

**Spectral AI, Inc.**  
**2515 McKinney Avenue.**  
**Suite 1000**  
**Dallas, Texas 75201**

**VIA EDGAR**

November 21, 2023

U.S. Securities & Exchange Commission  
Division of Corporation Finance  
Office of Energy & Transportation  
100 F Street, NE  
Washington, D.C. 20549  
Attn: Juan Grana

**Re: Spectral AI, Inc.**  
**Registration Statement on Form S-1**  
**Filed October 30, 2023**  
**File No. 333-275218**

Dear Mr. Grana:

Spectral AI, Inc., a Delaware corporation (the “**Company**,” “**we**,” “**our**” or “**us**”), hereby transmits the Company’s response to the comment letter received from the staff (the “**Staff**”) of the U.S. Securities and Exchange Commission (the “**Commission**”) dated November 7, 2023, regarding the Company’s Registration Statement on Form S-1 filed with the Commission on October 30, 2023 (the “**Registration Statement**”). For the Staff’s convenience, we have repeated below each of the Staff’s comments in bold, and have followed such comment with the Company’s response. Concurrently with the transmission of this letter, we are publicly filing Amendment No. 1 to the Company’s Registration Statement with the Commission through EDGAR (the “**Amended Registration Statement**”), which reflects the Company’s responses to the comments received by the Staff and certain updated information. All page references in the responses set forth below refer to page numbers in the Amended Registration Statement.

Registration Statement on Form S-1 Filed October 30, 2023

General

- 1. Form S-1 requires that registrants which are smaller reporting companies file an audited balance sheet as of the end of each of the most recent two fiscal years, and audited statements of comprehensive income, cash flows and changes in stockholders’ equity for each of the two fiscal years preceding the date of the most recent audited balance sheet. Please refer to Rule 8-02 of Regulation S-X and amend accordingly.**

The Company respectfully advises the Staff that it has revised the disclosures beginning on page F-1 of the Amended Registration Statement in response to the Staff’s comment to include the financial statements required under Rule 8-02 of Regulation S-X.

- 2. Form S-1 also requires that registrants file a copy of the auditor’s consent to the use of its audit report or an acknowledgment letter regarding the use of its review report in any filing under the Securities Act as an exhibit. Please refer to Item 601(B)(23) of Regulation S-K and amend accordingly.**

The Company respectfully advises the Staff that it has filed a copy of KPMG LLP’s consent and WithumSmith+Brown, PC’s consent to the use of their respective audit reports as Exhibits 23.2 and 23.3, respectively, of the Amended Registration Statement in response to the Staff’s comment.

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We thank the Staff for its review of the foregoing and Amended Registration Statement. If you have further comments, please feel free to contact our counsel, Lynwood E. Reinhardt, at [LReinhardt@reedsmith.com](mailto:LReinhardt@reedsmith.com) or by telephone at (469) 680-4220.

Sincerely,

/s/ Wensheng Fan

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Wensheng Fan  
Chief Executive Officer  
Spectral AI, Inc.

cc:

Herbert F. Kozlov, Lynwood E. Reinhardt, Reed Smith LLP

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