

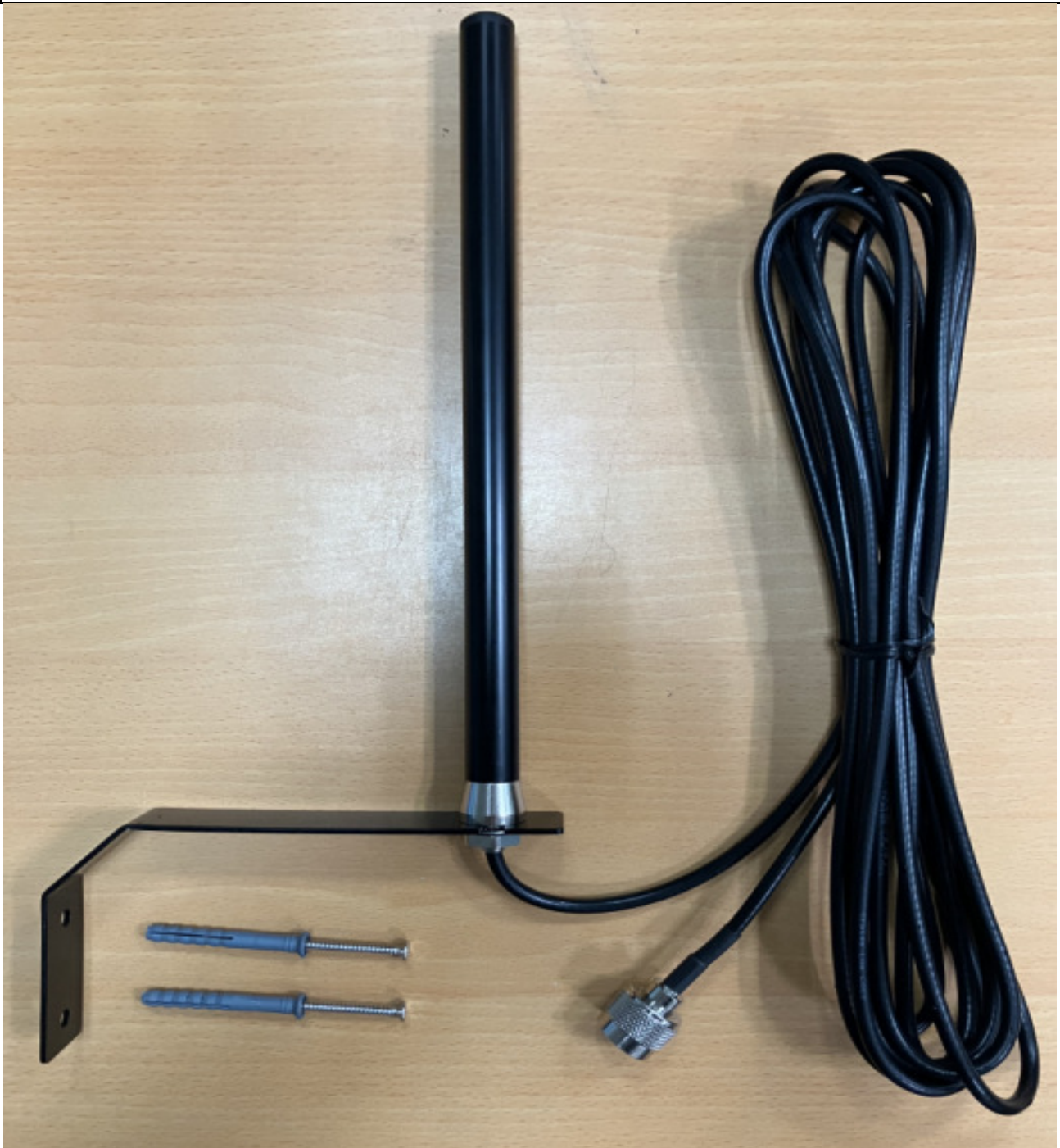
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INTRODUCTION

**5G/LTE/4G/3G Wall Bracket mount antenna
690~960/1710~2170/2400~2700/3200~3800MHz**

1. GENERAL DESCRIPTION

Model No
CPR23-5G/LTE/4G/3G-CFD195-5M-N Male



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Below is a table summarizing the antenna 5G/LTE/4G design specification.
With CFD195 Low loss cable 5M N Male connector

1.1 Electrica Properties

Parameter	Description
Communication System	5G/LTE/4G/3G/AMPS/GSM/DCS/UMTS
Frequency Band	600~960/1710~2170/2400~2700/3200~3800MHz
Nominal Impedance	50 ohm
Polarization	Vertical
Antenna Gain	3.0~6.5dBi
Return Loss (Check test Date)	688.20MHz(-28.930dB),1910.0MHz(-32.213dB) 2650.0MHz(-24.157dB),3328.1MHz(-26.393dB)
V.S.W.R <1.5:1	688.20MHz(1.074:1),1910.0MHz(1.050:1) 2650.0MHz(1.132:1),3328.1MHz(1.101:1)
Reflection coefficient	688.20MHz(0.036),1910.0MHz(0.025) 2650.0MHz(0.062),3328.1MHz(0.048)
Ground Plane Independent	No
Note: Gain includes the CFD195 5M Low loss cable	

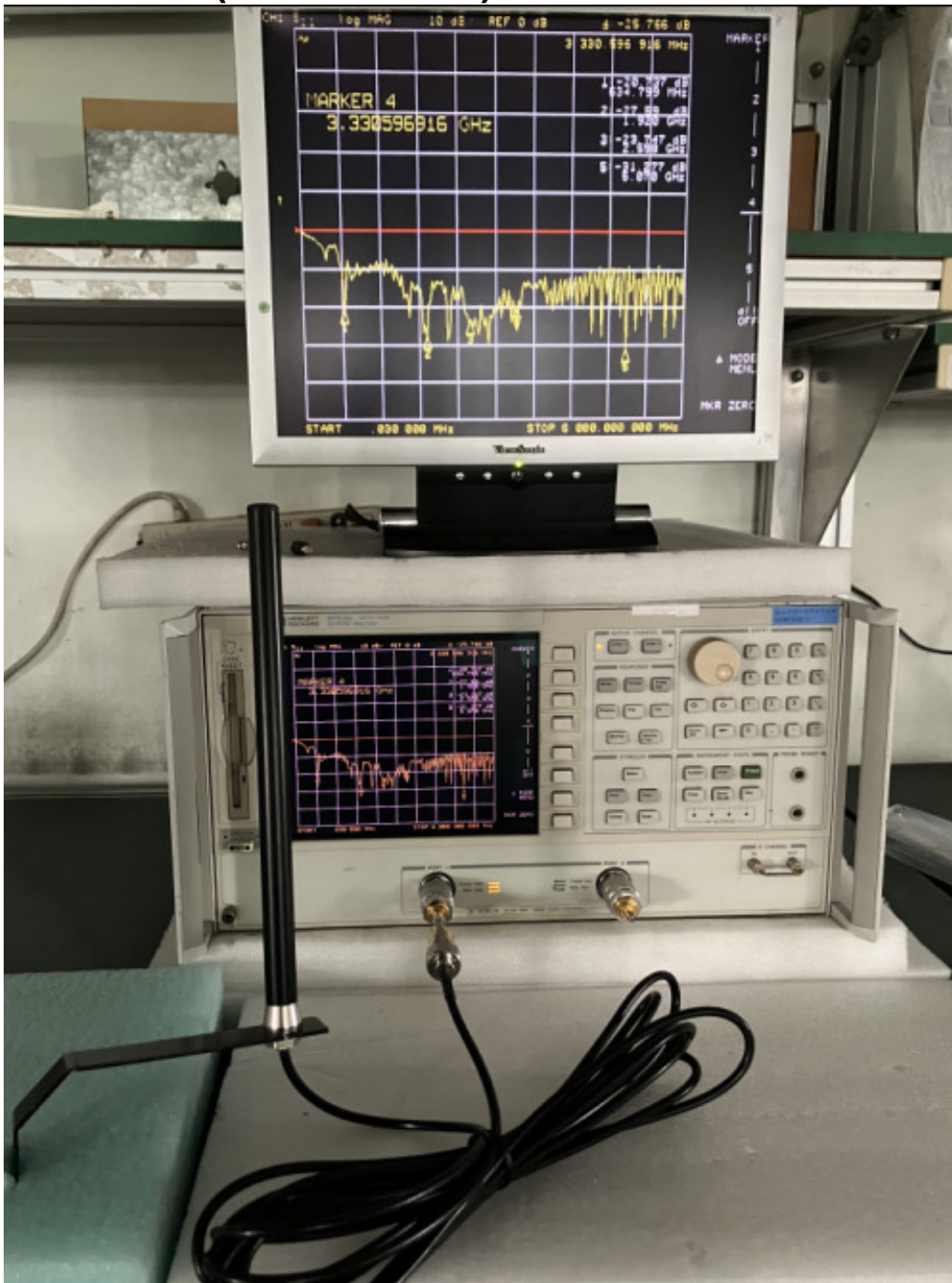
1.2 Mechanical Properties

Parameter	Description
Antenna Type	External Antenna
Touch Type	Screw Type
Antenna mounting	Wall bracket Mount
Connector Type	N Male connector
Antenna Dimensions	269mm ±5
Antenna Color	Black
Antenna Cable	CFD195 Low loss
Antenna cable total length	5 M
Cable connector	N Male
Water \proof	100% waterproof (IP66~IP67)

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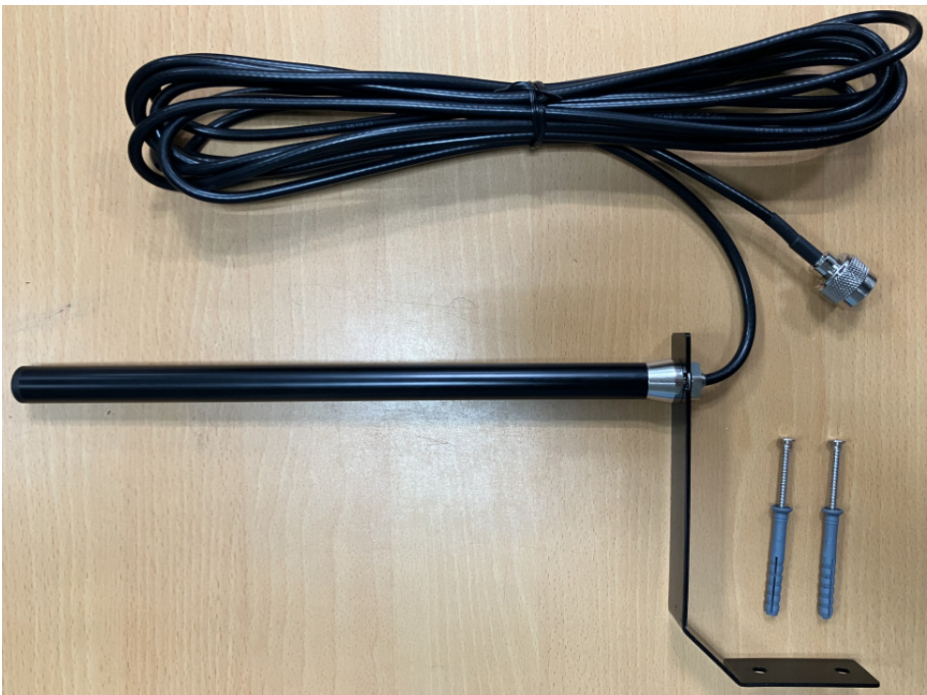
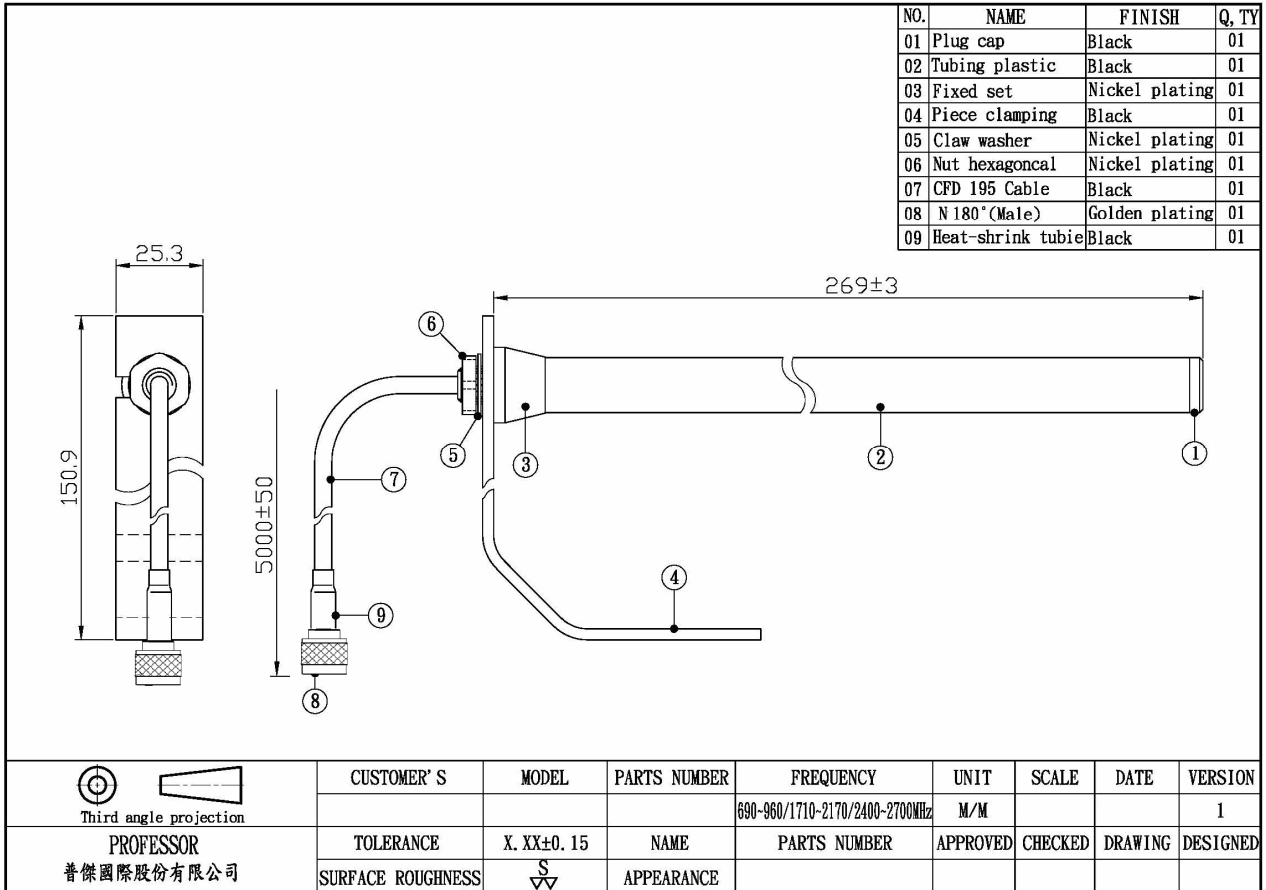
Operating Temperature Range	-30 °C~70 °C
Storage Temperature Range	-40 °C~+80 °C

1.3 5G/LTE/4G/3G/GSM Multi-Band Network analyzer test HP8753E (22-Nov-2022)



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2.Appearance



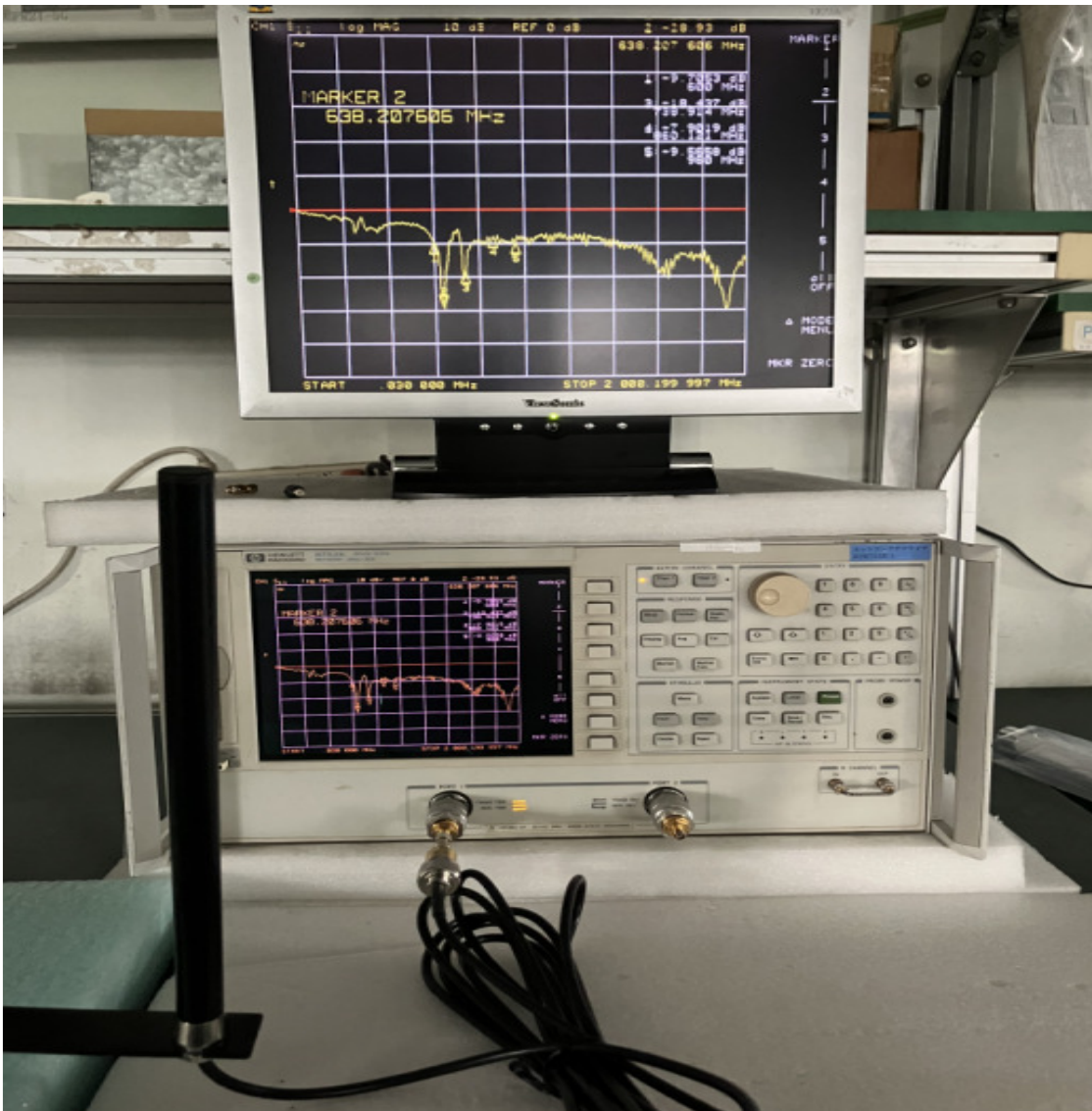
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3. 5G/LTE/4G/3G/GSM Multi-band Network analyzer test HP8753E (22-Nov-2022)

Frequency :600~960/1710~2170/2400~2700/3200~3800MHz

3-1 Detail band test - frequency : 600~960MHz

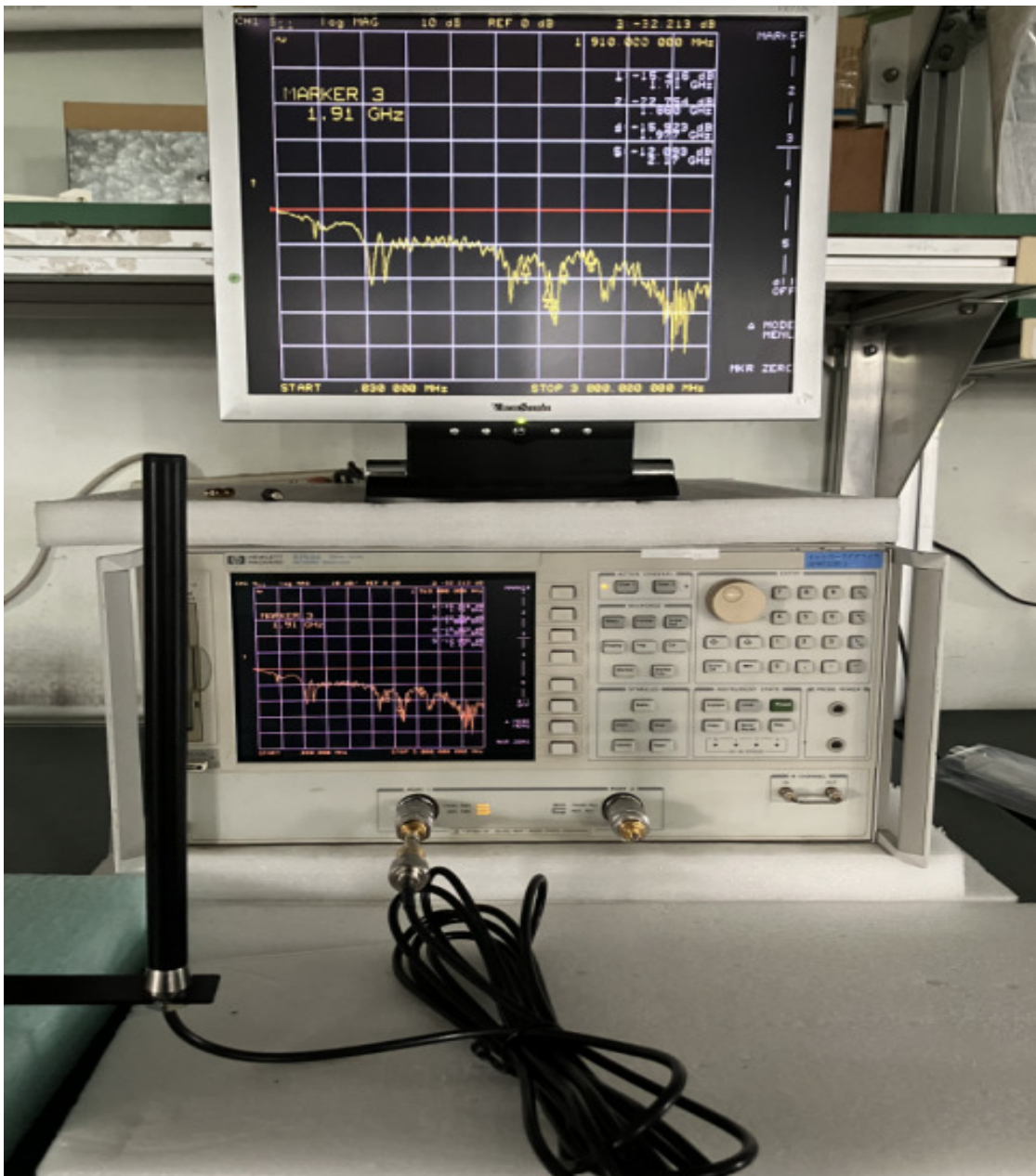
Frequency	Return loss	V.S.W.R	Reflection coefficient
600.000MHz	-9.7053dB	1.972:1	0.327
688.200MHz	-28.930dB	1.074:1	0.036
768.590MHz	-18.437dB	1.272:1	0.120
860.121MHz	-7.9019dB	2.348:1	0.403
960.000MHz	-9.5658dB	1.996:1	0.332



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

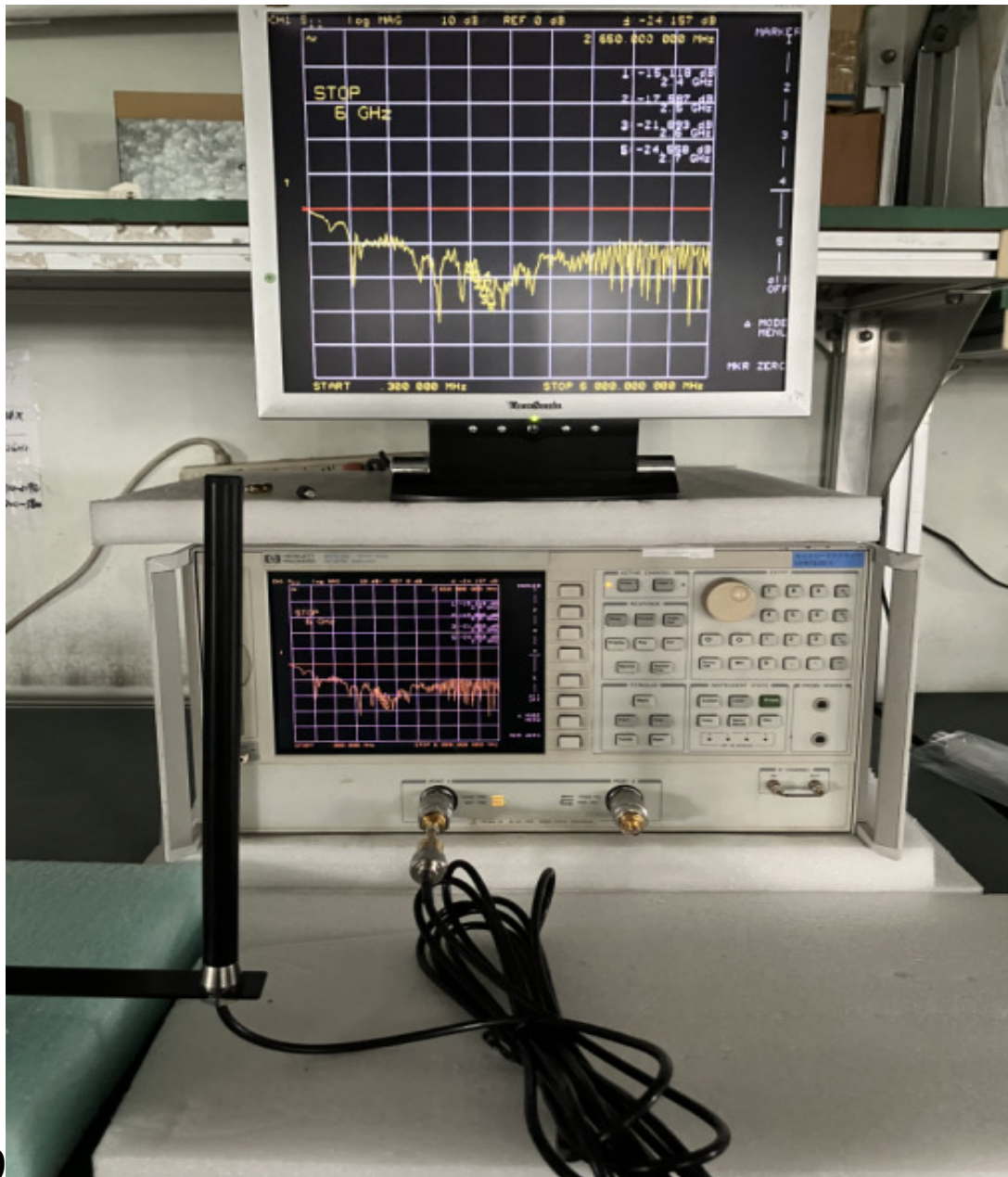
Frequency	Return loss	V.S.W.R	Reflection coefficient
1710.00MHz	-15.416dB	1.408:1	0.170
1860.00MHz	-22.754dB	1.157:1	0.073
1910.00MHz	-32.213dB	1.050:1	0.025
1977.00MHz	-15.923dB	1.381:1	0.160
2170.00MHz	-12.093dB	1.661:1	0.249



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3-3 Detail band test - frequency : 2400-2700MHz

Frequency	Return loss	V.S.W.R	Reflection coefficient
2400.00MHz	-15.118dB	1.426:1	0.175
2500.00MHz	-17.587dB	1.294:1	0.128
2600.00MHz	-21.893dB	1.175:1	0.080
2650.00MHz	-24.157dB	1.132:1	0.062
2700.00MHz	-24.558dB	1.126:1	0.059



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6-4 Detail band. test - frequency : 3200-3800MHz

Frequency	Return loss	V.S.W.R	Reflection coefficient
3200.00MHz	-17.264dB	1.318:1	0.137
3328.19MHz	-26.393dB	1.101:1	0.048
3367.00MHz	-18.853dB	1.258:1	0.114
3600.00MHz	-15.831dB	1.386:1	0.162
3800.00MHz	-15.837dB	1.385:1	0.161

