# FCC RF Test Report

## (Bluetooth)

| | |
|---|---|
| **Applicant:** | TECNO MOBILE LIMITED |
| **Address of Applicant:** | FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG |
| **Equipment Under Test (EUT)** | |
| Product Name: | Mobile Phone |
| Model No.: | AD8 |
| Trade Mark: | TECNO |
| **FCC ID:** | 2ADYY-AD8 |
| **Applicable Standards:** | FCC CFR Title 47 Part 15C (§15.247) |
| **Date of Sample Receipt:** | 25 Oct., 2022 |
| **Date of Test:** | 26 Oct., to 03 Nov., 2022 |
| **Date of Report Issued:** | 04 Nov., 2022 |
| **Test Result:** | PASS |

| | | | |
|---|---|---|---|
| ***Tested by:*** | Mike ou<br>***Test Engineer*** | ***Date:*** | *04 Nov., 2022* |
| ***Reviewed by:*** | Winner Zhang<br>***Project Engineer*** | ***Date:*** | *04 Nov., 2022* |
| ***Approved by:*** | ***Manager*** | ***Date:*** | *04 Nov., 2022* |

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in above the application standard version. Test results reported herein relate only to the item(s) tested.

# 1 Version

| Version No. | Date | Description |
|---|---|---|
| *00* | *04 Nov., 2022* | *Original* |
| | | |
| | | |
| | | |
| | | |
| | | |

# 2 Contents

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# 3 General Information

## 3.1 Client Information

| | |
|---|---|
| Applicant: | TECNO MOBILE LIMITED |
| Address: | FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG |
| Manufacturer: | TECNO MOBILE LIMITED |
| Address: | FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG |
| Factory: | SHENZHEN TECNO TECHNOLOGY CO., LTD. |
| Address: | 101, Building 24, Waijing Industrial Park, Fumin Community, Fucheng Street, Longhua District, Shenzhen City, P.R.China |

## 3.2 General Description of E.U.T.

| | |
|---|---|
| Product Name: | Mobile Phone |
| Model No.: | AD8 |
| Operation Frequency: | 2402 MHz - 2480 MHz |
| Transfer Rate: | 1/2/3 Mbits/s |
| Number of Channel: | 79 |
| Modulation Type: | GFSK, π/4-DQPSK, 8DPSK |
| Modulation Technology: | FHSS |
| Antenna Type: | Internal Antenna |
| Antenna Gain: | 1.3 dBi (declare by applicant) |
| Antenna transmit mode: | SISO (1TX, 1RX) |
| Power Supply: | Rechargeable Li-ion Polymer Battery DC3.87V, 5040mAh |
| AC Adapter: | Model: U450TSA<br>Input: AC100-240V, 50/60Hz, 1.8A<br>Output: DC 5.0V, 2.0A or 11.0V, 4.1A MAX |
| Test Sample Condition: | The test samples were provided in good working order with no visible defects. |

## 3.3 Test Mode and Test Environment

| **Test Mode:** | |
|---|---|
| Transmitting mode | Keep the EUT in continuous transmitting with modulation |
| ***Remark:*** *For radiated spurious emission (below 1GHz), pre-scan all data speed, found 1 Mbps (LE 1M PHY) was worse case mode. The report only reflects the test data of worst mode.* | |
| **Operating Environment:** | |
| Temperature: | 15℃ ~ 35℃ |
| Humidity: | 20 % ~ 75 % RH |
| Atmospheric Pressure: | 1008 mbar |

## 3.4 Description of Test Auxiliary Equipment

The EUT has been tested as an independent unit.

## 3.5 Measurement Uncertainty

| Parameter | Expanded Uncertainty (Confidence of 95%(U = 2Uc(y))) |
|---|---|
| Radiated Emission (30MHz ~ 1GHz) (3m SAC) | ±4.45 dB |
| Radiated Emission (1GHz ~ 18GHz) (3m SAC) | ±5.34 dB |
| Radiated Emission (18GHz ~ 40GHz) (3m SAC) | ±5.34 dB |
| ***Note:*** *All the measurement uncertainty value were shown with a coverage k=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.* | |

## 3.6 Additions to, Deviations, or Exclusions From the Method

No

## 3.7 Laboratory Facility

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

- **FCC - Designation No.: CN1211**

JianYan Testing Group Shenzhen Co., Ltd. has been accredited as a testing laboratory by FCC(Federal Communications Commission). The test firm Registration No. is 727551.

- **ISED – CAB identifier.: CN0021**

The 3m Semi-anechoic chamber and 10m Semi-anechoic chamber of JianYan Testing Group Shenzhen Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

- **CNAS - Registration No.: CNAS L15527**

JianYan Testing Group Shenzhen Co., Ltd. is accredited to ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L15527.

- **A2LA - Registration No.: 4346.01**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. The test scope can be found as below link: https://portal.a2la.org/scopepdf/4346-01.pdf

## 3.8 Laboratory Location

JianYan Testing Group Shenzhen Co., Ltd.
Address: No.101, Building 8, Innovation Wisdom Port, No.155 Hongtian Road, Huangpu Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, People's Republic of China.
Tel: +86-755-23118282, Fax: +86-755-23116366
Email: info-JYTee@lets.com, Website: http://jyt.lets.com

## 3.9 Test Instruments List

| Radiated Emission(3m SAC): | | | | | |
|---|---|---|---|---|---|
| **Test Equipment** | **Manufacturer** | **Model No.** | **Manage No.** | **Cal. Date (mm-dd-yy)** | **Cal. Due date (mm-dd-yy)** |
| 3m SAC | ETS | 9m*6m*6m | WXJ001-1 | 04-14-2021 | 04-13-2024 |
| Loop Antenna | Schwarzbeck | FMZB 1519 B | WXJ002-4 | 03-07-2022 | 03-06-2023 |
| BiConiLog Antenna | Schwarzbeck | VULB9163 | WXJ002 | 03-08-2022 | 03-07-2023 |
| Horn Antenna | Schwarzbeck | BBHA9120D | WXJ002-2 | 03-08-2022 | 03-07-2023 |
| Horn Antenna | Schwarzbeck | BBHA9170 | WXJ002-5 | 04-07-2022 | 04-06-2023 |
| Pre-amplifier (30MHz ~ 1GHz) | Schwarzbeck | BBV9743B | WXJ001-2 | 01-20-2022 | 01-19-2023 |
| Pre-amplifier (1GHz ~ 18GHz) | SKET | LNPA_0118G-50 | WXJ001-3 | 01-20-2022 | 01-19-2023 |
| Pre-amplifier (18GHz ~ 40GHz) | RF System | TRLA-180400G45B | WXJ002-7 | 03-30-2022 | 03-29-2023 |
| EMI Test Receiver | Rohde & Schwarz | ESRP7 | WXJ003-1 | 03-05-2022 | 03-04-2023 |
| Spectrum Analyzer | Rohde & Schwarz | FSP 30 | WXJ004 | 01-20-2022 | 01-19-2023 |
| Spectrum Analyzer | KEYSIGHT | N9010B | WXJ004-2 | 10-17-2022 | 10-16-2023 |
| Coaxial Cable (30MHz ~ 1GHz) | JYTSZ | JYT3M-1G-NN-8M | WXG001-4 | 01-20-2022 | 01-19-2023 |
| Coaxial Cable (1GHz ~ 18GHz) | JYTSZ | JYT3M-18G-NN-8M | WXG001-5 | 01-20-2022 | 01-19-2023 |
| Coaxial Cable (18GHz ~ 40GHz) | JYTSZ | JYT3M-40G-SS-8M | WXG001-7 | 01-20-2022 | 01-19-2023 |
| Band Reject Filter Group | Tonscend | JS0806-F | WXJ089 | N/A | |
| Test Software | Tonscend | TS+ | Version: 3.0.0.1 | | |

# 4 Measurement Setup and Procedure

## 4.1 Test Channel

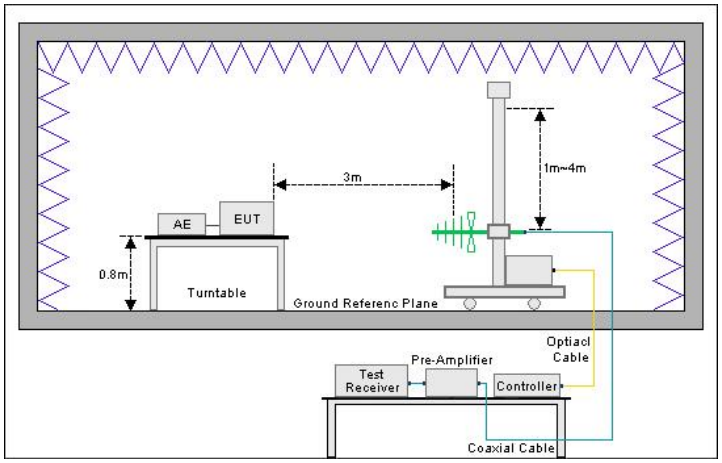
According to ANSI C63.10-2013 chapter 5.6.1 Table 4 requirement, select lowest channel, middle channel, and highest channel in the frequency range in which device operates for testing. The detailed frequency points are as follows:

| Lowest channel | | Middle channel | | Highest channel | |
|---|---|---|---|---|---|
| Channel No. | Frequency (MHz) | Channel No. | Frequency (MHz) | Channel No. | Frequency (MHz) |
| 0 | 2402 | 39 | 2441 | 78 | 2480 |

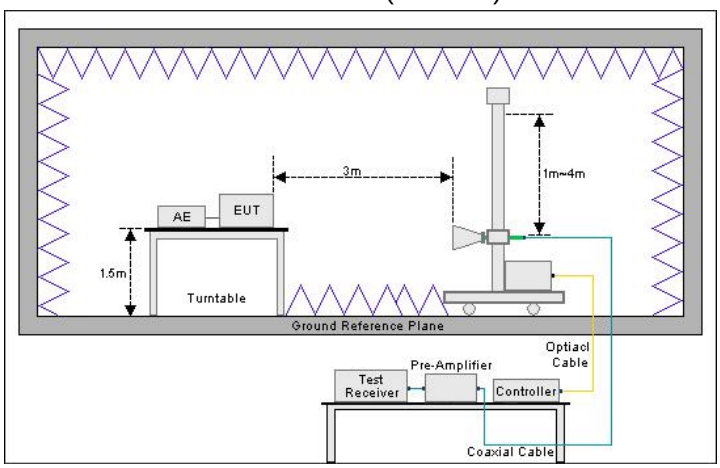
## 4.2 Test Setup

**1) Radiated emission measurement:**

Below 1GHz (3m SAC)




Above 1GHz (3m SAC)



## 4.3 Test Procedure

| Test method | Test step |
|---|---|
| Radiated emission | **For below 1GHz:**<br>1. The EUT was placed on the tabletop of a rotating table 0.8 m the ground at a 3 m semi anechoic chamber. The measurement distance from the EUT to the receiving antenna is 3 m.<br>2. EUT works in each mode of operation that needs to be tested，and having the EUT continuously working, respectively on 3 axis (X, Y & Z) and considered typical configuration to obtain worst position. The highest signal levels relative to the limit shall be determined by rotating the EUT from 0° to 360° and with varying the measurement antenna height between 1 m and 4 m in vertical and horizontal polarizations.<br>3. Open the test software to control the test antenna and test turntable. Perform the test, save the test results, and export the test data.<br><br>**For above 1GHz:**<br>1. The EUT was placed on the tabletop of a rotating table 1.5 m the ground at a 3 m fully anechoic room. The measurement distance from the EUT to the receiving antenna is 3 m.<br>2. EUT works in each mode of operation that needs to be tested，and having the EUT continuously working, respectively on 3 axis (X, Y & Z) and considered typical configuration to obtain worst position. The highest signal levels relative to the limit shall be determined by rotating the EUT from 0° to 360° and with varying the measurement antenna height between 1 m and 4 m in vertical and horizontal polarizations.<br>3. Open the test software to control the test antenna and test turntable. Perform the test, save the test results, and export the test data. |

# 5 Test Results

## 5.1 Summary

### 5.1.1 Clause and data summary

This report was amended on FCC ID: 2ADYY-AD8 follow FCC Class II Permissive Change. The original report: JYTSZ- R12-2201449, issued by JianYan Testing Group Shenzhen Co., Ltd. The differences between them as below: Only the applicant and manufacturer addresses are updated, change the shape of the shield cover of PMU, change the size of QR code, delete: L3217 L3533 and Components position adjustment, Sub PCB: replace a capacitance(C123) with a diode(D102), update ANT1(2.4G Wi-Fi MIMO&BT) and ANT11(5G NR N77 N78 DRX2), ANT13(5G NR N41 DRX1). So retest: Emissions in Restricted Frequency Bands and Emissions in Non-restricted Frequency Bands.

| Test items | Standard clause | Test data | Result |
|---|---|---|---|
| Antenna Requirement | 15.203<br>15.247 (b)(4) | See Section 5.2 | Pass |
| AC Power Line Conducted Emission | 15.207 | Please refer to JYTSZ-R12-2201449 report | Pass* |
| Conducted Output Power | 15.247 (b)(1) | Please refer to JYTSZ-R12-2201449 report | Pass* |
| 20dB Occupied Bandwidth | 15.247 (a)(1) | Please refer to JYTSZ-R12-2201449 report | Pass* |
| Carrier Frequencies Separation | 15.247 (a)(1) | Please refer to JYTSZ-R12-2201449 report | Pass* |
| Hopping Channel Number | 5.247 (a)(1)(iii) | Please refer to JYTSZ-R12-2201449 report | Pass* |
| Dwell Time | 15.247 (a)(1)(iii) | Please refer to JYTSZ-R12-2201449 report | Pass* |
| Band-edge Emission<br>Conduction Spurious Emission | 15.247 (d) | Please refer to JYTSZ-R12-2201449 report | Pass* |
| Emissions in Restricted Frequency Bands | 15.205<br>15.247 (d) | See Section 5.3 | Pass |
| Emissions in Non-restricted Frequency Bands | 15.209<br>15.247(d) | See Section 5.4 | Pass |
| ***Remark:***<br>*1. Pass*: Please refer to JYTSZ-R12-2201449 report, issued by JianYan Testing Group Shenzhen Co., Ltd.* | | | |
| ***Test Method:*** | *ANSI C63.10-2013*<br>*KDB 558074 D01 15.247 Meas Guidance v05r02* | | |

### 5.1.2 Test Limit

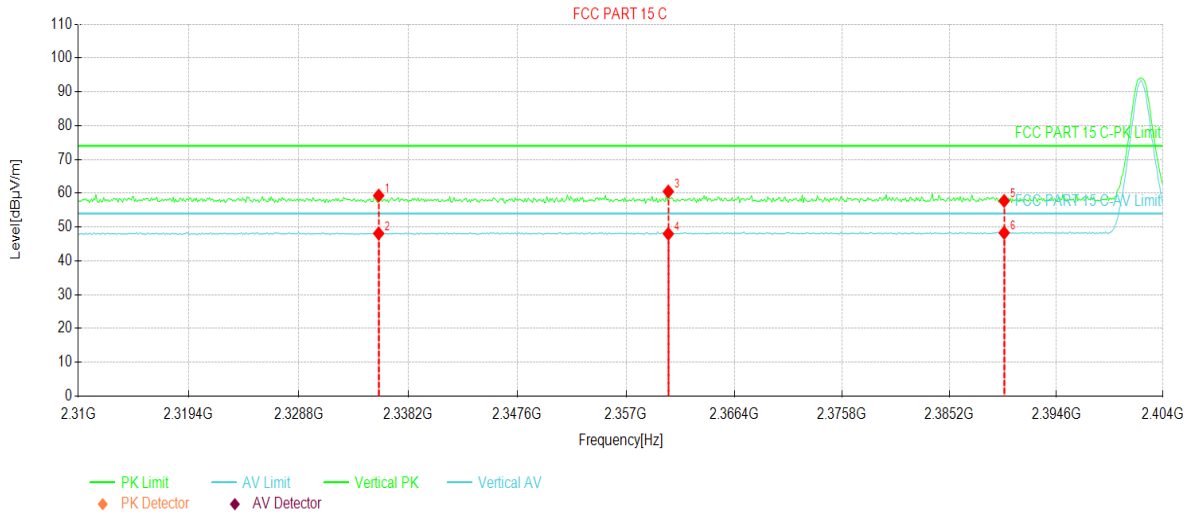
<table>
<tr><th>Test items</th><th>Limit</th></tr>
<tr><td>AC Power Line Conducted Emission</td><td>
<table>
<tr><th rowspan="2">Frequency (MHz)</th><th colspan="2">Limit (dBµV)</th></tr>
<tr><th>Quasi-Peak</th><th>Average</th></tr>
<tr><td>0.15 – 0.5</td><td>66 to 56 Note 1</td><td>56 to 46 Note 1</td></tr>
<tr><td>0.5 – 5</td><td>56</td><td>46</td></tr>
<tr><td>5 – 30</td><td>60</td><td>50</td></tr>
<tr><td colspan="3">Note 1: The limit level in dBµV decreases linearly with the logarithm of frequency.<br>Note 2: The more stringent limit applies at transition frequencies.</td></tr>
</table>
</td></tr>
<tr><td>Conducted Output Power</td><td>For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts.</td></tr>
<tr><td>20dB Occupied Bandwidth</td><td>Within authorization band</td></tr>
<tr><td>Carrier Frequencies Separation</td><td>a) 0.025MHz or the 20dB bandwidth (whichever is greater).<br>b) 0.025MHz or two-thirds of the 20dB bandwidth (whichever is greater).</td></tr>
<tr><td>Hopping Channel Number</td><td>At least 15 channels.</td></tr>
<tr><td>Dwell Time</td><td>Not be greater than 0.4 seconds.</td></tr>
<tr><td>Band-edge Emission<br><br>Conduction Spurious Emission</td><td>In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).</td></tr>
<tr><td>Emissions in Restricted Frequency Bands<br><br>Emissions in Non-restricted Frequency Bands</td><td>
<table>
<tr><th rowspan="2">Frequency (MHz)</th><th colspan="2">Limit (dBµV/m)</th><th rowspan="2">Detector</th></tr>
<tr><th>@ 3m</th><th>@ 10m</th></tr>
<tr><td>30 – 88</td><td>40.0</td><td>30.0</td><td>Quasi-peak</td></tr>
<tr><td>88 – 216</td><td>43.5</td><td>33.5</td><td>Quasi-peak</td></tr>
<tr><td>216 – 960</td><td>46.0</td><td>36.0</td><td>Quasi-peak</td></tr>
<tr><td>960 – 1000</td><td>54.0</td><td>44.0</td><td>Quasi-peak</td></tr>
<tr><td colspan="4">Note: The more stringent limit applies at transition frequencies.</td></tr>
<tr><th rowspan="2">Frequency</th><th colspan="3">Limit (dBµV/m) @ 3m</th></tr>
<tr><th colspan="2">Average</th><th>Peake</th></tr>
<tr><td>Above 1 GHz</td><td colspan="2">54.0</td><td>74.0</td></tr>
<tr><td colspan="4">Note: The measurement bandwidth shall be 1 MHz or greater.</td></tr>
</table>
</td></tr>
</table>

## 5.2 Antenna requirement

| **Standard requirement:** | FCC Part 15 C Section 15.203 /247(b)(4) |
|---|---|
| **15.203 requirement:**<br>An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.<br>**15.247(b) (4) requirement:**<br>(4) The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi. | |
| **E.U.T Antenna:** | |
| The BLE antenna is an Internal antenna which cannot replace by end-user, the best case gain of the antenna is 1.3 dBi. See product internal photos for details. | |

## 5.3 Emissions in Restricted Frequency Bands

| Product Name: | Mobile Phone | Product Model: | AD8 |
|---|---|---|---|
| Test By: | Mike | Test mode: | DH1 Tx mode |
| Test Channel: | Lowest channel | Polarization: | Vertical |
| Test Voltage: | DC 3.87V | | |

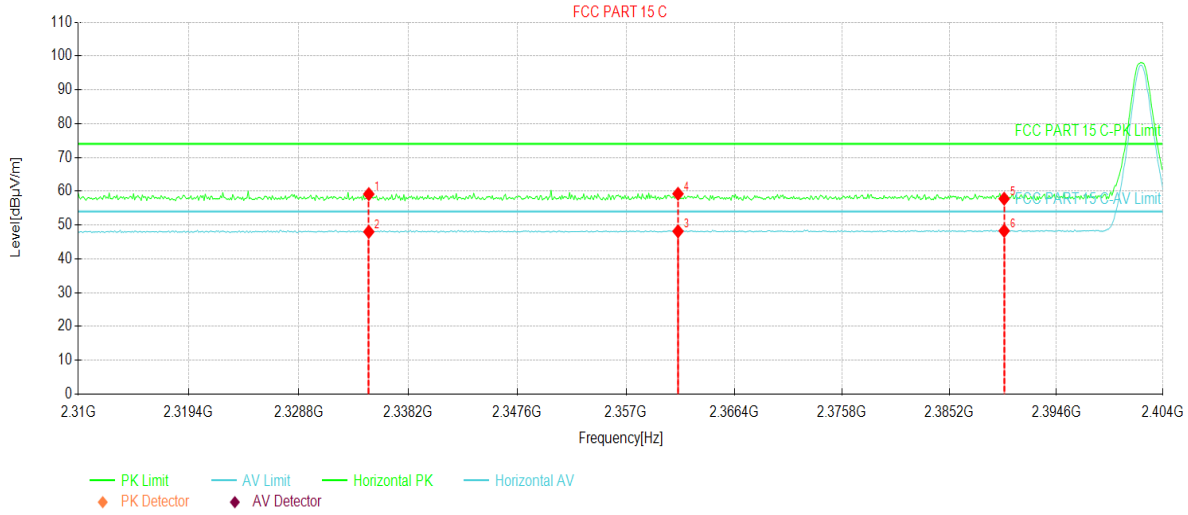



| Suspected Data List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Reading [dBµV/m] | Factor [dB] | Level [dBµV/m] | Limit [dBµV/m] | Margin [dB] | Trace | Polarity |
| 1 | 2335.66 | 24.12 | 35.19 | 59.31 | 74.00 | 14.69 | PK | Vertical |
| 2 | 2335.66 | 12.92 | 35.19 | 48.11 | 54.00 | 5.89 | AV | Vertical |
| 3 | 2360.66 | 25.15 | 35.37 | 60.52 | 74.00 | 13.48 | PK | Vertical |
| 4 | 2360.66 | 12.62 | 35.37 | 47.99 | 54.00 | 6.01 | AV | Vertical |
| 5 | 2390.00 | 22.14 | 35.60 | 57.74 | 74.00 | 16.26 | PK | Vertical |
| 6 | 2390.00 | 12.70 | 35.60 | 48.30 | 54.00 | 5.70 | AV | Vertical |

***Remark:***

*1. Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).*

| Product Name: | Mobile Phone | Product Model: | AD8 |
|---|---|---|---|
| Test By: | Mike | Test mode: | DH1 Tx mode |
| Test Channel: | Lowest channel | Polarization: | Horizontal |
| Test Voltage: | DC 3.87V | | |



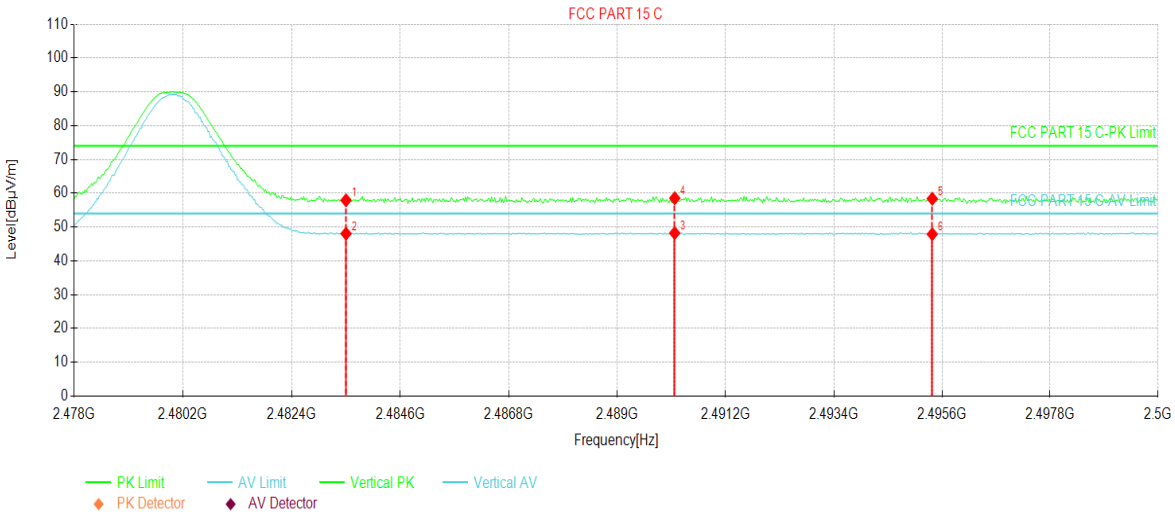

**Suspected Data List**

| NO. | Freq. [MHz] | Reading [dBµV/m] | Factor [dB] | Level [dBµV/m] | Limit [dBµV/m] | Margin [dB] | Trace | Polarity |
|---|---|---|---|---|---|---|---|---|
| 1 | 2334.81 | 23.97 | 35.18 | 59.15 | 74.00 | 14.85 | PK | Horizontal |
| 2 | 2334.81 | 12.83 | 35.18 | 48.01 | 54.00 | 5.99 | AV | Horizontal |
| 3 | 2361.51 | 12.79 | 35.38 | 48.17 | 54.00 | 5.83 | AV | Horizontal |
| 4 | 2361.51 | 23.86 | 35.38 | 59.24 | 74.00 | 14.76 | PK | Horizontal |
| 5 | 2390.00 | 22.19 | 35.60 | 57.79 | 74.00 | 16.21 | PK | Horizontal |
| 6 | 2390.00 | 12.70 | 35.60 | 48.30 | 54.00 | 5.70 | AV | Horizontal |

***Remark:***

*1. Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).*

| Product Name: | Mobile Phone | Product Model: | AD8 |
|---|---|---|---|
| Test By: | Mike | Test mode: | DH1 Tx mode |
| Test Channel: | Highest channel | Polarization: | Vertical |
| Test Voltage: | DC 3.87V | | |



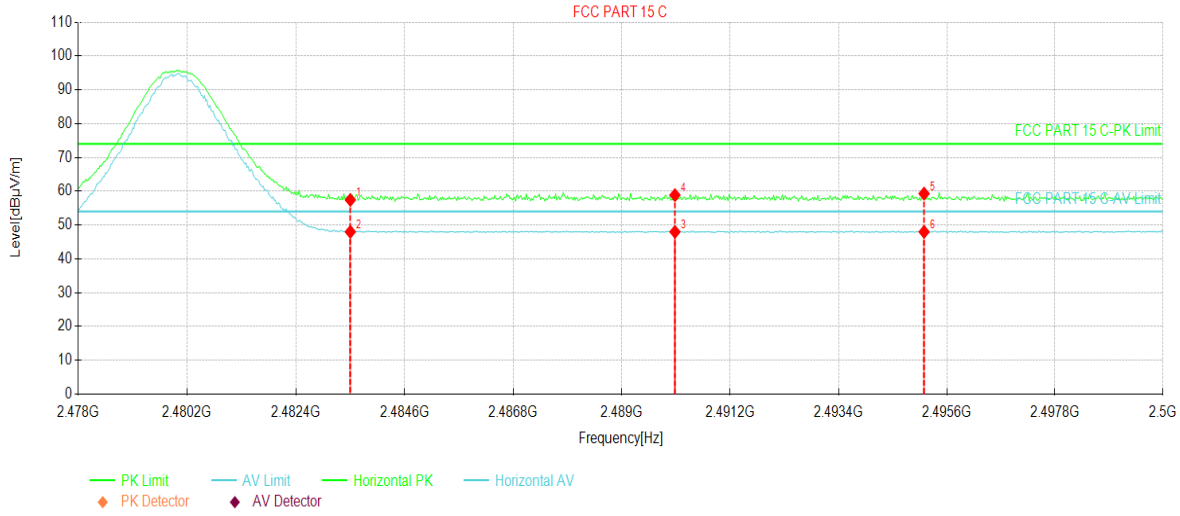

**Suspected Data List**

| NO. | Freq. [MHz] | Reading [dBµV/m] | Factor [dB] | Level [dBµV/m] | Limit [dBµV/m] | Margin [dB] | Trace | Polarity |
|---|---|---|---|---|---|---|---|---|
| 1 | 2483.50 | 22.41 | 35.51 | 57.92 | 74.00 | 16.08 | PK | Vertical |
| 2 | 2483.50 | 12.55 | 35.51 | 48.06 | 54.00 | 5.94 | AV | Vertical |
| 3 | 2490.16 | 12.72 | 35.50 | 48.22 | 54.00 | 5.78 | AV | Vertical |
| 4 | 2490.16 | 23.02 | 35.50 | 58.52 | 74.00 | 15.48 | PK | Vertical |
| 5 | 2495.40 | 22.88 | 35.49 | 58.37 | 74.00 | 15.63 | PK | Vertical |
| 6 | 2495.40 | 12.41 | 35.49 | 47.90 | 54.00 | 6.10 | AV | Vertical |

***Remark:***

*1. Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).*

| Product Name: | Mobile Phone | Product Model: | AD8 |
|---|---|---|---|
| Test By: | Mike | Test mode: | DH1 Tx mode |
| Test Channel: | Highest channel | Polarization: | Horizontal |
| Test Voltage: | DC 3.87V | | |




**Suspected Data List**

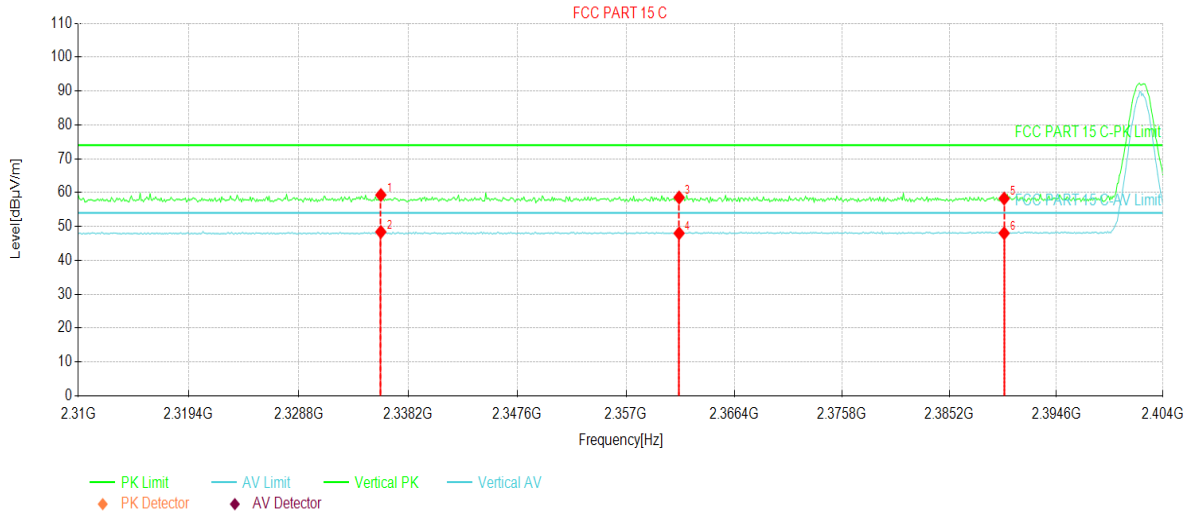
| NO. | Freq. [MHz] | Reading [dBμV/m] | Factor [dB] | Level [dBμV/m] | Limit [dBμV/m] | Margin [dB] | Trace | Polarity |
|---|---|---|---|---|---|---|---|---|
| 1 | 2483.50 | 21.92 | 35.51 | 57.43 | 74.00 | 16.57 | PK | Horizontal |
| 2 | 2483.50 | 12.48 | 35.51 | 47.99 | 54.00 | 6.01 | AV | Horizontal |
| 3 | 2490.07 | 12.50 | 35.50 | 48.00 | 54.00 | 6.00 | AV | Horizontal |
| 4 | 2490.07 | 23.36 | 35.50 | 58.86 | 74.00 | 15.14 | PK | Horizontal |
| 5 | 2495.13 | 23.80 | 35.49 | 59.29 | 74.00 | 14.71 | PK | Horizontal |
| 6 | 2495.13 | 12.50 | 35.49 | 47.99 | 54.00 | 6.01 | AV | Horizontal |

***Remark:***

*1. Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).*

**π/4-DQPSK mode**

| **Product Name:** | Mobile Phone | **Product Model:** | AD8 |
|---|---|---|---|
| **Test By:** | Mike | **Test mode:** | 2DH1 Tx mode |
| **Test Channel:** | Lowest channel | **Polarization:** | Vertical |
| **Test Voltage:** | DC 3.87V | | |

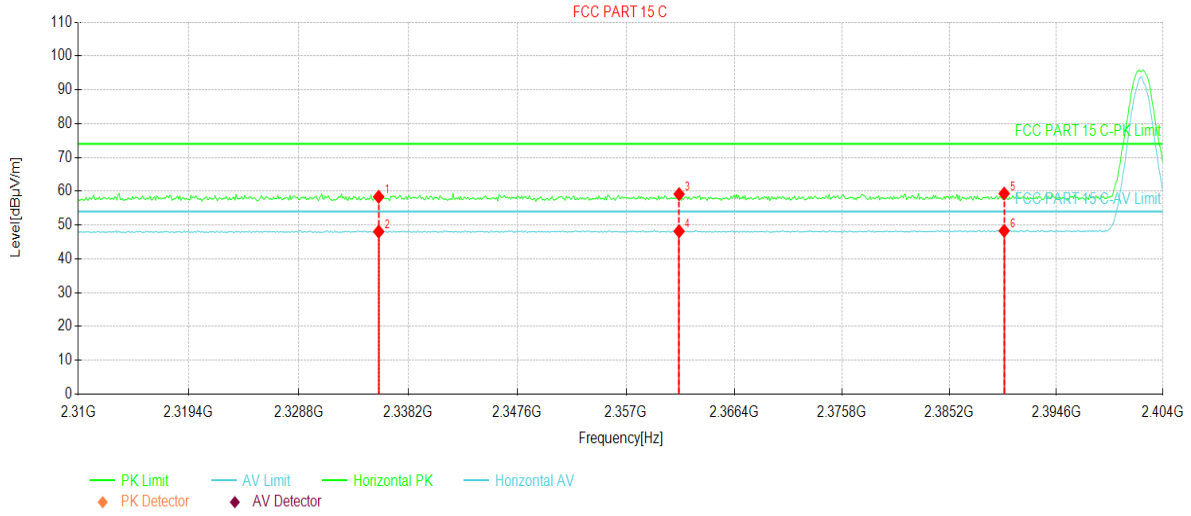



| **Suspected Data List** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Reading [dBµV/m] | Factor [dB] | Level [dBµV/m] | Limit [dBµV/m] | Margin [dB] | Trace | Polarity |
| 1 | 2335.85 | 24.10 | 35.19 | 59.29 | 74.00 | 14.71 | PK | Vertical |
| 2 | 2335.85 | 13.21 | 35.19 | 48.40 | 54.00 | 5.60 | AV | Vertical |
| 3 | 2361.60 | 23.18 | 35.38 | 58.56 | 74.00 | 15.44 | PK | Vertical |
| 4 | 2361.60 | 12.63 | 35.38 | 48.01 | 54.00 | 5.99 | AV | Vertical |
| 5 | 2390.00 | 22.65 | 35.60 | 58.25 | 74.00 | 15.75 | PK | Vertical |
| 6 | 2390.00 | 12.43 | 35.60 | 48.03 | 54.00 | 5.97 | AV | Vertical |

***Remark:***

*1. Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).*

| Product Name: | Mobile Phone | Product Model: | AD8 |
|---|---|---|---|
| Test By: | Mike | Test mode: | 2DH1 Tx mode |
| Test Channel: | Lowest channel | Polarization: | Horizontal |
| Test Voltage: | DC 3.87V | | |



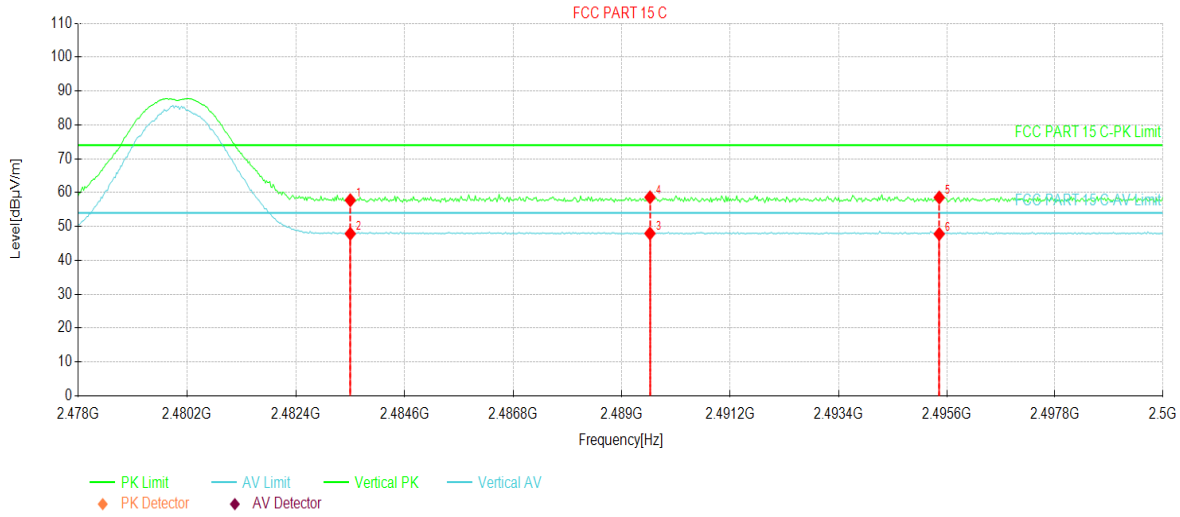

**Suspected Data List**

| NO. | Freq. [MHz] | Reading [dBµV/m] | Factor [dB] | Level [dBµV/m] | Limit [dBµV/m] | Margin [dB] | Trace | Polarity |
|---|---|---|---|---|---|---|---|---|
| 1 | 2335.66 | 23.17 | 35.19 | 58.36 | 74.00 | 15.64 | PK | Horizontal |
| 2 | 2335.66 | 12.86 | 35.19 | 48.05 | 54.00 | 5.95 | AV | Horizontal |
| 3 | 2361.60 | 23.77 | 35.38 | 59.15 | 74.00 | 14.85 | PK | Horizontal |
| 4 | 2361.60 | 12.79 | 35.38 | 48.17 | 54.00 | 5.83 | AV | Horizontal |
| 5 | 2390.00 | 23.72 | 35.60 | 59.32 | 74.00 | 14.68 | PK | Horizontal |
| 6 | 2390.00 | 12.71 | 35.60 | 48.31 | 54.00 | 5.69 | AV | Horizontal |

***Remark:***

*1. Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).*

| Product Name: | Mobile Phone | Product Model: | AD8 |
|---|---|---|---|
| Test By: | Mike | Test mode: | 2DH1 Tx mode |
| Test Channel: | Highest channel | Polarization: | Vertical |
| Test Voltage: | DC 3.87V | | |



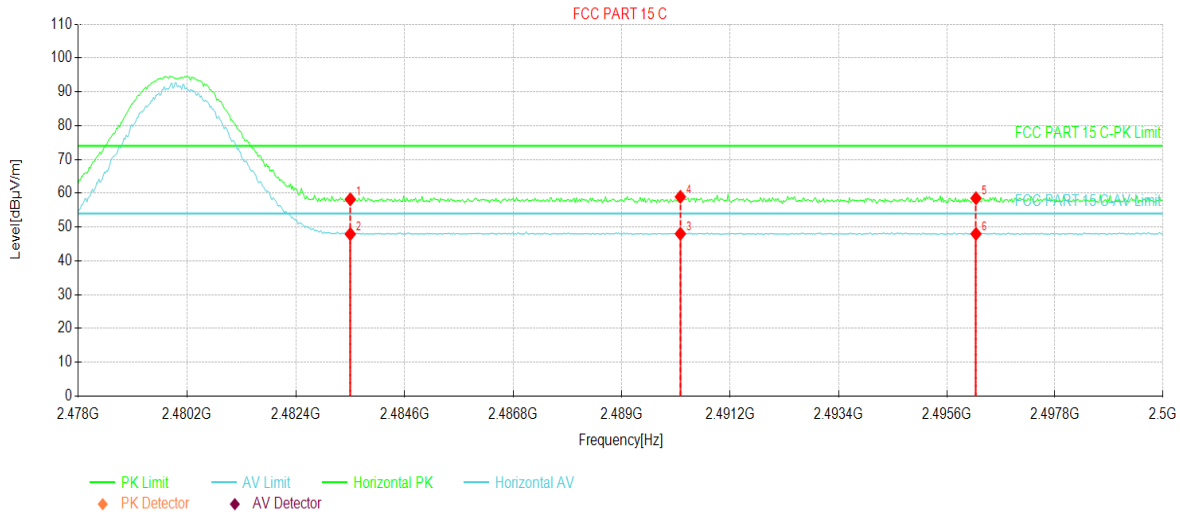

**Suspected Data List**

| NO. | Freq. [MHz] | Reading [dBµV/m] | Factor [dB] | Level [dBµV/m] | Limit [dBµV/m] | Margin [dB] | Trace | Polarity |
|---|---|---|---|---|---|---|---|---|
| 1 | 2483.50 | 22.25 | 35.51 | 57.76 | 74.00 | 16.24 | PK | Vertical |
| 2 | 2483.50 | 12.36 | 35.51 | 47.87 | 54.00 | 6.13 | AV | Vertical |
| 3 | 2489.57 | 12.45 | 35.50 | 47.95 | 54.00 | 6.05 | AV | Vertical |
| 4 | 2489.57 | 23.12 | 35.50 | 58.62 | 74.00 | 15.38 | PK | Vertical |
| 5 | 2495.44 | 23.06 | 35.49 | 58.55 | 74.00 | 15.45 | PK | Vertical |
| 6 | 2495.44 | 12.31 | 35.49 | 47.80 | 54.00 | 6.20 | AV | Vertical |

***Remark:***

*1. Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).*

| Product Name: | Mobile Phone | Product Model: | AD8 |
|---|---|---|---|
| Test By: | Mike | Test mode: | 2DH1 Tx mode |
| Test Channel: | Highest channel | Polarization: | Horizontal |
| Test Voltage: | DC 3.87V | | |




**Suspected Data List**

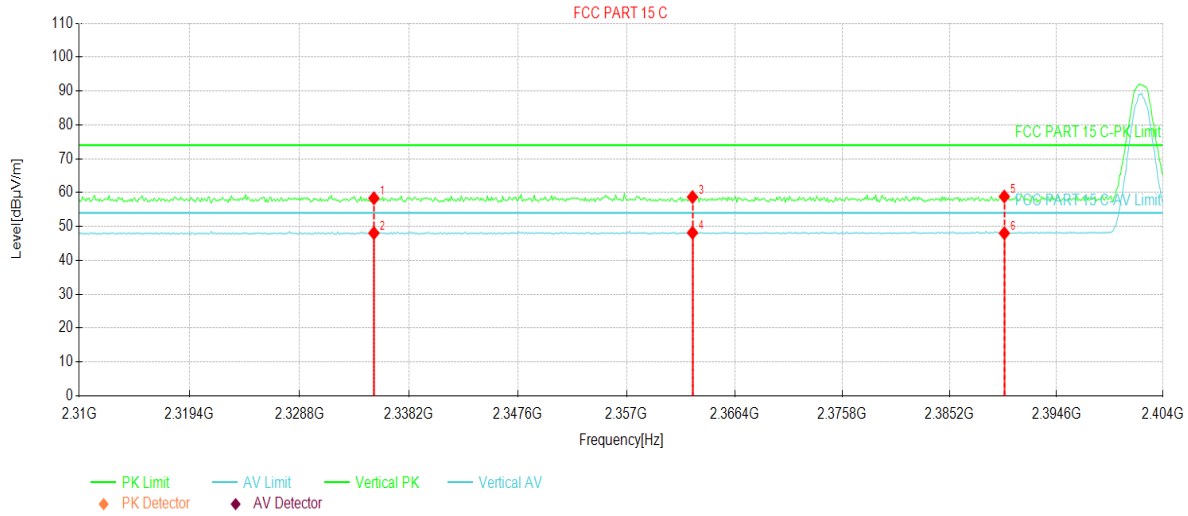
| NO. | Freq. [MHz] | Reading [dBµV/m] | Factor [dB] | Level [dBµV/m] | Limit [dBµV/m] | Margin [dB] | Trace | Polarity |
|---|---|---|---|---|---|---|---|---|
| 1 | 2483.50 | 22.70 | 35.51 | 58.21 | 74.00 | 15.79 | PK | Horizontal |
| 2 | 2483.50 | 12.41 | 35.51 | 47.92 | 54.00 | 6.08 | AV | Horizontal |
| 3 | 2490.18 | 12.52 | 35.50 | 48.02 | 54.00 | 5.98 | AV | Horizontal |
| 4 | 2490.18 | 23.43 | 35.50 | 58.93 | 74.00 | 15.07 | PK | Horizontal |
| 5 | 2496.19 | 23.04 | 35.49 | 58.53 | 74.00 | 15.47 | PK | Horizontal |
| 6 | 2496.19 | 12.49 | 35.49 | 47.98 | 54.00 | 6.02 | AV | Horizontal |

***Remark:***

*1. Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).*

**8DPSK mode**

| **Product Name:** | Mobile Phone | **Product Model:** | AD8 |
|---|---|---|---|
| **Test By:** | Mike | **Test mode:** | 3DH1 Tx mode |
| **Test Channel:** | Lowest channel | **Polarization:** | Vertical |
| **Test Voltage:** | DC 3.87V | | |



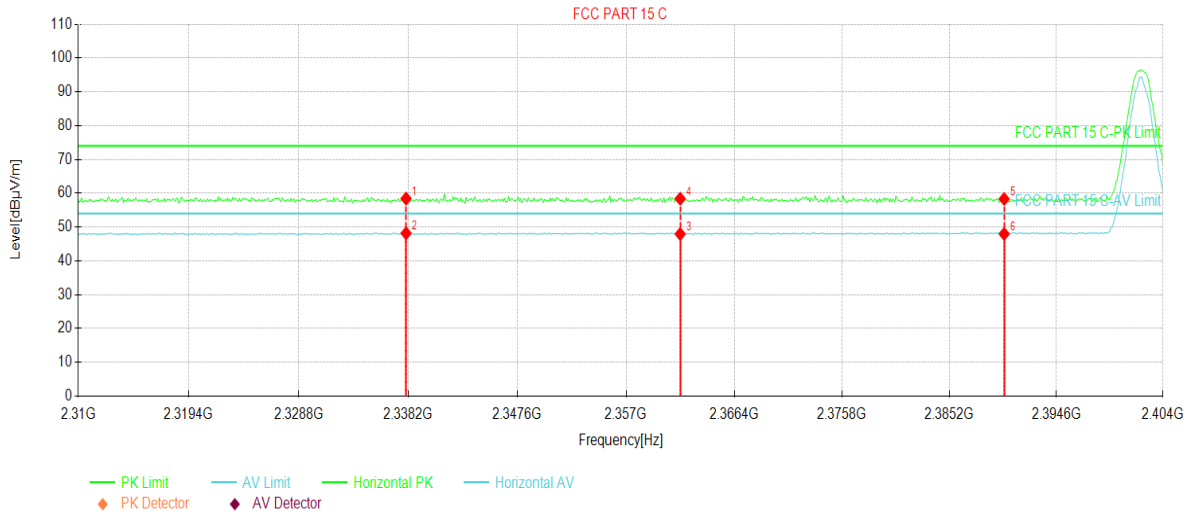

**Suspected Data List**

| NO. | Freq. [MHz] | Reading [dBµV/m] | Factor [dB] | Level [dBµV/m] | Limit [dBµV/m] | Margin [dB] | Trace | Polarity |
|---|---|---|---|---|---|---|---|---|
| 1 | 2335.19 | 23.16 | 35.18 | 58.34 | 74.00 | 15.66 | PK | Vertical |
| 2 | 2335.19 | 12.87 | 35.18 | 48.05 | 54.00 | 5.95 | AV | Vertical |
| 3 | 2362.73 | 23.30 | 35.39 | 58.69 | 74.00 | 15.31 | PK | Vertical |
| 4 | 2362.73 | 12.75 | 35.39 | 48.14 | 54.00 | 5.86 | AV | Vertical |
| 5 | 2390.00 | 23.24 | 35.60 | 58.84 | 74.00 | 15.16 | PK | Vertical |
| 6 | 2390.00 | 12.43 | 35.60 | 48.03 | 54.00 | 5.97 | AV | Vertical |

***Remark:***

*1. Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).*

| Product Name: | Mobile Phone | Product Model: | AD8 |
|---|---|---|---|
| Test By: | Mike | Test mode: | 3DH1 Tx mode |
| Test Channel: | Lowest channel | Polarization: | Horizontal |
| Test Voltage: | DC 3.87V | | |



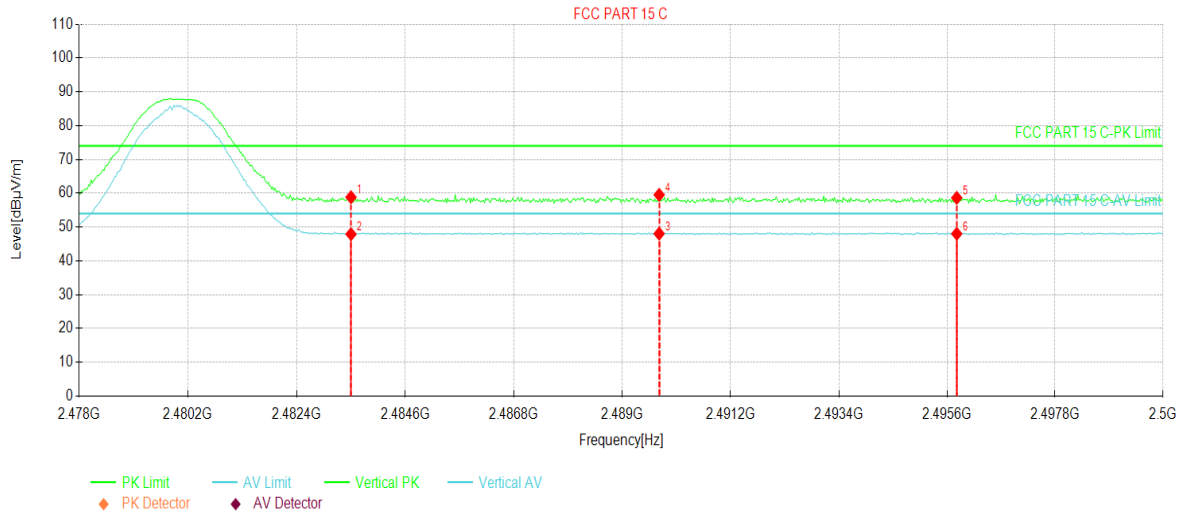

**Suspected Data List**

| NO. | Freq. [MHz] | Reading [dBµV/m] | Factor [dB] | Level [dBµV/m] | Limit [dBµV/m] | Margin [dB] | Trace | Polarity |
|---|---|---|---|---|---|---|---|---|
| 1 | 2338.01 | 23.21 | 35.21 | 58.42 | 74.00 | 15.58 | PK | Horizontal |
| 2 | 2338.01 | 12.95 | 35.21 | 48.16 | 54.00 | 5.84 | AV | Horizontal |
| 3 | 2361.70 | 12.56 | 35.38 | 47.94 | 54.00 | 6.06 | AV | Horizontal |
| 4 | 2361.70 | 23.00 | 35.38 | 58.38 | 74.00 | 15.62 | PK | Horizontal |
| 5 | 2390.00 | 22.71 | 35.60 | 58.31 | 74.00 | 15.69 | PK | Horizontal |
| 6 | 2390.00 | 12.36 | 35.60 | 47.96 | 54.00 | 6.04 | AV | Horizontal |

***Remark:***

*1. Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).*

| Product Name: | Mobile Phone | Product Model: | AD8 |
|---|---|---|---|
| Test By: | Mike | Test mode: | 3DH1 Tx mode |
| Test Channel: | Highest channel | Polarization: | Vertical |
| Test Voltage: | DC 3.87V | | |



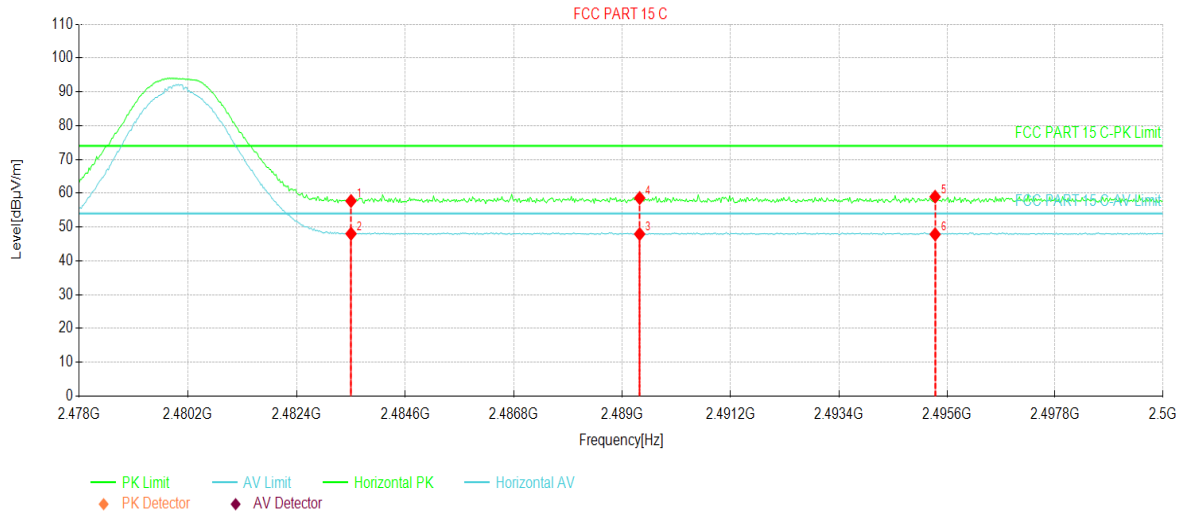

**Suspected Data List**

| NO. | Freq. [MHz] | Reading [dBµV/m] | Factor [dB] | Level [dBµV/m] | Limit [dBµV/m] | Margin [dB] | Trace | Polarity |
|---|---|---|---|---|---|---|---|---|
| 1 | 2483.50 | 23.32 | 35.51 | 58.83 | 74.00 | 15.17 | PK | Vertical |
| 2 | 2483.50 | 12.39 | 35.51 | 47.90 | 54.00 | 6.10 | AV | Vertical |
| 3 | 2489.74 | 12.54 | 35.50 | 48.04 | 54.00 | 5.96 | AV | Vertical |
| 4 | 2489.74 | 24.03 | 35.50 | 59.53 | 74.00 | 14.47 | PK | Vertical |
| 5 | 2495.79 | 23.15 | 35.49 | 58.64 | 74.00 | 15.36 | PK | Vertical |
| 6 | 2495.79 | 12.52 | 35.49 | 48.01 | 54.00 | 5.99 | AV | Vertical |

***Remark:***

*1. Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).*

| Product Name: | Mobile Phone | Product Model: | AD8 |
|---|---|---|---|
| Test By: | Mike | Test mode: | 3DH1 Tx mode |
| Test Channel: | Highest channel | Polarization: | Horizontal |
| Test Voltage: | DC 3.87V | | |




**Suspected Data List**

| NO. | Freq. [MHz] | Reading [dBµV/m] | Factor [dB] | Level [dBµV/m] | Limit [dBµV/m] | Margin [dB] | Trace | Polarity |
|---|---|---|---|---|---|---|---|---|
| 1 | 2483.50 | 22.19 | 35.51 | 57.70 | 74.00 | 16.30 | PK | Horizontal |
| 2 | 2483.50 | 12.51 | 35.51 | 48.02 | 54.00 | 5.98 | AV | Horizontal |
| 3 | 2489.35 | 12.44 | 35.50 | 47.94 | 54.00 | 6.06 | AV | Horizontal |
| 4 | 2489.35 | 23.07 | 35.50 | 58.57 | 74.00 | 15.43 | PK | Horizontal |
| 5 | 2495.35 | 23.47 | 35.49 | 58.96 | 74.00 | 15.04 | PK | Horizontal |
| 6 | 2495.35 | 12.36 | 35.49 | 47.85 | 54.00 | 6.15 | AV | Horizontal |

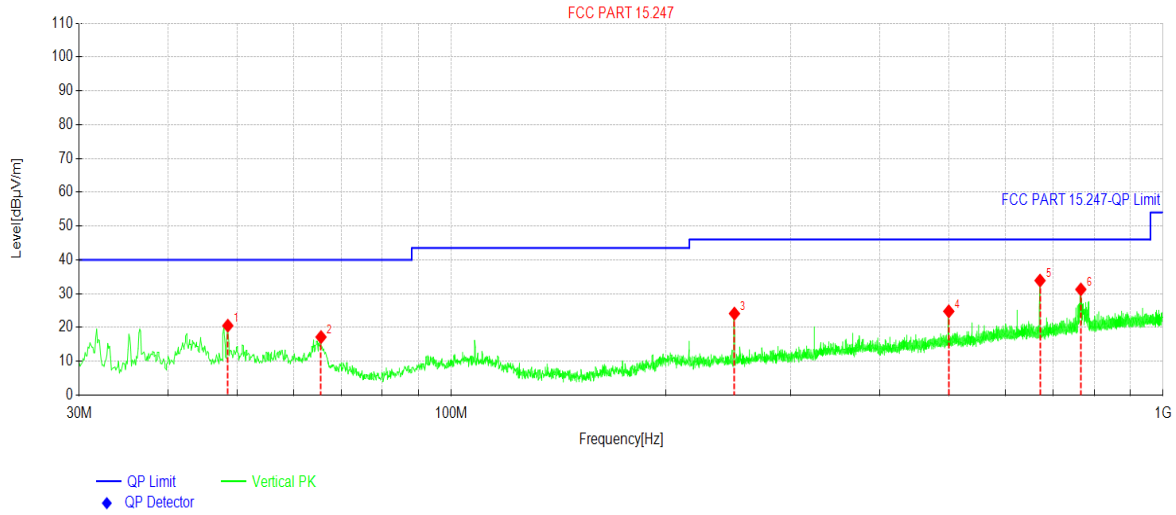
***Remark:***

*1. Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).*

## 5.4 Emissions in Non-restricted Frequency Bands

**Below 1GHz:**

| | | | |
|---|---|---|---|
| **Product Name:** | Mobile Phone | **Product Model:** | AD8 |
| **Test By:** | Mike | **Test mode:** | BT Tx mode |
| **Test Frequency:** | 30 MHz ~ 1 GHz | **Polarization:** | Vertical |
| **Test Voltage:** | DC 3.87V | | |

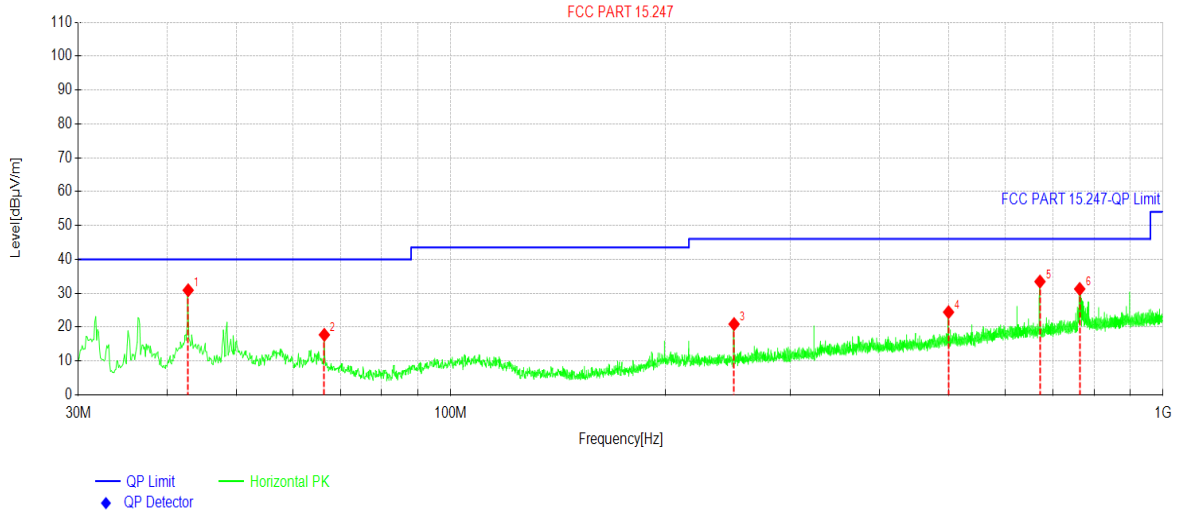



| Suspected Data List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Reading[dBµV/m] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Trace | Polarity |
| 1 | 48.5289 | 33.32 | 20.54 | -12.78 | 40.00 | 19.46 | PK | Vertical |
| 2 | 65.6026 | 32.21 | 17.17 | -15.04 | 40.00 | 22.83 | PK | Vertical |
| 3 | 249.921 | 38.12 | 24.12 | -14.00 | 46.00 | 21.88 | PK | Vertical |
| 4 | 500.012 | 33.77 | 24.78 | -8.99 | 46.00 | 21.22 | PK | Vertical |
| 5 | 671.719 | 39.73 | 33.88 | -5.85 | 46.00 | 12.12 | PK | Vertical |
| 6 | 766.497 | 35.54 | 31.25 | -4.29 | 46.00 | 14.75 | PK | Vertical |

***Remark:***

*1. Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).*

| Product Name: | Mobile Phone | Product Model: | AD8 |
|---|---|---|---|
| Test By: | Mike | Test mode: | BT Tx mode |
| Test Frequency: | 30 MHz ~ 1 GHz | Polarization: | Horizontal |
| Test Voltage: | DC 3.87V | | |




**Suspected Data List**

| NO. | Freq. [MHz] | Reading[dBµV/m] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Trace | Polarity |
|---|---|---|---|---|---|---|---|---|
| 1 | 42.8053 | 44.11 | 30.89 | -13.22 | 40.00 | 9.11 | PK | Horizontal |
| 2 | 66.4756 | 33.17 | 17.73 | -15.44 | 40.00 | 22.27 | PK | Horizontal |
| 3 | 249.921 | 34.89 | 20.89 | -14.00 | 46.00 | 25.11 | PK | Horizontal |
| 4 | 500.012 | 33.42 | 24.43 | -8.99 | 46.00 | 21.57 | PK | Horizontal |
| 5 | 671.816 | 39.29 | 33.44 | -5.85 | 46.00 | 12.56 | PK | Horizontal |
| 6 | 763.975 | 35.56 | 31.26 | -4.30 | 46.00 | 14.74 | PK | Horizontal |

***Remark:***

*1. Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).*

**Above 1GHz:**

| Test channel: Lowest channel | | | | | | |
|---|---|---|---|---|---|---|
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dBuV) | Factor(dB) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Polarization |
| 4804.00 | 53.18 | -9.60 | 43.58 | 74.00 | 30.42 | Vertical |
| 4804.00 | 54.15 | -9.60 | 44.55 | 74.00 | 29.45 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dBuV) | Factor(dB) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Polarization |
| 4804.00 | 46.82 | -9.60 | 37.22 | 54.00 | 16.78 | Vertical |
| 4804.00 | 46.85 | -9.60 | 37.25 | 54.00 | 16.75 | Horizontal |
| | | | | | | |
| Test channel: Middle channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dBuV) | Factor(dB) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Polarization |
| 4882.00 | 52.81 | -9.05 | 43.76 | 74.00 | 30.24 | Vertical |
| 4882.00 | 53.71 | -9.05 | 44.66 | 74.00 | 29.34 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dBuV) | Factor(dB) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Polarization |
| 4882.00 | 46.86 | -9.05 | 37.81 | 54.00 | 16.19 | Vertical |
| 4882.00 | 46.64 | -9.05 | 37.59 | 54.00 | 16.41 | Horizontal |
| | | | | | | |
| Test channel: Highest channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dBuV) | Factor(dB) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Polarization |
| 4960.00 | 53.78 | -8.45 | 45.33 | 74.00 | 28.67 | Vertical |
| 4960.00 | 53.91 | -8.45 | 45.46 | 74.00 | 28.54 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dBuV) | Factor(dB) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Polarization |
| 4960.00 | 47.05 | -8.45 | 38.60 | 54.00 | 15.40 | Vertical |
| 4960.00 | 46.70 | -8.45 | 38.25 | 54.00 | 15.75 | Horizontal |

***Remark:***

1. *Level = Reading + Factor.*
2. *Test Frequency up to 25GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.*

------End of report------