



Onyx-153 (PCM-8200 A1.0)
With HDD
Environment Test Report

Report NO: 05P020002

Issued by: Rex-Chang / 03/29/2005
Test Engineer Date

Reviewed by: Wenyuan Yang / 03/29/2005
Manager Date

Onyx-153 (PCM-8200 A1.0) Low Noise Medical Station

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Num	Item	Spec
1.	Low Noise Medical Station:	Onyx-153
	1.LCD	15" CPT CLAA150XP03
	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-153 (PCM-8200 A1.0) Low Noise Medical Station

Test Date: 03-22~25-2005

Test Product: Onyx-153 (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:

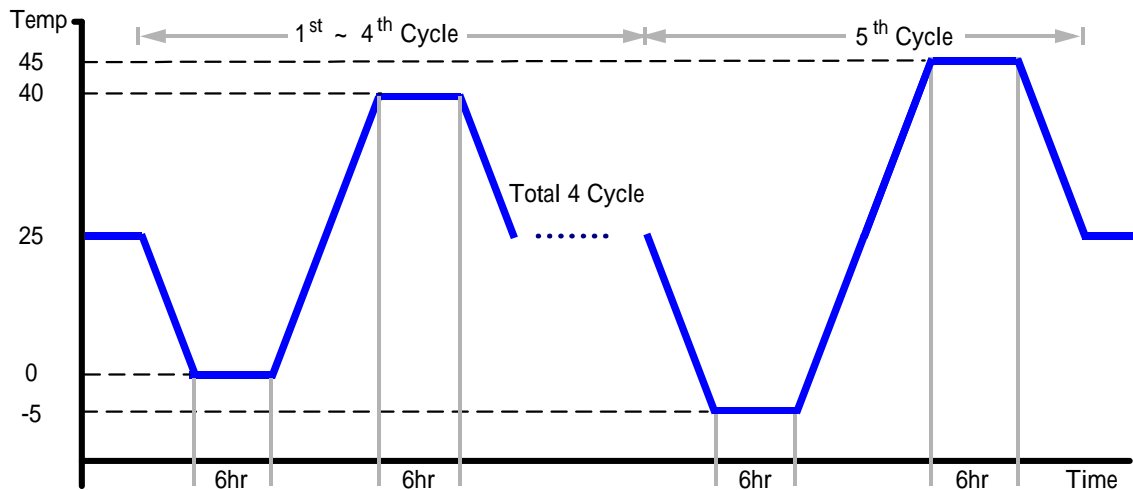
Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: THS-D4H+-100
Date of Calibration: 05/24/04
Serial Number: 1241

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



Onyx-153 (PCM-8200 A1.0) Low Noise Medical Station

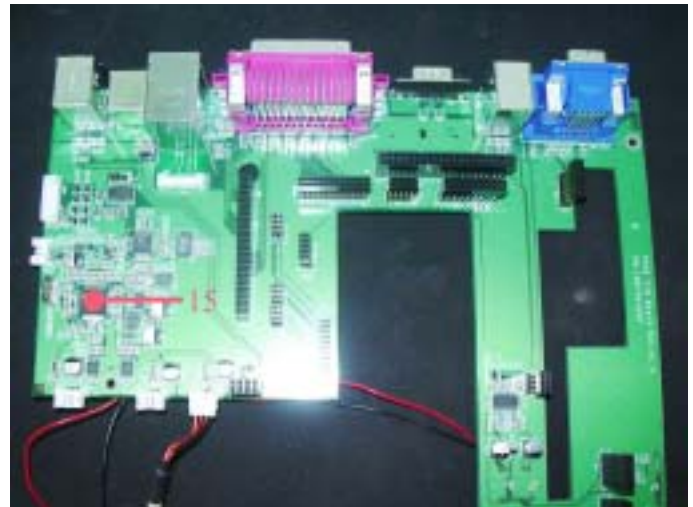
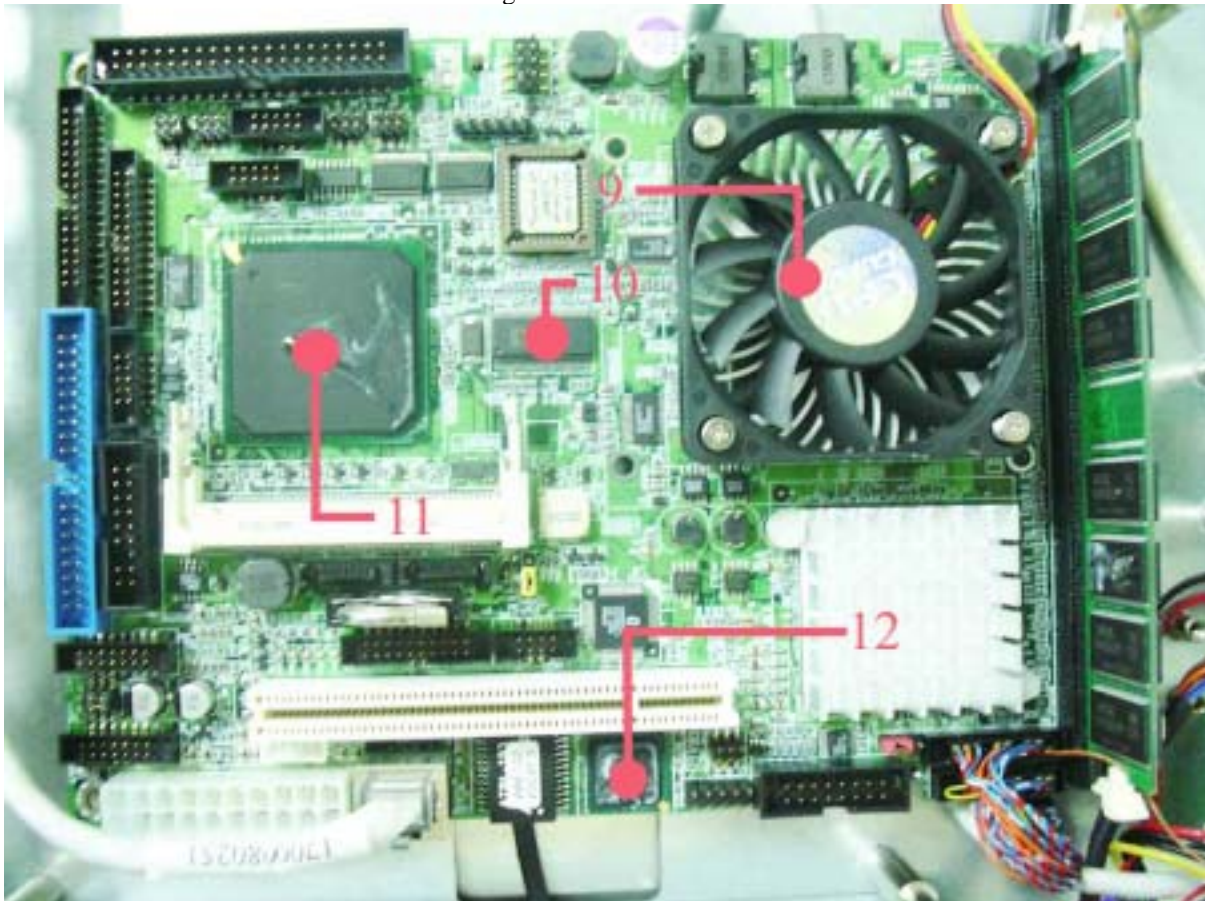
Test O.S. / Software:

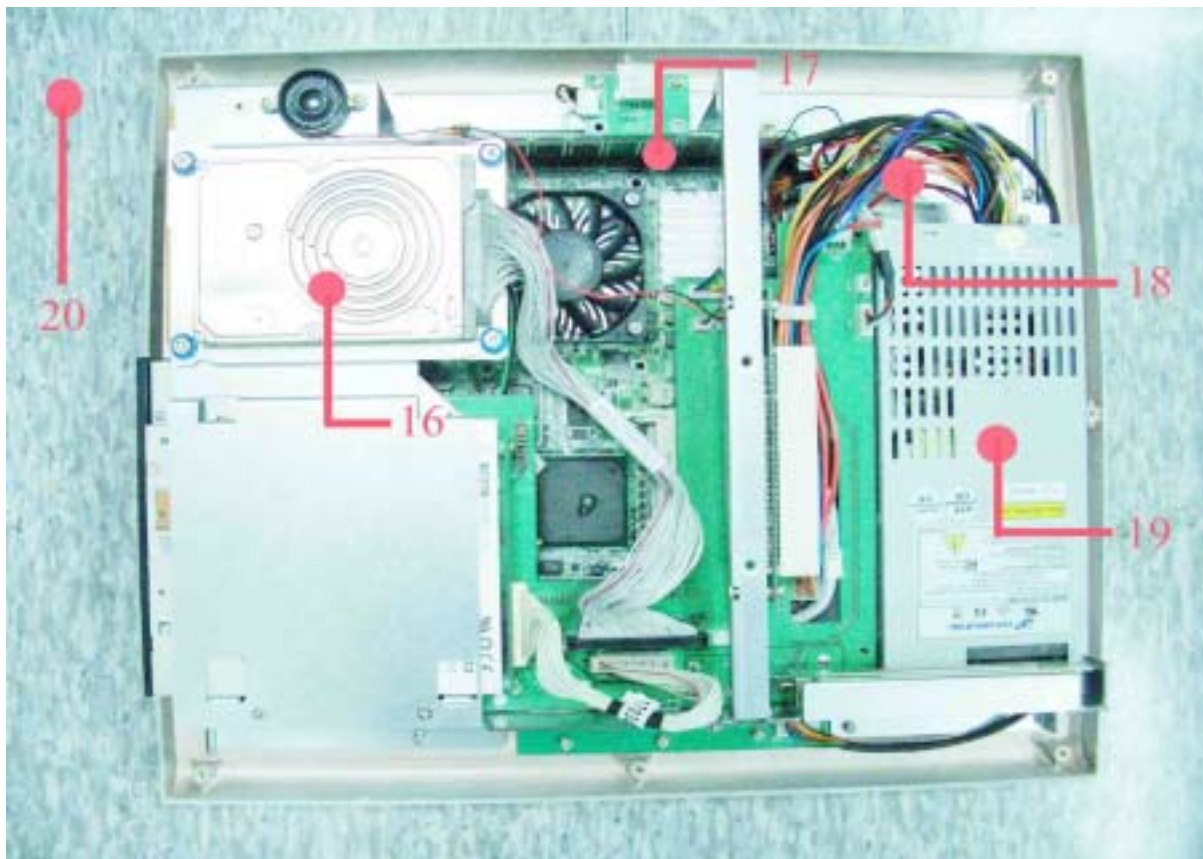
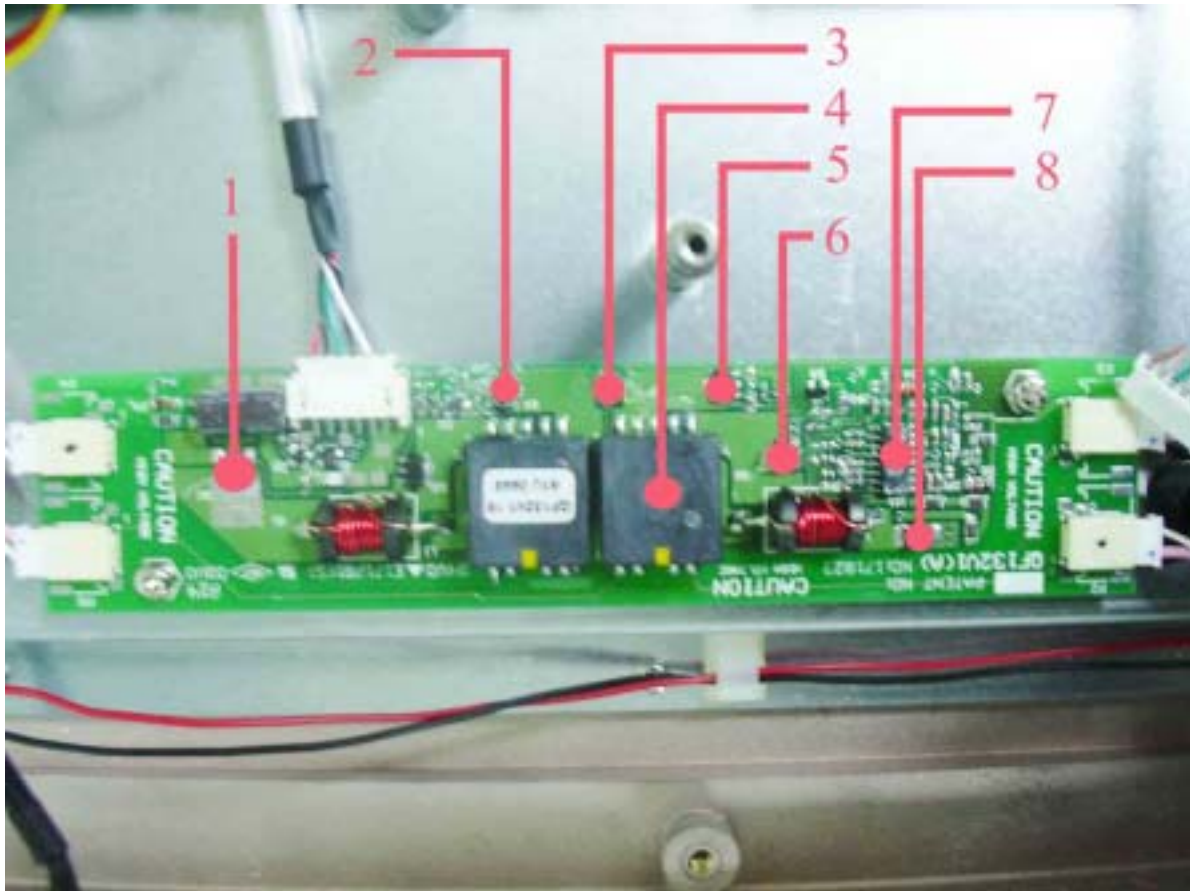
Windows 2000 / Run HCT 9.5

Sample Configuration & Quantity Under Test:

Using one Onyx-153 (PCM-8200 A1.0) Low Noise Medical Station Recorder:

Measuring Accelerometer Position:





Onyx-153 (PCM-8200 A1.0) Low Noise Medical Station

Thermal profile data:

Onyx-153

Point	Temp. Stage	45	40	25	0	-5	Tc
1. Inverter - Q2		86.2	81.7	70.3	45.6	40.0	-
2. Inverter - Q4		88.3	85.0	74.3	49.1	33.3	-
3. Inverter - Q6		81.5	77.8	66.7	42.9	37.8	-
4. Inverter - T2		78.8	75.0	64.5	42.4	37.5	-
5. Inverter - Q7		83.7	79.9	68.8	45.2	40.2	-
6. Inverter - Q8		82.0	78.1	66.8	43.5	38.6	-
7. Inverter - IC1		76.1	72.0	59.8	36.8	32.5	-
8. Inverter - SX14		74.4	69.9	56.6	34.2	29.4	-
9. Intel Micro-FCBGA 479pin Banias 1.6GHz (PCM - 8200 Component Side)		86.7	82.0	74.8	51.2	45.5	25~75
10. U12 - CLOCK GENERATOR.ICS.ICS952601 (PCM - 8200 Component Side)		81.9	77.4	66.7	43.2	37.9	-30~100
11. U4 - Chipset MONTARA.INTEL.RG82855GME (PCM - 8200 Component Side)		80.0	75.5	63.8	40.4	25.1	105
12. U2 - Ethernet 10/100BaseT.Intel.GD82551ER (PCM - 8200 Component Side)		79.7	75.1	63.7	40.9	35.9	0~85
13. Q43 (PCM - 8200 Solder Side)		75.2	70.8	64.0	36.6	31.0	-40~115
14. Q47 (PCM - 8200 Solder Side)		75.3	71.1	59.7	36.9	31.2	-40~115
15. U11 - .USB2.0 4-PORT HUB Controller .GENESYS.GL850(Y010 I/O Board A1.0)		79.1	74.6	62.1	38.7	33.8	-60~130
16. HDD		61.5	58.9	46.6	24.0	19.2	0~55
17. Memory		73.6	68.6	58.6	35.5	29.9	-
18. Control Box. Inside Air Temperature		52.8	47.6	34.2	17.2	11.2	-
19. Power Supply Surface		60.0	55.4	42.5	20.5	15.9	-
20. Chamber Air Temperature		45.0	40.3	25.2	1.4	-3.8	-

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

Sample Configuration & Quantity Under Test:

Quantity: 1 (Onyx-153)

Test Result:

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

Onyx-153 (PCM-8200 A1.0) Low Noise Medical Station

Test Date: 03-14~16-2005

Test Product: Onyx-153 (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
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-153)

Test Result:

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

Onyx-153 (PCM-8200 A1.0) Low Noise Medical Station

Test Date: 03-17~19-2005

Test Product: Onyx-153 (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: -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-153)

Test Result:

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

Onyx-153 (PCM-8200 A1.0) Low Noise Medical Station

Test Date: 03-19~22-2005

Test Product: Onyx-153 (PCM-8200 Rev: A1.0).

Test Site: AAEON QA Internal Lab.

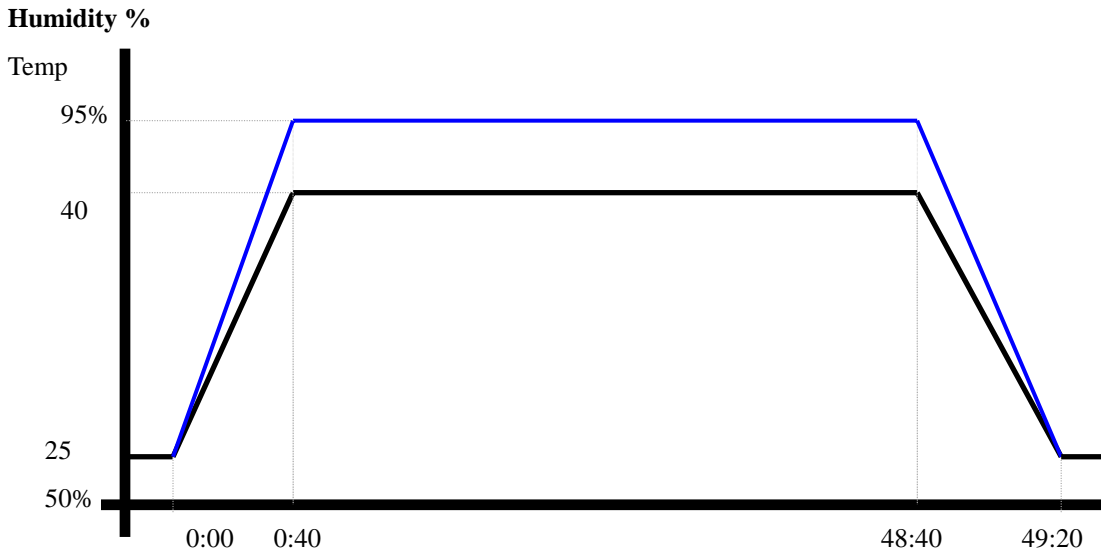
Performed By: Rex Chang

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
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-153)

Test Result:

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

Onyx-153 (PCM-8200 A1.0) Low Noise Medical Station

Test Date: 03-16~17-2005

Test Product: Onyx-153 (PCM-8200 Rev: A1.0).

Test Site: AAEON QA Internal Lab.

Performed By: Rex Chang

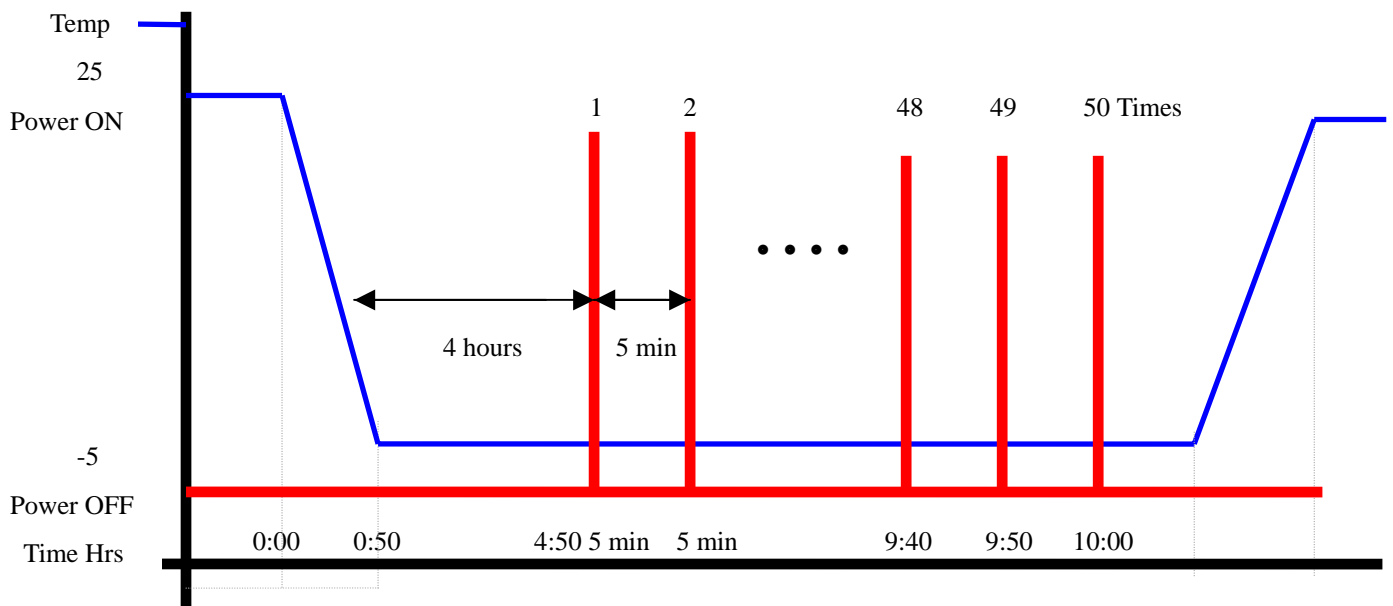
Test Standard: Reference IEC 68-2-1 Testing procedures
Test Ab: Cold Test

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
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-153 (PCM-8200 A1.0) Low Noise Medical Station

Sample Configuration & Quantity Under Test:

Quantity: 1 (Onyx-153)

Test Result:

Passed.