



Date: 10/10/2018

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

To whom it may concern,

Please find the attached files that document the QT50R design. This information is being sent to you as part of your requirements to obtain certification under FCC part 15.249 for models QT50R and SA1T family of sensor, FCC ID number UE3RGAGE50. These two models are electrically and mechanically identical with only minor variation in their labels. Please let me know if there are additional pieces of information that is still needed. Please refer to Banner EMC test plan for additional information. All the supporting documents have been sent along with this inquiry to Northwest EMC lab to review, approve and file all the necessary paper work with FCC. The following is a high level product description provided for your reference to our application:

These devices are radar-Based Dual Zone Narrow Band Sensors for detection of moving and stationary targets. The following is a short list of some of the applications in the field ensuring moving equipment collision avoidance:

- Onboard mobile equipment such as forklifts, mining vehicles, entry/exit application for gate control. Vehicle detection (Park meter automation and Drive through lane)
- Indoor overhead gantry
- Outdoor crane to crane
- Ship detection, ship container detection, Rail car detection

The sensors are to be supplied by a Class 2 source for NA.

Sensor emits a well-defined beam of high-frequency radio waves from an internal antenna. Some of this emitted energy is reflected back to the receiving antenna. Signal processing electronics determine the distance from the sensor to the object based on the time delay of the return signal. The sensor can be configured to two independent sensing zones.

We would appreciate anything you can do to expedite your review and approval process

Kind regards,

A handwritten signature in blue ink, appearing to read "Joel Jankord".

Joel Jankord  
Product Compliance Test Engineer

**Banner Engineering Corporation**

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