

INTERTEK TESTING SERVICES

Analysis Report

The equipment under test (EUT) is a Disney Frozen Find My Nose Olaf 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: -30.0dBm (+/- 3dB)

The nominal radiated output power (e.r.p) specified: -32.15dBm (+/- 3dB)

Modulation Type: ASK

According to the KDB 447498:

The worst-case peak radiated emission for the EUT is 64.3dBμV/m at 3m in the frequency 13.56MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = -30.93dBm

The ERP = EIRP - 2.15 = -33.08dBm

which is within the production variation.

The maximum conducted output power specified is -27dBm = 0.00200mW

The source- based time-averaging conducted output power
= $0.00200 \cdot \text{Duty cycle}$ mW = 0.00200 mW (Duty cycle = 100%)

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

= $474 \cdot [1 + \log(100/f(\text{MHz}))]/2$

= 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.