

Issuing Laboratory:
Intertek Testing Services Hong Kong Limited

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TEST REPORT

Report Number: HK12041325-1

Application
for

Original Grant of 47 CFR Part 15 Certification
New Family of RSS-210 Issue 8 Equipment Certification


2.4GHz Frequency Hopping Spread Spectrum Baby Unit

FCC ID: VLJMBP10SBU


IC: 4522A-MBP10SBU

Prepared and Checked by:

Approved by:



Koo Wai Ip
Senior Lead Engineer



Nip Ming Fung, Melvin
Assistant Manager
September 05, 2012

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Intertek Testing Services Hong Kong Ltd.

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GENERAL INFORMATION

Applicant Name:	Binatone Electronics International Ltd.
Applicant Address:	Floor 23A, 9 Des Voeux Road West, Sheung Wan, Hong Kong.
FCC Specification Standard:	FCC Part 15, October 1, 2010 Edition
FCC ID:	VLJMBP10SBU
FCC Model(s):	MBP10SBU, MBP10S/2BU
IC Specification Standard:	RSS-210 Issue 8, December 2010 RSS-Gen Issue 3, December 2010
IC:	4522A-MBP10SBU
IC Model(s):	MBP10SBU, MBP10S/2BU
Type of EUT:	Transceiver
Description of EUT:	2.4GHz Frequency Hopping Spread Spectrum Baby Unit
Serial Number:	N/A
Sample Receipt Date:	April 27, 2012
Date of Test:	August 10 - 13, 2012
Report Date:	September 05, 2012
Environmental Conditions:	Temperature: +10 to 40°C Humidity: 10 to 90%

Table of Contents

1.0 Test Results Summary & Statement of Compliance	4
1.1 Summary of Test Results	4
1.2 Statement of Compliance	4
2.0 General Description	6
2.1 Product Description	6
2.2 Test Methodology	6
2.3 Test Facility	6
3.0 System Test Configuration	8
3.1 Justification	8
3.2 EUT Exercising Software	9
3.3 Details of EUT and Description of Accessories	10
3.4 Measurement Uncertainty	10
4.0 Test Results	12
4.1 Field Strength Calculation	12
4.2 Radiated Emissions	13
4.2.1 Radiated Emission Configuration Photograph	13
4.2.2 Radiated Emission Data	13
4.2.3 Transmitter Duty Cycle Calculation	13
4.3 Radiated Emission on the Bandedge	23
4.4 AC Power Line Conducted Emission	25
4.4.1 AC Power Line Conducted Emission Configuration Photograph	25
4.4.2 AC Power Line Conducted Emission Data	25
5.0 Equipment List	32

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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

Test Items	FCC Part 15 Section	RSS-210/ RSS-Gen [#] / RSS-310 [^] Section	Results	Details see section
Antenna Requirement	15.203	7.1.2 [#]	Pass	2.1
Radiated Emission	15.249(a), 209, & 109	A2.9(a)	Pass	4.2
Radiated Emission on the Bandedge	15.249(d)	A2.9(b)	Pass	4.3
Radiated Emission in Restricted Bands	15.205	2.2	Pass	4.2
AC Power Line Conducted Emission	15.207 & 15.107	7.2.4 [#]	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, 2010 Edition
RSS-210 Issue 8, December 2010
RSS-Gen Issue 3, December 2010

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EXHIBIT 2
GENERAL DESCRIPTION

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2.0 General Description

2.1 Product Description

The MBP10SBU is a 2.4GHz Frequency Hopping Spread Spectrum Baby Unit. It operates at frequency range of 2402.784MHz to 2479.680MHz. The Baby Unit is powered by an adaptor 100-240VAC to 5VDC 600mA with either 5ESP brand, Model: 5E-AD050060-U or GPE brand, Model: GPE003W-050060-1.

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

The Model(s): MBP10S/2BU is the same as the Model: MBP10SBU in electrical designs including software & firmware, PCB layout and construction design/physical design/enclosure. The only differences between these models are cosmetic details, model number and number of parents to be sold for marketing purpose.

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

2.2 Test Methodology

Both AC power line-conducted and radiated emission measurements were performed according to the procedures in ANSI C63.4 (2009). Preliminary radiated scans and all radiated measurements were performed in Open Area 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 open area test site and conducted measurement facility used to collect the radiated data and conducted data are at Roof Top and 2nd 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 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 radiated emissions testing, the equipment under test (EUT) was setup to transmit continuously 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 5VDC 600mA adaptor.

For the measurements, the EUT was attached to a plastic stand if necessary and placed on the wooden turntable. If the EUT attached to peripherals, they were connected and operational to simulate typical use.

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. Digital circuitry used to control additional functions other than the operation of the transmitter are subject to FCC Part 15 Section 15.109 Limits.

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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 (T_{eff}) was referred to Exhibit 4.2.3. 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.

As the baby 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

All relevant operation modes have been tested, and the worst case data is 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.

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3.3 Details of EUT and Description of Accessories

Details of EUT:

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

- (1) Baby Unit: An AC adaptor (100-240VAC to 5VDC 600mA, Model: 5E-AD050060-U, Brand: 5ESP or Model: GPE003W-050060-1, Brand: GPE) (Supplied by Client)

Description of Accessories:

There are no special accessories necessary for compliance of this product.

3.4 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

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 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 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 dB μ V/m. This value in dB μ V/m was 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 dB
PD = 0 dB
AV = -10 dB

$$FS = 62 + 7.4 + 1.6 - 29 + 0 + (-10) = 32 \text{ dB}\mu\text{V/m}$$

$$\text{Level in } \mu\text{V/m} = \text{Common Antilogarithm} [(32 \text{ dB}\mu\text{V/m})/20] = 39.8 \mu\text{V/m}$$

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4.2 Radiated Emissions

4.2.1 Radiated Emission Configuration Photograph

Worst Case Radiated Emission at

Baby Unit with 5ESP & GPE Adaptor: 2402.784 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 1-8 list the significant emission frequencies, the limit and the margin of compliance.

Judgement -

Baby Unit with 5ESP & GPE Adaptor: Passed by 3.4 dB margin compare with peak limit

4.2.3 Transmitter Duty Cycle Calculation

For 2 parent units operation with dummy,
Duty Cycle (DC) = Maximum On time in 100ms/100ms
= (0.818+0.818+0.246)ms / 100ms

Average Factor (AF) = $20 \log(\text{DC})$
= $20 * \log(0.01882)$
= -34.5

The plots of transmitter ON time is saved as below.

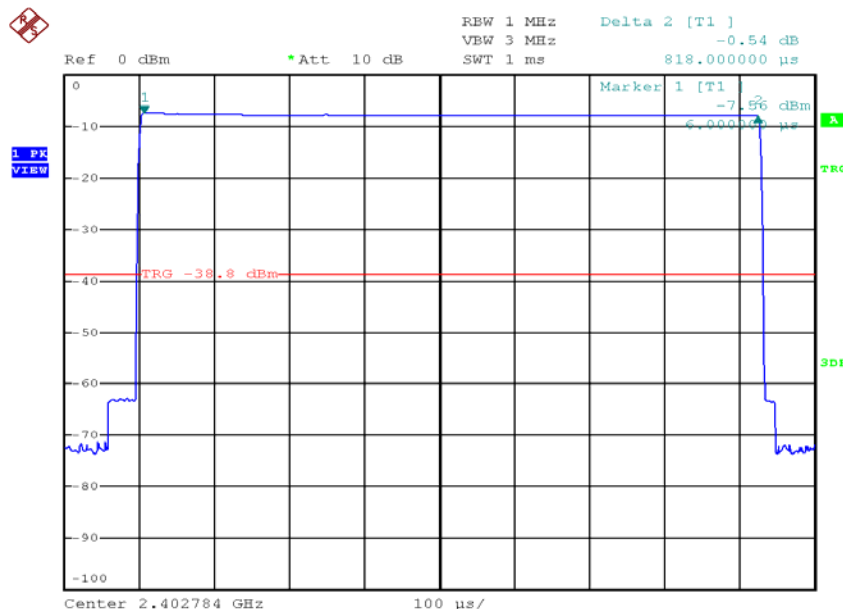
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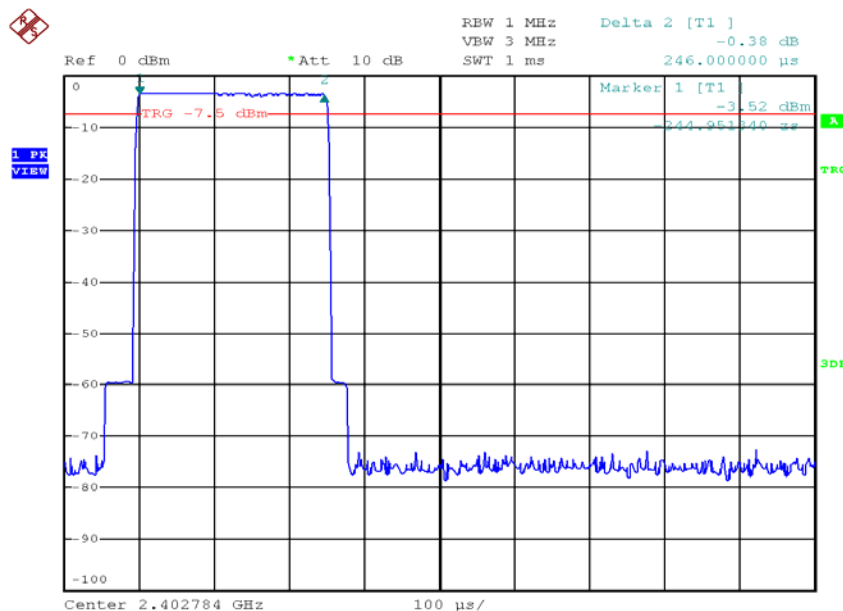


Plots of transmitter ON time

Baby Unit, Traffic



Baby Unit, Dummy



Mode: TX-Channel 2 (with 5ESP adaptor)

Table 1, Baby Unit

Radiated Emission Data

Polarization	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Average Factor (dB)	Calculated at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
H	2402.784	114.2	33	29.4	34.5	76.1	94.0	-17.9
H	4805.568	59.9	33	34.9	34.5	27.3	54.0	-26.7
H	7208.352	56.3	33	37.9	34.5	26.7	54.0	-27.3
H	9611.136	50.2	33	40.4	34.5	23.1	54.0	-30.9
H	12013.920	46.9	33	40.5	34.5	19.9	54.0	-34.1
H	14416.704	45.1	33	40.0	34.5	17.6	54.0	-36.4

Polarization	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)
H	2402.784	114.2	33	29.4	110.6	114.0	-3.4
H	4805.568	59.9	33	34.9	61.8	74.0	-12.2
H	7208.352	56.3	33	37.9	61.2	74.0	-12.8
H	9611.136	50.2	33	40.4	57.6	74.0	-16.4
H	12013.920	46.9	33	40.5	54.4	74.0	-19.6
H	14416.704	45.1	33	40.0	52.1	74.0	-21.9

- 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 / RSS-210 Section 2.2.

Mode: TX-Channel 46 (with 5ESP adaptor)

Table 2, Baby Unit

Radiated Emission Data

Polarization	Frequency (MHz)	Reading (dBμV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Average Factor (dB)	Calculated at 3m (dBμV/m)	Average Limit at 3m (dBμV/m)	Margin (dB)
H	2440.800	113.8	33	29.4	34.5	75.7	94.0	-18.3
H	4881.600	60.0	33	34.9	34.5	27.4	54.0	-26.6
H	7322.400	56.5	33	37.9	34.5	26.9	54.0	-27.1
H	9763.200	50.0	33	40.4	34.5	22.9	54.0	-31.1
H	12204.000	47.1	33	40.5	34.5	20.1	54.0	-33.9
H	14644.800	48.6	33	38.4	34.5	19.5	54.0	-34.5

Polarization	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)
H	2440.800	113.8	33	29.4	110.2	114.0	-3.8
H	4881.600	60.0	33	34.9	61.9	74.0	-12.1
H	7322.400	56.5	33	37.9	61.4	74.0	-12.6
H	9763.200	50.0	33	40.4	57.4	74.0	-16.6
H	12204.000	47.1	33	40.5	54.6	74.0	-19.4
H	14644.800	48.6	33	38.4	54.0	74.0	-20.0

- 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 / RSS-210 Section 2.2.

Mode: TX-Channel 91 (with 5ESP adaptor)

Table 3, Baby Unit

Radiated Emission Data

Polarization	Frequency (MHz)	Reading (dBμV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Average Factor (dB)	Calculated at 3m (dBμV/m)	Average Limit at 3m (dBμV/m)	Margin (dB)
H	2479.680	113.9	33	29.4	34.5	75.8	94.0	-18.2
H	4959.360	59.3	33	34.9	34.5	26.7	54.0	-27.3
H	7439.040	56.5	33	37.9	34.5	26.9	54.0	-27.1
H	9918.720	49.8	33	40.4	34.5	22.7	54.0	-31.3
H	12398.400	47.0	33	40.5	34.5	20.0	54.0	-34.0
H	14878.080	48.2	33	38.4	34.5	19.1	54.0	-34.9

Polarization	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)
H	2479.680	113.9	33	29.4	110.3	114.0	-3.7
H	4959.360	59.3	33	34.9	61.2	74.0	-12.8
H	7439.040	56.5	33	37.9	61.4	74.0	-12.6
H	9918.720	49.8	33	40.4	57.2	74.0	-16.8
H	12398.400	47.0	33	40.5	54.5	74.0	-19.5
H	14878.080	48.2	33	38.4	53.6	74.0	-20.4

- 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 / RSS-210 Section 2.2.

Mode: Talk (with 5ESP adaptor)

Table 4, Baby unit

Radiated Emission Data

Polarization	Frequency (MHz)	Reading (dB μ V)	Pre-amp (dB)	Antenna Factor (dB)	Net at 3m (dB μ V/m)	Limit at 3m (dB μ V/m)	Margin (dB)
V	41.472	39.4	16	10.0	33.4	40.0	-6.6
V	55.296	38.9	16	11.0	33.9	40.0	-6.1
V	69.120	42.8	16	7.0	33.8	40.0	-6.2
V	82.942	43.1	16	7.0	34.1	40.0	-5.9
H	110.590	36.2	16	14.0	34.2	43.5	-9.3
H	165.880	32.6	16	17.0	33.6	43.5	-9.9
H	193.531	33.2	16	16.0	33.2	43.5	-10.3

- 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. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205 / RSS-210 Section 2.2.

Mode: TX-Channel 2 (with GPE adaptor)

Table 5, Baby Unit

Radiated Emission Data

Polarization	Frequency (MHz)	Reading (dB μ V)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Average Factor (dB)	Calculated at 3m (dB μ V/m)	Average Limit at 3m (dB μ V/m)	Margin (dB)
H	2402.784	114.2	33	29.4	34.5	76.1	94.0	-17.9
H	4805.568	59.9	33	34.9	34.5	27.3	54.0	-26.7
H	7208.352	56.4	33	37.9	34.5	26.8	54.0	-27.2
H	9611.136	50.5	33	40.4	34.5	23.4	54.0	-30.6
H	12013.920	47.1	33	40.5	34.5	20.1	54.0	-33.9
H	14416.704	45.2	33	40.0	34.5	17.7	54.0	-36.3

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	2402.784	114.2	33	29.4	110.6	114.0	-3.4
H	4805.568	59.9	33	34.9	61.8	74.0	-12.2
H	7208.352	56.4	33	37.9	61.3	74.0	-12.7
H	9611.136	50.5	33	40.4	57.9	74.0	-16.1
H	12013.920	47.1	33	40.5	54.6	74.0	-19.4
H	14416.704	45.2	33	40.0	52.2	74.0	-21.8

- 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 / RSS-210 Section 2.2.

Mode: TX-Channel 46 (with GPE adaptor)

Table 6, Baby Unit

Radiated Emission Data

Polarization	Frequency (MHz)	Reading (dBμV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Average Factor (dB)	Calculated at 3m (dBμV/m)	Average Limit at 3m (dBμV/m)	Margin (dB)
H	2440.800	113.9	33	29.4	34.5	75.8	94.0	-18.2
H	4881.600	59.9	33	34.9	34.5	27.3	54.0	-26.7
H	7322.400	56.6	33	37.9	34.5	27.0	54.0	-27.0
H	9763.200	50.5	33	40.4	34.5	23.4	54.0	-30.6
H	12204.000	46.9	33	40.5	34.5	19.9	54.0	-34.1
H	14644.800	48.8	33	38.4	34.5	19.7	54.0	-34.3

Polarization	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)
H	2440.800	113.9	33	29.4	110.3	114.0	-3.7
H	4881.600	59.9	33	34.9	61.8	74.0	-12.2
H	7322.400	56.6	33	37.9	61.5	74.0	-12.5
H	9763.200	50.5	33	40.4	57.9	74.0	-16.1
H	12204.000	46.9	33	40.5	54.4	74.0	-19.6
H	14644.800	48.8	33	38.4	54.2	74.0	-19.8

- 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 / RSS-210 Section 2.2.

Mode: TX-Channel 91

Table 7, Baby Unit

Radiated Emission Data

Polarization	Frequency (MHz)	Reading (dB μ V)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Average Factor (dB)	Calculated at 3m (dB μ V/m)	Average Limit at 3m (dB μ V/m)	Margin (dB)
H	2479.680	114.0	33	29.4	34.5	75.9	94.0	-18.1
H	4959.360	59.7	33	34.9	34.5	27.1	54.0	-26.9
H	7439.040	56.5	33	37.9	34.5	26.9	54.0	-27.1
H	9918.720	50.4	33	40.4	34.5	23.3	54.0	-30.7
H	12398.400	47.0	33	40.5	34.5	20.0	54.0	-34.0
H	14878.080	48.6	33	38.4	34.5	19.5	54.0	-34.5

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	2479.680	114.0	33	29.4	110.4	114.0	-3.6
H	4959.360	59.7	33	34.9	61.6	74.0	-12.4
H	7439.040	56.5	33	37.9	61.4	74.0	-12.6
H	9918.720	50.4	33	40.4	57.8	74.0	-16.2
H	12398.400	47.0	33	40.5	54.5	74.0	-19.5
H	14878.080	48.6	33	38.4	54.0	74.0	-20.0

- 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 / RSS-210 Section 2.2.

Mode: Talk (with GPE adaptor)

Table 8, Baby Unit

Radiated Emission Data

Polari- zation	Frequency (MHz)	Reading (dBµV)	Pre- amp (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Limit at 3m (dBµV/m)	Margin (dB)
V	41.472	39.4	16	10.0	33.4	40.0	-6.6
V	55.296	38.9	16	11.0	33.9	40.0	-6.1
V	69.120	42.8	16	7.0	33.8	40.0	-6.2
V	82.941	43.1	16	7.0	34.1	40.0	-5.9
H	110.590	36.2	16	14.0	34.2	43.5	-9.3
H	165.880	32.6	16	17.0	33.6	43.5	-9.9
H	193.531	33.5	16	16.0	33.5	43.5	-10.0

- 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. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205 / RSS-210 Section 2.2.

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.



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 (2009) 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 / Table 5 of RSS-Gen, whichever is the lesser attenuation, which meet the requirement of FCC Part 15 Section 15.249(d) / RSS-210 A2.9(b).

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

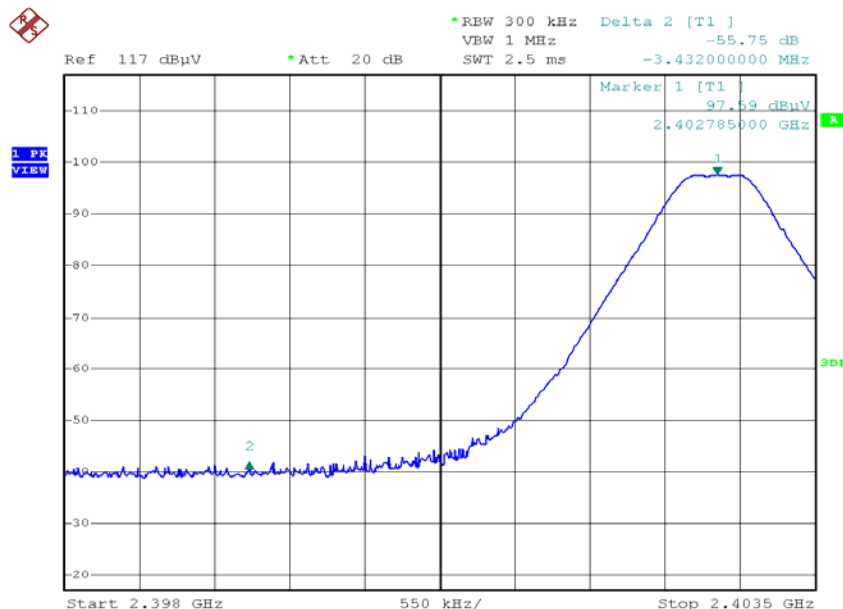
Issuing Laboratory:
Intertek Testing Services Hong Kong Limited

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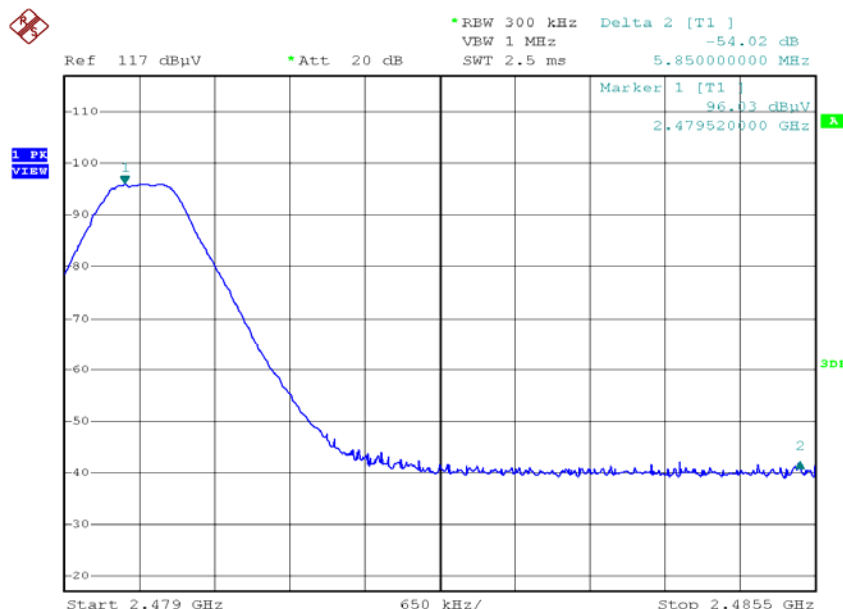


Plots of radiated emission on the bandedge

Baby Unit, Lowest Channel



Baby Unit, Highest Channel



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

4.4.1 AC Power Line Conducted Emission Configuration Photograph

Worst Case Line-Conducted Configuration
at

Baby Unit with 5ESP Adaptor: 0.150 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.

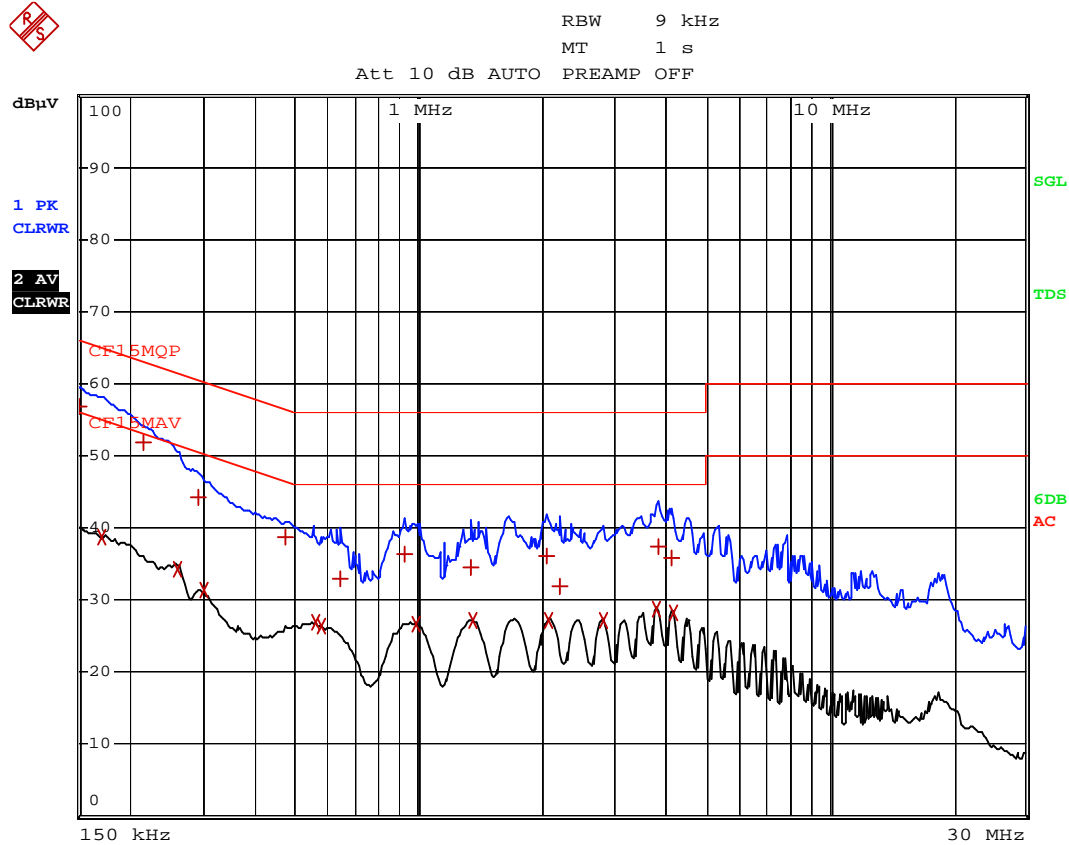
Baby Unit with 5ESP Adaptor: Passed by 9.25 dB margin compare with quasi-peak limit

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Worst Case: Talk (5ESP Adaptor)



Date: 10.AUG.2012 11:24:58

Issuing Laboratory:
Intertek Testing Services Hong Kong Limited

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Worst Case: Talk (5ESP Adaptor)

EDIT PEAK LIST (Final Measurement Results)

Trace1: CF15MQP

Trace2: CF15MAV

Trace3: ---

	TRACE	FREQUENCY	LEVEL dBμV		DELTA LIMIT dB
1	Quasi Peak	150 kHz	56.74	N	-9.25
2	CISPR Average	172.5 kHz	38.73	L1	-16.10
1	Quasi Peak	217.5 kHz	51.81	N	-11.09
2	CISPR Average	262.5 kHz	34.29	L1	-17.05
1	Quasi Peak	294 kHz	44.15	N	-16.26
2	CISPR Average	298.5 kHz	31.43	L1	-18.85
1	Quasi Peak	474 kHz	38.74	N	-17.70
2	CISPR Average	559.5 kHz	26.97	L1	-19.02
2	CISPR Average	577.5 kHz	26.29	L1	-19.70
1	Quasi Peak	640.5 kHz	32.82	N	-23.17
1	Quasi Peak	928.5 kHz	36.41	L1	-19.58
2	CISPR Average	982.5 kHz	26.56	L1	-19.43
1	Quasi Peak	1.3335 MHz	34.63	L1	-21.37
2	CISPR Average	1.3515 MHz	27.13	L1	-18.86
1	Quasi Peak	2.0535 MHz	36.18	L1	-19.81
2	CISPR Average	2.0715 MHz	27.17	L1	-18.82
1	Quasi Peak	2.1975 MHz	31.81	L1	-24.18
2	CISPR Average	2.8095 MHz	27.13	L1	-18.86
2	CISPR Average	3.804 MHz	28.67	L1	-17.32
1	Quasi Peak	3.8355 MHz	37.31	L1	-18.68

Date: 10.AUG.2012 11:24:12

Issuing Laboratory:
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Worst Case: Talk (5ESP Adaptor)

EDIT PEAK LIST (Final Measurement Results)				
Trace1: CF15MQP				
Trace2: CF15MAV				
Trace3: ---				
	TRACE	FREQUENCY	LEVEL dB μ V	DELTA LIMIT dB
1	Quasi Peak	4.146 MHz	35.88 L1	-20.11
2	CISPR Average	4.1595 MHz	28.30 L1	-17.70

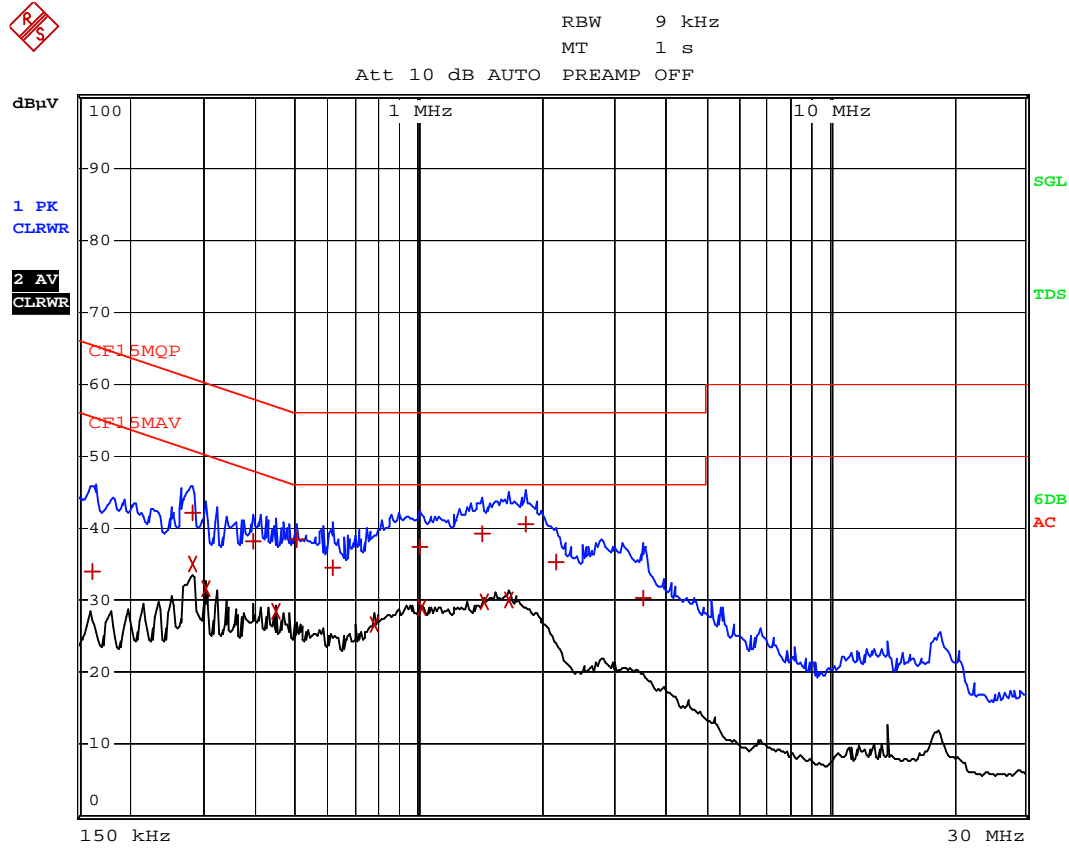
Date: 10.AUG.2012 11:24:42

Issuing Laboratory:
Intertek Testing Services Hong Kong Limited

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Worst Case: Talk (GPE Adaptor)



Date: 10.AUG.2012 11:31:41

Issuing Laboratory:
Intertek Testing Services Hong Kong Limited

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Worst Case: Talk (5ESP Adaptor)

EDIT PEAK LIST (Final Measurement Results)				
Trace1:	CF15MQP			
Trace2:	CF15MAV			
Trace3:	---			
	TRACE	FREQUENCY	LEVEL dB μ V	DELTA LIMIT dB
1	Quasi Peak	163.5 kHz	33.86 N	-31.42
1	Quasi Peak	280.5 kHz	42.25 L1	-18.54
2	CISPR Average	280.5 kHz	34.98 L1	-15.82
2	CISPR Average	303 kHz	31.60 L1	-18.56
1	Quasi Peak	393 kHz	38.21 L1	-19.78
2	CISPR Average	447 kHz	28.49 L1	-18.44
1	Quasi Peak	501 kHz	38.32 L1	-17.67
1	Quasi Peak	618 kHz	34.59 L1	-21.40
2	CISPR Average	775.5 kHz	26.73 L1	-19.26
1	Quasi Peak	1.0095 MHz	37.40 L1	-18.59
2	CISPR Average	1.014 MHz	28.96 L1	-17.03
1	Quasi Peak	1.4235 MHz	39.28 L1	-16.71
2	CISPR Average	1.437 MHz	29.71 L1	-16.28
2	CISPR Average	1.653 MHz	30.17 L1	-15.82
1	Quasi Peak	1.8285 MHz	40.42 L1	-15.57
1	Quasi Peak	2.1615 MHz	35.30 L1	-20.69
1	Quasi Peak	3.5385 MHz	30.22 L1	-25.77

Date: 10.AUG.2012 11:31:23

Issuing Laboratory:
Intertek Testing Services Hong Kong Limited

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**EXHIBIT 5
EQUIPMENT LIST**

Issuing Laboratory:
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5.0 Equipment List

1) Radiated Emissions Test

Equipment	Biconical Antenna	Log Periodic Antenna	Double Ridged Guide Antenna
Registration No.	EW-2512	EW-0446	EW-1133
Manufacturer	EMCO	EMCO	EMCO
Model No.	3104C	3146	3115
Calibration Date	Nov. 15, 2011	Oct. 31, 2011	Mar. 02, 2011
Calibration Due Date	May. 15, 2013	Apr. 30, 2013	Sep. 02, 2012

Equipment	EMI Test Receiver	Spectrum Analyzer	Spectrum Analyzer
Registration No.	EW-2500	EW-2188	EW-2253
Manufacturer	R&S	AGILENTTECH	R&S
Model No.	ESCI	E4407B	FSP40
Calibration Date	Feb. 24, 2012	Sep. 26, 2011	Jan. 12, 2012
Calibration Due Date	Feb. 24, 2013	Sep. 26, 2012	Jan. 12, 2013

Equipment	Broad-Band Horn Antenna with frequency range	Digital Multimeter
Registration No.	EW-1679	EW-1237
Manufacturer	SCHWARZBECK	FLUKE
Model No.	BBHA9170	179
Calibration Date	Mar. 21, 2012	Sep. 05, 2011
Calibration Due Date	Mar. 21, 2013	Oct. 01, 2012

2) Conducted Emissions Test

Equipment	EMI Test Receiver	Artificial Mains	Pulse Limiter
Registration No.	EW-2666	EW-0192	EW-0698
Manufacturer	R&S	R&S	R&S
Model No.	ESCI7	ESH3-Z5	ESH3-Z2
Calibration Date	May. 21, 2012	Apr. 11, 2012	Apr. 06, 2012
Calibration Due Date	May. 21, 2013	Apr. 11, 2013	Apr. 06, 2013

END OF TEST REPORT