

VTech Telecommunications Ltd.

Application
For

47 CFR Part 15 Permissive Change Class II
RSS-213 Issue 2 Equipment Permissive Change Class I

Unlicensed Personal Communication Service Devices/
2 GHz License-exempt Personal Communications Service Devices

(Base Unit)

FCC ID: EW780-6948-00

Model: LS6225, LS6225-xy, LS6226, LS6226-xy

IC: 1135B-80694800

**Model: LS6225, LS6225-2, LS6225-3, LS6225-4, LS6225-5, LS6226-2,
LS6226-5**

Test Report Number: HK09031161-1

Issue Date: May 12, 2009

KS/ cl

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MEASUREMENT/TECHNICAL REPORT

**VTech Telecommunications Ltd. - Model: LS6225, LS6225-xy, LS6226,
LS6226-xy
FCC ID: EW780-6948-00**

This report concerns (check one:) Original Grant Class II Change

Equipment Type : PUB - Part 15 Unlicensed PCS Base Station

Deferred grant requested per 47 CFR 0.457(d)(1)(ii)? Yes No

If yes, defer until :

_____ Date

Company Name agrees to notify the Commission by: _____ Date

of the intended date of announcement of the product so that the grant can be issued on that date.

Transition Rules Request per 15.37? Yes No

If no, assumed Part 15, Subpart D for Unlicensed Personal Communication Service Device - the new 47 CFR [10-01-07 Edition] Provision.

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Table of Contents

1.0 Summary of Test Results	4
2.0 General Description	6
2.1 Product Description	6
2.2 Technical Description	6
2.3 Related Submittal(s) Grants	7
2.4 Test Methodology	7
2.5 Test Facility	7
3.0 System Test Configuration	9
3.1 Justification	9
3.2 Conducted Emission Test Configuration	10
3.3 EUT Exercising Software	10
3.4 Details of EUT and Description of Peripherals	11
3.5 Measurement Uncertainty	12
3.6 Equipment Modification	12
4.0 Measurement Results	14
4.1 Antenna Requirement	14
4.2 Directional Gain of the Antenna	14
4.3 Power Spectral Density	15
4.4 Unwanted Emission Inside the Sub-Band	16
4.5 Emissions Outside the Sub-Band	17
4.5.1 Radiated Emissions Configuration Photographs	18
4.5.2 Radiated Emissions Data	18
4.5.3 Field Strength Calculation	24
4.6 Radiated Emissions from Receiver	25
4.6.1 Radiated Emission Configuration Photographs	26
4.6.2 Radiated Emissions Data	26
4.7 AC Power Lines Conducted Emissions from Transmitter portion of EUT	28
4.7.1 AC Power Lines Conducted Emissions Configuration Photographs	29
4.7.2 AC Power Line Conducted Emissions Data	29
4.8 Radio Frequency Radiation Exposure	30
4.9 Radio Frequency Exposure Compliance	30
4.10 Monitoring Antenna	31
5.0 Equipment List	32
Appendix – Exhibits of Application for Certification	

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**EXHIBIT 1
SUMMARY OF TEST RESULTS**

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1.0 Summary of Test Results

VTech Telecommunications Ltd.

FCC ID: EW780-6948-00

MODEL: LS6225, LS6225-xy, LS6226, LS6226-xy

IC: 1135B-80694800

MODEL: LS6225, LS6225-2, LS6225-3, LS6225-4, LS6225-5, LS6226-2,
LS6226-5

General Technical Requirements

Test Items	RSS-213 / RSS-Gen [#] Clause	FCC Part 15 Section	Test Procedure ANSI C63.17 / ANSI C63.4 [*]	Results	Details see section
Antenna Requirement	7.1.4 [#]	15.317	---	Pass	4.1
Directional Gain of the Antenna	4.1(e)	15.319(e)	4.3.1	Pass	4.2
Power Spectral Density	6.6	15.319(d)	6.1.5	Pass	4.3
AC Power Lines Conducted Emissions from EUT	6.3	15.315	7 [*]	Pass	4.4
Radiated Emissions from Receiver Portion of EUT	6.8	---	8 [*]	Pass	4.5
Radio Frequency Radiation Exposure	RSS-102	15.319(i)	---	Pass	4.6
Unwanted Emission Inside the Sub- Band	6.7.2	15.323(d)	6.1.6.1	Pass	4.8
Emissions Outside the Sub-Band	6.7.1	15.323(d)	6.1.6.2	Pass	4.9
Monitoring Antenna	4.3.4(b8)	15.323(c)(8)	4	Pass	4.10

Test Engineer:



Simple Shum
Engineer

Date: May 12, 2009

Approved By:



Sit Kim Wai, Ken
Assistant Manager

Date: May 12, 2009

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**EXHIBIT 2
GENERAL DESCRIPTION**

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2.0 General Description

2.1 Product Description

The LS6225-2 is a 1.9GHz Digital Modulation Cordless Phone with Caller ID, Speakerphone and Digital Answering Machine - Base Unit. It operates at frequency range of 1921.536MHz to 1928.448MHz with 5 channels (1921.536MHz, 1923.264MHz, 1924.992MHz, 1926.720MHz and 1928.448MHz). The Base Unit is powered by an adaptor 100-120VAC to 6VDC 400mA.

The antennas used in base unit are integral, and the test sample is a prototype.

The Models: LS6225, LS6225-xy, LS6226 and LS6226-xy are the same as the Model: LS6225-2 in hardware aspect except different number of handsets and chargers. Suffix "x" represents number of handsets and chargers. The difference in model number serves as the marketing strategy.

The Models: LS6225, LS6225-3, LS6225-4, LS6225-5, LS6226-2, LS6226-5 are the same as model: LS6225-2 in hardware aspect except different number of handsets and chargers.

Connection between the device and the telephone network is accomplished through the use of USOC RJ11C in the 2-wire loop calling central office line.

2.2 Technical Description

The circuit description and digital modulation techniques description are saved as filename: descri.pdf.

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2.3 Purpose of Application

The purpose of change is saved as filename: product change.pdf

For the Model: LS6225-2, the RF module and algorithm are the same as the previous granted Model: CS6229-2. The enclosure, Baseband layout, circuit of Base are changed.

This is an application for Certification of a PUB - Part 15 Unlicensed PCS Base Station. A verification report has been prepared for the digital portion.

2.4 Test Methodology

The radiated emission measurements for unintentional radiator (if any) and AC power line-conducted emission measurements were performed according to the test procedures specified in ANSI C63.4 (2003). The radiated emission measurements for intentional radiator contained in UPCS device and conducted emission measurements were performed according to the test procedures specified in ANSI C63.17 (2006). All radiated measurements were performed in Open Area Test Sites. Preliminary scans were performed in the Open Area Test Sites only to determine worst case modes. All radiated tests were performed at an antenna to EUT distance of 3 meters, unless stated otherwise in the "Justification Section" of this Application. All other measurements were made in accordance with the procedures in 47 CFR Part 2 / RSS-Gen Issue 2 (2007).

2.5 Test Facility

The open area test site and conducted measurement facility used to collect the emission data is located at Garment Centre, 576 Castle Peak Road, Kowloon, Hong Kong. This test facility and site measurement data have been fully placed on file with the FCC and the Industry Canada.

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**EXHIBIT 3
SYSTEM TEST CONFIGURATION**

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3.0 System Test Configuration

3.1 Justification

For emissions testing, the equipment under test (EUT) was setup to transmit continuously in burst mode with pseudo-random data to simplify the measurement methodology. Care was taken to ensure proper power supply voltages during testing. During testing, all cables (if any) were manipulated to produce worst-case emissions. The handset (if any) was powered by a fully charged battery.

For the measurements, the EUT was attached to a plastic stand if necessary and placed on the wooden turntable. If the base unit attached to peripherals, they were connected and operational (as typical as possible).

The signal was maximized through rotation and placement in the three orthogonal axes. The antenna height and polarization were varied during the search for maximum signal level. The antenna height was varied from 1 to 4 meters. Detector function was in peak mode. Radiated emissions are taken at three meters unless the signal level was too low for measurement at that distance. If necessary, a pre-amplifier was used and/or the test was conducted at a closer distance.

For UPCS transmitter radiated measurement, the spectrum analyzer resolution bandwidth was approximately 1% of EUT emission bandwidth, unless otherwise specified.

For receiver radiated measurement, the spectrum analyzer resolution bandwidth was 1 MHz for measurement above 1 GHz while 100 kHz for measurement from 30 MHz to 1 GHz.

Radiated emission measurements for UPCS transmitter were performed from the lowest radio frequency signal generated in the device which is greater than 9 kHz to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower. Receiver was performed from 30 MHz to the fifth harmonic of the highest frequency or 40 GHz, whichever is lower.

For FCC, RF module for base unit of LS6225-2 is the same with original granted model CS6229-2. Therefore conducted emission measurement for emission bandwidth, peak transmit power, jitter, frame repetition stability, carrier stability and listen before transmit requirements for LS6225-2 are skipped.

For IC, RF module for base unit of LS6225-2 is the same with original granted model LS6225-2. Therefore conducted emission measurement for emission bandwidth, peak transmit power, jitter, frame repetition stability, carrier stability and listen before transmit requirements for LS6225-2 are skipped.

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3.2 Conducted Emission Test Configuration

The setup and equipment setting were made in accordance with ANSI C63.17. The antenna of EUT transmitter was replaced by a coaxial cable. The impedance matching of connection, cable loss and external RF attenuator are taken into account. The EUT was arranged to communicate via a fixed carrier frequency between its transmitter and a companion device. The transmission was configured in burst mode with pseudo-random data as typical as normal operation.

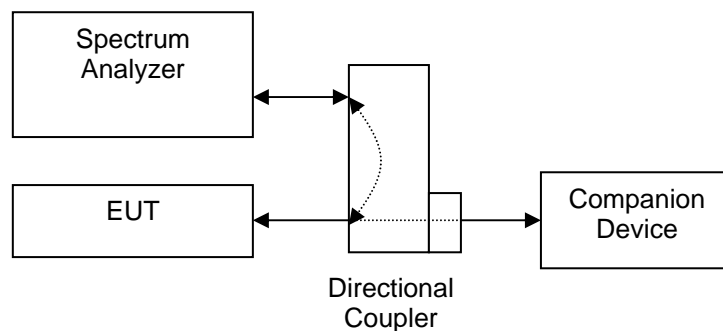


Figure 3.2.1

3.3 EUT Exercising Software

The EUT exercise program (if any) used during radiated and conducted testing was designed to exercise the various system components in a manner similar to a typical use.

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3.4 Details of EUT and Description of Peripherals

Details of EUT:

An AC adaptor and/or a battery (provided with the unit) were used to power the device. Their description are listed below.

- (1) AC adaptor (100-120VAC to 6VDC 400mA, Model: S005IU0600040)
(Supplied by Client)

Description of Peripherals:

- (1) Handset, Model: LS6225 (Supplied by client)
- (2) Handset Battery: "Ni-MH" type rechargeable battery pack (2.4V 500mAh)
(Supplied by Client)
- (3) Telecommunication cable with RJ11C connectors (1m, unshielded), terminated
(Supplied by Intertek)

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3.5 Measurement Uncertainty

When determining of the test conclusion, the Measurement Uncertainty test has been considered.

Uncertainty and Compliance - Unless the standard specifically states that measured values are to be extended by the measurement uncertainty in determining compliance, all compliance determinations are based on the actual measured value.

3.6 Equipment Modification

Any modifications installed previous to testing by VTech Telecommunications Ltd. will be incorporated in each production model sold/leased in the United States/Canada.

No modifications were installed by Commercial & Electrical Division, Intertek Testing Services Hong Kong Ltd.

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**EXHIBIT 4
MEASUREMENT RESULTS**

INTERTEK TESTING SERVICES

Company: VTech Telecommunications Ltd.
Model: LS6225-2

Date of Test: March 19-April 23, 2009

4.0 **Measurement Results**

4.1 Antenna Requirement, FCC Rule 15.317 / RSS-Gen Clause 7.1.4:

EUT must meet the antenna requirement of FCC Rule 15.203 / RSS-Gen Clause 7.1.4.

EUT uses a permanently attached antenna which is considered sufficient to comply with the provisions of this rule. Please refer to internal photos.pdf for more details.

EUT uses a unique antenna jack or electrical connector which is considered sufficient to comply with the provisions of this rule. Please refer to internal photos.pdf for more details.

4.2 Directional Gain of the Antenna, FCC Rule FCC 15.319(e) / RSS-213 Clause 4.1(e):

The peak transmit power shall be reduced by the amount in dB that the maximum directional gain of the antenna exceeds 3 dBi.

The requirements are made in accordance with ANSI C63.17 sub-clause 4.3.1 / RSS-213 Clause 4.1(e).

Manufacturer declares that the directional gain of the antenna is less than or equal to 3dBi. No peak transmit power reduction is required.

Manufacturer declares that the directional gain of the antenna is greater than 3dBi. The peak transmit power shall be reduced by _____ dB.

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Company: VTech Telecommunications Ltd.
Model: LS6225-2

Date of Test: March 19-April 23, 2009

4.3 Power Spectral Density, FCC Rule 15.319(d) / RSS-213 Clause 6.6:

Power spectral density shall not exceed 3 mW (4.8dBm) in any 3 kHz bandwidth as measured with a spectrum analyzer having a resolution bandwidth of 3 kHz.

Measurements are made in accordance with ANSI C63.17 sub-clause 6.1.5. Test setup is shown in section 3.2 Figure 3.2.1.

Test Results:

1a. Base unit - Traffic Carrier

Channel	Channel Frequency (MHz)	Measured Power Spectral Density (dBm/3kHz)	Limit (dBm/3 kHz)	Results
Lowest	1921.536	-7.6	4.8	Pass
Middle	1924.992	-8.1	4.8	Pass
Highest	1928.448	-9.7	4.8	Pass

1b. Base unit - Dummy Carrier

Channel	Channel Frequency (MHz)	Measured Power Spectral Density (dBm/3kHz)	Limit (dBm/3 kHz)	Results
Lowest	1921.536	-15.1	4.8	Pass
Middle	1924.992	-9.5	4.8	Pass
Highest	1928.448	-10.9	4.8	Pass

INTERTEK TESTING SERVICES

Company: VTech Telecommunications Ltd.
Model: LS6225-2

Date of Test: March 19-April 23, 2009

4.4 Unwanted Emission Inside the Sub-Band, FCC Rule 15.323(d) / RSS-213 Clause 6.7.2:

Emissions inside the sub-band must comply with the following emission mask:

1. In the bands between $1B$ and $2B$ measured from the center of the emission bandwidth, emission shall be at least 30 dB below the permitted peak transmit power.
2. In the bands between $2B$ and $3B$ measured from the center of the emission bandwidth, emission shall be at least 50 dB below the permitted peak transmit power.
3. In the bands between $3B$ and the band edge, emission shall be at least 60 dB below the permitted peak transmit power.

Where B = emission bandwidth or occupied bandwidth in Hz

Measurements are made in accordance with ANSI C63.17 sub-clause 6.1.6.1. Test setup is shown in section 3.2 Figure 3.2.1.

Test Results:

la. Base unit - Traffic Carrier

Channel	Channel Frequency (MHz)	Results
Lowest	1921.536	Pass
Middle	1924.992	Pass
Highest	1928.448	Pass

Ib. Base unit - Dummy Carrier

Channel	Channel Frequency (MHz)	Results
Lowest	1921.536	Pass
Middle	1924.992	Pass
Highest	1928.448	Pass

INTERTEK TESTING SERVICES

Company: VTech Telecommunications Ltd.
 Model: LS6225-2

Date of Test: March 19-April 23, 2009

4.5 Emissions Outside the Sub-Band, FCC Rule 15.323(d) / RSS-213 Clause 6.7.1:

Emissions outside the sub-band shall be attenuated below a reference power of 112 mW (20.5 dBm) as follows:

1. 30 dB between the band edge and 1.25 MHz above or below the band;
2. 50 dB between 1.25 and 2.5 MHz above or below the band; and
3. 60 dB at 2.5 MHz or greater above or below the band, or shall meet the requirement of FCC Rule 15.319(g) which shall not exceed the limits of FCC Rule 15.209 / RSS-210 Clause 2.6.

Example: Calculation of Limit for emissions between the band edge and 1.25 MHz (1920.000 – 1918.750 MHz)

The emissions shall not exceed the Limit: 20.5 dBm – 30 dB = -9.5 dBm

Measurements are made in accordance with ANSI C63.17 sub-clause 6.1.6.2. As EUT has non-detachable antenna(s), radiated emissions test method is used for out-of-band emissions tests. Emissions that are directly caused by digital circuits in the transmit path and transmitter portion are measured. Test setup and procedures are described in section 3.2 Figure 3.2.1.

Test Results:

Channel	Carrier Frequency (MHz)	Measured Band (MHz)	Limit (dBm)	Results
Lowest	1921.536	1920.000 - 1918.750	-9.5	Pass
		1918.750 - 1917.500	-29.5	Pass
		0.009 - 1917.500 & 1932.500 - 19300.000	-39.5 / FCC Rule 15.209 / RSS-210 Clause 2.6	Pass
Highest	1928.448	1930.000 - 1931.250	-9.5	Pass
		1931.250 - 1932.500	-29.5	Pass
		0.009 – 1917.500 & 1932.500 - 19300.000	-39.5 / FCC Rule 15.209 / RSS-210 Clause 2.6	Pass

Please refer to the section 4.9.1 to 4.9.4 for more details.

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Company: VTech Telecommunications Ltd.

Date of Test: March 19-April 23, 2009

Model: LS6225-2

Mode: Transmission

4.5.1 Radiated Emissions Configuration Photographs:

Worst Case Radiated Emission
at

3843.072 MHz

The worst case radiated emission configuration photographs are saved as filename: config photos.pdf

4.5.2 Radiated Emissions Data:

Data are included of the worst case configuration (the configuration which resulted in the highest emission levels). A sample calculation, configuration photographs and data tables of the emissions are included. All measurements were performed with peak detection unless otherwise specified.

The data in table 1-5 list the significant emission frequencies, the limit and the margin of compliance.

Judgement:

Passed by 5.7 dB margin compare with the average limit

INTERTEK TESTING SERVICES

Company: VTech Telecommunications Ltd.

Date of Test: March 19-April 23, 2009

Model: LS6225-2

Mode: Transmission

Table 1

**Radiated Emissions Data
Pursuant To FCC Part 15 Section 15.323 (d) / RSS-213 Clause 6.7.1
Emissions Requirements**

Lowest Channel

Polarization	Frequency (MHz)	Measured Power (dBm)	Power Limit (dBm)	Margin (dB)
V	1917.101	-51.6	-39.5	-12.1
V	1918.085	-46.7	-29.5	-17.2
V	1919.852	-42.8	-9.5	-33.3

NOTES:

1. Peak detector is used for the emission measurement.
2. All measurements were made at 3 meters.
3. Negative value in the margin column shows emission below limit.

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Company: VTech Telecommunications Ltd.
Model: LS6225-2
Mode: Transmission

Date of Test: March 19-April 23, 2009

Table 2

Radiated Emissions Data Pursuant To FCC Part 15 Section 15.209 / RSS-210 Clause 2.6 Emissions Requirements

Lowest Channel

Polarization	Frequency (MHz)	Reading (dB μ V)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dB μ V/m)	Average Factor (dB)	Calculated at 3m (dB μ V/m)	Average Limit at 3m (dB μ V/m)	Margin (dB)
H	3843.072	63.6	33	33.3	63.9	15.6	48.3	54.0	-5.7
H	5764.608	55.3	33	36.6	58.9	15.6	43.3	54.0	-10.7
H	7686.144	57.3	33	38.9	63.2	15.6	47.6	54.0	-6.4
H	9607.680	52.2	33	40.4	59.6	15.6	44.0	54.0	-10.0
H	11529.216	52.7	33	40.5	60.2	15.6	44.6	54.0	-9.4

Polarization	Frequency (MHz)	Reading (dB μ V)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dB μ V/m)	Peak Limit at 3m (dB μ V/m)	Margin (dB)
H	3843.072	63.6	33	33.3	63.9	74.0	-10.1
H	5764.608	55.3	33	36.6	58.9	74.0	-15.1
H	7686.144	57.3	33	38.9	63.2	74.0	-10.8
H	9607.680	52.2	33	40.4	59.6	74.0	-14.4
H	11529.216	52.7	33	40.5	60.2	74.0	-13.8

NOTES:

1. Peak detector is used for the emission measurement.
2. All measurements were made at 3 meters.
3. Negative value in the margin column shows emission below limit.

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Company: VTech Telecommunications Ltd.
Model: LS6225-2
Mode: Transmission

Date of Test: March 19-April 23, 2009

Table 3

**Radiated Emissions Data
Pursuant To FCC Part 15 Section 15.323 (d) / RSS-213 Clause 6.7.1
Emissions Requirements**

Highest Channel

Polarization	Frequency (MHz)	Measured Power (dBm)	Power Limit (dBm)	Margin (dB)
V	1930.104	-42.6	-9.5	-33.1
V	1931.692	-47.3	-29.5	-17.8
V	1933.476	-52.0	-39.5	-12.5

NOTES:

1. Peak detector is used for the emission measurement.
2. All measurements were made at 3 meters.
3. Negative value in the margin column shows emission below limit.

INTERTEK TESTING SERVICES

Company: VTech Telecommunications Ltd.
 Model: LS6225-2
 Mode: Transmission

Date of Test: March 19-April 23, 2009

Table 4

Radiated Emissions Data Pursuant To FCC Part 15 Section 15.209 / RSS-210 Clause 2.6 Emissions Requirements

Highest Channel

Polarization	Frequency (MHz)	Reading (dB μ V)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dB μ V/m)	Average Factor (dB)	Calculated at 3m (dB μ V/m)	Average Limit at 3m (dB μ V/m)	Margin (dB)
H	3856.896	63.1	33	33.3	63.4	15.6	47.8	54.0	-6.2
H	5785.344	55.3	33	36.6	58.9	15.6	43.3	54.0	-10.7
H	7713.792	57.5	33	38.9	63.4	15.6	47.8	54.0	-6.2
H	9642.240	51.8	33	40.4	59.2	15.6	43.6	54.0	-10.4
H	11570.688	52.5	33	40.5	60.0	15.6	44.4	54.0	-9.6

Polarization	Frequency (MHz)	Reading (dB μ V)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dB μ V/m)	Peak Limit at 3m (dB μ V/m)	Margin (dB)
H	3856.896	63.1	33	33.3	63.4	74.0	-10.6
H	5785.344	55.3	33	36.6	58.9	74.0	-15.1
H	7713.792	57.5	33	38.9	63.4	74.0	-10.6
H	9642.240	51.8	33	40.4	59.2	74.0	-14.8
H	11570.688	52.5	33	40.5	60.0	74.0	-14.0

NOTES:

- 1 Peak detector is used for the emission measurement.
- 2 All measurements were made at 3 meters.
- 3 Negative value in the margin column shows emission below limit.

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Company: VTech Telecommunications Ltd.

Date of Test: March 19-April 23, 2009

Model: LS6225-2

Mode: Talk

Table 5

**Radiated Emissions Data
Pursuant To FCC Part 15 Section 15.323 (d) / RSS-213 Clause 6.7.1
Emissions Requirements**

Polarization	Frequency (MHz)	Net at 3m (dB μ V/m)	Measured Power (dBm)	Power Limit (dBm)	Margin (dB)
V	56.900	34.2	-63.2	-39.5	-23.7
V	113.800	33.9	-63.5	-39.5	-24.0
H	170.700	32.9	-64.5	-39.5	-25.0
H	227.600	32.6	-64.8	-39.5	-25.3
H	284.500	32.4	-65.0	-39.5	-25.5
H	341.400	31.6	-65.8	-39.5	-26.3

NOTES:

1. Peak detector is used for the emission measurement.
2. All measurements were made at 3 meters.
3. Negative value in the margin column shows emission below limit.

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Company: VTech Telecommunications Ltd.
Model: LS6225-2

Date of Test: March 19-April 23, 2009

4.5.3 Field Strength Calculation

The field strength is calculated by adding the reading on the Spectrum Analyzer to the factors associated with preamplifiers (if any), antennas, cables, pulse desensitization and average factors (when specified limit is in average and measurements are made with peak detectors). A sample calculation is included below.

$$FS = RA + AF + CF - AG + PD + AV$$

Where

- FS = Field Strength in dB μ V/m
- RA = Receiver Amplitude (including preamplifier) in dB μ V
- CF = Cable Attenuation Factor in dB
- AF = Antenna Factor in dB
- AG = Amplifier Gain in dB
- PD = Pulse Desensitization in dB
- AV = Average Factor in -dB

In the radiated emission table which follows, the reading shown on the data table may reflect the preamplifier gain. An example of the calculations, where the reading does not reflect the preamplifier gain, follows:

$$FS = RA + AF + CF - AG + PD + AV$$

Example

Assume a receiver reading of 62.0 dB μ V is obtained. The antenna factor of 7.4 dB and cable factor of 1.6 dB is added. The amplifier gain of 29.0 dB is subtracted. The pulse desensitization factor of the spectrum analyzer is 0.0 dB, and the resultant average factor is -10.0 dB. The net field strength for comparison to the appropriate emission limit is 32.0 dB μ V/m. This value in dB μ V/m is converted to its corresponding level in μ V/m.

RA = 62.0 dB μ V
AF = 7.4 dB
CF = 1.6 dB
AG = 29.0 dB
PD = 0.0 dB
AV = -10 dB

$$FS = 62.0 + 7.4 + 1.6 - 29.0 + 0.0 + (-10.0) = 32.0 \text{ dB}\mu\text{V/m}$$

$$\text{Level in mV/m} = \text{Common Antilogarithm} [(32.0 \text{ dB}\mu\text{V/m})/20] = 39.8 \mu\text{V/m}$$

INTERTEK TESTING SERVICES

Company: VTech Telecommunications Ltd.
Model: LS6225-2

Date of Test: March 19-April 23, 2009

4.6 Radiated Emissions from Receiver, RSS-213 Clause 6.8

The receiver portion is subject to the requirements of RSS-Gen Clause 7.2.3.2 and the radiated emission shall not exceed the limits of Table 1 in RSS-Gen Clause 6 (a).

Measurements are made in accordance with ANSI C63.4 sub-clause 8. Radiated emissions shall be measured with EUT operating in typical operation modes.

INTERTEK TESTING SERVICES

Company: VTech Telecommunications Ltd.

Date of Test: March 19-April 23, 2009

Model: LS6225-2

Mode: Receiving

4.6.1 Radiated Emission Configuration Photographs:

Worst Case Radiated Emission
at

2565.504 MHz

4.6.2 Radiated Emissions Data:

Data are included of the worst-case configuration (the configuration which resulted in the highest emission levels). A sample calculation, configuration photographs and data tables of the emissions are included. All measurements were performed with peak detection unless otherwise specified.

The data in table 4 list the significant emission frequencies, the limit and the margin of compliance.

Judgement:

Passed by 3.6 dB margin

INTERTEK TESTING SERVICES

Company: VTech Telecommunications Ltd.

Date of Test: March 19-April 23, 2009

Model: LS6225-2

Mode: Receiving

Table 4

Radiated Emissions Data Pursuant To RSS-213 Clause 6.8 Emissions Requirements

Middle Channel

Polarization	Frequency (MHz)	Reading (dB μ V/m)	Pre-amp (dB)	Antenna Factor (dB)	Net at 3m (dB μ V/m)	Limit at 3m (dB μ V/m)	Margin (dB)
H	1282.752	50.5	33	26.1	43.6	54.0	-10.4
H	2565.504	53.0	33	30.4	50.4	54.0	-3.6
H	3848.256	44.1	33	33.3	44.4	54.0	-9.6
H	5131.008	43.5	33	35.7	46.2	54.0	-7.8
H	7696.512	39.3	33	38.9	45.2	54.0	-8.8
H	10262.016	36.8	33	40.5	44.3	54.0	-9.7

NOTES:

1. Peak detector is used for the emission measurement.
2. The resolution bandwidth of the spectrum analyzer shall be 100kHz for spurious emission measurements below 1.0GHz and 1.0MHz for measurements above 1.0GHz.
3. All measurements were made at 3 meters.
4. Negative value in the margin column shows emission below limit.

INTERTEK TESTING SERVICES

Company: VTech Telecommunications Ltd.
Model: LS6225-2

Date of Test: March 19-April 23, 2009

4.7 AC Power Lines Conducted Emissions from Transmitter portion of EUT, FCC Rule 15.315 / RSS-213 Clause 6.3:

The AC power lines conducted emission shall not exceed the limits of FCC Rule 15.207 / Table 2 in RSS-Gen Clause 7.2.2.

Measurements are made in accordance with ANSI C63.4 sub-clause 7. Emissions that are directly caused by digital circuits in the transmit path and transmitter portion are measured.

Not applicable – EUT is only powered by battery for operation.

EUT connects to AC power lines. Emission Data are listed in following pages.

INTERTEK TESTING SERVICES

Company: VTech Telecommunications Ltd.

Date of Test: March 19-April 23, 2009

Model: LS6225-2

Model: Talk

4.7.1 AC Power Lines Conducted Emissions Configuration Photographs:

Worst Case AC Power Line Conducted Emission

The worst case AC power Line conducted emission configuration photographs are saved as filename: config photos.pdf

4.7.2 AC Power Line Conducted Emissions Data:

The data on the following pages list the significant emission frequencies, the limit, and the margin of compliance.

Judgment:

Passed by more than 20 dB margin

The worst case AC power line conducted emission data are saved as filename: conduct.pdf

INTERTEK TESTING SERVICES

Company: VTech Telecommunications Ltd.
Model: LS6225-2

Date of Test: March 19-April 23, 2009

4.8 Radio Frequency Radiation Exposure, FCC Rule 15.319(i):

EUT is subject to the radio frequency exposure requirements specified in FCC Rule §§ 1.1307(b), 2.1091 and 2.1093. It shall be considered to operate in a “general population / uncontrolled” environment.

- [] Handset unit: EUT was evaluated for Specific Absorption Rate (SAR) evaluation compliance according to OET Bulletin 65, Supplement C (Edition 01-01). It is in compliance with the SAR evaluation requirements. A SAR test report was submitted at same time and saved as SAR Report.pdf.
- [×] Base unit: EUT was evaluated for Maximum Permissible Exposure (MPE) evaluation compliance according to OET Bulletin 65, Supplement C (Edition 01-01). The evaluation calculation results are saved as filename: RF exposure info.pdf.

4.9 Radio Frequency Exposure Compliance, RSS-102:

The Routine RF Exposure Evaluation, Routine SAR Evaluation and Declaration of RF Exposure Compliance are saved as filename: RF exposure.pdf

INTERTEK TESTING SERVICES

Company: VTech Telecommunications Ltd.
Model: LS6225-2

Date of Test: March 19-April 23, 2009

4.10 Monitoring Antenna, FCC Rule 15.323(c)(8) / RSS-213 Clause 4.3.4(b)(8):

The monitoring system shall use the same antenna used for transmission, or an antenna that yields equivalent reception at that location.

- EUT uses the same antenna used for transmission and monitoring that is in compliance meet above provision.
- EUT uses difference antenna used for transmission and monitoring. It must be verified that the monitoring antenna provides coverage equivalent to that of the transmitting antenna. Measurements are made in accordance with ANSI C63.17 sub-clause 4.

INTERTEK TESTING SERVICES

5.0 Equipment List

1) Radiated Emissions Test

Equipment	Biconical Antenna	Log Periodic Antenna	Double Ridged Guide Antenna
Registration No.	EW-0954	EW-0446	EW-1015
Manufacturer	EMCO	EMCO	EMCO
Model No.	3104C	3146	3115
Calibration Date	Sep. 30, 2008	Oct. 02, 2008	Jul. 28, 2008
Calibration Due Date	Mar. 30, 2010	Apr. 02, 2010	Jan. 28, 2010

Equipment	EMI Test Receiver	Spectrum Analyzer	RF Pre-Amplifier
Registration No.	EW-0014	EW-2188	EW-1779a
Manufacturer	R&S	AGILENTTECH	MITEQ
Model No.	ESVS30	E4407B	AMF-4D-001120-34-13P
Calibration Date	May 09, 2008	Dec. 18, 2008	Jul. 05, 2008
Calibration Due Date	May 09, 2009	Dec. 18, 2009	Aug. 01, 2009

2) Conducted Emissions Test

Equipment	EMI Test Receiver	LISN
Registration No.	EW-0015	EW-2501
Manufacturer	R&S	R&S
Model No.	ESHS30	ENV-216
Calibration Date	Jul. 30, 2008	Sep. 19, 2008
Calibration Due Date	Jul. 30, 2009	Sep. 19, 2009

3) Conductive Measurement Test

Equipment	Coaxial directional coupler	Spectrum Analyzer	Digital Radiocommunication Tester for DECT
Registration No.	EW-2337	EW-2253	EW-2460
Manufacturer	MAGNA	R&S	R&S
Model No.	4222-16	FSP40	CMD60
Calibration Date	Nil	Aug. 12, 2008	Aug. 22, 2008
Calibration Due Date	Nil	Aug. 12, 2009	Aug. 22, 2009