



19 May 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 Microsoft's Azure Cognitive Services Face Liveness application on an iPhone 13 Pro Max running iOS 16.2, in conjunction with the backend component 2022-10-15-preview.04. Testing of the facial liveness verification solution was conducted from 3 May to 19 May 2023.

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 involved enrolling subjects and having them authenticate five times successfully. Six species of presentation attacks (PAs) were then attempted ten times each, for a total of 360 presentation attacks on the iPhone 13 Pro Max. The device indicated a successful match by displaying the message "RealFace," while a failure resulted in the message "SpoofFace". 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, yielding an overall Presentation Attack (PA) success rate of 0%, which then equates to the overall combined Imposter Attack Presentation Match Rate (IAPMR) of 0%. The bona fide False Non-Match Rate (FNMR) may be found in the final report.

The Azure Cognitive Services Face Liveness application, installed on an iPhone 13 Pro Max and used in conjunction with back end server component 2022-10-15-preview.04, 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". The signature is fluid and cursive, with a prominent loop at the end.

Ryan Borgstrom  
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