

民倚星

样品承认书

Parts Approval Sheet

生产厂商: 国质信网络 物料名称: 左耳 BT 天线
Supplier Parts Name
型号/规格: NQI-RT42-LBT-FB-V10 客户料号: _____
Type/Spec Parts No.
品牌: NQI 样品数量: _____
Brand Quantity
送样日期: 2020.12.30 文件编号: _____
Send out Date Document No.
承认日期: _____ 版本: V0
Approve Date Version

Supplier		Customer	
Approved By	Prepared By	Engineering Dept.	Quality Dept.

Contents

1.Summary.....	3
2.General Description.....	3
2.1 Components/Part revisions.....	3
2.2 Definitions	3
3.Electrical Performance.....	3-4
3.1 Specification	3
3.1.1 VSWR	4
3.2 Set-up.....	4
3.2.1 VSWR	4
3.2.2 Matching Circuit Description	4
3.3 VSWR&R.L.(Test in freespace)	4
4. Plots	4-6
4.1 VSWR.....	5
4.2 Return Loss.....	5
4.3 Efficiency and Gain.....	6
4.4 Directional graph.....	6
5. Antenna Engineer drawing	7
6.Reliability Testing Report	8

1. Summary

This report summarizes the electrical results of the our antenna to support the project BT
The test fixture is made for further testing, which is show below:



2. General Description

2.1 Antenna Components/Part revisions

The antenna part number is T: A

2.2 Definitions

VSWR: Voltage Standing Wave Rate

TRP: total radiated power

TIS: total isotropic sensitivity

3. Electrical Performance

3.1 Specification

Worst allowable in band values are presented. A setup according to should be used when testing these values.

3.1.1 VSWR(Test in free space)

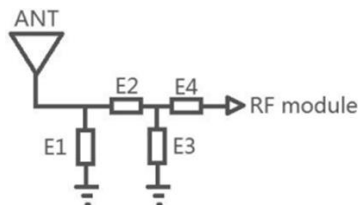
Freq.	2400	2500
VSWR	≤3.6	≤2.4

3.2 Set-up

3.2.1 VSWR

The S11 parameter is performed using Angilent E5071B Network Analyzer and NQI's test fixture that is using customer-providing device. We use a 30cm long ferrite de-coupling sleeve to mitigate surface currents on the outside of the testing cable.

3.2.2 Matching Circuit Description



Element	Value
E1 (0201)	5.1NH
E2 (0201)	0Ω
E3 (0201)	1PF
E4 (0201)	0Ω

3.3 VSWR& R.L.(Test in free space)

Freq.(MHz)	2400	2500
VSWR	2.6	1.4
R.L.	-6.8	-14

4. Plots

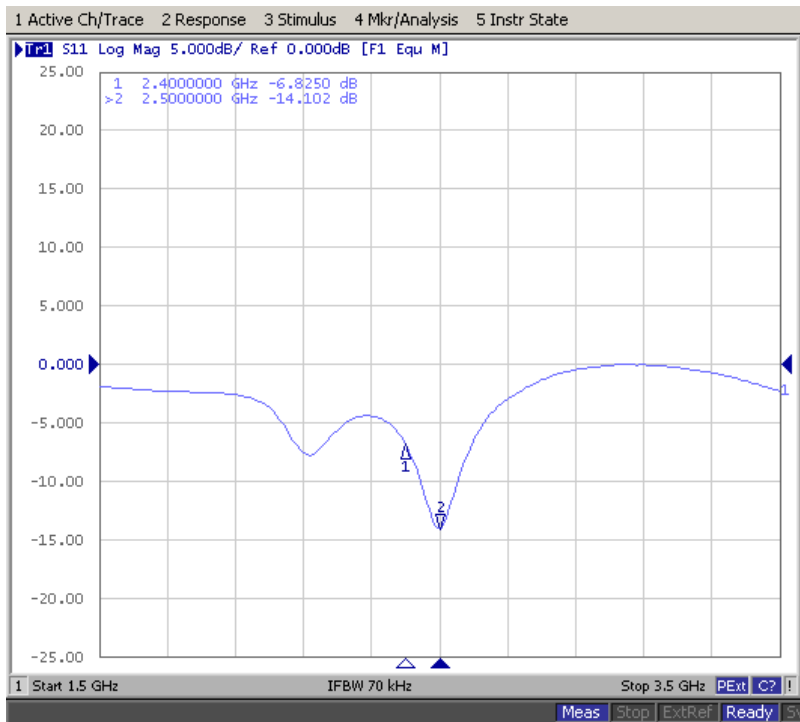
4.1 VSWR

VSWR parameter in sample antenna tested in free space



4.2 Return Loss

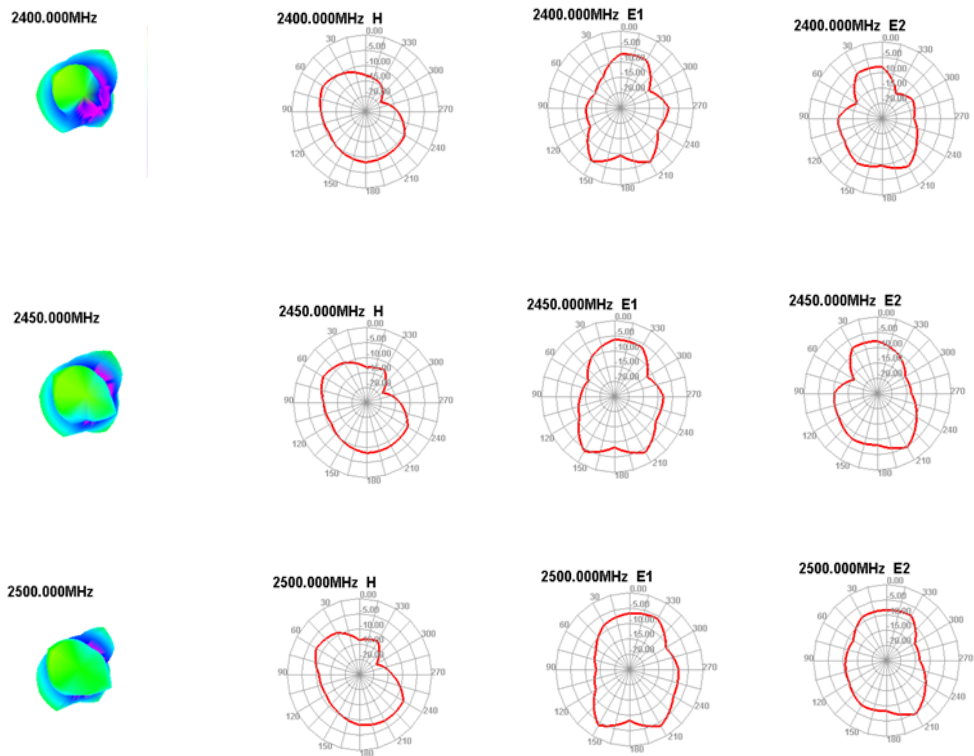
S11 parameter in sample antenna tested in free space



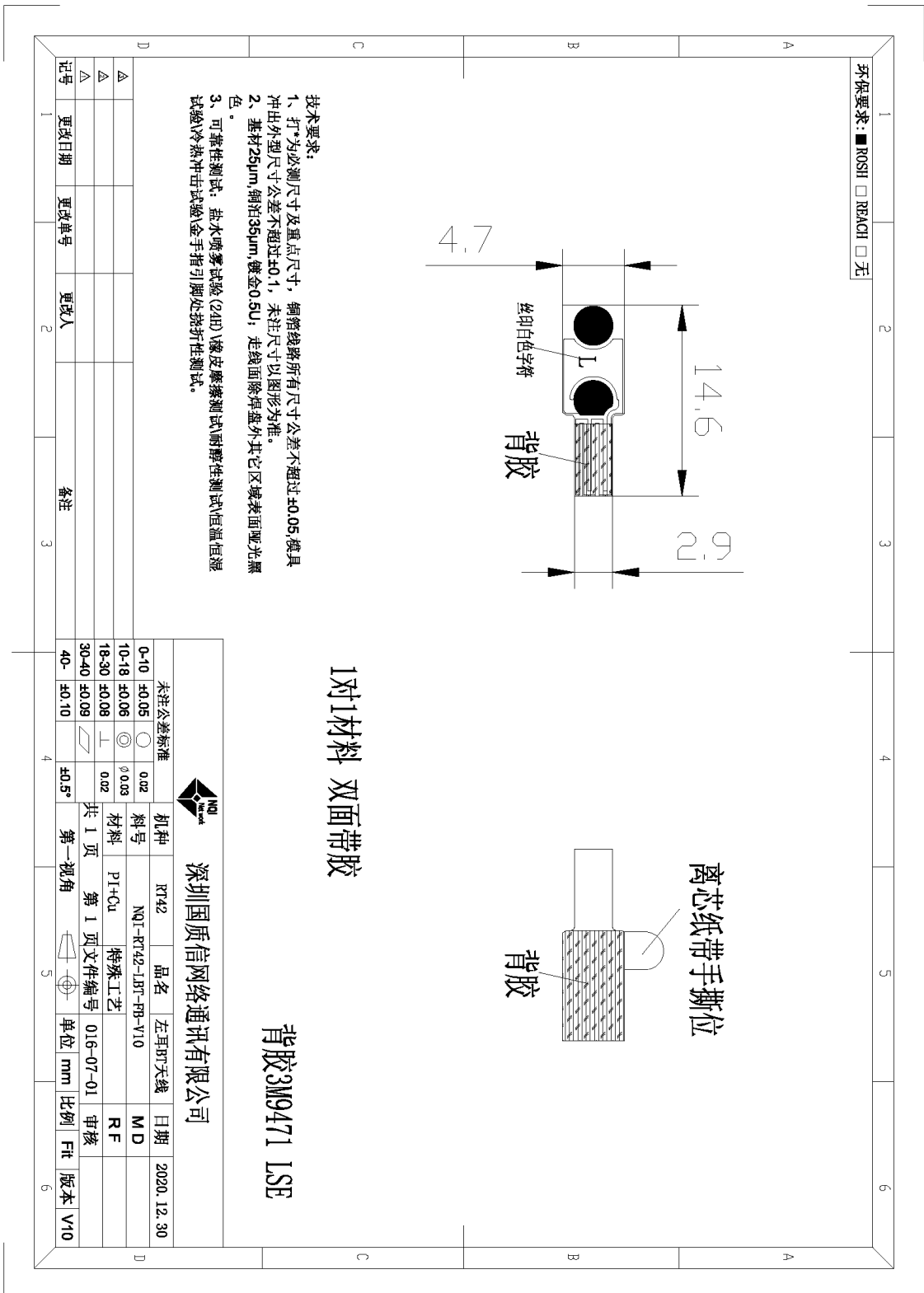
4.3 Efficiency and Gain

BT (Efficiency&Gain)			
Frequency (GHz)	2. 40	2. 45	2. 50
Efficiency	19. 57%	21. 35%	23. 17%
Gain(dBi)	-3. 41	-2. 86	-2. 48

4.4 2.4G-2D Patterns&3D radiation pattern



5. Antenna Engineer drawing:



6. Reliability Testing Report:

customer	民倚星	part number	FPC	Work Date	2020.12.30
Test item	Test requirement			Test result	Evaluation
neutral Salt-Fog test	Hydrochloric fog through neutral testing: In the time of 24 hours, no rust corrosion, color fading or solder peel off to the antenna fpc sop in Nacl 5% ± 1% PH value 6.5-7.2, above 85% humidity. and 35°C ± 2°C Seals environment.			Norust corrosion, color fading or solder peel off on the antenna surface after testing	pass
tester: 黄土勇			approval:		

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2.2 Definitions	3
3.Electrical Performance.....	3-4
3.1 Specification	3
3.1.1 VSWR	4
3.2 Set-up.....	4
3.2.1 VSWR	4
3.2.2 Matching Circuit Description	4
3.3 VSWR&R.L.(Test in freespace)	4
4. Plots	4-6
4.1 VSWR.....	5
4.2 Return Loss.....	5
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3. Electrical Performance

3.1 Specification

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3.1.1 VSWR(Test in free space)

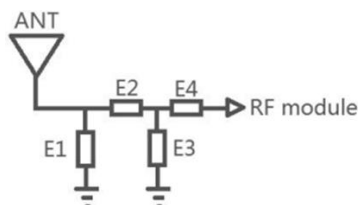
Freq.	2400	2500
VSWR	≤3.4	≤2.9

3.2 Set-up

3.2.1 VSWR

The S11 parameter is performed using Angilent E5071B Network Analyzer and NQI's test fixture that is using customer-providing device. We use a 30cm long ferrite de-coupling sleeve to mitigate surface currents on the outside of the testing cable.

3.2.2 Matching Circuit Description



Element	Value
E1 (0201)	3.9NH
E2 (0201)	4.3NH
E3 (0201)	NF
E4 (0201)	0Ω

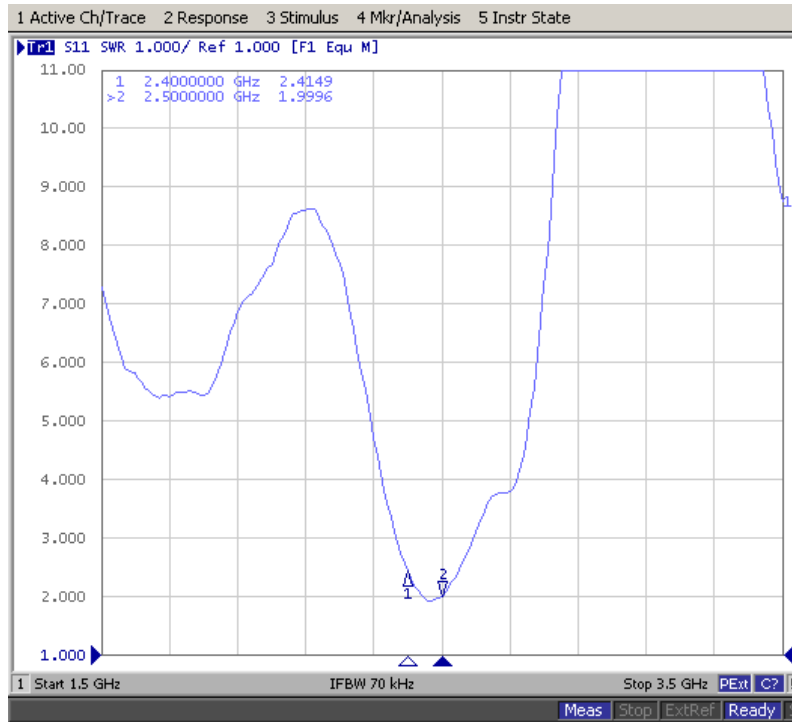
3.3 VSWR& R.L.(Test in free space)

Freq.(MHz)	2400	2500
VSWR	2.4	1.9
R.L.	-7.6	-9.5

4. Plots

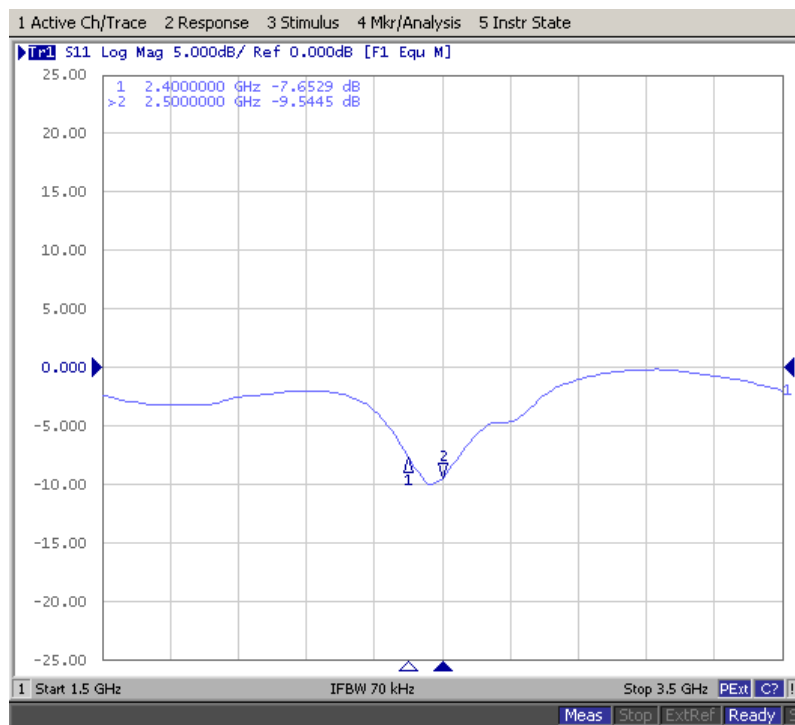
4.1 VSWR

VSWR parameter in sample antenna tested in free space



4.2 Return Loss

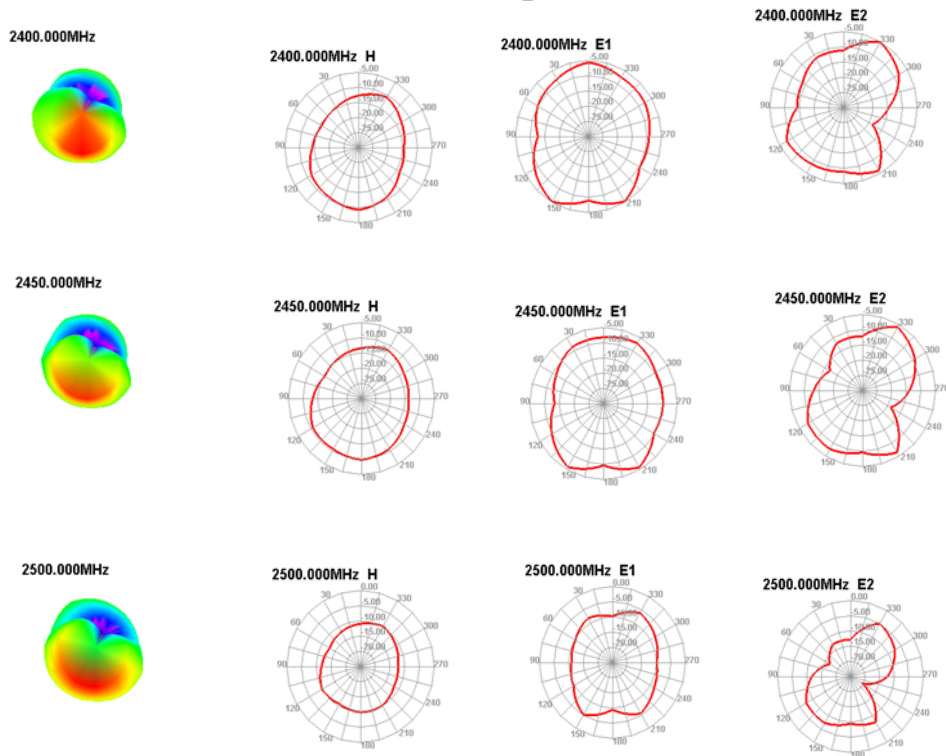
S11 parameter in sample antenna tested in free space



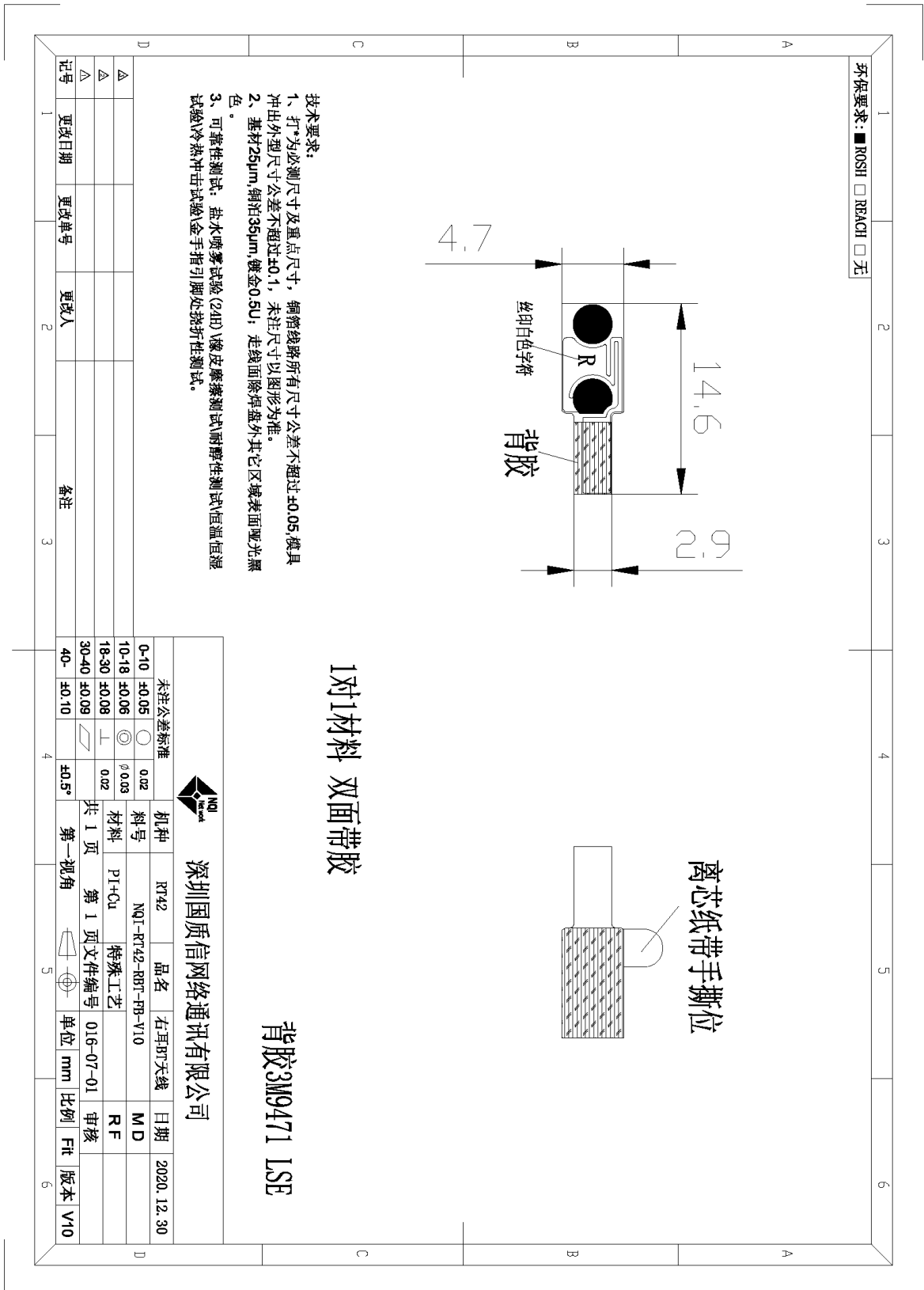
4.3 Efficiency and Gain

BT (Efficiency&Gain)			
Frequency (GHz)	2.40	2.45	2.50
Efficiency	17.10%	19.57%	18.74%
Gain(dBi)	-3.56	-3.01	-3.48

4.4 2.4G-2D Patterns&3D radiation pattern



5. Antenna Engineer drawing:



6. Reliability Testing Report:

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Test item	Test requirement			Test result	Evaluation
neutral Salt-Fog test	Hydrochloric fog through neutral testing: In the time of 24 hours, no rust corrosion, color fading or solder peel off to the antenna fpc sop in Nacl 5% ± 1% PH value 6.5-7.2, above 85% humidity. and 35°C ± 2°C Seals environment.			Norust corrosion, color fading or solder peel off on the antenna surface after testing	pass
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