

UPCP-CR-NPL4

Temperature/Humidity Test Report

Report NO: 19D020012

Summary	<p><input checked="" type="checkbox"/> Pass</p> <p><input type="checkbox"/> Fail Note : There is/are ____ defect(s) not list in the report, please check it in the DTS Website.</p> <p><input type="checkbox"/> Pass with Deviation Comment: _____</p>
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<u>Issue date</u>	<u>Supervisor</u>	<u>Test Engineer</u>
2019-04-16	Louie Lee	Rex Chang

Test item list

1. <i>Test item list</i> -----	2
2. <i>Configuration of EUT</i> -----	3
3. <i>Temperature variation operation test</i> -----	4
4. <i>Cold start and hot start test</i> -----	5
5. <i>Humidity test</i> -----	6

Testing Result

Num	Test item list	Result	Remark
1	Temperature variation operation test	Pass	
2	Cold start and hot start test	Pass	
3	Humidity test	Pass	

Configuration of EUT

Test Product: UPCP-CR-NPL4 A0.3 + UPC-PLUS A0.4

Sample Configuration & Quantity Under Test:

NET-PLUS A0.3

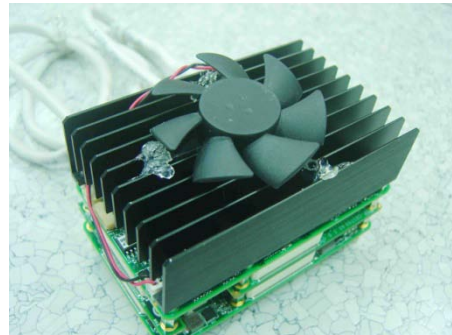
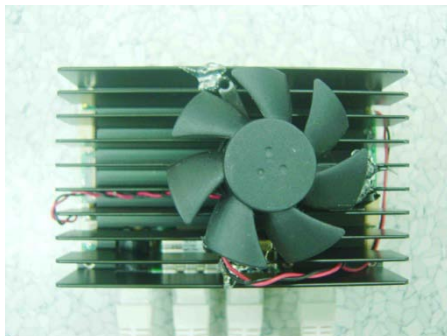
1. Chipset: Intel® I210 Ethernet * 4 & PCI-E Switch

Carrier Board :

1. UPC-PSDB00 A0.2
2. UPCRST00 A0.2

UPC-PLUS A0.4

1. CPU: Intel® Atom Processor E3950 / 1.60 GHz
2. BIOS Ver.:UPCPSM10
3. Chipset: Intel® Apollo Lake
4. Memory: 8GB / LPDDR4 / SAMSUNG K4F6E304HB-MGCJ
5. Storage: eMMC 64GB SandiskSDINBDA4-64G-V
6. Test Software: Windows 10 / Run PassMark Burn In Test 9.0 Pro (1011)
7. Adapter: FSP FSP060-DIBAN2 / 12V, 5A MAX
8. CPU Cooler:



Temperature variation operation test

Test Date: 04-13 ~ 15-2019

Test Site: AAEON QE Dept.

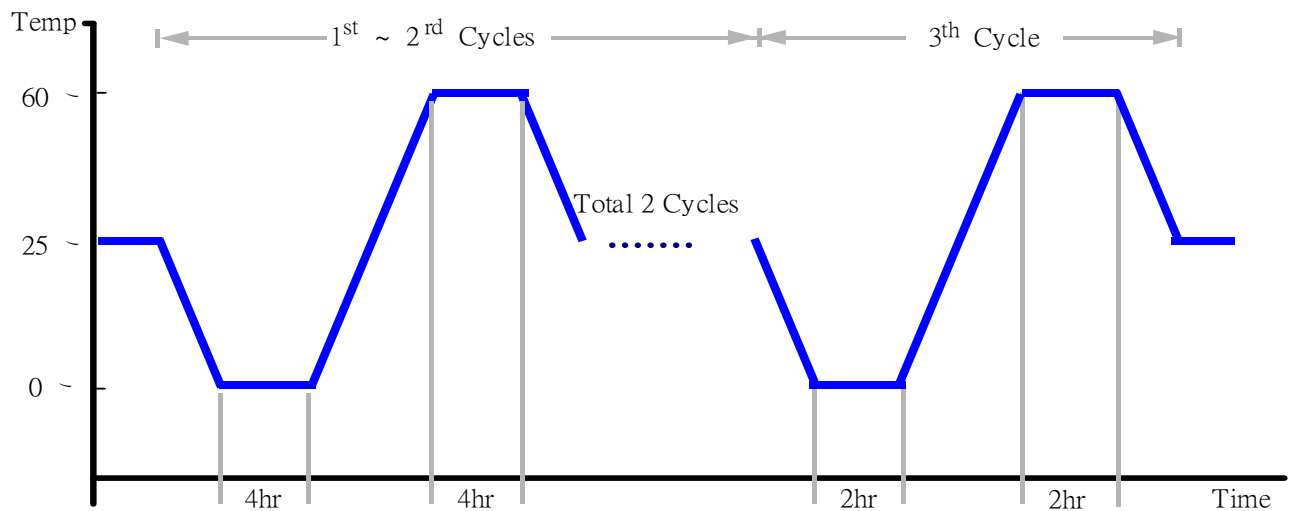
Test Standard: Refer to IEC 68-2-14 Testing procedures
Test N: Change of temperature Test

Test Equipment:

Programmable Temperature & Humidity Chamber: (K.SON. INS. TECH. CORP.)
Model: THS-D4H+-100
Date of Calibration: 11/08/18
Due date of Calibration: 11/07/19
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 (3rdcycle)
4. Temperature slope: 2°C/min
5. Test cycle: 3 cycles
6. Test Software: Windows 10 / Run PassMark Burn In Test 8.1 Pro (1011)
7. Test Environment Curve:



Test Result:

No issues were found during the temperature variation operation test.

Cold start and hot start test

Test Date: 04-15 ~ 16-2019

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.)

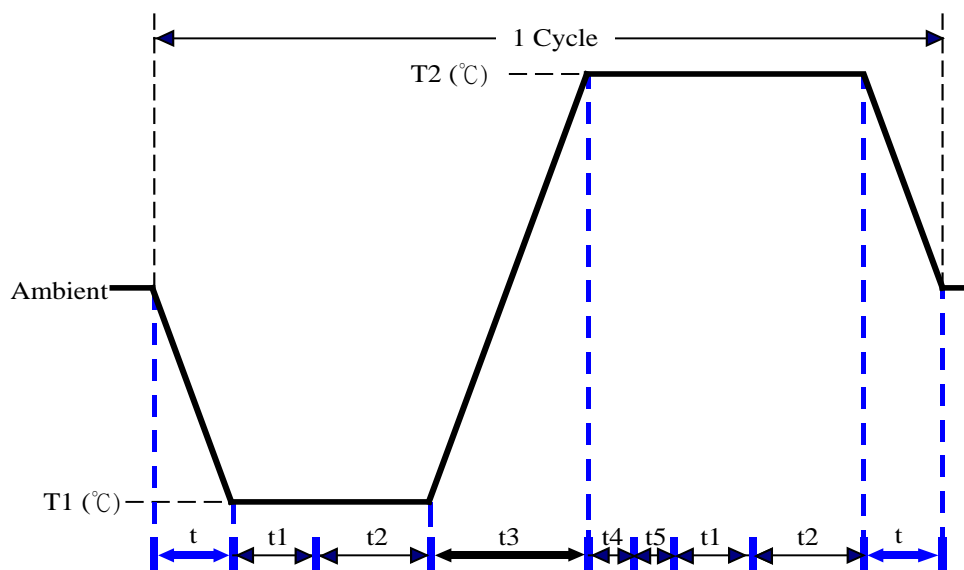
Model: THS-D4H+-100

Date of Calibration: 11/08/18

Due date of Calibration: 11/07/19

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 = temprature 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 10 Software restart test 2 times

Test Software: Windows 10

Test Result:

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

Humidity test

Test Date: 04-12 ~ 13-2019

Test Site: AAEON QE Dept.

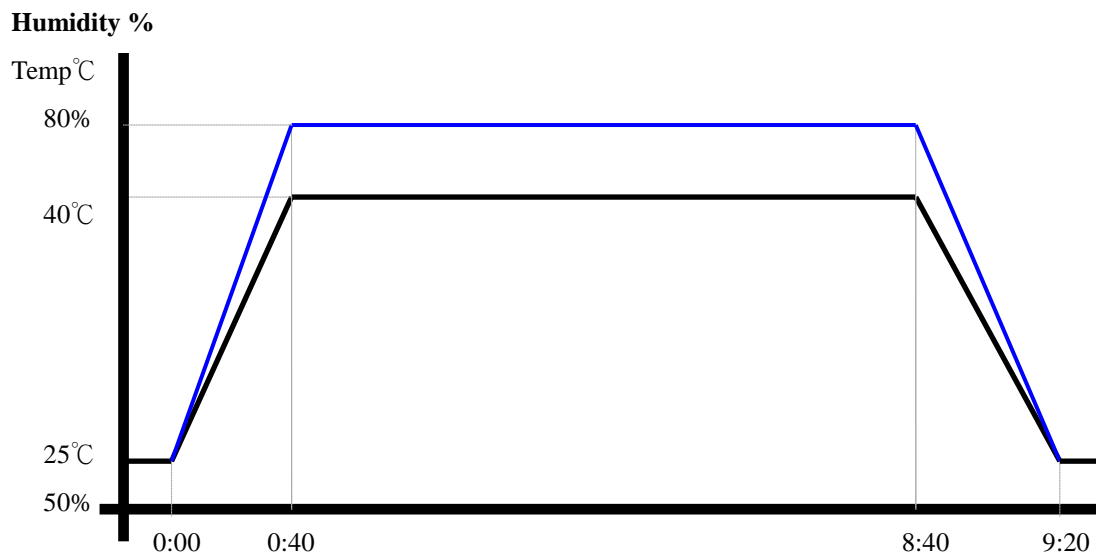
Test Standard: Refer to IEC 68-2-3 Testing procedures
Test Ca: Damp heat, steady state

Test Equipment:

Programmable Temperature & Humidity Chamber: (K.SON. INS. TECH. CORP.)
Model: THS-D4H+-100
Date of Calibration: 11/08/18
Due date of Calibration: 11/07/19
Serial Number: 2582

Testing Item:

1. Operation
2. Test Temperature: 40°C
3. Test Humidity: 80% RH
4. Test Times: 8Hrs
5. Test Software: Windows 10 / Run PassMark Burn In Test 8.1 Pro (1011)
6. Test Environment Curve:



Test Result:

No issues were found after the humidity operation test.