CLAIMS

1. A method for operating an optical signaling network for controlling a street lighting system comprising the steps of:

   configuring each one of a plurality of street lights with a luminaire that provides light through at least one LED (Light Emitting Diode), wherein light intensity of the at least one LED is controllable, and an optical receiver with an optical receiving aperture;

   varying an output of the at least one LED to send messages to signal at least one other optical device;

   monitoring the output of the at least one LED by at least one of the street lights to determine if there is a diminished amount of light intensity from the at least one LED required for proper signaling;

   adjusting the output of the at least one LED to reduce signaling errors if monitoring determines there is diminished light intensity from the at least one LED;

   receiving a message from an optically enabled device by at least one of a plurality of luminaire associates after the at least one luminaire associate has sent a clear-to-send signal; and

   transporting the received message through a street lighting communication network to an intended recipient, wherein timing of the clear-to-send signal is based on a master timing signal broadcast through the optical signaling network or based upon a time slot that is allocated using a GPS receiver comprised in the at least one luminaire associate.

2. The method of claim 1 wherein the at least one other optical device is another of the street lights.

3. The method of claim 1 wherein the at least one other optical device is a mobile device.

4. The method of claim 1 wherein adjusting further comprises increasing the power of the at least one LED or decreasing the signaling rate.

5. The method of claim 1 further comprising:

covering the optical receiving aperture with a polarizing filter; and rotating the polarizing filter to block passage of interfering light.

6. The method of claim 1 wherein varying further comprises allowing adequate functioning by employing a protocol that functions according to a parameter related to delivery goals.

7. The method of claim 6 wherein the protocol employs at least one of the following techniques: clock recovery, absence of a DC component, Manchester Coding, or Differential Manchester Encoding.

8. The method of claim 1 wherein receiving further comprises forming at least one optical link comprised in the optical signaling network and using the at least one optical link to assess a condition of the luminaire by employing a protocol for handling an acceptance, a transport, and a delivery of messages and controls throughout the network.