



YONG CHENG INTERNATIONAL(OTA)

HQ20 天线规格书

Antenna Specifications



◆ Date: June 5th, 2024

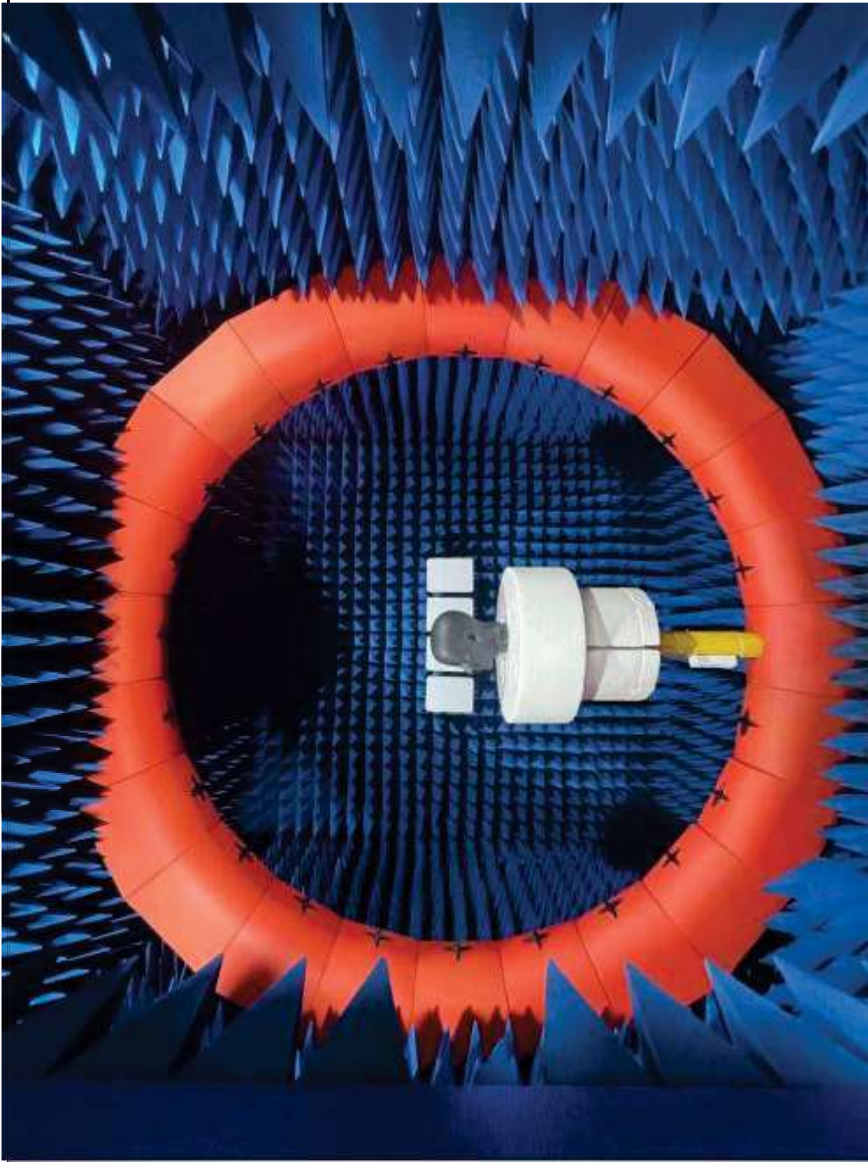
Test item	
1	Matching parameter
2	Network debugging antenna S parameters
3	Microwave darkroom test OTA active data
4	Measurement of antenna efficiency field pattern in microwave darkroom
5	measuring distance
6	Assembly item
7	summary of commissioning test



Customer		Projectt name	HQ20
frequency band ANT Type ANT Model Max. Gain manufacturer: Shenzhen Xinlianxin Electronics Co., Ltd add.: 5th Floor, Building 2, Hezhou Anle Industrial Park, Hezhou Community, Hangcheng Street, Bao'an District, Shenzhen	UTC		
	2400MHZ -2500MHZ		
	PCB Antenna	engineer:	CK
	HQ20-JL7006F-V5.0		
	3.47dBi		
Date		phone:	13530576606
2024/06/04			

1.测试工具

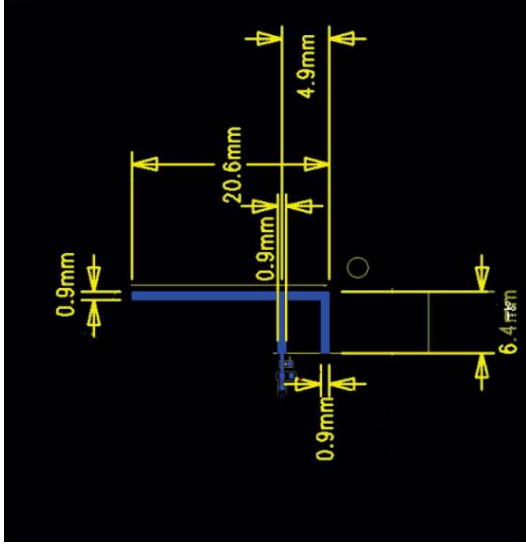
矢量网络分析仪&综测仪	Agilent Technologies E5071B & R&S CMW500		
暗室	Atenlab	M3	
测试工程师	CK		
温度	25℃		
湿度	65% (RH)		





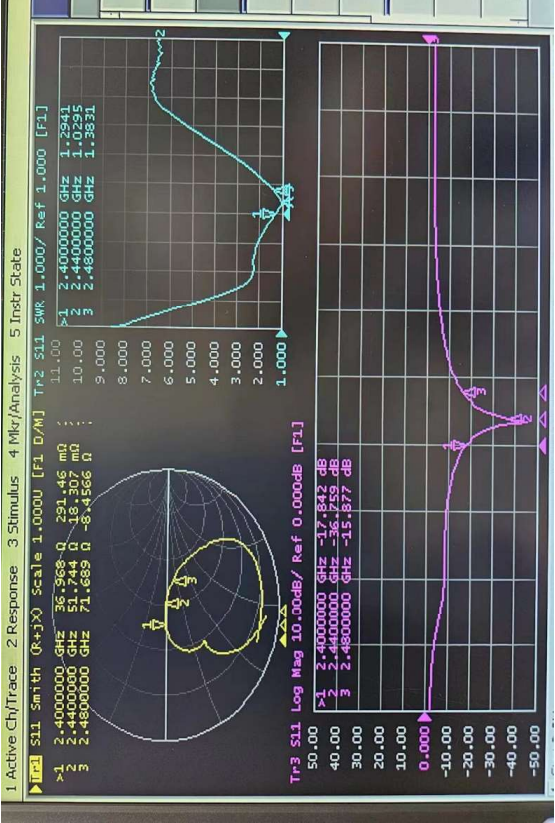
Antenna size

ANT: antenna(咏成国际)
Matching Circuit: 参数





S11、SWR、smith chart:





Antenna active test data

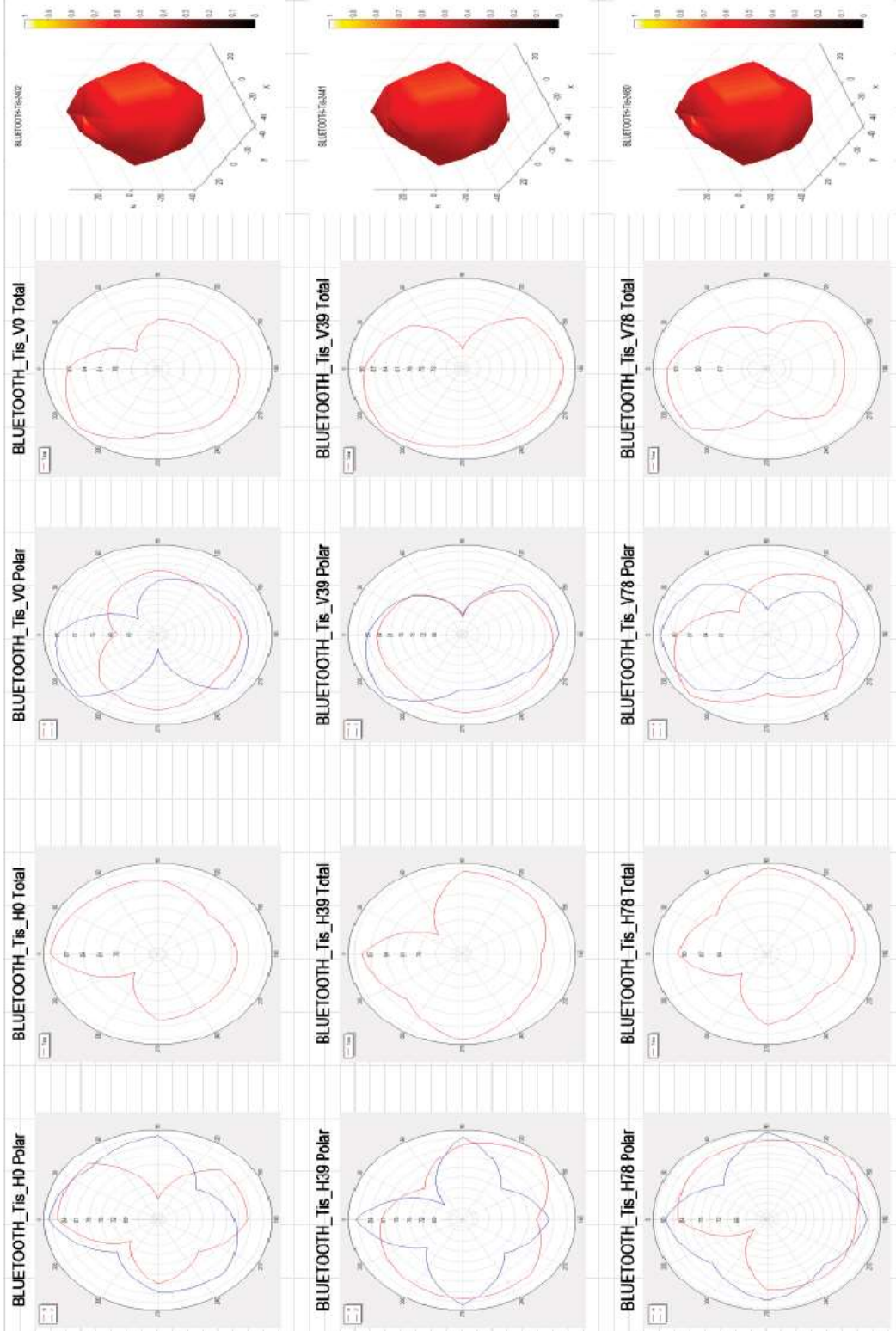
ANT EIRP&EIS parameter Summary (free field)					
频段frequency band	BT 2.4G				
信道route	0	39	78		
# TRP (dBm)	6.54	6.79	6.66		
# TIS (dBm)	-89.28	-89.72	-91.63		

ANT EIRP&EIS parameter Summary (phantom head)					
频段frequency band	BT 2.4G				
信道route	0	39	78		
# TRP (dBm)	3.27	3.56	3.28		
# TIS (dBm)	-85.44	-85.27	-86.13		



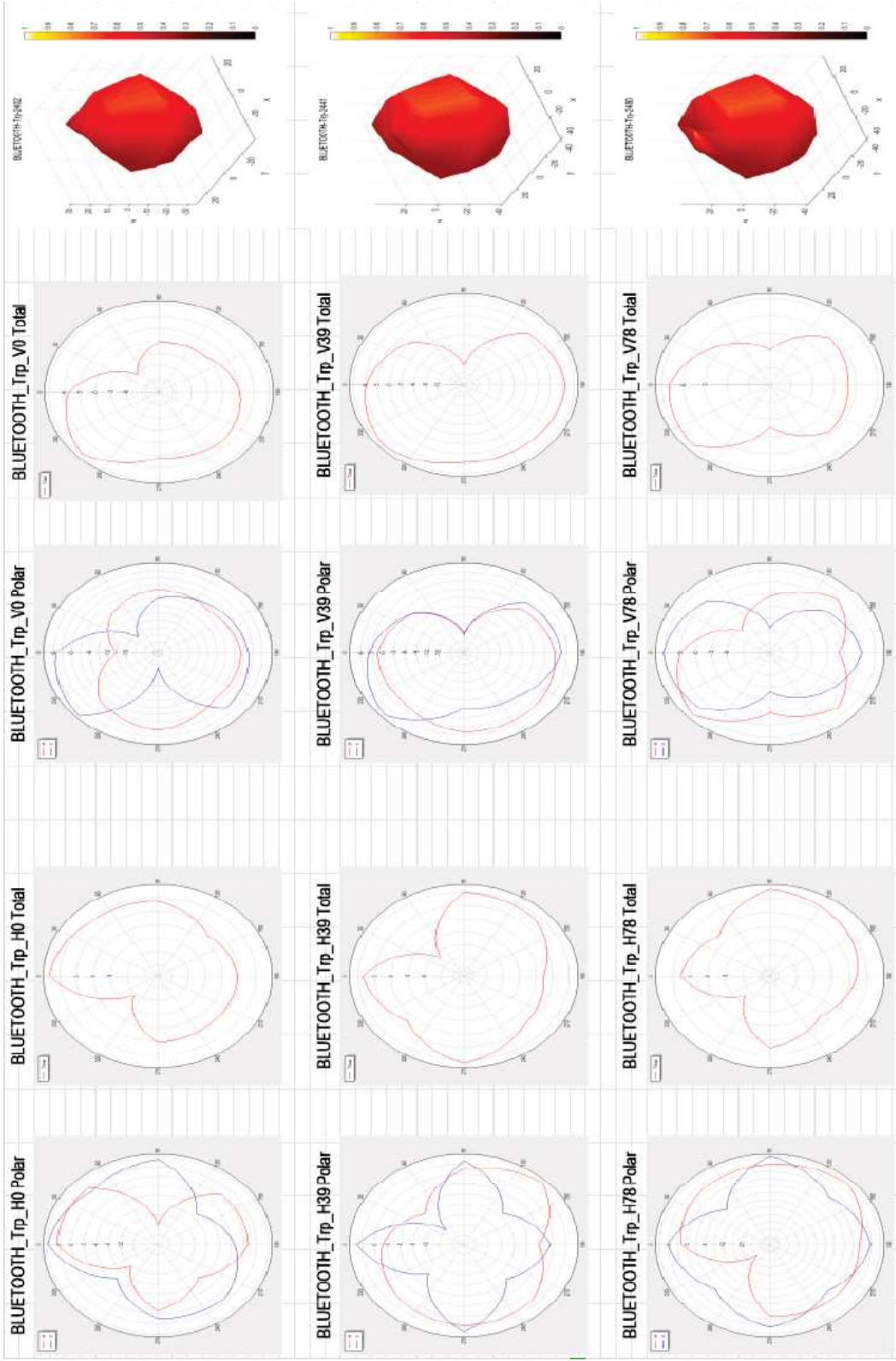
#

-TIS The antenna pattern of the free field

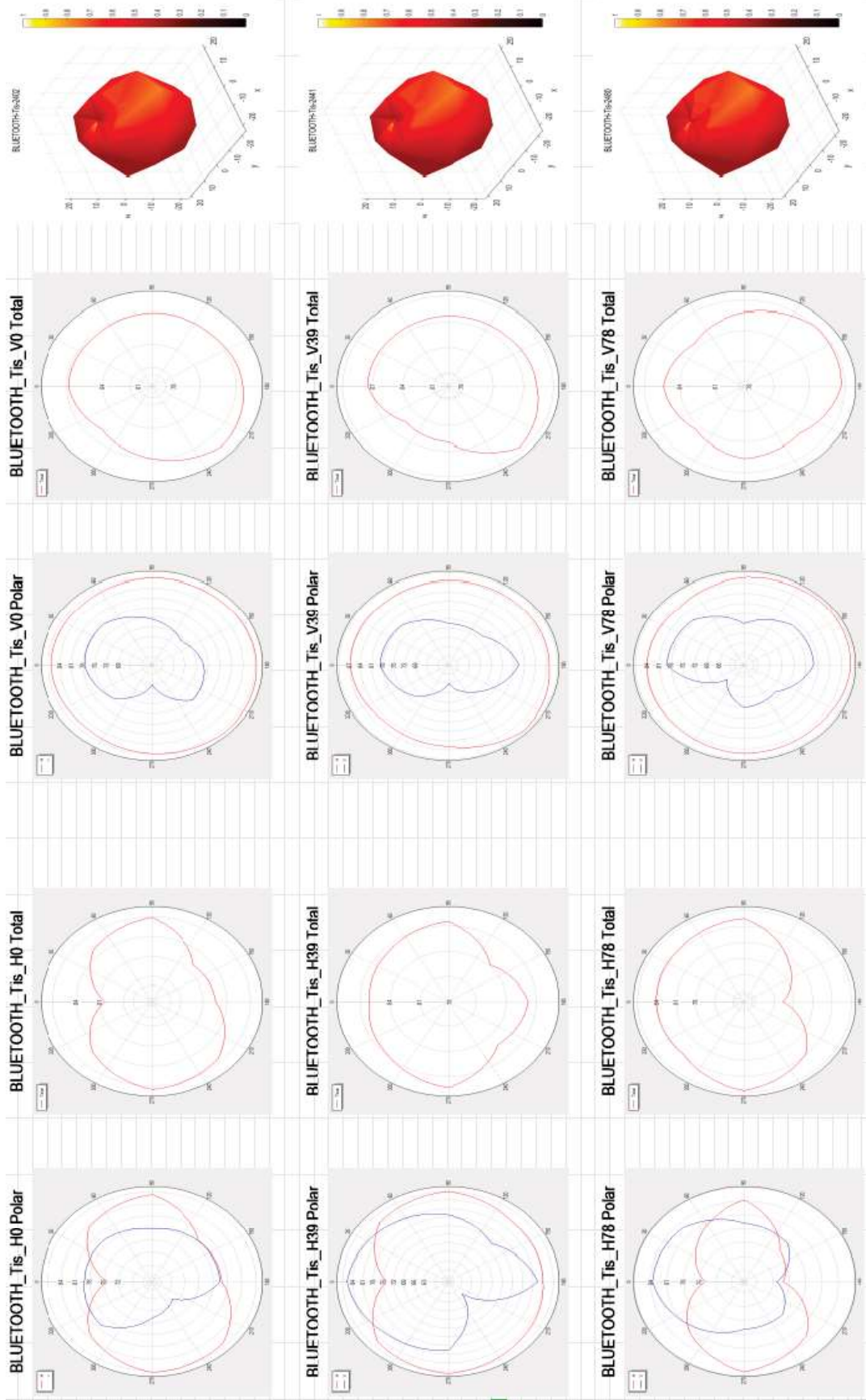




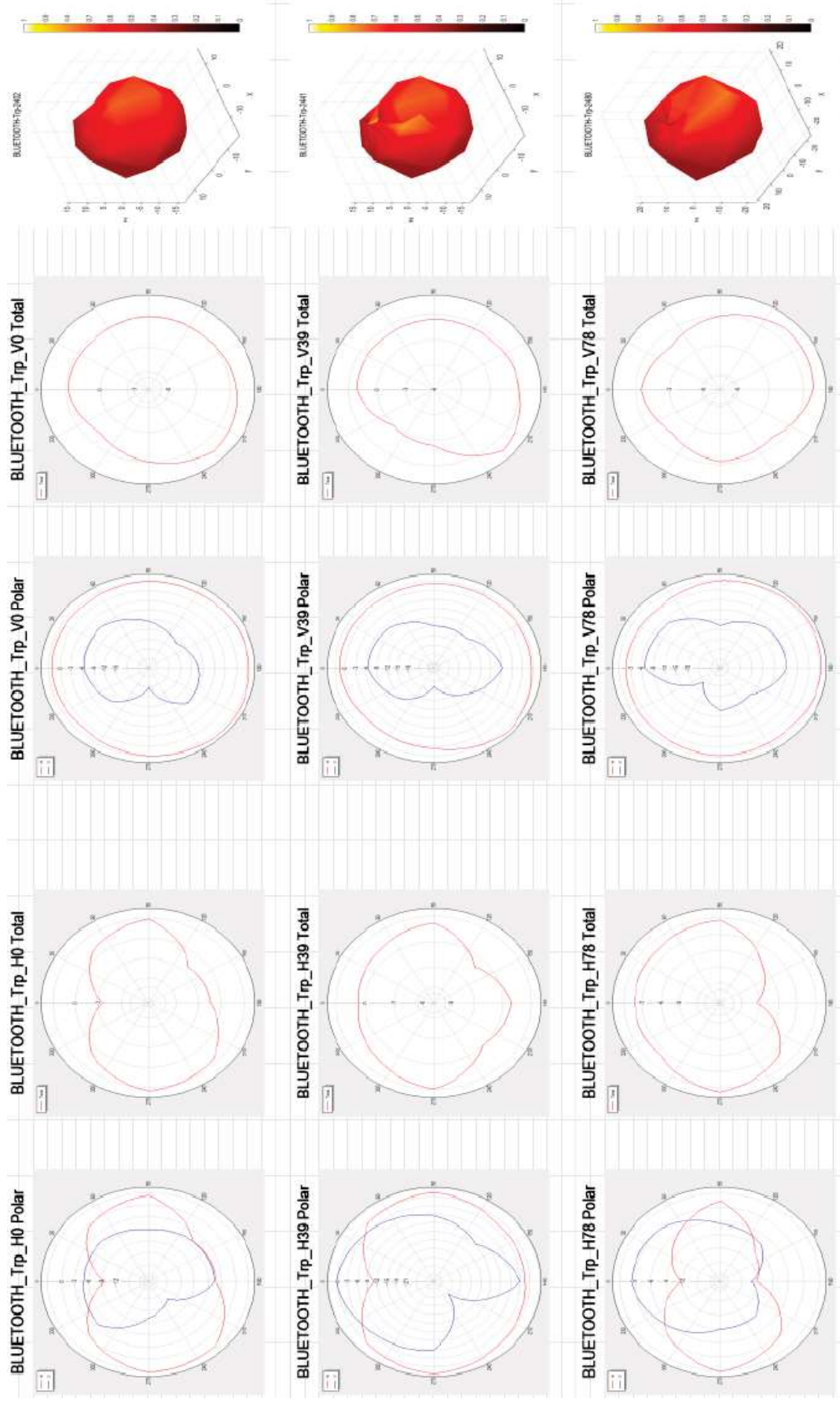
-TRP The antenna pattern of the free field



-TIS-An antenna pattern simulating a human head



-TRP-An antenna pattern simulating a human head





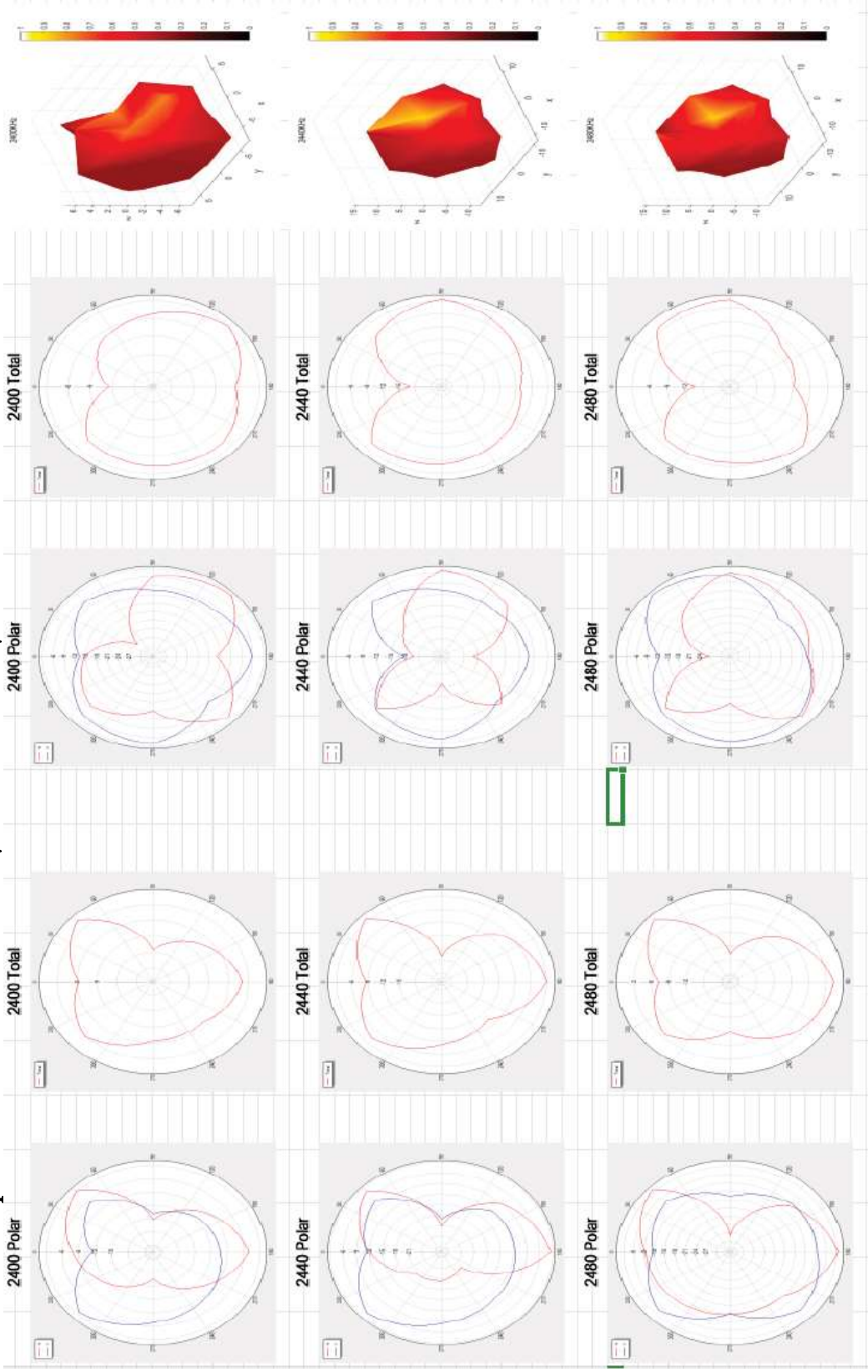
Antenna efficiency gain

天线效率与增益图

Frequency	Effic	Perce	Gain
2400	-4.12	38.76%	0.66
2410	-4.11	38.81%	1.12
2420	-3.92	40.56%	1.96
2430	-4.2	37.99%	2.16
2440	-4.46	35.79%	3.04
2450	-4.1	38.87%	3.47
2460	-4.2	38.04%	3.27
2470	-3.93	40.46%	3.04
2480	-3.4	45.74%	2.79



Antenna radiation pattern 2400.00MHz/2440.00MHz/2480.00MHz



measuring distance

a. Environme

test project	Trying hard not to hear	Pocket test requirement	descr
HQ20		right front	The iPhone5 was tested over 15+ meters in the park
		front-left	
	OK	right rear	
		left rear	

b. summarize

HQ20 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



2023-6-12