



F2 Labs
16740 Peters Road
Middlefield, Ohio 44062
United States of America
www.f2labs.com

CERTIFICATION TEST REPORT

Manufacturer: Knox Company
1601 West Deer Valley Road
Phoenix, Arizona 85027 USA

Applicant: Same as Above

Product Name: Radio Module

Product Description: Radio Module

Model(s): CC3100MODR11MAMOB

FCC ID: 2AOVI-KNOX-RAS

Testing Commenced: Oct. 22, 2019

Testing Ended: Oct. 22, 2019

Test Results: In Compliance

The EUT complies with the EMC requirements when manufactured identically as the unit tested in this report, including any required modifications. Any changes to the design or build of this unit subsequent to this testing may deem it non-compliant.

Standards:

- KDB447498



Order Number: F2P21834

Client: Knox Company
Model(s): CC3100MODR11MAMOB

Evaluation Conducted by:

Julius Chiller, EMC/Wireless Engineer

Report Reviewed by:

Ken Littell, Director of EMC & Wireless Operations

F2 Labs
26501 Ridge Road
Damascus, MD 20872
Ph 301.253.4500

F2 Labs
16740 Peters Road
Middlefield, OH 44062
Ph 440.632.5541

F2 Labs
8583 Zionsville Road
Indianapolis, IN 46268
Ph 317.610.0611

This test report may be reproduced in full; partial reproduction only may be made with the written consent of F2 Labs. The results in this report apply only to the equipment tested.



TABLE OF CONTENTS

Section	Title	Page
1	ADMINISTRATIVE INFORMATION	4
2	SUMMARY OF TEST RESULTS/MODIFICATIONS	5
3	ENGINEERING STATEMENT	6
4	EUT INFORMATION AND DATA	7
5	RF EXPOSURE FOR DEVICE >20cm FROM HUMAN	8



1 ADMINISTRATIVE INFORMATION

1.1 Measurement Location:

F2 Labs in Middlefield, Ohio. Site description and attenuation data are on file with the FCC's Sampling and Measurement Branch at the FCC Laboratory in Columbia, MD.

1.2 Measurement Procedure:

All measurements were performed according to KDB558074.

1.4 Document History

Document Number	Description	Issue Date	Approved By
F2P21834-05E	First Issue	Nov. 22, 2019	K. Littell



2 SUMMARY OF TEST RESULTS

Test Name	Standard(s)	Results
RF Exposure for Device >20cm from Human	KDB447498	Complies

Modifications Made to the Equipment
None



Order Number: F2P21834

Client: Knox Company
Model(s): CC3100MODR11MAMOB

3 ENGINEERING STATEMENT

This report has been prepared on behalf of Knox Company to provide documentation for the testing described herein. This equipment has been tested and found to comply with KDB447498. The test results found in this test report relate only to the item(s) tested.



4 EUT INFORMATION AND DATA

4.1 Equipment Under Test:

Product(s): Radio Module
Model(s): CC3100MODR11MAMOB
Serial No(s): None Specified
FCC ID: 2AOVI-KNOX-RAS

4.2 Trade Name:

Knox Company

4.3 Power Supply:

FSP Group Inc. FSPO84-DIBAN2

4.4 Applicable Rules:

CFR 47, Part 15.247, subpart C

4.5 Equipment Category:

Radio Transmitter-DTS

4.6 Antenna:

5dBi Whip Antenna - Larsen NMO5E2400B

4.7 Accessories:

N/A

4.8 Testing Algorithm:

The radio module was set to transmit a continuously modulated signal on the low, mid and high channels, in the 2.4 GHz Wi-Fi band.



5. RF EXPOSURE FOR DEVICE >20cm FROM HUMAN

5.1 Requirements:

Limit: 1mW/cm²

Formula used for result: $\frac{E.I.R.P.}{4 \pi R^2}$

Results for distance of 20cm: E.I.R.P. = 92.04mW

92.04mW at the 2412-2462 MHz band
which is the highest.

$$\frac{92.04\text{mW}}{4 \pi R^2} = \frac{92.04\text{mW}}{5026.55} = 0.0183\text{mW/cm}^2$$