§ 15.407(f)   **Maximum Permissible Exposure**

Test Requirement(s):   **§15.407(f):** U-NII devices are subject to the radio frequency radiation exposure requirements specified in §1.1307(b), §2.1091 and §2.1093 of this chapter, as appropriate. All equipment shall be considered to operate in a "general population/uncontrolled" environment.

RF Exposure Requirements: **§1.1307(b)(1) and §1.1307(b)(2):** Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the Commission's guidelines.

RF Radiation Exposure Limit: **§1.1310:** As specified in this section, the Maximum Permissible Exposure (MPE) Limit shall be used to evaluate the environmental impact of human exposure to radiofrequency (RF) radiation as specified in Sec. 1.1307(b), except in the case of portable devices which shall be evaluated according to the provisions of Sec. 2.1093 of this chapter.

SAR Exclusion: **KDB 447498 4.3.1(a):** For 100 MHz to 6 GHz and test separation distances $\leq$ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following: [(max. power of channel, including tune-up tolerance, mW) / (min. test separation distance, mm)] · [$\sqrt{f(GHz)}$] ≤ 3.0 for 1-g SAR, and ≤ 7.5 for 10-g extremity SAR, where • f(GHz) is the RF channel transmit frequency in GHz.
The test exclusions are applicable only when the minimum test separation distance is $\leq$ 50 mm, and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm according to 4.1 f) is applied to determine SAR test exclusion.

Test Results: Since the device is a handheld device, the SAR exclusion criteria was evaluated.

EUT's operating frequencies @ <u>5725 - 5850 MHz</u>;
Equation from page 12 of KDB 447498 4.3.1(a) in order for the device to be exempt from SAR,

(Max. Power (mW) / Min. Test separation distance (mm))* $\sqrt{}$ Frequency (GHz) ≤ 3

Max Output Power was -1.33 dBm (0.736 mW) at 5.825 GHz.

(0.736 mW / 5 mm) * $\sqrt{}$5.825 GHz ≤ 3
0.355 ≤ 3
Based on this calculation the device is exempt from SAR testing.