

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

May 19, 2014

Via Email
Marc A. Stapley
Senior Vice President and
Chief Financial Officer
Illumina, Inc.
5200 Illumina Way
San Diego, California 92122

Re: Illumina, Inc.

Form 10-K for the Fiscal Year Ended December 29, 2013

Filed February 18, 2014 File No. 001-35406

Dear Mr. Stapley:

We have completed our review of your filings. We remind you that our comments or changes to disclosure in response to our comments do not foreclose the Commission from taking any action with respect to the company or 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. 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 rules require.

Sincerely,

/s/ Martin James

Martin James Senior Assistant Chief Accountant