

Test Report



中国认可
国际互认
检测
TESTING
CNAS L17231

Client Qingdao MicroSense Intelligent Technology Co.,Ltd.
Address Room 803,Floor 8, Building F, Innovation Park II, No. 1, Keyuan Wei 1st Road, Laoshan District, Qingdao, Shandong, China
Tester Weifang Goertek Microelectronics Co.,Ltd Testing Lab
Address No.268, Dongfang Road, Hi-Tech Industry Development Zone, Weifang, Shandong, China
Test Site Reliability laboratory, first floor, complex building

Sample Informations

Sample 3D TOF CAMERA
Model NYX650
Status of Sample In good condition
Date of Receival 2024.06.13
Test Date 2024.06.13~2024.06.26

Test Item Damp heat, steady state Test,Damp heat,cyclic,Cold,Change of temperature,ESD,Free fall *,Shock

Test Result See the body of the report

Remark The test basis and test items marked "*" are not within the scope of CNAS accreditation of our laboratory.

Writer/Date 王新芳 2024.06.27

I undertake to be responsible for the accuracy of the reported data.

Reviewer/Date 徐臻 2024.06.27

I promise to be responsible for the accuracy and effectiveness of the reported data.

Approver/Date 张明华 2024.06.27

I promise to be responsible for the accuracy and effectiveness of the reported data.

Report No.: 240606LR005

Test Report

The following is the body of the report:

Test Item Number 240606LR005-00-00

1. Message of the Sample

Sample Quantity 3

Sample No. 1#~3#

2. Test Method

GB/T 2423.3-2016 Environmental testing—Part 2: Testing method—Test Cab: Damp heat, steady state

3. Test Requipment

Test Item Damp heat, steady state Test

Test Condition 60°C 90%RH 120H, Sample work with voltage of 12V

4. Test Process

Test Equipment M-YB-0600 Temperature&Humidity Chamber Model:EW0440S

Calibration Date 2023.08.27-2024.08.26

Environmental Conditions Temperature:22.3°C, Humidity:46.8%RH, Atmospheric Pressure:100.1kPa

Test By Pengfei Wang

Test Date 2024.06.16 20:46:00 - 2024.06.21 23:11:00

Test Report

5. Test Result

There was no obvious abnormality in the appearance of the samples before and after the test, and the depth image could be displayed normally when the samples were powered on.

6. Test Photos

Damp heat, steady state Test



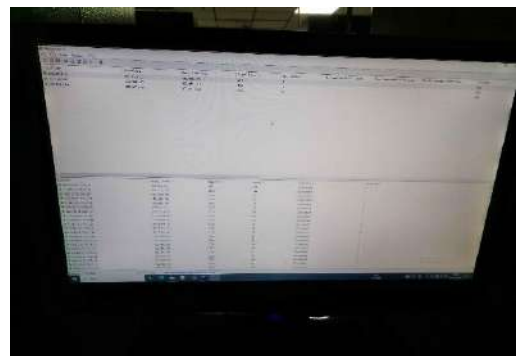
Obverse photo before test



Reverse photo before test



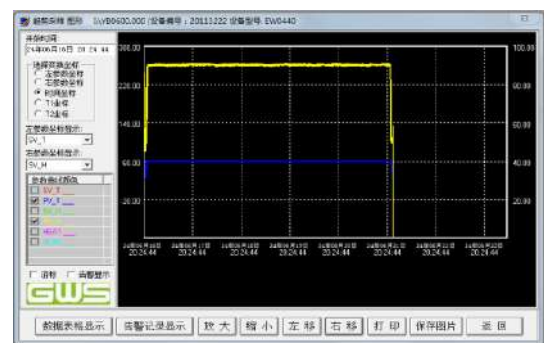
Sample placement photo



Sample work monitoring photo



Test program setup



Trial curve

Report No.: 240606LR005

Test Report



Obverse photo after test



Reverse photo after test

Test Item Number 240606LR005-01-00

1. Message of the Sample

Sample Quantity 3

Sample No. 4#~6#

2. Test Method

GB/T 2423.4-2008 Environmental testing for electric and electronic products ——Part2:Test methods
Test Db:Damp heat,cyclic(12 h+12h cycle)

3. Test Requirement

Test Item Damp heat, cyclic Test

Test Condition 25°C 95%RH/9H~55°C 95%RH/9H,change time 3hours,3 cycles,Sample work with voltage of 12V

Report No.: 240606LR005

Test Report

4. Test Process

Test Equipment M-YB-0600 Temperature&Humidity Chamber Model:EW0440S
Calibration Date 2023.08.27-2024.08.26
Environmental Conditions Temperature:23.1 °C ,Humidity:46.5%RH,Atmospheric Pressure:100.1kPa
Test By Pengfei Wang
Test Date 2024.06.13 13:45:00 - 2024.06.16 13:48:00

5. Test Result

There was no obvious abnormality in the appearance of the samples before and after the test, and the depth image could be displayed normally when the samples were powered on.

6. Test Photos

Damp heat, cyclic Test



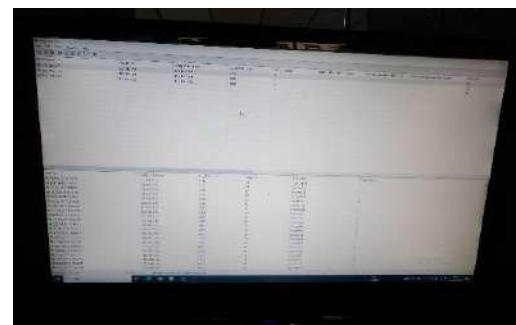
Obverse photo before test



Reverse photo before test



Sample placement photo



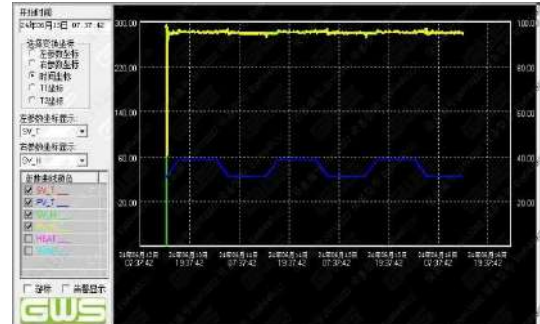
Sample work monitoring photo

Report No.: 240606LR005

Test Report



Test program setup



Trial curve



Obverse photo after test



Reverse photo after test

Test Item Number 240606LR005-02-00

1.Message of the Sample

Sample Quantity 3

Sample No. 7#~9#

2.Test Method

GB/T 2423.3-2016 Environmental testing—Part 2:Testing method—Test Cab:Damp heat,steady state

Report No.: 240606LR005

Test Report

3. Test Requirement

Test Item Damp heat, steady state Test
Test Condition 70°C 90%RH, Storage 120H

4. Test Process

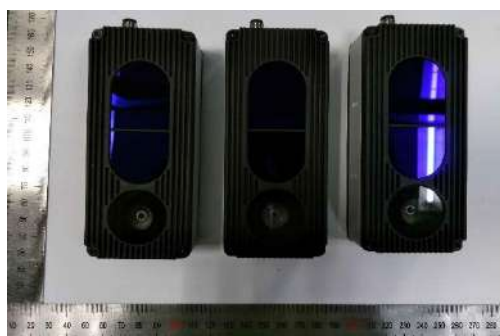
Test Equipment M-YB-0104 Temperature&Humidity Chamber Model:EW0440
Calibration Date 2023.08.26-2024.08.25
Environmental Conditions Temperature:22.6°C, Humidity:51.9%RH, Atmospheric Pressure:99.7kPa
Test By Jie Zhang
Test Date 2024.06.14 20:12:00 - 2024.06.19 22:40:00

5. Test Result

There was no obvious abnormality in the appearance of the samples before and after the test, and the depth image could be displayed normally when the samples were powered on.

6. Test Photos

Damp heat, steady state Test



Obverse photo before test



Reverse photo before test

Test Report



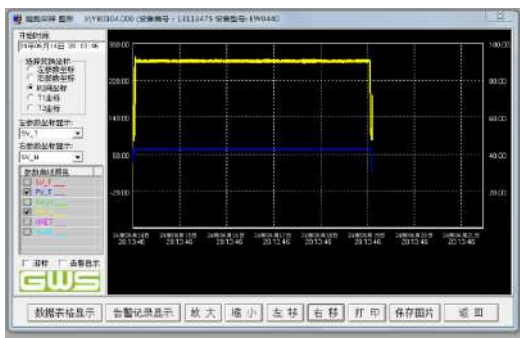
Sample placement photo

程序显示 程序号: 18 STEP号 0

STEP	小时:分钟	%℃	温度℃	湿度%RH	开关
0	0 : 1.0	11	+25.0	50.0	00000000
1	0 : 45.0	00	+70.0	50.0	00000000
2	0 : 30.0	00	+70.0	90.0	00000000
3	120 : 0.0	00	+70.0	90.0	00000000
4	0 : 30.0	00	+70.0	50.0	00000000
5	0 : 45.0	00	+25.0	50.0	00000000

周期 详细 << >> 结束

Test program setup



Trial curve



Obverse photo after test



Reverse photo after test

Report No.: 240606LR005

Test Report

Test Item Number 240606LR005-03-00

1.Message of the Sample

Sample Quantity 3

Sample No. 10#~12#

2.Test Method

GB/T 2423.1-2008 Environmental testing for electric and electronic products —Part2:Test methods—
Tests A: Cold

3.Test Requirement

Test Item Cold Test

Test Condition -30°C, Storage 120H

4.Test Process

Test Equipment M-YB-0093 Temperature Chamber Model:MC-711

Calibration Date 2024.04.27-2025.04.26

Environmental Conditions Temperature:23.1°C, Humidity:46.5%RH, Atmospheric Pressure:100.1kPa

Test By Pengfei Wang

Test Date 2024.06.13 13:37:00 - 2024.06.18 15:55:00

5.Test Result

There was no obvious abnormality in the appearance of the samples before and after the test, and the depth image could be displayed normally when the samples were powered on.

Test Report

6.Test Photos

Cold Test



Obverse photo before test



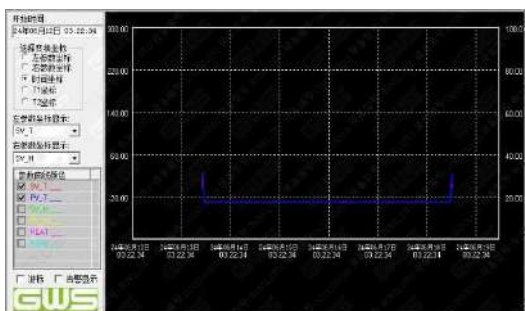
Reverse photo before test



Sample placement photo



Test program setup



Trial curve

Report No.: 240606LR005

Test Report



Obverse photo after test



Reverse photo after test

Test Item Number 240606LR005-04-00

1.Message of the Sample

Sample Quantity 3

Sample No. 13#~15#

2.Test Method

GB/T 2423.22-2012 Environmental testing —Part2:Test methods —Test N:Change of temperature Test Na

3.Test Requipment

Test Item Change of temperature Test

Test Condition High Temp:85℃;Low Temp:-40℃;Each step duration for 30min;Transition : < 5 min;Cycle:45

4.Test Process

Test Equipment M-YB-0012 Thermal Shock Test Chamber Model:TS130

Calibration Date 2024.04.27-2025.04.26

Test Report

Environmental Conditions Temperature:23.1℃,Humidity:46.5%RH,Atmospheric Pressure:100.1kPa

Test By Jie Zhang

Test Date 2024.06.13 23:13:00 - 2024.06.15 20:13:00

5.Test Result

There was no obvious abnormality in the appearance of the samples before and after the test, and the depth image could be displayed normally when the samples were powered on.

6.Test Photos

Change of temperature Test



Obverse photo before test

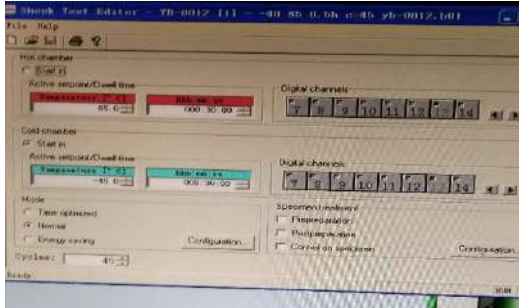


Reverse photo before test

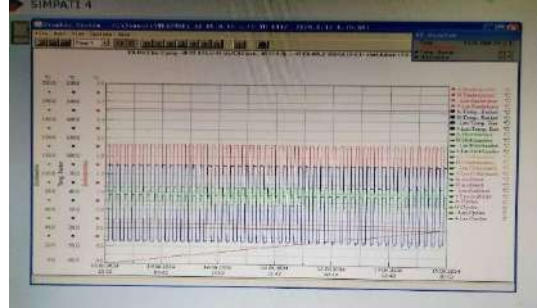


photo of test equipment

Test Report



Test program setup



Trial curve



Obverse photo after test



Reverse photo after test

Test Item Number 240606LR005-05-00

1.Message of the Sample

Sample Quantity 4

Sample No. 16#~19#

2.Test Method

GB/T 17626.2-2018 Electromagnetic compatibility—Testing and measurement techniques—
Electrostatic discharge immunity test

Test Report

3. Test Requirement

Test Item	Electrostatic discharge immunity Test
Test Condition	Contact discharge: discharge voltage: $\pm 4\text{kV}$, discharge counts: 10, discharge position: outer shell, Sample ungrounded and work with voltage of 12V; Air discharge: discharge voltage: $\pm 8\text{kV}$, discharge counts: 10, discharge position: shell gap, Sample ungrounded and work with voltage of 12V.

4. Test Process

Test Equipment	M-DG-0457 Electrostatic discharge tester Model: ESS-B3011>-30R
Calibration Date	2023.08.10-2024.08.09
Environmental Conditions	Temperature: 22°C, Humidity: 50%RH, Atmospheric Pressure: 100.1kPa
Test By	Pengfei Wang
Test Date	2024.06.13 11:00:00 - 2024.06.13 15:00:00

5. Test Result

There was no obvious abnormality in the appearance of the samples before and after the test, and the depth image could be displayed normally when the samples were powered on.

6. Test Photos

Electrostatic discharge immunity Test



Obverse photo before test



Reverse photo before test

Test Report



Test layout



Test setup



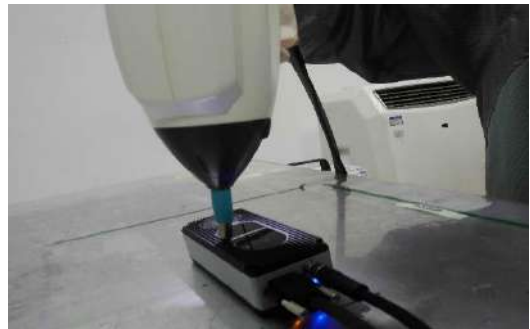
Contact discharge setting



Contact discharge process



Air discharge setting



Air discharge process



Obverse photo after test



Reverse photo after test

Report No.: 240606LR005

Test Report

Test Item Number 240606LR005-06-00

1.Message of the Sample

Sample Quantity 3

Sample No. 20#~22#

2.Test Method

GB/T 2423.7-2018 Environmental testing—Part 2:Test methods—Test Ec:Rough handling shocks,primarily for equipment-type specimens

3.Test Requirement

Test Item Free fall*

Test Condition 76cm,One corner, three edges and five sides(do not do the face with the plug)

4.Test Process

Test Equipment M-YC-0033 Single drop frame Model:ZZCSY

Calibration Date 2023.10.10-2024.10.09

Environmental Conditions Temperature:22.8°C ,Humidity:46.5%RH,Atmospheric Pressure:100.5kPa

Test By Jie Zhang

Test Date 2024.06.25 16:40:00 - 2024.06.25 17:40:00

5.Test Result

There was no obvious abnormality in the appearance of the samples before and after the test, and the depth image could be displayed normally when the samples were powered on.

Test Report

6. Test Photos

Free fall Test



Obverse photo before test



Reverse photo before test



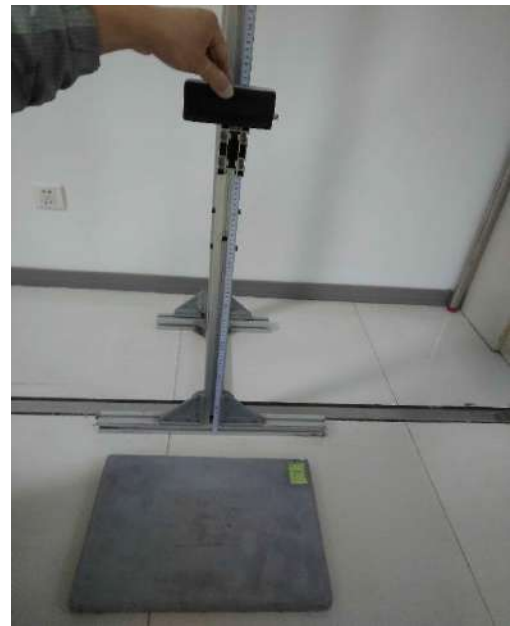
Drop height



Drop surface



Drop process 1



Drop process 2

Report No.: 240606LR005

Test Report



Obverse photo after test



Reverse photo after test

Test Item Number 240606LR005-07-00

1.Message of the Sample

Sample Quantity 3

Sample No. 23#~25#

2.Test Method

GB/T 2423.5-2019 Environmental testing—Part 2:Test methods—Test Ea and guidance: Shock

3.Test Requirement

Test Item Shock

Test Condition 6axis($\pm X, \pm Y, \pm Z$), 50g, 11ms, Half sine, No Package 3 times

4.Test Process

Test Equipment M-YC-0185 Electric vibration table Model:DC-600-6

Calibration Date 2023.09.20-2024.09.19

Test Report

Environmental Conditions Temperature:22.6°C, Humidity:51.3% RH, Atmospheric Pressure:99.5kPa

Test By Qingpeng Xin

Test Date 2024.06.20 16:00:00 - 2024.06.20 17:00:00

5. Test Result

There was no obvious abnormality in the appearance of the samples before and after the test, and the depth image could be displayed normally when the samples were powered on.

6. Test Photos

Shock Test



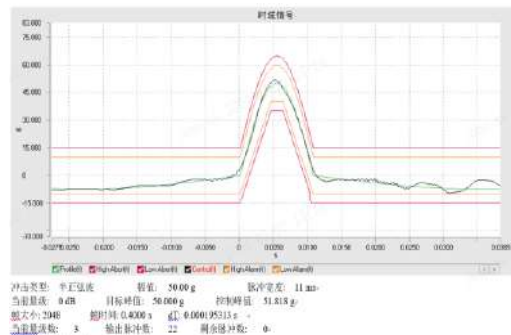
Obverse photo before test



Reverse photo before test



Sample placement



trial curve

Test Report



Obverse photo after test



Reverse photo after test

*****End of Report*****

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