# **FCC RF Test Report**

APPLICANT : Xiaomi Communications Co., Ltd.

**EQUIPMENT**: Mobile Phone

BRAND NAME : Redmi

MODEL NAME : M1901F7H

FCC ID : 2AFZZ-RMSF7H

STANDARD : FCC Part 15 Subpart E §15.407

**CLASSIFICATION**: (NII) Unlicensed National Information Infrastructure

This is a data re-used report which is only valid together with the original test report. We, Sporton International (Kunshan) Inc., would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International (Kunshan) Inc., the test report shall not be reproduced except in full.



Approved by: James Huang / Manager

## Sporton International (Kunshan) Inc.

No. 1098, Pengxi North Road, Kunshan Economic Development Zone, Jiangsu Province 215335, China

Sporton International (Kunshan) Inc.

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Report No.: FR8O2308-01D

Report Version : Rev. 01

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### **APPENDIX A. REFERENCE REPORT**

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# **REVISION HISTORY**

| REPORT NO.   | VERSION | DESCRIPTION             | ISSUED DATE   |
|--------------|---------|-------------------------|---------------|
| FR8O2308-01D | Rev. 01 | Initial issue of report | Jan. 23, 2019 |
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# 1 General Description

# 1.1 Applicant

### Xiaomi Communications Co., Ltd.

The Rainbow City of China Resources, NO.68, Qinghe Middle Street, Haidian District, Beijing, China

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### 1.2 Manufacturer

### Xiaomi Communications Co., Ltd.

The Rainbow City of China Resources, NO.68, Qinghe Middle Street, Haidian District, Beijing, China

### 1.3 Product Feature of Equipment Under Test

| Product Feature                 |  |  |
|---------------------------------|--|--|
| Equipment                       | Mobile Phone   |  |
| Brand Name                      | Redmi  |  |
| Model Name                      | M1901F7H   |  |
| FCC ID                          | 2AFZZ-RMSF7H   |  |
| EUT supports Radios application | GSM/GPRS/EGPRS/WCDMA/HSPA/<br>DC-HSDPA/HSPA+/LTE<br>WLAN 2.4GHz 802.11b/g/n HT20<br>WLAN 5GHz 802.11a/n HT20/HT40<br>WLAN 5GHz 802.11ac VHT20/VHT40/VHT80<br>Bluetooth BR/EDR/LE |  |
| HW Version                      | P2   |  |
| SW Version                      | MIUI10   |  |
| EUT Stage                       | Identical Prototype  |  |

### Remark:

The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

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# 1.4 Product Specification of Equipment Under Test

| Standards-related Product Specification |  |  |  |
|---|--|--|--|
|   | 5180 MHz ~ 5240 MHz                                    |  |  |
| Tx/Rx Frequency Range                   | 5260 MHz ~ 5320 MHz                                    |  |  |
|   | 5500 MHz ~ 5700 MHz                                    |  |  |
|   | <5180 MHz ~ 5240 MHz>                                  |  |  |
|   | Fixed internal Antenna with gain -4.47 dBi             |  |  |
| Antenna Type / Gain                     | <5260 MHz ~ 5320 MHz>                                  |  |  |
|   | Fixed internal Antenna with gain -5.4 dBi              |  |  |
|   | <5500 MHz ~ 5720 MHz >                                 |  |  |
|   | Fixed internal Antenna with gain -6.1 dBi              |  |  |
| Type of Madulation                      | 802.11a/n: OFDM (BPSK / QPSK / 16QAM / 64QAM)          |  |  |
| Type of Modulation                      | 802.11ac : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM) |  |  |

### 1.5 Modification of EUT

No modifications are made to the EUT during all test items.

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### 1.6 Re-use of Measured Data

#### 1.6.1 Introduction Section

This application re-uses data collected on a similar device. The subject device of this application (Model: M1901F7H, FCC ID: 2AFZZ-RMSF7H) is electrically identical to the reference device (Model: M1901F7G, FCC ID: 2AFZZ-RMSF7G) for the portions of the circuitry corresponding to the data being re-used, as treated by KDB Publication 484596 D01.

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### 1.6.2 Difference Section

For details concerning the similarity with respect to component placement, mechanical/electrical design etc., please refer to the Product Equality Declaration.

The re-used RF data includes the following bands provided in Appendix A (Sporton RF Report No. FR8O2308D for the reference device Model: M1901F7G, FCC ID: 2AFZZ-RMSF7G).

#### 1.6.3 Reference detail Section:

| Equipment Class | Reference FCC ID | Folder Test        | Report Title/Section    |
|-----------------|------------------|--------------------|-------------------------|
| NII (B1~3)      | 2AFZZ-RMSF7G     | Part15E(FR8O2308D) | All sections applicable |
| NII (B4)        | 2AFZZ-RMSF7G     | Part15E(FR8O2308E) | All sections applicable |
| NII (DFS)       | 2AFZZ-RMSF7G     | Part15E(FZ8O2308)  | All sections applicable |

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### 1.6.4 Spot Check Verification Data Section

In order to confirm hardware similarity of the subject device with the reference device, spot check measurements were performed on the subject device for the Radiated Spurious Emission, the test result were consistent with FCC ID: 2AFZZ-RMSF7G.

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Assertions concerning the similarity of these devices are based on representations by the applicant. The applicant accepts full responsibility for the validity of the similarity claim, and for the determination that verification test data are sufficient to support it.

| Test Item   | Mode                 | Worst Result<br>2AFZZ-RMSF7G | Worst Result<br>2AFZZ-RMSF7H | Difference (dB) |
|---|----------------------|------------------------------|------------------------------|-----------------|
| Radiated<br>Spurious<br>Emission<br>(Band Edge.<br>Haromic)<br>(dBuV/m) | 802.11n HT40, 5.2GHz | 49.62                        | 47.00                        | -2.62           |

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# Appendix A. Reference Report

Please refer to Sporton report number FR8O2308D which is issued separately.

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