



642天线测试报告V1

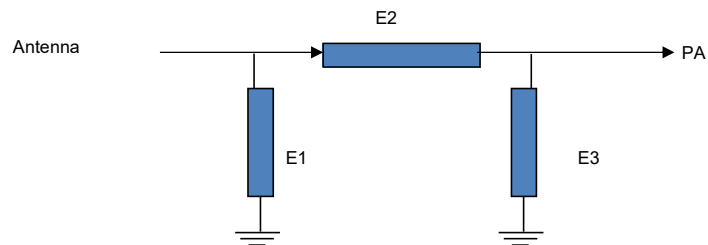
时间： 2023/1/10

本次报告主要目的：验证更新PCB主板整机天线匹配性能

本次报告主要结论：天线效率接近40，建议装入整机实测验证性能

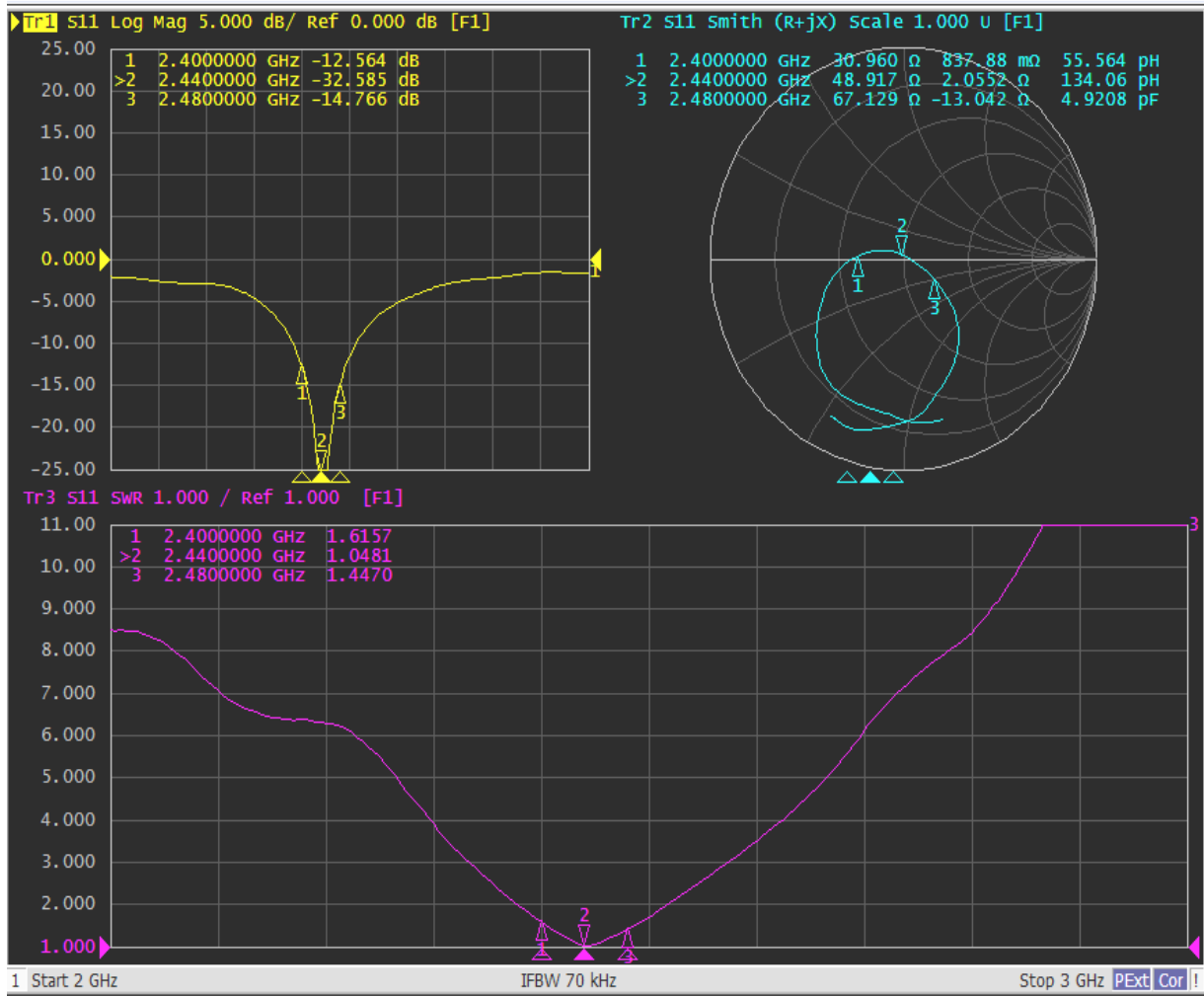
该报告中所包含一切信息版权归远德所有，请勿散播给任何第三方！

天线匹配电路修改示意



Element	Value
E1(0402)	NC
E2(0402)	2.0NH
E3(0402)	1PF

天线阻抗参数测试情况

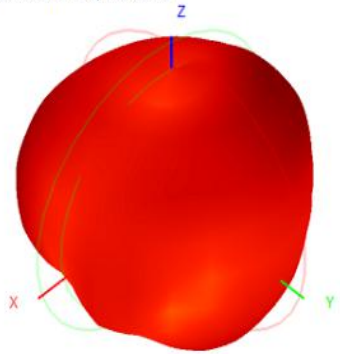


天线效率参数测试情况

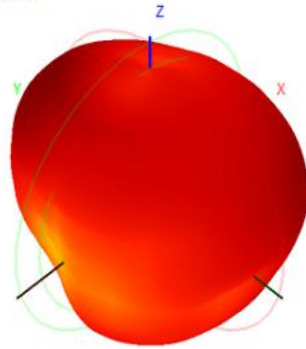
Frequency (MHz)	Gain (dBi)	Efficiency (%)
2400.00	-0.48	38.90
2410.00	-0.32	41.02
2420.00	-0.43	40.23
2430.00	-0.24	39.29
2440.00	-0.13	40.26
2450.00	-0.36	38.43
2460.00	-0.46	39.74
2470.00	-0.63	38.77
2480.00	-0.89	37.09
2490.00	-0.95	36.55
2500.00	-1.10	34.73

天线2D/3D方向图

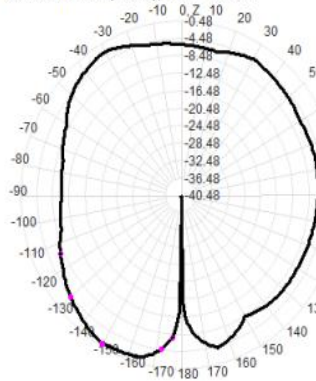
2400.0MHz H+V, Eff: 38.9%



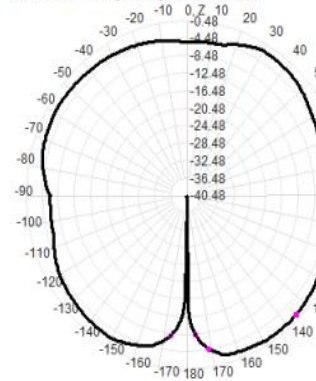
Back View



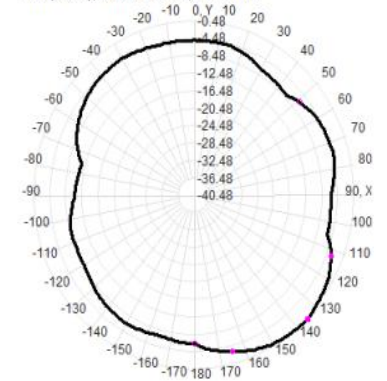
2400.0MHz Total(E1-XZ), Max=-1.41dBi



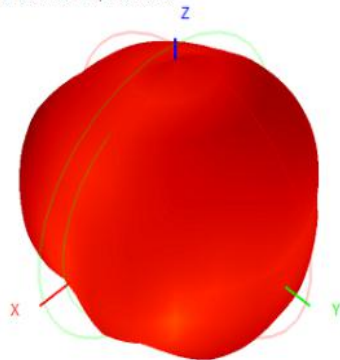
2400.0MHz Total(E2-YZ), Max=-1.80dBi



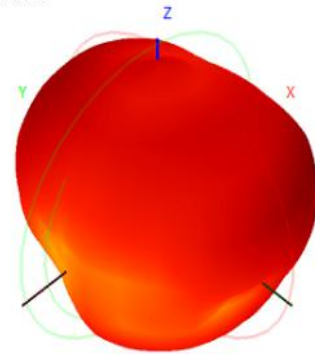
Total(H-XY), Max=-0.48dBi, CirD=11.11



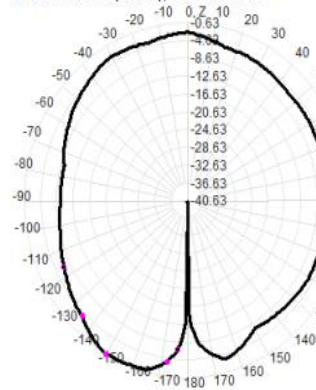
2440.0MHz H+V, Eff: 40.3%



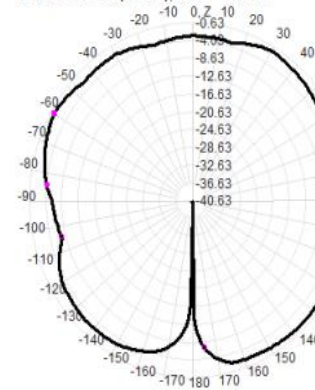
Back View



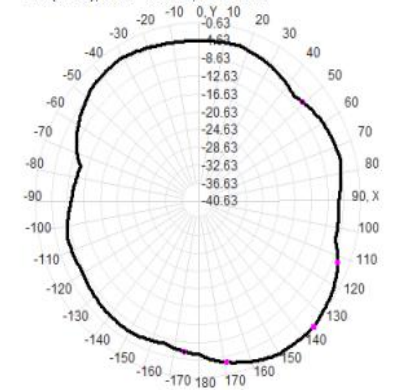
2440.0MHz Total(E1-XZ), Max=-0.93dBi



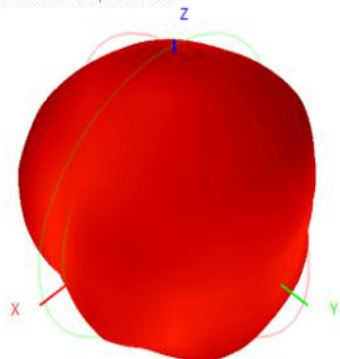
2440.0MHz Total(E2-YZ), Max=-1.50dBi



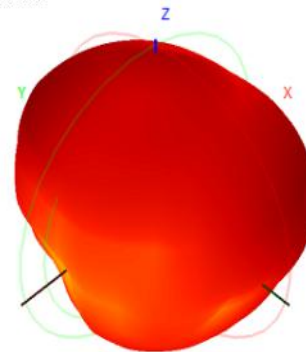
Total(H-XY), Max=-0.63dBi, CirD=10.19



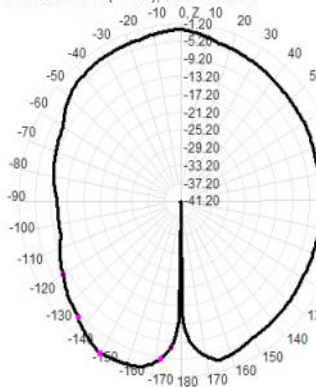
2480.0MHz H+V, Eff: 37.1%



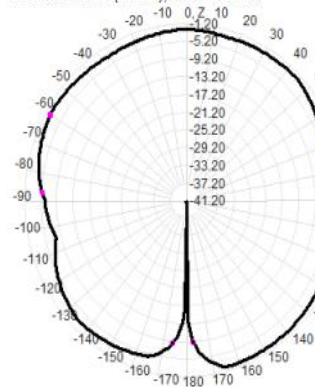
Back View



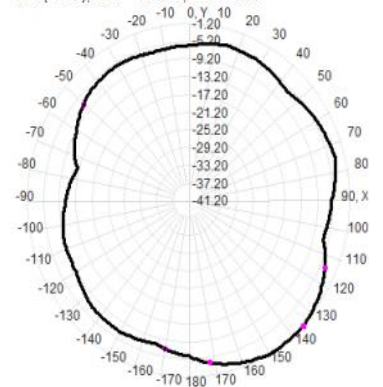
2480.0MHz Total(E1-XZ), Max=-1.63dBi



2480.0MHz Total(E2-YZ), Max=-2.35dBi



Total(H-XY), Max=-1.20dBi, CirD=11.43



有源测试

	Channel	TRP (dBm)	TIS (dBm)
OTA数据	0	3.53	-91.25
	39	3.76	-90.81
	78	2.78	-90.14

天线位置

