

PROFESSOR TECHNOLOGY CO.,LTD.

INTRODUCTION

**5G/4G/3G Multiband Antenna
3M Adhesive Mount**

CP68-5G/4G/3G-2.5M-CRC9 R/A

LTE/5G/4G/3G/GSM

690-960/1710-2170/2500-2700/3200-3600MHz 2-5dBi

1. GENERAL DESCRIPTION

Model No
CP68-5G/4G/3G-2.5M-CRC9 R/A (Huawei)

Below is a table summarizing the LTE 5G/4G/3G/GSM antenna design specification

1.1 LTE 5G/4G/3G Multi-band Antenna Electrical Properties

Parameter	Description
Communication System	5G/4G/3G/AMPS/GSM/DCS/UMTS/LTE
Frequency Band (MHz)	690~960/1710~2170/2500~2700/3200~3600MHz
Average Efficiency	47%/67%/59%/54%/57%
Average Gain	2.0~5.0dBi
Nominal Impedance	50 ohm
Polarization	Vertical
Radiation Pattern	Omni-directional
Return Loss	Please See Data
V.S.W.R	<1.5 : 1
Note: Gain includes the cable loss	

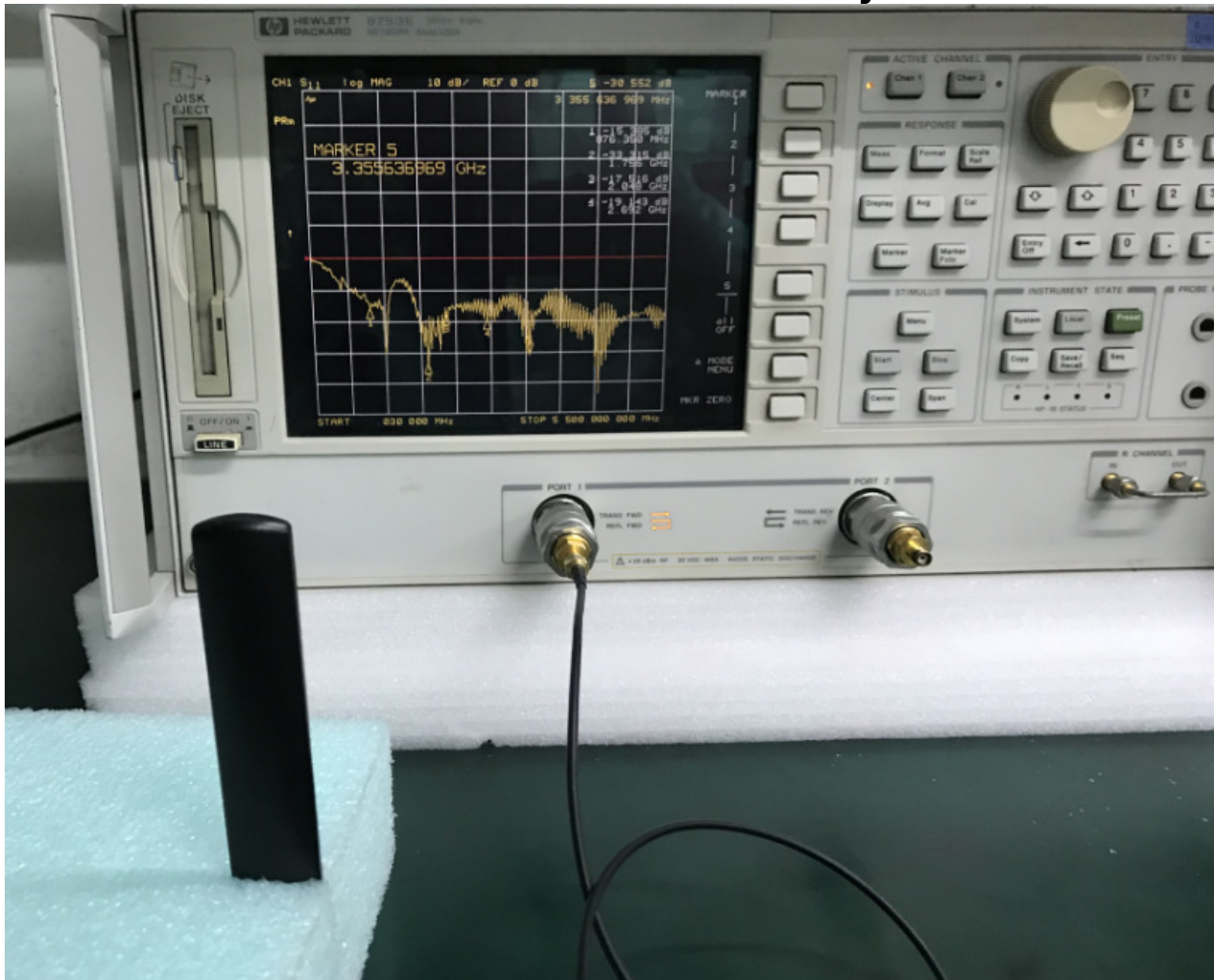
1.2 LTE/5G/4G/3G Multi-band Antenna Mechanical Properties

Parameter	Description
Antenna Type	External Antenna
Mount Type	Adhesive (3M) Mount
Antenna cable	RG174 Low loss cable
Connector Type	CRC9 R/A (Huawei)

Antenna Cable Total Length	2500mm ±50mm
Antenna Color	Black
Waterproof	100% waterproof
Operating Temperature Range	-35 °C~+75 °C
Storage Temperature Range	-40 °C~+80 °C

1-3

5G/4G/3G/GSM Multi -band Network analyzer test

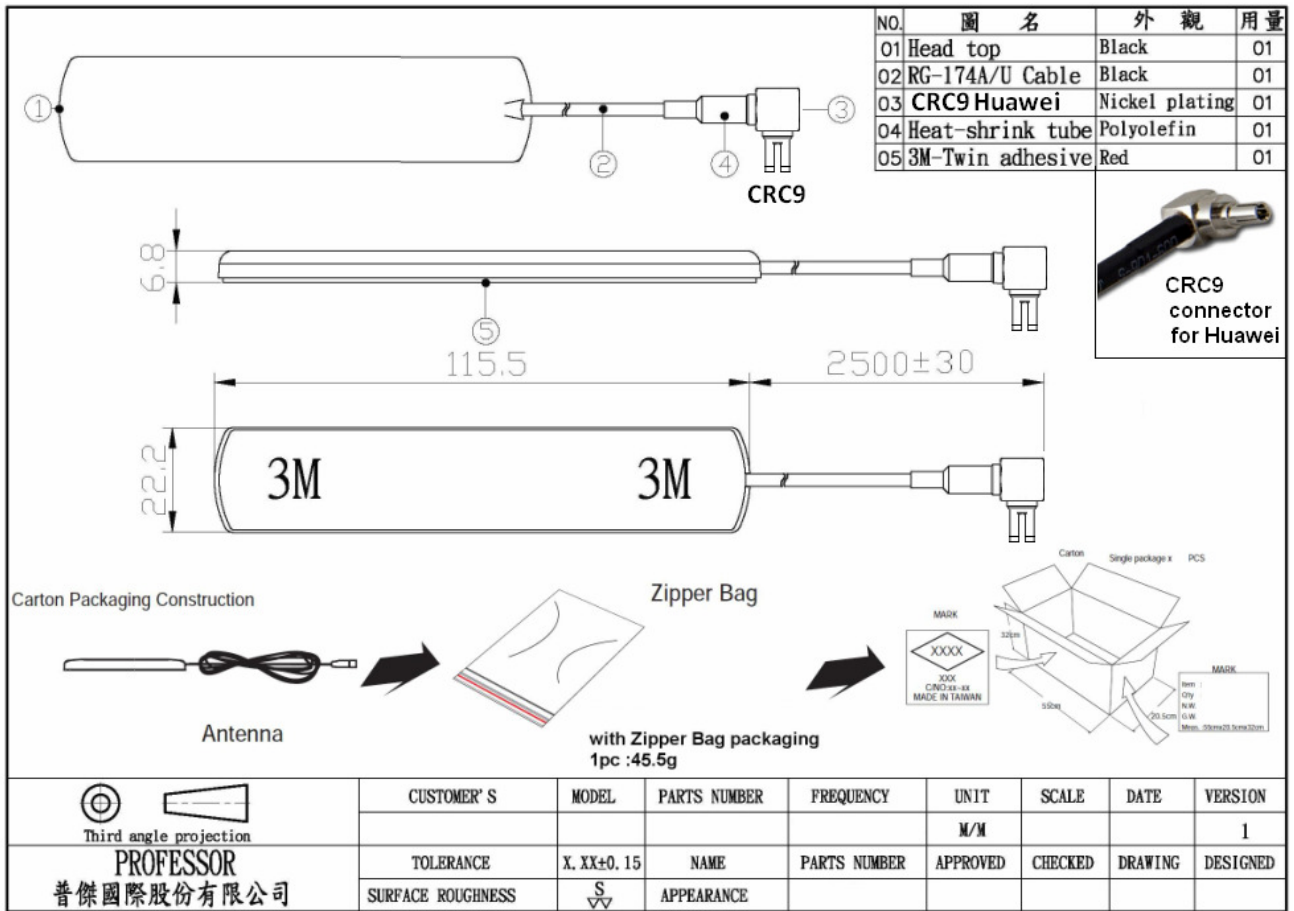


2. Antenna Appearance Size:

L : 115.5mm

W :22.2 mm

H:6.8mm

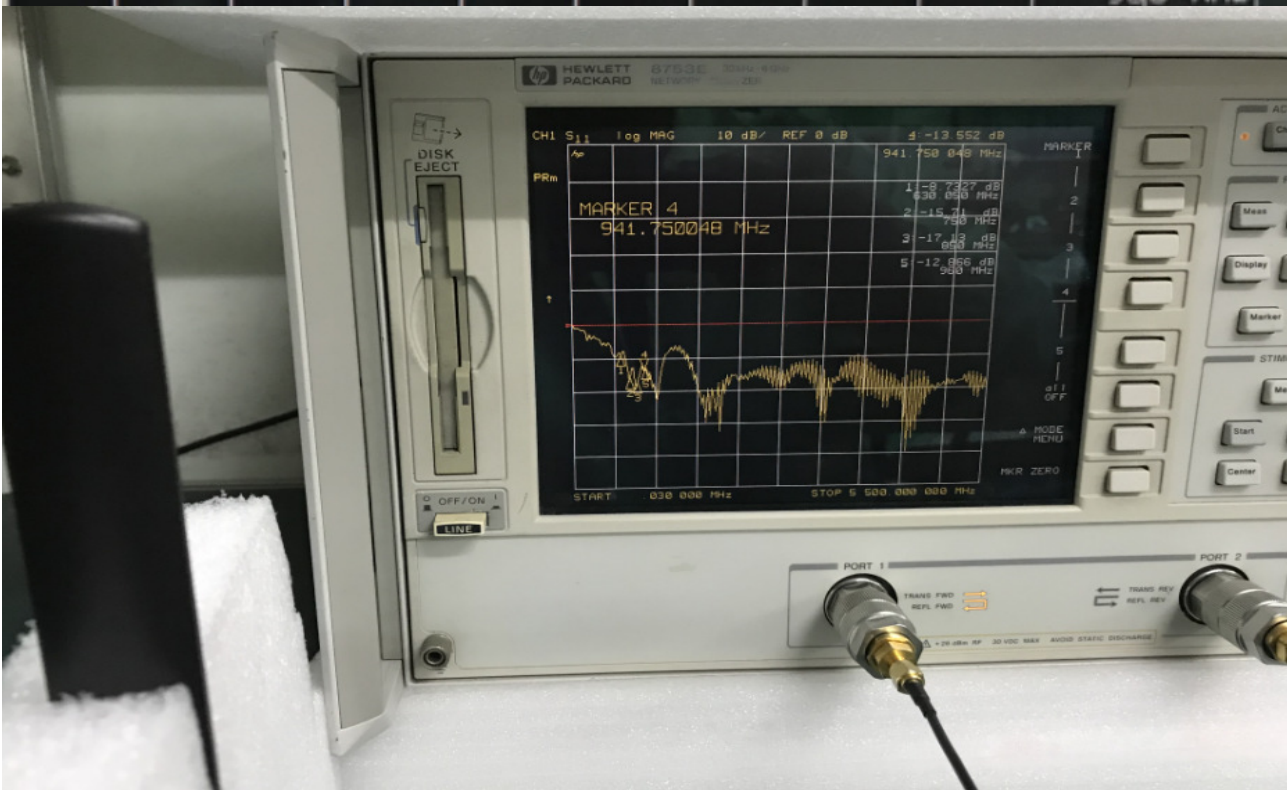


3. 5G/4G/3G/GSM Multi -band Network analyzer test

Frequency : 690~960/1710~2170/2500~2700/3200-3600MHz

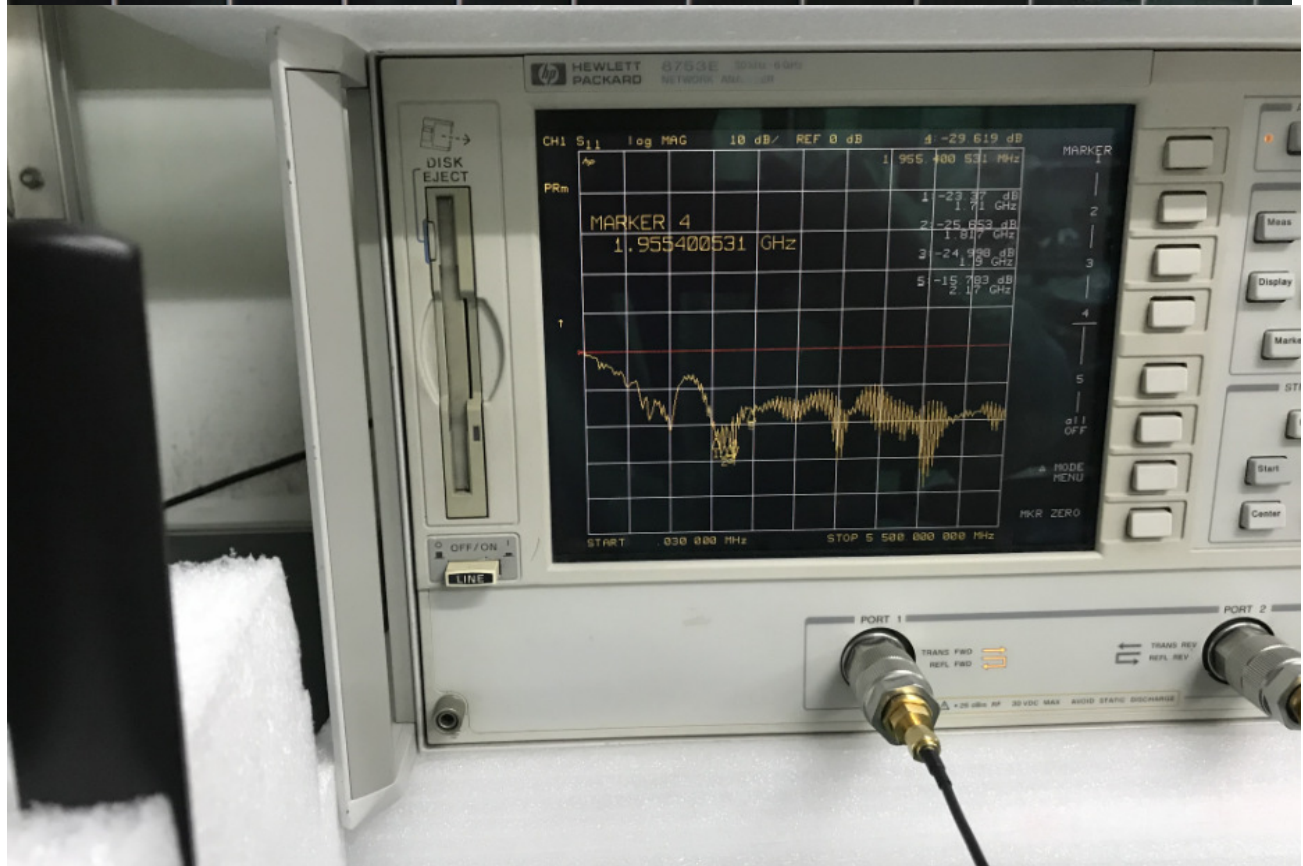
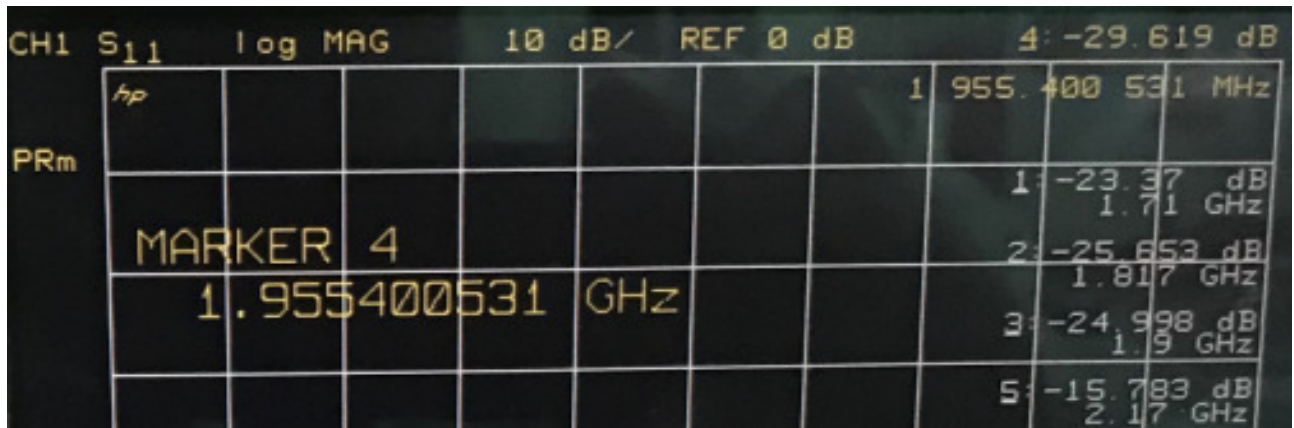
3-1 Detail band test - Frequency : 690~960MHz

Frequency	Return loss	V.S.W.R	Reflection coefficient
630.000MHz	-8.7327dB	2.154:1	0.366
750.000MHz	-15.710dB	1.325:1	0.164
850.000MHz	-17.130dB	1.323:1	0.139
941.750MHz	-13.552dB	1.532:1	0.210
960.000MHz	-12.866dB	1.589:1	0.227



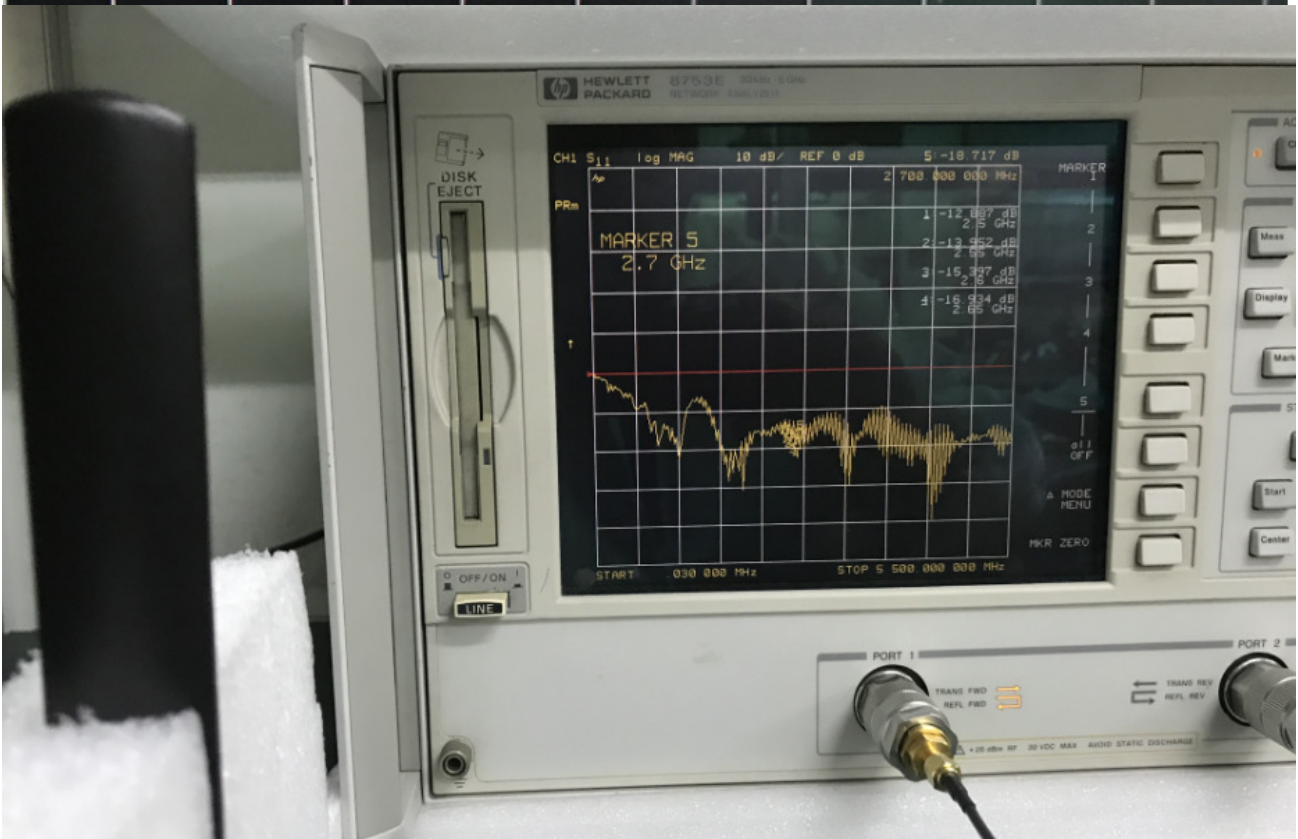
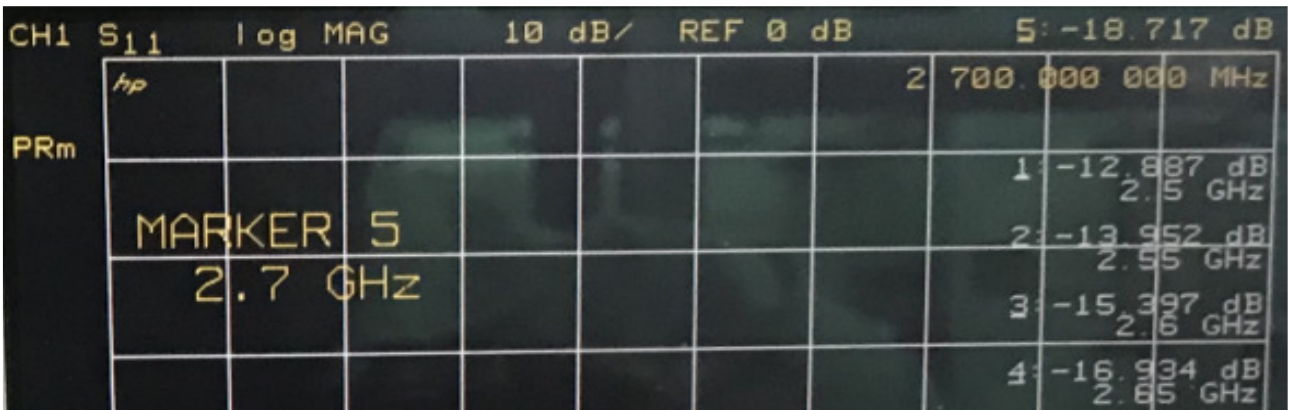
3-2 Detail band test - Frequency : 1710~2170MHz

Frequency	Return loss	V.S.W.R	Reflection coefficient
1710.00MHz	-23.370dB	1.146:1	0.068
1817.00MHz	-25.653dB	1.110:1	0.052
1900.00MHz	-24.998dB	1.119:1	0.056
1955.40MHz	-29.619dB	1.068:1	0.033
2170.00MHz	-15.783dB	1.388:1	0.162



3-3 Detail band test - Frequency : 2500-2700MHz

Frequency	Return loss	V.S.W.R	Reflection coefficient
2500.00MHz	-12.887dB	1.587:1	0.227
2550.00MHz	-13.952dB	1.502:1	0.201
2600.00MHz	-15.397dB	1.409:1	0.170
2650.00MHz	-16.934dB	1.332:1	0.142
2700.00MHz	-18.717dB	1.262:1	0.116



3-4 Detail band test - Frequency : 3200~3600MHz

Frequency	Return loss	V.S.W.R	Reflection coefficient
3200.00MHz	-16.701dB	1.342:1	0.146
3300.00MHz	-30.090dB	1.065:1	0.031
3355.00MHz	-29.860dB	1.066:1	0.032
3500.00MHz	-16.330dB	1.549:1	0.216
3574.70MHz	-16.655dB	1.345:1	0.147

