



17 July 2023

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 the Kasikorn Labs AINU Liveness Passive v1.0.0 application. Testing was conducted from 27 June to 17 July 2023 on an iPhone 13 Pro running iOS 15.1 and a Samsung Galaxy Note 20 running Android 10.

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 photos and videos of their likeness. 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 was to apply 1 bona fide subject presentation that alternated with 3 artefact presentations such that each species consisted of 150 Presentation Attacks (PAs) and 50 bona fide presentations. The application would then state “Sorry, please try again” for the artefact presentations and “Thank you” for bona fide presentations.

On both the iPhone 13 Pro and the Galaxy Note 20, iBeta was unable to gain a liveness classification with a presentation attack of 150 times per species. With 150 PAs for each of the 6 species on each phone, the total number of attacks for the device was 1800 and the Attack Presentation Classification Error Rate (APCER) was 0%. The Bona Fide Presentation Classification Error Rate (BPCER) was also calculated and may be found in the final report.

The Kasikorn Labs AINU Liveness Passive v1.0.0 application was tested by iBeta to the ISO 30107-3 Biometric Presentation Attack Detection Standards and was found to be in compliance with Level 1 on both iPhone 13 Pro and Galaxy Note 20.

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