

# Compliance Testing, LLC

Previously Flom Test Lab EMI, EMC, RF Testing Experts Since 1963 toll-free: (866)311-3268 fax: (480)926-3598

http://www.ComplianceTesting.com info@ComplianceTesting.com

### **Test Report**

**Prepared for: Knox Company** 

Model: KSM200K2 & KLS400K2

**Description: Key Retention Device** 

Serial Number: N/A

FCC ID: Z64-CC3100MODR1

То

FCC Part 1.1310

Date of Issue: August 3, 2017

On the behalf of the applicant: Knox Company

1601 W Deer Valley Rd Phoenix, AZ 85027

Attention of: Howard Needham, Sr. Engineer

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Project No: p1690016-TCB

Poona Saber

**Project Test Engineer** 

Danala

# **Test Report Revision History**

Revision	Date	Revised By	Reason for Revision
1.0	August 3, 2017	Poona Saber	Original Document

#### ILAC / A2LA

Compliance Testing, LLC, has been accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer joint ISO-ILAC-IAF Communiqué dated January 2009)

The tests results contained within this test report all fall within our scope of accreditation, unless below

Please refer to http://www.compliancetesting.com/labscope.html for current scope of accreditation.

Testing Certificate Number: 2152.01



FCC Site Reg. #349717

IC Site Reg. #2044A-2

Non-accredited tests contained in this report:

N/A

**EUT Description** 

Model: KSM200K2 & KLS-400K2

Description: Keysecure is a key retention device used for securing the Knox mechanical key in

emergency vehicles Firmware: NA Software: NA Serial Number: NA

Additional Information:

Device incorporates a 2.4 GHz module incorporating a 5dBi Air802 antenna, Model: ANRD2405-RPSMA

# **Source Based Time Averaged Power Calculation**

### **Average Power calculations**

Average Power = Peak Power \* duty-cycle%

Tuned Frequency (MHz)	Conducted Peak Output Power (mW)	Duty Cycle (%)	Average Power (mW)
2437	0.029	100	0.029

#### **MPE Evaluation**

This is a portable device used in Uncontrolled Exposure environment.

Limits Uncontrolled Exposure 47 CFR 1.1310 Table 1, (B)

0.3-1.234 MHz:	Limit [mW/cm <sup>2</sup> ] = 100
1.34-30 MHz:	Limit $[mW/cm^2] = (180/f^2)$
30-300 MHz:	Limit $[mW/cm^2] = 0.2$
300-1500 MHz:	Limit $[mW/cm^2] = f/1500$
1500-100,000 MHz	Limit $[mW/cm^2] = 1.0$

#### **Test Data**

Test Frequency, MHz	2437
Power, Conducted, mW (P)	29.1
Antenna Gain Isotropic	5 dBi
Antenna Gain Numeric (G)	3.16
Antenna Type	patch
Distance (R)	20 cm

$$S = \frac{P*G}{4\pi r^2}$$
 Power Density (S) mw/cm<sup>2</sup>

Power Density (S) = 0.018
Limit =(from above table) = 1

So the Unit shall be at least 20 centimeters away from human bodies.

**END OF TEST REPORT**