

Analysis Report

Report No.: 18071570HKG-001

The Equipment Under Test (EUT) is a PROJECTION AM/FM CLCOK RADIO (Alarm Clock Radio with USB Charging). It can accept analog input source (3.5mm phone jack aux-in), AM/FM tuner and wireless Bluetooth device. The audio signal is amplified and fed to the built-in passive loudspeakers. The time can be projected on a wall. The EUT is powered by an AC/DC adaptor (5VDC 3A). The EUT has an USB port for charging external device without PC data transfer function. The adaptor can accept 100-240VAC. A CR2032 Lithium battery is for real-time-clock back-up.

Antenna Type: Internal integral antenna

Antenna Gain: 0dBi

Nominal rated field strength: 87 dB μ V/m at 3m

Maximum allowed field strength of production tolerance: +/- 6dB

According to the KDB 447498:

Based on the Maximum allowed field strength of production tolerance was 93dB μ V/m at 3m in frequency 2.4GHz, thus;

The EIRP = $[(FS \cdot D)^2 \cdot 1000 / 30] = 0.603\text{mW}$

Conducted power = Radiated Power (EIRP) – Antenna Gain
So;

Conducted Power = 0.603mW.

The SAR Exclusion Threshold Level:

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

= $3.0 \cdot 5 / \text{sqrt}(2.480) \text{ mW}$

= 9.53 mW

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.