



WLT8016 天线规格书

WLT8016 antenna specification

最新版本 V1.4

Latest version V1.4

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1. 概述

1. Overview

本天线规格书中描述了WLT8016模块板载天线的射频性能，确保当连接到50欧姆源时，在2.4 GHz ISM频段上的VSWR小于2，天线不同方向的增益图，不同频段的天线效率和增益值。

This antenna specification describes the RF performance of the onboard antenna of the WLT8016 module, ensuring that the VSWR in the 2.4 GHz ISM band is less than 2 when connected to a 50 ohm source, the gain diagram of the antenna in different directions, and the antenna efficiency and gain values in different frequency bands.

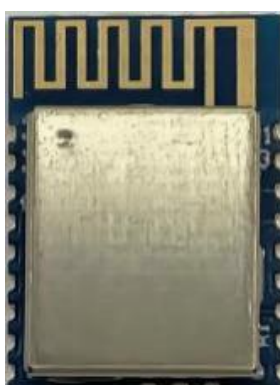
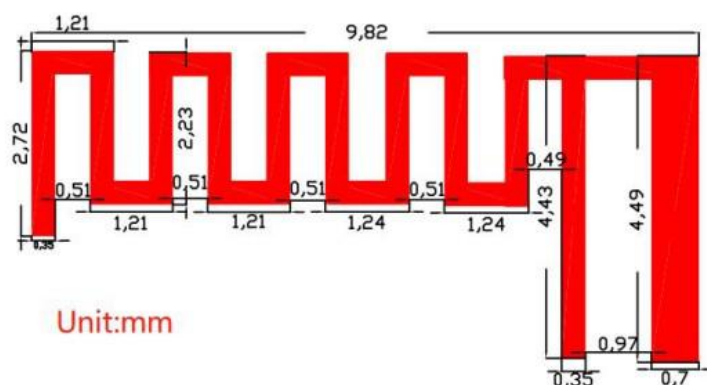


图1- 1 : WLT8016模块



WLT8016模块天线尺寸

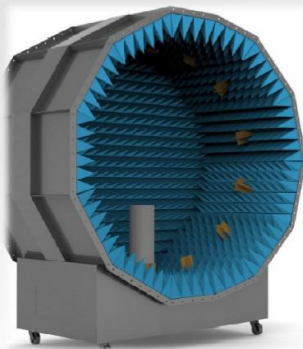
Design Specifications	Typical	Units
Antenna type	PCB antenna	
working Frequency	2400-2500	MHZ
Gain (max)	-0.06	DBi
Antenna efficiency	30~50	%
VSWR	<1.8	
Radiation pattern	omnidirectional	
impedance	50	ohm
Overall dimensions	9.8*4.49	mm
Weight	No requirement	
Operatin Temp	-40-85	°C
Storing Temp	-40-85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

WLT8016天线信息

2. 测试设备

2. Test the equipment

测试设备 / Equipment



- 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

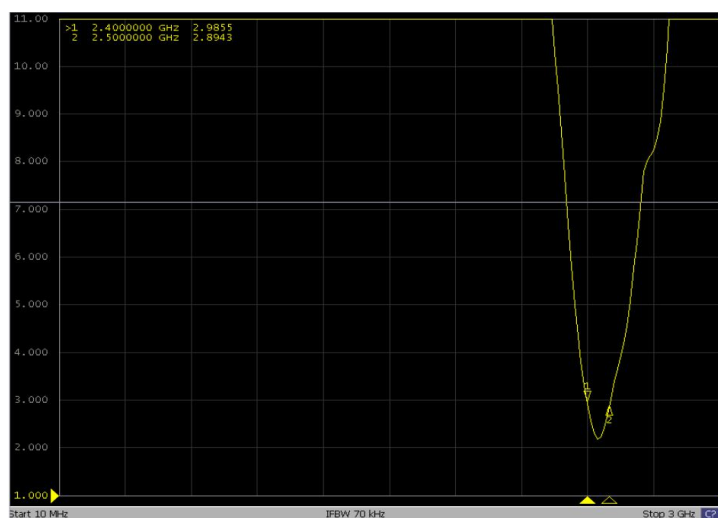


VS

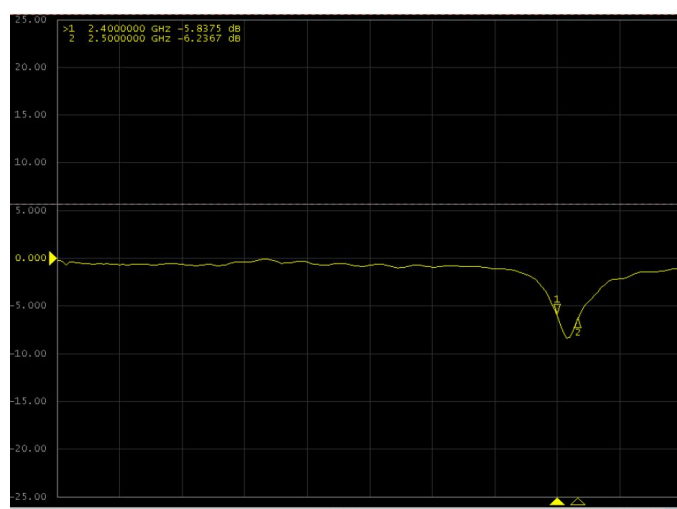
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Many aspects of this presentation are protected by US, TW, CN and International patents and patent applications

3.Return loss、VSWR



VSWR

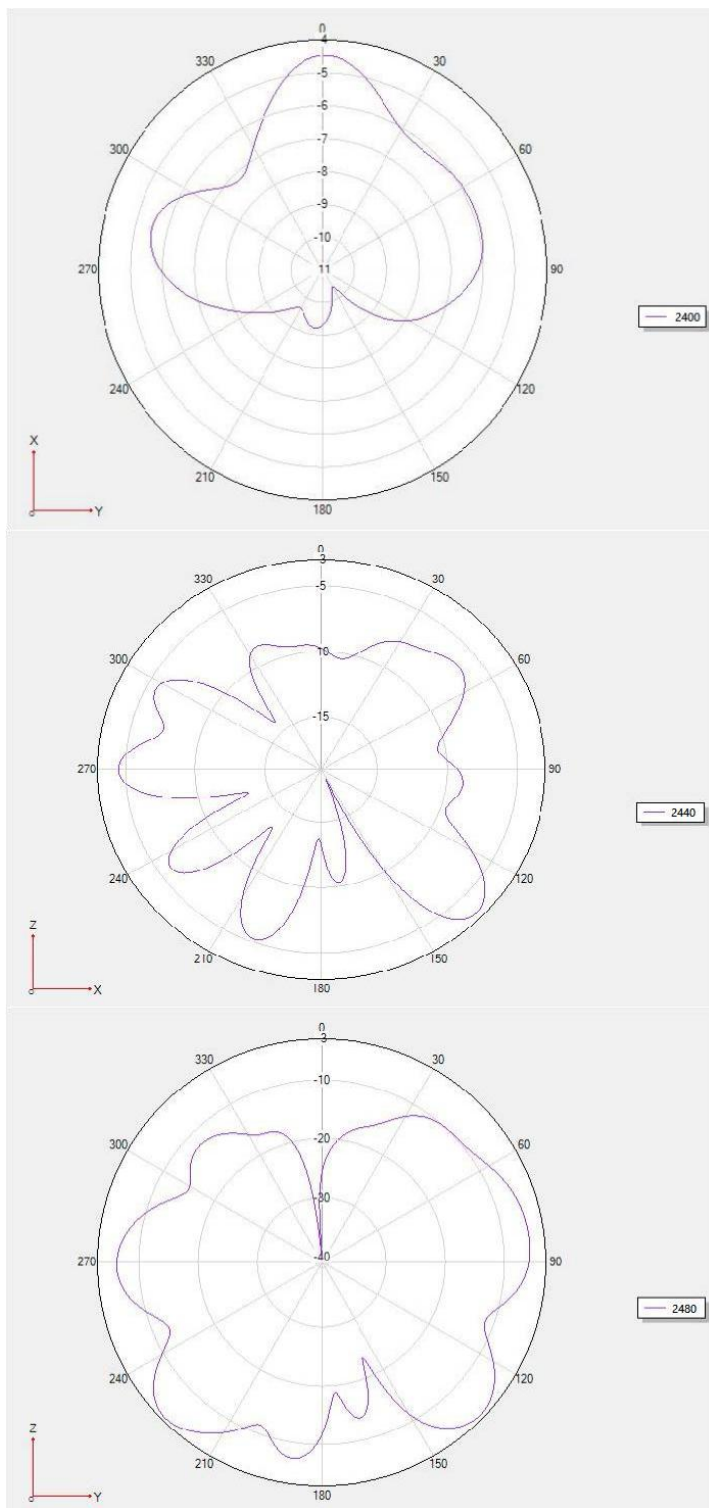


Return loss

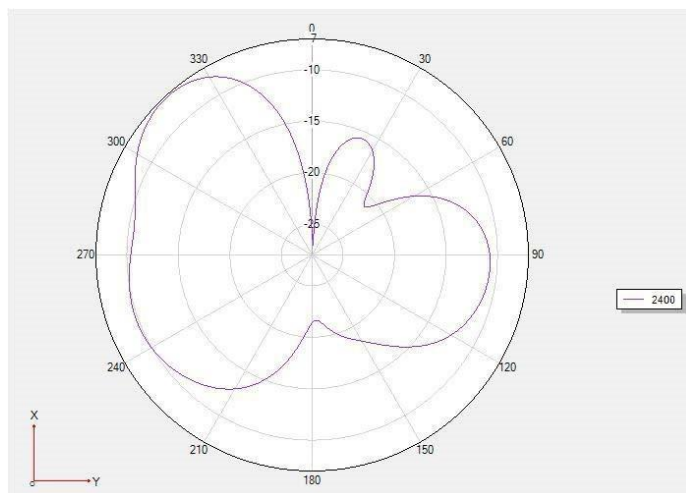
4. 方向和增益图

4. Direction and gain diagram

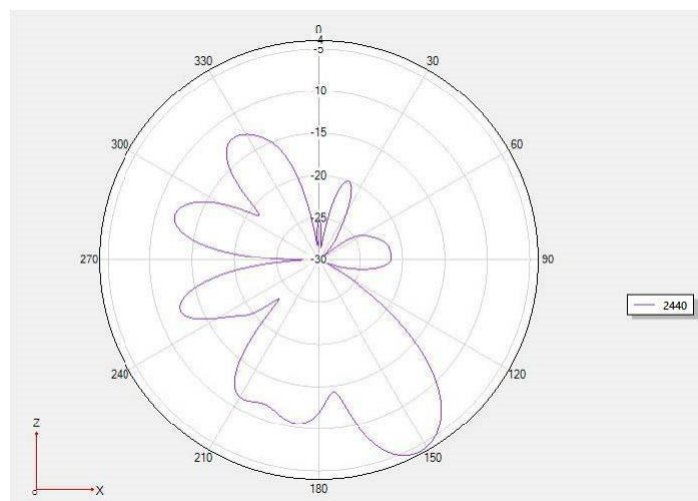
Etheta[Unit:dBi]



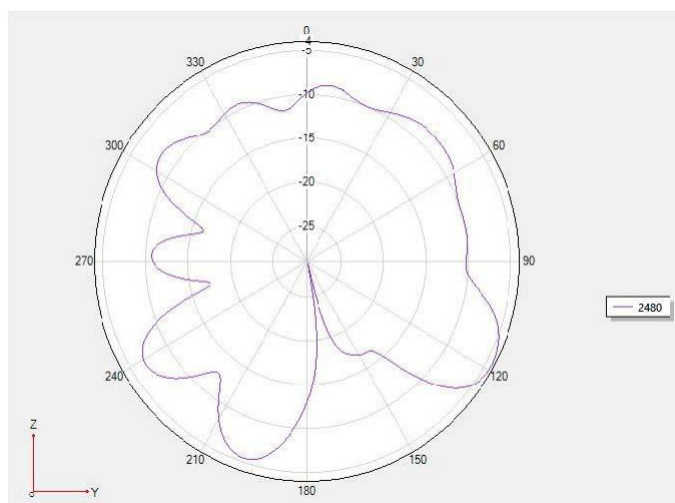
Ephi[Unit:dBi]



增益: -1.90dBi



增益: -0.72dBi



增益: -0.06dBi

5. 天线增益表

6. 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