

LENSAR, Inc.
2800 Discovery Drive, Suite 100
Orlando, Florida 32826

August 8, 2023

VIA EDGAR AND E-MAIL

United States Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, D.C. 20549-6010
Attention: Nicholas O'Leary & Katherine Bagley

Re: LENSAR, Inc. Registration Statement on Form S-3 (Registration No. 333-272930)

To the addressees set forth above:

In accordance with Rule 461 under the Securities Act of 1933, as amended, we hereby request acceleration of the effective date of the Registration Statement on Form S-3 (Registration No. 333-272930) (the "**Registration Statement**") of LENSAR, Inc. (the "**Company**"). We respectfully request that the Registration Statement become effective as of 5:00 p.m., Washington, D.C. time, on August 10, 2023, or as soon as practicable thereafter, or at such other time thereafter as our counsel, Latham & Watkins LLP, may request by telephone. Once the Registration Statement has been declared effective, please orally confirm that event with our counsel, Latham & Watkins LLP, by calling Drew Capurro at (714) 755-8008 or Shayne Kennedy at (714) 755-8181.

Thank you for your assistance in this matter.

Sincerely,

LENSAR, INC.

By: /s/ Thomas Staab, II
Thomas Staab, II
Chief Financial Officer

cc: Nicholas T. Curtis, LENSAR, Inc.
Kendra Wong, LENSAR, Inc.
B. Shayne Kennedy, Latham & Watkins LLP
Drew Capurro, Latham & Watkins LLP