

March 13, 2013

Federal Communications Commission Authorization and Evaluation Division

RE: Modular Approval Request of the FCC ID: S3Z-CIM35X1

To Whom It May Concern:

CIMCON Lighting, Inc. hereby submits the enclosed application for Equipment Authorization under 47 CFR Part 15.247, Subpart C for their RF module CIMX1PRO.

§15.212 Modular transmitters must meet the following requirements to obtain a modular transmitter approval:

(i) The radio elements of the modular transmitter must have their own shielding. The physical crystal and tuning capacitors may be located external to the shielded radio elements.

CIMCON's RF module CIMX1PRO has the their own shield and it doesn't rely upon the shielding provided by the device into which it is installed

(ii) The modular transmitter must have buffered modulation/data inputs (if such inputs are provided) to ensure that the module will comply with part 15 requirements under conditions of excessive data rates or over-modulation.

The module contains buffered data inputs and software is controlled by the manufacturer of the module so that excessive data rates or over modulation will not occur.

(iii) The modular transmitter must have its own power supply regulation.

The radio module operates from 2.1V DC to 3.6V DC and has power regulation to all the radio circuitry.

(iv) The modular transmitter must comply with the antenna and transmission system requirements of §§15.203, 15.204(b) and 15.204(c). The antenna must either be permanently attached or employ a "unique" antenna coupler (at all connections between the module and the antenna, including the cable). The "professional installation" provision of §15.203 is not applicable to modules



but can apply to limited modular approvals under paragraph (b) of this section.

The module contains a permanently attached soldered wire antenna (monopole antenna) under control of the manufacturer and it also has a ufl connector for external antenna. Module has been tested with the following external antenna.

Dipole Antenna (P/N: A24-HASM-525; Maximum Antenna Gain: 2.1dBi) Dipole Antenna (P/N: A24-HASM-450; Maximum Antenna Gain: 2.1dBi)

Our User manual has the instructions to use the above approved antenna.

(v) The modular transmitter must be tested in a stand-alone configuration, i.e., the module must not be inside another device during testing for compliance with part 15 requirements. Unless the transmitter module will be battery powered, it must comply with the AC line conducted requirements found in §15.207. AC or DC power lines and data input/output lines connected to the module must not contain ferrites, unless they will be marketed with the module (see §15.27(a)). The length of these lines shall be the length typical of actual use or, if that length is unknown, at least 10 centimeters to insure that there is no coupling between the case of the module and supporting equipment. Any accessories, peripherals, or support equipment connected to the module during testing shall be unmodified and commercially available (see §15.31(i)).

Module has been tested in a stand-alone configuration. Test report can be referred with the AC line conducted requirements found in §15.207.

(vi) The modular transmitter must be equipped with either a permanently affixed label or must be capable of electronically displaying its FCC identification number.

Upon receipt of this grant, the grant ID will be applied to the module. Instructions for maintaining compliance are provided in the product manual when the module will be used in the host devices. Products which incorporate this device will be labeled "Contains FCC ID: S3Z-CIM35X1" and their associated Instructions for Use will also advise the user concerning instructions for maintaining compliance.

(vii) The modular transmitter must comply with any specific rule or operating requirements applicable to the transmitter and the manufacturer must provide adequate instructions along with the



module to explain any such requirements. A copy of these instructions must be included in the application for equipment authorization. For example, there are very strict operational and timing requirements that must be met before a transmitter is authorized for operation under Section 15.231. For instance, data transmission is prohibited, except for operation under Section 15.231(e), in which case there are separate field strength level and timing requirements. Compliance with these requirements must be assured.

Product manual of the RF module has been included with the specific instruction for the modular use in the host devices. It has the details of the power level settings for the transmitter chip which the host devices have to maintain in order to meet the compliance requirements.

(viii) The modular transmitter must comply with any applicable RF exposure requirements. For example, FCC Rules in Sections 2.1091, 2.1093 and specific Sections of Part 15, including 15.319(i), 15.407(f), 15.253(f) and 15.255(g), require that Unlicensed PCS, UNII and millimeter wave devices perform routine environmental evaluation for RF Exposure to demonstrate compliance. In addition, spread spectrum transmitters operating under Section 15.247 are required to address RF Exposure compliance in accordance with Section 15.247(b)(4). transmitters approved under other Sections of Part 15, when necessary, may also need to address certain RF Exposure concerns, typically by providing specific installation and operating instructions for users, installers and other interested parties to ensure compliance.

Module has been tested with RF exposure requirements and is compliant in accordance to 15.247(b)(4) and 1.1307 (b)(1). Test report can be referred for the measurement details.

Thank you in advance for your consideration of this application.

Anil Agrawal