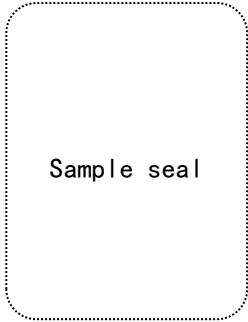




APPROVAL SHEET



Customer Name XIAOMI

Product Model RD23

Customer P/N L530100074521

Specifications 5G-1, 5dBi, White housing, 1.37Black RFcable L=215mm

Southstar P/N 3.N102.1051

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, Xinde 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



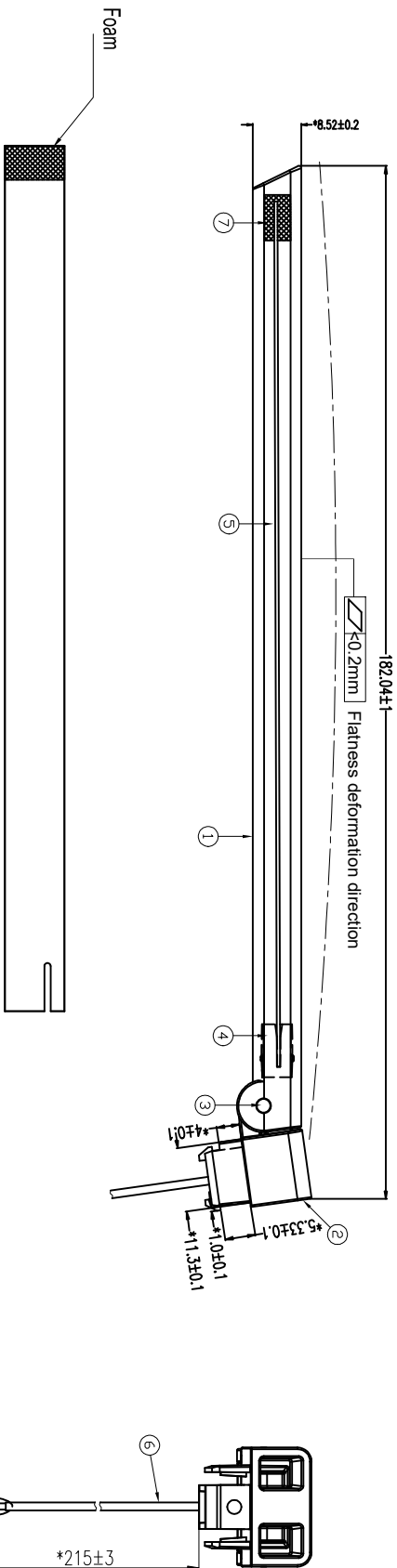
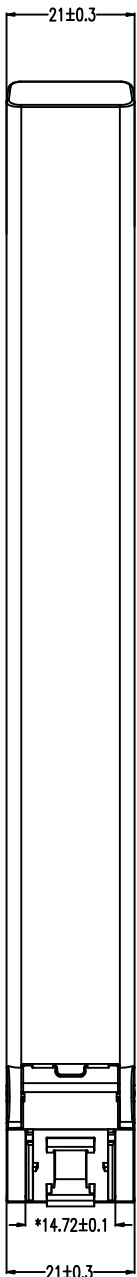
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Antenna Specification

A. Electrical Characteristics	
Frequency	5150MHz~5850 MHz
VSWR	≤ 2
Efficiency	$> 60\%$
Impedance	50 Ohm
Polarization	Linear
Gain	5850 MHz@5.93dBi
Note	
B. Material & Mechanical Characteristics	
Material of Radiator	
Cable Type	5G: 1.37 Black
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	



- 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。

7	1.Z02.0396	5G/Foam	EVA Black, 10.5*15*2.5mm	1	
6	2.A02.1474	5G-1/Cable	φ1.37 Black	1	
5	2.A21.0463	5G/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
			Cable L ≤ 200	±45°	
			100 < Cable L < 200	±90°	
			Cable L > 200	Don't control	

		South Star 深圳市南斗星科技有限公司 Dongguan South Star Technology Co., Ltd		Shenzhen South Star Technology Co., Ltd Dongguan South Star Technology Co., Ltd	
Undeclared tolerance table			Project		
0.5~6	±0.1	—	0.1	Part Name	MD03
>6~30	±0.2	○	0.1	Part No.	5G-1 Antenna
>30~120	±0.3	◎	∅0.1	Customer P/N	3.N102.1051
>120~400	±0.5	⊥	0.1	Customer P/N	L530100074521
>400~1000	±0.8	∠	0.1	Page 1 of 1	Third Angle
>1000	±1.2	Angle	±1.0°	Scale	

Designed by	梅海金	2024-03-15
RF by	张锦江	2024-03-15
Approved by	张辉	2024-03-15
Unit	mm	
Scale	FIT	
Rev	A	

Test Equipment & Conditions

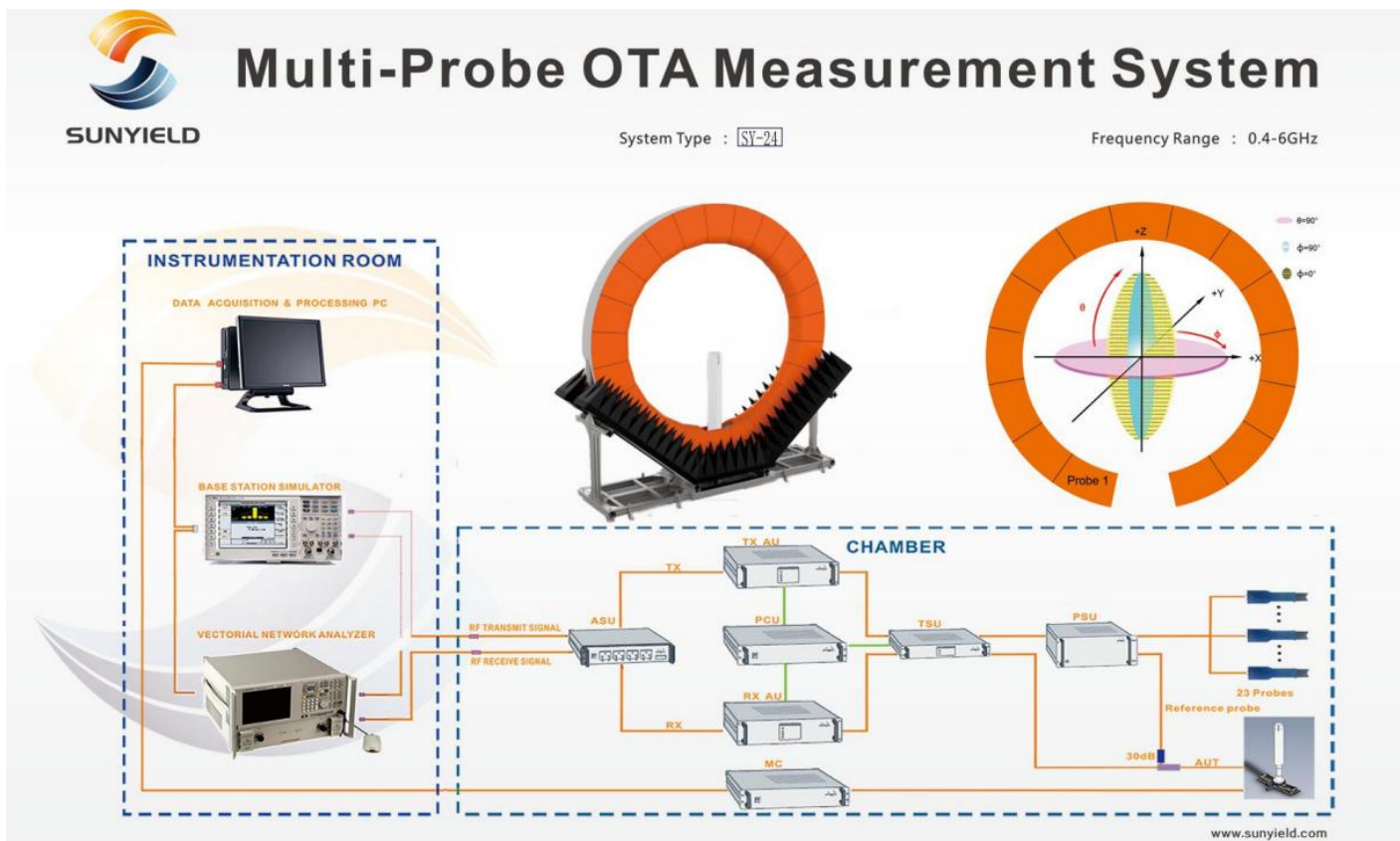
1. Network Analyzers:

Keysight E5071C

2. Comprehensive tester:

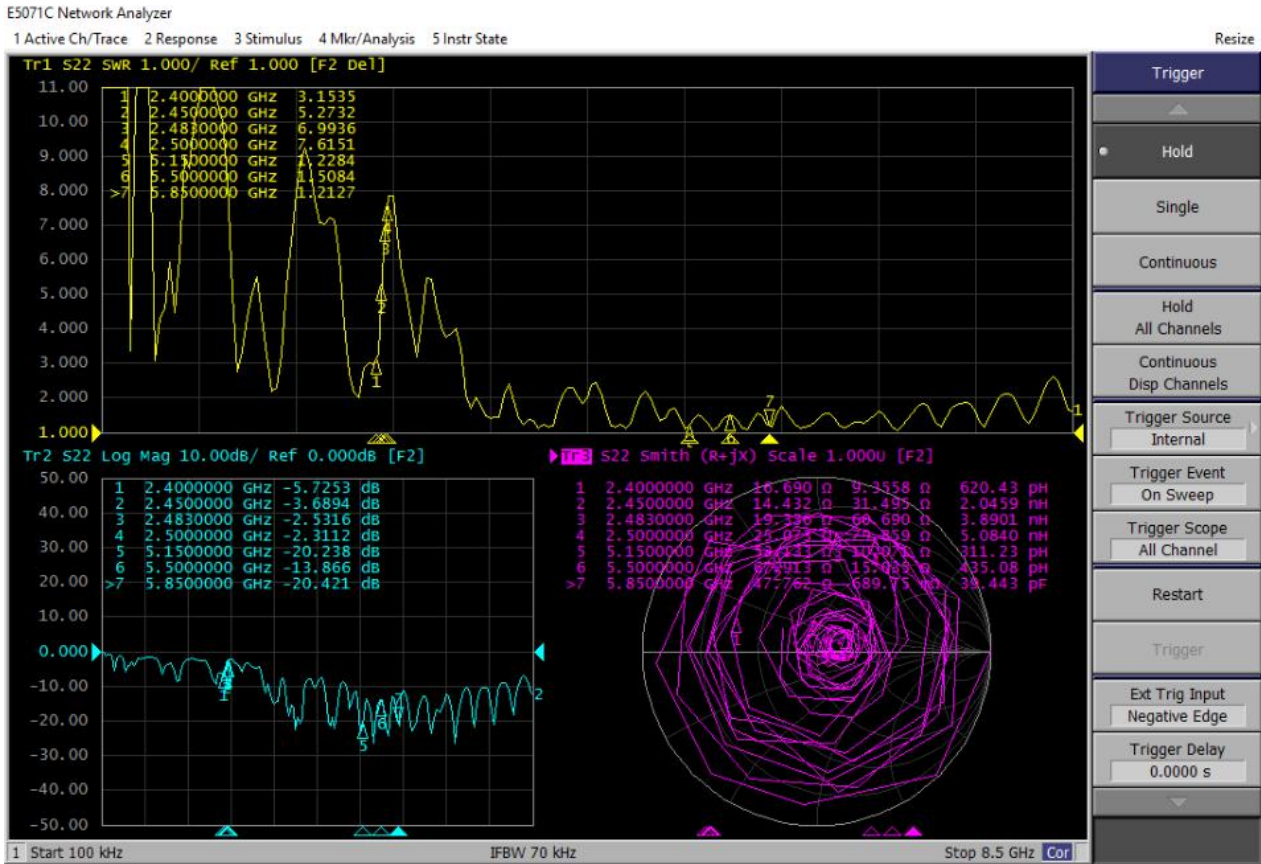
CMW500 、 MT8000A、 MT8862A

3. 3D Chamber Test System:



Antenna Impedance:

S11

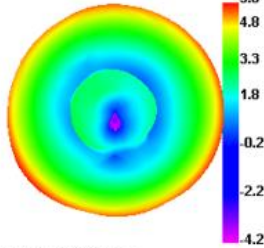


效率&增益(Efficiency & Gain):

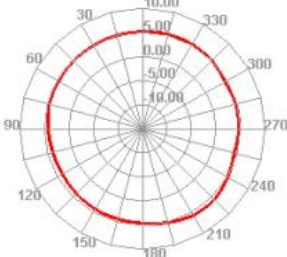
Freq (MHz)	Effi (%)	Gain (dBi)
5150	74.13	5.76
5200	66.59	5.25
5250	61.36	4.76
5300	64.16	4.87
5350	67.24	5.23
5400	66.37	5
5450	62.86	4.92
5500	69.72	5.46
5550	73.42	5.75
5600	70.61	5.71
5650	68.25	5.7
5700	67.3	5.85
5750	63.71	5.78
5800	62.85	5.61
5850	71.03	5.93

Antenna 3D & 2D pattern:

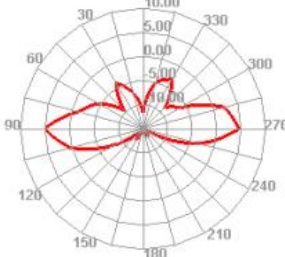
5150.000MHz



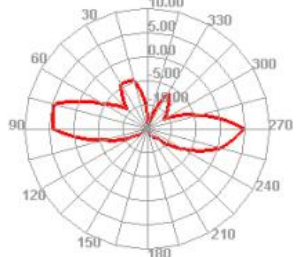
5150.000MHz H



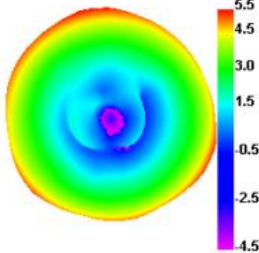
5150.000MHz E1



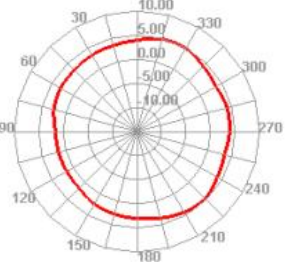
5150.000MHz E2



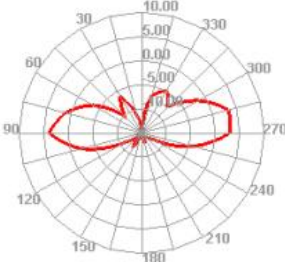
5500.000MHz



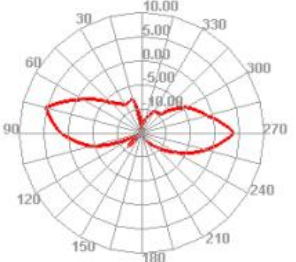
5500.000MHz H



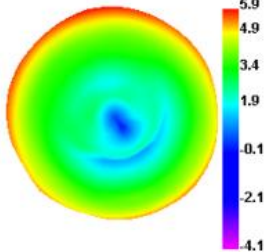
5500.000MHz E1



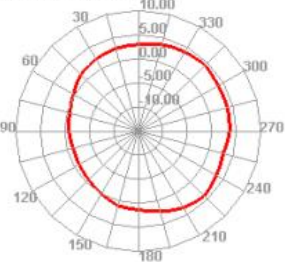
5500.000MHz E2



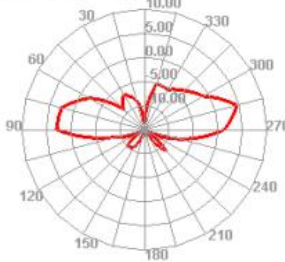
5850.000MHz



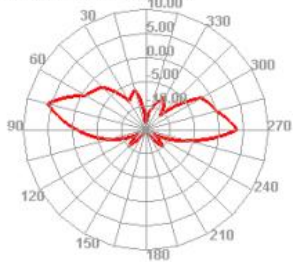
5850.000MHz H



5850.000MHz E1



5850.000MHz E2



antenna assembly picture:

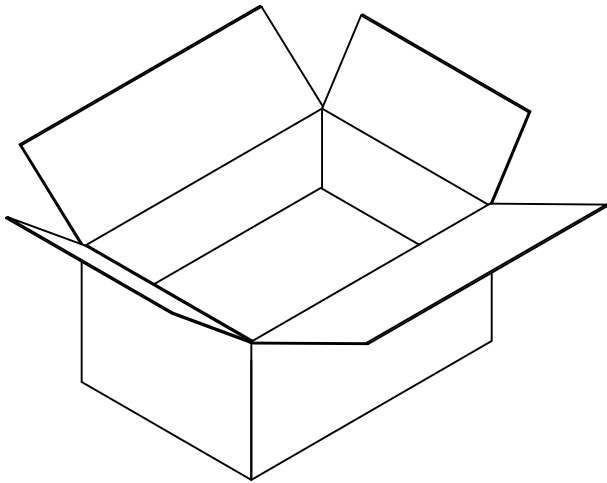
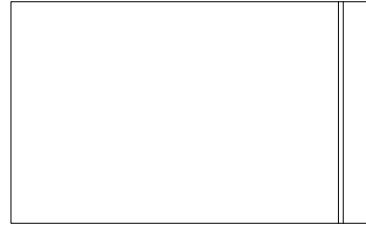


成品名称 : MD03 外置天线	版本: A
	客户: 小米

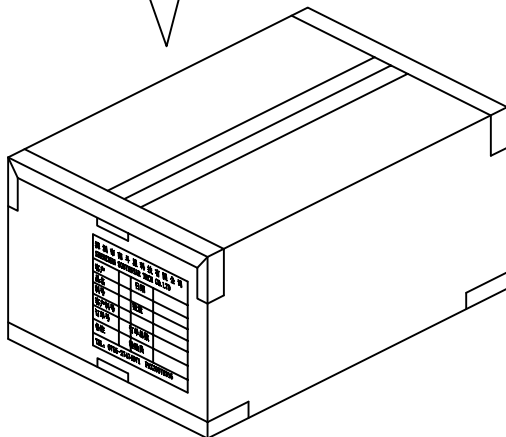
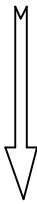
一: 成品天线



二: 装袋, 每PE袋装40PCS产品。



三: 装箱(以实际包装数量为准)



四: 封箱, 外箱贴我司生产标签和ROHS标签。