



咏成国际科技有限公司(OTA)

M200

荣科威测试报告

Antenna Test Report



日期 2023年8月18日

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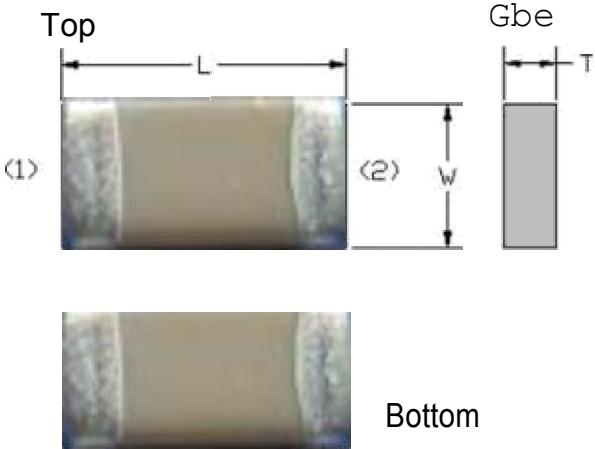


Customer	荣科威	Project name	M200
frequency band	2400MHZ-2500MHZ	engineer:	C K
Date	2023/08/18	phone :	13530576606

Electrical Specification,

Working Frequency Range	2400 -2500 MHz
Bandwidth	120 MHz (Min.)
Peak Gain	2.58 dBi (Typ.)
Impedance	50 Ohm
Return loss	10 dB (Min)
Polarization	Linear
Azimuth Beamwidth	Omni-direclonal
Operation Temperatue{"C)	-40 -85”C:
Resistance to Soldering Heats	10sec. (@ 280°C)
Termination	Ni / Au (Leadless)

Dimension and Terminal Configuration

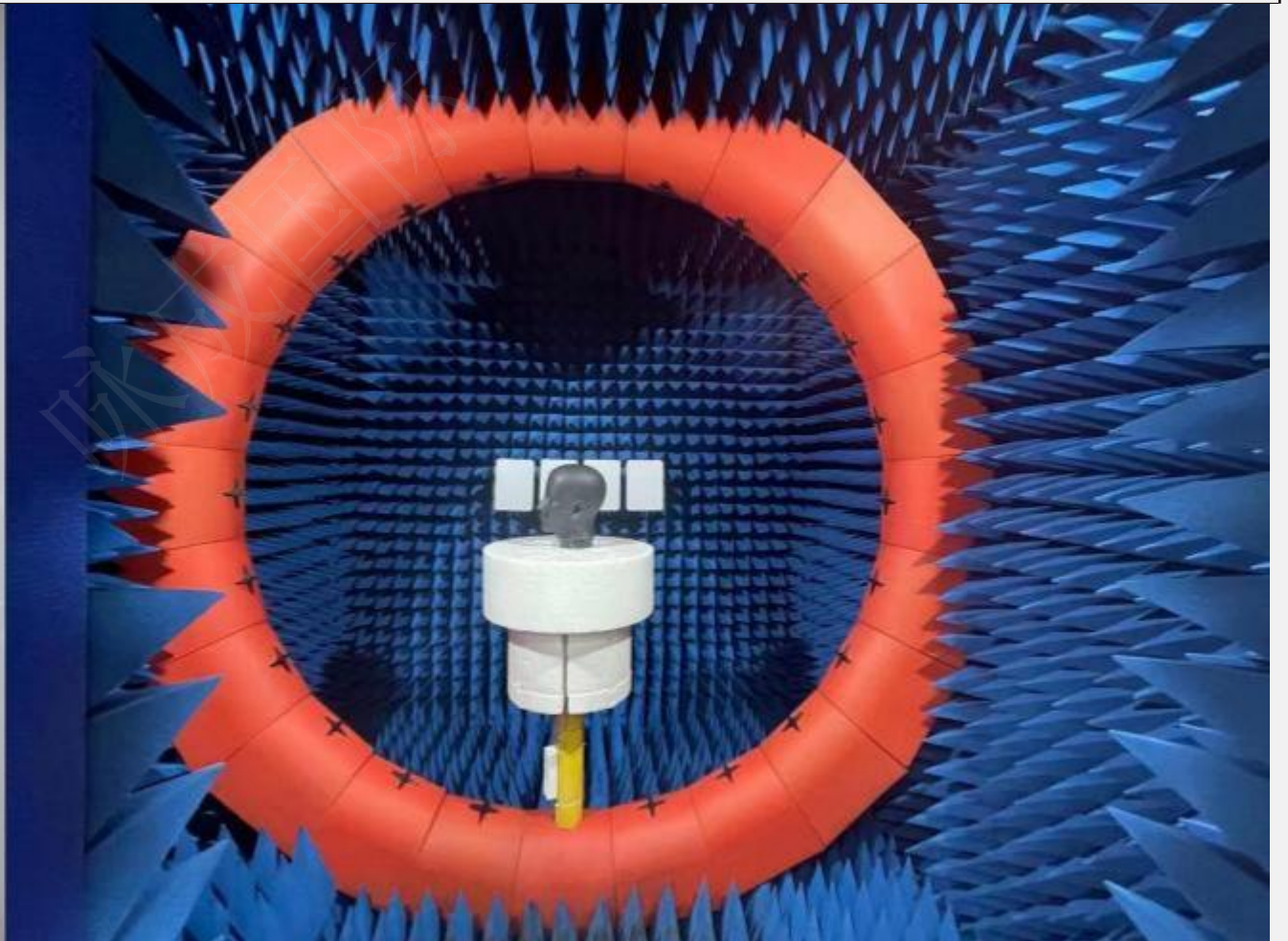


Dimension (mm)	
*	1.60 + 0.1o
>/	0.80 1 0.10
T	0.80 1 0.10

No.	Terminal Name
1	Feeding/GNG
2	GND/Feeding

1.测试工具

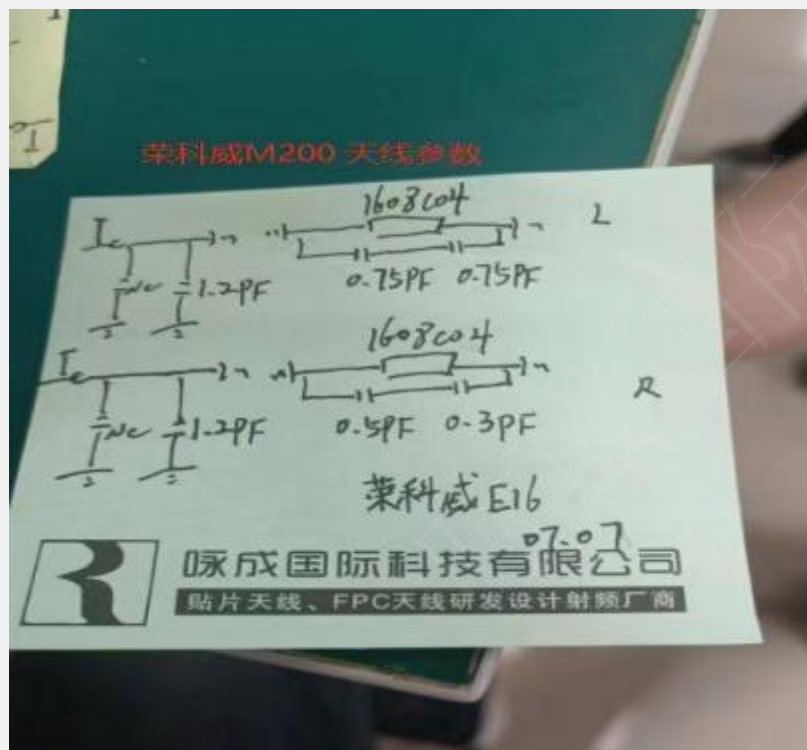
仪	Agilent Technologies E5071B & R&S CMW500
暗室	Atenlab M3
	CK
温度	25℃
湿度	65% (RH)



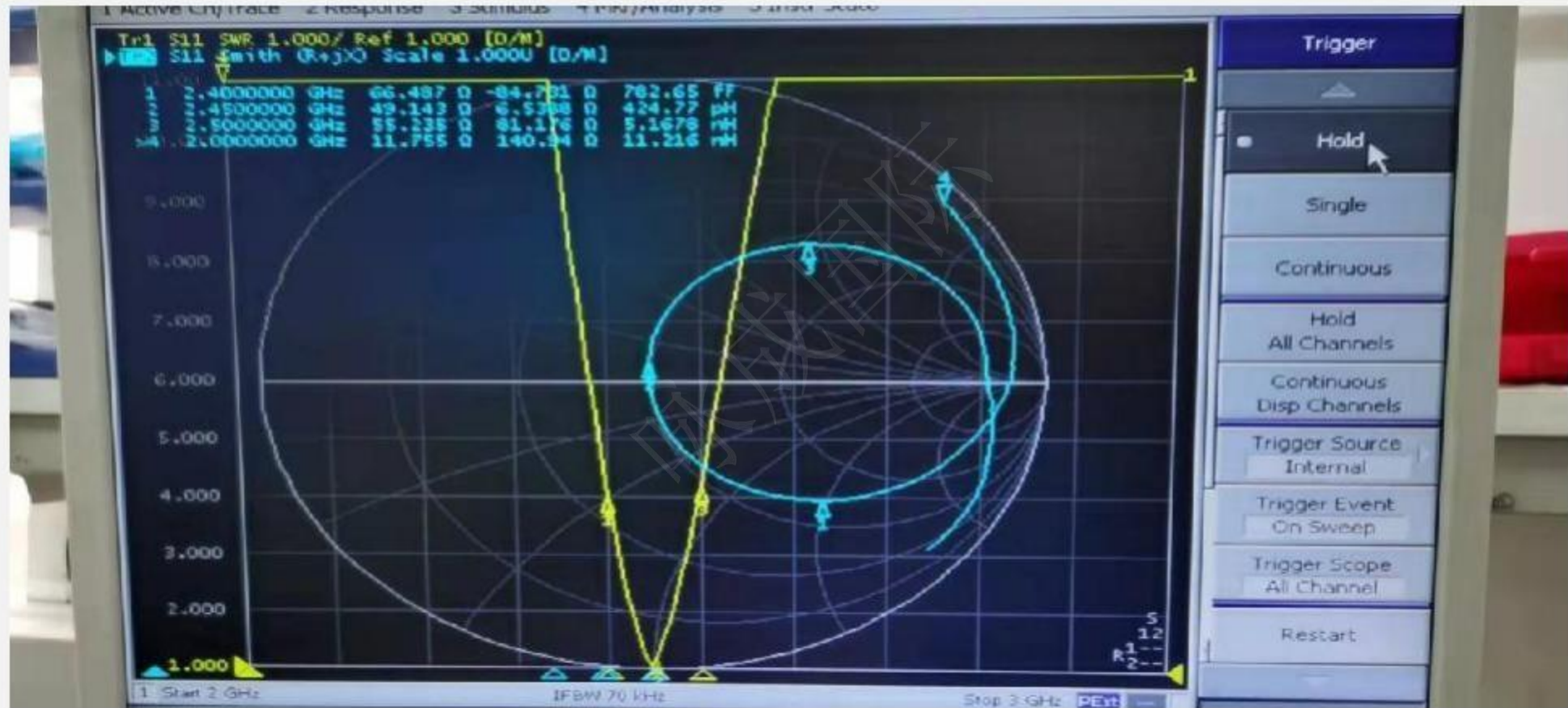
Antenna Placement

ANT: 陶瓷天线1608F245C04(咏成国际) L/R

Matching Circuit: 左右参数



S11、SWR、smith chart:



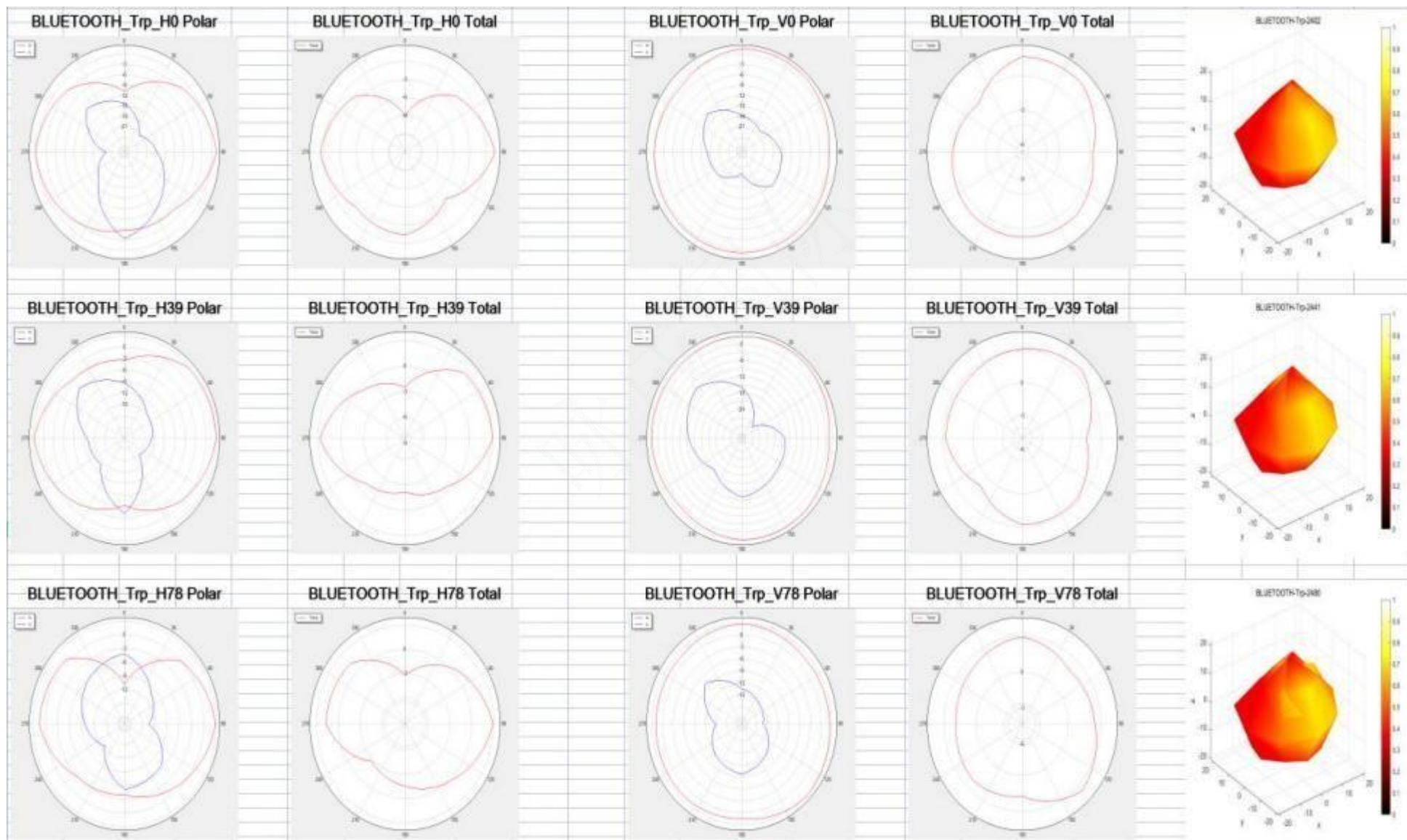
Antenna active test data

有源测试数据

ANT EIRP&EIS parameter Summary						
频段frequency band	BT 2.4G (L)			BT 2.4G (R)		
信道route	0	39	78	0	39	78
1# TRP (dBm)	4.45	4.23	4.33	4.46	4.45	4.67
1# TIS (dBm)	-88.12	-88.34	-88.56	-88.12	-88.34	-88.13

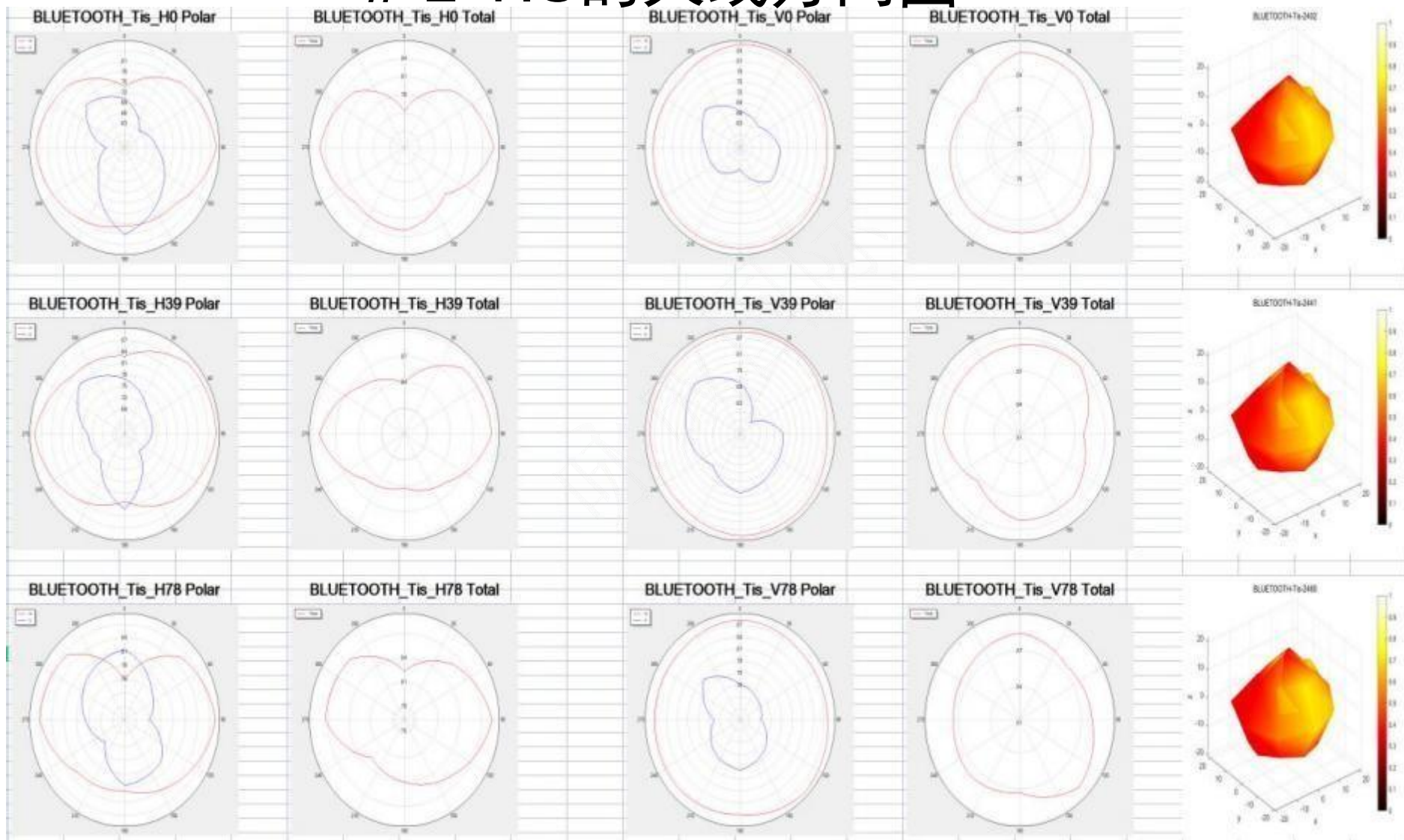
#-L

#-L-TRP的天线方向图



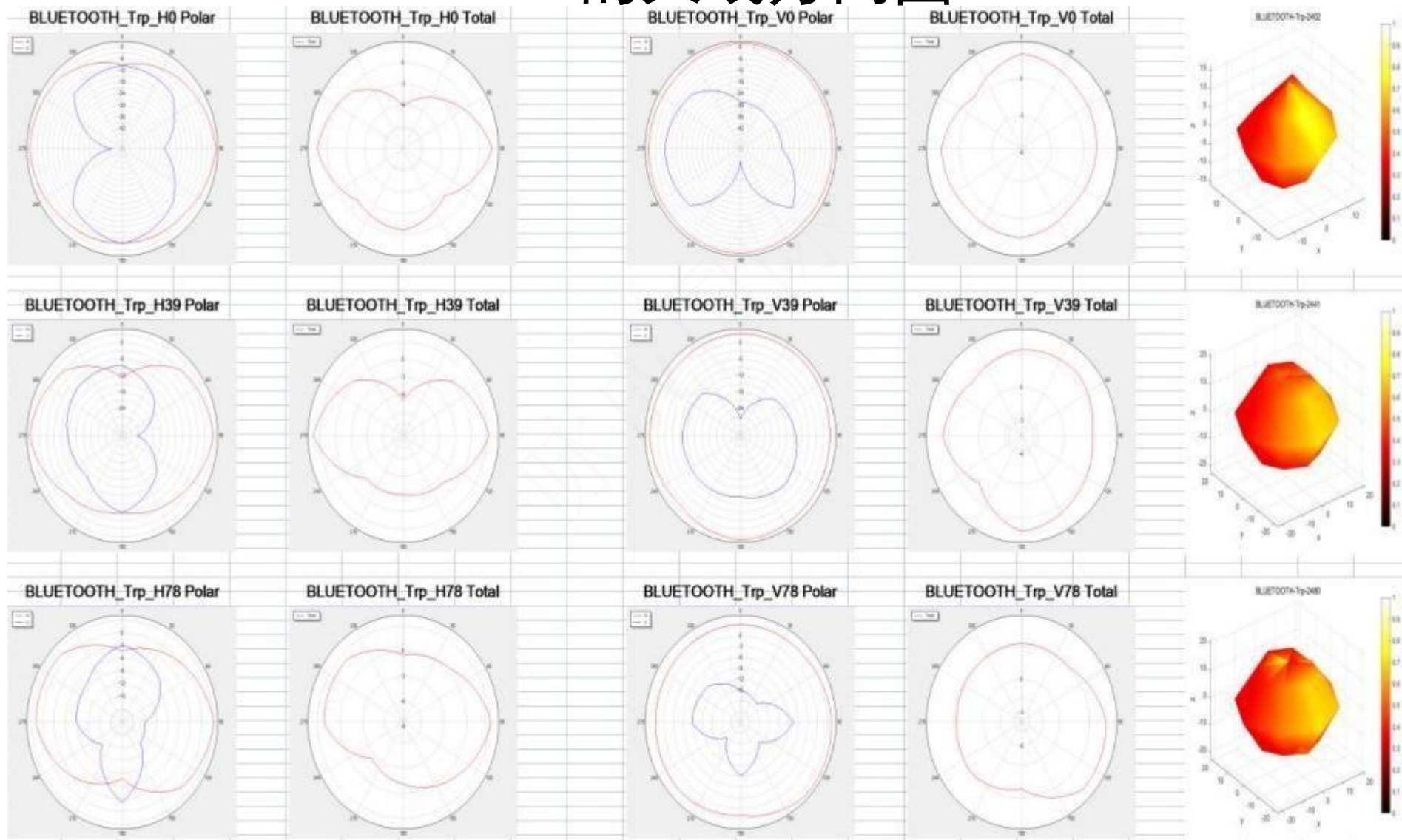
#-L

#-L-TIS的天线方向图



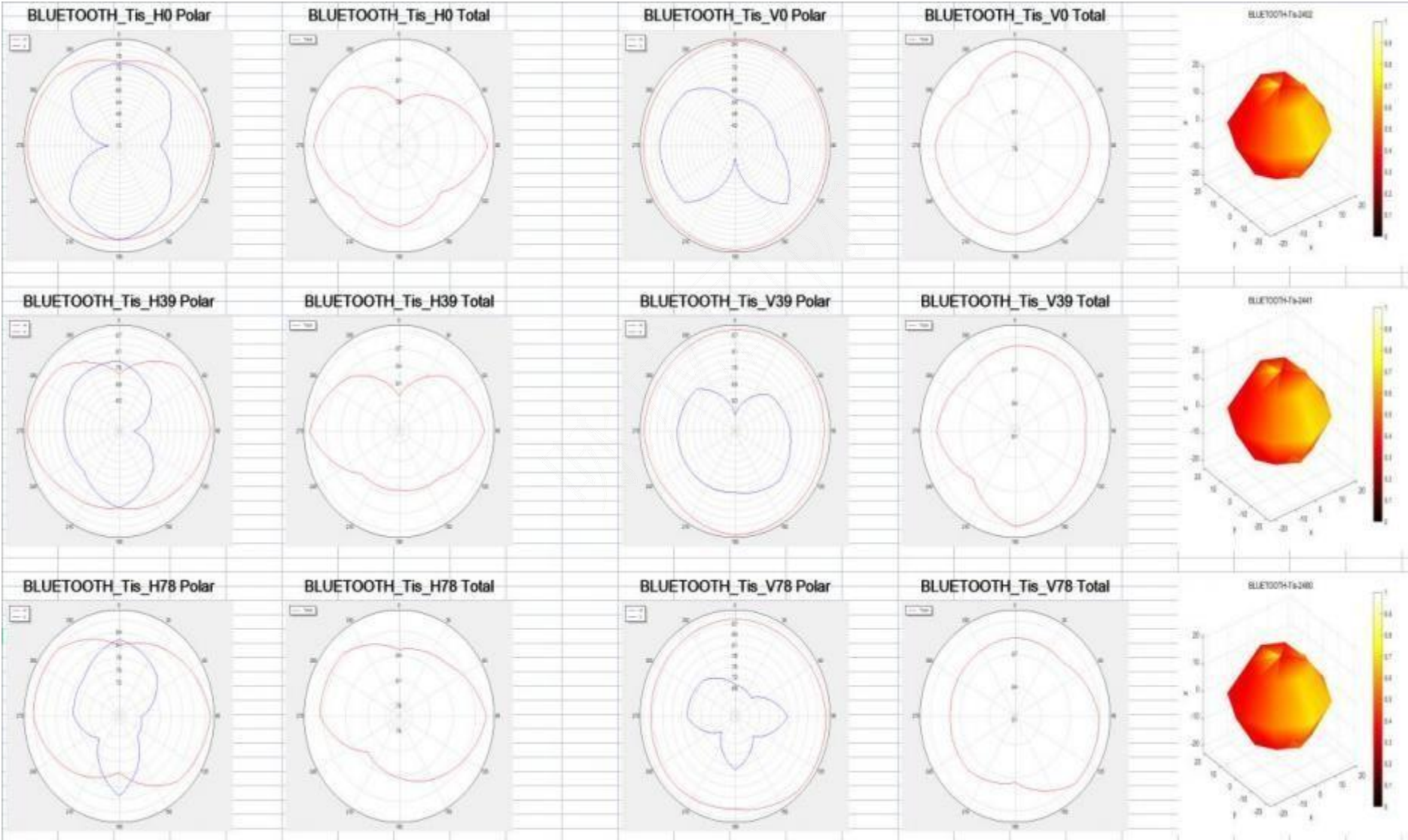
#-R

#-R-TRP的天线方向图



#-R

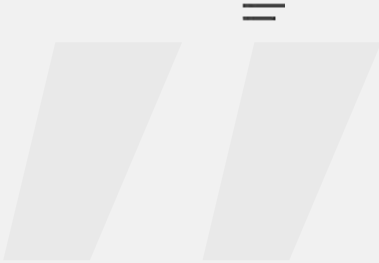
#-R-TIS的天线方向图





Antenna efficiency gain

天线效率与增益图



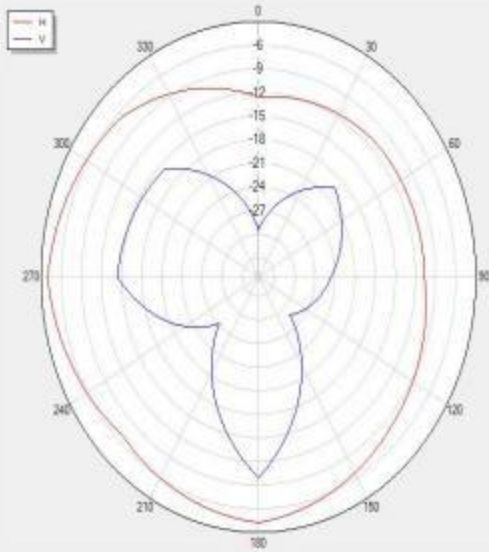
L/R

Frequency	Efficiency	percentage	Gain
2400	-4.04	40.19%	1.57
2410	-3.88	42.41%	2.15
2420	-3.76	42.22%	2.18
2430	-3.56	44.56%	2.56
2440	-3.56	44.54%	2.58
2450	-3.89	45.55%	2.56
2460	-3.65	45.23%	2.56
2470	-3.56	44.82%	2.01
2480	-3.23	44.54%	1.1
2490	-3.56	40.56%	1.19
2500	-3.96	41.42%	1.11

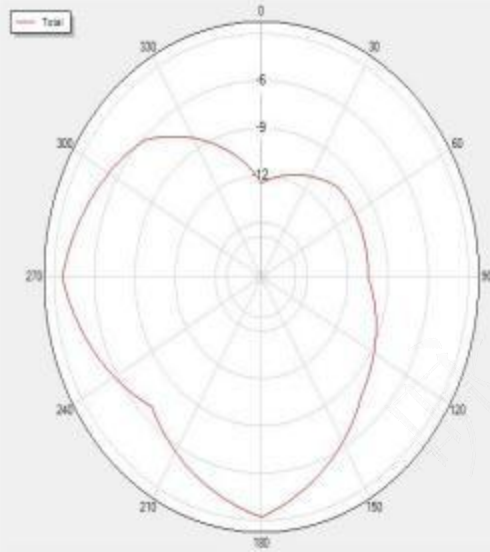


Antenna radiation pattern 2400.00MHz

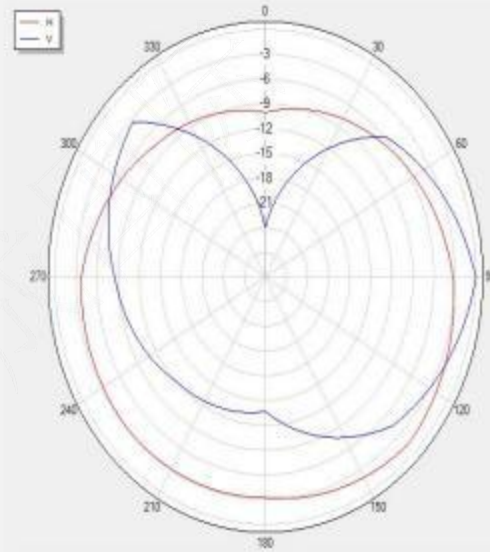
2400 Polar



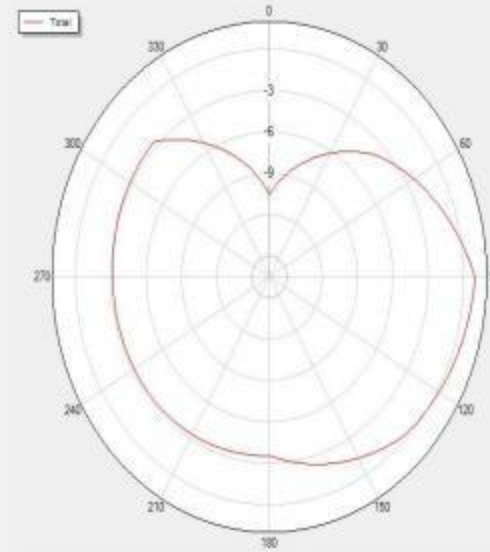
2400 Total



2400 Polar



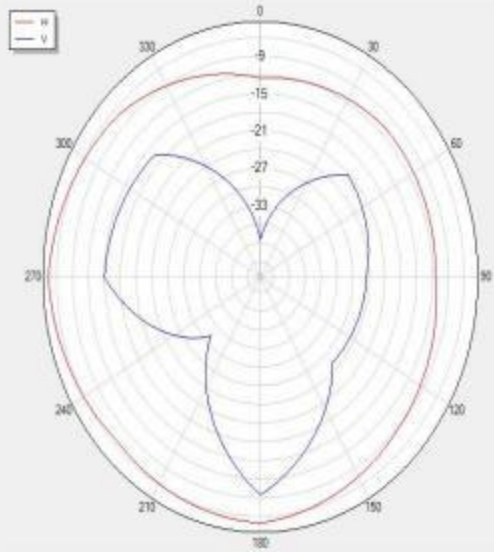
2400 Total



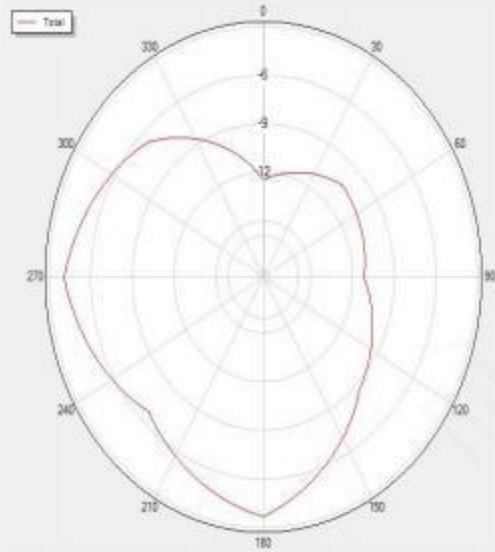


Antenna radiation pattern 2450.00MHz

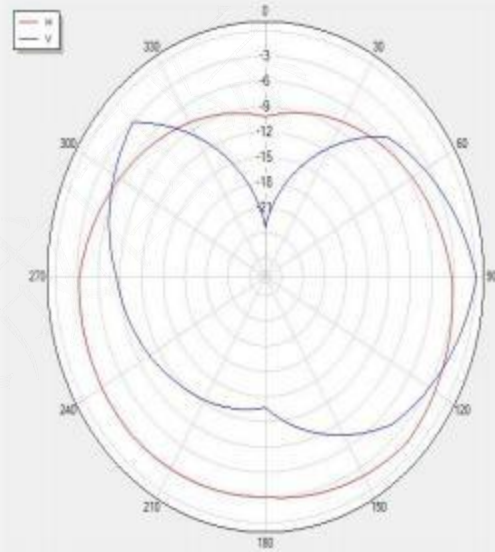
2450 Polar



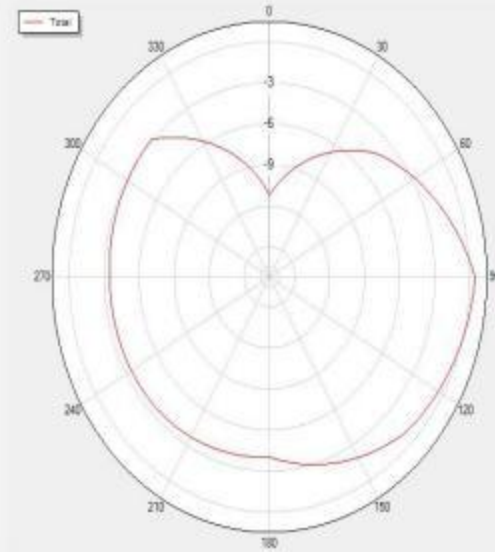
2450 Total



2450 Polar



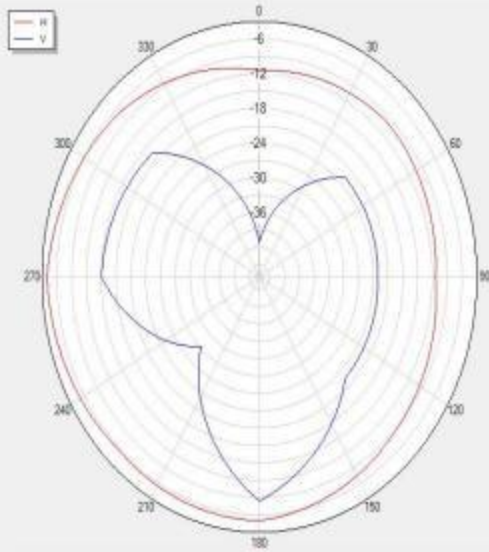
2450 Total



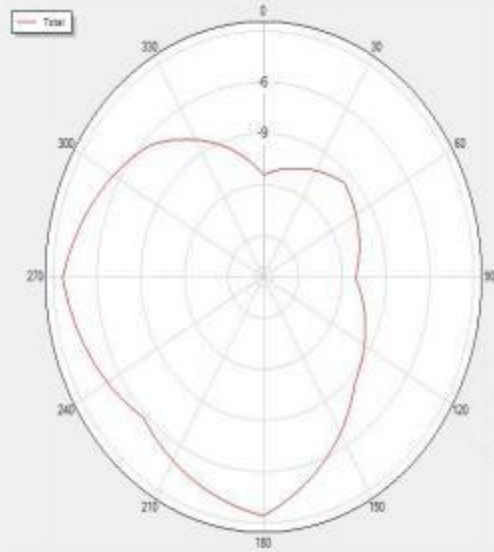


Antenna radiation pattern 2500.00MHz

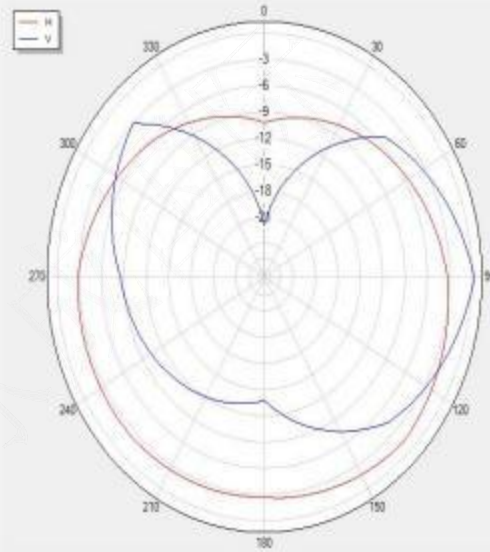
2500 Polar



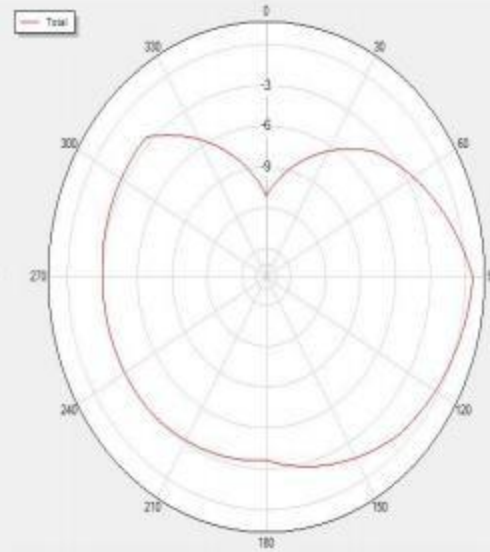
2500 Total



2500 Polar



2500 Total



拉距测试

a. 环境/手机

测试项目	测试吾耳	口袋测试要求(请叙述以下项目测试距离)		备注
M200	双手吾耳OK	右前	OK	iPhone6 公园草地测试15M+
		左前	OK	
		右后	OK	
		左后	OK	

b. 总结

组装方式

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Thank you for watching !

Wish you enjoy your life

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