Xpandit-Expandable plastic barricade

ENVIRONMENTAL TEST REPORT

20100110358 Nov. 2010

Prepared: _____ Date: Nov. 2010

Approved: _____ Date: Nov. 2010

This Verification of Compliance is based on evaluation of a sample ofthe above mentioned product. Technical Report and documentation are at the Licence Holdr's disposal. The holder of the certificate is authorized to use this certificate in connection with the EC declaration of conformity.

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1. GENERAL

1. 1. This Verification of Compliance is based on evaluation of a sample ofthe above mentioned product. Technical Report and documentation are at the Licence Holdr's disposal. The holder of the certificate is authorized to use this certificate in connection with the EC declaration of conformity, on Xpandit, Expandable Plastic Barricade.

1. 2. The test plan was issued by the customer-Mr.YanChen-C.M(China) Road Safety Industrial Co.

2. APPLICABLE DOCUMENTS

2. 1. Test order, MLR International Email, Dated: 15st Nov. 2010.

2. 2. Working order No: 20100110358.

3. DEFINITION OF PRODUCT

3. 1. Xpandit, Expandable plastic barricade.

3. 2. A total of three (3) items were tested.

4. TYPE OF TESTS

4. 1. Low temperature test.

4. 2. High temperature test.

4. 3. Drop test.

4. 4. Vibration test.

5. DESCRIPTION OF TESTS

5. 1. Low Temperature test

5.1.1. Test Specifications

a. Standard: MIL STD 810C

b. Method: 502.1.

c. Procedure: I .

d. Test Conditions:

1. Test temperature: -20 ℃.
2. Test duration: 24 hours.
3. The item was tested unpacked.

5.1.2. Test Facility

a. Thermotron Temperature chamber.

5.1.3. Item under test

One (1) expandable plastic barricade, that had not undergone previous tests.

5.1.4. Test Performance

a. The test was commenced on Nov. 15th 2010 and completed on Nov. 16th 2010.

b. The test was performed in accordance with paragraph 5.1.1. above.

Photo No. 1 Expandable plastic barricade in Low temperature chamber

5.1.5. Test Results

No visible damage was observed during the test and at its completion.

5.1.6. Appendix

The temperature curve is shown in appendix A .

5. 2. High Temperature test

5.2.1. Test Specifications

a. Standard: MIL STD 810C

b. Method: 501.1.

c. Procedure: I .

d. Test Conditions:

1. Test temperature: +55 ℃, constant temperature.
2. Test duration: 24 hours.
3. The item was tested unpacked.

5.2.2. Test Facility

a. Tenney Engineering Temperature chamber.

5.2.3. Item under test

One (1) expandable plastic barricade, that had not undergone previous tests.

5.2.4. Test Performance

a. The test was commenced on Nov. 15th 2010 and completed on Nov. 16th 2010.

b. The test was performed in accordance with paragraph 5.2.1. above.

Photo No. 2: Expandable plastic barricade in High temperature chamber

5.2.5. Test Results

No visible damage was observed during the test and at its completion.

5.2.6. Appendix

The temperature curves shown in appendix B .

5. 3. Droptest

5.3.1. Test Specifications

a. Test Conditions:

1. Drop height: 76 cm.
2. Drop orientation: On base.
3. Item was tested unpacked.

5.3.2. Test Facility

L.A.B. Drop tester.

5.3.3. Item under test

One (1) expandable plastic barricade, that had undergone Low temperature test.

5.3.4. Test Performance

a. The test was performed on Nov. 15th 2010.

b. The test was performed in accordance with paragraph 5.3.1 above.

Photo No. 3: Expandable plastic barricade, on Drop tester.

5.3.5. Test Results

No visible damage was observed during the test and at its completion.

5. 4. Vibrationtest

5.4.1. Test Specifications

a. Standard: MIL STD 810D

b. Method : 514.3

c. Category: Basic Transportation.

d. Figures: 514.3-1 to 514.3-3 .

e. Test Conditions:

1. Vibration Type: Random.
2. Vibration axes: Three (3) orthogonal axes, longitudinal, lateral and vertical.
3. Test duration: 60 minutes per axis.
4. The item was tested in its original package.

5.4.2. Items Under Test

One (1) expandable plastic barricade, that had not undergone previous tests.

5.4.3. Test Facility

a. Ling Electronics Vibration system 20,000 lbs capacity.

b. Unholtz & Dickey Vibration system, 12,000 lbs capacity.

c. UDVwin Vibration Control system, calibrated until June 2010.

5.4.4. Test Performance

a. The test was performed on Nov. 15th 2010.

b. The test was conducted in accordance with paragraph 5.4.1. above.

Photo No. 4: Vibration test, vertical axis

Photo No. 5: Vibration test, lateral axis

Photo No. 6: Vibration test, longitudinal axis

5.4.5. Test Results

No visible damage was observed during the test and at its completion.

5.4.6. Appendices

The vibration curves for the test are shown in appendices C-1 through C-3.

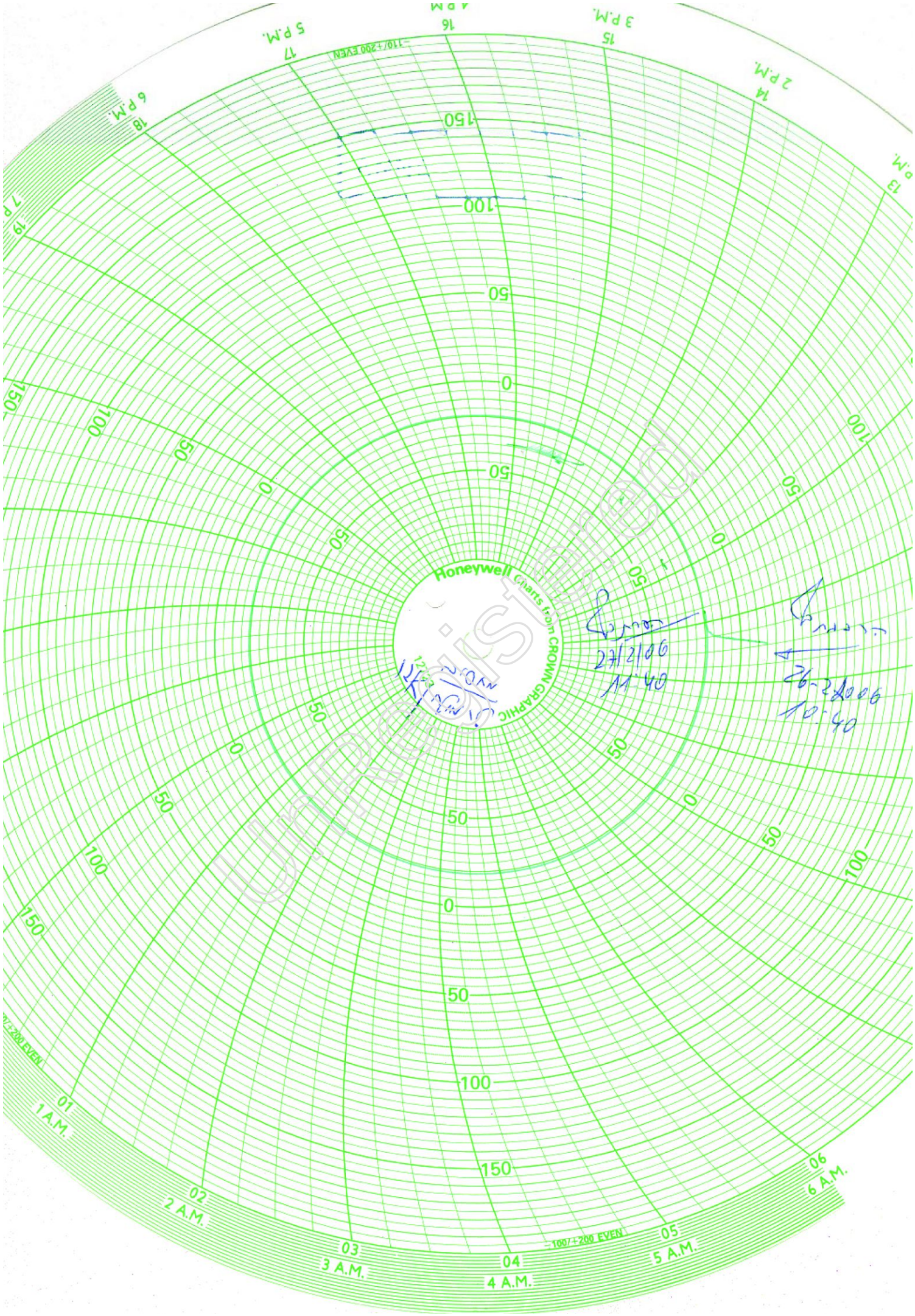
6. SUMMARY

6.1. Upon completion of the tests, the items were returned to the customer for further inspection.

6.2. The customer will draw the conclusions regarding the degree to which the product withstand the environmental conditions detailed in this report.

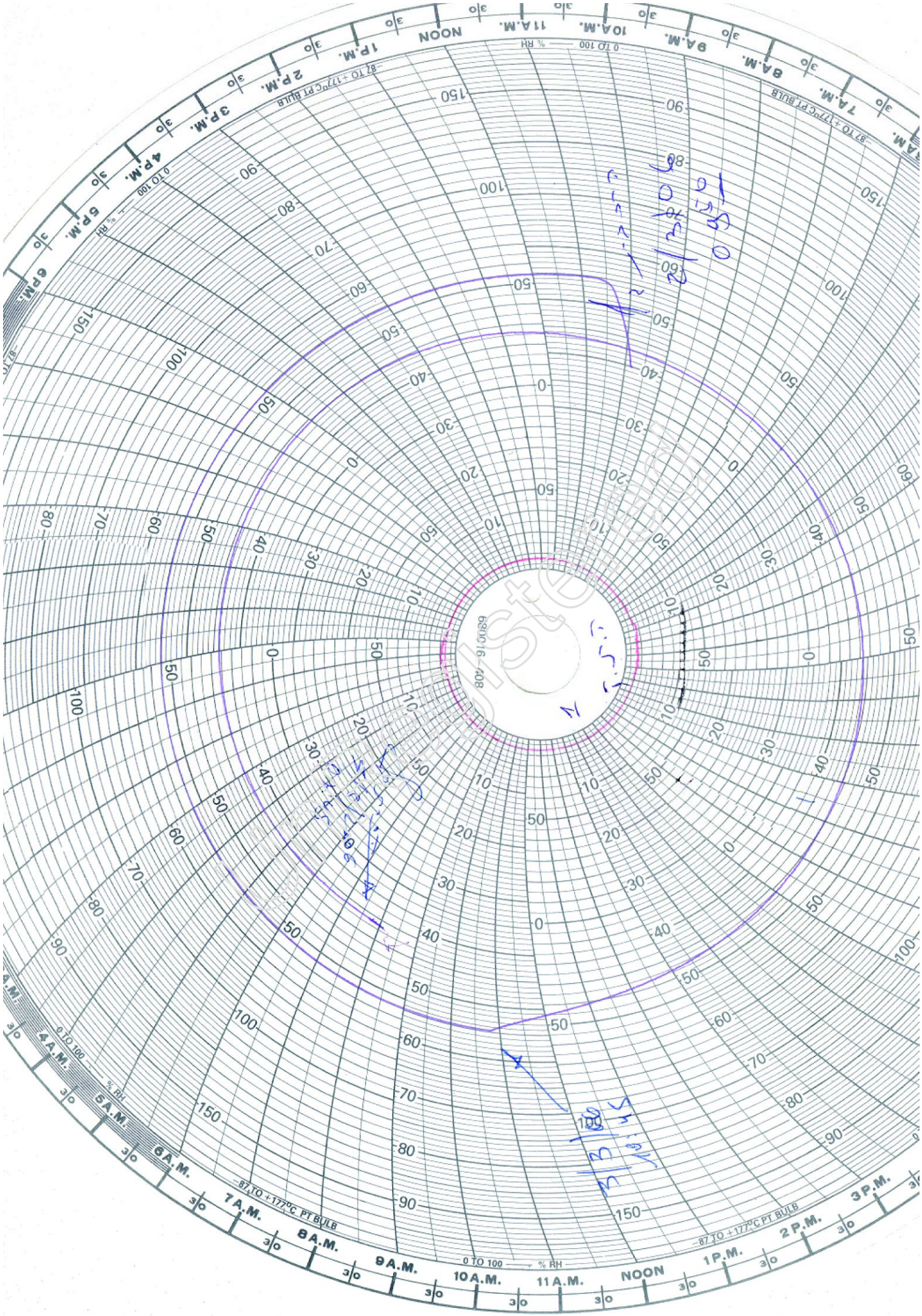
APPENDIX A

Low Temperature test Curve


Honeywell Charts from CROWN GRAPHIC
150
100
50
0
50
100
150
01
1 A.M.
02
2 A.M.
03
3 A.M.
04
4 A.M.
05
5 A.M.
06
6 A.M.
13
14
2 P.M.
15
3 P.M.
16
4 P.M.
17
5 P.M.
18
6 P.M.
19
7 P.M.
27/2/06
11.40
26-2-2006
10.40

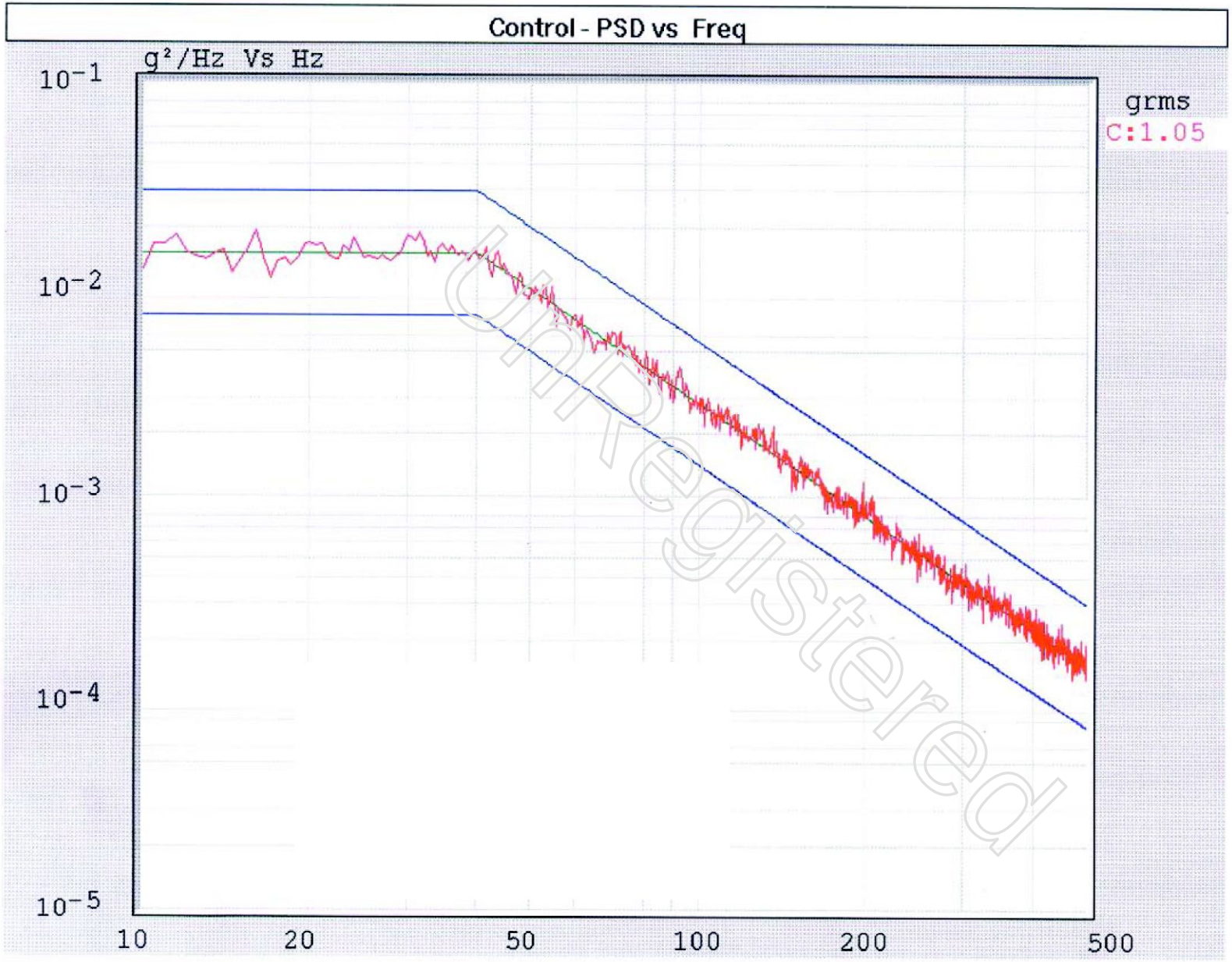
APPENDIX B

High temperature test Curve


4 A.M.
5 A.M.
6 A.M.
7 A.M.
8 A.M.
9 A.M.
10 A.M.
11 A.M.
NOON
1 P.M.
2 P.M.
3 P.M.
0 TO 100 % RH
87 TO +177°C PT BULB

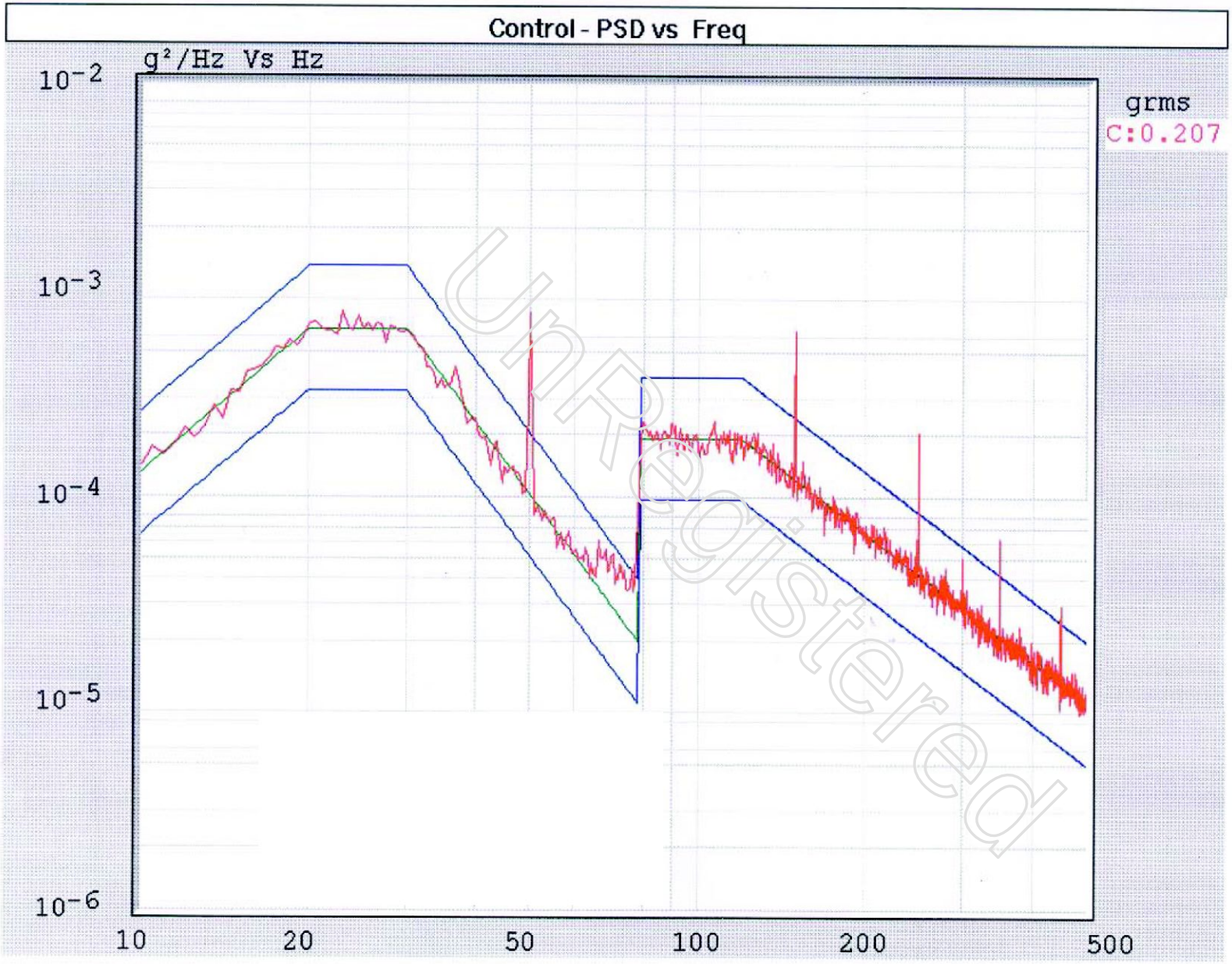
APPENDIX C

Vibration test Curves



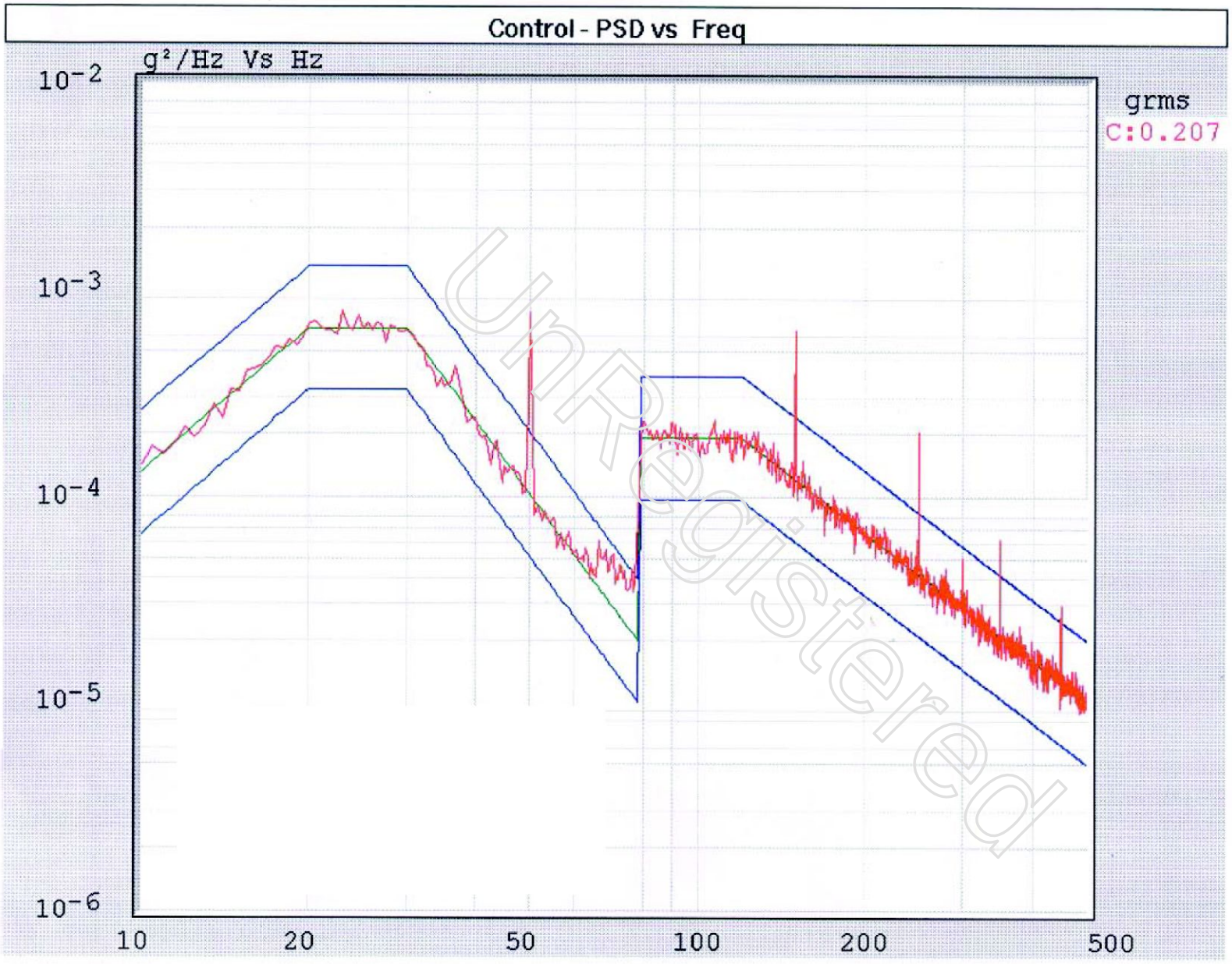
3/13/06
12:18:41 PM
Total: 01:05:11
Auto: 01:00:00
of 01:00:00
Status: Auto
FINISHED
Level 0.0 dB
Ref GRMS 1.04
Con GRMS 1.05
Drv Lim: 3.00 σ
DOF: 100
Lines: 1000
Res: 0.50 Hz
Control:Single
C:1
AutoSave
S:1

RANDOM SETUP ID: bastransV
SETUP DESCRIPTION: MIL STD 810D 514.3-1
RUN NAME: run6
RUN DESC: no: IV at z axis
CH-1: 100.0 mV/g CH-2: 100.0 mV/g CH-3: 100.0 mV/g CH-4: 100.0 mV/g
UD-VWIN



3/13/06
03:35:32 PM
Total: 01:06:20
Auto: 01:00:00
of 01:00:00
Status: Auto
FINISHED
Level 0.0 dB
Ref GRMS 0.20
Con GRMS 0.21
Drv Lim: 3.00 σ
DOF: 100
Lines: 1000
Res: 0.50 Hz
Control:Single
C:1
AutoSave
S:1

RANDOM SETUP ID: bastransT
SETUP DESCRIPTION: MIL STD 810D 514.3-2
RUN NAME: run4
RUN DESC: no: IV at y axis
CH-1: 100.0 mV/g CH-2: 100.0 mV/g CH-3: 100.0 mV/g CH-4: 100.0 mV/g
UD-VWIN



3/13/06
03:35:32 PM
Total: 01:06:20
Auto: 01:00:00
of 01:00:00
Status: Auto
FINISHED
Level 0.0 dB
Ref GRMS 0.20
Con GRMS 0.21
Drv Lim: 3.00 σ
DOF: 100
Lines: 1000
Res: 0.50 Hz
Control:Single
C:1
AutoSave
S:1

RANDOM SETUP ID: bastransT
SETUP DESCRIPTION: MIL STD 810D 514.3-2
RUN NAME: run4
RUN DESC: no: IV at y axis
CH-1: 100.0 mV/g CH-2: 100.0 mV/g CH-3: 100.0 mV/g CH-4: 100.0 mV/g
UD-VWIN