4.2 Radio Frequency Exprosure Compliance

4.2.1 Electromagnetic Fields

RESULT: **Passed**

Date of testing : 2016-12-20
Test standard : FCC KDB publication 447498 D01 V06

FCC Requirement and Limit
According to FCC KDB 447498 D01 V06, Clause 4.3.1

a) For 100MHz to 6GHz and test separation distances≤50mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:
[(max. power of channel, including tunne-up tolerance, mW) / (min. test separation distance, mm)]* [√f(GHz)] ≤3.0 for 1-g SAR, and <7.5 for 10-g extremity SAR.

b) For 100MHz to 6GHz and test separation distances>50mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:
   1) {[Power allowed at numeric threshold for 50 mm in step a] + [(test separation distance-50 mm) * (f(MHz)/150)]} mW, for 100MHz to 1500MHz

   2) {[Power allowed at numeric threshold for 50 mm in step a] + [(test separation distance-50 mm) * 10]} mW, for >1500MHz and ≤6GHz

FCC Evaluation Result
According to the test result of clause 4.1.3 of this report. The maximum peak conducted output power is

Frequency (GHz)	Maximum Peak conducted Output Power(dBm)	Duty Cycle	Maximum Peak Output Power(mW)
2.437	19.84	100%	96.39

When take Antenna gain -3.5dBi into consideration, the maximum peak conducted output power is the worst case.
And for the frequency 2.437GHz, the SAR test exclusion thresholds at the test separation distance 200mm is,
1-g SAR test exclusion thresholds = 1596.08mW
10-g SAR test exclusion thresholds = 1740.21mW

Conclusion
The device is excluded for SAR test and complies with the FCC exposure requirements since the maximum peak output power is lower than the SAR test exclusion thresholds.