

## INTERTEK TESTING SERVICES

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### RF Exposure

The equipment under test (EUT) is a BLUETOOTH CLOCK RADIO AND CD PLAYER, All in one CD Micro system, DAB+ Radio with CD with Bluetooth FHSS technology operating in 2402-2480MHz. The EUT is powered by AC 100-240V~ 50/60Hz. For more detail information pls. refer to the user manual.

Bluetooth Version: 5.4 EDR

Antenna Type: Integral antenna

Antenna Gain: 1.19 dBi max

Modulation Type: GFSK,  $\pi/4$ -DQPSK and 8-DPSK

The nominal conducted output power specified: -3.19dBm (+/-3dB).

The nominal radiated output power (e.i.r.p) specified: -2dBm (+/- 3dB).

According to the KDB 447498 V07:

The Maximum peak radiated emission for the EUT is 95.3 dB $\mu$ V/m at 3m in the frequency 2402MHz

The EIRP = [(FS\*D) ^2 / 30] mW = 0.07dBm

which is within the production variation.

The Minimum peak radiated emission for the EUT is 91.3 dB $\mu$ V/m at 3m in the frequency 2480MHz

The EIRP = [(FS\*D) ^2 / 30] mW = -3.93dBm

which is within the production variation.

The maximum conducted output power specified is -0.19dBm= 0.957mW

The maximum radiated output power specified is 1dBm= 1.259mW

The SAR Exclusion Threshold Level:

$$P_{th}(mW) = ERP_{20cm} * (d/20cm)^x \quad (X = -\log_{10} \left( \frac{60}{ERP_{20cm} \sqrt{f}} \right))$$
$$= 3060 * (0.5/20)^{1.9} mW$$
$$= 2.72 mW$$

Since max. conducted output power and effective radiated power (ERP) is well below the SAR low threshold level, so the EUT is considered to comply with SAR requirement without testing.

Note: EIRP is higher than ERP, thus EIRP is compared with the Exclusion Threshold.