

TEST REPORT

Maximum Permissive Exposure

for

Products Name: MIDI CONTROLLER

Model No.: STARRYPAD PRO, STARRYPAD, STARRYPAD MINI,
STARRYKEY-37 PLAY, POCKET FM

FCC ID: 2AV7N-STARRYPADLINE

Report No.: SST2606E147

Issued Date: Jun. 12, 2026

Issued for

GUANGZHOU RANTION TECHNOLOGY CO., LTD.

Room 7002 and 7003, 7th Floor, Digital Entertainment Industrial Park, Greater Bay Area, No.28 Huangpu Park
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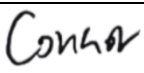
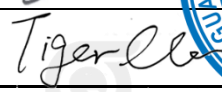
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1. Basic Introduction

Applicant's name..... :	GUANGZHOU RANTION TECHNOLOGY CO., LTD.	
Address	Room 7002 and 7003, 7th Floor, Digital Entertainment Industrial Park, Greater Bay Area, No.28 Huangpu Park West Road, Huangpu District, Guangzhou, China	
Manufacturer's name	GUANGZHOU RANTION TECHNOLOGY CO., LTD.	
Address	Room 7002 and 7003, 7th Floor, Digital Entertainment Industrial Park, Greater Bay Area, No.28 Huangpu Park West Road, Huangpu District, Guangzhou, China	
Products Name..... :	MIDI CONTROLLER	
Model No..... :	STARRYPAD PRO, STARRYPAD, STARRYPAD MINI, STARRYKEY-37 PLAY, POCKET FM	
Trade Mark	DONNER, MouKey, Eastar	
Rating(s)..... :	Rechargeable Li-ion Battery DC 3.7V	
Operation frequency	2402MHz ~ 2480MHz	
Channel numbers	40	
Channel separation	2MHz	
Modulation technology	GFSK	
Antenna type..... :	PCB antenna	
Antenna gain..... :	0.67dBi	
Date of sample receipt..... :	Jun. 03, 2026	
Date of Test..... :	Jun. 03, 2026 ~ Jun. 12, 2026	
Standard(s)	FCC 47 CFR PART 1.1310 FCC 47 CFR PART 1.1307 KDB 447498 D04	
Tested by (+signature)..... :	Connor Ma	
Check by (+signature)..... :	Davis Zhou	
Approved by (+signature).... :	Tiger Chen	



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.

The limit for maximum permissible exposure(MPE), specific in §1.1307of 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)

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

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	2440	0.67	3.20	2.09	1.72	1.49	2.75	54.18	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: $3060 * (0.5/20)^{-(-\log_{10}(60/3060 * \sqrt{2.44}))} = 2.75$

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. An appropriate RF exposure compliance statement will be placed in the user's manual.

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