承 认 书

SPECIFICATION FORAPPROVAL

客户名称 Customer Name	SHENZHEN KONTSO TECHNOLOGY CO.,LTD		
客户项目名 Customer Project Name	NYFZ-S20-906-0B-V1.0-20240316	项目名 Project Name	
客户编码 Customer P/N	YKQ-33	料号 Surbaner P/N	
频段 Band	433MHz		
版本号 Version	A0		

目录/Catalogue

一. 产品图纸或实物图片/DrawingorProduct Image

二. Technical Parameter /技术参数

1.Antenna/天线		
No/序号	**Part Name/项目**	**SPEC/规格**
1	Frequency Range/ 频率范围	433MHz
2	Impendence/阻抗	50 ohm nominal
3	Gain/增益	＞-3dBi
4	Polarization/极化	LINE
5	VSWR/驻波比	≤1.5
6	Efficiency/效率	≥18%

2. Environmental Characteristics/环境特性		
No/序号	**Part Name/项目**	**SPEC/规格**
1	Operation Humidity/ 工作湿度	5~95%不冷凝 No condensation
2	Operating Temperature/工作温度	-20~+60℃
3	Store Temperatuer/储存温度	-30~+70℃

射频性能测量报告

RF Performance Test Report

客户名称 Customer Name	深圳市康泰硕电子有限公司	项目名称 Project Name	NYFZ-S20-906-0B-V1.0-20240316	料号 P/N	
频段 Band	433MHz	测试日期 Test Date	2024/3/28	测试人 Inspector	

天线测试设备简介

Antenna Test Equipment Introduction

测试天线输入特性使用 **Agilent E5071C and Agilent 5062A** 矢量网络分析仪；辐射特性利用 Satimo 三维近场暗室进行测试，并分别使用 8960 E5515 和 Agilent E4438C 进行了分析。暗房的测试坐标如下:

Test of antenna input characteristics using **Agilent E5071C and Agilent 5062A** vector network analyzer; The radiation pattern of the antenna are tested using the Satimostarlab3D near fieldAnechoic Chamber, and the instrument is used to agilent8960 E5515 and Agilent E4438C. The test coordinates of the darkroom are as follows:

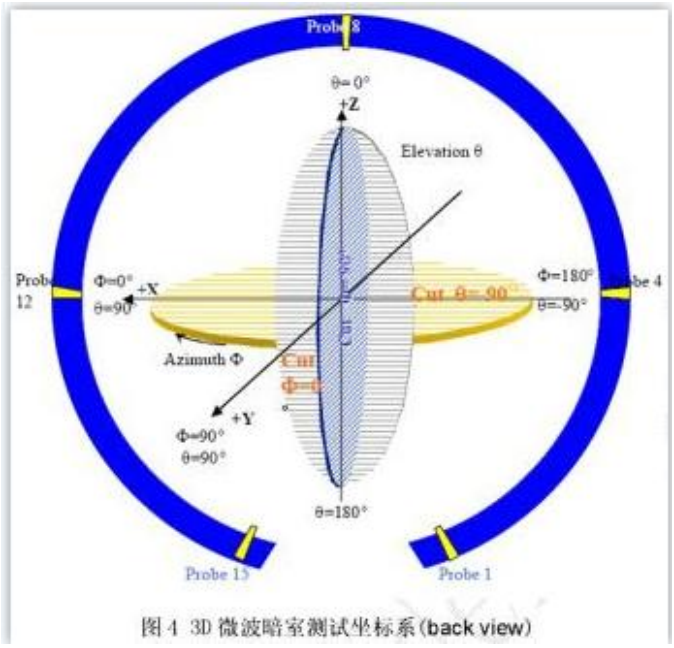


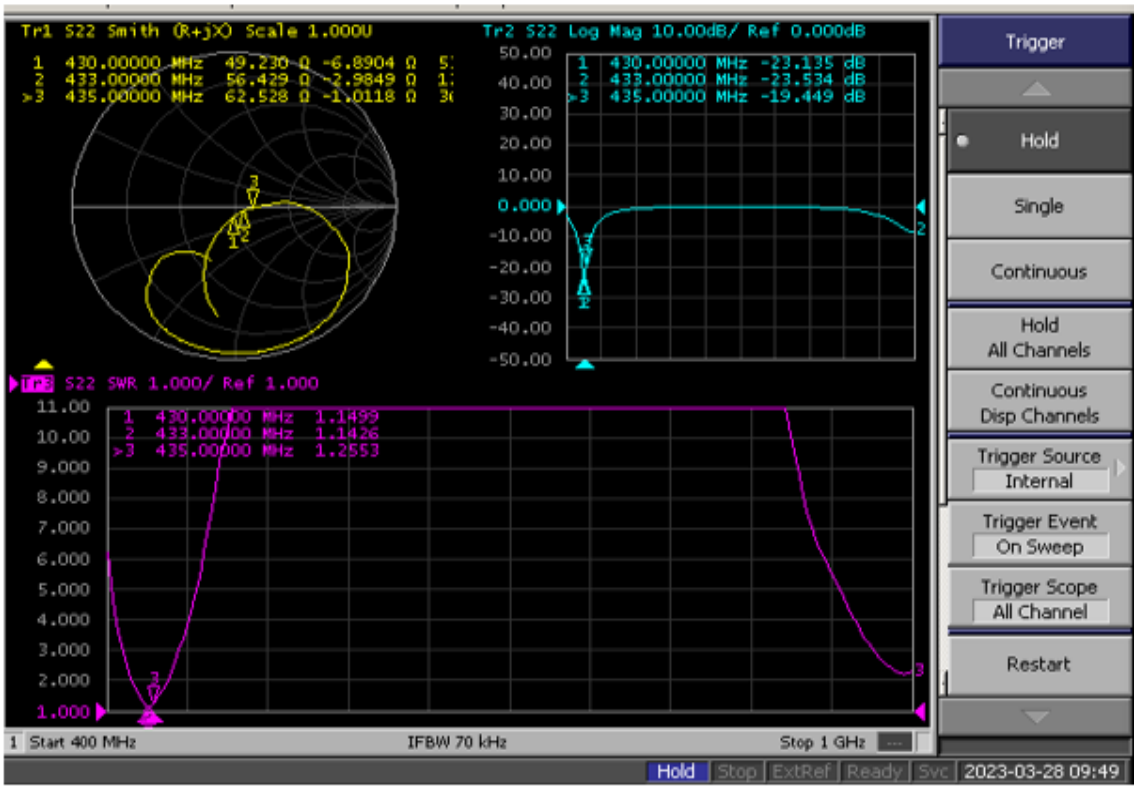
图 4 3D 微波暗室测试坐标系(back view)

1. S11 参数测量/***S11 Parameter-VSWR***

使用一根 50Ω 同轴电缆连接到天线，然后该电缆连接到网络分析仪测量 S11 参数，被测量产品远离金属至少 20 厘米。

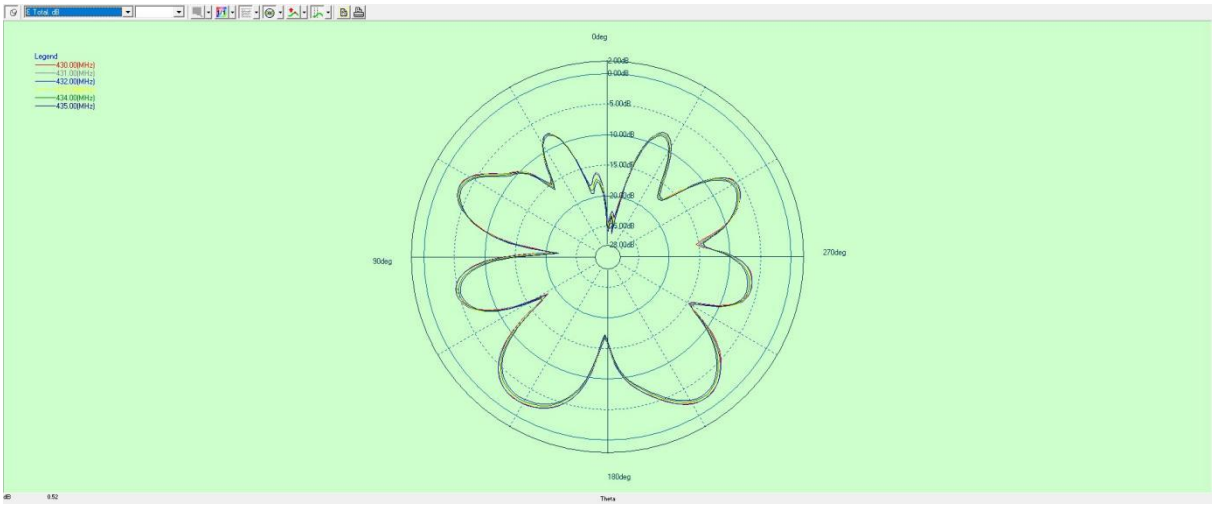
MeasuringMethod is a 50Ωcoaxial cable is connected to the antenna. Then this cable isconnected to a networkanalyzer to measure the S11 parameter, Keeping this fixture away from metal at least 20cm.

S11 Parameter

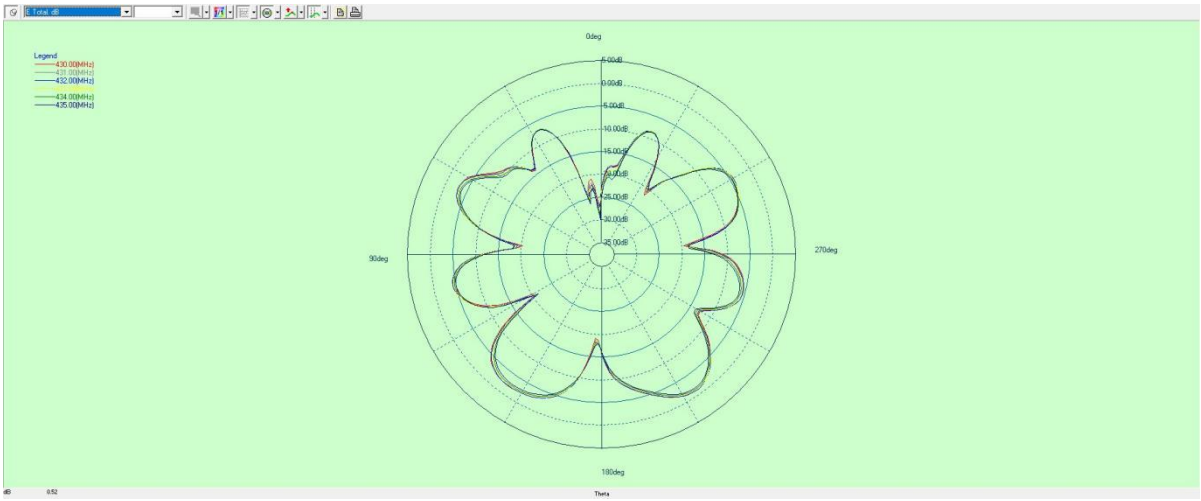


Frequency(MHz)	430	433	435
VSWR	1.14	1.14	1.25

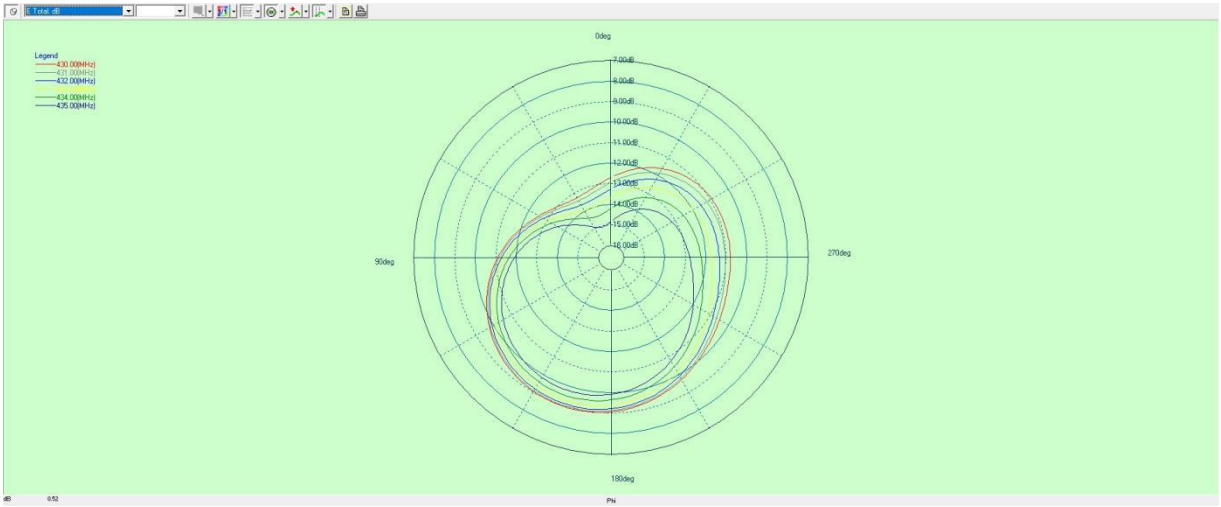
2D Pattern



Phi =0



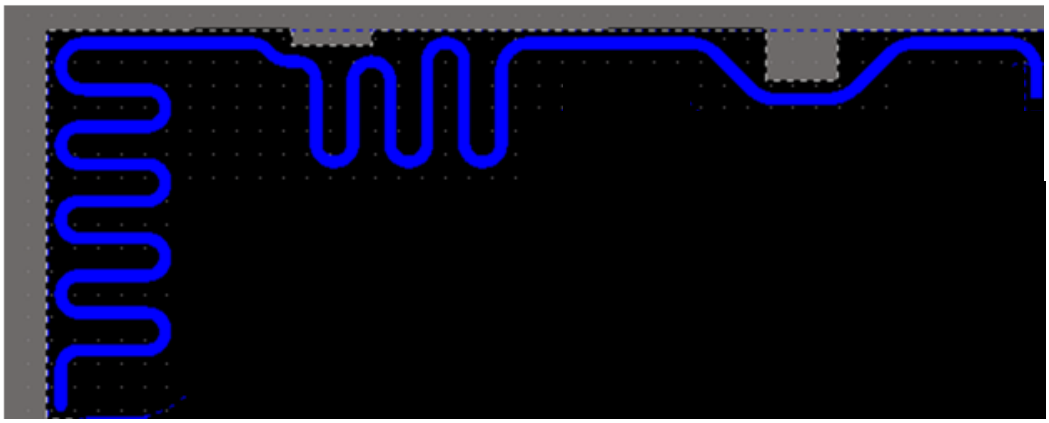
Phi =90



Theta =90

3. Gain & Efficiency-ANT

Frequency (MHz)	Efficiency (%)	Peak GAIN (dBi)
430	21.27	-1.33
433	21.66	-1.22
435	20.19	-1.53



产品包装规范

PACKING CRITERION

样品尺寸测量报告

Sample Dimensions Test Report

客户名称 Customer Name	SHENZHEN KONTSO TECHNOLOGY CO.,LTD	客户料号 Customer P/N	YKQ-03	料号 Surbaner P/N	
测试日期 Test Date	2024/3/28	样品数量 Sample Qty.	3	测试人 Inspector	
尺寸编号 Dimension No.	标准 Standard	样品 1 Sample1	样品 2 Sample2	样品 3 Sample3	Pass/NG
①尺寸 1	88.80±1mm	88.81	88.80	88.98	Pass
②尺寸 2	32.50±0.5mm	32.52	32.50	32.48	Pass
③					
④					
⑤					
⑥					
⑦					

最终结论 Conclusion			PASS
测试人&日期 Inspector & Date	钟向国 2024/03/28	批准&日期 Approval &Date	

可靠性测试报告

Reliability Test Report

客户名称 Customer Name	SHENZHEN KONTSO TECHNOLOGY CO.,LTD	客户料号 Customer P/N	YKQ-03	料号 P/N		
测试日期 Test Date	2024/3/28	样品数量 Sample Qty.	3	测试人 Inspector		
测试项目 Test Item	要求 Requirement	试验设备 testing equipment	样品 1 Sample1	样品 2 Sample2	样品 3 Sample3	判定 PASS/NG
High temperature storage	Expose at +70℃ for 24 hours, and test after 2 hours of recovery. The electrical performance is normal.	Constant temperature and humidity chamber	OK	OK	OK	Pass
Low temperature storage	Expose to -30℃ for 24 hours, and test after 2 hours of recovery. The electrical performance is normal.	Constant temperature and humidity chamber	OK	OK	OK	Pass
High temperature work	The electrical performance is normal when powered on and working for 24 hours at +60℃	Constant temperature and humidity chamber	OK	OK	OK	Pass
Low temperature operation	The electrical performance is normal when powered on and working for 24 hours at -20℃	Constant temperature and humidity chamber	OK	OK	OK	Pass
最终结论 Conclusion						Pass
测试人&日期 Inspector & Date		批准&日期 Approval &Date				