

Robert Bosch LLC

Request for Grant of Special Temporary Authority

File No. 0464-EX-ST-2021

Application: Parking Lot Occupancy System

This application seeks authority to test a parking lot sensor system. It uses a magnetometer and radar to determine if a parking spot in a parking lot is occupied. It uses LoRa communication technology to transmit data to a gateway. The gateway will use WLAN wireless technology to send the data to a dashboard where the data can be tracked and analyzed to determine parking availability in a parking structure or on a street. The data can be used to determine parking trends and to provide users with a view of what spots are available at a given time.

The purpose of the STA is to test at one location the practical applications of this product for a limited time to determine the demand for the product, for market analysis and for demonstration to potential customers.

The sensor device necessitates an occupied bandwidth of 80 megahertz in the band 2400-2483.5 MHz, which is permitted for radiodetermination devices in the entirety of that band in the United States, pursuant to Section 15.249 of the Commission's Rules. The LoRa portion of the product operates at 922-923.4 MHz. There is no interference anticipated because the system operates at less than 13 dBm EIRP at 922-923.4 MHz and less than 28 dBm EIRP at 2400-2483.5 MHz. The radius of operation is only 0.2 to 0.4 kilometers.

A stop buzzer contact for this experiment will be Christopher R. Koch of Bosch, who can be reached at +1(312) 802-4672.

Any other questions can be addressed to:

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