



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

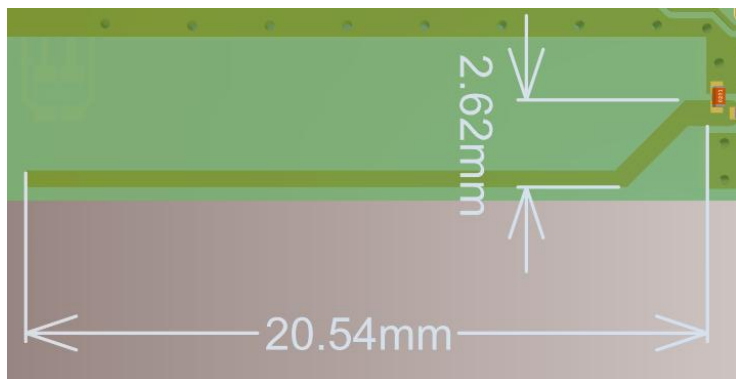
V003

密级：绝密 /confidentiality

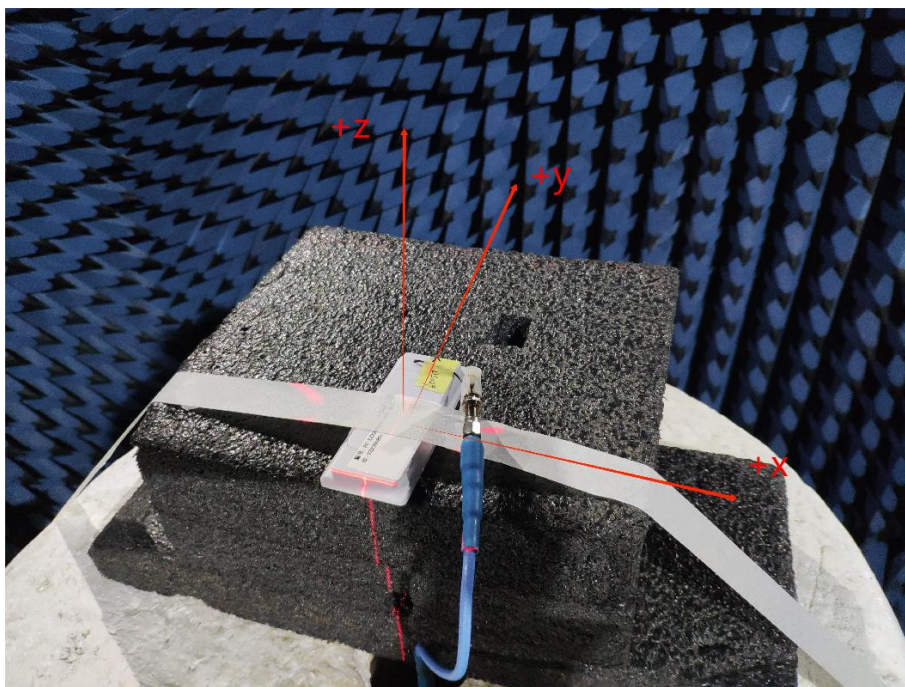
天线型号 (Antenna Version) : ANT-BBNCNC23018
产品型号 (Model of the DUT) : DS029
PCB 编号及版本 (PCB number and version) : ES004F6_V1.1
责任硬件工程师 (Hardware Engineer) : 黄保青
测试日期 (Test Data) : 2023.11.21
1、技术指标 (Technical Specification)

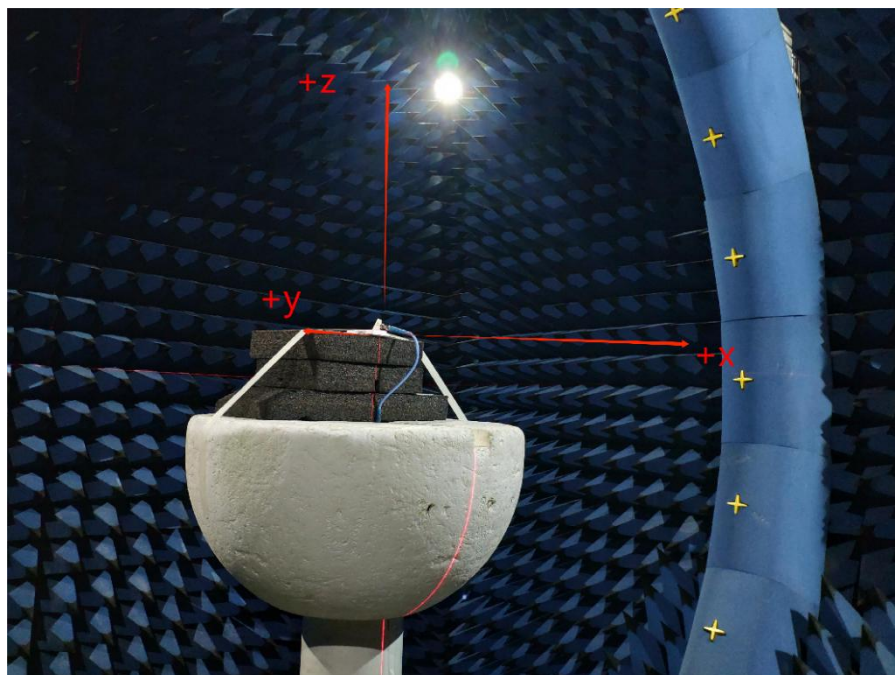
电性能指标 Electrical Specifications	
频率范围 Frequency Range (MHz)	2400-2480
频带宽度 Bandwidth (-10dB) (MHz)	300MHZ
输入阻抗 Input Impedance (Ω)	50
回波损耗 Return Loss (dB)	<-12
电压驻波比 VSWR	<1.6
增益 Gain (@2.44GHz) (dBi)	3.52
峰值增益 (Peak Gain) (dBi)	3.68
极化形式 Polarization Type	线极化 Linear polarization
雷电保护 Lightning Protection	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)	20.5mm*2.6mm
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)

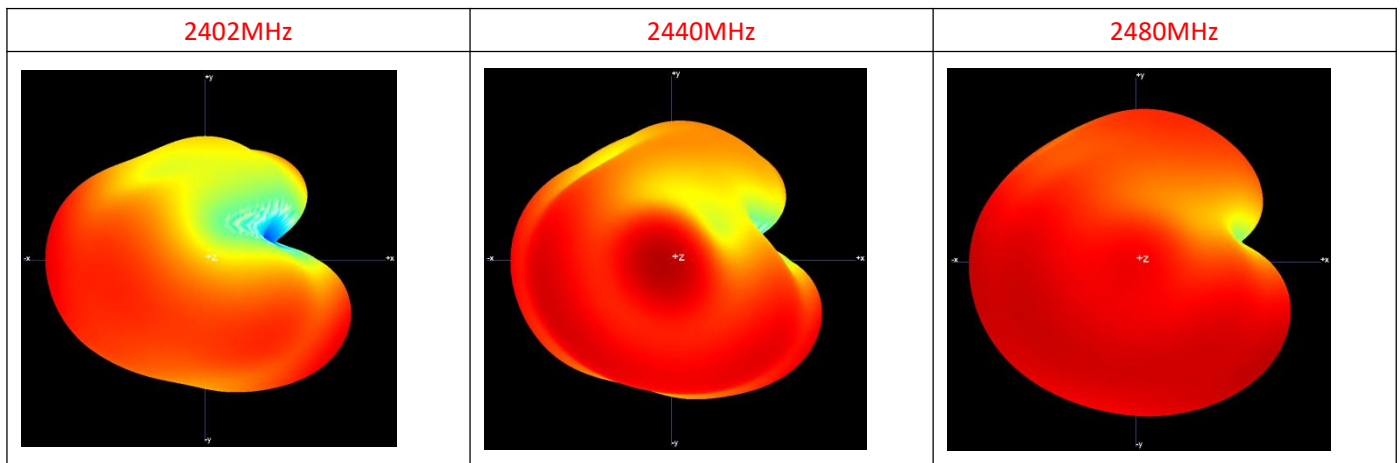
样品编号	3#-DS029	
EUT型号	3#	
备注		
Frequency	Gain (dBi)	Efficiency()
2400MHz	3.24	62%
2402MHz	3.26	62%
2404MHz	3.26	62%
2406MHz	3.26	63%
2408MHz	3.27	63%
2410MHz	3.29	64%
2412MHz	3.29	64%
2414MHz	3.26	64%
2416MHz	3.28	64%
2418MHz	3.28	64%
2420MHz	3.25	64%
2422MHz	3.21	64%
2424MHz	3.22	64%
2426MHz	3.41	65%
2428MHz	3.41	65%
2430MHz	3.39	64%

2432MHz	3.40	65%
2434MHz	3.44	65%
2436MHz	3.47	65%
2438MHz	3.47	65%
2440MHz	3.52	65%
2442MHz	3.57	65%
2444MHz	3.58	65%
2446MHz	3.65	65%
2448MHz	3.66	65%
2450MHz	3.68	65%
2452MHz	3.68	65%
2454MHz	3.65	65%
2456MHz	3.65	65%
2458MHz	3.65	65%
2460MHz	3.63	65%
2462MHz	3.60	65%
2464MHz	3.57	65%
2466MHz	3.50	65%

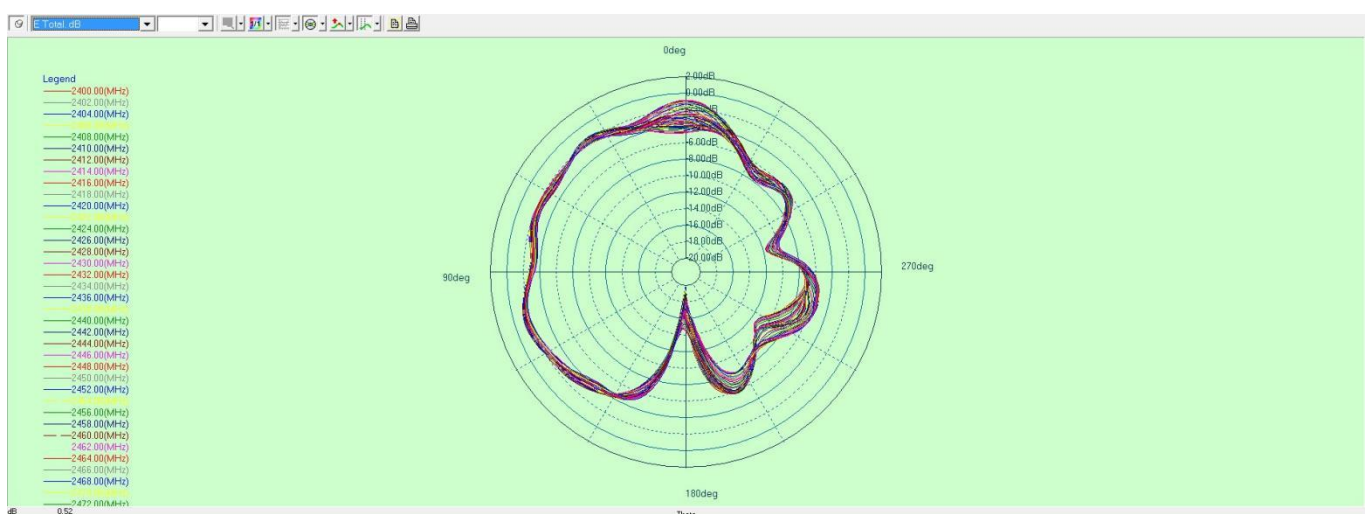
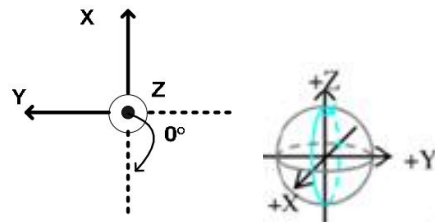
2468MHz	3.49	65%
2470MHz	3.44	65%
2472MHz	3.41	64%
2474MHz	3.42	65%
2476MHz	3.46	65%
2478MHz	3.42	64%
2480MHz	3.38	64%
2482MHz	3.33	63%
2484MHz	3.29	63%
2486MHz	3.34	63%
2488MHz	3.27	62%
2490MHz	3.22	62%
2492MHz	3.22	62%
2494MHz	3.18	61%
2496MHz	3.02	61%
2498MHz	3.00	61%
2500MHz	2.99	60%

3.2 辐射方向图 (Radiation Pattern)

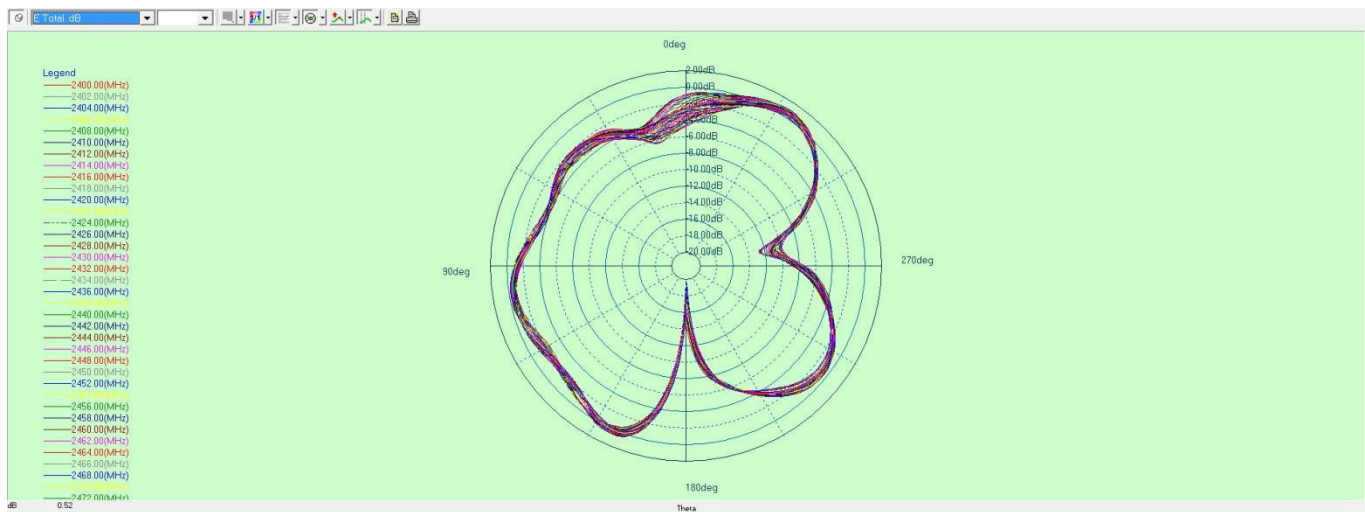
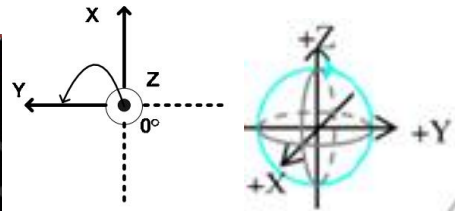
3D 方向图



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



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



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

