

INTERTEK TESTING SERVICES

RF Exposure

The equipment under test (EUT) is a 1:12 Radio Control Cat 770 Mining Truck operating at 2.4G Band. The EUT can be powered by DC 6.4V (1 x 6.4V rechargeable battery). 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: 2.0dBm (tolerance: +/- 3dB).

The normal conducted output power is 2.0dBm (tolerance: +/- 3dB).

Modulation Type: GFSK.

According to the KDB 447498:

The Maximum peak radiated emission for the EUT is 98.7dB μ V/m at 3m in the frequency 2420MHz

The EIRP = [(FS*D) ^2 / 30] mW = 3.47dBm
which is within the production variation.

The Minimum peak radiated emission for the EUT is 96.8dB μ V/m at 3m in the frequency 2470MHz

The EIRP = [(FS*D) ^2 / 30] mW = 1.57dBm
which is within the production variation.

The maximum conducted output power specified is 5dBm= 3.162mW

The source- based time-averaging conducted output power
=3.162mW

The SAR Exclusion Threshold Level:

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

= 3.0 * 5 / sqrt (2.470) mW

= 9.54 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.