



深圳信诺山通信技术有限公司

Shenzhen SignalSen Telecom Technology Co , .Ltd

WIFI 天线规格书

WiFi Antenna specification

我司料号 Our material No: W700-1B-G

客户：南京乐韵瑞信息技术有限公司		项目名	
Customer: Linkplay Technology Inc.		Project:	
频段：WiFi/BT		日期：2024/5/23	版本：R:A
FB：WiFi/BT		Data: 5/23/2024	Version: R:A
研发	结构：	审核：	批准：
	射频：	审核：	
天线型号:2.4G&5.8G&6G 三频天线,黑色,一代端子同轴线 L=150mm			

Address:

Room 211, Hengbo science and technology Industrial Park, Qingning road,
Longhua District, Shenzhen



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1. Project information and Electrical Specification

*Those specifications were specially defined for **WiiM's Products** WIFI /BT model, and all characteristics were measured under the model's handset testing jig .*

1-1Project picture

1-2 Frequency Band:

Frequency Band	MHz
WiFi/BT	2400-2500/5150-5850/6100-7125

1-3 Impedance matching

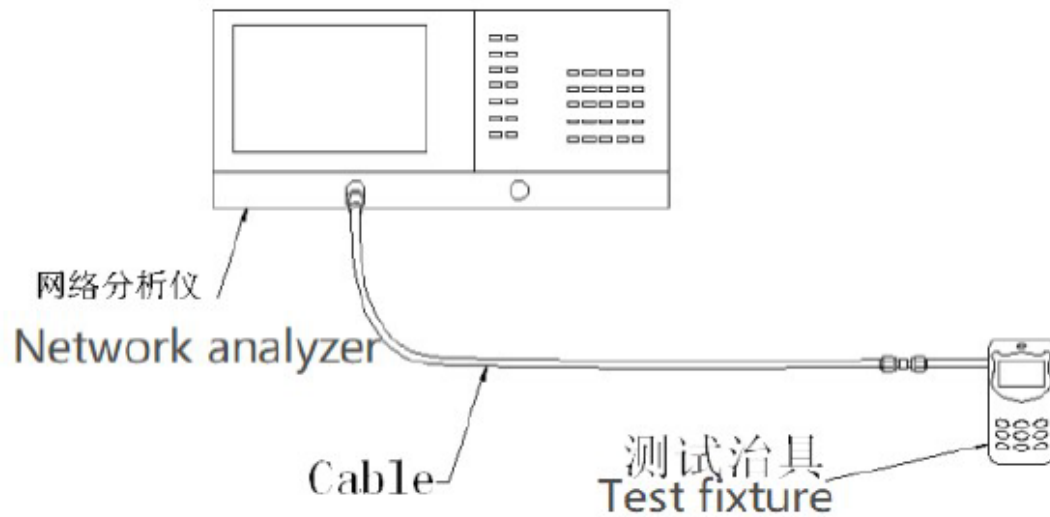
DUT 的 RF 线路上的所有匹配器件都保持不变 All matching devices on the RF circuit of DUT remain unchanged

2.VSWR

2-1 Measuring Method:

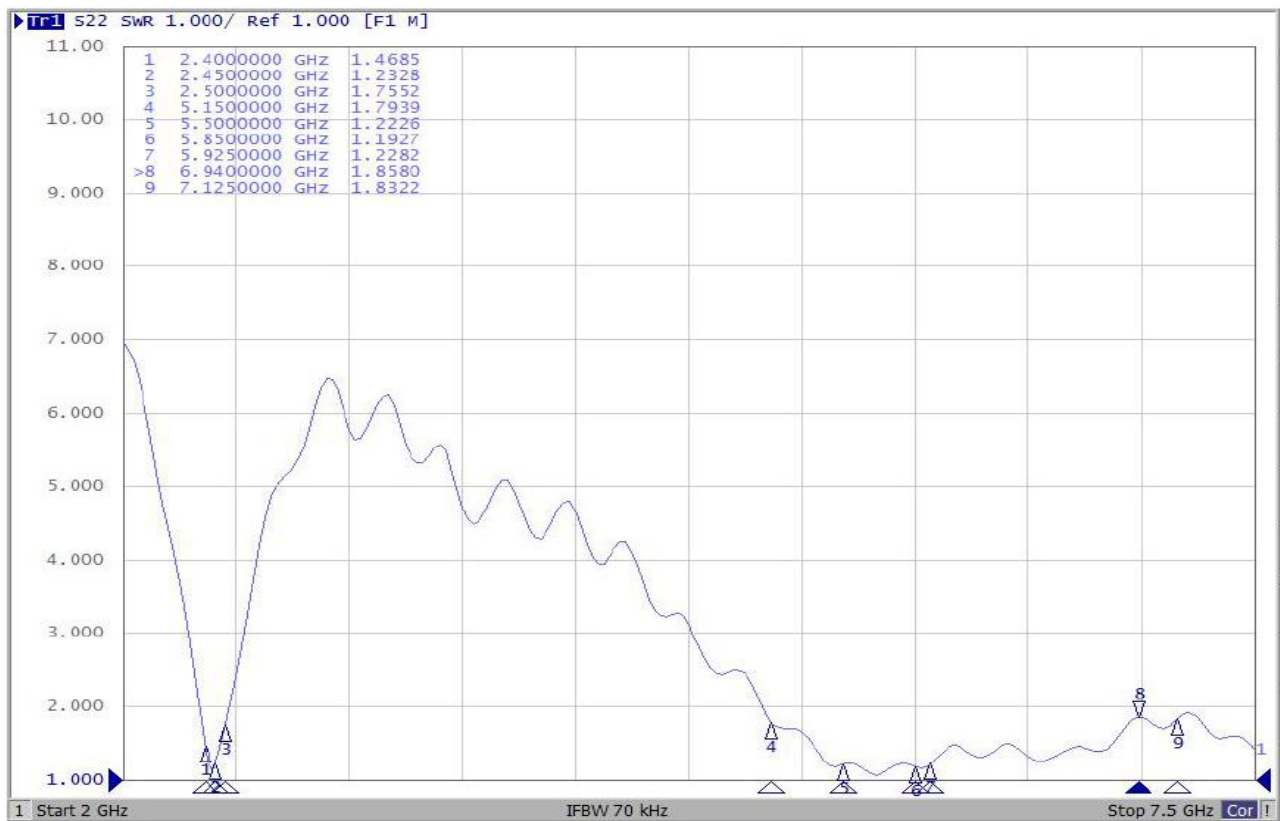
- 1. A 50 Ω coaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the VSWR,*
- 2. Keeping this jig away from metal at least 20cm.*

测试示意图如下 The test diagram is as follows:



2-2 S11 parameter values

频率 Frequency (MHZ)	2400	2450	2500	5150	5500	5850	5925	6940	7125
驻波 Standing wave	1.46	1.23	1.75	1.79	1.22	1.19	1.22	1.85	1.83



3. Efficiency and Gain

*measuring and test instruments:

微波暗室 Microwave anechoic chamber

Agilent 网络分析仪 Microwave anechoic chamber

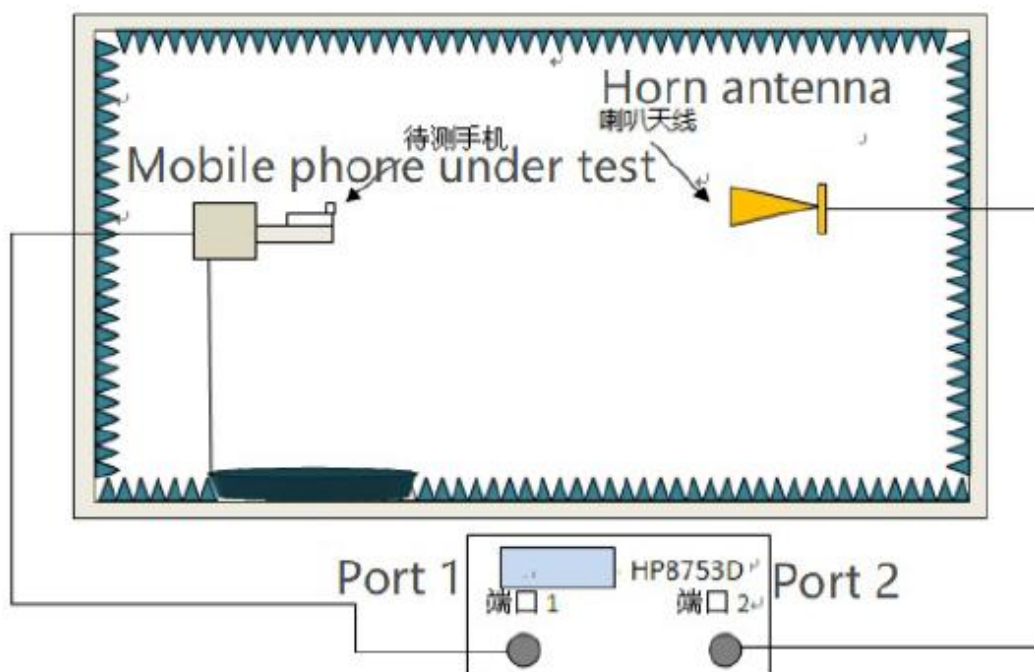
Agilent 频谱分析仪 Spectrum analyzer

8960 综合测试仪 Network analyzer

标准天线 Standard antenna

*test method:

equipment 以 H 面放于转台中心位置固定，与喇叭天线中心位置在同一个水平线上。

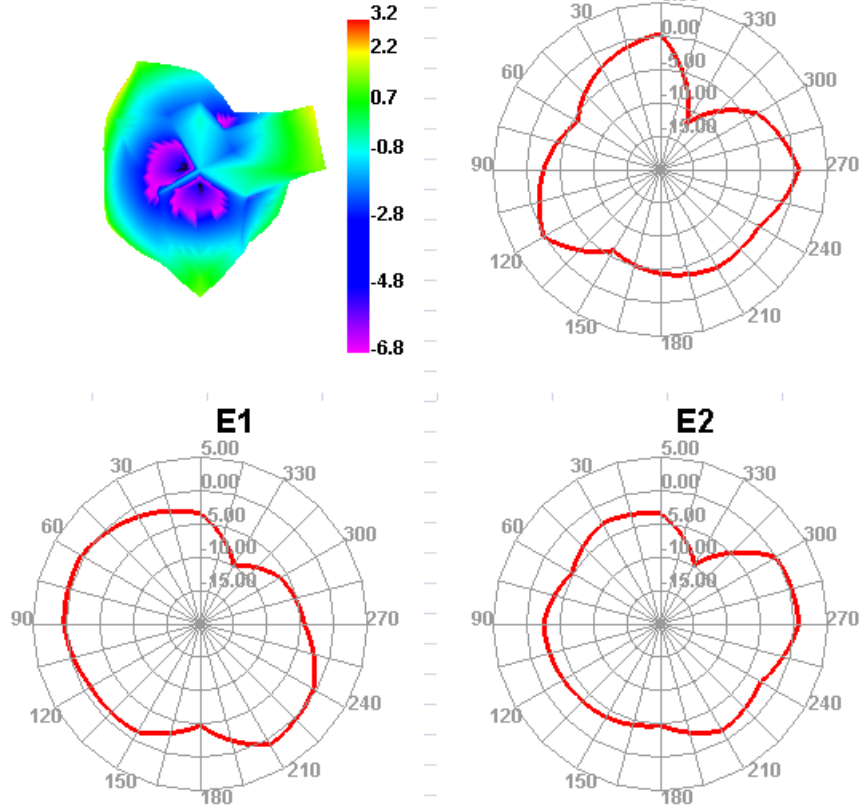


3-1 Efficiency/Gain- WIFI/BT

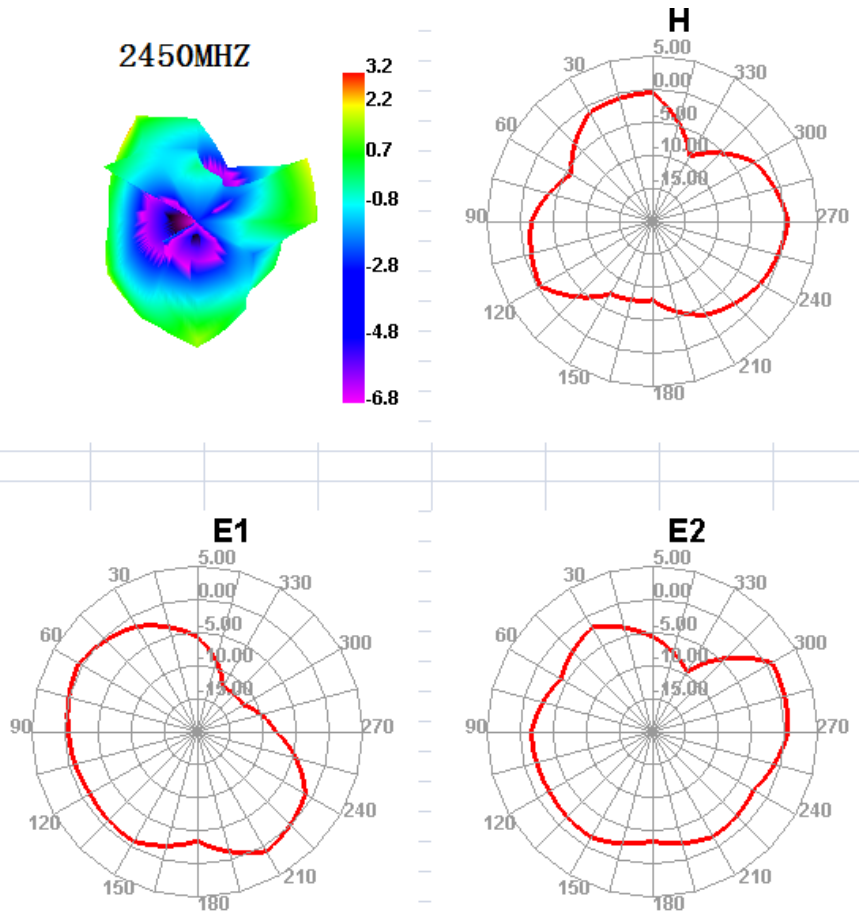
2.4G

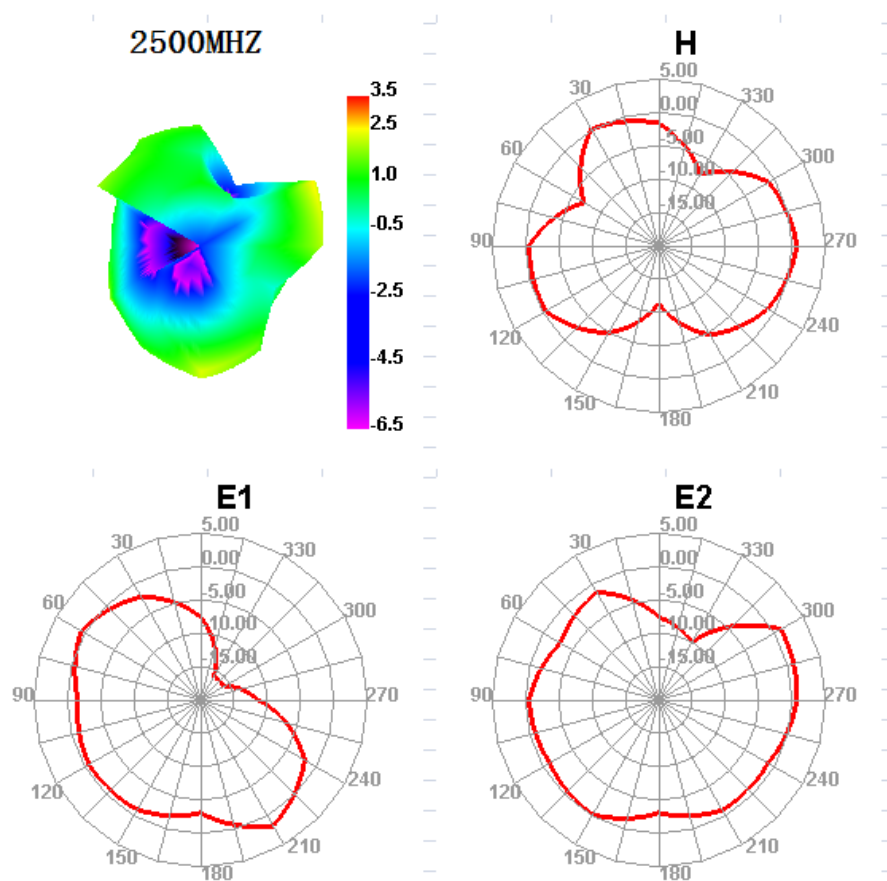
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	62.8	-2.02	3.21
2450	66.1	-1.8	3.24
2500	69.56	-1.58	3.46

2400MHZ



2450MHZ

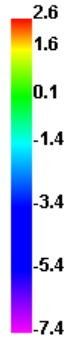
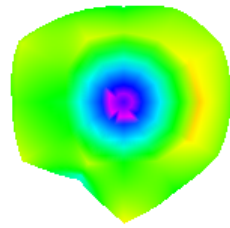




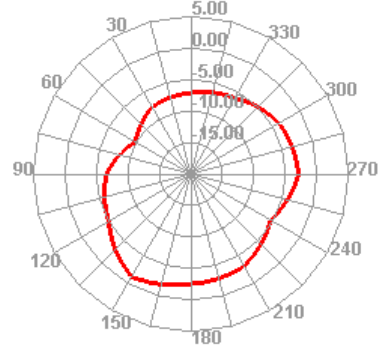
5G

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
5150	54.17	-2.66	2.6
5250	53.88	-2.69	2.51
5350	51.47	-2.88	2.26
5450	53.89	-2.68	2.44
5550	54.92	-2.6	2.44
5650	57.62	-2.39	2.67
5750	53.77	-2.69	2.15
5850	57.78	-2.38	2.46

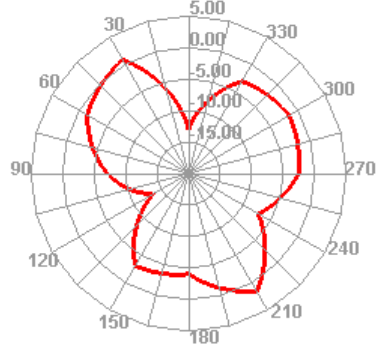
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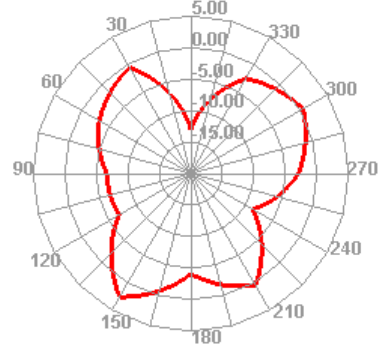
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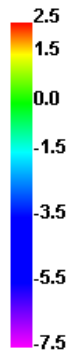
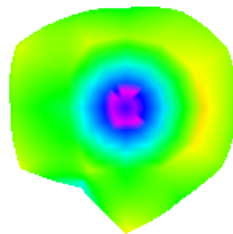
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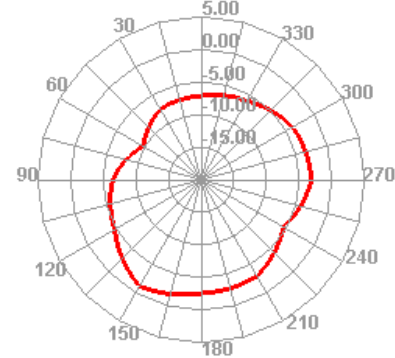
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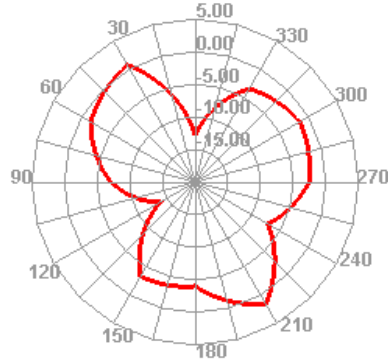
5250MHZ



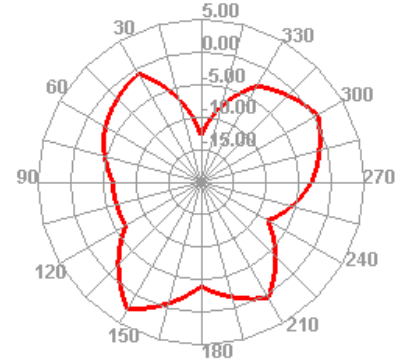
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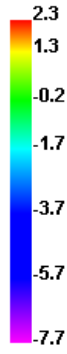
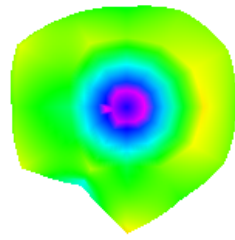
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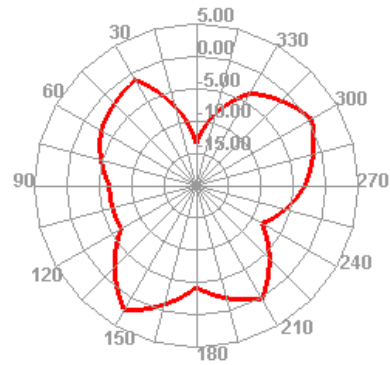
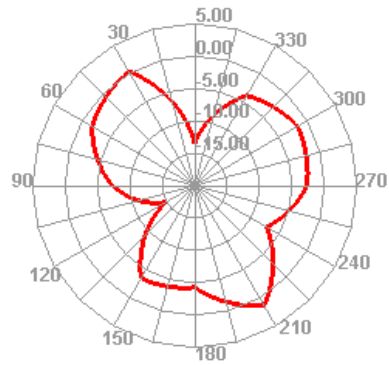
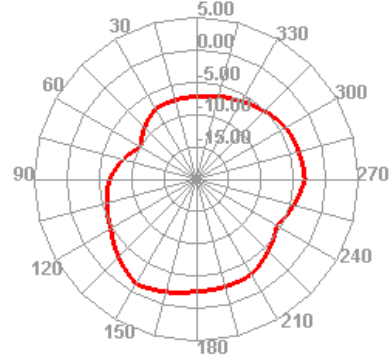
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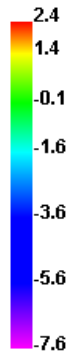
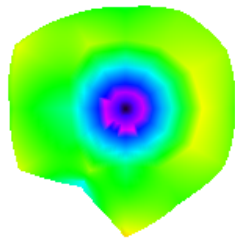
5350MHZ



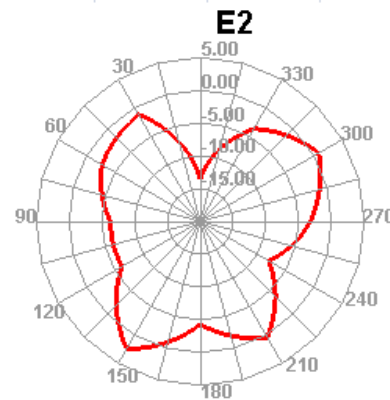
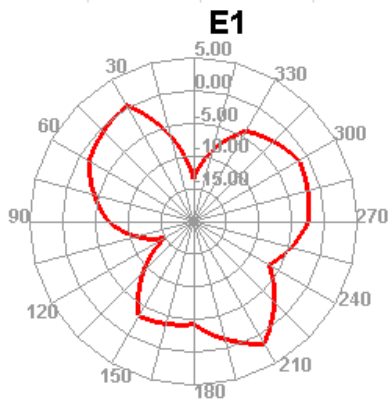
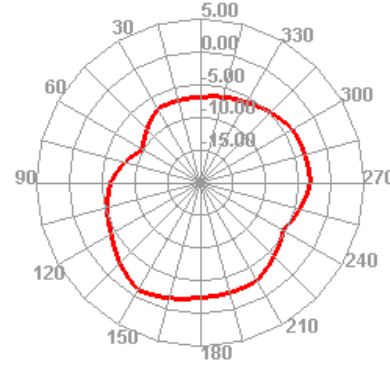
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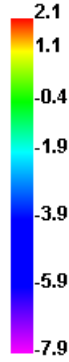
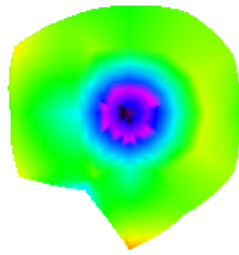
5450MHZ



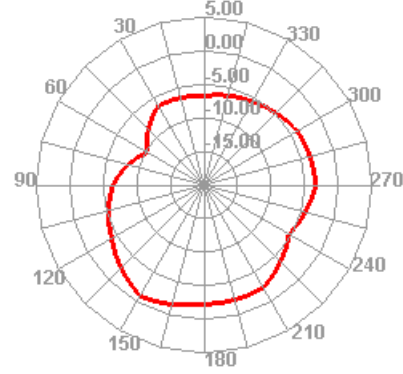
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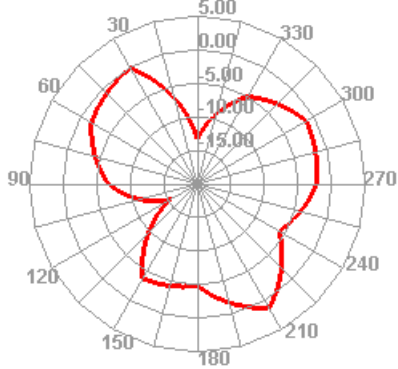
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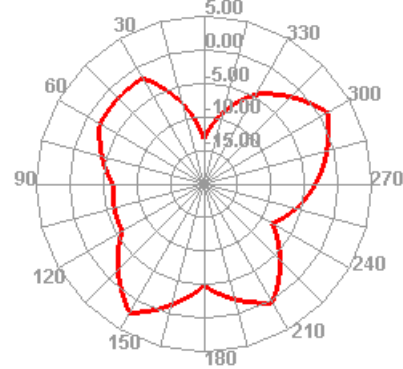
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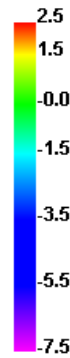
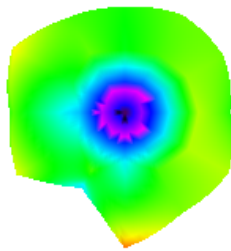
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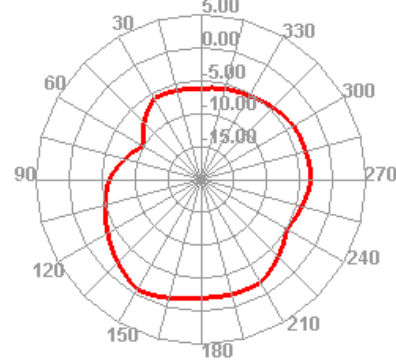
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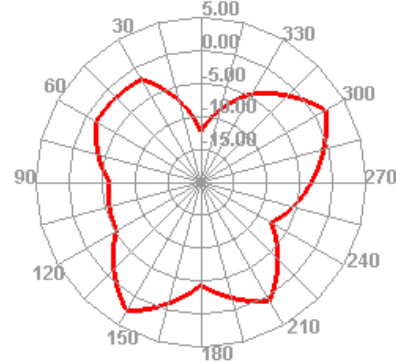
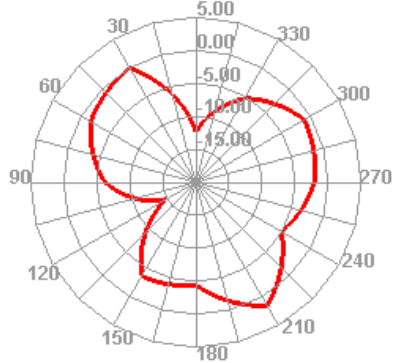
5850MHZ



H

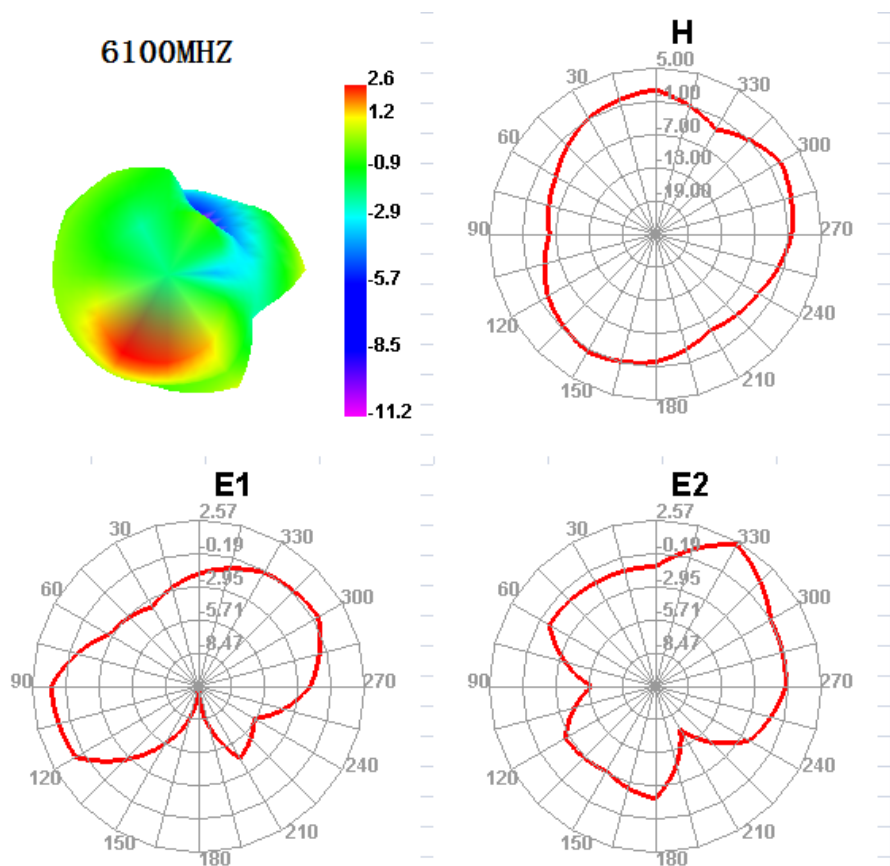


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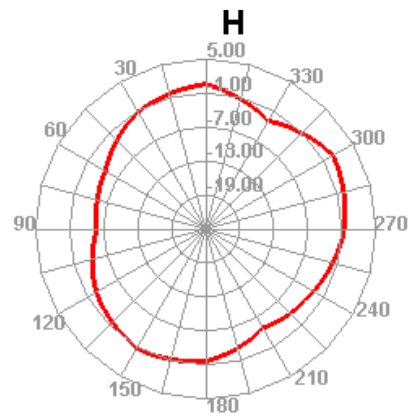
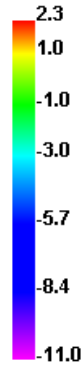
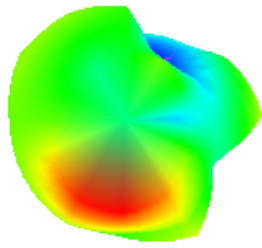


6G

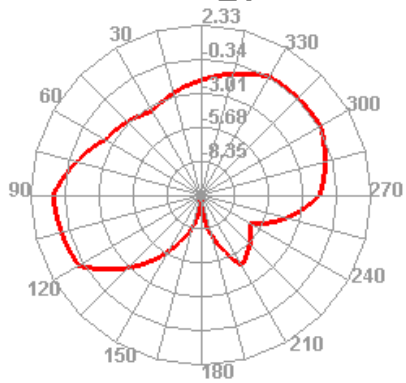
Freq (MHz)	Effi (%%)	Effi (dB)	Gain (dBi)
6100	43.52	-3.61	2.57
6200	41.2	-3.85	2.33
6300	40.71	-3.9	2.58
6400	40.09	-3.97	2.8
6500	35.58	-4.49	3.21
6600	35.9	-4.45	3.51
6700	38.57	-4.14	3.51
6800	39.36	-4.05	3.48
6900	38.55	-4.14	3.3
7000	40.6	-3.91	3.28
7100	41.94	-3.77	3.05



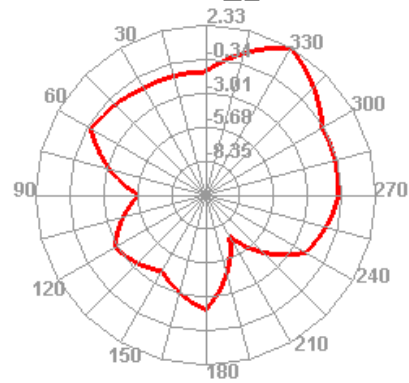
6200MHZ



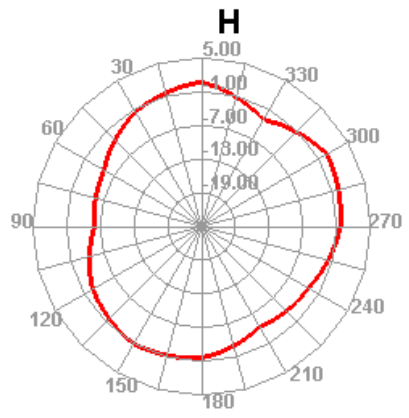
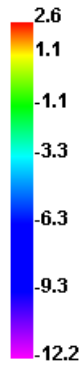
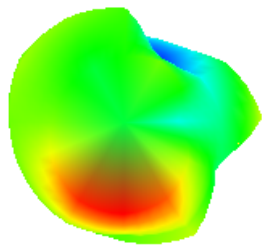
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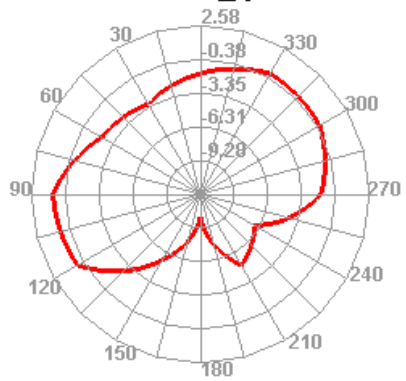
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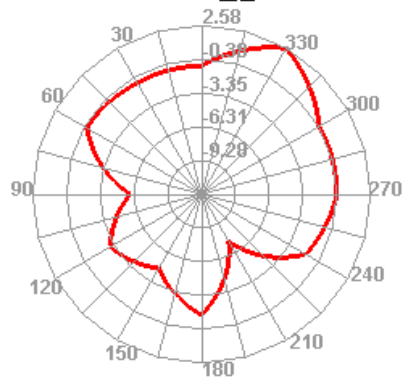
6300MHZ



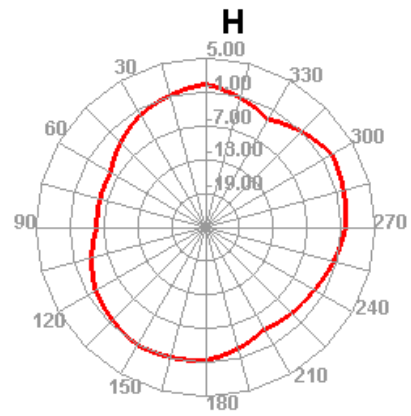
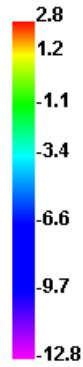
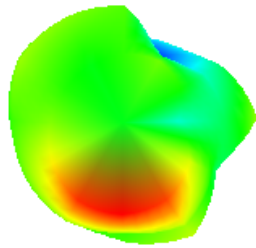
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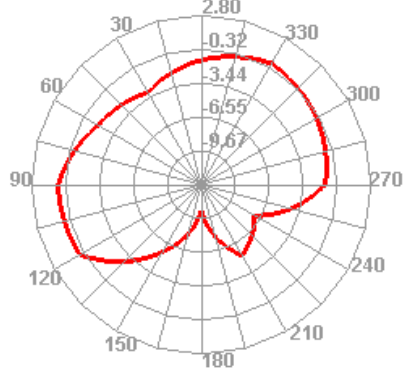
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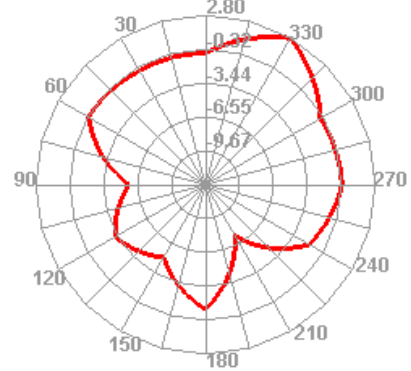
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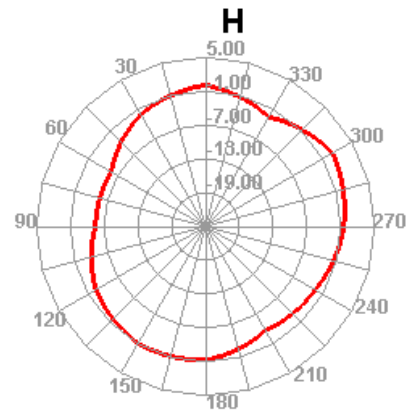
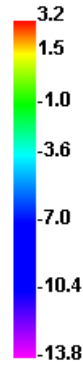
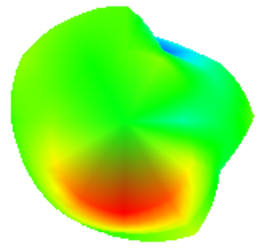
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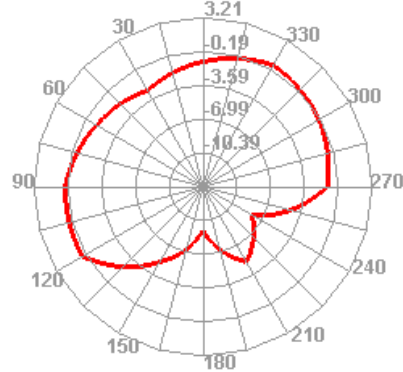
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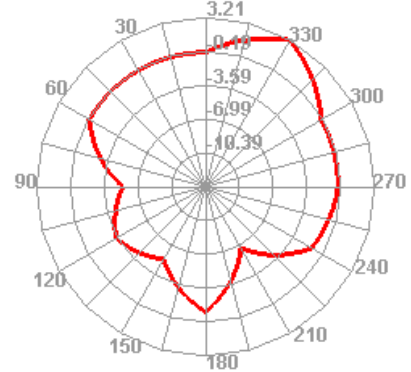
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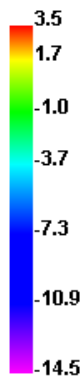
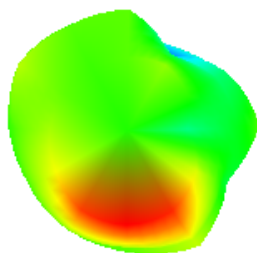
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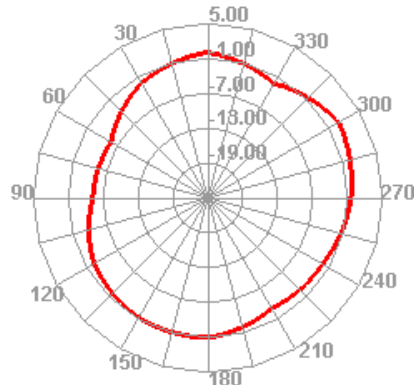
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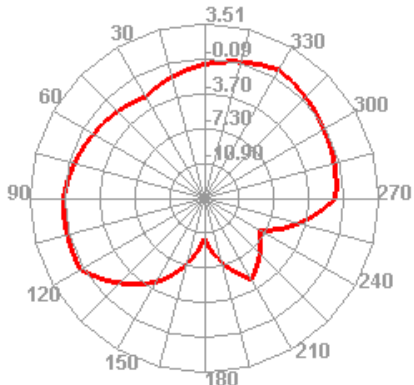
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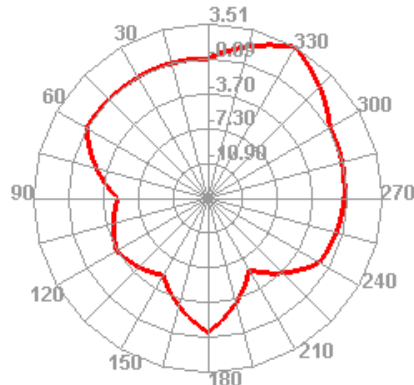
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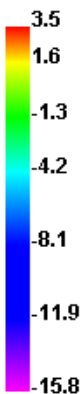
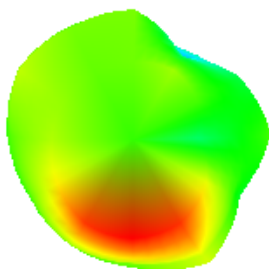
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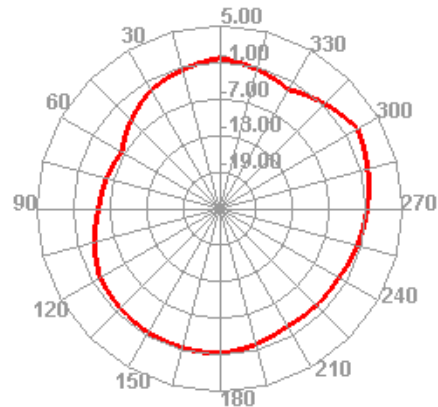
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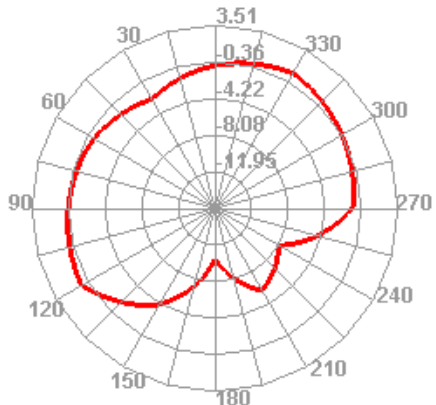
6700MHZ



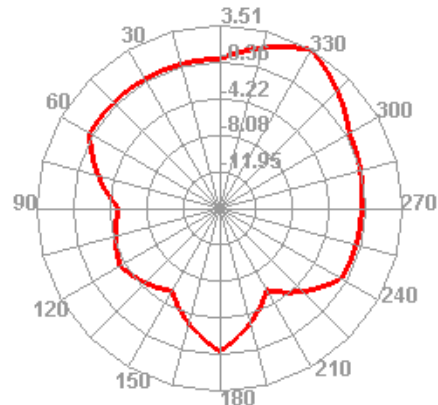
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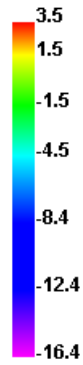
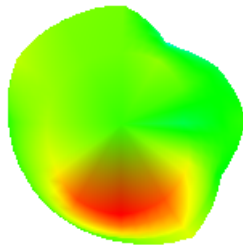
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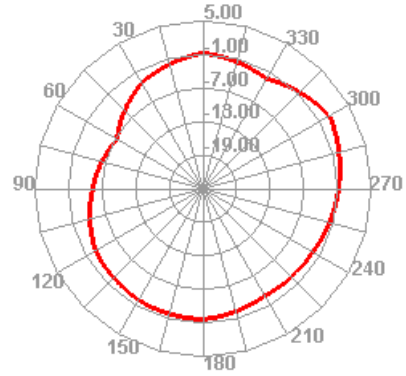
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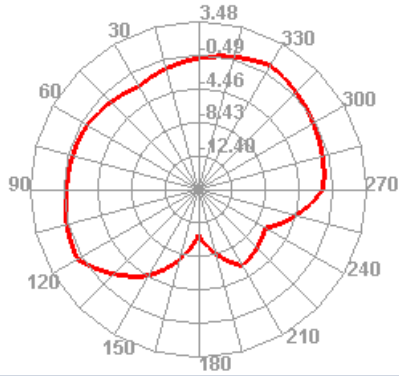
6800MHZ



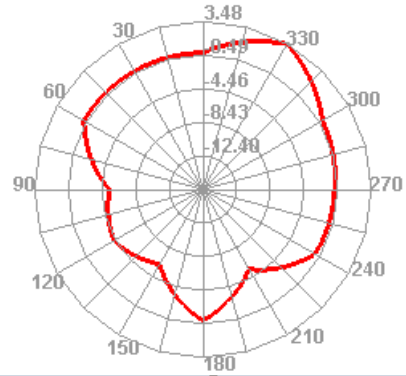
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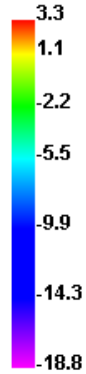
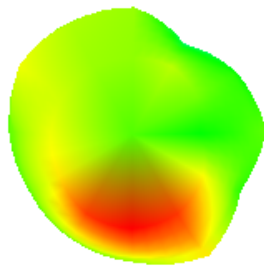
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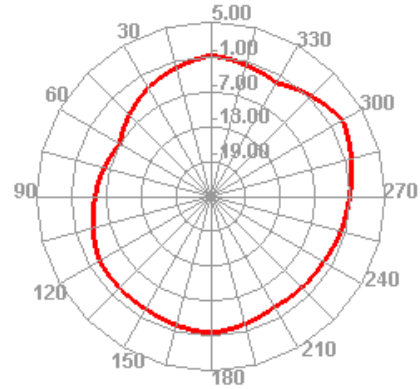
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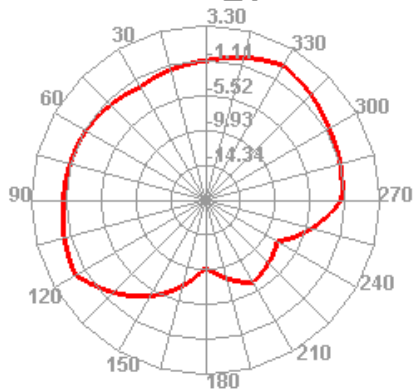
6900MHZ



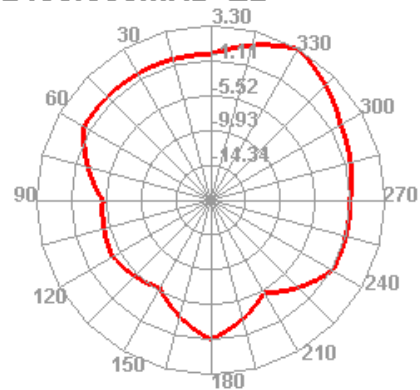
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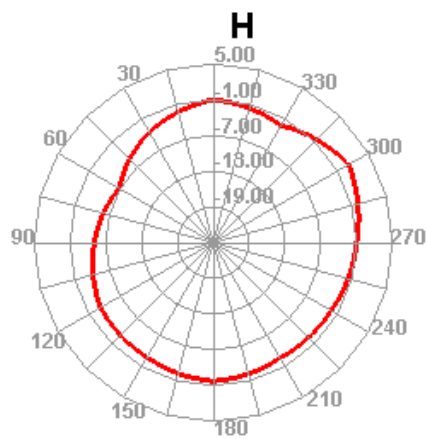
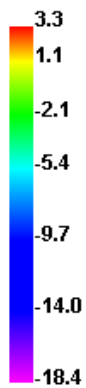
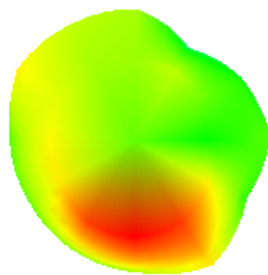
E1



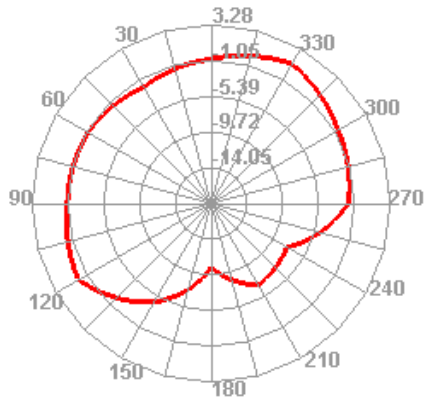
2480.000MHz E2



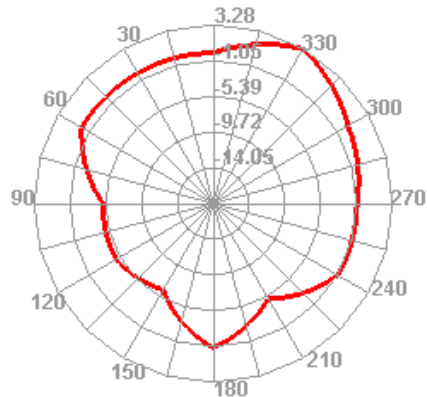
7000MHZ



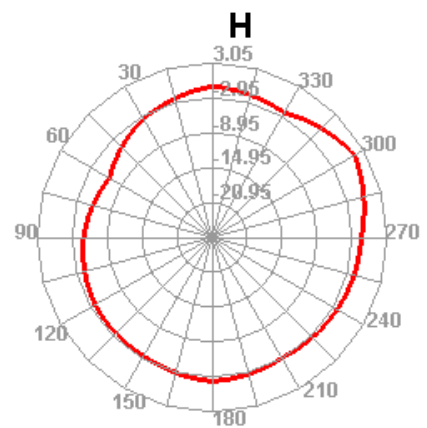
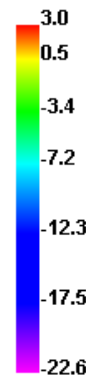
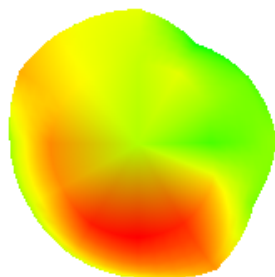
E1



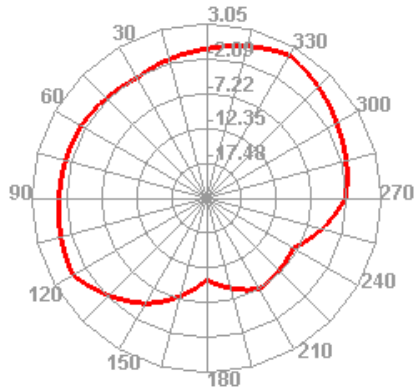
E2



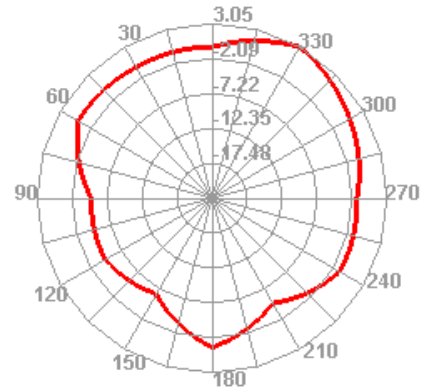
7100MHZ



E1



E2



4. The production index

天线量产时，以驻波比作为量产测试标准 In the mass production of antenna, the standing-wave ratio is used as the test standard.

根据项目本身的差异,给出如下标准 According to the differences of the project itself, the following standards are given:

频率 Frequency (MHZ)	量产标准 Mass production standard
WIFI (2400-2500/5150-5850/6100-7125)	VSWR (量产产品 Mass production products) <) <VSWR(设计样品 Design sample)+)+0.5

5. structural drawings

