ONYX-175

With HDD

Environment Test Report

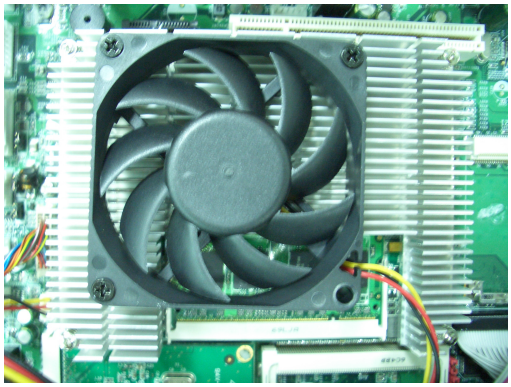
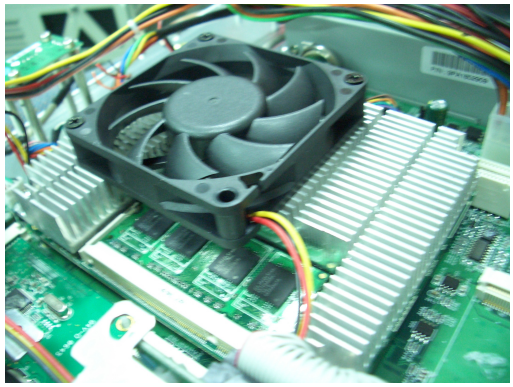
Report NO: 07P020007

Issued by:	Sean Hsu	/	*02/12/2007*
	Test Engineer		**Date**
Reviewed by:	Wenyuan Yang	/	*02/12/2007*
	Manager		**Date**

Test item list

Num	Item	Spec
1.	**Low Noise Medical Station**:	ONYX-175
	1.LCD	TFT LCD.17" CPT CLAA170EA07 / 4 LAMP
	2.Power	FSP 180-50MP
	3. Inverter	HYUNDAI 17" TFT LCD. (4LAMPS) QF132V1.16(S)
2.	CPU Board:	COM-945 Rev: A1.0
	1. BIOS Ver.	ONYX-175 BIOS Ver.0.3
	2.CPU	Genuine Intel Core 2 Duo / T7200 / 2.0GHz
	3.Memory	DSL 512MB ELPIDA E5108AGBG-6E-E (DDRII-667)
	4.I/O Board	T070 Ver: 1.0
	4. HDD (SATA)	FUJITSU MHV2040BH / 40GB
	5.Test Software	Windows XP
	6.DVD-ROM	TEAC DV-28SL-R93

Cooler

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Temperature cycle test

Test Date: 02-06~08-2007

Test Product: ONYX-175

Test Site: AAEON QA Internal Lab.

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

Test Equipment:

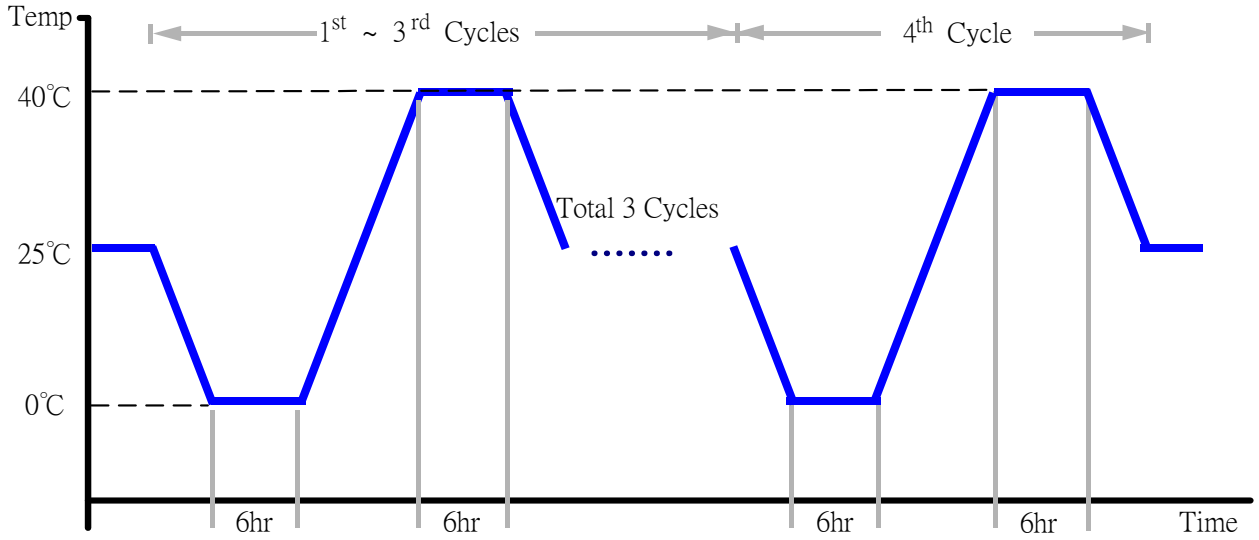
Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: THS-D4L+-100
Date of Calibration: 11/17/06
Serial Number: 2582

Temperature Measurement:

40 Channel Thermal Recorder:
YOKOGAWA Inc,
Model: DA100-13-1D
Date of Calibration: 12/11/06
Serial Number: 12A323190

Test Condition:

1. Test Low Temperature: 0℃
2. Test High Temperature: 40℃
3. Test dwell time: 6Hrs
4. Temperature slope: 2℃/min
5. Test cycle: 4 cycles
6. Test Software: Windows XP / Run PassMark Burn In Test Pro 4.0
7. Test Environment Curve:



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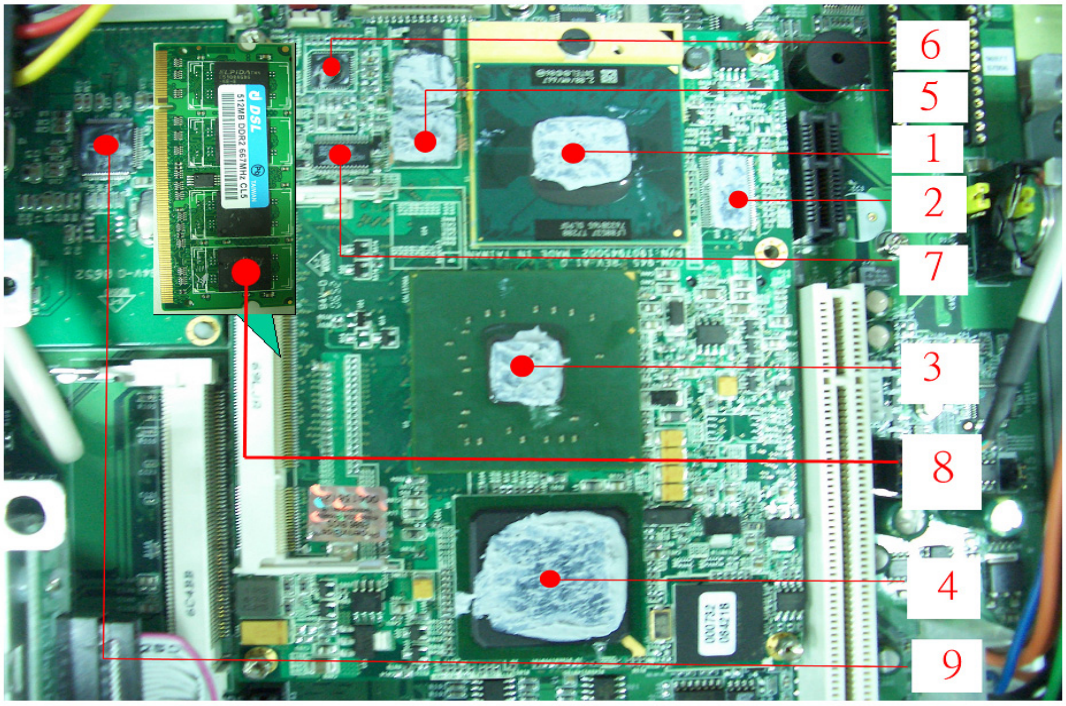
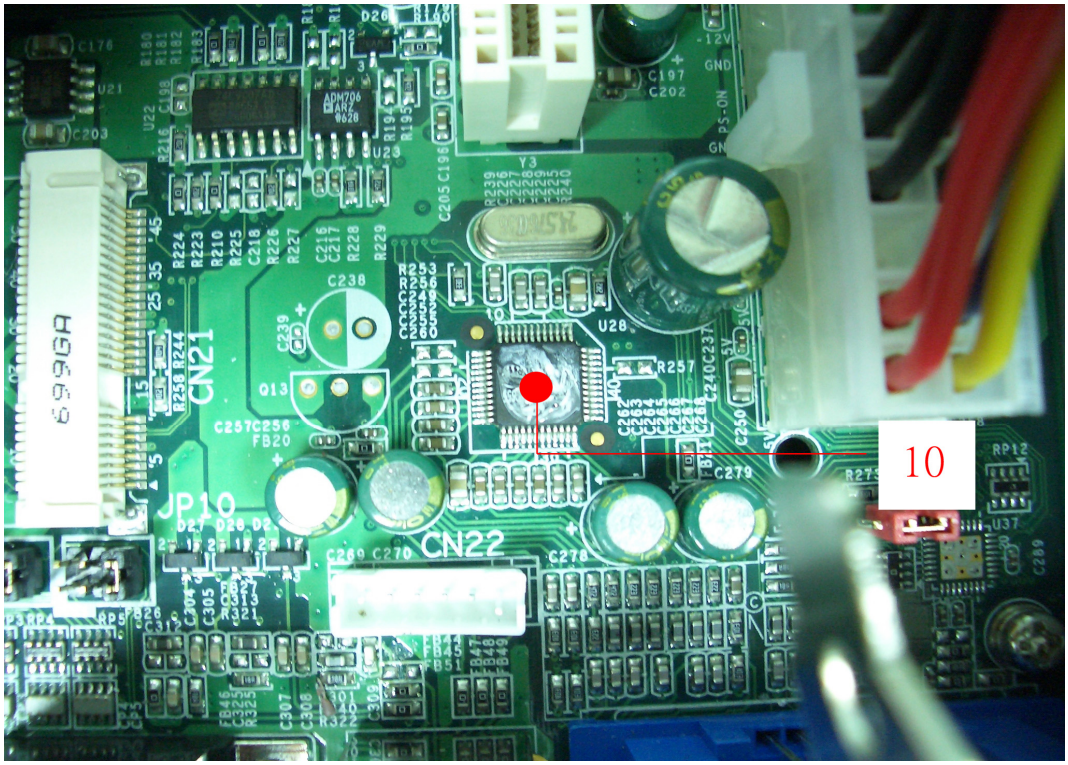
Temperature cycle test

Temperature Recorder:

Measuring Thermal Couple Position:





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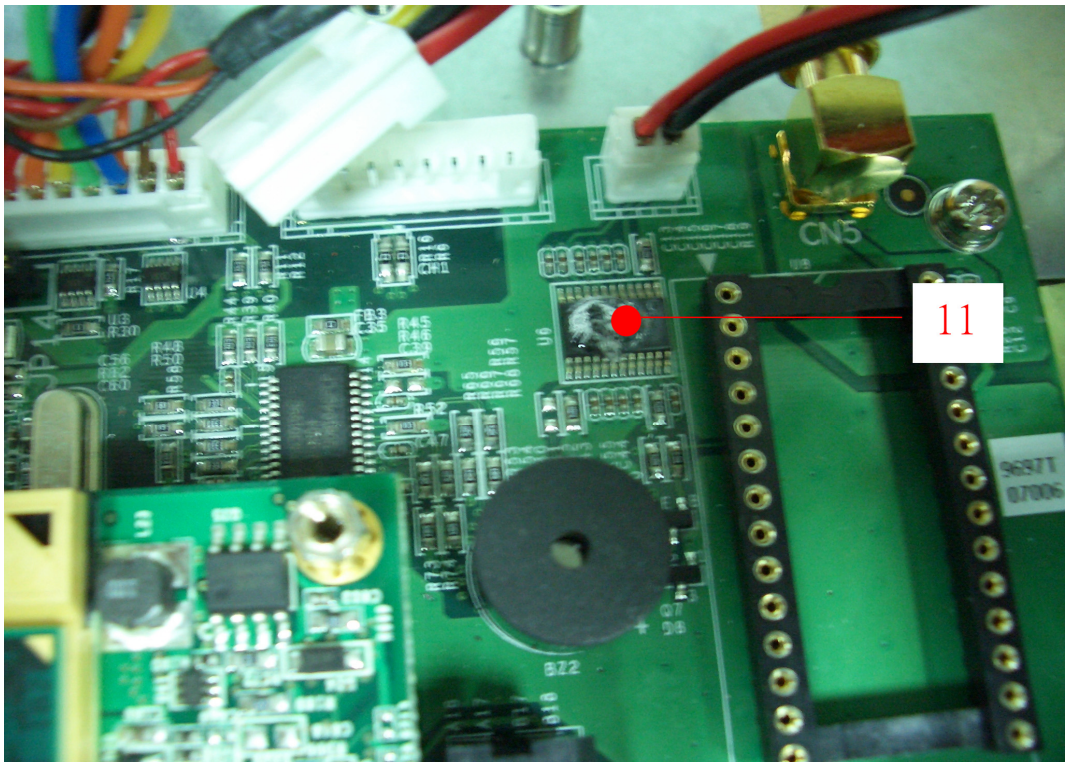
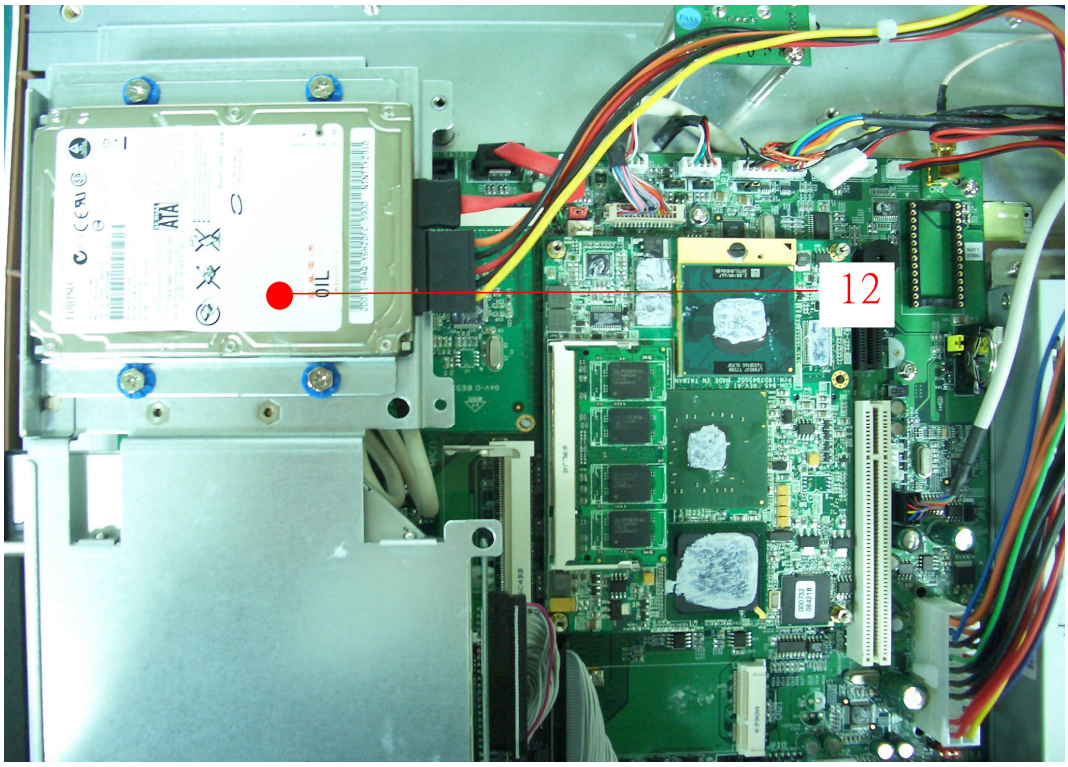
Temperature cycle test





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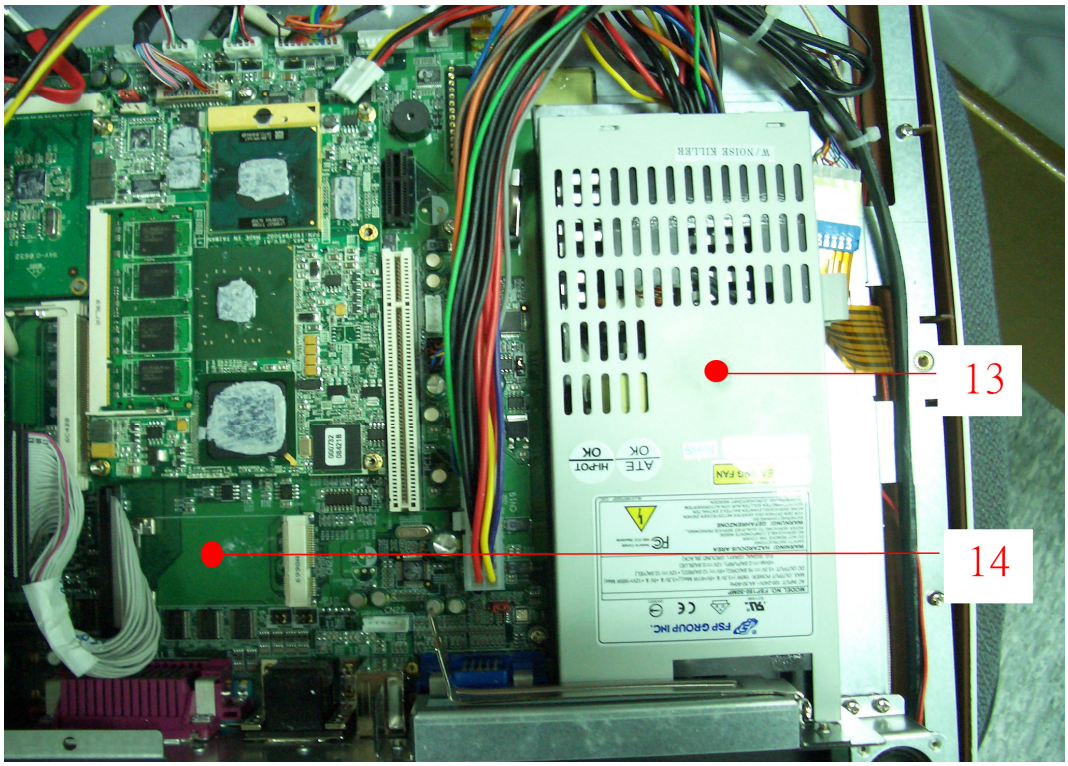

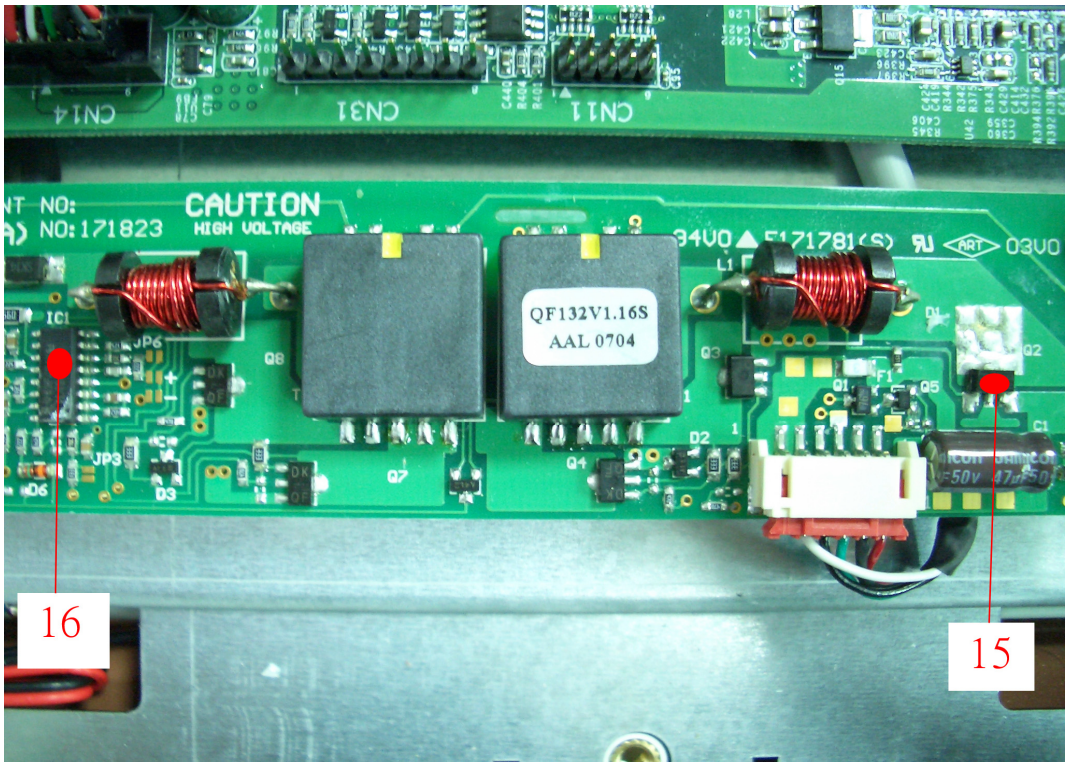

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Temperature cycle test

Thermal profile data:

Onyx-175

System						
Point / Temp. Stage(℃)	Spec	45	40	25	0	-5
Board-COM-945						
1.CPU- Intel(R) Core 2 Duo / T7200 / 2.0GHz	100	84.1	79.1	64.1	39.1	34.1
2.U10-.TSSOP 56P.CLOCK GENERATOR.ICS.ICS954226AGLF	100	80.8	75.8	60.8	35.8	30.8
3. U3 -Chipset Intel 945GM Express. Intel.QG82945GM SL8Z2;EE-A060321;14S4294501;TWN	99	74.2	69.2	54.2	29.2	24.2
4. U4 - ICH7M.Intel.NH82801GBM SL8YB; EE-A060320;14S428010D;TWN	99	69.2	64.2	49.2	24.2	19.2
5.L24-COIL.0.56uh EE-A061714;1211105673;TWN	125	80.5	75.5	60.5	35.5	30.5
6. U24-QFN 48P.IMVP6 Two Phase PWM. Intersil.ISL6262CRZ-T;EE-A060306;14S3626200;TWN	125	79.6	74.6	59.6	34.6	29.6
7.U18- TSSOP-28.Dual Power Supply Controller. SEMTECH.SC1485ITSTRT;EE-A031097;14S4148500;TWN	100	80.9	75.9	60.9	35.9	30.9
8.Memory- DSL 512MB ELPIDA E5108AGBG-6E-E (DDRII-667)	70	71.1	66.1	51.1	26.1	21.1
Board-T079						
9.U3- LQFP 64P.LVDS Transmitter.Rev:D.CHRONTEL.CH7308A-TF	85	80.3	75.3	60.3	35.3	30.3
Board-T070						
10.U28- LQFP 48Pin.6 Channel AC'97 Audio Codec.REALTEK.ALC655-LF	100	73.1	68.1	53.1	28.1	23.1
11.U6-TSSOP 24Pin.Audio Power Amplifier.TI.TPA0132PWP	85	73.2	68.2	53.2	28.2	23.2
12.HDD- FUJITSU MHV2040BH / 40GB	70	60.8	52.3	40.8	15.8	10.8
13.Switching Power-FSP FSP-180-50MP 180W	70	58.9	53.9	38.9	13.9	8.9
14.Control Box Internal Air Temperature	N/A	63.4	58.4	43.4	18.4	13.4
Inverter						
15. Inverter - Q2	150	77.6	72.6	57.6	32.6	27.6
16. Inverter - IC1	85	73.3	68.3	53.3	28.3	23.3
17.Chamber Air Temperature	N/A	45.5	40.5	25.5	0.5	-4.5
The description in red states which temperature is over the specification of the device.						

Sample Configuration & Quantity Under Test:

Quantity: 1 (ONYX-175)

Test Result:

No problem was found during the temperature operation cycle test.

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High temperature storage test

Test Date: 01-17~20-2007

Test Product: ONYX-175

Test Site: AAEON QA Internal Lab.

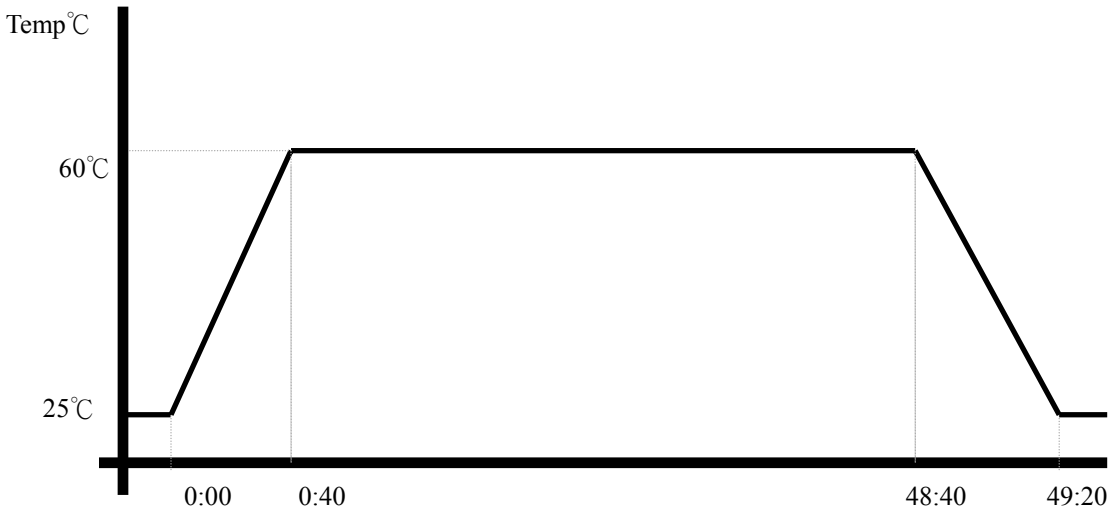
Test Standard: Reference IEC 68-2-2 Testing procedures
Test Bb: Dry Heat Test (Non-operation)

Test Equipment:

Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: THS-D4L+-100
Date of Calibration: 11/17/06
Serial Number: 2582

Testing Item:

1. Test Temperature: 60℃
2. Test Times: 48Hrs
3. Test Software: Windows media Player (Video test soft-MPEG from HDD)
4. Test Environment Curve:



Sample Configuration & Quantity Under Test:
Quantity: 1 (ONYX-175)

Test Result:

No problem was found after the high temperature storage test.

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Low temperature storage test

Test Date: 01-21~23-2007

Test Product: ONYX-175

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: 11/17/06
Serial Number: 2582

Testing Item:

1. Test Temperature: -20℃
2. Test Times: 48Hrs
3. Test Software: Windows media Player (Video test soft-MPEG from HDD)
4. Test Environment Curve:

Sample Configuration & Quantity Under Test:
Quantity: 1 (ONYX-175)

Test Result:
No problem was found after the low temperature storage test.

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Humidity test

Test Date: 01-25~28-2007

Test Product: ONYX-175

Test Site: AAEON QA Internal Lab.

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

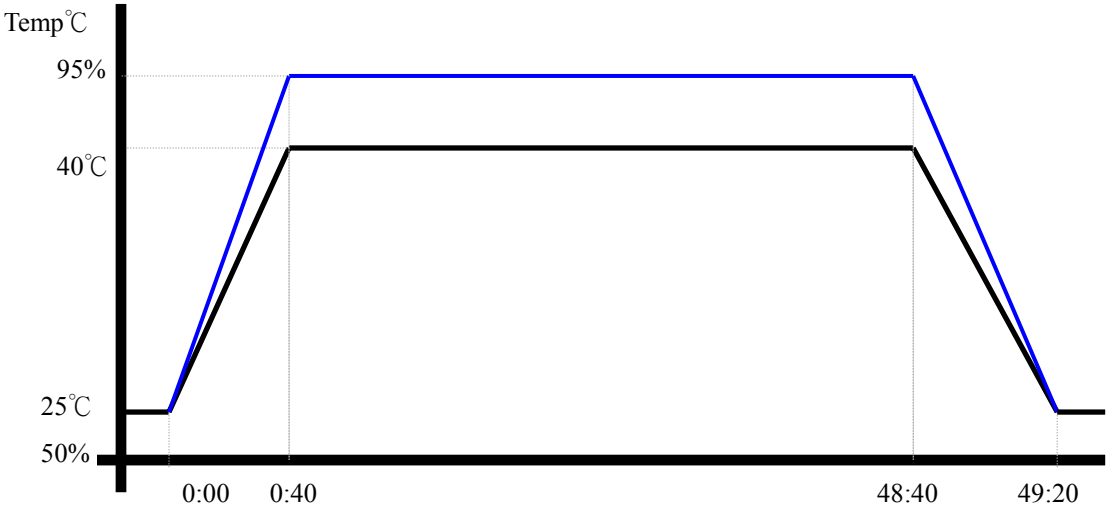
Test Equipment:

Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: THS-D4L+-100
Date of Calibration: 11/17/06
Serial Number: 2582

Testing Item:

1. Test Temperature: 40℃
2. Test Humidity: 95%RH
3. Test Times: 48Hrs
4. Test Software: Windows media Player (Video test soft-MPEG from HDD)
5. Test Environment Curve:

Humidity %



Sample Configuration & Quantity Under Test:
Quantity: 1 (ONYX-175)

Test Result:

No problem was found after the humidity storage test.

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Cold Start test

Test Date: 01-15-2007

Test Product: ONYX-175

Test Site: AAEON QA Internal Lab.

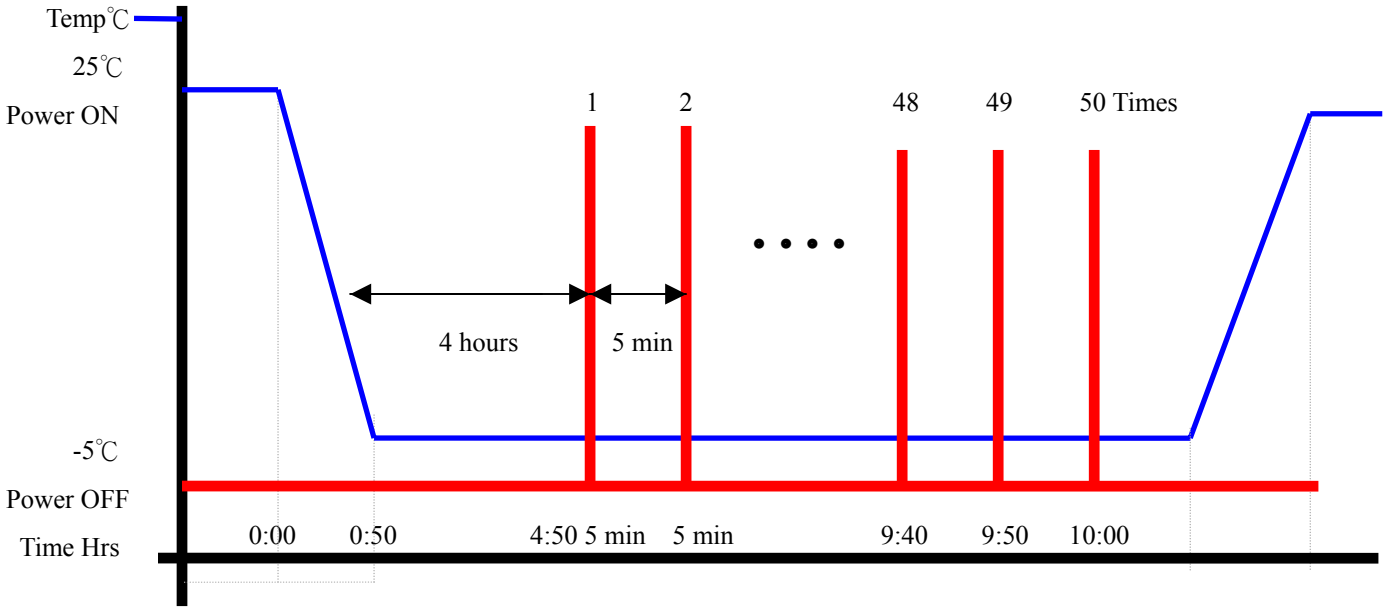
Test Standard: Reference IEC 68-2-1 Testing procedures
Test Ab: Cold Test

Test Equipment:

Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: THS-D4L+-100
Date of Calibration: 11/17/06
Serial Number: 2582

Test Condition:

1. Test Temperature: -5℃
2. Test Times: 5 Hours or 50 times of ON/OFF
   (1) Power off for 4 hours before 1'st power on. Then once complete boot, power off immediately.
   (2) After 5 min later power on again and wait until booting is completed.
   (3) Repeat (2) for around 4:50
   (4) Power off then wait for 5 min before final power on operation.
3. Number of test: 50 times
4. Test Software: Windows XP
5. Test Environment Curve:



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Cold Start test

Sample Configuration & Quantity Under Test:

Quantity: 1 (ONYX-175)

Test Result:

No problem was found after the Cold Start test.

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