



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 3030

February 24, 2009

VIA U.S. MAIL AND FAX 972-4-959-9050

Dov Ofer
Chief Executive Officer
Lumenis Ltd
P.O. Box 240
Yokneam 20692
Israel

Re: Lumenis Ltd.
Form 20-F for the Fiscal Year Ended December 31, 2007
Filed June 25, 2008
File No. 000-27572

Dear Dov Ofer:

We have reviewed your letter dated January 20, 2009 and filing and have the following comments. Where indicated, we think you should revise your Form 20-F in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Amendment No. 2 to Form 20-F for the Fiscal Year Ended December 31, 2007

1. We note that you only included certain portions of Items 15T, 8, and 18 in your filing while you incorporated by reference the remaining portions. Please refer to Exchange Act Rule 12b-15 which requires that the amended 20-F includes the complete text of each item being amended. For example, Item 18 should include a complete set of audited financial statements - i.e., auditor reports, primary financial statements, and notes thereto. In addition, Exchange Act Rule 12b-15 also requires that in an amendment to any report required to include the certifications under Rule 13a-14(a) or 15d-14(a) you must include new certifications by each principal executive and principal financial officer of the registrant. Please further amend your Form 20-F to fully comply.

Note 11. Bank Debt, page F-16

2. Please refer to our prior comments 6 and 12. It is unclear to us how you applied paragraphs 17 and 19 of SFAS 15 in accounting for the modification of your debt. Please provide us with journal entries you recorded in connection with the modification of the debt and explain to us how each journal entry was appropriate in accordance with SFAS 15 in greater detail.

Controls and Procedures, page 3

3. Please revise the section to include a clear and definitive statement disclosing management's conclusion on the effectiveness of the company's internal controls over financial reporting as of December 31, 2007, clearly stating whether they were effective or not effective at that date.
4. We note your disclosure that you were unable to perform all of the formal procedures testing the effectiveness of controls designed to be in place within such processes by the time the annual report was filed, but, utilizing alternative evaluation procedures you completed your assessment. Please tell us the nature of the alternative evaluation procedures used by the company.
5. We note your disclosure that it is possible that had you performed your assessment during the reporting period or closer to the balance sheet date you may have found other control deficiencies. You also disclose that it is possible that you might have found other control weaknesses or deficiencies if you had been able to perform formal testing of control effectiveness as you had originally intended. Since Item 308T(a)(3) of Regulation S-K requires you to include a discussion of any material weakness in your internal control over financial reporting identified by management, please tell us why you believe the company was able to comply with this requirement.

Dov Ofer
Lumenis Ltd
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As appropriate, please amend your Form 20-F and respond to these comments within 10 business days or tell us when you will provide us with a response. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

You may contact Andri Boerman, Staff Accountant, at (202) 551-3645 or me at (202) 551-3604 if you have questions regarding comments on the financial statements and related matters. You may also contact Angela Crane, Branch Chief, at (202) 551-3554 with any questions.

Sincerely,

Kate Tillan
Assistant Chief Accountant