

Isofix Loads Measurements

Task 5.1

CLEPA Contribution

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Test description

- R44 bench equipped with :
 - Lower isofix anchorages loads sensors
 - Load given in this document are calculated in the centre of the 6 mm diameter anchorage
 - Support Leg load sensor
- Tests performed
 - Seat A : Gr0+ with Support leg R44 / P1,5
 - Seat B : Gr1 with Support leg R44 / P3
 - Seat A : Gr0+ with Support leg Euroncap / Q1,5
 - Seat B : Gr1 with Support leg Euroncap / Q3

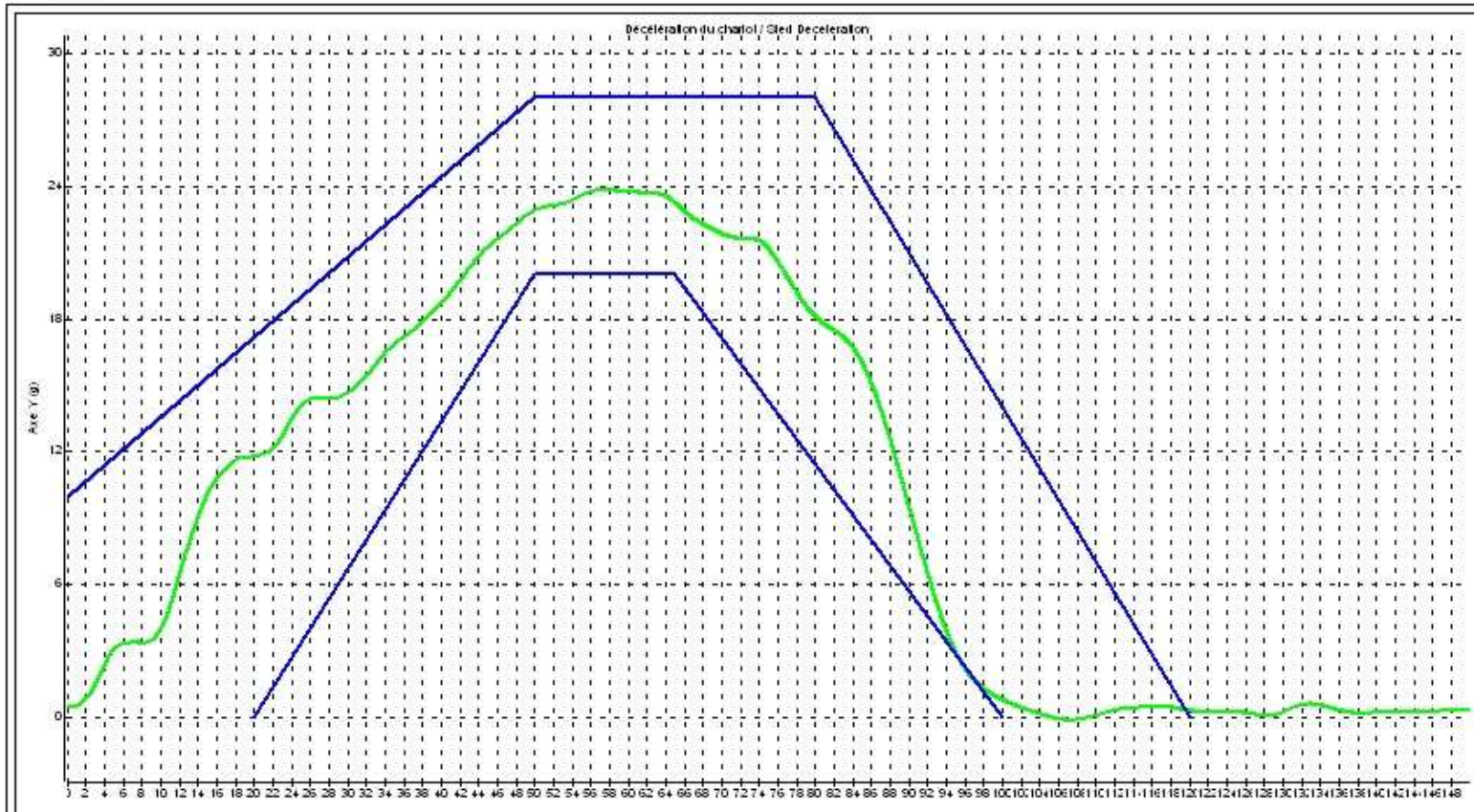


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R44 Pulse



Essai n° / Test number : LSP-08-1102



Décélération chariot (Sled Deceleration) = 23.8 g à (at) 57 ms
Niveau à (Level at) 5 ms = 3.1 g Niveau à (Level at) 10 ms = 3.9 g

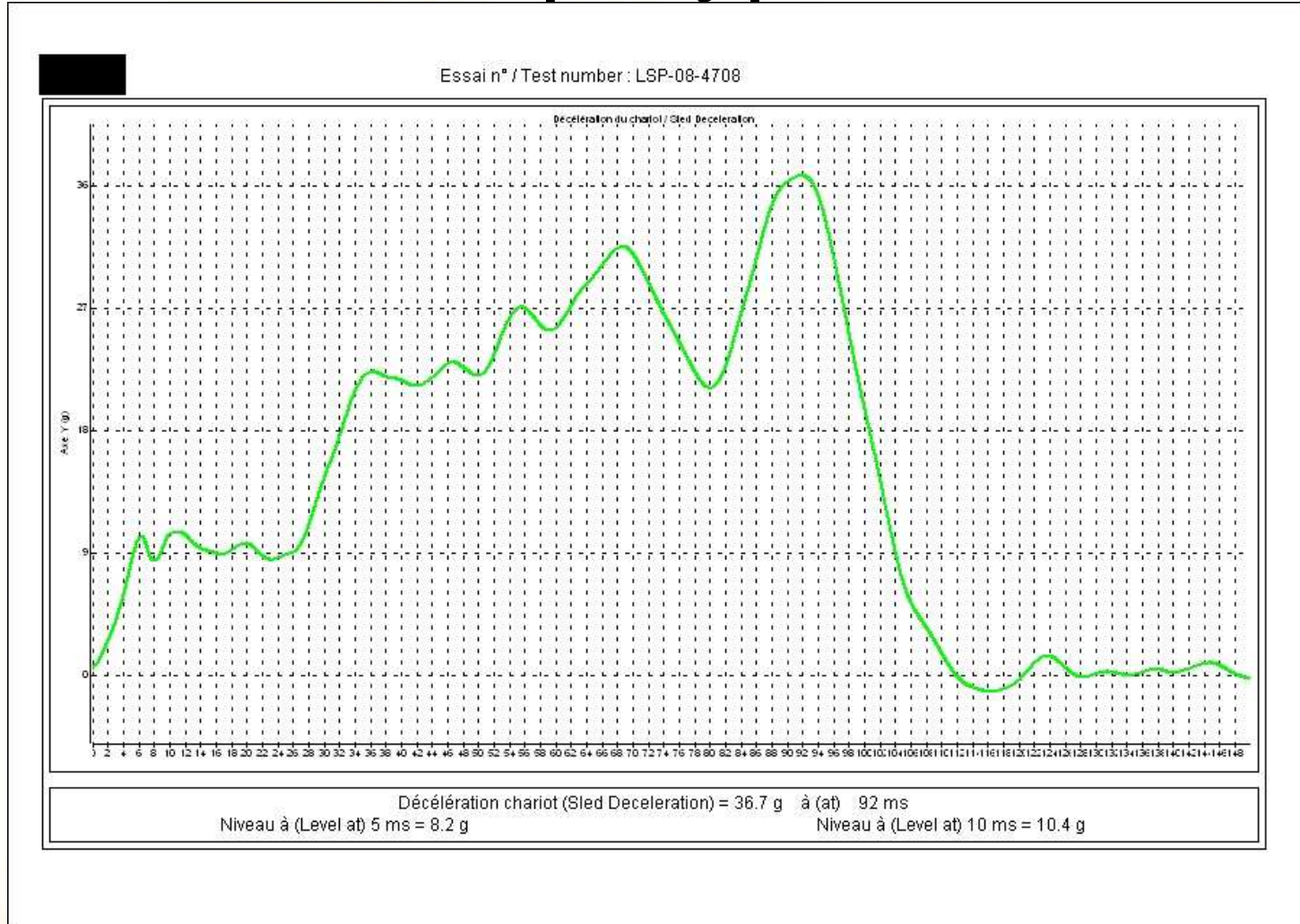


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EuroNcap Type Pulse

Max : 36.7 g



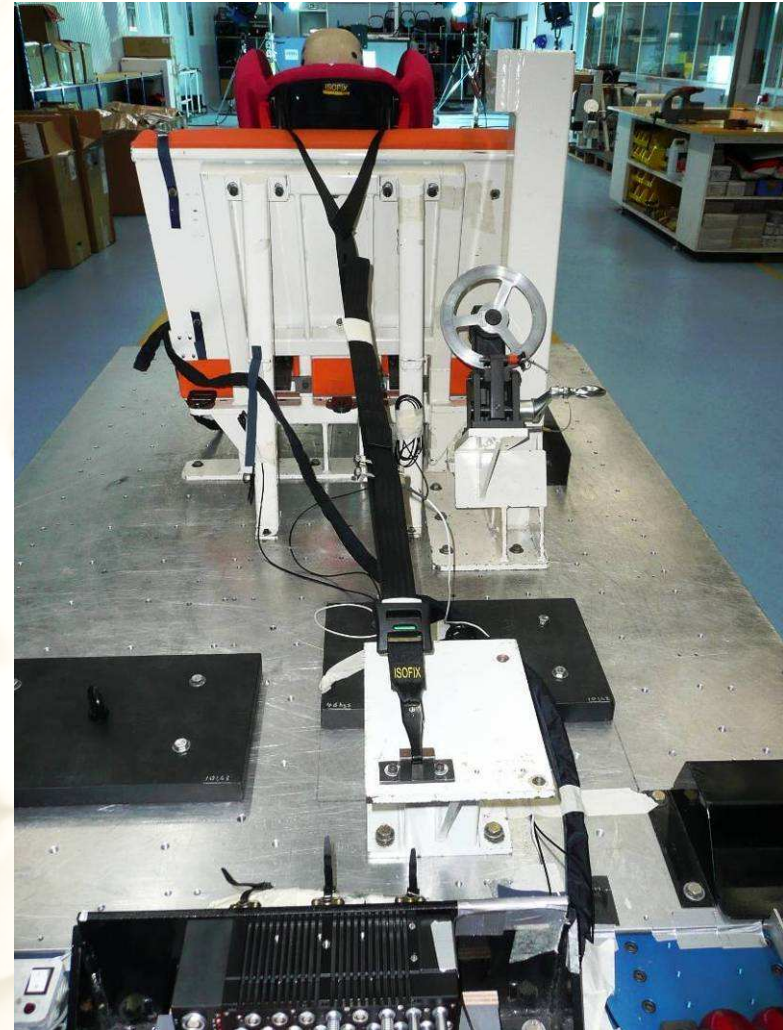
- **Seat A** weight 12.2 kg – Gr 0+ Support Leg



- **Seat B** weight 14.6 kg . Gr 1 Support Leg



- **Previous test Seat C :**
weight 11 kg
 - Gr 1 Top Tether

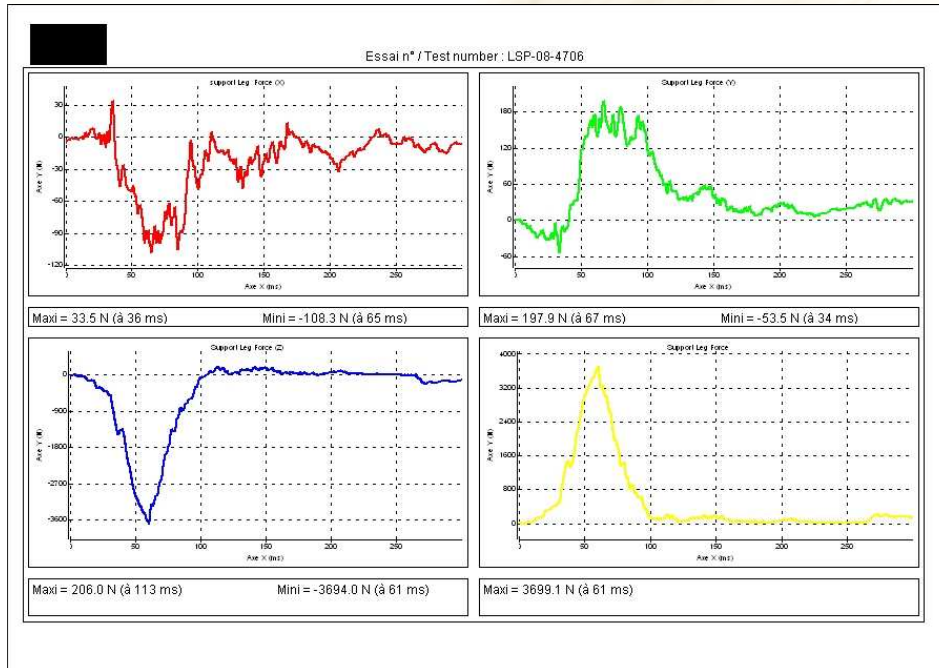




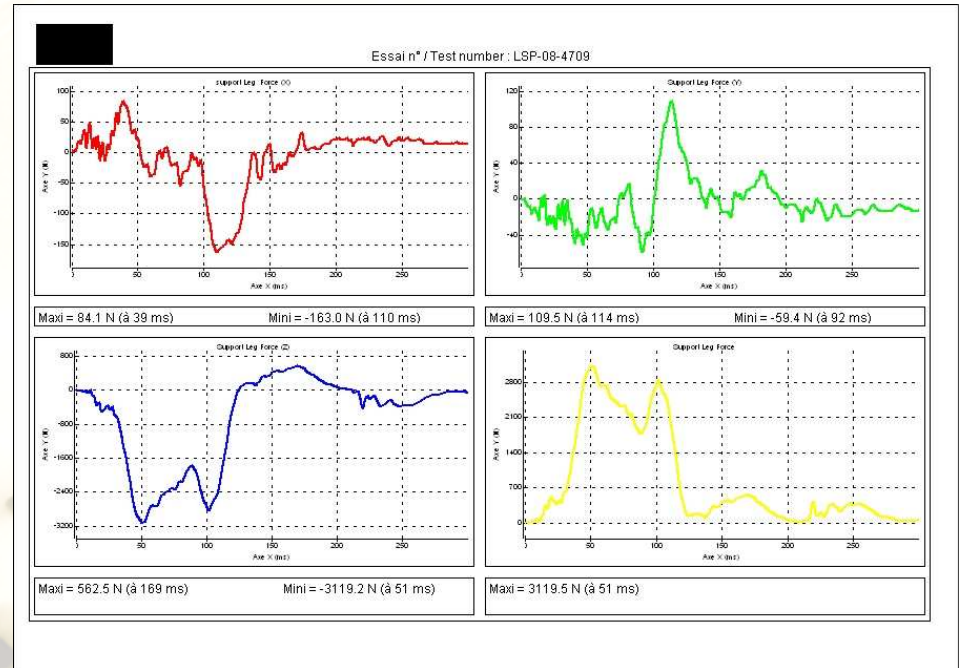
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Results- Synthesis



R44



EURONCAP

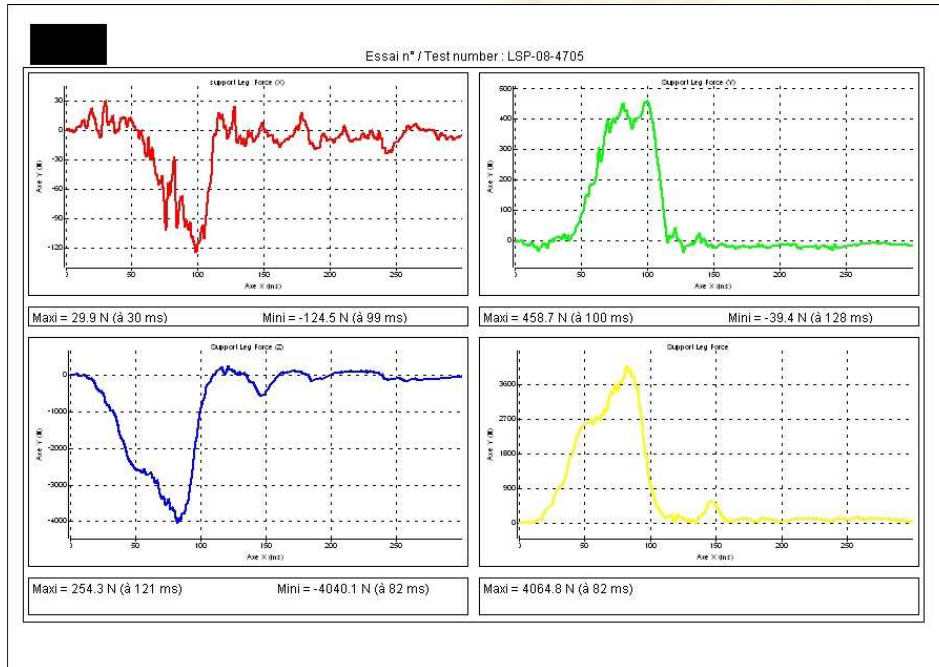
Force measured in N in SL for seat A



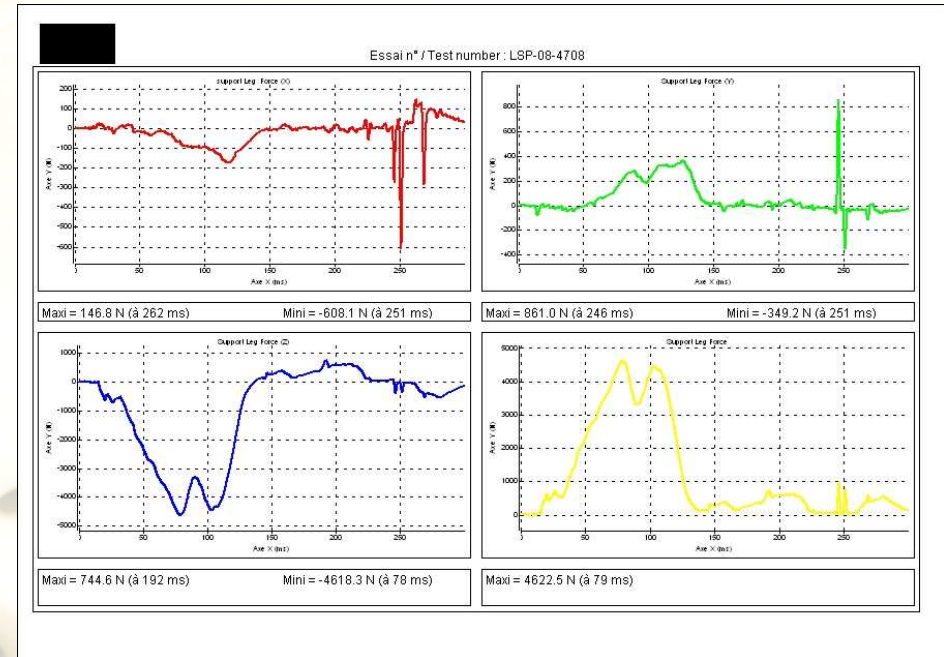
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Results- Synthesis



R44

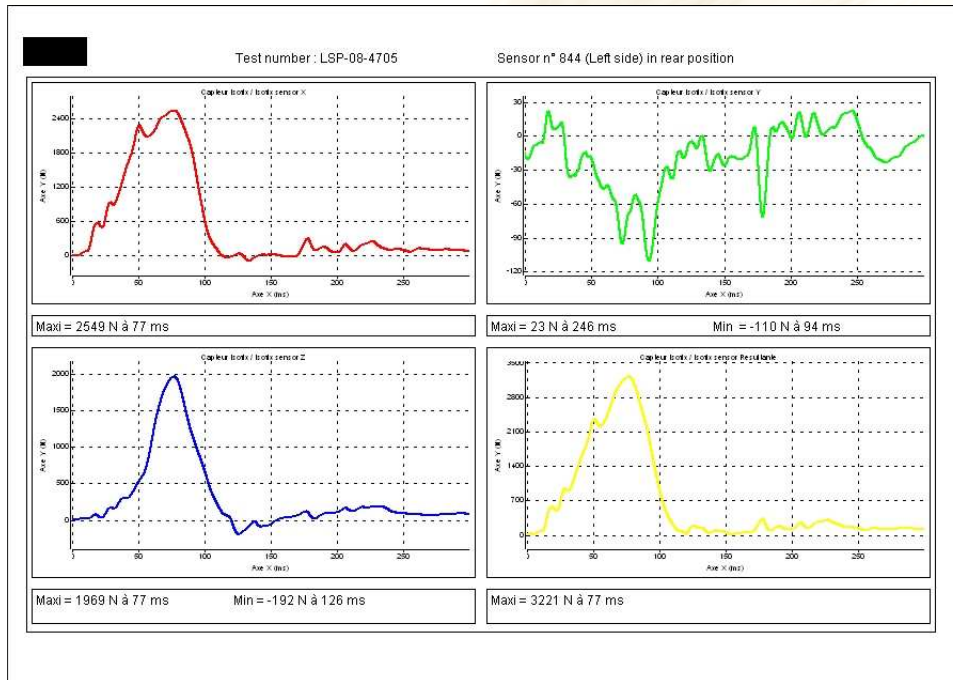


EURONCAP

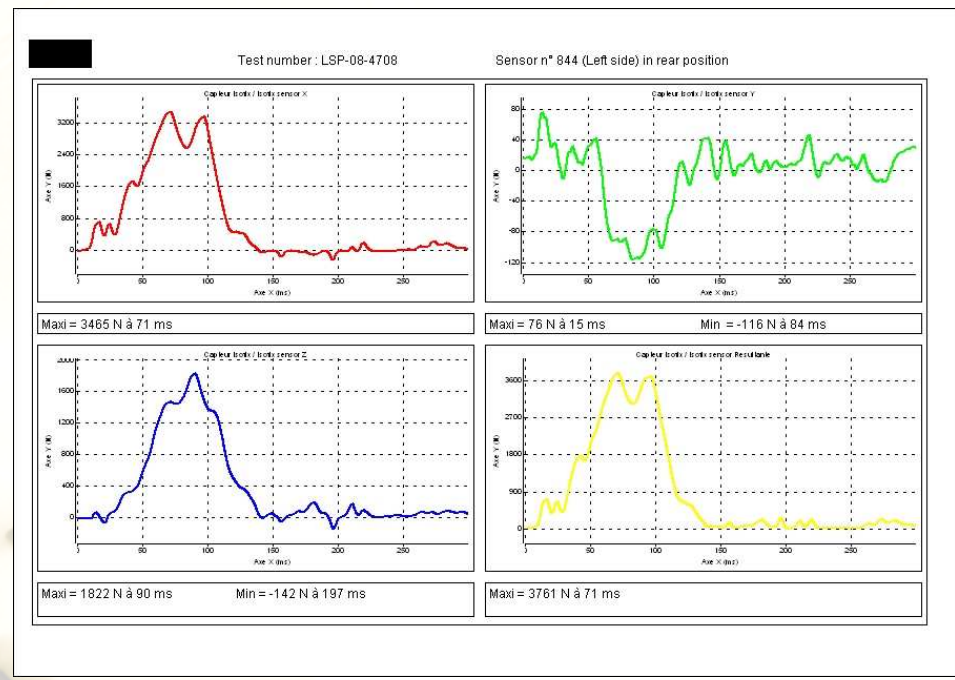
Force measured in N in SL for seat B



Results- Synthesis



R44



EURONCAP

Force measured in N in lower anchorage for seat B

Results- Synthesis

Pulse	Seat	Anti-rotation	Dummy	Lower Isofix anchorage				SL/TT
				X	Y	Z	Res	
R44	C	TT	P3	2383	126	640	2418	3870
R44	C	/	P3	3370	233	825	3468	/
R44	A	SL	P1,5	2668	/	1005	2847	3699
R44	B	SL	P3	2549	/	1969	3221	4065
Euroncap	A	SL	Q1,5	2911	/	851	2968	3119
Euroncap	B	SL	Q3	3465	/	1822	3761	4622

Force measured in N

Result Synthesis

- Higher forces in anchorages with 2 points only and with support leg
- For Gr0+ lower force in Euroncap. But more important impulse for support leg in Euroncap.

Next Steps

- Tests with other labs to check results
- Input from car manufactures to evaluate anchorages deformation.
- Tests with Gr1 rwd facing
- Test with Gr1 and P6 for max loads