

Sony Global Manufacturing & Operations Corporation EMC/RF Test Laboratory, Main Lab.

8-4 Shiomi Kisarazu-shi Chiba-ken, 292-0834, Japan

Date: March 7, 2022

FCC ID : AK8YY2960

Applicant: Sony Group Corporation

SAR Evaluation Exemption

To whom it may concern,

We, Sony Global Manufacturing & Operations Corporation EMC/RF Test Laboratory, Main Lab., hereby declare that Wireless Gaming Headset, model: YY2960 (FCC ID: AK8YY2960) of Sony Corporation is exempt from RF exposure SAR evaluation, as its output power meets the exclusion limits, stated in FCC Part 2 §2.1093.

According to KDB 447498 D01 (v06), section 4.3.1:

... These test exclusion conditions are based on source-based time-averaged (i.e. frame averaged) maximum conducted output power of the RF channel requiring evaluation, adjusted for tune-up tolerance, and the minimum test separation distance required for the exposure conditions.

... The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances \leq 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] • $[\sqrt{f(GHz)}] \le 3.0$ 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 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.

For above device,

Regarding Bluetooth BR/EDR;

f = 2.48 GHz, distance = 5mm, the max. possible duty cycle = 77.0 % = -1.14 dB,

(* xDH5: The maximum duty cycle of 77.0 % is declared by the client.) the max. possible <u>burst averaged</u> power incl. tune-up tolerance = 6.50 dBm, and the max. possible <u>frame averaged</u> power incl. tune-up tolerance = 6.50 + (-1.14) = 5.36 dBm = 3.43 mW ≈ 3 mW.

Therefore,

3 mW / 5 mm * ($\sqrt{2.48~GHz})$ = 0.9 < 3.0 and no SAR evaluation is required.



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Regarding Bluetooth Low Energy;

f = 2.48 GHz, distance = 5mm,

the max. possible duty cycle = 100 % = 0.00 dB,

the max. possible <u>burst averaged</u> power incl. tune-up tolerance = 4.60 dBm, and the max. possible <u>frame averaged</u> power incl. tune-up tolerance = 4.60 + (0.00) = 4.60 dBm = $2.88 \text{ mW} \approx 3 \text{ mW}$.

Therefore,

3 mW / 5 mm * ($\sqrt{2.48~\mathrm{GHz}})$ = 0.9 < 3.0 and no SAR evaluation is required.

Regarding simultaneous transmission of Bluetooth BR/EDR and Bluetooth Low Energy;

the max. possible frame averaged power incl. tune-up tolerance = 3.43 mW + 2.88 mW = 6.31 mW ≈ 6 mW

Therefore,

6 mW / 5 mm * ($\sqrt{2.48~\mathrm{GHz}})$ = 2.0 < 3.0 and no SAR evaluation is required.

Thank you for your attention to this matter.

Yamada

Sincerely,

Takashi Yamada

Technical Manager

EMC/ RF Test Laboratory Main Lab.

Design Technology Division

Sony Global Manufacturing & Operations Corporation