

INTERNATIONAL ELECTROTECHNICAL COMMISSION

IEC 62908-12-10
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TOUCH AND INTERACTIVE DISPLAYS –

Part 12-10: Measurement methods of touch displays –
Touch and electrical performance

CORRIGENDUM 1

5.4.2.2 Method 1

Replace the first sentence of the second paragraph with:

The distance between the centre of the reported point and straight line is calculated by the formula in Figure 12.

Replace Figure 12 with:

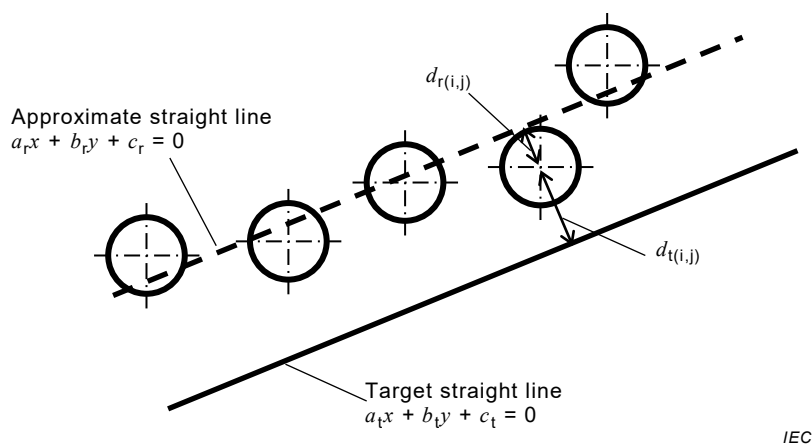


Figure 12 – Linearity definition

Replace Equations (17) and (18) with:

$$d_{r(i,j)} = \frac{|a_r x_{r(i,j)} + b_r y_{r(i,j)} + c_r|}{\sqrt{a_r^2 + b_r^2}} \quad (17)$$

$$d_{t(i,j)} = \frac{|a_t x_{r(i,j)} + b_t y_{r(i,j)} + c_t|}{\sqrt{a_t^2 + b_t^2}} \quad (18)$$

5.4.2.3 Method 2

Replace the last sentence of the first paragraph with:

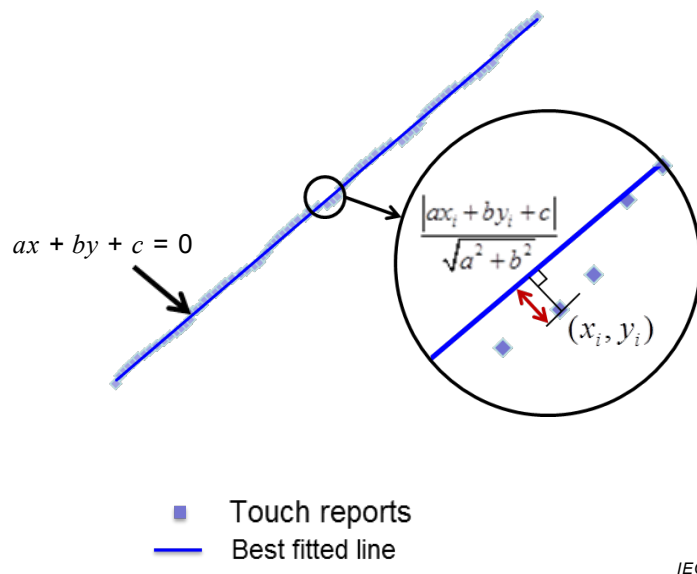
If the best fitted line is represented as 'ax+by+c=0', then the coefficients a, b, c and the linearity are calculated as in the following formulae.

Replace Equations (21) and (22) with:

$$\begin{aligned}
 a &= S_{xy} \\
 b &= \lambda - S_{xx} \\
 c &= -a\bar{x} - b\bar{y} \\
 \bar{x} &= \frac{1}{n} \sum_{i=1}^n x_i \\
 \bar{y} &= \frac{1}{n} \sum_{i=1}^n y_i \\
 S_{xx} &= \sum_{i=1}^n (x_i - \bar{x})^2 \\
 S_{yy} &= \sum_{i=1}^n (y_i - \bar{y})^2 \\
 S_{xy} &= \sum_{i=1}^n (x_i - \bar{x})(y_i - \bar{y}) \\
 \lambda &= \frac{S_{xx} + S_{yy} - \sqrt{D}}{2} \\
 D &= (S_{xx} - S_{yy})^2 + 4S_{xy}^2
 \end{aligned}
 \tag{21}$$

$$L = \text{Max}_{i=1,2,\dots,n} \left(\frac{|ax_i + by_i + c|}{\sqrt{a^2 + b^2}} \right)
 \tag{22}$$

Replace Figure 13 with:



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Figure 13 – Example of measurement and calculation of linearity