

Analysis Report

The Equipment Under Test (EUT) is the Appliance Controller (model: 2635-222A) which is a plug-in on/off switch that receives and transmits signals via 915MHz radio frequency and AC power line signals (131.65kHz) in order to control 120-volt loads.

915MHz Module:

Modulation Type: FSK

Antenna Type: Integral, Internal

Frequency Range: 915MHz, single channel

EIRP range is -4dBm to 2dBm

Antenna gain is 0dBi

According to the KDB 447498:

Conducted power = Radiated Power (EIRP) – Antenna Gain

$$= 2\text{dBm} - 0\text{dBi} = 2\text{dBm}$$

Conducted Power = 1.58mW

The SAR Exclusion Threshold Level:

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

$$= 3.0 * 5 / \text{sqrt}(0.915) \text{ mW}$$

$$= 15.68 \text{ mW}$$

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.