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 February 2024

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

Results of the Extraordinary General Meeting of Shareholders

On February 21, 2024, Rail Vision Ltd. (the "Company") convened an extraordinary general meeting of shareholders (the "Meeting"). At the Meeting, the shareholders of the Company approved each of the two proposals brought before the Meeting in accordance with the majority required for each proposal.

This Report is incorporated by reference into the Registrant's Registration Statements on Form F-3 (File Nos. 333-271068, 333-272933 and 333-276869) and Form S-8 (Registration No. 333-265968), 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and Exchange Commission, to be a part thereof from the date on which this report is submitted, to the extent not superseded by documents or reports subsequently filed or furnished.

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: February 21, 2024

By: /s/ Ofer Naveh

Name: Ofer Naveh Title: Chief Financial Officer

2