



FCC PART 15C TEST REPORT

No. I17Z60265-SRD02

for

TCL Communication Ltd.

SIMBA6 CRICKET

Model Name: 6060C

FCC ID: 2ACCJA021

with

Hardware Version: 10

Software Version: 2A5TUCT0

Issued Date: 2017-4-25

Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of CTTL.

Test Laboratory:

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REPORT HISTORY

| Report Number | Revision | Description | Issue Date |
|----------------------|-----------------|--------------------|-------------------|
| I17Z60265-SRD02 | Rev.0 | 1st edition | 2017-4-25 |

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1. Test Laboratory

1.1. Testing Location

Conducted testing Location: CTTL(huayuan North Road)

Address: No. 52, Huayuan North Road, Haidian District, Beijing,
P. R. China100191

Radiated testing Location: CTTL(Shouxiang)

Address: No. 51 Shouxiang Science Building, Xueyuan Road,
Haidian District, Beijing, P. R. China100191

1.2. Testing Environment

Normal Temperature: 15-35°C

Relative Humidity: 20-75%

1.3. Project data

Testing Start Date: 2017-3-9

Testing End Date: 2017-4-25

1.4. Signature

A handwritten signature in black ink, appearing to read '武乐' (Wu Le).

Wu Le

(Prepared this test report)

A handwritten signature in black ink, appearing to read '孙震宇' (Sun Zhenyu).

Sun Zhenyu

(Reviewed this test report)

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Li Zhuofang

(Approved this test report)



2. Client Information

2.1. Applicant Information

Company Name: TCL Communication Ltd.
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2.2. Manufacturer Information

Company Name: TCL Communication Ltd.
Address /Post: 5F, C building, No. 232, Liang Jing Road ZhangJiang High-Tech Park,
Pudong Area Shanghai, P.R. China. 201203
City: Shanghai
Postal Code: 201203
Country: China
Telephone: 0086-21-51798260
Fax: 0086-21-61460602

3. Equipment UnderTest (EUT) and Ancillary Equipment (AE)

3.1. About EUT

| | |
|--------------------|-----------------------|
| Description | SIMBA6 CRICKET |
| Model Name | 6060C |
| FCC ID | 2ACCJA021 |
| Frequency Band | ISM 2400MHz~2483.5MHz |
| Type of Modulation | GFSK/π/4 DQPSK/8DPSK |
| Number of Channels | 79 |
| Power Supply | 3.85V DC by Battery |

3.2. Internal Identification of EUT

| EUT ID* | SN or IMEI | HW Version | SW Version |
|---------|-----------------|------------|------------|
| EUT1 | 014889000003020 | 10 | 2A5TUCT0 |
| EUT2 | 014889000002659 | 10 | 2A5TUCT0 |

*EUT ID: is used to identify the test sample in the lab internally.

3.3. Internal Identification of AE

AE ID* Description

| | | | |
|------|-----------|---|---------|
| AE1 | Battery | / | Inbuilt |
| AE3 | Charger | / | / |
| AE11 | USB Cable | / | / |

AE1

| | |
|-----------------|--------------|
| Model | CAC2780001C1 |
| Manufacturer | / |
| Capacitance | 2780 mAh |
| Nominal voltage | / |

AE3

| | |
|-----------------|--------------|
| Model | CBA0063AGAC4 |
| Manufacturer | / |
| Length of cable | / |

AE11

| | |
|-----------------|--------------|
| Model | CDA0000104CF |
| Manufacturer | / |
| Length of cable | 98cm |

*AE ID: is used to identify the test sample in the lab internally.



3.4. Normal Accessory setting

Fully charged battery should be used during the test.

3.5. General Description

The Equipment Under Test (EUT) is a model of SIMBA6 CRICKET with integrated antenna. It consists of normal options: lithium battery, charger. Manual and specifications of the EUT were provided to fulfil the test.

4. Reference Documents

4.1. Documents supplied by applicant

EUT feature information is supplied by the applicant or manufacturer, which is the basis of testing.

4.2. Reference Documents for testing

The following documents listed in this section are referred for testing.

| Reference | Title | Version |
|-------------|--|-----------|
| FCC Part15 | FCC CFR 47, Part 15, Subpart C: 15.205 Restricted bands of operation; 15.209 Radiated emission limits, general requirements; 15.247 Operation within the bands 902–928MHz, 2400–2483.5 MHz, and 5725–5850 MHz. | 2015 |
| ANSI C63.10 | American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices | June,2013 |

5. Test Results

5.1. Summary of Test Results

Abbreviations used in this clause:

- P** Pass, The EUT complies with the essential requirements in the standard.
F Fail, The EUT does not comply with the essential requirements in the standard
NA Not Applicable, The test was not applicable
NP Not Performed, The test was not performed by CTTL

| SUMMARY OF MEASUREMENT RESULTS | Sub-clause | Verdict |
|---------------------------------|------------------------|-----------|
| Peak Output Power - Conducted | 15.247 (b)(1) | P |
| Frequency Band Edges | 15.247 (d) | P |
| Conducted Emission | 15.247 (d) | P |
| Radiated Emission | 15.247, 15.205, 15.209 | P |
| Time of Occupancy (Dwell Time) | 15.247 (a) (1)(iii) | P |
| 20dB Bandwidth | 15.247 (a)(1) | NA |
| Carrier Frequency Separation | 15.247 (a)(1) | P |
| Number of hopping channels | 15.247 (a)(b)(iii) | P |
| AC Powerline Conducted Emission | 15.107, 15.207 | P |

Please refer to **ANNEX A** for detail.

The measurement is made according to ANSI C63.10.

5.2. Statements

CTTL has evaluated the test cases requested by the applicant /manufacturer as listed in section 5.1 of this report for the EUT specified in section 3 according to the standards or reference documents listed in section 4.2

6. Test Facilities Utilized

Conducted test system

| No. | Equipment | Model | Serial Number | Manufacturer | Calibration Period | Calibration Due date |
|-----|------------------------|--------|---------------|-----------------|--------------------|----------------------|
| 1 | Vector Signal Analyzer | FSQ26 | 200136 | Rohde & Schwarz | 1 year | 2017-10-25 |
| 2 | Bluetooth Tester | CBT32 | 100649 | Rohde & Schwarz | 1 year | 2017-10-26 |
| 3 | LISN | ENV216 | 101200 | Rohde & Schwarz | 1 year | 2017-07-10 |
| 4 | Test Receiver | ESCI | 100344 | Rohde & Schwarz | 1 year | 2018-03-01 |
| 5 | Shielding Room | S81 | / | ETS-Lindgren | / | / |

Radiated emission test system

| No. | Equipment | Model | Serial Number | Manufacturer | Calibration Period | Calibration Due date |
|-----|-----------------------------------|----------|---------------|-----------------|--------------------|----------------------|
| 1 | Test Receiver | ESU26 | 100376 | Rohde & Schwarz | 1 year | 2017-11-30 |
| 2 | BiLog Antenna | VULB9163 | 514 | Schwarzbeck | 3 years | 2017-11-24 |
| 3 | Dual-Ridge Waveguide Horn Antenna | 3117 | 00139065 | ETS-Lindgren | 3 years | 2017-09-21 |
| 4 | Dual-Ridge Waveguide Horn Antenna | 3116 | 2663 | ETS-Lindgren | 3 years | 2017-06-17 |
| 5 | Vector Signal Analyzer | FSV | 101047 | Rohde & Schwarz | 1 year | 2017-06-28 |
| 6 | Bluetooth Tester | CBT | 101042 | Rohde & Schwarz | 1 year | 2018-03-02 |

7. Measurement Uncertainty

7.1. Peak Output Power - Conducted

Measurement Uncertainty:

| | |
|-------------------------------|--------|
| Measurement Uncertainty (k=2) | 0.66dB |
|-------------------------------|--------|

7.2. Frequency Band Edges

Measurement Uncertainty:

| | |
|-------------------------------|--------|
| Measurement Uncertainty (k=2) | 0.66dB |
|-------------------------------|--------|

7.3. Conducted Emission

Measurement Uncertainty:

| Frequency Range | Uncertainty (k=2) |
|-------------------|-------------------|
| 30 MHz ~ 8 GHz | 1.22dB |
| 8 GHz ~ 12.75 GHz | 1.51dB |
| 12.7GHz ~ 26 GHz | 1.51dB |

7.4. Radiated Emission

Measurement Uncertainty:

| Frequency Range | Uncertainty (k=2) |
|-----------------|-------------------|
| < 1 GHz | 4.86dB |
| > 1 GHz | 5.26dB |

7.5. Time of Occupancy (Dwell Time)

Measurement Uncertainty:

| | |
|-------------------------------|--------|
| Measurement Uncertainty (k=2) | 0.88ms |
|-------------------------------|--------|

7.6. 20dB Bandwidth

Measurement Uncertainty:

| | |
|-------------------------------|----------|
| Measurement Uncertainty (k=2) | 61.936Hz |
|-------------------------------|----------|



7.7. Carrier Frequency Separation

Measurement Uncertainty:

| | |
|-------------------------------|----------|
| Measurement Uncertainty (k=2) | 61.936Hz |
|-------------------------------|----------|

7.8. AC Powerline Conducted Emission

Measurement Uncertainty:

| | |
|-------------------------------|--------|
| Measurement Uncertainty (k=2) | 3.38dB |
|-------------------------------|--------|

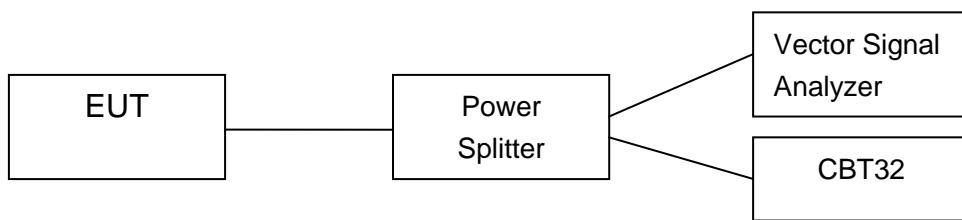
ANNEX A: Detailed Test Results

A.1. Measurement Method

A.1.1. Conducted Measurements

The measurement is made according to ANSI C63.10.

- 1). Connect the EUT to the test system correctly.
- 2). Set the EUT to the required work mode (Transmitter, receiver or transmitter & receiver).
- 3). Set the EUT to the required channel.
- 4). Set the EUT hopping mode (hopping or hopping off).
- 5). Set the spectrum analyzer to start measurement.
- 6). Record the values. Vector Signal Analyzer



A.1.2. Radiated Emission Measurements

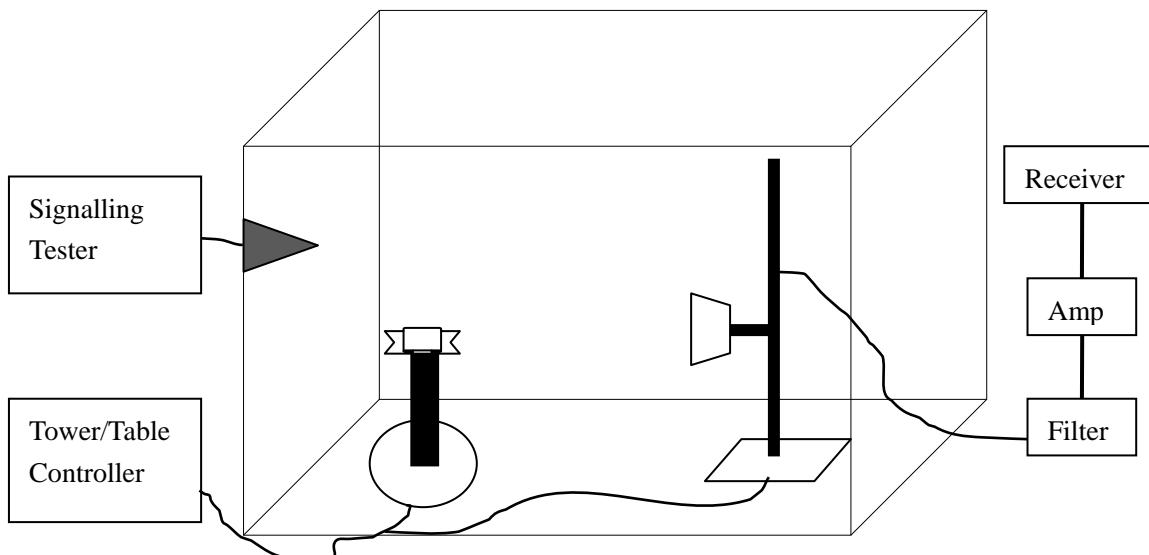
The measurement is made according to ANSI C63.10

The radiated emission test is performed in semi-anechoic chamber. The distance from the EUT to the reference point of measurement antenna is 3m. The test is carried out on both vertical and horizontal polarization and only maximization result of both polarizations is kept. During the test, the turntable is rotated 360° and the measurement antenna is moved from 1m to 4m to get the maximization result.

In the case of radiated emission, the used settings are as follows,

Sweep frequency from 30 MHz to 1GHz, RBW = 100 kHz, VBW = 300 kHz;

Sweep frequency from 1 GHz to 26GHz, RBW = 1MHz, VBW = 1MHz;



A.2. Peak Output Power – Conducted

Method of Measurement: See ANSI C63.10-clause 7.8.5

- a) Use the following spectrum analyzer settings:
 - Span: 6MHz
 - RBW: 3MHz
 - VBW: 3MHz
 - Sweep time: 2.5ms
 - Detector function: peak
 - Trace: max hold
- b) Allow trace to stabilize.
- c) Use the marker-to-peak function to set the marker to the peak of the emission.
- d) The indicated level is the peak output power.

Measurement Limit:

| Standard | Limit (dBm) |
|-----------------------|-------------|
| FCC Part 15.247(b)(1) | < 30 |

Measurement Results:

For GFSK

| Channel | Ch 0 2402 MHz | Ch 39 2441 MHz | Ch 78 2480 MHz | Conclusion |
|--------------------------------------|------------------|-------------------|-------------------|------------|
| Peak Conducted Output Power (dBm) | 8.66 | 9.75 | 11.88 | P |

For 4 DQPSK

| Channel | Ch 0 2402 MHz | Ch 39 2441 MHz | Ch 78 2480 MHz | Conclusion |
|--------------------------------------|------------------|-------------------|-------------------|------------|
| Peak Conducted Output Power (dBm) | 8.12 | 9.20 | 11.18 | P |

For 8DPSK

| Channel | Ch 0 2402 MHz | Ch 39 2441 MHz | Ch 78 2480 MHz | Conclusion |
|--------------------------------------|------------------|-------------------|-------------------|------------|
| Peak Conducted Output Power (dBm) | 8.60 | 9.42 | 11.60 | P |

Conclusion: PASS

A.3. Frequency Band Edges – Conducted

Method of Measurement: See ANSI C63.10-clause 7.8.6

Connect the spectrum analyzer to the EUT using an appropriate RF cable connected to the EUT output. Configure the spectrum analyzer settings as described below (be sure to enter all losses between the unlicensed wireless device output and the spectrum analyzer).

- Span: 10 MHz
- Resolution Bandwidth: 100 kHz
- Video Bandwidth: 300 kHz
- Sweep Time: 5ms
- Detector: Peak
- Trace: max hold

Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands. Save the spectrum analyzer plot. Repeat for each power and modulation for lowest and highest channel.

Observe the stored trace and measure the amplitude delta between the peak of the fundamental and the peak of the band-edge emission. This is not an absolute field strength measurement; it is only a relative measurement to determine the amount by which the emission drops at the band edge relative to the highest fundamental emission level.

Measurement Limit:

| Standard | Limit (dBc) |
|----------------------------|-------------|
| FCC 47 CFR Part 15.247 (d) | < -20 |

Measurement Result:

For GFSK

| Channel | Hopping | Band Edge Power (dBc) | | Conclusion |
|---------|-------------|------------------------|--------|------------|
| 0 | Hopping OFF | Fig.1 | -57.62 | P |
| | Hopping ON | Fig.2 | -54.98 | P |
| 78 | Hopping OFF | Fig.3 | -66.54 | P |
| | Hopping ON | Fig.4 | -70.38 | P |

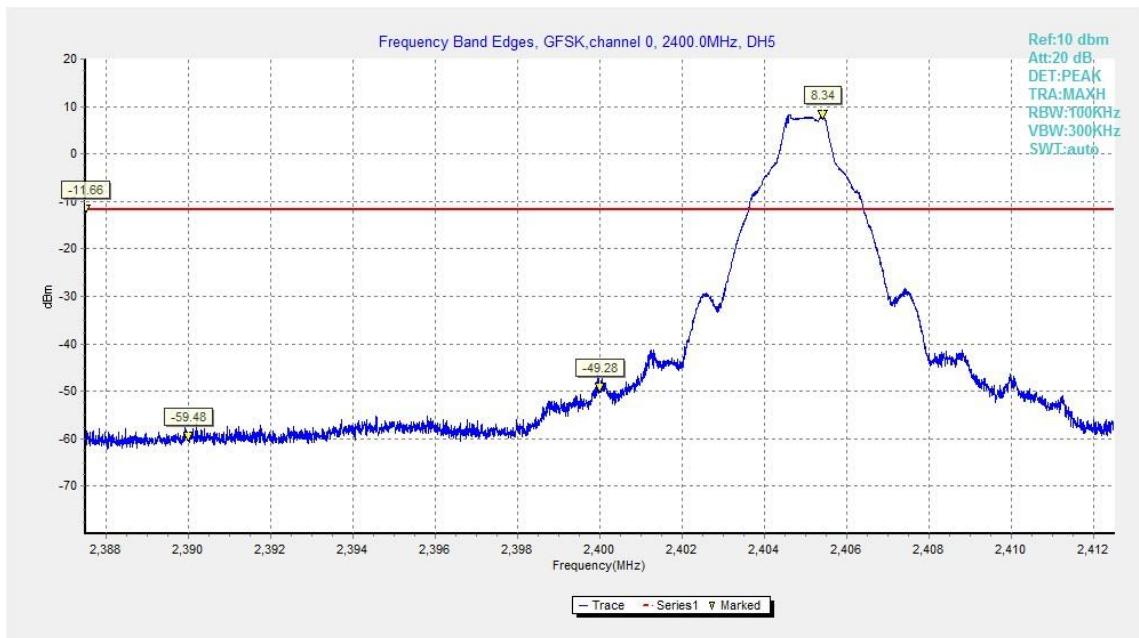
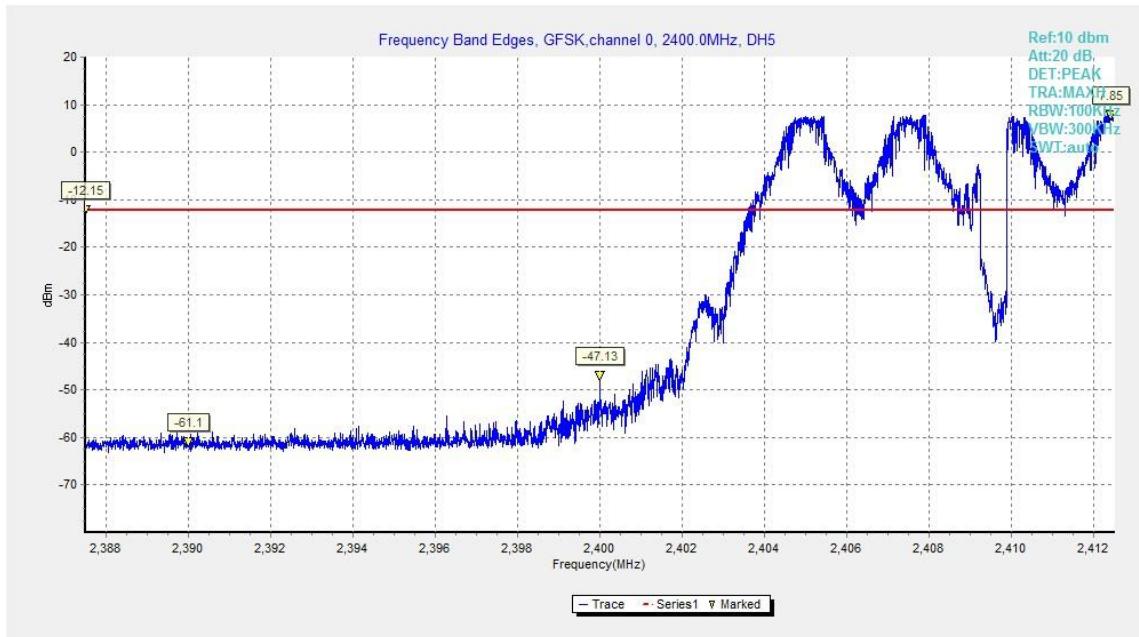
For π/4 DQPSK

| Channel | Hopping | Band Edge Power (dBc) | | Conclusion |
|---------|-------------|------------------------|--------|------------|
| 0 | Hopping OFF | Fig.5 | -57.77 | P |
| | Hopping ON | Fig.6 | -66.33 | P |
| 78 | Hopping OFF | Fig.7 | -65.68 | P |
| | Hopping ON | Fig.8 | -68.37 | P |

For 8DPSK

| Channel | Hopping | Band Edge Power (dBc) | | Conclusion |
|---------|-------------|------------------------|--------|------------|
| 0 | Hopping OFF | Fig.9 | -55.86 | P |
| | Hopping ON | Fig.10 | -62.46 | P |

| | | | | |
|----|-------------|--------|--------|---|
| 78 | Hopping OFF | Fig.11 | -63.37 | P |
| | Hopping ON | Fig.12 | -68.89 | P |

Conclusion: PASS
Test graphs as below

Fig.1. Frequency Band Edges: GFSK, Channel 0, Hopping Off

Fig.2. Frequency Band Edges: GFSK, Channel 0, Hopping On

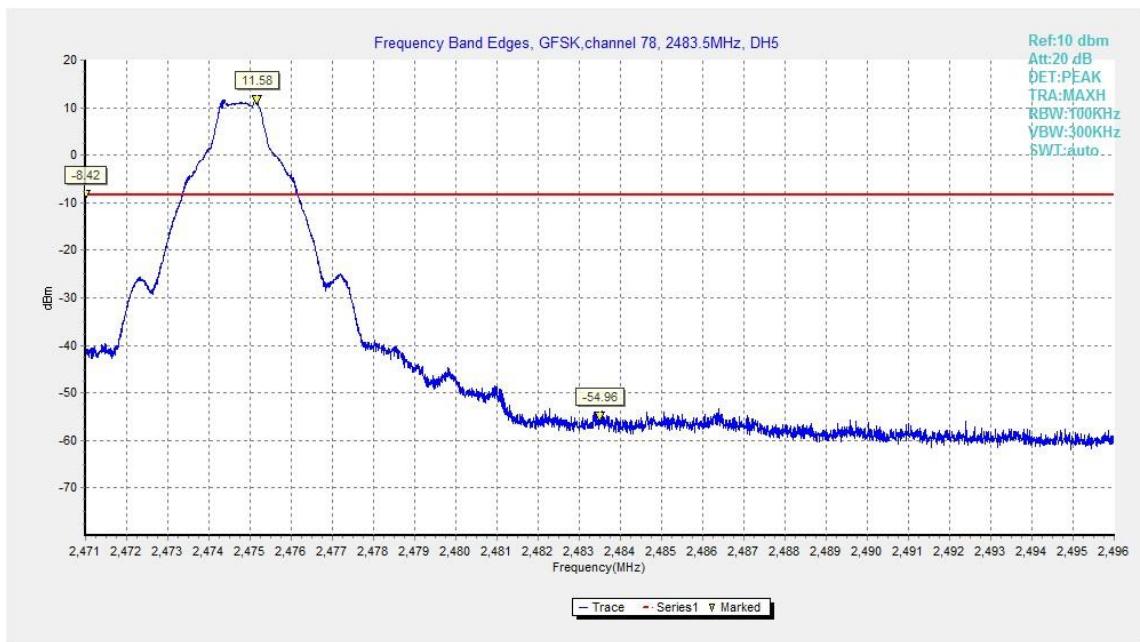


Fig.3. Frequency Band Edges: GFSK, Channel 78, Hopping Off

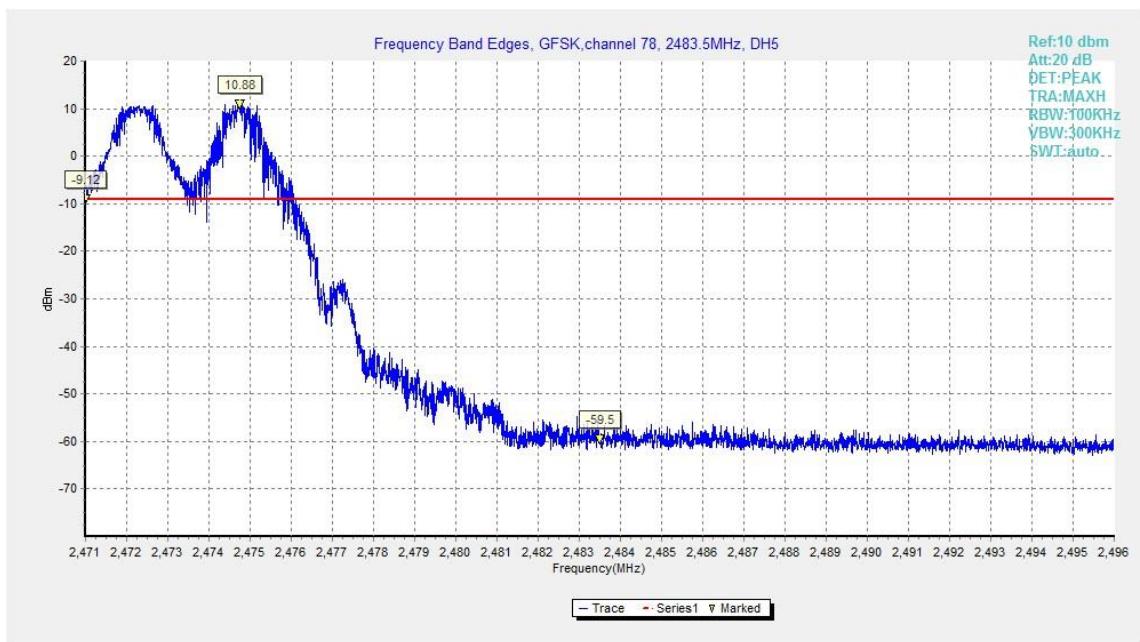
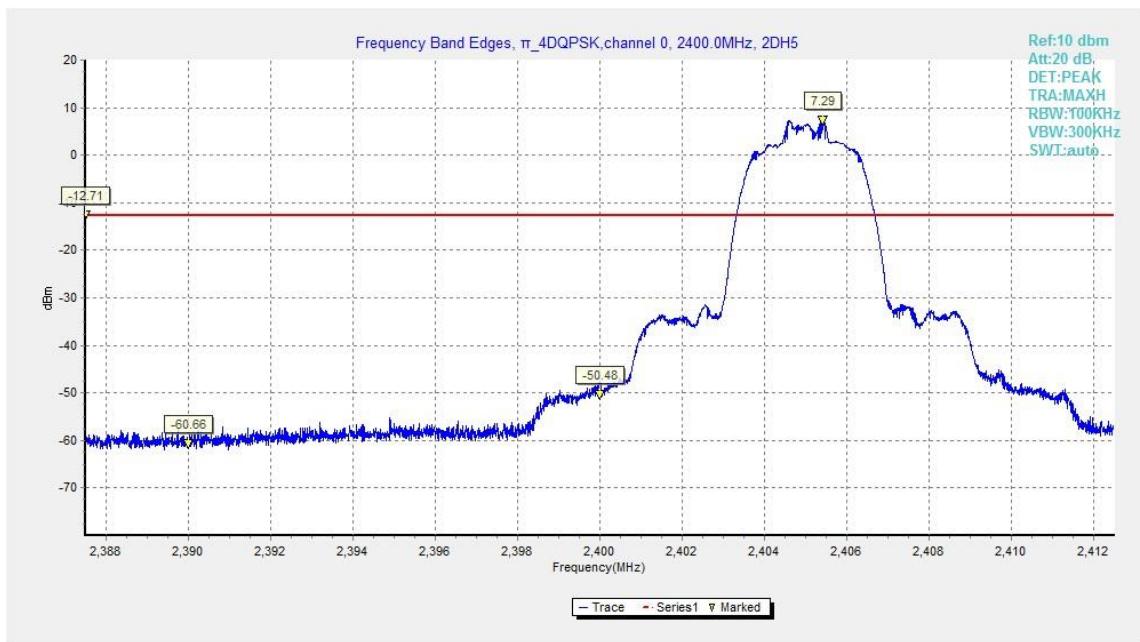
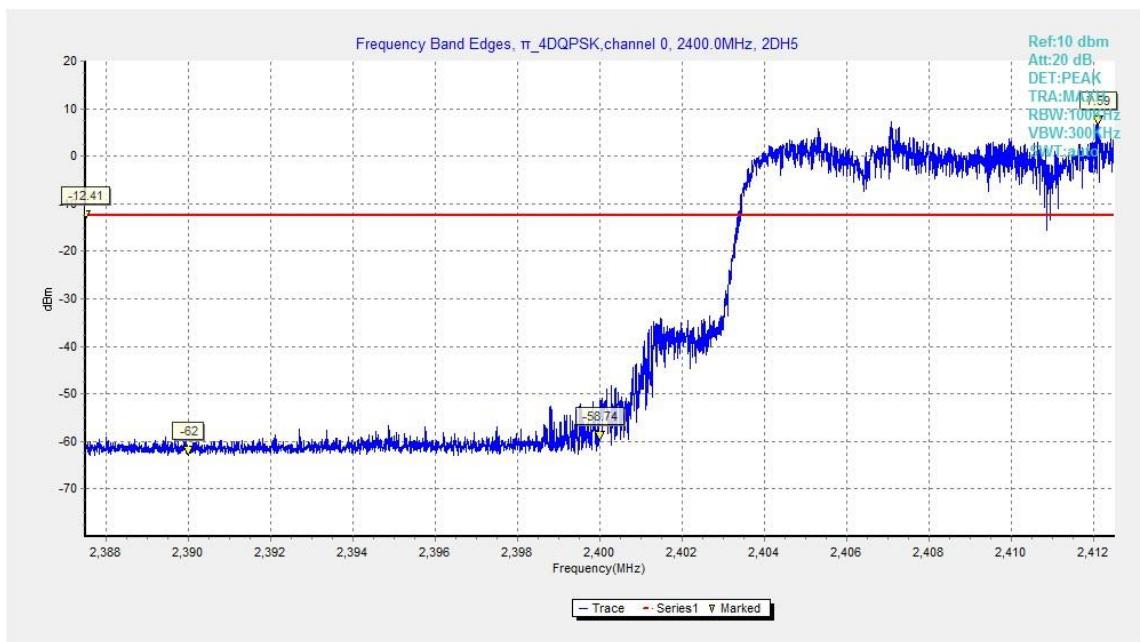


Fig.4. Frequency Band Edges: GFSK, Channel 78, Hopping On


 Fig.5. Frequency Band Edges: $\pi/4$ DQPSK, Channel 0, Hopping Off

 Fig.6. Frequency Band Edges: $\pi/4$ DQPSK, Channel 0, Hopping On

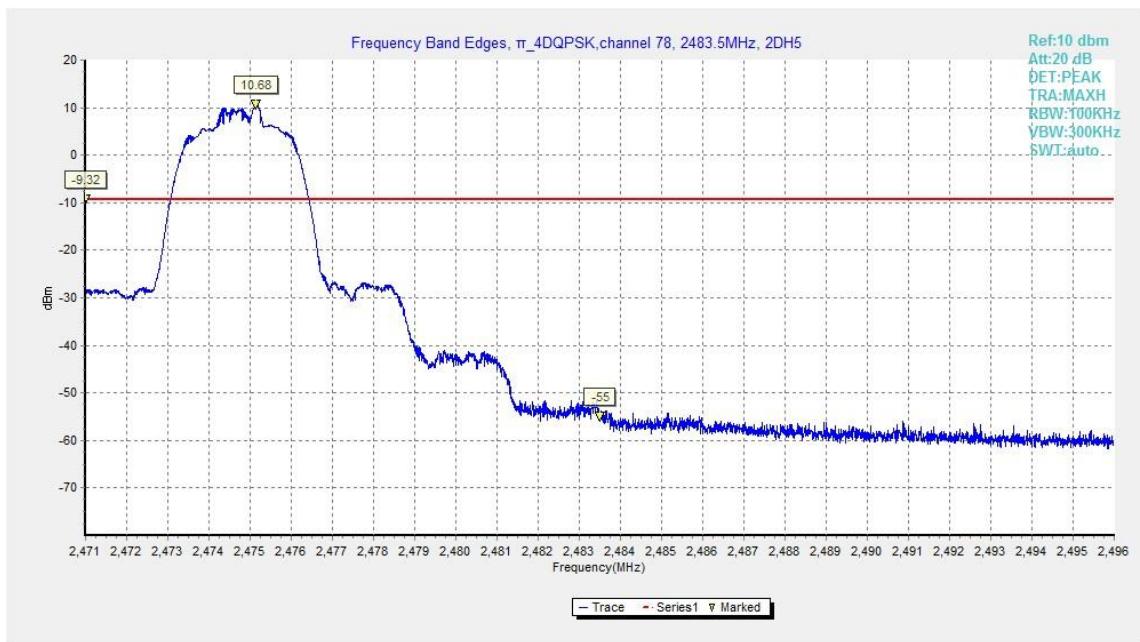


Fig.7. Frequency Band Edges: $\pi/4$ DQPSK, Channel 78, Hopping Off

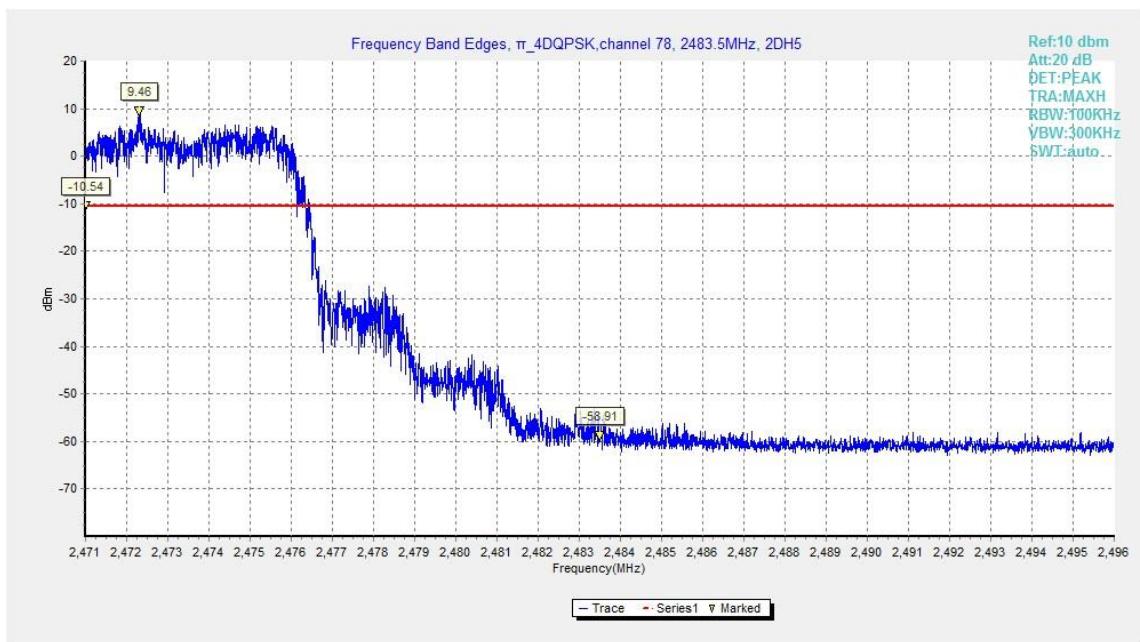


Fig.8. Frequency Band Edges: $\pi/4$ DQPSK, Channel 78, Hopping On

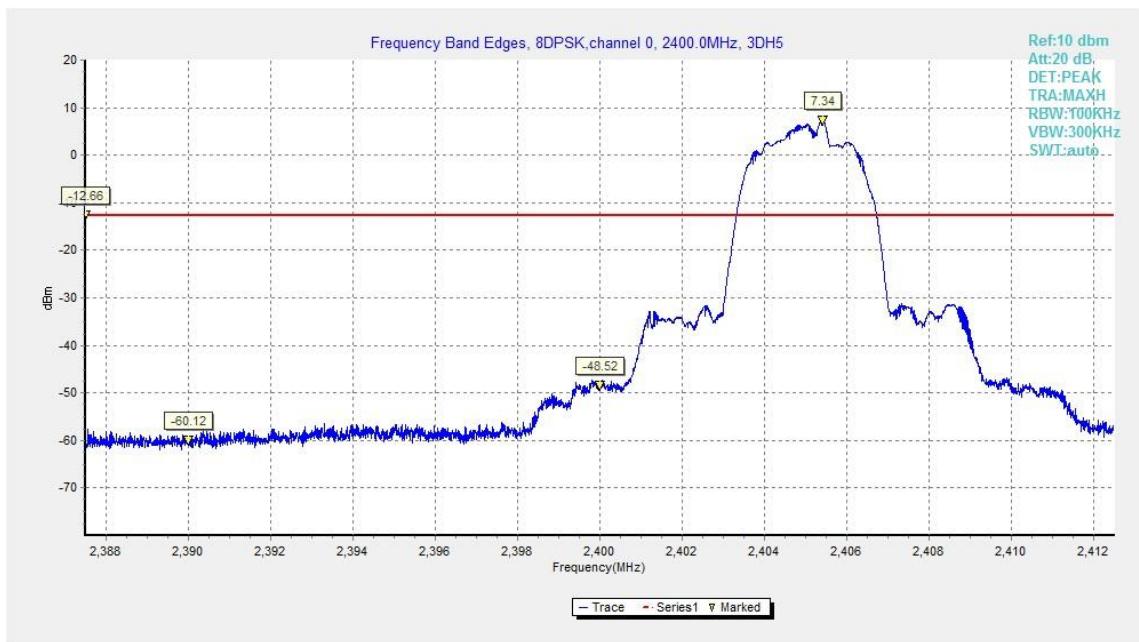


Fig.9. Frequency Band Edges: 8DPSK, Channel 0, Hopping Off

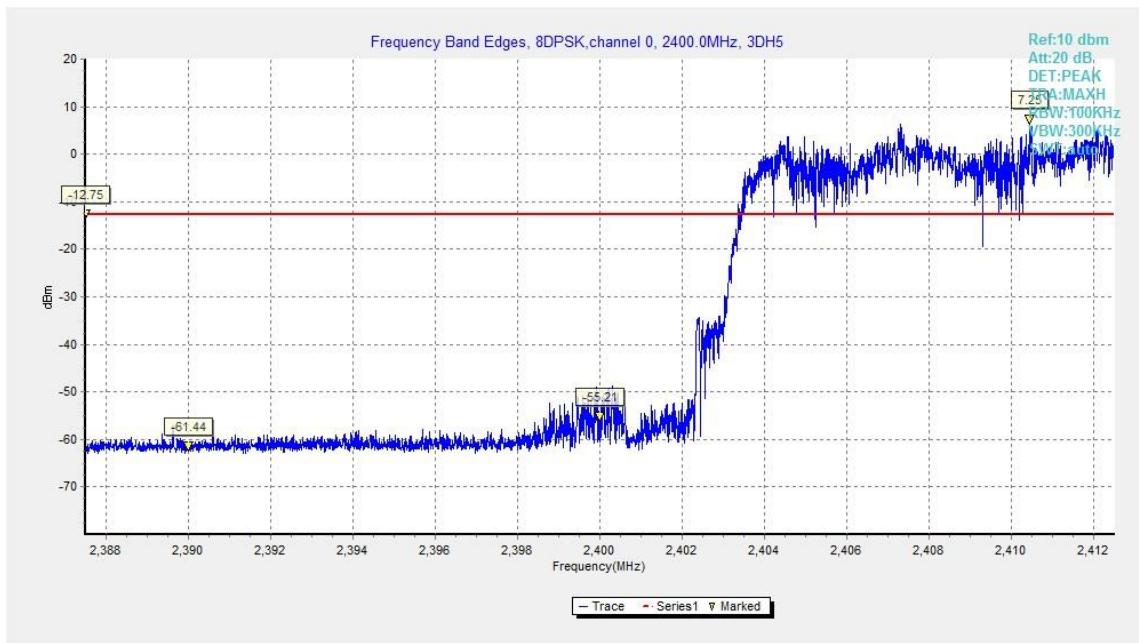


Fig.10. Frequency Band Edges: 8DPSK, Channel 0, Hopping On

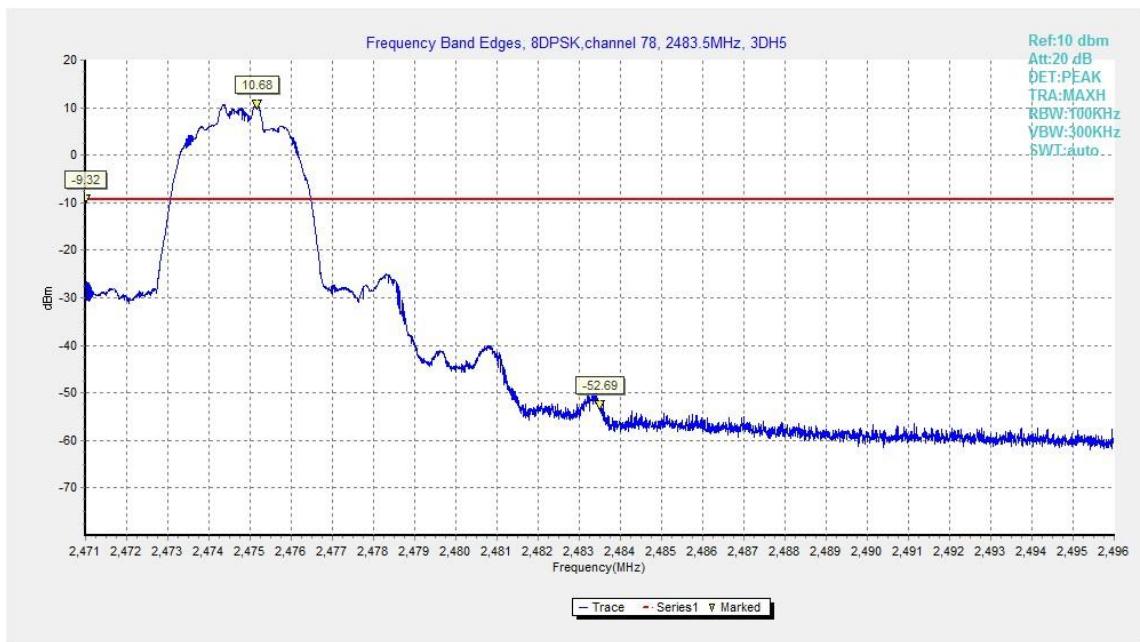


Fig.11. Frequency Band Edges: 8DPSK, Channel 78, Hopping Off

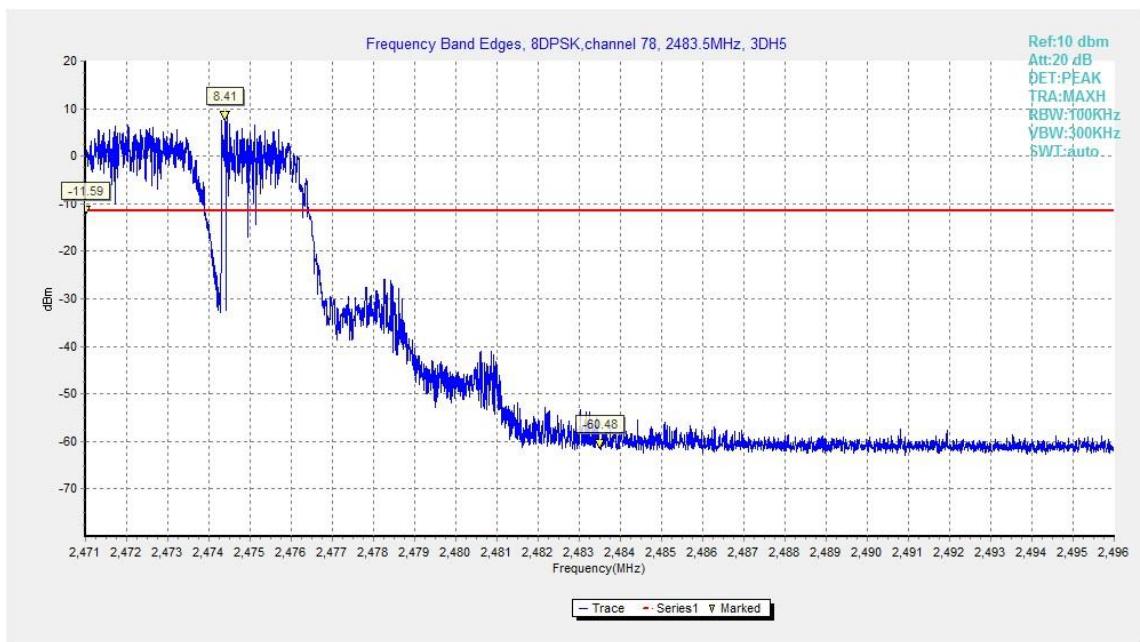


Fig.12. Frequency Band Edges: 8DPSK, Channel 78, Hopping On

A.4. Conducted Emission

Method of Measurement: See ANSI C63.10-clause 7.8.8

Measurement Procedure – Reference Level

1. Set the RBW = 100 kHz.
2. Set the VBW = 300 kHz.
3. Set the span to 5-30 % greater than the EBW.
4. Detector = peak.
5. Sweep time = auto couple.
6. Trace mode = max hold.
7. Allow trace to fully stabilize.
8. Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW. Next, determine the power in 100 kHz band segments outside of the authorized frequency band using the following measurement:

Measurement Procedure - Unwanted Emissions

1. Set RBW = 100 kHz.
2. Set VBW = 300 kHz.
3. Set span to encompass the spectrum to be examined.
4. Detector = peak.
5. Trace Mode = max hold.
6. Sweep = auto couple.
7. Allow the trace to stabilize (this may take some time, depending on the extent of the span).

Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) is attenuated by at least the minimum requirements specified above.

Measurement Limit:

| Standard | Limit |
|----------------------------|---|
| FCC 47 CFR Part 15.247 (d) | 20dB below peak output power in 100 kHz bandwidth |

Measurement Results:

For GFSK

| Channel | Frequency Range | Test Results | Conclusion |
|---------|------------------|--------------|------------|
| Ch 0 | Center Frequency | Fig.13 | P |

| | | | |
|-------------------|------------------|--------|---|
| 2402 MHz | 30 MHz ~ 1 GHz | Fig.14 | P |
| | 1 GHz ~ 3 GHz | Fig.15 | P |
| | 3 GHz ~ 10 GHz | Fig.16 | P |
| | 10 GHz ~ 26 GHz | Fig.17 | P |
| Ch 39 2441 MHz | Center Frequency | Fig.18 | P |
| | 30 MHz ~ 1 GHz | Fig.19 | P |
| | 1 GHz ~ 3 GHz | Fig.20 | P |
| | 3 GHz ~ 10 GHz | Fig.21 | P |
| | 10 GHz ~ 26 GHz | Fig.22 | P |
| Ch 78 2480 MHz | Center Frequency | Fig.23 | P |
| | 30 MHz ~ 1 GHz | Fig.24 | P |
| | 1 GHz ~ 3 GHz | Fig.25 | P |
| | 3 GHz ~ 10 GHz | Fig.26 | P |
| | 10 GHz ~ 26 GHz | Fig.27 | P |

For π/4 DQPSK

| Channel | Frequency Range | Test Results | Conclusion |
|-------------------|------------------|--------------|------------|
| Ch 0 2402 MHz | Center Frequency | Fig.28 | P |
| | 30 MHz ~ 1 GHz | Fig.29 | P |
| | 1 GHz ~ 3 GHz | Fig.30 | P |
| | 3 GHz ~ 10 GHz | Fig.31 | P |
| | 10 GHz ~ 26 GHz | Fig.32 | P |
| Ch 39 2441 MHz | Center Frequency | Fig.33 | P |
| | 30 MHz ~ 1 GHz | Fig.34 | P |
| | 1 GHz ~ 3 GHz | Fig.35 | P |
| | 3 GHz ~ 10 GHz | Fig.36 | P |
| | 10 GHz ~ 26 GHz | Fig.37 | P |
| Ch 78 2480 MHz | Center Frequency | Fig.38 | P |
| | 30 MHz ~ 1 GHz | Fig.39 | P |
| | 1 GHz ~ 3 GHz | Fig.40 | P |
| | 3 GHz ~ 10 GHz | Fig.41 | P |
| | 10 GHz ~ 26 GHz | Fig.42 | P |

For 8DPSK

| Channel | Frequency Range | Test Results | Conclusion |
|------------------|------------------|--------------|------------|
| Ch 0 2402 MHz | Center Frequency | Fig.43 | P |
| | 30 MHz ~ 1 GHz | Fig.44 | P |
| | 1 GHz ~ 3 GHz | Fig.45 | P |
| | 3 GHz ~ 10 GHz | Fig.46 | P |
| | 10 GHz ~ 26 GHz | Fig.47 | P |

| | | | |
|-------------------|------------------|--------|---|
| Ch 39 2441 MHz | Center Frequency | Fig.48 | P |
| | 30 MHz ~ 1 GHz | Fig.49 | P |
| | 1 GHz ~ 3 GHz | Fig.50 | P |
| | 3 GHz ~ 10 GHz | Fig.51 | P |
| | 10 GHz ~ 26 GHz | Fig.52 | P |
| Ch 78 2480 MHz | Center Frequency | Fig.53 | P |
| | 30 MHz ~ 1 GHz | Fig.54 | P |
| | 1 GHz ~ 3 GHz | Fig.55 | P |
| | 3 GHz ~ 10 GHz | Fig.56 | P |
| | 10 GHz ~ 26 GHz | Fig.57 | P |

Conclusion: PASS

Test graphs as below

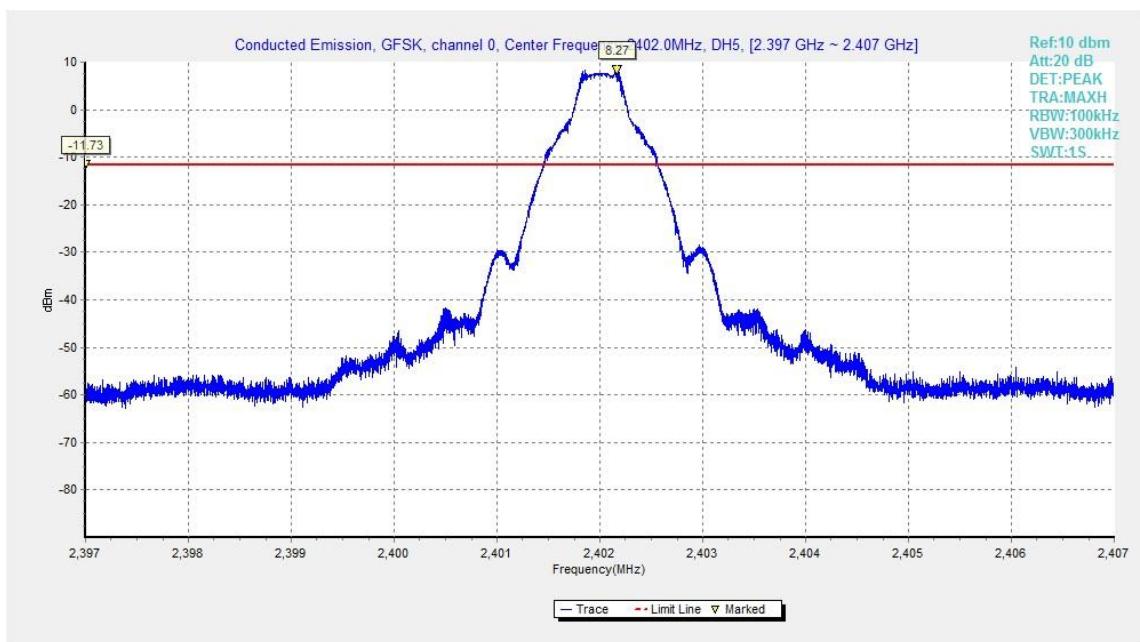


Fig.13. Conducted spurious emission: GFSK, Channel 0,2402MHz

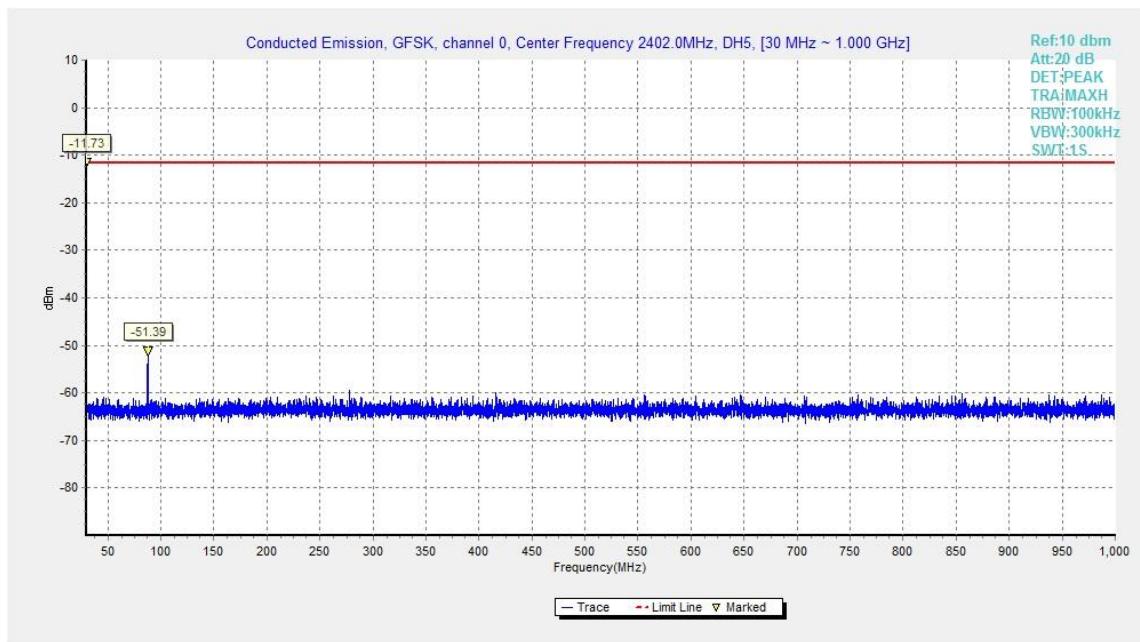


Fig.14. Conducted spurious emission: GFSK, Channel 0, 30MHz - 1GHz

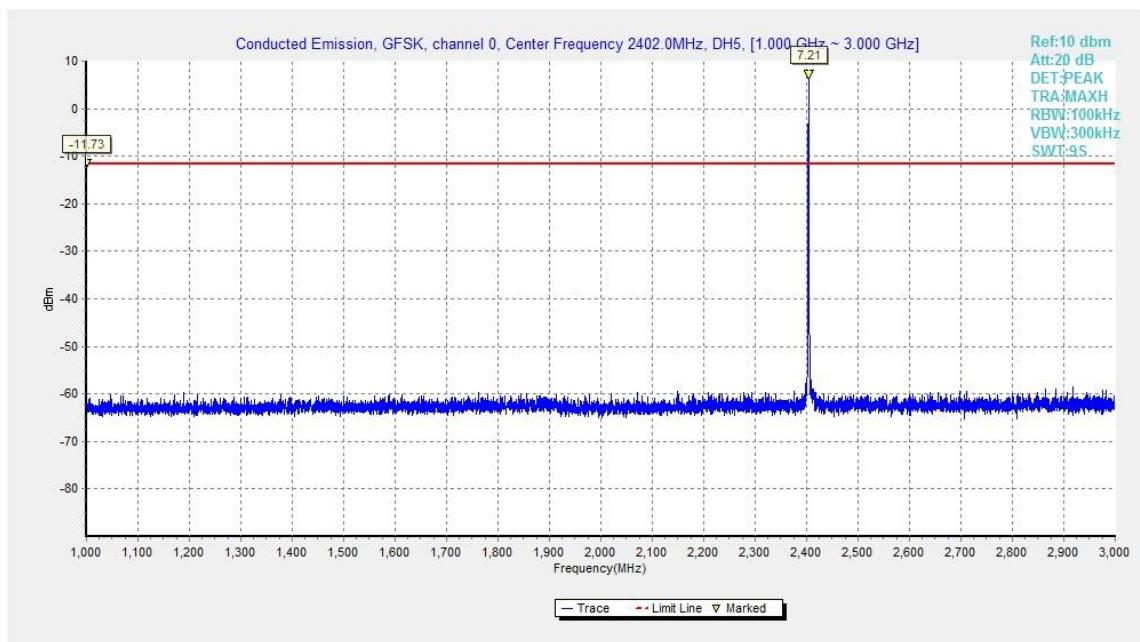


Fig.15. Conducted spurious emission: GFSK, Channel 0, 1GHz - 3GHz

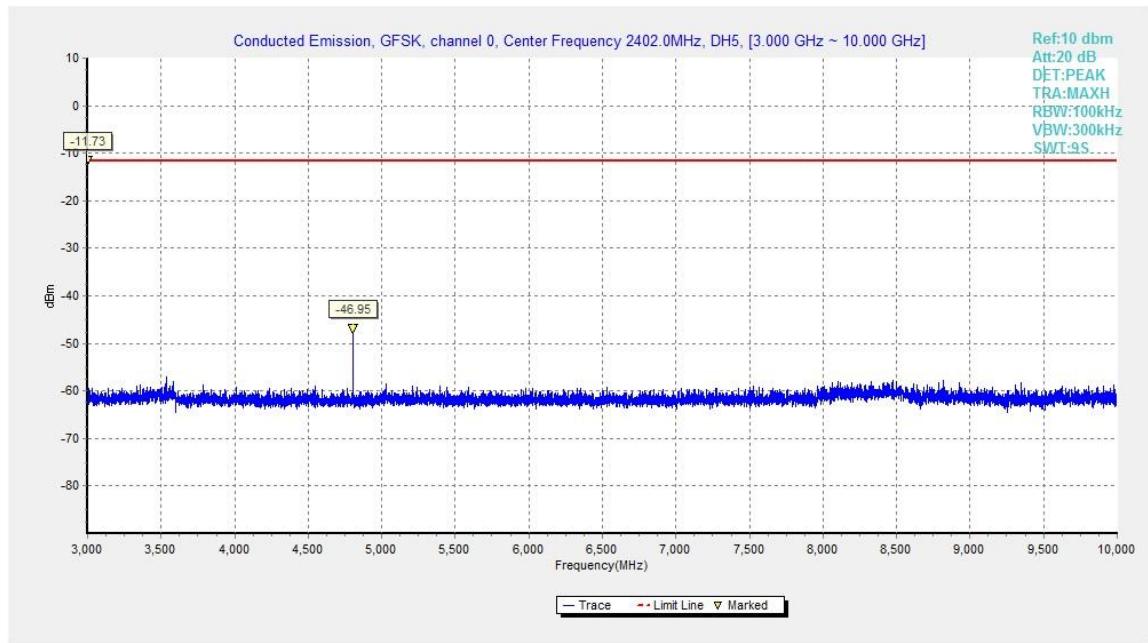


Fig.16. Conducted spurious emission: GFSK, Channel 0, 3GHz - 10GHz

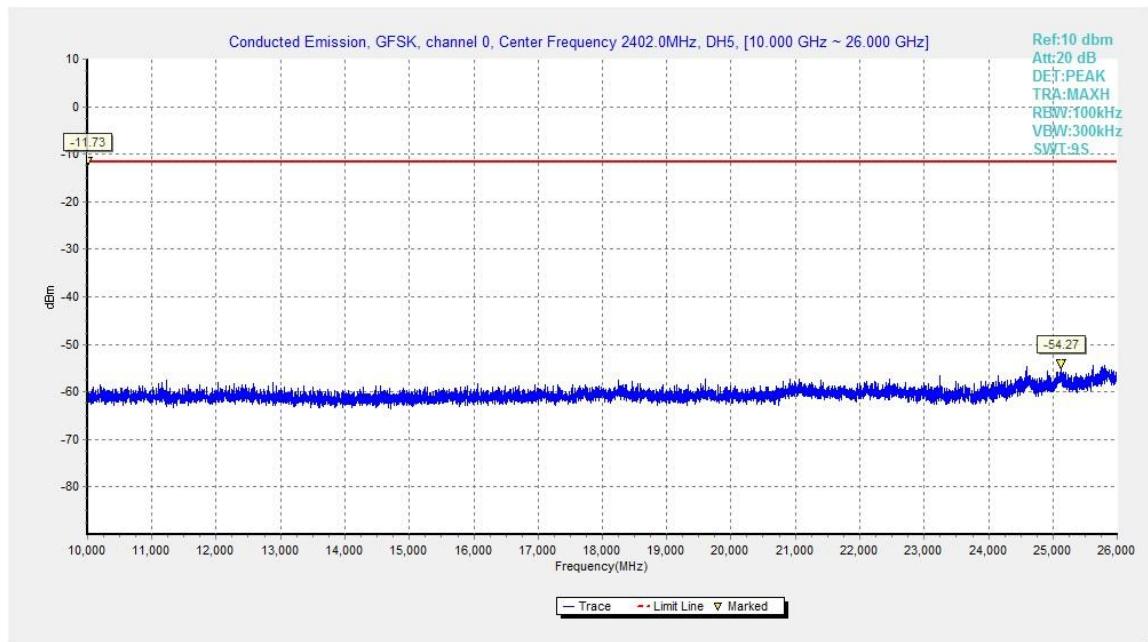


Fig.17. Conducted spurious emission: GFSK, Channel 0, 10GHz - 26GHz

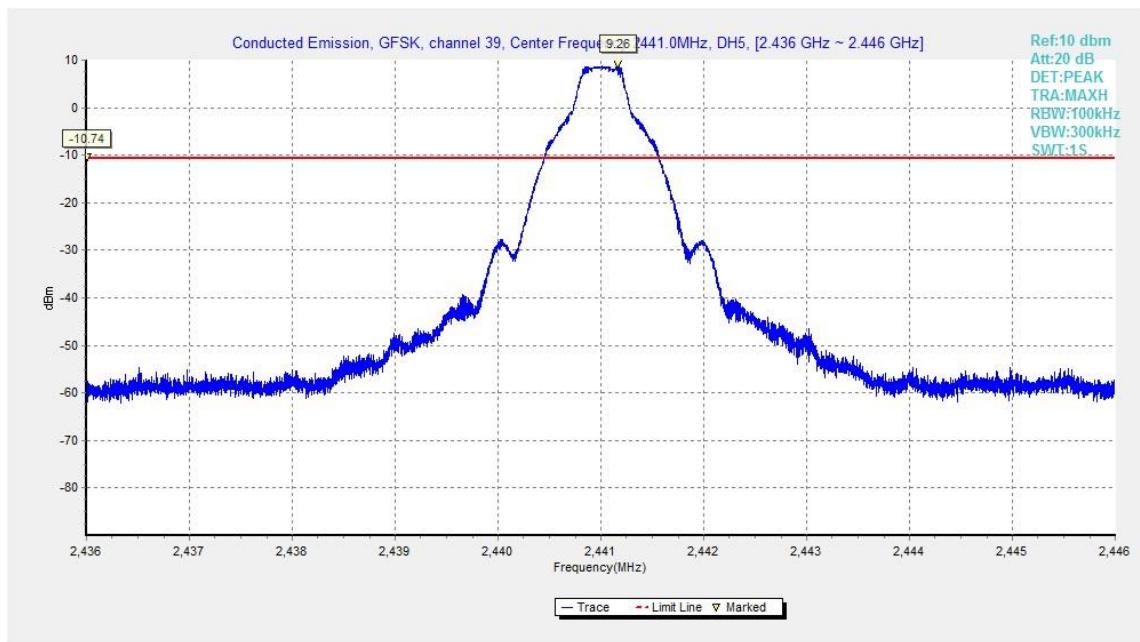


Fig.18. Conducted spurious emission: GFSK, Channel 39, 2441MHz

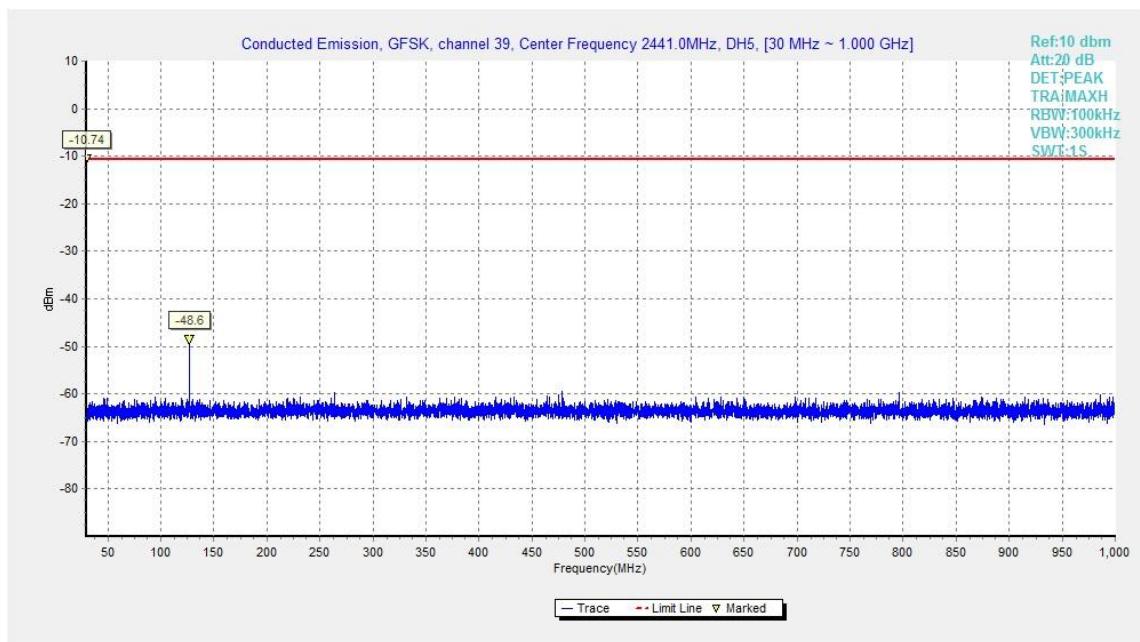


Fig.19. Conducted spurious emission: GFSK, Channel 39, 30MHz - 1GHz

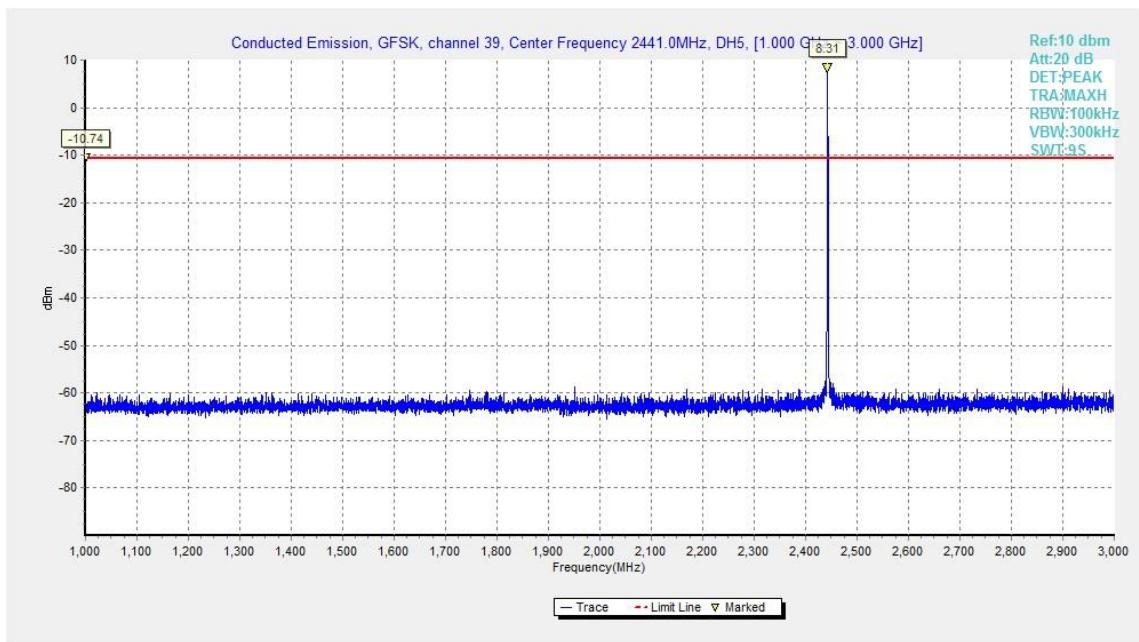


Fig.20. Conducted spurious emission: GFSK, Channel 39, 1GHz – 3GHz

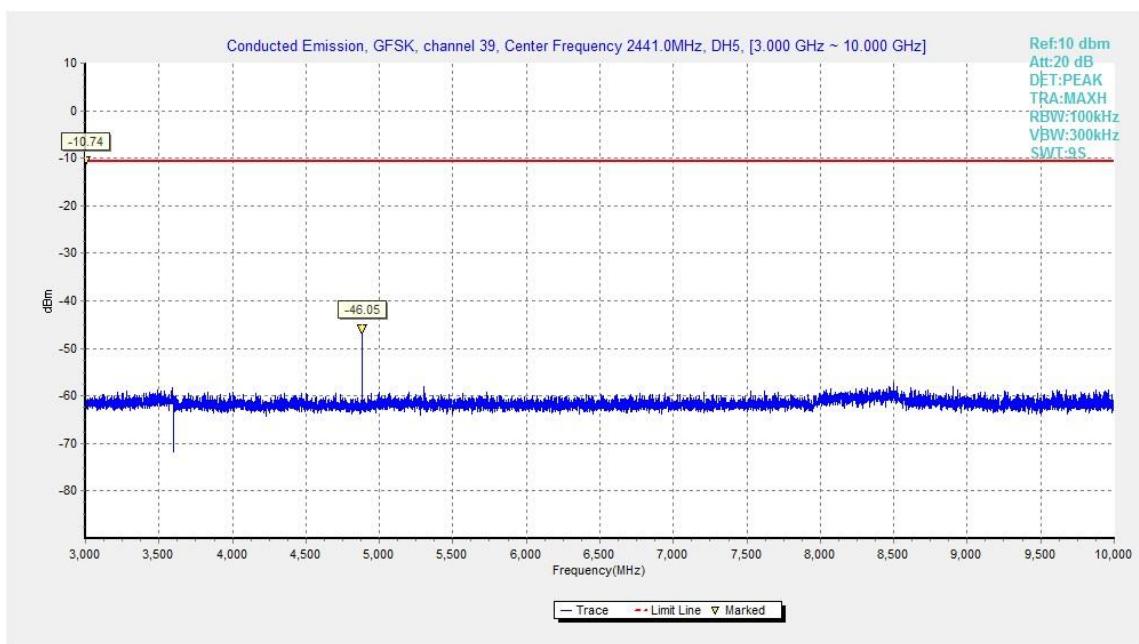


Fig.21. Conducted spurious emission: GFSK, Channel 39, 3GHz – 10GHz

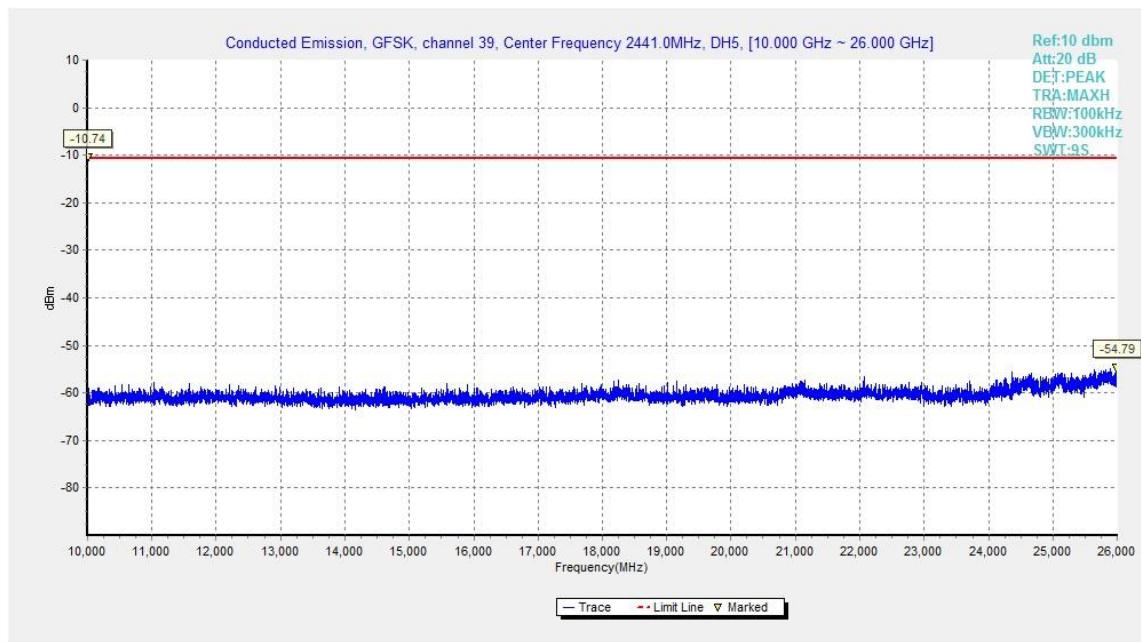


Fig.22. Conducted spurious emission: GFSK, Channel 39, 10GHz – 26GHz

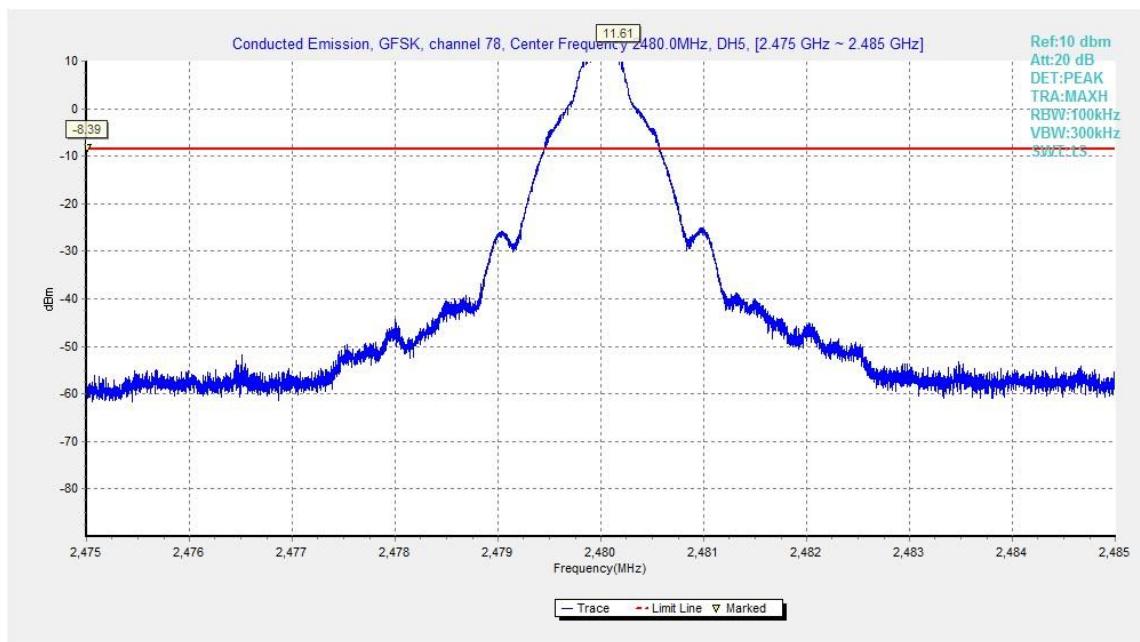


Fig.23. Conducted spurious emission: GFSK, Channel 78, 2480MHz

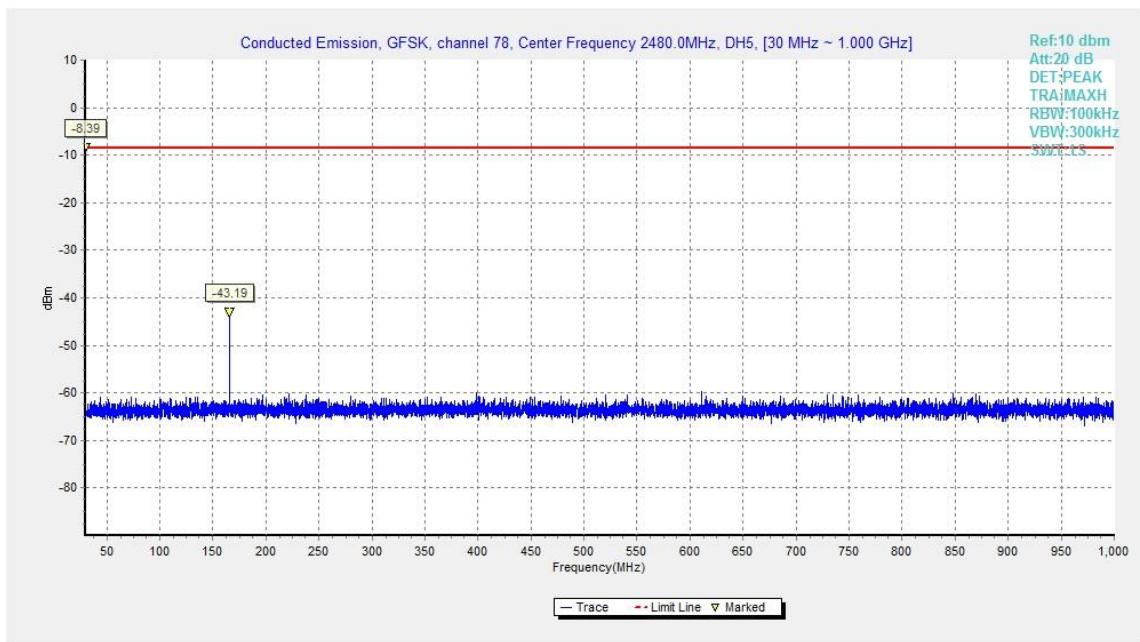


Fig.24. Conducted spurious emission: GFSK, Channel 78, 30MHz - 1GHz

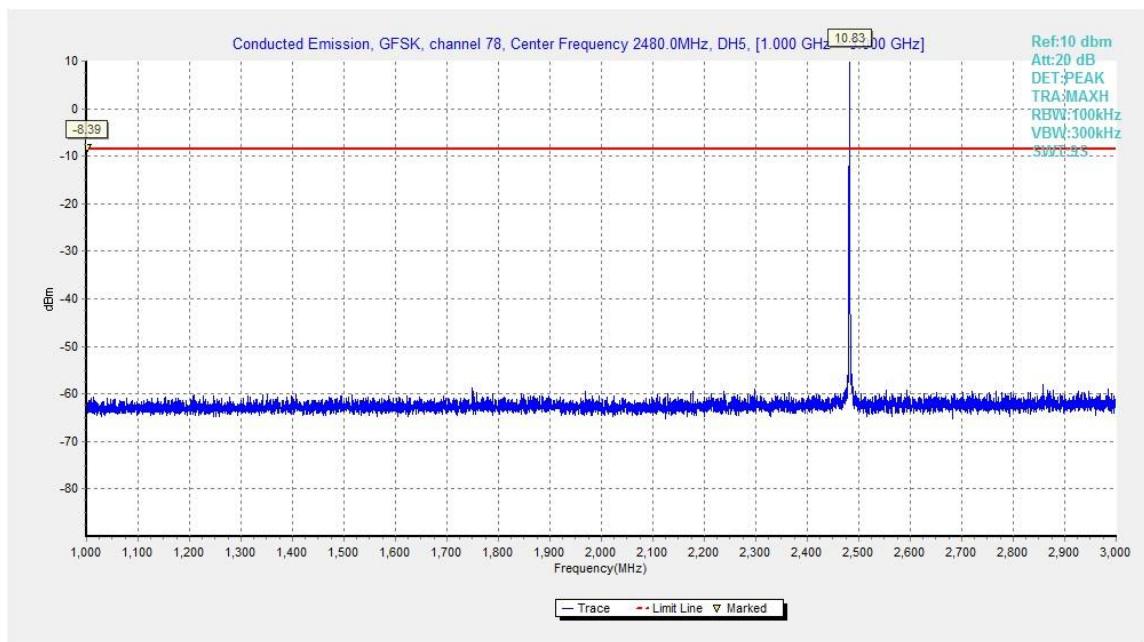


Fig.25. Conducted spurious emission: GFSK, Channel 78, 1GHz - 3GHz

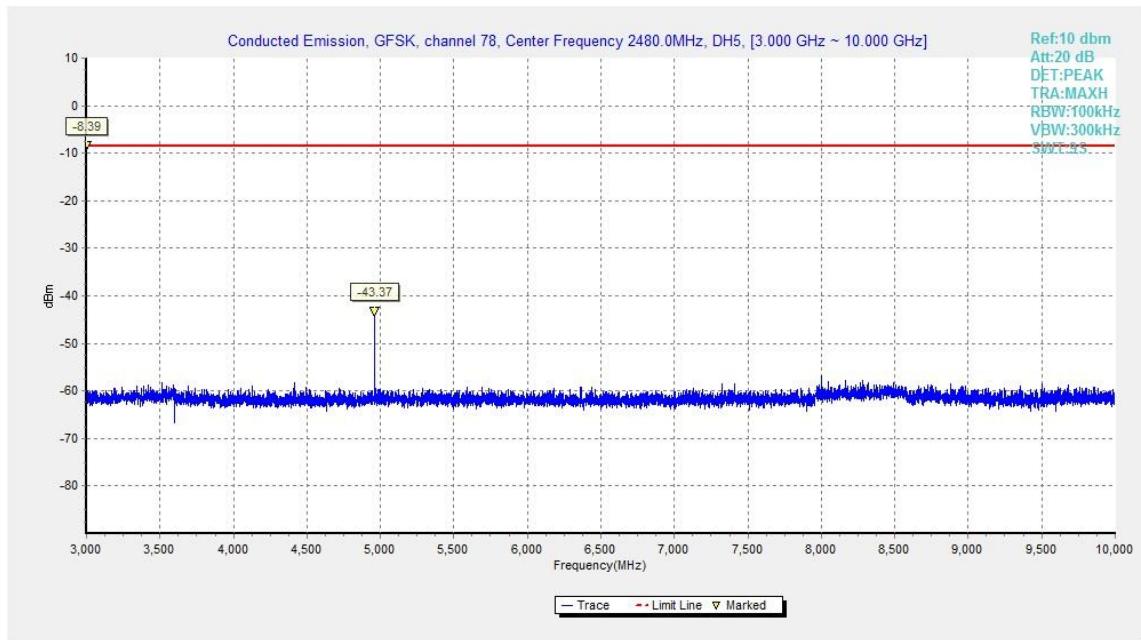


Fig.26. Conducted spurious emission: GFSK, Channel 78, 3GHz - 10GHz

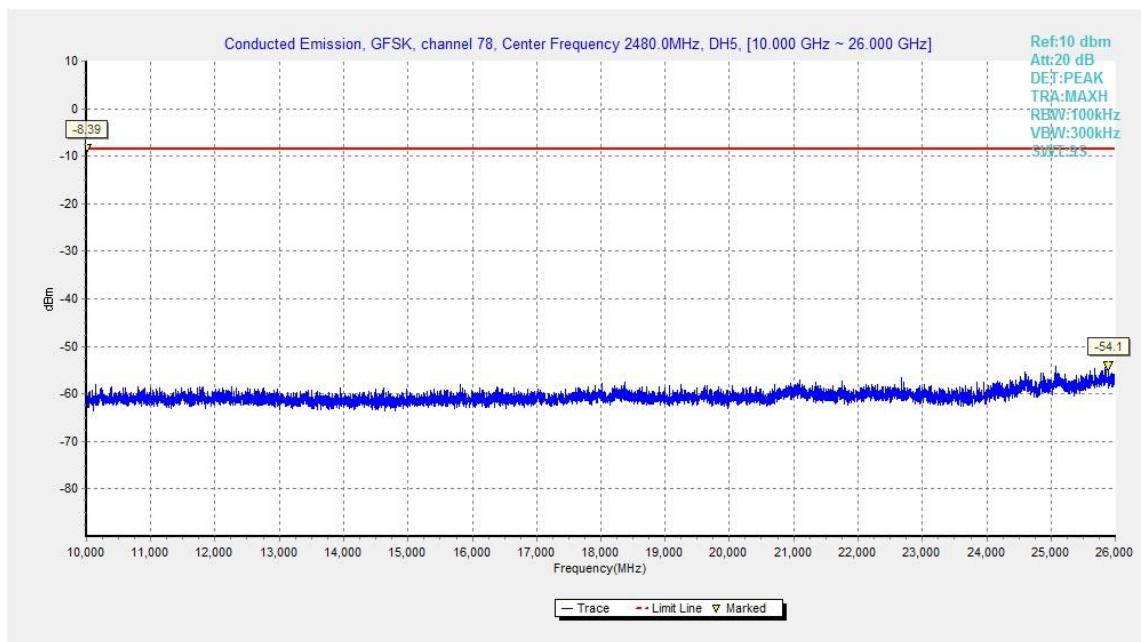


Fig.27. Conducted spurious emission: GFSK, Channel 78, 10GHz - 26GHz

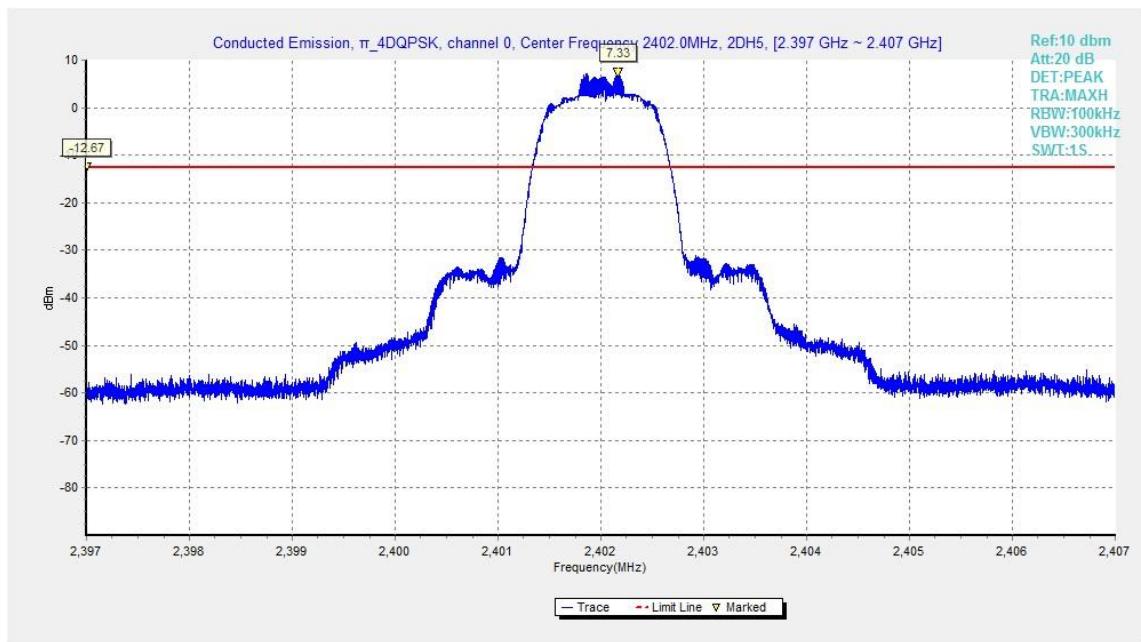


Fig.28. Conducted spurious emission: π/4 DQPSK, Channel 0, 2402MHz

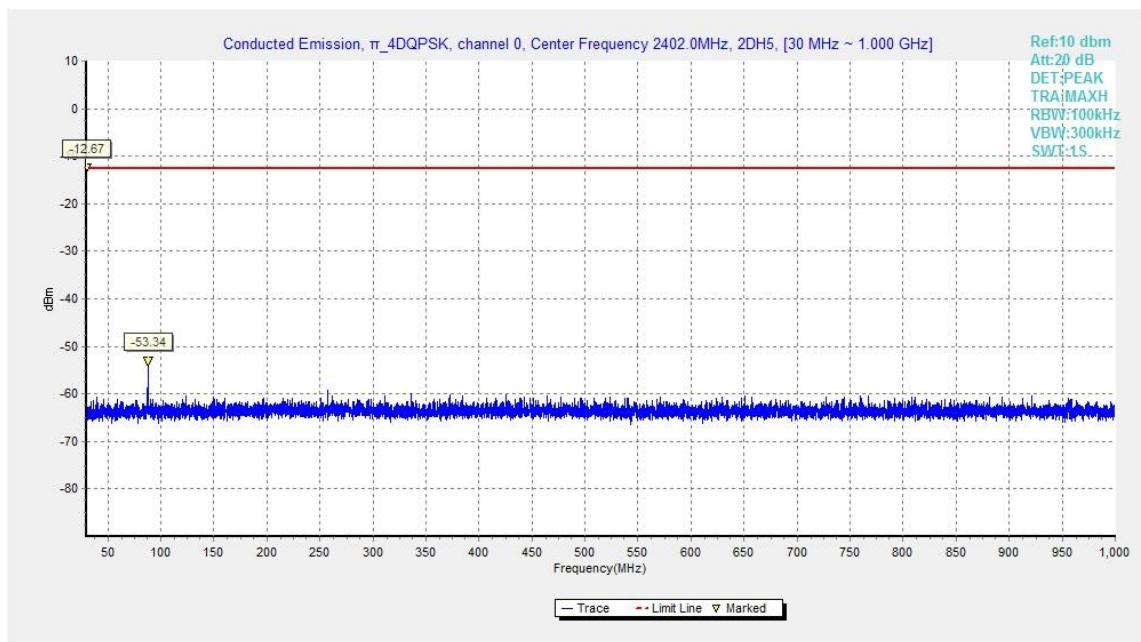


Fig.29. Conducted spurious emission: π/4 DQPSK, Channel 0, 30MHz - 1GHz

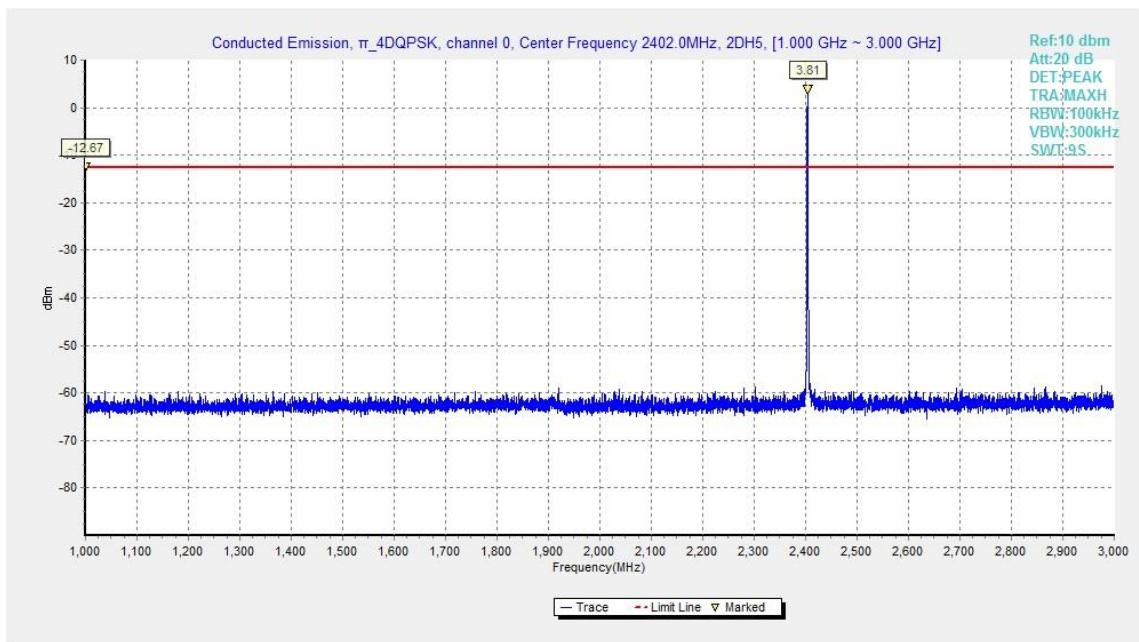


Fig.30. Conducted spurious emission: π/4 DQPSK, Channel 0, 1GHz - 3GHz

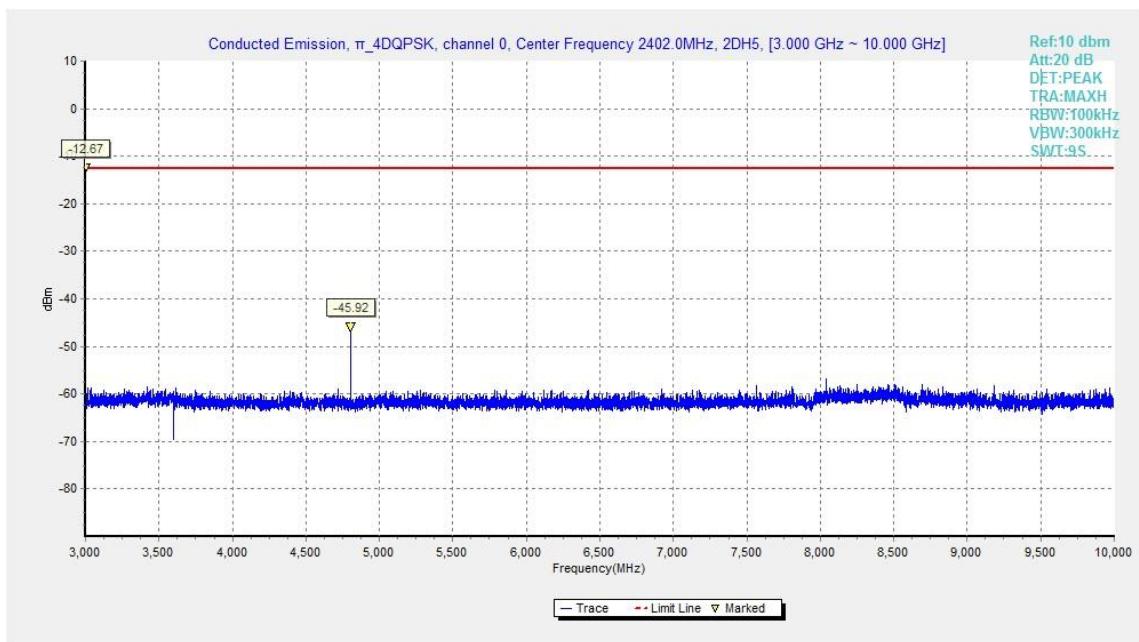


Fig.31. Conducted spurious emission: π/4 DQPSK, Channel 0, 3GHz - 10GHz

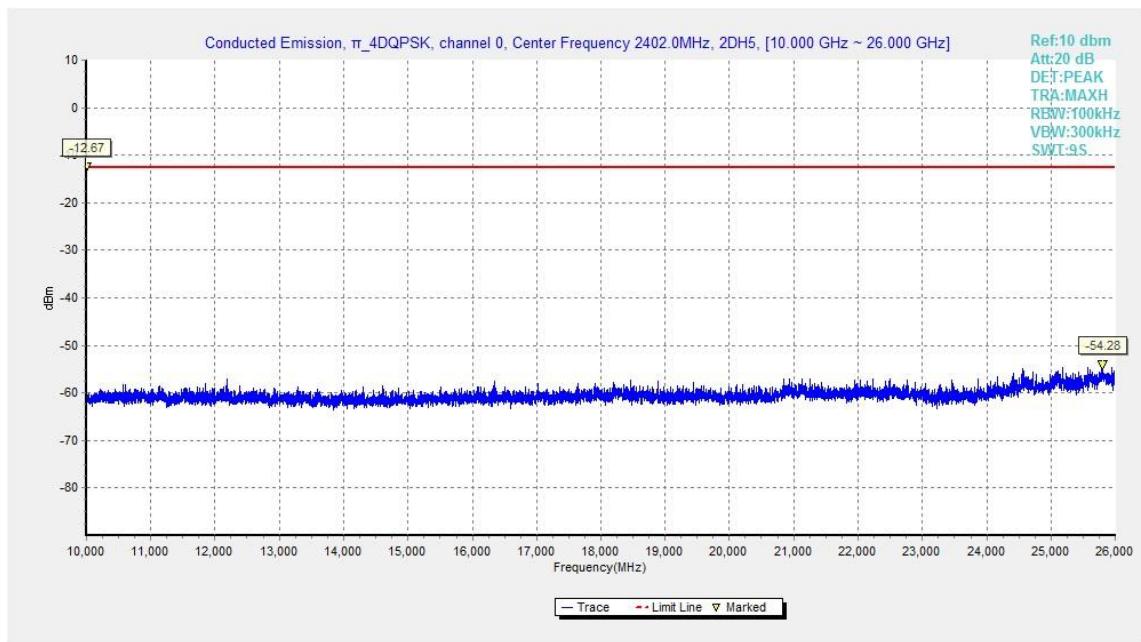


Fig.32. Conducted spurious emission: $\pi/4$ DQPSK, Channel 0, 10GHz - 26GHz

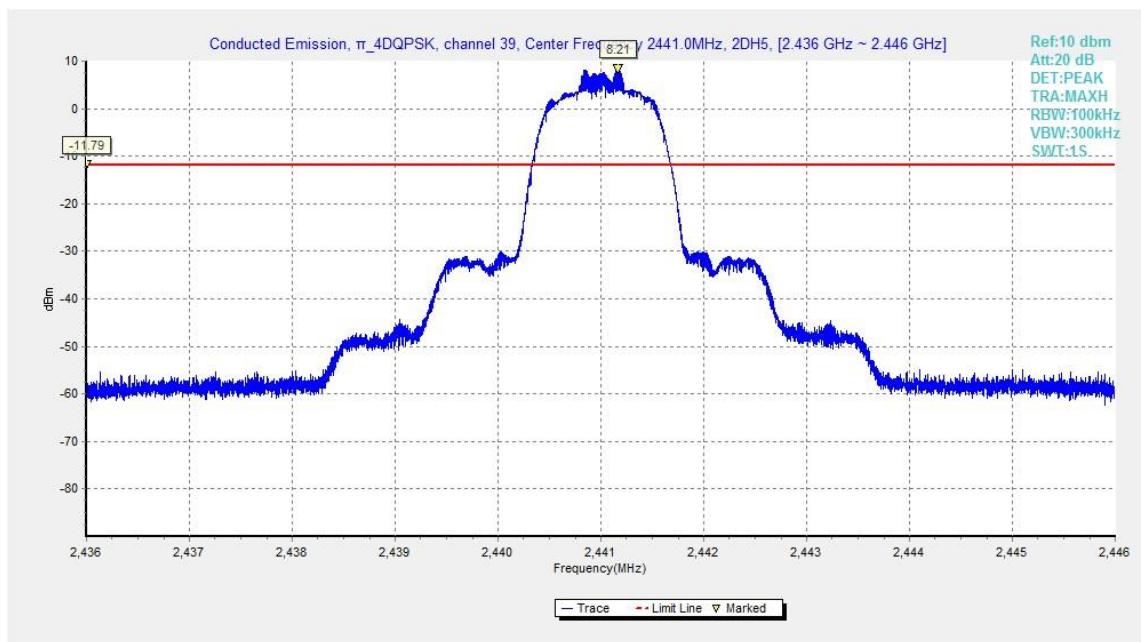


Fig.33. Conducted spurious emission: $\pi/4$ DQPSK, Channel 39, 2441MHz

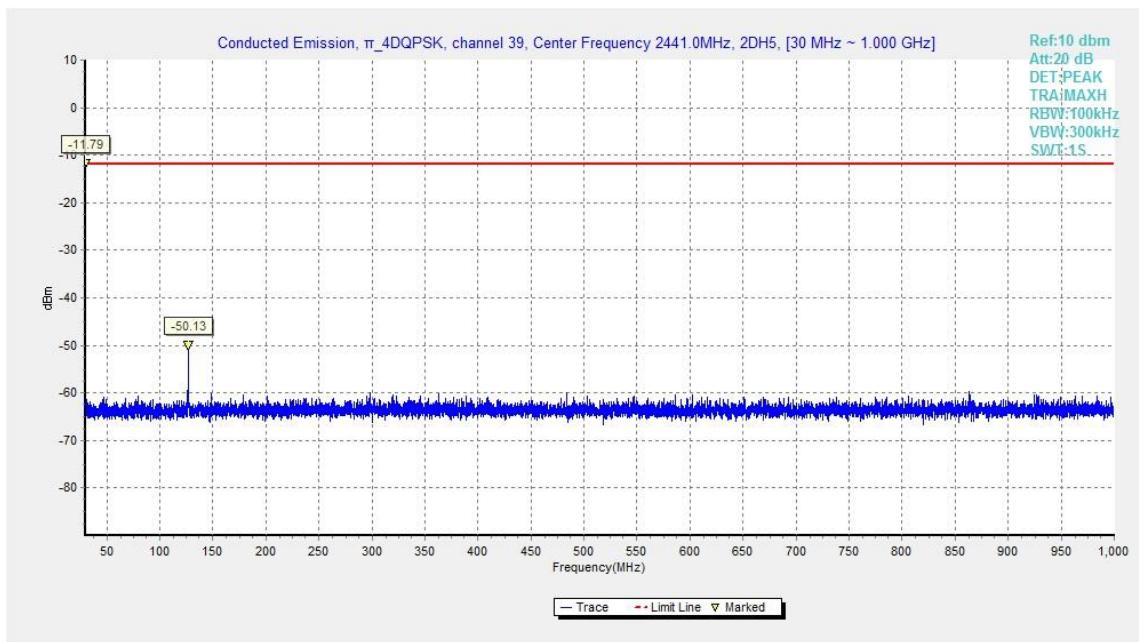


Fig.34. Conducted spurious emission: $\pi/4$ DQPSK, Channel 39, 30MHz - 1GHz

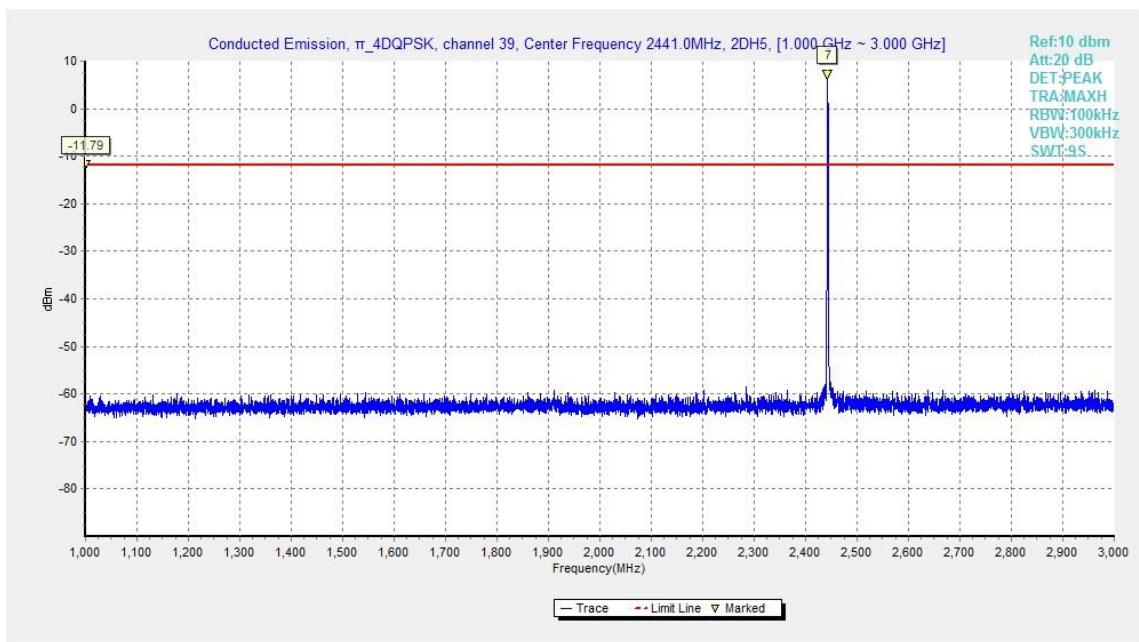


Fig.35. Conducted spurious emission: $\pi/4$ DQPSK, Channel 39, 1GHz - 3GHz

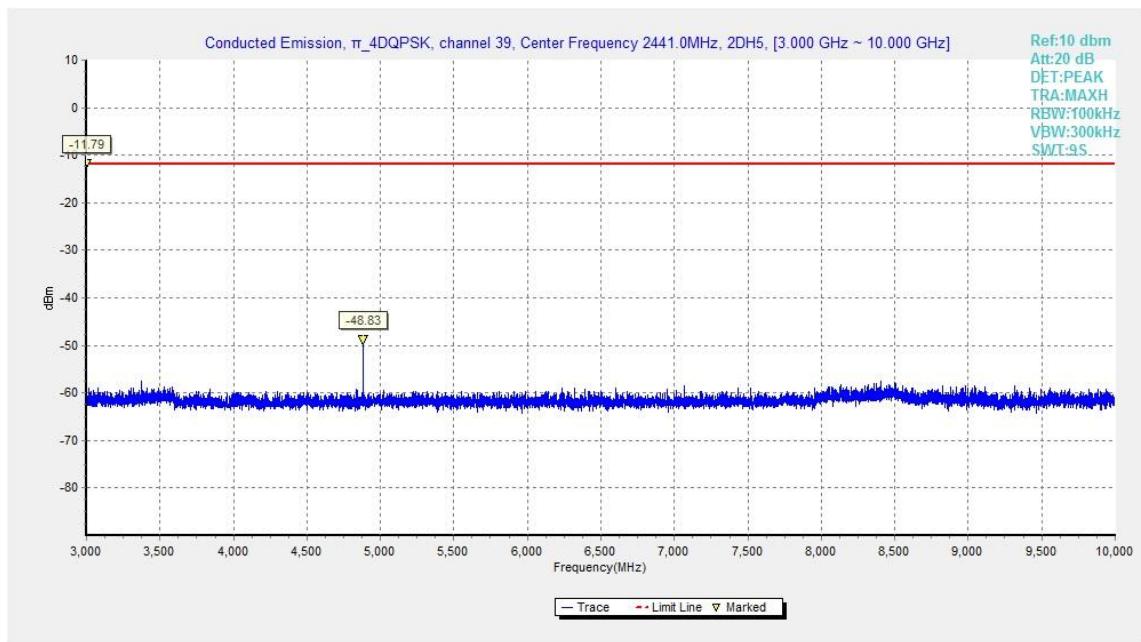


Fig.36. Conducted spurious emission: $\pi/4$ DQPSK, Channel 39, 3GHz - 10GHz

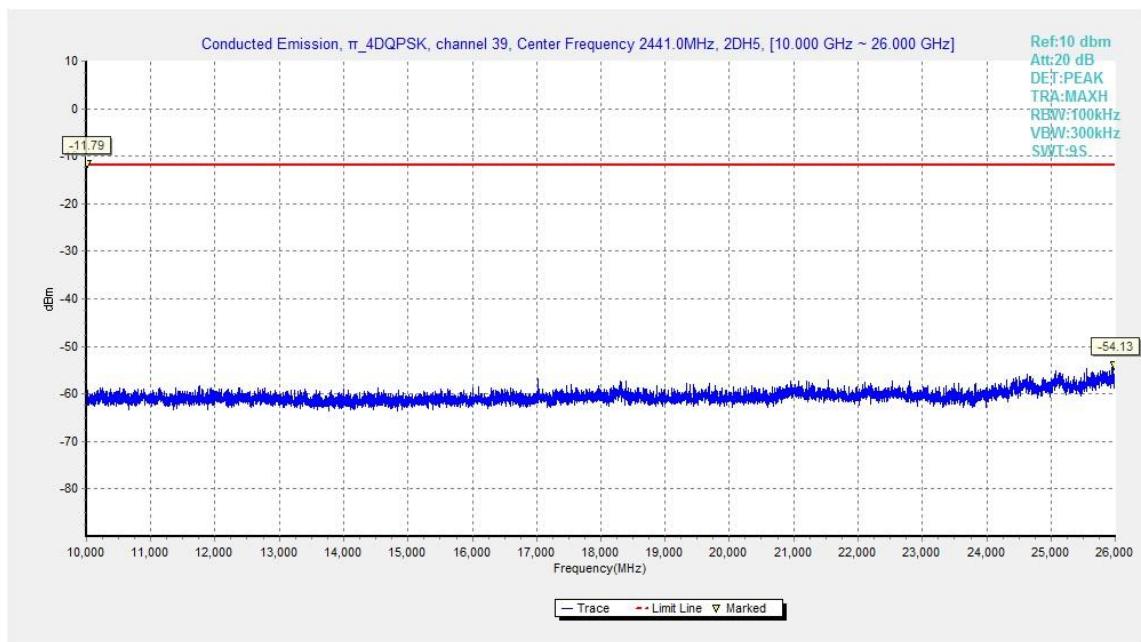


Fig.37. Conducted spurious emission: $\pi/4$ DQPSK, Channel 39, 10GHz – 26GHz

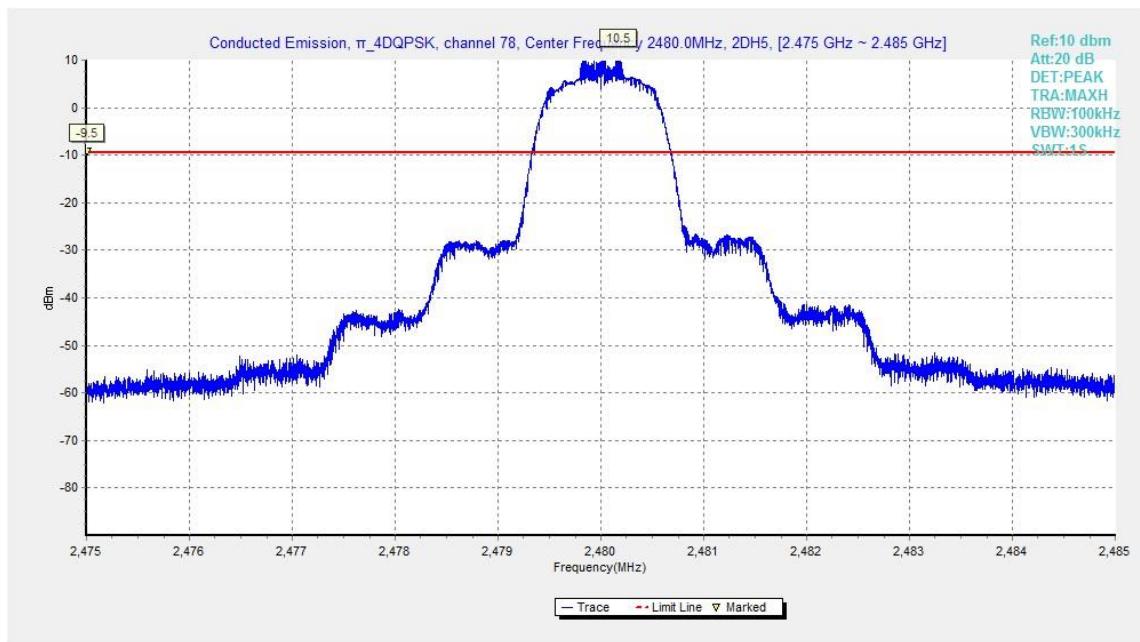


Fig.38. Conducted spurious emission: $\pi/4$ DQPSK, Channel 78, 2480MHz

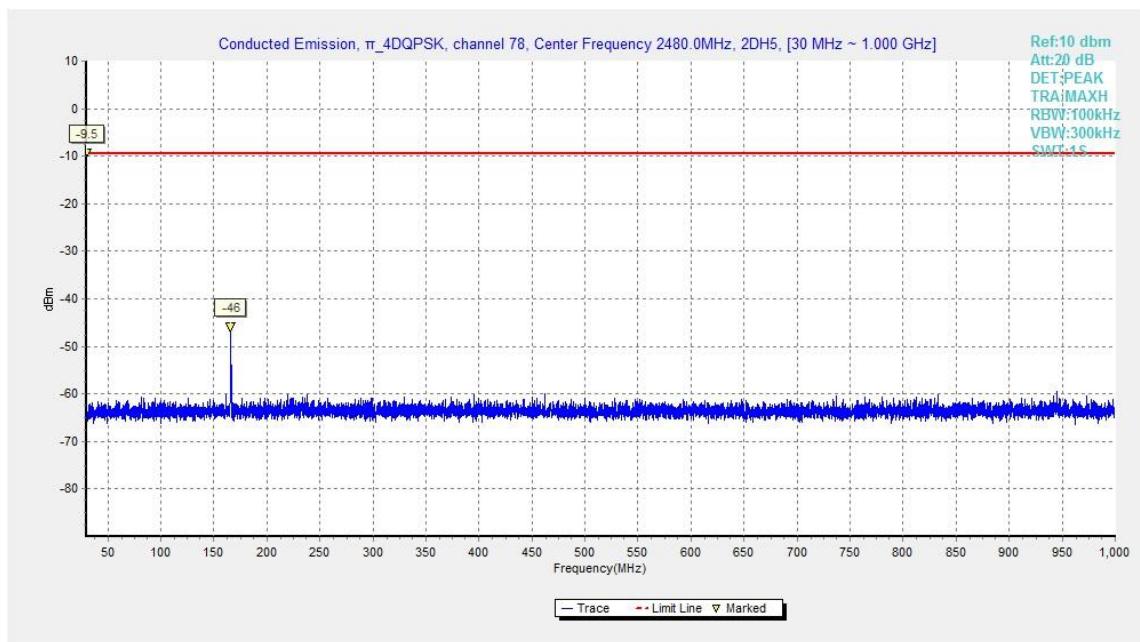


Fig.39. Conducted spurious emission: $\pi/4$ DQPSK, Channel 78, 30MHz - 1GHz

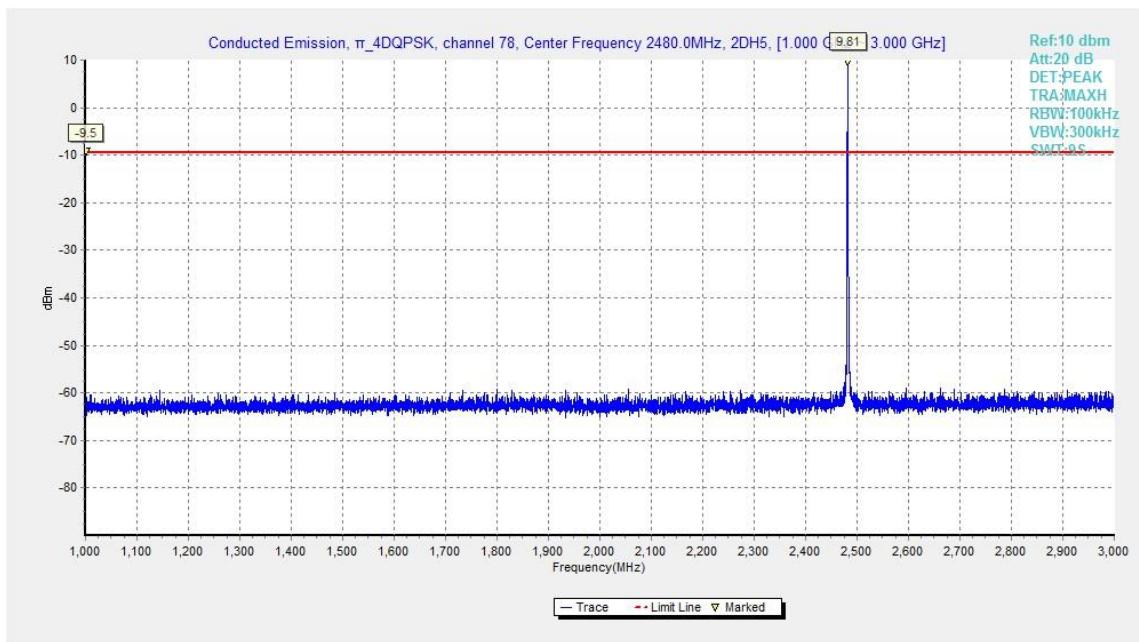


Fig.40. Conducted spurious emission: $\pi/4$ DQPSK, Channel 78, 1GHz - 3GHz

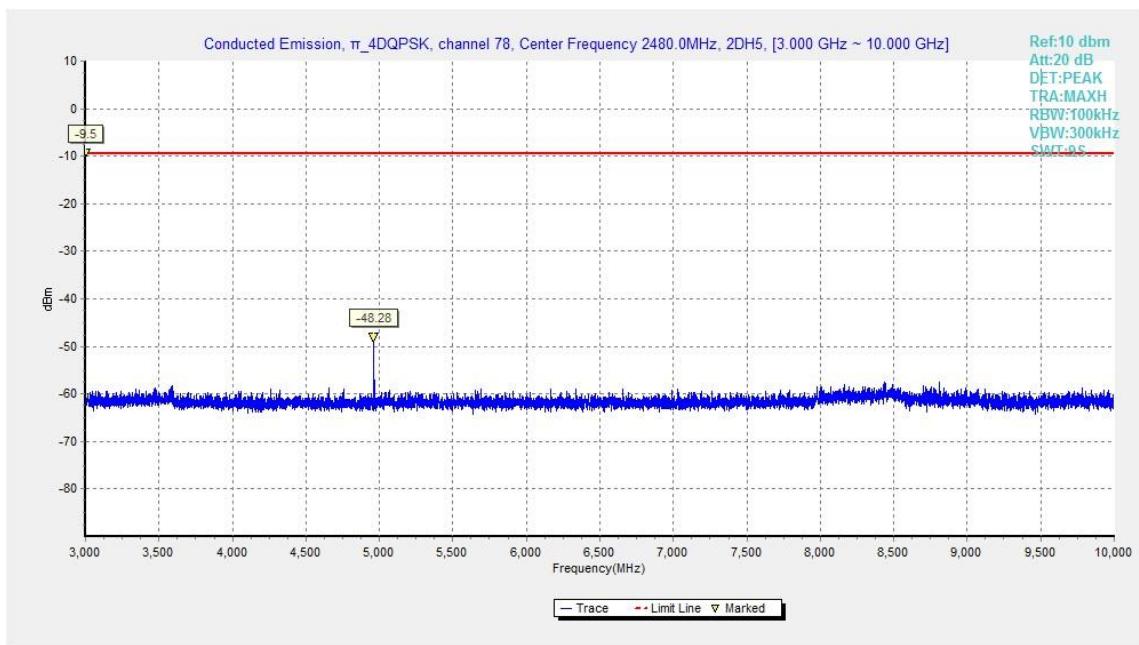


Fig.41. Conducted spurious emission: $\pi/4$ DQPSK, Channel 78, 3GHz - 10GHz

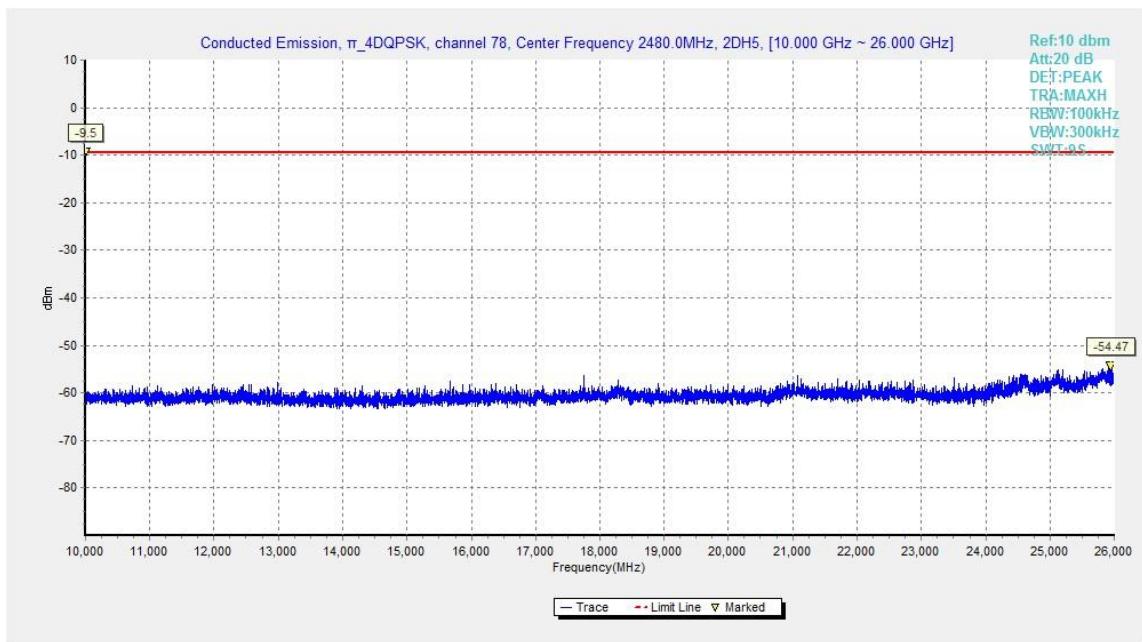


Fig.42. Fig.30 Conducted spurious emission: $\pi/4$ DQPSK, Channel 78, 10GHz - 26GHz

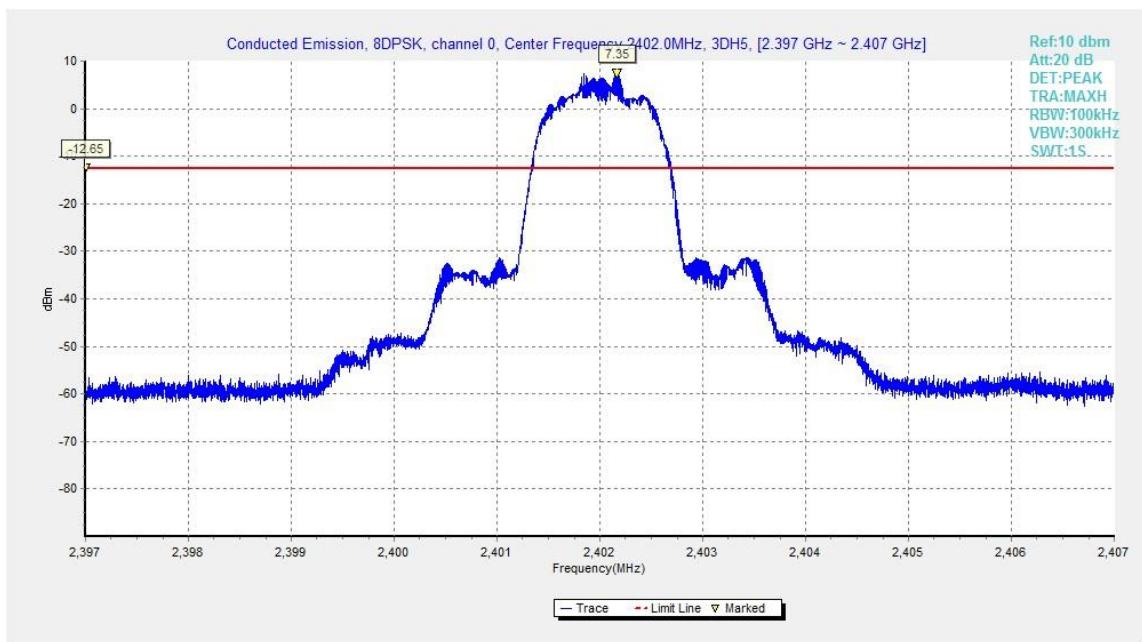


Fig.43. Conducted spurious emission: 8DPSK, Channel 0, 2402MHz

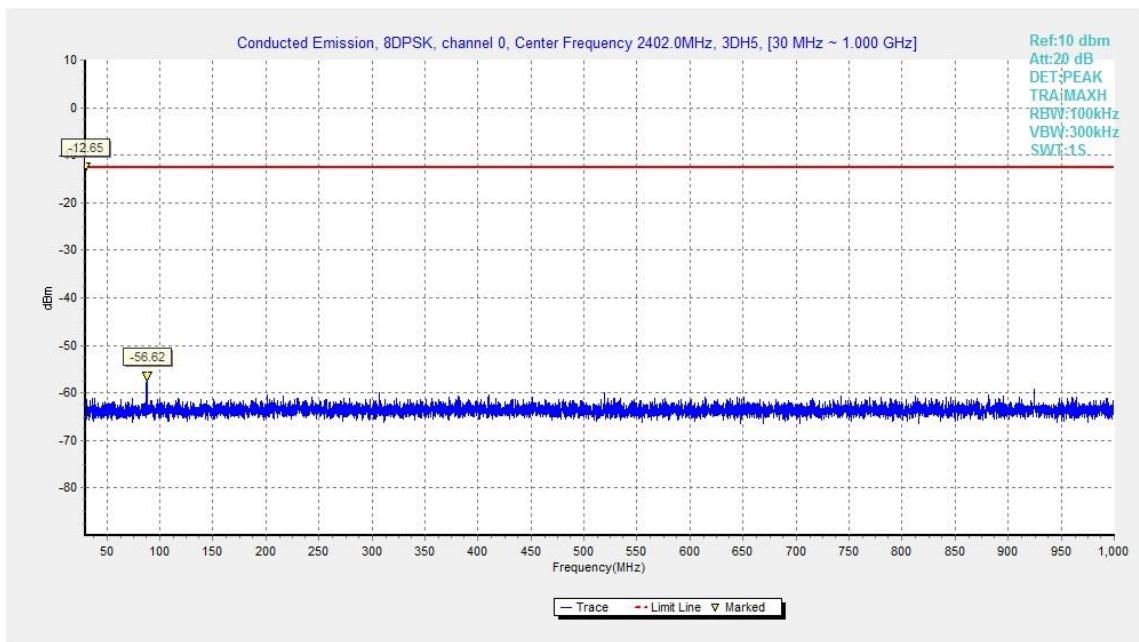


Fig.44. Conducted spurious emission: 8DPSK, Channel 0, 30MHz - 1GHz

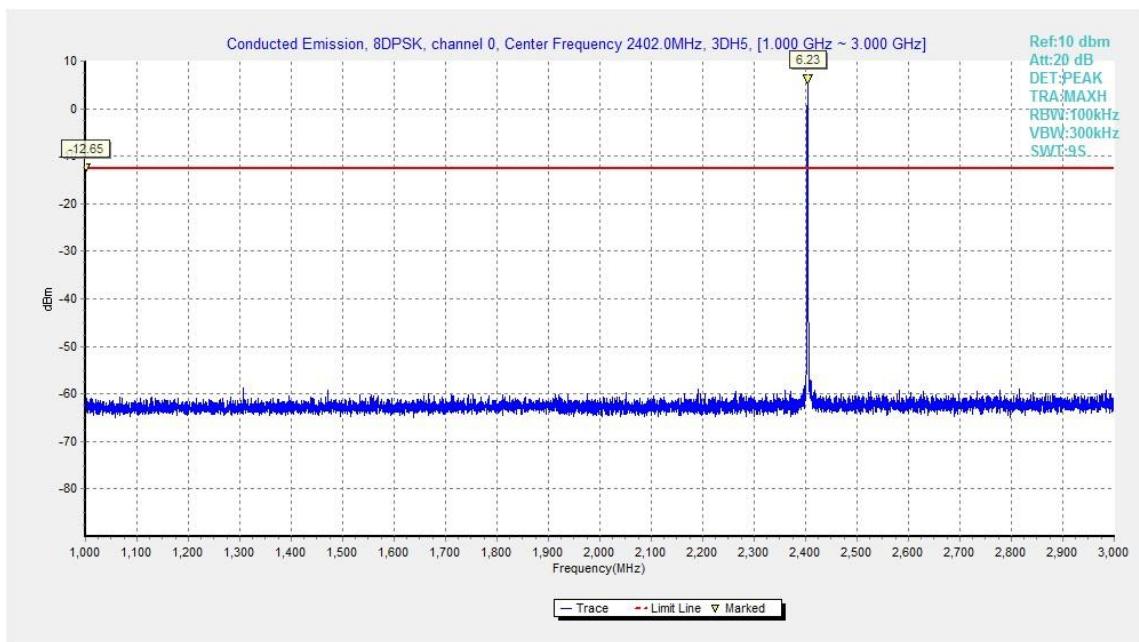


Fig.45. Conducted spurious emission: 8DPSK, Channel 0, 1GHz - 3GHz

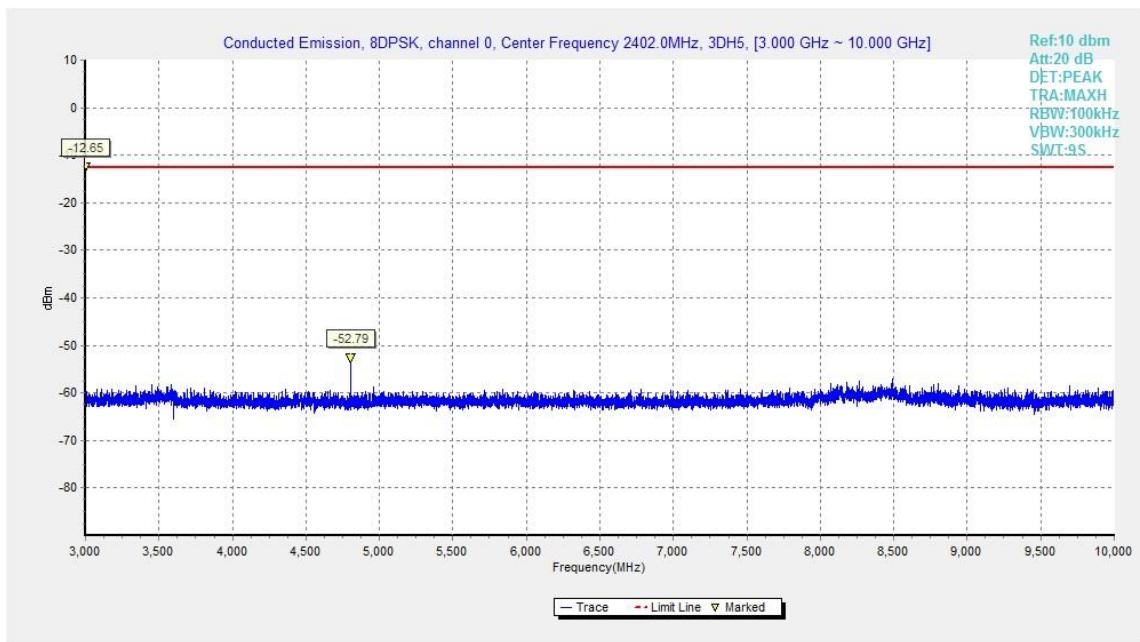


Fig.46. Conducted spurious emission: 8DPSK, Channel 0, 3GHz - 10GHz

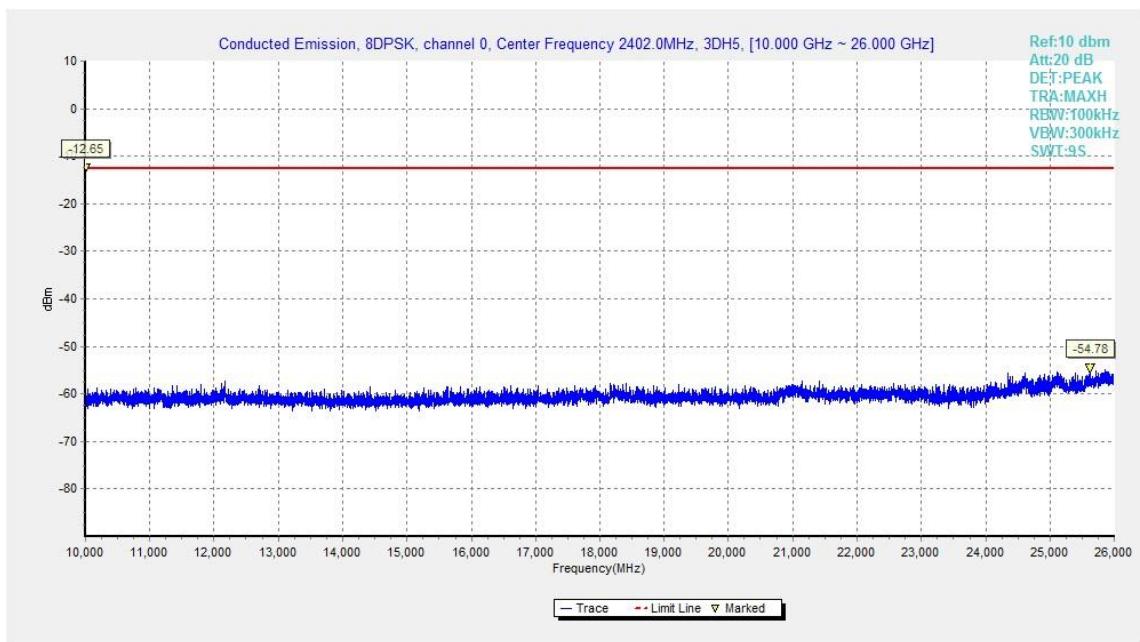


Fig.47. Conducted spurious emission: 8DPSK, Channel 0, 10GHz - 26GHz

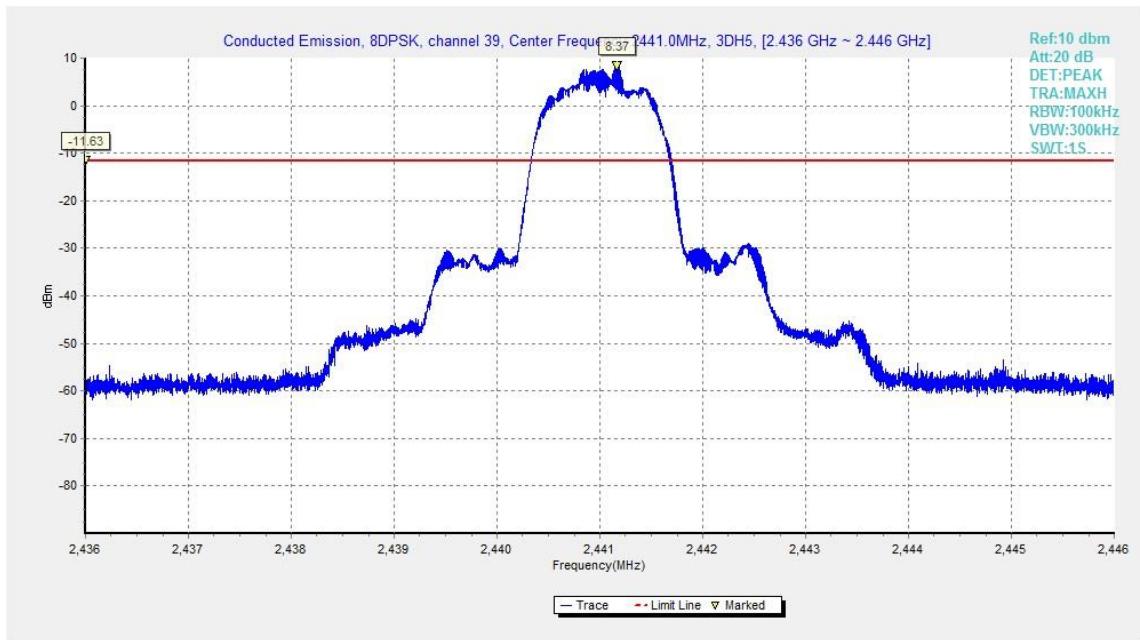


Fig.48. Conducted spurious emission: 8DPSK, Channel 39, 2441MHz

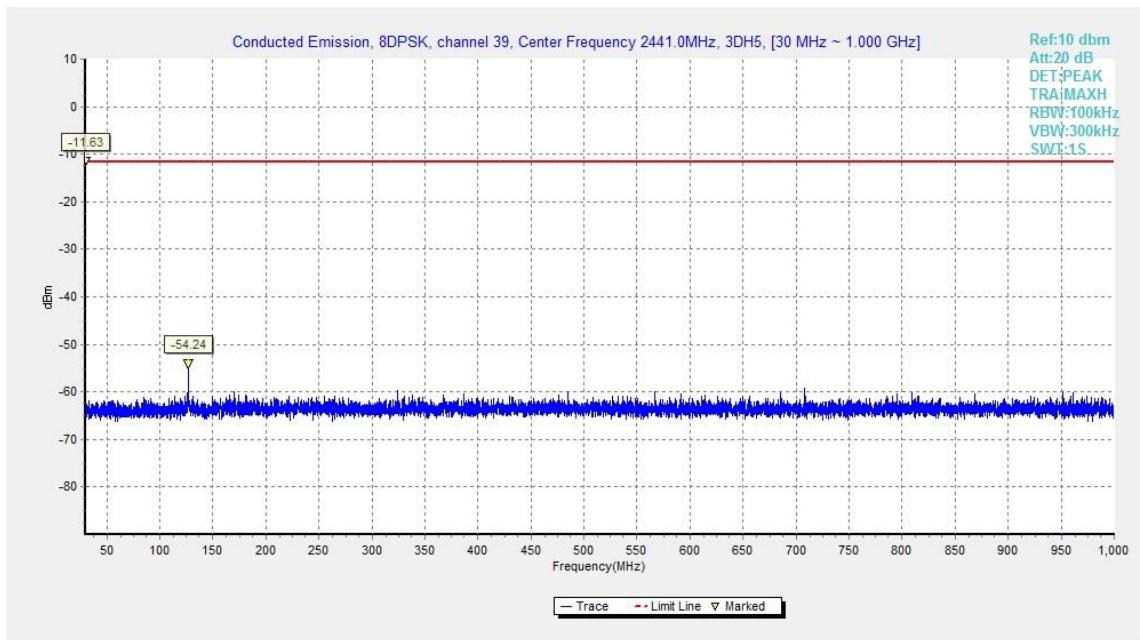


Fig.49. Conducted spurious emission: 8DPSK, Channel 39, 30MHz - 1GHz

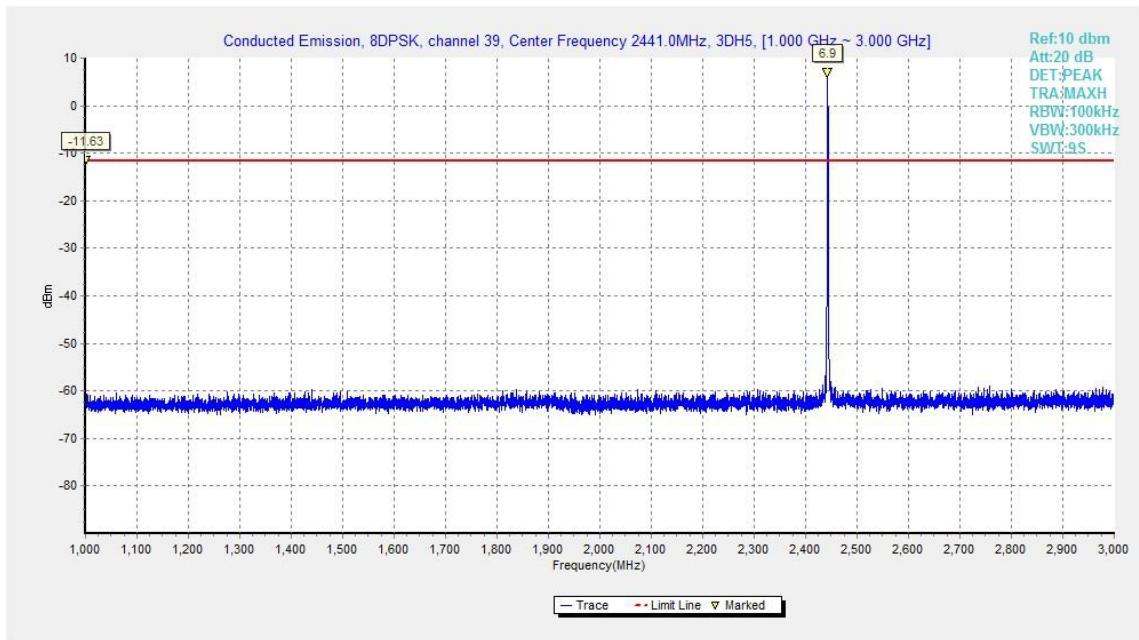


Fig.50. Conducted spurious emission: 8DPSK, Channel 39, 1GHz - 3GHz

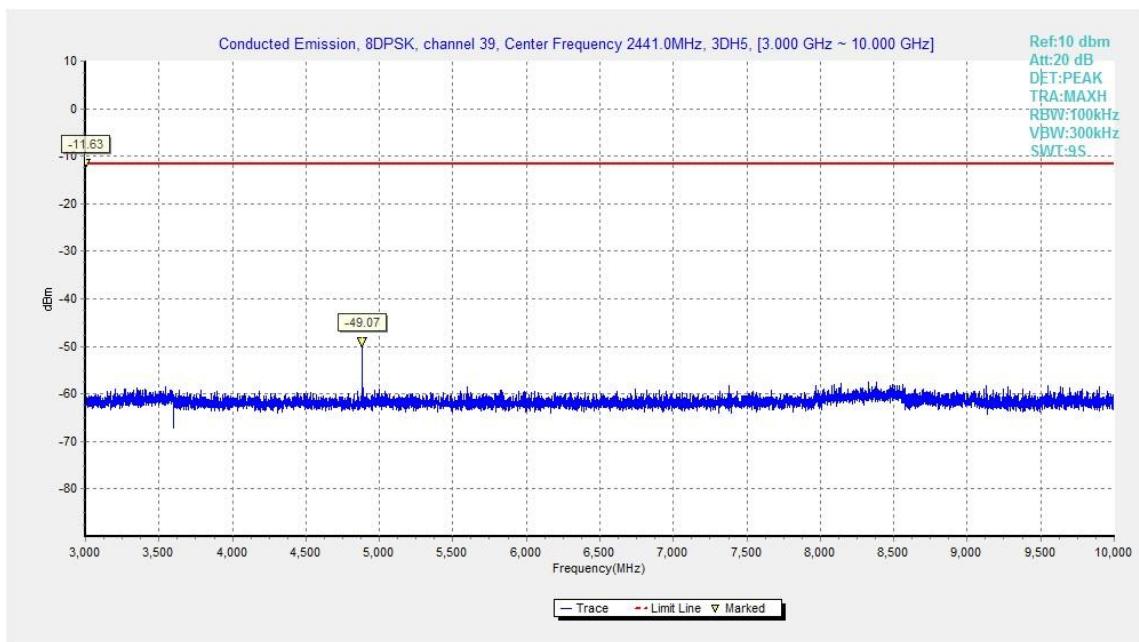


Fig.51. Conducted spurious emission: 8DPSK, Channel 39, 3GHz - 10GHz

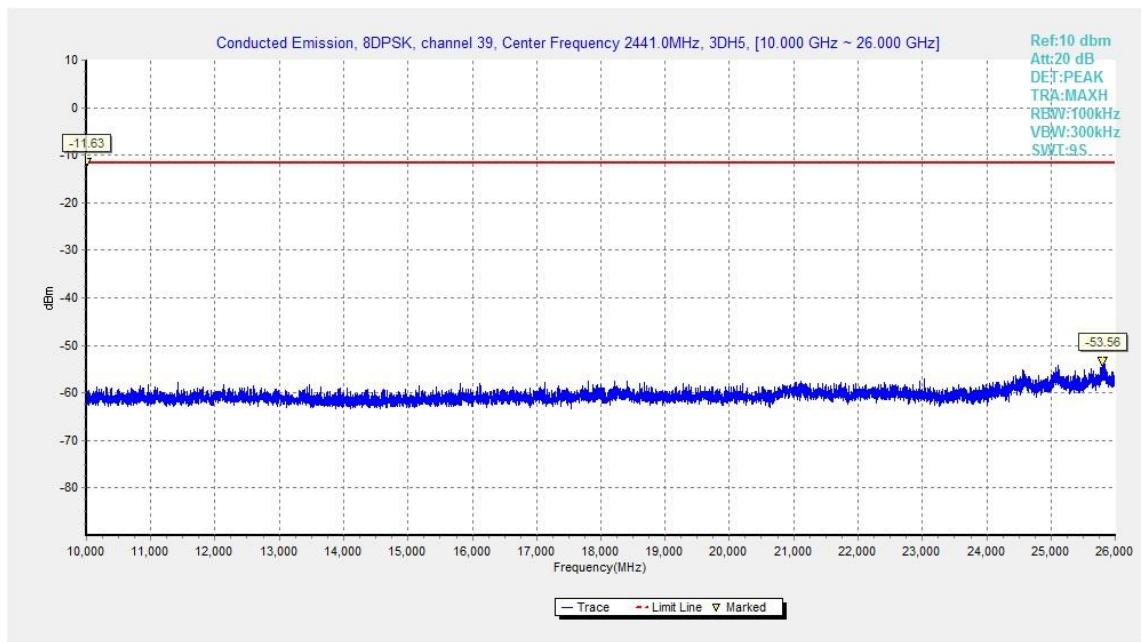


Fig.52. Conducted spurious emission: 8DPSK, Channel 39, 10GHz – 26GHz

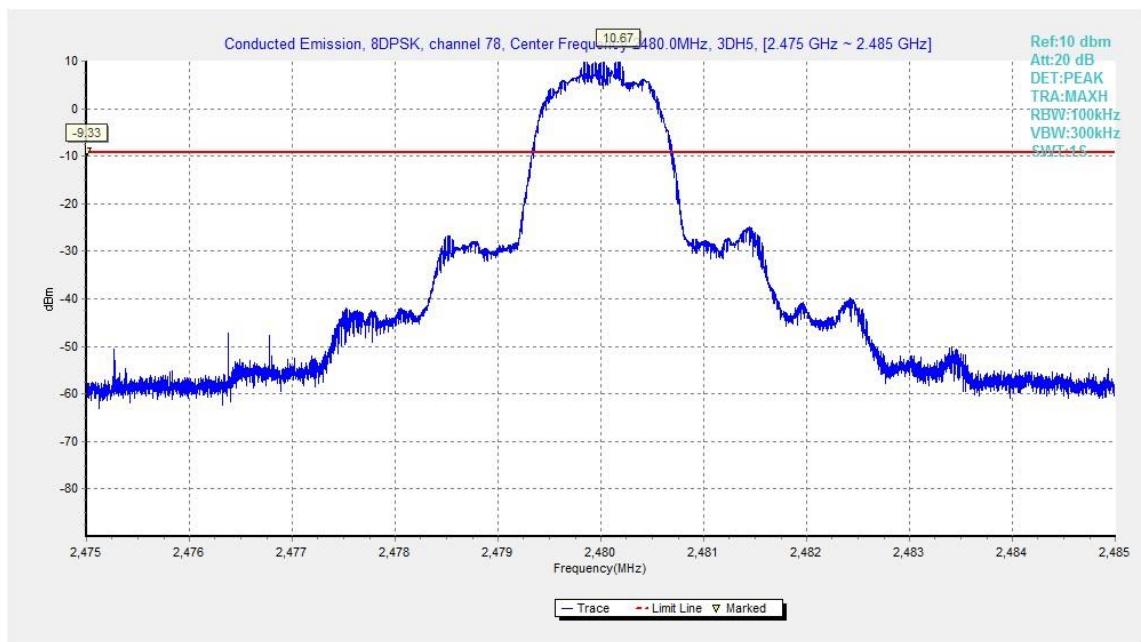


Fig.53. Conducted spurious emission: 8DPSK, Channel 78, 2480MHz

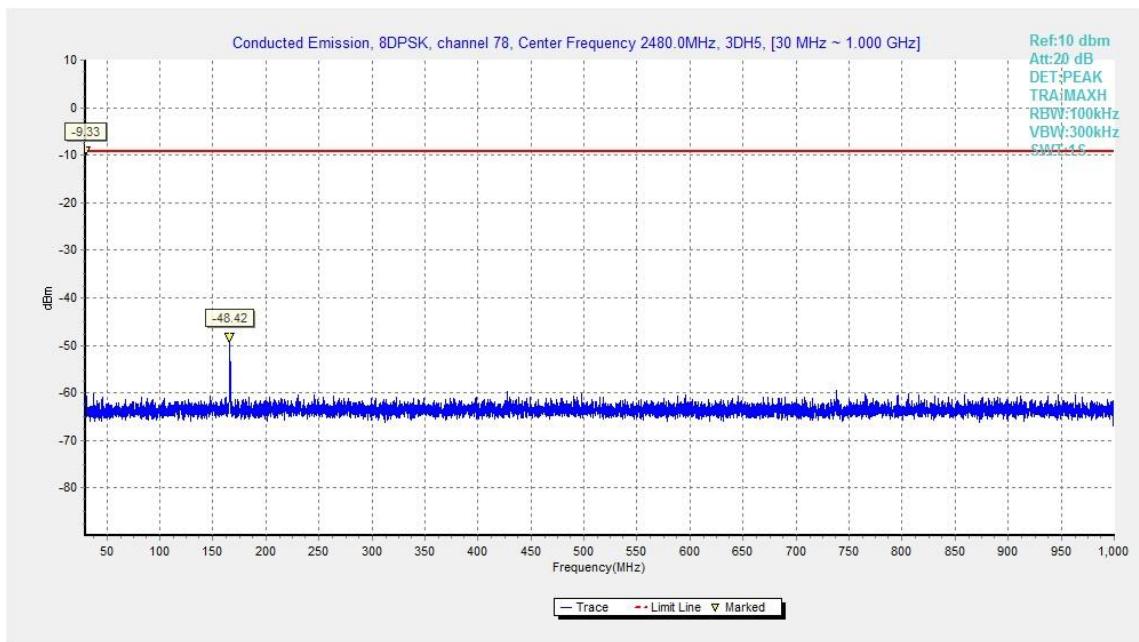


Fig.54. Conducted spurious emission: 8DPSK, Channel 78, 30MHz - 1GHz

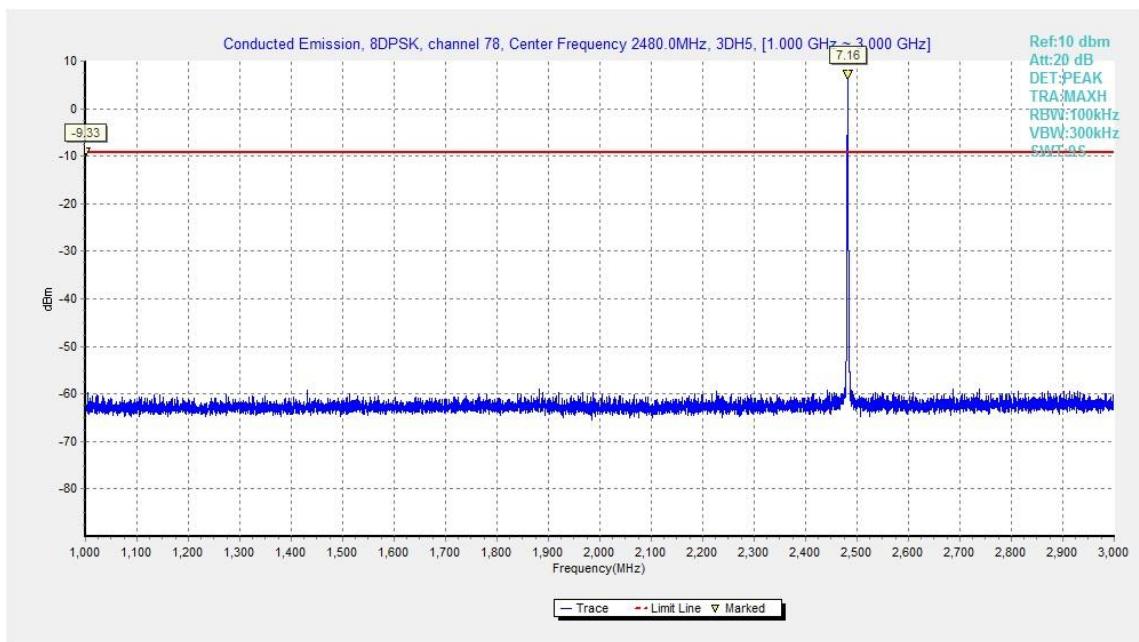


Fig.55. Conducted spurious emission: 8DPSK, Channel 78, 1GHz - 3GHz

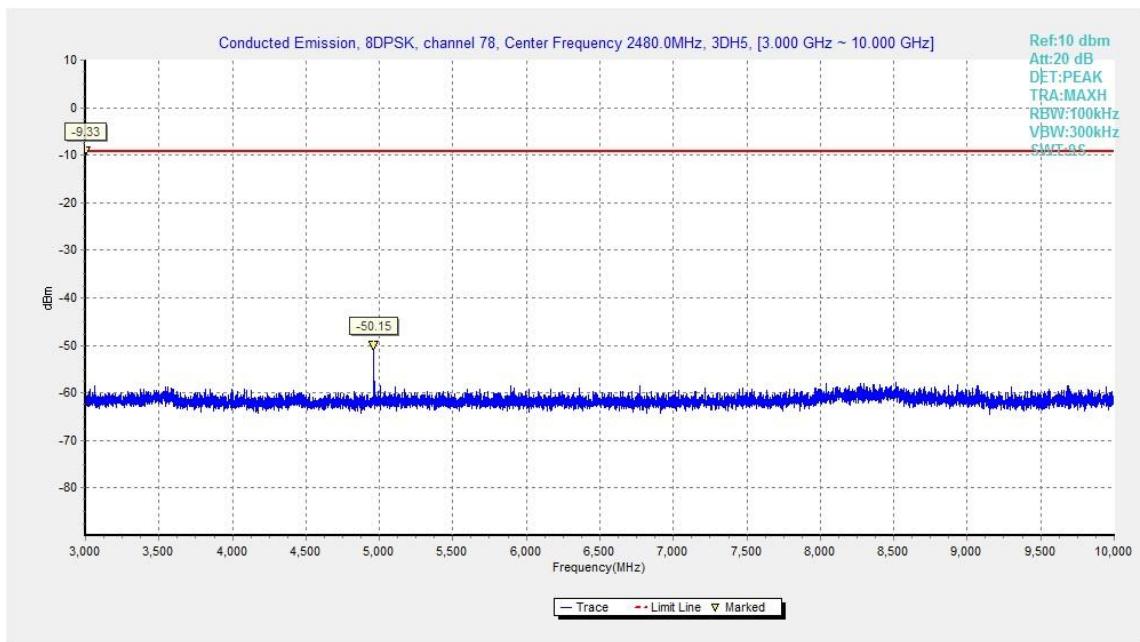


Fig.56. Conducted spurious emission: 8DPSK, Channel 78, 3GHz - 10GHz

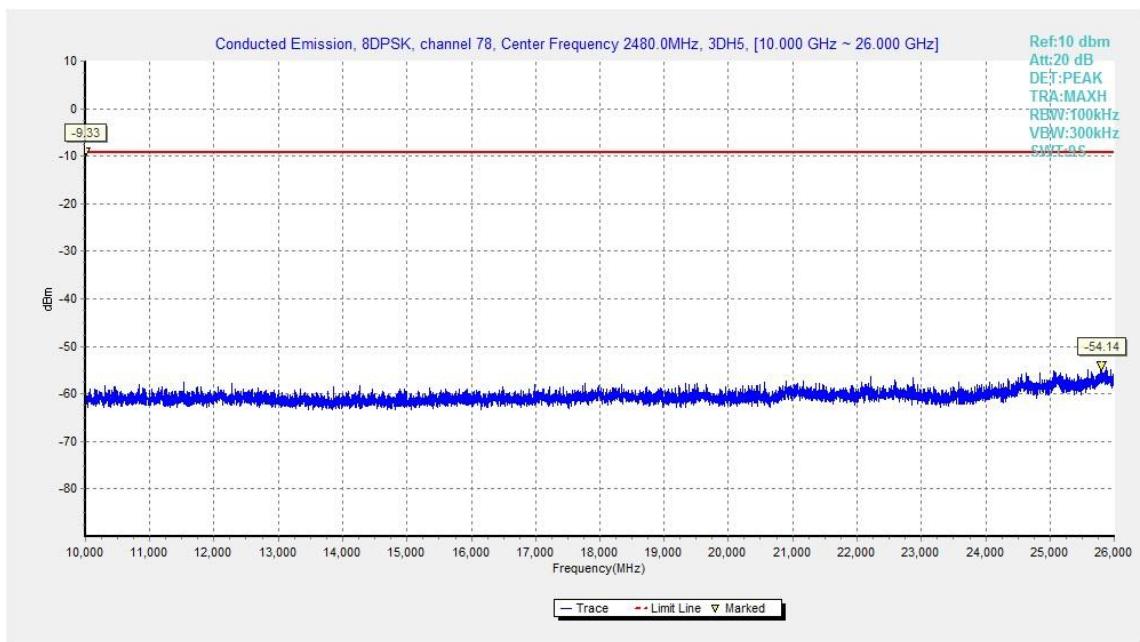


Fig.57. Conducted spurious emission: 8DPSK, Channel 78, 10GHz - 26GHz

A.5. Radiated Emission

Measurement Limit:

| Standard | Limit |
|--|------------------------------|
| FCC 47 CFR Part 15.247, 15.205, 15.209 | 20dB below peak output power |

In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

The measurement is made according to ANSI C63.10

Limit in restricted band:

| Frequency of emission (MHz) | Field strength(uV/m) | Field strength(dBuV/m) |
|-----------------------------|----------------------|------------------------|
| 30-88 | 100 | 40 |
| 88-216 | 150 | 43.5 |
| 216-960 | 200 | 46 |
| Above 960 | 500 | 54 |

Test Condition

The EUT was placed on a non-conductive table. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

| Frequency of emission (MHz) | RBW/VBW | Sweep Time(s) |
|-----------------------------|---------------|---------------|
| 30-1000 | 100KHz/300KHz | 5 |
| 1000-4000 | 1MHz/1MHz | 15 |
| 4000-18000 | 1MHz/1MHz | 40 |
| 18000-26500 | 1MHz/1MHz | 20 |

Measurement Results:

$$\text{Result} = P_{\text{Mea}} + \text{ARPL}$$

For GFSK

| Channel | Frequency Range | Test Results | Conclusion |
|---------|--------------------|--------------|------------|
| Power | 2.38GHz~2.4GHz---L | Fig.58 | P |
| Power | 2.45GHz~2.5GHz---H | Fig.59 | P |

For π/4 DQPSK

| Channel | Frequency Range | Test Results | Conclusion |
|---------|--------------------|--------------|------------|
| Power | 2.38GHz~2.4GHz---L | Fig.60 | P |
| Power | 2.45GHz~2.5GHz---H | Fig.61 | P |

For 8DPSK

| Channel | Frequency Range | Test Results | Conclusion |
|---------|--------------------|--------------|------------|
| Power | 2.38GHz~2.4GHz---L | Fig.62 | P |
| Power | 2.45GHz~2.5GHz---H | Fig.63 | P |