



WLT8016

Antenna Specification Sheet

V1.5

1.summarize

This antenna specification describes the RF performance of the on-board antenna of the WLT8016 module, ensuring that when connected to a 50-ohm source, the VSWR in the 2.4GHz ISM band is less than 2. It also shows the gain plots of the antenna in different directions, as well as the antenna efficiency and gain values in different bands.

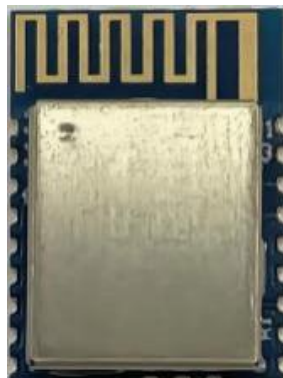
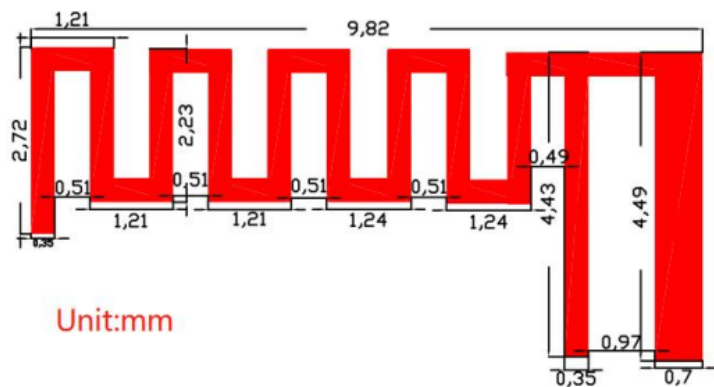


图1- 1 : WLT8016



Unit:mm

WLT8016 Antenna size

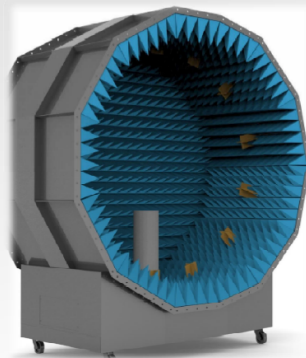
Design Specifications	Typical	Units
Antenna type	PCB antenna	
working Frequency	2400-2500	MHZ
Gain (max)	-0.06	DBi
Antenna efficiency	30~50	%
VSWR	<1.8	
Radiation pattern	omnidirectional	
impedance	50	ohm
Overall dimensions	9.8*4.49	mm
Weight	No requirement	
Operatin Temp	-40-85	°C
Storing Temp	-40-85	°C

WLT8016 Antenna information

2.test equipment

测试设备 / Equipment

auden

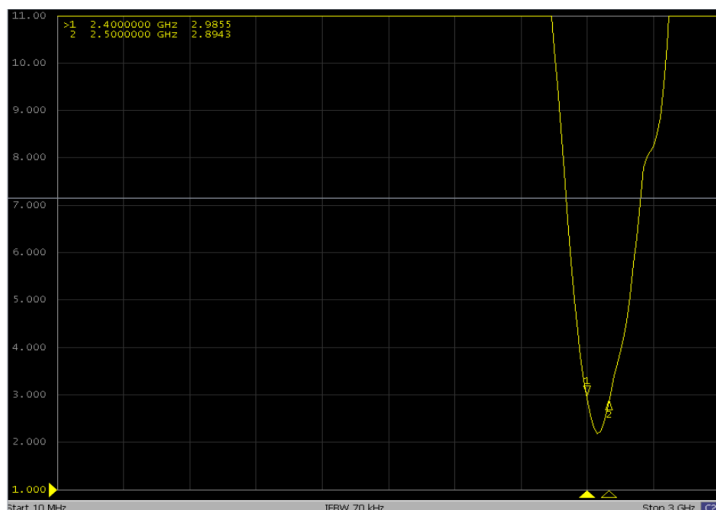


- Chamber : GTS Rayzone1800
- 网络分析仪 : Agilent E5071C
- 2G/3G综测仪 : Agilent 8960
- LTE综测仪 : Anritsu MT8820
- TD综测仪 : StarPoint SP6010
- WIFI综测仪 : Anritsu MT8860
- GPS信号源 : Agilent E4438C

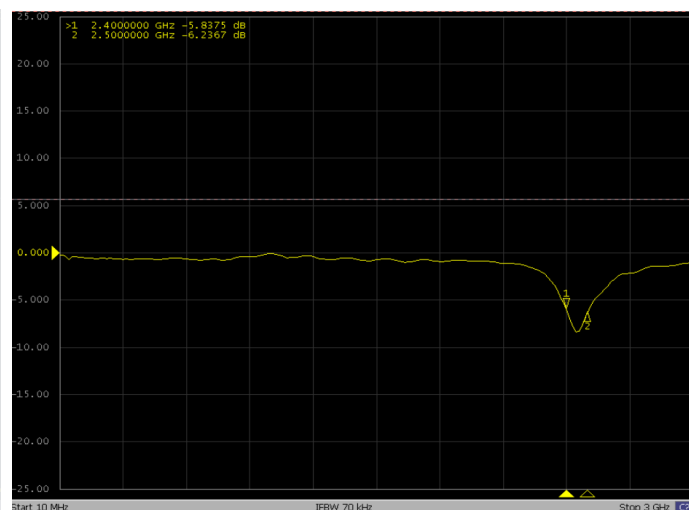


2 Company Confidential, Auden
Many aspects of this presentation are protected by US, TW, CN and international patents and patent applications

3.Return loss、VSWR



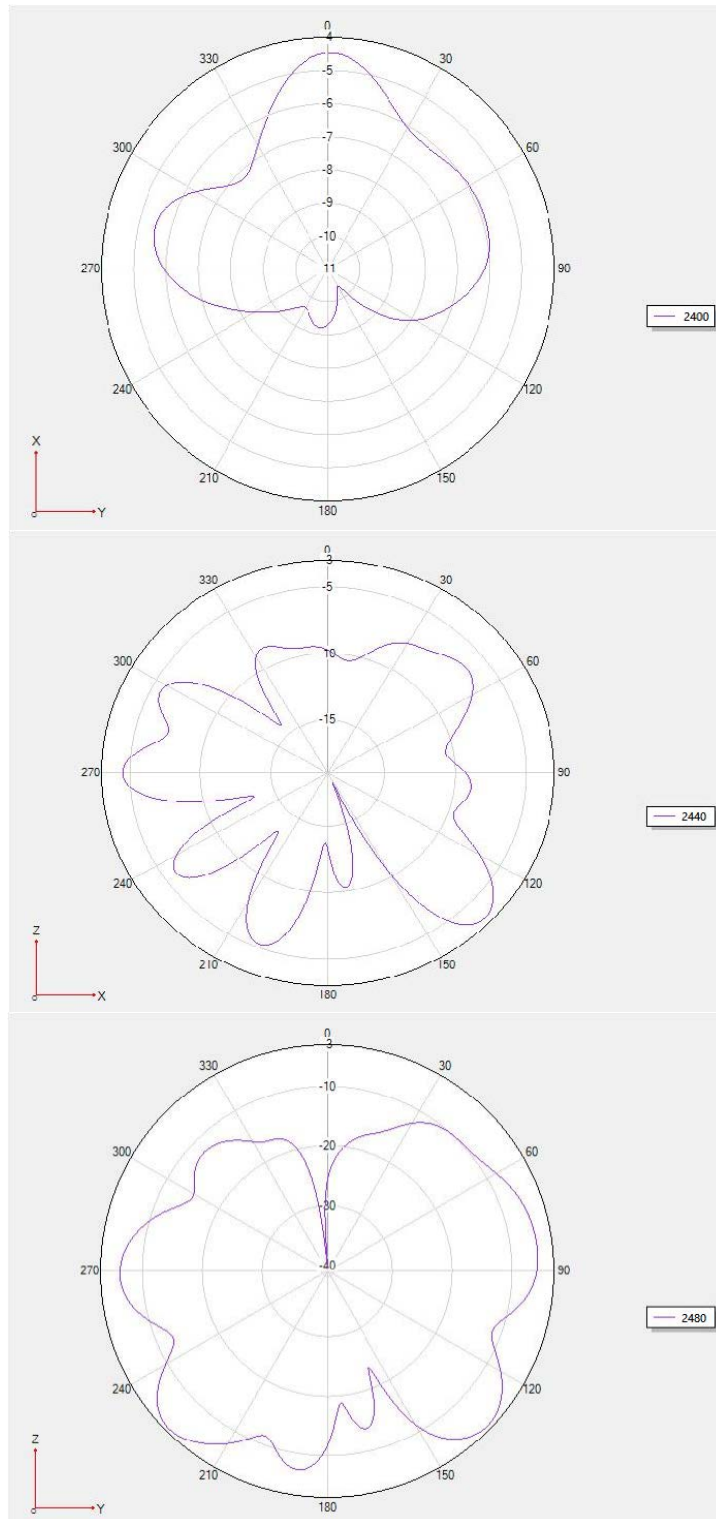
VSWR



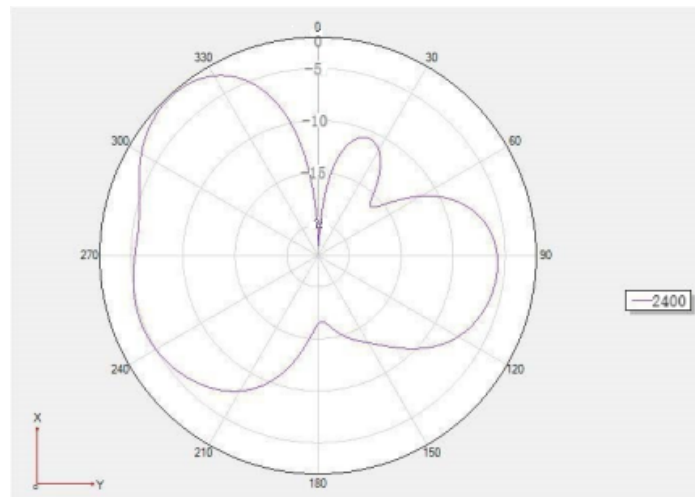
Return loss

4. Direction and gain diagrams

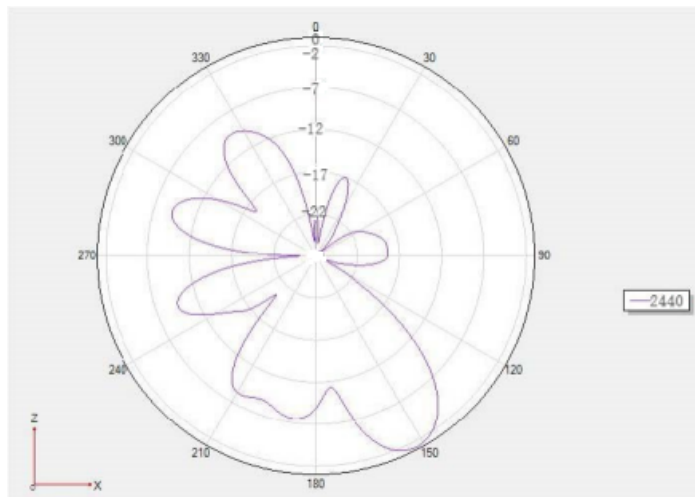
Etheta[Unit:dBi]



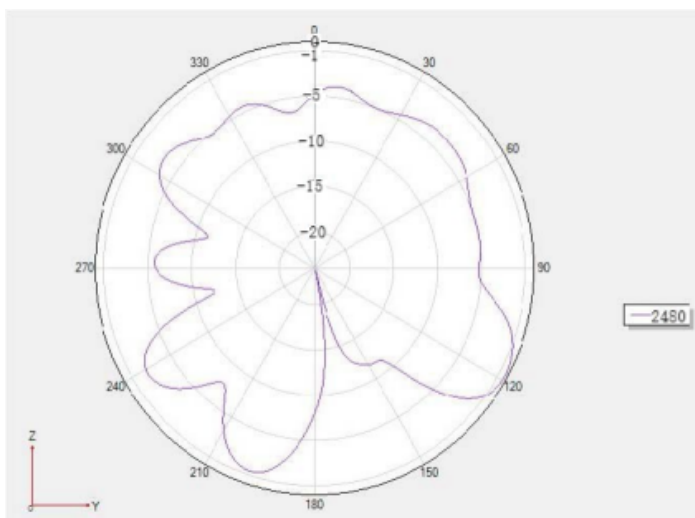
Ephi[Unit:dBi]



gain: -1.90dBi



gain: -0.72dBi



gain: -0.06 dBi

5. Antenna gain meter

Frequency / MHz	Efficiency / %	Gain/ dBi
2400	22.29	-1.90
2410	24.61	-1.52
2420	26.72	-1.15
2430	28.62	-0.77
2440	27.97	-0.72
2450	30.65	-0.17
2460	30.04	-0.16
2470	28.77	-0.17
2480	28.70	-0.06
2490	26.38	-0.34
2500	25.77	-0.40