



承 认 书

APPROVAL SHEET

样品封订

客户名称 Customer Name 通力

产品型号 Product Model BoomBox4

客户料号 Customer P/N 290000-019600-1

规格描述 Specifications BT 天线

南斗星料号 Southstar P/N 3. N204. 0445

制作日期 Production date 2025. 2. 28

制作版本 Revision 3. 0

南斗星 (Southstar)		
编制 (FICTION)	品质 (DQE)	研发 (R&D)
客户 (Customer)		
采 购 (PUR)	品质 (QC)	研发 (R&D)

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承认书变更履历

版本	日期	变更描述	备注
1.0	2024.12.4	初版规格书	
2.0	2025.1.2	更新线长	
3.0	2025.2.28	更新 DV 样机测试数据	

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基本参数 (The basic parameters)

A. 电性能Electrical Characteristics	
Frequency 频率	2400MHz~2500MHz
VSWR 电压驻波比	< 2
Efficiency 效率	>54%
Impedance 阻抗	50 Ohm
Polarization 极化	Linear
Peak Gain 最大增益	2.27dBi
Antenna type 天线类型	PIFA
B. 材料&物理性能Material & Mechanical Characteristics	
射频材料 Material of Radiator	FPC Black
射频线类型 Cable Type	1.13mm 线径 Black
接头类型 Connector Type	1 代端子
C. 环境 Environmental	
工作温度 Operation Temperature	- 30° C ~ + 65° C
存放温度 Storage Temperature	- 40° C ~ + 70° C

测试设备 (Test Equipment & Conditions)

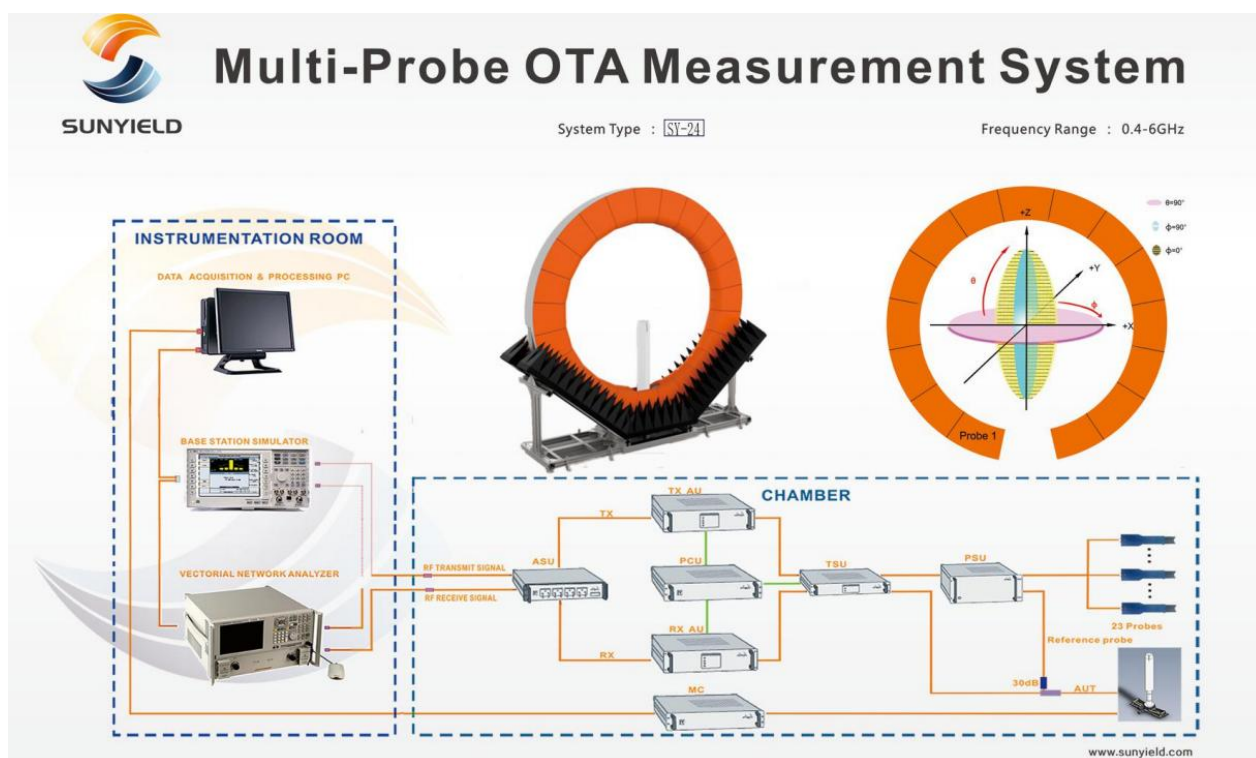
1. 网络分析仪 NetWork Analyzers:

Keysight E5071C

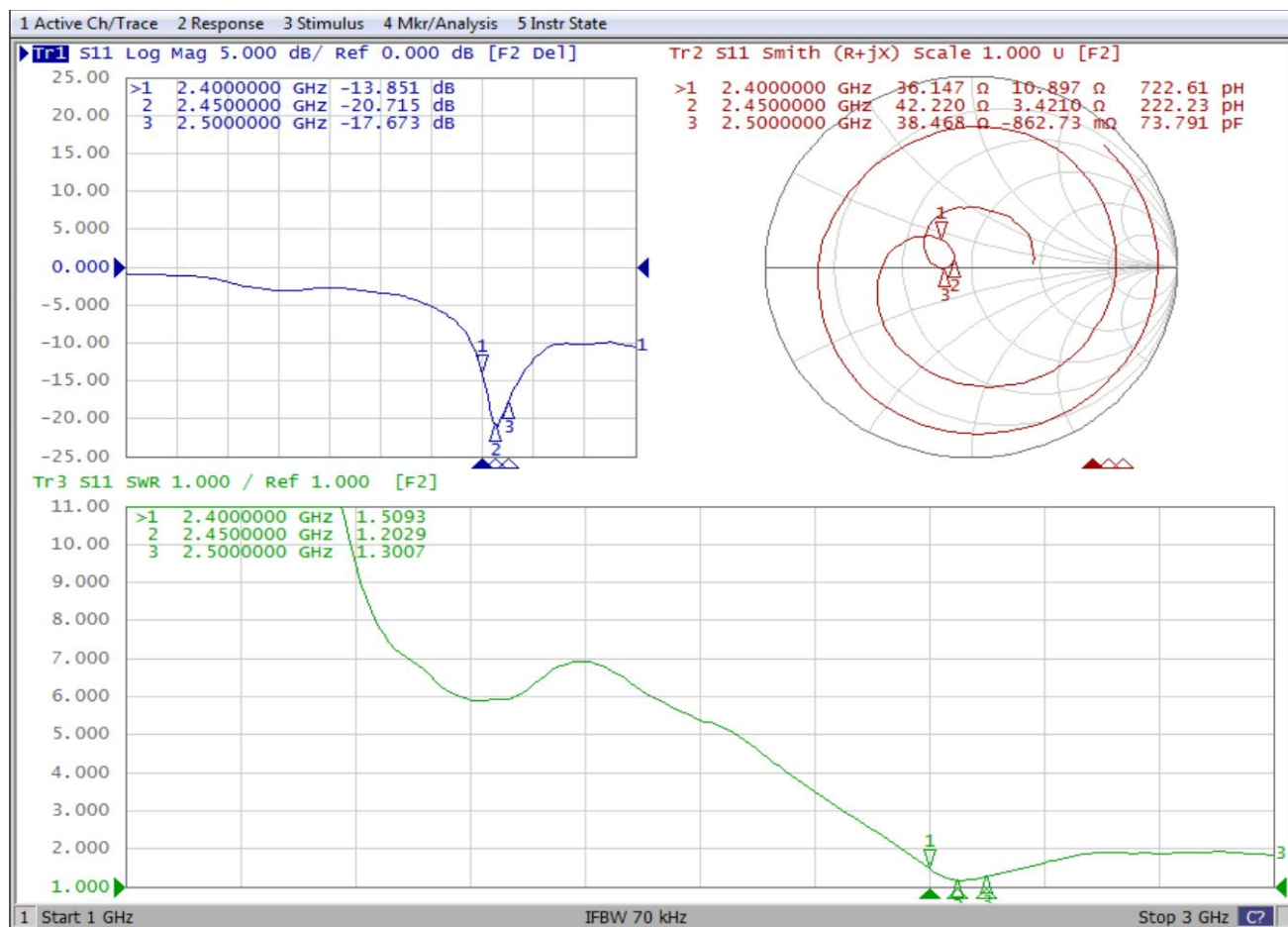
2. 综合测试仪 Comprehensive tester:

CMW500 、 MT8000A、 MT8862A

3. 3D 暗室测试系统 3D Chamber Test System:



天线阻抗Antenna Impedance: S11



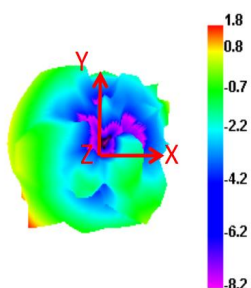
效率&增益Efficiency & Gain:

Freq (MHz)	Effi (%)	Gain (dBi)
2400	55.72	1.84
2410	56.39	1.91
2420	56.66	1.93
2430	57.76	2.27
2440	58.77	2.24
2450	57.59	2.16
2460	56.67	2.03
2470	55.16	1.89
2480	55.84	2.01
2490	54.95	1.84
2500	54.68	1.82

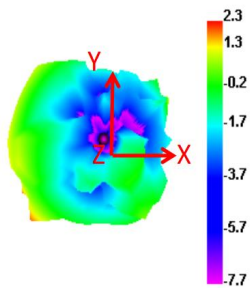
avg. 56.38

天线3D&2D方向图Antenna 3D & 2D pattern:

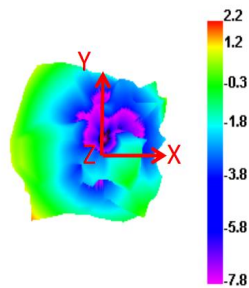
2400.000MHz



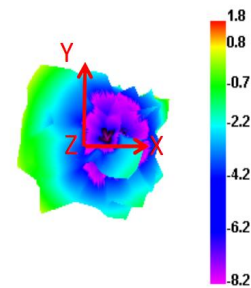
2430.000MHz



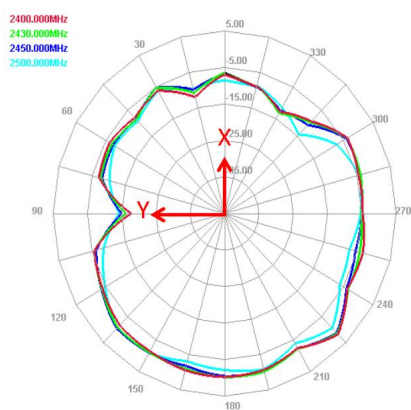
2450.000MHz



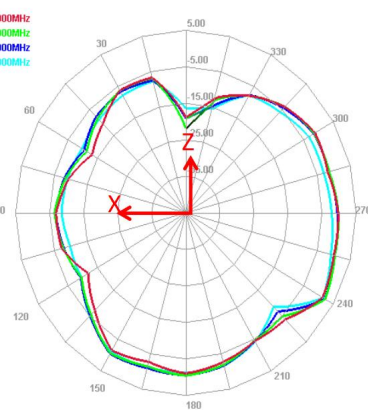
2500.000MHz



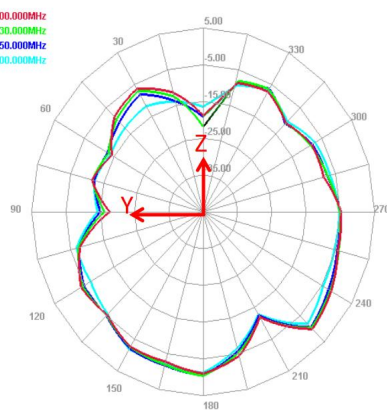
Horizontal



E1 Face



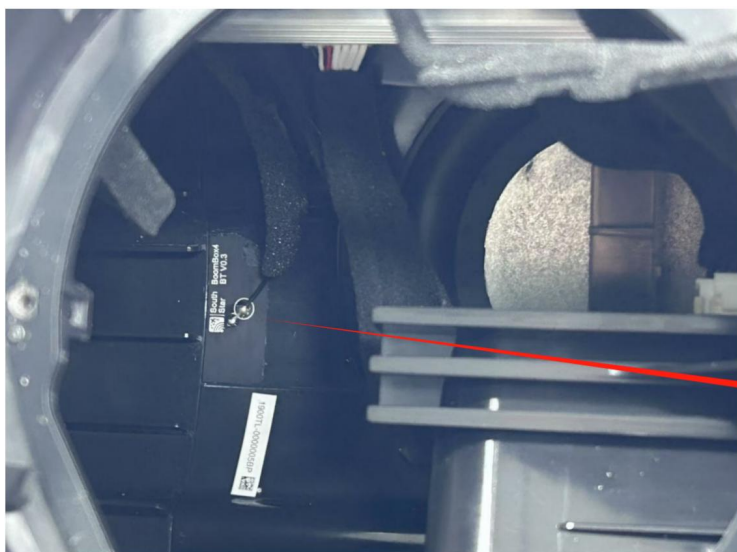
E2 Face



OTA:

BT (BR)	信道	TRP	TIS	TX	RX
	0	6.09	-93.19	8.5	-95
	39	5.95	-93.68	8.5	-95
	78	6.21	-93.55	8.5	-95

天线装配:



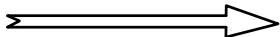
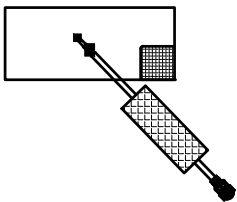
BT天线装配 示意图



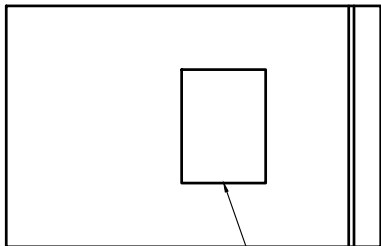


成品名称：BoomBox4 内置天线	版本：A
	客户：通力

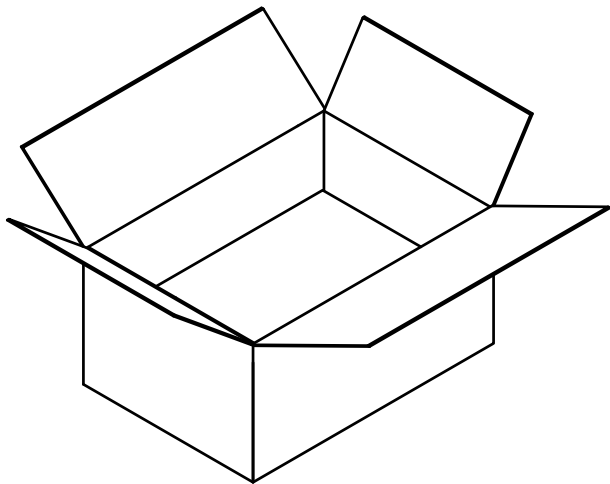
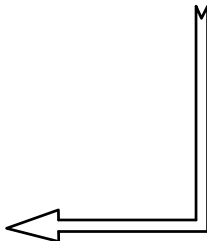
一：成品天线



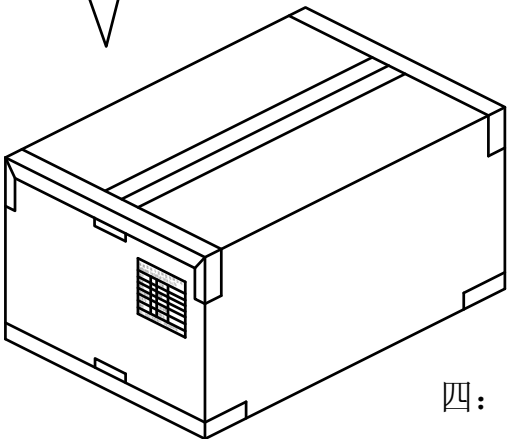
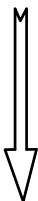
二：装袋，每PE袋装100PCS产品.



标贴



三：装箱(以实际包装为准)。



四：封箱，外箱贴我司生产标签。