Microlynx Systems Ltd.

REPORT
VUI Frequency Stability Report

Document No.: RPT-00045-04

Version: 1v0

Author: Jeffery Wu

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Contents

Proprietary Information Notification

Revision History

Version	Date	Author	Reviewed	Approved	Description
1v0	Nov. 9, 05	Jeffery Wu			Initial Draft
1v1	Nov. 15, 05	Jeffery Wu			Add Glen Moore Comments

1. Introduction

This report is the VUI RFID fundamental frequency stability measurement from –30C to +60C.

2. Spectrum Analyzer Setting

Model No: IFR 2390A

Atten: 30dB

REF: 10.0dB

RBW: 30Hz

VBW: 100KHz

Sweep: 50mS

Span: 200Hz/Div

3. EUT Description

Model Number: G-Force Plus, VM + VUI

Serial Number: VM-04, VUI-04

Test Set up: 10V, 12V and 14V DC input for VM, VUI connected to VM, Accelerometer connected to VM.

4. Test Date

Nov. 15th, 2005

5. Test Method

The unit is allowed to stabilize at each temperature for 30 minutes. After the 30 minutes has elapsed, power up the test units for 60 seconds, the measurement tests are undertaken to determine that the equipment complies with operational standard.

6. Test Result

The table only shows the measurement reading data.

Temperature (C)	Frequency(Mhz) Power Input 10.0V	Frequency(Mhz) Power Input 12.0V	Frequency(Mhz) Power Input 14.0V	Level(dBm) at Power Input 12.0V Note: The output level is for reference only
-30	13.559176	13.559176	13.559176	-25.1
-25	13.559300	13.559300	13.559300	-25.1
-20	13.559321	13.559321	13.559321	-25.1

-15	13.559338	13.559338	13.559338	-24.2
-10	13.559351	13.559351	13.559351	-25.4
-5	13.559356	13.559356	13.559356	-25.1
0	13.559356	13.559356	13.559356	-25.4
5	13.559356	13.559356	13.559356	-25.4
10	13.559356	13.559356	13.559356	-25.4
15	13.559356	13.559356	13.559356	-25.4
20	13.559356	13.559356	13.559356	-25.4
25	13.559356	13.559356	13.559356	-25.4
30	13.559356	13.559356	13.559356	-25.4
35	13.559352	13.559352	13.559352	-26.4
40	13.559352	13.559352	13.559352	-26.4
45	13.559360	13.559360	13.559360	-26.4
50	13.559378	13.559378	13.559378	-26.4
55	13.559412	13.559412	13.559412	-26.4
60	13.559450	13.559450	13.559450	-26.0

7. Test Equipment List

Spectrum Analyzer:

- Model IFR 2390A.
- Manufacturer: IFR.
- Calibrated by using IFR2032 Signal Generator at test date. Offset frequency –1Hz at 13.560000MHz input.

Signal Generator:

- Model IFR 2032.
- Manufacturer: IFR.
- Calibration Date: Apr. 13, 2005; Due Date: Apr. 13, 2007

Temperature Chamber:

- Model: Tenney Jr.
- Manufacturer: Tenney Engineering INC

Temperature Controller:

- Model: CNI16D22-EI
- Manufacturer: Omega Engineering INC
- Purchased on March. 2005, calibrated by manufacturer, still under warranty.

DC Power supply:

- Model: GPS-3030
- Manufacturer: Good Will Instrument

Multi-Meter:

- Model: Fluke 77
- Manufacturer: Fluke
- Calibration Date: Feb. 11, 2005; Due Date: Feb. 11, 2006

8. Test Set up Photo