# SPOT CHECK EVALUATION

FCC ID : PY7-87607S

Equipment: GSM/WCDMA/LTE Phone with BT,

DTS/UNII a/b/g/n/ac/ax, GPS, WPC

Report No.: 9O1543-01

and NFC

**Brand Name: Sony** 

**Applicant**: Sony Mobile Communications Inc.

4-12-3 Higashi-Shinagawa,

Shinagawa-ku, Tokyo, 140-0002,

Japan

Standard : 47 CFR Part 2, 22(H), 24(E), 27(L)

FCC Part 15 Subpart C §15.247 FCC Part 15 Subpart C §15.225 FCC Part 15 Subpart E §15.407

The product was received on Dec. 04, 2019 and testing was started from Jan. 22, 2020 and completed on Feb. 10, 2020. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, 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 report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

The test results in this spot check data report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Approved by: Jones Tsai

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

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# History of this test report

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| Version | Description             | Issued Date   |
|---------|-------------------------|---------------|
| 01      | Initial issue of report | Feb. 18, 2020 |
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#### 1. Introduction Section

The FCC ID: PY7-87261H (original model) and FCC ID: PY7-87607S (variant model) are HW identical except for Sub antenna which doesn't support transmission in FCC area. Based on their similarity, the FCC Part 15C (equipment class: DTS, DSS, DXX) and FCC Part 15E (equipment class: NII) and FCC Part 22, 24, 27 (equipment class: PCE) reuse the original model's result and do spot-check, following the FCC KDB 484596 D01 v01.

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The applicant takes full responsibility that the test data as referenced in this report represent compliance for this FCC ID (FCC ID: PY7-87607S).

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### 2. Difference Section

The difference between PY7-87261H and PY7-87607S is the antenna performance for cellular bands.

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The details of similarity and difference can be found in the Operating Description.

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# 3. Spot Check Verification Data Section

Conducted power test and radiated spurious emission test against the variant model based on the worst-case condition from the original model was performed in this filing and the verification test results Similar to the original FCC ID. Detail spot check test result can be found in the variant model report, please refer to detail section table in section 4.

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Summary of the spot check:

| Test Item               | Mode                     | PY7-87261H<br>Worst Result | PY7-87607S<br>Worst Result | Difference (dB) |
|-------------------------|--------------------------|----------------------------|----------------------------|-----------------|
|                         | BT-DH1                   | 13.52                      | 13.09                      | 0.43            |
|                         | BLE5.1(2Mbps)            | 9.2                        | 9.1                        | 0.1             |
|                         | WLAN 2.4G(MIMO)          | 17.33                      | 17.24                      | 0.09            |
|                         | WLAN 5G B1-3(MIMO)       | 14.41                      | 14.41                      | 0               |
|                         | WLAN 5G B4 (MIMO)        | 14.41                      | 14.41                      | 0               |
| Average                 | WWAN GSM(GPRS)(EDGE)850  | 32.77                      | 32.35                      | 0.42            |
| onducted Power          | WWAN GSM(GPRS)(EDGE)1900 | 27.89                      | 27.48                      | 0.41            |
| (dBm)                   | WWAN WCDMA Band 5        | 24.40                      | 23.98                      | 0.42            |
|                         | WWAN LTE Band 4          | 18.82                      | 18.05                      | 0.77            |
|                         | WWAN LTE Band 5          | 24.41                      | 23.74                      | 0.67            |
|                         | WWAN LTE Band 7          | 19.55                      | 19.16                      | 0.39            |
|                         | WWAN LTE Band 13         | 24.23                      | 23.99                      | 0.24            |
|                         | WWAN LTE Band 41         | 20                         | 19.36                      | 0.64            |
| WLAN                    |                          | •                          |                            |                 |
|                         | BT-DH1                   | 51.34                      | 51.02                      | 0.32            |
| Radiated Spurious       | BLE5.1(2Mbps)            | 45.87                      | 45.74                      | 0.13            |
| Emission (Band<br>Edge) | WLAN 2.4G(MIMO)          | 46.66                      | 47.75                      | -1.09           |
| (dBuV/m)                | WLAN 5G B1-3(MIMO)       | 64.08                      | 63.53                      | 0.55            |
| ` ,                     | WLAN 5G B4 (MIMO)        | 51.78                      | 50.49                      | 1.29            |
|                         |                          | •                          |                            |                 |
|                         | BT-DH1                   | 43.86                      | 42.82                      | 1.04            |
| Radiated Spurious       | BLE5.0(2Mbps)            | 36.48                      | 35.95                      | 0.53            |
| Emission                | WLAN 2.4G(MIMO)          | 42.01                      | 41.92                      | 0.09            |
| (Harmonic)<br>(dBuV/m)  | WLAN 5G B1-3(MIMO)       | 55.11                      | 48.99                      | 6.12            |
| <b>(</b> ,              | WLAN 5G B4 (MIMO)        | 55.06                      | 54.03                      | 1.03            |
|                         |                          |                            |                            |                 |
| WWAN                    |                          |                            |                            |                 |
|                         | WWAN GSM(GPRS)(EDGE)850  | -37.25                     | -48.61                     | 11.36           |
|                         | WWAN GSM(GPRS)(EDGE)1900 | -42.53                     | -42.94                     | 0.41            |
| Radiated Spurious       | WWAN WCDMA Band 5        | -55.41                     | -56.14                     | 0.73            |
| Emission                | WWAN LTE Band 4          | -42.30                     | -43.39                     | 1.09            |
| (Harmonic)              | WWAN LTE Band 5          | -54.80                     | -55.88                     | 1.08            |
| (dBuV/m)                | WWAN LTE Band 7          | -41.55                     | -42.13                     | 0.58            |
|                         | WWAN LTE Band 13         | -60.46                     | -61.36                     | 0.9             |
|                         | WWAN LTE Band 41         | -40.41                     | -40.86                     | 0.45            |
|                         |                          |                            |                            |                 |
| NFC<br>(dBuV/m)         | RSE (30MHz to1GHz)       | 31.17                      | 33.89                      | -2.72           |

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## 4. Reference detail Section

| Rule Part     | Equipment<br>Class | Wireless<br>Technology   | Frequency Band (MHz)                             | Original<br>FCC ID | Original<br>Report                          | Variant Model<br>FCC ID | Variant Model<br>Report                     |
|---------------|--------------------|--------------------------|--|--------------------|---|-------------------------|---|
|               | DTS                | Bluetooth – LE<br>Wii-Fi | 2400~2483.5                                      | PY7-87261H         | Part 15C<br>(FR9O1542-02B,<br>FR9O1542-02C) | PY7-87607S              | Part 15C<br>(FR9O1543-01B,<br>FR9O1543-01C) |
| 15C           | DSS                | Bluetooth                | 2400~2483.5                                      | PY7-87261H         | Part 15C<br>(FR9O1542-02A)                  | PY7-87607S              | Part 15C<br>(FR9O1543-01A)                  |
|               | DXX                | NFC                      | 13.56  | PY7-87261H         | Part 15C<br>(FR9O1542-02D)                  | PY7-87607S              | Part 15C<br>(FR9O1543-01D)                  |
| 15E           | NII                | Wi-Fi                    | 5150~5250<br>5250~5350<br>5470~5725<br>5725~5850 | PY7-87261H         | Part 15E<br>(FR9O1542-02E,<br>FR9O1542-02F) | PY7-87607S              | Part 15E<br>(FR9O1543-01E,<br>FR9O1543-01F) |
| Dor# 22 24 27 | PCE                | GSM /WCDMA               | GSM 850/1900<br>WCDMA B5                         | PY7-87261H         | Part 22.24.27<br>(FG9O1542-02A)             | PY7-87607S              | Part 22.24.27<br>(FG9O1543-01A)             |
| Part 22.24.27 | PUE                | LTE                      | LTE B4/5/7/13/41                                 | PY7-87261H         | Part 22.24.27<br>(FG9O1542-02B)             | PY7-87607S              | Part 22.24.27<br>(FG9O1543-01B)             |

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END of this report

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