



20 September 2021

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 Dicio<sup>MR</sup> Liveness version 2.1.11 facial liveness detection application. The solution uses active liveness detection. Testing was conducted from 25 August 2021 through 8 September 2021 on a single Android smartphone device (Samsung Galaxy A50 with Android 9).

The test method was designed to simulate user enrollment into a biometric authentication system. This test did not perform matching and was purely a test of liveness detection effectiveness. 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 a 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 subject was limited to eight hours. This is considered a Level 1 PAD test effort (first of three levels).

The test method was to apply one bona fide subject presentation that alternated with 3 presentations of each species resulting in 150 Presentation Attacks (PAs) and 50 bona fide presentations per species. The application displayed a 'Persona Real' message for successful liveness confirmation or a 'Spoof detected' message for an unsuccessful liveness confirmation.

On the smartphone device used in the test, iBeta was not able to gain unauthorized access (simulated enrollment) with a presentation attack of 150 times with each of 6 species of attack. With 150 presentation attacks for each species, 900 total attacks were presented 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 anti-spoofing capability provided by Transmission y Vision Digital, S.A. de C.V. with Dicio<sup>MR</sup> Liveness version 2.1.11 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 blue ink that reads "Gail Audette".

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