



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: Time Keeping Systems Inc.

Model: DD-001 - Duress Device

Description: Wireless positioning and duress alarm for prison guards

Serial Number: N/A

FCC ID: MTD-DD-001

To

FCC Part 1.1310

Date of Issue: May 8, 2017

On the behalf of the applicant:

**Time Keeping Systems Inc.
30700 Bainbridge Rd
Cleveland, OH 44139**

Attention of:

**Dean Chriss
Ph: (216)595-1026
Email: dchriss@guard1.com**

**Prepared By
Compliance Testing, LLC
1724 S. Nevada Way
Mesa, AZ 85204
(480) 926-3100 phone / (480) 926-3598 fax
www.compliancetesting.com
Project No: p1650002**

**Kenneth Lee
Project Test Engineer**

This report may not be reproduced, except in full, without written permission from Compliance Testing
All results contained herein relate only to the sample tested



Test Report Revision History

Revision	Date	Revised By	Reason for Revision
1.0	June 15, 2016	Kenneth Lee	Original Document
2.0	August 29, 2016	Kenneth Lee	Updated SAR exclusion
3.0	January 5, 2016	Kenneth Lee	Updated Duty Cycle Correction to a percentage for clarification
4.0	May 5, 2017	Kenneth Lee	Updated SAR Exclusion Calculation



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: Wireless positioning and duress alarm for prison guards

Description: DD-001 - Duress Device

Firmware: N/A

Software: N/A

S/N: N/A

Additional Information: None



SAR Exclusion

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at *test separation distances* ≤ 50 mm are determined by:

$$\left[\frac{(\text{max. power of channel, including tune-up tolerance, mW})}{(\text{min. test separation distance, mm})} \right] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR,}^{25} \text{ where}$$

- $f(\text{GHz})$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation²⁶
- The result is rounded to one decimal place for comparison
- 3.0 and 7.5 are referred to as the numeric thresholds in the step 2 below

The test exclusions are applicable only when the minimum *test separation distance* is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum *test separation distance* is < 5 mm, a distance of 5 mm according to 5) in section 4.1 is applied to determine SAR test exclusion.

Max Power in mW = 238 mW

Antenna Gain = 5.44 dB

Corrected Power = 839 mW

Duty Cycle Correction = $\frac{236.3\mu s}{100\text{ ms}} = 0.002633 = 0.2633\%$

Min. Test Separation Distance = 1 mm

Frequency of Operation = 2402

$$\frac{2.209\text{ mW}}{5\text{ mm}} \times \sqrt{2.4\text{ GHz}} = 0.6847$$

END OF TEST REPORT