

**STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP**

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

| OMB APPROVAL                                 |           |
|--|-----------|
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|   |   |   |
|---|---|---|
| 1. Name and Address of Reporting Person*<br><b>SMITH GARY B</b><br><br>(Last) (First) (Middle)<br><b>C/O CIENA CORPORATION</b><br><b>7035 RIDGE RD.</b><br><br>(Street)<br><b>HANOVER MD 21076-1426</b><br><br>(City) (State) (Zip) | 2. Issuer Name and Ticker or Trading Symbol<br><b>CIENA CORP [ CIEN ]</b> | 5. Relationship of Reporting Person(s) to Issuer<br>(Check all applicable)<br><br><input checked="" type="checkbox"/> Director 10% Owner<br><br><input checked="" type="checkbox"/> Officer (give title below) Other (specify below)<br><b>PRESIDENT, CEO</b> |
|   | 3. Date of Earliest Transaction (Month/Day/Year)<br><b>12/21/2017</b>     |   |
|   | 4. If Amendment, Date of Original Filed (Month/Day/Year)                  | 6. Individual or Joint/Group Filing (Check Applicable Line)<br><br><input checked="" type="checkbox"/> Form filed by One Reporting Person<br><br>Form filed by More than One Reporting Person   |

**Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned**

| 1. Title of Security (Instr. 3) | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | 3. Transaction Code (Instr. 8) |   | 4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5) |            |         | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4) | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) |
|---------------------------------|--------------------------------------|--|--------------------------------|---|---|------------|---------|---|--|---|
|                                 |                                      |  | Code                           | V | Amount  | (A) or (D) | Price   |   |  |   |
| Common Stock                    | 12/21/2017                           |  | S                              |   | 2,894 <sup>(1)</sup>  | D          | \$21.22 | 844,764 <sup>(2)</sup>  | D  |   |
| Common Stock                    | 12/21/2017                           |  | S                              |   | 3,842 <sup>(3)</sup>  | D          | \$21.22 | 840,922 <sup>(2)</sup>  | D  |   |
| Common Stock                    | 12/21/2017                           |  | S                              |   | 2,818 <sup>(4)</sup>  | D          | \$21.22 | 838,104 <sup>(2)</sup>  | D  |   |
| Common Stock                    | 12/21/2017                           |  | S                              |   | 3,032 <sup>(5)</sup>  | D          | \$21.22 | 835,072 <sup>(2)</sup>  | D  |   |
| Common Stock                    | 12/21/2017                           |  | S                              |   | 15,709 <sup>(6)</sup>   | D          | \$21.22 | 819,363 <sup>(2)</sup>  | D  |   |
| Common Stock                    | 12/21/2017                           |  | S                              |   | 9,449 <sup>(6)</sup>  | D          | \$21.22 | 809,914 <sup>(2)</sup>  | D  |   |
| Common Stock                    | 12/21/2017                           |  | S                              |   | 41,184 <sup>(7)</sup>   | D          | \$21.22 | 768,730 <sup>(2)</sup>  | D  |   |
| Common Stock                    | 12/21/2017                           |  | S                              |   | 12,983 <sup>(7)</sup>   | D          | \$21.22 | 755,747 <sup>(2)</sup>  | D  |   |
| Common Stock                    | 12/21/2017                           |  | S                              |   | 11,033 <sup>(8)</sup>   | D          | \$21.22 | 744,714 <sup>(2)</sup>  | D  |   |
| Common Stock                    | 12/21/2017                           |  | S                              |   | 10,791 <sup>(8)</sup>   | D          | \$21.22 | 733,923 <sup>(2)</sup>  | D  |   |

**Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)**

| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Date, if any (Month/Day/Year) | 4. Transaction Code (Instr. 8) |   | 6. Date Exercisable and Expiration Date (Month/Day/Year) |     | 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) | 8. Price of Derivative Security (Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |
|--|--|--------------------------------------|--|--------------------------------|---|--|-----|---|--|--|---|--|
|  |  |                                      |  | Code                           | V | (A)  | (D) |   |  |  |   |  |

**Explanation of Responses:**

- Shares reported represent an amount sold to cover the tax liabilities of the reporting person pursuant to a 10b5-1 sales instruction related to a restricted stock unit (RSU) award agreement dated 12/17/2013. Acquisition of the RSU was previously reported in Table I of reporting person's Form 4 on 12/19/2013.
- Shares reported include unvested Restricted Stock Units (RSUs) and Performance Stock Units (PSUs).
- Shares reported represent an amount sold to cover the tax liabilities of the reporting person pursuant to a 10b5-1 sales instruction related to a restricted stock unit (RSU) award agreement dated 12/17/2014. Acquisition of the RSU was previously reported in Table I of reporting person's Form 4 on 12/19/2014.
- Shares reported represent an amount sold to cover the tax liabilities of the reporting person pursuant to a 10b5-1 sales instruction related to a restricted stock unit (RSU) award agreement dated 12/15/2015. Acquisition of the RSU was previously reported in Table I of reporting person's Form 4 on 12/17/2015.
- Shares reported represent an amount sold to cover the tax liabilities of the reporting person pursuant to a 10b5-1 sales instruction related to a restricted stock unit (RSU) award agreement dated 12/14/2016. Acquisition of the RSU was previously reported in Table I of reporting person's Form 4 on 12/16/2016.
- Shares reported represent an amount sold to cover the tax liabilities of the reporting person pursuant to a 10b5-1 sales instruction related to a performance stock unit (PSU) award agreement dated 12/15/2015. The earning of the PSU was previously reported on Table I of reporting person's Form 4 on 12/14/2016.
- Shares reported represent an amount sold to cover the tax liabilities of the reporting person pursuant to a 10b5-1 sales instruction related to a performance stock unit (PSU) award agreement dated 12/17/2014. The earning of the PSU was previously reported on Table I of reporting person's Form 4 on 12/17/2015.
- Shares reported represent an amount sold to cover the tax liabilities of the reporting person pursuant to a 10b5-1 sales instruction related to a performance stock unit (PSU) award agreement dated 12/14/2016. The earning of the PSU was previously reported on Table I of reporting person's Form 4 on 12/14/2017.

By: Michelle Rankin For: Gary B. Smith 12/26/2017

\*\* Signature of Reporting Person Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

\* If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

\*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

**Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.**