AOP-8070HT

Environment Test Report

Report NO: 06P020019

Issued by:	Rex Chang	/	*11/24/2006*
	Test Engineer		**Date**
Reviewed by:	Wenyuan Yang	/	*11/24/2006*
	Manager		**Date**

Test item list

Num	Item	Spec
1.	Control Box:	AOP-8070HT / 7”, WinCE, Linux, Ethernet Operator Panel
	1. Main Board	AAEON GENE-1270 Rev. B1.0
	2. 7" [16:9] LCD	DATA IMAGE FG070060DNCWAG02.480X234 18Bits TFT
	3. Inverter	HWA YOUN QF38V6.60I(S)
	4. 7" Touch Screen	3G International 3G070-164105-W4 .4-Wire Analog Resistive Type
	5. CPU	Onboard Intel XSCALE PXA270 / 520MHz
	6. Memory	Onboard 128MB SAMSUNG.K4S51163PF-PF75 (PC-133)
	7. Adapter	EDAC 100/240V.12V.5A.60W.DC.With Lock EA1050A (13)

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Temperature cycle test

Test Date: 11-19~22-2006

Test Product: AOP-8070HT

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:

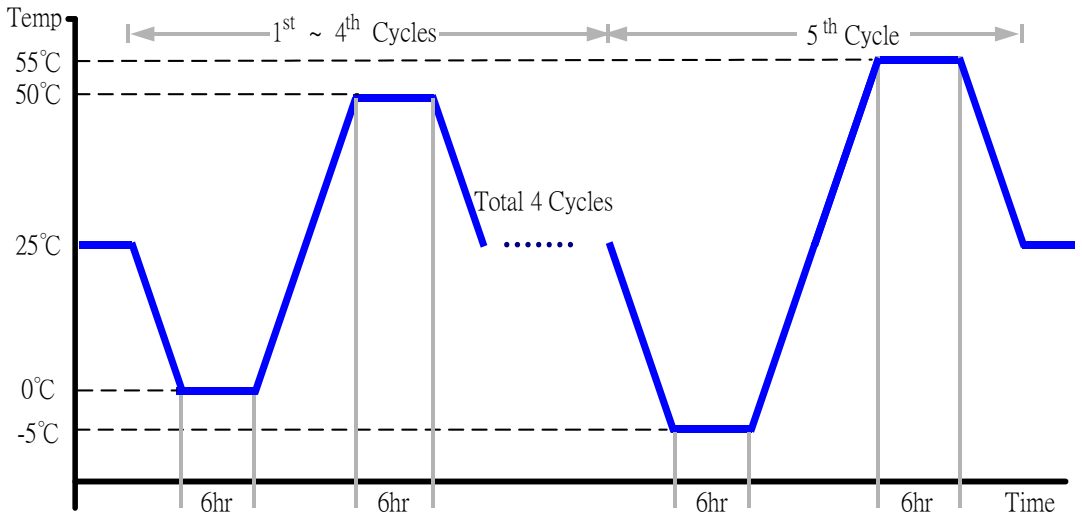
Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: TS-F3L+-100
Date of Calibration: 03/20/06
Serial Number: 1467

Temperature Measurement:

40 Channel Thermal Recorder:
YOKOGAWA Inc,
Model: DA100-13-1D
Date of Calibration: 12/14/05
Serial Number: 12A323190

Test Condition:

1. Test Low Temperature: 0℃ (1~4 cycles)
   -5℃ (5^{th} cycle)
2. Test High Temperature: 50℃ (1~4 cycles)
   55℃ (5^{th} cycle)
3. Test dwell time: 6Hrs
4. Temperature slope: 2℃/min
5. Test cycle: 5 cycles
6. Test Environment Curve:



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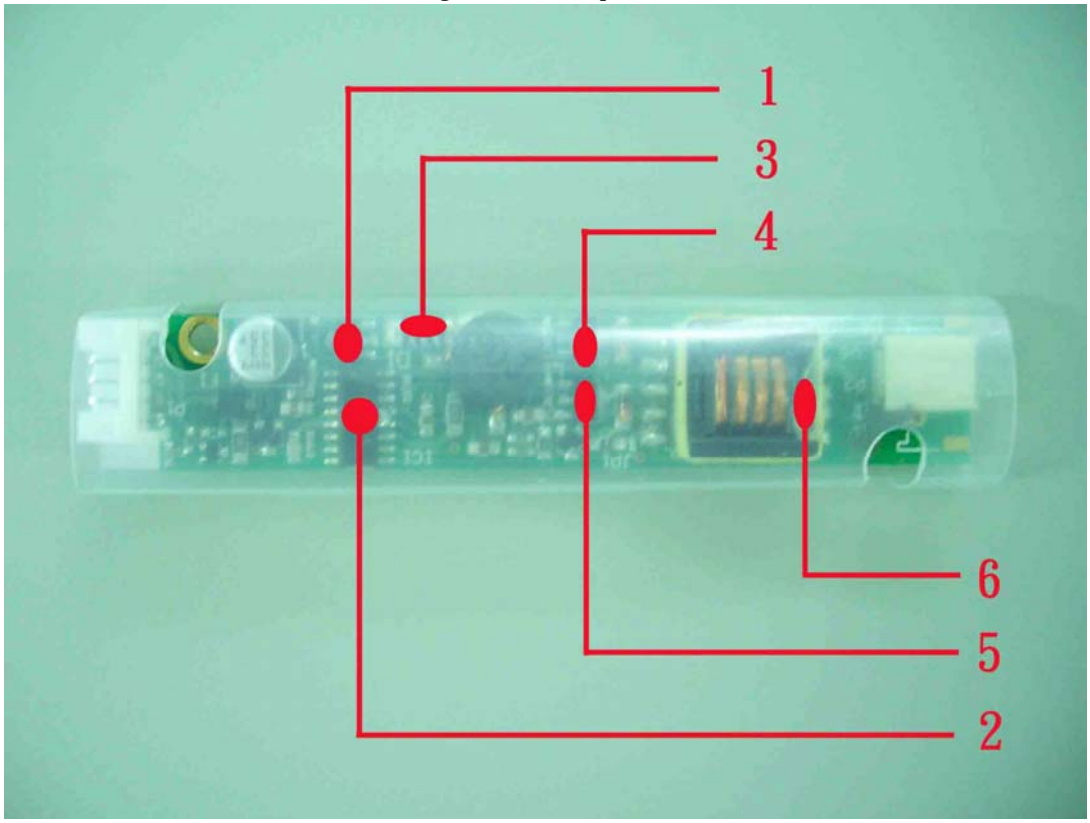
Temperature cycle test

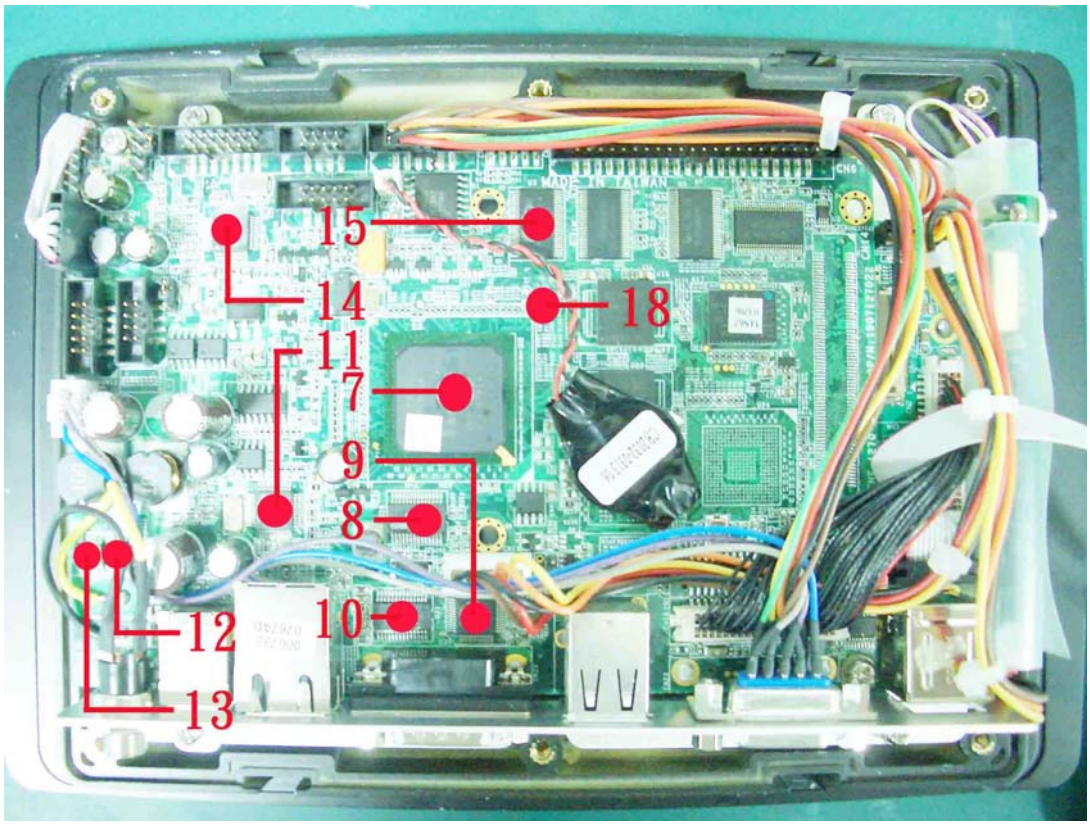
Test O.S. / Software:

Windows CE / Run one Microsoft media player simultaneously

Temperature Recorder:

Measuring Thermal Couple Position：





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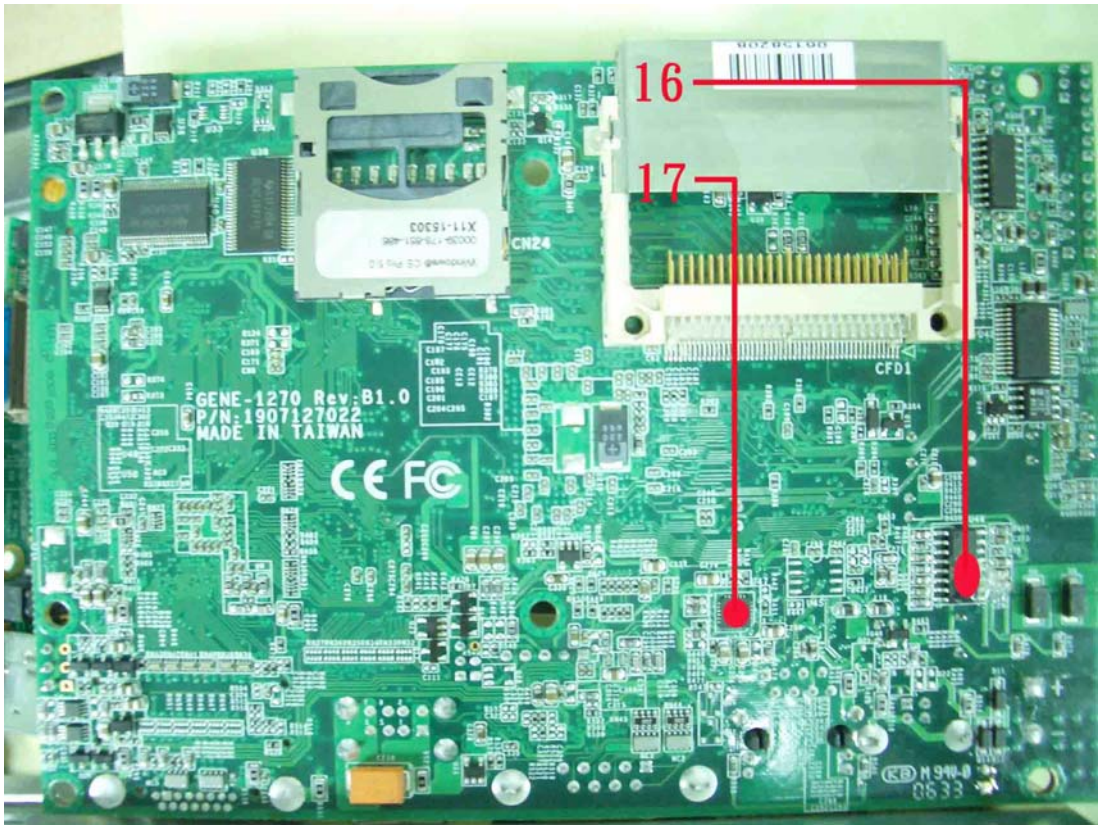
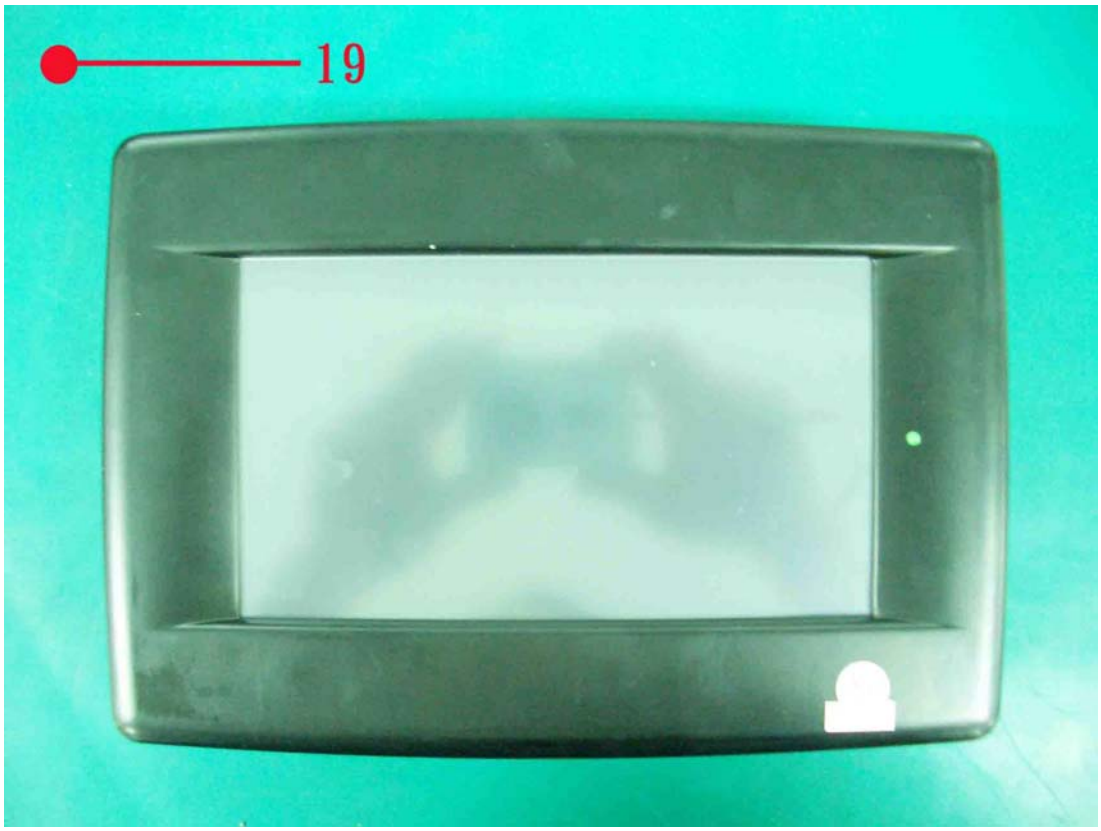
Temperature cycle test





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Temperature cycle test

Thermal profile data:

AOP-8070HT

Point / Temp. Stage(℃)	Spec	55	50	25	0	-5
Inverter -						
1. Inverter - Q2	125	92.7	87.7	62.7	37.7	32.7
2. Inverter - IC1	100	83.4	78.4	53.4	28.4	23.4
3. Inverter - D1	125	91.3	86.3	61.3	36.3	31.3
4. Inverter - Q4	125	88.7	83.7	58.7	33.7	28.7
5. Inverter - Q3	125	87.0	82.0	57.0	32.0	27.0
6. Inverter - T1	200	79.7	74.7	49.7	24.7	19.7
Main Board – GENE-1270						
7.U20 - Intel PXA 270 RISC Processor.520MHz.	85	72.0	67.0	42.0	17.0	12.0
8. U28 - SSOP 28P.USB1.1 4PORT HUB.ALCOR.AU9254	85	76.8	71.8	46.8	21.8	16.8
9. U30 - Video D/A Converter.ANALOG DEVICE.ADV7125KST140	85	81.1	76.1	51.1	26.1	21.1
10. U31 - RS232 Driver ESD 15KV.AD.ADM213EARSZ;EE-A970562	85	83.4	78.4	53.4	28.4	23.4
11. U27- Non PCI Ethernet CHIP.DAVICOM.DM9000AEP	85	79.0	74.0	49.0	24.0	19.0
12. Q10 - P-Channel E-Mode MOSFET.ANPEC.APM9435KC-TRL	125	82.6	77.6	52.6	27.6	22.6
13. Q9 - P-Channel E-Mode MOSFET.ANPEC.APM9435KC-TRL	125	81.4	76.4	51.4	26.4	21.4
14. U7 - Audio Code.with Touch Screen Controller.PHILIPS.UCB1400	95	76.4	71.4	46.4	21.4	16.4
15. U3 - TI.SN74ALVC164245DGGR	110	71.6	66.6	41.6	16.6	11.6
16. U46 - PWM IC.FEELING.FP5452DR-LF	95	85.0	80.0	55.0	30.0	25.0
17. U47 - Regulator.LINEAR.LTC3445EUF#PBF	125	78.3	73.3	48.3	23.3	18.3
18. Control Box Inside Air Temperature	N/A	71.0	67.0	42.0	17.0	12.0
Chamber Air Temperature	N/A	55.3	50.3	25.3	0.3	-4.7
1. Tm (Measured operation temperature) must less than Tc (Specified case temperature) + 5 degree C. **2. Any Tm value showed in red words which meaning the value over the Tc + 5 degree C of this device specification.**						

Sample Configuration & Quantity Under Test:

Quantity: 1 (AOP-8070HT)

Test Result:

No problem was found during the temperature cycle test.

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High temperature storage test

Test Date: 11-15~17-2006

Test Product: AOP-8070HT

Test Site: AAEON QA Internal Lab.

Performed By: Rex Chang

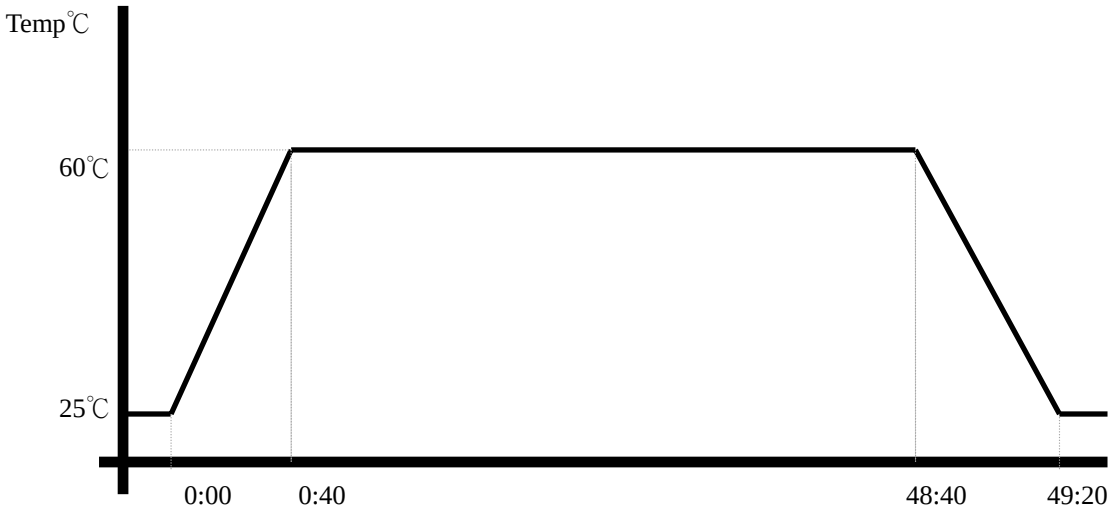
Test Standard: Reference IEC 68-2-2 Testing procedures
Test Bb: Dry Heat Test (Non-operation)

Test Equipment:

Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: TS-F3L+-100
Date of Calibration: 03/20/06
Serial Number: 1467

Testing Item:

1. Test Temperature: 60℃
2. Test Times: 48Hrs
3. Test Software: Windows CE / Run one Microsoft media player simultaneously
4. Test Environment Curve:



Sample Configuration & Quantity Under Test:
Quantity: 1 (AOP-8070HT)

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

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Low temperature storage test

Test Date: 11-17~19-2006

Test Product: AOP-8070HT

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: TS-F3L+-100
Date of Calibration: 03/20/06
Serial Number: 1467

Testing Item:

1. Test Temperature: -20℃
2. Test Times: 48Hrs
3. Test Software: Windows CE / Run one Microsoft media player simultaneously
4. Test Environment Curve:

Sample Configuration & Quantity Under Test:
Quantity: 1 (AOP-8070HT)

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

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Humidity test

Test Date: 11-21~23-2006

Test Product: AOP-8070HT

Test Site: AAEON QA Internal Lab.

Performed By: Rex Chang

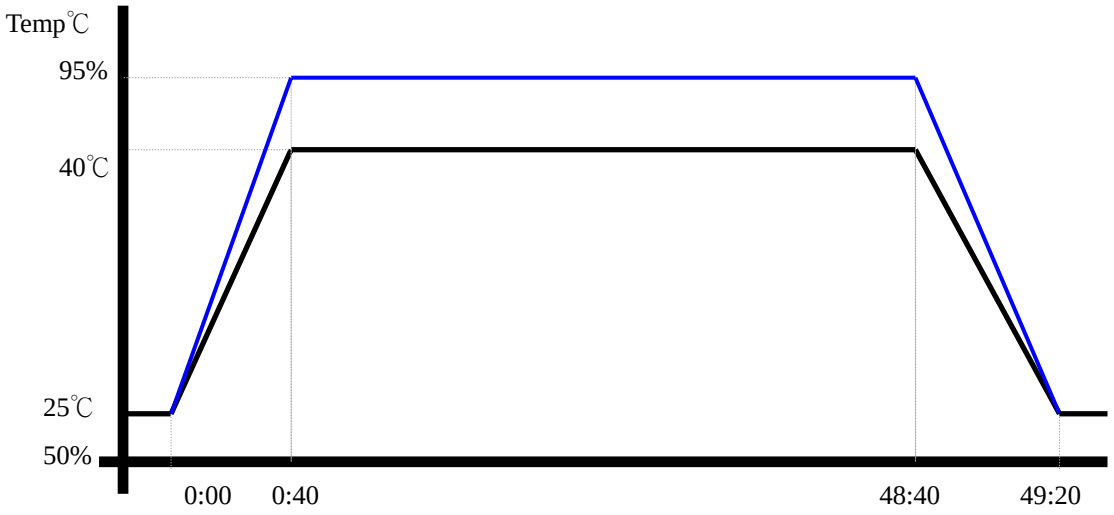
Test Standard: Reference IEC 68-2-3 Testing procedures
Test Ca: Damp heat, steady state (Non-operation)

Test Equipment:
Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: THS-D4L+-100
Date of Calibration: 11/20/06
Serial Number: 2582

Testing Item:

1. Test Temperature: 40℃
2. Test Humidity: 95%RH
3. Test Times: 48Hrs
4. Test Software: Windows CE / Run one Microsoft media player simultaneously
5. Test Environment Curve:

Humidity %



Sample Configuration & Quantity Under Test:
Quantity: 1 (AOP-8070HT)

Test Result:
No problem was found after the humidity test.

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Cold Start test

Test Date: 11-22~23-2006

Test Product: AOP-8070HT

Test Site: AAEON QA Internal Lab.

Performed By: Rex Chang

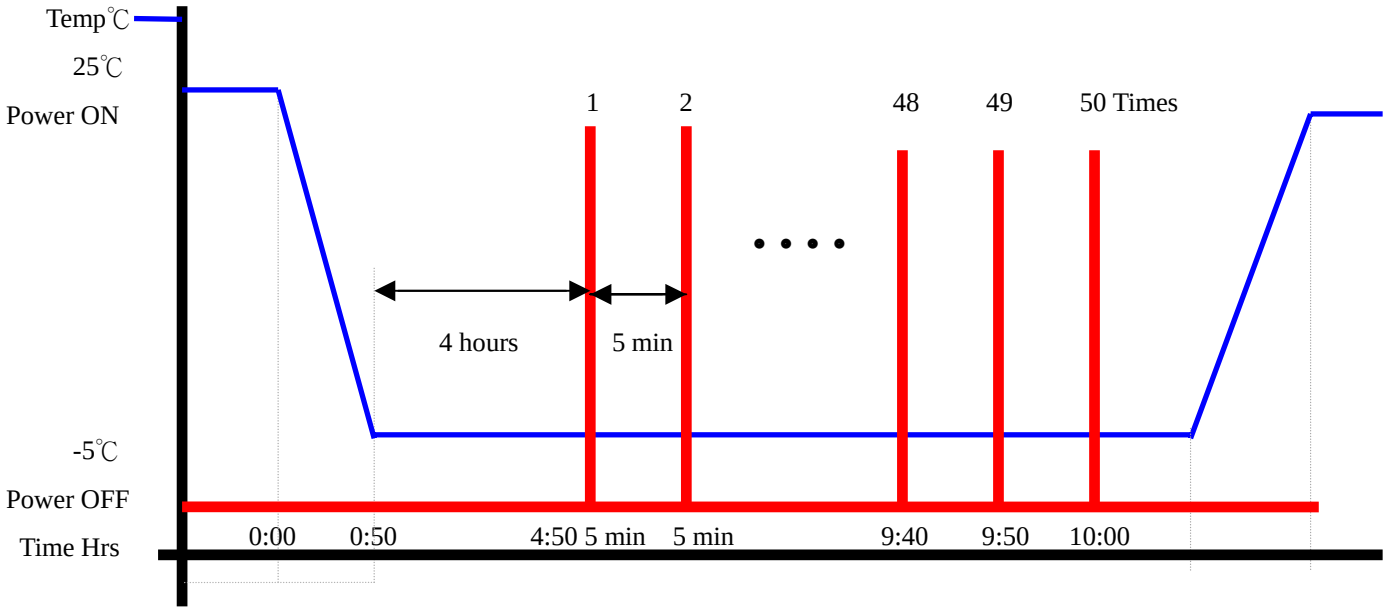
Test Standard: Reference IEC 68-2-1 Testing procedures
Test Ab: Cold Test

Test Equipment:

Programmable Temperature & Humidity Chamber
K.SON. INS. TECH. CORP.
Model: TS-F3L+-100
Date of Calibration: 03/20/06
Serial Number: 1467

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 CE
5. Test Environment Curve:



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Cold Start test

Sample Configuration & Quantity Under Test:

Quantity: 1 (AOP-8070HT)

Test Result:

No problem was found during the cold start test.

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