



1 August 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 using WISE AI's WISE AI FACE LIVENESS (ISO) v2.0 application on a realme C21-Y phone running Android 11, as well as backend component ai v1.4.1. Testing was conducted from 18 July to 1 August 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 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 results were displayed for the tester on the device as "Liveness Detected" in green for a successful attempt or "Liveness Not Detected" in red for an unsuccessful attempt.

On the realme C21-Y, 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, the total number of attacks for the device 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.

The WISE AI FACE LIVENESS (ISO) v2.0 passive liveness solution, with backend component ai 1.4.1, 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 the realme C21-Y phone.

Best regards,

A handwritten signature in black ink, appearing to read "Ryan Borgstrom".

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