



Shenzhen Sunwin Telecommunication Technology Co., LTD.

Antenna Specifications

CUSTOMER		AOWEISI	
CS P/N		AWS07	
P/N		VTL66-AWS07-F	
Checked by(RF)	Checkedby(QA)	Approval led by	Date
TONY	TONY	TONY	<u>2021-04-05</u>
Customer Approval			

Add: Room 401, West Tower, Building No.211, Tairan Industry & Trade Park, Chegongmiao, Futian District, Shenzhen City, Guangdong Province, P.R. China

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Index

1	Specifications.....	3
2	Impadance	3
3	Active Measurements	4
4	QC schedule drawing/Mechanical Properties	5
5	Environmental Characteristic	7
6	Package.....	14

Add: Room 401, West Tower, Building No.211, Tairan Industry & Trade Park, Chegongmiao, Futian District, Shenzhen City, Guangdong Province, P.R. China

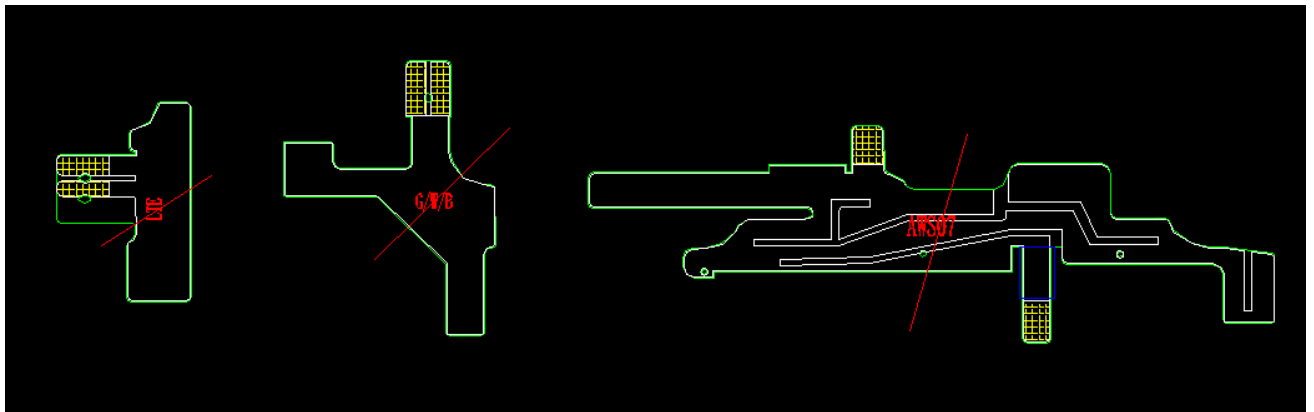
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1.Specifications

This report mainly provides the testing conditions of various electric and structural performance parameters for cell phone antenna - AWS07 Figure 2-1 shows the antenna designed by SW & The fixturing of AWS07



2.Impedance

2.1Nominal

Nominal Impedance(including matching circuit) : 50 ohms

2.2Matching Circuit

The matching circuit is as Figure 2-2.

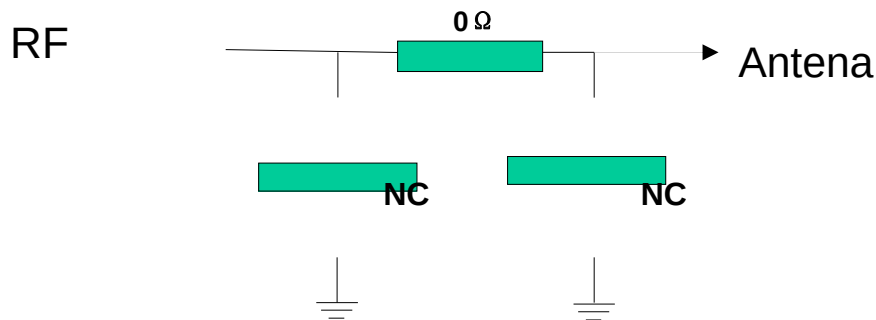


Figure 2-2: Matching circuit

3. Active Measurements

Active Measurements Data

Total Radiated Power (TRP) and Total Isotropic Sensitivity (TIS) of the handsets with antenna are tested in the antenna chambers .

Antenna Chamber Test Data

NFC ANT

NFC ANT GAIN:0dbi



4G Hamber Test Data

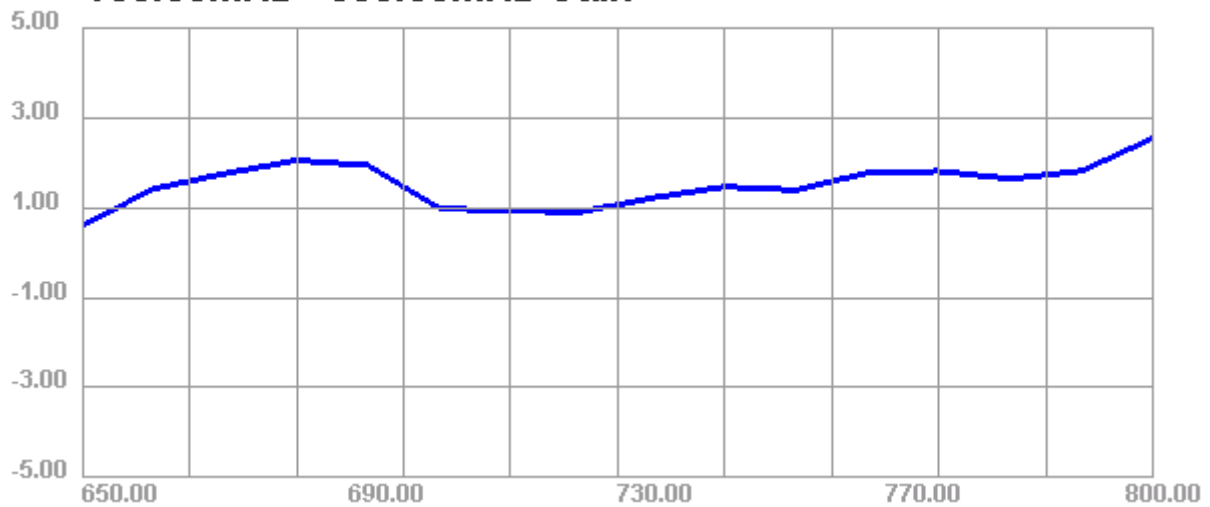


Freq. (MHz)		700	800	900	960	1710	1800	2000	2200	2400	2700
VSWR		3.21	2.4	1.9	3.88	2.81	1.98	1.78	1.63	1.72	1.35

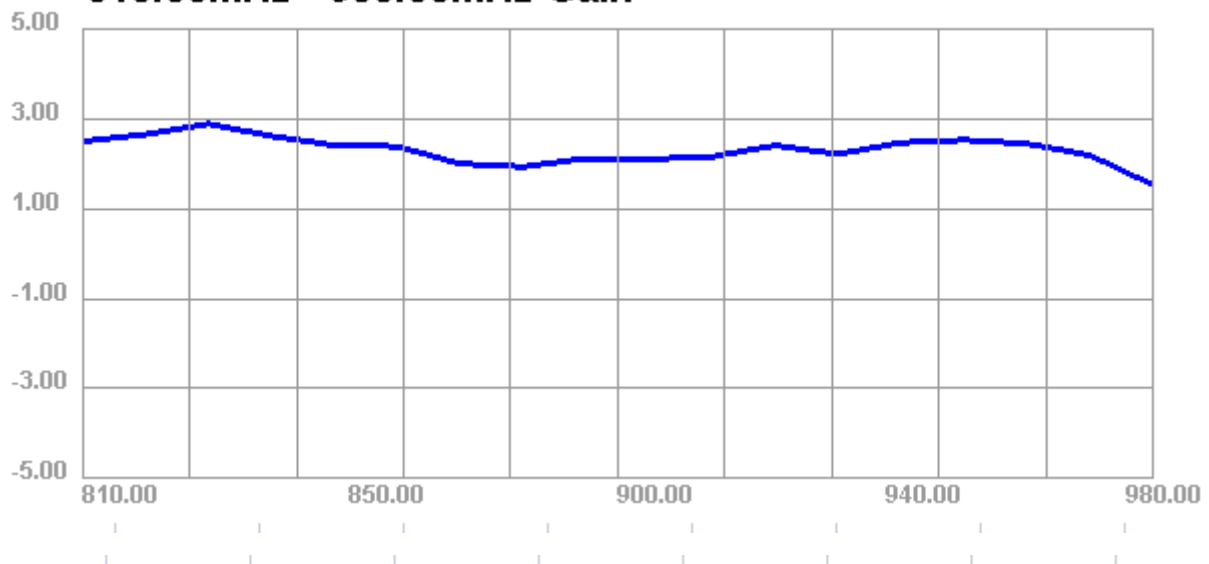


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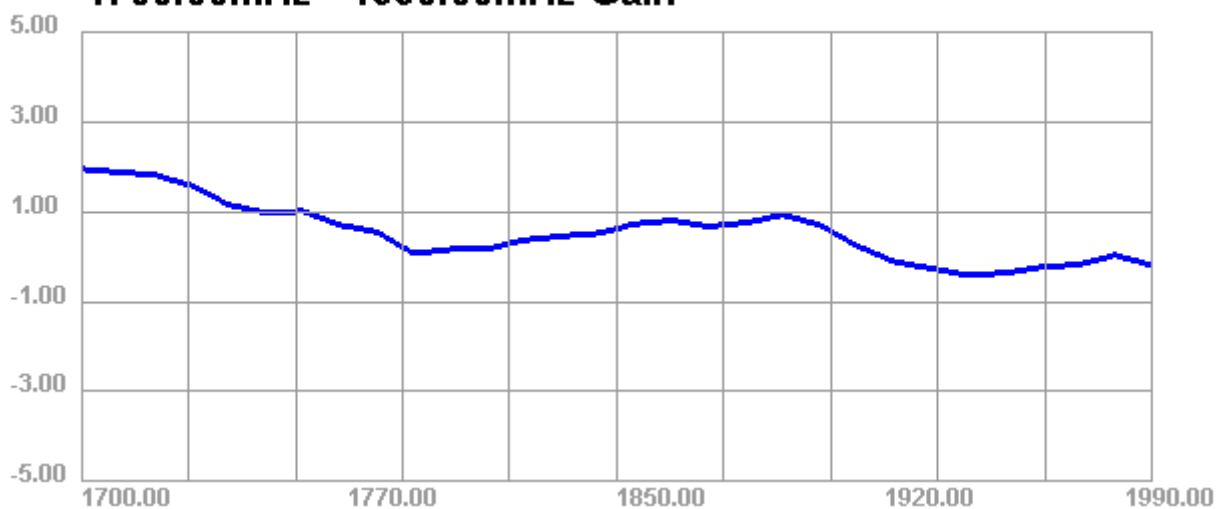
650.00MHz - 800.00MHz Gain



810.00MHz - 980.00MHz Gain



1700.00MHz - 1990.00MHz Gain



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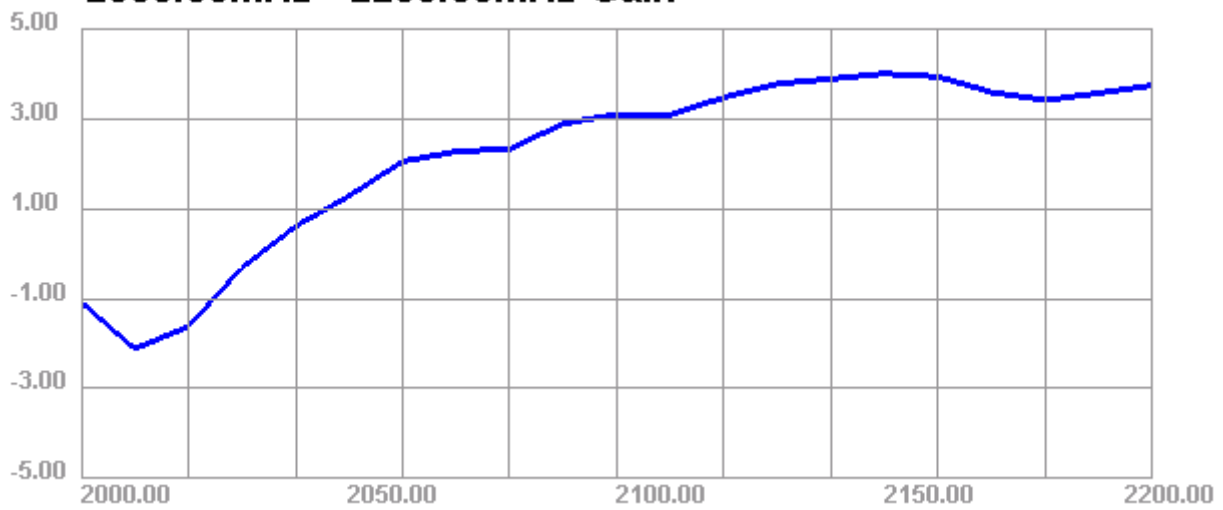
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Email: sunwin_vip@163.com

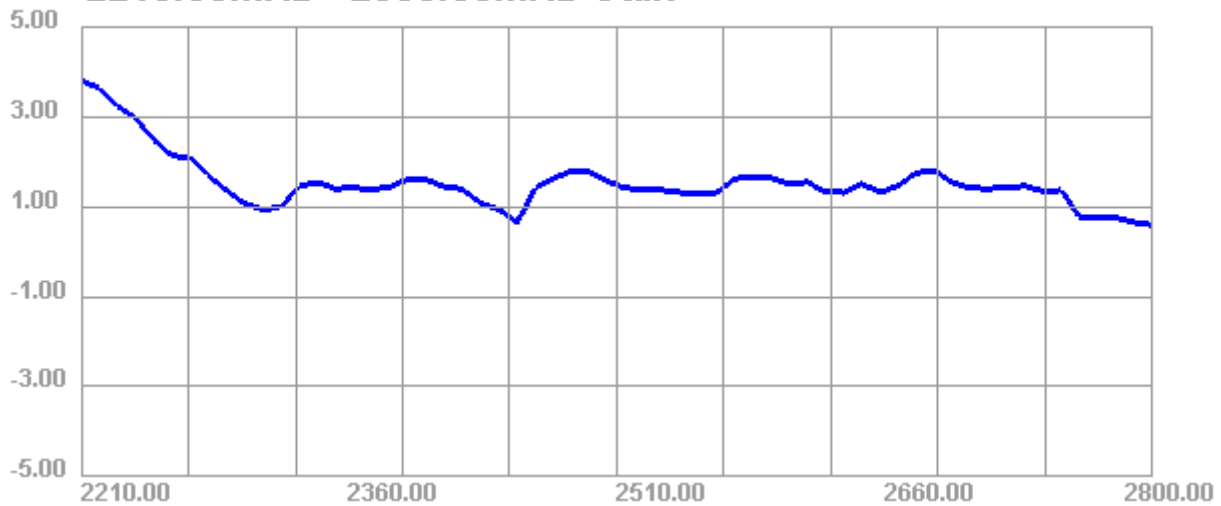


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2000.00MHz - 2200.00MHz Gain



2210.00MHz - 2800.00MHz Gain



Freq. (MHz)		700	800	900	960	1710	1800	2000	2200	2400	2700
Gain		0.99	2.55	2.1	2.44	1.88	0.16	-1.08	3.74	1.6	1.41

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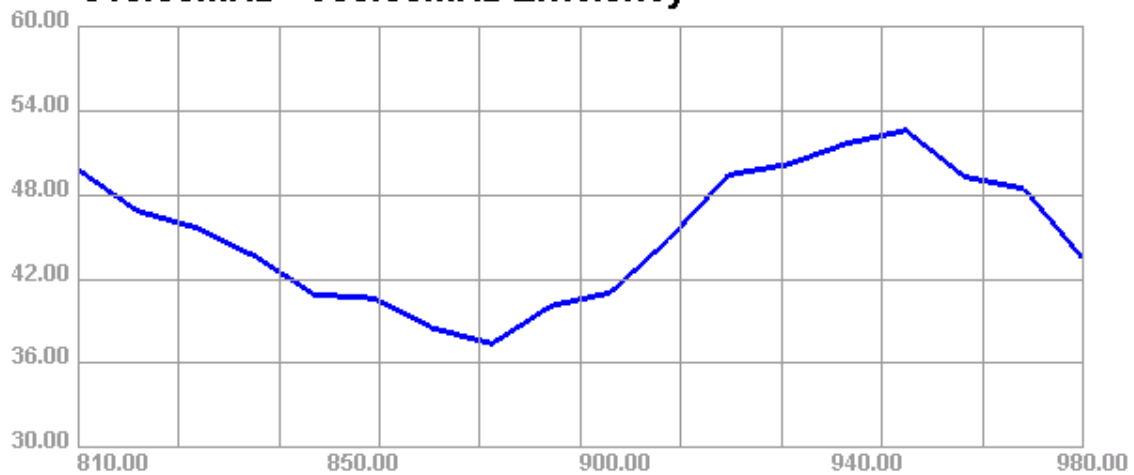


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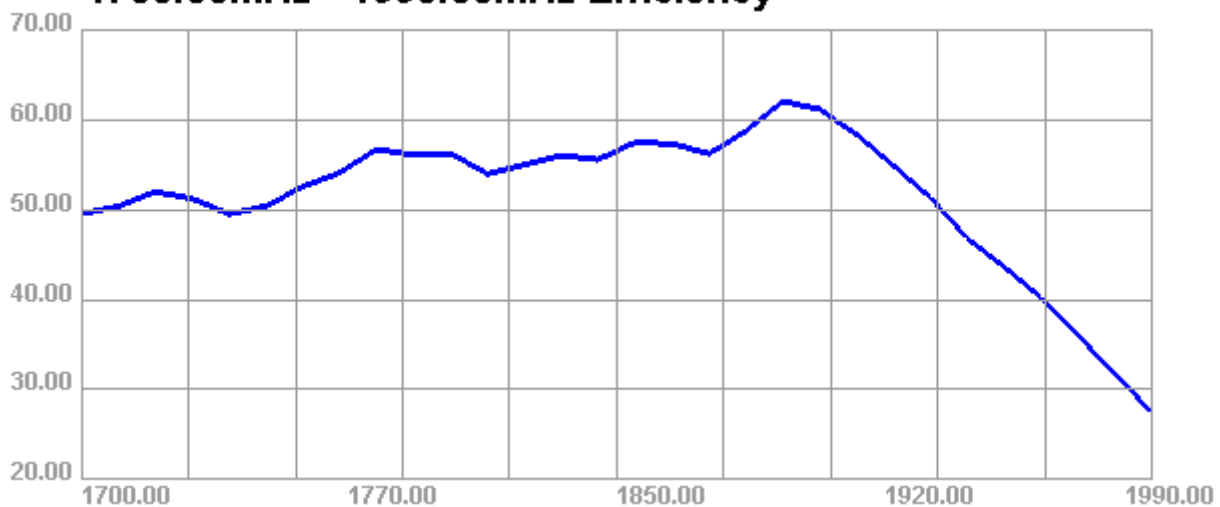
650.00MHz - 800.00MHz Efficiency



810.00MHz - 980.00MHz Efficiency



1700.00MHz - 1990.00MHz Efficiency

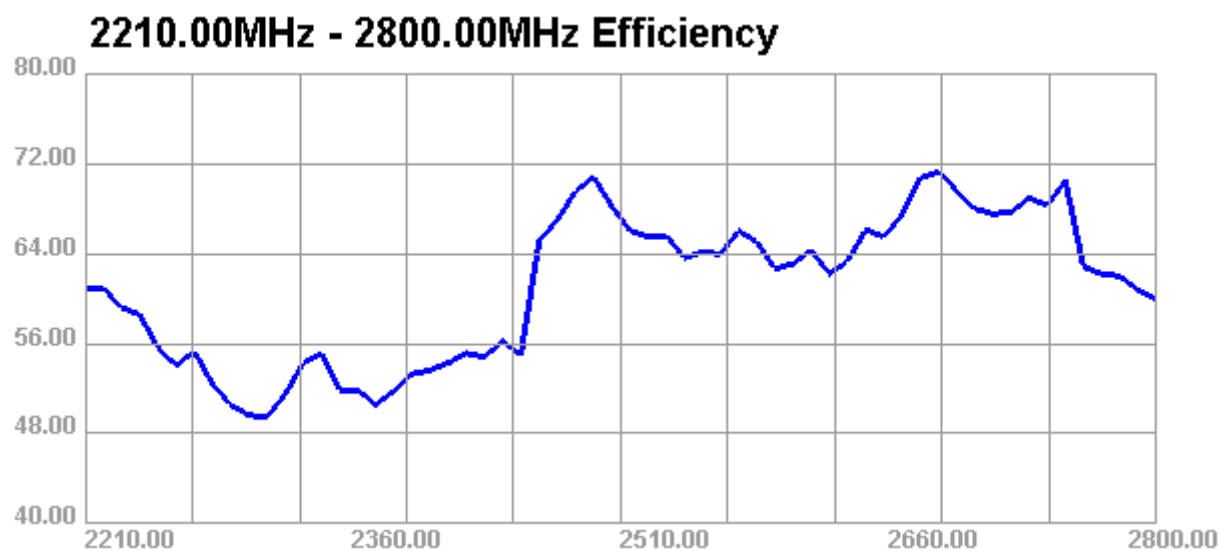
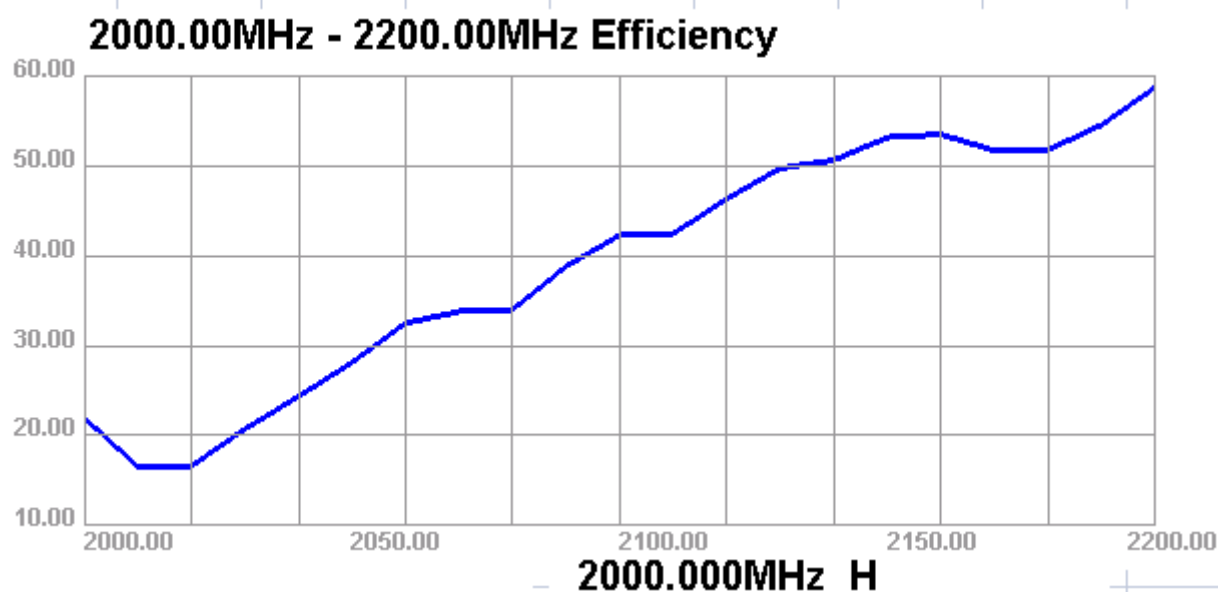


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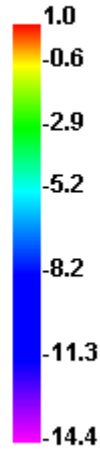
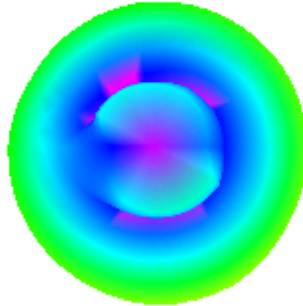
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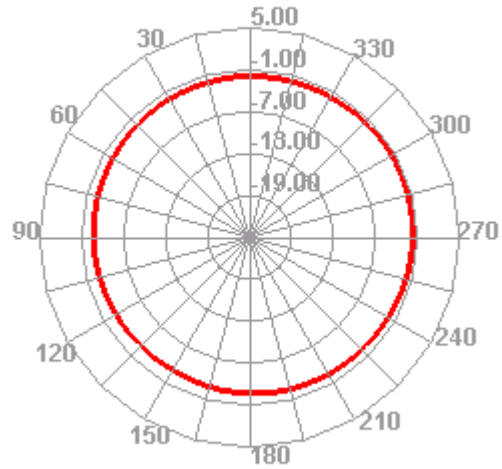


Freq. (MHz)	700	800	900	960	1710	1800	2000	2200	2400	2700
Effi (%)	39.72	53.6	41.05	49.28	50.39	56.26	31.97	58.71	53.65	67.99

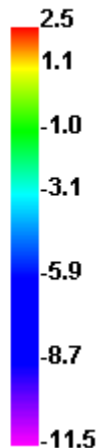
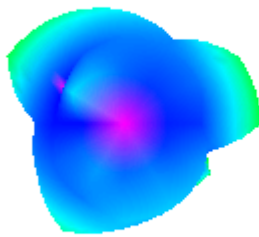
700.000MHz



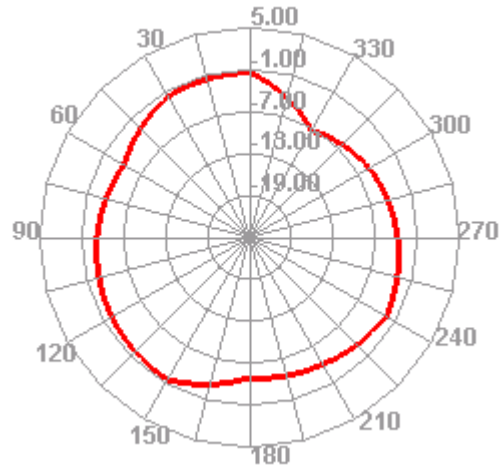
700.000MHz H



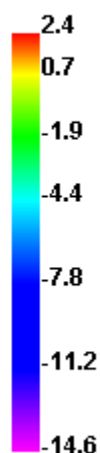
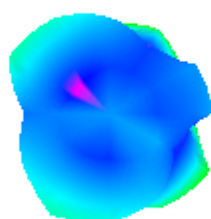
810.000MHz



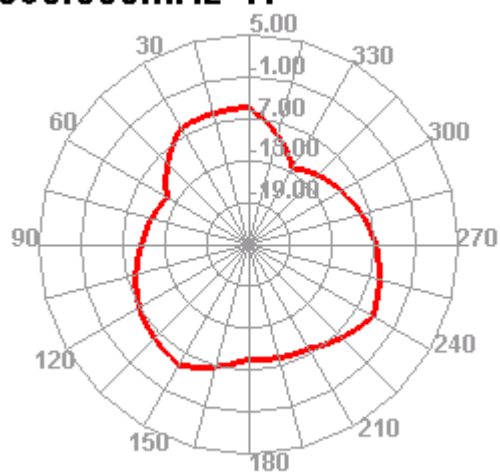
810.000MHz H



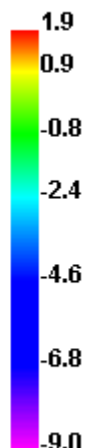
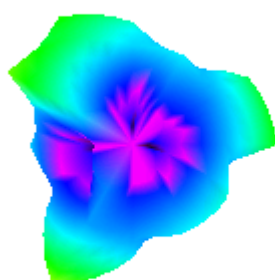
860.000MHz



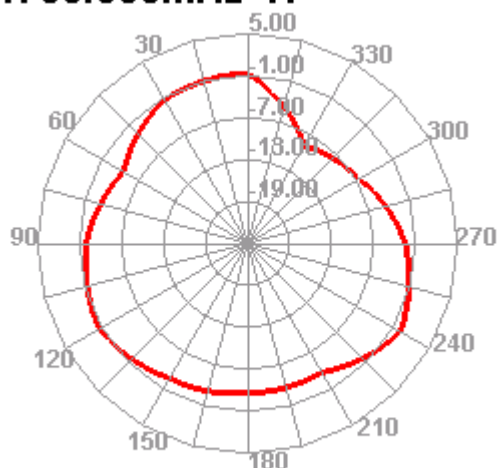
860.000MHz H



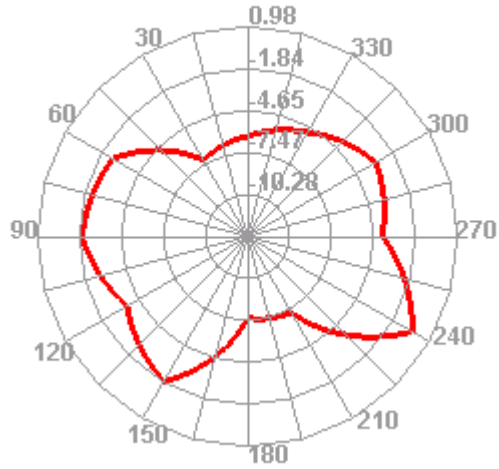
1700.000MHz



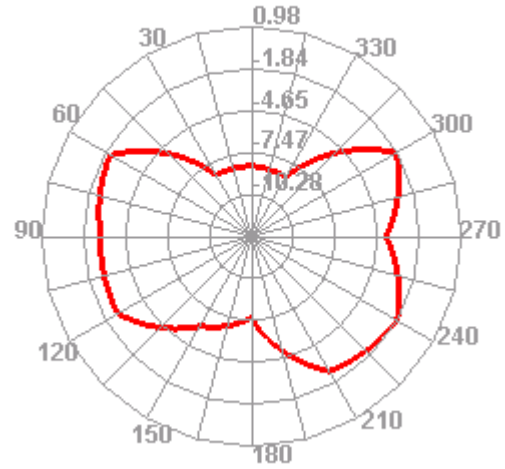
1700.000MHz H



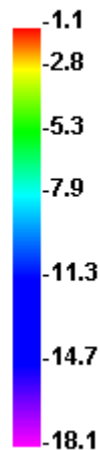
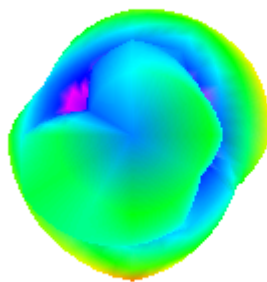
1750.000MHz E1



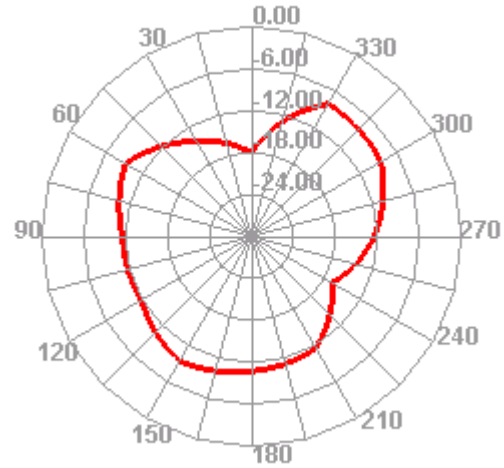
1750.000MHz E2



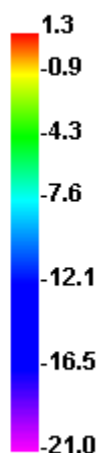
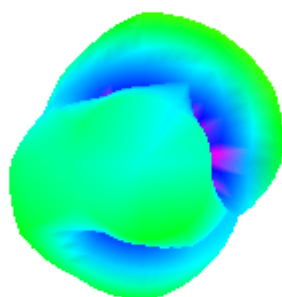
2000.000MHz



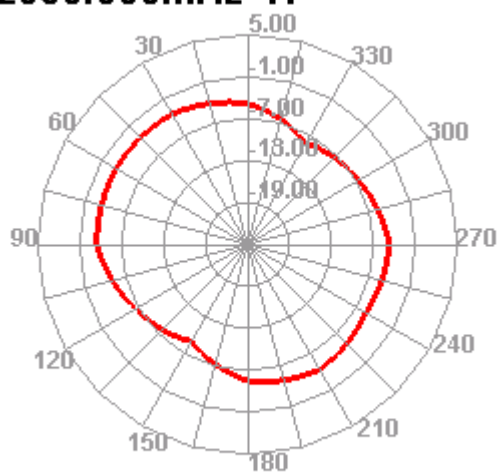
2000.000MHz H



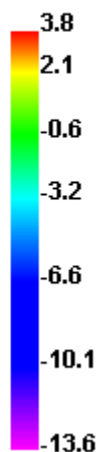
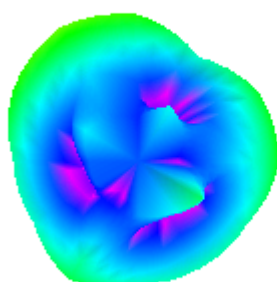
2050.000MHz



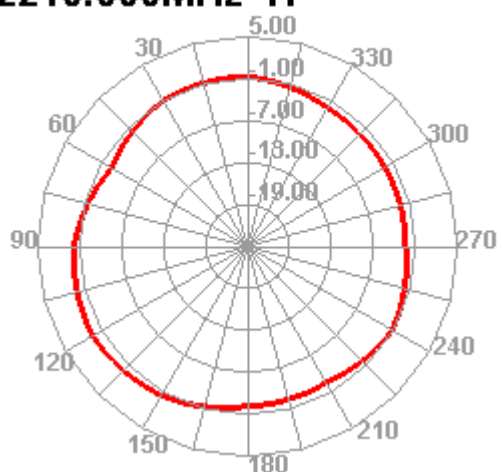
2050.000MHz H



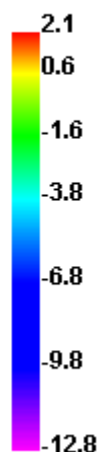
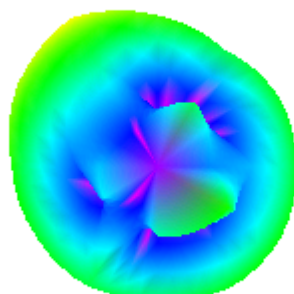
2210.000MHz



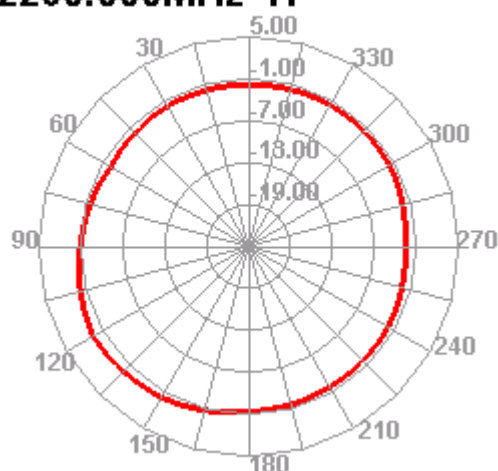
2210.000MHz H



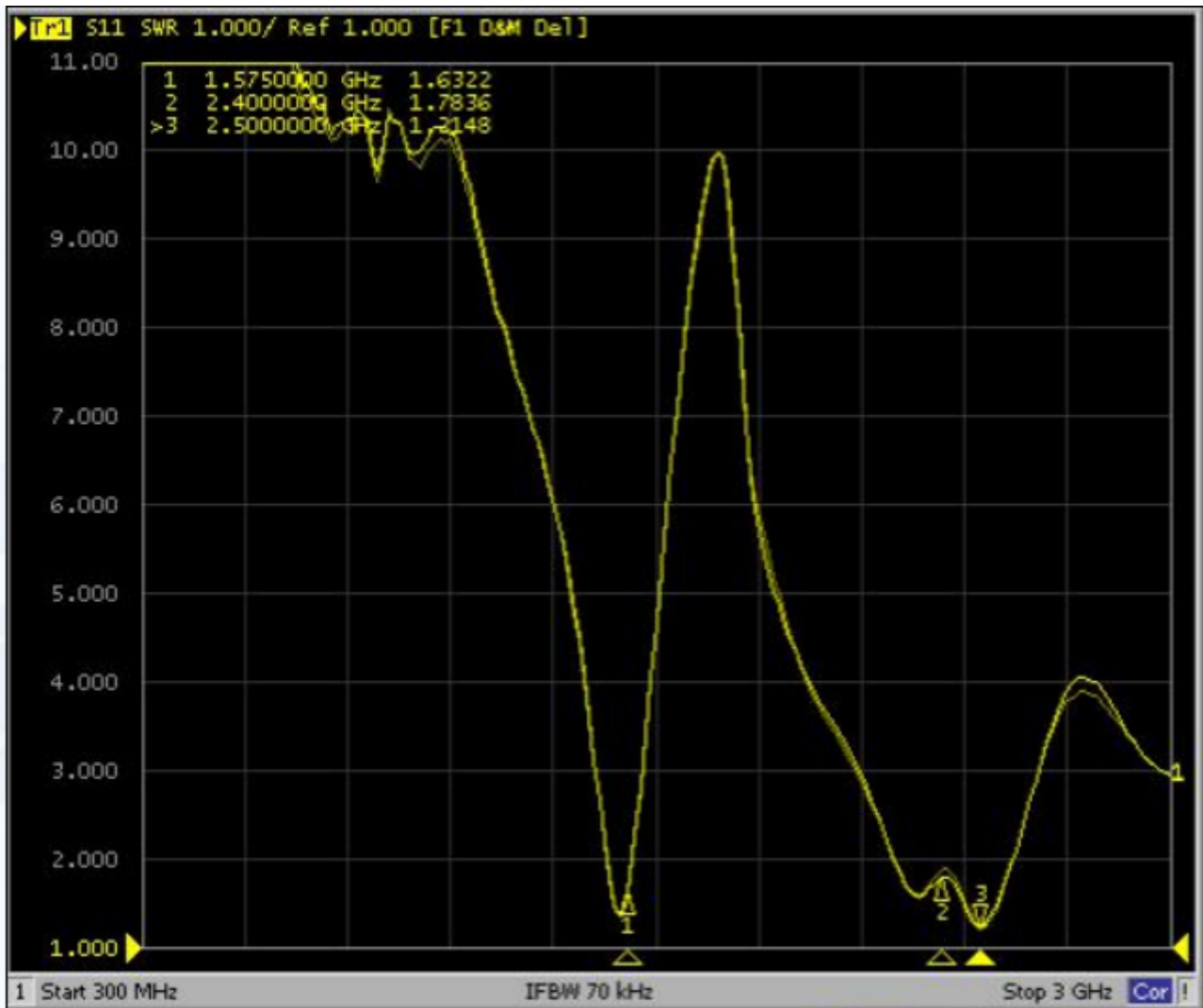
2260.000MHz



2260.000MHz H

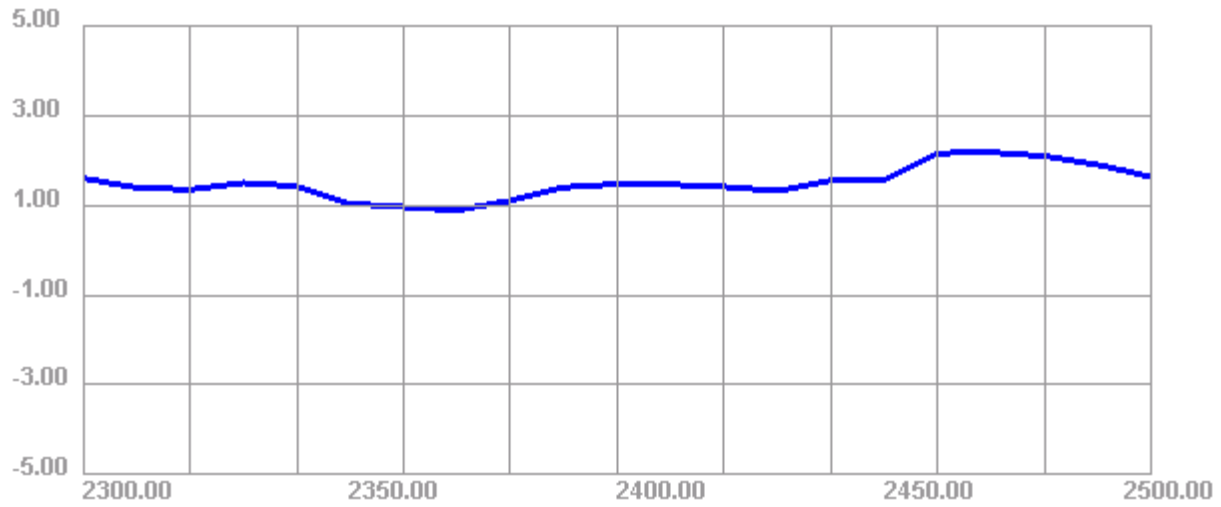


WiFi/BT 驻波和效率、增益图



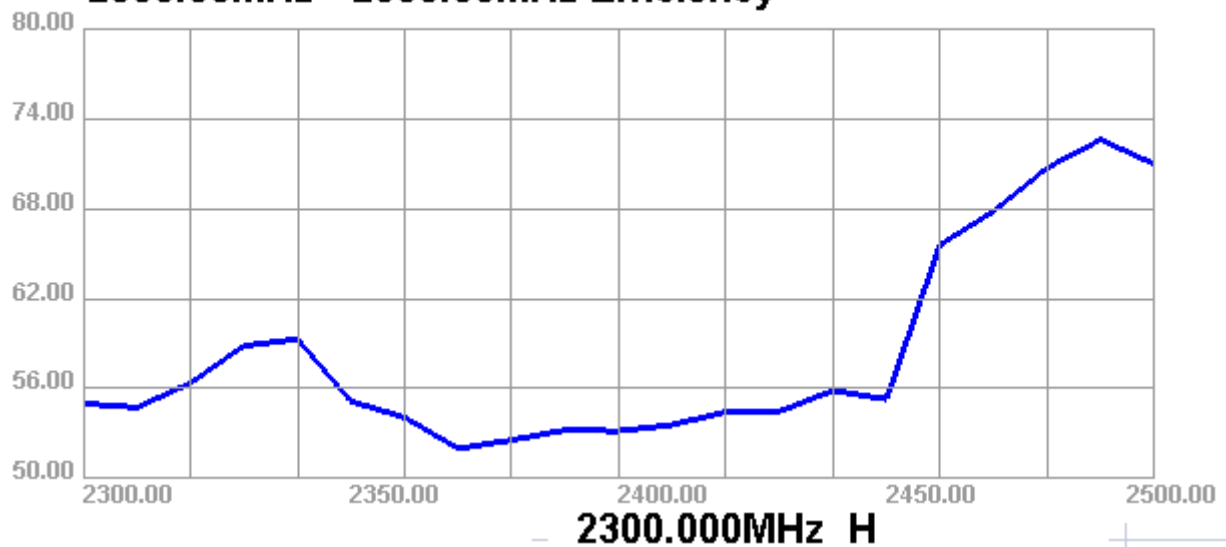
Freq. (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2500
VSWR	1.78	1.25	1.52	1.73	1.85	1.43	1.46	1.43	1.32	1.24

2300.00MHz - 2500.00MHz Gain

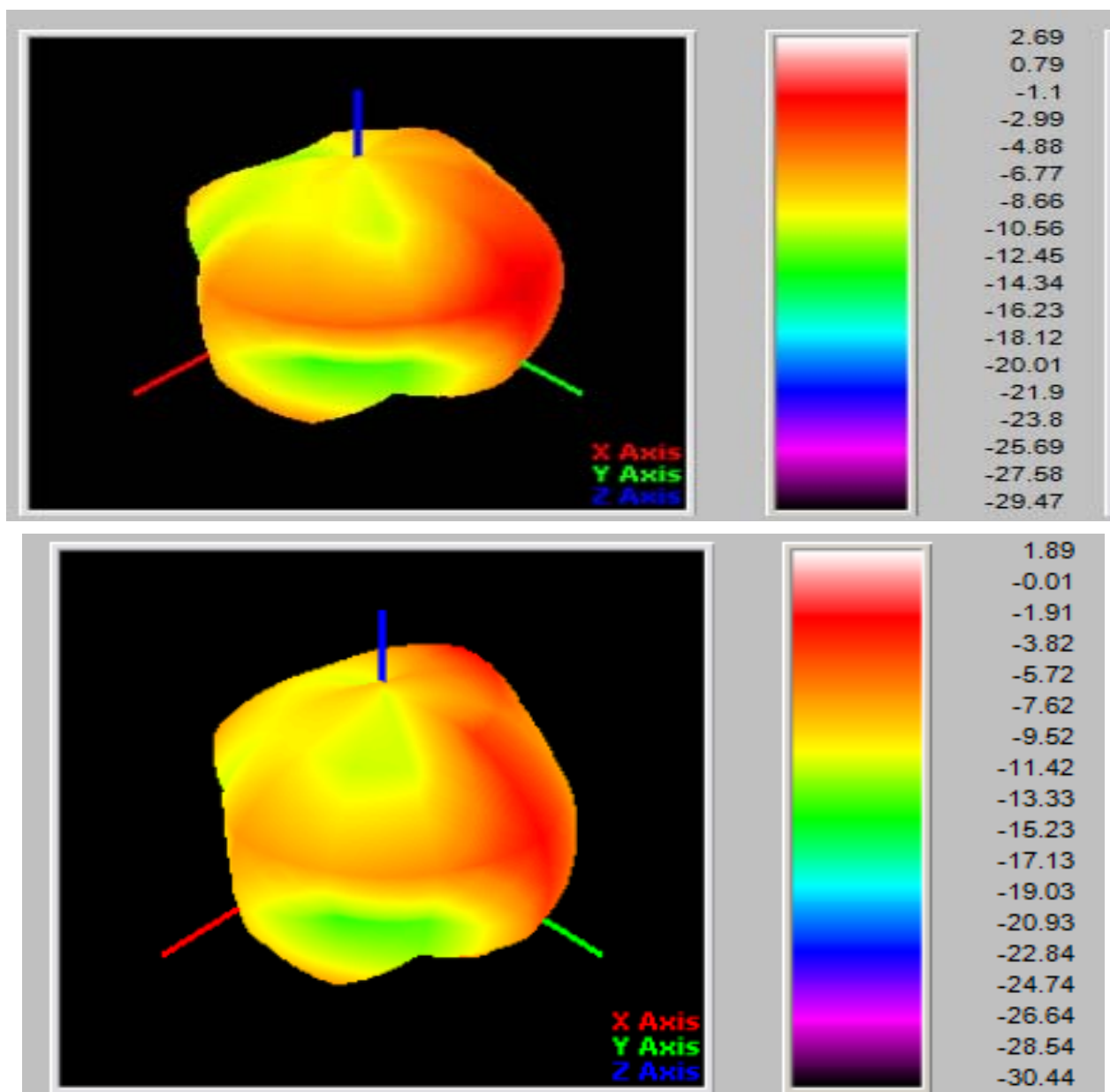


Freq. (MHz)	13.56	2400	2410	2420	2430	2440	2450	2460	2470	2480	2500
Gain	0	1.47	1.46	1.41	1.32	1.55	1.56	2.16	2.18	2.09	1.63

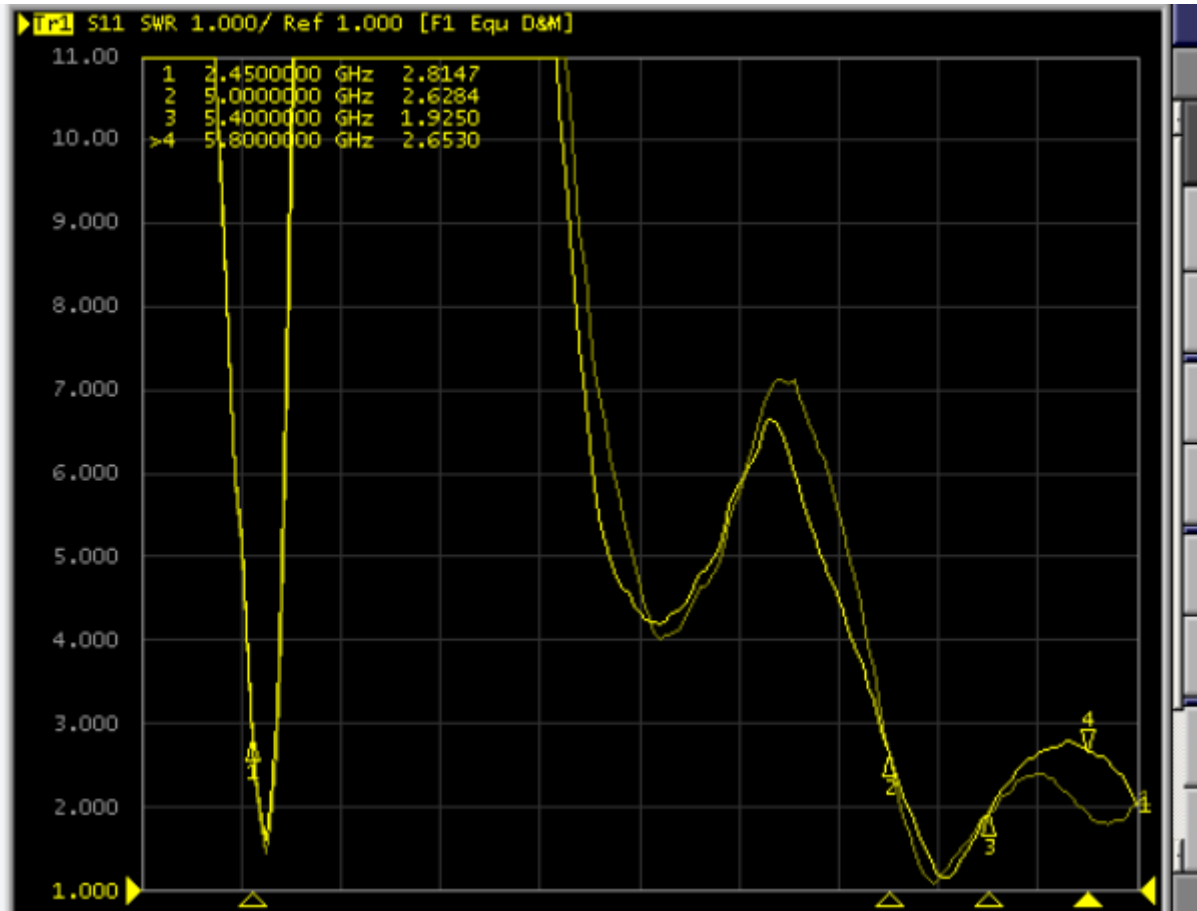
2300.00MHz - 2500.00MHz Efficiency



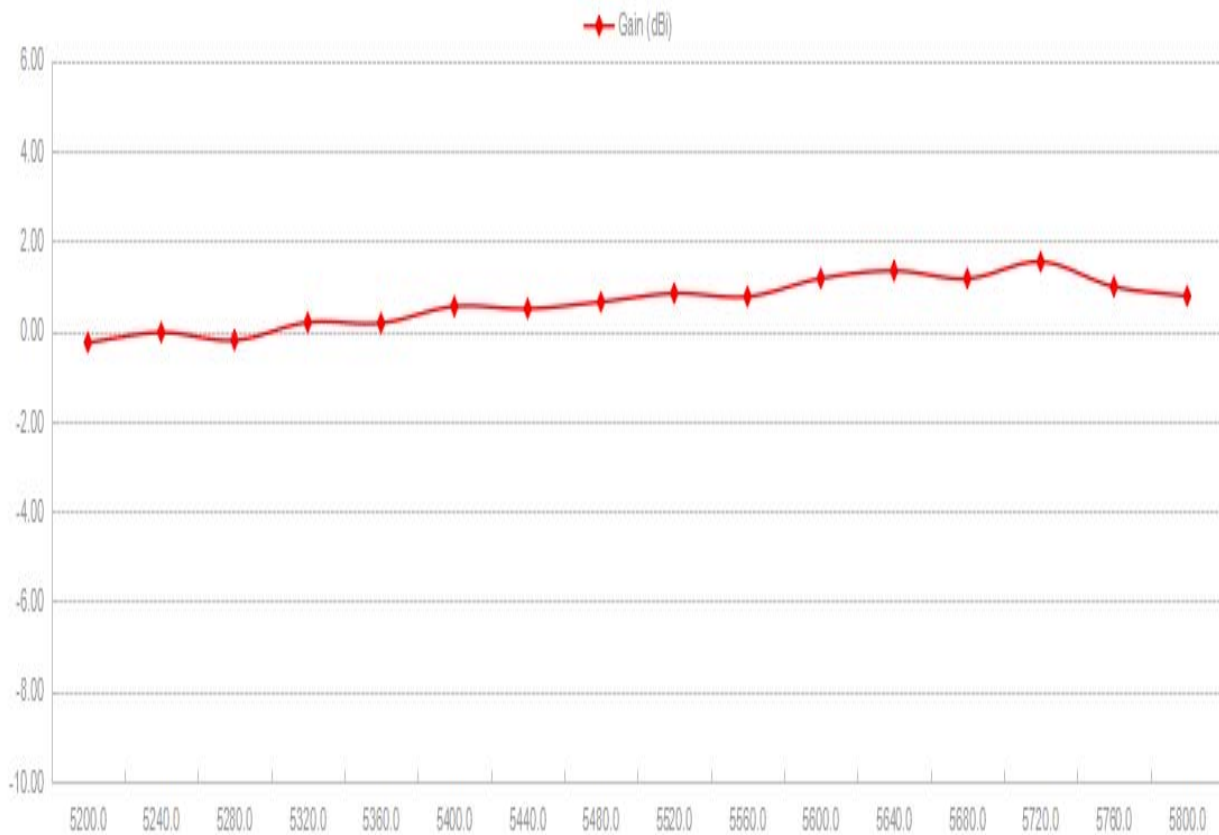
Freq. (MHz)		2400	2410	2420	2430	2440	2450	2460	2470	2480	2500
Effi (%)		39.72	53.6	41.05	49.28	50.39	56.26	31.97	58.71	53.65	67.99



5G WIFI Hamber Test Data



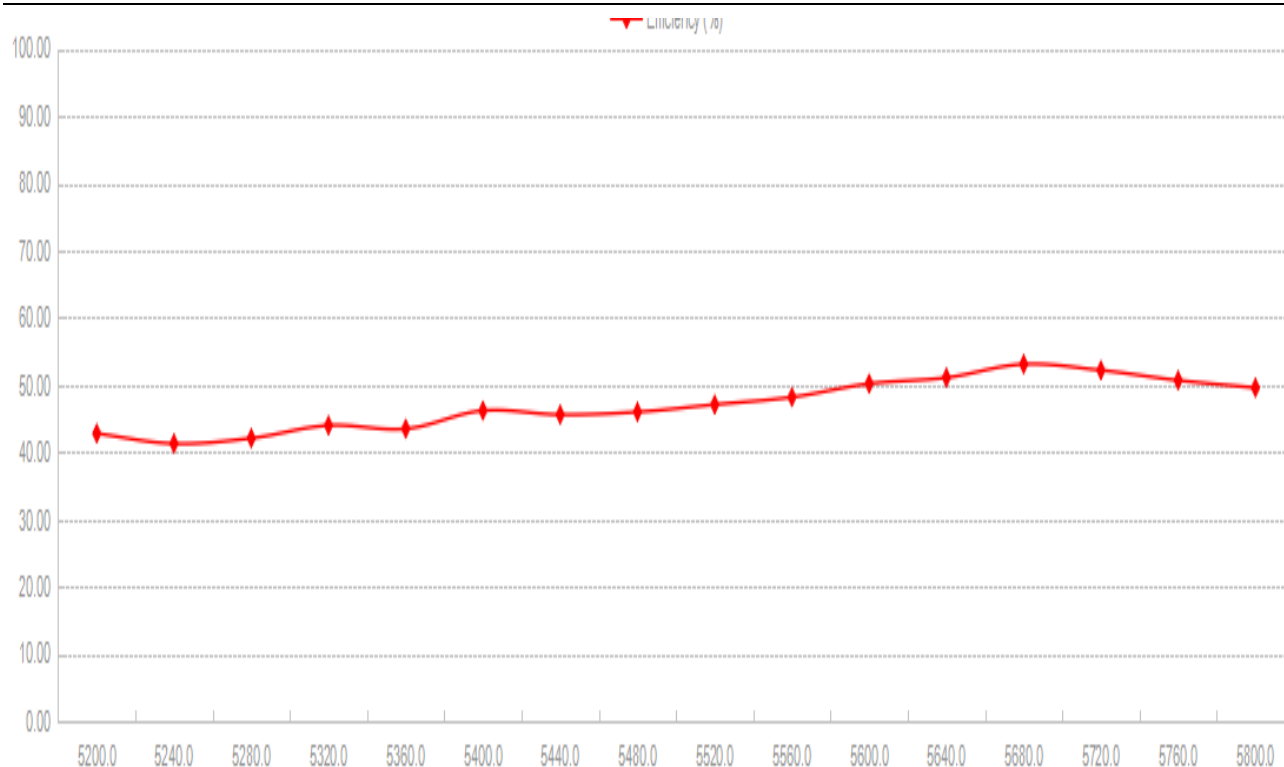
Freq. (MHz)	5200	5300	5400	5500	5600	5700	5800
VSWR	2.3	1.5	1.9	2.2	2.4	2.5	2.6



Freq. (MHz)		5200	5300	5400	5500	5600	5700	5800			
Gain		-0.26	-0.21	0.54	0.83	1.16	1.56	0.77			



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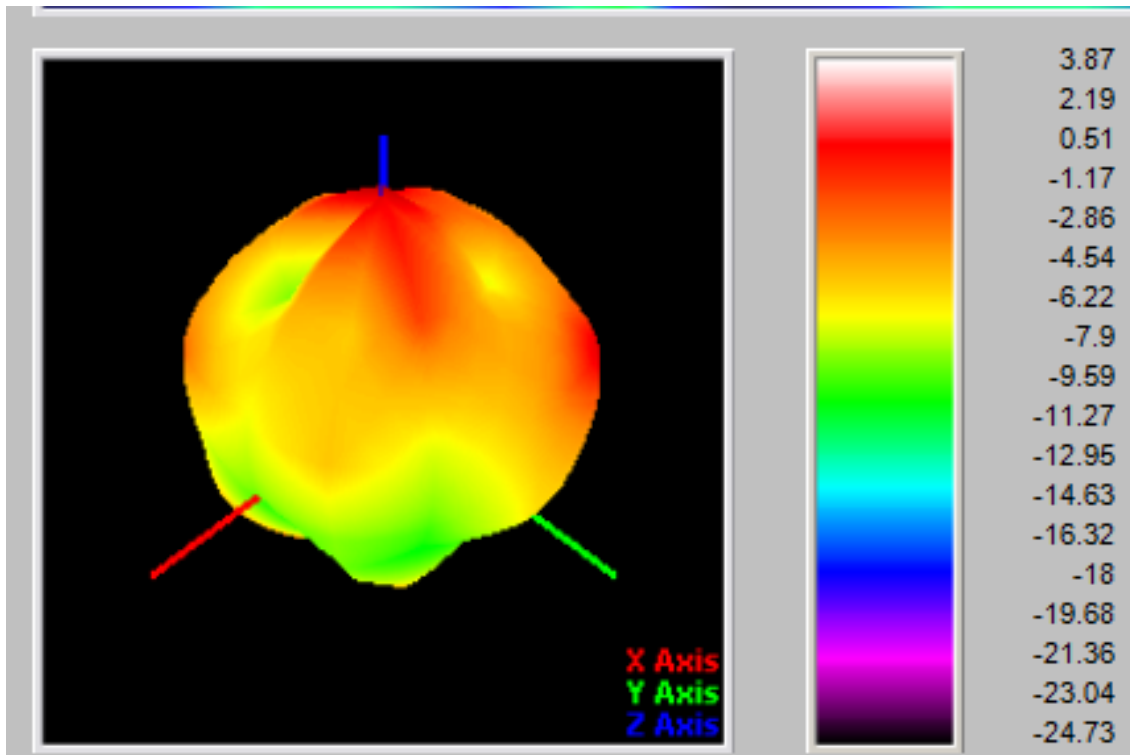
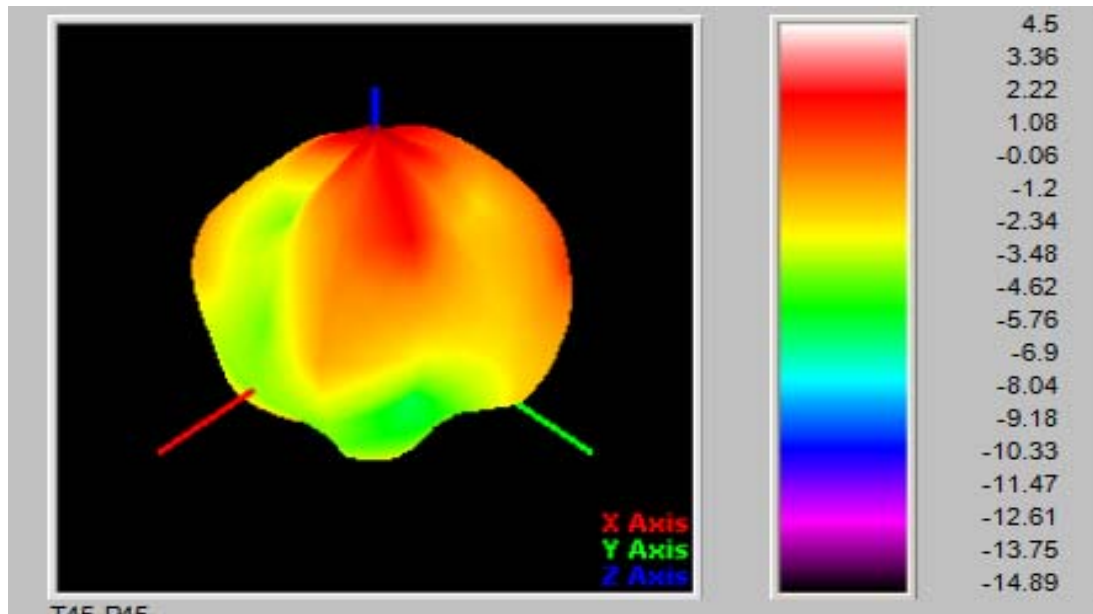
Freq. (MHz)		5200	5300	5400	5500	5600	5700	5800
Effi (%)		42.80	44.00	46.20	47.10	50.20	52.20	49.60

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2G	Channel	TRP (dBm)	TIS (dBm)
850	128	26.5	
	190	26.9	
	251	27.3	-105.1
900	1	27.5	
	62	27.1	
	124	26.4	-100.2
1800	512	27.3	
	698	26.8	
	885	25.8	-104.1
1900	512	24.7	
	661	24.4	
	810	24.5	-102.5

3G	Channel	TRP (dBm)	TIS (dBm)
W2	L	15.4	
	W	15.3	
	H	15.7	-105.9
W4	L	17.1	
	W	16.6	
	H	16.3	-102.9
W5	L	17.1	
	W	17.4	
	H	17.5	-105.5

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4G	Channel	TRP (dBm)	TIS (dBm)	4G	Channel	TRP (dBm)	TIS (dBm)
LTE-1	L	18.2		LTE-5	L	17.1	
	W	18.4			W	17.1	
	H	18.8	-90.1		H	17.5	-89.1
LTE-2	L	16.1		LTE-12	L	13.2	
	W	16.2			W	13.4	
	H	16.3	-94.1		H	13.3	-92.8
LTE-3	L	17.2		LTE-13	L	16.2	
	W	17.6			W	16.3	-92.6
	H	17.9	-87.5		H	16.7	
LTE-4	L	16.2		LTE-17	L	13.3	
	W	16.1			W	13.3	
	H	15.6	-92.3		H	13.3	-92.1

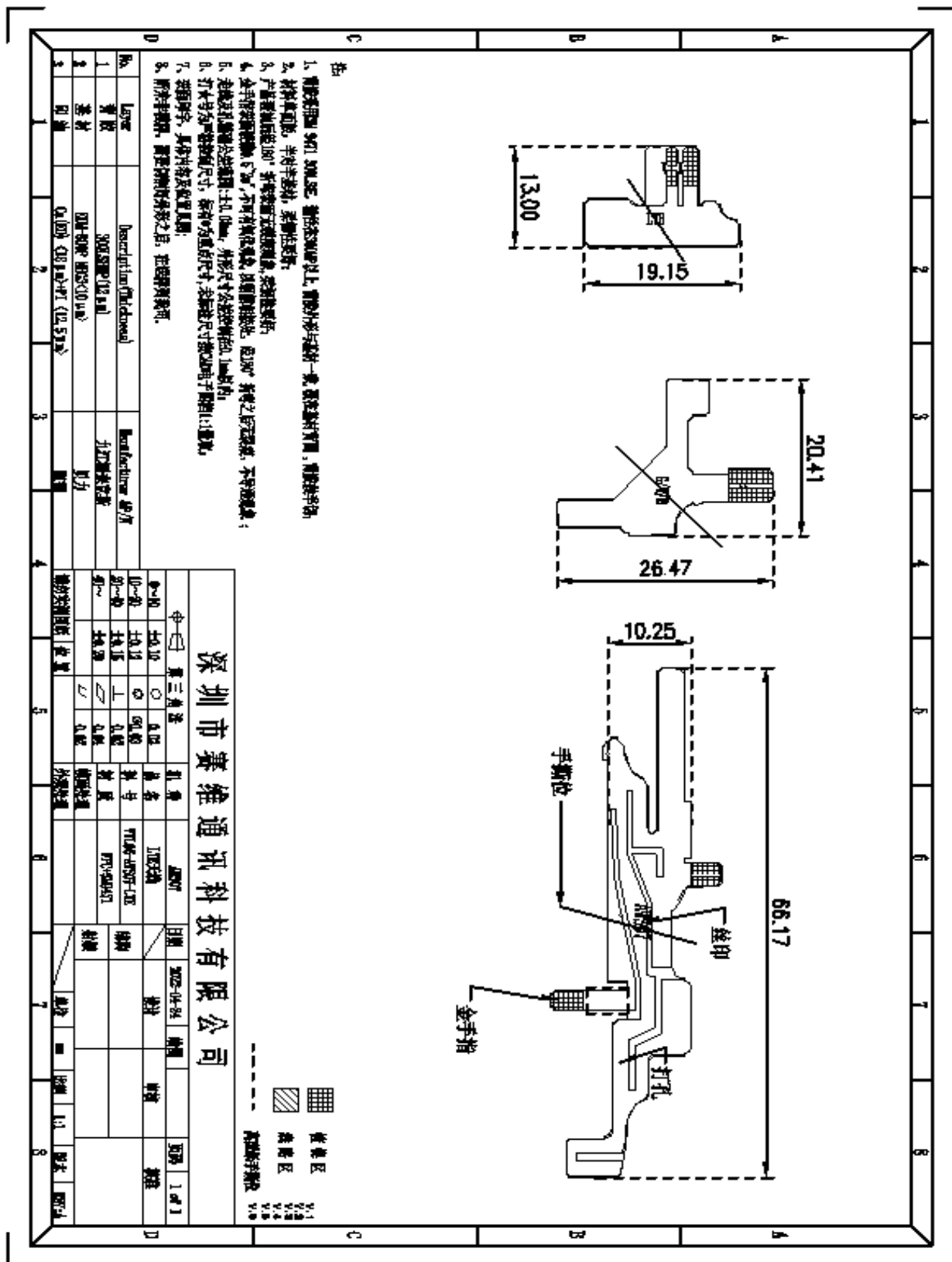
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4 QC schedule drawing/Mechanical Properties



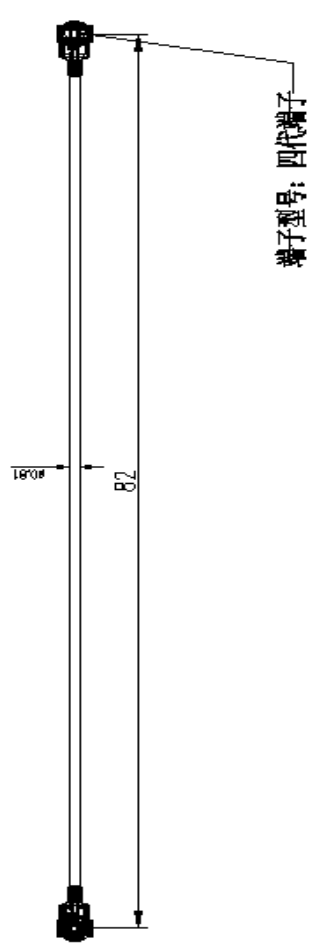
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端子同向



端子型号: 四代端子

技术要求

- 1、端子需和同轴线连接处需压合牢靠，两端端子同向
- 2、端子型号为四代端子，同轴线外径为0.8mm
- 3、同轴线表面无破损
- 4、同轴线颜色为黑色
- 4、符合RoHS标准

修改标记	
修改次数	修改说明
第一次	△
第二次	△

Third angle	Third angle
0°10	±0.05
10°18	±0.05
18°30	±0.05
30°40	±0.05
40°	±0.10

深圳市赛维通讯科技有限公司			
客户 customers	图号 DRAWN BY	孔文强	审核
材料 material	日期 DATE	2022-04-24	CHECKED BY
数量 QTY.	比例 SCALE	1:1	批准 APPROVED BY



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5. Environmental Characteristic

Test Item	Test description
1. Low Temperature	Temp.: -20 °C Time: 24 hours
2. High Temperature	Temp.: 80°C Time: 24 hours
3. Salt Fog	5±0.1% Nad salt fog PH Value: 6.5-7.2 Temp: 35±1°C Time:24 hours