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TEST REPORT

Report Number: 17010689HKG-003

Application
for
Original of 47 CFR Part 15 Certification

Cordless Phone with Bluetooth Device - Bluetooth Portion

FCC ID: EW780-0839-00

Prepared and Checked by:

Signed on File
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March 09, 2017

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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, 2015 Edition
FCC ID:	EW780-0839-00
FCC Model(s):	XT802, XT801, XT811, XT821, XT831, XT822, XT803, XT804, XT8AB, XT8, XT81, XT8A, XT801 BS, XT801 HS, XT811 BS, XT811 HS, XT821 BS, XT821 HS, XT831 BS, XT831 HS, XT802 BS, XT802 HS, XT822 BS, XT822 HS, XT803 BS, XT803 HS, XT804 BS, XT804 HS, XT8AB BS, XT8AB HS, XT8 HS, XT81 HS, XT8A HS
Type of EUT:	Transceiver
Description of EUT:	Cordless Phone with Bluetooth Device - Bluetooth Portion
Serial Number:	N/A
Sample Receipt Date:	January 18, 2017
Date of Test:	February 14 - 28, 2017
Report Date:	March 09, 2017
Environmental Conditions:	Temperature: +10 to 40°C Humidity: 10 to 90%

Table of Contents

EXHIBIT 1
TEST RESULTS SUMMARY & STATEMENT OF COMPLIANCE

1.0 Test Results Summary & Statement of Compliance

1.1 Summary of Test Results

Test Items	FCC Part 15 Section	Results	Details see section
Antenna Requirement	15.203	Pass	2.1
Security Code Information	15.214(d)	Pass	2.1
Radiated Emission Radiated Emission on the Bandedge	15.249(a), 15.209, 15.249(d)	Pass Pass	4.2 4.3
Radiated Emission in Restricted Bands	15.205	Pass	4.2
AC Power Line Conducted Emission	15.207	Pass	4.4

Note: Pursuant to FCC Part 15 Section 15.215(c), the 20dB bandwidth of the emission was contained within the frequency band designated (mentioned as above) which the EUT operated. The effects, if any, from frequency sweeping, frequency hopping, other modulation techniques and frequency stability over expected variations in temperature and supply voltage were considered.

1.2 Statement of Compliance

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

FCC Part 15, October 1, 2015 Edition

EXHIBIT 2
GENERAL DESCRIPTION

2.0 General Description

2.1 Product Description

The XT802 is a Cordless Phone with Bluetooth Device - Bluetooth Portion. 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) and Bluetooth transmitter operates at frequency range of 2402MHz to 2480MHz with 79 channels. The Bluetooth transceiver manages Bluetooth connections to a Bluetooth-equipped mobile device. With Bluetooth and 1.9GHz wireless communications enabled, the Base Unit allows user uses the cordless handset to make or receive cellular phone calls via the cellular network. The Base Unit is powered by 100-120VAC 60Hz 150mA AC adaptor.

The Bluetooth antenna used in base unit is integral, and the test sample is a prototype.

The Model(s): XT801, XT811, XT821, XT831, XT822, XT803, XT804, XT8AB, XT8, XT81, XT8A, XT801 BS, XT801 HS, XT811 BS, XT811 HS, XT821 BS, XT821 HS, XT831 BS, XT831 HS, XT802 BS, XT802 HS, XT822 BS, XT822 HS, XT803 BS, XT803 HS, XT804 BS, XT804 HS, XT8AB BS, XT8AB HS, XT8 HS, XT81 HS and XT8A HS are the same as the Model: XT802 in electronics/electrical designs including software & firmware, PCB layout and construction design/physical design/enclosure. The only differences between these models are color, package type, number of handset and charger to be sold for marketing purpose. Suffix (A,B in XT8AB, XT8A) indicates different packaging type and different number of handset and charger.

The circuit description is saved with filename: descri.pdf.

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 Test Methodology

Both AC power line-conducted and radiated emission measurements were performed according to the procedures in ANSI C63.4 (2014) and ANSI C63.10 (2013). Preliminary radiated scans and all radiated measurements were performed in Radiated Emission Test Sites. All Radiated tests were performed at an antenna to EUT distance of 3 meters, unless stated otherwise in the "**Justification Section**" of this Application.

2.3 Test Facility

The radiated emission test sites and conducted measurement facility used to collect the radiated data and conducted data are at Workshop No. 3, G/F., World-Wide Industrial Centre, 43-47 Shan Mei Street, Fo Tan, Sha Tin, N.T., Hong Kong. This test facility and site measurement data have been fully placed on file with the FCC.

EXHIBIT 3
SYSTEM TEST CONFIGURATION

3.0 System Test Configuration

3.1 Justification

For radiated emissions testing, the equipment under test (EUT) was setup to transmit continuously mode 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 Base Unit was powered by a 100-120VAC 60Hz 150mA to 6VDC 150mA adaptor.

For the measurements, the EUT was attached to a plastic stand if necessary and placed on the wooden turntable which is four feet in diameter and approximately 0.8m in height above the ground plane for emission measurement at or below 1GHz and 1.5m in height above the ground plane for emission measurement above 1GHz. If the base unit attached to peripherals, they were connected and operational to simulate typical use. The handset was remotely located as far from the antenna and the base as possible to ensure full power transmission from the base. Else, the base was wired to transmit full power.

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. Radiated emissions were 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 any intentional radiator powered by AC power line, measurements of the radiated signal level of the fundamental frequency component of the emission was performed with the supply voltage varied between 85% and 115% of the nominal rated supply voltage.

For transmitter radiated measurement, the spectrum analyzer resolution bandwidth was 100 kHz for frequencies below 1000 MHz. The resolution bandwidth was 1 MHz for frequencies above 1000 MHz.

Radiated emission measurement for transmitter was 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.

Emission that are directly caused by digital circuits in the transmit path and transmitter portion were measured, and the limit are according to FCC Part 15 Section 15.209.

The DECT module was put into transmission mode when taking radiated emission data for determining worst-case spurious emission.

3.1 Justification - Cont'd

Detector function for radiated emissions is in peak mode. Average readings, when required, are taken by measuring the duty cycle of the equipment under test and subtracting the corresponding amount in dB from the measured peak readings. A detailed description for the calculation of the average factor can be found in section 4.2.3.

Determination of pulse desensitization was made according to *Hewlett Packard Application Note 150-2, Spectrum Analysis... Pulsed RF.* The effective period (Teff) was 625µs. With the resolution bandwidth 1MHz and spectrum analyzer IF bandwidth 3dB, the pulse desensitization factor was 0dB.

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.

All relevant operation modes have been tested, and the worst case data was included in this report.

3.2 EUT Exercising Software

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

3.3 Radiated Emission Test Setup

The figure below shows the test setup, which is utilized to make these measurements.

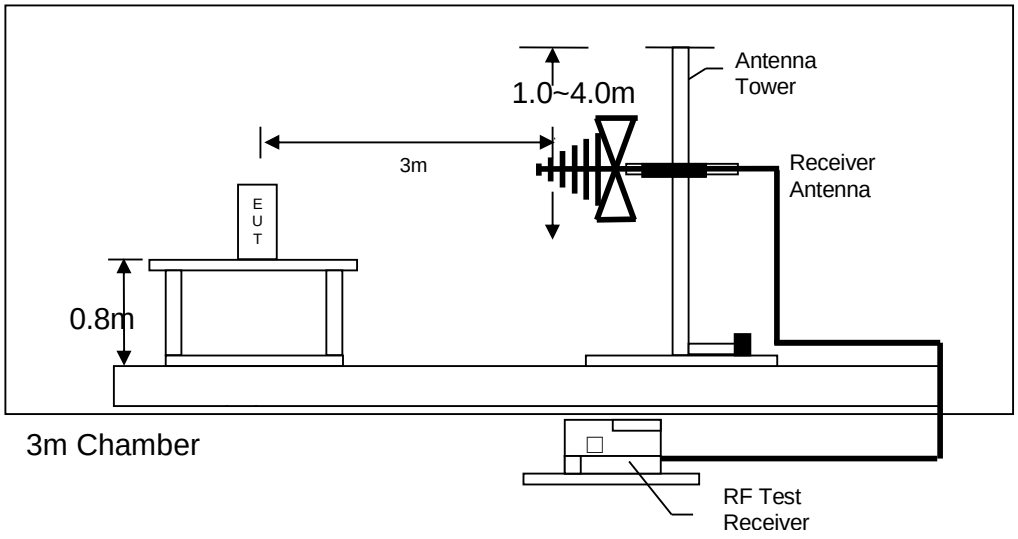


Figure 3.3.1 Test setup of radiated emissions up to 1GHz

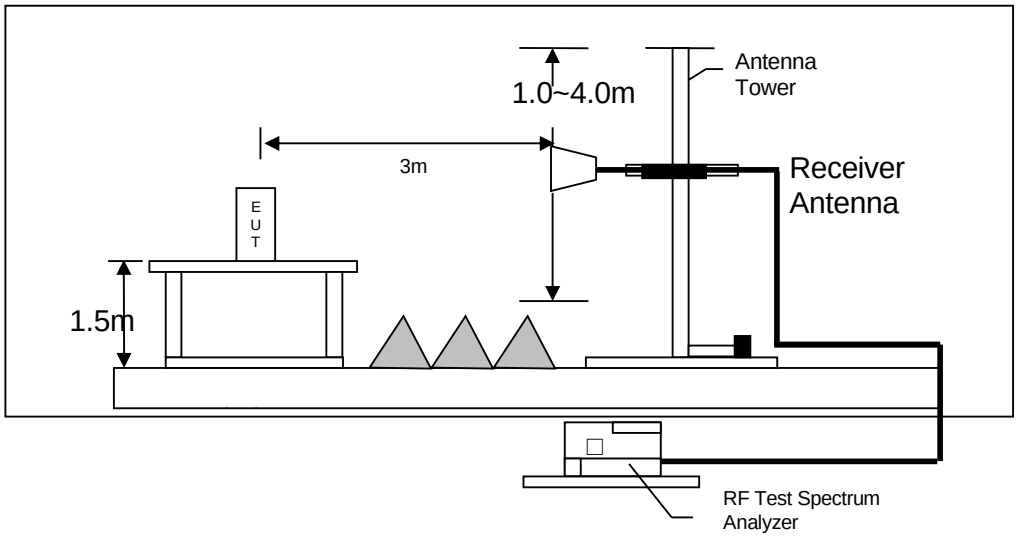


Figure 3.3.2 Test setup of radiated emissions above 1GHz

3.4 Conducted Emission Test Setup

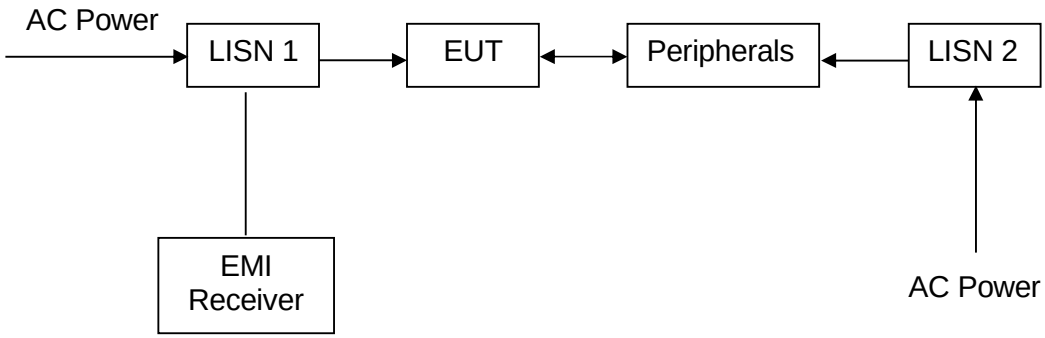


Figure 3.4.1

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 description are listed below.

(1) Base Unit: An AC adaptor (100-120VAC 60Hz 150mA to 6VDC 150mA, Model: RJ-AS060400U001, Brand: RuiJing) (Supplied by Client)
(2) Base Unit: An AC adaptor (100-120VAC 60Hz 150mA to 6VDC 150mA, Model: S003AKU0600040, Brand: Ten pao) (Supplied by Client)
(3) Base Unit: An AC adaptor (100-120VAC 60Hz 150mA to 6VDC 150mA, Model: VT04UUS06040, Brand: VTPL) (Supplied by Client)
(4) Handset: A Ni-MH type rechargeable battery (2.4V 400mAh, Brand: Corun, NI-MH AAA300*2) (Supplied by Client)
(5) Handset: A Ni-MH type rechargeable battery (2.4V 400mAh, Brand: Coslight, LH030-3AH45C2B) (Supplied by Client)
(6) Handset: A Ni-MH type rechargeable battery (2.4V 400mAh, Brand: GPI, VT30AAAHC2BMJZ) (Supplied by Client)

Description of Accessories:

(1) Telecommunication cable with RJ11C connectors (1m, unshielded), terminated (Supplied by Intertek)

3.6 Measurement Uncertainty

When determining of the test conclusion, the Measurement Uncertainty of test has been considered. The values of the Measurement uncertainty for radiated emission test, AC line conducted emission test and RF conducted test are ± 5.3dB, ± 4.2dB, ±1dB respectively.

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.

EXHIBIT 4
TEST RESULTS

4.0 **Test Results**

Data is 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.

4.1 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 reflects 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 dB is subtracted. The pulse desensitization factor of the spectrum analyzer was 0 dB, and the resultant average factor was -10 dB. The net field strength for comparison to the appropriate emission limit is 32 dBμV/m. This value in dBμV/m was converted to its corresponding level in μV/m.

RA = 62.0 dBμV
AF = 7.4 dB
CF = 1.6 dB
AG = 29 dB
PD = 0 dB
AV = -10 dB
FS = 62 + 7.4 +1.6 -29 +0 + (-10) = 32 dBμV/m

Level in μV/m = Common Antilogarithm [(32 dBμV/m)/20] = 39.8 μV/m

4.2 Radiated Emissions

4.2.1 Radiated Emission Configuration Photograph

Worst Case Radiated Emission
at

132.213 MHz

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

4.2.2 Radiated Emission Data

The data in tables 1-4 list the significant emission frequencies, the limit and the margin of compliance. Test setup is shown in section 3.3 Figure 3.3.1 and 3.3.2.

Judgement -

Passed by 7.2 dB margin

Mode: TX-Channel 00

Table 1, Base Unit

Radiated Emission Data

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBµV/m)	Average Factor (dB)	Calculated at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
V	2402.000	99.9	33	29.4	96.3	24	72.3	94.0	-21.7
H	***4804.000***	***40.6***	***33***	***34.9***	***42.5***	***24***	***18.5***	***54.0***	***-35.5***
V	7206.000	39.8	33	37.9	44.7	24	20.7	54.0	-33.3
V	9608.000	38.9	33	40.4	46.3	24	22.3	54.0	-31.7
H	***12010.000***	***41.9***	***33***	***40.5***	***49.4***	***24***	***25.4***	***54.0***	***-28.6***
V	14412.000	45.8	33	40.0	52.8	24	28.8	54.0	-25.2

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
V	2402.000	99.9	33	29.4	96.3	114.0	-17.7
H	***4804.000***	***40.6***	***33***	***34.9***	***42.5***	***74.0***	***-31.5***
V	7206.000	39.8	33	37.9	44.7	74.0	-29.3
V	9608.000	38.9	33	40.4	46.3	74.0	-27.7
H	***12010.000***	***41.9***	***33***	***40.5***	***49.4***	***74.0***	***-24.6***
V	14412.000	45.8	33	40.0	52.8	74.0	-21.2

NOTES: 1. Peak detector is used for the emission measurement.

2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.

3. Negative value in the margin column shows emission below limit.

4. Horn antenna is used for the emission over 1000MHz.

5. Emission (the row indicated by ***bold italic***) within the restricted band meets the requirement of FCC Part 15 Section 15.205.

Mode: TX-Channel 39

Table 2, Base Unit

Radiated Emission Data

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBµV/m)	Average Factor (dB)	Calculated at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
V	2440.000	100.1	33	29.4	96.5	24	72.5	94.0	-21.5
H	***4880.000***	***40.5***	***33***	***34.9***	***42.4***	***24***	***18.4***	***54.0***	***-35.6***
V	***7320.000***	***39.5***	***33***	***37.9***	***44.4***	***24***	***20.4***	***54.0***	***-33.6***
V	9760.000	39.1	33	40.4	46.5	24	22.5	54.0	-31.5
H	***12200.000***	***41.8***	***33***	***40.5***	***49.3***	***24***	***25.3***	***54.0***	***-28.7***
V	14640.000	47.0	33	38.4	52.4	24	28.4	54.0	-25.6

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
V	2440.000	100.1	33	29.4	96.5	114.0	-17.5
H	***4880.000***	***40.5***	***33***	***34.9***	***42.4***	***74.0***	***-31.6***
V	***7320.000***	***39.5***	***33***	***37.9***	***44.4***	***74.0***	***-29.6***
V	9760.000	39.1	33	40.4	46.5	74.0	-27.5
H	***12200.000***	***41.8***	***33***	***40.5***	***49.3***	***74.0***	***-24.7***
V	14640.000	47.0	33	38.4	52.4	74.0	-21.6

NOTES: 1. Peak detector is used for the emission measurement.

2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.

3. Negative value in the margin column shows emission below limit.

4. Horn antenna is used for the emission over 1000MHz.

5. Emission (the row indicated by ***bold italic***) within the restricted band meets the requirement of FCC Part 15 Section 15.205.

Mode: TX-Channel 78

Table 3, Base Unit

Radiated Emission Data

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBµV/m)	Average Factor (dB)	Calculated at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
V	2480.000	99.7	33	29.4	96.1	24	72.1	94.0	-21.9
H	***4960.000***	***40.9***	***33***	***34.9***	***42.8***	***24***	***18.8***	***54.0***	***-35.2***
V	***7440.000***	***39.8***	***33***	***37.9***	***44.7***	***24***	***20.7***	***54.0***	***-33.3***
V	9920.000	39.4	33	40.4	46.8	24	22.8	54.0	-31.2
H	***12400.000***	***42.2***	***33***	***40.5***	***49.7***	***24***	***25.7***	***54.0***	***-28.3***
V	14880.000	47.2	33	38.4	52.6	24	28.6	54.0	-25.4

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
V	2480.000	99.7	33	29.4	96.1	114.0	-17.9
H	***4960.000***	***40.9***	***33***	***34.9***	***42.8***	***74.0***	***-31.2***
V	***7440.000***	***39.8***	***33***	***37.9***	***44.7***	***74.0***	***-29.3***
V	9920.000	39.4	33	40.4	46.8	74.0	-27.2
H	***12400.000***	***42.2***	***33***	***40.5***	***49.7***	***74.0***	***-24.3***
V	14880.000	47.2	33	38.4	52.6	74.0	-21.4

NOTES: 1. Peak detector is used for the emission measurement.

2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.

3. Negative value in the margin column shows emission below limit.

4. Horn antenna is used for the emission over 1000MHz.

5. Emission (the row indicated by ***bold italic***) within the restricted band meets the requirement of FCC Part 15 Section 15.205.

Mode: Bluetooth Talk

Table 4, Base Unit

Radiated Emission Data

Polarization	Frequency (MHz)	Reading (dBµV)	Pre-amp (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Limit at 3m (dBµV/m)	Margin (dB)
H	37.153	35.0	16	10.0	29.0	40.0	-11.0
V	50.491	31.1	16	11.0	26.1	40.0	-13.9
V	100.688	31.2	16	12.0	27.2	43.5	-16.3
V	119.967	35.5	16	14.0	33.5	43.5	-10.0
V	132.213	38.3	16	14.0	36.3	43.5	-7.2
V	180.107	29.5	16	20.0	33.5	43.5	-10.0
V	207.359	31.0	16	17.0	32.0	43.5	-11.5
H	289.111	23.1	16	22.0	29.1	46.0	-16.9

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.

4.2.3 Transmitter Duty Cycle Calculation

Based on the Bluetooth Specification Version 4.0, the transmitter ON time for each timeslot of Bluetooth is 625µs. DH5 has the maximum duty cycle, which consists of 5 continuous Tx slots and 1 Rx slot. Therefore one hopset take (5+1) x 625µs = 3.75ms. For one period for a pseudo-random hopping through at least 20 RF channels in adaptive mode (worst case), it take: 20 x 3.75ms = 75ms.

The dwell time for DH5 is 5 x 625us = 3.125ms

For the worst case calculation, there are two transmissions might occur in 100ms.

Therefore,

Duty Cycle (DC) = Maximum On time in 100ms/100ms
= 3.125ms x 2 /100ms
= 0.0625

Average Factor (AF) of Bluetooth in dB = $20 \log_{10} (0.0625)$
= -24.0dB

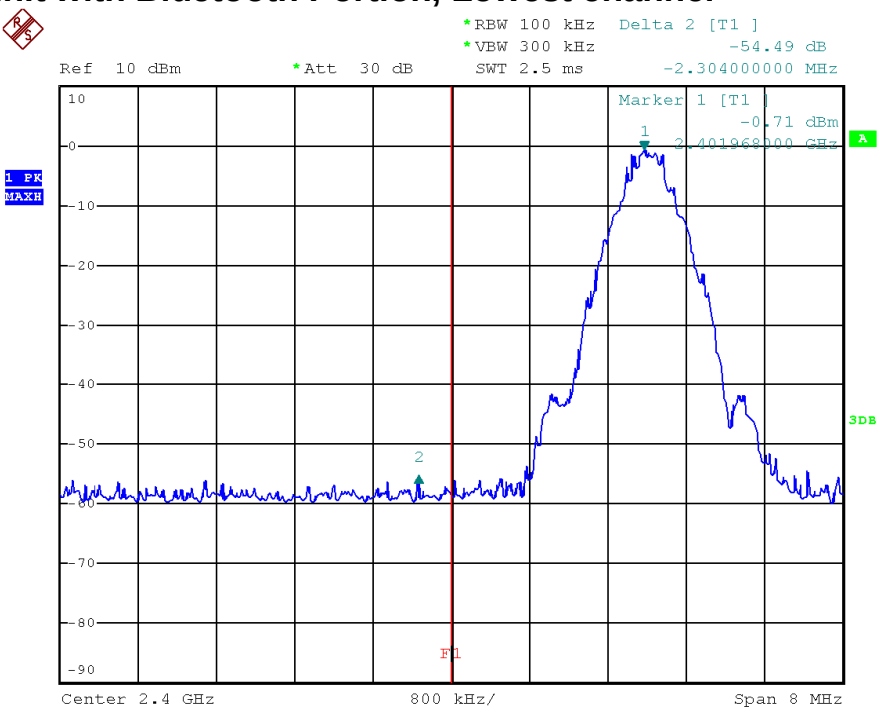
4.3 Radiated Emission on the Bandedge

From the following plots, they show that the fundamental emissions are confined in the specified band (2400MHz and 2483.5MHz). In case of emissions up to two standard bandwidths away from the bandedge, the delta measurement technique is used for determining bandedge compliance. Standard bandwidth is the bandwidth specified by ANSI C63.4 (2014) for frequency being measured.

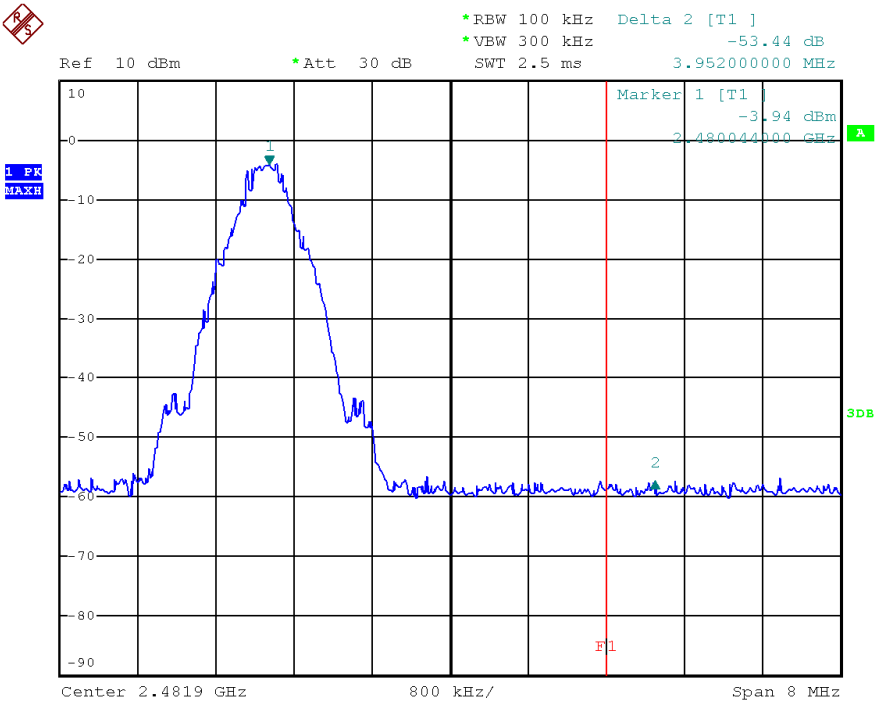
Emissions radiated outside of the specified frequency bands, except harmonics, are attenuated by 50 dB below the level of the fundamental or to the general radiated emission limits in FCC Part 15 Section 15.209, whichever is the lesser attenuation, which meet the requirement of FCC Part 15 Section 15.249(d).

The plots of radiated emission on the bandedge are saved as below.

Base unit with Bluetooth Portion, Lowest channel



Base unit with Bluetooth Portion, Highest channel



Bandedge compliance is determined by applying marker-delta method, i.e.

Resultant Field Strength = Fundamental Emissions - Delta from the plot

Resultant field strength for the lowest and/or highest channel(s), with corresponding average values are calculated as follows:

Channel	Fundamental Emission (dBµV/m)	Delta from the Plot (dB)	Resultant Field Strength (dBµV/m)	Average Limit (dBµV/m)	Margin (dB)
Lowest	72.3	54.49	17.81	54	-36.19
Highest	72.1	53.44	18.66	54	-35.34

Channel	Fundamental Emission (dBµV/m)	Delta from the Plot (dB)	Resultant Field Strength (dBµV/m)	Peak Limit (dBµV/m)	Margin (dB)
Lowest	96.3	54.49	41.81	74	-32.19
Highest	96.1	53.44	42.66	74	-31.34

The resultant field strength meets the general radiated emission limit in FCC Part 15 Section 15.209 / Table 4 of RSS-Gen, which does not exceed 74dBµV/m for peak limit and also 54dBµV/m for average limit.

4.4 AC Power Line Conducted Emission

[ ] 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.

Test setup is shown in section 3.4 Figure 3.4.1.

4.4.1 AC Power Line Conducted Emission Configuration Photograph

Worst Case Line-Conducted Configuration
at

with adaptor Ten Pao: 429 kHz
with adaptor RuiJing: 6.7515 MHz
with adaptor VTPL: 6.018 MHz

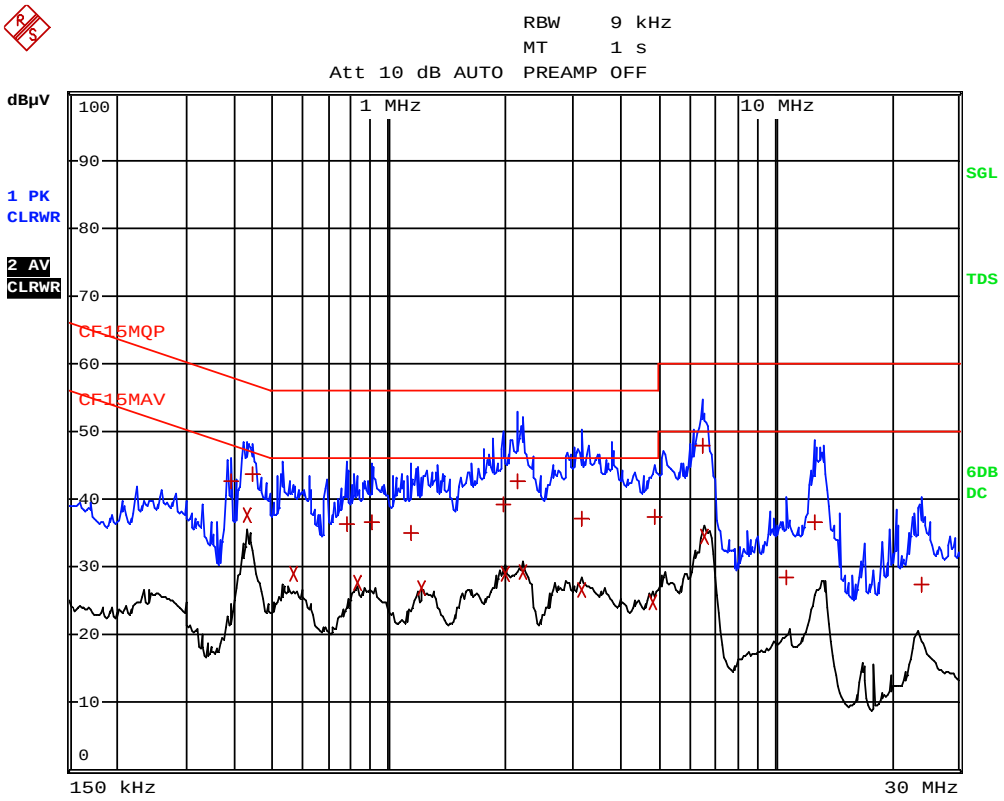
The worst case line conducted configuration photographs are saved with filename: config photos.pdf.

4.4.2 AC Power Line Conducted Emission Data

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

with adaptor Ten Pao - Passed by 9.72 dB margin compared with CISPR-average limit
adaptor RuiJing - Passed by 16.28 dB margin compared with Quasi Peak limit
with adaptor VTPL - Passed by 13.88 dB margin compared with Quasi Peak limit

Worst Case: Bluetooth Ringing and Charging with adaptor Ten pao



Worst Case: Bluetooth Ringing and Charging with adaptor Ten pao

EDIT PEAK LIST (Final Measurement Results)

Trace1: CF15MQP
Trace2: CF15MAV
Trace3: ---

	TRACE	FREQUENCY	LEVEL dBµV		DELTA LIMIT dB
1	Quasi Peak	388.5 kHz	42.74	N gnd	-15.35
2	CISPR Average	429 kHz	37.54	N gnd	-9.72
1	Quasi Peak	442.5 kHz	43.81	L1 gnd	-13.19
2	CISPR Average	568.5 kHz	28.91	N gnd	-17.08
1	Quasi Peak	780 kHz	36.23	L1 gnd	-19.77
2	CISPR Average	834 kHz	27.74	N gnd	-18.25
1	Quasi Peak	901.5 kHz	36.61	L1 gnd	-19.39
1	Quasi Peak	1.14 MHz	35.02	L1 gnd	-20.97
2	CISPR Average	1.221 MHz	27.03	N gnd	-18.96
1	Quasi Peak	1.986 MHz	39.20	L1 gnd	-16.79
2	CISPR Average	2.004 MHz	28.99	N gnd	-17.01
1	Quasi Peak	2.1615 MHz	42.59	L1 gnd	-13.40
2	CISPR Average	2.2335 MHz	29.20	L1 gnd	-16.79
1	Quasi Peak	3.1695 MHz	37.09	L1 gnd	-18.90
2	CISPR Average	3.1695 MHz	26.64	L1 gnd	-19.35
2	CISPR Average	4.821 MHz	24.82	L1 gnd	-21.18
1	Quasi Peak	4.9155 MHz	37.37	L1 gnd	-18.62
1	Quasi Peak	6.5175 MHz	47.86	L1 gnd	-12.13
2	CISPR Average	6.5715 MHz	34.61	L1 gnd	-15.38
1	Quasi Peak	10.7295 MHz	28.35	L1 gnd	-31.64

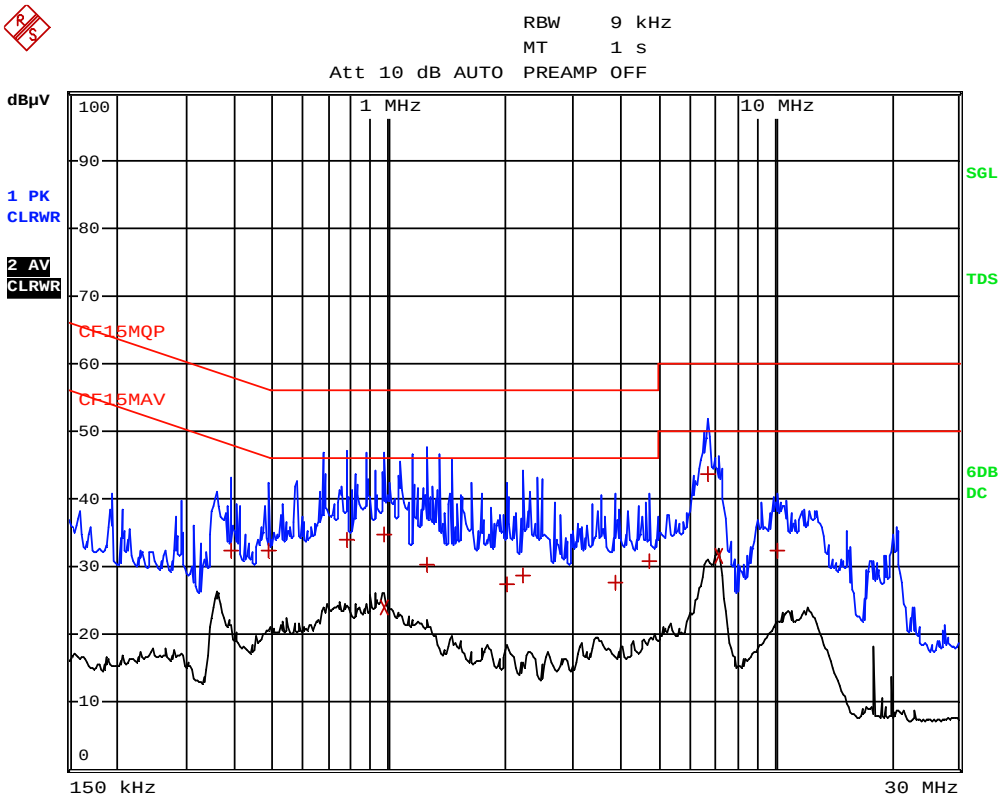
Worst Case: Bluetooth Ringing and Charging with adaptor Ten pao

EDIT PEAK LIST (Final Measurement Results)

Trace1: CF15MQP
Trace2: CF15MAV
Trace3: ---

	TRACE	FREQUENCY	LEVEL dBµV		DELTA LIMIT dB
1	Quasi Peak	12.7635 MHz	36.50	L1 gnd	-23.49
1	Quasi Peak	23.8875 MHz	27.30	L1 gnd	-32.69

Worst Case: Bluetooth Ringing and Charging with adaptor RuiJing



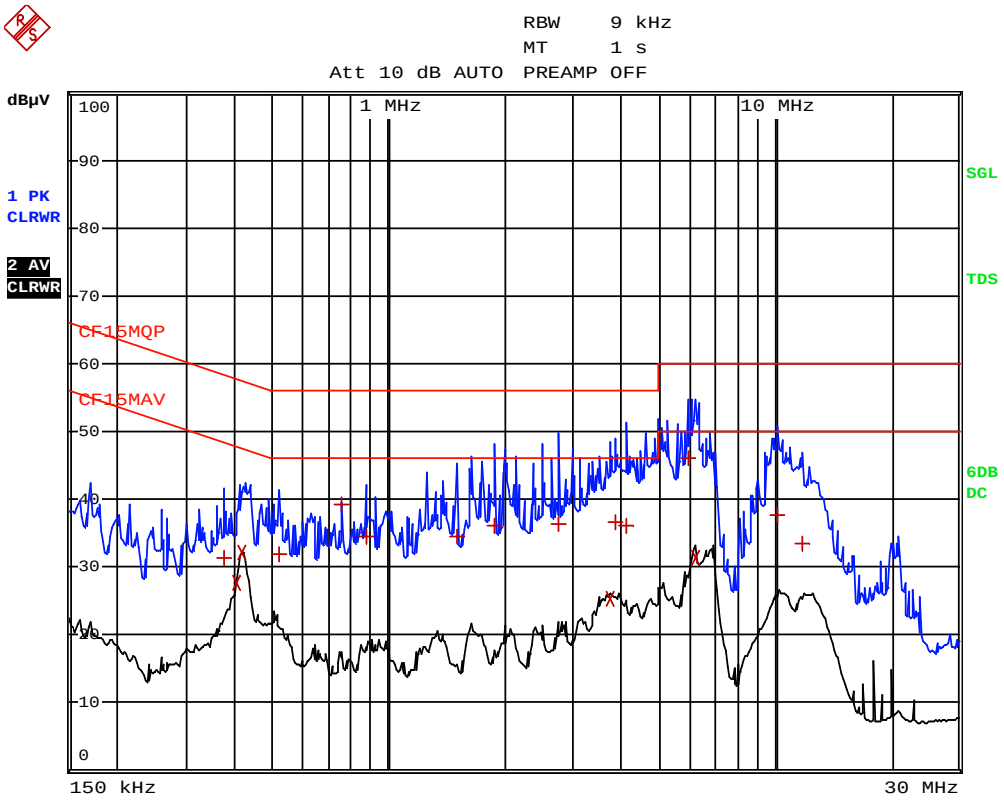
Worst Case: Bluetooth Ringing and Charging with adaptor RuiJing

EDIT PEAK LIST (Final Measurement Results)

Trace1: CF15MQP
Trace2: CF15MAV
Trace3: ---

	TRACE	FREQUENCY	LEVEL dBµV		DELTA LIMIT dB
1	Quasi Peak	388.5 kHz	32.36	L1 gnd	-25.72
1	Quasi Peak	487.5 kHz	32.40	L1 gnd	-23.80
1	Quasi Peak	775.5 kHz	33.95	L1 gnd	-22.04
1	Quasi Peak	973.5 kHz	34.79	L1 gnd	-21.20
2	CISPR Average	978 kHz	24.12	L1 gnd	-21.87
1	Quasi Peak	1.257 MHz	30.23	L1 gnd	-25.76
1	Quasi Peak	2.031 MHz	27.49	L1 gnd	-28.50
1	Quasi Peak	2.2245 MHz	28.64	N gnd	-27.35
1	Quasi Peak	3.885 MHz	27.67	N gnd	-28.32
1	Quasi Peak	4.749 MHz	30.82	N gnd	-25.17
1	Quasi Peak	6.7515 MHz	43.71	N gnd	-16.28
2	CISPR Average	7.197 MHz	31.74	L1 gnd	-18.25
1	Quasi Peak	10.1985 MHz	32.29	N gnd	-27.70

Worst Case: Bluetooth talk with adaptor VTPL



Worst Case: Bluetooth talk with adaptor VTPL

EDIT PEAK LIST (Final Measurement Results)

Trace1: CF15MQP
Trace2: CF15MAV
Trace3: ---

	TRACE	FREQUENCY	LEVEL dBµV		DELTA LIMIT dB
1	Quasi Peak	375 kHz	31.44	N gnd	-26.94
2	CISPR Average	402 kHz	27.80	L1 gnd	-20.01
2	CISPR Average	415.5 kHz	32.17	L1 gnd	-15.36
1	Quasi Peak	519 kHz	31.83	L1 gnd	-24.16
1	Quasi Peak	753 kHz	39.30	N gnd	-16.69
1	Quasi Peak	879 kHz	34.57	N gnd	-21.42
1	Quasi Peak	1.5045 MHz	34.56	L1 gnd	-21.44
1	Quasi Peak	1.878 MHz	36.13	L1 gnd	-19.87
1	Quasi Peak	2.76 MHz	36.45	L1 gnd	-19.54
2	CISPR Average	3.7545 MHz	25.39	L1 gnd	-20.60
1	Quasi Peak	3.885 MHz	36.68	L1 gnd	-19.31
1	Quasi Peak	4.146 MHz	36.12	L1 gnd	-19.87
1	Quasi Peak	6.018 MHz	46.11	L1 gnd	-13.88
2	CISPR Average	6.234 MHz	31.34	L1 gnd	-18.65
1	Quasi Peak	10.1895 MHz	37.58	L1 gnd	-22.41
1	Quasi Peak	11.787 MHz	33.41	N gnd	-26.58

EXHIBIT 5
EQUIPMENT LIST

5.0 **Equipment List**

1) Radiated Emissions Test

Equipment	BiConiLog Antenna	Double Ridged Guide Antenna	Broad-Band Horn Antenna
Registration No.	EW-3061	EW-1133	EW-1679
Manufacturer	EMCO	EMCO	SCHWARZBECK
Model No.	3412E	3115	BBHA9170
Calibration Date	Sep. 23, 2016	Nov. 05, 2015	Jun. 28, 2016
Calibration Due Date	Sep. 23, 2017	May 05, 2017	Jun. 28, 2017

Equipment	EMI Test Receiver	Spectrum Analyzer
Registration No.	EW-3095	EW-2466
Manufacturer	R&S	R&S
Model No.	ESCI	FSP30
Calibration Date	Oct. 25, 2016	Oct. 03, 2016
Calibration Due Date	Oct. 25, 2017	Aug. 20, 2017

2) Conducted Emissions Test

Equipment	EMI Test Receiver	LISN	Pulse Limiter
Registration No.	EW-2666	EW-0192	EW-3248
Manufacturer	R&S	R&S	R&S
Model No.	ESCI7	ESH3-Z5	ESH3-Z2
Calibration Date	Jun. 17, 2016	Aug. 26, 2016	Oct. 12, 2016
Calibration Due Date	Jun. 17, 2017	Aug. 26, 2017	Oct. 12, 2017

3) Bandedge Measurement Test

Equipment	Spectrum Analyzer
Registration No.	EW-2253
Manufacturer	R&S
Model No.	FSP40
Calibration Date	Jun. 15, 2016
Calibration Due Date	Jun. 15, 2017

END OF TEST REPORT