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Report No.: SZEMO070100080RFF(I)
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FCC ID : U3ULGHP-MBG-1

FEDERAL COMMUNICATIONS COMMISSION
Registration number: 556682

FCC TEST REPORT

Application No. : SZEMO070100080RF
Applicant : LG HOME PRODUCTS, LLC
FCC ID : U3ULGHP-MBG-1

Fundamental Frequency : 434MHz

Equipment under Test (EUT):

EUT Name : Toilet tunes
Item No. : TT-MBG100
Serial No. : Not supplied by client
Standards : FCC PART 15, SUBPART C : 2006 (Section 15.231)

Section 15.231

Date of Receipt : 18 January 2007
Date of Test : 23 January to 10 February 2007
Date of Issue : 27 February 2007

Test Result :	PASS *
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* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:

Robinson Lo
Laboratory Manager

This report refers to the General Conditions for Inspection and Testing Services, printed overleaf

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

All test results in this report can be traceable to National or International Standards .



2 Test Summary

Test	Test Requirement	Standard Paragraph	Result
Radiated Emission (30MHz to 1000MHz)	FCC PART 15 :2006	Section 15.231	PASS *
Occupied Bandwidth	FCC PART 15 :2006	Section 15.231	PASS
Calculation Of Duty Cycle	FCC PART 15 :2006	Section 15.231	PASS

Tx: In this whole report Tx (or tx) means Transmitter.

Rx: In this whole report Rx (or rx) means Receiver.

RF: In this whole report RF means Radiated Frequency.

* The EUT passed the RE test after retest.



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4 General Information

4.1 Client Information

Applicant: LG HOME PRODUCTS, LLC
Address of Applicant: 3300 NE 192 Street #913 Aventura, Florida Details of E.U.T.
Product Name: Toilet tunes
Item No: TT-MBG100
Power Supply: 4.5V DC (3 * 1.5V 'AAA' Size Batteries) for Tx
6.0V DC (4 * 1.5V 'R14S' Size Batteries) for Rx.
Power Cord: N/A-

4.2 Description of Support Units

The EUT was tested as an independent unit: a 434MHz radio transmitter.

4.3 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou EMC Laboratory, No.198 Kezhu Road,
Science Town Economic & Technology Development District Guangzhou, China 510663

Tel: +86 20 8215 5555 Fax: +86 20 8207 5059

4.4 Other Information Requested by the Customer

None.

5 Test Results

5.1 Test Instruments

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal.Date (dd-mm-yy)	Cal.Due date (dd-mm-yy)
1	3m Semi-Anechoic Chamber	ETS-LINDGREN	N/A	SEL0017	28-04-2005	27-04-2007
2	EMI Test Receiver	Rohde & Schwarz	ESIB26	100249	22-09-2006	21-09-2007
3	EMI Test software	AUDIX	E3	SEL0050	N/A	N/A
4	Coaxial cable	SGS	N/A	SEL0028	20-05-2006	19-05-2007
5	Coaxial cable	SGS	N/A	SEL0027	20-05-2006	19-05-2007
6	BiConiLog Antenna	ETS-LINDGREN	3142C	00042673	03-03-2006	02-03-2007
7	EMI Test Receiver	Rohde & Schwarz	ESCI	100119	09-03-2006	08-03-2007
8	Loop Antenna	Emco	6502	00042963	30-05-2006	29-05-2007

5.2 E.U.T. Operation

Input voltage: 4.5V DC (3 * 1.5V 'AAA' Size Batteries)for the transmitter.

Operating Environment:

Temperature: 23.0 °C

Humidity: 49 % RH

Atmospheric Pressure: 1015 mbar

EUT Operation:

Test the EUT in transmitting mode.

5.3 Test Procedure & Measurement Data

5.3.1 Radiated Emissions

Test Requirement: FCC Part15 C Section 15.231

Test Method: ANSI C63.4

Test Date: 23 January 2007 (Initial Test)

10 February 2007(Retest)

Measurement Distance: 3m (Semi-Anechoic Chamber)

Requirements:

Fundamental Frequency MHz	Field Strength Fundamental (dBµV/m @ 3m)	of	Field Strength of Harmonics and Spurious Emissions (dBµV/m @ 3m)
40.66 to 40.70	67.04		47.04
70 to 130	61.94		41.94
130 to 174	61.94 to 71.48		41.94 to 51.48
174 to 260	71.48		51.48
260 to 470	71.48 to 81.94		51.48 to 61.94
470 and above	81.94		61.94



The fundamental frequency of the EUT is 434MHz

The limit for average field strength dBuV/m for the fundamental frequency= 80.83dBuV/m.

Test Procedure: The procedure used was ANSI Standard C63.4-2003. The receiver was scanned from 30MHz to 1000MHz. When an emission was found, the table was rotated to produce the maximum signal strength. An initial pre-scan was performed in peak detection mode using the receiver. The EUT was measured for both the Horizontal and Vertical polarities and performed a pre-test three orthogonal planes. The worst case emissions were reported.

An initial pre-scan was performed in the 3m chamber using the spectrum analyser in peak detection mode. The EUT was measured by Bilog antenna with 2 orthogonal polarities and peak emissions from the EUT were detected within 6dB of the class B limit line.

The following measurements were performed on the modified EUT on 10 February 2007:
Test the EUT in transmitting mode.

1. Intentional emission

Test Frequency (MHz)	Peak (dB μ V/m)		Limits (dB μ V/m)	Margin (dB)	
	Vertical	Horizontal		Vertical	Horizontal
434	80.56	71.20	100.83	20.27	29.63

Test Frequency (MHz)	Average (dB μ V/m)		Limits (dB μ V/m)	Margin (dB)	
	Vertical	Horizontal		Vertical	Horizontal
434	73.56	64.25	80.83	7.27	16.58



2. Harmonics & Spurious Emissions

Test Frequency (MHz)	Average (dBµV/m)		Limits (dBµV/m)	Margin (dB)	
	Vertical	Horizontal		Vertical	Horizontal
868.021	35.50	27.20	60.83	25.33	33.83
1302.010	34.20	29.50	60.83	26.63	31.33
1736.087	33.20	29.40	60.83	27.63	31.43
2170.127	32.10	27.10	60.83	28.73	33.73

Remark:

According to 15.35 (b) When average radiated emission measurements are specified in the regulations, including emission measurements below 1000 MHz, there is also a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit for the frequency being investigated unless a different peak emission limit is otherwise specified in the rules, e.g., see Section 15.255.

Test Results: The unit does meet the FCC Part 15 C Section 15.231 requirements.



5.3.2 Occupied Bandwidth

Test Requirement: FCC Part15 C Section 15.231

Test Method: ANSI C63.4

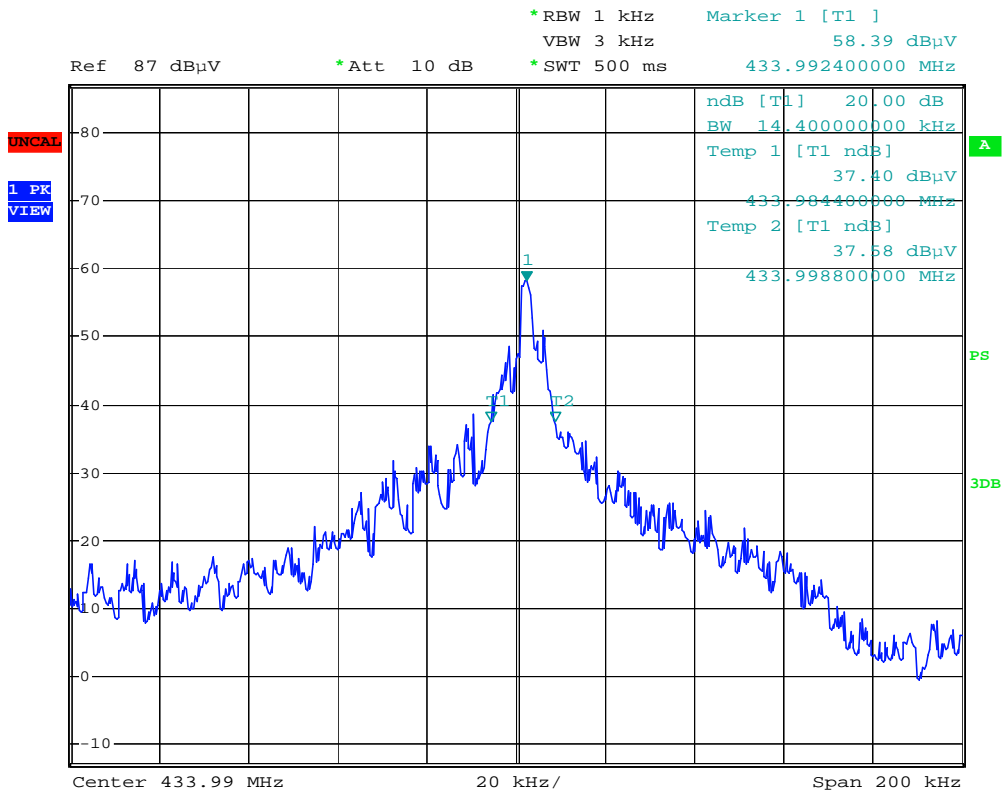
Test Date: 23 January 2007

Requirements: 15.231 (c) The bandwidth of the emission shall be no wider than 0.25% of the center frequency for devices operating above 70 MHz and below 900 MHz. For devices operating above 900 MHz, the emission shall be no wider than 0.5% of the center frequency.

Bandwidth is determined at the points 20 dB down from the modulated carrier.

Method of measurement: The useful radiated emission from the EUT was detected by the spectrum analyzer with peak detector. The vertical Scale is set to -10dB per division. The horizontal scale is set to 20KHz per division.

The graph as below, represents the emissions take for this device.



N

Date: 23.JAN.2007 08:54:03

The results: The unit does meet the FCC Part 15 C Section 15.231 requirements.



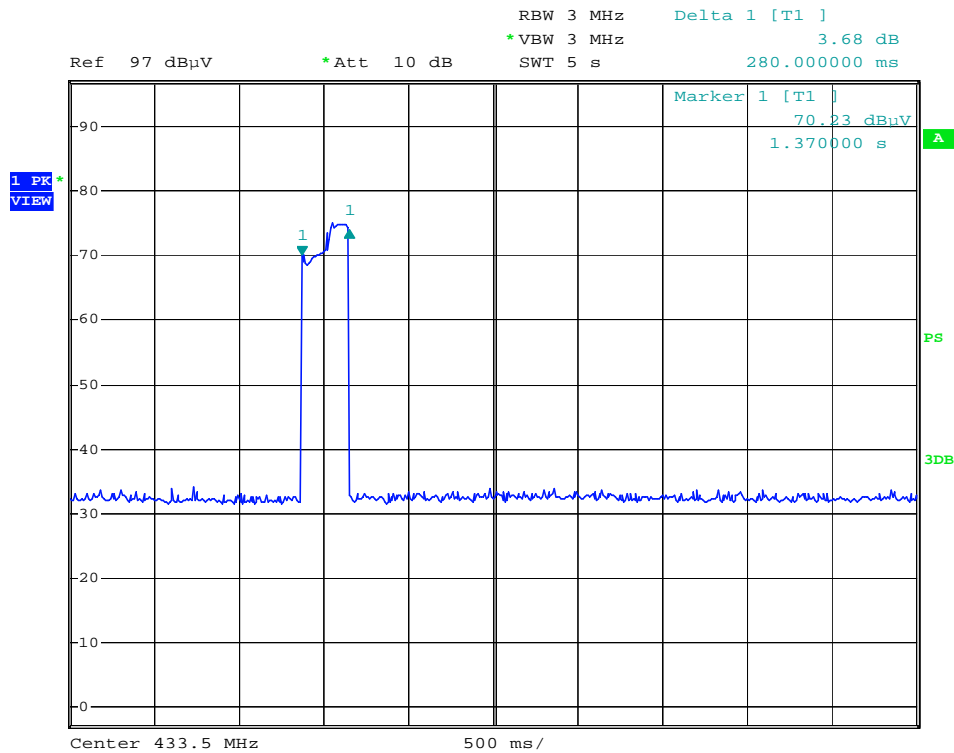
5.3.3 Calculation Of Duty Cycle:

Test Requirement: FCC Part15 C
Test Method: FCC Part15 C Section 15.231.
Test Date: 8 February 2007
Requirements:

1. Regulation 15.231 (a) The provisions of this Section are restricted to periodic operation within the band 40.66 40.70 MHz and above 70 MHz. Except as shown in paragraph (e) of this Section, the intentional radiator is restricted to the transmission of a control signal such as those used with alarm systems, door openers, remote switches, etc. Radio control of toys is not permitted. Continuous transmissions, such as voice or video, and data transmissions are not permitted. The prohibition against data transmissions does not preclude the use of recognition codes. Those codes are used to identify the sensor that is activated or to identify the particular component as being part of the system.

Result:

The EUT is similar as a remote switch. The test result as follows



N

Date: 8.FEB.2007 16:09:28

Test Results: The unit does meet the FCC Part 15 C Section 15.231 requirements.