

INTERTEK TESTING SERVICES

RF Exposure

The equipment under test (EUT) is a ONN 2.0 MINI SOUNDBAR with Bluetooth function operating in 2402-2480MHz. The EUT is powered by DC 15V from adaptor. For more detail information pls. refer to the user manual.

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

Bluetooth Version: 4.2(without BLE)

Antenna Type: Copper dipole antenna

Antenna Gain: 3.87dBi Max

The nominal radiated output power (e.i.r.p) specified: 7.87dBm (Tolerance: +/- 3dB)

The nominal conducted output power specified: 4dBm (Tolerance: +/- 3dB)

According to the KDB 447498:

The maximum peak radiated emission for the EUT is 100.3dB μ V/m at 3m in the frequency 2480MHz of BT 4.2

The EIRP = $[(FS * D)^2 / 30]$ mW = 5.1 dBm
which is within the production variation.

The minimum peak radiated emission for the EUT is 100.2 dB μ V/m at 3m in the frequency 2402MHz of BT 4.2

The EIRP = $[(FS * D)^2 / 30]$ mW = 5.0 dBm
which is within the production variation.

The maximum conducted output power specified is 7dBm = 5.012mW

The source- based time-averaging conducted output power
= 5.012 * Duty factor mW (where Duty Factor ≤ 1)
= 5.012 mW

The SAR Exclusion Threshold Level:

= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)
= 3.0 * 5 / sqrt (2.480) mW
= 9.53 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.