

Low Temperature Test Report

Issue by

Design Technology Department

Report No: 1704LT0640BR

Product Model	5" Rugged Handheld PDA_E500RM8
Product Description	PDA
Test Reason	<input checked="" type="checkbox"/> New product <input type="checkbox"/> Renew product <input type="checkbox"/> PCB : <input type="checkbox"/> BIOS: <input type="checkbox"/> Revision change <input type="checkbox"/> PCB : <input type="checkbox"/> BIOS: <input type="checkbox"/> Component:

2017/04/24
Issue date

David Chen
Approved

Freeman Lee
Test Engineer

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	Low(Cold) Temperature Test	- Operating - Temperature: $-10^{\circ}\text{C} \pm 2^{\circ}\text{C}$ - For a period of 16 Hours	4 / 5	IEC60068-2-1

2. Product Configuration

1. M/B : Winmate E500RM8-120A
2. CPU : MTK6735 1.3GHz
3. Panel : TRULY HD0499K00032 1280X720 / 450Nits
4. Memory : 2GB
5. Storage : 16GB eMMC
6. Touch : Projective Capacitive Multi-touch
7. GPS : Built-in GPS module
8. Bluetooth : Bluetooth V4.0
9. WiFi : 802.11 a/b/g/n
10. Camera : Yuanda CLOV80-RC02-A0 8M
11. Proximity & Light Sensor : Built-in
12. Battery : JM E430 3.7V 1S2P 3900mAh
13. 2D Barcode Reader : Motorola SE4500DL
14. NFC : Built-in
15. Adapter : ADT 6A-181WP05 AC: 100-240V~ 50-60Hz 0.6A DC: 5V 3A 15W

3. Photo of Product Configuration

Photo of EUT



4. Low (Cold) Temperature Test

A. Test Equipment:

- Test Site: Winmate LAB
- Programmable Temperature & Humidity Chamber
- TERCHY / MHC-120L / S/N: 960731

B. LAB Environmental Conditions:

- Ambient Temperature :25 +/- 3°C
- Relative Humidity: 55 +/- 20% RH

C. Test Method / Specification:

- Reference to IEC60068-2-1 Testing Procedures
- Operating
- Temperature: $-10^{\circ}\text{C} \pm 2^{\circ}\text{C}$
- For a period of 16 Hours
- Testing Software:
 - Running Android 5.1
- Quantity: Total 1 Set
- Testing Period: Mar.10, 2017 to Mar.11, 2017

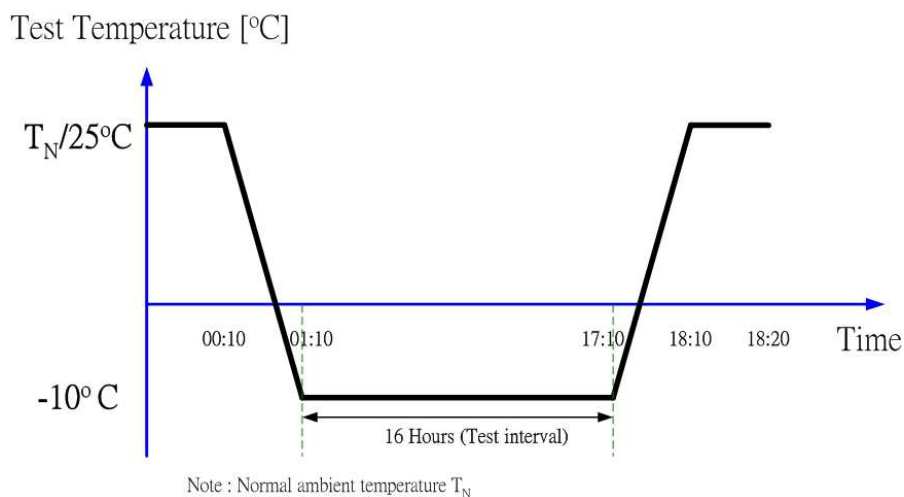


Figure 1: Low (Cold) , temperature cycle



D. Check Condition and Requirements:

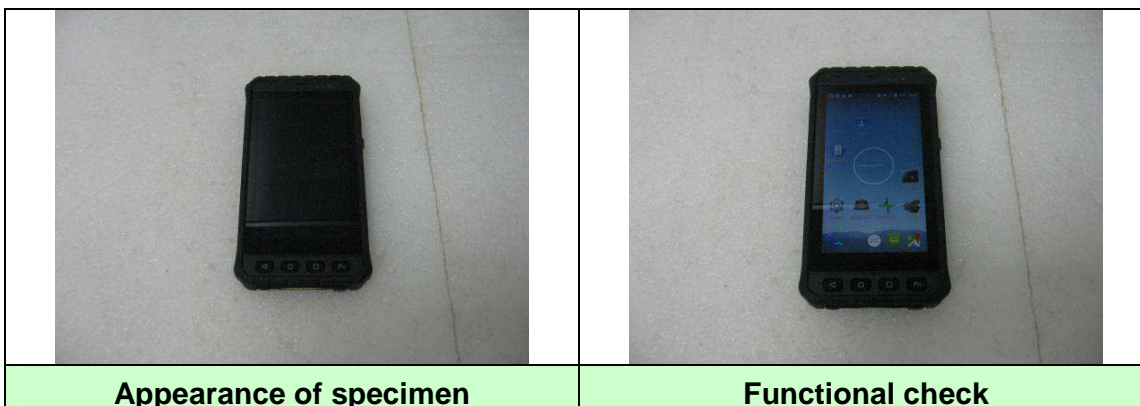
After the preconditioning time, the temperature cycle is started at normal ambient temperature T_N and run as shown in Fig.1. The equipment in its low (Cold) temperature mode, shall exposed to daily low (cold) temperature cycles between 16 Hours at -10°C .

The equipment shall withstand the required environmental conditions and shall meet, without any functional damage, all performance requirements after being exposed to 1 cycle of low (cold) temperatures, as illustrated in Figure 1.

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 as below:

Check Item Style Item No.	Appearance check (Visual check)		Functional & Performance check
	Initial	Final	
5" Rugged Handheld PDA_E500RM8	No visible damage	No visible damage	Normal