

RF EXPOSURE REPORT

FCC ID: X5B-500238

Report Reference No. : 23EFSS04011 02591

Date of issue : 2023-04-28

Applicant's name..... : PERFORMANCE DESIGNED PRODUCTS, LLC

Address..... : 14144 Ventura Blvd, Suite 200 Sherman. Oaks CA
91423 United States Of America

Manufacturer..... : PERFORMANCE DESIGNED PRODUCTS, LLC

Equipment..... : AFTERGLOW WAVE WIRELESS CONTROLLER
FOR Nintendo Switch

Trade Mark..... : /

Model : 500-238

Ratings..... : Input: DC 5V Charged
DC 3.7V Li-ion Battery

Testing Laboratory : DongGuan ShuoXin Electronic Technology Co., Ltd.

Address..... : Zone A, 1F, No. 6, XinGang Road YuanGang Street,
XinAn District, ChangAn Town, DongGuan City,
GuangDong, China

According : KDB 447498 D04 Interim General RF Exposure Guidance v01

Test Engineer:



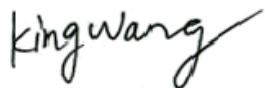
Blue Qiu

Responsible Engineer :



Smile Wang

Authorized Signatory:



King Wang

MPE CALCULATION METHOD:

$$P_{th} \text{ (mW)} = ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases} \quad (\text{B.1})$$

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases} \quad (\text{B.2})$$

where

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

and f is in GHz, d is the separation distance (cm), and $ERP_{20 \text{ cm}}$ is per Formula (B.1). The example values shown in Table B.2 are for illustration only.

Table B.2—Example Power Thresholds (mW)

Frequency (MHz)	Distance (mm)									
	5	10	15	20	25	30	35	40	45	50
300	39	65	88	110	129	148	166	184	201	217
450	22	44	67	89	112	135	158	180	203	226
835	9	25	44	66	90	116	145	175	207	240
1900	3	12	26	44	66	92	122	157	195	236
2450	3	10	22	38	59	83	111	143	179	219
3600	2	8	18	32	49	71	96	125	158	195
5800	1	6	14	25	40	58	80	106	136	169

Antenna gain = 1.63dBi

MAX Output Power : 3.073dBm@2402MHz

ERP=3.073+1.63-2.15=2.553dBm

WORSE CASE:

$10^{-0.2553} = 0.7008 \text{ mW} < 1.800 \text{ mW}$

Then SAR evaluation is not required

END