



YONG CHENG INTERNATIONAL(OTA)



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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	A3
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frequency
band

2400MHZ-2500MHZ

engineer:

CK

Date

2025/06/06

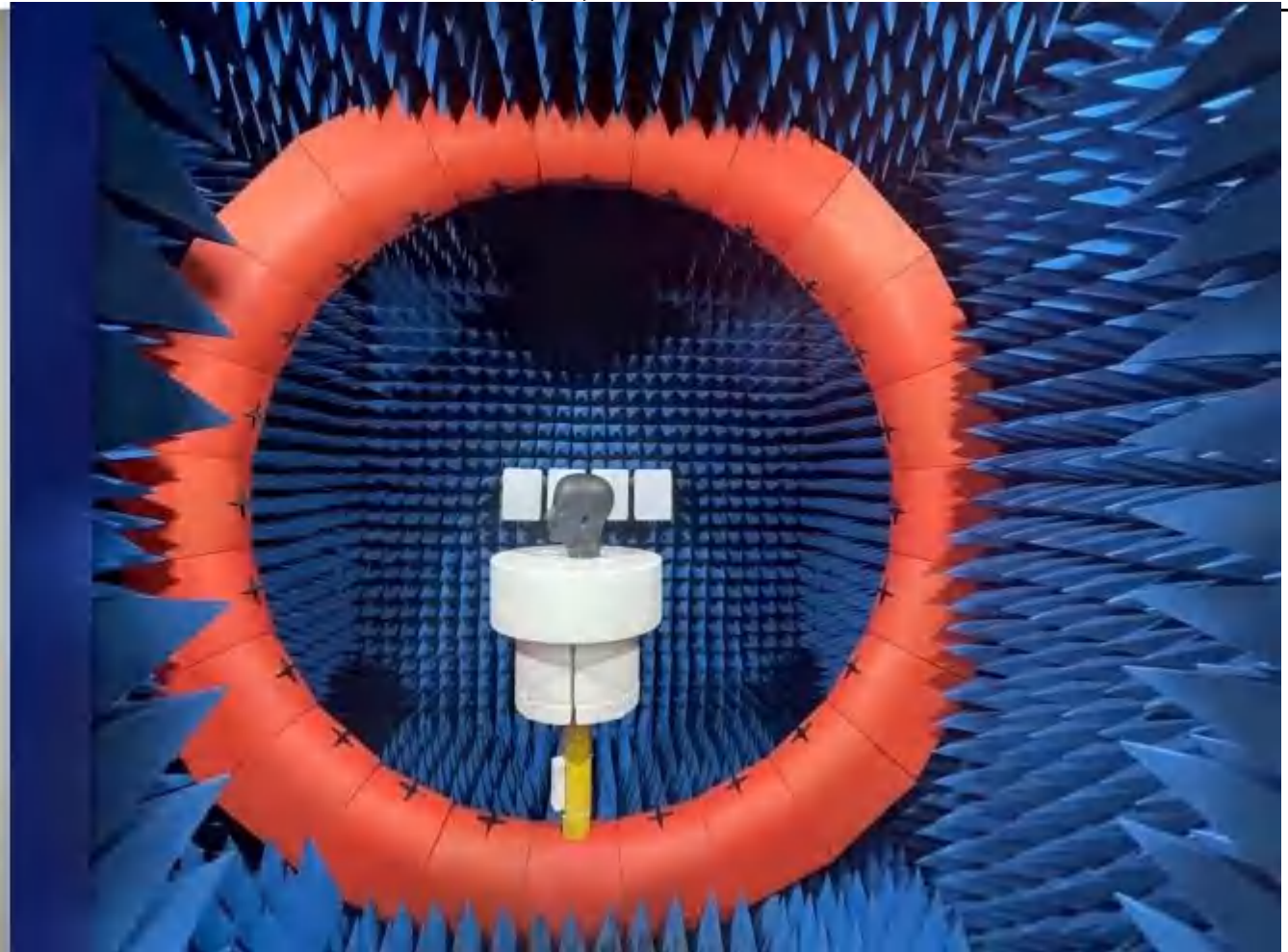
phone:

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)



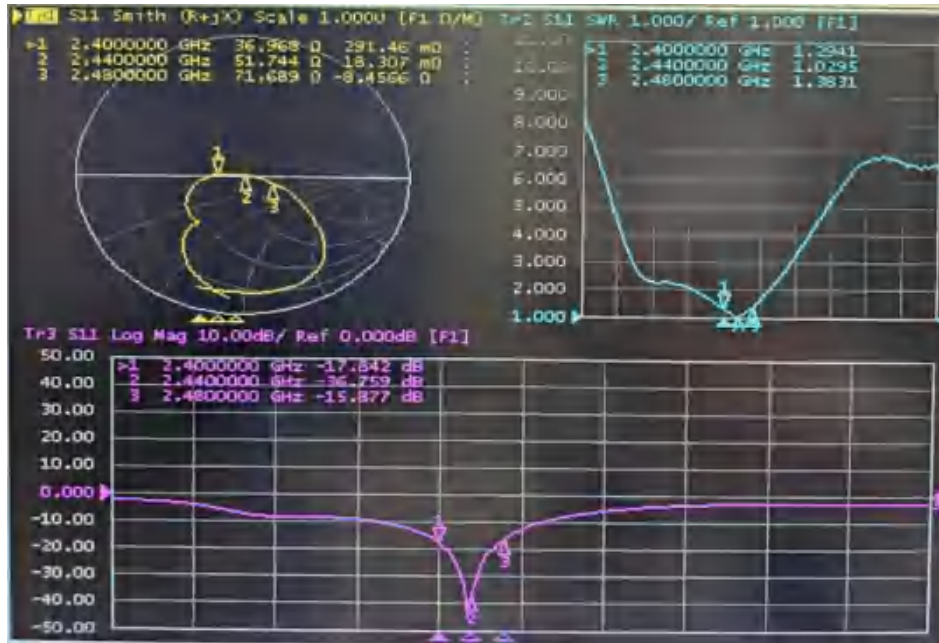


Antenna Placement ANT:2012F245X5(咏成国际)

L/R:Matching Circuit: 左右参数

S11、SWR、smith chart:

L



R



Antenna active test data

A3		Free		Human			A3		Free		Human	
IL#	Channel	TRP	TIS	TRP	TIS		R#	Channel	TRP	TIS	TRP	TIS
	CH 0	3.67	-86.55	1.88	-82.81			CH 0	2.4	-85.37	1.98	-83.78
	CH 39	3.36	-88.36	1.73	-82.05			CH 39	1.42	-85.49	0.17	-80.76
	CH 78	3.17	-89.59	-3.09	-80.48			CH 78	0.48	-85.33	-1.66	-80.74

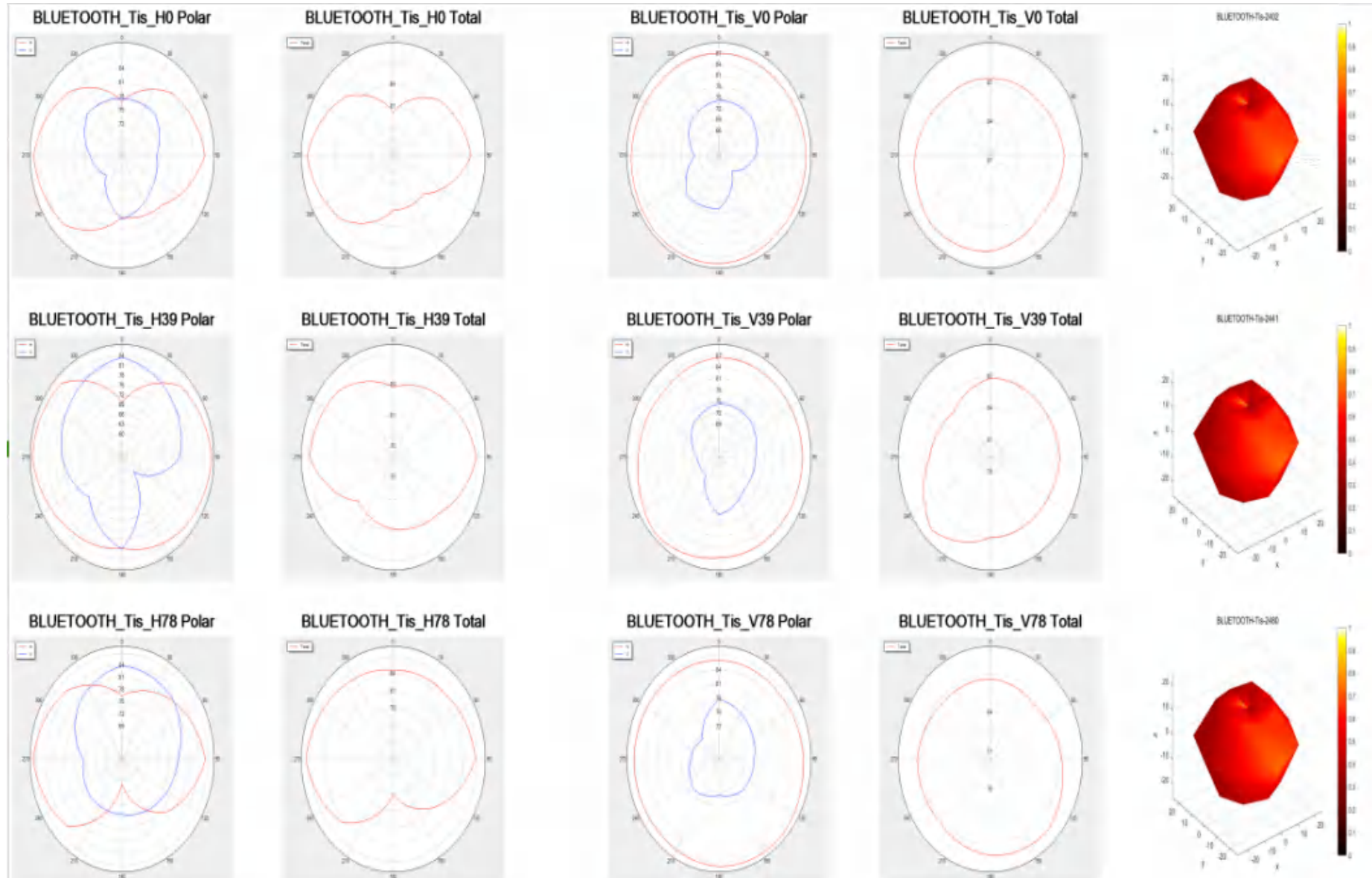
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2L#	Channel	TRP	TIS	TRP	TIS		2R#	Channel	TRP	TIS	TRP	TIS
	CH 0	2.33	-84.35	2.6	-82.01			CH 0	2.28	-86.06	0.99	-81.01
	CH 39	3.19	-87.19	1.87	-83.91			CH 39	1.22	-85.68	0.27	-80.79
	CH 78	3.73	-89.19	-1.53	-82.26			CH 78	0.65	-84.88	-1.24	-80.94

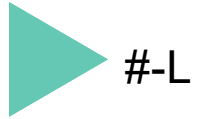
A3		Free		Human			A3		Free		Human	
3L#	Channel	TRP	TIS	TRP	TIS		3R#	Channel	TRP	TIS	TRP	TIS
	CH 0	2.16	-83.97	1.7	-82.2			CH 0	1.98	-85	0.59	-80.96
	CH 39	3.41	-86.88	1.35	-83.14			CH 39	1	-84.91	-0.43	-79.87
	CH 78	2.93	-87.98	-1.08	-78.74			CH 78	0.95	-85.46	-2.51	-79.12



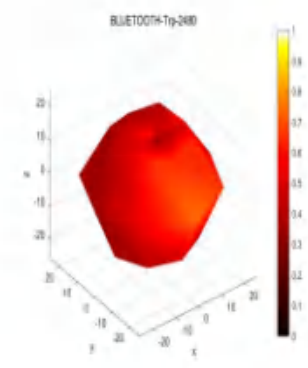
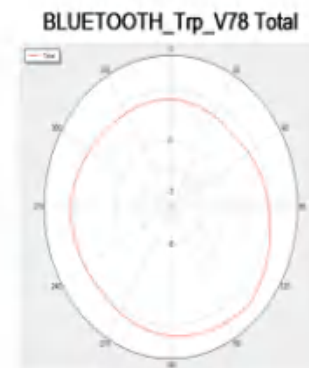
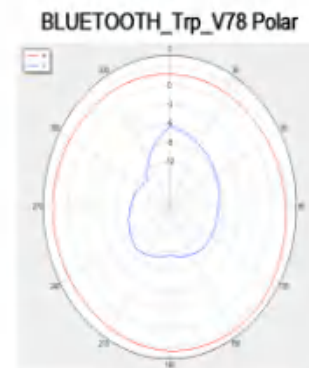
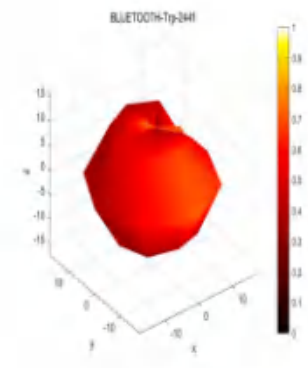
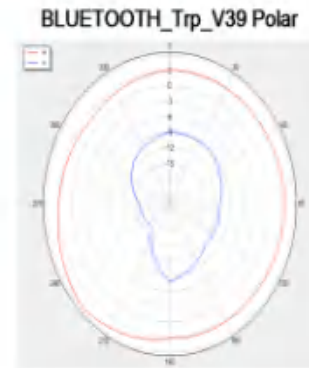
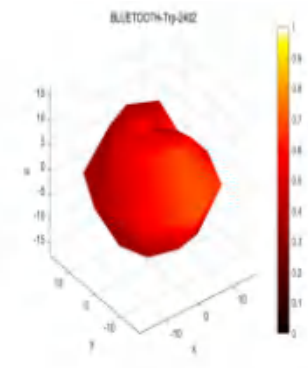
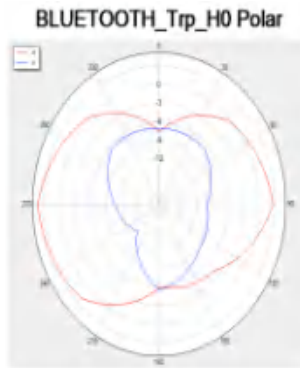
#-L

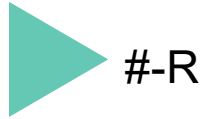
-L-TIS The antenna pattern of the free field



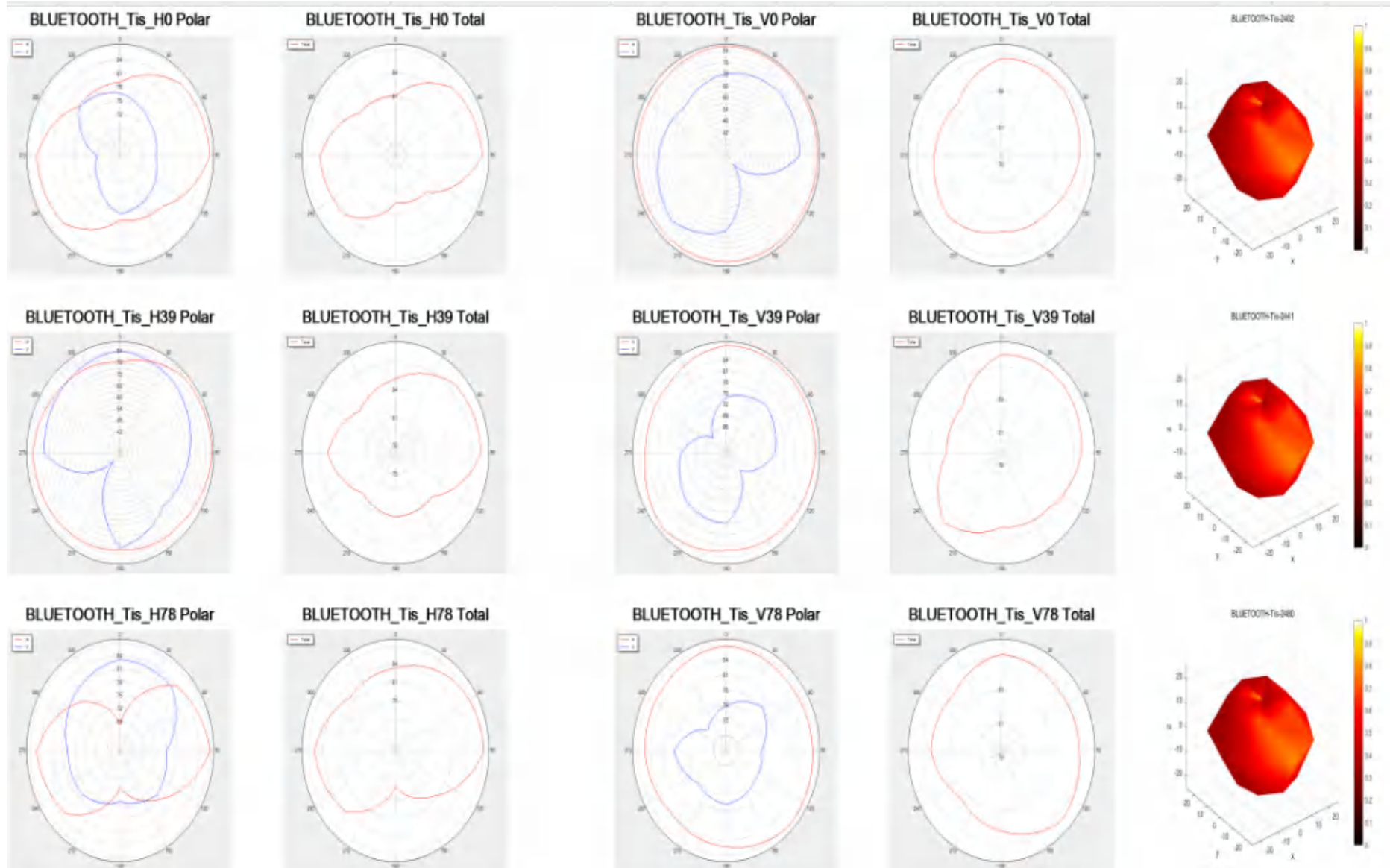


-L-TRP The antenna pattern of the free field





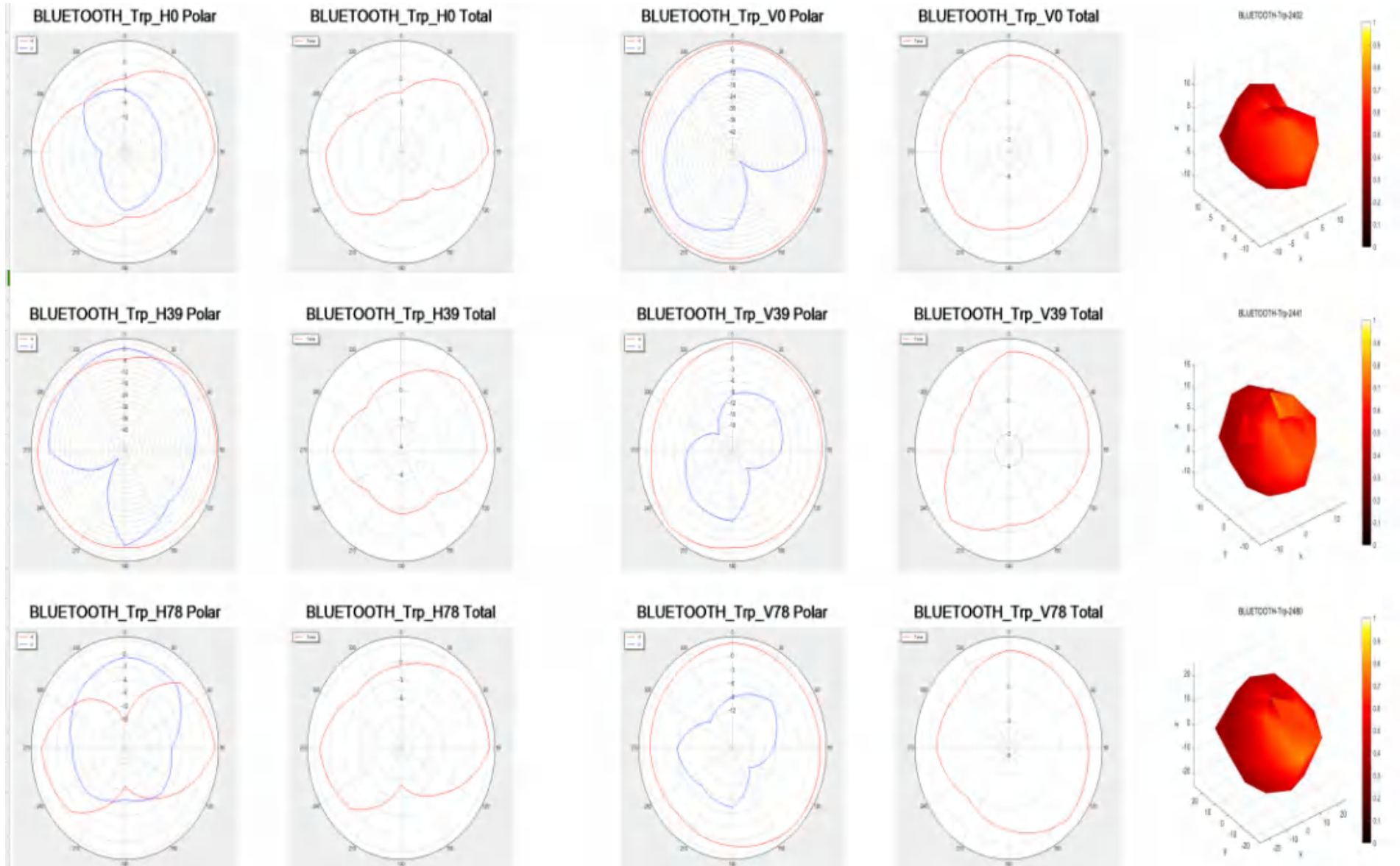
-R-TIS The antenna pattern of the free field





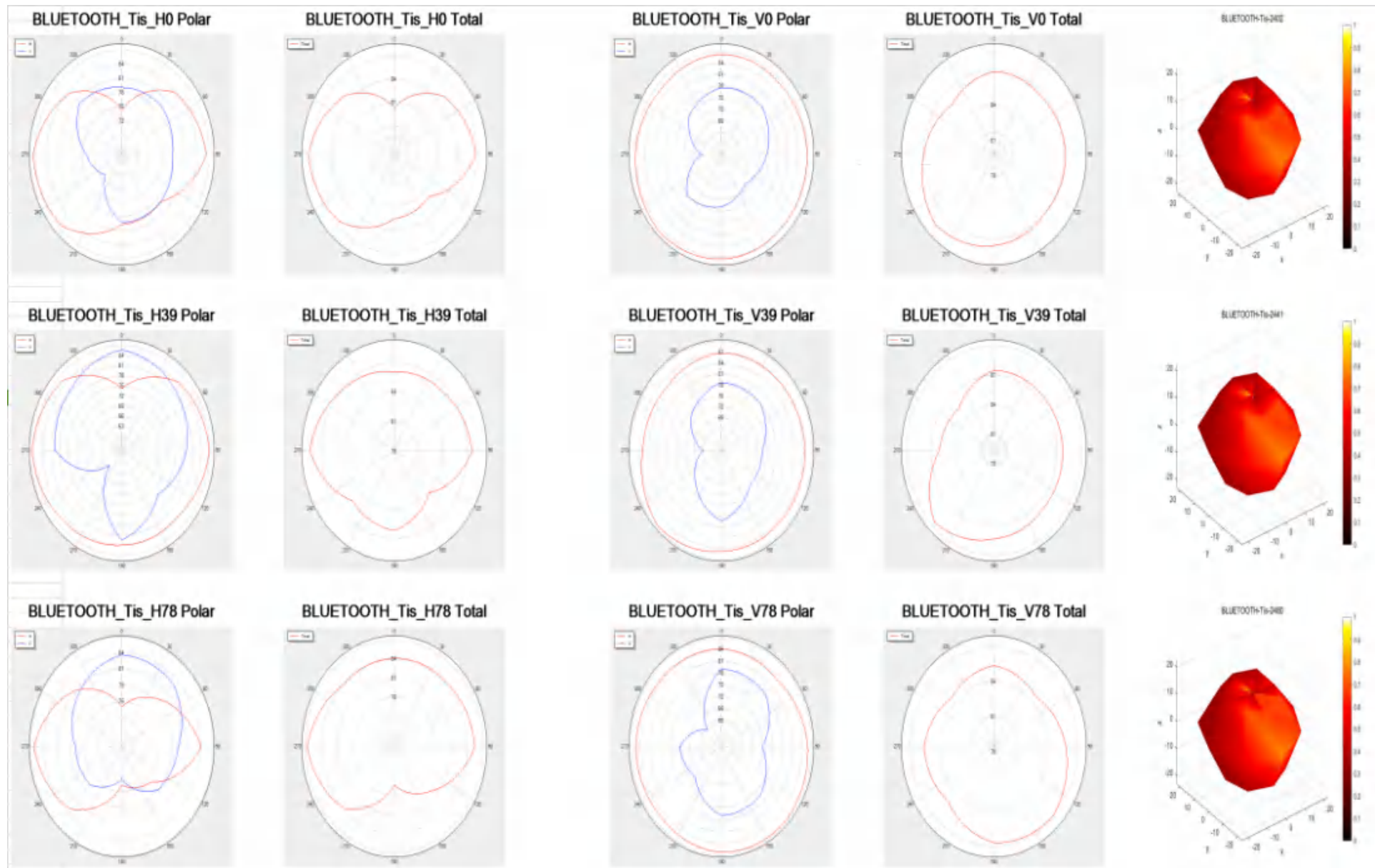
#-R

-R-TRP The antenna pattern of the free field



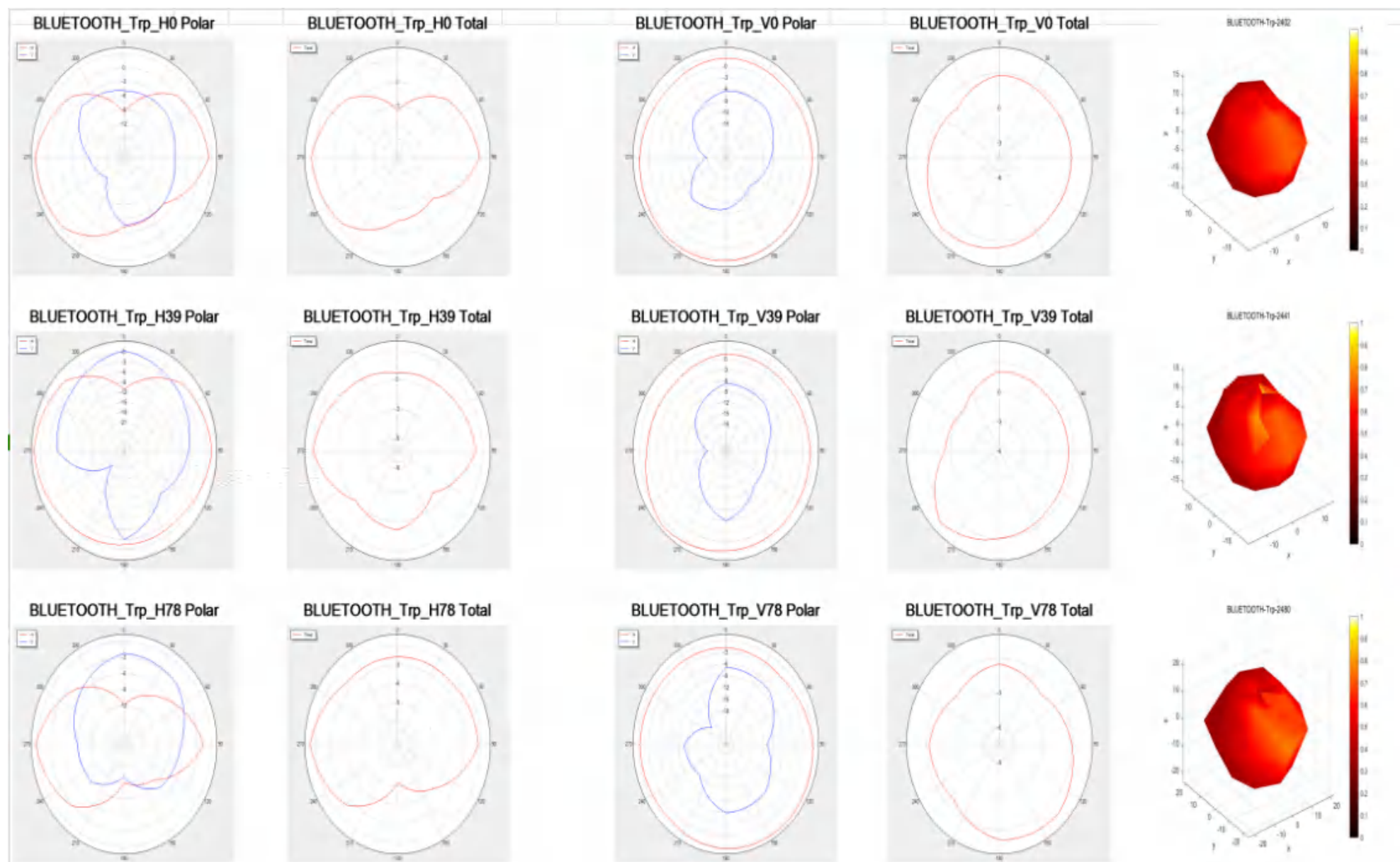
-L-TIS-An antenna pattern simulating a human head

#-L



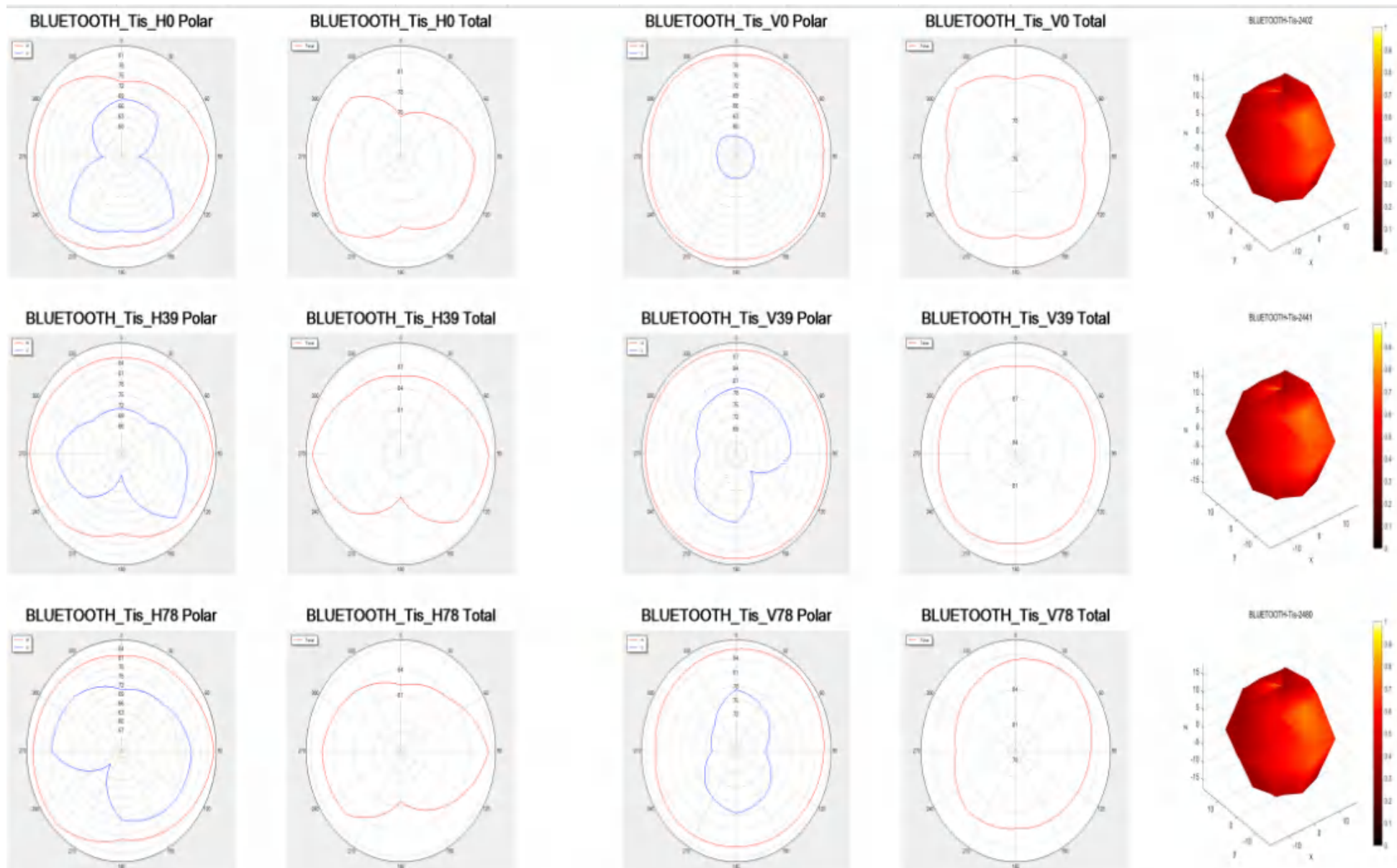
-L-TRP-An antenna pattern simulating a human head

#-L



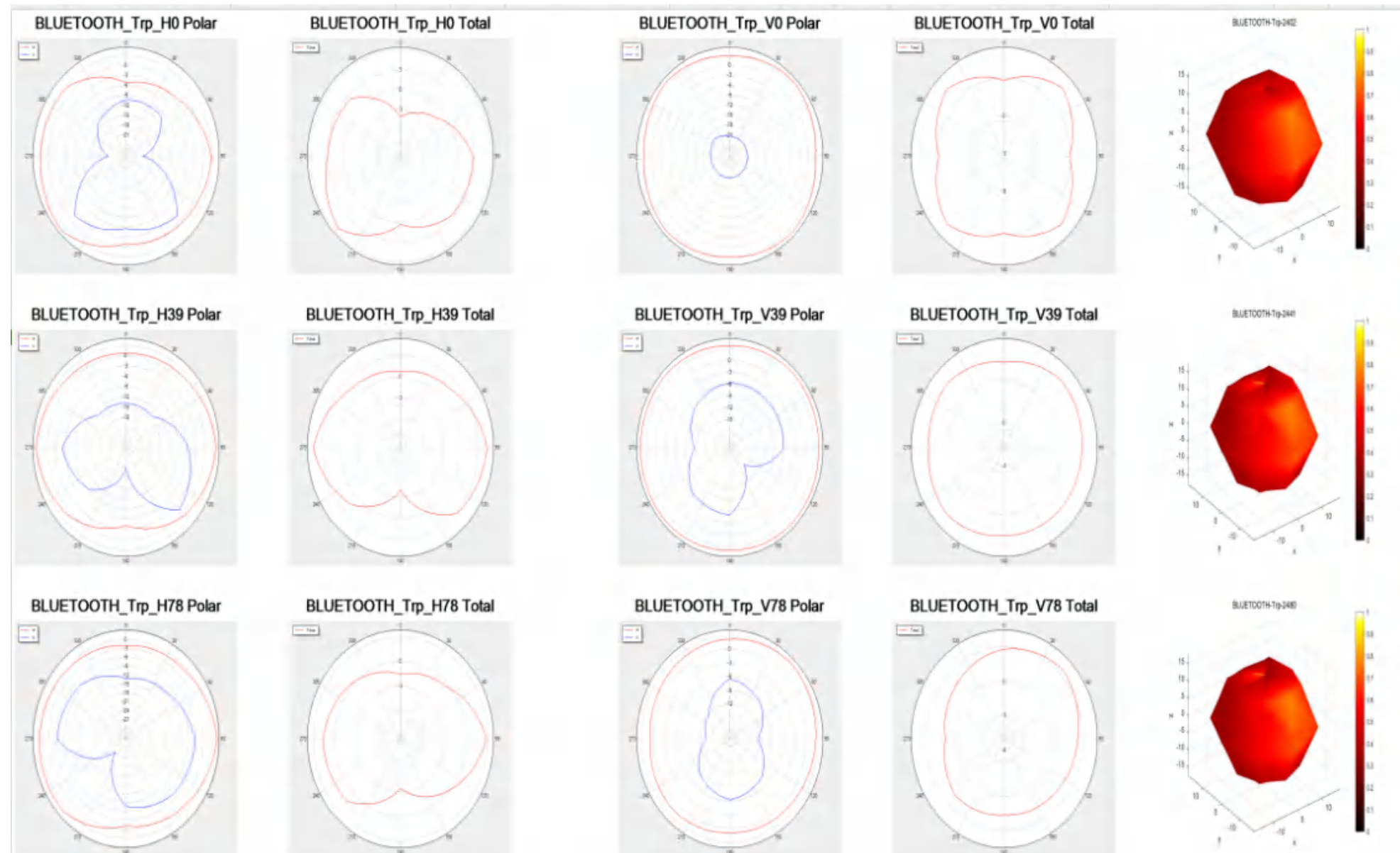
-R-TIS-An antenna pattern simulating a human head

#-R



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

#-R

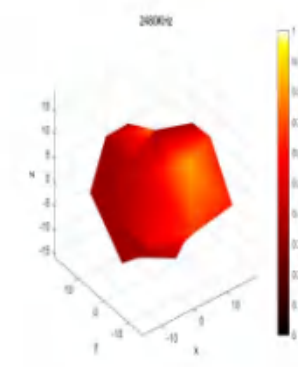
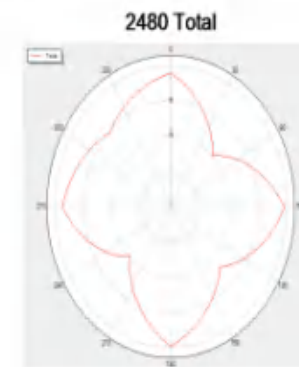
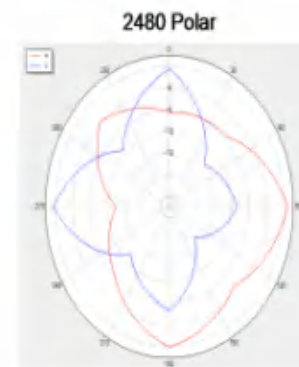
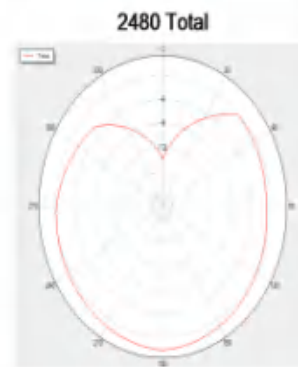
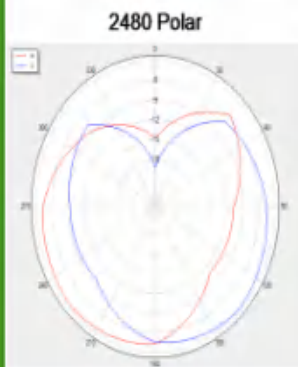
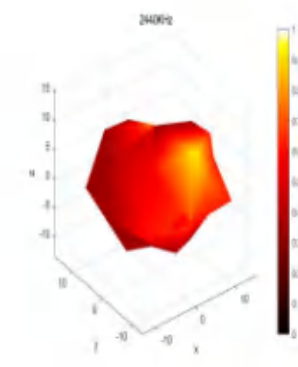
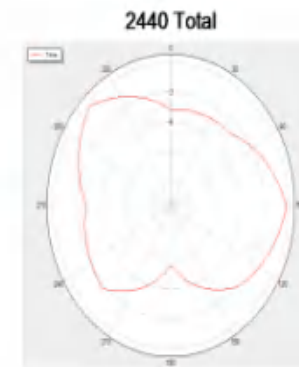
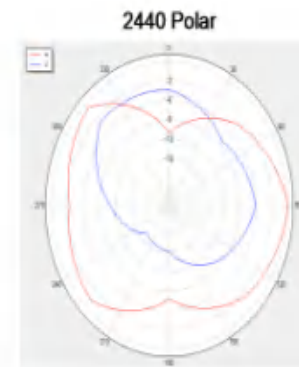
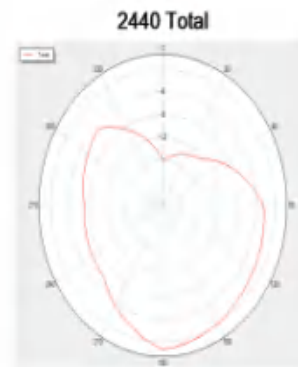
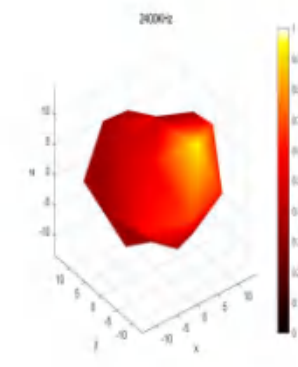
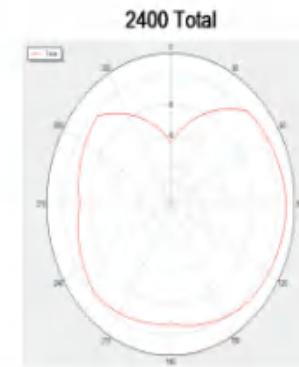
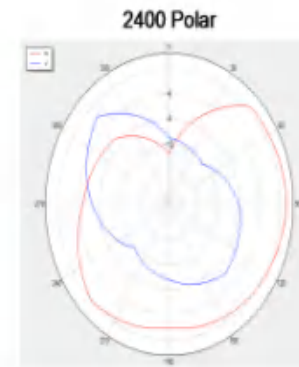


Antenna efficiency gain
天线效率与增益图

L					R			
Frequency	Effic	Percen	Gain		Frequency	Effic	Percen	Gain
2400	-6.81	22.85%	1.87		2400	-6.81	22.85%	1.87
2440	-6.79	22.87%	1.89		2440	-6.8	22.86%	1.88
2480	-6.8	22.86%	1.88		2480	-6.82	22.84%	1.86

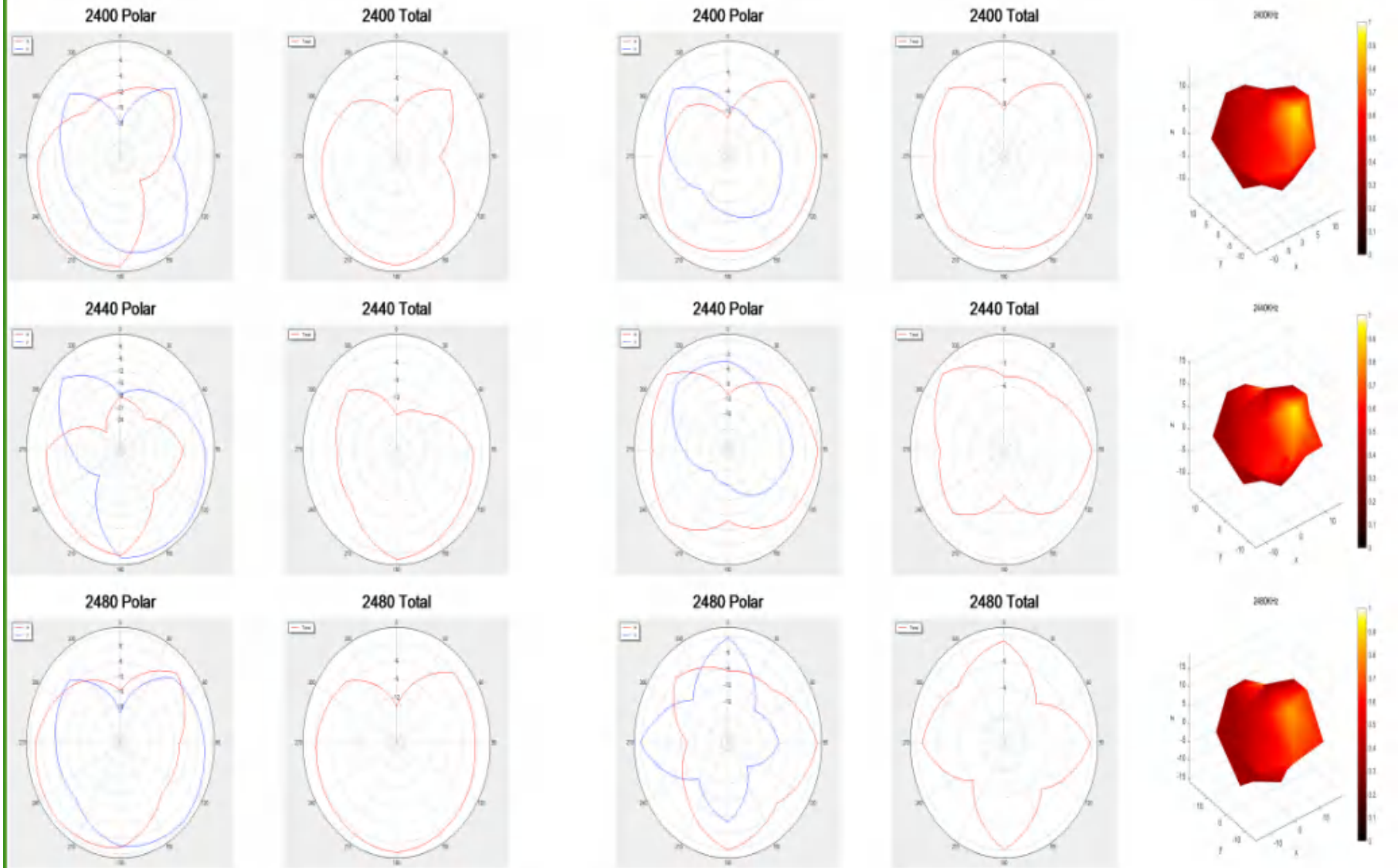
#-R

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
A3			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

A3 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