



Liteon_Wi-Fi Antenna FCC Report

Date of Report: 2023/ 02 / 09

Department: WCB , Auden Techno Corp.

Tested by: Sean Li

auden 

Document/Report Information

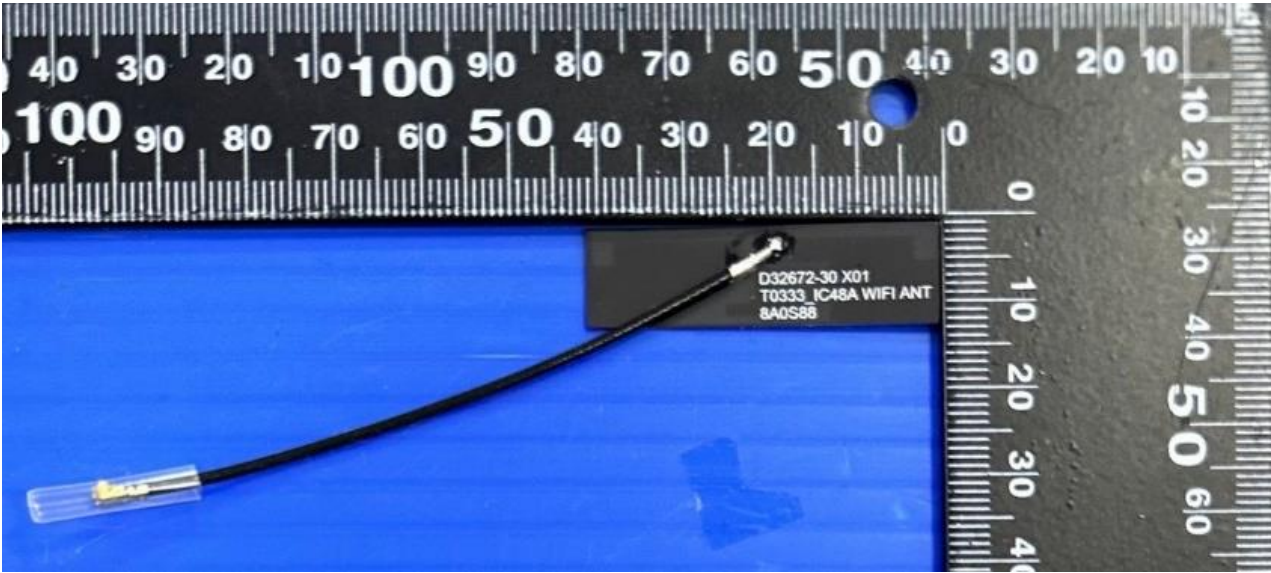
Antenna model Name	D32672-30
Topics	Wi-Fi Antenna FCC Report
Date of Report	2023/ 02 / 09
Report Revision	Rev00
Dept.	WCB, Auden Techno Corp.
Tested by	Sean Li
Revised by	Jessie Chien

Report History

Date	Report Rev.	Project Stage	Description
2023/02/09	Rev00	RFQ	Wi-Fi Antenna FCC Report

- Platform and Antenna Introduction
- Antenna Performance
- 3D Radiation Pattern
- Conclusions

Information of Wi-Fi Antenna



Date of Report: 2023-02-09

Antenna Model

Name : D32672-30

Department : WCB, Auden Techno Corp.

Tested by : Sean Li

Antenna Type : Dipole

Assembly : FPCB + Coaxial Cable (1.37Ø low loss) 83mm

PCB Size : 40.5mm x 10mm x t=0.25mm



Frequency range	2400~2500MHz
Gain	3.0 dBi
Connector	IPEX I
Impedance	50 Ohm

Antenna Position and Cable Routing



- Platform and Antenna Introduction
- **Antenna Performance**
- 3D Radiation Pattern
- Conclusions

Measurement software



Setup

DUT

Templates

Pathloss

Display

Start

Stop

Test Setup

Settings

Operator: GTS Temperature: 20 °C Humidity: 50 %
Test Polar: Both Pole Test Manner: Single Test Position: FS
Instrument Preset: Once Ring Off End: True Manual Page Max: 10

Equipment

Product Series: RayZone
Instrument: R8S ZNB8
Instrument Add: TCPIP0:ZNB8-42-102677::inst0:INSTR Refresh Identify GPIB LAN
Controller: COM4 Refresh ON
Amplifier: COM5 Refresh Bypass Reading amplifier serial port successfully.
Working Port: Port1
Link Port: NULL

Manual Operation

Command: Execute

Testing Information

Template: Zebra_SRV_Ant6.xml
DUT Code: Luke
Instrument Type: R8S_ZNB8
Test System: Passive
Test Mode:
DUT Memo:

Controller

Theta: 0 Phi: 0 Polar: -

Logging

13:14:57 >> Start
13:14:57 >> Target chamber type is RayZone2800G.
13:14:57 >> Authorization will be expired in 748 days.
13:14:57 >> DUT[Luke] load success
13:14:57 >> Pathloss load success
13:14:59 >> Instrument Address scanning done.
13:15:00 >> Reading serial port[COM4] successfully.
13:15:02 >> PC - Extra Controller START...
13:15:02 >> Power Limit, downLink: -25dBm; upLink -10dBm
13:15:02 >> GTSAMP, -25, -10, 288
13:15:02 >> Extra controller connected.
13:15:02 >> Reading amplifier serial port[COM5] successfully.

☒ Display Logging Line Count Limit: 5000 Collect Debug Info

Ready

Test Status: Idle Estimated Left Time: Beep

Test Lab Environment Conditions

Temperature	20° C to 28° C
Humidity	30% to 70%

Test Equipment List

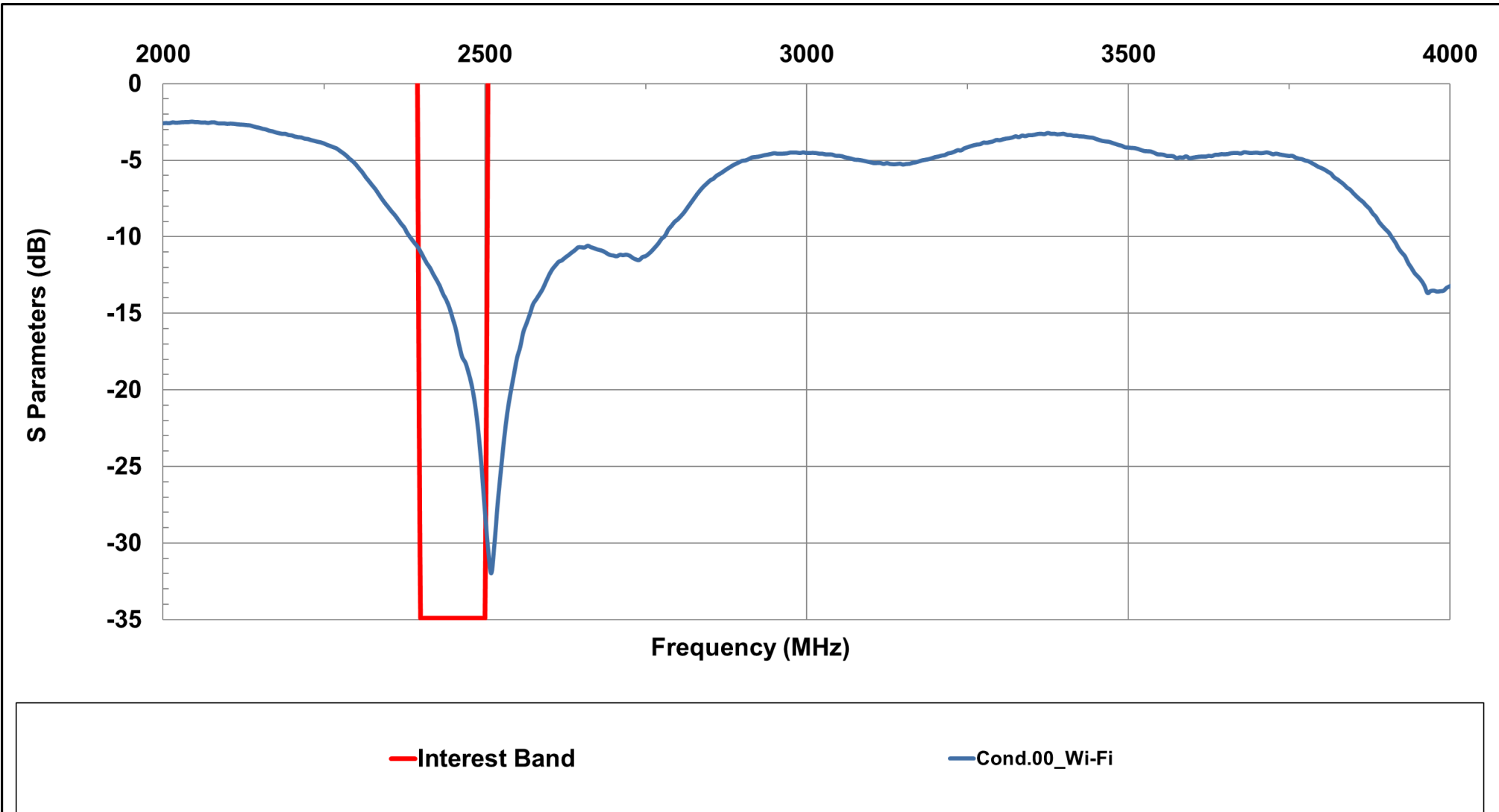
Type of Equipment	Model Number	Calibration Due Date
Antenna Chamber	GTS2800	14 May 2023
Vector Network Analyzer	Agilent Technologies E5071B	14 May 2023

Test Date: 2023/02/09

ISSUED: 2023/02/09

Test Location: No. 19, Lane 772, Heping Road, Bade District, Taoyuan City, 334

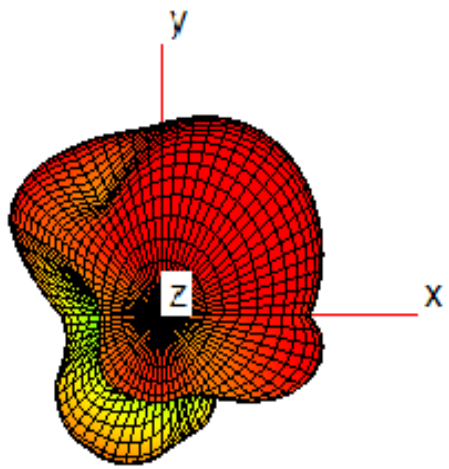
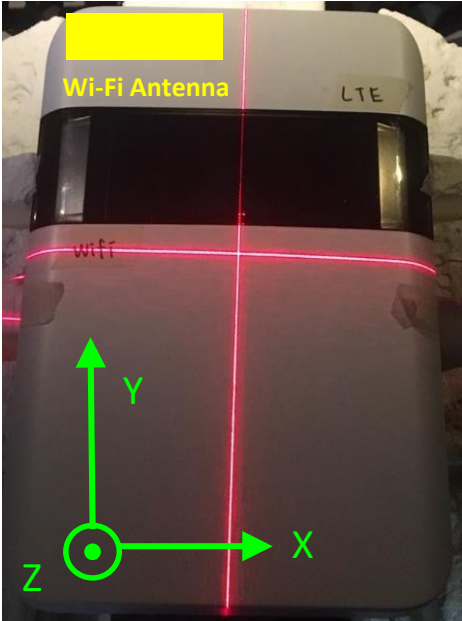
Device Under Test mounted on Antenna Chamber turntable as shown in Appendix A. Measurements, including conducted power, TRP, and Peak EIRP and obtained by the TS8991 test system across low, mid and hi portions of the frequency band and across a 360 degree sphere. Peak antenna gain is determined from the maximum EIRP measured across the sphere with respect to the conducted power.



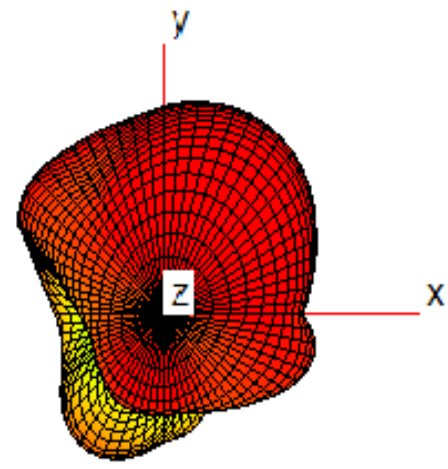
Conditions		Cond.01			
Date		2023/2/9			
Report Rev.		Rev 01			
Antenna (Rev.)		WIFI			
Detail		*Dipole antenna type(IC-48A)			
Chamber		Auden GTS 2800			
MHz	Spec	MHz	Avg. (dB)	Peak Gain(dBi)	Eff. (%)
2400	-5.0	2400	-3.8	2.2	41.7
2450	-5.0	2450	-3.3	2.6	47.2
2500	-5.0	2500	-3.1	3.0	49.2

- Platform and Antenna Introduction
- Antenna Performance
- **3D Radiation Pattern**
- Conclusions

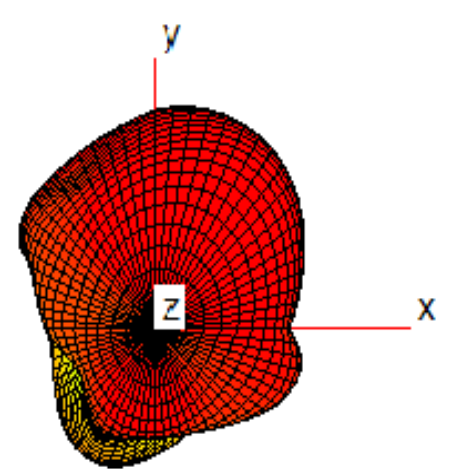
WLAN Antenna 3D Radiation Pattern



2400MHZ



2450MHZ



2500MHZ

- Platform and Antenna Introduction
- Antenna Performance
- 3D Radiation Pattern
- **Conclusions**

- WLAN (Wi-Fi):
 1. **2.4G**部分，效率約為-3.1~-3.8dB，最大Peak Gain = 3.0dBi