



Dongguan Yenona Audio Co., Ltd.

T44

Antenna Test Report



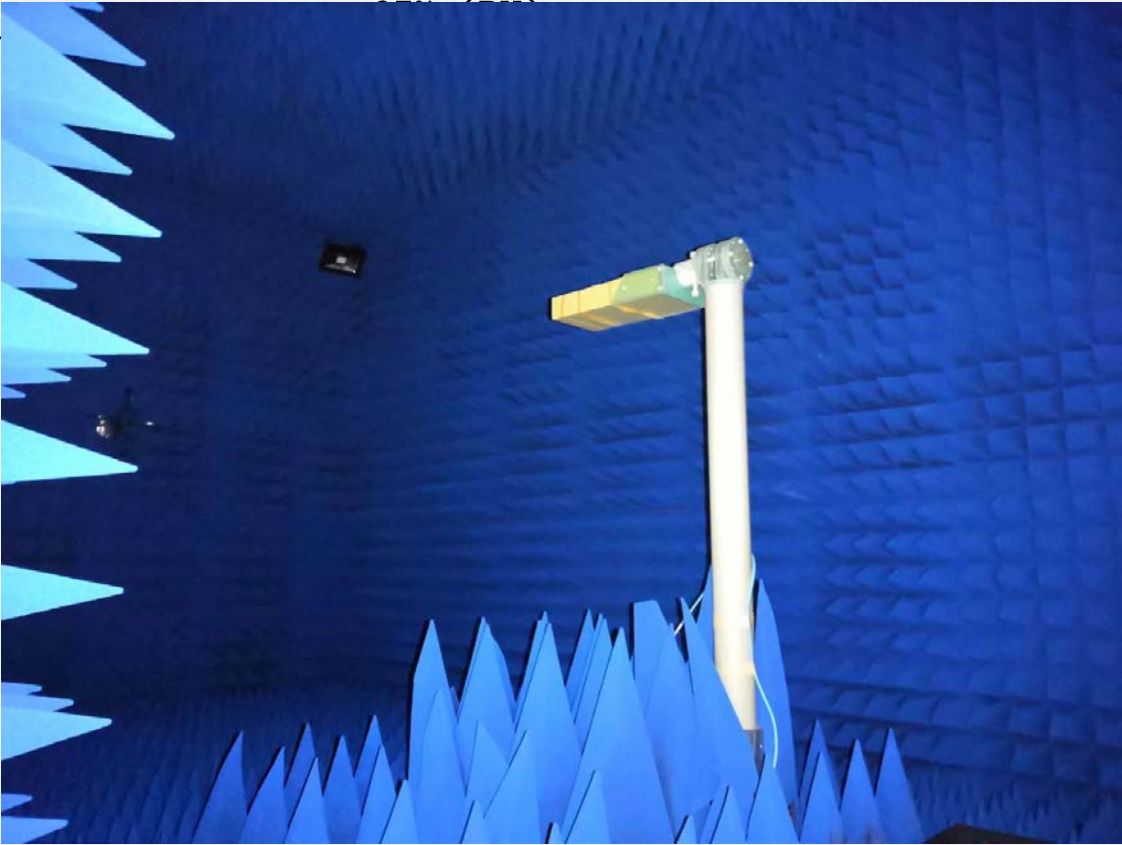
May 11th, 2024



Client		Project name	T44
Frequency band	2400MHZ-2500MHZ	Antenna engineering	Alex Chou
Date	2024/05/10	Contact number	15220251426

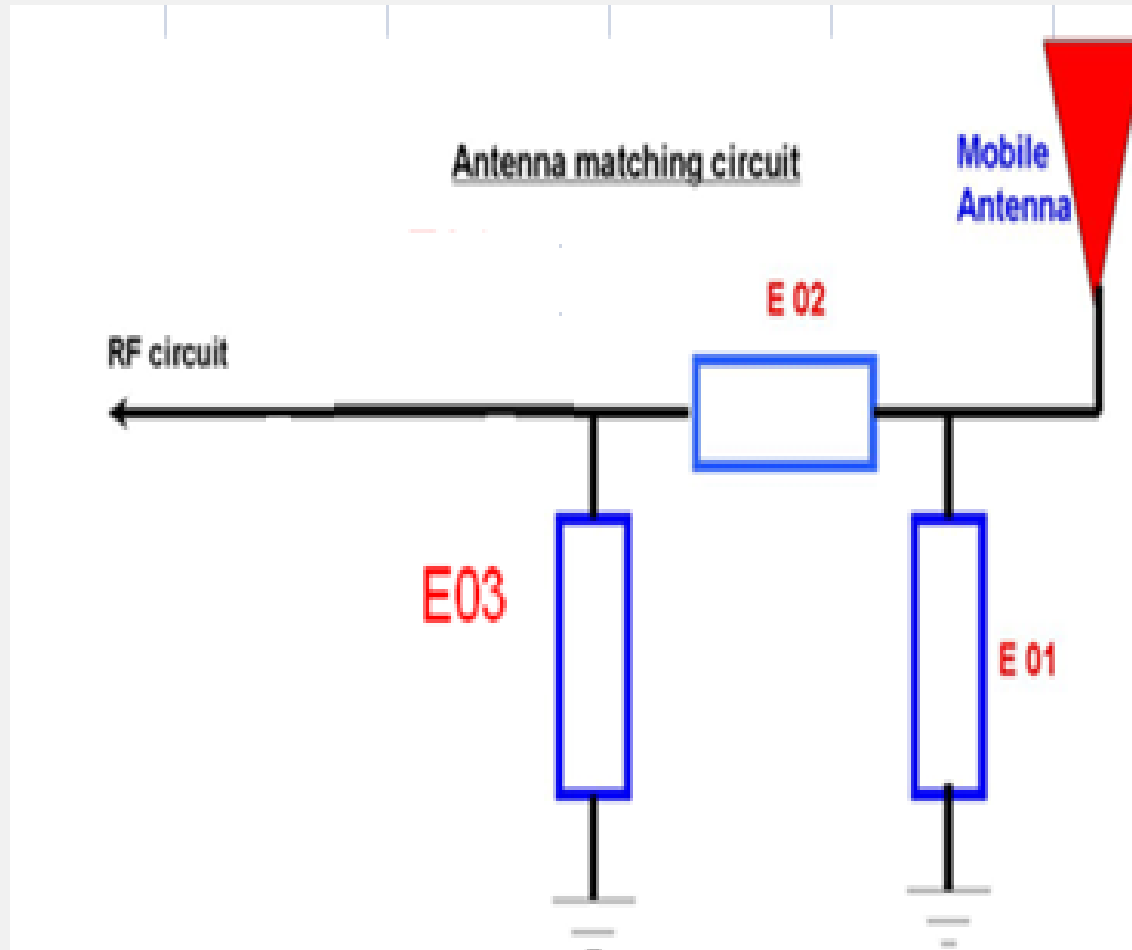
1. Testing Machine

Vector network analyzer & comprehensive measuring instrument	Agilent Technologies E5071B & R&S CMW500
Darkroom	Atenlab M3
Testing Engineer	Alex Chou
Temperature	25℃





Antenna matching circuit
diagram :



E01

1pf

E02

1pf

E03

NC

Antenna information and pictures:

整机类型:	S10
天线频段:	2400MHZ 2485MHZ
天线形式:	FPC天线
馈电形式:	双馈
馈脚数量:	天线馈电点+触摸馈点
天线版号:	S10-R-V5 S10-L-V5

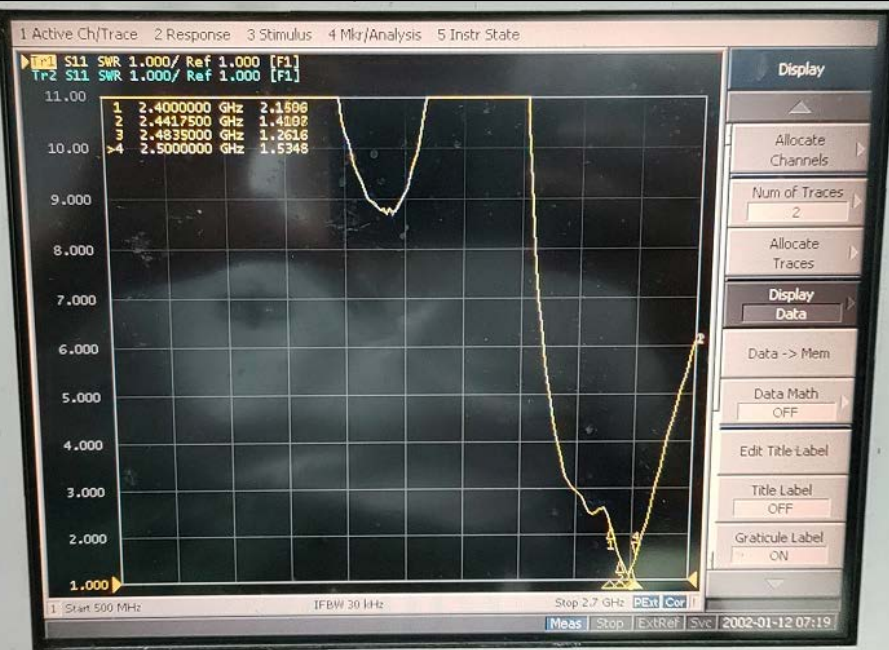
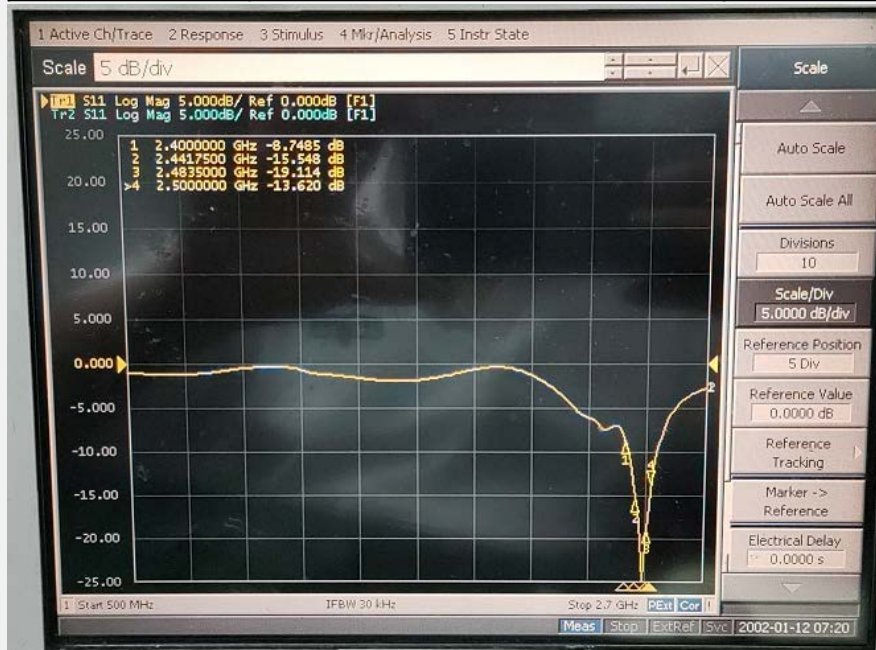
天线信息



L-Return loss and standing wave ratio

LTC ANT S11 parameter Summary

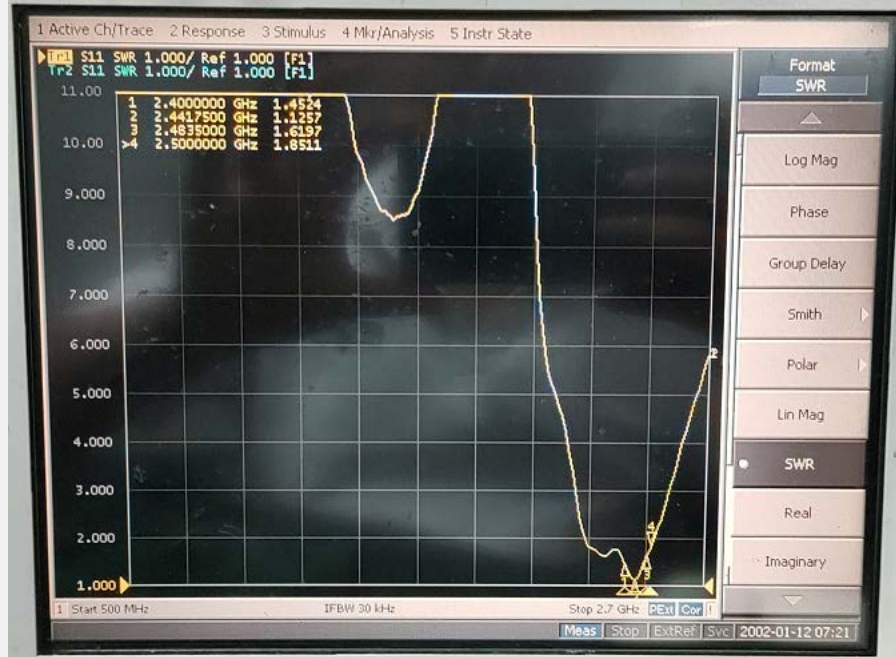
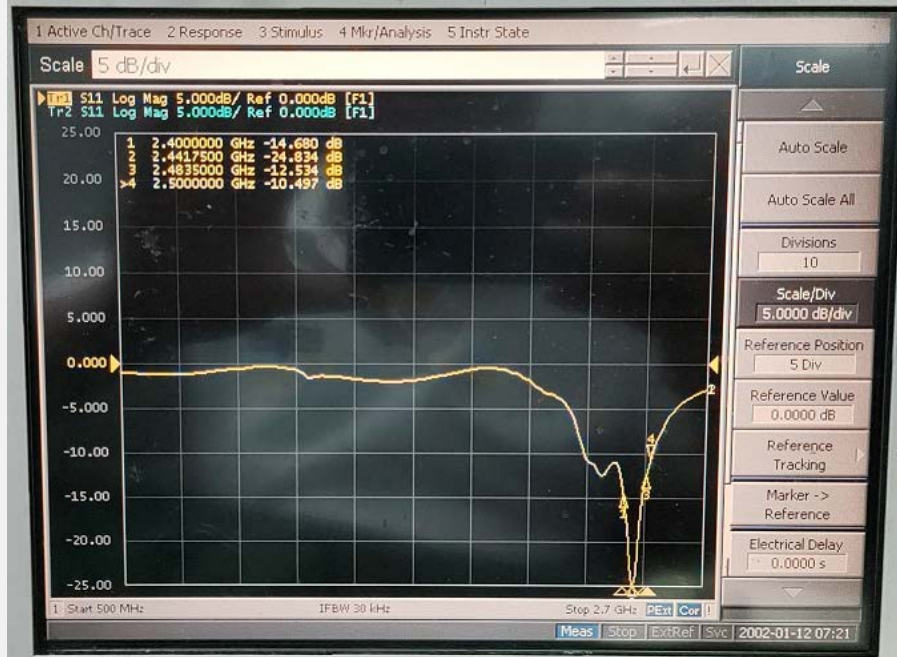
Band	2400–2500 (MHz)		
	2400	2450	2483
R. L (dB)	-8.7	-15.5	-19.1
VSWR	2.1	1.4	1.2



R-Return loss and standing wave ratio

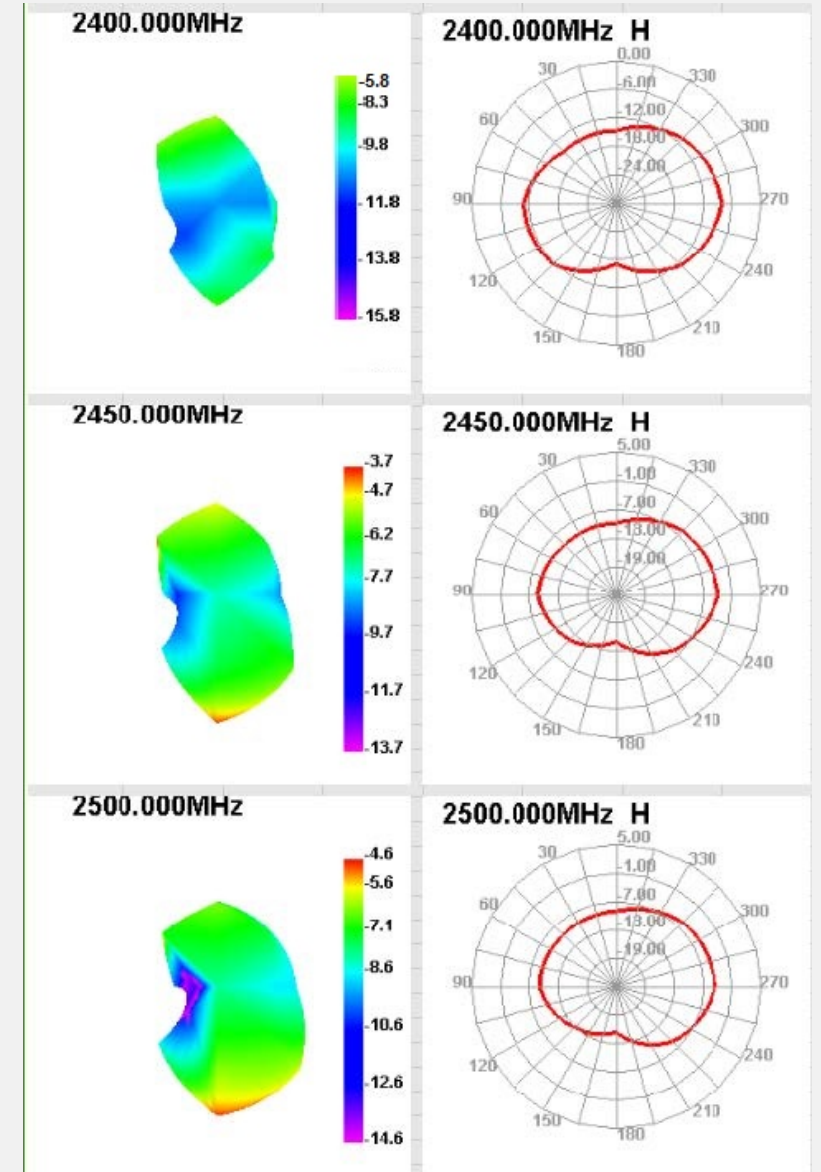
LTC ANT S11 parameter Summary

Band	2400–2500 (MHz)		
	2400	2450	2483
R. L (dB)	-14.6	-24.8	-12.5
VSWR	1.4	1.1	1.6



L-Efficiency and Gain

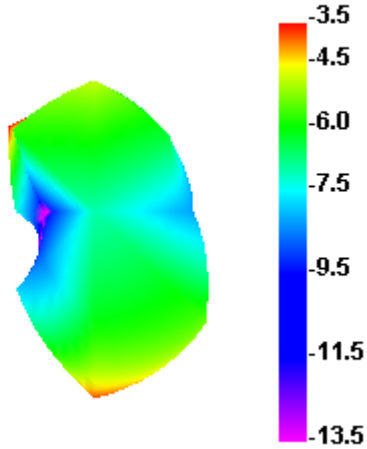
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)
2400	9.72	-10.12	-5.82	-7.97
2410	10.98	-9.59	-5.55	-7.7
2420	12.82	-8.92	-5.17	-7.32
2430	14.25	-8.46	-4.91	-7.06
2440	15.26	-8.17	-4.49	-6.64
2450	17.54	-7.56	-3.71	-5.86
2460	17.87	-7.48	-3.46	-5.61
2470	15.96	-7.97	-4.15	-6.3
2480	16.17	-7.91	-4.01	-6.16
2490	16.57	-7.81	-3.98	-6.13
2500	13.9	-8.57	-4.61	-6.76



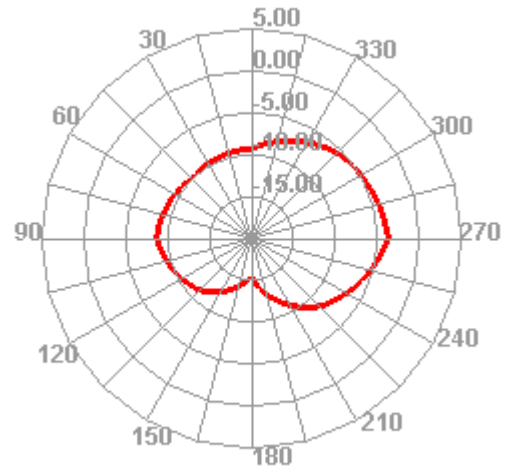
L-Efficiency and Gain2460Mhz



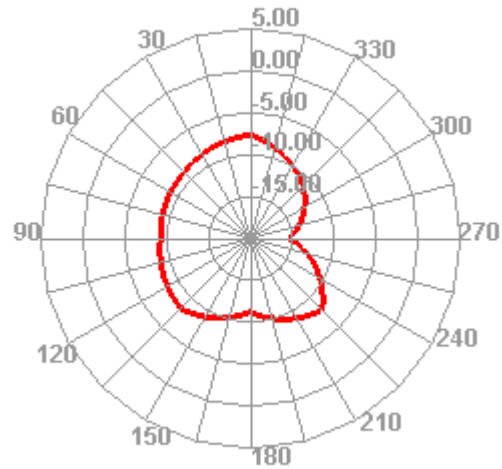
2460.000MHz



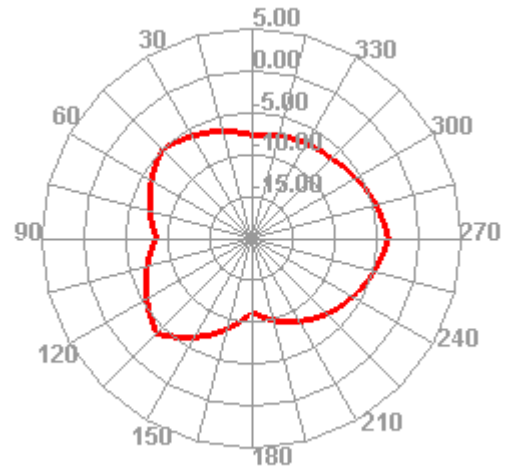
2460.000MHz H



2460.000MHz E1



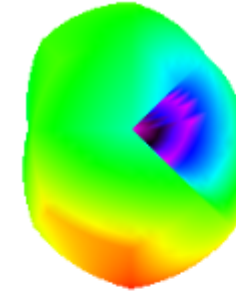
2460.000MHz E2



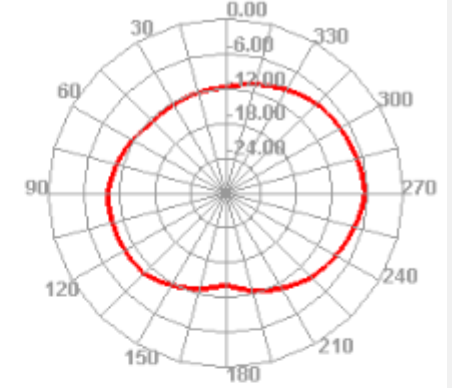
R-Efficiency and Gain

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)
2400	8.69	-10.61	-6.46	-8.61
2410	9.87	-10.06	-5.57	-7.72
2420	12.44	-9.05	-4.28	-6.43
2430	14.51	-8.38	-3.31	-5.46
2440	16.17	-7.91	-2.74	-4.89
2450	18.14	-7.41	-2.21	-4.36
2460	16.64	-7.79	-2.59	-4.74
2470	15.52	-8.09	-2.95	-5.1
2480	14.14	-8.5	-3.31	-5.46
2490	13.53	-8.69	-3.41	-5.56
2500	11.13	-9.54	-4.2	-6.35

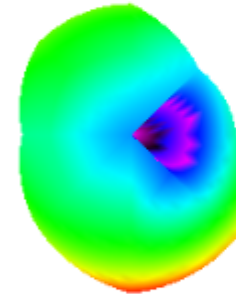
2400.000MHz



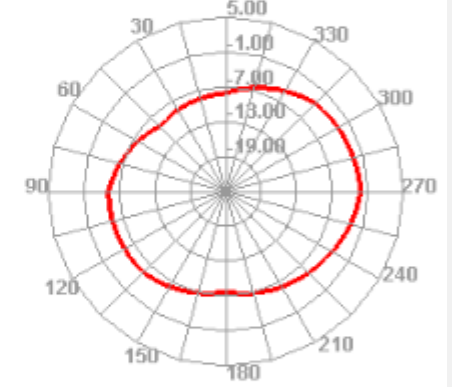
2400.000MHz H



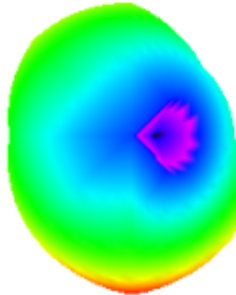
2450.000MHz



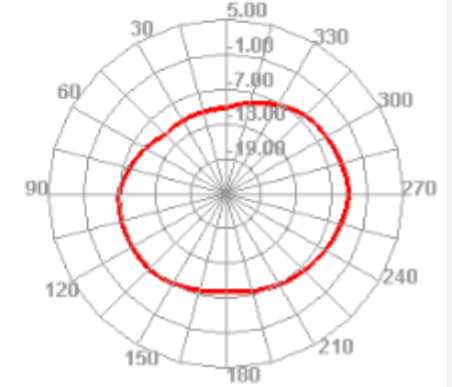
2450.000MHz H



2500.000MHz



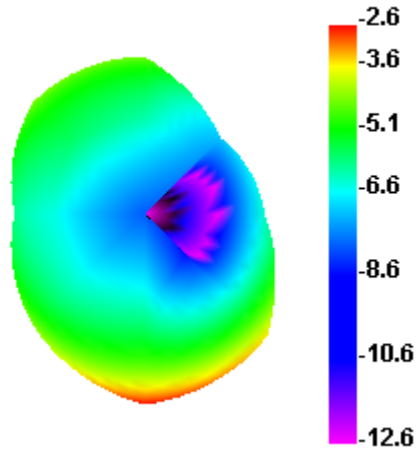
2500.000MHz H



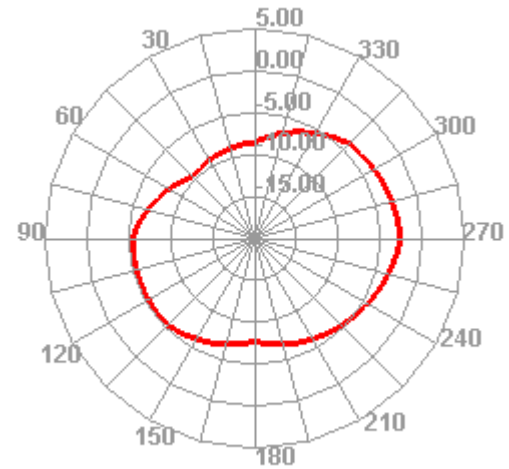
R-Efficiency and Gain2460Mhz



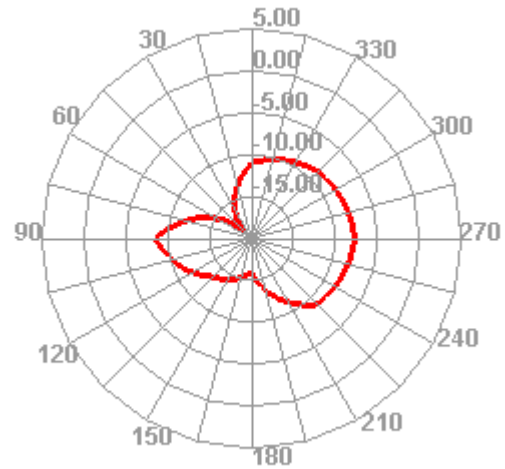
2460.000MHz



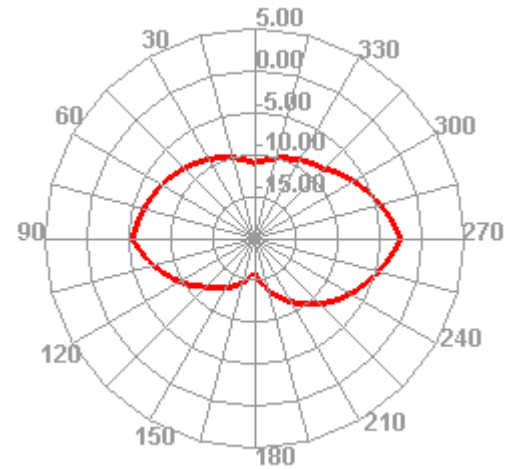
2460.000MHz H



2460.000MHz E1



2460.000MHz E2





Free space antenna OTA test data



ANT EIRP&EIS parameter Summary						
Frequency	BT 2.4G (R)			BT 2.4G (L)		
Signal Channel	0	39	78	0	39	78
TRP (dBm)	0.15	1.91	2.37	0.28	1.49	2.20
TIS (dBm)	-86.13	-86.34	-86.01	-84.10	-86.59	-86.42



Active test data of head model antenna

ANT EIRP&EIS parameter Summary						
Frequency	BT 2.4G (R)			BT 2.4G (L)		
Signal Channel	0	39	78	0	39	78
TRP (dBm)	-0.83	-0.26	-0.39	-0.53	-0.6	-0.01
TIS (dBm)	-83.59	-83.12	-83.55	-82.11	-83.44	-83.23

Test Site: New Lake Road

Test items: S10

Test the phone: 荣耀X40

Red MI Note11

Test distance: Left 20m. Right 20m
360 degree

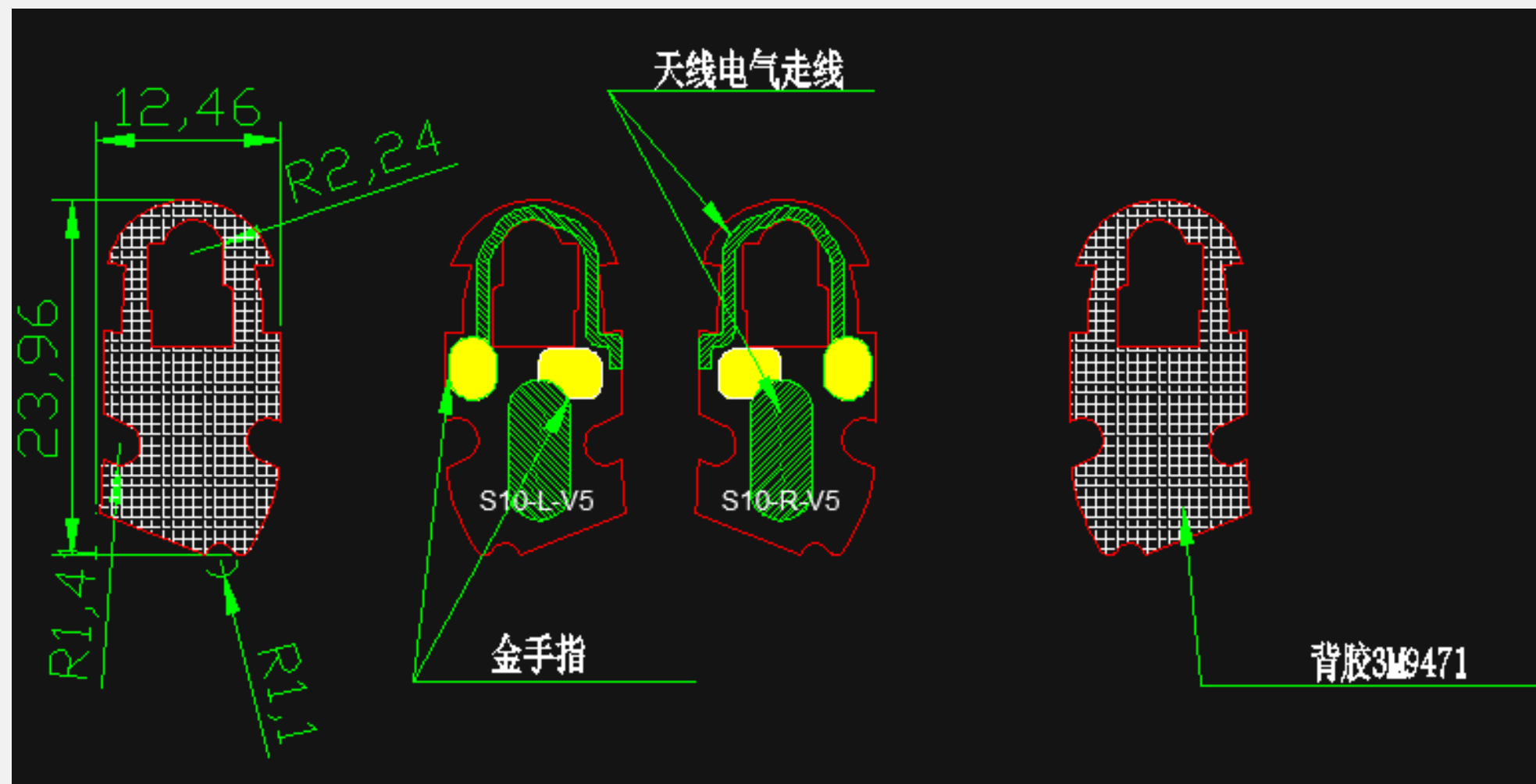
Test distance: Left 25m. Right 25m
360 degree



Date: 2024/4/18

S10 Antenna size and pictures

Unit: mm





Thank you for
watching! Happy
cooperation

