

Analysis Report

The Equipment Under Test (EUT) is a Bluetooth version 4.1 without LE function for a Disc with speaker function operating from 2402-2480MHz with 1MHz channel spacing. The EUT is powered by 1X3.7VDC rechargeable battery. After switch on the EUT and paired with smart device, music can be played by EUT.

Antenna Type: Internal antenna

Antenna Gain: 0dBi

Nominal rated field strength: 99.7dB μ V/m at 3m

Maximum allowed field strength of production tolerance: +/- 2dB

According to the KDB 447498:

Based on the Maximum allowed field strength of production tolerance was 102.7dB μ V/m at 3m in frequency 2.4GHz, thus;

The EIRP = $[(FS \cdot D)^2 \cdot 1000 / 30] = 4.437\text{mW}$

Conducted power = Radiated Power (EIRP) – Antenna Gain
So;

Conducted Power = 4.437mW.

The SAR Exclusion Threshold Level:
= $3.0 \cdot (\text{min. test separation distance, mm}) / \sqrt{\text{freq. in GHz}}$
= $3.0 \cdot 5 / \sqrt{2.480} \text{ mW}$
= 9.53 mW

Since the above conducted output power is well below the SAR Exclusion threshold level, so the EUT is considered to comply with SAR requirement without testing.