

# Analysis Report

The Equipment Under Test (EUT) is a Force Link Starter Set, which contains a 13MHz NFC reader. The EUT is powered by 3 X 1.5V AAA batteries. After placing the tags on the EUT, the EUT will recognize the tags with sending out different sound effects.

**Antenna Type: Internal antenna**

**Antenna Gain: 0dBi**

**Nominal rated field strength: 72.8 dB $\mu$ V/m at 3m**

**Maximum allowed field strength of production tolerance: +/- 3dB**

According to the KDB 447498:

Based on the Maximum allowed field strength of production tolerance was 75.8 dB $\mu$ V/m at 3m in frequency 13.56MHz, thus;

The EIRP =  $[(FS \cdot D)^2 \cdot 1000 / 30] = 0.011\text{mW}$

Conducted power = Radiated Power (EIRP) – Antenna Gain

So;

Conducted Power = 0.011mW.

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

=  $[474 \cdot (1 + \log_{10}(100/f(\text{MHz})))]/2$

= 442.7mW

Since the above conducted output power is well below the SAR Exclusion threshold level, so the EUT is considered to comply with SAR requirement without testing.