

OTA TEST REPORT

Antennat Specification

Model:	PSM05G/RG880I
CompanyName:	Power Idea Technology (Shenzhen) Co., Ltd.
Antenna type:	PIFA Antenna
Supplier:	Shenzhen Fu Bang Wireless Technology Co., Ltd

Test Laboratory

1.1 Notes of the Test report

This report shall not be reproduced in full or partial. The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. Measurement Uncertainties were not taken into account and are published for informational purposes only. This report is written to support regulatory compliance of applicable standards stated above.

1.2 Test facility

GTS1800 Microwave Anechoic Chamber : testing frequency ranges from 600MHz to 6GHz .

1.3 Laboratory Environment

Temperature	Min.= 19℃, Max.=25℃	
Relative humidity	Min.=40%, Max.=72%	
Shield effect	0.6-7GHz	>100dB
Ground resistance	<0.5 Ω	

2. General Description of Equipment under Test

2.1 General information

Shenzhen Fu Bang Wireless Technology Co., Ltd.

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Page1

EUT Description	
Product Name	RayZone1800
Model	GTS-ANT D-H
HW Version	RayZone1800 V1.0
SW Version	MaxSign 100
Antenna Type	PCB Antenna
Antenna Manufacturer	Shenzhen General Test System Co., Ltd
Test Frequency	700MHz-5.8GHz

2.2 Applied Standards

According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

Test Method: **ANSI/IEEE Std 149-2008**

3. Test Conditions

3.1 Test Configuration

The method is used to measure the antenna 3D GAIN of EUT in OTA qualified anechoic chamber. Equipment Under Test(EUT) geometry centre vertical projection at the centre of platform, the distance from EUT to measurement antenna is 1m.

3.2 Test Measurement

Spherical coordinate system

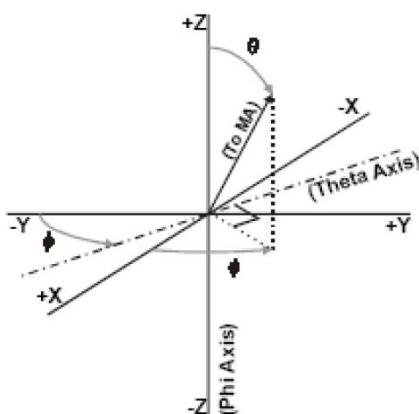
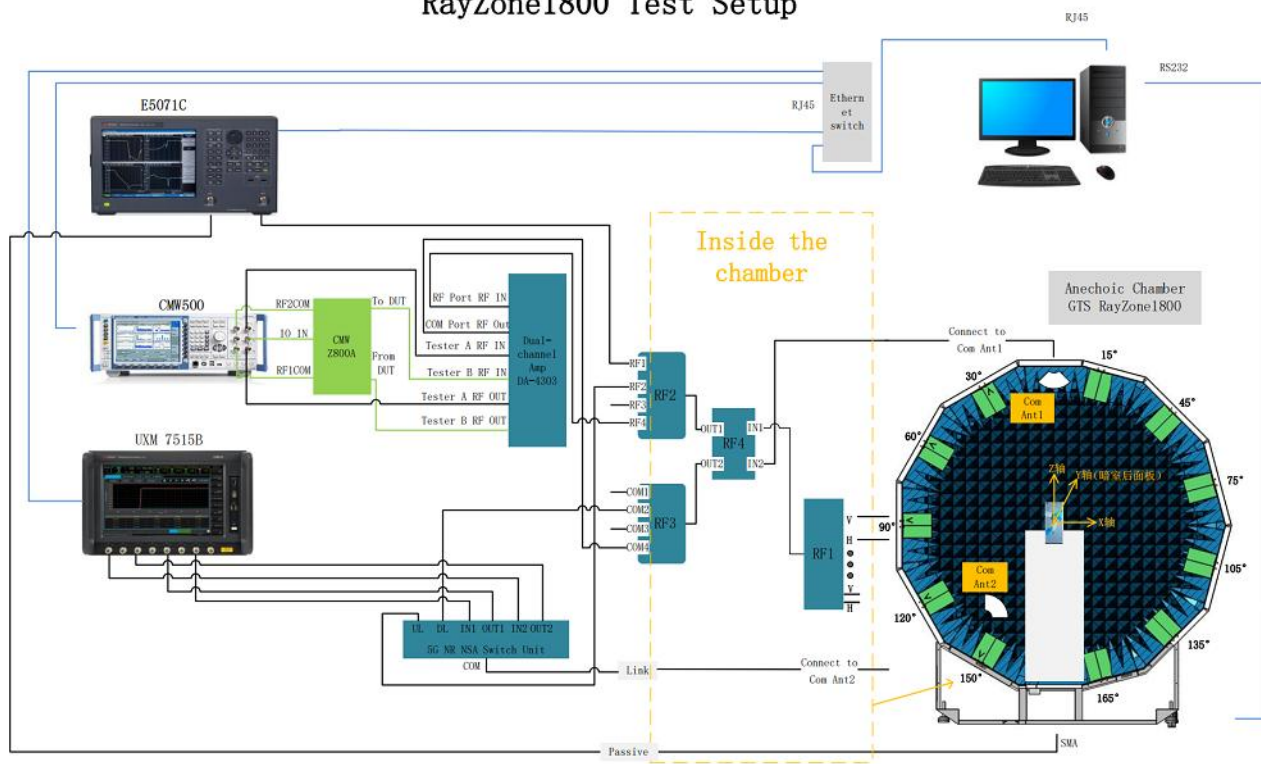


Figure 1 Test coordinate system

Note: Theta is from 0-180degree. Phi is from EUT and record the Date, the step of rotation is 15 degree.

Test Setup

RayZone1800 Test Setup



4. Test Results

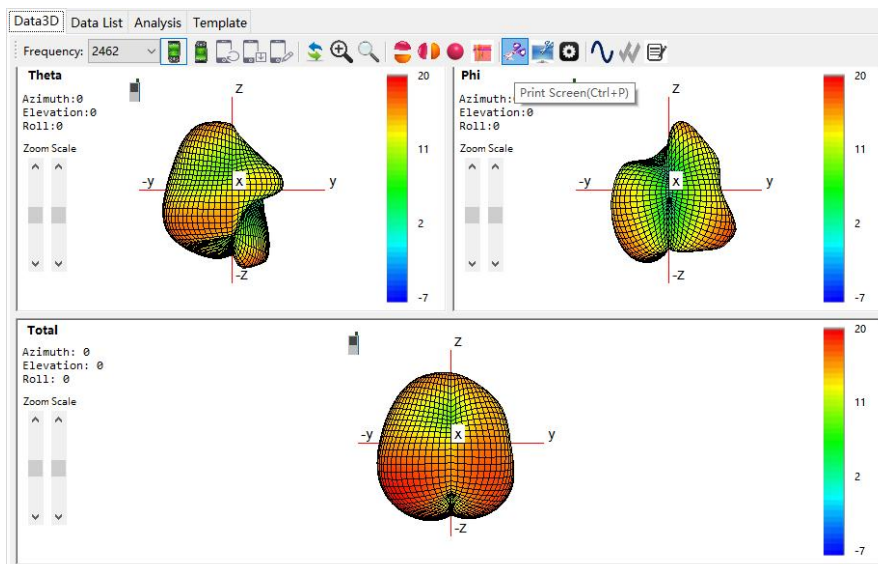
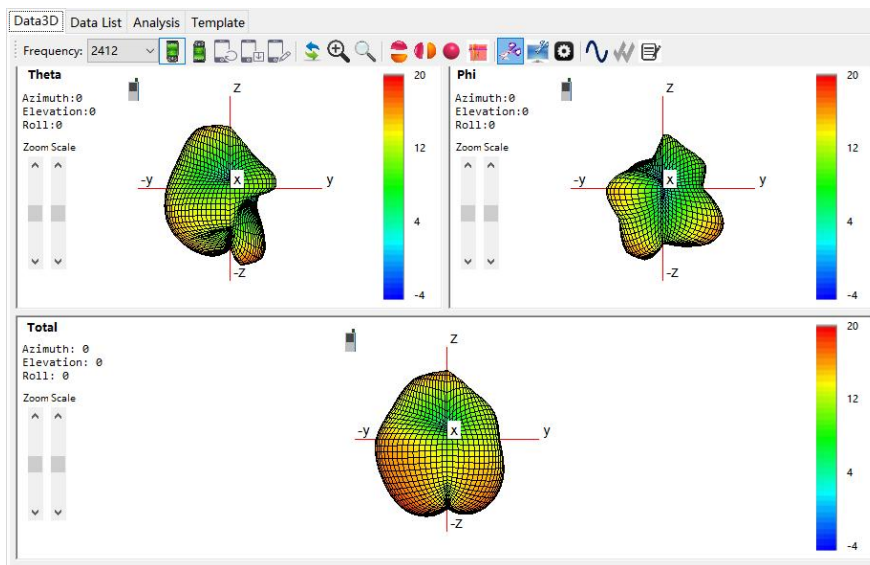
4.1 Gain and Efficiency

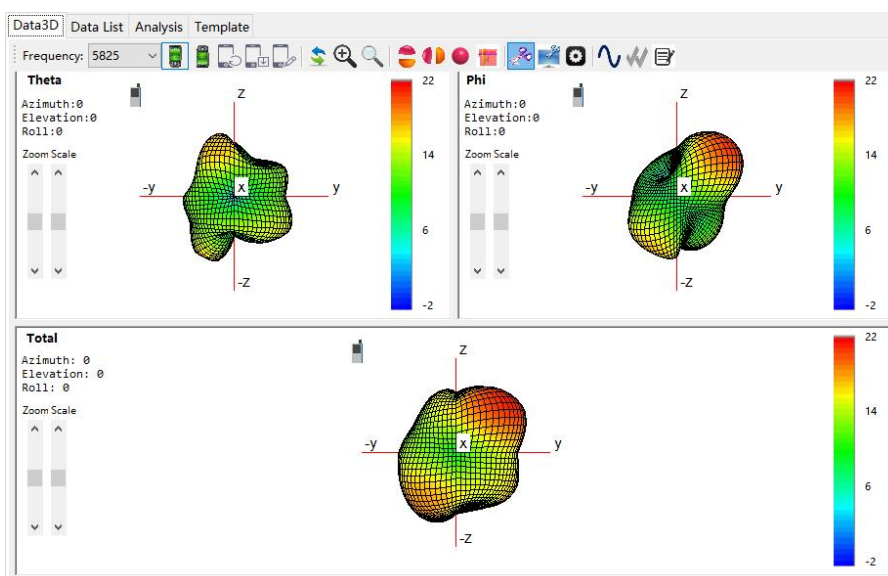
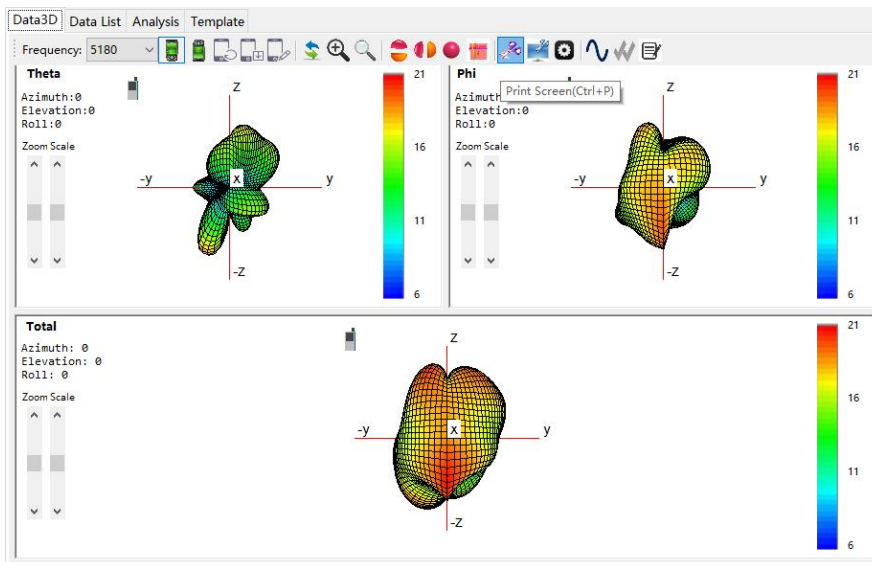
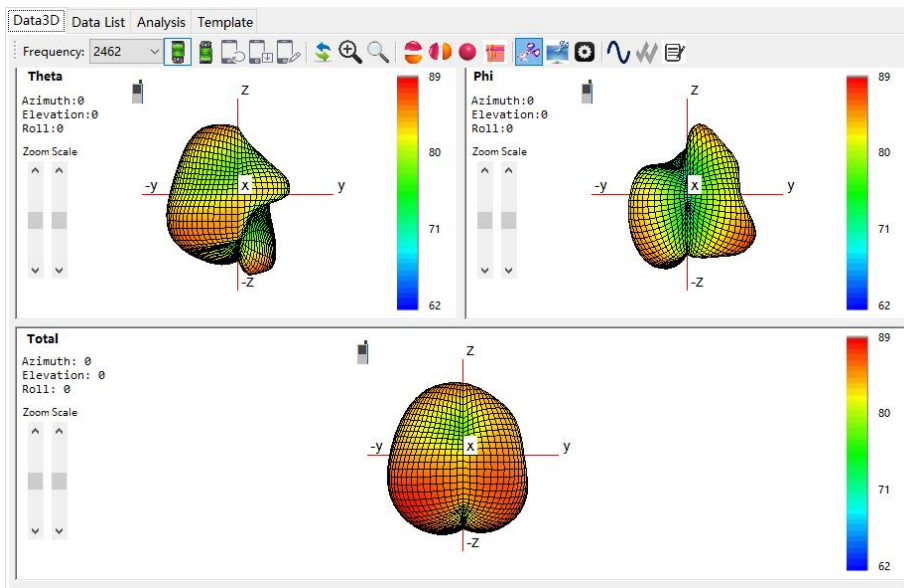
	Gain(dbi)
GSM850/WCDMA B5/LTE B5/BC0	-1.6
GSM900/WCDMA B8/LTE B8	0.2
WCDMA B1/LTE B1	-0.5
WCDMA B2/LTE B2/39/PCS1900/BC1	-0.6
GSM1800/LTE B3/4/66/WCDMA B4	-0.8
LTE B20	-1.2
LTE B28	-2.45
LTE B12/17	-2.7
LTE B13/14	-2
LTE B34	-0.9
LTE B38/41/7	-1.2
WIFI 2.4G/BT	1.8
WIFI 5G	0.8

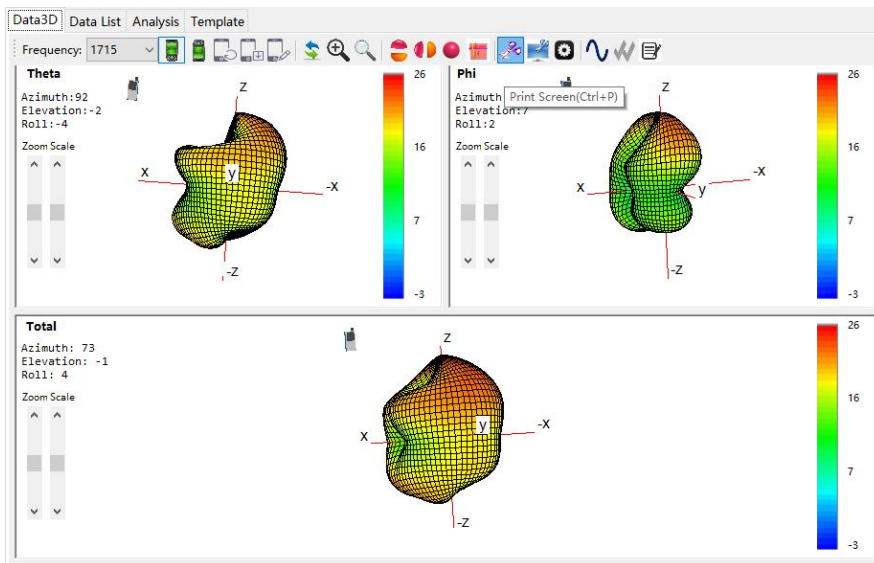
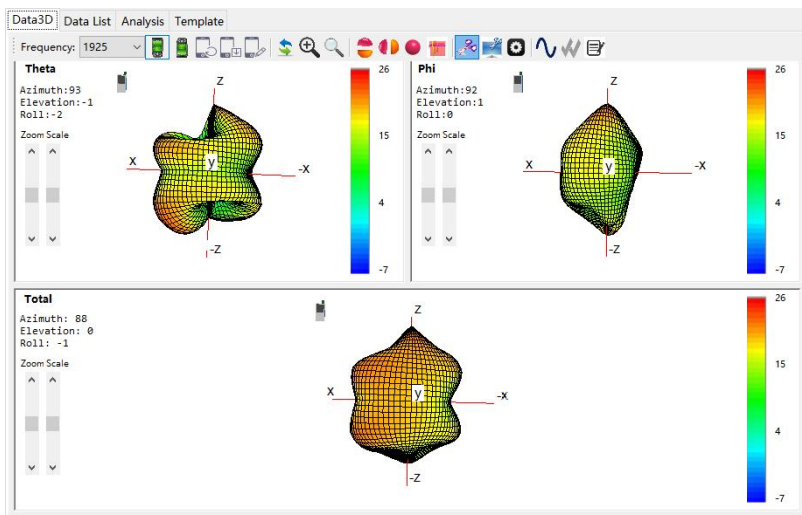
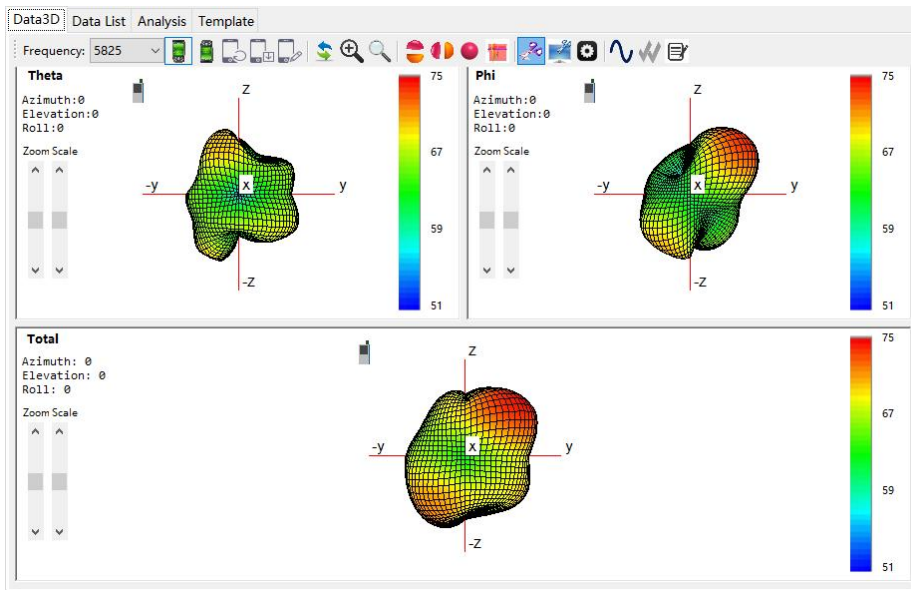
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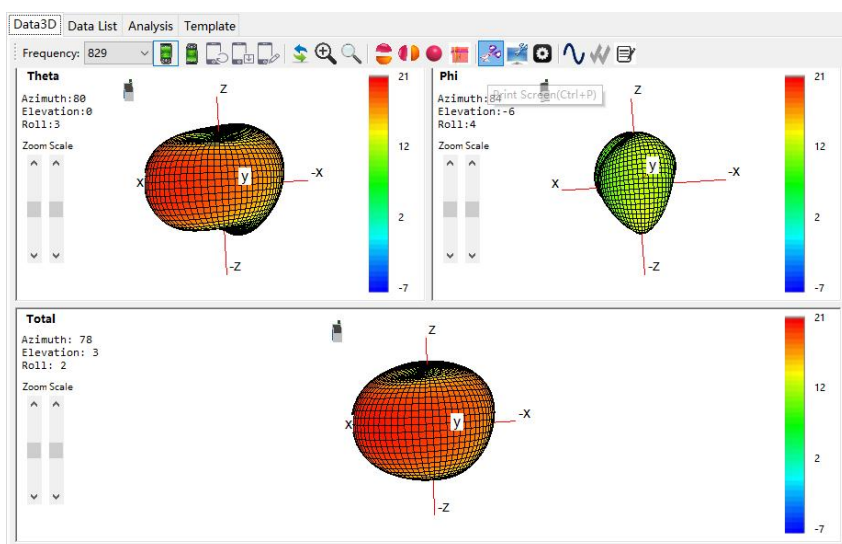
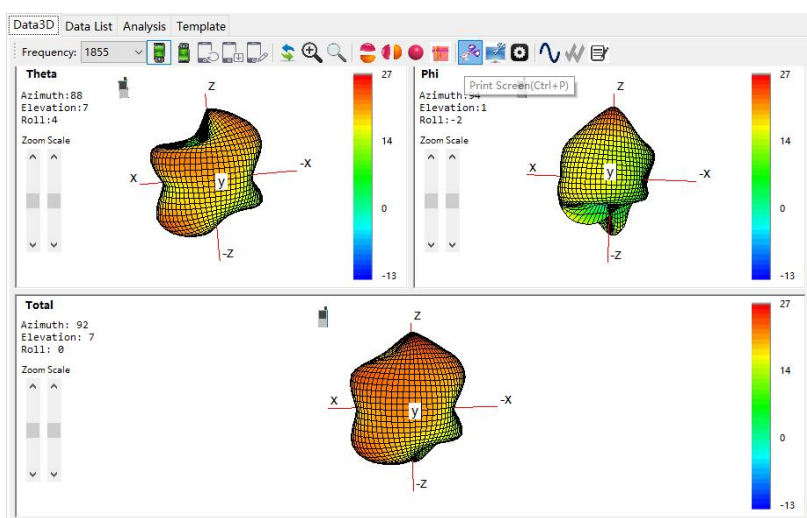
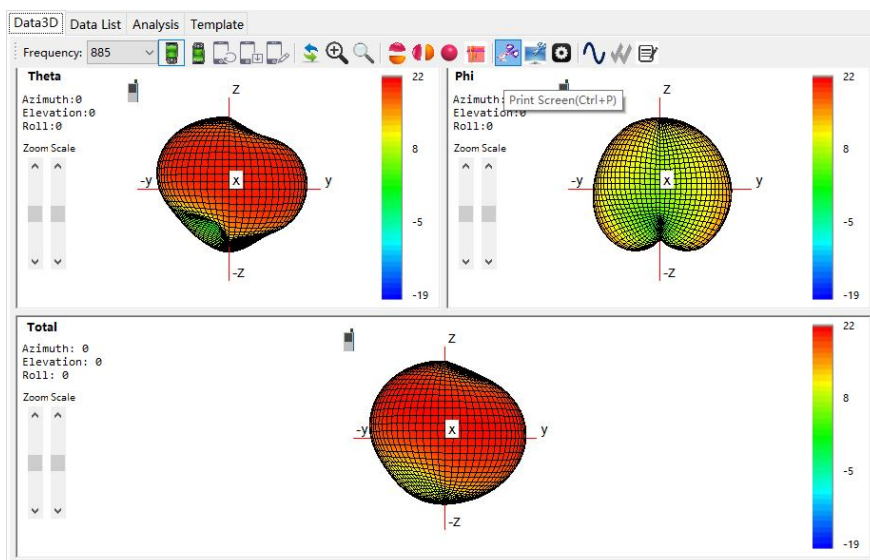
WIFI	CH	Data Rate		
			TPR	TIS
11b	1	11	15.3	
	6	11	15.0	
	11	11	14.7	-83.9
11a	36	6/54	13.7	
	56	6/54	14.0	
	165	6/54	14.4	-71.8

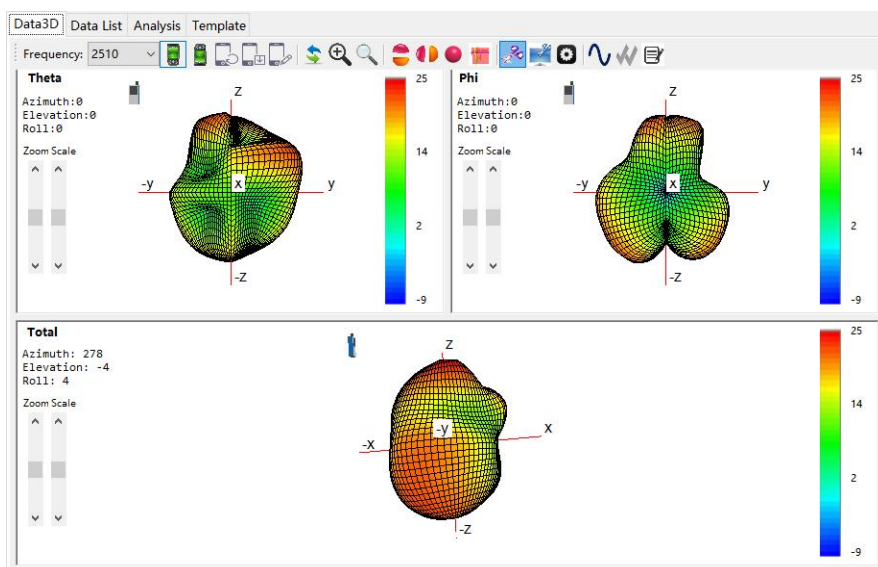
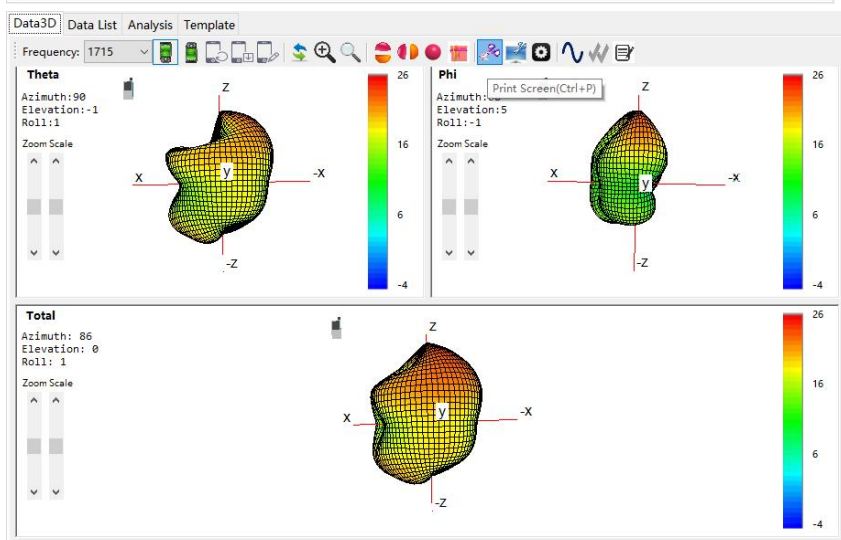
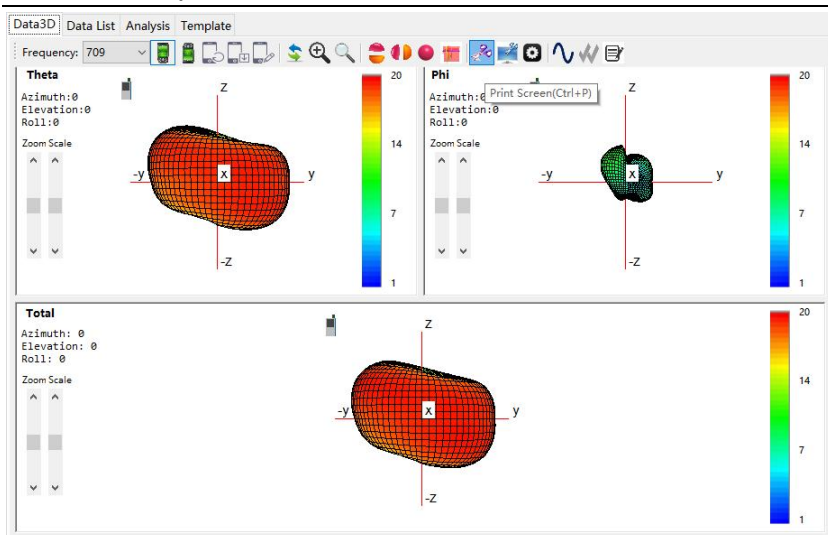
4.3 A 3D Patten Plots











5. Equipment List

Type of Equipment	Manufacture	Model Number
Network Analyzer	Key sight	E5071C
Switch control System	GTS	RayZone1800
Software	GTS	MaxSign 100Patten Measurement software

Test Configuration

