



**EMC Technologies Pty Ltd**  
ABN 82 057 105 549  
176 Harrick Road  
Keilor Park Victoria Australia 3042

Ph: + 613 9365 1000  
Fax: + 613 9331 7455  
email: melb@emctech.com.au

**EMI TEST REPORT FOR CERTIFICATION  
to  
FCC PART 15 Subpart E (Section 15.407) & RSS-210**

FCC ID: EJE-WB0086  
Industry Canada ID: 337J-WB0086

Test Sample: Lifebook T series  
Model: T734, TH734

Radio Module: Intel Centrino Advanced-N Wilkins Peak 7260HMW

Report Number M130811\_FCC\_7260HMW\_NII\_rev2

Issue Date: 8<sup>th</sup> October 2013

EMC Technologies Pty Ltd reports apply only to the specific samples tested under stated test conditions. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. EMC Technologies Pty Ltd shall have no liability for any deductions, inferences or generalisations drawn by the client or others from EMC Technologies Pty Ltd issued reports. This report shall not be used to claim, constitute or imply product endorsement by EMC Technologies Pty Ltd.

This document must not be copied or reproduced, except in full without the written permission of the Manager, EMC Technologies Pty Ltd. The certificate of pg 3 may be reproduced in full.  
[www.emctech.com.au](http://www.emctech.com.au)

**EMI TEST REPORT FOR CERTIFICATION**  
**to**  
**FCC PART 15 Subpart E (Section 15.407) & RSS-210**

**EMC Technologies Report No. M130811\_FCC\_7260HMW \_NII-1**

**Issue Date: 8<sup>th</sup> October 2013**

**CONTENTS**

- 1.0 INTRODUCTION**
- 2.0 GENERAL INFORMATION**

**FCC 15.407 (U-NII) RESULTS**

- 3.0 CONDUCTED EMI MEASUREMENTS**
- 4.0 RADIATED EMI MEASUREMENTS**
- 5.0 PEAK OUTPUT POWER**
- 6.0 CHANNEL BANDWIDTH**
- 7.0 PEAK POWER SPECTRAL DENSITY**
- 8.0 PEAK EXCURSION**
- 9.0 FREQUENCY STABILITY**
- 10.0 DYNAMIC FREQUENCY SELECTION**
- 11.0 DISCONTINUE TRANSMISSION**
- 12.0 RADIO FREQUENCY EXPOSURE**
- 13.0 ANTENNA REQUIREMENT**
- 14.0 COMPLIANCE STATEMENT**
- 15.0 MEASUREMENT UNCERTAINTIES**
- 16.0 TEST REPORT APPENDICES**

**APPENDIX A: MEASUREMENT INSTRUMENT DETAILS**

**APPENDIX B: PHOTOGRAPHS**

**APPENDIX C: OPERATIONAL DESCRIPTION**

**APPENDIX D: BLOCK DIAGRAM**

**APPENDIX E: SCHEMATIC**

**APPENDIX F: ANTENNA INFORMATION**

**APPENDIX G: FCC LABELLING DETAILS**

**APPENDIX H: USER MANUAL**

**Attachment – RF Exposure Information**

**Attachment – FCC DOC for LifeBook T Series**

**Attachment – Intel FCC Part 15E Test Report**

**EMI TEST REPORT FOR CERTIFICATION**  
**to**  
**FCC PART 15 Subpart E (Section 15.407) & RSS-210**

**Report No. M130811\_FCC\_7260HMW\_NII\_rev2**

**Test Sample:** Portable PC LifeBook T Series  
**Model:** T734, TH734  
**Radio Module:** Intel Centrino Advanced-N Wilkins Peak 7260HMW

**FCC ID:** EJE-WB0086  
**Industry Canada ID:** 337J-WB0086  
**Equipment Type:** Intentional Radiator (Transceiver)

**Manufacturer (LifeBook):** Fujitsu Ltd  
**Address:** 1-1 Kamikodanaka 4-Chome, Nakahara-Ku, Kawasaki, Japan

**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 – 2009  
  
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:** 13 September 2013 to 18 September 2013

**Test Engineer:** Kevin Hansen

**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:**



**Rob Weir**  
**Facility Manager**  
**EMC Technologies Pty Ltd**

**EMI TEST REPORT FOR CERTIFICATION**  
**to**  
**FCC PART 15 Subpart E (Section 15.407) & RSS-210**

## **1.0 INTRODUCTION**

EMI testing was performed on the Portable PC Fujitsu LifeBook T Series, Model: T734, TH734 with Intel Centrino Advanced-N 7260 (Wilkins Peak2 802.11a/b/g/n), Model: 7260HMW.

The 7260HMW WLAN module was originally certified by INTEL Corporation as a modular approval under FCC ID: PD97260H (Canada ID: 1000M-7260H).

The intention of this application is to FCC certify Intel Centrino Advanced-N 7260 (Wilkins Peak2 802.11a/b/g/n), Model: 7260HMW installed in Portable PC Fujitsu LifeBook T Series, Model: T734, TH734. 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, Subpart E:	Unlicensed National Information Infrastructure Devices (U-NII) operating 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 and the RF exposure requirements of RSS-102.

The measurement procedure used was in accordance with ANSI C63.4-2009. The instrumentation conformed to the requirements of ANSI C63.2-2009.

## 1.1 Summary of Results

### FCC Subpart E, Section 15.407

FCC Part 15, Subpart E Clauses	Industry Canada RSS-210 Clauses	Test Performed	Result
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 2

**Note 1:** Refer to FCC Part 15B Test Report

**Note 2:** Refer to the original module report for Intel.

## 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:** Half Mini-Card Wireless LAN Module  
**Wireless Module:** Intel Centrino Advanced-N 7260 (Wilkins Peak2) (11a/b/g/n)  
**Model Number:** 7260HMW  
**Manufacturer:** Intel Corporation  
**Frequency Ranges:** 2.412–2.462 GHz for 11b/g/n  
5.18-5.32 GHz and 5.745-5.825 GHz for 11a/n  
**Maximum Data Rates:** 802.11b = 11Mbps, 802.11g and 802.11a = 54Mbps  
802.11n = 450 Mbps  
**Antenna Types:** Nissei Inverted F PIFA Antenna  
**Antenna gain:** 1.73dBi max (less than 6dBi)  
Refer antenna data provided separately

#### Channels and Output Power Settings:

The following power settings were taken from the Intel module report.

5 GHz (802.11a)

Mode	Channel	Frequency (MHz)	Data Rate (Mbps)	Tx BW (MHz)	Average Power Target (dBm)	
					Ch A	Ch B
802.11a	5.2 GHz		6	-		
	36	5180			13.5	13.0
	40	5200			15.0	15.0
	44	5220				
	48	5240				
	5.3 GHz					
	52	5260			16	16
	56	5280				
	60	5300				
	64	5320			13.5	13.0
	5.6 GHz					
	100	5500			13.5	13.0
	104	5520			16.5	16.5
	108	5540				
	112	5560				
	116	5580				
	120	5600				
	124	5620				
	128	5640				
	132	5660				
	136	5680			13.0	12.5
	140	5700				
	5.8 GHz					
	149	5745			16.5	16.5
	153	5765				
	157	5785				
	161	5805				
	165	5825				

**5 GHz (802.11n)**

Mode	Channel	Frequency (MHz)	Data Rate (Mbps)	Tx BW (MHz)	Average Power Target (dBm)		
					Ch A		Ch B
802.11n	5.2 GHz		HT0	20			
	36	5180			13.5	13.0	
	40	5200			15.0	15.0	
	44	5220					
	48	5240					
	5.3 GHz						
	52	5260			16	16	
	56	5280					
	60	5300			13.5	13.0	
	64	5320					
	5.6 GHz						
	100	5500			13.5	13.0	
	104	5520			16.5	16.5	
	108	5540					
	112	5560					
	116	5580					
	120	5600					
	124	5620					
	128	5640			13.0	12.5	
	132	5660					
	136	5680					
	140	5700					
	5.8 GHz						
	149	5745			16.5	16.5	
	153	5765					
	157	5785					
	161	5805					
	165	5825					
	5.2 GHz						
	38	5190		9.5	10.0		
	46	5230					
	5.3 GHz						
	54	5270		9.5	10.0		
	62	5310		11.0	11.0		
	5.6 GHz						
	102	5510		10.5	10.5		
	110	5550		16.5	16.5		
	118	5590		15.5			
	126	5630		16.5			
	134	5670		15.5			
	5.8 GHz						
	151	5755		16.5		16.5	
159	5795						

The 7260HMW AN is capable of feeding two antennas simultaneously, the power level is lower for each antenna port than if a single antenna was used.

An initial investigation of the transmitted power using data rates HT0, HT4 and HT8 were not significantly different. As the spurious results were not close to the limit further investigation of all data rates was not deemed necessary.

## 2.2 EUT (Notebook PC) Details

<b>NoteBook PC:</b>	Portable PC LifeBook T series
<b>*Model Name:</b>	T734, TH734
<b>Serial Number:</b>	Pre-production Sample
<b>Manufacturer:</b>	FUJITSU LIMITED
<b>CPU Type and Speed:</b>	Core i7 2.9GHz
<b>LCD:</b>	12.5"HD+(1366x768) : LP125WH2
<b>Wired LAN:</b>	Intel I217LM : 10 Base-T/100 Base-TX/1000Base-T
<b>Modem:</b>	None
<b>Port Replicator Model:</b>	FPCPR132
<b>AC Adapter Model:</b>	PJW1942NA (Tamura)
<b>Voltage out:</b>	19 V
<b>Current out:</b>	4.22A
<b>Watts:</b>	80W

\*The model numbers shown T734 and TH734 are for the same product. The difference between T734 and TH734 is color and target market.  
The T734 is for commercial market.  
The TH734 is for consumer market.

## 2.3 Test Configuration

The Intel WLAN test software "DRTU" was used to control the transmitter module enabling it to transmit continuously and with selected channels, modulation and data rates.

Radiated harmonics and spurious emissions were performed while the transmitter transmits continuously.

Power is provided via an AC adaptor.

## 2.4 Test Procedure

Emissions measurements were performed in accordance with the procedures of ANSI C63.4-2009. 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](http://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 (A<sup>2</sup>LA).

## 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 and log-periodic) calibrated by EMC Technologies. The complete list of test equipment used for the measurements, including calibration dates and traceability is contained in Appendix A

## FCC 15.407 (U-NII) RESULTS

### 3.0 CONDUCTED EMISSION MEASUREMENTS

Testing was performed by Fujitsu General EMC Laboratory, JAPAN accredited by NVLAP (Lab Code: 200373-0). Report number FG13-092EAL (1/12), issued September 5, 2013.

### 4.0 RADIATED 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. The procedure was repeated with the device orientated in three orthogonal axis to further maximise the emission. In this instance the device antennas are located in the swivel display, this was adjusted to give maximum emissions.

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:

**E** = Radiated Field Strength in dB $\mu$ V/m.

**V** = EMI Receiver Voltage in dB $\mu$ V. (measured value)

**AF** = Antenna Factor in dB(m<sup>-1</sup>). (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:

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

### 4.3 Results - Out of Band 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 manufacturer's original test report (FCC 15E) for full results showing compliance with the spurious and harmonics limits. However, to ensure the transmitter module install in T734, TH734 LifeBook 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.

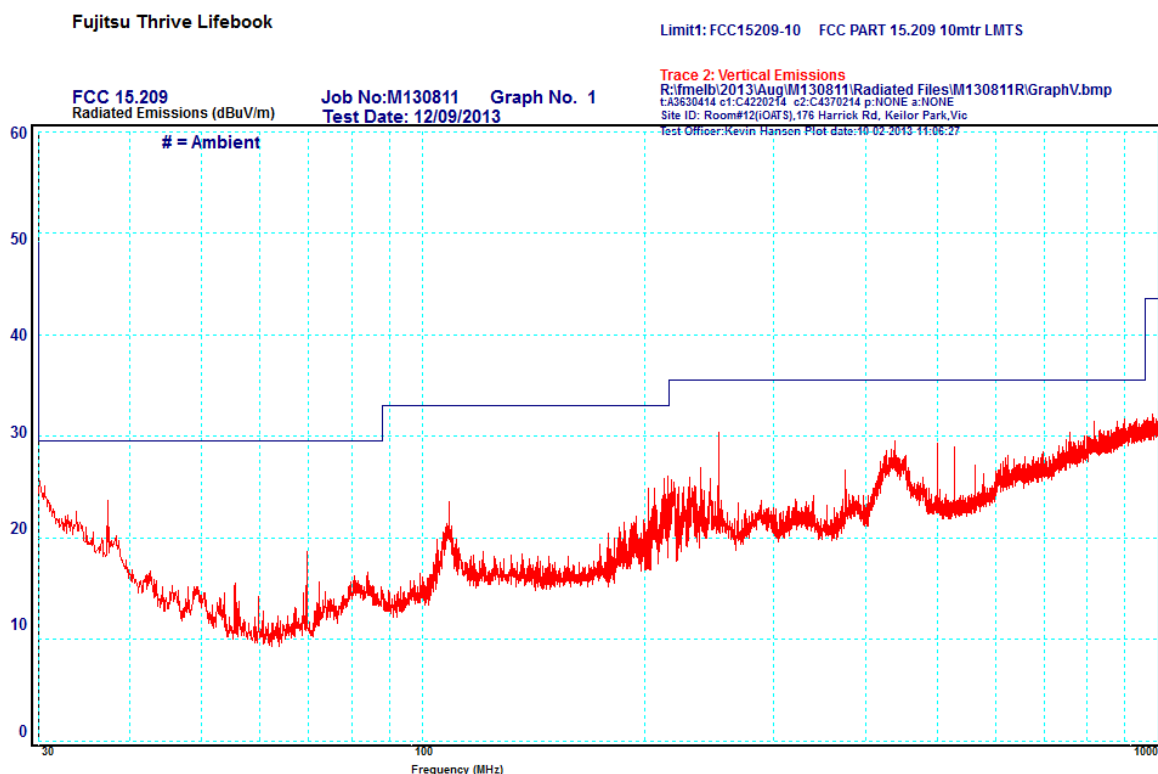
Initial investigations were performed with all data rates. Final testing was performed while the transmitter continuously operated in the worst case condition.

#### 4.3.1 Frequency Band: 30 - 1000 MHz

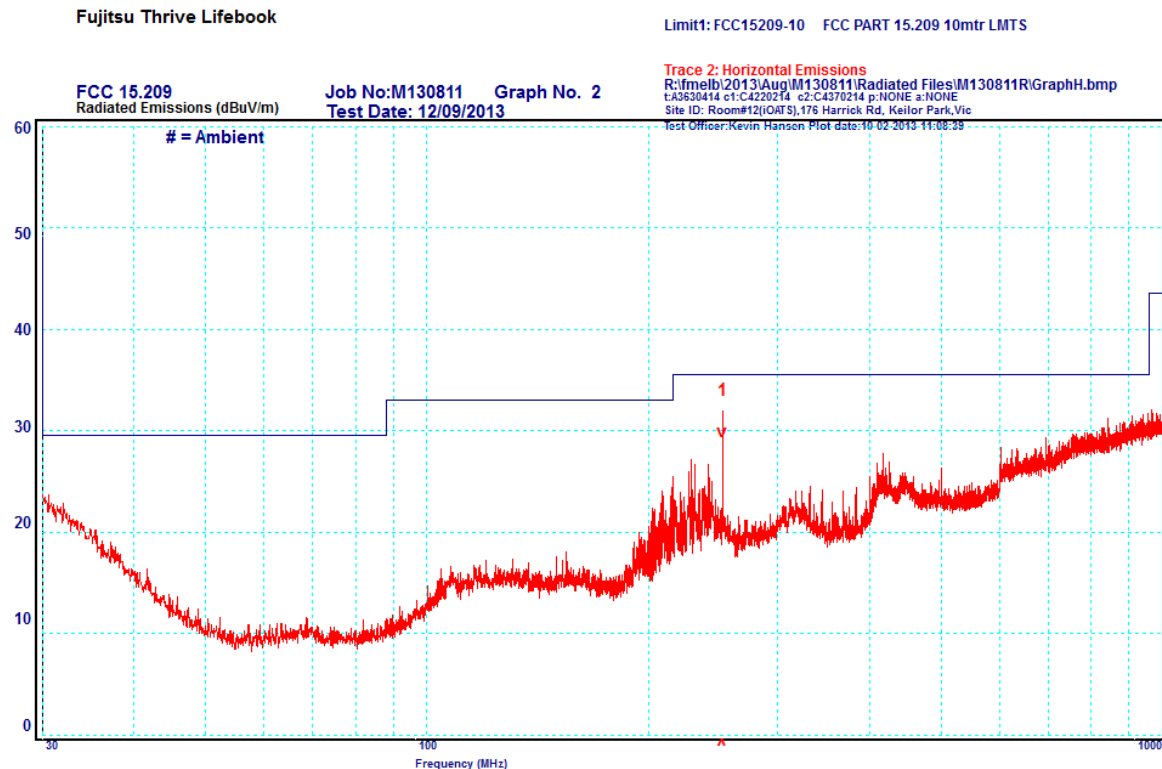
After some investigation no significant sub harmonics or emissions were detected. The Intel module report also noted that "The spurious emissions below 1 GHz do not depend on either the operating channel or the modulation mode selected in the EUT."

It was decided to perform the test with the module drawing the most power so the 2.4GHz channel with the highest output power was chosen. The measurements were made at a distance of 10 metres.

##### Vertical Emissions:



All peak measurements were below the FCC 15.209 limit.

**Horizontal Emissions:**

Peak	Frequency MHz	Polarisation	Quasi Peak dBuV/m	Limit dBuV/m	Margin dB
1	252.45	Horizontal	20.8	35.5	-14.7

**4.3.2 Frequency Band: 1 – 40 GHz**

The peak limits for undesirable emission outside of the restricted bands are  $-27$  dBm ( $68.3$  dBuV/m @  $3$  m). The  $74$  dBuV/m @  $3$  m and  $54$  dBuV/m @  $3$  m 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  $1$  m.

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 M130811\_FCC\_7260HMW\_DTS\_rev2.

Measurements were performed with the EUT operating in the worst case mode of single antenna transmitting. For multiple antennas transmitting the power level is lower with respect to single antenna mode.

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

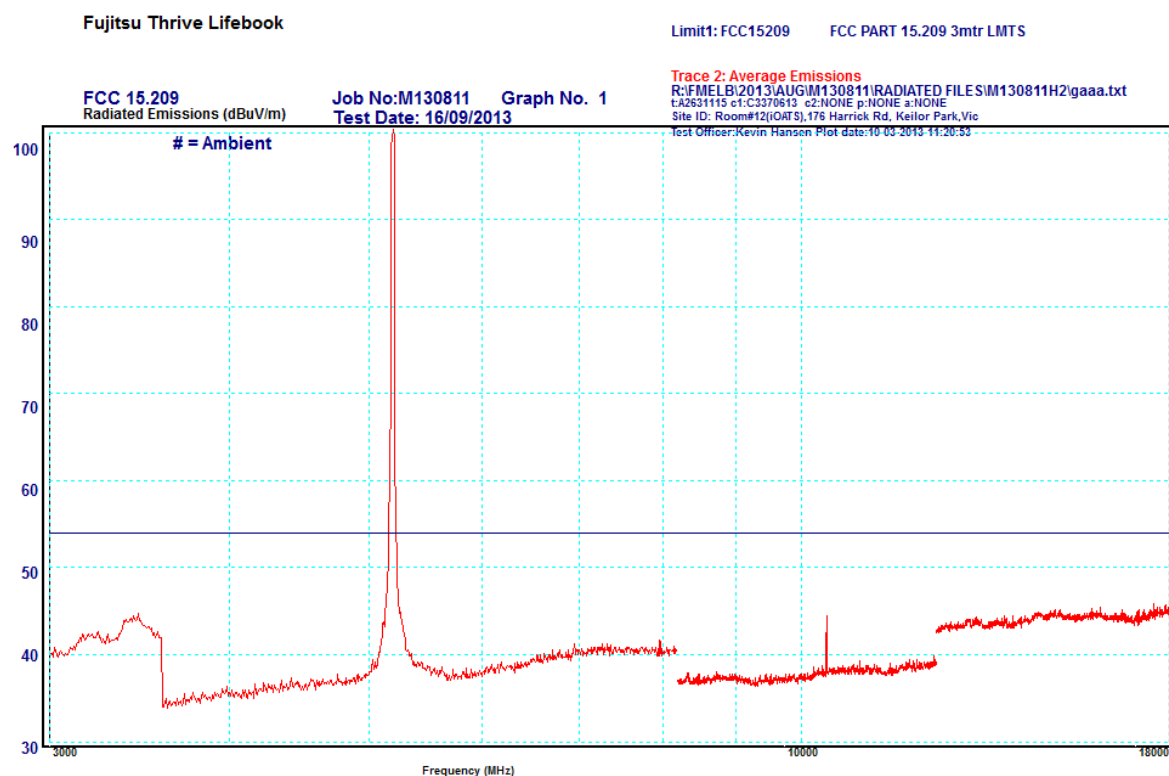
#### 4.3.2.1 5.2 GHz Band with 20MHz Signal Bandwidth

Considering Intel's original antenna port conducted emissions and the antenna gain of this host it was determined to conduct the test with the configuration having the highest power to the antenna: 802.11a at 5200 MHz, refer to channel and power output table.

Frequency MHz	Peak Detector dBμV/m	Average Detector dBμV/m	Peak Limit dBμV/m	Average Limit dBμV/m	Result
5200 (802.11a)	Transmit Frequency				
10400	NF = 48.0	44.5	74.0	54.0	Complied
15600	NF = 53.0	NF = 44.0	74.0	54.0	Complied
20800	NF = 56.9	NF = 46.4	74.0	54.0	Complied

NF = instrumentation noise floor.

#### Average emissions 3GHz to 18GHz



**Result:** Harmonics and spurious emissions were recorded up to 40 GHz. Other emissions 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.

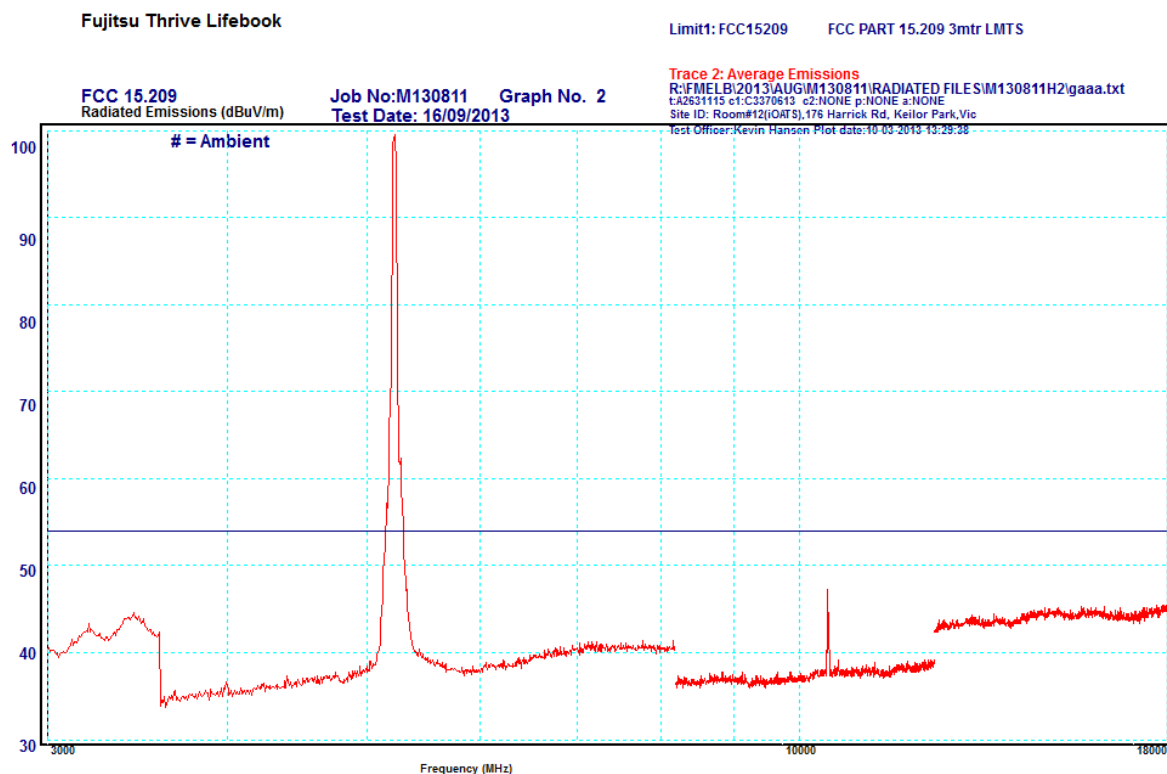
#### 4.3.2.2 5.2 GHz Band with 40MHz Signal Bandwidth

Considering Intel's original antenna port conducted emissions and the antenna gain of this host it was determined to conduct the test with the configuration having the highest power to the antenna: 802.11n at 5230 MHz, refer to channel and power output table.

Frequency MHz	Peak Detector dB $\mu$ V/m	Average Detector dB $\mu$ V/m	Peak Limit dB $\mu$ V/m	Average Limit dB $\mu$ V/m	Result
5230 (802.11n)	Transmit Frequency				
10460	NF = 48.0	47.3	74.0	54.0	Complied
15690	NF = 53.0	NF = 44.0	74.0	54.0	Complied
20920	NF = 57.0	NF = 46.5	74.0	54.0	Complied

NF = instrumentation noise floor.

#### Average emissions 3GHz to 18GHz



**Result:** Harmonics and spurious emissions were recorded up to 40 GHz. Other emissions 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.







## **5.0 PEAK OUTPUT POWER - Section 15.407(a)**

Refer to original Intel module test report (submitted). Testing was performed by AT4 Wireless, S.A. with FCC registration number 905266 and Canadian Certification reference number IC 4621A-1. Report 30867RRF.002 and 30867RRF.003.

It was not deemed likely that the host equipment will cause the output power to exceed the limits specified for the different bands.

## **6.0 CHANNEL BANDWIDTH**

Refer to original Intel module test report (submitted). Testing was performed by AT4 Wireless, S.A. with FCC registration number 905266 and Canadian Certification reference number IC 4621A-1. Report 30867RRF.002 and 30867RRF.003.

It was not deemed likely that the host equipment will cause the 99% or 26dB bandwidth parameters to change.

## **7.0 PEAK POWER SPECTRAL DENSITY**

Refer to original Intel module test report (submitted). Testing was performed by AT4 Wireless, S.A. with FCC registration number 905266 and Canadian Certification reference number IC 4621A-1. Report 30867RRF.002 and 30867RRF.003.

It was not deemed likely that the host equipment will cause the power spectral density to exceed the limits specified for the different bands.

## **8.0 PEAK EXCURSION**

Refer to original Intel module test report (submitted). Testing was performed by AT4 Wireless, S.A. with FCC registration number 905266 and Canadian Certification reference number IC 4621A-1. Report 30867RRF.002 and 30867RRF.003.

## **9.0 FREQUENCY STABILITY**

Refer to original Intel module test report (submitted). Testing was performed by AT4 Wireless, S.A. with FCC registration number 905266 and Canadian Certification reference number IC 4621A-1. Report 30867RRF.002 and 30867RRF.003.

## **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 Intel module test report (submitted). Testing was performed by AT4 Wireless, S.A. with FCC registration number 905266 and Canadian Certification reference number IC 4621A-1. Report 30867RRF.002 and 30867RRF.003.

## 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 reported under EMC Technologies reports M130809\_FCC\_7260HMW\_SAR\_2.4 (2.4 GHz) and M130809\_FCC\_7260HMW\_SAR\_5.6 (5.18 – 5.825 GHz). SAR values of 1.53 mW/g (5GHz) and 0.431 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 Portable PC Fujitsu LifeBook T Series, Model: T734, TH734 with Intel Centrino Advanced-N 7260 (Wilkins Peak2 802.11a/b/g/n), Model: 7260HMW AN, **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.

## 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:

<b>Conducted Emissions:</b>	9 kHz to 30 MHz	±3.2 dB
<b>Radiated Emissions:</b>	30 MHz to 300 MHz	±5.1 dB
	300 MHz to 1000 MHz	±4.7 dB
	1 GHz to 18 GHz	±4.6 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

**APPENDIX A: MEASUREMENT INSTRUMENT DETAILS**

**APPENDIX B: PHOTOGRAPHS**

**APPENDIX C: OPERATIONAL DESCRIPTION**

**APPENDIX D: BLOCK DIAGRAM**

**APPENDIX E: SCHEMATIC**

**APPENDIX F: ANTENNA INFORMATION**

**APPENDIX G: FCC LABELLING DETAILS**

**APPENDIX H: USER MANUAL**

**Attachment – RF Exposure Information**

**Attachment – FCC DOC for LifeBook T Series**

**Attachment – Intel FCC Part 15E Test Report**