

**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* <b>FRODSHAM JAMES</b>  (Last) (First) (Middle) <b>C/O CIENA CORPORATION</b> <b>7035 RIDGE RD.</b>  (Street) <b>HANOVER MD 21076-1426</b>  (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <b>CIENA CORP [ CIEN ]</b>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable)  Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <b>SR. VP, Chief Strategy Officer</b>
	3. Date of Earliest Transaction (Month/Day/Year) <b>12/20/2018</b>	

**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	12/20/2018		F		599 <sup>(1)</sup>	D	\$32.91	190,931 <sup>(2)</sup>	D	
Common Stock	12/20/2018		F		679 <sup>(3)</sup>	D	\$32.91	190,252 <sup>(2)</sup>	D	
Common Stock	12/20/2018		F		632 <sup>(4)</sup>	D	\$32.91	189,620 <sup>(2)</sup>	D	
Common Stock	12/20/2018		F		867 <sup>(5)</sup>	D	\$32.91	188,753 <sup>(2)</sup>	D	
Common Stock	12/20/2018		F		1,758 <sup>(6)</sup>	D	\$32.91	186,995 <sup>(2)</sup>	D	
Common Stock	12/20/2018		F		1,412 <sup>(6)</sup>	D	\$32.91	185,583 <sup>(2)</sup>	D	
Common Stock	12/20/2018		F		1,611 <sup>(7)</sup>	D	\$32.91	183,972 <sup>(2)</sup>	D	
Common Stock	12/20/2018		F		1,647 <sup>(7)</sup>	D	\$32.91	182,325 <sup>(2)</sup>	D	
Common Stock	12/20/2018		F		4,158 <sup>(8)</sup>	D	\$32.91	178,167 <sup>(2)</sup>	D	
Common Stock	12/20/2018		F		770 <sup>(8)</sup>	D	\$32.91	177,397 <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:**

- Represents shares withheld to cover payment of the tax liabilities of the reporting person 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 include unvested Restricted Stock Units (RSUs) and Performance Stock Units (PSUs).
- Represents shares withheld to cover payment of the tax liabilities of the reporting person 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.
- Represents shares withheld to cover payment of the tax liabilities of the reporting person 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.
- Represents shares withheld to cover payment of the tax liabilities of the reporting person related to a restricted stock unit (RSU) award agreement dated 12/12/2017. Acquisition of the RSU was previously reported in Table I of reporting person's Form 4 on 12/14/2017.
- Represents shares withheld to cover payment of the tax liabilities of the reporting person 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 12/16/2016.
- Represents shares withheld to cover payment of the tax liabilities of the reporting person 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.
- Represents shares withheld to cover payment of the tax liabilities of the reporting person related to a performance stock unit (PSU) award agreement dated 12/12/2017. The earning of the PSU was previously reported on Table I of reporting person's Form 4 on 12/20/2018.

By: Michelle Rankin For: 12/26/2018  
James A. Frodsham

\*\* 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.

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