

INTERTEK TESTING SERVICES

RF Exposure

The equipment under test (EUT) is a RC Car operating at 2.4G Band. The EUT can be powered by DC 7.4V (1 x 7.4V 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.

The normal radiated output power (e.i.r.p) is: -23.0dBm (tolerance: +/- 3dB).

The normal conducted output power is -23.0dBm (tolerance: +/- 3dB).

Modulation Type: GFSK.

According to the KDB 447498:

The Maximum peak radiated emission for the EUT is 71.9dB μ V/m at 3m in the frequency 2432MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = -23.33dBm

which is within the production variation.

The Minimum peak radiated emission for the EUT is 70.1dB μ V/m at 3m in the frequency 2463MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = -25.13dBm

which is within the production variation.

The maximum conducted output power specified is -20.0dBm= 0.010mW

The source- based time-averaging conducted output power =0.010mW

The SAR Exclusion Threshold Level:

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

= $3.0 \cdot 5 / \text{sqrt}(2.463)$ mW

= 9.56 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.