

### 3.1.8 RF Exposure

Test Requirement: FCC 47CFR 15.247(i)  
Test Date: 2018-11-20  
Mode of Operation: Wifi 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 =119 mW

The power tune up tolerance is 19.76±1.0dBm

Max. duty factor is 100%

$$\begin{aligned} P_d &= PG / 4\pi * R^2 = (119 \times 1.97) / 12.566 * (20)^2 \\ &= (234.43) / 12.566 \times 400 = 234.43 / 5026.4 \\ &= 0.0466 \text{ mW/cm}^2 \end{aligned}$$

where:

\*Pd = power density in mW/cm<sup>2</sup>

\* G = Antenna numeric gain (2.94); Log G = g/10 ( g = 1.97dBi ).

\* P = Conducted RF power to antenna (119 mW).

\* R = Minimum allowable distance.(20 cm)

\*The power density Pd = 0.0466mW/cm<sup>2</sup> is less than 1 mW/cm<sup>2</sup> (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.