August 3, 2023

Via Edgar Correspondence

Thomas Jones Geoff Kruczek Division of Corporation Finance Office of Manufacturing U.S. Securities Exchange Commission 100 F Street, NE Washington, D.C., 20549

Re: Aeluma, Inc. (the "Company")

Registration Statement on Form S-1 Filed July 6, 2023 File No. 333-273149

To whom it may concern:

This letter is in response to the letter dated July 21, 2023 from the staff (the "Staff") of the U.S. Securities Exchange Commission ("SEC") addressed to Aeluma, Inc. (the "Company", "we", and "our"). For ease of reference, we have recited SEC's comments in this response and numbered them accordingly. An amended registration statement on Form S-1 (the "Amended Registration Statement") is being submitted to accompany this letter.

Registration Statement on Form S-1 filed July 6, 2023

Executive Compensation, page 50

1) Please update the disclosure in this section. For example, revise this section to include compensation information for each of the company's last two completed fiscal years in a Summary Compensation Table. For guidance, see Item 402(n) of Regulation S-K. In addition, update the table on page 50 to present the information as of the end of the company's last completed fiscal year. As another example, expand the disclosure in the Compensation Paid to Directors section on page 51 to provide the compensation information of the directors for the company's last completed fiscal year. For guidance, see Item 402(r) of Regulation S-K.

RESPONSE: We note the Staff's comment, and in response hereto, respectfully advise the Staff that we have revised the disclosure in Executive Compensation section generally to (i) include the compensation information for each of the Company's last two completed fiscal years in a Summary Compensation Table; (ii) update the table on page 50 to present the information as of the end of the Company's last completed fiscal year; and (iii) update the disclosure in the Compensation Paid to Directors section on page 51 to provide the compensation information of the directors for the company's last completed fiscal year.

We hope this response has addressed all of the Staff's concerns relating to the comment letter. Should you have additional questions regarding the information contained herein, please contact our securities counsel Louis Taubman, Esq. of Hunter Taubman Fischer & Li LLC at ltaubman@htflawyers.com.

Aeluma, Inc.

/s/ Jonathan Klamkin

Name: Jonathan Klamkin
Title: Chief Executive Officer &

Principal Financial Officer & Chairman