RF Exposure

The equipment under test (EUT) is a Speaker with lights with Bluetooth 5.2 (dual-mode) function operating in 2402-2480MHz. The EUT is powered by DC 3.7V, 1.11Wh by battery or DC 5V from adapter. For more detail information pls. refer to the user manual.

Antenna Type: Integral antenna
Modulation Type: GFSK, p/4-DQPSK and 8-DPSK
Antenna Gain: -0.58dBi
Bluetooth Version: 5.2 (Dual Mode)
The nominal conducted output power specified: 3.28 dBm (±4dB)
The nominal radiated output power (e.i.r.p) specified: 2.7 dBm (±4dB)

According to the KDB 447498:

The maximum peak radiated emission for the EUT is 101.9dBμV/m at 3m in the frequency 2480MHz.
The EIRP = [(FS*D) ^2 / 30] mW = 6.67dBm
which is within the production variation.

The maximun conducted output power specified is 3.7+3+0.58dBm = 5.34564mW
The source- based time-averaging conducted output power
= 5.34564 * Duty factor mW (where Duty Factor≤1)
=5.34564 mW

The SAR Exclusion Threshold Level:
= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)
= 3.0 * 5 / sqrt (2.480) mW
= 9.52502 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.