FCC Test Report

Product Name	DCM (Data Communication Module)
Model No	5-104348-192
FCC ID.	H8NCDD6020

Applicant	ASKEY COMPUTER CORP.
Address	10F, NO.119, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23585

Date of Receipt	Oct. 13, 2017
Issue Date	Nov. 28, 2017
Report No.	17A0157R-RFUSP01V00
Report Version	V1.0

Testing Laboratory
3023

The test results relate only to the samples tested.
The test results shown in the test report are traceable to the national/international standard through the calibration report of the equipment and evaluated measurement uncertainty herein.
This report must not be used to claim product endorsement by TAF or any agency of the government.
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Test Report

Issue Date: Nov. 28, 2017
Report No.: 17A0157R-RFUSP01V00

Product Name	DCM (Data Communication Module)
Applicant	ASKEY COMPUTER CORP.
Address	10F, NO.119, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23585
Manufacturer	ASKEY COMPUTER CORP.
Model No.	5-104348-192
FCC ID.	H8NCDD6020
EUT Rated Voltage	DC12V (Power by Battery)
EUT Test Voltage	DC 12V (Power by Battery)
Trade Name	DENSO CORPORATION
Applicable Standard	FCC CFR Title 47 Part 15 Subpart C: 2016 ANSI C63.4: 2014, ANSI C63.10: 2013 KDB 558074 D01 DTS Meas Guidance v04
Test Result	Complied

Documented By : Anny Chou

(Senior Adm. Specialist / Anny Chou)

Tested By : Eason chen

(Engineer / Eason Chen)

Approved By :

(Director / Vincent Lin)

TABLE OF CONTENTS

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	DCM (Data Communication Module)
Trade Name	DENSO CORPORATION
Model No.	5-104348-192
FCC ID.	H8NCDD6020
Frequency Range	2412-2462MHz for 802.11b/g/n-20BW, 2422-2452MHz for 802.11n-40BW
Number of Channels	802.11b/g/n-20MHz: 11, n-40MHz: 7
Data Speed	802.11b: 1-11Mbps, 802.11g: 6-54Mbps, 802.11n: up to 150Mbps
Type of Modulation	802.11b:DSSS (DBPSK, DQPSK, CCK) 802.11g/n:OFDM (BPSK, QPSK, 16QAM, 64QAM)
Antenna Type	PIFA Antenna
Antenna Gain	Refer to the table “Antenna List”
Channel Control	Auto

Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	ASKEY	CDD6020	PIFA Antenna	2.74dBi for 2.4GHz

Note:

1. The antenna of EUT conforms to FCC 15.203.

802.11b/g/n-20MHz Center Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 01:	2412 MHz	Channel 02:	2417 MHz	Channel 03:	2422 MHz	Channel 04:	2427 MHz
Channel 05:	2432 MHz	Channel 06:	2437 MHz	Channel 07:	2442 MHz	Channel 08:	2447 MHz
Channel 09:	2452 MHz	Channel 10:	2457 MHz	Channel 11:	2462 MHz		

802.11n-40MHz Center Frequency of Each Channel:

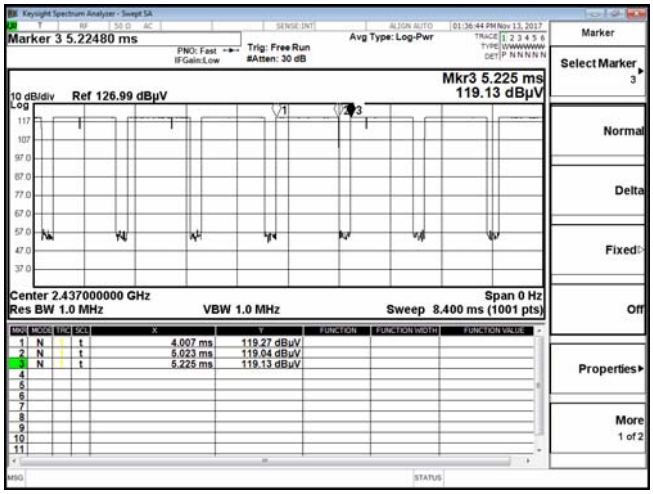
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 03:	2422 MHz	Channel 04:	2427 MHz	Channel 05:	2432 MHz	Channel 06:	2437 MHz
Channel 07:	2442 MHz	Channel 08:	2447 MHz	Channel 09:	2452 MHz		

Duty Cycle:

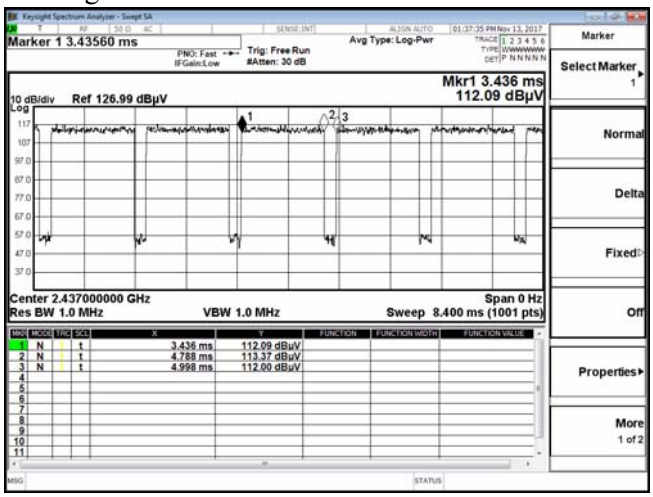
802.11b	0.834
802.11g	0.866
802.11n-20	0.863
802.11n-40	0.700

*Duty cycle = Ton / (Ton + Toff)

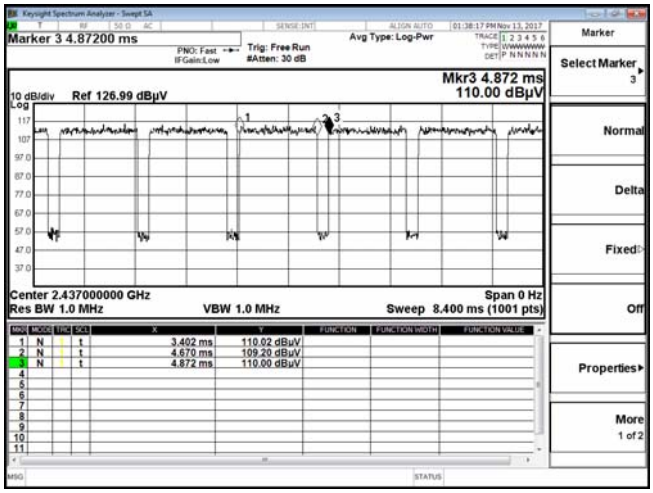
802.11b:



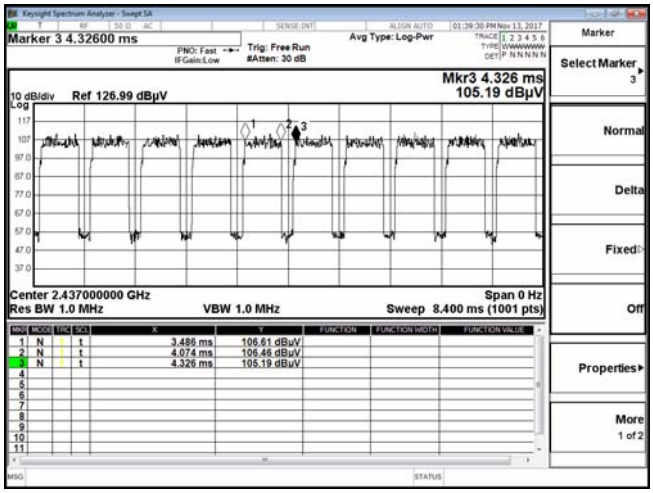
802.11g:



802.11n20:



802.11n40:



Note:

1. The EUT is a DCM (Data Communication Module) with a built-in WLAN and Bluetooth transceiver, this report for WLAN.
2. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
3. At result of pretests, module supports dual-channel transmission, only the worst case is shown in the report.
4. Lowest and highest data rates are tested in each mode. Only worst case is shown in the report. (802.11b is 1Mbps、802.11g is 6Mbps、802.11n(20M-BW) is 7.2Mbps and 802.11n(40M-BW) is 15Mbps)
5. These tests are conducted on a sample for the purpose of demonstrating compliance of 802.11b/g/n transmitter with Part 15 Subpart C Paragraph 15.247 of spread spectrum devices.
6. The radiation measurements are performed in X, Y, Z axis positioning. Only the worst case is shown in the report.

Test Mode:	Mode 1: Transmit (802.11b 1Mbps)
	Mode 2: Transmit (802.11g 6Mbps)
	Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)
	Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)

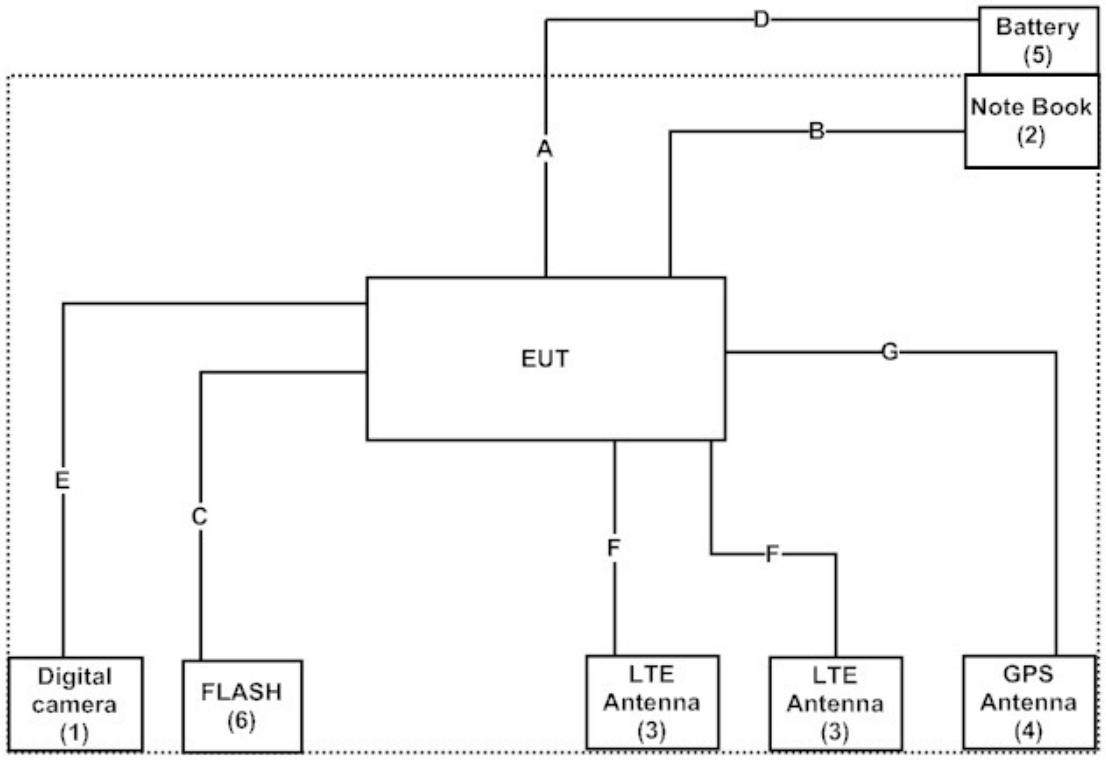
1.3. Tested System Details

The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product		Manufacturer	Model No.	Serial No.	Power Cord
1	Digital camera	ASKEY	N/A	N/A	N/A
2	Note Book	DELL	Inspiron 15 3000	N/A	N/A
3	LTE Antenna	ASKEY	N/A	N/A	N/A
4	GPS Antenna	ASKEY	N/A	N/A	Non-shielded, 1.4m
5	Battery (DC 12V)	TRANE	12B50PE	N/A	N/A
6	FLASH	Transcend	JF110	132706-1218	N/A

Signal Cable Type		Signal cable Description
A	Power Cable	Non-shielded, 0.5m
B	USB Cable	Non-shielded, 0.4m
C	USB Cable	Non-shielded, 1.4m
D	Signal Cable	Non-shielded, 1.2m
E	Signal Cable	Non-shielded, 2.9m
F	Signal Cable	Non-shielded, 1.4m, two PCS
G	Signal Cable	Non-shielded, 1.4m

1.4. Configuration of Tested System



1.5. EUT Exercise Software

1. Setup the EUT as shown in Section 1.4.
2. Execute software “QRCT V3.0.230.0” on the EUT.
3. Configure the test mode, the test channel, and the data rate.
4. Press “OK” to start the continuous Transmit.
5. Verify that the EUT works properly.

1.6. Test Facility

Ambient conditions in the laboratory:

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	20-35
Humidity (%RH)	25-75	50-65
Barometric pressure (mbar)	860-1060	950-1000

The related certificate for our laboratories about the test site and management system can be downloaded from DEKRA Testing and Certification Co., Ltd. Web Site:
http://www.dekra.com.tw/english/about/certificates.aspx?bval=5
The address and introduction of DEKRA Testing and Certification Co., Ltd. laboratories can be founded in our Web site: http://www.dekra.com.tw/index_en.aspx

Site Description: Accredited by TAF
Accredited Number: 3023

Site Name: DEKRA Testing and Certification Co., Ltd
Site Address: No.5-22, Ruishukeng, Linkou Dist., New Taipei City 24451, Taiwan, R.O.C.
TEL : 886-2-8601-3788 / FAX : 886-2-8601-3789
E-Mail : info.tw@dekra.com

FCC Accreditation Number: TW3023

1.7. List of Test Equipment

For Conducted measurements /CB3/SR8

	Equipment	Manufacturer	Model No.	Serial No.	Cali. Date	Due. Date
	Temperature Chamber	WIT GROUP	TH-1S-B	EQ-201-00146	2016/11/28	2017/11/27
X	Spectrum Analyzer	Agilent	N9010A	MY48030495	2017/7/22	2018/7/21
X	Power Meter	Anritsu	ML2495A	6K00003357	2017/6/23	2018/6/22
X	Pulse power sensor	Anritsu	MA2411B	0846193	2017/6/23	2018/6/22
X	EMI Test Receiver	R&S	ESCS 30	100369	2017/10/13	201810/12
X	LISN	R&S	ESH3-Z5	836679/017	2017/1/18	2018/1/17
X	LISN	R&S	ENV216	100097	2017/1/18	2018/1/17
X	Coaxial Cable	QTK(Arnist)	RG 400	LC018-RG	2017/6/25	2018/6/24

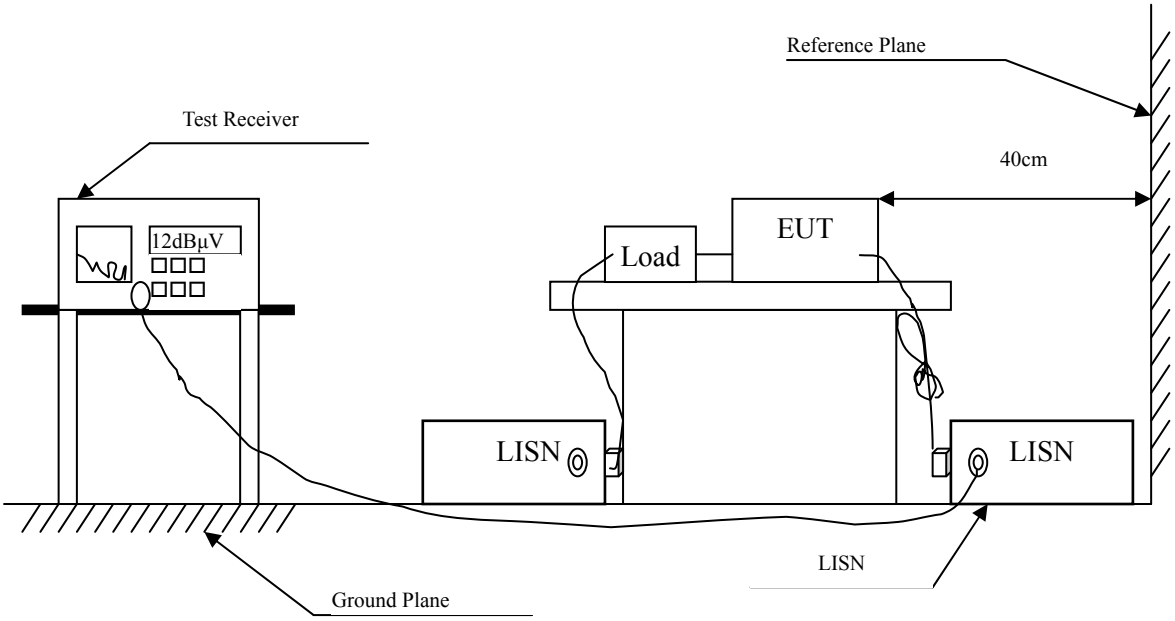
For Radiated measurements /Site3/CB8

	Equipment	Manufacturer	Model No.	Serial No.	Cali. Date	Due. Date
X	Spectrum Analyzer	R&S	FSP40	100170	2017/1/18	2018/1/17
X	Loop Antenna	Teseq	HLA6121	37133	2017/3/18	2018/3/17
X	Bi-Log Antenna	Schaffner Chase	CBL6112B	2707	2017/6/11	2018/6/10
X	Horn Antenna	ETS-Lindgren	3117	00135205	2017/4/6	2018/4/5
X	Horn Antenna	Schwarzbeck	BBHA9170	9170430	2017/4/14	2018/4/13
X	Pre-Amplifier	QTK	AP/0100A	CHM/0901069	2017/6/23	2018/6/22
X	Pre-Amplifier	EMCI	EMC012630SE	980210	2017/1/26	2018/1/24
X	Pre-Amplifier	NARDA WE	DBL-1840N506	013	2017/9/30	2018/9/29
X	Filter	MicroTRON	BRM50701	019	2017/11/2	2018/11/1
	Filter	Microwave Circuits	N0257881	36681	2017/1/3	2018/1/2
X	EMI Test Receiver	R&S	ESR26	101385	2017/9/29	2018/9/28
X	Coaxial Cable	QTK(Arnist)	SUCOFLEX 106	L1606-015C	2017/6/23	2018/6/22
X	EMI Test Receiver	R&S	ESCS 30	838251/001	2017/7/21	2018/7/20
X	Coaxial Cable	QTK(Arnist)	RG 214	LC003-RG	2017/6/16	2018/6/15
X	Coaxial signal switch	Anritsu	MP59B	6201415889	2017/6/16	2018/6/15

Note:
1. All equipments are calibrated every one year.
2. The test instruments marked with “X” are used to measure the final test results.
3. Test Software version :QuieTek EMI 2.0 V2.1.113.

2. Conducted Emission

2.1. Test Setup



2.2. Limits

FCC Part 15 Subpart C Paragraph 15.207 (dBµV) Limit		
Frequency MHz	Limits	
	QP	AVG
0.15 - 0.50	66-56	56-46
0.50-5.0	56	46
5.0 - 30	60	50

2.3. Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm /50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs.)

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2014 on conducted measurement.

Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

2.4. Uncertainty

± 2.26 dB

2.5. Test Result of Conducted Emission

Owing to the DC operation of EUT, this test item is not performed.

3. Peak Power Output

3.1. Test Setup

3.2. Limits

The maximum peak power shall be less 1 Watt.

3.3. Test Procedure

Tested according to DTS test procedure of KDB 558074 for compliance to FCC 47CFR 15.247 requirements. The maximum peak conducted output power using KDB 558074 section 9.1.3 PKPM1 Peak power meter method.

3.4. Uncertainty

± 1.19 dB

3.5. Test Result of Peak Power Output

Product : DCM (Data Communication Module)
Test Item : Peak Power Output Data
Test Site : No.3 OATS
Test Date : 2017/11/16
Test Mode : Mode 1: Transmit (802.11b 1Mbps)

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)				Peak Power	Required Limit	Result
		1	2	5.5	11	1		
		Measurement Level (dBm)						
01	2412	18.3	--	--	--	21.41	<30dBm	Pass
06	2437	18.9	18.84	18.76	18.7	21.92	<30dBm	Pass
11	2462	19.74	--	--	--	22.24	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

Product : DCM (Data Communication Module)
Test Item : Peak Power Output Data
Test Site : No.3 OATS
Test Date : 2017/11/16
Test Mode : Mode 2: Transmit (802.11g 6Mbps)

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Peak Power	Required Limit	Result
		6	9	12	18	24	36	48	54	6		
		Measurement Level (dBm)										
01	2412	12.69								20.59	<30dBm	Pass
02	2417	15.8								22.62	<30dBm	Pass
03	2422	16.83								22.82	<30dBm	Pass
06	2437	17.03	16.98	16.83	16.75	16.65	16.55	16.45	16.35	23.02	<30dBm	Pass
11	2462	16.75								23.01	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

Product : DCM (Data Communication Module)
Test Item : Peak Power Output Data
Test Site : No.3 OATS
Test Date : 2017/11/16
Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Peak Power	Required Limit	Result
		7.2	14.4	21.7	28.9	43.3	57.8	65	72.2	7.2		
		Measurement Level (dBm)										
01	2412	12.59								20.37	<30dBm	Pass
06	2437	14.02	13.95	13.87	13.80	13.72	13.65	13.57	13.50	21.75	<30dBm	Pass
11	2462	13.34								21.07	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

Product : DCM (Data Communication Module)
Test Item : Peak Power Output Data
Test Site : No.3 OATS
Test Date : 2017/11/16
Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)

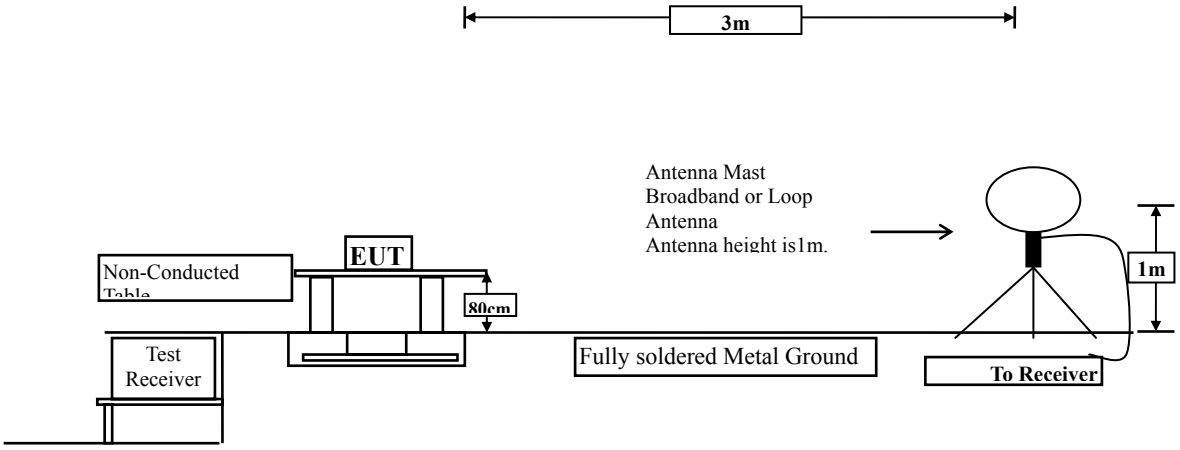
Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Peak Power	Required Limit	Result
		15	30	45	60	90	120	135	150	15		
		Measurement Level (dBm)										
03	2422	9.38								17.8	<30dBm	Pass
04	2427	10.77								19.1	<30dBm	Pass
05	2432	12.84								21.17	<30dBm	Pass
06	2437	14.34	14.27	14.19	14.13	14.03	13.98	13.92	13.85	22.34	<30dBm	Pass
08	2442	14.53								22.56	<30dBm	Pass
09	2452	11.6								20.47	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

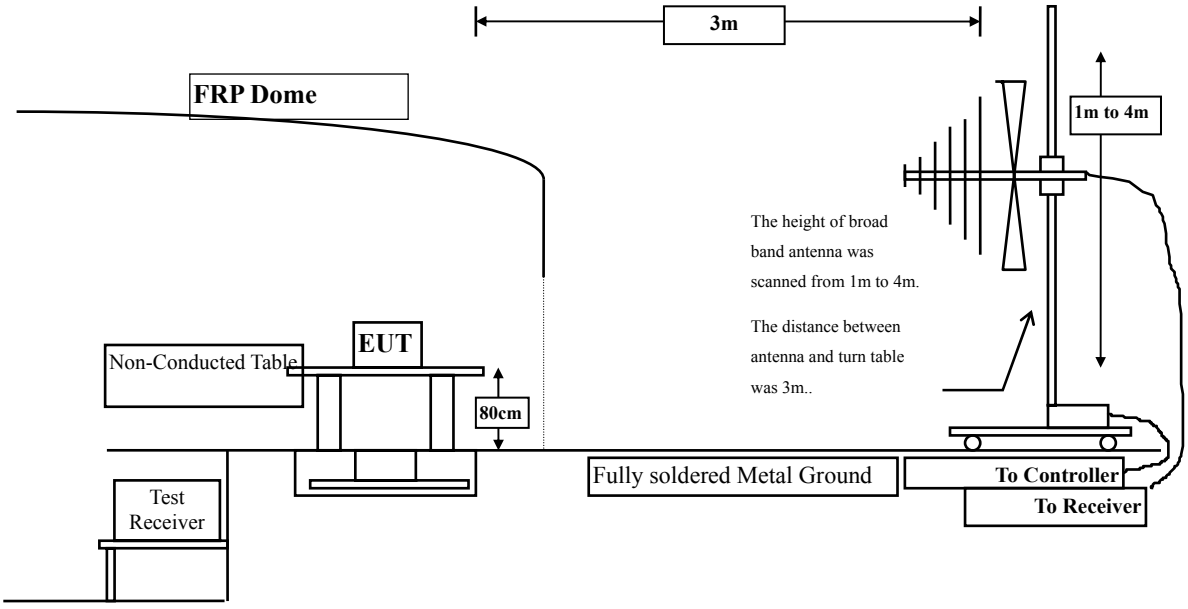
4. Radiated Emission

4.1. Test Setup

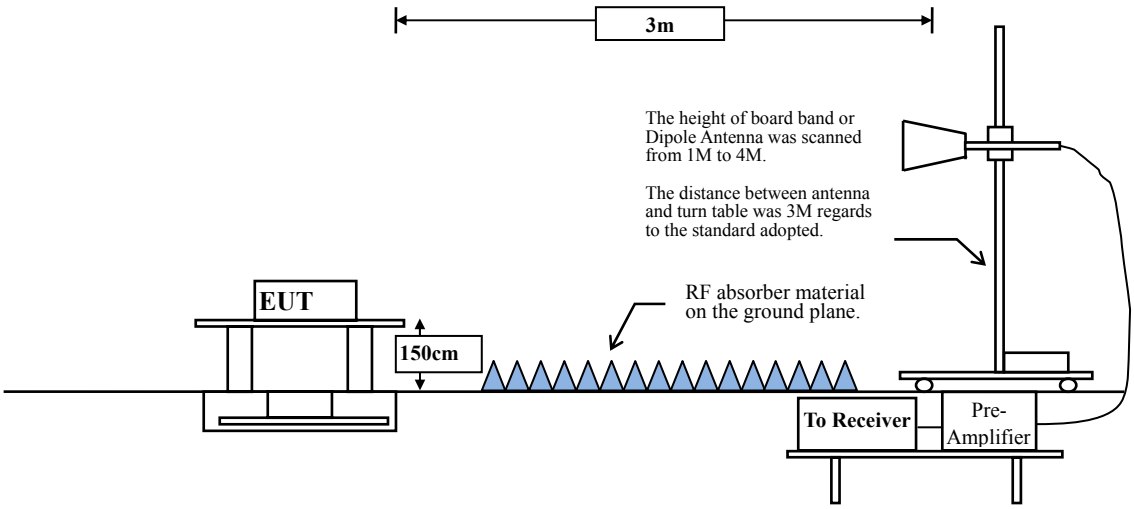
Radiated Emission Under 30MHz



Radiated Emission Below 1GHz



Radiated Emission Above 1GHz



4.2. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

FCC Part 15 Subpart C Paragraph 15.209(a) Limits		
Frequency MHz	Field strength (microvolts/meter)	Measurement distance (meter)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Remarks: E field strength (dBμV/m) = 20 log E field strength (uV/m)

4.3. Test Procedure

The EUT was setup according to ANSI C63.10: 2013 and tested according to DTS test procedure of KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Measuring the frequency range below 1GHz, the EUT is placed on a turn table which is 0.8 meter above ground,when measuring the frequency range above 1GHz, the EUT is placed on a turn table which is 1.5 meter above ground.

The turn table is rotated 360 degrees to determine the position of the maximum emission level.

The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna is scanned between 1 meter and 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10: 2013 on radiated measurement.

The resolution bandwidth below 30MHz setting on the field strength meter is 9kHz and 30MHz~1GHz is 120kHz and above 1GHz is 1MHz.

Radiated emission measurements below 30MHz are made using Loop Antenna and 30MHz~1GHz are made using broadband Bilog antenna and above 1GHz are made using Horn Antennas.

The measurement is divided into the Preliminary Measurement and the Final Measurement.

The suspected frequencies are searched for in Preliminary Measurement with the measurement antenna kept pointed at the source of the emission both in azimuth and elevation, with the polarization of the antenna oriented for maximum response. The antenna is pointed at an angle towards the source of the emission, and the EUT is rotated in both height and polarization to maximize the measured emission. The emission is kept within the illumination area of the 3 dB bandwidth of the antenna.

The worst radiated emission is measured in the Open Area Test Site on the Final Measurement.

The measurement frequency range form 9kHz - 10th Harmonic of fundamental was investigated.

The average measurement tested according to KDB 558074 section 12.2.5.3. Reduced VBW averaging across on- and off-times of the EUT transmissions with max hold.

VBW ≥ 1/T:

Mode	Duty Cycle	T	1/T	VBW Setting
802.11b	0.834	1.016 ms	984 Hz	1 kHZ
802.11g	0.866	1.352 ms	739 HZ	1 kHZ
802.11n20	0.863	1.268 ms	788 Hz	1 kHZ
802.11n40	0.700	0.588 ms	1700 Hz	2 kHZ

4.4. Uncertainty

± 4.08 dB above 1GHz

± 4.22 dB below 1GHz

4.5. Test Result of Radiated Emission

Product : DCM (Data Communication Module)
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Date : 2017/11/14
Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2412MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
4824.000	2.428	38.785	41.214	-32.786	74.000
7236.000	9.177	36.434	45.611	-28.389	74.000
9648.000	10.019	35.112	45.132	-28.868	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4824.000	2.836	38.496	41.333	-32.667	74.000
7236.000	9.676	36.944	46.620	-27.380	74.000
9648.000	10.556	35.177	45.734	-28.266	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 1 kHz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	DCM (Data Communication Module)
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2017/11/14
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
4874.000	2.076	41.178	43.255	-30.745	74.000
7311.000	9.512	37.013	46.525	-27.475	74.000
9748.000	9.630	36.891	46.521	-27.479	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4874.000	2.532	41.309	43.841	-30.159	74.000
7311.000	10.089	37.425	47.514	-26.486	74.000
9748.000	10.266	36.687	46.954	-27.046	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 1 kHz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : DCM (Data Communication Module)
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Date : 2017/11/14
Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2462 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
4924.000	2.191	42.060	44.251	-29.749	74.000
7386.000	10.373	36.841	47.215	-26.785	74.000
9848.000	9.964	36.190	46.154	-27.846	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4924.000	2.805	43.776	46.581	-27.419	74.000
7386.000	11.180	36.307	47.487	-26.513	74.000
9848.000	10.801	36.713	47.514	-26.486	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 1 kHz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : DCM (Data Communication Module)
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Date : 2017/11/14
Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2412MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
4824.000	2.428	38.822	41.251	-32.749	74.000
7236.000	9.177	36.444	45.621	-28.379	74.000
9648.000	10.019	35.605	45.625	-28.375	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4824.000	2.836	38.415	41.252	-32.748	74.000
7236.000	9.676	36.584	46.260	-27.740	74.000
9648.000	10.556	34.790	45.347	-28.653	74.000
Average Detector:					
--					

Note:
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 1 kHz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	DCM (Data Communication Module)
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2017/11/14
Test Mode	:	Mode 2: Transmit (802.11g 6Mbps) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
4874.000	2.076	40.284	42.361	-31.639	74.000
7311.000	9.512	36.013	45.525	-28.475	74.000
9748.000	9.630	36.891	46.521	-27.479	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4874.000	2.532	40.731	43.263	-30.737	74.000
7311.000	10.089	37.442	47.531	-26.469	74.000
9748.000	10.266	36.328	46.595	-27.405	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 1 kHz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : DCM (Data Communication Module)
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Date : 2017/11/14
Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2462 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
4924.000	2.191	41.030	43.221	-30.779	74.000
7386.000	10.373	35.877	46.251	-27.749	74.000
9848.000	9.964	36.551	46.515	-27.485	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4924.000	2.805	43.142	45.947	-28.053	74.000
7386.000	11.180	35.307	46.487	-27.513	74.000
9848.000	10.801	35.768	46.569	-27.431	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 1 kHz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : DCM (Data Communication Module)
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Date : 2017/11/14
Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)(2412MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
4824.000	2.428	39.785	42.214	-31.786	74.000
7236.000	9.177	36.818	45.995	-28.005	74.000
9648.000	10.019	36.112	46.132	-27.868	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4824.000	2.836	39.514	42.351	-31.649	74.000
7236.000	9.676	36.849	46.525	-27.475	74.000
9648.000	10.556	35.287	45.844	-28.156	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 1 kHz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	DCM (Data Communication Module)
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2017/11/16
Test Mode	:	Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
4874.000	2.076	40.586	42.663	-31.337	74.000
7311.000	9.512	37.100	46.612	-27.388	74.000
9748.000	9.630	36.512	46.142	-27.858	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4874.000	2.532	39.829	42.361	-31.639	74.000
7311.000	10.089	36.425	46.514	-27.486	74.000
9748.000	10.266	36.307	46.574	-27.426	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 1 kHz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : DCM (Data Communication Module)
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Date : 2017/11/14
Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2462 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
4924.000	2.191	41.073	43.264	-30.736	74.000
7386.000	10.373	36.510	46.884	-27.116	74.000
9848.000	9.964	36.991	46.955	-27.045	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4924.000	2.805	43.717	46.522	-27.478	74.000
7386.000	11.180	36.231	47.411	-26.589	74.000
9848.000	10.801	36.021	46.822	-27.178	74.000
Average Detector:					
--					

Note:
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 1 kHz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : DCM (Data Communication Module)
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Date : 2017/11/14
Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)(2422MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
4844.000	2.280	39.971	42.252	-31.748	74.000
7266.000	9.106	36.505	45.611	-28.389	74.000
9688.000	9.663	35.970	45.633	-28.367	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4844.000	2.707	38.625	41.333	-32.667	74.000
7266.000	9.626	36.994	46.620	-27.380	74.000
9688.000	10.284	35.450	45.734	-28.266	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 2 kHz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	DCM (Data Communication Module)
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Date	:	2017/11/14
Test Mode	:	Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
4874.000	2.076	41.567	43.644	-30.356	74.000
7311.000	9.512	37.312	46.824	-27.176	74.000
9748.000	9.630	36.425	46.055	-27.945	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4874.000	2.532	39.612	42.144	-31.856	74.000
7311.000	10.089	36.844	46.933	-27.067	74.000
9748.000	10.266	36.691	46.958	-27.042	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 2 kHz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : DCM (Data Communication Module)
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Date : 2017/11/14
Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)(2452 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
Peak Detector:					
4904.000	2.000	40.524	42.525	-31.475	74.000
7356.000	10.308	36.221	46.529	-27.471	74.000
9808.000	9.850	36.375	46.225	-27.775	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4904.000	2.513	39.900	42.414	-31.586	74.000
7356.000	11.022	34.946	45.968	-28.032	74.000
9808.000	10.512	36.693	47.205	-26.795	74.000
Average Detector:					
--					

Note:
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 2 kHz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : DCM (Data Communication Module)
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Date : 2017/11/14
Test Mode : Mode 1: Transmit (802.11b 1Mbps)(2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
143.490	-7.665	37.113	29.448	-14.052	43.500
239.520	-6.878	36.890	30.012	-15.988	46.000
288.020	-5.557	40.918	35.361	-10.639	46.000
345.250	-1.492	34.374	32.883	-13.117	46.000
634.310	1.679	24.404	26.083	-19.917	46.000
799.210	6.413	23.996	30.409	-15.591	46.000
Vertical					
143.490	-5.525	38.363	32.838	-10.662	43.500
178.410	-0.966	33.104	32.138	-11.362	43.500
239.520	-6.138	38.878	32.740	-13.260	46.000
359.800	-1.316	38.082	36.766	-9.234	46.000
599.390	1.198	30.494	31.692	-14.308	46.000
743.920	0.718	30.966	31.684	-14.316	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 1 kHz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : DCM (Data Communication Module)
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Date : 2017/11/14
Test Mode : Mode 2: Transmit (802.11g 6Mbps)(2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV	dBμV/m	dB	dBμV/m
Horizontal					
120.210	-7.275	38.875	31.600	-11.900	43.500
263.770	-5.493	36.653	31.160	-14.840	46.000
380.170	1.382	27.834	29.216	-16.784	46.000
562.530	1.945	26.957	28.902	-17.098	46.000
767.200	5.099	28.116	33.216	-12.784	46.000
861.290	6.327	23.501	29.828	-16.172	46.000
Vertical					
167.740	-4.506	31.612	27.106	-16.394	43.500
239.520	-6.138	38.890	32.752	-13.248	46.000
356.890	-1.090	26.825	25.735	-20.265	46.000
499.480	-0.199	28.986	28.786	-17.214	46.000
599.390	1.198	30.662	31.860	-14.140	46.000
743.920	0.718	31.228	31.946	-14.054	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 1 kHz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : DCM (Data Communication Module)
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Date : 2017/11/14
Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)(2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
239.520	-6.878	38.890	32.012	-13.988	46.000
288.020	-5.557	40.934	35.377	-10.623	46.000
407.330	0.433	36.215	36.648	-9.352	46.000
556.710	2.695	33.344	36.039	-9.961	46.000
691.540	3.722	29.612	33.334	-12.666	46.000
825.400	7.346	24.590	31.936	-14.064	46.000
Vertical					
216.240	-6.051	38.972	32.921	-13.079	46.000
288.020	-5.487	40.934	35.447	-10.553	46.000
470.380	-3.540	45.562	42.022	-3.978	46.000
556.710	-2.545	33.344	30.799	-15.201	46.000
695.420	1.352	31.899	33.251	-12.749	46.000
743.920	0.718	31.887	32.605	-13.395	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 1 kHz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : DCM (Data Communication Module)
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Date : 2017/11/14
Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)(2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
239.520	-6.878	38.890	32.012	-13.988	46.000
323.910	-4.531	37.852	33.321	-12.679	46.000
556.710	2.695	33.344	36.039	-9.961	46.000
647.890	1.609	32.926	34.536	-11.464	46.000
722.580	3.823	25.130	28.953	-17.047	46.000
782.720	5.387	28.079	33.466	-12.534	46.000
Vertical					
177.440	-1.248	34.727	33.479	-10.021	43.500
263.770	-4.993	37.351	32.358	-13.642	46.000
383.080	0.195	31.957	32.152	-13.848	46.000
532.460	1.209	26.931	28.140	-17.860	46.000
599.390	1.198	30.776	31.974	-14.026	46.000
743.920	0.718	31.887	32.605	-13.395	46.000

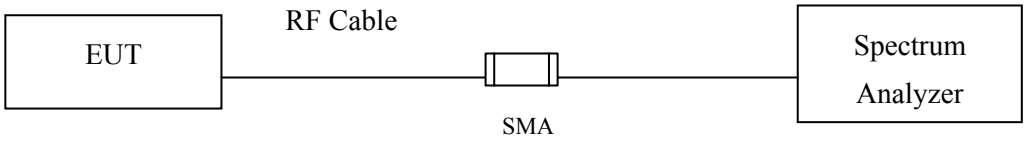
Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 2 kHz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

5. RF antenna conducted test

5.1. Test Setup

RF antenna Conducted Measurement:



5.2. Limits

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum 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. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

5.3. Test Procedure

The EUT was tested according to DTS test procedure of KDB558074 for compliance to FCC 47CFR 15.247 requirements.
Set RBW = 100 kHz, Set VBW> RBW, scan up through 10th harmonic.

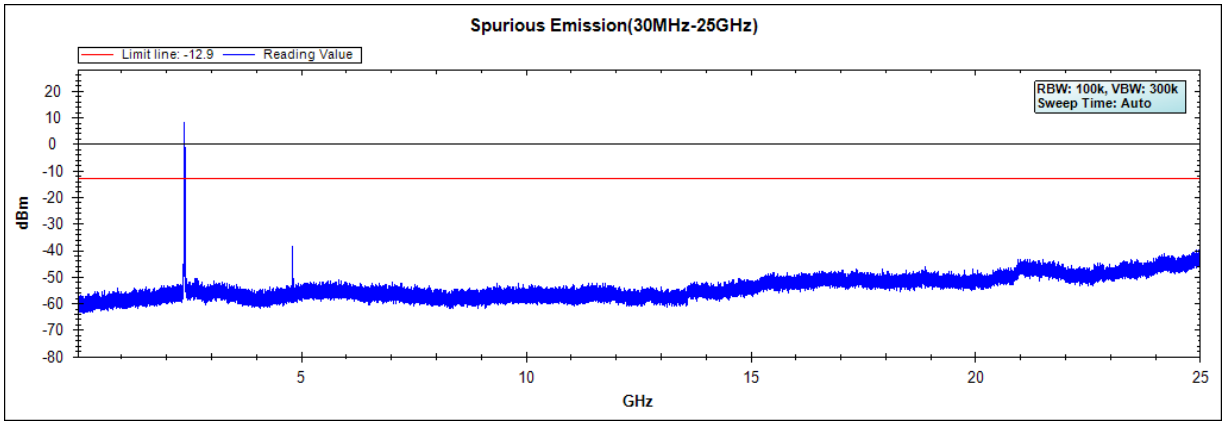
5.4. Uncertainty

The measurement uncertainty
Conducted is defined as ± 1.20dB

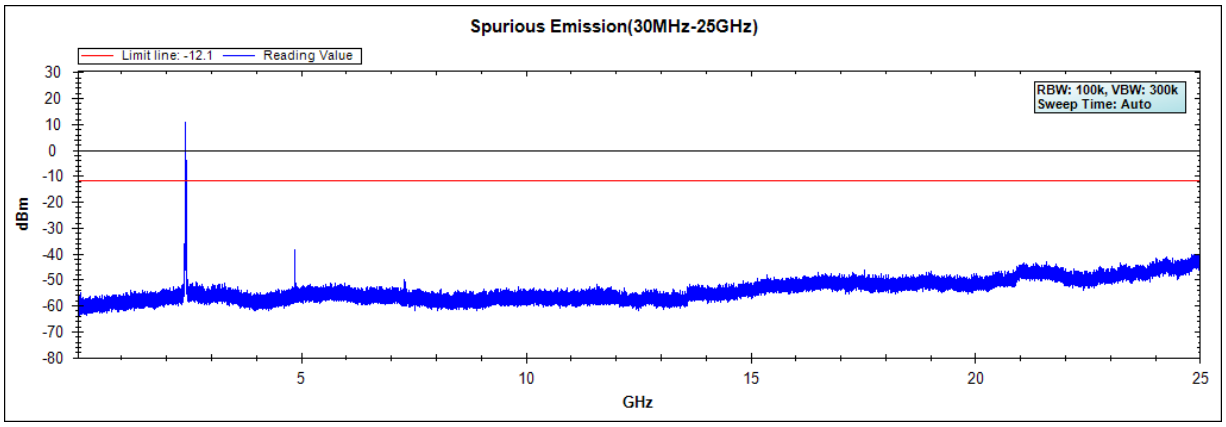
5.5. Test Result of RF antenna conducted test

Product	:	DCM (Data Communication Module)
Test Item	:	RF antenna conducted test
Test Site	:	No.3 OATS
Test Date	:	2017/11/16
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps)

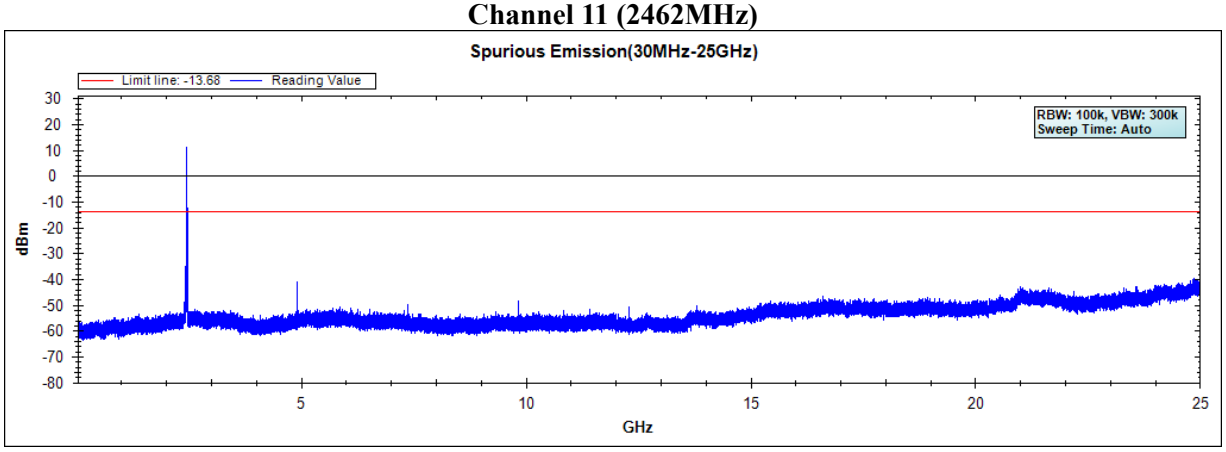
Channel 01 (2412MHz)



Channel 06 (2437MHz)



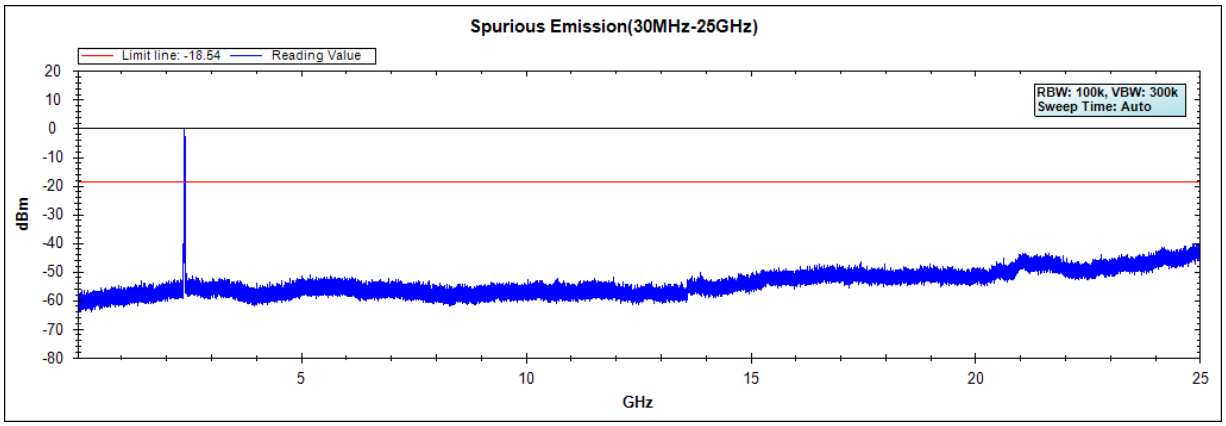
Channel 11 (2462MHz)



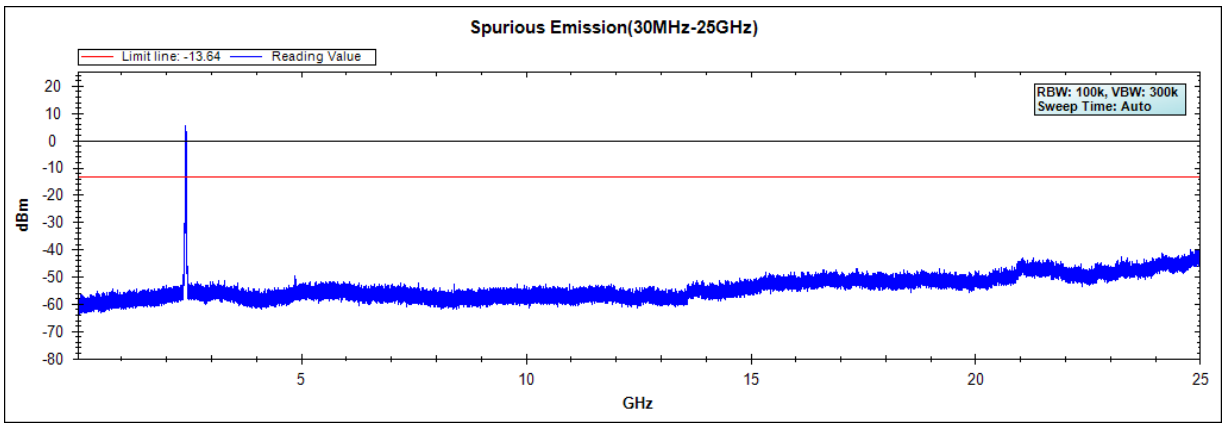
Note: The above test pattern is synthesized by multiple of the frequency range.

Product	:	DCM (Data Communication Module)
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	No.3 OATS
Test Date	:	2017/11/16
Test Mode	:	Mode 2: Transmit (802.11g 6Mbps)

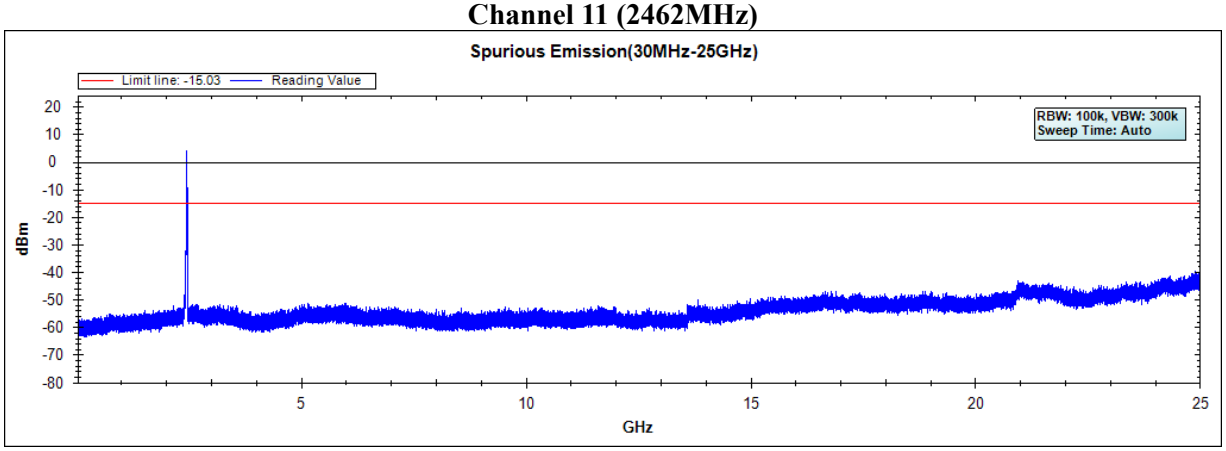
Channel 01 (2412MHz)



Channel 06 (2437MHz)



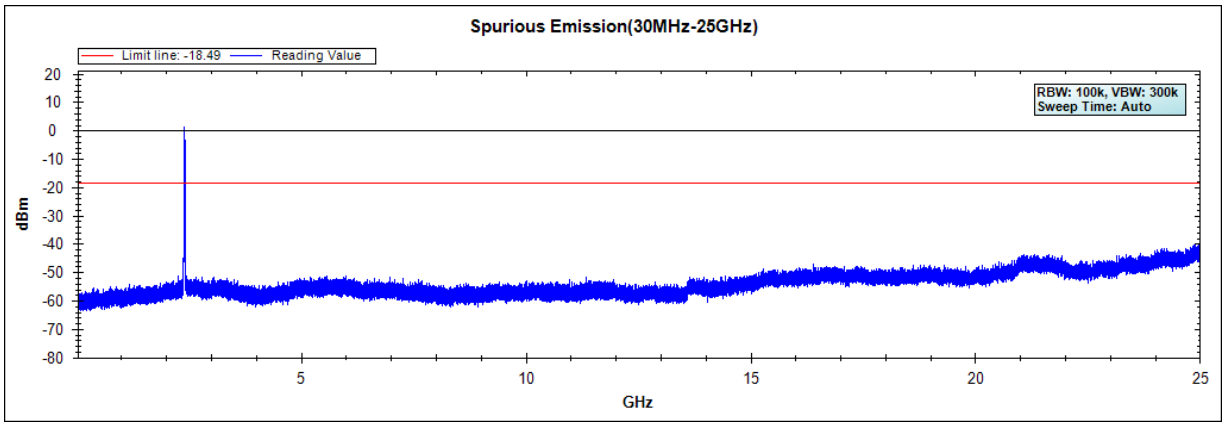
Channel 11 (2462MHz)



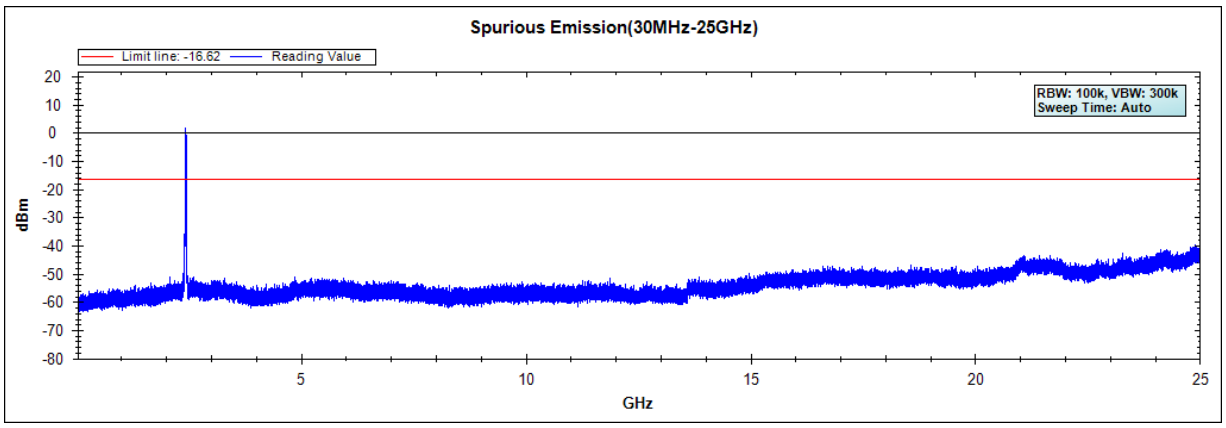
Note: The above test pattern is synthesized by multiple of the frequency range.

Product	:	DCM (Data Communication Module)
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	No.3 OATS
Test Date	:	2017/11/16
Test Mode	:	Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)

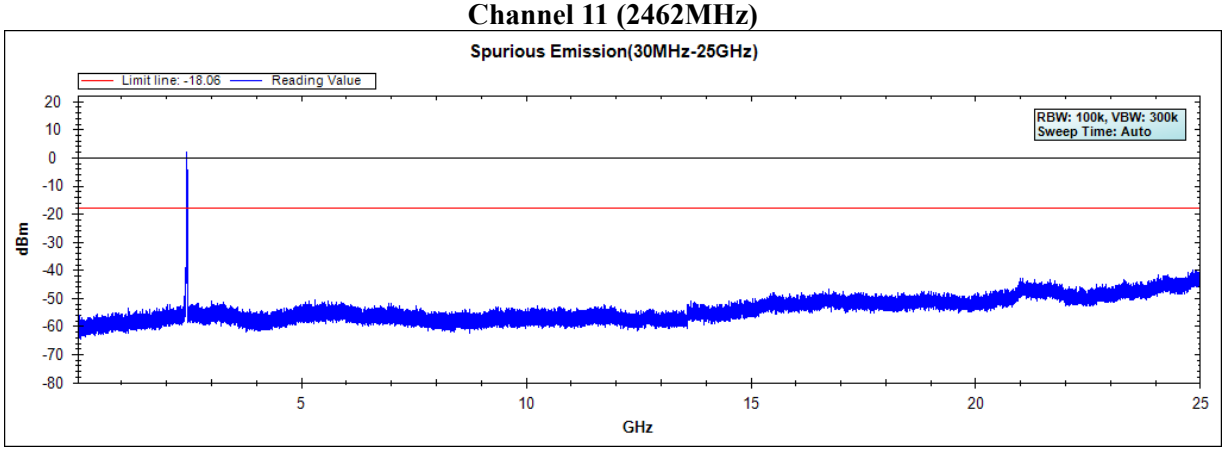
Channel 01 (2412MHz)



Channel 06 (2437MHz)



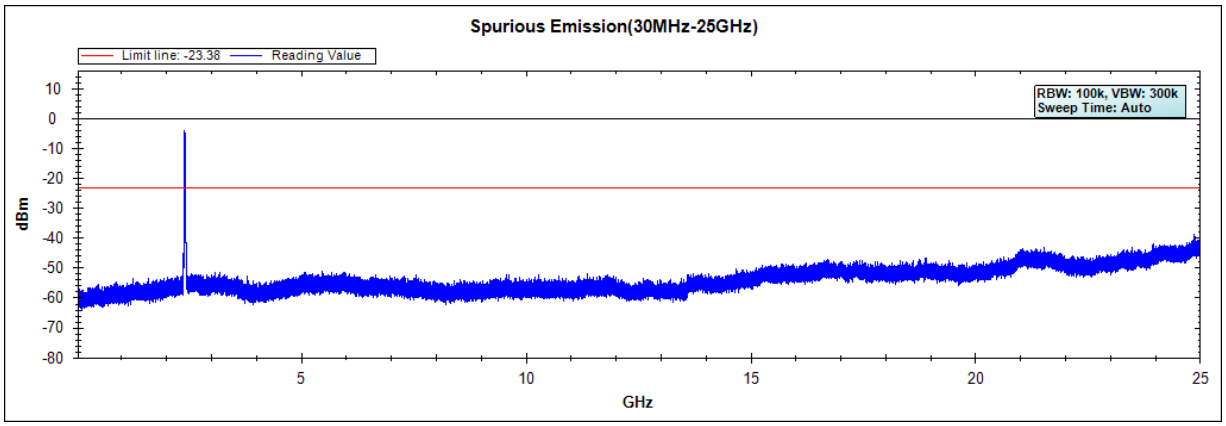
Channel 11 (2462MHz)



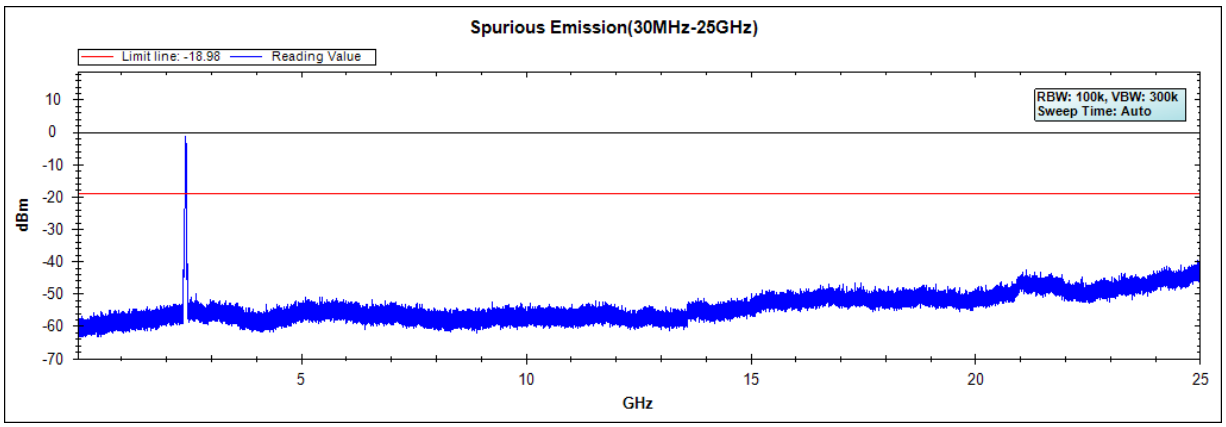
Note: The above test pattern is synthesized by multiple of the frequency range.

Product	:	DCM (Data Communication Module)
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	No.3 OATS
Test Date	:	2017/11/16
Test Mode	:	Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)

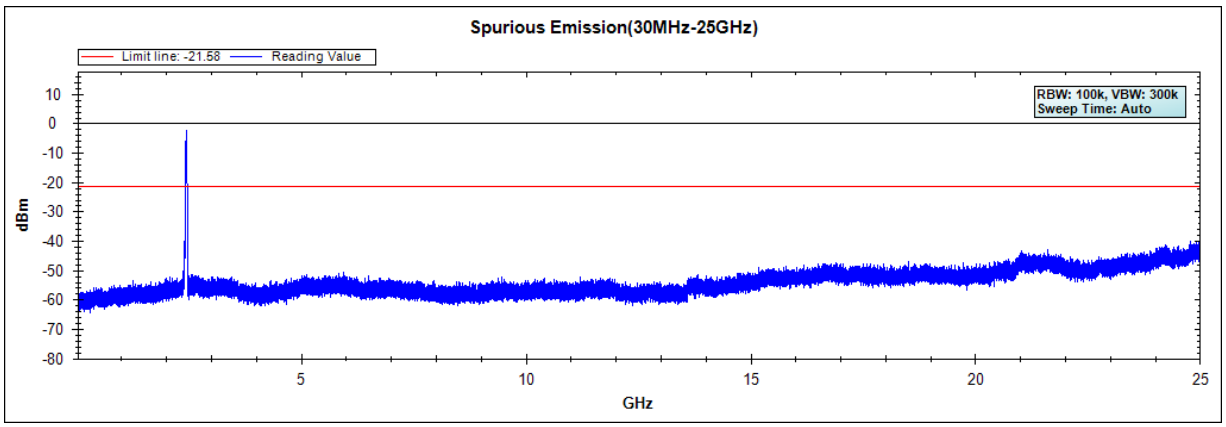
Channel 01 (2422MHz)



Channel 04 (2437MHz)



Channel 07 (2452MHz)

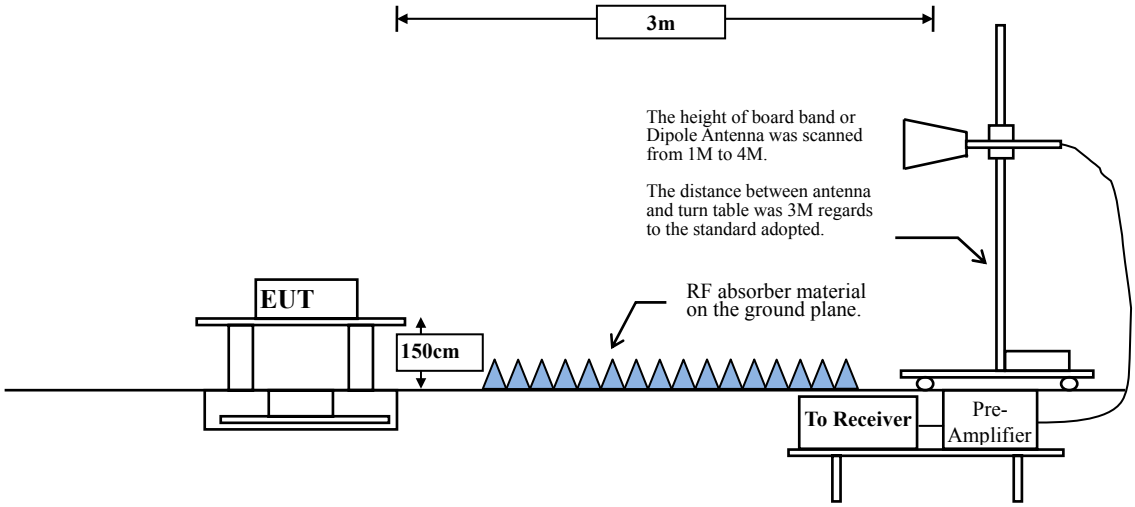


Note: The above test pattern is synthesized by multiple of the frequency range.

6. Band Edge

6.1. Test Setup

RF Radiated Measurement:



6.2. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

6.3. Test Procedure

The EUT was setup according to ANSI C63.10, 2013 and tested according to DTS test procedure of KDB558074 for compliance to FCC 47CFR 15.247 requirements.
The EUT is placed on a turn table which is 1.5 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10:2013 on radiated measurement.

The average measurement tested according to KDB 558074 section 12.2.5.3. Reduced VBW averaging across on- and off-times of the EUT transmissions with max hold.

VBW ≥ 1/T:

Mode	Duty Cycle	T	1/T	VBW Setting
802.11b	0.834	1.016 ms	984 Hz	1 kHZ
802.11g	0.866	1.352 ms	739 HZ	1 kHZ
802.11n20	0.863	1.268 ms	788 Hz	1 kHZ
802.11n40	0.700	0.588 ms	1700 Hz	2 kHZ

6.4. Uncertainty

± 4.08 dB above 1GHz

± 4.22 dB below 1GHz

6.5. Test Result of Band Edge

Product	:	DCM (Data Communication Module)
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Date	:	2017/11/14
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps) (2412MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2390.000	-2.687	62.906	60.219	74.00	54.00	Pass
01 (Peak)	2400.000	-2.660	76.519	73.859	--	--	--
01 (Peak)	2411.000	-2.644	113.757	111.113	--	--	--
01 (Average)	2386.300	-2.703	56.589	53.886	74.00	54.00	Pass
01 (Average)	2390.000	-2.687	55.452	52.765	74.00	54.00	Pass
01 (Average)	2400.000	-2.660	71.985	69.325	--	--	--
01 (Average)	2411.300	-2.643	111.075	108.432	--	--	--

Figure Channel 01: Horizontal (Peak)

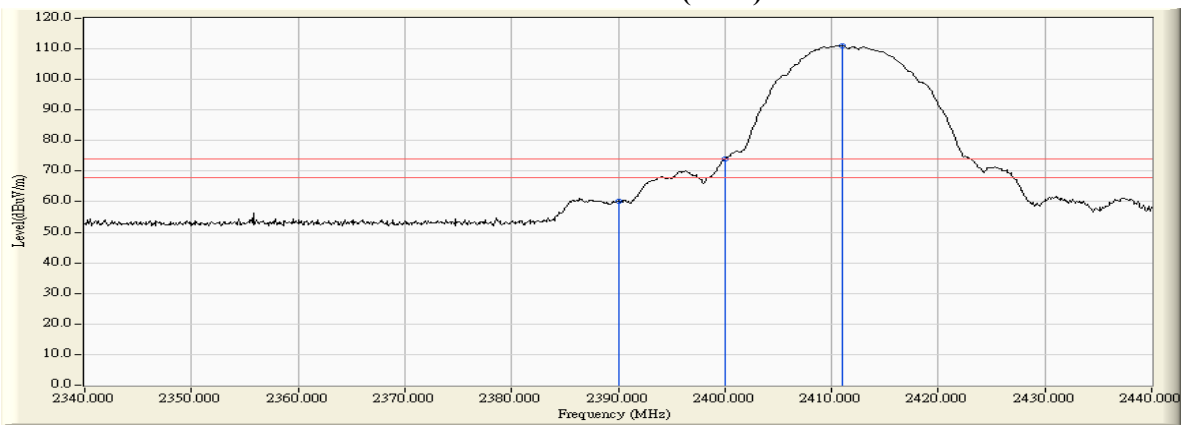
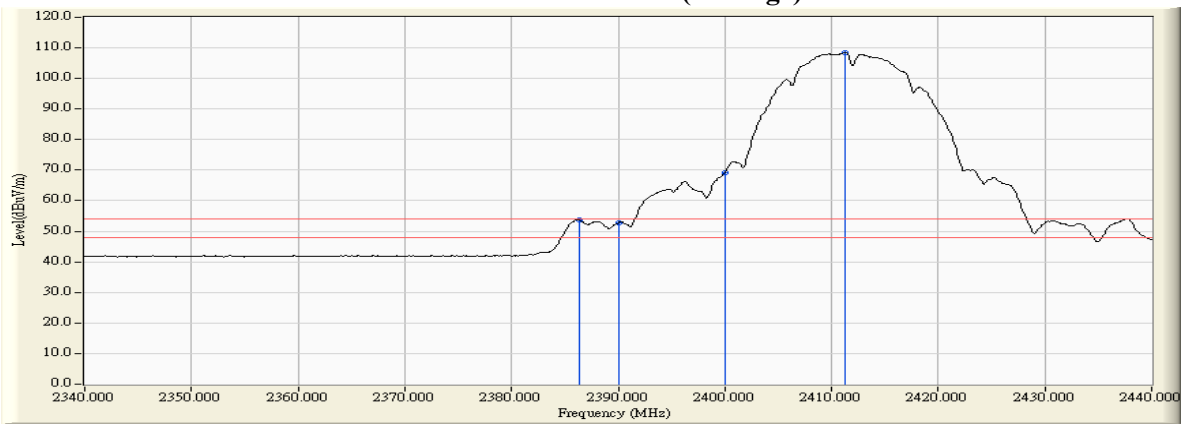


Figure Channel 01: Horizontal (Average)



Note:1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 1 kHz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product	:	DCM (Data Communication Module)
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Date	:	2017/11/14
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps) (2412MHz)

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2390.000	-4.159	61.937	57.778	74.00	54.00	Pass
01 (Peak)	2400.000	-4.171	75.535	71.364	--	--	--
01 (Peak)	2411.000	-4.169	112.880	108.711	--	--	--
01 (Average)	2386.200	-4.146	55.415	51.269	74.00	54.00	Pass
01 (Average)	2390.000	-4.159	54.334	50.175	74.00	54.00	Pass
01 (Average)	2400.000	-4.171	70.790	66.619	--	--	--
01 (Average)	2411.200	-4.168	110.193	106.025	--	--	--

Figure Channel 01: VERTICAL (Peak)

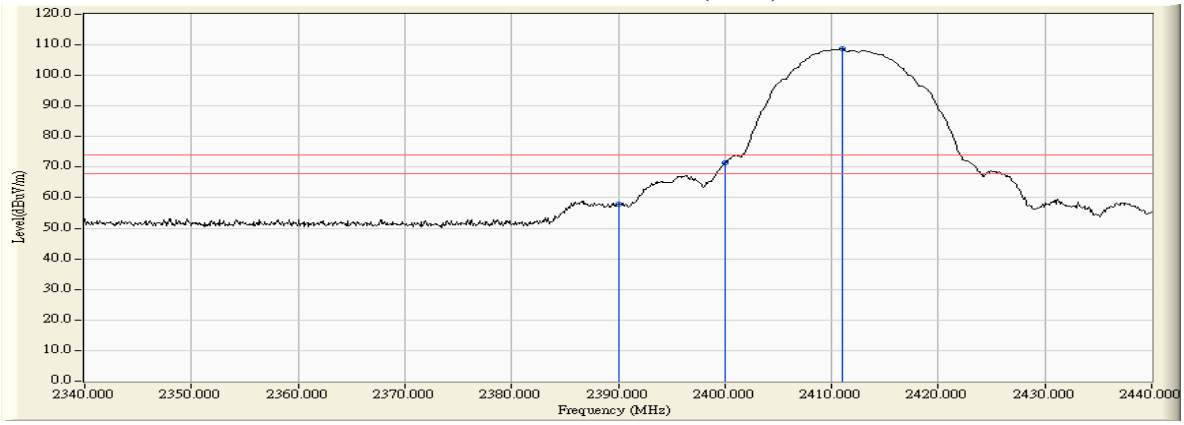
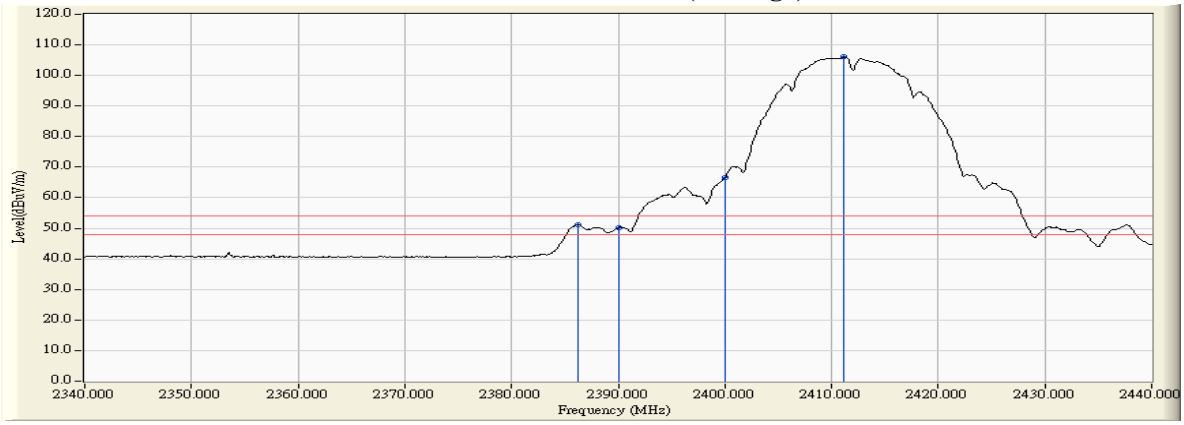


Figure Channel 01: VERTICAL (Average)



Note:1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 1 kHz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product	:	DCM (Data Communication Module)
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Date	:	2017/11/14
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps) (2462MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
11 (Peak)	2461.000	-2.623	114.756	112.133	--	--	--
11 (Peak)	2483.500	-2.601	58.929	56.327	74.00	54.00	Pass
11 (Average)	2461.300	-2.624	112.101	109.478	--	--	--
11 (Average)	2483.500	-2.601	50.511	47.909	74.00	54.00	Pass

Figure Channel 11: Horizontal (Peak)

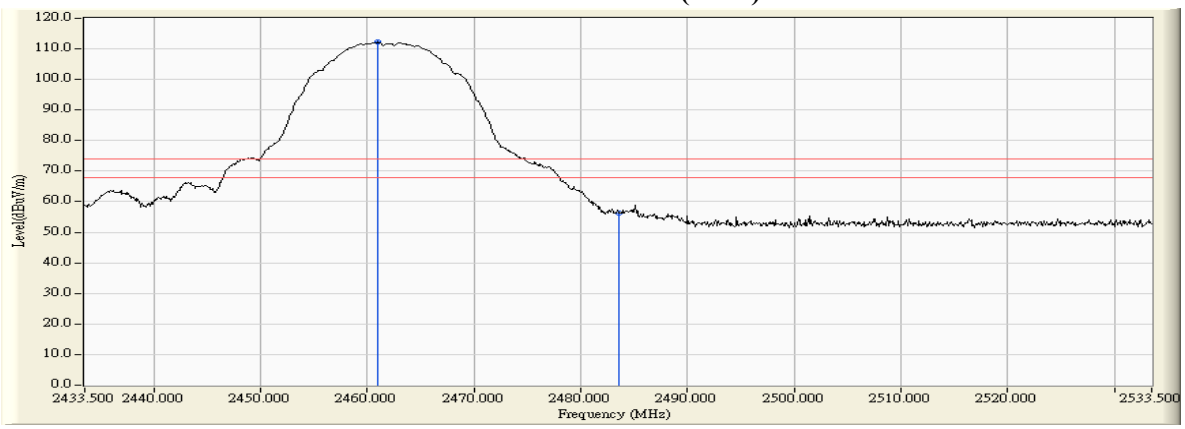
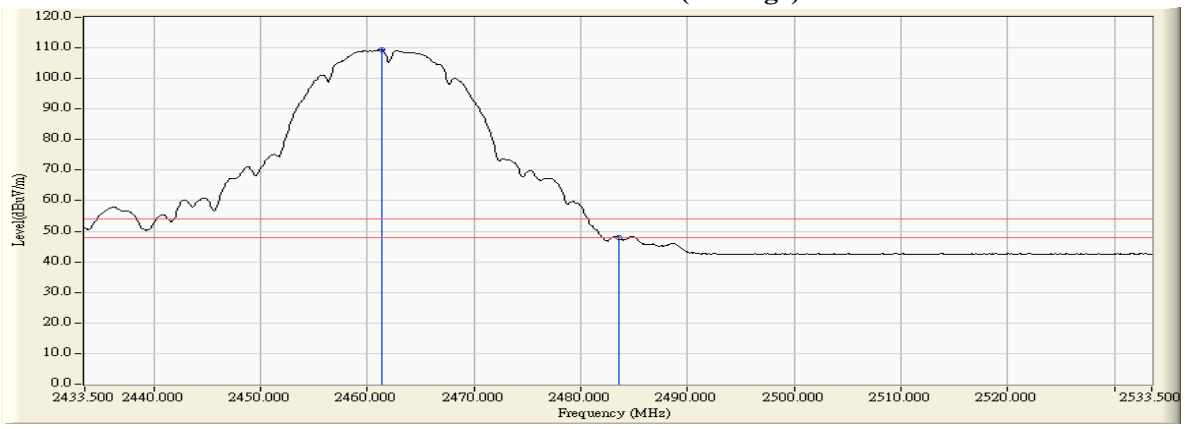


Figure Channel 11: Horizontal (Average)



Note:1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 1 kHz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product	:	DCM (Data Communication Module)
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Date	:	2017/11/14
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps) (2462MHz)

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
11 (Peak)	2461.000	-4.037	113.537	109.499	--	--	--
11 (Peak)	2483.500	-3.966	58.979	55.012	74.00	54.00	Pass
11 (Average)	2461.200	-4.036	110.842	106.805	--	--	--
11 (Average)	2483.500	-3.966	48.808	44.841	74.00	54.00	Pass

Figure Channel 11: VERTICAL (Peak)

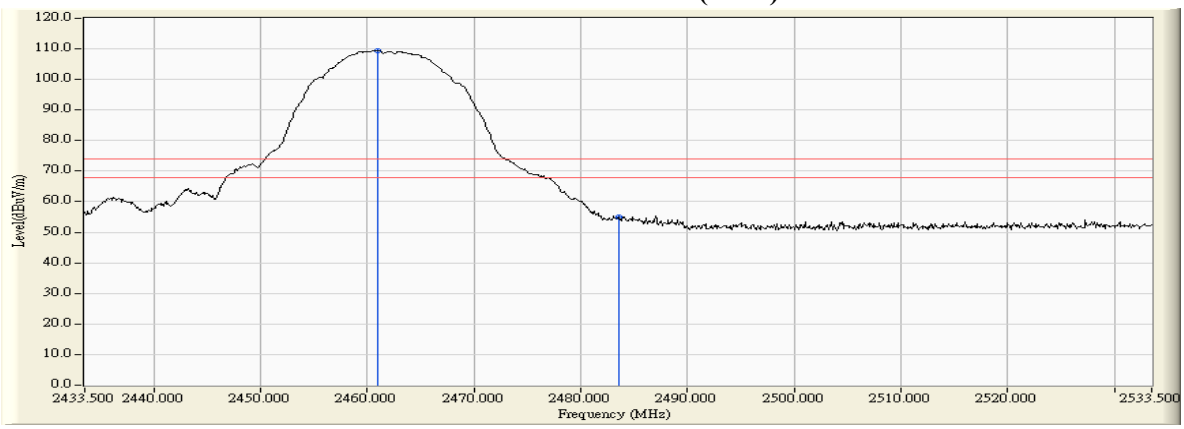
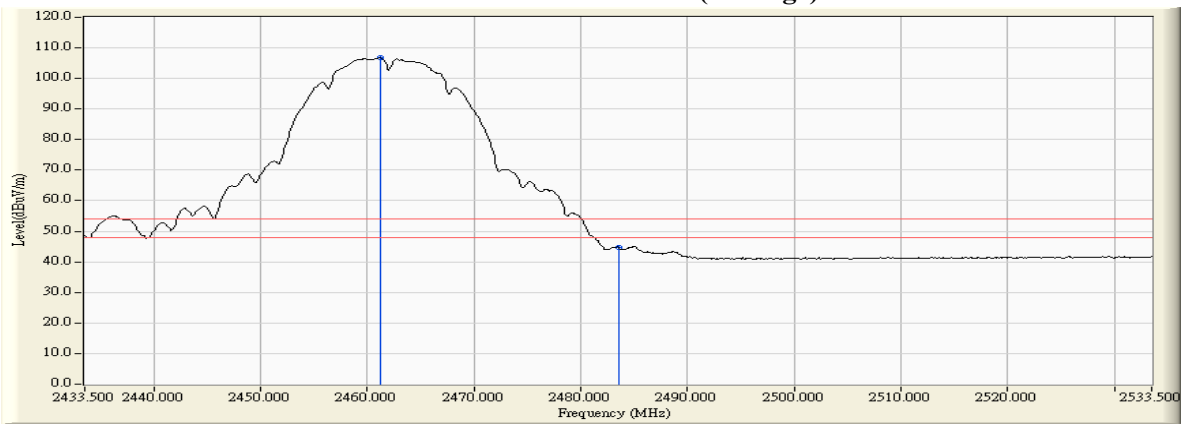


Figure Channel 11: VERTICAL (Average)



Note:1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 1 kHz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : DCM (Data Communication Module)
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2017/11/14
Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2412MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2389.000	-2.692	71.954	69.263	74.00	54.00	Pass
01 (Peak)	2390.000	-2.687	68.891	66.204	74.00	54.00	Pass
01 (Peak)	2398.900	-2.662	84.250	81.588	--	--	--
01 (Peak)	2400.000	-2.660	82.870	80.210	--	--	--
01 (Peak)	2406.600	-2.650	112.086	109.436	--	--	--
01 (Average)	2390.000	-2.687	52.946	50.259	74.00	54.00	Pass
01 (Average)	2400.000	-2.660	60.768	58.108	--	--	--
01 (Average)	2408.100	-2.648	101.650	99.002	--	--	--

Figure Channel 01: Horizontal (Peak)

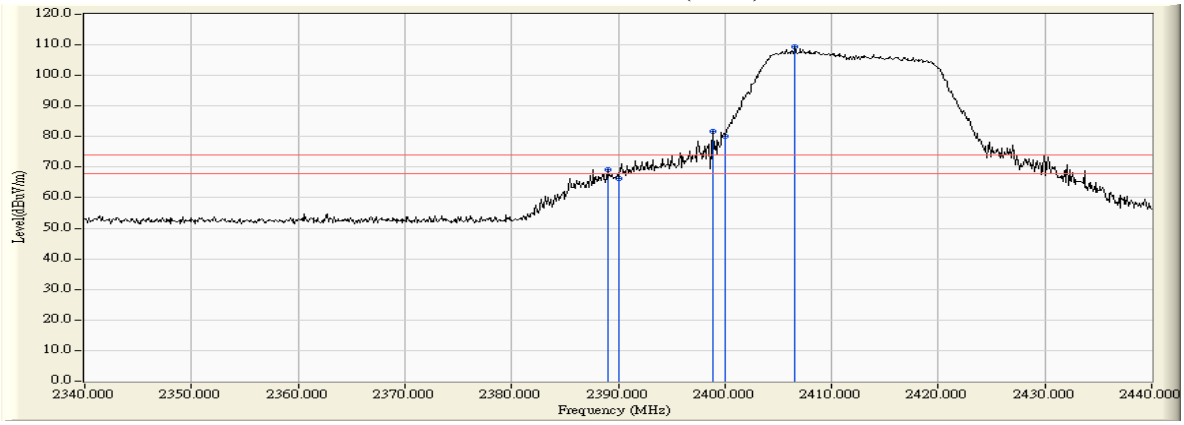
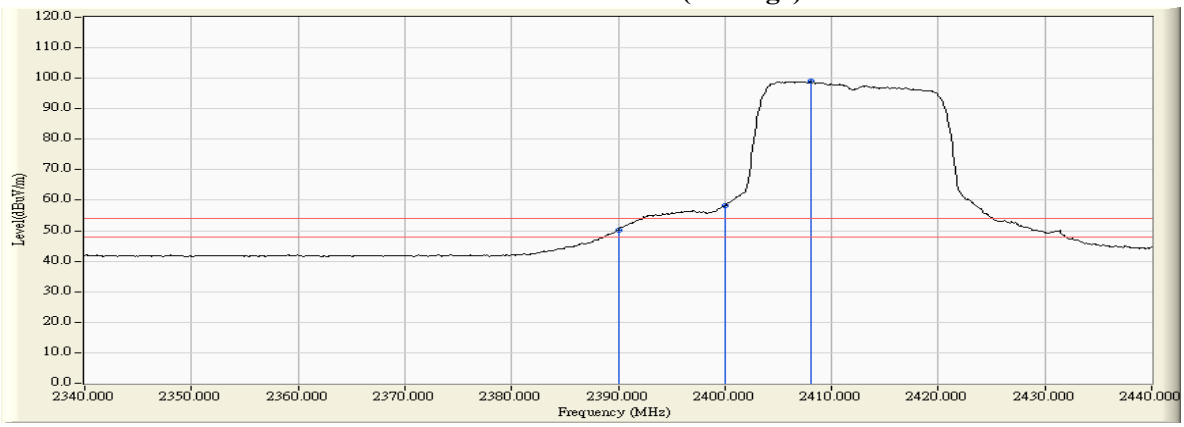


Figure Channel 01: Horizontal (Average)



Note:1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 1 kHz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : DCM (Data Communication Module)
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2017/11/14
Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2412MHz)

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2390.000	-4.159	71.430	67.271	74.00	54.00	Pass
01 (Peak)	2400.000	-4.171	84.519	80.348	--	--	--
01 (Peak)	2407.400	-4.170	110.642	106.473	--	--	--
01 (Average)	2390.000	-4.159	52.654	48.495	74.00	54.00	Pass
01 (Average)	2400.000	-4.171	60.358	56.187	--	--	--
01 (Average)	2408.200	-4.169	100.961	96.792	--	--	--

Figure Channel 01: VERTICAL (Peak)

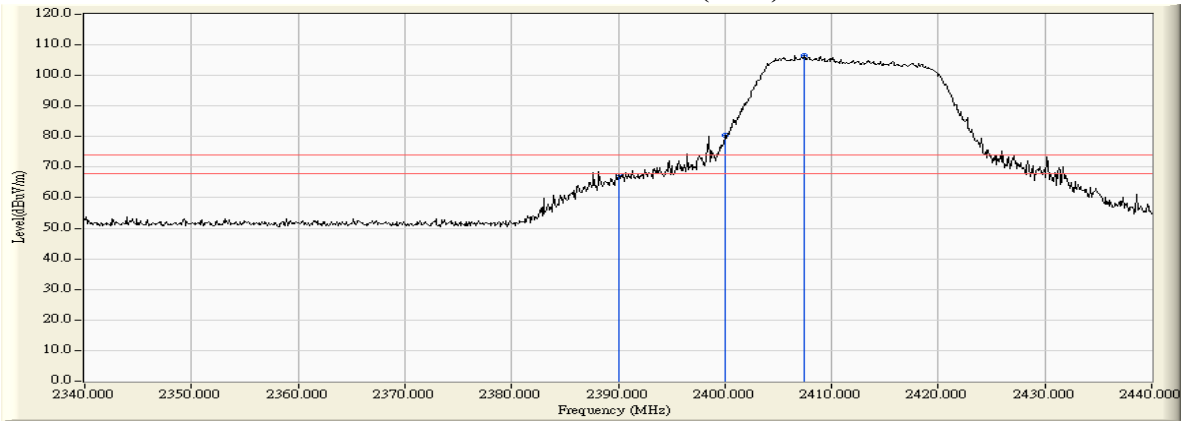
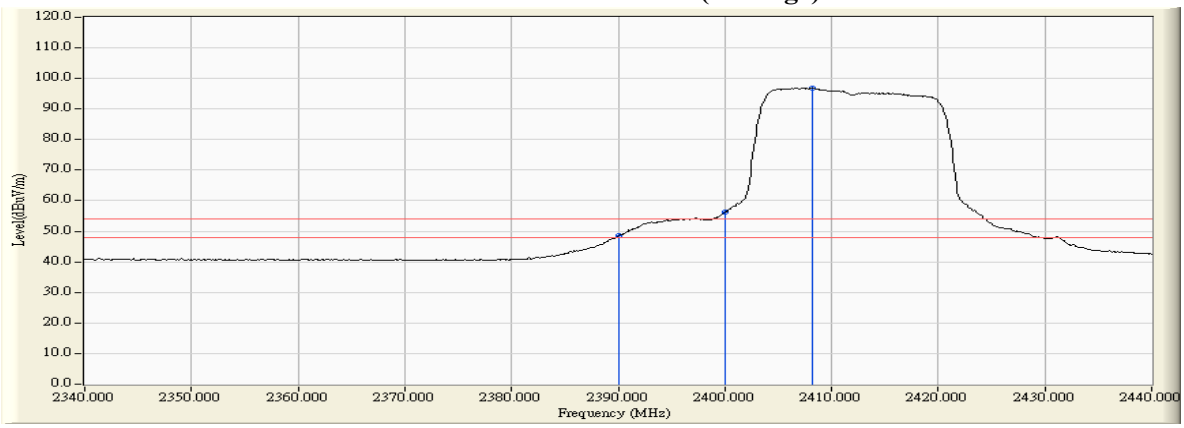


Figure Channel 01: VERTICAL (Average)



Note:1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 1 kHz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : DCM (Data Communication Module)
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2017/11/14
Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2417MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2389.000	-2.692	74.984	72.293	74.00	54.00	Pass
01 (Peak)	2390.000	-2.687	74.160	71.473	74.00	54.00	Pass
01 (Peak)	2398.300	-2.663	85.784	83.121	--	--	--
01 (Peak)	2400.000	-2.660	84.478	81.818	--	--	--
01 (Peak)	2411.400	-2.643	111.923	109.280	--	--	--
01 (Average)	2390.000	-2.687	55.481	52.794	74.00	54.00	Pass
01 (Average)	2400.000	-2.660	65.075	62.415	--	--	--
01 (Average)	2410.500	-2.644	102.414	99.770	--	--	--

Figure Channel 01: Horizontal (Peak)

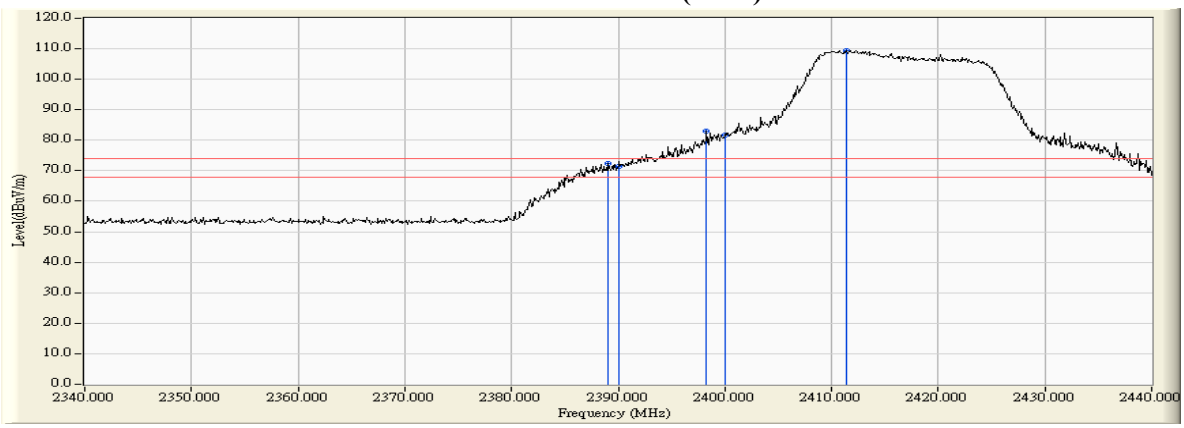
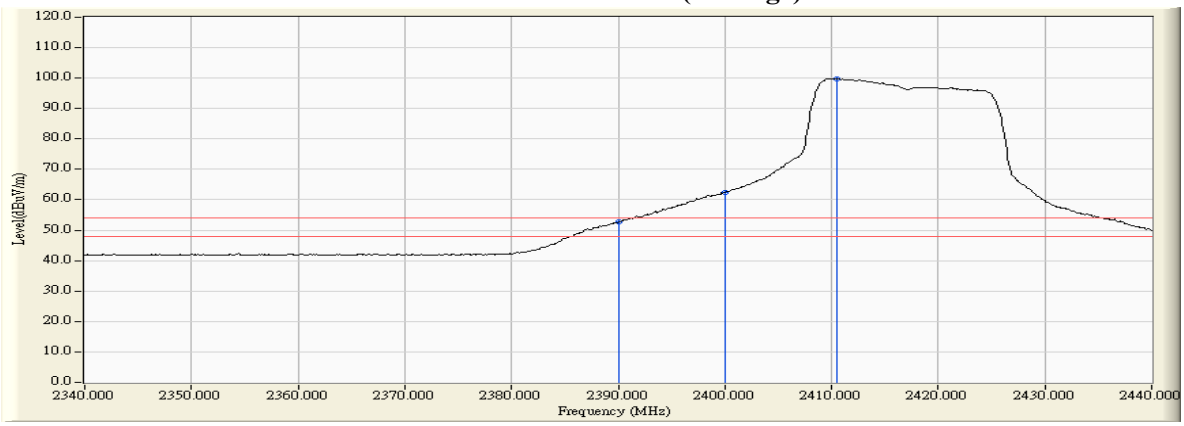


Figure Channel 01: Horizontal (Average)



Note:1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 1 kHz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : DCM (Data Communication Module)
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2017/11/14
Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2417MHz)

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2390.000	-4.159	74.177	70.018	74.00	54.00	Pass
01 (Peak)	2400.000	-4.171	84.427	80.256	--	--	--
01 (Peak)	2413.200	-4.164	111.879	107.716	--	--	--
01 (Average)	2390.000	-4.159	54.878	50.719	74.00	54.00	Pass
01 (Average)	2400.000	-4.171	64.406	60.235	--	--	--
01 (Average)	2409.900	-4.169	101.899	97.730	--	--	--

Figure Channel 01: VERTICAL (Peak)

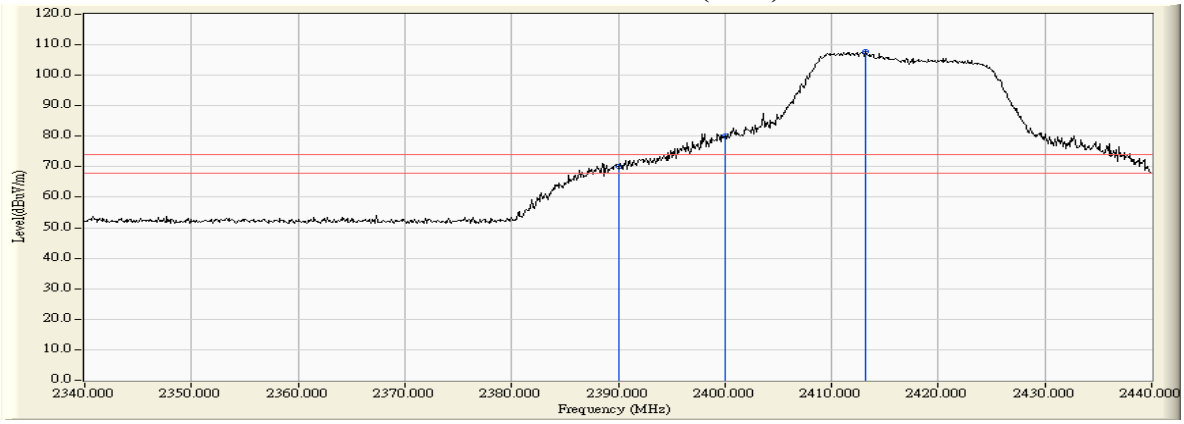
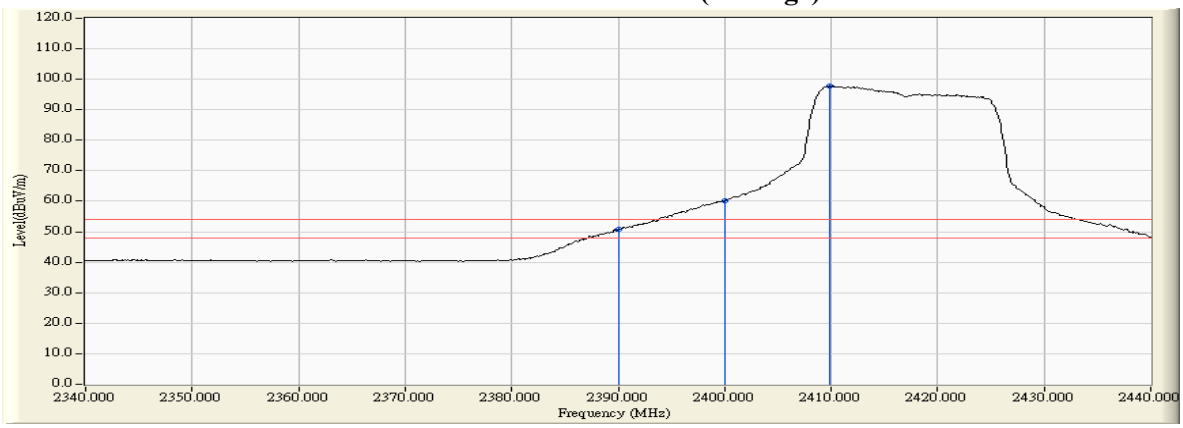


Figure Channel 01: VERTICAL (Average)



Note:1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 1 kHz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : DCM (Data Communication Module)
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2017/11/14
Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2422MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2390.000	-2.687	70.567	67.880	74.00	54.00	Pass
01 (Peak)	2400.000	-2.660	80.504	77.844	--	--	--
01 (Peak)	2416.300	-2.642	112.085	109.443	--	--	--
01 (Average)	2390.000	-2.687	54.079	51.392	74.00	54.00	Pass
01 (Average)	2400.000	-2.660	64.416	61.756	--	--	--
01 (Average)	2414.500	-2.642	102.473	99.830	--	--	--

Figure Channel 01: Horizontal (Peak)

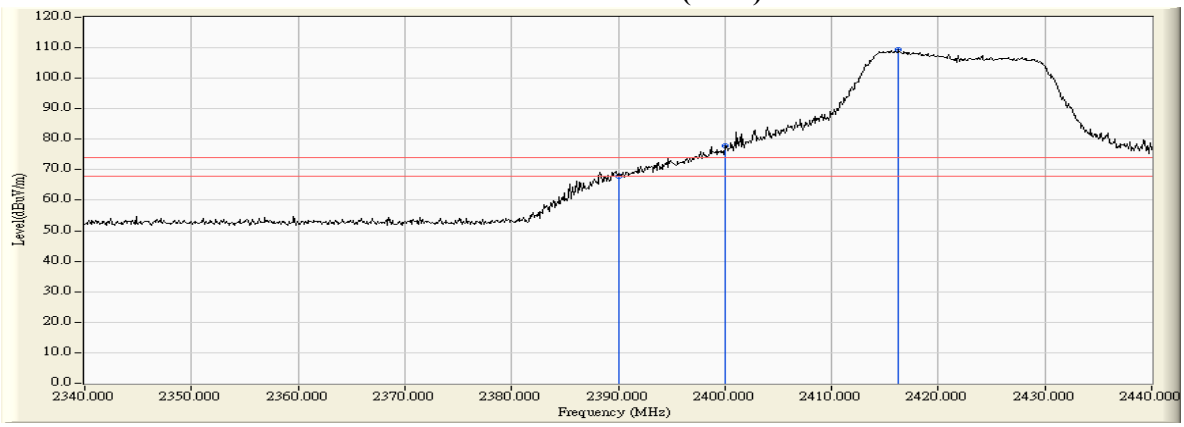
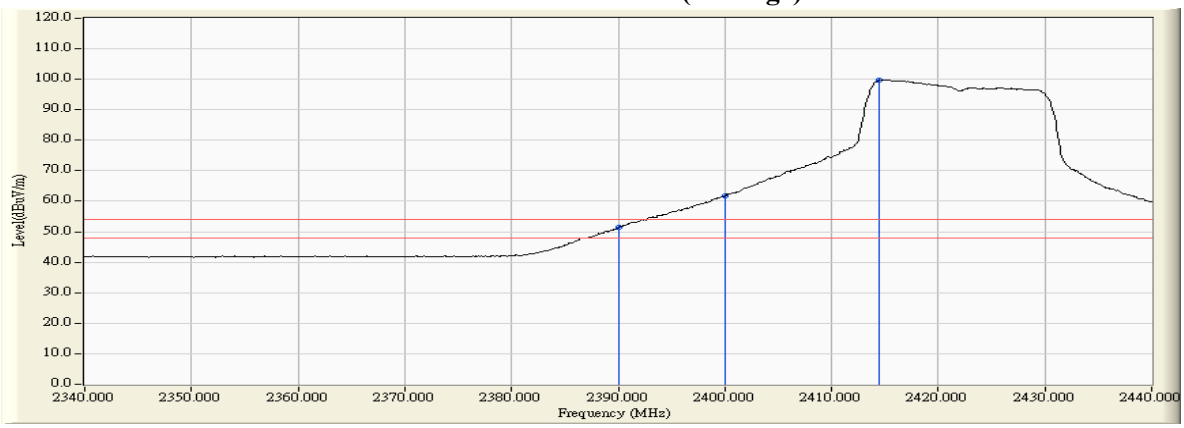


Figure Channel 01: Horizontal (Average)



Note:1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 1 kHz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : DCM (Data Communication Module)
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2017/11/14
Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2422MHz)

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2390.000	-4.159	73.063	68.904	74.00	54.00	Pass
01 (Peak)	2400.000	-4.171	78.430	74.259	--	--	--
01 (Peak)	2414.500	-4.159	111.827	107.667	--	--	--
01 (Average)	2390.000	-4.159	54.459	50.300	74.00	54.00	Pass
01 (Average)	2400.000	-4.171	64.600	60.429	--	--	--
01 (Average)	2415.000	-4.159	102.242	98.083	--	--	--

Figure Channel 01: VERTICAL (Peak)

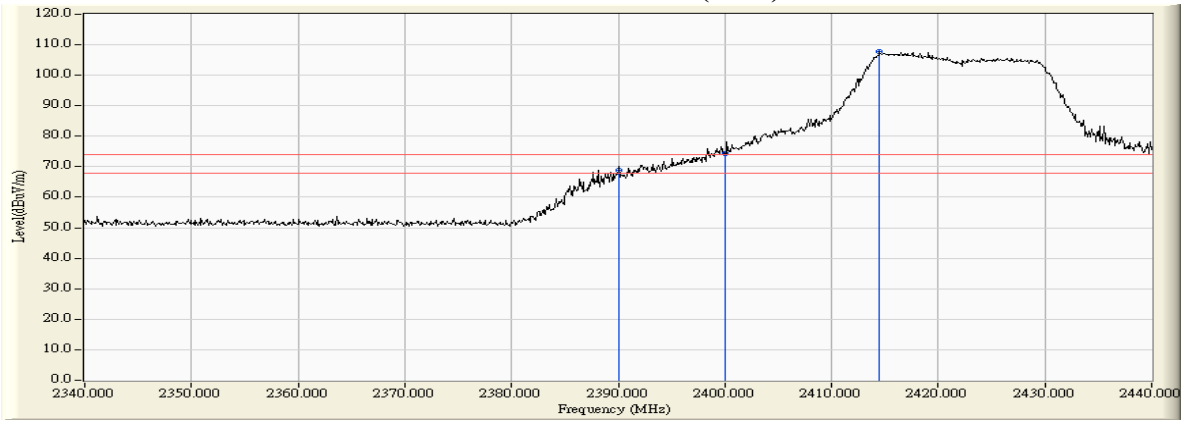
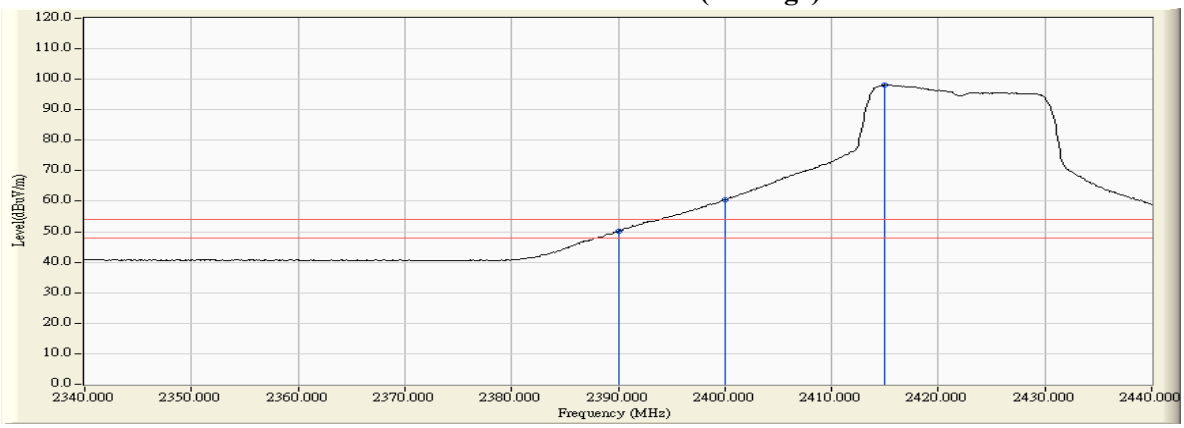


Figure Channel 01: VERTICAL (Average)



Note:1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 1 kHz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product	:	DCM (Data Communication Module)
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Date	:	2017/11/14
Test Mode	:	Mode 2: Transmit (802.11g 6Mbps) (2462MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
11 (Peak)	2455.300	-2.628	112.464	109.836	--	--	--
11 (Peak)	2483.500	-2.601	65.015	62.413	74.00	54.00	Pass
11 (Average)	2455.800	-2.627	103.090	100.463	--	--	--
11 (Average)	2483.500	-2.601	49.254	46.652	74.00	54.00	Pass

Figure Channel 11: Horizontal (Peak)

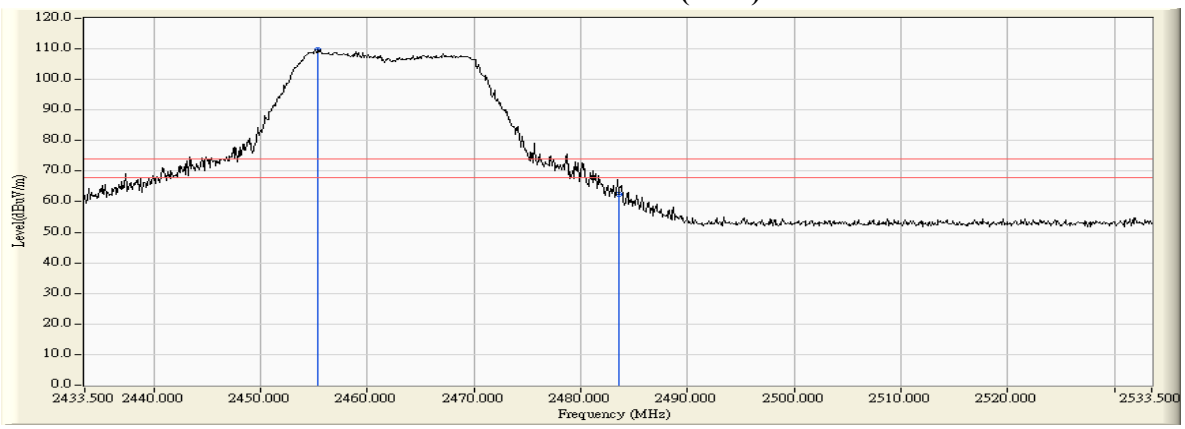
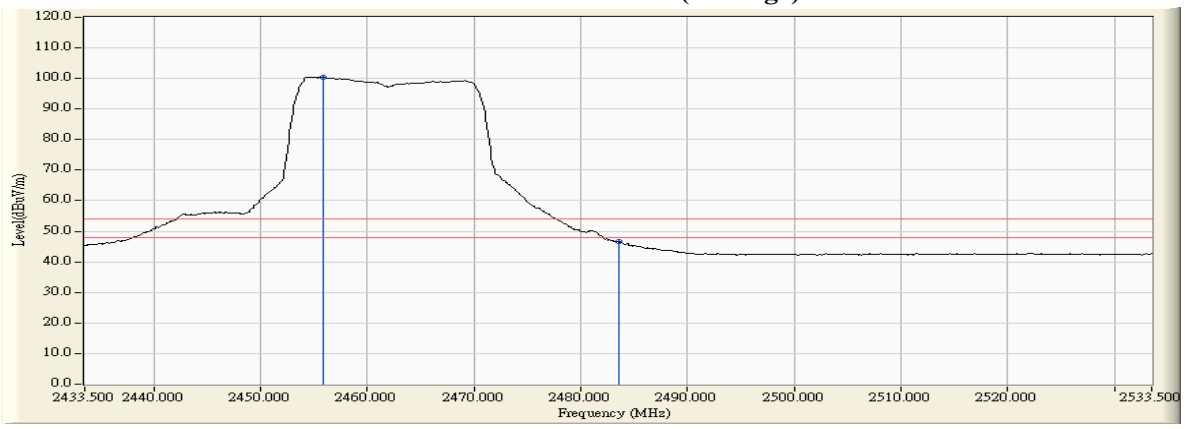


Figure Channel 11: Horizontal (Average)



Note:1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 1 kHz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product	:	DCM (Data Communication Module)
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Date	:	2017/11/14
Test Mode	:	Mode 2: Transmit (802.11g 6Mbps) (2462MHz)

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
11 (Peak)	2455.500	-4.054	111.492	107.438	--	--	--
11 (Peak)	2483.500	-3.966	66.035	62.068	74.00	54.00	Pass
11 (Average)	2454.700	-4.057	101.569	97.512	--	--	--
11 (Average)	2483.500	-3.966	47.780	43.813	74.00	54.00	Pass

Figure Channel 11: VERTICAL (Peak)

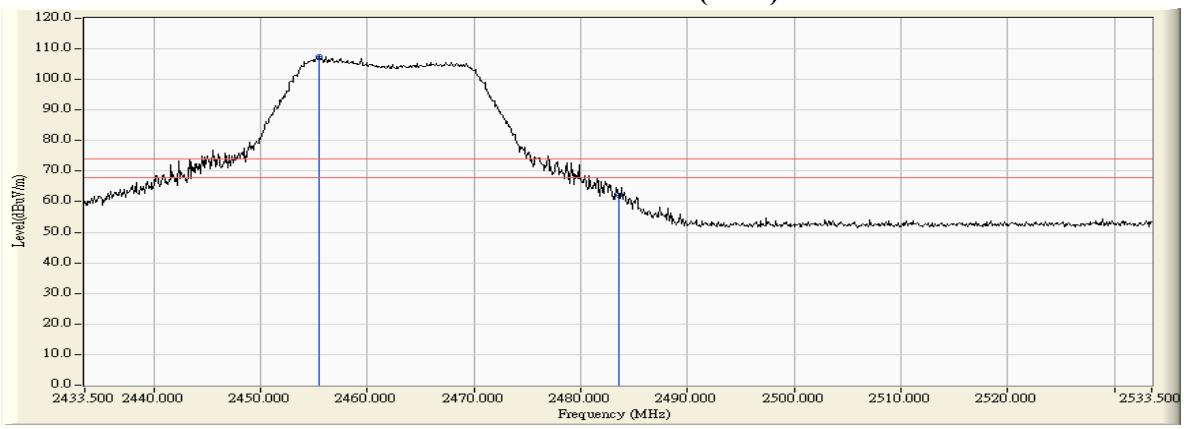
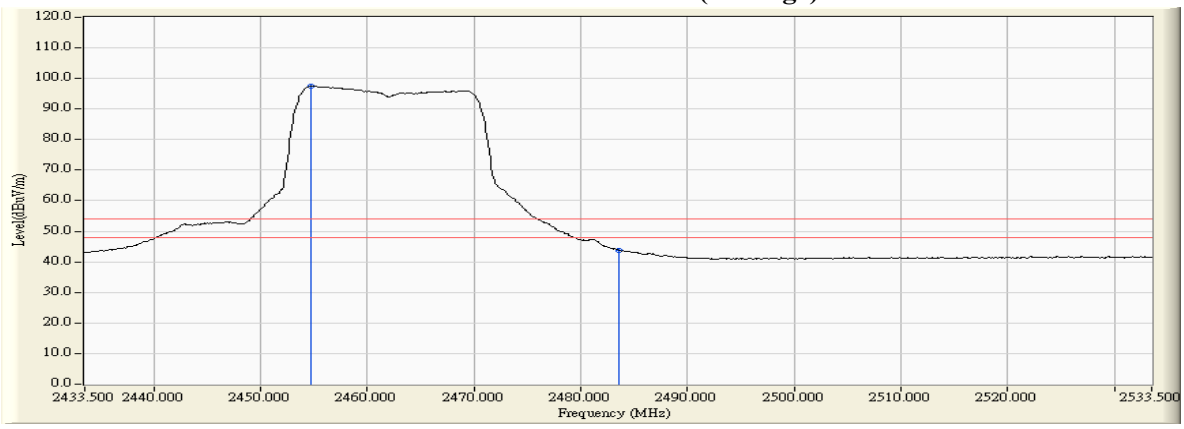


Figure Channel 11: VERTICAL (Average)



Note:1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 1 kHz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : DCM (Data Communication Module)
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2017/11/14
Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2412MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2390.000	-2.687	73.815	71.128	74.00	54.00	Pass
01 (Peak)	2400.000	-2.660	83.728	81.068	--	--	--
01 (Peak)	2405.600	-2.652	111.185	108.533	--	--	--
01 (Average)	2390.000	-2.687	55.832	53.145	74.00	54.00	Pass
01 (Average)	2400.000	-2.660	62.215	59.555	--	--	--
01 (Average)	2406.900	-2.650	101.800	99.150	--	--	--

Figure Channel 01: Horizontal (Peak)

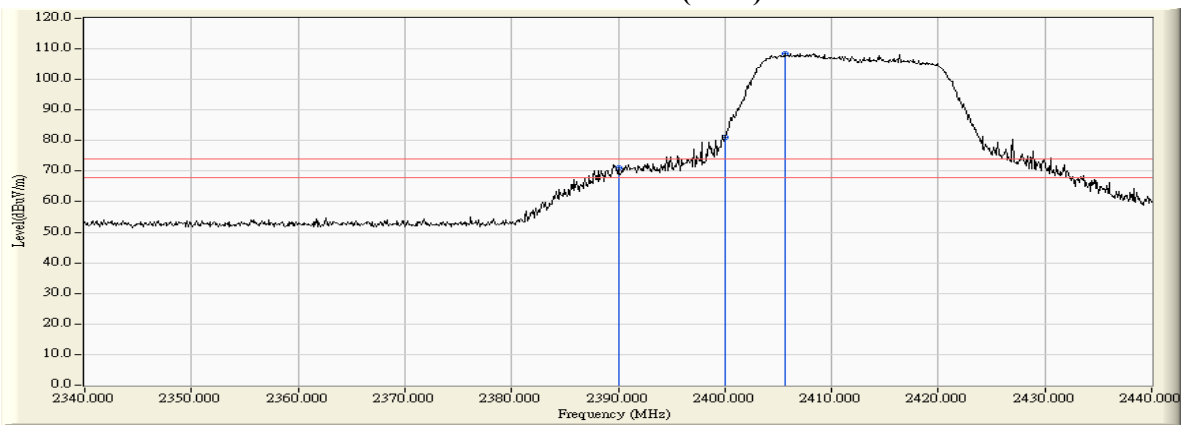
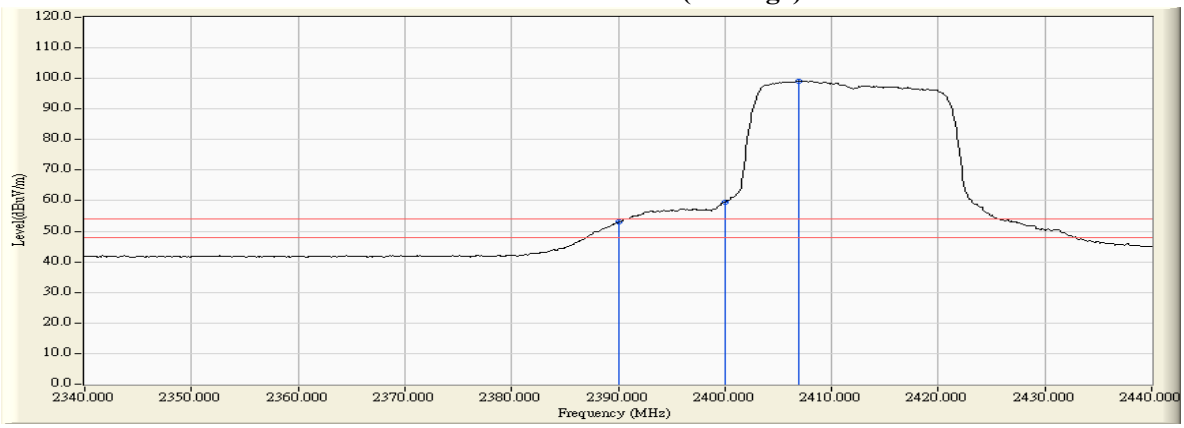


Figure Channel 01: Horizontal (Average)



Note:1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 1 kHz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product	:	DCM (Data Communication Module)
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Date	:	2017/11/14
Test Mode	:	Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2412MHz)

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
01 (Peak)	2389.700	-4.157	74.853	70.695	74.00	54.00	Pass
01 (Peak)	2390.000	-4.159	71.207	67.048	74.00	54.00	Pass
01 (Peak)	2400.000	-4.171	83.231	79.060	--	--	--
01 (Peak)	2406.500	-4.169	110.662	106.492	--	--	--
01 (Average)	2390.000	-4.159	54.657	50.498	74.00	54.00	Pass
01 (Average)	2400.000	-4.171	61.177	57.006	--	--	--
01 (Average)	2406.100	-4.170	100.812	96.642	--	--	--

Figure Channel 01: VERTICAL (Peak)

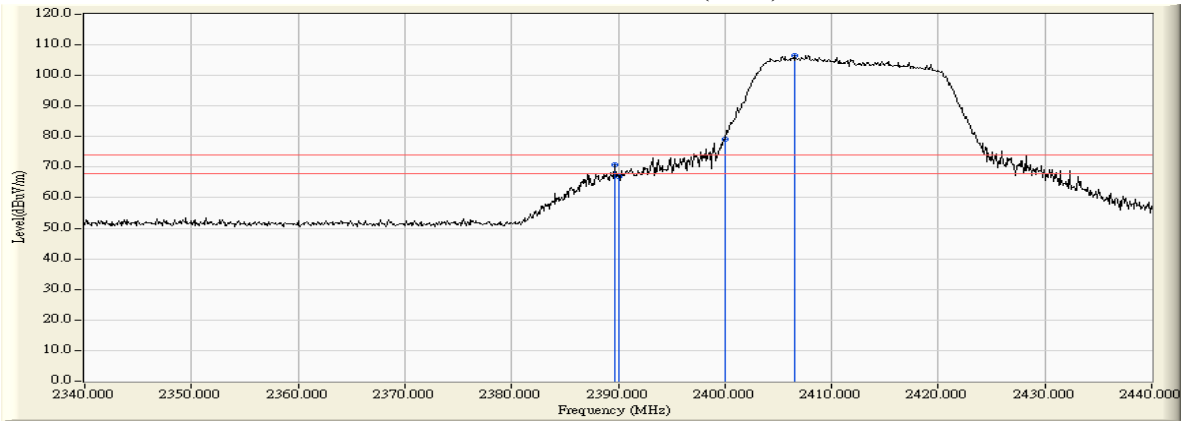
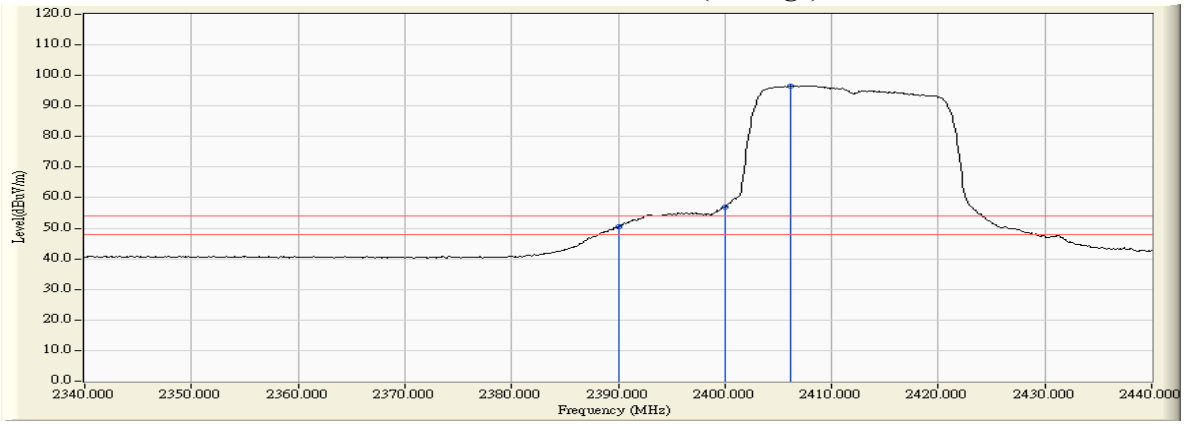


Figure Channel 01: VERTICAL (Average)



Note:1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 1 kHz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : DCM (Data Communication Module)
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2017/11/14
Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2462MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
11 (Peak)	2458.200	-2.626	112.581	109.956	--	--	--
11 (Peak)	2483.500	-2.601	70.820	68.218	74.00	54.00	Pass
11 (Peak)	2485.100	-2.600	75.168	72.568	74.00	54.00	Pass
11 (Average)	2454.600	-2.628	103.348	100.720	--	--	--
11 (Average)	2483.500	-2.601	51.565	48.963	74.00	54.00	Pass

Figure Channel 11: Horizontal (Peak)

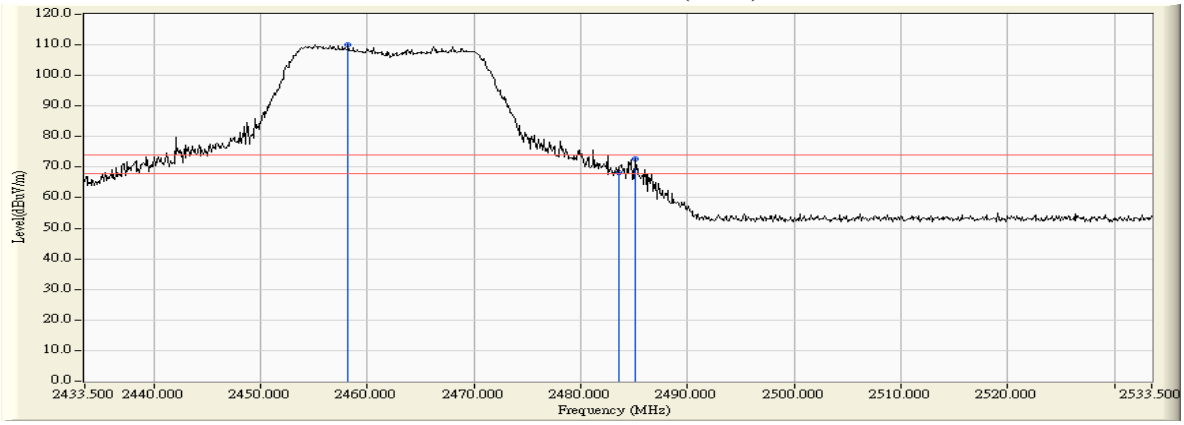
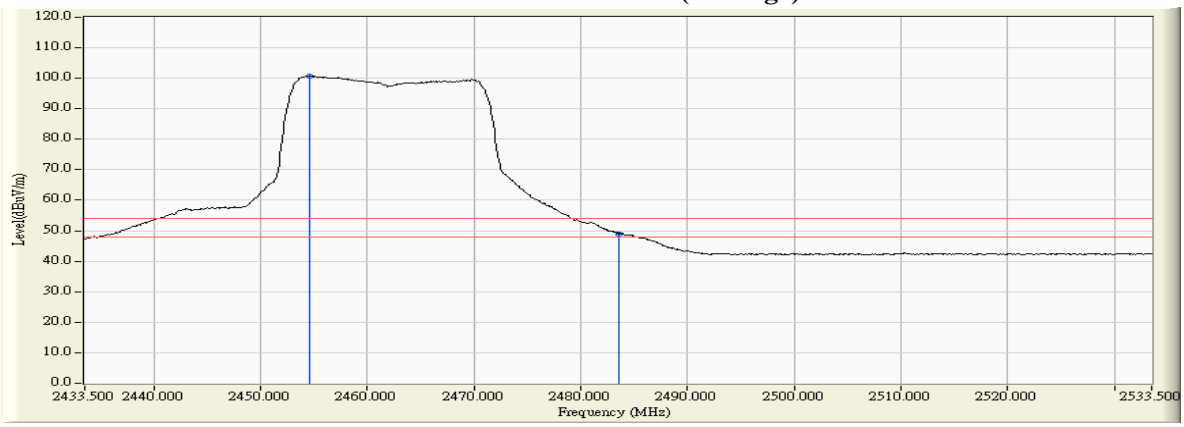


Figure Channel 11: Horizontal (Average)



Note:1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 1 kHz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product	:	DCM (Data Communication Module)
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Date	:	2017/11/14
Test Mode	:	Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2462MHz)

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
11 (Peak)	2456.500	-4.051	112.625	108.574	--	--	--
11 (Peak)	2483.500	-3.966	71.581	67.614	74.00	54.00	Pass
11 (Average)	2454.700	-4.057	102.603	98.546	--	--	--
11 (Average)	2483.500	-3.966	49.838	45.871	74.00	54.00	Pass

Figure Channel 11: VERTICAL (Peak)

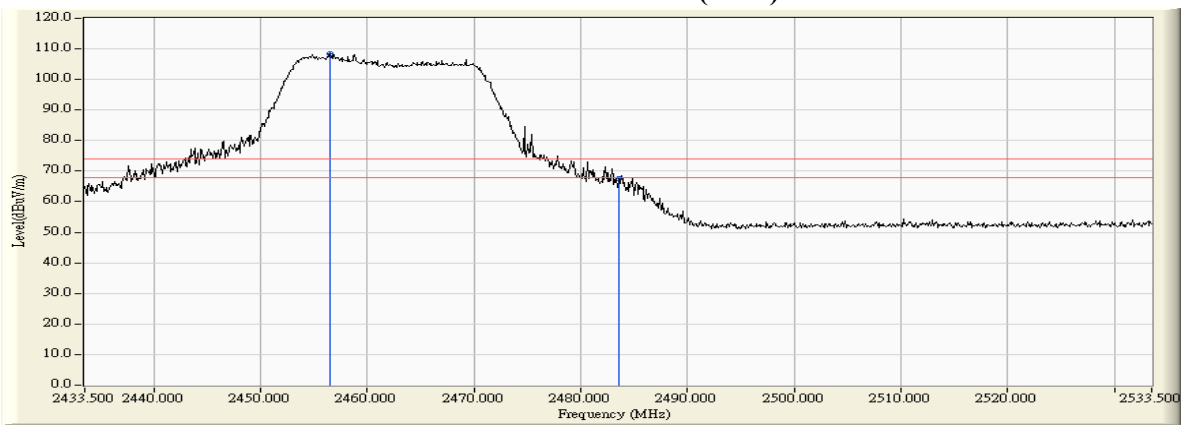
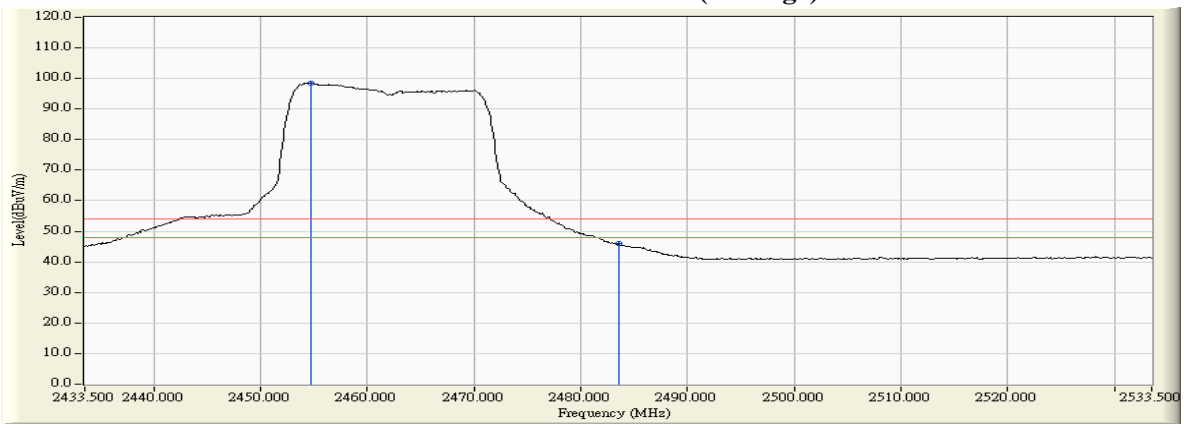


Figure Channel 11: VERTICAL (Average)



Note:1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 1 kHz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : DCM (Data Communication Module)
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2017/11/14
Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2422MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
03 (Peak)	2390.000	-2.687	70.316	67.629	74.00	54.00	Pass
03 (Peak)	2400.000	-2.660	81.452	78.792	--	--	--
03 (Peak)	2411.700	-2.643	106.956	104.313	--	--	--
03 (Average)	2390.000	-2.687	54.882	52.195	74.00	54.00	Pass
03 (Average)	2400.000	-2.660	59.562	56.902	--	--	--
03 (Average)	2409.900	-2.645	97.185	94.540	--	--	--

Figure Channel 03: Horizontal (Peak)

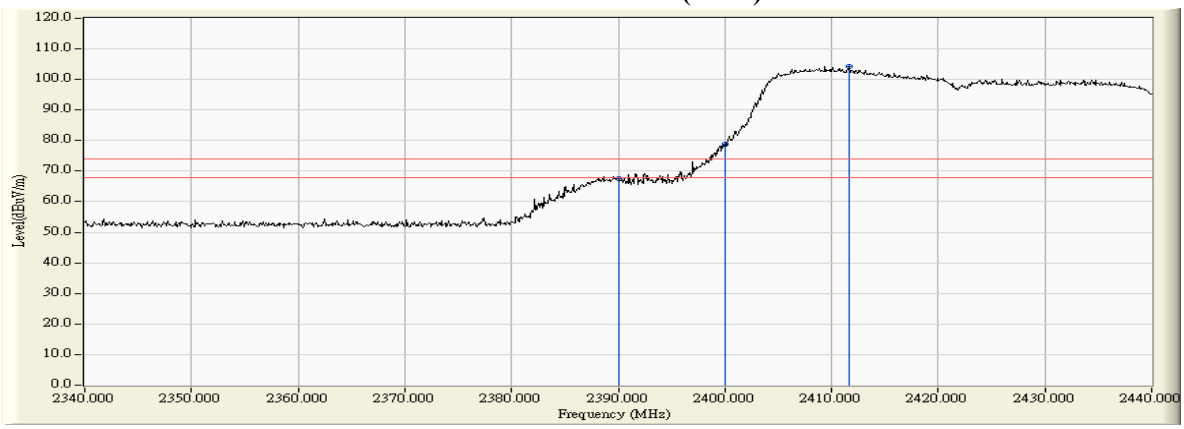
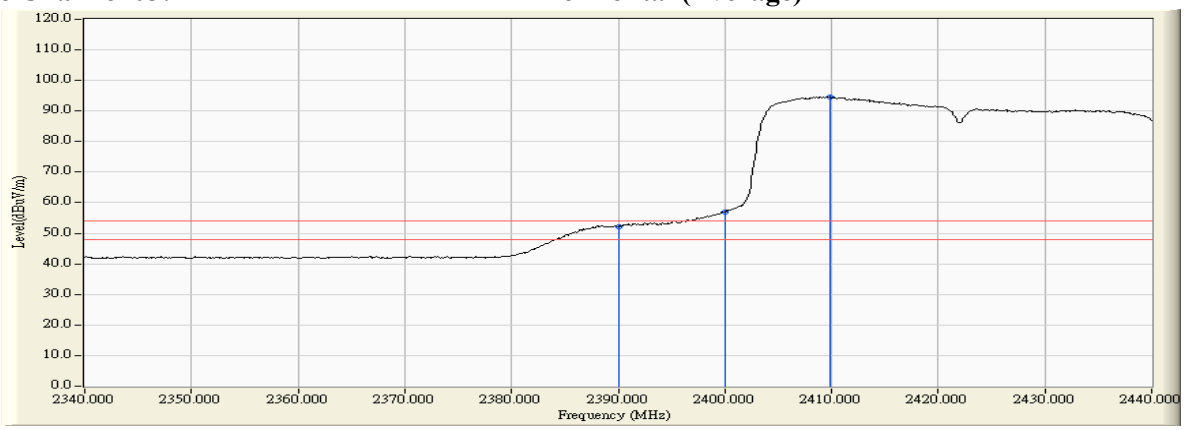


Figure Channel 03: Horizontal (Average)



Note:1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 2 kHz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : DCM (Data Communication Module)
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2017/11/14
Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2422MHz)

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
03 (Peak)	2390.000	-4.159	69.012	64.853	74.00	54.00	Pass
03 (Peak)	2400.000	-4.171	80.250	76.079	--	--	--
03 (Peak)	2409.800	-4.169	105.895	101.726	--	--	--
03 (Average)	2390.000	-4.159	54.152	49.993	74.00	54.00	Pass
03 (Average)	2400.000	-4.171	58.753	54.582	--	--	--
03 (Average)	2409.400	-4.168	96.124	91.955	--	--	--

Figure Channel 03: VERTICAL (Peak)

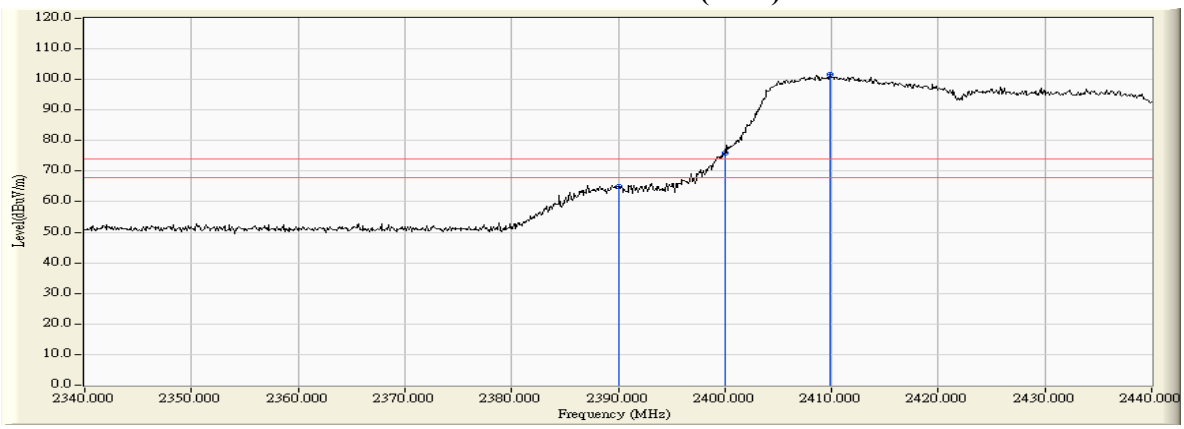
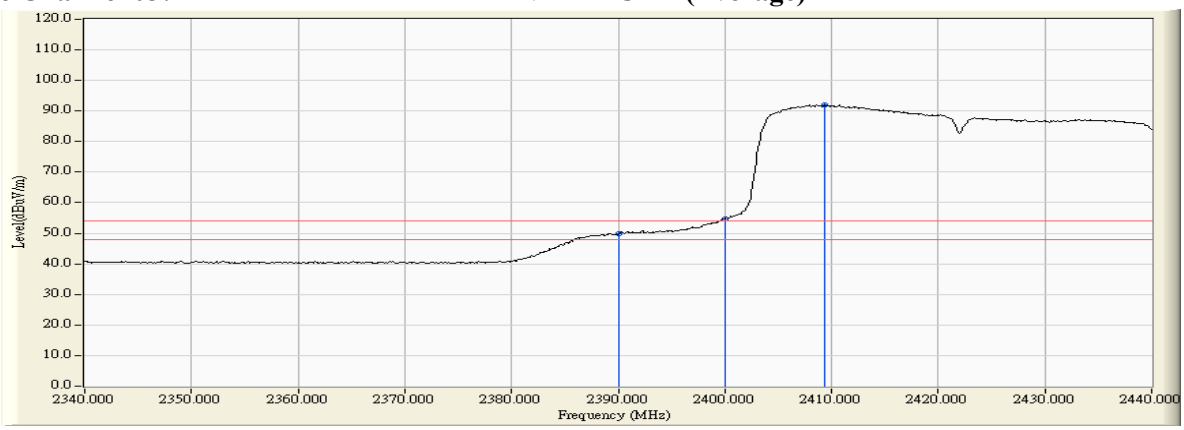


Figure Channel 03: VERTICAL (Average)



Note:1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 2 kHz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : DCM (Data Communication Module)
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2017/11/14
Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2427MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
03 (Peak)	2390.000	-2.687	67.108	64.421	74.00	54.00	Pass
03 (Peak)	2400.000	-2.660	68.694	66.034	--	--	--
03 (Peak)	2412.500	-2.643	105.166	102.523	--	--	--
03 (Average)	2390.000	-2.687	55.207	52.520	74.00	54.00	Pass
03 (Average)	2400.000	-2.660	56.194	53.534	--	--	--
03 (Average)	2412.600	-2.643	95.393	92.750	--	--	--

Figure Channel 03: Horizontal (Peak)

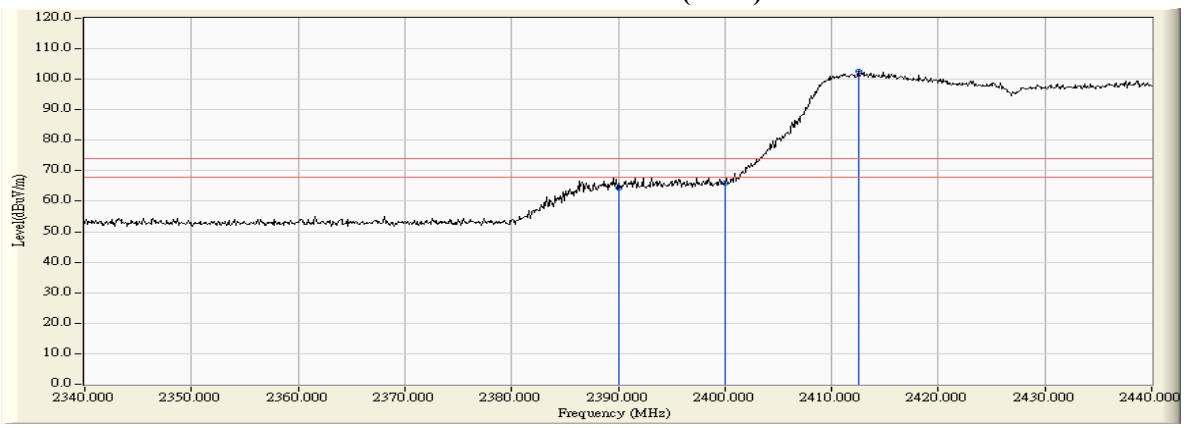
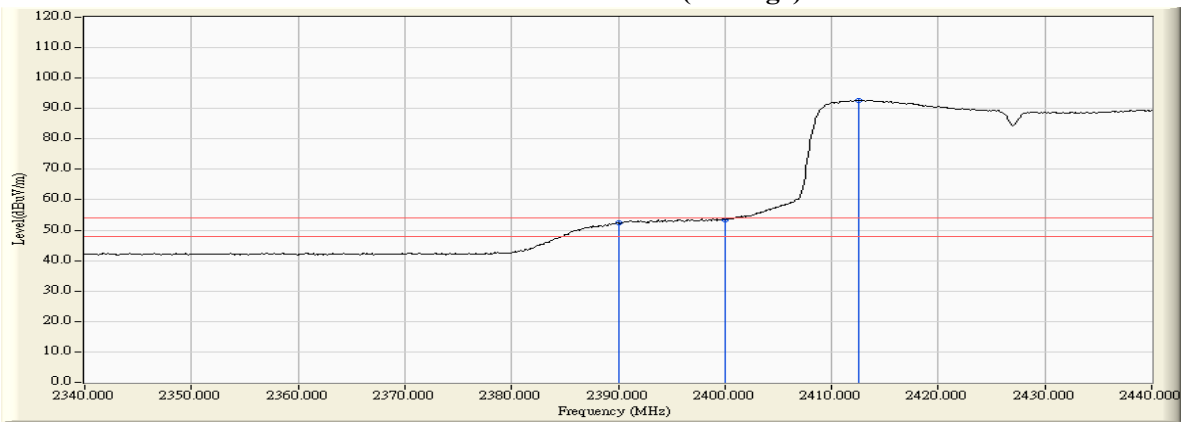


Figure Channel 03: Horizontal (Average)



Note:1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 2 kHz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : DCM (Data Communication Module)
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2017/11/14
Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2427MHz)

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
03 (Peak)	2390.000	-4.159	67.716	63.557	74.00	54.00	Pass
03 (Peak)	2400.000	-4.171	67.952	63.781	--	--	--
03 (Peak)	2412.800	-4.164	105.127	100.963	--	--	--
03 (Average)	2390.000	-4.159	54.457	50.298	74.00	54.00	Pass
03 (Average)	2400.000	-4.171	55.834	51.663	--	--	--
03 (Average)	2411.900	-4.167	95.043	90.877	--	--	--

Figure Channel 03: VERTICAL (Peak)

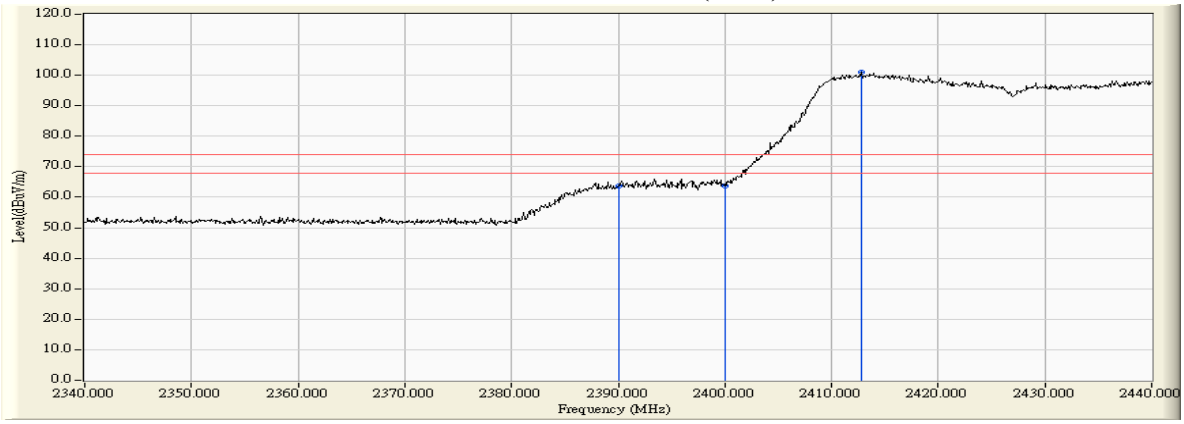
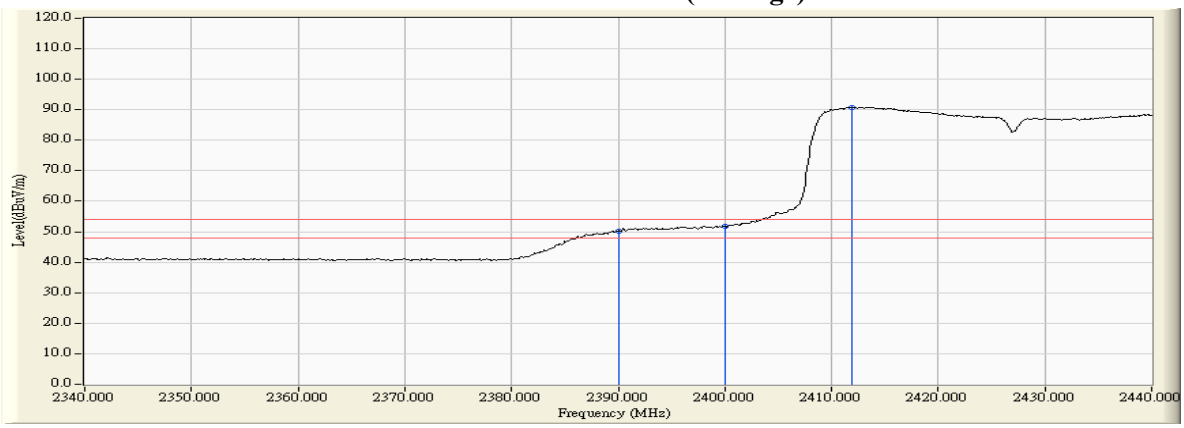


Figure Channel 03: VERTICAL (Average)



Note:1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 2 kHz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : DCM (Data Communication Module)
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2017/11/14
Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2432MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
03 (Peak)	2390.000	-2.687	69.951	67.264	74.00	54.00	Pass
03 (Peak)	2394.000	-2.669	75.889	73.220	--	--	--
03 (Peak)	2400.000	-2.660	74.716	72.056	--	--	--
03 (Peak)	2418.100	-2.641	105.582	102.940			
03 (Average)	2390.000	-2.687	55.858	53.171	74.00	54.00	Pass
03 (Average)	2400.000	-2.660	60.412	57.752	--	--	--
03 (Average)	2417.900	-2.642	95.873	93.231	--	--	--

Figure Channel 03: Horizontal (Peak)

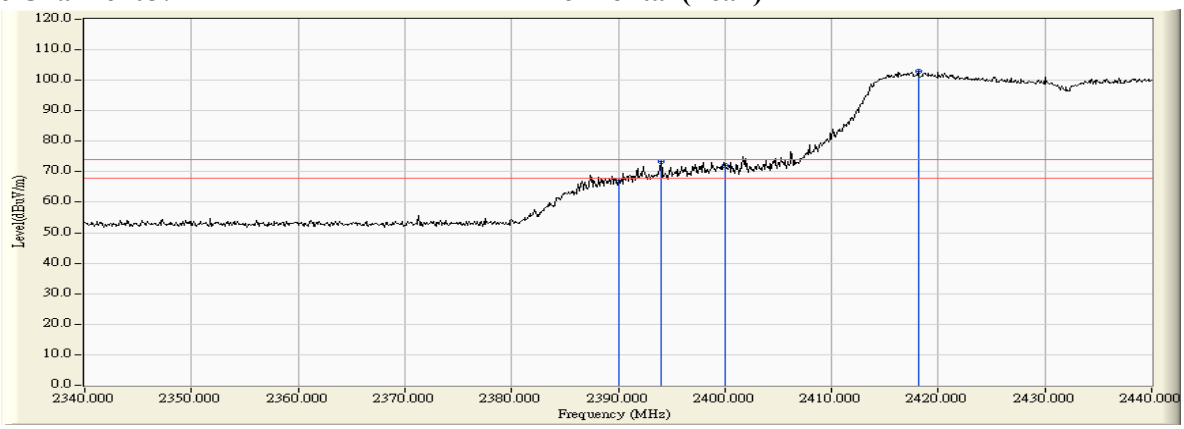
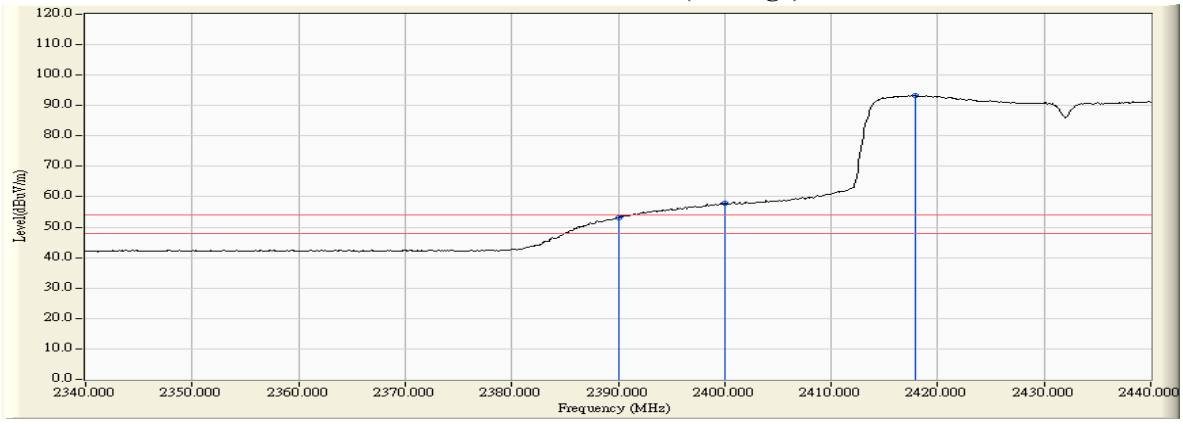


Figure Channel 03: Horizontal (Average)



Note:1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 2 kHz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : DCM (Data Communication Module)
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2017/11/14
Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2432MHz)

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
03 (Peak)	2390.000	-4.159	70.099	65.940	74.00	54.00	Pass
03 (Peak)	2394.500	-4.172	75.901	71.729	--	--	--
03 (Peak)	2400.000	-4.171	73.214	69.043	--	--	--
03 (Peak)	2417.800	-4.152	105.836	101.684			
03 (Average)	2390.000	-4.159	55.882	51.723	74.00	54.00	Pass
03 (Average)	2400.000	-4.171	60.611	56.440	--	--	--
03 (Average)	2418.700	-4.150	96.384	92.234	--	--	--

Figure Channel 03: VERTICAL (Peak)

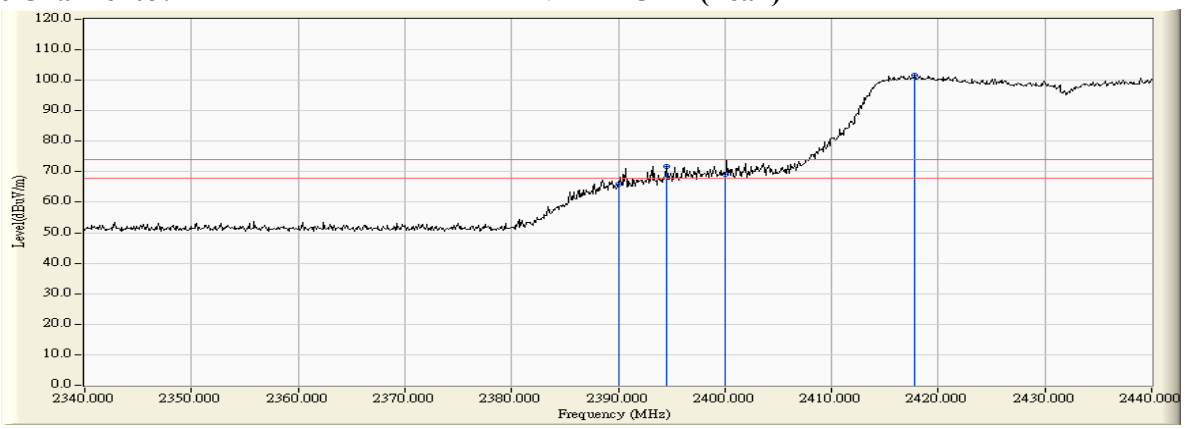
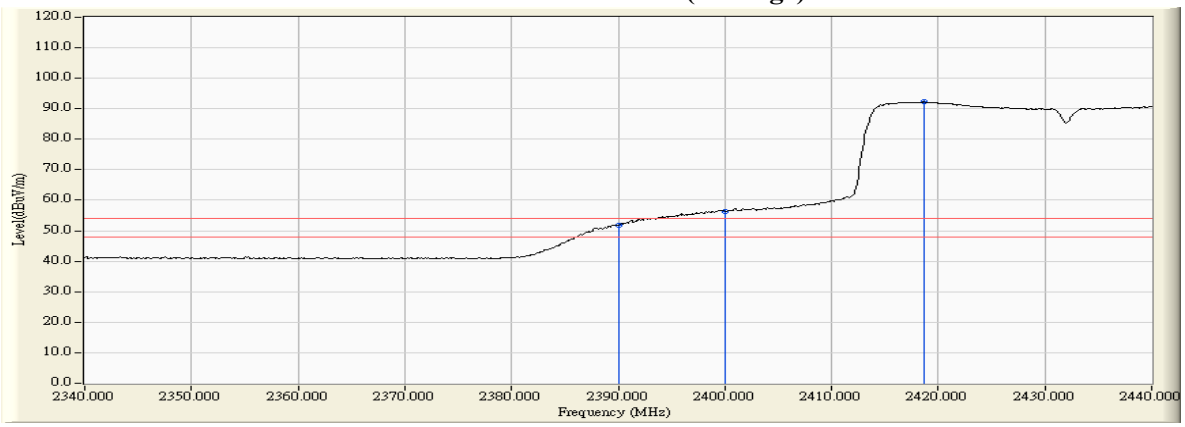


Figure Channel 03: VERTICAL (Average)



Note:1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 2 kHz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : DCM (Data Communication Module)
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2017/11/14
Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2437MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
03 (Peak)	2390.000	-2.687	72.242	69.555	74.00	54.00	Pass
03 (Peak)	2400.000	-2.660	79.867	77.207	--	--	--
03 (Peak)	2424.000	-2.640	107.172	104.532	--	--	--
03 (Average)	2390.000	-2.687	54.789	52.102	74.00	54.00	Pass
03 (Average)	2400.000	-2.660	61.599	58.939	--	--	--
03 (Average)	2424.300	-2.639	96.759	94.119	--	--	--

Figure Channel 03: Horizontal (Peak)

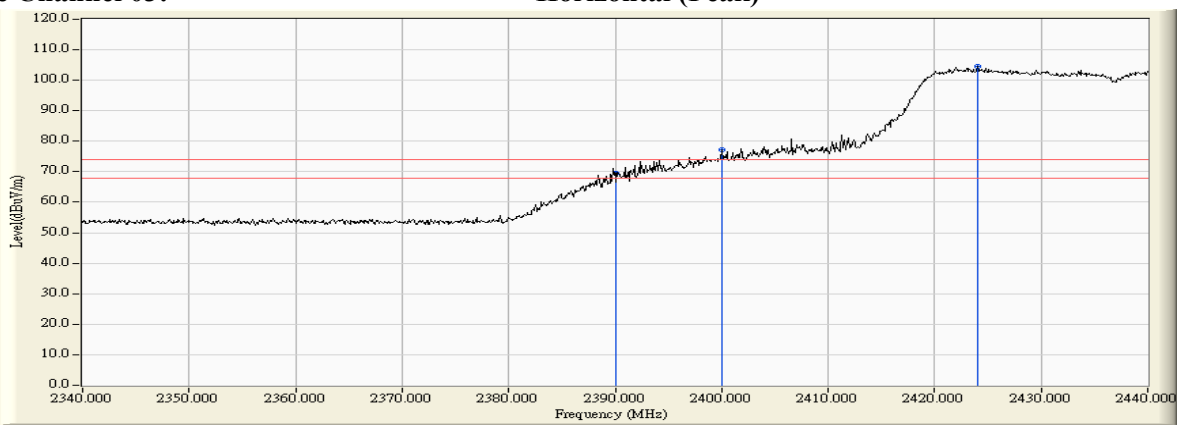
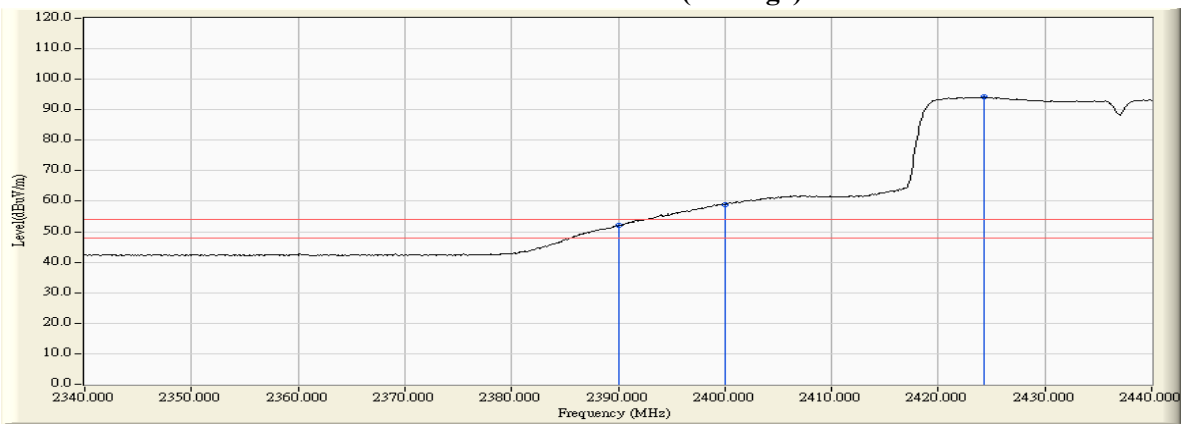


Figure Channel 03: Horizontal (Average)



Note:1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 2 kHz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product	:	DCM (Data Communication Module)
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Date	:	2017/11/14
Test Mode	:	Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2437MHz)

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
03 (Peak)	2390.000	-4.159	68.066	63.907	74.00	54.00	Pass
03 (Peak)	2399.800	-4.171	79.256	75.085	--	--	--
03 (Peak)	2400.000	-4.171	76.061	71.890			
03 (Peak)	2423.700	-4.139	106.192	102.054	--	--	--
03 (Average)	2390.000	-4.159	54.241	50.082	74.00	54.00	Pass
03 (Average)	2400.000	-4.171	61.124	56.953	--	--	--
03 (Average)	2424.100	-4.137	96.462	92.325	--	--	--

Figure Channel 03: VERTICAL (Peak)

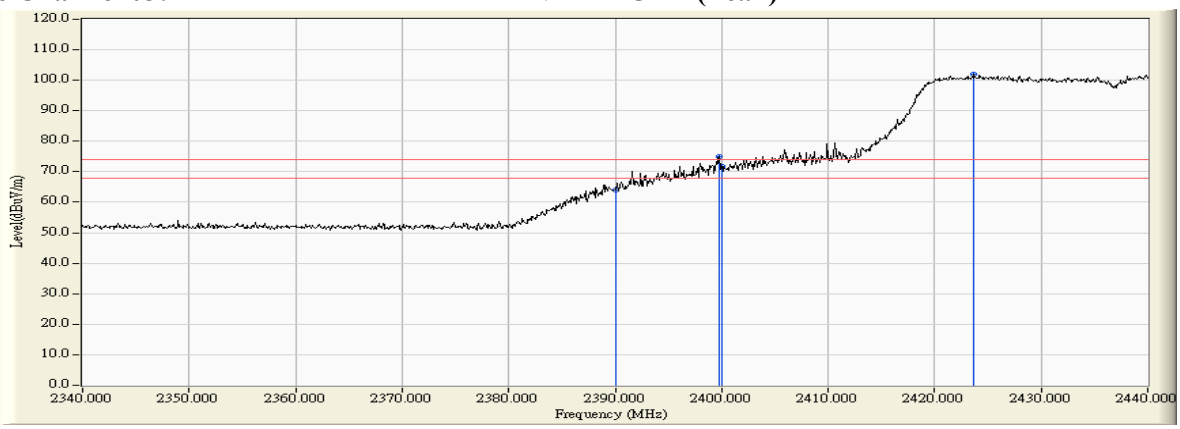
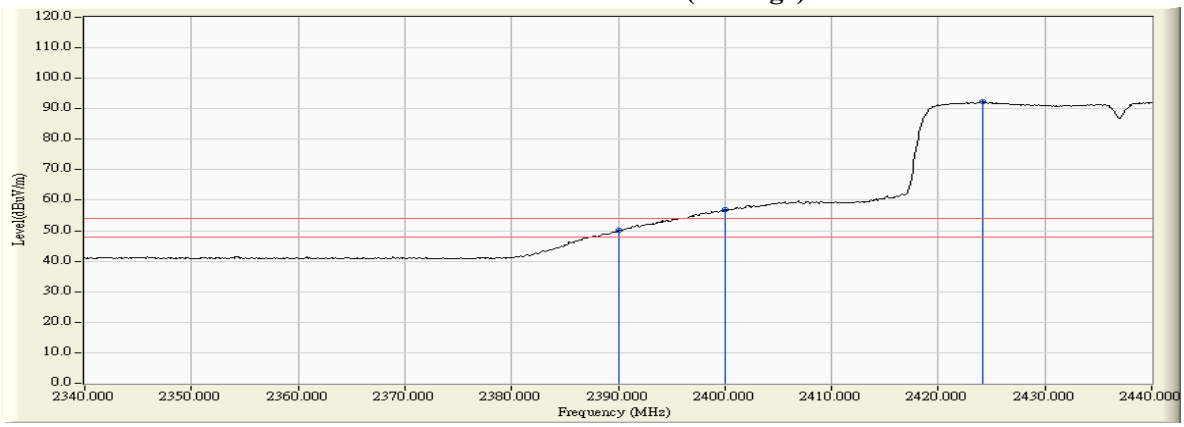


Figure Channel 03: VERTICAL (Average)



Note:1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 2 kHz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product	:	DCM (Data Communication Module)
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Date	:	2017/11/14
Test Mode	:	Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2437MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
03 (Peak)	2449.600	-2.632	107.044	104.412	--	--	--
03 (Peak)	2483.500	-2.601	63.927	61.325	74.00	54.00	Pass
03 (Peak)	2485.600	-2.600	66.172	63.572	74.00	54.00	Pass
03 (Average)	2449.600	-2.632	97.096	94.464	--	--	--
03 (Average)	2483.500	-2.601	49.014	46.412	74.00	54.00	Pass

Figure Channel 03: Horizontal (Peak)

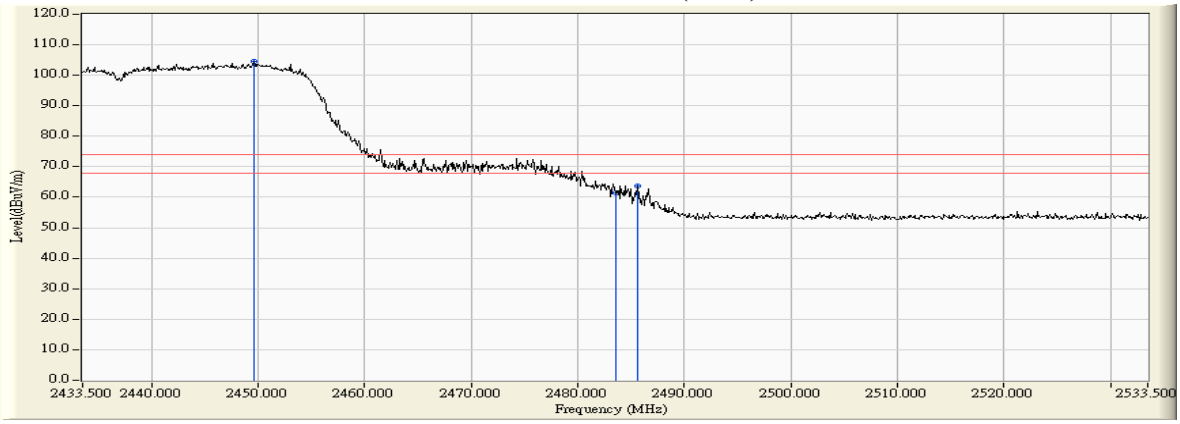
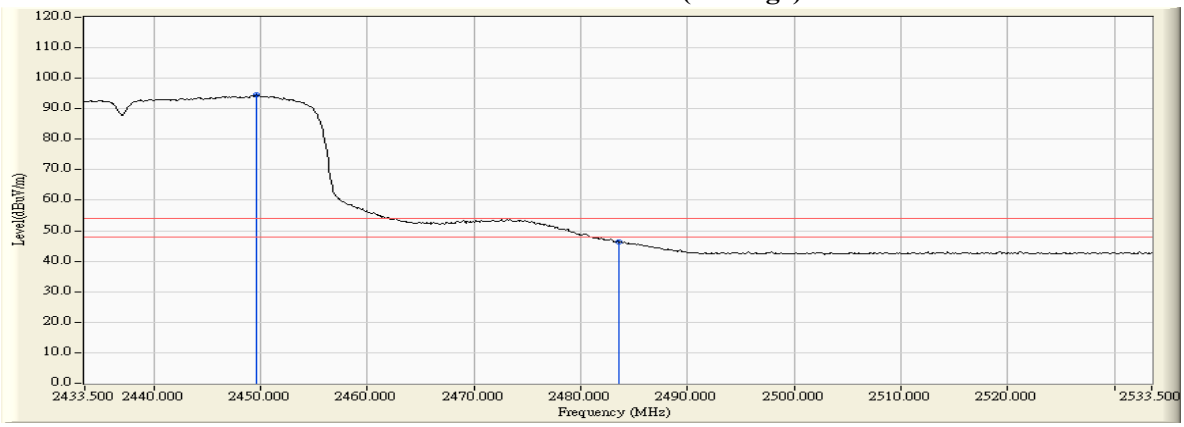


Figure Channel 03: Horizontal (Average)



Note:1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 2 kHz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : DCM (Data Communication Module)
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2017/11/14
Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2437MHz)

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
03 (Peak)	2448.500	-4.076	107.434	103.358	--	--	--
03 (Peak)	2483.500	-3.966	65.171	61.204	74.00	54.00	Pass
03 (Peak)	2485.300	-3.961	67.621	63.660	74.00	54.00	Pass
03 (Average)	2449.400	-4.073	98.067	93.994	--	--	--
03 (Average)	2483.500	-3.966	50.048	46.081	74.00	54.00	Pass

Figure Channel 03: VERTICAL (Peak)

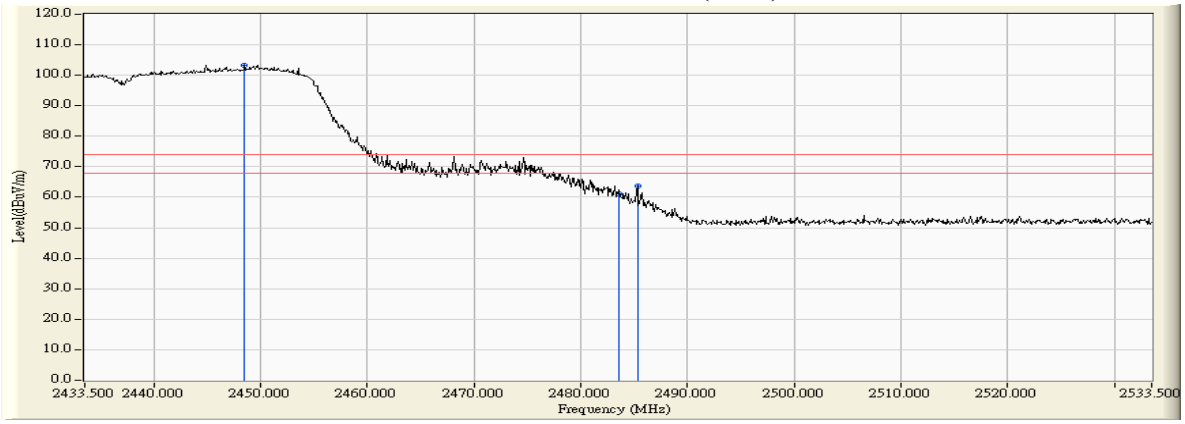
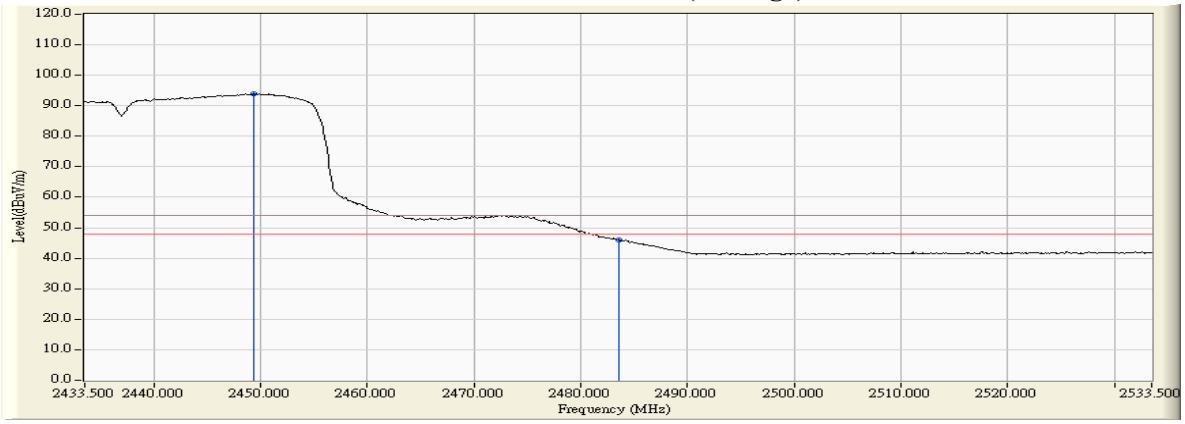


Figure Channel 03: VERTICAL (Average)



Note:1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 2 kHz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product	:	DCM (Data Communication Module)
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Date	:	2017/11/14
Test Mode	:	Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2447MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Peak Limit (dBµV/m)	Average Limit (dBµV/m)	Result
03 (Peak)	2448.900	-2.633	111.290	108.657	--	--	--
03 (Peak)	2483.500	-2.601	70.950	68.348	74.00	54.00	Pass
03 (Average)	2450.900	-2.631	101.523	98.892	--	--	--
03 (Average)	2483.500	-2.601	53.943	51.341	74.00	54.00	Pass

Figure Channel 03: Horizontal (Peak)

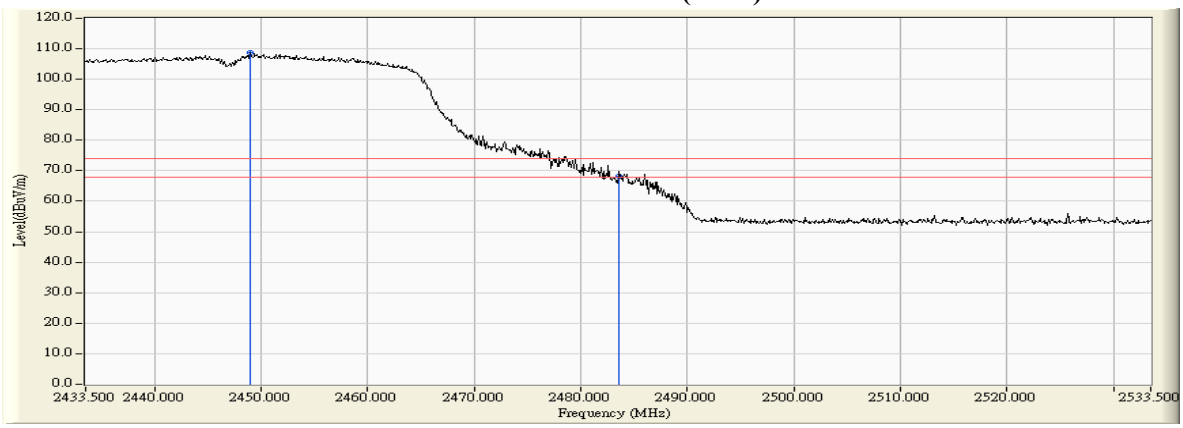
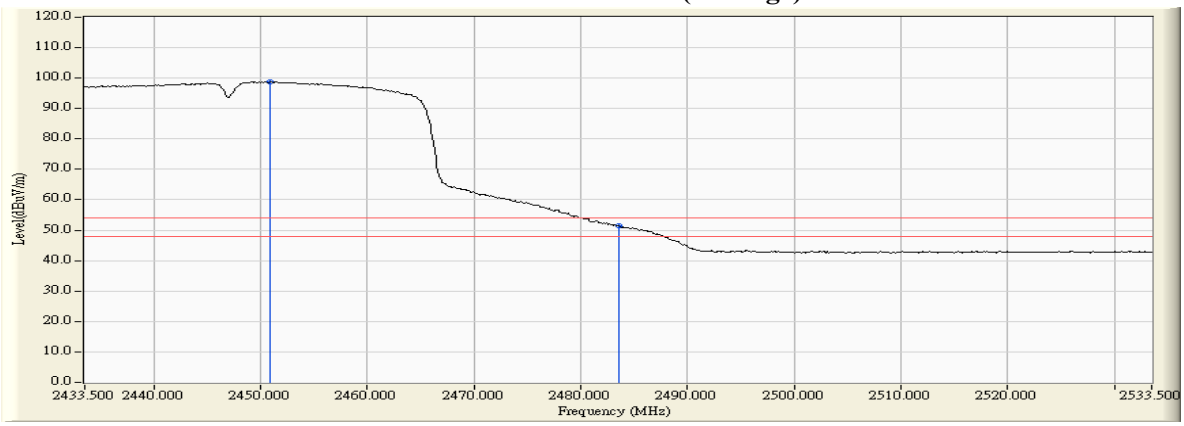


Figure Channel 03: Horizontal (Average)



Note:1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 2 kHz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product	:	DCM (Data Communication Module)
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Date	:	2017/11/14
Test Mode	:	Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2447MHz)

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
03 (Peak)	2448.700	-4.074	107.443	103.368	--	--	--
03 (Peak)	2483.500	-3.966	69.170	65.203	74.00	54.00	Pass
03 (Average)	2450.000	-4.071	97.870	93.799	--	--	--
03 (Average)	2483.500	-3.966	50.980	47.013	74.00	54.00	Pass

Figure Channel 03: VERTICAL (Peak)

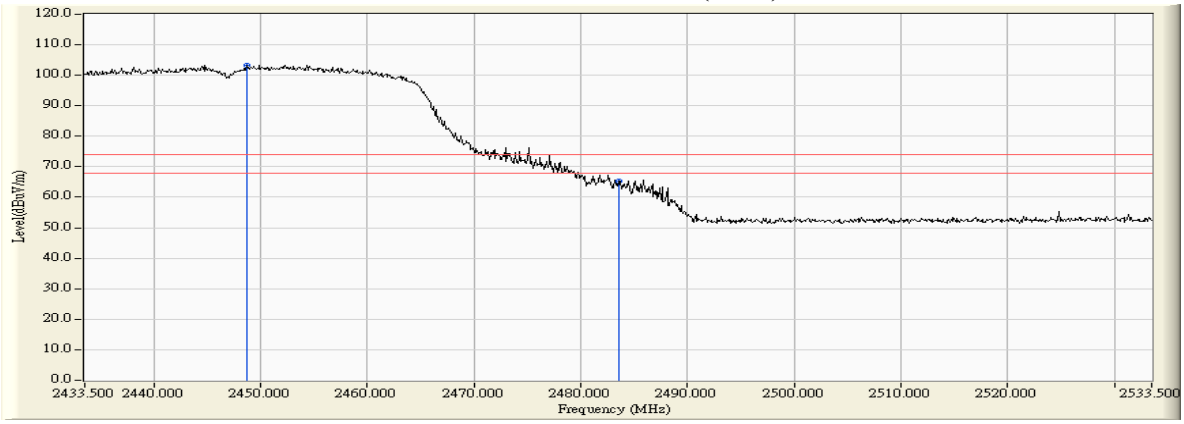
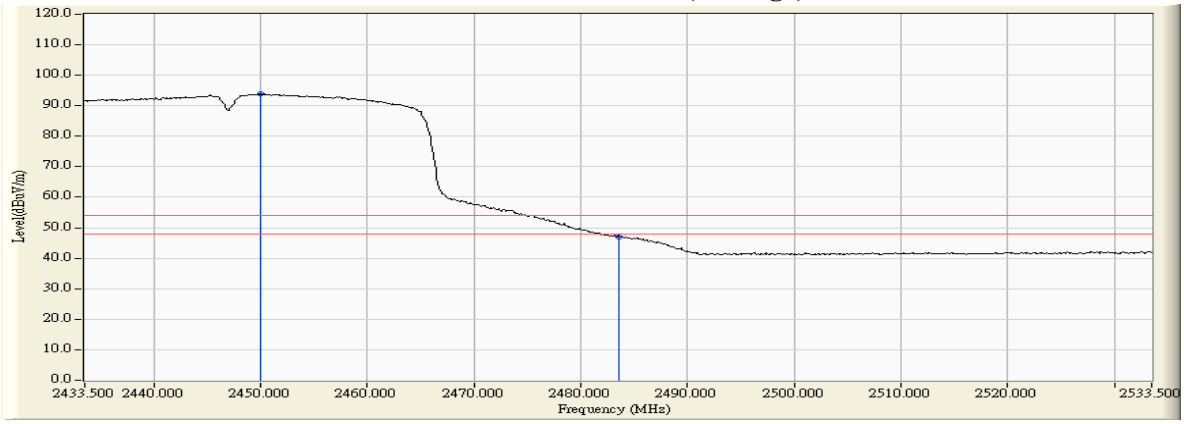


Figure Channel 03: VERTICAL (Average)



Note:1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 2 kHz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product	:	DCM (Data Communication Module)
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Date	:	2017/11/14
Test Mode	:	Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2452MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
09 (Peak)	2446.500	-2.635	109.639	107.004	--	--	--
09 (Peak)	2483.500	-2.601	73.526	70.924	74.00	54.00	Pass
09 (Average)	2450.000	-2.632	100.225	97.593	--	--	--
09 (Average)	2483.500	-2.601	54.230	51.628	74.00	54.00	Pass

Figure Channel 09: Horizontal (Peak)

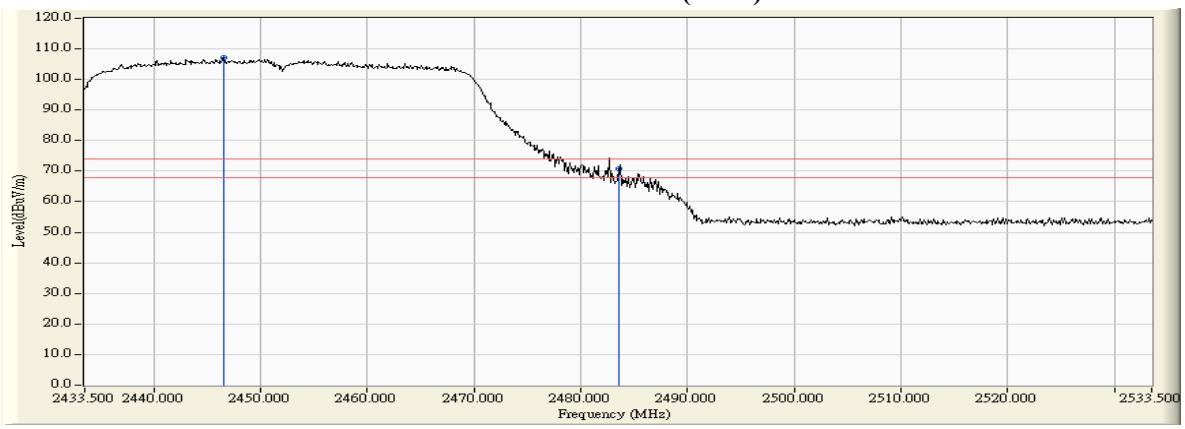
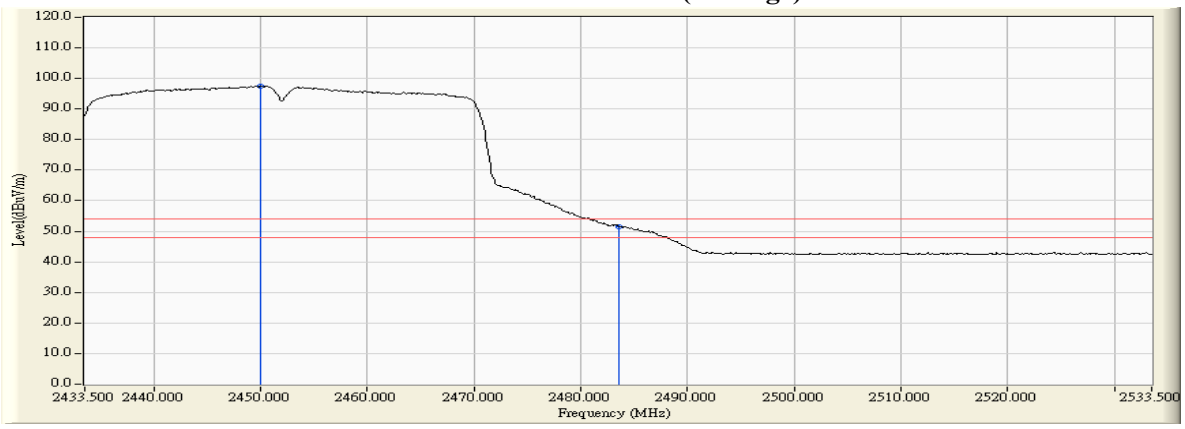


Figure Channel 09: Horizontal (Average)



Note:1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 2 kHz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : DCM (Data Communication Module)
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Date : 2017/11/14
Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2452MHz)

RF Radiated Measurement (VERTICAL):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
09 (Peak)	2445.200	-4.086	108.806	104.720	--	--	--
09 (Peak)	2483.500	-3.966	66.113	62.146	74.00	54.00	Pass
09 (Peak)	2485.600	-3.961	69.479	65.519	74.00	54.00	Pass
09 (Average)	2449.900	-4.072	99.597	95.525	--	--	--
09 (Average)	2483.500	-3.966	52.105	48.138	74.00	54.00	Pass

Figure Channel 09: VERTICAL (Peak)

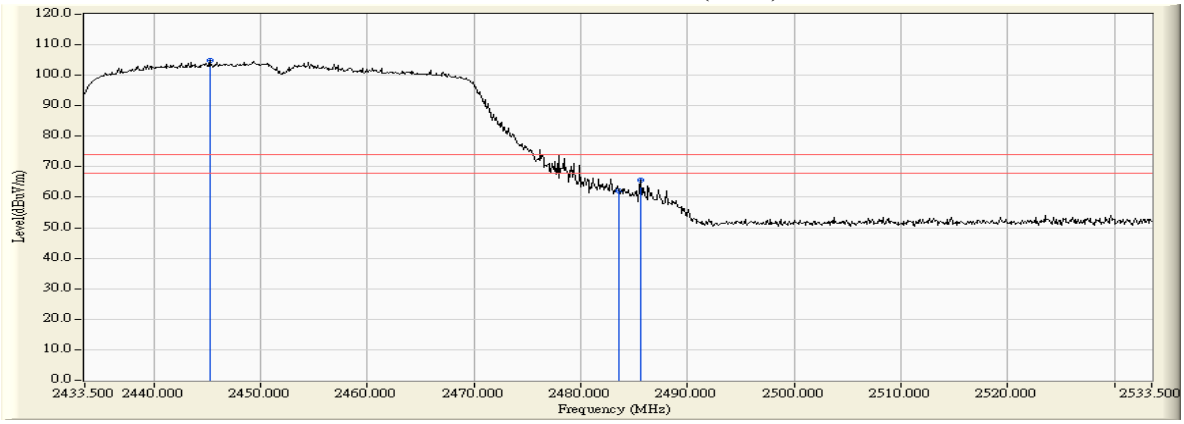
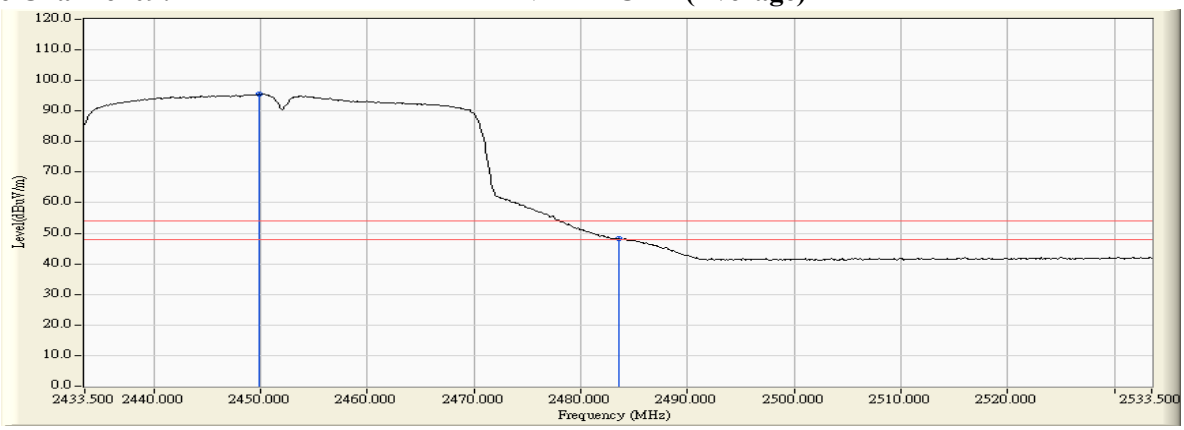


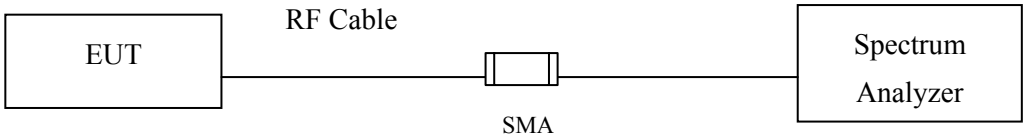
Figure Channel 09: VERTICAL (Average)



Note:1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 2 kHz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

7. 6dB Bandwidth

7.1. Test Setup



7.2. Limits

The minimum bandwidth shall be at least 500 kHz.

7.3. Test Procedure

The EUT was setup according to ANSI C63.4: 2014; tested according to DTS test procedure of Jan KDB558074 for compliance to FCC 47CFR 15.247 requirements.

7.4. Uncertainty

± 283Hz

7.5. Test Result of 6dB Bandwidth

Product : DCM (Data Communication Module)
Test Item : 6dB Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
01	2412	9700	>500	Pass
06	2437	10100	>500	Pass
11	2462	9650	>500	Pass

Figure Channel 01:

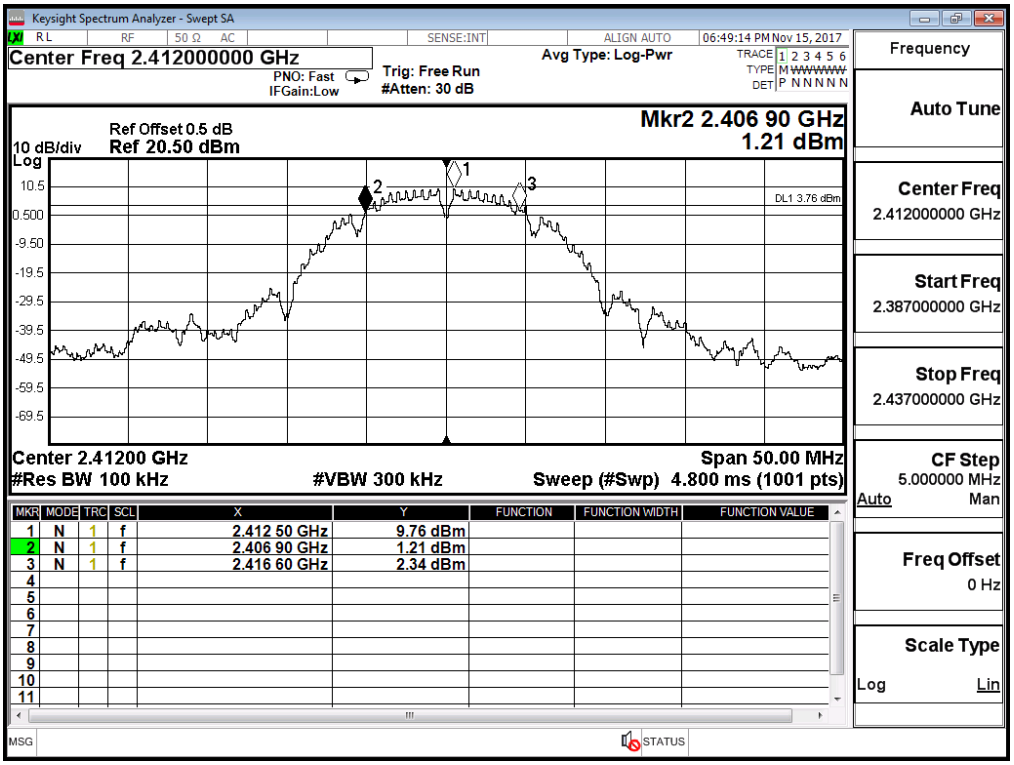


Figure Channel 06:

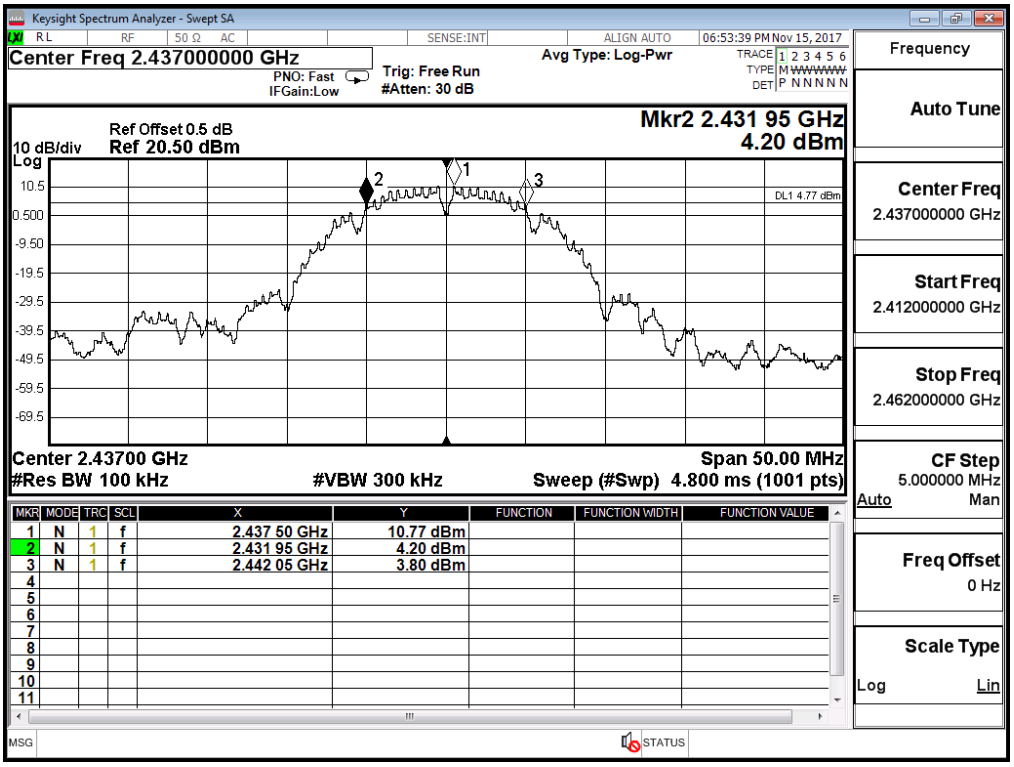
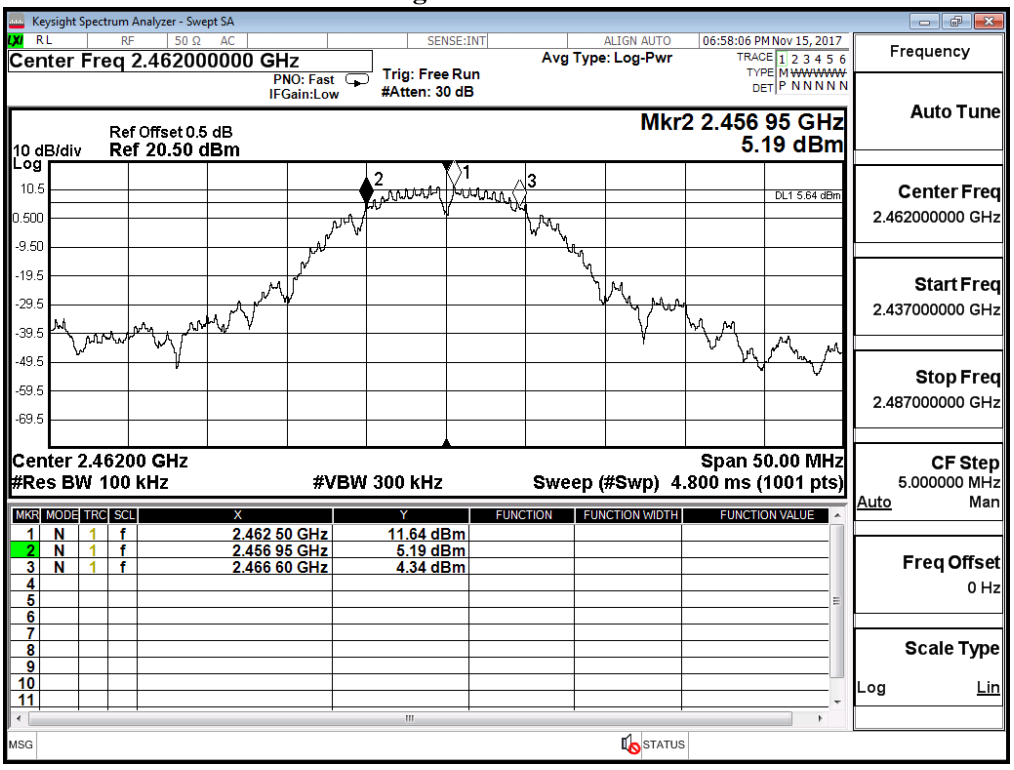


Figure Channel 11:



Product : DCM (Data Communication Module)
Test Item : 6dB Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2412MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
01	2412	16450	>500	Pass
06	2437	16450	>500	Pass
11	2462	16450	>500	Pass

Figure Channel 01:

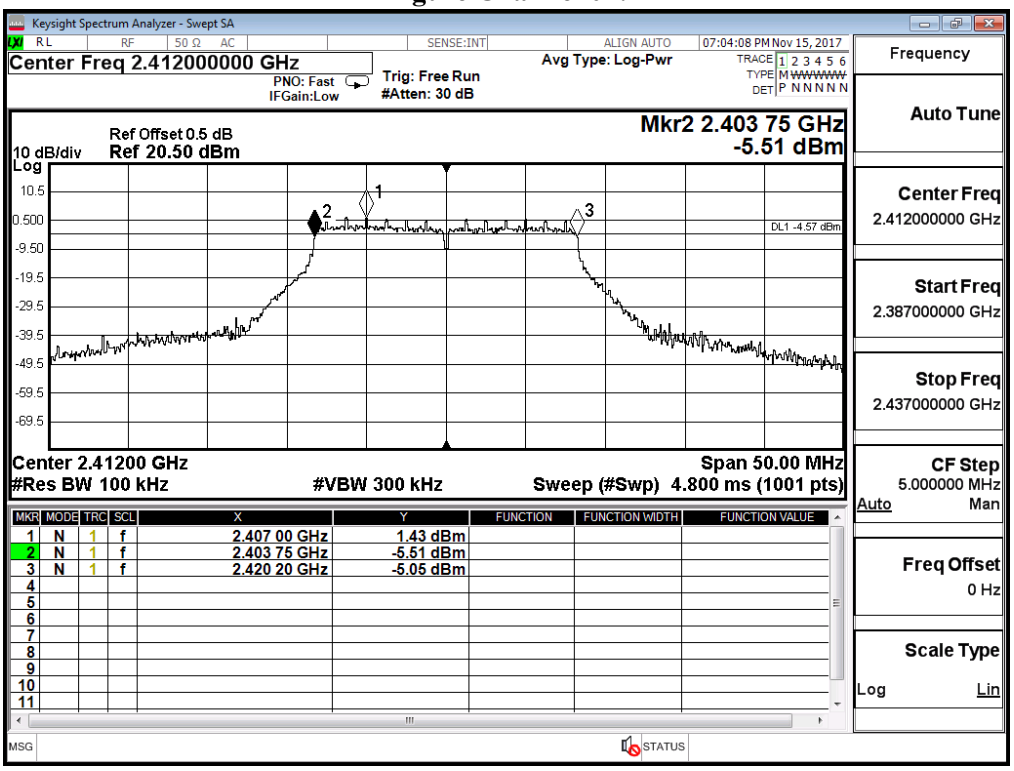


Figure Channel 06:

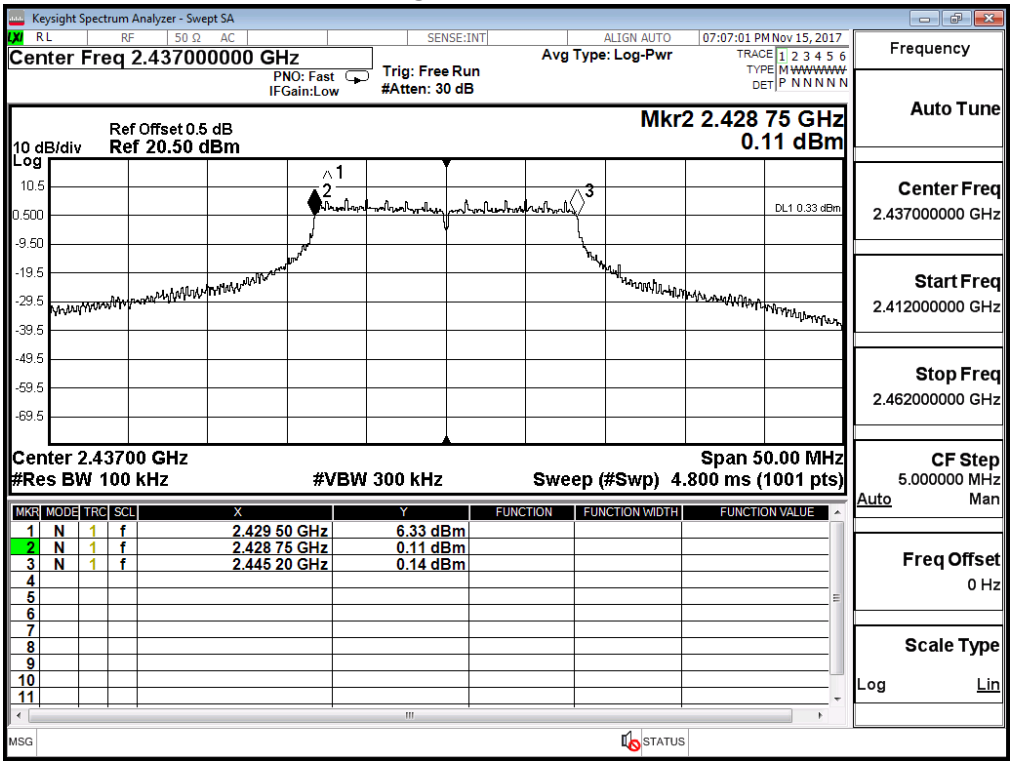
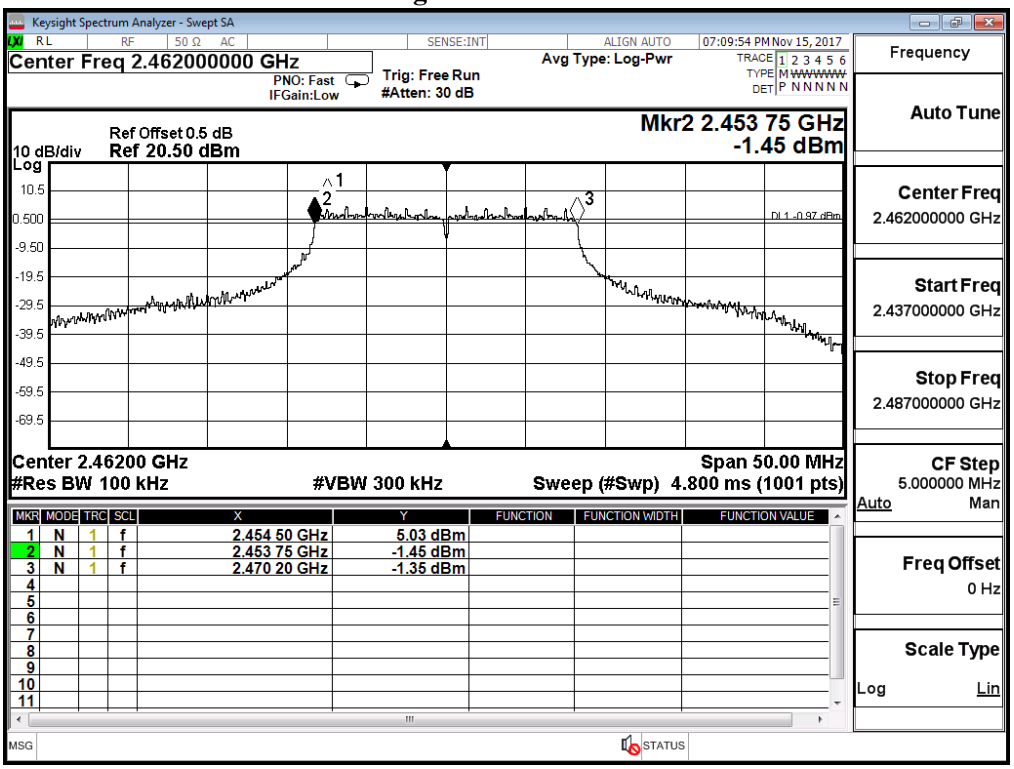


Figure Channel 11:



Product : DCM (Data Communication Module)
Test Item : 6dB Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
01	2412	17650	>500	Pass
06	2437	17700	>500	Pass
11	2462	17650	>500	Pass

Figure Channel 01:

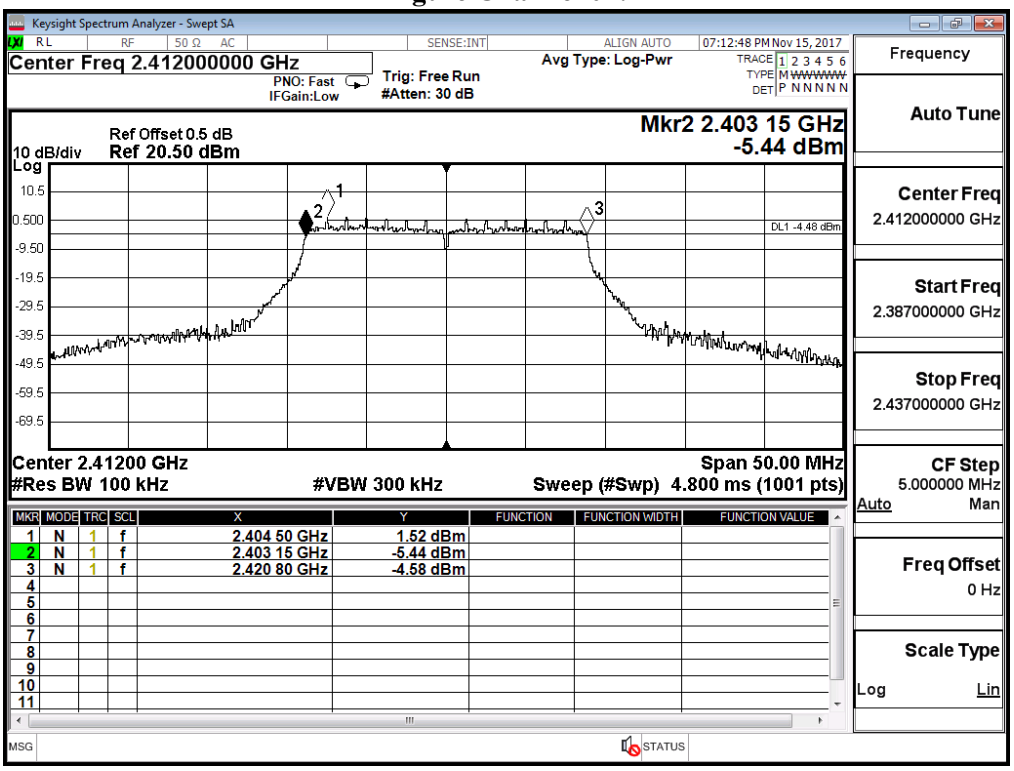


Figure Channel 06:

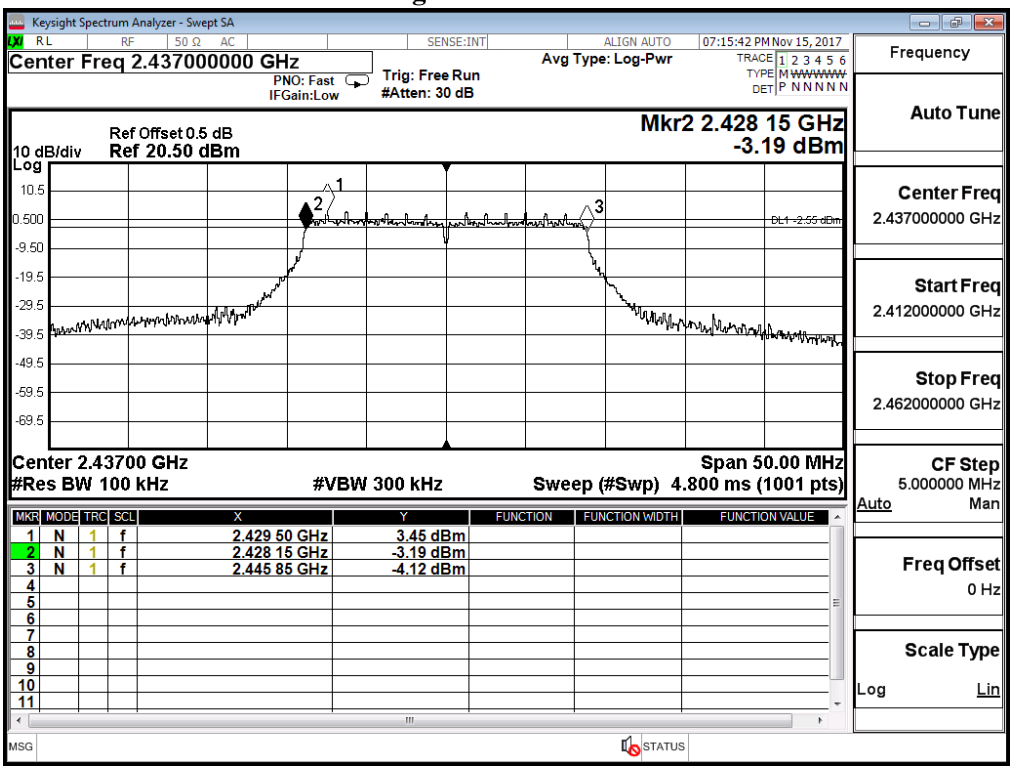
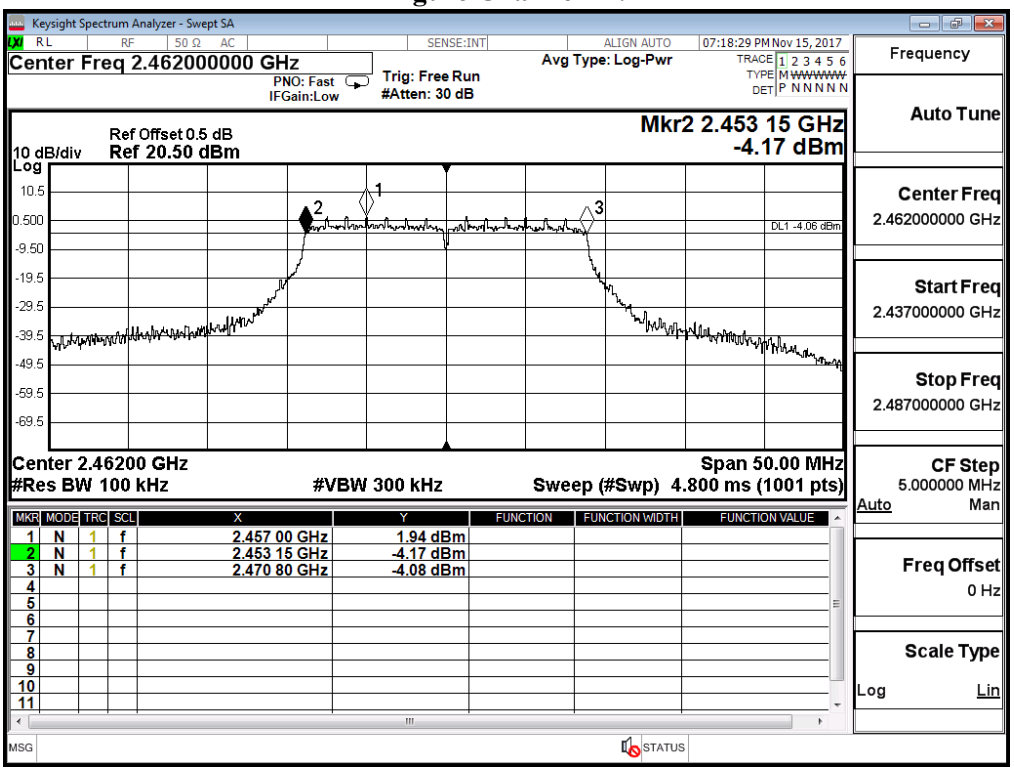


Figure Channel 11:



Product : DCM (Data Communication Module)
Test Item : 6dB Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
03	2422	35600	>500	Pass
06	2437	35800	>500	Pass
09	2452	35400	>500	Pass

Figure Channel 03:

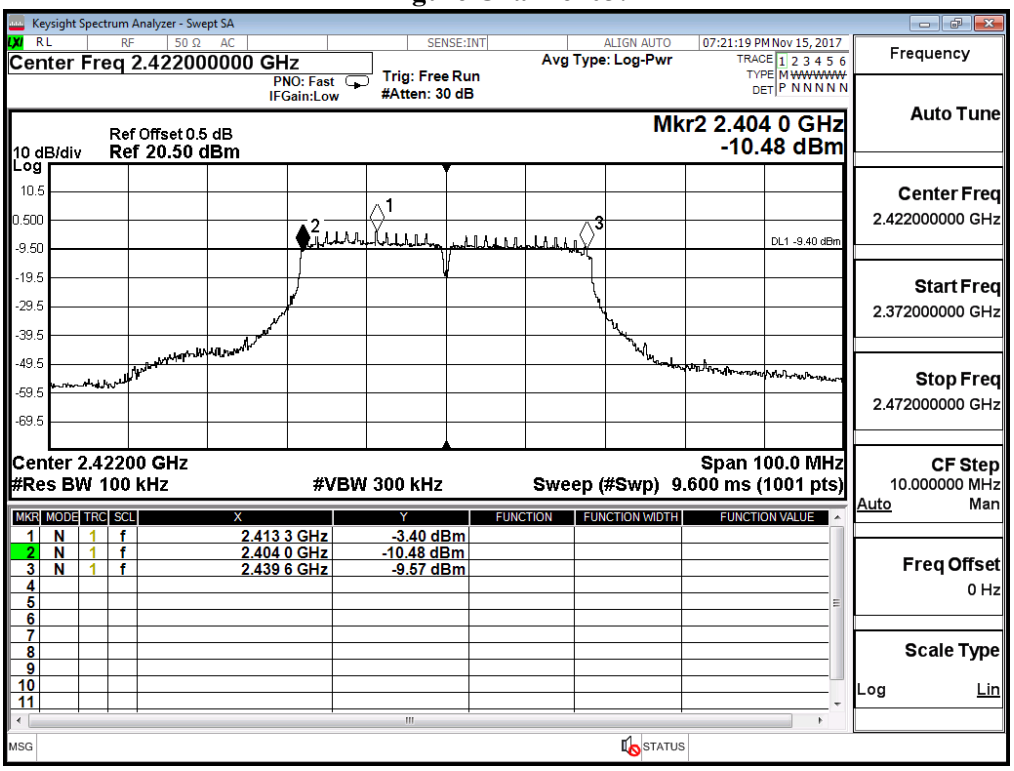


Figure Channel 06:

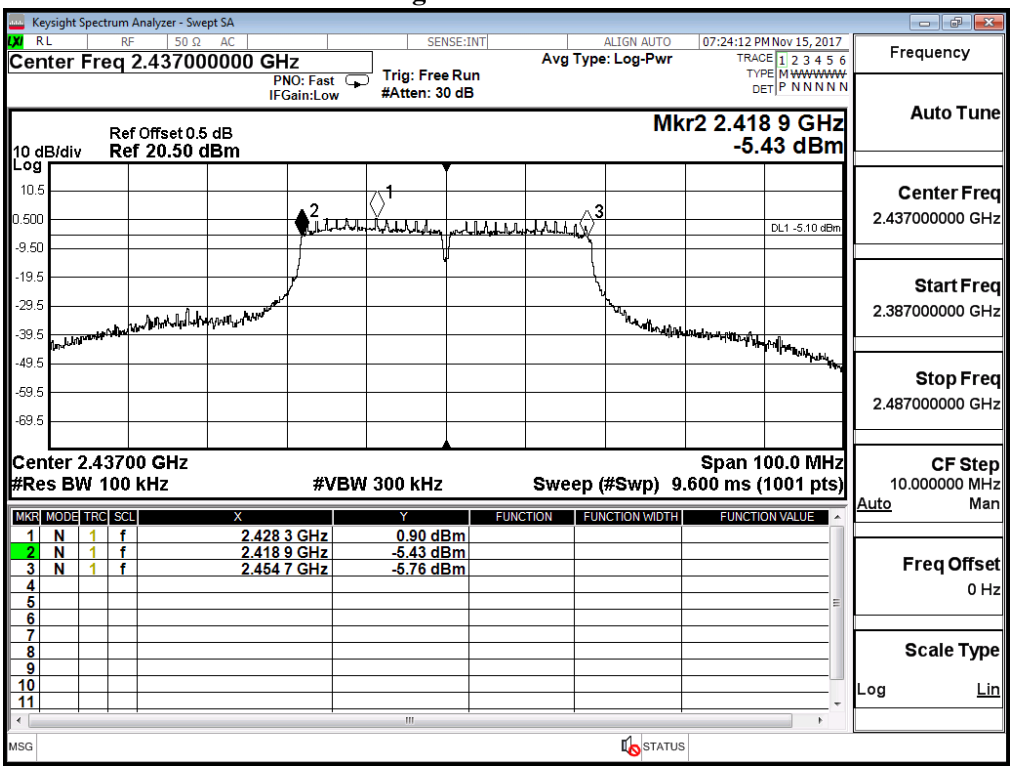
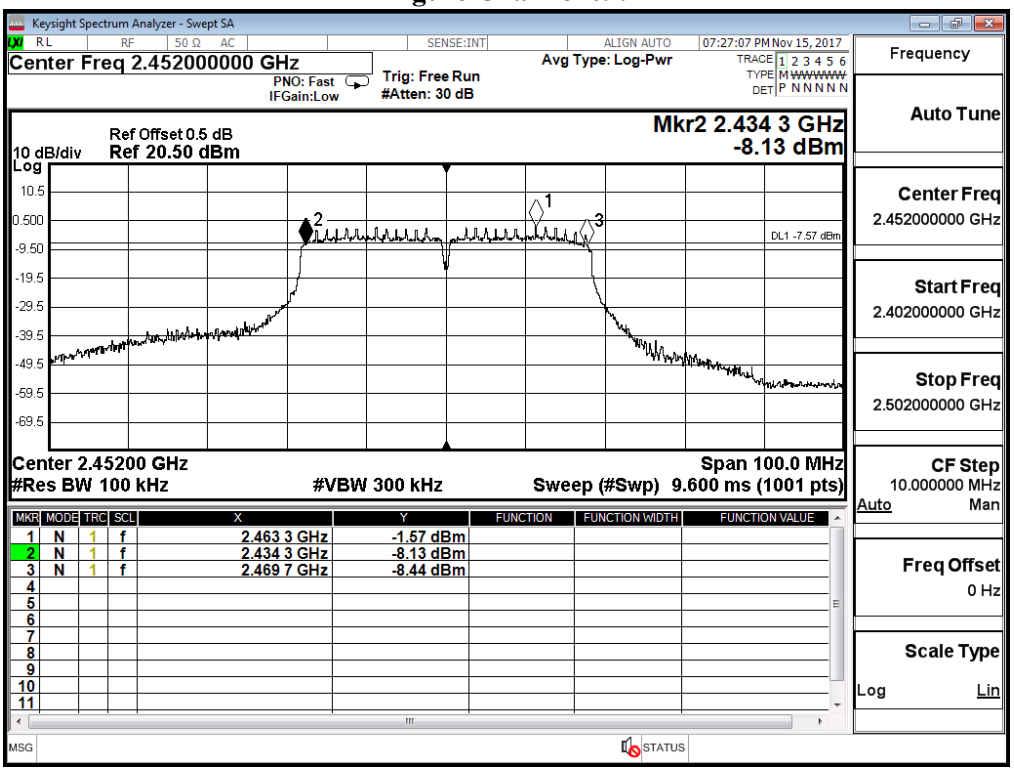
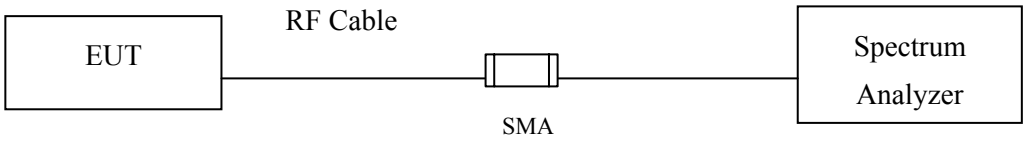


Figure Channel 09:



8. Power Density

8.1. Test Setup



8.2. Limits

The transmitted power density averaged over any 1 second interval shall not be greater +8dBm in any 3kHz bandwidth.

8.3. Test Procedure

The EUT was setup according to ANSI C63.10, 2013; tested according to DTS test procedure of KDB 558074 for compliance to FCC 47CFR 15.247 requirements.
The maximum power spectral density using KDB 558074 section 10.2 PKPSD (peak PSD) method.

8.4. Uncertainty

± 1.20 dB

8.5. Test Result of Power Density

Product : DCM (Data Communication Module)
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
01	2412	7.10	≦8dBm	Pass
06	2437	7.90	≦8dBm	Pass
11	2462	6.31	≦8dBm	Pass

Figure Channel 01:

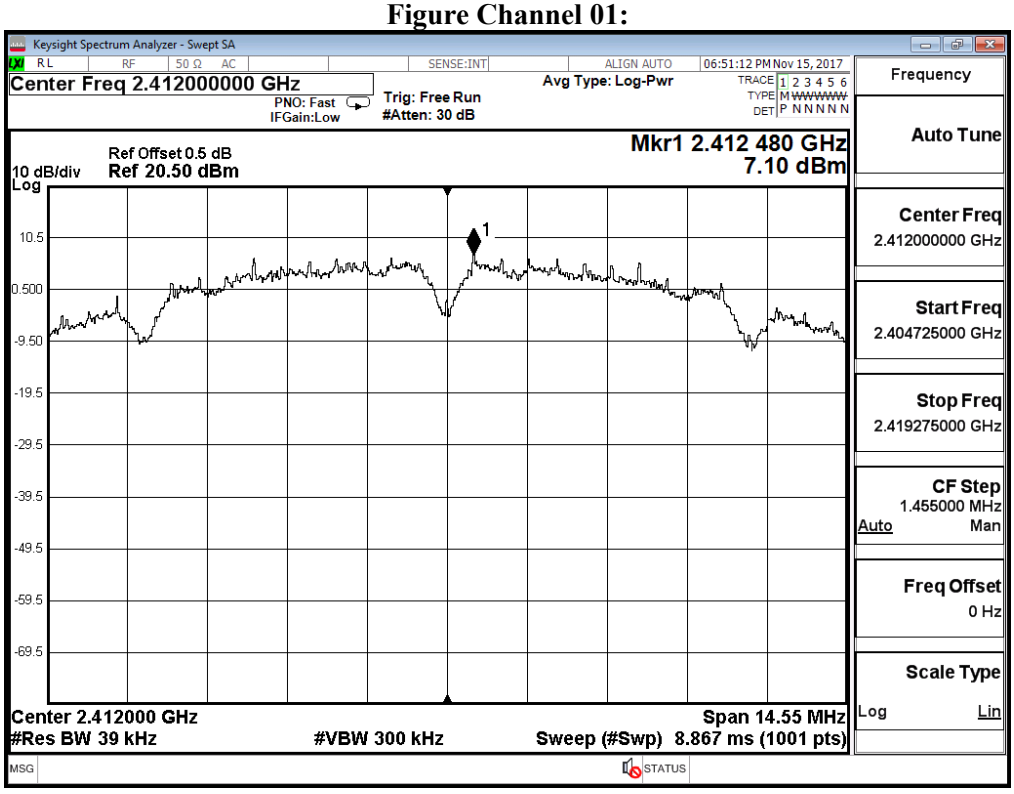


Figure Channel 06:

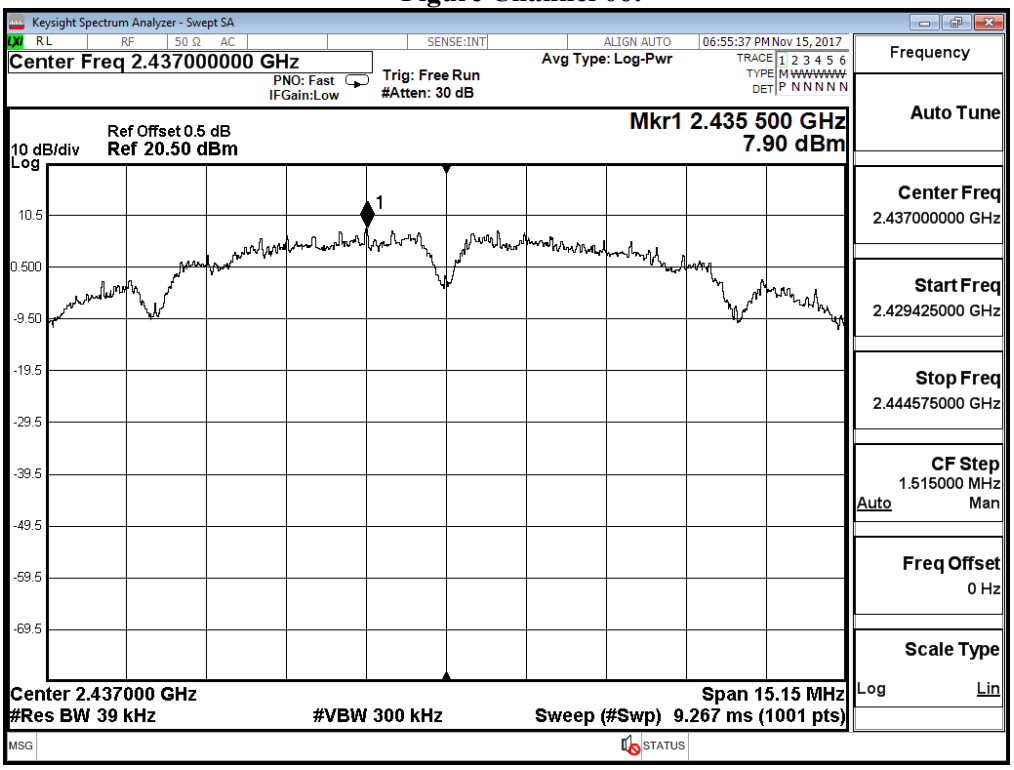
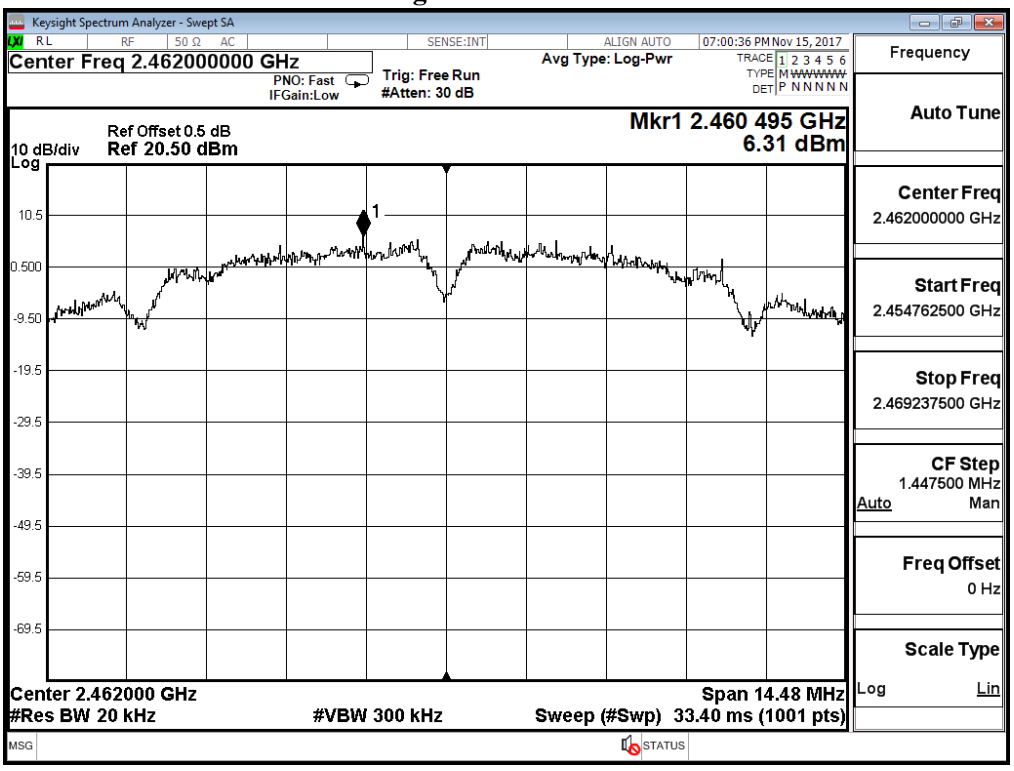


Figure Channel 11:



Product : DCM (Data Communication Module)
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
01	2412	1.46	≦8dBm	Pass
06	2437	6.36	≦8dBm	Pass
11	2462	4.97	≦8dBm	Pass

Figure Channel 01:

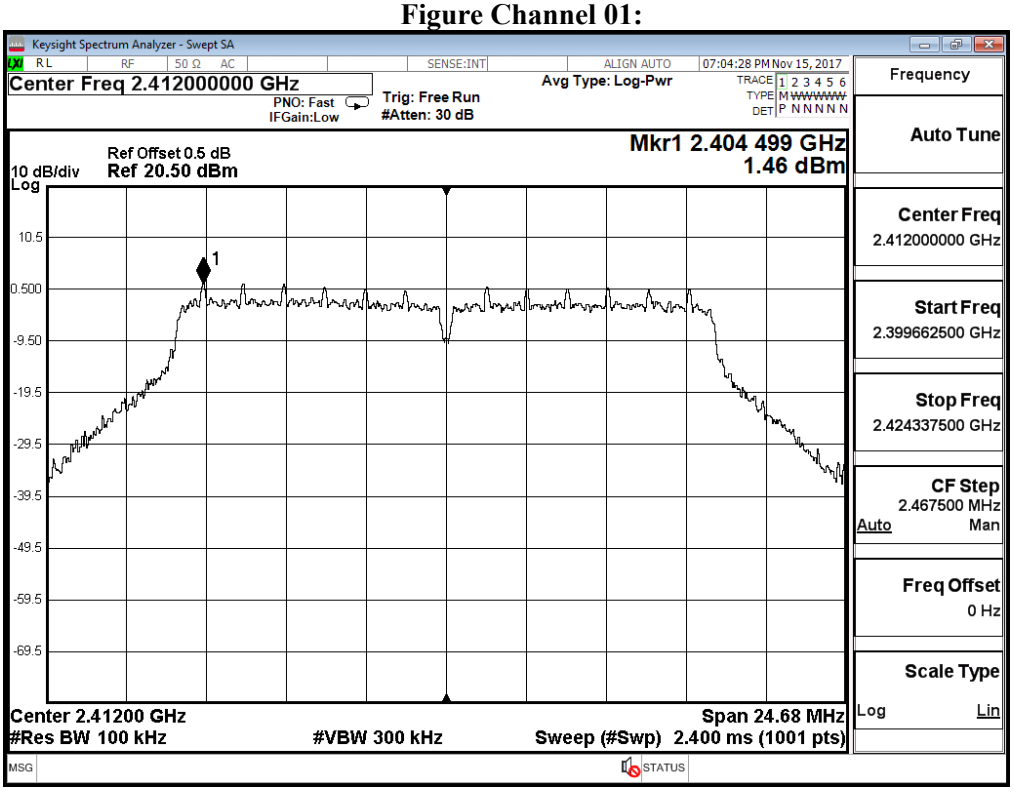


Figure Channel 06:

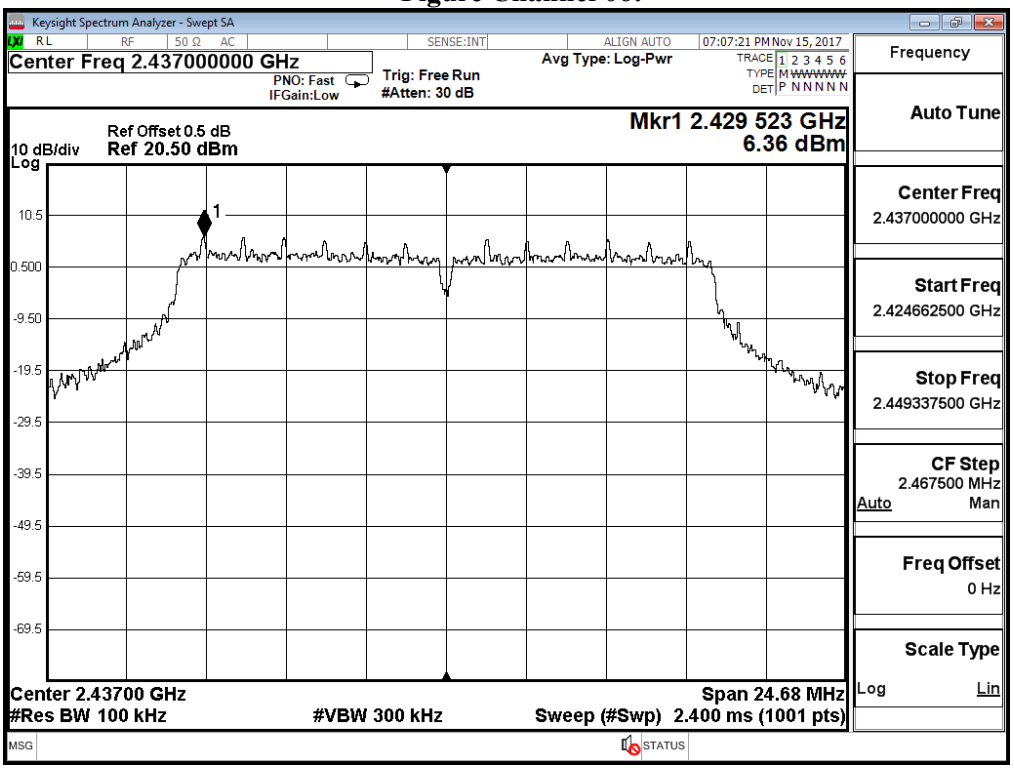
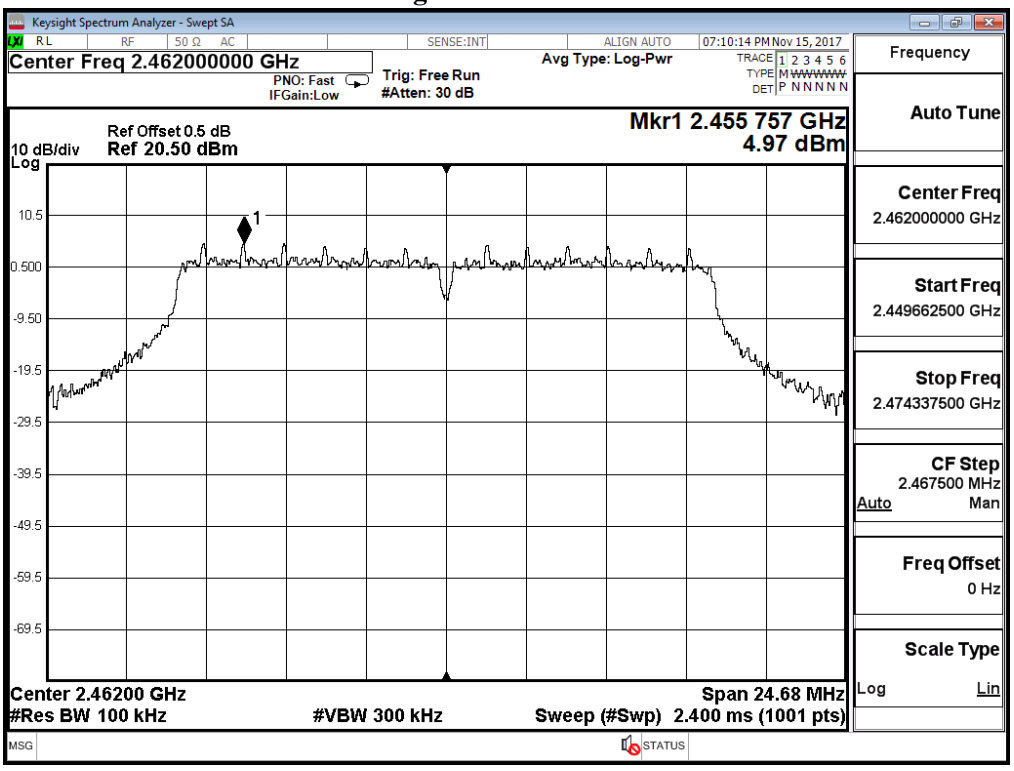


Figure Channel 11:



Product : DCM (Data Communication Module)
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
01	2412	1.51	≦8dBm	Pass
06	2437	3.38	≦8dBm	Pass
11	2462	1.94	≦8dBm	Pass

Figure Channel 01:

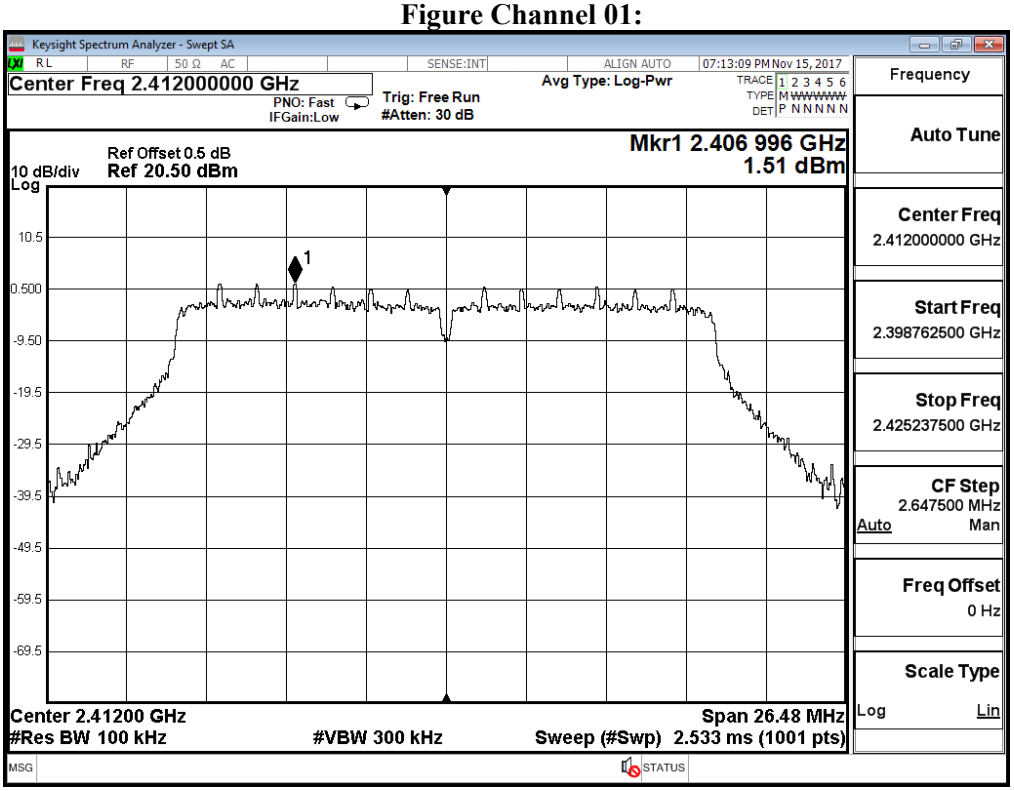


Figure Channel 06:

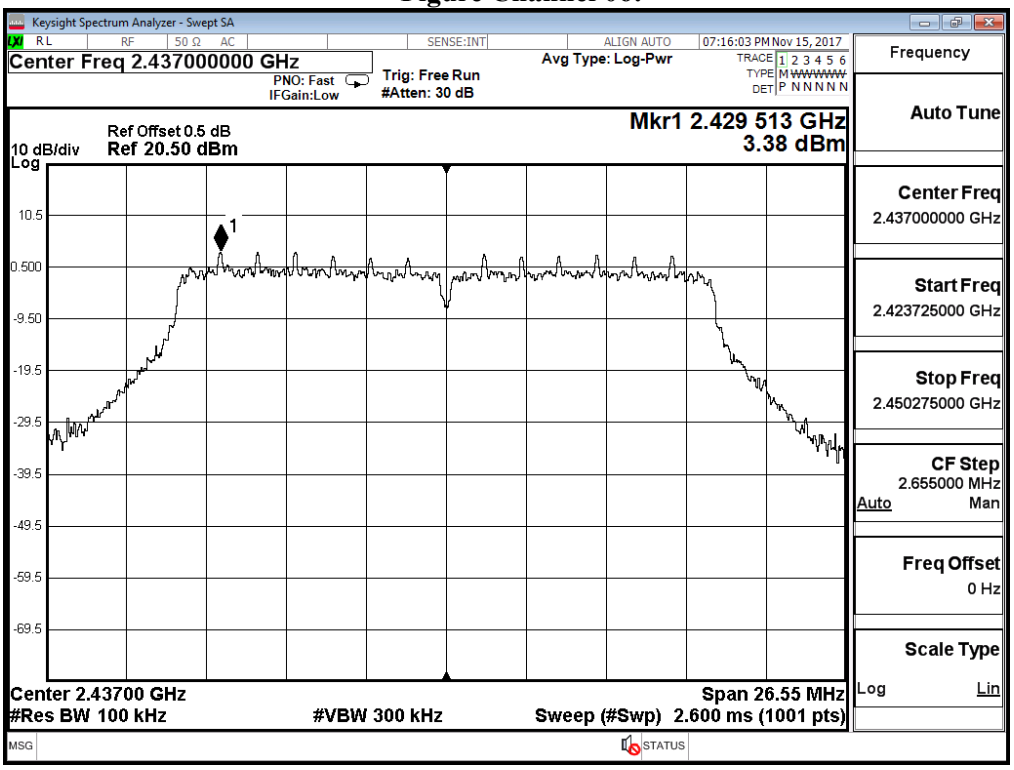
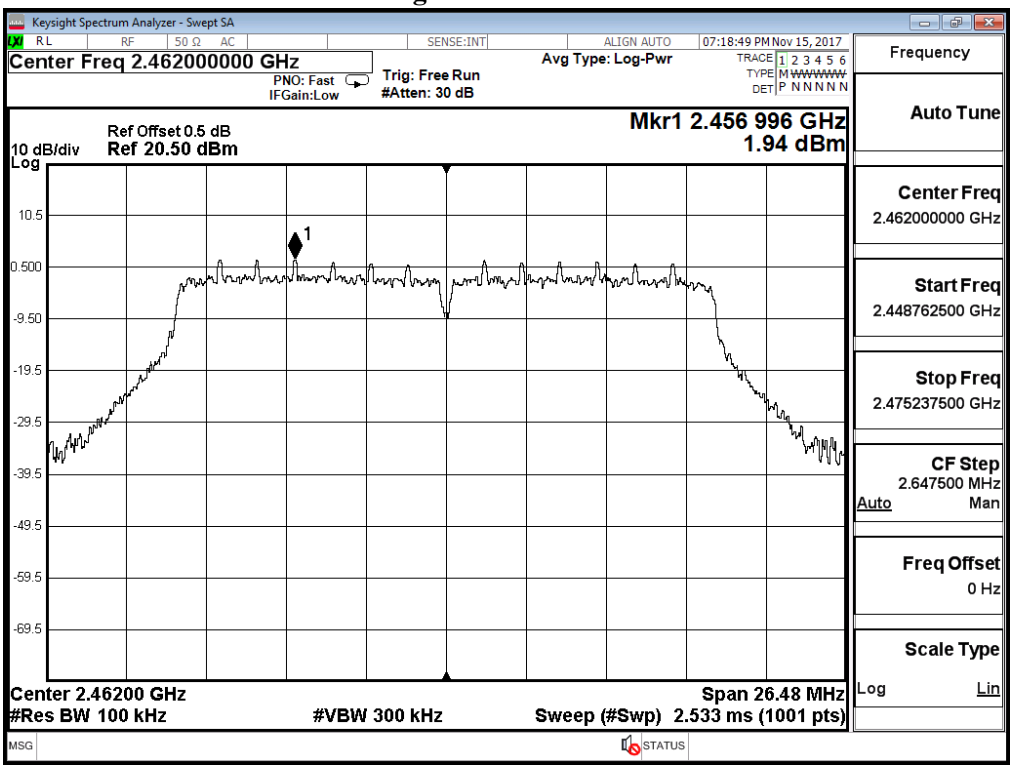


Figure Channel 11:



Product : DCM (Data Communication Module)
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
03	2422	-3.37	≦8dBm	Pass
06	2437	1.02	≦8dBm	Pass
09	2452	-1.58	≦8dBm	Pass

Figure Channel 03:

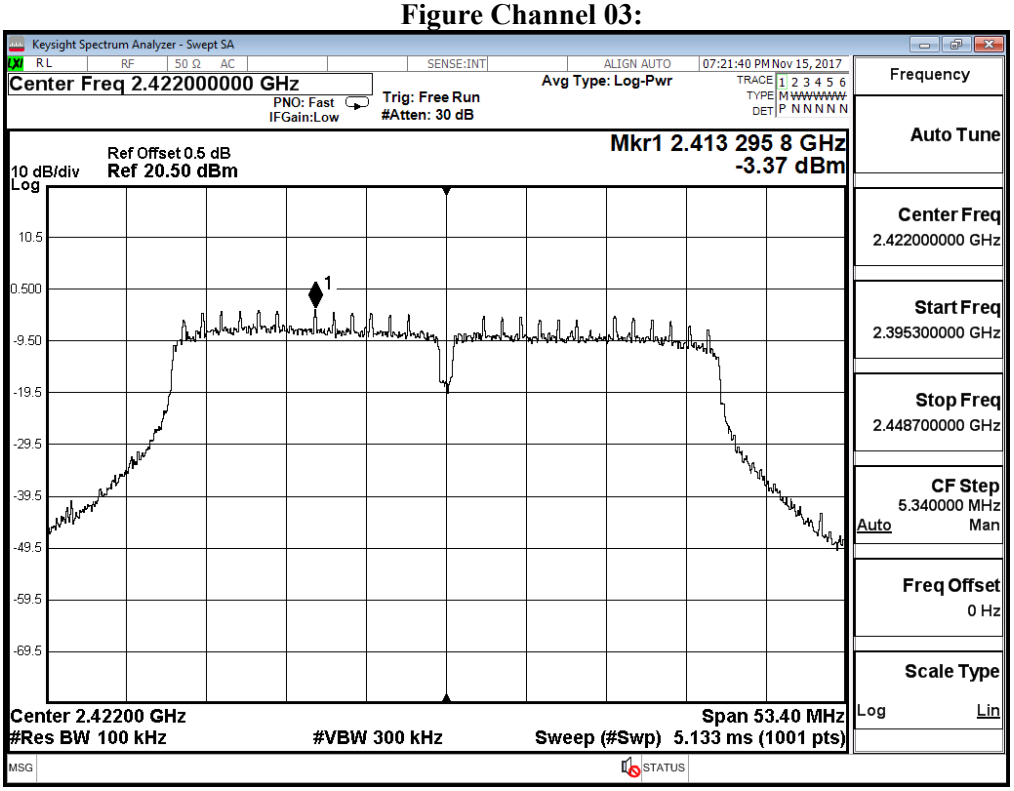


Figure Channel 06:

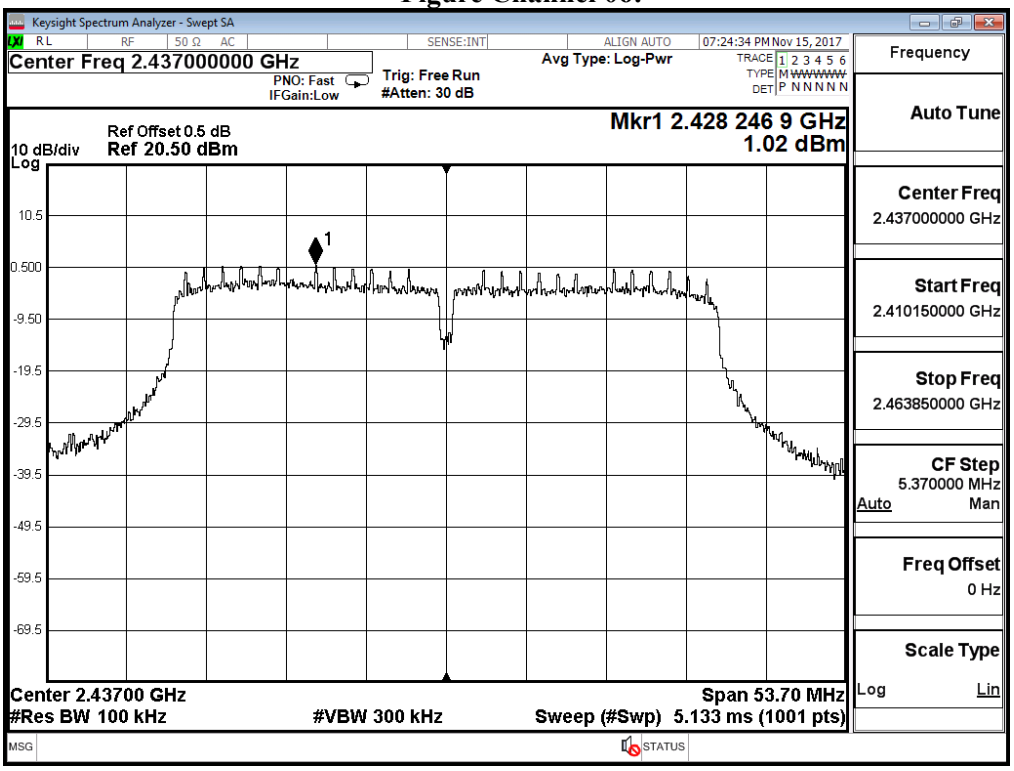
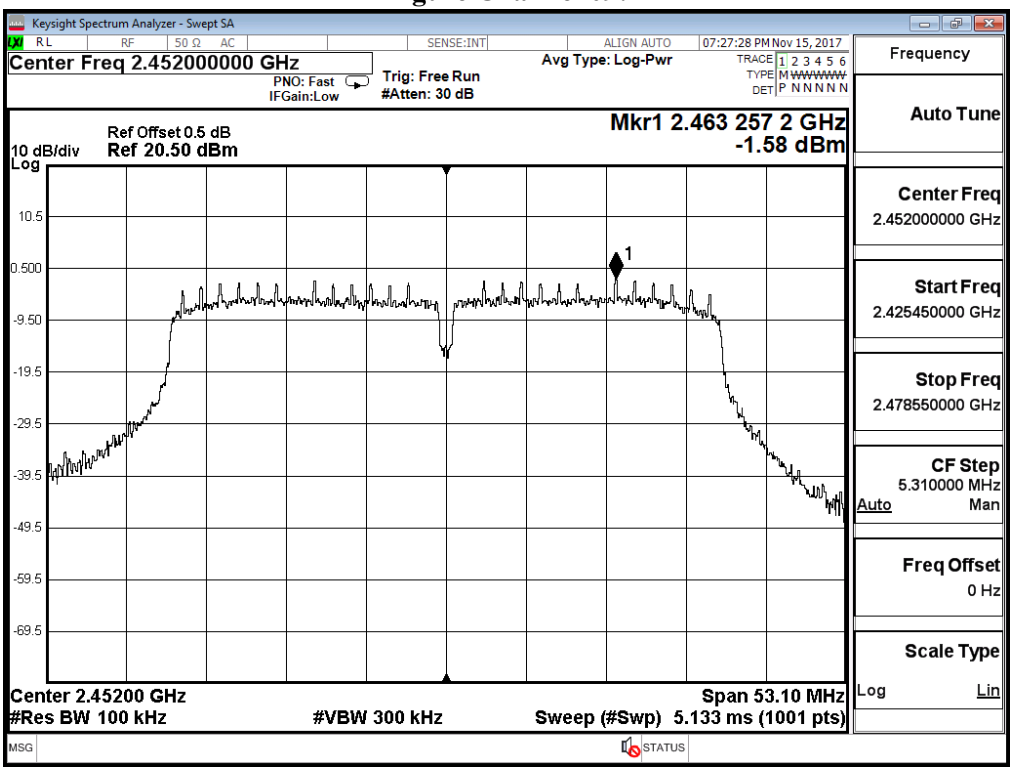


Figure Channel 09:



9. EMI Reduction Method During Compliance Testing

No modification was made during testing.