

INTERTEK TESTING SERVICES

RF Exposure

The equipment under test (EUT) is a 1/41 Bluetooth RC + 1/41 Diecast (Mix Carton) (1:41 Bluetooth RC Ferrari 499P) with Bluetooth 5.0 BLE function operating in 2402-2480MHz. The EUT is powered by DC 3.2V (1 x 3.2V rechargeable battery). Once use the USB cable charging to the EUT, the wireless function will be disabled. For more detail information pls. refer to the user manual.

Antenna Type: Integral antenna.

Antenna Gain: 0dBi.

Bluetooth Version: 5.0 BLE (Single Mode)

The normal radiated output power (e.i.r.p) is: -3.0dBm (tolerance: +/- 3dB).

The normal conducted output power is -3.0dBm (tolerance: +/- 3dB).

Modulation Type: GFSK.

According to the KDB 447498 D01 V06 section 4.3:

The Maximum peak radiated emission for the EUT is 91.3dBμV/m at 3m in the frequency 2402MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = -3.93dBm

which is within the production variation.

The Minimum peak radiated emission for the EUT is 90.3dBμV/m at 3m in the frequency 2480MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = -4.93dBm

which is within the production variation.

The maximum conducted output power specified is 0dBm= 1.000mW

The source- based time-averaging conducted output power
=1.000mW

The SAR Exclusion Threshold Level:

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

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

= 9.53 mW

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.