

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
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Report Revision	:	Rev00
Dept	:	WCB, Auden Techno Corp.
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Revised by	:	Jessie Chien

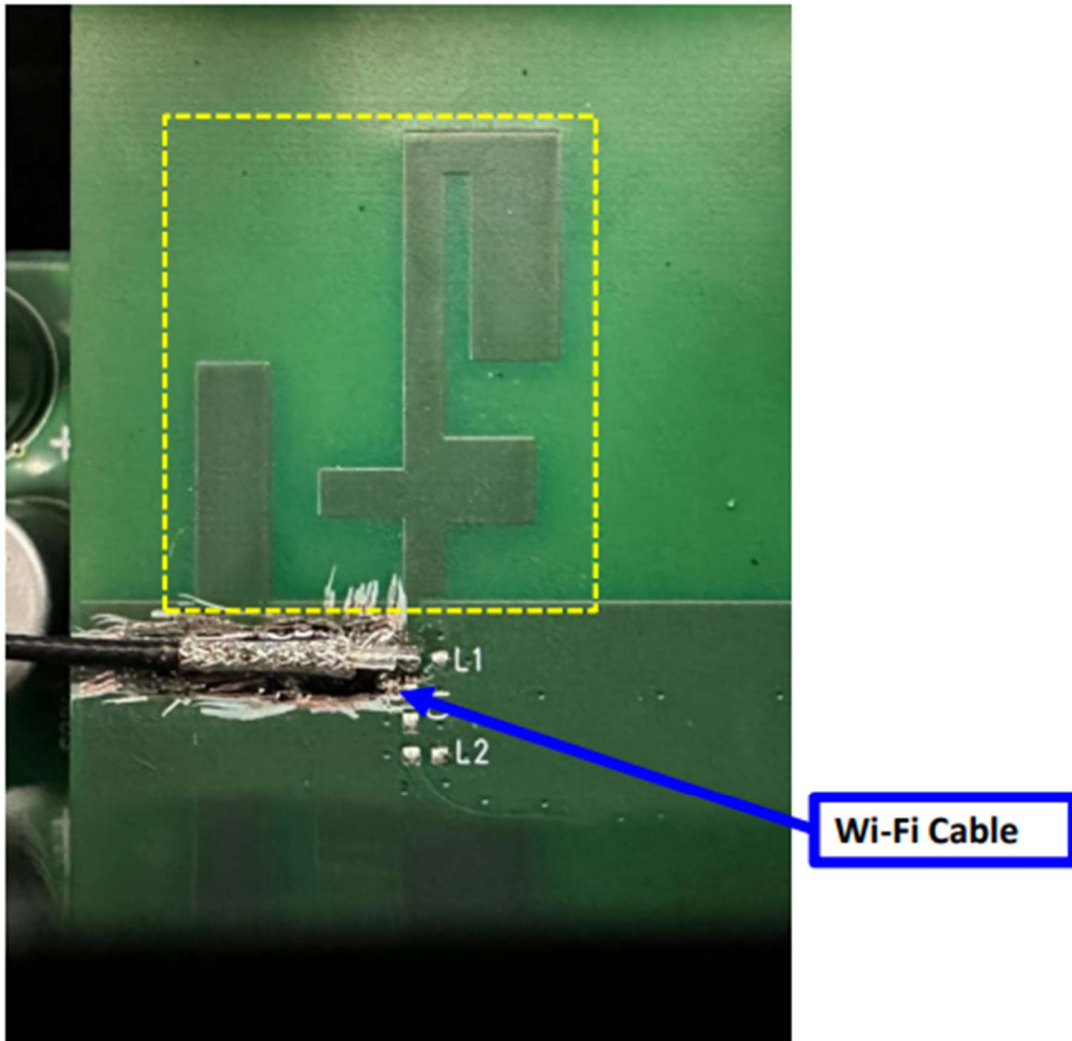
Test Equipment List

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



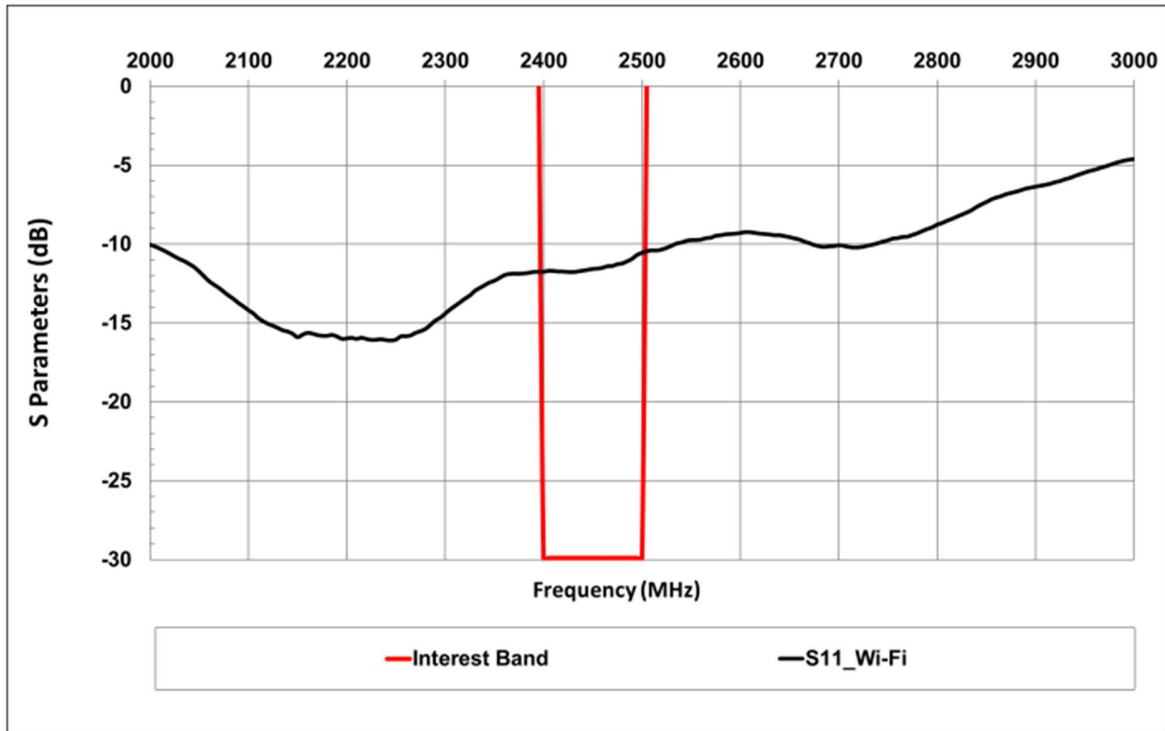
Test Procedure

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

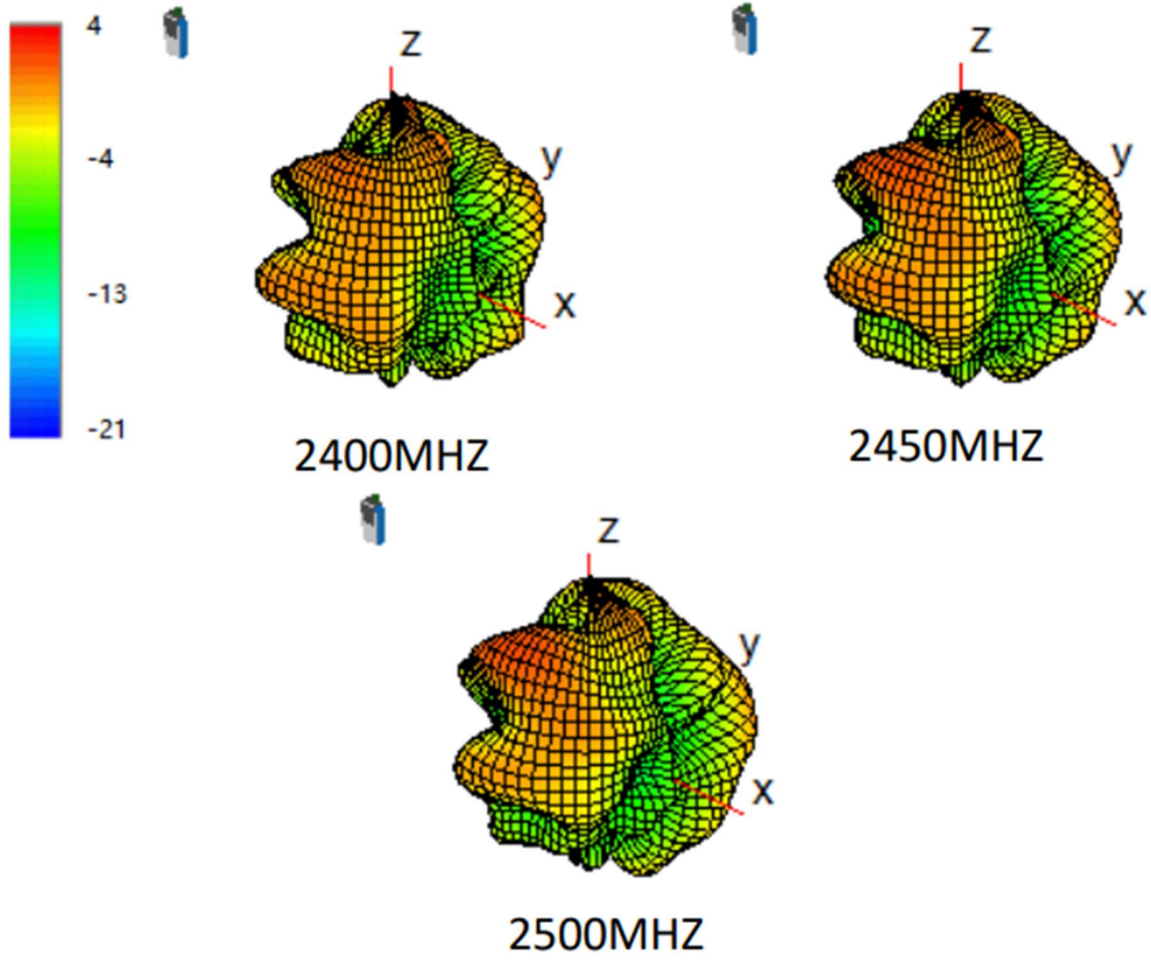
Date	2022/10/25	
Antenna (Rev.)	Wi-Fi Antenna	
Detail	Pattern on board	
Chamber	Auden GTS1800-2	
MHz	Efficiency (dB)	Peak Gain (dBi)
	FS	FS
2412	-2.9	1.6
2422	-3.0	1.6
2437	-3.1	1.4
2442	-3.0	1.5
2452	-2.8	1.8
2484	-3.1	2.0

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