

APPLICATION FOR CERTIFICATION

On Behalf of

LG Electronics Inc.

HD Compact Network Camera

Model No. : LW130W

FCC ID : BEJ9QK-LW130W

Brand: LG

Prepared for : LG Electronics Inc.
19-1, Cheongho-ri, Jinwi-myeon,
Pyeongtaek-si, Gyeonggi-do,
451-713 Korea

Prepared By : AUDIX Technology Corporation
EMC Department
No. 53-11, Dingfu, Linkou Dist.,
New Taipei City 244, Taiwan, R.O.C.

Tel : (02) 2609-9301, 2609-2133
Fax: (02) 2609-9303

File Number : C1M1109085
Report Number : EM-F1000803
Date of Test : Sep. 13 ~ 16, 2011
Date of Report : Sep. 16, 2011

TABLE OF CONTENTS

Description	Page
TEST REPORT CERTIFICATION	4
1. GENERAL INFORMATION	5
1.1. Description of Device (EUT).....	5
1.2. Data Rate Relative to Output Power (Perform at CH 6).....	6
1.3. Test Configuration for Each Test Item	7
1.4. Tested Supporting System Details	7
1.5. Description of Test Facility	8
1.6. Measurement Uncertainty	8
2. CONDUCTED EMISSION MEASUREMENT	9
2.1. Test Equipment.....	9
2.2. Block Diagram of Test Setup.....	9
2.3. Conducted Emission Limits (§15.207)	9
2.4. Operating Condition of EUT	10
2.5. Test Procedure	10
2.6. Conducted Emission Measurement Results.....	10
3. RADIATED EMISSION MEASUREMENT	13
3.1. Test Equipment.....	13
3.2. Test Setup	13
3.3. Radiated Emission Limits (§15.209)	15
3.4. Operating Condition of EUT	15
3.5. Test Procedure	16
3.6. Test Results.....	17
4. 6dB BANDWIDTH MEASUREMENT	42
4.1. Test Equipment.....	42
4.2. Block Diagram of Test Setup.....	42
4.3. Specification Limits (§15.247(a)(2))	42
4.4. Operating Condition of EUT	42
4.5. Test Procedure	42
4.6. Test Results.....	43
5. MAXIMUM PEAK OUTPUT POWER MEASUREMENT	49
5.1. Test Equipment.....	49
5.2. Block Diagram of Test Setup.....	49
5.3. Specification Limits (§15.247(b)-(3)).....	49
5.4. Operating Condition of EUT	49
5.5. Test Procedure	49
5.6. Test Results.....	50
6. EMISSION LIMITATIONS MEASUREMENT	51
6.1. Test Equipment.....	51
6.2. Block Diagram of Test Setup.....	51
6.3. Specification Limits (§15.247(c)).....	51
6.4. Operating Condition of EUT	51
6.5. Test Procedure	51
6.6. Test Results.....	51
7. BAND EDGES MEASUREMENT	79
7.1. Test Equipment.....	79
7.2. Block Diagram of Test Setup.....	79
7.3. Specification Limits (§15.247(c)).....	79
7.4. Operating Condition of EUT	79

7.5. Test Procedure 79

7.6. Test Results..... 80

8. POWER SPECTRAL DENSITY MEASUREMENT 84

8.1. Test Equipment..... 84

8.2. Block Diagram of Test Setup..... 84

8.3. Specification Limits (§15.247(d))..... 84

8.4. Operating Condition of EUT 84

8.5. Test Procedure 84

8.6. Test Results..... 85

9. DEVIATION TO TEST SPECIFICATIONS..... 91

10. PHOTOGRAPHS..... 92

10.1. Photos of Conducted Emission Measurement 92

10.2. Photos of Radiated Emission Measurement at Semi-Anechoic Chamber 93

10.3. Photo of 6dB Bandwidth, Emission Limitations, Band Edges, Power Spectral Density Measurement
94

10.4. Photo of Maximum Peak Output Measurement..... 94

TEST REPORT CERTIFICATION

Applicant	:	LG Electronics Inc.
Manufacturer	:	LG Innoteck Co., Ltd.
EUT Description	:	HD Compact Network Camera
FCC ID	:	BEJ9QK-LW130W
	(A) Model No.	: LW130W
	(B) Serial No.	: N/A
	(C) Brand	: LG
	(D) Power Supply	: DC 5V
	(E) Test Voltage	: AC 120V/60Hz Via AC Adapter

Measurement Procedure Used:

FCC RULES AND REGULATIONS PART 15 SUBPART C, Oct. 2010
AND ANSI C63.4/2003

(FCC CFR 47 Part 15C, §15.207 and §15.209 and §15.247)

The device described above was tested by AUDIX Technology Corporation to determine the maximum emission levels emanating from the device. The maximum emission levels were compared to the FCC Part 15 subpart C limits.

The measurement results are contained in this test report and AUDIX Technology Corporation is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT to be technically compliant with the FCC official limits.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of AUDIX Technology Corporation.

Date of Test : Sep. 13 ~ 16, 2011 Date of Report : Sep. 16, 2011

Producer : Tina Huang
(Tina Huang/Administrator)

Signatory : Ben Cheng
(Ben Cheng/Manager)

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

Description	:	HD Compact Network Camera
Model Number	:	LW130W
Serial Number	:	N/A
Brand	:	LG
FCC ID	:	BEJ9QK-LW130W
Applicant	:	LG Electronics Inc. 19-1, Cheongho-ri, Jinwi-myeon, Pyeongtaek-si, Gyeonggi-do, 451-713 Korea
Manufacturer	:	LG Innotek Co., Ltd. #978-1, Jangduk-Dong, Gwangsan-Gu, Gwang-ju, Republic of Korea.
Wireless Module	:	GEMTEK, M/N: GB9619, 1T1R
Fundamental Range	:	2412MHz ~ 2462MHz
Frequency Channel	:	802.11b/g: 11 channels 802.11n-HT20: 11 channels
Radio Technology	:	802.11b: DSSS Modulation (DBPSK/DQPSK/CCK) 802.11g/n: OFDM Modulation (BPSK/QPSK/16QAM/64QAM)
Data Transfer Rate	:	802.11b: 1/2/5.5/11Mbps 802.11g: 6/9/12/18/24/36/48/54Mbps 802.11n: up to 72.2Mbps
Antenna Gain	:	2.19dBi (Peak)
AC Adapter	:	LG, M/N DA-15F05 I/P: 100-240V~, 50-60Hz, 0.5A Max O/P: 5V, 3A DC Cord: Non-Shielded, Undetached, 1.5m AC Cord: Non-Shielded, Detached, 1.8m (2 Pin)

Date of Receipt of Sample : Sep. 09, 2011

Date of Test : Sep. 13 ~ 16, 2011

1.2. Data Rate Relative to Output Power

This average power table is measured in channel 1 for all data rates. Pursuant to this table, the lowest data rate is the worst case and is tested for all test items listed in this report.

802.11b			
Channel	Modulation	Date Rate(Mbps)	Power(dBm)
1	DBPSK	1	15.51
1	DQPSK	2	15.49
1	CCK	5.5	15.47
1	CCK	11	15.46

802.11g			
Channel	Modulation	Date Rate(Mbps)	Power(dBm)
1	BPSK	6	14.12
1	BPSK	9	14.11
1	QPSK	12	14.11
1	QPSK	18	14.08
1	16-QAM	24	14.07
1	16-QAM	36	14.03
1	64-QAM	48	14.02
1	64-QAM	54	14.00

802.11n-HT20			
Channel	Modulation	Date Rate(Mbps)	Power(dBm)
1	BPSK	6.5	11.56
1	QPSK	13.0	11.55
1	QPSK	19.5	11.53
1	16-QAM	26.0	11.50
1	16-QAM	39.0	11.49
1	64-QAM	52.0	11.47
1	64-QAM	58.5	11.46
1	64-QAM	65.0	11.42

1.3. Test Configuration for Each Test Item

Test Item	802.11b	802.11g	802.11n-HT20
	Data Rate for Test(Mbps)		
6dB BW	1	6	6.5
Peak Power Spectral Density	1	6	6.5
Peak Output Power	1	6	6.5
Band Edge	1	6	6.5
Conducted Spurious Emission	1	6	6.5
Radiated Spurious Emission	1	6	6.5

1.4. Tested Supporting System Details

1.4.1. NOTEBOOK PC

Model Number : MS2306
 Serial Number : LXR7Q0202404505CFA2000
 Brand : acer
 LAN Cable : Non-Shielded, Detachable, 1.5m
 AC Adapter : Delta, M/N ADP-90CD DB
 I/P: 100-240V~, 1.5A, 50-60Hz
 O/P: 19V, 4.74A
 DC Cord: Non-Shielded, Undetachable, 1.8m
 Bonded a ferrite core
 Power Cord : Non-Shielded, Detachable, 1.8m

1.5. Description of Test Facility

Name of Firm : **AUDIX Technology Corporation**
 EMC Department
 No. 53-11, Dingfu, Linkou Dist., New Taipei
 City 244, Taiwan, R.O.C.

Test Site : **No. 3 Shielded Room**
 (C3/Semi-AC) No. 67-4, Dingfu, Linkou Dist., New Taipei
 City 244, Taiwan, R.O.C.

Semi-Anechoic Chamber
 No. 53-11, Dingfu, Linkou Dist., New Taipei
 City 244, Taiwan, R.O.C.
 Federal Communication Commission
 Registration Number: 90993
 Date of Renewal: May 14, 2009

NVLAP Lab. Code : 200077-0

TAF Accreditation No : 1724

1.6. Measurement Uncertainty

Test Item	Frequency Range	Uncertainty (dB)
Conduction Test	150kHz~30MHz	±1.73dB
Radiation Test (Distance: 3m)	30MHz~300MHz	± 2.91dB
	300MHz~1000MHz	± 2.74dB
	Above 1GHz	± 5.02dB

Remark : Uncertainty = $k_{uc}(y)$

Test Item	Uncertainty
6dB Bandwidth	± 0.05kHz
Emission Limitations	± 0.13dB
Maximum peak output power	± 0.33dBm
Band edges	± 0.13dB
Power spectral density	± 0.13dB

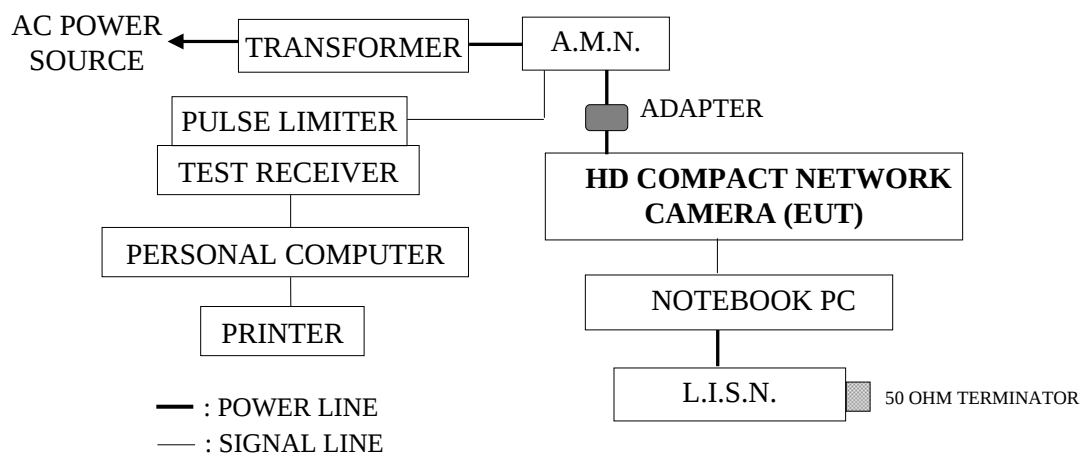
2. CONDUCTED EMISSION MEASUREMENT

2.1. Test Equipment

The following test equipment was used during the conducted emission measurement :
(No. 3 Shielded Room)

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Test Receiver	R & S	ESCS30	100337	Apr. 11, 11'	Apr. 10, 12'
2.	A.M.N.	Kyoritsu	KNW-244C	8-1373-5	Jul. 14, 11'	Jul. 13, 12'
3.	L.I.S.N.	Kyoritsu	KNW-407	8-1370-9	Jun. 09, 11'	Jun. 08, 12'
4.	Pulse Limiter	R & S	ESH3Z2	100041	Feb. 01, 11'	Jan. 31, 12'

2.2. Block Diagram of Test Setup



2.3. Conducted Emission Limits (§15.207)

Frequency	Maximum RF Line Voltage	
	Quasi-Peak Level	Average Level
150kHz ~ 500kHz	66 ~ 56 dB μ V	56 ~ 46 dB μ V
500kHz ~ 5MHz	56 dB μ V	46 dB μ V
5MHz ~ 30MHz	60 dB μ V	50 dB μ V

Remark 1.: If the average limit is met when using a Quasi-Peak detector, the EUT shall be deemed to meet both limits and measurement with the average detector is unnecessary.

2.: The lower limit applies at the band edges.

2.4. Operating Condition of EUT

- 2.4.1. Set up the EUT and simulator as shown on 2.2.
- 2.4.2. Turn on the power of all equipment.
- 2.4.3. The EUT was linked to the Notebook PC, the Notebook PC was running test program "Telnet" and to set the EUT on transmitting during all testing.

2.5. Test Procedure

The EUT was put on table which was above the ground by 80cm and its AC adapter's power cord connected to the AC mains through an Artificial Mains Network (A.M.N.). The other peripheral devices power cord connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provided a 50 ohm coupling impedance for the measuring equipment. (Please refer to the block diagram of the test setup and photographs.)

Both sides of A.C. line were checked for maximum conducted interference. In order to find the maximum emission, the relative positions simulators of the interface cables should be manipulated according to ANSI C63.4-2003, RSS-Gen and RSS-210 regulation during conducted measurement.

The bandwidth of the R&S Test Receiver ESCS30 was set at 9kHz.

The frequency range from 150kHz to 30MHz was checked.

All the final readings from Test Receiver were measured with the Quasi-Peak detector and Average detector. Remark: If the Average limit is met when using a Quasi-Peak detector, the Average detector is unnecessary)

2.6. Conducted Emission Measurement Results

PASSED.

(All the emissions not reported below are too low against the prescribed limits.)

The EUT was performed during this section testing and all the test results are attached in next pages.

EUT : HD Compact Network Camera

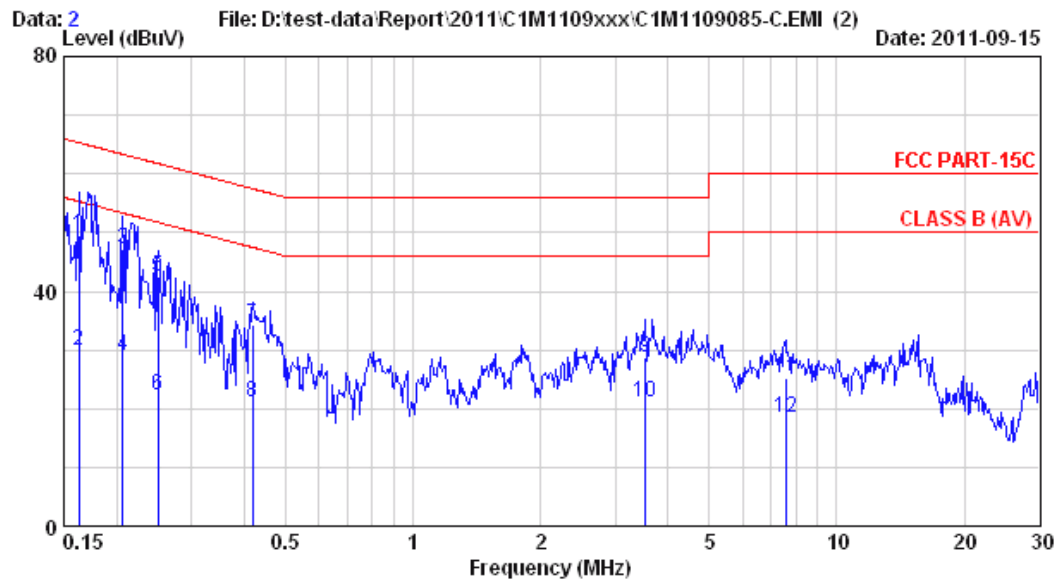
M/N : LW130W

Test Date : Sep. 15, 2011 Temperature : 25°C Humidity : 52%

Reference Test Data : Neutral # 2; Line # 1



AUDIX TECHNOLOGY Corp. EMC Laboratory
No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
County, Taiwan R.O.C. Post Code:24443
Tel:+886-2-26092133 Fax:+886-2-26099303
Email:emc@audixtech.com



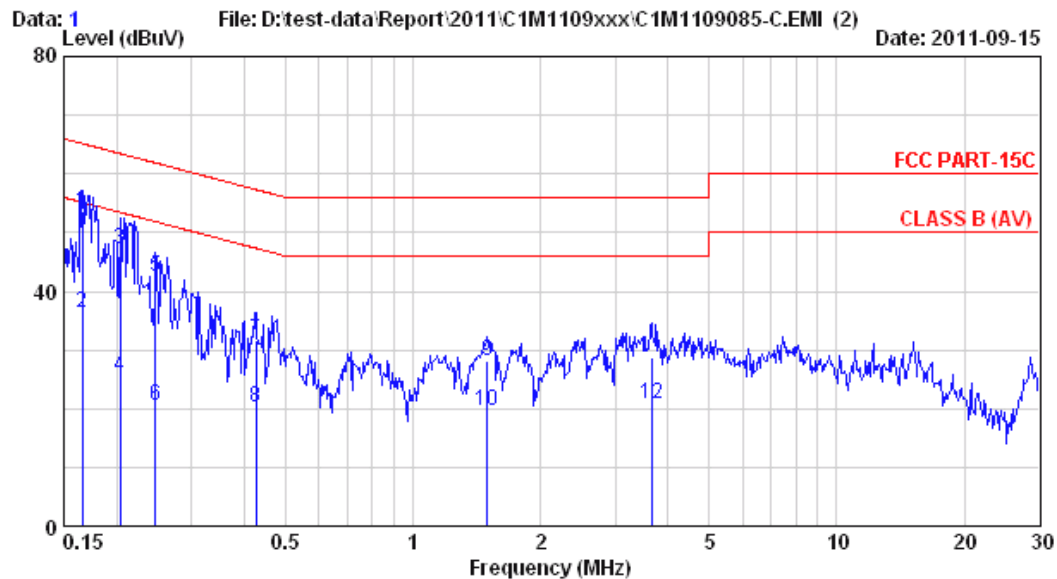
Site : No.3 Shielded Room Data : 2
Condition : KNW-244C Phase : NEUTRAL
Limit : FCC PART-15C
Env. / Ins. : 25°C / 52% ESCS 30 (337) Engineer: Edward
EUT M/N : LW130W
Power Rating : 120Vac / 60Hz
Test Mode : LINK PC (OPERATING)

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.162	0.13	0.20	49.12	49.45	65.34	15.89	QP
2	0.162	0.13	0.20	29.53	29.86	55.34	25.48	AVERAGE
3	0.206	0.10	0.20	46.75	47.05	63.36	16.31	QP
4	0.206	0.10	0.20	28.79	29.09	53.36	24.27	AVERAGE
5	0.251	0.10	0.20	42.22	42.52	61.73	19.21	QP
6	0.251	0.10	0.20	22.02	22.32	51.73	29.41	AVERAGE
7	0.419	0.10	0.20	33.86	34.16	57.46	23.30	QP
8	0.419	0.10	0.20	20.94	21.24	47.46	26.22	AVERAGE
9	3.547	0.20	0.40	28.05	28.65	56.00	27.35	QP
10	3.547	0.20	0.40	20.55	21.15	46.00	24.85	AVERAGE
11	7.566	0.27	0.60	24.25	25.12	60.00	34.88	QP
12	7.566	0.27	0.60	17.71	18.58	50.00	31.42	AVERAGE

Remarks: 1.Emission Level= AMN Factor + Cable Loss + Reading.
2.If the average limit is met when using a quasi-peak detector ,the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



AUDIX TECHNOLOGY Corp. EMC Laboratory
No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
County, Taiwan R.O.C. Post Code:24443
Tel:+886-2-26092133 Fax:+886-2-26099303
Email:emc@audixtech.com



Site : No.3 Shielded Room Data : 1
Condition : KNW-244C Phase : LINE
Limit : FCC PART-15C
Env. / Ins. : 25°C / 52% ESCS 30 (337) Engineer: Edward
EUT M/N : LW130W
Power Rating : 120Vac / 60Hz
Test Mode : LINK PC (OPERATING)

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.166	0.13	0.20	53.37	53.70	65.16	11.47	QP
2	0.166	0.13	0.20	35.98	36.31	55.16	18.86	AVERAGE
3	0.204	0.10	0.20	46.95	47.25	63.45	16.20	QP
4	0.204	0.10	0.20	25.12	25.42	53.45	28.03	AVERAGE
5	0.247	0.10	0.20	42.32	42.62	61.86	19.24	QP
6	0.247	0.10	0.20	20.12	20.42	51.86	31.44	AVERAGE
7	0.426	0.10	0.20	31.27	31.57	57.33	25.76	QP
8	0.426	0.10	0.20	19.91	20.21	47.33	27.12	AVERAGE
9	1.495	0.10	0.40	27.51	28.01	56.00	27.99	QP
10	1.495	0.10	0.40	19.13	19.63	46.00	26.37	AVERAGE
11	3.661	0.19	0.40	28.12	28.71	56.00	27.29	QP
12	3.661	0.19	0.40	20.08	20.67	46.00	25.33	AVERAGE

Remarks: 1.Emission Level= AMN Factor + Cable Loss + Reading.
2.If the average limit is met when using a quasi-peak detector ,the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

3. RADIATED EMISSION MEASUREMENT

3.1. Test Equipment

The following test equipment was used during the radiated emission measurement:

3.1.1. For Frequency Range 30MHz~1000MHz (at Semi-Anechoic Chamber)

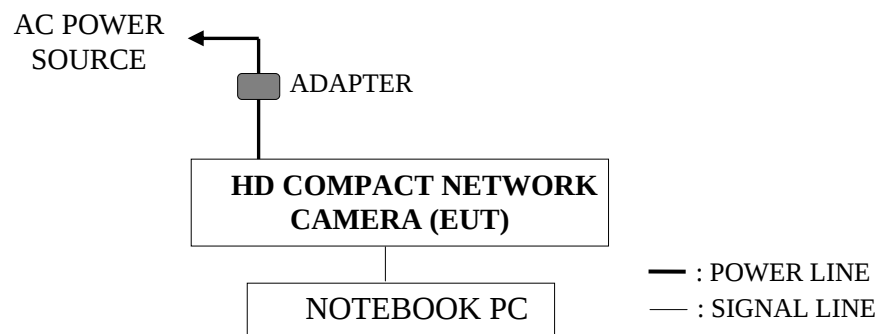
Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Spectrum Analyzer	Agilent	E4446A	US44300366	Aug. 04, 11'	Aug. 03, 12'
2.	Test Receiver	R & S	ESCS30	100338	Jul. 12, 11'	Jul. 11, 12'
3.	Amplifier	HP	8447D	2944A06305	Feb. 10, 11'	Feb. 09, 12'
4.	Log Periodic Antenna	Schwarzbeck	UHALP 9108-A	0810	Mar. 08, 11'	Mar. 07, 12'
5.	Biconical Antenna	CHASE	VBA6106A	1264	Mar. 08, 11'	Mar. 07, 12'

3.1.2. For Frequency Above 1GHz (at Semi-Anechoic Chamber)

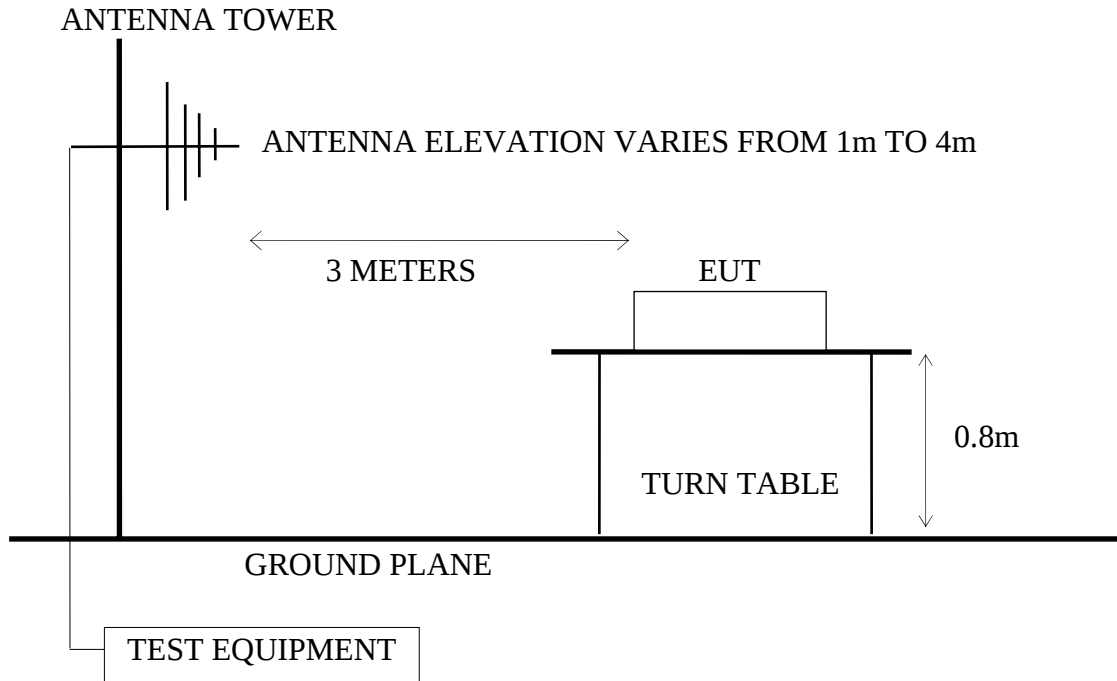
Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Spectrum Analyzer	Agilent	E4446A	US44300366	Aug. 04, 11'	Aug. 03, 12'
2.	Test Receiver	R & S	ESCS30	100338	Jul. 12, 11'	Jul. 11, 12'
3.	Amplifier	HP	8449B	3008A00529	Dec. 10, 10'	Dec. 09, 11'
4.	Horn Antenna	EMCO	3115	9112-3775	May 09, 11'	May 08, 12'
5.	Horn Antenna	EMCO	3116	2653	Oct. 04, 10'	Oct. 03, 11'
6.	2.4GHz Notch Filter	EWT	EWT-14-007 0-R1	G2	Dec. 05, 10'	Dec. 04, 11'
7.	3.5G High Pass Filter	HP	84300-80038	005	Jan. 05, 11'	Jan. 04, 12'

3.2. Test Setup

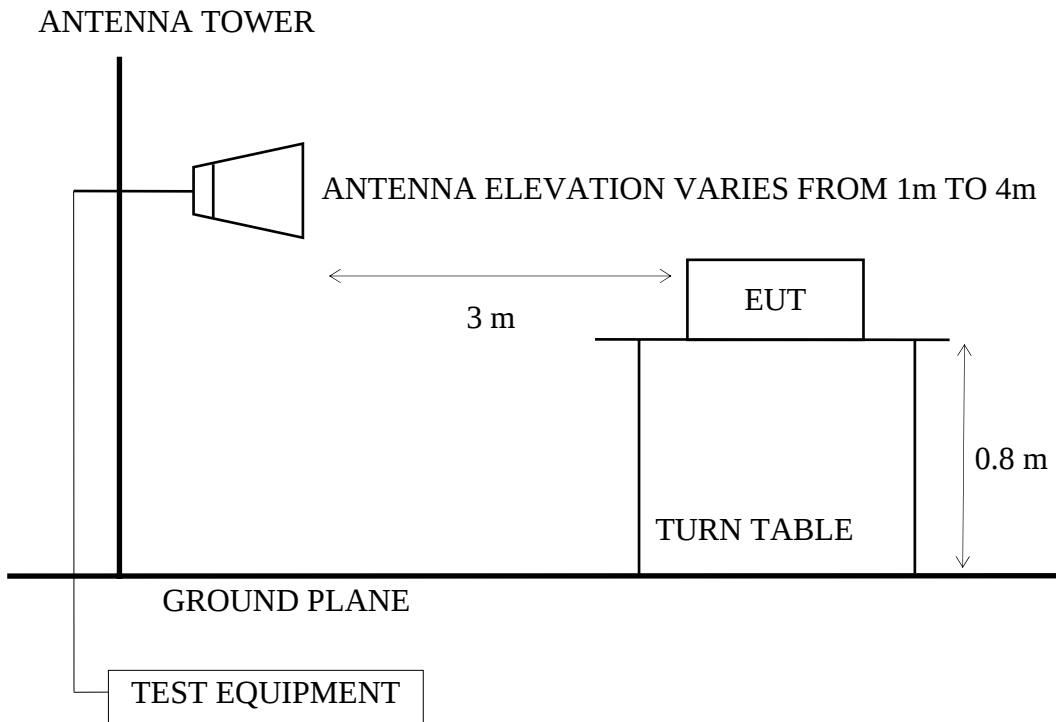
3.2.1. Block Diagram of connection between EUT and simulators



3.2.2. Semi-Anechoic Chamber (3m) Setup Diagram for 30-1000MHz



3.2.3. Semi-Anechoic Chamber (3m) Setup Diagram for above 1GHz



3.3. Radiated Emission Limits (§15.209)

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMITS	
		$\mu\text{V/m}$	$\text{dB}\mu\text{V/m}$
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
Above 960	3	500	54.0
Above 1000	3	74.0 $\text{dB}\mu\text{V/m}$ (Peak) 54.0 $\text{dB}\mu\text{V/m}$ (Average)	

Remark : (1) Emission level ($\text{dB}\mu\text{V/m}$) = 20 log Emission level ($\mu\text{V/m}$)

(2) The tighter limit applies at the edge between two frequency bands.

(3) Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

3.4. Operating Condition of EUT

3.4.1. Set up the EUT (HD Compact Network Camera) and simulator as shown on 3.2.

3.4.2. To turn on the power of all equipments.

3.4.3. The EUT was linked to Notebook PC. The Notebook PC using test program "Telnet".

3.4.4. This device supports 802.11/b/g/n-HT20, 802.11n-HT40 is not available, we performed 802.11/b/g/n-HT20 modes pre-scan high, middle, low channels for each mode for spurious emission and listed the worst channel of each mode in test report.

The worst channel of each mode as following:

Mode	Type of Network	Channel
1.	802.11b	CH 1
2.	802.11g	CH 11
3.	802.11n-HT20	CH 11

3.4.5. The EUT was set to continuously transmit signals during testing.

3.5. Test Procedure

The EUT and its simulators were placed on a turn table which was 0.8 meter above the ground. The turn table rotated 360 degrees to determine the position of the maximum emission level. EUT was set to 3 meters away from the receiving antenna which was mounted on an antenna tower. The antenna moved up and down between 1 to 4 meters to find out the maximum emission level. Broadband antenna such as calibrated biconical and log-periodical antenna or horn antenna were used as a receiving antenna. Both horizontal and vertical polarization of the antenna were set on measurement. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.4-2003 regulation during radiated measurement.

The bandwidth of the R&S Test Receiver was set at 120kHz. (For 30MHz to 1000MHz)

The resolution bandwidth and video bandwidth of test spectrum analyzer is 1MHz for peak detection (PK) at frequency above 1GHz.

The resolution bandwidth of test spectrum analyzer is 1MHz and the video bandwidth is 10Hz for average detection (AV) at frequency above 1GHz.

The frequency range from 30MHz to 25GHz (Up to 10th harmonics from fundamental frequency) was checked. 30MHz to 1000MHz was measured with Quasi-Peak detector. Above 1GHz was measured with peak and average detector.

For average reading in frequency from 5.5GHz to 25GHz, we checked it in 1 meter distance and with a shorter cable 2 meter instead of original's. There is no signal exist.

3.6. Test Results

PASSED.

(All emissions not reported below are too low against the prescribed limits.)

EUT : HD Compact Network Camera M/N : LW130W

Test Date : Sep. 15, 2011 Temperature : 26°C Humidity : 58%

For Frequency Range 30MHz~1000MHz:

The EUT with following test modes was performed during this section testing and all the test results are listed in section 3.6.1.

Mode	Type of Network	Channel	Frequency	Test Mode	Reference Test Data	
					Horizontal	Vertical
1.	802.11b	CH 1	2412MHz	Transmit	# 1	# 2
2.	802.11g	CH 11	2462MHz	Transmit	# 1	# 2
3.	802.11n-HT20	CH 11	2462MHz	Transmit	# 1	# 2

* Above all final readings were measured with Quasi-Peak detector.

For Frequency above 1GHz:

The EUT with following test modes was performed during this section testing and all the test results are listed in section 3.6.2.

Mode	Type of Network	Channel	Frequency	Test Mode	Reference Test Data			
					Horizontal		Vertical	
					Peak	Average	Peak	Average
1.	802.11b	CH 1	2412MHz	Transmit	# 3, 10	# 5, 11	# 4, 9	# 6, 12
2.	802.11g	CH 11	2462MHz	Transmit	# 6	# 4	# 5	# 3
3.	802.11n-HT20	CH 11	2462MHz	Transmit	# 4	# 6	# 3	# 5

Note: Above all final readings were measured with Peak detector.

For Restricted Bands:

The EUT was tested in restricted bands and all the test results are listed in section 3.6.3. (The restricted bands defined in part 15.205(a))

Mode	Type of Network	Channel	Frequency	Test Mode	Reference Test Data	
					Horizontal	Vertical
1.	802.11b	CH 1	2412MHz	Transmit	# 2, # 3	# 1, # 4
2.		CH 11	2462MHz		# 5, # 8	# 6, # 7
3.	802.11g	CH 1	2412MHz	Transmit	# 1, # 2	# 3, # 4
4.		CH 11	2462MHz		# 7, # 8	# 5, # 6
5.	802.11n-HT20	CH 1	2412MHz	Transmit	# 2, # 3	# 1, # 4
6.		CH 11	2462MHz		# 6, # 7	# 5, # 8

3.6.1. For 30-1000MHz Frequency Range Measurement Results

802.11b, Transmit, Frequency: 2412MHz

Site no. : A/C Chamber Data no. : 1
 Dis. / Ant. : 3m VBA6106A/UHALP9108A Ant. pol. : HORIZONTAL
 Limit : FCC PART-15C
 Env. / Ins. : E4446A 26°C/58% □Jarwei Wang
 EUT : LW130W
 Power Rating : 120Vac/60Hz
 Test Mode : TX2412MHz (802.11b)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	102.750	17.40	2.10	5.51	25.01	43.50	18.49	QP
2	182.290	21.33	2.90	3.10	27.33	43.50	16.17	QP
3	518.880	20.01	6.90	1.44	28.35	46.00	17.65	QP
4	698.330	23.36	6.50	2.64	32.50	46.00	13.50	QP
5	870.020	25.71	7.20	2.35	35.26	46.00	10.74	QP
6	971.870	26.79	7.70	2.29	36.78	54.00	17.22	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

Site no. : A/C Chamber Data no. : 2
 Dis. / Ant. : 3m VBA6106A/UHALP9108A Ant. pol. : VERTICAL
 Limit : FCC PART-15C
 Env. / Ins. : E4446A 26°C/58% □Jarwei Wang
 EUT : LW130W
 Power Rating : 120Vac/60Hz
 Test Mode : TX2412MHz (802.11b)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	80.440	13.81	1.89	7.43	23.13	40.00	16.87	QP
2	195.870	21.85	3.00	3.34	28.19	43.50	15.31	QP
3	532.460	19.64	7.00	2.03	28.67	46.00	17.33	QP
4	710.940	23.54	6.51	1.91	31.95	46.00	14.05	QP
5	840.920	25.08	7.10	2.52	34.70	46.00	11.30	QP
6	969.930	26.83	7.69	2.80	37.33	54.00	16.67	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

802.11g, Transmit, Frequency: 2462MHz

Site no. : A/C Chamber Data no. : 1
 Dis. / Ant. : 3m VBA6106A/UHALP9108A Ant. pol. : HORIZONTAL
 Limit : FCC PART-15C
 Env. / Ins. : E4446A 26°C/58% □Jarwei Wang
 EUT : LW130W
 Power Rating : 120Vac/60Hz
 Test Mode : TX2462MHz (802.11g)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	102.750	17.40	2.10	6.99	26.49	43.50	17.01	QP
2	521.790	19.91	6.90	6.84	33.66	46.00	12.34	QP
3	572.230	21.12	6.50	6.11	33.72	46.00	12.28	QP
4	774.960	24.26	6.80	6.69	37.75	46.00	8.25	QP
5	861.290	26.09	7.20	6.49	39.78	46.00	6.22	QP
6	973.810	26.64	7.70	7.49	41.84	54.00	12.16	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

Site no. : A/C Chamber Data no. : 2
 Dis. / Ant. : 3m VBA6106A/UHALP9108A Ant. pol. : VERTICAL
 Limit : FCC PART-15C
 Env. / Ins. : E4446A 26°C/58% □Jarwei Wang
 EUT : LW130W
 Power Rating : 120Vac/60Hz
 Test Mode : TX2462MHz (802.11g)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	116.330	18.78	2.30	6.20	27.28	43.50	16.22	QP
2	513.060	19.95	6.80	6.32	33.07	46.00	12.93	QP
3	572.230	21.12	6.50	6.78	34.39	46.00	11.61	QP
4	705.120	23.56	6.60	6.45	36.61	46.00	9.39	QP
5	735.190	22.18	6.68	7.34	36.20	46.00	9.80	QP
6	969.930	26.83	7.69	6.49	41.02	54.00	12.98	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

802.11n-HT20, Transmit, Frequency: 2462MHz

Site no. : A/C Chamber Data no. : 1
 Dis. / Ant. : 3m VBA6106A/UHALP9108A Ant. pol. : HORIZONTAL
 Limit : FCC PART-15C
 Env. / Ins. : E4446A 26°C/58% □Jarwei Wang
 EUT : LW130W
 Power Rating : 120Vac/60Hz
 Test Mode : TX2462MHz (802.11n-HT20)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	83.350	14.41	1.90	14.74	31.05	40.00	8.95	QP
2	102.750	17.40	2.10	8.39	27.89	43.50	15.61	QP
3	162.890	20.87	2.70	8.64	32.21	43.50	11.29	QP
4	669.230	22.82	6.40	7.53	36.75	46.00	9.25	QP
5	831.220	24.79	7.10	7.51	39.40	46.00	6.60	QP
6	966.050	26.89	7.70	6.93	41.52	54.00	12.48	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

Site no. : A/C Chamber Data no. : 2
 Dis. / Ant. : 3m VBA6106A/UHALP9108A Ant. pol. : VERTICAL
 Limit : FCC PART-15C
 Env. / Ins. : E4446A 26°C/58% □Jarwei Wang
 EUT : LW130W
 Power Rating : 120Vac/60Hz
 Test Mode : TX2462MHz (802.11n-HT20)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	57.160	13.77	1.60	10.75	26.12	40.00	13.88	QP
2	80.440	13.81	1.89	8.50	24.20	40.00	15.80	QP
3	353.980	15.64	4.30	8.76	28.70	46.00	17.30	QP
4	521.790	19.91	6.90	7.43	34.25	46.00	11.75	QP
5	676.020	22.89	6.40	7.00	36.28	46.00	9.72	QP
6	959.260	26.38	7.60	7.21	41.20	46.00	4.80	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

3.6.2. For Above 1GHz Frequency Range Measurement Results

802.11b, Transmit, Frequency: 2412MHz

Site no. : A/C Chamber Data no. : 3
 Dis. / Ant. : 3m 3115(3775) Ant. pol. : HORIZONTAL
 Limit : FCC PART-15C (1G-PK)
 Env. / Ins. : E4446A 26°C/58% □Jarwei Wang
 EUT : LW130W
 Power Rating : 120Vac/60Hz
 Test Mode : TX2412MHz (802.11b)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2233.120	27.94	6.14	12.36	46.44	74.00	27.56	Peak
2	2258.320	27.96	6.17	16.62	50.75	74.00	23.25	Peak
3	2338.960	28.04	6.28	22.71	57.03	74.00	16.97	Peak
4	2577.520	28.52	6.59	16.98	52.09	74.00	21.91	Peak
5	2594.320	28.58	6.61	14.69	49.89	74.00	24.11	Peak
6	2658.160	28.83	6.71	12.04	47.59	74.00	26.41	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

Site no. : A/C Chamber Data no. : 5
 Dis. / Ant. : 3m 3115(3775) Ant. pol. : HORIZONTAL
 Limit : FCC PART-15C (1G-AV)
 Env. / Ins. : E4446A 26°C/58% □Jarwei Wang
 EUT : LW130W
 Power Rating : 120Vac/60Hz
 Test Mode : TX2412MHz (802.11b)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2233.120	27.94	6.14	9.76	43.84	54.00	10.16	Average
2	2258.320	27.96	6.17	13.59	47.72	54.00	6.28	Average
3	2338.960	28.04	6.28	18.71	53.03	54.00	0.97	Average
4	2577.520	28.52	6.59	14.08	49.18	54.00	4.82	Average
5	2594.320	28.58	6.61	11.77	46.96	54.00	7.04	Average
6	2658.160	28.83	6.71	9.30	44.85	54.00	9.15	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

Site no. : A/C Chamber
 Dis. / Ant. : 3m 3115(3775)
 Limit : FCC PART-15C (1G-PK)
 Env. / Ins. : E4446A 26°C/58%
 EUT : LW130W
 Power Rating : 120Vac/60Hz
 Test Mode : TX2412MHz (802.11b)

Data no. : 4
 Ant. pol. : VERTICAL
 □Jarwei Wang

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2258.320	27.96	6.17	14.51	48.64	74.00	25.36	Peak
2	2338.960	28.04	6.28	20.29	54.61	74.00	19.39	Peak
3	2540.560	28.39	6.53	13.38	48.30	74.00	25.70	Peak
4	2577.520	28.52	6.59	15.60	50.71	74.00	23.29	Peak
5	2594.320	28.58	6.61	13.82	49.02	74.00	24.98	Peak
6	2658.160	28.83	6.71	11.37	46.92	74.00	27.08	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

Site no. : A/C Chamber
 Dis. / Ant. : 3m 3115(3775)
 Limit : FCC PART-15C (1G-AV)
 Env. / Ins. : E4446A 26°C/58%
 EUT : LW130W
 Power Rating : 120Vac/60Hz
 Test Mode : TX2412MHz (802.11b)

Data no. : 6
 Ant. pol. : VERTICAL
 □Jarwei Wang

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2258.320	27.96	6.17	11.28	45.41	54.00	8.59	Average
2	2338.960	28.04	6.28	17.29	51.61	54.00	2.39	Average
3	2540.560	28.39	6.53	10.99	45.91	54.00	8.09	Average
4	2577.520	28.52	6.59	12.50	47.61	54.00	6.39	Average
5	2594.320	28.58	6.61	11.52	46.71	54.00	7.29	Average
6	2658.160	28.83	6.71	7.87	43.42	54.00	10.58	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

Site no. : A/C Chamber
 Dis. / Ant. : 3m 3115(3775)
 Limit : FCC PART-15C (1G-PK)
 Env. / Ins. : E4446A 26°C/58%
 EUT : LW130W
 Power Rating : 120Vac/60Hz
 Test Mode : TX2412MHz (802.11b)

Data no. : 10
 Ant. pol. : HORIZONTAL
 □Jarwei Wang

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	4828.000	32.96	9.14	10.87	52.96	74.00	21.04	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

Site no. : A/C Chamber
 Dis. / Ant. : 3m 3115(3775)
 Limit : FCC PART-15C (1G-AV)
 Env. / Ins. : E4446A 26°C/58%
 EUT : LW130W
 Power Rating : 120Vac/60Hz
 Test Mode : TX2412MHz (802.11b)

Data no. : 11
 Ant. pol. : HORIZONTAL
 □Jarwei Wang

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	4828.000	32.96	9.14	8.11	50.20	54.00	3.80	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

Site no. : A/C Chamber
 Dis. / Ant. : 3m 3115(3775)
 Limit : FCC PART-15C (1G-PK)
 Env. / Ins. : E4446A 26°C/58%
 EUT : LW130W
 Power Rating : 120Vac/60Hz
 Test Mode : TX2412MHz (802.11b)

Data no. : 9
 Ant. pol. : VERTICAL
 □Jarwei Wang

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	4828.000	32.96	9.14	14.87	56.96	74.00	17.04	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

Site no. : A/C Chamber
 Dis. / Ant. : 3m 3115(3775)
 Limit : FCC PART-15C (1G-AV)
 Env. / Ins. : E4446A 26°C/58%
 EUT : LW130W
 Power Rating : 120Vac/60Hz
 Test Mode : TX2412MHz (802.11b)

Data no. : 12
 Ant. pol. : VERTICAL
 □Jarwei Wang

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	4828.000	32.96	9.14	7.73	49.82	54.00	4.18	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

802.11g, Transmit, Frequency: 2462MHz

Site no. : A/C Chamber
 Dis. / Ant. : 3m 3115(3775)
 Limit : FCC PART-15C (1G-PK)
 Env. / Ins. : E4446A 26°C/58%
 EUT : LW130W
 Power Rating : 120Vac/60Hz
 Test Mode : TX2462MHz (802.11g)

Data no. : 6
 Ant. pol. : HORIZONTAL
 □Jarwei Wang

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2308.720	28.01	6.23	11.74	45.99	74.00	28.01	Peak
2	2367.520	28.06	6.31	10.48	44.86	74.00	29.14	Peak
3	2543.920	28.39	6.54	13.79	48.72	74.00	25.28	Peak
4	2641.360	28.77	6.69	10.61	46.07	74.00	27.93	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

Site no. : A/C Chamber
 Dis. / Ant. : 3m 3115(3775)
 Limit : FCC PART-15C (1G-AV)
 Env. / Ins. : E4446A 26°C/58%
 EUT : LW130W
 Power Rating : 120Vac/60Hz
 Test Mode : TX2462MHz (802.11g)

Data no. : 4
 Ant. pol. : HORIZONTAL
 □Jarwei Wang

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2308.720	28.01	6.23	9.51	43.75	54.00	10.25	Average
2	2367.520	28.06	6.31	8.04	42.42	54.00	11.58	Average
3	2543.920	28.39	6.54	11.39	46.32	54.00	7.68	Average
4	2641.360	28.77	6.69	9.54	45.00	54.00	9.00	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

Site no. : A/C Chamber
 Dis. / Ant. : 3m 3115(3775)
 Limit : FCC PART-15C (1G-PK)
 Env. / Ins. : E4446A 26°C/58%
 EUT : LW130W
 Power Rating : 120Vac/60Hz
 Test Mode : TX2462MHz (802.11g)

Data no. : 5
 Ant. pol. : VERTICAL
 □Jarwei Wang

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2313.760	28.01	6.24	11.87	46.13	74.00	27.87	Peak
2	2501.920	28.20	6.47	10.40	45.07	74.00	28.93	Peak
3	2548.960	28.39	6.54	13.98	48.92	74.00	25.08	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

Site no. : A/C Chamber
 Dis. / Ant. : 3m 3115(3775)
 Limit : FCC PART-15C (1G-AV)
 Env. / Ins. : E4446A 26°C/58%
 EUT : LW130W
 Power Rating : 120Vac/60Hz
 Test Mode : TX2462MHz (802.11g)

Data no. : 3
 Ant. pol. : VERTICAL
 □Jarwei Wang

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2313.760	28.01	6.24	10.69	44.95	54.00	9.05	Average
2	2501.920	28.20	6.47	8.93	43.60	54.00	10.40	Average
3	2548.960	28.39	6.54	11.85	46.78	54.00	7.22	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

802.11n-HT20, Transmit, Frequency: 2462MHz

Site no. : A/C Chamber Data no. : 4
 Dis. / Ant. : 3m 3115(3775) Ant. pol. : HORIZONTAL
 Limit : FCC PART-15C (1G-PK)
 Env. / Ins. : E4446A 26°C/58% □Jarwei Wang
 EUT : LW130W
 Power Rating : 120Vac/60Hz
 Test Mode : TX2462MHz (802.11n-HT20)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2305.360	28.01	6.23	12.11	46.36	74.00	27.64	Peak
2	2548.960	28.39	6.54	12.79	47.73	74.00	26.27	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

Site no. : A/C Chamber Data no. : 6
 Dis. / Ant. : 3m 3115(3775) Ant. pol. : HORIZONTAL
 Limit : FCC PART-15C (1G-AV)
 Env. / Ins. : E4446A 26°C/58% □Jarwei Wang
 EUT : LW130W
 Power Rating : 120Vac/60Hz
 Test Mode : TX2462MHz (802.11n-HT20)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2305.360	28.01	6.23	10.11	44.36	54.00	9.64	Average
2	2545.600	28.39	6.54	9.71	44.64	54.00	9.36	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

Site no. : A/C Chamber
 Dis. / Ant. : 3m 3115(3775)
 Limit : FCC PART-15C (1G-PK)
 Env. / Ins. : E4446A 26°C/58%
 EUT : LW130W
 Power Rating : 120Vac/60Hz
 Test Mode : TX2462MHz (802.11n-HT20)

Data no. : 3
 Ant. pol. : VERTICAL
 □Jarwei Wang

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2548.960	28.39	6.54	13.21	48.15	74.00	25.85	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

Site no. : A/C Chamber
 Dis. / Ant. : 3m 3115(3775)
 Limit : FCC PART-15C (1G-AV)
 Env. / Ins. : E4446A 26°C/58%
 EUT : LW130W
 Power Rating : 120Vac/60Hz
 Test Mode : TX2462MHz (802.11n-HT20)

Data no. : 5
 Ant. pol. : VERTICAL
 □Jarwei Wang

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2548.960	28.39	6.54	10.21	45.15	54.00	8.85	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

3.6.3. Restricted Bands Measurement Results

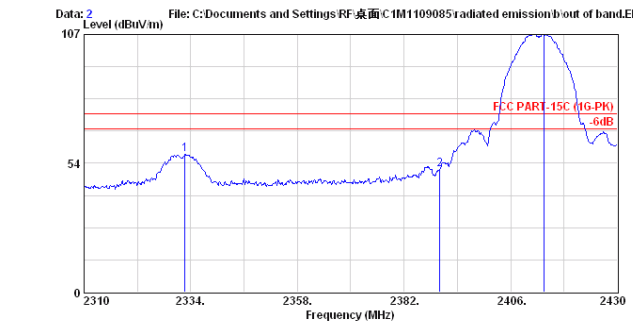
Date of Test : Sep. 15, 2011 Temperature : 26°C

EUT : HD Compact Network Camera Humidity : 58%

Test Mode : 802.11b, Transmit, Channel: 01, Frequency: 2412MHz



AUDIX TECHNOLOGY Corp. EMC Laboratory
No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
County, Taiwan R.O.C. Post Code:24443
Tel:+886-2-26092133 Fax:+886-2-26099303
Email:ttemc@ttemc.com.tw



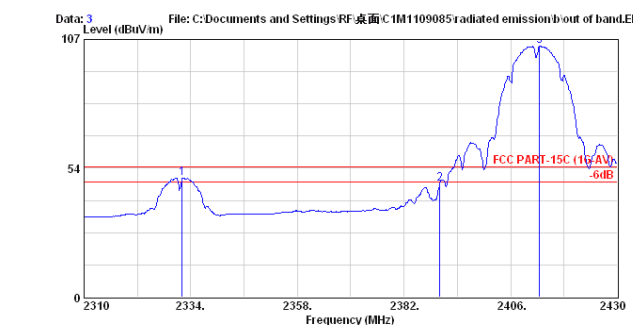
Site no. : A/C Chamber Data no. : 2
Dis. / Ant. : 3m 3115 (3775) Ant. pol. : HORIZONTAL
Limit : FCC PART-15C (1G-PK)
Env. / Ins. : E4446A 26°C/58% □Jarwei Wang
EUT : LW130W
Power Rating : 120Vac/60Hz
Test Mode : TX2412MHz (802.11b)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2332.680	28.03	6.27	23.04	57.34	74.00	16.66	Peak
2	2390.040	28.10	6.34	16.67	51.11	74.00	22.89	Peak
3	2413.440	28.11	6.36	73.12	107.60	74.00	-33.60	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



AUDIX TECHNOLOGY Corp. EMC Laboratory
No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
County, Taiwan R.O.C. Post Code:24443
Tel:+886-2-26092133 Fax:+886-2-26099303
Email:ttemc@ttemc.com.tw



Site no. : A/C Chamber Data no. : 3
Dis. / Ant. : 3m 3115 (3775) Ant. pol. : HORIZONTAL
Limit : FCC PART-15C (1G-AV)
Env. / Ins. : E4446A 26°C/58% □Jarwei Wang
EUT : LW130W
Power Rating : 120Vac/60Hz
Test Mode : TX2412MHz (802.11b)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2332.080	28.03	6.27	15.16	49.46	54.00	4.54	Average
2	2390.040	28.10	6.34	12.42	46.86	54.00	7.14	Average
3	2412.480	28.11	6.36	69.62	104.10	54.00	-50.10	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

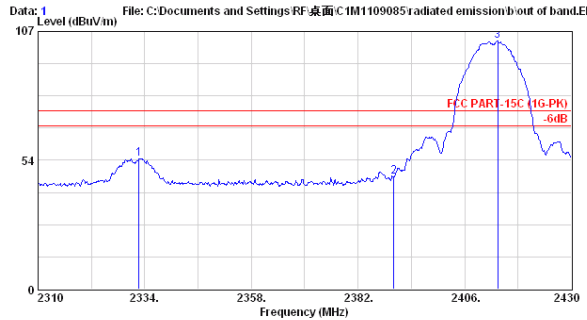
Date of Test : Sep. 15, 2011 Temperature : 26°C

EUT : HD Compact Network Camera Humidity : 58%

Test Mode : 802.11b, Transmit, Channel: 01, Frequency: 2412MHz



AUDIX TECHNOLOGY Corp. EMC Laboratory
No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
County, Taiwan R.O.C. Post Code:24443
Tel:+886-2-26092133 Fax:+886-2-26099303
Email:ttmc@ttmc.com.tw



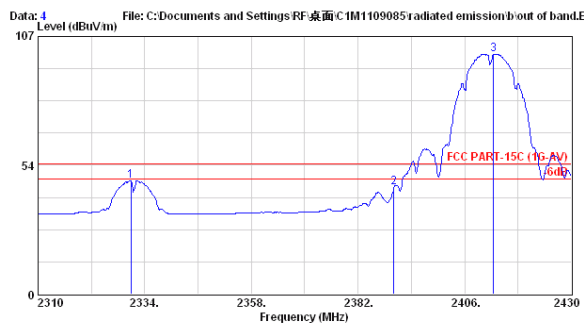
Site no. : A/C Chamber Data no. : 1
Dis. / Ant. : 3m 3115 (3775) Ant. pol. : VERTICAL
Limit : FCC PART-15C (1G-PK)
Env. / Ins. : E4446A 26°C/58% □Jarwei Wang
EUT : LW130W
Power Rating : 120Vac/60Hz
Test Mode : TX2412MHz (802.11b)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2332.680	28.03	6.27	19.78	54.08	74.00	19.92	Peak
2	2390.040	28.10	6.34	12.20	46.64	74.00	27.36	Peak
3	2413.440	28.11	6.36	68.79	103.27	74.00	-29.27	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



AUDIX TECHNOLOGY Corp. EMC Laboratory
No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
County, Taiwan R.O.C. Post Code:24443
Tel:+886-2-26092133 Fax:+886-2-26099303
Email:ttmc@ttmc.com.tw



Site no. : A/C Chamber Data no. : 4
Dis. / Ant. : 3m 3115 (3775) Ant. pol. : VERTICAL
Limit : FCC PART-15C (1G-AV)
Env. / Ins. : E4446A 26°C/58% □Jarwei Wang
EUT : LW130W
Power Rating : 120Vac/60Hz
Test Mode : TX2412MHz (802.11b)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2330.880	28.03	6.26	12.75	47.04	54.00	6.96	Average
2	2390.040	28.10	6.34	9.74	44.18	54.00	9.82	Average
3	2412.480	28.11	6.36	65.19	99.67	54.00	-45.67	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

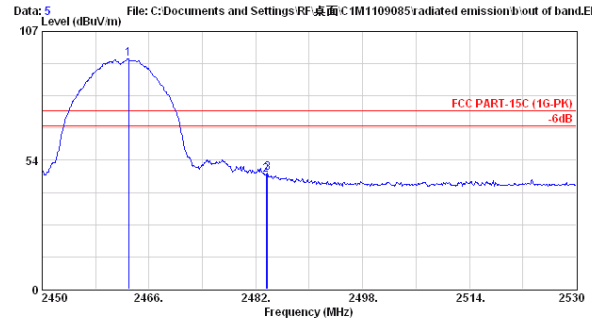
Date of Test : Sep. 15, 2011 Temperature : 26°C

EUT : HD Compact Network Camera Humidity : 58%

Test Mode : 802.11b, Transmit, Channel: 11, Frequency: 2462MHz



AUDIX TECHNOLOGY Corp. EMC Laboratory
No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
County, Taiwan R.O.C. Post Code 24443
Tel:+886-2-26092133 Fax:+886-2-26099203
Email:ttmc@ttmc.com.tw



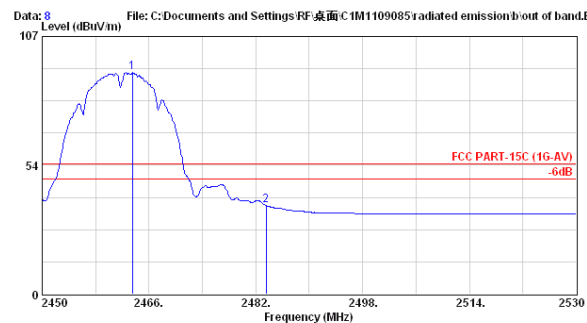
Site no. : A/C Chamber Data no. : 5
Dis. / Ant. : 3m 3115 (3775) Ant. pol. : HORIZONTAL
Limit : FCC PART-15C (1G-PK)
Env. / Ins. : E4446A 26°C/58% □Jarwei Wang
EUT : LW130W
Power Rating : 120Vac/60Hz
Test Mode : TX2462MHz (802.11b)

Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 2462.960	28.17	6.42	60.98	95.57	74.00	-21.57	Peak
2 2483.520	28.18	6.45	12.78	47.41	74.00	26.59	Peak
3 2483.760	28.18	6.45	13.46	48.09	74.00	25.91	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



AUDIX TECHNOLOGY Corp. EMC Laboratory
No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
County, Taiwan R.O.C. Post Code 24443
Tel:+886-2-26092133 Fax:+886-2-26099203
Email:ttmc@ttmc.com.tw



Site no. : A/C Chamber Data no. : 8
Dis. / Ant. : 3m 3115 (3775) Ant. pol. : HORIZONTAL
Limit : FCC PART-15C (1G-AV)
Env. / Ins. : E4446A 26°C/58% □Jarwei Wang
EUT : LW130W
Power Rating : 120Vac/60Hz
Test Mode : TX2462MHz (802.11b)

Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 2463.520	28.17	6.42	57.37	91.96	54.00	-37.96	Average
2 2483.520	28.18	6.45	2.07	36.70	54.00	17.30	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

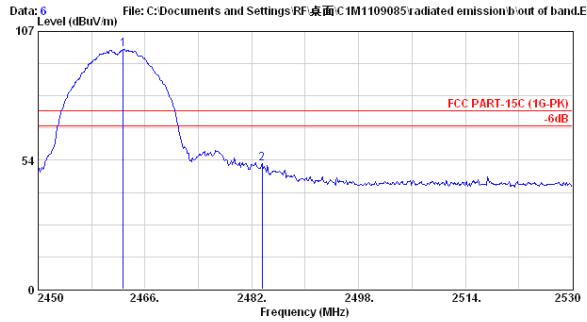
Date of Test : Sep. 15, 2011 Temperature : 26°C

EUT : HD Compact Network Camera Humidity : 58%

Test Mode : 802.11b, Transmit, Channel: 11, Frequency: 2462MHz



AUDIX TECHNOLOGY Corp. EMC Laboratory
No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
County, Taiwan R.O.C. Post Code:24443
Tel:+886-2-26092133 Fax:+886-2-26099303
Email:ttmc@ttmc.com.tw



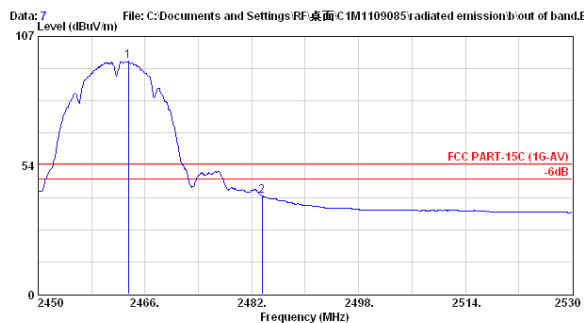
Site no. : A/C Chamber Data no. : 6
Dis. / Ant. : 3m 3115 (3775) Ant. pol. : VERTICAL
Limit : FCC PART-15C (1G-PK)
Env. / Ins. : E4446A 26°C/58% □Jarwei Wang
EUT : LW130W
Power Rating : 120Vac/60Hz
Test Mode : TX2462MHz (802.11b)

Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 2462.720	28.17	6.42	64.95	99.54	74.00	-25.54	Peak
2 2483.520	28.18	6.45	17.44	52.07	74.00	21.93	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



AUDIX TECHNOLOGY Corp. EMC Laboratory
No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
County, Taiwan R.O.C. Post Code:24443
Tel:+886-2-26092133 Fax:+886-2-26099303
Email:ttmc@ttmc.com.tw



Site no. : A/C Chamber Data no. : 7
Dis. / Ant. : 3m 3115 (3775) Ant. pol. : VERTICAL
Limit : FCC PART-15C (1G-AV)
Env. / Ins. : E4446A 26°C/58% □Jarwei Wang
EUT : LW130W
Power Rating : 120Vac/60Hz
Test Mode : TX2462MHz (802.11b)

Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 2463.520	28.17	6.42	62.24	96.83	54.00	-42.83	Average
2 2483.520	28.18	6.45	6.23	40.86	54.00	13.14	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

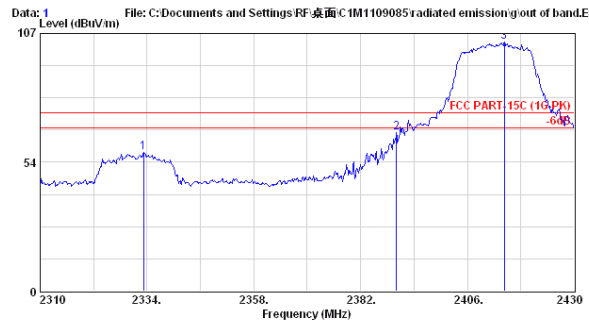
Date of Test : Sep. 15, 2011 Temperature : 26°C

EUT : HD Compact Network Camera Humidity : 58%

Test Mode : 802.11g, Transmit, Channel: 01, Frequency: 2412MHz



AUDIX TECHNOLOGY Corp. EMC Laboratory
No.53-11, Tin-Fu Tsun, Lin-kou Hsiang, Taipei
County, Taiwan R.O.C. Post Code:24443
Tel:+886-2-26092133 Fax:+886-2-26099303
Email:ttmc@ttmc.com.tw



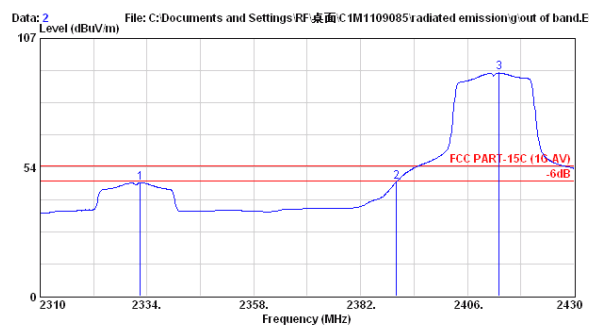
Site no. : A/C Chamber Data no. : 1
Dis. / Ant. : 3m 3115 (3775) Ant. pol. : HORIZONTAL
Limit : FCC PART-15C (1G-PK)
Env. / Ins. : E4446A 26°C/58% DJarwei Wang
EUT : LW130W
Power Rating : 120Vac/60Hz
Test Mode : TX2412MHz (802.11g)

Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 2333.280	28.03	6.27	23.39	57.69	74.00	16.31	Peak
2 2390.040	28.10	6.34	31.41	65.85	74.00	8.15	Peak
3 2414.280	28.11	6.36	69.10	103.57	74.00	-29.57	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



AUDIX TECHNOLOGY Corp. EMC Laboratory
No.53-11, Tin-Fu Tsun, Lin-kou Hsiang, Taipei
County, Taiwan R.O.C. Post Code:24443
Tel:+886-2-26092133 Fax:+886-2-26099303
Email:ttmc@ttmc.com.tw



Site no. : A/C Chamber Data no. : 2
Dis. / Ant. : 3m 3115 (3775) Ant. pol. : HORIZONTAL
Limit : FCC PART-15C (1G-AV)
Env. / Ins. : E4446A 26°C/58% DJarwei Wang
EUT : LW130W
Power Rating : 120Vac/60Hz
Test Mode : TX2412MHz (802.11g)

Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 2332.440	28.03	6.27	12.79	47.09	54.00	6.91	Average
2 2390.040	28.10	6.34	12.96	47.40	54.00	6.60	Average
3 2413.080	28.11	6.36	58.23	92.71	54.00	-38.71	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

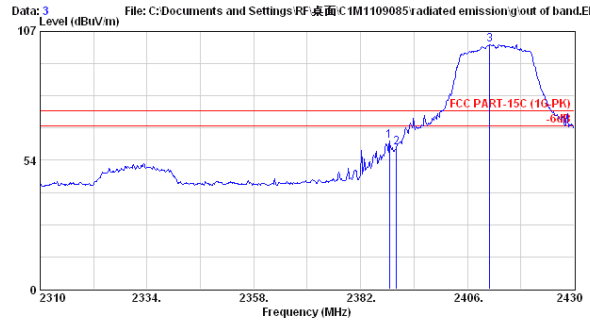
Date of Test : Sep. 15, 2011 Temperature : 26°C

EUT : HD Compact Network Camera Humidity : 58%

Test Mode : 802.11g, Transmit, Channel: 01, Frequency: 2412MHz



AUDIX TECHNOLOGY Corp. EMC Laboratory
No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
County, Taiwan R.O.C. Post Code 24443
Tel:+886-2-26092133 Fax:+886-2-26099303
Email:ttmc@ttmc.com.tw



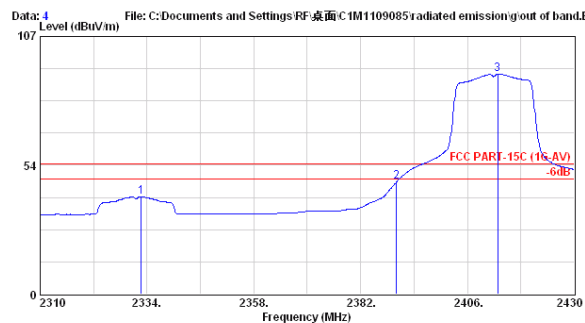
Site no. : A/C Chamber Data no. : 3
Dis. / Ant. : 3m 3115 (3775) Ant. pol. : VERTICAL
Limit : FCC PART-15C (1G-PK)
Env. / Ins. : E4446A 26°C/58% □Jarwei Wang
EUT : LW130W
Power Rating : 120Vac/60Hz
Test Mode : TX2412MHz (802.11g)

Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 2388.480	28.10	6.34	27.10	61.53	74.00	12.47	Peak
2 2390.040	28.10	6.34	24.29	58.73	74.00	15.27	Peak
3 2411.040	28.11	6.36	67.19	101.67	74.00	-27.67	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



AUDIX TECHNOLOGY Corp. EMC Laboratory
No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
County, Taiwan R.O.C. Post Code 24443
Tel:+886-2-26092133 Fax:+886-2-26099303
Email:ttmc@ttmc.com.tw



Site no. : A/C Chamber Data no. : 4
Dis. / Ant. : 3m 3115 (3775) Ant. pol. : VERTICAL
Limit : FCC PART-15C (1G-AV)
Env. / Ins. : E4446A 26°C/58% □Jarwei Wang
EUT : LW130W
Power Rating : 120Vac/60Hz
Test Mode : TX2412MHz (802.11g)

Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 2332.680	28.03	6.27	6.07	40.37	54.00	13.63	Average
2 2390.040	28.10	6.34	12.04	46.48	54.00	7.52	Average
3 2412.840	28.11	6.36	56.94	91.42	54.00	-37.42	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

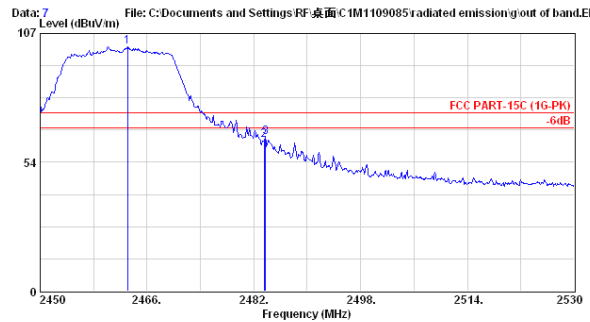
Date of Test : Sep. 15, 2011 Temperature : 26°C

EUT : HD Compact Network Camera Humidity : 58%

Test Mode : 802.11g, Transmit, Channel: 11, Frequency: 2462MHz



AUDIX TECHNOLOGY Corp. EMC Laboratory
No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
County, Taiwan R.O.C. Post Code 24443
Tel:+886-2-26092133 Fax:+886-2-26099303
Email:ttmc@ttmc.com.tw



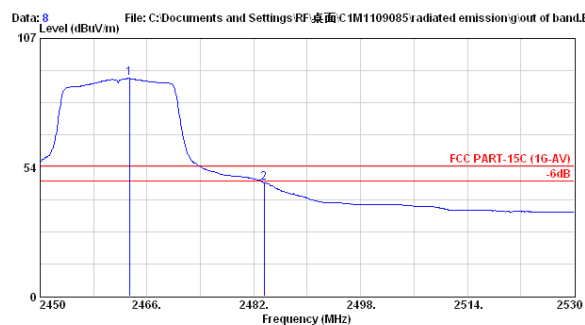
Site no. : A/C Chamber Data no. : 7
Dis. / Ant. : 3m 3115 (3775) Ant. pol. : HORIZONTAL
Limit : FCC PART-15C (1G-PK)
Env. / Ins. : E4446A 26°C/58% □Jarwei Wang
EUT : LW130W
Power Rating : 120Vac/60Hz
Test Mode : TX2462MHz (802.11g)

		Ant.	Cable		Emission			
	Freq.	Factor	Loss	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	2463.120	28.17	6.42	66.76	101.35	74.00	-27.35	Peak
2	2483.520	28.18	6.45	27.92	62.55	74.00	11.45	Peak
3	2483.760	28.18	6.45	29.42	64.05	74.00	9.95	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



AUDIX TECHNOLOGY Corp. EMC Laboratory
No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
County, Taiwan R.O.C. Post Code 24443
Tel:+886-2-26092133 Fax:+886-2-26099303
Email:ttmc@ttmc.com.tw



Site no. : A/C Chamber Data no. : 8
Dis. / Ant. : 3m 3115 (3775) Ant. pol. : HORIZONTAL
Limit : FCC PART-15C (1G-AV)
Env. / Ins. : E4446A 26°C/58% □Jarwei Wang
EUT : LW130W
Power Rating : 120Vac/60Hz
Test Mode : TX2462MHz (802.11g)

		Ant.	Cable		Emission			
	Freq.	Factor	Loss	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	2463.360	28.17	6.42	55.78	90.37	54.00	-36.37	Average
2	2483.520	28.18	6.45	12.46	47.09	54.00	6.91	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

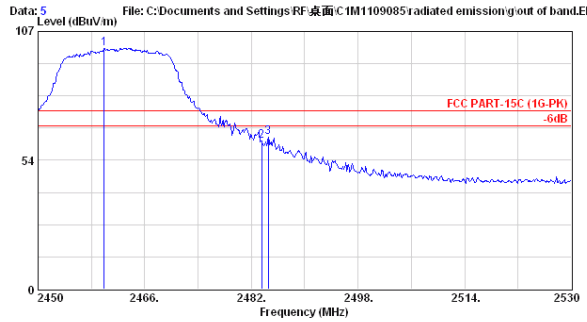
Date of Test : Sep. 15, 2011 Temperature : 26°C

EUT : HD Compact Network Camera Humidity : 58%

Test Mode : 802.11g, Transmit, Channel: 11, Frequency: 2462MHz



AUDIX TECHNOLOGY Corp. EMC Laboratory
No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
County, Taiwan R.O.C. Post Code:24443
Tel:+886-2-26092133 Fax:+886-2-26099303
Email:ttmc@ttmc.com.tw



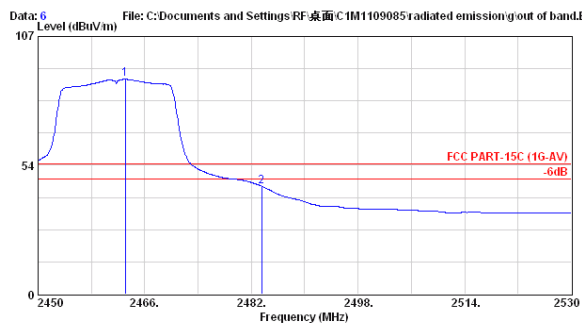
Site no. : A/C Chamber Data no. : 5
Dis. / Ant. : 3m 3115 (3775) Ant. pol. : VERTICAL
Limit : FCC PART-15C (1G-PK)
Env. / Ins. : E4446A 26°C/58% □Jarwei Wang
EUT : LW130W
Power Rating : 120Vac/60Hz
Test Mode : TX2462MHz (802.11g)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2459.920	28.17	6.42	65.51	100.09	74.00	-26.09	Peak
2	2483.520	28.18	6.45	27.07	61.70	74.00	12.30	Peak
3	2484.560	28.18	6.45	28.30	62.93	74.00	11.07	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



AUDIX TECHNOLOGY Corp. EMC Laboratory
No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
County, Taiwan R.O.C. Post Code:24443
Tel:+886-2-26092133 Fax:+886-2-26099303
Email:ttmc@ttmc.com.tw



Site no. : A/C Chamber Data no. : 6
Dis. / Ant. : 3m 3115 (3775) Ant. pol. : VERTICAL
Limit : FCC PART-15C (1G-AV)
Env. / Ins. : E4446A 26°C/58% □Jarwei Wang
EUT : LW130W
Power Rating : 120Vac/60Hz
Test Mode : TX2462MHz (802.11g)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2463.120	28.17	6.42	54.62	89.21	54.00	-35.21	Average
2	2483.520	28.18	6.45	10.11	44.74	54.00	9.26	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

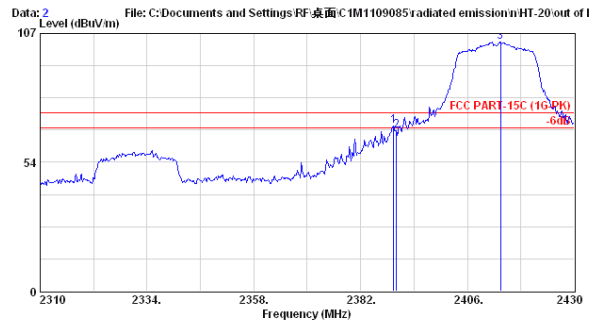
Date of Test : Sep. 15, 2011 Temperature : 26°C

EUT : HD Compact Network Camera Humidity : 58%

Test Mode : 802.11n-HT20, Transmit, Channel: 01, Frequency: 2412MHz



AUDIX TECHNOLOGY Corp. EMC Laboratory
No.53-11, Tin-Fu Tsun, Lin-kou Hsiang, Taipei
County, Taiwan R.O.C. Post Code:24443
Tel:+886-2-26092133 Fax:+886-2-26099303
Email:ttmc@ttmc.com.tw



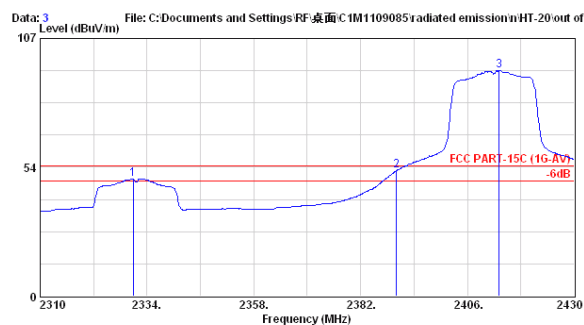
Site no. : A/C Chamber Data no. : 2
Dis. / Ant. : 3m 3115 (3775) Ant. pol. : HORIZONTAL
Limit : FCC PART-15C (1G-PK)
Env. / Ins. : E4446A 26°C/58% □Jarwei Wang
EUT : LW130W
Power Rating : 120Vac/60Hz
Test Mode : TX2412MHz (802.11n-HT20)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2389.440	28.10	6.34	34.06	68.50	74.00	5.50	Peak
2	2390.040	28.10	6.34	32.15	66.59	74.00	7.41	Peak
3	2413.440	28.11	6.36	69.04	103.52	74.00	-29.52	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



AUDIX TECHNOLOGY Corp. EMC Laboratory
No.53-11, Tin-Fu Tsun, Lin-kou Hsiang, Taipei
County, Taiwan R.O.C. Post Code:24443
Tel:+886-2-26092133 Fax:+886-2-26099303
Email:ttmc@ttmc.com.tw



Site no. : A/C Chamber Data no. : 3
Dis. / Ant. : 3m 3115 (3775) Ant. pol. : HORIZONTAL
Limit : FCC PART-15C (1G-AV)
Env. / Ins. : E4446A 26°C/58% □Jarwei Wang
EUT : LW130W
Power Rating : 120Vac/60Hz
Test Mode : TX2412MHz (802.11n-HT20)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2330.880	28.03	6.26	14.43	48.72	54.00	5.28	Average
2	2390.040	28.10	6.34	17.59	52.03	54.00	1.97	Average
3	2413.080	28.11	6.36	59.35	93.83	54.00	-39.83	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

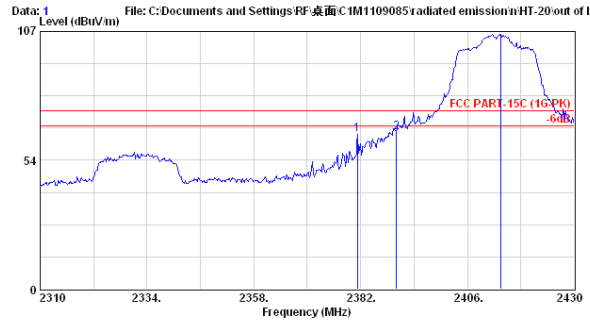
Date of Test : Sep. 15, 2011 Temperature : 26°C

EUT : HD Compact Network Camera Humidity : 58%

Test Mode : 802.11n-HT20, Transmit, Channel: 01, Frequency: 2412MHz



AUDIX TECHNOLOGY Corp. EMC Laboratory
No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
County, Taiwan R.O.C. Post Code 24443
Tel:+886-2-26092133 Fax:+886-2-26099303
Email:ttmc@ttmc.com.tw



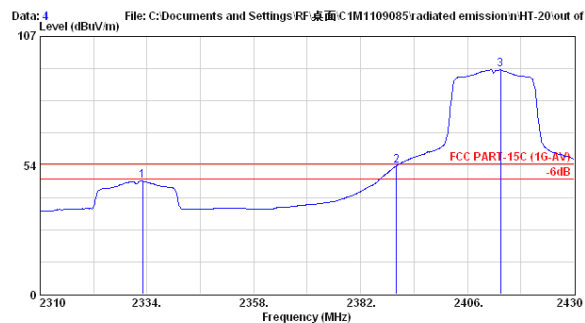
Site no. : A/C Chamber Data no. : 1
Dis. / Ant. : 3m 3115 (3775) Ant. pol. : VERTICAL
Limit : FCC PART-15C (1G-PK)
Env. / Ins. : E4446A 26°C/58% □Jarwei Wang
EUT : LW130W
Power Rating : 120Vac/60Hz
Test Mode : TX2412MHz (802.11n-HT20)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2381.280	28.08	6.33	29.93	64.34	74.00	9.66	Peak
2	2390.040	28.10	6.34	30.67	65.11	74.00	8.89	Peak
3	2413.440	28.11	6.36	71.40	105.88	74.00	-31.88	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



AUDIX TECHNOLOGY Corp. EMC Laboratory
No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
County, Taiwan R.O.C. Post Code 24443
Tel:+886-2-26092133 Fax:+886-2-26099303
Email:ttmc@ttmc.com.tw



Site no. : A/C Chamber Data no. : 4
Dis. / Ant. : 3m 3115 (3775) Ant. pol. : VERTICAL
Limit : FCC PART-15C (1G-AV)
Env. / Ins. : E4446A 26°C/58% □Jarwei Wang
EUT : LW130W
Power Rating : 120Vac/60Hz
Test Mode : TX2412MHz (802.11n-HT20)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2333.040	28.03	6.27	12.77	47.07	54.00	6.93	Average
2	2390.040	28.10	6.34	18.90	53.34	54.00	0.66	Average
3	2413.440	28.11	6.36	58.94	93.42	54.00	-39.42	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

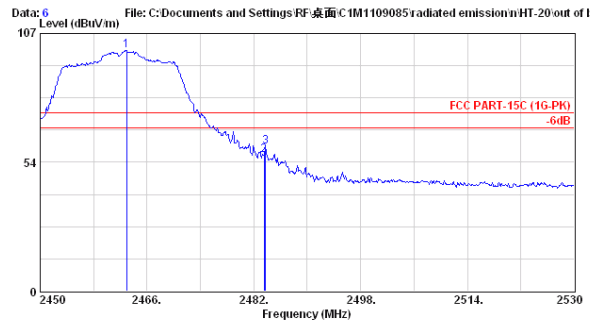
Date of Test : Sep. 15, 2011 Temperature : 26°C

EUT : HD Compact Network Camera Humidity : 58%

Test Mode : 802.11n-HT20, Transmit, Channel: 11, Frequency: 2462MHz



AUDIX TECHNOLOGY Corp. EMC Laboratory
No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
County, Taiwan R.O.C. Post Code 24443
Tel:+886-2-26092133 Fax:+886-2-26099303
Email:ttmc@ttmc.com.tw



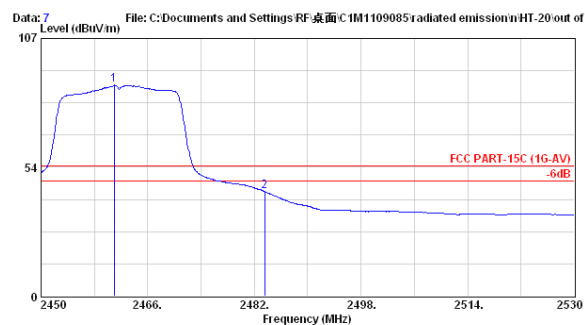
Site no. : A/C Chamber Data no. : 6
Dis. / Ant. : 3m 3115 (3775) Ant. pol. : HORIZONTAL
Limit : FCC PART-15C (1G-PK)
Env. / Ins. : E4446A 26°C/58% □Jarwei Wang
EUT : LW130W
Power Rating : 120Vac/60Hz
Test Mode : TX2462MHz (802.11n-HT20)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.960	28.17	6.42	65.51	100.10	74.00	-26.10	Peak
2	2483.520	28.18	6.45	21.82	56.45	74.00	17.55	Peak
3	2483.760	28.18	6.45	25.29	59.92	74.00	14.08	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



AUDIX TECHNOLOGY Corp. EMC Laboratory
No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
County, Taiwan R.O.C. Post Code 24443
Tel:+886-2-26092133 Fax:+886-2-26099303
Email:ttmc@ttmc.com.tw



Site no. : A/C Chamber Data no. : 7
Dis. / Ant. : 3m 3115 (3775) Ant. pol. : HORIZONTAL
Limit : FCC PART-15C (1G-AV)
Env. / Ins. : E4446A 26°C/58% □Jarwei Wang
EUT : LW130W
Power Rating : 120Vac/60Hz
Test Mode : TX2462MHz (802.11n-HT20)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2460.960	28.17	6.42	53.09	87.68	54.00	-33.68	Average
2	2483.520	28.18	6.45	8.78	43.41	54.00	10.59	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

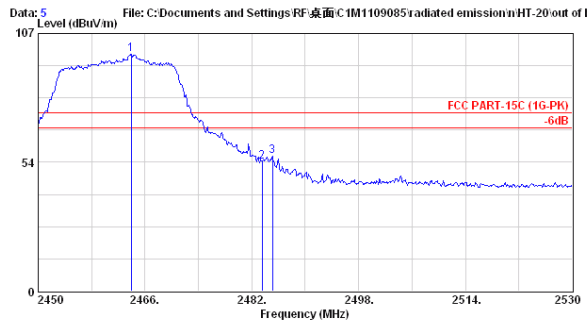
Date of Test : Sep. 15, 2011 Temperature : 26°C

EUT : HD Compact Network Camera Humidity : 58%

Test Mode : 802.11n-HT20, Transmit, Channel: 11, Frequency: 2462MHz



AUDIX TECHNOLOGY Corp. EMC Laboratory
No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
County, Taiwan R.O.C. Post Code:24443
Tel:+886-2-26092133 Fax:+886-2-26099303
Email:ttmc@ttmc.com.tw



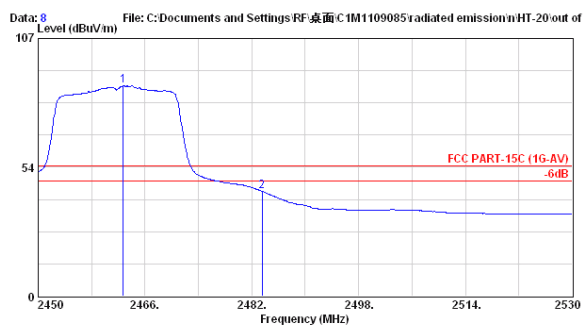
Site no. : A/C Chamber Data no. : 5
Dis. / Ant. : 3m 3115 (3775) Ant. pol. : VERTICAL
Limit : FCC PART-15C (1G-PK)
Env. / Ins. : E4446A 26°C/58% □Jarwei Wang
EUT : LW130W
Power Rating : 120Vac/60Hz
Test Mode : TX2462MHz (802.11n-HT20)

Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 2463.920	28.17	6.42	63.85	98.44	74.00	-24.44	Peak
2 2483.520	28.18	6.45	19.00	53.63	74.00	20.37	Peak
3 2485.120	28.18	6.45	21.23	55.87	74.00	18.13	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



AUDIX TECHNOLOGY Corp. EMC Laboratory
No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
County, Taiwan R.O.C. Post Code:24443
Tel:+886-2-26092133 Fax:+886-2-26099303
Email:ttmc@ttmc.com.tw



Site no. : A/C Chamber Data no. : 8
Dis. / Ant. : 3m 3115 (3775) Ant. pol. : VERTICAL
Limit : FCC PART-15C (1G-AV)
Env. / Ins. : E4446A 26°C/58% □Jarwei Wang
EUT : LW130W
Power Rating : 120Vac/60Hz
Test Mode : TX2462MHz (802.11n-HT20)

Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 2462.720	28.17	6.42	52.90	87.49	54.00	-33.49	Average
2 2483.520	28.18	6.45	8.85	43.48	54.00	10.52	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

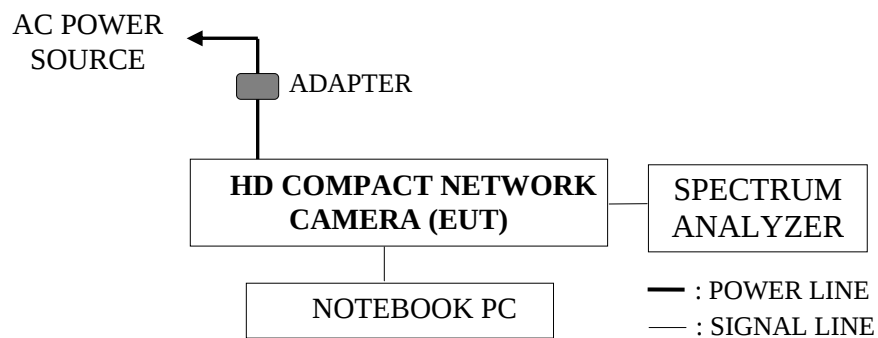
4. 6dB BANDWIDTH MEASUREMENT

4.1. Test Equipment

The following test equipment was used during the Emission Bandwidth measurement:

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Spectrum Analyzer	Agilent	E4446A	US44300366	Aug. 04, 11'	Aug. 03, 12'

4.2. Block Diagram of Test Setup



4.3. Specification Limits (§15.247(a)(2))

The minimum 6dB bandwidth shall be at least 500kHz.

4.4. Operating Condition of EUT

The test program “Telnet” was used to enable the EUT to transmit data at different channel frequency individually.

4.5. Test Procedure

The transmitter output was connected to the spectrum analyzer. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100kHz RBW and 100kHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

The measurement guideline was according to KDB 558074.

4.6. Test Results

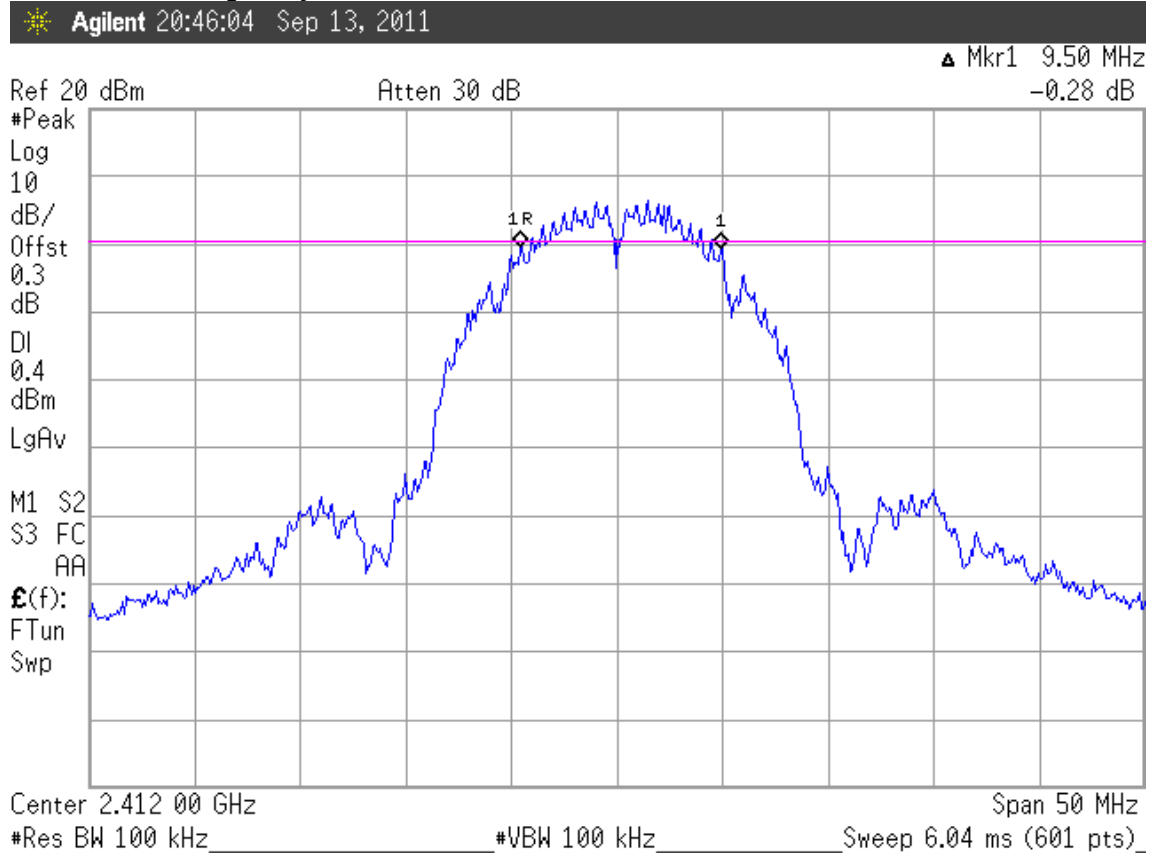
PASSED. All the test results are attached in next pages.

Test Date: Sep. 13, 2011 Temperature : 25°C Humidity : 53 %

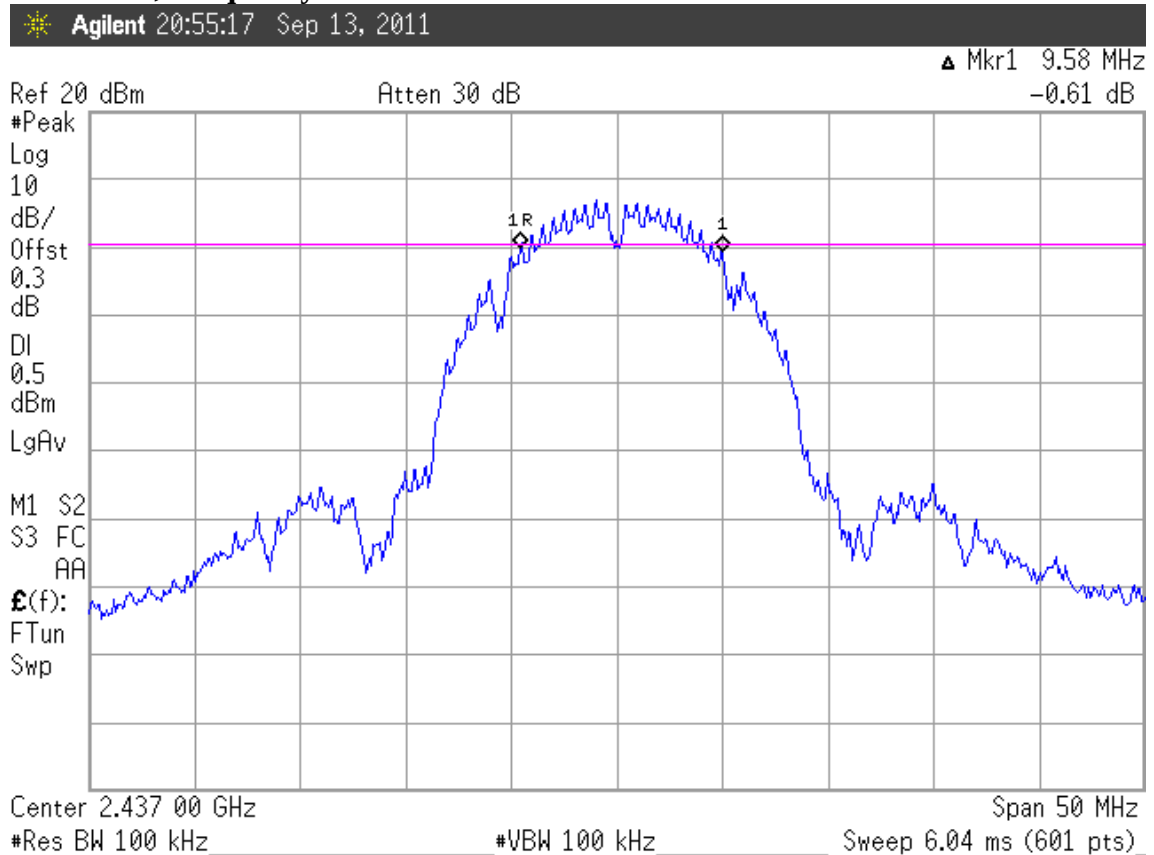
Mode	Type of Network	Channel	Frequency	6dB Bandwidth
1.	802.11b	CH 1	2412MHz	9.50MHz
2.		CH 6	2437MHz	9.58MHz
3.		CH 11	2462MHz	9.50MHz
4.	802.11g	CH 1	2412MHz	15.67MHz
5.		CH 6	2437MHz	15.42MHz
6.		CH 11	2462MHz	15.50MHz
7.	802.11n-HT20	CH 1	2412MHz	15.08MHz
8.		CH 6	2437MHz	15.17MHz
9.		CH 11	2462MHz	15.17MHz

[Limit: least 500kHz]

802.11b, Frequency: 2412MHz



802.11b, Frequency: 2437MHz

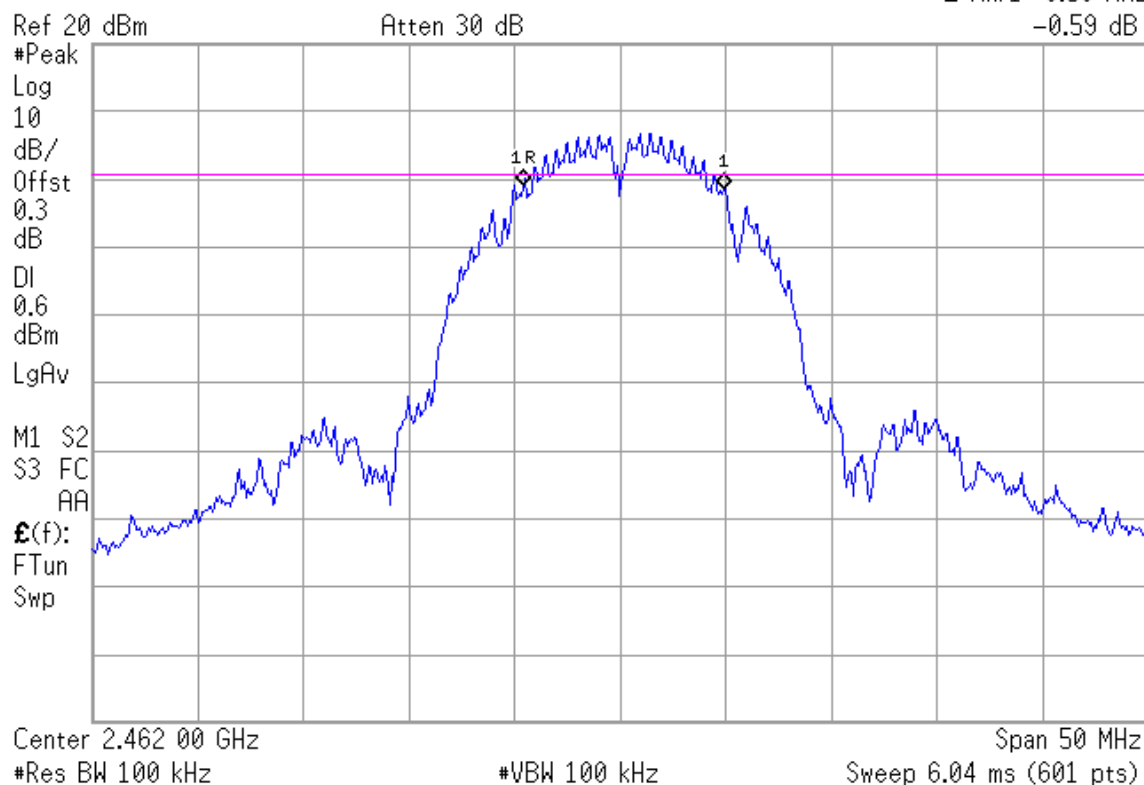


802.11b, Frequency: 2462MHz

Agilent 22:03:13 Sep 13, 2011

Δ Mkr1 9.50 MHz

-0.59 dB

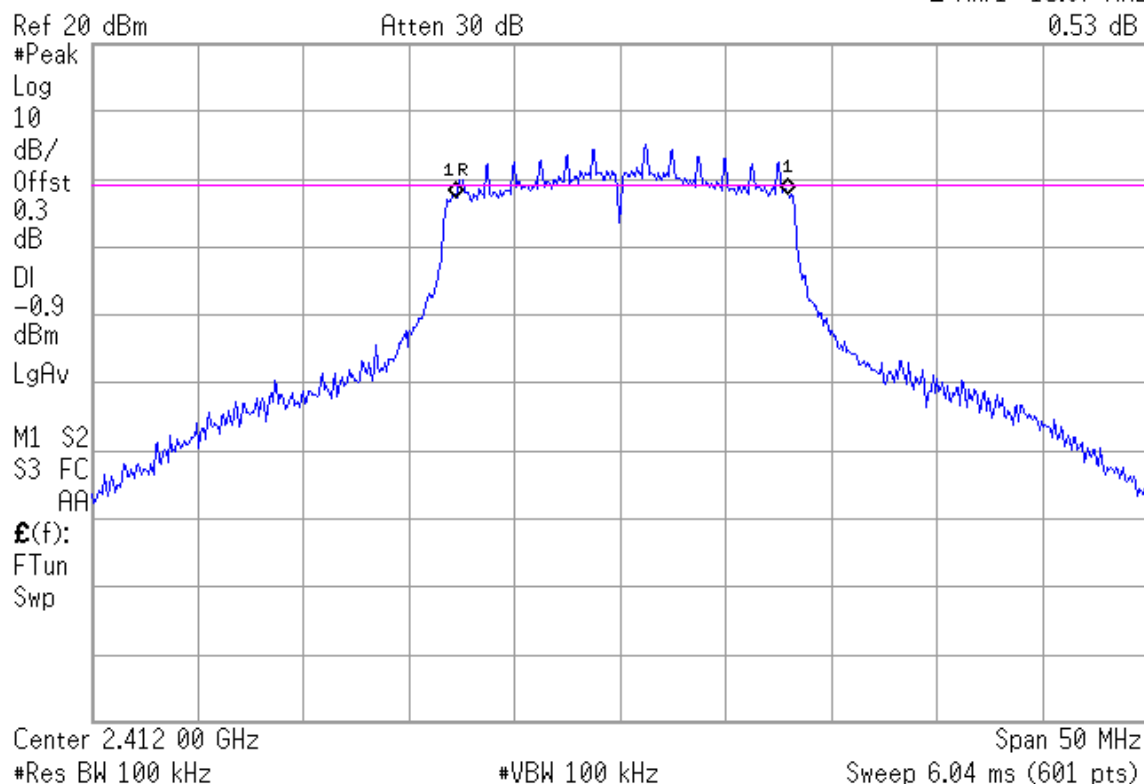


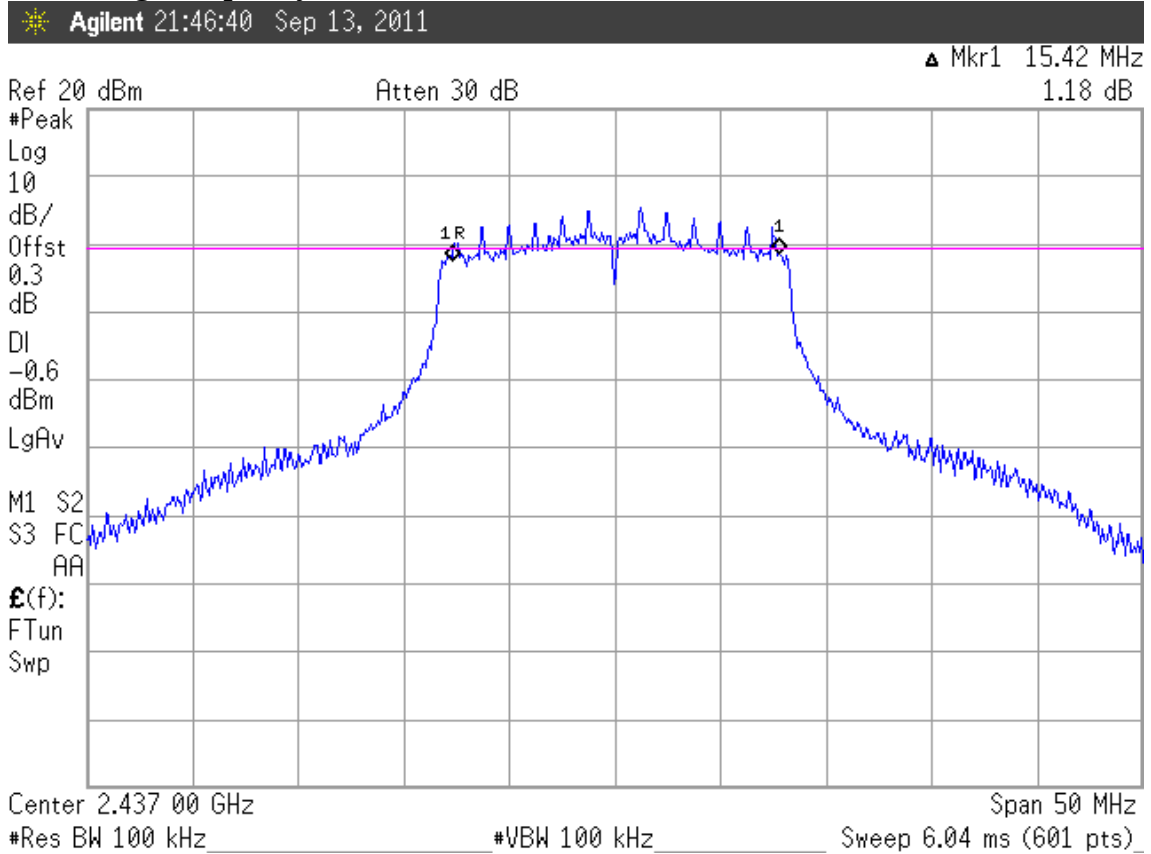
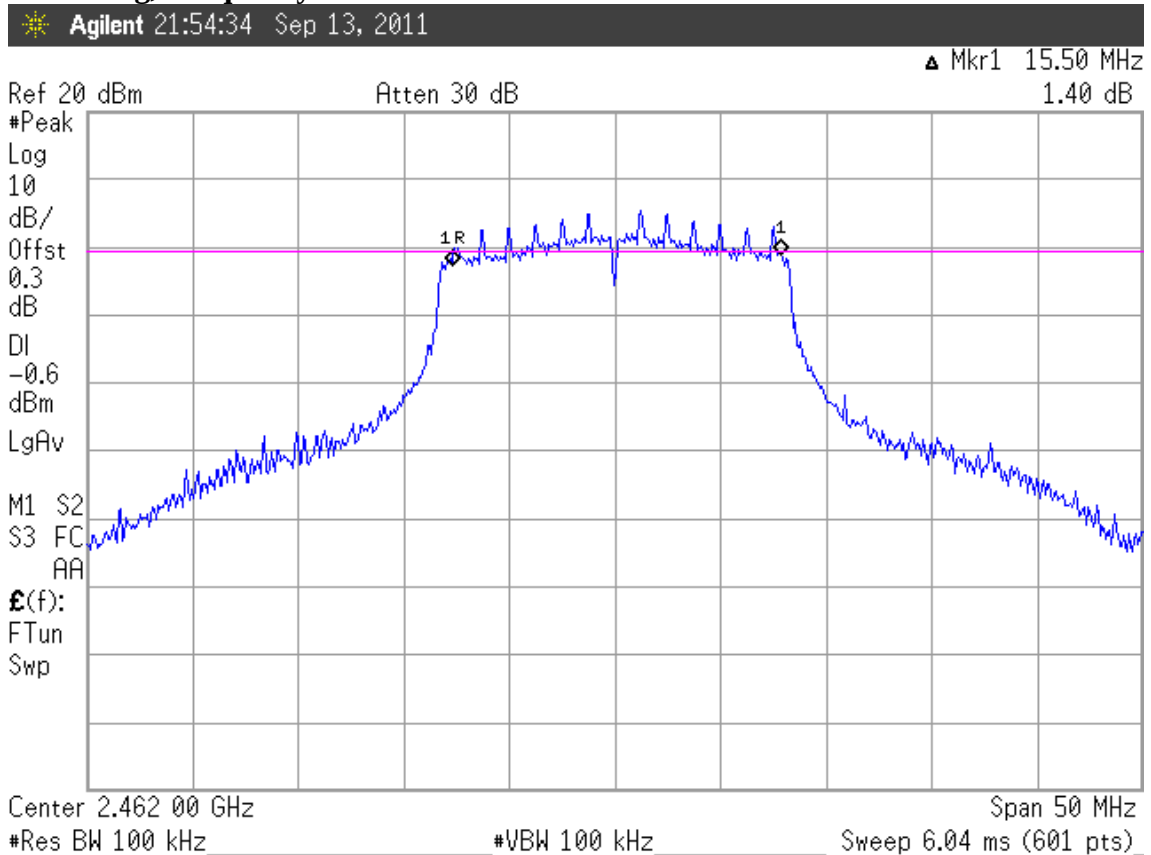
802.11g, Frequency: 2412MHz

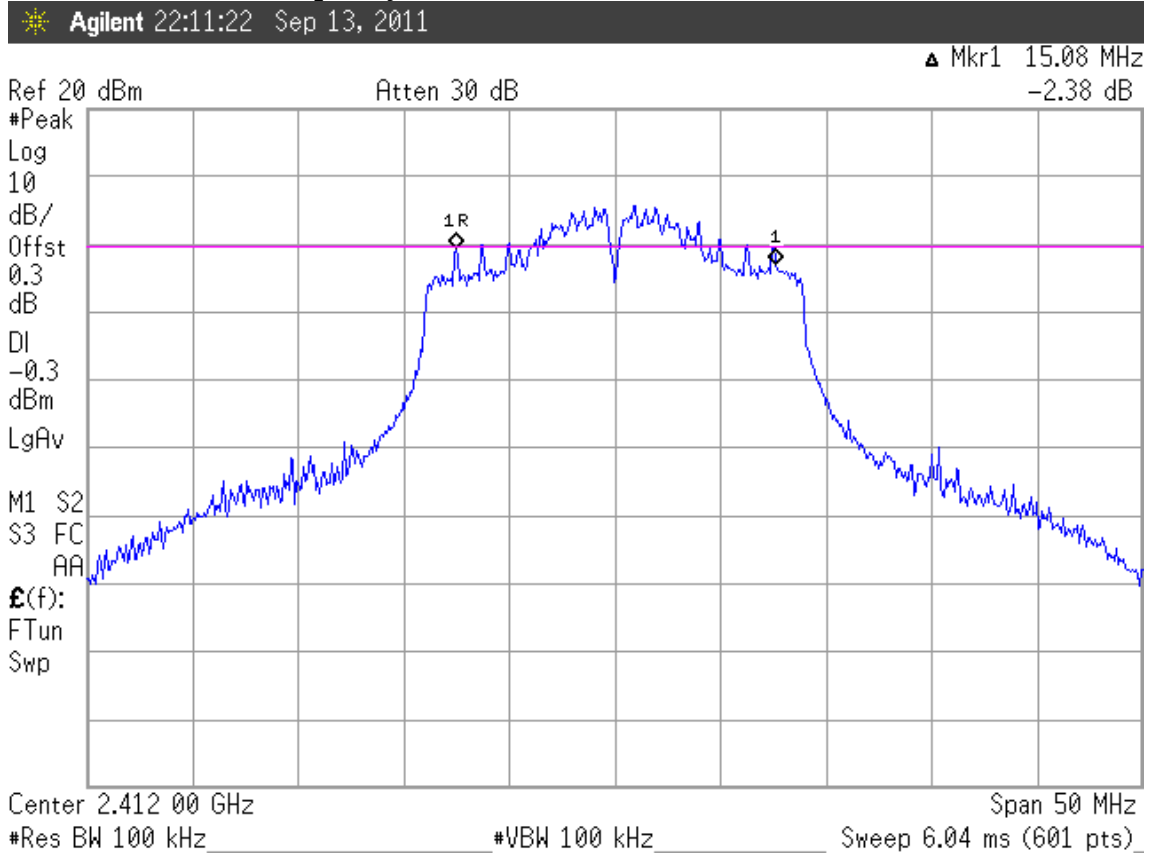
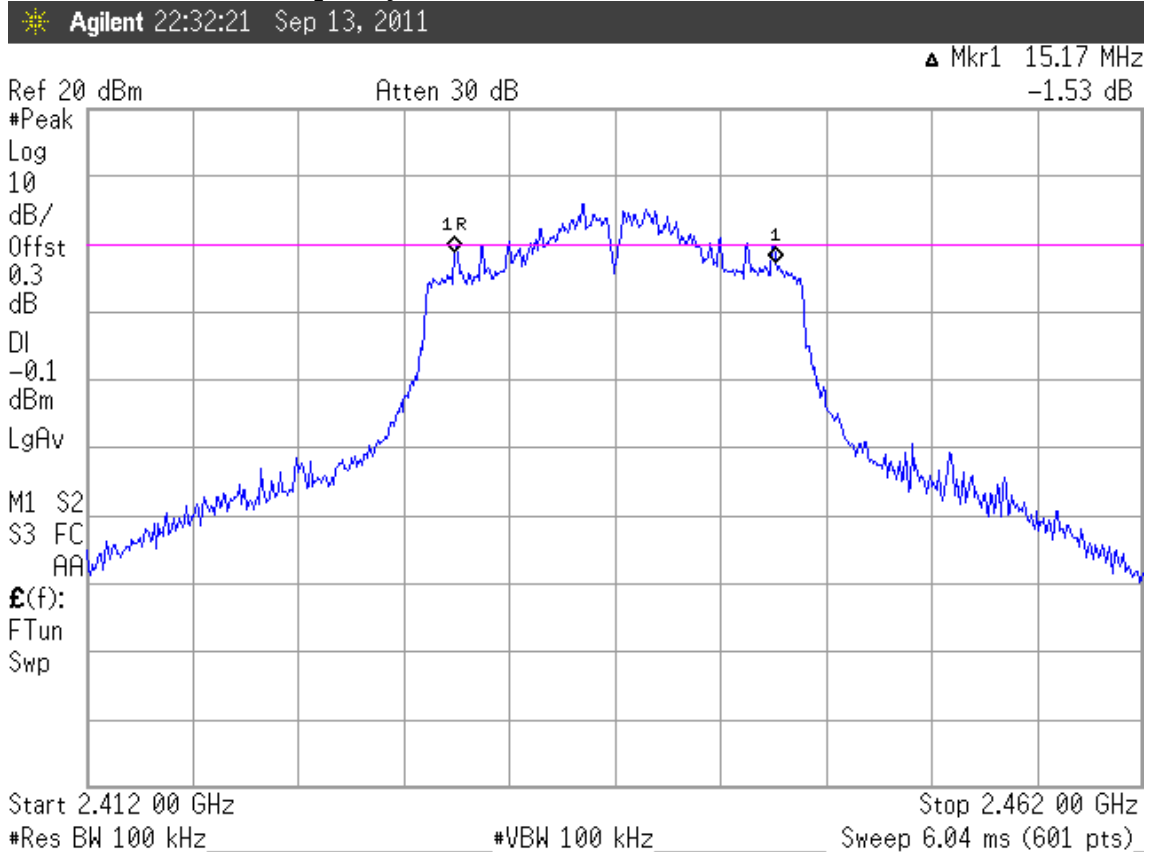
Agilent 21:34:14 Sep 13, 2011

▲ Mkr1 15.67 MHz

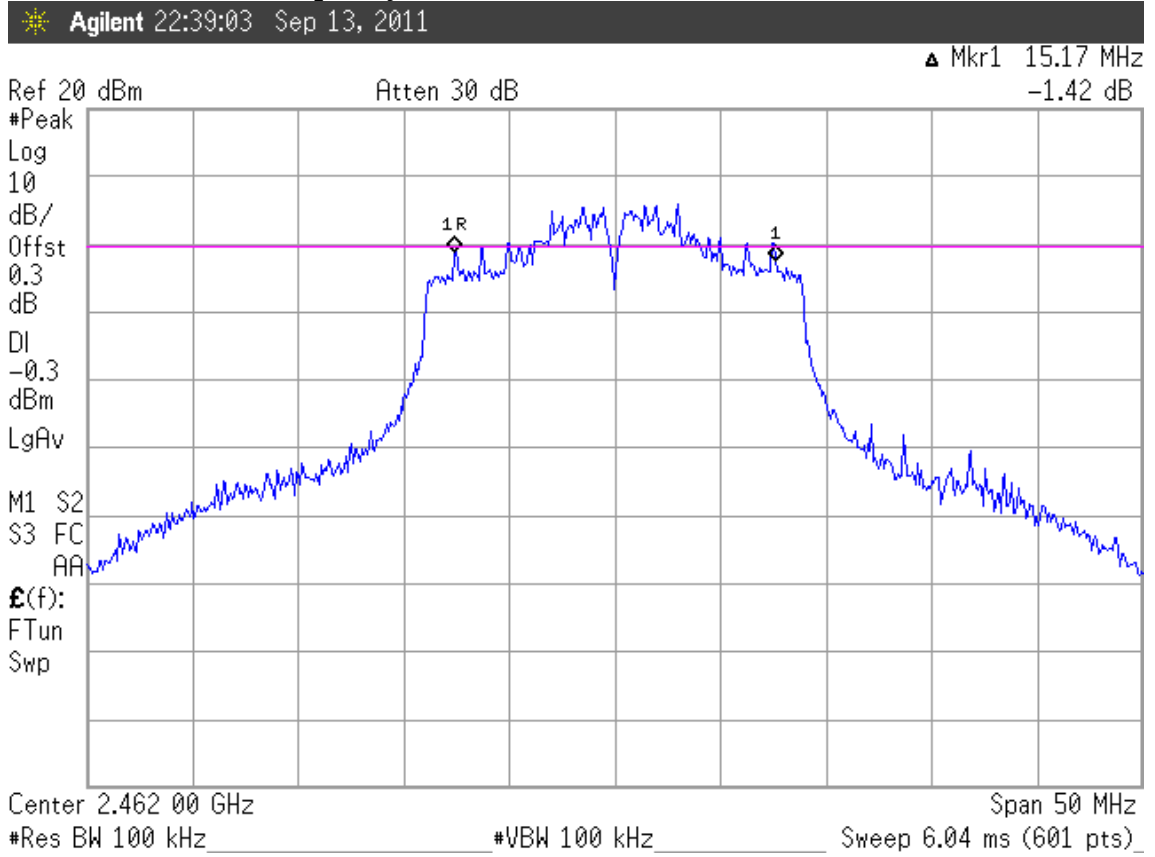
0.53 dB



802.11g, Frequency: 2437MHz**802.11g, Frequency: 2462MHz**

802.11n-HT20, Frequency: 2412MHz**802.11n-HT20, Frequency: 2437MHz**

802.11n-HT20, Frequency: 2462MHz



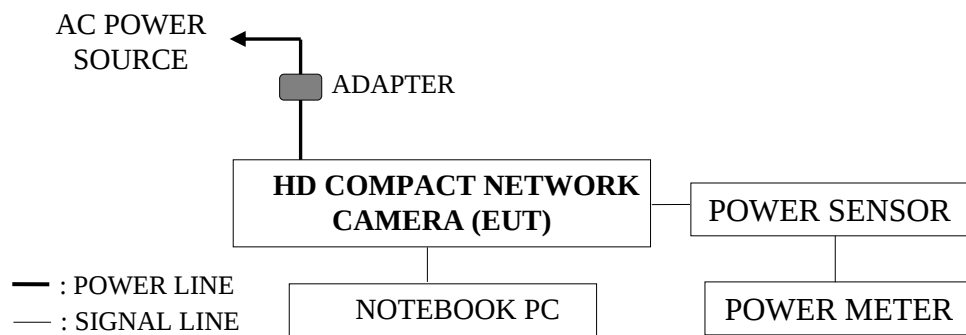
5. MAXIMUM PEAK OUTPUT POWER MEASUREMENT

5.1. Test Equipment

The following test equipment was used during the maximum peak output power measurement:

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Power Meter	Anritsu	ML2487A	6K00005406	Feb. 11, 11'	Feb. 10, 12'
2.	Power Sensor	Anritsu	MA2491A	030873	Feb. 11, 11'	Feb. 10, 12'

5.2. Block Diagram of Test Setup



5.3. Specification Limits (§15.247(b)-(3))

The Limits of maximum Peak Output Power for digital modulation in 2400-2483.5MHz is: 1Watt. (30dBm)

5.4. Operating Condition of EUT

The test program “Telnet” was used to enable the EUT to transmit data at different channel frequency individually.

5.5. Test Procedure

The EUT connected to power meter and sensor and record the peak value.

The measurement guideline was according to KDB 558074.

5.6. Test Results

PASSED. All the test results are listed below.

Test Date: Sep. 14, 2011 Temperature : 26°C Humidity : 56 %

Mode	Type of Network	Channel	Frequency	Peak Output Power
1.	802.11b	CH 1	2412MHz	18.21dBm
2.		CH 6	2437MHz	17.39dBm
3.		CH 11	2462MHz	17.31dBm
4.	802.11g	CH 1	2412MHz	22.90dBm
5.		CH 6	2437MHz	22.85dBm
6.		CH 11	2462MHz	22.95dBm
7.	802.11n-HT20	CH 1	2412MHz	21.12dBm
8.		CH 6	2437MHz	21.18dBm
9.		CH 11	2462MHz	21.67dBm

[Limit: 1Watt. (30dBm)]

6. EMISSION LIMITATIONS MEASUREMENT

6.1. Test Equipment

The following test equipment was used during the emission limitations test :

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Spectrum Analyzer	Agilent	E4446A	US44300366	Aug. 04, 11'	Aug. 03, 12'

6.2. Block Diagram of Test Setup

The same as section.4.2.

6.3. Specification Limits (§15.247(c))

In any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz 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 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)).(※ This test result attaching to §3.6.3)

6.4. Operating Condition of EUT

The test program “Telnet” was used to enable the EUT to transmit data at different channel frequency individually.

6.5. Test Procedure

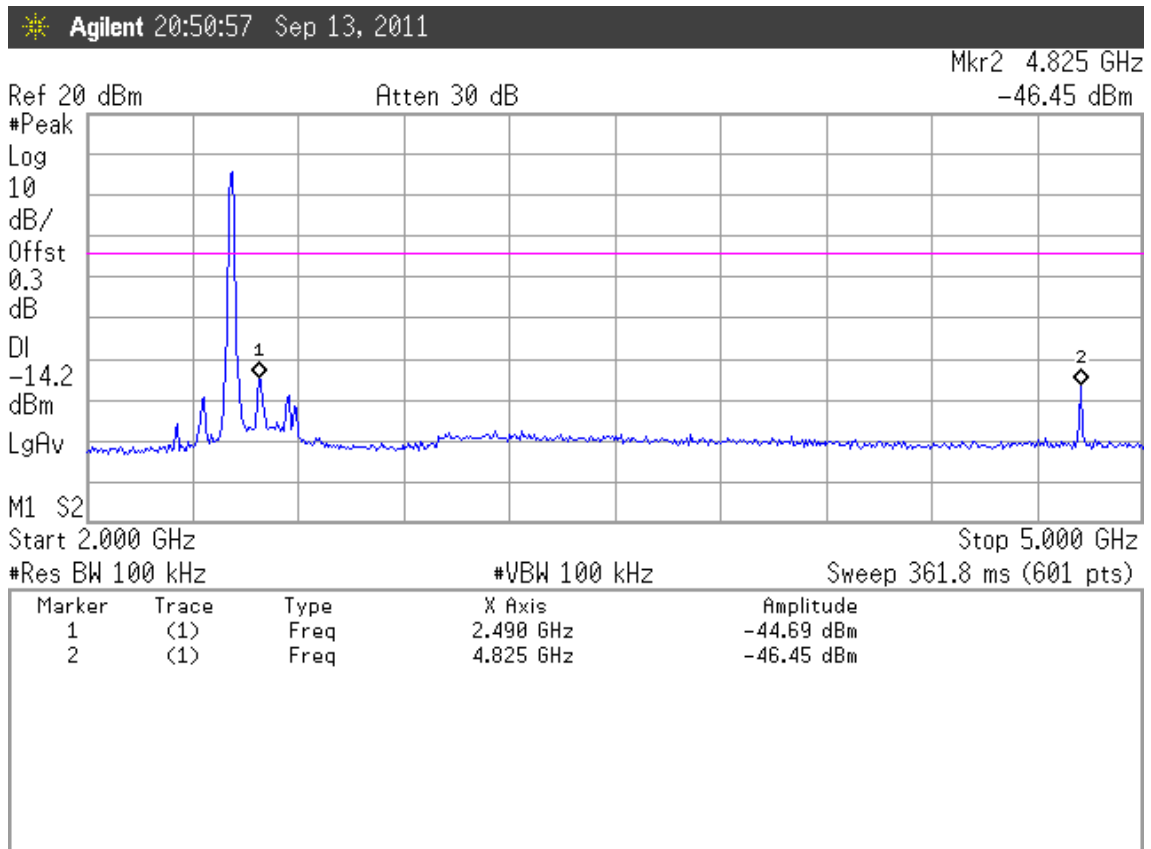
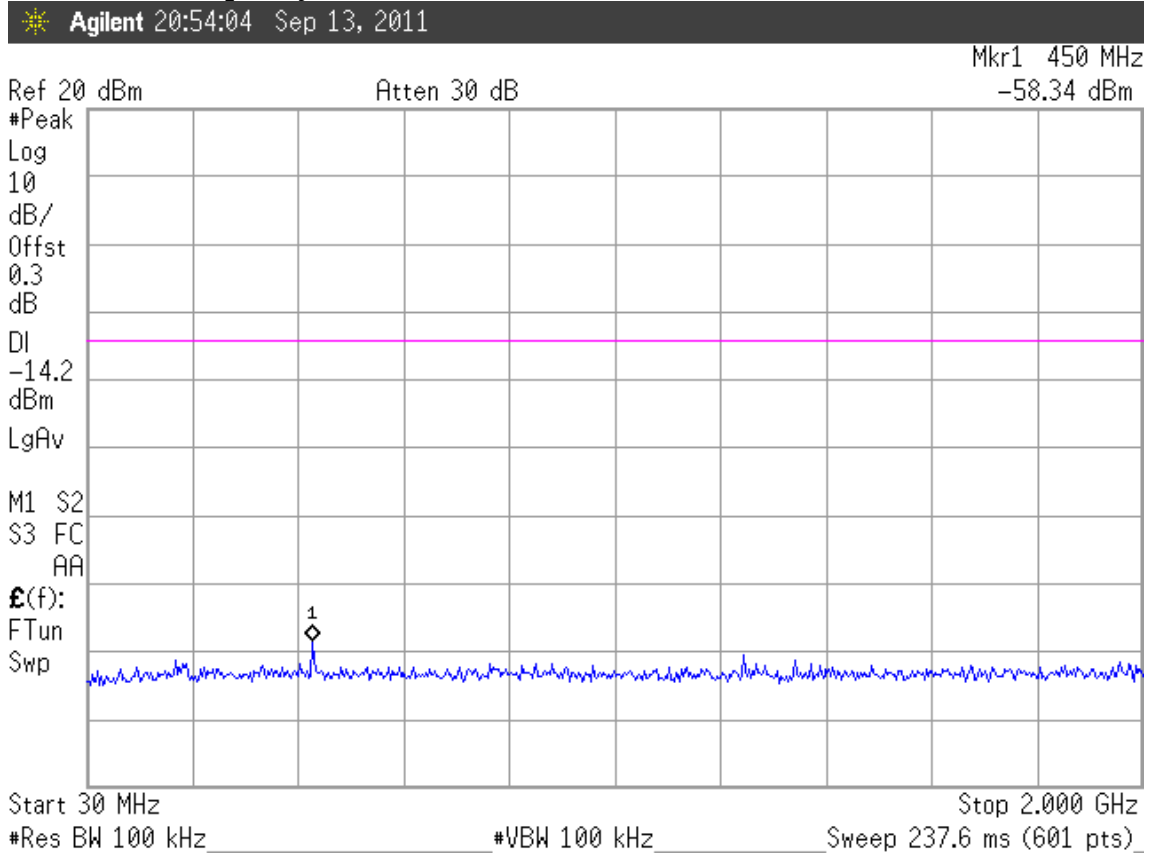
The transmitter output was connected to the spectrum analyzer. The bandwidth of the fundamental frequency was measure by spectrum analyzer with 100kHz RBW and 100kHz VBW.

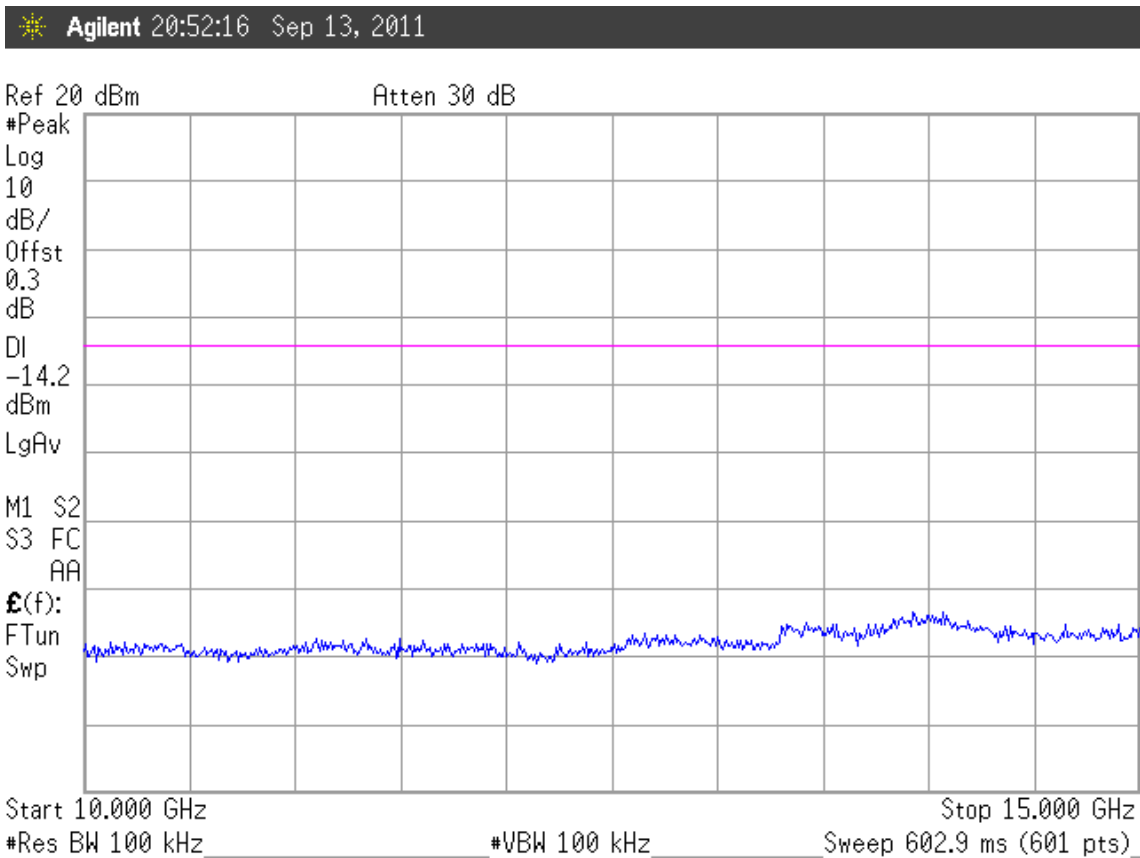
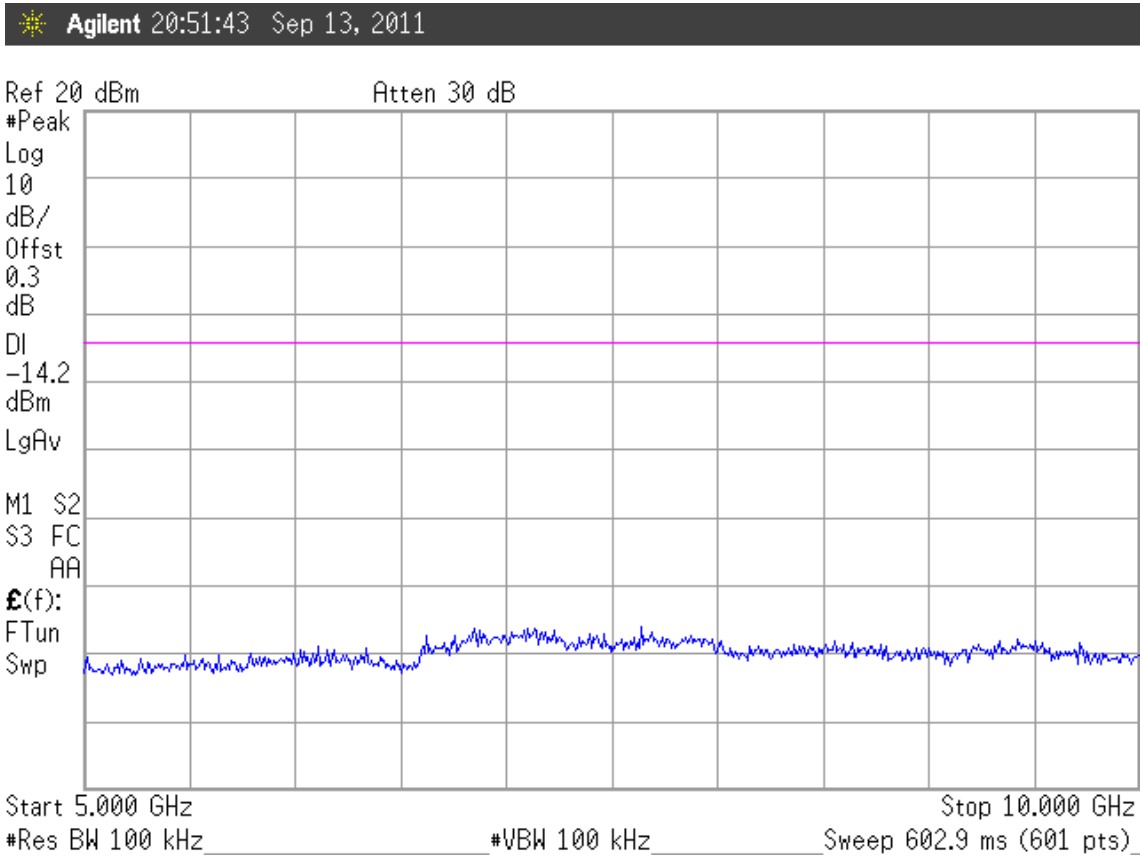
The measurement guideline was according to KDB 558074.

6.6. Test Results

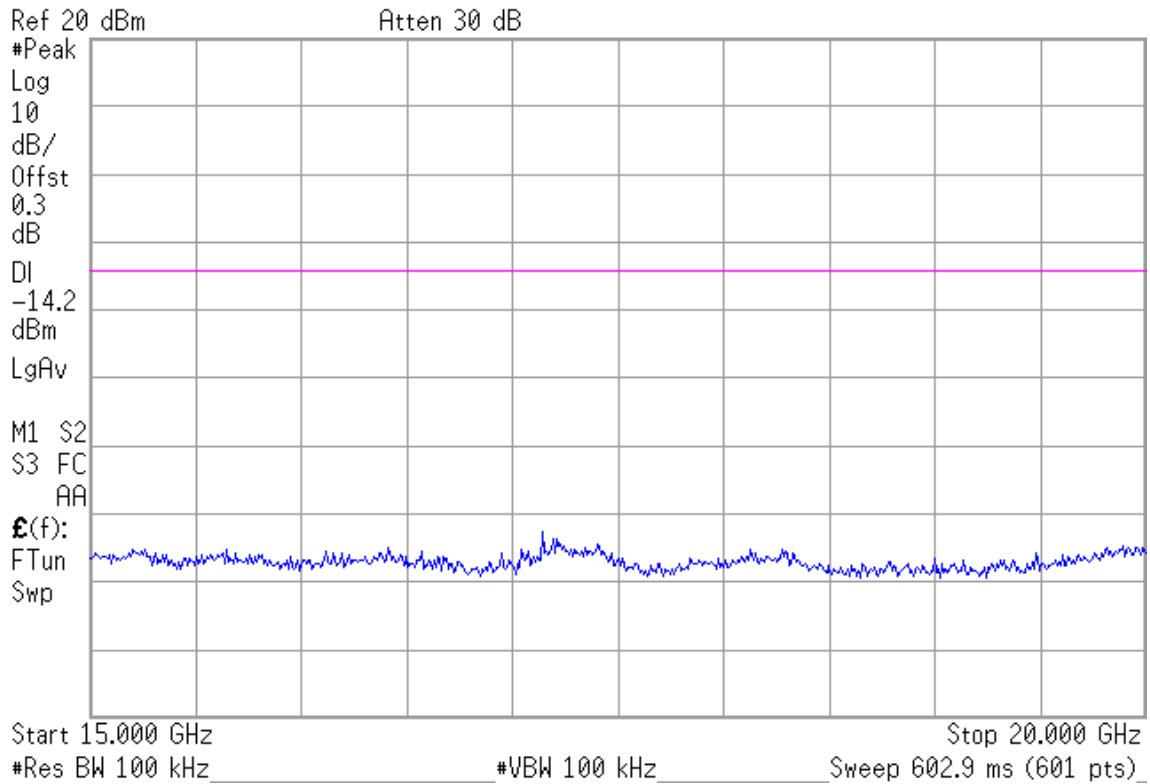
PASSED. The testing data was attached in the next pages.

Test Date: Sep. 13, 2011 Temperature : 23°C Humidity : 54 %

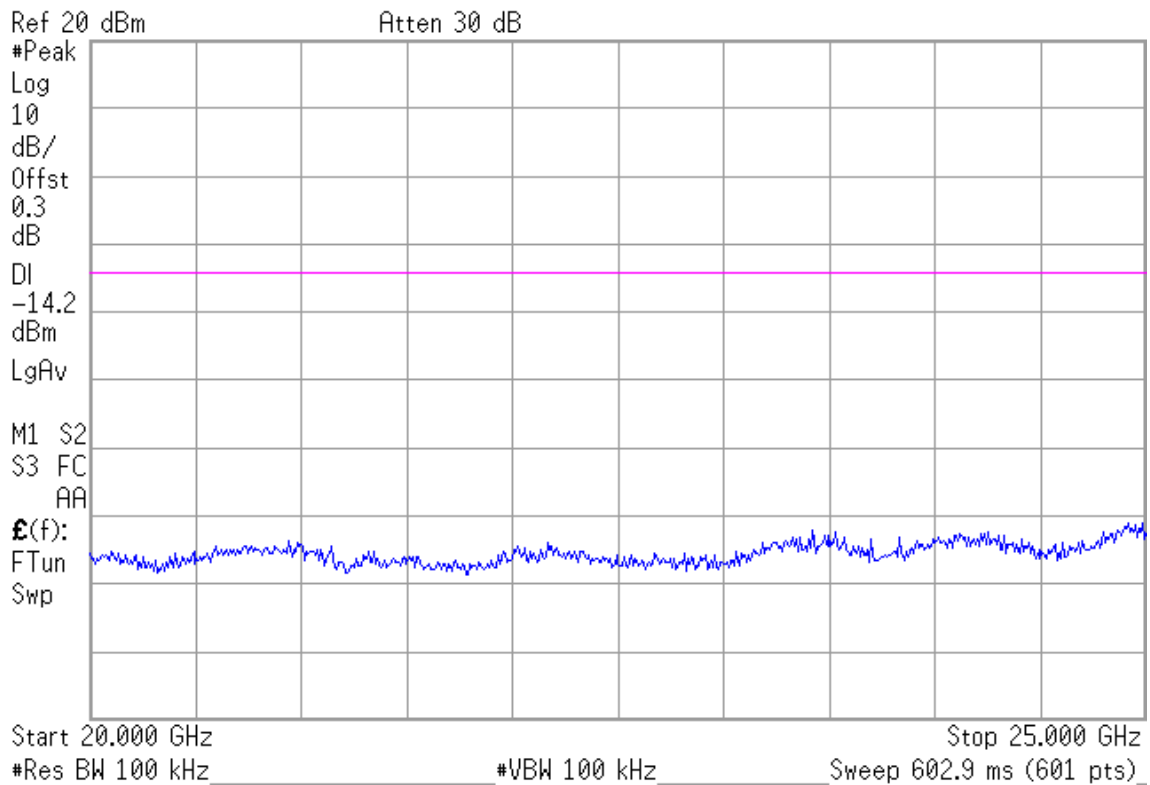
802.11b, Frequency: 2412MHz

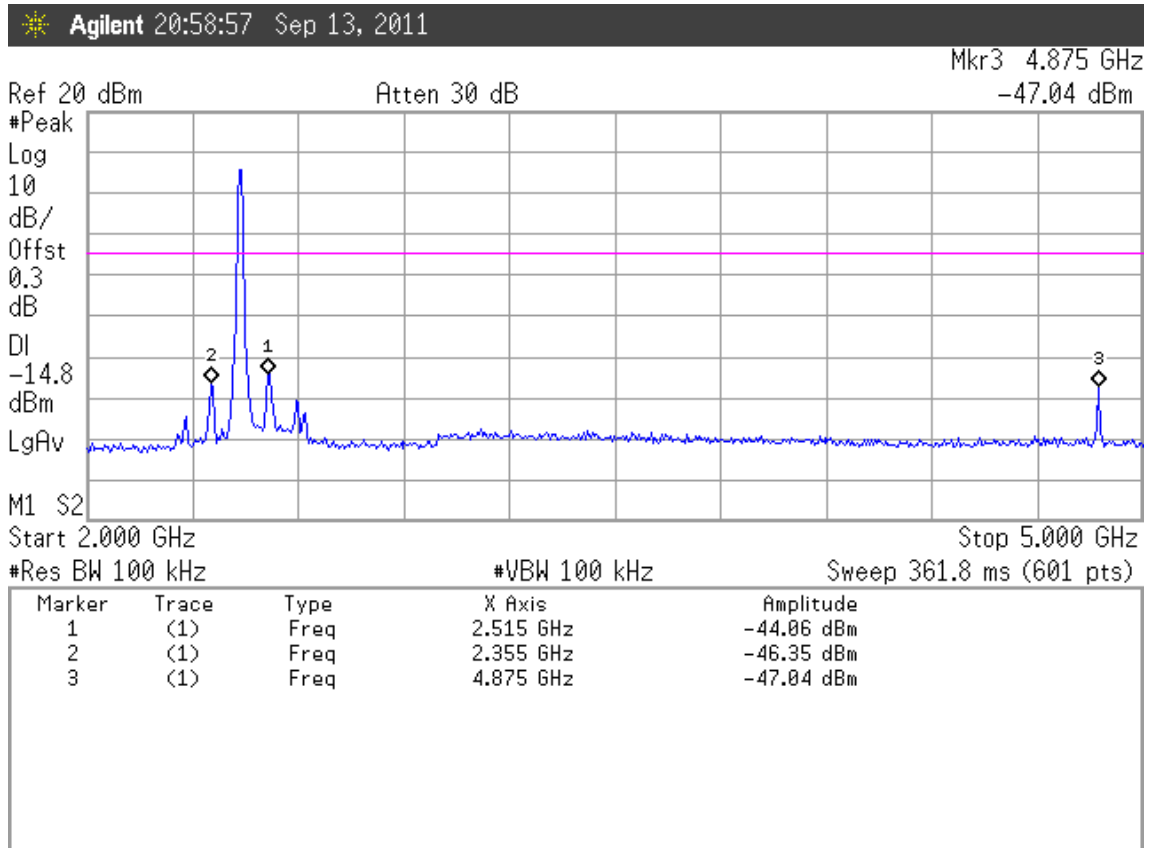
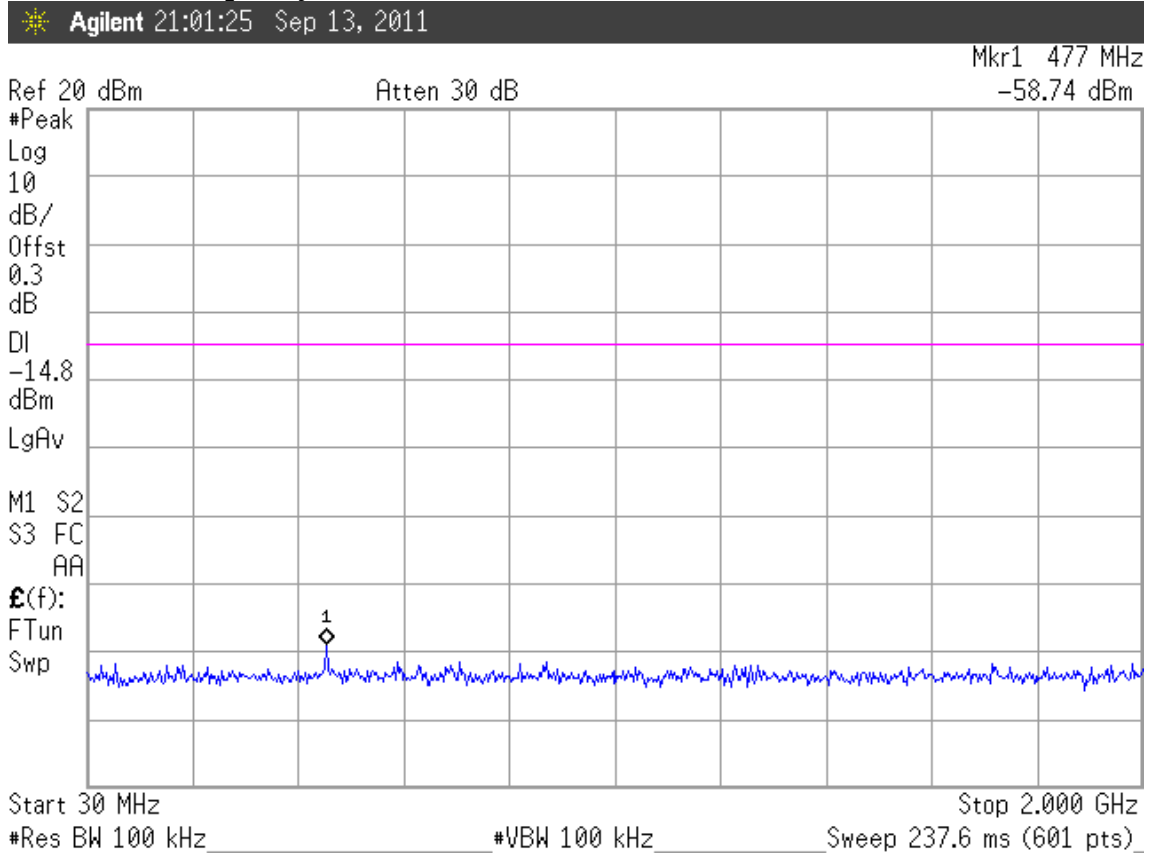


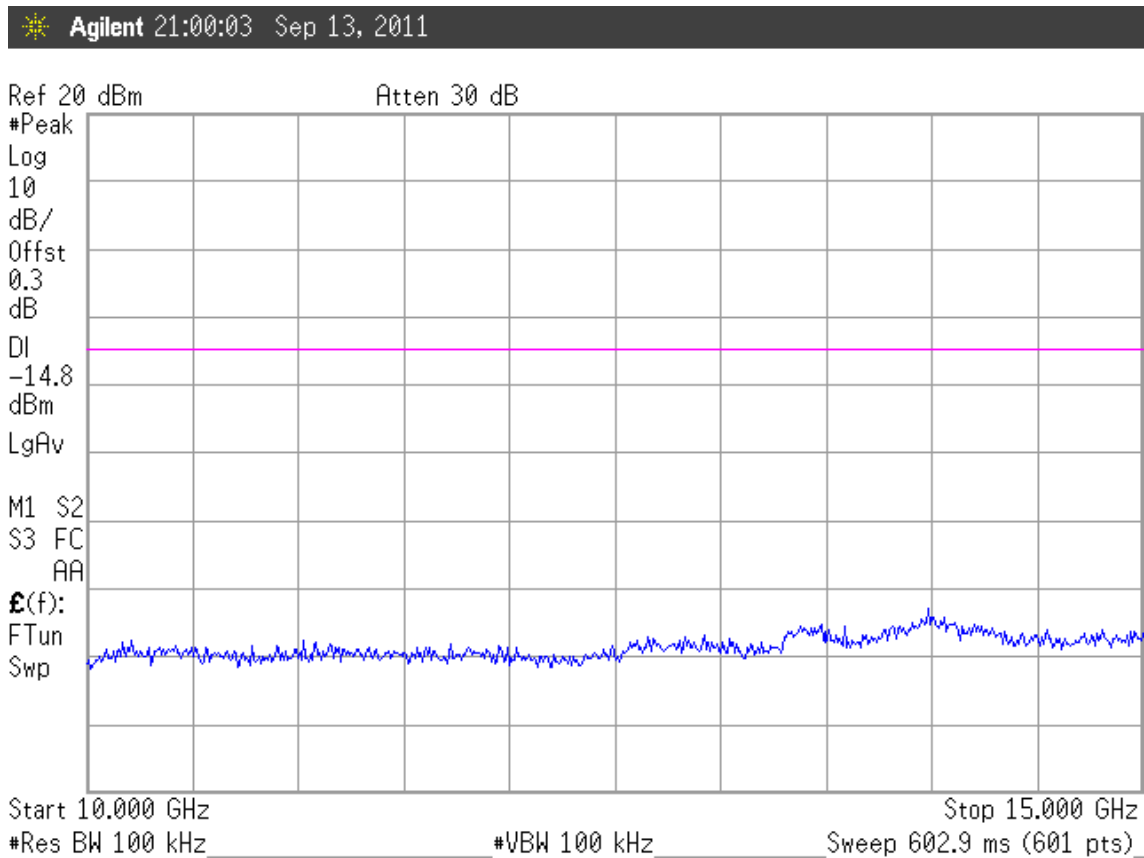
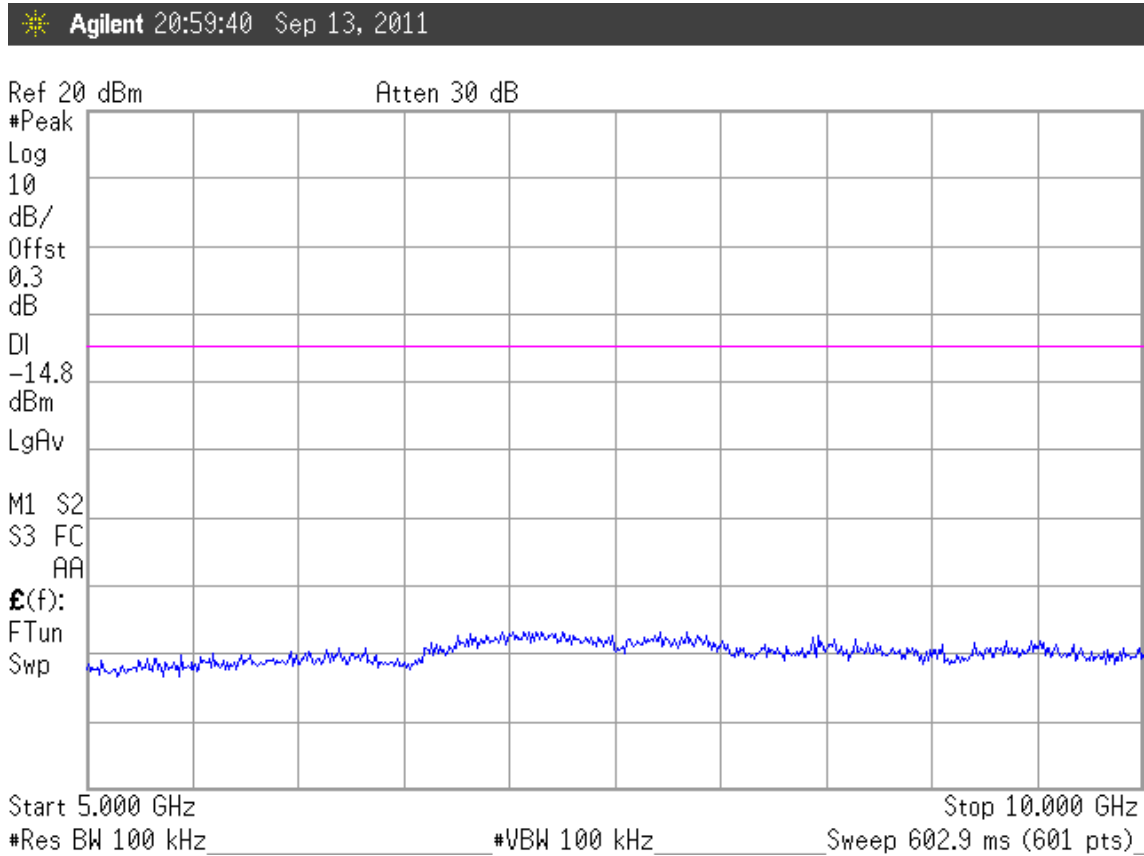
Agilent 20:53:03 Sep 13, 2011

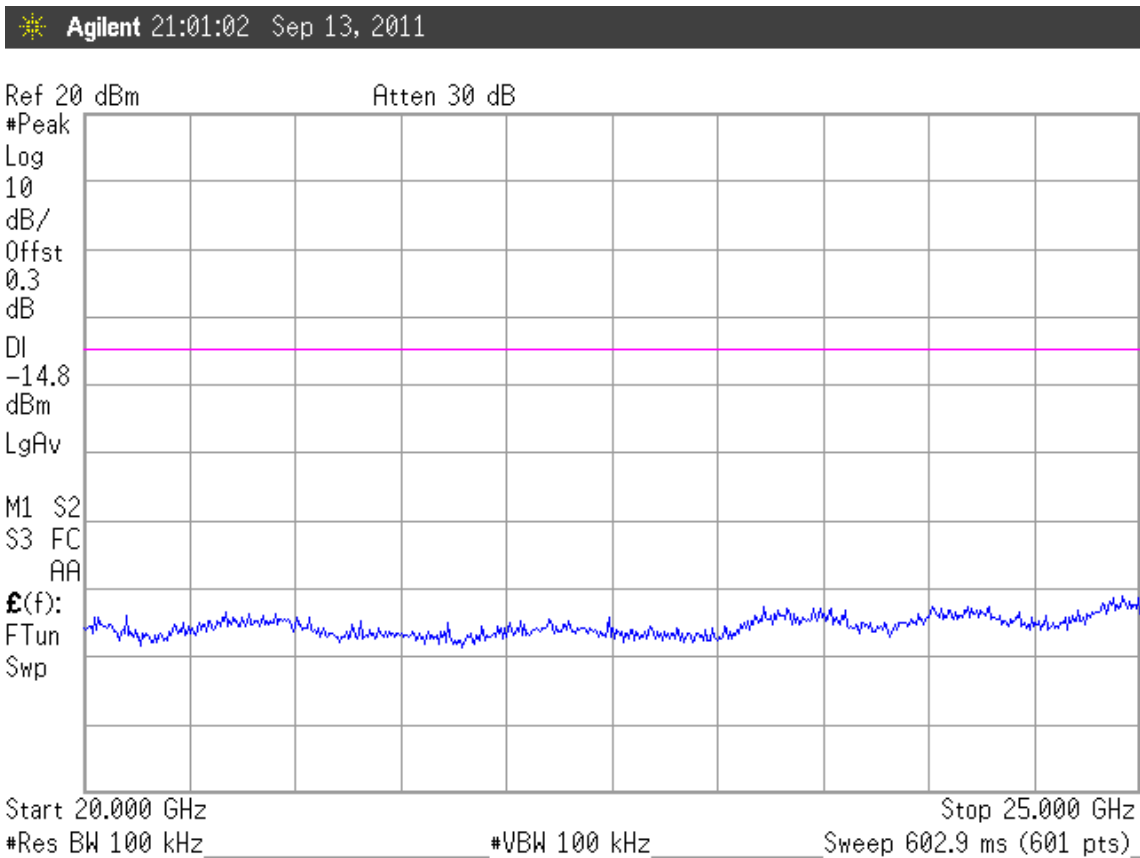
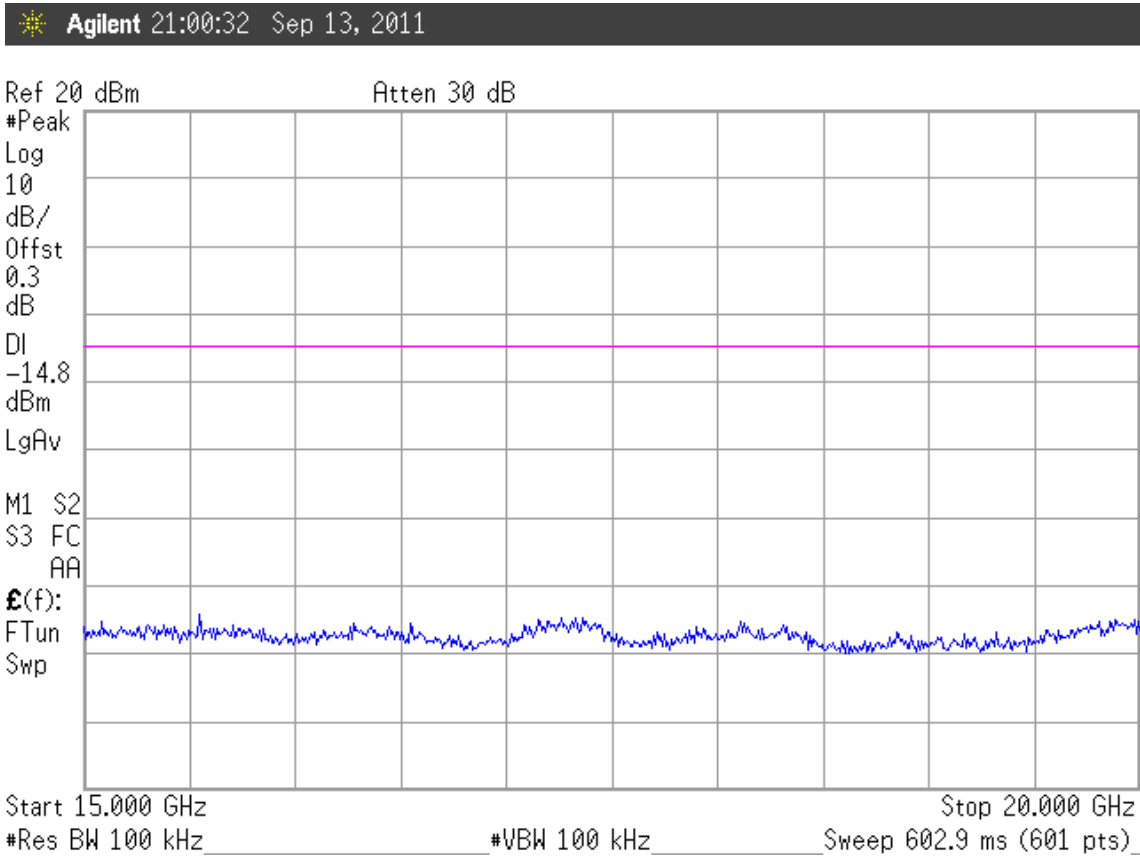


Agilent 20:53:31 Sep 13, 2011

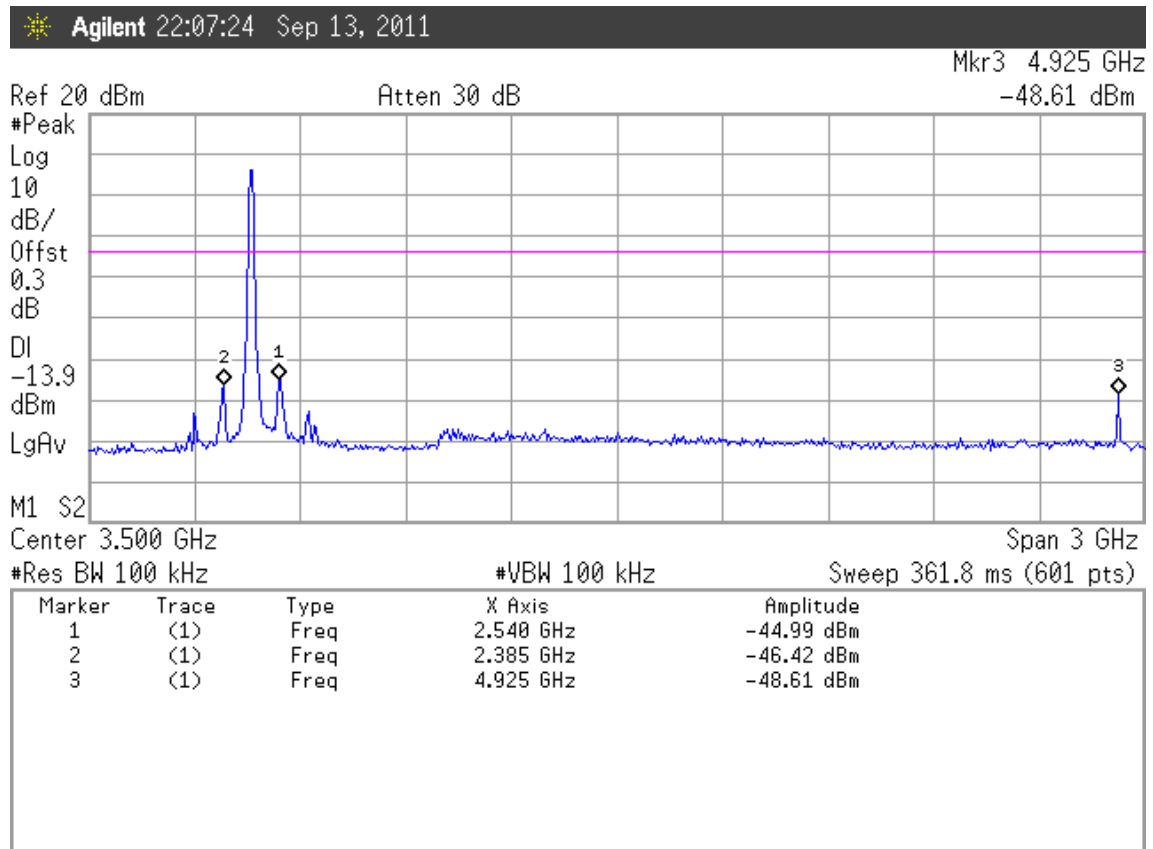
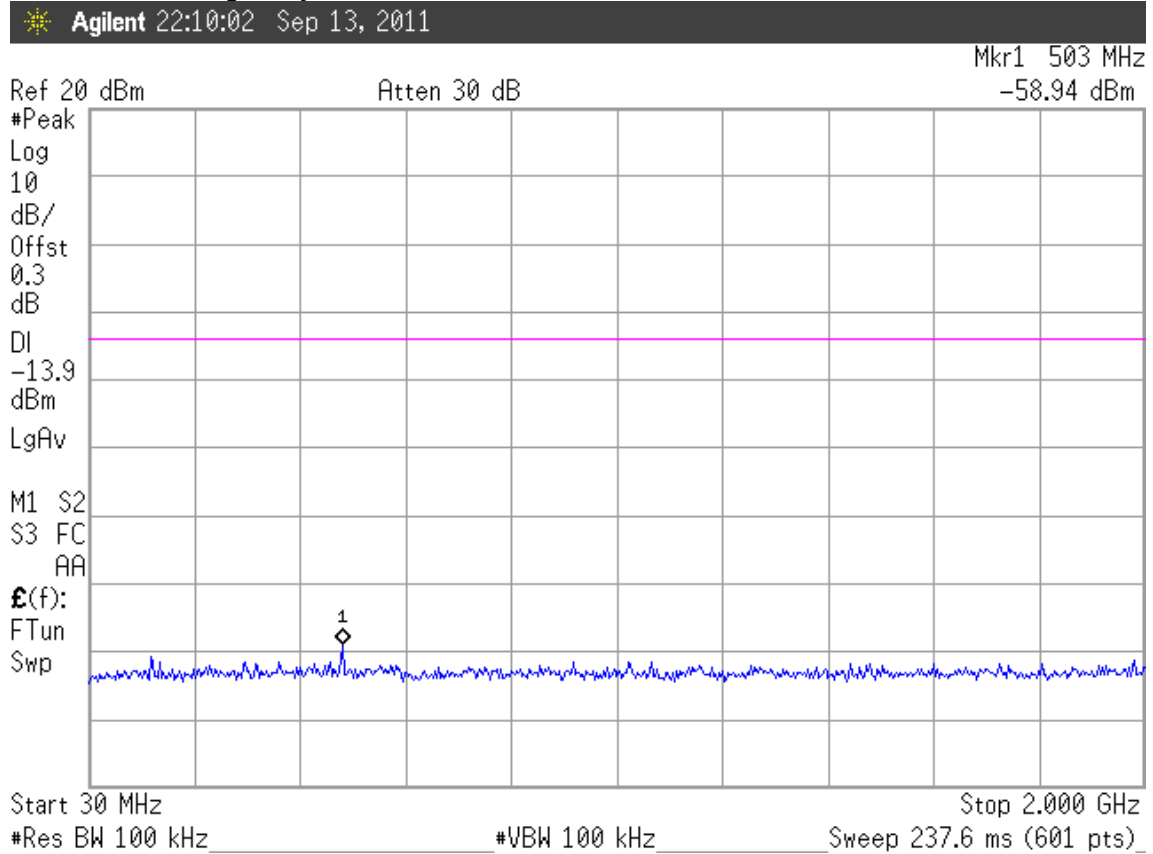


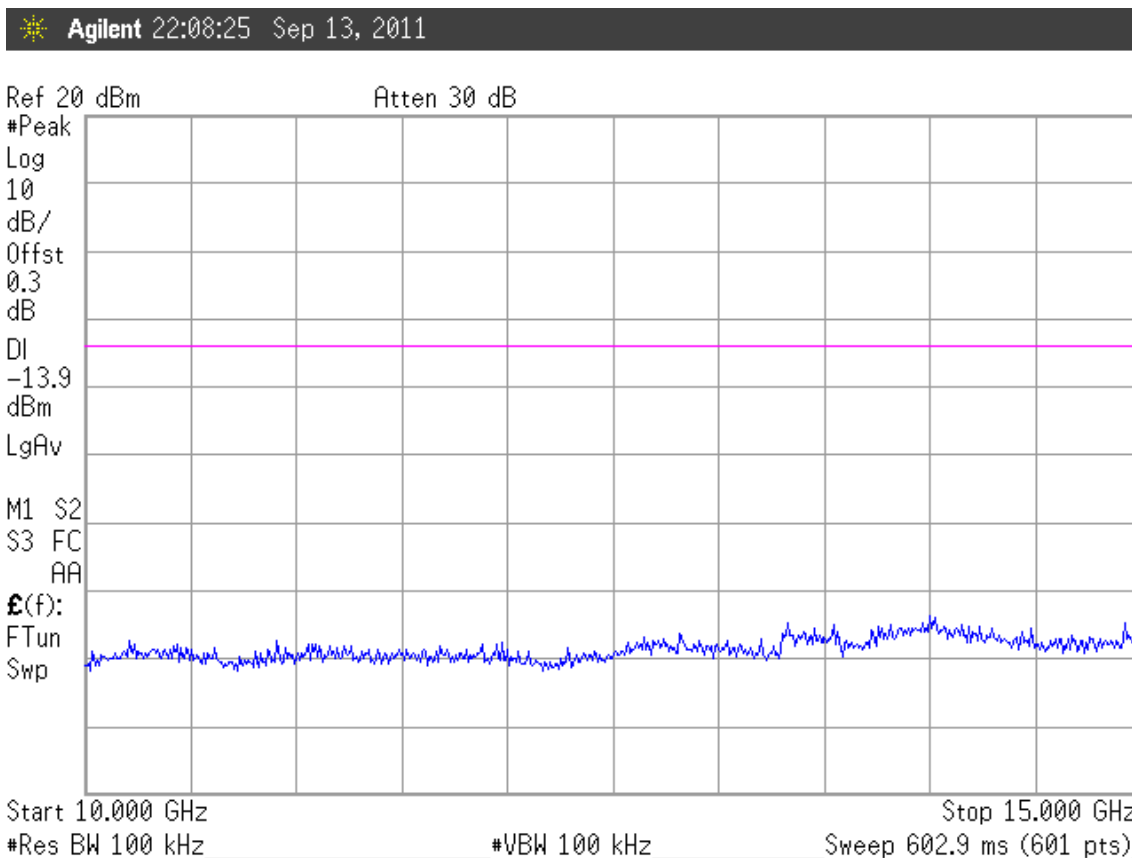
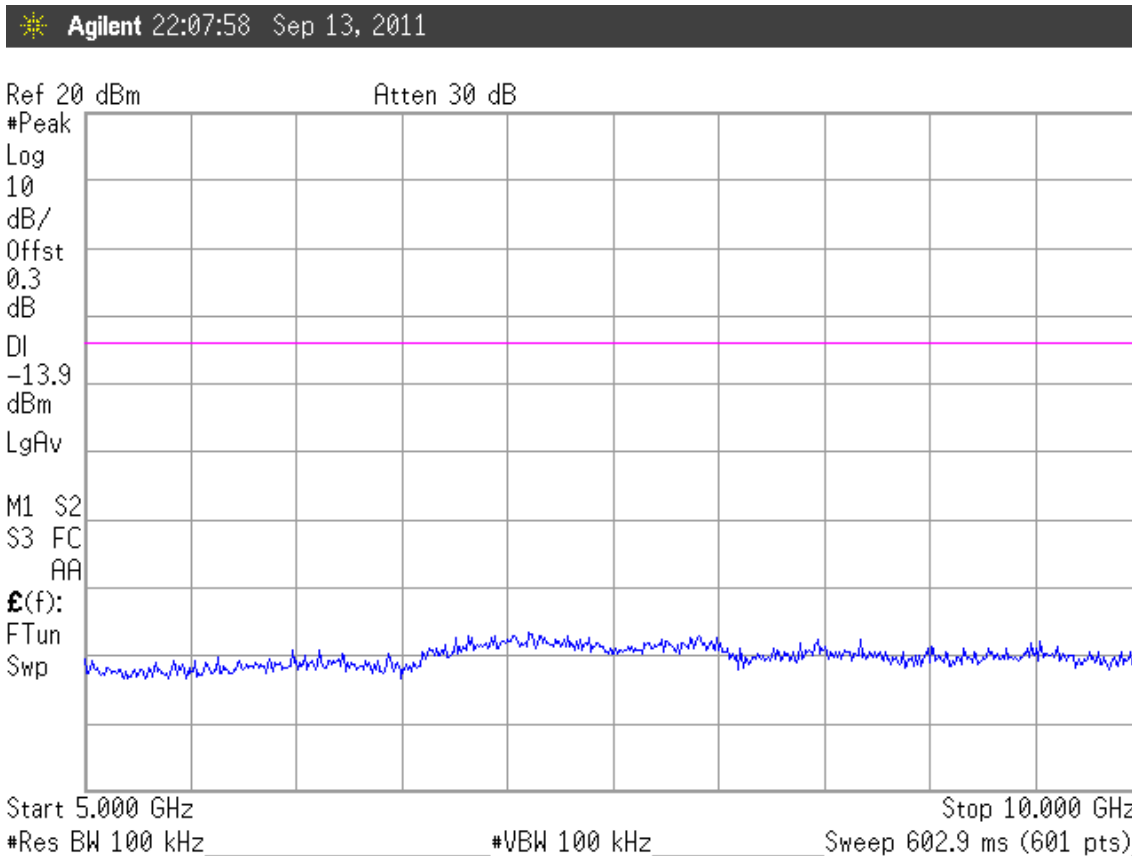
802.11b, Frequency: 2437MHz

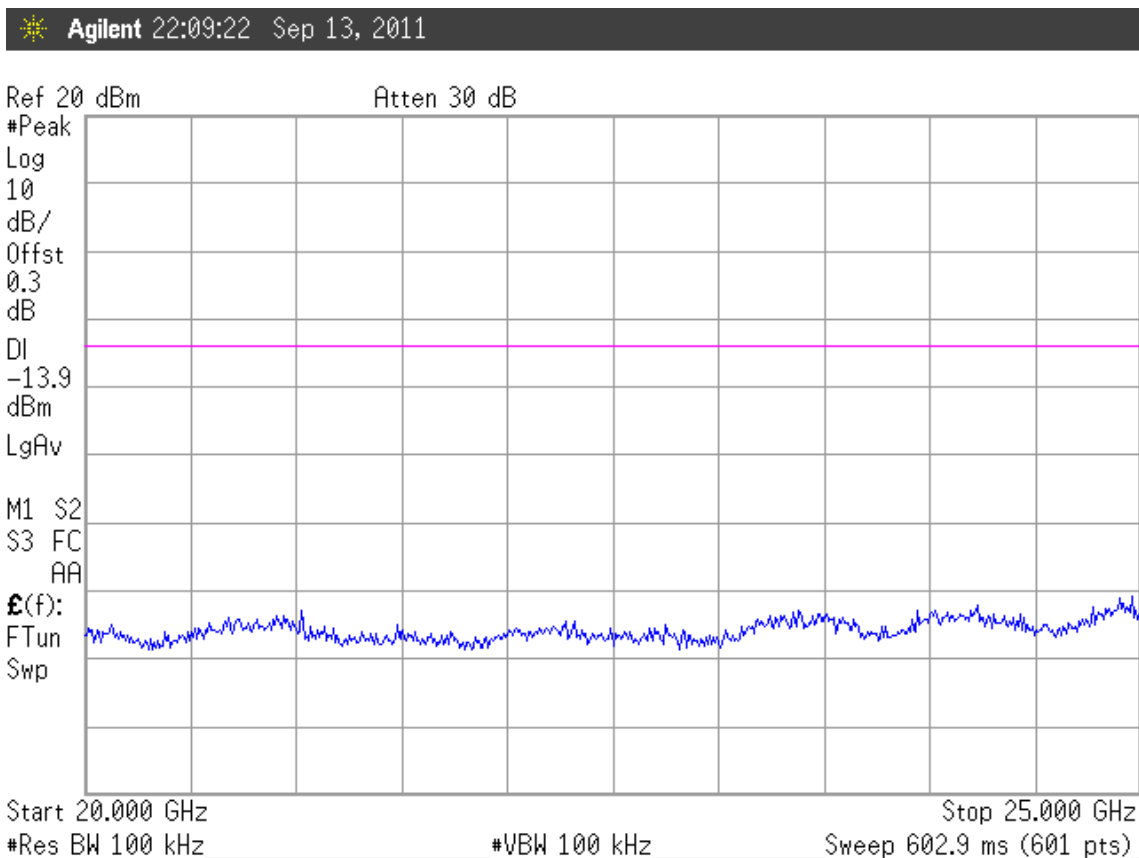
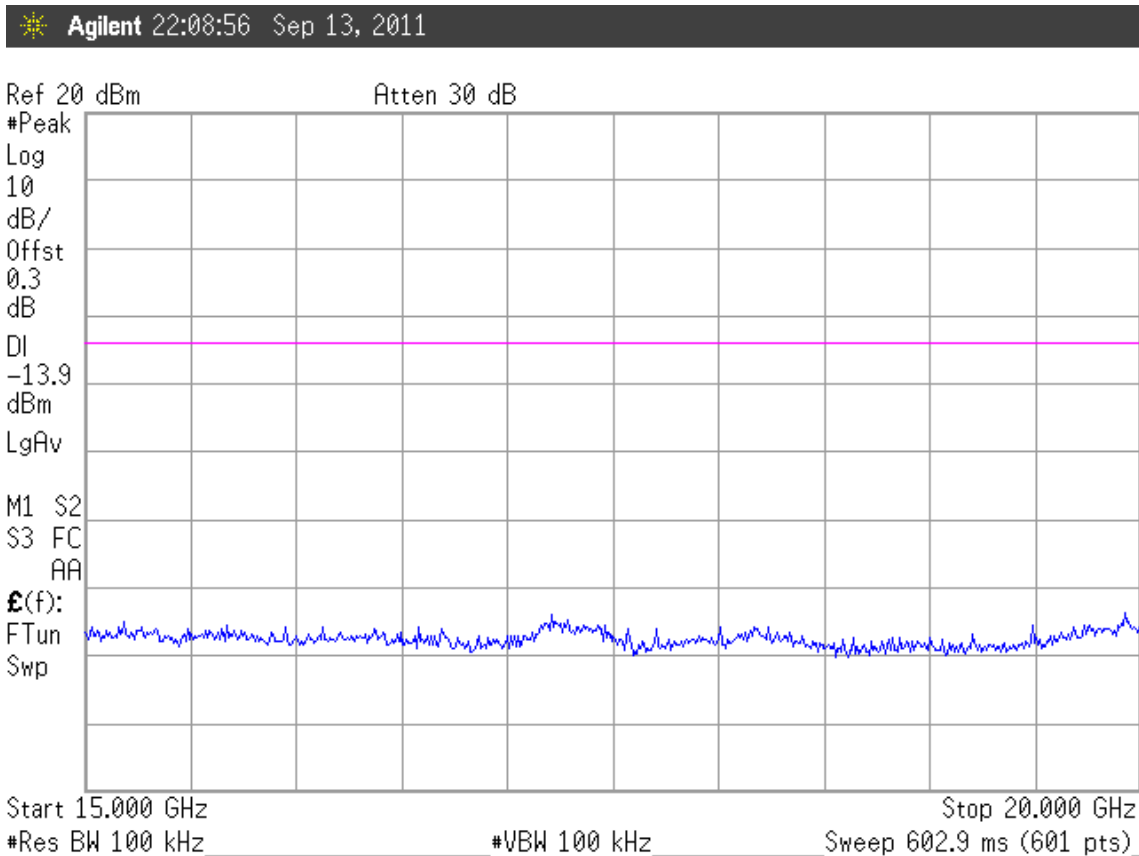




802.11b, Frequency: 2462MHz

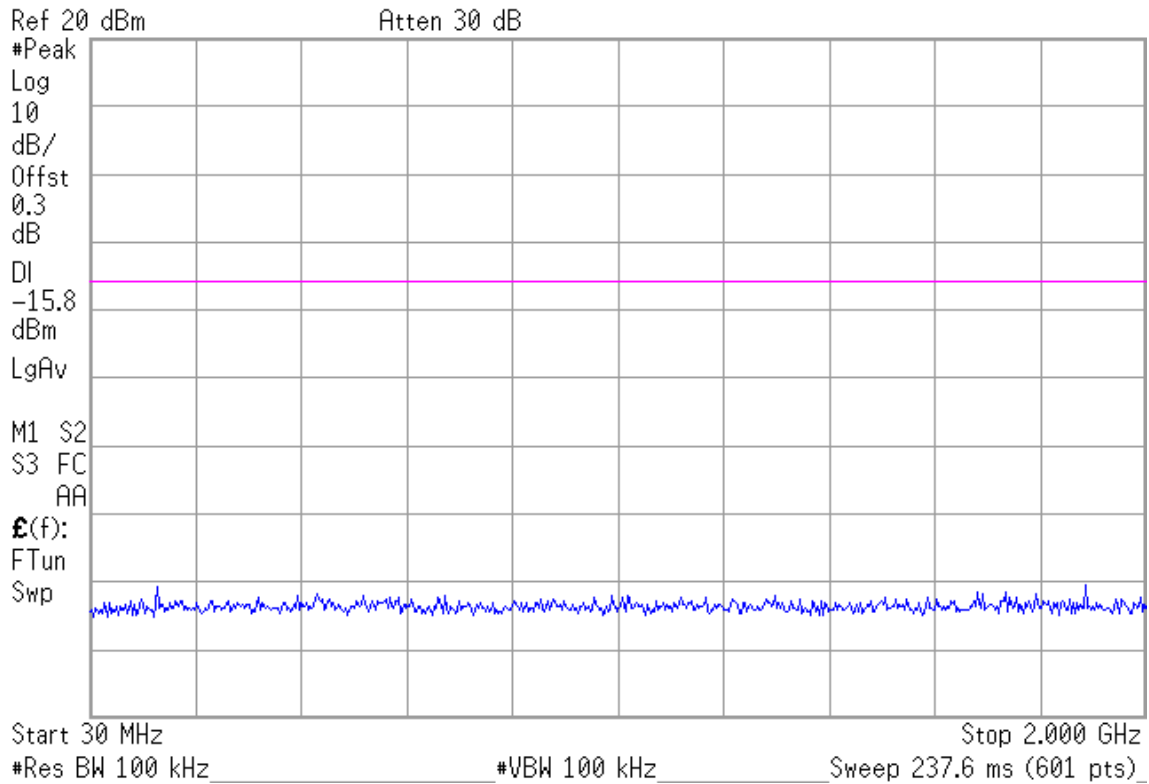




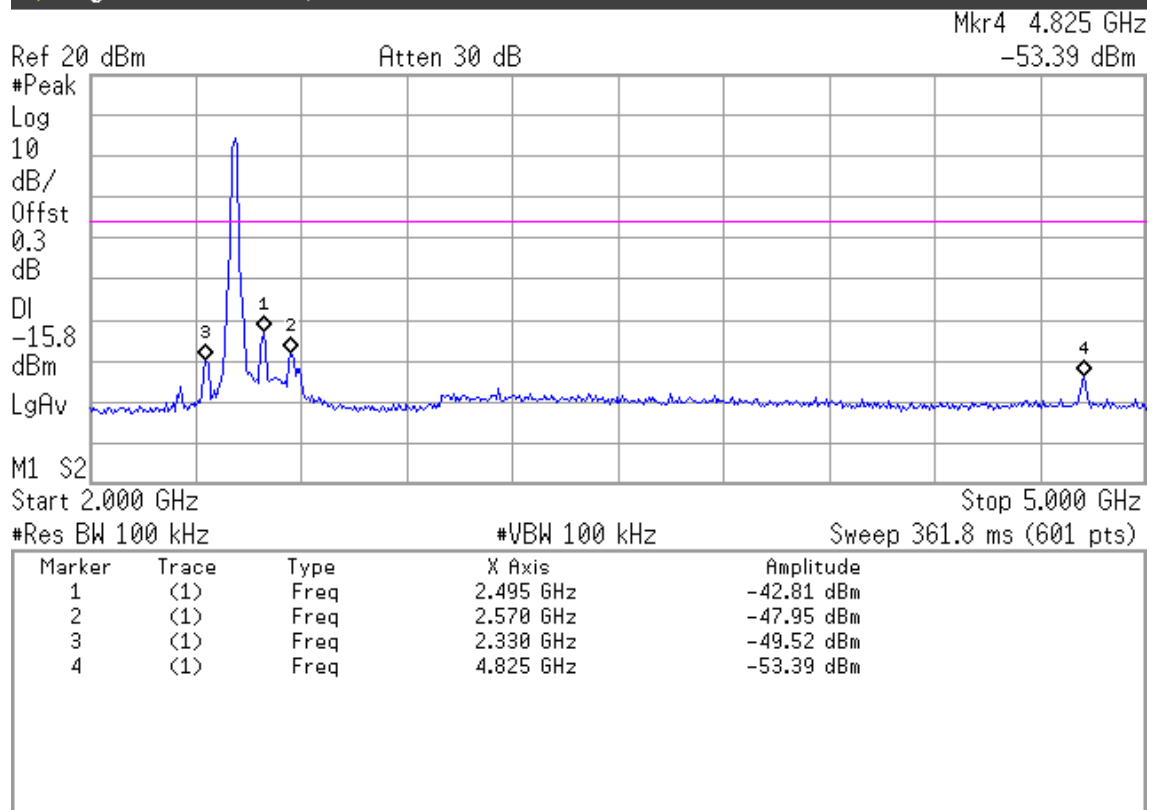


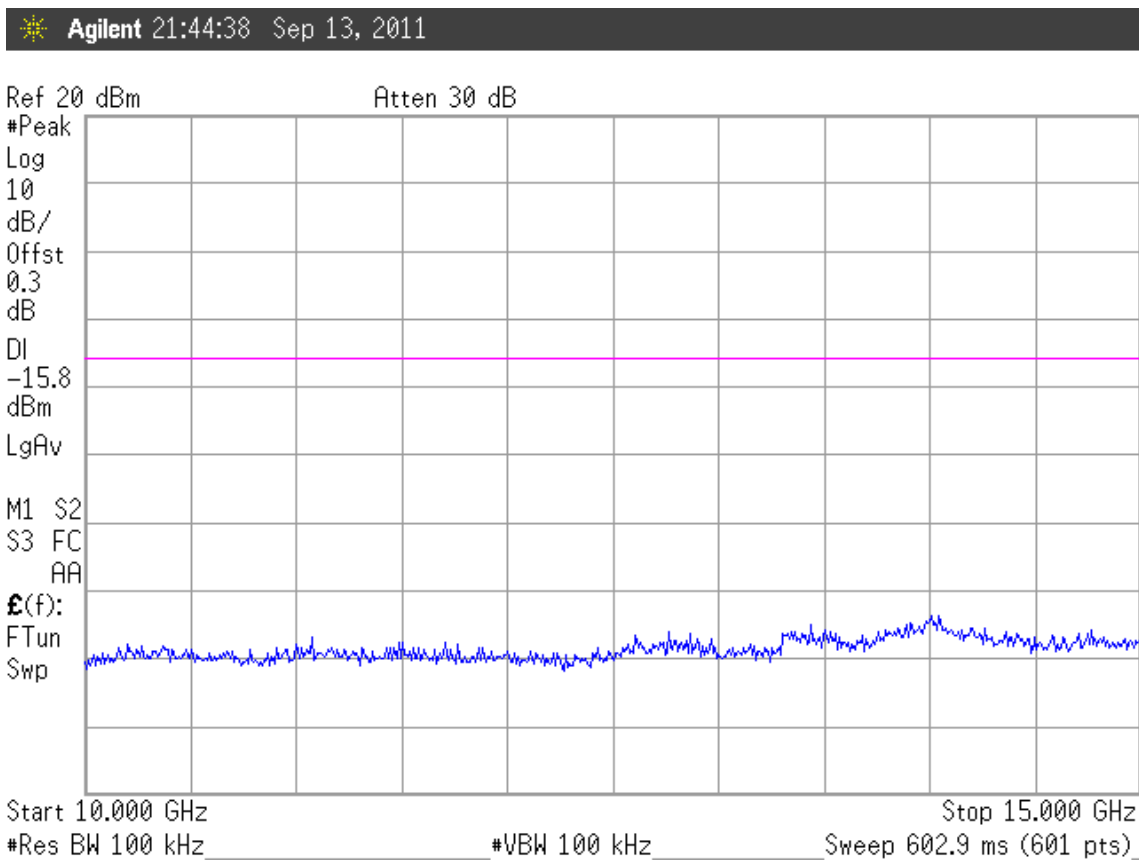
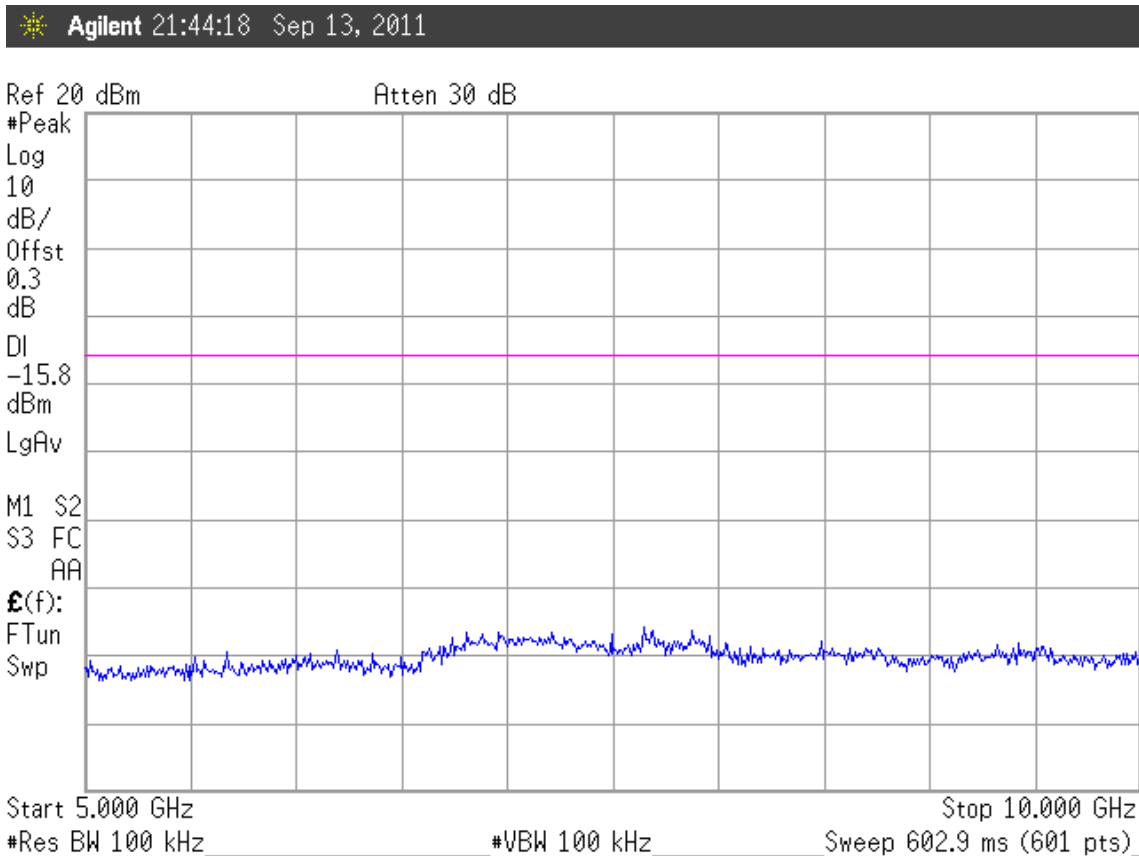
802.11g, Frequency: 2412MHz

Agilent 21:45:48 Sep 13, 2011

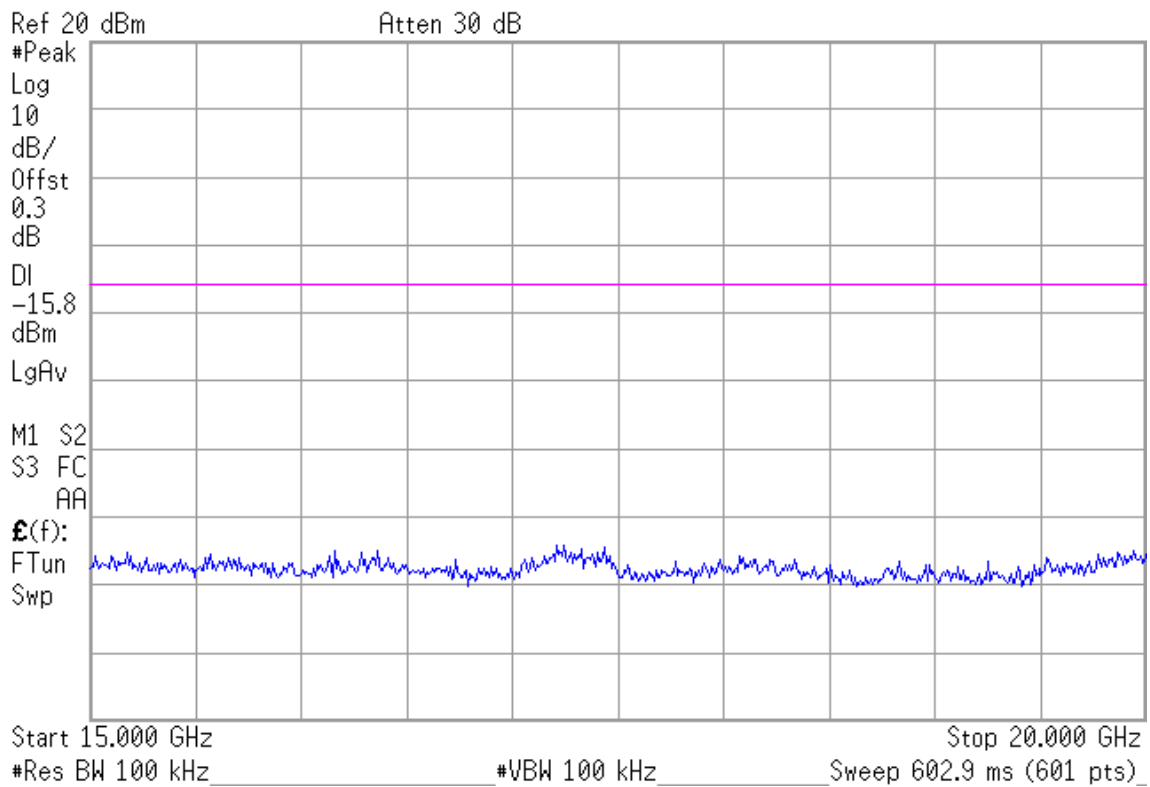


Agilent 21:43:35 Sep 13, 2011

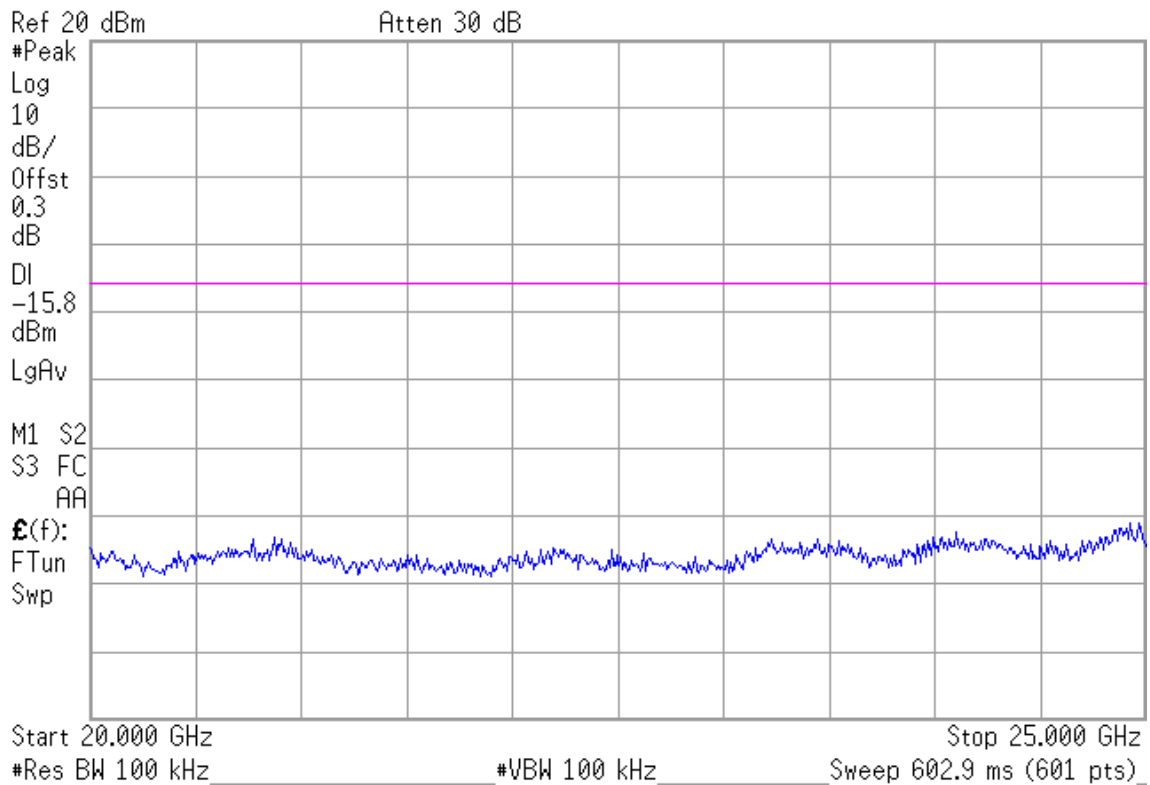




Agilent 21:45:00 Sep 13, 2011

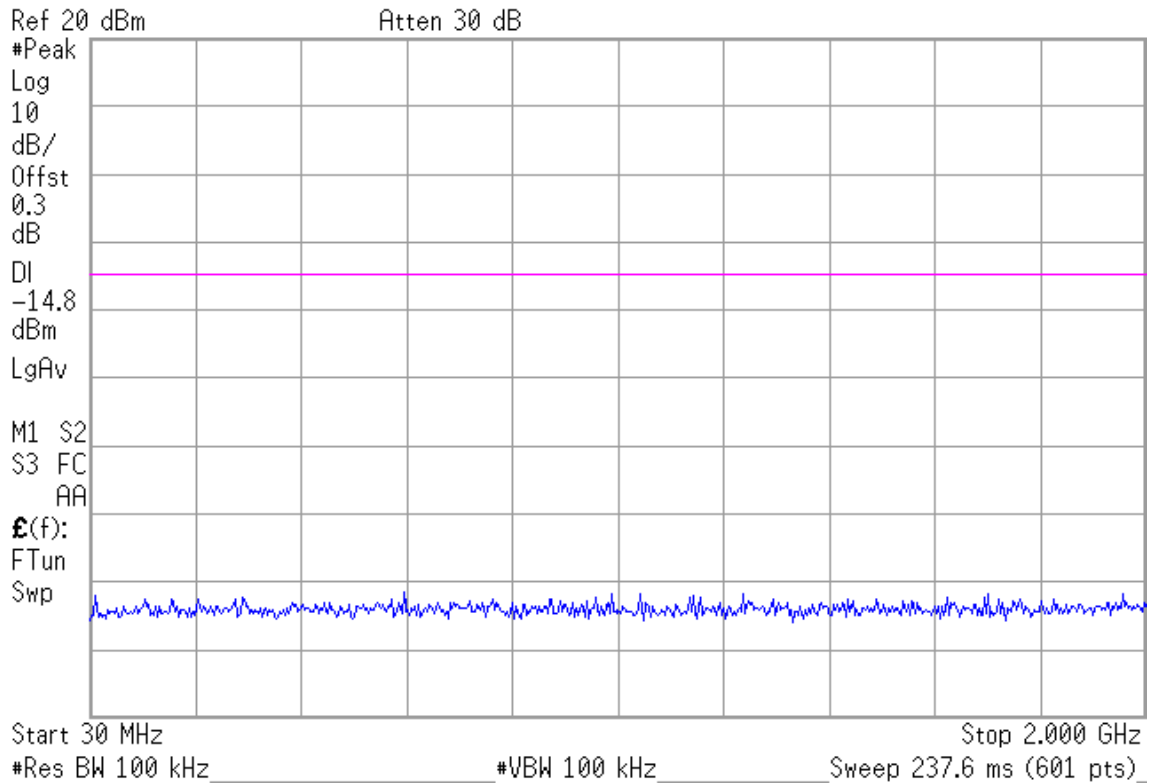


Agilent 21:45:26 Sep 13, 2011

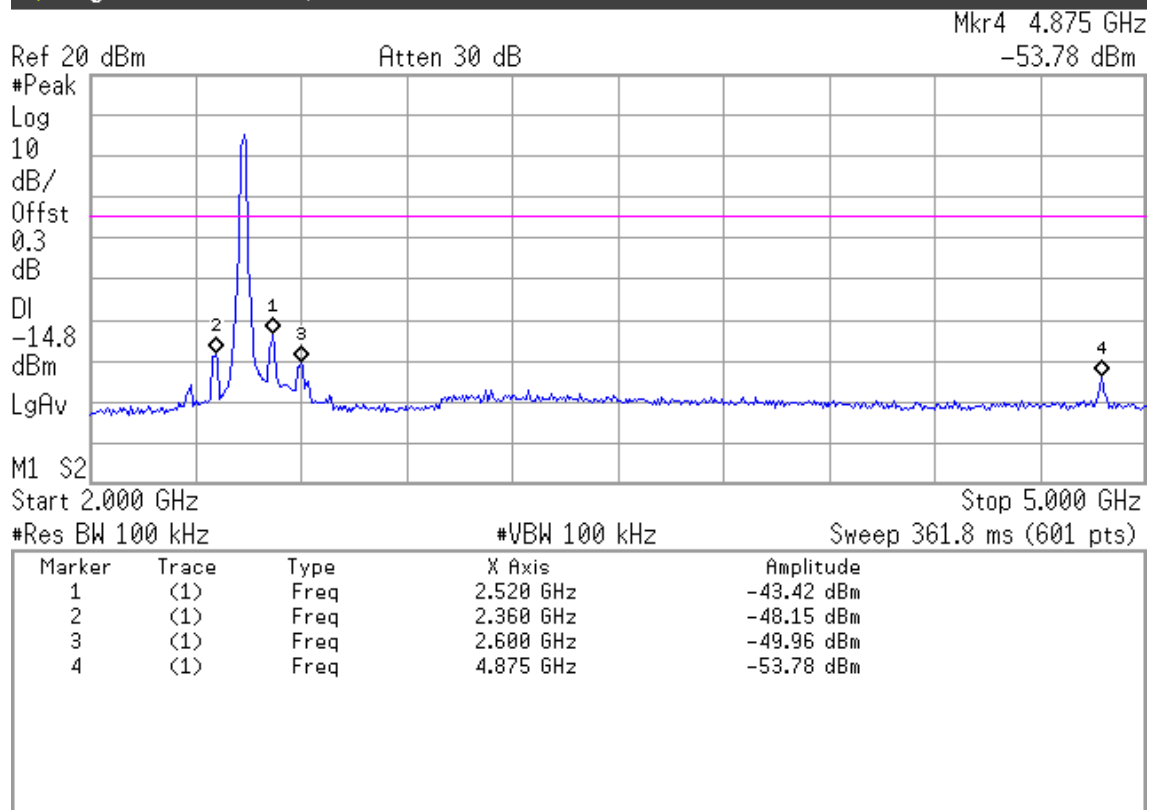


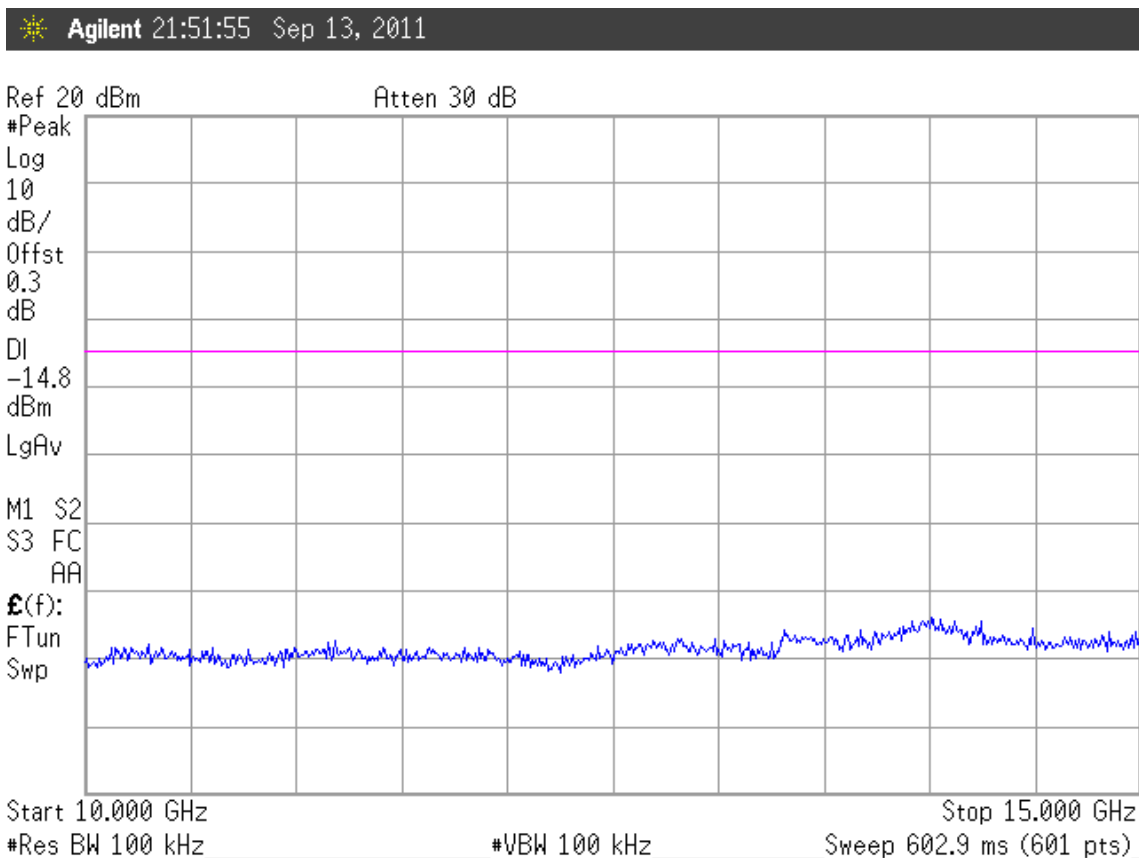
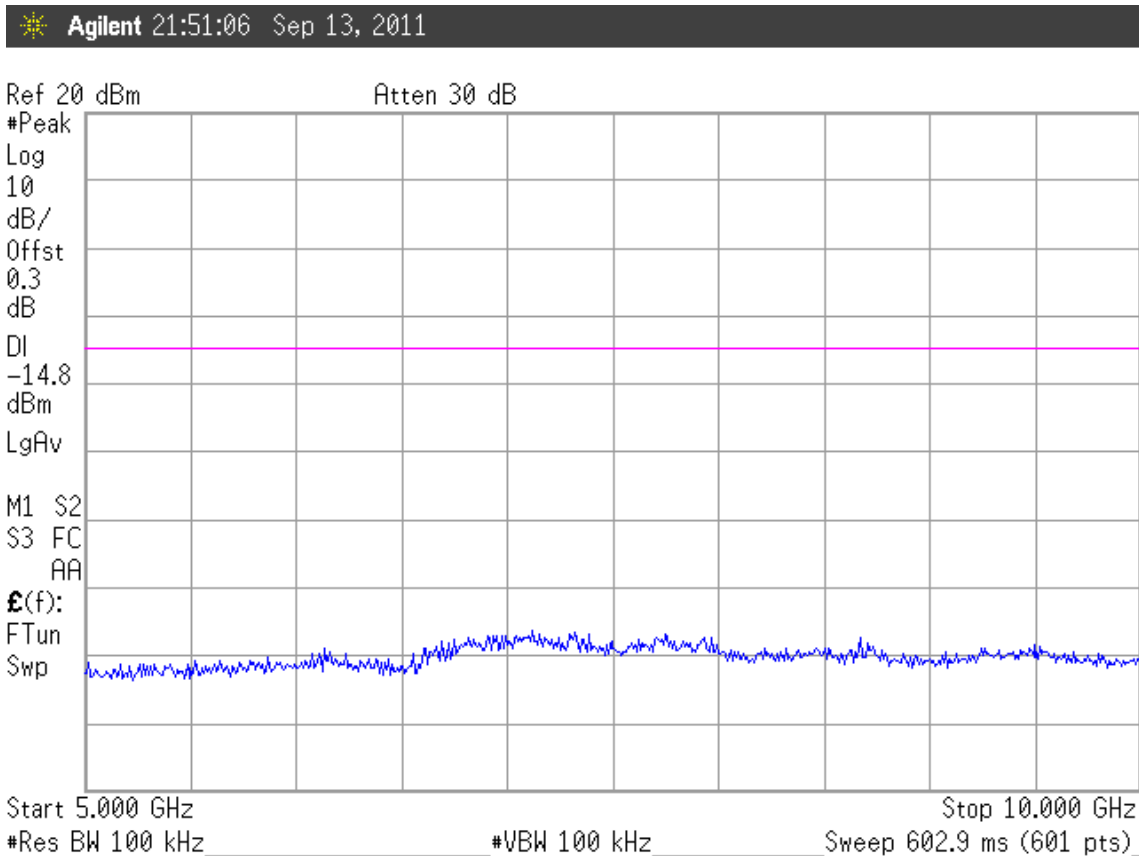
802.11g, Frequency: 2437MHz

Agilent 21:53:28 Sep 13, 2011

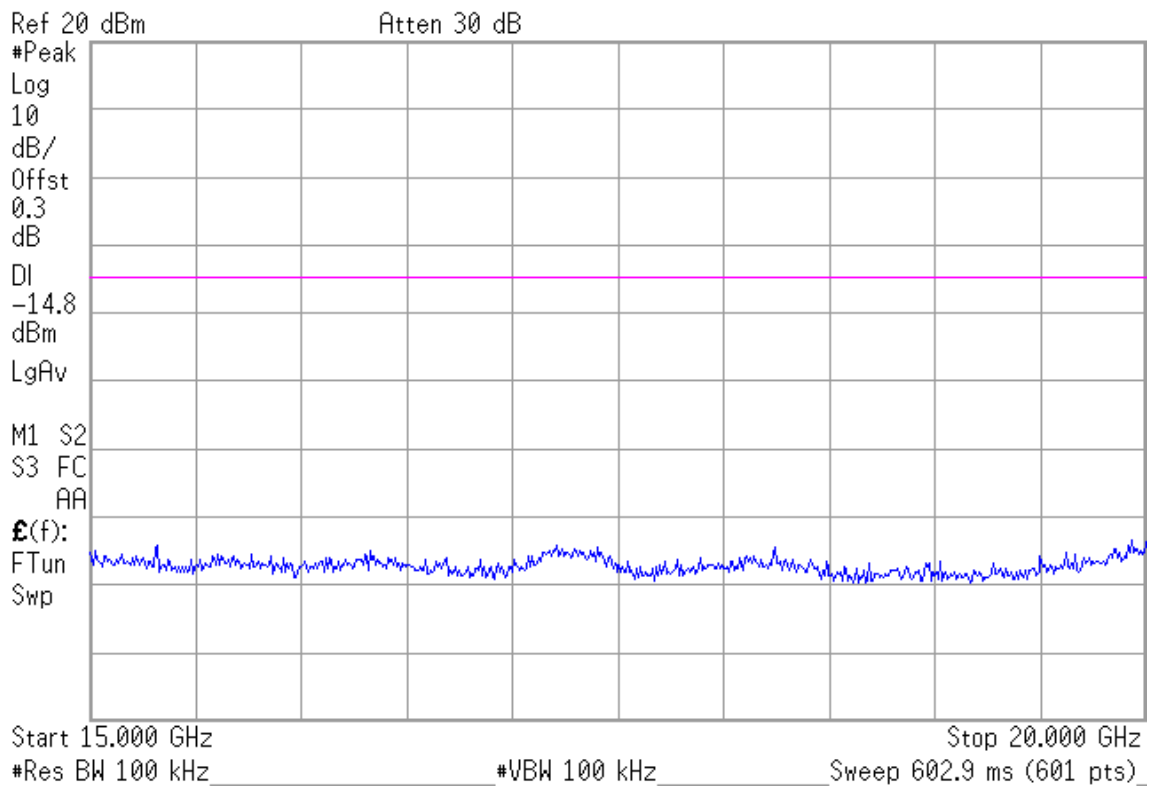


Agilent 21:50:29 Sep 13, 2011

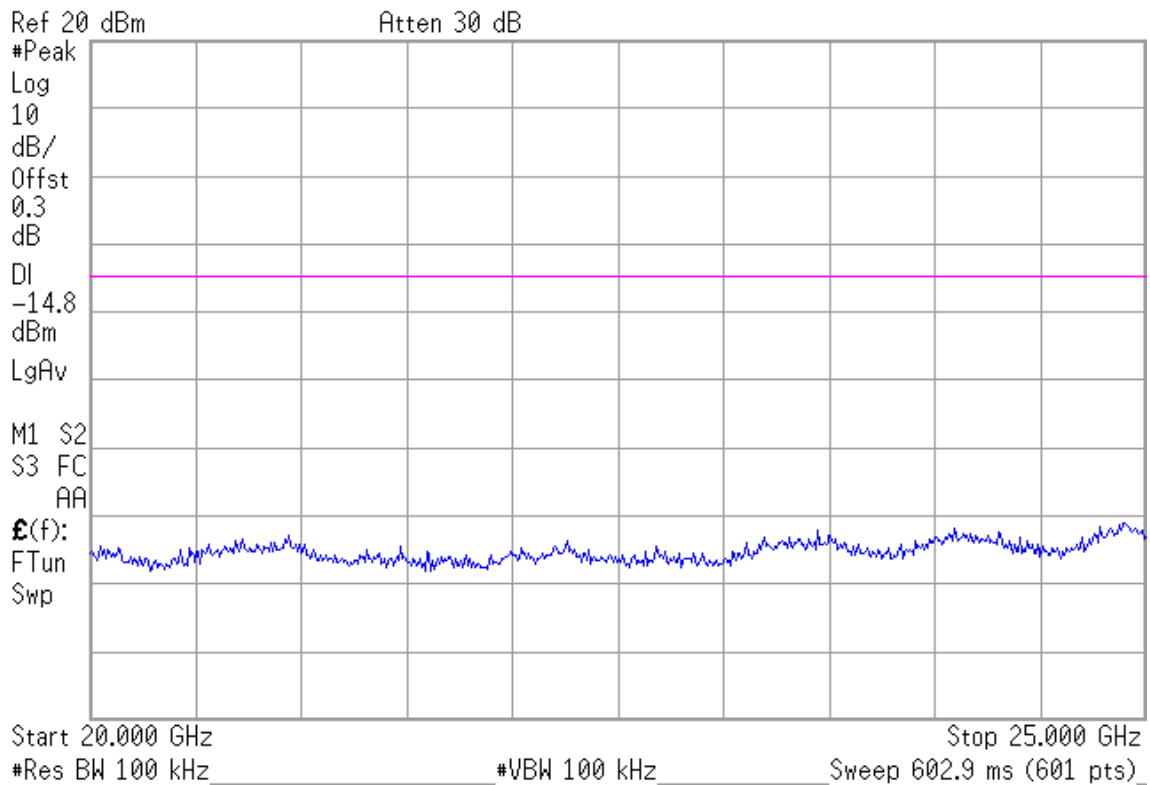


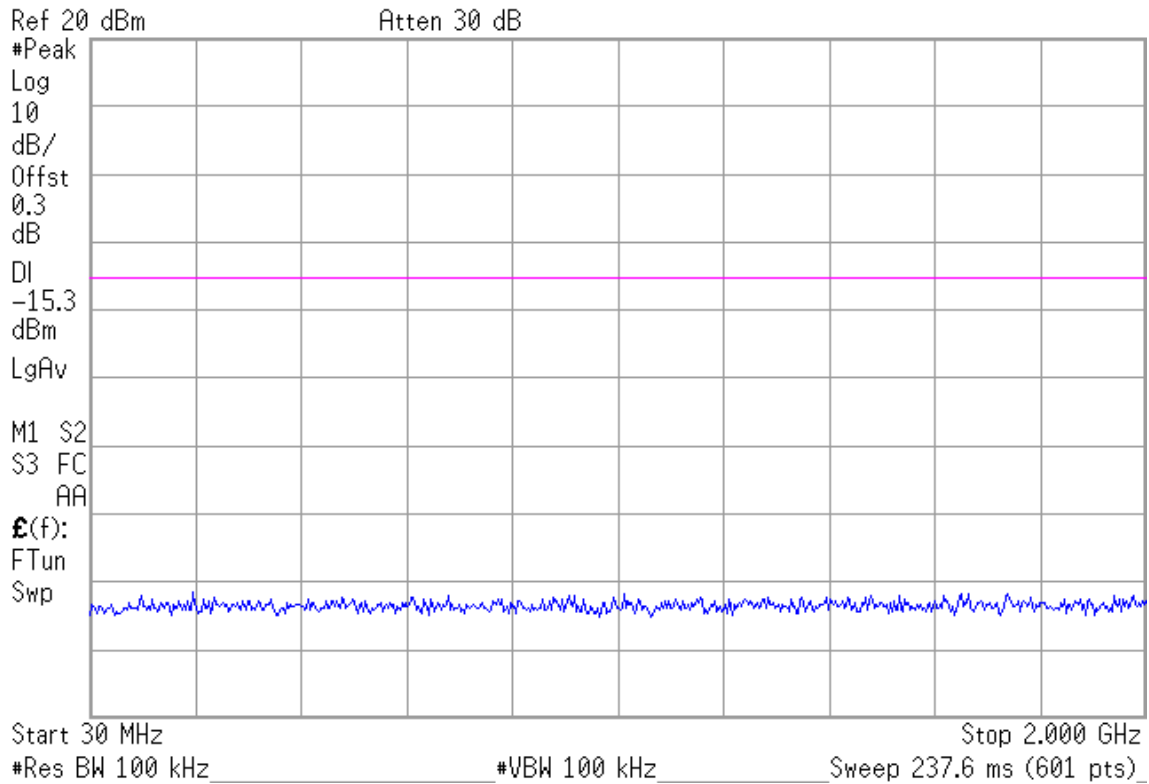
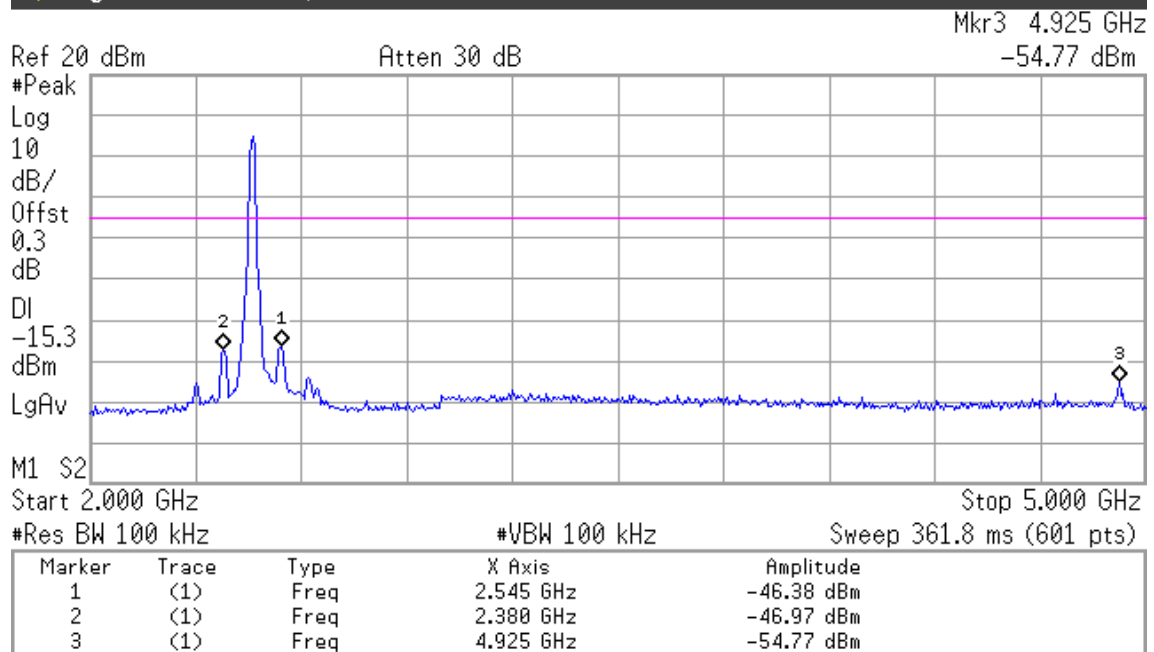


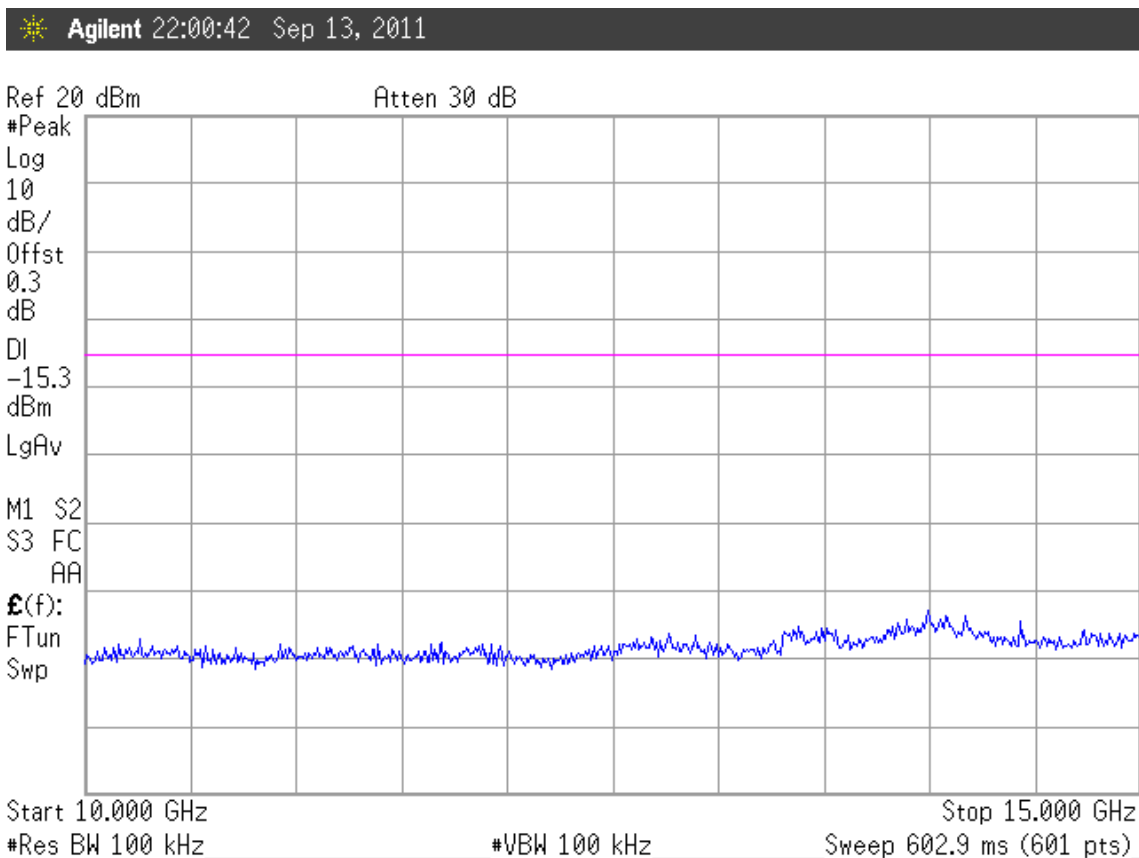
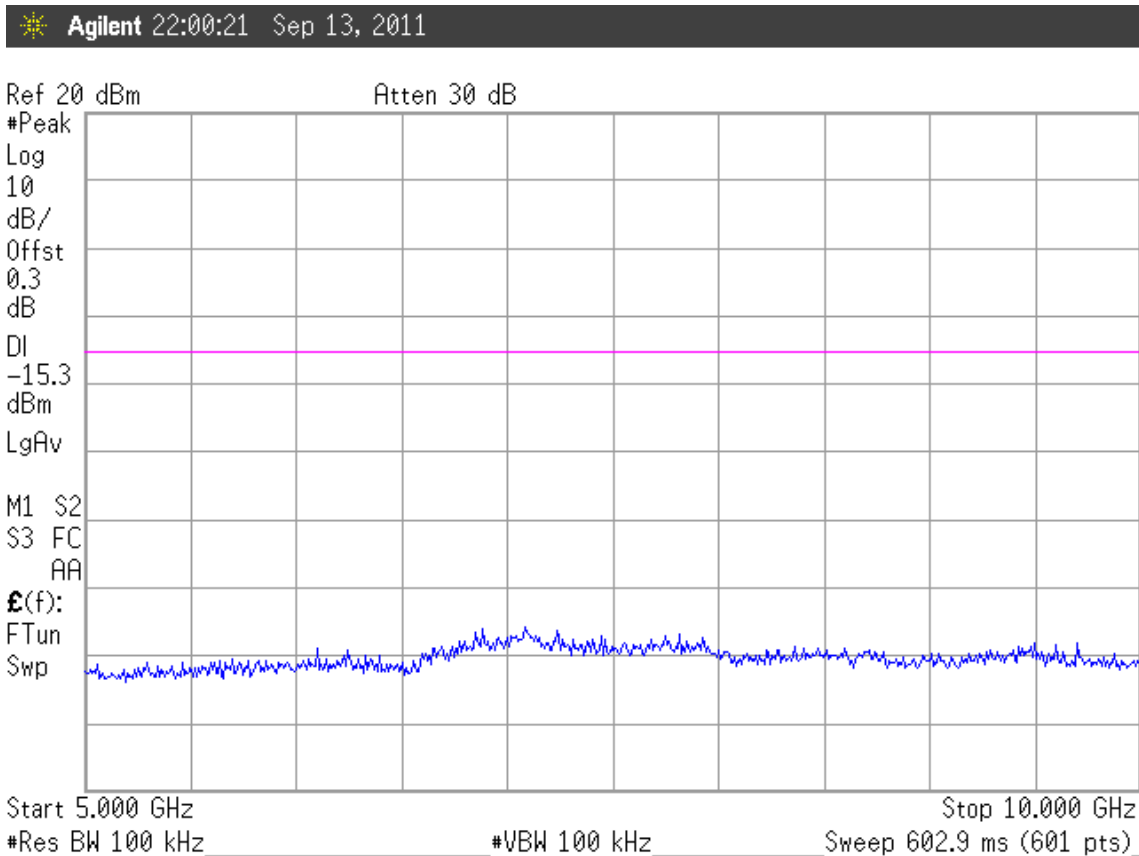
Agilent 21:52:22 Sep 13, 2011

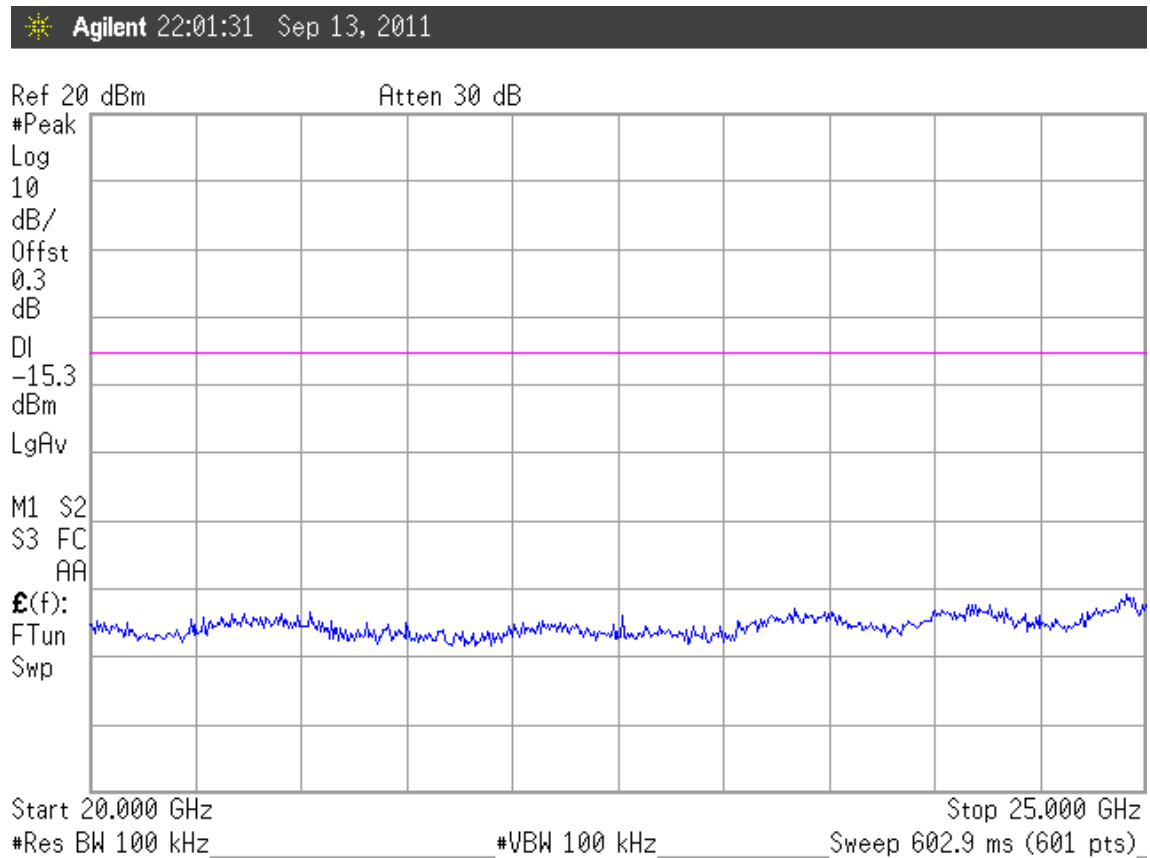
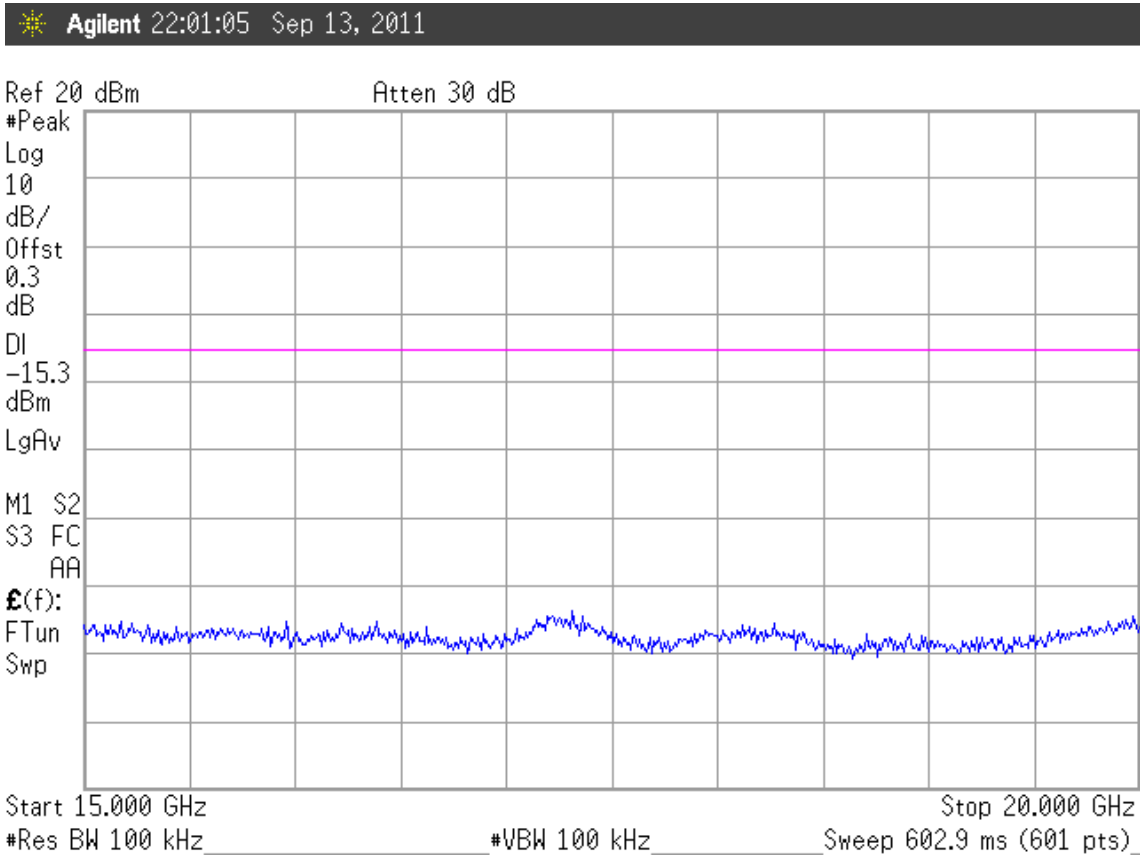


Agilent 21:53:03 Sep 13, 2011



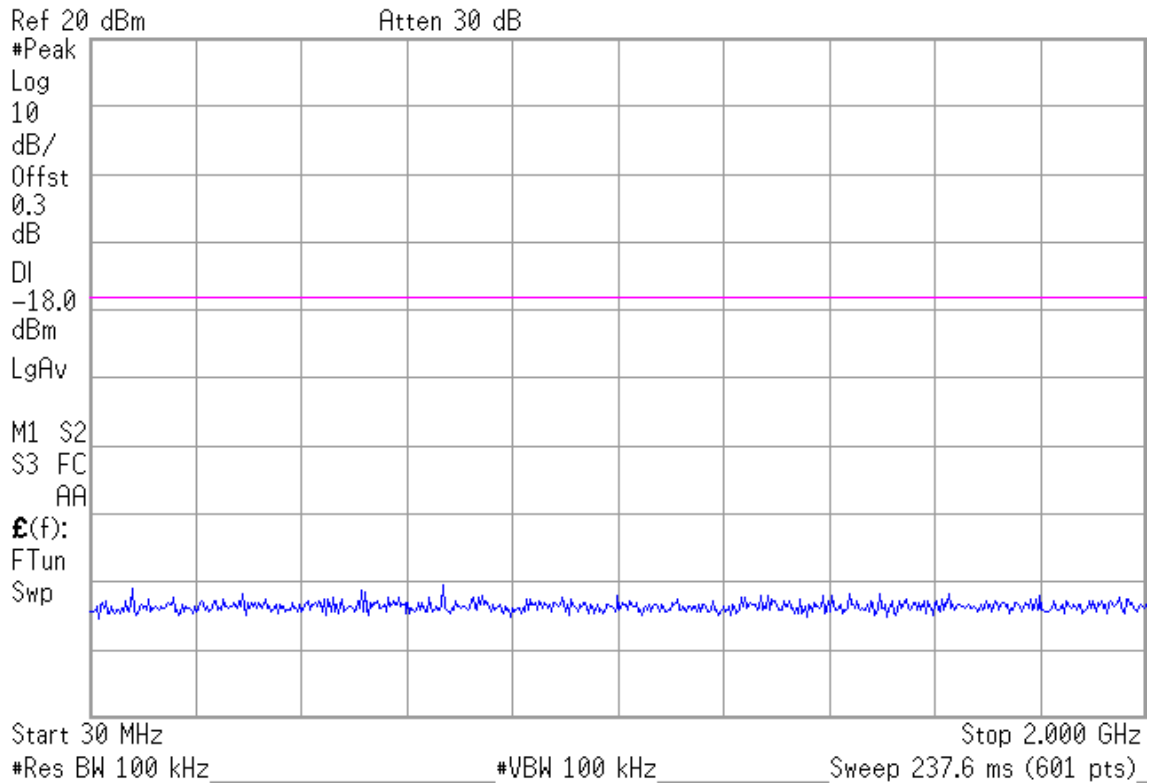
802.11g, Frequency: 2462MHz
 **Agilent** 22:01:59 Sep 13, 2011

 **Agilent** 21:59:34 Sep 13, 2011




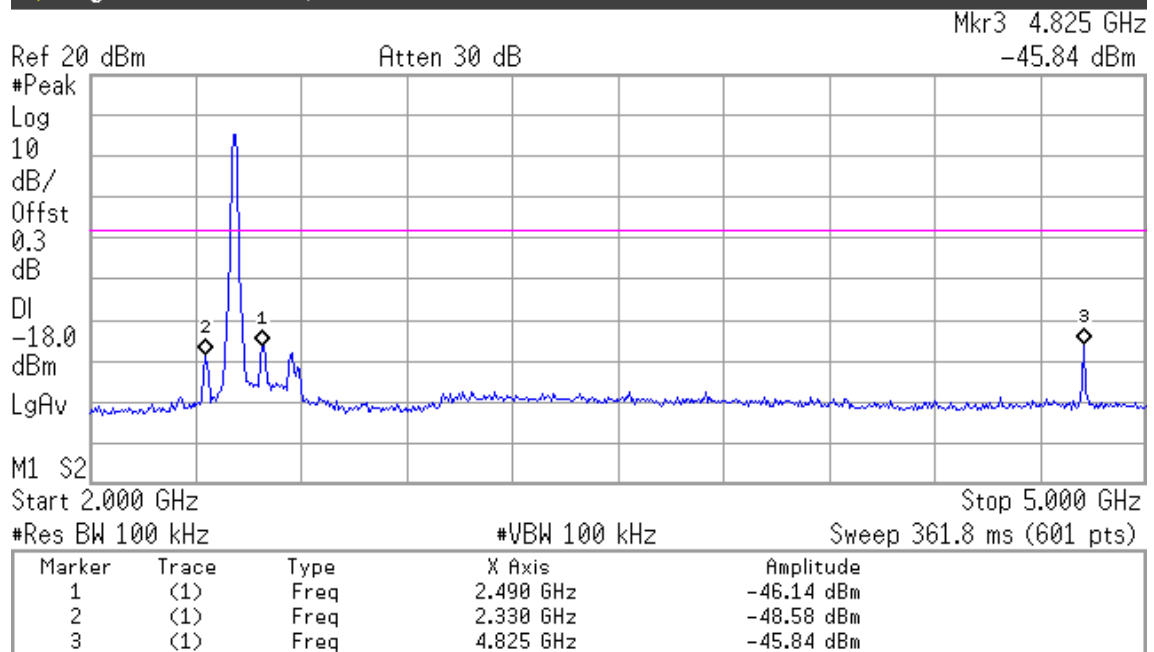


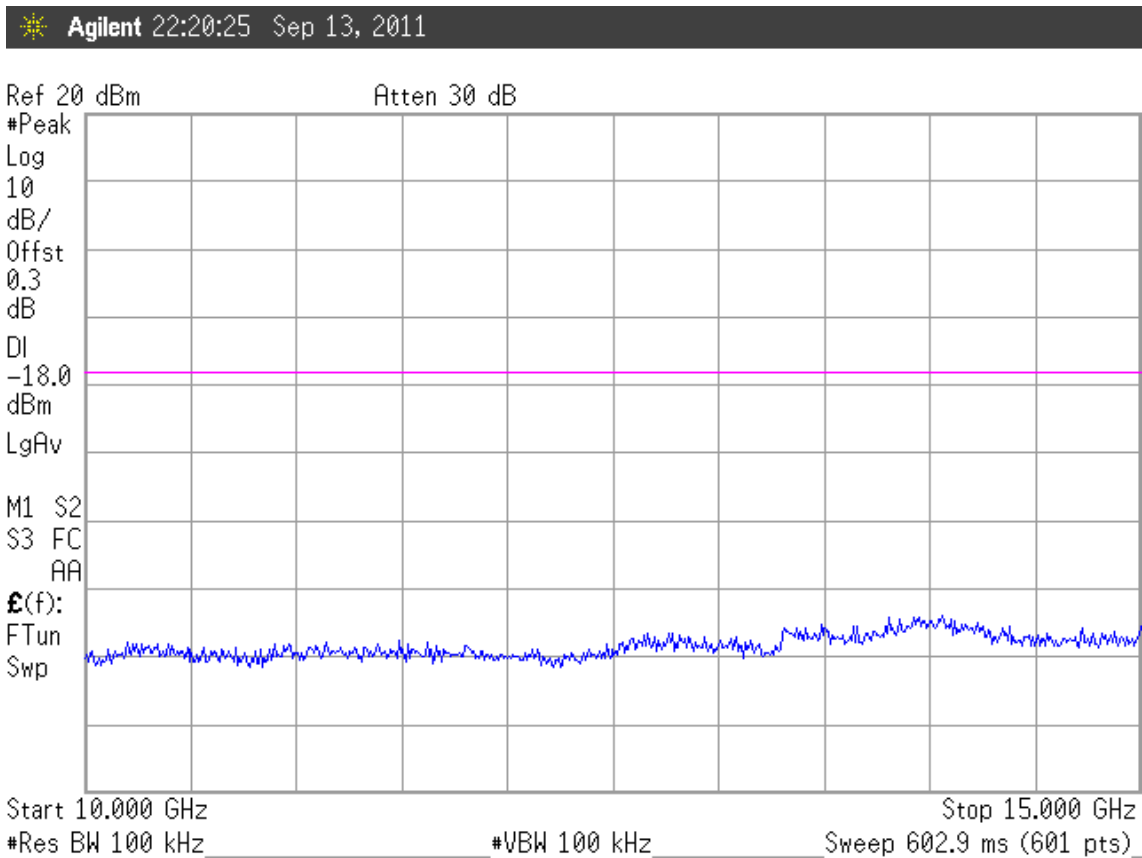
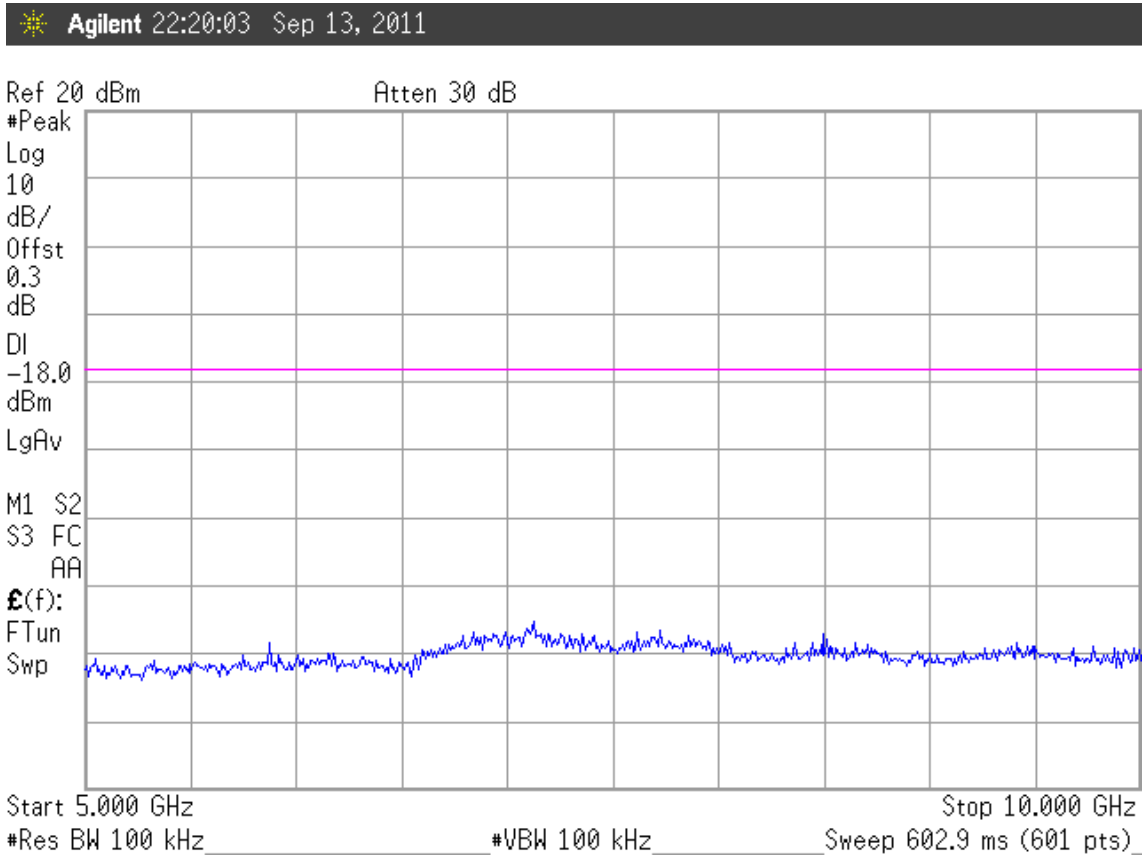
802.11n-HT20, Frequency: 2412MHz

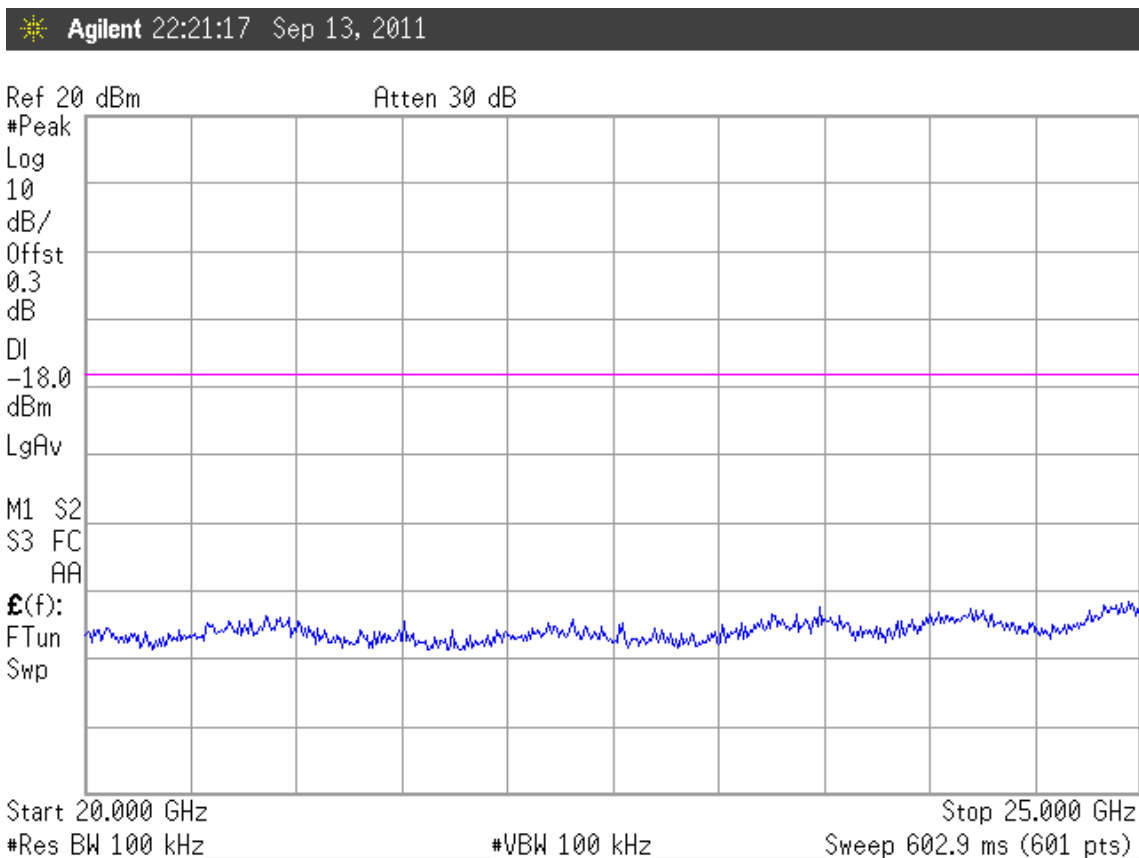
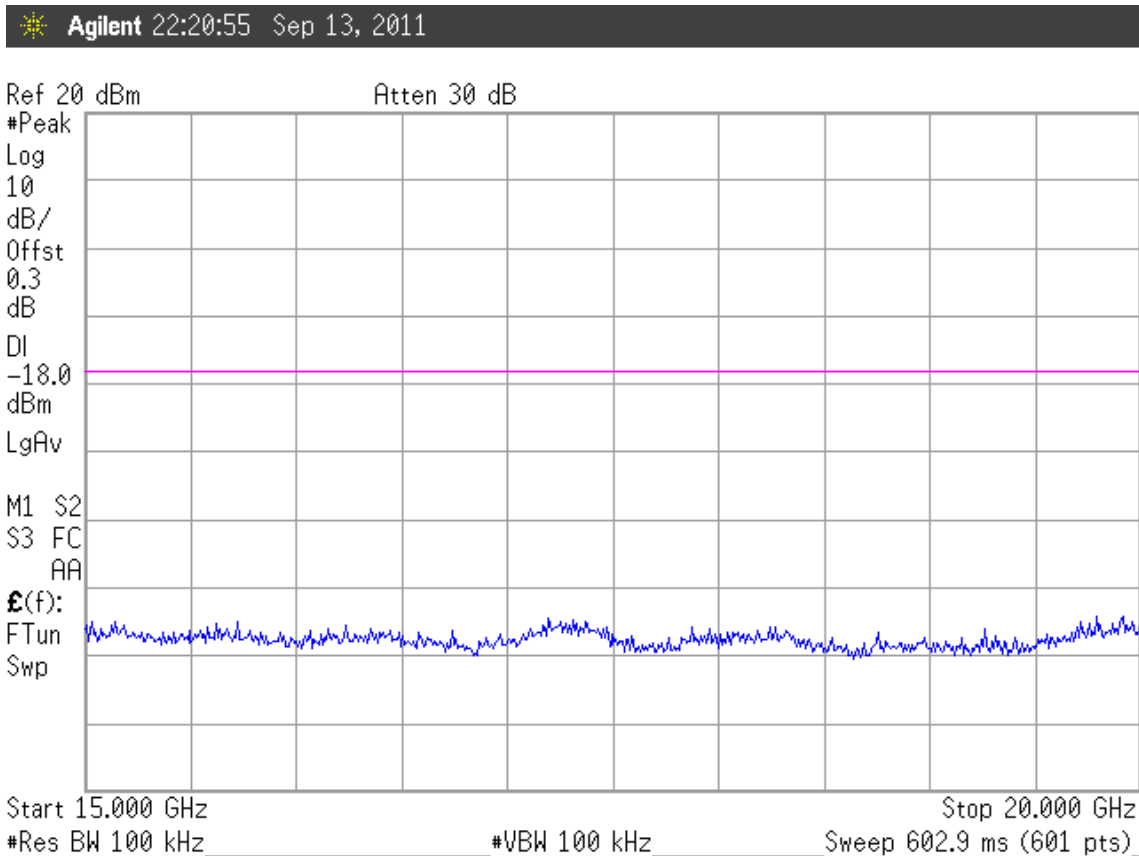
Agilent 22:21:40 Sep 13, 2011



Agilent 22:19:23 Sep 13, 2011

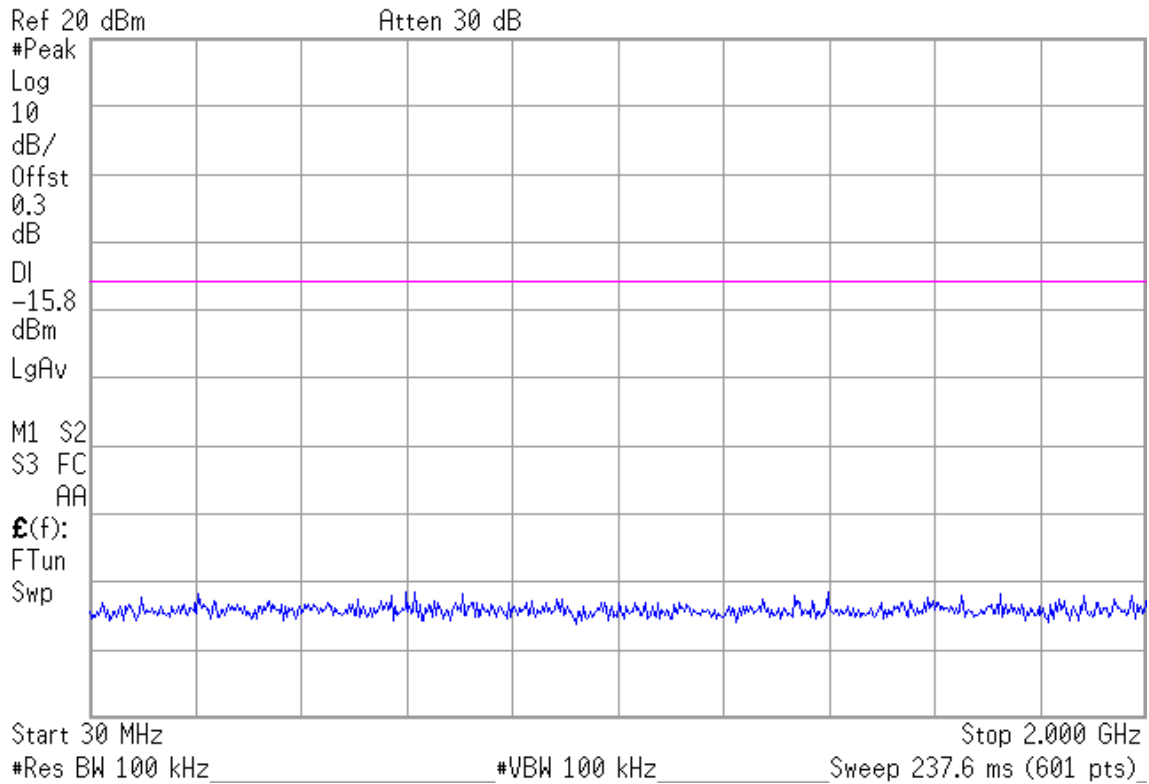




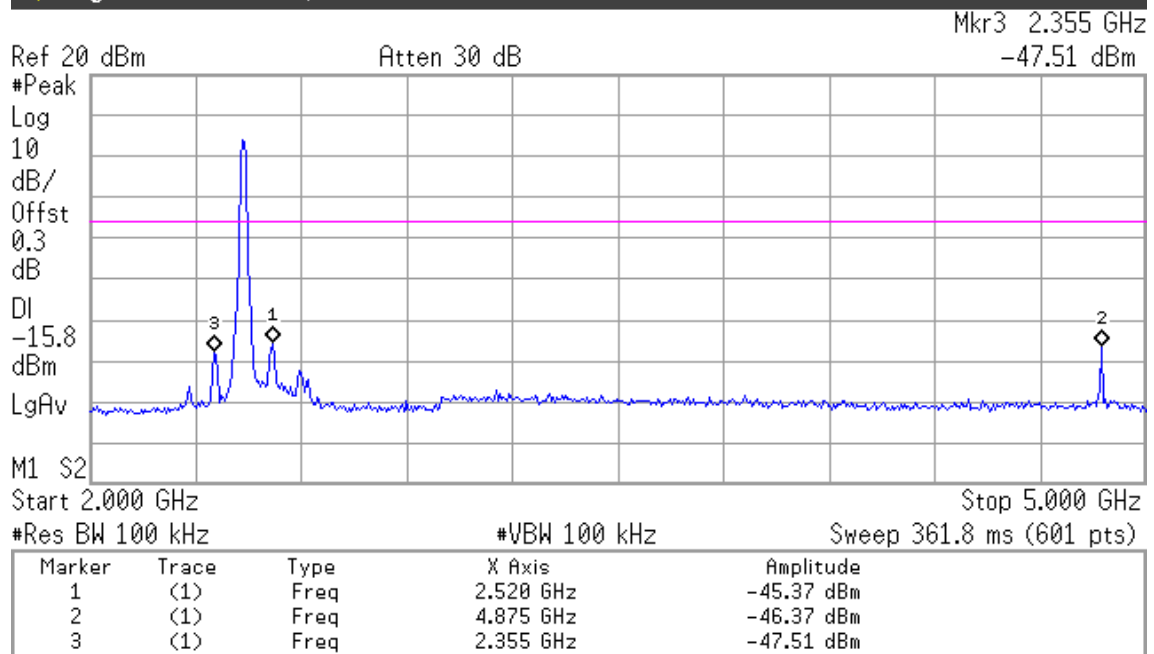


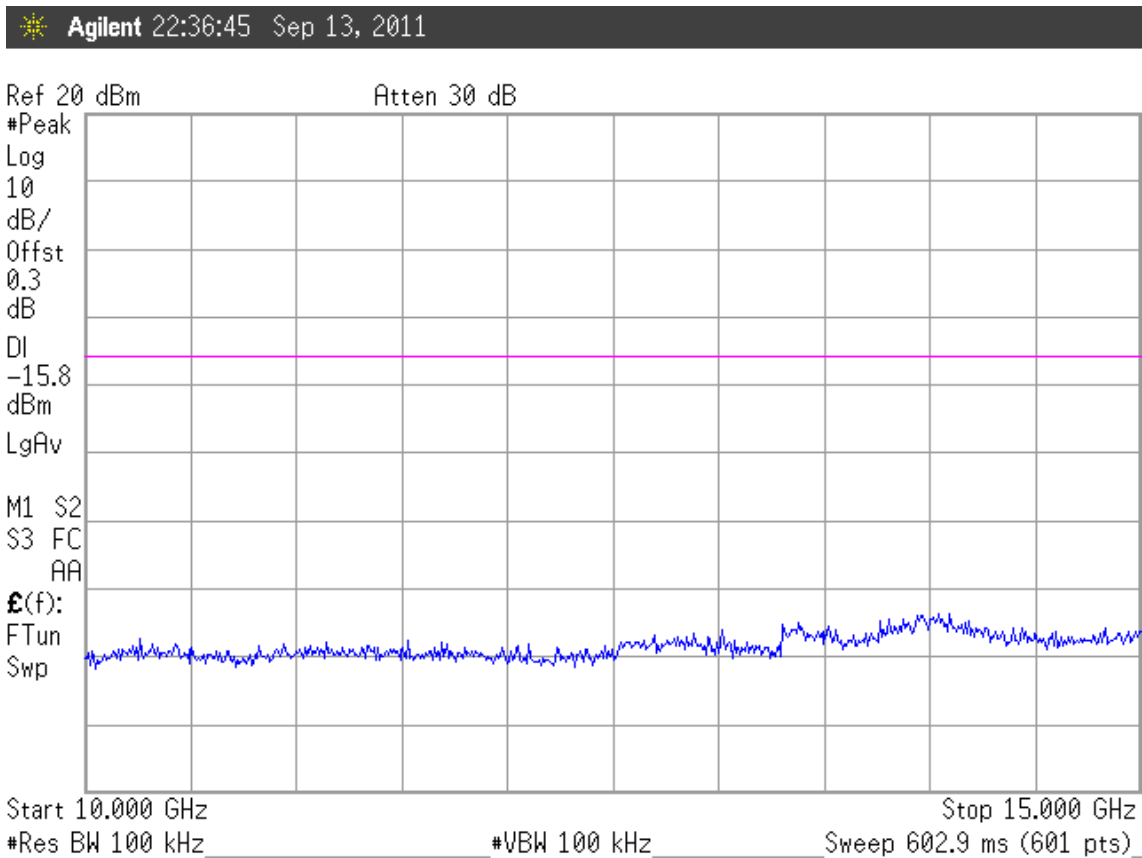
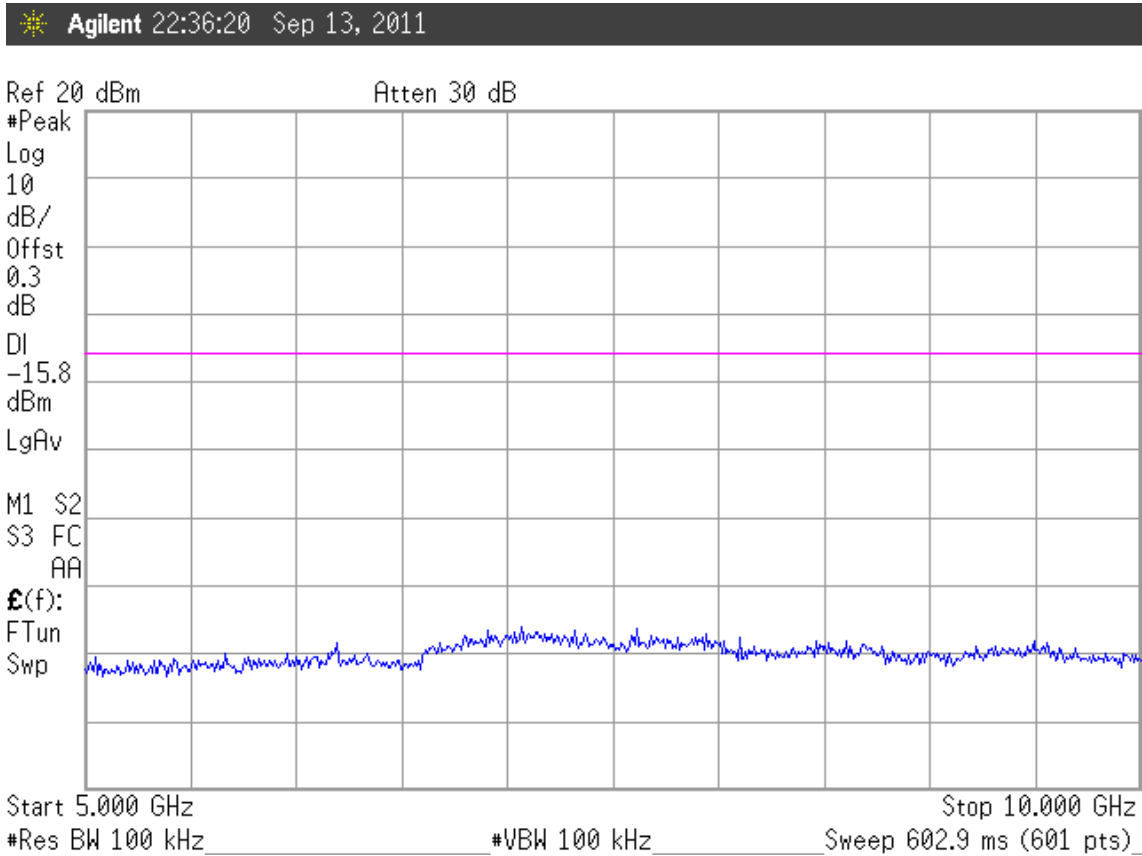
802.11n-HT20, Frequency: 2437MHz

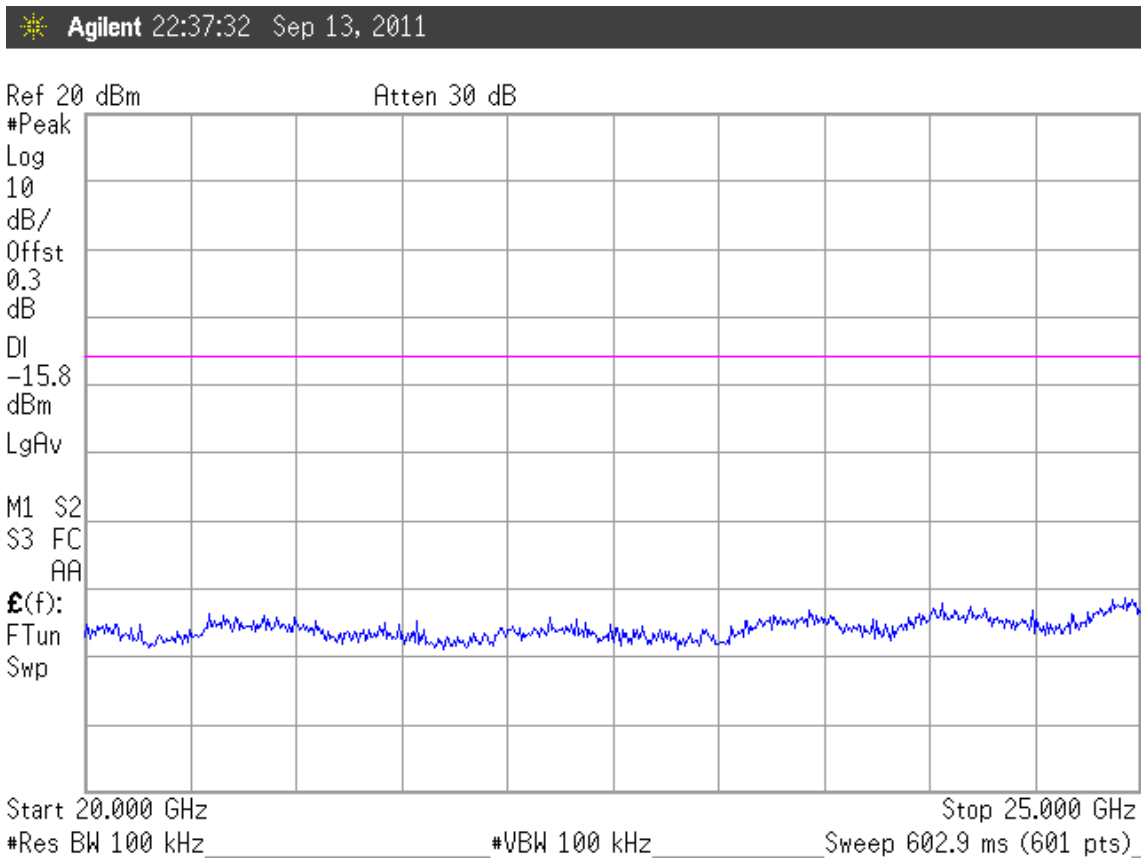
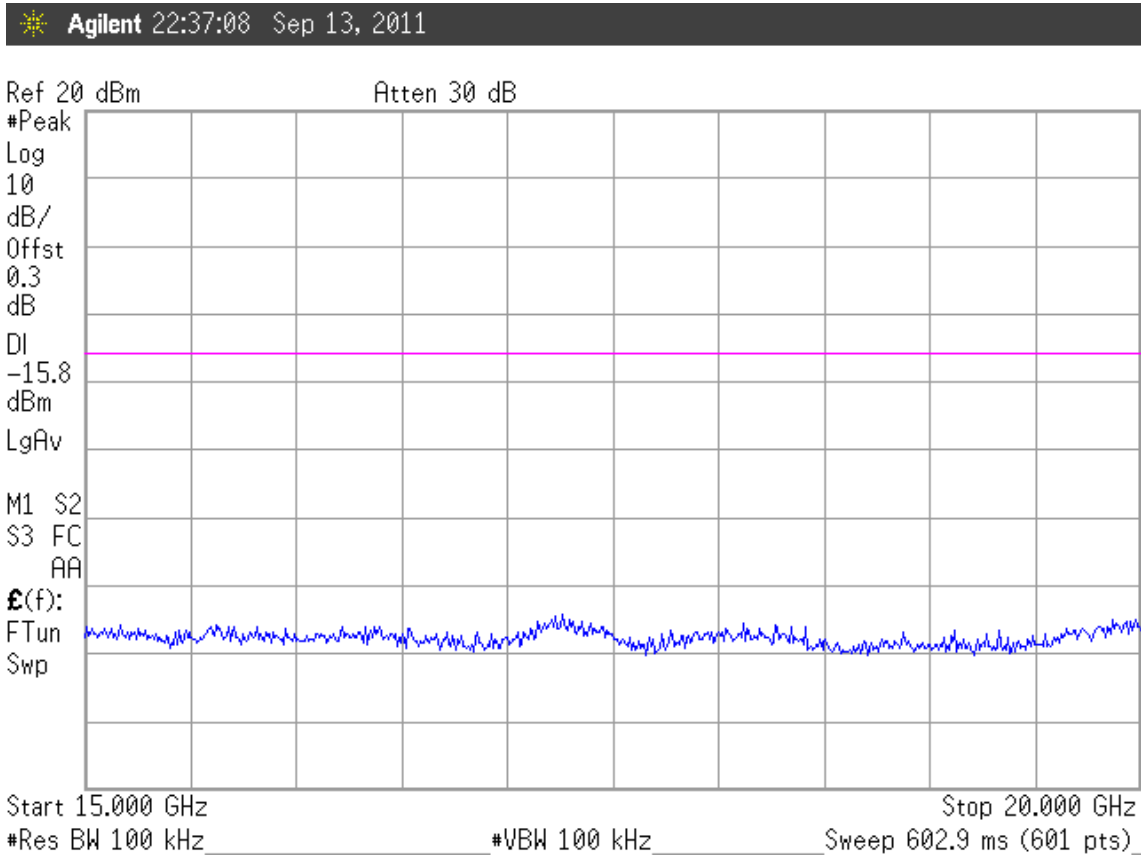
Agilent 22:37:52 Sep 13, 2011



Agilent 22:35:41 Sep 13, 2011

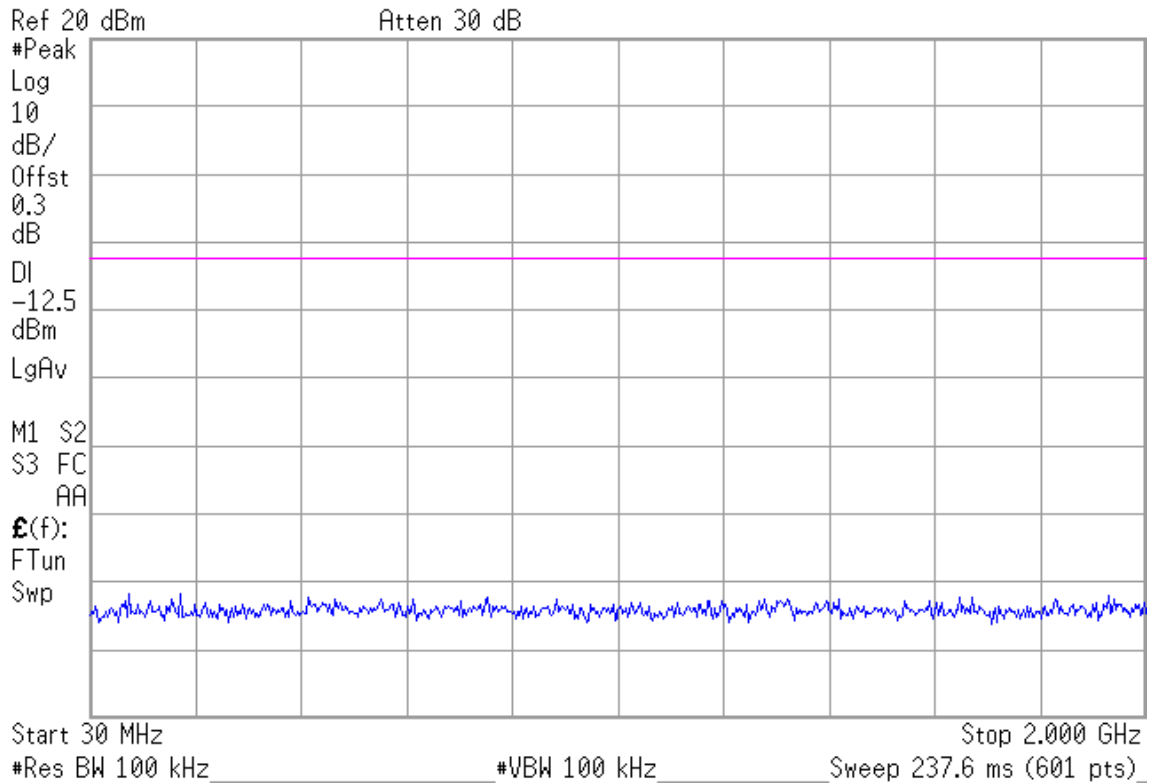




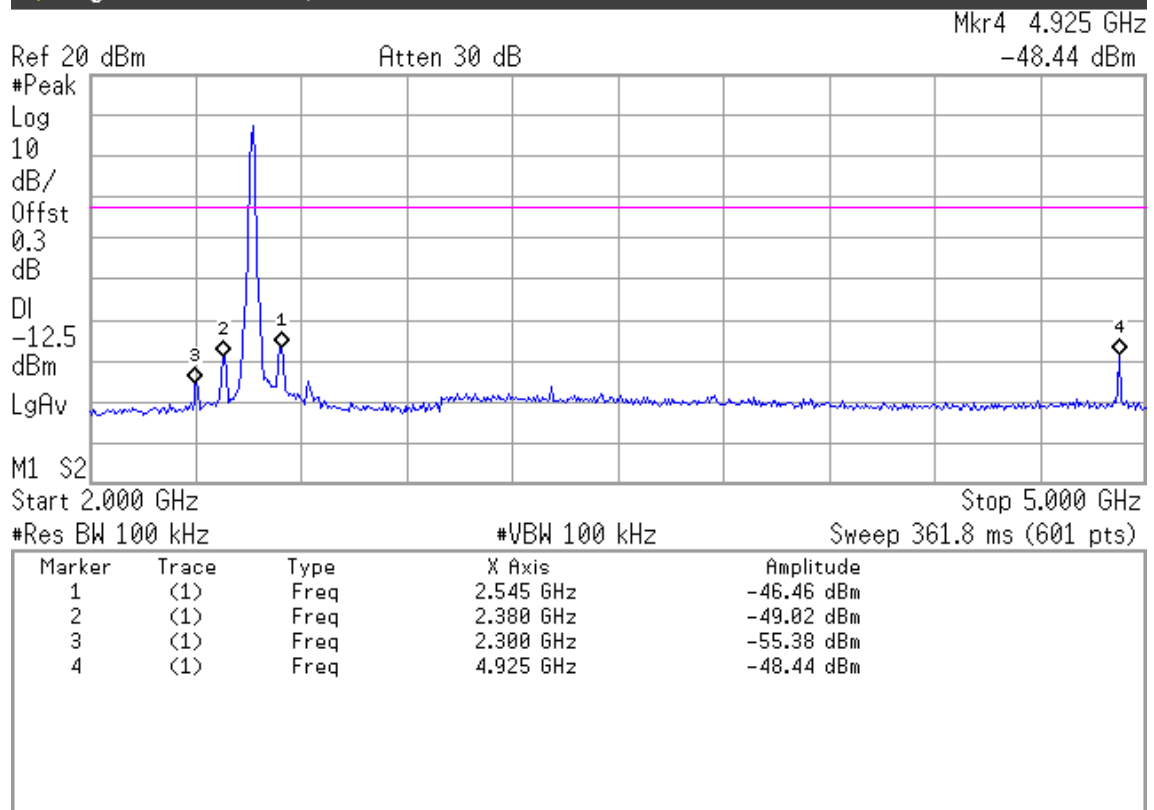


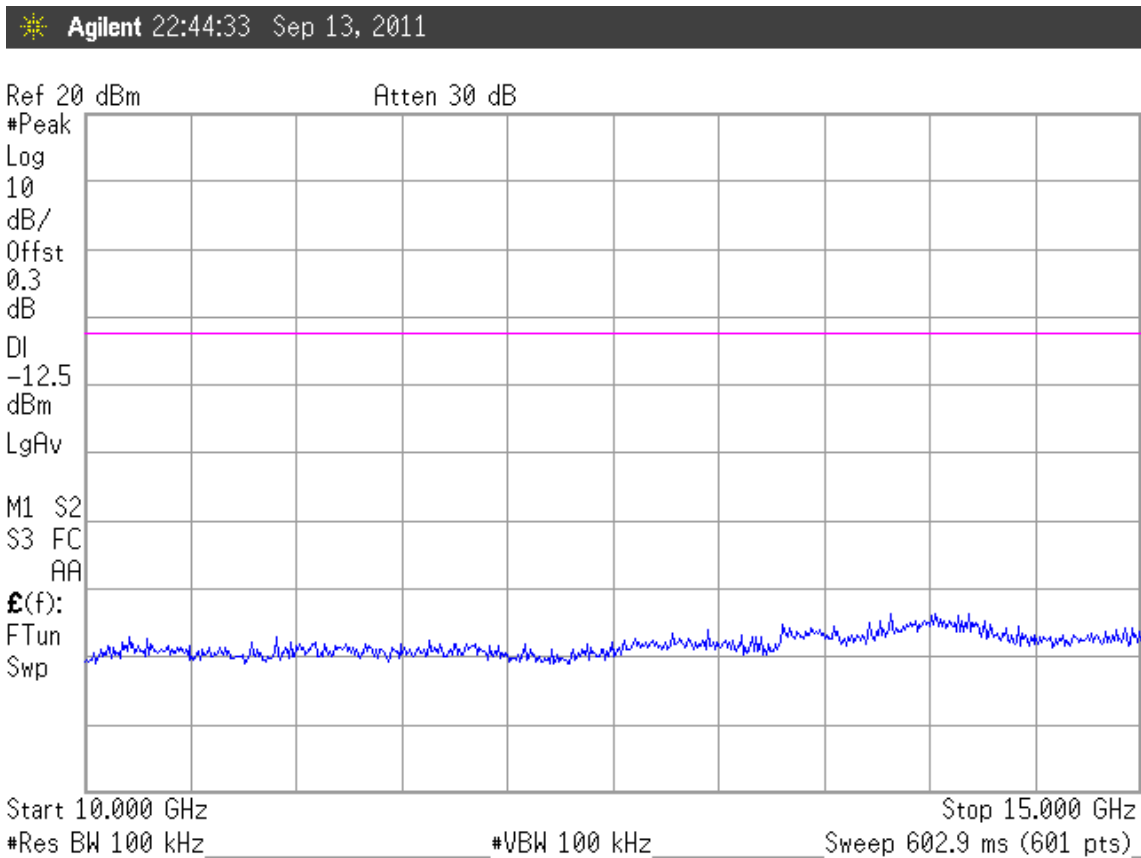
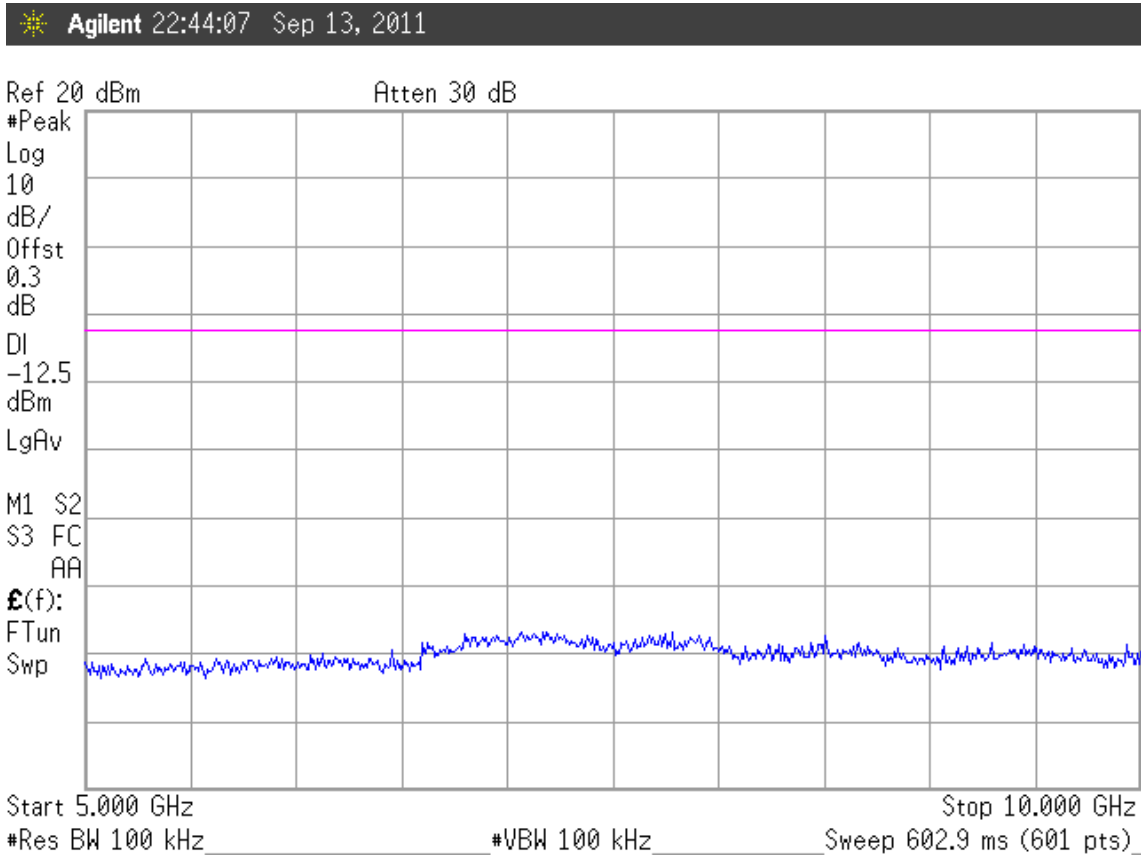
802.11n-HT20, Frequency: 2462MHz

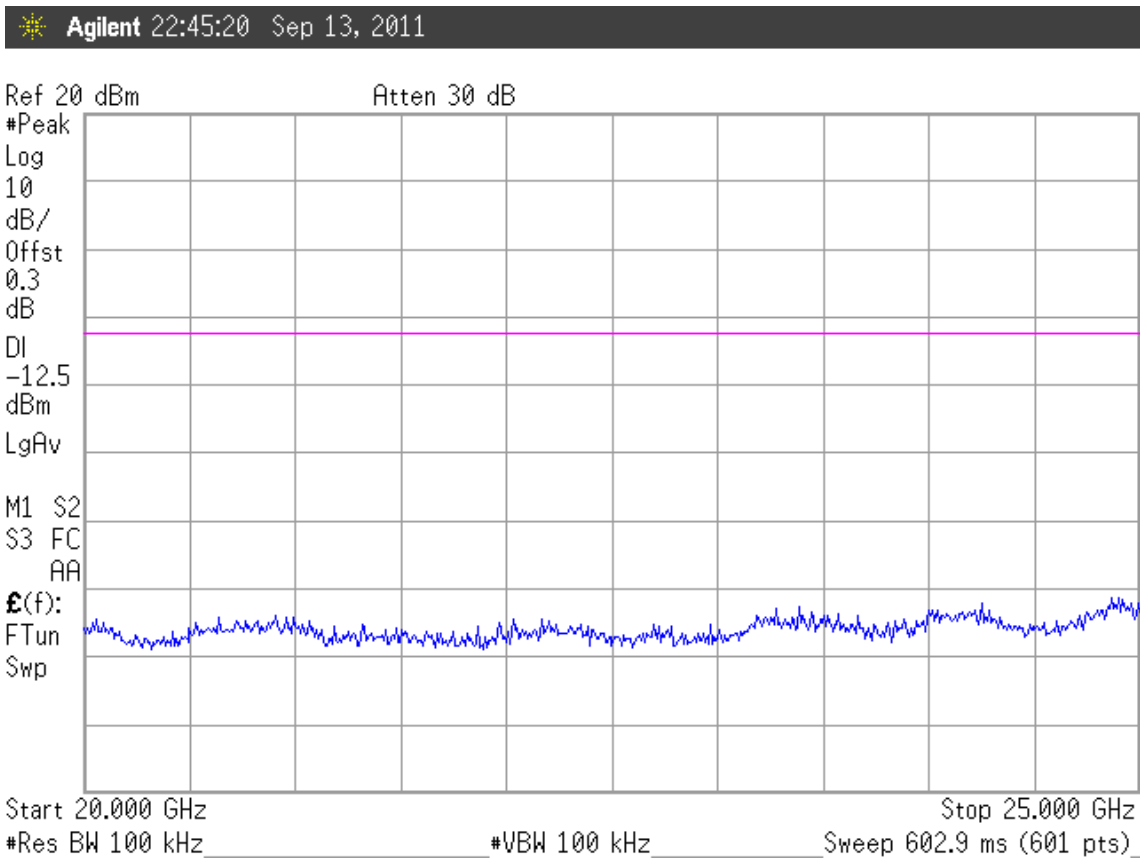
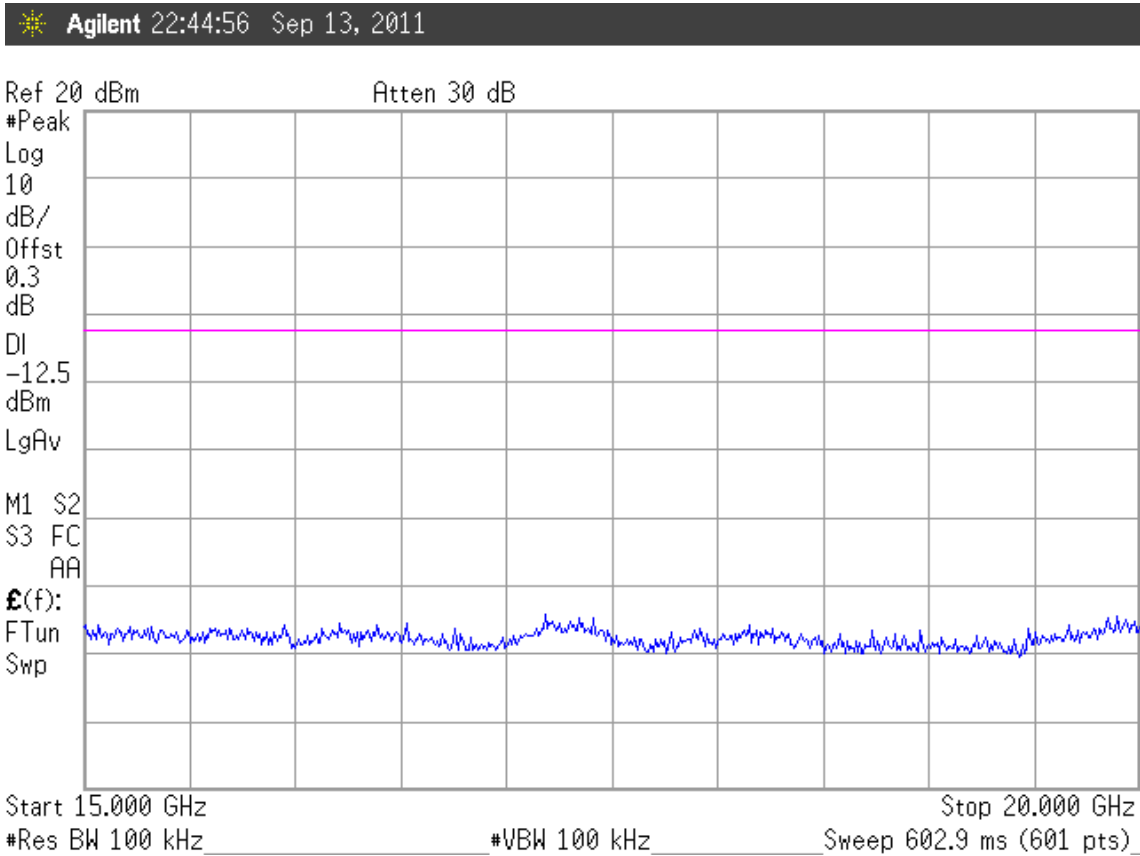
Agilent 22:45:46 Sep 13, 2011



Agilent 22:43:27 Sep 13, 2011







7. BAND EDGES MEASUREMENT

7.1. Test Equipment

The following test equipment was used during the band edges measurement:

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Spectrum Analyzer	Agilent	E4446A	US44300366	Aug. 04, 11'	Aug. 03, 12'

7.2. Block Diagram of Test Setup

The same as section.4.2.

7.3. Specification Limits (§15.247(c))

The highest level should be at least 20 dB below that in the 100kHz bandwidth.

7.4. Operating Condition of EUT

The test program “Telnet” was used to enable the EUT to transmit data at different channel frequency individually.

7.5. Test Procedure

The transmitter output was connected to the spectrum analyzer. Set both RBW and VBW of spectrum analyzer to 100kHz with suitable frequency span including 100kHz bandwidth from band edge.

The measurement guideline was according to KDB 558074.

7.6. Test Results

PASSED. All the test results are attached in next pages.

Test Date: Sep. 13, 2011 Temperature : 23°C Humidity : 54 %

802.11b

Below Band edge: The highest emission level is -43.62dBm on 2.39992GHz ◦

Upper Band edge : The highest emission level is -48.78dBm on 2.48350GHz ◦

802.11g

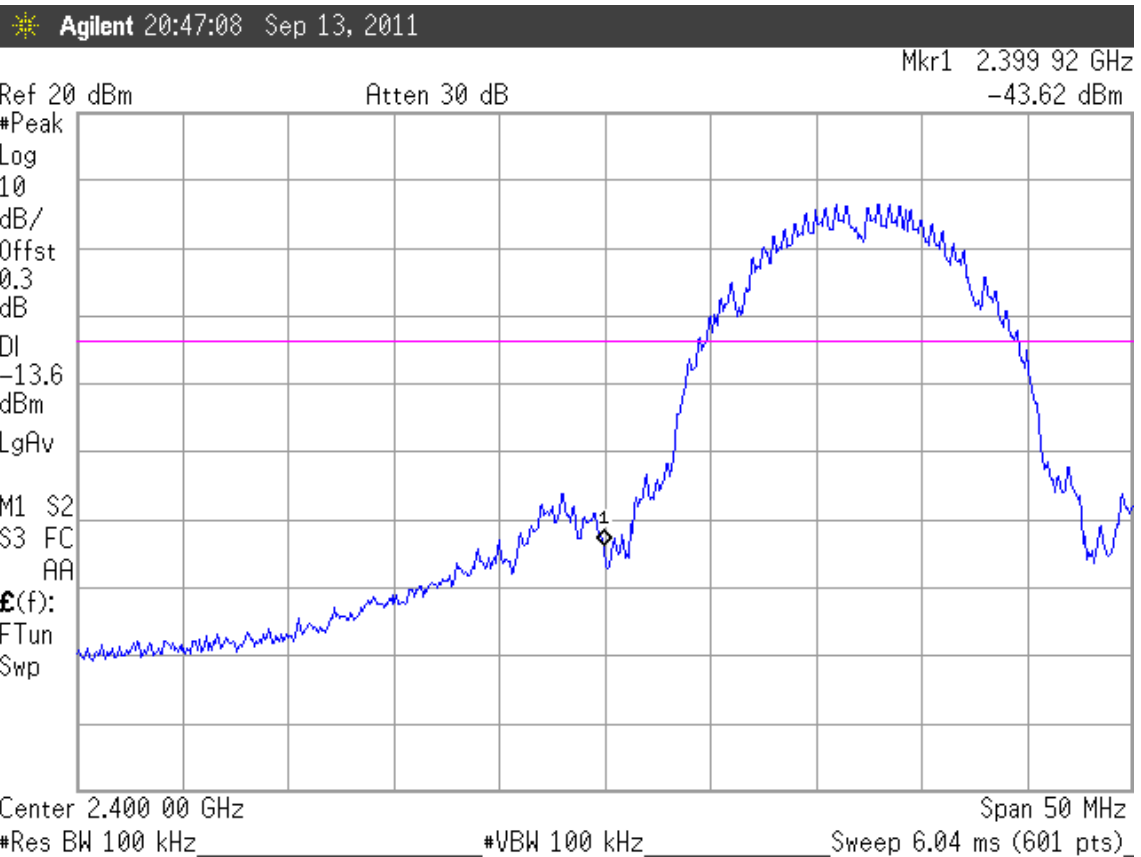
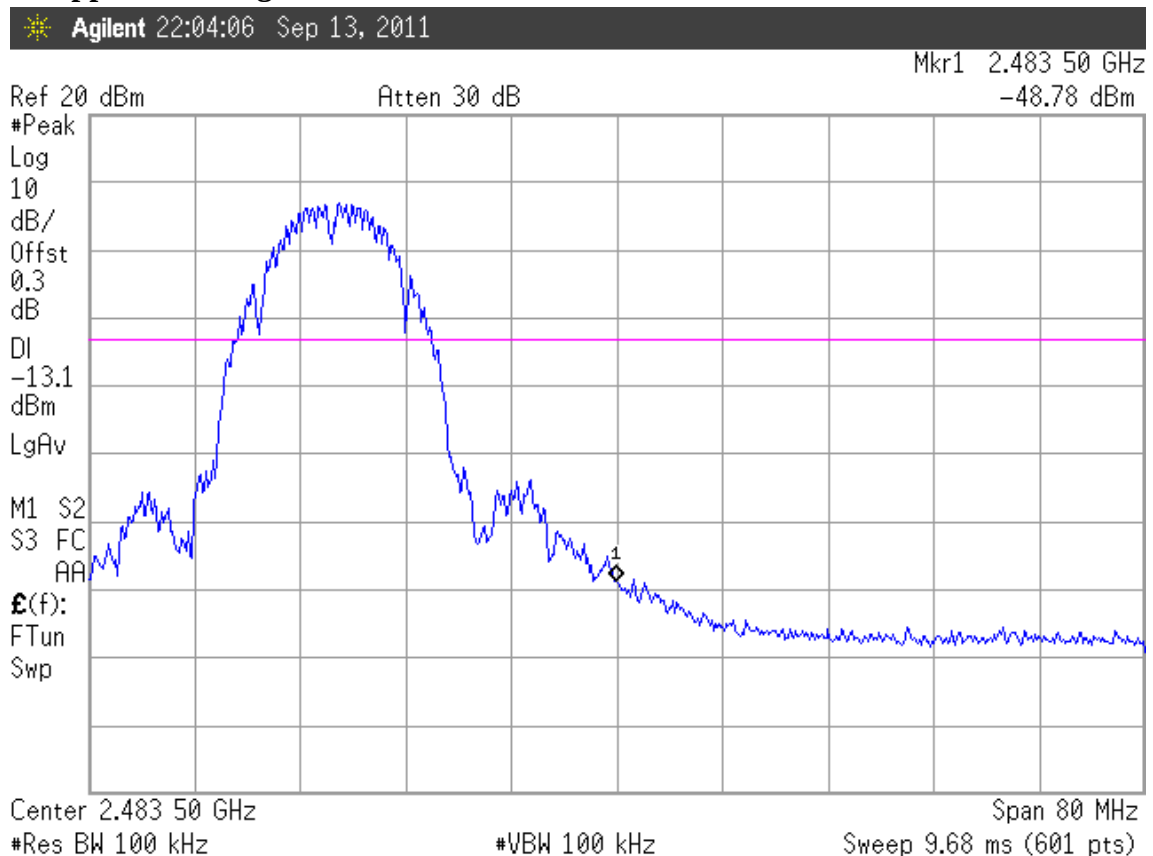
Below Band edge: The highest emission level is -28.41dBm on 2.39992GHz ◦

Upper Band edge : The highest emission level is -35.91dBm on 2.48350GHz ◦

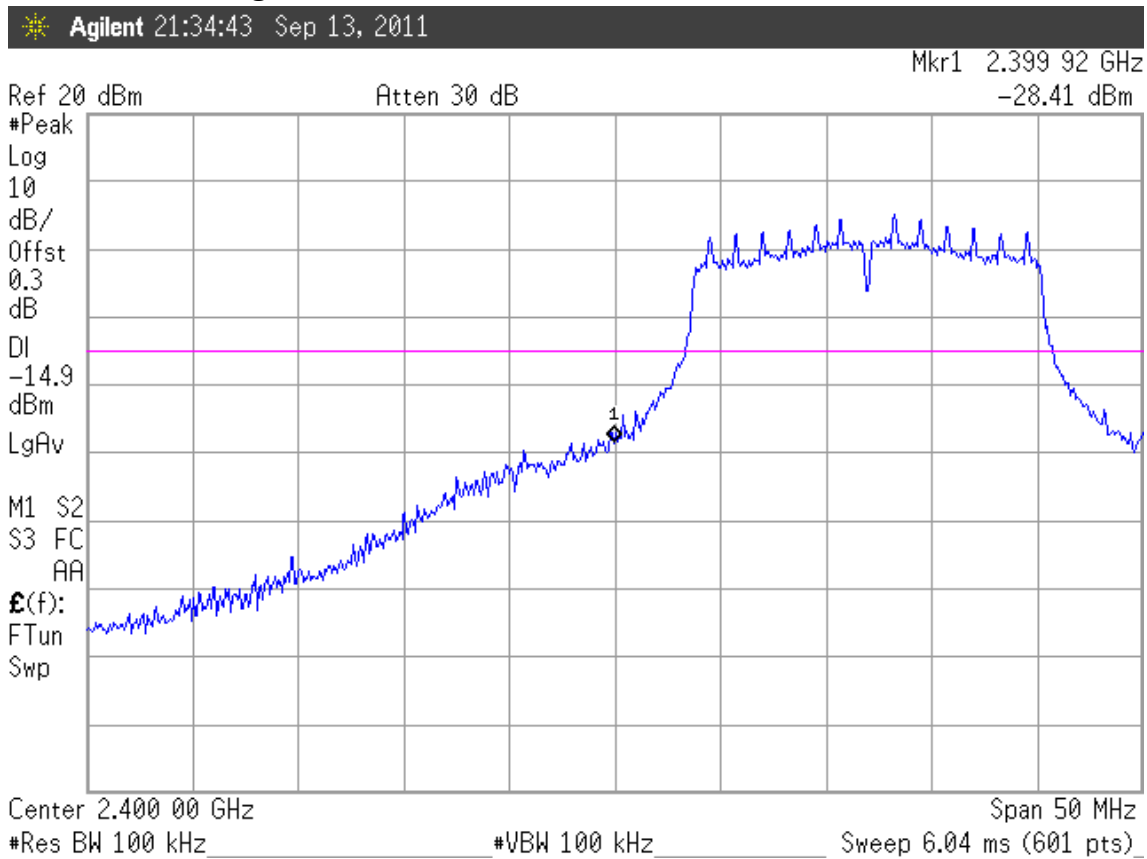
802.11n-HT20

Below Band edge: The highest emission level is -33.04dBm on 2.39992GHz ◦

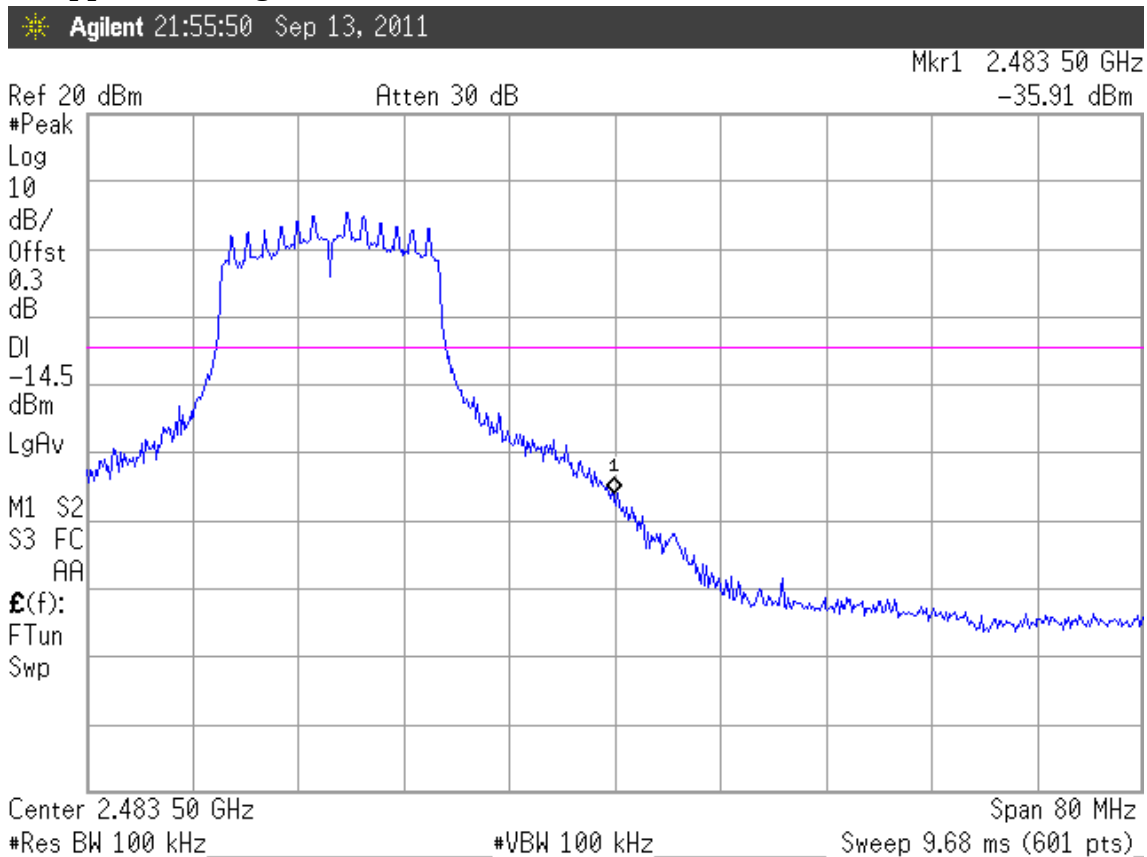
Upper Band edge : The highest emission level is -40.97dBm on 2.48350GHz ◦

802.11b**Below Band edge****Upper Band edge**

802.11g Below Band edge

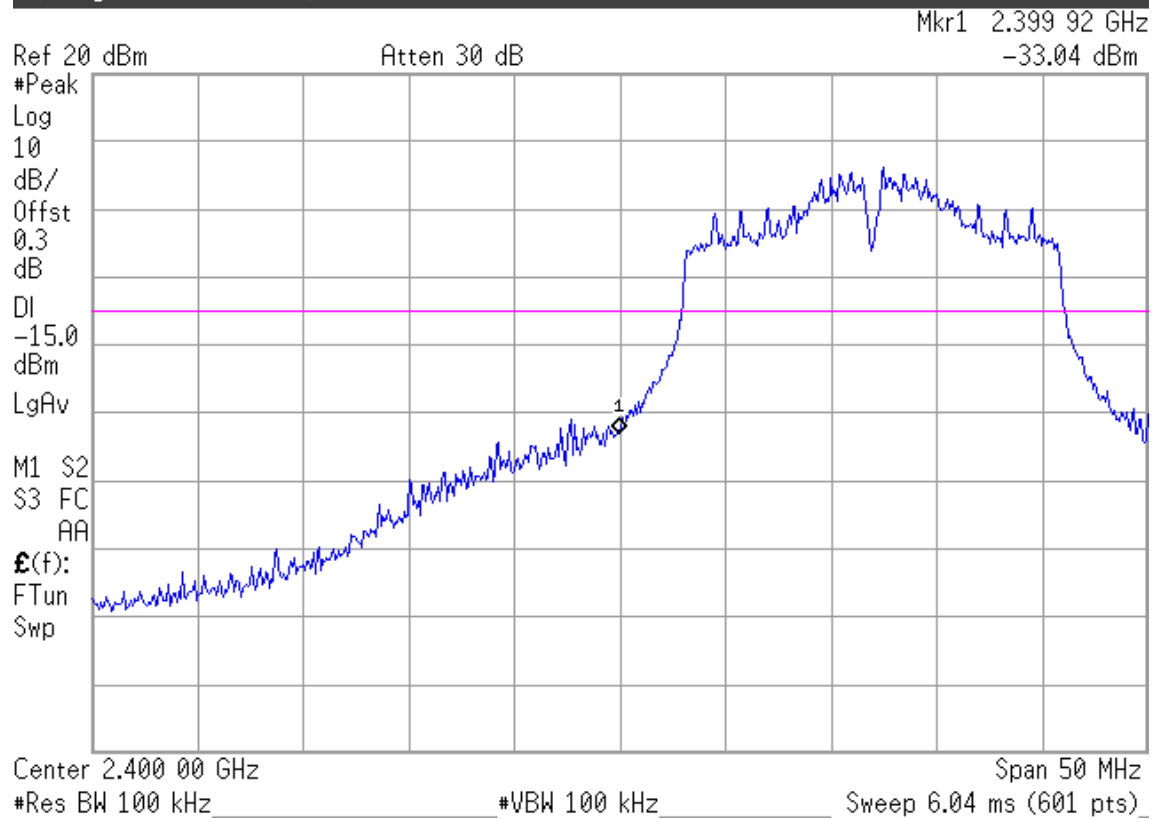


Upper Band edge



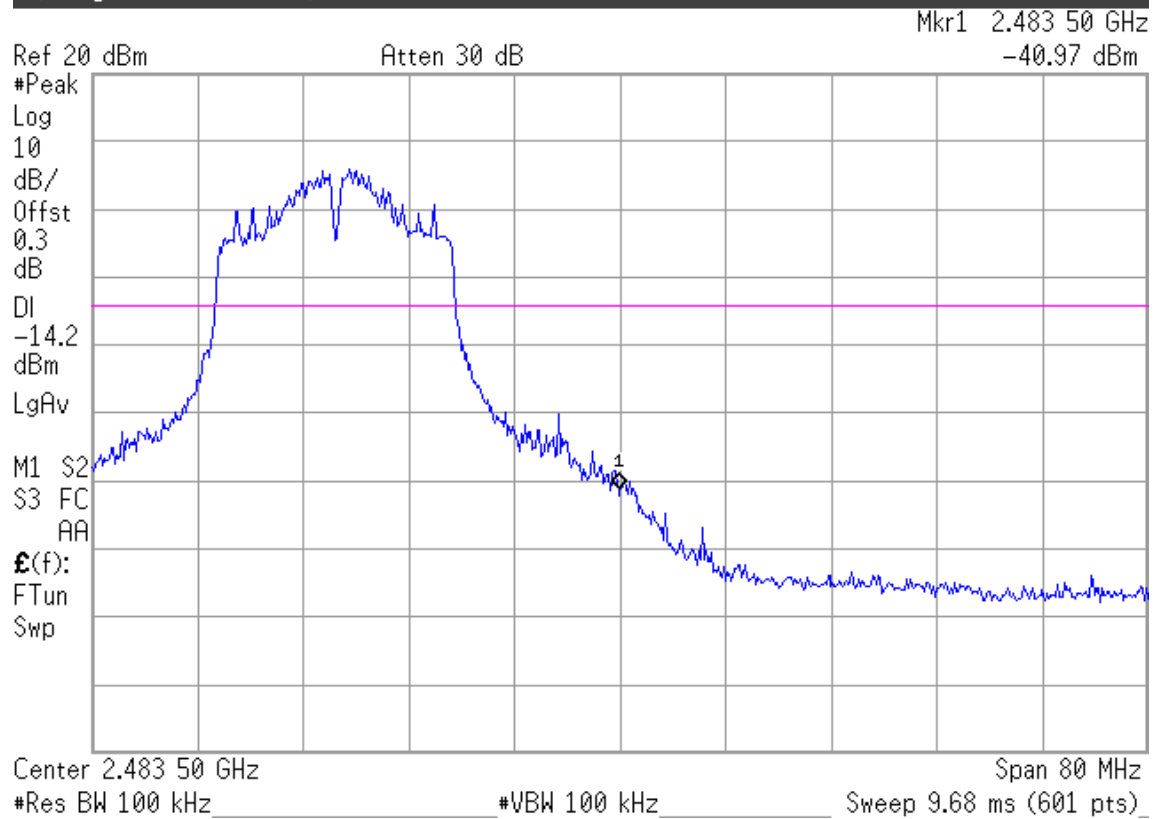
802.11n-HT20 Below Band edge

Agilent 22:15:37 Sep 13, 2011



Upper Band edge

Agilent 22:40:01 Sep 13, 2011



8. POWER SPECTRAL DENSITY MEASUREMENT

8.1. Test Equipment

The following test equipment was used during the power spectral density measurement:

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Spectrum Analyzer	Agilent	E4446A	US44300366	Aug. 04, 11'	Aug. 03, 12'

8.2. Block Diagram of Test Setup

The same as section.4.2.

8.3. Specification Limits (§15.247(d))

The peak power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3kHz band.

8.4. Operating Condition of EUT

The test program “Telnnet” was used to enable the EUT to transmit data at different channel frequency individually.

8.5. Test Procedure

The transmitter output was connected to the spectrum analyzer. The bandwidth of the fundamental frequency was measured with the spectrum analyzer using 3kHz RBW and 30kHz VBW, set sweep time = span/3kHz.

The measurement guideline was according to KDB 558074.

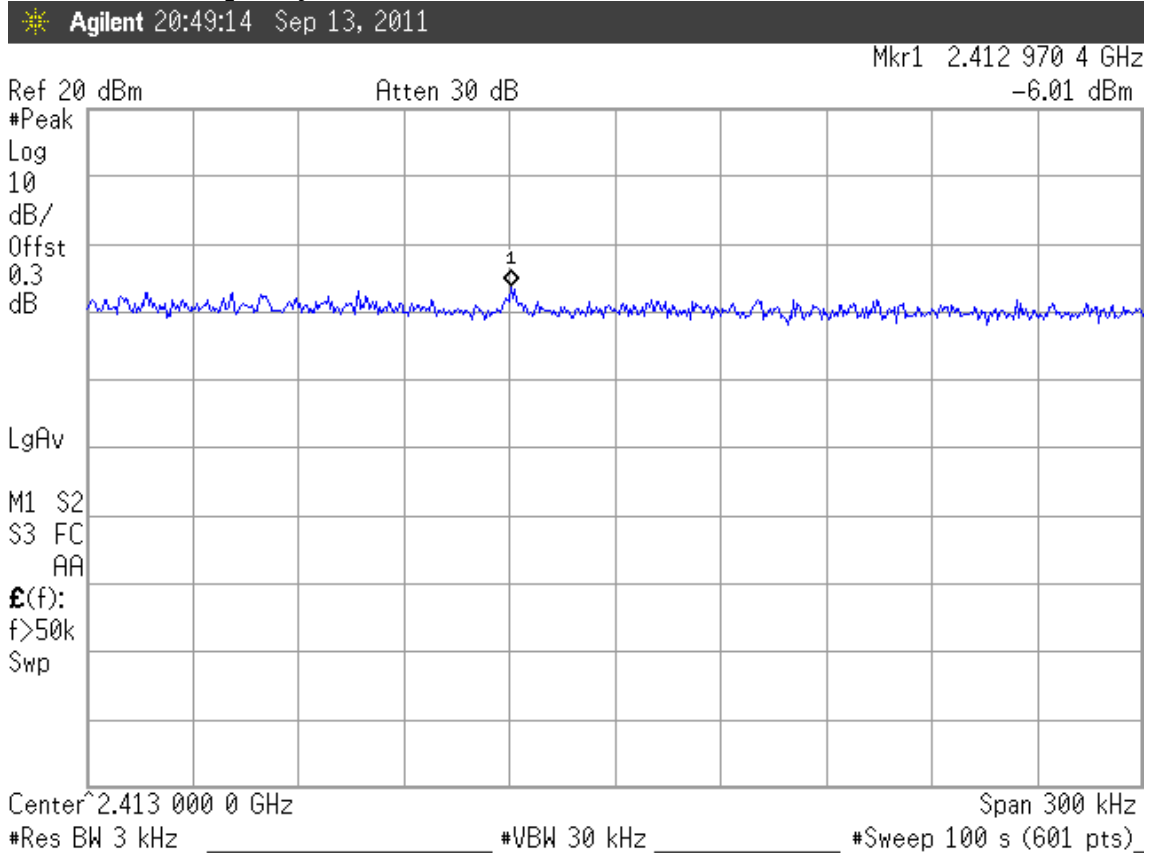
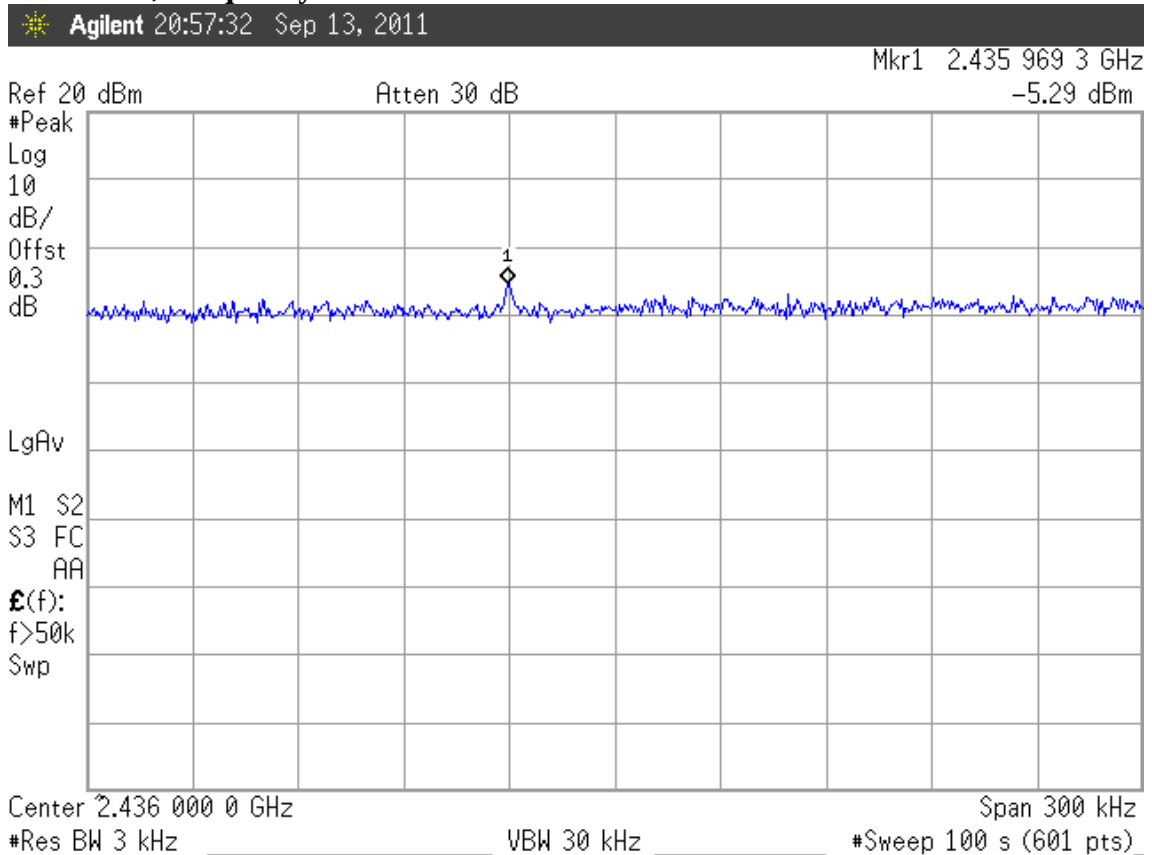
8.6. Test Results

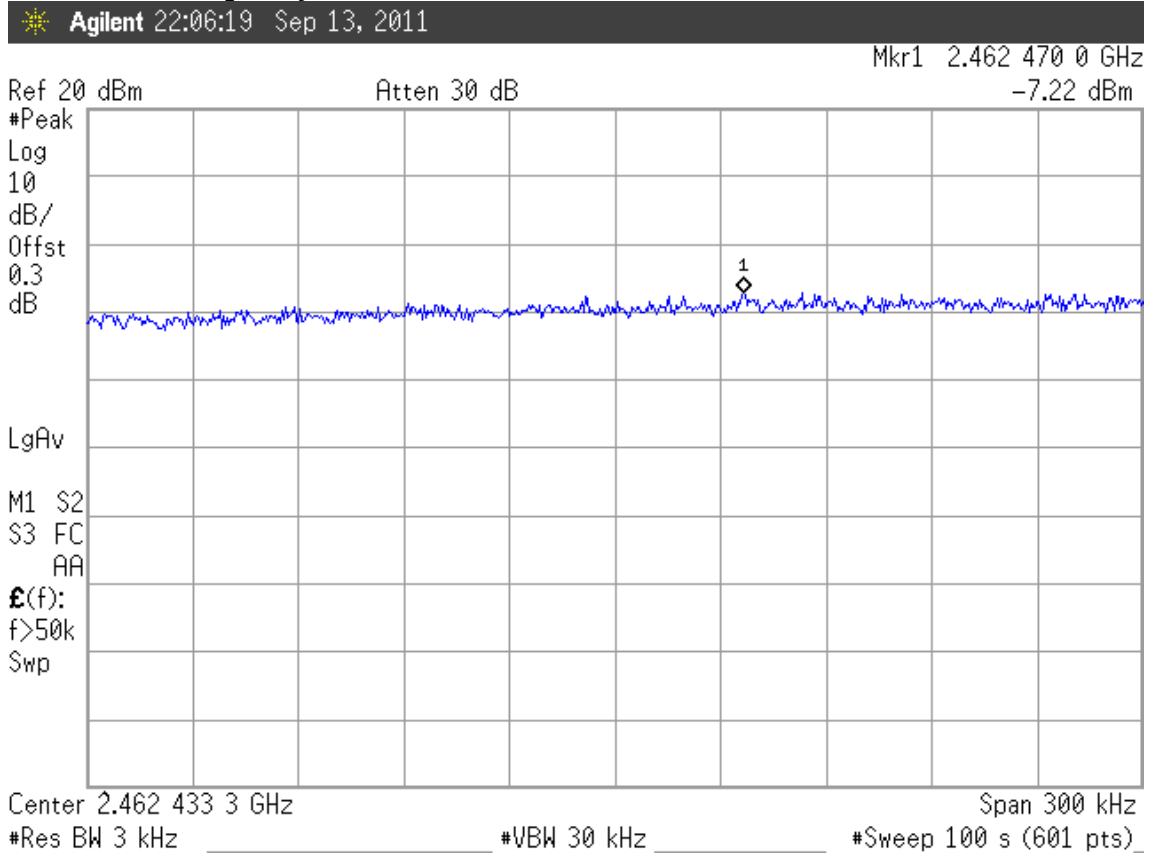
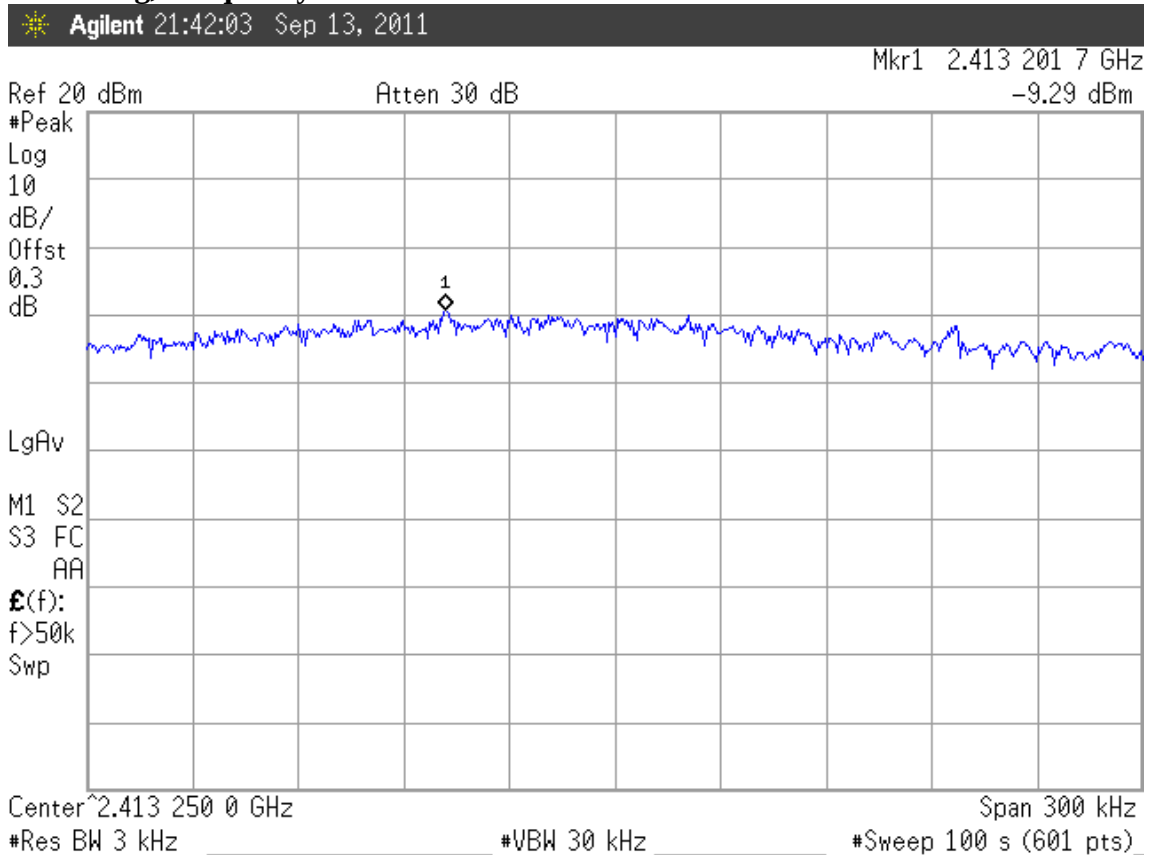
PASSED. All the test results are attached in next pages.

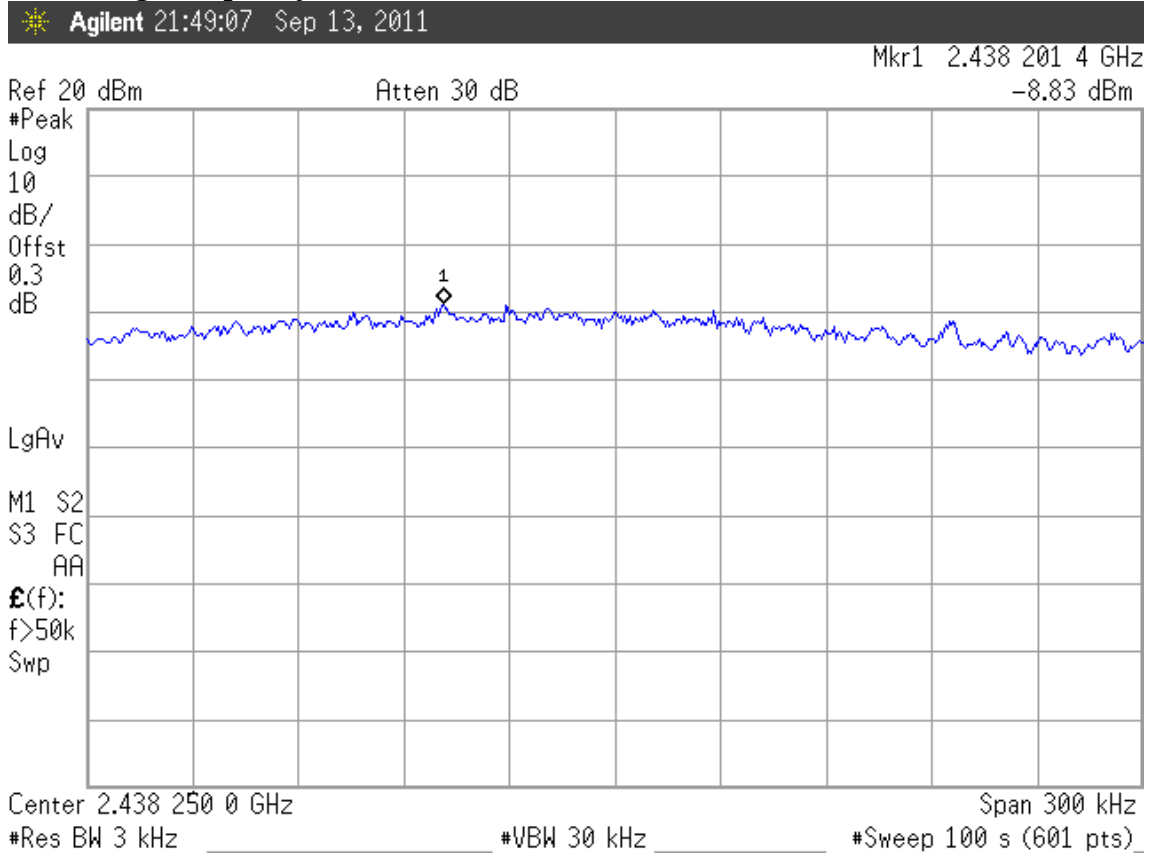
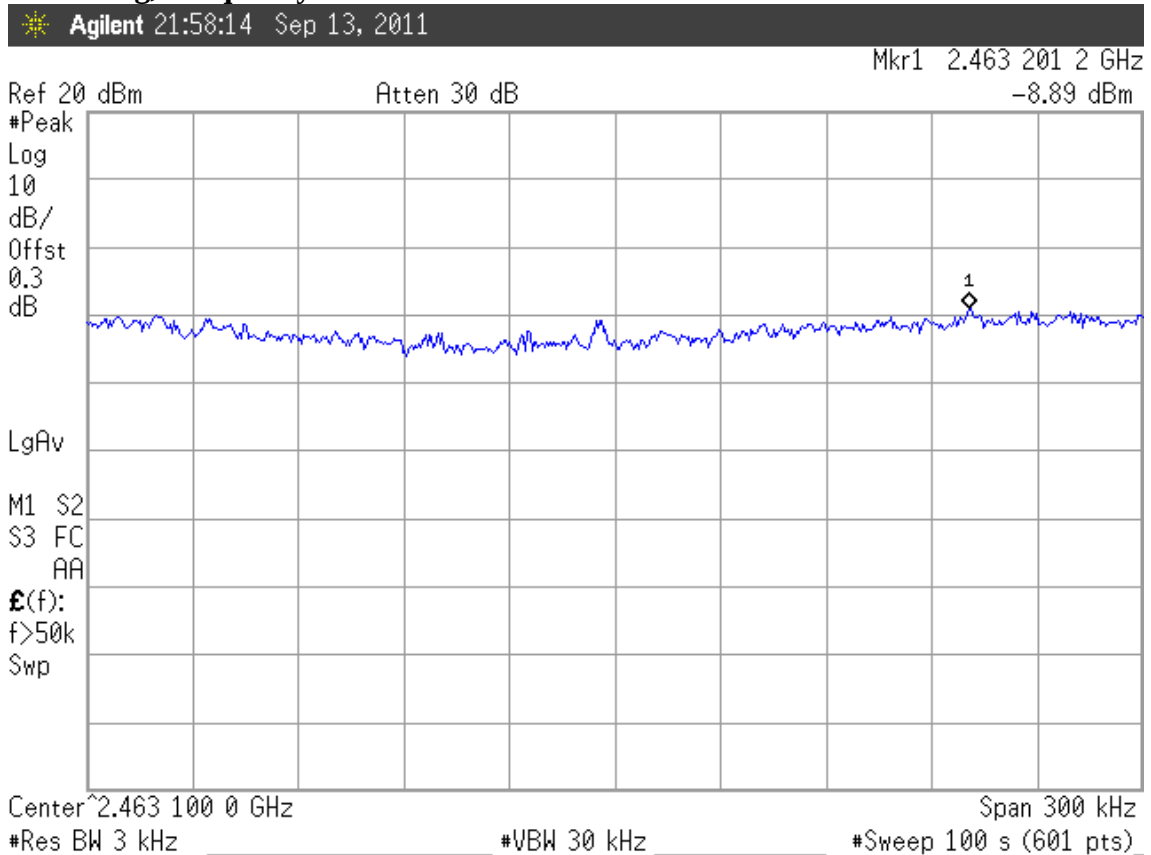
Test Date: Sep. 13, 2011 Temperature : 23°C Humidity : 54 %

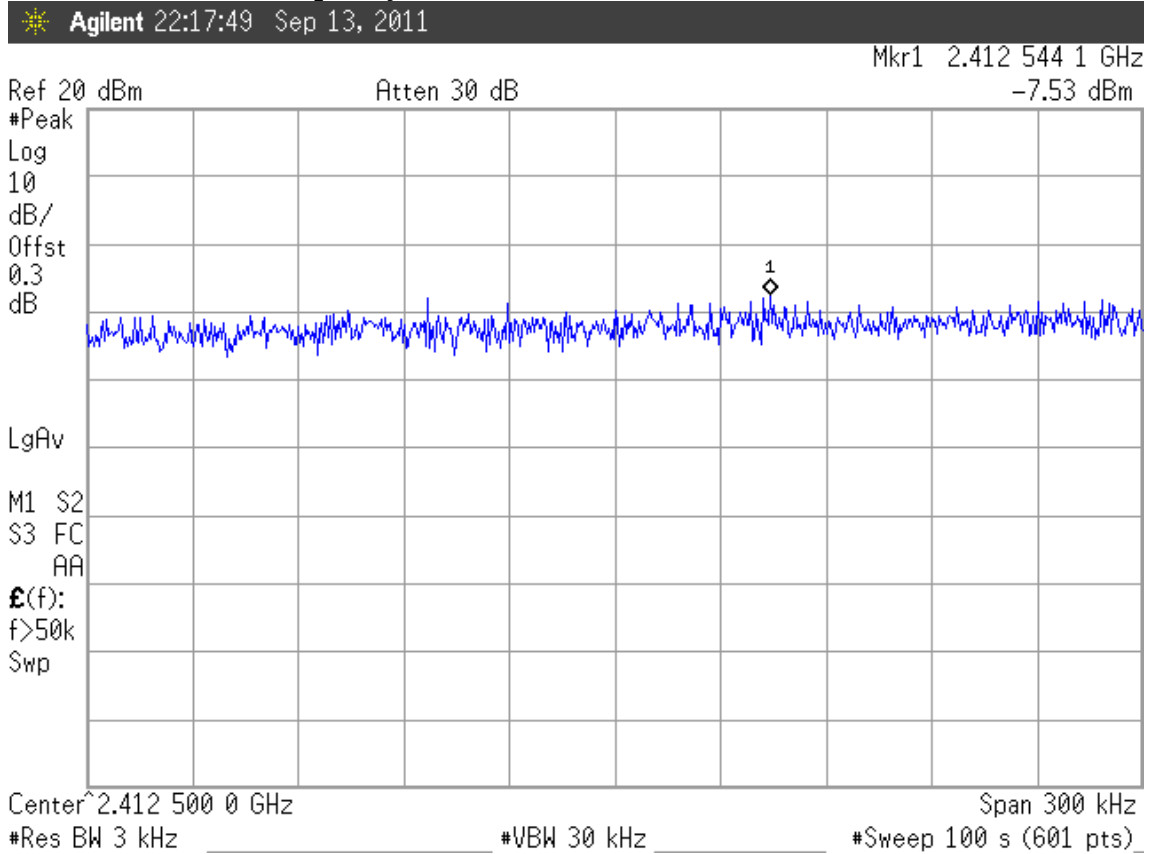
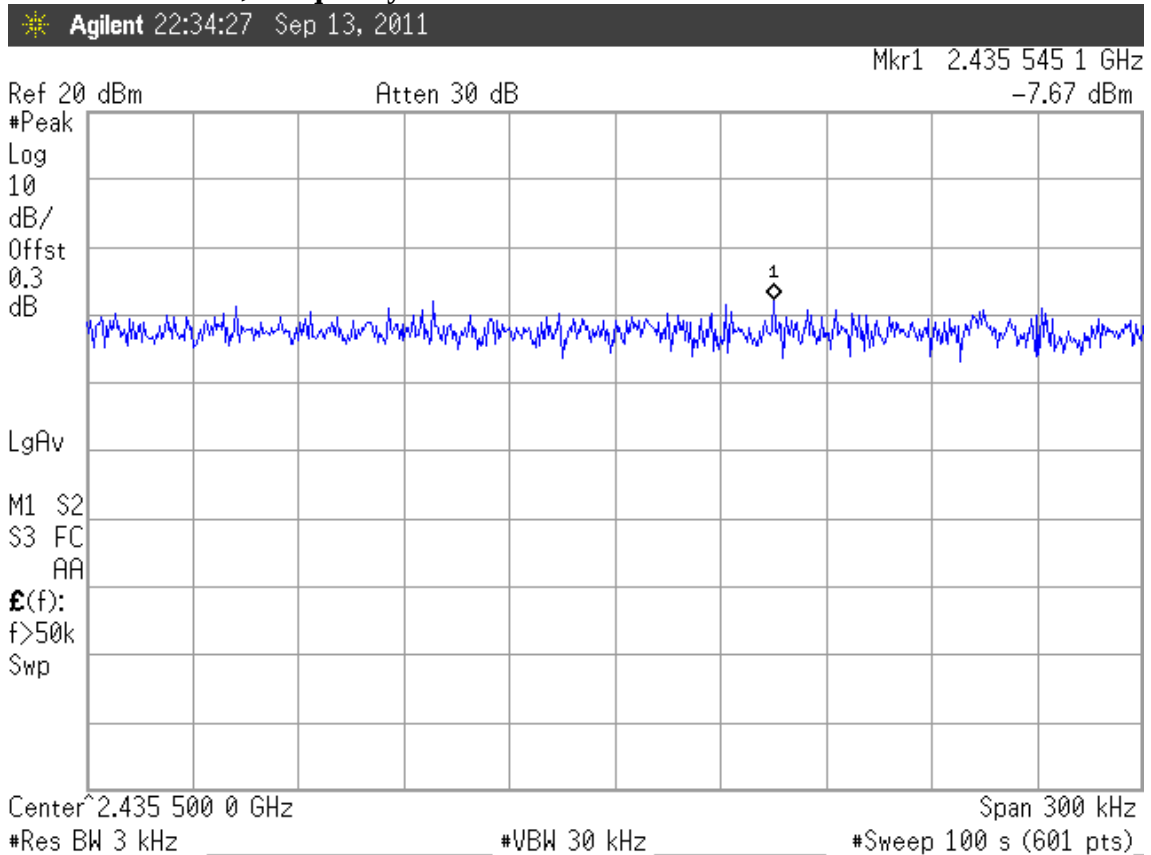
Mode	Type of Network	Channel	Frequency	Power Spectral Density
1.	802.11b	CH 1	2412MHz	-6.01dBm
2.		CH 6	2437MHz	-5.29dBm
3.		CH 11	2462MHz	-7.22dBm
4.	802.11g	CH 1	2412MHz	-9.29dBm
5.		CH 6	2437MHz	-8.83dBm
6.		CH 11	2462MHz	-8.89dBm
7.	802.11n-HT20	CH 1	2412MHz	-7.53dBm
8.		CH 6	2437MHz	-7.67dBm
9.		CH 11	2462MHz	-6.81dBm

[Limit: 8dBm]

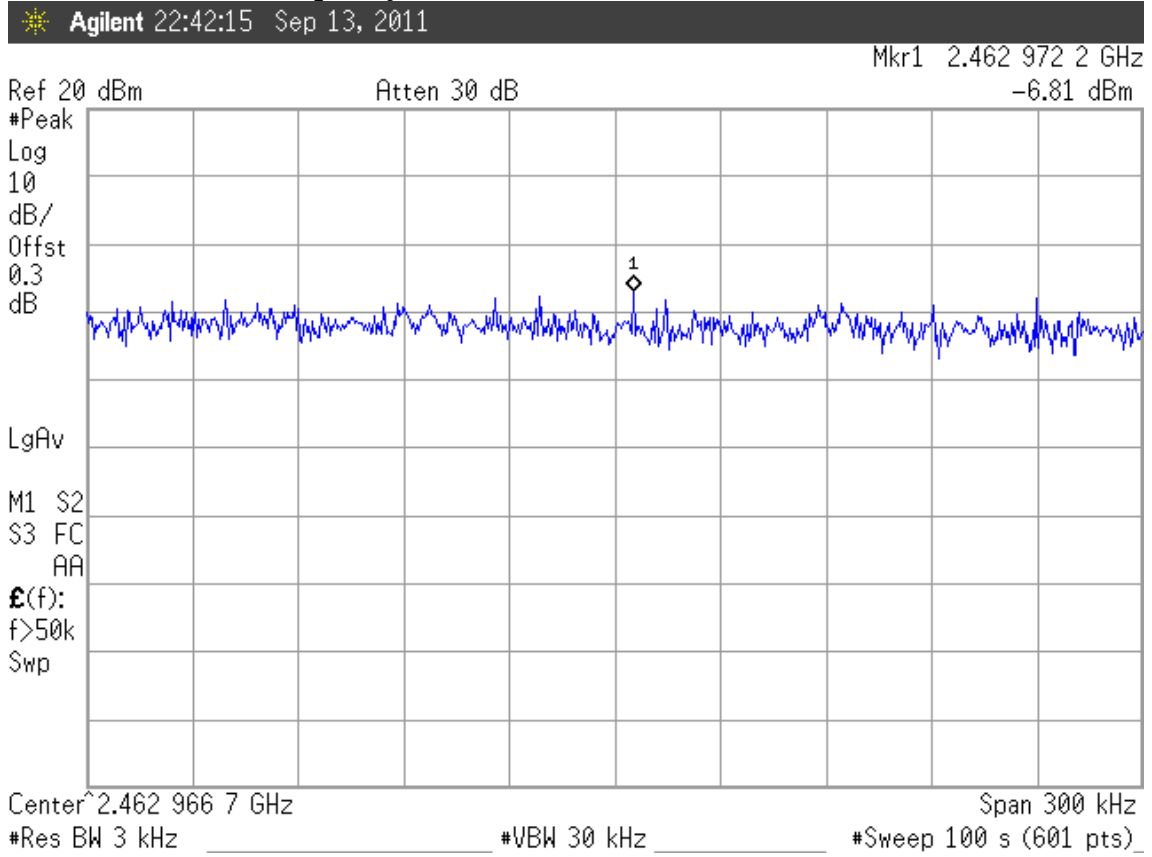
802.11b, Frequency: 2412MHz**802.11b, Frequency: 2437MHz**

802.11b, Frequency: 2462MHz**802.11g, Frequency: 2412MHz**

802.11g, Frequency: 2437MHz**802.11g, Frequency: 2462MHz**

802.11n-HT20, Frequency: 2412MHz**802.11n-HT20, Frequency: 2437MHz**

802.11n-HT20, Frequency: 2462MHz



9. DEVIATION TO TEST SPECIFICATIONS

【NONE】