

**EXHIBIT VI.**

**Supplemental Test Report WLAN**

**New Certification of Previously Certified OEM Module**

**FCC ID: KBCIX260A750MPIBT**

IX260 Rugged Laptop with Aircard 750 GPRS radio modem

co-located with

WLAN & Bluetooth Intentional Radiators

**This report is for the WLAN for**

**Certification Under Title 47 CFR, Part 15.247**

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Exhibit VI

## Supplemental Test Report

### TABLE OF CONTENTS

Cover Page	1
Table Of Contents	2
Exhibit 6A – Conducted RF Power Output Part 15.247 (b) & Equivalent Isotropic Radiated Power	3
Exhibit 6A - Field Strength of Three Fundamental Operating Frequencies	4
Exhibit 6G – Radiated Harmonics and Spurious Emissions	5

**Note:** Please refer to the original Certification exhibits for all of the original OEM test report data for the ITRONIX Corporation, Intentional Radiator referenced herein:

1.) FCC ID: LDK102042 which is the OEM filing for the WLAN Compact Flash Card, Model: MPI-352 Series

**EXHIBIT 6A - TEST: CONDUCTED RF POWER OUTPUT**

Applicant: ITRONIX, Corporation

Model: IX260 Rugged Laptop with Aircard 750 GPRS radio modem co-located with WLAN & Bluetooth Intentional Radiators

Minimum Standard Specified: Part 15.247(b)(1) is 1 Watt for DTS

Test Results: The measured output power level shows compliance with the above limit and the power granted for the OEM module.

Authorization Procedure: Part 2.1046

Maximum Conducted Power Output: 21.2 dBm

**Method of Measurement:**

1. The output power levels above had been preset during production for this model.
2. The peak output power was measured by Celltech with a Gigatronics 8652A Universal Power Meter (S/N: 1835272). The measured channels cover the low, middle and top of the operational frequency range previously approved for this Intentional Radiator of 2412 – 2462 MHz.
4. Both antenna ports were measured, the results below were the maximum level measured.

**Tabular Results of Conducted RF Output Power and EIRP**

WLAN		Rangestar Antenna		
Serial No: VMS06180144		P/N 100929		
Frequency GHz	Power dBm	Cable loss	Ant. Gain dBi	EIRP
2.412	21.2	-inc-	4.5	<b>25.7</b> *MAX
2.437	21.1	-inc-	4.5	25.6
2.462	21.1	-inc-	4.5	25.6

The maximum WLAN EIRP is 25.7 dBm with the Rangestar Antenna, P/N 100929, peak antenna gain of 4.5 dBi.

**EXHIBIT 6G - TEST: FIELD STRENGTH OF THREE FUNDAMENTAL OPERATING FREQUENCIES**

Applicant: ITRONIX, Corporation

Model: IX260 Rugged Laptop with Aircard 750 GPRS radio modem co-located with a WLAN & Bluetooth Intentional Radiators

Minimum Standard Specified: Part 15.247(c), 15.205 & 15.209(a)

Test Results: Equipment complies with standard

Authorization Procedure: Part 2.1053

Test Equipment Set Up: See Block Diagram in Exhibit 7

Test Frequencies **WLAN**: 2412, 2437, & 2462 MHz (2412 – 2462 MHz band)

**Field Strength For Low Mid and High Channel**

<b>WLAN</b> Frequency in GHz	Ant. Vert/ Horz	Spectrum Analyzer Reading dBuV	+ Ant Factor	- Amp Gain	+ Cable Loss	= dBuV/m @ 3 meters	or uV/m @ 3 meters
Ch. 1 Low 2.412	V	84.67	28.37	0	1.33	114.37	522997.96
Ch. 6 Mid 2.437	V	85.67	28.37	0	1.33	115.37	586813.36
Ch.11 High 2.462	V	86.33	28.37	0	1.33	116.03	633140.36

Measurements were made with the MPI350 feeding the left antenna in the PC display only, for this co-located model. The right antenna in the display is used by the Bluetooth Intentional radiator exclusively in this configuration and covered under a different test report.

**EXHIBIT 6G - TEST: RADIATED HARMONICS AND SPURIOUS EMISSIONS**

Applicant: ITRONIX, Corporation

Model: IX260 Rugged Laptop with Aircard 750 GPRS radio modem co-located with a WLAN & Bluetooth Intentional Radiators

Minimum Standard Specified: Part 15.247(c), 15.205 & 15.209(a)

Authorization Procedure: Part 2.1053

Test Equipment Set Up: See Block Diagram in Exhibit 7

RADIATED HARMONIC AND SPURIOUS EMISSIONS & RESTRICTED BANDS									
Frequency GHz	Max. SA Rdg. dBuV	Ant. Vert. or Horz.	Peak or Average Detector	Antenna Factor dB	Cable & filter loss dB	Amp Gain	Corrected Reading dBuV/m	Limit 74 Peak 54 Avg dBuV	uV/m
<b>Fo - 2.412</b>									
4.824	35.83	V	Peak	32.83	3.95	23.2	49.41	74	295.46
4.824	23.17	V	Average	32.83	3.95	23.2	36.75	54	68.78
<b>Fo - 2.437</b>									
4.874	37.00	V	Peak	33.33	3.95	23.2	51.00	74	358.09
4.874	23.50	V	Average	33.33	3.95	23.2	37.58	54	75.68
<b>Fo - 2.462</b>									
4.924	37.0	V	Peak	33.33	3.95	23.2	51.00	74	358.09
4.924	23.33	V	Average	33.33	3.95	23.2	37.41	54	74.21
<b>Harmonic emissions on all three channels (low, mid &amp; high) 3Fo – 10Fo at or below noise floor</b>									
Channel	Frequency in GHz	Harmonics observed				Limit 74 dBuV/m Peak & 54 dBuV/m Average			
<b>Ch. 1 - Low Fo</b>	2.412								
<b>3Fo - 10Fo</b>	7.236 – 24.120	None, At or < noise floor @3m				All emissions < 54 dBuV/m or 500 uV/m			
<b>Ch. 6 - Mid Fo</b>	2.437								
<b>3Fo – 10Fo</b>	7.311 – 24.370	None, At or < noise floor @3m				All emissions < 54 dBuV/m or 500 uV/m			
<b>Ch. 11 - High Fo</b>	2.462								
<b>3Fo - 10Fo</b>	7.386 – 24.620	None, At or < noise floor @3m				All emissions < 54 dBuV/m or 500 uV/m			

All harmonic and spurious emissions were below the limit. 2Fo and 3Fo were measurable during preliminary measurements at less than 1.0 meter with 100 kHz RBW only. Only 2 Fo was measurable at three meters with 1 MHz RBW and VBW. A HP preamplifier with over 20 dB of gain was used during the measurements of the harmonics. A high pass filter was used to reduce the fundamental signal and avoid the possibility of overloading the front end of the analyzer when using the preamp.

- Test Notes:**
- 1.) All harmonics in the restricted bands listed in Part 15.205 are below the Part 15.209(a) limit.
  - 2.) No peak emissions above 1 GHz are more than 20 dB above the average limit.
  - 3.) Peak measurements made with 1 MHz RBW & VBW, Average made with 1MHz RBW & 10 Hz VBW.
  - 4.) The maximum levels reported above were with the MPI350 connected to and radiating from the left antenna within the PC display.