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EMI TEST REPORT FOR CERTIFICATION to

FCC PART 15 Subpart E (Section 15.407) & RSS-210 Class II Permissive Change

FCC ID: EJE-WL0025 Industry Canada ID: 337J-WL0025

Radio Module: Ralink WLU5110-D50(ROHS) 802.11agbn WLAN

Host NoteBook: STYLISTIC Q Series

Model Number: Q550

Report Number: M110324_FCC_WLU5110-D50(ROHS)_C2PC_NII

Issue Date: 6th April 2011

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Report No. M110324_FCC_WLU5110-D50(ROHS)_C2PC_NII

Radio Module: Ralink WLU5110-D50(ROHS) 802.11agbn WLAN

Manufacturer: Ralink

FCC ID: EJE-WL0025 Industry Canada ID: 337J-WL0025

Equipment Type: Intentional Radiator (Transceiver)

Host NoteBook: Q550 STYLISTIC Q Series

Manufacturer: Fujitsu Ltd - Mobile Computing Division

Address: 1-1 Kamikodanaka 4-Chome, Nakahara-Ku, Kawasaki, Japan

Contact: Mr. Tsuyoshi Uchihara

Test Standards: FCC Part 15 – Radio Frequency Devices (October 2009)

FCC Part 15, Subpart E – Unlicensed National Information, Infrastructure

Devices

FCC Part 15.407, General Technical Requirements

ANSI C63.4 - 2003

RSS-210 Issue 8 Low Power Licence-Exempt RadioCommunication

Devices Annex 9: Local Area Network Devices

RSS-102 Issue 1 (Provisional), Evaluation Procedure for Mobile and Portable Radio Transmitters with respect to Health Canada's Safety Code 6

for Exposure of Humans to Radio Frequency Fields

Test Dates: 27th March to 1st April 2011

Test Engineer: Chieu Huynh - B.Eng (Hons) Electronics

Attestation: I hereby certify that the device(s) described herein were tested as

described in this report and that the data included is that which was

obtained during such testing.

Authorised Signatory: Chie

Chieu Huynh

Senior EMC Engineer EMC Technologies Pty Ltd





EMI TEST REPORT FOR CERTIFICATION

to

FCC PART 15 Subpart E (Section 15.407) & RSS-210 Class II Permissive Change

1.0 INTRODUCTION

EMI testing was performed on the Ralink 802.11abgn Wireless LAN Module, Model: WLU5110-D50(ROHS) installed in Fujitsu STYLISTIC Q Series, Model number: Q550.

The WLU5110-D50(ROHS) WLAN transmitter installed in the Q550 STYLISTIC is a Ralink 802.11abgn Wireless LAN Module. This module was originally certified by Fujitsu Ltd as a modular approval under FCC ID: EJE-WL0025 (Canada ID: 337J-WL0025).

The other transmitter installed in the Q550 STYLISTIC is Broadcom Bluetooth Module, Model: BCM92070MD_REF6. The Bluetooth module was originally certified by Broadcom as a modular approval under FCC ID: QDS-BRCM1043 (Canada ID: 4324A-BRCM1043). This Bluetooth preapproved module, is not co-located as the WLAN and Bluetooth antennas are >5cms apart. RF exposure and labeling will be addressed by Fujitsu according to FCC multi-transmitter and modular procedures.

The intention of this Class II Permissive Change application is to certify WLU5110-D50(ROHS) Ralink WLAN module installed in Fujitsu STYLISTIC Q Series, Model number: Q550. The Radio modules are installed in a controlled environment at the Fujitsu notebook production/assembly factory.

Test results and procedures were performed in accordance with the following Federal Communications Commission (FCC) standards/regulations:

47 CFR, Part 15, Unlicensed National Information Infrastructure Devices (U-NII) operating Subpart E: in the 5.15-5.35 GHz, 5.47-5.725 GHz and 5.725-5.825 GHz frequency

bands

Section 15.203: Antenna requirements
Section 15.205: Restricted bands of operation
Section 15.207: Conducted Emission Limits

Section 15.209: Radiated Emission Limits (General requirements)

Section 15.407: General Technical Requirements

The results and technical details of the test sample are detailed in this report. The test sample **complied** with the requirements of 47 CFR, Part 15 Subpart E - Section 15.407.

The test sample also complied with the Industry Canada RSS-210 issue 8 - Low Power Licence-Exempt Radiocommunication Devices (All Frequency Bands): Category I Equipment, Annex 9 Local Area Network Devices requirements and the RF exposure requirements of RSS-102.

The measurement procedure used was in accordance with ANSI C63.4-2003. The instrumentation conformed to the requirements of ANSI C63.2-1996.





1.1 Summary of Results

FCC Subpart E, Section 15.407

FCC Part 15,	Industry Canada	Test Performed	Result
Subpart E	RSS-210		
Clauses	Clauses		
15.203	5.5	Antenna Requirement	Complies
15.205	6.3	Operation in Restricted Band	Complies
15.207	6.6	Conducted Emissions	Note 1
15.209	6.3	Radiated Emissions	Complies
15.407 (a)(1) (a)(2)	Annex A9.2	Peak Transmit Power	Note 2
15.407 (a)(5)	Annex A9.2	Peak Power Spectral Density	Note 2
15.407 (a)(6)		Peak Excursion	Note 2
15.407 (b)	Annex A9.3	Undesirable Emission	Complies
15.407 (c)	Annex A9.5(4)	Discontinue Transmission	Complies
15.407 (d)		Reserved	-
15.407 (e)	2.2 (Table 1)	Restricted to Indoor Operations	Complies
15.407 (f)	RSS-Gen (5.5)	Radio Frequency Hazard	Complies
15.407 (g)	Annex A9.5(5)	Frequency Stability	Note 2
15.407 (h)		Transmit Power Control	Not Applicable E.I.R.P < 500 mW
15.407 (h)	Annex A9.4	Dynamic Frequency Selection	Note 3

Note 1: Refer to FCC Part 15B Test Report

Note 2: Refer to original approval under FCC ID: EJE-WL0025 (Canada ID: 337J-WL0025) **Note 3:** Refer to original approval under FCC ID: EJE-WL0025 (Canada ID: 337J-WL0025)

1.2 Modifications by EMC Technologies

No modifications were required.





2.0 GENERAL INFORMATION

(Information supplied by the Client)

2.1 EUT (WLAN) Details

Transmitter: Wireless LAN Module

Wireless Module: Ralink WLU5110-D50(ROHS) (11a/b/g/n)

Model Number: WLU5110-D50(ROHS)

Manufacturer: Ralink

Maximum Data Rate: 802.11b = 11Mbps, 802.11g and 802.11a = 54Mbps

802.11n = 150 Mbps

Frequency Ranges: 2.412 –2.462 GHz for 11b/g/n

5.18 - 5.32 GHz, 5.5 - 5.7 GHz and 5.745 - 5.825 GHz for 11a/n

Number of Channels: 11 channels for 11b/g/n

24 channels for 11a/n with 20 MHz bandwidth 18 channels for 11n with 40 MHz bandwidth

Antenna Type: Nissei Inverted F

Antenna gain: Max antenna gain is less than 6 dBi.

Refer antenna data provided separately

Power Supply: 3.3 VDC from PCI bus

Channels and Output Power Settings:

Modes	Channels	Frequency MHz	Average Output Power (dBm)
802.11b	1, 6 and 11	2412, 2437 and 2462	16.0
802.11g	1, 6 and 11	2412, 2437 and 2462	15.0
	36, 40 and 48	5180, 5200 and 5240	
000.44	52, 60 and 64	5260, 5300 and 5320	13.0
802.11a	100, 120 and 140	5500, 5600 and 5700	
	149, 157 and 165	5745, 5785 and 5825	12.0
	1	2412	
	6	2437	15.0
902 11n	11	2462	
802.11n 20MHz Bandwidth	36, 40 and 48	5180, 5200 and 5240	
Zomi iz Banawiani	52, 60 and 64	5260, 5300 and 5320	40.0
	100, 120 and 140	5500, 5600 and 5700	13.0
	149, 157 and 165	5745, 5785 and 5825	
	3	2422	
	6	2437	15.0
802.11n	9	2452	
40MHz Bandwidth	38, 54 and 62	5190, 5270 and 5310	
	102, 118 and 134	5510, 5590 and 5670	13.0
	151 and 159	5755 and 5795	1



2.2 Host (Notebook PC) Details

NoteBook PC: STYLISTIC Q Series

Model Name: Q550

Serial Number: Pre-production Sample **Manufacturer:** FUJITSU LIMITED

CPU Type and Speed: Atom Z670 1.5GHz

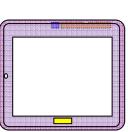
LCD 10.1"WXGA(1280x800 : LTN101AL01-701

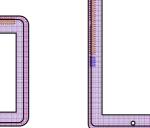
Graphics chip Non
Wired LAN: Non
Modem: Non

Port Replicator Model: FPCPR114

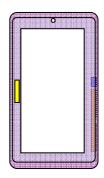
AC Adapter Model: 80W: SEE55N2-19.0(Sanken)

Voltage: 19 V Current Specs: 2.1A Watts: 40W









Primary Landscape

Primary Portrait

Secondary Landscape

Secondary Portrait

2.3 Test Configuration

The Ralink WLAN test software "QA" was used to transmit continuously during the tests.

Conducted tests were performed at the WLAN Antenna ports.

Radiated tests were performed for measuring the harmonics and spurious from the transmitters.

Power is provided via an AC adaptor. Testing was performed at a voltage of 110VAC at 50Hz.

2.4 Test Procedure

Emissions measurements were performed in accordance with the procedures of ANSI C63.4-2003. Radiated emissions tests were performed at a distance of 1 and 3 metres from the EUT.





2.5 Test Facility

2.5.1 General

EMC Technologies Pty Ltd is listed by the FCC as a test laboratory able to perform compliance testing for the public. EMC Technologies is listed as an FCC part 47CFR2.948 test lab and may perform the testing required under Parts 15 and 18 – FCC Registration Number 90560

EMC Technologies Pty Ltd has also been accredited as a Conformity Assessment Body (CAB) by Australian Communications and Media Authority (ACMA) under the APECTEL MRA and is designated to perform compliance testing on equipment subject to Declaration of Conformity (DoC) and Certification under Parts 15 & 18 of the FCC Commission's rules – **Registration Number 494713 & Designation number AU0001.**

EMC Technologies has also been accepted by Industry Canada for the performance of radiated measurements in accordance with RSS 212, Issue 1 (Provisional) - **Industry Canada number 3569B.**

Measurements were performed at EMC Technologies' laboratory in Keilor Park, Victoria Australia.

2.5.2 NATA Accreditation

EMC Technologies is accredited in Australia to test to the following standards by the National Association of Testing Authorities (NATA).

"FCC Part 15 unintentional and intentional emitters in the frequency range 9kHz to 18 GHz excluding TV receivers (15.117 and 15.119), TV interface devices (15.115), cable ready consumer electronic equipment (15.118), cable locating equipment (15.213) and unlicensed national information infrastructure devices (Sub part E)."

The current full scope of accreditation can be found on the NATA website: www.nata.asn.au
It also includes a large number of emissions, immunity, SAR, EMR and Safety standards.

NATA is the Australian national laboratory accreditation body and has accredited EMC Technologies to operate to the IEC/ISO17025 requirements. A major requirement for accreditation is the assessment of the company and its personnel as being technically competent in testing to the standards. This requires fully documented test procedures, continued calibration of all equipment to the National Standard at the National Measurements Institute (NMI) and an internal quality system to ISO 9002. NATA has mutual recognition agreements with the National Voluntary Laboratory Accreditation Program (NVLAP) and the American Association for Laboratory Accreditation (A²LA).

2.6 Test Equipment Calibration

Measurement instrumentation and transducers were calibrated in accordance with the applicable standards by an independent NATA registered laboratory such as Agilent Technologies (Australia) Pty Ltd or the National Measurement Institute (NMI). All equipment calibration is traceable to Australia national standards at the National Measurements Institute. The reference antenna calibration was performed by NMI and the working antennas (biconical, log-periodic and horns) calibrated by the EMC Technologies. The complete list of test equipment used for the measurements, including calibration dates and traceability is contained in the Measurement Instrument Details.





FCC 15.407 (U-NII) RESULTS

3.0 CONDUCTED EMISSION MEASUREMENTS

Refer to FCC Part 15B Test Report

Testing was performed by Fujitsu General EMC Laboratory, JAPAN accredited by NVLAP (Lab Code: 200373-0).

4.0 RADIATED SPURIOUS EMISSION MEASUREMENTS

4.1 Test Procedure

Testing was performed in accordance with the requirements of FCC Part 15.407(b).

Radiated emission measurements were performed to the limits as per section 15.209 and 15.407. Measurements above 1 GHz were made over a distance of 3 and 1 metres.

Calibrated EMCO 3115, EMCO 3116 and ETS standard gain horn antennas were used for measurements between 1 to 40 GHz.

The measurement of emissions above 1000 MHz was measured using a following setting:

Peak measurements setting: RBW = VBW = 1 MHz

Average measurements setting: RBW = 1 MHz and VBW = 10 Hz

The receiver bandwidth was set to 6 dB.

The EUT was slowly rotated with the Peak Detector set to Max-Hold. This was performed for two antenna heights. When an emission was located, it was positively identified and its maximum level found by rotating the automated turntable, and by varying the antenna height. Each significant peak was investigated with the Peak/Average Detectors. The measurement data for each frequency range was corrected for cable losses, antenna factors and preamplifier gain. This process was performed for both horizontal and vertical antenna polarisations.

4.2 Calculation of field strength

The field strength was calculated automatically by the software using all the pre-stored calibration data. The method of calculation is shown below:

E = V + AF - G + L Where:

 \mathbf{E} = Radiated Field Strength in dB μ V/m.

V = EMI Receiver Voltage in dB μ V. (measured value) AF = Antenna Factor in dB(m $^{-1}$). (stored as a data array)

G = Preamplifier Gain in dB. (stored as a data array)

L = Cable loss in dB. (stored as a data array of Insertion Loss versus frequency)

• Example Field Strength Calculation

Assuming a receiver reading of 34.0 dB $_{\mu}V$ is obtained at 90 MHz, the Antenna Factor at that frequency is 9.2 dB. The cable loss is 1.9 dB while the preamplifier gain is 20 dB. The resulting Field Strength is therefore as follows:

 $34.0 + 9.2 + 1.9 - 20 = 25.1 dB\mu V/m$





4.3 Radiated Emissions (Spurious and Harmonics)

This transmitter module was originally tested and certified by the manufacturer as a stand-alone module outside a laptop (host) with higher gain antennas. Refer to original approval under FCC ID: EJE-WL0025 (Canada ID: 337J-WL0025) certified by Fujitsu Ltd. Manufacturer's original FCC 15.407 WLU5110-D50(ROHS) test report for full results showing compliance with the spurious and harmonics limits. However, to ensure the transmitter module install in Q550 STYLISTIC is still in compliance, verification tests were performed at the worst case (frequencies with higher average output power) or selected frequencies for harmonics and spurious emissions.

Initial investigations were performed with all data rates. Final testing was performed while the transmitter continuously operated in the worst case condition.

All orientations were investigated and tested. Worst results were reported below.

4.3.1 Frequency Band: 1 – 40 GHz

The peak limits for undesirable emission outside of the restricted bands are -27 dBm (68.3 dBuV/m @ 3m). The 74 dB μ V/m @ 3m and 54 dB μ V/m @ 3m limits are applied for emissions fall in the restricted bands. The limits are adjusted by 10.5 dB when measurements perform at a distance of 1m.

Testing was performed while the WLAN transmitter continuously operated. Harmonics related to the WLAN transmitter operated in the frequency bands 5.15 – 5.35 GHz and 5.47 – 5.725 GHz are reported below. Harmonics in the frequency bands 2.4 – 2.4835 GHz and 5.725 – 5.850 GHz, refer to M110324_FCC_WLU5110-D50(ROHS)_C2PC_DTS.

Harmonics were measured for channels where the RF output power was highest.

4.3.1.1 Configuration 802.11a

Frequency MHz	Peak Detector dBuV/m	Average Detector dBuV/m	Peak Limit dBuV/m	Average Limit dBuV/m	Result			
5180		Transmit Frequency						
	Harmonics and spurious are low Complied							

Frequency MHz	Peak Detector dBuV/m	Average Detector dBuV/m	Peak Limit dBuV/m	Average Limit dBuV/m	Result		
5260		Transmit Frequency					
	Harmonics and spurious are low Complied						

Frequency MHz	Peak Detector dBuV/m	Average Detector dBuV/m	Peak Limit dBuV/m	Average Limit dBuV/m	Result		
5500		Transmit Frequency					
	Harmonics and spurious are low Complied						

Result: No harmonic was recorded up to 40 GHz. Harmonics were confirmed low with both RBW and VBW reduced. The worst case emissions complied with the FCC limits of sections 15.209 and 15.247 by a margin of > 10 dB.





4.3.1.2 Configuration 802.11n - Tx BW = 20 MHz

Frequency MHz	Peak Detector dBuV/m	Average Detector dBuV/m	Peak Limit dBuV/m	Average Limit dBuV/m	Result			
5240		Transmit Frequency						
	Harmonics and spurious are low Complied							

Frequency MHz	Peak Detector dBuV/m	Average Detector dBuV/m	Peak Limit dBuV/m	Average Limit dBuV/m	Result		
5320		Transmit Frequency					
	Harmonics and spurious are low Complied						

Frequency MHz	Peak Detector dBuV/m	Average Detector dBuV/m	Peak Limit dBuV/m	Average Limit dBuV/m	Result			
5700		Transmit Frequency						
Harmonics and spurious are low Complied								

Result: No harmonic was recorded up to 40 GHz. Harmonics were confirmed low with both RBW and VBW reduced. The worst case emissions complied with the FCC limits of sections 15.209 and 15.247 by a margin of > 10 dB.

4.3.1.3 Configuration 802.11n - Tx BW = 40 MHz

Frequency MHz	Peak Detector dBuV/m	Average Detector dBuV/m	Peak Limit dBuV/m	Average Limit dBuV/m	Result			
5270		Transmit Frequency						
	Harmonics and spurious are low Complied							

Frequency MHz	Peak Detector dBuV/m	Average Detector dBuV/m	Peak Limit dBuV/m	Average Limit dBuV/m	Result		
5310		Transmit Frequency					
	Harmonics and spurious are low Complied						

Frequency MHz	Peak Detector dBuV/m	Average Detector dBuV/m	Peak Limit dBuV/m	Average Limit dBuV/m	Result			
5590		Transmit Frequency						
	Harmonics and spurious are low Complied							

Result: No harmonic was recorded up to 40 GHz. Harmonics were confirmed low with both RBW and VBW reduced. The worst case emissions complied with the FCC limits of sections 15.209 and 15.247 by a margin of > 10 dB.





4.3.2 Frequency Band: 30 - 1000 MHz

Refer to FCC Part 15B Test Report

Testing was performed by Fujitsu General EMC Laboratory, JAPAN accredited by NVLAP (Lab Code: 200373-0).

4.3.3 RF Conducted Measurements at the Antenna Terminal (including Band Edge)

Refer to original approval under FCC ID: EJE-WL0025 (Canada ID: 337J-WL0025) certified by Fujitsu Ltd.

Testing was performed by Sporton International Inc, Taiwan (Testing Laboratory: 1190).

5.0 PEAK OUTPUT POWER - Section 15.407(a)

Refer to original approval under FCC ID: EJE-WL0025 (Canada ID: 337J-WL0025) certified by Fujitsu Ltd.

Testing was performed by Sporton International Inc, Taiwan (Testing Laboratory: 1190).

6.0 CHANNEL BANDWIDTH

Refer to original approval under FCC ID: EJE-WL0025 (Canada ID: 337J-WL0025) certified by Fujitsu Ltd.

Testing was performed by Sporton International Inc, Taiwan (Testing Laboratory: 1190).

7.0 PEAK POWER SPECTRAL DENSITY

Refer to original approval under FCC ID: EJE-WL0025 (Canada ID: 337J-WL0025) certified by Fujitsu Ltd.

Testing was performed by Sporton International Inc, Taiwan (Testing Laboratory: 1190).

8.0 PEAK EXCURSION

Refer to original approval under FCC ID: EJE-WL0025 (Canada ID: 337J-WL0025) certified by Fujitsu Ltd.

Testing was performed by Sporton International Inc, Taiwan (Testing Laboratory: 1190).

9.0 FREQUENCY STABILITY

Refer to original approval under FCC ID: EJE-WL0025 (Canada ID: 337J-WL0025) certified by Fujitsu Ltd.

Testing was performed by Sporton International Inc, Taiwan (Testing Laboratory: 1190).





10.0 DYNAMIC FREQUENCY SELECTION

The EUT is a Client Device without Radar Interference Detection Function.

Ad-hoc operation (not under control of a Master Device) is supported in the 2.4 GHz & 5.15 - 5.25 GHz bands only. This Ad-hoc capability is limited in hardware via factory programmed EEPROM settings that cannot be accessed or changed by end users. The Ad-hoc supported channels of operation cannot be modified – regardless of which client utility or operating system control is used.

Refer to original approval under FCC ID: EJE-WL0025 (Canada ID: 337J-WL0025) certified by Fujitsu Ltd.

Testing was performed by Sporton International Inc, Taiwan (Testing Laboratory: 1190).

11.0 DISCONTINUE TRANSMISSION

Data Transmission is always initiated by software, which is then passed down through the MAC, through the digital and analog baseband, finally to the RF chip. Several special packets (ACKs, CTS, PSPoll, etc) are initiated by the MAC. These are the only ways the digital baseband portion will turn on the RF transmitter, which then turns off at the end of the packet. Therefore, the transmitter will be ON only while one of the four mentioned packets is being transmitted.

12.0 RADIO FREQUENCY EXPOSURE (HAZARD) INFORMATION

Testing was performed in accordance with the requirements of FCC Part 15.407(f)

Spread spectrum transmitters operating in the 5.15 - 5.35 GHz and 5.47 - 5.725 GHz are required to be operated in a manner that ensures that the public is not exposed to RF energy levels in accordance with CFR 47, Section 1.1307(b)(1).

In accordance with this section and also section 2.1093 this device has been defined as a portable device.

SAR testing was performed in accordance with OET Bulletin 65 and reported under EMC Technologies reports M110325_FCC_WLU5110-D50(ROHS)_SAR_2.4 (2.4 GHz) and M110325_FCC_WLU5110-D50(ROHS)_SAR_5.6 (5.18 - 5.825 GHz). SAR values of 1.120 mW/g (5GHz) and 0.870 mW/g (2.4GHz) were measured which complied with the FCC human exposure requirements of 47 CFR 2.1093 (d).

13.0 ANTENNA REQUIREMENT

This intentional radiator was designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.





14.0 COMPLIANCE STATEMENT

The Ralink 802.11abgn Wireless LAN Module, Model: WLU5110-D50(ROHS) installed in Fujitsu STYLISTIC Q Series, Model number: Q550, **complied** with the requirements of 47 CFR, Part 15 Subpart E - Section 15.407 (5.15-5.35 GHz and 5.47 – 5.725 GHz bands).

The test sample also complied with the Industry Canada RSS-210 issue 8 - Low Power Licence-Exempt Radiocommunication Devices (All Frequency Bands): Category I Equipment, Annex 9 Local Area Network Devices requirements and the RF exposure requirements of RSS-102.

Results were as follows:

FCC Subpart E, Section 15.407

FCC Part 15,	Industry Canada	Test Performed	Result
Subpart E Clauses	RSS-210 Clauses		
15.203	5.5	Antenna Requirement	Complies
15.205	6.3	Operation in Restricted Band	Complies
15.207	6.6	Conducted Emissions	Note 1
15.209	6.3	Radiated Emissions	Complies
15.407 (a)(1)	Annex A9.2	Peak Transmit Power	Note 2
(a)(2)			
15.407 (a)(5)	Annex A9.2	Peak Power Spectral Density	Note 2
15.407 (a)(6)		Peak Excursion	Note 2
15.407 (b)	Annex A9.3	Undesirable Emission	Complies
15.407 (c)	Annex A9.5(4)	Discontinue Transmission	Complies
15.407 (d)		Reserved	-
15.407 (e)	2.2 (Table 1)	Restricted to Indoor Operations	Complies
15.407 (f)	RSS-Gen (5.5)	Radio Frequency Hazard	Complies
15.407 (g)	Annex A9.5(5)	Frequency Stability	Note 2
15.407 (h)		Transmit Power Control	Not Applicable E.I.R.P < 500 mW
15.407 (h)	Annex A9.4	Dynamic Frequency Selection	Note 3

Note 1: Refer to FCC Part 15B Test Report

Note 2: Refer to original approval under FCC ID: EJE-WL0025 (Canada ID: 337J-WL0025)

Note 3: Refer to original approval under FCC ID: EJE-WL0025 (Canada ID: 337J-WL0025)





15.0 MEASUREMENT UNCERTAINTIES

EMC Technologies has evaluated the equipment and the methods used to perform the emissions testing. The estimated measurement uncertainties for emissions tests shown within this report are as follows:

Conducted Emissions: 9 kHz to 30 MHz ±3.2 dB

Radiated Emissions: 30 MHz to 300 MHz ± 5.1 dB

The above expanded uncertainties are based on standard uncertainties multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95%.

16.0 TEST REPORT APPENDICES

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