

Feasibility Study FS21063

Client	<i>[Company name]</i>
Date	June 2021
Device	EddyCus® TF map 2525SR
Task	Sheet resistance mapping

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Enforcing non-disclosure agreement

According to our internal processes we are obliged to handle information and samples with care. Therefore, if you want to have your sample back, please send us your account number of your courier of choice.

Otherwise, we will **dispose of your sample(s)** after 3 months once you have received this report.

1 Overview of Study

A titanium-layer sample was provided by the customer in order to find any imperfect regions within the sample and test its overall homogeneity.

2 Samples



Figure 1. Provided sample.

The sample had dimensions of 100×100 mm and is pictured in Figure 1. As mentioned above, the sample had a titanium layer composition.

3 Measurement Setup

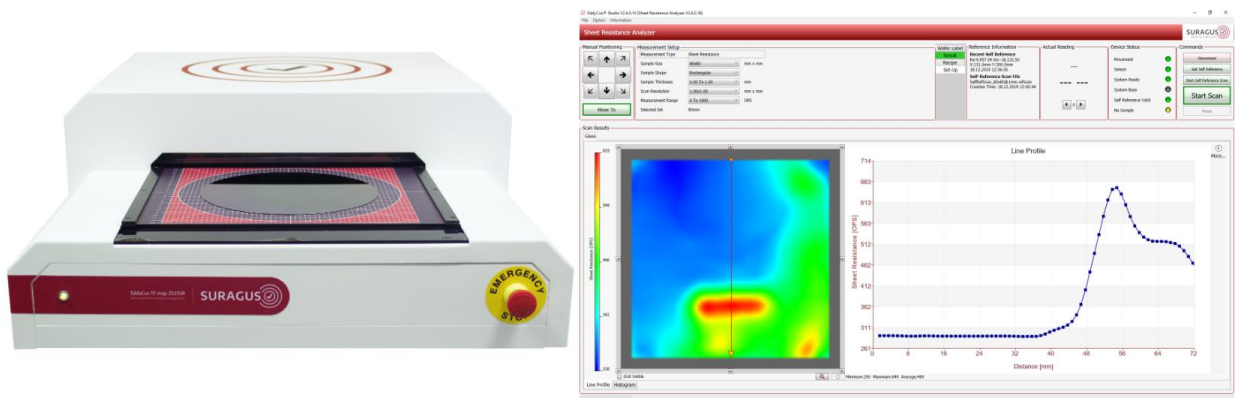


Figure 2 EddyCus® TF map 2525SR with accompanying EddyCus® Studio software.

The sheet resistance of the sample was mapped using the EddyCus® TF map 2525SR automated sheet resistance mapping device. This device is capable of creating a complete map of the sheet resistance of a sample, composed of thousands of data points, in just minutes, immediately allowing the user to identify defects and inhomogeneous regions within a sample. The sample were mapped with a scanning pitch of 2.5 mm. The device was calibrated using 100 × 100 mm calibration samples based on NIST reference standards.

4 Measurement Results

Normal scan and counter-clockwise 90° scan of the Titanium Sample.

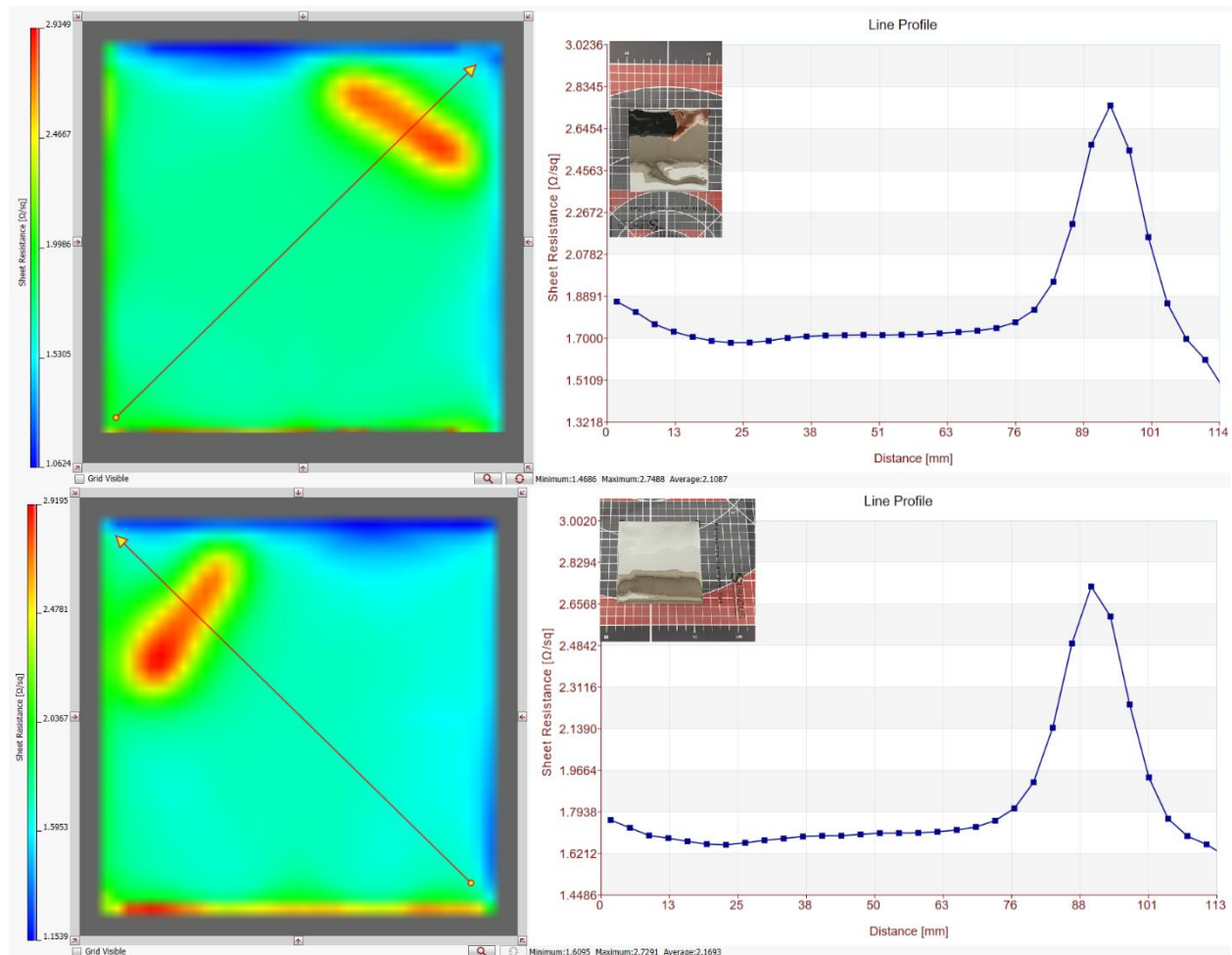


Figure 3 Sheet resistance map of sample.

5 Conclusions

The EddyCus® TF map 2525SR identified a concerning, inhomogeneous region within the sample which was not easily identifiable by observational means. The device offers substantial advantages over contact-measurement devices for characterizing the sheet resistance of conductive layers such as these.

The results will be discussed with the customer.