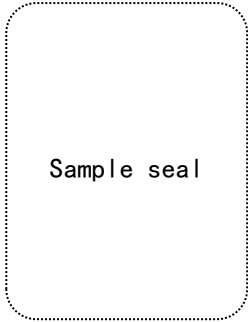




# APPROVAL SHEET



Customer Name XIAOMI

Product Model RD23

Customer P/N L530100074421

Specifications 2.4G, 5dBi, White housing, 1.37Gary RFcable L=220mm

Southstar P/N 3.N102.1050

Production date 2024-03-15

Revision 1.0

Southstar		
FICTION	DQE	R&D
Customer		
PUR	QC	R&D

**Manufacturers:** SHENZHEN SOUTH STAR TECHNOLOGY CO., LTD

**Office address:** 803, Tianshu block, Xinggang tongchuanghui, No. 6099, Bao'an Avenue, Xinhe community, Fuhai street, Bao'an District, Shenzhen

**Production address:**No. 3, Chigang Nanfang 1st Road, Humen Town, Dongguan City, Guangdong Province

**Tel:** 0755-27474071 0769-88086190

**Http://**[www.southstar-tech.com](http://www.southstar-tech.com)





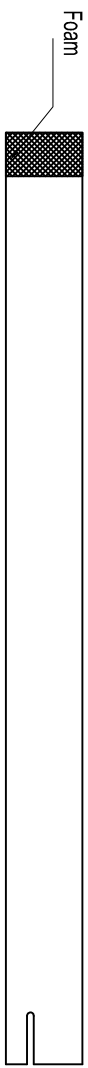
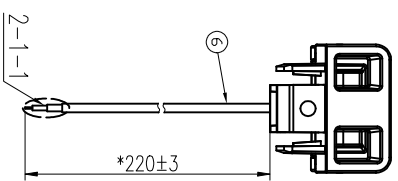
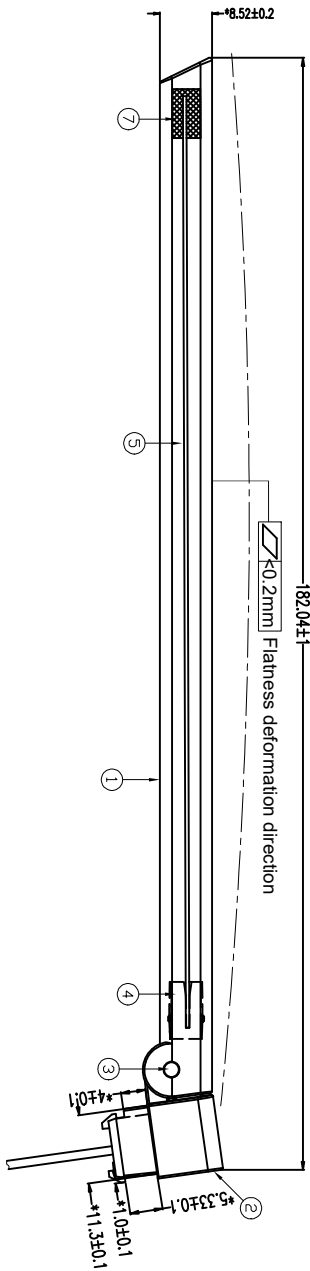
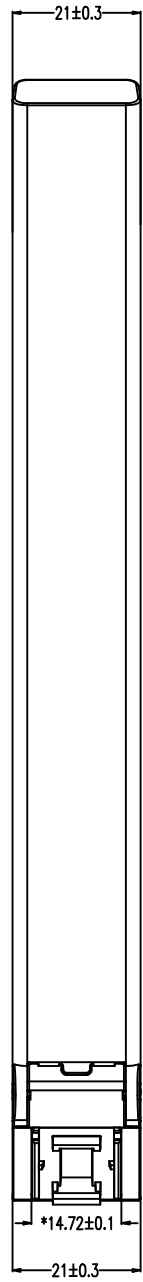
# Index

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## Antenna Specification

A. Electrical Characteristics	
Frequency	2400MHz~2500 MHz
VSWR	$\leq 2$
Efficiency	> 60%
Impedance	50 Ohm
Polarization	Linear
Gain	2400MHz@5.02dBi
Note	
B. Material & Mechanical Characteristics	
Material of Radiator	
Cable Type	2G: 1.37 Gray
Connector Type	soldering
C. Environmental	
Operation Temperature	- 30 °C ~ + 65 °C
Storage Temperature	- 40 °C ~ + 70 °C

Rev	Description	Date	Remark
△	New drawing	2024-03-15	



7	1.202.0391	2.4G/Foam	EVA Black, 12.5*15*2.5mm	1	
6	2.A02.1473	2.4G/Cable	$\phi 1.37$ Dark Gray	1	
5	2.A21.0462	2.4G/PCB	FR4 Black T=0.6mm	1	
4	2.A07.0558	Plug	ABS White	1	
3	2.A07.0123	Rivet	POM White	2	
2	2.A07.0557	Base	PC+ABS White	1	
1	2.A07.0547	Body	ABS White	1	
No.	Part NO.	Name	Specification	Amount	Remark
1	2	3	4	5	6

Connector orientation	Standard
Cable Ls 100	145°
Cable Ls 200	190°
Cable Ls >200	Point control

	South Star	深圳市南斗星科技有限公司	Shenzhen South Star Technology Co., Ltd
		东莞市南斗星科技有限公司	Dongguan South Star Technology Co., Ltd
Undeclared tolerance table		Project	MD03
0.5~6	±0.1	—	0.1
>6~30	±0.2	○	0.1
>30~120	±0.3	◎	0.1
>120~400	±0.5	⊥	0.1
>400~1000	±0.8	∠	0.1
>1000	±1.2	Angle	±1.0°
Part Name	2.4G Antenna	Designed by	梅海金 2024-03-15
Part No.	3.N102.1050	RF by	张锦江 2024-03-15
Customer P/N	L530100074421	Approved by	张辉 2024-03-15
Page 1 of 1	Third Angle	Unit	mm
Scale		FIT	Rev
7	8		A

- 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.

# Test Equipment & Conditions

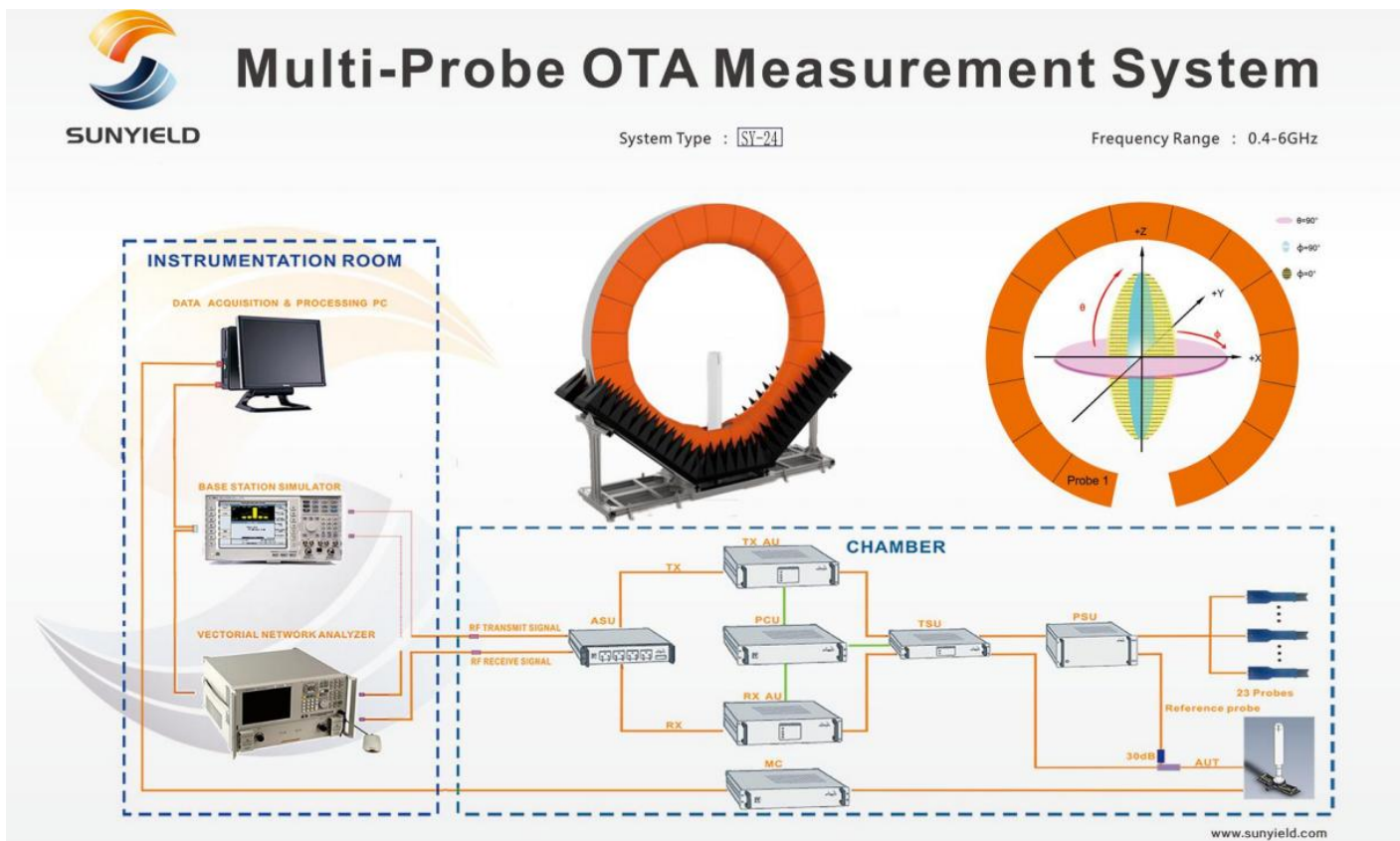
## 1. Network Analyzers:

Keysight E5071C

## 2. Comprehensive tester:

CMW500 、 MT8000A、 MT8862A

## 3. 3D Chamber Test System:



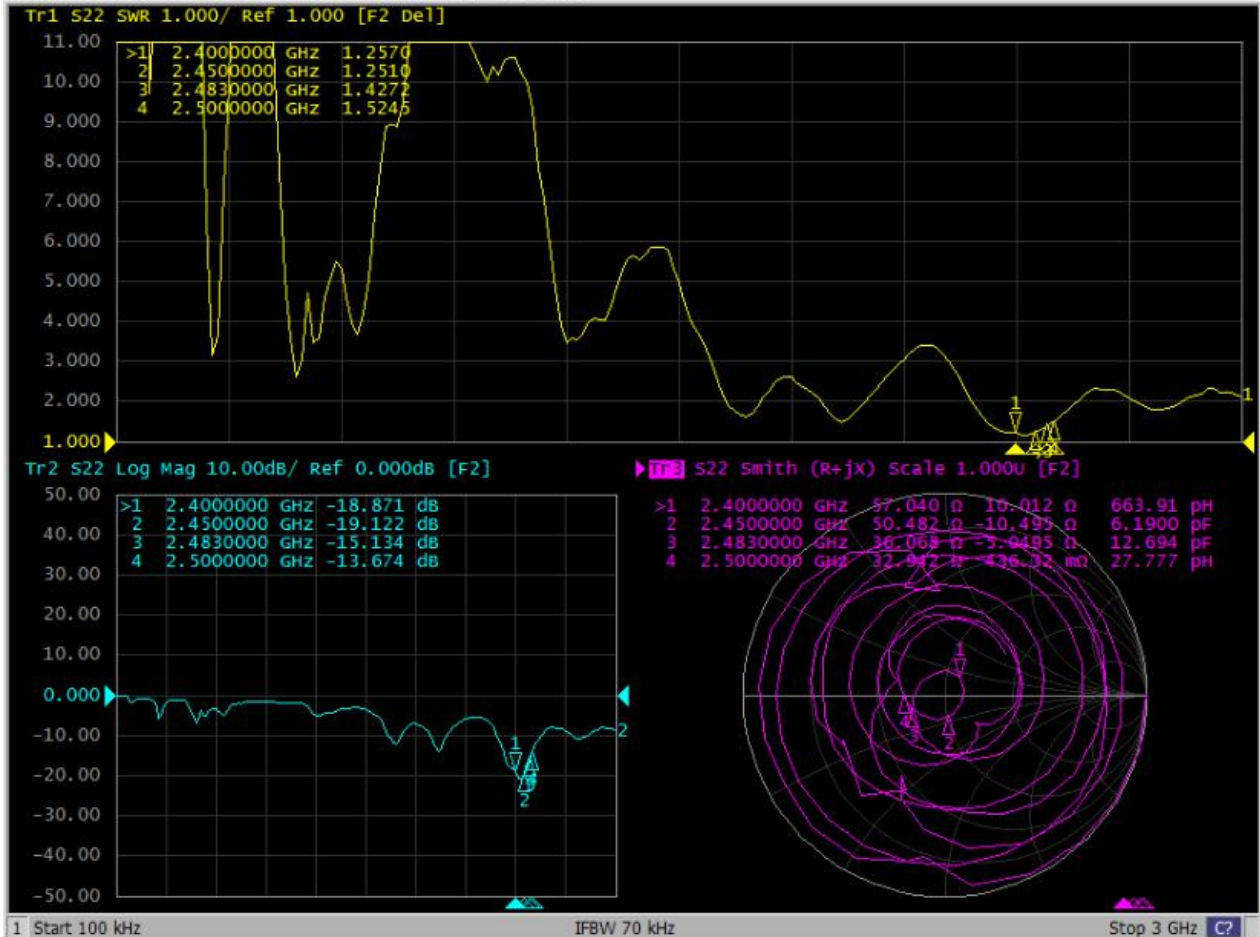


Antenna Impedance:

S11

E5071C Network Analyzer

1 Active Ch/Trace 2 Response 3 Stimulus 4 Mkr/Analysis 5 Instr State

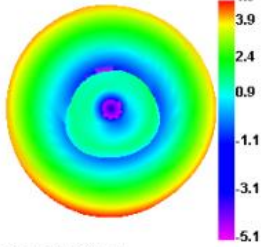


效率&增益(Efficiency & Gain):

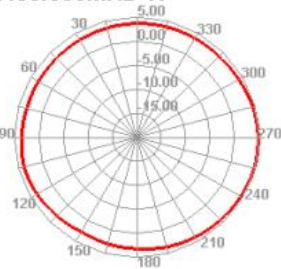
Freq (MHz)	Effi (%)	Gain (dBi)
2400	71.22	4.87
2410	76.75	4.71
2420	75.4	4.69
2430	75.76	4.76
2440	78.92	4.96
2450	79.47	5.02
2460	76.43	4.89
2470	72.65	4.69
2480	70.42	4.57
2490	68.73	4.42
2500	71.99	4.54

Antenna 3D & 2D patter :

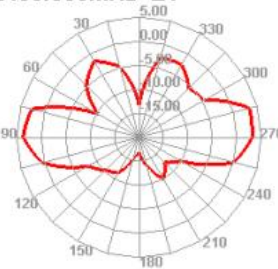
**2400.000MHz**



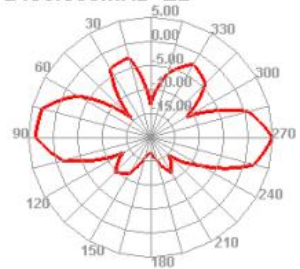
**2400.000MHz H**



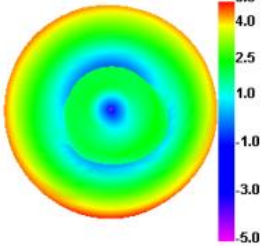
**2400.000MHz E1**



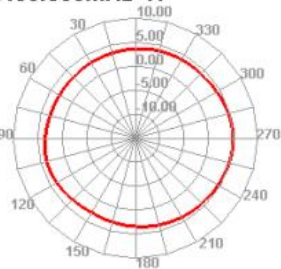
**2400.000MHz E2**



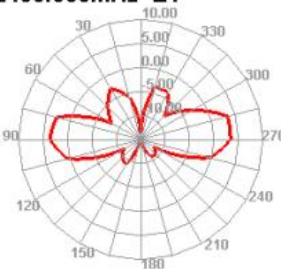
**2450.000MHz**



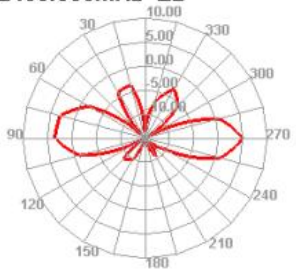
**2450.000MHz H**



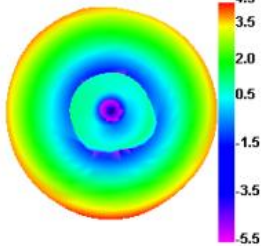
**2450.000MHz E1**



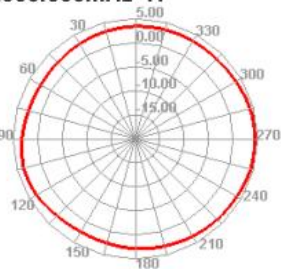
**2450.000MHz E2**



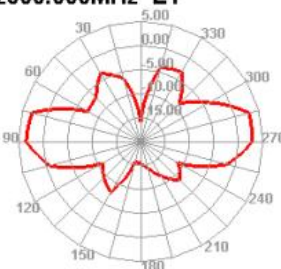
**2500.000MHz**



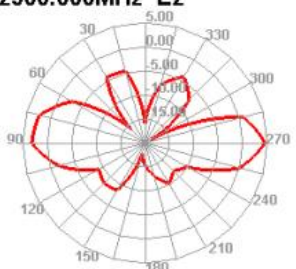
**2500.000MHz H**



**2500.000MHz E1**



**2500.000MHz E2**



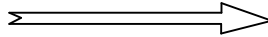


antenna assembly picture:

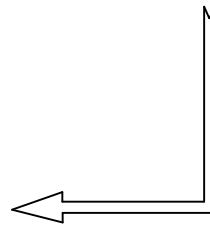
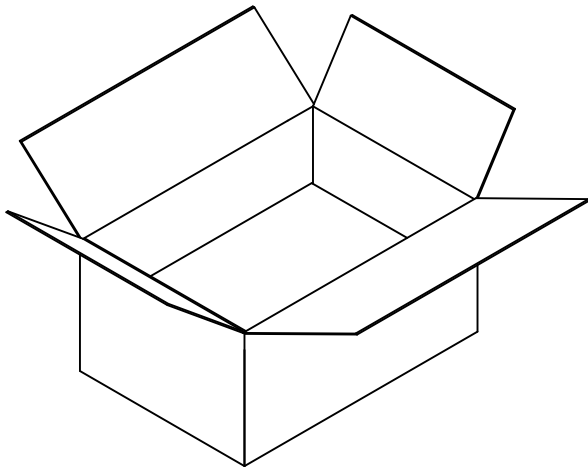


Name : MD03 Antenna	Version: A
	Customer: XIAOMI

1: The product



二: 30PCS/per PE Bag。



3.Packing (according to the actual quantity of packing)

