

INTERTEK TESTING SERVICES

RF Exposure

The equipment under test (EUT) is a HS-8AA remote control with Bluetooth(BLE only) function operating in 2402-2480MHz. The EUT is powered by DC 3V for 2*AAA batteries. For more detailed features description, please refer to the user's manual.

Antenna Type: Integral antenna

Modulation Type: GFSK

Antenna Gain: 1.0dBi

Bluetooth Version: 5.0 BLE (Single Mode)

The nominal conducted output power specified: -4.0 dBm (± 2 dB)

The nominal radiated output power (e.i.r.p) specified: -3.0 dBm (± 2 dB)

The maximum conducted output power for the EUT is -4.39dBm in the frequency 2402MHz which is within the production variation.

The minimum conducted output power for the EUT is -4.94dBm in the frequency 2480MHz which is within the production variation.

The maximum conducted output power specified is -2dBm= 0.631mW

The source- based time-averaging conducted output power
=0.631

The SAR Exclusion Threshold Level:

$$\begin{aligned} P_{th}(\text{mW}) &= ERP_{20\text{cm}} * (d/20\text{cm})^x \quad (X = -\log_{10} \left(\frac{60}{ERP_{20\text{cm}} \sqrt{f}} \right)) \\ &= 3060 * (0.5/20)^{1.9} \text{ mW} \\ &= 2.72 \text{ mW} \end{aligned}$$

Since max. power of the source-based time-averaging conducted output power and effective radiated power (ERP) is well below the SAR low threshold level, so the EUT is considered to comply with SAR requirement without testing.