



深圳云里物里科技股份有限公司

产品天线测试报告 (The Antenna Test Report)

Y-YB-CR-089

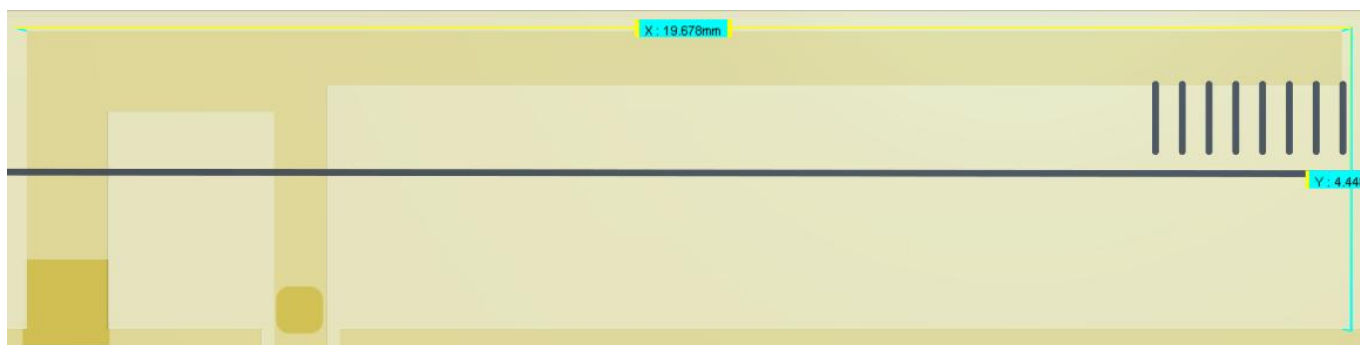
V003

密级：绝密 /confidentiality

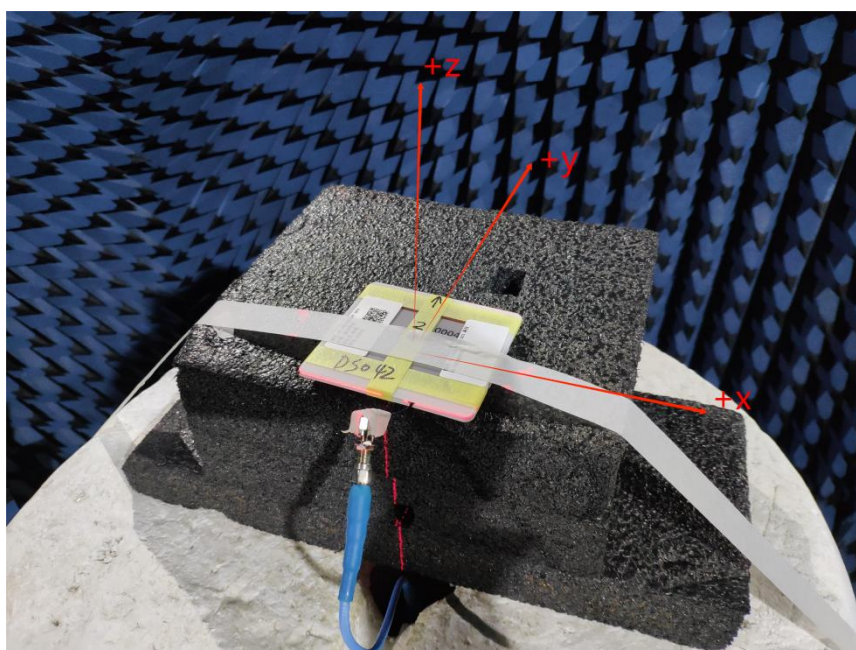
天线型号 (Antenna Version) : ANT-BBNCNC23017
产品型号 (Model of the DUT) : DS042
PCB 编号及版本 (PCB number and version) : ES005F6_V1.0
责任硬件工程师 (Hardware Engineer) : 窦淼全
测试日期 (Test Data) : 2023.11.21
1、技术指标 (Technical Specification)

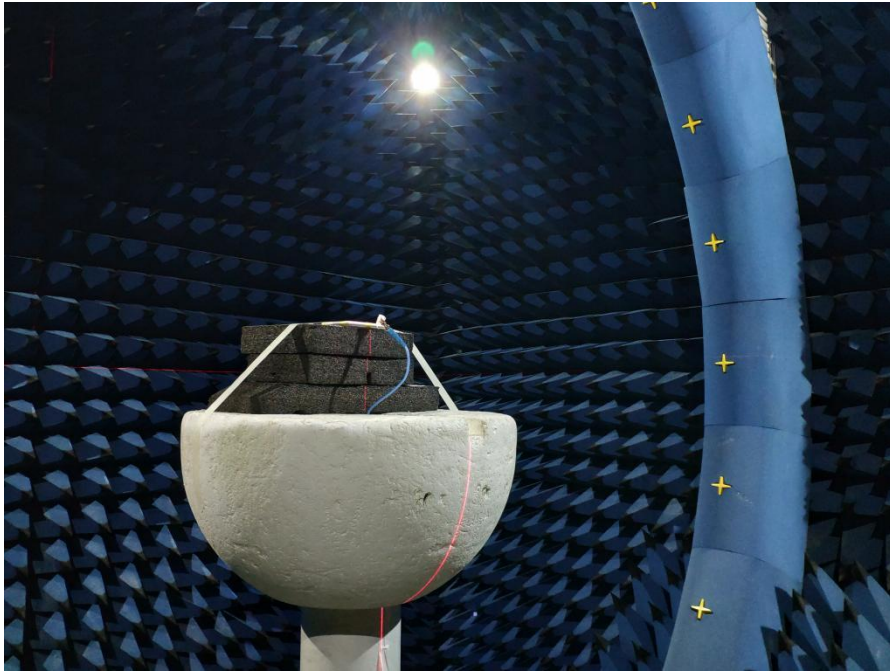
电性能指标 Electrical Specifications	
频率范围 Frequency Range (MHz)	2400-2500
频带宽度 Bandwidth (-10dB) (MHz)	300MHZ
输入阻抗 Input Impedance (Ω)	50
回波损耗 Return Loss (dB)	<-13
电压驻波比 VSWR	<1.5
增益 Gain (@2.44GHz) (dBi)	2.01
峰值增益 (Peak Gain) (dBi)	2.26
极化形式 Polarization Type	线极化 Linear polarization
雷电保护 Lightning Protection	直流接地 (DC grounding)
功率容量 Power Capacity (mW)	1000
机械指标 Mechanical Specifications	
天线尺寸 Antenna Size (mm)	19.7mm*4.5mm
辐射体 Radiator	铜 Cuprum
连接器型号 Connect Type	无
工作温度 Working Temperature (℃)	-20~50
存储温度 Storage Temperature (℃)	-40~65

2、天线外形和尺寸 (the shape and size of the antenna)



3、测试结果 (The result of the test)





3.1 增益和效率 (Gain and Efficiency)



样品编号	2#-DS042 2#	
EUT型号		
备注		
Frequency	Gain (dBi)	Efficiency()
2400MHz	1.83	58%
2402MHz	1.66	58%
2404MHz	1.65	58%
2406MHz	1.59	58%
2408MHz	1.60	59%
2410MHz	1.58	59%
2412MHz	1.58	60%
2414MHz	1.56	60%
2416MHz	1.60	60%
2418MHz	1.60	60%
2420MHz	1.57	60%
2422MHz	1.56	61%
2424MHz	1.82	61%
2426MHz	1.85	62%
2428MHz	1.84	62%
2430MHz	1.83	62%
2432MHz	1.86	62%



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2434MHz	1.88	63%
2436MHz	1.97	63%
2438MHz	1.98	63%
2440MHz	2.01	63%
2442MHz	2.04	63%
2444MHz	2.04	63%
2446MHz	2.19	63%
2448MHz	2.17	63%
2450MHz	2.18	63%
2452MHz	2.18	63%
2454MHz	2.13	63%
2456MHz	2.13	63%
2458MHz	2.13	63%
2460MHz	2.12	63%
2462MHz	2.08	63%
2464MHz	2.06	64%
2466MHz	1.96	64%
2468MHz	1.95	65%
2470MHz	1.97	65%



2472MHz	2.01	65%
2474MHz	2.06	66%
2476MHz	2.09	67%
2478MHz	2.13	67%
2480MHz	2.15	67%
2482MHz	2.16	67%
2484MHz	2.19	67%
2486MHz	2.25	67%
2488MHz	2.25	66%
2490MHz	2.25	66%
2492MHz	2.26	65%
2494MHz	2.24	65%
2496MHz	2.12	64%
2498MHz	2.13	64%
2500MHz	2.11	63%

3.2 辐射方向图 (Radiation Pattern)

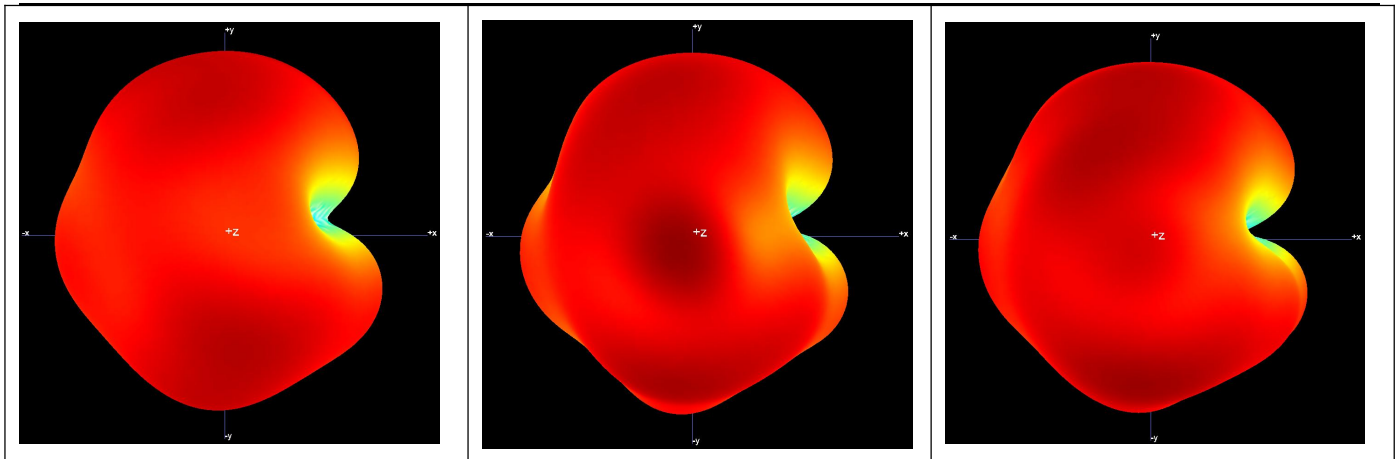
3D 方向图

2402MHz	2440MHz	2480MHz
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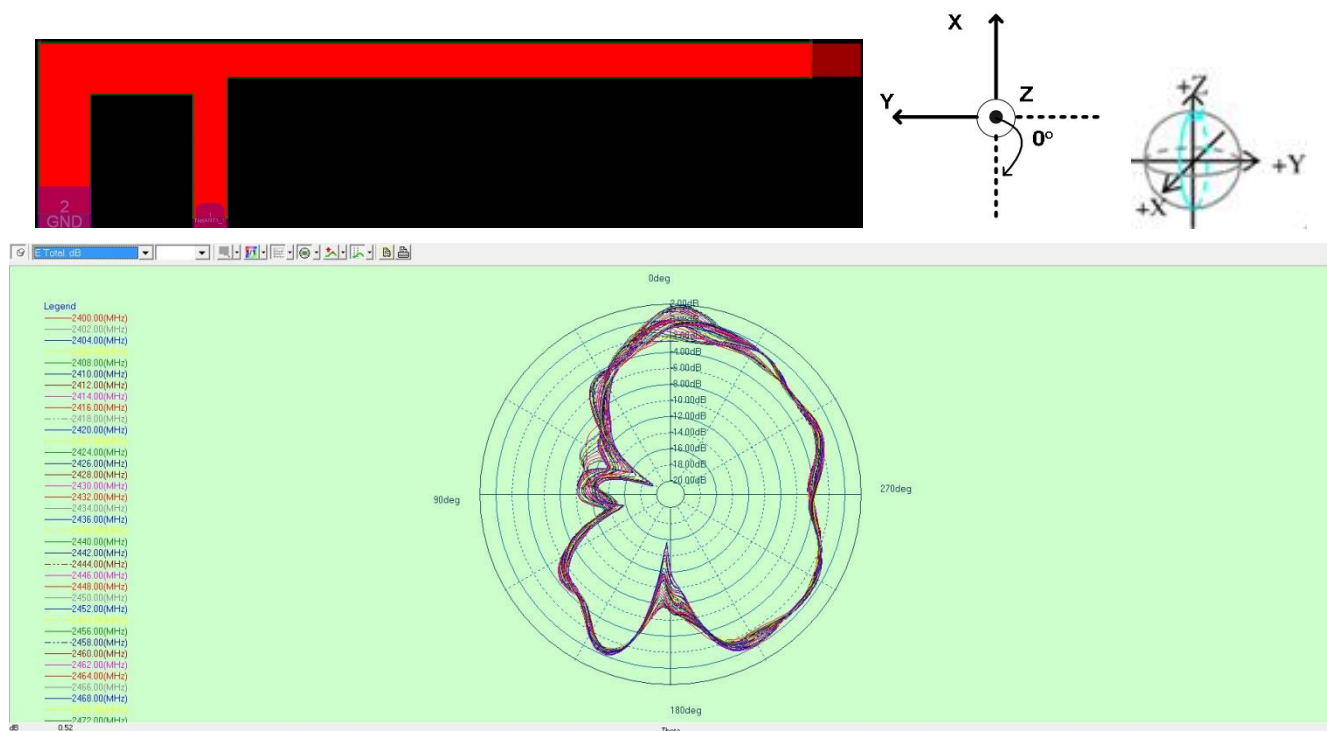
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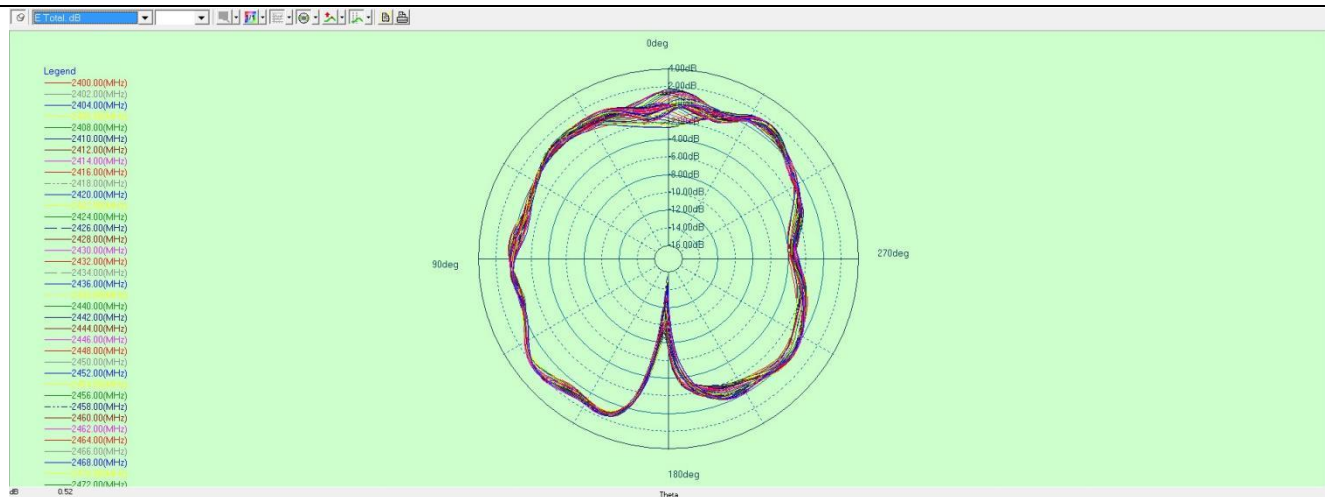


(1) E1, XZ 面, $\phi=0^\circ$; (E1, XZ plane, $\phi=0^\circ$)



(2) E2, YZ 面, $\phi=90^\circ$; (E2, YZ plane, $\phi=90^\circ$)





(3) H, XY 面, $\theta=90^\circ$; (H, XY plane, $\theta=90^\circ$)

