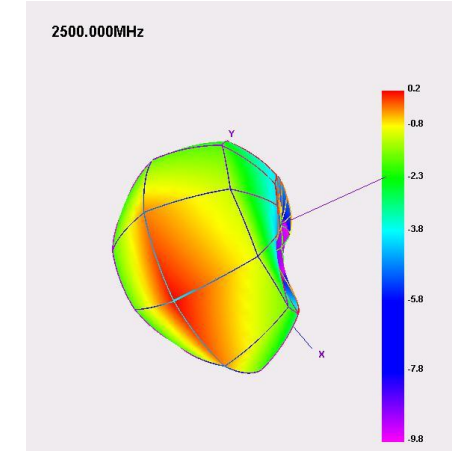
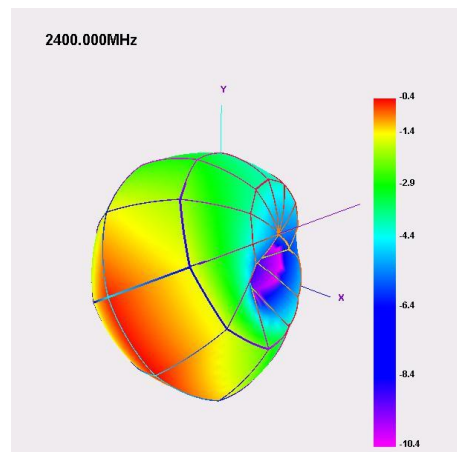
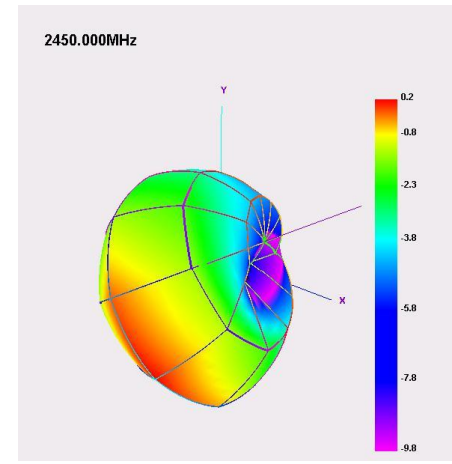
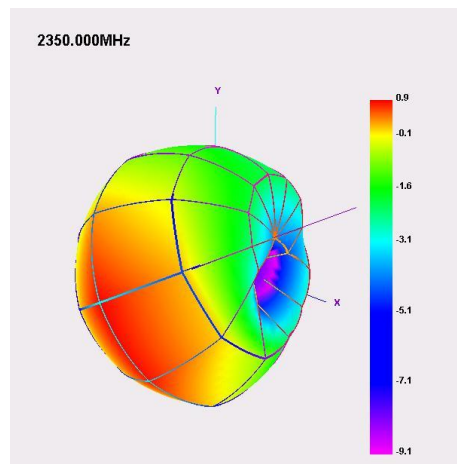
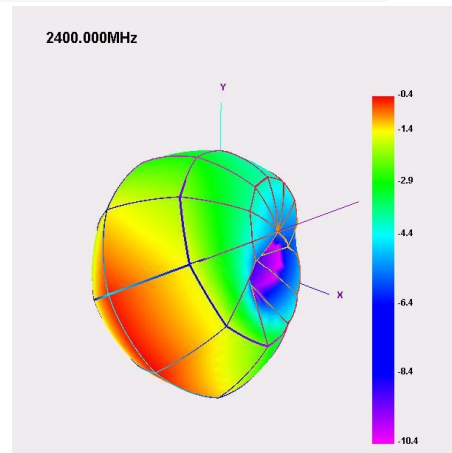
WIFI & BT antenna efficiency

Passive Test For 2.3G-2.5G wifi						
Freq	Effi	Effi	Gain	Gain	Max	Min
(MHz)	(%)	(dB)	(dBi)	(dBd)	(dB)	(dB)
2300	57.47	-2.41	1.95	-0.2	1.95	-15.32
2310	57.76	-2.38	2.04	-0.11	2.04	-15.83
2320	45.79	-3.39	1.12	-1.03	1.12	-16.95
2330	41.81	-3.79	0.77	-1.38	0.77	-17.11
2340	36.34	-4.4	0.25	-1.9	0.25	-17.19
2350	40.49	-3.93	0.86	-1.29	0.86	-16.37
2360	40.8	-3.89	1.04	-1.11	1.04	-15.81
2370	39.93	-3.99	1.08	-1.07	1.08	-15.58
2380	38.22	-4.18	1.02	-1.13	1.02	-15.71
2390	34.92	-4.57	0.75	-1.4	0.75	-15.95
2400	25.49	-5.94	-0.44	-2.59	-0.44	-17.27
2410	22.4	-6.5	-0.89	-3.04	-0.89	-17.46
2420	23.18	-6.35	-0.61	-2.76	-0.61	-16.76
2430	26.52	-5.76	0.08	-2.07	0.08	-15.72
2440	29.54	-5.3	0.71	-1.44	0.71	-15.35
2450	25.47	-5.94	0.19	-1.96	0.19	-15.95
2460	23.96	-6.21	0	-2.15	0	-16.26
2470	16.89	-7.72	-1.46	-3.61	-1.46	-18.63
2480	15.8	-8.01	-1.71	-3.86	-1.71	-19.38
2490	16.82	-7.74	-1.37	-3.52	-1.37	-19.25
2500	23.48	-6.29	0.19	-1.96	0.19	-17.71

2.3G-2.4G WIFI



2.4G-2.5GWIFI



Antenna matching

