RF Exposure

The equipment under test (EUT) is a SPMN Bubble RC VHCL operating at 2.4G Band. The EUT can be powered by DC 9.0V (6 x 1.5V AA batteries).For more detail information pls. refer to the user manual.

Antenna Type: Integral antenna.
Antenna Gain: 0.17dBi Max
The normal radiated output power (e.i.r.p) is: -5.0dBm (tolerance: +/- 3dB).
The normal conducted output power is -5.17dBm (tolerance: +/- 3dB).
Modulation Type: GFSK.

According to the KDB 447498 D01 V06 section 4.3:

The Maximum peak radiated emission for the EUT is 90.8dBμV/m at 3m in the frequency 2415z
The EIRP = [(FS*D) ^2 / 30] mW = -4.43dBm
which is within the production variation.

The Minimum peak radiated emission for the EUT is 88.4dBμV/m at 3m in the frequency 2469z
The EIRP = [(FS*D) ^2 / 30] mW = -6.83dBm
which is within the production variation.

The maximum conducted output power specified is -2.17dBm= 0.607mW
The source- based time-averaging conducted output power
=0.607mW

The SAR Exclusion Threshold Level:
= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)
= 3.0 * 5 / sqrt (2.469) mW
= 9.55 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.