July 13, 2023

Nicholas Curtis Chief Executive Officer LENSAR, Inc. 2800 Discovery Drive, Suite 100 Orlando, Florida 32826

> Re: LENSAR, Inc. Registration

Statement on Form S-3

Filed June 26, 2023 File No. 333-272930

Dear Nicholas Curtis:

We have limited our review of your registration statement to those issues we have

addressed in our comments. In some of our comments, we may ask you to provide us with

information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the

requested information. If you do not believe our comments apply to your facts and

circumstances or do not believe an amendment is appropriate, please tell us why in your

response.

After reviewing any amendment to your registration statement and the information you

provide in response to these comments, we may have additional comments.

Registration Statement on Form S-3 filed June 26, 2023

Risk Factors, page 5

We note that you are registering for resale a significant amount of shares of your common stock. Please revise to include risk factor disclosure describing the impact of sales by your selling shareholders in connection with this offering, including the risk and impact of potential stock price volatility, potential sales of a substantial portion of your shares, and any potential change in control upon the conversion, issuance, or sale of your securities. We remind you that the company and its management are responsible for the accuracy

and adequacy of their disclosures, notwithstanding any review, comments, action or absence of

action by the staff.

Nicholas Curtis LENSAR, Inc. July 13, 2023 Page 2

Refer to Rules 460 and 461 regarding requests for acceleration. Please allow adequate time for us to review any amendment prior to the requested effective date of

the registration statement.

Please contact Nicholas O'Leary at 202-551-4451 or Katherine Bagley at 202-551-2545 with any questions.

Sincerely,

Division of

Office of Industrial

FirstName LastNameNicholas Curtis Corporation Finance

Applications and Comapany NameLENSAR, Inc.

July 13, 2023 Page 2 cc: Shayne Kennedy, Esq. FirstName LastName

Services