

TEST REPORT

Report No. : BJ-R240308102A-01-EN

Test Item : High Temperature Operational Test、
Low Temperature Operational Test、
High Temperature Storage Test、
Low Temperature Storage Test、
Thermal Shock Test、 Temperature Cycle Test、
High Temperature & High Humidity Test、
High Temperature & Low Humidity Test

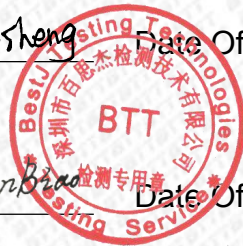
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Inspected Engineer: Lin Yuehui Date Of Approval: Apr. 09, 2024

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Authorized Signatory: Zhang Jianbiao Date Of Approval: Apr. 09, 2024



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1. Sample Information

Sample Name	A10 Industrial single board computer
Sample Model	A10-3588 (NA10011E)
Sample No.	BJ-R240308102A-3#~5#
Sample Size	/
Weight Of Sample	/
Sample Quantity	3 PCS
Manufacturer	/
Address	/
Sample Source	Commissioned units send sample
Inspection Type	Commissioning test
Sample Description	Sample appearance is good

2. Test Results

Test Items	Test Results
High Temperature Operational Test	During and after test, there was no obvious change in the appearance of the samples, and the function was normal.
Low Temperature Operational Test	During and after test, there was no obvious change in the appearance of the samples, and the function was normal.
High Temperature Storage Test	After test, there was no obvious change in the appearance of the samples, and the function was normal.
Low Temperature Storage Test	After test, there was no obvious change in the appearance of the samples, and the function was normal.
Thermal Shock Test	After test, there was no obvious change in the appearance of the samples, and the function was normal.
Temperature Cycle Test	After test, there was no obvious change in the appearance of the samples, and the function was normal.
High Temperature & High Humidity Test	During and after test, there was no obvious change in the appearance of the samples, and the function was normal.
High Temperature & Low Humidity Test	During and after test, there was no obvious change in the appearance of the samples, and the function was normal.

3.High Temperature Operational Test

3.1 Laboratory Environment

Ambient temperature: $25\pm 3^{\circ}\text{C}$ Relative humidity: $55\pm 20\%\text{RH}$

3.2 Test Information

Sample No.	Received Date	Date Of Test(s)
BJ-R240308102A- 3#~5#	Mar. 08, 2024	Mar. 09, 2024~ Mar. 13, 2024

3.3 Test Equipment

Test Equipment	Equipment Model	Calibration Date
Temperature & humidity test chamber	THS-C4C-100	Apr. 13, 2023

3.4 Test Standard

Test according to customer's requirement.

3.5 Test Conditions

Sample status: Power on

Temperature: $+80^{\circ}\text{C}$

Humidity: $50\pm 5\%\text{RH}$

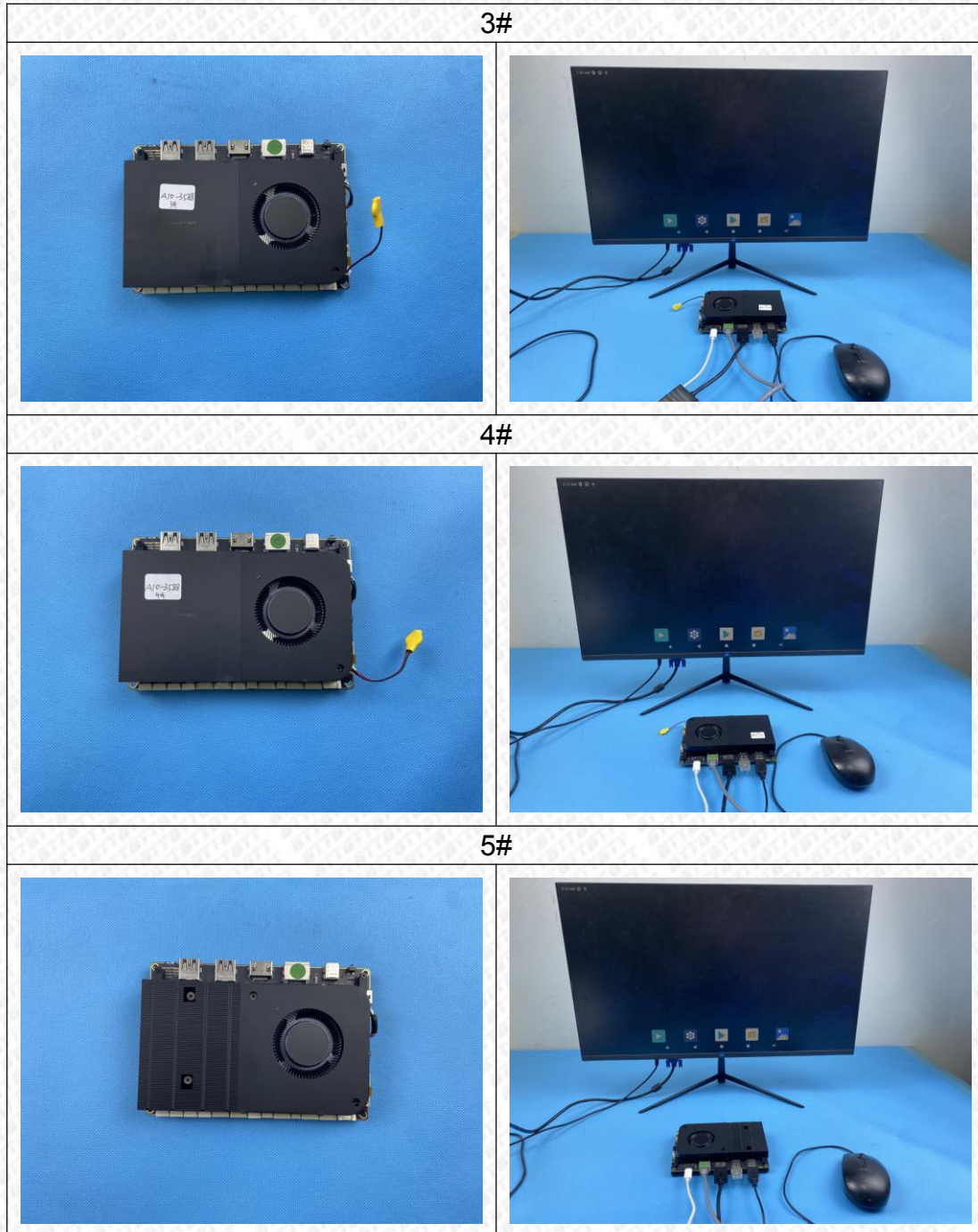
Test duration: 96H

Requirements:

- 1) During the test: the performance/function/appearance is normal.
- 2) After the test: the performance/function/appearance is normal after 2H recovery at room temperature.

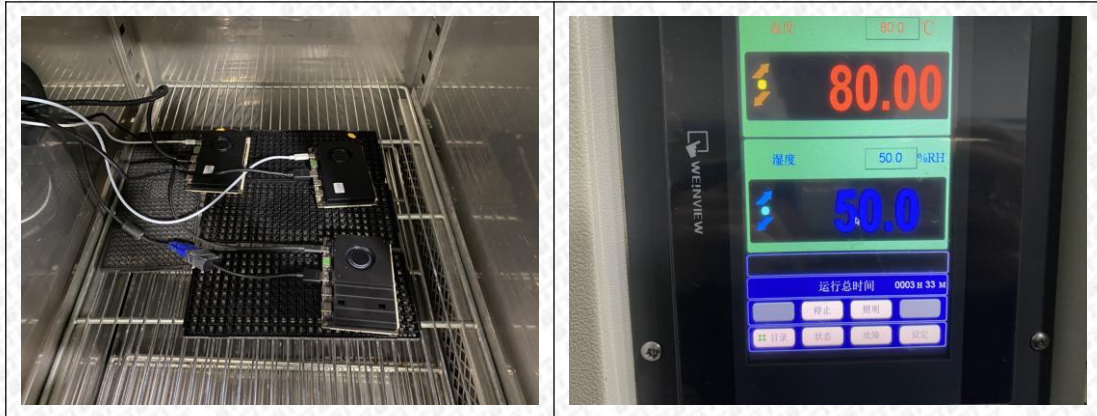
3.6 Test Photos

Before test



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Test setup



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After test

3#



4#



5#



4.Low Temperature Operational Test

4.1 Laboratory Environment

Ambient temperature: $25\pm 3^{\circ}\text{C}$ Relative humidity: $55\pm 20\%\text{RH}$

4.2 Test Information

Sample No.	Received Date	Date Of Test(s)
BJ-R240308102A- 3#~5#	Mar. 08, 2024	Mar. 13, 2024~ Mar. 17, 2024

4.3 Test Equipment

Test Equipment	Equipment Model	Calibration Date
Temperature & humidity test chamber	THS-C4C-100	Apr. 13, 2023

4.4 Test Standard

Test according to customer's requirement.

4.5 Test Conditions

Sample status: Power on

Temperature: -20°C

Test duration: 96H

Requirements:

- 1) During the test: the performance/function/appearance is normal.
- 2) After the test: the performance/function/appearance is normal after 2H recovery at room temperature.

4.6 Test Photos

Test setup



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After test

3#



4#



5#



5.High Temperature Storage Test

5.1 Laboratory Environment

Ambient temperature: $25\pm 3^{\circ}\text{C}$ Relative humidity: $55\pm 20\%\text{RH}$

5.2 Test Information

Sample No.	Received Date	Date Of Test(s)
BJ-R240308102A- 3#~5#	Mar. 08, 2024	Mar. 18, 2024~ Mar. 20, 2024

5.3 Test Equipment

Test Equipment	Equipment Model	Calibration Date
Temperature & humidity test chamber	THS-C4C-100	Apr. 13, 2023

5.4 Test Standard

Test according to customer's requirement.

5.5 Test Conditions

Sample status: Power off

Temperature: $+85^{\circ}\text{C}$

Humidity: $50\pm 5\%\text{RH}$

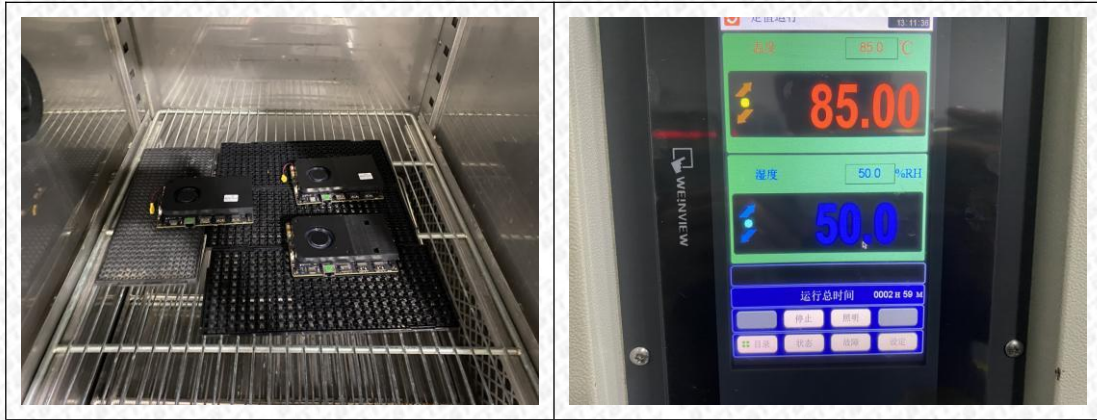
Test duration: 48H

Requirements:

After the test: the performance/function/appearance is normal after 2H recovery at room temperature.

5.6 Test Photos

Test setup



After test

3#



4#



5#



6.Low Temperature Storage Test

6.1 Laboratory Environment

Ambient temperature: $25\pm 3^{\circ}\text{C}$ Relative humidity: $55\pm 20\%\text{RH}$

6.2 Test Information

Sample No.	Received Date	Date Of Test(s)
BJ-R240308102A- 3#~5#	Mar. 08, 2024	Mar. 20, 2024~ Mar. 22, 2024

6.3 Test Equipment

Test Equipment	Equipment Model	Calibration Date
Temperature & humidity test chamber	THS-C4C-100	Apr. 13, 2023

6.4 Test Standard

Test according to customer's requirement.

6.5 Test Conditions

Sample status: Power off

Temperature: -40°C

Test duration: 48H

Requirements:

After the test: the performance/function/appearance is normal after 2H recovery at room temperature.

6.6 Test Photos

Test setup



After test

3#



4#



5#



7. Thermal Shock Test

7.1 Laboratory Environment

Ambient temperature: $25\pm 3^{\circ}\text{C}$ Relative humidity: $55\pm 20\%\text{RH}$

7.2 Test Information

Sample No.	Received Date	Date Of Test(s)
BJ-R240308102A- 3#~5#	Mar. 08, 2024	Mar. 23, 2024~ Mar. 25, 2024

7.3 Test Equipment

Test Equipment	Equipment Model	Calibration Date
Thermal shock test chamber	BE-CH-216D	Apr. 13, 2023

7.4 Test Standard

Test according to customer's requirement.

7.5 Test Conditions

Sample status: Power off

Temperature: $+85^{\circ}\text{C}$, -40°C

Conversion time: 3 min

Dwell time: 30min for high temperature and low temperature.

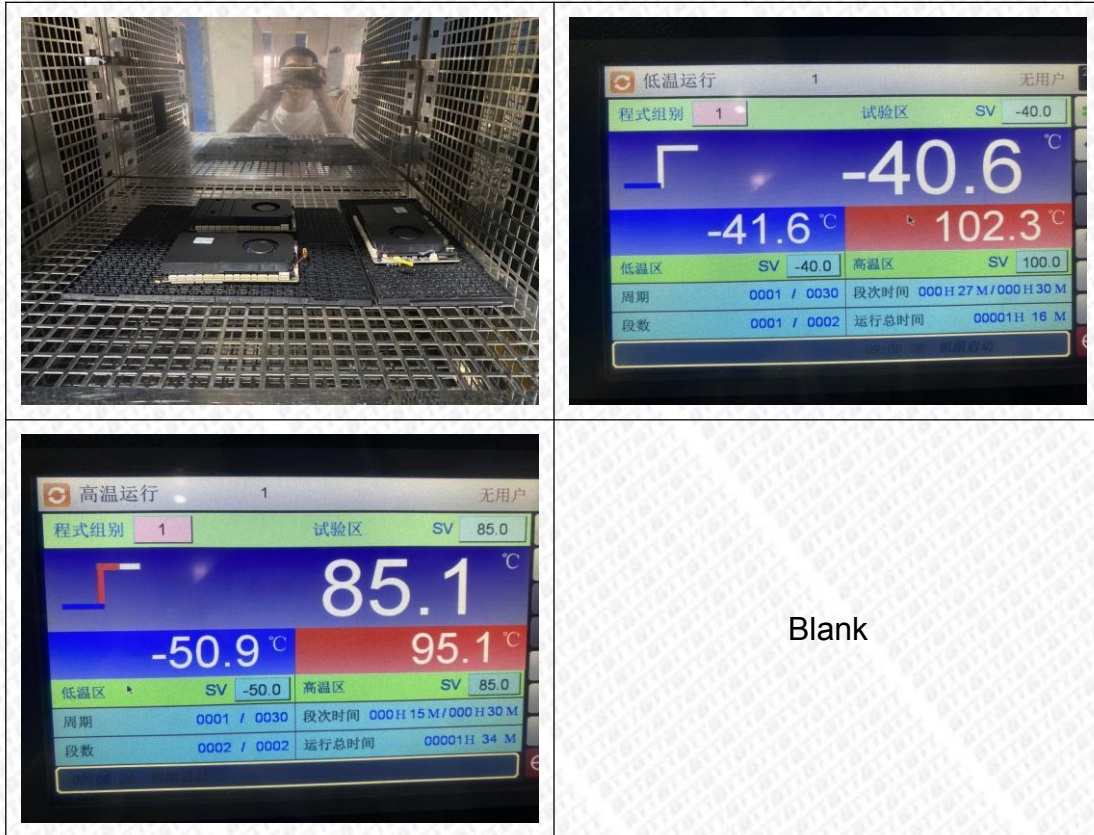
Test cycles: 30 cycles

Requirements:

After the test: the performance/function/appearance is normal after 2H recovery at room temperature.

7.6 Test Photos

Test setup



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After test

3#



4#



5#



8. Temperature Cycle Test

8.1 Laboratory Environment

Ambient temperature: $25\pm 3^{\circ}\text{C}$ Relative humidity: $55\pm 20\%\text{RH}$

8.2 Test Information

Sample No.	Received Date	Date Of Test(s)
BJ-R240308102A- 3#~5#	Mar. 08, 2024	Mar. 25, 2024~ Mar. 27, 2024

8.3 Test Equipment

Test Equipment	Equipment Model	Calibration Date
Temperature & humidity test chamber	THS-C4C-100	Apr. 13, 2023

8.4 Test Standard

Test according to customer's requirement.

8.5 Test Conditions

Sample status: Power off

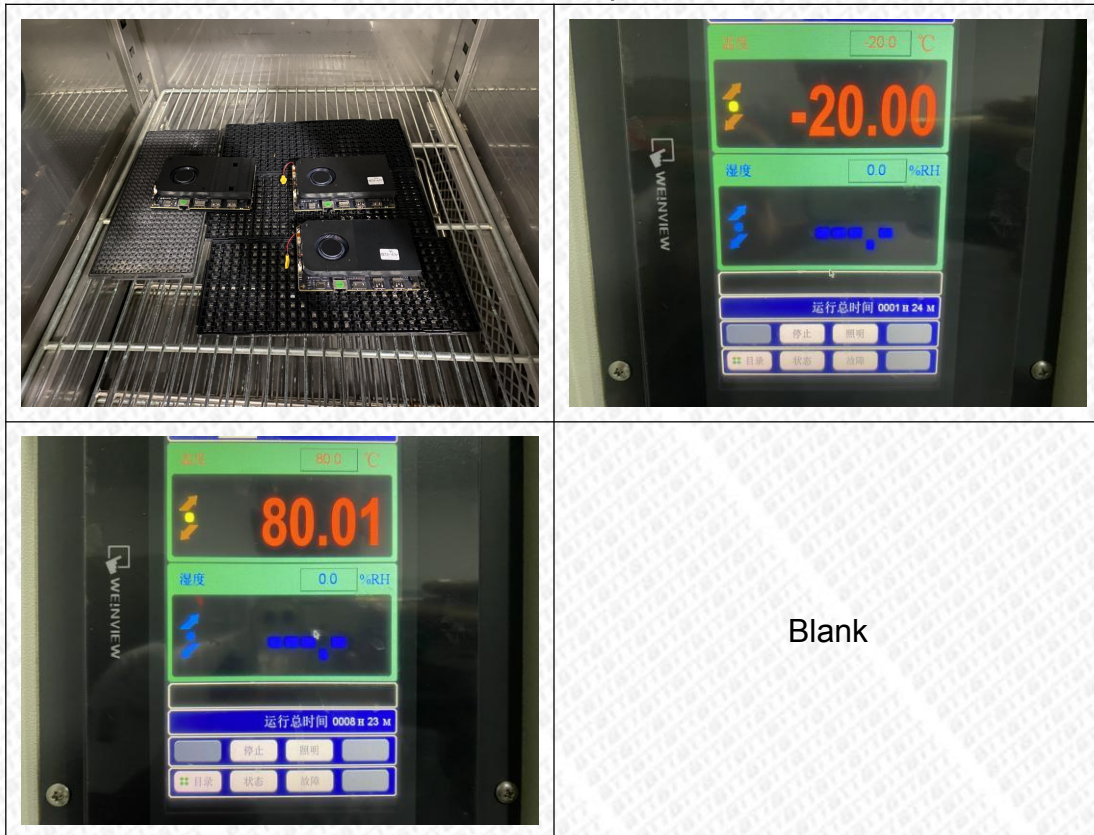
-20°C (1H) ← R.T. (10min) → 80°C (1H), 5cycles.

Requirements:

After the test: the performance/function/appearance is normal after 2H recovery at room temperature.

8.6 Test Photos

Test setup



After test

3#



4#



5#



9.High Temperature & High Humidity Test

9.1 Laboratory Environment

Ambient temperature: $25\pm 3^{\circ}\text{C}$ Relative humidity: $55\pm 20\%\text{RH}$

9.2 Test Information

Sample No.	Received Date	Date Of Test(s)
BJ-R240308102A- 3#~5#	Mar. 08, 2024	Mar. 27, 2024~ Mar. 31, 2024

9.3 Test Equipment

Test Equipment	Equipment Model	Calibration Date
Temperature & humidity test chamber	THS-C4C-100	Apr. 13, 2023

9.4 Test Standard

Test according to customer's requirement.

9.5 Test Conditions

Sample status: Power on

Temperature: $+80^{\circ}\text{C}$

Humidity: $95\%\text{RH}$

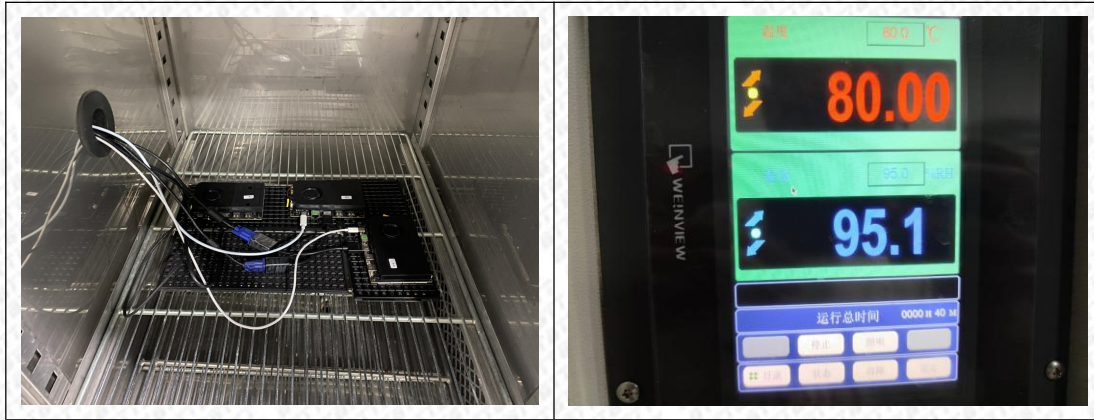
Test duration: 96H

Requirements:

- 1) During the test: the performance/function/appearance is normal.
- 2) After the test: the performance/function/appearance is normal after 2H recovery at room temperature.

9.6 Test Photos

Test setup



After test

3#



4#



5#



10.High Temperature & Low Humidity Test

10.1 Laboratory Environment

Ambient temperature: $25\pm 3^{\circ}\text{C}$ Relative humidity: $55\pm 20\%\text{RH}$

10.2 Test Information

Sample No.	Received Date	Date Of Test(s)
BJ-R240308102A-3#~5#	Mar. 08, 2024	Apr. 01, 2024~ Apr. 05, 2024

10.3 Test Equipment

Test Equipment	Equipment Model	Calibration Date
Temperature & humidity test chamber	THS-C4C-100	Apr. 13, 2023

10.4 Test Standard

Test according to customer's requirement.

10.5 Test Conditions

Sample status: Power on

Temperature: $+80^{\circ}\text{C}$

Humidity: 5%RH

Test duration: 96H

Requirements:

- 1) During the test: the performance/function/appearance is normal.
- 2) After the test: the performance/function/appearance is normal after 2H recovery at room temperature.

10.6 Test Photos

Test setup



After test

3#



4#



5#



End of report