Zelibor Thomas Edward Form 4 December 14, 2010

Check this box

if no longer

subject to

Section 16.

Form 4 or

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF **SECURITIES**

Form 5 Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, obligations Section 17(a) of the Public Utility Holding Company Act of 1935 or Section may continue. 30(h) of the Investment Company Act of 1940 See Instruction

1(b).

(Last)

(City)

(Print or Type Responses)

1. Name and Address of Reporting Person * Zelibor Thomas Edward

> (First) (Middle)

121 CONTINENTAL DRIVE, SUITE 110

(Street)

(State)

2. Issuer Name and Ticker or Trading Symbol

Lightwave Logic, Inc. [LWGL]

3. Date of Earliest Transaction (Month/Day/Year)

12/13/2010

4. If Amendment, Date Original

Filed(Month/Day/Year)

X Form filed by One Reporting Person Form filed by More than One Reporting

Issuer

below)

X_ Director

Applicable Line)

Officer (give title

NEWARK, DE 19713

(Zip) Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1.Title of 2. Transaction Date 2A. Deemed Security (Month/Day/Year) (Instr. 3)

Execution Date, if

Code (Month/Day/Year) (Instr. 8)

3.

TransactionAcquired (A) or Disposed of (D)

4. Securities

(Instr. 3, 4 and 5)

(A) or Code V Amount (D) Price

5. Amount of Securities Beneficially Owned

Following Reported Transaction(s)

(Instr. 3 and 4)

Form: Direct (D) or Indirect Beneficial (I)

6. Ownership

Indirect Ownership (Instr. 4)

7. Nature of

10% Owner

Other (specify

OMB APPROVAL

3235-0287

January 31,

2005

0.5

OMB

Number:

Expires:

response...

5. Relationship of Reporting Person(s) to

6. Individual or Joint/Group Filing(Check

(Check all applicable)

Estimated average

burden hours per

(Instr. 4)

(9-02)

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

Persons who respond to the collection of SEC 1474 information contained in this form are not required to respond unless the form displays a currently valid OMB control number.

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

1. Title of Derivative Security

Conversion or Exercise

3. Transaction Date 3A. Deemed (Month/Day/Year) Execution Date, if any

4. 5. Number of TransactionDerivative Code Securities

6. Date Exercisable and **Expiration Date** (Month/Day/Year)

7. Title and Amount of **Underlying Securities** (Instr. 3 and 4)

Edgar Filing: Zelibor Thomas Edward - Form 4

| (Instr. 3) | Price of Derivative Security | | (Month/Day/Year) | (Instr. | | Acquired (A Disposed of (Instr. 3, 4, 5) | of (D) | | | | |
|--|------------------------------------|------------|------------------|---------|---|--|--------|---------------------|--------------------|-----------------|----------------------------|
| | | | | Code | V | (A) | (D) | Date Exercisable | Expiration Date | Title | Amount Number Shares |
| Employee Stock Option (Right to Buy) | \$ 1 | 12/13/2010 | | A | | 100,000 | | <u>(1)</u> | 12/12/2015 | Common Stock | 100,00 |

Reporting Owners

| Reporting Owner Name / Address | Relationships | | | | | | |
|---|---------------|-----------|---------|-------|--|--|--|
| F- | Director | 10% Owner | Officer | Other | | | |
| Zelibor Thomas Edward 121 CONTINENTAL DRIVE SUITE 110 NEWARK, DE 19713 | X | | | | | | |
| | | | | | | | |

Signatures

/s/Thomas E.
Zelibor

**Signature of Reporting Person

Date

Explanation of Responses:

- * 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).
- (1) Employee Stock Option granted pursuant to the issuer's 2007 Employee Stock Plan. 25,000 shares vest immediately and 25,000 shares vest at the end of every 12 month period commencing November 4, 2010.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.

Reporting Owners 2