Performed changes and improvements.

Abstract: added “A simulation model, with the inclusion of not ideal soil is proposed and used to estimate the correct value of track to ground conductance from the measured values.”

Section 1: English improved. Last three paragraph improved to include the two substantial changes respect the conference paper: inclusion of simple soil model in the used model; assessment and experimental proof of the variability in track to ground conductance measurement results, due to the location of the voltmetric terminal using IEC 62128-2 A.3. measurement method.

Section 3: improved figure, to represent the improved model and test modified.

Section 4 variability of tesults: modified text in order to take into account the second variability analized.

Sec 4.1: added paragraph 4 and 5 with the description of two new measured section (C and D).

Sec 4.2.2: completely new section.

Sec 4.3: added paragraph 3 and 4 and figure 4

Sec 4.4 : completely revised considering new model results and results about variability due to the location of the voltmetric terminal and the soil characteristics included in the model.

Sec 5: completely revised

References: added ref. 9 the 22nd Imeko paper.