

Test Report

3.1.12 RF Exposure

Test Requirement: FCC 47CFR 15.247(i)

Test Date: 2017-11-24

Mode of Operation: On mode

Test Method:

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.

Test Results:

The EUT complied with the requirement(s) of this section.

EUT meets the requirements of these sections as proven through MPE calculation

The MPE calculation for EUT @ 20cm

Based on the highest P = 0.827 mW@2442MHz

Pd = PG/ 4pi*R² =
$$(0.827 \text{ x } 1.48) / 12.566* (20)^2$$

= $(1.223)/12.566\text{x } 400= 1.223 / 5026.4$
= 0.000243mW/cm^2

where:

*Pd = power density in mW/cm2

* G = Antenna numeric gain (1.48); Log G = g/10 (g = 1.7dBi).

* P = Conducted RF power to antenna (0.827mW@2442MHz).

* R = Minimum allowable distance.(20 cm)

*The power density $Pd = 0.000243 \text{mW/cm}^2$ is less than 1 mW/cm² (listed MPE limit)

*The SAR evaluation is not needed (this is a desk top device, R> 20 cm)

* The EUT(antenna) must be 0.2 meters away from the General Population.