**UN/ECE Technical Service No. E8/C and E27/J**

# TECHNICAL REPORT
# No. CW160 – 23 – TAC

Test according to UN Regulation No. 129.03

## Uniform provisions concerning the approval of enhanced child restraint system use on board of motor vehicles (ECRS)

UN Regulation No. 129.00 – date of entry into force: 2013-07-09
including all amendments up to and including
UN Regulation No. 129.03, supplement 7 – date of entry into force: 2023-01-04

Objectives: Document for issue of approval certificate

## I. Technical data

0.1. Make (trade name of manufacturer):

Bbqool, Mega baby, Kingbaby, Bene baby, Martin nor, Moni, Lorelli, Minebaby, Cangaroo, Kiddo, Lionelo, Kindersafety, KENGA, BELLABABY, bebeglo, bebesit, BIUCO, Chipolino, Felcraft, kiddo, whoop, love, kidgo, prinsel, kiddy, bebglo, kenga, bellababy, bebeglo, SAFETY 1ST, INFANTI, Forsage kids, Beianbao, Kabihu, BBPRO, BBGO, baby kit's allobebe, TWIGY, Anakku, Action Baby, Kids Joy, Bambi. Mothercare, PRENATAL, Giordani, BABY MICHEL, Camera, BRITTON, GESSLEIN, LEAMAN, KRAFT, Baby & Plus, MamaLoes, SAFEWAY, MS, Infantia, LIKOBABY, CHELINO, HAPPY BABY, Lenox, BEBESIT, CUTEBABIES, BABY KIT'S, Infanti, Galzerano, CotoBaby, LOOPING, KinderKraft, IO BIMBO, AVANTI, COALA, BABY DESIGN, ESPIRO, BOMIKO, PRENATAL, COCCOLLE, TWINGO, BORSINO BABY, Lorelli, MS, Babyauto, More, Play, Kikkaboo, Cabino, Xadventure, Huggy, Prego, Sunnybaby, bebestars, Asalvo, Apollo, Speli, 4Baby, infababy, Titaniumbaby, Nuovita, OTOMO, baby tilly, Kari kids, Kari, CozyNsafe, Infababy, My Child, farfello, bebe 2 luxe, Babyton, Olsson, Ninia, Migo, Disney, Bonbijou, Koopers, Beblum, Crolla, Quinton, Royal Kiddy, Cocolatte, Babydoes, Soon Sung, MC, Mumzworld, Bebesit, Carestino, Kinderkraft, Kiddy, 4Kraft

| | | |
|---|---|---|
| 0.2. | Type: | KBH605S |
| 0.2.1. | Commercial name: | n.a. |
| 0.2.2. | Variants: | n.a. |
| 0.3. | Means of identification of type: | Letters and digits |
| 0.4. | Category of vehicle: | n.a. |

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| | | |
|---|---|---|
| 0.5. | Name and address of manufacturer: | Ningbo Cappi Tiger Children Products Co., Ltd.<br>No.17, Zhennan Road, Ditang Street, Yuyao City, Zhejiang Province, China |
| 0.8. | Address of assembly plant: | See 0.5. |
| 0.9. | Location of the approval mark: | Sticker pasted on the back of product |
| 0.10. | ECRS | |
| 0.10.1. | ECRS category: | i-Size (40-105cm);<br>i-Size booster seat (100-150cm) |
| 0.10.2. | ECRS class: | Integral (40-105cm);<br>Non-integral (100-150cm) |
| 0.10.3. | Size Range: | 40-150cm |
| 0.10.4. | Maximum occupant mass for Integral ECRS: | 18 kg |
| 0.10.5. | ECRS orientation: | Rearward-facing (40-105cm);<br>Forward-facing (76-150cm) |
| 0.10.6. | Anti-rotation device: | Top tether |
| 0.10.7. | Child Restraint Mode: | Harness belt (40-105cm);<br>Adult safety belt (100-150cm) |
| 0.10.8. | Locking-off device type: | n.a. |
| 0.10.9. | Type of retractor: | n.a. |
| 0.10.10. | Belt type: | Adult safety belt |
| 0.10.11. | Other features: | Chair assembly |
| 0.10.12. | Installation Methods: | Rearward facing,<br>ISOFIX attachments + Top tether (40-105cm);<br>Forward facing,<br>ISOFIX attachments + Top tether (76-105cm);<br>ISOFIX attachments + adult safety-belt (100-150cm);<br>adult safety-belt (100-150cm) |
| 0.10.13. | Backrest positions: | Rearward facing,<br>40-105cm: Upright, Inclined (position “R1”-“R5”);<br>Forward facing,<br>76-150cm: Upright, Inclined (position “F4”-“F5”). |

| | | |
|---|---|---|
| 0.10.14. | Declaration on toxicity in accordance with par.6.3.1.1. of this regulation: | See Appendix 3 of information document |
| 0.10.15. | Declaration on flammability in accordance with par.6.3.1.2. of this regulation: | See Appendix 3 of information document |
| 0.10.16. | Instruction for use of ECRS in the vehicle: | See Appendix 2, Appendix 4 and Appendix 5 of information document |

## II. Test report

### 1. Test conditions

| | | |
|---|---|---|
| 1.1. | Test sample: | ECRS of size range 40-150cm, type KBH605S. For type approval tests: Samples No. 1 to 43, and relative components; for production qualification tests: PQT-1 to 5 |
| 1.1.1 | Technical data from the manufacturer: | n.a. |
| 1.2. | Test procedures used: | According to UN Regulation No. 129.03 |
| 1.3. | Measuring and test equipment: | Used equipment fulfill all requirements of the UN Regulation No. 129.03 |
| 1.4. | Worst case evaluation: | N/A, single case - no variant.<br>This paragraph is required by the Type Approval Authority. |
| 1.5 | Testing conditions: | n.a. |
| 1.6. | Test track or site: | Jiangsu EQO Testing Services Co., Ltd.<br>No. 28, Lufeng East Road, Lujia, Kunshan, Jiangsu, China |

### 2. Test results

*Following numbering is according to UN Regulation No. 129.03*

| | | |
|---|---|---|
| *4.* | Markings | |
| *4.1.* | ECRS is marked of manufacturer's name, initials or trade mark: | fulfilled |
| *4.2.* | ECRS is clear and indelible marked with year of production: | fulfilled |
| *4.3.* | Orientation, size range, maximum occupant mass, webbing path, and visibility of these marking: | fulfilled |

| | | |
|---|---|---|
| *4.4.* | ECRS is permanently attached the warning label of “Airbag”: | fulfilled |
| *4.5.* | ECRS is permanently attached the warning label of no forward-facing for child less than 15 months: | fulfilled |
| *4.6.* | The webbing path markings shall be permanently and durably attached and visible: | fulfilled |
| *4.7.* | Marking for integral ECRS including ISOFIX connections attachments | |
| *4.7.1.* | for i-Size ECRS, the i-Size Logo shall permanently visible: | fulfilled |
| *4.7.2.* | for Specific Vehicle ISOFIX ECRS, the ISO ISOFIX logo and user instruction label shall permanently visible: | n.a. |
| *4.7.3.* | If ECRS containing modules, approval mark shall be permanently attached on ISOFIX base: | n.a. |
| *4.7.4.* | If ECRS containing modules, module mark shall be permanently attached on the module: | n.a. |
| *4.8.* | Marking for non-integral ECRS | |
| *4.8.1.* | for i-Size booster seat ECRS, the i-Size booster seat user instruction label shall permanently visible: | fulfilled |
| *4.8.2.* | for Specific vehicle booster seat ECRS, the Specific vehicle booster seat user instruction label shall permanently visible: | n.a. |
| *4.8.3.* | for Universal booster cushion ECRS, the Universal booster cushion ECRS user instruction label shall permanently visible: | n.a. |
| *4.8.4.* | for Specific vehicle booster cushion ECRS, the Specific vehicle booster cushion ECRS user instruction label shall permanently visible: | n.a. |
| *4.8.5.* | Marking for Booster cushion: | n.a. |
| *4.9.* | Marking for ECRS with an impact shield: | n.a. |

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| | | |
|---|---|---|
| *4.10.* | Any removable insert, shall have a permanently attached label to indicate the brand, model and size range of the ECRS to which it belongs: | fulfilled |
| *4.11.* | A Booster seat that converts to a Booster cushion by a removable backrest, shall have a permanently attached label on the backrest, to indicate the brand and model of the Enhanced Child Restraint System to which it belongs and the size range: | n.a. |
| *4.12.* | ECRS shall have a permanently attached label to inform the user of the appropriate method of restraint of the child over the entire stature range declared by the manufacturer: | fulfilled |
| *4.13.* | Marking for Integral Belted Enhanced Child Restraint System | |
| *4.13.1.* | for Universal Belted ECRS, the Universal Belted ECRS user instruction label shall permanently visible: | n.a. |
| *4.13.2.* | for Specific vehicle Belted ECRS, the Specific vehicle Belted user instruction label shall permanently visible: | n.a. |
| *4.14.* | Additional markings: | fulfilled |

*6.* General specifications

*6.1.* Positioning and securing on the vehicle

*6.1.2.5.& 6.1.3.4.* Measurement from Cr to load bearing point (Left & Right)

| Item | | Measured | Limit |
|---|---|---|---|
| Measurement from Cr to load bearing point | Left | 230mm | ≥150mm |
| | Right | 235mm | ≥150mm |

Sample No. 1: meet the requirements

*6.1.2.6.& 6.1.3.5.* Belt remaining on spool

| Item | | Measured | Limit |
|---|---|---|---|
| Belt remaining on spool | Integral | - | - |
| | Non-integral | 495mm | ≥150mm |
| | Booster cushion | - | - |

Sample No. 1: meet the requirements

*6.2.* Configuration of the ECRS

*6.2.1.4.* Buckle position when smallest & largest dummies are installed: fulfilled

*6.2.1.5.* Angle α and β measured with smallest & largest dummies

| Items | | Measured | Limit |
|---|---|---|---|
| Angle α and β measured with smallest & largest dummies | α1 | 35.7° | ≥10° |
| | β1 | 36.5° | ≥10° |
| | α2 | 35.5° | ≥10° |
| | β2 | 34.5° | ≥10° |

Sample No. 1: meet the requirements

*6.3.* ECRS specification

*6.3.1.* Material

| Items | Signed Declaration Received? | Test Report Reference (If applicable) |
|---|---|---|
| *6.3.1.1.* Flammability | See Appendix 3 of information document | EQO22080310T |
| *6.3.1.2.* Toxicity | See Appendix 3 of information document | EQO22080310T |

*6.3.2.* General characteristics

*6.3.2.1* Internal geometric characteristics

| | | Unit | Measured | Limit |
|---|---|---|---|---|
| Declared stature range | 40-150cm | | | |
| For Integral ECRS | 40-105cm | | | |
| The minimum occupant size | Minimum Shoulder Height (E1) | cm | 25.3 | <27.4 |
| The maximum occupant size | Sitting Height (B) | cm | 66.7 | ≥61.8 |
| | Shoulder Breadth (C) | cm | 38.8 | ≥30.1 |
| | Hip Breadth (D) | cm | 32.3 | ≥24.9 |
| | Maximum Shoulder Height (E2) | cm | 39.1 | ≥39.1 |
| For Non-integral ECRS | 100-150cm | | | |
| The minimum occupant size | Minimum Shoulder Height (E1) | cm | 28.0 | ≤32.4 |
| The maximum occupant size fit within the ISO/B2 size envelope(135cm) | Sitting Height (B) | cm | 77.0 | ≥74.4 |
| | Shoulder Breadth (C) | cm | 38.8 | ≥33.3 |
| | Hip Breadth (D) | cm | 32.3 | ≥29.1 |
| | Maximum Shoulder Height (E2) | cm | 48.3 | ≥47.9 |
| The maximum occupant size | Sitting Height (B) | cm | 82.6 | ≥81.1 |
| | Shoulder Breadth (C) | cm | 38.8 | ≥36.4 |
| | Hip Breadth (D) | cm | 32.3 | ≥32.0 |
| | Maximum Shoulder Height (E2) | cm | 53.4 | ≥53.3 |

Sample No. 1: meet the requirements

*6.3.2.2.* External dimensions

| | |
|---|---|
| Configuration Measured | Rearward facing, Integral, 40-105cm |
| ISO volume | R2 |
| ECRS adjustments that fit within volume | |
| Headrest position | Position 1-5 |
| Reclined position | Position “R1”-“R5” |
| Side wing position | n.a. |
| Verification photos of physical check | fulfilled |
| Verification image if checked using CAD drawing | n.a. |
| | |
| Configuration Measured | Forward facing, Integral, 76-105cm |
| ISO volume | F2x |
| ECRS adjustments that fit within volume | |
| Headrest position | Position 1-5 |
| Reclined position | Position “F1”-“F5” |
| Side wing position | n.a. |
| Verification photos of physical check | fulfilled |
| Verification image if checked using CAD drawing | n.a. |
| | |
| Configuration Measured | Forward facing, Booster Seat, 100-135cm |
| ISO volume | B2 |
| ECRS adjustments that fit within volume | |
| Headrest position | Position 1-10 |
| Reclined position | Position “F1”-“F5” |
| Side wing position | n.a. |
| Verification photos of physical check | fulfilled |
| Verification image if checked using CAD drawing | n.a. |

Sample No. 1: meet the requirements

*6.3.2.3.* Mass

| Item | | Measured | Limit |
|---|---|---|---|
| Mass | Mass of CRS [kg] | 13.5 ± 0.5 kg | - |
| | Max. Mass of Occupant [kg] | 18 kg | - |
| | Mass of System [kg] | 31.5 ± 0.5 kg | ≤33 kg |

Sample No. 1: meet the requirements

*6.3.3.* ISOFIX attachments: fulfilled

*6.3.4.* ISOFIX ECRS top tether strap specifications: fulfilled

*6.3.5.* i-Size ECRS support-leg and support-leg foot requirements: n.a.

*6.4.* Control of marking: fulfilled

*6.5.* Control of instructions on installation and the instructions for use: fulfilled

*6.6.* Provisions applicable to the assembled restraint

*6.6.1.* Resistance to corrosion
(only the corrosible parts were tested): fulfilled

*6.6.2.* Energy absorption

| | Area of headform impact | | Headform deceleration |
|---|---|---|---|
| Deceleration of headform [g] (limit 60g) | The middle of head backrest | | 10.3 |
| | The sides of head backrest | left side wing | 4.1 |
| | | right side wing | 6.3 |
| Depth of the side wings* ≥90 mm | fulfilled | | |

*only apply for rearward-facing device

Sample No. 2: meet the requirements

*6.6.3.* Overturning

| | ECRS orientation | Installation Methods | Direction of rotation | | | | Mass of the dummy [kg] |
|---|---|---|---|---|---|---|---|
| | | | Clock wise | Anti-clock wise | Roll ahead | Roll back | |
| Dummy's head vertical movement [mm] (limit 300 mm) | Rearward-facing (40-105cm) | ISOFIX + Top tether | 13 | 9 | 13 | 11 | 3.5 |
| | | | 17 | 16 | 58 | 47 | 15.1 |
| | Forward-facing (76-105cm) | ISOFIX + Top tether | 12 | 10 | 13 | 12 | 11.3 |
| | | | 26 | 25 | 19 | 21 | 15.1 |
| | Forward-facing (100-150cm) | adult safety-belt + ISOFIX | 94 | 30 | 121 | 123 | 15.1 |
| | | | 59 | 49 | 78 | 68 | 36.1 |
| | Forward-facing (100-150cm) | adult safety-belt | 135 | 90 | 143 | 138 | 15.1 |
| | | | 76 | 64 | 101 | 82 | 36.1 |

Sample No. 3: meet the requirements

*6.6.4.* Dynamic test

Type of dynamic test device: Deceleration

Deceleration curves: meet the requirements

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| | |
|---|---|
| Position of buckle during the test: | 40-105cm: on the dummy abdomen<br>100-150cm: buckle for adult seat |
| Configuration of Test samples:<br>(Sample No. 4 to No. 21) | i-Size ECRS, integral, rearward-facing (40-105cm). |
| Configuration of Test samples:<br>(Sample No. 22 to No. 29) | i-Size ECRS, integral, forward-facing (76-105cm). |
| Configuration of Test samples:<br>(Sample No. 30 to No. 43) | i-Size booster seat ECRS, non-integral, forward-facing (100-150cm) |
| Remarks: | Detail results of dynamic test see below *Table 1* to *Table 8* |

*Table 1*

| Testing parameter | | Limit | Result | | |
|---|---|---|---|---|---|
| ECRS Class | | - | integral | | |
| ECRS orientation | | - | rearward-facing | | |
| Impact direction | | - | frontal | | |
| Backrest position | | - | upright | | |
| Sample No. | | - | 4 | 5 | 6 |
| Used dummy | | - | Q0 | Q1.5 | Q3 |
| Mass of dummy [kg] | | - | 3.5 | 11.3 | 15.1 |
| Trolley impact speed [km/h] | | 48-50 | 48.9 | 48.9 | 49.1 |
| Trolley Stopping distance [mm] | | 600-700 | 664 | 667 | 672 |
| Trolley max. deceleration [g] | | 20-28 | 24.0 | 24.1 | 25.1 |
| Head performance criterion | | - | 169 | 297 | 267 |
| Head acceleration 3ms [g] | | ≤75/80 | 42.2 | 57.7 | 53.3 |
| Chest acceleration 3ms [g] | | ≤55 | 41.0 | 44.2 | 32.3 |
| Chest deflection [mm] | | - | - | 2.7 | 9.9 |
| Upper neck tension force [N] | | - | 330 | 1034 | 1036 |
| Upper neck flexion moment [Nm] | | - | 3.7 | 13.1 | 17.0 |
| Abdominal pressure [bar] | L | ≤1.2/1.0 | - | 0.07 | 0.06 |
| | R | ≤1.2/1.0 | - | 0.06 | 0.08 |
| Maximum of head displacement | x [mm] (horizontal) | ≤ 700 | 369 | 595 | 644 |
| | at time [ms] | - | 81 | 79 | 83 |
| | Contact Ø100mm bar | - | no | no | no |
| | z [mm] (vertical) | ≤ 800/840 | 613 | 748 | 765 |
| | at time [ms] | - | 172 | 237 | 233 |
| | no pass DE plane | no | no | no | no |
| Buckle open force after [N] | | ≤ 80 | 76 | 77 | 79 |
| Failure or breakage | | no | no | no | no |

Samples No. 4 to No. 6 fulfilled the dynamic test requirements.

*Table 2*

| Testing parameter | | Limit | Result | | | | | |
|---|---|---|---|---|---|---|---|---|
| ECRS Class | | - | integral | | | | | |
| ECRS orientation | | - | rearward-facing | | | | | |
| Impact direction | | - | frontal | | | | | |
| Backrest position | | - | inclined | | | | | |
| Sample No. | | - | 7 | 8 | 9 | 10* | 11 | 12** |
| Used dummy | | - | Q0 | Q1.5 | Q3 | Q3 | Q3 | Q3 |
| Mass of dummy [kg] | | - | 3.5 | 11.3 | 15.1 | 15.1 | 15.1 | 15.1 |
| Trolley impact speed [km/h] | | 48-50 | 49.0 | 48.9 | 49.0 | 49.1 | 49.2 | 49.2 |
| Trolley Stopping distance [mm] | | 600-700 | 666 | 669 | 667 | 670 | 665 | 669 |
| Trolley max. deceleration [g] | | 20-28 | 24.0 | 24.3 | 24.2 | 25.0 | 23.6 | 23.6 |
| Head performance criterion | | - | 244 | 219 | 448 | 478 | 191 | 225 |
| Head acceleration 3ms [g] | | ≤75/80 | 50.0 | 47.0 | 73.9 | 74.8 | 45.7 | 48.8 |
| Chest acceleration 3ms [g] | | ≤55 | 42.2 | 43.3 | 49.1 | 49.8 | 32.5 | 32.1 |
| Chest deflection [mm] | | - | - | 3.4 | 9.3 | 8.7 | 8.0 | 9.3 |
| Upper neck tension force [N] | | - | 457 | 713 | 1009 | 1057 | 980 | 1247 |
| Upper neck flexion moment [Nm] | | - | 4.1 | 17.5 | 23.7 | 25.0 | 21.1 | 18.1 |
| Abdominal pressure [bar] | L | ≤1.2/1.0 | - | 0.09 | 0.11 | 0.09 | 0.09 | 0.11 |
| | R | ≤1.2/1.0 | - | 0.09 | 0.08 | 0.14 | 0.12 | 0.11 |
| Maximum of head displacement | x [mm] (horizontal) | ≤ 700 | 381 | 620 | 668 | 665 | - | - |
| | at time [ms] | - | 80 | 82 | 81 | 79 | - | - |
| | Contact Ø100mm bar | - | no | no | yes | yes | - | - |
| | z [mm] (vertical) | ≤ 800/840 | 611 | 732 | 747 | 752 | 764 | 784 |
| | at time [ms] | - | 181 | 221 | 235 | 244 | 229 | 232 |
| | no pass DE plane | no | no | no | no | no | no | no |
| Buckle open force after [N] | | ≤ 80 | 78 | 74 | 68 | 75 | 77 | 78 |
| Failure or breakage | | no | no | no | no | no | no | no |

*Sample No. 10, verification test with optional buckle 2#.
**Sample No. 12, verification test without top tether used.

Samples No. 7 to No. 12 fulfilled the dynamic test requirements.

*Table 3*

| Testing parameter | | Limit | Result | | | | | |
|---|---|---|---|---|---|---|---|---|
| ECRS Class | | - | integral | | | | | |
| ECRS orientation | | - | rearward-facing | | | | | |
| Impact direction | | - | rear | | | | | |
| Backrest position | | - | upright | | | inclined | | |
| Sample No. | | - | 13 | 14 | 15 | 16 | 17 | 18 |
| Used dummy | | - | Q0 | Q1.5 | Q3 | Q0 | Q1.5 | Q3 |
| Mass of dummy [kg] | | - | 3.5 | 11.3 | 15.1 | 3.5 | 11.3 | 15.1 |
| Trolley impact speed [km/h] | | 30-32 | 30.6 | 30.7 | 30.7 | 30.5 | 30.7 | 30.8 |
| Trolley Stopping distance [mm] | | 250-300 | 275 | 270 | 271 | 272 | 273 | 273 |
| Trolley max. deceleration [g] | | 14-21 | 19.1 | 19.3 | 19.2 | 19.1 | 19.3 | 19.3 |
| Head performance criterion | | - | 231 | 256 | 100 | 233 | 231 | 180 |
| Head acceleration 3ms [g] | | ≤75/80 | 57.8 | 70.2 | 35.5 | 62.4 | 59.2 | 51.0 |
| Chest acceleration 3ms [g] | | ≤55 | 54.5 | 43.8 | 39.9 | 46.3 | 46.5 | 42.9 |
| Chest deflection [mm] | | - | - | 5.4 | 13.6 | - | 4.6 | 15.2 |
| Upper neck tension force [N] | | - | 714 | 1076 | 880 | 571 | 1049 | 1117 |
| Upper neck flexion moment [Nm] | | - | 12.5 | 17.4 | 12.3 | 9.8 | 17.8 | 14.9 |
| Abdominal pressure [bar] | L | ≤1.2/1.0 | - | 0.39 | 0.22 | - | 0.33 | 0.23 |
| | R | ≤1.2/1.0 | - | 0.38 | 0.21 | - | 0.37 | 0.27 |
| Maximum of head displacement | x [mm] (horizontal) | ≤ 700 | 296 | 476 | 513 | 302 | 491 | 548 |
| | at time [ms] | - | 185 | 201 | 244 | 178 | 196 | 210 |
| | z [mm] (vertical) | ≤ 800/840 | 589 | 655 | 710 | 560 | 653 | 700 |
| | at time [ms] | - | 119 | 69 | 79 | 82 | 71 | 78 |
| | no pass DE plane | no | no | no | no | no | no | no |
| Buckle open force after [N] | | ≤ 80 | 75 | 77 | 69 | 72 | 73 | 76 |
| Failure or breakage | | no | no | no | no | no | no | no |

Samples No. 13 to No. 18 fulfilled the dynamic test requirements.

*Table 4*

| Testing parameter | | Limit | Result | | | | | |
|---|---|---|---|---|---|---|---|---|
| ECRS Class | | - | integral | | | | | |
| ECRS orientation | | - | forward-facing | | | | | |
| Impact direction | | - | frontal | | | | | |
| Backrest position | | - | upright | | inclined | | | |
| Sample No. | | - | 22 | 23 | 24 | 25 | 26* | 27** |
| Used dummy | | - | Q1.5 | Q3 | Q1.5 | Q3 | Q3 | Q3 |
| Mass of dummy [kg] | | - | 11.3 | 15.1 | 11.3 | 15.1 | 15.1 | 15.1 |
| Trolley impact speed [km/h] | | 48-50 | 48.9 | 48.9 | 48.9 | 48.8 | 49.0 | 48.9 |
| Trolley Stopping distance [mm] | | 600-700 | 667 | 668 | 664 | 665 | 665 | 667 |
| Trolley max. deceleration [g] | | 20-28 | 23.1 | 23.2 | 23.2 | 23.2 | 23.3 | 23.0 |
| Head performance criterion | | - | 469 | 377 | 437 | 412 | 401 | 683 |
| Head acceleration 3ms [g] | | ≤75/80 | 64.5 | 59.7 | 61.8 | 59.9 | 60.1 | 76.5 |
| Chest acceleration 3ms [g] | | ≤55 | 36.6 | 31.4 | 37.8 | 34.2 | 34.7 | 35.8 |
| Chest deflection [mm] | | - | 12.3 | 29.6 | 11.4 | 30.8 | 31.5 | 35.0 |
| Upper neck tension force [N] | | - | 1918 | 2273 | 2002 | 2384 | 3470 | 2995 |
| Upper neck flexion moment [Nm] | | - | 16.4 | 15.3 | 17.5 | 22.9 | 25.9 | 27.5 |
| Abdominal pressure [bar] | L | ≤1.2/1.0 | 0.53 | 0.55 | 0.46 | 0.53 | 0.40 | 0.42 |
| | R | ≤1.2/1.0 | 0.57 | 0.63 | 0.54 | 0.61 | 0.34 | 0.44 |
| Maximum of head displacement | x [mm] (horizontal) | ≤ 500** | 365 | 440 | 370 | 448 | 444 | 536 |
| | at time [ms] | - | 88 | 98 | 90 | 100 | 98 | 101 |
| | z [mm] (vertical) | ≤ 800 | 663 | 720 | 628 | 681 | 677 | 691 |
| | at time [ms] | - | 151 | 180 | 151 | 170 | 167 | 188 |
| | no pass DE plane | no | no | no | no | no | no | no |
| Buckle open force after [N] | | ≤ 80 | 78 | 77 | 79 | 70 | 73 | 75 |
| Failure or breakage | | no | no | no | no | no | no | no |

*Sample No. 26, verification test with optional buckle 2#.
**Sample No. 27, test without top tether used, the forward displacement limit is 550.

Samples No. 22 to No. 27 fulfilled the dynamic test requirements.

*Table 5*

| Testing parameter | | Limit | Result | | | |
|---|---|---|---|---|---|---|
| ECRS Class | | - | non-integral | | | |
| ECRS orientation | | - | forward-facing | | | |
| Impact direction | | - | frontal | | | |
| Backrest position | | - | upright | | | |
| ISOFIX attachments | | - | with attachments | | without attachments | |
| Sample No. | | - | 30 | 31 | 32 | 33 |
| Used dummy | | - | Q3 | Q10 | Q3 | Q10 |
| Mass of dummy [kg] | | - | 15.1 | 36.1 | 15.1 | 36.1 |
| Trolley impact speed [km/h] | | 48-50 | 49.1 | 48.9 | 48.9 | 48.9 |
| Trolley Stopping distance [mm] | | 600-700 | 670 | 671 | 665 | 668 |
| Trolley max. deceleration [g] | | 20-28 | 23.7 | 23.7 | 23.3 | 23.5 |
| Head performance criterion | | - | 642 | 421 | 456 | 414 |
| Head acceleration 3ms [g] | | ≤80 | 72.5 | 65.1 | 64.7 | 64.8 |
| Chest acceleration 3ms [g] | | ≤55 | 50.8 | 28.7 | 34.9 | 27.2 |
| Chest deflection [mm] | | - | 39.0 | 34.2 | 37.7 | 35.3 |
| Upper neck tension force [N] | | - | 2679 | 3634 | 2470 | 3321 |
| Upper neck flexion moment [Nm] | | - | 23.2 | 18.6 | 21.2 | 24.9 |
| Abdominal pressure [bar] | L | ≤1.0/1.2 | 0.46 | 0.47 | 0.66 | 0.50 |
| | R | ≤1.0/1.2 | 0.29 | 0.26 | 0.34 | 0.30 |
| Maximum of head displacement | x [mm] (horizontal) | ≤ 500/550 | 373 | 379 | 360 | 403 |
| | at time [ms] | - | 87 | 96 | 90 | 98 |
| | z [mm] (vertical) | ≤ 800/840 | 709 | 838 | 710 | 838 |
| | at time [ms] | - | 278 | 3 | 176 | 6 |
| | no pass DE plane | no | no | no | no | no |
| Buckle open force after [N] | | ≤ 80 | - | - | - | - |
| Failure or breakage | | no | no | no | no | no |
| Belt Force [N] | Shoulder | 45-55 | 51 | 51 | 51 | 49 |
| | Lap | 45-55 | 54 | 52 | 51 | 48 |

Samples No. 30 to No. 33 fulfilled the dynamic test requirements.

*Table 6*

| Testing parameter | | Limit | Result | | | |
|---|---|---|---|---|---|---|
| ECRS Class | | - | non-integral | | | |
| ECRS orientation | | - | forward-facing | | | |
| Impact direction | | - | frontal | | | |
| Backrest position | | - | inclined | | | |
| ISOFIX attachments | | - | with attachments | | without attachments | |
| Sample No. | | - | 34 | 35 | 36 | 37 |
| Used dummy | | - | Q3 | Q10 | Q3 | Q10 |
| Mass of dummy [kg] | | - | 15.1 | 36.1 | 15.1 | 36.1 |
| Trolley impact speed [km/h] | | 48-50 | 49.0 | 49.2 | 48.8 | 49.0 |
| Trolley Stopping distance [mm] | | 600-700 | 671 | 672 | 663 | 670 |
| Trolley max. deceleration [g] | | 20-28 | 23.7 | 24.2 | 23.6 | 23.4 |
| Head performance criterion | | - | 593 | 485 | 501 | 597 |
| Head acceleration 3ms [g] | | ≤80 | 72.8 | 68.8 | 68.4 | 76.1 |
| Chest acceleration 3ms [g] | | ≤55 | 42.9 | 32.3 | 40.6 | 29.6 |
| Chest deflection [mm] | | - | 36.3 | 31.8 | 29.9 | 37.6 |
| Upper neck tension force [N] | | - | 2697 | 3682 | 2412 | 3934 |
| Upper neck flexion moment [Nm] | | - | 26.5 | 36.3 | 26.4 | 42.9 |
| Abdominal pressure [bar] | L | ≤1.0/1.2 | 0.34 | 0.48 | 0.39 | 0.47 |
| | R | ≤1.0/1.2 | 0.18 | 0.30 | 0.24 | 0.37 |
| Maximum of head displacement | x [mm] (horizontal) | ≤ 500/550 | 366 | 371 | 361 | 384 |
| | at time [ms] | - | 89 | 96 | 89 | 98 |
| | z [mm] (vertical) | ≤ 800/840 | 683 | 795 | 660 | 787 |
| | at time [ms] | - | 269 | 11 | 255 | 8 |
| | no pass DE plane | no | no | no | no | no |
| Buckle open force after [N] | | ≤ 80 | - | - | - | - |
| Failure or breakage | | no | no | no | no | no |
| Belt Force [N] | Shoulder | 45-55 | 49 | 49 | 53 | 50 |
| | Lap | 45-55 | 50 | 49 | 49 | 49 |

Samples No. 34 to No. 37 fulfilled the dynamic test requirements.

*Table 7*

| Testing parameter | Limit | Result | | | | |
|---|---|---|---|---|---|---|
| ECRS Class | - | integral | | | | |
| ECRS orientation | - | rearward | | | forward | |
| Impact direction | - | lateral | | | | |
| Backrest position | - | upright | | | | |
| Sample No. | - | 19 | 20 | 21 | 28 | 29 |
| Used dummy | - | Q0 | Q1.5 | Q3 | Q1.5 | Q3 |
| Mass of dummy [kg] | - | 3.5 | 11.3 | 15.1 | 11.3 | 15.1 |
| Door bench relative velocity [m/s] | 6.375-7.25 | 6.76 | 6.74 | 6.71 | 6.67 | 6.69 |
| Head performance criterion | ≤600/800 | 433 | 333 | 287 | 297 | 307 |
| Head acceleration 3ms [g] | ≤75/80 | 67.1 | 67.3 | 61.2 | 65.1 | 65.9 |
| Upper neck force [N] | - | 258 | 688 | 1307 | 854 | 1053 |
| Upper neck moment [Nm] | - | 13.4 | 23.4 | 18.6 | 20.1 | 13.1 |
| Head containment (No head contact and not exceed vertical plane) | | no | no | no | no | no |
| Buckle open force after [N] | ≤80 | 74 | 76 | 75 | 75 | 73 |
| Failure or breakage | no | no | no | no | no | no |

Samples No. 19 to No. 21, No. 28 and No. 29 fulfilled the dynamic test requirements.

*Table 8*

| Testing parameter | | Limit | Result | | | | | |
|---|---|---|---|---|---|---|---|---|
| ECRS Class | | - | non-integral | | | | | |
| ECRS orientation | | - | forward-facing | | | | | |
| Impact direction | | - | lateral | | | | | |
| Backrest position | | - | upright | | | | | |
| ISOFIX attachments | | - | with attachments | | | without attachments | | |
| Sample No. | | - | 38 | 39 | 40 | 41 | 42 | 43 |
| Used dummy | | - | Q3 | Q6 | Q10 | Q3 | Q6 | Q10 |
| Mass of dummy [kg] | | - | 15.1 | 23.5 | 36.1 | 15.1 | 23.5 | 36.1 |
| Door bench relative velocity [m/s] | | 6.375-7.25 | 6.89 | 6.86 | 6.96 | 6.88 | 6.84 | 6.83 |
| Head performance criterion | | ≤800 | 294 | 256 | 192 | 296 | 270 | 155 |
| Head acceleration 3ms [g] | | ≤80 | 61.5 | 56.7 | 46.8 | 62.0 | 57.5 | 48.2 |
| Upper neck tension force [N] | | - | 1147 | 1571 | 2147 | 1171 | 1614 | 2001 |
| Upper neck flexion moment [Nm] | | - | 15.0 | 25.6 | 25.8 | 23.3 | 25.9 | 27.3 |
| Head containment (No head contact and not exceed vertical plane) | | | no | no | no | no | no | no |
| Buckle open force after [N] | | ≤80 | - | - | - | - | - | - |
| Failure or breakage | | no | no | no | no | no | no | no |
| Belt Force [N] | Shoulder | 45-55 | 52 | 51 | 52 | 50 | 52 | 50 |
| | Lap | 45-55 | 53 | 53 | 51 | 50 | 55 | 51 |

Samples No. 38 to No. 43 fulfilled the dynamic test requirements.

*6.6.5.* Resistance to temperature
(only the relevant parts were tested): fulfilled

*6.7.* Provisions applicable to individual components of the restraint

*6.7.1.* Buckle

*6.7.1.1. ~6.7.1.5.* General requirements for buckles (including dimensional and geometrical): fulfilled

| Buckle 2# | Result | Limit |
|---|---|---|
| Width for enclosed [mm] | - | ≥15 |
| Area for enclosed [cm$^2$] | - | ≥4.5 |
| Width for non-enclosed [mm] | 15 | ≥10 |
| Area for non-enclosed [cm$^2$] | 5.2 | ≥2.5 |

| Buckle 3# | Result | Limit |
|---|---|---|
| Width for enclosed [mm] | - | ≥15 |
| Area for enclosed [cm$^2$] | - | ≥4.5 |
| Width for non-enclosed [mm] | 24 | ≥10 |
| Area for non-enclosed [cm$^2$] | 5.2 | ≥2.5 |

*6.7.1.6.* The buckle shall be test by heat and operate 5,000 ± 5 opening and closing cycles, before dynamic test: fulfilled

*6.7.1.7.* Buckle releasing force before and after dynamic test: fulfilled

| Buckle 2# | Result | Limit |
|---|---|---|
| Unloaded buckle opening force [N] | 59 | 40~80 |
| Loaded buckle opening force [N] | 68 | 80 |

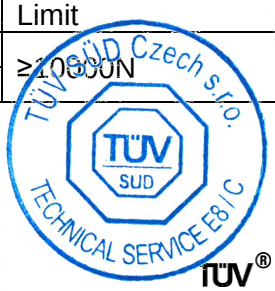
| Buckle 3# | Result | Limit |
|---|---|---|
| Unloaded buckle opening force [N] | 54 | 40~80 |
| Loaded buckle opening force [N] | 78 | 80 |

*6.7.1.8.* Strength of the buckle

Buckle shall withstand 10kN for mass limit greater than13kg: fulfilled

| Buckle 2# | Result | Limit |
|---|---|---|
| Sample 1 | 18590N | ≥10000N |
| Sample 2 | 18832N | |

| Buckle 3# | Result | Limit |
|---|---|---|
| Sample 1 | 14349N | ≥10000N |
| Sample 2 | 20492N | |



*6.7.2.* Adjusting device

*6.7.2.1. ~6.7.2.4.* General requirements for adjusting device: fulfilled

*6.7.2.5.* Microslip testing, the amount of strap slip shall not exceed 25mm for one adjusting device or 40mm for all adjusting devices: fulfilled

*6.7.2.6.* The adjuster must not break or become detached when test for ease of adjustment: fulfilled

*6.7.2.7.* An adjuster shall be test by operate 5,000 ± 5 cycles, before dynamic test: fulfilled

| Item | | Measured | Limit |
|---|---|---|---|
| Manual adjusting force [N] | | 21 | ≤50 |
| Repeated operation before dynamic test [cycles] | | 5000 | 5000 ± 5 |
| Microslip [mm] | Sample 1 | 0 | ≤25 |
| | Sample 2 | 0 | |

*6.7.3.* Retractors: n.a.

*6.7.4.* Straps

| | | | Requirements | Measured value | | Result |
|---|---|---|---|---|---|---|
| Strap | | | - | 25 mm | 38 mm | |
| Strap width [mm] strained by 75% of its breaking load | | Sample 1 | ≥25 | 26.1 | 39.4 | pass |
| | | Sample 2 | ≥25 | 26.1 | 39.4 | pass |
| Strength F [kN] after room conditioning | | Sample 1 (F1) | | 13.3 | 20.5 | pass |
| | | Sample 2 (F2) | | 13.4 | 21.0 | pass |
| Difference between F1 and F2 (< 10% of the bigger value of F1, F2) | | | | 0.7% | 2.4% | pass |
| Force [kN] of the strap destruction after its special conditioning | 75% of the average of F1 and F2 | | | 10.0 | 15.6 | - |
| | light conditioning | Sample 1 | ≥3.6 kN, and ≥75% of the average of F1 and F2 | 12.5 | 20.1 | pass |
| | | Sample 2 | | 12.6 | 20.2 | pass |
| | cold conditioning | Sample 1 | | 13.1 | 20.6 | pass |
| | | Sample 2 | | 13.2 | 21.0 | pass |
| | heat conditioning | Sample 1 | | 13.2 | 21.1 | pass |
| | | Sample 2 | | 13.3 | 21.2 | pass |
| | exposure to water | Sample 1 | | 12.9 | 20.4 | pass |
| | | Sample 2 | | 13.0 | 20.5 | pass |
| | abrasion conditioning | Sample 1 | | - | 18.6 | pass |
| | | Sample 2 | | - | 18.4 | pass |

*6.7.5.* ISOFIX attachment specifications: fulfilled

| Item | Result | Limit |
|---|---|---|
| Repeated operations before dynamic test [cycles] | 2000 | 2000 ± 5 |
| Two consecutive actions | fulfilled | 2 consecutive actions or opening force ≥50N |
| opening force [N] | - | |

*6.7.6.* Lock-off devices: n.a.

*6.8.* Classification: fulfilled

*9.* Production qualification

*9.2.* Production qualification test

Configuration of test samples: (Sample No. PQT-1 to 5): i-Size ECRS, integral, forward-facing (76-105cm). Backrest position: inclined. Test with Q3 dummy (15.1kg), frontal impact.

Remarks: n.a.

| PQT No. | Maximum horizontal head excursion [mm] (L: 500) | Head acc. 3ms [g] (≤80) | Chest acc. 3ms [g] (≤55) | Head criterion - HPC (≤800) | Abdominal pressure [bar] (≤1.0) | | Upper neck tension force [N] | Upper neck flexion moment [Nm] | Chest def. [mm] |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 454 | 61.5 | 33.0 | 442 | 0.33 | 0.31 | 2520 | 24.7 | 32.0 |
| 2 | 447 | 61.2 | 38.0 | 413 | 0.34 | 0.31 | 2419 | 22.0 | 31.3 |
| 3 | 457 | 61.0 | 37.3 | 456 | 0.32 | 0.27 | 2666 | 21.7 | 32.9 |
| 4 | 460 | 61.7 | 33.5 | 392 | 0.28 | 0.32 | 2335 | 20.2 | 30.8 |
| 5 | 453 | 62.9 | 34.4 | 425 | 0.28 | 0.30 | 2588 | 25.1 | 32.0 |
| Calculation X | 454.2 | 61.7 | 35.2 | - | - | - | - | - | - |
| Calculation S | 4.4 | 0.7 | 2.0 | - | - | - | - | - | - |
| X + S | 458.6 | 62.3 | 37.3 | - | - | - | - | - | - |

No value shall exceed 1.05 L, and X + S shall not exceed L: Samples PQT-1 to 5 fulfilled the production qualification test requirements.

*14.* Information for users

*14.1.* ECRS is accompanied by instructions in the language of the country where the device is sold: fulfilled

| | | |
|---|---|---|
| *14.2.* | Instructions on installation: | fulfilled |
| *14.3.* | Instructions for use: | fulfilled |
| 3. | Specimen submitted to test on: | 2022-12-20 |
| 4. | Date of test: | 2022-12-20 to 2023-03-10 |
| **III.** | **Manufacturer's information folder** | No. 129-KBH605S-00<br>39 pages total of 2022-12-20 |

**IV. Other documentation**

Graphs
-Deceleration curves of sled test trolley: Pages 21 to 40

**V. Attachments**

No attachments

The results presented above relate to the tested items only and to the sample as provided by the customer.
Measuring and test equipment and test site meet the requirements of the applicable legislation.
This report shall never be reproduced incomplete and without a written permission of the testing laboratory. TÜV SÜD CZECH confidentiality degree: confidential

**VI. Final assessment**

The described sample in tested items

**complies**

with the requirements of UN Regulation No. 129.03
for issue of approval certificate

This technical report consists of pages No. 1 to 40.

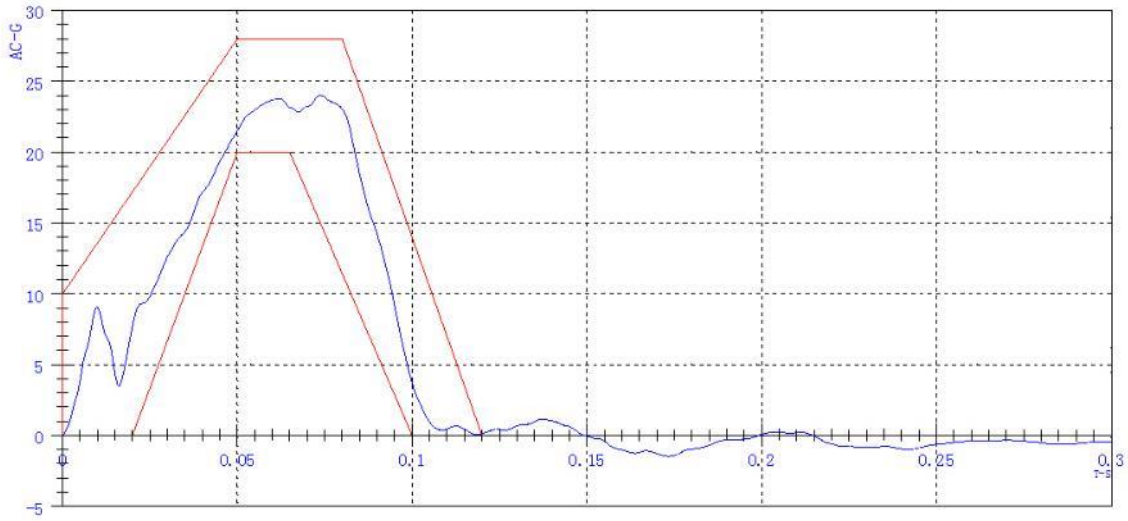
Václav Baloun
Report author

Vit Bursik
Officially recognized expert

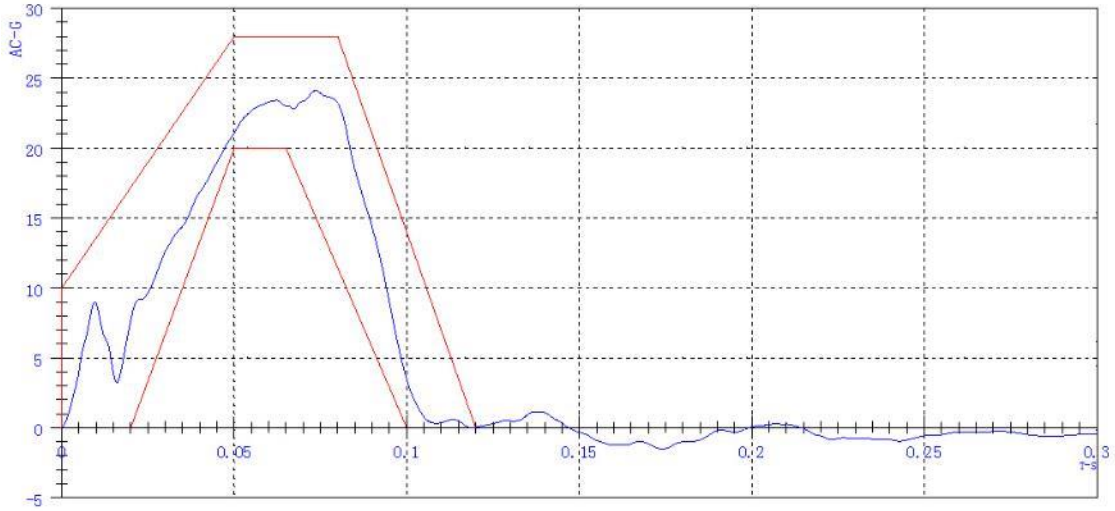
Prague, 2023-03-30

## Graphs: Deceleration curves of sled test trolley

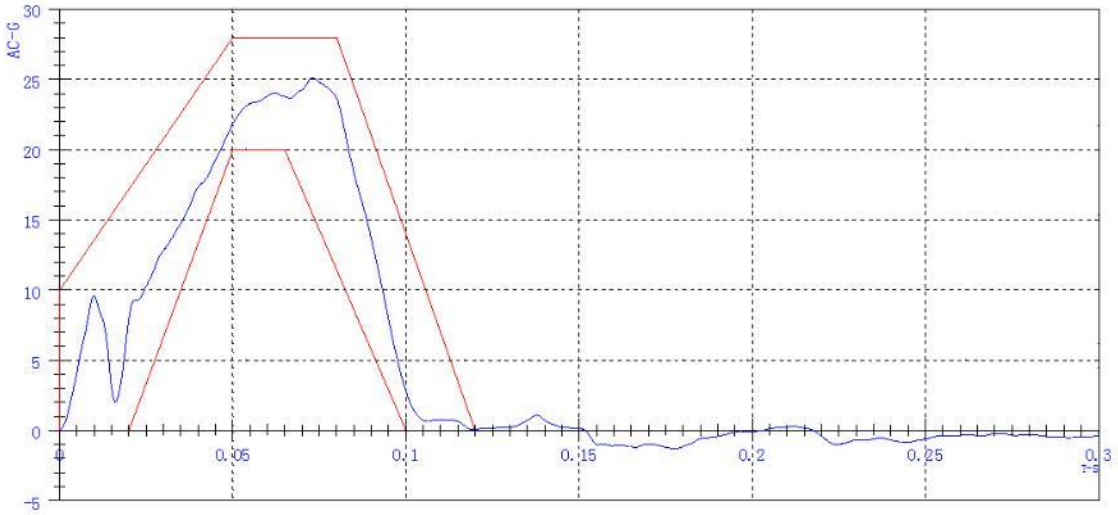
a) Tested sample No. 4, dummy Q0, frontal impact; i-Size ECRS, integral, rearward facing, with Ø100mm bar; upright.



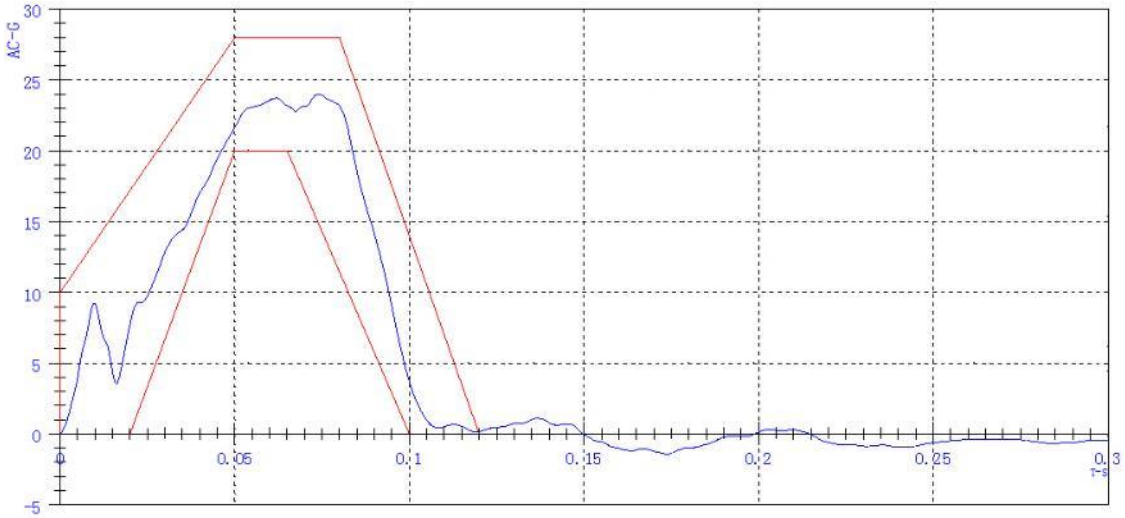

b) Tested sample No. 5, dummy Q1.5, frontal impact; i-Size ECRS, integral, rearward facing, with Ø100mm bar; upright.



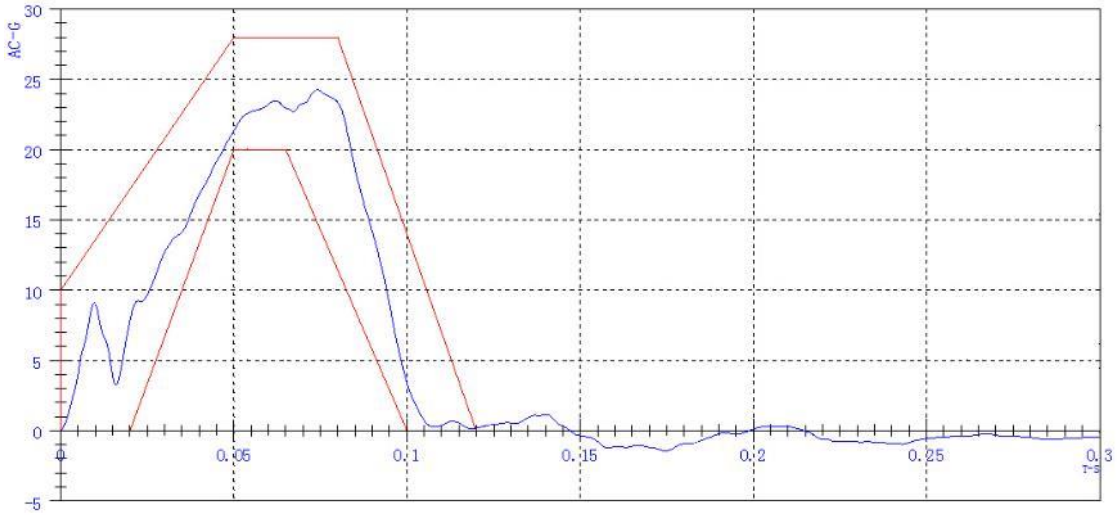
c) Tested sample No. 6, dummy Q3, frontal impact; i-Size ECRS, integral, rearward facing, with Ø100mm bar; upright.



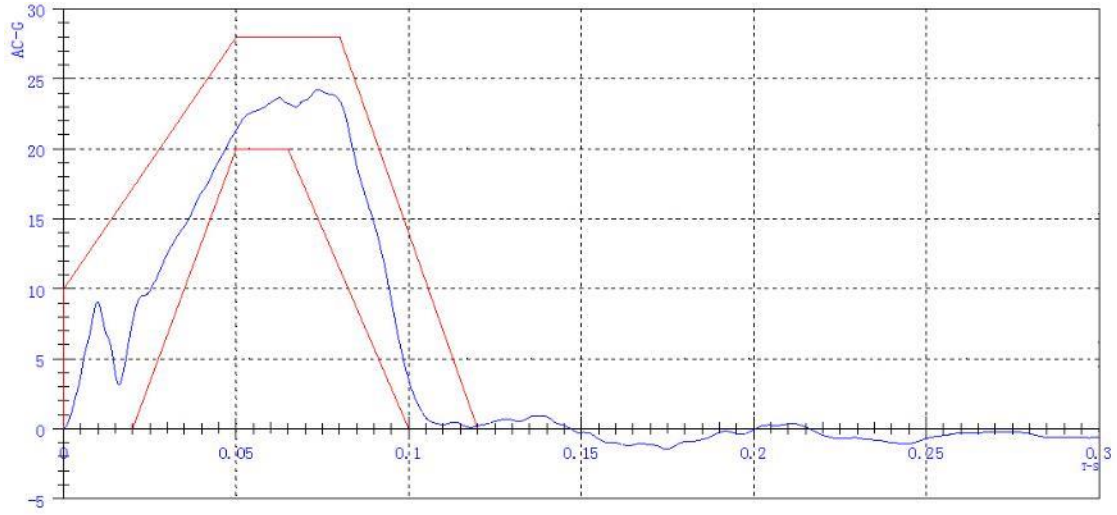

d) Tested sample No. 7, dummy Q0, frontal impact; i-Size ECRS, integral, rearward facing, with Ø100mm bar; inclined.



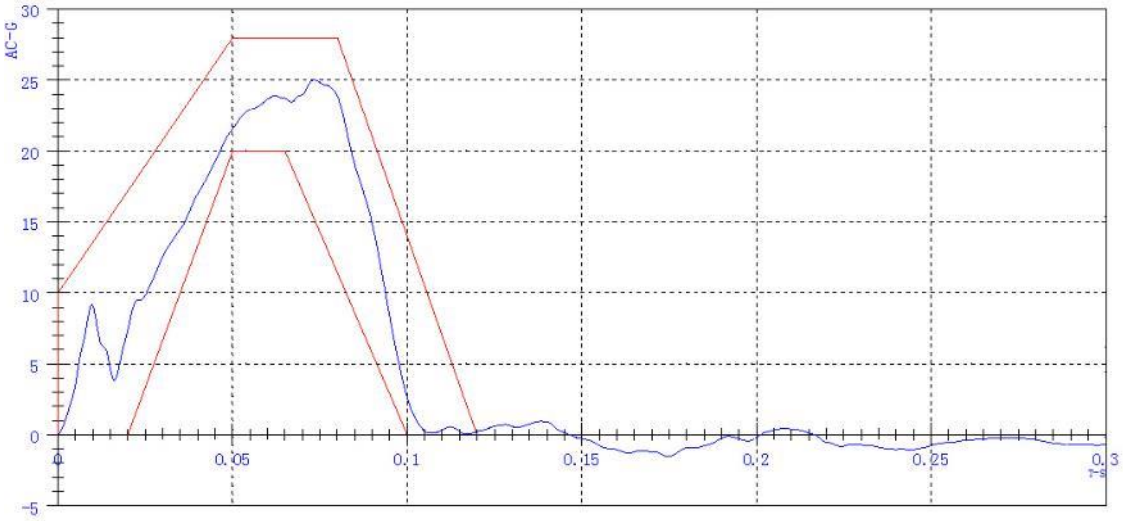
e) Tested sample No. 8, dummy Q1.5, frontal impact; i-Size ECRS, integral, rearward facing, with Ø100mm bar; inclined.



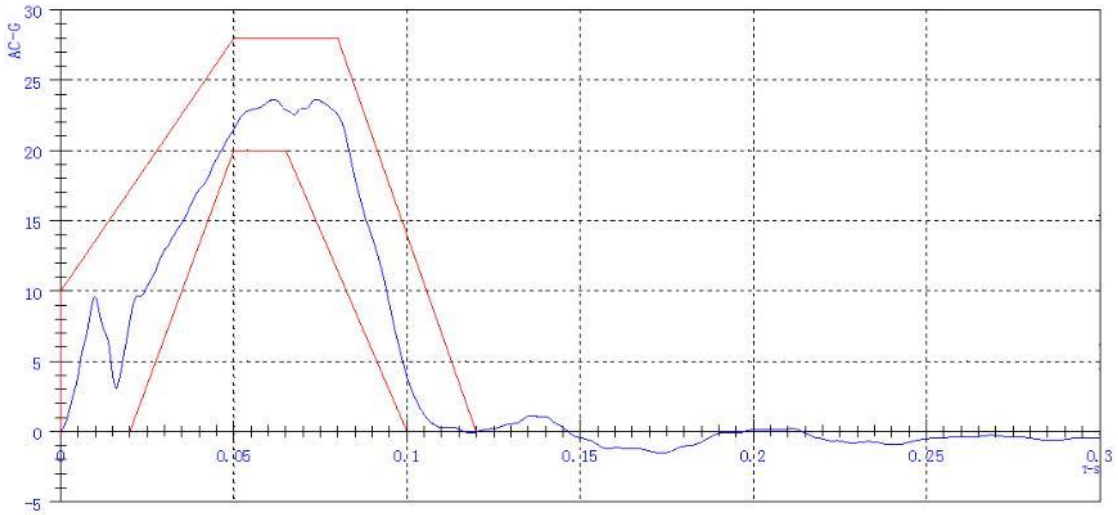

f) Tested sample No. 9, dummy Q3, frontal impact; i-Size ECRS, integral, rearward facing, with Ø100mm bar; inclined.



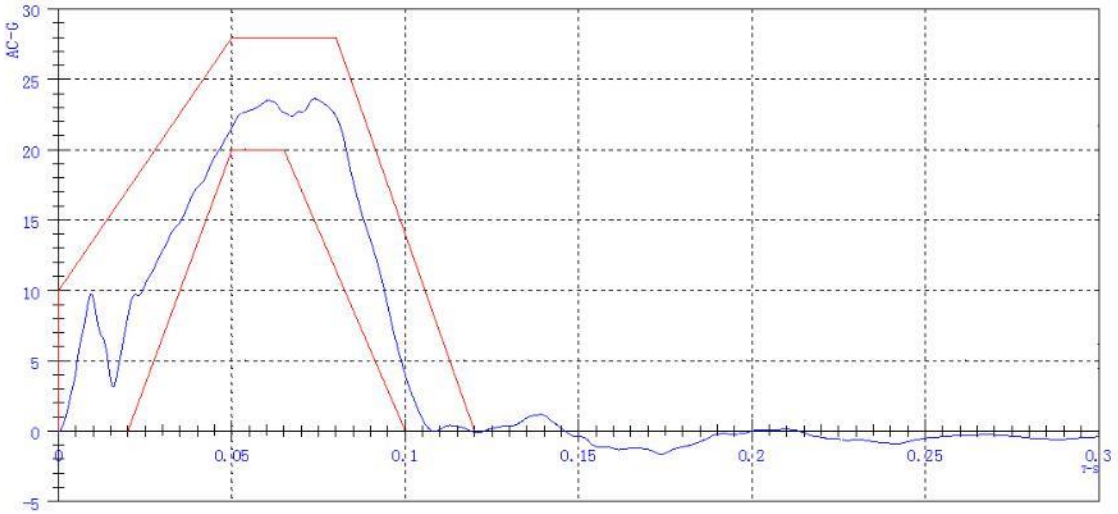
g) Tested sample No. 10, dummy Q3, frontal impact; i-Size ECRS, integral, rearward facing, with Ø100mm bar; inclined, with optional buckle 2#.



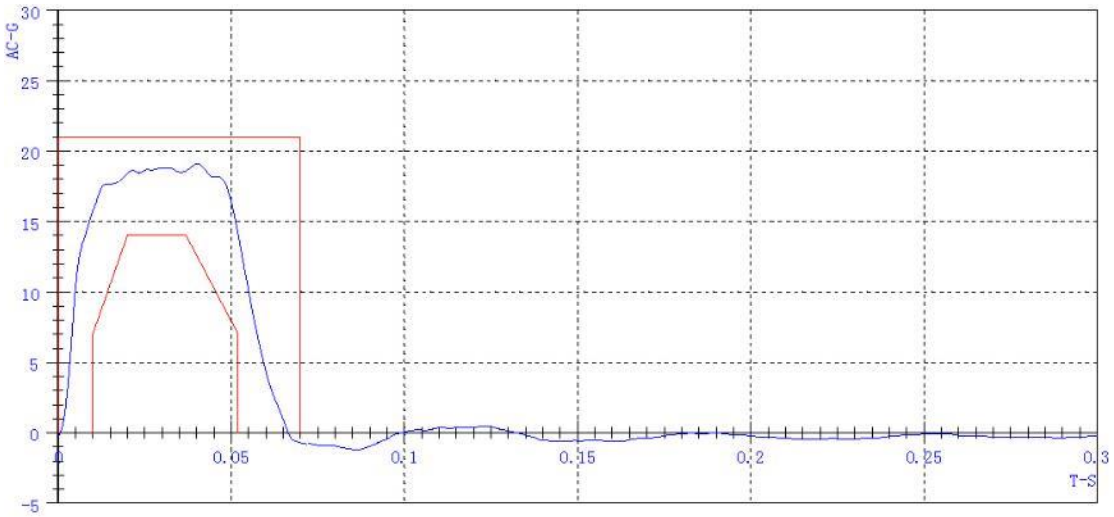

h) Tested sample No. 11, dummy Q3, frontal impact; i-Size ECRS, integral, rearward facing, without Ø100mm bar; inclined.



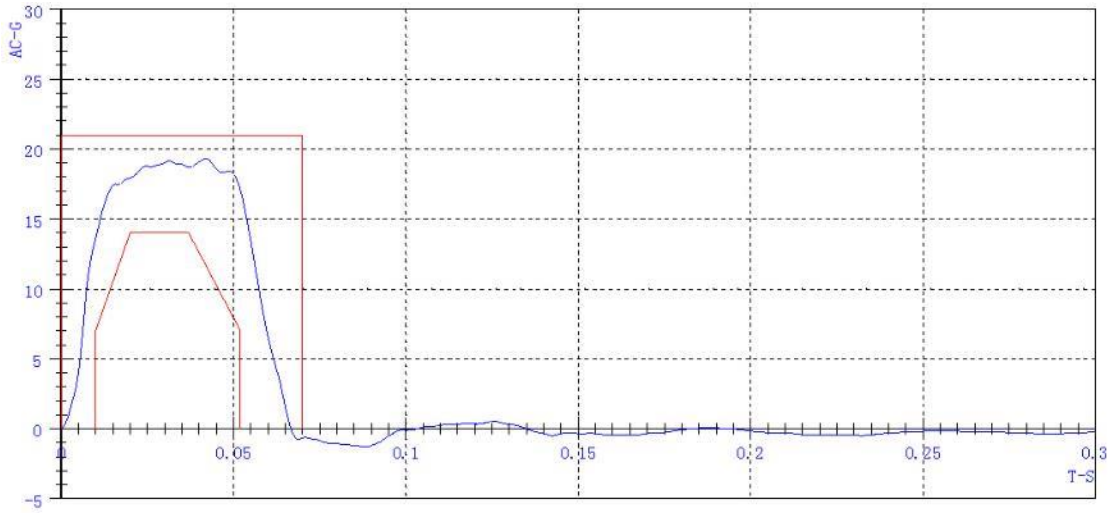
i) Tested sample No. 12, dummy Q3, frontal impact; i-Size ECRS, integral, rearward facing, inclined, misuse, without top tether used.



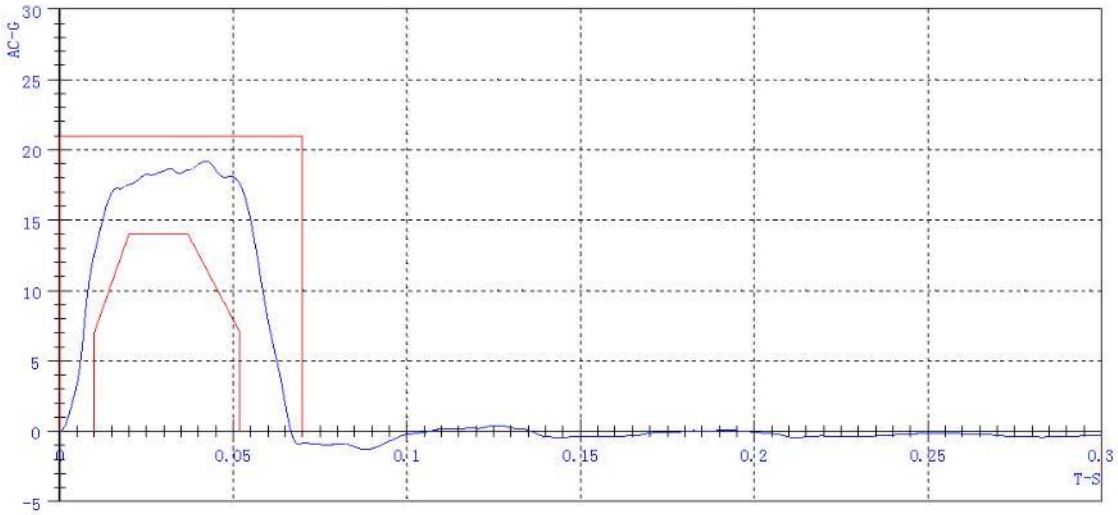

j) Tested sample No. 13, dummy Q0, rear impact; i-Size ECRS, integral, rearward facing, upright.



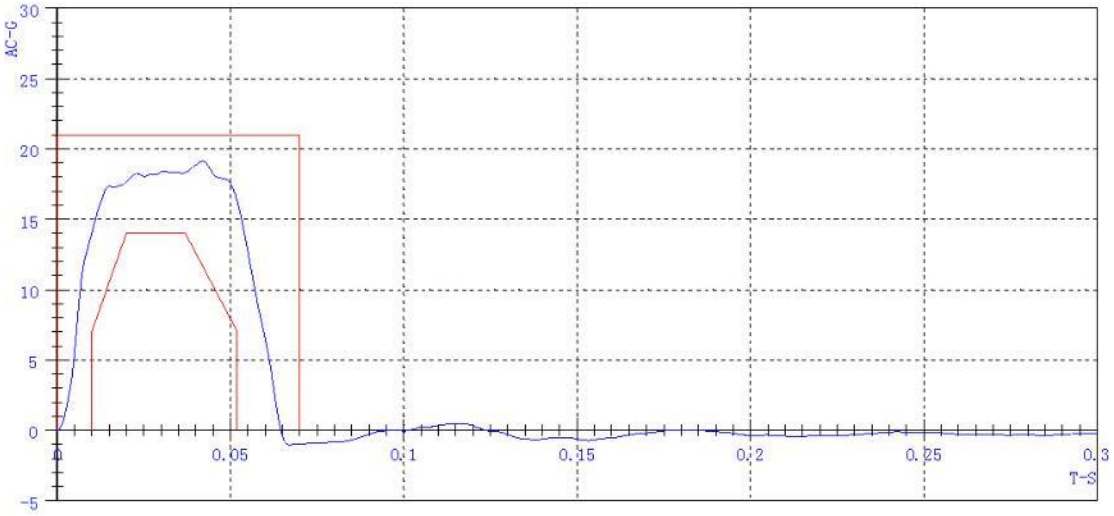
k) Tested sample No. 14, dummy Q1.5, rear impact; i-Size ECRS, integral, rearward facing, upright.



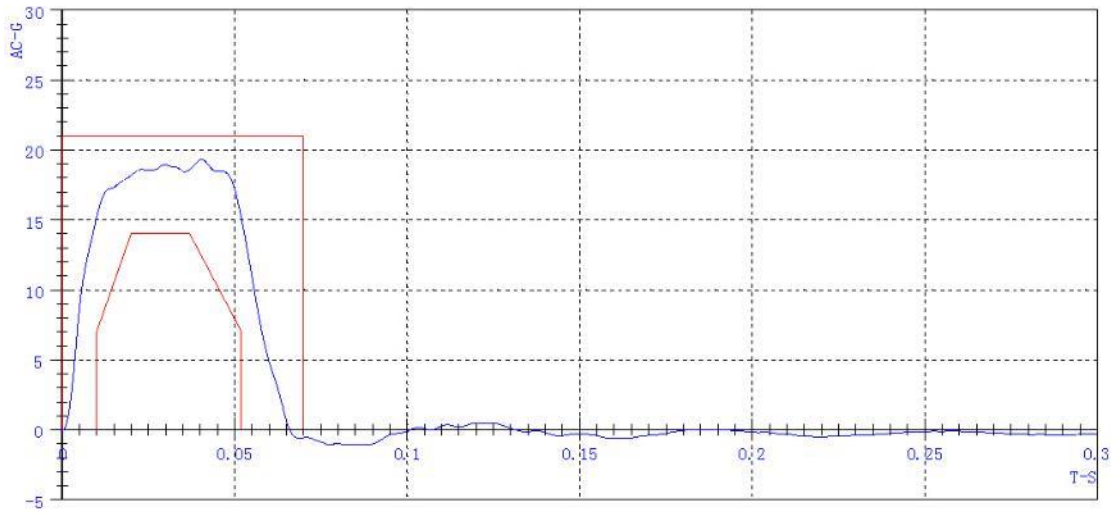

l) Tested sample No. 15, dummy Q3, rear impact; i-Size ECRS, integral, rearward facing, upright.



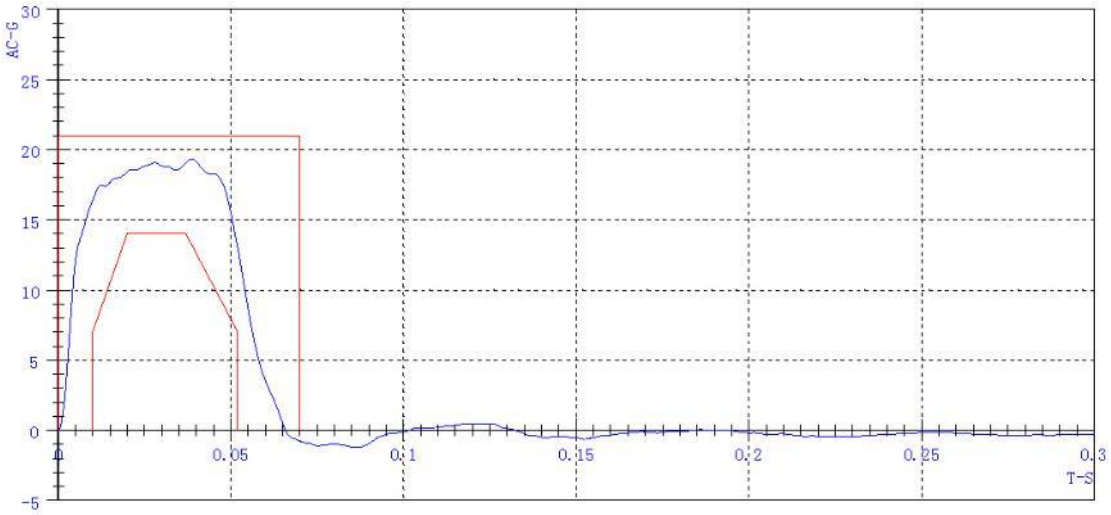
m) Tested sample No. 16, dummy Q0, rear impact; i-Size ECRS, integral, rearward facing, inclined.



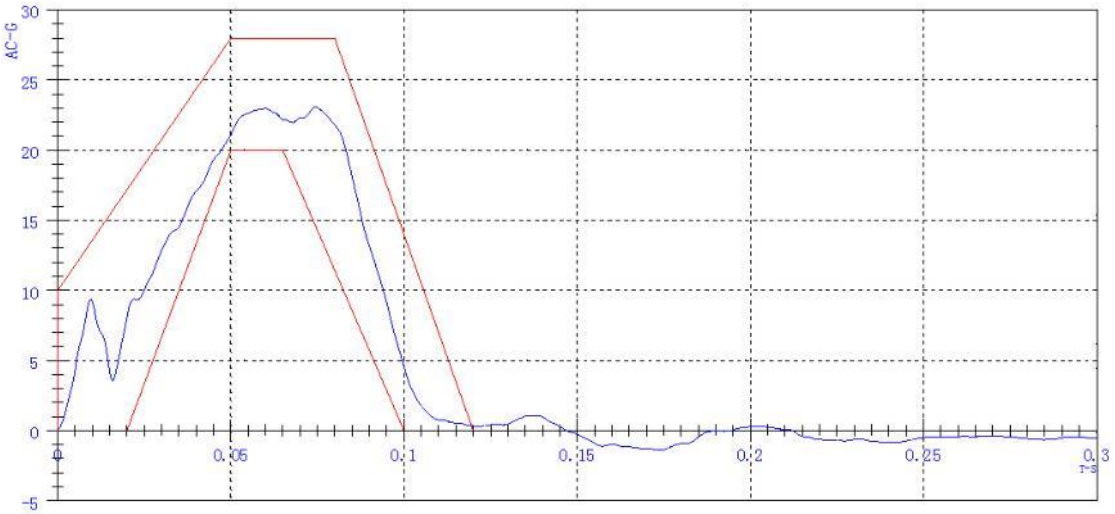

n) Tested sample No. 17, dummy Q1.5, rear impact; i-Size ECRS, integral, rearward facing, inclined.



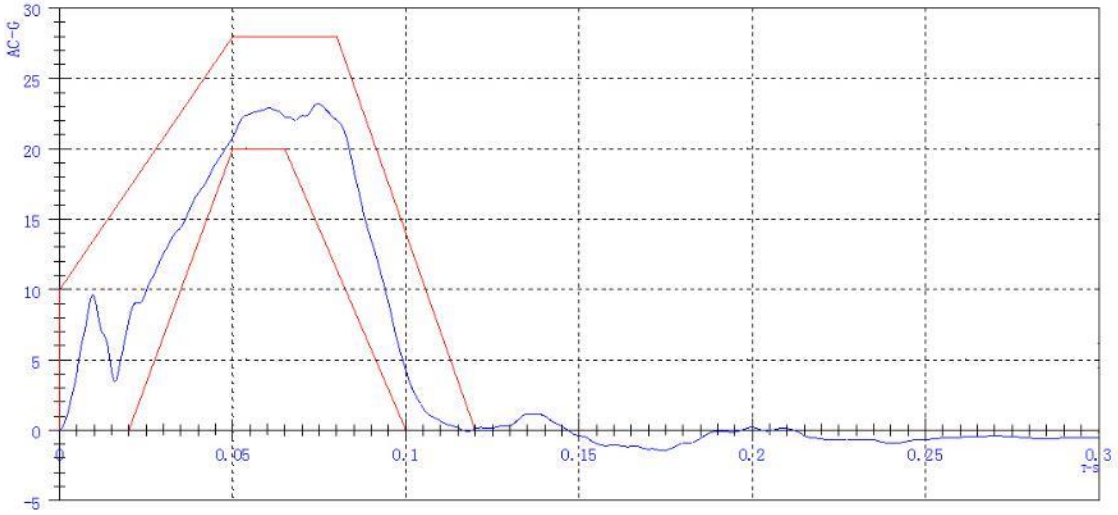
o) Tested sample No. 18, dummy Q3, rear impact; i-Size ECRS, integral, rearward facing, inclined.



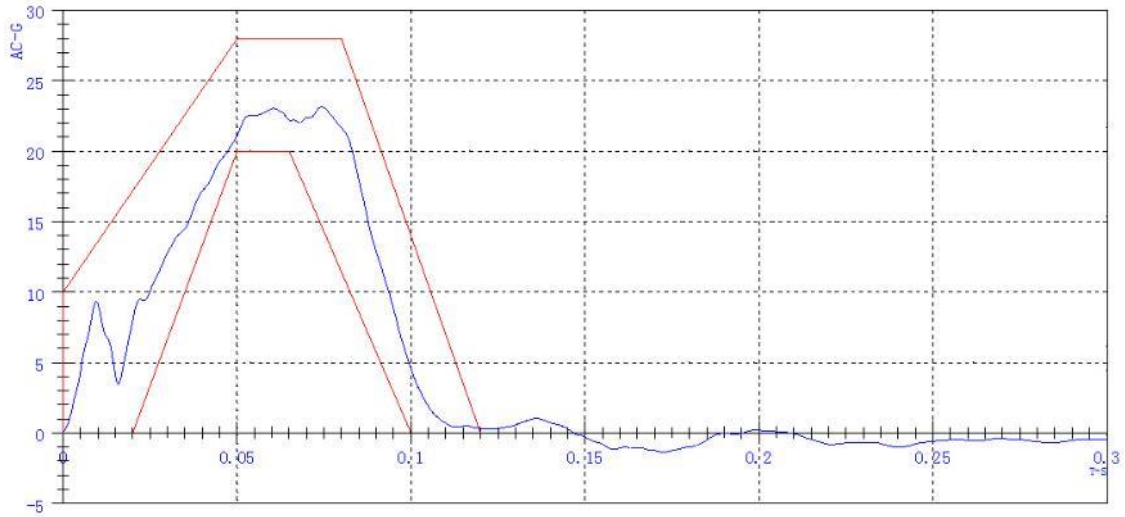

p) Tested sample No. 22, dummy Q1.5, frontal impact; i-Size ECRS, integral, forward facing, upright.



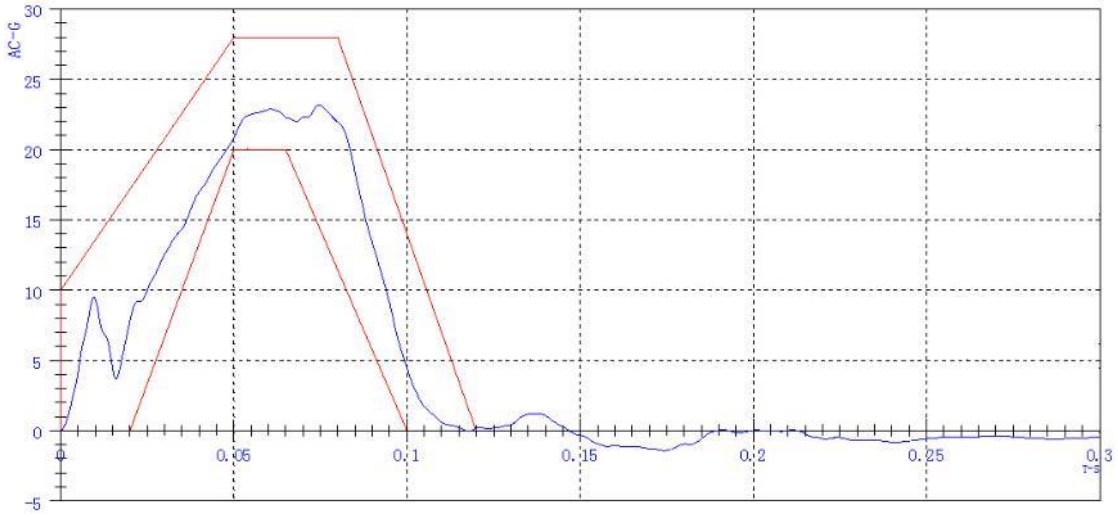
q) Tested sample No. 23, dummy Q3, frontal impact; i-Size ECRS, integral, forward facing, upright.



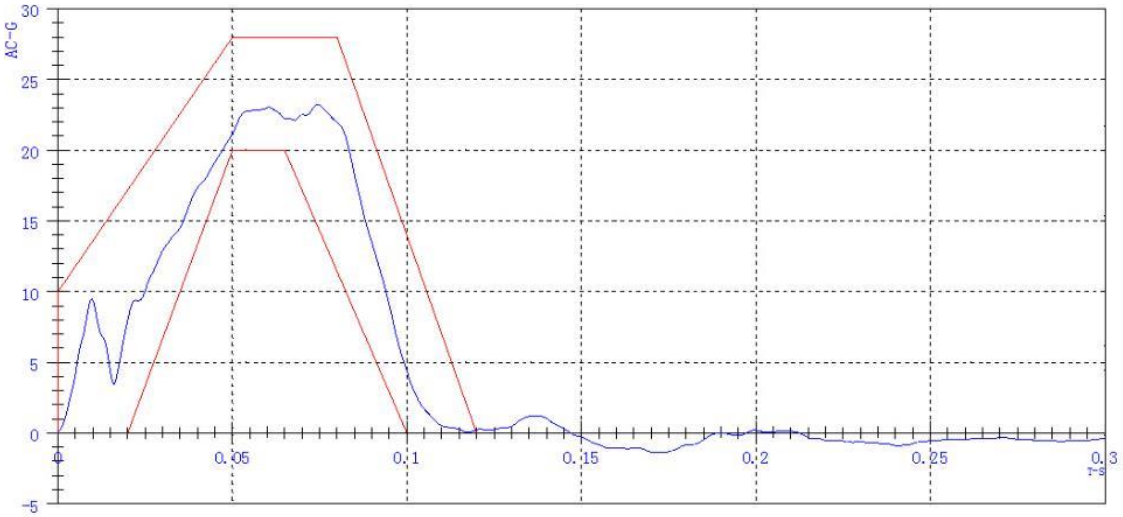

r) Tested sample No. 24, dummy Q1.5, frontal impact; i-Size ECRS, integral, forward facing, inclined.



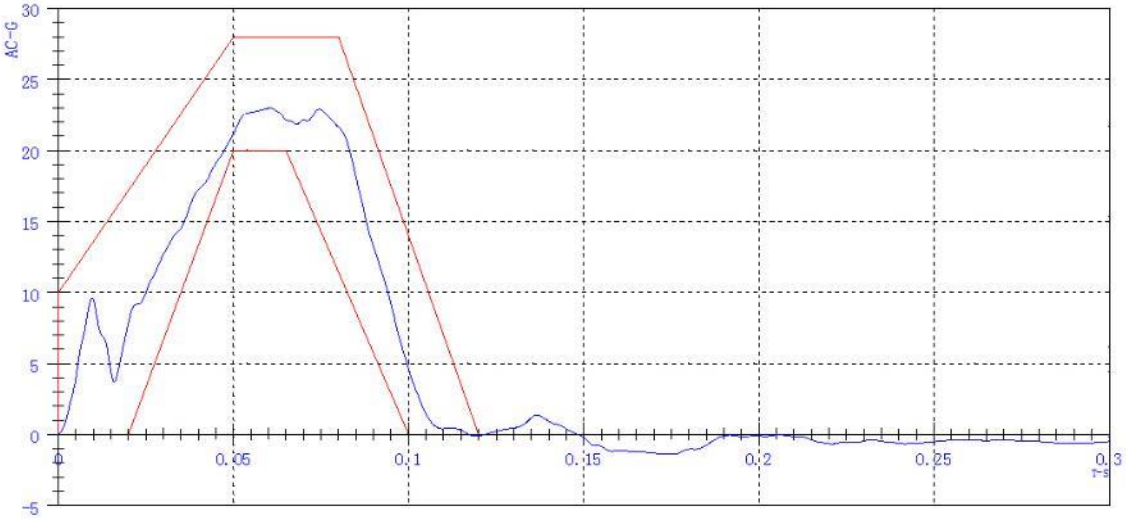
s) Tested sample No. 25, dummy Q3, frontal impact; i-Size ECRS, integral, forward facing, inclined.



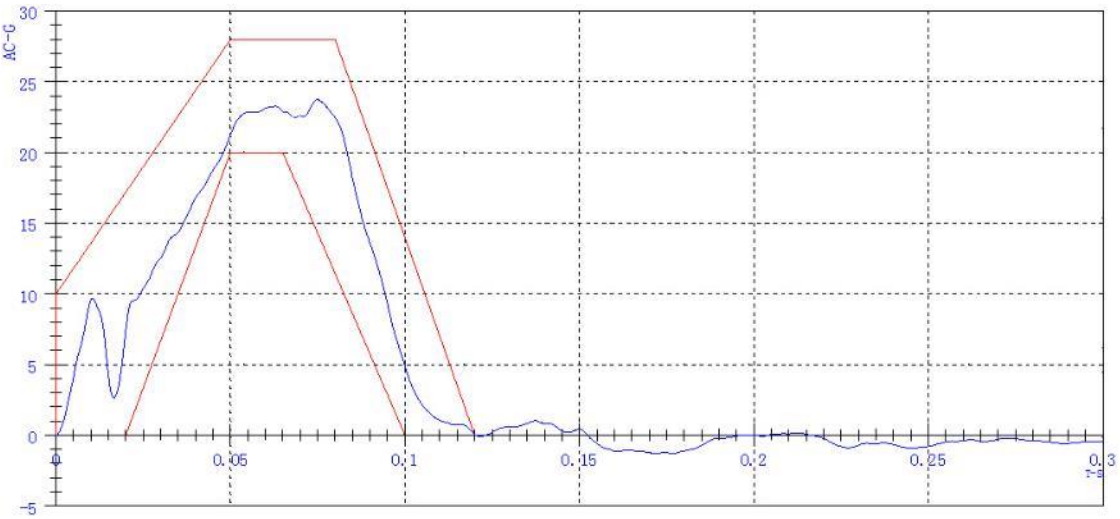

t) Tested sample No. 26, dummy Q3, frontal impact; i-Size ECRS, integral, forward facing, inclined, with optional buckle 2#.



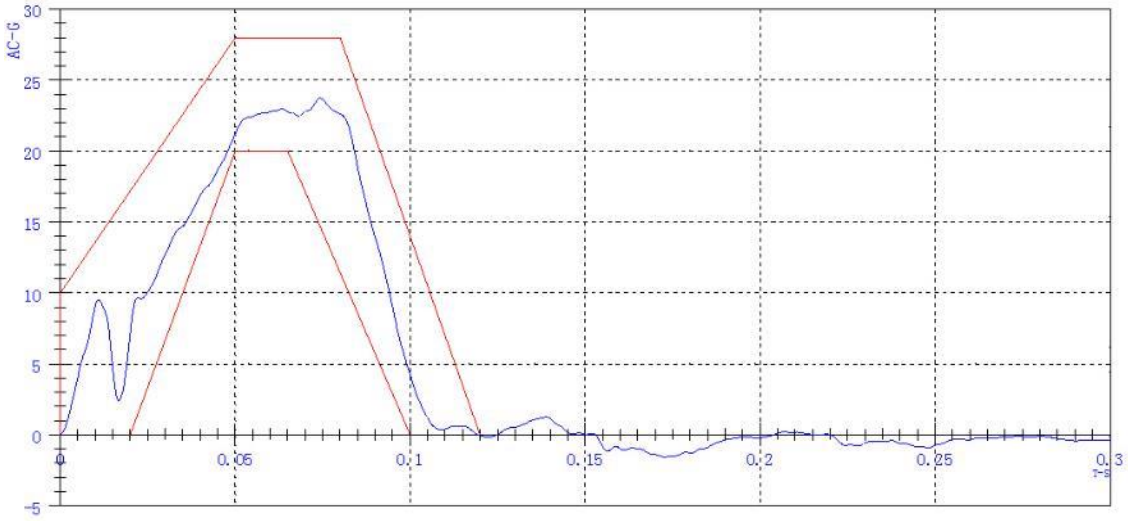
u) Tested sample No. 27, dummy Q3, frontal impact; i-Size ECRS, integral, forward facing, without top tether used, inclined.



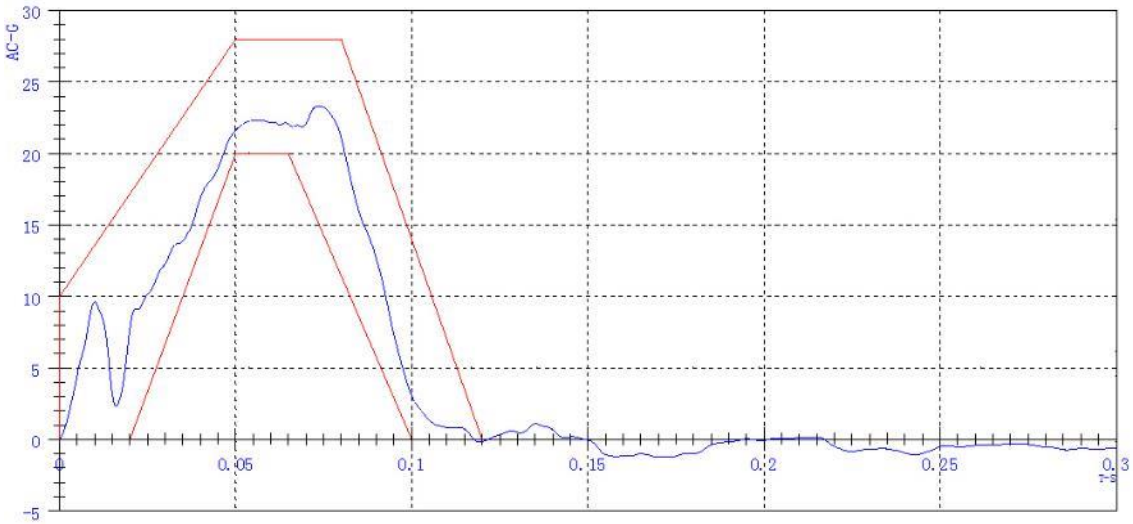

v) Tested sample No. 30, dummy Q3, frontal impact; i-Size booster seat, non-integral, forward facing, upright.



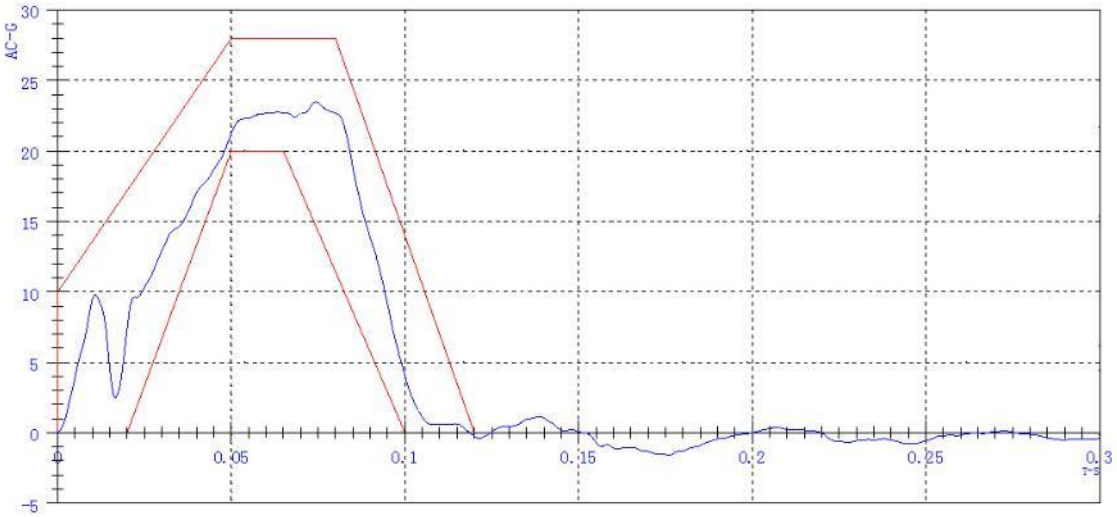
w) Tested sample No. 31, dummy Q10, frontal impact; i-Size booster seat, non-integral, forward facing, upright.



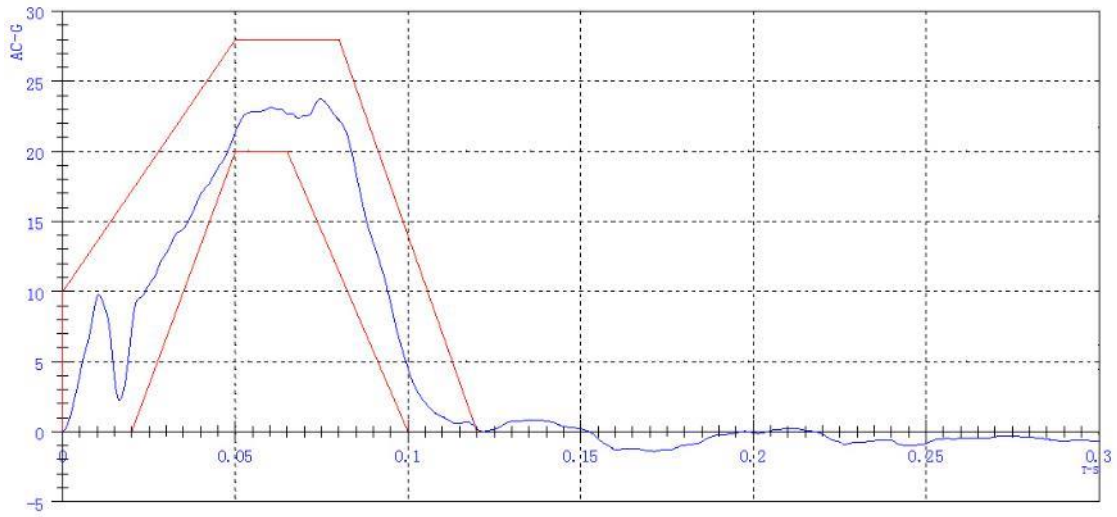

x) Tested sample No. 32, dummy Q3, frontal impact; i-Size booster seat, non-integral, forward facing, upright, without ISOFIX attachments.



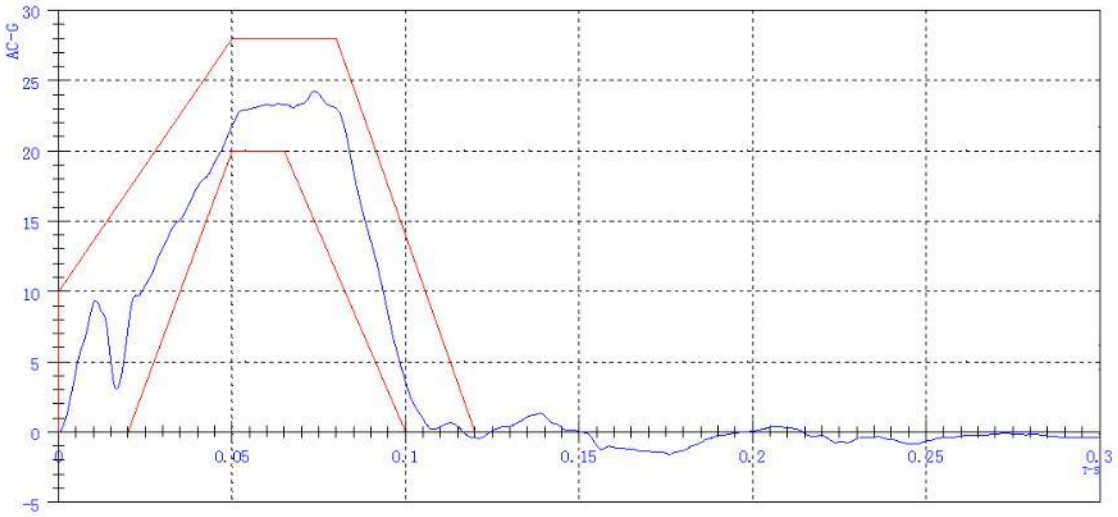
y) Tested sample No. 33, dummy Q10, frontal impact; i-Size booster seat, non-integral, forward facing, upright, without ISOFIX attachments.



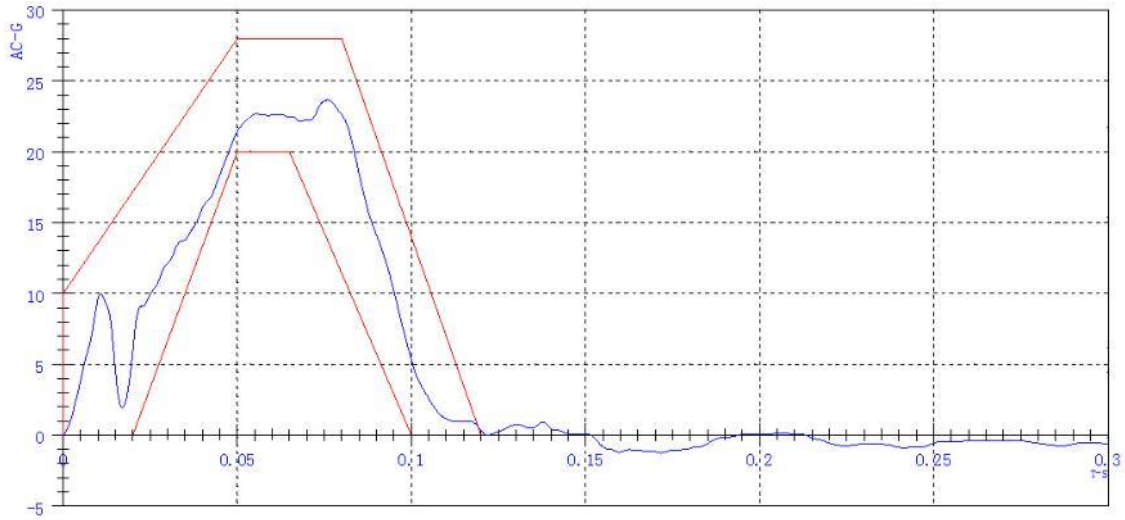

z) Tested sample No. 34, dummy Q3, frontal impact; i-Size booster seat, non-integral, forward facing, inclined.



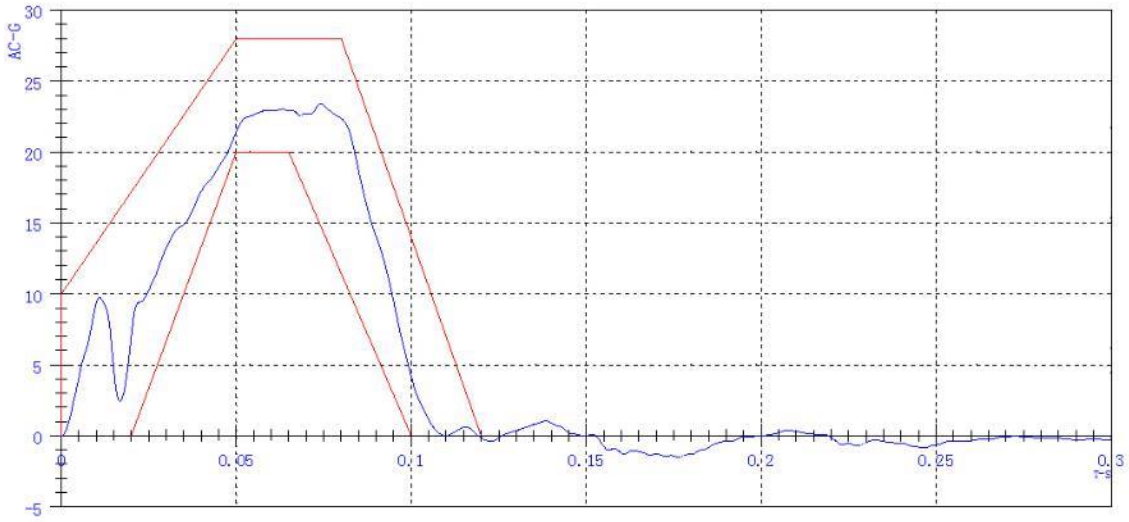
aa) Tested sample No. 35, dummy Q10, frontal impact; i-Size booster seat, non-integral, forward facing, inclined.



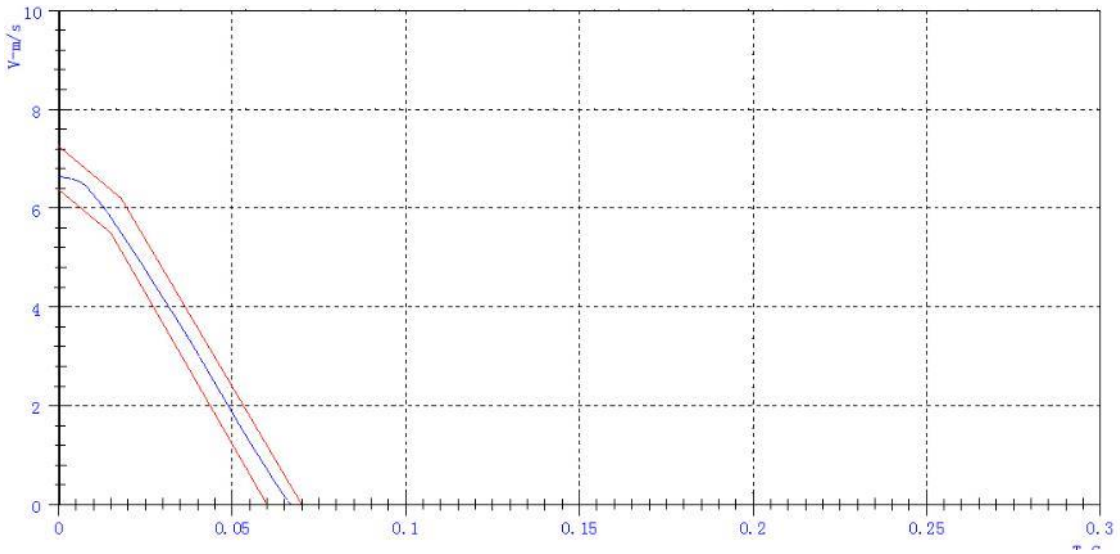

bb) Tested sample No. 36, dummy Q3, frontal impact; i-Size booster seat, non-integral, forward facing, inclined, without ISOFIX attachments.



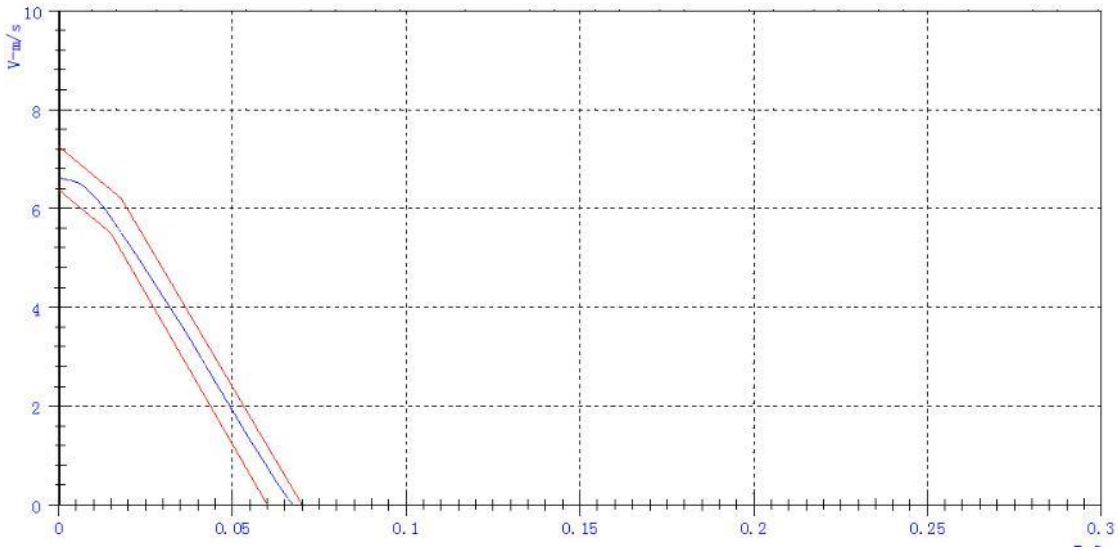
cc) Tested sample No. 37, dummy Q10, frontal impact; i-Size booster seat, non-integral, forward facing, inclined, without ISOFIX attachments.



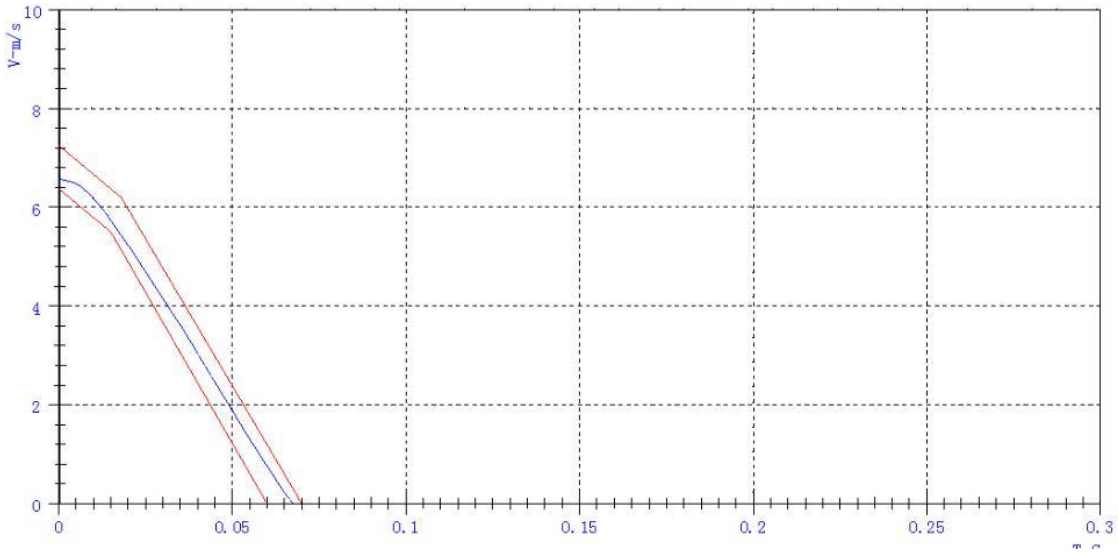

dd) Tested sample No. 19, dummy Q0, lateral impact; i-Size ECRS, integral, rearward facing, upright.



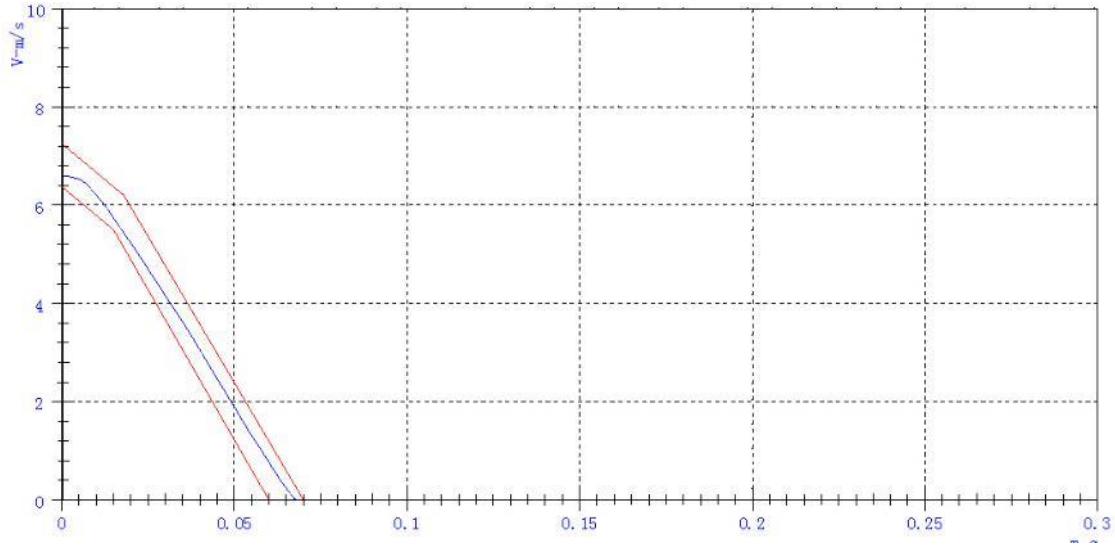
ee) Tested sample No.20, dummy Q1.5, lateral impact; i-Size ECRS, integral, rearward facing, upright.



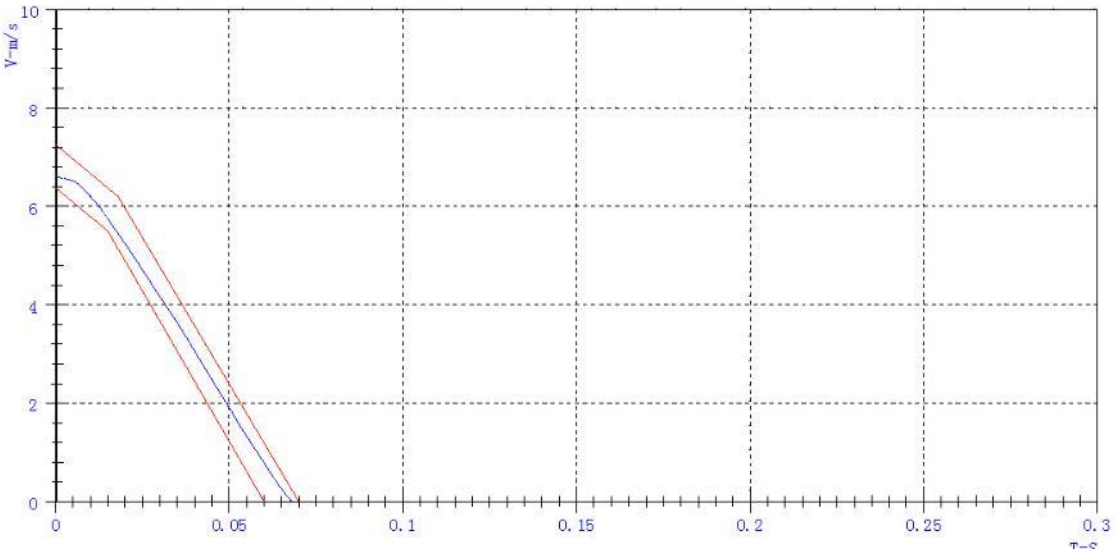

ff) Tested sample No. 21, dummy Q3, lateral impact; i-Size ECRS, integral, rearward facing, upright.



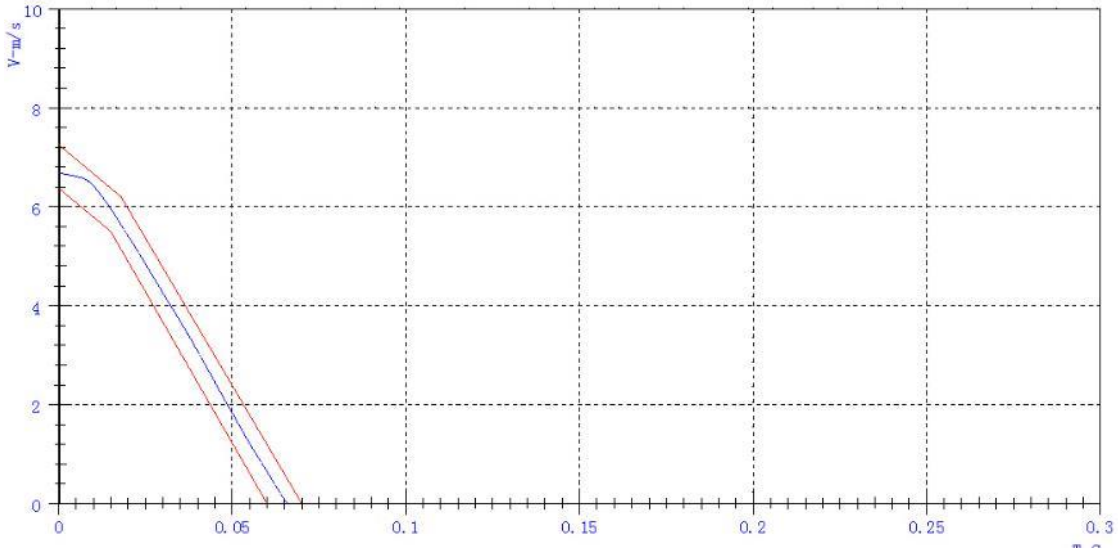
gg) Tested sample No. 28, dummy Q1.5, lateral impact; i-Size ECRS, integral, forward facing, upright.



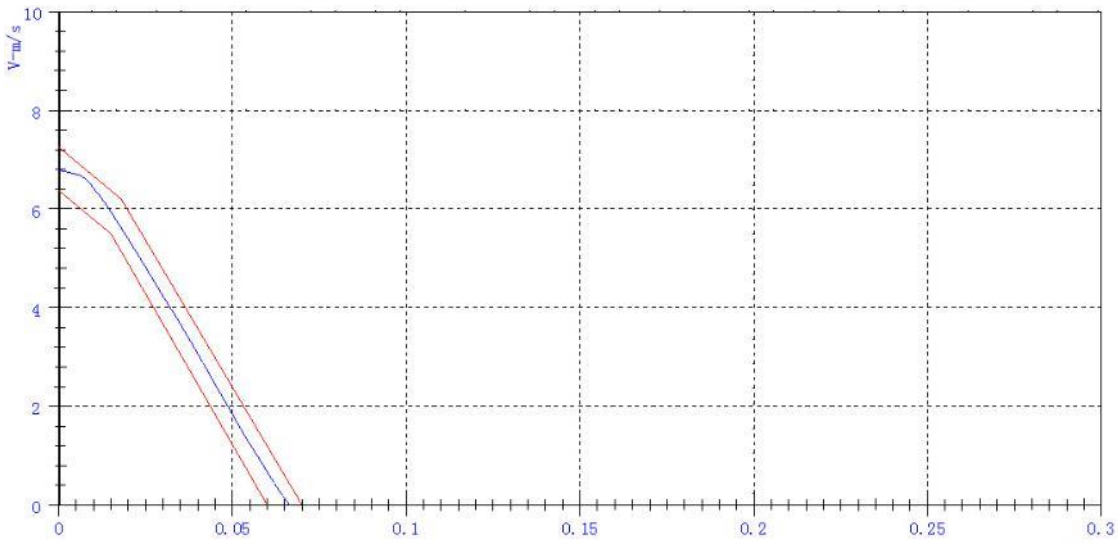

hh) Tested sample No. 29, dummy Q3, lateral impact; i-Size ECRS, integral, forward facing, upright.



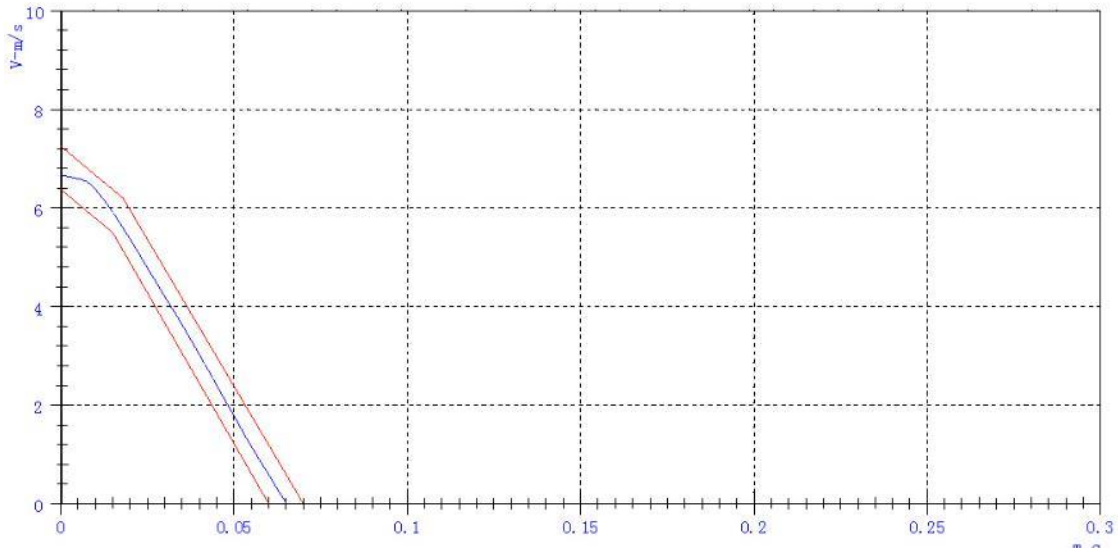
ii) Tested sample No. 38, dummy Q3, lateral impact; i-Size booster seat, non-integral, forward facing, upright.



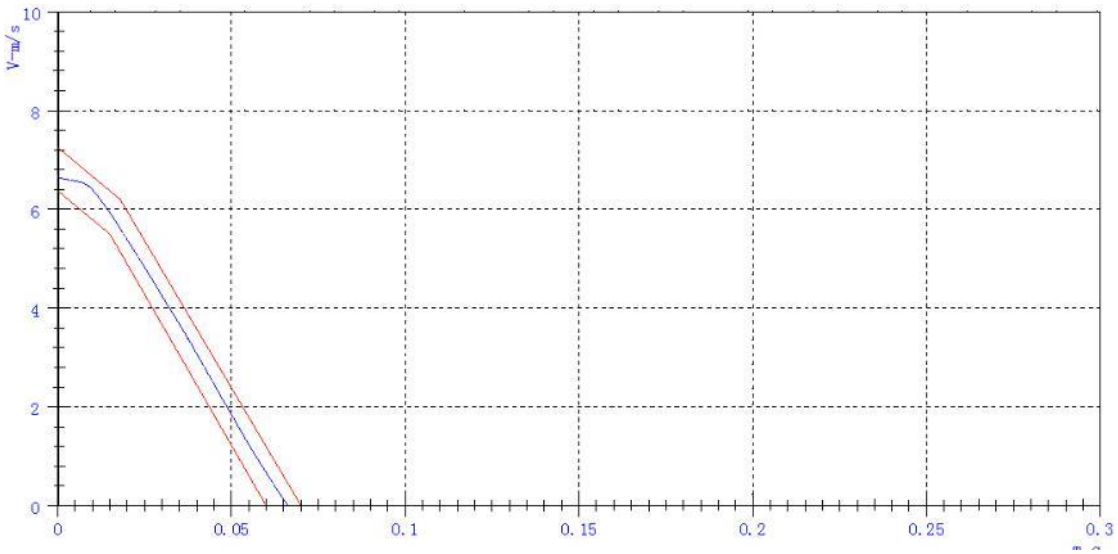

jj) Tested sample No. 39, dummy Q6, lateral impact; i-Size booster seat, non-integral, forward facing, upright.



kk) Tested sample No. 40, dummy Q10, lateral impact; i-Size booster seat, non-integral, forward facing, upright.




ll) Tested sample No. 41, dummy Q3, lateral impact; i-Size booster seat, non-integral, forward facing, upright, without ISOFIX attachments.

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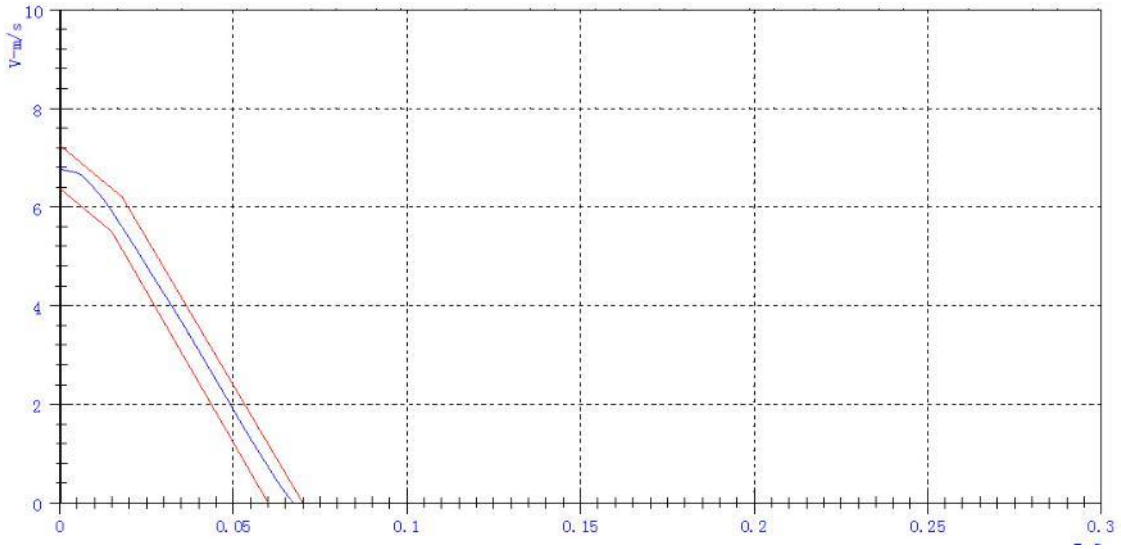
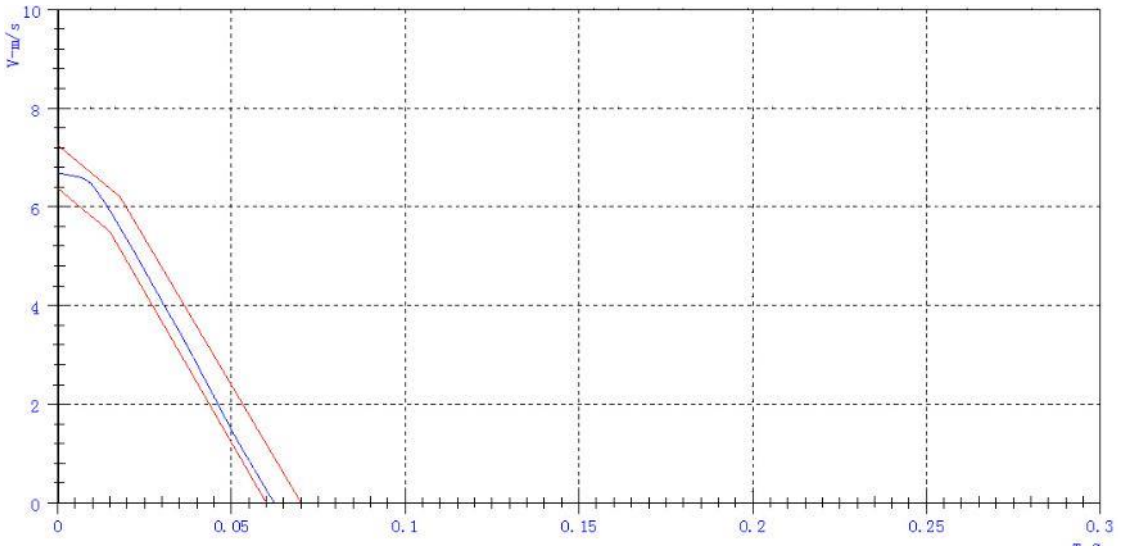
mm) Tested sample No. 42, dummy Q6, lateral impact; i-Size booster seat, non-integral, forward facing, upright, without ISOFIX attachments.




nn) Tested sample No. 43, dummy Q10, lateral impact; i-Size booster seat, non-integral, forward facing, upright, without ISOFIX attachments.




End of the technical report