INTERTEK TESTING SERVICES

RF Exposure

The Equipment Under Test (EUT) is a WIRELESS OPEN-EAR EARPHONES In Ear with Qi Charging with Bluetooth 5.2 (EDR&BLE Mode) function operating in 2402-2480MHz. The EUT is powered by DC3.7V rechargeable battery or DC 5V through charging Box. The two earbuds have the same hardware. The Bluetooth function does not work when the Earbuds is charging. The Key For more detailed features description, please refer to the user's manual.

Bluetooth Version: 5.2 EDR mode.
Antenna Type: FPC antenna.
Antenna Gain: -1.0dBi.
Modulation Type: GFSK, π/4DQPSK, 8DPSK.

According to the KDB 447498 D01 General RF Exposure Guidance v05 The 1-g and 10-g SAR test exclusion thresholds for 100MHz to 6GHz at test separation distance≤50mm are determined by：
[(max.power of channel, including tune-up tolerance, mW) / (min. test separation distance, mm)] • $[\sqrt{f(GHz)}]$ ≤3.0 for 1-g SAR and ≤7.5 for 10-g extremity SAR, where
f(Ghz) is the RF channel transmit frequency in GHz
Power and distance are rounded to the nearest mW and mm before calculation
The resulet is rounded to one decimal place for comparison

$eirp = pt \times gt = (Exd)^2 / 30$
Where:
pt = transmitter output power in watts,
gt = numeric gain of the transmitting antenna (unitless),
E = electric field strength in V/m, --- $10^{((dB \mu V/m)/20)} / 10^6$
D = measurement distance in meters(m) --- 3m
$Sopt = (EXd)^2 / 30 \times gt$

Ant gain = -1.0dBi; so Ant numeric gain = 0.794

Field strength = 102.8dBμV/m @3m

So $Pt = \{[10^{(102.8/20)}/10^6 \times 3]2 / 30 \times 0.794\} \times 1000$ mW = 4.536mW

So (4.536 mW / 5mm) X $2.441^{(0.5)} = 1.415 < 3$

The SAR evaluation is not required.

FCC ID: 2ADTV-69443

Bluetooth Version: 5.2 (Single Mode BLE)
Antenna Type: FPC antenna
Modulation Type: GFSK
Antenna Gain: -1.0dBi Max

According to the KDB 447498 D01 General RF Exposure Guidance v05 The 1-g and 10-g SAR test exclusion thresholds for 100MHz to 6GHz at test separation distance≤50mm are determined by：
[(max.power of channel, including tune-up tolerance, mW) / (min. test separation distance, mm)] • [$\sqrt{f(GHz)}$] ≤3.0 for 1-g SAR and ≤7.5 for 10-g extremity SAR, where
f(Ghz) is the RF channel transmit frequency in GHz
Power and distance are rounded to the nearest mW and mm before calculation
The resulet is rounded to one decimal place for comparison

eirp=pt x gt = (Exd)^2 / 30
Where:
pt = transmitter output power in watts,
gt = numeric gain of the transmitting antenna (unitless),
E = electric field strength in V/m, --- $10^{((dB\,\mu V/m)/20)}$ / 10^6
D = measurement distance in meters(m) --- 3m
Sopt = (EXd)^2 / 30 x gt

Ant gain = -1.0dBi; so Ant numeric gain = 0.794

Field strength = 101dBμV/m @3m

So Pt={[$10^{(101/20)}$/10^6 x 3]2 / 30 x 0.794} x 1000 mW = 2.999mW

So (2.999 mW / 5mm) X $2.48^{(0.5)}$ = $1.01 < 3$

The SAR evaluation is not required.