RF Exposure Evaluation

The device is used in a portable RF exposure configuration – at a distance less than 20 cm from human's body. For this configuration SAR evaluation is required.

The RF Power is low; therefore the SAR test exclusion threshold is calculated.

SAR test exclusion threshold formula according to FCC KDB 447898 D01 v05r02 is

$$P^*\sqrt{f}/d < 3$$

Where:
P *is maximum RF conducted power of a channel or EIRP, including tune-up tolerance, mW;*
f *is operating frequency in GHz;*
d *is the minimum test separation distance, mm; the minimum distance is 5 mm.*

The maximum Peak conducted RF power is -7.0 dBm or 0.2 mW.
The antenna gain is less than 0 dBm and doesn't need to be considered.

The **SAR test exclusion threshold** at 5mm distance is calculated as:

$0.2 \times \sqrt{2.480} \div 5 = 0.06 < 3$.

Therefore, SAR testing is not required as the SAR Test Exclusion Threshold condition is satisfied.

For IC: ***SAR Exemption limit according to IC RSS-102 Issue 5, at 5 mm separation distance = 4 mW***

Routine evaluation is not required since the higher of the maximum conducted or equivalent isotropically radiated power (e.i.r.p.) source-based, time averaged output power is below the exemption limit.

Results	**Complies**