# FCC RADIO TEST REPORT

| | | |
|---|---|---|
| **FCC ID** | : | **PY7-58237R** |
| **Equipment** | : | **GSM/WCDMA/LTE Phone with BT, DTS/UNII a/b/g/n/ac, NFC, FM receiver and GNSS** |
| **Brand Name** | : | **SONY** |
| **Applicant** | : | **Sony Corporation<br>1-7-1 Konan Minato-ku Tokyo, 108-0076 Japan** |
| **Manufacturer** | : | **Sony Corporation<br>1-7-1 Konan Minato-ku Tokyo, 108-0076 Japan** |
| **Standard** | : | **FCC Part 15 Subpart C §15.247** |
| **Test Date(s)** | : | **Dec. 12, 2021 ~ Feb. 06, 2022** |

**We, Sporton International Inc. (Kunshan), 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 Inc. (Kunshan), the test report shall not be reproduced except in full.**

Jason Jia

**Reviewed by: Jason Jia / Supervisor**

Alexwang

**Approved by: Alex Wang / Manager**

ACCREDITED Cert #5145.02

***Sporton International Inc. (Kunshan)***

***No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China***

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# History of this test report

| Report No. | Version | Description | Issued Date |
|---|---|---|---|
| FR1D0404B | 01 | Initial issue of report | Mar. 02, 2022 |
| FR1D0404B | 02 | Updated the data rate description in Appendix A to 2Mbps. | Mar. 07, 2022 |
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# Summary of Test Result

| Report Clause | Ref Std. Clause | Test Items | Result (PASS/FAIL) | Remark |
|---|---|---|---|---|
| - | 15.247(a)(2) | 6dB Bandwidth | - | See Note |
| - | 2.1049 | 99% Occupied Bandwidth | - | See Note |
| 4.1 | 15.247(b)(3) | Output Power | Pass | - |
| - | 15.247(e) | Power Spectral Density | - | See Note |
| - | 15.247(d) | Conducted Band Edges and Spurious Emission | - | See Note |
| 4.2 | 15.247(d) | Radiated Band Edges and Spurious Emission | Pass | Under limit 6.77 dB at 2483.500 MHz |
| - | 15.207 | AC Conducted Emission | - | See Note |
| 4.3 | 15.203 & 15.247(b) | Antenna Requirement | Pass | - |

**Note:** Refer to information of Section 3 Spot Check Evaluation.

| **Declaration of Conformity:** |
|---|
| The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers. |
| **Comments and Explanations:** |
| The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification. |

# 1 General Description

## 1.1 Product Feature of Equipment Under Test

GSM/WCDMA/LTE, Bluetooth, DTS/UNII a/b/g/n/ac, NFC, FM Receiver, and GNSS

| Standards-related Product Specification | |
|---|---|
| **Antenna Type / Gain** | PIFA Antenna with gain 2.3 dBi |

**Remark:** The above EUT's information was declared by manufacturer. Please refer to Comments and Explanations in report summary.

## 1.2 Modification of EUT

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

## 1.3 Testing Location

Sporton International Inc. (Kunshan) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

| | | | |
|---|---|---|---|
| **Test Firm** | Sporton International Inc. (Kunshan) | | |
| **Test Site Location** | No. 1098, Pengxi North Road, Kunshan Economic Development Zone<br>Jiangsu Province 215300 People's Republic of China<br>TEL : +86-512-57900158<br>FAX : +86-512-57900958 | | |
| **Test Site No.** | **Sporton Site No.** | **FCC Designation No.** | **FCC Test Firm Registration No.** |
| | 03CH06-KS<br>TH01-KS | CN1257 | 314309 |

## 1.4 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC Part 15 Subpart C §15.247
- FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v05r02
- FCC KDB 414788 D01 Radiated Test Site v01r01
- ANSI C63.10-2013

**Remark:**

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

# 2 Test Configuration of Equipment Under Test

## 2.1 Test Mode

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: radiation emission (1GHz to the 10th harmonic). For radiated measurement, the measured emission level of the EUT was maximized by rotating the EUT on a turntable, adjusting the orientation of the EUT and EUT antenna in three orthogonal axis (X: flat, Y: portrait, Z: landscape), and adjusting the measurement antenna orientation, following C63.10 exploratory test procedures and find X plane as worst plane. The worst case position of the EUT was investigated under two configurations: EUT with AC adapter and earphone, EUT with standalone. The EUT with standalone configuration was determined to be worst-case configurations; therefore, all final tests were performed on the EUT with standalone.

The following summary table is showing all test modes to demonstrate in compliance with the standard.

| Summary table of Test Cases | |
|---|---|
| **Test Item** | **Data Rate / Modulation** |
| **Radiated Test Cases** | Mode 1: Bluetooth Tx CH39_2480 MHz_2Mbps |

## 2.2 Connection Diagram of Test System

## 2.3 EUT Operation Test Setup

The RF test items, utility “FTM” was installed in Notebook which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.

# 3 Spot Check Evaluation

## 3.1 Introduction Section

This application for certification is leveraging the data reuse procedures from KDB 484596 D01 based on reference FCC ID PY7-34943G/ PY7-81713C to cover variant model FCC ID PY7-58237R (this model). The major difference between the parent/reference model and the variant model are NFC chipset change and the difference bands supported on cellular circuits. All other circuitry and features are identical.
For details, please refer to Theory of operation Appendix B.
Sony Corporation takes full responsibility that the test data as referenced in this report represent compliance for this FCC ID.

## 3.2 Difference Section

Difference between PY7-34943G (lead) and PY7-58237R (this model):
Sony Corporation, hereby declares the differences between PY7-34943G (lead) and PY7-58237R (this model) are related only to the cellular part and NFC, other functions are not affected. Therefore the WLAN and Bluetooth report/data of PY7-34943G (lead) may represent for PY7-58237R (this model).

## 3.3 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. All tests meet FCC technical limits. Detail spot check test result can be found in the variant model report, please refer to the detail section table in section 3.4.

Summary of the spot check:

| Test Item | Mode | PY7-34943G Worst Result | PY7-58237R Worst Result | Difference (dB) |
|---|---|---|---|---|
| Conducted Power (dBm) | BLE 2Mbps | 6.19 | 6.07 | 0.12 |
| Radiated Spurious Emission (dBuV/m) @ 3m | BLE 2Mbps | 47.99 | 47.23 | 0.76 |

## 3.4 Reference detail Section

| Rule Part | Equipment Class | Wireless Technology | Frequency Band (MHz) | Original FCC ID | Original Report | Variant Model FCC ID | Variant Model Report |
|---|---|---|---|---|---|---|---|
| 15C | DTS | Bluetooth LE | 2400~2483.5 | PY7-34943G | Part 15C (FR1D0310B) | PY7-58237R | Part 15C (FR1D0404B) |

# 4 Test Result

## 4.1 Output Power Measurement

### 4.1.1 Limit of Output Power

For systems using digital modulation in the 2400-2483.5 MHz, the limit for output power is 30 dBm. If transmitting antenna of directional gain greater than 6 dBi is used, the peak output power from the intentional radiator shall be reduced below the above stated value by the amount in dB that the directional gain of the antenna exceeds 6 dBi. In case of point-to-point operation, the limit has to be reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.

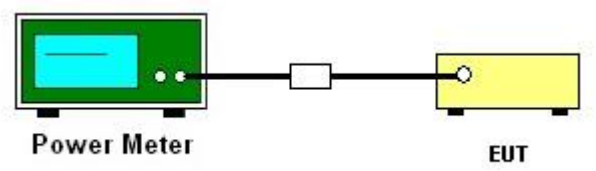
### 4.1.2 Measuring Instruments

See list of measuring equipment of this test report.

### 4.1.3 Test Procedures

1. The testing follows the Measurement Procedure of ANSI C63.10-2013 clause 11.9.1.3 PKPM1 Peak power meter.
2. The RF output of EUT was connected to the power meter by RF cable and attenuator.
3. The path loss was compensated to the results for each measurement.
4. Set the maximum power setting and enable the EUT to transmit continuously.
5. Measure the conducted output power and record the results in the test report.

### 4.1.4 Test Setup




### 4.1.5 Test Result of Peak Output Power

Please refer to Appendix A.

## 4.2 Radiated Band Edges and Spurious Emission Measurement

### 4.2.1 Limit of Radiated Band Edges and Spurious Emission

In any 100 kHz bandwidth outside the intentional radiator frequency band, all harmonics/spurious must be at least 20 dB below the highest emission level within the authorized band. If the output power of this device was measured by spectrum analyzer, the attenuation under this paragraph shall be 30 dB instead of 20 dB. In addition, radiated emissions which fall in the restricted bands must also comply with the limits as below.

| Frequency (MHz) | Field Strength (microvolts/meter) | Measurement Distance (meters) |
|---|---|---|
| 0.009 – 0.490 | 2400/F(kHz) | 300 |
| 0.490 – 1.705 | 24000/F(kHz) | 30 |
| 1.705 – 30.0 | 30 | 30 |
| 30 – 88 | 100 | 3 |
| 88 – 216 | 150 | 3 |
| 216 - 960 | 200 | 3 |
| Above 960 | 500 | 3 |

### 4.2.2 Measuring Instruments

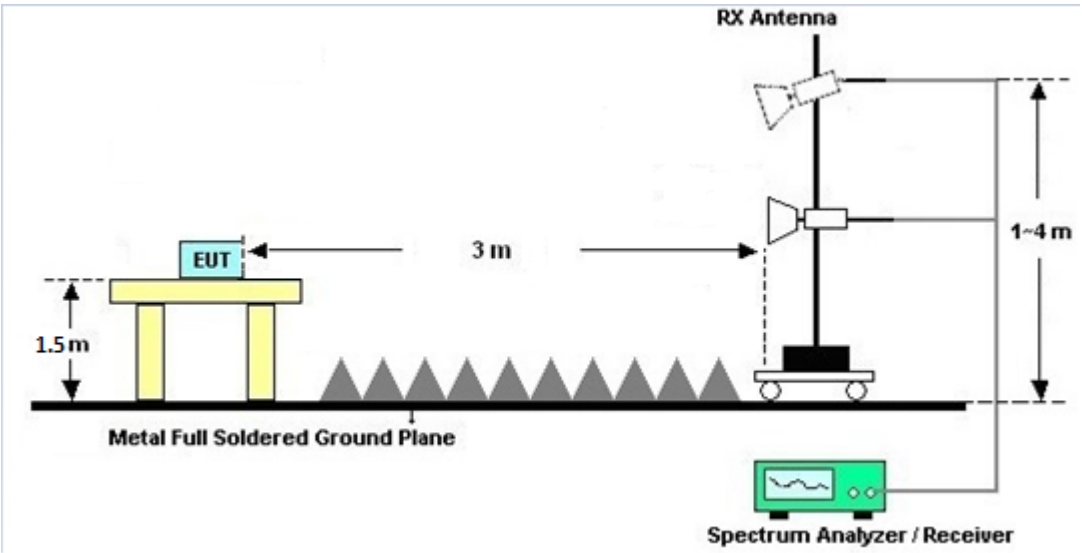
See list of measuring equipment of this test report.

### 4.2.3 Test Procedures

1. The testing follows the ANSI C63.10 Section 11.12.1 Radiated emission measurements.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level.
3. The EUT was placed on a turntable with 0.8 meter for frequency below 1 GHz and 1.5 meter for frequency above 1 GHz respectively above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
6. For testing below 1 GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and be reported.
7. For testing above 1 GHz, the emission level of the EUT in peak mode was 20 dB lower than average limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and be reported.
8. Use the following spectrum analyzer settings:
   (1) Span shall wide enough to fully capture the emission being measured;
   (2) Set RBW = 100 kHz for f < 1 GHz; VBW ≥ RBW; Sweep = auto; Detector function = peak; Trace = max hold;
   (3) Set RBW = 1 MHz, VBW = 3 MHz for f ≥ 1 GHz for peak measurement.
   For average measurement:
   - VBW = 10 Hz, when duty cycle is no less than 98 percent.
   - VBW ≥ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

### 4.2.4 Test Setup

**For radiated test from 1GHz to 18GHz**




### 4.2.5 Test Result of Radiated Spurious Emissions

Please refer to Appendix B and C.

### 4.2.6 Duty Cycle

Please refer to Appendix D.

## 4.3 Antenna Requirements

### 4.3.1 Standard Applicable

If directional gain of transmitting antennas is greater than 6 dBi, the power shall be reduced by the same level in dB comparing to gain minus 6 dBi. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the rule.

### 4.3.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

### 4.3.3 Antenna Gain

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.

# 5 List of Measuring Equipment

| Instrument | Manufacturer | Model No. | Serial No. | Characteristics | Calibration Date | Test Date | Due Date | Remark |
|---|---|---|---|---|---|---|---|---|
| Spectrum Analyzer | R&S | FSV40 | 101040 | 10Hz~40GHz | Oct. 14, 2021 | Dec. 12, 2021 ~Dec. 23, 2021 | Oct. 13, 2022 | Conducted (TH01-KS) |
| Pulse Power Senor | Anritsu | MA2411B | 0917070 | 300MHz~40GHz | Jan. 06, 2021 | Dec. 12, 2021 ~Dec. 23, 2021 | Jan. 05, 2022 | Conducted (TH01-KS) |
| Power Meter | Anritsu | ML2495A | 1005002 | 50MHz Bandwidth | Jan. 06, 2021 | Dec. 12, 2021 ~Dec. 23, 2021 | Jan. 05, 2022 | Conducted (TH01-KS) |
| EMI Test Receiver | Keysight | N9038A | MY56400004 | 3Hz~8.5GHz;Max 30dBm | Oct. 16, 2021 | Feb. 06, 2022 | Oct. 15, 2022 | Radiation (03CH06-KS) |
| EXA Spectrum Analyzer | Keysight | N9010A | MY55150208 | 10Hz-44GHz | Apr. 12, 2021 | Feb. 06, 2022 | Apr. 11, 2022 | Radiation (03CH06-KS) |
| Double Ridge Horn Antenna | ETS-Lindgren | 3117 | 00218652 | 1GHz~18GHz | Apr. 25, 2021 | Feb. 06, 2022 | Apr. 24, 2022 | Radiation (03CH06-KS) |
| SHF-EHF Horn | Com-power | AH-840 | 101093 | 18GHz~40GHz | Jan. 05, 2022 | Feb. 06, 2022 | Jan. 04, 2023 | Radiation (03CH06-KS) |
| Amplifier | MITEQ | EM18G40GGA | 060728 | 18~40GHz | Jan. 05, 2022 | Feb. 06, 2022 | Jan. 04, 2023 | Radiation (03CH06-KS) |
| high gain Amplifier | MITEQ | AMF-7D-00101800-30-10P | 2025788 | 1Ghz-18Ghz | Jul. 30, 2021 | Feb. 06, 2022 | Jul. 29, 2022 | Radiation (03CH06-KS) |
| AC Power Source | Chroma | 61601 | F104090004 | N/A | NCR | Feb. 06, 2022 | NCR | Radiation (03CH06-KS) |
| Turn Table | ChamPro | EM 1000-T | 060762-T | 0~360 degree | NCR | Feb. 06, 2022 | NCR | Radiation (03CH06-KS) |
| Antenna Mast | ChamPro | EM 1000-A | 060762-A | 1 m~4 m | NCR | Feb. 06, 2022 | NCR | Radiation (03CH06-KS) |

NCR: No Calibration Required

# 6 Uncertainty of Evaluation

**Uncertainty of Radiated Emission Measurement (1000 MHz ~ 40000 MHz)**

| | |
|---|---|
| **Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))** | **5.0dB** |

# Appendix A. Conducted Test Results

| | | | | |
|---|---|---|---|---|
| Test Engineer: | Smile Wang | Temperature: | 20~26 | °C |
| Test Date: | 2021/12/12~2021/12/23 | Relative Humidity: | 40~51 | % |

***TEST RESULTS DATA***

***Peak Power Table***

| Mod. | Data Rate | NTX | CH. | Freq. (MHz) | Peak Conducted Power (dBm) | Conducted Power Limit (dBm) | DG (dBi) | EIRP Power (dBm) | EIRP Power Limit (dBm) | Pass /Fail |
|---|---|---|---|---|---|---|---|---|---|---|
| BLE | 2Mbps | 1 | 0 | 2402 | 5.91 | 30.00 | 2.30 | 8.21 | 36.00 | Pass |
| BLE | 2Mbps | 1 | 19 | 2440 | 5.82 | 30.00 | 2.30 | 8.12 | 36.00 | Pass |
| BLE | 2Mbps | 1 | 39 | 2480 | 6.07 | 30.00 | 2.30 | 8.37 | 36.00 | Pass |

# Appendix B. Radiated Spurious Emission

| | | | |
|---|---|---|---|
| **Test Engineer :** | Henzy Li | **Temperature :** | 22~23°C |
| | | **Relative Humidity :** | 41~42% |

## 2.4GHz 2400~2483.5MHz

## BLE (Band Edge @ 3m)

| BLE | Note | Frequency | Level | Over | Limit | Read | Antenna | Path | Preamp | Ant | Table | Peak | Pol. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Limit | Line | Level | Factor | Loss | Factor | Pos | Pos | Avg. | |
| | | ( MHz ) | ( dBμV/m ) | ( dB ) | ( dBμV/m ) | ( dBμV ) | ( dB/m ) | ( dB ) | ( dB ) | ( cm ) | ( deg ) | (P/A) | (H/V) |
| BLE CH 39 2480MHz | | 2494.18 | 54.96 | -19.04 | 74 | 49.06 | 31.17 | 7.3 | 32.57 | 100 | 129 | P | H |
| | | 2483.5 | 47.23 | -6.77 | 54 | 41.47 | 31.13 | 7.27 | 32.64 | 100 | 129 | A | H |
| | | 2480 | 99.68 | --- | --- | 93.92 | 31.13 | 7.27 | 32.64 | 100 | 129 | P | H |
| | | 2480 | 96.52 | --- | --- | 90.76 | 31.13 | 7.27 | 32.64 | 100 | 129 | A | H |
| | | 2483.68 | 55.23 | -18.77 | 74 | 49.47 | 31.13 | 7.27 | 32.64 | 323 | 107 | P | V |
| | | 2483.5 | 45.94 | -8.06 | 54 | 40.18 | 31.13 | 7.27 | 32.64 | 323 | 107 | A | V |
| | | 2480 | 95.63 | --- | --- | 89.87 | 31.13 | 7.27 | 32.64 | 323 | 107 | P | V |
| | | 2480 | 92.52 | --- | --- | 86.76 | 31.13 | 7.27 | 32.64 | 323 | 107 | A | V |
| **Remark** | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |

## 2.4GHz 2400~2483.5MHz

## BLE (Harmonic @ 3m)

| BLE | Note | Frequency ( MHz ) | Level ( dBμV/m ) | Over Limit ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BLE CH 39 2480MHz | | 4965 | 42.26 | -31.74 | 74 | 57.03 | 34.81 | 10.43 | 60.01 | 300 | 0 | P | H |
| | | 7440 | 44.52 | -29.48 | 74 | 55.59 | 36.59 | 12.88 | 60.54 | 300 | 0 | P | H |
| | | 4965 | 42.24 | -31.76 | 74 | 57.01 | 34.81 | 10.43 | 60.01 | 100 | 0 | P | V |
| | | 7440 | 43.98 | -30.02 | 74 | 55.05 | 36.59 | 12.88 | 60.54 | 100 | 0 | P | V |
| **Remark** | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |

**Note symbol**

| | |
|---|---|
| * | **Fundamental Frequency** which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency. |
| ! | Test result is **over limit** line. |
| P/A | **P**eak or **A**verage |
| H/V | **H**orizontal or **V**ertical |

## A calculation example for radiated spurious emission is shown as below:

| BLE | Note | Frequency | Level | Over | Limit | Read | Antenna | Path | Preamp | Ant | Table | Peak | Pol. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Limit | Line | Level | Factor | Loss | Factor | Pos | Pos | Avg. | |
| | | ( MHz ) | ( dBμV/m ) | ( dB ) | ( dBμV/m ) | ( dBμV ) | ( dB/m ) | ( dB ) | ( dB ) | ( cm ) | ( deg ) | (P/A) | (H/V) |
| BLE CH 00 2402MHz | | 2390 | 55.45 | -18.55 | 74 | 54.51 | 32.22 | 4.58 | 35.86 | 103 | 308 | P | H |
| | | 2390 | 43.54 | -10.46 | 54 | 42.6 | 32.22 | 4.58 | 35.86 | 103 | 308 | A | H |

1. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB)
2. Level(dBμV/m) =

Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

3. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

**For Peak Limit @ 2390MHz:**

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)

= 55.45 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

**For Average Limit @ 2390MHz:**

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)

= 43.54 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 43.54(dBμV/m) – 54(dBμV/m)

= -10.46(dB)

**Both peak and average measured complies with the limit line, so test result is “PASS”.**

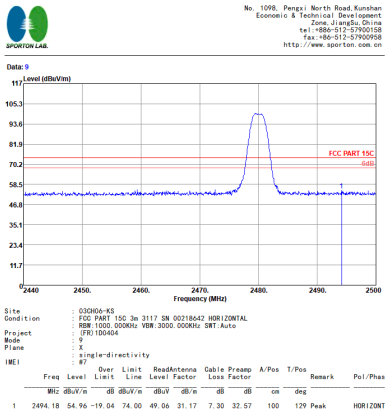
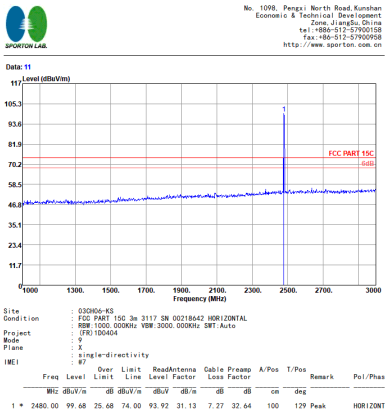
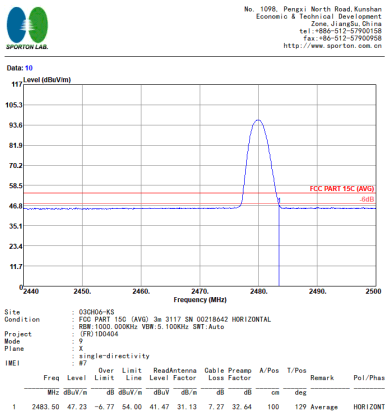
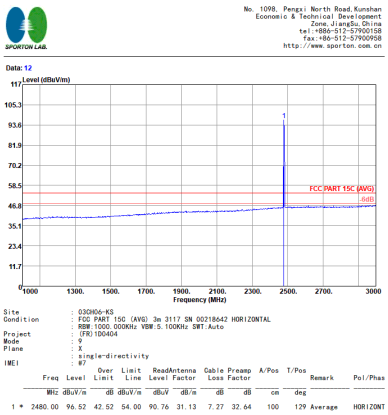
# Appendix C. Radiated Spurious Emission Plots

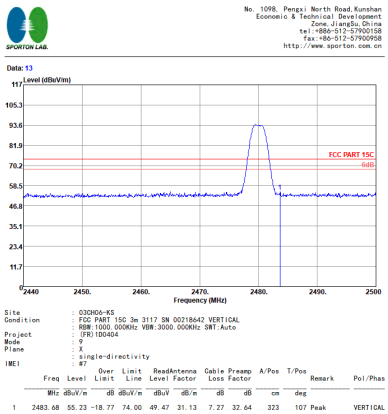
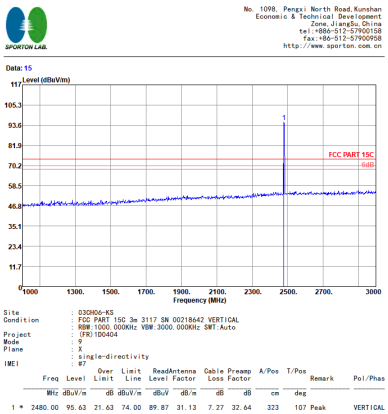
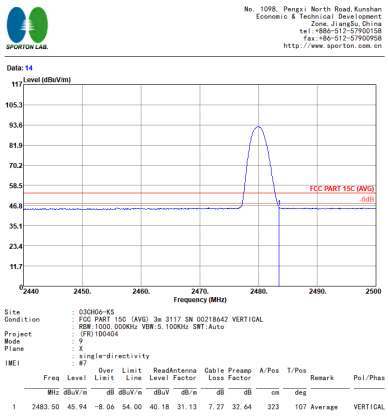
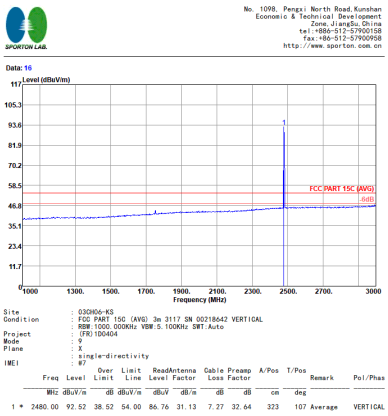
## Note symbol

| | |
|---|---|
| -L | **Low channel location** |
| -R | **High channel location** |

## 2.4GHz 2400~2483.5MHz

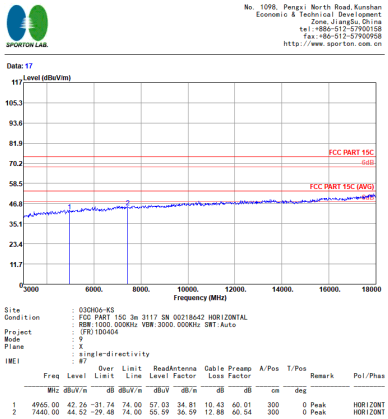
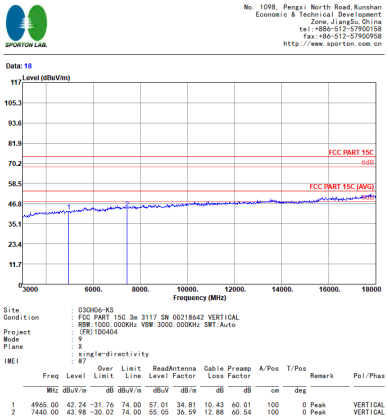
## BLE (Band Edge @ 3m)

| BLE | 2.4GHz 2400~2483.5MHz Band Edge @ 3m | |
|---|---|---|
| ANT | BLE CH39 2480MHz | |
| 6 | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  |  |

| BLE | 2.4GHz 2400~2483.5MHz Band Edge @ 3m | |
|---|---|---|
| ANT | BLE CH39 2480MHz | |
| 6 | Vertical | Fundamental |
| Peak |  |  |
| Avg. |  |  |

## 2.4GHz 2400~2483.5MHz

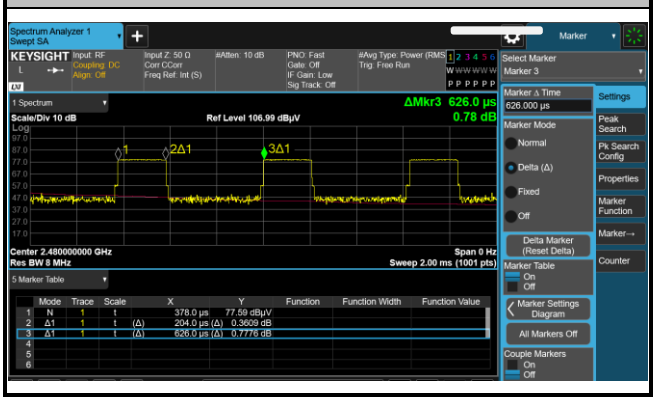
## BLE (Harmonic @ 3m)

| BLE | 2.4GHz 2400~2483.5MHz Harmonic @ 3m | |
|---|---|---|
| ANT | BLE CH39 2480MHz | |
| 6 | Horizontal | Vertical |
| Peak |  <br>No. 1098, Pengxi North Road,Kunshan Economic & Technical Development Zone,JiangSu,China tel:+86-512-57900158 fax:+86-512-57900958 http://www.sporton.com.cn<br>Data: 17<br>Level (dBuV/m)<br>117 105.3 93.6 81.9 70.2 58.5 46.8 35.1 23.4 11.7 0<br>FCC PART 15C<br>6dB<br>FCC PART 15C (AVG)<br>6dB<br>3000 6000. 8000. 10000. 12000. 14000. 16000. 18000<br>Frequency (MHz)<br>Site : 03CH06-KS<br>Condition : FCC PART 15C 3m 3117 SN 00218642 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Project : (FR)1D0404<br>Mode : 9<br>Plane : X<br>: single-directivity<br>IMEI : #7<br>Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Preamp Factor A/Pos T/Pos Remark Pol/Phas<br>MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg<br>1 4965.00 42.26 -31.74 74.00 57.03 34.81 10.43 60.01 300 0 Peak HORIZONT<br>2 7440.00 44.52 -29.48 74.00 55.59 36.59 12.88 60.54 300 0 Peak HORIZONT |  <br>No. 1098, Pengxi North Road,Kunshan Economic & Technical Development Zone,JiangSu,China tel:+86-512-57900158 fax:+86-512-57900958 http://www.sporton.com.cn<br>Data: 18<br>Level (dBuV/m)<br>117 105.3 93.6 81.9 70.2 58.5 46.8 35.1 23.4 11.7 0<br>FCC PART 15C<br>6dB<br>FCC PART 15C (AVG)<br>6dB<br>3000 6000. 8000. 10000. 12000. 14000. 16000. 18000<br>Frequency (MHz)<br>Site : 03CH06-KS<br>Condition : FCC PART 15C 3m 3117 SN 00218642 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto<br>Project : (FR)1D0404<br>Mode : 9<br>Plane : X<br>: single-directivity<br>IMEI : #7<br>Freq Level Over Limit Limit Line ReadAntenna Level Factor Cable Loss Preamp Factor A/Pos T/Pos Remark Pol/Phas<br>MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg<br>1 4965.00 42.24 -31.76 74.00 57.01 34.81 10.43 60.01 100 0 Peak VERTICAL<br>2 7440.00 43.98 -30.02 74.00 55.05 36.59 12.88 60.54 100 0 Peak VERTICAL |

# Appendix D. Duty Cycle Plots

| Band | Duty Cycle(%) | T(us) | 1/T(kHz) | VBW Setting |
|---|---|---|---|---|
| Bluetooth LE for 2Mbps | 32.59 | 0.204 | 4.902 | 5.1kHz |

**Bluetooth LE for 2Mbps**




———THE END———