



22 June 2023

To whom it may concern,

iBeta Quality Assurance conducted Presentation Attack Detection (PAD) testing in accordance with ISO/IEC 30107-1 and 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 Microsoft's Azure Cognitive Services Face Liveness on an iPhone 13 Pro Max running iOS 16.2, in conjunction with the specific backend component. 2022-10-15-preview.04. Testing of the facial liveness verification solution was conducted from 6 June to 23 June 2023.

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 involved enrolling six bona fide subjects, who then authenticated five times each. After authentication, a total of eight species of Level 2 presentation attacks (PAs) were utilized. The results were displayed for the tester on the device as "RealFace" for a successful liveness presentation, or "SpoofFace" for an unsuccessful liveness presentation. 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 unable to gain unauthorized access with the iPhone 13 Pro Max, yielding an overall combined Imposter Attack Presentation Match Rate (IAPMR) of 0%. The bona fide False Non-Match Rate (FNMR) was also calculated and may be found in the final report.

The Azure Cognitive Services Face Liveness application and associated server 2022-10-15-preview.04 were tested by iBeta to the ISO 30107-3 Biometric Presentation Attack Detection Standard and were 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