

FCC ID: AK8CFIZAS1

To whom it may concern,

We, UL Japan, Inc, hereby declare that Wireless Arcade Stick Controller, model: CFI-ZAS1 (FCC ID: AK8CFIZAS1) of Sony Interactive Entertainment Inc. is exempt from RF exposure SAR evaluation because the available maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold P_{th} (mW) described in the following formula according to the Code of Federal Regulation title 47 section 1.1307(b)(3)(i)(B). This method is used at separation distances d (cm) from 0.5 centimeters to 40 centimeters and at frequencies from 0.3 GHz to 6 GHz (inclusive) for single RF sources. P_{th} is given by:

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d / 20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases}$$

Where

$$x = -\log_{10} \left(\frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right) \text{ and } f \text{ is in GHz}$$

$$ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases}$$

When the minimum separation distance is shorter than 0.5 cm, 0.5 cm is applied.

The SAR evaluation exemption threshold is calculated as below.

For 10-g extremity SAR test exemption, P_{th} is applied a factor of 2.5 to the SAR-based exemption thresholds.

[2.4 GHz proprietary part]

Body

P_{th} (mW)	22.05
f (GHz)	2.47435
$ERP_{20 \text{ cm}}$ (mW)	3060
d (cm)	1.5

 d : Rear side(10.34 mm) + Separation distance(5 mm)

Conducted Power (dBm)	4.77
(mW)	3.00
Antenna Gain (dBi)	2.47
EIRP (dBm)	7.24
ERP (dBm)	5.10
(mW)	3.24

Extremity

P_{th} (mW)	25.45
f (GHz)	2.47435
$ERP_{20 \text{ cm}}$ (mW)	3060
d (cm)	1.0

 d : Rear side(10.34 mm)

The Maximum time-averaged power or ERP whichever greater is 3.3 mW.
(Rounded up to two decimals place)

[Bluetooth (BR / EDR) part]**Body**

<i>P</i> _{th} (mW)	14.39
<i>f</i> (GHz)	2.48
<i>ERP</i> _{20 cm} (mW)	3060
<i>d</i> (cm)	1.2

d : Rear side(7.79 mm) + Separation distance(5 mm)

Extremity

<i>P</i> _{th} (mW)	12.88
<i>f</i> (GHz)	2.48
<i>ERP</i> _{20 cm} (mW)	3060
<i>d</i> (cm)	0.7

d : Rear side(7.79 mm)

Conducted Power	(dBm)	2.00
	(mW)	1.58
Antenna Gain	(dBi)	5.09
EIRP	(dBm)	7.09
ERP	(dBm)	4.95
	(mW)	3.13

The Maximum time-averaged power or ERP whichever greater is 3.2 mW.

(Rounded up to two decimals place)

Even considering the tolerance, this device can be satisfied with the threshold.

Thank you for your attention to this matter.



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Leader