



深圳自由行通信技术有限公司  
Shenzhen Free Walk Communication Technology Co. LTD

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客户 (Customer) : Micronet Union Technology

产品 (Product) : 5G-exposed antenna (L=170mm)

型号 (Model) : 51010049

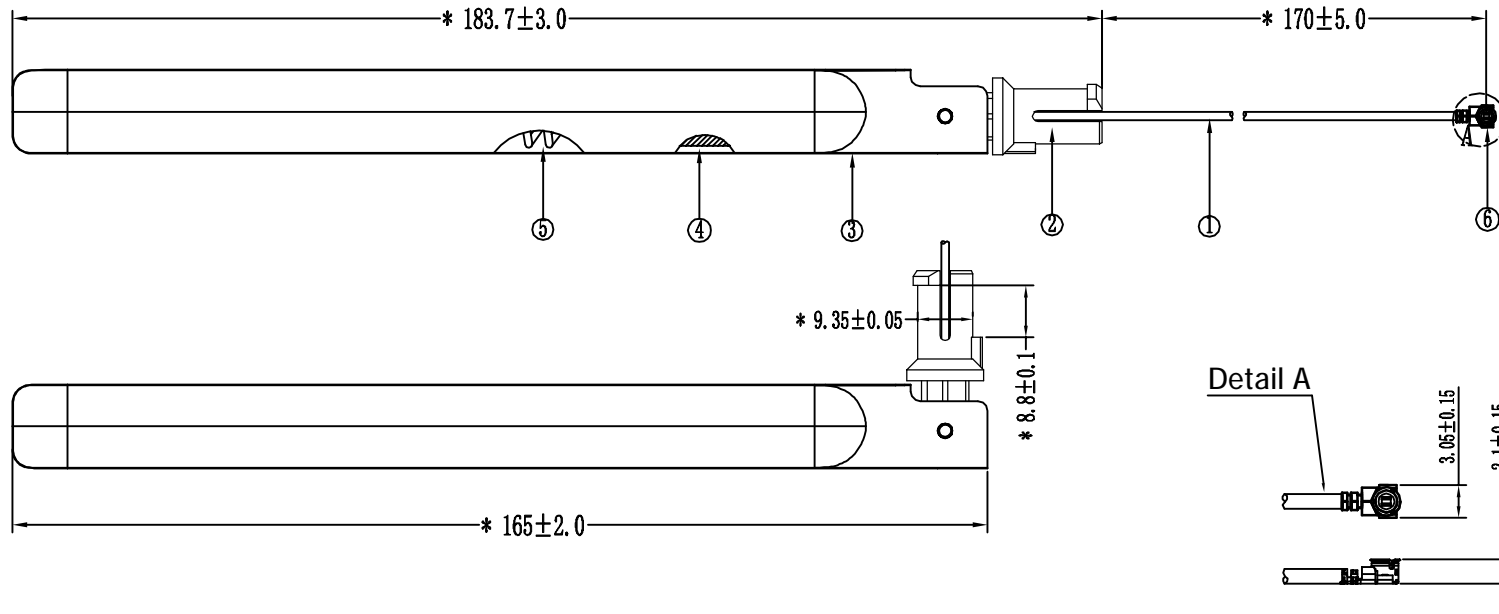
料号 (Part Number) : Z01-50105-R01

## The basic parameters

A. Electrical Characteristics	
<b>Frequency</b>	<b>5150 MHz ~5850MHz</b>
<b>VSWR</b>	<b>≤2</b>
<b>Efficiency</b>	<b>&gt;60%</b>
<b>Impedance</b>	<b>50 Ohm</b>
<b>Polarization</b>	<b>Linear</b>
<b>Gain</b>	<b>5dBi±1</b>
B. Material & Mechanical Characteristics	
<b>Material of Radiator</b>	
<b>Cable Type</b>	<b>Φ1.37mm Black</b>
<b>Connector Type</b>	<b>FIRST GEN IPEX</b>
<b>Dimension</b>	
C. Environmental	
<b>Operation Temperature</b>	<b>- 20 °C ~ + 60 °C</b>
<b>Storage Temperature</b>	<b>- 40 °C ~ + 80 °C</b>



NAME	NAME	MATEL/Spec	COLOR	QTY	note
①	RF cable	1.37 Coaxial line	BLACK	1	
②	Lower mount	ABS+PC	WHITE	1	
③	Sleeve	ABS	WHITE	1	
④	PCB	FR-4	BLACK	1	
⑤	spring	carbon steel	SILVER	1	
⑥	Terminal	first gen	GOLDEN	1	
⑦					



## Test Equipment & Conditions

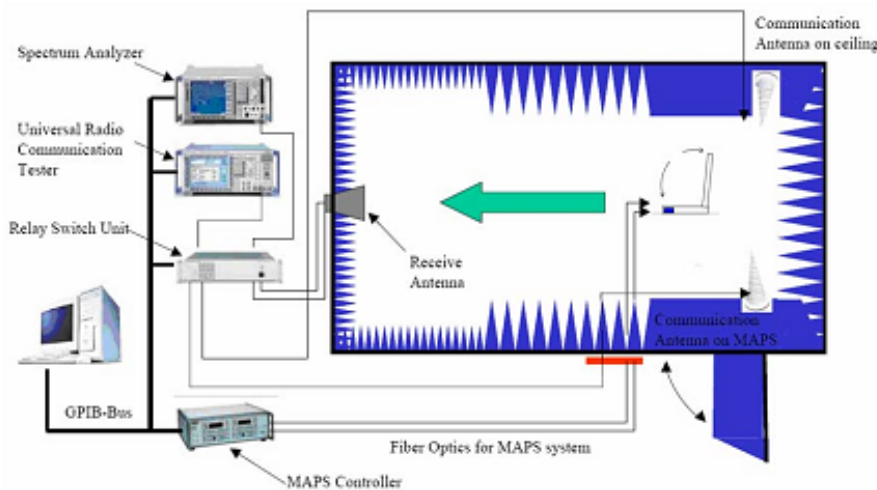
### 1. Network Analyzers :

Agilent 8753D 5071C

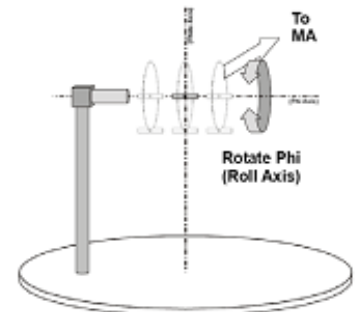
### 2. Communications Test Set:

Agilent 8960 CMW500

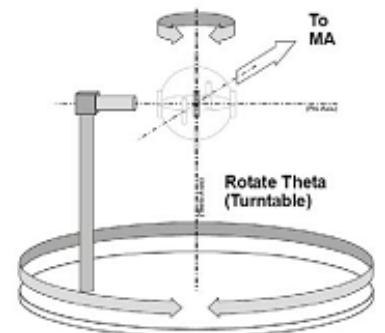
### 3. 3D Chamber Test System



(Testing by 3D anechoic chamber)



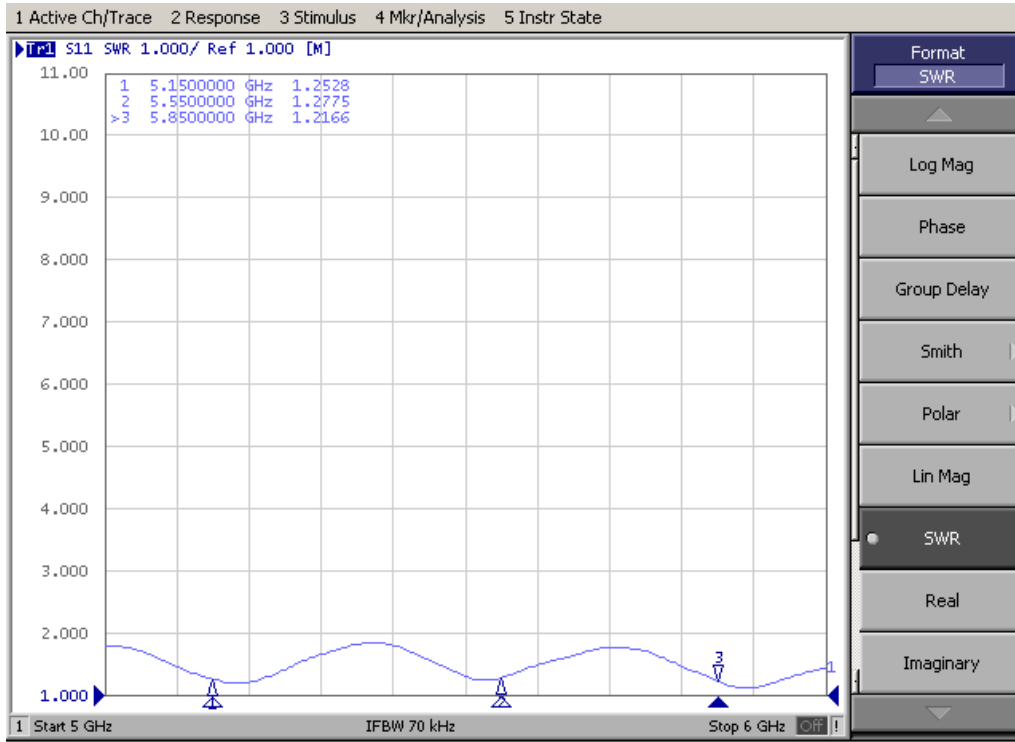
Phi axis test



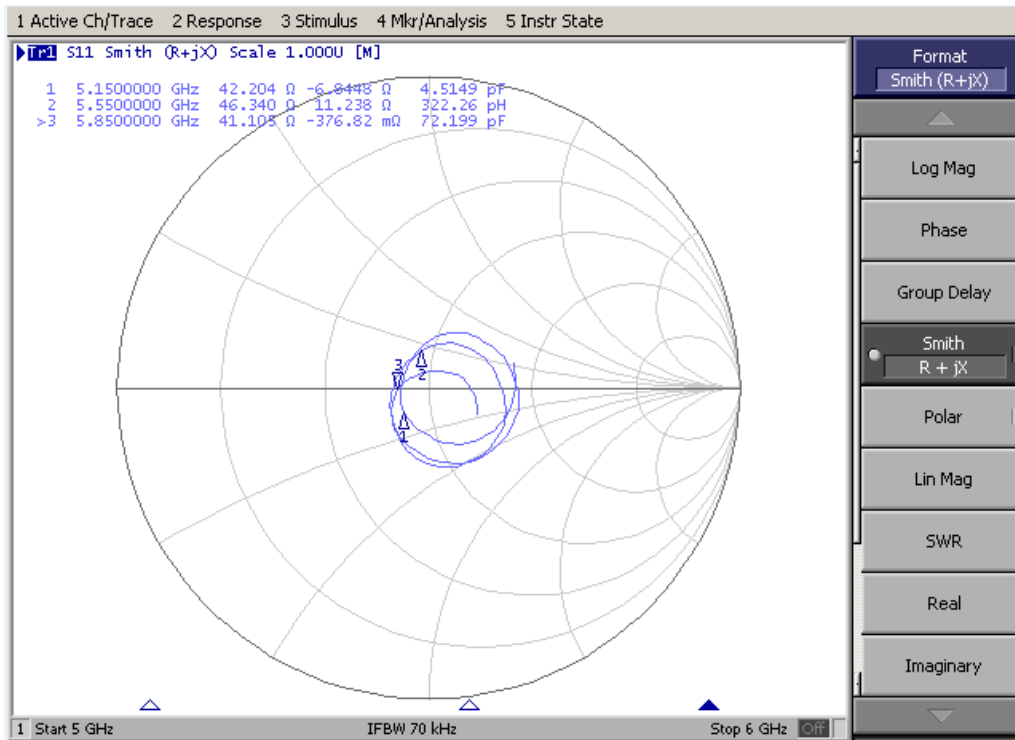
Theta axis test

## Test Data

### SWR



### Smith

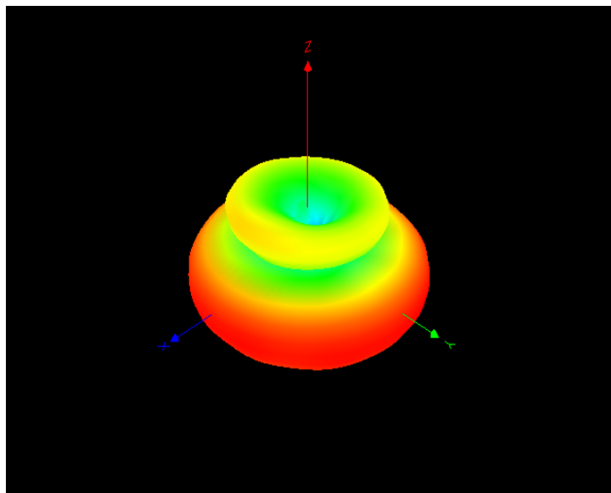


**效率&增益:**  
**Efficiency&Gain**

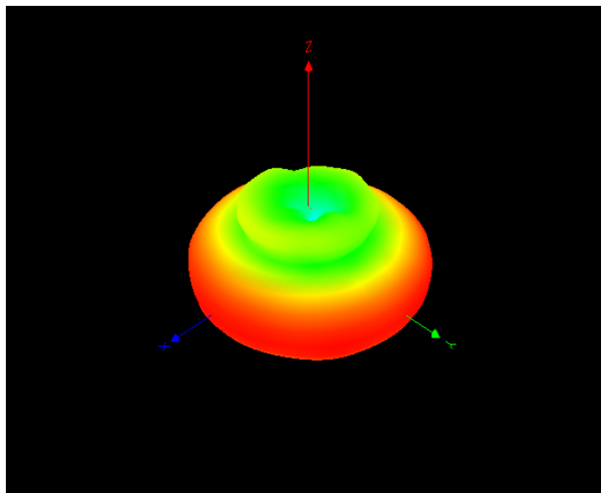
Frequency / MHz	Efficiency / %	Gain/ dBi
5150	71.52	4.96
5200	70.63	5.25
5250	70.22	4.87
5300	71.35	5.15
5350	69.34	4.92
5400	72.13	4.82
5450	72.35	5.26
5500	70.34	4.87
5550	69.28	4.55
5600	72.15	4.89
5650	70.36	5.06
5700	69.24	4.95
5750	70.35	4.73
5800	68.47	4.93
5850	69.37	4.82

### 3D Patten

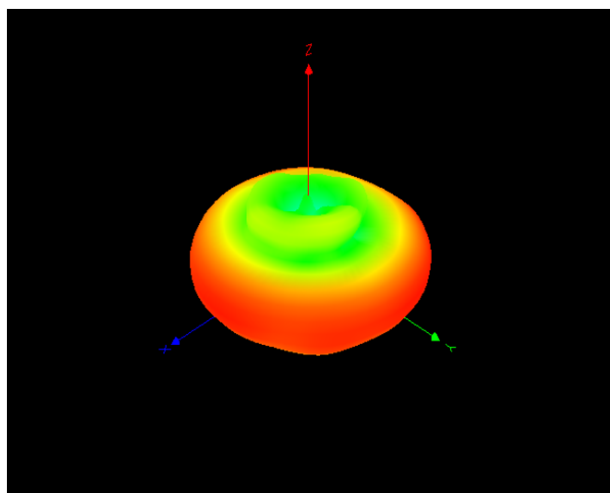
5150MHz



5550MHz

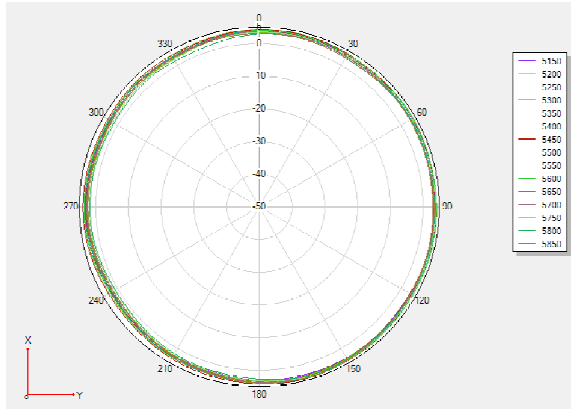


5850MHz

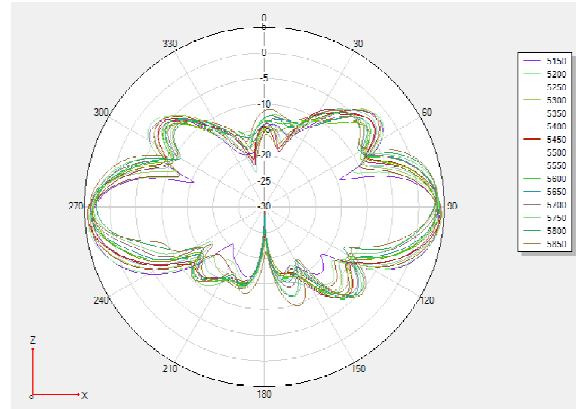


## 2D Patten

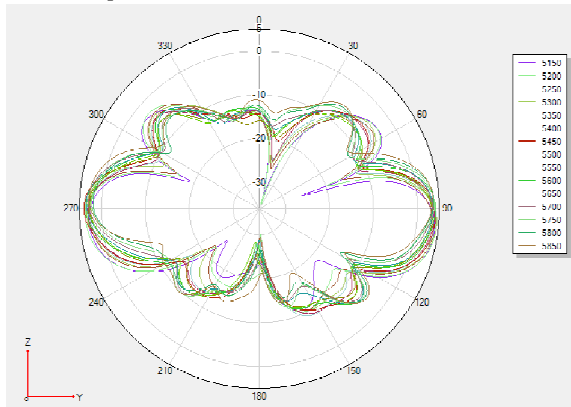
XOY- p l a n e



ZOX - p l a n e



ZOY- p l a n e





## Antenna picture

