Lab Code: 200707-0

FCC PART 15.247

TEST REPORT

For

Shenzhen MobiTek Technology limited

1218, Dynamic World, Zhonghang Rd, Futian disctrict, Shenzhen

FCC ID: OZHMBTTXT

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

Test Engineer:	Ares Liu
Report Number:	RSZ120711004-00B
Report Date:	2012-07-26
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TABLE OF CONTENTS

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

The *Shenzhen MobiTek Technology limited*'s product, model number: *TXT (FCC ID: OZHMBTTXT)* (the "EUT") in this report was a GSM *Mobile Phone.* which was measured approximately: 9.8cm (L) x 5.3cm (W) x 1.5cm (H), rated input voltage: DC 3.7V Lithium battery or DC 5.0V from adapter.

Operating Frequency Range:
GSM850： 824-849MHz(TX),
869-894MHz (RX);
PCS1900: 1850-1910MHz(TX),
1930-1990 MHz (RX);
Bluetooth: 2400MHz-2483.5MHz

Adapter Information:
MODEL:HY-818B<IC>
INPUT: 100-240V, 50/60 Hz, 0.1A
OUTPUT: 5.0V, 500mA

** All measurement and test data in this report was gathered from production sample serial number: 120711004 (Assigned by BACL, Dongguan). The EUT was received on 2012-07-14*

Objective

This report is prepared on behalf of *Shenzhen MobiTek Technology limited* in 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 the compliance of EUT with FCC Part 15, Subpart C, and section 15.203, 15.205, 15.207, 15.209 and 15.247 rules.

Related Submittal(s)/Grant(s)

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

Test Methodology

All measurements contained in this report were conducted with ANSI C63.4-2009, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz.

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

The uncertainty of any RF tests which use conducted method measurement is ±1.5 dB, the uncertainty of any radiation on emissions measurement is ±4.9 dB

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Dongguan) to collect test data is located on the No.69 Pulongcun, Puxinhu Industrial Zone, Tangxia, Dongguan, Guangdong, China

Test site at Bay Area Compliance Laboratories Corp. (Dongguan) 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 February 02, 2012. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2009.

The Federal Communications Commission has the reports on file and is listed under FCC Registration No.: 273710. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

Additionally, Bay Area Compliance Laboratories Corp. (Shenzhen) is an ISO/IEC 17025 accredited laboratory, and is accredited by National Voluntary Laboratory Accredited Program (Lab Code 200707-0).

The current scope of accreditations can be found at http://ts.nist.gov/Standards/scopes/2007070.htm

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The system was configured for testing in an engineering mode, which is provided by manufacturer.

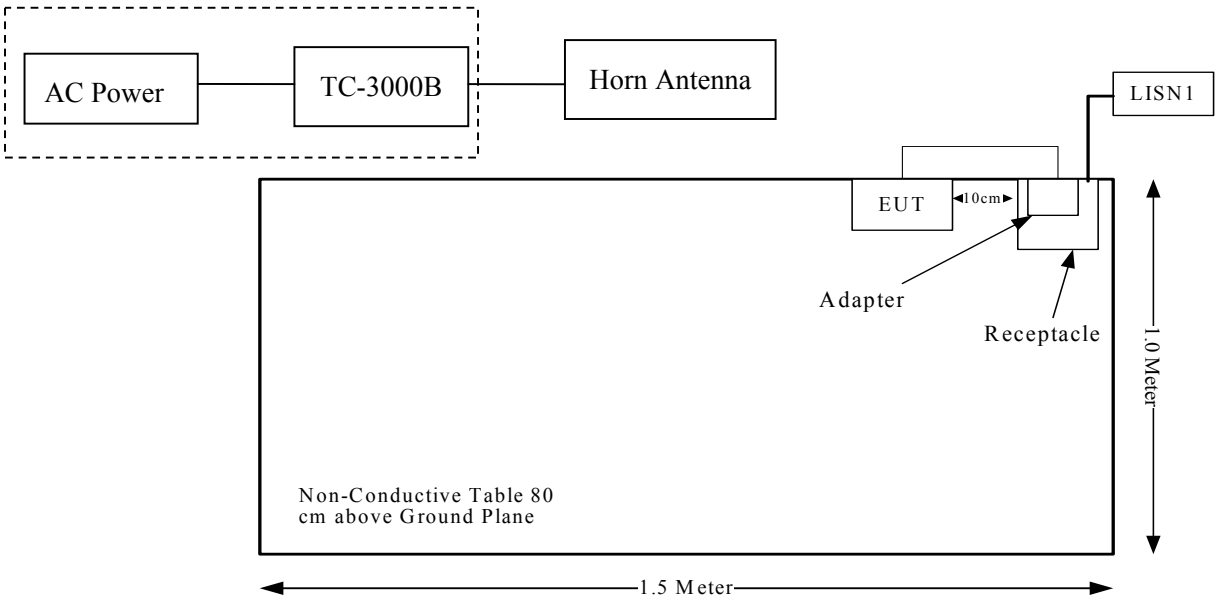
Equipment Modifications

No modification was made to the EUT tested.

Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
TESCOM	Bluetooth Tester	TC-3000B	3000B650083

Block Diagram of Test Setup



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§15.247 (i), §2.1093	RF Exposure	Compliace
§15.203	Antenna Requirement	Compliance
§15.207 (a)	Conducted Emissions	Compliance
§15.205, §15.209, §15.247(d)	Radiated Emissions	Compliance
§15.247 (a)(1)	20 dB 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) AND §2.1093 – RF EXPOSURE

Applicable Standard

According to §15.247 (i) and §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

Table 2 – Summary of SAR Evaluation Requirements for a Cell Phone with Multiple Transmitters

	Individual Transmitter	Simultaneous Transmission
Licensed Transmitters	Routine evaluation required	SAR not required: Unlicensed only ○ when stand-alone 1-g SAR is not required and antenna is ≥ 5 cm from other antennas Licensed & Unlicensed ○ when the sum of the 1-g SAR is < 1.6 W/kg for all simultaneous transmitting antennas ○ when SAR to peak location separation ratio of simultaneous transmitting antenna pair is < 0.3
Unlicensed Transmitters	When there is no simultaneous transmission – ○ output ≤ 60/f: SAR not required ○ output > 60/f: stand-alone SAR required When there is simultaneous transmission – Stand-alone SAR not required when ○ output ≤ 2·P_{Ref} and antenna is ≥ 5.0 cm from other antennas ○ output ≤ P_{Ref} and antenna is ≥ 2.5 cm from other antennas ○ output ≤ P_{Ref} and antenna is < 2.5 cm from other antennas, each with either output power ≤ P_{Ref} or 1-g SAR < 1.2 W/kg Otherwise stand-alone SAR is required When stand-alone SAR is required ○ test SAR on highest output channel for each wireless mode and exposure condition ○ if SAR for highest output channel is > 50% of SAR limit, evaluate all channels according to normal procedures	SAR required: Licensed & Unlicensed antenna pairs with SAR to peak location separation ratio ≥ 0.3; test is only required for the configuration that results in the highest SAR in stand-alone configuration for each wireless mode and exposure condition Note: simultaneous transmission exposure conditions for head and body can be different for different style phones; therefore, different test requirements may apply
Jaw, Mouth and Nose	Flat phantom SAR required ○ when measurement is required in tight regions of SAM and it is not feasible or the results can be questionable due to probe tilt, calibration, positioning and orientation issues ○ position rectangular and clam-shell phones according to flat phantom procedures and conduct SAR measurements for these specific locations	When simultaneous transmission SAR testing is required, contact the FCC Laboratory for interim guidance.

Routine SAR evaluation refers to that specifically required by § 2.1093, using measurements or computer simulation. When routine SAR evaluation is not required, portable transmitters with output power greater than the applicable low threshold require SAR evaluation to qualify for TCB approval.

1) Bluetooth can transmit simultaneously with GSM.
2) The distance between BT and GSM antenna is cm 4.7cm> 2.5cm. The max output power of Bluetooth antenna is (4.28dBm) 2.68mW < P_{Ref} (12mW) .According to KDB648474, stand-alone SAR is not required for BT antenna and simultaneous SAR evaluation is not required for Bluetooth and GSM antennas.
3) P_{Ref} is defined as the maximum conducted power available at the antenna according to source-based time-averaging requirements of Section 2.1093(d) (5).

Result: Compliance

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 a monopole antenna soldered on the printed circuit boards, which complied with 15.203, the maximum gain is 0 dBi, please refer to the internal photos.

Result: Compliance.

FCC §15.207 (a) – AC LINE CONDUCTED EMISSIONS

Applicable Standard

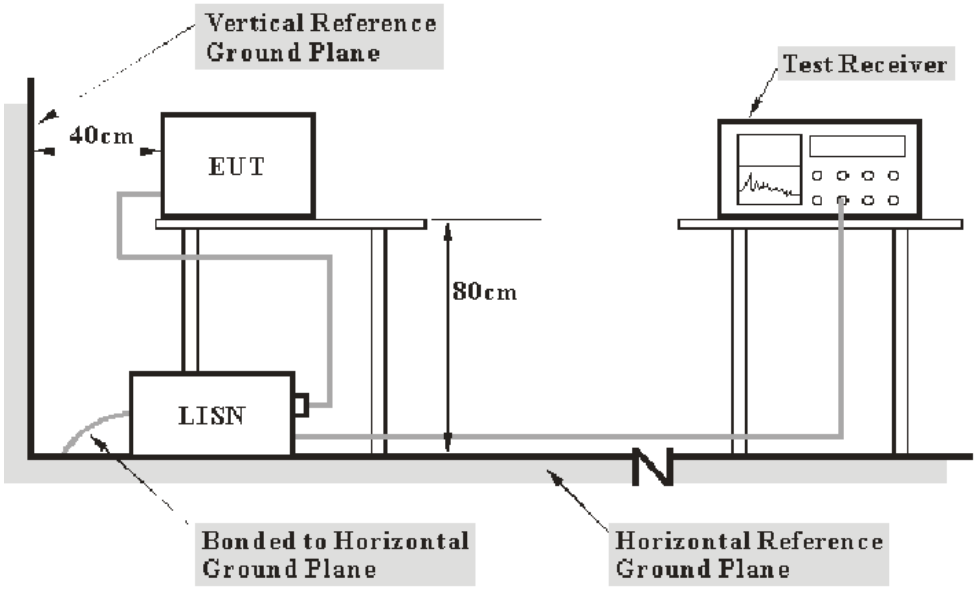
FCC §15.207

Measurement Uncertainty

All measurements involve certain levels of uncertainties, especially in field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, and LISN.

Based on CISPR 16-4-2, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any conducted emissions measurement at Bay Area Compliance Laboratories Corp. (Dongguan) is 1.5 dB.

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 setup of EUT is according with per ANSI C63.4-2009 measurement procedure. The specification used was with the FCC Part 15.207 limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

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 BW***
150 kHz – 30 MHz	9 kHz

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	EMI Test Reciever	ESCS 30	830245/006	2011-10-08	2012-10-07
Rohde & Schwarz	LISN	ESH3-Z5	843331/015	2011-10-08	2012-10-07

*** Statement of Traceability:** Bay Area Compliance Laboratory Corp. (Dongguan) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

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

Test Results Summary

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

15.39 dB at **0.510 MHz** in the **Neutral**

Test Data

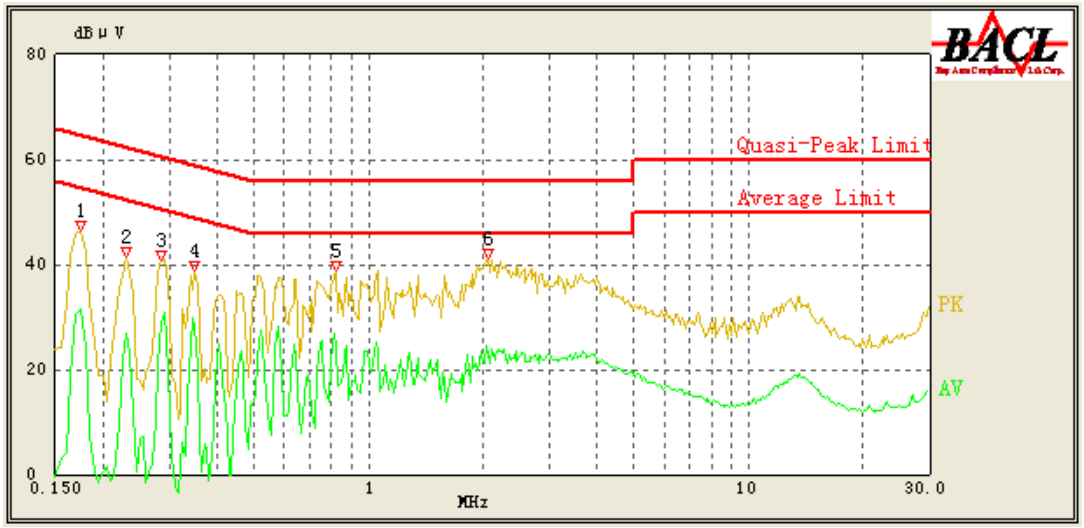
Environmental Conditions

Temperature:	25 °C
Relative Humidity:	56 %
ATM Pressure:	100.0kPa

** The testing was performed by Ares Liu on 2012-07-23.*

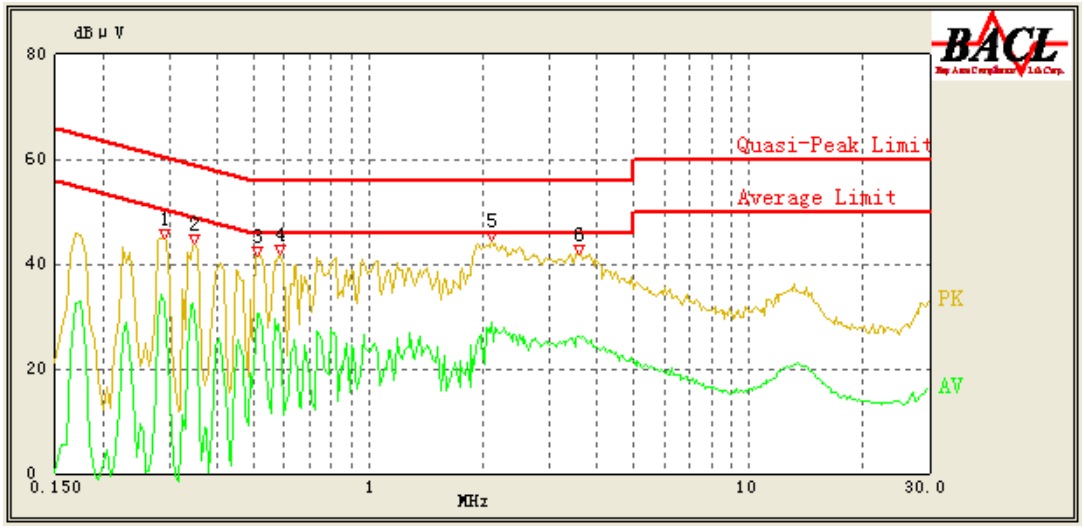
Test Mode: Transmitting

120V, 60 Hz, Line:



Frequency (MHz)	Corrected Result (dBμV)	Correction Factor (dB)	Limit (dBμV)	Margin (dB)	Detector (PK /QP/Ave.)
0.820	35.60	0.44	56.00	20.40	QP
2.055	35.40	0.48	56.00	20.60	QP
0.820	24.93	0.44	46.00	21.07	Ave.
2.040	24.64	0.48	46.00	21.36	Ave.
0.350	28.36	0.42	50.29	21.93	Ave.
0.285	28.98	0.42	52.14	23.16	Ave.
0.175	41.71	0.41	65.29	23.58	QP
0.175	31.37	0.41	55.29	23.92	Ave.
0.350	36.07	0.42	60.29	24.22	QP
0.285	36.30	0.42	62.14	25.84	QP
0.230	37.21	0.42	63.71	26.50	QP
0.230	26.99	0.42	53.71	26.72	Ave.

120V, 60 Hz, Neutral:



Frequency (MHz)	Corrected Result (dBµV)	Correction Factor (dB)	Limit (dBµV)	Margin (dB)	Detector (PK /QP/Ave.)
0.510	30.61	0.42	46.00	15.39	Ave.
2.105	39.34	0.48	56.00	16.66	QP
0.585	39.15	0.43	56.00	16.85	QP
0.510	38.95	0.42	56.00	17.05	QP
2.105	28.71	0.48	46.00	17.29	Ave.
0.580	28.49	0.43	46.00	17.51	Ave.
0.350	41.25	0.42	60.29	19.04	QP
0.290	32.92	0.42	52.00	19.08	Ave.
0.350	30.61	0.42	50.29	19.68	Ave.
3.570	26.15	0.50	46.00	19.85	Ave.
0.290	41.33	0.42	62.00	20.67	QP
3.585	35.12	0.50	56.00	20.88	QP

FCC §15.209, §15.205 & §15.247(d) - SPURIOUS EMISSIONS

Applicable Standard

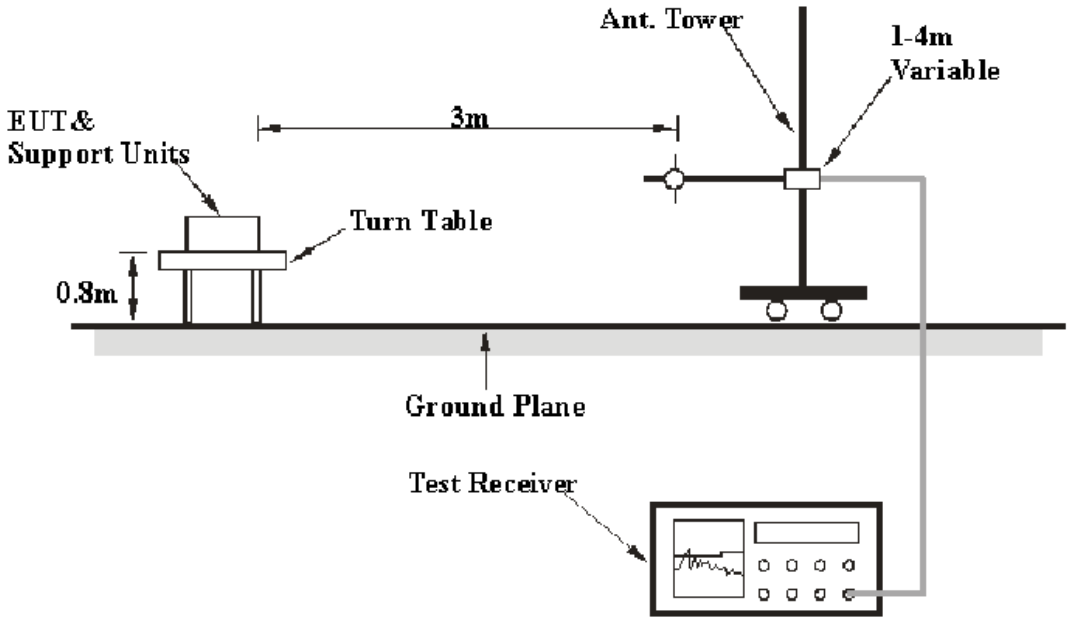
FCC §15.247 (d); §15.209; §15.205;

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, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of a radiation emissions measurement from 30 MHz to 1 GHz at Bay Area Compliance Laboratories Corp. (Dongguan) is 4.9 dB.

EUT Setup



The radiated emission tests were performed in the 3 meters test site, using the setup accordance with the ANSI C63.4-2009. The specification used was the FCC 15.209, and FCC 15.247 limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

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 BW***	***Detector***
30 MHz – 1000 MHz	100 kHz	300 kHz	QP
1000 MHz – 25 GHz	1 MHz	3 MHz	PK
1000 MHz – 25 GHz	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.

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

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	EMI Test Reciever	ESCI	100224	2012-05-13	2013-05-12
Sunol Sciences	Hybrid Antennas	JB3	A060611-1	2011-09-06	2012-09-05
HP	Pre-amplifier	8447E	2434A02181	2011-10-08	2012-10-07
Rohde & Schwarz	Spectrum Analyzer	FSEM	1079 8500	2011-10-09	2012-10-08
Dayang	Horn Antenna	OMCDH10180	10279001B	2011-07-30	2013-07-29
mini-circuits	Wideband Amplifier	ZVA-183-S+	96901149	2012-04-24	2013-04-23

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

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 = 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 Results Summary

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

Transmitting (BDR-π/4-QPSK) Mode: 1.20dB at **7206 MHz** in the **Vertical** polarization at low channel

Test Data

Environmental Conditions

Temperature:	25 °C
Relative Humidity:	56 %
ATM Pressure:	100.0kPa

The testing was performed by Ares Liu on 2012-07-23.

Test Mode: Tansmitting (BDR- GFSK)

Frequency	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	(Test standard)	
(MHz)	Reading (dBμV)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB)				Limit (dBμV/m)	Margin (dB)
Low Channel:2402MHz									
7206	53.99	PK	V	38.67	6.50	26.54	72.62	74.00	1.38*
7206	32.33	AV	V	38.67	6.50	26.54	50.96	54.00	3.04*
854.57	38.96	QP	V	22.21	3.53	22.25	42.45	46.00	3.55*
2390	14.28	AV	V	30.98	3.84	0.00	49.11	54.00	4.89
1099.4	43.71	AV	V	25.10	2.23	27.10	43.94	54.00	10.06
2390	28.31	PK	V	30.98	3.84	0.00	63.14	74.00	10.86
4804	24.69	AV	V	33.17	4.67	27.34	35.19	54.00	18.81
9608	14.19	AV	V	38.52	8.75	26.39	35.06	54.00	18.94
4804	43.39	PK	V	33.17	4.67	27.34	53.89	74.00	20.11
9608	32.26	PK	V	38.52	8.75	26.39	53.13	74.00	20.87
1099.4	44.32	PK	V	25.10	2.23	27.10	44.55	74.00	29.45
2402	30.24	AV	H	31.05	3.90	0.00	65.20	N/A	N/A
2402	59.59	PK	H	31.05	3.90	0.00	94.55	N/A	N/A
2402	30.52	AV	V	31.05	3.90	0.00	65.48	N/A	N/A
2402	60.63	PK	V	31.05	3.90	0.00	95.59	N/A	N/A

Frequency	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	(Test standard)	
(MHz)	Reading (dBμV)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB)				Limit (dBμV/m)	Margin (dB)
Middle Channel:2441MHz									
7323	52.67	PK	V	38.88	6.72	26.67	71.61	74.00	2.39*
7323	31.47	AV	V	38.88	6.72	26.67	50.41	54.00	3.59*
459.23	32.02	QP	V	17.48	2.61	21.92	30.19	46.00	15.81
4882	25.03	AV	V	33.34	4.75	27.04	36.08	54.00	17.92
9764	14.31	AV	V	38.83	8.58	26.54	35.17	54.00	18.83
4882	41.92	PK	V	33.34	4.75	27.04	52.97	74.00	21.03
9764	31.64	PK	V	38.83	8.58	26.54	52.50	74.00	21.50
2441	31.87	AV	H	31.27	3.99	0.00	67.13	N/A	N/A
2441	60.24	PK	H	31.27	3.99	0.00	95.50	N/A	N/A
2441	30.84	AV	V	31.27	3.99	0.00	66.10	N/A	N/A
2441	60.25	PK	V	31.27	3.99	0.00	95.51	N/A	N/A

Frequency	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	(Test standard)	
(MHz)	Reading (dBμV)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB)				Limit (dBμV/m)	Margin (dB)
High Channel:2480MHz									
7440	32.49	AV	V	39.09	6.95	26.79	51.74	54.00	2.26*
7440	51.31	PK	V	39.09	6.95	26.79	70.56	74.00	3.44*
2483.5	14.02	AV	V	31.51	3.80	0.00	49.32	54.00	4.68
2483.5	31.28	PK	V	31.51	3.80	0.00	66.58	74.00	7.42
610.25	32.86	QP	V	19.45	3.04	22.27	33.07	46.00	12.93
4960	24.18	AV	V	33.51	4.70	27.26	35.13	54.00	18.87
9920	14.23	AV	V	39.14	8.41	26.70	35.08	54.00	18.92
9920	31.87	PK	V	39.14	8.41	26.70	52.72	74.00	21.28
4960	40.94	PK	V	33.51	4.70	27.26	51.89	74.00	22.11
2480	29.97	AV	H	31.49	3.82	0.00	65.28	N/A	N/A
2480	58.63	PK	H	31.49	3.82	0.00	93.94	N/A	N/A
2480	31.11	AV	V	31.49	3.82	0.00	66.42	N/A	N/A
2480	61.02	PK	V	31.49	3.82	0.00	96.33	N/A	N/A

Test Mode: Tansmitting (BDR-π/4-QPSK)

Frequency	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	(Test standard)	
(MHz)	Reading (dBμV)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB)				Limit (dBμV/m)	Margin (dB)
Low Channel:2402MHz									
7206	54.17	PK	V	38.67	6.50	26.54	72.80	74.00	1.20*
7206	32.38	AV	V	38.67	6.50	26.54	51.01	54.00	2.99 *
854.57	39.05	QP	V	22.21	3.53	22.25	42.54	46.00	3.46*
2390	14.16	AV	V	30.98	3.84	0.00	48.99	54.00	5.01
1099.4	43.84	AV	V	25.10	2.23	27.10	44.07	54.00	9.93
2390	27.51	PK	V	30.98	3.84	0.00	62.34	74.00	11.66
9608	14.21	AV	V	38.52	8.75	26.39	35.08	54.00	18.92
4804	23.64	AV	V	33.17	4.67	27.34	34.14	54.00	19.86
4804	43.4	PK	V	33.17	4.67	27.34	53.90	74.00	20.10
9608	32.33	PK	V	38.52	8.75	26.39	53.20	74.00	20.80
1099.4	44.29	PK	V	25.10	2.23	27.10	44.52	74.00	29.48
2402	30.36	AV	H	31.05	3.90	0.00	65.32	N/A	N/A
2402	59.38	PK	H	31.05	3.90	0.00	94.34	N/A	N/A
2402	30.6	AV	V	31.05	3.90	0.00	65.56	N/A	N/A
2402	60.38	PK	V	31.05	3.90	0.00	95.34	N/A	N/A

Frequency	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	(Test standard)	
(MHz)	Reading (dBμV)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB)				Limit (dBμV/m)	Margin (dB)
Middle Channel:2441MHz									
4882	34.29	AV	V	33.34	4.75	27.04	45.34	54.00	8.66
4882	52.79	PK	V	33.34	4.75	27.04	63.84	74.00	10.16
7323	22.87	AV	V	38.88	6.72	26.67	41.81	54.00	12.19
7323	42.16	PK	V	38.88	6.72	26.67	61.10	74.00	12.90
459.23	32.16	QP	V	17.48	2.61	21.92	30.33	46.00	15.67
9764	14.17	AV	V	38.83	8.58	26.54	35.03	54.00	18.97
9764	31.59	PK	V	38.83	8.58	26.54	52.45	74.00	21.55
2441	31.92	AV	H	31.27	3.99	0.00	67.18	N/A	N/A
2441	60.41	PK	H	31.27	3.99	0.00	95.67	N/A	N/A
2441	30.96	AV	V	31.27	3.99	0.00	66.22	N/A	N/A
2441	60.42	PK	V	31.27	3.99	0.00	95.68	N/A	N/A

Frequency	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	(Test standard)	
(MHz)	Reading (dBμV)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB)				Limit (dBμV/m)	Margin (dB)
High Channel:2480MHz									
7440	32.18	AV	V	39.09	6.95	26.79	51.43	54.00	2.57*
7440	51.43	PK	V	39.09	6.95	26.79	70.68	74.00	3.32*
2483.5	14.41	AV	V	31.51	3.80	0.00	49.71	54.00	4.29
2483.5	31.24	PK	V	31.51	3.80	0.00	66.54	74.00	7.46
610.25	32.94	QP	V	19.45	3.04	22.27	33.15	46.00	12.85
9920	14.18	AV	V	39.14	8.41	26.70	35.03	54.00	18.97
4960	22.65	AV	V	33.51	4.70	27.26	33.60	54.00	20.40
9920	31.9	PK	V	39.14	8.41	26.70	52.75	74.00	21.25
4960	41.16	PK	V	33.51	4.70	27.26	52.11	74.00	21.89
2480	30.02	AV	H	31.49	3.82	0.00	65.33	N/A	N/A
2480	58.7	PK	H	31.49	3.82	0.00	94.01	N/A	N/A
2480	31.24	AV	V	31.49	3.82	0.00	66.55	N/A	N/A
2480	61.16	PK	V	31.49	3.82	0.00	96.47	N/A	N/A

Test Mode: Tansmitting (BDR-8DPSK)

Frequency	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	(Test standard)	
(MHz)	Reading (dBμV)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB)				Limit (dBμV/m)	Margin (dB)
Low Channel:2402MHz									
7206	51.93	PK	V	38.67	6.50	26.54	70.56	74.00	3.44*
854.57	38.88	QP	V	22.21	3.53	22.25	42.37	46.00	3.63*
7206	31.09	AV	V	38.67	6.50	26.54	49.72	54.00	4.28
2390	14.01	AV	V	30.98	3.84	0.00	48.84	54.00	5.16
1099.4	43.49	AV	V	25.10	2.23	27.10	43.72	54.00	10.28
4804	52.74	PK	V	33.17	4.67	27.34	63.24	74.00	10.76
2390	27.81	PK	V	30.98	3.84	0.00	62.64	74.00	11.36
4804	31.52	AV	V	33.17	4.67	27.34	42.02	54.00	11.98
9608	14.13	AV	V	38.52	8.75	26.39	35.00	54.00	19.00
9608	32.16	PK	V	38.52	8.75	26.39	53.03	74.00	20.97
1099.4	45.02	PK	V	25.10	2.23	27.10	45.25	74.00	28.75
2402	30.1	AV	H	31.05	3.90	0.00	65.06	N/A	N/A
2402	59.59	PK	H	31.05	3.90	0.00	94.55	N/A	N/A
2402	30.41	AV	V	31.05	3.90	0.00	65.37	N/A	N/A
2402	60.72	PK	V	31.05	3.90	0.00	95.68	N/A	N/A

Frequency	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	(Test standard)	
(MHz)	Reading (dBμV)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB)				Limit (dBμV/m)	Margin (dB)
Middle Channel:2441MHz									
7323	52.53	PK	V	38.88	6.72	26.67	71.47	74.00	2.53*
7323	30.27	AV	V	38.88	6.72	26.67	49.21	54.00	4.79
459.23	31.77	QP	V	17.48	2.61	21.92	29.94	46.00	16.06
9764	14.03	AV	V	38.83	8.58	26.54	34.89	54.00	19.11
4882	41.82	PK	V	33.34	4.75	27.04	52.87	74.00	21.13
9764	31.36	PK	V	38.83	8.58	26.54	52.22	74.00	21.78
4882	20.95	AV	V	33.34	4.75	27.04	32.00	54.00	22.00
2441	31.79	AV	H	31.27	3.99	0.00	67.05	N/A	N/A
2441	60.16	PK	H	31.27	3.99	0.00	95.42	N/A	N/A
2441	30.76	AV	V	31.27	3.99	0.00	66.02	N/A	N/A
2441	60.17	PK	V	31.27	3.99	0.00	95.43	N/A	N/A

Frequency	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	(Test standard)	
(MHz)	Reading (dBμV)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB)				Limit (dBμV/m)	Margin (dB)
High Channel:2480MHz									
7440	51.2	PK	V	39.09	6.95	26.79	70.45	74.00	3.55*
2483.5	14.27	AV	V	31.51	3.80	0.00	49.57	54.00	4.43
7440	30.24	AV	V	39.09	6.95	26.79	49.49	54.00	4.51
2483.5	31.23	PK	V	31.51	3.80	0.00	66.53	74.00	7.47
4960	50.84	PK	V	33.51	4.70	27.26	61.79	74.00	12.21
610.25	32.64	QP	V	19.45	3.04	22.27	32.85	46.00	13.15
4960	29.79	AV	V	33.51	4.70	27.26	40.74	54.00	13.26
9920	14.36	AV	V	39.14	8.41	26.70	35.21	54.00	18.79
9920	31.59	PK	V	39.14	8.41	26.70	52.44	74.00	21.56
2480	29.8	AV	H	31.49	3.82	0.00	65.11	N/A	N/A
2480	58.52	PK	H	31.49	3.82	0.00	93.83	N/A	N/A
2480	31.33	AV	V	31.49	3.82	0.00	66.64	N/A	N/A
2480	60.9	PK	V	31.49	3.82	0.00	96.21	N/A	N/A

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 20dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.50 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20dB bandwidth of the hopping channel, whichever is greater provided the systems operate with an output power no greater than 125 mW.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	Spectrum Analyzer	FSP38	100478	2012-05-13	2013-05-12

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Procedure

1. Set the EUT in transmitting mode, spectrum Bandwidth was set at 30 kHz, maxhold the truce.
2. Set the adjacent channel of the EUT maxhold another truce.
3. Measure the channel separation.

Test Data

Environmental Conditions

Temperature:	25 °C
Relative Humidity:	56 %
ATM Pressure:	100.9kPa

** The testing was performed by Ares Liu on 2012-07-24.*

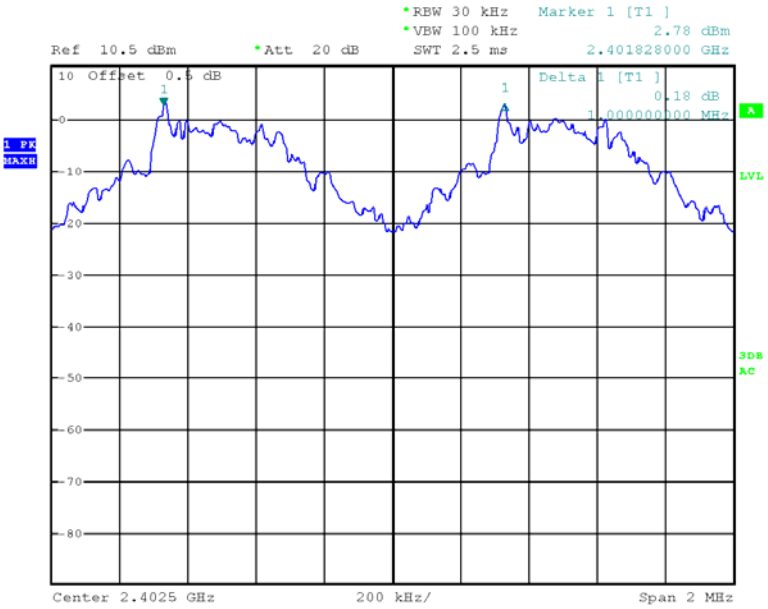
Test Result: Compliance.

Please refer to following tables and plots

Test Mode: Transmitting

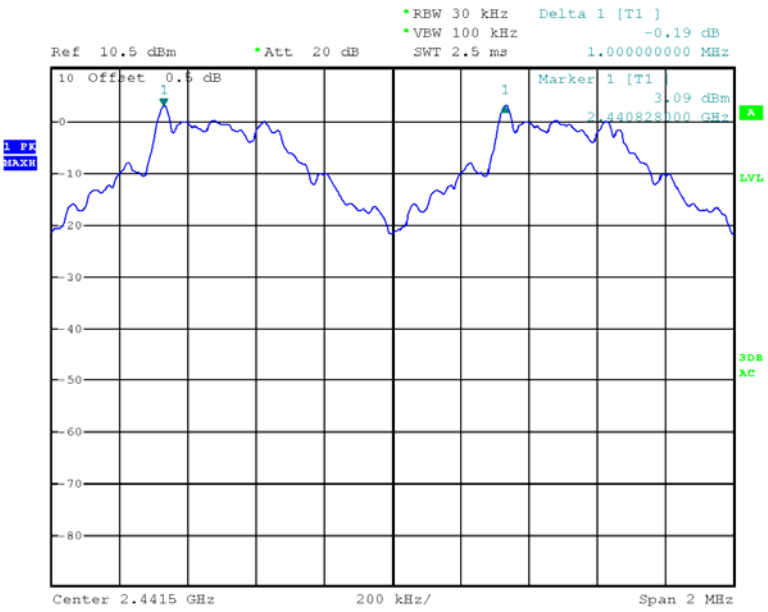
Mode	Channel	Frequency (MHz)	Channel Separation (MHz)	Limit (MHz)	Result
BDR Mode (GFSK)	Low	2402	1.000	0.624	Pass
	Adjacent	2403			
	Middle	2441	1.000	0.621	Pass
	Adjacent	2442			
	High	2480	1.004	0.621	Pass
	Adjacent	2479			
EDR Mode (π/4-QPSK)	Low	2402	1.000	0.893	Pass
	Adjacent	2403			
	Middle	2441	1.000	0.888	Pass
	Adjacent	2442			
	High	2480	1.008	0.891	Pass
	Adjacent	2479			
EDR Mode (8DPSK)	Low	2402	1.000	0.827	Pass
	Adjacent	2403			
	Middle	2441	1.000	0.827	Pass
	Adjacent	2442			
	High	2480	1.004	0.827	Pass
	Adjacent	2479			

BDR - Low Channel



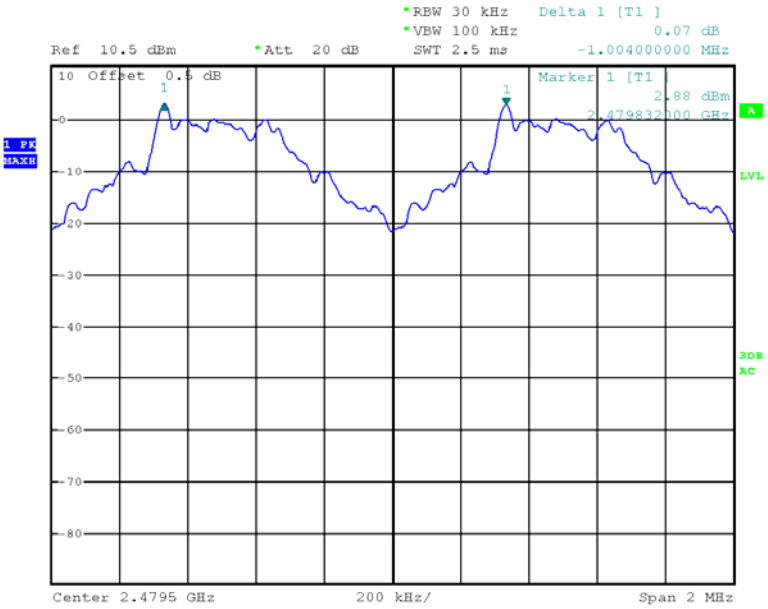
Date: 24.JUL.2012 15:59:24

BDR - Middle Channel



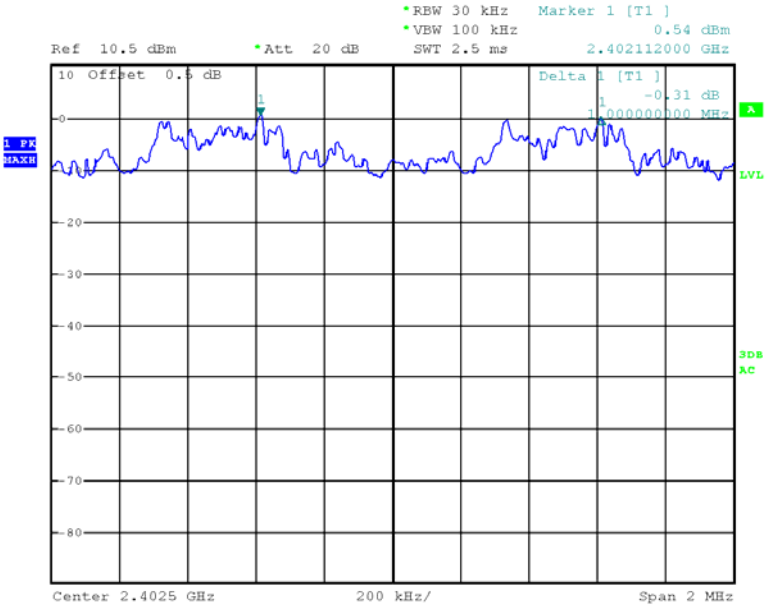
Date: 24.JUL.2012 15:55:14

BDR - High Channel



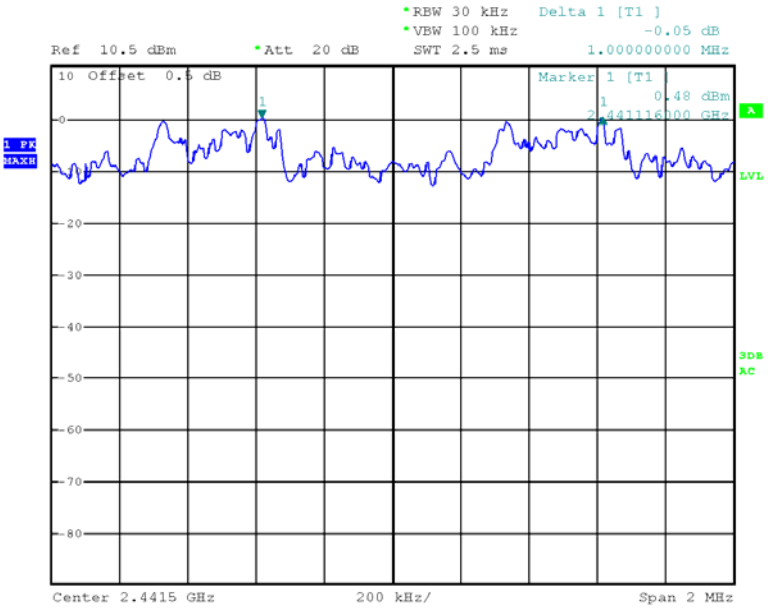
Date: 24.JUL.2012 15:54:14

EDR (π/4-QPSK) - Low Channel



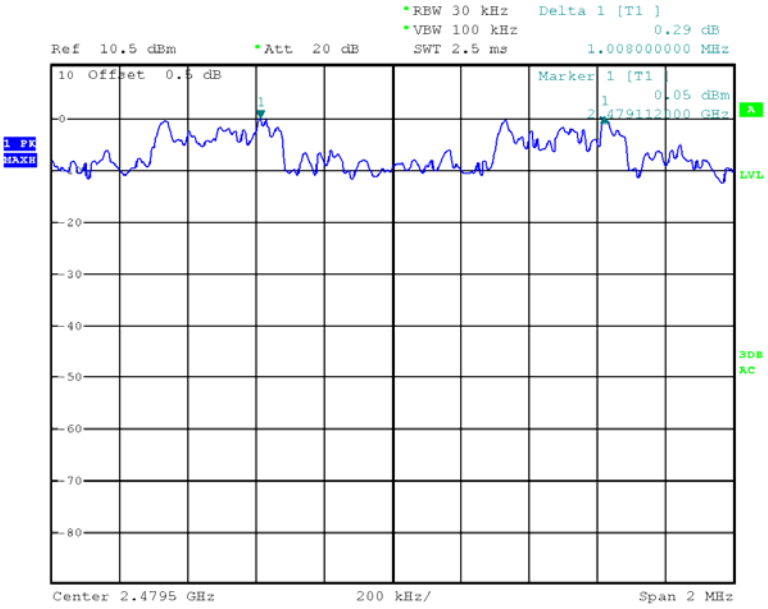
Date: 24.JUL.2012 15:45:09

EDR (π/4-QPSK) - Middle Channel



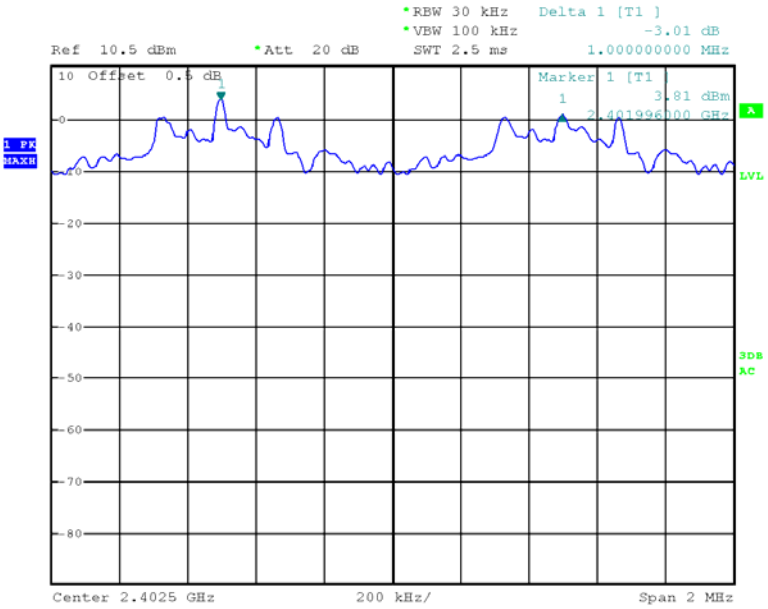
Date: 24.JUL.2012 15:47:22

EDR (π/4-QPSK) - High Channel



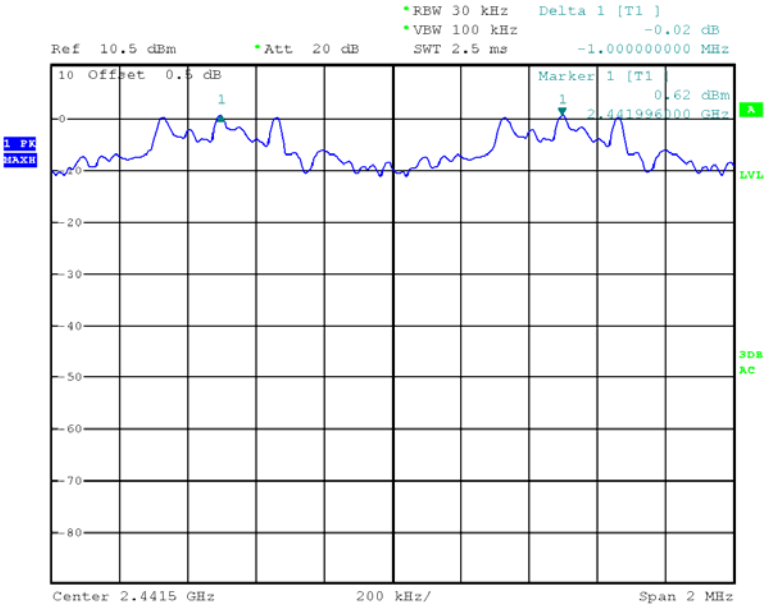
Date: 24.JUL.2012 15:50:17

EDR (8DPSK) - Low Channel



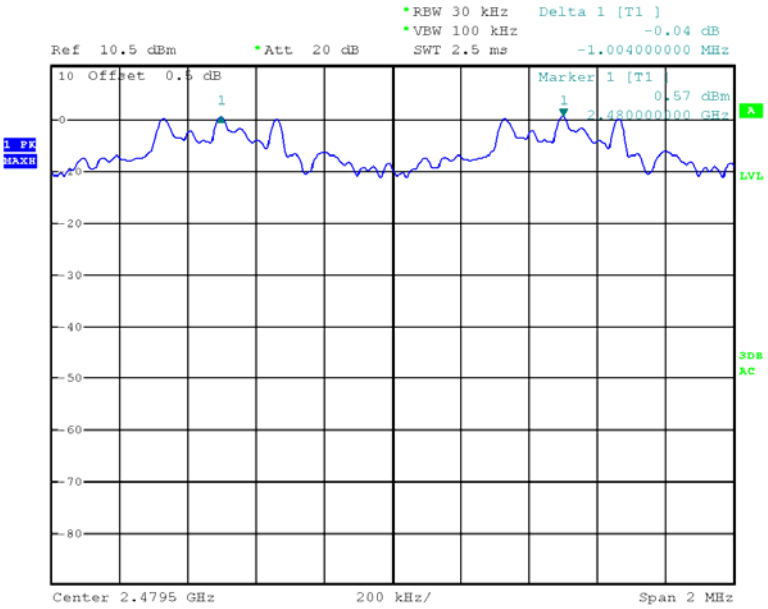
Date: 24.JUL.2012 15:39:44

EDR (8DPSK) - Middle Channel



Date: 24.JUL.2012 15:37:47

EDR (8DPSK) - High Channel



Date: 24.JUL.2012 15:36:08

FCC §15.247(a) (1) – 20 dB BANDWIDTH TESTING

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 on the test table without connection to measurement instrument. Turn on the EUT. 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	Spectrum Analyzer	FSP38	100478	2012-5-13	2013-5-12

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Data

Environmental Conditions

Temperature:	25 °C
Relative Humidity:	56 %
ATM Pressure:	100.9kPa

** The testing was performed by Ares Liu on 2012-07-24.*

Test Result: Compliance.

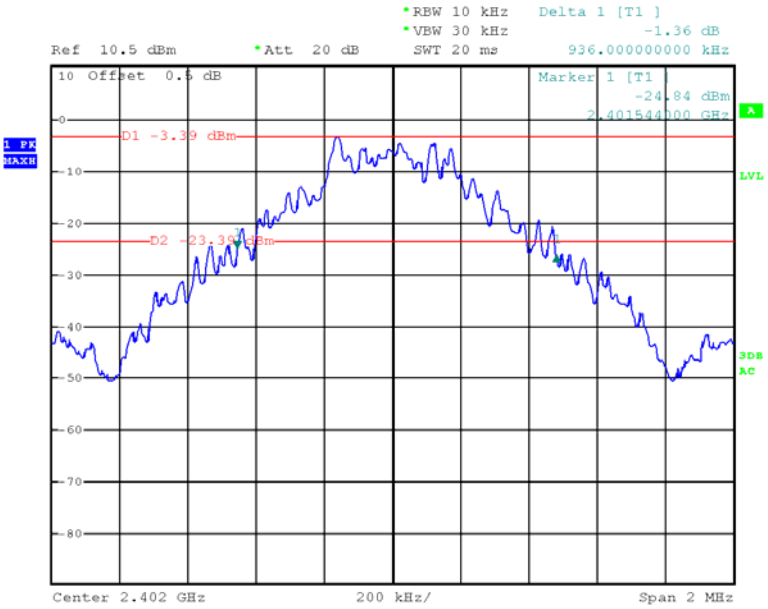
Please refer to following tables and plots

Test Mode: Transmitting

	Channel	Frequency (MHz)	20 dB Bandwidth (MHz)
BDR Mode (GFSK)	Low	2402	0.936
	Middle	2441	0.932
	High	2480	0.932
EDR Mode (π/4-QPSK)	Low	2402	1.340
	Middle	2441	1.332
	High	2480	1.336
EDR Mode (8DPSK)	Low	2402	1.240
	Middle	2441	1.240
	High	2480	1.240

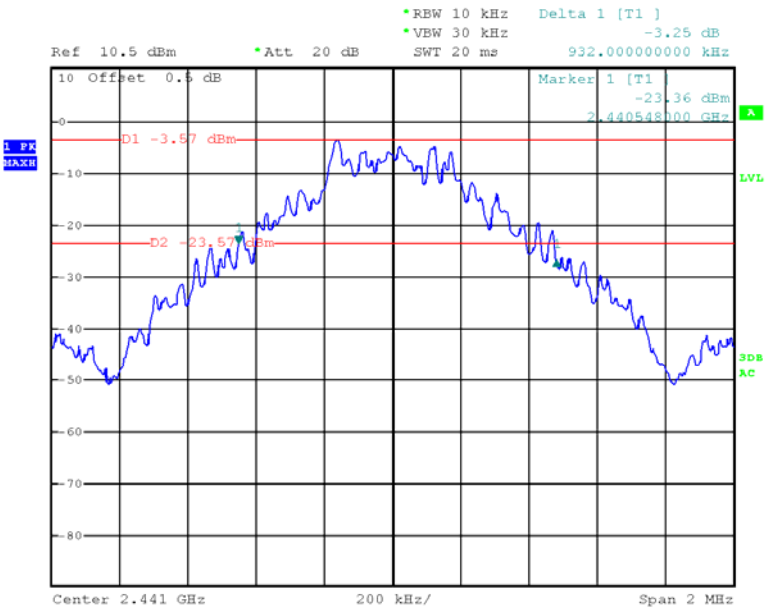
Please refer to the following plots.

BDR - Low Channel



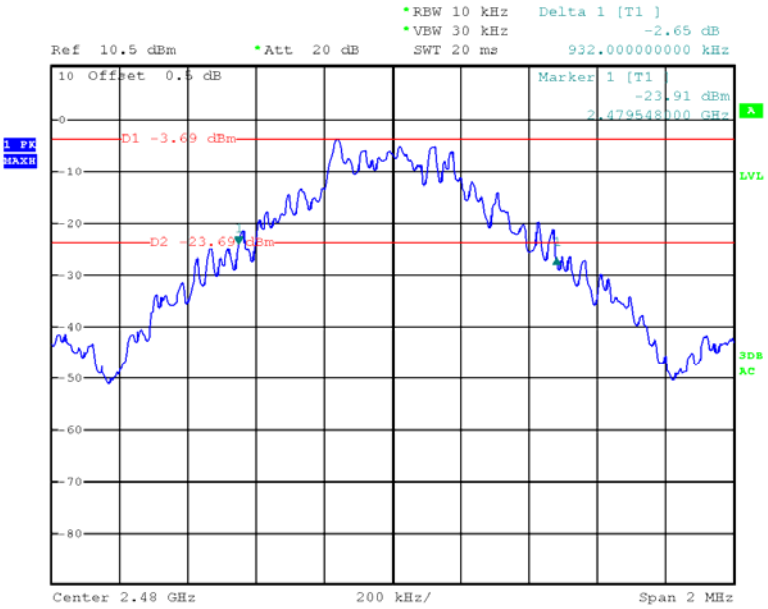
Date: 24.JUL.2012 15:12:42

BDR - Middle Channel



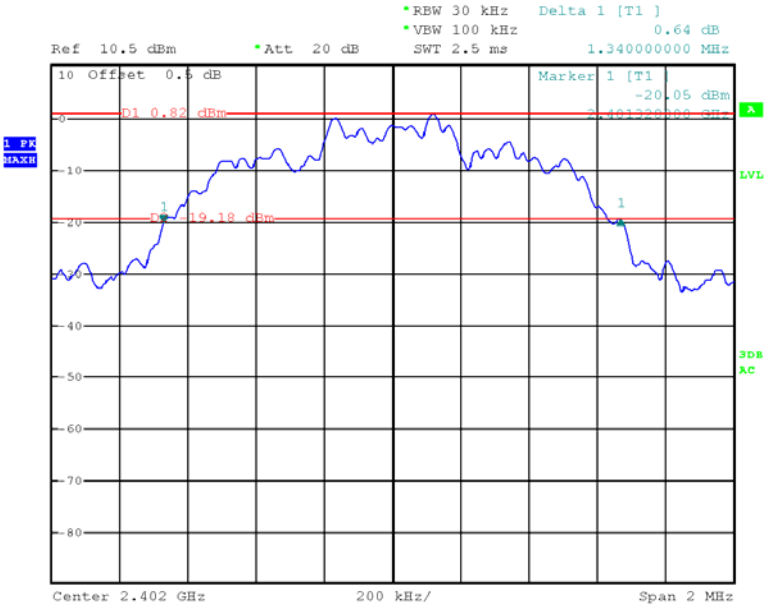
Date: 24.JUL.2012 15:11:33

BDR - High Channel



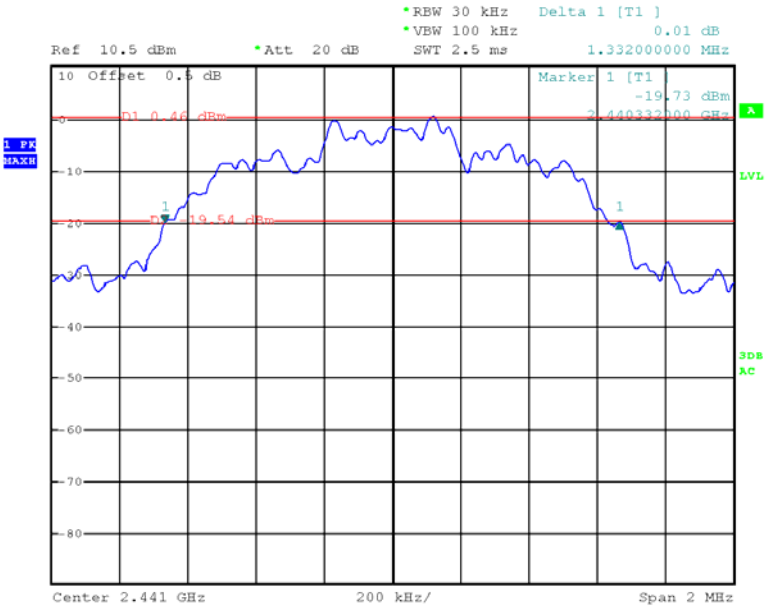
Date: 24.JUL.2012 15:09:59

EDR (π/4-QPSK) - Low Channel



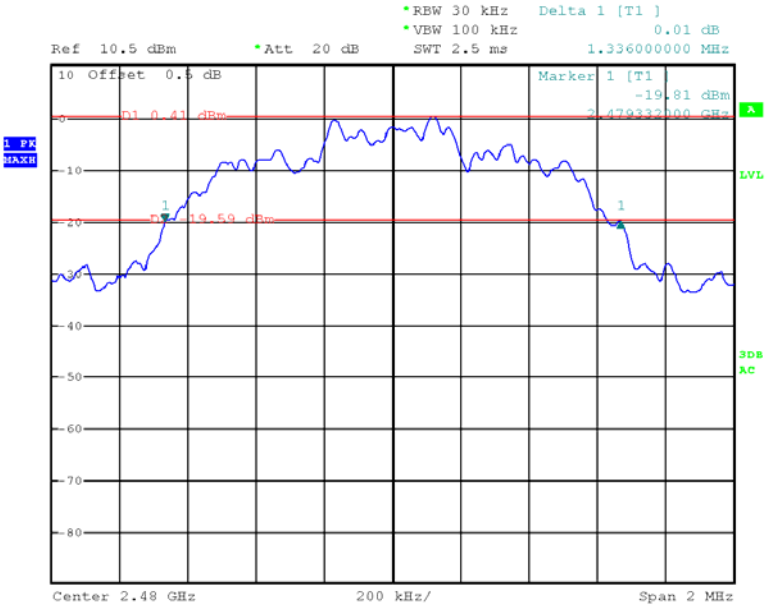
Date: 24.JUL.2012 15:14:16

EDR (π/4-QPSK) - Middle Channel



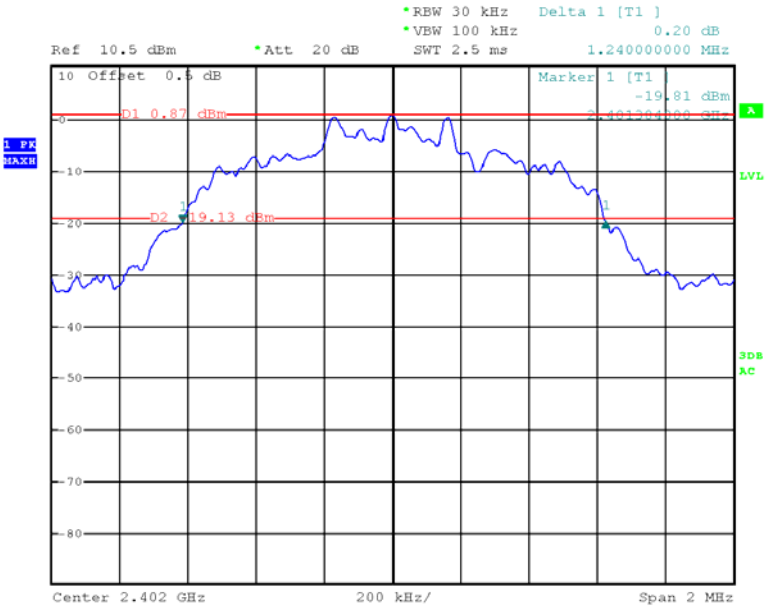
Date: 24.JUL.2012 15:16:46

EDR (π/4-QPSK) - High Channel



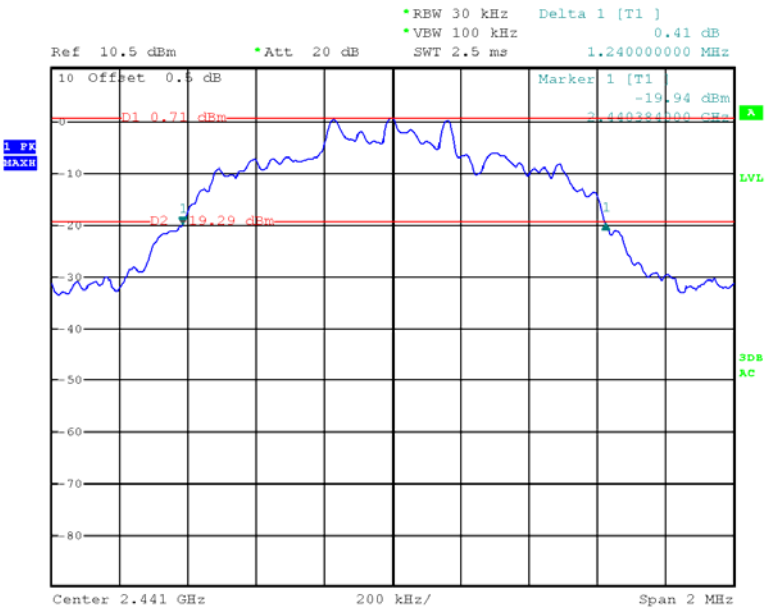
Date: 24.JUL.2012 15:18:47

EDR (8DPSK) - Low Channel



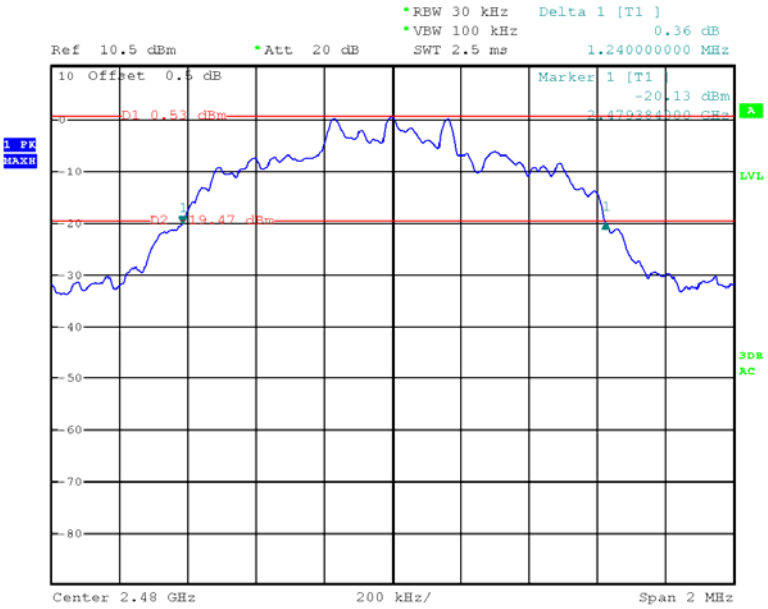
Date: 24.JUL.2012 15:24:43

EDR (8DPSK) - Middle Channel



Date: 24.JUL.2012 15:22:09

EDR (8DPSK) - High Channel



Date: 24.JUL.2012 15:20:42

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	Spectrum Analyzer	FSP38	100478	2012-05-13	2013-05-12

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Data

Environmental Conditions

Temperature:	25 °C
Relative Humidity:	56 %
ATM Pressure:	100.9kPa

The testing was performed by Ares Liu on 2012-07-24.

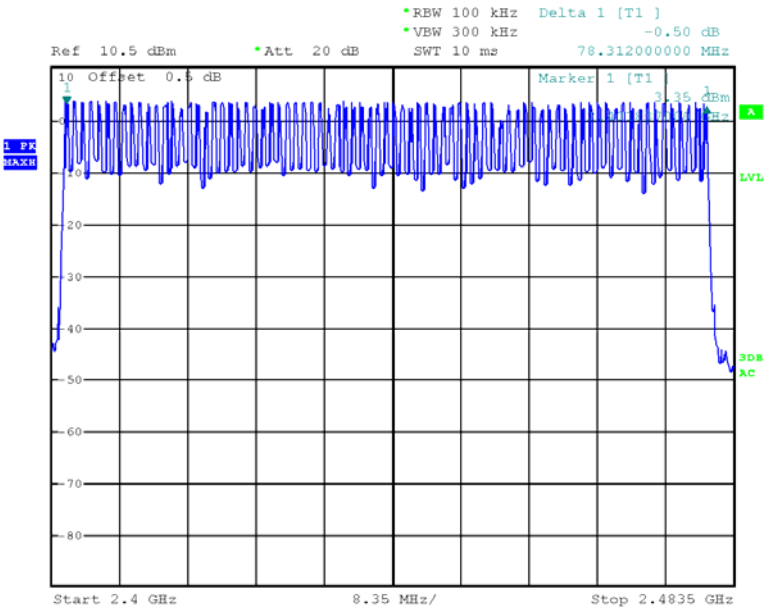
Test Result: Compliance.

Please refer to following tables and plots

Test Mode: Transmitting (BDR & EDR)

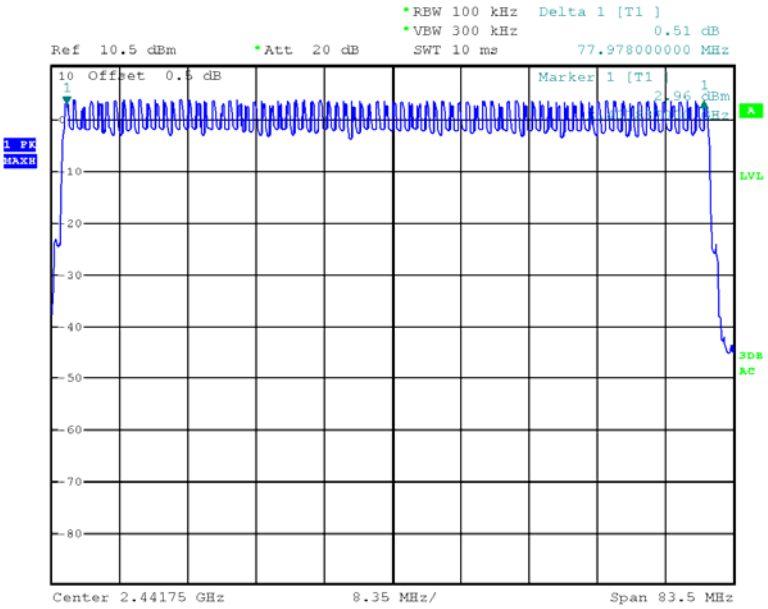
	Frequency Range (MHz)	Number of Hopping Channel	Limit
BDR	2400-2483.5	79	≥15
EDR (π/4-QPSK)	2400-2483.5	79	≥15
EDR (8DPSK)	2400-2483.5	79	≥15

BDR - Number of Hopping Channels



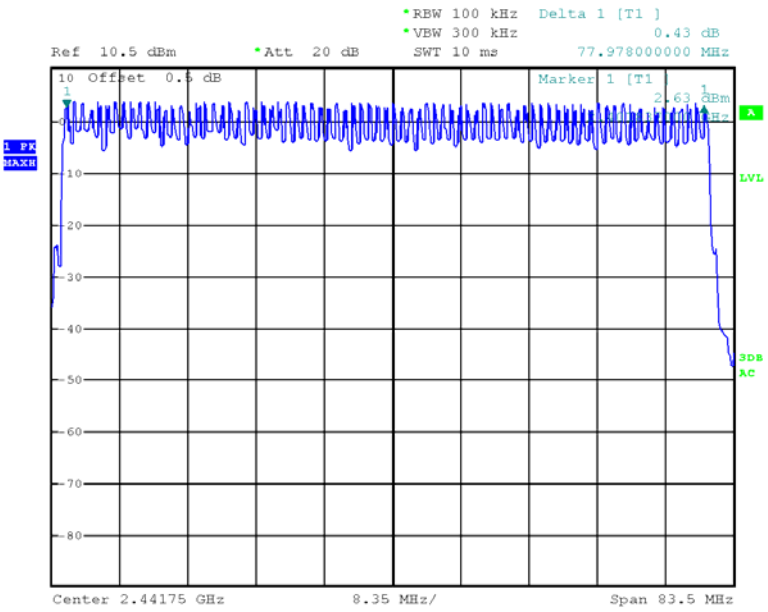
Date: 24.JUL.2012 16:01:09

EDR (π/4-QPSK) - Number of Hopping Channels



Date: 24.JUL.2012 16:11:12

EDR (8DPSK) - Number of Hopping Channels



Date: 24.JUL.2012 16:14:04

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 * channel no. (s), the quantity of pulse was get from single sweep. In addition, the time of single pulses was tested.

Dwell Time= Pulse idth * hop rate/ number of hopping channels * number of hopping channels * 0.4s
Hop rate=1600/s

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	Spectrum Analyzer	FSP38	100478	2012-05-13	2013-05-12

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Data

Environmental Conditions

Temperature:	25 °C
Relative Humidity:	56 %
ATM Pressure:	100.0kPa

** The testing was performed by Ares Liu on 2012-07-24.*

Test Result: Compliance.

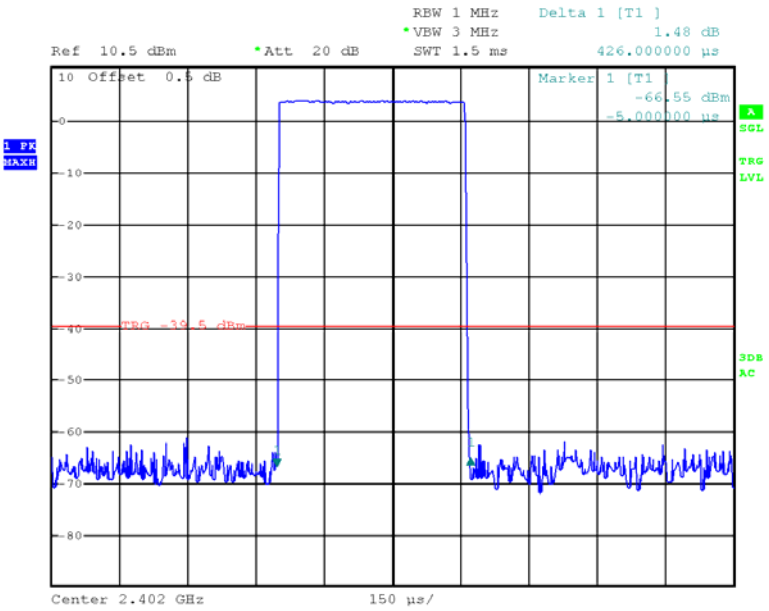
Please refer to following tables and plots

DH1:

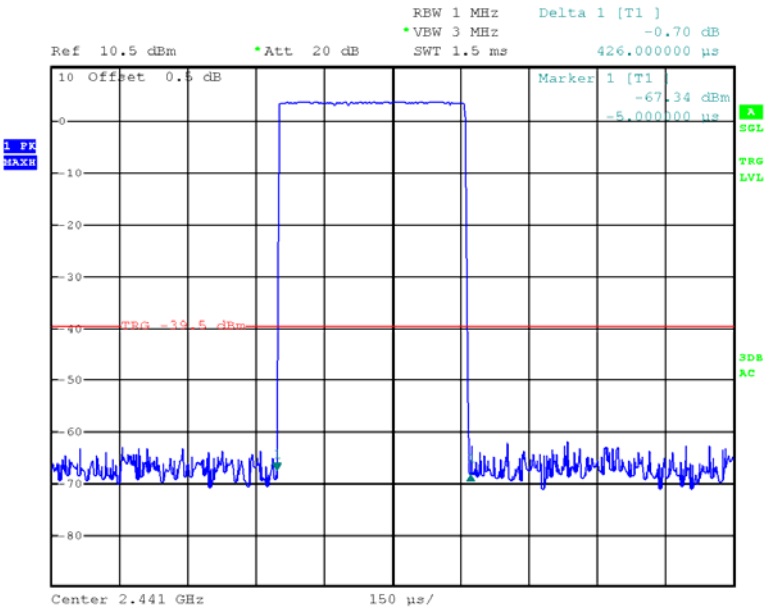
Test Mode: Transmitting

	Channel	Pulse Width (ms)	Dwell Time (s)	Limit (s)	Result
BDR Mode (GFSK)	Low	0.426	0.136	0.4	Pass
	Middle	0.426	0.136	0.4	Pass
	High	0.426	0.136	0.4	Pass
	Note: Dwell time = Pulse time*(1600/2/79)*31.6S				
EDR Mode (π/4-QPSK)	Low	0.426	0.136	0.4	Pass
	Middle	0.426	0.136	0.4	Pass
	High	0.426	0.136	0.4	Pass
	Note: Dwell time = Pulse time*(1600/2/79)*31.6S				
EDR Mode (8DPSK)	Low	0.426	0.136	0.4	Pass
	Middle	0.426	0.136	0.4	Pass
	High	0.426	0.136	0.4	Pass
	Note: Dwell time = Pulse time*(1600/2/79)*31.6S				

BDR - Low Channel

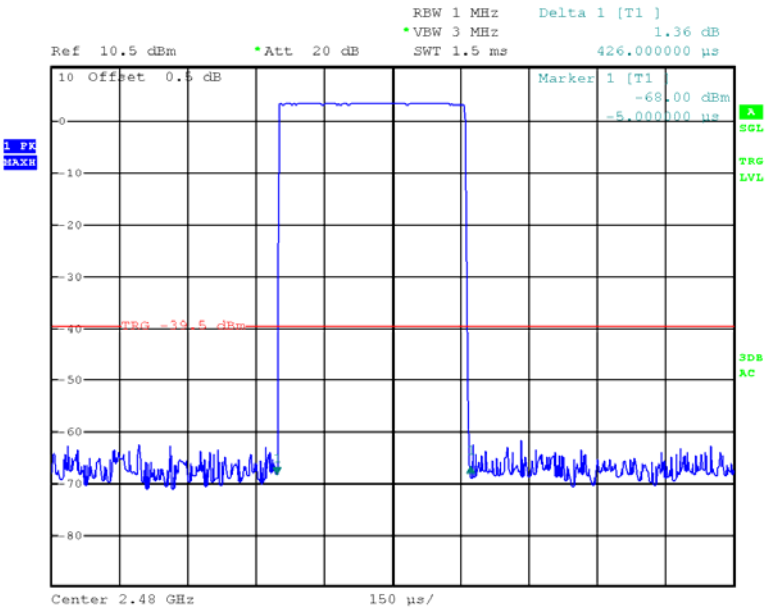


BDR - Middle Channel



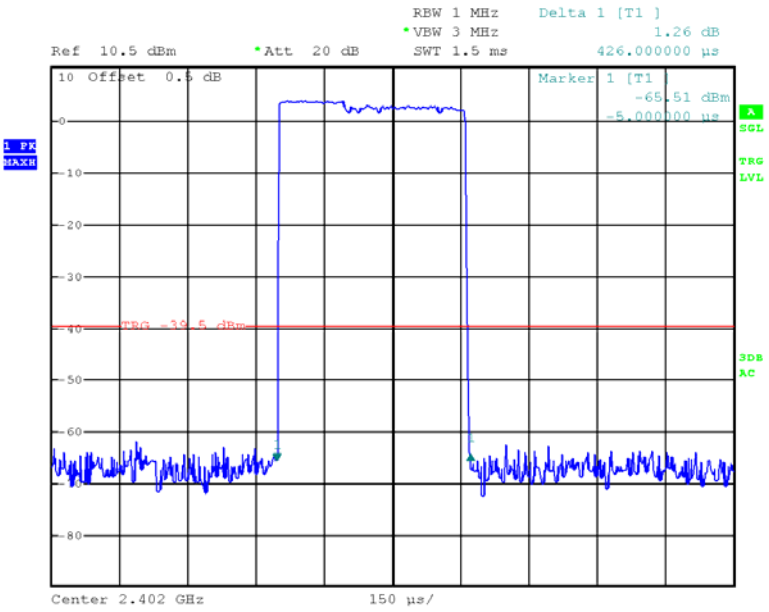
Date: 24.JUL.2012 16:20:25

BDR - High Channel



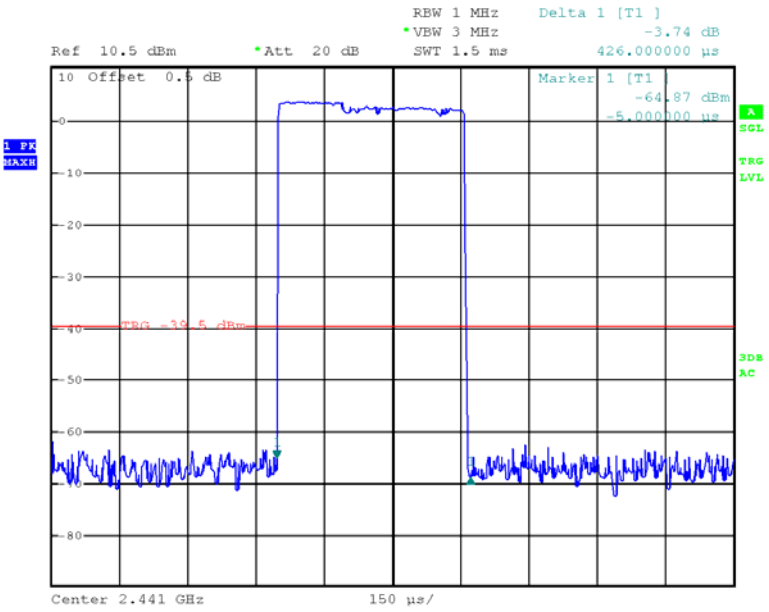
Date: 24.JUL.2012 16:20:41

EDR (π/4-QPSK) - Low Channel



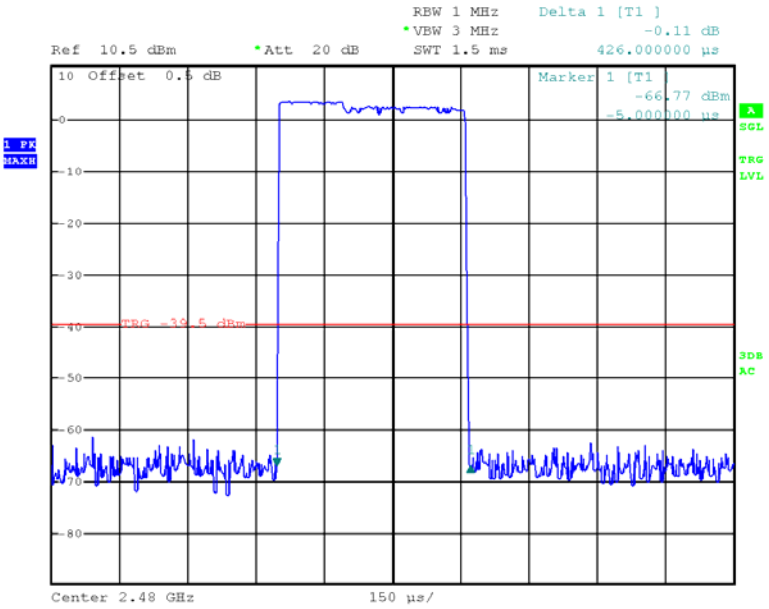
Date: 24.JUL.2012 16:19:24

EDR (π/4-QPSK) - Middle Channel



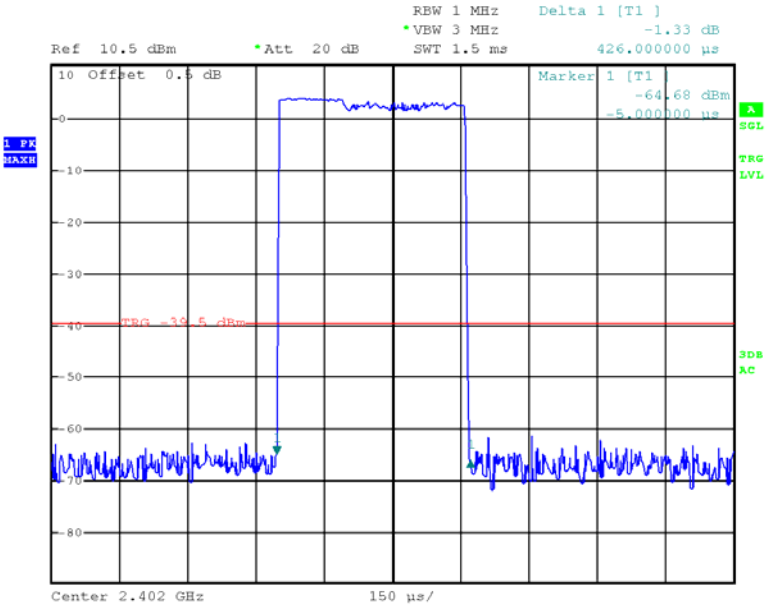
Date: 24.JUL.2012 16:18:48

EDR (π/4-QPSK) - High Channel



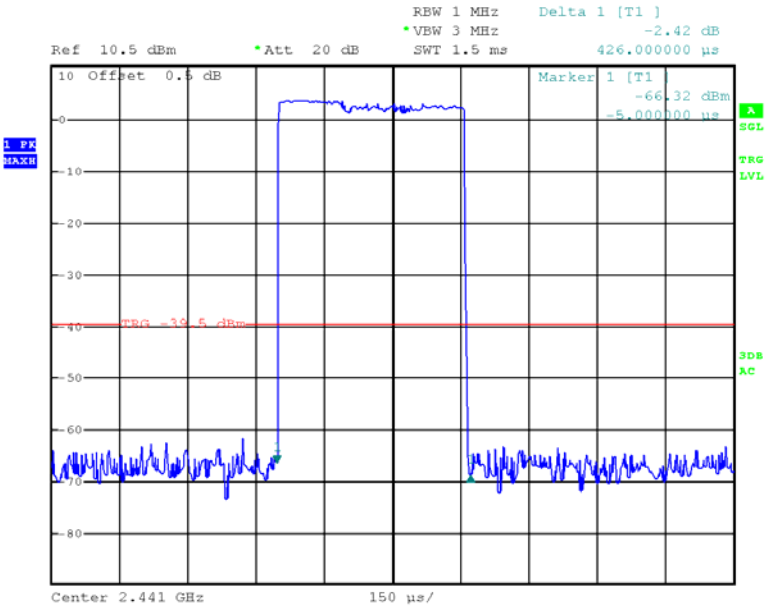
Date: 24.JUL.2012 16:18:27

EDR (8DPSK) - Low Channel



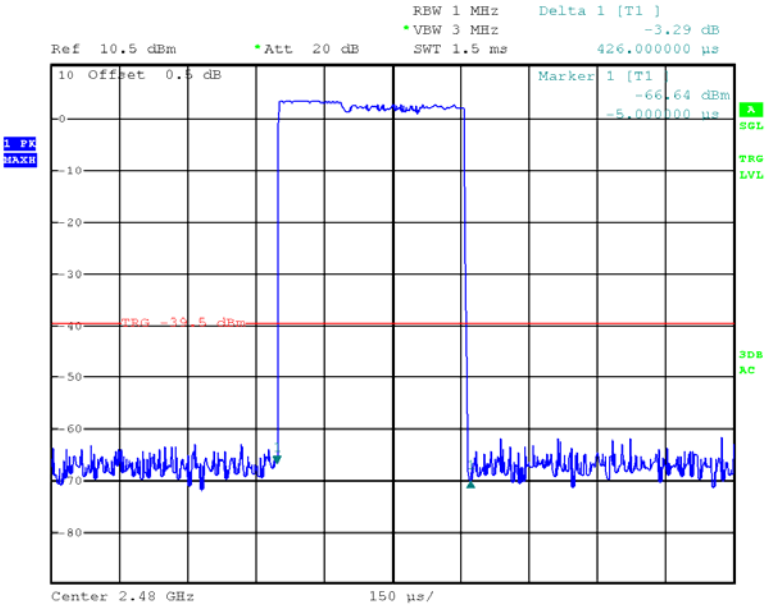
Date: 24.JUL.2012 16:16:52

EDR (8DPSK) - Middle Channel



Date: 24.JUL.2012 16:17:31

EDR (8DPSK) - High Channel



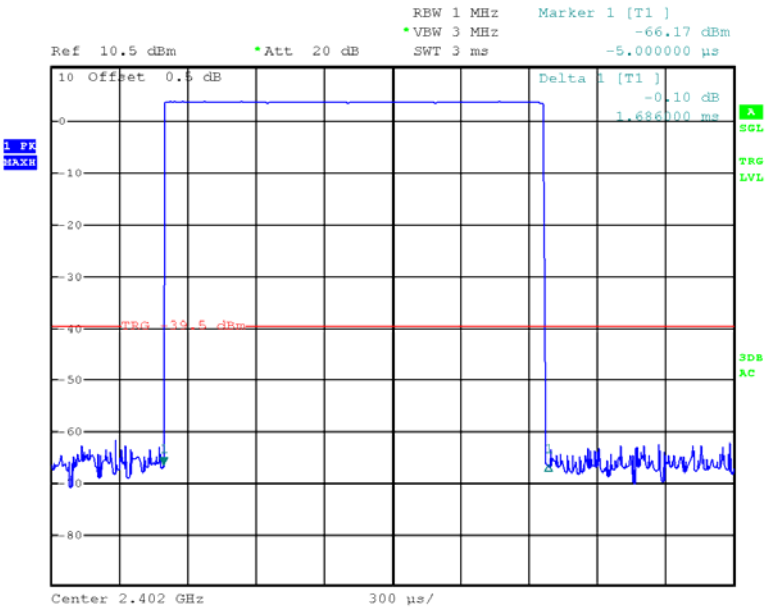
Date: 24.JUL.2012 16:17:56

DH3:

Test Mode: Transmitting

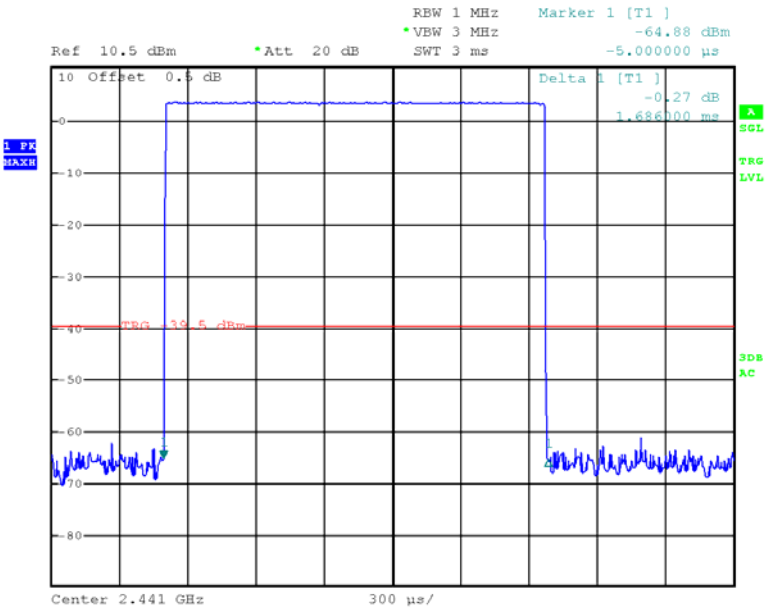
	Channel	Pulse Width (ms)	Dwell Time (s)	Limit (s)	Result
BDR Mode (GFSK)	Low	1.686	0.270	0.4	Pass
	Middle	1.686	0.270	0.4	Pass
	High	1.686	0.270	0.4	Pass
	Note: Dwell time = Pulse time(1600/4/79)*31.6S*				
EDR Mode (π/4-QPSK)	Low	1.686	0.270	0.4	Pass
	Middle	1.686	0.270	0.4	Pass
	High	1.686	0.270	0.4	Pass
	Note: Dwell time = Pulse time(1600/4/79)*31.6S*				
EDR Mode (8DPSK)	Low	1.680	0.269	0.4	Pass
	Middle	1.680	0.269	0.4	Pass
	High	1.680	0.269	0.4	Pass
	Note: Dwell time = Pulse time(1600/4/79)*31.6S*				

BDR - Low Channel



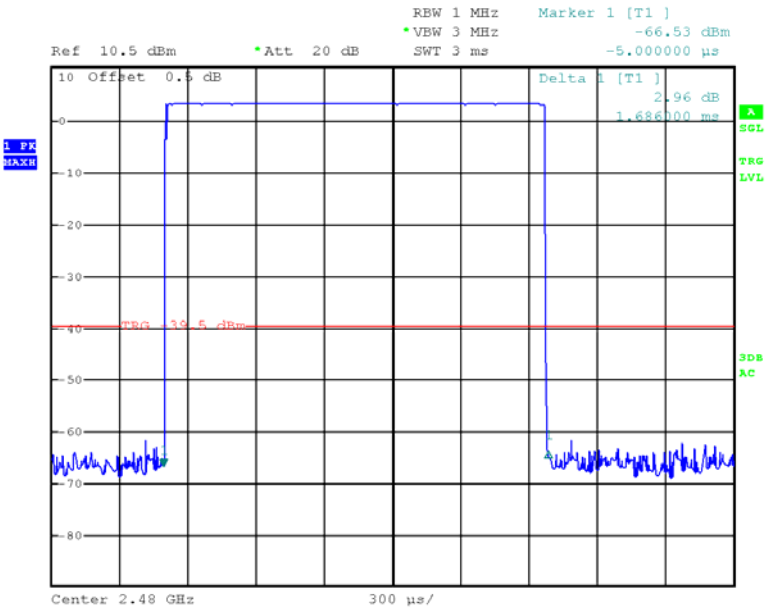
Date: 24.JUL.2012 16:23:20

BDR - Middle Channel



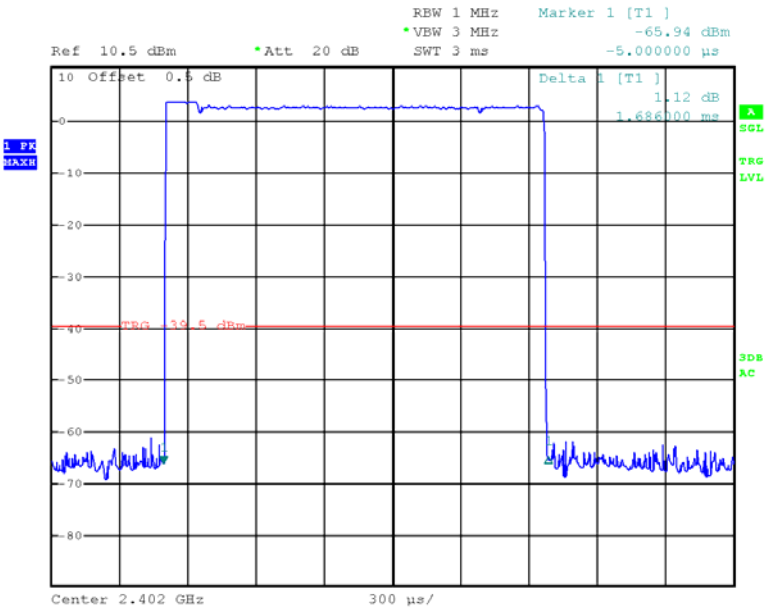
Date: 24.JUL.2012 16:22:24

BDR - High Channel



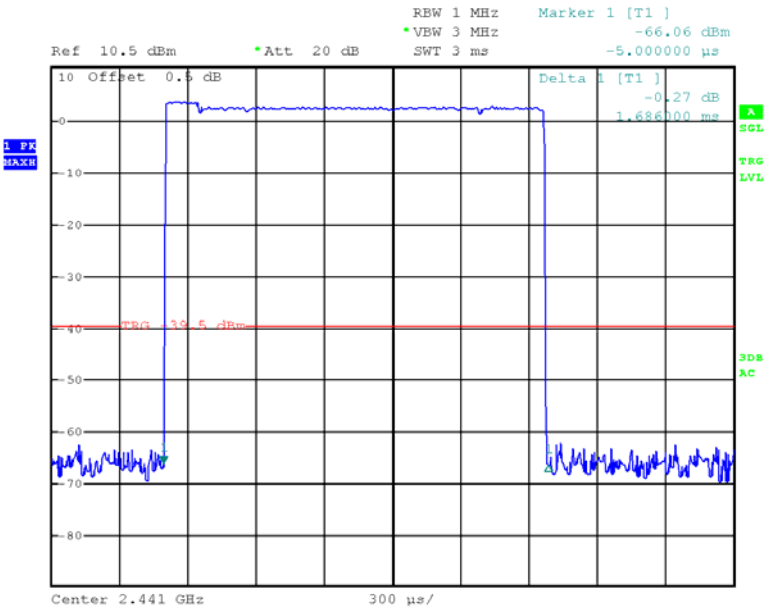
Date: 24.JUL.2012 16:21:58

EDR (π/4-QPSK) - Low Channel



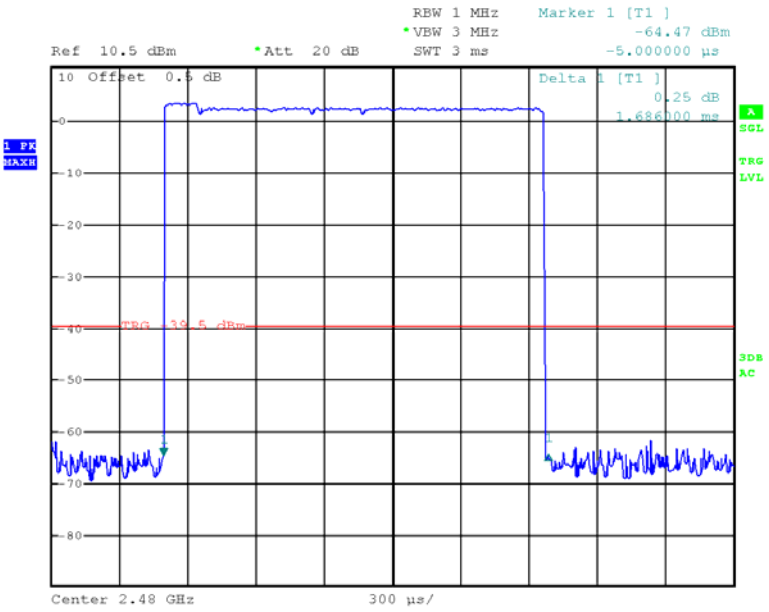
Date: 24.JUL.2012 16:24:13

EDR (π/4-QPSK) - Middle Channel



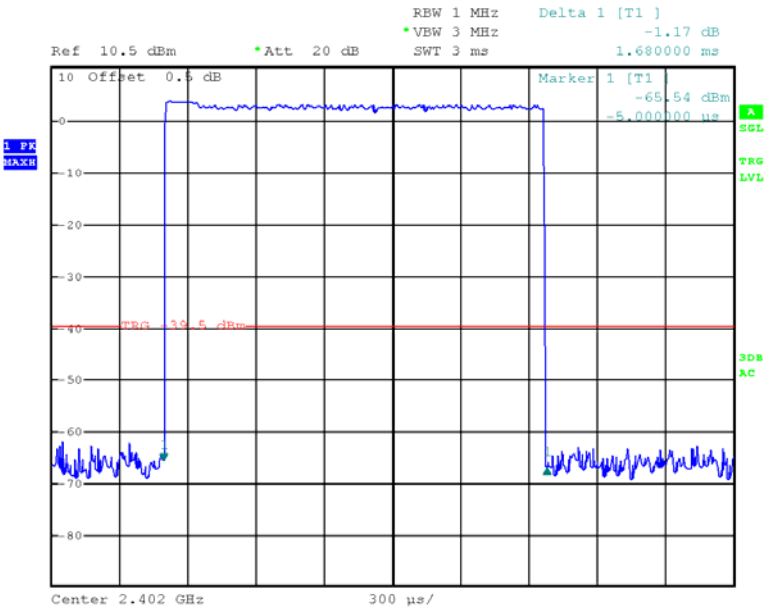
Date: 24.JUL.2012 16:24:35

EDR (π/4-QPSK) - High Channel



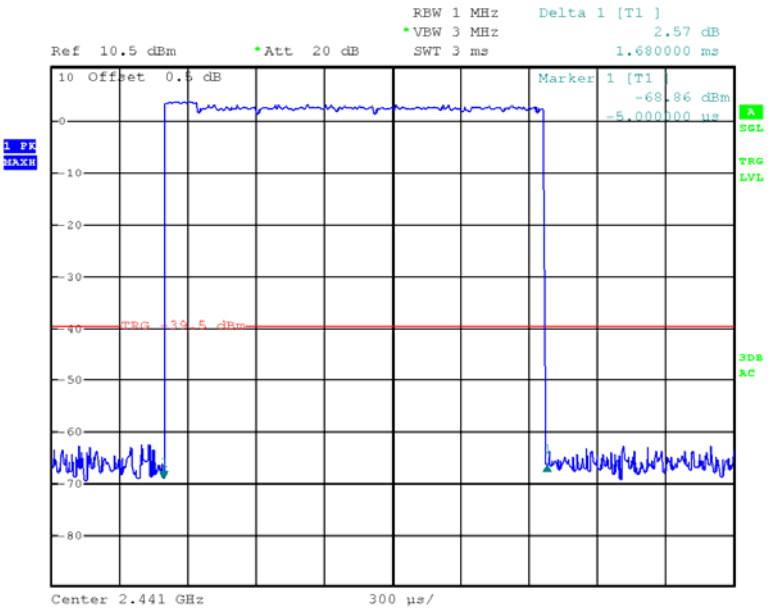
Date: 24.JUL.2012 16:24:58

EDR (8DPSK) - Low Channel



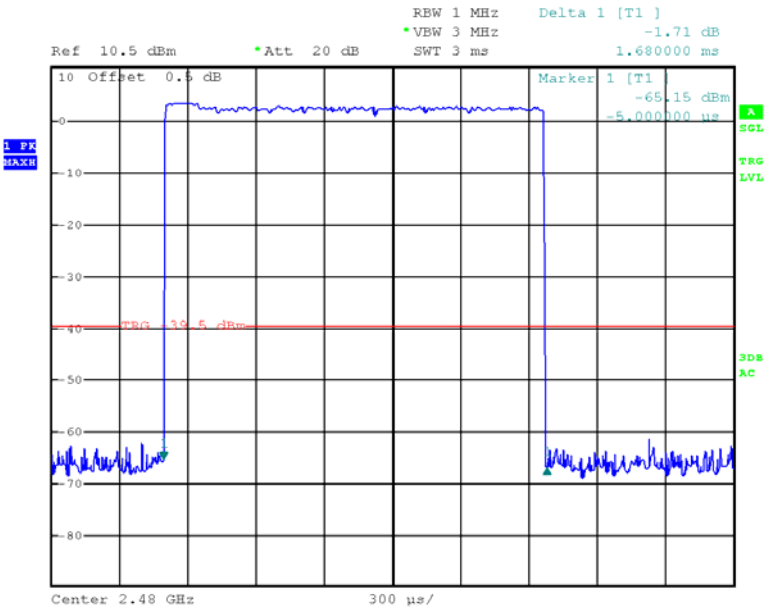
Date: 24.JUL.2012 16:27:19

EDR (8DPSK) - Middle Channel



Date: 24.JUL.2012 16:26:37

EDR (8DPSK) - High Channel



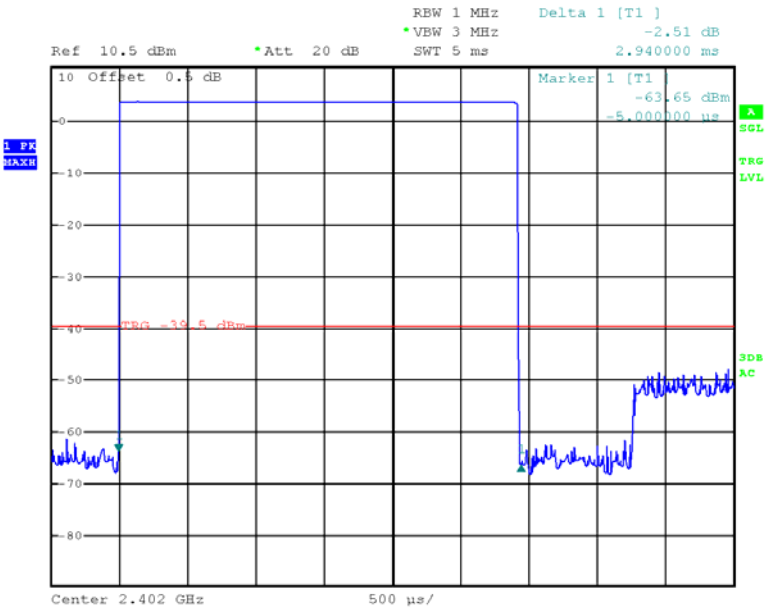
Date: 24.JUL.2012 16:25:35

DH5:

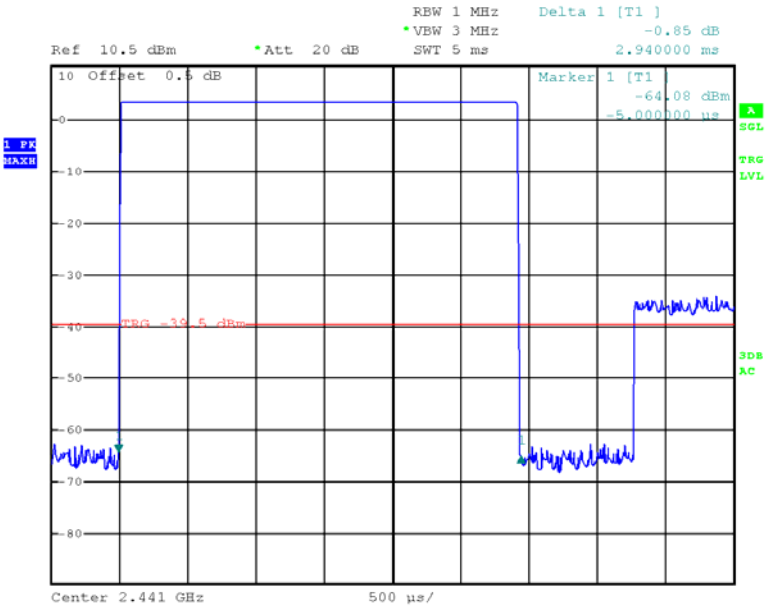
Test Mode: Transmitting

	Channel	Pulse Width (ms)	Dwell Time (s)	Limit (s)	Result
BDR Mode (GFSK)	Low	2.940	0.314	0.4	Pass
	Middle	2.940	0.314	0.4	Pass
	High	2.940	0.314	0.4	Pass
	Note: Dwell time = Pulse time(1600/6/79)*31.6S*				
EDR Mode (π/4-QPSK)	Low	2.930	0.313	0.4	Pass
	Middle	2.940	0.314	0.4	Pass
	High	2.940	0.314	0.4	Pass
	Note: Dwell time = Pulse time(1600/6/79)*31.6S*				
EDR Mode (8DPSK)	Low	2.930	0.313	0.4	Pass
	Middle	2.930	0.313	0.4	Pass
	High	2.940	0.314	0.4	Pass
	Note: Dwell time = Pulse time(1600/6/79)*31.6S*				

BDR - Low Channel

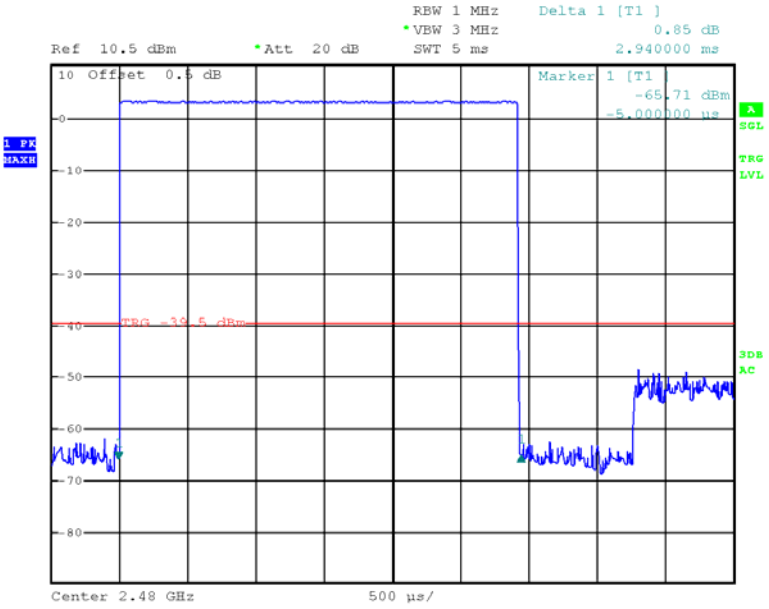


BDR - Middle Channel



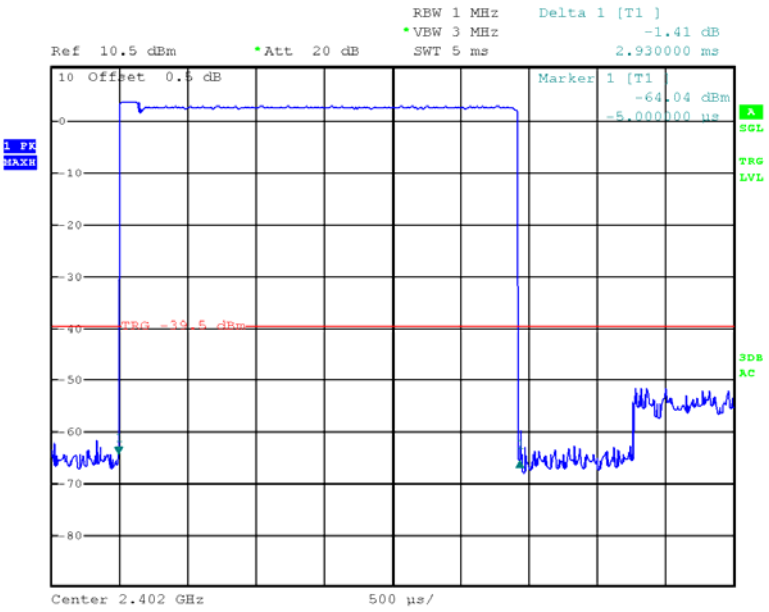
Date: 24.JUL.2012 16:28:40

BDR - High Channel



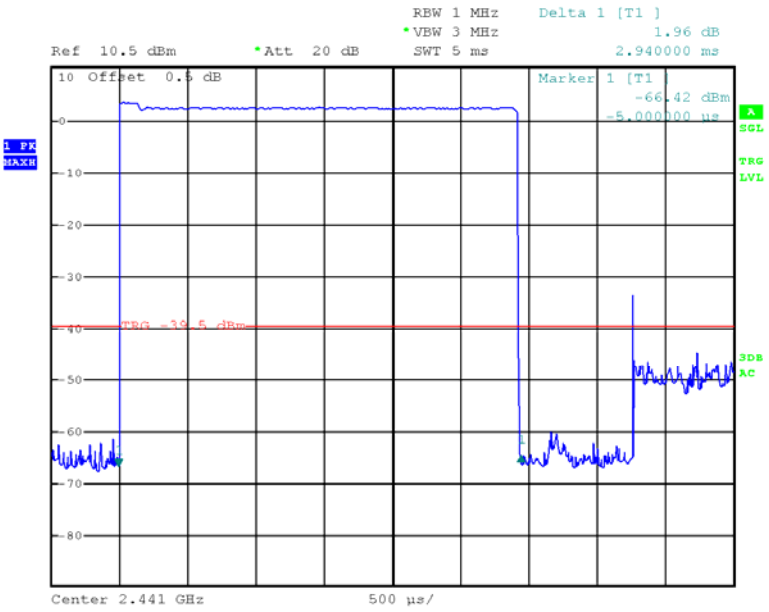
Date: 24.JUL.2012 16:29:05

EDR (π/4-QPSK) - Low Channel



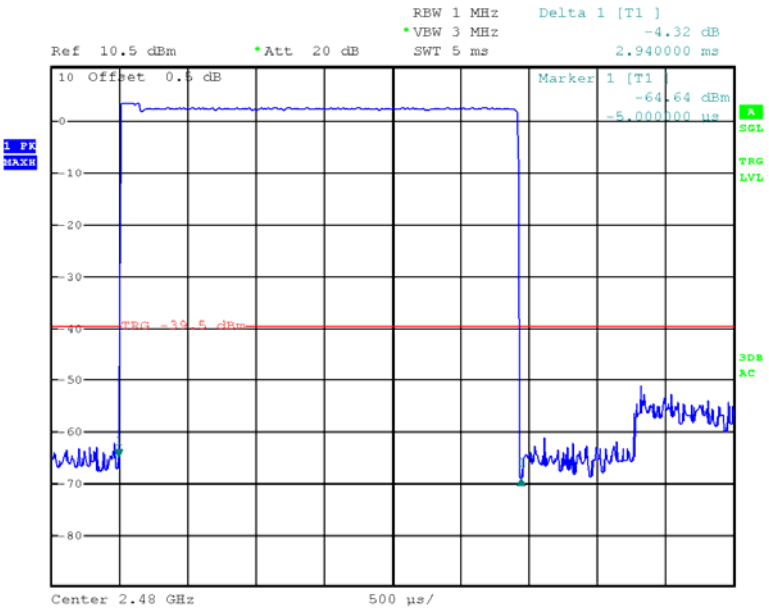
Date: 24.JUL.2012 16:30:47

EDR (π/4-QPSK) - Middle Channel



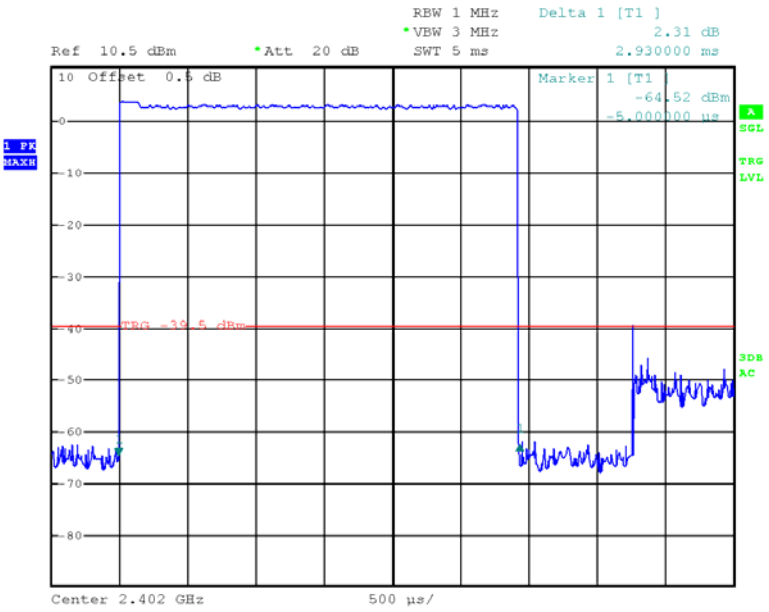
Date: 24.JUL.2012 16:30:24

EDR (π/4-QPSK) - High Channel



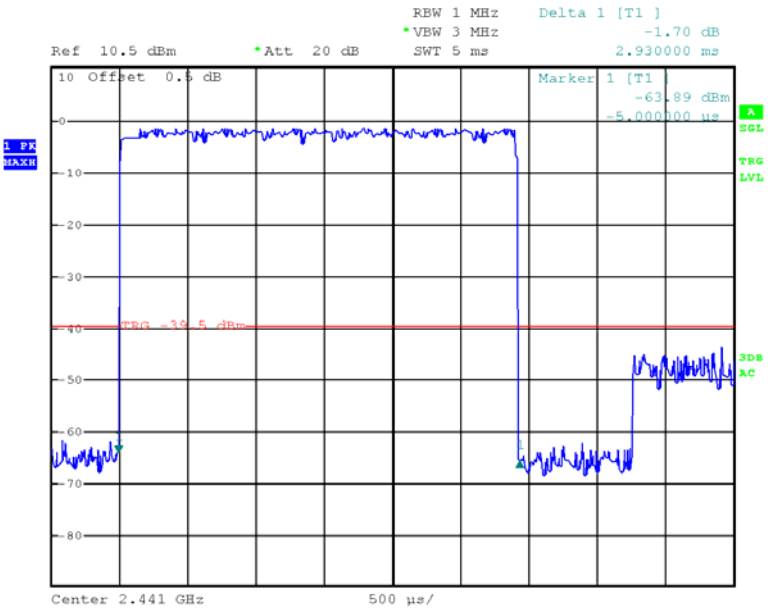
Date: 24.JUL.2012 16:30:02

EDR (8DPSK) - Low Channel



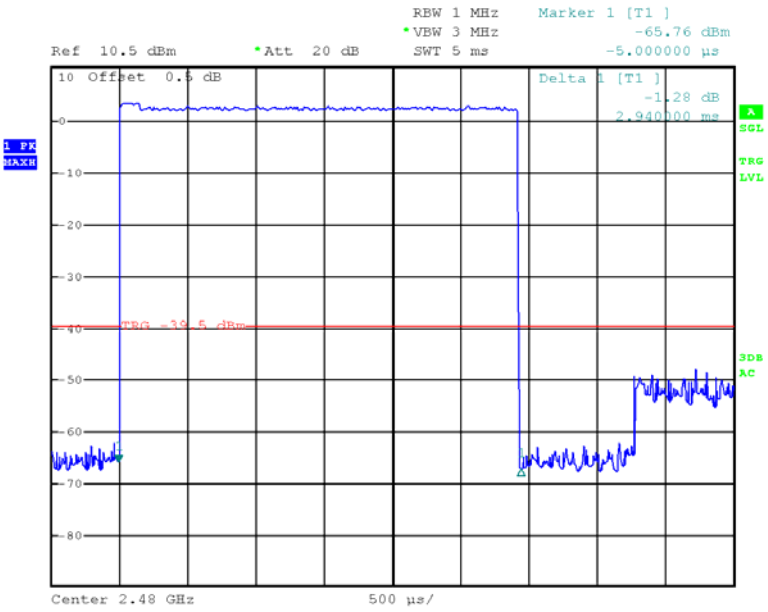
Date: 24.JUL.2012 16:31:27

EDR (8DPSK) - Middle Channel



Date: 24.JUL.2012 16:32:16

EDR (8DPSK) - High Channel



Date: 24.JUL.2012 16:33:35

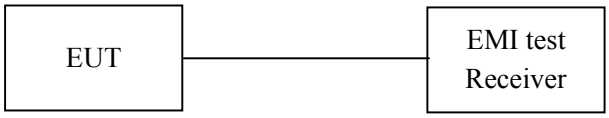
FCC §15.247(b) (1) - PEAK OUTPUT POWER MEASUREMENT

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. 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 an EMI test receiver.
3. Add a correction factor to the display.



Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	Spectrum Analyzer	FSP38	100478	2012-05-13	2013-05-12

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Data

Environmental Conditions

Temperature:	25 °C
Relative Humidity:	56 %
ATM Pressure:	100.9kPa

** The testing was performed by Dean Liu on 2012-07-24.*

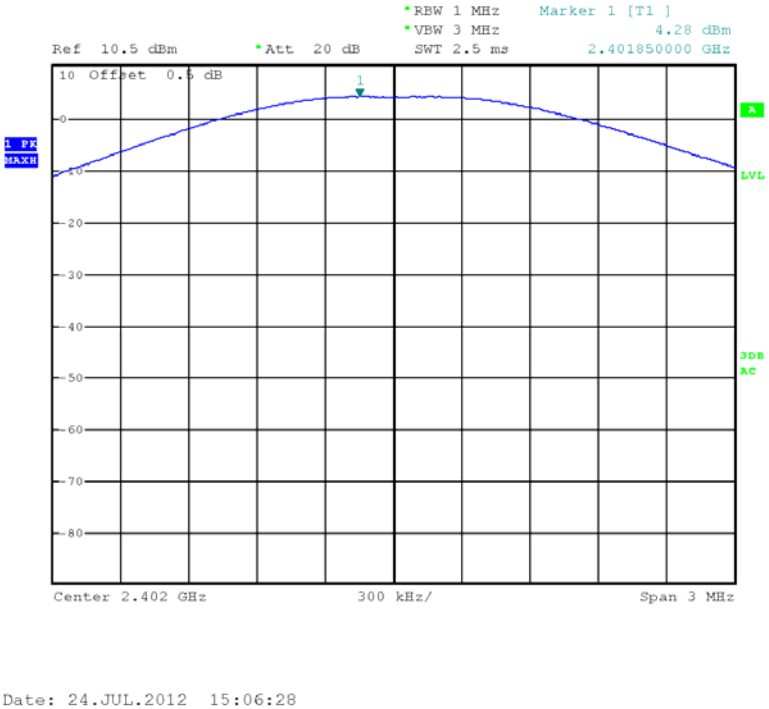
Test Result: Compliance.

Test Mode: Transmitting

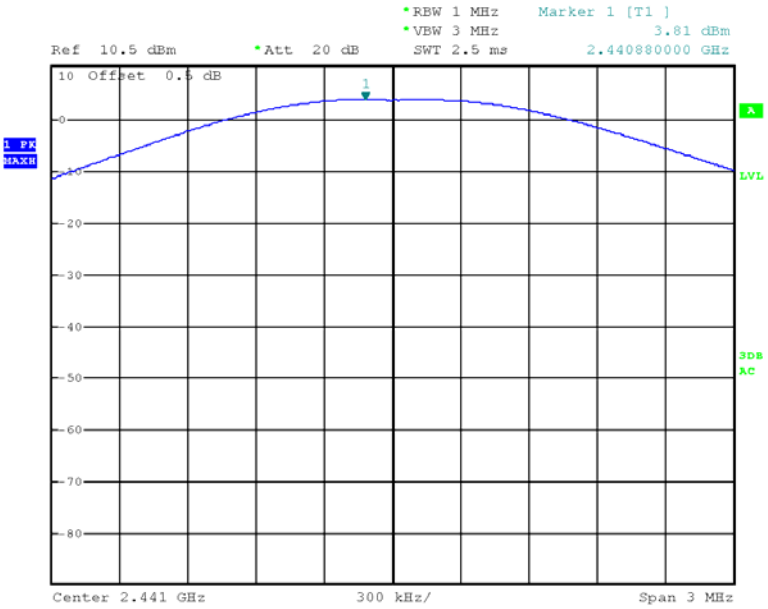
	Channel	Frequency (MHz)	Output power (dBm)	Limit (dBm)
BDR Mode (GFSK)	Low	2402	4.28	30
	Middle	2441	3.81	30
	High	2480	3.6	30
EDR Mode (π/4-QPSK)	Low	2402	4.03	30
	Middle	2441	3.88	30
	High	2480	3.72	30
EDR Mode (8DPSK)	Low	2402	4.12	30
	Middle	2441	3.88	30
	High	2480	3.82	30

Note: The data above was tested in conducted mode.

BDR: Output Power, Low

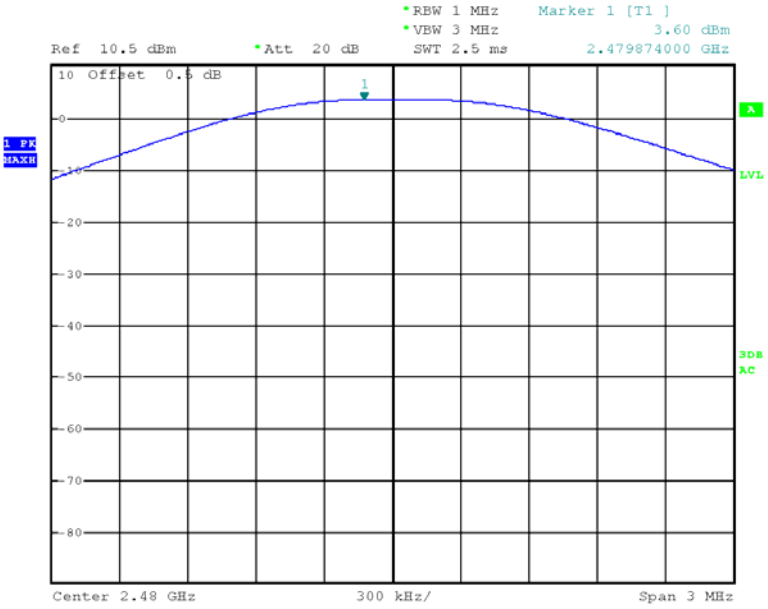


BDR: Output Power, Middle



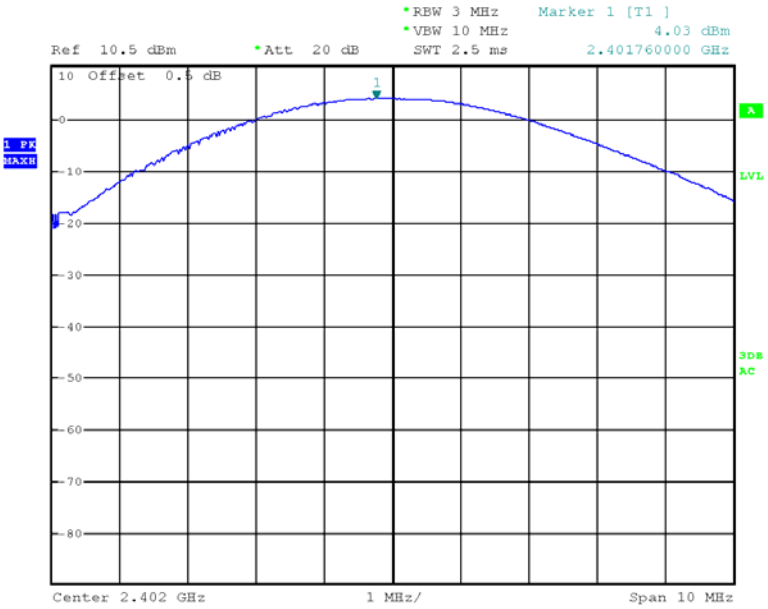
Date: 24.JUL.2012 15:07:51

BDR: Output Power, High



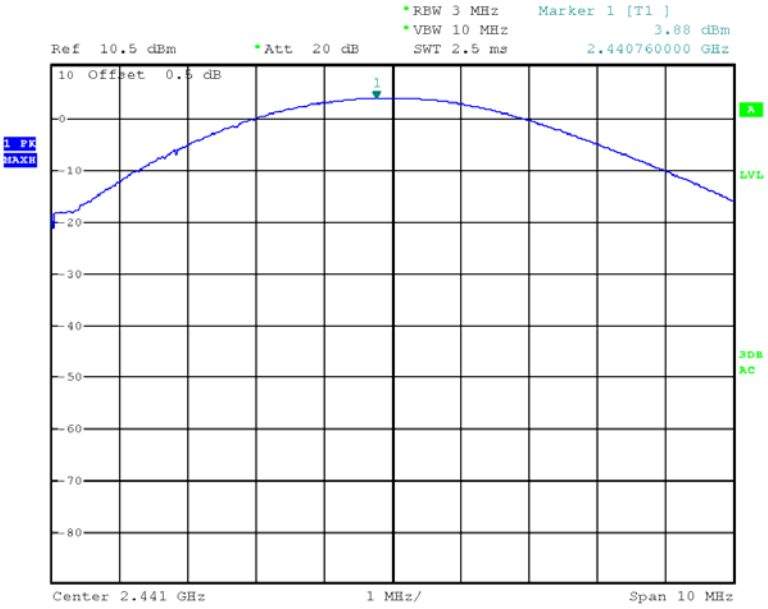
Date: 24.JUL.2012 15:08:46

EDR (π/4-QPSK) : Output Power, Low



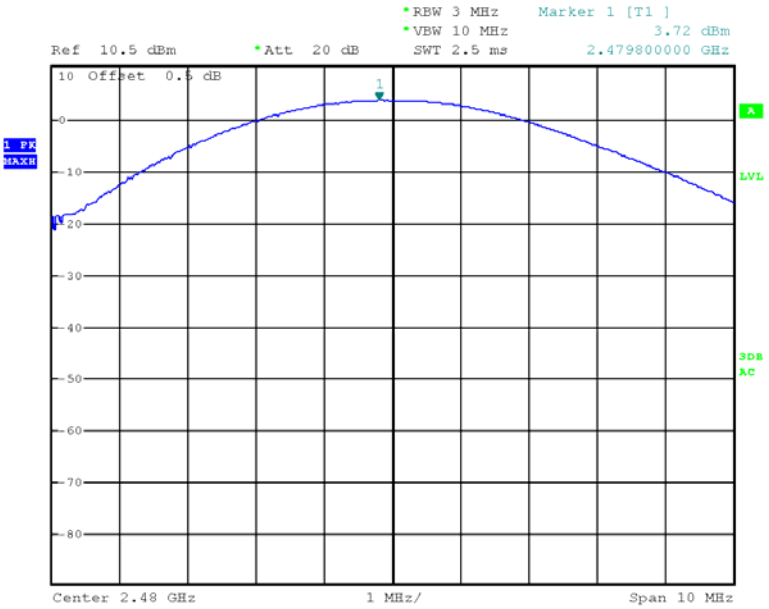
Date: 24.JUL.2012 15:14:46

EDR (π/4-QPSK) : Output Power, Middle



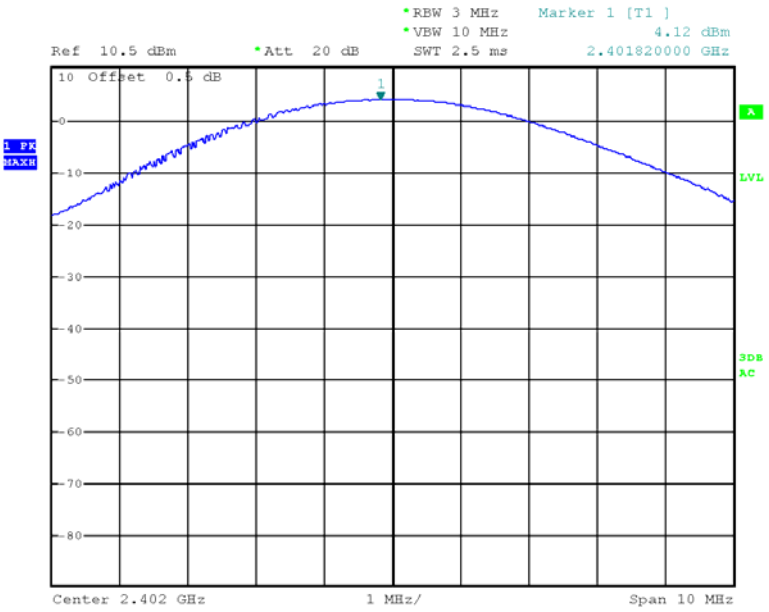
Date: 24.JUL.2012 15:15:37

EDR (π/4-QPSK) : Output Power, High



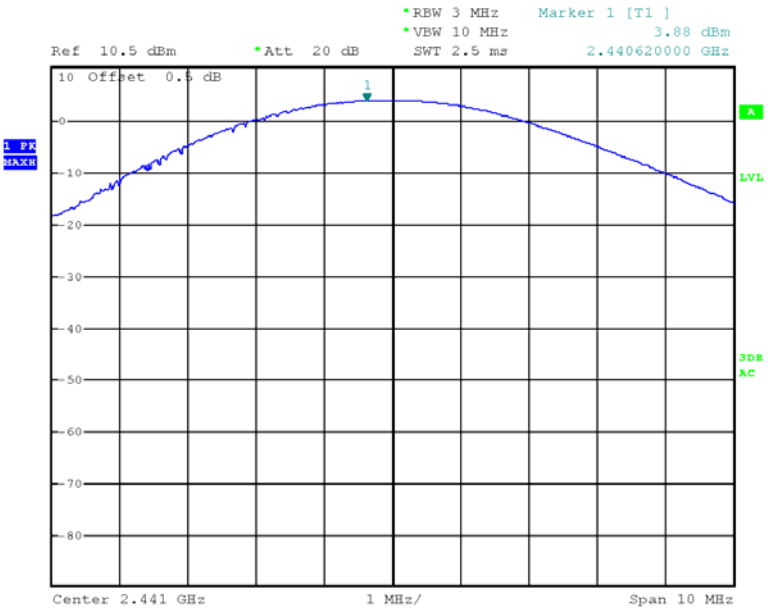
Date: 24.JUL.2012 15:19:15

EDR (8DPSK): Output Power, Low



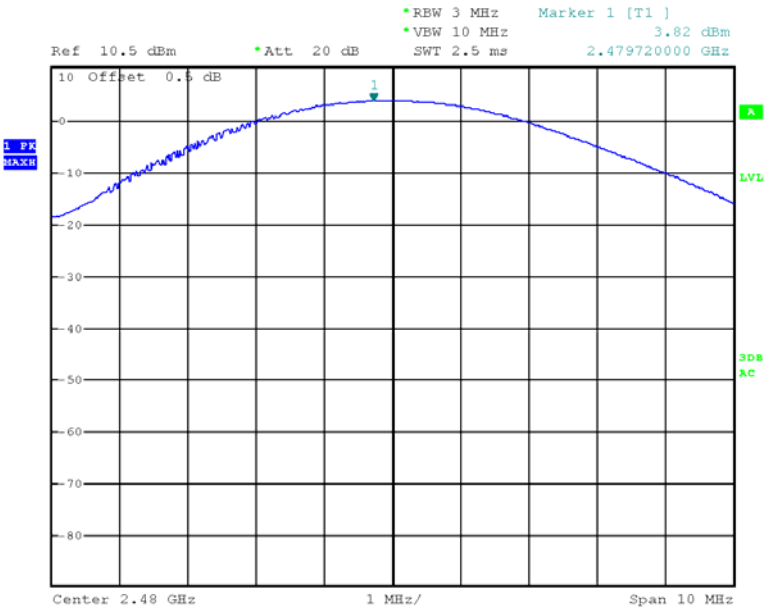
Date: 24.JUL.2012 15:23:27

EDR (8DPSK): Output Power, Middle



Date: 24.JUL.2012 15:22:49

EDR (8DPSK): Output Power, High



Date: 24.JUL.2012 15:19:44

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 and VBW of spectrum analyzer to 100 kHz/300 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	ESCI	101122	2011-11-17	2012-11-16

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Data

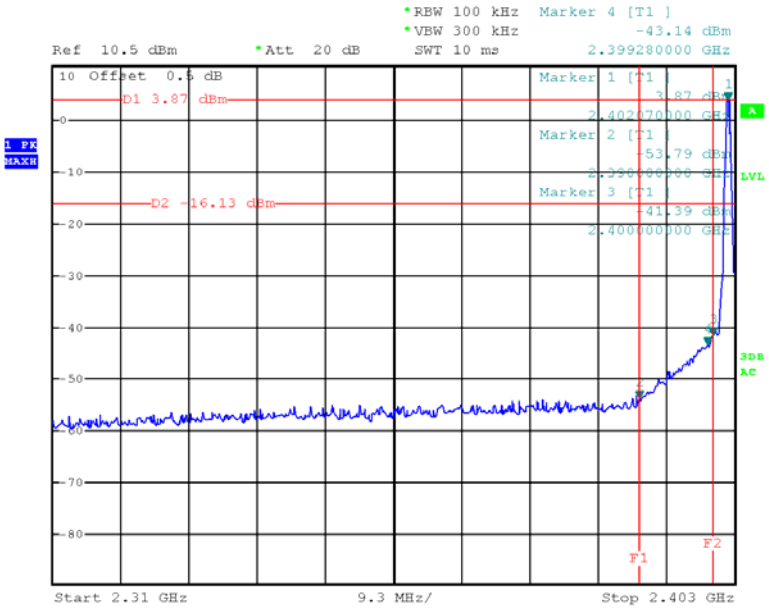
Environmental Conditions

Temperature:	26 °C
Relative Humidity:	56 %
ATM Pressure:	100.9 kPa

**The testing was performed by Ares Liu on 2012-07-24.*

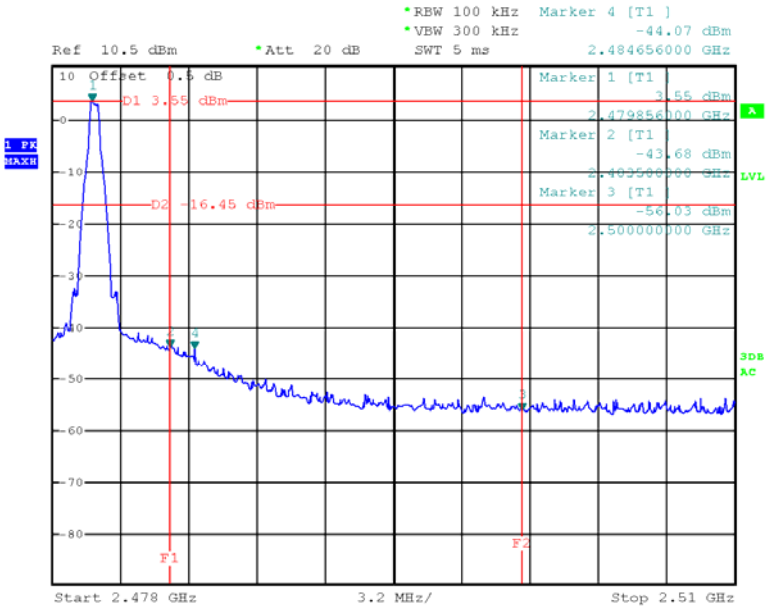
Test Result: Compliance

BDR: Band Edge, Left Side



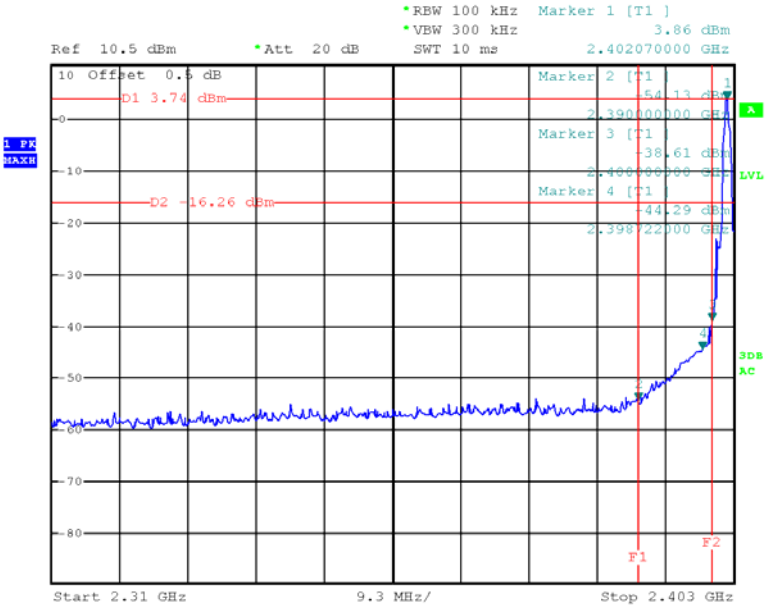
Date: 24.JUL.2012 15:29:18

BDR: Band Edge, Right Side



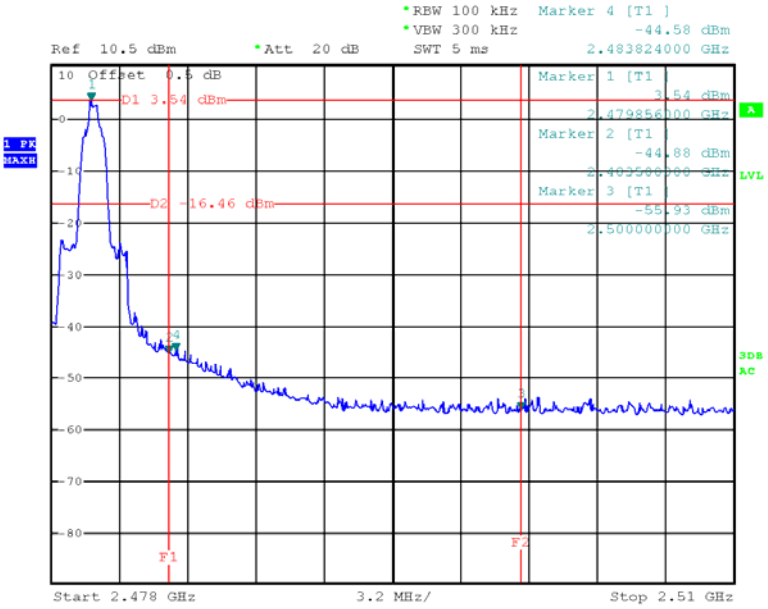
Date: 24.JUL.2012 15:30:45

EDR (π/4-QPSK) : Band Edge, Left Side



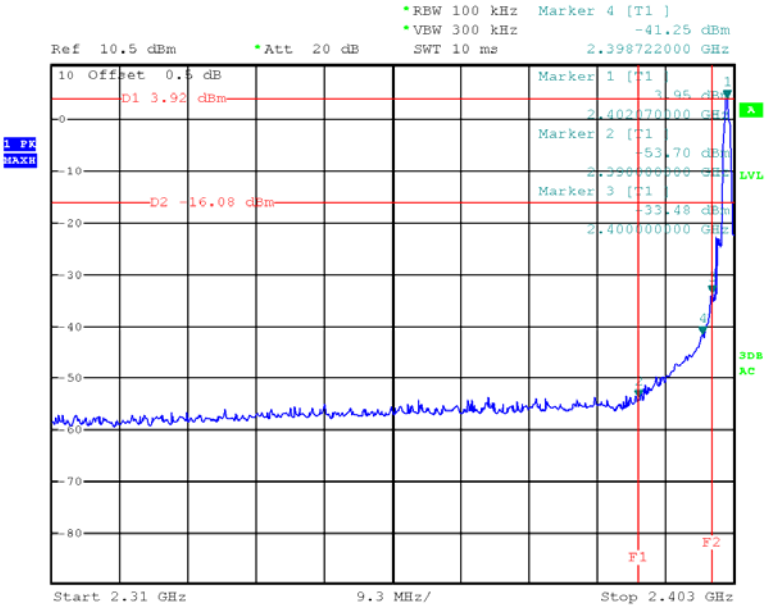
Date: 24.JUL.2012 15:27:53

EDR (π/4-QPSK) : Band Edge, Right Side



Date: 24.JUL.2012 15:32:21

EDR (8DPSK): Band Edge, Left Side



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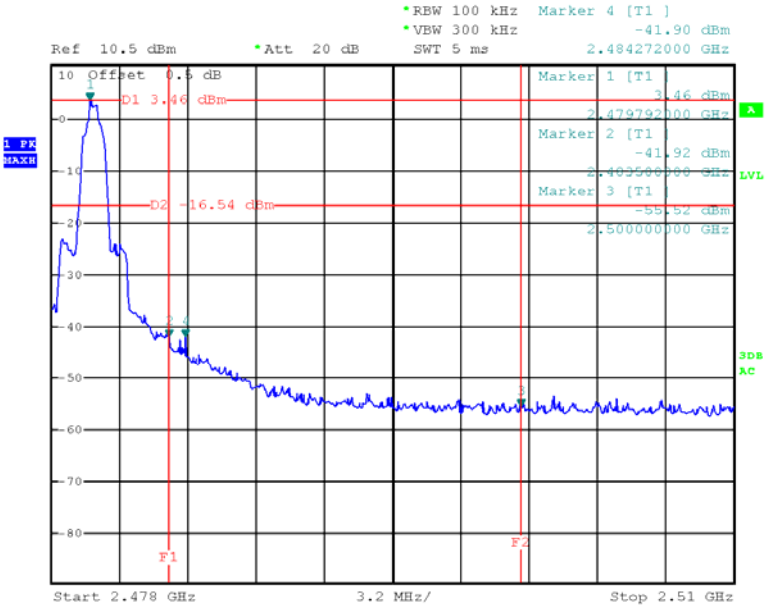
EDR (8DPSK): Band Edge, Right Side



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