

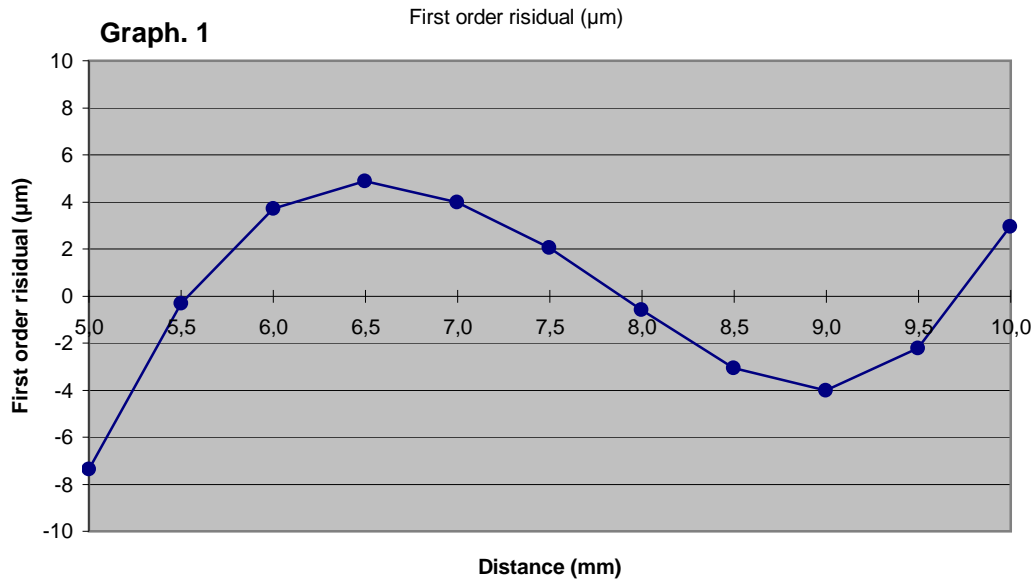
# H7DC-042

Date : 19/12/2012

## First order linearization

First order regression coefficients

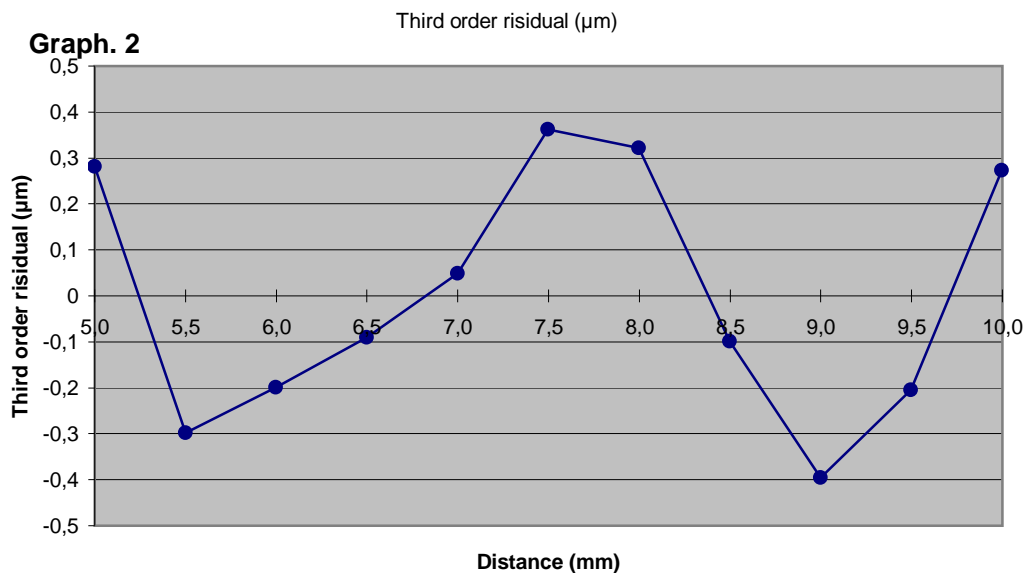
$$d = 5,0070 + 0,49896 V$$



## Third order linearization

Third order regression coefficients

$$d = 4,9993 + 0,50883 V - 0,002321 V^2 + 0,0001437 V^3$$



Legend : Linearization polynoms express distance  $d$  as a fonction of voltage  $V$

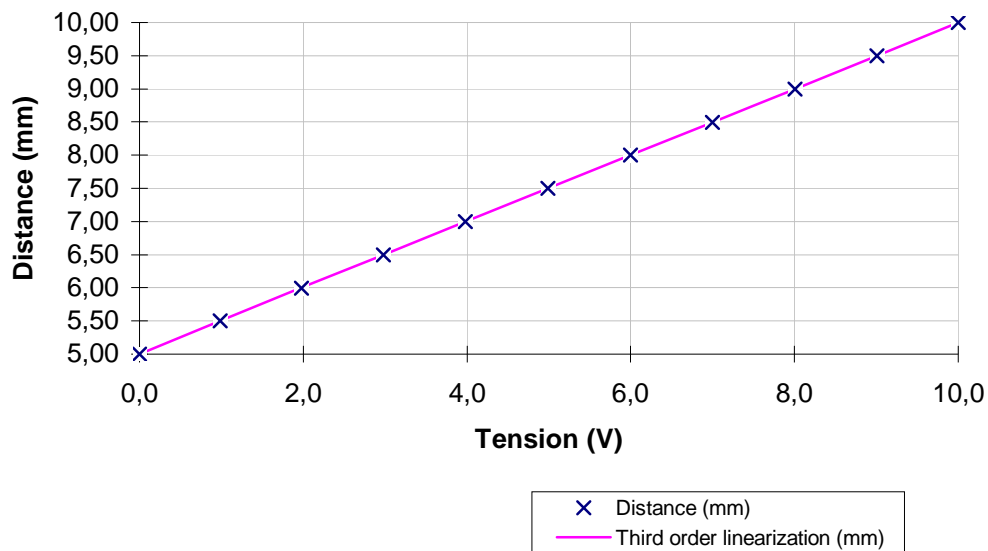
- Distance is in mm

- Voltage is in V

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## Sensor linearization



## Résultats

Distance (mm)	Voltage (V)
4,9994	-0,0004
5,4992	0,9872
5,9989	1,9805
6,4973	2,9771
6,9978	3,9820
7,4970	4,9863
7,9978	5,9953
8,4968	7,0004
8,9977	8,0061
9,4970	9,0032
9,9977	9,9964