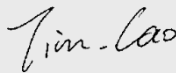


Test report No:  
2580343R.701C

## TEST REPORT

|                                           |                                                                                                                                     |
|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Product Name                              | Wireless Earphones                                                                                                                  |
| Model and /or type reference              | M2537E1                                                                                                                             |
| Trademark                                 | REDMI                                                                                                                               |
| FCC ID                                    | 2AFZZM2537E1                                                                                                                        |
| Applicant's name / address                | Xiaomi Communications Co., Ltd.<br>#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District,<br>Beijing, China, 100085 |
| Test method requested, standard           | 47 CFR FCC Part 15 (Section 15.247)<br>ANSI C63.10: 2020                                                                            |
| Verdict Summary                           | IN COMPLIANCE                                                                                                                       |
| Tested by (name / position & signature)   | Tim Cao / Project Manager<br>                    |
| Approved by (name / position & signature) | Frank He / Technical Manager<br>                 |
| Date of issue                             | 2025-09-08                                                                                                                          |
| Report Version                            | V1.0                                                                                                                                |
| Report template No                        | Template_FCC 15.247-RF-V1.0                                                                                                         |

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## COMPETENCES AND GUARANTEES

DEKRA is a testing laboratory competent to carry out the tests described in this report.

In order to assure the traceability to other national and international laboratories, DEKRA has a calibration and maintenance program for its measurement equipment.

DEKRA guarantees the reliability of the data presented in this report, which is the result of the measurements and the tests performed to the item under test on the date and under the conditions stated in the report and it is based on the knowledge and technical facilities available at DEKRA at the time of performance of the test.

DEKRA is liable to the client for the maintenance of the confidentiality of all information related to the item under test and the results of the test.

The results presented in this Test Report apply only to the particular item under test established in this document.

**IMPORTANT:** No parts of this report may be reproduced or quoted out of context, in any form or by any means, except in full, without the previous written permission of DEKRA.

## GENERAL CONDITIONS

|                      |                                                                        |
|----------------------|------------------------------------------------------------------------|
| Test Location        | No. 99, Hongye Road, Suzhou Industrial Park Suzhou, 215006, P.R. China |
| Date(receive sample) | Aug.13, 2025                                                           |
| Date (start test)    | Aug.15, 2025                                                           |
| Date (finish test)   | Aug.26, 2025                                                           |

1. This report is only referred to the item that has undergone the test.
2. This report does not constitute or imply on its own an approval of the product by the Certification Bodies or Competent Authorities.
3. This document is only valid if complete; no partial reproduction can be made without previous written permission of DEKRA.
4. This test report cannot be used partially or in full for publicity and/or promotional purposes without previous written permission of DEKRA.

## ENVIRONMENTAL CONDITIONS

The climatic conditions during the tests are within the limits specified by the manufacturer for the operation of the EUT and the test equipment. The climatic conditions during the tests were within the following limits:

|                       |               |
|-----------------------|---------------|
| Ambient temperature   | 15 °C – 35 °C |
| Relative Humidity air | 30% - 60%     |

If explicitly required in the basic standard or applied product / product family standard the climatic values are recorded and documented separately in this test report.

## POSSIBLE TEST CASE VERDICTS

|                                         |                 |
|-----------------------------------------|-----------------|
| Test case does not apply to test object | N/A             |
| Test object does meet requirement       | P (Pass) / PASS |
| Test object does not meet requirement   | F (Fail) / FAIL |
| Not measured                            | N/M             |

## ABBREVIATIONS

For the purposes of the present document, the following abbreviations apply:

|       |                                 |
|-------|---------------------------------|
| EUT   | : Equipment Under Test          |
| PK    | : Peak                          |
| QP    | : Quasi-Peak                    |
| CAV   | : CISPR Average                 |
| AV    | : Average                       |
| CDN   | : Coupling Decoupling Network   |
| SAC   | : Semi-Anechoic Chamber         |
| OATS  | : Open Area Test Site           |
| BW    | : Bandwidth                     |
| AM    | : Amplitude Modulation          |
| PM    | : Pulse Modulation              |
| HCP   | : Horizontal Coupling Plane     |
| VCP   | : Vertical Coupling Plane       |
| $U_N$ | : Nominal voltage               |
| $T_x$ | : Transmitter                   |
| $R_x$ | : Receiver                      |
| N/A   | : Not Applicable                |
| N/M   | : Not Measured                  |
| RMS   | : Root Mean Squar               |
| NT    | : Normal Temperature            |
| HT    | : High Extreme Test Temperature |
| LT    | : Low Extreme Test Temperature  |
| NV    | : Normal Voltage                |
| HV    | : High Extreme Test Voltage     |
| LV    | : Low Extreme Test Voltage      |

## DOCUMENT HISTORY

| Report No.    | Version | Description              | Issued Date |
|---------------|---------|--------------------------|-------------|
| 2580343R.701C | V1.0    | Initial issue of report. | 2025-09-08  |
|               |         |                          |             |
|               |         |                          |             |
|               |         |                          |             |
|               |         |                          |             |
|               |         |                          |             |
|               |         |                          |             |
|               |         |                          |             |
|               |         |                          |             |

## REMARKS AND COMMENTS

1. The equipment under test (EUT) does meet the essential requirements of the stated standard(s)/test(s).
2. These test results on a sample of the device are for the purpose of demonstrating Compliance with 47 CFR FCC Part 15 (Section 15.247).
3. The measurement result is considered in conformance with the requirement if it is within the prescribed limit, it is not necessary to account the uncertainty associated with the measurement result.
4. The test results presented in this report relate only to the object tested.
5. The test report shall not be reproduced without the written approval of DEKRA Testing and Certification (Suzhou) Co., Ltd.
6. This report will not be used for social proof function in China market.
7. DEKRA declines any responsibility with the following test data provided by customer that may affect the validity of result:

- Chapter 1 General Information;

## USED EQUIPMENT

### Conducted Test/ TR8

| Instrument                                                    | Manufacturer | Model No.     | Serial No. | Cal. Date  | Next Cal. Date | Firmware Version | Software version |
|---------------------------------------------------------------|--------------|---------------|------------|------------|----------------|------------------|------------------|
| Wireless Connectivity Tester                                  | R&S          | CMW 270       | 102593     | 2025.05.10 | 2026.05.09     | V 4.0.60         | N/A              |
| Coaxial Cable                                                 | N/A          | N/A           | 2477       | 2024.06.11 | 2025.06.10     | N/A              | N/A              |
| Coaxial Cable                                                 | N/A          | N/A           | 2478       | 2024.06.11 | 2025.06.10     | N/A              | N/A              |
| High and low temperature and fast temperature change test box | ASTUOD       | ASTD-FBT-225K | N/A        | 2025.04.13 | 2026.04.12     | N/A              | N/A              |
| Temperature/Humidity Meter                                    | RTS          | RTS-8S        | RF08       | 2025.06.17 | 2026.06.16     | N/A              | N/A              |
| Test system                                                   |              |               |            |            |                |                  |                  |
| Instrument                                                    | Manufacturer | Model No.     | Serial No. | Cal. Date  | Next Cal. Date | Firmware Version | Software version |
| MAX Signal Analyzer                                           | Keysight     | N9010A        | MY48030494 | 2024.10.26 | 2025.10.25     | A.14.03          | N/A              |
| RF Control Unit                                               | Tonscend     | JS0806-2      | 22G8060594 | 2025.01.26 | 2026.01.25     | N/A              | N/A              |
| MXG-B RF Vector Signal Generator                              | Keysight     | N5182B        | MY61252529 | 2025.03.23 | 2026.03.22     | B.01.96          | N/A              |
| Frequency extender for EXG or MXG                             | Keysight     | N5182BX07     | MY59362500 | 2025.03.23 | 2026.03.22     | N/A              | N/A              |
| EXG-B MW Analog Signal Generator                              | Keysight     | N5173B        | MY61252566 | 2025.05.10 | 2026.05.09     | B.01.95          | N/A              |
| Test Software                                                 | Tonscend     | TS1120        | JS1120-3   | N/A        | N/A            | N/A              | V3.0.22          |

## AC Power Line Conducted Emission / TR1

| Instrument                      | Manufacturer | Model No. | Serial No. | Cal. Date  | Next Cal. Date | Firmware Version | Software version |
|---------------------------------|--------------|-----------|------------|------------|----------------|------------------|------------------|
| EMI Test Receiver               | R&S          | ESCI      | 100726     | 2025.05.18 | 2026.05.17     | 4.42 SP1         | N/A              |
| Two-Line V-Network              | R&S          | ENV 216   | 101044     | 2024.10.26 | 2025.10.25     | N/A              | N/A              |
| Two-Line V-Network              | R&S          | ENV 216   | 101189     | 2025.05.10 | 2026.05.09     | N/A              | N/A              |
| 50ohm Coaxial Switch            | Anritsu      | MP59B     | 6200464462 | 2025.03.16 | 2026.03.15     | N/A              | N/A              |
| Coaxial Cable                   | Huber+Suhner | RG 223    | TR1-C1     | 2025.03.16 | 2026.03.15     | N/A              | N/A              |
| Impedance Stabilization Network | Teseq GmbH   | ISN T800  | 57318      | 2025.02.25 | 2026.02.24     | N/A              | N/A              |
| Temperature/Humidity Meter      | RTS          | RTS-8S    | EMC01      | 2025.06.17 | 2026.06.16     | N/A              | N/A              |
| Dekra test software             | Dekra        | N/A       | N/A        | N/A        | N/A            | N/A              | 3                |

## Radiated Emission(9kHz-1GHz) / AC6

| Instrument                  | Manufacturer | Model No. | Serial No. | Cal. Date  | Next Cal. Date | Firmware Version | Software version |
|-----------------------------|--------------|-----------|------------|------------|----------------|------------------|------------------|
| Signal analyzer             | Agilent      | N9020A    | MY49100159 | 2025.05.10 | 2026.05.09     | A 08.54          | N/A              |
| TRILOG Broadband Antenna    | SCHWARZBECK  | VULB 9168 | 01231      | 2025.05.28 | 2026.05.27     | N/A              | N/A              |
| Loop Antenna                | R&S          | HFH2-Z2E  | 101149     | 2025.04.16 | 2026.04.15     | N/A              | N/A              |
| Coaxial Cable               | N/A          | N/A       | 2225       | 2025.06.10 | 2026.06.09     | N/A              | N/A              |
| Coaxial Cable               | N/A          | N/A       | 2229       | 2025.06.10 | 2026.06.09     | N/A              | N/A              |
| Temperature/ Humidity Meter | RTS          | RTS-8S    | RF07       | 2025.06.17 | 2026.06.16     | N/A              | N/A              |
| Temperature/ Humidity Meter | RTS          | RTS-8S    | RF06       | 2025.06.17 | 2026.06.16     | N/A              | N/A              |
| Test Software               | Tonscend     | JS36      | N/A        | N/A        | N/A            | N/A              | 5.0.0            |

## UNCERTAINTY

Uncertainties have been calculated according to the DEKRA internal document. The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor of  $k=2$ , providing a level of confidence of approximately 95%.

| Test item                        | Uncertainty                                                                                                                            |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| AC Power Line Conducted Emission | 9kHz~150kHz: 2.8 dB<br>150kHz~30MHz: 2.4 dB                                                                                            |
| Peak Power Output                | $\pm 1.3$ dB                                                                                                                           |
| Radiated Emission(30MHz~1GHz)    | Horizontal: 30MHz~200MHz: 3.5 dB<br>300MHz~1GHz: 3.6 dB<br>Vertical: 30MHz~200MHz: 3.6 dB<br>300MHz~1GHz: 3.5 dB                       |
| Radiated Emission(1GHz~26.5GHz)  | Horizontal: 1GHz~18GHz: 5.0 dB<br>Vertical: 1GHz~18GHz: 4.8 dB<br>Horizontal: 18GHz~26.5GHz: 5.3 dB<br>Vertical: 18GHz~26.5GHz: 4.9 dB |
| RF antenna conducted test        | $\pm 1.3$ dB                                                                                                                           |
| Radiated Emission Band Edge      | $\pm 3.9$ dB                                                                                                                           |
| DTS Bandwidth                    | $\pm 1.0$ kHz                                                                                                                          |
| Occupied Bandwidth               | $\pm 1.0$ kHz                                                                                                                          |
| Power Density                    | $\pm 1.3$ dB                                                                                                                           |

## 1 GENERAL INFORMATION

|                                     |                                                                                               |         |                                     |            |                                             |
|-------------------------------------|-----------------------------------------------------------------------------------------------|---------|-------------------------------------|------------|---------------------------------------------|
| Product Name..... :                 | Wireless Earphones                                                                            |         |                                     |            |                                             |
| Model No. .... :                    | M2537E1                                                                                       |         |                                     |            |                                             |
| Trademark. .... :                   | REDMI                                                                                         |         |                                     |            |                                             |
| FCC ID ..... :                      | 2AFZZM2537E1                                                                                  |         |                                     |            |                                             |
| Manufacturer..... :                 | Xiaomi Communications Co., Ltd.                                                               |         |                                     |            |                                             |
| Manufacturer Address..... :         | #019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085 |         |                                     |            |                                             |
| Power supply ..... :                | 3.85 Vdc                                                                                      |         |                                     |            |                                             |
| Wireless specification..... :       | Bluetooth                                                                                     |         |                                     |            |                                             |
| Operating frequency range(s)..... : | 2400~2483.5MHz                                                                                |         |                                     |            |                                             |
| Type of Modulation..... :           | GFSK                                                                                          |         |                                     |            |                                             |
| PHYs ..... :                        | <input checked="" type="checkbox"/>                                                           | GFSK    | <input checked="" type="checkbox"/> | Pi/4 DQPSK | <input checked="" type="checkbox"/> 8DPSK   |
| Data Rate ..... :                   | <input checked="" type="checkbox"/>                                                           | 1Mbit/s | <input checked="" type="checkbox"/> | 2Mbit/s    | <input checked="" type="checkbox"/> 3Mbit/s |
| Antenna type..... :                 | FPC                                                                                           |         |                                     |            |                                             |
| Antenna Gain..... :                 | Left:-3.02 dBi; Right:-2.59 dBi                                                               |         |                                     |            |                                             |

### Remark:

1. The product is an in ear earphone, which includes two types: left and right. The PCBs used for the left and right earphones are exactly the same, and the antenna type used is also the same. The report reflects the complete data of the right earphone with a larger antenna gain.
2. As above information is provided and confirmed by the applicant. DEKRA is not liable to the accuracy, suitability, reliability or/and integrity of the information.

## 2 DESCRIPTION OF TEST SETUP

| Auxiliary equipment   | Type / Version | Manufacturer | Supplied by |
|-----------------------|----------------|--------------|-------------|
| (1) Notebook          | Think pad x220 | Lenovo       | Adapter     |
| (2) USB Control Cable | N/A            | N/A          | N/A         |
| (3) USB Control Cable | N/A            | N/A          | N/A         |
| Software              | Type / Version | Manufacturer | Supplied by |
| FCC_assist            | 1.0.4          | N/A          | N/A         |

| Accessories Information | Cable                       |                                     |                                     |
|-------------------------|-----------------------------|-------------------------------------|-------------------------------------|
|                         | Length used during test [m] | Attached during test                | Shielded                            |
| (2)USB Control Cable    | 1                           | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (3)USB Control Cable    | 8                           | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

### 3 VERDICT SUMMARY SECTION

This chapter presents an overview of standards and results. Refer to the next chapters for details of measured test results and applied test levels.

#### 3.1 Standards

| Standard                           | Year | Description                                                                                                         |
|------------------------------------|------|---------------------------------------------------------------------------------------------------------------------|
| FCC CFR Title 47 Part 15 Subpart C | 2024 | Operation within the bands 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz.                                         |
| ANSI C63.10                        | 2020 | American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices                      |
| KDB558074 D01 v05r02               | 2019 | Guidance for performing compliance measurements on Digital Transmission System (DTS) operating under section 15.247 |
|                                    |      |                                                                                                                     |
|                                    |      |                                                                                                                     |

#### 3.2 Deviation(s) from the Standard(s) / Test Specification(s)

The following deviation(s) was / were made from the published requirements of the listed standards: N/A.

*(Please define the deviations from the standard(s) if applicable)*

### 3.3 Overview of results

| Performed Test Item                         | Normative References                                                  | Test Performed | Remark                                 |
|---------------------------------------------|-----------------------------------------------------------------------|----------------|----------------------------------------|
| Emissions in restricted frequency bands     | FCC CFR Title 47 Part 15 Subpart C: 2015Section 15.209                | Yes            | Please refer to appendix for test data |
| 20dB Bandwidth                              | FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.247(a)(1)         | Yes            | Please refer to appendix for test data |
| Carrier Frequency Separation                | FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.247(a)(1)         | Yes            | Please refer to appendix for test data |
| Number of Hopping Frequencies               | FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.247(a)(1)(iii)    | Yes            | Please refer to appendix for test data |
| Time of Occupancy (Dwell Time)              | FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.247(a)(1)(iii)    | Yes            | Please refer to appendix for test data |
| Peak OutputPower                            | FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.247(b)(1)         | Yes            | Please refer to appendix for test data |
| Emissions in non-restricted frequency bands | FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.215(c), 15.247(d) | Yes            | Please refer to appendix for test data |
| Band Edge                                   | FCC CFR Title 47 Part 15 Subpart C: 2015 15.247(d)                    | Yes            | Please refer to appendix for test data |
| Conducted Emission                          | FCC CFR Title 47 Part 15 Subpart C: 2015Section 15.207                | Yes            | Please refer to appendix for test data |
| Antenna Requirement                         | FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.203               | Yes            | ---                                    |

### 3.4 Power setting in test

| Mode | Channel | Frequency (MHz) | Power setting |
|------|---------|-----------------|---------------|
| DH5  | 00      | 2402            | 10            |
|      | 39      | 2441            | 10            |
|      | 78      | 2480            | 10            |
| 2DH5 | 00      | 2402            | 10            |
|      | 39      | 2441            | 10            |
|      | 78      | 2480            | 10            |
| 3DH5 | 00      | 2402            | 10            |
|      | 39      | 2441            | 10            |
|      | 78      | 2480            | 10            |

### 3.5 Test Facility

**Test Location** : **FCC Designation Number: CN1199**

## 4 TEST RESULTS

### 4.1 Conducted Emission

**VERDICT: PASS**

#### 4.1.1 Limit

| Standard              | FCC Part 15 Subpart C Paragraph 15.207  |                                         |
|-----------------------|-----------------------------------------|-----------------------------------------|
| Frequency range [MHz] | Limit: QP [dB( $\mu$ V) <sup>1)</sup> ] | Limit: AV [dB( $\mu$ V) <sup>1)</sup> ] |
| 0,15 - 0,50           | 66 - 56 <sup>2)</sup>                   | 56 - 46 <sup>2)</sup>                   |
| 0,50 - 5,0            | 56                                      | 46                                      |
| 5,0 - 30              | 60                                      | 50                                      |

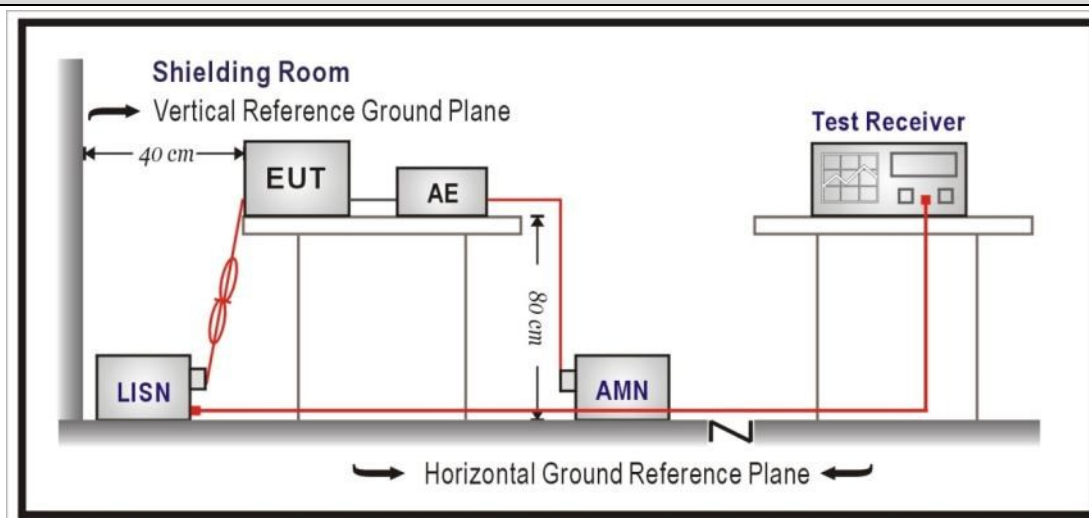
<sup>1)</sup> At the transition frequency, the lower limit applies.

<sup>2)</sup> The limit decreases linearly with the logarithm of the frequency.

**NOTE 1:** The exclusion band for transmitters shall be considered for transmitters operating at frequencies below 30 MHz.

**NOTE 2:** Where the AC output port is directly connected (or via a circuit breaker) to the AC power input port of the EUT the AC power output port need not to be tested.

#### 4.1.2 Test Setup



#### 4.1.3 Test Procedure

|                                     | References Rule  | Chapter | Item                                                                                        |
|-------------------------------------|------------------|---------|---------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> | ANSI C63.10-2013 | 6.2     | Standard test method for ac power-line conducted emissions from unlicensed wireless devices |

**4.2 Emissions in restricted frequency bands****VERDICT: PASS****4.2.1 Limit****Standard** FCC Part 15 Subpart C Paragraph 15.209

Restricted Bands of operation for FCC

| Frequency<br>(MHz)  | Frequency<br>(MHz)    | Frequency<br>(MHz) | Frequency<br>(GHz) |
|---------------------|-----------------------|--------------------|--------------------|
| 0.090 – 0.110       | 16.42 – 16.423        | 399.9 – 410        | 4.5 – 5.15         |
| 0.495 – 0.505       | 16.69475 – 16.69525   | 608 – 614          | 5.35 – 5.46        |
| 2.1735 – 2.1905     | 16.80425 – 16.80475   | 960 – 1240         | 7.25 – 7.75        |
| 4.125 – 4.128       | 25.5 – 25.67          | 1300 – 1427        | 8.025 – 8.5        |
| 4.17725 – 4.17775   | 37.5 – 38.25          | 1435 – 1626.5      | 9.0 – 9.2          |
| 4.20725 – 4.20775   | 73 – 74.6             | 1645.5 – 1646.5    | 9.3 – 9.5          |
| 6.215 – 6.218       | 74.8 – 75.2           | 1660 – 1710        | 10.6 – 12.7        |
| 6.26775 – 6.26825   | 108 – 121.94          | 1718.8 – 1722.2    | 13.25 – 13.4       |
| 6.31175 – 6.31225   | 123 – 138             | 2200 – 2300        | 14.47 – 14.5       |
| 8.291 – 8.294       | 149.9 – 150.05        | 2310 – 2390        | 15.35 – 16.2       |
| 8.362 – 8.366       | 156.52475 – 156.52525 | 2483.5 – 2500      | 17.7 – 21.4        |
| 8.37625 – 8.38675   | 156.7 – 156.9         | 2690 – 2900        | 22.01 – 23.12      |
| 8.81425 – 8.81475   | 162.0125 – 167.17     | 3260 – 3267        | 23.6 – 24.0        |
| 12.29 – 12.293      | 167.72 – 173.2        | 3332 – 3339        | 31.2 – 31.8        |
| 12.51975 – 12.52025 | 240 – 285             | 3345.8 – 3358      | 36.43 – 36.5       |
| 12.57675 – 12.57725 | 322 – 335.4           | 3600 – 4400        |                    |
| 13.36 – 13.41       |                       |                    |                    |

## Restricted Band Emissions Limit

| Frequency<br>(MHz) | Field strength<br>( $\mu$ V/m) | Field strength<br>(dB $\mu$ V/m) | Measurement distance<br>(m) |
|--------------------|--------------------------------|----------------------------------|-----------------------------|
| 0.009 - 0.49       | 2400/F(kHz)                    | 48.5 – 13.8                      | 300 <sub>(Note 1)</sub>     |
| 0.49 - 1.705       | 24000/F(kHz)                   | 33.8 - 23                        | 30 <sub>(Note 1)</sub>      |
| 1.705 - 30         | 30                             | 29.5                             | 30 <sub>(Note 1)</sub>      |
| 30 -88             | 100                            | 40                               | 3 <sub>(Note 2)</sub>       |
| 88-216             | 150                            | 43.5                             | 3 <sub>(Note 2)</sub>       |
| 216 - 960          | 200                            | 46                               | 3 <sub>(Note 2)</sub>       |
| Above 960          | 500                            | 54                               | 3 <sub>(Note 2)</sub>       |

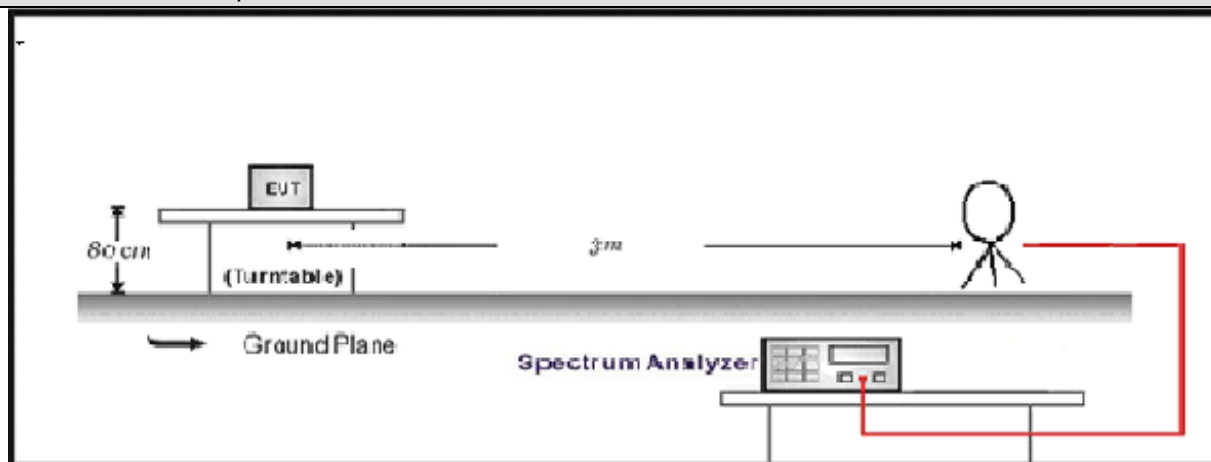
Note 1: At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed below 30 MHz, when performing measurements at a closer distance than specified, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade).

Note 2: At frequencies at or above 30 MHz, measurements may be performed at a distance other than what is specified provided: measurements are not made in the near field except where it can be shown that near field measurements are appropriate due to the characteristics of the device; and it can be demonstrated that the signal levels needed to be measured at the distance employed can be detected by the measurement equipment.

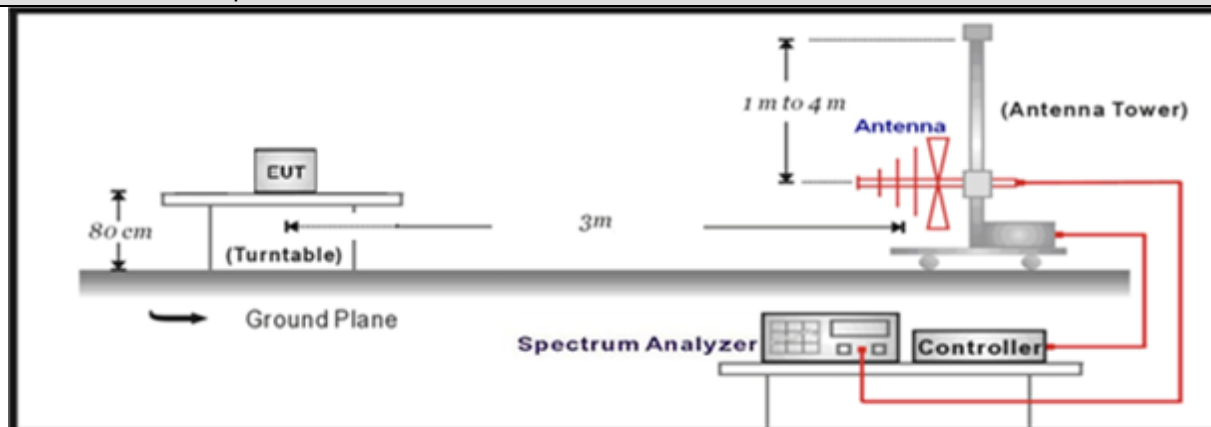
Measurements shall not be performed at a distance greater than 30 meters unless it can be further demonstrated that measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).

## 4.2.2 Test Setup

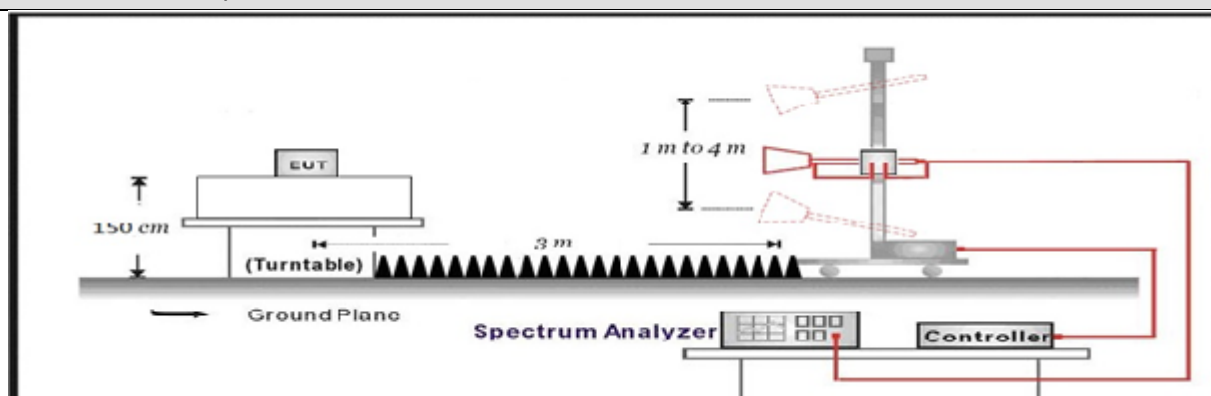
Below 30MHz Test Setup:



30MHz-1GHz Test Setup:



Above 1GHz Test Setup:

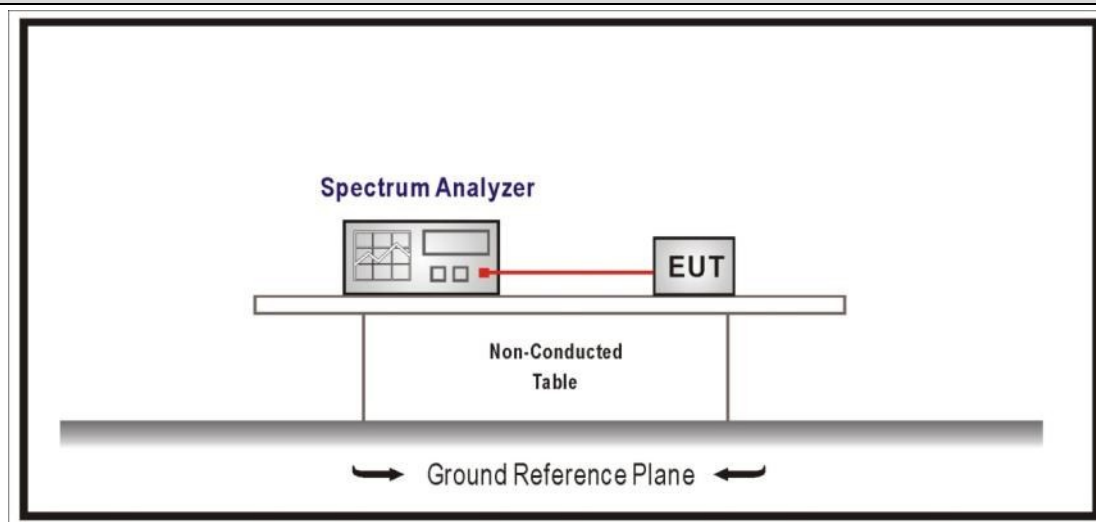


#### 4.2.3 Test Procedure

|                                     | References Rule                     |             | Chapter   | Description                                                                                      |
|-------------------------------------|-------------------------------------|-------------|-----------|--------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> | ANSI C63.10                         |             | 11.12     | Emissions in restricted frequency bands                                                          |
|                                     | <input checked="" type="checkbox"/> | ANSI C63.10 | 11.12.1   | Radiated emission measurements                                                                   |
|                                     | <input checked="" type="checkbox"/> | ANSI C63.10 | 11.12.2.7 | Radiated spurious emission test                                                                  |
|                                     | <input checked="" type="checkbox"/> | ANSI C63.10 | 6.4       | Radiated emissions from unlicensed wireless devices below 30 MHz                                 |
|                                     | <input checked="" type="checkbox"/> | ANSI C63.10 | 6.5       | Radiated emissions from unlicensed wireless devices in the frequency range of 30 MHz to 1000 MHz |
|                                     | <input checked="" type="checkbox"/> | ANSI C63.10 | 6.6       | Radiated emissions from unlicensed wireless devices above 1 GHz                                  |

**4.3 20dB Bandwidth****VERDICT: PASS****4.3.1 Limit**

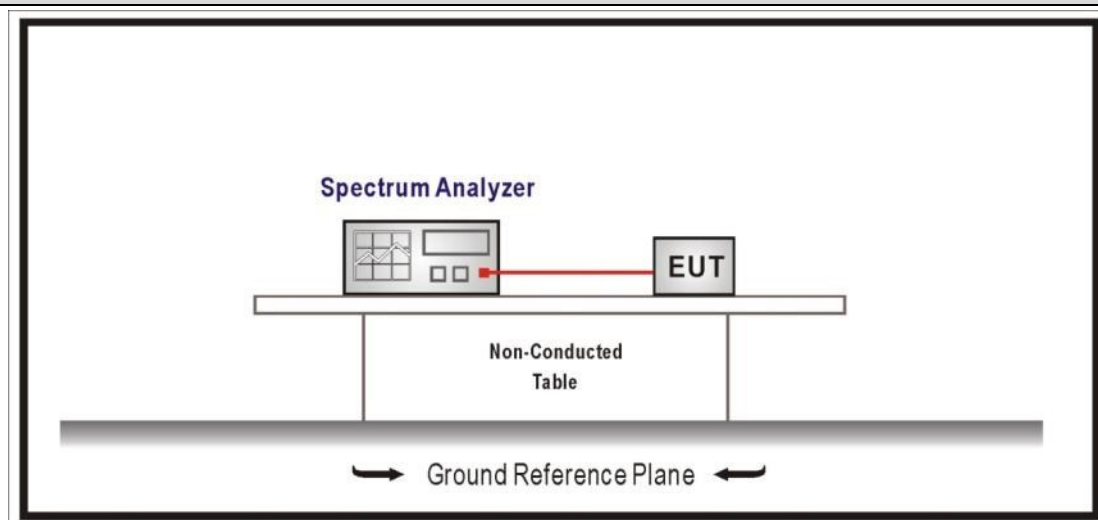
| Standard                            |                                                                                                                                     | FCC Part 15 Subpart C Paragraph 15.247(a) |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| <input checked="" type="checkbox"/> | For frequency hopping systems operating in 2400-2483.5 MHz band, within frequency range.                                            |                                           |
| <input type="checkbox"/>            | For frequency hopping systems operating in 902-928 MHz band, the maximum allowed 20 dB bandwidth of the hopping channel is 500 kHz. |                                           |
| <input type="checkbox"/>            | For frequency hopping systems operating in 5725-5850 MHz band, the maximum 20 dB bandwidth of the hopping channel is 1 MHz.         |                                           |

**4.3.2 Test Setup****4.3.3 Test Procedure**

| References Rule                     |             | Chapter | Description                                       |
|-------------------------------------|-------------|---------|---------------------------------------------------|
| <input checked="" type="checkbox"/> | ANSI C63.10 | 6.9     | Occupied bandwidth tests                          |
| <input checked="" type="checkbox"/> | ANSI C63.10 | 6.9.2   | Occupied bandwidth—relative measurement procedure |

**4.4 CarrierFrequencySeparation****VERDICT: PASS****4.4.1 Limit**

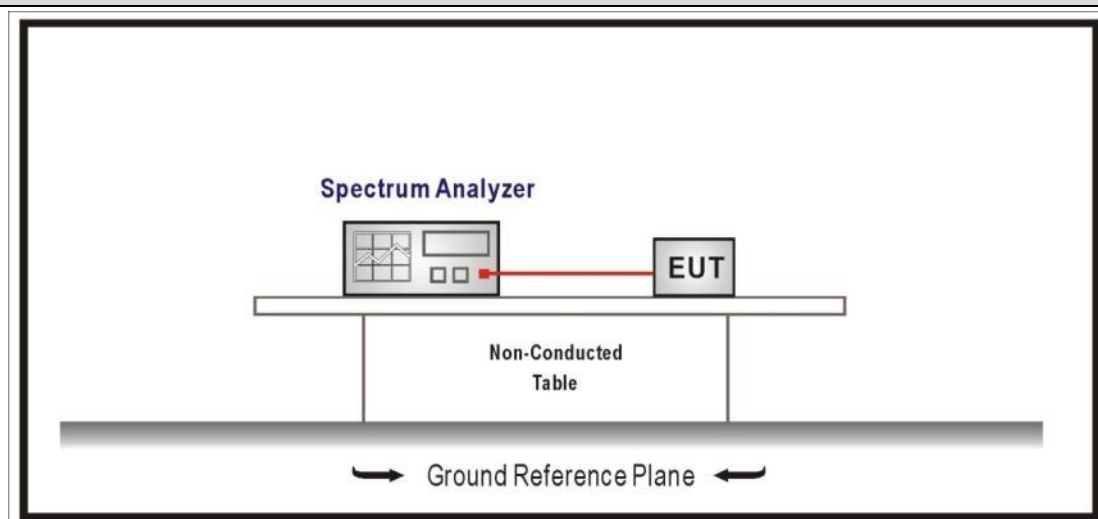
| Standard                            | FCC Part 15 Subpart C Paragraph 15.247(a)                                                                                                                                                               |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/>            | Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater.                          |
| <input checked="" type="checkbox"/> | Frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel.  |
| <input type="checkbox"/>            | The 20 dB bandwidth of the hopping channel is less than 250 kHz, the system shall use at least 50 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4  |
| <input type="checkbox"/>            | The 20 dB bandwidth of the hopping channel is 250 kHz or greater, the system shall use at least 25 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 |
| <input type="checkbox"/>            | Frequency hopping systems operating in the 5725-5850 MHz band shall use at least 75 hopping frequencies. The maximum 20 dB bandwidth of the hopping channel is 1 MHz.                                   |

**4.4.2 Test Setup****4.4.3 Test Procedure**

| References Rule                                 | Chapter | Description                                       |
|-------------------------------------------------|---------|---------------------------------------------------|
| <input checked="" type="checkbox"/> ANSI C63.10 | 7.8     | Evaluation of frequency-hopping device parameters |
| <input checked="" type="checkbox"/> ANSI C63.10 | 7.8.2   | Carrier frequency separation                      |

**4.5 Number of hopping Frequencies****VERDICT: PASS****4.5.1 Limit**

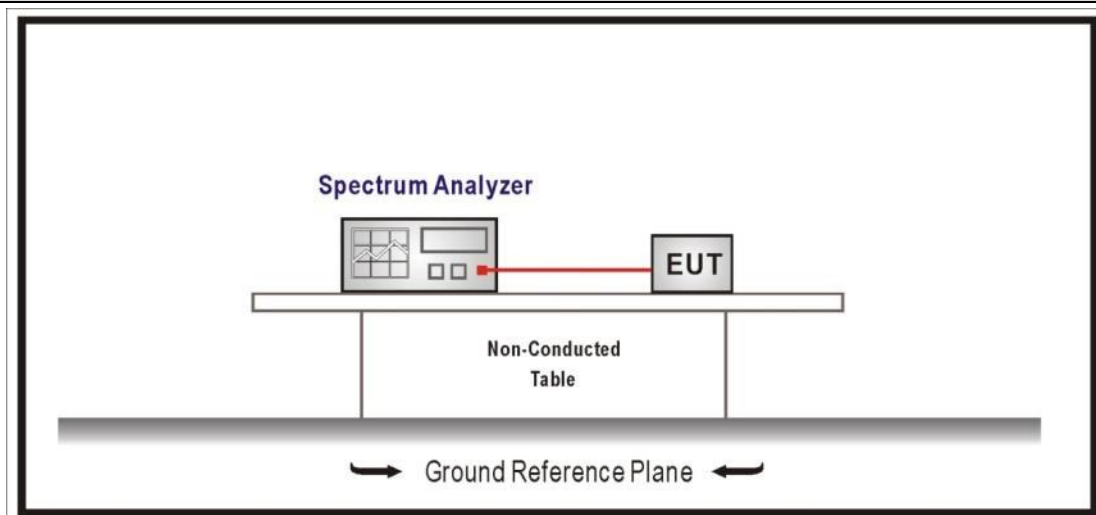
| Standard                            |                                                                                                                                                                               | FCC Part 15 Subpart C Paragraph 15.247(a) |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| <input checked="" type="checkbox"/> | For frequency hopping systems operating in the 2400-2483.5 MHz band shall use at least 15 hopping frequencies.                                                                |                                           |
| <input type="checkbox"/>            | For frequency hopping systems operating in 902-928 MHz band, if the 20 dB bandwidth of the hopping channel is less than 250 kHz, shall use at least 50 hopping frequencies.   |                                           |
| <input type="checkbox"/>            | For frequency hopping systems operating in 902-928 MHz band, if the 20 dB bandwidth of the hopping channel is higher than 250 kHz, shall use at least 25 hopping frequencies. |                                           |
| <input type="checkbox"/>            | For frequency hopping systems operating in the 5725-5850 MHz band shall use at least 75 hopping frequencies.                                                                  |                                           |

**4.5.2 Test Setup****4.5.3 Test Procedure**

| References Rule                     |             | Chapter | Description                                       |
|-------------------------------------|-------------|---------|---------------------------------------------------|
| <input checked="" type="checkbox"/> | ANSI C63.10 | 7.8.    | Evaluation of frequency-hopping device parameters |
| <input checked="" type="checkbox"/> | ANSI C63.10 | 7.8.3   | Number of Hopping Frequencies                     |

**4.6 Time of Occupancy(Dwell Time)****VERDICT: PASS****4.6.1 Limit**

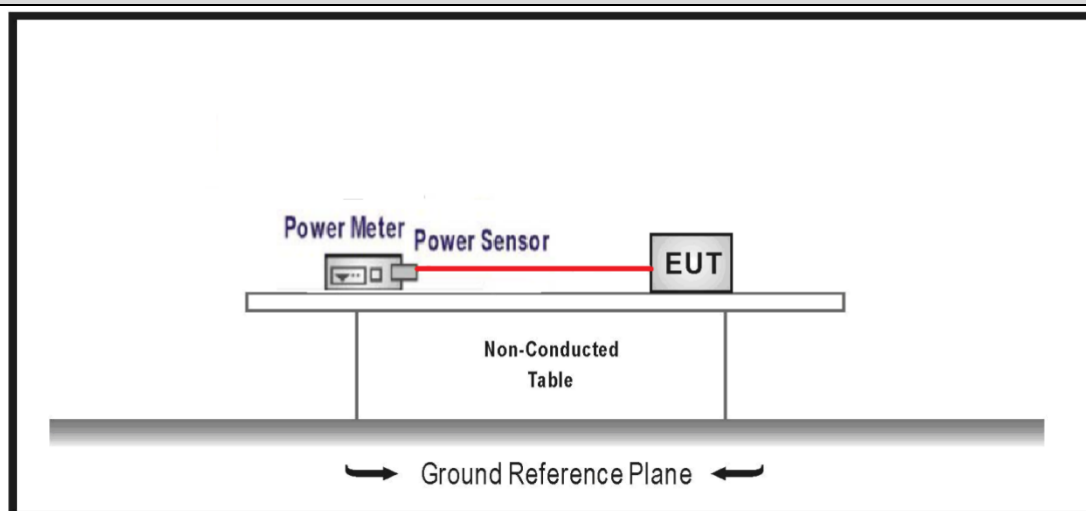
| Standard                            | FCC Part 15 Subpart C Paragraph 15.247(a)                                                                                                                                                                                                                                                                      |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> | Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.                                                 |
| <input type="checkbox"/>            | For frequency hopping systems operating in the 902-928 MHz band: if the 20 dB bandwidth of the hopping channel is less than 250 kHz, the system shall use at least 50 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 20 second period   |
| <input type="checkbox"/>            | For frequency hopping systems operating in the 902-928 MHz band: if the 20 dB bandwidth of the hopping channel is 250 kHz or greater, the system shall use at least 25 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 10 second period. |
| <input type="checkbox"/>            | Frequency hopping systems operating in the 5725-5850 MHz band shall use at least 75 hopping frequencies. The maximum 20 dB bandwidth of the hopping channel is 1 MHz. The average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 30 second period.                          |

**4.6.2 Test Setup****4.6.3 Test Procedure**

| References Rule                                 | Chapter | Description                                       |
|-------------------------------------------------|---------|---------------------------------------------------|
| <input checked="" type="checkbox"/> ANSI C63.10 | 7.8     | Evaluation of frequency-hopping device parameters |
| <input checked="" type="checkbox"/> ANSI C63.10 | 7.8.4   | Time of occupancy (dwell time)                    |

**4.7 Peak Output Power****VERDICT: PASS****4.7.1 Limit**

| Standard                            | FCC Part 15 Subpart C Paragraph 15.247 (a)(1)                                                                                                                                                                                                                                                          |
|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> | Frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts.                         |
| <input checked="" type="checkbox"/> | Frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW. |
| <input type="checkbox"/>            | For frequency hopping systems operating in the 902-928 MHz band: 1 watt for systems employing at least 50 hopping channels; and, 0.25 watts for systems employing less than 50 hopping channels, but at least 25 hopping channels                                                                      |

**4.7.2 Test Setup**

#### 4.7.3 Test Procedure

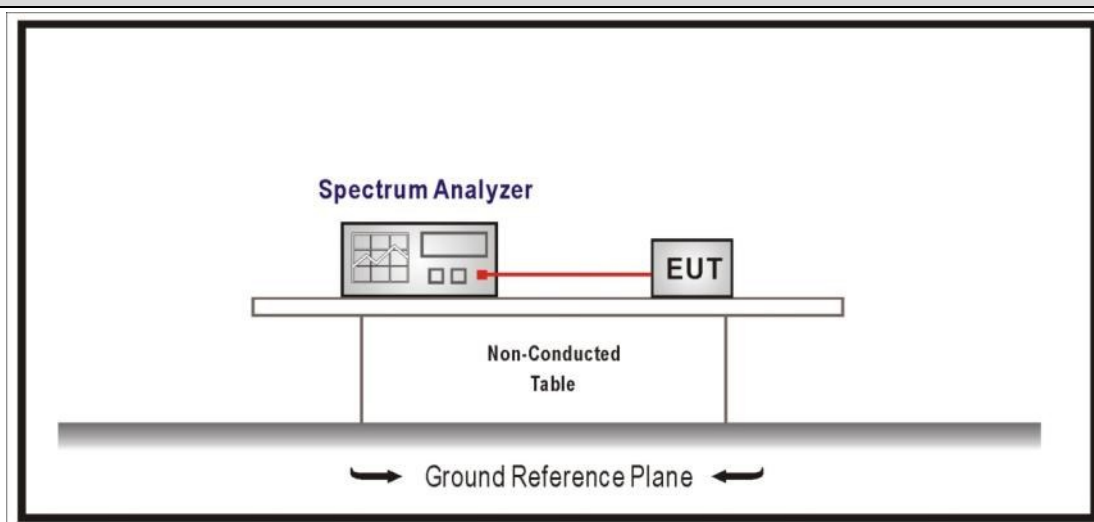
|                                     | References Rule                     |             | Chapter | Description                                                                      |
|-------------------------------------|-------------------------------------|-------------|---------|----------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> | ANSI C63.10                         |             | 7.8     | Evaluation of frequency-hopping device parameters                                |
|                                     | <input checked="" type="checkbox"/> | ANSI C63.10 | 7.8.5   | Output power test procedure for frequency-hopping spread-spectrum (FHSS) devices |

**4.8 Emissions in non-restricted frequency band****VERDICT: PASS****4.8.1 Limit**

| Standard                            | FCC Part 15 Subpart C Paragraph 15.247(d) |
|-------------------------------------|-------------------------------------------|
| RF Output power (Detection methods) | Limit(dB)                                 |
| RF Output power(Average detector)   | 30dBc(Note1)                              |
| RF Output power(PK detector)        | 20dBc(Note2)                              |

Note 1: If maximum conducted (average) output power was used to demonstrate compliance as described in 9.2, then the peak power in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 30 dBc).

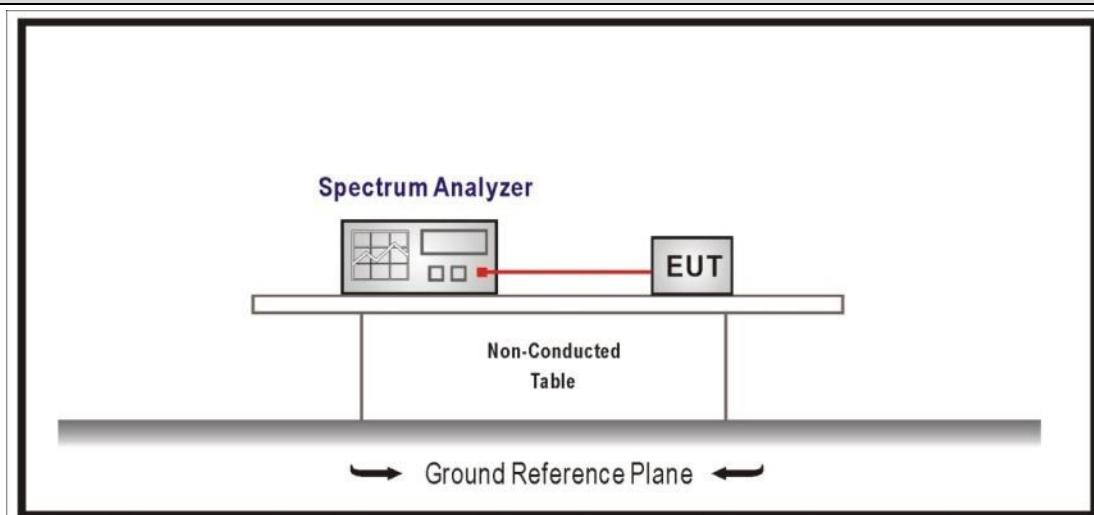
Note 2: If the maximum peak conducted output power procedure was used, then the peak output power measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 20 dBc).

**4.8.2 Test Setup****4.8.3 Test Procedure**

| References Rule                                 | Chapter | Description                                       |
|-------------------------------------------------|---------|---------------------------------------------------|
| <input checked="" type="checkbox"/> ANSI C63.10 | 7.8     | Evaluation of frequency-hopping device parameters |
| <input checked="" type="checkbox"/> ANSI C63.10 | 7.8.6   | Band-edge measurements for RF conducted emissions |

**4.9 Duty cycle****VERDICT: PASS****4.9.1 Limit**

N/A

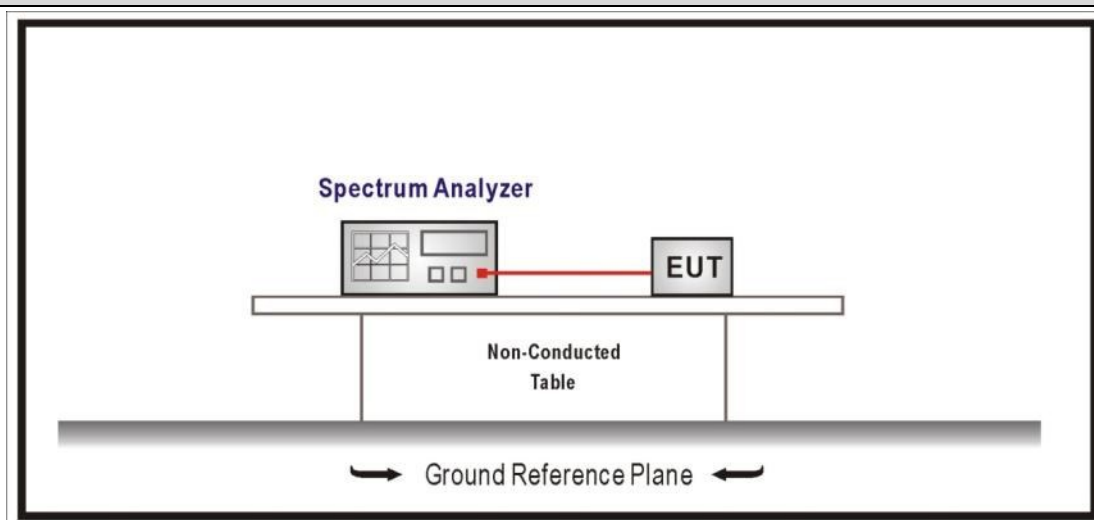
**4.9.2 Test Setup****4.9.3 Test Procedure**

| References Rule                     |             | Chapter | Description                                                                |
|-------------------------------------|-------------|---------|----------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> | ANSI C63.10 | 11.6    | Duty cycle (D), transmission duration (T), and maximum power control level |

**4.10 Band Edge****VERDICT: PASS****4.10.1 Limit**

| Standard              |          | FCC Part 15 Subpart C Paragraph 15.247(d) , 15.209 |           |              |
|-----------------------|----------|----------------------------------------------------|-----------|--------------|
| Frequency bands (MHz) | Detector | Limit (dB $\mu$ V/m)                               | RBW (MHz) | Distance (m) |
| 2310-2390             | PK       | 74                                                 | 1         | 3            |
| 2483.5-2500           | AV       | 54                                                 | 1         | 3            |

Note: The field strength of emissions appearing within these frequency bands shall not exceed the limits.

**4.10.2 Test Setup****4.10.3 Test Procedure**

## Test Method

|                                     | References Rule | Chapter | Description                                                                                      |
|-------------------------------------|-----------------|---------|--------------------------------------------------------------------------------------------------|
| <input type="checkbox"/>            | DA 00-705       | N/A     | duty cycle correction factor                                                                     |
| <input checked="" type="checkbox"/> | ANSI C63.10     | 6.10    | Band-edge testing                                                                                |
| <input checked="" type="checkbox"/> | ANSI C63.10     | 6.10.5  | Restricted-band band-edge measurements                                                           |
| <input type="checkbox"/>            | ANSI C63.10     | 6.10.6  | Marker-delta method                                                                              |
| <input type="checkbox"/>            | ANSI C63.10     | 6.4     | Radiated emissions from unlicensed wireless devices below 30 MHz                                 |
| <input type="checkbox"/>            | ANSI C63.10     | 6.5     | Radiated emissions from unlicensed wireless devices in the frequency range of 30 MHz to 1000 MHz |
| <input type="checkbox"/>            | ANSI C63.10     | 6.6     | Radiated emissions from unlicensed wireless devices above 1 GHz                                  |

**4.11 Antenna Requirement****VERDICT: PASS****4.11.1 Limit:**

| Standard | FCC Part 15 Subpart C Paragraph 15.203 |
|----------|----------------------------------------|
|----------|----------------------------------------|

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 shall be considered sufficient to comply with the provisions of this section. 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. This requirement does not apply to carrier current devices or to devices operated under the provisions of §15.211, §15.213, §15.217, §15.219, or §15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

**4.11.2 Antenna Connector Construction:**

- |                                     |                                                                  |
|-------------------------------------|------------------------------------------------------------------|
| <input type="checkbox"/>            | The use of a permanently attached antenna                        |
| <input type="checkbox"/>            | The antenna use of a unique coupling to the intentional radiator |
| <input checked="" type="checkbox"/> | The use of a nonstandard antenna jack or electrical connector    |

Please refer to the attached document "Internal Photograph" to show the antenna connector.

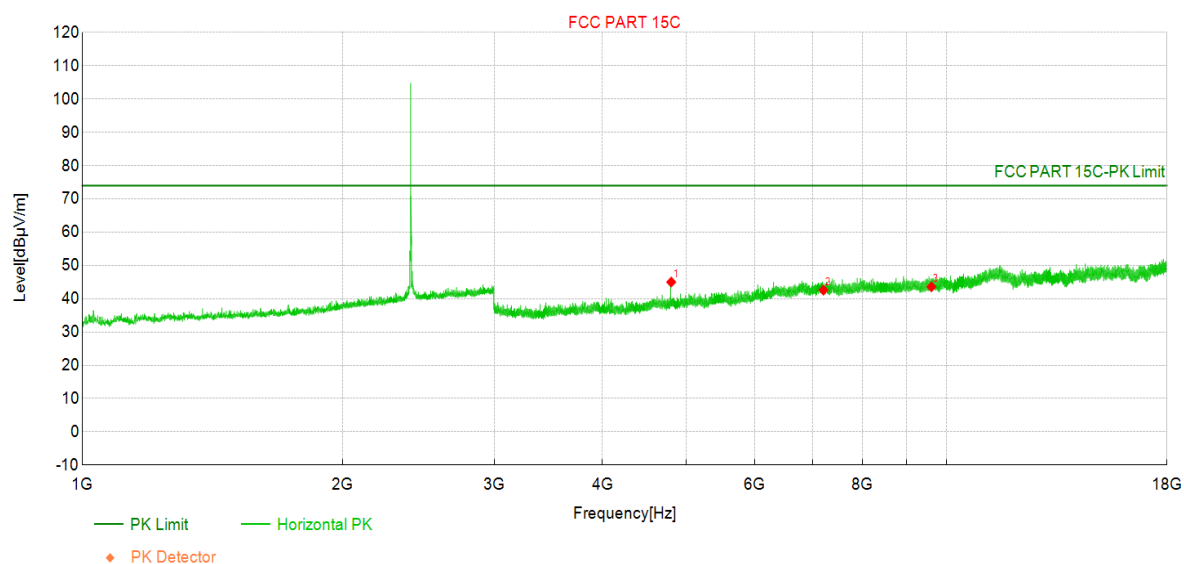
**5 TEST SETUP PHOTO AND EUT PHOTO**

Remark: The test setup photo and EUT Photo please see appendix.

## Appendix A: Test data of Emissions in restricted frequency bands

Transmit at 2402MHz by DH5

Test Graph

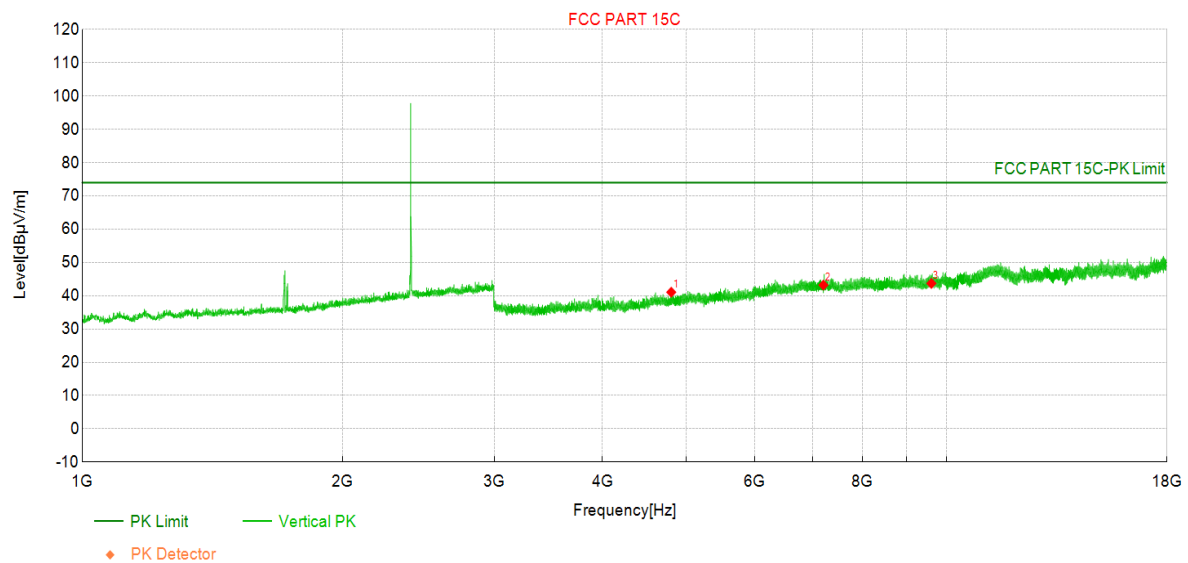


Data List

| NO | Frequency [MHz] | Reading [dBμV] | Level [dBμV/m] | Factor [dB/m] | Limit [dBμV/m] | Margin [dB] | Det | Pol    | Verdict |
|----|-----------------|----------------|----------------|---------------|----------------|-------------|-----|--------|---------|
| 1  | 4803.53         | 53.50          | 45.00          | -8.48         | 74.00          | 29.00       | PK  | Horizo | PASS    |
|    | 4803.53         | -              | 20.21          | -             | 54.00          | 33.79       | AV  | Horizo | PASS    |
| 2  | 7206.00         | 44.20          | 42.58          | -1.62         | 74.00          | 31.42       | PK  | Horizo | PASS    |
|    | 7206.00         | -              | 17.79          | -             | 54.00          | 36.21       | AV  | Horizo | PASS    |
| 3  | 9608.00         | 42.20          | 43.57          | 1.38          | 74.00          | 30.43       | PK  | Horizo | PASS    |
|    | 9608.00         | -              | 18.78          | -             | 54.00          | 35.22       | AV  | Horizo | PASS    |

## Transmit at 2402MHz by DH5

Test Graph

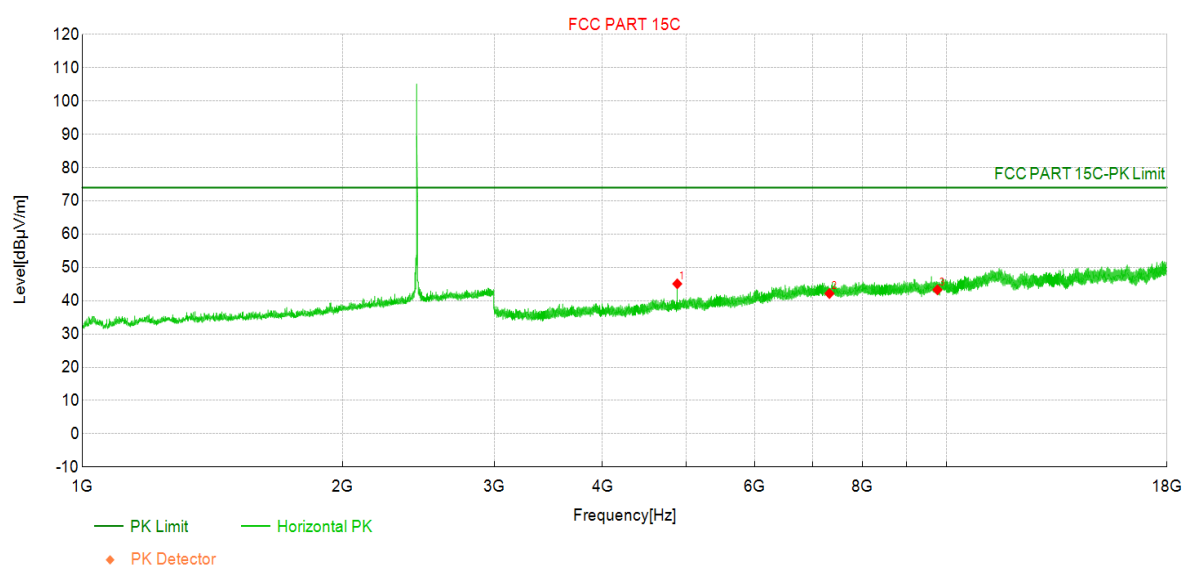


## Data List

| NO | Frequency [MHz] | Reading [dBμV] | Level [dBμV/m] | Factor [dB/m] | Limit [dBμV/m] | Margin [dB] | Det | Pol    | Verdict |
|----|-----------------|----------------|----------------|---------------|----------------|-------------|-----|--------|---------|
| 1  | 4804.00         | 49.50          | 41.05          | -8.48         | 74.00          | 32.95       | PK  | Vertic | PASS    |
|    | 4804.00         | -              | 16.26          | -             | 54.00          | 37.74       | AV  | Vertic | PASS    |
| 2  | 7206.00         | 44.80          | 43.20          | -1.62         | 74.00          | 30.80       | PK  | Vertic | PASS    |
|    | 7206.00         | -              | 18.41          | -             | 54.00          | 35.59       | AV  | Vertic | PASS    |
| 3  | 9608.00         | 42.30          | 43.69          | 1.38          | 74.00          | 30.31       | PK  | Vertic | PASS    |
|    | 9608.00         | -              | 18.90          | -             | 54.00          | 35.10       | AV  | Vertic | PASS    |

## Transmit at 2441MHz by DH5

Test Graph

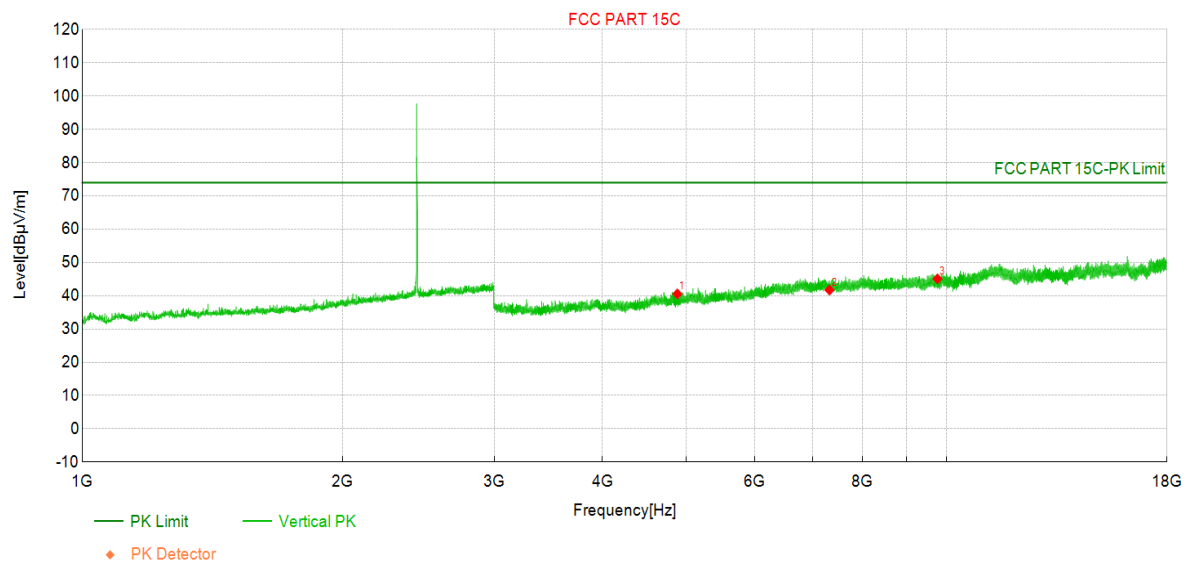


## Data List

| NO | Frequency [MHz] | Reading [dBμV] | Level [dBμV/m] | Factor [dB/m] | Limit [dBμV/m] | Margin [dB] | Det | Pol    | Verdict |
|----|-----------------|----------------|----------------|---------------|----------------|-------------|-----|--------|---------|
| 1  | 4881.62         | 53.20          | 45.08          | -8.15         | 74.00          | 28.92       | PK  | Horizo | PASS    |
|    | 4881.62         | -              | 20.29          | -             | 54.00          | 33.71       | AV  | Horizo | PASS    |
| 2  | 7323.00         | 43.60          | 42.16          | -1.42         | 74.00          | 31.84       | PK  | Horizo | PASS    |
|    | 7323.00         | -              | 17.37          | -             | 54.00          | 36.63       | AV  | Horizo | PASS    |
| 3  | 9764.00         | 41.80          | 43.29          | 1.46          | 74.00          | 30.71       | PK  | Horizo | PASS    |
|    | 9764.00         | -              | 18.50          | -             | 54.00          | 35.50       | AV  | Horizo | PASS    |

## Transmit at 2441MHz by DH5

Test Graph

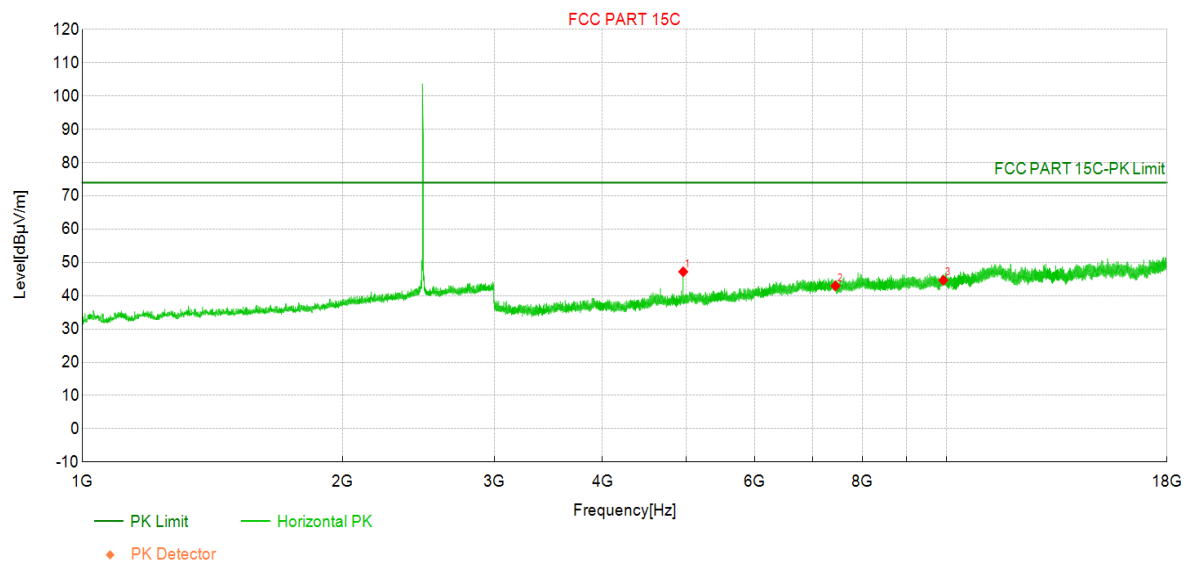


## Data List

| NO | Frequency [MHz] | Reading [dBμV] | Level [dBμV/m] | Factor [dB/m] | Limit [dBμV/m] | Margin [dB] | Det | Pol    | Verdict |
|----|-----------------|----------------|----------------|---------------|----------------|-------------|-----|--------|---------|
| 1  | 4882.00         | 48.70          | 40.53          | -8.15         | 74.00          | 33.47       | PK  | Vertic | PASS    |
|    | 4882.00         | -              | 15.74          | -             | 54.00          | 38.26       | AV  | Vertic | PASS    |
| 2  | 7323.00         | 43.10          | 41.71          | -1.42         | 74.00          | 32.29       | PK  | Vertic | PASS    |
|    | 7323.00         | -              | 16.92          | -             | 54.00          | 37.08       | AV  | Vertic | PASS    |
| 3  | 9764.00         | 43.60          | 45.07          | 1.46          | 74.00          | 28.93       | PK  | Vertic | PASS    |
|    | 9764.00         | -              | 20.28          | -             | 54.00          | 33.72       | AV  | Vertic | PASS    |

## Transmit at 2480MHz by DH5

Test Graph

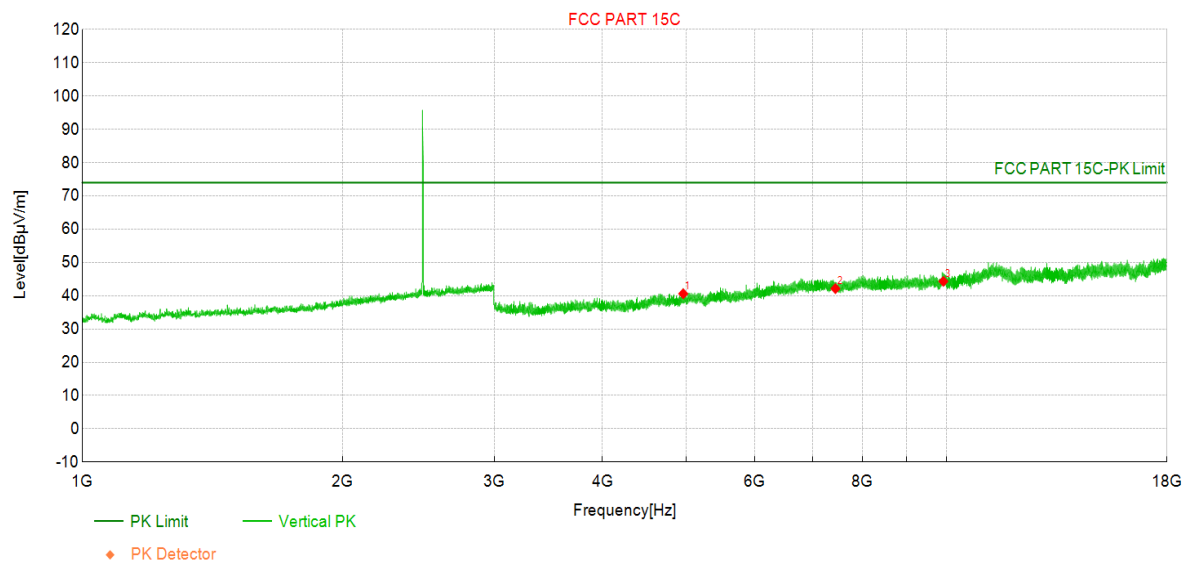


## Data List

| NO | Frequency [MHz] | Reading [dBμV] | Level [dBμV/m] | Factor [dB/m] | Limit [dBμV/m] | Margin [dB] | Det | Pol    | Verdict |
|----|-----------------|----------------|----------------|---------------|----------------|-------------|-----|--------|---------|
| 1  | 4959.71         | 55.00          | 47.21          | -7.83         | 74.00          | 26.79       | PK  | Horizo | PASS    |
|    | 4959.71         | -              | 22.42          | -             | 54.00          | 31.58       | AV  | Horizo | PASS    |
| 2  | 7440.00         | 44.20          | 42.94          | -1.30         | 74.00          | 31.06       | PK  | Horizo | PASS    |
|    | 7440.00         | -              | 18.15          | -             | 54.00          | 35.85       | AV  | Horizo | PASS    |
| 3  | 9920.00         | 42.30          | 44.65          | 2.35          | 74.00          | 29.35       | PK  | Horizo | PASS    |
|    | 9920.00         | -              | 19.86          | -             | 54.00          | 34.14       | AV  | Horizo | PASS    |

## Transmit at 2480MHz by DH5

Test Graph

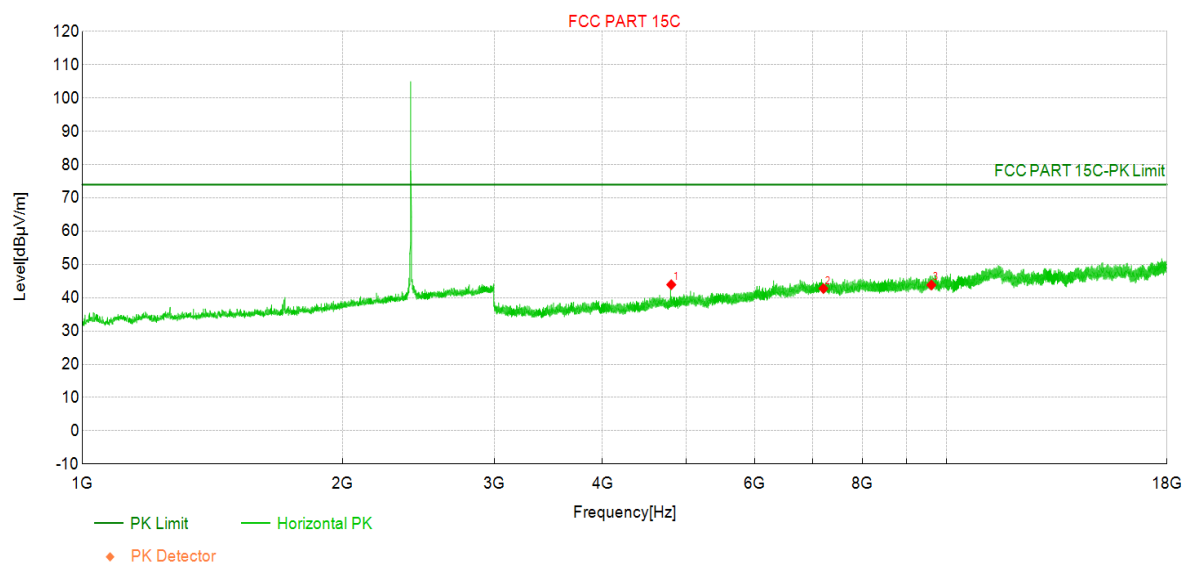


## Data List

| NO | Frequency [MHz] | Reading [dBμV] | Level [dBμV/m] | Factor [dB/m] | Limit [dBμV/m] | Margin [dB] | Det | Pol    | Verdict |
|----|-----------------|----------------|----------------|---------------|----------------|-------------|-----|--------|---------|
| 1  | 4960.00         | 48.40          | 40.60          | -7.83         | 74.00          | 33.40       | PK  | Vertic | PASS    |
|    | 4960.00         | -              | 15.81          | -             | 54.00          | 38.19       | AV  | Vertic | PASS    |
| 2  | 7440.00         | 43.50          | 42.15          | -1.30         | 74.00          | 31.85       | PK  | Vertic | PASS    |
|    | 7440.00         | -              | 17.36          | -             | 54.00          | 36.64       | AV  | Vertic | PASS    |
| 3  | 9920.00         | 42.00          | 44.32          | 2.35          | 74.00          | 29.68       | PK  | Vertic | PASS    |
|    | 9920.00         | -              | 19.53          | -             | 54.00          | 34.47       | AV  | Vertic | PASS    |

## Transmit at 2402MHz by 2DH5

Test Graph

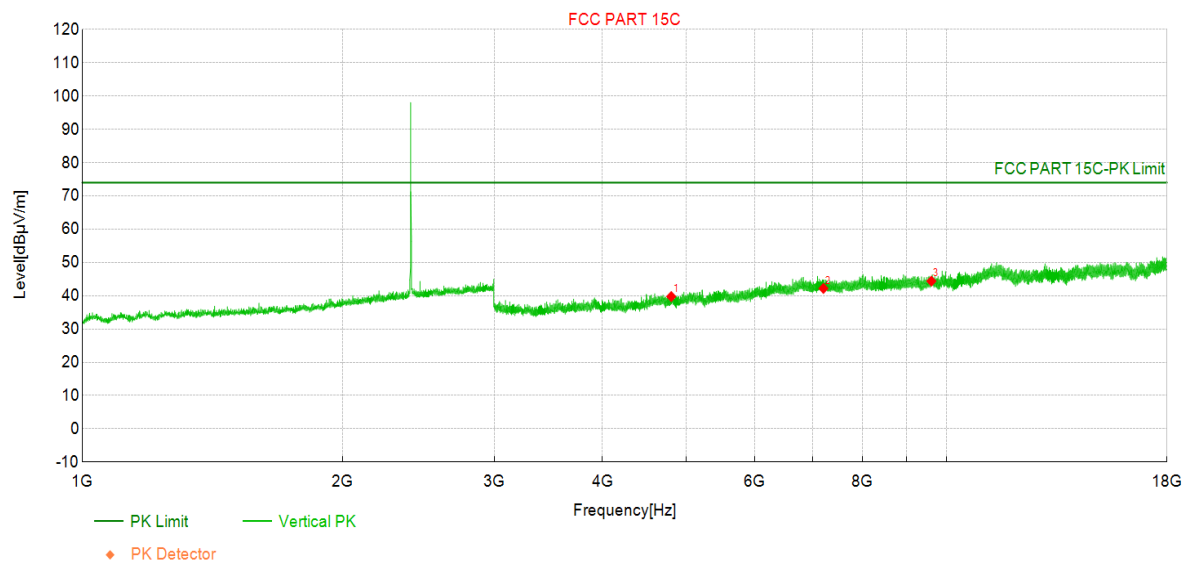


## Data List

| NO | Frequency [MHz] | Reading [dBμV] | Level [dBμV/m] | Factor [dB/m] | Limit [dBμV/m] | Margin [dB] | Det | Pol    | Verdict |
|----|-----------------|----------------|----------------|---------------|----------------|-------------|-----|--------|---------|
| 1  | 4804.41         | 52.40          | 43.91          | -8.48         | 74.00          | 30.09       | PK  | Horizo | PASS    |
|    | 4804.41         | -              | 19.12          | -             | 54.00          | 34.88       | AV  | Horizo | PASS    |
| 2  | 7206.00         | 44.40          | 42.77          | -1.62         | 74.00          | 31.23       | PK  | Horizo | PASS    |
|    | 7206.00         | -              | 17.98          | -             | 54.00          | 36.02       | AV  | Horizo | PASS    |
| 3  | 9608.00         | 42.50          | 43.83          | 1.38          | 74.00          | 30.17       | PK  | Horizo | PASS    |
|    | 9608.00         | -              | 19.04          | -             | 54.00          | 34.96       | AV  | Horizo | PASS    |

## Transmit at 2402MHz by 2DH5

Test Graph

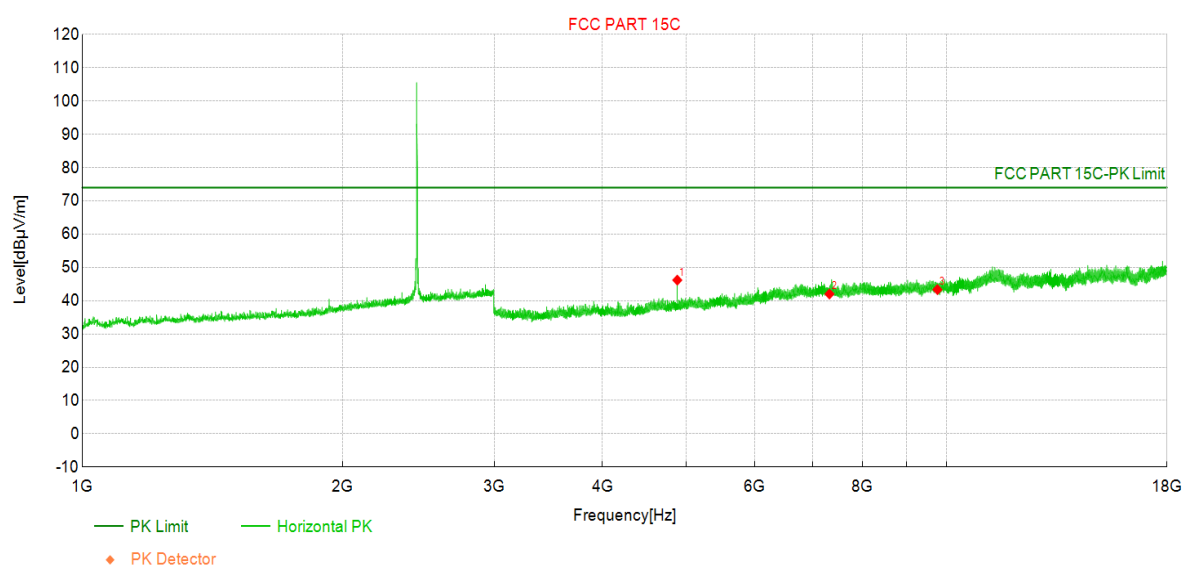


## Data List

| NO | Frequency [MHz] | Reading [dBμV] | Level [dBμV/m] | Factor [dB/m] | Limit [dBμV/m] | Margin [dB] | Det | Pol    | Verdict |
|----|-----------------|----------------|----------------|---------------|----------------|-------------|-----|--------|---------|
| 1  | 4804.00         | 48.20          | 39.75          | -8.48         | 74.00          | 34.25       | PK  | Vertic | PASS    |
|    | 4804.00         | -              | 14.96          | -             | 54.00          | 39.04       | AV  | Vertic | PASS    |
| 2  | 7206.00         | 43.80          | 42.20          | -1.62         | 74.00          | 31.80       | PK  | Vertic | PASS    |
|    | 7206.00         | -              | 17.41          | -             | 54.00          | 36.59       | AV  | Vertic | PASS    |
| 3  | 9608.00         | 43.00          | 44.38          | 1.38          | 74.00          | 29.62       | PK  | Vertic | PASS    |
|    | 9608.00         | -              | 19.59          | -             | 54.00          | 34.41       | AV  | Vertic | PASS    |

## Transmit at 2441MHz by 2DH5

Test Graph

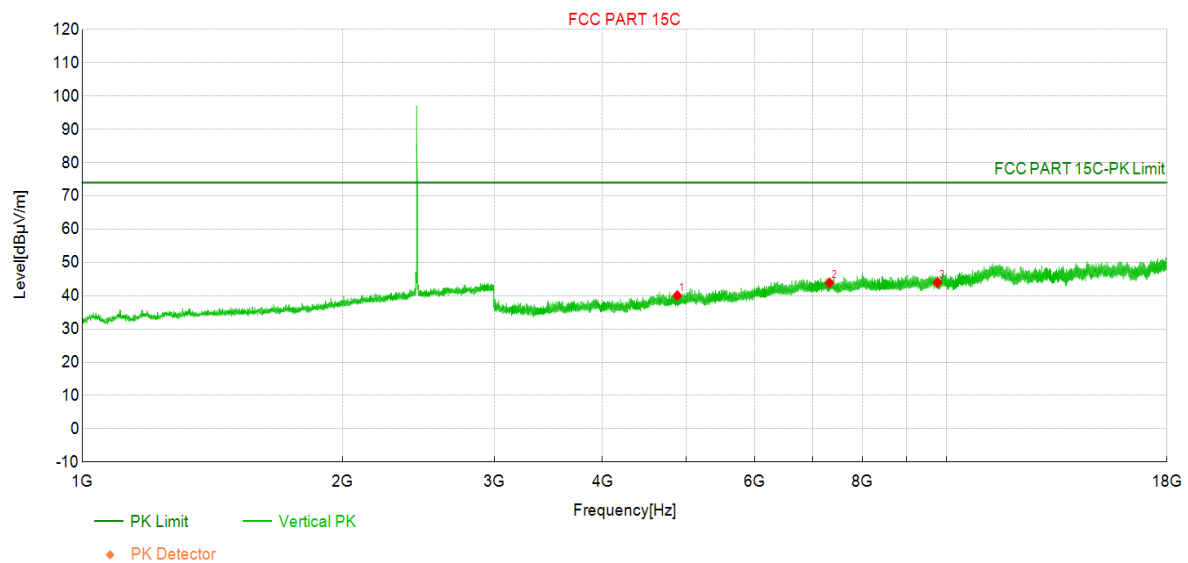


## Data List

| NO | Frequency [MHz] | Reading [dBμV] | Level [dBμV/m] | Factor [dB/m] | Limit [dBμV/m] | Margin [dB] | Det | Pol    | Verdict |
|----|-----------------|----------------|----------------|---------------|----------------|-------------|-----|--------|---------|
| 1  | 4882.06         | 54.30          | 46.19          | -8.15         | 74.00          | 27.81       | PK  | Horizo | PASS    |
|    | 4882.06         | -              | 21.40          | -             | 54.00          | 32.60       | AV  | Horizo | PASS    |
| 2  | 7323.00         | 43.40          | 42.02          | -1.42         | 74.00          | 31.98       | PK  | Horizo | PASS    |
|    | 7323.00         | -              | 17.23          | -             | 54.00          | 36.77       | AV  | Horizo | PASS    |
| 3  | 9764.00         | 41.90          | 43.34          | 1.46          | 74.00          | 30.66       | PK  | Horizo | PASS    |
|    | 9764.00         | -              | 18.55          | -             | 54.00          | 35.45       | AV  | Horizo | PASS    |

## Transmit at 2441MHz by 2DH5

Test Graph

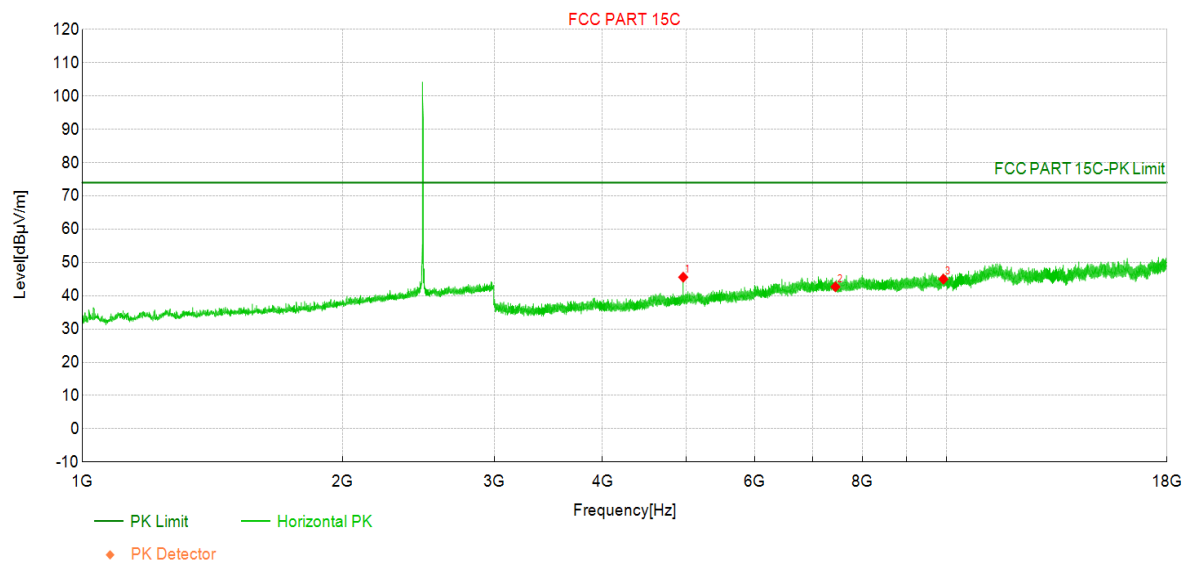


## Data List

| NO | Frequency [MHz] | Reading [dBμV] | Level [dBμV/m] | Factor [dB/m] | Limit [dBμV/m] | Margin [dB] | Det | Pol    | Verdict |
|----|-----------------|----------------|----------------|---------------|----------------|-------------|-----|--------|---------|
| 1  | 4882.00         | 48.20          | 40.03          | -8.15         | 74.00          | 33.97       | PK  | Vertic | PASS    |
|    | 4882.00         | -              | 15.24          | -             | 54.00          | 38.76       | AV  | Vertic | PASS    |
| 2  | 7323.00         | 45.30          | 43.87          | -1.42         | 74.00          | 30.13       | PK  | Vertic | PASS    |
|    | 7323.00         | -              | 19.08          | -             | 54.00          | 34.92       | AV  | Vertic | PASS    |
| 3  | 9764.00         | 42.50          | 43.94          | 1.46          | 74.00          | 30.06       | PK  | Vertic | PASS    |
|    | 9764.00         | -              | 19.15          | -             | 54.00          | 34.85       | AV  | Vertic | PASS    |

## Transmit at 2480MHz by 2DH5

Test Graph

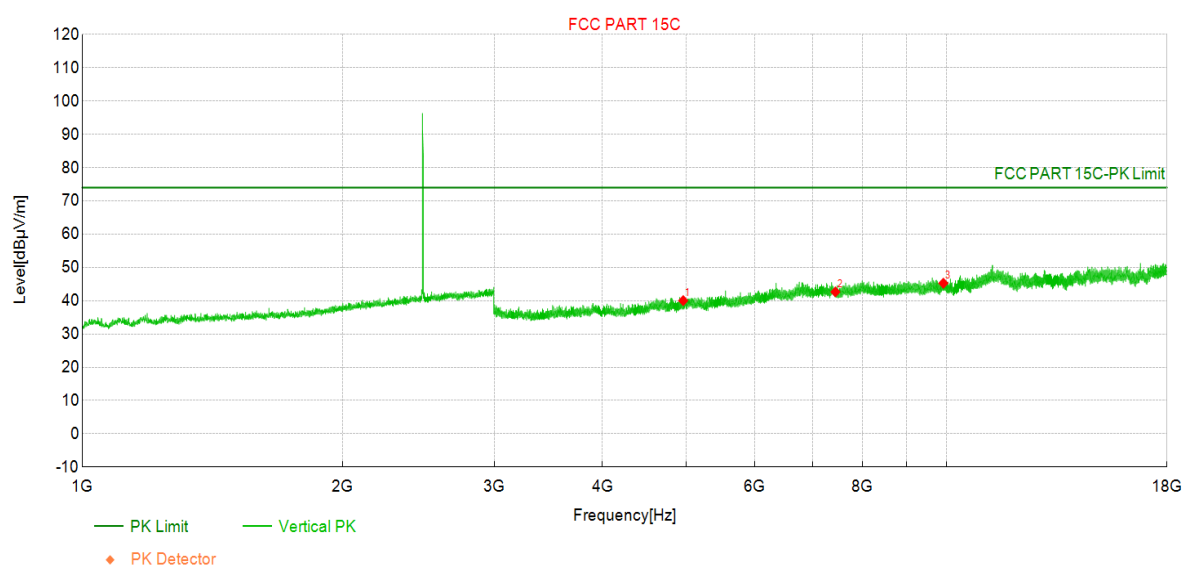


## Data List

| NO | Frequency [MHz] | Reading [dBμV] | Level [dBμV/m] | Factor [dB/m] | Limit [dBμV/m] | Margin [dB] | Det | Pol    | Verdict |
|----|-----------------|----------------|----------------|---------------|----------------|-------------|-----|--------|---------|
| 1  | 4959.71         | 53.40          | 45.58          | -7.83         | 74.00          | 28.42       | PK  | Horizo | PASS    |
|    | 4959.71         | -              | 20.79          | -             | 54.00          | 33.21       | AV  | Horizo | PASS    |
| 2  | 7440.00         | 44.00          | 42.69          | -1.30         | 74.00          | 31.31       | PK  | Horizo | PASS    |
|    | 7440.00         | -              | 17.90          | -             | 54.00          | 36.10       | AV  | Horizo | PASS    |
| 3  | 9920.00         | 42.60          | 44.99          | 2.35          | 74.00          | 29.01       | PK  | Horizo | PASS    |
|    | 9920.00         | -              | 20.20          | -             | 54.00          | 33.80       | AV  | Horizo | PASS    |

## Transmit at 2480MHz by 2DH5

Test Graph

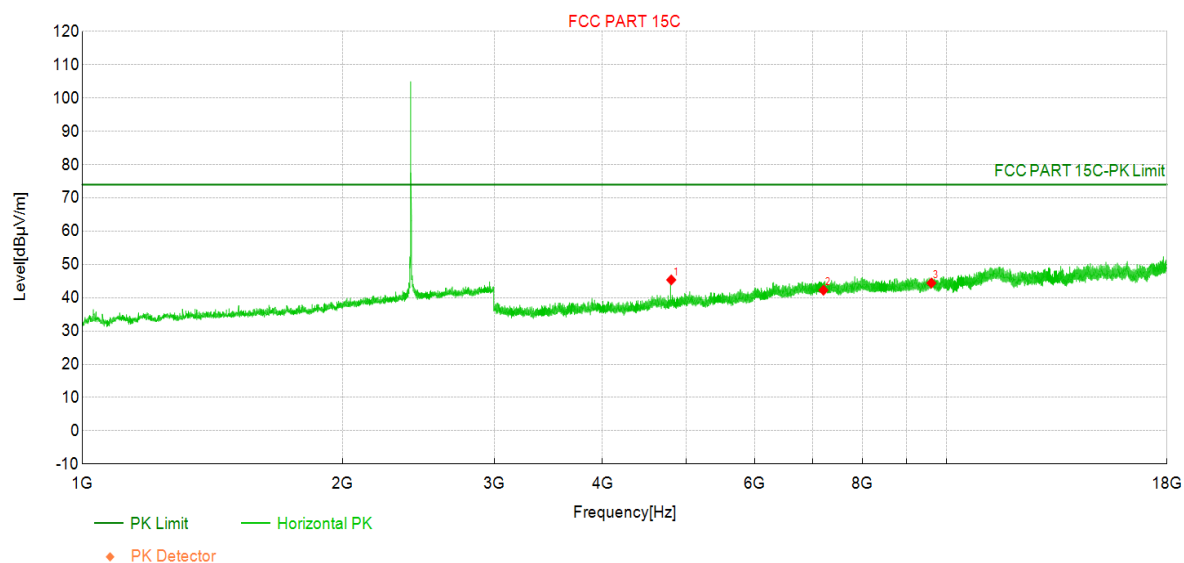


## Data List

| NO | Frequency [MHz] | Reading [dBμV] | Level [dBμV/m] | Factor [dB/m] | Limit [dBμV/m] | Margin [dB] | Det | Pol    | Verdict |
|----|-----------------|----------------|----------------|---------------|----------------|-------------|-----|--------|---------|
| 1  | 4960.00         | 47.90          | 40.03          | -7.83         | 74.00          | 33.97       | PK  | Vertic | PASS    |
|    | 4960.00         | -              | 15.24          | -             | 54.00          | 38.76       | AV  | Vertic | PASS    |
| 2  | 7440.00         | 44.00          | 42.66          | -1.30         | 74.00          | 31.34       | PK  | Vertic | PASS    |
|    | 7440.00         | -              | 17.87          | -             | 54.00          | 36.13       | AV  | Vertic | PASS    |
| 3  | 9920.00         | 42.90          | 45.26          | 2.35          | 74.00          | 28.74       | PK  | Vertic | PASS    |
|    | 9920.00         | -              | 20.47          | -             | 54.00          | 33.53       | AV  | Vertic | PASS    |

## Transmit at 2402MHz by 3DH5

Test Graph

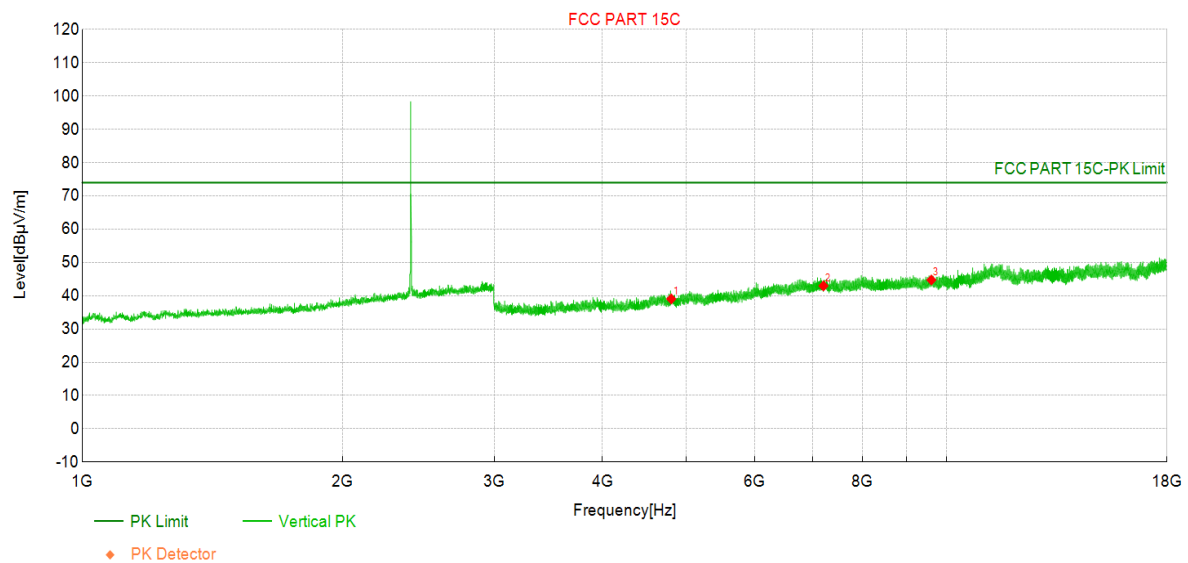


## Data List

| NO | Frequency [MHz] | Reading [dBμV] | Level [dBμV/m] | Factor [dB/m] | Limit [dBμV/m] | Margin [dB] | Det | Pol    | Verdict |
|----|-----------------|----------------|----------------|---------------|----------------|-------------|-----|--------|---------|
| 1  | 4803.97         | 53.80          | 45.35          | -8.48         | 74.00          | 28.65       | PK  | Horizo | PASS    |
|    | 4803.97         | -              | 20.56          | -             | 54.00          | 33.44       | AV  | Horizo | PASS    |
| 2  | 7206.00         | 43.90          | 42.25          | -1.62         | 74.00          | 31.75       | PK  | Horizo | PASS    |
|    | 7206.00         | -              | 17.46          | -             | 54.00          | 36.54       | AV  | Horizo | PASS    |
| 3  | 9608.00         | 43.00          | 44.41          | 1.38          | 74.00          | 29.59       | PK  | Horizo | PASS    |
|    | 9608.00         | -              | 19.62          | -             | 54.00          | 34.38       | AV  | Horizo | PASS    |

## Transmit at 2402MHz by 3DH5

Test Graph

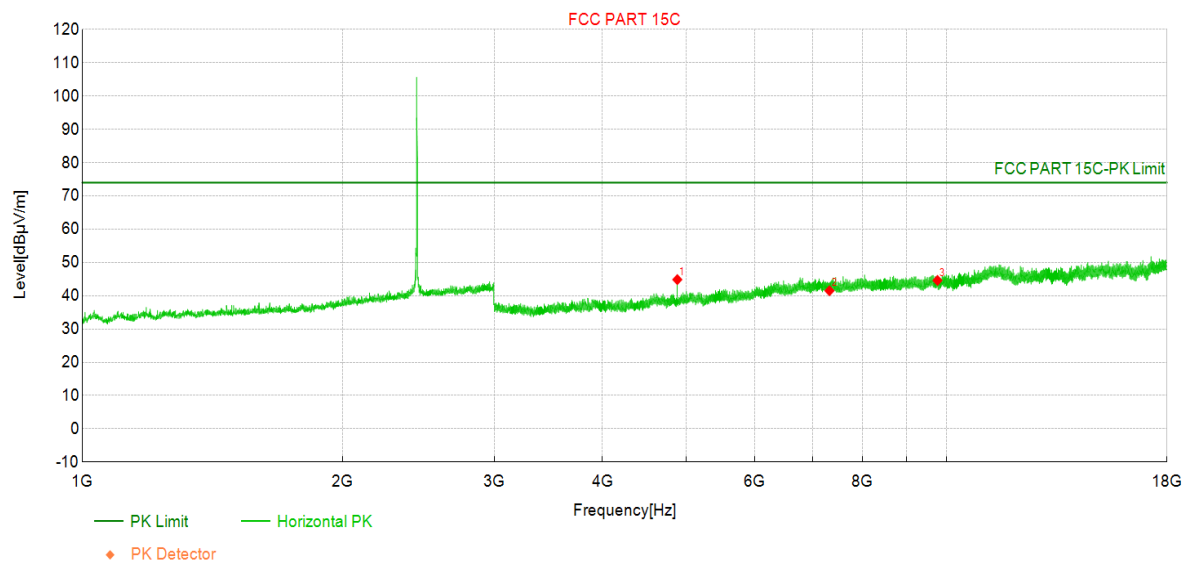


## Data List

| NO | Frequency [MHz] | Reading [dBμV] | Level [dBμV/m] | Factor [dB/m] | Limit [dBμV/m] | Margin [dB] | Det | Pol    | Verdict |
|----|-----------------|----------------|----------------|---------------|----------------|-------------|-----|--------|---------|
| 1  | 4804.00         | 47.50          | 39.02          | -8.48         | 74.00          | 34.98       | PK  | Vertic | PASS    |
|    | 4804.00         | -              | 14.23          | -             | 54.00          | 39.77       | AV  | Vertic | PASS    |
| 2  | 7206.00         | 44.60          | 42.95          | -1.62         | 74.00          | 31.05       | PK  | Vertic | PASS    |
|    | 7206.00         | -              | 18.16          | -             | 54.00          | 35.84       | AV  | Vertic | PASS    |
| 3  | 9608.00         | 43.40          | 44.73          | 1.38          | 74.00          | 29.27       | PK  | Vertic | PASS    |
|    | 9608.00         | -              | 19.94          | -             | 54.00          | 34.06       | AV  | Vertic | PASS    |

## Transmit at 2441MHz by 3DH5

Test Graph

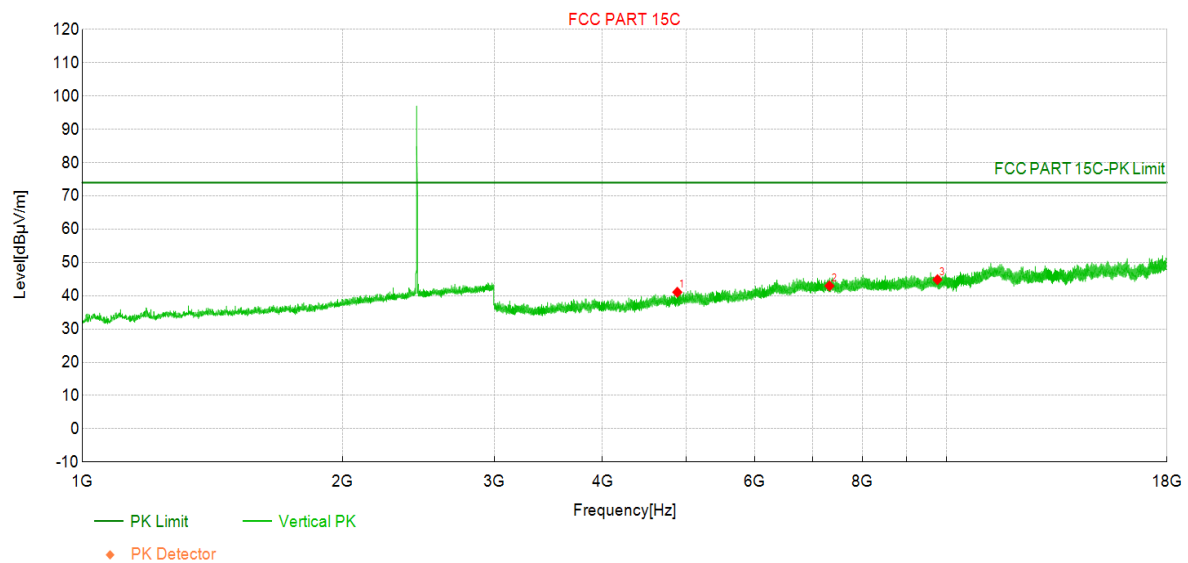


## Data List

| NO | Frequency [MHz] | Reading [dBμV] | Level [dBμV/m] | Factor [dB/m] | Limit [dBμV/m] | Margin [dB] | Det | Pol    | Verdict |
|----|-----------------|----------------|----------------|---------------|----------------|-------------|-----|--------|---------|
| 1  | 4882.00         | 53.00          | 44.85          | -8.15         | 74.00          | 29.15       | PK  | Horizo | PASS    |
|    | 4882.00         | -              | 20.06          | -             | 54.00          | 33.94       | AV  | Horizo | PASS    |
| 2  | 7323.00         | 42.90          | 41.49          | -1.42         | 74.00          | 32.51       | PK  | Horizo | PASS    |
|    | 7323.00         | -              | 16.70          | -             | 54.00          | 37.30       | AV  | Horizo | PASS    |
| 3  | 9764.00         | 43.10          | 44.60          | 1.46          | 74.00          | 29.40       | PK  | Horizo | PASS    |
|    | 9764.00         | -              | 19.81          | -             | 54.00          | 34.19       | AV  | Horizo | PASS    |

## Transmit at 2441MHz by 3DH5

Test Graph

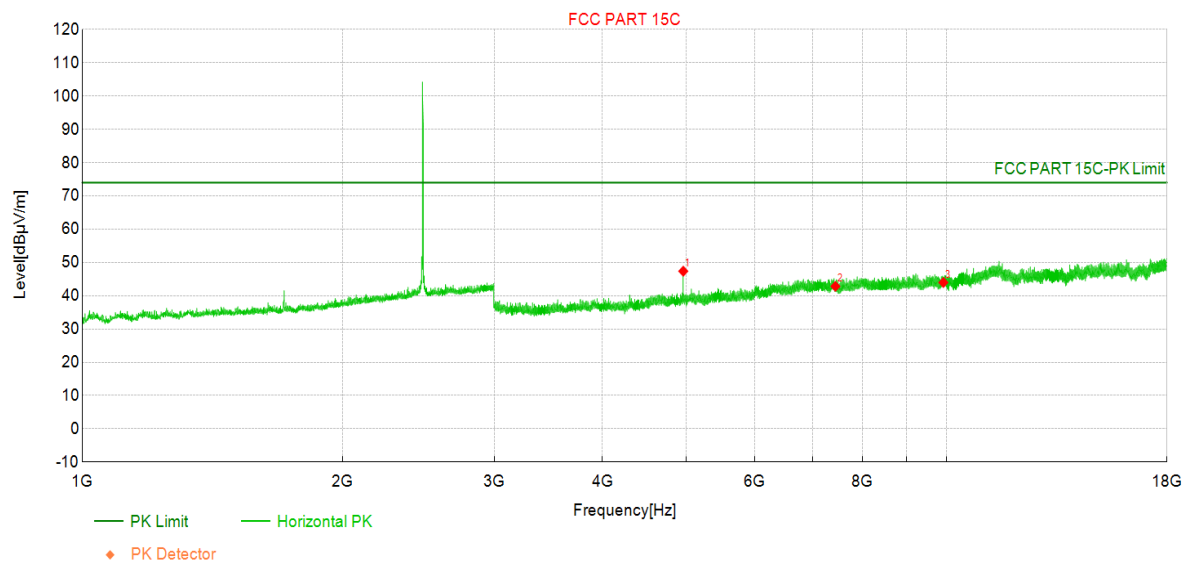


## Data List

| NO | Frequency [MHz] | Reading [dBμV] | Level [dBμV/m] | Factor [dB/m] | Limit [dBμV/m] | Margin [dB] | Det | Pol    | Verdict |
|----|-----------------|----------------|----------------|---------------|----------------|-------------|-----|--------|---------|
| 1  | 4882.00         | 49.20          | 41.06          | -8.15         | 74.00          | 32.94       | PK  | Vertic | PASS    |
|    | 4882.00         | -              | 16.27          | -             | 54.00          | 37.73       | AV  | Vertic | PASS    |
| 2  | 7323.00         | 44.40          | 42.96          | -1.42         | 74.00          | 31.04       | PK  | Vertic | PASS    |
|    | 7323.00         | -              | 18.17          | -             | 54.00          | 35.83       | AV  | Vertic | PASS    |
| 3  | 9764.00         | 43.40          | 44.84          | 1.46          | 74.00          | 29.16       | PK  | Vertic | PASS    |
|    | 9764.00         | -              | 20.05          | -             | 54.00          | 33.95       | AV  | Vertic | PASS    |

## Transmit at 2480MHz by 3DH5

Test Graph

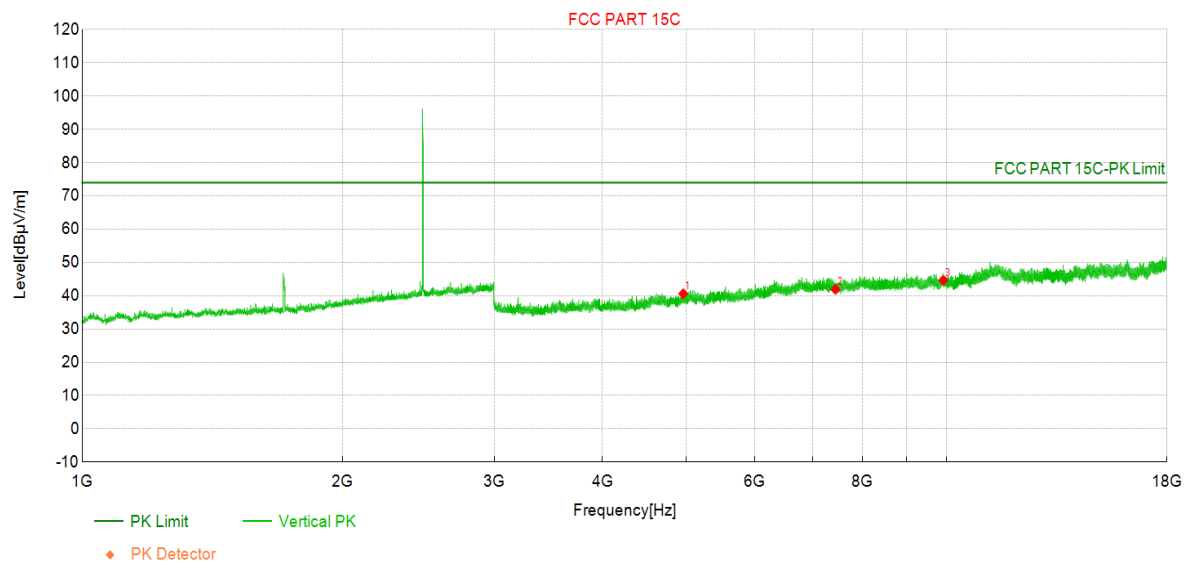


## Data List

| NO | Frequency [MHz] | Reading [dBμV] | Level [dBμV/m] | Factor [dB/m] | Limit [dBμV/m] | Margin [dB] | Det | Pol    | Verdict |
|----|-----------------|----------------|----------------|---------------|----------------|-------------|-----|--------|---------|
| 1  | 4960.00         | 55.20          | 47.37          | -7.83         | 74.00          | 26.63       | PK  | Horizo | PASS    |
|    | 4960.00         | -              | 22.58          | -             | 54.00          | 31.42       | AV  | Horizo | PASS    |
| 2  | 7440.00         | 44.10          | 42.82          | -1.30         | 74.00          | 31.18       | PK  | Horizo | PASS    |
|    | 7440.00         | -              | 18.03          | -             | 54.00          | 35.97       | AV  | Horizo | PASS    |
| 3  | 9920.00         | 41.60          | 43.97          | 2.35          | 74.00          | 30.03       | PK  | Horizo | PASS    |
|    | 9920.00         | -              | 19.18          | -             | 54.00          | 34.82       | AV  | Horizo | PASS    |

## Transmit at 2480MHz by 3DH5

Test Graph

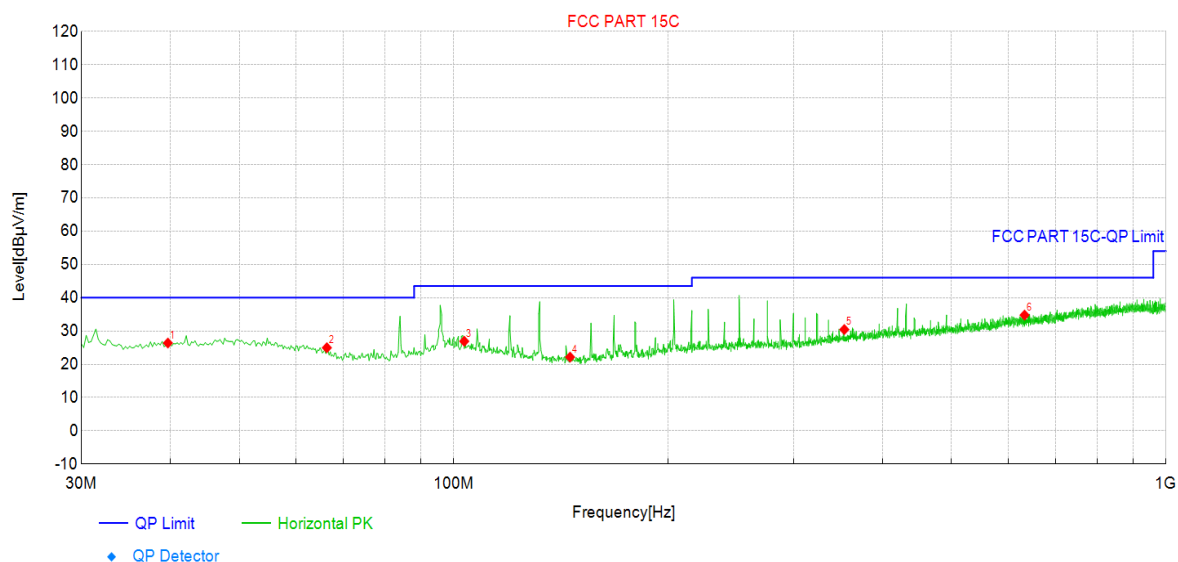


## Data List

| NO | Frequency [MHz] | Reading [dBμV] | Level [dBμV/m] | Factor [dB/m] | Limit [dBμV/m] | Margin [dB] | Det | Pol    | Verdict |
|----|-----------------|----------------|----------------|---------------|----------------|-------------|-----|--------|---------|
| 1  | 4960.00         | 48.40          | 40.61          | -7.83         | 74.00          | 33.39       | PK  | Vertic | PASS    |
|    | 4960.00         | -              | 15.82          | -             | 54.00          | 38.18       | AV  | Vertic | PASS    |
| 2  | 7440.00         | 43.20          | 41.90          | -1.30         | 74.00          | 32.10       | PK  | Vertic | PASS    |
|    | 7440.00         | -              | 17.11          | -             | 54.00          | 36.89       | AV  | Vertic | PASS    |
| 3  | 9920.00         | 42.30          | 44.60          | 2.35          | 74.00          | 29.40       | PK  | Vertic | PASS    |
|    | 9920.00         | -              | 19.81          | -             | 54.00          | 34.19       | AV  | Vertic | PASS    |

**The worst data of Emissions in restricted frequency bands below 1GHz:  
Transmit at 2402MHz by DH5**

Test Graph

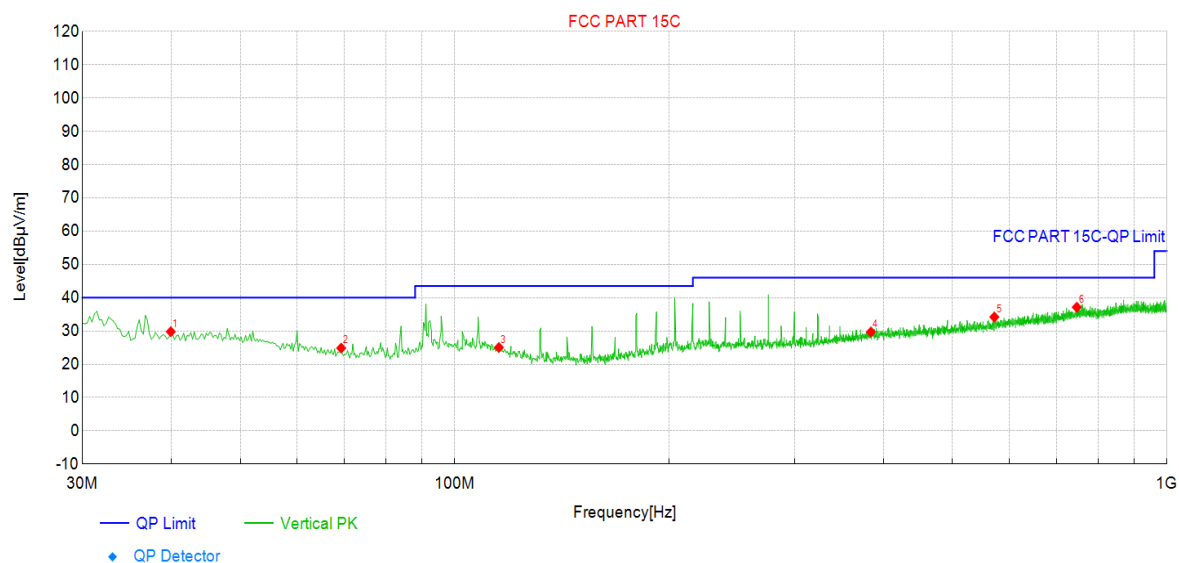


## Data List

| NO | Frequency [MHz] | Reading [dBμV] | Level [dBμV/m] | Factor [dB/m] | Limit [dBμV/m] | Margin [dB] | Det | Pol    | Verdict |
|----|-----------------|----------------|----------------|---------------|----------------|-------------|-----|--------|---------|
| 1  | 39.70           | 12.5           | 26.38          | 13.850        | 40.00          | 13.62       | PK  | Horizo | PASS    |
| 2  | 66.38           | 13.8           | 24.96          | 11.180        | 40.00          | 15.04       | PK  | Horizo | PASS    |
| 3  | 103.48          | 14.4           | 26.90          | 12.500        | 43.50          | 16.60       | PK  | Horizo | PASS    |
| 4  | 145.67          | 12.8           | 22.14          | 9.360         | 43.50          | 21.36       | PK  | Horizo | PASS    |
| 5  | 353.50          | 14.9           | 30.44          | 15.560        | 46.00          | 15.56       | PK  | Horizo | PASS    |
| 6  | 633.10          | 14.8           | 34.77          | 19.990        | 46.00          | 11.23       | PK  | Horizo | PASS    |

## Transmit at 2402MHz by DH5

Test Graph



## Data List

| NO | Frequency [MHz] | Reading [dBμV] | Level [dBμV/m] | Factor [dB/m] | Limit [dBμV/m] | Margin [dB] | Det | Pol    | Verdict |
|----|-----------------|----------------|----------------|---------------|----------------|-------------|-----|--------|---------|
| 1  | 39.94           | 15.9           | 29.79          | 13.880        | 40.00          | 10.21       | PK  | Vertic | PASS    |
| 2  | 69.29           | 14.4           | 24.86          | 10.430        | 40.00          | 15.14       | PK  | Vertic | PASS    |
| 3  | 115.36          | 13.5           | 25.04          | 11.520        | 43.50          | 18.46       | PK  | Vertic | PASS    |
| 4  | 384.05          | 13.7           | 29.69          | 15.970        | 46.00          | 16.31       | PK  | Vertic | PASS    |
| 5  | 572.23          | 15.1           | 34.20          | 19.070        | 46.00          | 11.80       | PK  | Vertic | PASS    |
| 6  | 747.07          | 15.7           | 37.15          | 21.500        | 46.00          | 8.85        | PK  | Vertic | PASS    |

Note:

1. Level = Reading + Factor.

2. Margin = Limit – Level

## Appendix B: Test data of 20dB Bandwidth

| TestMode | Frequency[MHz] | 20db EBW[MHz] | FL[MHz]  | FH[MHz]  | Limit[MHz]  | Verdict |
|----------|----------------|---------------|----------|----------|-------------|---------|
| DH5      | 2402           | 0.945         | 2401.502 | 2402.447 | Within band | pass    |
| DH5      | 2441           | 0.954         | 2440.505 | 2441.459 | Within band | pass    |
| DH5      | 2480           | 0.957         | 2479.505 | 2480.462 | Within band | pass    |
| 2DH5     | 2402           | 1.317         | 2401.310 | 2402.627 | Within band | pass    |
| 2DH5     | 2441           | 1.290         | 2440.337 | 2441.627 | Within band | pass    |
| 2DH5     | 2480           | 1.287         | 2479.340 | 2480.627 | Within band | pass    |
| 3DH5     | 2402           | 1.296         | 2401.322 | 2402.618 | Within band | pass    |
| 3DH5     | 2441           | 1.296         | 2440.319 | 2441.615 | Within band | pass    |
| 3DH5     | 2480           | 1.317         | 2479.316 | 2480.633 | Within band | pass    |

DH5\_Ant1\_2402



DH5\_Ant1\_2441



DH5\_Ant1\_2480



2DH5\_Ant1\_2402



2DH5\_Ant1\_2441



2DH5\_Ant1\_2480



3DH5\_Ant1\_2402



3DH5\_Ant1\_2441



3DH5\_Ant1\_2480



## Occupied Channel Bandwidth

| TestMode | Antenna | Frequency[MHz] | OCB [MHz] | FL[MHz]   | FH[MHz]   | Limit[MHz] | Verdict |
|----------|---------|----------------|-----------|-----------|-----------|------------|---------|
| DH5      | Ant1    | 2402           | 0.86802   | 2401.5363 | 2402.4043 | ---        | ---     |
|          |         | 2441           | 0.86355   | 2440.5351 | 2441.3987 | ---        | ---     |
|          |         | 2480           | 0.86201   | 2479.5409 | 2480.4029 | ---        | ---     |
| 2DH5     | Ant1    | 2402           | 1.1843    | 2401.3778 | 2402.5621 | ---        | ---     |
|          |         | 2441           | 1.1847    | 2440.3753 | 2441.5600 | ---        | ---     |
|          |         | 2480           | 1.1800    | 2479.3802 | 2480.5602 | ---        | ---     |
| 3DH5     | Ant1    | 2402           | 1.1945    | 2401.3739 | 2402.5684 | ---        | ---     |
|          |         | 2441           | 1.1905    | 2440.3761 | 2441.5666 | ---        | ---     |
|          |         | 2480           | 1.1959    | 2479.3670 | 2480.5629 | ---        | ---     |

DH5\_Ant1\_2402



DH5\_Ant1\_2441



DH5\_Ant1\_2480



2DH5\_Ant1\_2402



2DH5\_Ant1\_2441



2DH5\_Ant1\_2480



3DH5\_Ant1\_2402



3DH5\_Ant1\_2441



3DH5\_Ant1\_2480



| TestMode | Frequency[MHz] | Result[MHz] | Limit[MHz] | Verdict |
|----------|----------------|-------------|------------|---------|
| DH5      | Hop            | 0.998       | ≥0.957     | PASS    |
| 2DH5     | Hop            | 1.024       | ≥0.878     | PASS    |
| 3DH5     | Hop            | 1.104       | ≥0.878     | PASS    |

