

INTERTEK TESTING SERVICES

RF Exposure

The equipment under test (EUT) is a 7" TFT PORTABLE DVD PLAYER WITH ATSC TV/ AM/ FM/ USB/ SD/ BT with Bluetooth function. The EUT was powered by AC120V, 60Hz or operated by DC 12V(8*1.5V "UM-2" Batteries). For more detail information pls. refer to the user manual.

Modulation Type: GFSK, $\pi/4$ DQPSK, 8DPSK.
Bluetooth Version: 2.1+EDR.

Antenna Type: Integral antenna.

Antenna Gain: 0dBi.

The nominal conducted output power specified: -18.0dBm (+/-3dB).

The nominal radiated output power (e.i.r.p) specified: -18.0dBm (+/- 3dB)

According to the KDB 447498:

The maximum peak radiated emission for the EUT is 75.6dB μ V/m at 3m in the frequency 2402MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = -19.63dBm
which is within the production variation.

The minimum peak radiated emission for the EUT is 78.8dB μ V/m at 3m in the frequency 2480MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = -16.43dBm
which is within the production variation.

The maximum conducted output power specified is -15.0dBm = 0.032mW

The source- based time-averaging conducted output power
= 0.032 * Duty Cycle mW (where Duty Cycle < 100%) < 0.032mW

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.