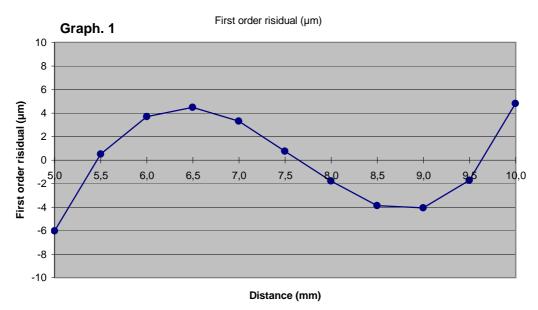
## H7DC-054

Date: 19/12/2012

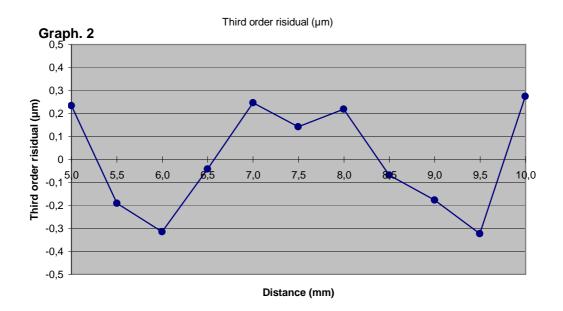
#### First order linearization

First order regression coefficients  $d = 5,0058 + 0,49875 \ V$ 



#### Third order linearization

Third order regression coefficients  $d=4,9996+0,50791\ V\text{ - }0,002309\ V^2+0,0001501\ V^3$ 



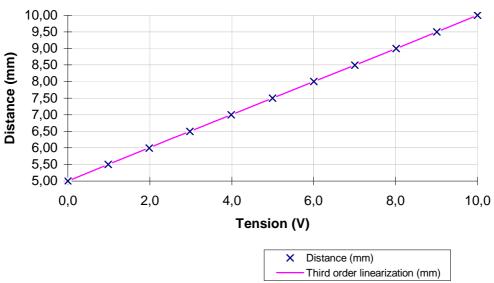
<u>Legend</u>: Linearization polynoms express distance d as a fonction of voltage V

- Distance is in mm
- Voltage is in V

# H7DC-054

19/12/2012 Date:

### **Sensor linearization**



Résults

Distance (mm)	Voltage (V)
4,9992	-0,0012
5,4991	0,9881
5,9989	1,9838
6,4974	2,9817
6,9980	3,9877
7,4972	4,9938
7,9981	6,0032
8,4970	7,0077
8,9980	8,0126
9,4973	9,0090
9,9980	9,9998