



UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

DIVISION OF  
CORPORATION FINANCE

Mail Stop 3030

November 17, 2015

Via E-mail

George Laplante  
Chief Financial Officer  
Ambarella, Inc.  
3101 Jay Street  
Santa Clara, California 95054

**Re: Ambarella, Inc.  
Form 10-K for Fiscal Year Ended January 31, 2015  
Filed March 30, 2015  
File No. 001-35667**

Dear Mr. Laplante:

We have limited our review of your filing to the financial statements and related disclosures and have the following comment. In our comment, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this comment within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comment applies to your facts and circumstances, please tell us why in your response.

After reviewing your response to this comment, we may have additional comments.

Form 10-K for the Fiscal Year Ended January 31, 2015

Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations, page 44

Comparison of the Fiscal Years Ended January 31, 2015, 2014 and 2013, page 48

1. We note the discussion of the reasons for the 38.5% increase in revenues in fiscal 2015 on page 44. Please revise the discussion in future filings to separately describe and quantify the impact of the change attributed to each of the markets in which you operate. Refer to Item 303 of Regulation S-K which requires quantification of the contribution of each factor when necessary to the understanding of a material change. Also refer to the guidance in Section III (D) of SEC Release 34-26831.

George Laplante  
Ambarella, Inc.  
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We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comment, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

You may contact Andri Boerman at (202) 551-3645, or Michael Fay, Senior Accountant, at (202) 551-3812 with any questions. You may also reach me at (202) 551-3676.

Sincerely,

/s/ Brian Cascio

Brian Cascio  
Accounting Branch Chief  
Office of Electronics and Machinery