www.winmate.com.tw

WinMate Communication Inc.
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San-Chung, Taipei, Taiwan, R.O.C
TEL：886-2-6635-5758
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Humidity Test Report

Issue by

Certification Center

Product Model	**5.7” Rugged Handheld Device : R05I98H-RTD1**
Product Description	**Rugged Handheld Device**
Test Reason	■New product ■Rugged Handheld Device ☐Renew product ☐PCB : ☐BIOS: ☐ Revision change ☐PCB : ☐BIOS: ☐Component:

2011/10/12	*Lindon Lin*	*Freeman Lee*
Issue date	Approved	Test Engineer

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1. Document Introduction and Revision History

This document describes how we conduct the environment conditions and test procedure. It includes the test equipment we use, the test condition, and the test procedure we take. We also define our test criteria and the way to conclude the test result.
(According to client's test specification, please see following sheets in detail.)

Table of Testing Summary Results

NO	Test Item	Condition Description	Sect. / Page	Reference to
1	**Humidity Test**	Operation Test temperature: 20℃ to 60℃ ± 2℃ Relative Humidity : 95%RH ± 3% For a period of 240 Hours (5 Cycles; 1 Cycle=48Hours)	4 / 5	**MIL-STD-810F Method 507.4**

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2. Product Configuration

1. M/B：Winmate I98H5-110
2. CPU：Intel® Atom™ Processor Z510 @ 1.10 GHz
3. Chipset：Intel US15W
4. RAM：Transcend TS128MSQ64V6U SODIMM DDR2-667 1GB
5. SSD：PQI D10080G57RW01A70 MiniPCIe PATA SSD 8G MLC
6. Panel：DataImage 050722DSSWDG01 640x480
7. Battery：FSP RTB-057HH Li-Ion Battery 2S1P 7.4V 2600mAh x 2
8. Bluetooth：Q-COM Bluetooth QBT400-USB01p
9. 3G：HUAWEI EM770W HSPA Module
10. GPS：u-blox LEA-6S GPS Module
11. Wifi：Wi2Wi W2SW0001 WLAN SIP 802.11b/g
12. Adapter：EDAC EA1050C-120 / AC IN 100-240V~1.8A,50-60Hz / DC OUT 12V,4.16A
13. Hot Tab / EC：205_H5 / 212

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3. Humidity Test

A. Test Equipment:

— Test Site: Winmate LAB
— Programmable Temperature & Humidity Chamber
—KSON / THS-E4C-100 / S/N: 3087

B. LAB Environmental Conditions:

—Ambient Temperature: 25 +/- 3℃
—Relative Humidity: 55 +/- 20% RH

C. Test Method / Specification :

— Reference to MIL-STD-810F Method 507.4 Testing Procedures
— Selecting Produces: Operation (This method has one produce.)
— Reference to Figure 507.4-1. Aggravated temperature-humidity cycle.
— Temperature: 20 to 60℃ ± 2℃
— Humidity: 95 +/- 3%RH
— For a period of 240 Hours (5 Cycles; 1cycle=48Hours)
— Testing Software:
Running Windows XP with PassMark BurnIn Test Professional V6.0 (Build 1030)
— Quantity: Total 1 Set
—Testing Period: Aug. 17, 2011 to Aug. 26, 2011

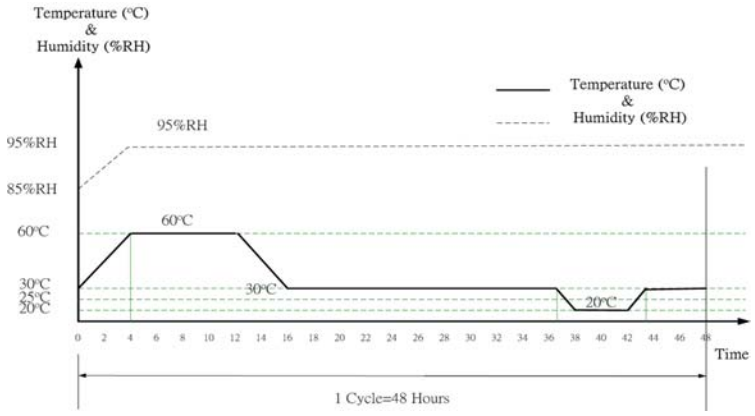

Figure 1 : Humidity Test Cycle

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D. Check Condition and Requirements:

After the preconditioning, humidity and temperature cycling is to be carried out in accordance with Fig. 1. This test determines the ability of equipment to be operated under condition of high humidity . A single cycle is used with an upper temperature limit of +60℃ which is the maximum that occurs in the earth's surface atmosphere with a relative humidity of 95%RH.
The EUT shall be placed in a chamber at normal room temperature and relative humidity. The temperature shall then be raised to +20 to +60℃+/- 2℃ , and the relative humidity raised to 95% +/- 3% over a period of 4 hour .The conditions shall be maintained for a period of 240Hours.
Expose the test item(s) to the appropriate number of test cycles (figure 507.4-1). Within 15 minutes after (figure 507.4-1) is completed, conduct an operational performance check, if applicable, and document the results. Performance check: Running Window XP with PassMark BurnIn Test Professional V6.0 (Build 1030)

E. Test Result:

Examine the appearance of specimen(s) by visual check and perform functional check after this test. Connect the specimen with rated power then examine whether the display function of specimen could be work normally or not.

— Functional Check & Mechanical Structure: Normal
—Appearance check (Visual check): No visible damage
—The requirements of the performance test and check shall be met.

F. Test Judgment:

— Test Result

Check Item / Style Item No.	Appearance check (Visual check)		Functional & Performance check
	Initial	Final	
5.7" Rugged Handheld Device: R05I98H-RTD1	No visible damage	No visible damage	Normal