# CFR 47 FCC PART 15 SUBPART C

## TEST REPORT

*For*

**REMOTE CONTROL**

**MODEL NUMBER: ZNYK01-01, ZNYK02-02**

**REPORT NUMBER: 4790588962-RF-1**

**ISSUE DATE: March 21, 2023**

**FCC ID: 2BACM-ZNYK01**

*Prepared for*

**XIAMEN OLT CO.,LTD.**
**Room 501, Building 1,No. 950, Tonglong 2nd Road, Xiamen Torch High-tech Zone (Xiang'an) Industrial Zone, Xiamen City, China.**

*Prepared by*

**UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch**

**Building 10, Innovation Technology Park, No. 1, Li Bin Road, Song Shan Lake Hi-Tech Development Zone Dongguan, 523808, People's Republic of China**

**Tel: +86 769 22038881**
**Fax: +86 769 33244054**
**Website: www.ul.com**

**The results reported herein have been performed in accordance with the laboratory's terms of accreditation. This report shall not be reproduced except in full without the written approval of the Laboratory. The results in this report apply to the test sample(s) mentioned above at the time of the testing period only and are not to be used to indicate applicability to other similar products.**

Revision History

| Rev. | Issue Date | Revisions | Revised By |
|---|---|---|---|
| V0 | March 21, 2023 | Initial Issue | |


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| Summary of Test Results | | | |
|---|---|---|---|
| Clause | Test Items | FCC Rules | Test Results |
| 1 | 20dB Bandwidth and 99% Occupied Bandwidth | CFR 47 FCC §15.215 (c) | Pass |
| 2 | Radiated Emission | CFR 47 FCC §15.249 (a)(d)(e)<br>CFR 47 FCC §15.205 and §15.209 | Pass |
| 3 | Conducted Emission Test for AC Power Port | CFR 47 FCC §15.207 | Not Applicable (Note 2) |
| 4 | Antenna Requirement | CFR 47 FCC §15.203 | Pass |

Note 1: This test report is only published to and used by the applicant, and it is not for evidence purpose in China.
Note 2: The EUT is powered by battery.
Note 3: The measurement result for the sample received is <Pass> according to < CFR 47 FCC PART 15 SUBPART C> when <Accuracy Method> decision rule is applied.


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# 1. ATTESTATION OF TEST RESULTS

**Applicant Information**

Company Name: XIAMEN OLT CO.,LTD.
Address: Room 501, Building 1,No. 950, Tonglong 2nd Road, Xiamen Torch High-tech Zone (Xiang'an) Industrial Zone, Xiamen City, China.

**Manufacturer Information**

Company Name: XIAMEN OLT CO.,LTD.
Address: Room 501, Building 1,No. 950, Tonglong 2nd Road, Xiamen Torch High-tech Zone (Xiang'an) Industrial Zone, Xiamen City, China.

**EUT Information**

EUT Name: REMOTE CONTROL
Model: ZNYK01-01, ZNYK02-02
Model difference: Only the name and appearance are different.
Brand Name: TCK
Sample Received Date: March 15, 2023
Sample Status: Normal
Sample ID: 5883077
Date of Tested: March 15, 2023 to March 21, 2023

| APPLICABLE STANDARDS | |
|---|---|
| **STANDARD** | **TEST RESULTS** |
| CFR 47 FCC PART 15 SUBPART C | PASS |

Prepared By:

Kebo Zhang
Senior Project Engineer

Checked By:

Denny Huang
Senior Project Engineer

Approved By:

Stephen Guo
Operations Manager


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## 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with KDB 414788 D01 Radiated Test Site v01r01, FCC CFR 47 Part 2, FCC CFR 47 Part 15, ANSI C63.10-2013.

## 3. FACILITIES AND ACCREDITATION

| | |
|---|---|
| Accreditation Certificate | **A2LA (Certificate No.: 4102.01)**<br>UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with A2LA.<br>**FCC (FCC Designation No.: CN1187)**<br>UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. Has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules<br>**ISED (Company No.: 21320)**<br>UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been registered and fully described in a report filed with ISED.<br>The Company Number is 21320 and the test lab Conformity Assessment Body Identifier (CABID) is CN0046.<br>**VCCI (Registration No.: G-20019, R-20004, C-20012 and T-20011)**<br>UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with VCCI, the Membership No. is 3793.<br>Facility Name:<br>Chamber D, the VCCI registration No. is G-20019 and R-20004<br>Shielding Room B , the VCCI registration No. is C-20012 and T-20011 |

Note 1:
All tests measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, No. 1, Li Bin Road, Song Shan Lake Hi-Tech Development Zone Dongguan, 523808, People's Republic of China.

Note 2:
The test anechoic chamber in UL Verification Services (Guangzhou) Co., Ltd.
Song Shan Lake Branch had been calibrated and compared to the open field sites and the test anechoic chamber is shown to be equivalent to or worst case from the open field site.

Note 3:
For below 30 MHz, lab had performed measurements at test anechoic chamber and comparing to measurements obtained on an open field site. And these measurements below 30 MHz had been correlated to measurements performed on an OFS.


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# 4. CALIBRATION AND UNCERTAINTY

## 4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations and is traceable to recognized national standards.

## 4.2. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

| Test Item | Uncertainty |
|---|---|
| Conduction emission | 3.62 dB |
| Radiated Emission<br>(Included Fundamental Emission) (9 kHz ~ 30 MHz) | 2.2 dB |
| Radiated Emission<br>(Included Fundamental Emission) (30 MHz ~ 1 GHz) | 4.00 dB |
| Radiated Emission<br>(Included Fundamental Emission) (1 GHz to 26 GHz) | 5.78 dB (1 GHz ~ 18 GHz) |
| | 5.23 dB (18 GHz ~ 26 GHz) |
| Duty Cycle | ±0.028% |
| DTS and 99% Occupied Bandwidth | ±0.0196% |
| Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2. | |


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# 5. EQUIPMENT UNDER TEST

## 5.1. DESCRIPTION OF EUT

| | | |
|---|---|---|
| EUT Name | REMOTE CONTROL | |
| Model: | ZNYK01-01, ZNYK02-02 | |
| Model difference: | Only the name and appearance are different. | |
| Product Description | Operation Frequency | 2408 MHz ~ 2479 MHz |
| | Modulation Type | GFSK |
| Battery | DC 3 V | |

## 5.2. CHANNEL LIST

| Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) |
|---|---|---|---|---|---|---|---|
| 1 | 2408 | 2 | 2443 | 3 | 2479 | / | / |

## 5.3. MAXIMUM FIELD STRENGTH

| Test Mode | Frequency (MHz) | Channel Number | Max Peak field strength (dBµV/m) |
|---|---|---|---|
| GFSK | 2408 ~ 2479 | 1-3 [3] | 75.84 |

## 5.4. TEST CHANNEL CONFIGURATION

| Test Mode | Test Channel | Frequency |
|---|---|---|
| GFSK | CH 1(Low Channel), CH 2(MID Channel), CH 3(High Channel) | 2408 MHz, 2443 MHz, 2479 MHz |

## 5.5. THE WORSE CASE POWER SETTING PARAMETER

| The Worse Case Power Setting Parameter under 2408 MHz ~ 2479 MHz Band | | | | |
|---|---|---|---|---|
| Test Software Version | | / | | |
| Modulation Type | Transmit Antenna Number | Test Channel | | |
| | | CH 1 | CH 2 | CH 3 |
| GFSK | 1 | Default | Default | Default |


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## 5.6. DESCRIPTION OF AVAILABLE ANTENNAS

| Antenna | Frequency (MHz) | Antenna Type | Maximum Antenna Gain (dBi) |
|---|---|---|---|
| 1 | 2408 ~ 2479 | PCB Antenna | -0.85 |

| Test Mode | Transmit and Receive Mode | Description |
|---|---|---|
| GFSK | ☒1TX | Antenna 1 can be used as transmitting/receiving antenna. |

Note: The value of the antenna gain was declared by customer.


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## 5.7. DESCRIPTION OF TEST SETUP

**SUPPORT EQUIPMENT**

| Item | Equipment | Brand Name | Model Name | P/N |
|---|---|---|---|---|
| / | / | / | / | / |

**I/O CABLES**

| Cable No | Port | Connector Type | Cable Type | Cable Length(m) | Remarks |
|---|---|---|---|---|---|
| / | / | / | / | / | / |

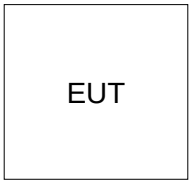
**ACCESSORY**

| Item | Equipment | Mfr/Brand | Model/Type No. | Specification | Series No. |
|---|---|---|---|---|---|
| / | / | / | / | / | / |

**TEST SETUP**

The EUT have the engineer mode inside.

**SETUP DIAGRAM FOR TEST**




Note: New battery was used during all tests.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# 6. MEASURING EQUIPMENT AND SOFTWARE USED

| Tonsend RF Test System | | | | | |
|---|---|---|---|---|---|
| Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Due. Date |
| Wireless Connectivity Tester | R&S | CMW270 | 1201.0002N75-102 | Sep.28, 2022 | Sep.27, 2023 |
| Attenuator | Agilent | 8495B | 2814a12853 | Oct.18, 2022 | Oct.17, 2023 |

| Software | | | |
|---|---|---|---|
| Description | Manufacturer | Name | Version |
| Tonsend SRD Test System | Tonsend | JS1120-3 RF Test System | 2.6.77.0518 |

| Radiated Emissions | | | | | |
|---|---|---|---|---|---|
| Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Due Date |
| MXE EMI Receiver | KESIGHT | N9038A | MY56400036 | Oct.17, 2022 | Oct.16, 2023 |
| Hybrid Log Periodic Antenna | TDK | HLP-3003C | 130959 | Aug.02, 2021 | Aug.01, 2024 |
| Preamplifier | HP | 8447D | 2944A09099 | Oct.17, 2022 | Oct.16, 2023 |
| EMI Measurement Receiver | R&S | ESR26 | 101377 | Oct.17, 2022 | Oct.16, 2023 |
| Horn Antenna | TDK | HRN-0118 | 130940 | July 20, 2021 | July 19, 2024 |
| Preamplifier | TDK | PA-02-0118 | TRS-305-00067 | Oct.17, 2022 | Oct.16, 2023 |
| Horn Antenna | Schwarzbeck | BBHA9170 | 697 | July 20, 2021 | July 19, 2024 |
| Preamplifier | TDK | PA-02-2 | TRS-307-00003 | Oct.17, 2022 | Oct.16, 2023 |
| Preamplifier | TDK | PA-02-3 | TRS-308-00002 | Oct.17, 2022 | Oct.16, 2023 |
| Loop antenna | Schwarzbeck | 1519B | 00008 | Dec.14, 2021 | Dec.13, 2024 |
| Preamplifier | TDK | PA-02-001-3000 | TRS-302-00050 | Oct.17, 2022 | Oct.16, 2023 |
| High Pass Filter | Wi | WHKX10-2700-3000-18000-40SS | 23 | / | / |
| Band Reject Filter | Wainwright | WRCJV8-2350-2400-2483.5-2533.5-40SS | 4 | / | / |

| Software | | | |
|---|---|---|---|
| Description | Manufacturer | Name | Version |
| Test Software for Radiated Emissions | Farad | EZ-EMC | Ver. UL-3A1 |


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# 7. ANTENNA PORT TEST RESULTS

## 7.1. 20DB BANDWIDTH AND 99% OCCUPIED BANDWIDTH

**LIMITS**

| CFR 47 FCC Part15 (15.249) Subpart C | | | |
|---|---|---|---|
| Section | Test Item | Limit | Frequency Range (MHz) |
| CFR 47 FCC §15.215 (c) | 20dB Bandwidth | for reporting purposes only | 2400-2483.5 |
| ISED RSS-Gen Clause 6.7 Issue 5 | 99% Occupied Bandwidth | For reporting purposes only. | 2400-2483.5 |

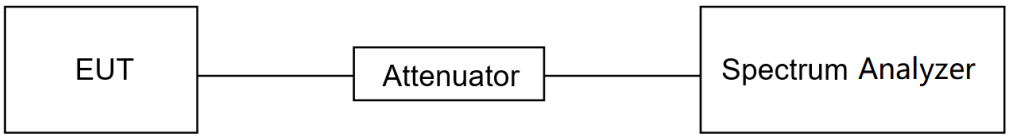
**TEST PROCEDURE**

Connect the UUT to the spectrum analyzer and use the following settings:

| | |
|---|---|
| Center Frequency | The center frequency of the channel under test |
| Detector | Peak |
| RBW | 1% to 5% of the occupied bandwidth |
| VBW | approximately 3×RBW |
| Trace | Max hold |
| Sweep | Auto couple |

Allow the trace to stabilize and measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 20 dB/99% relative to the maximum level measured in the fundamental emission.

**TEST SETUP**




**TEST ENVIRONMENT**

| | | | |
|---|---|---|---|
| Temperature | 22.6 °C | Relative Humidity | 53 % |
| Atmosphere Pressure | 101 kPa | Test Voltage | DC 3 V |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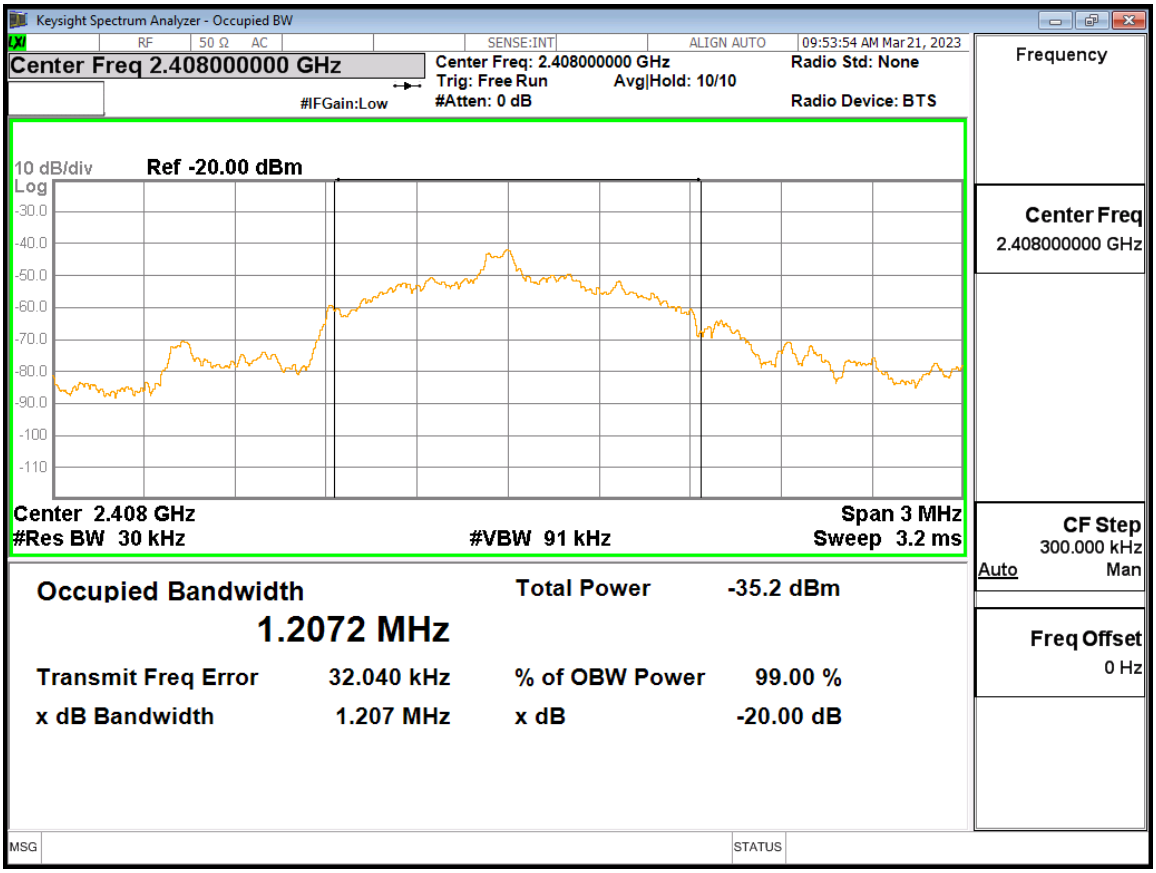
**TEST RESULTS**

| Frequency (MHz) | 99% Bandwidth (MHz) | 20dB Bandwidth (MHz) | Result |
|---|---|---|---|
| 2408 | 1.2072 | 1.207 | PASS |

20 dB BANDWIDTH AND 99% OCCUPIED BANDWIDTH LOW CH





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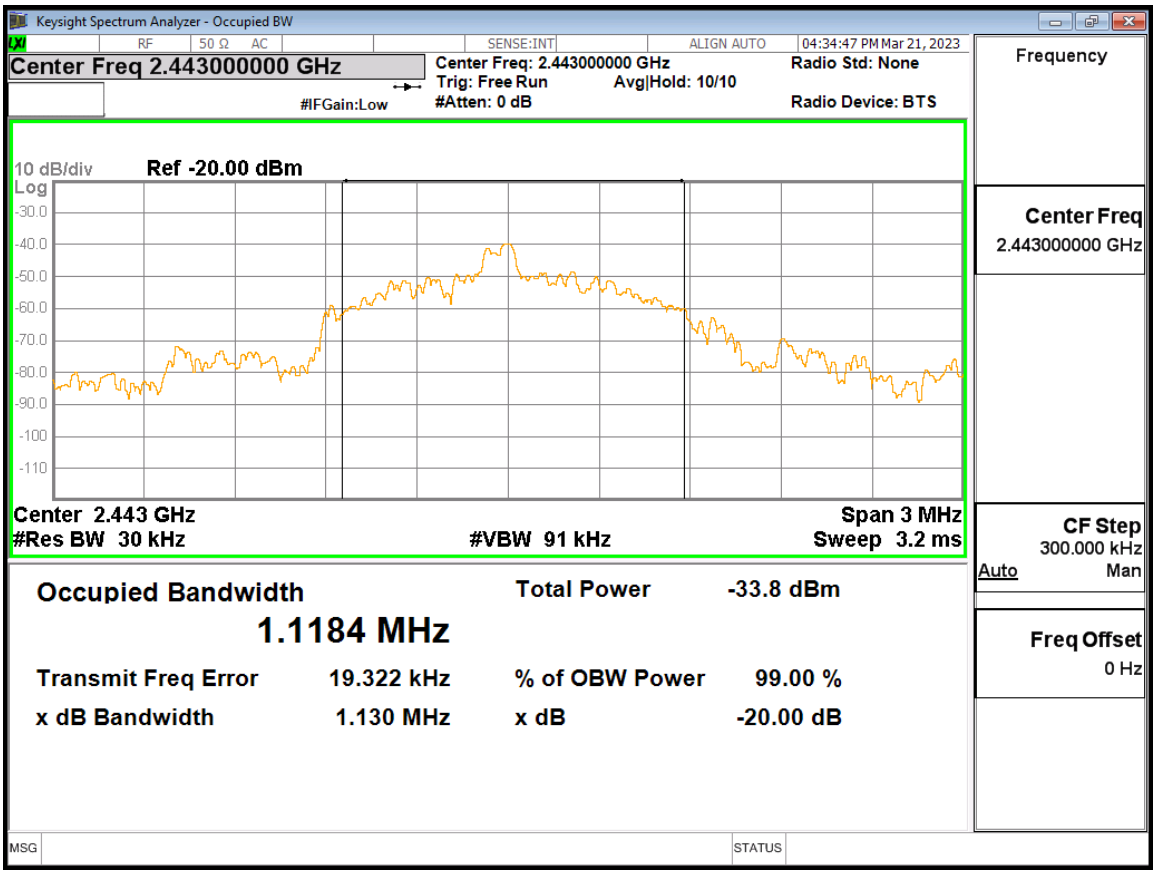
| Frequency (MHz) | 99% Bandwidth (MHz) | 20dB Bandwidth (MHz) | Result |
|---|---|---|---|
| 2443 | 1.1184 | 1.130 | PASS |

20 dB BANDWIDTH AND 99% OCCUPIED BANDWIDTH MIDDLE CH





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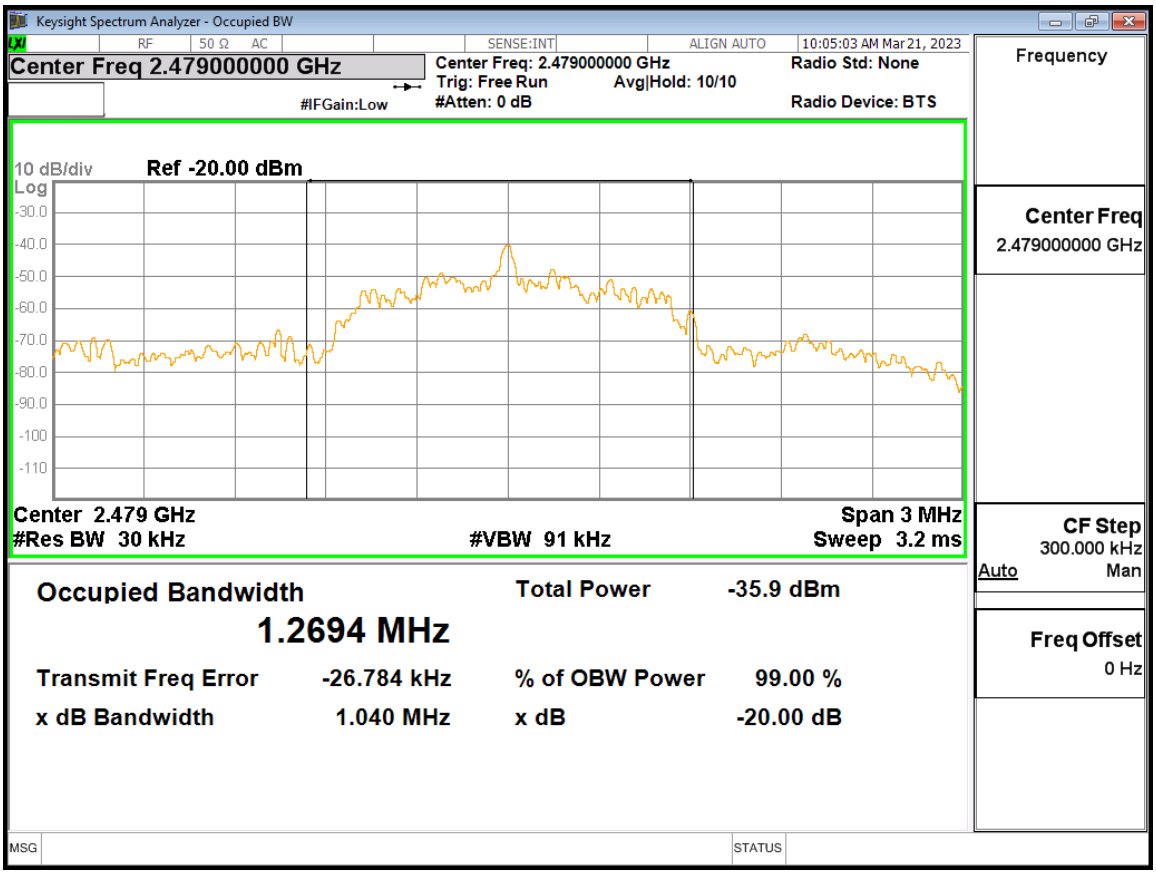
| Frequency (MHz) | 20dB bandwidth (MHz) | 99% bandwidth (MHz) | Result |
|---|---|---|---|
| 2479 | 1.2694 | 1.040 | PASS |

20 dB BANDWIDTH AND 99% OCCUPIED BANDWIDTH HIGH CH





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## 7.2. DUTY CYCLE

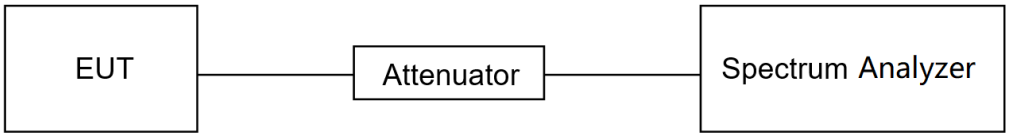
**LIMITS**

None; for reporting purposes only.

**TEST PROCEDURE**

Refer to ANSI C63.10-2013 clause 11.6 Zero – Span Spectrum Analyzer method.

**TEST SETUP**




**TEST ENVIRONMENT**

| | | | |
|---|---|---|---|
| Temperature | 22.6 °C | Relative Humidity | 53 % |
| Atmosphere Pressure | 101 kPa | Test Voltage | DC 3 V |

**TEST RESULTS**

| Mode | Burst (msec) | Number of Burst | On Time (msec) | Period (msec) | Duty Cycle x (Linear) | Duty Cycle (%) | Duty Cycle Correction Factor (db) |
|---|---|---|---|---|---|---|---|
| GFSK | 0.41 | 30 | 12.3 | 100 | 0.123 | 12.3 | -18.20 |

Note: Duty Cycle Correction Factor=20log(x).
Where: x is Duty Cycle
On Time=Burst* Number of Burst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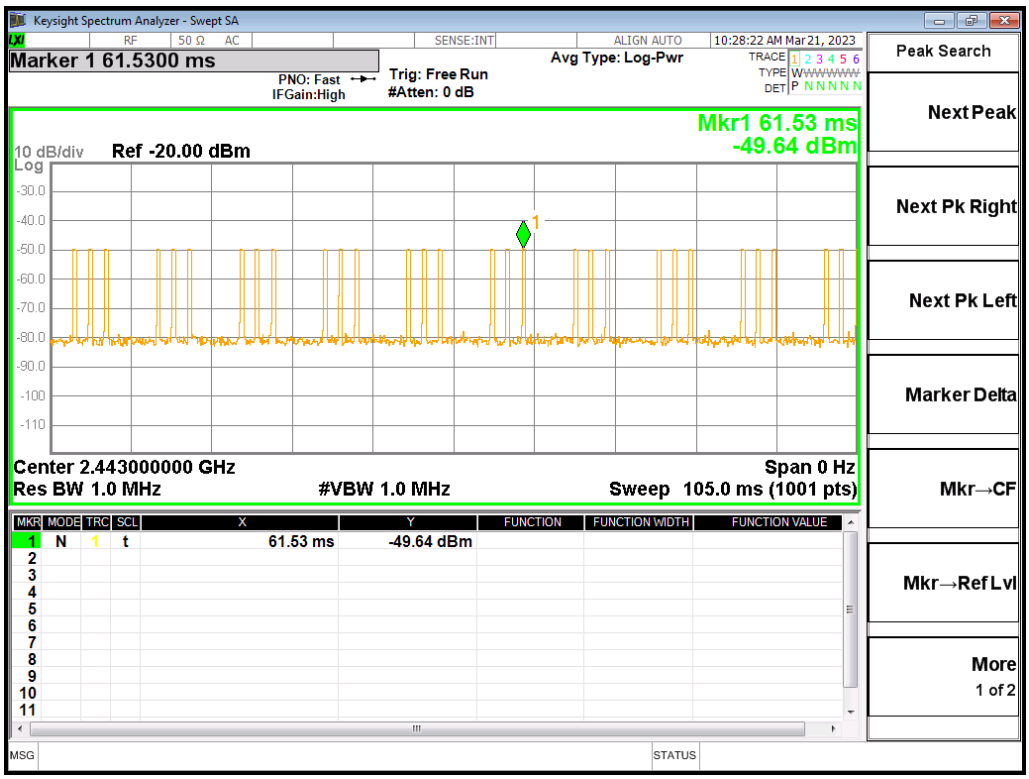
ON TIME AND DUTY CYCLE MID CH PLOT




ON TIME AND DUTY CYCLE MID CH PLOT-2

Note: All the modes had been tested, but only the worst duty cycle recorded in the report.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# 8. RADIATED TEST RESULTS

**LIMITS**

Please refer to CFR 47 FCC §15.205 and §15.209.

Radiation Disturbance Test Limit for FCC (Class B) (9 kHz ~ 1 GHz)

| Emissions radiated outside of the specified frequency bands above 30 MHz | | | |
|---|---|---|---|
| Frequency Range (MHz) | Field Strength Limit (uV/m) at 3 m | Field Strength Limit (dBuV/m) at 3 m | |
| | | Quasi-Peak | |
| 30 - 88 | 100 | 40 | |
| 88 - 216 | 150 | 43.5 | |
| 216 - 960 | 200 | 46 | |
| Above 960 | 500 | 54 | |
| Above 1000 | 500 | Peak | Average |
| | | 74 | 54 |

| FCC Emissions radiated outside of the specified frequency bands below 30 MHz | | |
|---|---|---|
| Frequency (MHz) | Field strength (microvolts/meter) | Measurement distance (meters) |
| 0.009-0.490 | 2400/F(kHz) | 300 |
| 0.490-1.705 | 24000/F(kHz) | 30 |
| 1.705-30.0 | 30 | 30 |


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FCC Restricted bands of operation refer to FCC §15.205 (a):

| MHz | MHz | MHz | GHz |
|---|---|---|---|
| 0.090-0.110 | 16.42-16.423 | 399.9-410 | 4.5-5.15 |
| [1]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 |
| 8.41425-8.41475 | 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 | ([2]) |
| 13.36-13.41 | | | |

Note: [1]Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.
[2]Above 38.6c

**TEST PROCEDURE**

Below 30 MHz

The setting of the spectrum analyzer

| | |
|---|---|
| RBW | 200 Hz (From 9 kHz to 0.15 MHz)/ 9 kHz (From 0.15 MHz to 30 MHz) |
| VBW | 200 Hz (From 9 kHz to 0.15 MHz)/ 9 kHz (From 0.15 MHz to 30 MHz) |
| Sweep | Auto |

1. The testing follows the guidelines in ANSI C63.10-2013 clause 6.4.

2. The EUT was arranged to its worst case and then turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both Horizontal, Face-on and Face-off polarizations of the antenna are set to make the measurement.

3. The EUT was placed on a turntable with 80 cm above ground.

4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a 1 m height antenna tower.

5. The radiated emission limits are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz Radiated emission limits in these three bands are based on measurements employing an average detector.

6. For measurement below 1 GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak and average detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak and average detector and reported.


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7. Although these tests were performed other than open field site, adequate comparison measurements were confirmed against 30m open field site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field site based on KDB 414788.

8. The limits in CFR 47, Part 15, Subpart C, paragraph 15.209 (a), are identical to those in RSS-GEN Section 8.9, Table 6, since the measurements are performed in terms of magnetic field strength and converted to electric field strength levels (as reported in the table) using the free space impedance of 377Ω. For example, the measurement frequency X KHz resulted in a level of Y dBuV/m, which is equivalent to Y-51.5 = Z dBuA/m, which has the same margin, W dB, to the corresponding RSS-GEN Table 6 limit as it has to be 15.209(a) limit.


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Below 1 GHz and above 30 MHz

The setting of the spectrum analyzer

| | |
|---|---|
| RBW | 120 kHz |
| VBW | 300 kHz |
| Sweep | Auto |
| Detector | Peak/QP |
| Trace | Max hold |

1. The testing follows the guidelines in ANSI C63.10-2013 clause 6.5.

2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

3. The EUT was placed on a turntable with 80 cm above ground.

4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.

5. For measurement below 1 GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.


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Above 1 GHz

The setting of the spectrum analyzer

| | |
|---|---|
| RBW | 1 MHz |
| VBW | PEAK: 3 MHz<br>AVG: see note 6 |
| Sweep | Auto |
| Detector | Peak |
| Trace | Max hold |

1. The testing follows the guidelines in ANSI C63.10-2013 clause 6.6.

2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

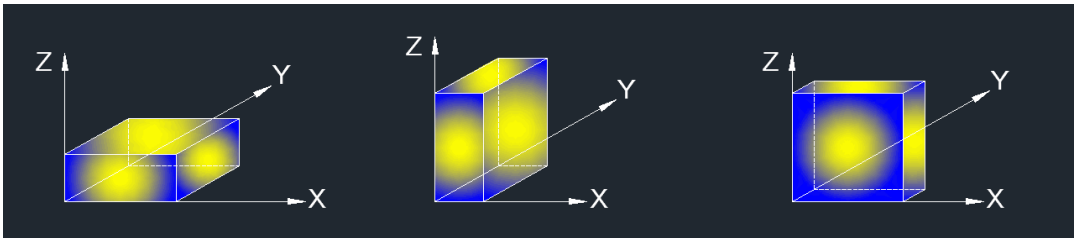
3. The EUT was placed on a turntable with 1.5 m above ground.

4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.

5. For measurement above 1 GHz, the emission measurement will be measured by the peak detector. This peak level, once corrected, must comply with the limit specified in Section 15.209.

6. For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and 1 MHz resolution bandwidth with 1/T video bandwidth with peak detector for average measurements. For the Duty Cycle please refer to clause 7.2. DUTY CYCLE.

X axis, Y axis, Z axis positions:




Note 1: For all radiated test, EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data recorded in the report.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For Restricted Bandedge:
Note:
1. Measurement = Reading Level + Correct Factor.
2. If the peak values are less than the average limit of 54 dBuV/m, the average result is deemed to comply with average limit.
3. Peak: Peak detector.
4. AVG Result=Peak Result + Duty Cycle Correction Factor.
5. For the transmitting duration, please refer to clause 7.2.
6. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.
7. Both horizontal and vertical have been tested, only the worst data was recorded in the report.
8. All modes and channels have been tested, only the worst data was recorded in the report.

For Radiate Spurious emission (9 kHz ~ 30 MHz):
Note:
1. Measurement = Reading Level + Correct Factor.
2. If the peak values are less than the QP limit, the QP result is deemed to comply with QP limit.
3. All 3 polarizations (Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.
4. All modes and channels have been tested, only the worst data was recorded in the report.

For Radiate Spurious Emission (30 MHz ~ 1 GHz):
Note:
1. Result Level = Read Level + Correct Factor.
2. If the peak values are less than the QP limit, the QP result is deemed to comply with QP limit.
3. All modes and channels have been tested, only the worst data was recorded in the report.


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For Radiate Spurious Emission (1 GHz ~ 3 GHz):
1. Measurement = Reading Level + Correct Factor.
2. If the peak values are less than the average limit of 54 dBuV/m, the average result is deemed to comply with average limit.
3. Peak: Peak detector.
4. AVG Result=Peak Result + Duty Cycle Correction Factor.
5. For the transmitting duration, please refer to clause 7.2.
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
8. All modes and channels have been tested, only the worst data was recorded in the report.

For Radiate Spurious Emission (3 GHz ~ 18 GHz):
Note:
1. Peak Result = Reading Level + Correct Factor.
2. If the peak values are less than the average limit of 54 dBuV/m, the average result is deemed to comply with average limit.
3. Peak: Peak detector.
4. AVG Result=Peak Result + Duty Cycle Correction Factor.
5. For the transmitting duration, please refer to clause 7.2.
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
8. All modes and channels have been tested, only the worst data was recorded in the report.

For Radiate Spurious emission (18 GHz ~ 26 GHz):
Note:
1. Measurement = Reading Level + Correct Factor.
2. If the peak values are less than the average limit of 54 dBuV/m, the average result is deemed to comply with average limit.
3. Peak: Peak detector.
4. All modes and channels have been tested, only the worst data was recorded in the report.


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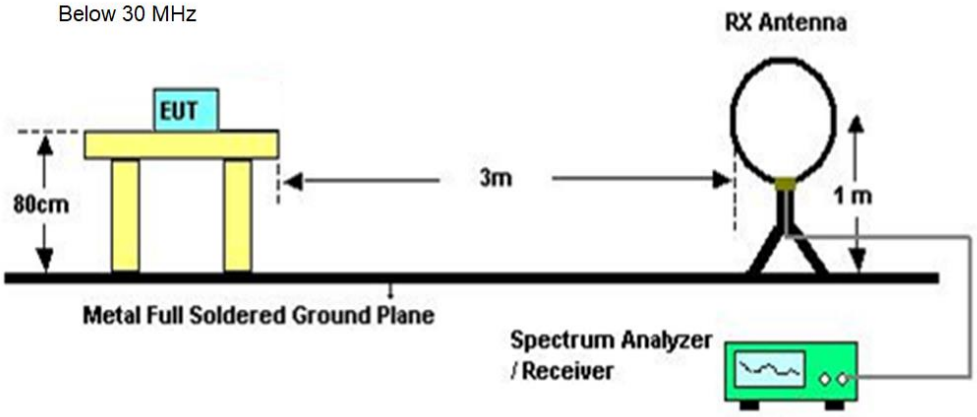
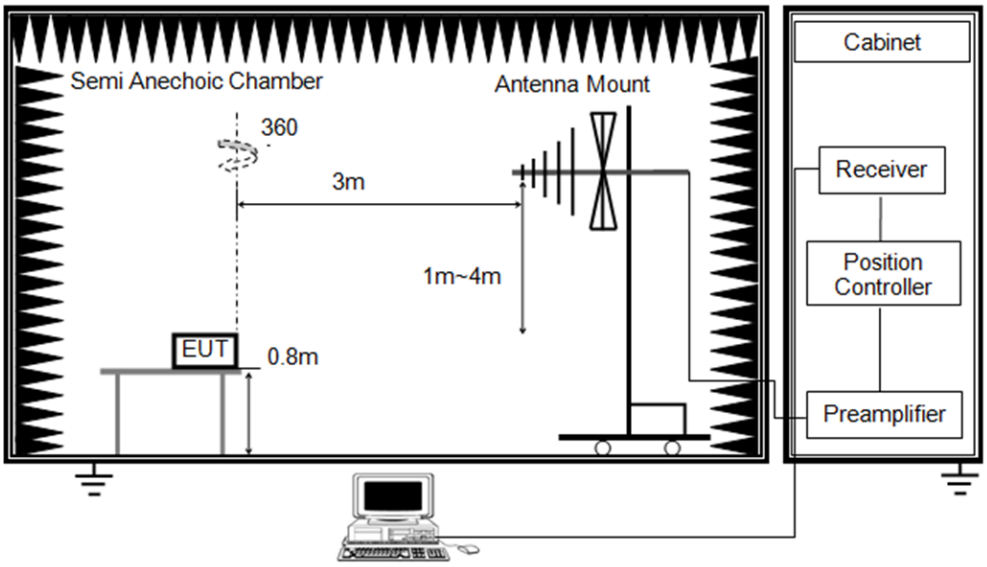
**TEST SETUP**

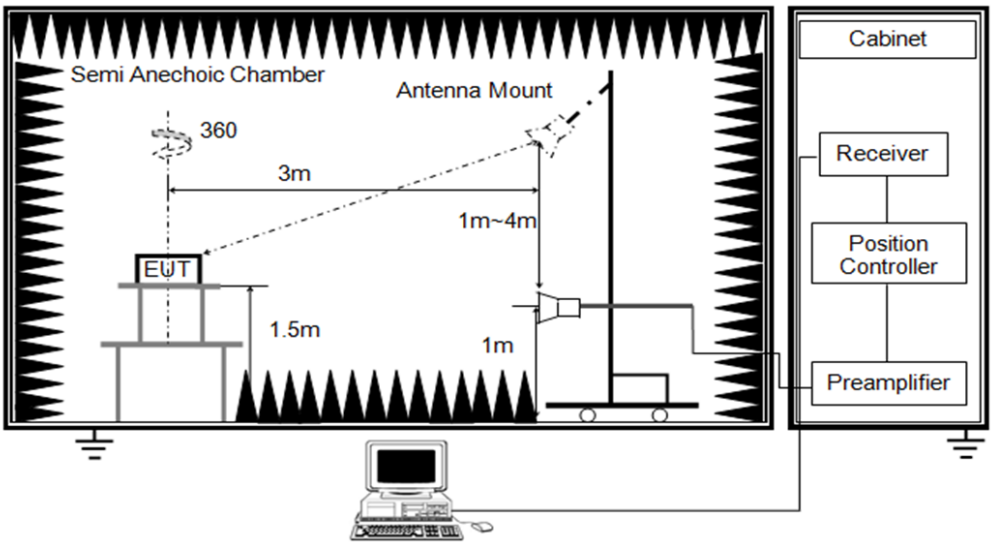
Below 30 MHz




Below 1 GHz and above 30 MHz




Above 1 GHz





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**TEST ENVIRONMENT**

| | | | |
|---|---|---|---|
| Temperature | 24.3 °C | Relative Humidity | 61 % |
| Atmosphere Pressure | 101 kPa | Test Voltage | DC 3 V |

**TEST RESULTS**


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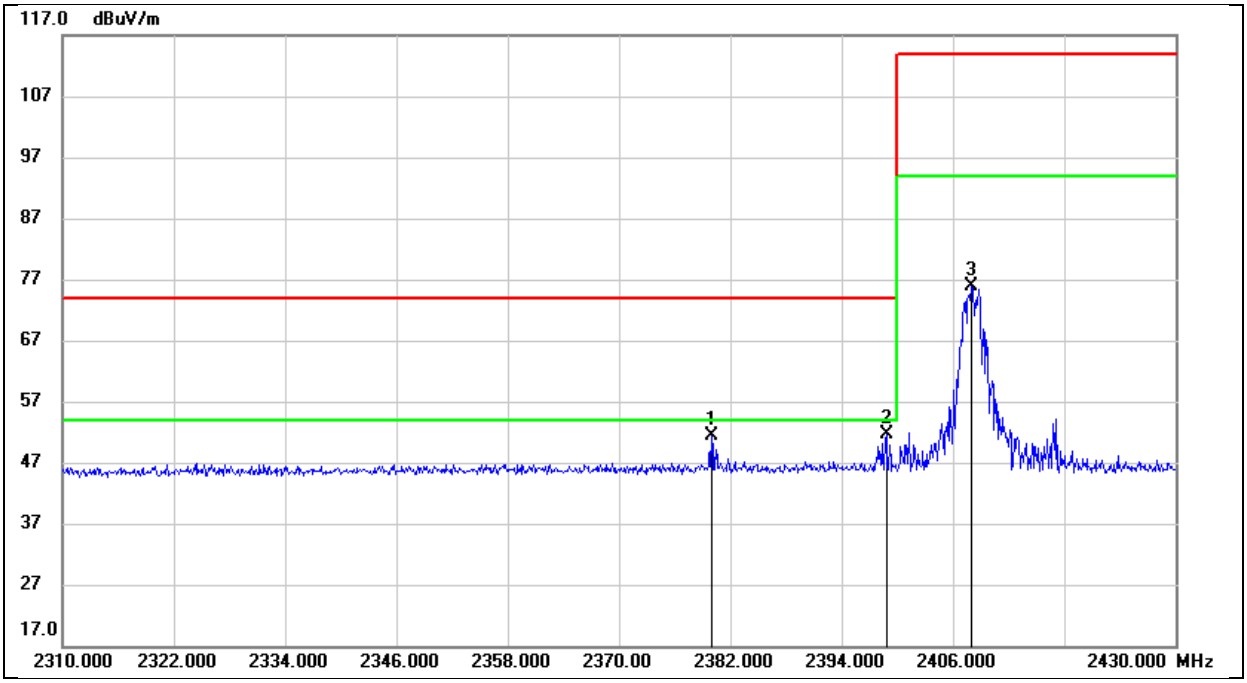
## 8.1. RESTRICTED BANDEDGE

| | | | |
|---|---|---|---|
| Test Mode: | GFSK Peak | Channel: | 2408 MHz |
| Polarity: | Horizontal | Test Voltage: | DC 3 V |




| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|
| 1 | 2379.960 | 19.25 | 32.13 | 51.38 | 74.00 | -22.62 | peak |
| 2 | 2398.800 | 19.50 | 32.19 | 51.69 | 74.00 | -22.31 | peak |
| 3 | 2408.000 | 43.63 | 32.21 | 75.84 | 114.00 | -38.16 | Peak-Fundamental |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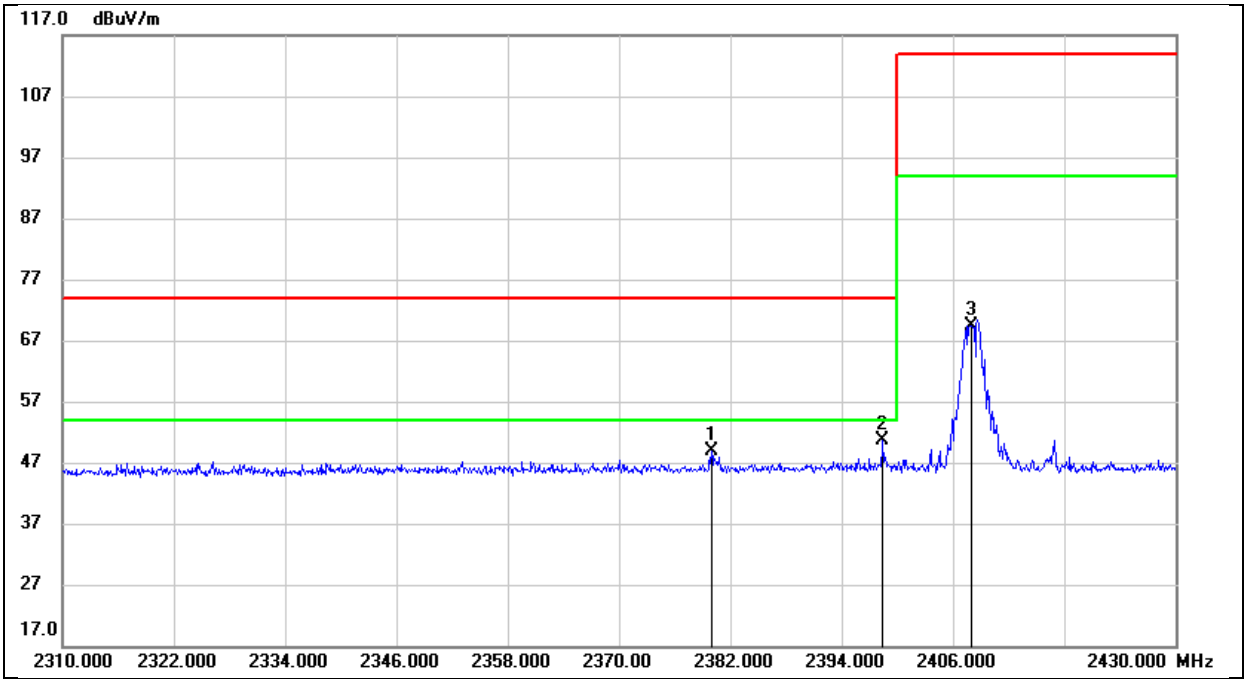
| | | | |
|---|---|---|---|
| Test Mode: | GFSK Peak | Channel: | 2408 MHz |
| Polarity: | Vertial | Test Voltage: | DC 3 V |




| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|
| 1 | 2379.960 | 16.63 | 32.13 | 48.76 | 74.00 | -25.24 | peak |
| 2 | 2398.440 | 18.51 | 32.19 | 50.70 | 74.00 | -23.30 | peak |
| 3 | 2408.000 | 37.28 | 32.21 | 69.49 | 114.00 | -44.51 | Peak-Fundamental |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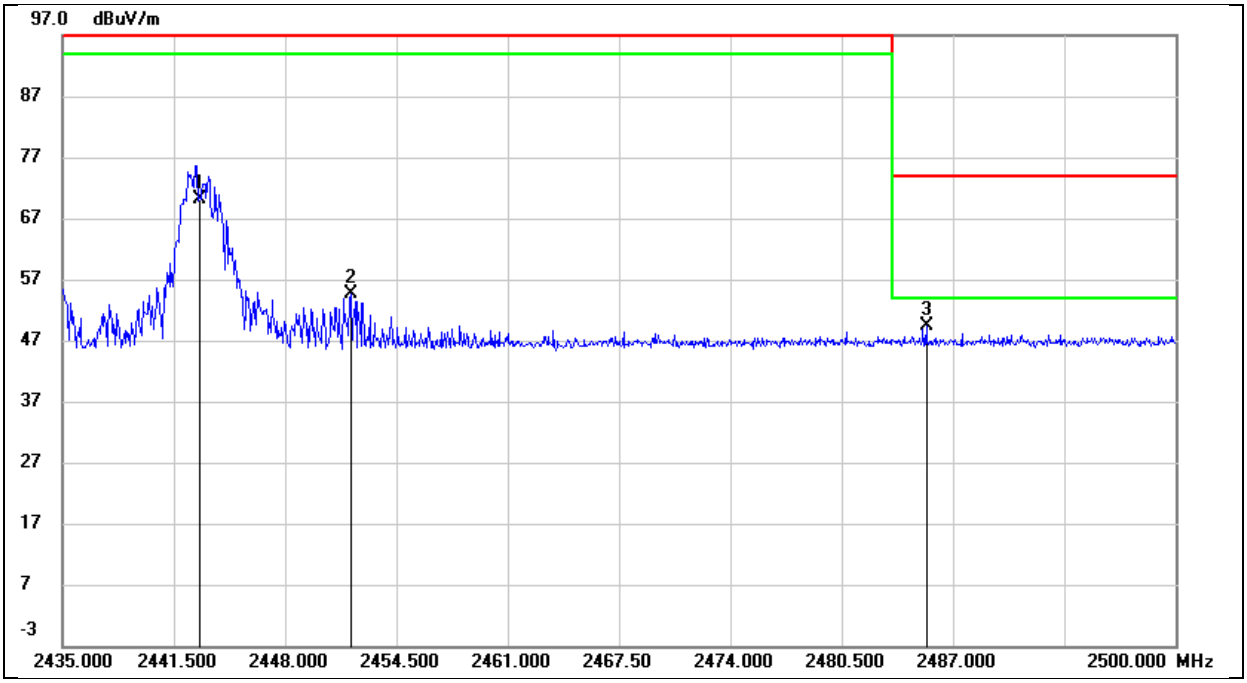
| | | | |
|---|---|---|---|
| Test Mode: | GFSK Peak | Channel: | 2443 MHz |
| Polarity: | Horizontal | Test Voltage: | DC 3 V |




| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|
| 1 | 2443.000 | 37.92 | 32.32 | 70.24 | 114.00 | -43.76 | Peak-Fundamental |
| 2 | 2451.835 | 22.22 | 32.34 | 54.56 | 114.00 | -59.44 | peak |
| 3 | 2485.440 | 16.95 | 32.44 | 49.39 | 74.00 | -24.61 | peak |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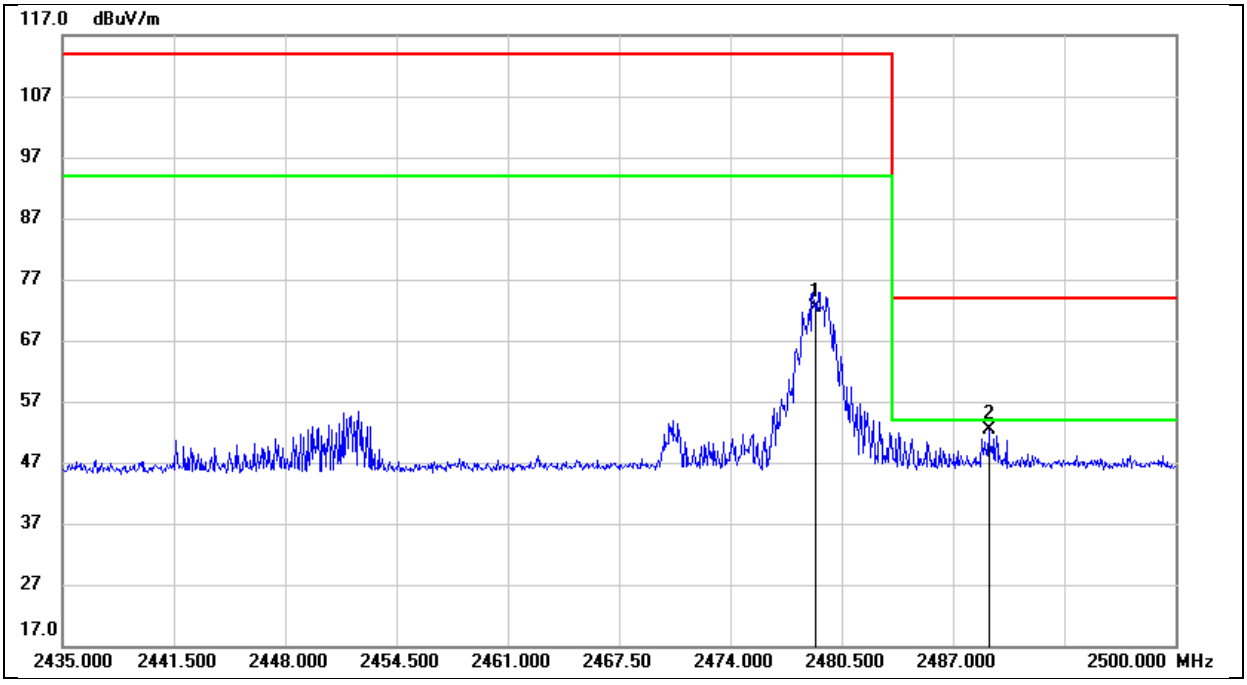
| | | | |
|---|---|---|---|
| Test Mode: | GFSK Peak | Channel: | 2479 MHz |
| Polarity: | Horizontal | Test Voltage: | DC 3 V |




| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|
| 1 | 2479.000 | 39.98 | 32.43 | 72.41 | 114.00 | -41.59 | Peak-Fundamental |
| 2 | 2489.080 | 19.98 | 32.46 | 52.44 | 74.00 | -21.56 | peak |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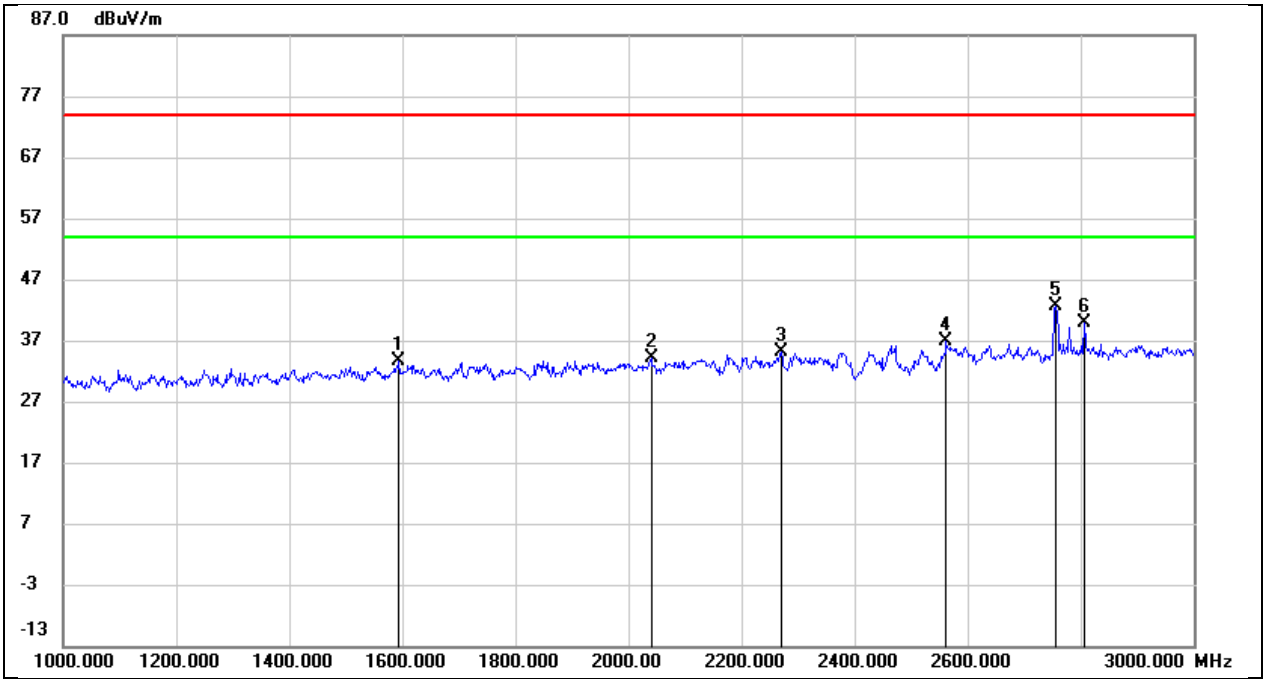
## 8.2. SPURIOUS EMISSIONS (1 GHZ ~ 3 GHZ)

| | | | |
|---|---|---|---|
| Test Mode: | GFSK | Channel: | 2408 MHz |
| Polarity: | Horizontal | Test Voltage: | DC 3 V |




| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|
| 1 | 1594.000 | 45.92 | -12.40 | 33.52 | 74.00 | -40.48 | peak |
| 2 | 2040.000 | 44.93 | -10.86 | 34.07 | 74.00 | -39.93 | peak |
| 3 | 2270.000 | 44.72 | -9.67 | 35.05 | 74.00 | -38.95 | peak |
| 4 | 2562.000 | 45.07 | -8.31 | 36.76 | 74.00 | -37.24 | peak |
| 5 | 2756.000 | 50.35 | -7.72 | 42.63 | 74.00 | -31.37 | peak |
| 6 | 2806.000 | 47.48 | -7.57 | 39.91 | 74.00 | -34.09 | peak |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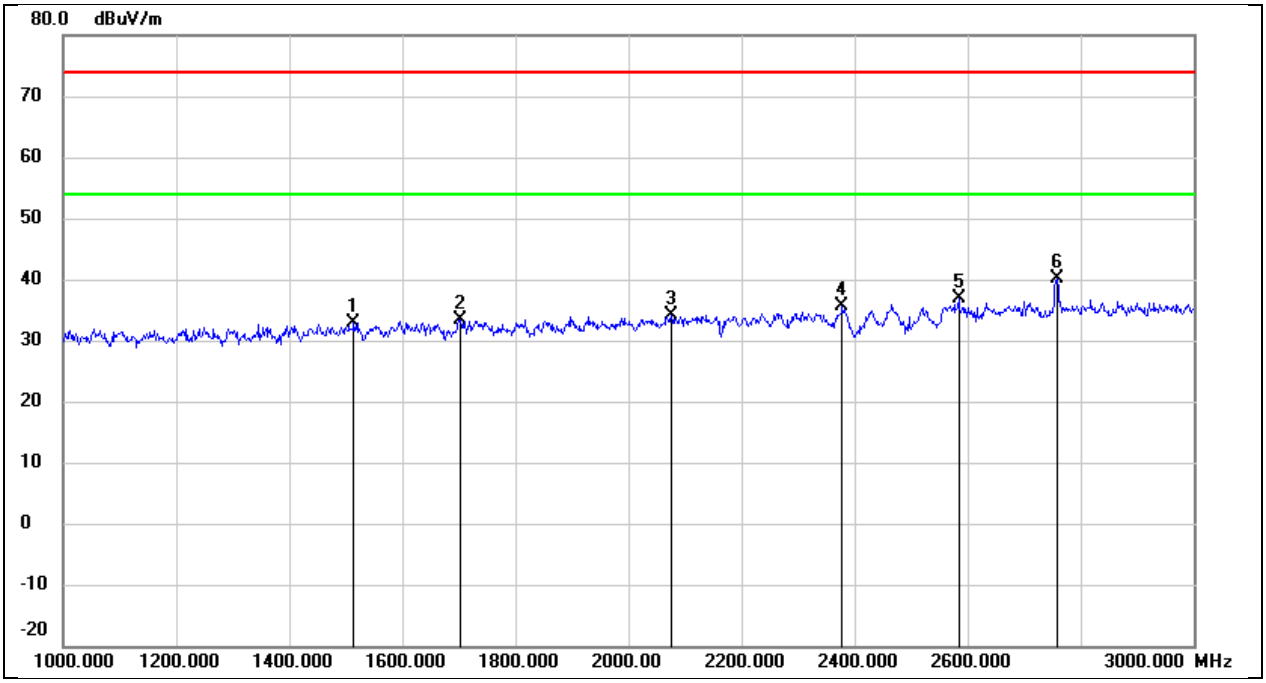
| | | | |
|---|---|---|---|
| Test Mode: | GFSK | Channel: | 2408 MHz |
| Polarity: | Vertical | Test Voltage: | DC 3 V |




| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|
| 1 | 1514.000 | 45.57 | -12.67 | 32.90 | 74.00 | -41.10 | peak |
| 2 | 1702.000 | 45.35 | -12.05 | 33.30 | 74.00 | -40.70 | peak |
| 3 | 2076.000 | 44.78 | -10.67 | 34.11 | 74.00 | -39.89 | peak |
| 4 | 2378.000 | 44.74 | -9.12 | 35.62 | 74.00 | -38.38 | peak |
| 5 | 2584.000 | 45.20 | -8.24 | 36.96 | 74.00 | -37.04 | peak |
| 6 | 2758.000 | 47.78 | -7.72 | 40.06 | 74.00 | -33.94 | peak |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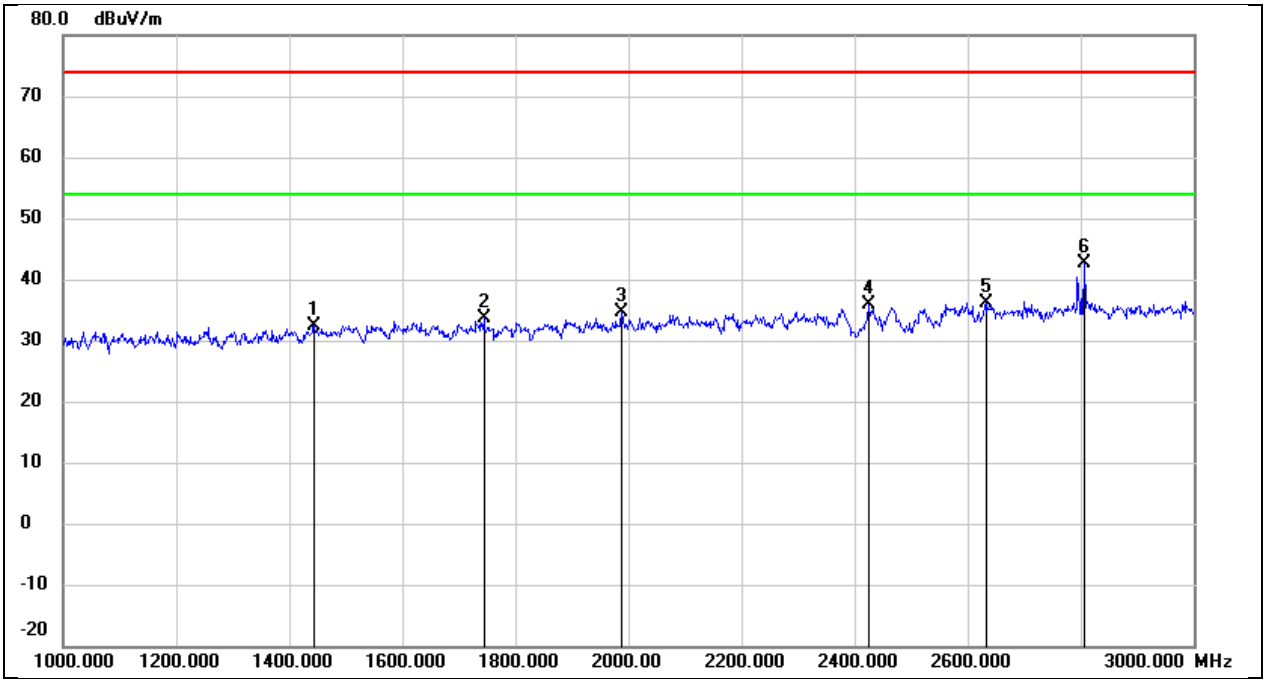
| | | | |
|---|---|---|---|
| Test Mode: | GFSK | Channel: | 2443 MHz |
| Polarity: | Horizontal | Test Voltage: | DC 3 V |




| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|
| 1 | 1444.000 | 45.43 | -12.97 | 32.46 | 74.00 | -41.54 | peak |
| 2 | 1744.000 | 45.49 | -11.90 | 33.59 | 74.00 | -40.41 | peak |
| 3 | 1988.000 | 45.77 | -11.10 | 34.67 | 74.00 | -39.33 | peak |
| 4 | 2424.000 | 44.82 | -8.88 | 35.94 | 74.00 | -38.06 | peak |
| 5 | 2632.000 | 44.29 | -8.09 | 36.20 | 74.00 | -37.80 | peak |
| 6 | 2806.000 | 50.13 | -7.57 | 42.56 | 74.00 | -31.44 | peak |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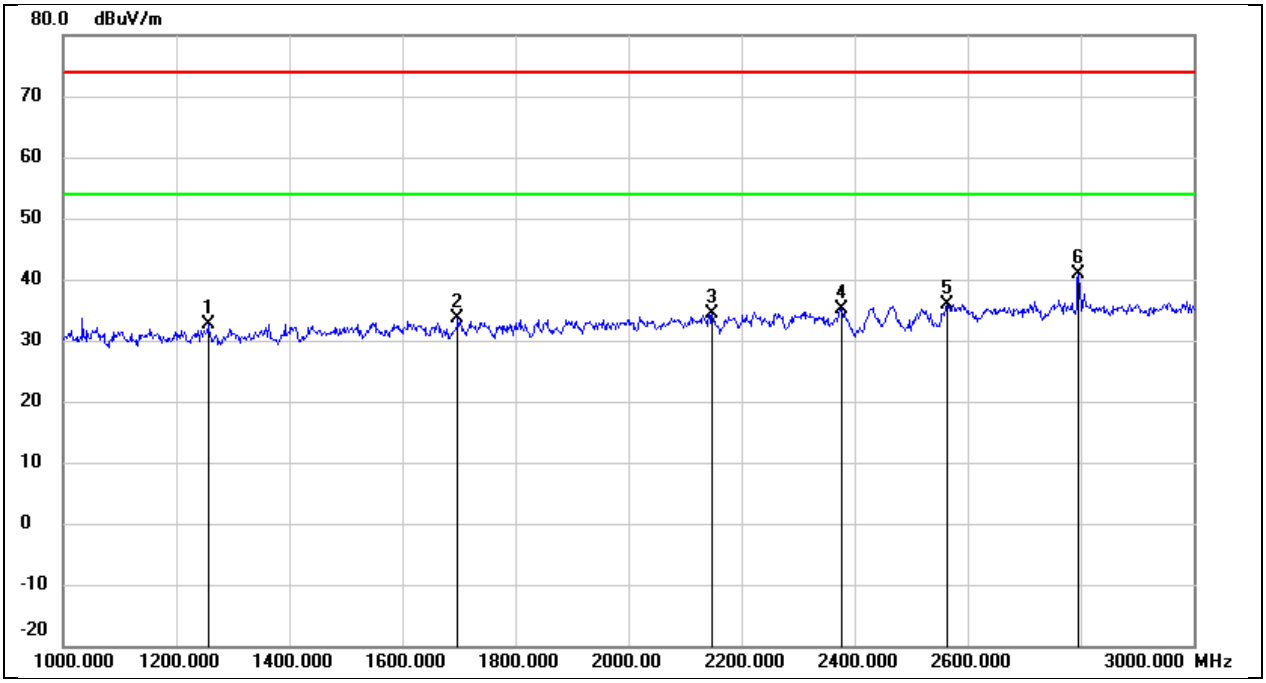
| | | | |
|---|---|---|---|
| Test Mode: | GFSK | Channel: | 2443 MHz |
| Polarity: | Vertical | Test Voltage: | DC 3 V |




| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|
| 1 | 1256.000 | 46.47 | -13.84 | 32.63 | 74.00 | -41.37 | peak |
| 2 | 1698.000 | 45.62 | -12.05 | 33.57 | 74.00 | -40.43 | peak |
| 3 | 2148.000 | 44.78 | -10.31 | 34.47 | 74.00 | -39.53 | peak |
| 4 | 2378.000 | 44.34 | -9.12 | 35.22 | 74.00 | -38.78 | peak |
| 5 | 2564.000 | 44.13 | -8.30 | 35.83 | 74.00 | -38.17 | peak |
| 6 | 2796.000 | 48.37 | -7.60 | 40.77 | 74.00 | -33.23 | peak |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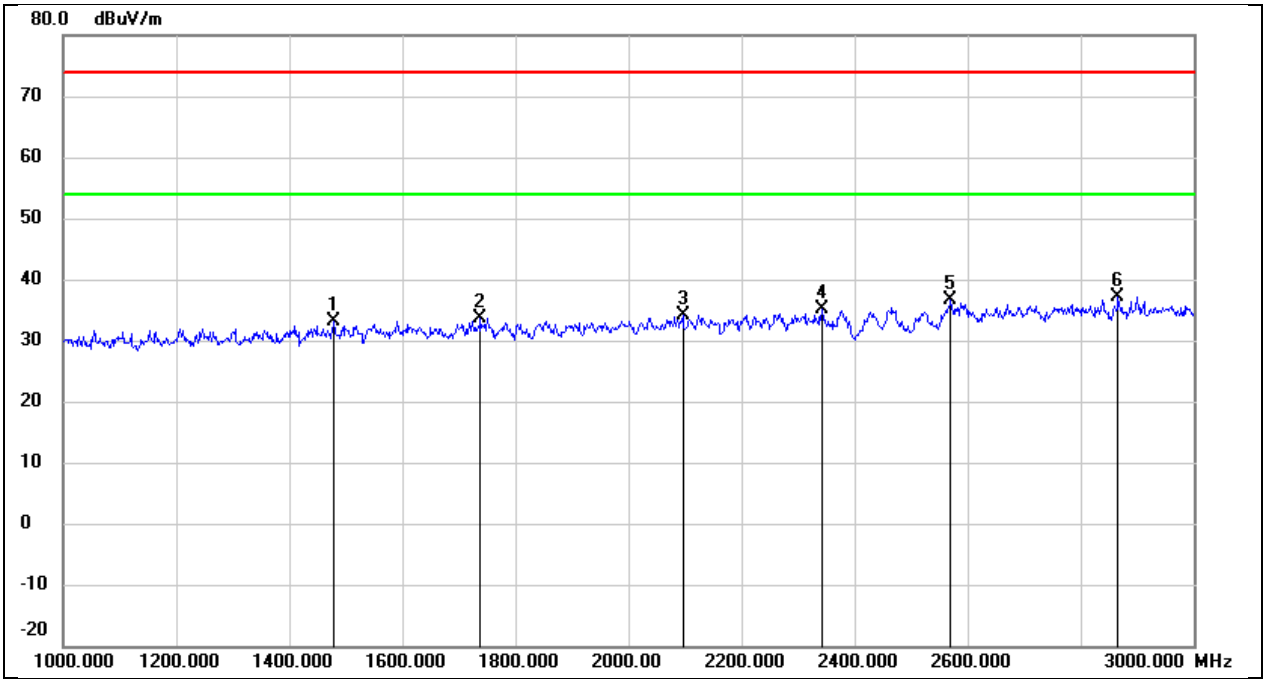
| | | | |
|---|---|---|---|
| Test Mode: | GFSK | Channel: | 2479 MHz |
| Polarity: | Horizontal | Test Voltage: | DC 3 V |




| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|
| 1 | 1478.000 | 45.83 | -12.81 | 33.02 | 74.00 | -40.98 | peak |
| 2 | 1738.000 | 45.65 | -11.93 | 33.72 | 74.00 | -40.28 | peak |
| 3 | 2096.000 | 44.62 | -10.56 | 34.06 | 74.00 | -39.94 | peak |
| 4 | 2342.000 | 44.35 | -9.30 | 35.05 | 74.00 | -38.95 | peak |
| 5 | 2570.000 | 44.83 | -8.27 | 36.56 | 74.00 | -37.44 | peak |
| 6 | 2866.000 | 44.53 | -7.38 | 37.15 | 74.00 | -36.85 | peak |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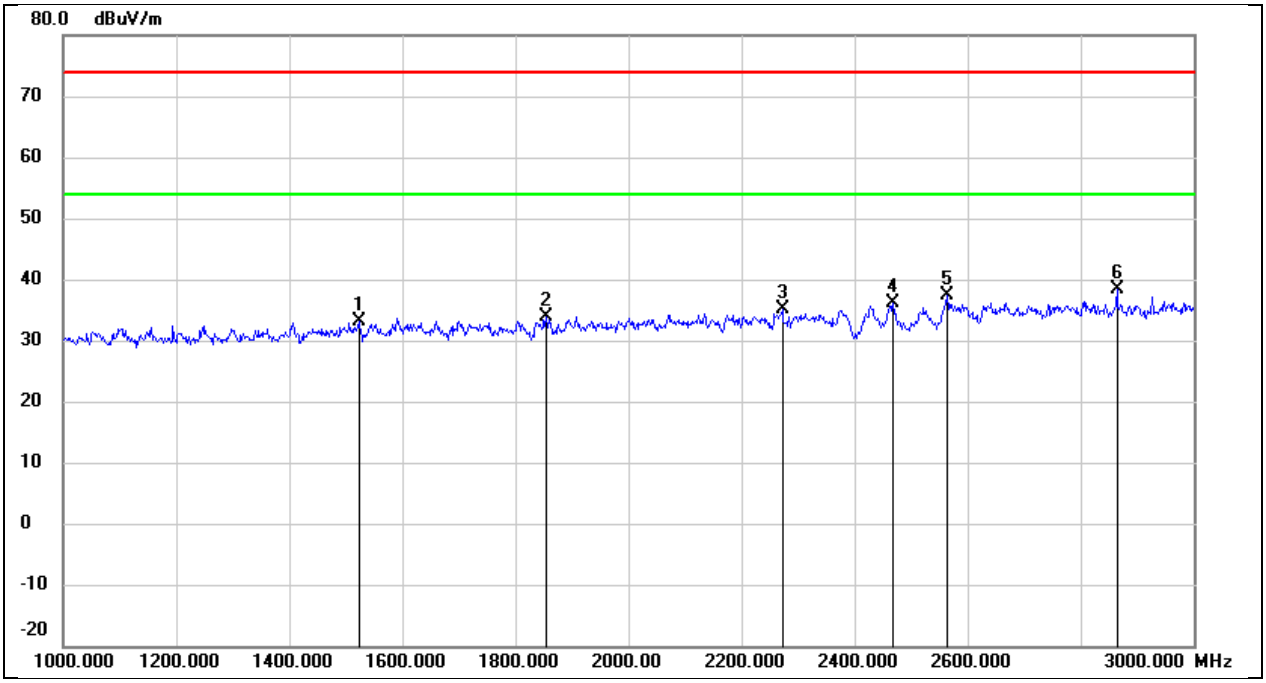
| | | | |
|---|---|---|---|
| Test Mode: | GFSK | Channel: | 2479 MHz |
| Polarity: | Vertical | Test Voltage: | DC 3 V |




| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|
| 1 | 1524.000 | 45.79 | -12.63 | 33.16 | 74.00 | -40.84 | peak |
| 2 | 1854.000 | 45.37 | -11.54 | 33.83 | 74.00 | -40.17 | peak |
| 3 | 2272.000 | 44.89 | -9.66 | 35.23 | 74.00 | -38.77 | peak |
| 4 | 2468.000 | 44.82 | -8.65 | 36.17 | 74.00 | -37.83 | peak |
| 5 | 2564.000 | 45.65 | -8.30 | 37.35 | 74.00 | -36.65 | peak |
| 6 | 2864.000 | 45.75 | -7.39 | 38.36 | 74.00 | -35.64 | peak |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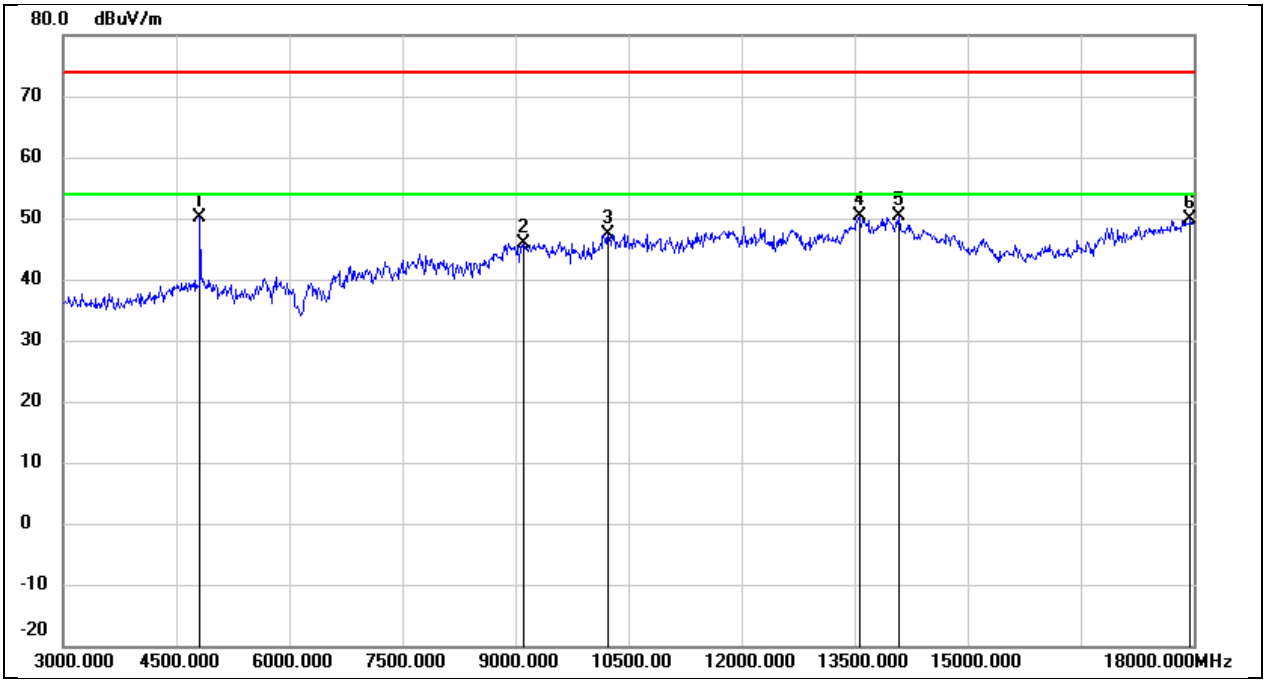
## 8.3. SPURIOUS EMISSIONS (3 GHZ ~ 18 GHZ)

| | | | |
|---|---|---|---|
| Test Mode: | GFSK | Channel: | 2408 MHz |
| Polarity: | Horizontal | Test Voltage: | DC 3 V |




| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|
| 1 | 4815.000 | 50.45 | -0.26 | 50.19 | 74.00 | -23.81 | peak |
| 2 | 9105.000 | 35.47 | 10.53 | 46.00 | 74.00 | -28.00 | peak |
| 3 | 10230.000 | 35.01 | 12.46 | 47.47 | 74.00 | -26.53 | peak |
| 4 | 13560.000 | 29.26 | 21.04 | 50.30 | 74.00 | -23.70 | peak |
| 5 | 14085.000 | 28.65 | 21.61 | 50.26 | 74.00 | -23.74 | peak |
| 6 | 17955.000 | 24.48 | 25.42 | 49.90 | 74.00 | -24.10 | peak |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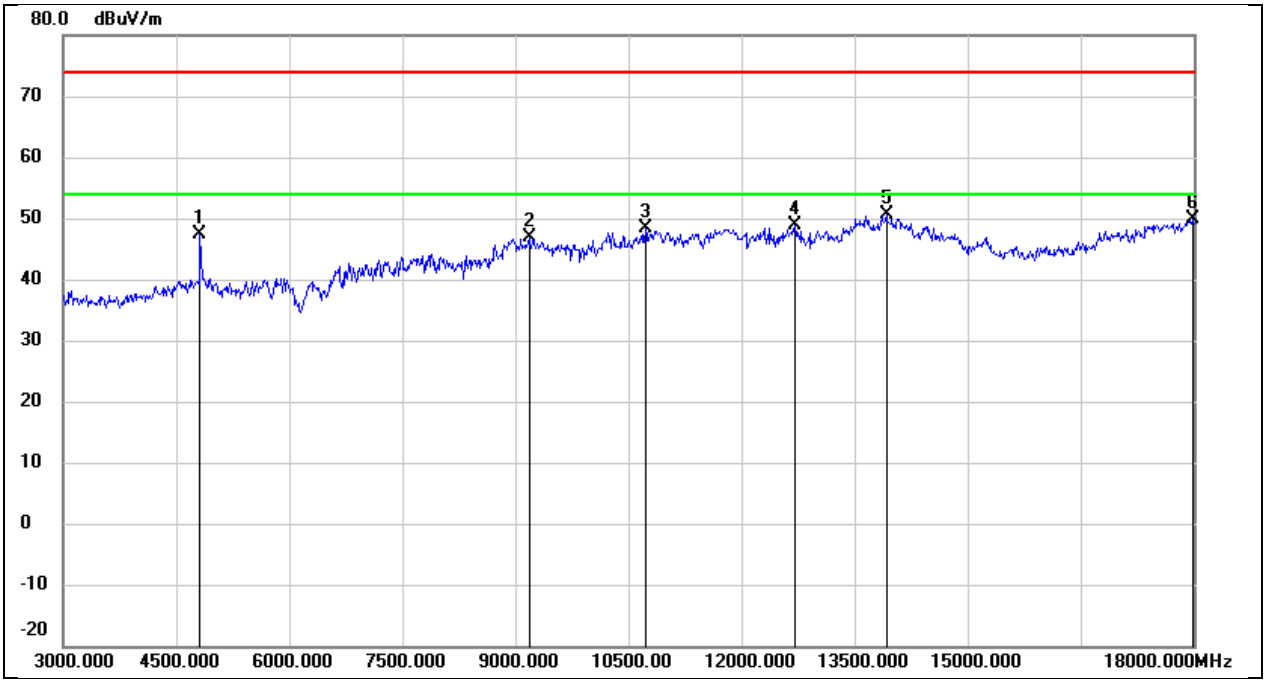
| | | | |
|---|---|---|---|
| Test Mode: | GFSK | Channel: | 2408 MHz |
| Polarity: | Vertical | Test Voltage: | DC 3 V |




| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|
| 1 | 4815.000 | 47.54 | -0.26 | 47.28 | 74.00 | -26.72 | peak |
| 2 | 9180.000 | 36.32 | 10.56 | 46.88 | 74.00 | -27.12 | peak |
| 3 | 10725.000 | 34.49 | 13.79 | 48.28 | 74.00 | -25.72 | peak |
| 4 | 12705.000 | 30.78 | 18.06 | 48.84 | 74.00 | -25.16 | peak |
| 5 | 13920.000 | 28.81 | 21.79 | 50.60 | 74.00 | -23.40 | peak |
| 6 | 17985.000 | 24.16 | 25.60 | 49.76 | 74.00 | -24.24 | peak |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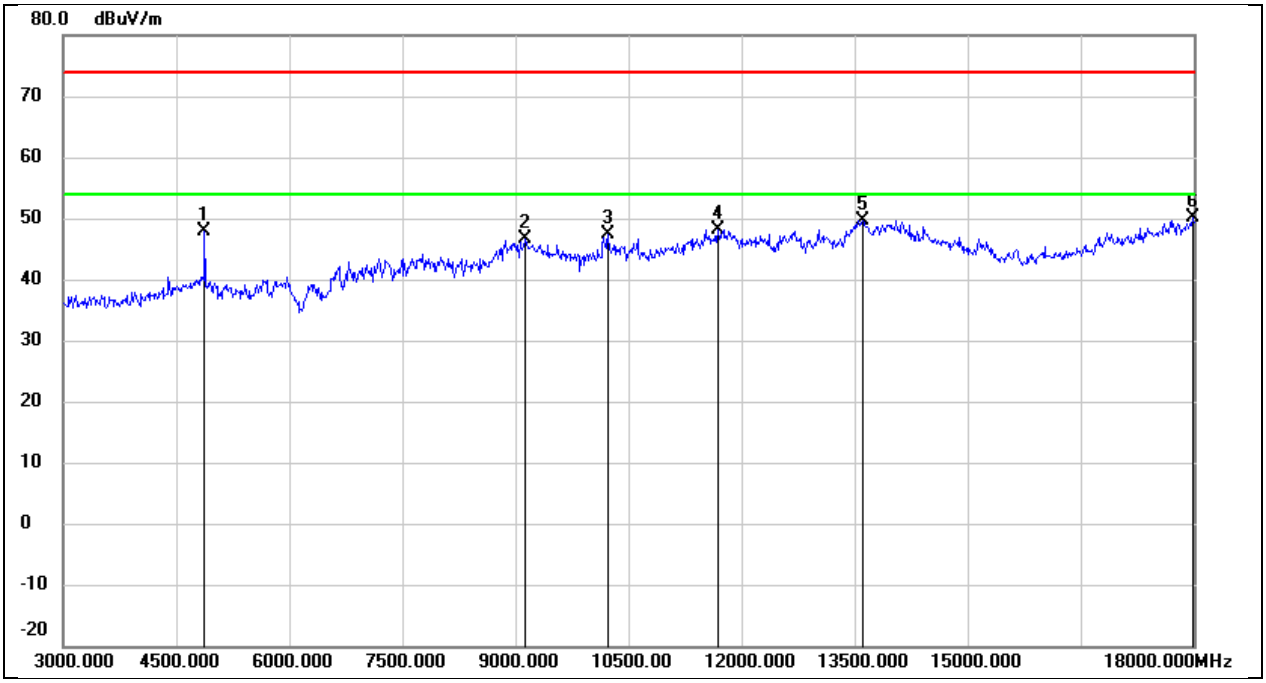
| | | | |
|---|---|---|---|
| Test Mode: | GFSK | Channel: | 2443 MHz |
| Polarity: | Horizontal | Test Voltage: | DC 3 V |




| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|
| 1 | 4875.000 | 48.00 | -0.03 | 47.97 | 74.00 | -26.03 | peak |
| 2 | 9135.000 | 36.14 | 10.55 | 46.69 | 74.00 | -27.31 | peak |
| 3 | 10230.000 | 34.81 | 12.46 | 47.27 | 74.00 | -26.73 | peak |
| 4 | 11685.000 | 31.05 | 17.10 | 48.15 | 74.00 | -25.85 | peak |
| 5 | 13605.000 | 28.50 | 21.12 | 49.62 | 74.00 | -24.38 | peak |
| 6 | 17985.000 | 24.41 | 25.60 | 50.01 | 74.00 | -23.99 | peak |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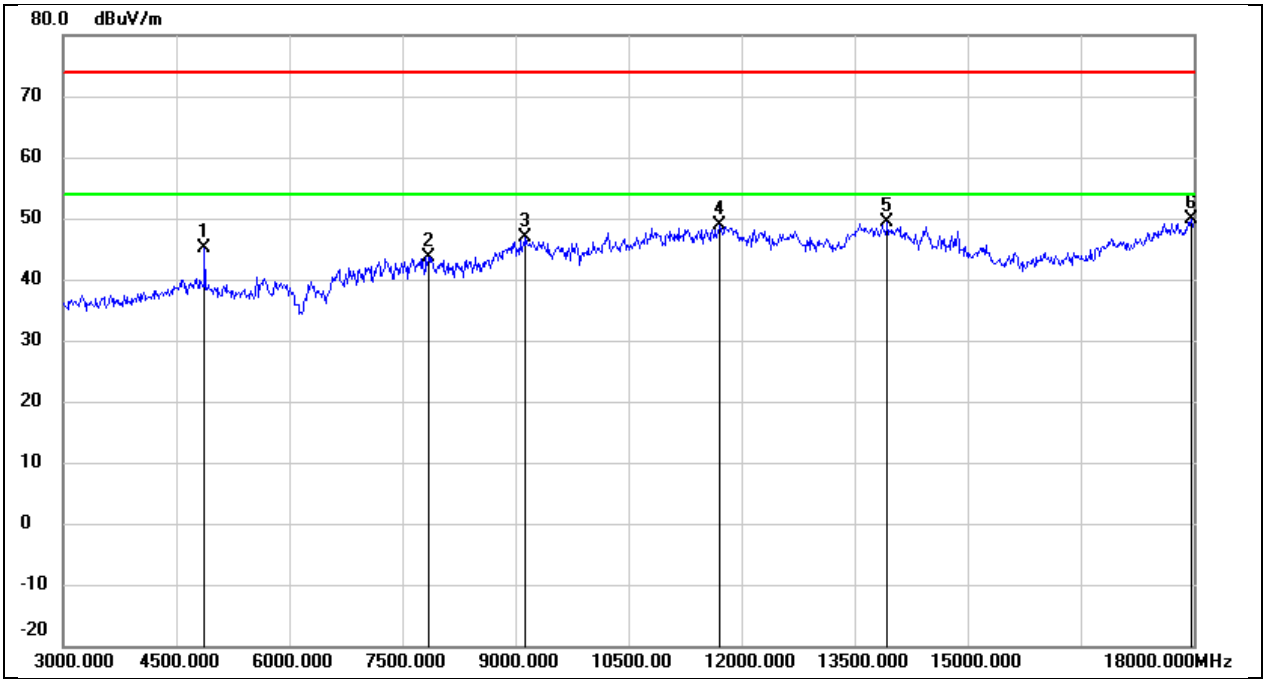
| | | | |
|---|---|---|---|
| Test Mode: | GFSK | Channel: | 2443 MHz |
| Polarity: | Vertical | Test Voltage: | DC 3 V |




| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|
| 1 | 4875.000 | 45.08 | -0.03 | 45.05 | 74.00 | -28.95 | peak |
| 2 | 7845.000 | 37.31 | 6.32 | 43.63 | 74.00 | -30.37 | peak |
| 3 | 9135.000 | 36.23 | 10.55 | 46.78 | 74.00 | -27.22 | peak |
| 4 | 11715.000 | 31.77 | 17.19 | 48.96 | 74.00 | -25.04 | peak |
| 5 | 13935.000 | 27.55 | 21.82 | 49.37 | 74.00 | -24.63 | peak |
| 6 | 17970.000 | 24.34 | 25.51 | 49.85 | 74.00 | -24.15 | peak |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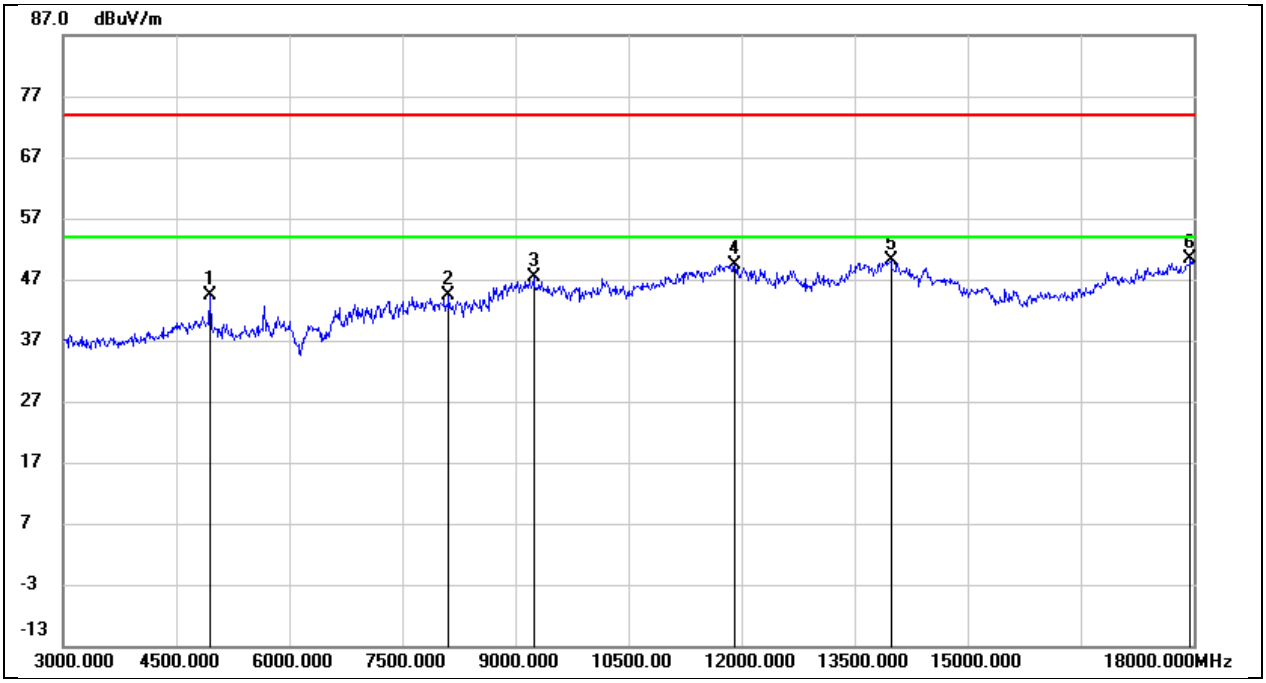
| | | | |
|---|---|---|---|
| Test Mode: | GFSK | Channel: | 2479 MHz |
| Polarity: | Horizontal | Test Voltage: | DC 3 V |




| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|
| 1 | 4950.000 | 44.10 | 0.26 | 44.36 | 74.00 | -29.64 | peak |
| 2 | 8115.000 | 37.84 | 6.43 | 44.27 | 74.00 | -29.73 | peak |
| 3 | 9240.000 | 36.75 | 10.58 | 47.33 | 74.00 | -26.67 | peak |
| 4 | 11910.000 | 31.66 | 17.72 | 49.38 | 74.00 | -24.62 | peak |
| 5 | 13980.000 | 28.20 | 21.92 | 50.12 | 74.00 | -23.88 | peak |
| 6 | 17955.000 | 25.01 | 25.42 | 50.43 | 74.00 | -23.57 | peak |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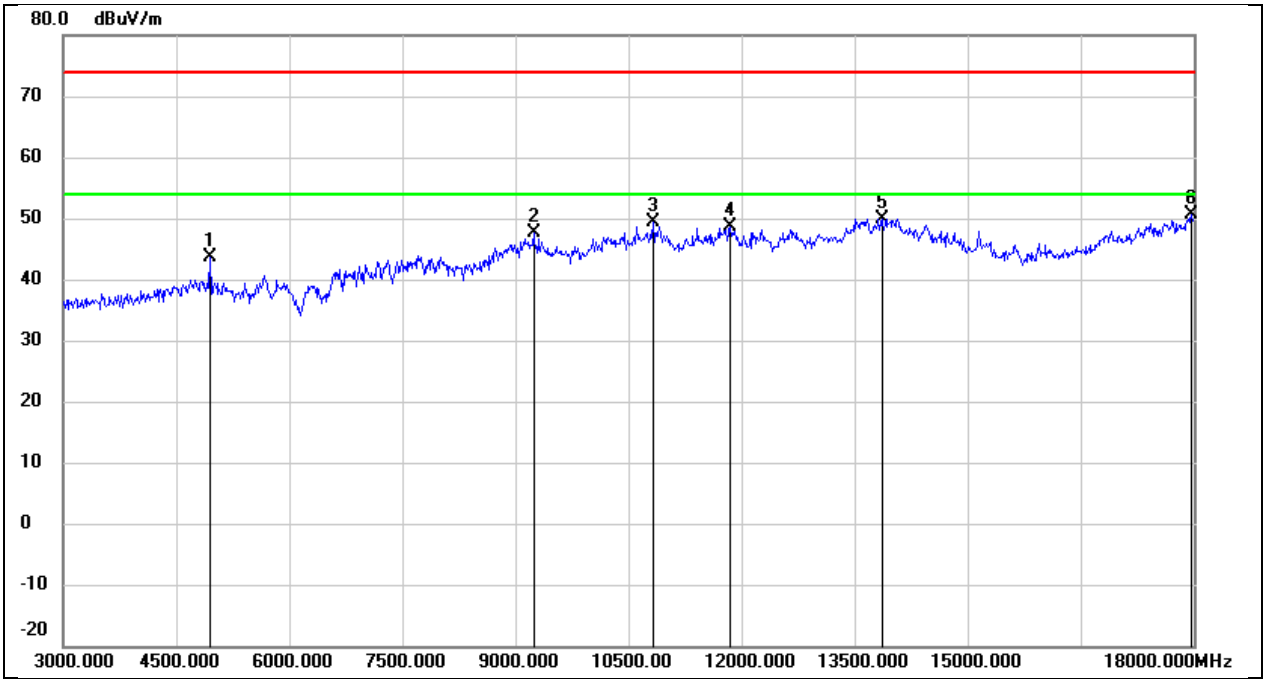
| | | | |
|---|---|---|---|
| Test Mode: | GFSK | Channel: | 2479 MHz |
| Polarity: | Vertical | Test Voltage: | DC 3 V |




| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|
| 1 | 4950.000 | 43.43 | 0.26 | 43.69 | 74.00 | -30.31 | peak |
| 2 | 9240.000 | 37.02 | 10.58 | 47.60 | 74.00 | -26.40 | peak |
| 3 | 10830.000 | 35.22 | 14.16 | 49.38 | 74.00 | -24.62 | peak |
| 4 | 11850.000 | 31.03 | 17.56 | 48.59 | 74.00 | -25.41 | peak |
| 5 | 13860.000 | 28.27 | 21.67 | 49.94 | 74.00 | -24.06 | peak |
| 6 | 17970.000 | 25.22 | 25.51 | 50.73 | 74.00 | -23.27 | peak |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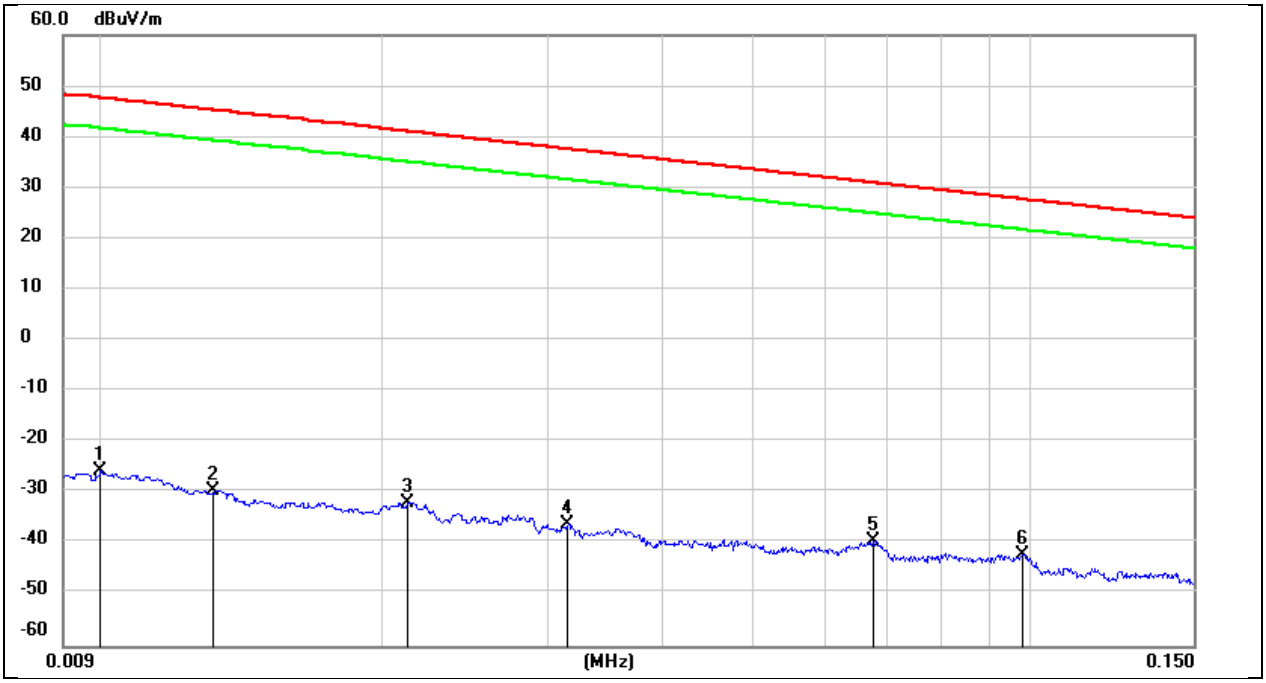
## 8.4. SPURIOUS EMISSIONS (9 KHZ ~ 30 MHZ)

| | | | |
|---|---|---|---|
| Test Mode: | GFSK | Channel: | 2408 MHz |
| Polarity: | Loop Antenna Face On To The EUT | Test Voltage | DC 3.0 V |




| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB/m) | FCC Result (dBuV/m) | FCC Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|
| 1 | 0.0100 | 75.72 | -101.40 | -25.68 | 47.6 | -73.28 | peak |
| 2 | 0.0131 | 71.97 | -101.38 | -29.41 | 45.25 | -74.66 | peak |
| 3 | 0.0212 | 69.54 | -101.35 | -31.81 | 41.07 | -72.88 | peak |
| 4 | 0.0316 | 65.24 | -101.40 | -36.16 | 37.61 | -73.77 | peak |
| 5 | 0.0675 | 62.14 | -101.56 | -39.42 | 31.02 | -70.44 | peak |
| 6 | 0.0981 | 59.77 | -101.78 | -42.01 | 27.77 | -69.78 | peak |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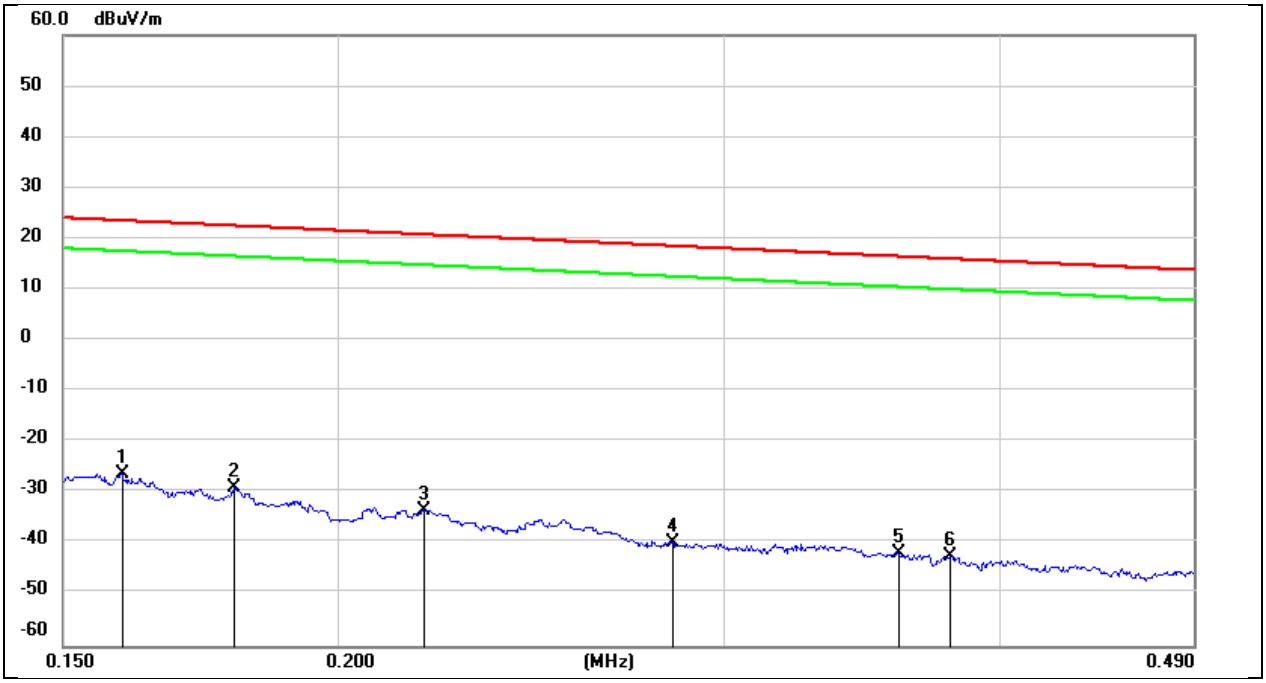
| | | | |
|---|---|---|---|
| Test Mode: | GFSK | Channel: | 2408 MHz |
| Polarity: | Loop Antenna Face On To The EUT | Test Voltage | DC 3.0 V |




| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB/m) | FCC Result (dBuV/m) | FCC Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|
| 1 | 0.1595 | 75.36 | -101.65 | -26.29 | 23.55 | -49.84 | peak |
| 2 | 0.1794 | 72.77 | -101.68 | -28.91 | 22.53 | -51.44 | peak |
| 3 | 0.2190 | 68.27 | -101.75 | -33.48 | 20.79 | -54.27 | peak |
| 4 | 0.2837 | 62.22 | -101.83 | -39.61 | 18.54 | -58.15 | peak |
| 5 | 0.3600 | 60.01 | -101.91 | -41.9 | 16.48 | -58.38 | peak |
| 6 | 0.3800 | 59.52 | -101.94 | -42.42 | 16.01 | -58.43 | peak |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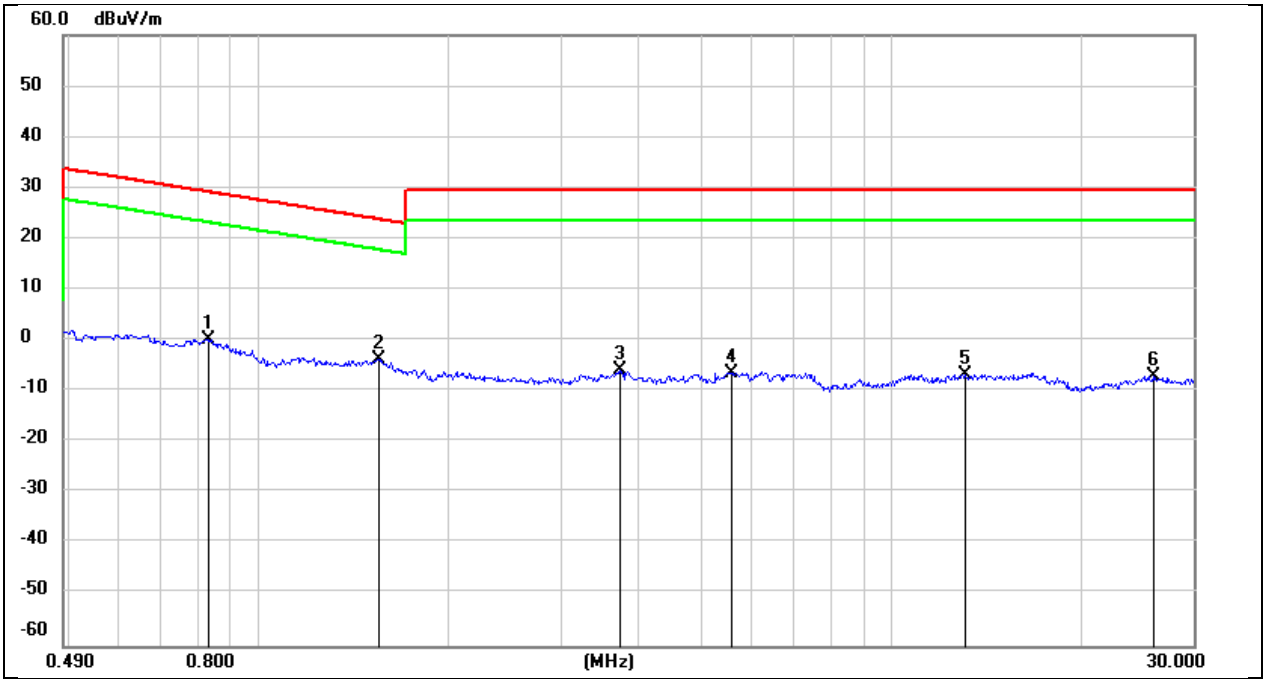
| | | | |
|---|---|---|---|
| Test Mode: | GFSK | Channel: | 2408 MHz |
| Polarity: | Loop Antenna Face On To The EUT | Test Voltage | DC 3.0 V |




| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB/m) | FCC Result (dBuV/m) | FCC Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|
| 1 | 0.8296 | 62.44 | -62.17 | 0.27 | 29.23 | -28.96 | peak |
| 2 | 1.5443 | 58.35 | -62.03 | -3.68 | 23.83 | -27.51 | peak |
| 3 | 3.7100 | 55.70 | -61.41 | -5.71 | 29.54 | -35.25 | peak |
| 4 | 5.5952 | 55.05 | -61.41 | -6.36 | 29.54 | -35.90 | peak |
| 5 | 13.0907 | 54.13 | -60.93 | -6.8 | 29.54 | -36.34 | peak |
| 6 | 25.8978 | 53.26 | -60.36 | -7.1 | 29.54 | -36.64 | peak |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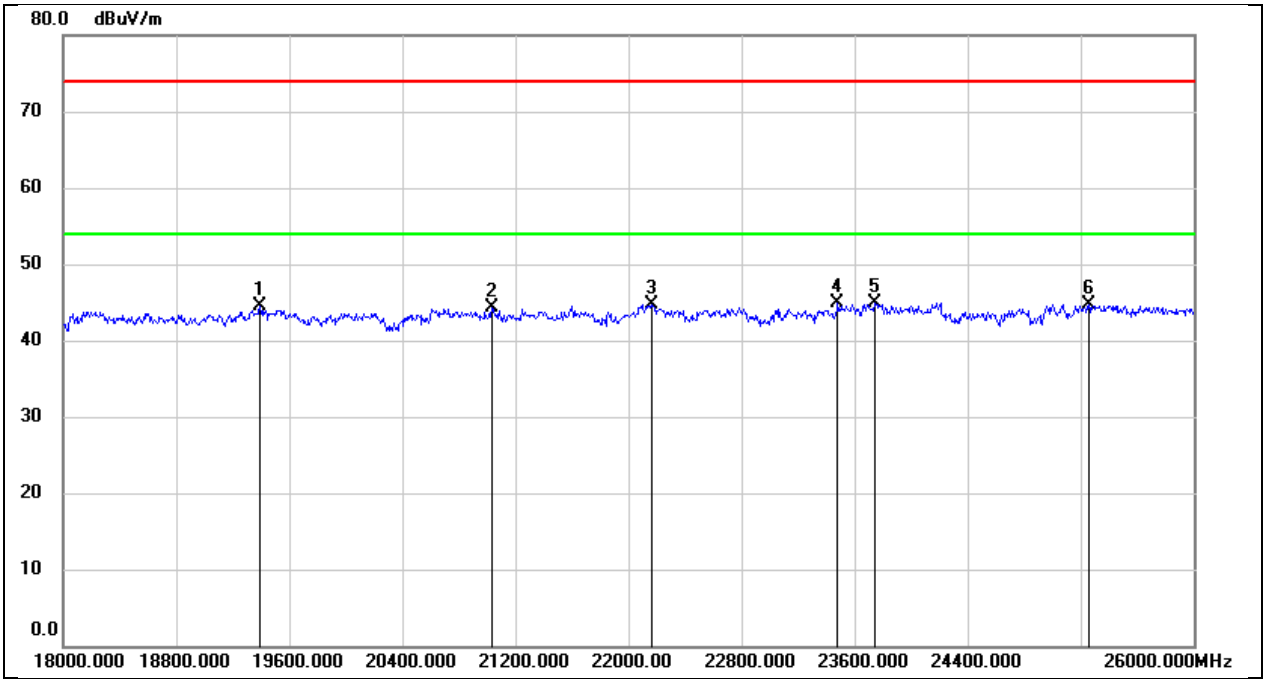
## 8.5. SPURIOUS EMISSIONS (18 GHZ ~ 26 GHZ)

| | | | |
|---|---|---|---|
| Test Mode: | GFSK | Channel: | 2408 MHz |
| Polarity: | Horizontal | Test Voltage | DC 3.0 V |




| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|
| 1 | 19392.000 | 50.12 | -5.57 | 44.55 | 74.00 | -29.45 | peak |
| 2 | 21032.000 | 49.15 | -4.87 | 44.28 | 74.00 | -29.72 | peak |
| 3 | 22160.000 | 49.08 | -4.31 | 44.77 | 74.00 | -29.23 | peak |
| 4 | 23480.000 | 48.04 | -3.16 | 44.88 | 74.00 | -29.12 | peak |
| 5 | 23744.000 | 48.15 | -3.20 | 44.95 | 74.00 | -29.05 | peak |
| 6 | 25256.000 | 46.29 | -1.67 | 44.62 | 74.00 | -29.38 | peak |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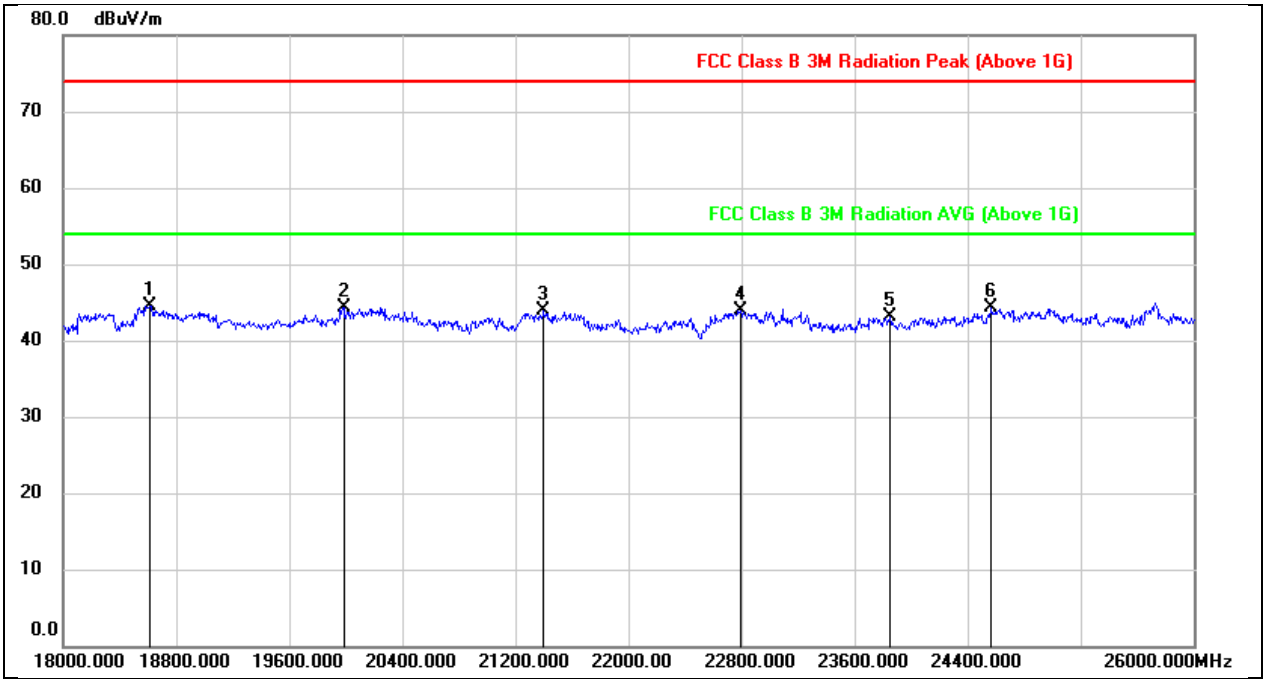
| | | | |
|---|---|---|---|
| Test Mode: | GFSK | Channel: | 2408 MHz |
| Polarity: | Vertical | Test Voltage | DC 3.0 V |




| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|
| 1 | 18616.000 | 49.89 | -5.34 | 44.55 | 74.00 | -29.45 | peak |
| 2 | 19984.000 | 49.71 | -5.44 | 44.27 | 74.00 | -29.73 | peak |
| 3 | 21400.000 | 48.54 | -4.72 | 43.82 | 74.00 | -30.18 | peak |
| 4 | 22792.000 | 47.61 | -3.65 | 43.96 | 74.00 | -30.04 | peak |
| 5 | 23848.000 | 46.18 | -3.03 | 43.15 | 74.00 | -30.85 | peak |
| 6 | 24568.000 | 46.60 | -2.33 | 44.27 | 74.00 | -29.73 | peak |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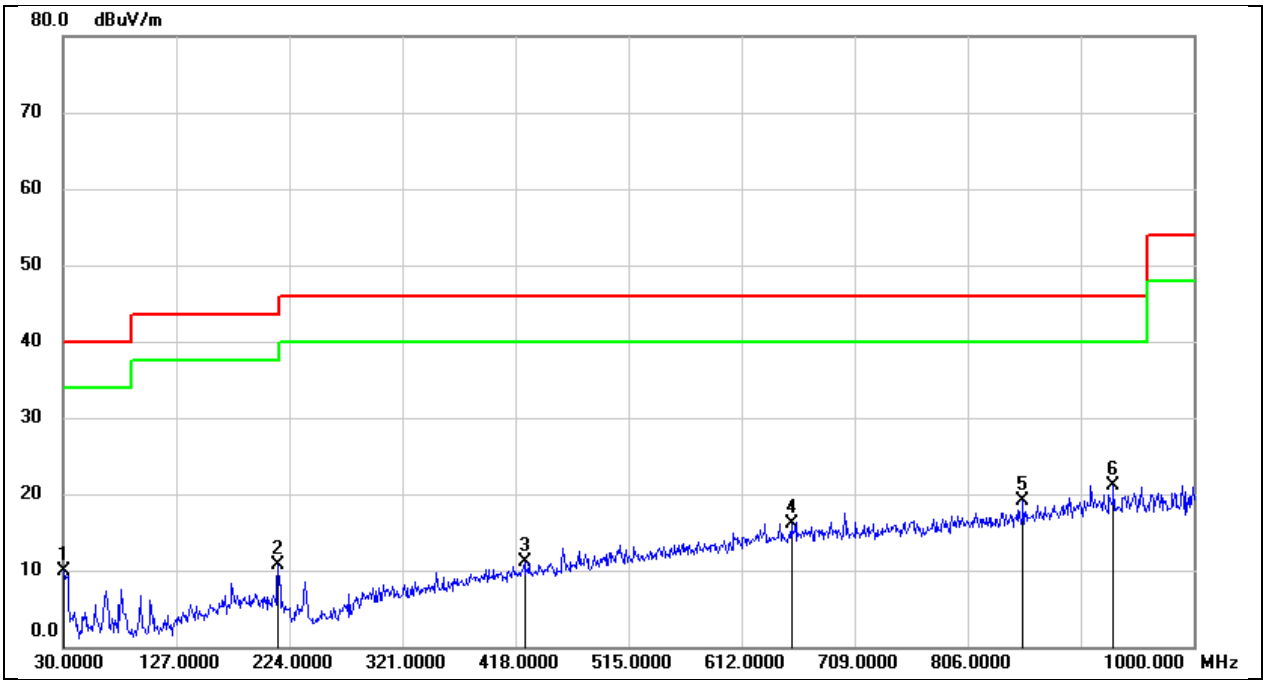
## 8.6. SPURIOUS EMISSIONS (30 MHZ ~ 1 GHZ)

| | | | |
|---|---|---|---|
| Test Mode: | GFSK | Channel: | 2408 MHz |
| Polarity: | Horizontal | Test Voltage | DC 3.0 V |




| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|
| 1 | 30.9700 | 28.91 | -19.04 | 9.87 | 40.00 | -30.13 | QP |
| 2 | 214.3000 | 28.38 | -17.66 | 10.72 | 43.50 | -32.78 | QP |
| 3 | 425.7600 | 23.87 | -12.83 | 11.04 | 46.00 | -34.96 | QP |
| 4 | 654.6800 | 25.06 | -8.88 | 16.18 | 46.00 | -29.82 | QP |
| 5 | 853.5300 | 25.29 | -6.18 | 19.11 | 46.00 | -26.89 | QP |
| 6 | 931.1300 | 25.85 | -4.76 | 21.09 | 46.00 | -24.91 | QP |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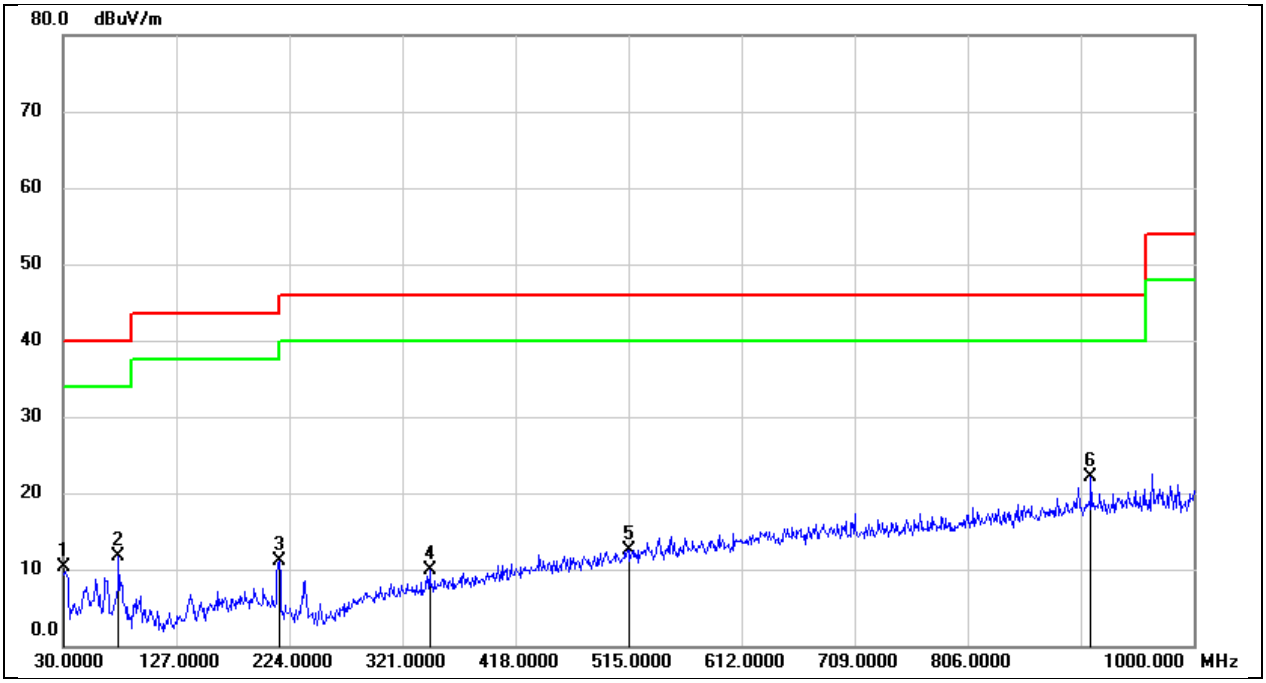
| | | | |
|---|---|---|---|
| Test Mode: | GFSK | Channel: | 2408 MHz |
| Polarity: | Vertical | Test Voltage | DC 3.0 V |




| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|
| 1 | 30.0000 | 29.29 | -18.94 | 10.35 | 40.00 | -29.65 | QP |
| 2 | 77.5300 | 32.86 | -21.14 | 11.72 | 40.00 | -28.28 | QP |
| 3 | 215.2700 | 28.91 | -17.76 | 11.15 | 43.50 | -32.35 | QP |
| 4 | 344.2800 | 24.28 | -14.39 | 9.89 | 46.00 | -36.11 | QP |
| 5 | 515.0000 | 23.69 | -11.17 | 12.52 | 46.00 | -33.48 | QP |
| 6 | 911.7300 | 27.13 | -4.93 | 22.20 | 46.00 | -23.80 | QP |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# 9. ANTENNA REQUIREMENT

**APPLICABLE REQUIREMENTS**

Please refer to FCC §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.

Please refer to FCC §15.247(b)(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.

**RESULTS**

Complies

## END OF REPORT


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