

## Wifi antenna performance Report for Liteon IC3-40A

Date of Report : 2022-10-25  
Model No : IC3-40A  
Department : WCB , Auden Techno Corp.  
Prepared by : Sean Li

## Document/Report Information

|                 |   |                                  |
|-----------------|---|----------------------------------|
| Project Name    | : | IC3-40A                          |
| Topics          | : | Wi-Fi antenna performance report |
| Date of Report  | : | 2022-10-25                       |
| Report Revision | : | Rev00                            |
| Dept            | : | WCB, Auden Techno Corp.          |
| Prepared by     | : | Sean-Li                          |
| Revised by      | : | Jessie Chien                     |

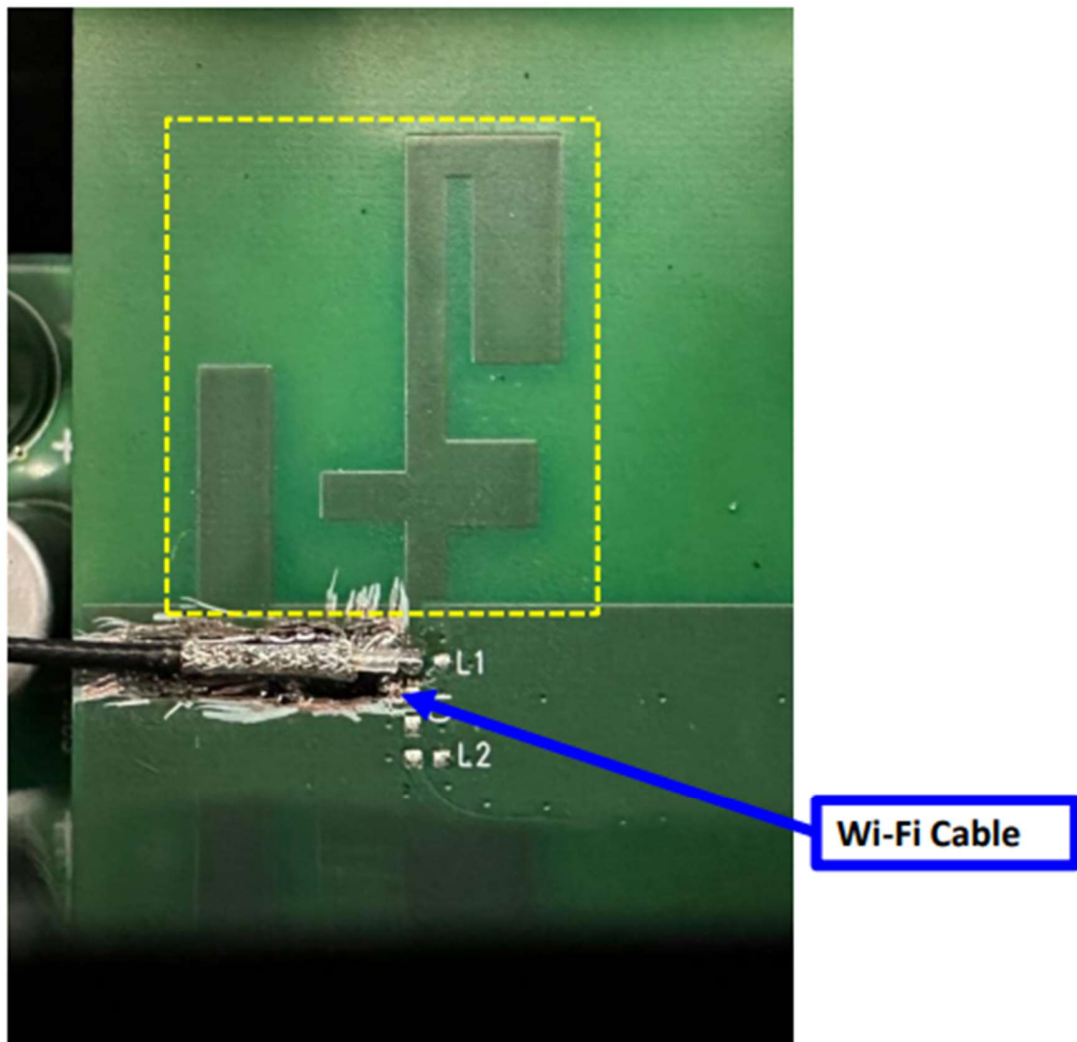
## Test Equipment List

| Type of Equipment       | Model Number                | Calibration Due Date |
|-------------------------|-----------------------------|----------------------|
| Antenna Chamber         | GTS2800                     | 2023-05-14           |
| Vector Network Analyzer | Agilent Technologies E5071B | 2023-05-14           |

## Content

- Antenna Introduction
- Wi-Fi Antenna Performance
- 3D Radiation Pattern
- Conclusions

## Antenna Area and Cable Routing



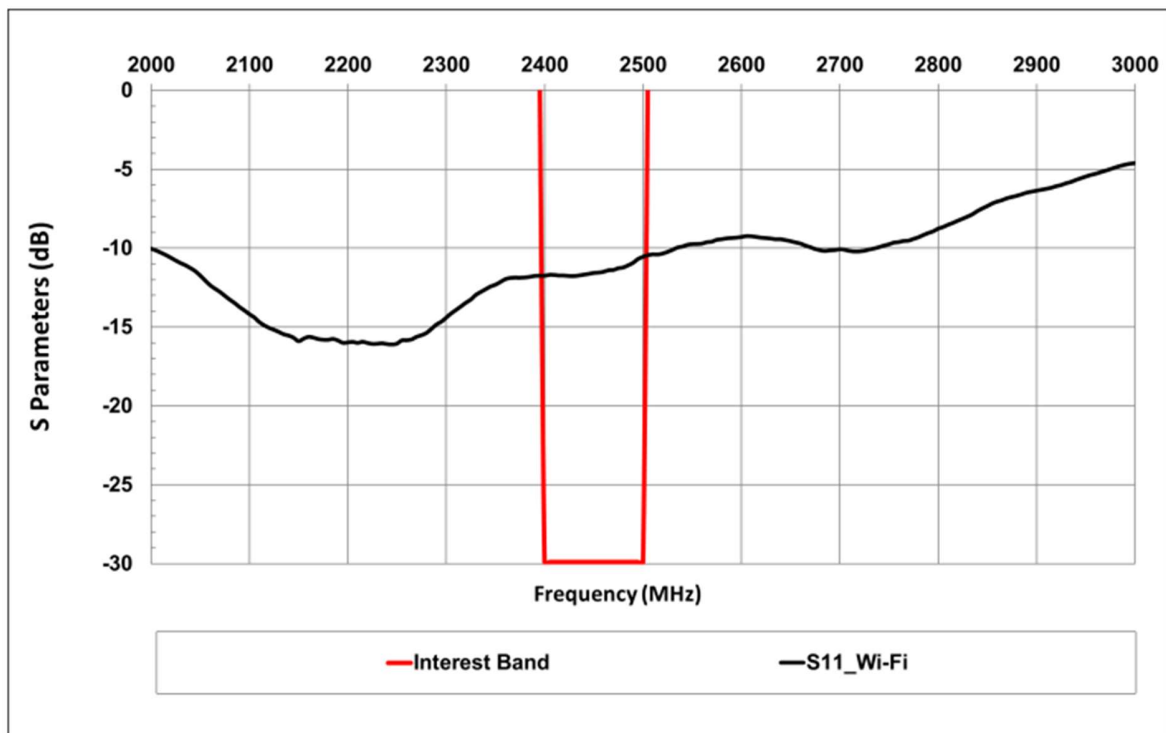
## Test Procedure

Device Under Test mounted on Antenna Chamber turntable as shown in Appendix B. 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

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## Wi-Fi Antenna\_S11



NOTE : Lab Condition 23.4 °C , 60 %RH

## Wi-Fi Antenna\_Efficiency

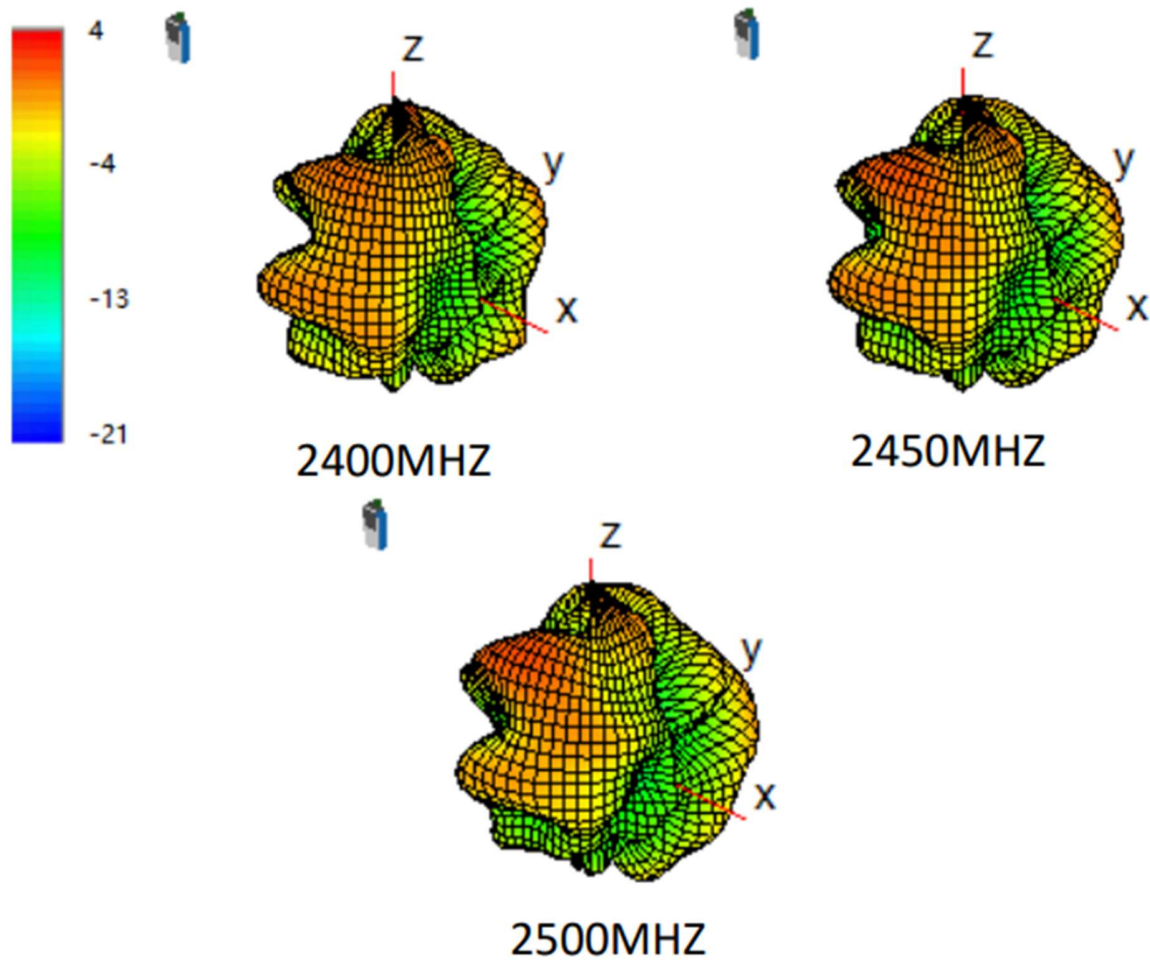
| Date           | 2022/10/25       |                 |
|----------------|------------------|-----------------|
| Antenna (Rev.) | Wi-Fi Antenna    |                 |
| Detail         | Pattern on board |                 |
| Chamber        | Auden GTS1800-2  |                 |
| MHz            | Efficiency (dB)  | Peak Gain (dBi) |
|                | FS               | FS              |
| 2412           | -2.9             | 1.6             |
| 2422           | -3.0             | 1.6             |
| 2437           | -3.1             | 1.4             |
| 2442           | -3.0             | 1.5             |
| 2452           | -2.8             | 1.8             |
| 2484           | -3.1             | 2.0             |

NOTE : Lab Condition 23.4 °C , 60 %RH

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## Wi-Fi Antenna 3D Radiation Pattern



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## Conclusions

- Wi-Fi: 1. There is -2.8~-3dB efficiency in 2.4(GHz), and the Peak Gain is under 2dBi