



*Industrial Computing Platform Partner*

# **OPD-215E**

## **Environment Test Report**

**Report NO: 08P020018**

Issued by: **Sean Hsu** / **09/12/2008**  
\_\_\_\_\_  
Test Engineer Date

Reviewed by: **Wenyuan Yang** / **09/12/2008**  
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Manager Date

# Test item list

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Num	Item	Spec
1.	Mounting Chassis:	OPD-215E
	1.LCD	TFT LCD.15". AUO G150XG03
	2. Inverter	HWA YOUN QF133V1.15IS(4LAMPS).
	3.AD Board	BIEN TECHNOLOGY CORPORATION / BT-R15LDNQ
	4.Touch Panel Controller	eGalax_eMPLA / ETP-S5000REGG-00
2.	Power Supply	EDACPOWER ELEC. EA-1050A-120 O/P:12V/5A

# Temperature rise test

**Test Date:** 09-08-2008

**Test Product:** OPD-215E

**Test Site:** AAEON QA Internal Lab.

**Test Standard:** Reference EN 61131-2(94), UL508 (94)

**Temperature Measurement:**

40 Channel Thermal Recorder:

YOKOGAWA Inc,

Model: DA100-13-1D

Date of Calibration: 12/14/05

Serial Number: 12A323190

**Test Condition:**

Ambient temperature: 40dC

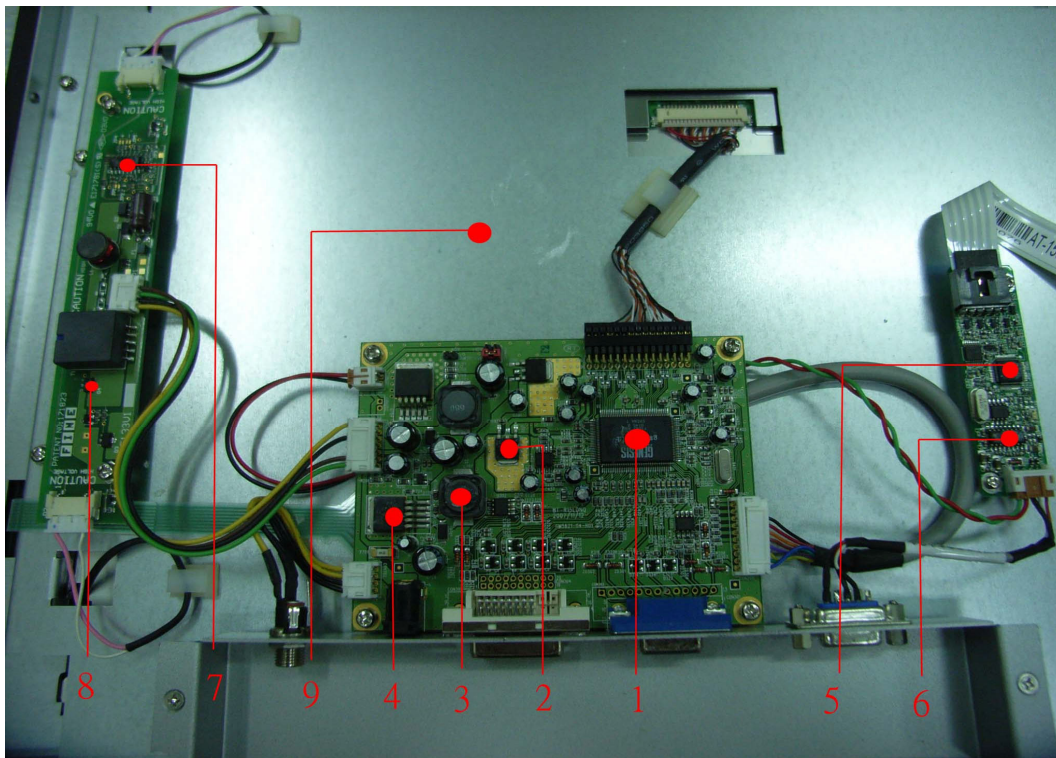
Continuous running till thermal stability (within less than 1°C)

**Test Software:**

Run Media Player

**Terminal Recorder:**

Measuring Thermal Couple Position :



# Temperature rise test

**Thermal profile data:**

**OPD-215E**

Point	Temp. Stage(°C)	Spec	50
<b>AD Board</b>			
1. U401- IC SCALING GENESIS GM5621-LF-AA		100	91.5
2. U702- IC VOLTAGE REGULATOR AP1117D18LA1.8V 1A		125	91.6
3. L702- COIL SCDS125T-680M-N		85	75.4
4. U700- IC VOLTAGE REGULATOR KP1500-ADJ		125	74.9
<b>Touch Panel Controller</b>			
5. U1-MC68HC908SR12CFA		85	66.5
6. U3-Enhanced RS-232 Line Drivers Sipex SP232ACN		70	68.4
<b>Inverter</b>			
7. Inverter - IC1		85	84.8
8. Inverter - Q2		150	78.2
9. Control Box External Surface		N/A	66.1
10. Chamber Air Temperature		N/A	49.4
<b>The description in red states which temperature is over the specification of the device.</b>			

**Sample Configuration & Quantity Under Test:**

Quantity: 1 (OPD-215E)

**Test Result:**

No problem was found during the temperature cycle operation test.

# Temperature cycle test

**Test Date:** 09-01~03-2008

**Test Product:** OPD-215E

**Test Site:** AAEON QA Internal Lab.

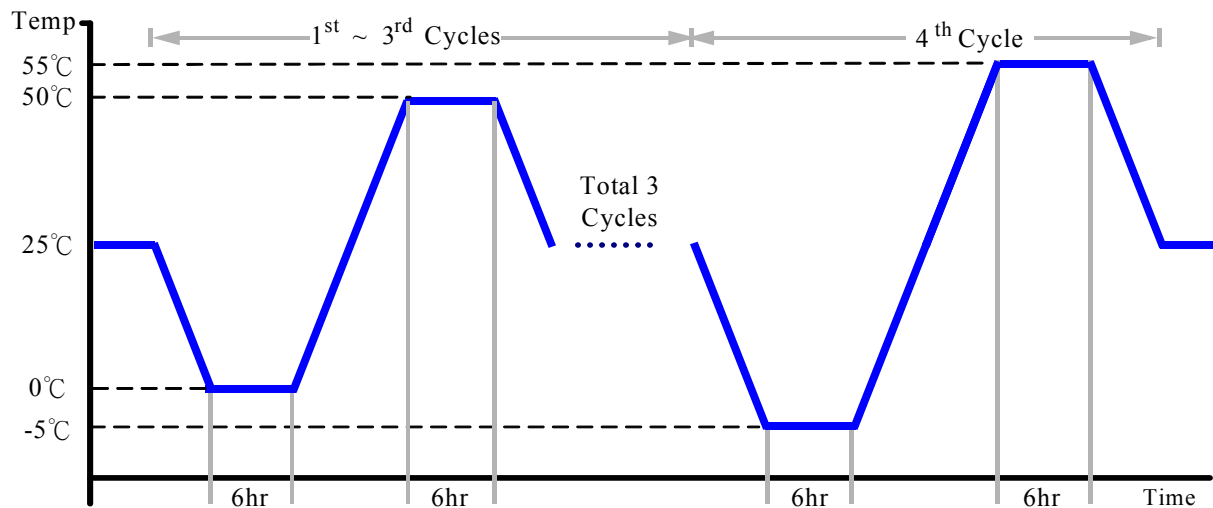
**Test Standard:** Reference IEC68-2-14 Testing procedures  
Test N: Change of temperature Test

**Test Equipment:**

Programmable Temperature & Humidity Chamber  
K.SON. INS. TECH. CORP.  
Model: THS-D4L+-100  
Date of Calibration: 11/06/07  
Serial Number: 2582

**Test Condition:**

1. Test Low Temperature: 0°C (1~3 cycles)  
-5°C (4<sup>th</sup> cycle)
2. Test High Temperature: 50°C (1~3 cycles)  
55°C (4<sup>th</sup> cycle)
3. Test dwell time: 6Hrs
4. Temperature slope: 2°C/min
5. Test cycle: 4 cycles
6. Windows XP / Run PassMark Burn In Test 5.0
7. Test Environment Curve:



**Sample Configuration & Quantity Under Test:**

Quantity: 1 (OPD-215E)

**Test Result:**

No problem was found during the temperature cycle operation test.

# High temperature storage test

**Test Date:** 09-04~05-2008

**Test Product:** OPD-215E

**Test Site:** AAEON QA Internal Lab.

**Test Standard:** Reference IEC 68-2-2 Testing procedures  
Test Bb: Dry Heat Test (Non-operation)

**Test Equipment:**

Programmable Temperature & Humidity Chamber  
K.SON. INS. TECH. CORP.

Model: THS-D4L+-100

Date of Calibration: 11/06/07

Serial Number: 2582

**Testing Item:**

1. Test Temperature: 60°C
2. Test Times: 48Hrs
3. Test Software: Windows XP / Run PassMark Burn In Test 5.0
4. Test Environment Curve:



**Sample Configuration & Quantity Under Test:**

Quantity: 1 (OPD-215E)

**Test Result:**

No problem was found after the high temperature storage test.

**Test Date:** 09-05~07-2008

**Test Product:** OPD-215E

**Test Site:** AAEON QA Internal Lab.

**Test Standard:** Reference IEC 68-2-1  
Testing procedures Test Ab: Cold Test (Non-operation)

**Test Equipment:**

Programmable Temperature & Humidity Chamber

K.SON. INS. TECH. CORP.

Model: THS-D4L+-100

Date of Calibration: 11/06/07

Serial Number: 2582

**Testing Item:**

1. Test Temperature: -20°C
2. Test Times: 48Hrs
3. Test Software: Windows XP / Run PassMark Burn In Test 5.0
4. Test Environment Curve:



**Sample Configuration & Quantity Under Test:**

Quantity: 1 (OPD-215E)

**Test Result:**

No problem was found after the low temperature storage test.

# Humidity test

**Test Date:** 09-08~09-2008

**Test Product:** OPD-215E

**Test Site:** AAEON QA Internal Lab.

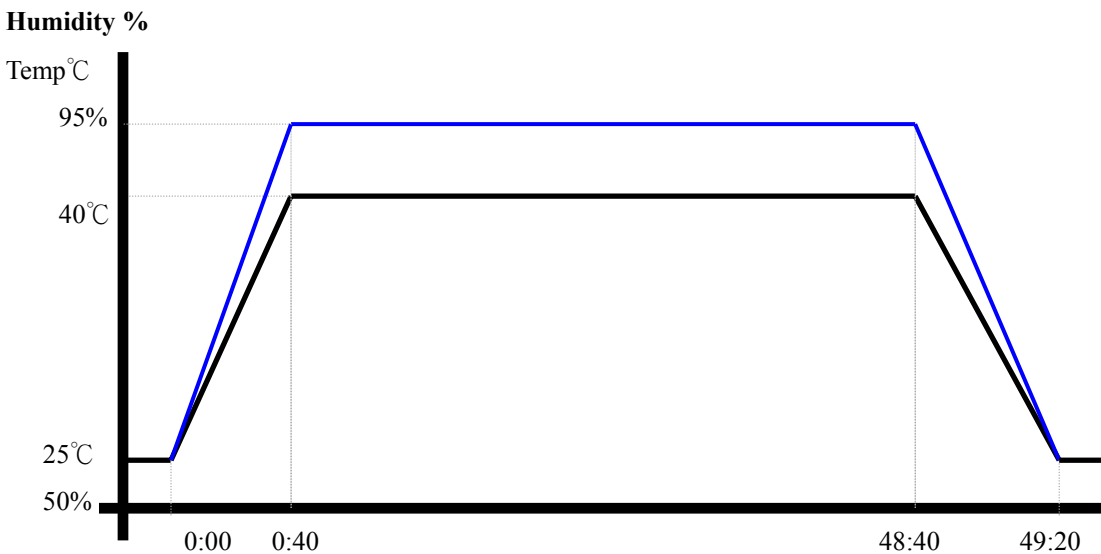
**Test Standard:** Reference IEC 68-2-3 Testing procedures  
Test Ca: Damp heat, steady state (Non-operation)

**Test Equipment:**

Programmable Temperature & Humidity Chamber  
K.SON. INS. TECH. CORP.  
Model: THS-D4L+-100  
Date of Calibration: 11/06/07  
Serial Number: 2582

**Testing Item:**

1. Test Temperature: 40°C
2. Test Humidity: 95%RH
3. Test Times: 48Hrs
4. Test Software: Windows XP / Run PassMark Burn In Test 5.0
5. Test Environment Curve:



**Sample Configuration & Quantity Under Test:**

Quantity: 1 (OPD-215E)

**Test Result:**

No problem was found after the humidity test.



# Cold start and hot start test

**Test Date:** 09-03~04-2008

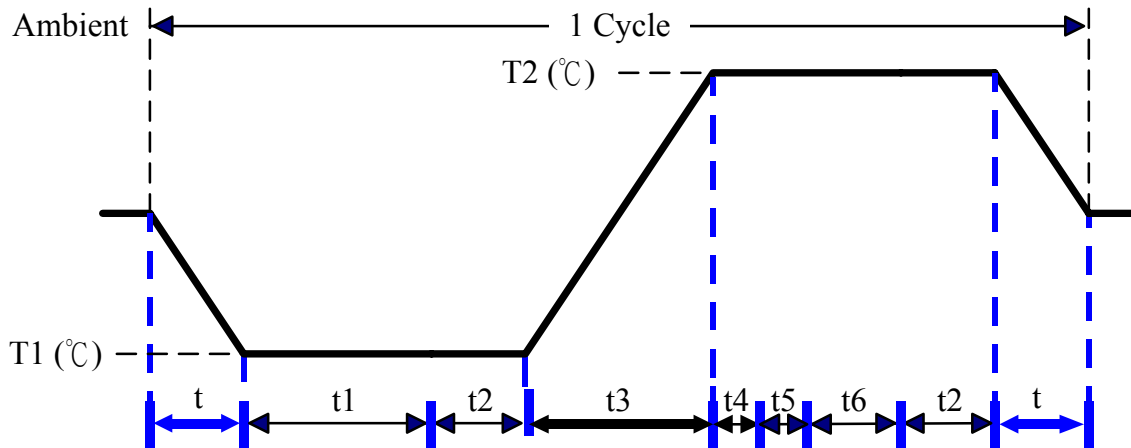
**Test Site:** AAEON QA Internal Lab.

**Test Product:** OPD-215E

**Test Standard:** Reference 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-D4L+-100  
Date of Calibration: 11/06/07  
Serial Number: 2582

**Test Condition:**



Parameters	Description
T1	-5°C
T2	55°C
t1	4 hrs
t2, t6	2 hrs
t4, t5	1hrs
t, t3	2°C/min
n (Cycle)	1

t = temprature slope  
t , t1, t6: Power Off  
t2: Power on/off test 10 times (on 2 min / off 5min)  
t3, t4: Run Media Player  
t5: Win XP Software restart test 3 times  
Test Software:Media Player

**Test Result:**

- a. No problem was found during the cold start test.
- b. No problem was found during the hot start test.