TEST REPORT

Product Name	:	ONN.BT EARBUD
Brand Mark	:	onn.
Model No.	:	AABLK100074910
Extension Model	:	SMBT-0972A;AABLU100074910; AALAV100074910; AALGW100074910
FCC ID	:	2ADZH-ONN28871
Report Number	:	BLA-EMC-202208-A0403
Date of Sample Receipt	:	2022/8/1
Date of Test	:	2022/8/1 to 2022/8/11
Date of Issue	:	2022/8/11
Test Standard	:	47 CFR Part 15, Part1.1307 47 CFR Part 15, Part2.1093 KDB447498D04 General RF Exposure Guidance v01
Test Result	:	Pass

Prepared for:

Dongguan Siyoto Electronics Co., Ltd.
No.10 North 7th Street, Qiaodong road, Qiaotou town, Dongguan, Guangdong, China

Prepared by:

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Approved by: Blue Zhong

Date: 2022/8/11

BlueAsia of Technical Services(Shenzhen) Co., Ltd. BLA

REPORT REVISE RECORD

Version No.	Date	Description
00	2022/8/11	Original

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1 TEST SUMMARY

Test item	Test Requirement	Test Method	Class/Severity	Result
RF Exposure	47 CFR Part 1.1307, Part 2.1093, KDB 447498	CFR 47 Part 2.1093	CFR 47 Part 2.1093	PASS

2 GENERAL INFORMATION

Applicant	Dongguan Siyoto Electronics Co., Ltd.
Address	No.10 North 7th Street, Qiaodong road, Qiaotou town, Dongguan, Guangdong, China
Manufacturer	SIYOTO VINA ELECTRONICS CO., LTD
Address	Lot CN 15.1, Le Chan Street, Chau Son Industrial Park, Le Hong Phong Ward, Phu Ly City, Ha Nam Province, Vietnam
Factory	SIYOTO VINA ELECTRONICS CO., LTD
Address	Lot CN 15.1, Le Chan Street, Chau Son Industrial Park, Le Hong Phong Ward, Phu Ly City, Ha Nam Province, Vietnam
Product Name	ONN.BT EARBUD
Test Model No.	AABLK100074910
Extension Model	SMBT-0972A;AABLU100074910;AALAV100074910; AALGW100074910
Remark	All above models are identical in the same PCB layout, interior structure and electrical circuits. The differences are model name for commercial purpose.

3 GENERAL DESCRIPTION OF E.U.T.

Hardware Version	V0.2
Software Version	V016
Bluetooth version	V5.3

Operation Frequency:	2402MHz-2480MHz
Modulation Type:	GFSK, pi/4DQPSK
Channel Spacing:	1MHz
Number of Channels:	79
Antenna Type:	Onboard Antenna
Antenna Gain:	0dBi(Provided by the customer)

4 LABORATORY LOCATION

All tests were performed at:
BlueAsia of Technical Services(Shenzhen) Co., Ltd.
Building C, No. 107, Shihuan Road, Shiyan Sub-District, Baoan District, Shenzhen, Guangdong Province, China
Telephone: TEL: +86-755-28682673 FAX: +86-755-28682673
No tests were sub-contracted.

5 RF EXPOSURE COMPLIANCE REQUIREMENT

5.1 RF EXPOSURE COMPLIANCE REQUIREMENT

Standard Requirement

According to 447498 D04 Interim General RF Exposure Guidance v01

Standalone SAR test exclusion considerations

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

Limits

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

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).

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

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

EIRP = pt x gt = (EXd)2/30
where:
pt = transmitter output power in watts,
gt = numeric gain of the transmitting antenna (unitless),
E = electric field strength in V/m, --- 10((dBuV/m)/20)/106
d = measurement distance in meters (m)---3m
Sopt = (EXd)2/30 x gt

Ant gain = 0 dBi
Max Output power =0.843dBm @ 2402MHz
ERP = 0.843dBm+0dBi-2.15=-1.307dBm
So
ERP is worse case
10^0.0843=1.214 mW < 2.79 mW
Then SAR evaluation is not required

----END OF REPORT----