

YONG CHENG INTERNATIONAL(OTA)

D338 Debugging Report

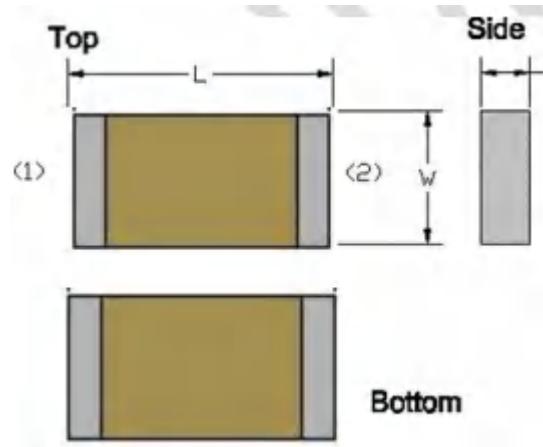
Antenna Test Report



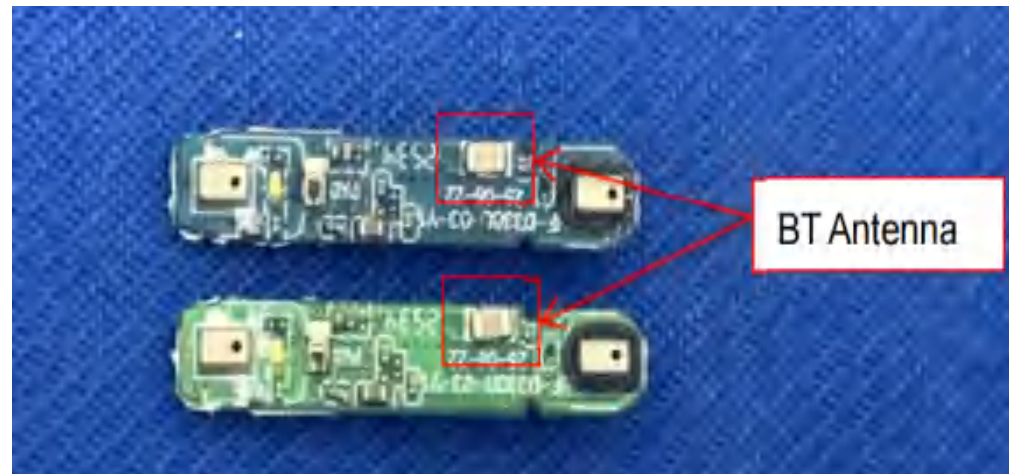
Address : Building A, Rite Science Park, Bao'an District, Shenzhen City, 7th Floor

Contact number: 13530576606

◆ July 10, 2025



Dimension (mm)	
L	1.60 ± 0.10
W	0.80 ± 0.10
T	0.45 ± 0.10



Test item	
1	Matching parameter
2	Network debugging antenna S parameters
3	Microwave darkroom test OTA active data
4	Measurement of antenna efficiency field pattern in microwave darkroom
5	measuring distance
6	Assembly item
7	summary of commissioning test



Customer	HF	Project name	D338
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frequency
band

2400MHZ-2500MHZ

engineer:

CK

Date

2025/07/10

phone:

13530576606





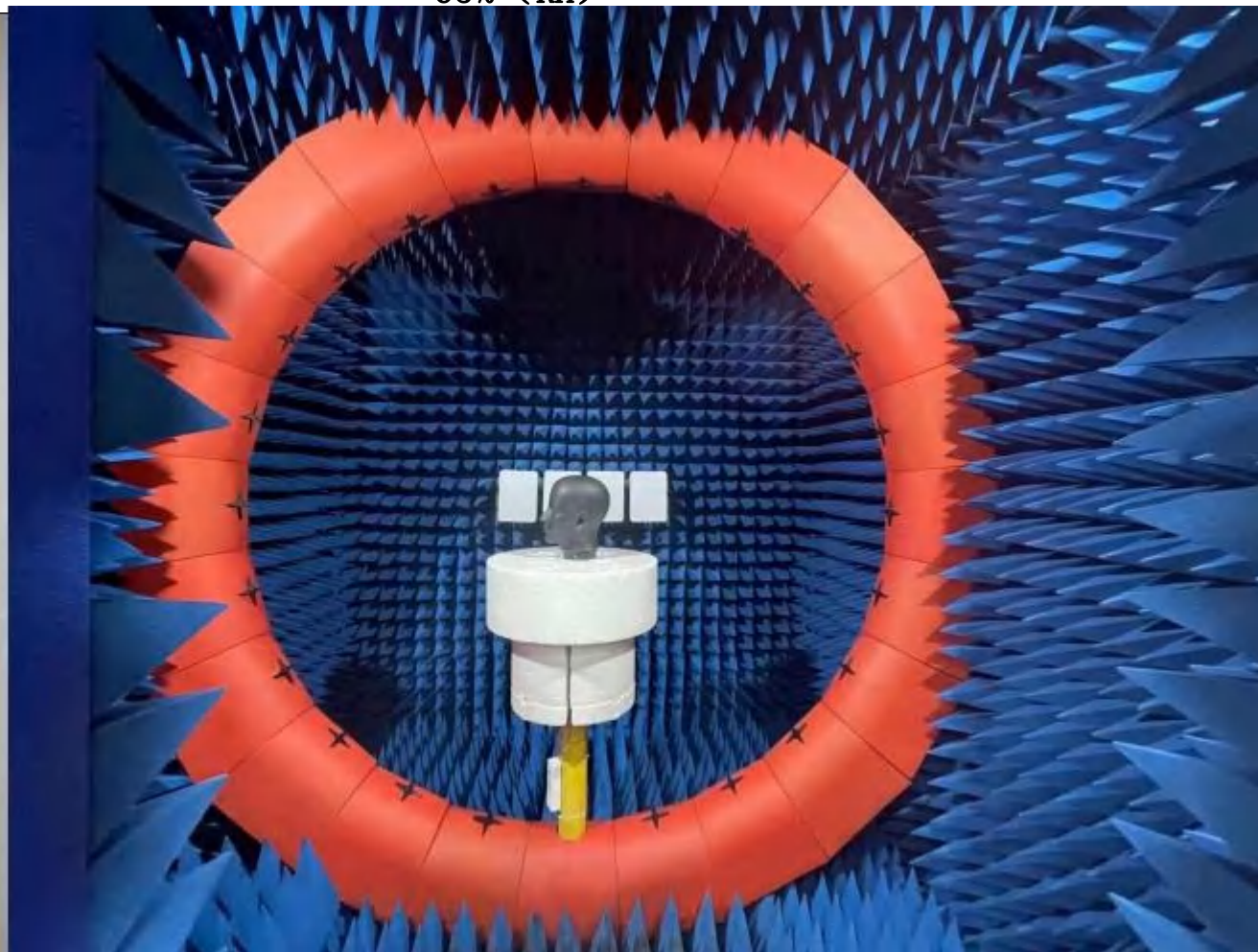
Agilent Technologies E5071B & R&S CMW500

Atenlab M3

CK

25°C

65% (RH)

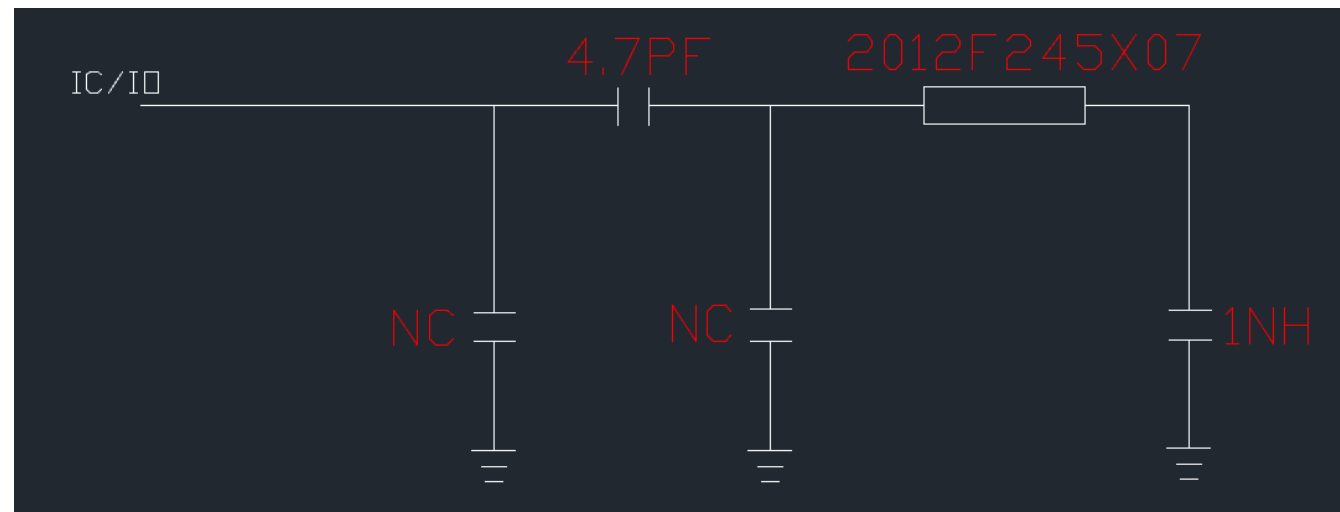




Antenna Placement ANT:2012F245X07

L/R:Matching Circuit:

Replace the 10Uh power inductor with a wound inductor.



S11、SWR、smith chart:

L



R



Antenna active test data

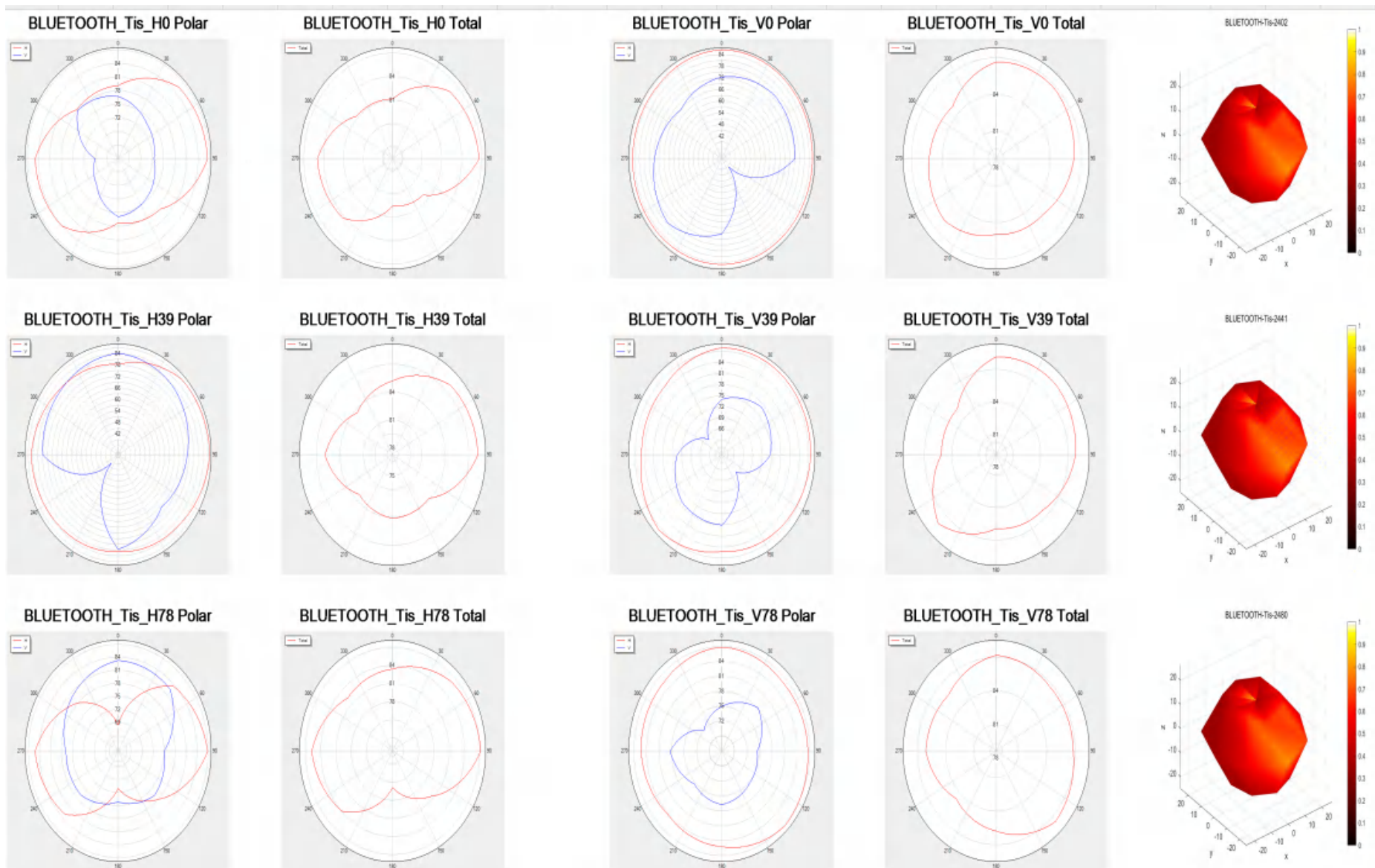
ANT EIRP&EIS parameter Summary (free field)

		Free		Human	
R#	Channel	TRP	TIS	TRP	TIS
	CH 0	4.28	-87.06	0.99	-83.01
	CH 39	4.22	-87.68	0.27	-83.79
	CH 78	4.65	-87.88	0.24	-83.94

atom head)

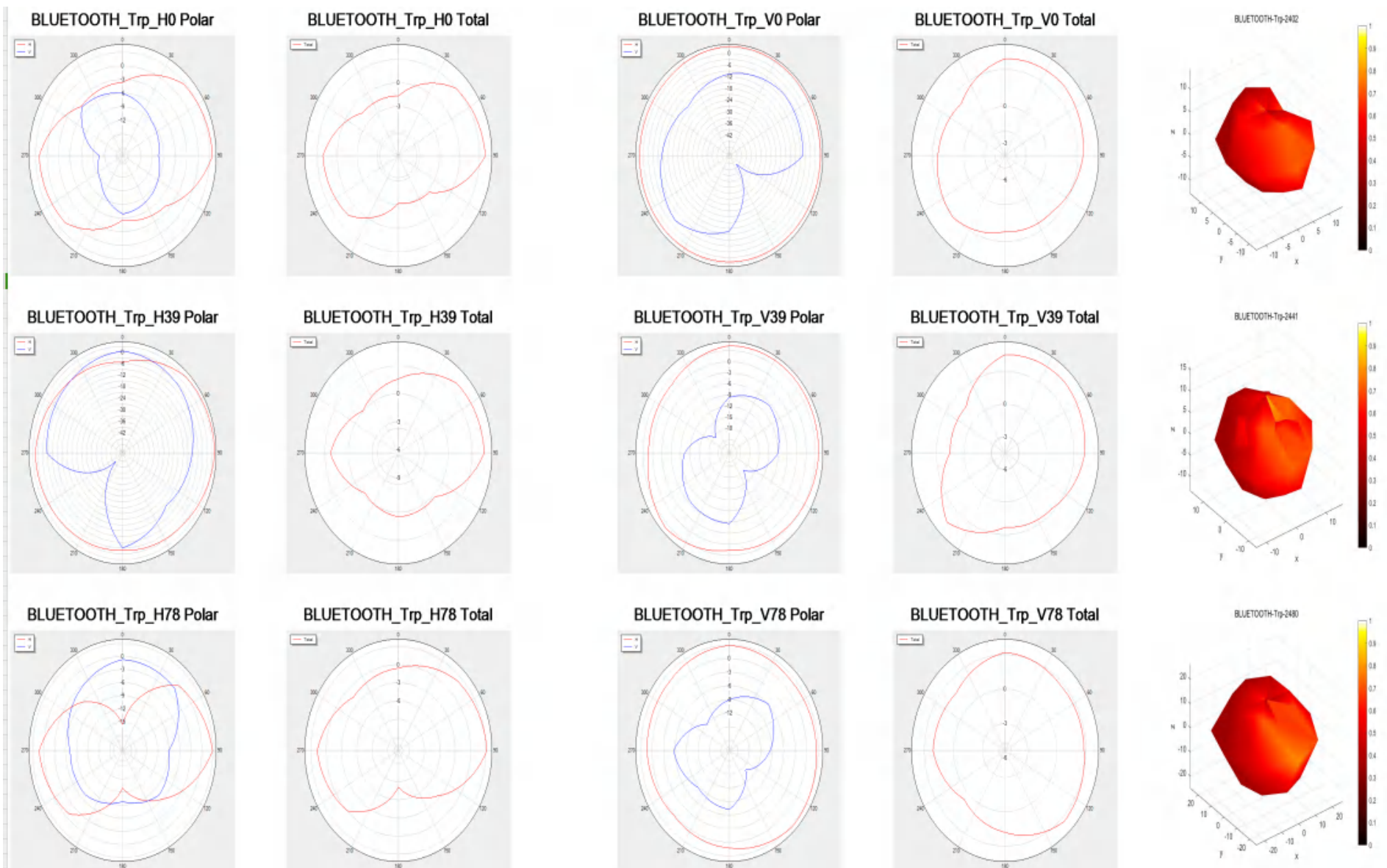


-TIS The antenna pattern of the free field

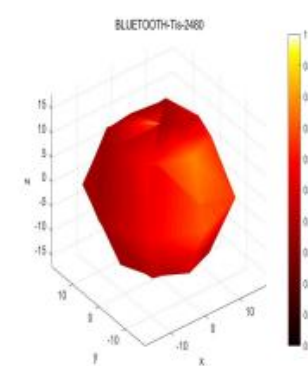
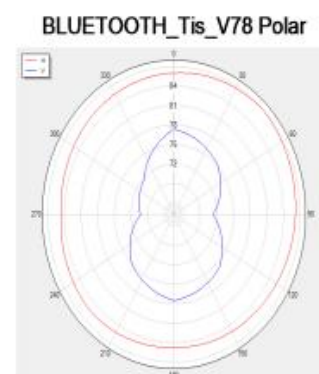
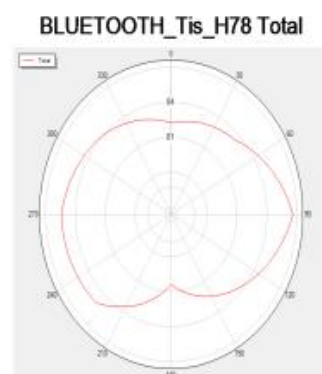
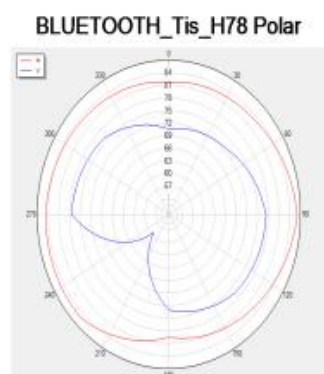
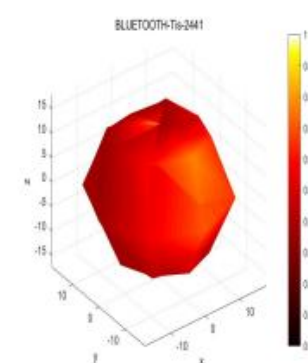
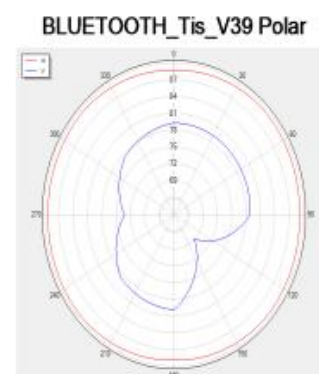
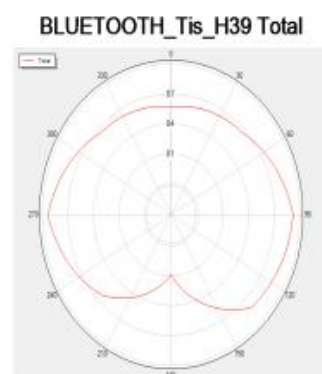
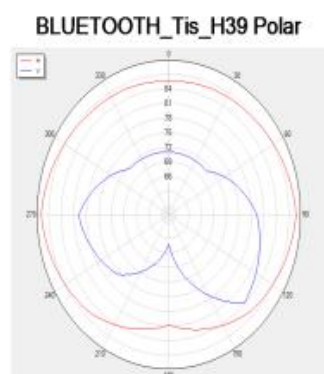
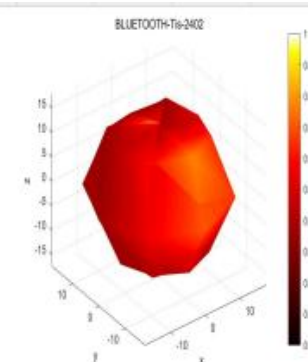
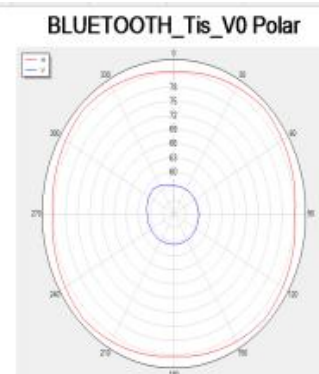
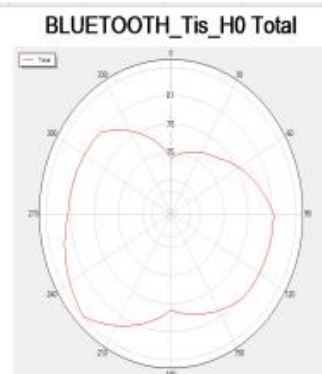
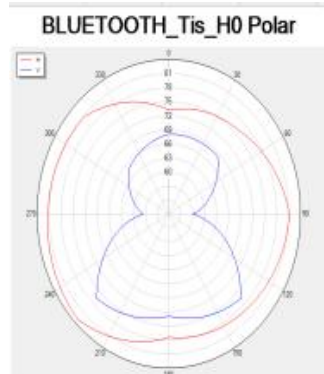




-TRP The antenna pattern of the free field



TIS-An antenna pattern simulating a human head





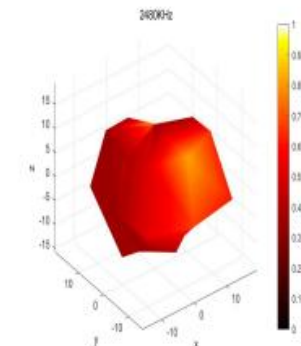
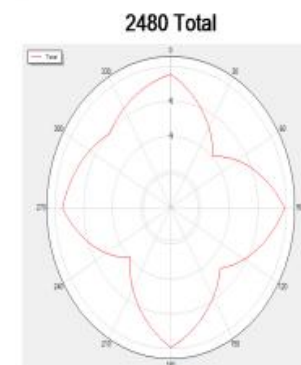
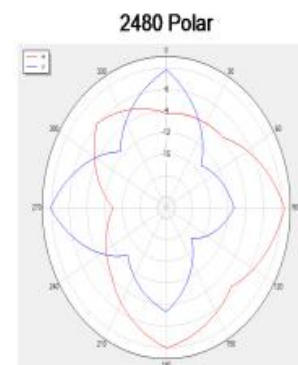
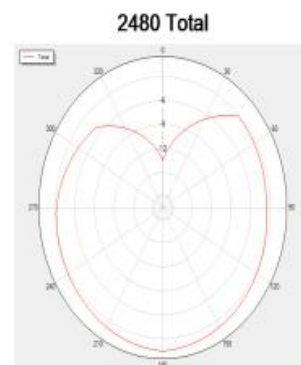
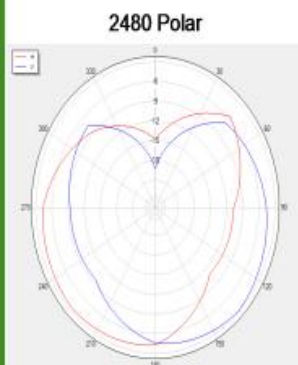
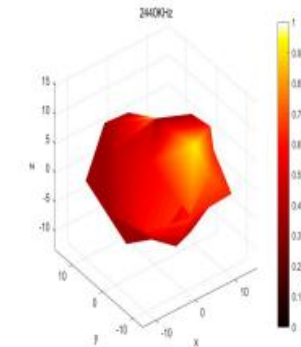
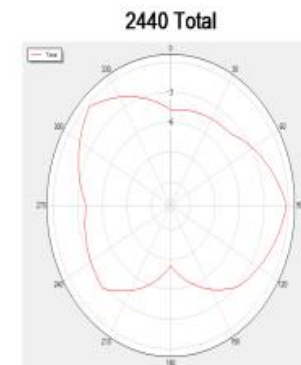
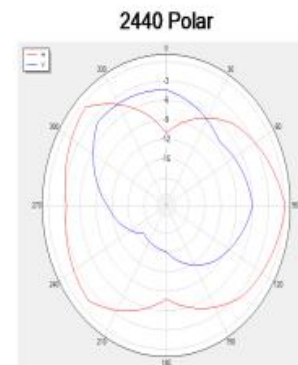
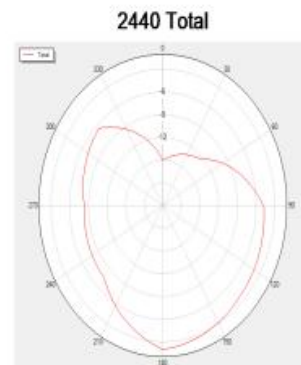
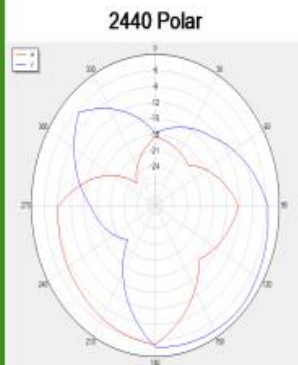
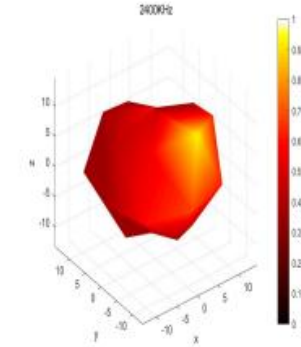
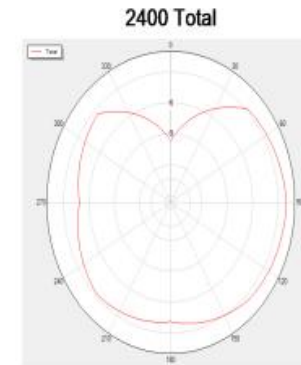
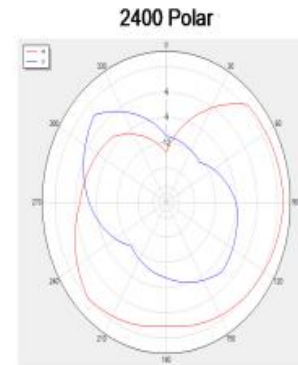
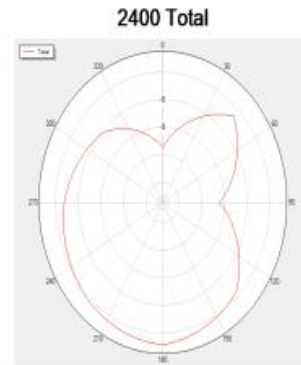
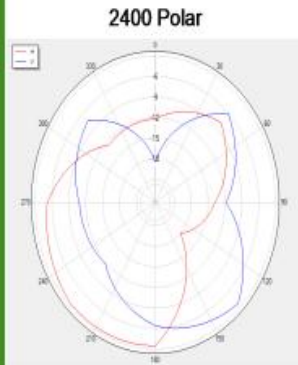
Antenna efficiency gain



Frequency	Effic	Percen	Gain (dbi)
2400	-4.88	32.50%	-1.55
2410	-4.59	34.73%	-1.33
2420	-4.82	32.93%	-1.69
2430	-4.92	32.21%	-2.06
2440	-5.28	29.64%	-1.94
2450	-5.48	28.34%	-2.54
2460	-5.75	26.60%	-3.19
2470	-5.9	25.67%	-2.57
2480	-5.69	26.97%	-2.07
2490	-5.8	26.30%	-1.83
2500	-5.62	27.44%	-1.7



Antenna radiation pattern 2400.00MHz/2440.00MHz/2480.00MHz



measuring distance

a. Environme

test project	Trying hard not to hear		Pocket test requirement		descr
D338			right front	OK	The iPhone5 was tested over 14+ meters in the park
	OK		front-left	OK	
			right rear	OK	
			left rear	OK	

b. summarize

D338 machine actual test, OTA data test, basically distance matching,
our park grass test effect is excellent

assembly method

Thank you for watching

Wish you enjoy your life

2023-5-12