PROSPECTUS SUPPLEMENT NO. 2

To Prospectus dated May 12, 2022

AEYE, INC.

Up to 68,139,193 Shares of Common Stock Up to 166,666 Warrants Up to 7,833,332 Shares of Common Stock Issuable Upon Exercise of Warrants

This prospectus supplement (this "Supplement") supplements the prospectus dated May 12, 2022 (as may be supplemented or amended from time to time, the "Prospectus"), which is part of a registration statement on Form S-1 (File No. 333-259554) relating to (i) the resale of 64,232,845 shares of Common Stock by certain of the selling securityholders named in the Prospectus (the "Selling Securityholders"), (ii) the issuance by us and resale of 3,885,268 shares of Common Stock upon the exercise of options to purchase Common Stock and 21,080 shares of Common Stock upon the settlement of outstanding RSUs, and (iii) the issuance by us of up to 7,833,332 shares of Common Stock upon the exercise of outstanding warrants to purchase Common Stock (the "Warrants"). The Prospectus also relates to the resale of up to 166,666 of our outstanding Warrants originally issued in a private placement in connection with the initial public offering of CF Finance Acquisition Corp. III by the holders thereof. We will not receive any proceeds from the sale by the Selling Securityholders of the securities offered by them described in the Prospectus, although we will receive the proceeds from any exercise of any Warrants for cash

This Supplement is being filed to update and supplement the information in the Prospectus with the information contained in the Form 8-K filed with the Securities and Exchange Commission on May 13, 2022.

This Supplement is not complete without, and may not be delivered or utilized except in connection with, the Prospectus. This Supplement should be read in conjunction with the Prospectus, and if there is any inconsistency between the information in the Prospectus and this Supplement, you should rely on the information in this Supplement.

Our Common Stock and Warrants are listed on The Nasdaq Stock Market LLC ("Nasdaq") under the symbols "LIDR" and "LIDRW," respectively. On May 12, 2022, the closing price of our Common Stock was \$4.30 per share and the closing price of our Warrants was \$0.76 per Warrant.

We are an "emerging growth company" as defined in Section 2(a) of the Securities Act of 1933, as amended, and are subject to reduced public company reporting requirements.

Our business and investment in our Common Stock and Warrants involve significant risks. These risks are described in the section titled "Risk Factors" beginning on page 10 of the Prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the accuracy or adequacy of the Prospectus. Any representation to the contrary is a criminal offense.

The date of this Supplement is May 13, 2022.

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): May 10, 2022

37-1827430 IRS Employer Identification No.)											
IRS Employer Identification No.)											
94568											
(Zip Code)											
Registrant's telephone number, including area code: (925) 400-4366 (Former Name or Former Address, if Changed Since Last Report)											
of the registrant under any of the											
2(b)) (c))											
change on which registered											
aq Stock Market LLC											
aq Stock Market LLC											
)											

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company ⊠

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 5.02	Departure of Dir	rectors or	· Certain	Officers;	Election	of	Directors;	Appointment	of	Certain	Officers;	Compensatory
	Arrangements of Certain Officers.											

On May 10, 2022, Dr. Karl-Thomas Neumann resigned as a member of the Board of Directors and the Compensation Committee of AEye, Inc. (the "Company"). Dr. Neumann's resignation was not due to any disagreement with the Company on any matter relating to the Company's operations, policies, or practices.

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 hereunto duly authorized.

AEye, Inc.

Dated: May 13, 2022

y: /s/ Andrew S. Hughes

Andrew S. Hughes

Senior Vice President, General Counsel & Corporate Secretary