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Email: sgs_internet_operations@sgs.com FCC ID: HS9-51360SL

FCC Test Report

SZEMO071203549RF Application No.: Applicant: Honeywell International Inc. Manufacturer: VTech Communications Ltd

FCC ID HS9-51360SL

Equipment Under Test (EUT):

Name: Premium Portable Wireless Chime

Model: 51360SL Band Name: Honeywell

Standards: FCC PART15 SECTION 15.109:2007

06 November 2007 Date of Receipt:

07 to 09 November 2007 Date of Test:

22 November 2007 Date of Issue:

Test Result: PASS*

In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:

Robinson Lo Laboratory Manager

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. 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.

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2 Test Summary

Test	Test Requirement	Test Method	Class / Severity	Result
Radiated Emission (30MHz to 1GHz)	FCC PART 15, Section 15.109: 2007	ANSI C63.4:2003	Class B	PASS

Remark:

The EUT can work with Portrait Push(Model: 51367SL/51368SL/51369SL/51370SL) and Landscape Push/Converter/Extender (Model: 51371SL) together.



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4 General Information

4.1 Client Information

Applicant Name: Honeywell International Inc.

Applicant Address: 1985 Douglas Drive, Golden Valley Minnesota United States

Manufacturer: VTech Communications Ltd

Manufacturer Address: Xia Ling Bei Management Zone, Liaobu District, Dongguan City,

Guangdong, China

4.2 General Description of E.U.T.

EUT Name: Premium Portable Wireless Chime

Item No.: 51360SL

Serial No.: Not supplied by client

Modulation Mode FSK

4.3 Details of E.U.T.

Power Supply: 4.5VDC (1.5V x 3 'AA' Size Batteries)

4.4 Description of Support Units

The EUT was tested as an independent unit: Premium Portable Wireless Chime

4.5 Standards Applicable for Testing

The standard used was FCC PART 15, Section 15.109, CLASS B (2007).

4.6 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

No tests were sub-contracted.



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4.7 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

NVLAP – Lab Code: 200611-0

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou EMC Laboratory is recognized under the National Voluntary Laboratory Accreditation Program (NVLAP/NIST). NVLAP Code: 200611-0.

ACA

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory can also perform testing for the Australian C-Tick mark as a result of our NVLAP accreditation.

VCC

The 3m Semi-anechoic chamber and Shielded Room (7.5m x 4.0m x 3.0m) of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-2197 and C-2383 respectively.

Date of Registration: September 29, 2005. Valid until September 28, 2008.

SGS UK(Certificate No.: 32), SGS-TUV SAARLAND and SGS-FIMKO

Have approved SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory as a supplier of EMC TESTING SERVICES and SAFETY TESTING SERVICES.

CNAS L0167

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been assessed and in compliance with CNAS-CL01:2006 accreditation criteria for testing laboratories (identical to ISO/IEC 17025:2005 General Requirements) for the Competence of Testing Laboratories.

• FCC – Registration No.: 556682

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 556682, Aug. 04, 2005

• Industry Canada (IC)

The 3m Semi-anechoic chamber of SGS-CSTC Standards Technical Services Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 6002.

4.8 Deviation from Standards

None.

4.9 Abnormalities from Standard Conditions

None.



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5 Equipments Used during Test

	RE in Chamber							
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (dd-mm-yy)	Cal.Due date (dd-mm-yy)		
1	3m Semi-Anechoic Chamber	ETS-LINDGREN	N/A	SEL0017	16-06-2007	15-06-2008		
2	2 EMI Test Receiver Rohde & Schwarz		ESIB26	SEL0023	12-12-2007	11-12-2008		
3	EMI Test software	AUDIX	E3	SEL0050	N/A	N/A		
4	Coaxial cable	SGS	N/A	SEL0028	01-06-2007	31-05-2008		
5	BiConiLog Antenna (26-3000MHz) ETS-LINDGREN		3142C	SEL0017	12-08-2007	11-08-2008		
6	Pre-amplifier (0.1-1300MHz)	Agilent Technologies	8447D	SEL0053	27-06-2007	26-06-2008		
7	Double-ridged horn (1-18GHz)	ETS-LINDGREN	3117	SEL0005	12-08-2007	11-08-2008		
8	Pre-amplifier (1-18GHz)	Rohde & Schwarz	AFS42-00101 800-25-S-42	SEL0081	27-06-2007	26-06-2009		

General used equipment								
Item	tem Test Equipment Manufacturer Model No.		Model No.	Inventory No.				
1	Thermo-/Hygrometer	N/A	TH01	SEL0032 to SEL0034	22-06-2006	21-06-2008		
2	Barometer	ChangChun	DYM3	SEL0088	22-06-2006	21-06-2008		



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6 Test Results

6.1 Radiated Emissions, 30MHz to 1GHz

Test Requirement: FCC Part15 Section 15.109

Test Method: ANSI C63.4

Test Date: 08 November 2007 Frequency Range: 30MHz to 1GHz

Measurement Distance: 3m
Class: Class B

Limit: $40.0 \text{ dB}\mu\text{V/m}$ between 30MHz & 88MHz

 $43.5 \text{ dB}\mu\text{V/m}$ between 88MHz & 216MHz $46.0 \text{ dB}\mu\text{V/m}$ between 216MHz & 960MHz

 $54.0 \text{ dB}\mu\text{V/m}$ zbove 960MHz

Detector: Peak for pre-scan (120kHz resolution bandwidth)

Quasi-Peak if maximised peak within 6dB of limit

6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 24.0 °C Humidity: 52 % RH Atmospheric Pressure: 1012 mbar

EUT Operation: Test in on mode connected with PC system.

Test Procedure:

- 1. The EUT is placed on a turntable, which is 0.8m above ground plane.
- 2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
- 3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
- 4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
- 6. Repeat above procedures until the measurements for all frequencies are complete.

The following measurements were performed on the modified modified EUT on 08 November 2007: Test the EUT in transmitting mode.



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6.1.2 Measurement Data

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 quasi-peak measurements were performed on the EUT on 08 November 2007:

Horizontal.

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)
32.910	0.60	13.84	28.16	26.88	13.16	40.00	-26.84
91.110	1.11	8.76	27.94	25.58	7.51	43.50	-35.99
148.340	1.31	8.86	27.47	22.96	5.66	43.50	-37.84
309.360	1.93	14.24	26.79	21.72	11.10	46.00	-34.90
460.680	2.45	17.29	27.60	23.62	15.76	46.00	-30.24
688.630	2.88	21.52	27.31	21.71	18.80	46.00	-27.20

Vertical.

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)
32.910	0.60	13.91	28.16	27.24	13.59	40.00	-26.41
94.020	1.14	8.87	27.92	29.51	11.60	43.50	-31.90
222.060	1.53	11.34	27.04	24.60	10.43	46.00	-35.57
356.890	2.08	15.59	27.14	22.36	12.89	46.00	-33.11
659.530	2.82	20.92	27.41	23.62	19.95	46.00	-26.05
885.540	3.54	23.09	26.50	21.47	21.60	46.00	-24.40