

TEST REPORT

Product Name: True wireless headphones

Trade Mark:  or PHILIPS

Model No./HVIN: TAT3217LC

Add. Model No.: TAT3217, TAT3217LCxx/yy (xx=AA-ZZ or blank denoted different color; yy=00-99 denoted different country destination)

Report Number: 211106069RFC-1R1

Test Standards: FCC 47 CFR Part 15 Subpart C
RSS-247 Issue 2
RSS-Gen Issue 5

FCC ID: 2AR2STAT3217LC

IC: 24589-TAT3217LC

Test Result: PASS

Date of Issue: January 6, 2022

Prepared for:

MMD Hong Kong Holding Limited
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Prepared by:

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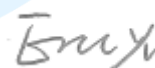
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January 6, 2022

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UTTR-RF-RSS247-V1.1

Version

| Version No. | Date | Description |
|-------------|-------------------|---------------------------------------|
| V1.0 | December 22, 2021 | Original (Report no.: 211106069RFC-1) |
| V1.1 | January 6, 2022 | Add the model TAT3217 |



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1. GENERAL INFORMATION

1.1 CLIENT INFORMATION

| | |
|---------------------------------|---|
| Applicant: | MMD Hong Kong Holding Limited |
| Address of Applicant: | Unit 1006, 10th Floor, C-Bons International Center, 108 Wai Yip Street, Kwun Tong, Kowloon, Hong Kong |
| Manufacturer: | MMD Hong Kong Holding Limited |
| Address of Manufacturer: | Unit 1006, 10th Floor, C-Bons International Center, 108 Wai Yip Street, Kwun Tong, Kowloon, Hong Kong |

1.2 EUT INFORMATION

1.2.1 General Description of EUT

| | | |
|--|---|---------------|
| Product Name: | True wireless headphones | |
| Model No. /HVIN: | TAT3217LC | |
| Add. Model No.: | TAT3217, TAT3217LCxx/yy (xx=AA-ZZ or blank denoted different color; yy=00-99 denoted different country destination) | |
| Sample No.: | 211106065-B02/2(Conducted) 211106065-C01/2(Radiated) | |
| Trade Mark: |  or PHILIPS | |
| DUT Stage: | Production Unit | |
| EUT Supports Function: | 2.4 GHz ISM Band: | Bluetooth 5.2 |
| Software Version: | V220.02.01 | |
| Hardware Version: | V1.2 | |
| Sample Received Date: | November 19, 2021 | |
| Sample Tested Date: | December 6, 2021 to December 15, 2021 | |
| Note: The additional model TAT3217, TAT3217LCxx/yy (xx=AA-ZZ or blank denoted different color; yy=00-99 denoted different country destination) is identical with the test model TAT3217LC except the model number for marketing purpose. | | |

1.2.2 Description of Accessories

| Cable | |
|---------------------|----------------------------|
| Description: | USB Type-C Plug Cable |
| Cable Type: | Unshielded without ferrite |
| Length: | 0.65 Meter |

| Battery (Charging case) | |
|--------------------------------|----------------------------------|
| Model No.: | 901535 |
| Battery Type: | Lithium-ion Rechargeable Battery |
| Rated Voltage: | 3.7 Vdc |
| Limited Charge Voltage: | 4.2 Vdc |
| Rated Capacity: | 460mAh |

| Battery (Earbud) | |
|--------------------------------|----------------------------------|
| Model No.: | WEL 501012 |
| Battery Type: | Lithium-ion Rechargeable Battery |
| Rated Voltage: | 3.7 Vdc |
| Limited Charge Voltage: | 4.2 Vdc |
| Rated Capacity: | 40mAh |

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1.3 PRODUCT SPECIFICATION SUBJECTIVE TO THIS STANDARD

| | | | |
|----------------------|---|----|----------|
| Frequency Band: | 2400 MHz to 2483.5 MHz | | |
| Frequency Range: | 2402 MHz to 2480 MHz | | |
| Bluetooth Version: | Bluetooth LE | | |
| Type of Modulation: | GFSK | | |
| Number of Channels: | 40 | | |
| Channel Separation: | 2 MHz | | |
| Antenna Type: | Chip Antenna | | |
| Antenna Gain: | Left earbud: 2.62 dBi Right earbud: 1.90 dBi | | |
| Maximum Peak Power: | Left Earbud | LE | 7.0 dBm |
| | Right Earbud | LE | 5.54 dBm |
| Normal Test Voltage: | 3.7 Vdc | | |

1.4 OTHER INFORMATION

| Operation Frequency Each of Channel | |
|--|-----------------------------------|
| $f = 2402 + 2k \text{ MHz, } k = 0, \dots, 39$ | |
| Note: | |
| f | is the operating frequency (MHz); |
| k | is the operating channel. |

1.5 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested with associated equipment below.

1) Support Equipment

| Description | Manufacturer | Model No. | Serial Number | Supplied by |
|-------------|--------------|-----------|---------------|-------------|
| Notebook | Lenovo | E450 | SL10G10780 | UnionTrust |
| Mouse | DELL | MS111 | CN-011D3V-738 | UnionTrust |

2) Support Cable

| Cable No. | Description | Connector | Length | Supplied by |
|-----------|---------------|-----------|------------|-------------|
| 1 | Antenna Cable | SMA | 0.10 Meter | UnionTrust |
| 2 | serial port | USB | 0.50 Meter | UnionTrust |

1.6 TEST LOCATION

Shenzhen UnionTrust Quality and Technology Co., Ltd.

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1.7 TEST FACILITY

The test facility is recognized, certified, or accredited by the following organizations:

CNAS-Lab Code: L9069

The measuring equipment utilized to perform the tests documented in this report has been calibrated once a year or in accordance with the manufacturer's recommendations, and is traceable under the ISO/IEC 17025 to international or national standards. Equipment has been calibrated by accredited calibration laboratories.

A2LA-Lab Certificate No.: 4312.01

Shenzhen UnionTrust Quality and Technology Co., Ltd. has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

ISED Wireless Device Testing Laboratories

CAB identifier: CN0032

FCC Accredited Lab.

Designation Number: CN1194

Test Firm Registration Number: 259480

1.8 DEVIATION FROM STANDARDS

None.

1.9 ABNORMALITIES FROM STANDARD CONDITIONS

None.

1.10 OTHER INFORMATION REQUESTED BY THE CUSTOMER

None.

1.11 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the Product as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

| No. | Item | Measurement Uncertainty |
|-----|-----------------------------------|--------------------------|
| 1 | Conducted emission 9KHz-150KHz | ±3.2 dB |
| 2 | Conducted emission 150KHz-30MHz | ±2.7 dB |
| 3 | Radiated emission 9KHz-30MHz | ± 4.7 dB |
| 4 | Radiated emission 30MHz-1GHz | ± 4.6 dB |
| 5 | Radiated emission 1GHz-18GHz | ± 4.4 dB |
| 6 | Radiated emission 18GHz-26GHz | ± 4.6 dB |
| 7 | Radiated emission 26GHz-40GHz | ± 4.6 dB |
| 8 | RF Power, Conducted | ± 0.69 dB |
| 9 | Transmission Time | ± 0.19 % |
| 10 | Occupied Bandwidth | ± 1.86 % |
| 11 | Power Spectral Density, conducted | ± 0.6 dB |
| 12 | Radio Frequency | ± 6.5 x 10 ⁻⁸ |
| 13 | Conducted out of band emission | ± 2.7 dB |

2. TEST SUMMARY

| Test Cases | | | |
|--|--|--|------------------|
| Test Item | Test Requirement | Test Method | Result |
| Antenna Requirement | FCC 47 CFR Part 15 Subpart C Section 15.203/15.247 (c) RSS-Gen Issue 5, Section 6.8 | N/A | PASS |
| AC Power Line Conducted Emission | FCC 47 CFR Part 15 Subpart C Section 15.207 RSS-Gen Issue 5, Section 8.8 | ANSI C63.10-2013 Clause 6.2 | N/A NOTE 2 |
| Conducted Peak Output Power | FCC 47 CFR Part 15 Subpart C Section 15.247 (b)(3) RSS-247 Issue 2, Section 5.4(d) | ANSI C63.10-2013 Clause 11.9.1.3 | VERIFIED (NOTE3) |
| 6dB Bandwidth | FCC 47 CFR Part 15 Subpart C Section 15.247 (a)(2) RSS-247 Issue 2, Section 5.2(a) | ANSI C63.10-2013 Clause 11.8.1 | VERIFIED (NOTE3) |
| Occupied Bandwidth | RSS-Gen Issue 5, Section 6.7 | RSS-Gen Issue 5, Section 6.7 | VERIFIED (NOTE3) |
| Power Spectral Density | FCC 47 CFR Part 15 Subpart C Section 15.247 (e) RSS-247 Issue 2, Section 5.2(b) | ANSI C63.10-2013 Clause 11.10.2 | VERIFIED (NOTE3) |
| Conducted Out of Band Emission | FCC 47 CFR Part 15 Subpart C Section 15.247(d) RSS-247 Issue 2, Section 5.5 | ANSI C63.10-2013 Clause 11.11 | VERIFIED (NOTE3) |
| Radiated Spurious Emissions | FCC 47 CFR Part 15 Subpart C Section 15.205/15.209 RSS-Gen Issue 5, Section 6.13/8.9/8.10 | ANSI C63.10-2013 Clause 11.11 & Clause 11.12 | VERIFIED (NOTE3) |
| Band Edge Measurements (Radiated) | FCC 47 CFR Part 15 Subpart C Section 15.205/15.209 RSS-247 Issue 2, Section 5.5 | ANSI C63.10-2013 Clause 11.13 | VERIFIED (NOTE3) |
| Note: 1) N/A: In this whole report not applicable. 2) This EUT is charged by AC adapter to the battery, when charging, it doesn't transmitting while charging. 3) This report is based on the original report add the model, after evaluation, no need to retest, all test items (test data) refer to the original report no. 211106069RFC-1 Issued December 22, 2021. | | | |

*** End of Report ***

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