Date: October 29, 2021

FCC ID : AK8YY2950
Applicant : Sony 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 Noise Canceling Stereo Headset, model: YY2950 (FCC ID: AK8YY2950) 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. <u>frame averaged</u>) 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 ≤ 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
>   · 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 = 83.3 % = -0.79 dB,
　　 (* xDH5: 83.3% = (On time; 625 μs * 5 slots) / (On time + Off time; 625 μs * 6 slots))
　　the max. possible <u>burst averaged</u> power incl. tune-up tolerance = 9.50 dBm, and
　　the max. possible <u>frame averaged</u> power incl. tune-up tolerance = 9.50 + (-0.79) = 8.71 dBm ≈ 7 mW.
Therefore,
　　　　7 mW / 5 mm * (√ 2.48 GHz) = 2.2 < 3.0
and no SAR evaluation is required.

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 = 9.50 dBm, and
　　the max. possible <u>frame averaged</u> power incl. tune-up tolerance = 9.50 + (0.00) = 9.50 dBm ≈ 9 mW.

Therefore,
　　　　9 mW / 5 mm * (√ 2.48 GHz) = 2.8 < 3.0
and no SAR evaluation is required.

Thank you for your attention to this matter.

Sincerely,

Takashi Yamada
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Sony Global Manufacturing & Operations Corporation