

TEST REPORT

Maximum Permissive Exposure

for

Products Name: Ai mobile power bank

Model No.: Ai1, BFPB4

FCC ID: 2A48S-AI1

Report No.: SST2508E1169

Issued Date: August 7, 2025

Issued for

Shenzhenshi weiduli Technology Co.,Ltd.

4h Floor, Building 4, Dejin industrial Zone, No. 40, Fuyuan 1st Road, Heping Community, Fuhai Street, Bao'an District Shenzhen, China

Issued by

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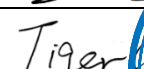
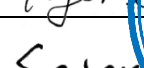
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Table of Contents

1.	BASIC INTRODUCTION	3
2.	RF EXPOSURE EVALUATION MAXIMUM PERMISSIBLE EXPOSURE (MPE)	4
2.1	INTRODUCTION	4
2.2	MPE CALCULATION.....	5
3	CONCLUSION	5

1. Basic Introduction

Applicant's name :	Shenzhenwei weiduli Technology Co.,Ltd.	
Address	4h Floor, Building 4, Dejin industrial Zone, No. 40, Fuyuan 1st Road, Heping Community, Fuhai Street, Bao'an District Shenzhen, China	
Manufacturer's name	Shenzhenwei weiduli Technology Co.,Ltd.	
Address	4h Floor, Building 4, Dejin industrial Zone, No. 40, Fuyuan 1st Road, Heping Community, Fuhai Street, Bao'an District Shenzhen, China	
Factory's name	Shenzhenwei weiduli Technology Co.,Ltd.	
Address	4h Floor, Building 4, Dejin industrial Zone, No. 40, Fuyuan 1st Road, Heping Community, Fuhai Street, Bao'an District Shenzhen, China	
Products Name :	Ai mobile power bank	
Model No. :	Ai1, BFPB4	
Trade Mark	/	
Rating(s) :	Battery Capacity: 5000mAh Type-C IN: DC 5V-3A, 9V-2A Type-C Out: DC 5V-3A, 9V-2.22A, 12V-1.67A Wireless charger Out: 5W/7.5W/10W/15W	
Software version :	/	
Hardware version	/	
Operation frequency :	2402MHz ~ 2480MHz	
Channel numbers	40	
Channel separation	2MHz	
Modulation technology:	GFSK	
Antenna type	PCB ANT	
Antenna gain	-0.68dBi	
Date of sample receipt :	July 18, 2025	
Date of Test :	July 18~August 6, 2025	
Standard(s)	FCC 47 CFR PART 1.1310 FCC 47 CFR PART 1.1307 KDB 447498 D04	
Tested by (+signature) :	Bo Li	
Check by (+signature) :	Tiger Chen	
Approved by (+signature) :	Seven Zhan	



2. RF EXPOSURE EVALUATION MAXIMUM PERMISSIBLE EXPOSURE (MPE)

2.1 Introduction

This document is prepared to show compliance with the RF Exposure requirements as required in §1.1310 of the FCC Rules and Regulations and RSS-102 of Industry Canada.

The limit for maximum permissible exposure(MPE), specific in §1.1307 of the FCC Rules and KDB 447498 D04 were list in below

The available maximum time-averaged power is no more than 1 mW, regardless of separation distance.

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.

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

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

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)

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

For multiple RF sources

$$\sum_{i=1}^a \frac{P_i}{P_{th,i}} + \sum_{j=1}^b \frac{ERP_j}{ERP_{th,j}} + \sum_{k=1}^c \frac{Evaluated_k}{Exposure Limit_k} \leq 1$$

2.2 MPE Calculation

Type	Frequency (MHz)	Antenna Gain (dBi)	Output power (dBm)	Output power (mW)	ERP (dBm)	ERP (mW)	Limit (mW, d=0.5cm)	Ratio (%)	Result
BLE	2402	-0.68	3.2	2.089	0.37	1.089	2.8	74.95	PASS

Note: The available RF source will be Maximum time-averaged power or ERP, whichever is greater.

$P_{th} = 3060 * (d/20)^x$, where x is $-\log_{10}(60/3060 * \sqrt{F, \text{ in GHz}})$;

eg: $3060 * (0.5/20)^{-\log_{10}(60/3060 * \sqrt{2.402})} = 2.8$

Bluetooth and wireless power transfer not work in Synchronous

3 Conclusion

The device meets the portable RF exposure limit at a minimum separation distance as specified in §2.1093 of the FCC Rules and Regulations and Health Canada Safety Code 6. An appropriate RF exposure compliance statement will be placed in the user's manual.

*****End of report*****