

深圳市华创翔科技有限公司

SHEN ZHEN WACOSUN TECHNOLOGY CO, LTD

产品规格书

PRODUCT SPECIFICATION SHEET

Customer: 湘凡科技

Product Name: 2.4GHz Antenna 音频控制器

Product code: HCX-TX-DZCM672

Customer code: CM672

Sample date: 2024-3-13

HCX Confirm:

Approval	Quality	Engineer	Signature
David	Henry	lisa	

Customer Confirm:

Approval	Quality	Engineer	Signature
Confirm result: ☐ PASS ☐ NG ☐ Others			



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SPECIFICATION ITEM

Item	Description
1.....	SPEC
2.....	SPEC ITEM
3.....	Engineer drawing
4.....	Performance

RF Antenna Cable Assembly

Specification

1. Electrical Properties

- 1.1 Frequency Range.....2.4GHz-2.5GHz
- 1.2 Impedance.....50 Ω Nominal
- 1.3 VSWR.....1.92:1MAX
- 1.4 Return Loss.....-14dB Max
- 1.5 Gain(peak)3.75dBi
- 1.6 Cable loss.....0.02dBi Max
- 1.7 Polarization.....Linear Vertical
- 1.8 Conn.....N/A

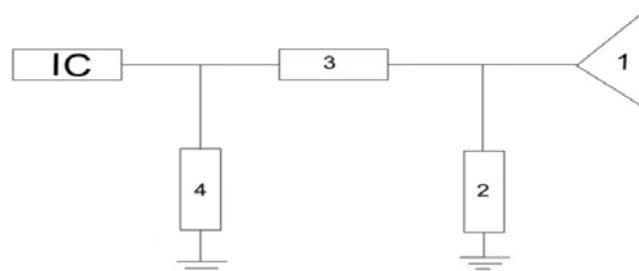
2. Physical Properties:

- 2.1 Antenna Material.....Cu
- 2.2 Operating Temp.....-20°C- +65°C
- 2.3 Storage Temp.....-30°C- +75°C

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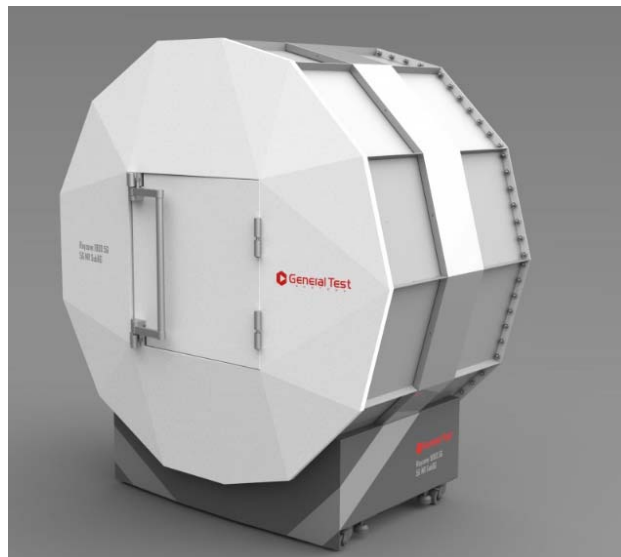
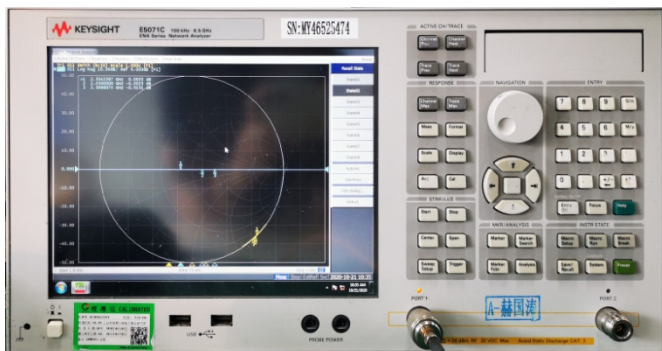
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FPC Antenna Test equipment
SPEC:2.4GHz Design Antenna

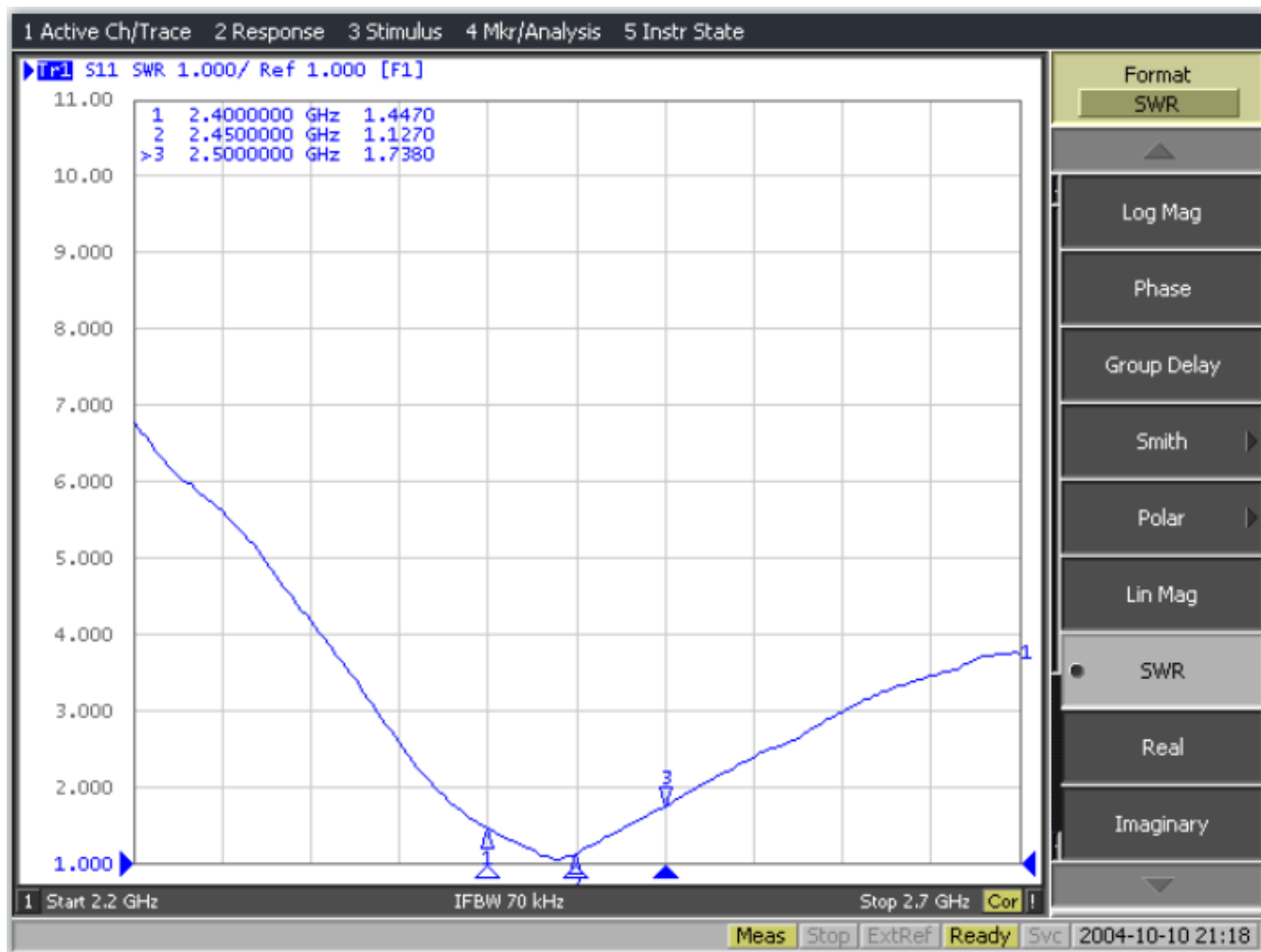


3 号位置：串 1.5nh

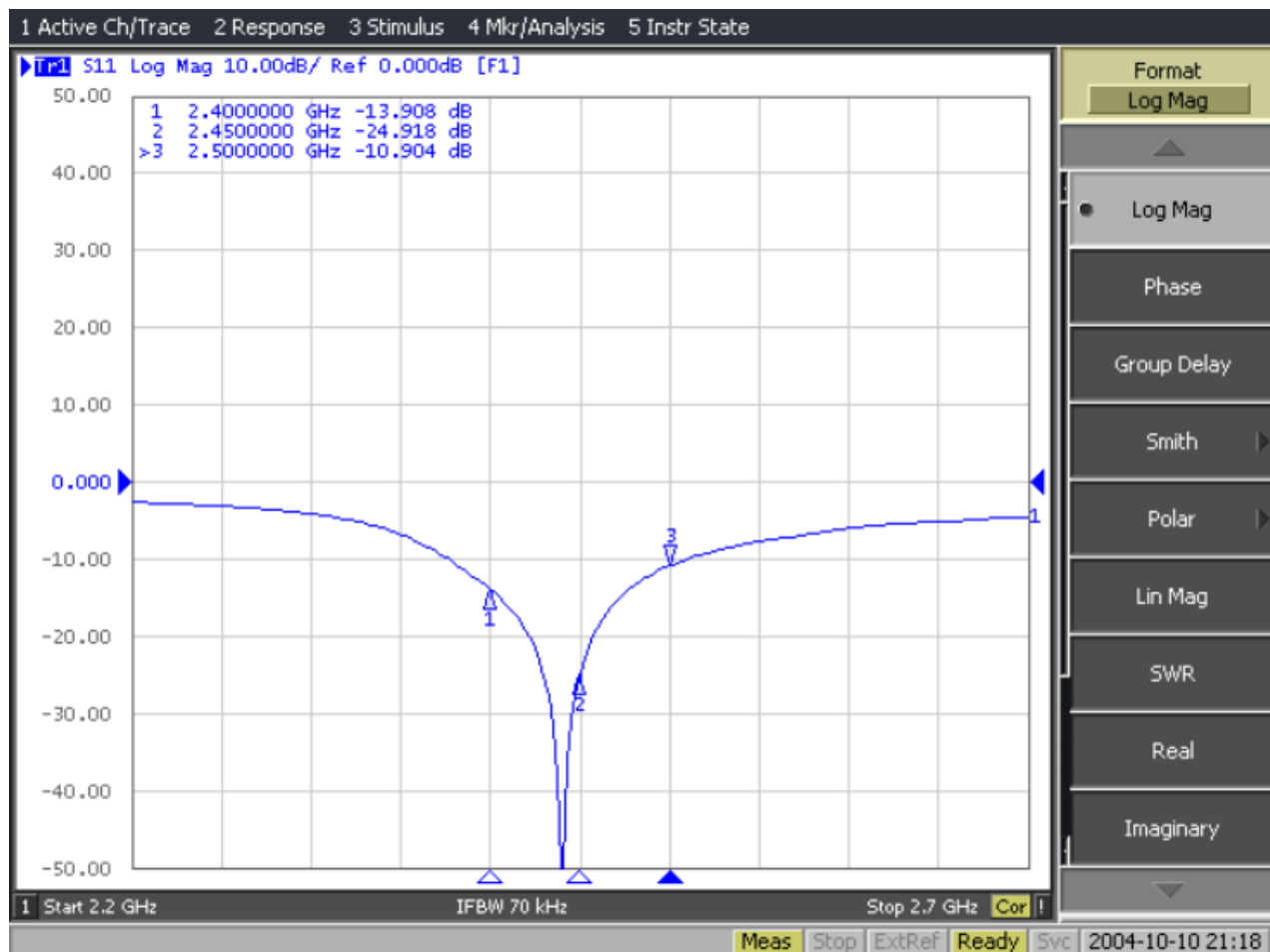
Antenna 实验室设备部份图片：



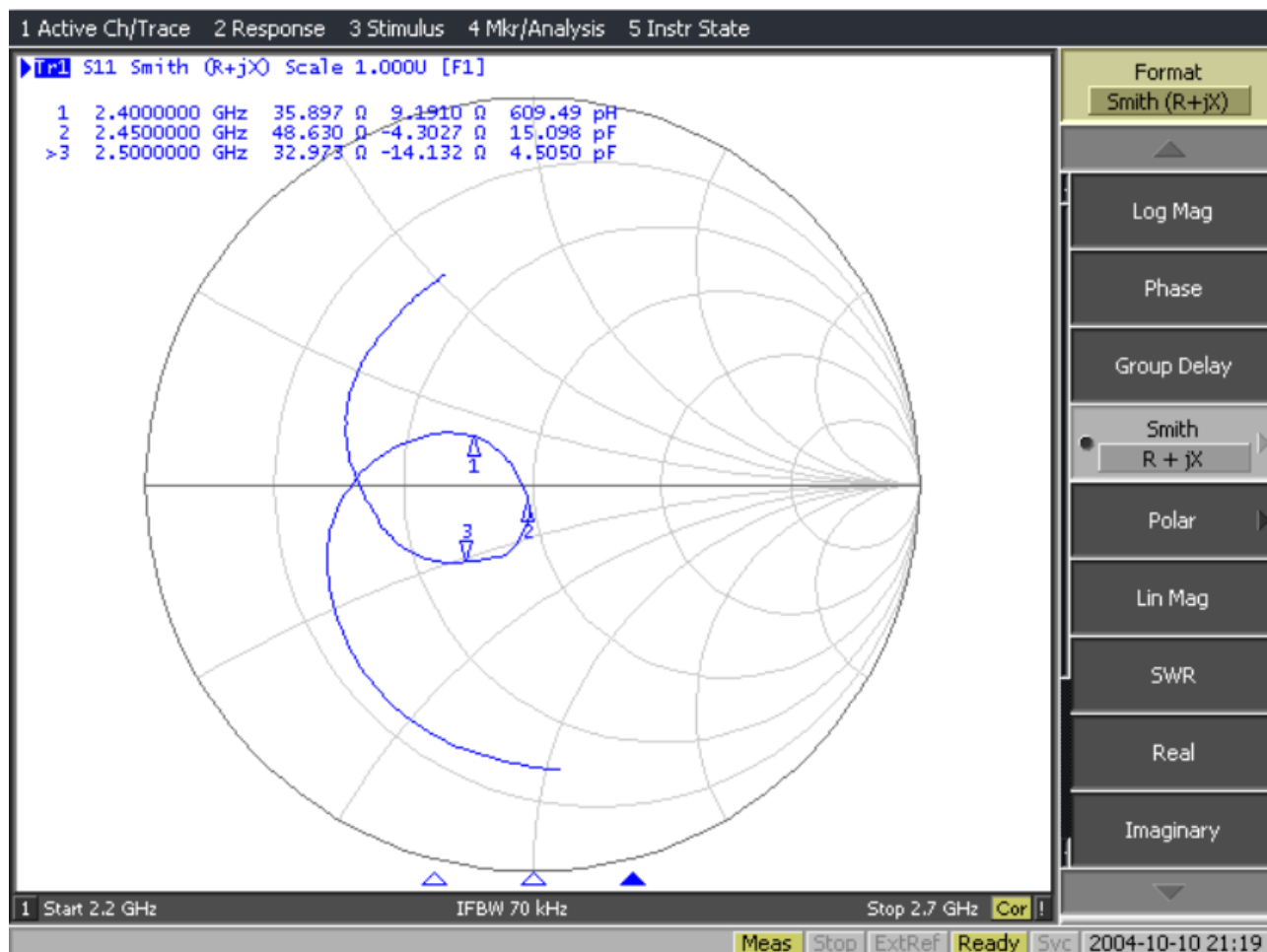
1.0 驻波比V.S.W.R



2.0 回波损耗 Log mag



3.0 史密斯图 Smith



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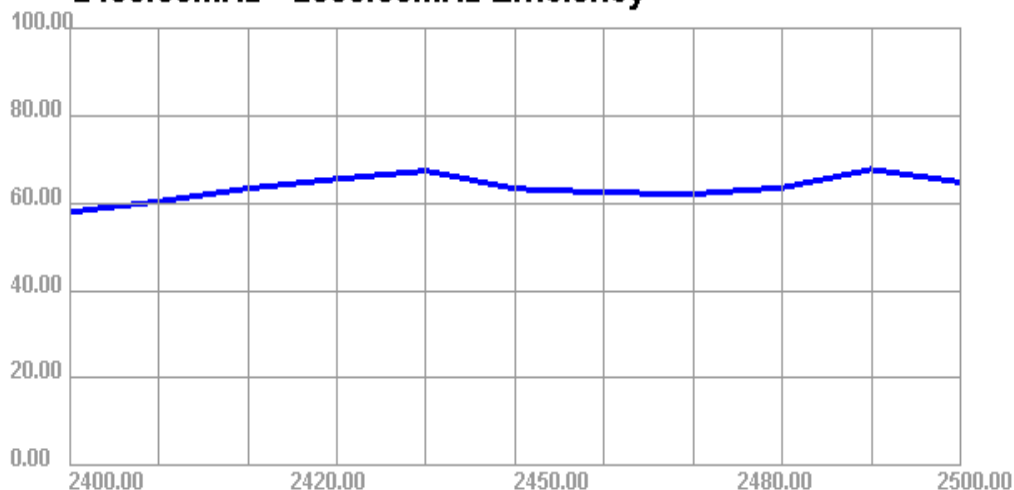
2.4Ghz Performance data:

Passive Test For WIFI2.4										
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	Max (dB)	Min (dB)	irectivity (dBi)	Beamwidth (3dB)
2400	57.94	-2.37	3.13	0.98	20.049	37.891	3.13	-13.85	5.5	0
2410	60.38	-2.19	3.4	1.25	20.446	39.931	3.4	-14.73	5.59	0
2420	63.37	-1.98	3.66	1.51	21.073	42.297	3.66	-14.31	5.64	0
2430	65.5	-1.84	3.68	1.53	21.654	43.848	3.68	-15.27	5.52	0
2440	67.37	-1.72	3.75	1.6	22.297	45.069	3.75	-17.35	5.47	0
2450	63.3	-1.99	3.43	1.28	21.205	42.094	3.43	-20.54	5.42	0
2460	62.43	-2.05	3.34	1.19	21.272	41.154	3.34	-27.17	5.39	0
2470	62.1	-2.07	3.22	1.07	21.559	40.539	3.22	-29.35	5.29	0
2480	63.53	-1.97	3.39	1.24	22.311	41.219	3.39	-22.69	5.36	0
2490	67.7	-1.69	3.7	1.55	23.899	43.798	3.7	-18.25	5.39	0
2500	64.75	-1.89	3.61	1.46	22.903	41.844	3.61	-16.65	5.5	0

2400.00MHz - 2500.00MHz Gain



2400.00MHz - 2500.00MHz Efficiency



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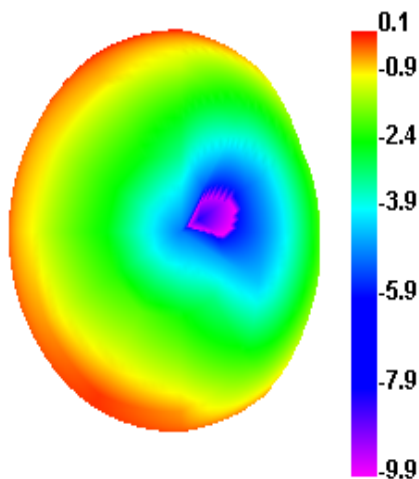
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Frequency:2.40GHz

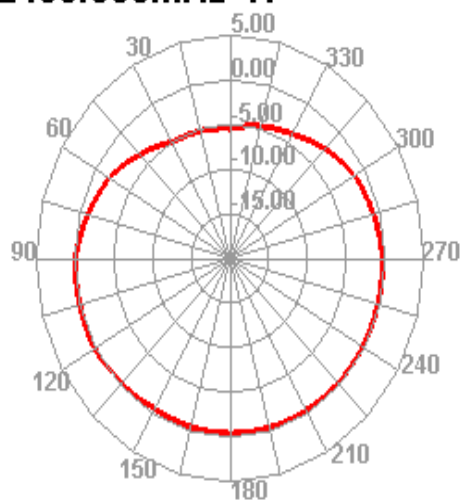
Peak Gain:3.13dBi

Efficiency:57.94%

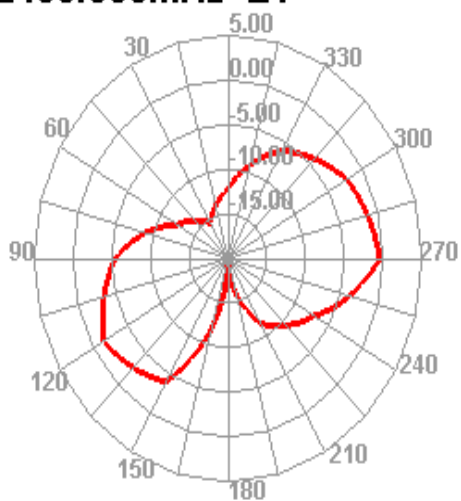
2400.000MHz



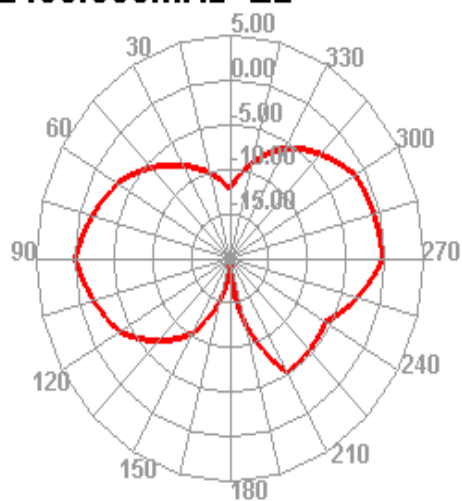
2400.000MHz H



2400.000MHz E1



2400.000MHz E2



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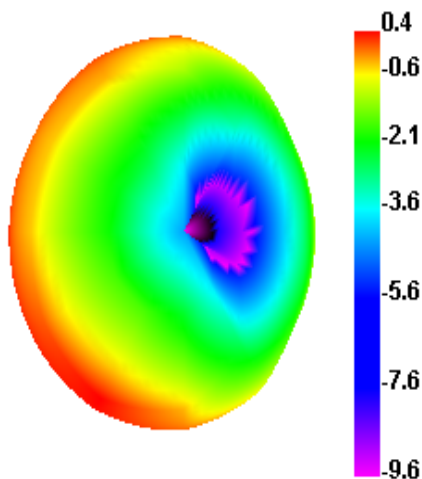
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Frequency:2.45GHz

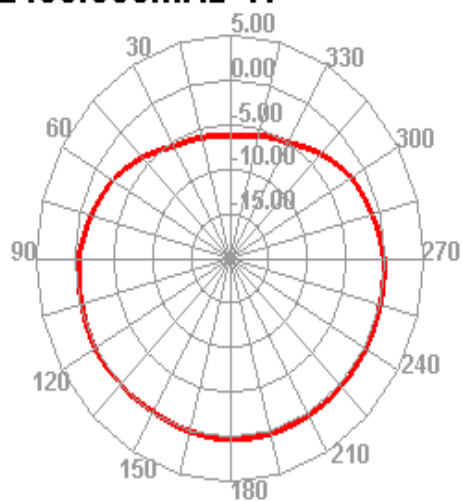
Peak Gain:3.43dBi

Efficiency:63.30%

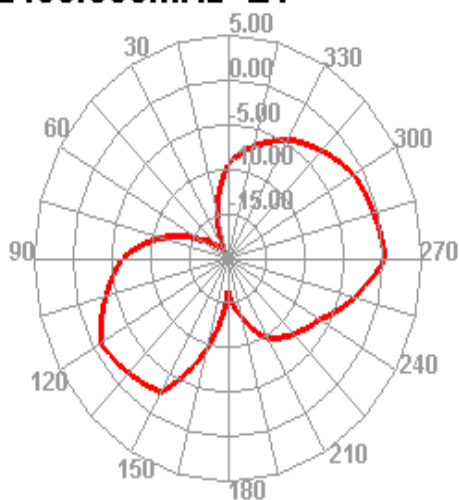
2450.000MHz



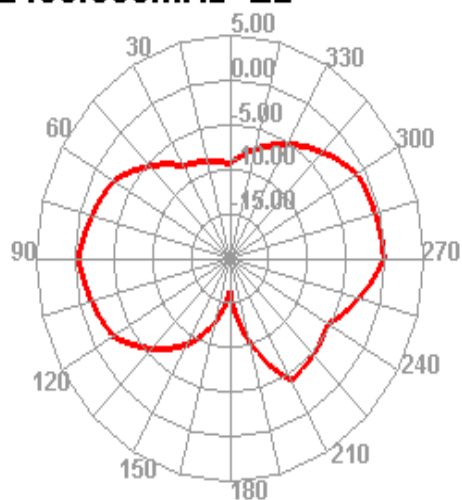
2450.000MHz H



2450.000MHz E1



2450.000MHz E2



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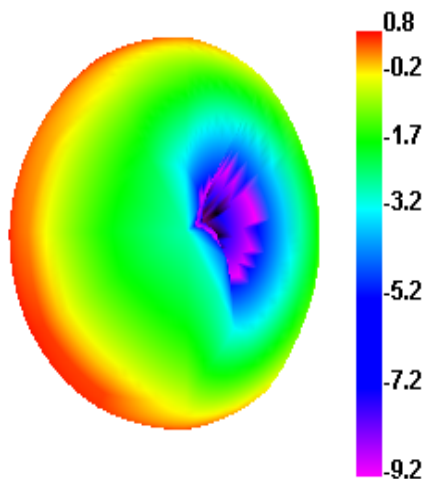
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Frequency:2.50GHz

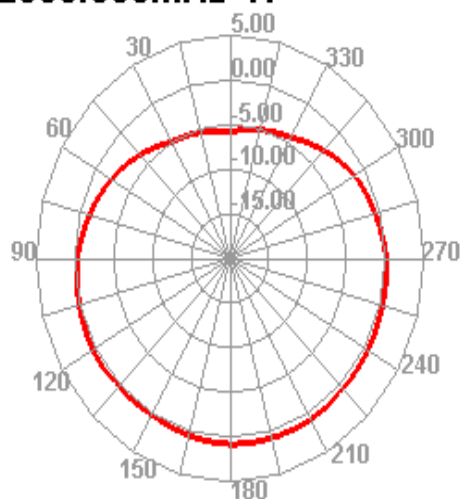
Peak Gain:3.61dBi

Efficiency:64.75%

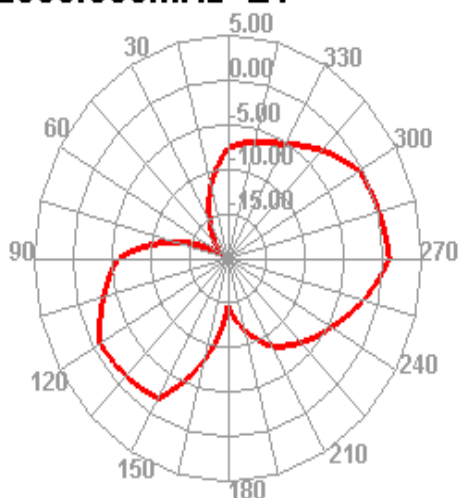
2500.000MHz



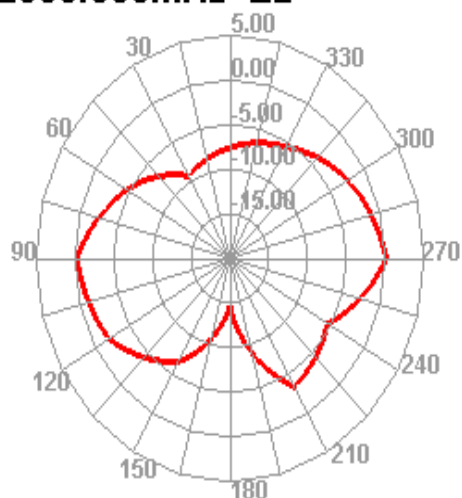
2500.000MHz H



2500.000MHz E1



2500.000MHz E2



工程师建议：综合以上数据，天线满足性能需求，可量产！

~~报告结束~~

~~The end~~