

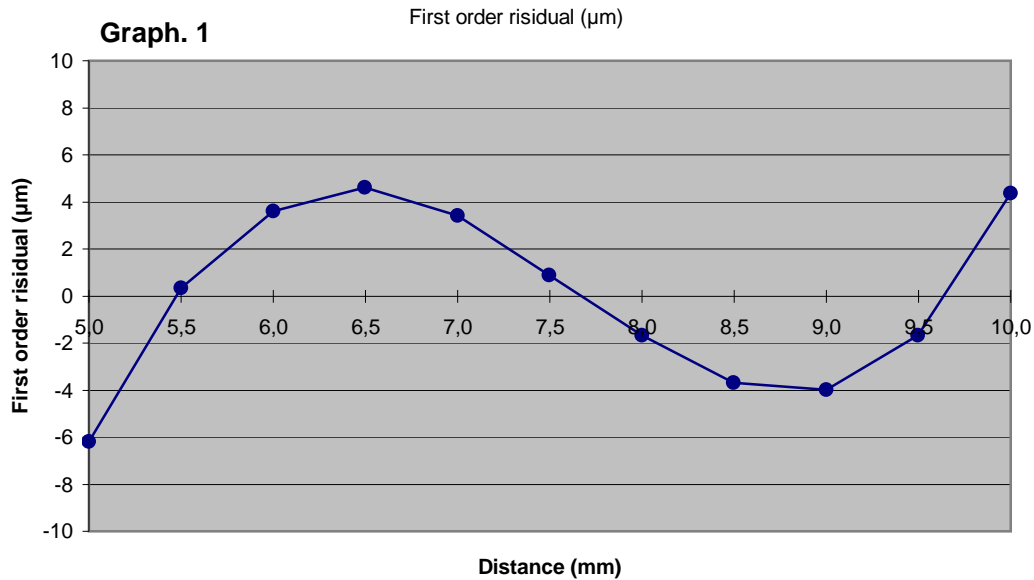
# H7DC-052

Date : 19/12/2012

## First order linearization

First order regression coefficients

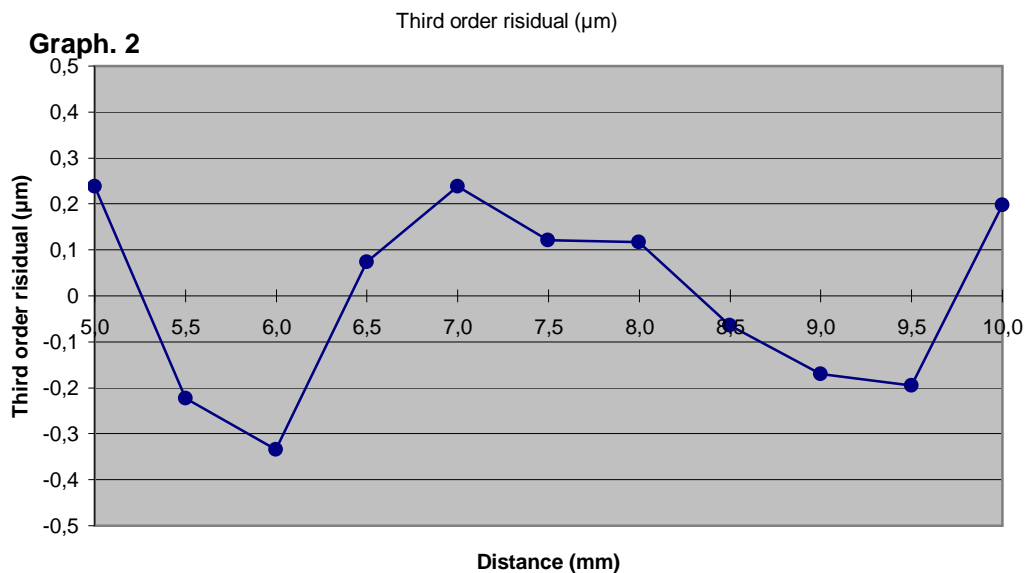
$$d = 5,0058 + 0,49808 V$$



## Third order linearization

Third order regression coefficients

$$d = 4,9994 + 0,50724 V - 0,002277 V^2 + 0,0001466 V^3$$



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

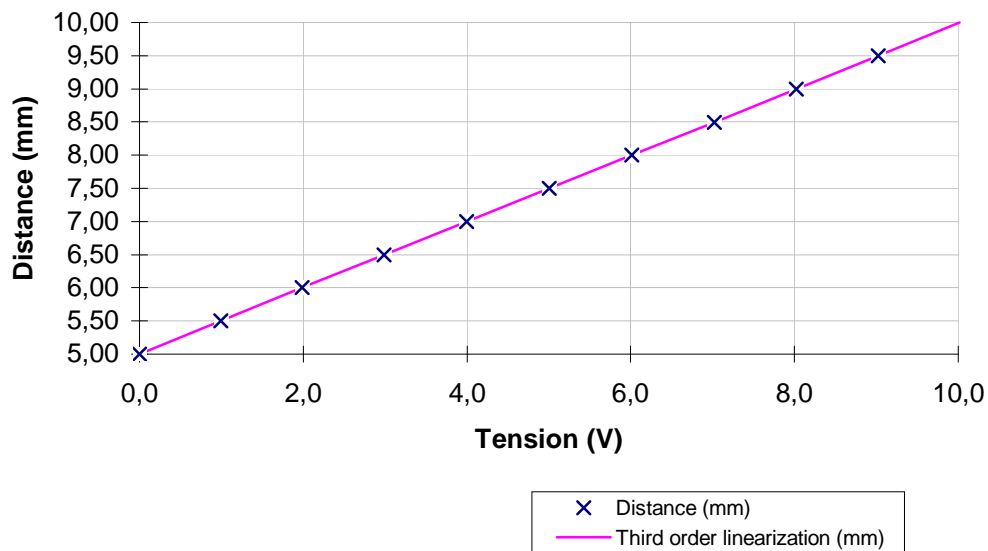
- Distance is in mm

- Voltage is in V

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## Sensor linearization



## Résultats

Distance (mm)	Voltage (V)
4,9998	0,0004
5,4996	0,9908
5,9995	1,9879
6,4980	2,9867
6,9987	3,9944
7,4978	5,0015
7,9987	6,0123
8,4977	7,0182
8,9986	8,0244
9,4979	9,0223
9,9985	10,0152