

测试报告

客户名称：奥尼

项目名称：D160

开发案号：Y202010201934

版本号：V1.0

天线频段：WIFI/BT

频段范围：2.400-2450MHz，5150-5850MHz/2400-2500MHz

结构工程师：柯友杰

射频工程师：刘立华

审核人：关宁

制作日期：20210422

修订日期	修 订 内 容	修订者	原版本

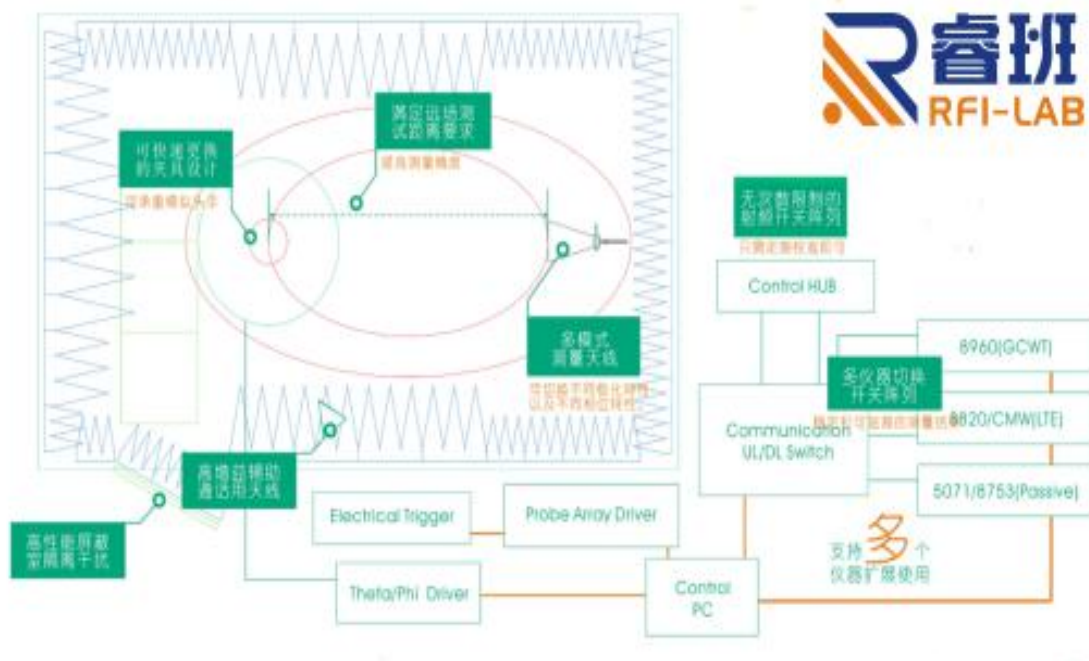
一、说明

这份报告总结了奥尼 D160 天线项目 WIFI/BT 天线的电气性能结果，包括天线的 S11 参数, Efficiency, gain。

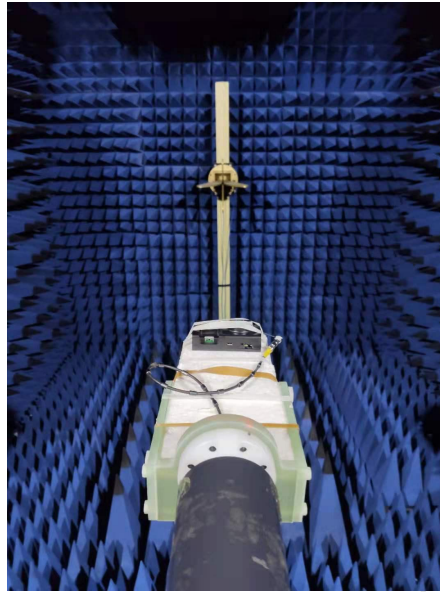
二、天线整机安装示意图



三、微波暗室的测试原理图



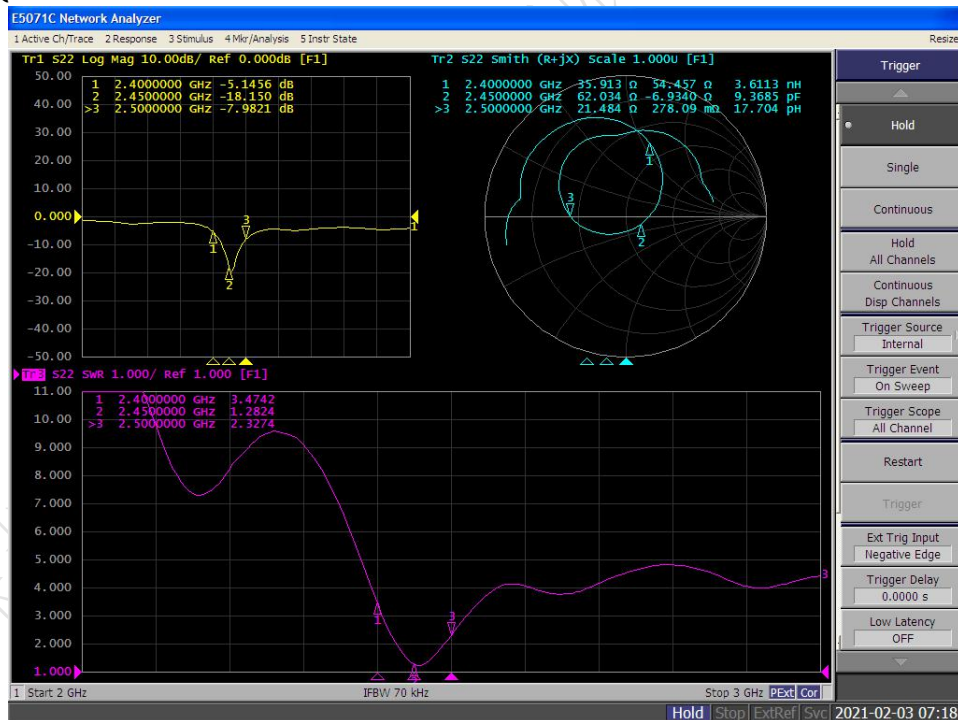
天线测试暗室摆放位置:



天线无源测试数据

天线 S11 参数图

BT 天线



驻波比数据

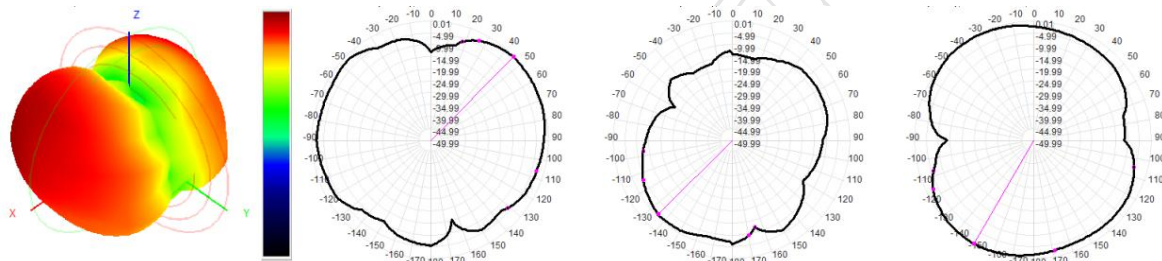
Freq/MHz	2400MHz	2450MHz	2500MHz
VSWR	3.47	1.28	2.32

➤ 天线暗室测试数据

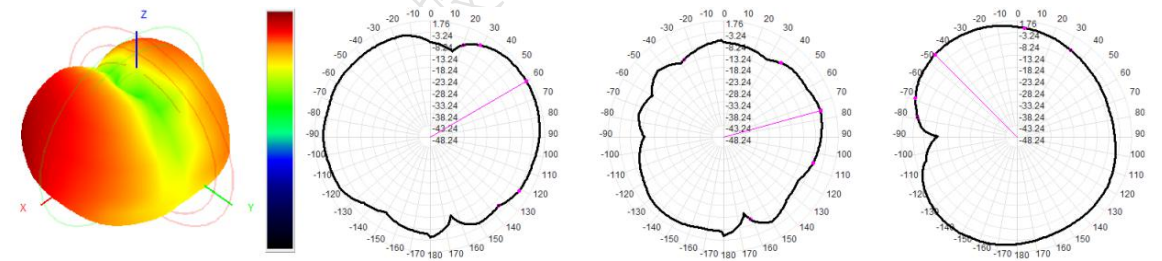
Frequency (MHz)	Gain (dBi)	Efficiency (%)
2400.0	1.13	37.52
2410.0	1.55	40.69
2420.0	2.11	45.61
2430.0	2.04	43.84
2440.0	2.18	44.08
2450.0	2.21	43.42
2460.0	2.05	41.36
2470.0	1.95	40.99
2480.0	1.75	40.79
2490.0	1.23	37.01
2500.0	1.15	35.58

天线方向图

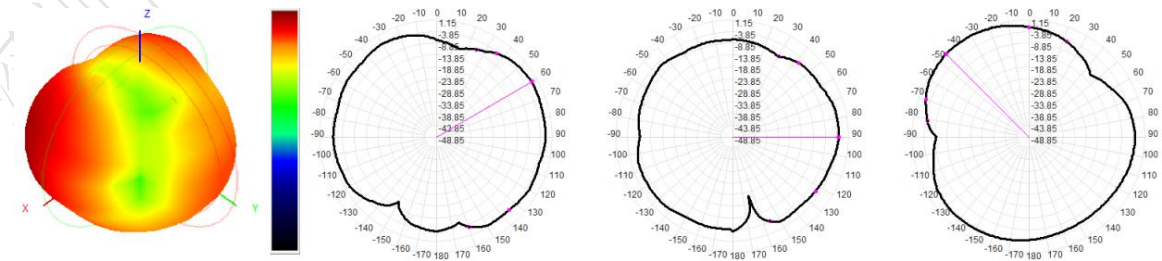
2400M 3D-E1-E2-H



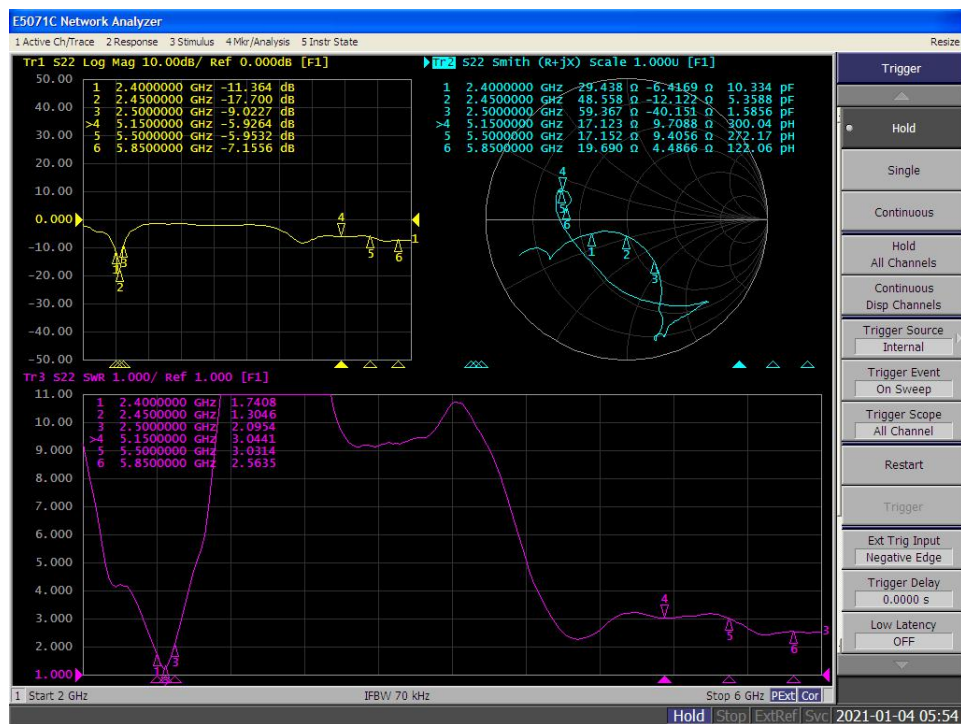
2450M 3D-E1-E2-H



2500M 3D-E1-E2-H



WIFI 天线



➤ 驻波比数据

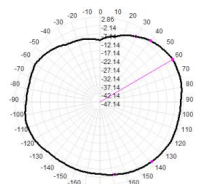
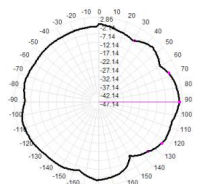
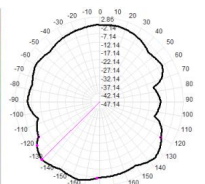
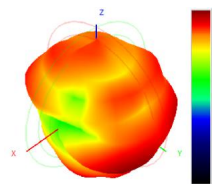
Freq/MHz	2400MHz	2450MHz	2500MHz	5150MHz	5500MHz	5850MHz
VSWR	1.74	1.30	2.09	3.04	3.03	2.56

➤ 天线暗室测试数据

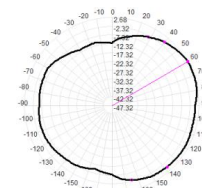
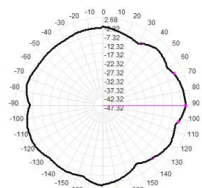
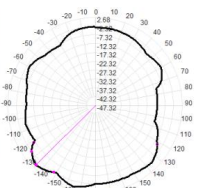
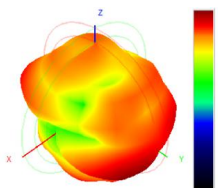
Frequency (MHz)	Gain (dBi)	Efficiency (%)
2400.0	2.86	53.13
2410.0	2.72	50.92
2420.0	3.13	53.51
2430.0	2.83	46.93
2440.0	2.89	45.77
2450.0	2.68	43.14
2460.0	2.30	40.00
2470.0	2.15	39.76
2480.0	2.25	41.74
2490.0	1.64	36.05
2500.0	1.86	37.95
5150.0	1.57	33.21
5200.0	1.30	30.01
5250.0	1.40	32.34
5300.0	0.95	31.43
5350.0	0.69	29.56
5400.0	1.25	29.57
5450.0	1.93	33.59
5500.0	2.22	35.65
5550.0	2.20	35.28
5600.0	2.30	40.01
5650.0	2.68	44.46
5700.0	2.50	43.25
5750.0	2.97	45.64
5800.0	3.73	49.71
5850.0	3.56	47.70

天线方向图

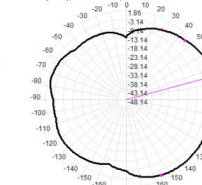
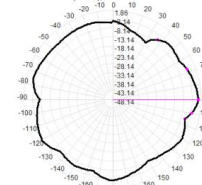
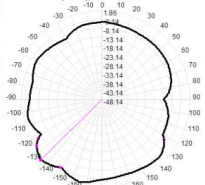
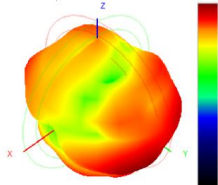
2400M 3D-E1-E2-H



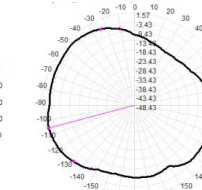
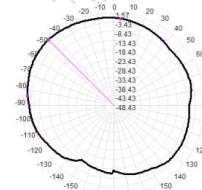
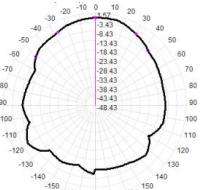
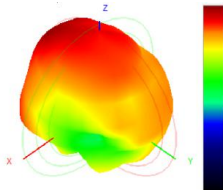
2450M 3D-E1-E2-H



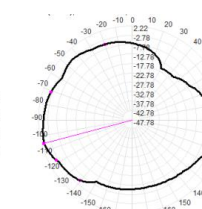
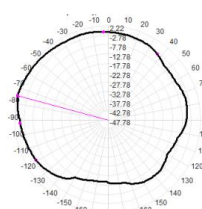
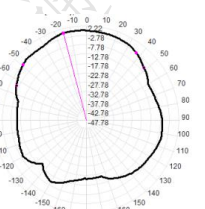
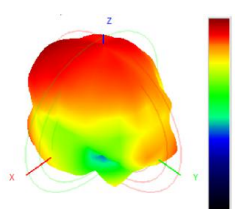
2500M 3D-E1-E2-H



5150M 3D-E1-E2-H



5500M 3D-E1-E2-H



5850M 3D-E1-E2-H

