

# INTERTEK TESTING SERVICES

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## Analysis Report

The equipment under test (EUT) is an Anki Drive car KOURAI (yellow) with Bluetooth (4.0 single mode) function. The EUT was powered by 1 x 3.7V Rechargeable Battery which can be charged by charger, but it can't use Bluetooth function while charging. For more detail information pls. refer to the user manual.

Modulation Type: GFSK

Bluetooth Version: 4.0 (Single Mode)

Antenna Type: Integral antenna

Antenna Gain: 0dBi

The nominal radiated output power (e.i.r.p) specified: 5.0dBm (tolerance: +/- 3 dB)

The nominal conducted output power specified: 5.0dBm (tolerance: +/- 3dB)

According to the KDB 447498:

The Maximum peak radiated emission for the EUT is 102.2dB $\mu$ V/m at 3m in the frequency 2402MHz

The EIRP =  $[(FS \cdot D)^2 / 30]$  mW = 7.0dBm  
which is within the production variation.

The Minimum peak radiated emission for the EUT is 100.2dB $\mu$ V/m at 3m in the frequency 2480MHz

The EIRP =  $[(FS \cdot D)^2 / 30]$  mW = 5.0dBm  
which is within the production variation.

The maximum conducted output power specified is 8.0 dBm = 6.3mW

The source- based time-averaging conducted output power  
= 6.3 \* Duty cycle mW= 6.3 mW

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

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.

### Transmitter Duty Cycle Calculation

The test signal of the EUT is Continuous emission, the Duty Cycle is 100%.