



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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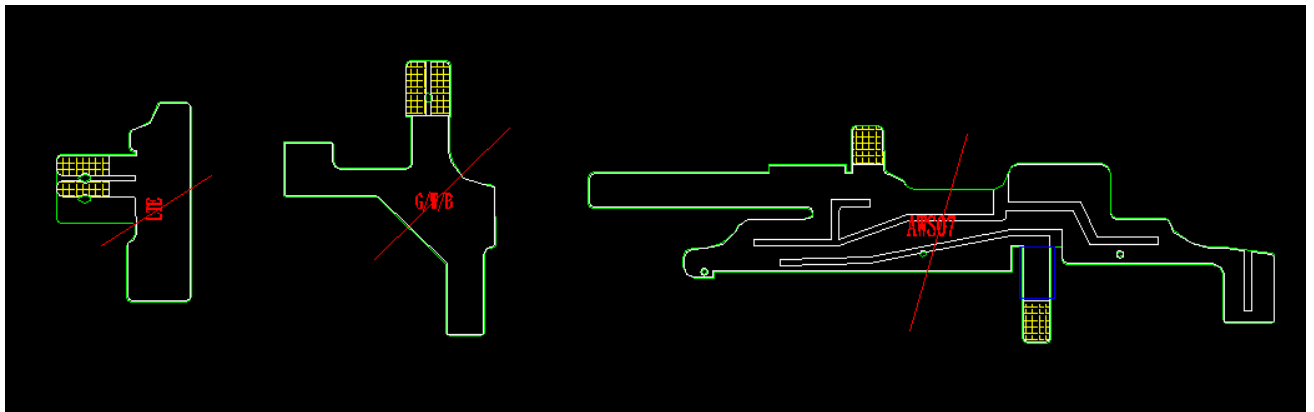
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1.Specifications

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.

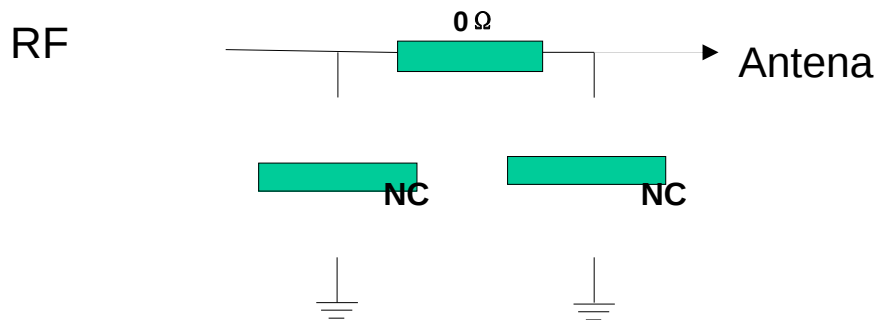


Figure 2-2: Matching circuit

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

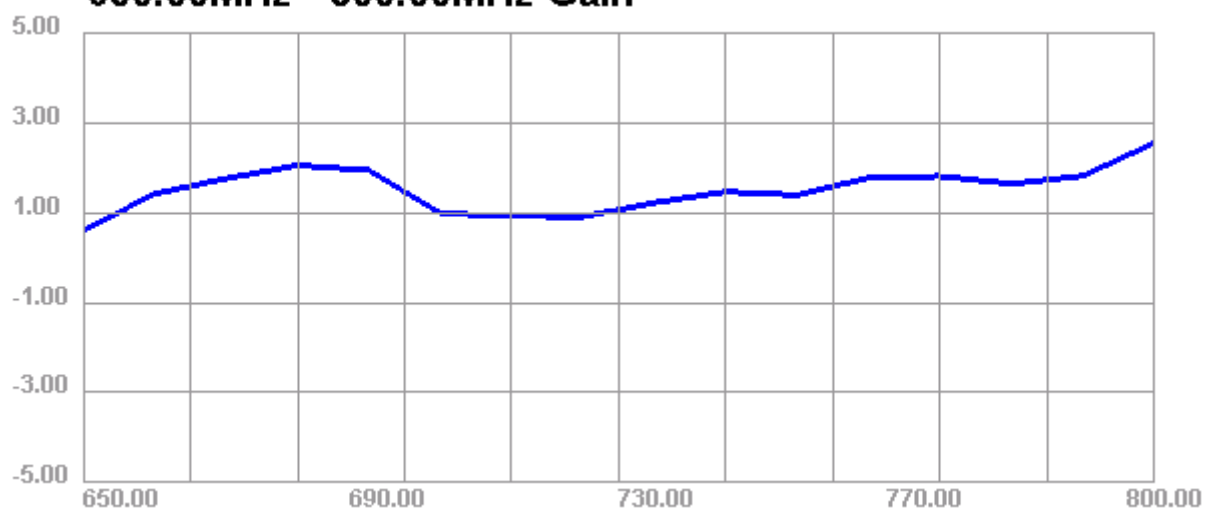


Freq. (MHz)		700	800	900	960	1710	1800	2000	2200	2400	2700
VSWR		3.21	2.4	1.9	3.88	2.81	1.98	1.78	1.63	1.72	1.35

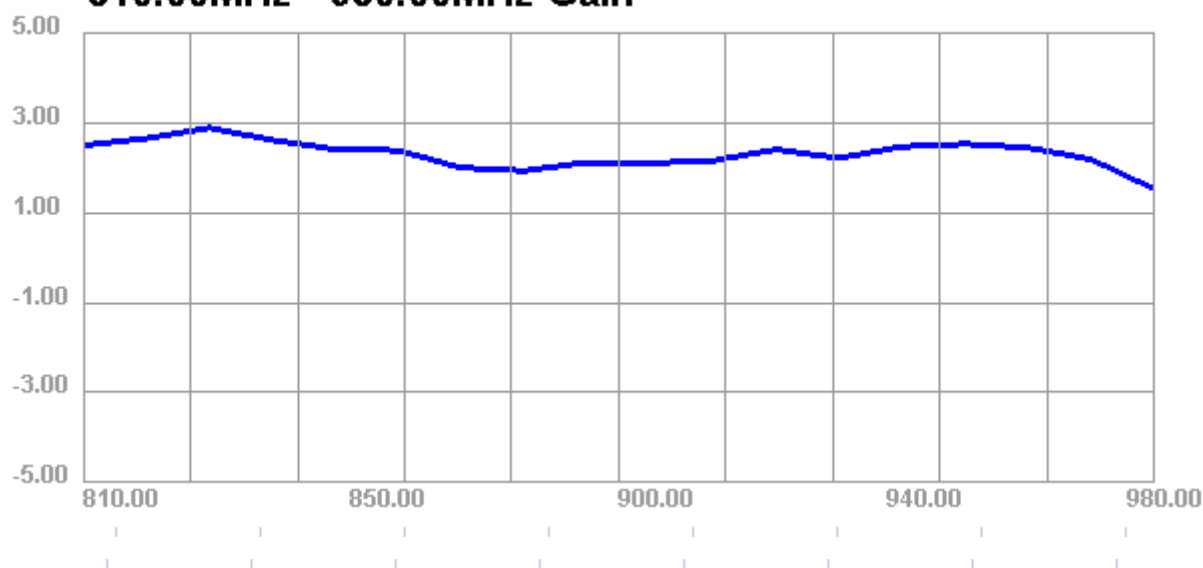


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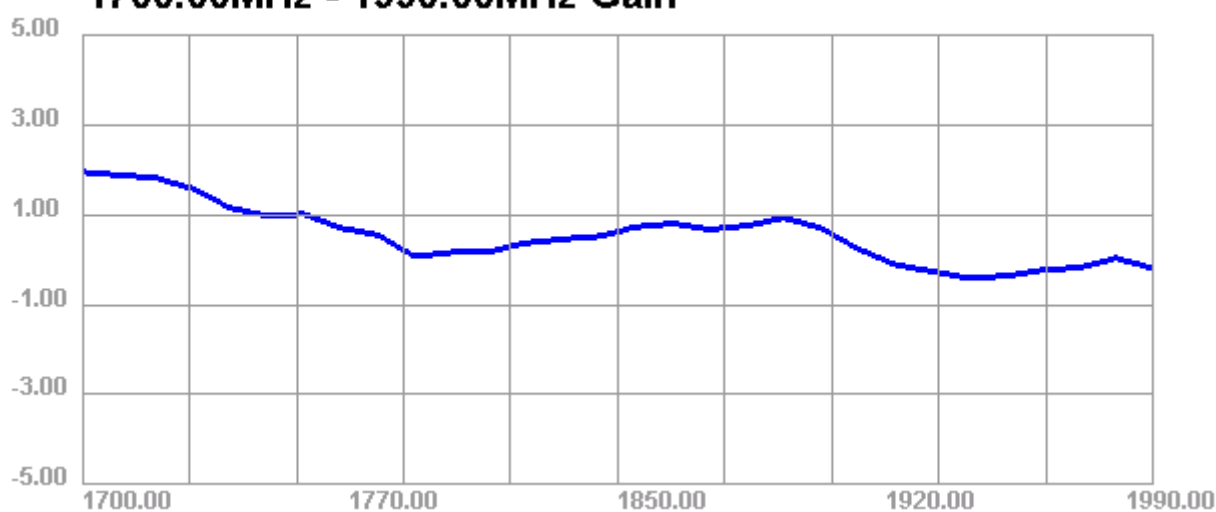
650.00MHz - 800.00MHz Gain



810.00MHz - 980.00MHz Gain



1700.00MHz - 1990.00MHz Gain



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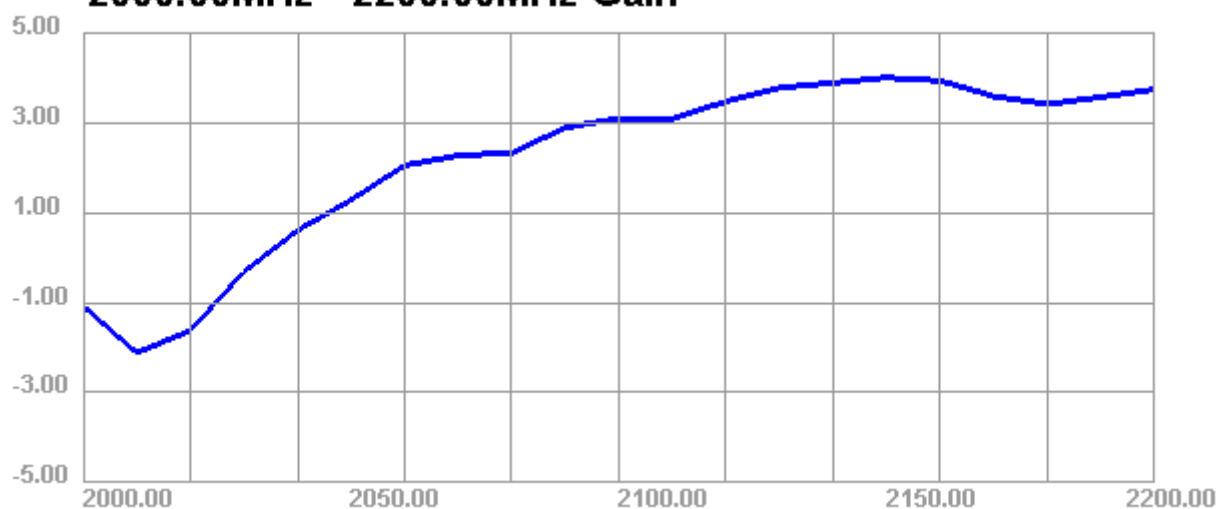
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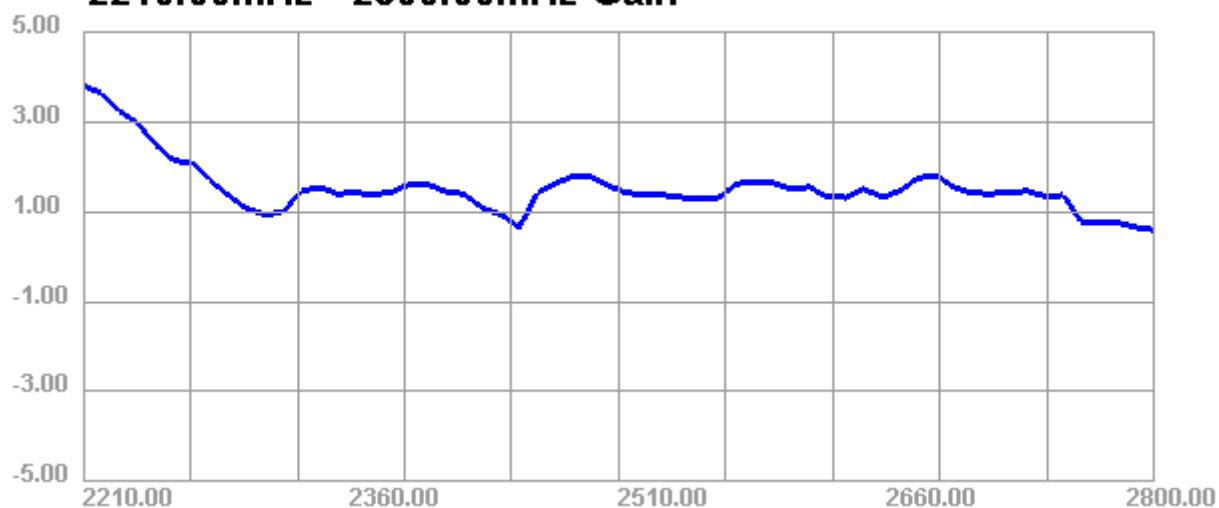


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2000.00MHz - 2200.00MHz Gain



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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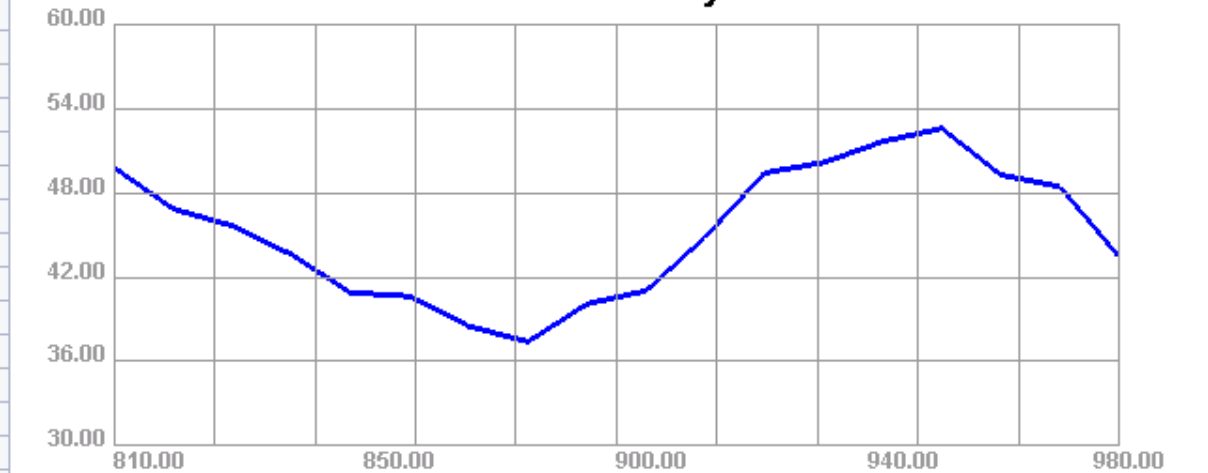
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650.00MHz - 800.00MHz Efficiency

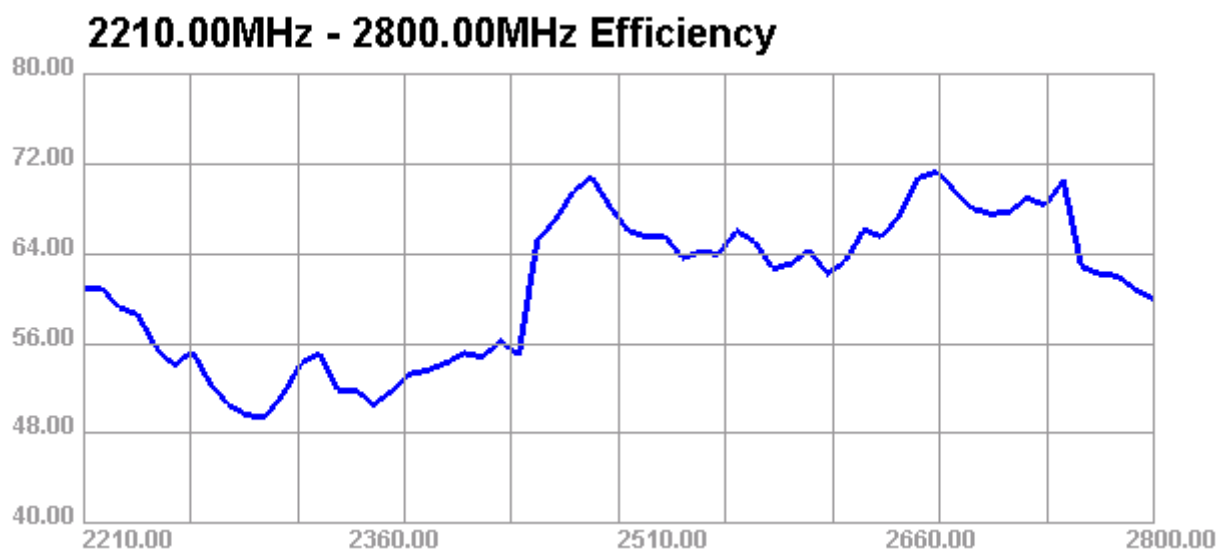
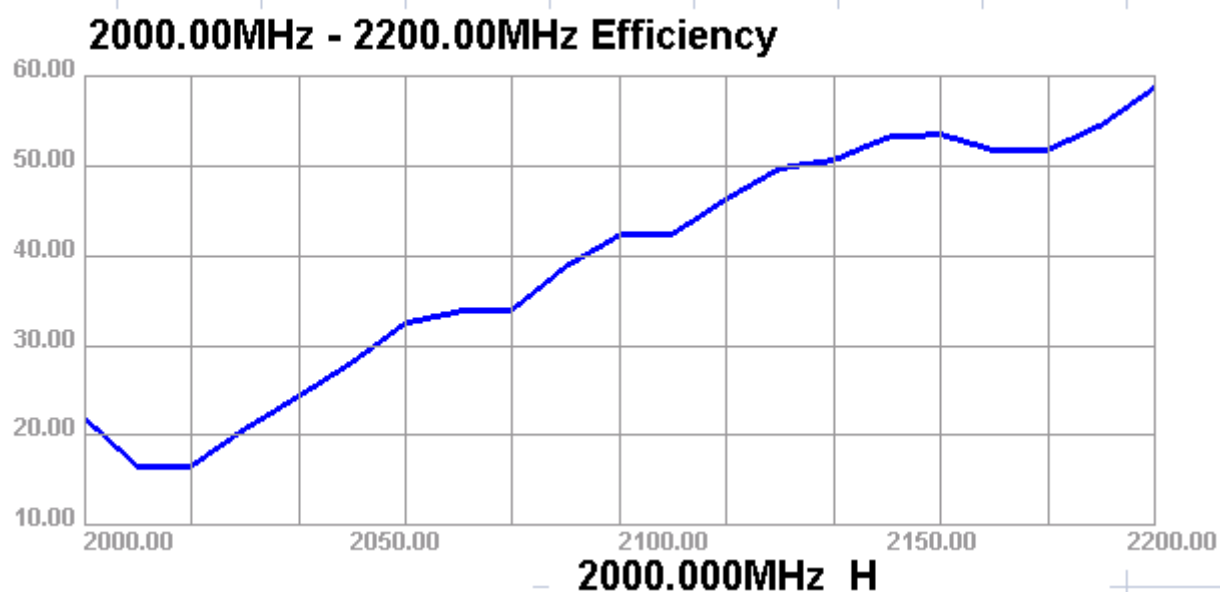


810.00MHz - 980.00MHz Efficiency



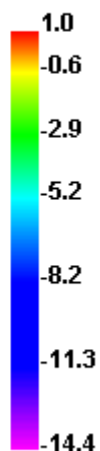
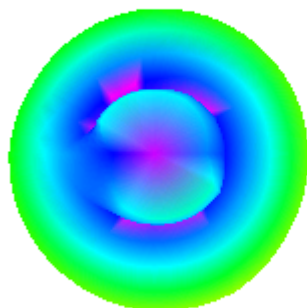
1700.00MHz - 1990.00MHz Efficiency



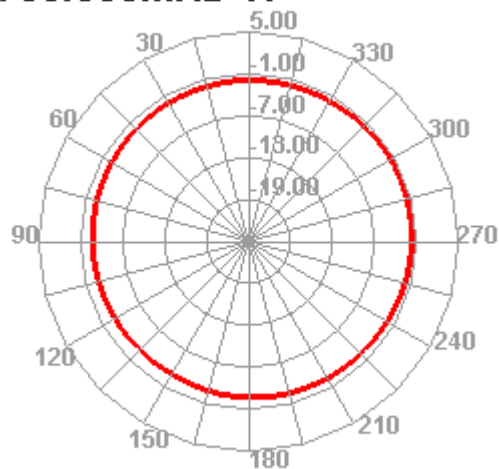


Freq. (MHz)	700	800	900	960	1710	1800	2000	2200	2400	2700
Effi (%)	39.72	53.6	41.05	49.28	50.39	56.26	31.97	58.71	53.65	67.99

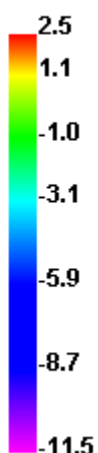
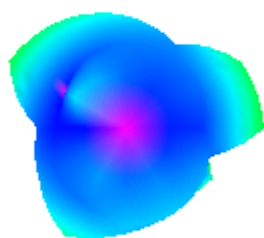
700.000MHz



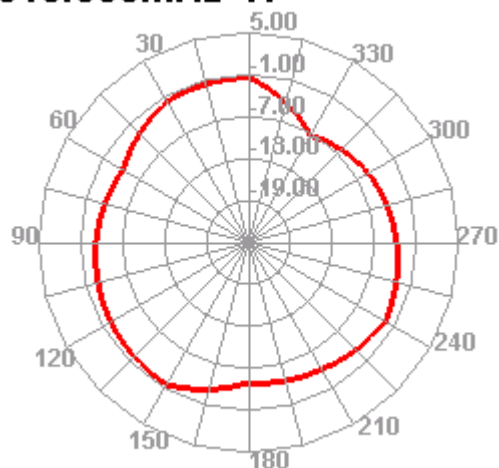
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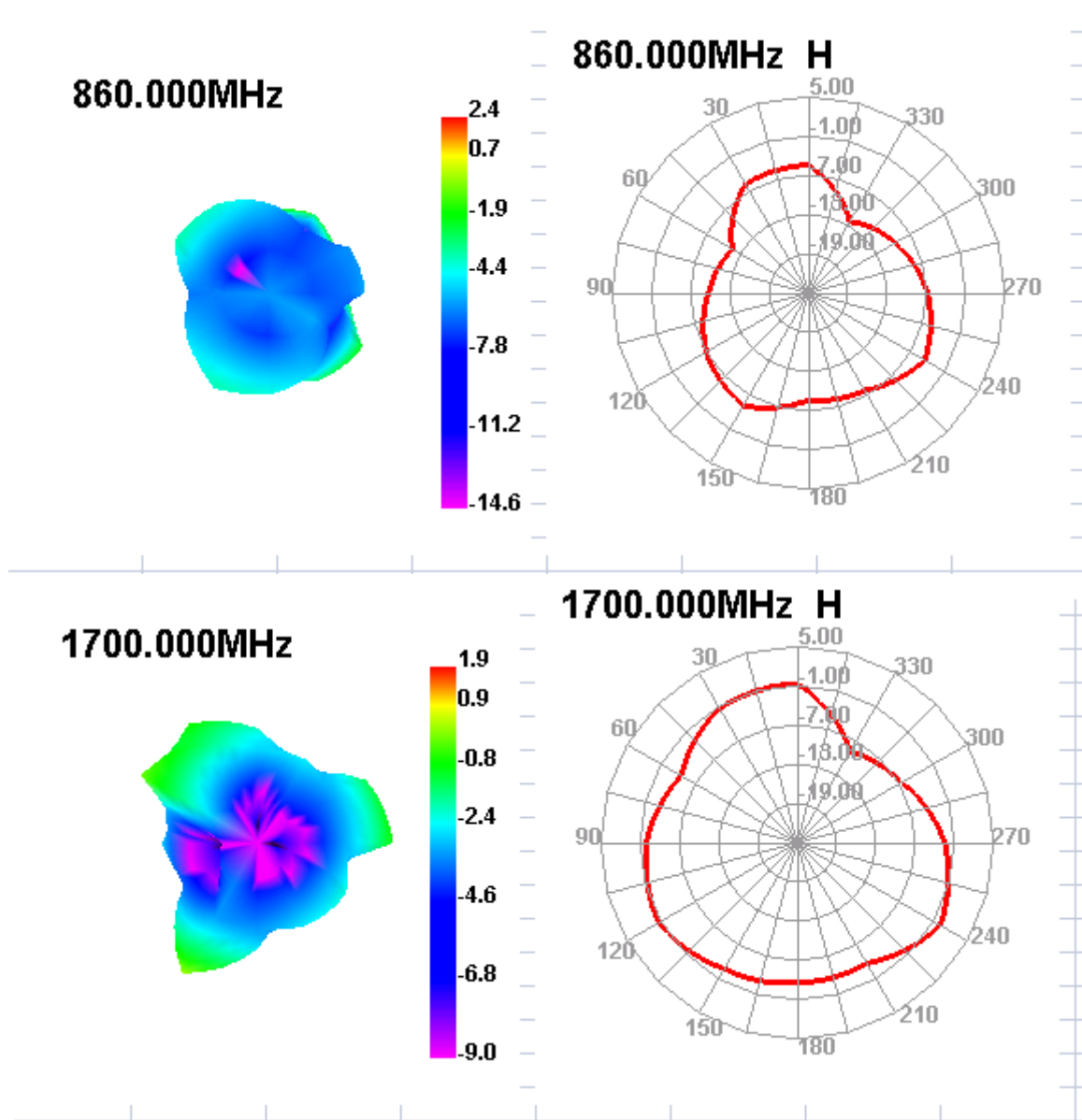


810.000MHz

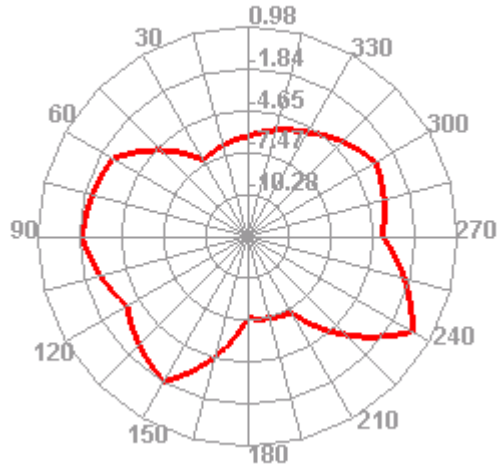


810.000MHz H

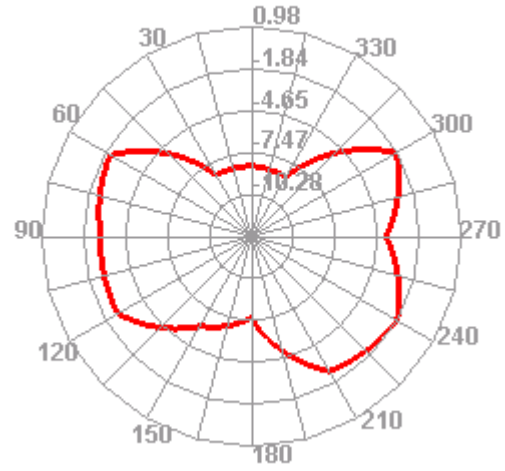




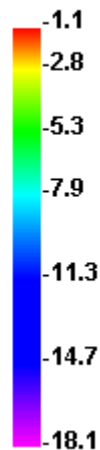
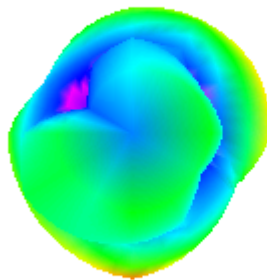
1750.000MHz E1



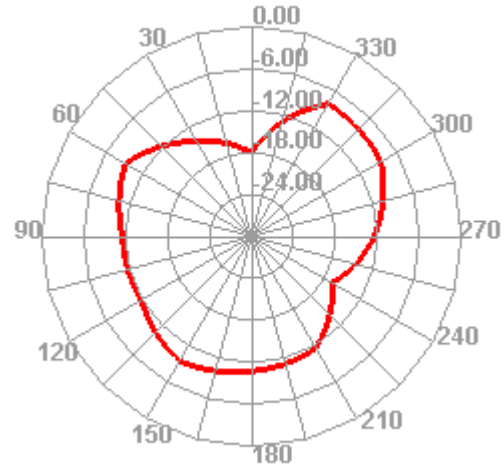
1750.000MHz E2



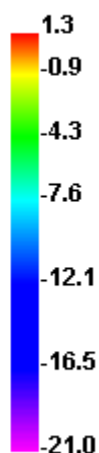
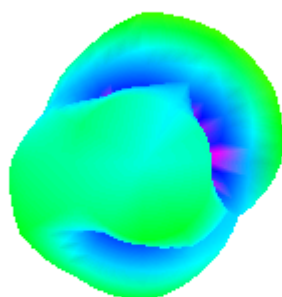
2000.000MHz



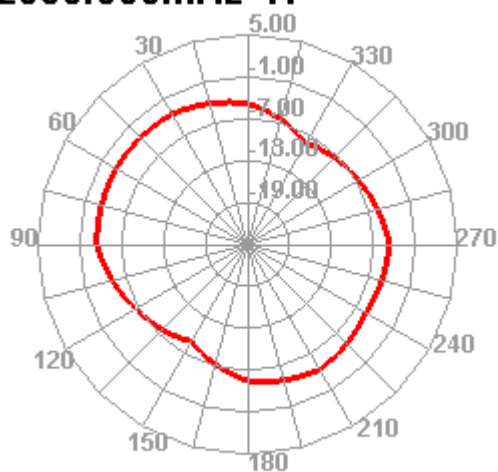
2000.000MHz H



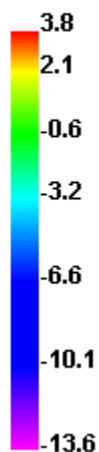
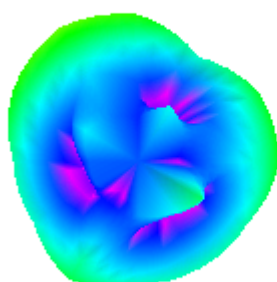
2050.000MHz



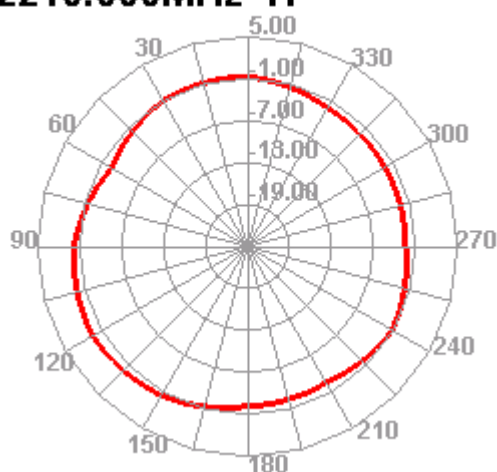
2050.000MHz H



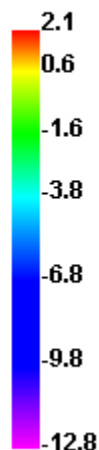
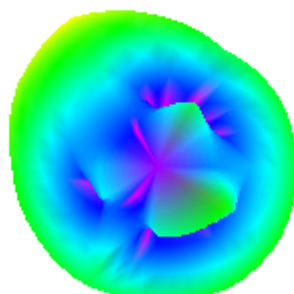
2210.000MHz



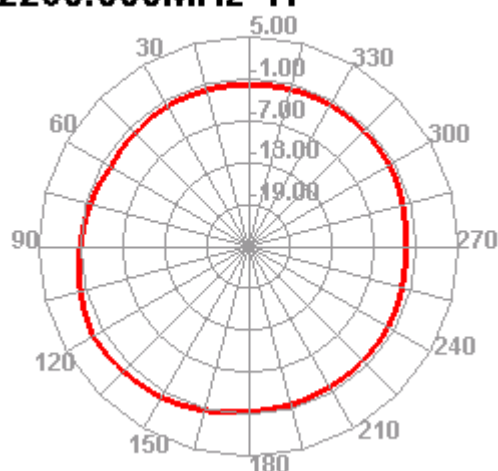
2210.000MHz H



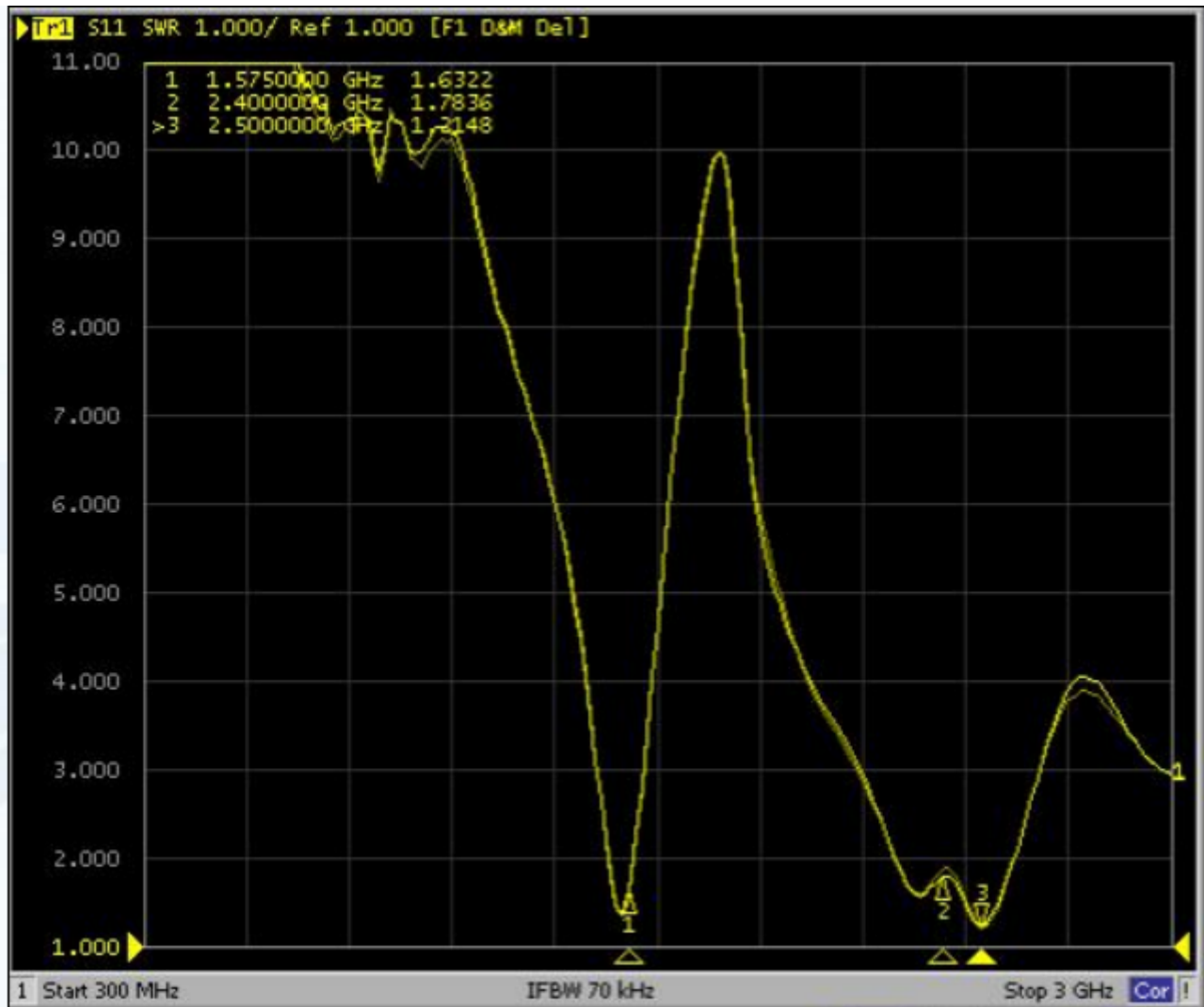
2260.000MHz



2260.000MHz H

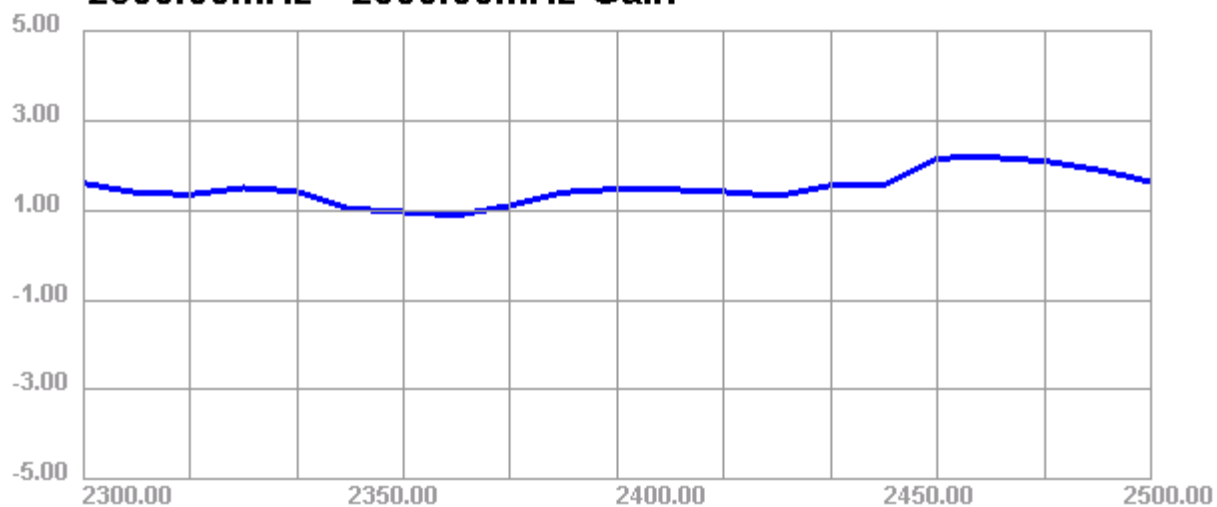


WiFi/BT 驻波和效率、增益图



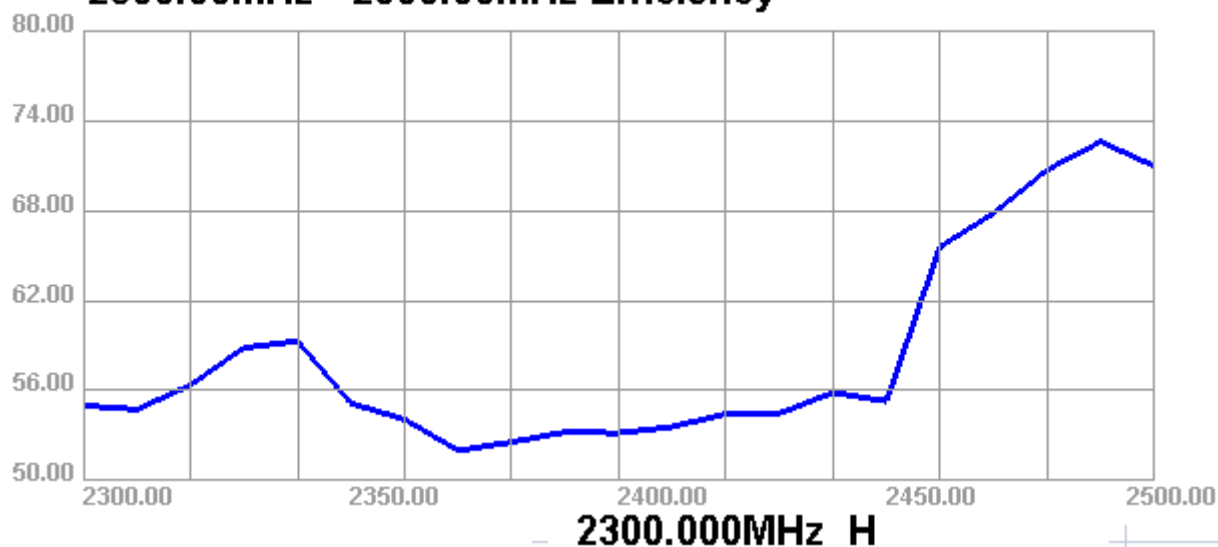
Freq. (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2500
VSWR	1.78	1.25	1.52	1.73	1.85	1.43	1.46	1.43	1.32	1.24

2300.00MHz - 2500.00MHz Gain

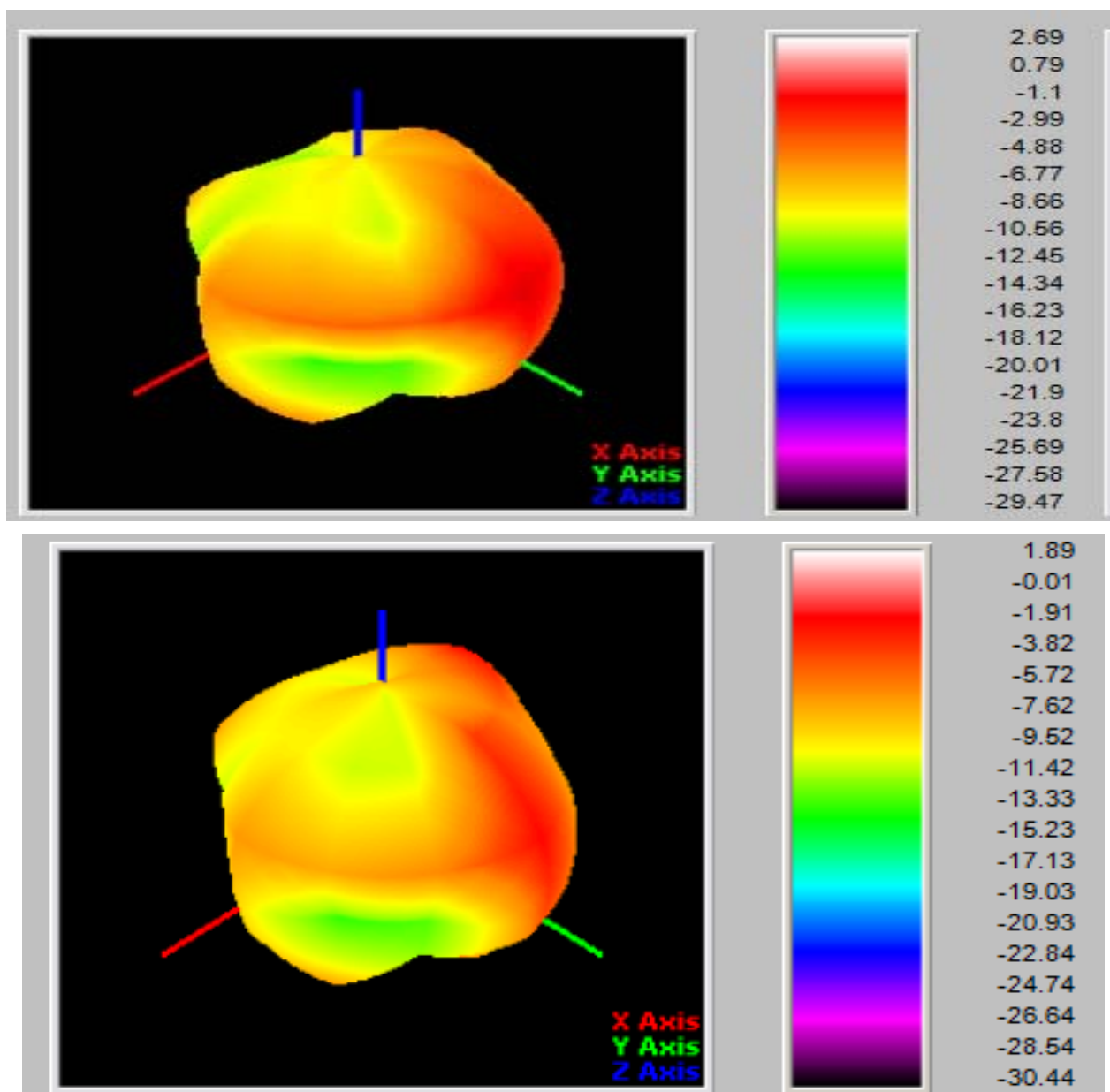


Freq. (MHz)	13.56	2400	2410	2420	2430	2440	2450	2460	2470	2480	2500
Gain	0	1.47	1.46	1.41	1.32	1.55	1.56	2.16	2.18	2.09	1.63

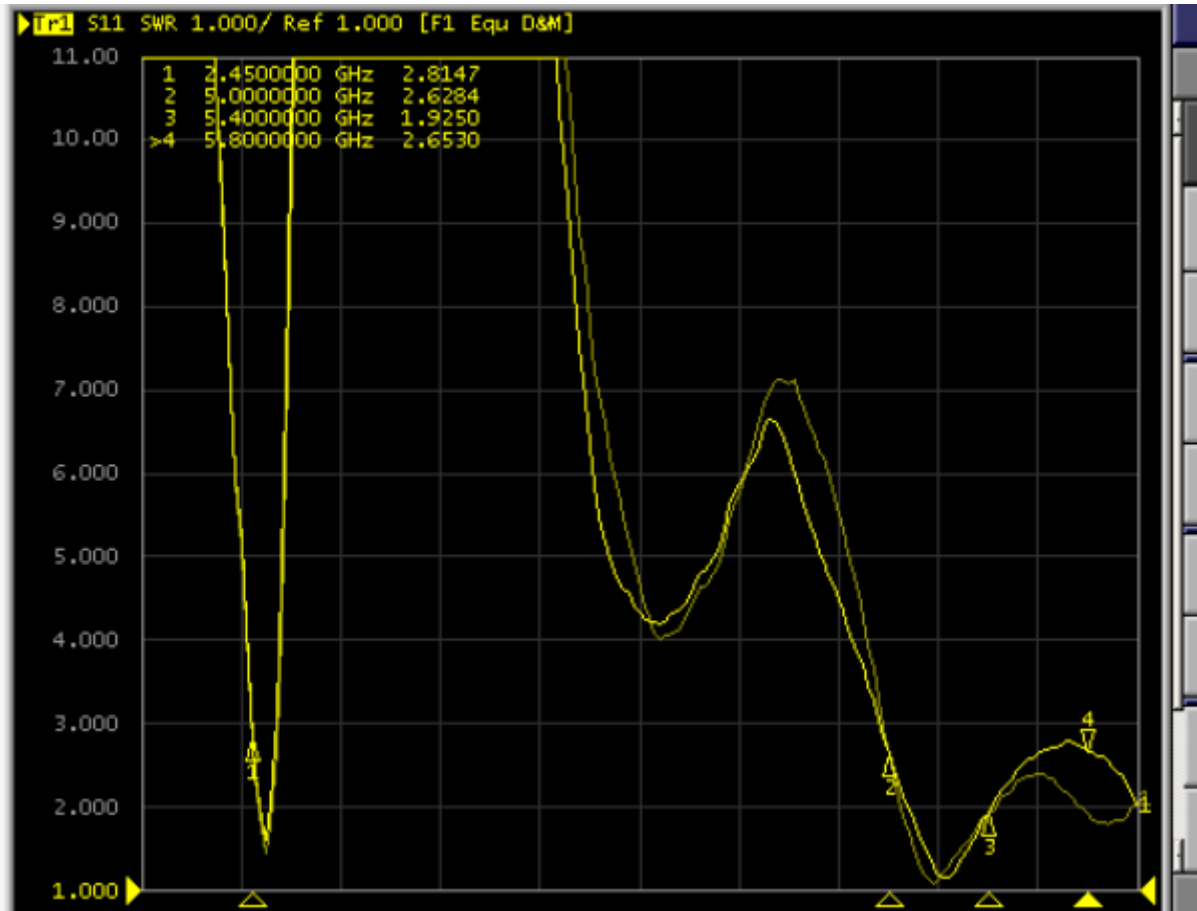
2300.00MHz - 2500.00MHz Efficiency



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



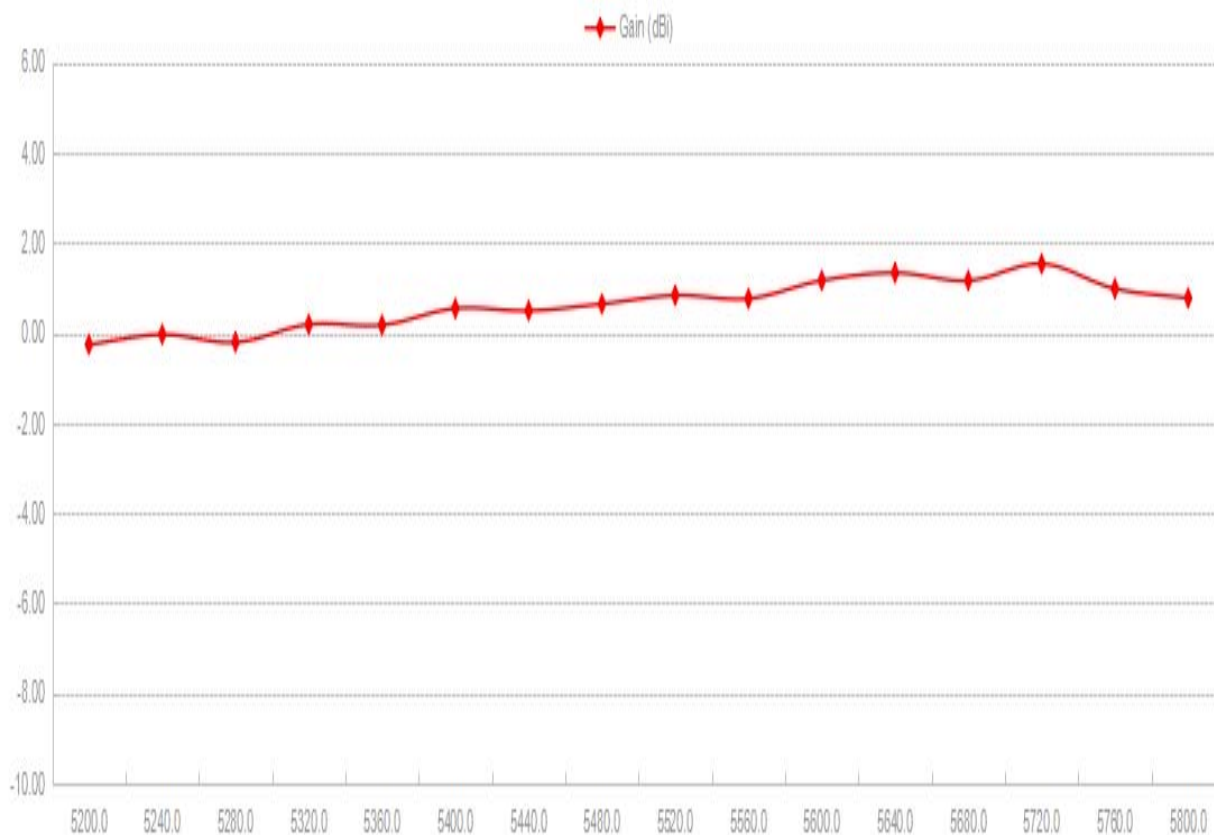
5G WIFI Hamber Test Data



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



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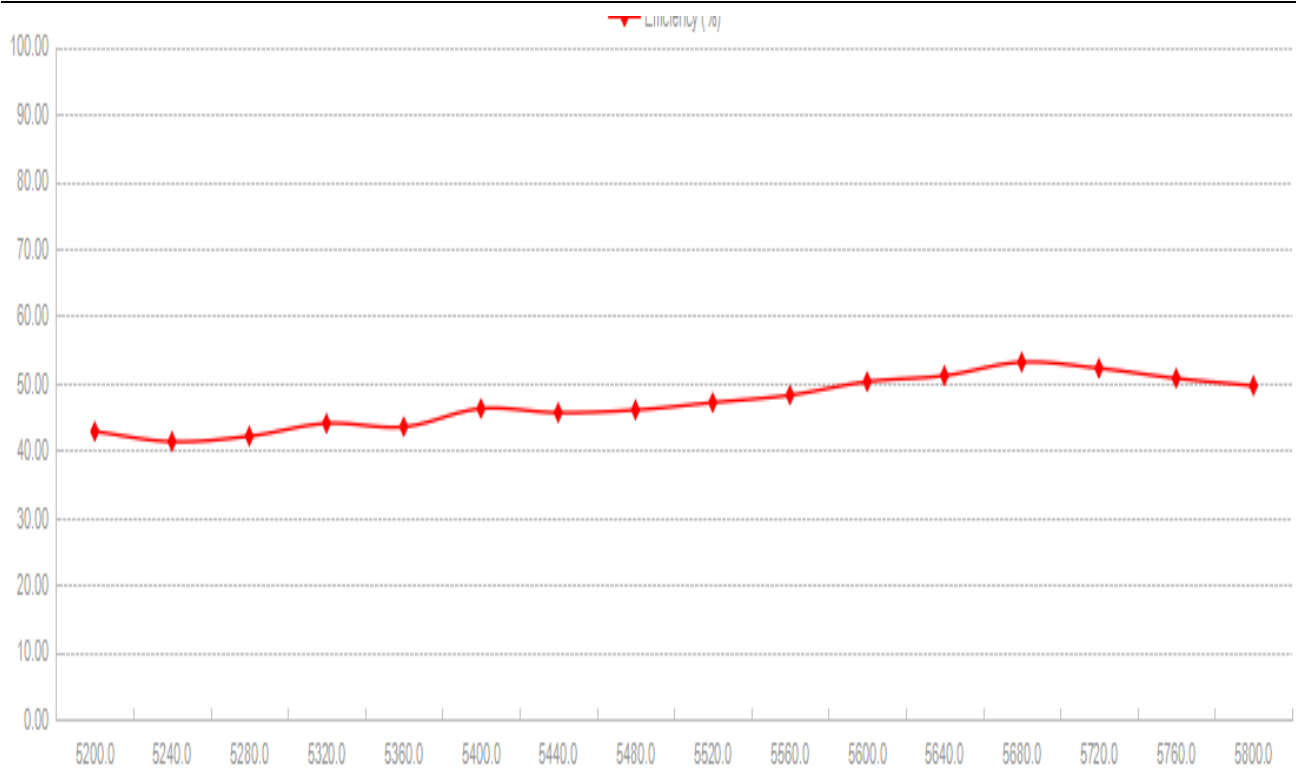
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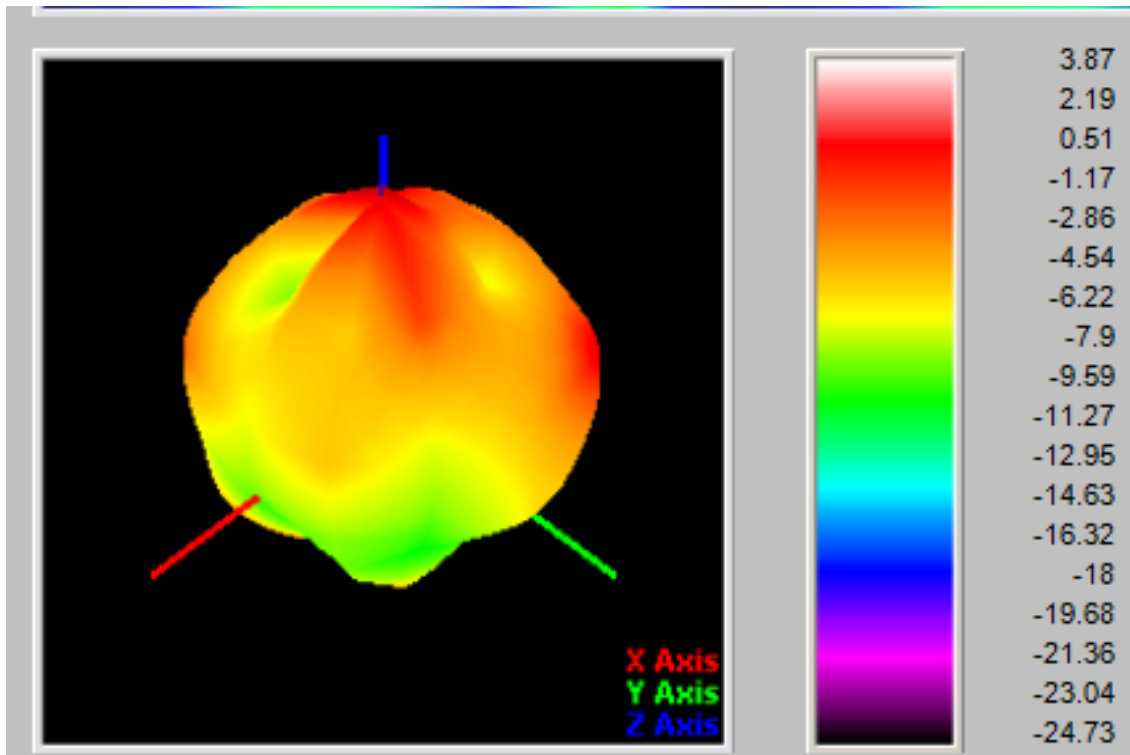
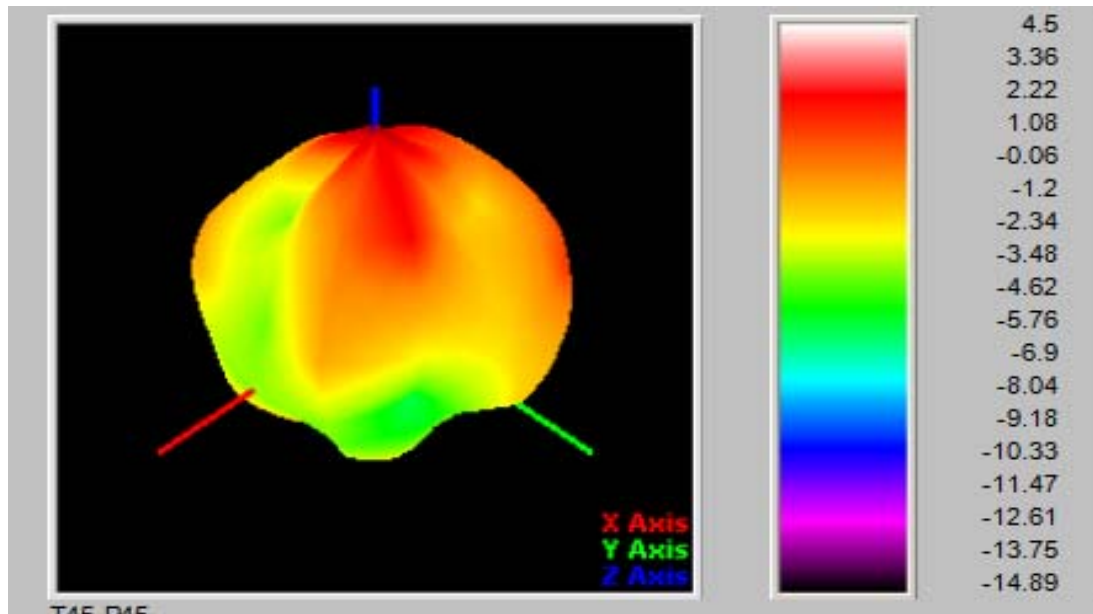
Freq. (MHz)		5200	5300	5400	5500	5600	5700	5800
Effi (%)		42.80	44.00	46.20	47.10	50.20	52.20	49.60

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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

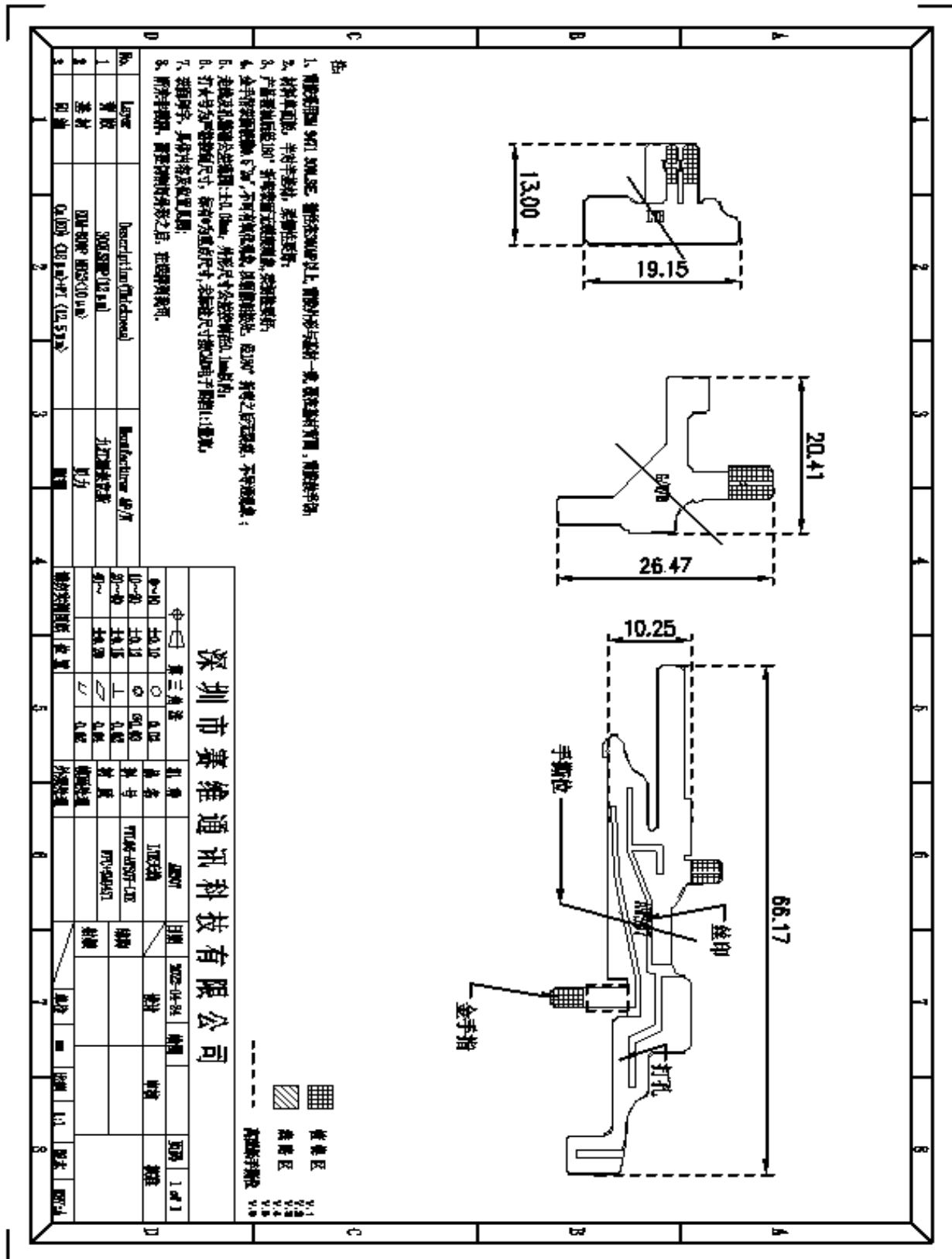
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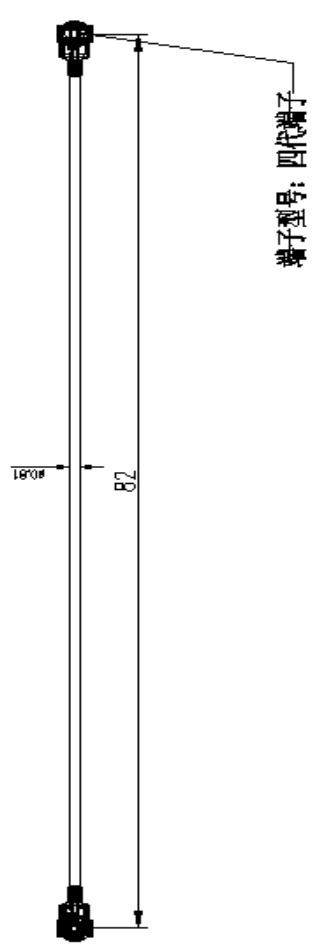
4 QC schedule drawing/Mechanical Properties



修改标记	
修改次数	修改说明
第一次	△
第二次	△

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

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

深圳市赛维通讯科技有限公司		客户	*****	制图	孔文强	审核
		customer		DATE	2022-04-24	CHECKED BY
产品名称	同轴线	材料	Cu	日期		
PRODUCT NAME		数量	01	比例	1:1	批准
产品编号	VTL01-5016-T	QTY.		SCALE		APPROVED BY
ITEM NO.						

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