

INTERTEK TESTING SERVICES

Analysis Report

The equipment under test (EUT) is a 36" 2.1 SOUNDBAR with Bluetooth function operating in 2402-2480MHz. The EUT is powered DC 20V/2.4A through adapter. For more detail information pls. refer to the user manual.

Classic Bluetooth function:

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

Bluetooth Version: 4.2(without BLE)

Antenna Type: PCB Antenna

Antenna Gain: 1dBi

The nominal radiated output power specified: -3dBm (Tolerance: +/-6dB)

According to the KDB 447498:

The maximum radiated emission for the EUT is 96.5 dB μ V/m at 3m in the frequency 2.441GHz = $[(FS \cdot D)^2 / 30]$ mW
= 1.3 dBm which is within the production variation

The minimum radiated emission for the EUT is 90.2 dB μ V/m for at 3m in the frequency 2.480GHz = $[(FS \cdot D)^2 / 30]$ mW
= -5.0 dBm which is within the production variation

The maximum conducted output power specified is 3dBm = 2.0mW

The source-based time-averaging conducted output power
= 2.0 * Duty cycle mW \leq 2.0 mW (Duty Cycle \leq 100%)

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.