



11 August 2026

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 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 the PAAS (Personhood Analysis ASsistant) v3.0 application provided by TWYN T4ISB DO BRASIL TECNOLOGIA E PARTICIPACOES LTDA (CNPJ 31.122.819/0001-55). The application was installed on a Samsung Galaxy S26 running Android 16 and an Apple iPhone 15 Pro Max running iOS 26.3, and supported by its backend server components. iBeta conducted active liveness testing from 17 July to 11 August 2026.

Testing was conducted in accordance with the contract for a level of spoofing technique that only utilized mid-level methods to create an artefact 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 biometric facial samples. The test time for each PAD test per Presentation Attack Instrument (PAI) was limited to 24 hours. This is considered a Level 2 PAD test effort (second of three levels).

The test method was to apply 1 bona fide subject presentation that alternated with 3 artefact presentations such that the presentation of each species consisted of 150 Presentation Attacks (PAs) and 50 bona fide presentations, or until 24 hours had passed. The results were displayed for the tester on the device as “Liveness Confirmed” for a successful attempt or “Liveness Failed” for an unsuccessful attempt.

iBeta was not able to gain a liveness classification with the presentation attacks (PAs) on TWYN T4ISB’s PAAS (Personhood Analysis ASsistant) v3.0 application over a total of 1500 attacks (750 per device), resulting in an Attack Presentation Classification Error Rate (APCER) of 0%. The Bona Fide Presentation Classification Error Rate (BPCER) was also calculated and may be found in the final report.

TWYN T4ISB’s PAAS (Personhood Analysis ASsistant) v3.0 application and its backend server components were tested by iBeta to the ISO 30107-3 Biometric Presentation Attack Detection Standard and found to be in compliance with Level 2.

Best regards,

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

Ryan Borgstrom
iBeta Quality Assurance Director of Biometrics
(303) 627-1110 ext. 182
RBorgstrom@ibeta.com