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Report Template Version: V03

Report Template Revision Date: Mar.1st, 2017

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# **RF Exposure Evaluation Report**

**Report No.:** CQASZ20180400045E-03

**Applicant:** 1MORE INC.

Address of Applicant: Tianliao Building F14 East Block (New Materials Industrial Park), Xueyuan Road,

Nanshan District, Shenzhen, China

Manufacturer: 1MORE Shen Zhen Acoustic Technology Co., Ltd.

Address of Tianliao Building 1403-1411, Zone A Tianliao Industrial Park, Taoyuan Street,

Manufacturer: Nanshan District, Shenzhen, P.R. China

**Equipment Under Test (EUT):** 

**Product:** 1MORE Triple Driver BT In-Ear Headphones

Model No.: E1001BT Brand Name: 1MORE

 FCC ID:
 2AF8ZE1001BT

 Standards:
 47 CFR Part 1.1307

47 CFR Part 2.1093

KDB447498D01 General RF Exposure Guidance v06

**Date of Test:** 2018-04-25 to 2018-07-04

**Date of Issue:** 2018-07-04

Test Result : PASS\*

Tested By:

(Aaron Ma)

(Aaron Ivia)

Reviewed By: Wen Mou

Owen Zhou)

Approved By:



The test report is effective only with both signature and specialized stamp, The result(s) shown in this report refer only to the sample(s) tested. Without written approval of CQA, this report can't be reproduced except in full.

<sup>\*</sup> In the configuration tested, the EUT complied with the standards specified above.



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# 2 Version

# **Revision History Of Report**

Report No.	Version	Description	Issue Date
CQASZ20180400045E-03	Rev.01	Initial report	2018-07-04





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# 4 General Information

### 4.1 Client Information

Applicant:	1MORE INC.	
Address of Applicant:	Tianliao Building F14 East Block (New Materials Industrial Park), Xueyuai Road, Nanshan District, Shenzhen, China	
Manufacturer:	1MORE Shen Zhen Acoustic Technology Co., Ltd.	
Address of Manufacturer:	Tianliao Building 1403-1411, Zone A Tianliao Industrial Park, Taoyuan Street, Nanshan District, Shenzhen, P.R. China	

# 4.2 General Description of EUT

Product Name:	1MORE Triple Driver BT In-Ear Headphones	
Model No.:	E1001BT	
Trade Mark:	1MORE	
Hardware Version:	V1.0	
Software Version:	V1.0	
Operation Frequency:	2402MHz~2480MHz	
Bluetooth Version:	V4.1	
Modulation Type:	BT classic: GFSK, π/4DQPSK, 8DPSK BLE: GFSK	
Number of Channel:	BT classic:79 BLE:40	
Sample Type:	portable production	
Test Software of EUT:	Non Signaling Test Tool (manufacturer declare )	
Antenna Type:	Ceramic antenna	
Antenna Gain:	2.72dBi	
Power Supply:	lithium battery:DC3.7V 160mAh, Charge by DC5.0V	





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### 5 SAR Evaluation

### **5.1** RF Exposure Compliance Requirement

### 5.1.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v06

4.3.1. 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.

#### **5.1.2 Limits**

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)]  $\cdot [\sqrt{f(GHz)}] \le 3.0$  for 1-g SAR and  $\le 7.5$  for 10-g extremity SAR, where

f(GHz) is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation<sup>17</sup>

The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is  $\leq 50$  mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion

### 5.1.3 EUT RF Exposure

For BT: Measurement Data

GFSK mode		
Test channel	Peak Output Power (dBm)	
Lowest	2.900	
Middle	2.880	
Highest	3.110	
π/4DQPSK mode		
Test channel	Peak Output Power (dBm)	
Lowest	4.920	
Middle	4.740	
Highest	4.940	
8DPSK mode		
Test channel	Peak Output Power (dBm)	
Lowest	Lowest 5.380	
Middle	Middle 5.180	
Highest	5.370	

Remark: The Conducted Peak Output Power data refer to report Report No.: CQASZ20180400045E-01



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#### For BLE:

#### **Measurement Data**

GFSK mode	
Test channel	Peak Output Power (dBm)
Lowest	-4.91
Middle	-3.67
Highest	-4.02

Remark: The Conducted Peak Output Power data refer to report Report No.: CQASZ20180400045E-02

BDR, EDR and BLE can not simultaneous transmitting at same time.

The worst case data: 8DPSK\_lowest channel

The Max Conducted Peak Output Power is 5.38dBm in lowest channel(2.402GHz);

The best case gain of the antenna is 2.72dBi.

EIRP= 5.38dBm + 2.72dBm= 8.1dBm

8.1dBm logarithmic terms convert to numeric result is nearly 6.46mW

According to the formula. calculate the EIRP test result:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)]  $\cdot [\sqrt{f(GHz)}]$ 

General RF Exposure =  $(6.46 \text{mW} / 5 \text{ mm}) \times \sqrt{2.402 \text{GHz}} = 2.0$  ①

SAR requirement:

S = 3.0

2;

1 < 2.

So the SAR report is not required.