

# INTERTEK TESTING SERVICES

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## Analysis Report

The equipment under test (EUT) is a PKW3330-PKW - Deluxe Feature Figure (TBD Pikachu) operating at 13.56 MHz. 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: 0dBi

The nominal conducted output power specified: -38.0dBm (+/- 3dB)

The nominal radiated output power (e.r.p) specified: -40.15dBm (+/- 3dB)

Modulation Type: ASK

According to the KDB 447498:

The worst-case peak radiated emission for the EUT is 56.9dB $\mu$ V/m at 3m in the frequency 13.56MHz

The EIRP = [(FS\*D) ^2 / 30] mW = -38.33dBm

The ERP = EIRP – 2.15 = -40.48dBm

which is within the production variation.

The maximum conducted output power specified is -35dBm= 0.00032mW

The source- based time-averaging conducted output power =0.00032\* Duty cycle mW =0.00032 mW(Duty cycle =100%)

The SAR Exclusion Threshold Level for 13.56MHz when the minimum test separation distance is < 50mm:

= 474 \* [1 + log(100/f(MHz))]/2

= 442.7mW

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.