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天线承认书

Antenna Acknowledgement

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一 . 天线特性说明/Antenna profil

此报告主要为 5150-5250 / 5725-5850 mhz 天线物理特性和电性能各种测试状况说明/This report mainly describes the physical characteristics and electrical performance test conditions of the antenna operating in the frequency bands of 5150–5250 MHz / 5725–5850 MHz. 575802307: 05-21 10:58:32 1.1 Antenna Schematic Diagram,

1.1 天线示意图/Antenna Schematic Diagram:



1.2 物理特性说明/Physical Specifications

天线丝印/Antenna Silkscreen	PD6024 hotspot-WIFI
功能 /Function	5150–5250 MHz / 5725–5850 MHz 天线
天线外观尺寸/ Antenna Dimensions	44.7±0.2mm*9.8±0.2mm
天线材质/Antenna Material	FPC/Flexible Printed Circuit
天线颜色/Antenna Color	黑色/Black

电缆类型 /Cable Type	线径 1.13mm 同轴线, 黑色, 线总长 100MM 一代 IPEX 头 /Coaxial cable, black, with IPEX connector; diameter: 1.13 ± 0.1mm, length: 100+1/-1mm
工作温度/Operating Temperature	-40℃-65℃
存储温度/Storage Temperature	-40℃-80℃

1.3 电气特性说明/Electrical Characteristics Specification

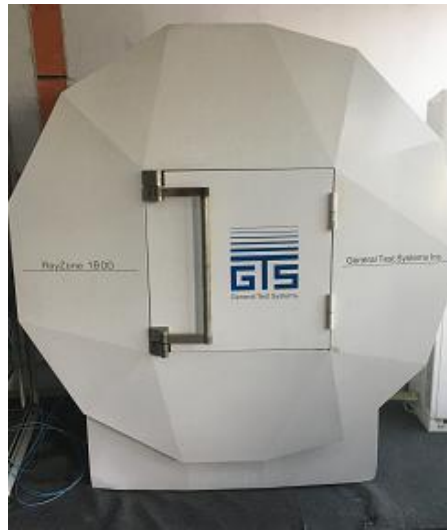
功能/Function	5150-5250 MHz / 5725-5850MHz 天线/Antenna
频率范围 (GHz) /Frequency Range (GHz)	5150-5250 MHz / 5725-5850MHz
电压驻波比 (VSWR) /Voltage Standing Wave Ratio (VSWR)	≤2
增益/Peak Gain	≤3dBi
输入阻抗 (Ω) /Input Impedance (Ω)	50
极化方式/Polarization Mode	垂直, 线性/Vertical, Linear
天线形式/Antenna Type	PIFA

二. 天线测试/Antenna Testing

2.1 测试设备/Test Equipment:

序号 Item	设备名称 Equipment Name	设备图片 Equipment image	测量指标 Measurement indicators	操作环境 operating environment
1	微波暗室 Microwave anechoic chamber		无源性能 passive capability	周围无较大金属物 常温常湿 (No large metal objects nearby Normal temperature and humidity)
2	HP8753D 网络分析 (Network analyzer)			

2.2 测试环境/Test Environment:



2.3 测试结果/Test Results:

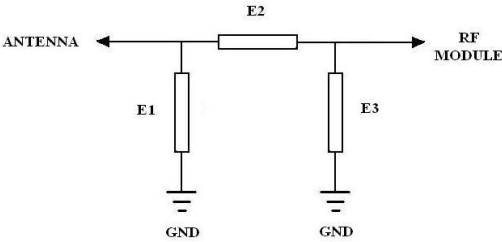
回波损耗图/Return Loss Plot:



天线驻波比图/Antenna VSWR Plot:



2.4 匹配电路/Matching Circuit:



Element	Value
E1	无改动
E2	无改动/Test Item
E3	无改动

注: 匹配电路由客户提供, 我司负责调试/Note: The matching circuit is provided by the customer, and our company is responsible for commissioning.

2.5 无源效率 /Antenna Efficiency:

5G 天线效率效 Passive Test For 5G											
Freq	Effi	Effi	Gain	Freq	Effi	Effi	Gain	Freq	Effi	Effi	Gain
(MHz)	(%)	(dB)	(dBi)	(MHz)	(%)	(dB)	(dBi)	(MHz)	(%)	(dB)	(dBi)
5150	56.01	-2.52	3.13	5730	57.93	-2.37	2.61	5840	42.09	-3.76	1.35
5160	58.86	-2.3	3.54	5740	53.57	-2.71	2.26	5850	42.83	-3.68	1.29
5170	56.4	-2.49	3.39	5750	55.83	-2.53	2.2				
5180	55.35	-2.57	3.33	5760	56.4	-2.49	2.29				
5190	53.44	-2.72	3.09	5770	55.3	-2.57	1.89				
5200	52.19	-2.82	3.14	5780	47.08	-3.27	2.1				
5210	60.77	-2.16	3.95	5790	51.6	-2.87	2.15				
5220	64.66	-1.89	4.34	5800	49.19	-3.08	2.04				
5230	66.95	-1.74	4.37	5810	49.04	-3.09	1.29				
5240	55.17	-2.58	3.46	5820	49.21	-3.08	1.59				
5250	60.12	-2.21	3.97	5830	45.78	-3.39	1.4				

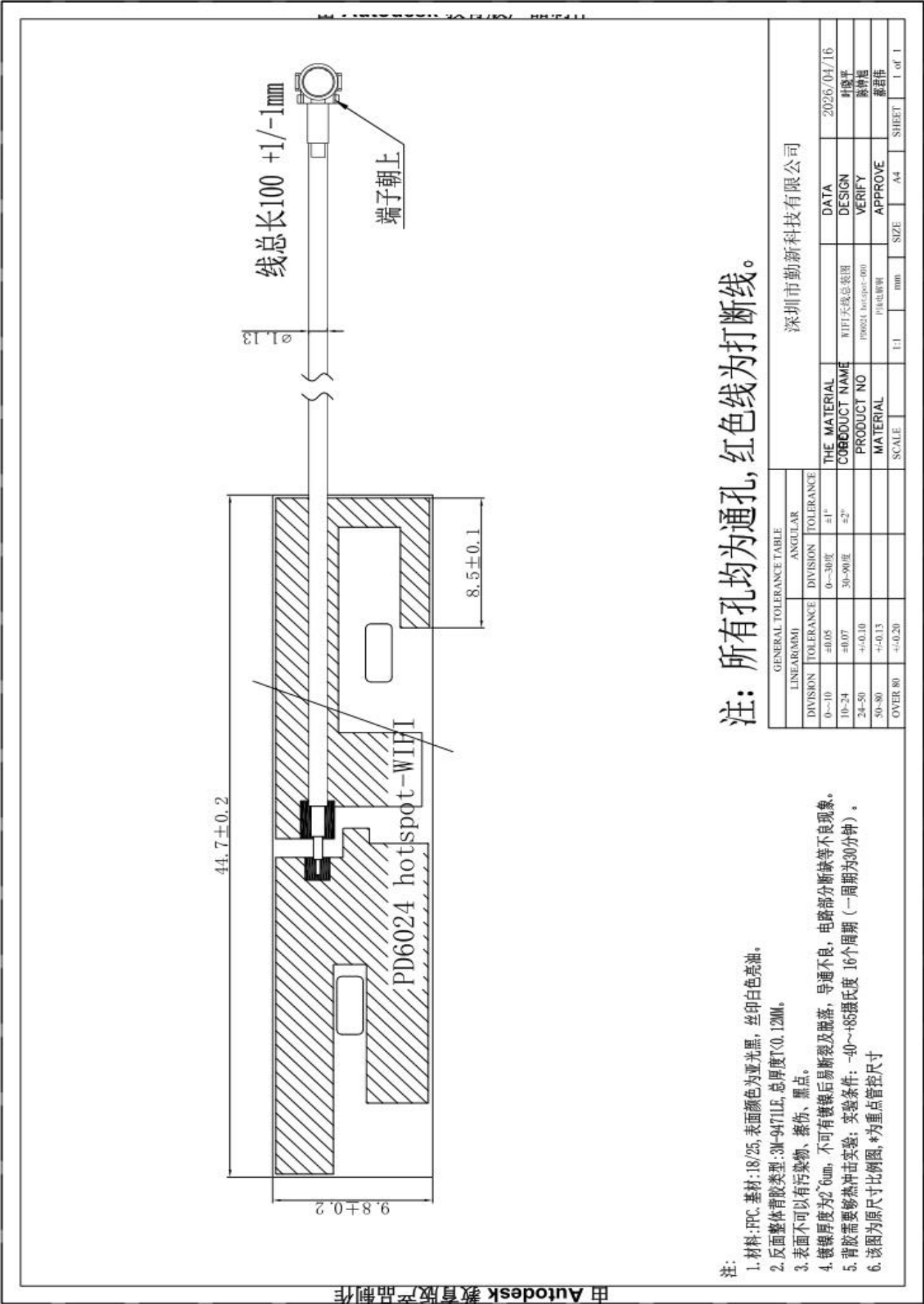
2.6 天线暗室 3D 数据/3D Antenna Anechoic Chamber Data:

802. a 测试 5G			
测试项目/Test Item	CH36	CH149	CH165
TRP	13.1	13.5	14.06
TIS	-69.06	-69.2	-69.1

三. 环境处理/Environmental Treatment:

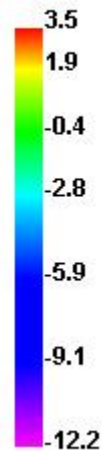
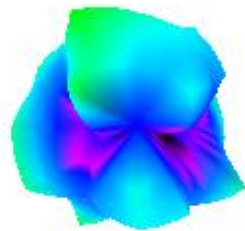
注: 环境处理与样机一样无改动/The environmental treatment is the same as the

四.天线图纸/Antenna Drawing:

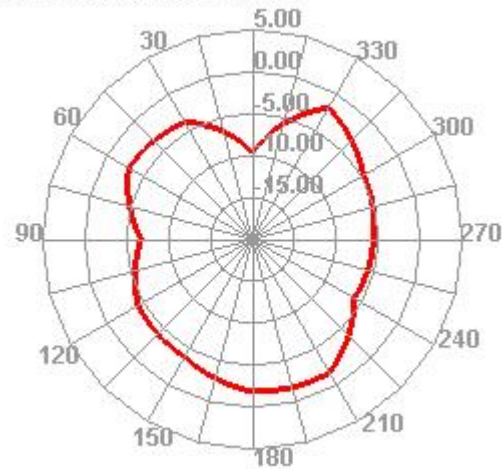


7: 2.4G:

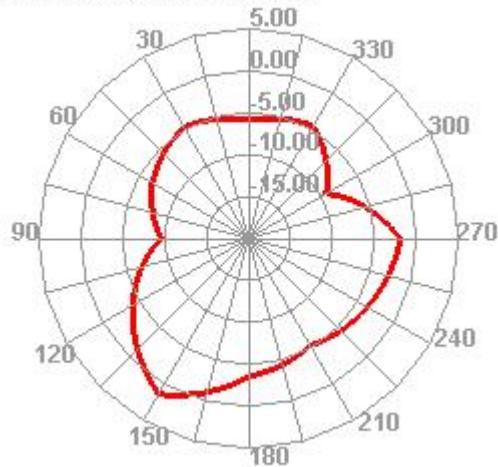
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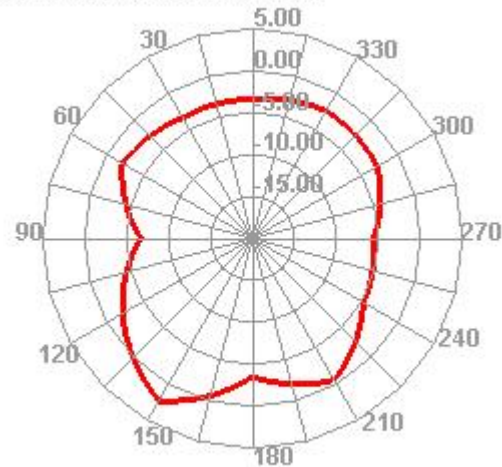
2400.000MHz H



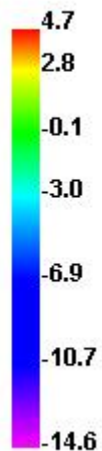
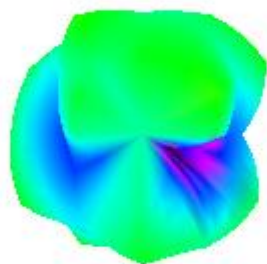
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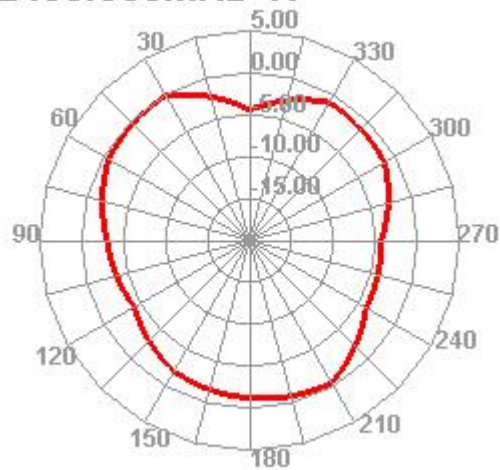
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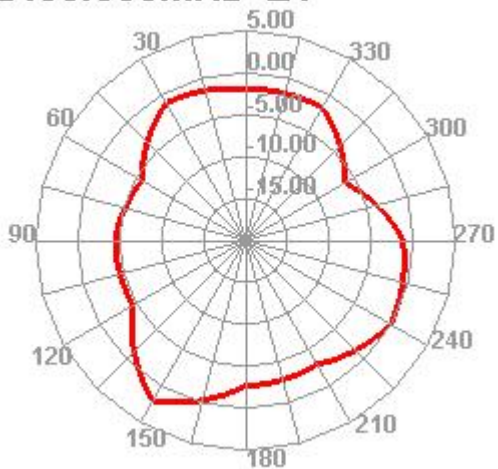
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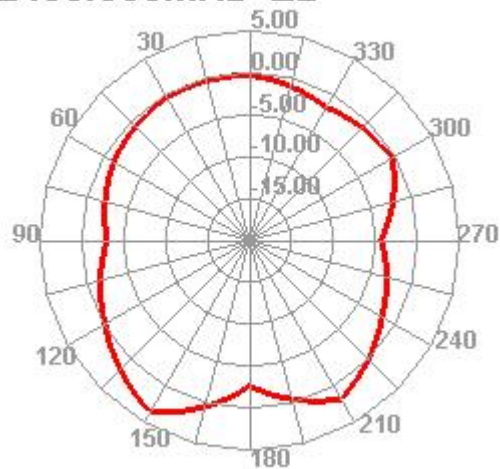
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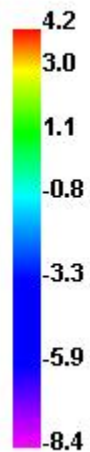
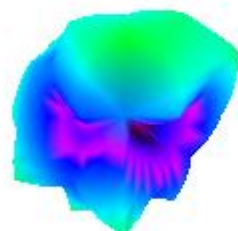
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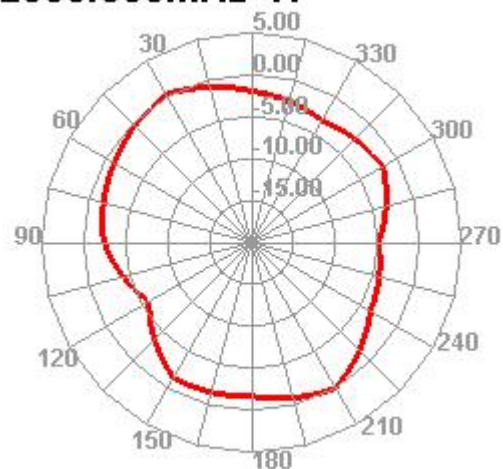
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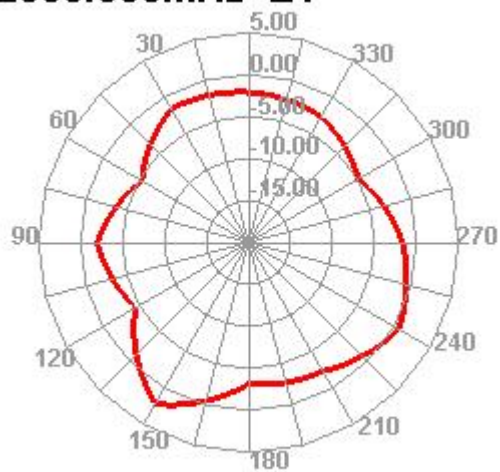
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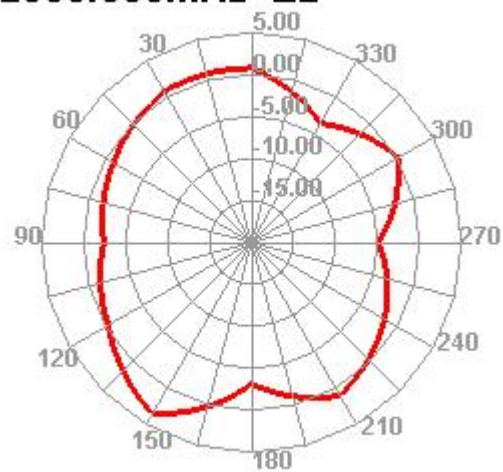
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2500.000MHz E1

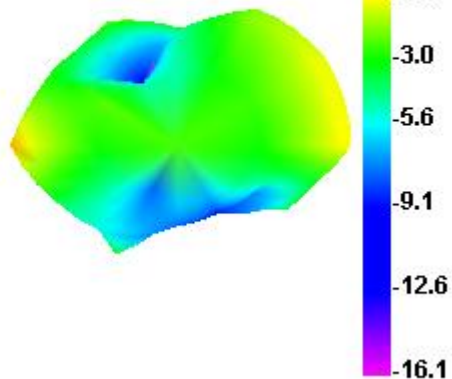


2500.000MHz E2

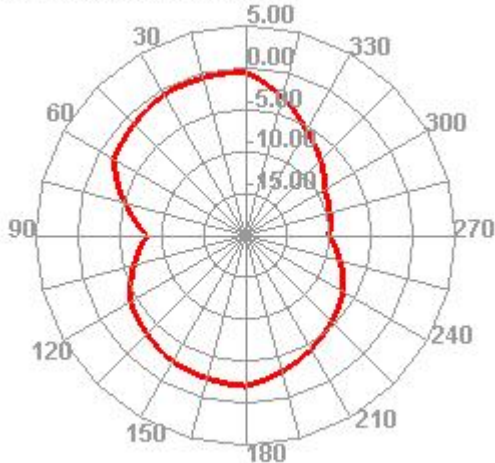


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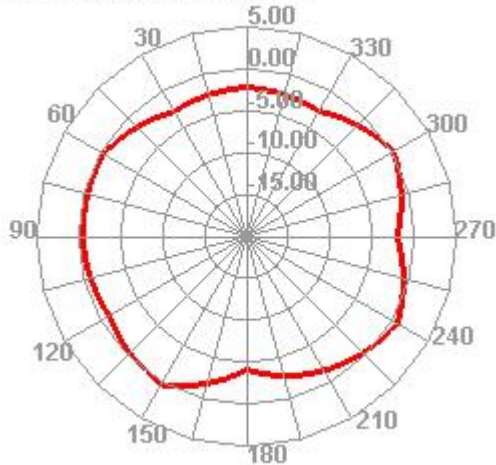
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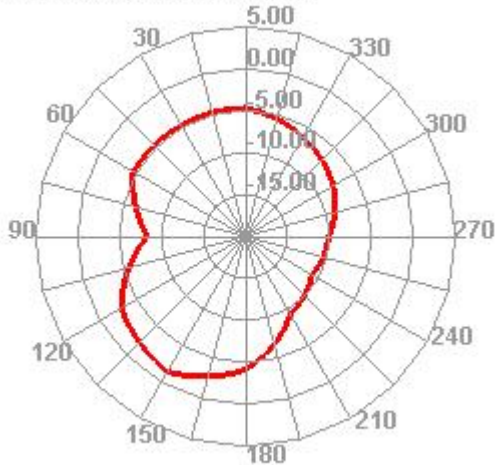
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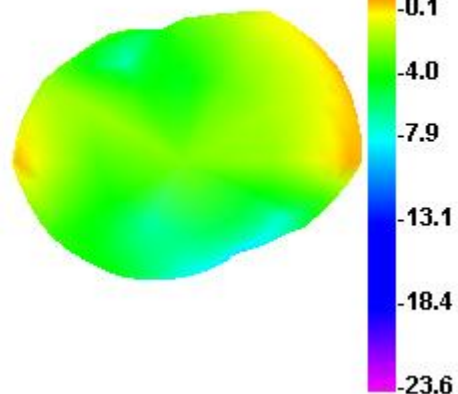
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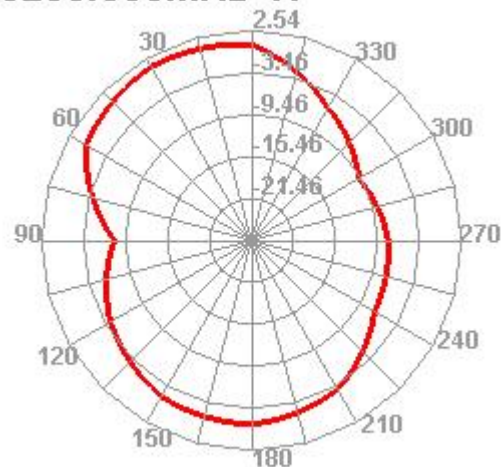
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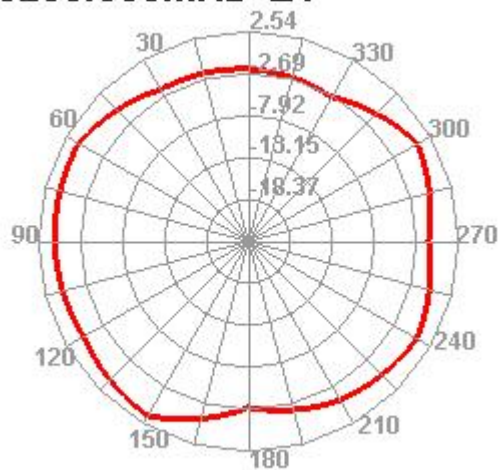
5250.000MHz



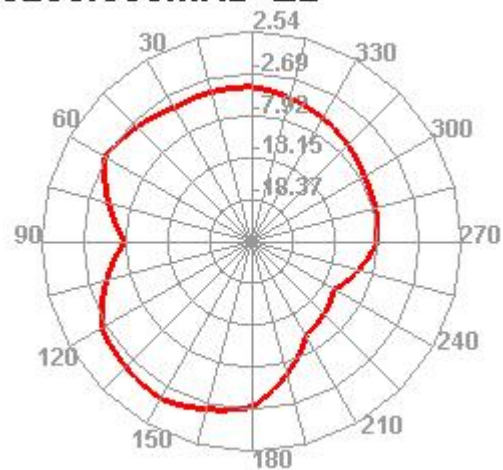
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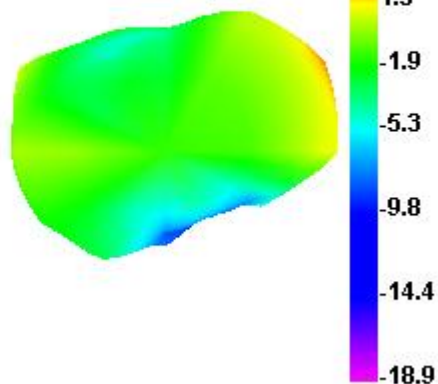
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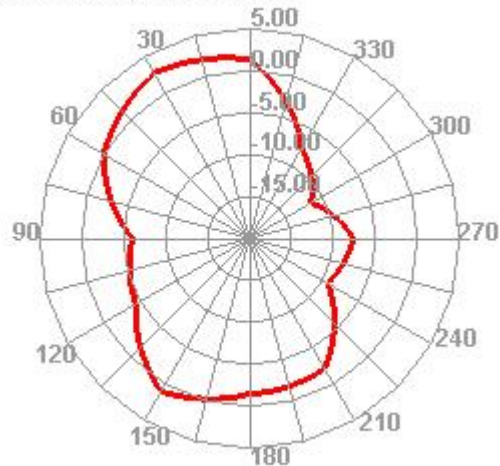
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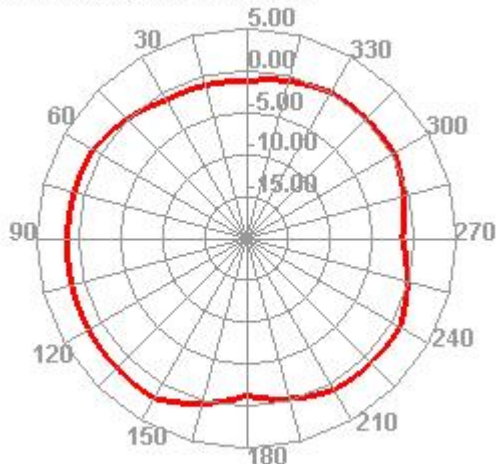
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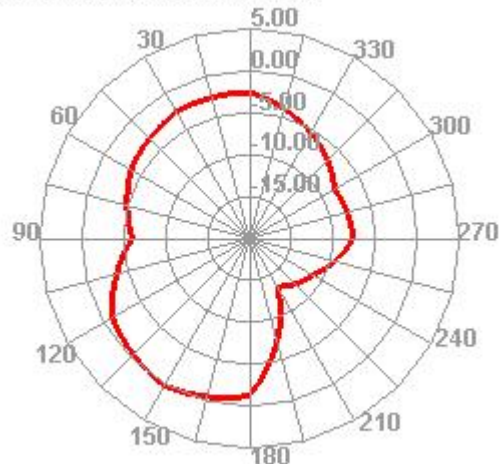
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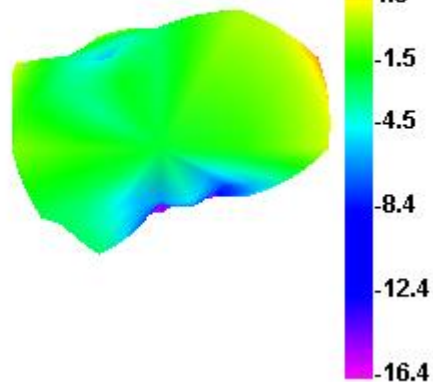
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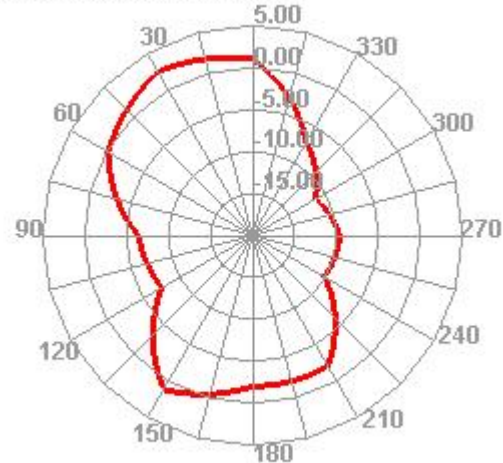
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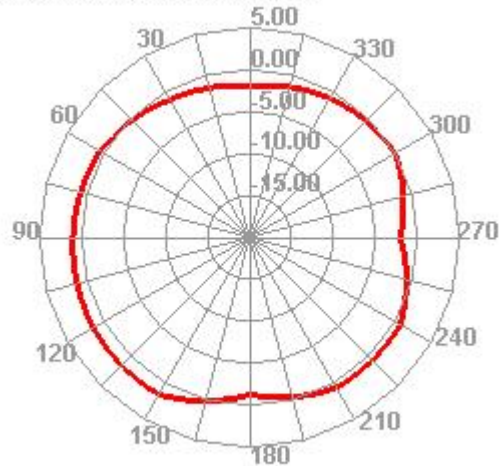
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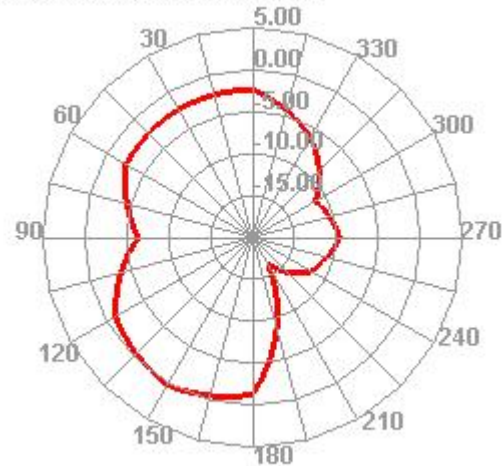
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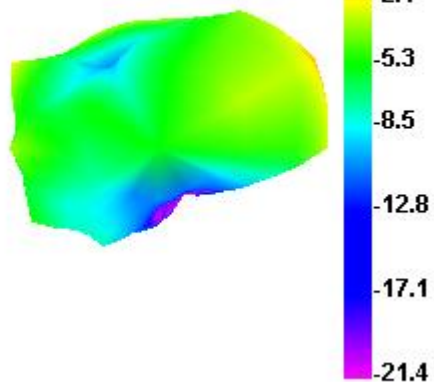
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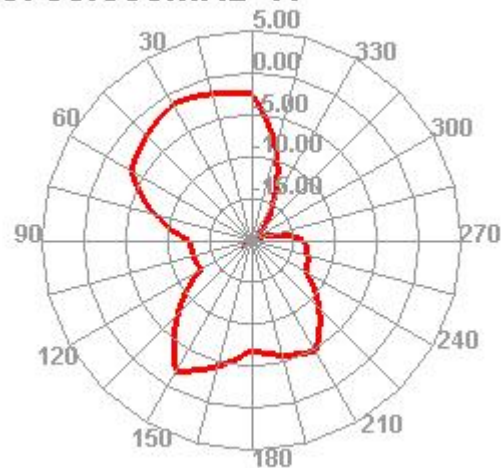
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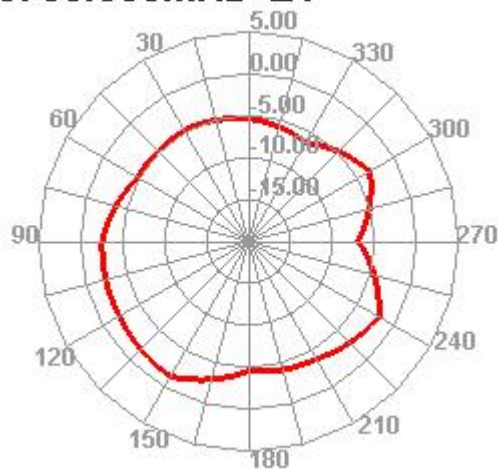
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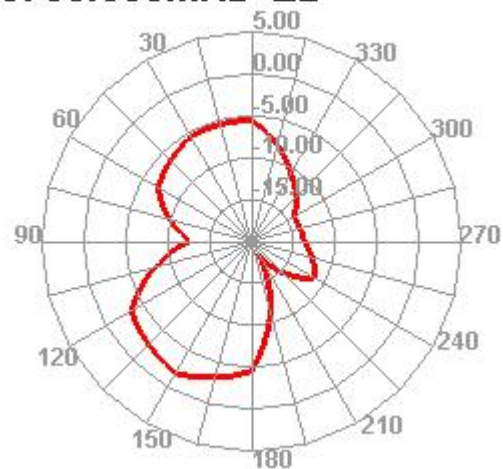
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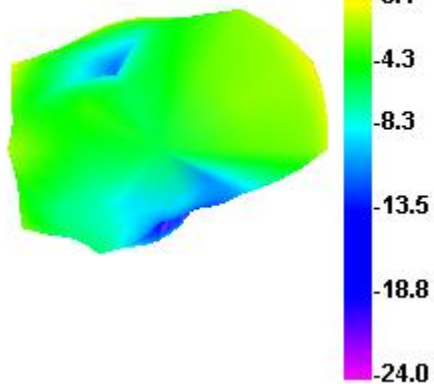
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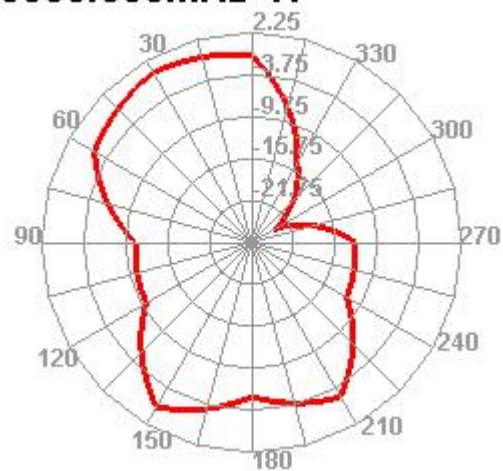
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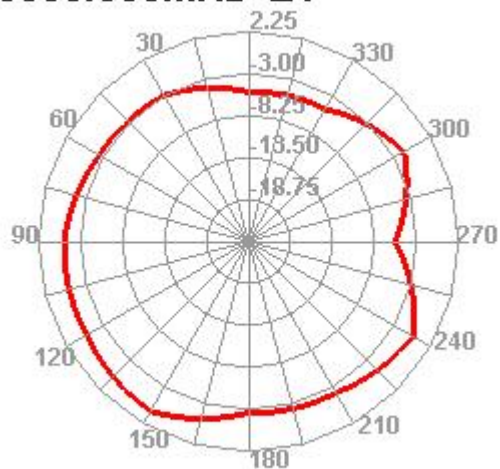
5850.000MHz



5850.000MHz H



5850.000MHz E1



5850.000MHz E2

