

INTERTEK TESTING SERVICES

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 4.5V (3 x 1.5V AAA 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: -8.0dBm (tolerance: +/- 3dB).

The normal conducted output power is -8.17dBm (tolerance: +/- 3dB).

Modulation Type: GFSK.

According to the KDB 447498 D01 V06 section 4.3:

The Maximum peak radiated emission for the EUT is 87.6dBμV/m at 3m in the frequency 2469MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = -7.63dBm
which is within the production variation.

The Minimum peak radiated emission for the EUT is 85.6dBμV/m at 3m in the frequency 2444MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = -9.63dBm
which is within the production variation.

The maximum conducted output power specified is -5.17dBm = 0.304mW

The source- based time-averaging conducted output power
= 0.304mW

The SAR Exclusion Threshold Level:

= $3.0 \cdot (\text{min. test separation distance, mm}) / \sqrt{\text{freq. in GHz}}$

= $3.0 \cdot 5 / \sqrt{2.469}$ 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.