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# RF Exposure Evaluation Report

**Report No. :** CQASZ20190900985E-02  
**Applicant:** Moya Communication Technology (Shenzhen) Co.,Ltd.  
**Address of Applicant:** Guang Hui Science Park, No.17 of Min Qing Road, Longhua District, Shenzhen  
**Equipment Under Test (EUT):**  
**EUT Name:** Helmet Bluetooth Headset  
**All Model No.:** M2, M2S, M3, M3S  
**Test Model No.:** M2  
**Brand Name:** MAXTO  
**FCC ID:** 2ATZP-MAXTO-M2  
**Standards:** 47 CFR Part 1.1307  
47 CFR Part 1.1310  
KDB447498D01 General RF Exposure Guidance v06  
**Date of Receipt:** 2019-09-27  
**Date of Test:** 2019-09-27 to 2019-10-11  
**Date of Issue:** 2019-10-12  
**Test Result :** **PASS\***

\*In the configuration tested, the EUT complied with the standards specified above

**Tested By:**

*Tom Chen.*

(Tom Chen)

**Reviewed By:**

*Sheek, Luo*

(Sheek Luo)

**Approved By:**

*Jack Ai*

( Jack Ai)



## 1 Version

### Revision History Of Report

Report No.	Version	Description	Issue Date
CQASZ20190900985E-02	Rev.01	Initial report	2019-10-12

## 2 Contents

	Page
1 VERSION.....	2
2 CONTENTS.....	3
3 GENERAL INFORMATION.....	4
3.1 CLIENT INFORMATION.....	4
3.2 GENERAL DESCRIPTION OF EUT.....	4
4 SAR EVALUATION.....	5
4.1 RF EXPOSURE COMPLIANCE REQUIREMENT.....	5
4.1.1 <i>Standard Requirement</i> .....	5
4.1.2 <i>Limits</i> .....	5
4.1.3 <i>EUT RF Exposure</i> .....	6

### 3 General Information

#### 3.1 Client Information

Applicant:	Moya Communication Technology (Shenzhen) Co.,Ltd.
Address of Applicant:	Guang Hui Science Park, No.17 of Min Qing Road, Longhua District, Shenzhen
Manufacturer:	Moya Communication Technology (Shenzhen) Co.,Ltd.
Address of Manufacturer:	Guang Hui Science Park, No.17 of Min Qing Road, Longhua District, Shenzhen

#### 3.2 General Description of EUT

Product Name:	Helmet Bluetooth Headset
All Model No.:	M2, M2S, M3, M3S
Test Model No.:	M2
Trade Mark:	MAXTO
Hardware Version:	V02
Software Version:	V1.0
Operation Frequency:	2402MHz~2480MHz
Bluetooth Version:	V5.0
Modulation Technique:	Frequency Hopping Spread Spectrum(FHSS)
Modulation Type:	GFSK, $\pi/4$ DQPSK, 8DPSK
Transfer Rate:	1Mbps/2Mbps/3Mbps
Number of Channel:	79
Hopping Channel Type:	Adaptive Frequency Hopping systems
Product Type:	<input type="checkbox"/> Mobile <input checked="" type="checkbox"/> Portable <input type="checkbox"/> Fix Location
Test Software of EUT:	Blue test 3 (manufacturer declare )
Antenna Type:	Integral antenna
Antenna Gain:	2dBi
Power Supply:	lithium battery:DC3.7V, Charge by DC5.0V

Note:

All model No.: M2, M2S, M3, M3S

Only the model M2 was tested, since the electrical circuit design, layout, components used and internal wiring were identical for the above models, with difference being appearance and model name.

## 4 SAR Evaluation

### 4.1 RF Exposure Compliance Requirement

#### 4.1.1 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.

#### 4.1.2 Limits

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

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

$f(\text{GHz})$  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

### 4.1.3 EUT RF Exposure

#### Measurement Data

GFSK mode				
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(2402MHz)	3.660	4±1	5	3.162
Middle(2441MHz)	4.330	4±1	5	3.162
Highest(2480MHz)	4.880	4±1	5	3.162
π/4DQPSK mode				
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(2402MHz)	4.740	5±1	6	3.981
Middle(2441MHz)	5.160	5±1	6	3.981
Highest(2480MHz)	5.570	5±1	6	3.981
8DPSK mode				
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(2402MHz)	4.980	5±1	6	3.981
Middle(2441MHz)	5.480	5±1	6	3.981
Highest(2480MHz)	5.600	5±1	6	3.981

Worst case: 8DPSK						
Channel	Maximum Peak Conducted Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune- up Power		Calculated value	Exclusion threshold
			(dBm)	(mW)		
Lowest (2402MHz)	4.980	5±1	6	3.981	1.23	3.0
Middle (2441MHz)	5.480	5±1	6	3.981	1.24	
Highest (2480MHz)	5.600	5±1	6	3.981	1.25	
Conclusion: the calculated value ≤3.0, SAR is exempted.						

Remark: The Max Conducted Peak Output Power data refer to report Report No.: CQASZ20190900985E-01