

INTERTEK TESTING SERVICES

RF Exposure

The Equipment under Test (EUT) is a Control unit for 1:10 MUSTANG BOSS model: 3758 operating at 2.4GHz band. It is powered by DC 3.0V (2 x 1.5V AA batteries). 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: 0dBm (tolerance: +/- 3dB).

The normal conducted output power is: 0dBm (tolerance: +/- 3dB).

Modulation Type: GFSK.

According to the KDB 447498:

The Maximum peak radiated emission for the EUT is 95.9dB μ V/m at 3m in the frequency 2477MHz

The EIRP = [(FS*D) ^2 / 30] mW = 0.67dBm

which is within the production variation.

The Minimum peak radiated emission for the EUT is 94.9dB μ V/m at 3m in the frequency 2443MHz

The EIRP = [(FS*D) ^2 / 30] mW = -0.33dBm

which is within the production variation.

The maximum conducted output power specified is 3.0dBm = 2.0mW

The source- based time-averaging conducted output power

= 2.0* Duty Cycle mW < 2.0mW (Duty Cycle<100%)

The SAR Exclusion Threshold Level:

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

= 3.0 * 5 / sqrt (2.477) mW

= 9.5mW

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.

The duration of one cycle = 12.1739ms

Effective period of the cycle = 0.1449ms x 16=2.3184ms

DC = 2.3184 / 12.1739ms = 0.1904 or 19.04%