

Analysis Report

Report No.: 130521881HKG-010

The Equipment Under Test (EUT) is a transceiver and it is a RF power socket. The EUT operates in the frequency is 921.286MHz (single channel). The EUT is powered by 120VAC.

When the EUT is powered on, the LED will flash. The socket starts searching for corresponding control hub. After pairing, the LED will stop flashing.

Antenna Type: Internal helical antenna

Antenna Gain: 0dBi

Nominal rated field strength: 83.2dB μ 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 86.2dB μ V/m at 3m in frequency 0.921286GHz, thus;

The EIRP = $[(FS \cdot D)^2 \cdot 1000 / 30] = 0.125\text{mW}$

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

Conducted Power = 0.125mW.

The SAR Exclusion Threshold Level:

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

= $3.0 \cdot 5 / \text{sqrt}(0.921286) \text{ mW}$

= 15.63 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.