RF Exposure

The equipment under test (EUT) is an Vega operating at 2.4G Band. The EUT can be powered by DC 12.0V (1 x 12.0V rechargeable battery). And the RF function will be shut down and it can't transmit RF signals while charging. For more detail information pls. refer to the user manual.

Antenna Type: Integral antenna.
Antenna Gain: 0dBi.
The normal radiated output power (e.i.r.p) is: -9.0dBm (tolerance: +/- 3dB).
The normal conducted output power is -9.0dBm (tolerance: +/- 3dB).
Modulation Type: GFSK.

According to the KDB 447498 V06:

The Maximum peak radiated emission for the EUT is 86.0dBμV/m at 3m in the frequency 2439MHz
The EIRP = [(FS*D) ^2 / 30] mW = -9.23dBm
which is within the production variation.

The Minimum peak radiated emission for the EUT is 84.4dBμV/m at 3m in the frequency 2472MHz
The EIRP = [(FS*D) ^2 / 30] mW = -10.83dBm
which is within the production variation.

The maximum conducted output power specified is -6dBm= 0.251mW
The source- based time-averaging conducted output power
=0.251mW

The SAR Exclusion Threshold Level:
= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)
= 3.0 * 5 / sqrt (2.472) mW
= 9.54 mW

Since the source-based time-averaging conducted output power is well below the SAR low threshold level, so the EUT is considered to comply with SAR requirement without testing.