

**1. Introduction**

By the instant application (“Application”), Lutron Electronics Co., Inc. (“Lutron”) requests that the Commission grant a two year experimental license to permit Lutron to operate the facilities (the “Facilities”) specified in the instant Application.

**2. Purpose of the Operation**

Lutron is an industry leader with respect to the design and manufacture of energy-saving lighting controls and dimmers, automated window treatments and appliance modules for both residential and commercial applications. Lutron products save energy, and the company estimates that the installed base of its products saves the nation nearly 10 billion kWh of electricity, or approximately \$1 billion in utility costs per year. Lutron manufactures more than 16,000 energy-saving products, sold in more than 100 countries around the world.

This Application requests authority to continue operation of the facilities previously authorized under STA under File No. 0785-EX-ST-2011 (WF9XKT). Initial evaluation of these facilities under STA proved the initial feasibility of this technology. Now, continued development of these devices is required for to evaluate product performance for international markets. As Lutron develops products for international markets, it is necessary to operate these products to ensure they meet specifications, test software, and test system operation. These products are design to meet ETSI EN 300-220-1. They are essentially international versions of Lutron's Domestic 434MHz products certified to 15.231. They are all for the purpose of telecommand and are periodic operators with low duty cycle.

This experiment is not intended to support a market survey. Rather, the experiment is intended to validate that certain products under development for international markets meet appropriate specifications. These products are intended for sale only outside of the U.S. The devices will only be operated inside Lutron-owned commercial building at the locations specified in the Application. As such, no fees will be collected for the devices and the devices will not be provided to members of the general public. Regarding the number of devices requested to be authorized for operation, the reason requesting authorization for 100 devices is that a fully loaded system of Lutron controls is limited to 100 devices. In order to conduct the required system testing to validate the products, Lutron needs to have all 100 devices activate at the same time. It would be difficult to ensure proper test coverage with only 50 devices. Having said that, as demonstrated herein, significant interference mitigation exists as power levels are low, all experiments will be conducted indoors which will significantly attenuate signal strength due to the building structure, and operation of the Facilities will not be continuous.

### **3. Mitigation of Interference**

Lutron is well aware of the responsibility of licensees in the Experimental Radio Service to avoid interference to other licensed operations. To that end, the following is shown:

- At each location, operation will occur indoors in a commercial office building. These locations are in a rural area in the Lehigh Valley area of Pennsylvania, on Lutron's private property. These buildings are not accessible to members of the public, except upon the express permission of Lutron. As all experiments will be conducted indoors, we expect significant signal strength attenuation by the building structure resulting in a reduced likelihood of interference.

- Operation of the Facilities will not be continuous. Rather, operation of the Facilities will occur only from 7am-6pm local time, and will be intermittent in nature. In the off state, no measurable power will be radiated.

Based on the location of the experiment, the technical parameters of the operation, and the manner in which the experiment will be conducted, the potential for interference to co-channel or adjacent channel operations is substantially mitigated.

### **4. Stop Buzzer**

Lutron's Don Mosebrook will be conducting the test and will be available by wireless telephone at 610-909-9349 if any issues regarding interference arise during testing. Alternate "stop buzzer": Rob Bollinger – (610-393-8106).