



承认书

APPROVAL SHEET

样品封订
Sample seal

客户名称 Customer Name EASTECH

产品型号 Product Model SC2201

客户料号 Customer P/N

规格描述 Specifications LE Audio Antenna

南斗星料号 Southstar P/N 3. N204. 0307

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承认书变更履历

Confirmation Letter Change History

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1.0	2024.07.04	初版(First edition)	



深圳市南斗星科技有限公司

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基本参数(The basic parameters)

A. 电性能Electrical Characteristics	
Frequency 频率	2400MHz~ 2500MHz
Return loss 回波损耗	≤ -18
VSWR 电压驻波比	≤ 2
Efficiency 效率	$\geq 40\%$
Impedance 阻抗	50 Ohm
Polarization 极化	Linear
Gain 增益 (Peak Gain)	2.5dBi (+0.83) 3.33dBi
B. 材料&物理性能Material & Mechanical Characteristics	
射频材料 Material of Radiator	PCB FR-4 Black
射频线类型 Cable Type	$\varnothing$ 1.13mm Blue
接头类型 Connector Type	一代 One generation

Connectors are directionless

* 410 ± 5

* 930 ± 5

* 11 ± 0.2

3 ± 0.2

⑤

⑥

①

③

②

④

5-5

15.2

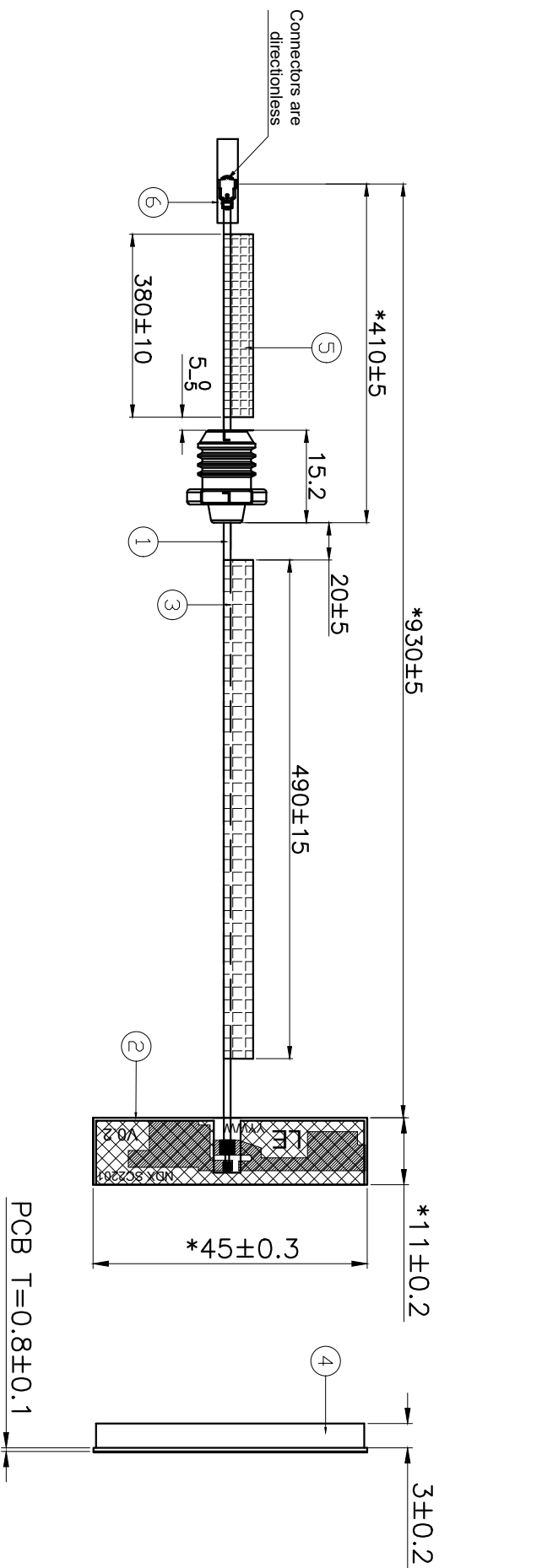
20±5

490±15

* 45 ± 0.3

380±10

PCB T=0.8±0.1



PCB T=0.8±0.1

- Note:
1. Marked "***" is the key size, and Marking "CpK" requires process capability analysis;
 2. Unmarked tolerance refer to the Undeclared tolerance table;
 3. The electrical property meets the requirements of the specification;
 4. All parts shall meet the requirements of RoHS2.0 and REACH、HF。

No.	Part NO.	Name	Specification	Amount	Remark
6	2.A15.0084	Protection	ID2.8*15mm	1	
5	1.Z02.0316	Sponge	380*20*3mm Black	1	
4	1.Z02.0405	Silicone	Black 60°	1	
3	1.Z02.XXXX	Sponge	490*20*3.0mm Black	1	
2	2.A21.0590	LE PCB	FR4 T=0.8mm Black	1	
1	2.A03.0273	LE SR Cable	Ø1.13+ 1 Connector+SR	1	

Connector orientation	
standard	
Cable L _s ≤ 100	±45°
100 < L _s ≤ 200	±90°
Cable L _s > 200	Don't connect

 South Star		深圳市南斗星科技有限公司 东莞市南斗星科技有限公司		Shenzhen South Star Technology Co., Ltd Dongguan South Star Technology Co., Ltd					
Undeclared tolerance table			Project	SC2201	Designed by	Kenny	2024-05-16		
0.5~6	±0.1	—	0.1	Part Name	LE Antenna	RF by	CBJ	2024-05-16	
>6~30	±0.2	○	0.1	Part No.	3.N204.0307	Approved by	ZH	2024-05-16	
>30~120	±0.3	◎	Ø0.1						
>120~400	±0.5	⊥	0.1	Customer	/	Unit	mm		
>400~1000	±0.8	▱	0.1	PN					
>1000	±1.2	Angle	±1.0°	Page 1 of 1	Third Angle	Scale	FIT	Rev	A

测试设备及条件 (Test Equipment & Conditions)

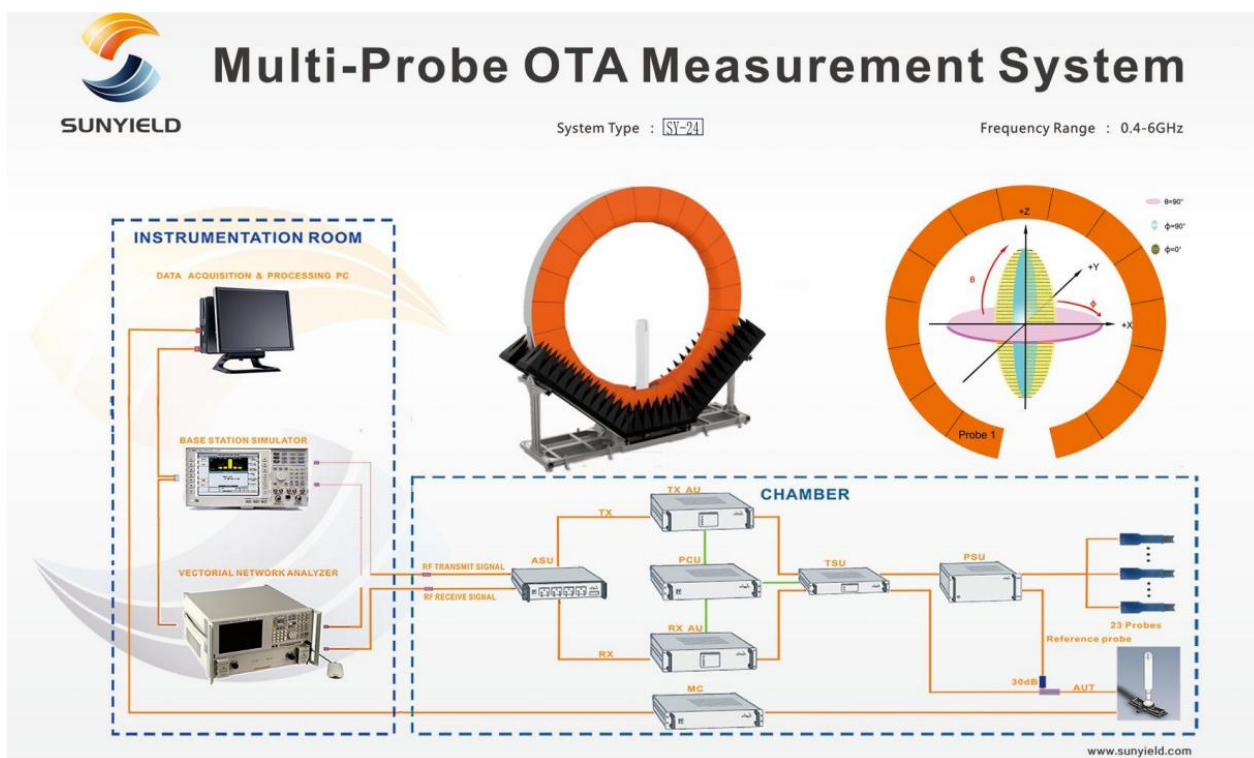
1. 网络分析仪 NetWork Analyzers:

Keysight E5071C

2. 综合测试仪 Comprehensive tester:

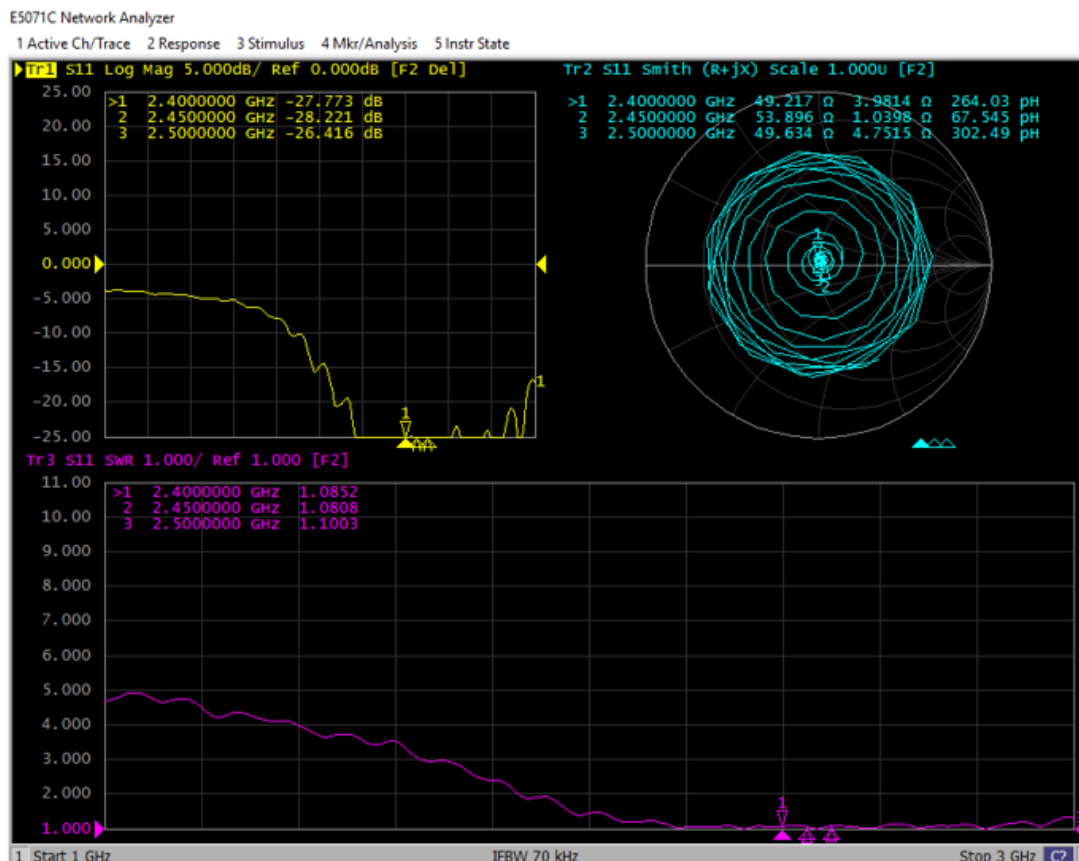
CMW500 、 MT8000A、 MT8862A

3. 3D 暗室测试系统 3D Chamber Test System:



性能报告 (Test Report)

天线阻抗 Antenna Impedance: S11



效率&增益 Efficiency & Gain:

Freq (MHz)	Effi (%)	Gain (dBi)
2400	40.3	2.64
2410	40.58	2.67
2420	40.8	2.79
2430	40.53	2.72
2440	41.11	2.81
2450	40.79	3.11
2460	42.64	3.33
2470	42.51	3.08
2480	42.58	2.69
2490	41.63	2.77
2500	41.64	2.99
AVG	41.37	2.87

天线3D&2D方向图Antenna 3D & 2D pattern:

