17 March 2026

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 Unikrew Solutions (Private) Limited's Faceoff Liveness Application (SDK v0.0.0.1.70) installed on a Samsung Galaxy S24 Ultra running Android 16 and supported by its backend cloud component face-spoof-detection v1.2. iBeta conducted passive liveness testing from 24 February to 17 March 2026.

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 was to apply 1 bona fide subject presentation that alternated with 3 artefact presentations such that the presentation of each species consisted of 150 Presentation Attacks (PAs) and 50 bona fide presentations, or until 24 hours had passed. The results were displayed for the tester on the device as "HAPPY TO SEE YOU ALIVE!" for a successful attempt or "Failed to verify the liveness" for an unsuccessful attempt.

iBeta was not able to gain a liveness classification with the presentation attacks (PAs) on Unikrew's Faceoff Liveness Application (SDK v0.0.0.1.170) over a total of 750 attacks, resulting in an Attack Presentation Classification Error Rate (APCER) of 0%. The Bona Fide Presentation Classification Error Rate (BPCER) was also calculated and may be found in the final report.

Unikrew Solutions (Private) Limited's Faceoff Liveness Application (SDK v0.0.0.1.70) and supporting backend component face-spoof-detection v1.2 were tested by iBeta to the ISO 30107-3 Biometric Presentation Attack Detection Standard and found to be in compliance with Level 2.

Best regards,

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