

VTech Telecommunications Ltd.

Application

For

47 CFR Part 15: 2010 Class II Permissive Change
RSS-213 Issue 2, December 2005 Equipment Certification of Previous Family

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

(Handset)

FCC ID: EW780-H014-00

Model: S2310-6VDC, S2320-6VDC

IC: 1135B-80H03300

Model: S2310-6VDC, S2320-6VDC

Test Report Number: HK11100782-1

Issue Date: November 16, 2011

MN/KY

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INTERTEK TESTING SERVICES

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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-H014-00
MODEL: S2310-6VDC, S2320-6VDC

IC: 1135B-80H03300
MODEL: S2310-6VDC, S2320-6VDC

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
Radiated Emissions from Receiver Portion of EUT	6.8	---	8 *	Pass	4.2
AC Power Line Conducted Emissions from EUT	6.3	15.315	7 *	Pass	4.3
Radio Frequency Radiation Exposure	RSS-102	15.319(i)	---	Pass	4.4 4.5
Security Code Information	5	---	---	Pass	2.2
Emissions Outside the Sub-Band	6.7.1	15.323(d)	6.1.6.2	Pass	4.1

Test Engineer:

Approved By:

Signed on File

Koo Wai Ip
Lead Engineer

Nip Ming Fung, Melvin
Senior Supervisor

Date: November 16, 2011

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**EXHIBIT 2
GENERAL DESCRIPTION**

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2.0 General Description

2.1 Product Description

The S2320-6VDC is 1.9GHz Digital Modulation Cordless Phone with Speakerphone – Corded Handset. 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 Handset connected to the base cradle which is powered by an AC adaptor 100-120VAC to 6VDC 400mA with Brand: Ten Pao and Sunstrong.

The antenna used in handset is integral, and the test sample is a prototype.

For FCC and IC, The Handset Model(s): S2310-6VDC is the same as the Model: S2320-6VDC in electronics/electrical designs, including software & firmware, PCB layout and construction design/Physical design/Enclosure. The only differences between these models are cosmetic details and model number to be sold for marketing purpose. Moreover, Handset Model: S2320-6VDC are two line handset which has two key buttons for Line 1 and Line 2 accordingly, while Handset Model S2310-6VDC is one line handset which has one key button for Line 1 only.

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 Change

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

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, 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 3 (2010).

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 set up 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 accessories, 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 and antenna for handset of S2320-6VDC is the same with original granted model S1420. Therefore conducted emission measurement for S2320-6VDC is skipped.

For IC, RF module and antenna for handset of S2320-6VDC is the same with previous granted model S2320. Therefore conducted emission measurement for S2320-6VDC is skipped.

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3.2 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.

3.3 Details of EUT and Description of Accessories

Details of EUT:

An AC adaptor (provided with the unit) was used to power the device. Their description are listed below.

- (1) 100-120VAC to 6VDC, 400mA, Model: S005IU0600040, Brand: Ten Pao (Supplied by Client)
- (2) 100-120VAC to 6VDC, 400mA, Model: SSA-5AP-09 US 060040L, Brand: Sunstrong (Supplied by Client)

Description of Accessories:

- (1) Base Unit, Model: S2420, FCC ID: EW780-H033-00 (Supplied by Client)

3.4 Measurement Uncertainty

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

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**EXHIBIT 4
MEASUREMENT RESULTS**

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Applicant: VTech Telecommunications Ltd. Date of Test: October 27 - November 01, 2011
Model: S2320-6VDC

4.0 Measurement Results

4.1 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 2.5.

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. Radiated emissions test method is used. Emissions that are directly caused by digital circuits in the transmit path and transmitter portion are measured.

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	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	Pass

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Applicant: VTech Telecommunications Ltd. Date of Test: October 27 - November 01, 2011
Model: S2320-6VDC
Mode: Transmission

4.1.1 Radiated Emissions Configuration Photographs:

Worst Case Radiated Emission
at

Handset: 5785.344 MHz

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

4.1.2 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 1-6 list the significant emission frequencies, the limit and the margin of compliance.

Judgement:

Handset - Passed by 4.1 dB margin

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Applicant: VTech Telecommunications Ltd. Date of Test: October 27 - November 01, 2011

Model: S2320-6VDC

Mode: Transmission with Adaptor "Ten Pao"

Table 1, Handset Unit

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	1919.900	-43.2	-9.5	-33.7
V	1918.006	-49.8	-29.5	-20.3
V	1917.410	-54.4	-39.5	-14.9
H	3843.072	-47.5	-39.5	-8.0
H	5764.608	-44.2	-39.5	-4.7
H	7686.144	-44.4	-39.5	-4.9
H	9607.680	-44.3	-39.5	-4.8
H	11529.216	-44.6	-39.5	-5.1

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

Applicant: VTech Telecommunications Ltd. Date of Test: October 27 - November 01, 2011

Model: S2320-6VDC

Mode: Transmission with Adaptor "Ten Pao"

Table 2, Handset

**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	1930.796	-42.2	-9.5	-32.7
V	1931.660	-49.2	-29.5	-19.7
V	1932.880	-54.1	-39.5	-14.6
H	3856.896	-47.7	-39.5	-8.2
H	5785.344	-44.2	-39.5	-4.7
H	7713.792	-43.8	-39.5	-4.3
H	9642.240	-45.2	-39.5	-5.7
H	11570.688	-45.1	-39.5	-5.6

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

Applicant: VTech Telecommunications Ltd. Date of Test: October 27 - November 01, 2011
Model: S2320-6VDC
Mode: Talk (3-way conference call) with Adaptor "Ten Pao"

Table 3, Handset

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

Polarization	Frequency (MHz)	Measured Power (dBm)	Power Limit (dBm)	Margin (dB)
V	41.473	-63.8	-39.5	-24.3
V	55.300	-64.4	-39.5	-24.9
H	69.124	-64.6	-39.5	-25.1
H	152.093	-64.4	-39.5	-24.9
H	207.389	-64.0	-39.5	-24.5
H	262.685	-65.0	-39.5	-25.5
H	331.805	-66.0	-39.5	-26.5

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.

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Applicant: VTech Telecommunications Ltd. Date of Test: October 27 - November 01, 2011
Model: S2320-6VDC
Mode: Talk with Adaptor "Sunstrong"

Table 4, Handset

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	1919.900	-43.3	-9.5	-33.8
V	1918.006	-49.9	-29.5	-20.4
V	1917.410	-54.2	-39.5	-14.7
H	3843.072	-47.6	-39.5	-8.1
H	5764.608	-44.1	-39.5	-4.6
H	7686.144	-44.6	-39.5	-5.1
H	9607.680	-44.5	-39.5	-5.0
H	11529.216	-44.2	-39.5	-4.7

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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Applicant: VTech Telecommunications Ltd. Date of Test: October 27 - November 01, 2011
Model: S2320-6VDC
Mode: Talk with Adaptor "Sunstrong"

Table 5, Handset

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	1930.796	-42.6	-9.5	-33.1
V	1931.660	-49.1	-29.5	-19.6
V	1932.880	-53.6	-39.5	-14.1
H	3856.896	-47.5	-39.5	-8.0
H	5785.344	-43.6	-39.5	-4.1
H	7713.792	-44.4	-39.5	-4.9
H	9642.240	-44.3	-39.5	-4.8
H	11570.688	-44.1	-39.5	-4.6

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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Applicant: VTech Telecommunications Ltd. Date of Test: October 27 - November 01, 2011
Model: S2320-6VDC
Mode: Talk (3-way conference call) with Adaptor "Sunstrong"

Table 6, Handset

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

Polarization	Frequency (MHz)	Measured Power (dBm)	Power Limit (dBm)	Margin (dB)
V	41.473	-64.0	-39.5	-24.5
V	55.300	-63.8	-39.5	-24.3
H	69.124	-64.6	-39.5	-25.1
H	152.093	-64.3	-39.5	-24.8
H	207.389	-64.1	-39.5	-24.6
H	262.685	-64.9	-39.5	-25.4
H	331.805	-65.4	-39.5	-25.9

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

Applicant: VTech Telecommunications Ltd. Date of Test: October 27 - November 01, 2011
Model: S2320-6VDC

4.1.3 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

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

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

INTERTEK TESTING SERVICES

Applicant: VTech Telecommunications Ltd. Date of Test: October 27 - November 01, 2011
Model: S2320-6VDC

4.1.4 Average Factor Calculation and Transmitter ON Time Measurements, FCC Rule 15.35(b, c) / RSS-Gen cl 4.5

- The EUT antenna output port was connected to the input of the spectrum analyzer. The analyzer center frequency was set to EUT RF channel carrier. The SPAN function on the analyzer was set to ZERO. The transmitter ON time was determined from the resultant time-amplitude display:

Please refer to the attached plots for more details:

The plots of Transmitter ON Time Measurements are saved as filename: txon.pdf

- Please refer to the attached transmitter timing diagram that are provided by manufacturer
- Not applicable - No average factor is required.
- Please refer to Technical Description (descri.pdf) for more details

INTERTEK TESTING SERVICES

Applicant: VTech Telecommunications Ltd. Date of Test: October 27 - November 01, 2011
Model: S2320-6VDC

4.2 Radiated Emissions from Receiver, RSS-213 Clause 6.8

The receiver portion is subject to the requirements of RSS-Gen Clause 6 and the radiated emission shall not exceed the limits of Table 2 in RSS-Gen Clause 6.

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

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Applicant: VTech Telecommunications Ltd. Date of Test: October 27 - November 01, 2011
Model: S2320-6VDC
Mode: Receiving

4.2.1 Radiated Emission Configuration Photographs:

Worst Case Radiated Emission
at

Handset: 14443.920 MHz

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

4.2.2 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 7-8 list the significant emission frequencies, the limit and the margin of compliance.

Judgement:

Handset: Passed by 6.5 dB margin

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Applicant: VTech Telecommunications Ltd. Date of Test: October 27 - November 01, 2011
Model: S2320-6VDC
Mode: Receiving with Adaptor "Sunstrong"

Table 7, Handset Unit

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

Polarization	Frequency (MHz)	Reading (dBuV)	Pre-amp (dB)	Antenna Factor (dB)	Net at 3m (dBuV/m)	Limit at 3m (dBuV/m)	Margin (dB)
V	960.086	17.0	16	33.0	34.0	54.0	-20.0
V	2888.784	46.0	33	30.4	43.4	54.0	-10.6
V	5777.568	40.8	33	36.6	44.4	54.0	-9.6
V	8666.352	39.1	33	39.5	45.6	54.0	-8.4
V	11555.136	38.6	33	40.5	46.1	54.0	-7.9
V	14443.920	38.3	33	41.7	47.0	54.0	-7.0

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.

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Applicant: VTech Telecommunications Ltd. Date of Test: October 27 - November 01, 2011
Model: S2320-6VDC
Mode: Receiving with Adaptor "Ten Pao"

Table 8, Handset Unit

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

Polarization	Frequency (MHz)	Reading (dBuV)	Pre-amp (dB)	Antenna Factor (dB)	Net at 3m (dBuV/m)	Limit at 3m (dBuV/m)	Margin (dB)
V	960.086	17.0	16	33.0	34.0	54.0	-20.0
V	2888.784	46.2	33	30.4	43.6	54.0	-10.4
V	5777.568	41.1	33	36.6	44.7	54.0	-9.3
V	8666.352	39.1	33	39.5	45.6	54.0	-8.4
V	11555.136	38.5	33	40.5	46.0	54.0	-8.0
V	14443.920	38.8	33	41.7	47.5	54.0	-6.5

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.

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Applicant: VTech Telecommunications Ltd. Date of Test: October 27 - November 01, 2011
Model: S2320-6VDC

4.3 AC Power Line Conducted Emissions, FCC Rule 15.315 / RSS-213 Clause 6.3:

The AC power line conducted emission shall not exceed the limits of FCC Rule 15.207 / Table 4 in RSS-Gen Clause 7.2.4.

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 line. Emission Data is listed in following pages.

Base Unit connects to AC power line and has transmission. Handset connects to AC power line but has no transmission. Emission Data of Base Unit is listed in following pages.

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Applicant: VTech Telecommunications Ltd. Date of Test: October 27 - November 01, 2011
Model: S2320-6VDC

4.3.1 AC Power Line Conducted Emissions Configuration Photographs:

Worst Case AC Power Line Conducted Emission
at

Handset: 15.5535 MHz

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

4.3.2 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:

Handset: Passed by 15.31 dB margin compare with the average limit

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

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Applicant: VTech Telecommunications Ltd. Date of Test: October 27 - November 01, 2011
Model: S2320-6VDC

4.4 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.

- [x] 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.

4.5 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

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5.0 Equipment List

1) Radiated Emissions Test

Equipment	EMI Test Receiver	Biconical Antenna	Spectrum Analyzer
Registration No.	EW-2500	EW-0571	EW-2188
Manufacturer	ROHDESCHWARZ	EMCO	AGILENTTECH
Model No.	ESCI	3104C	E4407B
Calibration Date	25-Jan-2011	28-Sep-2010	26-Sep-2011
Calibration Due Date	25-Jan-2012	28-Mar-2012	26-Sep-2012

Equipment	Broad-Band Horn Antenna with frequency range 14G - 40GHz	Double Ridged Guide Antenna (1GHz - 18GHz)	Log Periodic Antenna
Registration No.	EW-1679	EW-1133	EW-1042
Manufacturer	SCHWARZBECK	EMCO	EMCO
Model No.	BBHA9170	3115	3148
Calibration Date	03-Mar-2011	02-Mar-2011	06-Oct-2010
Calibration Due Date	03-Sep-2012	02-Sep-2012	06-Apr-2012

2) Conducted Emissions Test

Equipment	EMI Test Receiver	Artificial Mains	Pulse Limiter
Registration No.	EW-2251	EW-0192	EW-0698
Manufacturer	R&S	R&S	R&S
Model No.	ESCI	ESH3-Z5	ESH3-Z2
Calibration Date	06-May-2011	30-Nov-2010	11-Mar-2011
Calibration Due Date	06-May-2012	30-Nov-2011	11-Mar-2012