Side Impact Activity Britax Römer

Ulm, 16.11.2009
Test Rig

Support device for the door

PU Tubes

Door

Bench

Backrest Cushion

Seat Cushion

Sliding Isofix Anchorage Points
Test Bench

- 90° rotation of the test bench
- Test bench according NPACS proposal
- Backrest cushion NPACS proposal with a 50 mm cut
- Seat cushion NPACS proposal but without gaps
Isofix Anchorage Points

- Sliding anchorage points
- Isofix points according ECE 44 rearmost position
- Sliding force displacement function TBD
- NPACS Door dimension
- 35 mm rubber foam Polychloropren CR4271
- 20 mm Styrodur C2500
# Test Parameters

<table>
<thead>
<tr>
<th></th>
<th>ISO/PDPAS N623E</th>
<th>Britax Römer</th>
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<tbody>
<tr>
<td>Intrusion velocity</td>
<td>7-10 m/s</td>
<td>7 m/s</td>
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<tr>
<td>Intrusion depth</td>
<td>200-300 mm</td>
<td>250 mm</td>
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<tr>
<td>Sled deceleration</td>
<td>10-14 g</td>
<td>15 g</td>
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<tr>
<td>Intrusion surface height</td>
<td>500 mm</td>
<td>500 mm</td>
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</tbody>
</table>

![Sled v/s graph](image1)

![Sled deceleration graph](image2)
Comparison between EuroNCAP and Sled tests

Head Resultant 3 ms

- FF Gr. 1
- RF Gr. 0+

EuroNCAP vs Test Results
RF Group 0+ Dummy Q1,5
Importance of Set Up

Tape used to keep the head and CRS during acceleration phase
Next Steps

- Continue testing to gain experience
- Exchange with Dorel to define key parameters
  - Velocity corridor
  - Isofix sliding function
  - Repeatability of the procedure
  - Setup i.e. keep head position during sled acceleration