

**EXHIBIT VI.**

**Supplemental Test Report WLAN**

New Certification of Previously Certified OEM Module

**FCC ID: KBCIX260MPIA555BT**

IX260 Rugged Laptop with Aircard 555 Dual Band CDMA radio modem

co-located with

WLAN & Bluetooth Intentional Radiators

**This report is for the WLAN**

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

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Exhibit VI

## Supplemental Test Report

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Please see Exhibit 7 for the test equipment list and calibration dates as well as Photos of the Equipment Test Setup

**Note:** Please refer to the OEM Certification exhibits under FCC ID: LDK102042, WLAN Compact Flash Card, Model: MPI-352 Series for test report data and confidential exhibits where appropriate for this ITRONIX Corporation, Intentional Radiator referenced herein.

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

Applicant: ITRONIX, Corporation

Model: IX260 Rugged Laptop with Aircard 555 Dual Band CDMA Radio modem co-located with a 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 12/10/02 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.
3. 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>
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

FCC ID: KBCIX260MPIA555BT

Model: IX260 Rugged Laptop with Aircard 555 Dual Band CDMA Radio modem co-located with WLAN & Bluetooth Intentional Radiators

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

Test Date: 10/21/03

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	81.52	28.37	0	3.15	113.04	448745.39
Ch. 6 Mid 2.437	V	82.34	28.37	0	3.15	113.86	493173.80
Ch.11 High 2.462	V	81.76	28.37	0	3.15	113.28	459726.99

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 in the BT test report also submitted with the application.

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

Applicant: ITRONIX, Corporation  
 FCC ID: KBCIX260MPIA555BT  
 Model: IX260 Rugged Laptop with Aircard 555 Dual Band CDMA 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 Test Date: 10/21/03

RADIATED HARMONIC AND SPURIOUS EMISSIONS & RESTRICTED BANDS									
Frequency GHz	Max. SA Rdg. dBu/V	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 dBu/V	uV/m
<b>Fo - 2.412</b>									
4.824	37.05	V	Peak	32.83	3.95	23.2	50.63	74	340.02
4.824	24.65	V	Average	32.83	3.95	23.2	38.23	54	81.56
<b>Fo - 2.437</b>									
4.874	37.17	V	Peak	33.33	3.95	23.2	51.25	74	365.17
4.874	24.68	V	Average	33.33	3.95	23.2	38.76	54	86.70
<b>Fo - 2.462</b>									
4.924	36.52	V	Peak	33.33	3.95	23.2	50.60	74	338.84
4.924	24.80	V	Average	33.33	3.95	23.2	38.88	54	87.90
<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

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within the PC display.