Issuing Laboratory:
Intertek Testing Services Hong Kong Limited

Hong Kong Accreditation Service (HKAS) has accredited this laboratory under the Hong Kong Laboratory Accreditation Scheme (HOKLAS) for specific laboratory activities as listed in the HOKLAS directory of accredited laboratories. The results shown in this report were determined by this laboratory in accordance with its terms of accreditation.

HOKLAS 005
TEST

TEST REPORT

Report Number: 14010120HKG-001

Application
For
Class II Permissive Change of 47 CFR Part 15 Certification

Unlicensed Personal Communication Service Devices

(Deskset)

FCC ID: EW780-8519-00

Prepared and Checked by:

Chak Chun Yin, Ray
Assistant Engineer

Approved by:

Nip Ming Fung, Melvin
Assistant Manager
January 06, 2014

GENERAL INFORMATION

Applicant Name:	VTech Telecommunications Ltd.
Applicant Address:	23/F., Tai Ping Industrial Centre, Block 1, 57 Ting Kok Road, Tai Po, Hong Kong.
FCC Specification Standard:	FCC Part 15, October 1, 2012 Edition
FCC ID:	EW780-8519-00
FCC Model(s):	VSP735
Type of EUT:	Unlicensed Personal Communications Service Devices
Description of EUT:	1.9GHz Digital Modulation DECT SIP Cordless Deskset with Caller ID, Speakerphone and Corded Handset
Serial Number:	N/A
Sample Receipt Date:	December 11, 2013
Date of Test:	December 17-20, 2013
Report Date:	January 06, 2014
Environmental Conditions:	Temperature: +10 to 40°C Humidity: 10 to 90%

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2/F., Garment Centre, 576 Castle Peak Road, Kowloon, Hong Kong.
Tel: (852) 2173 8888 Fax: (852) 2785 5487 Website: www.hk.intertek-etlsemko.com

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EXHIBIT 1
TEST RESULTS SUMMARY & STATEMENT OF COMPLIANCE

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1.0 **Test Results Summary & Statement of Compliance**

1.1 Summary of Test Results

General Technical Requirements				
Test Items	**FCC Part 15 Section**	**Test Procedure ANSI C63.17 / ANSI C63.4 ***	**Results**	**Details see section**
Antenna Requirement	15.317	---	Pass	4.1
Emission Bandwidth	15.323(a)	6.1.3	Pass	4.2
Directional Gain of the Antenna	15.319(e)	4.3.1	Pass	4.3
Peak Transmit Power	15.319(c)	6.1.2	Pass	4.4
Power Spectral Density	15.319(d)	6.1.5	Pass	4.5
AC Power Line Conducted Emissions from EUT	15.315	7 *	Pass	4.8
Security Code Information	---	---	Pass	2.2

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1.1 Summary of Test Results (continued)

Specific Requirements for UPCS Device				
Test Items	**FCC Part 15 Section**	**Test Procedure ANSI C63.17**	**Results**	**Details see section**
Unwanted Emission Inside the Sub-Band	15.323(d)	6.1.6.1	Pass	4.6
Emissions Outside the Sub-Band	15.323(d)	6.1.6.2	Pass	4.7
Lower Monitoring Threshold	15.323(c2&c9)	7.3.1	NA	4.9.1
Upper Monitoring Threshold	15.323(c5.1&c9)	7.3.2	Pass	4.9.2.1

1.2 Statement of Compliance

The equipment under test is found to be complying with the following standard:

FCC Part 15, October 1, 2012 Edition

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EXHIBIT 2
GENERAL DESCRIPTION

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2.0 **General Description**

2.1 Product Description

The VSP735 is a 1.9GHz Digital Modulation DECT SIP Cordless Deskset with Caller ID, Speakerphone and 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 Deskset Unit is powered by an adaptor 100-240VAC to 5.1VDC 1700mA, Model: S012BU0510200, Brand: Ten Pao.

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

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 with filename: descri.pdf.

2.3 Purpose of Change

The purpose of change is saved with 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 (2009). The radiated emission measurements for intentional radiator contained in UPCS device, 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.

2.5 Test Facility

The open area test site, AC power line conducted measurement facility and antenna port conducted measurement facility used to collect the radiated data and conducted data are at Rooftop, 2nd Floor and 5th Floor respectively of Intertek Testing Services Hong Kong Ltd., which 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 FCC.

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2/F., Garment Centre, 576 Castle Peak Road, Kowloon, Hong Kong.
Tel: (852) 2173 8888 Fax: (852) 2785 5487 Website: www.hk.intertek-etlsemko.com

EXHIBIT 3
SYSTEM TEST CONFIGURATION

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2/F., Garment Centre, 576 Castle Peak Road, Kowloon, Hong Kong.
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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 EUT was powered by a 100-240VAC to 5.1VDC 1700mA adaptor. Model: S012BU0510200, Brand: Ten Pao.

For the measurements, the EUT was attached to a plastic stand if necessary and placed on the wooden turntable. If the EUT is 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.

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.

RF module for Deskset unit of VSP735 is the same with original/previous granted model SB8735. Therefore, conducted emission measurement for jitter, frame repetition stability, carrier stability and listen before transmit requirements (except the monitoring threshold) for VSP735 are skipped.

As the Deskset unit has 2 antennas, both have been checked. While conducting the test on one of antennas, another one was being disable its transmission. The data in this report represented the worst-case.

Deskset can be powered by Power adaptor and/or powered over Ethernet, both cases have been checked, The data in this report represented the worst-case.

For AC line conducted emission test, the EUT along with its peripherals were placed on a 1.0m(W)x1.5m(L) and 0.8m in height wooden table and the EUT was adjusted to maintain a 0.4 meter space from a vertical reference plane. The EUT was connected to power mains through a line impedance stabilization network (LISN), which provided 50ohm coupling impedance for measuring instrument. The LISN housing, measuring instrument case, reference ground plane, and vertical ground plane were bounded together. The excess power cable between the EUT and the LISN was bundled.

All connecting cables of EUT and peripherals were manipulated to find the maximum emission.

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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 impendence 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.

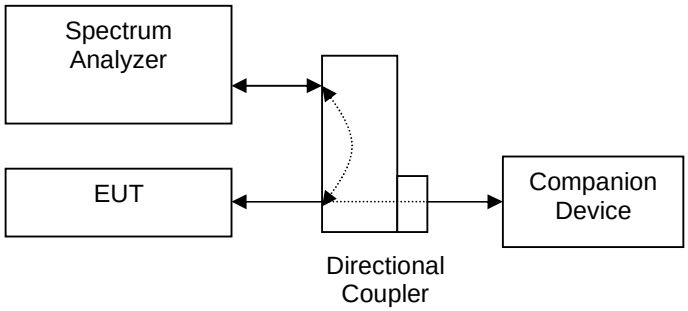

Figure 3.2.1

3.3 Conducted Monitoring and Operation Test Configuration

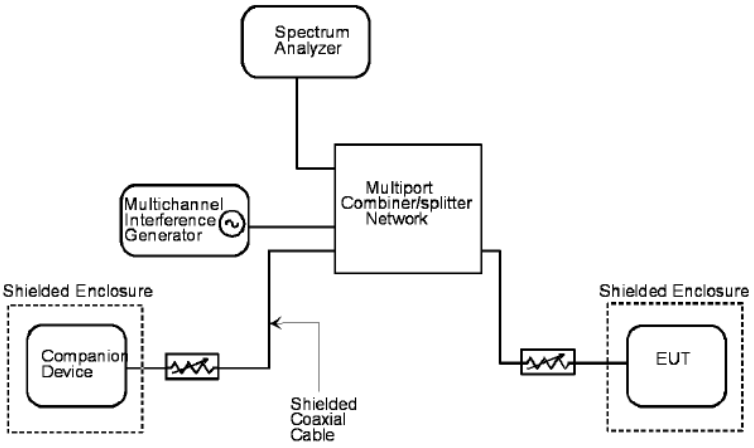

Figure 3.3.1

3.4 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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3.5 Details of EUT and Description of Accessories

Details of EUT:

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

(1) An AC adaptor (100-240VAC to 5.1VDC 1700mA, Model: S012BU0510200, Brand: Ten Pao) (Supplied by Client)

Description of Accessories:

(1) Cordless Headset Unit, Model: TL7600, FCC ID: EW780-6470-01, IC: 1135B-80647000 (Supplied by Client)
(2) Deskset, Model:MS2085, FCC ID: EW780-8587-00, IC : 1135B-80858700 (Supplied by Client)
(3) Telephone Headset with 1.1m long (Supplied by Intertek)
(4) Lenovo Notebook, Model: T61, S/N: L3-CF468, DoC Product (Supplied by Intertek)
(5) Smart-Drive External Hard Disk, Model: HD3-SU2FW, S/N: 0800261, DoC Product (Supplied by Intertek)
(6) TP-Link PoE Injector, Model: TL-POE150S, DoC Product (Supplied by Intertek)
(7) 1 x USB cable with ferrite and 0.7 meter long (Supplied by Intertek)
(8) 1 x 1394 cable with 0.8 meter long (Supplied by Intertek)
(9) 2 x CAT5 LAN unshielded cable with 1.0 meter long (Supplied by Intertek)

3.6 Measurement Uncertainty

When determining of the test conclusion, the Measurement Uncertainty of 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.

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EXHIBIT 4
TEST RESULTS

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2/F., Garment Centre, 576 Castle Peak Road, Kowloon, Hong Kong.
Tel: (852) 2173 8888 Fax: (852) 2785 5487 Website: www.hk.intertek-etlsemko.com

4.0 **Measurement Results**

4.1 Antenna Requirement, FCC Rule 15.317:

EUT must meet the antenna requirement of FCC Rule 15.203

[×] EUT uses permanently attached antenna(s) which is considered sufficient to comply with the provisions of this rule. Please refer to internal photos.pdf for more details.

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

4.2 Emission Bandwidth, FCC Rule 15.323(a):

Operation shall be contained within the 1920 – 1930 MHz band. The emission bandwidth (*B*) shall be less than 2.5 MHz and greater than 50 kHz.

Measurements are made in accordance with ANSI C63.17 sub-clause 6.1.3. Test setup is shown in section 3.2 Figure 3.2.1.

Test Results:

Traffic Carrier

Channel	Channel Frequency (MHz)	Measuring Signal Level	Measured Emission Bandwidth (MHz)	Results
Lowest	1921.536	26 dB down	1.52	Pass
Highest	1928.448	26 dB down	1.49	Pass

The plots of emission bandwidth are saved as below.

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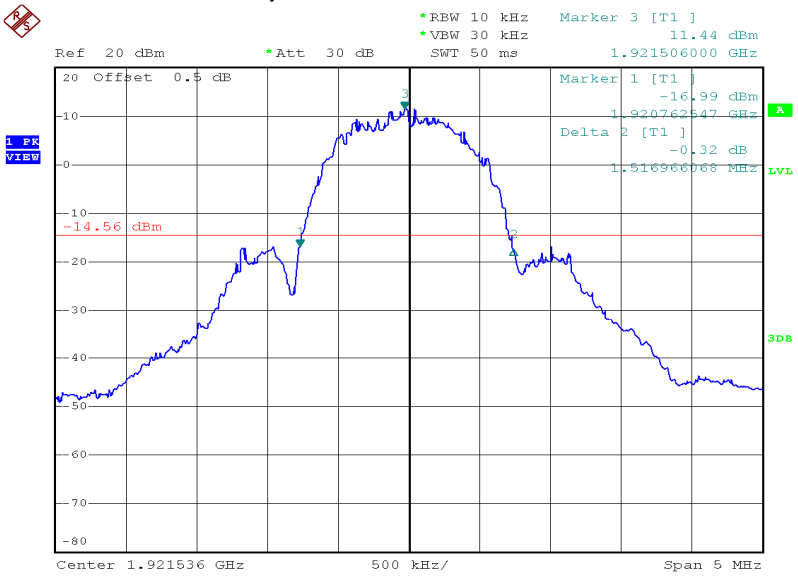
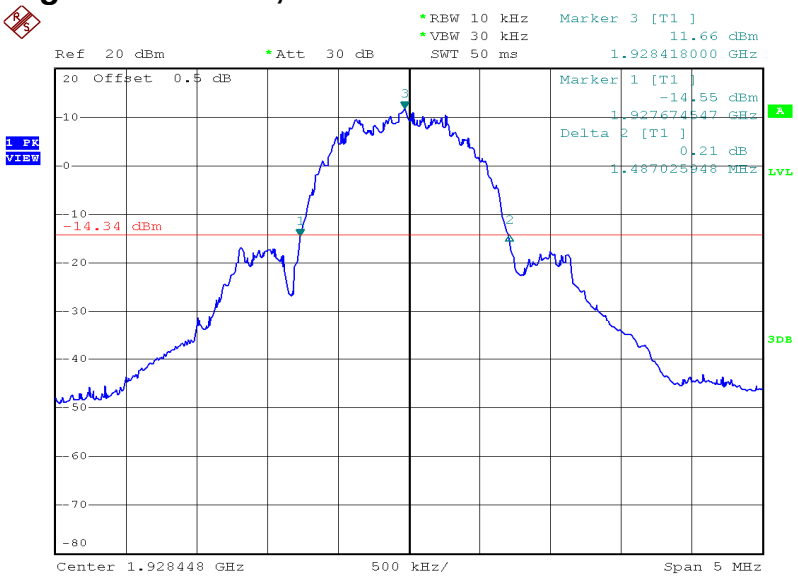
Plots of emission bandwidth

Lowest channel, Traffic carrier



Highest channel, Traffic carrier



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4.3 Directional Gain of the Antenna, FCC Rule FCC 15.319(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.

[×] 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.

4.4 Peak Transmit Power, FCC Rule 15.319(c):

The peak transmit power (P_{EUT}) shall not exceed 100μW multiplied by the square root of the emission bandwidth (B) in Hz or 5 $\log_{10} B$ – 10 dBm. The peak transmit power shall be reduced by the amount in dB that the maximum directional gain of the antenna exceeds 3 dBi.

Measurements are made in accordance with ANSI C63.17 sub-clause 6.1.2. Test setup is shown in section 3.2 Figure 3.2.1. The cable loss and/or external attenuation are included in OFFSET function of spectrum analyzer.

Calculation of Peak Transmit Power Limit (P_{max}):

[×] P_{max} = 5 $\log_{10} B$ – 10 dBm when $G_A \leq$ 3dBi

[ ] P_{max} = 5 $\log_{10} B$ – 10 dBm – (G_A – 3dBi) when $G_A >$ 3dBi

Where G_A = EUT Antenna Gain: 2 dBi

B = Measured Emission Bandwidth

Test Results:

Traffic Carrier

Channel	Channel Frequency (MHz)	Measured Peak Transmit Power (dBm)	Limit (dBm)	Results
Lowest	1921.536	19.93	20.91	Pass
Highest	1928.448	19.84	20.87	Pass

The plots of peak transmit power are saved as below.

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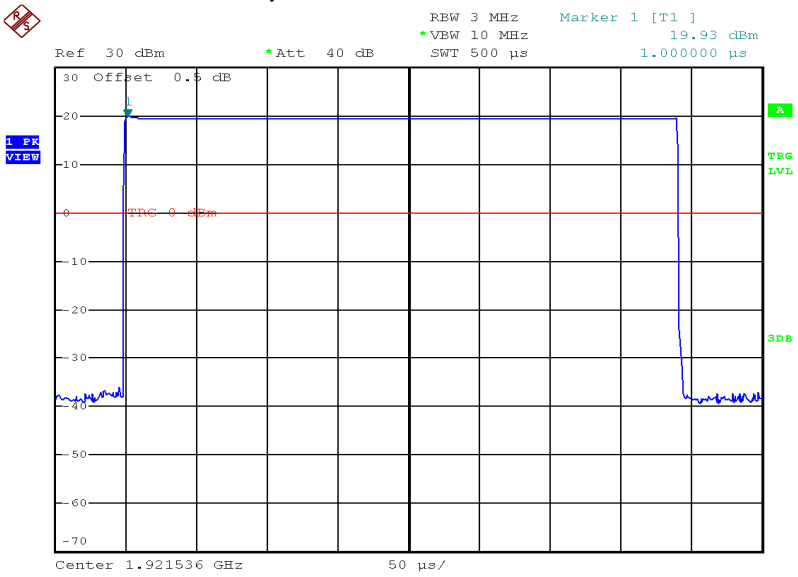
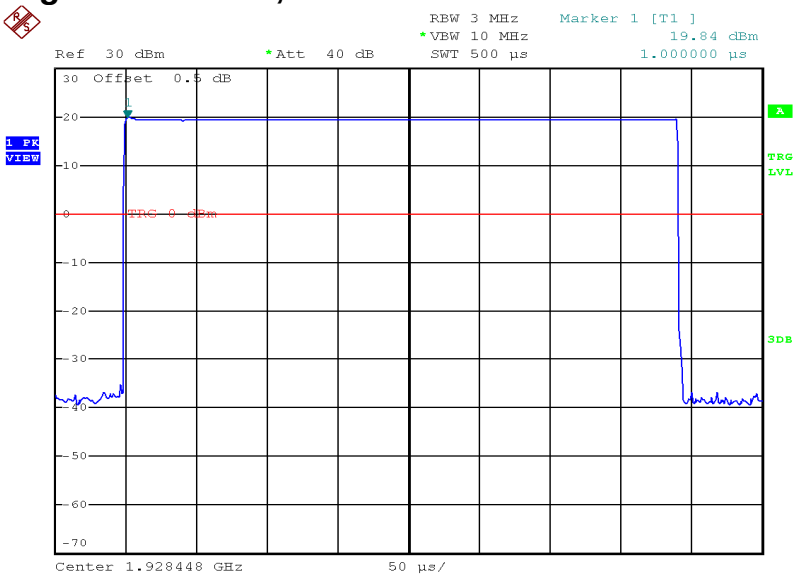
Plots of peak transmit power

Lowest channel, Traffic carrier



Highest channel, Traffic carrier



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4.5 Power Spectral Density, FCC Rule 15.319(d):

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:

Traffic Carrier

Channel	Channel Frequency (MHz)	Measured Power Spectral Density (dBm/3kHz)	Limit (dBm/3 kHz)	Results
Lowest	1921.536	-7.4	4.8	Pass
Highest	1928.448	-10.3	4.8	Pass

The plots of the power spectral density are saved as below.

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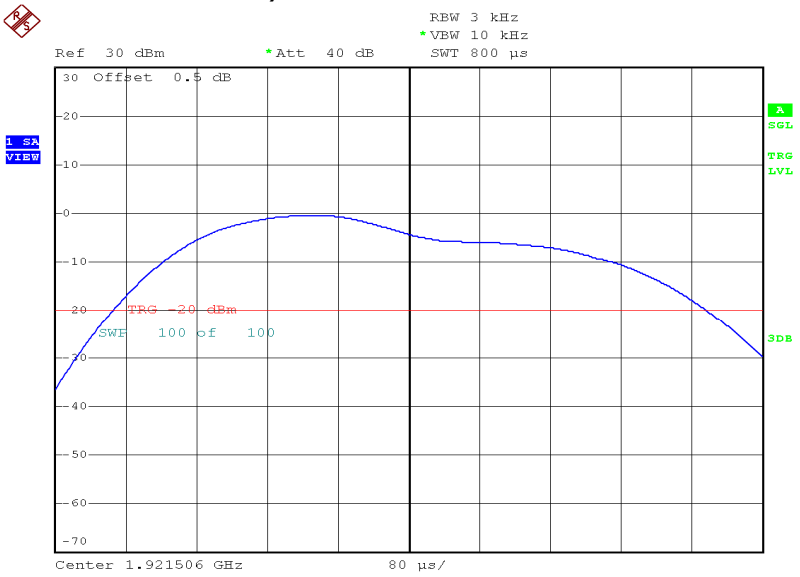
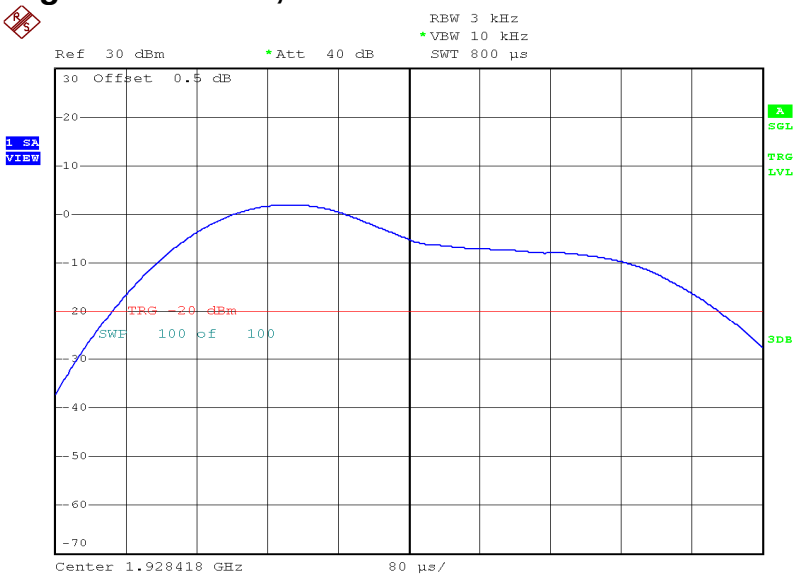
Plots of the power spectral density

Lowest channel, Traffic carrier



Highest channel, Traffic carrier



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4.6 Unwanted Emission Inside the Sub-Band, FCC Rule 15.323(d):

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

1. In the bands between 1*B* and 2*B* 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 2*B* and 3*B* 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 3*B* 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:

Traffic Carrier

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

The plots of the unwanted emission inside the sub-band are saved as below.

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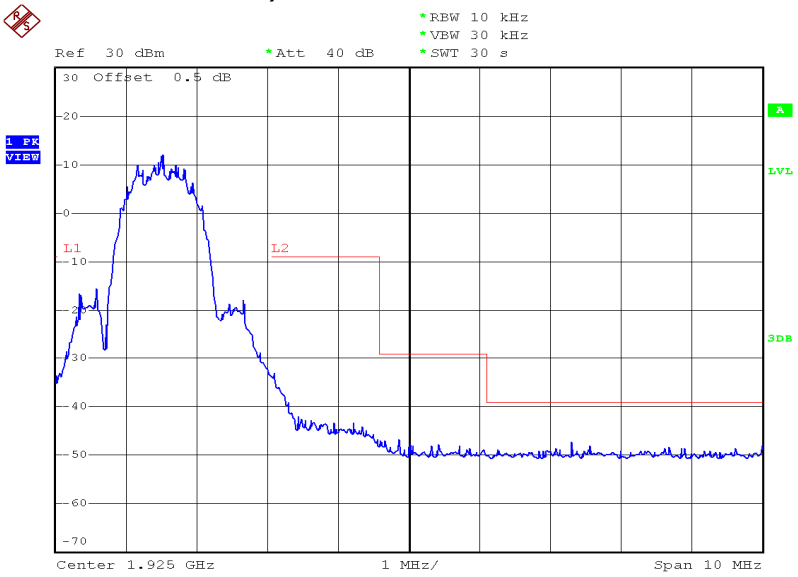
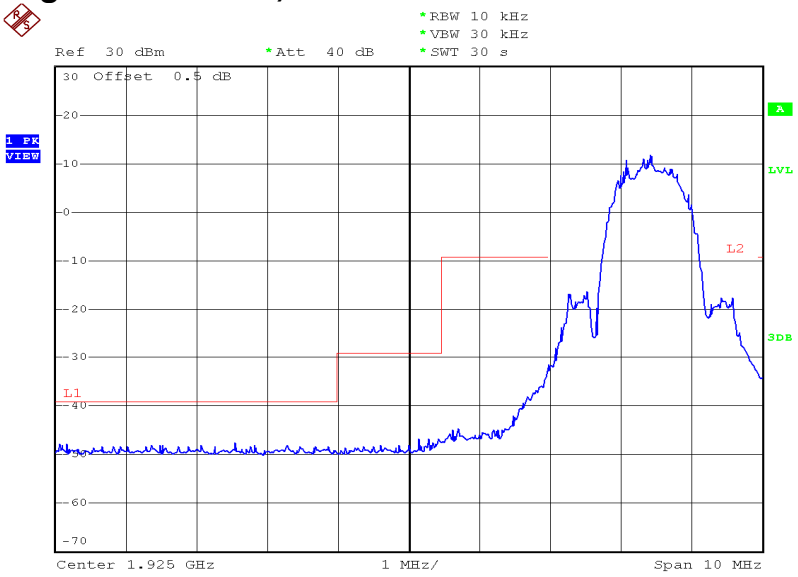
Plots of the unwanted emission inside the sub-band

Lowest channel, Traffic carrier



Highest channel, Traffic carrier



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4.7 Emissions Outside the Sub-Band, FCC Rule 15.323(d):

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.

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 / FCC Rule 15.209	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	Pass

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4.7.1 Radiated Emissions Configuration Photographs:

Worst Case Radiated Emission
at

3843.072 MHz

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

4.7.2 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 1-3 list the significant emission frequencies, the limit and the margin of compliance.

Judgement:

Passed by 4.4 dB margin

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Mode: Transmission

Table 1

Radiated Emissions Data
Pursuant To FCC Part 15 Section 15.323 (d)
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	1917.869	-46.7	-29.5	-17.2
V	1919.850	-42.0	-9.5	-32.5
H	3843.072	-43.9	-39.5	-4.4
H	5764.608	-44.8	-39.5	-5.3
H	7686.144	-44.6	-39.5	-5.1
H	9607.680	-45.0	-39.5	-5.5
H	11529.216	-45.4	-39.5	-5.9

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.

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Mode: Transmission

Table 2

Radiated Emissions Data
Pursuant To FCC Part 15 Section 15.323 (d)
Emissions Requirements

Highest Channel

Polarization	Frequency (MHz)	Measured Power (dBm)	Power Limit (dBm)	Margin (dB)
V	1930.013	-42.6	-9.5	-33.1
V	1931.686	-46.3	-29.5	-16.8
V	1933.471	-51.3	-39.5	-11.8
H	3856.896	-44.0	-39.5	-4.5
H	5785.344	-44.3	-39.5	-4.8
H	7713.792	-44.8	-39.5	-5.3
H	9642.240	-44.9	-39.5	-5.4
H	11570.688	-45.3	-39.5	-5.8

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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Mode: Deskset Talk and PC Online

Table 3

Radiated Emissions Data
Pursuant To FCC Part 15 Section 15.323 (d)
Emissions Requirements

Polarization	Frequency (MHz)	Measured Power (dBm)	Power Limit (dBm)	Margin (dB)
V	55.300	-63.8	-39.5	-24.3
V	132.600	-58.6	-39.5	-19.1
H	172.900	-55.3	-39.5	-15.8
H	216.200	-57.2	-39.5	-17.7
H	276.500	-62.0	-39.5	-22.5
H	293.800	-58.9	-39.5	-19.4
H	331.548	-62.3	-39.5	-22.8

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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4.7.3 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 dBμV/m
RA = Receiver Amplitude (including preamplifier) in dBμV
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 dBμV 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 dBμV/m. This value in dBμV/m is converted to its corresponding level in μV/m.

RA = 62.0 dBμV
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 dBμV/m

Level in μV/m = Common Antilogarithm [(32.0 dBμV/m)/20] = 39.8 μV/m

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4.7.4 Average Factor Calculation and Transmitter ON Time Measurements, FCC Rule 15.35(b, c):

[ ] 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 below.

[ ] 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

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4.8 AC Power Line Conducted Emissions, FCC Rule 15.315:

The AC power line conducted emission shall not exceed the limits of FCC Rule 15.207.

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.

[ ] Deskset Unit connects to AC power line and has transmission. Handset connects to AC power line (indirectly) but has no transmission. Emission Data of Deskset Unit is listed in following pages.

[ ] Handset connects to AC power line (indirectly) only during charging. Emission Data is listed in following pages.

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4.8.1 AC Power Line Conducted Emissions Configuration Photographs:

Worst Case AC Power Line Conducted Emission
at

0.546 MHz

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

4.8.2 AC Power Line Conducted Emissions Data:

The plot(s) and data in the following pages list the significant emission frequencies, the limit and the worst case margin of compliance.

Judgment:

Passed by 7.07 dB margin compared with quasi-peak limit

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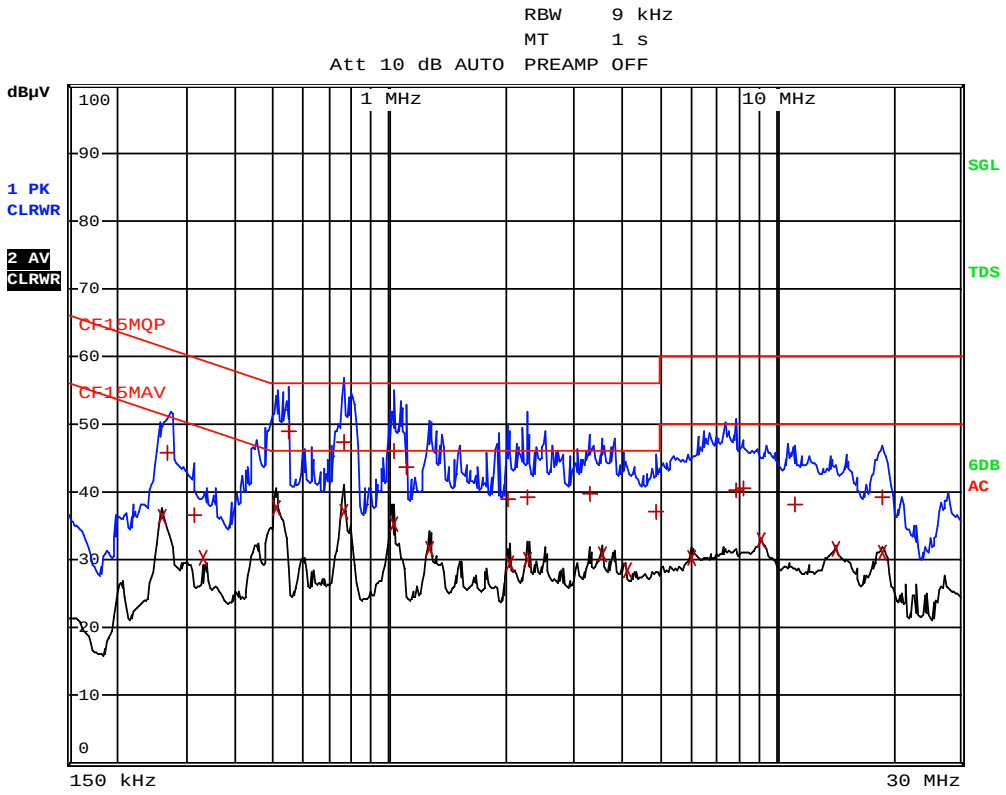
Worst Case: Cordless Headset On-Line and PC Online



Date: 17.DEC.2013 18:16:47

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Worst Case: Cordless Headset On-Line and PC Online

EDIT PEAK LIST (Final Measurement Results)

Trace1:	CF15MQP
Trace2:	CF15MAV
Trace3:	---

TRACE	FREQUENCY	LEVEL dBµV		DELTA LIMIT dB
2 CISPR Average	258 kHz	36.43	L1	-15.06
1 Quasi Peak	271.5 kHz	45.81	L1	-15.26
1 Quasi Peak	312 kHz	36.57	L1	-23.33
2 CISPR Average	334.5 kHz	30.28	L1	-19.05
2 CISPR Average	510 kHz	37.64	L1	-8.35
1 Quasi Peak	546 kHz	48.92	L1	-7.07
1 Quasi Peak	762 kHz	47.26	L1	-8.73
2 CISPR Average	762 kHz	37.21	L1	-8.78
1 Quasi Peak	1.023 MHz	46.07	L1	-9.92
2 CISPR Average	1.023 MHz	35.17	L1	-10.82
1 Quasi Peak	1.104 MHz	43.65	L1	-12.34
2 CISPR Average	1.275 MHz	31.51	L1	-14.48
1 Quasi Peak	2.0355 MHz	38.93	L1	-17.07
2 CISPR Average	2.04 MHz	29.53	L1	-16.46
1 Quasi Peak	2.2875 MHz	39.22	L1	-16.78
2 CISPR Average	2.292 MHz	29.97	L1	-16.02
1 Quasi Peak	3.318 MHz	39.79	L1	-16.20
2 CISPR Average	3.579 MHz	30.79	L1	-15.20
2 CISPR Average	4.1145 MHz	28.41	L1	-17.58
1 Quasi Peak	4.893 MHz	37.11	L1	-18.88

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Worst Case: Cordless Headset On-Line and PC Online

EDIT PEAK LIST (Final Measurement Results)

Trace1:	CF15MQP
Trace2:	CF15MAV
Trace3:	---

TRACE		FREQUENCY	LEVEL dBµV		DELTA LIMIT dB
2	CISPR Average	6.072 MHz	30.36	L1	-19.63
1	Quasi Peak	7.863 MHz	40.31	L1	-19.68
1	Quasi Peak	8.2275 MHz	40.67	L1	-19.32
2	CISPR Average	9.1095 MHz	32.88	L1	-17.11
1	Quasi Peak	11.175 MHz	38.10	L1	-21.89
2	CISPR Average	14.2125 MHz	31.68	L1	-18.31
2	CISPR Average	18.7935 MHz	31.04	L1	-18.95
1	Quasi Peak	18.87 MHz	39.25	L1	-20.74

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4.9 Monitoring Threshold:

Upper monitoring threshold limit is declared by manufacturer, and lower monitoring threshold limit is calculated with 20dB difference of upper monitoring threshold limit.

Monitoring Threshold Limits:

Lower Monitoring Threshold (T_L + U_M) in dBm	-75.2
Upper Monitoring Threshold (T_U + U_M) in dBm	-55.2

NA - Not applicable

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4.9.1 Lower Monitoring Threshold, FCC Rule 15.323(c)(2):

[×] Not applicable – EUT which supports at least of 20 duplex system access channels and implements Least Interfered Channel (LIC) algorithm is permitted to use an upper monitoring threshold. Please refer to the section 4.14.2 for more details.

[ ] The lower monitoring threshold must not be more than 30 dB above the thermal noise power for a bandwidth equivalent to the emission bandwidth used by EUT.

Measurements are made in accordance with ANSI C63.17 sub-clause 7.3.1. Test setup is shown in section 3.3 Figure 3.3.1. The test is performed on the carrier closest to center of the band. RF signal generators apply uniform CW interference on all EUT carriers each at level $T_L + U_M + 10$ dB. Then, the interference level is reduced uniformly on all carriers until the EUT can transmit. The interference level shall be lower than or equal to the threshold limit.

Test Results:

Measured Maximum Interference Level (dBm)	Lower Monitoring Threshold Limit (dBm) ($T_L + U_M$)	Results
NA	-75.2	NA

NA - Not applicable

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4.9.2 Least Interfered Channel, LIC, FCC Rule 15.323(c)(5):

[ ] Not implemented – EUT met lower monitoring threshold requirements. Please refer to the section 4.15.1 for more details

[×] If access to spectrum is not available as determined by section 4.14.1 and a minimum of 20 duplex system access channels are defined for the EUT, the time and spectrum windows with the lowest power level below a monitoring threshold of 50 dB above the thermal noise power determined for the emission bandwidth may be accessed

Number of duplex channels per frequency channel = 12
Number of frequency channel = 5
Total Duplex Channels = 60

Hence, the time and spectrum windows below upper monitoring threshold may be accessed.

4.9.2.1 Upper Monitoring Threshold, FCC Rule 15.323(c)(5):

Measurements are made in accordance with ANSI C63.17 sub-clause 7.3.2. Test setup is shown in section 3.3 Figure 3.3.1. The test is performed on the carrier closest to center of the band. RF signal generators apply uniform CW interference on all EUT carriers each at level T_U + U_M + 10 dB. Then, the interference level is reduced uniformly on all carriers until the EUT can transmit. The interference level shall be lower than or equal to the threshold limit.

Test Results:

Measured Maximum Interference Level (dBm)	Upper Monitoring Threshold Limit (dBm) (T_U + U_M)	Results
-71	-55.2	Pass

NA - Not applicable

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Tel: (852) 2173 8888 Fax: (852) 2785 5487 Website: www.hk.intertek-etlsemko.com

EXHIBIT 5
EQUIPMENT LIST

Intertek Testing Services Hong Kong Ltd.
2/F., Garment Centre, 576 Castle Peak Road, Kowloon, Hong Kong.
Tel: (852) 2173 8888 Fax: (852) 2785 5487 Website: www.hk.intertek-etlsemko.com

5.0 **Equipment List**

1) Radiated Emissions Test

Equipment	EMI Test Receiver	Log Periodic Antenna	Double Ridged Guide Antenna	Broad-Band Horn Antenna
Registration No.	EW-2500	EW-0446	EW-1015	EW-1679
Manufacturer	R&S	EMCO	EMCO	SCHWARZBECK
Model No.	ESCI	3146	3115	BBHA9170
Calibration Date	Mar. 22, 2013	Apr. 30, 2013	Mar. 05, 2013	Apr. 01, 2013
Calibration Due Date	Feb. 28, 2014	Oct. 30, 2014	Sep. 05, 2014	Apr. 01, 2014

Equipment	Biconical Antenna	Spectrum Analyzer
Registration No.	EW-0954	EW-2188
Manufacturer	EMCO	AGILENTTECH
Model No.	3104C	E4407B
Calibration Date	Apr. 30, 2013	Nov. 05, 2012
Calibration Due Date	Oct. 30, 2014	Feb. 05, 2014

2) Conducted Emissions Test

Equipment	EMI Test Receiver	LISN
Registration No.	EW-2251	EW-2874
Manufacturer	R&S	R&S
Model No.	ESCI	ENV216
Calibration Date	Nov. 20, 2013	Oct. 17, 2013
Calibration Due Date	Nov. 20, 2014	Aug. 17, 2014

3) Conductive Measurement Test

Equipment	Coaxial directional coupler	Digital Radiocommunication Tester for DECT
Registration No.	EW-2337	EW-2250
Manufacturer	MAGNA	R&S
Model No.	4222-16	CMD60
Calibration Date	Nil*	Sep. 26, 2013
Calibration Due Date	Nil*	Sep. 26, 2014

Equipment	Spectrum Analyzer	Digital Multimeter	Vector Signal Generator
Registration No.	EW-2253	EW-1017	EW-2411
Manufacturer	R&S	FLUKE	R&S
Model No.	FSP40	87-IV	SMU200A
Calibration Date	Apr. 24, 2013	Jun. 06. 2013	Apr. 12, 2013
Calibration Due Date	Apr. 24, 2014	Jul. 06, 2014	Apr. 12, 2014

END OF TEST REPORT

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2/F., Garment Centre, 576 Castle Peak Road, Kowloon, Hong Kong.
Tel: (852) 2173 8888 Fax: (852) 2785 5487 Website: www.hk.intertek-etlsemko.com