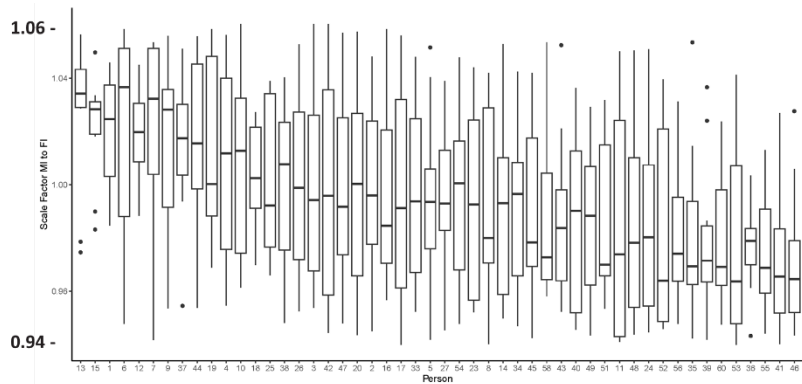# SCIOMETRICS
The Science of Assurance

Statement on Slapshot compliance with NIST SP-500-399

On April 6th, 2023 NIST released NIST SP-500-399. "Specification for Certification Testing of Contactless Fingerprint Acquisition Devices, v1.0". The link to this document is at https://nvlpubs.nist.gov/nistpubs/SpecialPublications/NIST.SP.500-339.pdf. This NIST document is the culmination of a decade of work by NIST as well as its Cooperative Research and Development Agreement (CRADA) partners from industry. Sciometrics has been a CRADA member since 2016.

NIST also developed a tool to enable contactless fingerprint technology providers seeking certification of their devices to perform self-testing of their device. This tool is called the NIST Fingerprint Registration and Comparison Tool (NFRaCT) and submit the results of those self-tests to the certifying authority for verification and acceptance. The methodology underlying the NFRaCT produces of two scores: (1) the Scale Factor and (2) the Matching Score. These scores are evaluated on a "pass/fail" basis. To pass, the Scale Factor must be within 6 percent of ground truth (94% to 106%) and the matching score must equal or exceed 15,000 (5,000 for RISC) which is a number generated by a regression analysis of likelihood to match in a government or commercial AFIS.

Sciometrics is pleased to state that SlapShot has routinely performed extremely well with the NFRaCT tool for evaluating touchless prints. Below is sample results for a 500 finger test where every finger measured within the passing Scale Factor range and at least 2 fingers matched on every hand.

50 Person Test: All 500 fingers produced Scale Factors between 0.94 and 1.06.

50 Person Test; Shows overwhelming majority of fingers meet RISC cutoff.