

YONG CHENG INTERNATIONAL(OTA)

Antenna specificationt



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	KLX	Project name	JX53
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frequency
band

2400MHZ-2500MHZ

engineer:

CK

Date

2024/07/02

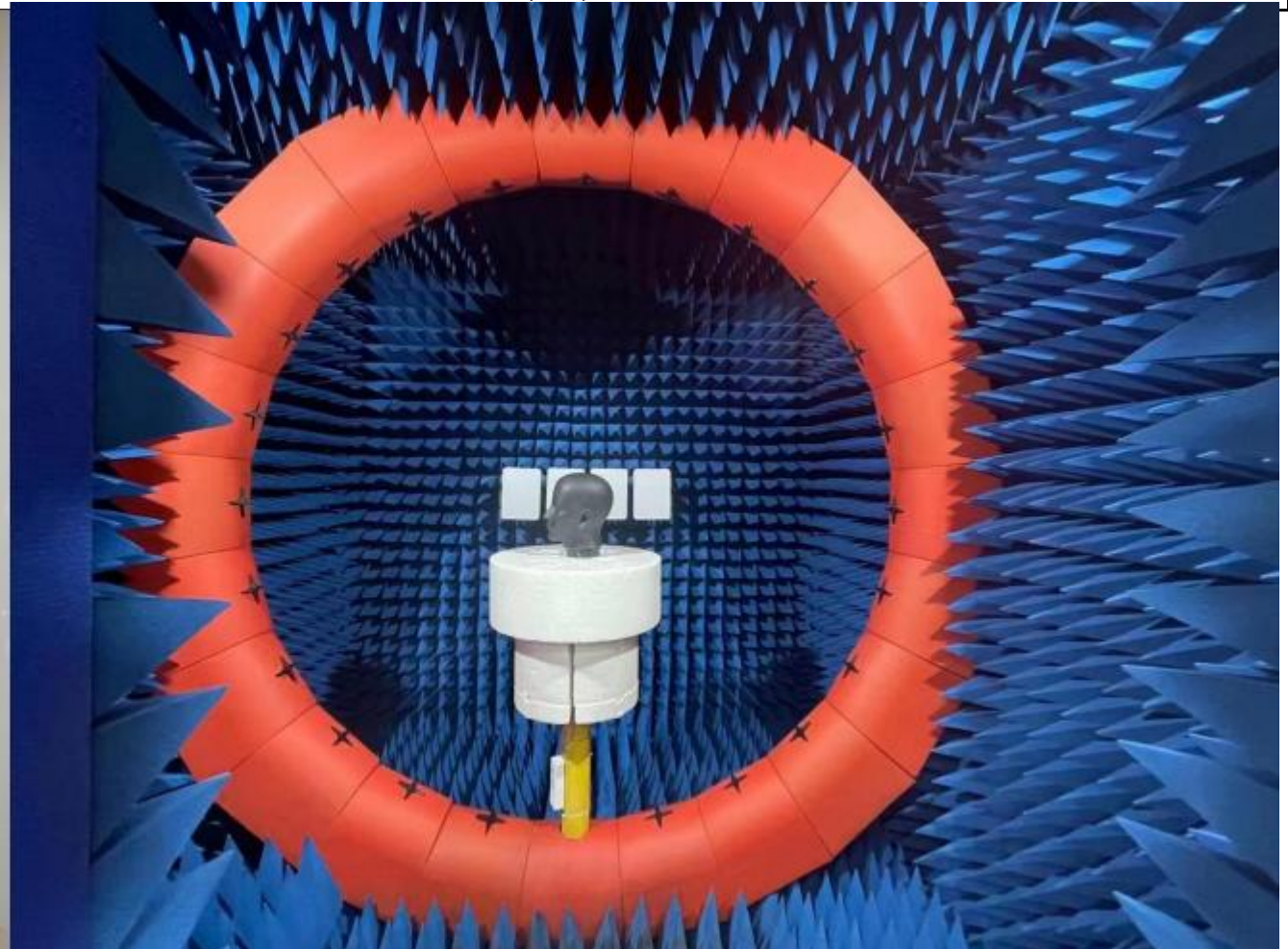
phone:

13530576606



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)

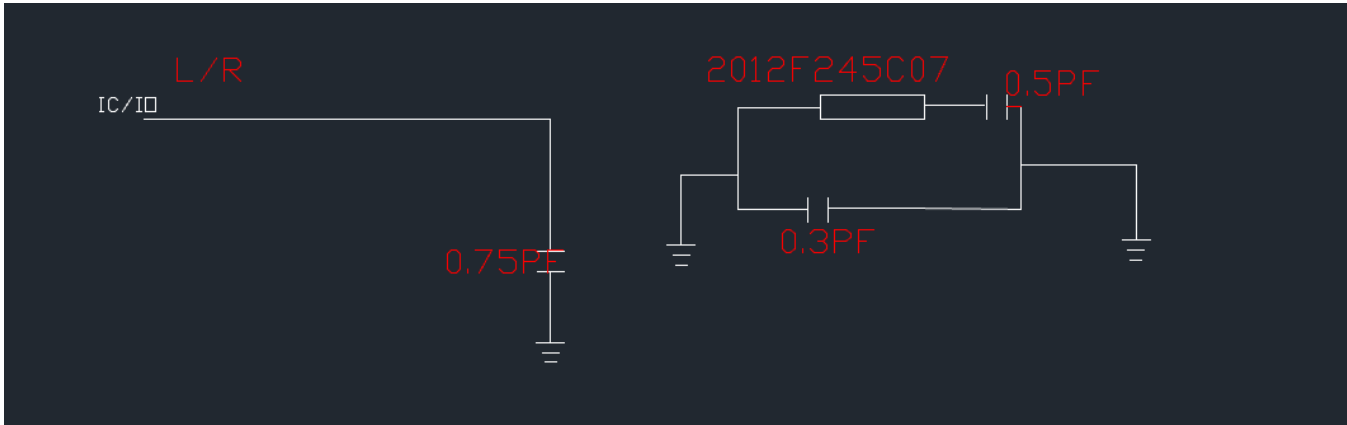




Antenna Placement ANT: 2012F245C07

antenna(咏成国际)

L/R
Matching Circuit: 左右参数



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

Features
SMD, high reliability, ultra Impact, Omni-directiona.

Part number Information

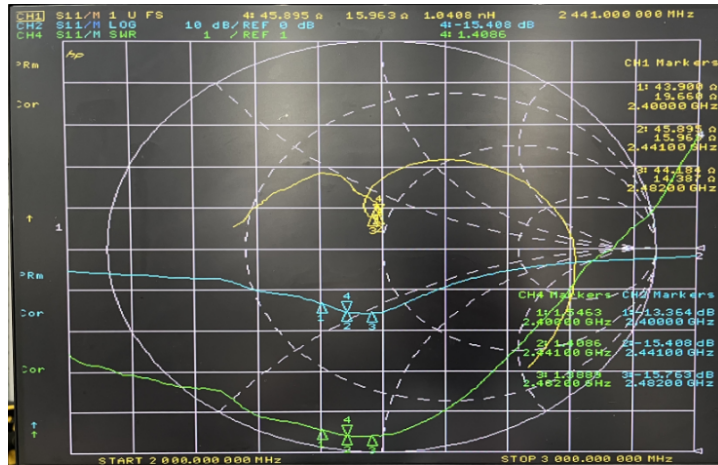
RANT	2012	F	245	C	07
(A)	(B)	(C)	(D)	(E)	(F)
(A)Product Type	Chip Antenna				
(B) Size Code	2.0x1.2mm(+0.2mm)				
(C) Material	High K material				
(D) Frequency	2.4 ~ 2.5GHz				
(E) Feeding mode	PIFA & Single Feeding				
(F) Antenna type	Type=07				



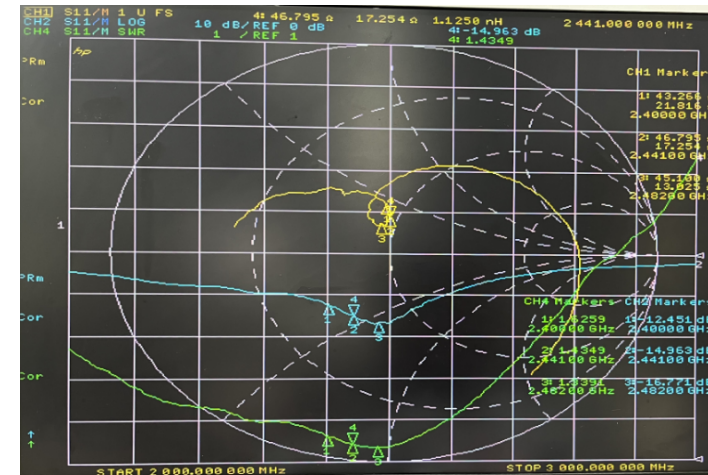


S11、SWR、smith chart:

L



R



Antenna active test data

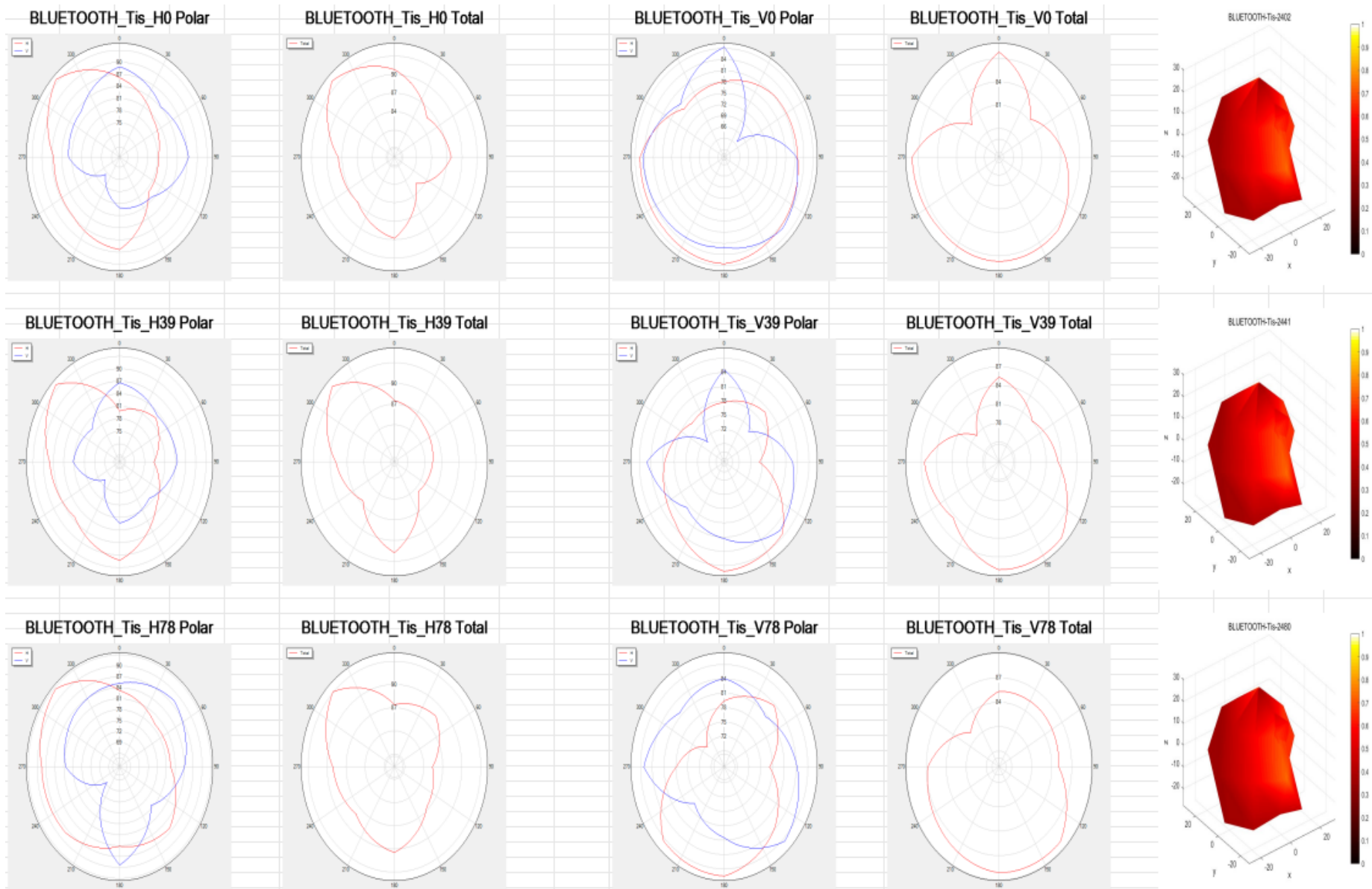
ANT EIRP&EIS parameter Summary (free field)						
频段frequency band	BT 2.4G (L)			BT 2.4G (R)		
信道route	0	39	78	0	39	78
# TRP (dBm)	3.21	3.62	3.18	3.15	3.26	3.79
# TIS (dBm)	-87.57	-87.26	-87.52	-87.2	-87.48	-87.74

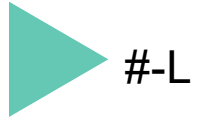
ANT EIRP&EIS parameter Summary (phantom head)						
频段frequency band	BT 2.4G (L)			BT 2.4G (R)		
信道route	0	39	78	0	39	78
# TRP (dBm)	0.87	0.96	0.57	0.32	0.47	0.46
# TIS (dBm)	-83.23	-83.86	-83.57	-83.57	-83.38	-83.34



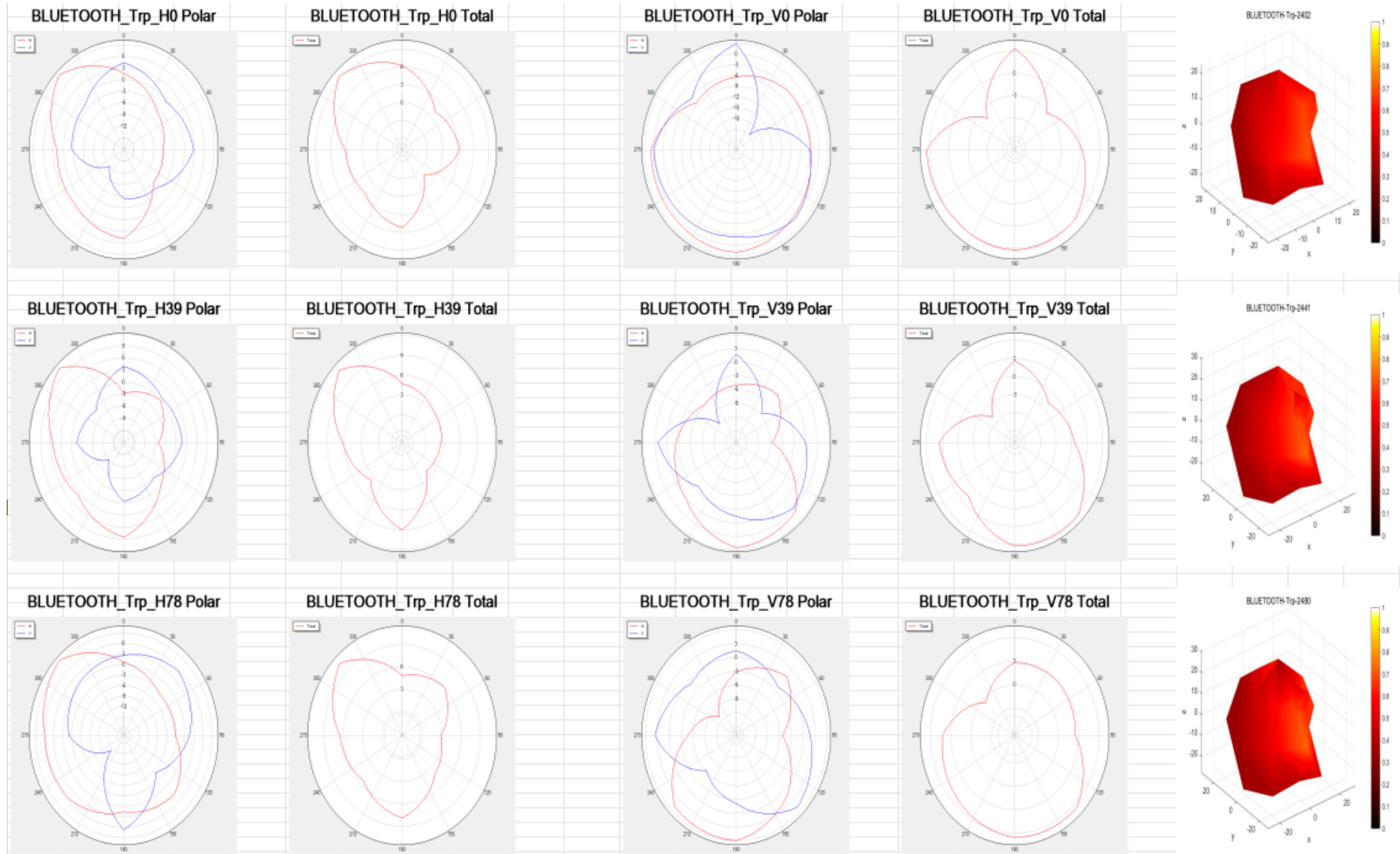
#-L

-L-TIS The antenna pattern of the free field





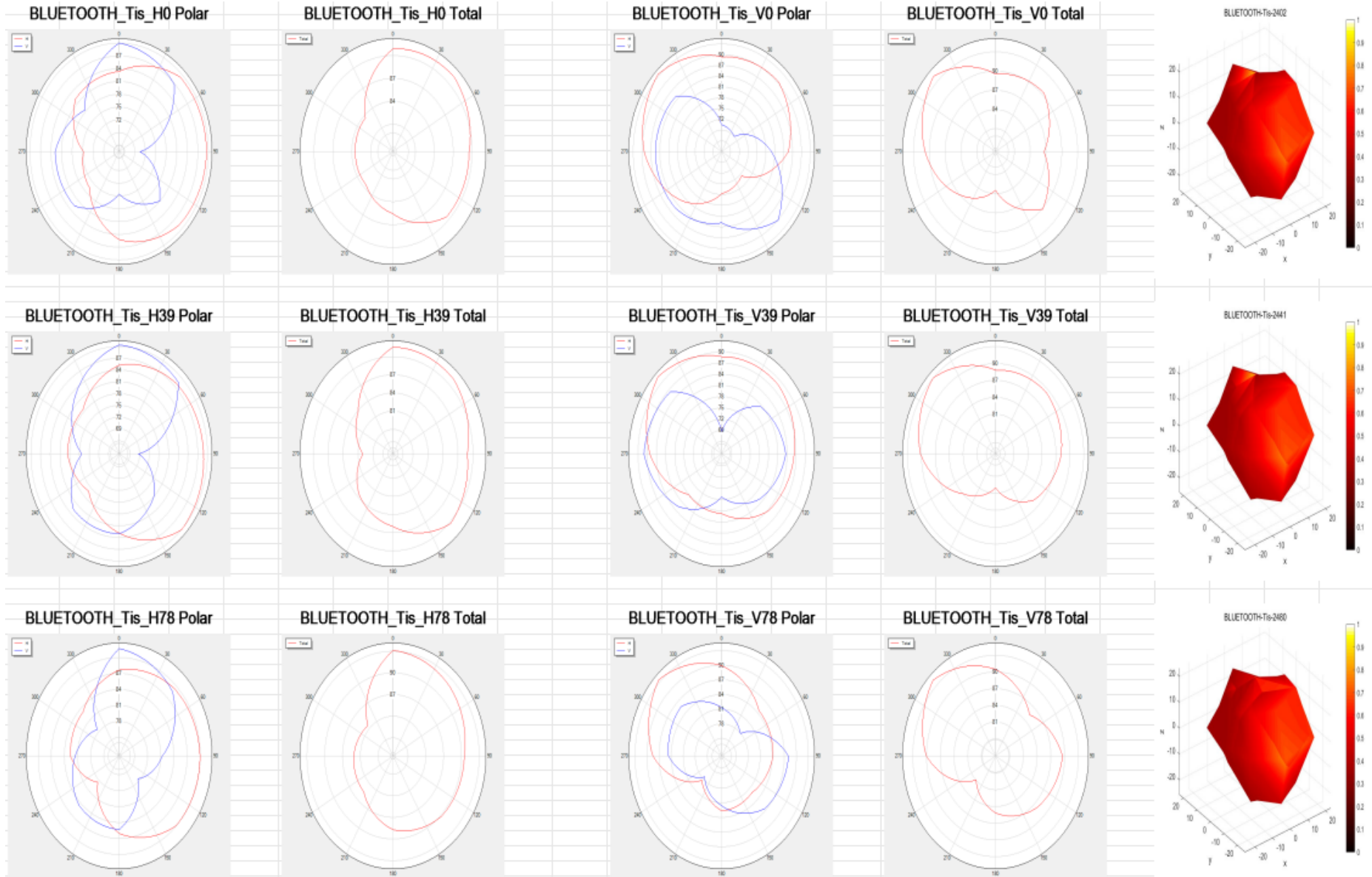
-L-TRP The antenna pattern of the free field

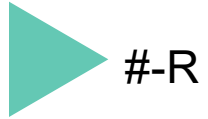




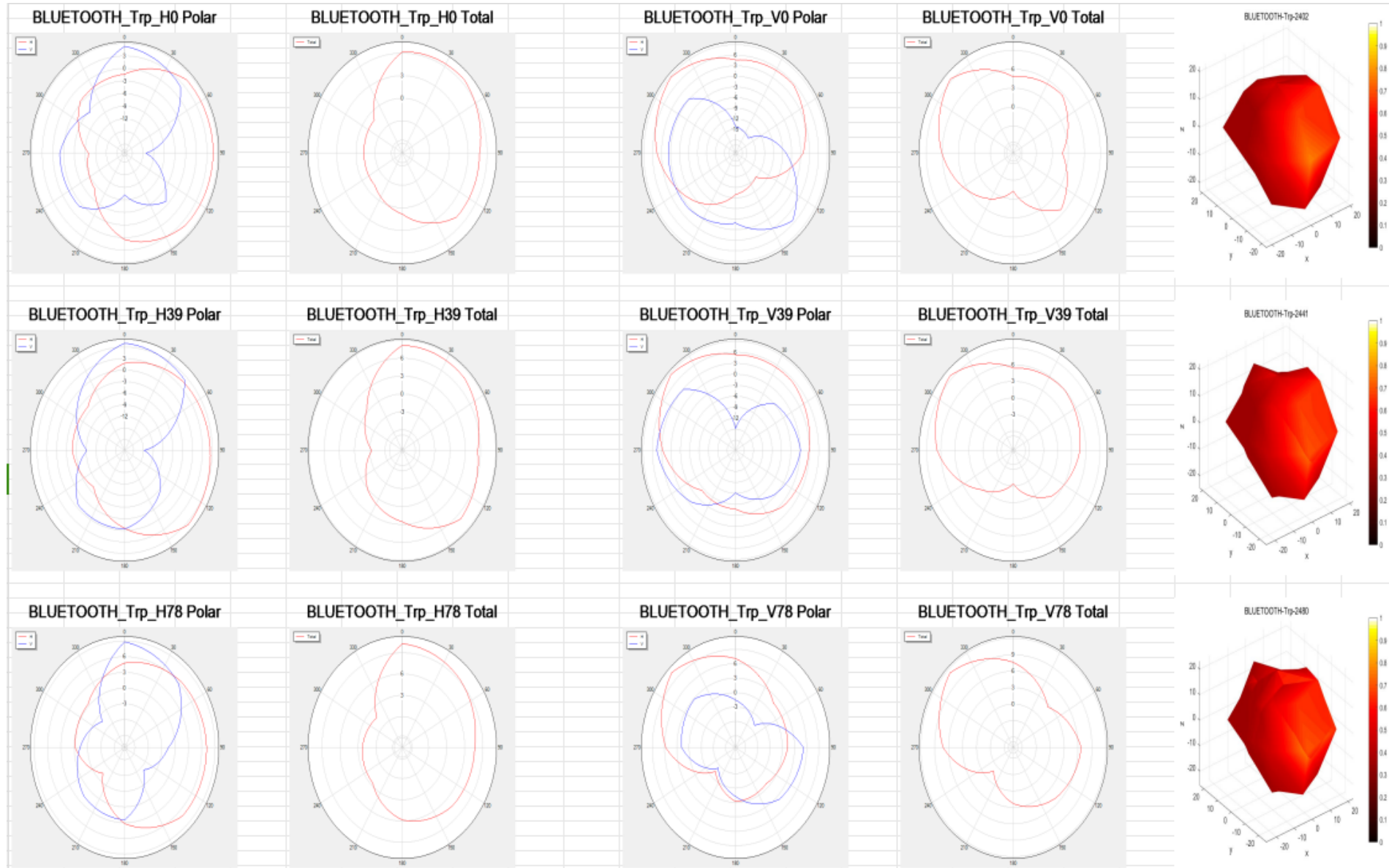
#-R

-R-TIS The antenna pattern of the free field



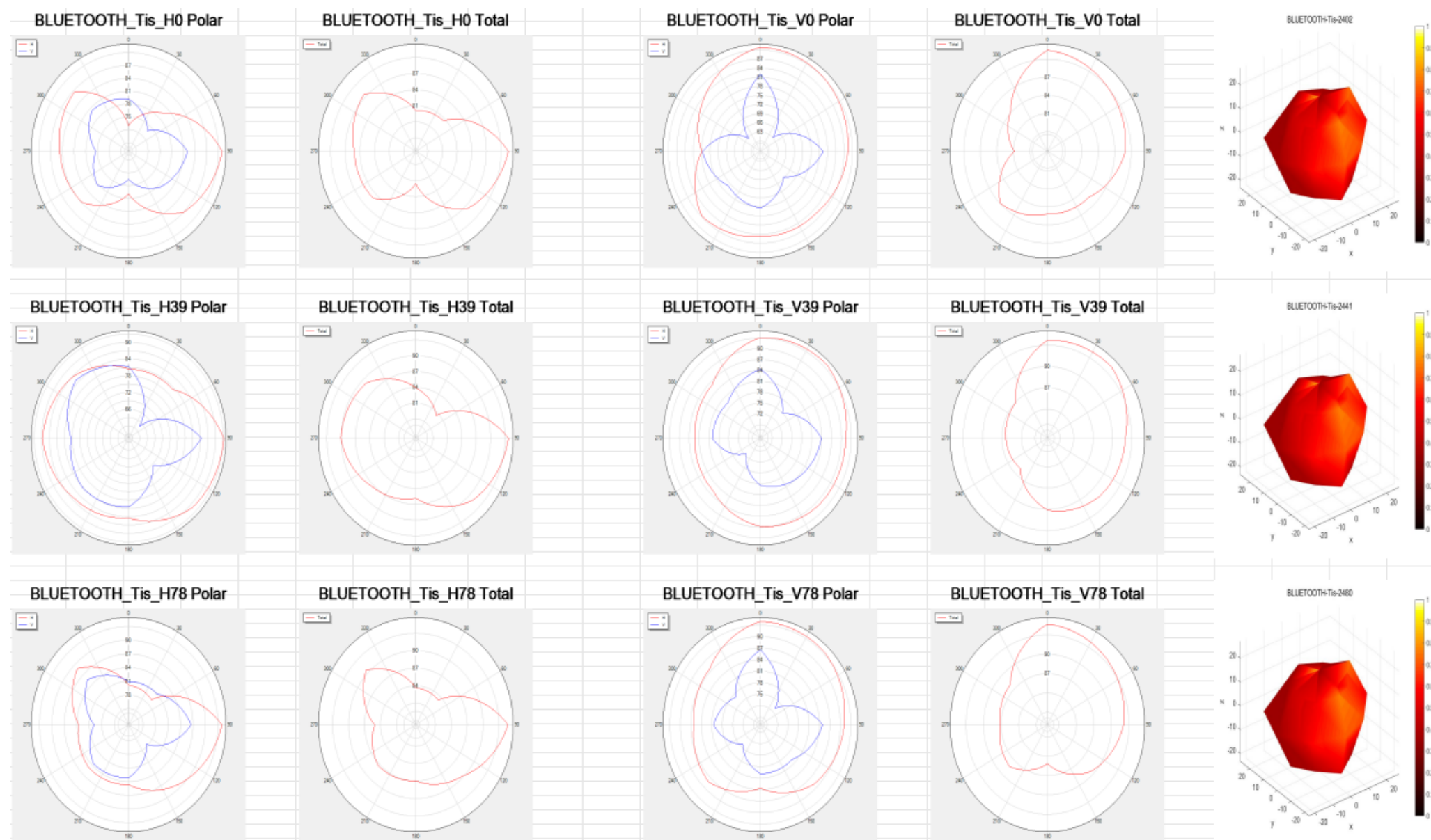


-R-TRP The antenna pattern of the free field



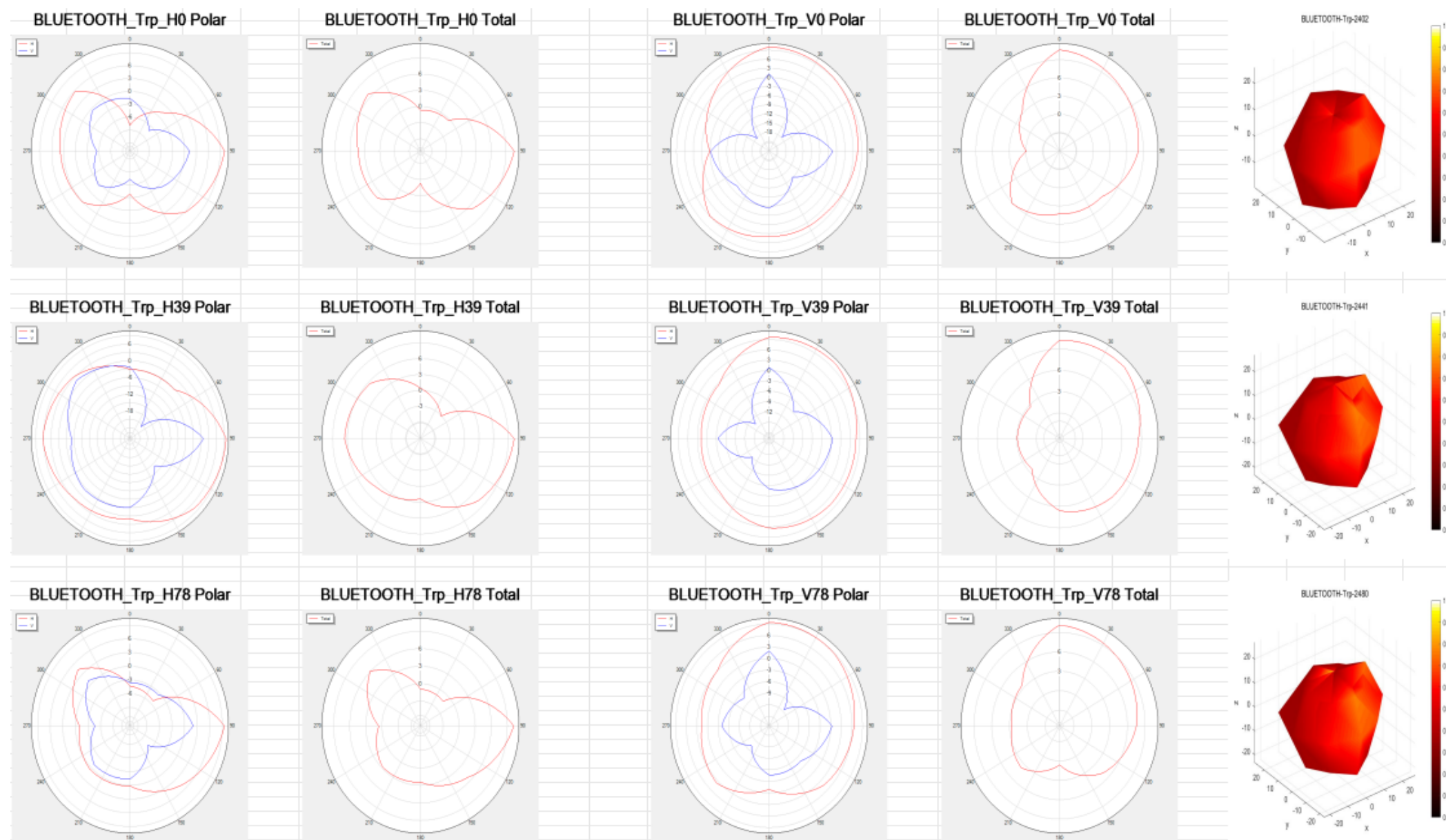
-L-TIS-An antenna pattern simulating a human head

#-L



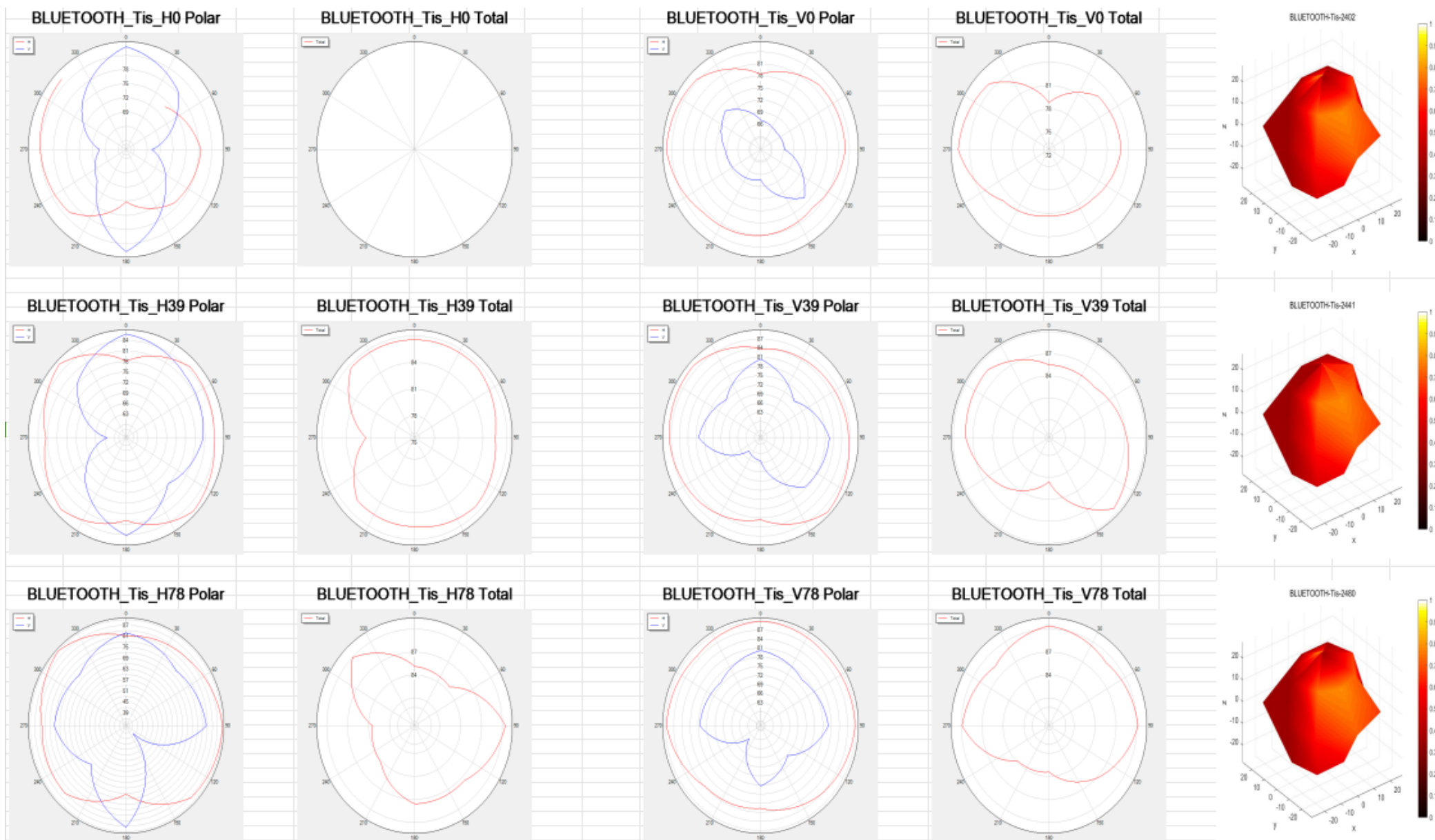
-L-TRP-An antenna pattern simulating a human head

#-L



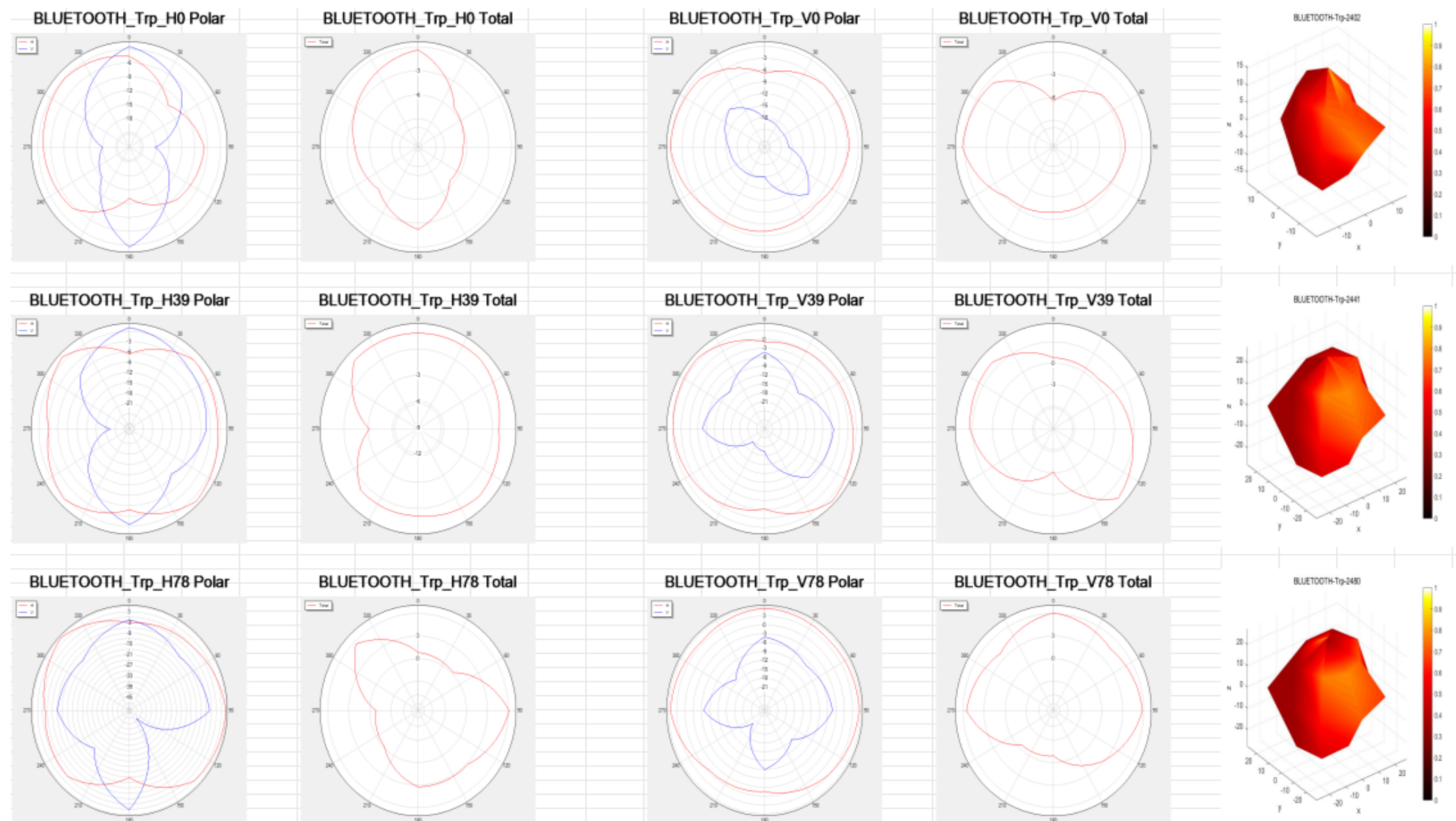
-R-TIS-An antenna pattern simulating a human head

#-R



-L-TRP-An antenna pattern simulating a human head

#-R





Antenna efficiency gain

天线效率与增益图

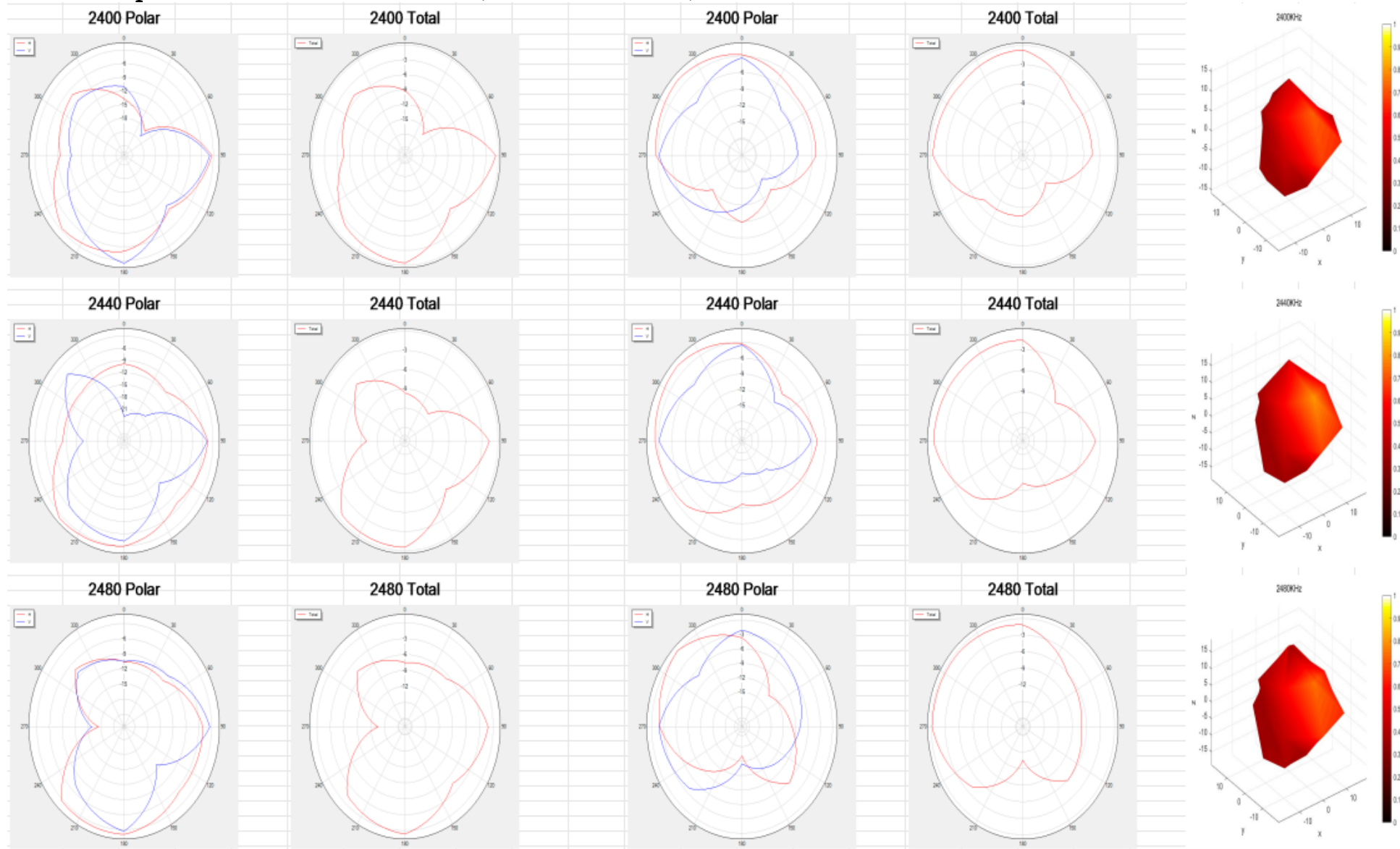


L				R			
Frequency	Effic	Percen	Gain	Frequency	Effic	Percen	Gain
2400	-3.57	44.75%	1.97	2400	-3.55	44.76%	1.99
2440	-3.48	44.86%	2.01	2440	-3.46	44.88%	2.02
2480	-3.58	44.74%	1.95	2480	-3.54	44.73%	1.94



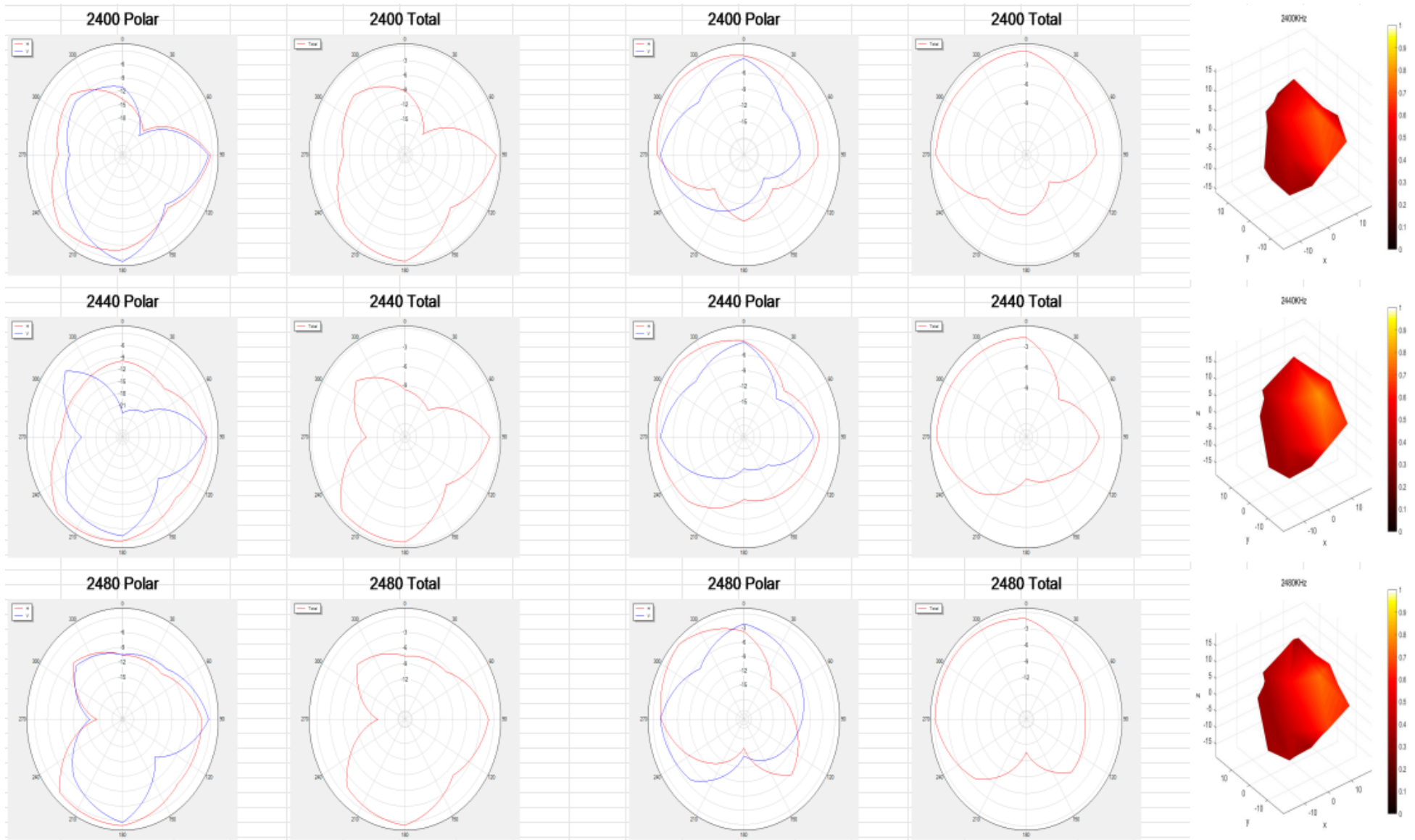
#-R

Antenna radiation pattern 2400.00MHz/2440.00MHz/2480.00MHz



#-L

Antenna radiation pattern 2400.00MHz/2440.00MHz/2480.00MHz



measuring distance

a. Environme

test project	Trying hard not to hear		Pocket test requirement		descr
JX53			right front	OK	The iPhone5 was tested over 1 5 + meters in the park
	OK		front-left	OK	
			right rear	OK	
			left rear	OK	

b. summarize

JX53 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