
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

Form 6-K

Report of Foreign Private Issuer
Pursuant to Rule 13a-16 or 15d-16
under the Securities Exchange Act of 1934

For the month of September 2026

Commission file number: 001-41334

RAIL VISION LTD.

(Translation of registrant's name into English)

15 Ha'Tidhar St
Ra'anana, 4366517 Israel
(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.

Form 20-F ☒ Form 40-F ☐

CONTENTS

Attached hereto and incorporated herein is the Registrant's press release issued on September 17, 2026, titled "Rail Vision Launches YardFlow™, its Leading AI Perception Solution for Industrial and Freight Railyard Operations."

The first, second, third and fifth paragraphs in the press release attached as Exhibit 99.1 are incorporated by reference into the Registrant's Registration Statements on Form F-3 (File Nos. [333-271068](#), [333-272933](#), [333-277963](#) and [333-278645](#)) and Form S-8 (File Nos. [333-265968](#), [333-281329](#) and [333-286652](#)), filed with the Securities and Exchange Commission, to be a part thereof from the date on which this report is submitted, to the extent not superseded by documents or reports subsequently filed or furnished.

EXHIBIT INDEX

Exhibit

No.

99.1	Press release issued by Rail Vision Ltd. on September 17, 2026, titled “Rail Vision Launches YardFlow™, its Leading AI Perception Solution for Industrial and Freight Railyard Operations”
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SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Rail Vision Ltd.

Date: September 17, 2026

By: /s/ Ofer Naveh

Name: Ofer Naveh

Title: Chief Financial Officer



Rail Vision Launches YardFlow™, its Leading AI Perception Solution for Industrial and Freight Railyard Operations

YardFlow brings Rail Vision's perception technology to a broad range of rail operations and will support the Company's expanding commercial collaboration with Railserve, a Marmon Rail company.

Ra'anana, Israel, September 17, 2026 (GLOBE NEWSWIRE) – Rail Vision Ltd. (Nasdaq: RVSN, FSE:C80) (“Rail Vision” or the “Company”), an early commercialization stage technology company transforming railway safety through advanced AI-integrated sensing systems, today announced the launch of **YardFlow™**, its leading solution for industrial and freight railyards, designed to address a broad range of operational requirements across diverse yard environments.

The existing **YardFlow Flex™** (formerly ShuntingYard) remains available as a specialized multi-spectral option for special railyard applications and use cases in the industry, requiring enhanced performance in harsh weather and low-visibility conditions, providing customers with a choice tailored to their specific operational needs.

The Company believes that YardFlow will also support Rail Vision's expanding commercial collaboration with Railserve, a Marmon Rail company. As previously announced, in 2024, Rail Vision and Railserve entered into a commercialization agreement for the deployment of the Company's AI-based railyard systems and, in May 2026, signed a non-binding MOU to explore additional deployments, railcar mover applications, broader railyard solutions and other commercial opportunities. YardFlow is designed, among other applications, to address these types of applications as Rail Vision and Railserve continue to explore opportunities to expand their collaboration.

“**YardFlow** was developed based on years of extensive experience and valuable customer feedback, mainly based on our ongoing collaboration with Railserve. We believe that these insights are helping us to set a new standard for the market,” said David BenDavid, Chief Executive Officer of Rail Vision. “We have optimized our platform to provide a high-performance and cost-effective solution tailored to the evolving needs of dynamic yard environments, enabling us to bring our technology to a much broader customer base.”

Powered by high-sensitivity electro-optical vision sensors and proprietary deep-learning algorithms, **YardFlow** detects on-track or near-track hazards at distances of up to 200 meters (650 ft) and provides real-time alerts to help operators prevent incidents and maintain continuous switching operations. Its compact, modular structure enables simple installation across switching locomotives and railcar movers in freight and industrial rail operations, while built-in video recording and analytics provide actionable operational insights.

For more information about **YardFlow**, visit railvision.io/yardflow/

About Rail Vision Ltd.

Rail Vision (Nasdaq: RVSN, FSE: C80) is an early commercialization stage technology company transforming railway safety through advanced AI-integrated sensing systems. The Company develops and commercializes proprietary, electro-optic platforms that provide extended-range situational awareness and real-time hazard detection. Using machine learning algorithms to identify and classify obstacles, Rail Vision's technology enhances safety, improves operational efficiency, and supports continuity across deployments.

The Company's cloud-based platform complements its products by transforming railway operational data into actionable insights that help optimize performance, reduce downtime, and improve safety. As the Company expands its global footprint, it delivers AI-driven perception that supports safer operations, reduces operational risk, and enables the transition to fully autonomous operations.

Rail Vision holds a 51% stake in Quantum Transportation, which has an exclusive sub-license for rail technologies under an innovative pending patent in quantum error correction owned by Ramot, the technology transfer company of Tel Aviv University.

For more information, please visit <https://www.railvision.io/>

Forward-Looking Statements

This press release contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act and other securities laws. Words such as "expects," "anticipates," "intends," "plans," "believes," "seeks," "estimates" and similar expressions or variations of such words are intended to identify forward-looking statements. For example, the Company is using forward-looking statements when it discusses the expected commercialization, deployment, capabilities, performance and benefits of YardFlow; the potential expansion of the Company's collaboration with Railserve and related commercial opportunities; the ability of YardFlow to serve a broad range of railyard applications; and the Company's future business plans, objectives and growth opportunities. Such expectations, beliefs and projections are expressed in good faith. However, there can be no assurance that management's expectations, beliefs and projections will be achieved, and actual results may differ materially from what is expressed in or indicated by the forward-looking statements. Forward-looking statements are subject to risks and uncertainties that could cause actual performance or results to differ materially from those expressed in the forward-looking statements. For a more detailed description of the risks and uncertainties affecting the Company, reference is made to the Company's reports filed from time to time with the Securities and Exchange Commission ("SEC"), including, but not limited to, the risks detailed in the Company's annual report on Form 20-F for the fiscal year ended December 31, 2025, filed with the SEC on March 31, 2026. Forward-looking statements speak only as of the date the statements are made. The Company assumes no obligation to update forward-looking statements to reflect actual results, subsequent events or circumstances, changes in assumptions or changes in other factors affecting forward-looking information except to the extent required by applicable securities laws. If the Company does update one or more forward-looking statements, no inference should be drawn that the Company will make additional updates with respect thereto or with respect to other forward-looking statements. References and links to websites have been provided as a convenience, and the information contained on such websites is not incorporated by reference into this press release. Rail Vision is not responsible for the contents of third-party websites.

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