

# IMBM-H81B

## Temperature/Humidity Test Report

Report NO: 16IP020005

Summary	<input checked="" type="checkbox"/> <b>Pass</b>  <input type="checkbox"/> <b>Fail</b>  <input type="checkbox"/> <b>Pass with Deviation</b> Comment: _____
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Issue date

2016-05-24

QE Manager

KJ Wang

Test Engineer

Ben Sun

# Test item list

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## Testing Result

Num	Test item list	Result	Remark
1	Temp./humidity power on/off test	Pass	
2	Temperature variation operation test	Pass	
3	Cold start and hot start test	Pass	

# Configuration of EUT

## Test Product: IMBM-H81B A1.01

### Sample Configuration & Quantity Under Test:

1. CPU: Intel i7-4770K / 3.9GHz
2. BIOS Ver. R0.6 (MH81BM06)
3. Chipset: Intel H81 Express
4. Memory: Transcend DDR3L-1600 8GB \* 2
5. USB Flash: Transcend 4GB (For DOS Mode Power On/Off Test)
6. 2.5" SATA HDD: Seagate ST9160412AS / 160GB
7. Test Software: Windows 8.1 / Run PassMark Burn In Test 8.0 Pro
8. AT Power Supply: DSA400P-C
9. CPU Cooler:



# Temp./humidity power on/off test

**Test Date:** 05-18 ~ 19-2016

**Test Site:** AAEON QE Dept.

**Test Standard:** Refer to IEC 68-2-30 Testing procedures  
 Test Db: Damp Heat Test  
 Refer to IEC 68-2-1 Testing procedures  
 Test Ad: Cold Test

**Test Equipment:**

Programmable Temperature & Humidity Chamber: (K.SON. INS. TECH. CORP.)  
 Model: THS-D4H+-100  
 Date of Calibration: 10/09/15  
 Due date of Calibration: 10/08/16  
 Serial Number: 2582

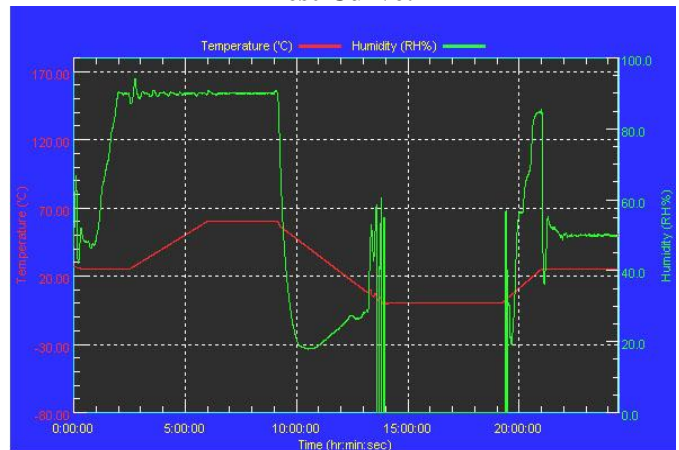
**Temperature & Humidity Power On/Off Test:**

1. Test High Temp./Humidity: 60°C @90%RH
2. Test Low Temperature: 0°C
3. Test Time: 24Hours / Cycle
4. Test Cycle: 1 Cycles
5. Test Software: DOS Mode / Run Boot Up Record Program ver 1.41

**Testing Specification:**

Step	Temperature (°C)	Humidity (%RH)	Duration (HH:MM)
1	25	50	00:30
2	25	50	00:30
3	25	90	01:00
4	25	90	00:30
5	60	90	03:30
6	60	90	03:00
7	0	0	04:50
8	0	0	05:23
9	25	50	01:47
10	25	50	03:00

**Test Curve:**



**Test Result:**

	Actual	Successful	Failure rate	Test Result
Power On/Off	1128/times	1128/times	0 %	Pass

**Note:** 1. Failure rate need to under 0%.  
 2. Power on/off fixture setting: on - 35 sec / off - 35 sec

# Temperature variation operation test

**Test Date:** 05-19 ~ 20-2016

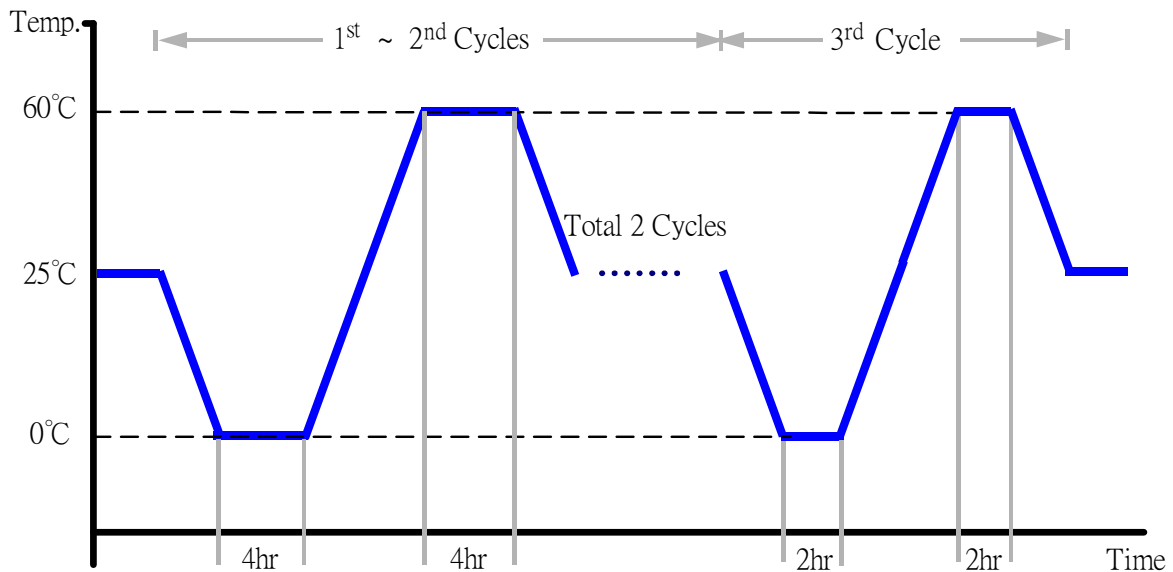
**Test Site:** AAEON QE Dept.

**Test Standard:** Refer to IEC 68-2-14 Testing procedures  
Test N: Change of temperature Test

**Test Equipment:**  
Programmable Temperature & Humidity Chamber: (K.SON. INS. TECH. CORP.)  
Model: THS-D4H+-100  
Date of Calibration: 10/09/15  
Due date of Calibration: 10/08/16  
Serial Number: 2582

## Temperature & Humidity Cycle Test:

1. Test Low Temperature: 0°C (1~3 cycles)
2. Test High Temperature: 60°C (1~3 cycles)
3. Test dwell time: 4Hrs (1~2 cycles)  
2Hrs (3<sup>rd</sup> cycle)
4. Temperature slope: 2°C/min
5. Test cycle: 3 cycles
6. Test Environment Curve:



## Test Result:

No issues were found during the temperature variation operation test.

# Cold start and hot start test

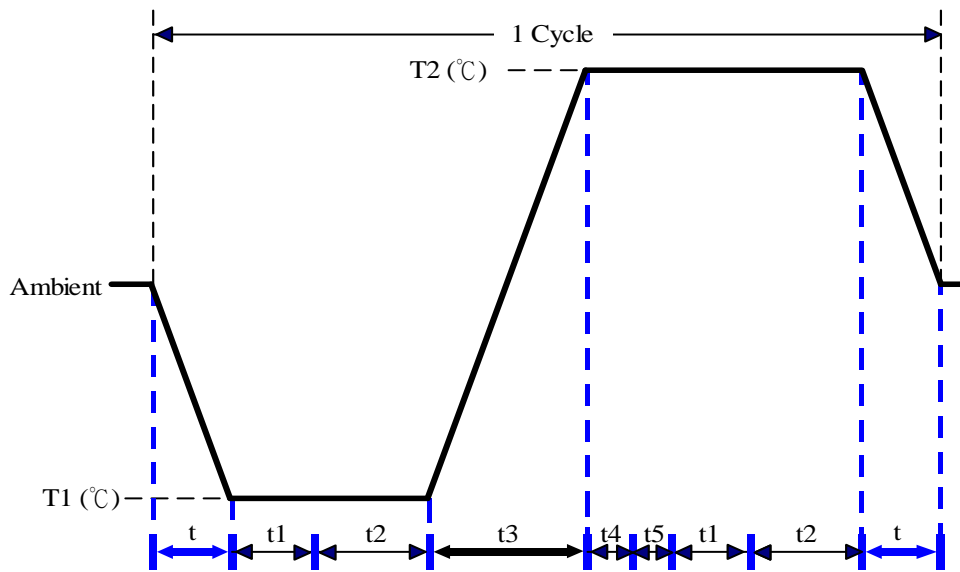
**Test Date:** 05-23-2016

**Test Site:** AAEON QE Dept.

**Test Standard:** Refer to IEC 68-2-14 Testing procedures  
Test N: Change of temperature Test

**Test Equipment:**  
Programmable Temperature & Humidity Chamber: (K.SON. INS. TECH. CORP.)  
Model: THS-D4H+-100  
Date of Calibration: 10/09/15  
Due date of Calibration: 10/08/16  
Serial Number: 2582

**Test Condition:**



Parameters	Description
T1	0°C
T2	60°C
t1	1 hrs
t2	2 hrs
t4, t5	30 min
t, t3	2°C/min
n (Cycle)	1

t,t3 = temperature slope  
t, t1: Power Off  
t2: Power on/off test 10 times (on 2 min / off 5min)  
t3,t4: Run PassMark Burn In Test  
t5: Windows 8.1 Software restart test 2 times  
Test Software: Windows 8.1

**Test Result:**

- a. No issues were found during the cold start test.
- b. No issues were found during the hot start test.