



TEST REPORT

성적서 번호 : CUS2011-0897

Report No.

신청자

Client

○ 회사명 : VISION X ASIA Co., Ltd.

Name

○ 주소 : 175-16, Cheongcheondong, Bupyeong-gu, Incheon, Republic of Korea

Address

○ 대표자명 : In Hong, Ko

Representative

시험성적서의 용도 : Quality Control

Purpose of Report

시험대상품목 또는 물질, 시료명 : LED Luminaire(9 ~ 32 Vd.c., 4.2 A / MIL-RXP1200)

Name of Product(rating/model)

접수 일자 : August. 08, 2011

Receipt Date

시험 기간 : August. 20, 2011 ~ August. 22, 2011

Test Period

시험 방법 : IEC 60068-2-6 : 2007

Test Method

시험 환경 : 온도 : (22 ± 2) °C,

Test Environment

Temperature

습도 : (25 ± 5) % R.H.,

Relative humidity

기압 : (99.1 ± 0.1) kPa

Atmospheric pressure

시험 결과 : Pass[See test results]

Test Result

비고 : 1. 이 성적서는 의뢰자가 제시한 시료 및 시료명으로 시험한 결과로서 전체 제품에 대한 품질을 보증하지는 않습니다.
The test result of this test report only limited in the sample and sample name presented by the client and do not guarantee the all products of the client.

2. 이 성적서는 홍보, 선전, 광고 및 소송용 등으로 사용될 수 없으며, 용도 이외의 사용을 금합니다.
This test report shall be used only within the purpose of its defined usage and also shall not be used for public relation, advertisement and suit without the KTR's written approval.

Tested by: Joon Ho, Lee
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Approved by: Jin Tai, Kim
E-mail : jtkim2762@ktr.or.kr

August. 25, 2011



KOREA TESTING & RESEARCH INSTITUTE



Test Results

1. Test equipments

Equipments	Model No.	Manufacturer	Calibration Date	Calibration Institutions
Vibration Testing Systems	V8-440/LPT900&SPA56K	LDS	2011.07.14, 2010.08.21	KTL
Vibration Sensor	4513B(59333)	B&K	2011.02.10	KTL

2. Test Conditions

IEC 60068-2-6 : 2007 (Test Condition : Test method requested by the client)

Test sample is mounted on the vibration table and tested under condition on the table below. After testing, there should be no slack or physical damage neither the appearance nor inner parts. there should be no trouble in operation as well.

2.1 Vibration Test Conditions

Vibration direction	Frequency range (Hz)	Displacement (mm)	Sweep rate (oct/min)	Test times (h)
X Axis(front and back)	10 ~ 200	0.35	1	1
Y Axis(left and right)	10 ~ 200	0.35	1	1
Z Axis(up and down)	10 ~ 200	0.35	1	2

2.2 Shock Test Conditions

Shock direction		Amplitude (m/s^2)	Pulse width (ms)	Pulse type	Test times (h)	Test counts
X Axis	+	60	25	Half Sine	0.5	2 500
	-				0.5	2 500
Y Axis	+	60	25	Half Sine	0.5	2 500
	-				0.5	2 500
Z Axis	+	60	25	Half Sine	1	5 000
	-				1	5 000

Test Results

3. Test Results

Vibration & shock direction	Test Clause	Before test	Results
X Axis	appearance	normal	normal
	the slack of inner parts	normal	no slack
	physical damage	normal	no damage
	operation	normal	normal operation
Y Axis	appearance	normal	normal
	the slack of inner parts	normal	no slack
	physical damage	normal	no damage
	operation	normal	normal operation
Z Axis	appearance	normal	normal
	the slack of inner parts	normal	no slack
	physical damage	normal	no damage
	operation	normal	normal operation

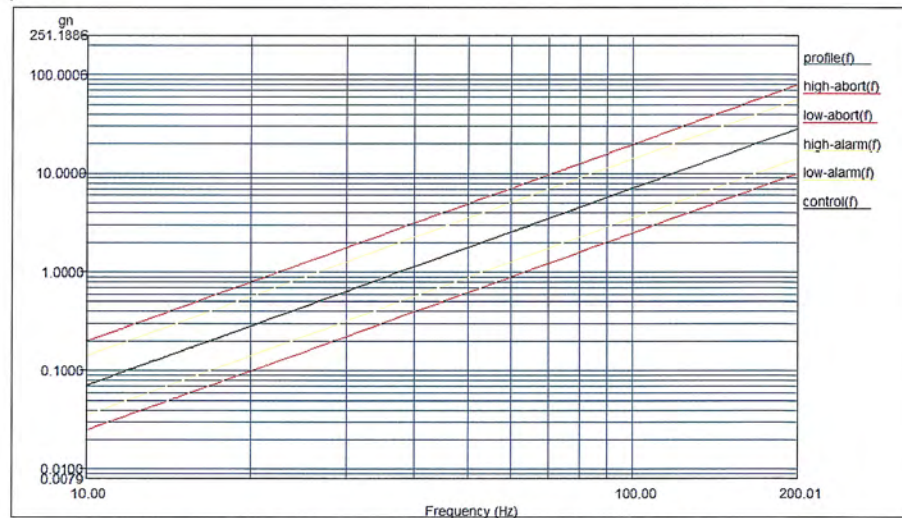
Test Results

Pictures



〈Vibration & Shock Test Picture(Front and back:X Axis)〉

DUT:
Serial Number:
Project File Name: 스위프.pri
Profile Name: Low Level
Test Type: Swept Sine
Run Folder: \RunDefault\Aug 20, 2011 10-43-44



Level: 100 %
Frequency: 14.347925 Hz
Full Level Time: 01:00:00
Time Remaining: 00:00:00
Sweep Type: Logarithmic
Sweep Rate: 1 Oct/Min

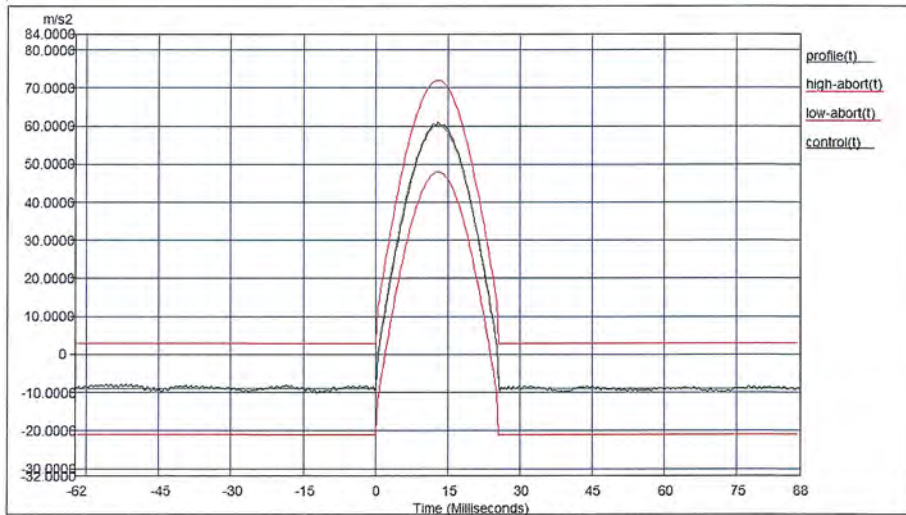
Data saved at 11:43:50 AM, Saturday, August 20, 2011
Report created at 11:43:53 AM, Saturday, August 20, 2011

〈Vibration Test Data(Front and back:X Axis)〉

Test Results

Pictures

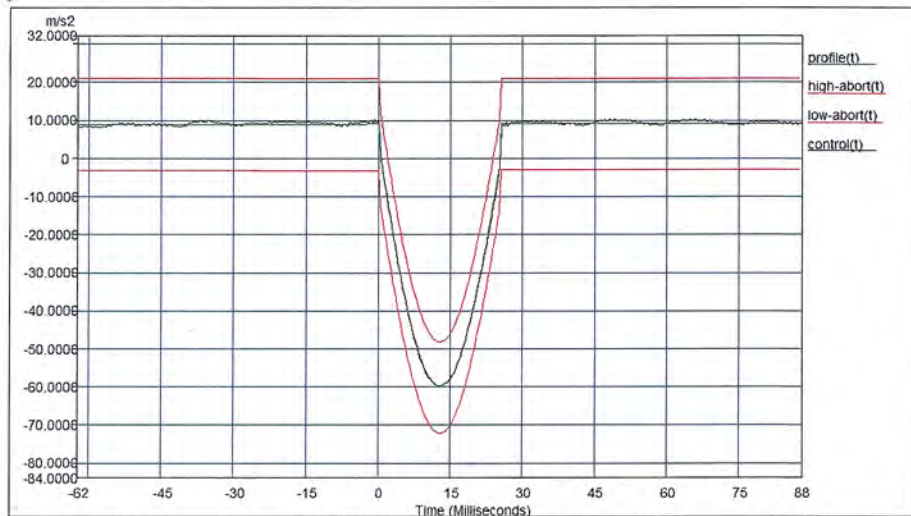
DUT:
 Serial Number:
 Project File Name: 충격.pj
 Profile Name: 5gn 11mSec Test Type: Classical Shock Run Folder: .\RunDefault Aug 20, 2011 14-48-31



Level: 100 % Block Size: 2048 Elapsed Pulses: 2505
 Frame Time: 0.682667 Seconds Control Peak: 60.681824 Control RMS: 9.679795 Full Level Elapsed Pulses: 2500
 dt: 0.000333 Seconds Demand Peak: 60.000000 Demand RMS: 9.649887 Remaining Pulses: 0
 Pulse Type: Half Sine Amplitude: 60.000000 Pulse Width: 25.000000 ms
 Data saved at 03:30:26 PM, Saturday, August 20, 2011 Report created at 03:30:29 PM, Saturday, August 20, 2011

<Shock Test Data(Front and back:X Axis(+))>

DUT:
 Serial Number:
 Project File Name: 충격 분방향.pj
 Profile Name: 5gn 11mSec Test Type: Classical Shock Run Folder: .\RunDefault Aug 20, 2011 15-43-12



Level: 100 % Block Size: 2048 Elapsed Pulses: 2505
 Frame Time: 0.682667 Seconds Control Peak: 59.905781 Control RMS: 9.680857 Full Level Elapsed Pulses: 2500
 dt: 0.000333 Seconds Demand Peak: 60.000000 Demand RMS: 9.649887 Remaining Pulses: 0
 Pulse Type: Half Sine Amplitude: 60.000000 Pulse Width: 25.000000 ms
 Data saved at 04:25:13 PM, Saturday, August 20, 2011 Report created at 04:25:15 PM, Saturday, August 20, 2011

<Shock Test Data(Front and back:X Axis(-))>

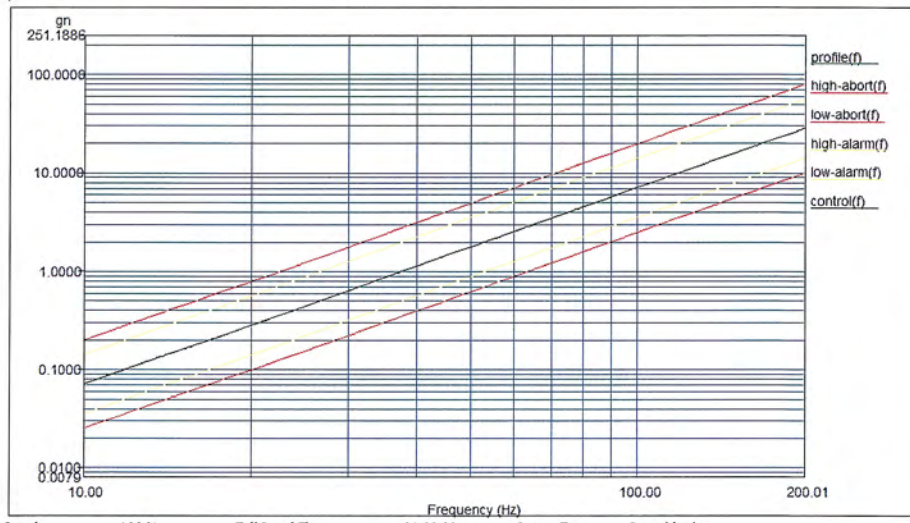
Test Results

Pictures



<Vibration & Shock Test Picture(Left and right:Y Axis)>

DUT:
Serial Number:
Project File Name: 스위프.프j
Profile Name: Low Level Test Type: Swept Sine Run Folder: .\RunDefault\Aug 20, 2011 13-28-12



Data saved at 02:28:17 PM, Saturday, August 20, 2011

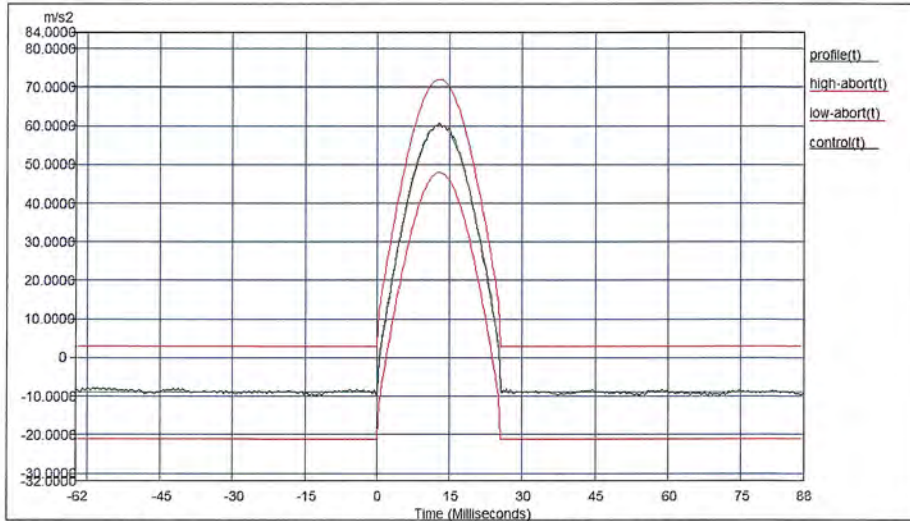
Report created at 02:28:20 PM, Saturday, August 20, 2011

<Vibration Test Data(Left and right:Y Axis)>

Test Results

Pictures

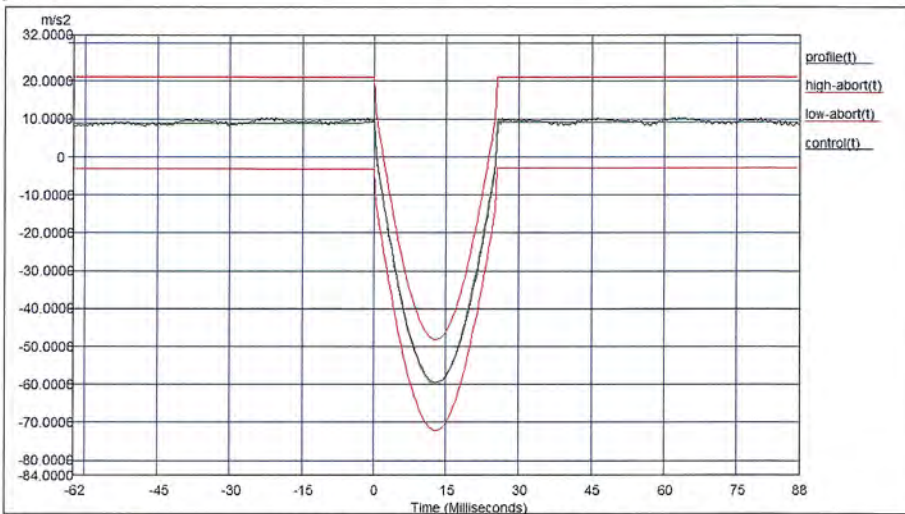
DUT:
 Serial Number:
 Project File Name: Untitled
 Profile Name: 5gn 11mSec Test Type: Classical Shock Run Folder: \RunDefault Aug 20, 2011 09-49-14



Level: 100 % Block Size: 2048 Elapsed Pulses: 2956
 Frame Time: 0.682667 Seconds Control Peak: 60.531643 Control RMS: 9.682839 Full Level Elapsed Pulses: 2951
 dT: 0.000333 Seconds Demand Peak: 60.000000 Demand RMS: 9.649887 Remaining Pulses: 0
 Pulse Type: Half Sine Amplitude: 60.000000 Pulse Width: 25.000000 ms
 Data saved at 10:38:37 AM, Saturday, August 20, 2011 Report created at 10:38:47 AM, Saturday, August 20, 2011

<Shock Test Data(Left and right:Y Axis(+))>

DUT:
 Serial Number:
 Project File Name: 충격_분발할.prj
 Profile Name: 5gn 11mSec Test Type: Classical Shock Run Folder: \RunDefault Aug 20, 2011 12-02-03

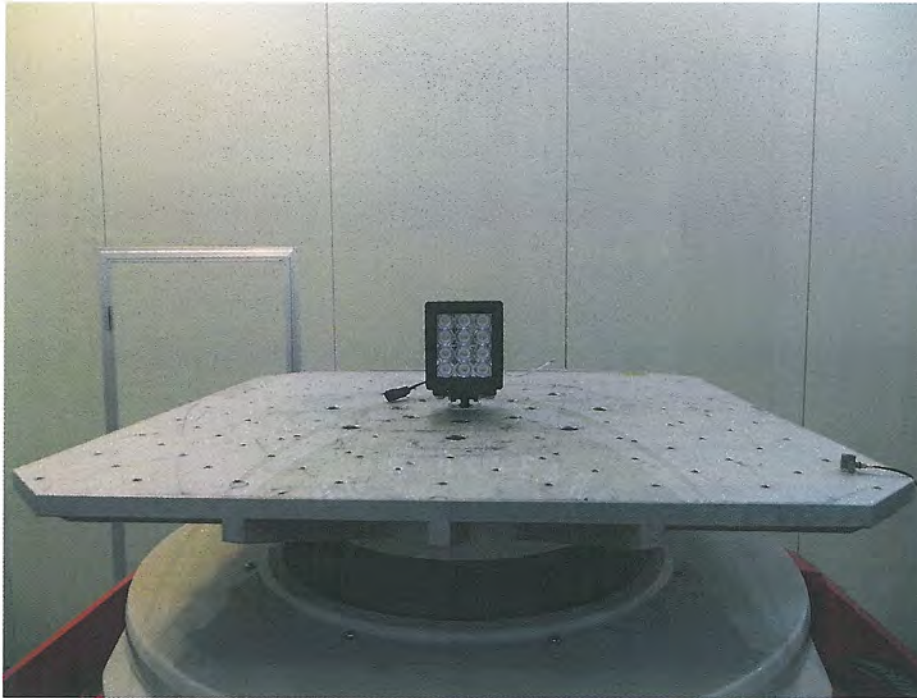


Level: 100 % Block Size: 2048 Elapsed Pulses: 2505
 Frame Time: 0.682667 Seconds Control Peak: 59.635124 Control RMS: 9.680259 Full Level Elapsed Pulses: 2500
 dT: 0.000333 Seconds Demand Peak: 60.000000 Demand RMS: 9.649887 Remaining Pulses: 0
 Pulse Type: Half Sine Amplitude: 60.000000 Pulse Width: 25.000000 ms
 Data saved at 12:43:54 PM, Saturday, August 20, 2011 Report created at 12:43:56 PM, Saturday, August 20, 2011

<Shock Test Data(Left and right:Y Axis(-))>

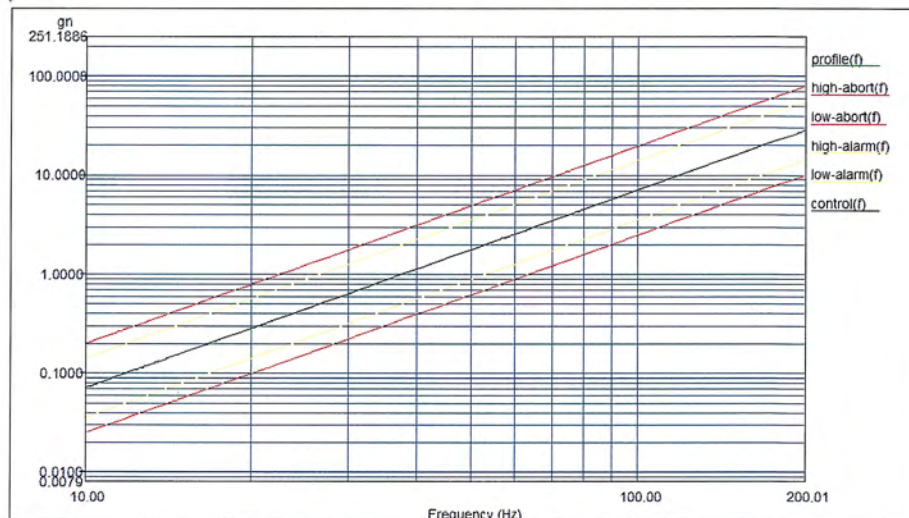
Test Results

Pictures



〈Vibration & Shock Test Picture(Up and down:Z Axis)〉

DUT:
Serial Number:
Project File Name: 스위프.prj
Profile Name: Low Level
Test Type: Swept Sine
Run Folder: RunDefault\Aug 22, 2011 10-35-31



Level: 100 %
Frequency: 20.577160 Hz
Full Level Time: 02:00:00
Time Remaining: 00:00:00
Sweep Type: Logarithmic
Sweep Rate: 1 Oct/Min

Data saved at 12:36:37 PM, Monday, August 22, 2011

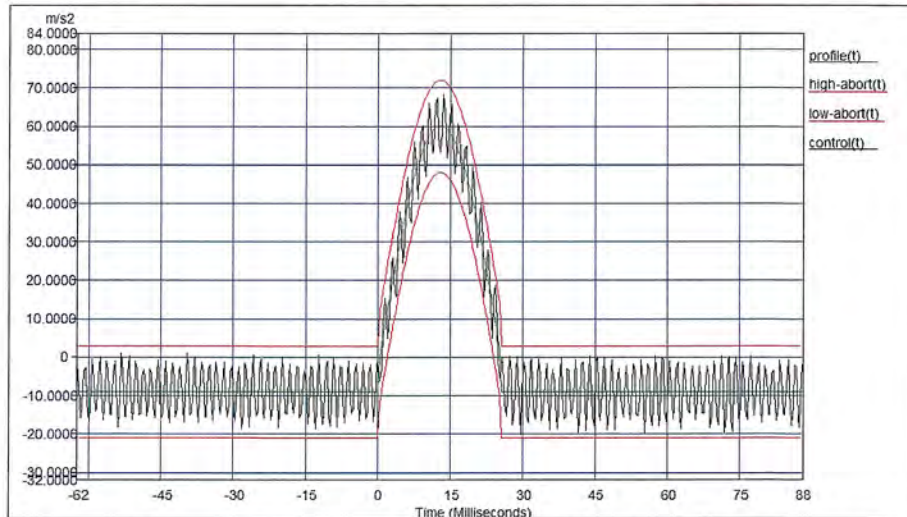
Report created at 12:36:50 PM, Monday, August 22, 2011

〈Vibration Test Data(Up and down:Z Axis)〉

Test Results

Pictures

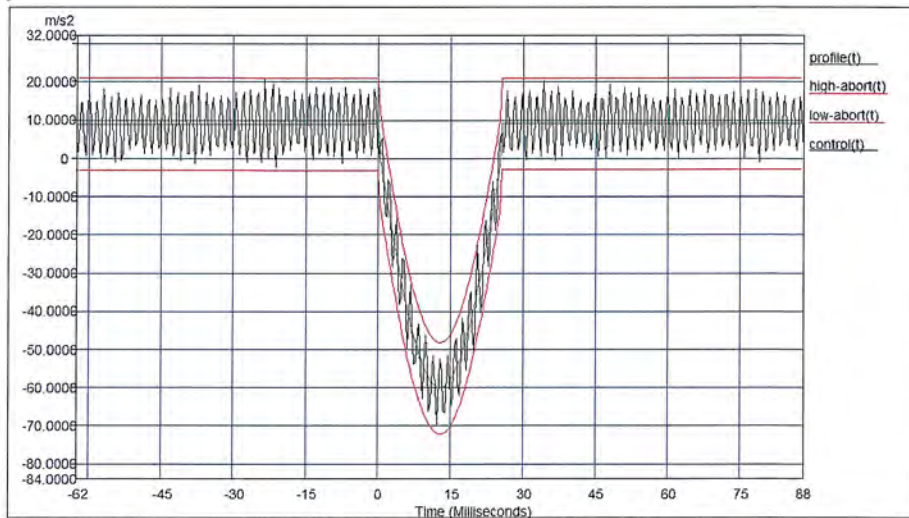
PUT:
 Serial Number:
 Project File Name: 충격.ppt
 Profile Name: 5gn 11mSec Test Type: Classical Shock Run Folder: \RunDefault\Aug 22, 2011 12-45-22



Level: 100 % Block Size: 2048 Elapsed Pulses: 5005
 Frame Time: 0.682667 Seconds Control Peak: 68.044823 Control RMS: 11.426133 Full Level Elapsed Pulses: 5000
 dT: 0.000333 Seconds Demand Peak: 60.000000 Demand RMS: 9.649887 Remaining Pulses: 0
 Pulse Type: Half Sine Amplitude: 60.000000 Pulse Width: 25.000000 ms
 Data saved at 02:08:53 PM, Monday, August 22, 2011 Report created at 02:08:56 PM, Monday, August 22, 2011

<Shock Test Data(Up and down:Z Axis(+))>

PUT:
 Serial Number:
 Project File Name: 충격 부방향.ppt
 Profile Name: 5gn 11mSec Test Type: Classical Shock Run Folder: \RunDefault\Aug 22, 2011 14-33-24



Level: 100 % Block Size: 2048 Elapsed Pulses: 1430
 Frame Time: 0.682667 Seconds Control Peak: 69.518318 Control RMS: 11.466855 Full Level Elapsed Pulses: 5000
 dT: 0.000333 Seconds Demand Peak: 60.000000 Demand RMS: 9.649887 Remaining Pulses: 0
 Pulse Type: Half Sine Amplitude: 60.000000 Pulse Width: 25.000000 ms
 Data saved at 02:57:31 PM, Monday, August 22, 2011 Report created at 02:57:33 PM, Monday, August 22, 2011

<Shock Test Data(Up and down:Z Axis(-))>

Test Results

Pictures



<Test sample>



<Operating picture after the test>