RF Exposure Requirements

Product Description: Battery Powered Bluetooth Enabled Wireless Switch

Model No.: IDEV0020

FCC ID: 2ABDJ-IDEV0020

According to the KDB 447498 D01 V06, the following RF exposure evaluation shall to demonstrate RF exposure compliance.

Bluetooth: V4.0 LE

Tx frequency range: 2402 ~ 2480 MHz

Type of Modulation: GFSK

Antenna Type: SMD antenna (Gain: 2.1 dBi)

The maximum conducted output power: -0.32 dBm

The maximun conducted output power specified is 0 dBm = 1.0 mW

The source- based time-averaging conducted output power

= 1.0 * Duty cycle mW = 0.8979 mW (Duty Cycle = 89.79%)

The SAR Exclusion Threshold Level:

= 3.0 * (min. test separation distance, mm) / sqrt (freq. in GHz)

= 3.0 * 5 / sqrt (2.480) mW

= 9.5 mW

Source-based time-averaged Conducted output power is 0.8979 mW < 9.5mW

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.