

## **Professional Installation Justification**

## 2017/05/04

FEDERAL COMMUNICATIONS COMMISSIONS Authorization and Evaluation Division 7435 Oakland Mills Road Columbia, MD 21046

Subject: Professional Installation Justification for certification of FCC ID: 2AJ8D-WANTXRX1-G1

In accordance with Section 15.203 of the Commission's Rules, *PerceptiMed, Inc* declares that Professional Installation is justified to comply with the requirement. The device (model SCLP-WANTXRX1-G1V1) is a wireless access component for use in the location and retrieval of tagged merchandise and is designed, manufactured and serviced solely by the company or its agents.

The device is marketed and sold for commercial use only. The initial use is for prescription retrieval in retail and commercial pharmacy. It could also be used for component identification in other commercial material management and retrieval programs. As such, the application is a fixed location for the device and its antenna.

The device requires proprietary software to operate, and specialized training, using the material supplied by the company. Customers enter into a contract that discloses only what they need to apply our product. All other detail is protected by trade secret.

The antenna used in this application operates with a ground plane. The antenna may be mounted to a wall facing the merchandise to be tracked, or overhead in a ceiling fixture. The antenna is manufactured by MP Antenna LTD, model 08-ANT-0923.

As is typical of these types of antenna, the antenna is the only component that is visible, and the ground plane is on the other side of the wall or in the ceiling. This necessitates that the antenna is assembled to a hole in the wall or ceiling and a second installer secures the base of the antenna to the ground plane. This frequently is in a limited crawl space, or a suspended ceiling tile. Operation without a ground plane would degrade the antenna gain so there is no reason to not use a ground plane with this component.

Operational test is made using the round trip Received Signal Strength Indication from the Transmitting WAN to a tracking tag and the tag's reply to the Receiving WAN. The trackers are either on a stack of shelves or hanging on a rack. As there may be shadows in the layout and placement of the WAN antenna or the tracking tag, a scan of the deployed trackers is compared against a roll of the assigned trackers. The RSSI is typically -60 to -70dBm when properly sited. Over the life of each battery operated tracker, the RSSI is continuously monitored.

The operation of the WAN and the trackers is a service. The equipment is sold to a client, and is monitored and maintained by the company. Customer security, safety and other concerns may dictate that they perform the physical installation of the hardware. The company will perform inspection to confirm adherence to the approved materials and construction.

Sincerely,

Jack E. Gratteau

Sr Electronic Engineer

Perceptimed, Inc

365 San Antonio Rd

Mountain View, CA 94040