# RF EXPOSURE

# EXEMPT REPORT

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|---|---|---|
| **APPLICANT** | : | **IRIS Audio Engineering Limited** |
| **PRODUCT NAME** | : | **IRIS FLOW Headphones** |
| **MODEL NAME** | : | **TGR1** |
| **BRAND NAME** | : | **IRIS** |
| **FCC ID** | : | **2AXKC-TGR101** |
| **STANDARD(S)** | : | **47 CFR Part 1.1307**<br>**47 CFR Part 2.1093**<br>**KDB447498D01 General RF Exposure Guidance v06** |
| **RECEIPT DATE** | : | **2020-08-27** |
| **TEST DATE** | : | **2020-08-27** |
| **ISSUE DATE** | : | **2020-09-15** |

## Equipment Under Test (EUT) Description

| | |
|---|---|
| **EUT Type:** | IRIS FLOW Headphones |
| **Hardware Version:** | N/A |
| **Software Version:** | N/A |
| **Antenna Type:** | FPC Antenna |
| **Antenna Gain:** | 3.2 dBi |
| **For BT:** | |
| **Frequency Bands:** | 2402MHz ~ 2480MHz |
| **Modulation Mode:** | GFSK, π /4-DQPSK, 8-DPSK |
| **For BLE:** | |
| **Frequency Bands:** | 2402MHz ~ 2480MHz |
| **Modulation Mode:** | GFSK |

**Standard Requirement**

According to KDB447498D01 General RF Exposure Guidance v06

4.3.1. Standalone SAR test exclusion considerations

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

**Limits**

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm 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[17]
The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion

**EUT RF Exposure**

**For BT/BLE**

The Max. power (including tune-up tolerance) is 3.0 dBm on the highest channel 2.48 GHz (*)

3.0 dBm logarithmic terms convert to numeric result is nearly 2.0 mW According to the formula. calculate the test exclusion thresholds:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] · [$\sqrt{f(GHz)}$]

*General RF Exposure = (2.0 mW / 5 mm) x $\sqrt{2.48\ GHz}$ = 0.63*                    (1)
SAR requirement:
*S = 3.0*                                                                              (2)
(1) < (2)
So the SAR report is not required.

- End of the Report -