Quantum eMotion's Quantum Entropy Source Submitted for NIST Validation

written by Raj Shah | August 26, 2026

Lightship Security completes independent assessment and submits SP 800-90B package through the production ESVTS

August 26, 2026 (Source) – Quantum eMotion Corp. (NYSE American: QNC) (TSXV: QNC) (FSE: 34Q0) ("QeM" or the "Company"), a leader in quantum-secure cybersecurity solutions, today announced that Lightship Security Inc. has completed its independent assessment of QeM's eCore-Q PCIe Quantum Entropy Module and submitted the supporting validation package through the production Entropy Source Validation Test System ("ESVTS") for review under the Cryptographic Module Validation Program ("CMVP").

The submission seeks a standalone Entropy Validation Certificate for the specified entropy-source implementation, version and operating environment. If issued, the certificate would attest conformance with NIST Special Publication 800-90B and applicable CMVP guidance. Submission begins the CMVP review process and does not itself constitute validation; neither the outcome nor the timing of the review is assured.

QeM's quantum entropy is generated by its proprietary QRNG technology, which harnesses inherently unpredictable quantum processes to produce high-quality randomness. NIST SP 800-90B validation would independently confirm the quality of this entropy for use in cryptographic systems.

"This submission marks an important technical milestone for Quantum eMotion," **said Francis Bellido, CEO of Quantum eMotion**.

“It reflects the rigorous work undertaken by our engineering team and Lightship Security to characterize, test and document our entropy-source implementation against the requirements of NIST SP 800-90B. Although CMVP review remains underway, this step advances our efforts to provide independently validated quantum entropy for regulated and security-sensitive applications. This work represents a foundational milestone in QeM’s continued development of a broader portfolio of cryptographic cybersecurity products for regulated and security-sensitive markets, where independently demonstrated conformance with NIST and other recognized cybersecurity standards is critical to customer trust and market access.”

Upon issuance, the Entropy Validation Certificate will support FIPS 140-3 cryptographic-module submissions that incorporate the validated entropy source in accordance with the certificate’s integration requirements.

About Lightship Security

Lightship Security Inc., an Applus+ Laboratories company, is an accredited independent cybersecurity testing laboratory providing evaluation and validation services for security standards including FIPS 140-3, Common Criteria and entropy-source validation. For more information, visit Lightship Security.

About Quantum eMotion

The Company addresses the growing demand for hardware and software security for connected devices through its patented Quantum Random Number Generator, exploiting quantum mechanics’ built-in unpredictability to protect high-value assets and critical systems. QeM targets Financial Services, Healthcare, Blockchain, Cloud-Based IT Security, Government Networks, Secure Device Keying (IoT, Automotive, Consumer Electronics), and

Quantum Cryptography.

For further information, please visit our website at https://www.quantumemotion.com/ or contact:

Francis Bellido, Chief Executive Officer
Tel: 514.956.2525

Email: info@quantumemotion.com
Website: https://www.quantumemotion.com

Cautionary Note regarding Forward-Looking Statements

This news release contains “forward-looking information” within the meaning of applicable securities laws. Forward-looking information is based on management’s current expectations, estimates, projections, assumptions, and beliefs as of the date of this release.

Forward-looking information in this release includes, but is not limited to, statements concerning: the timing and outcome of the Cryptographic Module Validation Program (“CMVP”) review of the Company’s Entropy Source Validation Test System (“ESVTS”) submission; the potential issuance of an Entropy Validation Certificate; the anticipated ability of such a certificate to support future FIPS 140-3 cryptographic-module submissions incorporating the Company’s entropy source; the potential use of the Company’s technology in regulated and security-sensitive applications; the continued development and commercialization of the Company’s cryptographic cybersecurity products; and the Company’s business strategy, target markets, and growth initiatives.

Words such as “anticipates,” “believes,” “expects,” “intends,” “plans,” “seeks,” “may,” “could,” “would,” “should,” “will,” “potential,” and similar expressions are intended to identify forward-looking information, although not all forward-looking information contains these identifying words.

The forward-looking information in this release is based on material assumptions that management considers reasonable as of the date of this release. These assumptions include that the submitted validation package will be reviewed in the ordinary course; that the Company and Lightship Security will be able to respond to any questions or requests for additional information, testing, or remediation; that the specified entropy-source implementation will continue to satisfy applicable NIST SP 800-90B and CMVP requirements; that applicable standards and guidance will not change materially; and that the Company will have sufficient technical, financial, and other resources to continue developing, integrating, and commercializing its technology.

Forward-looking information is subject to known and unknown risks, uncertainties, and other factors that could cause actual events or results to differ materially from those expressed or implied. Such risks and uncertainties include, without limitation: delays in the CMVP review process; requests for additional testing, documentation, modification, or remediation; deficiencies or other issues identified during review; failure to obtain an Entropy Validation Certificate; limitations imposed on the scope, version, operating environment, or permitted integration of the validated entropy source; changes to NIST, CMVP, FIPS 140-3, or other applicable requirements or guidance; delays in or failure to complete future cryptographic-module submissions; technical difficulties integrating the entropy source into future products; the Company’s ability to commercialize its technology and achieve customer adoption; competition and technological change; the availability of financing, technical personnel, and other resources; the Company’s ability to protect its intellectual-property rights;

changes in applicable laws and regulations; and the other risks described in the Company's public filings available on SEDAR+ at www.sedarplus.ca.

Neither submission of the validation package nor completion of Lightship Security's assessment guarantees that an Entropy Validation Certificate will be issued, or that any future cryptographic module incorporating the entropy source will obtain FIPS 140-3 validation.

Readers are cautioned not to place undue reliance on forward-looking information. Actual results and future events may differ materially from those anticipated. The Company undertakes no obligation to update or revise any forward-looking information, whether because of new information, future events, or otherwise, except as required by applicable securities laws.