WS105 IFA Antenna datasheet

contents

1. Project information and Electrical Specification

Those specifications were specially defined for CSMO_V3.0 model, and all characteristics were measured under the model's testing jig .

1-1 Project picture

1-2 Product specification

Quick Reference Date **Antenna**

Frequenc Range	2400 ~ 2500GHz
Ant. Port Input Pwr. (dBm)	0 dbm
Gain (dBi)	1.23(Avg Gain XY-plane)
Efficiency (dB)	62.5 %
Input Impendence(ohm)	50
Polarization Type	Vertical & Horizontal
V . S .W . R	< 1.4

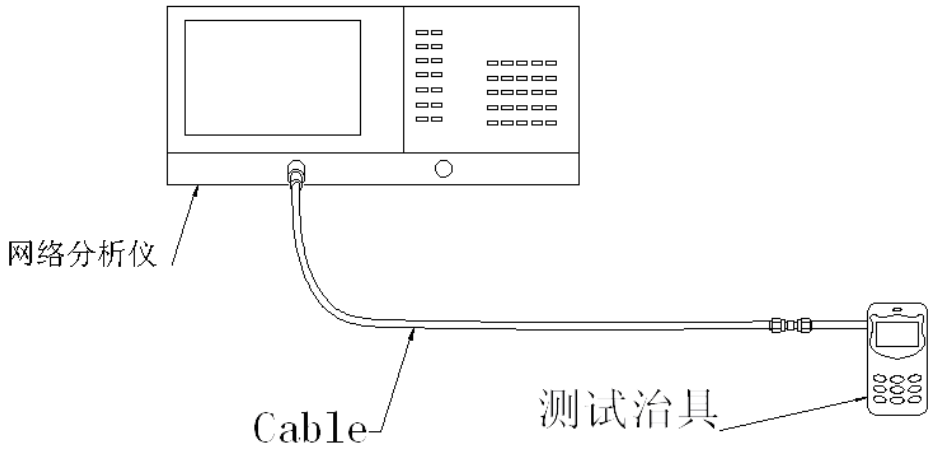
2.VSWR

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,

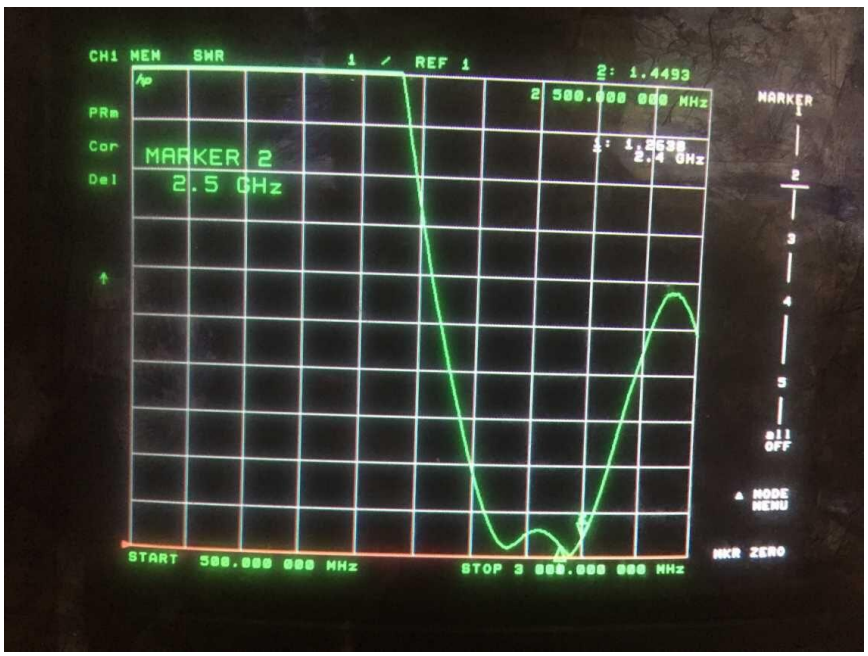
2. Keeping this jig away from metal at least 20cm.

测试示意图如下：



2-2 S11 parameter values

频率（MHZ）	2400	2500
驻波	1.26	1.44



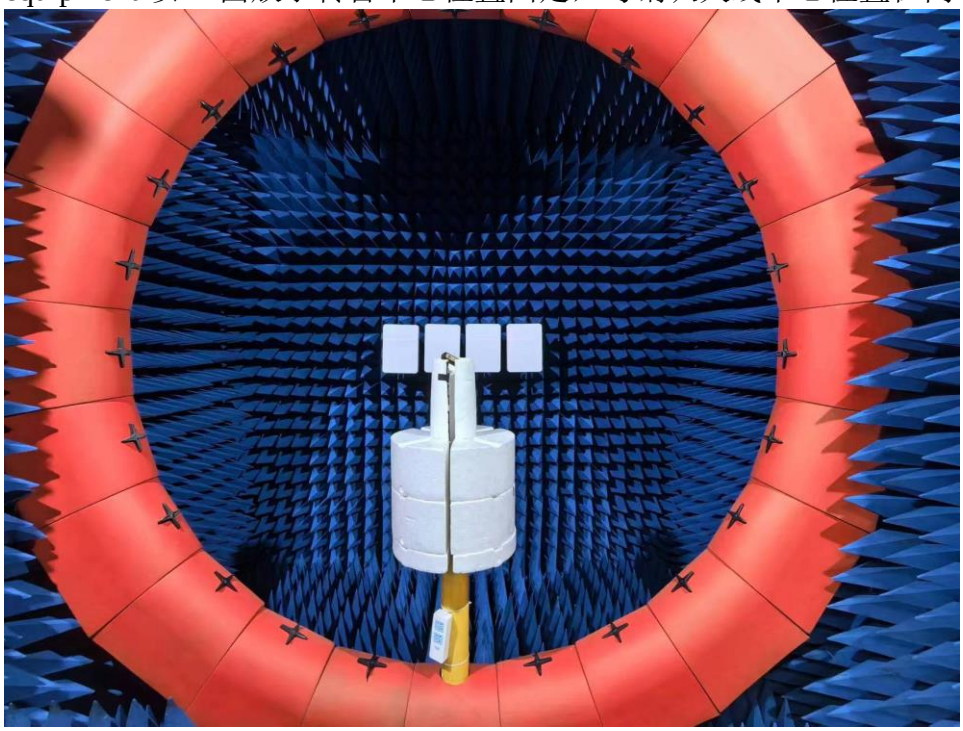
3. Efficiency and Gain

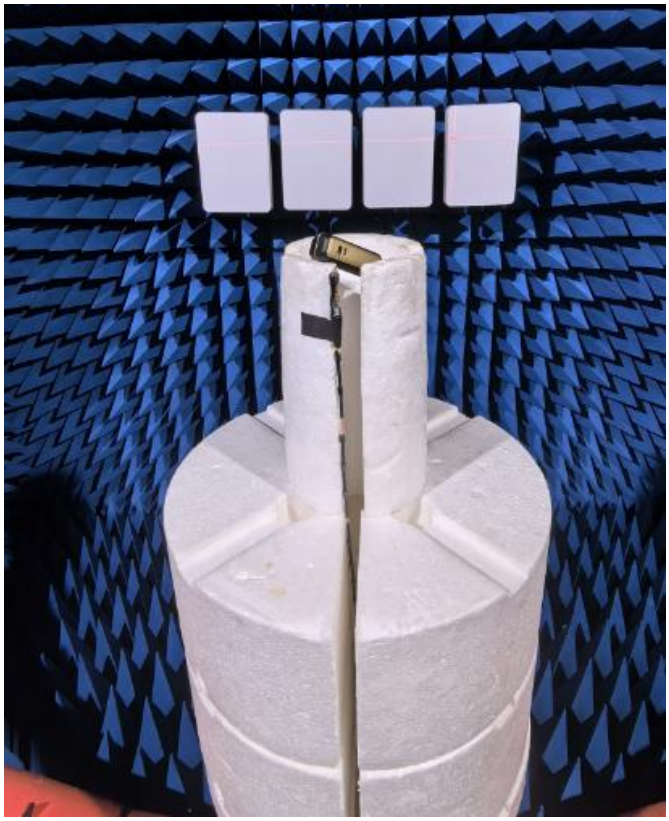
***measuring and test instruments:**

微波暗室，Agilent 网络分析仪，Agilent 频谱分析仪，8960 综合测试仪，标准天线

***test method:**

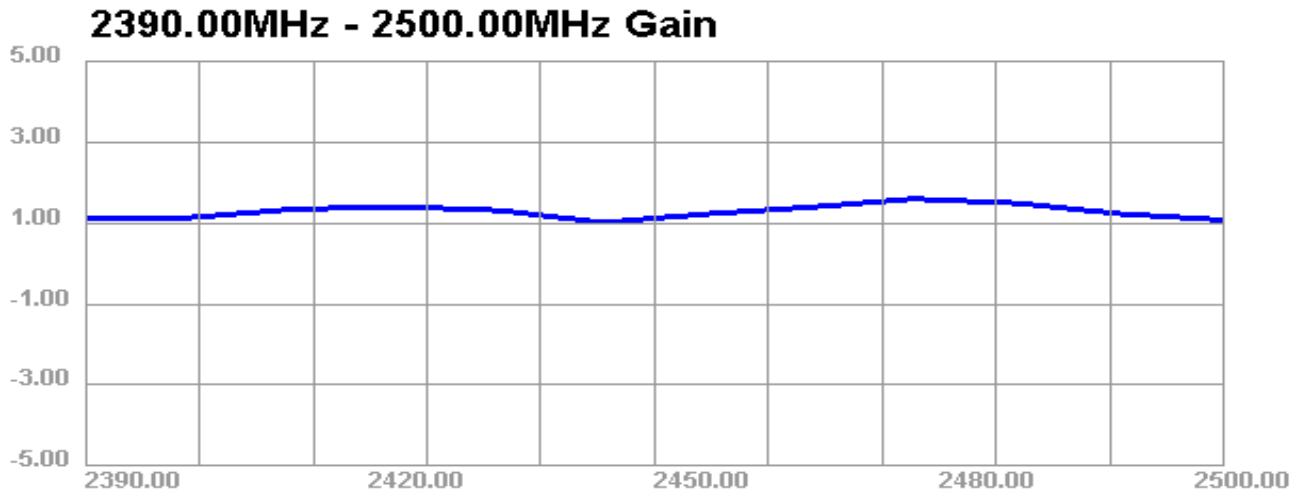
equipment 以 H 面放于转台中心位置固定，与喇叭天线中心位置在同一个水平线上。

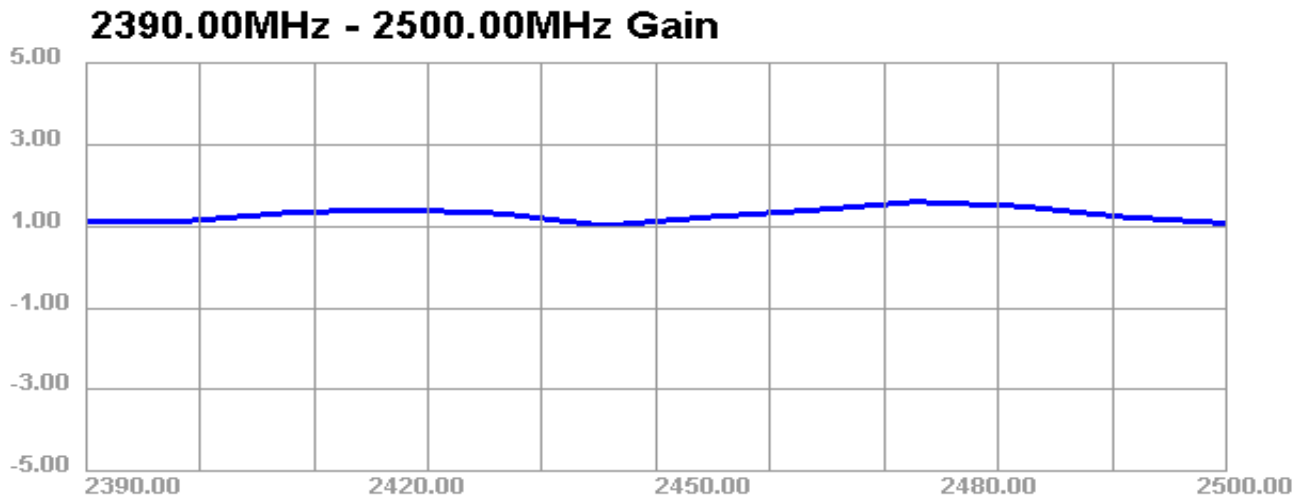




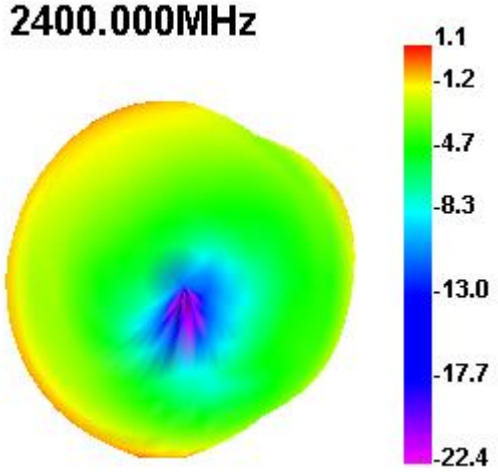
3-1 Efficiency/Peak Gain- IFA

BAND	2.4G										
Freq.[MHZ]	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Eff.[%]	59.08	61.94	64.29	65.71	63.45	62.93	63.83	64.44	63.51	61.92	60.14
Peak Gain [dBi]	1.13	1.34	1.41	1.31	1.01	1.22	1.39	1.6	1.49	1.23	1.08

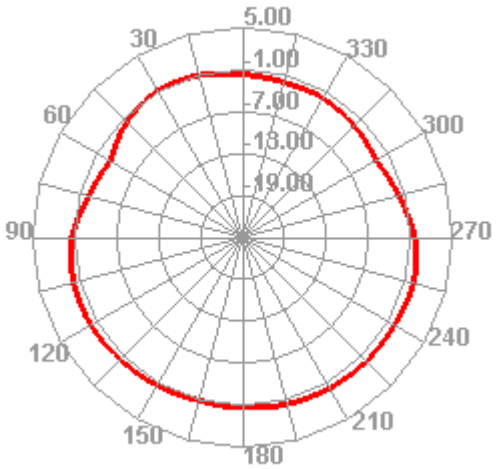




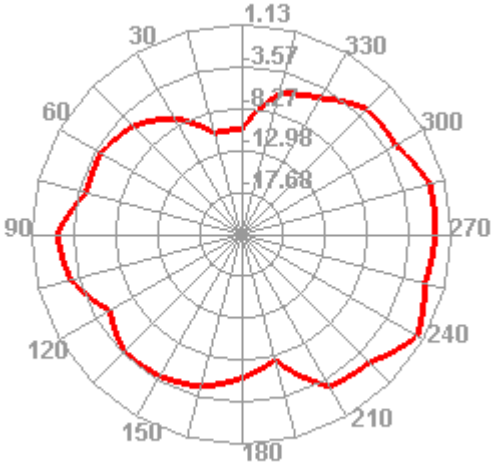
2400.000MHz



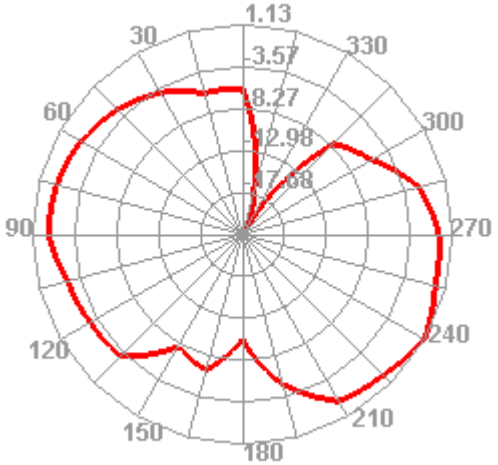
2400.000MHz H



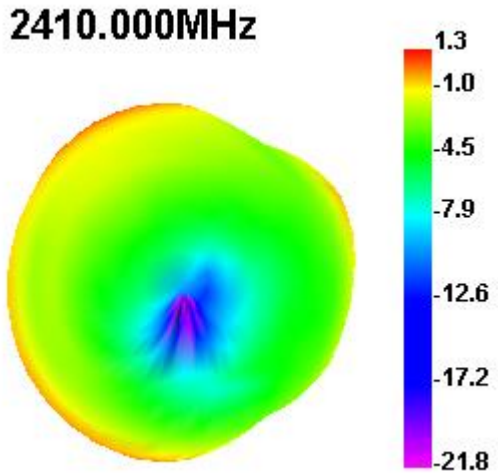
2400.000MHz E1



2400.000MHz E2



2410.000MHz



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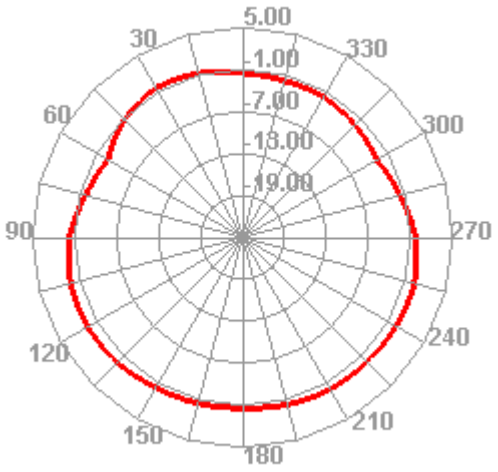

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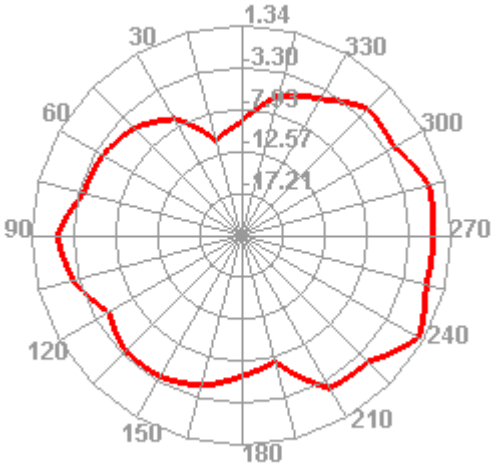

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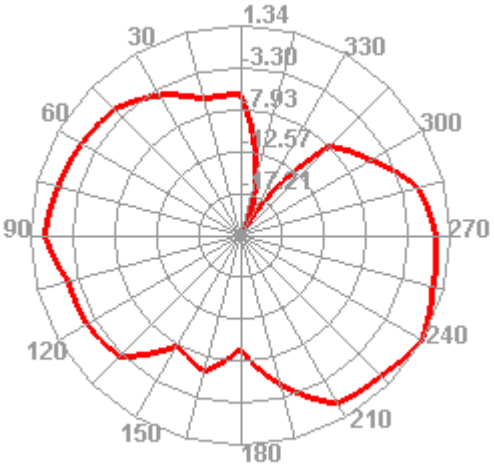

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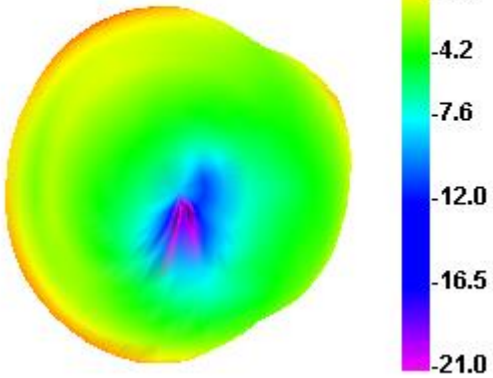

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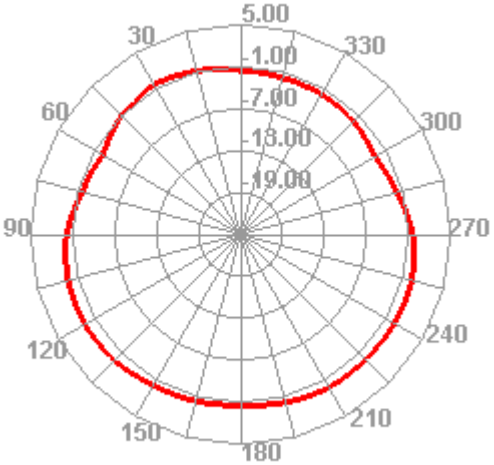

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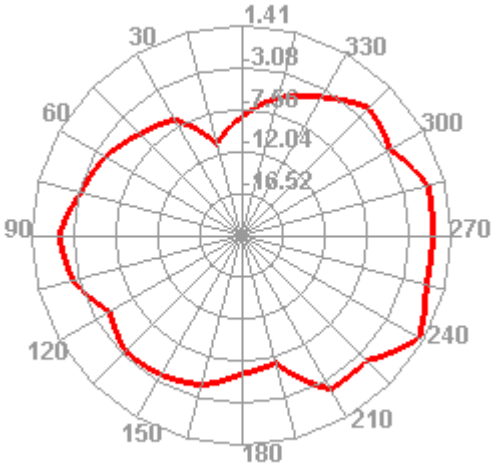

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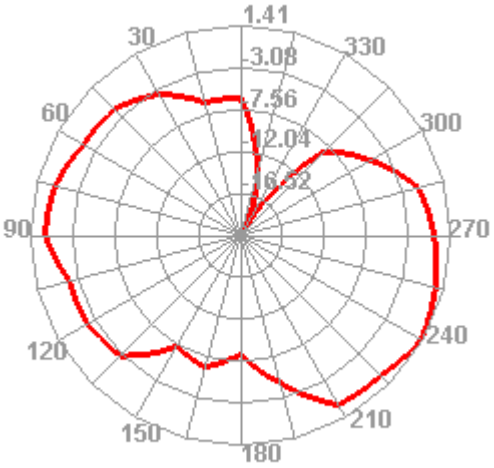

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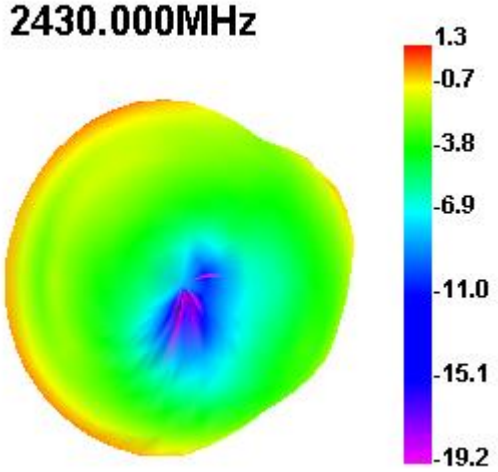

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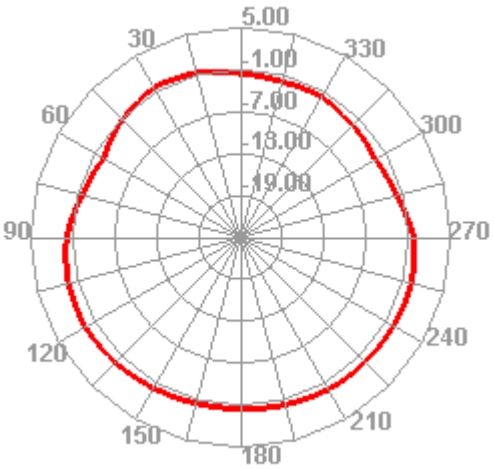
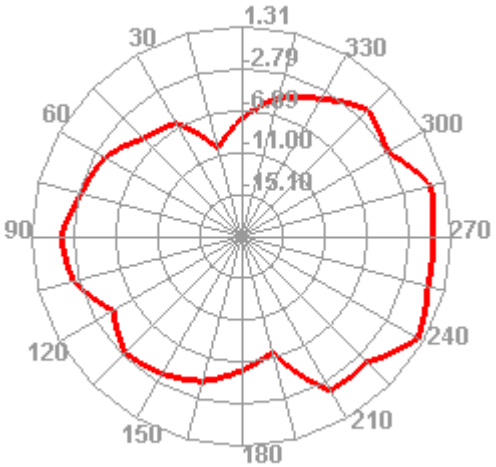


2430.000MHz E1



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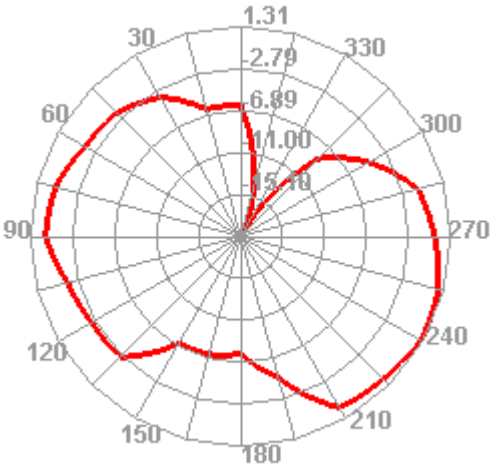

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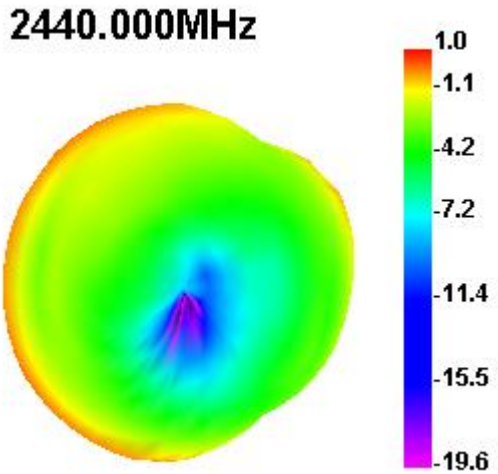

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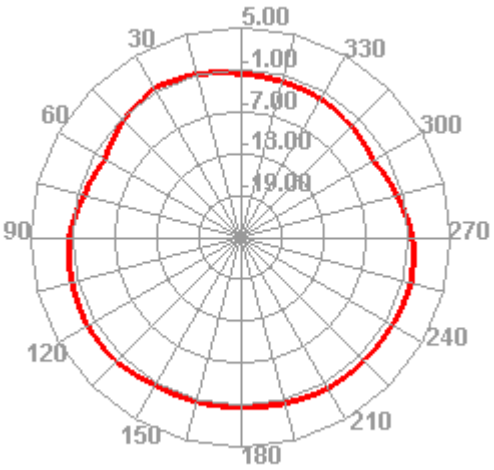

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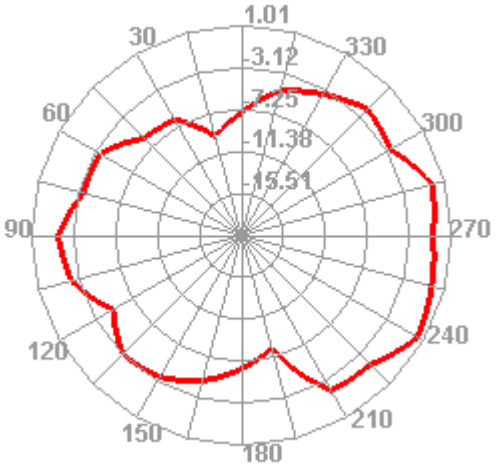

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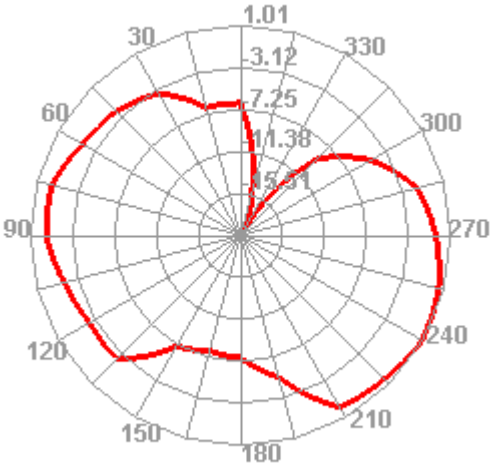

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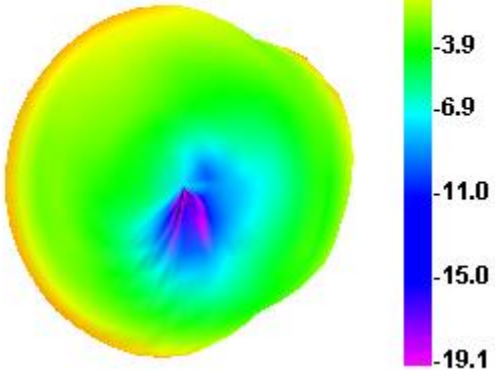

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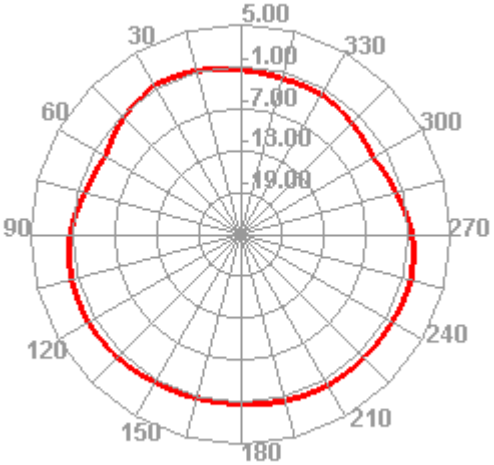

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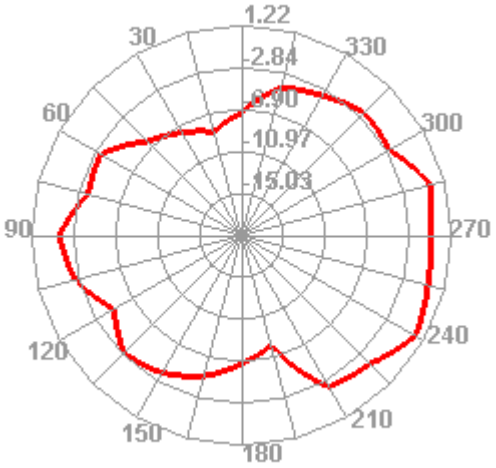

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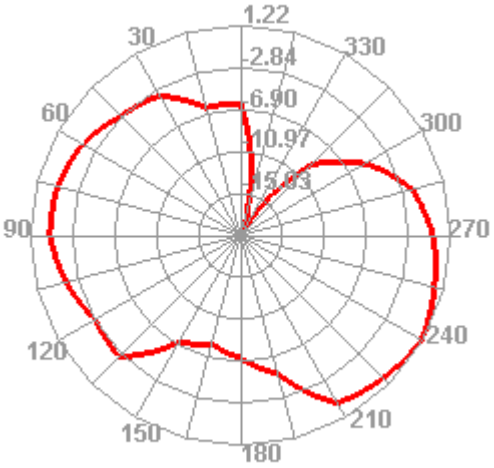

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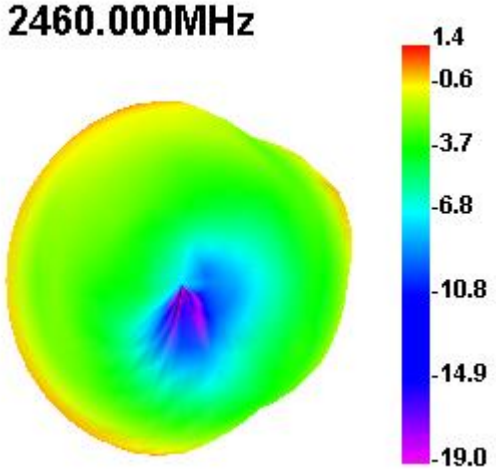

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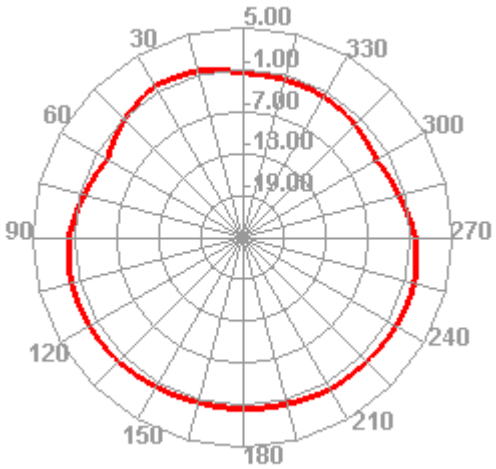

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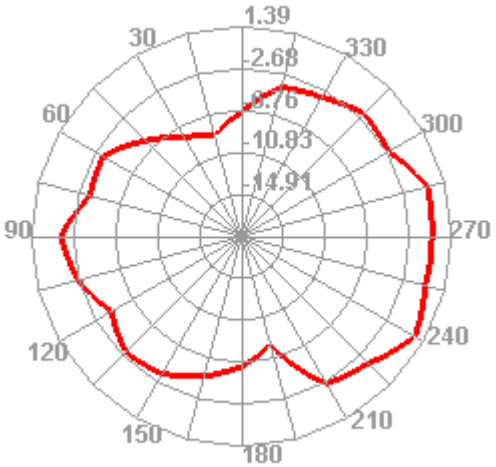

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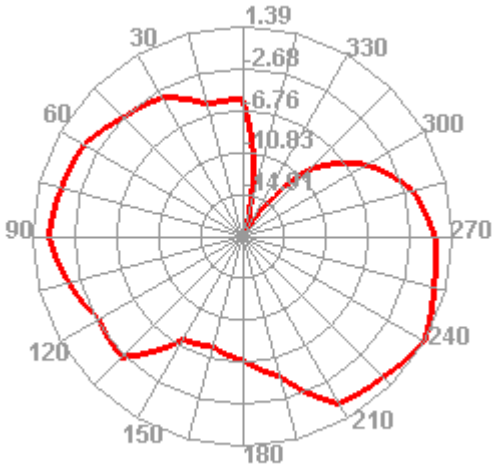
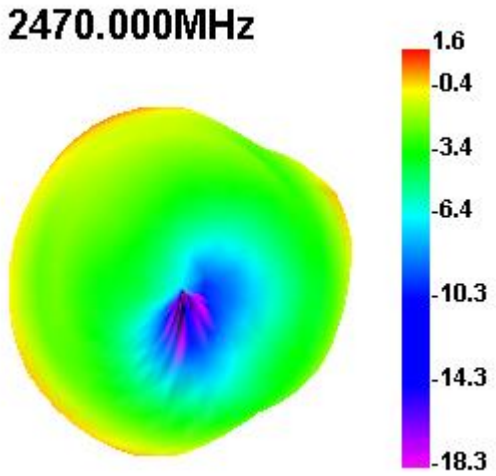


2470.000MHz



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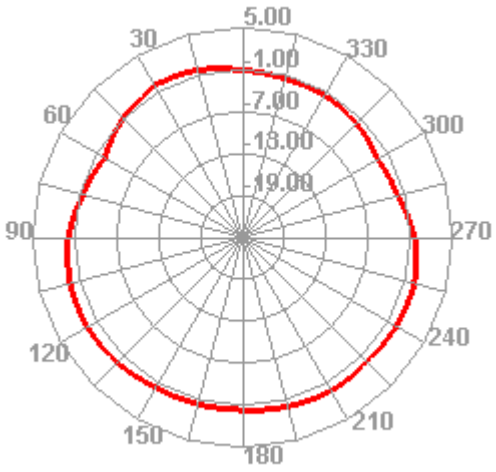

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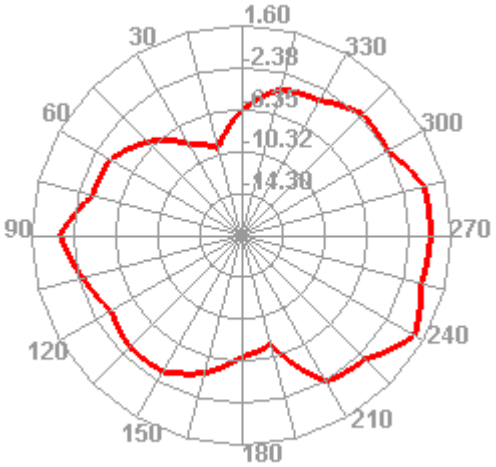

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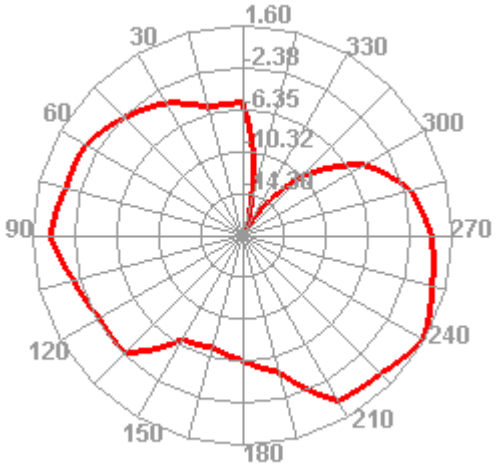

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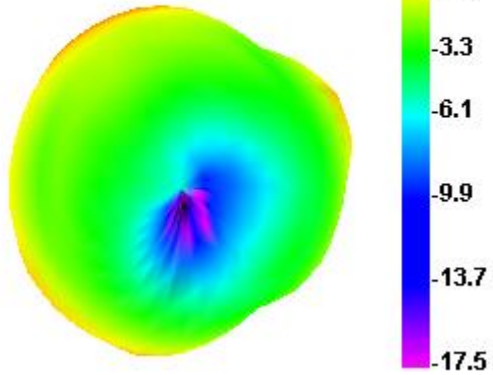

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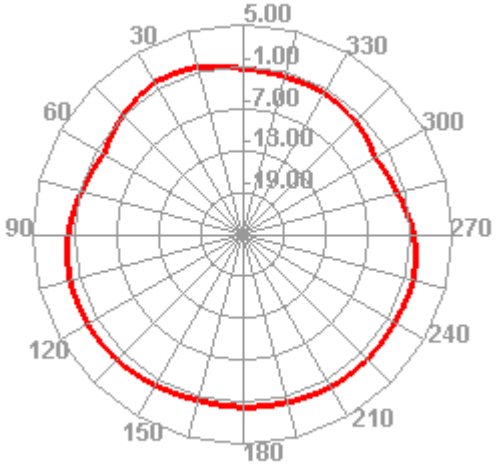

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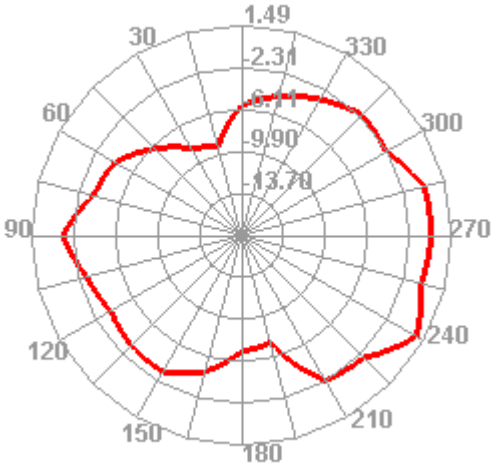

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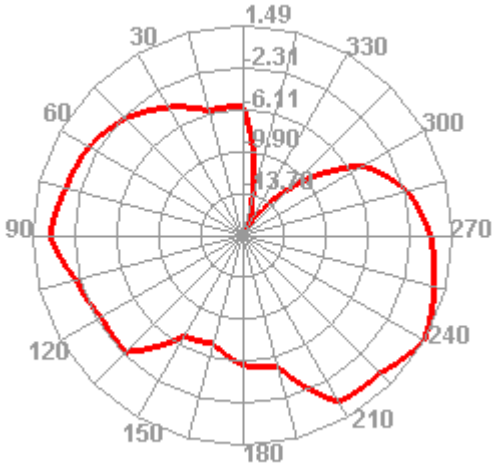
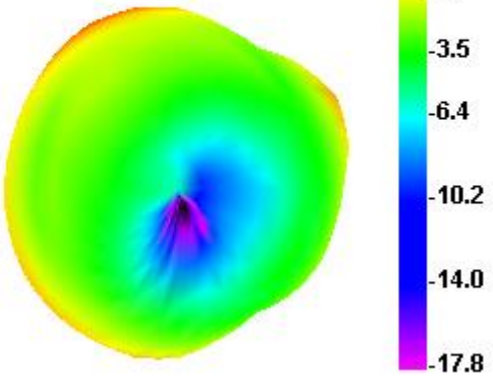


2490.000MHz



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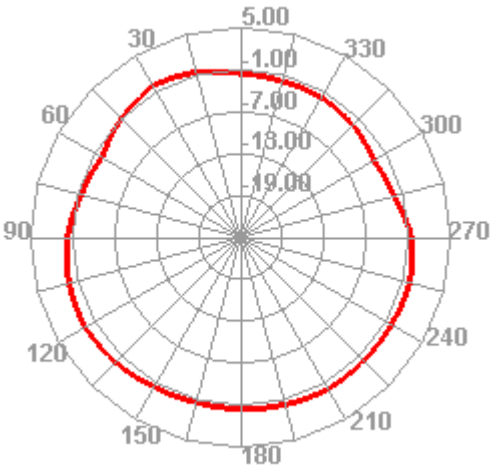
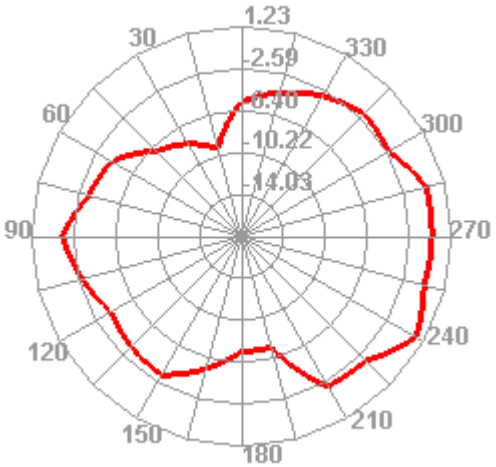
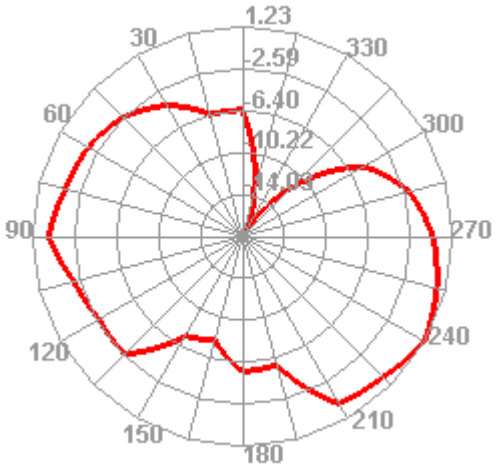


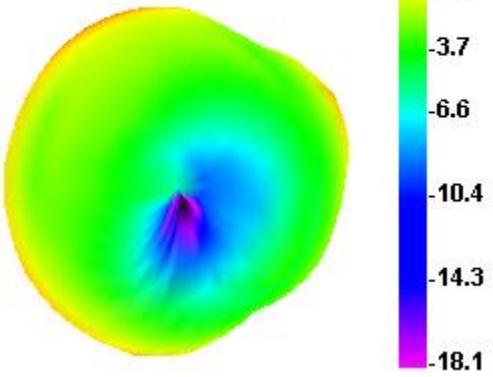
2490.000MHz E1



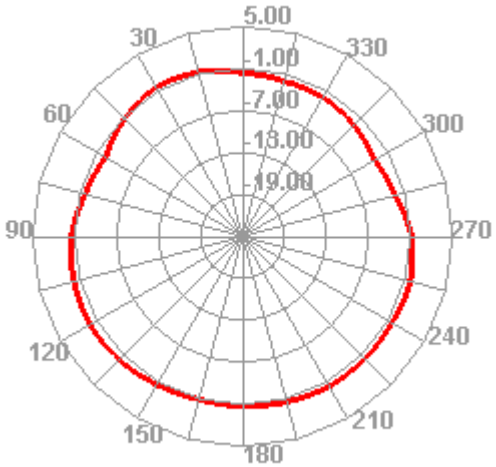
2490.000MHz E2

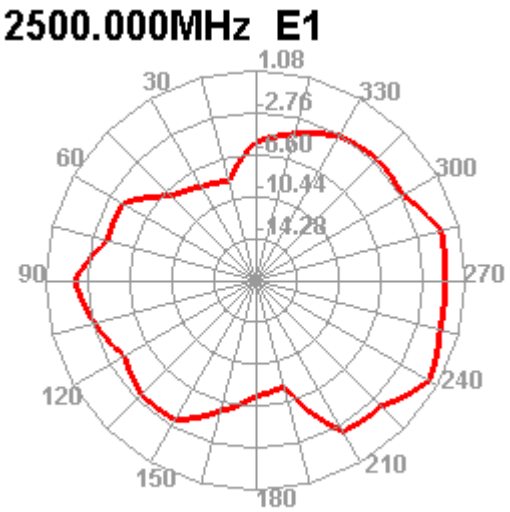


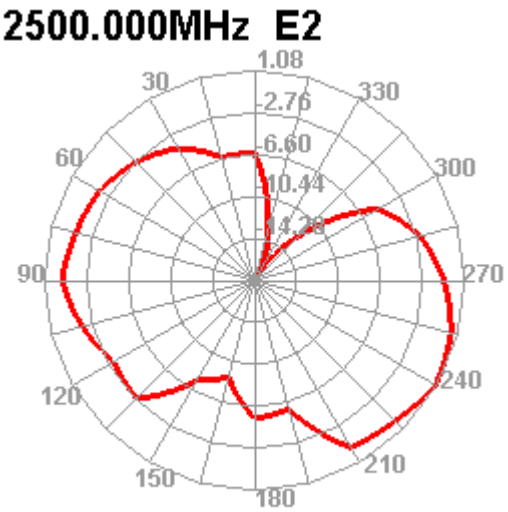
2500.000MHz



2500.000MHz H







4. The production index

天线量产时，以驻波比作为量产测试标准。

根据项目本身的差异,给出如下标准：

频率	量产标准
IFA (2400-2500MHZ)	VSWR（量产产品）<VSWR(设计样品)+0.5