



23 November 2022

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 Rank One Computing's ROC SDK v2.3. Testing of the passive liveness detection solution was conducted from 11 November to 23 November 2022, on a single device: a Samsung Galaxy S20 running Android 12.

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 Presentation Attack Instrument (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 show "Live Capture" for a successful attempt, or "Spoof Detected" for an unsuccessful attempt.

On the Samsung Galaxy S20, iBeta was not able to gain a liveness classification with the presentation attacks (PAs). With 150 PAs for each of 6 species, the total number of attacks was 900, 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.

Rank One Computing's ROC SDK v2.3, tested on the Samsung Galaxy S20 running Android 12, was tested by iBeta 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".

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