

承 认 书

APPROVAL SHEET

客户名称 Customer Name

产品型号 Product Model

产品名称 Product Name

客户料号 Customer P/N

南斗星料号 SouthstarP/N

制作日期 Production date

封样版本 Sample Version

Encore 2

FM054 TX Shrapnel

178-FM054-10A

3. N204. 0419

2024-10-22

2. 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）

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

Telephone: 0755-27474071 Fax: 0755-29976316

URL: WWW.SZ-SOUTHSTAR.COM

目 录

Index

一、封面（Cover）

.....

1

二、目录（Index）

.....

2

三、基本参数（The basic parameters）

.....

3

四、工程图纸（Product Drawing）

.....

4

五、测试设备（Test Equipment & Conditions）

.....

5

六、性能测试报告（Test Report）

.....

6-7

七、安装方式（Installation method）

.....

8

八、包装方式（Packing method）

.....

9

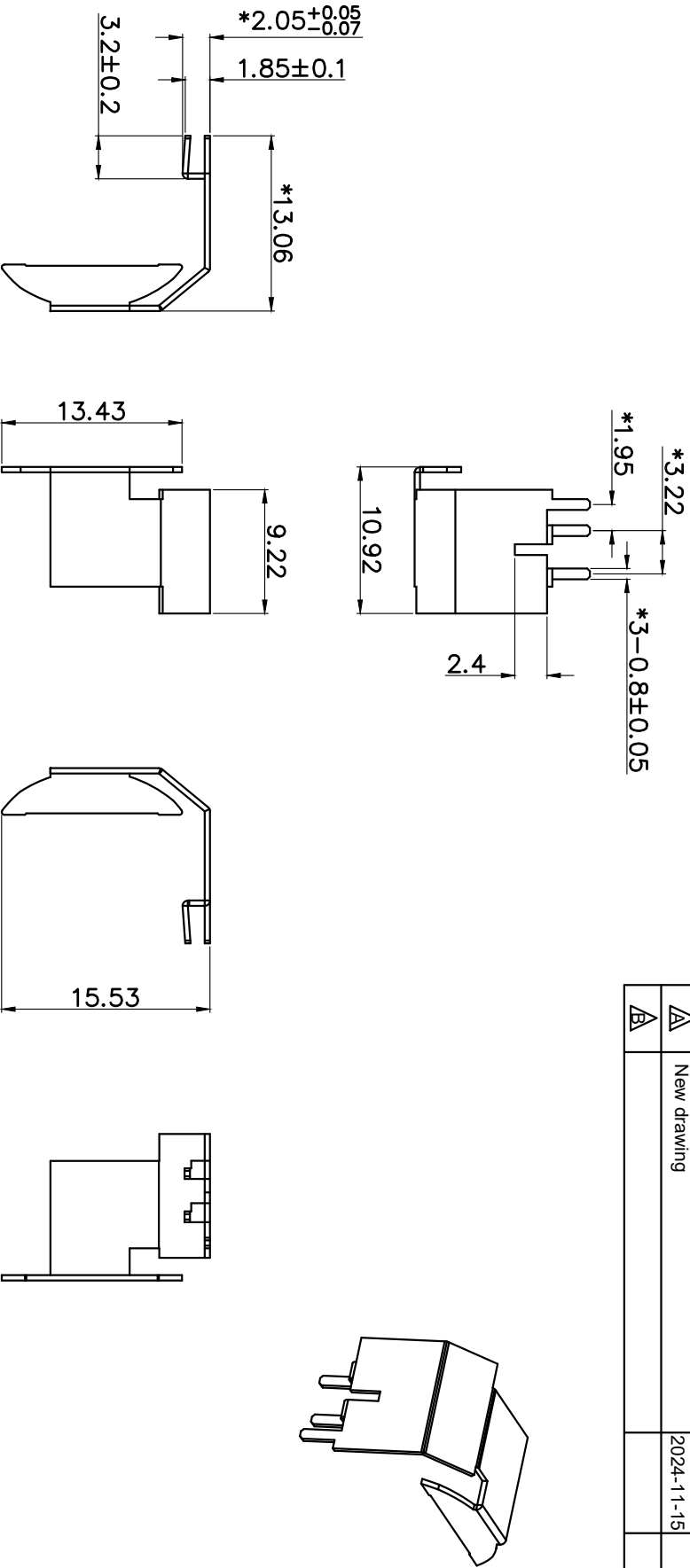
九、CPK（Complex ProcessCapability Index）

.....

10

基本参数(The basic parameters)

A. Electrical Characteristics	
Frequency	2400MHZ~2500MHZ
VSWR	< 2
Efficiency	>50%
Impedance	50 Ohm
Polarization	Linear
Peak Gain	2.4G: 2.41dBi
B. Material & Mechanical Characteristics	
Material of Radiator	Shrapnel
Cable Type	/
Connector Type	/
Dimension	



- Technical requirements:
1. Material: SUS304 T=0.4mm nickel plating $\geq 2\mu\text{m}$;
 2. The salt spray meets 48H;
 3. The "***" size is the key control size, and the "CpK" size requires process capability analysis;
 4. No marked tolerance according to the drawing no tolerance table;
 5. Environmental protection: ROHS2.0, REACH, SVHC, CP65, TSCA, VOC, halogen-free;
 6. Packaging: carrier;

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

Rev	Description	Date	Remark
A	New drawing	2024-11-15	
B			

South Star

深圳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		Encore2	Designed by	Kenny 2024-11-15	
0.5~6	±0.1	—	0.1	Part Name		FM054 Antenna	RF by	CBJ	2024-11-15
>6~30	±0.2	○	0.1	Part No.		3.N204.0419	Approved by	ZH	2024-11-15
>30~120	±0.3	◎	0.1	Customer		178-FM054-10A	Unit	mm	
>120~400	±0.5	⊥	0.1	P/N			Scale	FIT	Rev
>400~1000	±0.8	∠	0.1	Page 1 of 1		Third Angle			A
>1000	±1.2	Angle	±1.0°						

南斗星科技香港有限公司

SOUTH STAR TECHNOLOGY HONG KONG COMPANY LIMITED

测试设备(Test Equipment & Conditions)

1 测试仪器 (Testing equipment)

The VSWR was tested using the Agilent E5071B connected to the test fixture, with the status being free space.

2 测试环境及方式 (Testing environment and methods)

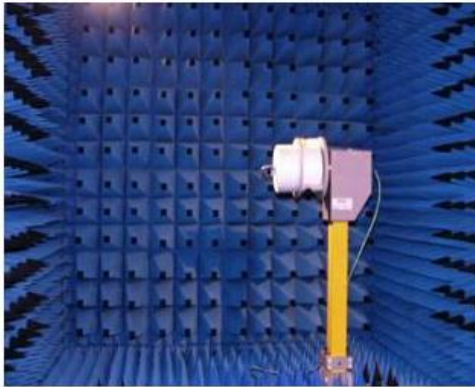
暗室规格: ETS-7 4 3

TD-SCDMA测试设备:StarPoint SP6010/Agilent 8960

LTE-TDD/FDD-SCDMA测试设备:StarPoint SP8011 /CMW500

WCDMA/GSM/CDMA测试设备: Agilent 8960

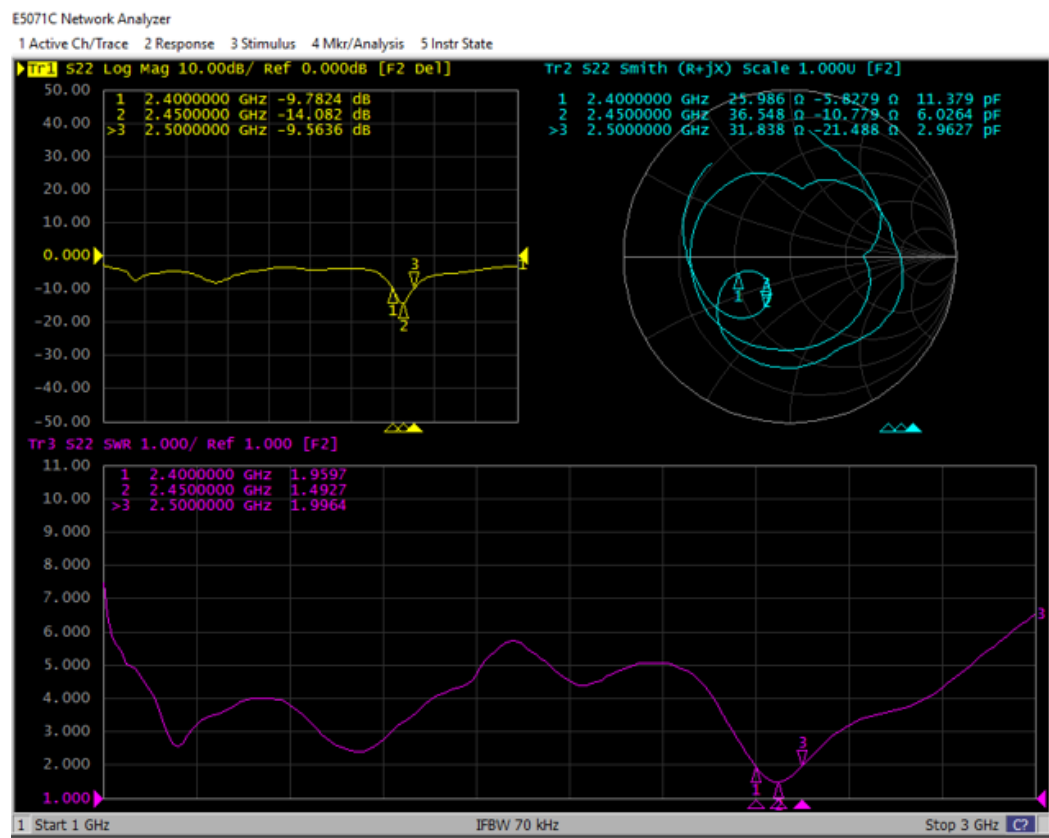
无源效率测试设备: Agilent Technologies E5071B



南斗星科技香港有限公司

SOUTH STAR TECHNOLOGY HONG KONG COMPANY LIMITED

S11:



效率&增益(Efficiency & gain):

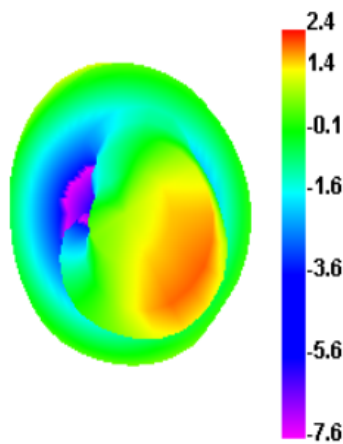
Freq (MHz)	Effi (%)	Gain (dBi)
2400	55.4	2.23
2410	53.81	2.41
2420	52.91	2.31
2430	53.17	2.37
2440	55.79	2.39
2450	56.31	2.38
2460	56.91	2.4
2470	55.19	2.39
2480	52.35	2.24

南斗星科技香港有限公司

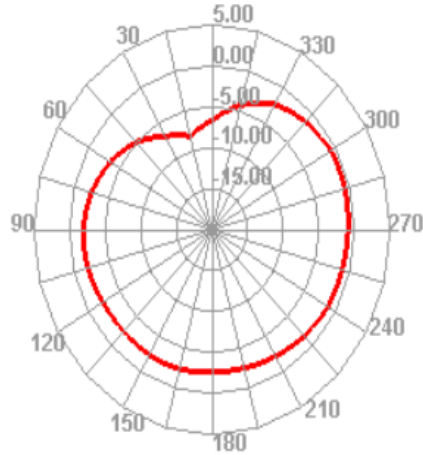
SOUTH STAR TECHNOLOGY HONG KONG COMPANY LIMITED

2D/3D方向图(2D/3D Directional diagram):

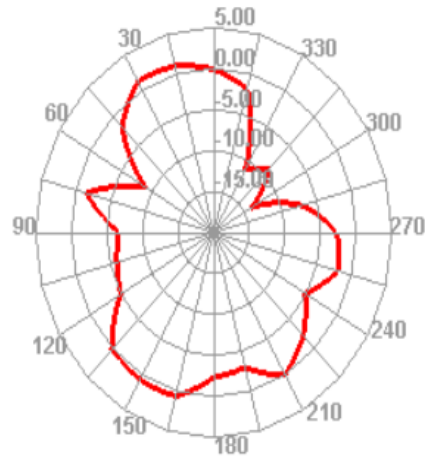
2410.000MHz



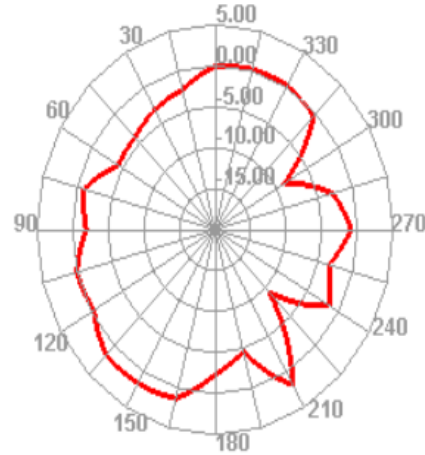
2410.000MHz H



2410.000MHz E1



2410.000MHz E2



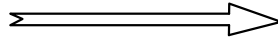
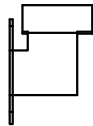


Date: 2024-11-15

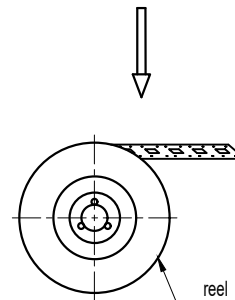
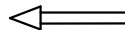
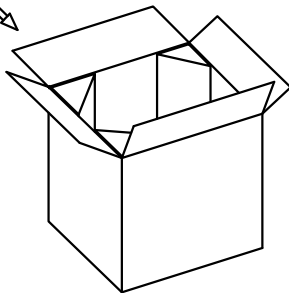
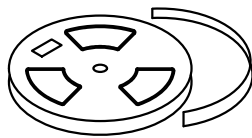
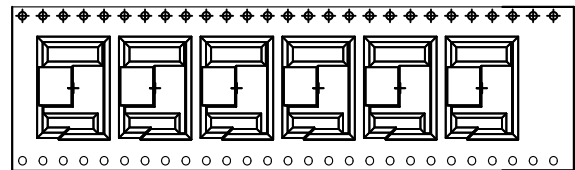
page: 1 of 1

Name : FM054 Antenna	Version: A
	Customer:

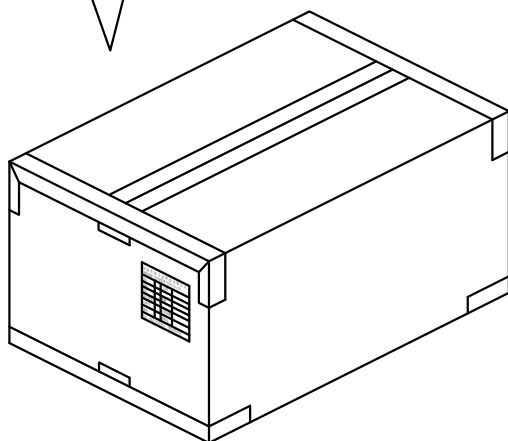
1. The Product



2: Carrier packaging ; each roll contains 300PCS products.



3. Packing (subject to actual packing) .



DESIGNED By: Kenny

APPROVED By: ZH

[illegible]