



2 October 2025

To whom it may concern,

iBeta Quality Assurance conducted Presentation Attack Detection (PAD) testing in accordance with ISO/IEC 30107-3. iBeta is accredited by NIST/NVLAP (NVLAP Testing Lab Code: 200962) to test and provide results to this PAD standard ([certificate and scope](#) may be downloaded from the NVLAP website).

This testing was conducted with Nubarium's Nubarium Biometrics – Liveness v1.0 application installed on a Samsung Galaxy S23 running Android 14 and supported by backend Model v2.0. iBeta conducted passive liveness detection testing from 22 September to 2 October 2025.

Testing was conducted in accordance with the contract for a level of spoofing technique that only utilized simple, readily available methods to create artefacts of the genuine biometric for use in the presentation attack. The subjects for the test effort were cooperative – meaning that they were willing and able to provide any and all biometric samples, including high-quality facial images. The test time for each PAD test per PAI was limited to eight hours. This is considered a Level 1 PAD test effort (first of three levels).

The test method involved enrolling six subjects and having them authenticate five times successfully. Six species of presentation attacks (PAs) were then attempted ten times each per subject. Successful presentations resulted in the application advancing to a confirmation screen with the message "Similitud: ##.##%" representing match similarity, while unsuccessful presentations resulted in either no confirmation screen (when failing liveness) or the message, "No se encontró ningún rostro" (when failing to match). At the conclusion of the PAD testing, the subject returned and authenticated five times successfully to verify that the application was still able to recognize the genuine subject.

iBeta was not able to gain unauthorized access with the PAs over a total of 360 attempts, yielding an overall Presentation Attack (PA) success rate of 0%, which then equates to the Imposter Attack Presentation Accept Rate (IAPAR) of 0% with the Nubarium Biometrics – Liveness v1.0 application. The bona fide False Non-Match Rate (FNMR) was also calculated and may be found in the final report.

The Nubarium Biometrics – Liveness v1.0 application provided by Nubarium, supported by backend Model v2.0, was installed on Samsung Galaxy S23 running Android 14, tested as a facial recognition biometric recognition system to the ISO 30107-3 Biometric Presentation Attack Detection Standard, and was found to be in compliance with Level 1.

Best regards,

A handwritten signature in black ink, appearing to read "Ryan Borgstrom".

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