

## **IrriGreen** Changing the Way We Water the World™

July 20, 2015

Federal Communications Commission Authorization and Evaluation Division 7435 Oakland Mills Road Columbia, Maryland 21046

To whom it may concern,

IrriGreen is seeking FCC original certification approval for its 501101 Genius Controller according to rules 15.107, 15.109, 15.207, 15.231 and 15.247. Our Genius Controller communicates with multiple Genius Servers using a 433.92 MHz radio and communicates to a mobile phone through a Texas Instruments Wi-Fi (802.11 b/g/n) evaluation board. The mobile phone app provides a user interface to the Genius Irrigation system. In this way the Genius Controller becomes a bridge from a mobile phone app to a Genius Server controlling a Genius Sprinkler.

Besides meeting FCC RF emission limits, we are seeking FCC approval of an intentional radiator centered at 433.92 MHz. The default radio channel center frequency is 433.92 MHz with the option of using one of 3 additional channels centered at 437.92 MHz. 439.92 MHz and 443.92 MHz, if needed to find a clear channel. Only one channel is used for a given communication session. The 433 MHz radio is operated based on a command received over the Wi-Fi radio and as such the radios are operated in sequence.

We are also seeking approval for an 802.11 b/g/n radio. The Texas Instruments CC3100BOOST is FCC approved as an evaluation board with an internal chip antenna, FCC ID: Z64-CC3100KITA. IrriGreen modifies the CC3100BOOST per the manufacturer's specification to use a UFL connector and an external 2.4 GHz antenna.

FRN: 0023299217 FCC ID: 2ABSA5011

Sincerely,

Gary Klinefelter, CEO

IrriGreen, Inc.