#### INSTYTUT TRANSPORTU SAMOCHODOWEGO MOTOR TRANSPORT INSTITUTE



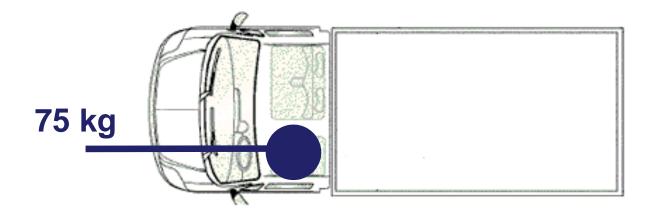
3rd IWG VGL, Paris 18-19 July 2016

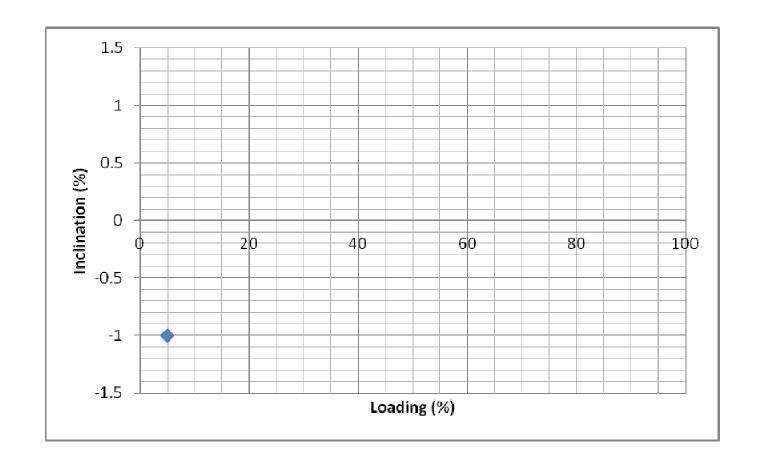
## N - vehicles load/levelling measurements proposal

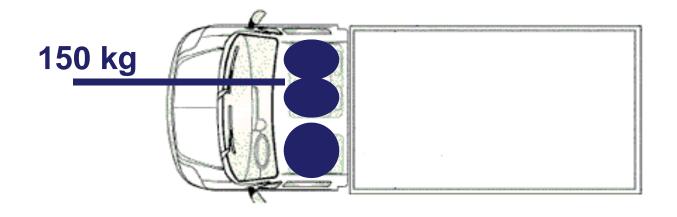
Tomasz Targosiński Ph. D. Eng Poland

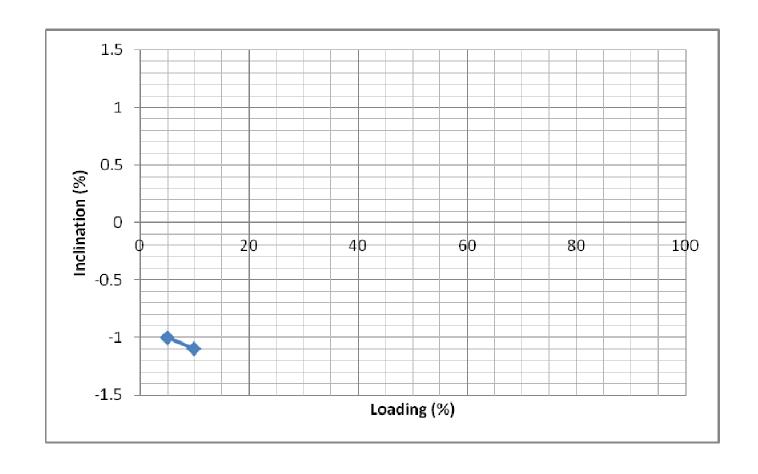


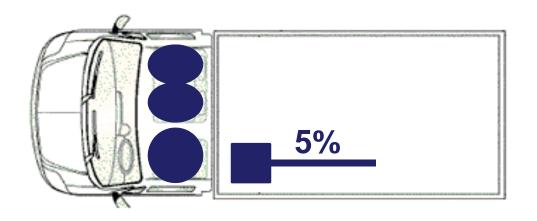
#### Lowest dipped beam inclination

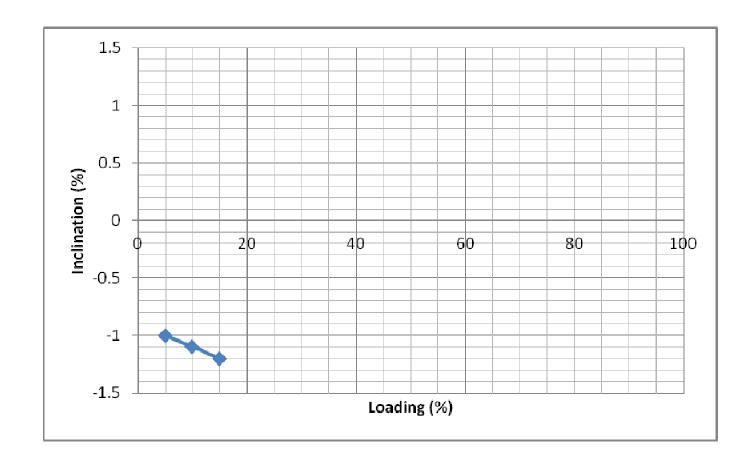


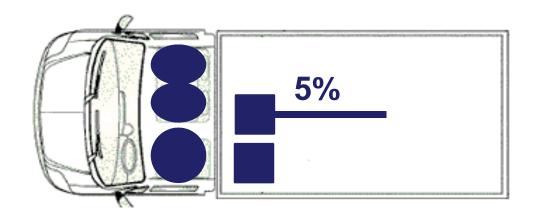


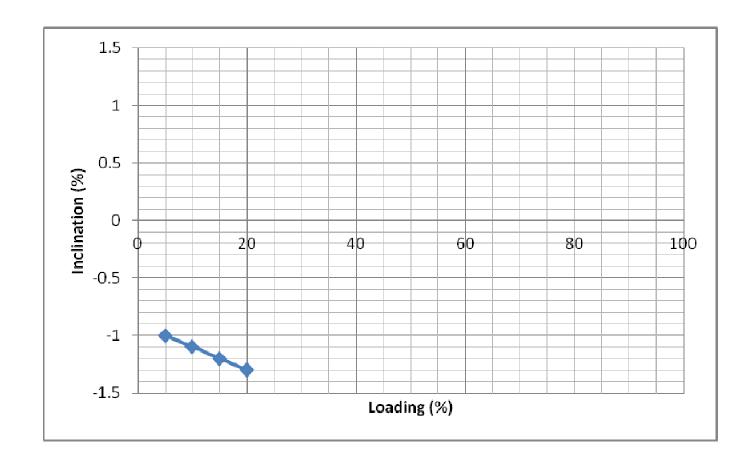


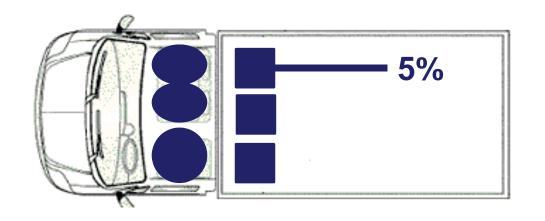


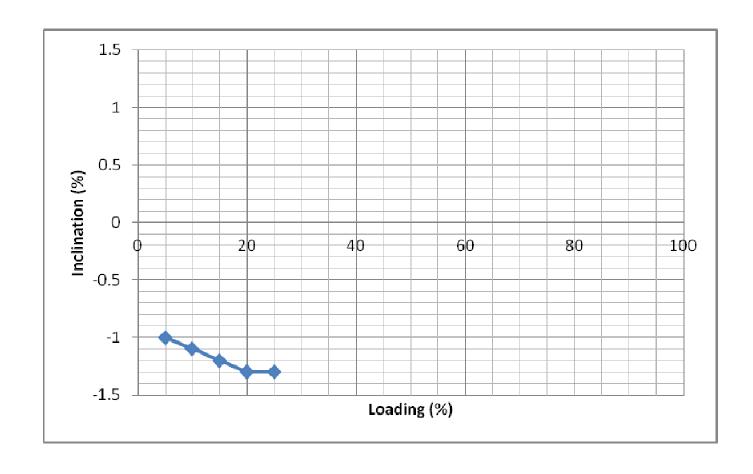


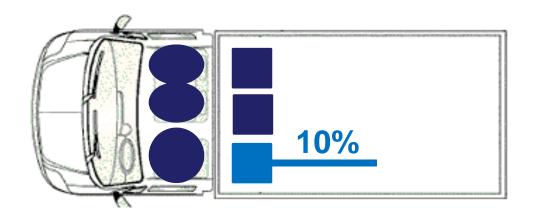


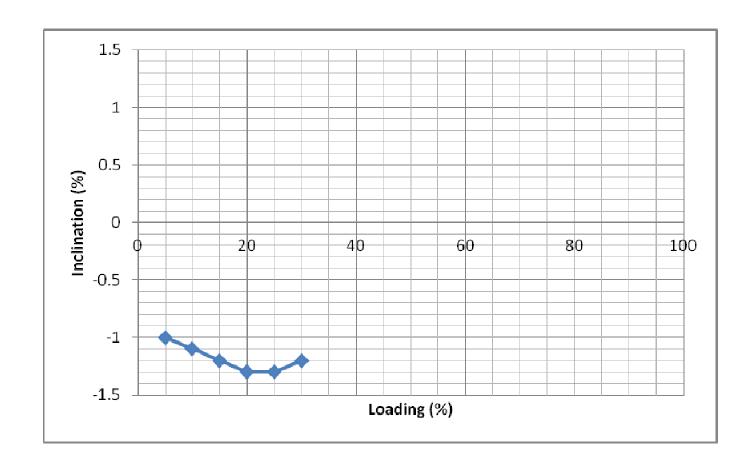


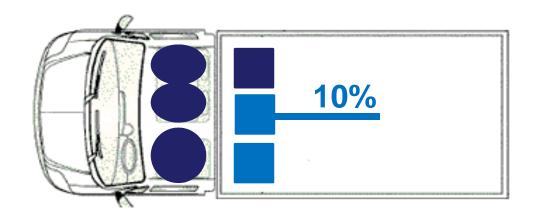


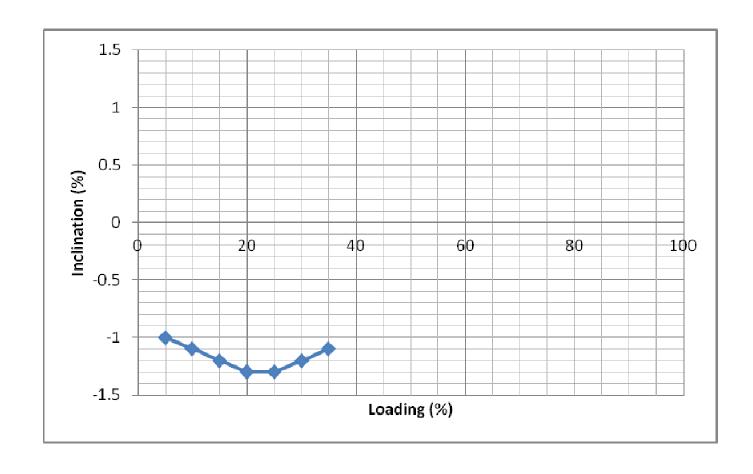


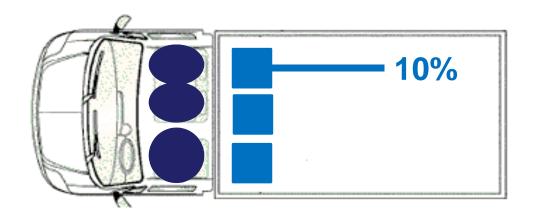


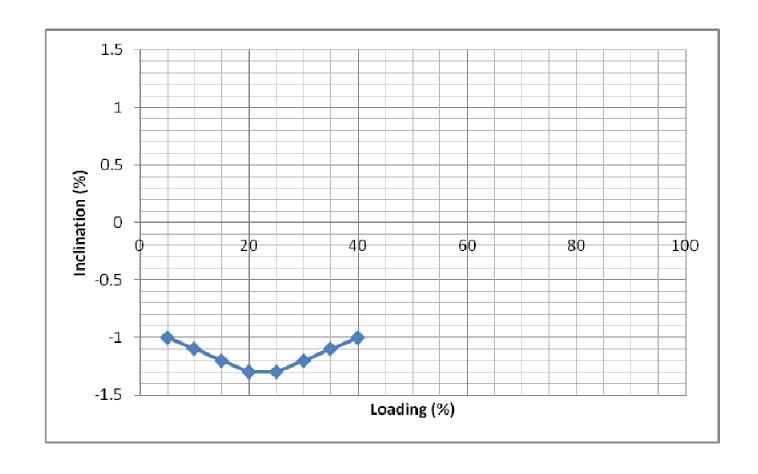


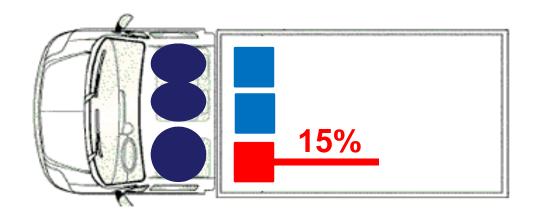


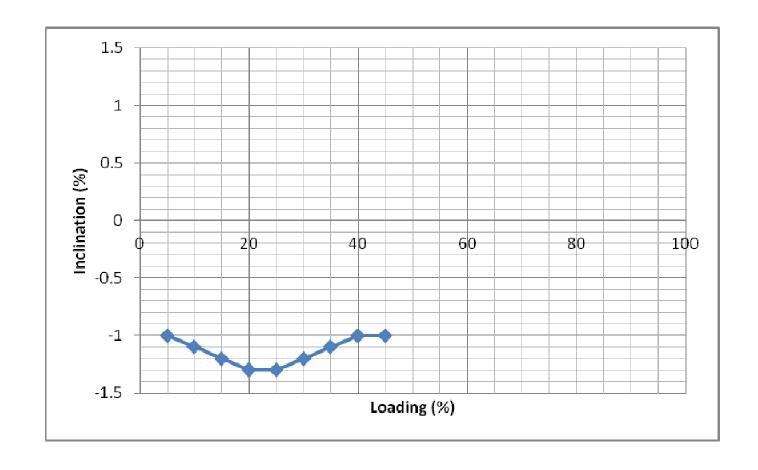


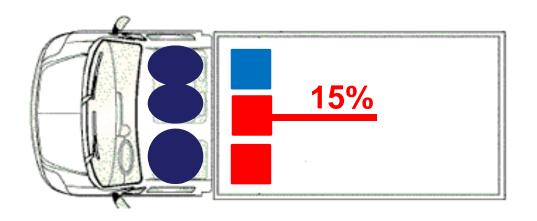


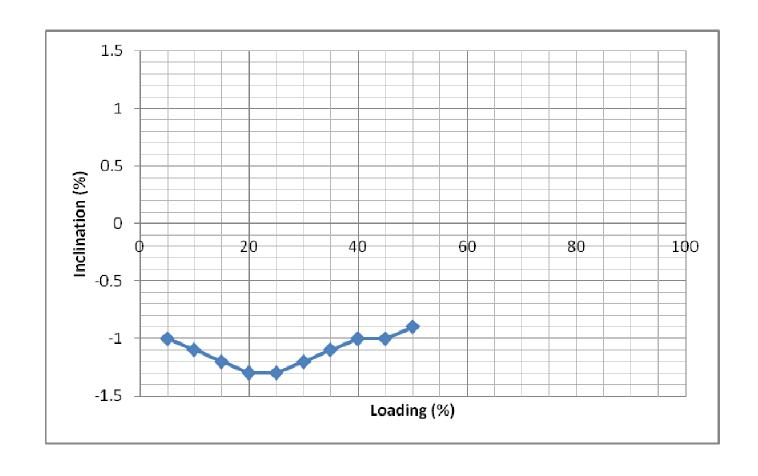


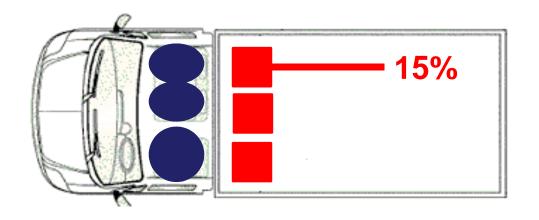


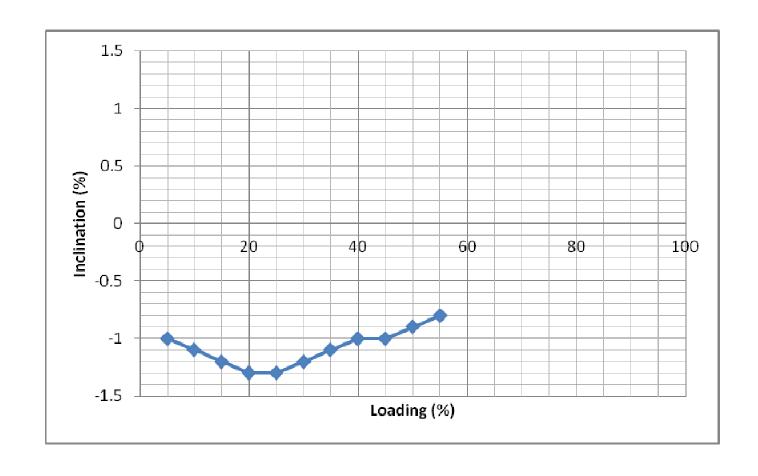


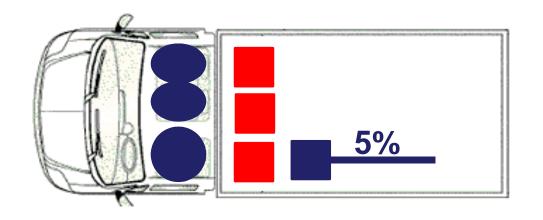


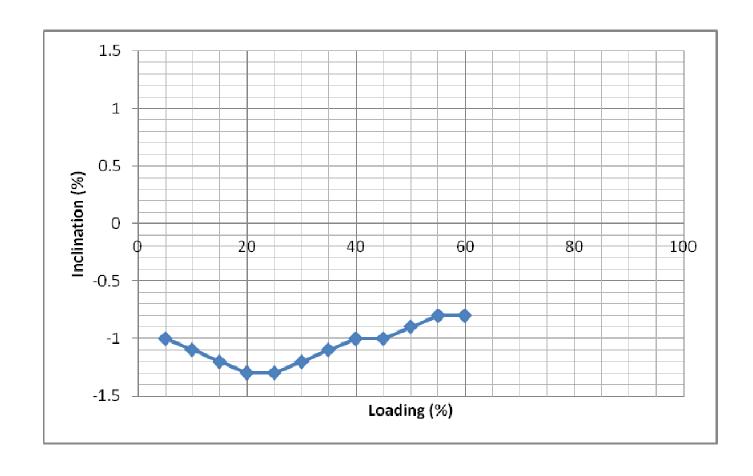


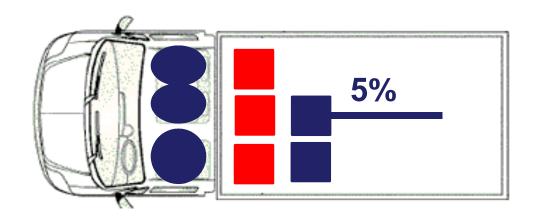


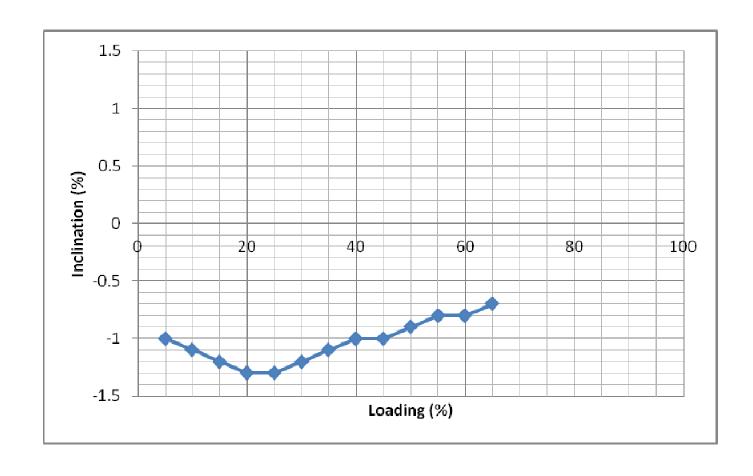


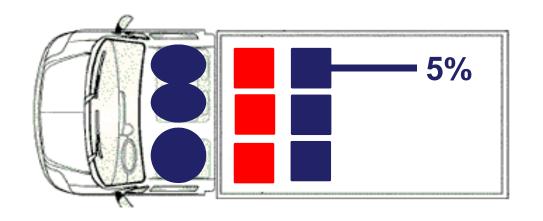


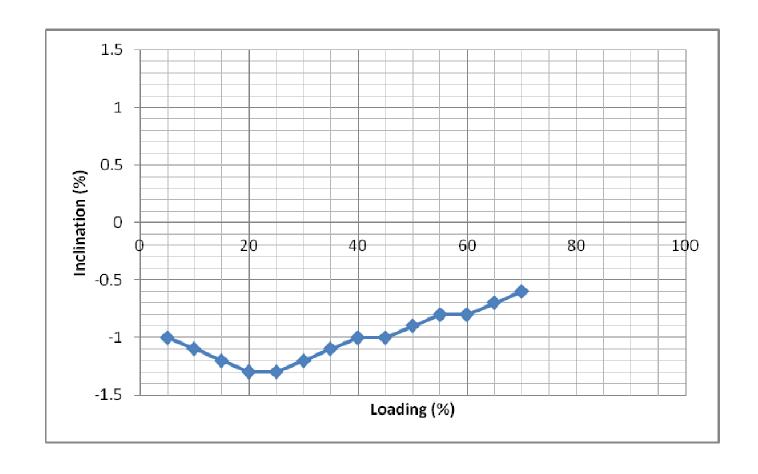


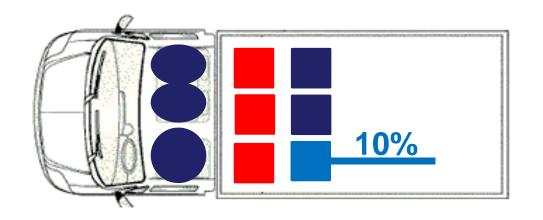


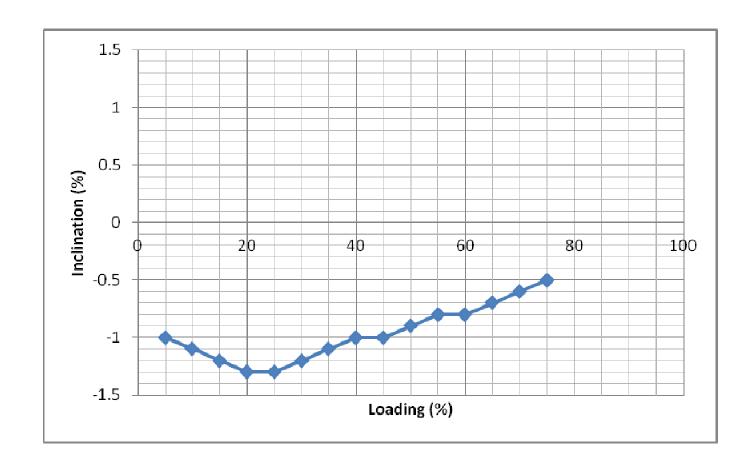


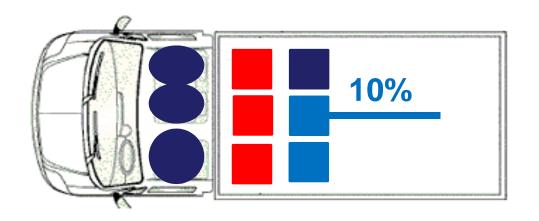


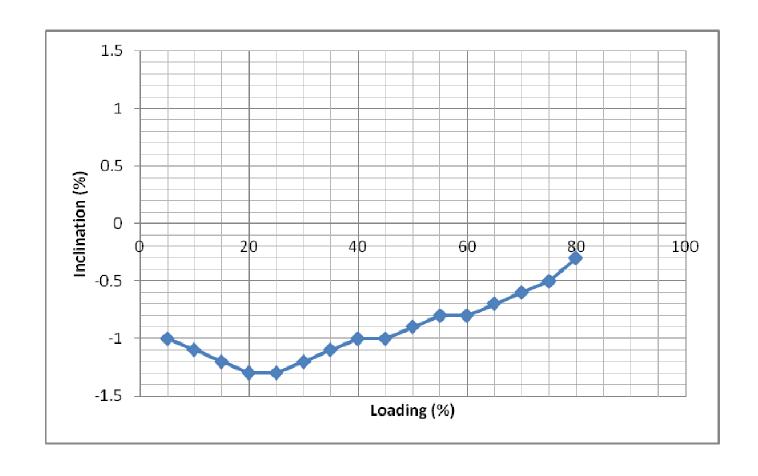


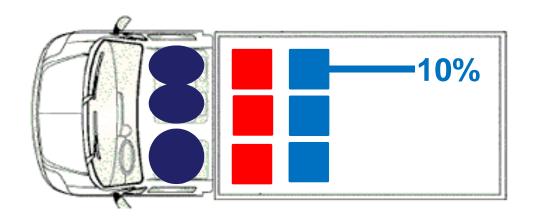


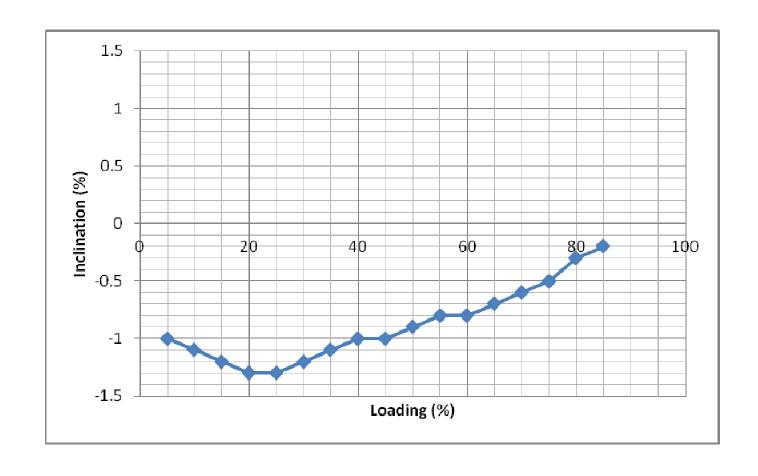


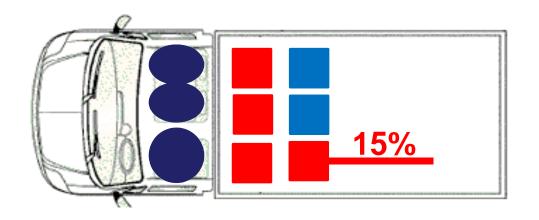


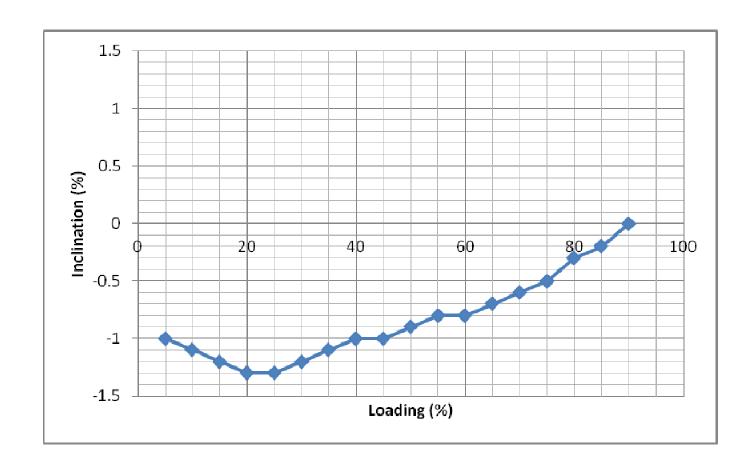


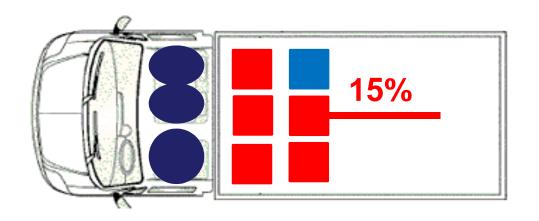


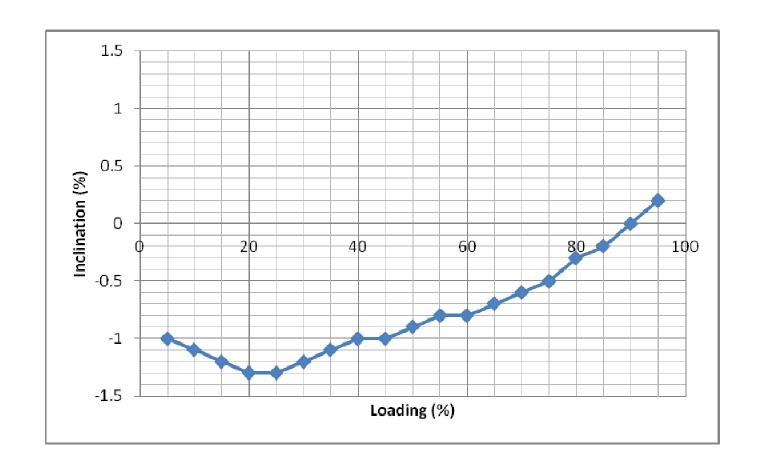


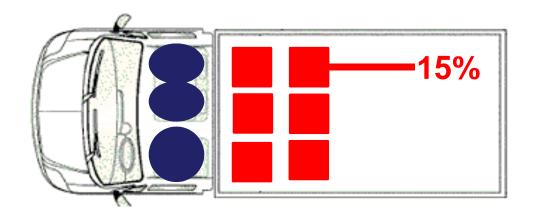


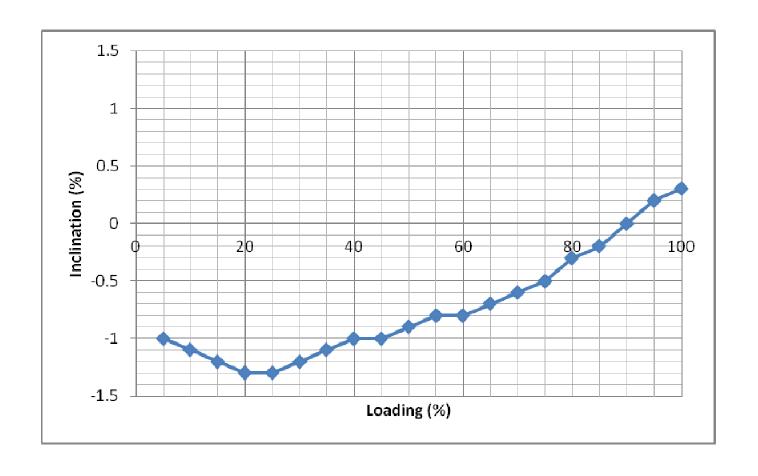






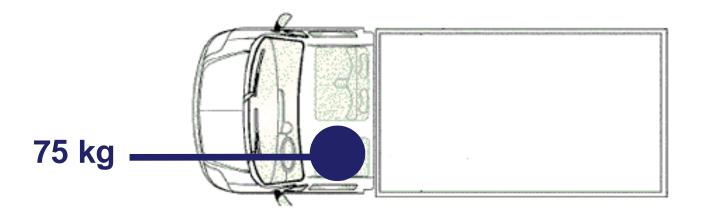


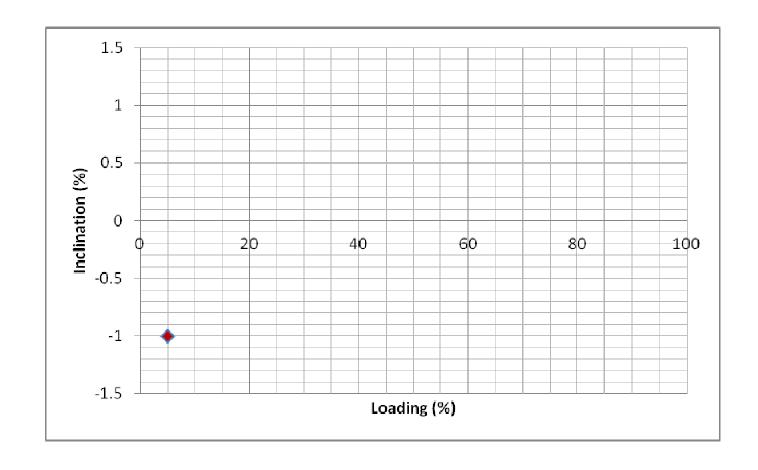


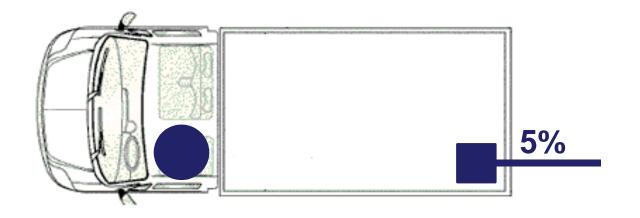


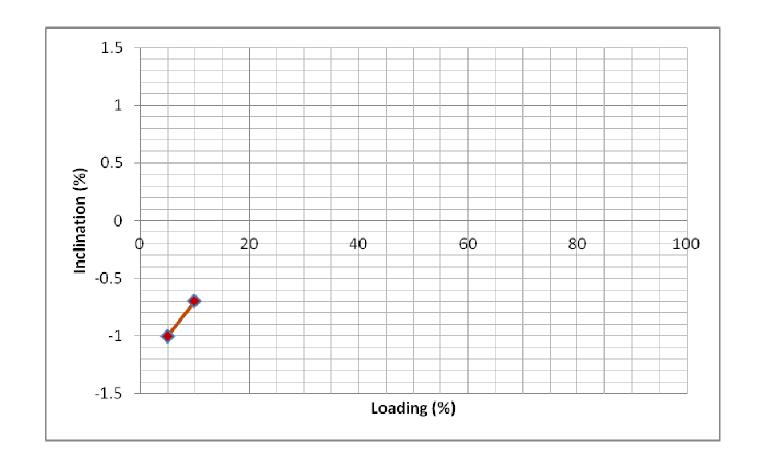
#### Highest dipped beam inclination

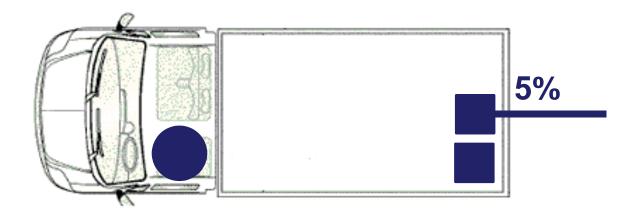
load distribution example

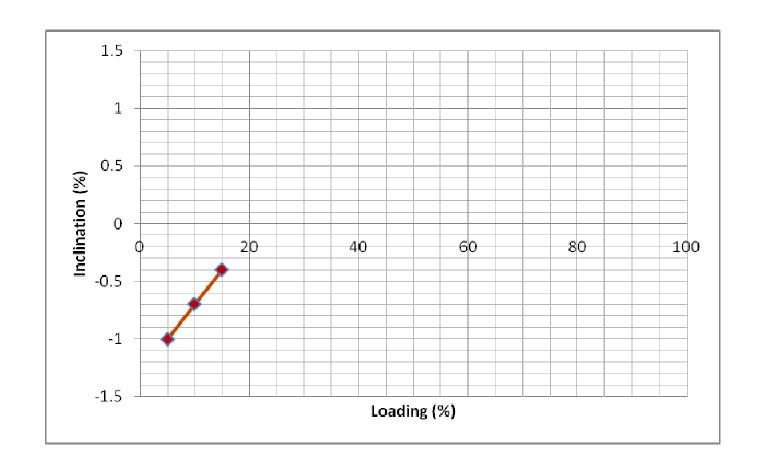


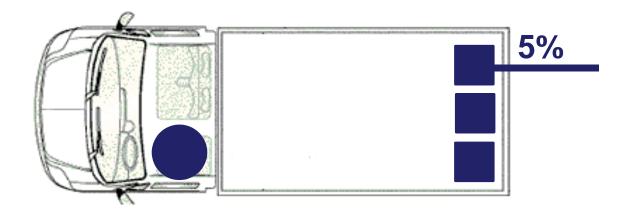


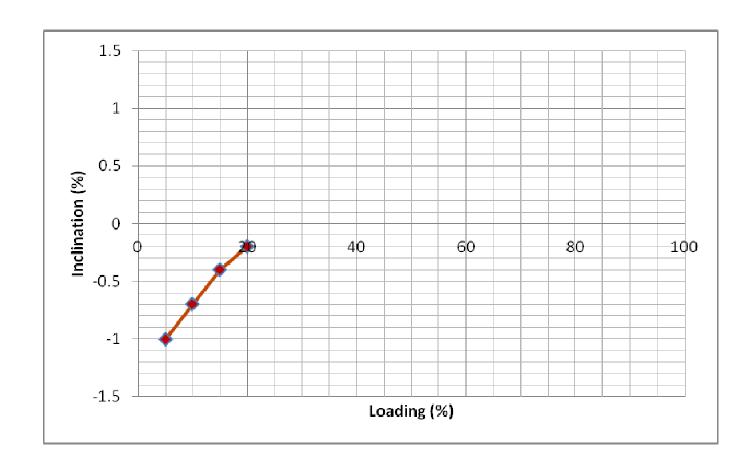


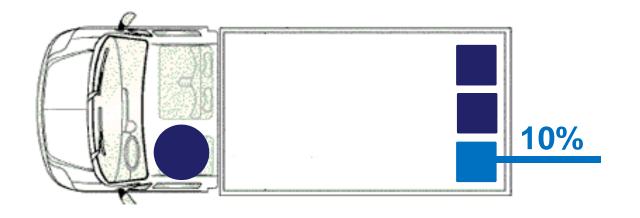


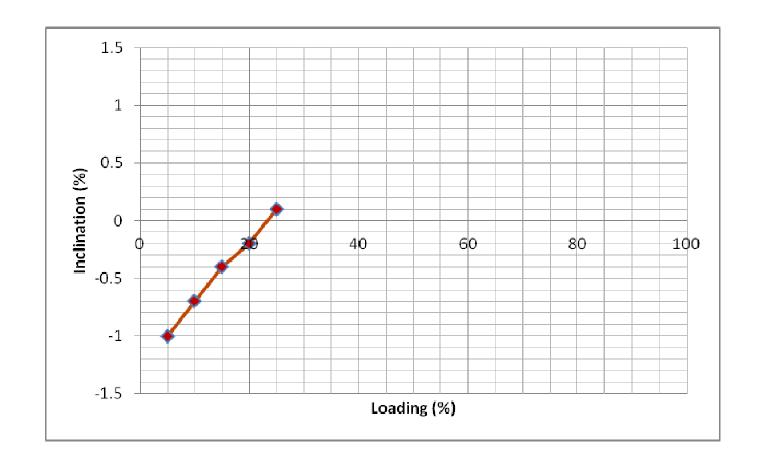


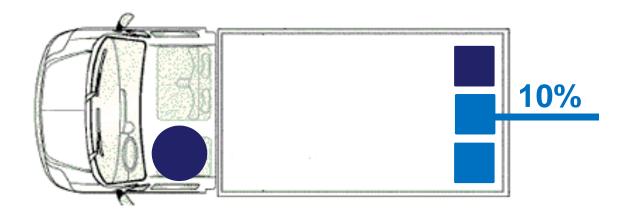


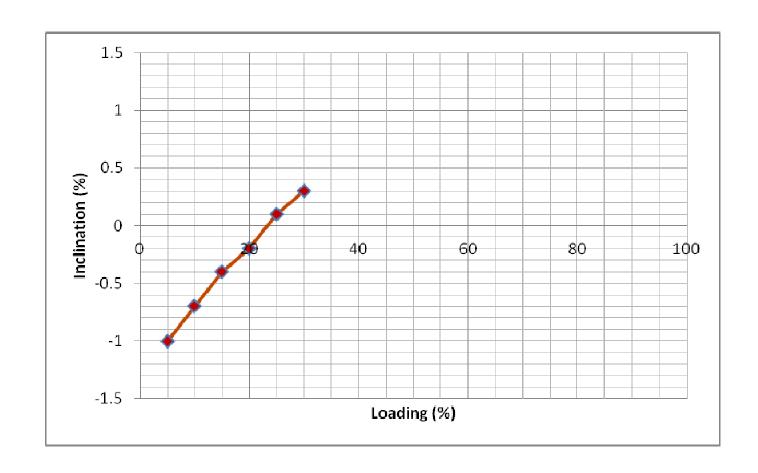


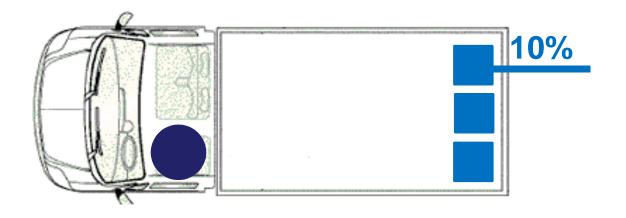


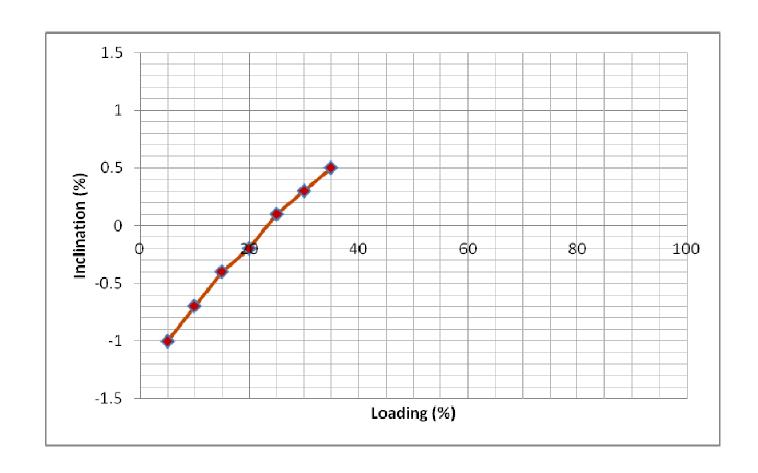


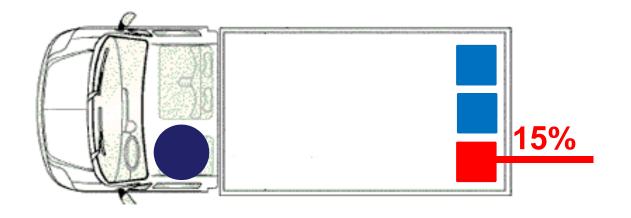


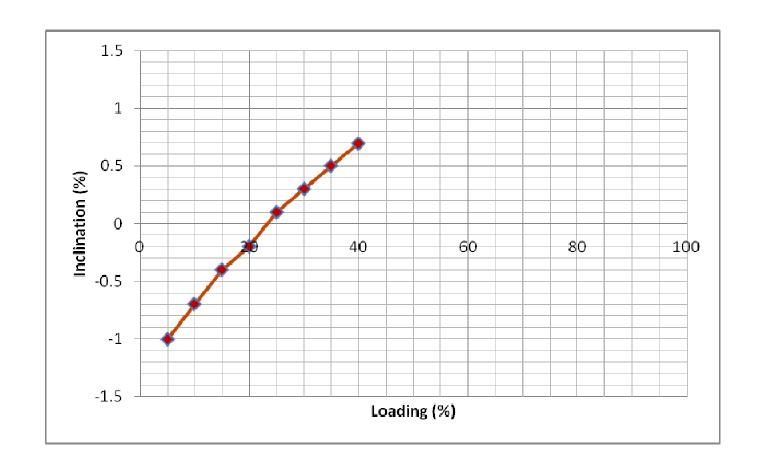


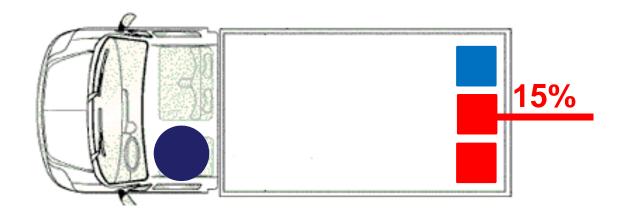


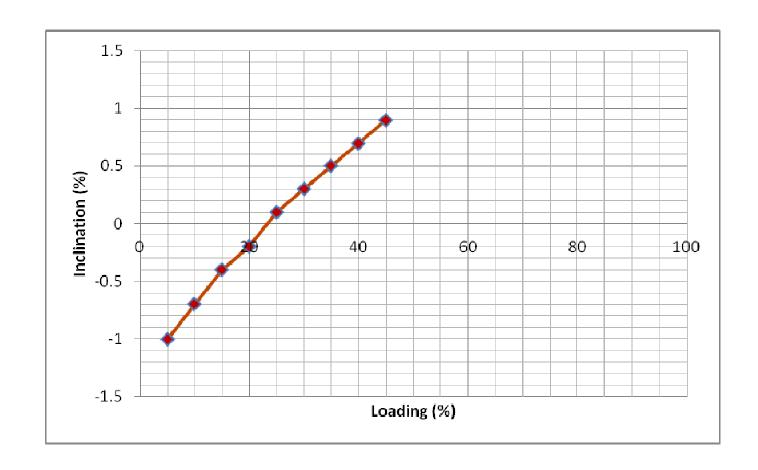


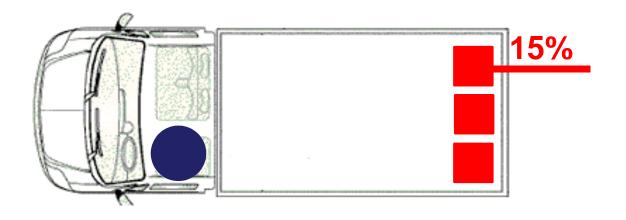


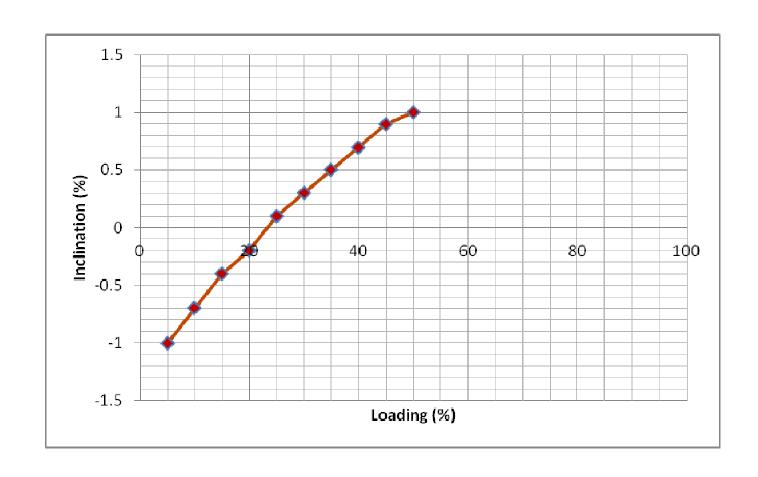


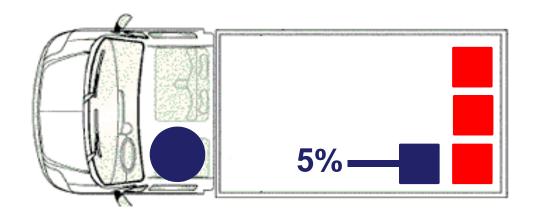


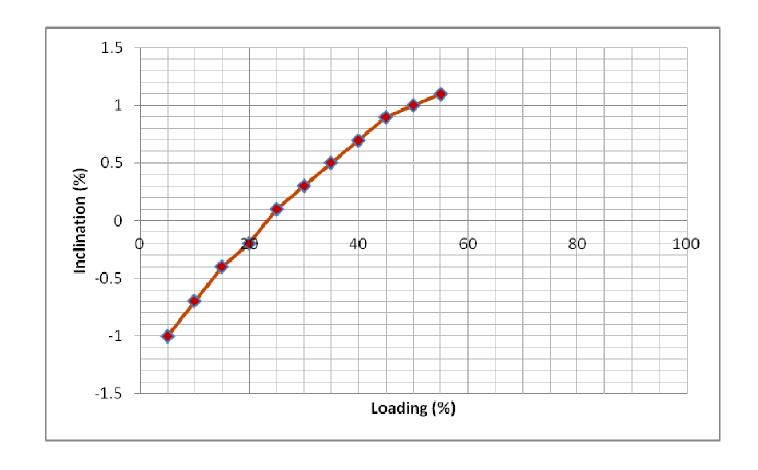


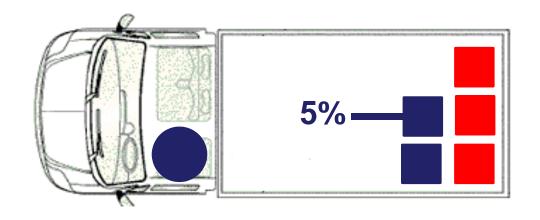


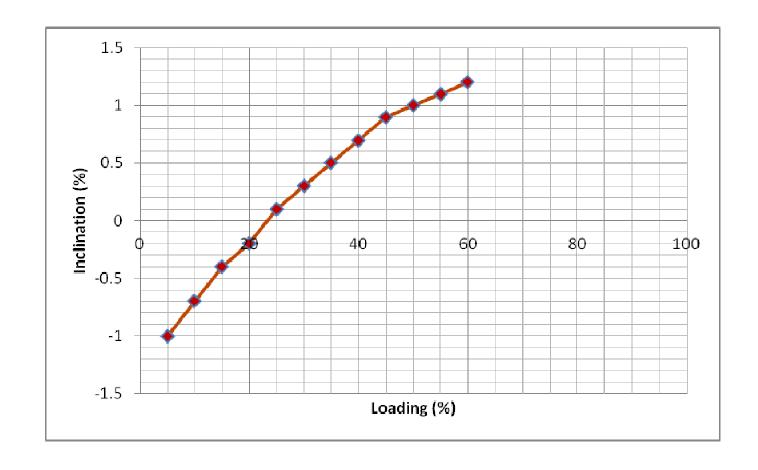


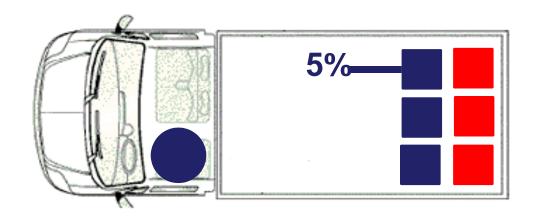


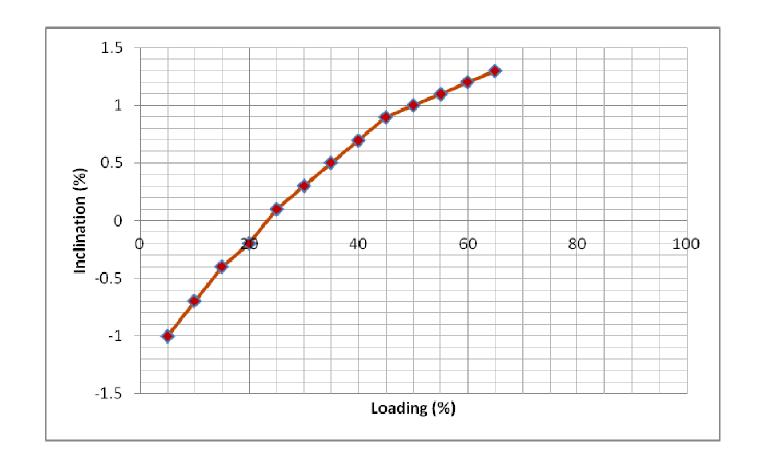


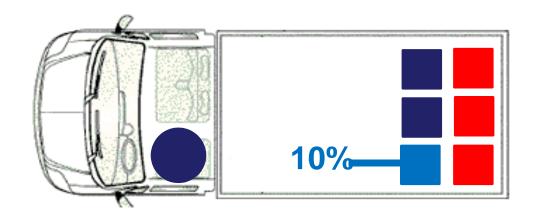


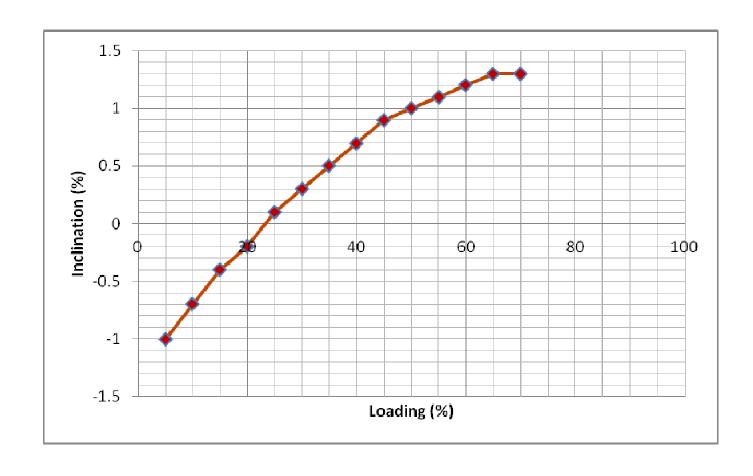


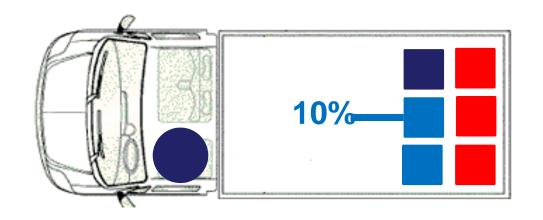


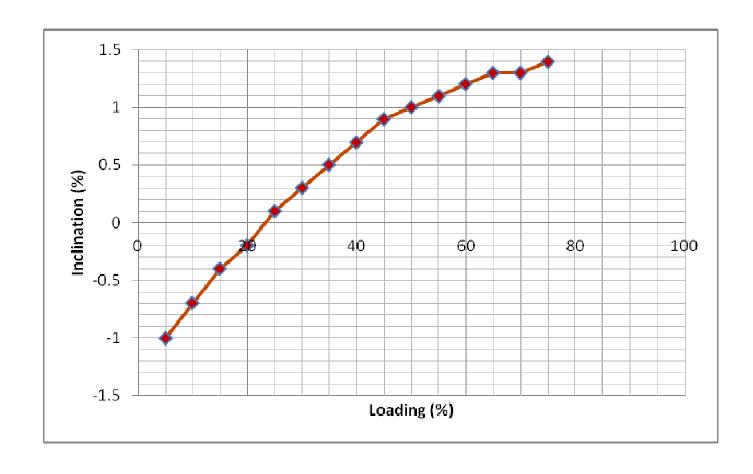


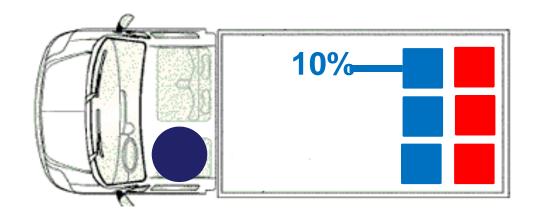


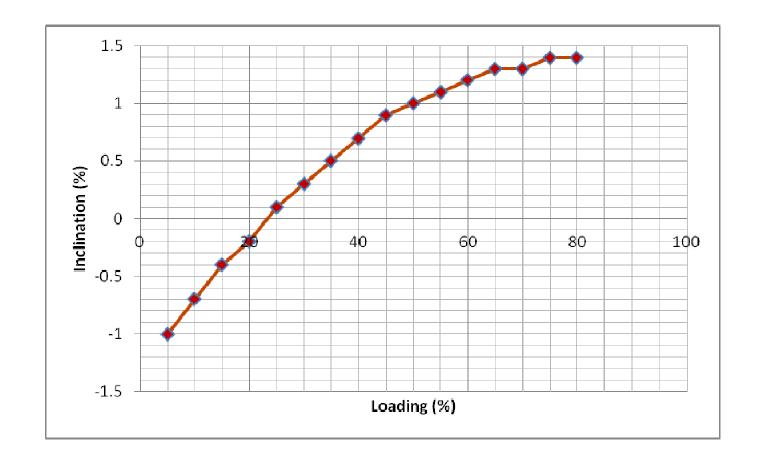


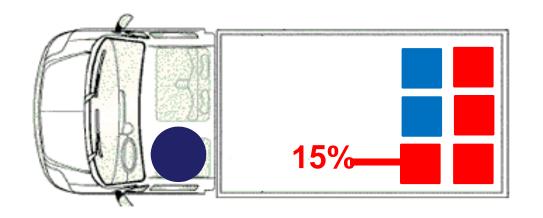


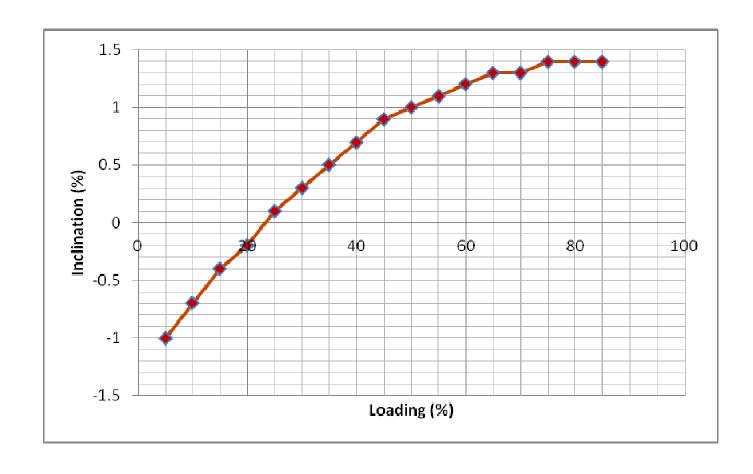


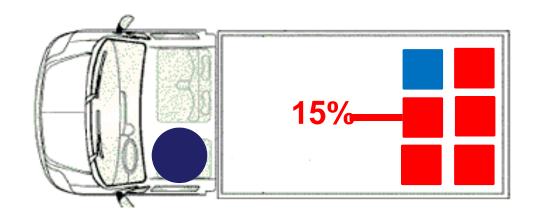


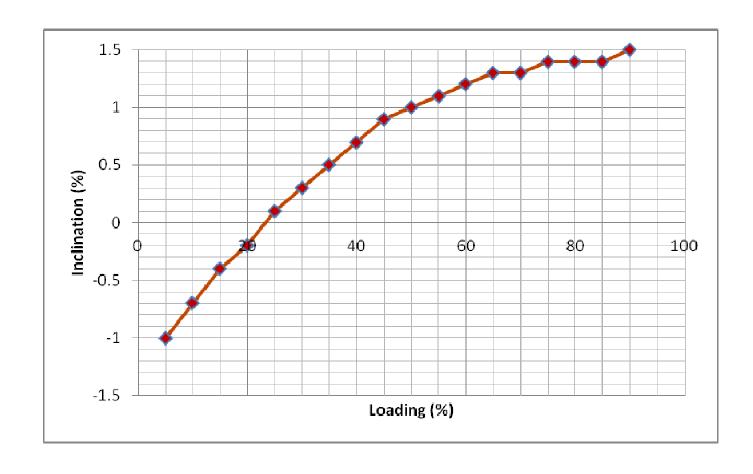


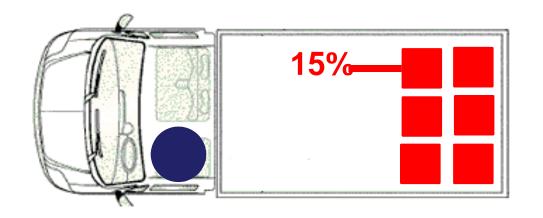


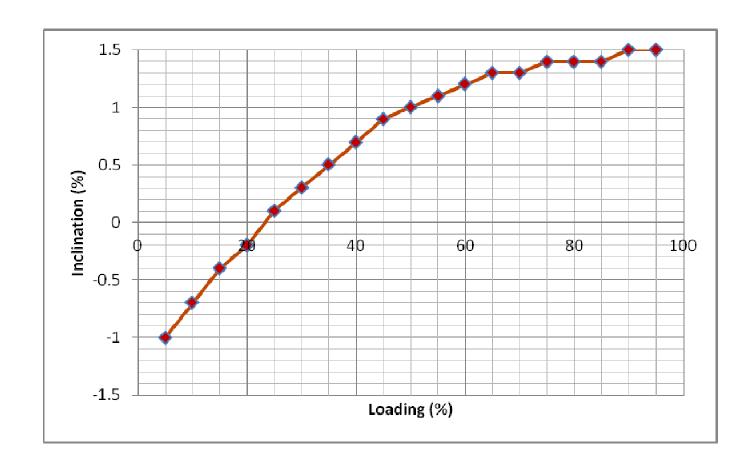


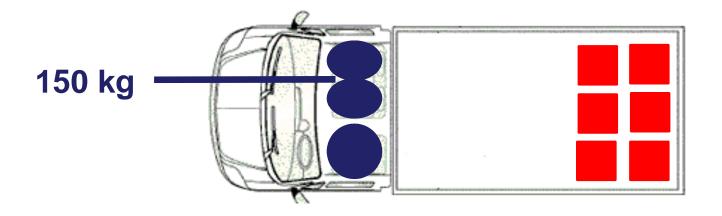


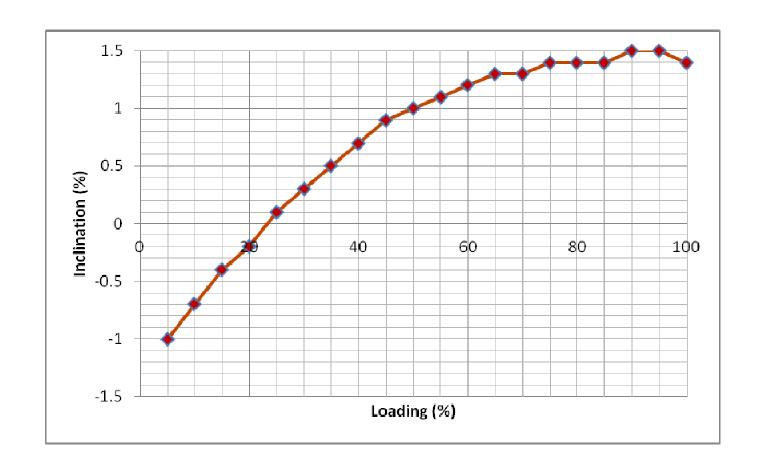






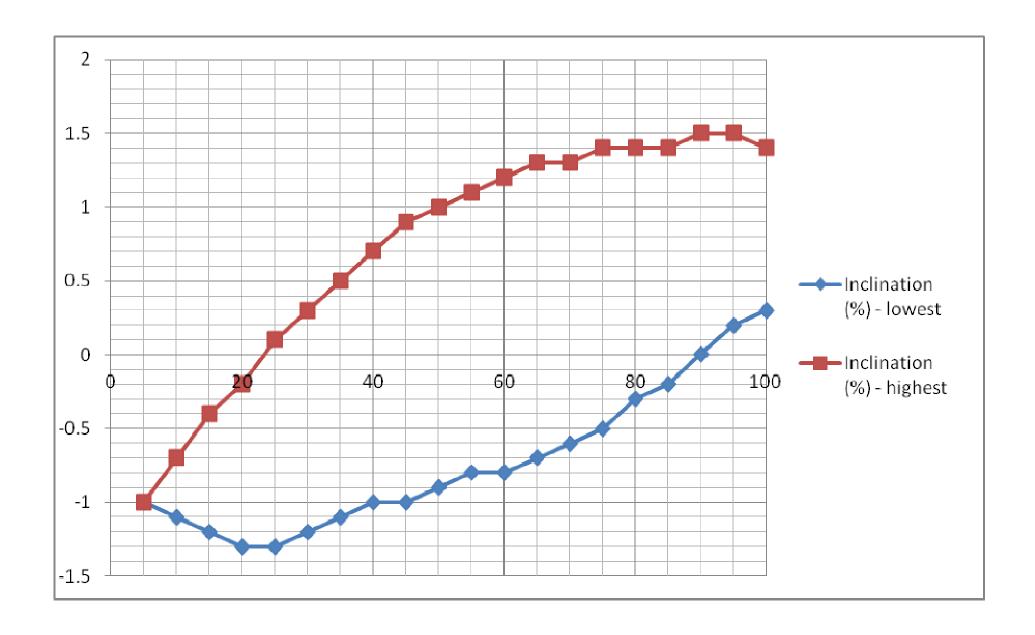






### Difference between the lowest and the highest dipped beam inclination caused by loading

Loading (%)	Inclination (%) - lowest	Inclination (%) - highest
5	-1	-1
10	-1.1	-0.7
15	-1.2	-0.4
20	-1.3	-0.2
25	-1.3	0.1
30	-1.2	0.3
35	-1.1	0.5
40	-1	0.7
45	-1	0.9
50	-0.9	1
55	-0.8	1.1
60	-0.8	1.2
65	-0.7	1.3
70	-0.6	1.3
75	-0.5	1.4
80	-0.3	1.4
85	-0.2	1.4
90	0	1.5
95	0.2	1.5
100	0.3	1.4





# THANK YOU FOR YOUR ATTENTION