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Management Group**  
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*Competent Body Approval #: 14082  
NVLAP Lab code: 200068-0*

## **EMC TEST CERTIFICATION REPORT**

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**On Models: 33-1 & 510  
Prepared for Trine Products Corporation**

**According to FCC Part 15 Class B**

**FCC ID #:** *H8A-510SH*

**Prepared by:** *Arcelia Maldonado*

**QC Manager:** *Michael J. Azar*

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## ADMINISTRATIVE DATA

*Test Sample* : *Wireless Door Chime*

*Part Number* : *N/A*

*Manufacturer* : *Smart Hero Enterprise Ltd.*

*Applicant* : *Trine Products Corporation  
1430 Ferris Place  
Bronx, NY 10461-3699 USA*

*Telephone* : *(718) 829-4796*

*Fax* : *(718) 792-9127*

## EUT Description

*Trine Products Corporation models 33-1 & 510 (referred to as the EUT in this report) is a Wireless Door Chime Receiver.*

### ***Model Differences***

1. *Receiver model 33-1 has same circuit as model 510. The difference of these two receivers is the battery, 510 uses 3 x UM-2 batteries while 33-1 uses 3 x UM-1 batteries.*

## Test Summary

*The Electromagnetic Compatibility requirements on Models 33-1 for this test are stated below. All results listed in this report relate exclusively to this above-mentioned model as the Equipment Under Test. This report confers no approval or endorsement upon any other component, host or subsystem used in the test set-up.*

<b>Radiated Emission Tests</b>			
<b>Specifications</b>	<b>Test Results</b>	<b>Test Point</b>	<b>Remark</b>
CFR 47 Part 15 Section 15.109	<b>Receiver</b> <i>(30MHz to 1,000MHz on Quasi-peak)</i> <i>Passed by 0.8 dB of QP</i>	Enclosure	Attachment 1

### **Test Location**

*EMC Compliance Management Group is located at 670 National Ave., Mountain View, CA 94043, USA.*

### **Accreditation Bodies**

*EMC Compliance Management Group is a fully accredited Test Laboratory for ITE, ISM and Telecommunications Products.*



*Laboratory Assessment #: 14082, Approved by Assessment Services, A U. K. Competent Body, as meeting the requirements of EN45001 and ISO Guide 25.*



*In compliance with the site registration requirements of Section 2.948 of the FCC Rules to perform EMI measurements for the general public.*



*Accredited by the National Voluntary Laboratory Accreditation Program for the specific scope of accreditation under Lab Code # 200068-0.*



*Registered in accordance with Japanese VCCI Regulations.*

### ***Equipment Modification***

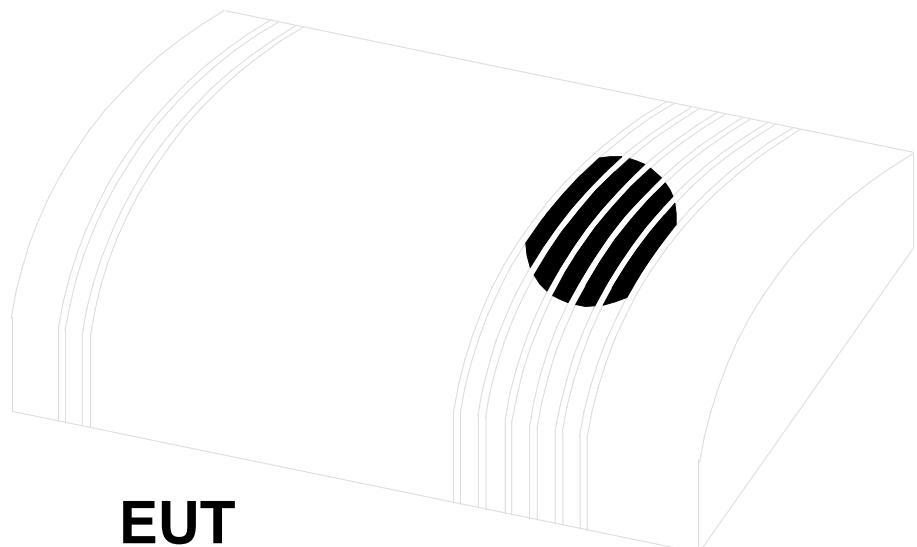
*Any modifications installed previous to testing by Trine Products Corporation will be incorporated in each production model sold or leased in United States.*

*There were no modifications installed by EMC Compliance Management Group.*

## ***Test System Details***

<b><i>EUT</i></b>	
<b><i>Model Number:</i></b>	<b><i>33-1</i></b>
<b><i>Description:</i></b>	<b><i>Wireless Door Chime</i></b>
<b><i>Manufacturer:</i></b>	<b><i>Smart Hero Enterprises Ltd.</i></b>
<b><i>Support Equipment</i></b>	
<b><i>None</i></b>	

*Configuration of Tested System*



**ATTACHMENT 1 - RADIATED EMISSION TEST RESULTS (204-R01)**

<b>CLIENT:</b>	Trine Products Corporation	<b>TEST REFERENCE:</b>	FCC Part 15.109
<b>EUT MODEL:</b>	33-1	<b>PRODUCT:</b>	Wireless Door Chime (Receiver)
<b>SERIAL NO.:</b>	N/A	<b>EUT DESIGNATION:</b>	Home Use
<b>TEMPERATURE:</b>	15°C	<b>HUMIDITY:</b>	48%
<b>ATM PRESSURE:</b>	1017 Mbar	<b>GROUNDING:</b>	N/A
<b>TESTED BY:</b>	Robert Li	<b>DATE OF TEST:</b>	2000 Feb 12
<b>SETUP METHOD:</b>	ANSI C63.4:1992, CISPR 16-1:1993		
<b>TEST PROCEDURE:</b>	<p>The EUT was set up according to the guidelines of ANSI C63.4:1992 for radiated emissions. An EMI receiver peak scan was made at the frequency measurement range (pre-scan) in an Anechoic chamber. Signal discrimination was then performed and the significant peaks marked. These peaks are then quasi-peaked from 30 MHz to 1GHz at an Anechoic chamber.</p> <p>The following data lists the significant emission frequencies, measured levels, correction factors (including cable and antenna correction factors), and the corrected readings against the limits. Explanation of the Correction Factor is given as follows:</p> <p>FS= RA + AF + CF - AG</p> <p>Where: FS = Field Strength</p> <p>RA = Receiver Amplitude</p> <p>AF = Antenna Factor</p> <p>CF = Cable Attenuation Factor</p> <p>AG = Amplifier Gain</p>		
<b>TESTED RANGE:</b>	30MHz to 1,000MHz on Quasi-peak		
<b>TEST VOLTAGE:</b>	4.5VDC		
<b>RESULTS:</b>	<ul style="list-style-type: none"> <li><b>Receiver:</b> The EUT meets the requirements of test reference for Radiated Emissions on horizontal polarization by 0.8 dB at 316.0585MHz.</li> </ul> <p><b>The test results relate only to the equipment under test provided by client.</b></p>		
<b>CHANGES OR MODIFICATIONS:</b>	There were no modifications installed by EMC Compliance Management Group test personnel.		
<b>M. UNCERTAINTY:</b>	Freq. $\pm 2 \times 10^{-7} \times$ Center Freq., Amp $\pm 2.6$ dB		

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<b>Receiver</b>					
Frequency [MHz]	Antenna Polarization [V/H]	Corrected Reading [dB $\mu$ V/m]	Delta, QP [dB]	3Meters Limits [dB $\mu$ V/m]	Correction Factors [dB/m]
Set-up/Configuration: ANSI C63.4:1992					
316.0585	H	45.2	-0.8	46.0	15.5
902.8305	H	39.9	-6.1	46.0	24.3
902.9425	V	34.4	-11.6	46.0	24.3
316.0585	V	31.9	-14.1	46.0	15.5
Comments: None					
Note: All readings are quasi-peak unless stated otherwise, using a QPA bandwidth of 120kHz, with a 30 ms sweep time. A video filter was not used.					

Test Equipment	Manufacturer/ Model	Serial No.	Last Cal.	Cal. Due Date
EMI Receiver	HP 85462A	3650A00363	05/21/99	05/21/00
RF Filter	HP 85460A	3704A00349	05/21/99	05/21/00
Antenna	CHASE CBL6112A	2274	11/15/99	11/15/00
Note: All testing were performed using internationally recognized standards. All test instruments were calibrated and traceable to the National Institute of Standards and Technology (NIST).				

SIGNED: Robert e.

REVIEWED: Mark J. Jaffee

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