

Onyx-173 (PCM-8200 A1.0)

With HDD

Environment Test Report

Report NO: 05P020003

Issued by: **Rex - Chang** / **03/23/2005**

Test Engineer Date

Reviewed by: **Wenyuan Yang** / **03/23/2005**

Manager Date

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Num	Item	Spec
1.	Low Noise Medical Station:	Onyx-173
	1.LCD	17" CPT CLAA170EA 07
	2.Power	FSP 180-50MP 165W
	3. Inverter	HWA YOUN QF132V1.16
2.	CPU Board:	PCM-8200 Rev: A1.0
	1. Bios Ver.	Onyx-153/173 Bios Ver.1.0 (2004/12/29)
	2.CPU	Genuine Intel Mobile 1.6GHz
	3.Memory	DSL 512MB SAMSUNG K4H560838F-TCB3 (DDR-333)
	4.HDD	Fujitsu MHT2020AT 20GB
	5.DVD-ROM	TEAC DV-28SL

CPU Cooler



Onyx-173 (PCM-8200 A1.0) Low Noise Medical Station

Test Date: 03-18~21-2005

Test Product: Onyx-173 (PCM-8200 Rev: A1.0).

Test Site: AAEON QA Internal Lab.

Performed By: Rex Chang

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

Test Equipment:

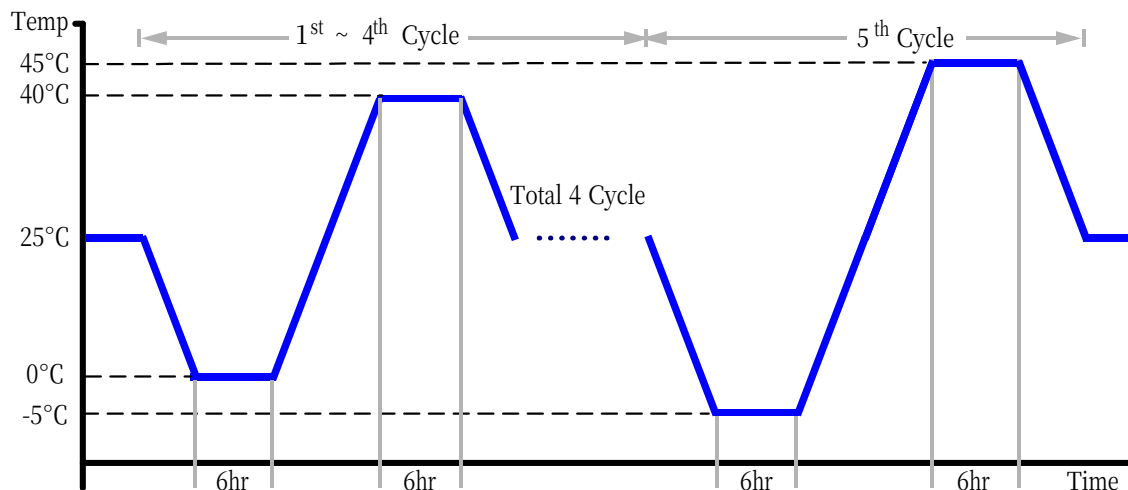
Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: THS-D4H+-100
Date of Calibration: 05/24/04
Serial Number: 1241

Temperature Measurement:

20 Channel Thermal Recorder:
YOKOGAWA Inc,
Model: DA100-13-1D
Date of Calibration: 12/25/04
Serial Number: 12A323190

Test Condition:

1. Test Low Temperature: 0°C (1~4 cycle)
-5°C (5th cycle)
2. Test High Temperature: 40°C (1~4 cycle)
45°C (5th cycle)
3. Test dwell time: 6Hrs
4. Temperature slope: 1°C/min
5. Test cycle: 5 cycle
6. Test Environment Curve:



Onyx-173 (PCM-8200 A1.0) Low Noise Medical Station

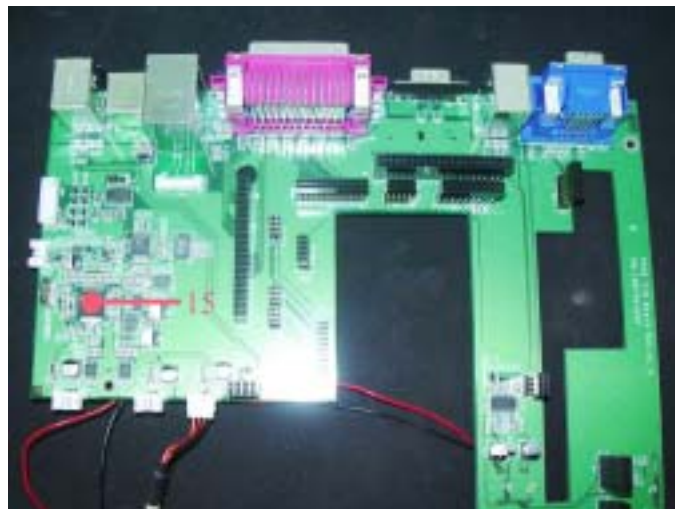
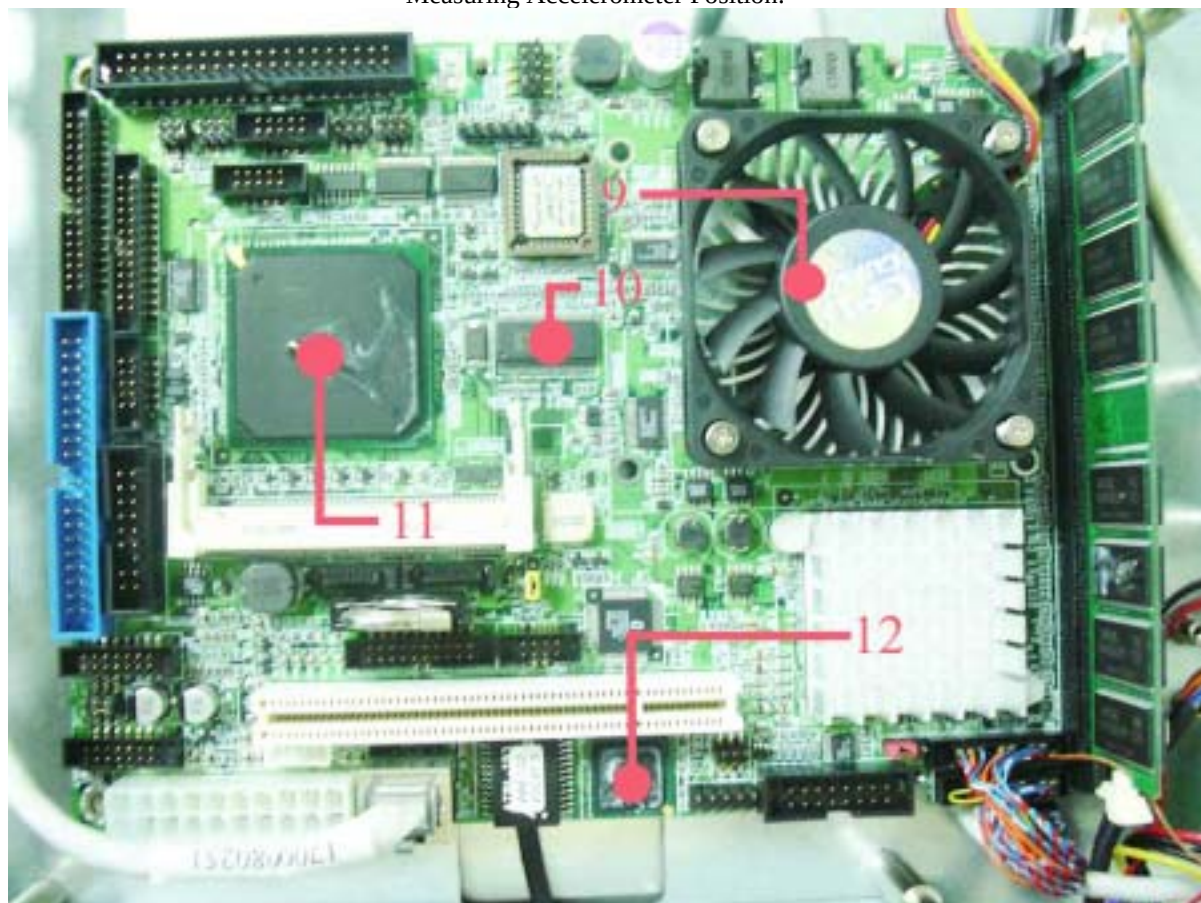
Test O.S. / Software:

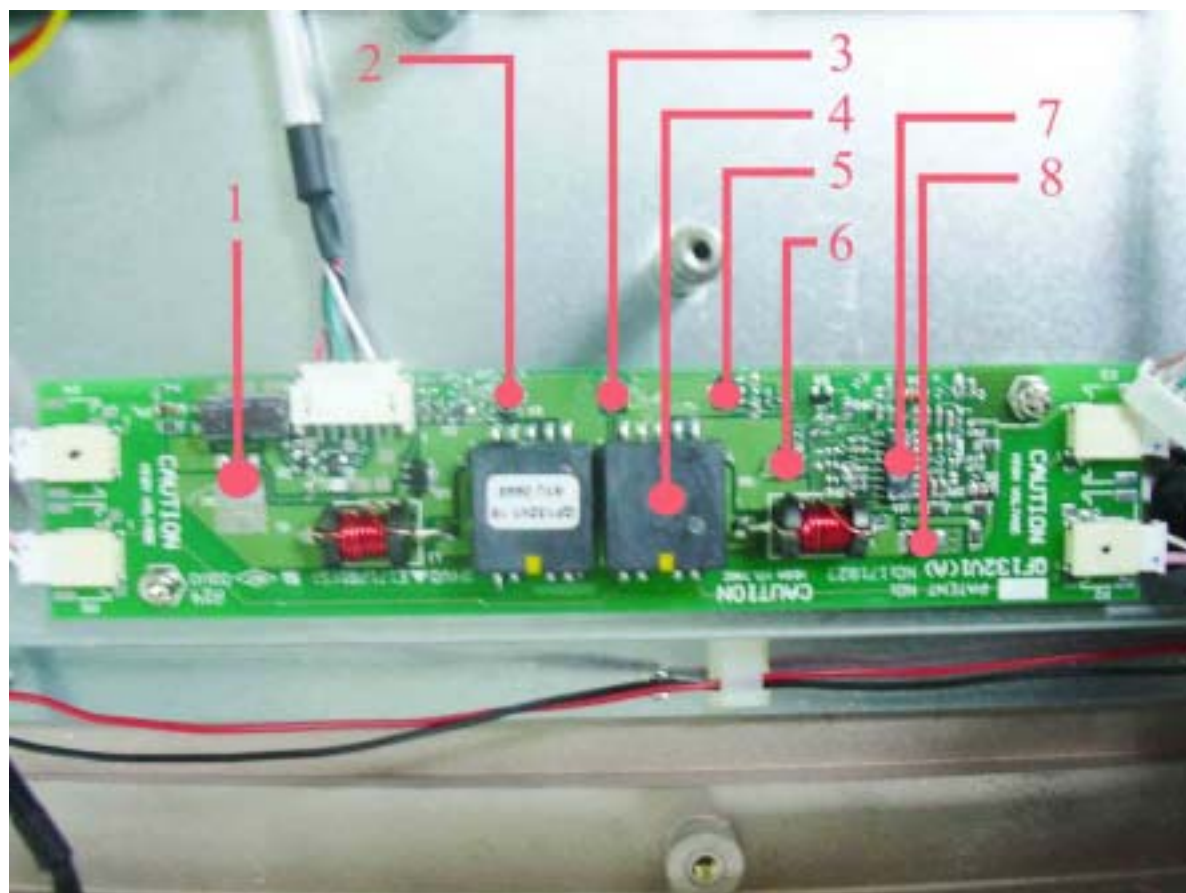
Windows 2000 / Run HCT 9.5

Sample Configuration & Quantity Under Test:

Using one Onyx-173 (PCm-8200 A1.0) Low Noise Medical Station Recorder:

Measuring Accelerometer Position:





Onyx-173 (PCM-8200 A1.0) Low Noise Medical Station

Thermal profile data:

Onyx-173 (PCM-8200 A1.0)

Point	Temp. Stage	45°C	40°C	25°C	0°C	-5°C	Tc
1. Inverter - Q2		92.4°C	88.2°C	77.3°C	50.4°C	45.1°C	-
2. Inverter - Q4		80.8°C	76.9°C	67.0°C	40.7°C	34.8°C	-
3. Inverter - Q6		80.4°C	75.0°C	61.5°C	35.0°C	29.3°C	-
4. Inverter - T2		78.2°C	74.3°C	64.5°C	40.1°C	34.9°C	-
5. Inverter - Q7		77.1°C	73.2°C	61.3°C	34.8°C	29.1°C	-
6. Inverter - Q8		76.6°C	72.5°C	61.2°C	34.6°C	28.9°C	-
7. Inverter - IC1		67.8°C	63.3°C	50.3°C	25.0°C	19.5°C	-
8. Inverter - SX14		74.7°C	70.2°C	57.0°C	31.7°C	26.0°C	-
9. Intel Micro-FCBGA 479pin Banias 1.6GHz (PCM - 8200 Component Side)		81.4°C	76.9°C	70.0°C	40.4°C	35.5°C	25~75°C
10. U12 - CLOCK GENERATOR.ICS.ICS952601 (PCM - 8200 Component Side)		79.2°C	75.0°C	65.7°C	37.9°C	32.2°C	-30~100°C
11. U4 - Chipset MONTARA.INTEL.RG82855GME (PCM - 8200 Component Side)		80.3°C	75.5°C	64.3°C	35.2°C	29.9°C	0~105°C
12. U2 - Ethernet 10/100BaseT.Intel.GD82551ER (PCM - 8200 Component Side)		75.7°C	71.1°C	59.7°C	32.8°C	27.5°C	0~85°C
13. Q43 (PCM - 8200 Solder Side)		76.4°C	71.7°C	61.8°C	33.3°C	28.1°C	-40~115°C
14. Q47 (PCM - 8200 Solder Side)		76.4°C	71.5°C	59.7°C	29.3°C	23.9°C	-40~115°C
15. U11 (Y010 I/O Board A1.0)		76.0°C	71.2°C	58.6°C	32.8°C	27.8°C	-60~130°C
16. HDD		60.1°C	55.3°C	42.8°C	17.8°C	12.5°C	0~55°C
17. Memory		70.2°C	65.7°C	56.1°C	30.2°C	23.3°C	-
18. Power Supply Surface		56.3°C	51.8°C	39.3°C	16.1°C	10.6°C	-
19. Control Box. Inside Air Temperature		52.8°C	49.3°C	33.2°C	8.4°C	2.3°C	-
20. Chamber Air Temperature		45.0°C	40.3°C	26.3°C	1.8°C	-3.9°C	-

Note: The description in red states which temperature is over the specification of the device.

Sample Configuration & Quantity Under Test:

Quantity: 1 (Onyx-173)

Test Result:

The system structure doesn't deformation; Function is passed during system test.

Onyx-173 (PCM-8200 A1.0) Low Noise Medical Station

Test Date: 03-14~16-2005

Test Product: Onyx-173 (PCM-8200 Rev: A1.0).

Test Site: AAEON QA Internal Lab.

Performed By: Rex Chang

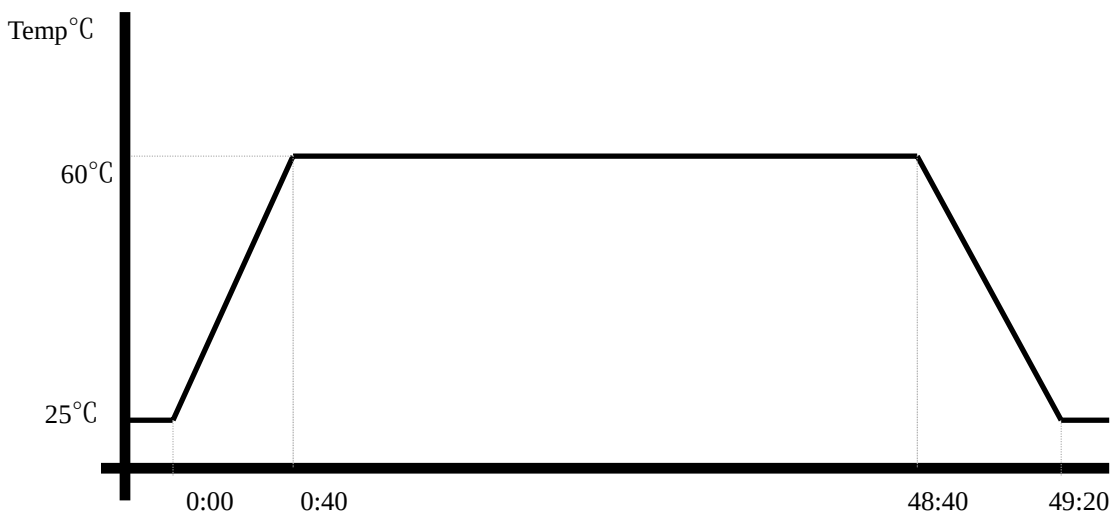
Test Standard: Reference IEC 68-2-2 Testing procedures
Test Bb: Dry Heat Test (Non-operation)

Test Equipment:

Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: THS-D4L+-100
Date of Calibration: 10/01/04
Serial Number: 2582

Testing Item:

1. Test Temperature: 60°C
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-173)

Test Result:

The system structure doesn't have any deformation; All functions are passed after low temperature storage test.

Onyx-173 (PCM-8200 A1.0) Low Noise Medical Station

Test Date: 03-09~11-2005

Test Product: Onyx-173 (PCM-8200 Rev: A1.0).

Test Site: AAEON QA Internal Lab.

Performed By: Rex Chang

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-D4H+-100

Date of Calibration: 10/01/04

Serial Number: 2582

Testing Item:

1. Test Temperature: 0°C
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-173)

Test Result:

The system structure doesn't have any deformation; All functions are passed after low temperature storage test.

Onyx-173 (PCM-8200 A1.0) Low Noise Medical Station

Test Date: 03-11~14-2005

Test Product: Onyx-173 (PCM-8200 Rev: A1.0).

Test Site: AAEON QA Internal Lab.

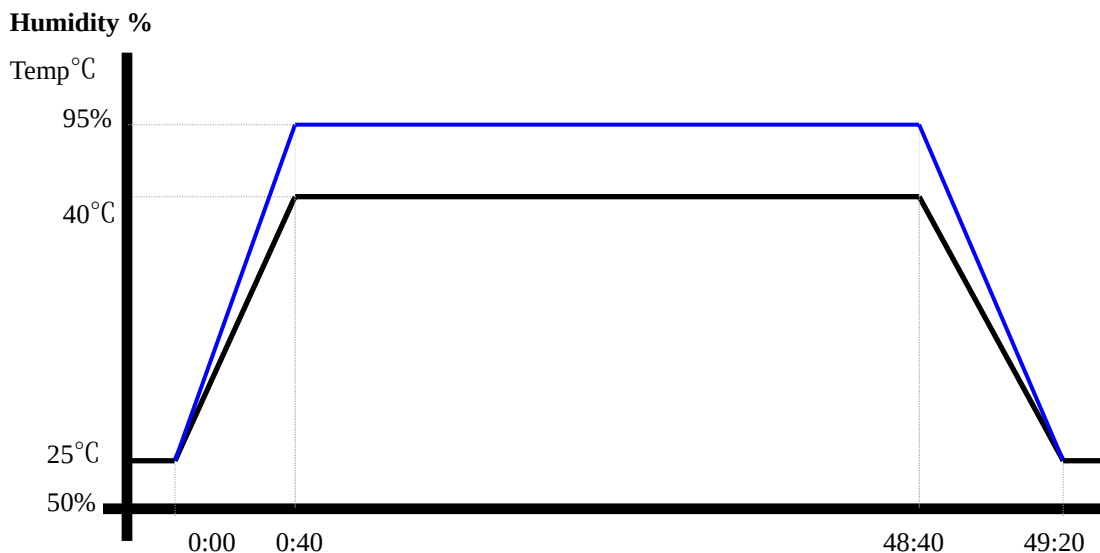
Performed By: Rex Chang

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-D4H+-100
Date of Calibration: 10/01/04
Serial Number: 2582

Testing Item:

1. Test Temperature: 40°C
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:



Sample Configuration & Quantity Under Test:

Quantity: 1 (Onyx-173)

Test Result:

The system structure doesn't have any deformation; All functions are passed after humidity test.

Onyx-173 (PCM-8200 A1.0) Low Noise Medical Station

Test Date: 03-16~17-2005

Test Product: Onyx-173 (PCM-8200 Rev: A1.0).

Test Site: AAEON QA Internal Lab.

Performed By: Rex Chang

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

Test Equipment:

Programmable Temperature & Humidity Chamber

K.SON. INS. TECH. CORP.

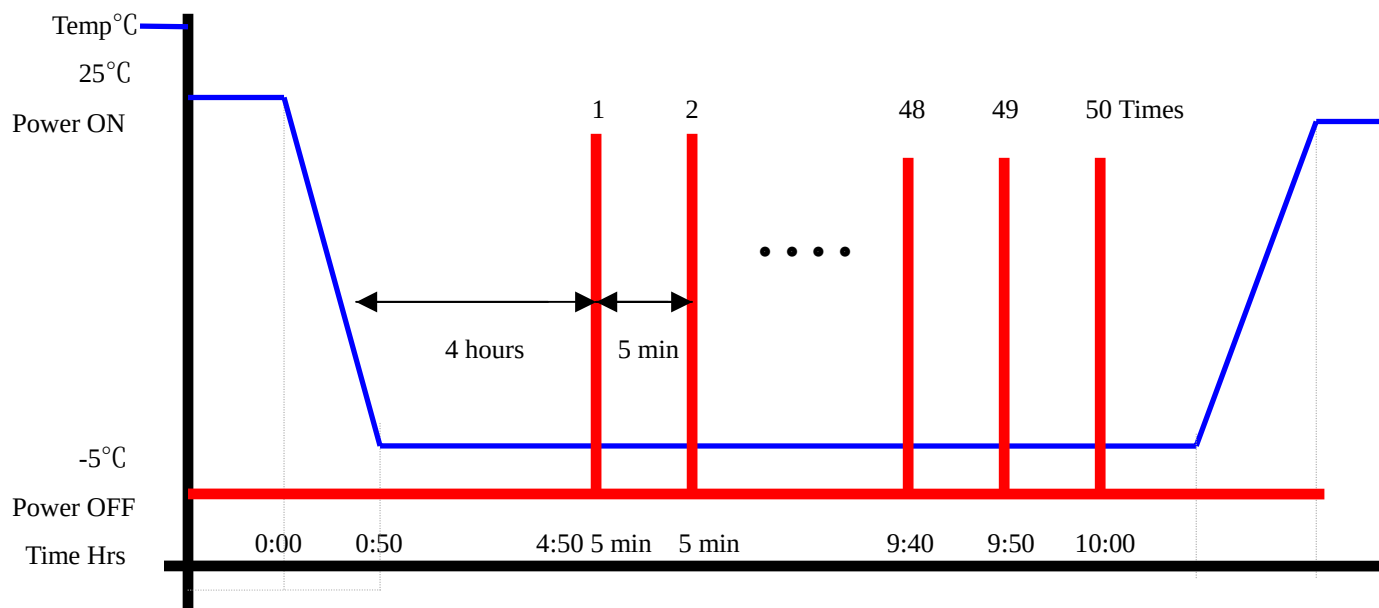
Model: THS-D4H+-100

Date of Calibration: 10/01/04

Serial Number: 2582

Test Condition:

1. Test Temperature: -5°C
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 2000
5. Test Environment Curve:



Onyx-173 (PCM-8200 A1.0) Low Noise Medical Station

Sample Configuration & Quantity Under Test:

Quantity: 1 (Onyx-173)

Test Result:

Passed.