

YONG CHENG INTERNATIONAL(OTA)

W3 survey

report

Antenna Test Report



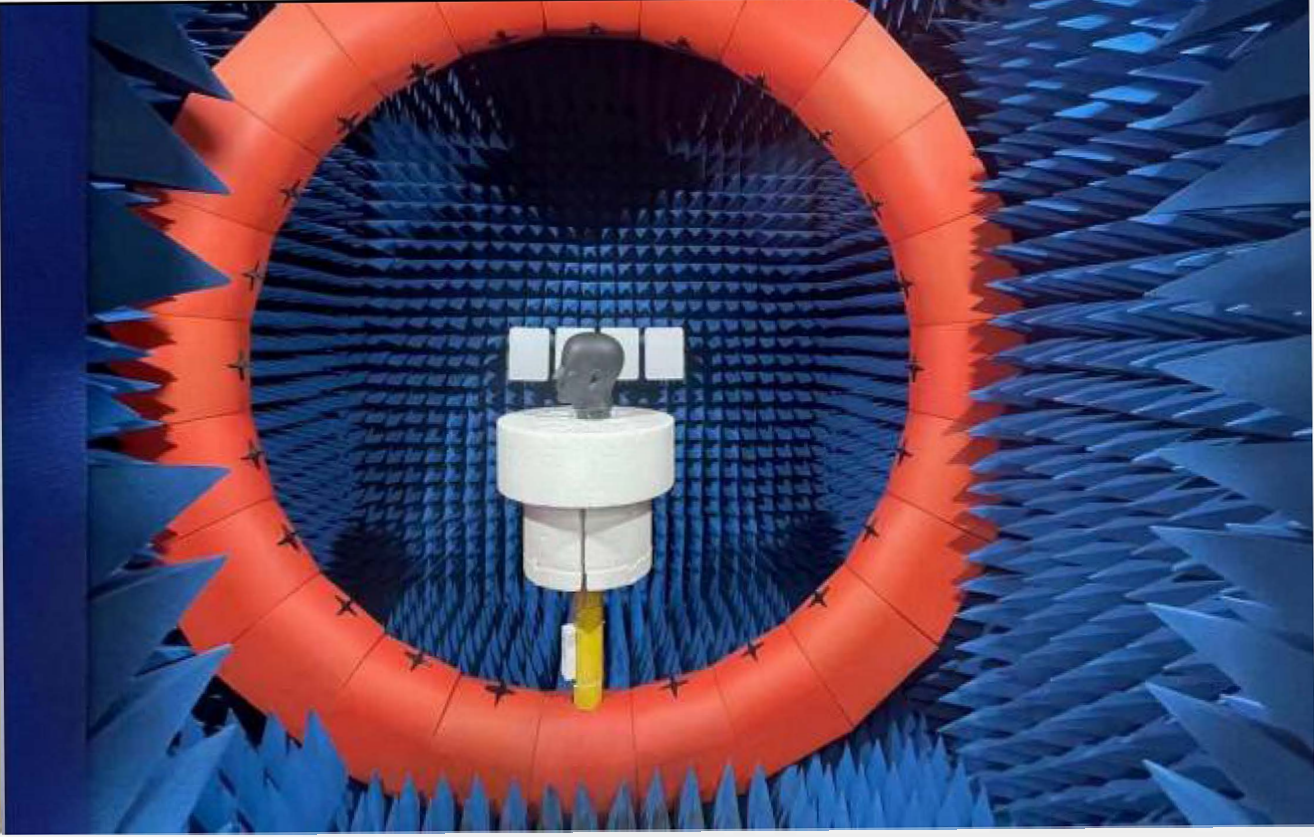
Test item	
1	Matching parameter
2	Network debugging antenna S parameters
three	Microwave darkroom test OIA active data
four	
five	measuring distance
six	Assembly item
seven	summary of commissioning test



Customer	JYX	Project name	W3
frequency band	2400MHZ-2500MHZ	engineer :	C K
Date	2024/05/08	phone :	13530576606

testing tool

Vector network analyzer & comprehensive measuring instrument	Agilent Technologies E5071B & R&S CMW500
darkroom	Atenlab M3
Test engineer	CK
temperature	25℃
humidity	65%(RH)



► Antenna Placement Ant: 2012f245x5 Antenna (Yongcheng International)



Application:

WLAN, 802.11b/g, Bluetooth, WLAN, etc...

Features

SMD, high reliability, ultra Impact, Omni-directional.

Part number Information

RANT	2012	F	245	X	5
(A)	(B)	(C)	(D)	(E)	(F)
(A)Product Type	Chip Antenna				
(B) Size Code	2.0x1.2mm(+/-0.2mm)				
(C) Material	High K material				
(D) Frequency	2.4 ~ 2.5GHz				
(E) Feeding mode	PIFA & Single Feeding				
(F) Antenna type	Type=5				





S11、SWR、smith chart:



Fre. (MHz)	2400	2440	2480
R-S11 (dB)	-12.13	-30.68	-12.16

Antenna active test data

ANT EIRP&EIS parameterSummary(free field)

频段frequency band	BT 2.4G (R)		
信道route	0	39	78
# TRP (dBm)	5.41	5.58	5.29
# TIS (dBm)	-87.74	87.44	-87.3

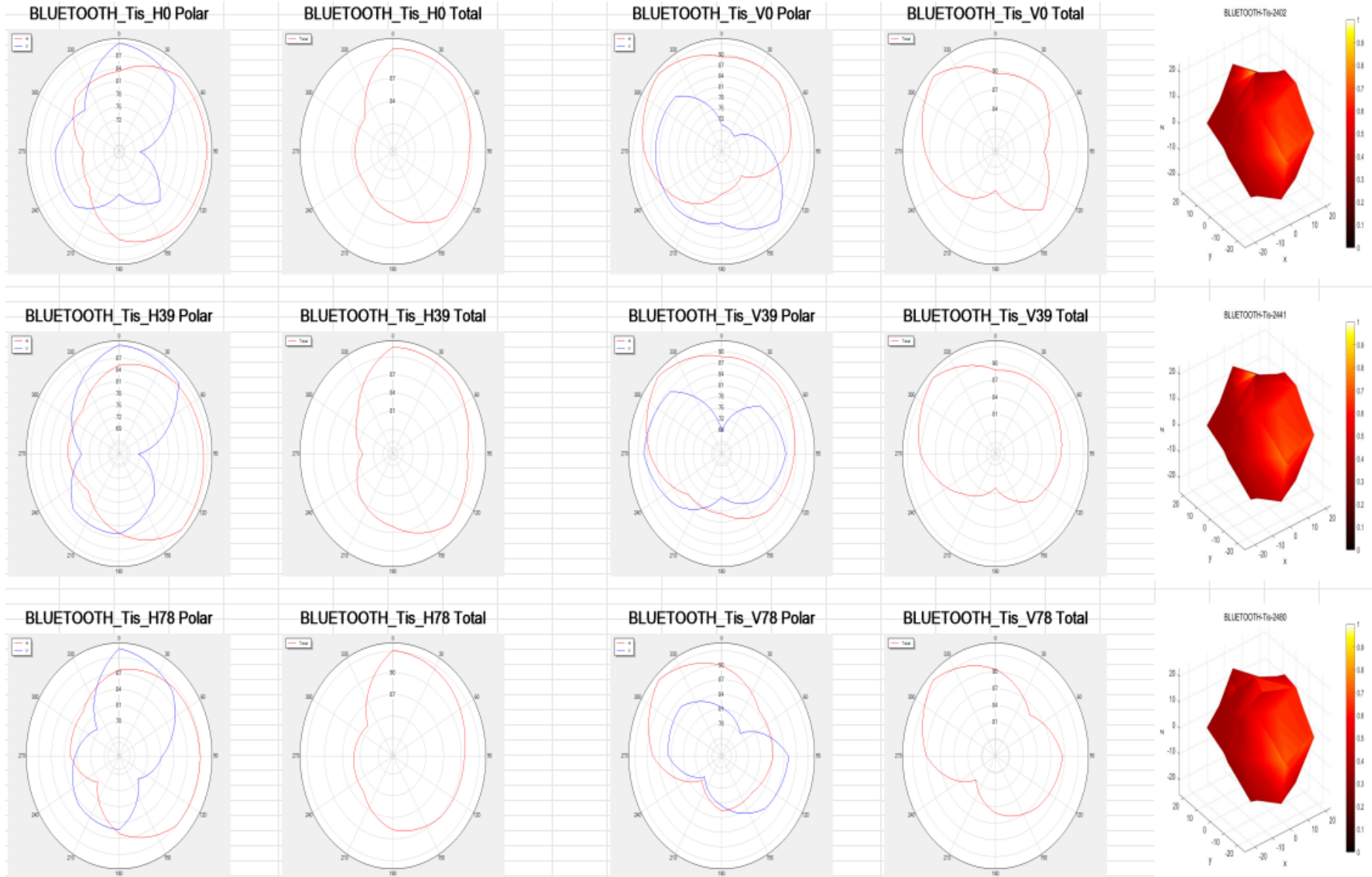
ANT EIRP&EIS parameter Summary(phantom head)

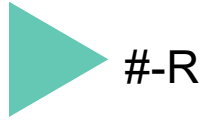
频段frequency band	BT 2.4G (R)		
信道route	0	39	78
# TRP (dBm)	2.22	2.28	2.25
# TIS (dBm)	-83.21	-83.32	-83.25



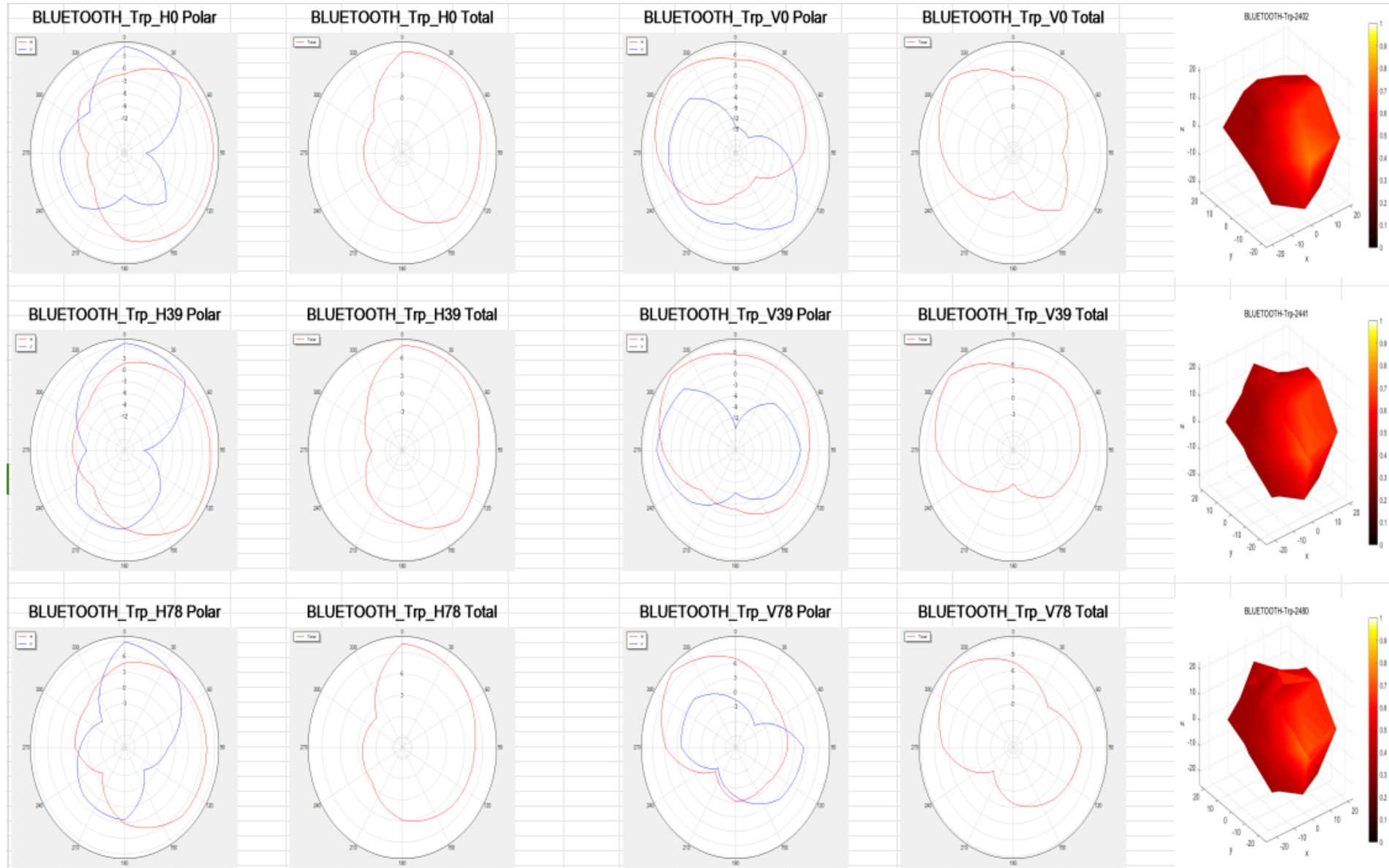
#-R

-R-TIS The antenna pattern of the free field



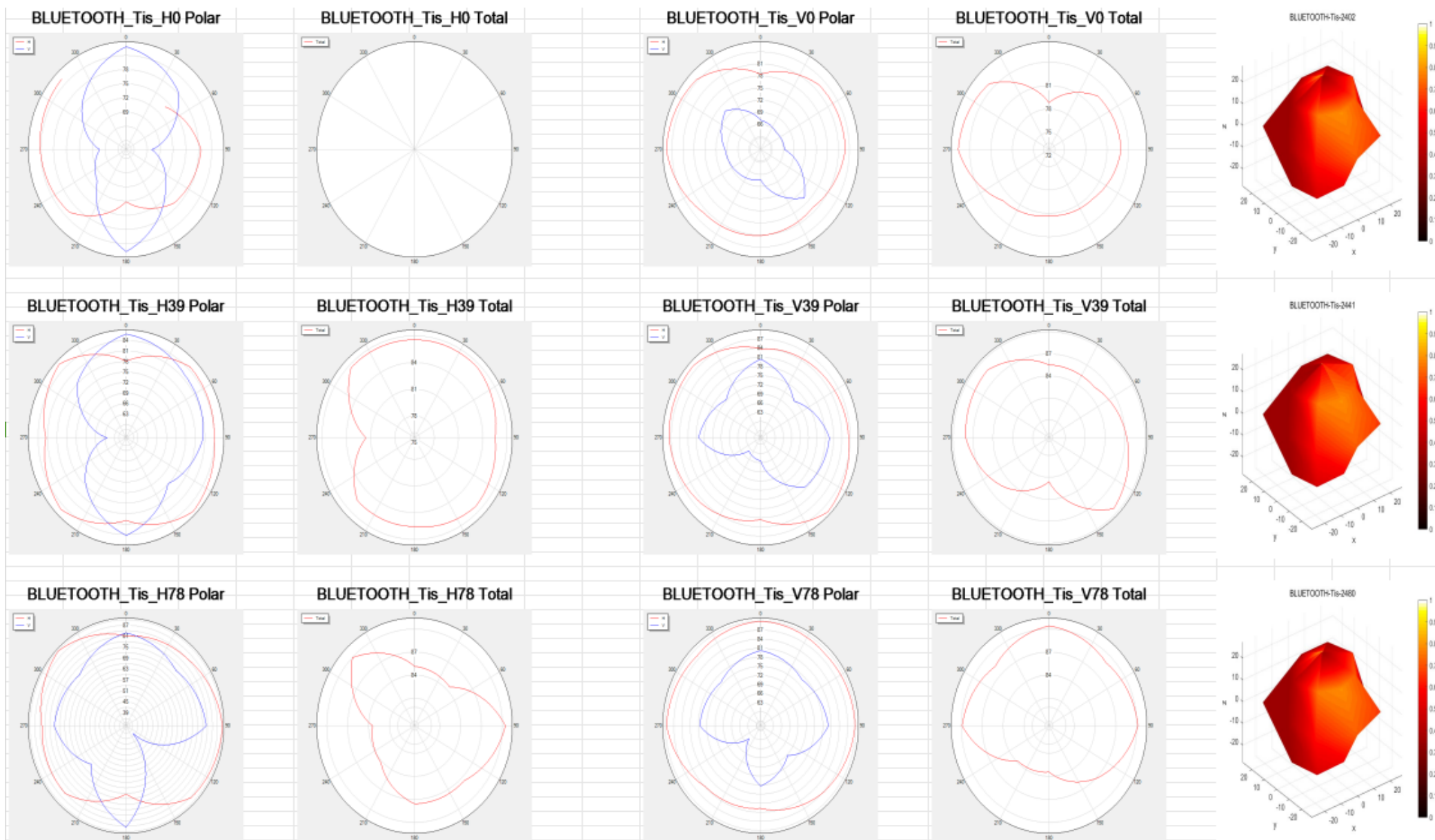


-R-TRP The antenna pattern of the free field



-R-TIS-An antenna pattern simulating a human head

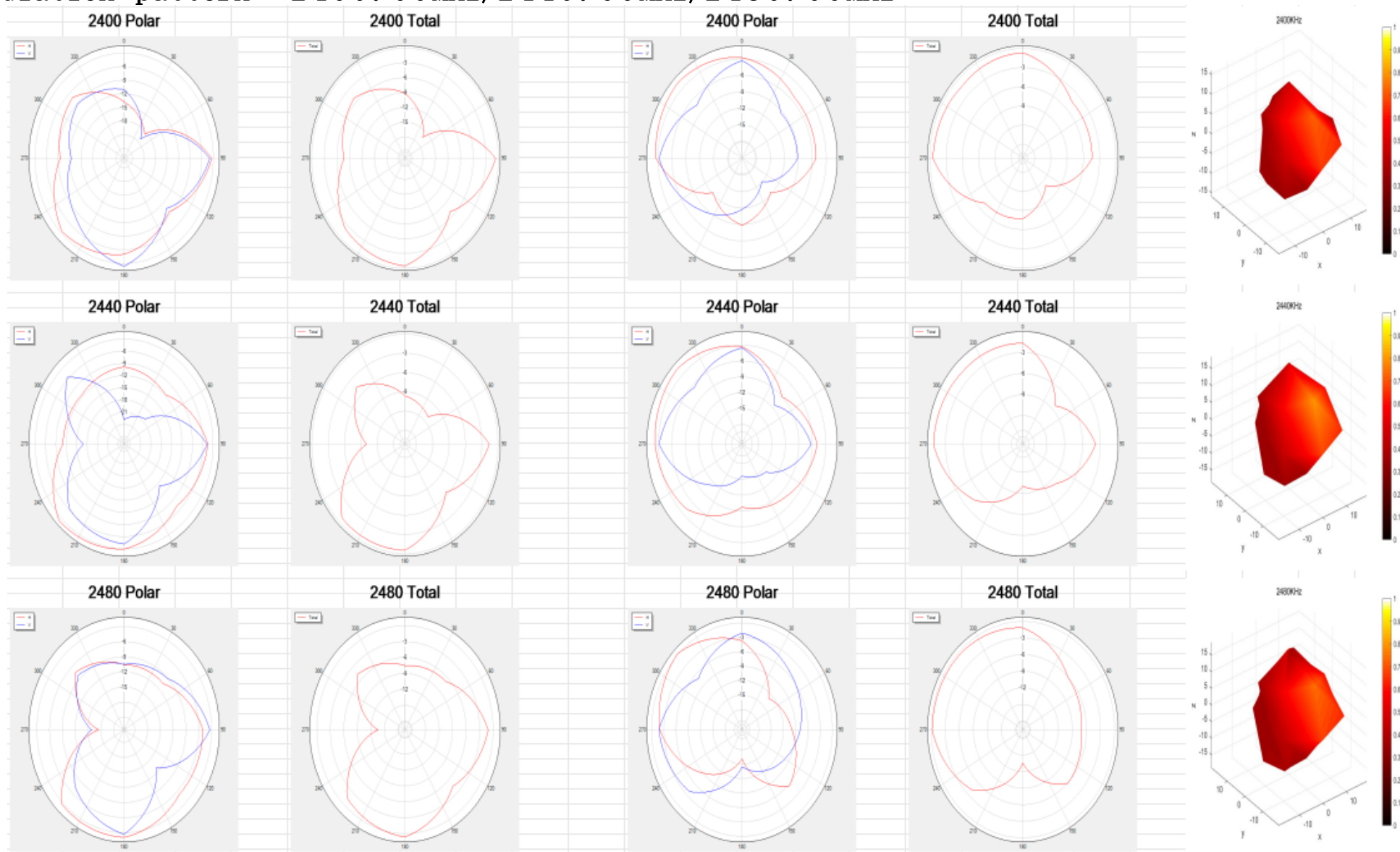
#-R





#-R

Antenna radiation pattern 2400.00MHz/2440.00MHz/2480.00MHz





Antenna efficiency gain

Antenna efficiency and gain diagram

R			
Frequency	Effic	Percen	Gain
2400	-3.55	44.76%	1.99
2440	-3.46	44.88%	2.02
2480	-3.54	44.73%	1.94

measuring distance

a. Environme

b.summar	test project	Trying hard not to hear		Pocket test requirement		descr
	W3			right front	O	The iPhone5 was tested over 1 5 + meters in the park
		O		front-left	O	
		K		right rear	O	
				left rear	O	

W3 machine actual test, OTA data test,basically distance matching, our park grass test effect is excellent

Thank you for watching

Wish you enjoy your life

o

2023-5-12