

KING DESIGN INDUSTRIAL CO., LTD.

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VIBRATION TEST LABORATORY<http://www.kdi.tw><http://www.vibration.com.tw>

E-mail:service@kdi.tw

TESTING / INSPECTION REPORT

REPORT NO : ST-151117-1

COMPANY : AAEON Technology Inc.

ADDRESS : 5F, No.135, Lane 235, Pao Chiao Rd.

Hsin-Tien City, Taipei, Taiwan, R. O. C.

TEL : 886-2-8919-1234

FAX : 886-2-8919-1049

SPECIMEN : FWS-7520 (With 2.5" SATA HDD)

DATE OF RECEIVED : 2015/11/17

DATE OF TESTED : 2015/11/17

TEST / INSPECTION ITEMS : Shock Test

REMARKS :

- The laboratory is accredited by ISO/IEC 17025 General Requirements for the Competence of Calibration and Testing Laboratory.
- The results only apply to the device under test.
- This report is 17 pages, and no part of it may be abstracted or reproduced.

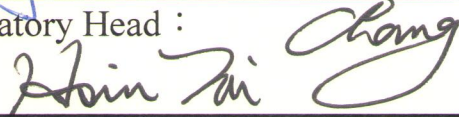
Test Engineer :



Approval Signatory :

2015.11.20 

Laboratory Head :



TESTING / INSPECTION REPORT

TESTING EQUIPMENT :

Vibration Tester : KING DESIGN KD-9363EM-600F2K-50N120,
S/N : KDS11054783
Controller : VCS-913⁺, S/N : 1312416
Control Accelerometer : Wilcoxon Research WR-777, S/N : 4208
Calibration Date : 2014/11/25

TEST ENVIRONMENT :

Temperature : 27°C (25±10°C)
Relative Humidity : 68%RH (50±20% RH)

SPECIMEN :

Model : FWS-7520 (With 2.5" SATA HDD)
Quantity : 1 unit

TESTING / INSPECTION REPORT

TEST SPECIFICATION (1) :

As per applicant's requirement

Shock test (Operating)

Wave Form : Half Sine wave
Acceleration : 10 g
Duration Time : 11 mS
No. of Shock : Each axis 3 times
Shock Direction : $\pm X$, $\pm Y$, $\pm Z$ axis

TEST SPECIFICATION (2) :

As per applicant's requirement

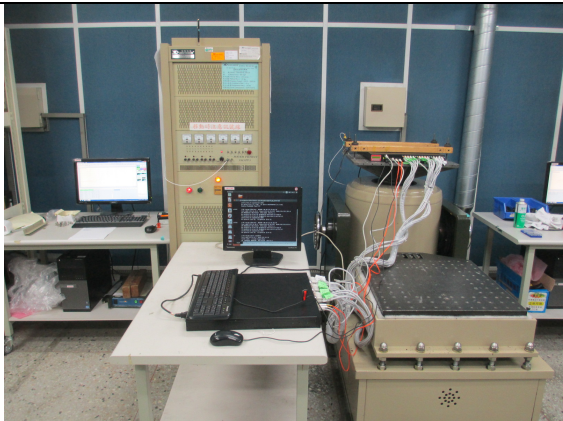
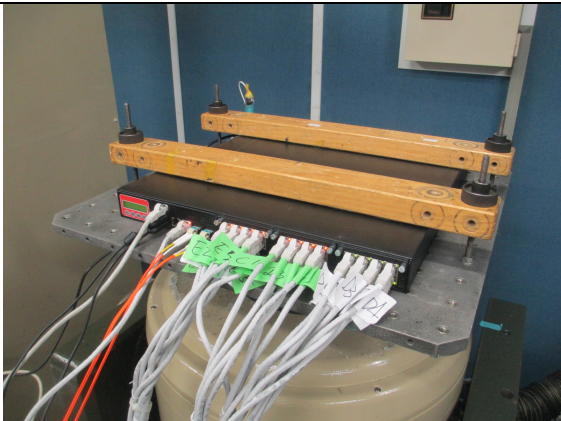
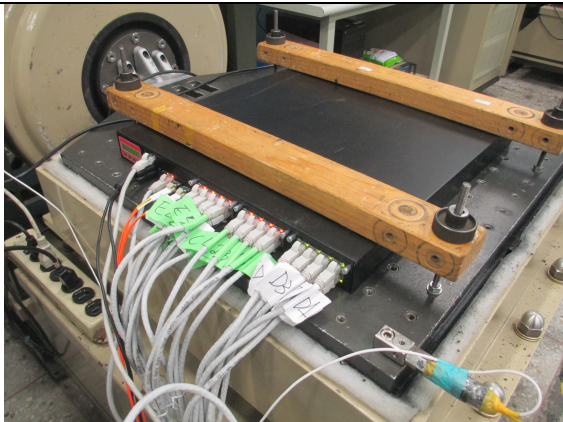
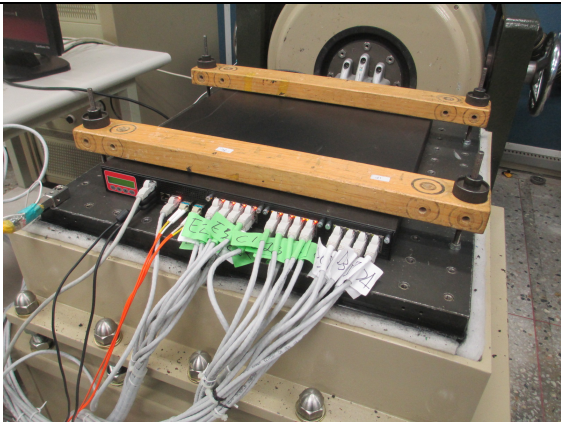
Shock test (Non-Operating)

Wave Form : Half Sine wave
Acceleration : 20 g
Duration Time : 11 mS
No. of Shock : Each axis 3 times
Shock Direction : $\pm X$, $\pm Y$, $\pm Z$ axis

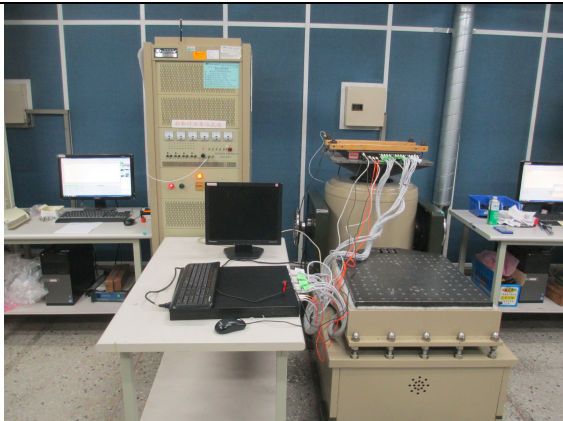
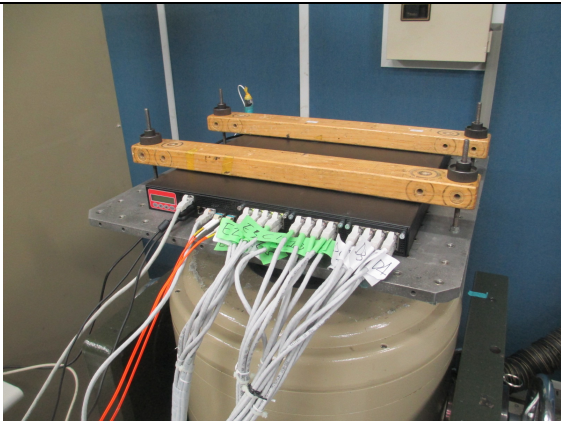
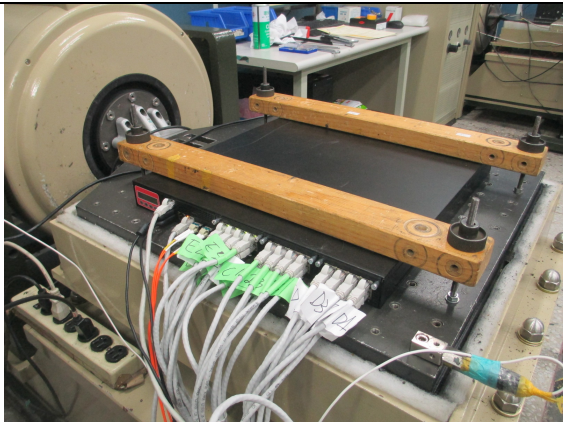
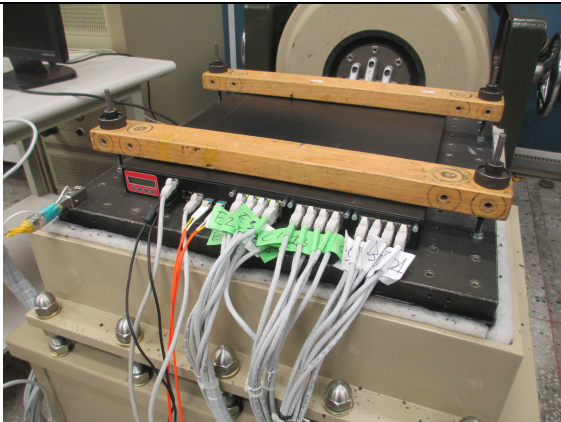
TEST RESULT :

Describe	PASS	FAIL	Non-Judgment
Function judgment ⁽¹⁾	√	---	---
Appearance check ⁽²⁾	√	---	---
(1)—Bootting function was normal after the test.			
(2)—No visible damages were found.			

TESTING / INSPECTION REPORT

Testing photos (Operating)	
Tester	$\pm Z$ axis
	
$\pm X$ axis	$\pm Y$ axis
	

TESTING / INSPECTION REPORT

Testing photos (Non-Operating)	
Tester	$\pm Z$ axis
	
$\pm X$ axis	$\pm Y$ axis
	



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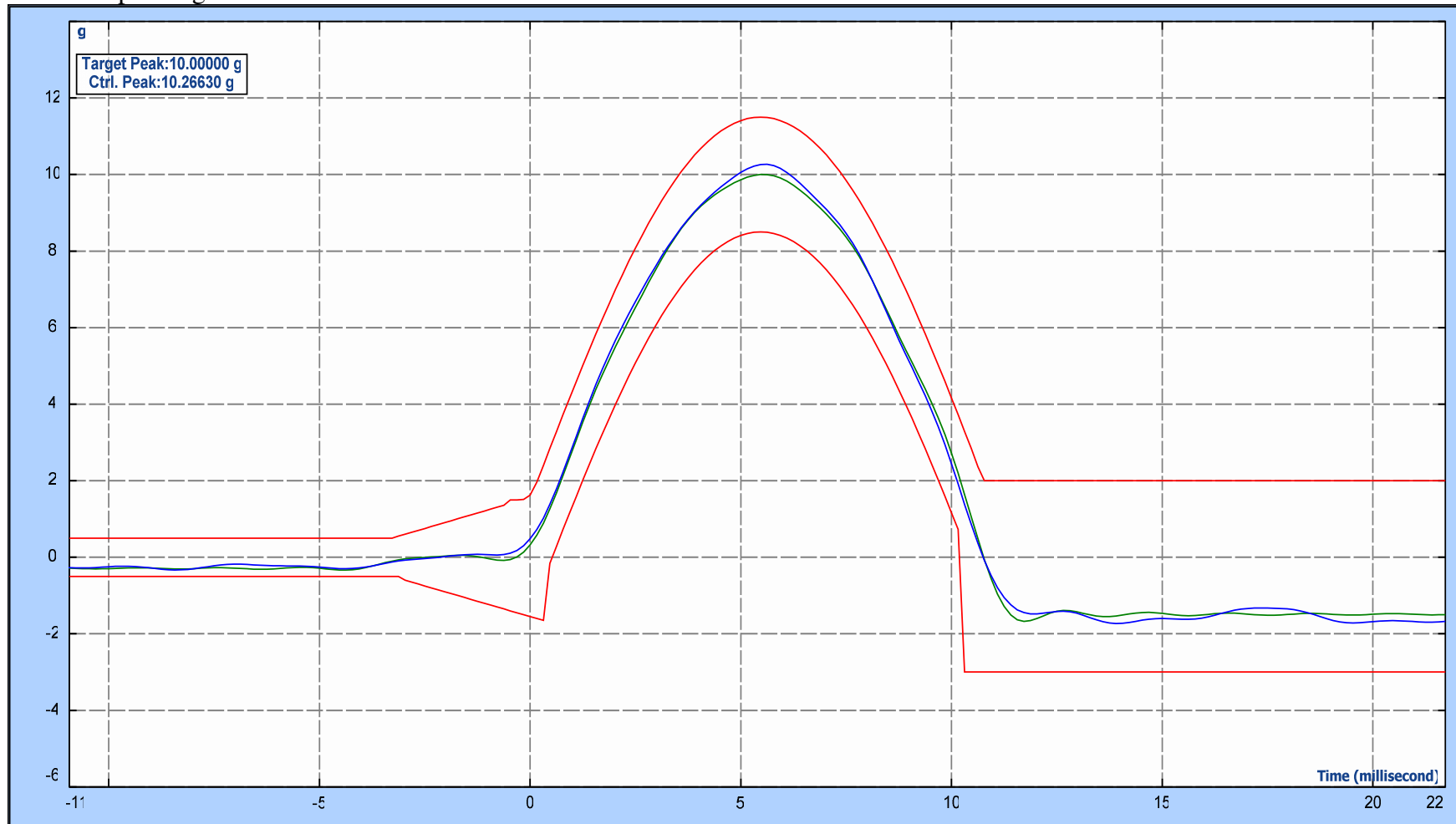
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+X axis Operating



Level: 100.00 %

Velocity Pk: 366.1 mm/s

Control RMS: 1.039 g

Full Level Elapsed: 3.0

Drive Pk: 1.467V

Control Pk: 10.27 g

Remaining: 0.0

Pulse width: 11.00 ms

Est. Disp. : 9.445 mm Pk-Pk

Target Pk: 10.00 g

Total Elapsed: 17.0

Measured Pulse width: 12.90296(ms)



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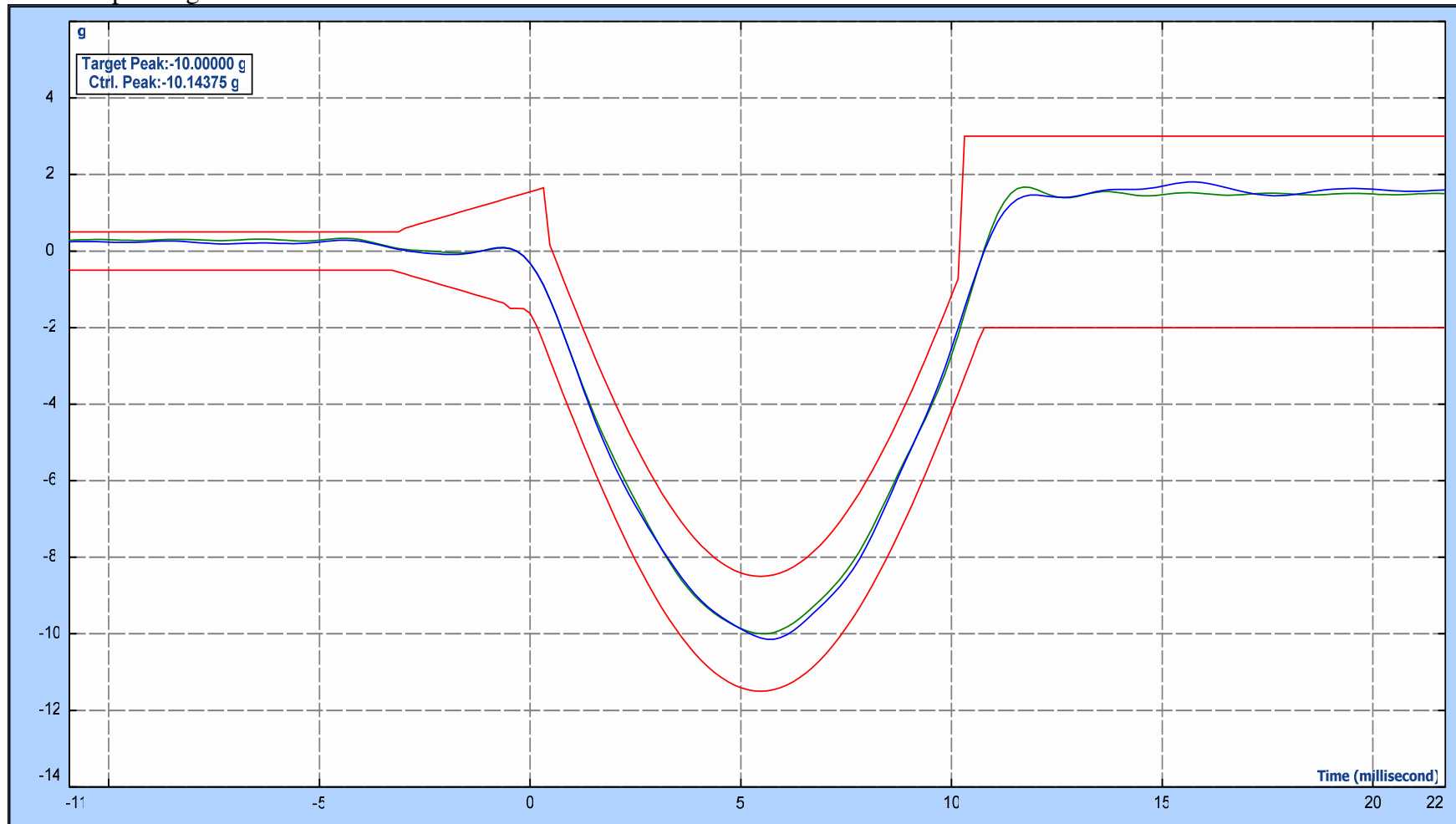
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-X axis Operating



Level: -100.00 %

Velocity Pk: 368.4 mm/s

Control RMS: 1.039 g

Full Level Elapsed: 3.0

Drive Pk: -1.5e+0V

Control Pk: -10.14 g

Remaining: 0.0

Pulse width: 11.00 ms

Est. Disp. : 9.415 mm Pk-Pk

Target Pk: -10.00 g

Total Elapsed: 17.0

Measured Pulse width: 11.09609(ms)



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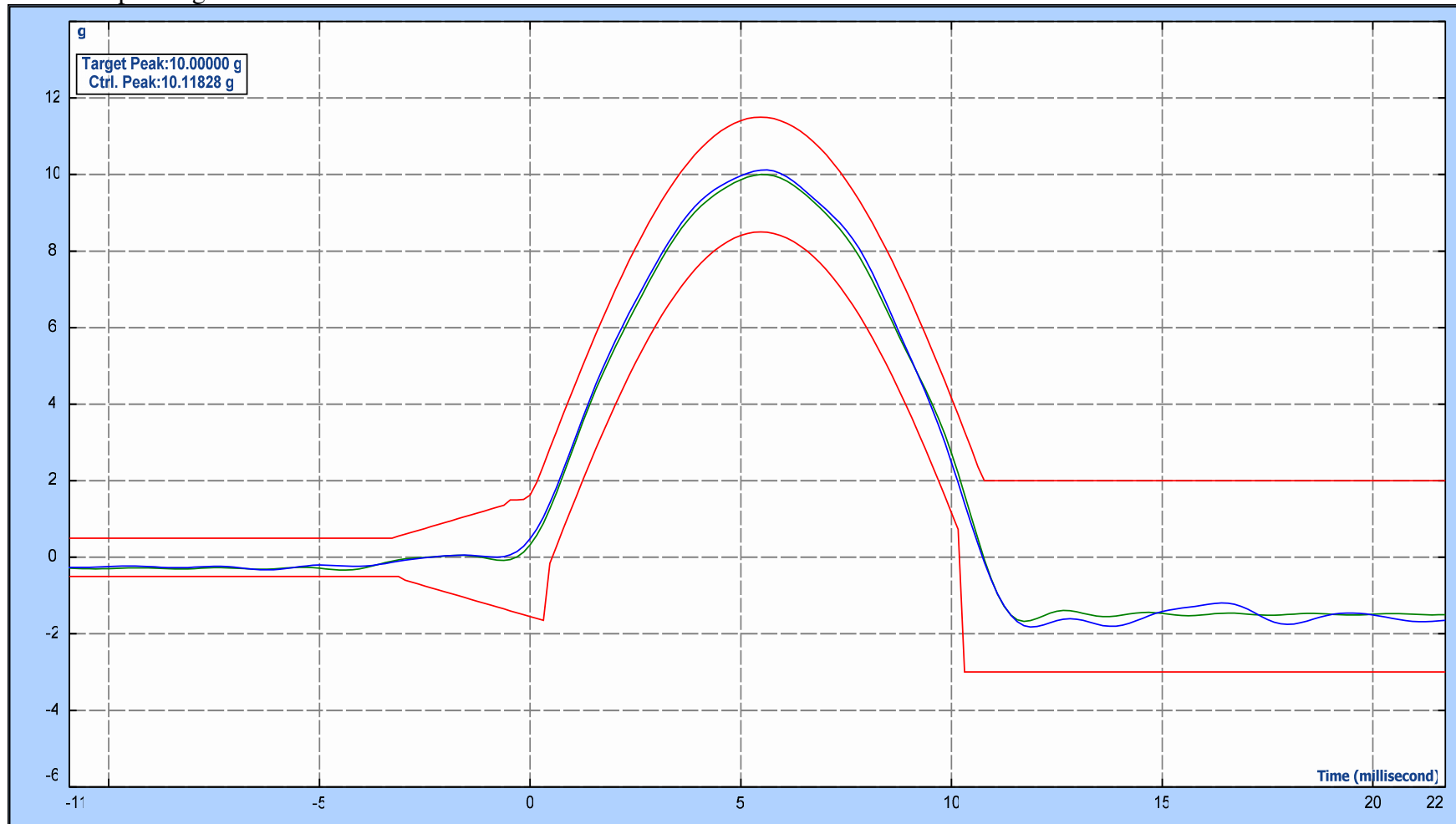
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+Y axis Operating



Level: 100.00 %

Velocity Pk: 367.4 mm/s

Control RMS: 1.042 g

Full Level Elapsed: 3.0

Drive Pk: 1.484V

Control Pk: 10.12 g

Remaining: 0.0

Pulse width: 11.00 ms

Est. Disp. : 9.429 mm Pk-Pk

Target Pk: 10.00 g

Total Elapsed: 17.0

Measured Pulse width: 13.12401(ms)



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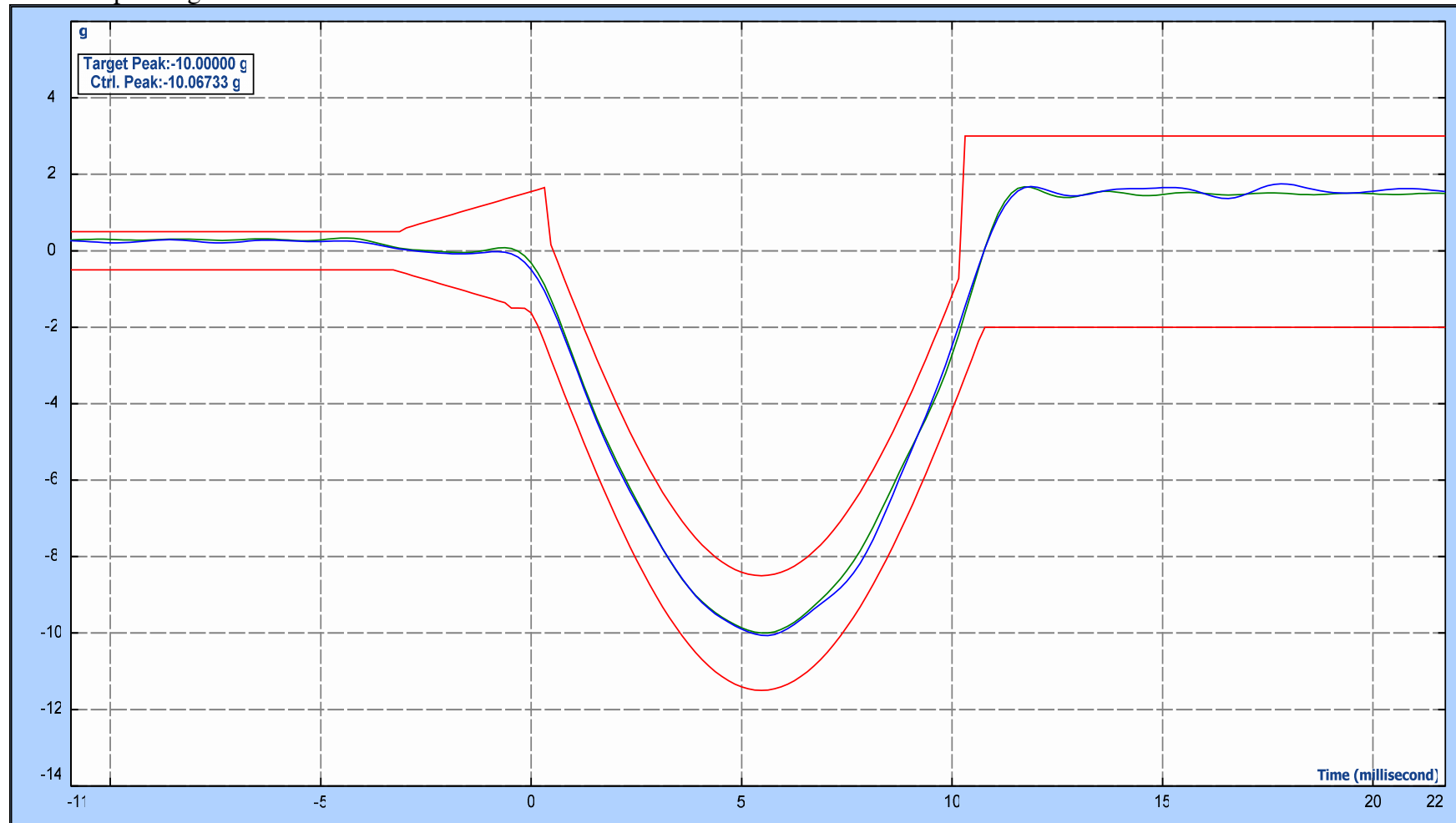
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-Y axis Operating



Level: -100.00 %

Velocity Pk: 368.7 mm/s

Control RMS: 1.040 g

Full Level Elapsed: 3.0

Drive Pk: -1.5e+0V

Control Pk: -10.07 g

Remaining: 0.0

Pulse width: 11.00 ms

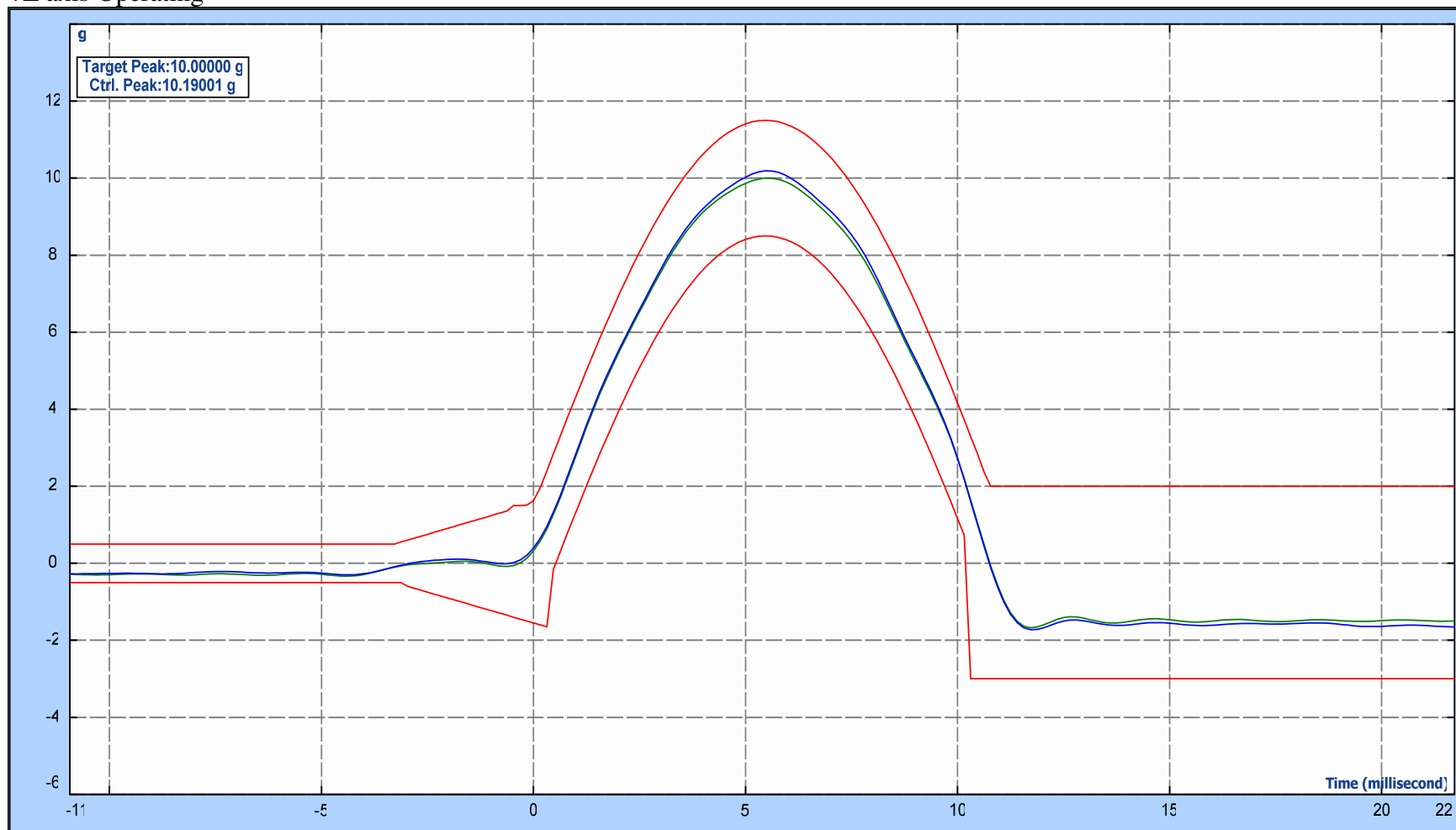
Est. Disp. : 9.442 mm Pk-Pk

Target Pk: -10.00 g

Total Elapsed: 17.0

Measured Pulse width: 13.56294(ms)

+Z axis Operating



Level: 100.00 %

Velocity Pk: 367.0 mm/s

Control RMS: 1.041 g

Full Level Elapsed: 3.0

Drive Pk: 1.218V

Control Pk: 10.19 g

Remaining: 0.0

Pulse width: 11.00 ms

Est. Disp. : 9.403 mm Pk-Pk

Target Pk: 10.00 g

Total Elapsed: 17.0

Measured Pulse width: 11.29430(ms)



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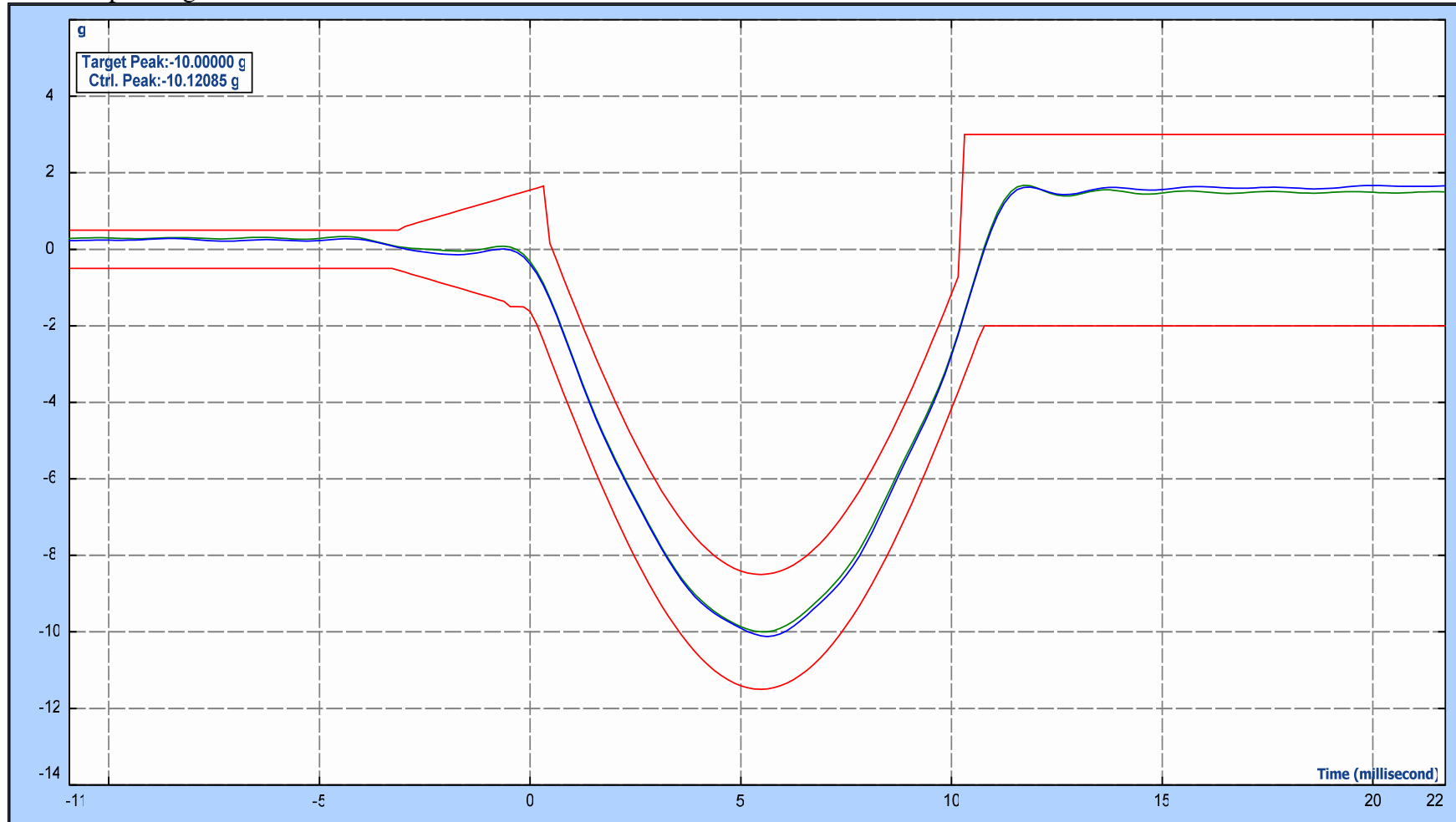
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-Z axis Operating



Level: -100.00 %

Velocity Pk: 368.6 mm/s

Control RMS: 1.040 g

Full Level Elapsed: 3.0

Drive Pk: -1.2e+0V

Control Pk: -10.12 g

Remaining: 0.0

Pulse width: 11.00 ms

Est. Disp. : 9.424 mm Pk-Pk

Target Pk: -10.00 g

Total Elapsed: 17.0

Measured Pulse width: 11.35659(ms)



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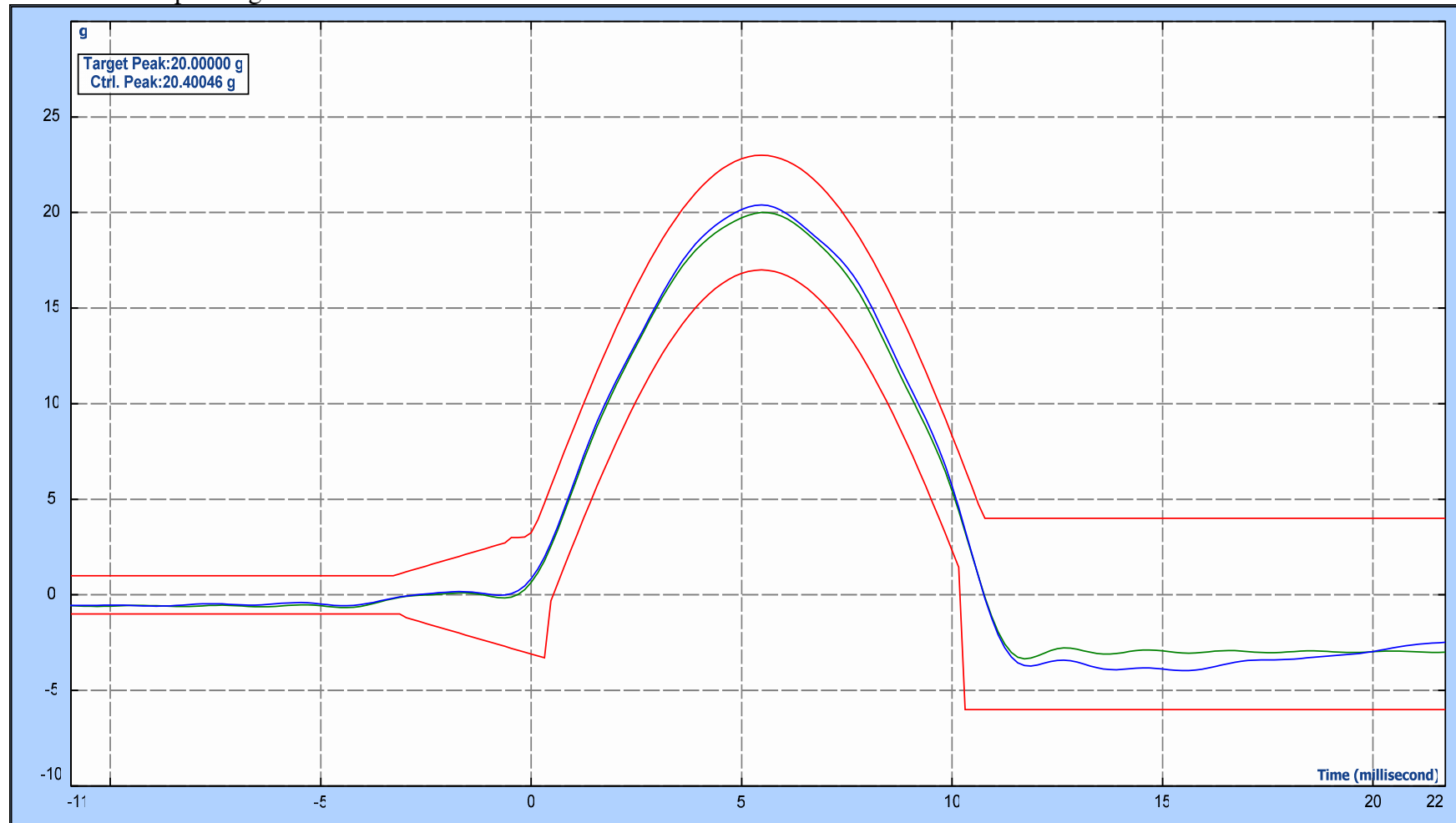
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+X axis Non-Operating



Level: 100.00 %

Velocity Pk: 740.6 mm/s

Control RMS: 2.094 g

Full Level Elapsed: 3.0

Drive Pk: 2.744V

Control Pk: 20.40 g

Remaining: 0.0

Pulse width: 11.00 ms

Est. Disp. : 18.71 mm Pk-Pk

Target Pk: 20.00 g

Total Elapsed: 18.0

Measured Pulse width: 11.35265(ms)



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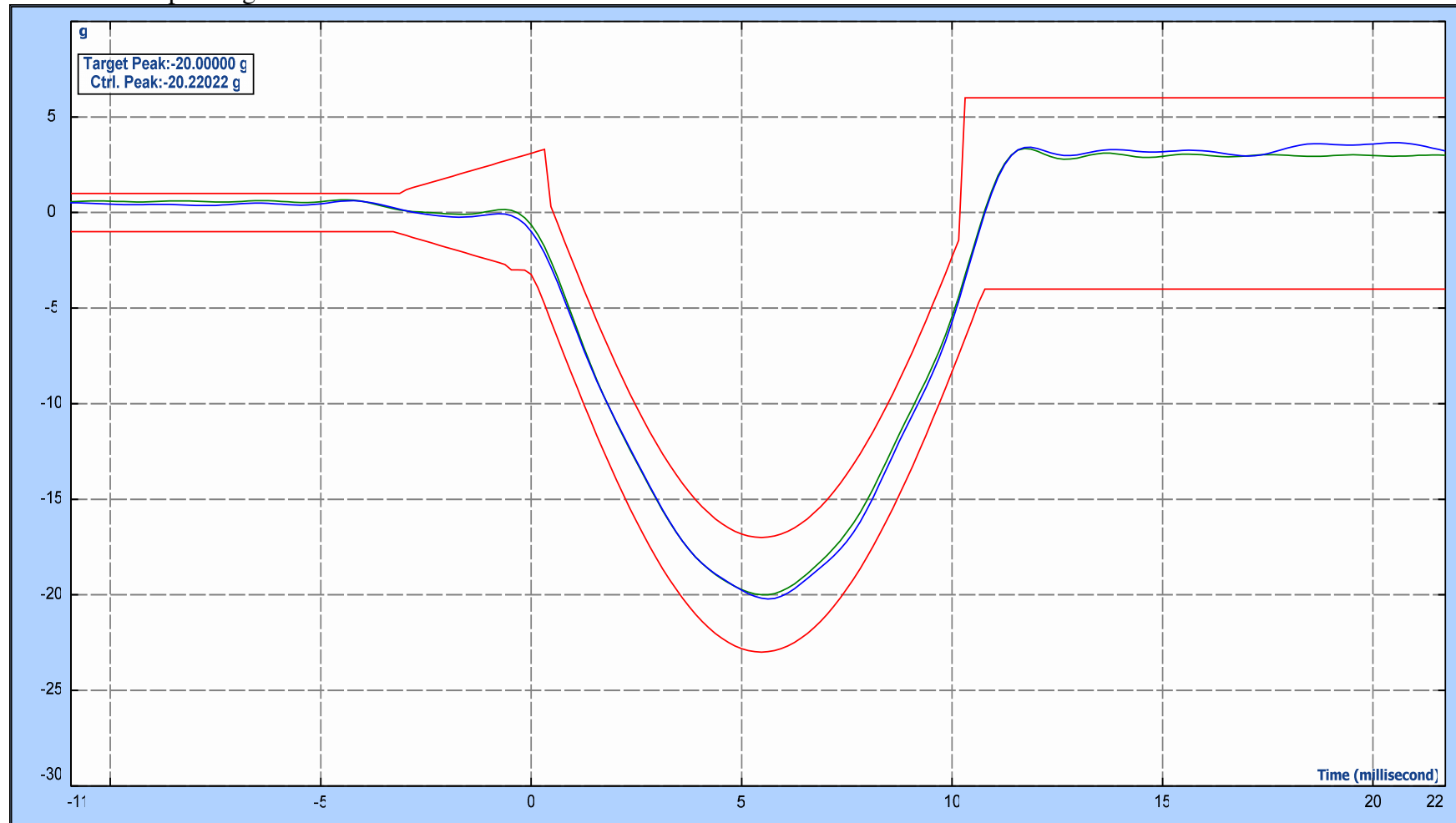
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-X axis Non-Operating



Level: -100.00 %

Velocity Pk: 735.8 mm/s

Control RMS: 2.077 g

Full Level Elapsed: 3.0

Drive Pk: -2.4e+0V

Control Pk: -20.22 g

Remaining: 0.0

Pulse width: 11.00 ms

Est. Disp. : 18.75 mm Pk-Pk

Target Pk: -20.00 g

Total Elapsed: 18.0

Measured Pulse width: 13.52945(ms)



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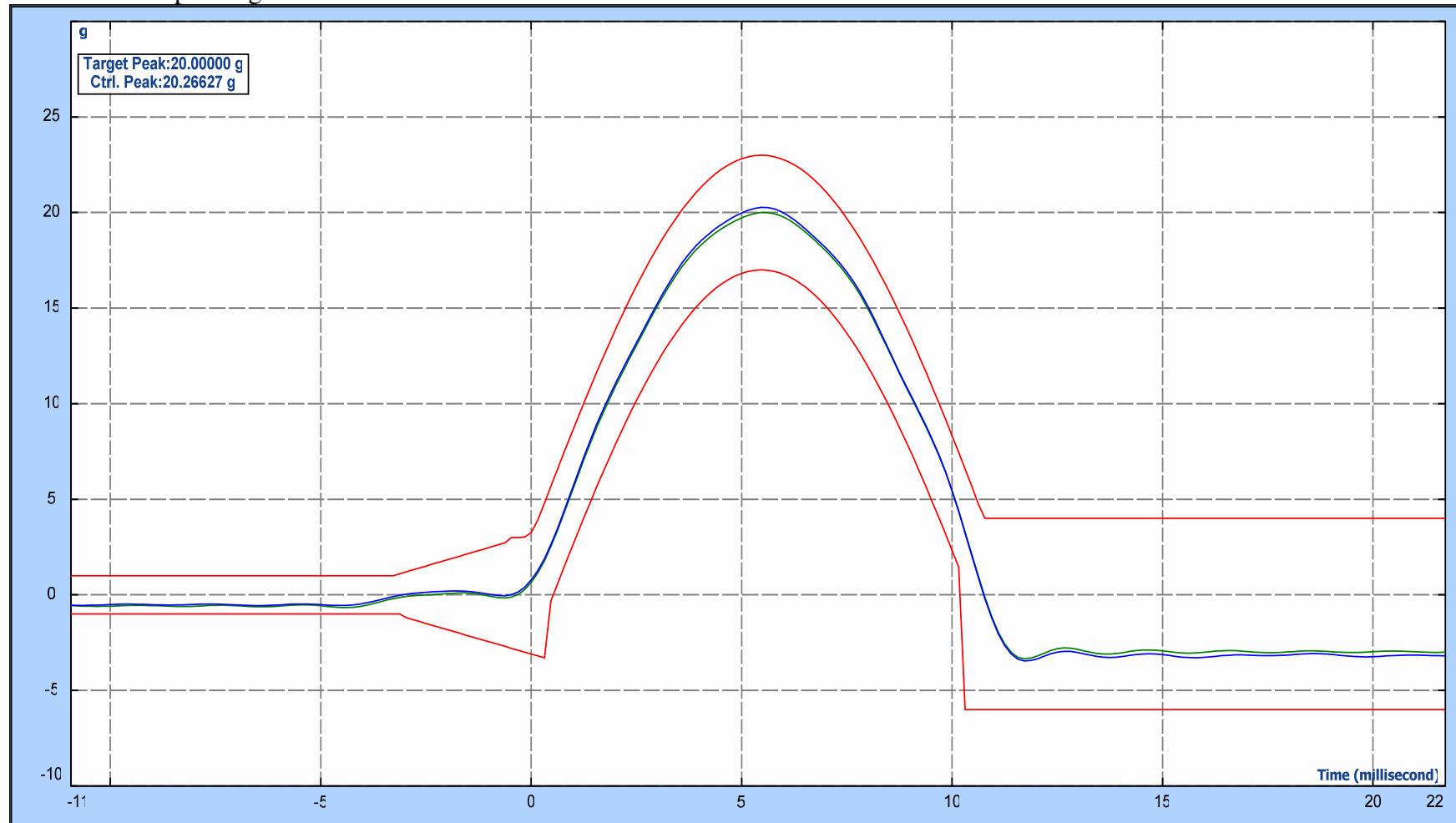
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+Y axis Non-Operating



Level: 100.00 %

Velocity Pk: 732.7 mm/s

Control RMS: 2.074 g

Full Level Elapsed: 3.0

Drive Pk: 2.411V

Control Pk: 20.27 g

Remaining: 0.0

Pulse width: 11.00 ms

Est. Disp. : 18.70 mm Pk-Pk

Target Pk: 20.00 g

Total Elapsed: 18.0

Measured Pulse width: 11.24781(ms)



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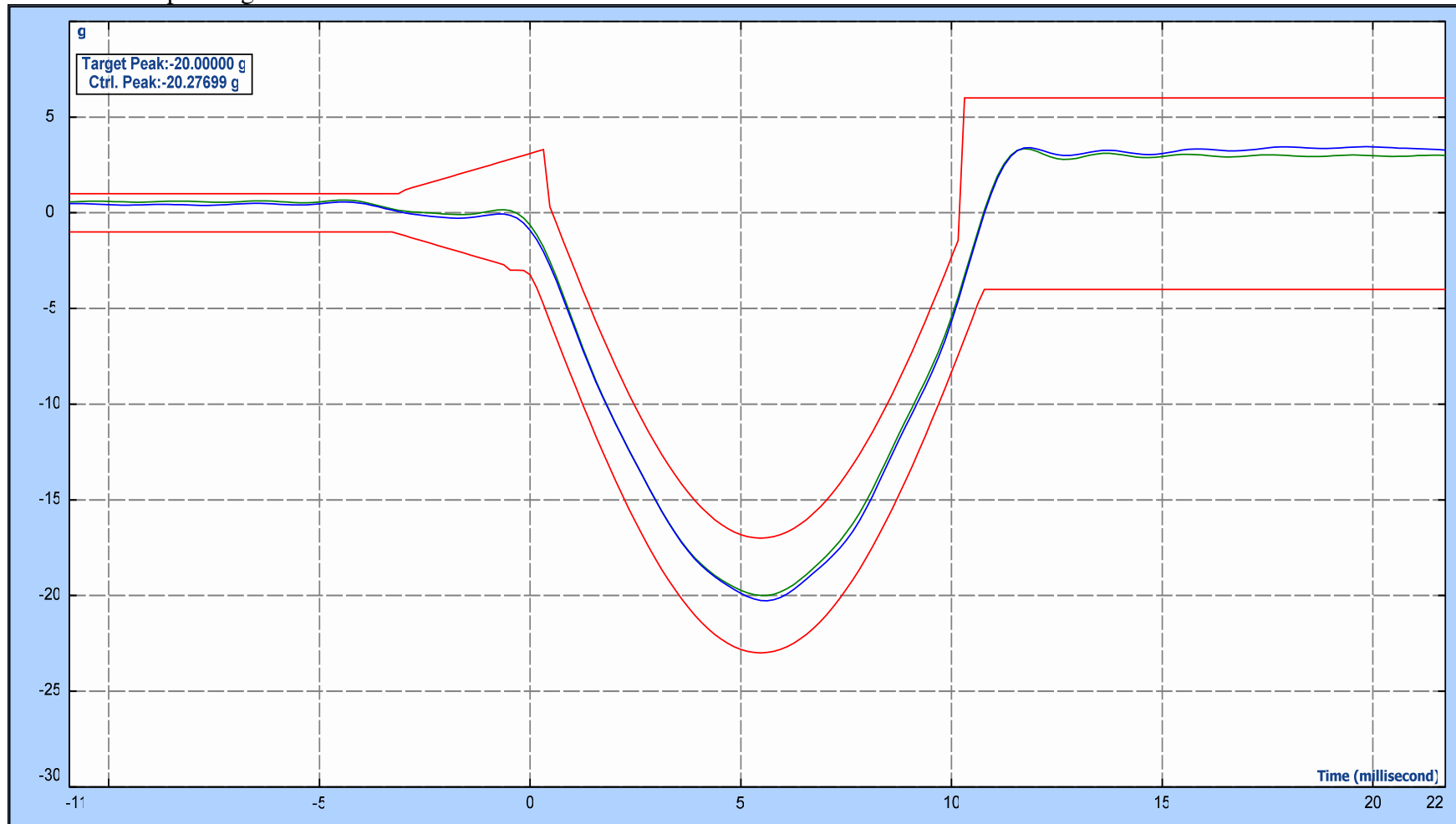
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-Y axis Non-Operating



Level: -100.00 %

Velocity Pk: 736.7 mm/s

Control RMS: 2.078 g

Full Level Elapsed: 3.0

Drive Pk: -2.4e+0V

Control Pk: -20.28 g

Remaining: 0.0

Pulse width: 11.00 ms

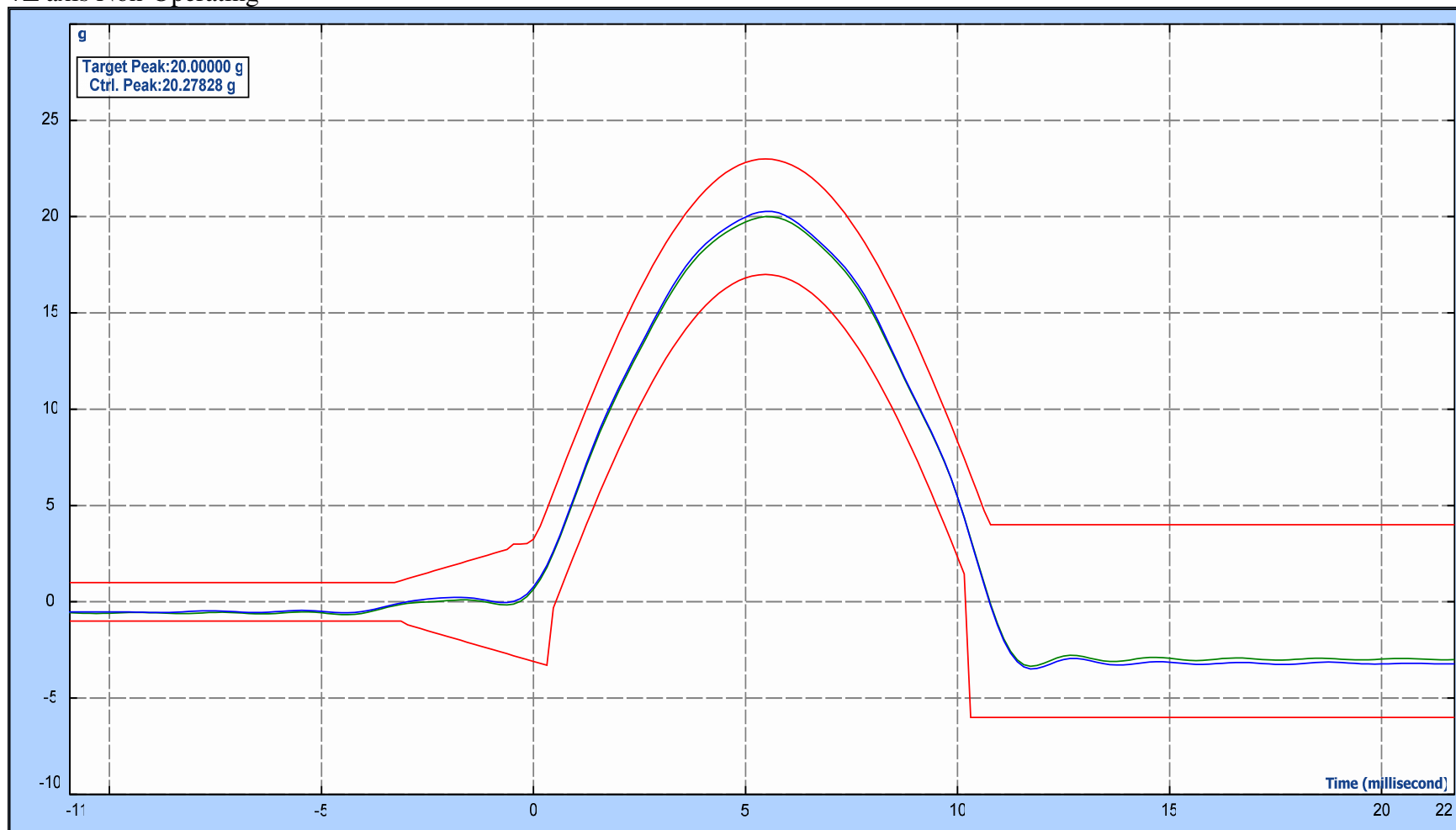
Est. Disp. : 18.77 mm Pk-Pk

Target Pk: -20.00 g

Total Elapsed: 18.0

Measured Pulse width: 13.75930(ms)

+Z axis Non-Operating



Level: 100.00 %

Velocity Pk: 733.4 mm/s

Control RMS: 2.076 g

Full Level Elapsed: 3.0

Drive Pk: 2.415V

Control Pk: 20.28 g

Remaining: 0.0

Pulse width: 11.00 ms

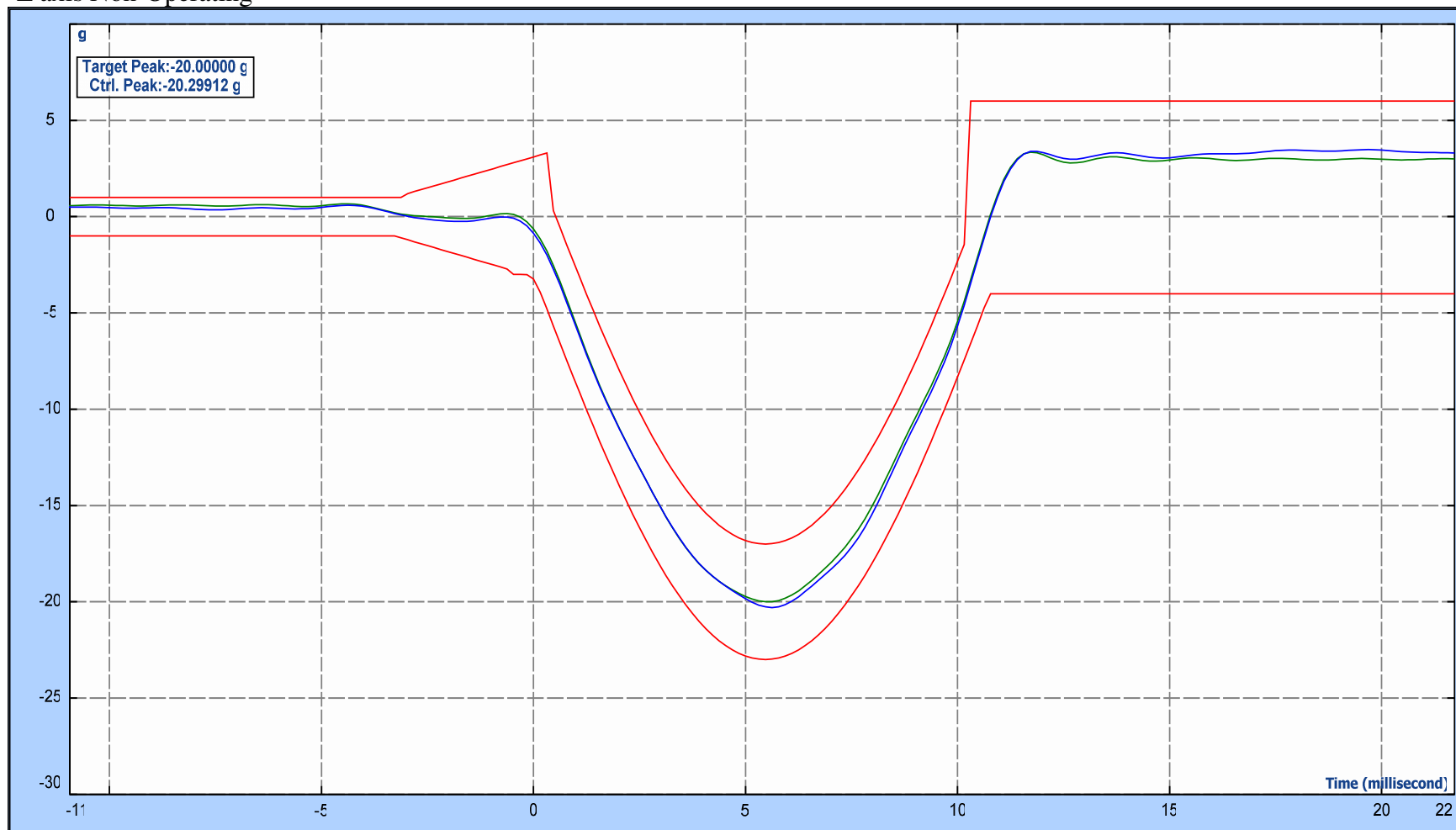
Est. Disp. : 18.70 mm Pk-Pk

Target Pk: 20.00 g

Total Elapsed: 18.0

Measured Pulse width: 11.25542(ms)

-Z axis Non-Operating



Level: -100.00 %

Velocity Pk: 736.1 mm/s

Control RMS: 2.078 g

Full Level Elapsed: 3.0

-END-

Drive Pk: -2.4e+0V

Control Pk: -20.30 g

Remaining: 0.0

Pulse width: 11.00 ms

Est. Disp. : 18.73 mm Pk-Pk

Target Pk: -20.00 g

Total Elapsed: 18.0

Measured Pulse width: 13.71185(ms)