

INTERTEK TESTING SERVICES

RF Exposure

The equipment under test (EUT) is a Hatch Baby Grow with Bluetooth function operating at 2.4G Band. The EUT can be powered by DC4.5V (3 x 1.5V AA batteries). For more detail information pls. refer to the user manual.

Bluetooth Version: 4.1 BLE (single mode)

Antenna Type: Integral antenna.

Antenna Gain: 0dBi.

The normal radiated output power (e.i.r.p) is: 1.5dBm (tolerance: +/- 4dB).

The normal conducted output power is 1.5dBm (tolerance: +/- 4dB).

Modulation Type: GFSK.

According to the KDB 447498:

The Maximum peak radiated emission for the EUT is 100.4dB μ V/m at 3m in the frequency 2440MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = 5.17dBm
which is within the production variation.

The Minimum peak radiated emission for the EUT is 94.9dB μ V/m at 3m in the frequency 2402MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = -0.33dBm
which is within the production variation.

The maximum conducted output power specified is 5.5dBm =mW

The source- based time-averaging conducted output power
=3.5* Duty cycle mW =3.5 mW(Duty cycle \leq 100%)
=3.5 mW

The SAR Exclusion Threshold Level:

= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)
= 3.0 * 5 / sqrt (2.480) mW
= 9.53 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.