

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

OMB APPROVAL

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Estimated average burden

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

1. Name and Address of Reporting Person* <u>COOL JONATHAN</u> <hr/> (Last) (First) (Middle) <u>C/O LUNA INNOVATIONS</u> <u>INCORPORATED</u> <u>1 RIVERSIDE CIRCLE, SUITE 400</u> <hr/> (Street) <u>ROANOKE VA 24015</u> <hr/> (City) (State) (Zip)	2. Date of Event Requiring Statement (Month/Day/Year) <u>01/12/2010</u>	3. Issuer Name and Ticker or Trading Symbol <u>LUNA INNOVATIONS INC [LUNA]</u> <hr/> 4. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director 10% Owner Officer (give title below) Other (specify below)	5. If Amendment, Date of Original Filed (Month/Day/Year) <hr/> 6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person Form filed by More than One Reporting Person
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Table I - Non-Derivative Securities Beneficially Owned

1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
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Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)		4. Conversion or Exercise Price of Derivative Security	5. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date	Title	Amount or Number of Shares			
<u>Stock Option (Right to Buy)</u>	<u>(1)</u>	<u>01/12/2020</u>	<u>Common Stock</u>	<u>120,000</u>	<u>4.43</u>	<u>D</u>	

Explanation of Responses:

1. Of the Shares subject to the Option, 40,000 Shares vest upon the first anniversary and the remaining 80,000 shares will vest in equal monthly installments over the following 24 months.

/s/ Talfourd H. Kemper, Jr., 04/05/2010
Attorney-In-Fact

** 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 5 (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.