16 August 2024

To whom it may concern,

iBeta Quality Assurance conducted performance testing in accordance with ISO/IEC 19795-2. iBeta is accredited by NIST/NVLAP (NVLAP Testing Lab Code: 200962) to test and provide results to this performance standard (certificate and scope may be downloaded from the NVLAP website).

This testing was conducted with a biometric facial recognition system provided by VNPay. The system was composed of the application VNPay Face EKYC v1.0 (34), which was installed on an iPhone 13 Pro Max running iOS 16.0.2 and used to collect facial biometric samples, and the matching engine VNPAY FACE EKYC v4.1, which was installed on a custom, high-performance Windows PC and supplied with the collected data to complete the technology test portion. iBeta conducted performance testing on this system from 23 July to 16 August 2024.

The test method was to enroll 246 subjects, who performed 5 post-enrollment authentications each. The images generated by this process were then put through a technology test of performing a n x n x z set of matches, with the results analyzed via bootstrapping as applicable. The evaluation did not cover any form of PAD testing or other procedures in which testing personnel intentionally attempted to gain unauthorized entry to the biometric system.

At the conclusion of the technology test, the False Accept Rate (FAR) with a 95% confidence interval was calculated to be 0.001%. As no False Accepts were observed during the technology test portion, Rule of 3 was applied. The False Reject Rate, also with a 95% confidence interval, was calculated at 0.0024% FRR from bootstrapping. Both the False Match Rate and False Non-Match Rate were calculated at 0%. The Failure to Acquire and Failure to Enroll Rates were also calculated and may be found in the final report.

VNPay's biometric facial recognition system, composed of application VNPay Face EKYC v1.0 (34) installed on an iPhone 13 Pro running iOS 16.02 and matching engine VNPAY FACE EKYC v4.1 installed on a custom Windows PC, was tested by iBeta to the ISO 19795-2 standard and was found to meet all of the normative requirements for performance testing.

Best regards,

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