

RF Exposure / MPE Calculation

Applicant: Sony Corporation
Type of Equipment: Wireless Noise Canceling Stereo Headset
Model No.: MDR-1000X
FCC ID: AK8MDR1000X

We, Sony Global Manufacturing & Operations Corporation, hereby declare that Wireless Noise Canceling Stereo Headset, model: MDR-1000X (FCC ID: AK8MDR1000X) 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.

KDB 447498 D01 has the following exclusion for portable devices:

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:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] * [\sqrt{f(\text{GHz})}]$
 ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

- $f(\text{GHz})$ 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.

This device has $f = 2.48$ GHz and distance = 5 mm (minimum separation distance: 5mm was used in the calculation) and the measured maximum average output power was 1.28mW.

* Clause 6.3 Low transmission duty factor devices of KDB447498 D01 was applied to this product due to its specification.

Therefore,

$$1.28 / 5 * (\sqrt{2.48}) = 0.40$$

* This is less than 3.0 so no SAR evaluation is required.

Thank you for your attention to this matter.

Sincerely,



Teruki Kurihara
Technical Manager
EMC/ RF Test Laboratory Main Lab.
Design Technology Division
Sony Global Manufacturing & Operations Corporation