October 20, 2011

TEE 24175 Research Dr. Farmington Hills, MI 48335-2642 Tel 248.478.7210 Fax 248.699.4241

RE: Certification for Toyota MY13 420A FSK 315 MHz TPM Sensor

FCC ID: GQ4-51T Canada IC: 1470A-32T Model #: 228408-101

## GENERAL DESCRIPTION

The Toyota Tire Pressure Monitor Sensor (TPM Sensor) is a self-contained module that includes the valve stem and sensor ECU subsystems and is attached to the rim of each monitored tire. There are no hardwired electrical connections to the TPM Sensors. The TPM Sensor monitors the pressure and the temperature inside the tire and transmits the information to a TPM receiver located in a vehicle by way of an Ultra High Frequency (UHF) band wireless signal. The TPM Sensor receives programming and diagnostic requests by way of a Low Frequency (LF) band wireless signal.

## **Description of Operations**

## **Table 1 Sensor State Table**

State Name	Transmit Period (sec)	Datagram Type	Pressure Measure Period (sec)	Temp Measure Period (sec)	Battery Measure Period (sec)	LF Poll Period (ms)
Normal	180	Normal	12	12	180	25ms on / 1000ms off
Sleep	N/A	N/A	60 (if pressure exit enabled)	60	N/A	50ms on / 500ms off
Accidental Pressure Change	4	Alert	4	4	4	25ms on / 1000ms off