September 23, 2017

TUV SUD BABT FCB
Octagon House,
Segensworth Road,
Fareham,
Hampshire,
PO15 5RL

Attention: Director of Certification

RE: Analysis of RF Exposure for Portable and Mobile use per KDB 447498 D01 RF Exposure Procedures and Equipment Authorization Policies for Mobile and Portable Devices v06

FCC ID: 2ALBARFIDMODULE

Portable exposure SAR Exemption Calculation using a 5mm separation distance:

As per Clause 4.3.1 (a) of KDB 447498 D01 v06:

Solving for power allowed at *numeric threshold* in step a:

$$\left(\frac{\text{power allowed @ numeric threshold}}{\text{min.test separation distance,mm}}\right) \text{x } \left(\sqrt{f\ (GHz)}\right) = 3.0$$

$$\left(\frac{\text{power allowed @ numeric threshold}}{5\text{ mm}}\right) \text{x } \left(\sqrt{0.0001342(GHz)}\right) = 3.0$$

Power allowed @ numeric threshold = 1.294 watts

Solving for SAR test exclusion thresholds at 100MHz using step b:

$$\{(\text{ power allowed @ numeric threshold}) + [(test\ separation\ distance - 50mm) \text{ x } (\tfrac{\text{f(MHz)}}{150})]\}\text{mw}$$

$$\{(\text{ 1,294 mW}) + [(5mm - 50mm) \text{ x } (\tfrac{\text{f(MHz)}}{150})]\}\text{mw}$$

SAR test exclusion thresholds at 100MHz = 1.294 watts

Solving for SAR test exclusion thresholds below 100MHz using step c at ≤ 50 mm:

(SAR test exclusion thresholds for 50 mm at 100MHz) x 1/2

(1.294 watts) x (1+log(100/f(MHz))) x 1/2

Calculated SAR test exclusion threshold at 134.2 kHz = 1.858 watt

The EUT complies with the SAR Test Exclusion Thresholds for < 100 MHz and < 200 mm (5 mm calculated) having a worst case EIRP of 70.1 dBµV/m @ 3 meters (0.003 mW).

Sincerely,

Ferdie S. Custodio
Name
Authorized Signatory
Title: Senior EMC/Wireless Test Engineer