LS RESEARCH LLC
Wireless Product Development

ACCREDITED
TESTING CERT #1255.01

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ADDENDUM II

EDIT of ENGINEERING TEST REPORT #: 313276
LSR JOB #: C-1833

Compliance Testing of:
SIQ Wireless Base Unit

Test Date(s):
February 18, 2014

Prepared For:
Attn: Rob Nunn
Select Comfort
9800 59th Ave North
Minneapolis, MN 55442

This Test Report is issued under the Authority of:
Peter Feilen, EMC Engineer

Signature: Date: 2/18/14

Test Report Reviewed by:
Shane D. Rismeyer, EMC Engineer

Signature: Date: 2/18/14

Project Engineer:
Peter Feilen, EMC Engineer

Signature: Date: 2/18/14

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LS Research, LLC In Review

As an EMC Testing Laboratory, our Accreditation and Assessments are recognized through the following:

A2LA – American Association for Laboratory Accreditation

Accreditation based on ISO/IEC 17025: 2005
with Electrical (EMC) Scope of Accreditation
A2LA Certificate Number: **1255.01**

Federal Communications Commission (FCC) – USA

Listing of 3 Meter Semi-Anechoic Chamber based on Title 47 CFR – Part 2.948
FCC Registration Number: **90756**

Industrie Canada Industry Canada

Industry Canada

On file, 3 Meter Semi-Anechoic Chamber based on RSS-212 – Issue 1
File Number: **IC 3088-A**

On file, 3 and 10 Meter OATS based on RSS-212 – Issue 1
File Number: **IC 3088**

U. S. Conformity Assessment Body (CAB) Validation

Validated by the European Commission as a **U. S. Competent Body** operating under the U. S. /EU, Mutual Recognition Agreement (MRA) operating under the European Union Electromagnetic Compatibility –Council Directive 2004/108/EC (*formerly 89/336/EEC, Article 10.2*).
Date of Validation: **January 16, 2001**

Validated by the European Commission as a **U.S. Notified Body** operating under the U.S./EU, Mutual Recognition Agreement (MRA) operating under the European Union Telecommunication Equipment – Council Directive 99/5/EC, Annex V.
Date of Validation: **November 20, 2002**
Notified Body Identification Number: **1243**

1. Product and General Information

Manufacturer:	Select Comfort
Date(s) of Test:	February 18, 2014
Tested By:	Peter Feilen
Voltage:	3.00-4.10 VDC
Operation Mode:	Continuous Transmit Mode

Environmental Conditions in the Test Lab:
Temperature: 20-25° C
Atmospheric Pressure: 86 kPa - 106 kPa
Humidity: 30-60%

2. Addendum Justification

An Addendum to Test Report 313276 was necessary to add omitted data to demonstrate compliance to CFR 47 Part 15 Section 15.31(e) regarding power stability over voltage variation. In order to correct the error this , AD 313276 II, has been issued. This is additional data to Test Report 313276.

3. Correction

Test Setup

The conducted RF output power of the EUT was measured at the antenna port using a connector along with an attenuator as protection for the spectrum analyzer. The loss from the attenuator was added on the analyzer as gain offset settings, there by allowing direct measurements without the need for any further corrections. The unit was configured to run in a continuous transmit mode, while being supplied with typical data from as a modulation source. The spectrum analyzer was used with resolution bandwidth set to 1 MHz and video bandwidths set to 3 MHz and a span equal to 1.5 times the respective DTS bandwidth. Measurements from a peak detector are presented in the charts below.

Test Data

			Power Over Voltage		
channel	channel frequency (MHz)	data rate (MBPS)	Power (dBm) at 3.0 VDC	Power (dBm) at 3.6 VDC	Power (dBm) at 4.1 VDC
1	2412	2	17.8	18.2	18.2
6	2437	2	17.4	17.8	17.8
11	2462	2	17.3	17.7	17.5
1	2412	11	20.8	21.2	21.1
6	2437	11	20.4	20.8	20.7
11	2462	11	20.4	20.8	20.6
1	2412	6	21.0	21.0	21.0
6	2437	6	21.2	21.3	21.3
11	2462	6	20.7	20.9	20.9
1	2412	54	19.3	19.3	19.3
6	2437	54	18.6	18.8	18.7
11	2462	54	18.7	18.8	18.8
1	2412	MCS0	19.1	19.3	19.1
6	2437	MCS0	19	19.2	19.1
11	2462	MCS0	19.0	19.1	19.1
1	2412	MCS7	16.4	16.5	16.3
6	2437	MCS7	16.1	16.2	16.2
11	2462	MCS7	16	16.2	16.2

Test Data Summary

Power stability over voltage adjustment is observed for the TiWi-BLE WLAN radio.