# FCC PART 15.247
# TEST REPORT

For

## Mobile commodity corporation

20955 Pathfinder Road, Suite 200 Diamond bar, California 91765, United States

**FCC ID: 2AF6M3396993M136**

| **Report Type:** | **Product Type:** |
|---|---|
| Original Report | GSM Mobile Phone |

| | |
|---|---|
| **Test Engineer:** | William Li |
| **Report Number:** | RSZ150925002-00B |
| **Report Date:** | 2015-10-15 |
| **Reviewed By:** | Jimmy Xiao<br>RF Engineer |
| **Prepared By:** | Bay Area Compliance Laboratories Corp. (Shenzhen)<br>6/F, the 3rd Phase of WanLi Industrial Building<br>ShiHua Road, FuTian Free Trade Zone<br>Shenzhen, Guangdong, China<br>Tel: +86-755-33320018<br>Fax: +86-755-33320008<br>www.baclcorp.com.cn |

# TABLE OF CONTENTS

# GENERAL INFORMATION

## Product Description for Equipment under Test (EUT)

The *Mobile commodity corporation* 's product, model number: *M136 (FCC ID: 2AF6M3396993M136)* or the "EUT" in this report was a *GSM Mobile Phone,* which was measured approximately: 114 mm (L) × 47 mm (W) × 13 mm (H), rated with input voltage: DC 3.7 V rechargeable Li-ion battery or DC 5 V from adapter.

Adapter Information:
Input: AC100~240V
Output: DC 5.0V, 500mA

**All measurement and test data in this report was gathered from production sample serial number: 1506610 (Assigned by Shenzhen BACL).The EUT supplied by the applicant was received on 2015-09-25.*

## Objective

This test report is prepared on behalf of *Mobile commodity corporation i*n accordance with Part 2-Subpart J, Part 15-Subparts A, B and C of the Federal Communication Commissions rules.

The tests were performed in order to determine compliance with FCC Part 15, Subpart C, section 15.203, 15.205, 15.207, 15.209 and 15.247 rules.

## Related Submittal(s)/Grant(s)

FCC Part 22H&24E PCE and Part 15B JBP submissions with FCC ID: 2AF6M3396993M136.

## Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

All emissions measurement was performed at Bay Area Compliance Laboratories Corp. (Shenzhen). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Measurement uncertainty with radiated emission is 5.91 dB for 30MHz-1GHz, and 4.92 dB for above 1GHz, 1.95dB for conducted measurement.

## Test Facility

The test site used by Bay Area Compliance Laboratories Corp. (Shenzhen) to collect test data is located on the 6/F, the 3rd Phase of WanLi Industrial Building, ShiHua Road, FuTian Free Trade Zone Shenzhen, Guangdong, China.

Test site at Bay Area Compliance Laboratories Corp. (Shenzhen) has been fully described in reports submitted to the Federal Communication Commission (FCC). The details of these reports have been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on October 31, 2013. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.10-2013.

The Federal Communications Commission has the reports on file and is listed under FCC Registration No.: 382179. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

# SYSTEM TEST CONFIGURATION

### Description of Test Configuration

The system was configured for testing in an engineering mode.

### EUT Exercise Software

N/A

### Special Accessories

No special accessory.

### Equipment Modifications

No modification was made to the EUT tested.

## Support Equipment List and Details

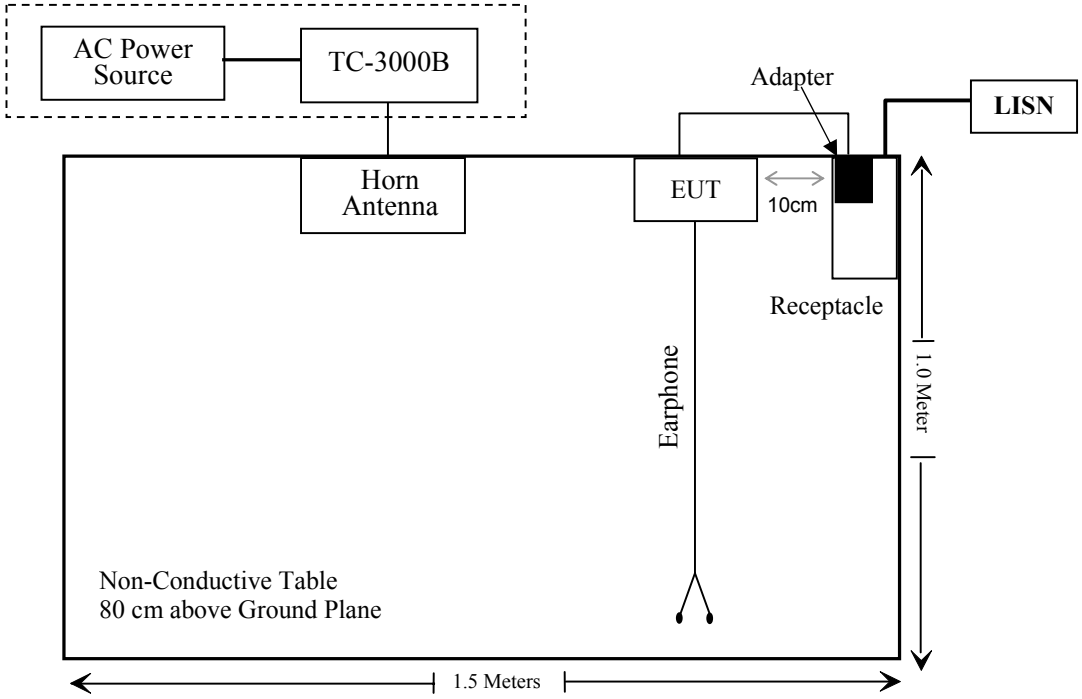
| Manufacturer | Description | Model | Serial Number |
|---|---|---|---|
| TESCOM | Bluetooth Tester | TC-3000B | 3000B630010 |

## External I/O Cable

| Cable Description | Length (m) | From Port | To |
|---|---|---|---|
| Un-shielding Detachable Adapter DC Cable | 1.0 | EUT | Adapter |
| Un-shielding Un-detachable Earphone Cable | 1.2 | EUT | Earphone |

## Block Diagram of Test Setup

For conducted emission



# SUMMARY OF TEST RESULTS

| FCC Rules | Description of Test | Result |
|---|---|---|
| §15.247 (i), §2.1093 | RF Exposure | Compliance |
| §15.203 | Antenna Requirement | Compliance |
| §15.207(a) | AC Line Conducted Emissions | Compliance |
| §15.205, §15.209 & §15.247(d) | Radiated Emissions | Compliance |
| §15.247(a)(1) | 20 dB Emission Bandwidth | Compliance |
| §15.247(a)(1) | Channel Separation Test | Compliance |
| §15.247(a)(1)(iii) | Time of Occupancy (Dwell Time) | Compliance |
| §15.247(a)(1)(iii) | Quantity of hopping channel Test | Compliance |
| §15.247(b)(1) | Peak Output Power Measurement | Compliance |
| §15.247(d) | Band edges | Compliance |

# FCC§15.247 (i), §1.1307 (b) (1) &§2.1093 – RF EXPOSURE

## Applicable Standard

According to FCC §2.1093 and §1.1307(b) (1), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

According to KDB 447498 D01 General RF Exposure Guidance

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:
[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] · [√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where
1. f(GHz) is the RF channel transmit frequency in GHz.
2. Power and distance are rounded to the nearest mW and mm before calculation.
3. The result is rounded to one decimal place for comparison.
4. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test Exclusion.

For worst case:

The Max Peak Output Power: 5.50dBm=3.55mW
(3.55/5)* √2.480=1.12<3.0

**Result: No SAR test is required**

# FCC §15.203 – ANTENNA REQUIREMENT

## Applicable Standard

According 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.

## Antenna Connector Construction

The EUT has one internal antenna arrangement for bluetooth, which was permanently attached and the antenna gain is 0.4 dBi, fulfill the requirement of this section. Please refer to the EUT photos.

**Result:** Compliance.

# FCC §15.207 (a) – AC LINE CONDUCTED EMISSIONS

## Applicable Standard

FCC §15.207(a)

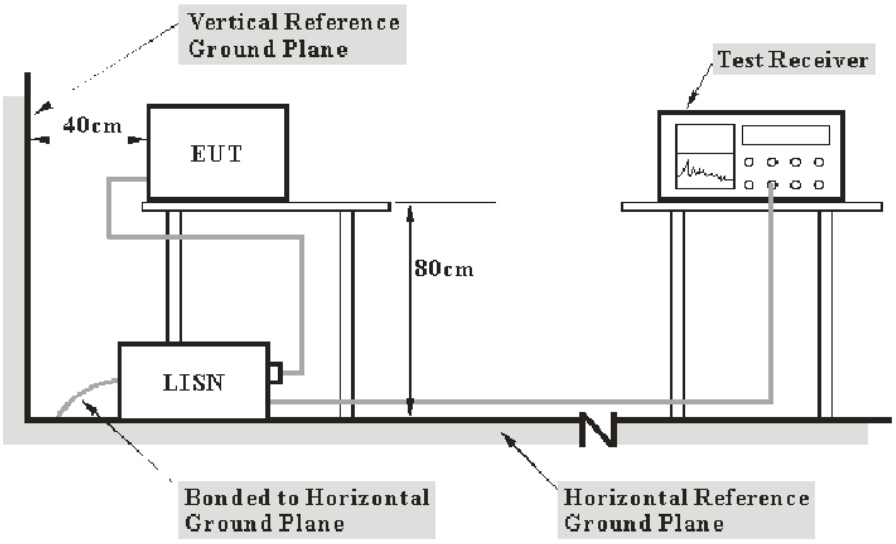
## Measurement Uncertainty

Input quantities to be considered for conducted disturbance measurements maybe receiver reading, attenuation of the connection between LISN and receiver, LISN voltage division factor, LISN VDF frequency interpolation and receiver related input quantities, etc.

Based on CISPR 16-4-2:2011, the expended combined standard uncertainty of conducted disturbance test at Bay Area Compliance Laboratories Corp. (Shenzhen) is shown as below. And the uncertainty will not be taken into consideration for the test data recorded in the report.

| Port | Expanded Measurement uncertainty |
|---|---|
| AC Mains | 3.26 dB (k=2, 95% level of confidence) |
| CAT 3 | 3.70 dB (k=2, 95% level of confidence) |
| CAT 5 | 3.86 dB (k=2, 95% level of confidence) |
| CAT 6 | 4.64 dB (k=2, 95% level of confidence) |

## EUT Setup




Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The measurement procedure of EUT setup is according with ANSI C63.10-2013. The related limit was specified in FCC Part 15.207.

The spacing between the peripherals was 10 cm.

The adapter was connected to a 120 VAC/60 Hz power source.

## EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

| Frequency Range | IF B/W |
|---|---|
| 150 kHz – 30 MHz | 9 kHz |

## Test Procedure

During the conducted emission test, the adapter was connected to the outlet of the LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All final data was recorded in the Quasi-peak and average detection mode.

## Test Equipment List and Details

| Manufacturer | Description | Model | Serial Number | Calibration Date | Calibration Due Date |
|---|---|---|---|---|---|
| Rohde & Schwarz | EMI Test Receiver | ESCS30 | 100176 | 2015-06-03 | 2016-06-02 |
| Rohde & Schwarz | LISN | ENV216 | 3560.6650.12-101613-Yb | 2014-12-01 | 2015-12-01 |
| Rohde & Schwarz | LISN | ESH2-Z5 | 892107/021 | 2015-06-09 | 2016-06-09 |
| Rohde & Schwarz | Transient Limiter | ESH3Z2 | DE25985 | 2015-05-14 | 2016-05-13 |
| Rohde & Schwarz | CE Test software | EMC 32 | V8.53 | NCR | NCR |

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

## Corrected Factor & Margin Calculation

The Corrected factor is calculated by adding LISN VDF (Voltage Division Factor), Cable Loss and Transient Limiter Attenuation. The basic equation is as follows:

Correction Factor = LISN VDF + Cable Loss + Transient Limiter Attenuation

The "**Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7 dB means the emission is 7 dB below the limit. The equation for margin calculation is as follows:

Margin = Limit – Corrected Amplitude

## Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Part 15.207, the worst margin reading as below:

**6.3 dB** at **7.793270 MHz** in the **Line** conducted mode

Refer to CISPR16-4-2:2011 and CISPR 16-4-1:2009, the measured level complies with the limit if

$$L_m + U_{(Lm)} \leq L_{lim} + U_{cispr}$$

In BACL, $U_{(Lm)}$ is less than $U_{cispr}$, if $L_m$ is less than $L_{lim}$, it implies that the EUT complies with the limit.

## Test Data

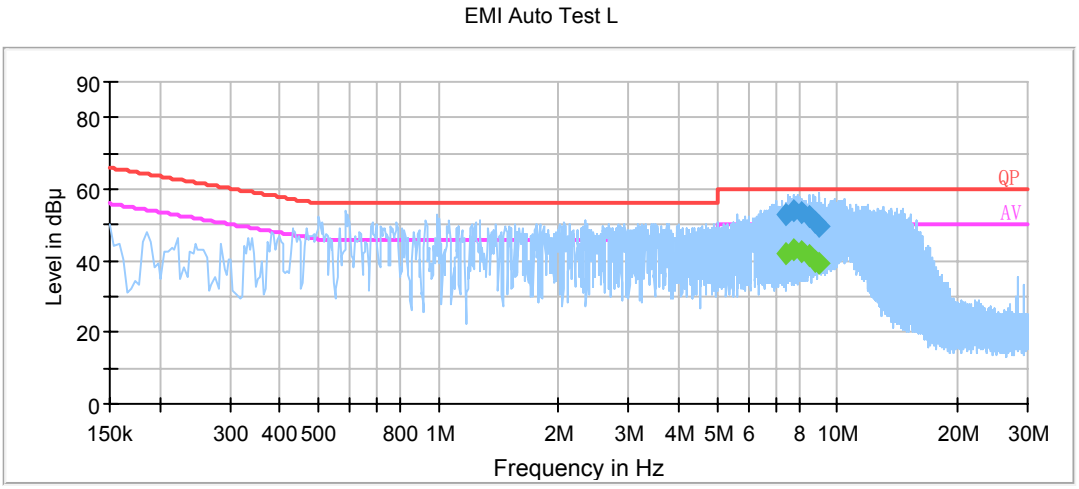
### Environmental Conditions

| | |
|---|---|
| **Temperature:** | 25 ℃ |
| **Relative Humidity:** | 51 % |
| **ATM Pressure:** | 101.0 kPa |

*The testing was performed by William Li on 2015-10-12.*

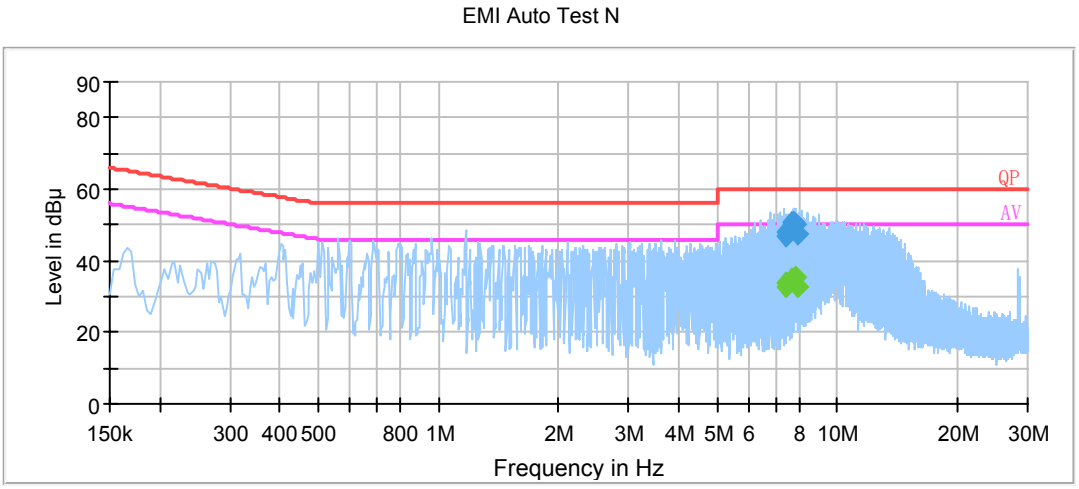
*EUT operation mode: Transmitting & Charging*

**AC 120V/60 Hz, Line**




| Frequency (MHz) | Corrected Amplitude (dBµV) | Correction Factor (dB) | Limit (dBµV) | Margin (dB) | Detector (PK/Ave./QP) |
|---|---|---|---|---|---|
| 7.453470 | 52.7 | 20.0 | 60.0 | 7.3 | QP |
| 7.453470 | 42.0 | 20.0 | 50.0 | 8.0 | Ave. |
| 7.793270 | 53.7 | 20.1 | 60.0 | 6.3 | QP |
| 7.793270 | 43.0 | 20.1 | 50.0 | 7.0 | Ave. |
| 8.102210 | 53.6 | 20.1 | 60.0 | 6.4 | QP |
| 8.102210 | 42.7 | 20.1 | 50.0 | 7.3 | Ave. |
| 8.466410 | 52.4 | 20.1 | 60.0 | 7.6 | QP |
| 8.466410 | 41.4 | 20.1 | 50.0 | 8.6 | Ave. |
| 8.799050 | 50.5 | 20.1 | 60.0 | 9.5 | QP |
| 8.799050 | 39.7 | 20.1 | 50.0 | 10.3 | Ave. |
| 9.047090 | 49.5 | 20.1 | 60.0 | 10.5 | QP |
| 9.047090 | 39.1 | 20.1 | 50.0 | 10.9 | Ave. |

**AC 120V/60 Hz, Neutral**




| Frequency (MHz) | Corrected Amplitude (dBµV) | Correction Factor (dB) | Limit (dBµV) | Margin (dB) | Detector (PK/Ave./QP) |
|---|---|---|---|---|---|
| 7.395330 | 46.9 | 20.0 | 60.0 | 13.1 | QP |
| 7.395330 | 32.8 | 20.0 | 50.0 | 17.2 | Ave. |
| 7.411990 | 47.8 | 20.0 | 60.0 | 12.2 | QP |
| 7.411990 | 34.0 | 20.0 | 50.0 | 16.0 | Ave. |
| 7.720430 | 50.8 | 20.1 | 60.0 | 9.2 | QP |
| 7.720430 | 35.1 | 20.1 | 50.0 | 14.9 | Ave. |
| 7.779770 | 50.5 | 20.1 | 60.0 | 9.5 | QP |
| 7.779770 | 34.8 | 20.1 | 50.0 | 15.2 | Ave. |
| 7.849210 | 50.2 | 20.1 | 60.0 | 9.8 | QP |
| 7.849210 | 35.3 | 20.1 | 50.0 | 14.7 | Ave. |
| 7.996230 | 47.4 | 20.1 | 60.0 | 12.6 | QP |
| 7.996230 | 32.7 | 20.1 | 50.0 | 17.3 | Ave. |

**Note:**
1) Correction Factor =LISN VDF (Voltage Division Factor) + Cable Loss + Transient Limiter Attenuation
2) Corrected Amplitude = Reading + Correction Factor
3) Margin = Limit – Corrected Amplitude

# FCC §15.205, §15.209 & §15.247(d) – RADIATED EMISSIONS

## Applicable Standard

FCC §15.205; §15.209; §15.247(d)

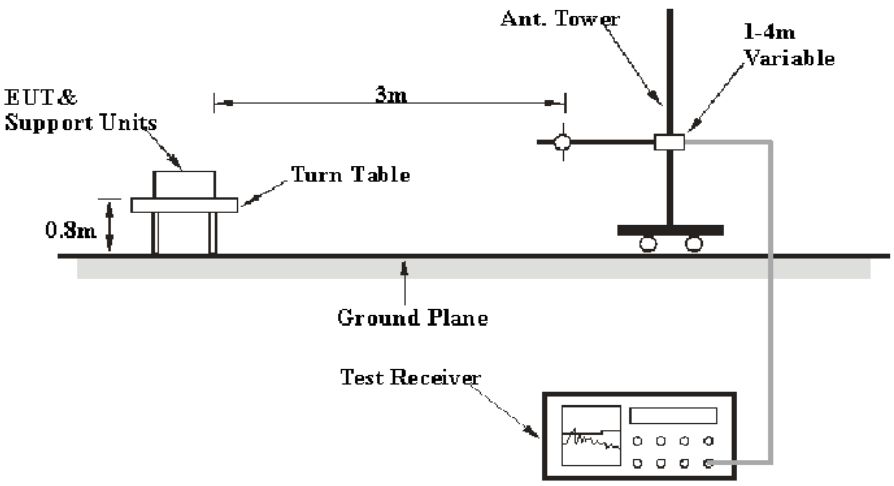
## Measurement Uncertainty

All measurements involve certain levels of uncertainties, especially in field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, antenna factor calibration, antenna directivity, antenna factor variation with height, antenna phase center variation, antenna factor frequency interpolation, measurement distance variation, site imperfections, mismatch (average), and system repeatability.

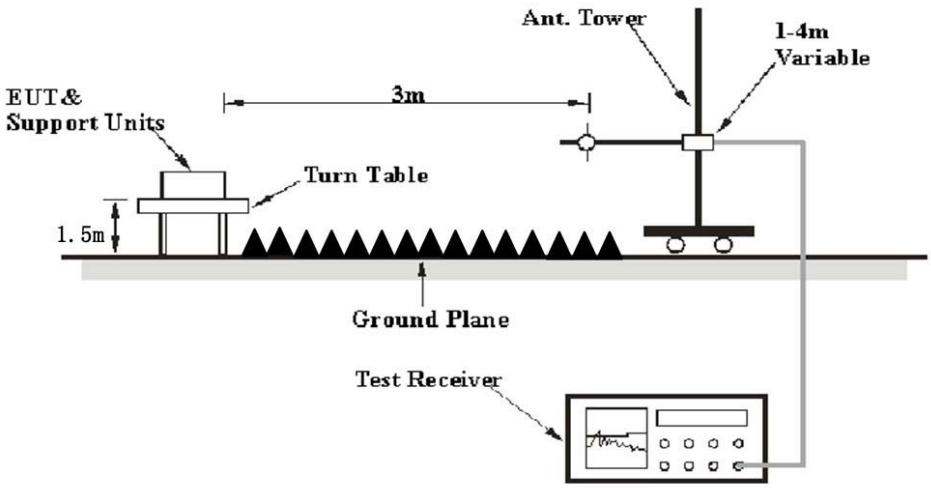
Based on CISPR 16-4-2:2011, the expended combined standard uncertainty of radiation emissions at Bay Area Compliance Laboratories Corp. (Shenzhen) is 5.91 dB for 30MHz-1GHz, and 4.92 dB for above 1GHz. And this uncertainty will not be taken into consideration for the test data recorded in the report.

## EUT Setup

**Below 1 GHz:**



**Above 1GHz:**




The radiated emission tests were performed in the 3 meters, using the setup accordance with the ANSI ANSI C63.10-2013. The specification used was the FCC 15.209 and FCC 15.247 limits.

The adapter was connected to a 120 VAC/60 Hz power source.

## EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 30 MHz to 25 GHz.

During the radiated emission test, the EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

| Frequency Range | RBW | Video B/W | IF B/W | Detector |
|---|---|---|---|---|
| 30 MHz – 1000 MHz | 100 kHz | 300 kHz | 120 kHz | QP |
| Above 1 GHz | 1 MHz | 3 MHz | / | PK |
| | 1 MHz | 10 Hz | / | Ave. |

## Test Procedure

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

All final data was recorded in Quasi-peak detection mode for frequency range of 30 MHz -1 GHz and peak and Average detection modes for frequencies above 1 GHz.

## Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

Corrected Amplitude = Meter Reading + Antenna Factor + Cable Loss - Amplifier Gain

The "**Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

Margin = Limit – Corrected Amplitude

## Test Equipment List and Details

| Manufacturer | Description | Model | Serial Number | Calibration Date | Calibration Due Date |
|---|---|---|---|---|---|
| HP | Amplifier | HP8447E | 1937A01046 | 2015-05-06 | 2016-05-05 |
| Rohde & Schwarz | EMI Test Receiver | ESCI | 101120 | 2014-11-03 | 2015-11-03 |
| Sunol Sciences | Bi-log Antenna | JB1 | A040904-2 | 2014-12-07 | 2017-12-06 |
| Mini | Amplifier | ZVA-183-S+ | 5969001149 | 2015-04-23 | 2016-04-22 |
| A.H. System | Horn Antenna | SAS-200/571 | 135 | 2015-02-10 | 2016-02-10 |
| Rohde & Schwarz | Signal Analyzer | FSIQ26 | 8386001028 | 2014-12-11 | 2015-12-11 |
| the electro-Mechanics Co. | Horn Antenna | 3116 | 9510-2270 | 2013-10-14 | 2016-10-13 |
| TDK | Chamber | Chamber A | 2# | 2012-10-15 | 2015-10-15 |
| TDK | Chamber | Chamber B | 1# | 2015-07-22 | 2016-07-22 |
| DUCOMMUN | Pre-amplifier | ALN-22093530-01 | 991373-01 | 2015-08-03 | 2016-08-03 |
| R&S | Auto test Software | EMC32 | V9.10 | NCR | NCR |

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

## Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Title 47, Part 15, Subpart C, section 15.205, 15.209 and 15.247.

**7.12 dB** at **9764.00 MHz** in the **Vertical** polarization for **Middle Channel**

Refer to CISPR16-4-2:2011 and CISPR 16-4-1:2009, the measured level complies with the limit if

$$L_{\mathrm{m}} + + \ U_{(L\mathrm{m})} \leq \ L_{\mathrm{lim}} + + \ U_{\mathrm{cispr}}$$

In BACL, $U_{(L\mathrm{m})}$ is less than + $U_{\mathrm{cispr}}$, if $L_{\mathrm{m}}$ is less than $L_{\mathrm{lim}}$, it implies that the EUT complies with the limit.

## Test Data

### Environmental Conditions

| | |
|---|---|
| **Temperature:** | 25 ℃ |
| **Relative Humidity:** | 51 % |
| **ATM Pressure:** | 101.0 kPa |

*The testing was performed by William Li on 2015-10-12.*

*EUT operation mode: Transmitting*

**30 MHz -25 GHz:** (*Scan with GFSK, π/4-DQPSK, 8-DPSK mode, the worst case is BDR Mode (GFSK)*)

| Frequency (MHz) | Receiver | | Turntable Degree | Rx Antenna | | Corrected Factor (dB) | Corrected Amplitude (dBμV/m) | FCC Part 15.247/205/209 | |
|---|---|---|---|---|---|---|---|---|---|
| | Reading (dBμV) | Detector (PK/QP/Ave.) | | Height (m) | Polar (H/V) | | | Limit (dBμV/m) | Margin (dB) |
| **Low Channel (2402 MHz)** | | | | | | | | | |
| 154.23 | 32.65 | QP | 174 | 1.9 | H | -14.00 | 18.65 | 43.5 | 24.85 |
| 2402.00 | 92.41 | PK | 157 | 1.9 | H | 4.97 | 97.38 | / | / |
| 2402.00 | 73.25 | Ave. | 157 | 1.9 | H | 4.97 | 78.22 | / | / |
| 2402.00 | 89.38 | PK | 322 | 1.4 | V | 4.97 | 94.35 | / | / |
| 2402.00 | 70.28 | Ave. | 322 | 1.4 | V | 4.97 | 75.25 | / | / |
| 2383.37 | 34.33 | PK | 351 | 1.9 | H | 4.97 | 39.30 | 74 | 34.70 |
| 2383.37 | 20.08 | Ave. | 351 | 1.9 | H | 4.97 | 25.05 | 54 | 28.95 |
| 2483.50 | 32.22 | PK | 204 | 1.9 | H | 6.29 | 38.51 | 74 | 35.49 |
| 2483.50 | 19.84 | Ave. | 204 | 1.9 | H | 6.29 | 26.13 | 54 | 27.87 |
| 2484.32 | 32.11 | PK | 13 | 1.5 | V | 6.29 | 38.40 | 74 | 35.60 |
| 2484.32 | 19.06 | Ave. | 13 | 1.5 | V | 6.29 | 25.35 | 54 | 28.65 |
| 4804.00 | 36.22 | PK | 98 | 2.3 | V | 16.92 | 53.14 | 74 | 20.86 |
| 4804.00 | 23.46 | Ave. | 98 | 2.3 | V | 16.92 | 40.38 | 54 | 13.62 |
| 7206.00 | 35.08 | PK | 177 | 2.0 | V | 19.08 | 54.16 | 74 | 19.84 |
| 7206.00 | 22.16 | Ave. | 177 | 2.0 | V | 19.08 | 41.24 | 54 | 12.76 |
| 9608.00 | 35.46 | PK | 239 | 1.9 | H | 22.72 | 58.18 | 74 | 15.82 |
| 9608.00 | 22.01 | Ave. | 239 | 1.9 | H | 22.72 | 44.73 | 54 | 9.27 |

| Frequency (MHz) | Receiver | | Turntable Degree | Rx Antenna | | Corrected Factor (dB) | Corrected Amplitude (dBμV/m) | FCC Part 15.247/205/209 | |
|---|---|---|---|---|---|---|---|---|---|
| | Reading (dBμV) | Detector (PK/QP/Ave.) | | Height (m) | Polar (H/V) | | | Limit (dBμV/m) | Margin (dB) |
| **Middle Channel (2441 MHz)** | | | | | | | | | |
| 154.23 | 31.19 | QP | 147 | 3.2 | H | -14.00 | 17.19 | 43.5 | 26.31 |
| 2441.00 | 93.59 | PK | 59 | 1.5 | H | 4.97 | 98.56 | / | / |
| 2441.00 | 73.54 | Ave. | 59 | 1.5 | H | 4.97 | 78.51 | / | / |
| 2441.00 | 89.11 | PK | 63 | 2.4 | V | 4.97 | 94.08 | / | / |
| 2441.00 | 69.06 | Ave. | 63 | 2.4 | V | 4.97 | 74.03 | / | / |
| 2344.58 | 31.16 | PK | 123 | 1.5 | H | 4.63 | 35.79 | 74 | 38.21 |
| 2344.59 | 23.44 | Ave. | 123 | 1.5 | H | 4.63 | 28.07 | 54 | 25.93 |
| 2483.66 | 44.74 | PK | 312 | 1.3 | H | 6.29 | 51.03 | 74 | 22.97 |
| 2483.66 | 29.42 | Ave. | 312 | 1.3 | H | 6.29 | 35.71 | 54 | 18.29 |
| 2881.26 | 36.92 | PK | 302 | 1.6 | H | 7.26 | 44.18 | 74 | 29.82 |
| 2881.26 | 24.76 | Ave. | 302 | 1.6 | H | 7.26 | 32.02 | 54 | 21.98 |
| 4882.00 | 36.81 | PK | 100 | 2.5 | H | 16.91 | 53.72 | 74 | 20.28 |
| 4882.00 | 22.03 | Ave. | 100 | 2.5 | H | 16.91 | 38.94 | 54 | 15.06 |
| 7323.00 | 35.46 | PK | 93 | 1.9 | H | 19.40 | 54.86 | 74 | 19.14 |
| 7323.00 | 22.48 | Ave. | 93 | 1.9 | H | 19.40 | 41.88 | 54 | 12.12 |
| 9764.00 | 36.23 | PK | 337 | 1.4 | V | 23.79 | 60.02 | 74 | 13.98 |
| 9764.00 | 23.09 | Ave. | 337 | 1.4 | V | 23.79 | 46.88 | 54 | 7.12 |
| **High Channel (2480 MHz)** | | | | | | | | | |
| 154.23 | 32.68 | QP | 350 | 1.6 | H | -14.00 | 18.68 | 43.5 | 24.82 |
| 2480.00 | 94.74 | PK | 111 | 1.7 | H | 6.29 | 101.03 | / | / |
| 2480.00 | 75.58 | Ave. | 111 | 1.7 | H | 6.29 | 81.87 | / | / |
| 2480.00 | 90.02 | PK | 263 | 1.5 | V | 6.29 | 96.31 | / | / |
| 2480.00 | 73.39 | Ave. | 263 | 1.5 | V | 6.29 | 79.68 | / | / |
| 2341.10 | 33.41 | PK | 93 | 1.5 | H | 4.63 | 38.04 | 74 | 35.96 |
| 2341.10 | 26.38 | Ave. | 93 | 1.5 | H | 4.63 | 31.01 | 54 | 22.99 |
| 2483.50 | 42.24 | PK | 341 | 2.0 | H | 6.29 | 48.53 | 74 | 25.47 |
| 2483.50 | 28.62 | Ave. | 341 | 2.0 | H | 6.29 | 34.91 | 54 | 19.09 |
| 2720.93 | 35.59 | PK | 342 | 2.2 | H | 6.61 | 42.20 | 74 | 31.80 |
| 2720.93 | 23.61 | Ave. | 342 | 2.2 | H | 6.61 | 30.22 | 54 | 23.78 |
| 4960.00 | 35.94 | PK | 284 | 1.6 | V | 17.91 | 53.85 | 74 | 20.15 |
| 4960.00 | 22.13 | Ave. | 284 | 1.6 | V | 17.91 | 40.04 | 54 | 13.96 |
| 7440.00 | 35.34 | PK | 206 | 2.5 | V | 18.34 | 53.68 | 74 | 20.32 |
| 7440.00 | 22.34 | Ave. | 206 | 2.5 | V | 18.34 | 40.68 | 54 | 13.32 |
| 9920.00 | 36.08 | PK | 52 | 2.4 | V | 23.79 | 59.87 | 74 | 14.13 |
| 9920.00 | 22.98 | Ave. | 52 | 2.4 | V | 23.79 | 46.77 | 54 | 7.23 |

Note:
Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
Corrected Amplitude = Corrected Factor + Reading
Margin = Limit - Corrected. Amplitude

# FCC §15.247(a) (1)-CHANNEL SEPARATION TEST

## Applicable Standard

Frequency hopping systems shall have hoping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, 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.

## Test Procedure

1. Set the EUT in transmitting mode, maxhold the channel.
2. Set the adjacent channel of the EUT and maxhold another trace.
3. Measure the channel separation.

## Test Equipment List and Details

| Manufacturer | Description | Model | Serial Number | Calibration Date | Calibration Due Date |
|---|---|---|---|---|---|
| Rohde & Schwarz | EMI Test Receiver | ESR | 1316.3003K03-101746-zn | 2015-06-13 | 2016-06-13 |

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

## Test Data

### Environmental Conditions

| | |
|---|---|
| **Temperature:** | 26 ℃ |
| **Relative Humidity:** | 52 % |
| **ATM Pressure:** | 101.0 kPa |

*The testing was performed by William Li on 2015-10-10.*

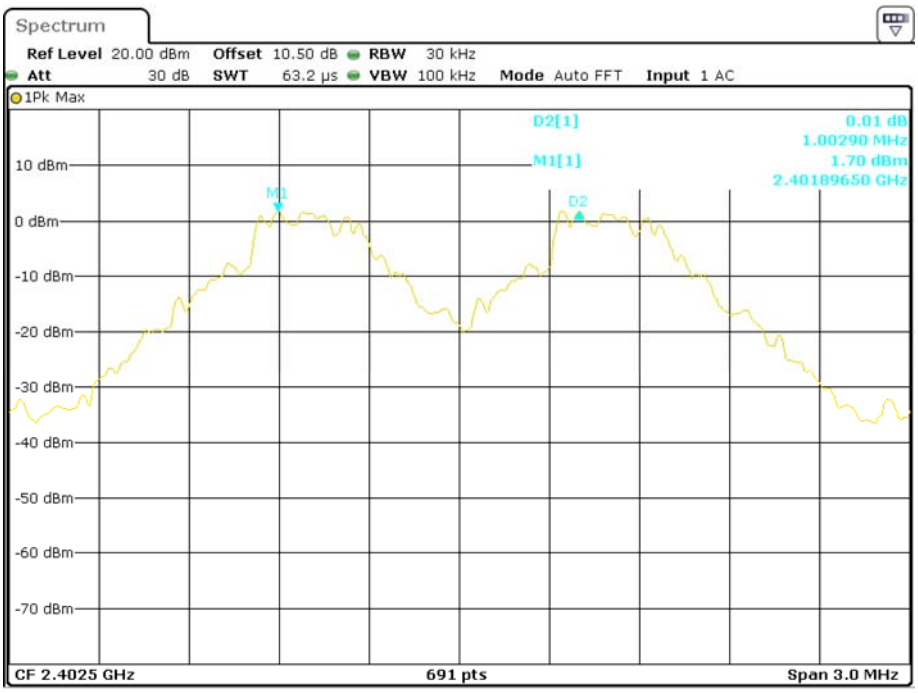
*EUT operation mode: Transmitting*

*Test Result: Compliance. Please refer to following table and plots*

| Mode | Channel | Frequency (MHz) | Channel Separation (MHz) | ≥Limit (MHz) | Result |
|---|---|---|---|---|---|
| BDR (GFSK) | Low | 2402 | 1.003 | 0.629 | Pass |
| | Adjacent | 2403 | | | |
| | Middle | 2441 | 0.999 | 0.633 | Pass |
| | Adjacent | 2442 | | | |
| | High | 2480 | 0.999 | 0.633 | Pass |
| | Adjacent | 2479 | | | |
| EDR (π/4-DQPSK) | Low | 2402 | 0.999 | 0.848 | Pass |
| | Adjacent | 2403 | | | |
| | Middle | 2441 | 1.003 | 0.851 | Pass |
| | Adjacent | 2442 | | | |
| | High | 2480 | 1.003 | 0.853 | Pass |
| | Adjacent | 2479 | | | |
| EDR (8DPSK) | Low | 2402 | 0.999 | 0.842 | Pass |
| | Adjacent | 2403 | | | |
| | Middle | 2441 | 0.999 | 0.845 | Pass |
| | Adjacent | 2442 | | | |
| | High | 2480 | 1.003 | 0.845 | Pass |
| | Adjacent | 2479 | | | |

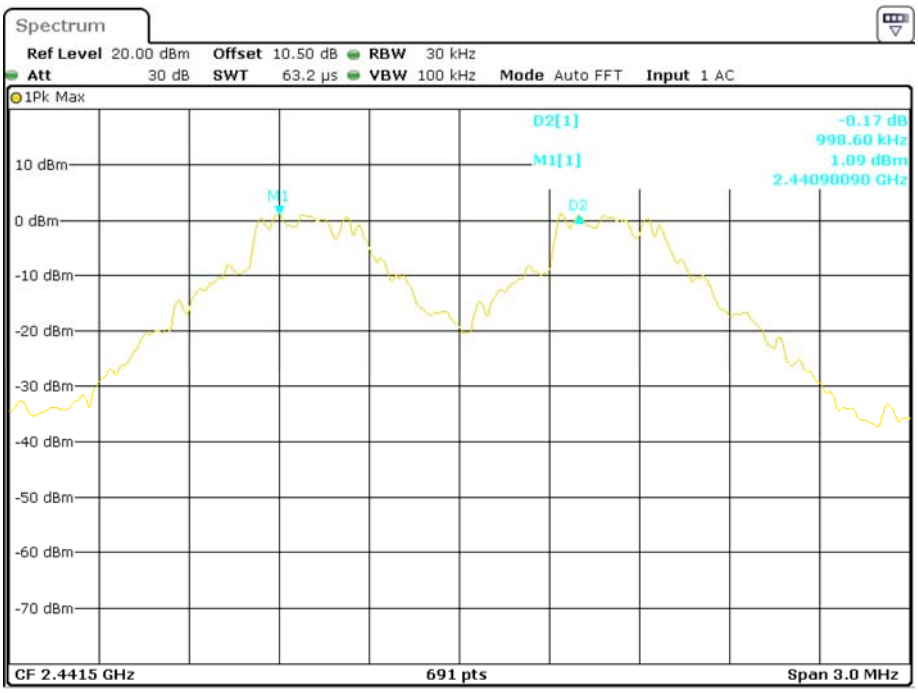
Note: Limit = 20 dB bandwidth *2/3

**BDR (GFSK): Low Channel**



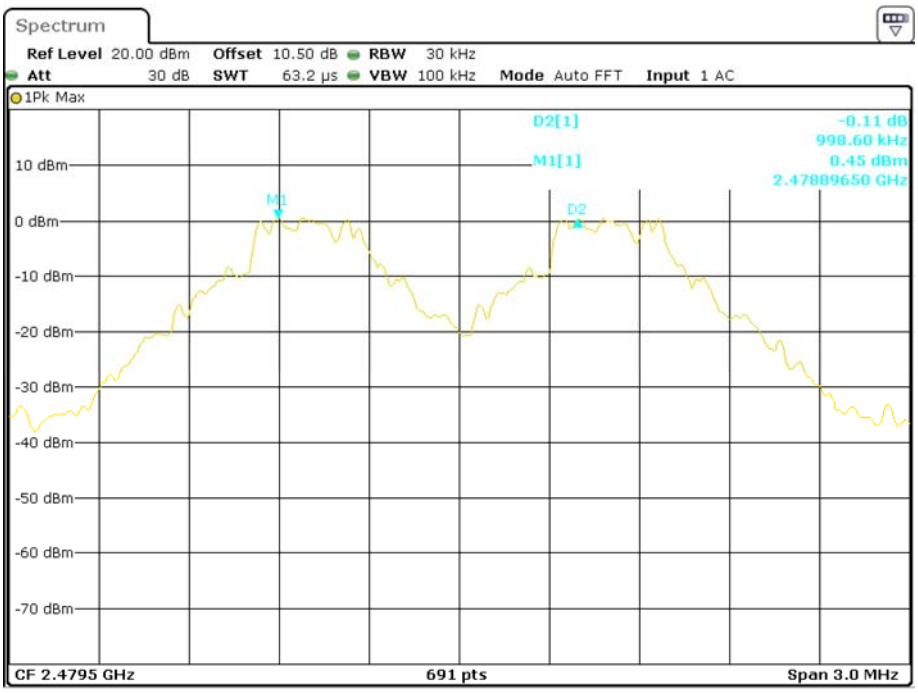

Date: 10.OCT.2015 11:04:07

**BDR (GFSK): Middle Channel**



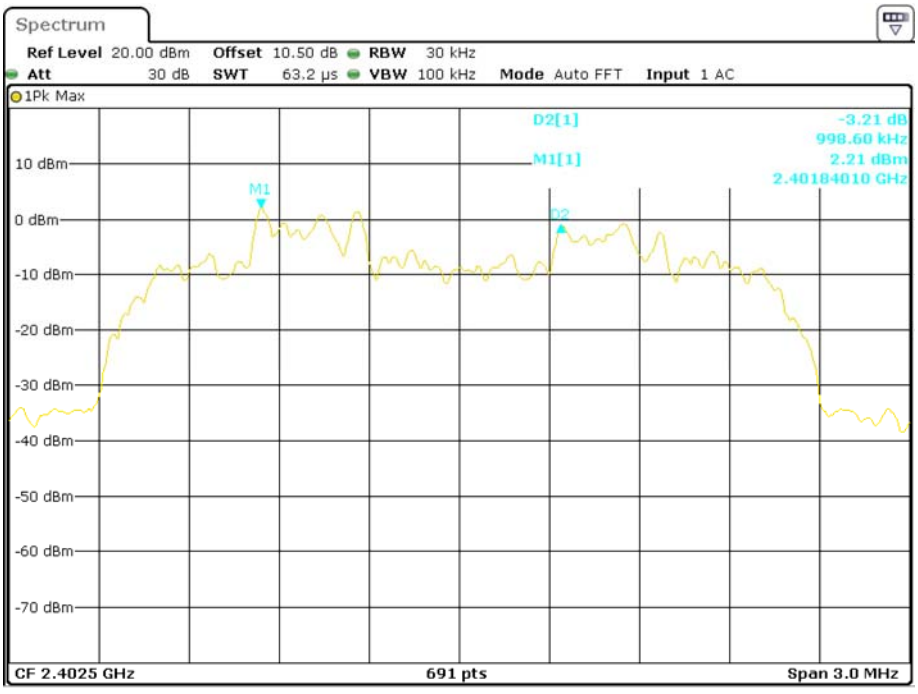

Date: 10.OCT.2015 11:05:34

**BDR (GFSK): High Channel**



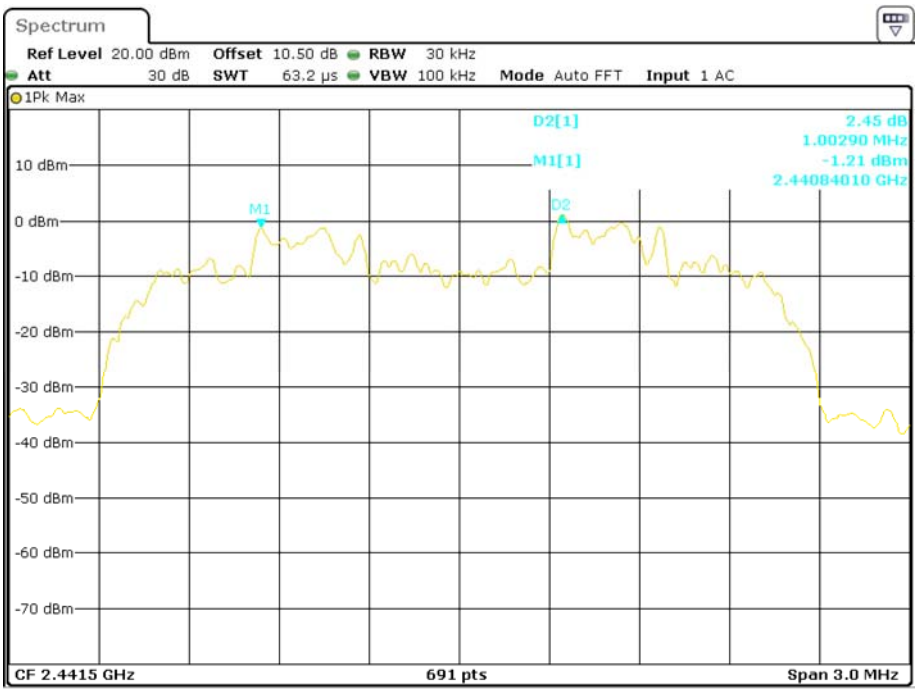

Date: 10.OCT.2015 11:07:17

**EDR (π/4-DQPSK): Low Channel**



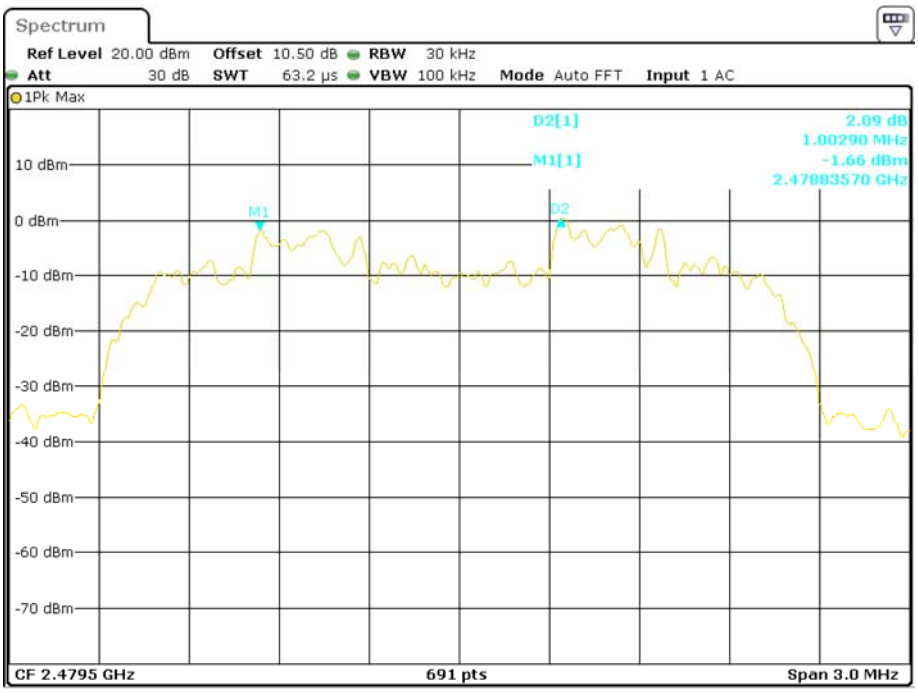

Date: 10.OCT.2015 10:56:59

**EDR (π/4-DQPSK): Middle Channel**



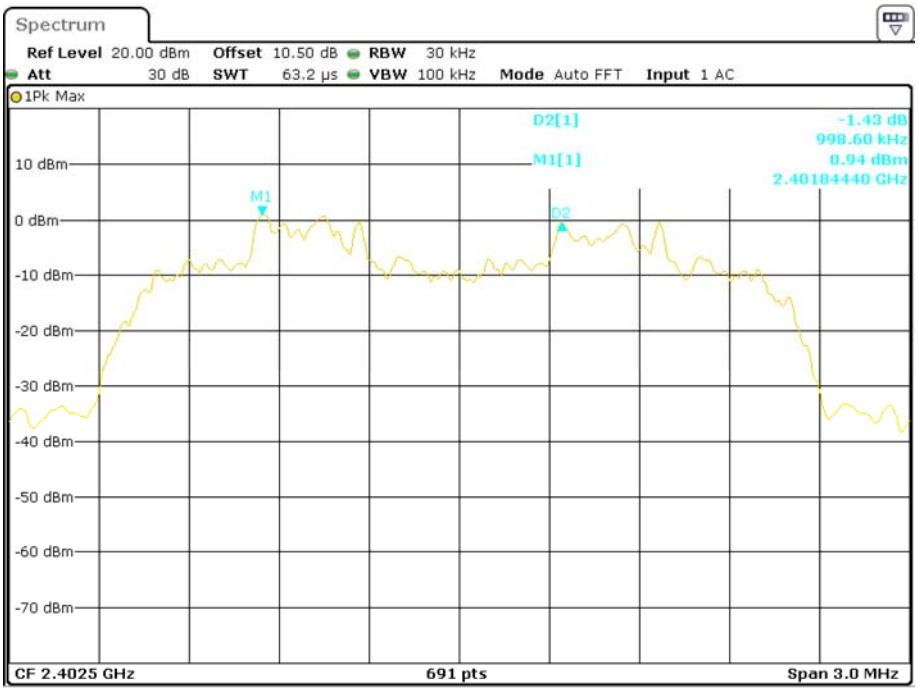

Date: 10.OCT.2015 10:58:41

**EDR (π/4-DQPSK): High Channel**



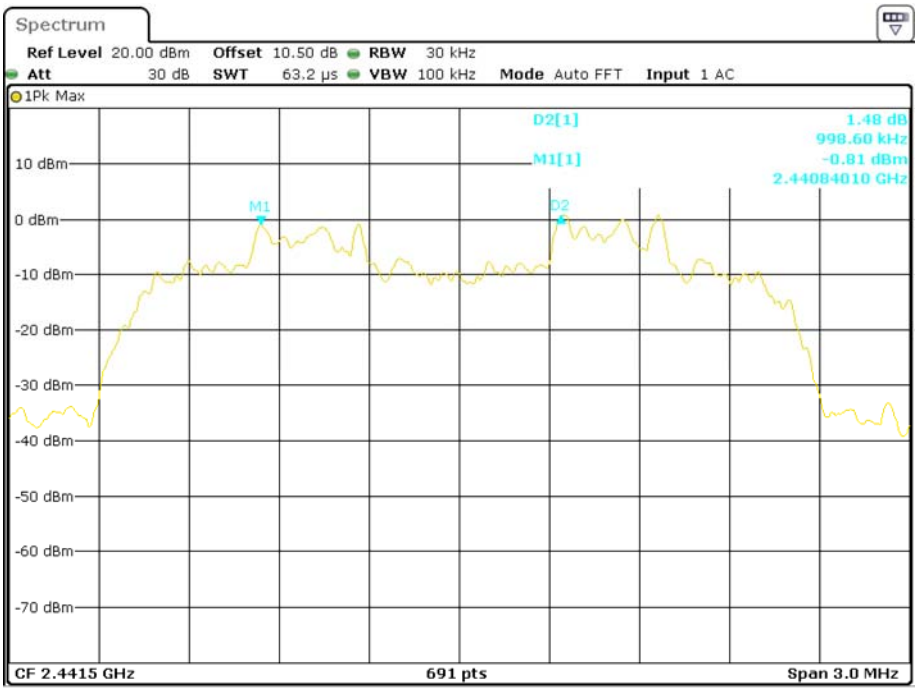

Date: 10.OCT.2015 11:02:18

**EDR (8DPSK): Low Channel**



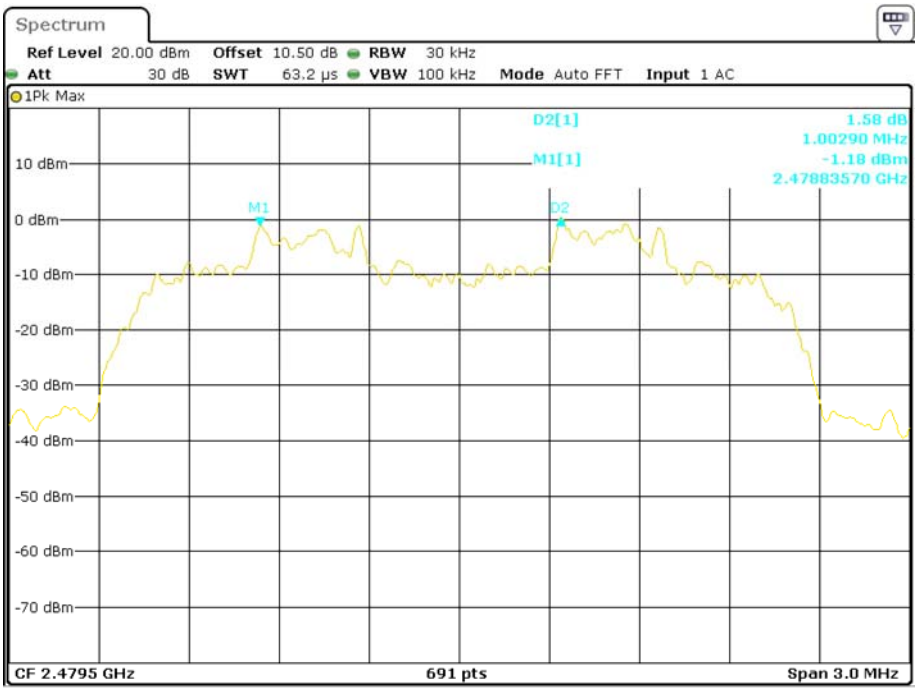

Date: 10.OCT.2015 10:43:00

**EDR (8DPSK): Middle Channel**




Date: 10.OCT.2015 10:41:42

**EDR (8DPSK): High Channel**



# FCC §15.247(a) (1) – 20 dB EMISSION BANDWIDTH

## Applicable Standard

Alternatively, 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.

## Test Procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect it to measurement instrument. Then set it to any one convenient frequency within its operating range. Set a reference level on the measuring instrument equal to the highest peak value.
3. Measure the frequency difference of two frequencies that were attenuated 20 dB from the reference level. Record the frequency difference as the emission bandwidth.
4. Repeat above procedures until all frequencies measured were complete.

## Test Equipment List and Details

| Manufacturer | Description | Model | Serial Number | Calibration Date | Calibration Due Date |
|---|---|---|---|---|---|
| Rohde & Schwarz | EMI Test Receiver | ESR | 1316.3003K03-101746-zn | 2015-06-13 | 2016-06-13 |

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

## Test Data

### Environmental Conditions

| | |
|---|---|
| **Temperature:** | 26 ℃ |
| **Relative Humidity:** | 52 % |
| **ATM Pressure:** | 101.0 kPa |

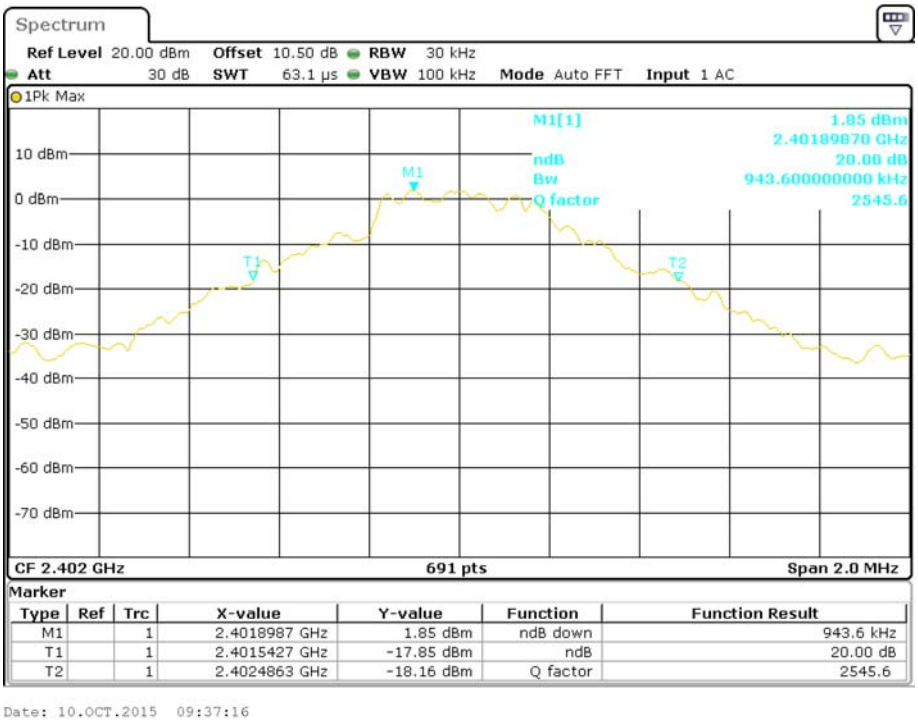
*The testing was performed by William Li on 2015-10-10.*

*EUT operation mode: Transmitting*

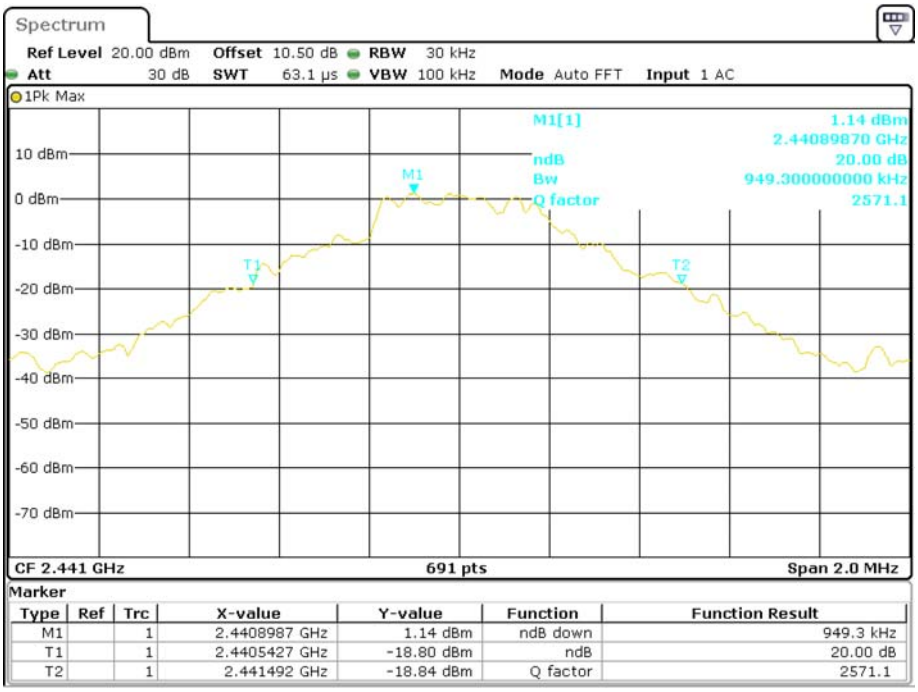
*Test Result: Compliance. Please refer to following table and plots*

| Mode | Channel | Frequency (MHz) | 20 dB Emission Bandwidth (MHz) |
|---|---|---|---|
| BDR (GFSK) | Low | 2402 | 0.944 |
| | Middle | 2441 | 0.949 |
| | High | 2480 | 0.949 |
| EDR (π/4-DQPSK) | Low | 2402 | 1.272 |
| | Middle | 2441 | 1.276 |
| | High | 2480 | 1.280 |
| EDR (8DPSK) | Low | 2402 | 1.263 |
| | Middle | 2441 | 1.268 |
| | High | 2480 | 1.268 |

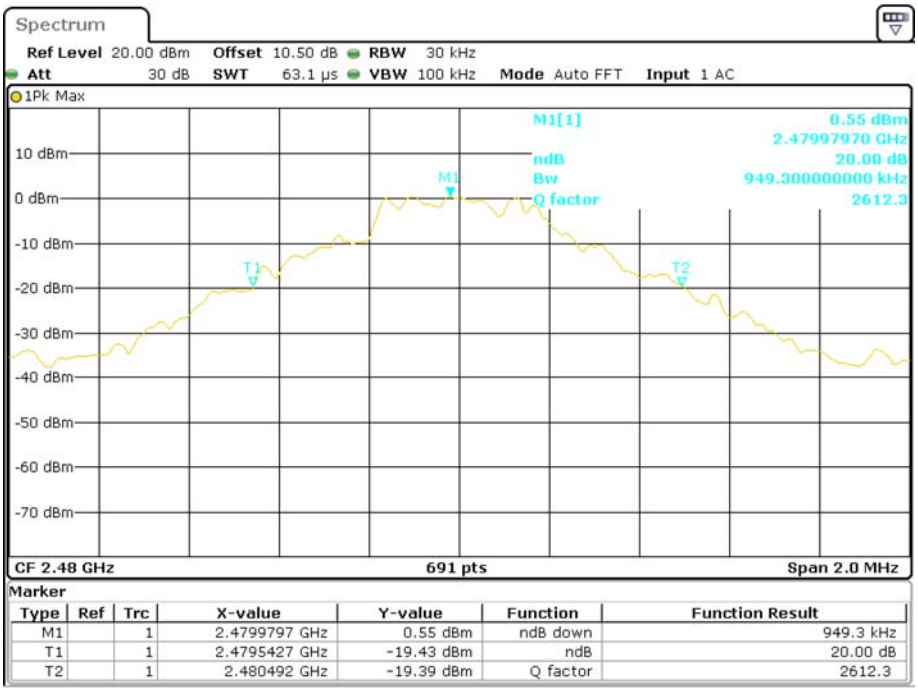
**BDR (GFSK): Low Channel**



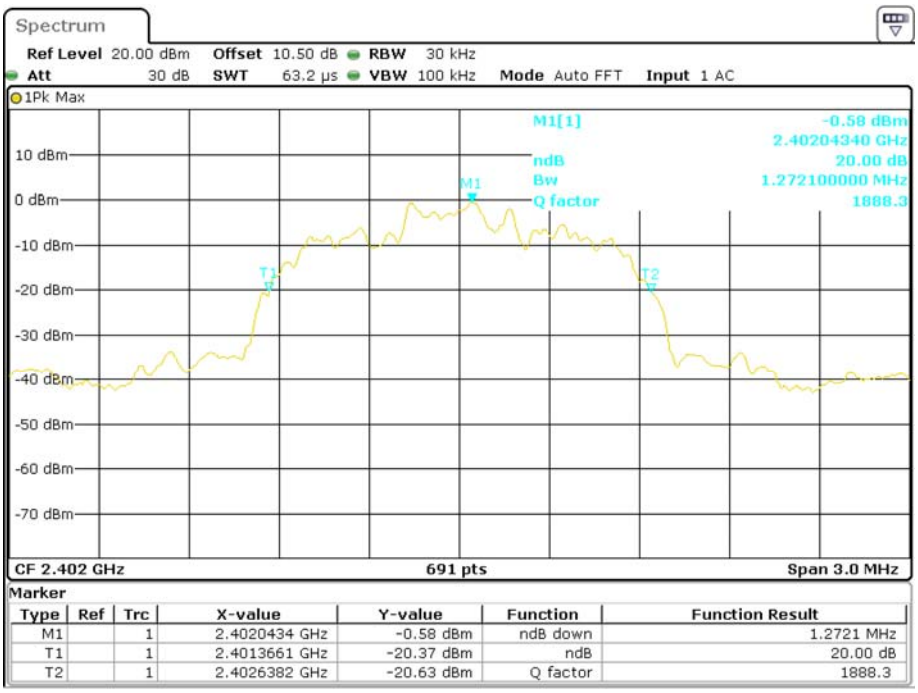
**BDR (GFSK): Middle Channel**




**BDR (GFSK): High Channel**

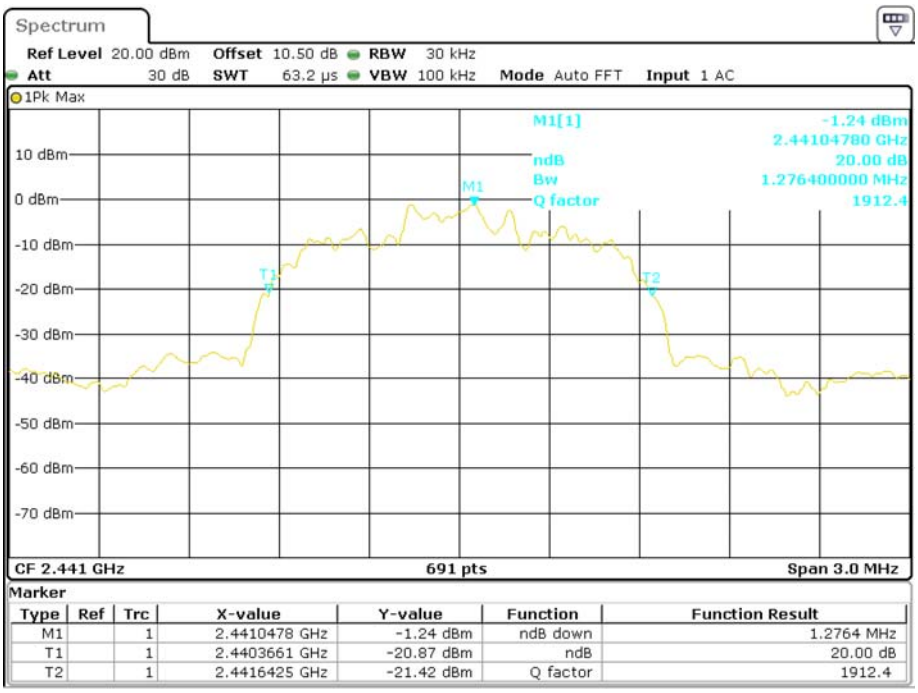


**EDR (π/4-DQPSK): Low Channel**



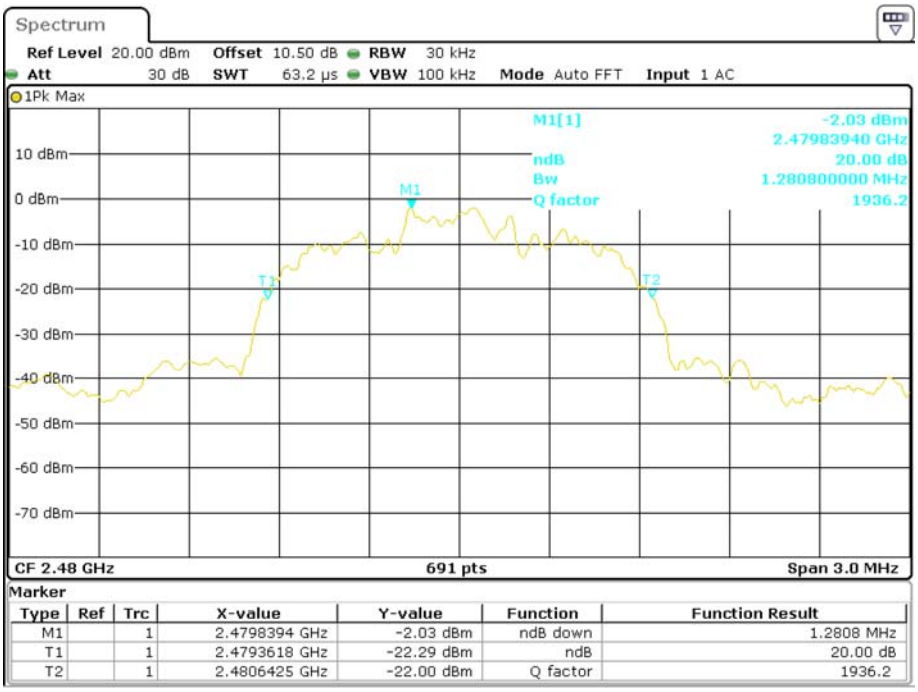

Date: 10.OCT.2015 09:43:31

**EDR (π/4-DQPSK): Middle Channel**




Date: 10.OCT.2015 09:42:29

**EDR (π/4-DQPSK): High Channel**

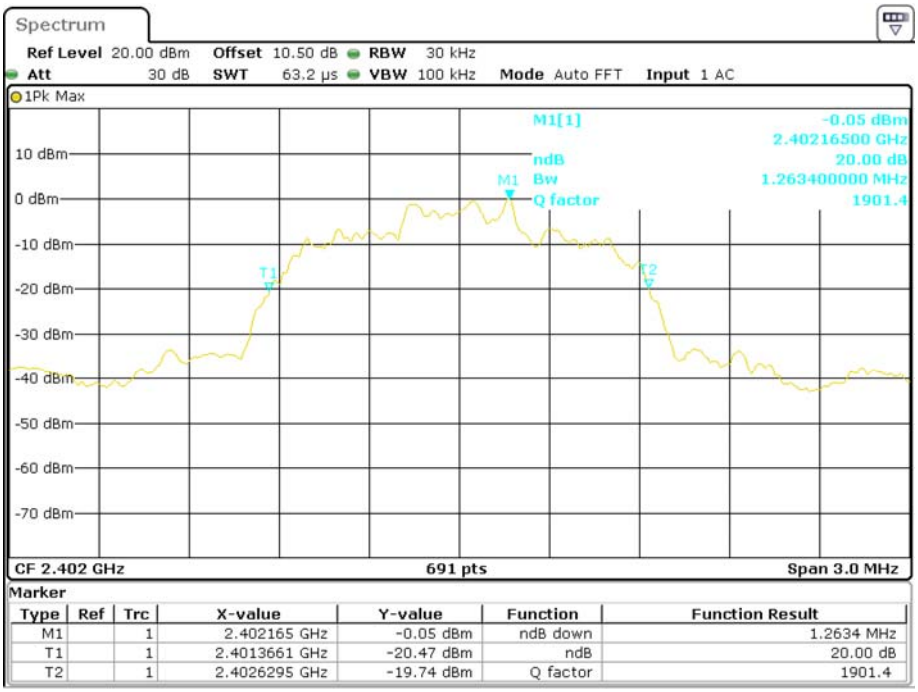



Marker

| Type | Ref | Trc | X-value | Y-value | Function | Function Result |
|---|---|---|---|---|---|---|
| M1 | | 1 | 2.4798394 GHz | -2.03 dBm | ndB down | 1.2808 MHz |
| T1 | | 1 | 2.4793618 GHz | -22.29 dBm | ndB | 20.00 dB |
| T2 | | 1 | 2.4806425 GHz | -22.00 dBm | Q factor | 1936.2 |

Date: 10.OCT.2015 09:43:03

**EDR (8DPSK): Low Channel**

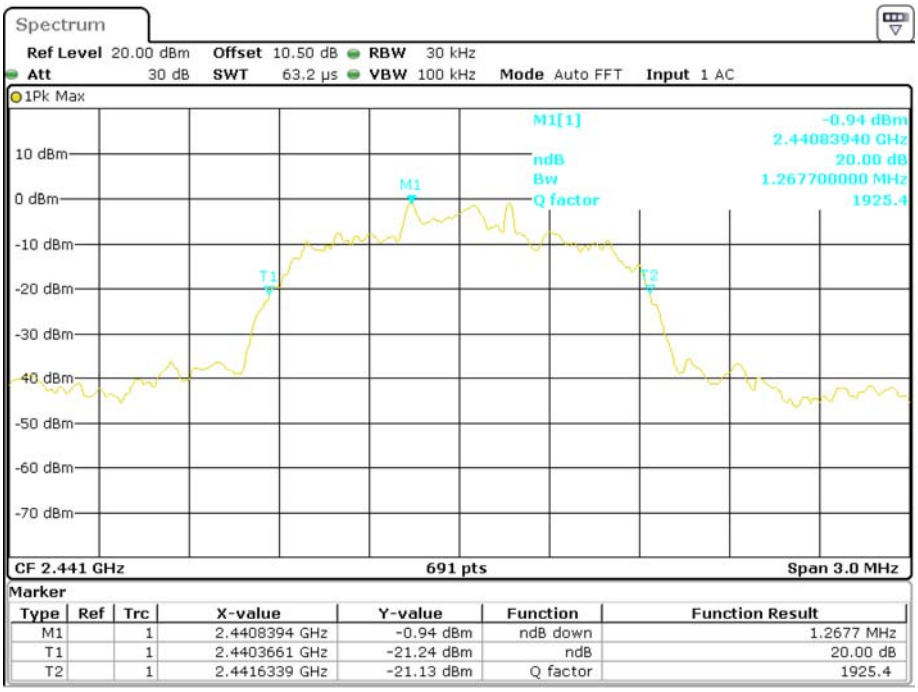



Marker

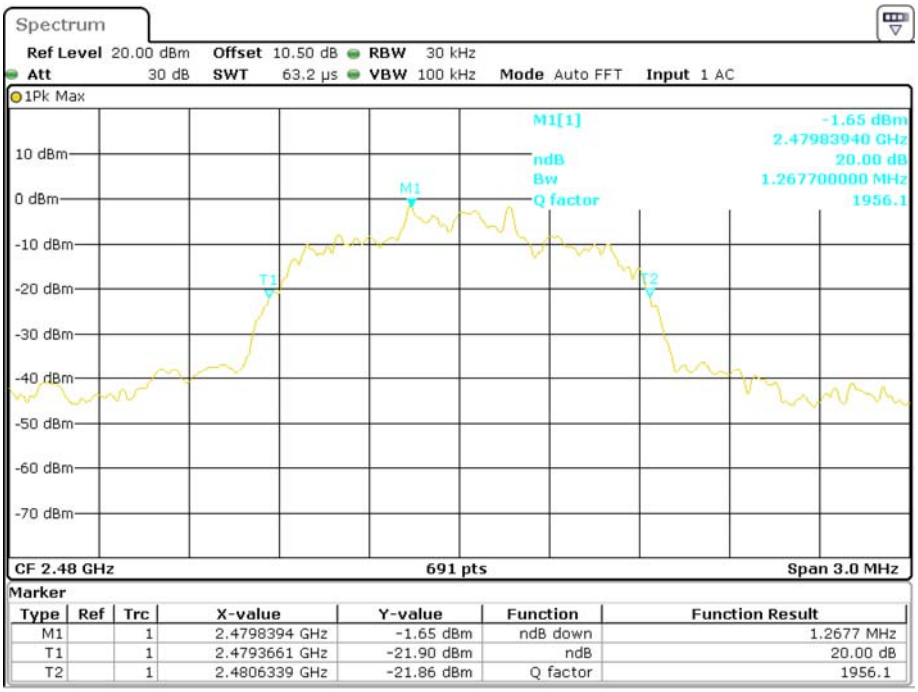
| Type | Ref | Trc | X-value | Y-value | Function | Function Result |
|---|---|---|---|---|---|---|
| M1 | | 1 | 2.402165 GHz | -0.05 dBm | ndB down | 1.2634 MHz |
| T1 | | 1 | 2.4013661 GHz | -20.47 dBm | ndB | 20.00 dB |
| T2 | | 1 | 2.4026295 GHz | -19.74 dBm | Q factor | 1901.4 |

Date: 10.OCT.2015 09:44:02

**EDR (8DPSK): Middle Channel**




**EDR (8DPSK): High Channel**



# FCC §15.247(a) (1) (iii)-QUANTITY OF HOPPING CHANNEL TEST

## Applicable Standard

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. Frequency hopping systems may avoid or suppress transmissions on a particular hopping frequency provided that a minimum of 15 channels are used.

## Test Procedure

1. Check the calibration of the measuring instrument (SA) using either an internal calibrator or a known signal from an external generator.

2. Set the EUT in hopping mode from first channel to last.

3. By using the max-hold function record the quantity of the channel.

## Test Equipment List and Details

| Manufacturer | Description | Model | Serial Number | Calibration Date | Calibration Due Date |
|---|---|---|---|---|---|
| Rohde & Schwarz | EMI Test Receiver | ESR | 1316.3003K03-101746-zn | 2015-06-13 | 2016-06-13 |

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

## Test Data

### Environmental Conditions

| | |
|---|---|
| **Temperature:** | 26 ℃ |
| **Relative Humidity:** | 52 % |
| **ATM Pressure:** | 101.0 kPa |

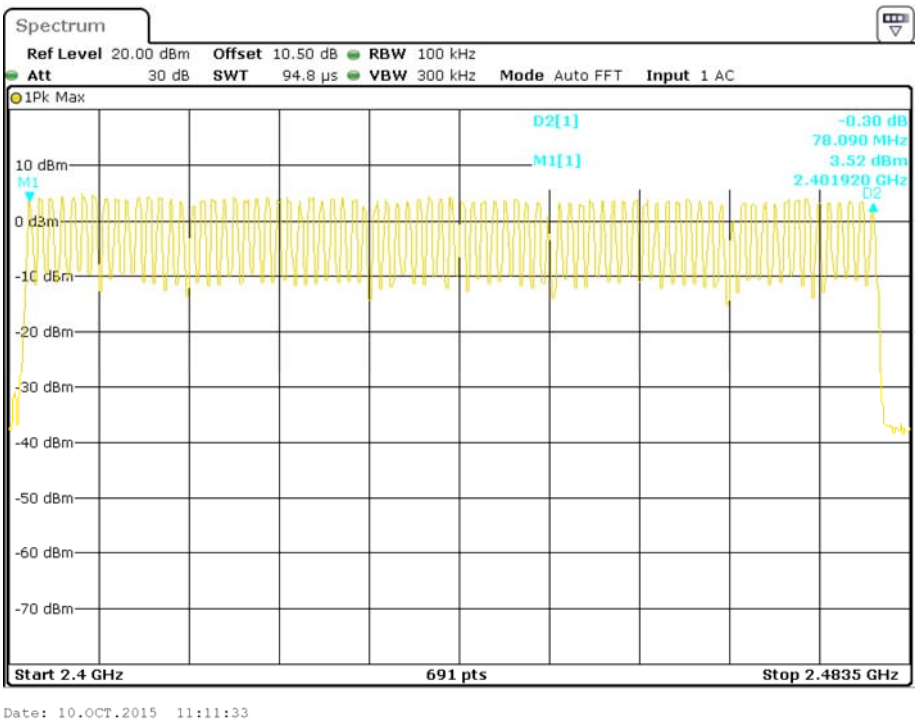
*The testing was performed by William Li on 2015-10-10.*

*EUT operation mode: Transmitting*

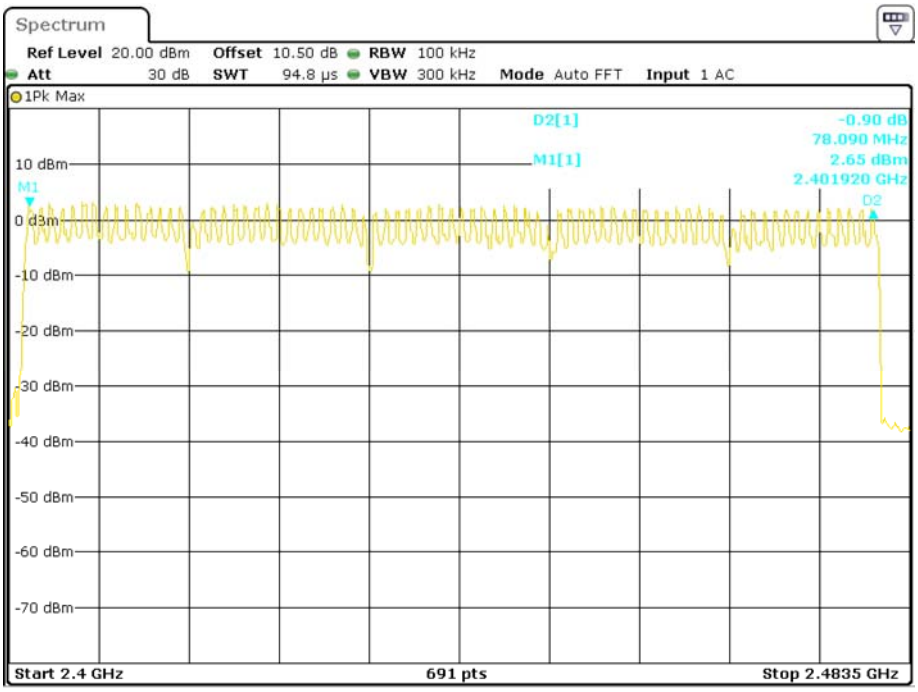
*Test Result: Compliance. Please refer to following table and plots*

| Mode | Frequency Range (MHz) | Number of Hopping Channel (CH) | Limit (CH) |
|---|---|---|---|
| BDR (GFSK) | 2400-2483.5 | 79 | ≥15 |
| EDR (π/4-DQPSK) | 2400-2483.5 | 79 | ≥15 |
| EDR (8DPSK) | 2400-2483.5 | 79 | ≥15 |

**BDR (GFSK): Number of Hopping Channels**

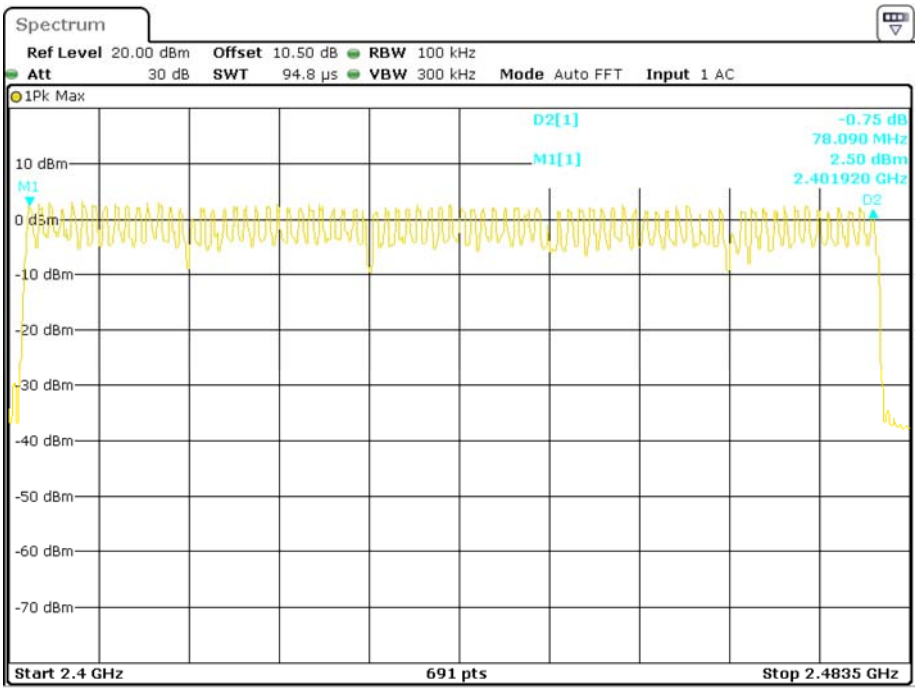


**EDR (π/4-DQPSK): Number of Hopping Channels**




Date: 10.OCT.2015 11:14:56

**EDR (8DPSK): Number of Hopping Channels**




Date: 10.OCT.2015 11:18:10

# FCC §15.247(a) (1) (iii) - TIME OF OCCUPANCY (DWELL TIME)

## Applicable Standard

Frequency hopping systems in the 2400-2483.5 MHz 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. Frequency hopping systems may avoid or suppress transmissions on a particular hopping frequency provided that a minimum of 15 channels are used.

## Test Procedure

The EUT was worked in channel hopping; Spectrum SPAN was set as 0. Sweep was set as 0.4 X channel no. (s), the quantity of pulse was get from single sweep. In addition, the time of single pulses was tested.

## Test Equipment List and Details

| Manufacturer | Description | Model | Serial Number | Calibration Date | Calibration Due Date |
|---|---|---|---|---|---|
| Rohde & Schwarz | EMI Test Receiver | ESR | 1316.3003K03-101746-zn | 2015-06-13 | 2016-06-13 |

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

## Test Data

### Environmental Conditions

| | |
|---|---|
| **Temperature:** | 26 ℃ |
| **Relative Humidity:** | 52 % |
| **ATM Pressure:** | 101.0 kPa |

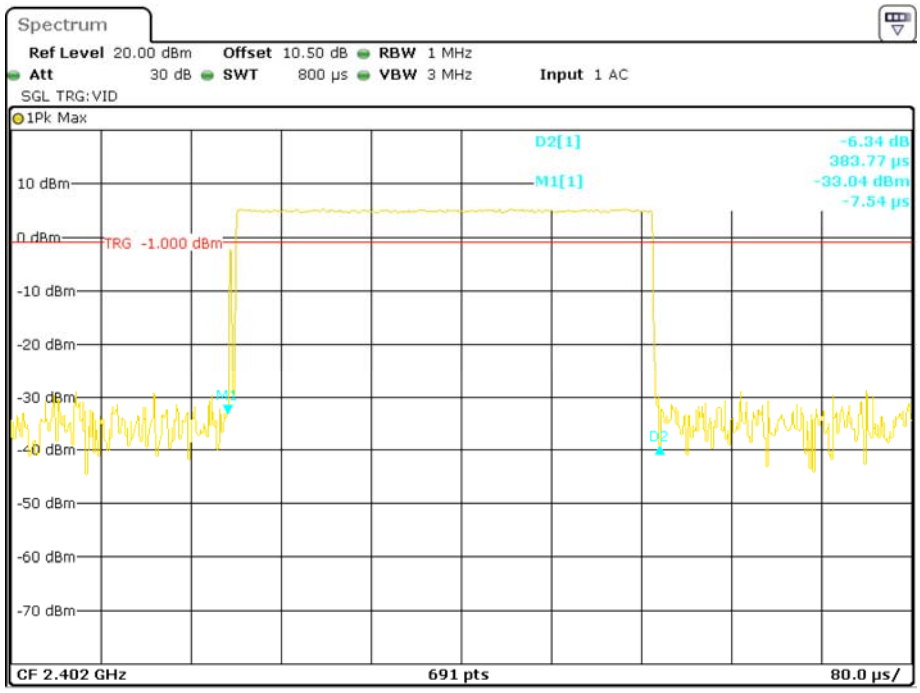
*The testing was performed by William Li on 2015-10-10.*

*EUT operation mode: Transmitting*

*Test Result: Compliance. Please refer to following table and plots*

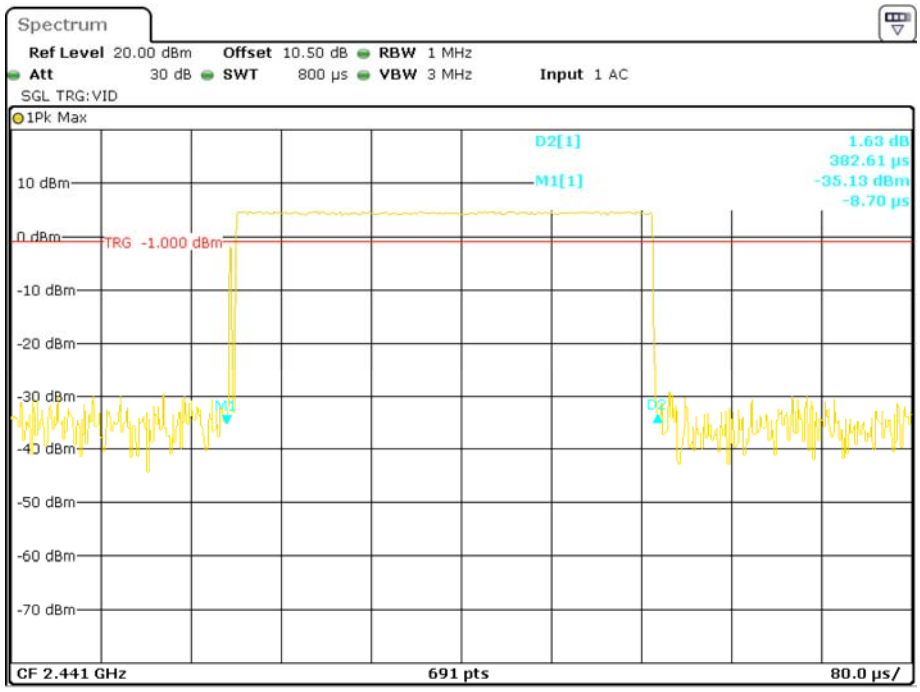
| Mode | | Channel | Pulse Width (ms) | Dwell Time (S) | Limit (S) | Result |
|---|---|---|---|---|---|---|
| BDR (GFSK) | DH 1 | Low | 0.384 | 0.123 | 0.4 | Pass |
| | | Middle | 0.383 | 0.123 | 0.4 | Pass |
| | | High | 0.384 | 0.123 | 0.4 | Pass |
| | | Note: DH1:Dwell time = Pulse time*(1600/2/79)*31.6S | | | | |
| | DH 3 | Low | 1.646 | 0.263 | 0.4 | Pass |
| | | Middle | 1.646 | 0.263 | 0.4 | Pass |
| | | High | 1.654 | 0.265 | 0.4 | Pass |
| | | Note: DH3:Dwell time = Pulse time*(1600/4/79)*31.6S | | | | |
| | DH 5 | Low | 2.906 | 0.310 | 0.4 | Pass |
| | | Middle | 2.906 | 0.310 | 0.4 | Pass |
| | | High | 2.906 | 0.310 | 0.4 | Pass |
| | | Note: DH5:Dwell time = Pulse time*(1600/6/79)*31.6S | | | | |
| EDR (π/4-DQPSK) | 2DH 1 | Low | 0.390 | 0.125 | 0.4 | Pass |
| | | Middle | 0.390 | 0.125 | 0.4 | Pass |
| | | High | 0.392 | 0.125 | 0.4 | Pass |
| | | Note: 2DH1:Dwell time = Pulse time*(1600/2/79)*31.6S | | | | |
| | 2DH 3 | Low | 1.650 | 0.264 | 0.4 | Pass |
| | | Middle | 1.650 | 0.264 | 0.4 | Pass |
| | | High | 1.650 | 0.264 | 0.4 | Pass |
| | | Note: 2DH3:Dwell time = Pulse time*(1600/4/79)*31.6S | | | | |
| | 2DH 5 | Low | 2.906 | 0.310 | 0.4 | Pass |
| | | Middle | 2.906 | 0.310 | 0.4 | Pass |
| | | High | 2.914 | 0.311 | 0.4 | Pass |
| | | Note:2DH5:Dwell time = Pulse time*(1600/6/79)*31.6S | | | | |
| EDR (8DPSK) | 3DH 1 | Low | 0.392 | 0.125 | 0.4 | Pass |
| | | Middle | 0.393 | 0.126 | 0.4 | Pass |
| | | High | 0.390 | 0.125 | 0.4 | Pass |
| | | Note: 3DH1:Dwell time = Pulse time*(1600/2/79)*31.6S | | | | |
| | 3DH 3 | Low | 1.646 | 0.263 | 0.4 | Pass |
| | | Middle | 1.646 | 0.263 | 0.4 | Pass |
| | | High | 1.650 | 0.264 | 0.4 | Pass |
| | | Note: 3DH3:Dwell time = Pulse time*(1600/4/79)*31.6S | | | | |
| | 3DH 5 | Low | 2.921 | 0.312 | 0.4 | Pass |
| | | Middle | 2.928 | 0.312 | 0.4 | Pass |
| | | High | 2.928 | 0.312 | 0.4 | Pass |
| | | Note: 3DH5:Dwell time = Pulse time*(1600/6/79)*31.6S | | | | |

**BDR (GFSK):**
**Pulse time, Low Channel, DH1**



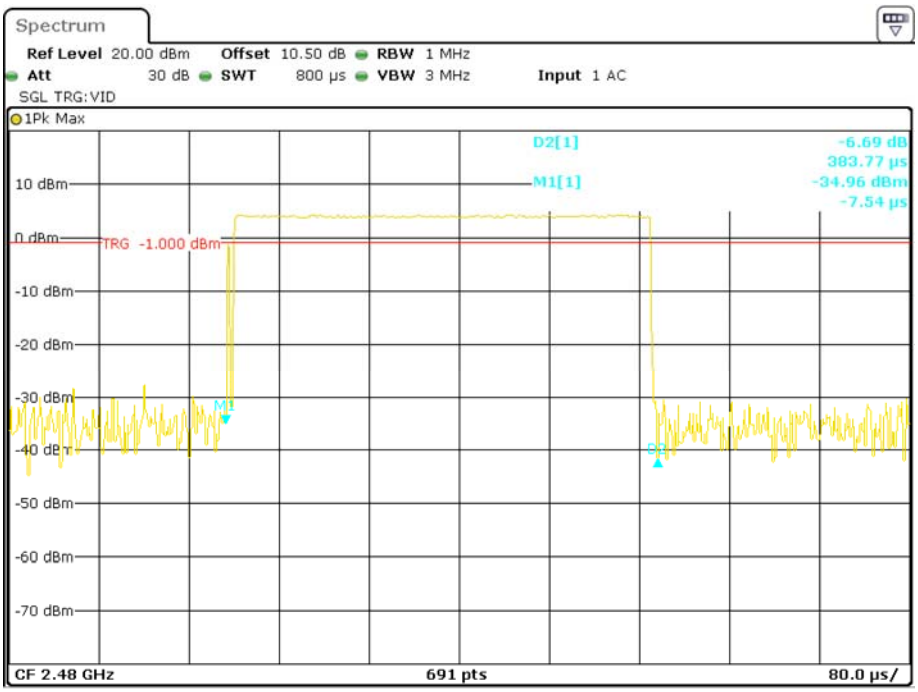

Date: 10.OCT.2015 11:33:26

**Pulse time, Middle Channel, DH1**



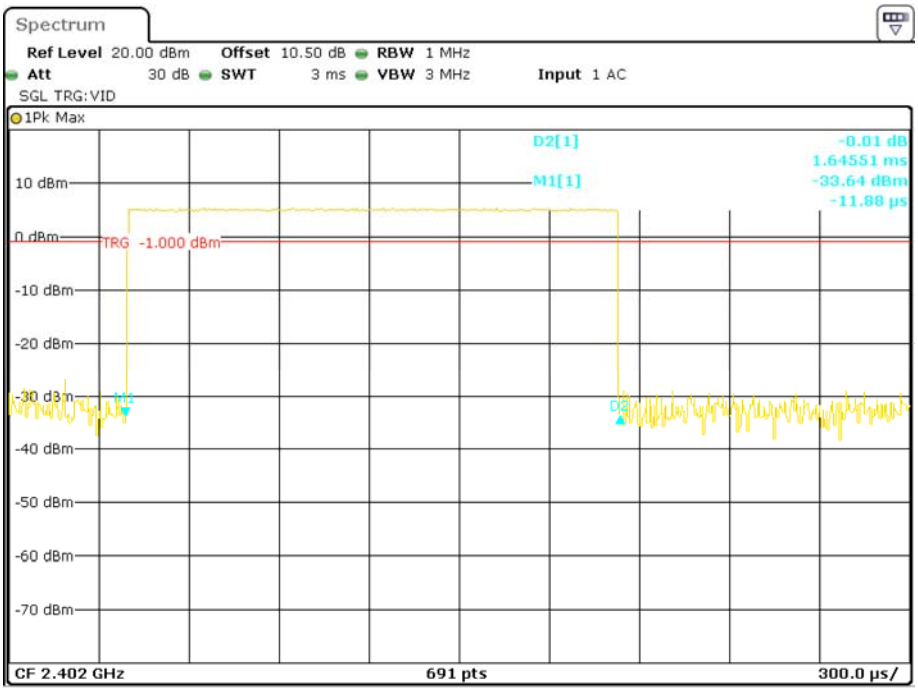

Date: 10.OCT.2015 11:48:54

**Pulse time, High Channel, DH1**



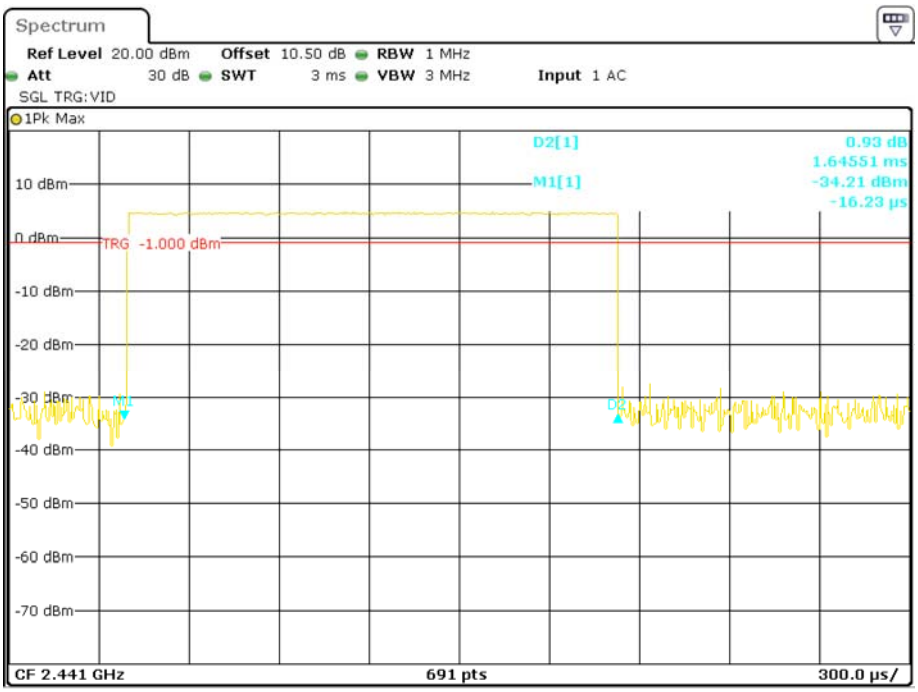

Date: 10.OCT.2015 11:50:09

**Pulse time, Low Channel, DH3**



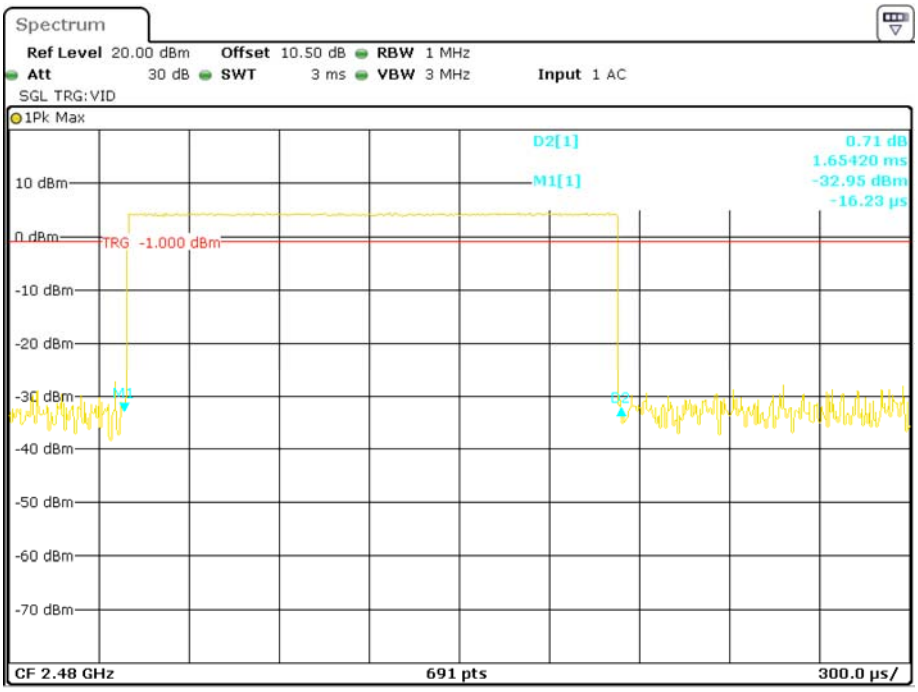

Date: 10.OCT.2015 11:53:54

**Pulse time, Middle Channel, DH3**



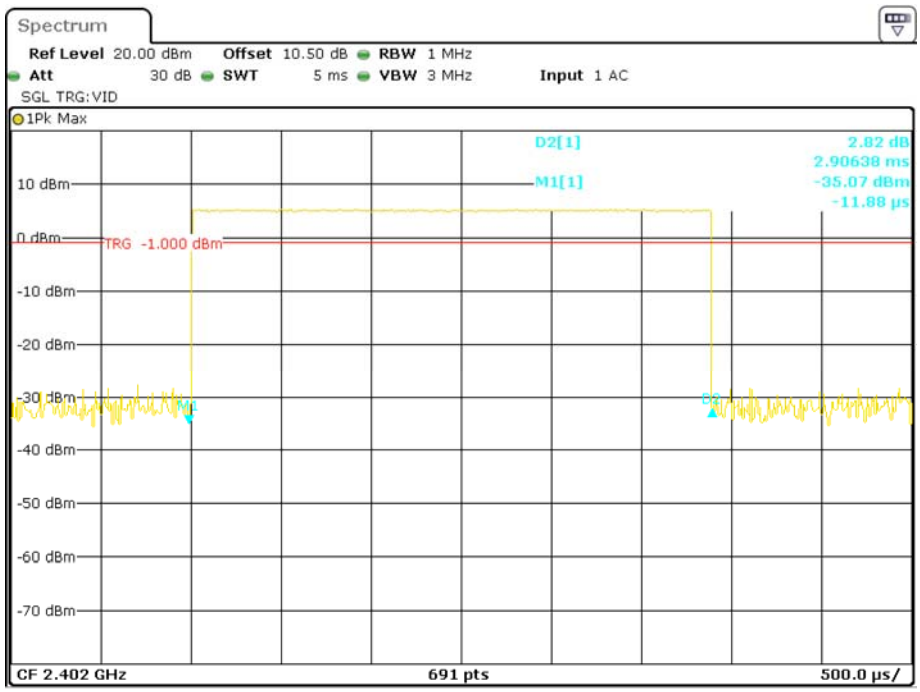

Date: 10.OCT.2015 11:53:06

**Pulse time, High Channel, DH3**

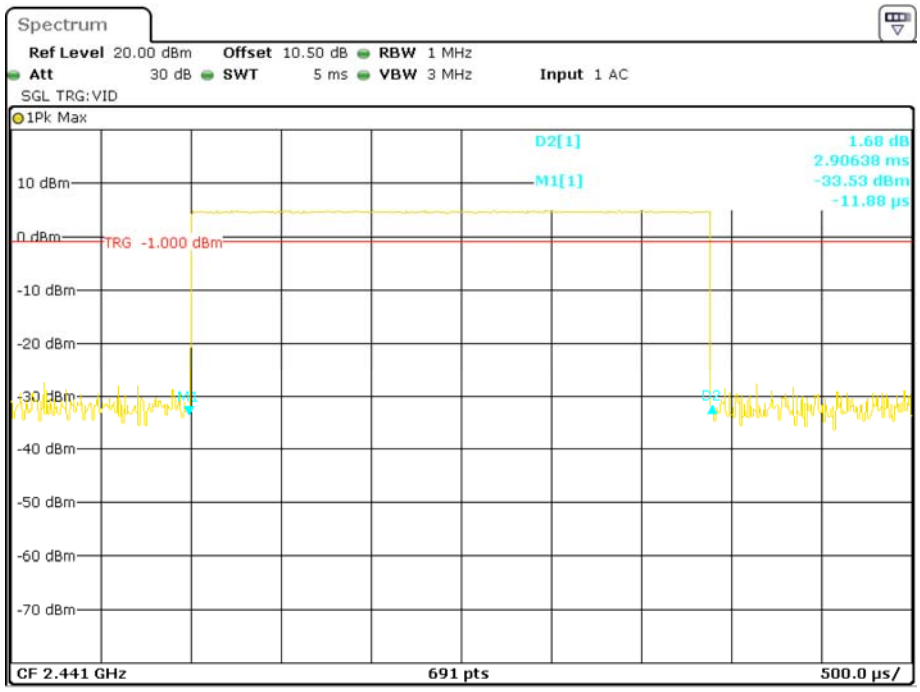



Date: 10.OCT.2015 11:52:09

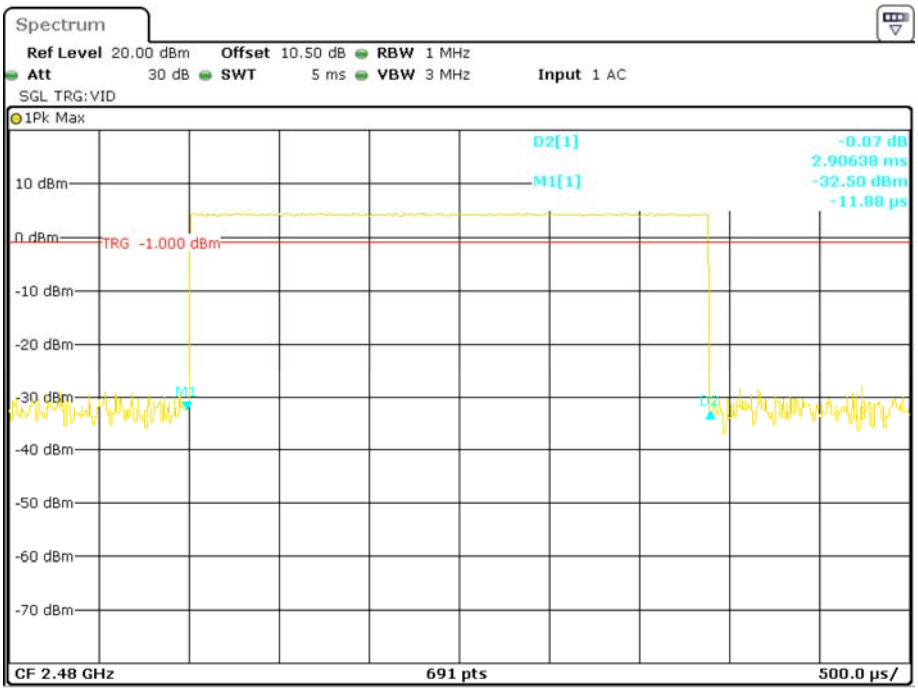
**Pulse time, Low Channel, DH5**




**Pulse time, Middle Channel, DH5**

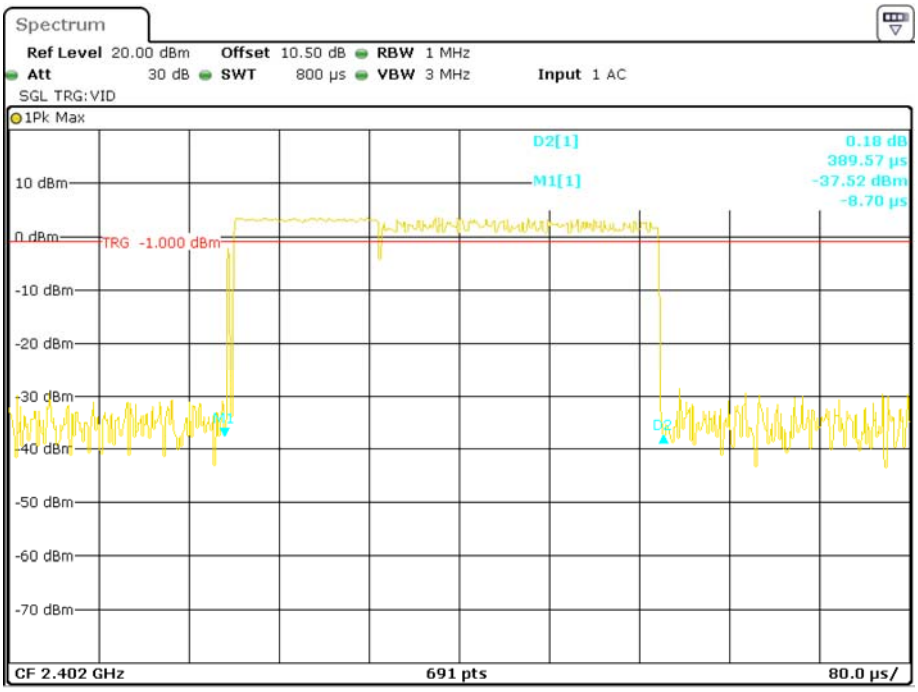


**Pulse time, High Channel, DH5**



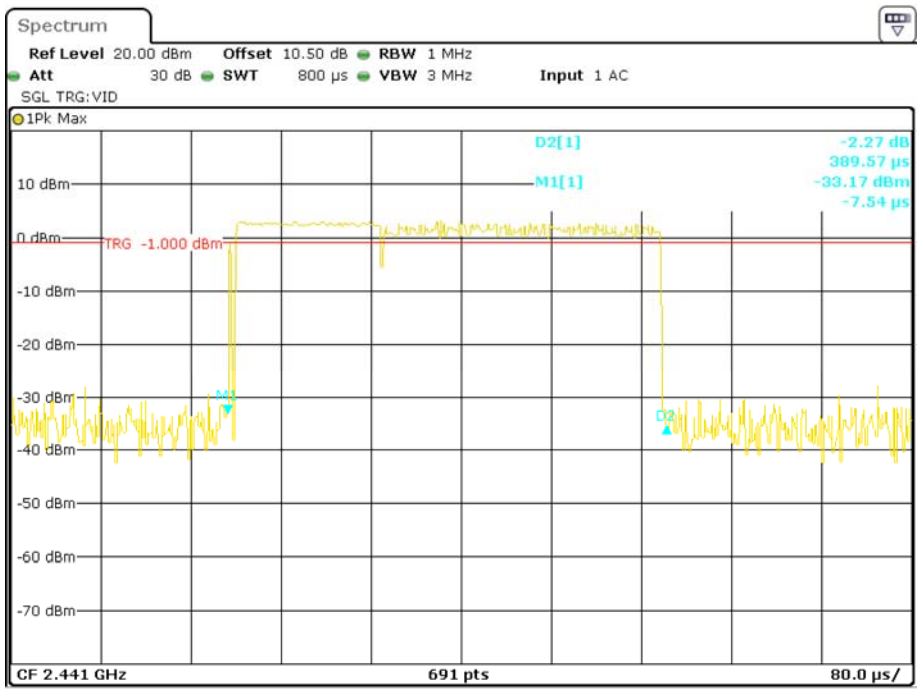

Date: 10.OCT.2015 12:33:02

**EDR (π/4-DQPSK):**
**Pulse time, Low Channel, 2DH1**

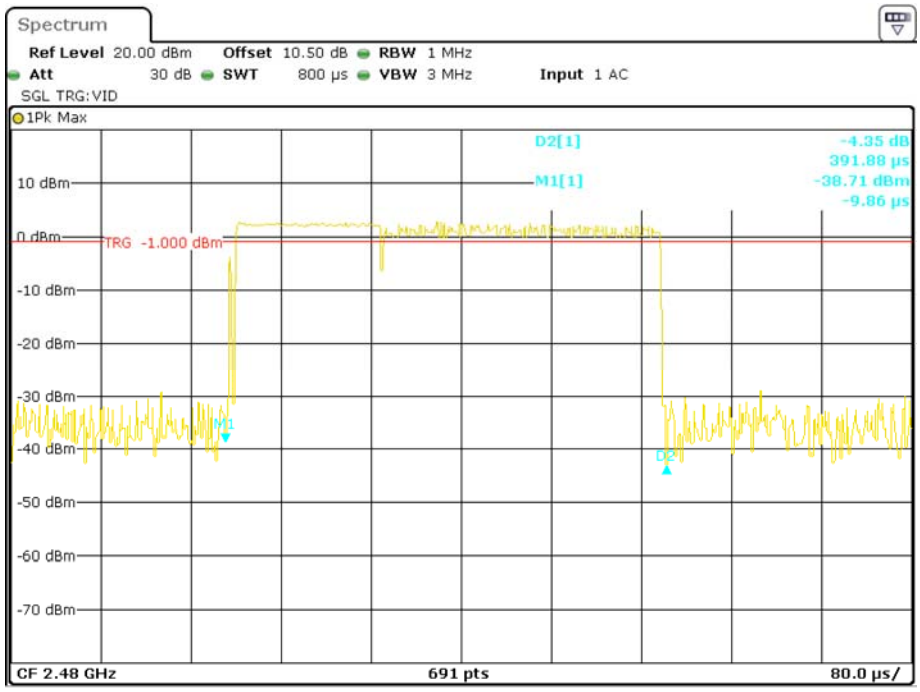



Date: 10.OCT.2015 11:27:25

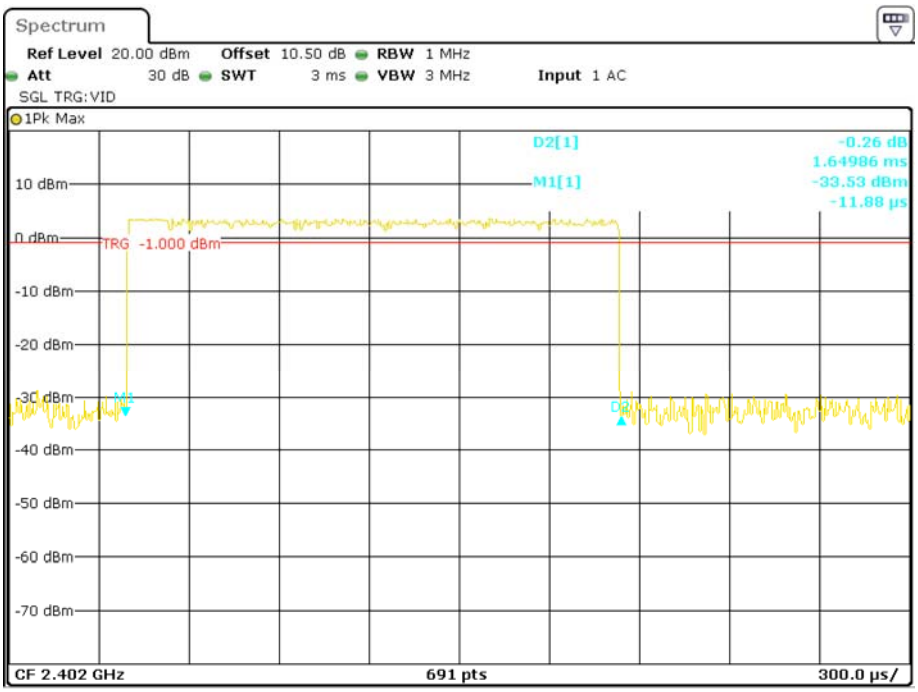
**Pulse time, Middle Channel, 2DH1**




**Pulse time, High Channel, 2DH1**

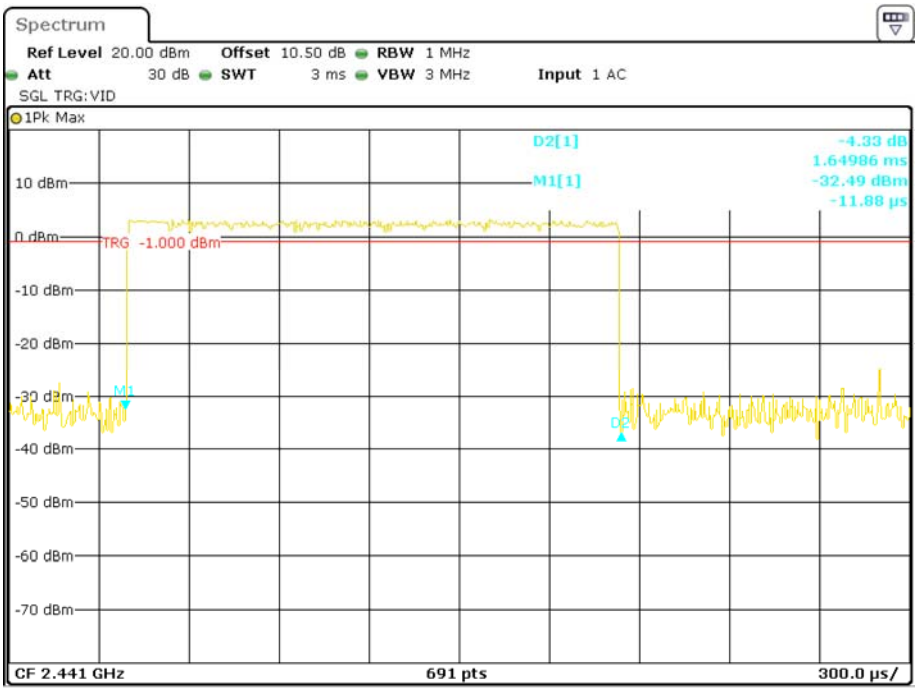


**Pulse time, Low Channel, 2DH3**



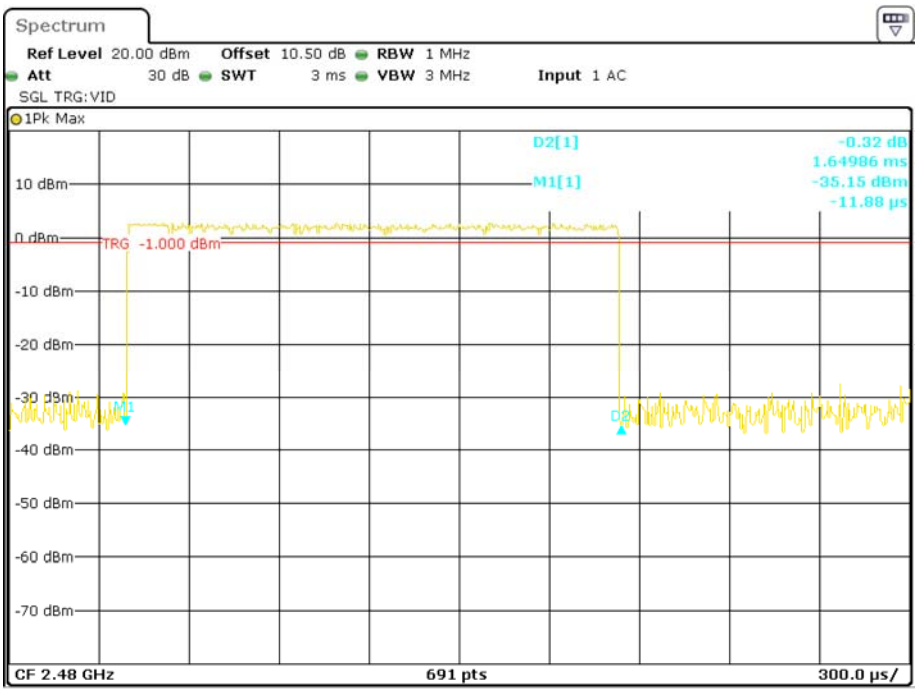

Date: 10.OCT.2015 11:54:50

**Pulse time, Middle Channel, 2DH3**



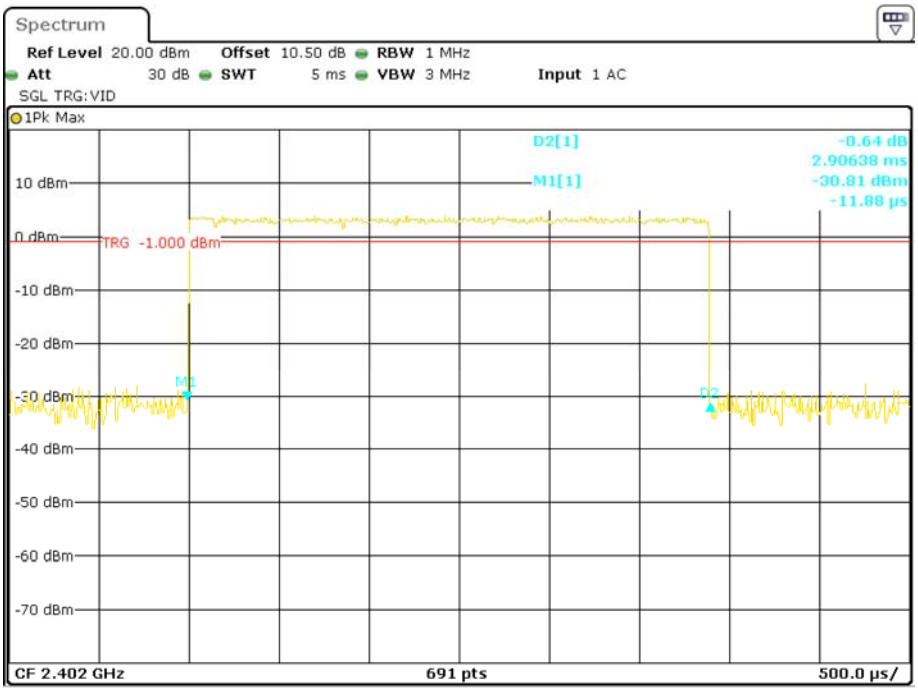

Date: 10.OCT.2015 11:55:44

**Pulse time, High Channel, 2DH3**



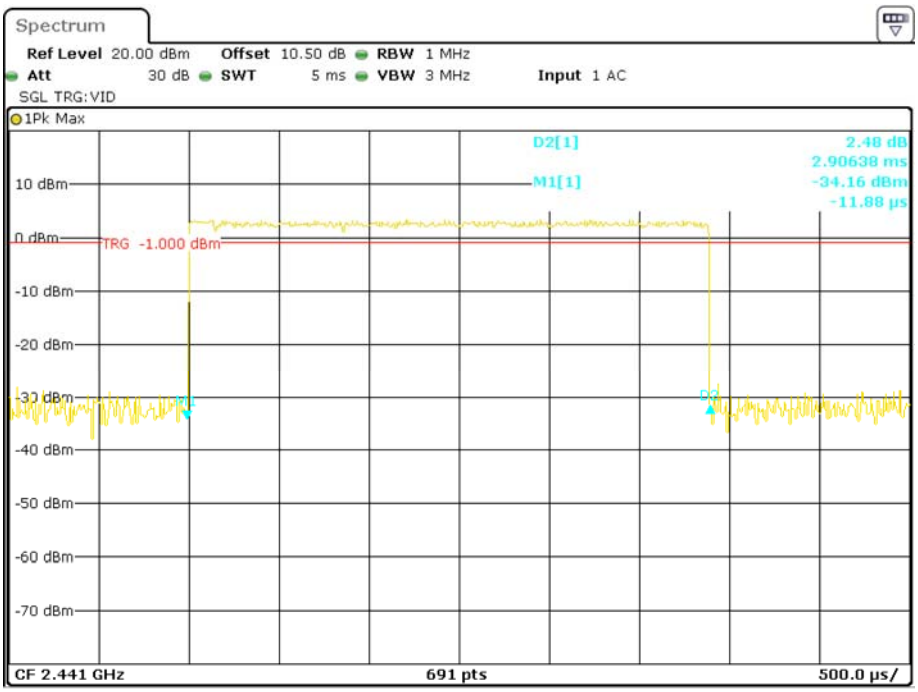

Date: 10.OCT.2015 11:56:51

**Pulse time, Low Channel, 2DH5**



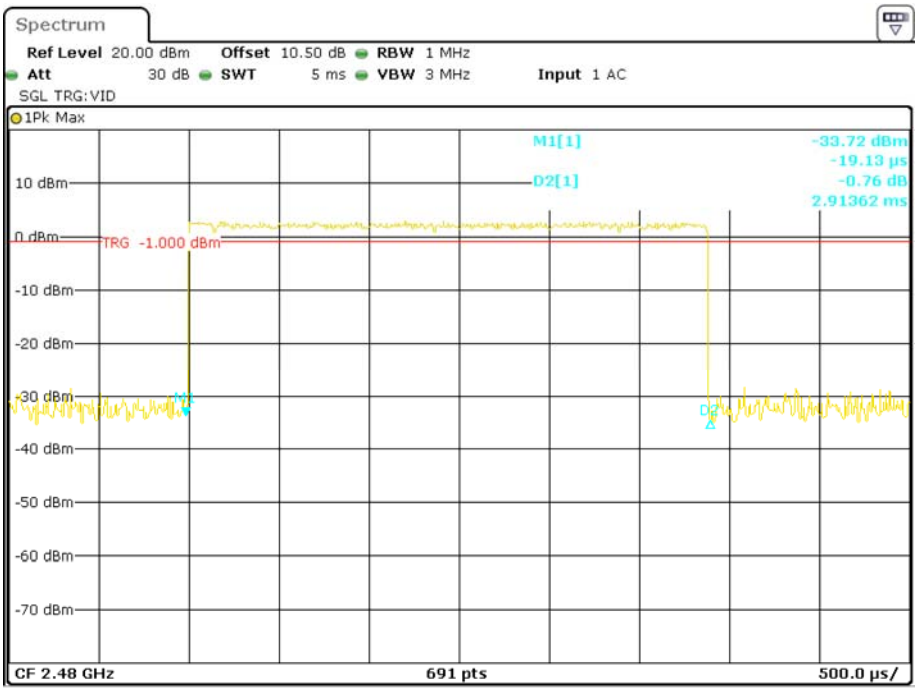

Date: 10.OCT.2015 12:30:40

**Pulse time, Middle Channel, 2DH5**



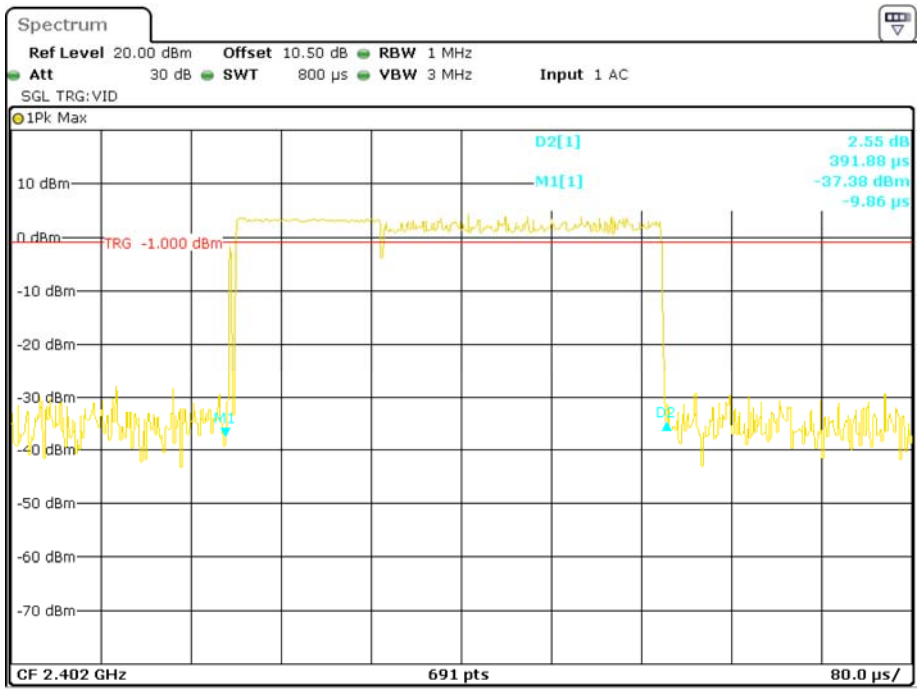

Date: 10.OCT.2015 12:29:48

**Pulse time, High Channel, 2DH5**



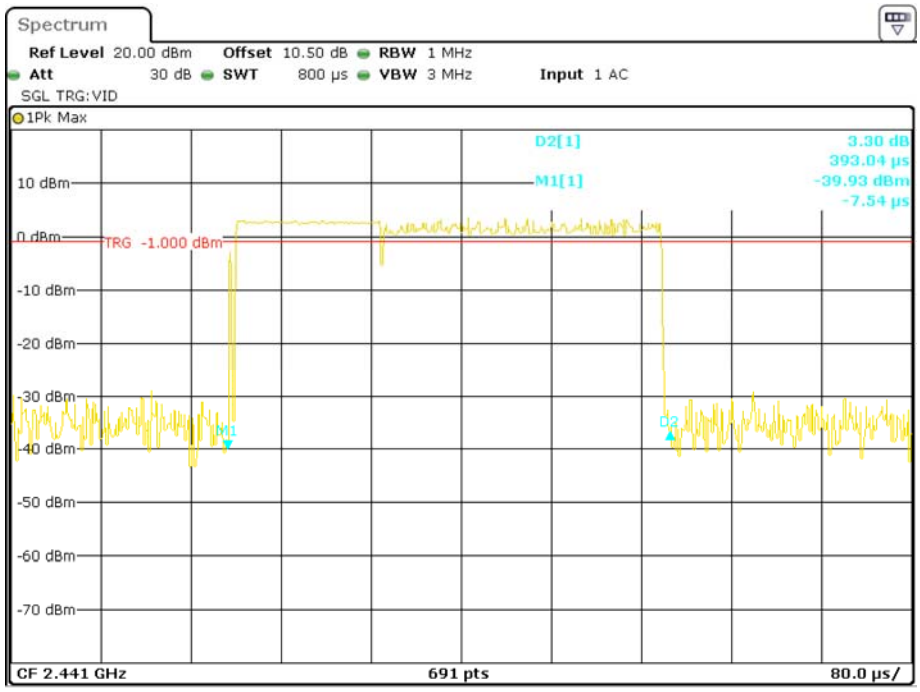

Date: 10.OCT.2015 12:28:52

**EDR (8DPSK):**
**Pulse time, Low Channel, 3DH1**



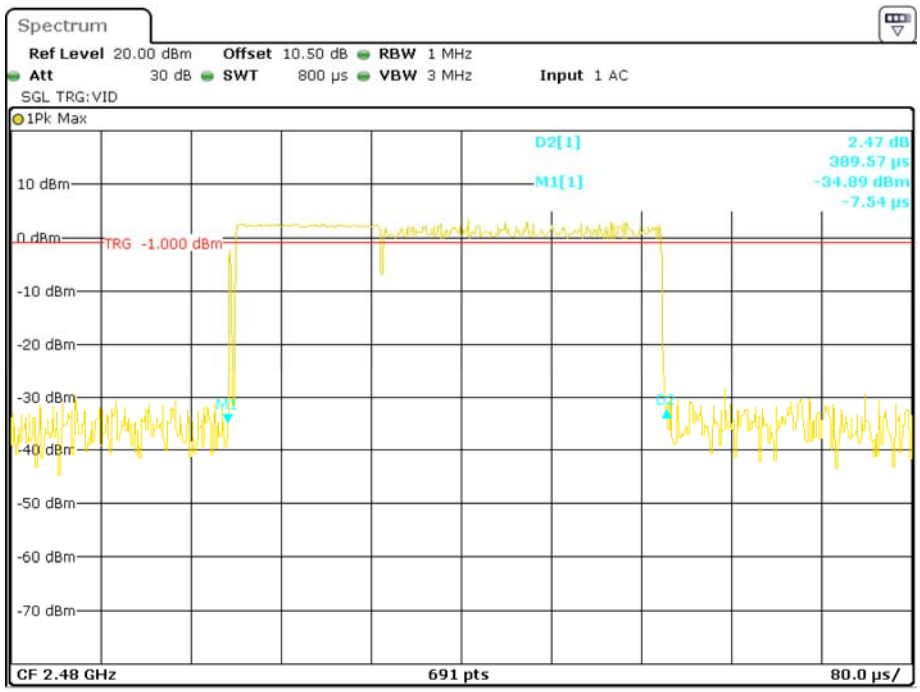

Date: 10.OCT.2015 11:21:50

**Pulse time, Middle Channel, 3DH1**

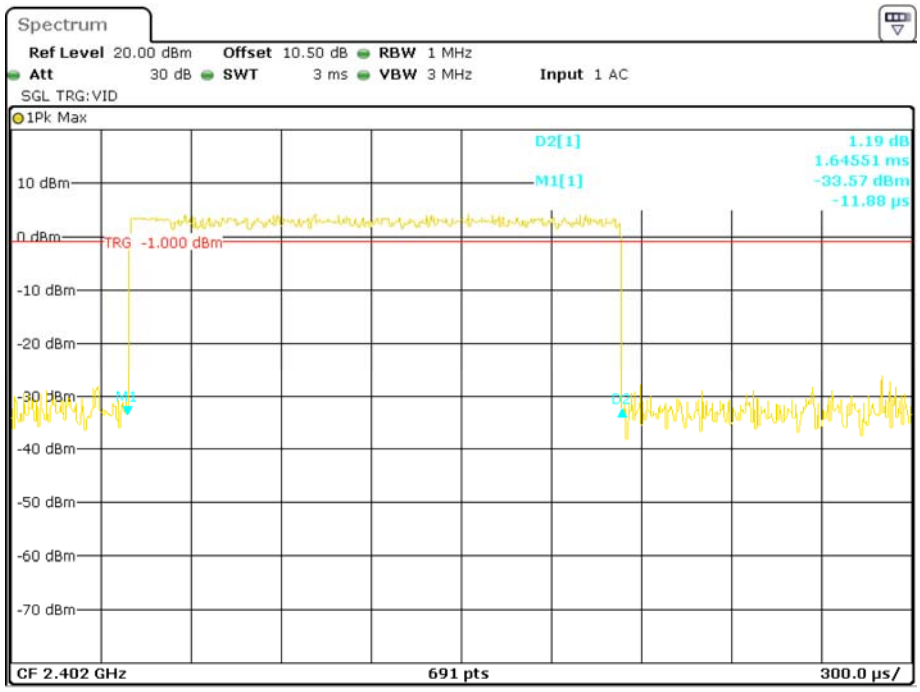



Date: 10.OCT.2015 11:23:28

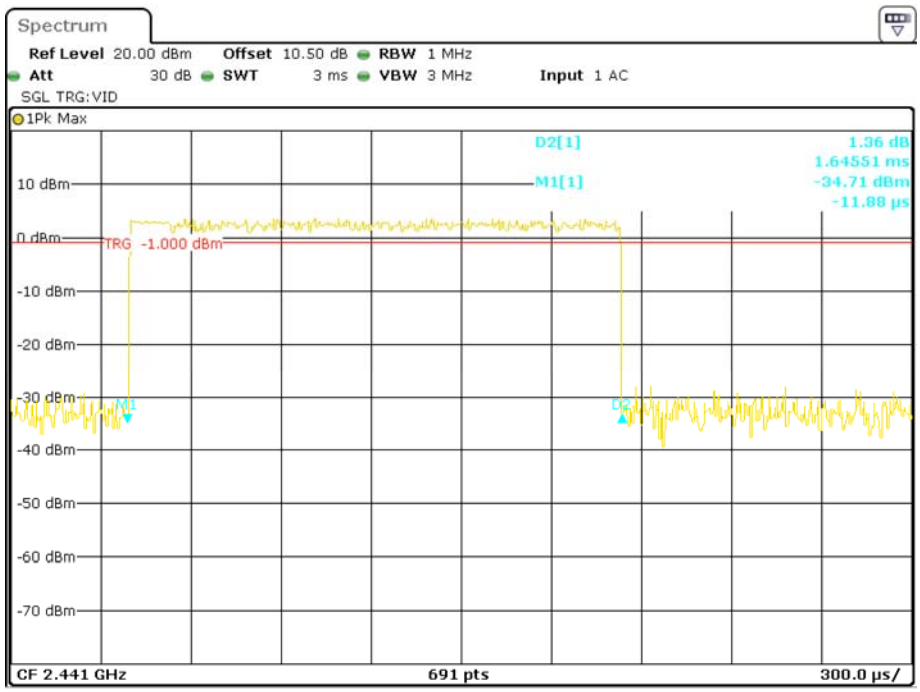
**Pulse time, High Channel, 3DH1**




**Pulse time, Low Channel, 3DH3**

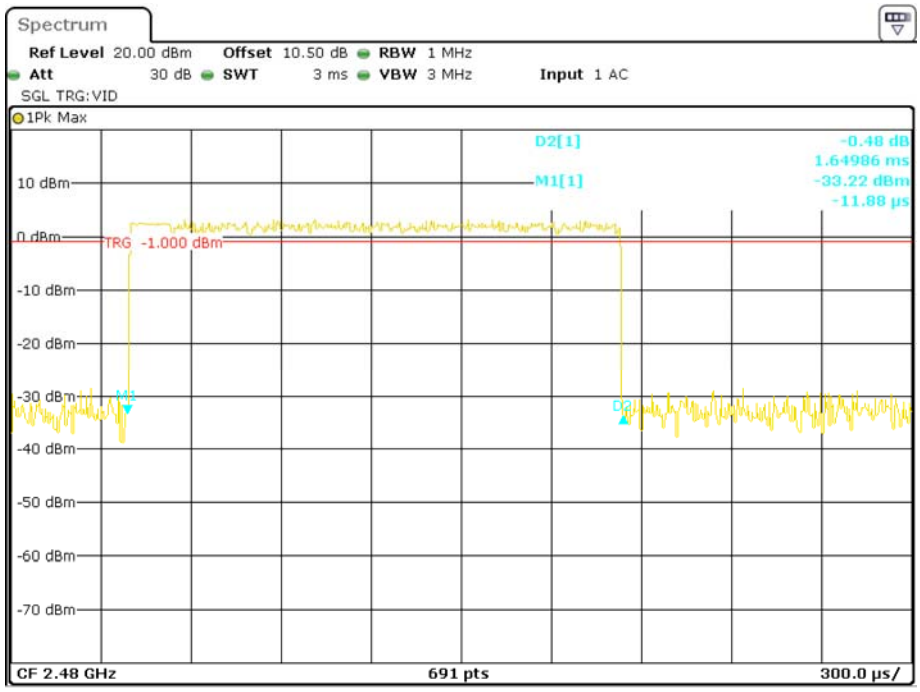


**Pulse time, Middle Channel, 3DH3**



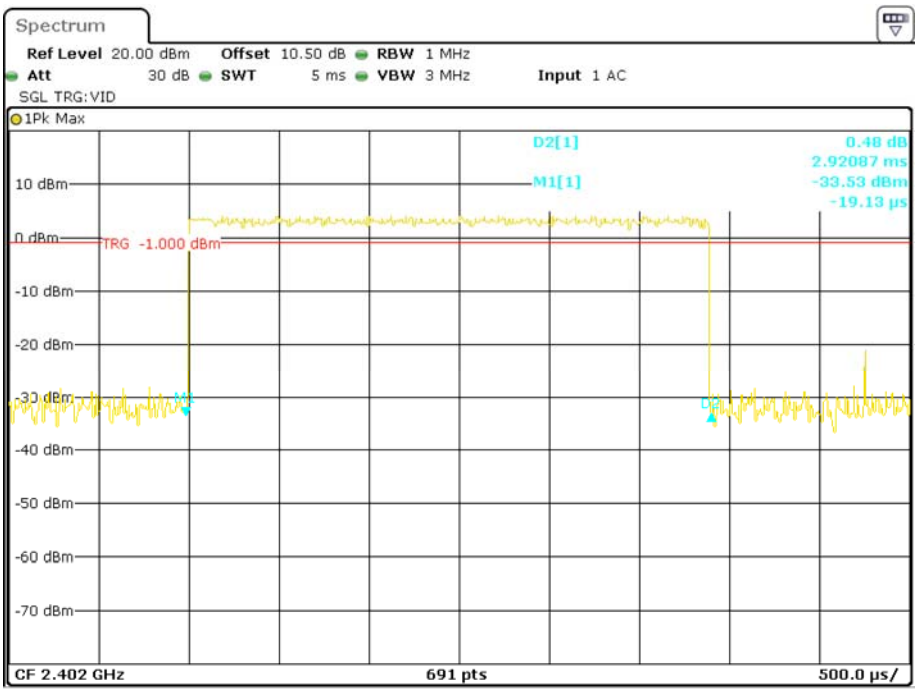

Date: 10.OCT.2015 11:58:17

**Pulse time, High Channel, 3DH3**



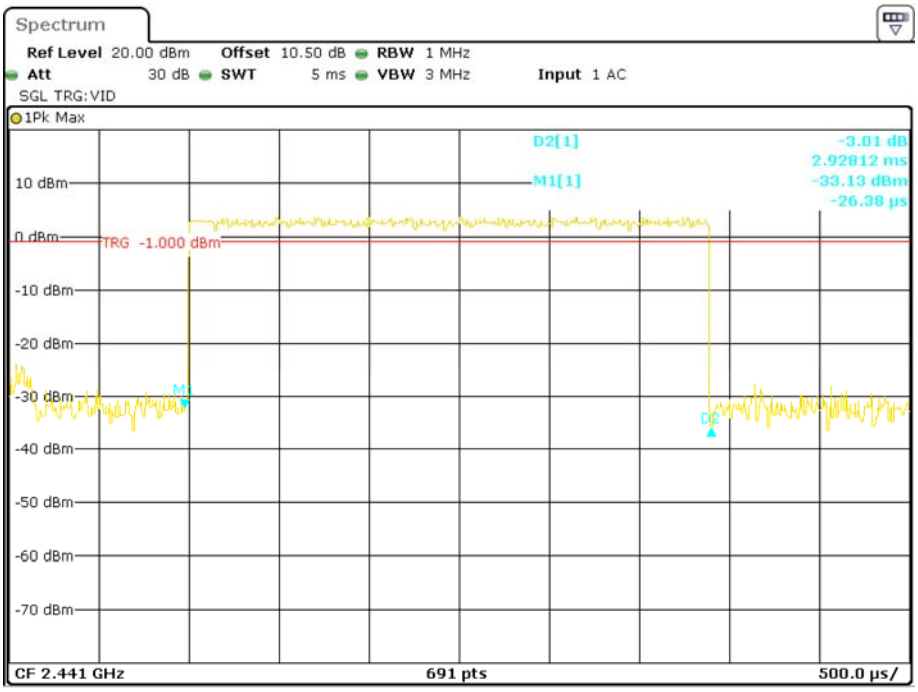

Date: 10.OCT.2015 11:57:20

**Pulse time, Low Channel, 3DH5**



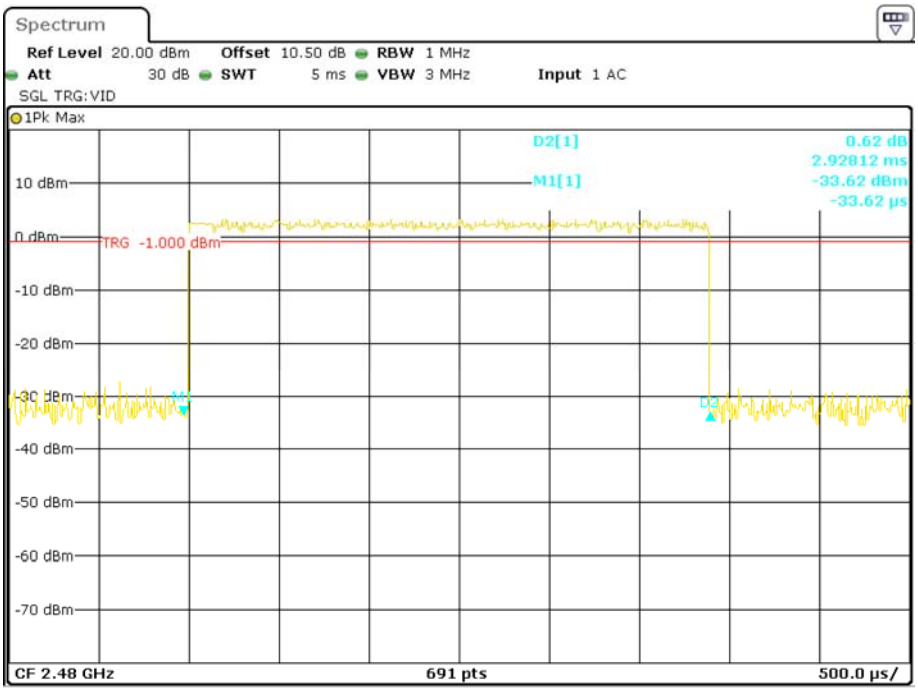

Date: 10.OCT.2015 12:01:30

**Pulse time, Middle Channel, 3DH5**




Date: 10.OCT.2015 12:02:59

**Pulse time, High Channel, 3DH5**



# FCC §15.247(b) (1) - PEAK OUTPUT POWER MEASUREMENT

## Applicable Standard

According to §15.247(b) (1), for 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. And for all other frequency hopping systems in the 2400–2483.5 MHz band: 0.125 watts.

## Test Procedure

1. Place the EUT on a bench and set in transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to one test equipment.
3. Add a correction factor to the display.

## Test Equipment List and Details

| Manufacturer | Description | Model | Serial Number | Calibration Date | Calibration Due Date |
|---|---|---|---|---|---|
| HP | Power Meter | N1912A | MY5000448 | 2014-11-03 | 2015-11-03 |
| HP | Power Sensor | N1921A | MY54210016 | 2014-11-03 | 2015-11-03 |

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

## Test Data

### Environmental Conditions

| | |
|---|---|
| **Temperature:** | 25 ℃ |
| **Relative Humidity:** | 51 % |
| **ATM Pressure:** | 101.0 kPa |

*The testing was performed by William Li on 2015-10-12.*

*EUT operation mode: Transmitting*

*Test Result: Compliance. Please refer to following table.*

| Mode | Channel | Frequency (MHz) | Peak Output Power | | Limit (mW) |
|---|---|---|---|---|---|
| | | | (dBm) | (mW) | |
| BDR (GFSK) | Low | 2402 | 5.44 | 3.50 | 1000 |
| | Middle | 2441 | 5.06 | 3.21 | 1000 |
| | High | 2480 | 4.65 | 2.92 | 1000 |
| EDR (π/4-DQPSK) | Low | 2402 | 4.49 | 2.81 | 1000 |
| | Middle | 2441 | 3.98 | 2.50 | 1000 |
| | High | 2480 | 3.61 | 2.30 | 1000 |
| EDR (8DPSK) | Low | 2402 | 4.89 | 3.08 | 1000 |
| | Middle | 2441 | 4.42 | 2.77 | 1000 |
| | High | 2480 | 3.96 | 2.49 | 1000 |

# FCC §15.247(d) - BAND EDGES TESTING

## Applicable Standard

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

## Test Procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Remove the antenna from the EUT and then connect to a low loss RF cable from the antenna port to a EMI test receiver, then turn on the EUT and make it operate in transmitting mode. Then set it to Low Channel and High Channel within its operating range, and make sure the instrument is operated in its linear range.
3. Set RBW of spectrum analyzer to 100 kHz with a convenient frequency span including 100 kHz bandwidth from band edge.
4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
5. Repeat above procedures until all measured frequencies were complete.

## Test Equipment List and Details

| Manufacturer | Description | Model | Serial Number | Calibration Date | Calibration Due Date |
|---|---|---|---|---|---|
| Rohde & Schwarz | EMI Test Receiver | ESR | 1316.3003K03-101746-zn | 2015-06-13 | 2016-06-13 |

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

## Test Data

### Environmental Conditions

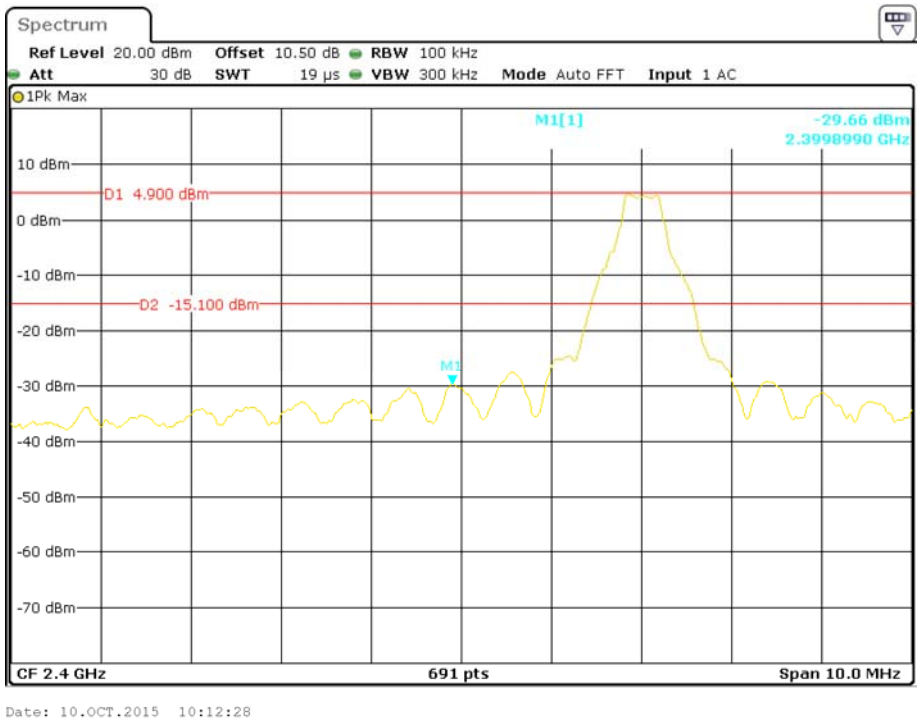
| | |
|---|---|
| **Temperature:** | 26 ℃ |
| **Relative Humidity:** | 52 % |
| **ATM Pressure:** | 101.0 kPa |

*The testing was performed by William Li on 2015-10-10.*

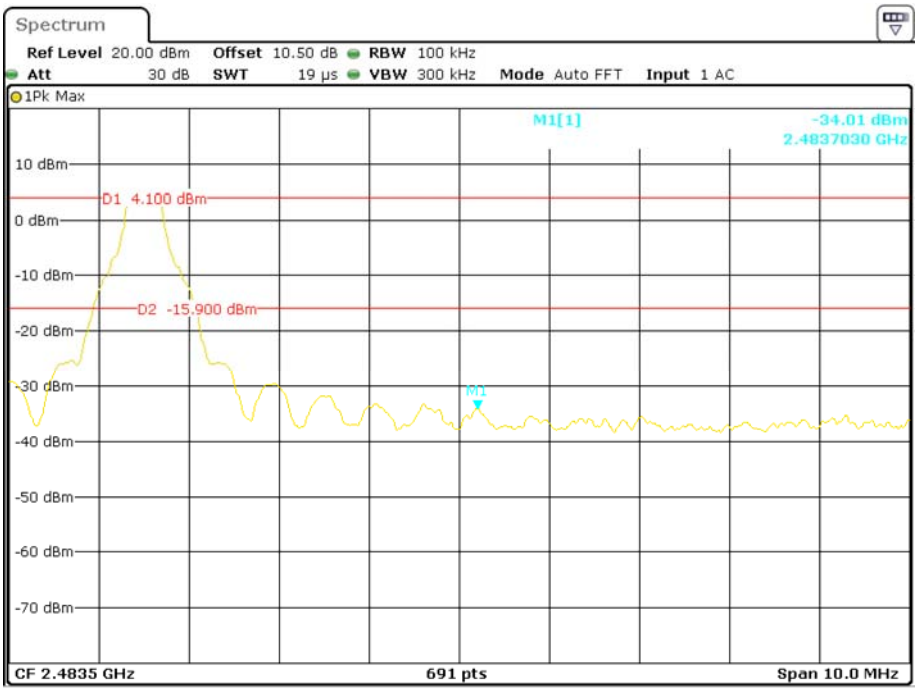
*EUT operation mode: Transmitting*

*Test Result: Compliance. Please refer to following plots.*

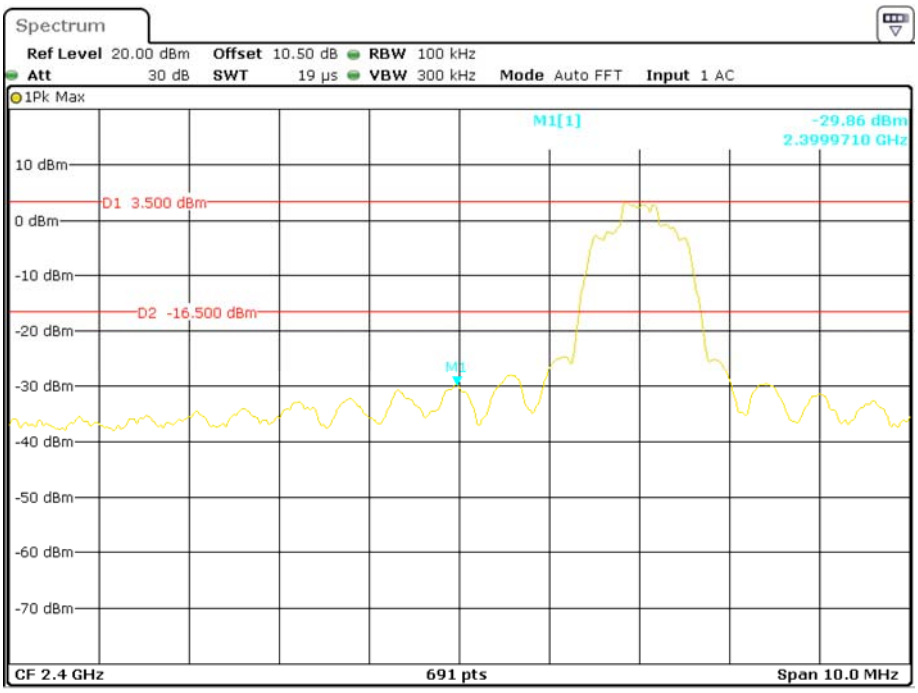
**BDR (GFSK): Band Edge-Left Side**



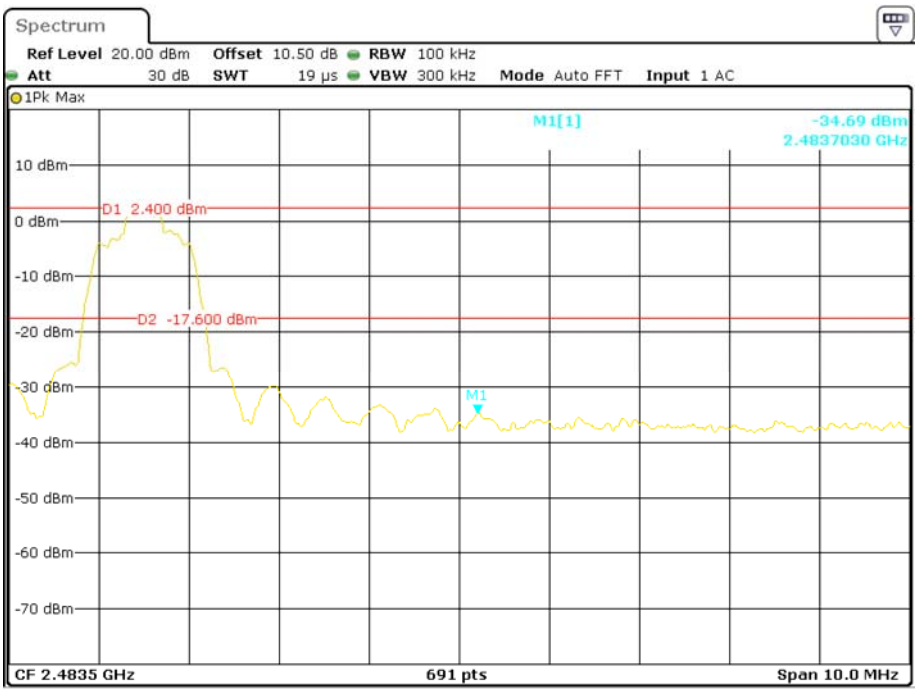
**BDR (GFSK): Band Edge-Right Side**



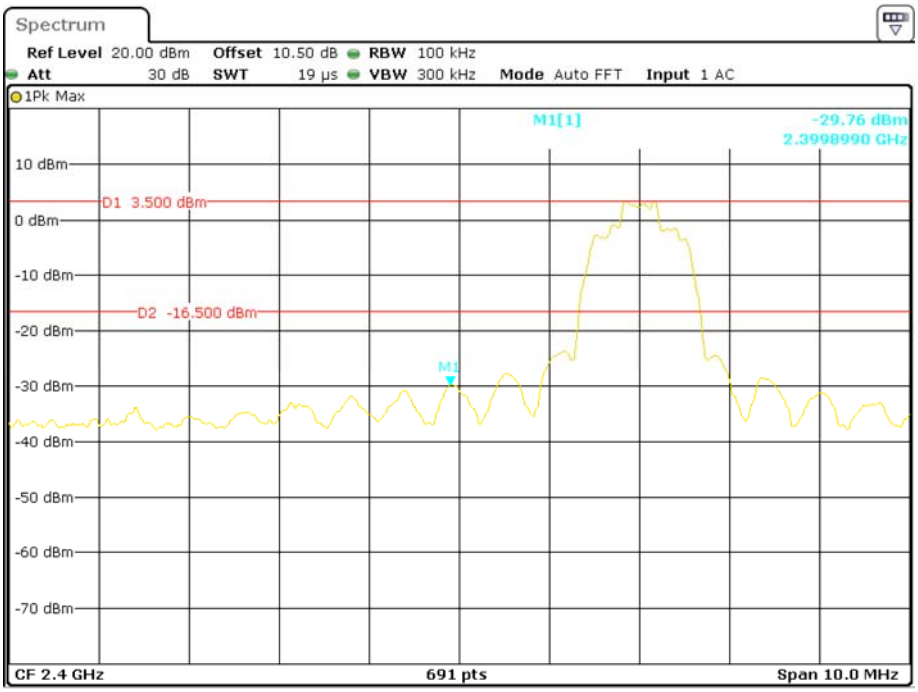

**EDR (π/4-DQPSK): Band Edge-Left Side**



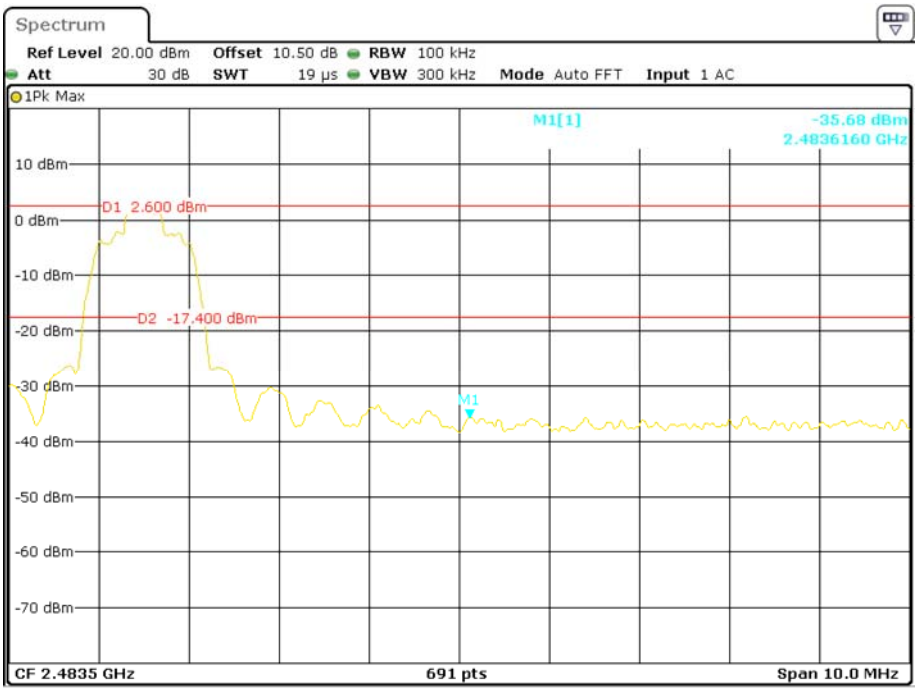
**EDR (π/4-DQPSK): Band Edge-Right Side**




**EDR (8DPSK): Band Edge-Left Side**



**BDR (8DPSK): Band Edge-Right Side**




******* END OF REPORT *******