



**F2 Labs**  
16740 Peters Road  
Middlefield, Ohio 44062  
United States of America  
[www.f2labs.com](http://www.f2labs.com)

**MPE 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:** Dec. 18, 2017

**Testing Ended:** Feb. 2, 2018

**Summary of 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 and/or manufacturer's statement. Any changes to the design or build of this unit subsequent to this testing may deem it non-compliant.

**Standards:**

- **KDB447498**



Order Number: F2LQ10489

Client: Knox Company  
Model(s): CC3100MODR11MAMOB

**Evaluation Conducted by:**

Joe Knepper, EMC Proj. Eng.

**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.



Order Number: F2LQ10489

Client: Knox Company  
Model(s): CC3100MODR11MAMOB

## 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



Order Number: F2LQ10489

Client: Knox Company  
Model(s): CC3100MODR11MAMOB

## 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
F2LQ10489-05E	First Issue	Feb. 22, 2018	K. Littell



Order Number: F2LQ10489

Client: Knox Company  
Model(s): CC3100MODR11MAMOB

## 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: F2LQ10489**

**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.



Order Number: F2LQ10489

Client: Knox Company  
Model(s): CC3100MODR11MAMOB

## 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:

Volgen KTPS90-1207

### 4.4 Applicable Rules:

- KDB447498

### 4.5 Equipment Category:

Radio Transmitter-DTS

### 4.6 Antenna:

4.5dBi Whip Antenna

### 4.7 Accessories:

N/A

### 4.8 Test Item Condition:

The equipment to be tested was received in good condition.



Order Number: F2LQ10489

Client: Knox Company  
Model(s): CC3100MODR11MAMOB

## 5. RF EXPOSURE FOR DEVICE >20cm FROM HUMAN

### 5.1 Requirements:

Limit: 1mW/cm<sup>2</sup>

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

Results: E.I.R.P. = 82.04mW

82.04mW which is the highest.

$$\frac{82.04\text{mW}}{4 \pi R^2} = \frac{82.04\text{mW}}{5026.55} = 0.01632\text{mW/cm}^2$$