

FCC PART 15.407

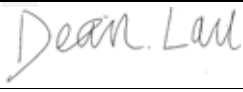
TEST REPORT

For

DT Research Inc.

11142 NW 71 Terrace, Doral, FL 33178, United States

FCC ID: YE3800D
Model: DT311

Report Type: Original Report	Product Type: Mobile Tablet
Test Engineer: Dean Liu 	
Report Number: RDG150615001-00E	
Report Date: 2015-07-15	
Reviewed By: Sula Huang RF Leader 	
Test Laboratory: Bay Area Compliance Laboratories Corp. (Dongguan) No.69 Pulongcun, Puxinhu Industrial Zone, Tangxia, Dongguan, Guangdong, China Tel: +86-769-86858888 Fax: +86-769-86858891 www.baclcorp.com.cn	

Note: This test report is prepared for the customer shown above and for the device described herein. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Dongguan). This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.

TABLE OF CONTENTS

GENERAL INFORMATION.....	4
PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT)	4
OBJECTIVE	4
RELATED SUBMITTAL(S)/GRANT(S).....	4
TEST METHODOLOGY	4
TEST FACILITY	4
SYSTEM TEST CONFIGURATION.....	5
DESCRIPTION OF TEST CONFIGURATION	5
EUT EXERCISE SOFTWARE	6
EQUIPMENT MODIFICATIONS	6
LOCAL SUPPORT EQUIPMENT LIST AND DETAILS	6
SUPPORT CABLE LIST AND DETAILS	7
BLOCK DIAGRAM OF TEST SETUP	7
SUMMARY OF TEST RESULTS	8
FCC §15.407 (f) & §1.1310 & §2.1093- RF EXPOSURE	9
APPLICABLE STANDARD	9
FCC §15.203 – ANTENNA REQUIREMENT	10
APPLICABLE STANDARD	10
ANTENNA CONNECTOR CONSTRUCTION	10
FCC §15.407 (b) (6) §15.207 (a) – CONDUCTED EMISSIONS	11
APPLICABLE STANDARD	11
MEASUREMENT UNCERTAINTY	11
EUT SETUP	11
EMI TEST RECEIVER SETUP.....	12
CORRECTED AMPLITUDE & MARGIN CALCULATION	12
TEST EQUIPMENT LIST AND DETAILS.....	12
TEST PROCEDURE	13
TEST RESULTS SUMMARY	13
TEST DATA	13
FCC §15.209, §15.205 & §15.407(b) (1) (6) (7) –UNWANTED EMISSION.....	16
APPLICABLE STANDARD	16
MEASUREMENT UNCERTAINTY	16
EUT SETUP	17
EMI TEST RECEIVER & SPECTRUM ANALYZER SETUP	18
TEST PROCEDURE	18
CORRECTED AMPLITUDE & MARGIN CALCULATION	18
TEST EQUIPMENT LIST AND DETAILS.....	19
TEST RESULTS SUMMARY	19
TEST DATA	19
FCC§15.407(b) –CONDUCTED SPURIOUS EMISSION AT ANTENNA PORT	37
APPLICABLE STANDARD	37
TEST EQUIPMENT LIST AND DETAILS.....	38
TEST DATA	38
FCC §15.407(a) –EMISSION BANDWIDTH	197
APPLICABLE STANDARD	197

TEST EQUIPMENT LIST AND DETAILS.....	197
TEST PROCEDURE	197
TEST DATA	197
FCC §15.407(a) (1) (ii) (4) –MAXIMUM CONDUCTED OUTPUT POWER.....	239
APPLICABLE STANDARD	239
TEST EQUIPMENT LIST AND DETAILS.....	240
TEST PROCEDURE	240
TEST DATA	240
FCC §15.407(a) - POWER SPECTRAL DENSITY	243
APPLICABLE STANDARD	243
TEST PROCEDURE	244
TEST EQUIPMENT LIST AND DETAILS.....	244
TEST DATA	244

FINAL

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

The *DT Research Inc.*'s product, model number: *DT311 (FCC ID: YE3800D)* (the "EUT") in this report was a *Mobile Tablet*, which was measured approximately: 31.5 cm (L) x 21.2 cm (W) x 4.2 cm (H), rated input voltage: DC 7.2V rechargeable Li-ion battery or DC19V charging from adapter. The device used Intel® Dual Band Wireless-AC 7265 module, FCC ID:PD97265NG, which support Bluetooth 4.0 standard include BLE and 802.11a/b/g/n/ac.

Adapter information:

Model: A11-065N1A

Input: 100-240V~50/60Hz, 1.7A

Output: 19V, 3.42A

All measurement and test data in this report was gathered from production sample serial number: 150615001 (Assigned by BACL, Dongguan). The EUT was received on 2015-06-15.

Objective

This type approval report is prepared on behalf of *DT Research Inc.* in accordance with Part 2-Subpart J, Part 15-Subparts A, B and E of the Federal Communications Commission's rules.

The tests were performed in order to determine compliance with FCC Part 15, Subpart E, section 15.203, 15.205, 15.207, 15.209 and 15.407 rules.

Related Submittal(s)/Grant(s)

FCC Part 15B JBC, 15C DTS, DSS and Part 22H, 24E, 27 PCB submissions with FCC ID: YE3800D.

Test Methodology

All measurements contained in this report were conducted with ANSI C63.4-2003, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz.

All emissions measurement was performed and Bay Area Compliance Laboratories Corp. (Dongguan).

Test Facility

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

Test site at Bay Area Compliance Laboratories Corp. (Dongguan) has been fully described in reports submitted to the Federal Communications Commission (FCC). The details of these reports have been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on February 06, 2015. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2009.

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

SYSTEM TEST CONFIGURATION

Description of Test Configuration

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

The system support 802.11a/n ht20/n ht40/ac vht20/ac vht40/ac vht80, the vh20/vht40 were reduced since the identical parameters with 802.11n ht20 and ht40, except the 802.11ac channel cross the band U-NII 2C to U-NII 3.

For 5150~5250 MHz band, 7 channels are provided:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	44	5220
38	5190	46	5230
40	5200	48	5240
42	5210	/	/

For 802.11a, 802.11n ht20, Channel 36, 40 and 48 was tested, for 802.11n ht40, Channel 38, 46 were tested, for 802.11ac 80, channel 42 was tested.

For 5250~5350 MHz band, 7 channels are provided:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
52	5260	60	5300
54	5270	62	5310
56	5280	64	5320
58	5290	/	/

For 802.11a, 802.11n ht20, Channel 52, 56 and 64 were tested, for 802.11n ht40, Channel 54, 62 were tested. For 802.11ac 80, channel 58 was tested.

For 5470~5725 MHz band, 12 channels are provided:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
100	5500	132	5660
102	5510	134	5670
104	5520	136	5680
106	5530	138	5690
108	5540	140	5700
110	5550	142	5710
112	5560	144	5720
116	5580	/	/

For 802.11a, 802.11n ht20, Channel 100, 116 and 140 were tested, for 802.11n ht40, Channel 102, 110 and 134 were tested, for 802.11ac 80, channel 106 was tested. For 802.11ac channel cross the band U-NII 2C to U-NII 3, channel 144 for ac20, 142 for ac40, 138 for ac80 were choosed to test for compliance requirement.

For 5725~5850MHz band, 8 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	159	5795
151	5755	161	5805
153	5765	165	5825
155	5775	/	/
157	5785	/	/

For 802.11a, 802.11n ht20, Channel 149, 157 and 165 was tested, for 802.11n ht40, Channel 151, 159 was tested, for 802.11ac 80, channel 155 was tested.

EUT Exercise Software

The Engineering mode was configured by the software: DRTU V1.7.6., which was used to configure the test channel, and test data rate, the maximum power level was configured as default value by the system.

The device support SISO and MIMO mode, 100% duty cycle was configured by the software, the worst-case data rates are determined to be as follows for each mode based upon investigations by measuring the average power and PSD across all data rates bandwidths, and modulations. The worst data rates as below:

802.11a: 6Mbps
 802.11n ht20 SISO: MCS0
 802.11n ht20 MIMO: MCS8
 802.11n ht40 SISO: MCS0
 802.11n ht40 MIMO: MCS8
 802.11ac 80: MCS0
 802.11ac 80: MCS8

Equipment Modifications

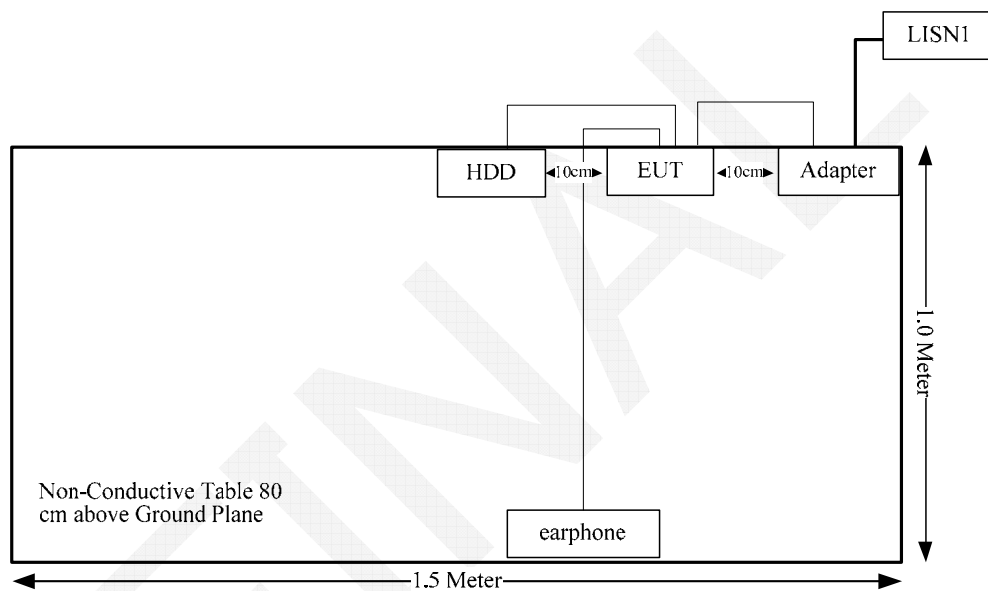
No modification was made to the EUT.

Local Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
TOSHIBA	HDD	V63700-A 500GB	7283TCUTSJ2
/	Earphone	/	/

Support Cable List and Details

Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
Adapter cable	yes	No	1.18	Adapter 1	EUT
Adapter cable	yes	No	1.71	Adapter 2	EUT
Audio Cable	No	No	1.5	EUT	Earphone
USB Cable	yes	No	0.8	EUT	USB-HDD

Block Diagram of Test Setup

SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
FCC §15.407 (f) & §1.1310 & §2.1093	RF Exposure	Compliance
§15.203	Antenna Requirement	Compliance
§15.407(b)(6)& §15.207(a)	Conducted Emissions	Compliance
§15.205& §15.209 &§15.407(b) (1),(6),(7)	Undesirable Emission& Restricted Bands	Compliance
&§15.407(b) (1),(6),(7)	Spurious Emission Antenna Ports	Compliance
§15.407(a) (1)	26 dB Bandwidth	Compliance
§15.407(a)(1),	Conducted Transmitter Output Power	Compliance
§15.407 (a)(1),(5)	Power Spectral Density	Compliance
§15.407(H)	Dynamic Frequency Selection	Compliance*

Compliance*: please refer the report number RDG150615001-DFS.

FCC §15.407 (f) & §1.1310 & §2.1093- RF EXPOSURE

Applicable Standard

According to §15.407(f) and §1.1310, U-NII devices are subject to the radio frequency radiation exposure requirements specified in §§ 1.1307(b), 2.1091 and 2.1093 of this chapter, as appropriate. All equipment shall be considered to operate in a "general population/uncontrolled" environment. Applications for equipment authorization of devices operating under this section must contain a statement confirming compliance with these requirements for both fundamental emissions and unwanted emissions. Technical information showing the basis for this statement must be submitted to the Commission upon request.

The SAR data please refer to the SAR report, report No.:RDG150615001-20 and RDG150615001-20A.

FCC §15.203 – ANTENNA REQUIREMENT

Applicable Standard

According to § 15.203, An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

And according to FCC 47 CFR section 15.407 (a)(1), if transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Antenna Connector Construction

The EUT has two internal antenna arrangement for WLAN, fulfill the requirement of this section. The antenna parameters please refer below table.

Frequency (GHz)	Main antenna Peak Gain (dBi)	AUX antenna Peak Gain (dBi)
2.4	1.08	0.67
2.45	0.67	0.86
2.5	-0.35	0.09
5.15	-0.18	2.67
5.25	0.14	3.14
5.35	1.42	2.87
5.47	2.21	2.34
5.6	1.88	1.29
5.725	2.54	0.99
5.785	2.93	0.81
5.85	2.88	0.46

Result: Compliance.

FCC §15.407 (b) (6) §15.207 (a) – CONDUCTED EMISSIONS

Applicable Standard

FCC §15.207, §15.407(b) (6)

Measurement Uncertainty

Compliance or non-compliance with a disturbance limit shall be determined in the following manner :

If U_{lab} is less than or equal to U_{cispr} of Table 1, then:

- compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.

If U_{lab} is greater than U_{cispr} of Table 1, then:

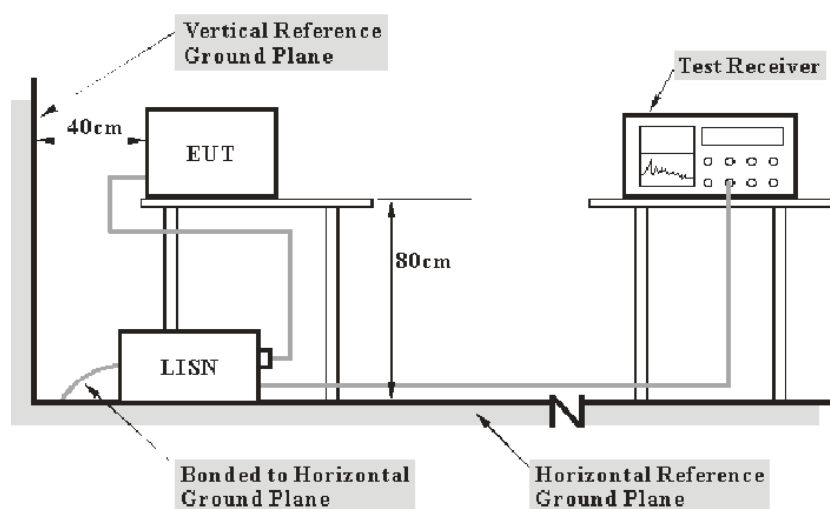
- compliance is deemed to occur if no measured disturbance level, increased by $(U_{lab} - U_{cispr})$, exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance level, increased by $(U_{lab} - U_{cispr})$, exceeds the disturbance limit.

Based on CISPR 16-4-2: 2011, measurement uncertainty of conducted disturbance at mains port using AMN at Bay Area Compliance Laboratories Corp. (Dongguan) is 3.46 dB (150 kHz to 30 MHz).

Table 1 – Values of U_{cispr}

Measurement	U_{cispr}
Conducted disturbance at mains port using AMN (150 kHz to 30 MHz)	3.4 dB

EUT Setup



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

The setup of EUT is according with per ANSI C63.4-2003 measurement procedure. The specification used was with the FCC Part 15.207 limits.

The spacing between the peripherals was 10 cm.

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

EMI Test Receiver Setup

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

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

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

Corrected Amplitude & Margin Calculation

The basic equation is as follows:

$$V_C = V_R + A_C + VDF$$

$$C_f = A_C + VDF$$

Herein,

V_C (cord. Reading): corrected voltage amplitude

V_R : reading voltage amplitude

A_C : attenuation caused by cable loss

VDF: voltage division factor of AMN

C_f : Correction Factor

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

$$\text{Margin} = \text{Limit} - \text{Corrected Amplitude}$$

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	EMI Test Receiver	ESCS 30	830245/006	2014-10-20	2015-10-20
R&S	L.I.S.N	ESH2-Z5	892107/021	2015-06-09	2016-06-09
R&S	Two-line V-network	ENV 216	3560.6550.12	2014-12-11	2015-12-11
R&S	Test Software	EMC32	Version8.53.0	N/A	N/A

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

Test Procedure

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

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

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

Test Results Summary

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

3.2 dB at 0.196675 MHz in the Line conducted mode

Test Data

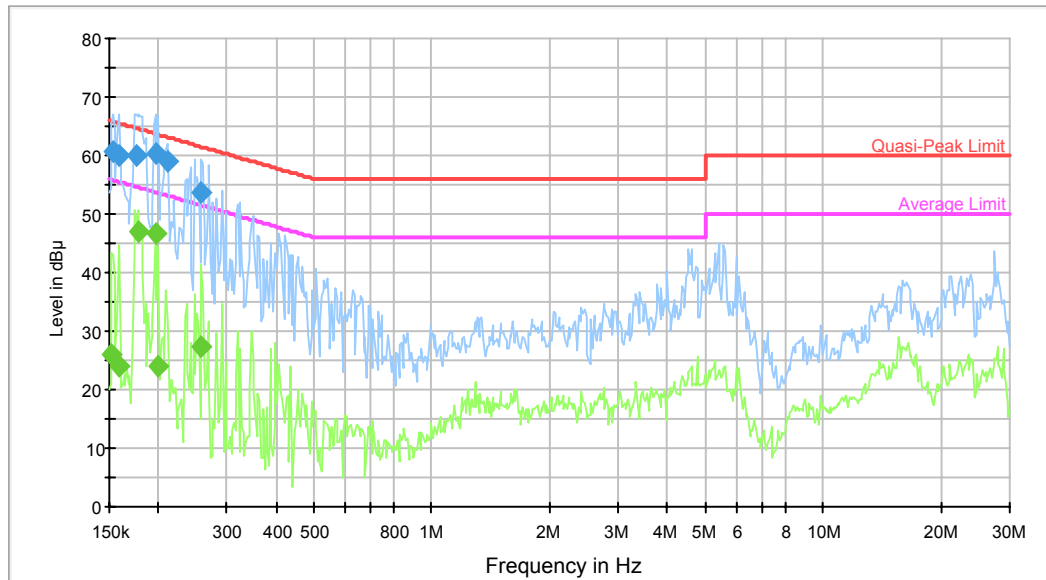
Environmental Conditions

Temperature:	27.6°C
Relative Humidity:	53 %
ATM Pressure:	100kPa

The testing was performed by Dean Liu on 2015-06-19.

Test Mode: Transmitting

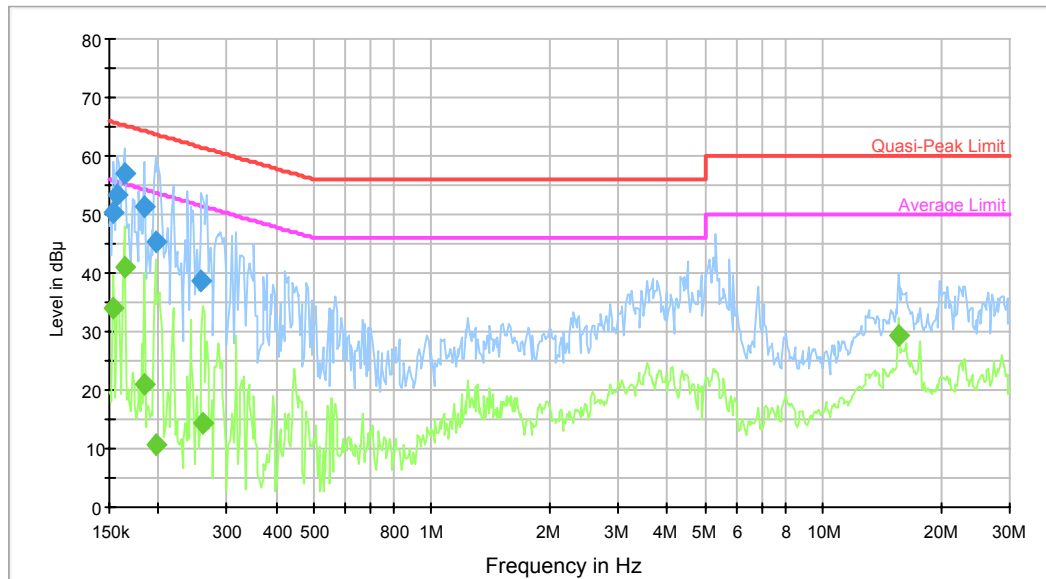
AC120 V, 60 Hz, Line:



Frequency (MHz)	QuasiPeak (dBμV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	Comment
0.153629	60.6	9.000	L1	10.2	5.2	65.8	Compliance
0.158604	59.9	9.000	L1	10.2	5.6	65.5	Compliance
0.175915	60.0	9.000	L1	10.2	4.7	64.7	Compliance
0.196675	60.5	9.000	L1	10.2	3.2*	63.7	Compliance
0.211298	58.9	9.000	L1	10.2	4.3	63.2	Compliance
0.257874	53.8	9.000	L1	10.2	7.7	61.5	Compliance

Frequency (MHz)	Average (dBμV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	Comment
0.152410	25.9	9.000	L1	10.2	30.0	55.9	Compliance
0.158604	23.9	9.000	L1	10.2	31.6	55.5	Compliance
0.177322	47.1	9.000	L1	10.2	7.5	54.6	Compliance
0.196675	46.6	9.000	L1	10.2	7.1	53.7	Compliance
0.199835	24.2	9.000	L1	10.2	29.4	53.6	Compliance
0.257874	27.4	9.000	L1	10.2	24.1	51.5	Compliance

*Within measurement uncertainty!

AC120 V, 60 Hz, Neutral:

Frequency (MHz)	QuasiPeak (dBμV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	Comment
0.153629	50.3	9.000	N	10.2	15.5	65.8	Compliance
0.157346	53.2	9.000	N	10.2	12.4	65.6	Compliance
0.163741	57.1	9.000	N	10.2	8.2	65.3	Compliance
0.184529	51.3	9.000	N	10.2	13.0	64.3	Compliance
0.196675	45.3	9.000	N	10.2	18.4	63.7	Compliance
0.257874	38.7	9.000	N	10.2	22.8	61.5	Compliance

Frequency (MHz)	Average (dBμV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	Comment
0.153629	34.0	9.000	N	10.2	21.8	55.8	Compliance
0.163741	41.1	9.000	N	10.2	14.2	55.3	Compliance
0.184529	20.9	9.000	N	10.2	33.4	54.3	Compliance
0.196675	10.8	9.000	N	10.2	42.9	53.7	Compliance
0.259937	14.5	9.000	N	10.2	36.9	51.4	Compliance
15.616430	29.4	9.000	N	10.7	20.6	50.0	Compliance

FCC §15.209, §15.205 & §15.407(b) (1) (6) (7) –UNWANTED EMISSION**Applicable Standard**

FCC §15.407; §15.209; §15.205;

(b) Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(4) For transmitters operating in the 5.725-5.85 GHz band: All emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of -17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of -27 dBm/MHz.

(5) The emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz. A lower resolution bandwidth may be employed near the band edge, when necessary, provided the measured energy is integrated to show the total power over 1 MHz.

(6) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209. Further, any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in §15.207.

(7) The provisions of §15.205 apply to intentional radiators operating under this section.

Measurement Uncertainty

Compliance or non-compliance with a disturbance limit shall be determined in the following manner :

If U_{lab} is less than or equal to U_{cisprr} of Table 1, then:

- compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.

If U_{lab} is greater than U_{cisprr} of Table 1, then:

- compliance is deemed to occur if no measured disturbance level, increased by $(U_{lab} - U_{cisprr})$, exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance level, increased by $(U_{lab} - U_{cisprr})$, exceeds the disturbance limit.

Based on CISPR 16-4-2: 2011, measurement uncertainty of radiated emission at a distance of 3m at Bay Area Compliance Laboratories Corp. (Dongguan) is:

30M~200MHz: 5.0 dB

200M~1GHz: 6.2 dB

1G~6GHz: 4.45 dB

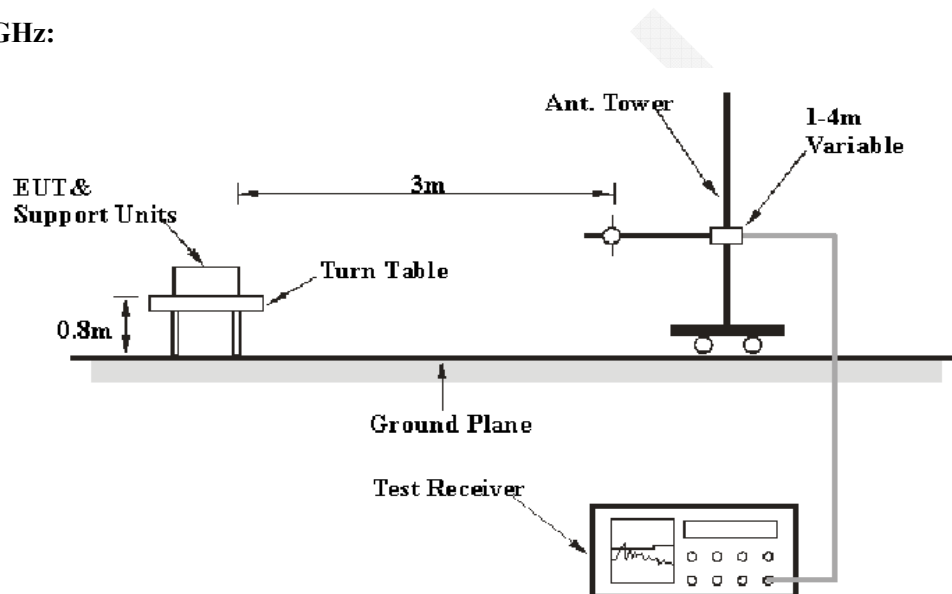
6G~18GHz: 5.23 dB

Table 1 – Values of U_{cispr}

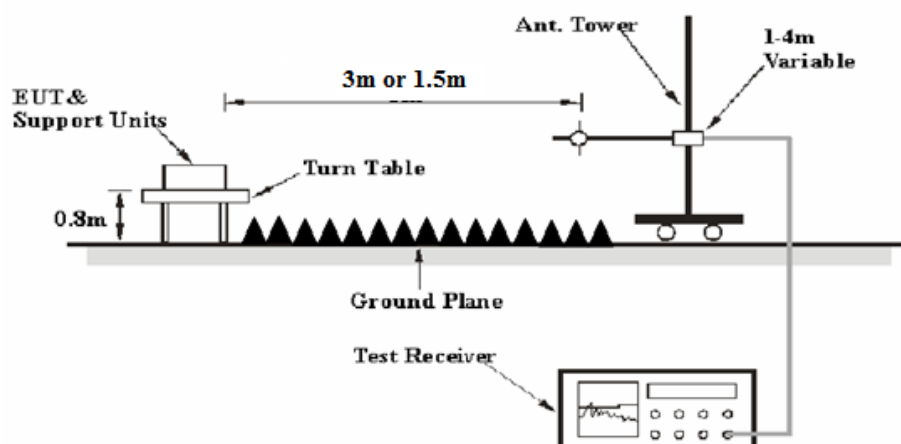
Measurement	U_{cispr}
Radiated disturbance (electric field strength at an OATS or in a SAC) (30 MHz to 1000 MHz)	6.3 dB
Radiated disturbance (electric field strength in a FAR) (1 GHz to 6 GHz)	5.2 dB
Radiated disturbance (electric field strength in a FAR) (6 GHz to 18 GHz)	5.5 dB

EUT Setup

Below 1 GHz:



Above 1 GHz:



The radiated emission tests were performed in the 3 meters chamber, using the setup accordance with the ANSI C63.4-2003. The specification used was the FCC 15.209, and FCC 15.407 limits.

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

The spacing between the peripherals was 10 cm.

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

EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 30 MHz to 40 GHz.

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

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

Test Procedure

During the radiated emission test, the adapter was connected to the first AC floor outlet.

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

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

According to KDB 789033 D02 General UNII Test Procedures New Rules v01, emission shall be computed as: $E [dB\mu V/m] = EIRP[dBm] + 95.2$, for $d = 3$ meters.

According to C63.4, the above 1G test result shall be extrapolated to the specified distance using an extrapolation factor of 20dB/decade from 3m to 1.5m

Distance extrapolation factor = $20 \log (\text{specific distance } [3m] / \text{test distance } [1.5m])$ dB

Extrapolation result = Corrected Amplitude (dB μ V/m) - distance extrapolation factor (6dB)

Corrected Amplitude & Margin Calculation

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

$$\text{Corrected Amplitude} = \text{Meter Reading} + \text{Antenna Loss} + \text{Cable Loss} - \text{Amplifier Gain}$$

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

$$\text{Margin} = \text{Limit} - \text{Extrapolation result}$$

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	EMI Test Receiver	ESCI	100224	2015-05-09	2016-05-09
Sunol Sciences	Antenna	JB3	A060611-3	2014-11-06	2017-11-05
HP	Amplifier	8447E	2434A02181	2014-09-01	2015-09-01
Agilent	Spectrum Analyzer	E4440A	SG43360054	2014-12-04	2015-12-04
ETS-Lindgren	Horn Antenna	3115	000 527 35	2012-09-06	2015-09-06
Mini-Circuit	Amplifier	ZVA-213-S+	054201245	2015-02-19	2016-02-19
R&S	Spectrum Analyzer	FSP 38	100478	2015-05-09	2016-05-09
Ducommun Technologies	Horn Antenna	ARH-4223-02	1007726-01 1304	2014-06-16	2017-06-15
Ducommun Technologies	Horn Antenna	ARH-2823-02	1007726-01 1302	2014-06-16	2017-06-15
Quinstar	Amplifier	QLW-18405536-JO	15964001001	2014-09-06	2015-09-06

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

Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Title 47, Part 15, Subpart C, Section 15.205, 15.209 and Subpart E, section 15.407, with the worst margin reading of:

1.4 dB at 5715 MHz in the Vertical polarization for 802.11n ht40 mode

Test Data**Environmental Conditions**

Temperature:	24.1 °C-25.4 °C
Relative Humidity:	53 %-60 %
ATM Pressure:	99.7 kPa-100.2 kPa

The testing was performed by Dean Liu from 2015-06-18 to 2015-6-23.

Result: Compliance.

Note 1: For above 1GHz, the test distance is 1.5m.

Note 2: the emission compliance 15.209 general requirements, or compliance the outside band emission limits in the un-restricted bands.

Note 3: per pretest, the worst mode was the SISO mode at chain 0, reported below tables:

Please refer to the following tables

Mode: Transmitting
5150-5250MHz Band: 802.11a Mode:

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
Reading (dBμV)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB)							
Low Channel:5180 MHz										
5180	68.98	PK	H	31.46	5.40	0.00	105.84	99.84	N/A	N/A
5180	59.74	AV	H	31.46	5.40	0.00	96.60	90.60	N/A	N/A
5180	74.83	PK	V	31.46	5.40	0.00	111.69	105.69	N/A	N/A
5180	64.52	AV	V	31.46	5.40	0.00	101.38	95.38	N/A	N/A
5150	27.65	PK	V	31.40	5.26	0.00	64.31	58.31	74.00	15.69
5150	16.02	AV	V	31.40	5.26	0.00	52.68	46.68	54.00	7.32
10360	34.23	PK	V	36.97	8.36	25.52	54.04	48.04	74.00	25.96
10360	21.58	AV	V	36.97	8.36	25.52	41.39	35.39	54.00	18.61
15540	32.69	PK	V	37.43	14.94	24.98	60.08	54.08	74.00	19.92
15540	20.17	AV	V	37.43	14.94	24.98	47.56	41.56	54.00	12.44
6903	34.53	PK	V	33.35	6.33	26.45	47.76	41.76	74.00	32.24
6903	22.02	AV	V	33.35	6.33	26.45	35.25	29.25	54.00	24.75
4936	34.18	PK	V	30.93	5.35	27.43	43.03	37.03	74.00	36.97
4936	21.35	AV	V	30.93	5.35	27.43	30.20	24.20	54.00	29.80
345.25	38.5	QP	H	14.98	2.22	21.63	34.07	28.07	46.00	17.93
139.61	40.6	QP	H	13.27	1.44	21.42	33.89	27.89	43.50	15.61
Middle Channel:5200 MHz										
5200	68.40	PK	H	31.50	5.49	0.00	105.39	99.39	N/A	N/A
5200	58.93	AV	H	31.50	5.49	0.00	95.92	89.92	N/A	N/A
5200	75.35	PK	V	31.50	5.49	0.00	112.34	106.34	N/A	N/A
5200	64.96	AV	V	31.50	5.49	0.00	101.95	95.95	N/A	N/A
10400	34.08	PK	V	36.98	8.32	25.50	53.88	47.88	74.00	26.12
10400	21.53	AV	V	36.98	8.32	25.50	41.33	35.33	54.00	18.67
15600	32.62	PK	V	37.32	14.69	24.69	59.94	53.94	74.00	20.06
15600	20.08	AV	V	37.32	14.69	24.69	47.40	41.40	54.00	12.60
6933	34.40	PK	V	33.43	6.34	26.38	47.79	41.79	74.00	32.21
6933	21.85	AV	V	33.43	6.34	26.38	35.24	29.24	54.00	24.76
3280	34.02	PK	V	28.10	5.61	27.30	40.43	34.43	74.00	39.57
3280	21.29	AV	V	28.10	5.61	27.30	27.70	21.70	54.00	32.30
345.25	38.7	QP	H	14.98	2.22	21.63	34.27	28.27	46.00	17.73
139.61	40.3	QP	H	13.27	1.44	21.42	33.59	27.59	43.50	15.91
High Channel:5240 MHz										
5240	69.85	PK	H	31.58	5.28	0.00	106.71	100.71	N/A	N/A
5240	59.33	AV	H	31.58	5.28	0.00	96.19	90.19	N/A	N/A
5240	75.81	PK	V	31.58	5.28	0.00	112.67	106.67	N/A	N/A
5240	65.51	AV	V	31.58	5.28	0.00	102.37	96.37	N/A	N/A
5350	27.21	PK	V	31.80	5.61	0.00	64.62	58.62	74.00	15.38
5350	15.03	AV	V	31.80	5.61	0.00	52.44	46.44	54.00	7.56
10480	34.06	PK	V	37.00	8.23	26.01	53.28	47.28	74.00	26.72
10480	21.37	AV	V	37.00	8.23	26.01	40.59	34.59	54.00	19.41
15720	32.54	PK	V	37.10	14.20	24.92	58.92	52.92	74.00	21.08
15720	20.06	AV	V	37.10	14.20	24.92	46.44	40.44	54.00	13.56
6984	34.25	PK	V	33.56	6.36	26.27	47.90	41.90	74.00	32.10
6984	21.71	AV	V	33.56	6.36	26.27	35.36	29.36	54.00	24.64
3280	34.00	PK	V	28.10	5.61	27.30	40.41	34.41	74.00	39.59
3280	21.27	AV	V	28.10	5.61	27.30	27.68	21.68	54.00	32.32
345.25	38.2	QP	H	14.98	2.22	21.63	33.77	27.77	46.00	18.23
139.61	40.1	QP	H	13.27	1.44	21.42	33.39	27.39	43.50	16.11

802.11n ht20 Mode:

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB)						
Low Channel:5180 MHz										
5180	68.34	PK	H	31.46	5.40	0.00	105.20	99.20	N/A	N/A
5180	59.36	AV	H	31.46	5.40	0.00	96.22	90.22	N/A	N/A
5180	73.25	PK	V	31.46	5.40	0.00	110.11	104.11	N/A	N/A
5180	64.34	AV	V	31.46	5.40	0.00	101.20	95.20	N/A	N/A
5150	29.31	PK	V	31.40	5.26	0.00	65.97	59.97	74.00	14.03
5150	16.07	AV	V	31.40	5.26	0.00	52.73	46.73	54.00	7.27
10360	34.04	PK	V	36.97	8.36	25.52	53.85	47.85	74.00	26.15
10360	21.49	AV	V	36.97	8.36	25.52	41.30	35.30	54.00	18.70
15540	32.59	PK	V	37.43	14.94	24.98	59.98	53.98	74.00	20.02
15540	20.15	AV	V	37.43	14.94	24.98	47.54	41.54	54.00	12.46
6903	34.44	PK	V	33.35	6.33	26.45	47.67	41.67	74.00	32.33
6903	21.96	AV	V	33.35	6.33	26.45	35.19	29.19	54.00	24.81
4936	33.98	PK	V	30.93	5.35	27.43	42.83	36.83	74.00	37.17
4936	21.16	AV	V	30.93	5.35	27.43	30.01	24.01	54.00	29.99
345.25	38.7	QP	H	14.98	2.22	21.63	34.27	28.27	46.00	17.73
139.61	40.6	QP	H	13.27	1.44	21.42	33.89	27.89	43.50	15.61
Middle Channel:5200 MHz										
5200	69.19	PK	H	31.50	5.49	0.00	106.18	100.18	N/A	N/A
5200	60.18	AV	H	31.50	5.49	0.00	97.17	91.17	N/A	N/A
5200	74.23	PK	V	31.50	5.49	0.00	111.22	105.22	N/A	N/A
5200	65.25	AV	V	31.50	5.49	0.00	102.24	96.24	N/A	N/A
10400	34.02	PK	V	36.98	8.32	25.50	53.82	47.82	74.00	26.18
10400	21.40	AV	V	36.98	8.32	25.50	41.20	35.20	54.00	18.80
15600	32.45	PK	V	37.32	14.69	24.69	59.77	53.77	74.00	20.23
15600	19.95	AV	V	37.32	14.69	24.69	47.27	41.27	54.00	12.73
6933	34.38	PK	V	33.43	6.34	26.38	47.77	41.77	74.00	32.23
6933	21.74	AV	V	33.43	6.34	26.38	35.13	29.13	54.00	24.87
2786	33.98	PK	V	26.64	4.45	27.55	37.52	31.52	74.00	42.48
2786	21.13	AV	V	26.64	4.45	27.55	24.67	18.67	54.00	35.33
345.25	38.9	QP	H	14.98	2.22	21.63	34.47	28.47	46.00	17.53
139.61	40.7	QP	H	13.27	1.44	21.42	33.99	27.99	43.50	15.51
High Channel:5240 MHz										
5240	69.43	PK	H	31.58	5.28	0.00	106.29	100.29	N/A	N/A
5240	59.24	AV	H	31.58	5.28	0.00	96.10	90.10	N/A	N/A
5240	75.34	PK	V	31.58	5.28	0.00	112.20	106.20	N/A	N/A
5240	65.47	AV	V	31.58	5.28	0.00	102.33	96.33	N/A	N/A
5350	27.31	PK	V	31.80	5.61	0.00	64.72	58.72	74.00	15.28
5350	15.21	AV	V	31.80	5.61	0.00	52.62	46.62	54.00	7.38
10480	34.03	PK	V	37.00	8.23	26.01	53.25	47.25	74.00	26.75
10480	21.19	AV	V	37.00	8.23	26.01	40.41	34.41	54.00	19.59
15720	32.40	PK	V	37.10	14.20	24.92	58.78	52.78	74.00	21.22
15720	19.92	AV	V	37.10	14.20	24.92	46.30	40.30	54.00	13.70
6984	34.22	PK	V	33.56	6.36	26.27	47.87	41.87	74.00	32.13
6984	21.69	AV	V	33.56	6.36	26.27	35.34	29.34	54.00	24.66
2786	33.95	PK	V	26.64	4.45	27.55	37.49	31.49	74.00	42.51
2786	21.12	AV	V	26.64	4.45	27.55	24.66	18.66	54.00	35.34
345.25	38.4	QP	H	14.98	2.22	21.63	33.97	27.97	46.00	18.03
139.61	40.1	QP	H	13.27	1.44	21.42	33.39	27.39	43.50	16.11

802.11n ht40 Mode:

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
Reading (dBμV)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB)							
Low Channel:5190 MHz										
5190	64.69	PK	H	31.48	5.44	0.00	101.61	95.61	N/A	N/A
5190	54.28	AV	H	31.48	5.44	0.00	91.20	85.20	N/A	N/A
5190	69.83	PK	V	31.48	5.44	0.00	106.75	100.75	N/A	N/A
5190	59.20	AV	V	31.48	5.44	0.00	96.12	90.12	N/A	N/A
5150	28.14	PK	V	31.40	5.26	0.00	64.80	58.80	74.00	15.20
5150	16.16	AV	V	31.40	5.26	0.00	52.82	46.82	54.00	7.18
10380	34.01	PK	V	36.98	8.34	25.51	53.82	47.82	74.00	26.18
10380	21.36	AV	V	36.98	8.34	25.51	41.17	35.17	54.00	18.83
15570	32.49	PK	V	37.37	14.81	24.83	59.84	53.84	74.00	20.16
15570	20.08	AV	V	37.37	14.81	24.83	47.43	41.43	54.00	12.57
6903	34.32	PK	V	33.35	6.33	26.45	47.55	41.55	74.00	32.45
6903	21.77	AV	V	33.35	6.33	26.45	35.00	29.00	54.00	25.00
2786	33.92	PK	V	26.64	4.45	27.55	37.46	31.46	74.00	42.54
2786	21.04	AV	V	26.64	4.45	27.55	24.58	18.58	54.00	35.42
345.25	38.8	QP	H	14.98	2.22	21.63	34.37	28.37	46.00	17.63
139.61	40.7	QP	H	13.27	1.44	21.42	33.99	27.99	43.50	15.51
High Channel:5230 MHz										
5230	67.25	PK	H	31.56	5.33	0.00	104.14	98.14	N/A	N/A
5230	57.83	AV	H	31.56	5.33	0.00	94.72	88.72	N/A	N/A
5230	72.56	PK	V	31.56	5.33	0.00	109.45	103.45	N/A	N/A
5230	62.85	AV	V	31.56	5.33	0.00	99.74	93.74	N/A	N/A
5350	27.64	PK	V	31.80	5.61	0.00	65.05	59.05	74.00	14.95
5350	15.13	AV	V	31.80	5.61	0.00	52.54	46.54	54.00	7.46
10460	33.97	PK	V	36.99	8.25	25.88	53.33	47.33	74.00	26.67
10460	21.03	AV	V	36.99	8.25	25.88	40.39	34.39	54.00	19.61
15690	32.29	PK	V	37.16	14.32	24.87	58.90	52.90	74.00	21.10
15690	19.77	AV	V	37.16	14.32	24.87	46.38	40.38	54.00	13.62
6973	34.13	PK	V	33.53	6.36	26.30	47.72	41.72	74.00	32.28
6973	21.66	AV	V	33.53	6.36	26.30	35.25	29.25	54.00	24.75
2786	33.94	PK	V	26.64	4.45	27.55	37.48	31.48	74.00	42.52
2786	21.08	AV	V	26.64	4.45	27.55	24.62	18.62	54.00	35.38
345.25	38.7	QP	H	14.98	2.22	21.63	34.27	28.27	46.00	17.73
139.61	40.3	QP	H	13.27	1.44	21.42	33.59	27.59	43.50	15.91

802.11n ac80 Mode:

Frequency	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
(MHz)	Reading (dBμV)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB)						
Low Channel:5210 MHz										
5210	62.37	PK	H	31.52	5.44	0.00	99.33	93.33	N/A	N/A
5210	51.89	AV	H	31.52	5.44	0.00	88.85	82.85	N/A	N/A
5210	67.32	PK	V	31.52	5.44	0.00	104.28	98.28	N/A	N/A
5210	57.12	AV	V	31.52	5.44	0.00	94.08	88.08	N/A	N/A
5150	34.22	PK	V	31.40	5.26	0.00	70.88	64.88	74.00	9.12
5150	19.15	AV	V	31.40	5.26	0.00	55.81	49.81	54.00	4.19*
5350	27.35	PK	V	31.80	5.61	0.00	64.76	58.76	74.00	15.24
5350	15.02	AV	V	31.80	5.61	0.00	52.43	46.43	54.00	7.57
10420	33.89	PK	V	36.98	8.30	25.63	53.54	47.54	74.00	26.46
10420	21.22	AV	V	36.98	8.30	25.63	40.87	34.87	54.00	19.13
15630	32.31	PK	V	37.27	14.57	24.75	59.40	53.40	74.00	20.60
15630	19.99	AV	V	37.27	14.57	24.75	47.08	41.08	54.00	12.92
6946	34.17	PK	V	33.46	6.35	26.36	47.62	41.62	74.00	32.38
6946	21.57	AV	V	33.46	6.35	26.36	35.02	29.02	54.00	24.98
345.25	38.3	QP	H	14.98	2.22	21.63	33.87	27.87	46.00	18.13
139.61	40.6	QP	H	13.27	1.44	21.42	33.89	27.89	43.50	15.61

*Within measurement uncertainty!

5250-5350MHz:

802.11a Mode:

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
Reading (dBμV)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB)							
Low Channel:5260 MHz										
5260	70.33	PK	H	31.62	5.24	0.00	107.19	101.19	N/A	N/A
5260	61.36	AV	H	31.62	5.24	0.00	98.22	92.22	N/A	N/A
5260	77.76	PK	V	31.62	5.24	0.00	114.62	108.62	N/A	N/A
5260	68.12	AV	V	31.62	5.24	0.00	104.98	98.98	N/A	N/A
5150	27.35	PK	V	31.40	5.26	0.00	64.01	58.01	74.00	15.99
5150	15.29	AV	V	31.40	5.26	0.00	51.95	45.95	54.00	8.05
10520	34.36	PK	V	37.02	8.21	26.27	53.32	47.32	74.00	26.68
10520	21.28	AV	V	37.02	8.21	26.27	40.24	34.24	54.00	19.76
15780	32.14	PK	V	37.00	13.95	25.04	58.05	52.05	74.00	21.95
15780	19.58	AV	V	37.00	13.95	25.04	45.49	39.49	54.00	14.51
1687	34.47	PK	V	23.97	2.88	27.69	33.63	27.63	74.00	46.37
1687	22.05	AV	V	23.97	2.88	27.69	21.21	15.21	54.00	38.79
1023	34.61	PK	V	22.36	2.85	26.53	33.29	27.29	74.00	46.71
1023	22.08	AV	V	22.36	2.85	26.53	20.76	14.76	54.00	39.24
345.25	38.4	QP	H	14.98	2.22	21.63	33.97	27.97	46.00	18.03
139.61	40.6	QP	H	13.27	1.44	21.42	33.89	27.89	43.50	15.61
Middle Channel:5280 MHz										
5280	68.79	PK	H	31.66	5.25	0.00	105.70	99.70	N/A	N/A
5280	59.90	AV	H	31.66	5.25	0.00	96.81	90.81	N/A	N/A
5280	76.98	PK	V	31.66	5.25	0.00	113.89	107.89	N/A	N/A
5280	67.55	AV	V	31.66	5.25	0.00	104.46	98.46	N/A	N/A
10560	34.23	PK	V	37.05	8.22	26.52	52.98	46.98	74.00	27.02
10560	21.14	AV	V	37.05	8.22	26.52	39.89	33.89	54.00	20.11
15840	32.04	PK	V	36.89	13.71	24.99	57.65	51.65	74.00	22.35
15840	19.53	AV	V	36.89	13.71	24.99	45.14	39.14	54.00	14.86
7038	34.36	PK	V	33.69	6.41	26.18	48.28	42.28	74.00	31.72
7038	22.00	AV	V	33.69	6.41	26.18	35.92	29.92	54.00	24.08
3280	34.53	PK	V	28.10	5.61	27.30	40.94	34.94	74.00	39.06
3280	21.98	AV	V	28.10	5.61	27.30	28.39	22.39	54.00	31.61
345.25	38.9	QP	H	14.98	2.22	21.63	34.47	28.47	46.00	17.53
139.61	40.3	QP	H	13.27	1.44	21.42	33.59	27.59	43.50	15.91
High Channel:5320 MHz										
5320	67.93	PK	H	31.74	5.40	0.00	105.07	99.07	N/A	N/A
5320	58.91	AV	H	31.74	5.40	0.00	96.05	90.05	N/A	N/A
5320	74.12	PK	V	31.74	5.40	0.00	111.26	105.26	N/A	N/A
5320	64.76	AV	V	31.74	5.40	0.00	101.90	95.90	N/A	N/A
5350	27.69	PK	V	31.80	5.61	0.00	65.10	59.10	74.00	14.90
5350	15.24	AV	V	31.80	5.61	0.00	52.65	46.65	54.00	7.35
10640	34.21	PK	V	37.11	8.24	26.78	33.81	27.81	74.00	46.19
10640	21.10	AV	V	37.11	8.24	26.78	39.67	33.67	54.00	20.33
15960	31.96	PK	V	36.67	13.21	24.70	57.14	51.14	74.00	22.86
15960	19.48	AV	V	36.67	13.21	24.70	44.66	38.66	54.00	15.34
1561	34.32	PK	V	23.72	2.63	27.65	33.02	27.02	74.00	46.98
1561	21.88	AV	V	23.72	2.63	27.65	20.58	14.58	54.00	39.42
3280	34.45	PK	V	28.10	5.61	27.30	40.86	34.86	74.00	39.14
3280	21.86	AV	V	28.10	5.61	27.30	28.27	22.27	54.00	31.73
345.25	37.9	QP	H	14.98	2.22	21.63	33.47	27.47	46.00	18.53
139.61	40.5	QP	H	13.27	1.44	21.42	33.79	27.79	43.50	15.71

802.11n ht20 Mode:

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB)						
Low Channel:5260 MHz										
5260	70.14	PK	H	31.62	5.24	0.00	107.00	101.00	N/A	N/A
5260	61.03	AV	H	31.62	5.24	0.00	97.89	91.89	N/A	N/A
5260	76.62	PK	V	31.62	5.24	0.00	113.48	107.48	N/A	N/A
5260	67.31	AV	V	31.62	5.24	0.00	104.17	98.17	N/A	N/A
5150	27.41	PK	V	31.40	5.26	0.00	64.07	58.07	74.00	15.93
5150	15.23	AV	V	31.40	5.26	0.00	51.89	45.89	54.00	8.11
10520	34.23	PK	V	37.02	8.21	26.27	53.19	47.19	74.00	26.81
10520	21.19	AV	V	37.02	8.21	26.27	40.15	34.15	54.00	19.85
15780	31.99	PK	V	37.00	13.95	25.04	57.90	51.90	74.00	22.10
15780	19.57	AV	V	37.00	13.95	25.04	45.48	39.48	54.00	14.52
1687	34.40	PK	V	23.97	2.88	27.69	33.56	27.56	74.00	46.44
1687	21.96	AV	V	23.97	2.88	27.69	21.12	15.12	54.00	38.88
1023	34.60	PK	V	22.36	2.85	26.53	33.28	27.28	74.00	46.72
1023	22.06	AV	V	22.36	2.85	26.53	20.74	14.74	54.00	39.26
345.25	38.8	QP	H	14.98	2.22	21.63	34.37	28.37	46.00	17.63
139.61	40.7	QP	H	13.27	1.44	21.42	33.99	27.99	43.50	15.51
Middle Channel:5280 MHz										
5280	68.94	PK	H	31.66	5.25	0.00	105.85	99.85	N/A	N/A
5280	59.99	AV	H	31.66	5.25	0.00	96.90	90.90	N/A	N/A
5280	75.54	PK	V	31.66	5.25	0.00	112.45	106.45	N/A	N/A
5280	66.20	AV	V	31.66	5.25	0.00	103.11	97.11	N/A	N/A
10560	34.17	PK	V	37.05	8.22	26.52	52.92	46.92	74.00	27.08
10560	20.99	AV	V	37.05	8.22	26.52	39.74	33.74	54.00	20.26
15840	31.94	PK	V	36.89	13.71	24.99	57.55	51.55	74.00	22.45
15840	19.41	AV	V	36.89	13.71	24.99	45.02	39.02	54.00	14.98
7038	34.24	PK	V	33.69	6.41	26.18	48.16	42.16	74.00	31.84
7038	21.81	AV	V	33.69	6.41	26.18	35.73	29.73	54.00	24.27
2786	34.36	PK	V	26.64	4.45	27.55	37.90	31.90	74.00	42.10
2786	21.87	AV	V	26.64	4.45	27.55	25.41	19.41	54.00	34.59
345.25	38.4	QP	H	14.98	2.22	21.63	33.97	27.97	46.00	18.03
139.61	40.1	QP	H	13.27	1.44	21.42	33.39	27.39	43.50	16.11
High Channel:5320 MHz										
5320	67.80	PK	H	31.74	5.40	0.00	104.94	98.94	N/A	N/A
5320	58.95	AV	H	31.74	5.40	0.00	96.09	90.09	N/A	N/A
5320	74.32	PK	V	31.74	5.40	0.00	111.46	105.46	N/A	N/A
5320	64.35	AV	V	31.74	5.40	0.00	101.49	95.49	N/A	N/A
5350	28.36	PK	V	31.80	5.61	0.00	65.77	59.77	74.00	14.23
5350	16.69	AV	V	31.80	5.61	0.00	54.10	48.10	54.00	5.90
10640	34.02	PK	V	37.11	8.24	26.78	52.59	46.59	74.00	27.41
10640	21.00	AV	V	37.11	8.24	26.78	39.57	33.57	54.00	20.43
15960	31.87	PK	V	36.67	13.21	24.70	57.05	51.05	74.00	22.95
15960	19.47	AV	V	36.67	13.21	24.70	44.65	38.65	54.00	15.35
1561	34.19	PK	V	23.72	2.63	27.65	32.89	26.89	74.00	47.11
1561	21.71	AV	V	23.72	2.63	27.65	20.41	14.41	54.00	39.59
2786	34.40	PK	V	26.64	4.45	27.55	37.94	31.94	74.00	42.06
2786	21.81	AV	V	26.64	4.45	27.55	25.35	19.35	54.00	34.65
345.25	38.5	QP	H	14.98	2.22	21.63	34.07	28.07	46.00	17.93
139.61	40.4	QP	H	13.27	1.44	21.42	33.69	27.69	43.50	15.81

802.11n ht40 Mode:

Frequency	Receiver		Rx Antenna		Cable loss	Amplifier Gain	Corrected Amplitude	Extrapolation result	Limit	Margin
(MHz)	Reading (dBμV)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB)	(dB)	(dB)	(dBμV/m)	(dBμV/m)	(dBμV/m)	(dB)
Low Channel:5270 MHz										
5270	67.46	PK	H	31.64	5.24	0.00	104.34	98.34	N/A	N/A
5270	57.82	AV	H	31.64	5.24	0.00	94.70	88.70	N/A	N/A
5270	73.54	PK	V	31.64	5.24	0.00	110.42	104.42	N/A	N/A
5270	63.71	AV	V	31.64	5.24	0.00	100.59	94.59	N/A	N/A
5150	27.36	PK	V	31.40	5.26	0.00	64.02	58.02	74.00	15.98
5150	14.98	AV	V	31.40	5.26	0.00	51.64	45.64	54.00	8.36
10540	34.17	PK	V	37.03	8.22	26.40	53.02	47.02	74.00	26.98
10540	21.10	AV	V	37.03	8.22	26.40	39.95	33.95	54.00	20.05
15810	31.91	PK	V	36.94	13.83	25.06	57.62	51.62	74.00	22.38
15810	19.51	AV	V	36.94	13.83	25.06	45.22	39.22	54.00	14.78
1687	34.28	PK	V	23.97	2.88	27.69	33.44	27.44	74.00	46.56
1687	21.89	AV	V	23.97	2.88	27.69	21.05	15.05	54.00	38.95
1023	34.52	PK	V	22.36	2.85	26.53	33.20	27.20	74.00	46.80
1023	21.91	AV	V	22.36	2.85	26.53	20.59	14.59	54.00	39.41
345.25	38.9	QP	H	14.98	2.22	21.63	34.47	28.47	46.00	17.53
139.61	40.7	QP	H	13.27	1.44	21.42	33.99	27.99	43.50	15.51
High Channel:5310 MHz										
5310	66.03	PK	H	31.72	5.33	0.00	103.08	97.08	N/A	N/A
5310	56.37	AV	H	31.72	5.33	0.00	93.42	87.42	N/A	N/A
5310	71.36	PK	V	31.72	5.33	0.00	108.41	102.41	N/A	N/A
5310	61.19	AV	V	31.72	5.33	0.00	98.24	92.24	N/A	N/A
5350	29.98	PK	V	31.80	5.61	0.00	67.39	61.39	74.00	12.61
5350	17.91	AV	V	31.80	5.61	0.00	55.32	49.32	54.00	4.68
10620	34.00	PK	V	37.10	8.24	26.78	52.56	46.56	74.00	27.44
10620	20.83	AV	V	37.10	8.24	26.78	39.39	33.39	54.00	20.61
15930	31.84	PK	V	36.73	13.34	24.77	57.14	51.14	74.00	22.86
15930	19.33	AV	V	36.73	13.34	24.77	44.63	38.63	54.00	15.37
1561	34.06	PK	V	23.72	2.63	27.65	32.76	26.76	74.00	47.24
1561	21.60	AV	V	23.72	2.63	27.65	20.30	14.30	54.00	39.70
2786	34.23	PK	V	26.64	4.45	27.55	37.77	31.77	74.00	42.23
2786	21.68	AV	V	26.64	4.45	27.55	25.22	19.22	54.00	34.78
345.25	38.1	QP	H	14.98	2.22	21.63	33.67	27.67	46.00	18.33
139.61	40.2	QP	H	13.27	1.44	21.42	33.49	27.49	43.50	16.01

802.11n ac80 Mode:

Frequency	Receiver		Rx Antenna		Cable loss	Amplifier Gain	Corrected Amplitude	Extrapolation result	Limit	Margin
(MHz)	Reading (dBμV)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB)	(dB)	(dB)	(dBμV/m)	(dBμV/m)	(dBμV/m)	(dB)
Low Channel:5290 MHz										
5290	62.58	PK	H	31.68	5.25	0.00	99.51	93.51	N/A	N/A
5290	52.42	AV	H	31.68	5.25	0.00	89.35	83.35	N/A	N/A
5290	68.38	PK	V	31.68	5.25	0.00	105.31	99.31	N/A	N/A
5290	58.22	AV	V	31.68	5.25	0.00	95.15	89.15	N/A	N/A
5150	27.36	PK	V	31.40	5.26	0.00	64.02	58.02	74.00	15.98
5150	15.27	AV	V	31.40	5.26	0.00	51.93	45.93	54.00	8.07
5350	31.58	PK	V	31.80	5.61	0.00	68.99	62.99	74.00	11.01
5350	18.74	AV	V	31.80	5.61	0.00	56.15	50.15	54.00	3.85
10580	33.89	PK	V	37.06	8.23	26.65	52.53	46.53	74.00	27.47
10580	20.81	AV	V	37.06	8.23	26.65	39.45	33.45	54.00	20.55
15870	31.80	PK	V	36.83	13.58	24.92	57.29	51.29	74.00	22.71
15870	19.19	AV	V	36.83	13.58	24.92	44.68	38.68	54.00	15.32
7050	33.93	PK	V	33.72	6.43	26.16	47.92	41.92	74.00	32.08
7050	21.50	AV	V	33.72	6.43	26.16	35.49	29.49	54.00	24.51
345.25	38.4	QP	H	14.98	2.22	21.63	33.97	27.97	46.00	18.03
139.61	40.1	QP	H	13.27	1.44	21.42	33.39	27.39	43.50	16.11

5470-5725MHz:

802.11a Mode:

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
Reading (dBμV)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB)							
Low Channel:5500 MHz										
5500	68.67	PK	H	32.10	5.48	0.00	106.25	100.25	N/A	N/A
5500	59.22	AV	H	32.10	5.48	0.00	96.80	90.80	N/A	N/A
5500	73.02	PK	V	32.10	5.48	0.00	110.60	104.60	N/A	N/A
5500	63.87	AV	V	32.10	5.48	0.00	101.45	95.45	N/A	N/A
5470	28.64	PK	V	32.04	5.50	0.00	66.18	60.18	74.00	13.82
5470	16.03	AV	V	32.04	5.50	0.00	53.57	47.57	54.00	6.43
11000	34.08	PK	V	37.40	8.32	26.42	53.38	47.38	74.00	26.62
11000	21.95	AV	V	37.40	8.32	26.42	41.25	35.25	54.00	18.75
16500	31.96	PK	V	37.40	13.42	23.97	58.81	52.81	74.00	21.19
16500	19.16	AV	V	37.40	13.42	23.97	46.01	40.01	54.00	13.99
3927	33.96	PK	V	29.74	4.62	27.27	41.05	35.05	74.00	38.95
3927	21.27	AV	V	29.74	4.62	27.27	28.36	22.36	54.00	31.64
1991	33.09	PK	V	24.58	3.11	27.48	33.30	27.30	74.00	46.70
1991	21.00	AV	V	24.58	3.11	27.48	21.21	15.21	54.00	38.79
345.25	38.9	QP	H	14.98	2.22	21.63	34.47	34.47	46.00	11.53
139.61	40.1	QP	H	13.27	1.44	21.42	33.39	33.39	43.50	10.11
Middle Channel:5580 MHz										
5580	69.20	PK	H	32.12	5.58	0.00	106.90	100.90	N/A	N/A
5580	59.70	AV	H	32.12	5.58	0.00	97.40	91.40	N/A	N/A
5580	74.18	PK	V	32.12	5.58	0.00	111.88	105.88	N/A	N/A
5580	63.79	AV	V	32.12	5.58	0.00	101.49	95.49	N/A	N/A
11160	34.17	PK	V	37.56	8.52	26.37	53.88	47.88	74.00	26.12
11160	22.05	AV	V	37.56	8.52	26.37	41.76	35.76	54.00	18.24
16740	32.12	PK	V	38.41	14.20	23.91	60.82	54.82	74.00	19.18
16740	19.34	AV	V	38.41	14.20	23.91	48.04	42.04	54.00	11.96
2233	34.09	PK	V	25.21	3.40	27.29	35.41	29.41	74.00	44.59
2233	21.29	AV	V	25.21	3.40	27.29	22.61	16.61	54.00	37.39
6194	33.28	PK	V	32.24	5.97	26.77	44.72	38.72	74.00	35.28
6194	21.02	AV	V	32.24	5.97	26.77	32.46	26.46	54.00	27.54
345.25	38.4	QP	H	14.98	2.22	21.63	33.97	33.97	46.00	12.03
139.61	40.3	QP	H	13.27	1.44	21.42	33.59	33.59	43.50	9.91
High Channel:5700 MHz										
5700	69.72	PK	H	32.14	5.68	0.00	107.54	101.54	N/A	N/A
5700	60.23	AV	H	32.14	5.68	0.00	98.05	92.05	N/A	N/A
5700	74.68	PK	V	32.14	5.68	0.00	112.50	106.50	N/A	N/A
5700	64.36	AV	V	32.14	5.68	0.00	102.18	96.18	N/A	N/A
5725	27.32	PK	V	32.15	5.60	0.00	65.07	59.07	74.00	14.93
5725	15.19	AV	V	32.15	5.60	0.00	52.94	46.94	54.00	7.06
11400	34.25	PK	V	37.80	8.82	26.21	54.66	48.66	74.00	25.34
11400	22.07	AV	V	37.80	8.82	26.21	42.48	36.48	54.00	17.52
17100	32.28	PK	V	40.10	14.47	25.36	61.49	55.49	74.00	18.51
17100	19.36	AV	V	40.10	14.47	25.36	48.57	42.57	54.00	11.43
2233	34.25	PK	V	25.21	3.40	27.29	35.57	29.57	74.00	44.43
2233	21.39	AV	V	25.21	3.40	27.29	22.71	16.71	54.00	37.29
1991	33.36	PK	V	24.58	3.11	27.48	33.57	27.57	74.00	46.43
1991	21.07	AV	V	24.58	3.11	27.48	21.28	15.28	54.00	38.72
345.25	38.5	QP	H	14.98	2.22	21.63	34.07	34.07	46.00	11.93
139.61	40.2	QP	H	13.27	1.44	21.42	33.49	33.49	43.50	10.01

802.11n ht20 Mode:

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB)						
Low Channel:5500 MHz										
5500	67.36	PK	H	32.10	5.48	0.00	104.94	98.94	N/A	N/A
5500	58.13	AV	H	32.10	5.48	0.00	95.71	89.71	N/A	N/A
5500	72.38	PK	V	32.10	5.48	0.00	109.96	103.96	N/A	N/A
5500	63.34	AV	V	32.10	5.48	0.00	100.92	94.92	N/A	N/A
5470	28.34	PK	V	32.04	5.50	0.00	65.88	59.88	74.00	14.12
5470	16.02	AV	V	32.04	5.50	0.00	53.56	47.56	54.00	6.44
11000	33.90	PK	V	37.40	8.32	26.42	53.20	47.20	74.00	26.80
11000	21.86	AV	V	37.40	8.32	26.42	41.16	35.16	54.00	18.84
16500	31.87	PK	V	37.40	13.42	23.97	58.72	52.72	74.00	21.28
16500	19.09	AV	V	37.40	13.42	23.97	45.94	39.94	54.00	14.06
3927	33.91	PK	V	29.74	4.62	27.27	41.00	35.00	74.00	39.00
3927	21.26	AV	V	29.74	4.62	27.27	28.35	22.35	54.00	31.65
1991	33.10	PK	V	24.58	3.11	27.48	33.31	27.31	74.00	46.69
1991	20.89	AV	V	24.58	3.11	27.48	21.10	15.10	54.00	38.90
345.25	38.6	QP	H	14.98	2.22	21.63	34.17	34.17	46.00	11.83
139.61	40.2	QP	H	13.27	1.44	21.42	33.49	33.49	43.50	10.01
Middle Channel:5580 MHz										
5580	67.89	PK	H	32.12	5.58	0.00	105.59	99.59	N/A	N/A
5580	58.66	AV	H	32.12	5.58	0.00	96.36	90.36	N/A	N/A
5580	72.84	PK	V	32.12	5.58	0.00	110.54	104.54	N/A	N/A
5580	63.79	AV	V	32.12	5.58	0.00	101.49	95.49	N/A	N/A
11160	34.18	PK	V	37.56	8.52	26.37	53.89	47.89	74.00	26.11
11160	21.91	AV	V	37.56	8.52	26.37	41.62	35.62	54.00	18.38
16740	31.95	PK	V	38.41	14.20	23.91	60.65	54.65	74.00	19.35
16740	19.33	AV	V	38.41	14.20	23.91	48.03	42.03	54.00	11.97
2233	33.98	PK	V	25.21	3.40	27.29	35.30	29.30	74.00	44.70
2233	21.20	AV	V	25.21	3.40	27.29	22.52	16.52	54.00	37.48
6194	33.22	PK	V	32.24	5.97	26.77	44.66	38.66	74.00	35.34
6194	20.86	AV	V	32.24	5.97	26.77	32.30	26.30	54.00	27.70
345.25	38.7	QP	H	14.98	2.22	21.63	34.27	34.27	46.00	11.73
139.61	40.3	QP	H	13.27	1.44	21.42	33.59	33.59	43.50	9.91
High Channel:5700 MHz										
5700	68.32	PK	H	32.14	5.68	0.00	106.14	100.14	N/A	N/A
5700	59.48	AV	H	32.14	5.68	0.00	97.30	91.30	N/A	N/A
5700	73.36	PK	V	32.14	5.68	0.00	111.18	105.18	N/A	N/A
5700	64.25	AV	V	32.14	5.68	0.00	102.07	96.07	N/A	N/A
5725	28.37	PK	V	32.15	5.60	0.00	66.12	60.12	74.00	13.88
5725	16.02	AV	V	32.15	5.60	0.00	53.77	47.77	54.00	6.23
11400	34.26	PK	V	37.80	8.82	26.21	54.67	48.67	74.00	25.33
11400	22.03	AV	V	37.80	8.82	26.21	42.44	36.44	54.00	17.56
17100	32.23	PK	V	40.10	14.47	25.36	61.44	55.44	74.00	18.56
17100	19.27	AV	V	40.10	14.47	25.36	48.48	42.48	54.00	11.52
2233	34.13	PK	V	25.21	3.40	27.29	35.45	29.45	74.00	44.55
2233	21.37	AV	V	25.21	3.40	27.29	22.69	16.69	54.00	37.31
1991	33.29	PK	V	24.58	3.11	27.48	33.50	27.50	74.00	46.50
1991	21.09	AV	V	24.58	3.11	27.48	21.30	15.30	54.00	38.70
345.25	38.2	QP	H	14.98	2.22	21.63	33.77	33.77	46.00	12.23
139.61	40.1	QP	H	13.27	1.44	21.42	33.39	33.39	43.50	10.11

802.11n ht40 Mode:

Frequency	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
(MHz)	Reading (dBμV)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB)						
Low Channel:5510 MHz										
5510	65.14	PK	H	32.10	5.45	0.00	102.69	96.69	N/A	N/A
5510	56.36	AV	H	32.10	5.45	0.00	93.91	87.91	N/A	N/A
5510	70.35	PK	V	32.10	5.45	0.00	107.90	101.90	N/A	N/A
5510	61.25	AV	V	32.10	5.45	0.00	98.80	92.80	N/A	N/A
5470	29.66	PK	V	32.04	5.50	0.00	67.20	61.20	74.00	12.80
5470	17.83	AV	V	32.04	5.50	0.00	55.37	49.37	54.00	4.63
11020	33.79	PK	V	37.42	8.35	26.41	53.15	47.15	74.00	26.85
11020	21.78	AV	V	37.42	8.35	26.41	41.14	35.14	54.00	18.86
16530	31.87	PK	V	37.53	13.52	23.89	59.03	53.03	74.00	20.97
16530	19.08	AV	V	37.53	13.52	23.89	46.24	40.24	54.00	13.76
2233	33.77	PK	V	25.21	3.40	27.29	35.09	29.09	74.00	44.91
2233	21.13	AV	V	25.21	3.40	27.29	22.45	16.45	54.00	37.55
6194	33.10	PK	V	32.24	5.97	26.77	44.54	38.54	74.00	35.46
6194	20.83	AV	V	32.24	5.97	26.77	32.27	26.27	54.00	27.73
345.25	38.8	QP	H	14.98	2.22	21.63	34.37	34.37	46.00	11.63
139.61	40.4	QP	H	13.27	1.44	21.42	33.69	33.69	43.50	9.81
Middle Channel:5550 MHz										
5550	65.99	PK	H	32.11	5.35	0.00	103.45	97.45	N/A	N/A
5550	57.18	AV	H	32.11	5.35	0.00	94.64	88.64	N/A	N/A
5550	71.23	PK	V	32.11	5.35	0.00	108.69	102.69	N/A	N/A
5550	62.12	AV	V	32.11	5.35	0.00	99.58	93.58	N/A	N/A
11100	34.08	PK	V	37.50	8.45	26.39	53.64	47.64	74.00	26.36
11100	21.79	AV	V	37.50	8.45	26.39	41.35	35.35	54.00	18.65
16650	31.91	PK	V	38.03	13.91	23.78	60.07	54.07	74.00	19.93
16650	19.34	AV	V	38.03	13.91	23.78	47.50	41.50	54.00	12.50
4917	33.99	PK	V	30.88	5.33	27.43	42.77	36.77	74.00	37.23
4917	21.07	AV	V	30.88	5.33	27.43	29.85	23.85	54.00	30.15
1991	33.20	PK	V	24.58	3.11	27.48	33.41	27.41	74.00	46.59
1991	20.79	AV	V	24.58	3.11	27.48	21.00	15.00	54.00	39.00
345.25	38.2	QP	H	14.98	2.22	21.63	33.77	33.77	46.00	12.23
139.61	40.3	QP	H	13.27	1.44	21.42	33.59	33.59	43.50	9.91
High Channel:5670 MHz										
5670	66.76	PK	H	32.13	5.44	0.00	104.33	98.33	N/A	N/A
5670	57.89	AV	H	32.13	5.44	0.00	95.46	89.46	N/A	N/A
5670	72.41	PK	V	32.13	5.44	0.00	109.98	103.98	N/A	N/A
5670	63.34	AV	V	32.13	5.44	0.00	100.91	94.91	N/A	N/A
5725	27.25	PK	V	32.15	5.60	0.00	65.00	59.00	74.00	15.00
5725	15.21	AV	V	32.15	5.60	0.00	52.96	46.96	54.00	7.04
11340	34.18	PK	V	37.74	8.75	26.26	54.41	48.41	74.00	25.59
11340	21.90	AV	V	37.74	8.75	26.26	42.13	36.13	54.00	17.87
17010	32.12	PK	V	39.56	14.99	25.11	61.56	55.56	74.00	18.44
17010	19.24	AV	V	39.56	14.99	25.11	48.68	42.68	54.00	11.32
1991	34.01	PK	V	24.58	3.11	27.48	34.22	28.22	74.00	45.78
1991	21.25	AV	V	24.58	3.11	27.48	21.46	15.46	54.00	38.54
6194	33.14	PK	V	32.24	5.97	26.77	44.58	38.58	74.00	35.42
6194	21.01	AV	V	32.24	5.97	26.77	32.45	26.45	54.00	27.55
345.25	38.6	QP	H	14.98	2.22	21.63	34.17	34.17	46.00	11.83
139.61	40.2	QP	H	13.27	1.44	21.42	33.49	33.49	43.50	10.01

802.11n ac80 Mode:

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
Reading (dBμV)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB)							
Low Channel:5530 MHz										
5530	62.33	PK	H	32.11	5.40	0.00	99.84	93.84	N/A	N/A
5530	52.47	AV	H	32.11	5.40	0.00	89.98	83.98	N/A	N/A
5530	67.36	PK	V	32.11	5.40	0.00	104.87	98.87	N/A	N/A
5530	57.12	AV	V	32.11	5.40	0.00	94.63	88.63	N/A	N/A
5470	33.38	PK	V	32.04	5.50	0.00	70.92	64.92	74.00	9.08
5470	19.17	AV	V	32.04	5.50	0.00	56.71	50.71	54.00	3.29 *
5725	27.69	PK	V	32.15	5.60	0.00	65.44	59.44	74.00	14.56
5725	15.36	AV	V	32.15	5.60	0.00	53.11	47.11	54.00	6.89
11060	33.91	PK	V	37.46	8.40	26.40	53.37	47.37	74.00	26.63
11060	21.63	AV	V	37.46	8.40	26.40	41.09	35.09	54.00	18.91
16590	31.73	PK	V	37.78	13.71	23.74	59.48	53.48	74.00	20.52
16590	18.89	AV	V	37.78	13.71	23.74	46.64	40.64	54.00	13.36
2233	33.58	PK	V	25.21	3.40	27.29	34.90	28.90	74.00	45.10
2233	21.01	AV	V	25.21	3.40	27.29	22.33	16.33	54.00	37.67
345.25	38.90	QP	H	14.98	2.22	21.63	34.47	34.47	46.00	11.53
139.61	40.20	QP	H	13.27	1.44	21.42	33.49	33.49	43.50	10.01

*Within measurement uncertainty!

802.11AC Cross Band:

Frequency	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
(MHz)	Reading (dBμV)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB)						
802.11AC vht 20 Channel:5720 MHz										
5720	70.38	PK	H	32.14	5.61	0.00	108.13	102.13	N/A	N/A
5720	61.36	AV	H	32.14	5.61	0.00	99.11	93.11	N/A	N/A
5720	76.04	PK	V	32.14	5.61	0.00	113.79	107.79	N/A	N/A
5720	67.25	AV	V	32.14	5.61	0.00	105.00	99.00	N/A	N/A
11440	34.35	PK	V	37.84	8.87	26.18	54.88	48.88	74.00	25.12
11440	21.39	AV	V	37.84	8.87	26.18	41.92	35.92	54.00	18.08
17160	32.73	PK	V	40.46	14.12	25.52	61.79	55.79	74.00	18.21
17160	19.31	AV	V	40.46	14.12	25.52	48.37	42.37	54.00	11.63
4867	34.75	PK	V	30.75	5.09	27.42	43.17	37.17	74.00	36.83
4867	22.12	AV	V	30.75	5.09	27.42	30.54	24.54	54.00	29.46
1107	34.29	PK	V	22.58	2.95	26.66	33.16	27.16	74.00	46.84
1107	21.87	AV	V	22.58	2.95	26.66	20.74	14.74	54.00	39.26
345.25	38.2	QP	H	14.98	2.22	21.63	33.77	33.77	46.00	12.23
139.61	40.2	QP	H	13.27	1.44	21.42	33.49	33.49	43.50	10.01
802.11AC vht 40 Channel:5710 MHz										
5710	68.06	PK	H	32.14	5.65	0.00	105.85	99.85	N/A	N/A
5710	58.62	AV	H	32.14	5.65	0.00	96.41	90.41	N/A	N/A
5710	73.93	PK	V	32.14	5.65	0.00	111.72	105.72	N/A	N/A
5710	64.29	AV	V	32.14	5.65	0.00	102.08	96.08	N/A	N/A
11420	34.51	PK	V	37.82	8.85	26.19	54.99	48.99	74.00	25.01
11420	21.62	AV	V	37.82	8.85	26.19	42.10	36.10	54.00	17.90
17130	32.66	PK	V	40.28	14.30	25.44	61.80	55.80	74.00	18.20
17130	19.45	AV	V	40.28	14.30	25.44	48.59	42.59	54.00	11.41
4867	34.91	PK	V	30.75	5.09	27.42	43.33	37.33	74.00	36.67
4867	22.15	AV	V	30.75	5.09	27.42	30.57	24.57	54.00	29.43
1107	34.18	PK	V	22.58	2.95	26.66	33.05	27.05	74.00	46.95
1107	22.05	AV	V	22.58	2.95	26.66	20.92	14.92	54.00	39.08
345.25	38.52	QP	H	14.98	2.22	21.63	34.09	34.09	46.00	11.91
139.61	40.5	QP	H	13.27	1.44	21.42	33.79	33.79	43.50	9.71
802.11AC vht 80 Channel:5690 MHz										
5690	64.54	PK	H	32.14	5.60	0.00	102.28	96.28	N/A	N/A
5690	54.08	AV	H	32.14	5.60	0.00	91.82	85.82	N/A	N/A
5690	70.24	PK	V	32.14	5.60	0.00	107.98	101.98	N/A	N/A
5690	60.35	AV	V	32.14	5.60	0.00	98.09	92.09	N/A	N/A
11380	34.37	PK	V	37.78	8.80	26.23	54.72	48.72	74.00	25.28
11380	21.61	AV	V	37.78	8.80	26.23	41.96	35.96	54.00	18.04
17070	32.74	PK	V	39.92	14.64	25.27	62.03	56.03	74.00	17.97
17070	19.34	AV	V	39.92	14.64	25.27	48.63	42.63	54.00	11.37
4867	34.70	PK	V	30.75	5.09	27.42	43.12	37.12	74.00	36.88
4867	22.03	AV	V	30.75	5.09	27.42	30.45	24.45	54.00	29.55
1107	34.62	PK	V	22.58	2.95	26.66	33.49	27.49	74.00	46.51
1107	21.92	AV	V	22.58	2.95	26.66	20.79	14.79	54.00	39.21
345.25	38.14	QP	H	14.98	2.22	21.63	33.71	33.71	46.00	12.29
139.61	40.3	QP	H	13.27	1.44	21.42	33.59	33.59	43.50	9.91

5725-5850MHz:

802.11a Mode:

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
Reading (dBμV)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB)							
Low Channel:5745 MHz										
5745	70.25	PK	H	32.15	5.53	0.00	107.93	101.93	N/A	N/A
5745	61.30	AV	H	32.15	5.53	0.00	98.98	92.98	N/A	N/A
5745	76.03	PK	V	32.15	5.53	0.00	113.71	107.71	N/A	N/A
5745	67.22	AV	V	32.15	5.53	0.00	104.90	98.90	N/A	N/A
5725	34.32	PK	V	32.15	5.60	0.00	72.07	66.07	78.20	12.13
5715	28.36	PK	V	32.14	5.63	0.00	66.13	60.13	68.20	8.07
11490	34.25	PK	V	37.89	8.94	26.14	54.94	48.94	74.00	25.06
11490	21.36	AV	V	37.89	8.94	26.14	42.05	36.05	54.00	17.95
17235	32.58	PK	V	40.91	13.69	25.63	61.55	55.55	74.00	18.45
17235	19.27	AV	V	40.91	13.69	25.63	48.24	42.24	54.00	11.76
4867	34.62	PK	V	30.75	5.09	27.42	43.04	37.04	74.00	36.96
4867	22.03	AV	V	30.75	5.09	27.42	30.45	24.45	54.00	29.55
1107	34.15	PK	V	22.58	2.95	26.66	33.02	27.02	74.00	46.98
1107	21.86	AV	V	22.58	2.95	26.66	20.73	14.73	54.00	39.27
345.25	38.1	QP	H	14.98	2.22	21.63	33.67	33.67	46.00	12.33
139.61	40.2	QP	H	13.27	1.44	21.42	33.49	33.49	43.50	10.01
Middle Channel:5785 MHz										
5785	70.75	PK	H	32.16	5.47	0.00	108.38	102.38	N/A	N/A
5785	61.91	AV	H	32.16	5.47	0.00	99.54	93.54	N/A	N/A
5785	76.44	PK	V	32.16	5.47	0.00	114.07	108.07	N/A	N/A
5785	67.36	AV	V	32.16	5.47	0.00	104.99	98.99	N/A	N/A
11570	34.41	PK	V	37.90	8.92	26.07	55.16	49.16	74.00	24.84
11570	21.57	AV	V	37.90	8.92	26.07	42.32	36.32	54.00	17.68
17355	32.64	PK	V	41.63	12.99	25.63	61.63	55.63	74.00	18.37
17355	19.33	AV	V	41.63	12.99	25.63	48.32	42.32	54.00	11.68
4867	34.78	PK	V	30.75	5.09	27.42	43.20	37.20	74.00	36.80
4867	22.05	AV	V	30.75	5.09	27.42	30.47	24.47	54.00	29.53
6187	34.19	PK	V	32.24	5.97	26.78	45.62	39.62	74.00	34.38
6187	21.97	AV	V	32.24	5.97	26.78	33.40	27.40	54.00	26.60
345.25	38.4	QP	H	14.98	2.22	21.63	33.97	33.97	46.00	12.03
139.61	40.4	QP	H	13.27	1.44	21.42	33.69	33.69	43.50	9.81
High Channel:5825 MHz										
5825	71.21	PK	H	32.17	5.75	0.00	109.13	103.13	N/A	N/A
5825	62.36	AV	H	32.17	5.75	0.00	100.28	94.28	N/A	N/A
5825	76.95	PK	V	32.17	5.75	0.00	114.87	108.87	N/A	N/A
5825	67.84	AV	V	32.17	5.75	0.00	105.76	99.76	N/A	N/A
5850	27.65	PK	V	32.17	6.05	0.00	65.87	59.87	78.20	18.33
5860	26.14	PK	V	32.17	6.02	0.00	64.33	58.33	68.20	9.87
11650	34.49	PK	V	37.90	8.90	25.75	55.54	49.54	74.00	24.46
11650	21.63	AV	V	37.90	8.90	25.75	42.68	36.68	54.00	17.32
17475	32.79	PK	V	42.35	12.30	25.39	62.05	56.05	74.00	17.95
17475	19.45	AV	V	42.35	12.30	25.39	48.71	42.71	54.00	11.29
4867	34.86	PK	V	30.75	5.09	27.42	43.28	37.28	74.00	36.72
4867	22.10	AV	V	30.75	5.09	27.42	30.52	24.52	54.00	29.48
1421	34.23	PK	V	23.39	3.00	27.09	33.53	27.53	74.00	46.47
1421	22.17	AV	V	23.39	3.00	27.09	21.47	15.47	54.00	38.53
345.25	38.2	QP	H	14.98	2.22	21.63	33.77	33.77	46.00	12.23
139.61	40.3	QP	H	13.27	1.44	21.42	33.59	33.59	43.50	9.91

802.11n ht20 Mode:

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB)						
Low Channel:5745 MHz										
5745	69.77	PK	H	32.15	5.53	0.00	107.45	101.45	N/A	N/A
5745	60.48	AV	H	32.15	5.53	0.00	98.16	92.16	N/A	N/A
5745	75.36	PK	V	32.15	5.53	0.00	113.04	107.04	N/A	N/A
5745	66.19	AV	V	32.15	5.53	0.00	103.87	97.87	N/A	N/A
5725	35.02	PK	V	32.15	5.60	0.00	72.77	66.77	78.20	11.43
5715	30.49	PK	V	32.14	5.63	0.00	68.26	62.26	68.20	5.94
11490	34.08	PK	V	37.89	8.94	26.14	54.77	48.77	74.00	25.23
11490	21.24	AV	V	37.89	8.94	26.14	41.93	35.93	54.00	18.07
17235	32.55	PK	V	40.91	13.69	25.63	61.52	55.52	74.00	18.48
17235	19.13	AV	V	40.91	13.69	25.63	48.10	42.10	54.00	11.90
4867	34.51	PK	V	30.75	5.09	27.42	42.93	36.93	74.00	37.07
4867	21.97	AV	V	30.75	5.09	27.42	30.39	24.39	54.00	29.61
1107	34.08	PK	V	22.58	2.95	26.66	32.95	26.95	74.00	47.05
1107	21.67	AV	V	22.58	2.95	26.66	20.54	14.54	54.00	39.46
345.25	38.1	QP	H	14.98	2.22	21.63	33.67	33.67	46.00	12.33
139.61	40.3	QP	H	13.27	1.44	21.42	33.59	33.59	43.50	9.91
Middle Channel:5785 MHz										
5785	70.37	PK	H	32.16	5.47	0.00	108.00	102.00	N/A	N/A
5785	60.98	AV	H	32.16	5.47	0.00	98.61	92.61	N/A	N/A
5785	75.93	PK	V	32.16	5.47	0.00	113.56	107.56	N/A	N/A
5785	66.78	AV	V	32.16	5.47	0.00	104.41	98.41	N/A	N/A
11570	34.35	PK	V	37.90	8.92	26.07	55.10	49.10	74.00	24.90
11570	21.39	AV	V	37.90	8.92	26.07	42.14	36.14	54.00	17.86
17355	32.53	PK	V	41.63	12.99	25.63	61.52	55.52	74.00	18.48
17355	19.15	AV	V	41.63	12.99	25.63	48.14	42.14	54.00	11.86
4867	34.74	PK	V	30.75	5.09	27.42	43.16	37.16	74.00	36.84
4867	21.85	AV	V	30.75	5.09	27.42	30.27	24.27	54.00	29.73
1421	34.17	PK	V	23.39	3.00	27.09	33.47	27.47	74.00	46.53
1421	21.76	AV	V	23.39	3.00	27.09	21.06	15.06	54.00	38.94
345.25	37.8	QP	H	14.98	2.22	21.63	33.37	33.37	46.00	12.63
139.61	40.1	QP	H	13.27	1.44	21.42	33.39	33.39	43.50	10.11
High Channel:5825 MHz										
5825	70.88	PK	H	32.17	5.75	0.00	108.80	102.80	N/A	N/A
5825	61.52	AV	H	32.17	5.75	0.00	99.44	93.44	N/A	N/A
5825	76.68	PK	V	32.17	5.75	0.00	114.60	108.60	N/A	N/A
5825	67.51	AV	V	32.17	5.75	0.00	105.43	99.43	N/A	N/A
5850	28.36	PK	V	32.17	6.05	0.00	66.58	60.58	78.20	17.62
5860	26.57	PK	V	32.17	6.02	0.00	64.76	58.76	68.20	9.44
11650	34.36	PK	V	37.90	8.90	25.75	55.41	49.41	74.00	24.59
11650	21.54	AV	V	37.90	8.90	25.75	42.59	36.59	54.00	17.41
17475	32.59	PK	V	42.35	12.30	25.39	61.85	55.85	74.00	18.15
17475	19.24	AV	V	42.35	12.30	25.39	48.50	42.50	54.00	11.50
4867	34.80	PK	V	30.75	5.09	27.42	43.22	37.22	74.00	36.78
4867	21.95	AV	V	30.75	5.09	27.42	30.37	24.37	54.00	29.63
6187	34.12	PK	V	32.24	5.97	26.78	45.55	39.55	74.00	34.45
6187	22.15	AV	V	32.24	5.97	26.78	33.58	27.58	54.00	26.42
345.25	38.1	QP	H	14.98	2.22	21.63	33.67	33.67	46.00	12.33
139.61	40.2	QP	H	13.27	1.44	21.42	33.49	33.49	43.50	10.01

802.11n ht40 Mode:

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
Reading (dBμV)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB)							
Low Channel:5755 MHz										
5755	67.36	PK	H	32.15	5.50	0.00	105.01	99.01	N/A	N/A
5755	57.12	AV	H	32.15	5.50	0.00	94.77	88.77	N/A	N/A
5755	73.21	PK	V	32.15	5.50	0.00	110.86	104.86	N/A	N/A
5755	63.47	AV	V	32.15	5.50	0.00	101.12	95.12	N/A	N/A
5725	36.69	PK	V	32.15	5.60	0.00	74.44	68.44	78.20	9.76
5715	35.03	PK	V	32.14	5.63	0.00	72.80	66.80	68.20	1.40*
11510	33.99	PK	V	37.90	8.95	26.12	54.72	48.72	74.00	25.28
11510	21.16	AV	V	37.90	8.95	26.12	41.89	35.89	54.00	18.11
17265	32.43	PK	V	41.09	13.51	25.63	61.40	55.40	74.00	18.60
17265	19.02	AV	V	41.09	13.51	25.63	47.99	41.99	54.00	12.01
4867	34.32	PK	V	30.75	5.09	27.42	42.74	36.74	74.00	37.26
4867	21.92	AV	V	30.75	5.09	27.42	30.34	24.34	54.00	29.66
1107	33.89	PK	V	22.58	2.95	26.66	32.76	26.76	74.00	47.24
1107	21.61	AV	V	22.58	2.95	26.66	20.48	14.48	54.00	39.52
345.25	38.2	QP	H	14.98	2.22	21.63	33.77	33.77	46.00	12.23
139.61	40.1	QP	H	13.27	1.44	21.42	33.39	33.39	43.50	10.11
High Channel:5795 MHz										
5795	68.03	PK	H	32.16	5.46	0.00	105.65	99.65	N/A	N/A
5795	58.58	AV	H	32.16	5.46	0.00	96.20	90.20	N/A	N/A
5795	73.88	PK	V	32.16	5.46	0.00	111.50	105.50	N/A	N/A
5795	64.21	AV	V	32.16	5.46	0.00	101.83	95.83	N/A	N/A
5850	29.64	PK	V	32.17	6.05	0.00	67.86	61.86	78.20	16.34
5860	27.21	PK	V	32.17	6.02	0.00	65.40	59.40	68.20	8.80
11590	34.12	PK	V	37.90	8.92	26.06	54.88	48.88	74.00	25.12
11590	21.42	AV	V	37.90	8.92	26.06	42.18	36.18	54.00	17.82
17385	32.54	PK	V	41.81	12.82	25.63	61.54	55.54	74.00	18.46
17385	19.22	AV	V	41.81	12.82	25.63	48.22	42.22	54.00	11.78
4867	34.51	PK	V	30.75	5.09	27.42	42.93	36.93	74.00	37.07
4867	22.14	AV	V	30.75	5.09	27.42	30.56	24.56	54.00	29.44
1421	34.05	PK	V	23.39	3.00	27.09	33.35	27.35	74.00	46.65
1421	21.92	AV	V	23.39	3.00	27.09	21.22	15.22	54.00	38.78
345.25	37.9	QP	H	14.98	2.22	21.63	33.47	33.47	46.00	12.53
139.61	40.3	QP	H	13.27	1.44	21.42	33.59	33.59	43.50	9.91

*Within measurement uncertainty!

802.11n ac80 Mode:

Frequency	Receiver		Rx Antenna		Cable loss	Amplifier Gain	Corrected Amplitude	Extrapolation result	Limit	Margin
(MHz)	Reading (dBμV)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB)	(dB)	(dB)	(dBμV/m)	(dBμV/m)	(dBμV/m)	(dB)
Low Channel:5775 MHz										
5775	64.58	PK	H	32.16	5.48	0.00	102.22	96.22	N/A	N/A
5775	54.13	AV	H	32.16	5.48	0.00	91.77	85.77	N/A	N/A
5775	70.25	PK	V	32.16	5.48	0.00	107.89	101.89	N/A	N/A
5775	60.37	AV	V	32.16	5.48	0.00	98.01	92.01	N/A	N/A
5725	40.24	PK	V	32.15	5.60	0.00	77.99	71.99	78.20	6.21
5715	32.24	PK	V	32.14	5.63	0.00	70.01	64.01	68.20	4.19 *
5850	36.31	PK	V	32.17	6.05	0.00	74.53	68.53	78.20	9.67
5860	31.28	PK	V	32.17	6.02	0.00	69.47	63.47	68.20	4.73
11550	34.02	PK	V	37.90	8.93	26.09	54.76	48.76	74.00	25.24
11550	21.27	AV	V	37.90	8.93	26.09	42.01	36.01	54.00	17.99
17325	32.48	PK	V	41.45	13.17	25.63	61.47	55.47	74.00	18.53
17325	19.02	AV	V	41.45	13.17	25.63	48.01	42.01	54.00	11.99
1421	34.33	PK	V	23.39	3.00	27.09	33.63	27.63	74.00	46.37
1421	21.90	AV	V	23.39	3.00	27.09	21.20	15.20	54.00	38.80
345.25	38.3	QP	H	14.98	2.22	21.63	33.87	33.87	46.00	12.13
139.61	40.6	QP	H	13.27	1.44	21.42	33.89	33.89	43.50	9.61

*Within measurement uncertainty!

FCC§15.407(b) –CONDUCTED SPURIOUS EMISSION AT ANTENNA PORT

Applicable Standard

FCC §15.407;

(b) Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(4) For transmitters operating in the 5.725-5.85 GHz band: All emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of -17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of -27 dBm/MHz.

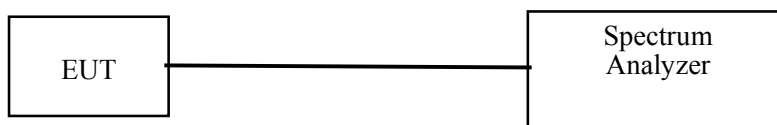
(5) The emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz. A lower resolution bandwidth may be employed near the band edge, when necessary, provided the measured energy is integrated to show the total power over 1 MHz.

(6) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209. Further, any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in §15.207.

(7) The provisions of §15.205 apply to intentional radiators operating under this section.

Test Procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. The Resolution bandwidth is set to 1MHz, The Video bandwidth is set to ≥ 1 MHz, report the peak value out of the operating band. Offset the cable loss in the display.
3. Repeat above procedures until all frequencies measured were complete.



Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSP 38	100478	2015-05-09	2016-05-09

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

Test Data**Environmental Conditions**

Temperature:	24.1 °C-25.4 °C
Relative Humidity:	53 %-60 %
ATM Pressure:	99.7 kPa-100.2 kPa

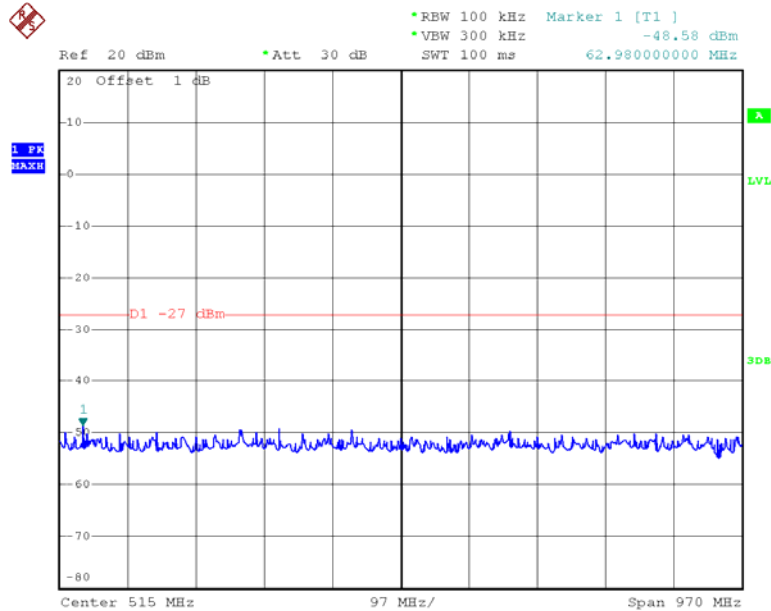
The testing was performed by Dean Liu from 2015-06-18 to 2015-7-15.

Result: Compliance.

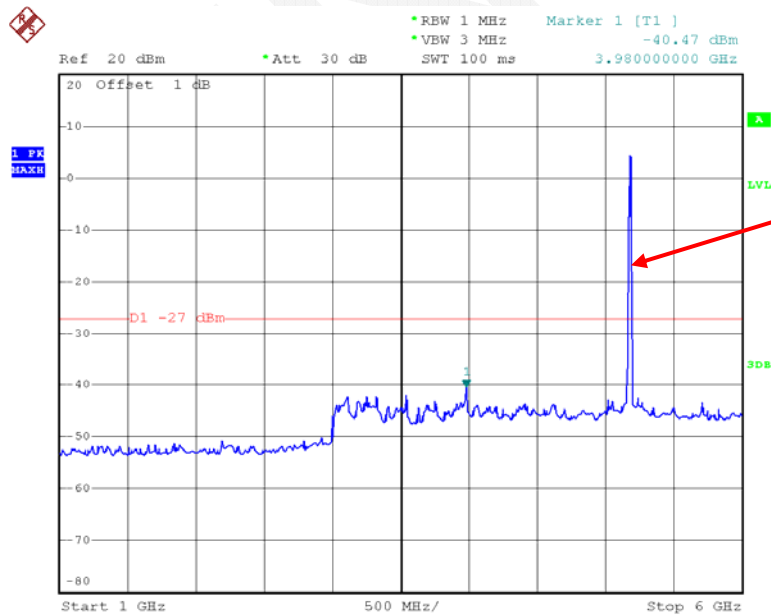
Note: the test performed at SISO mode since the output power is more than the MIMO mode, and all emissions per chain is below -34dBm (the device have two chains, and the maximum gain at 5G band is 3.14dBi), so combined two chains will below -27dBm. That is compliance with the requirement. Please refer to the below plots.

5150-5250MHz:

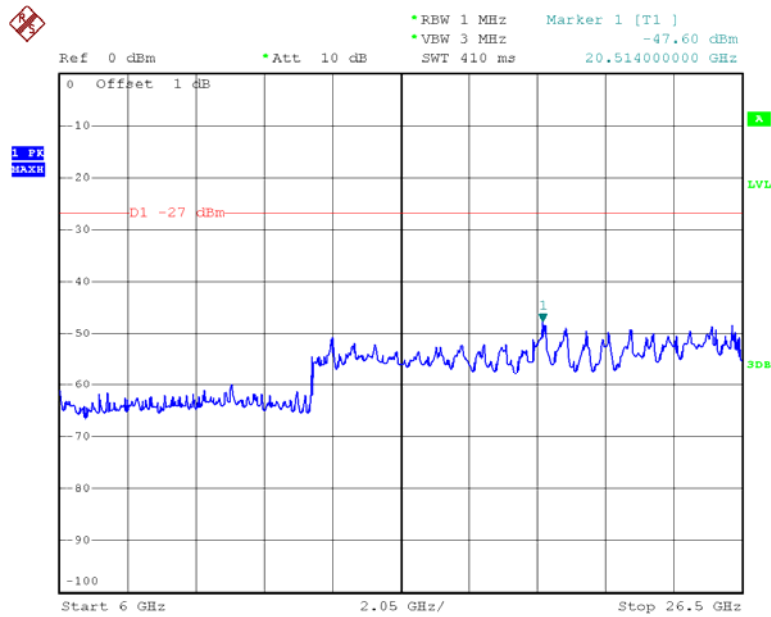
Chain 0:802.11a Low Channel



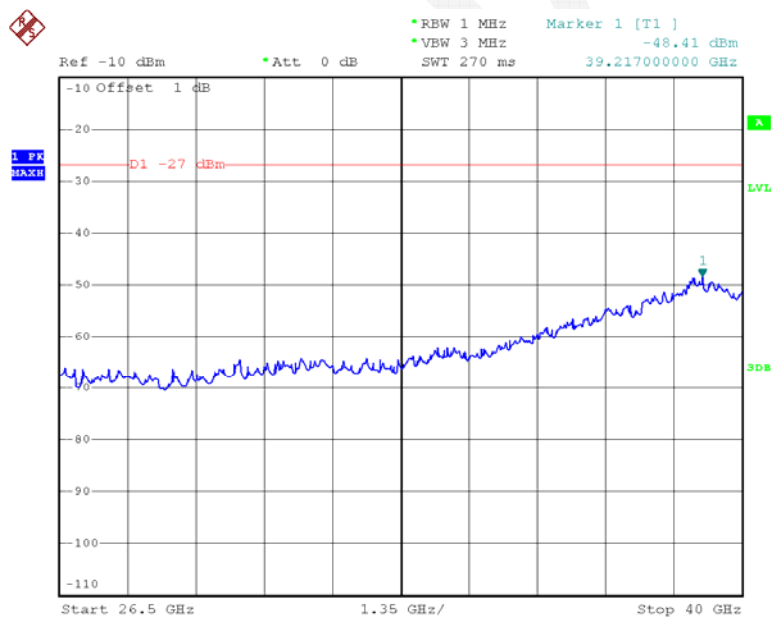
Date: 23.JUN.2015 12:41:22



Date: 22.JUN.2015 20:09:08

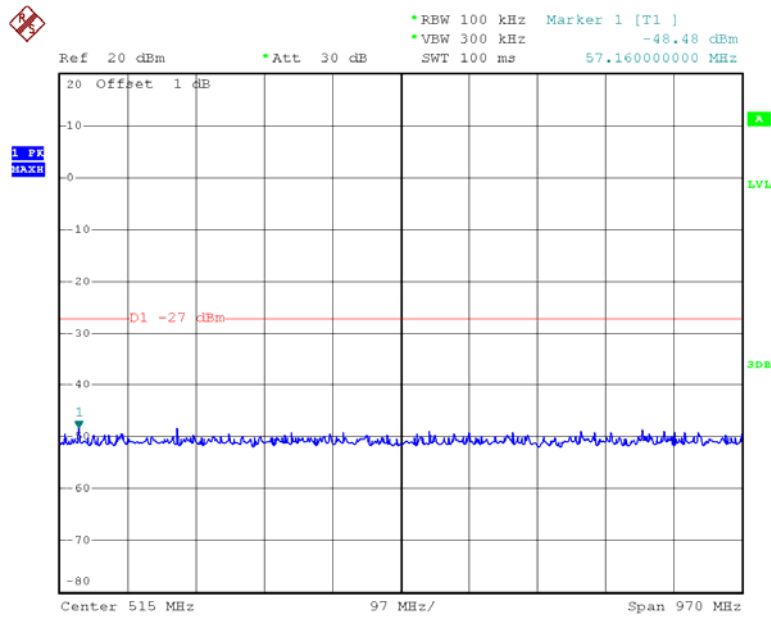


Date: 22.JUN.2015 21:01:37

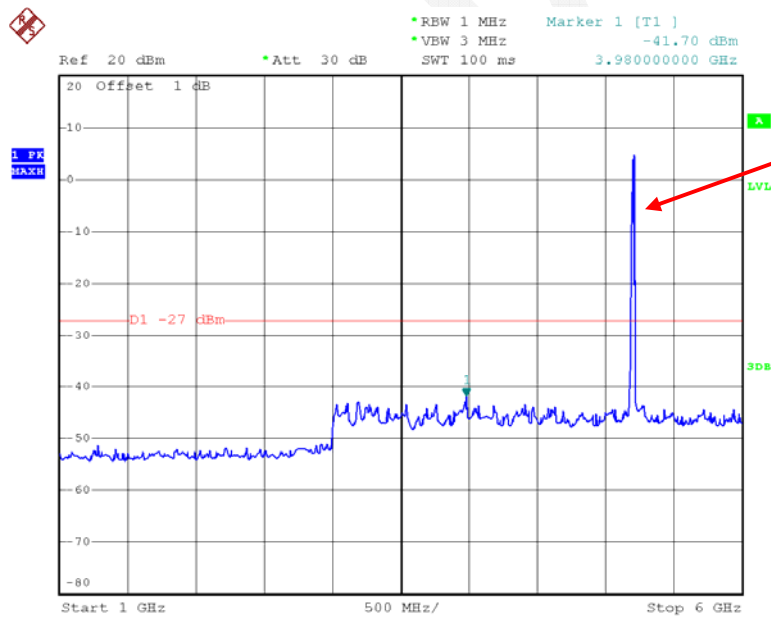


Date: 23.JUN.2015 13:01:46

Chain 0:802.11a Middle Channel

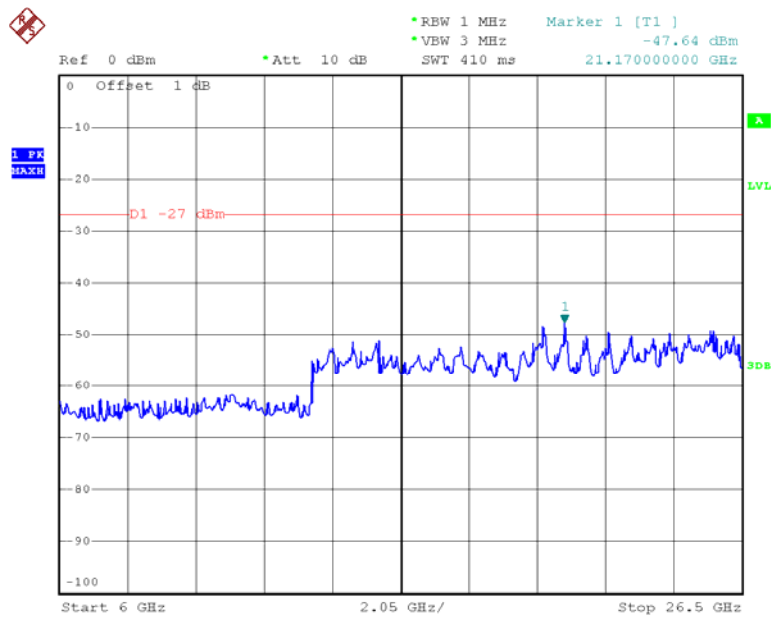


Date: 23.JUN.2015 12:41:55

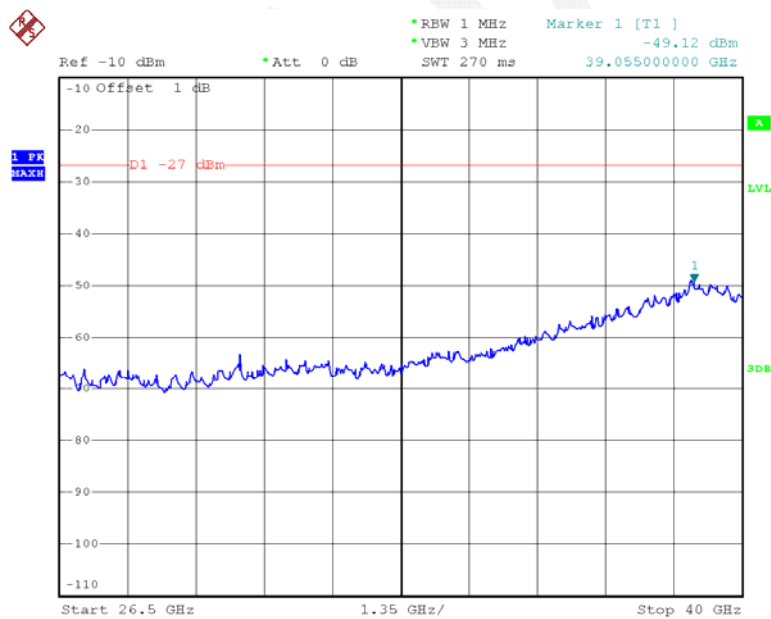


Fundamental

Date: 22.JUN.2015 20:09:24

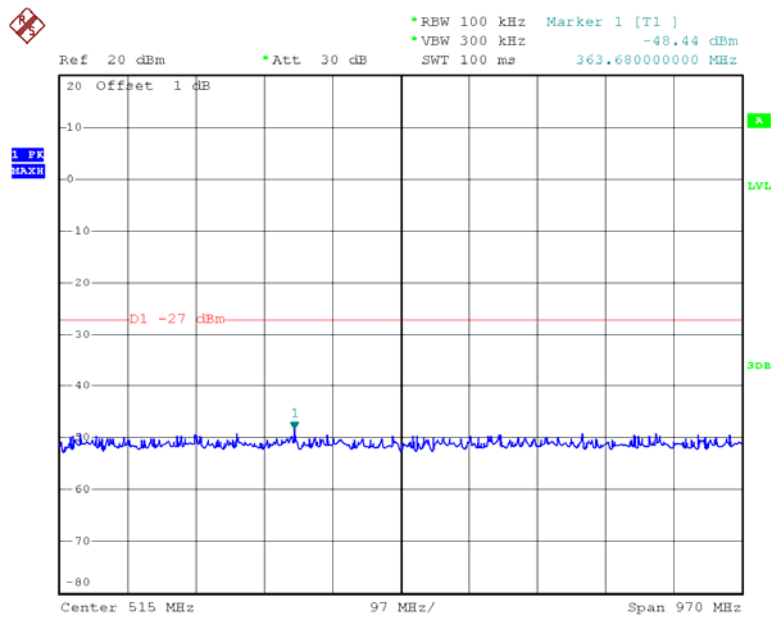


Date: 22.JUN.2015 21:02:45

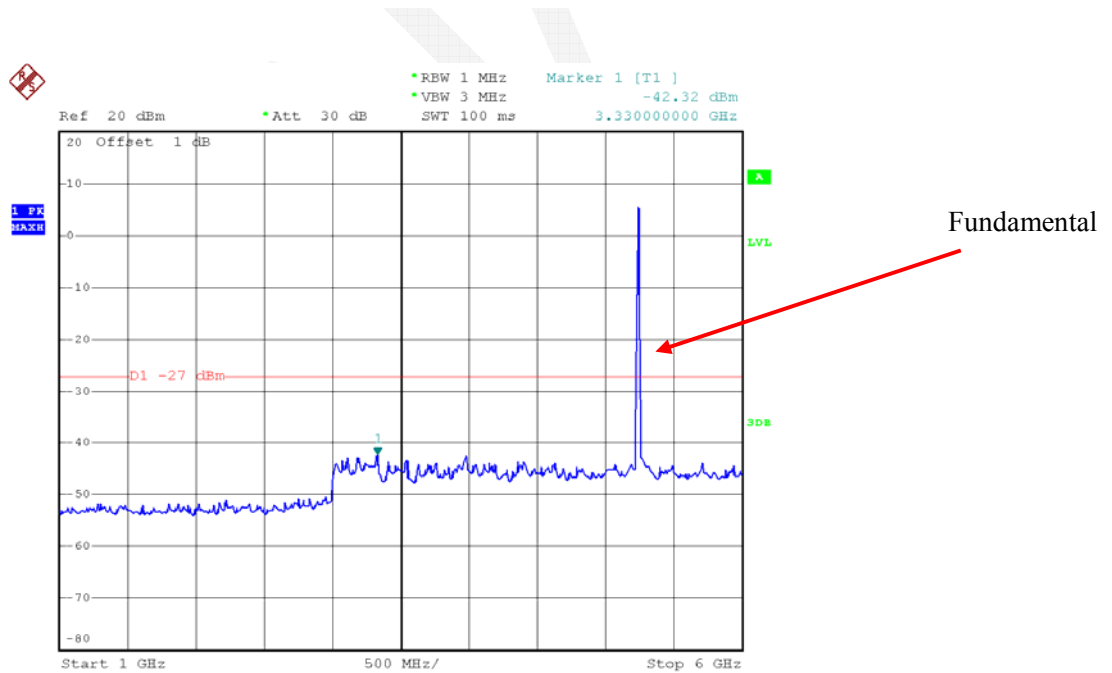


Date: 23.JUN.2015 13:02:00

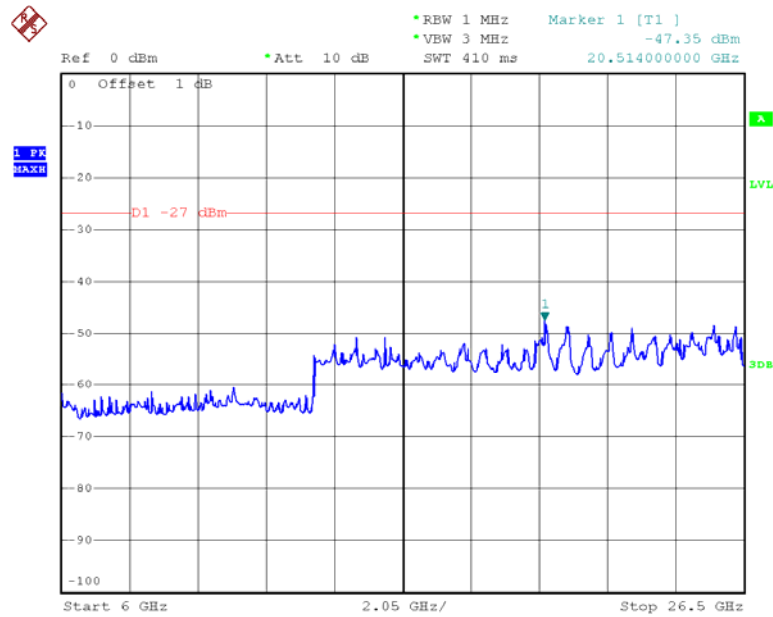
Chain 0:802.11a High Channel



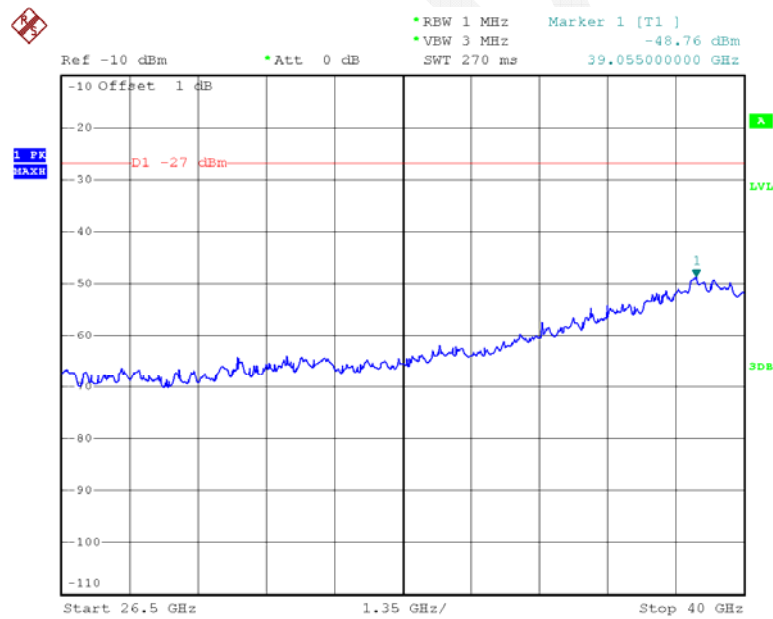
Date: 23.JUN.2015 12:42:41



Date: 22.JUN.2015 20:10:59

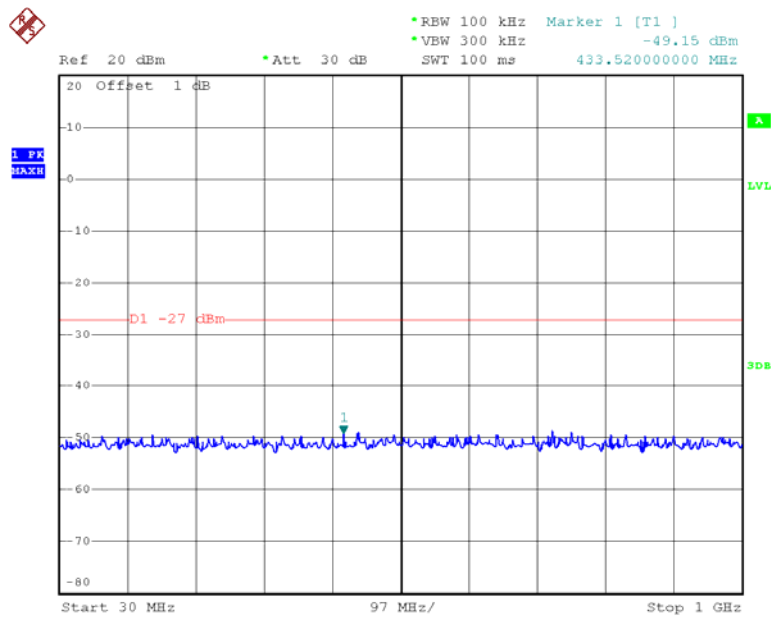


Date: 22.JUN.2015 21:03:16

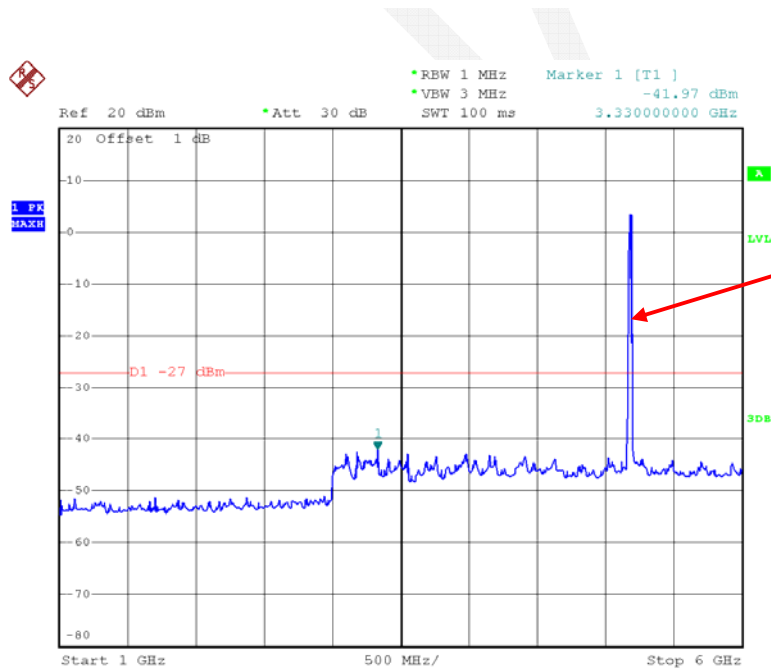


Date: 23.JUN.2015 13:02:18

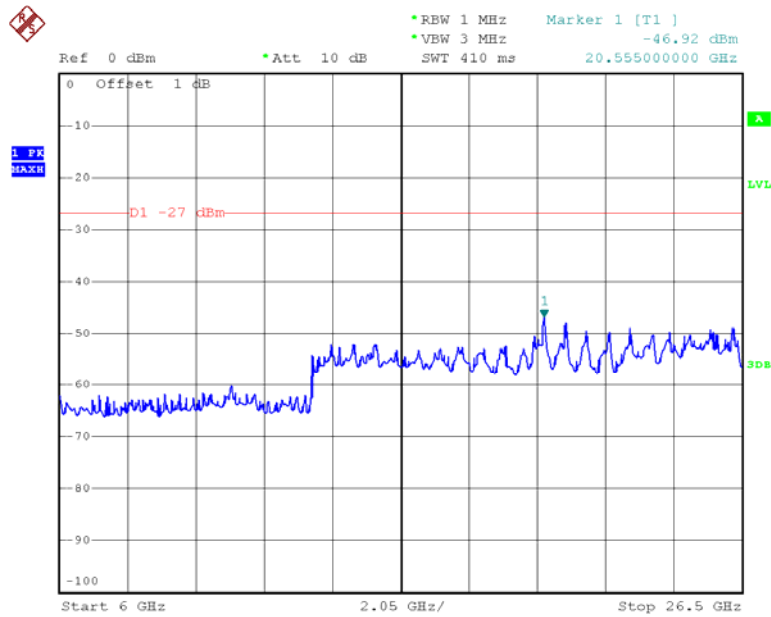
Chain 0:802.11n ht20 Low Channel



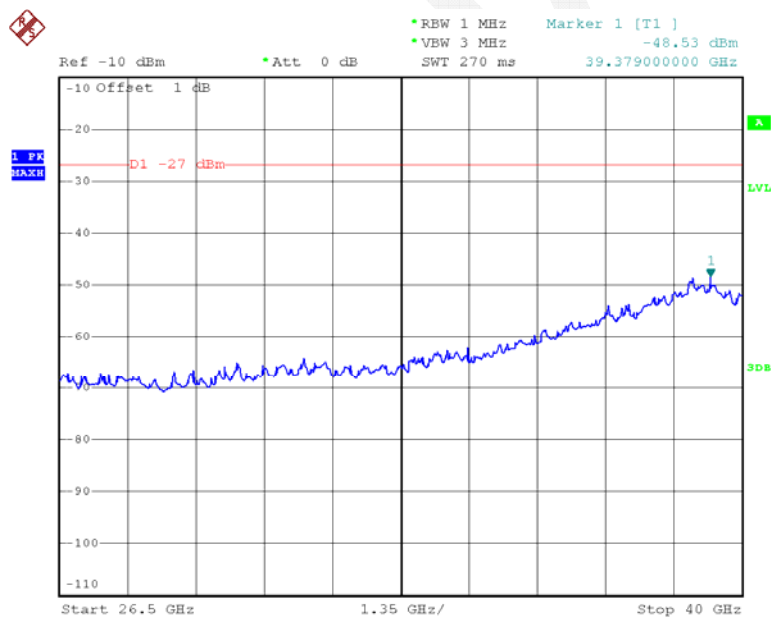
Date: 23.JUN.2015 12:46:23



Date: 22.JUN.2015 20:16:23

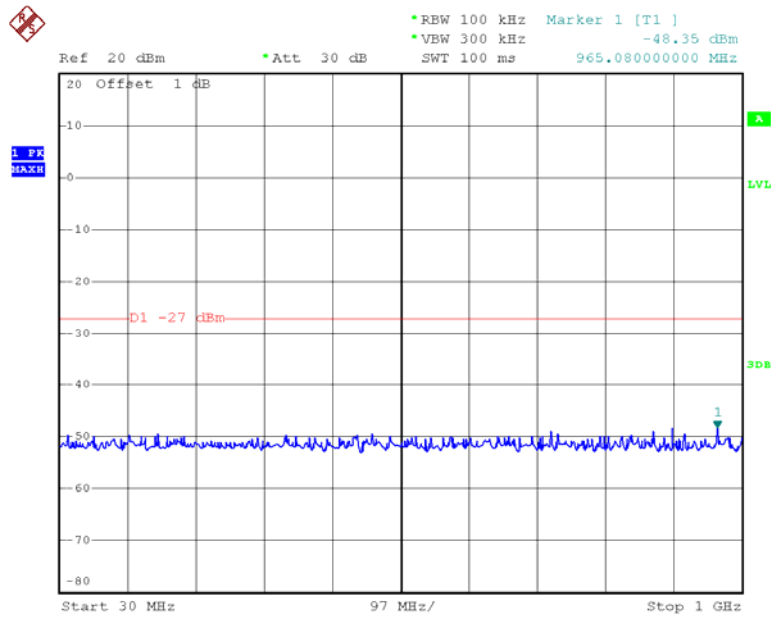


Date: 22.JUN.2015 21:11:39

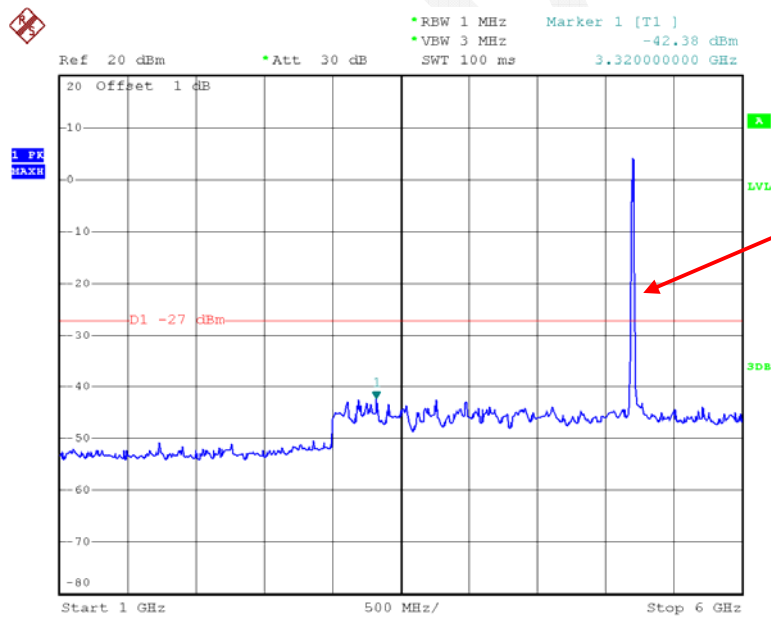


Date: 23.JUN.2015 13:05:43

Chain 0:802.11n ht20 Middle Channel

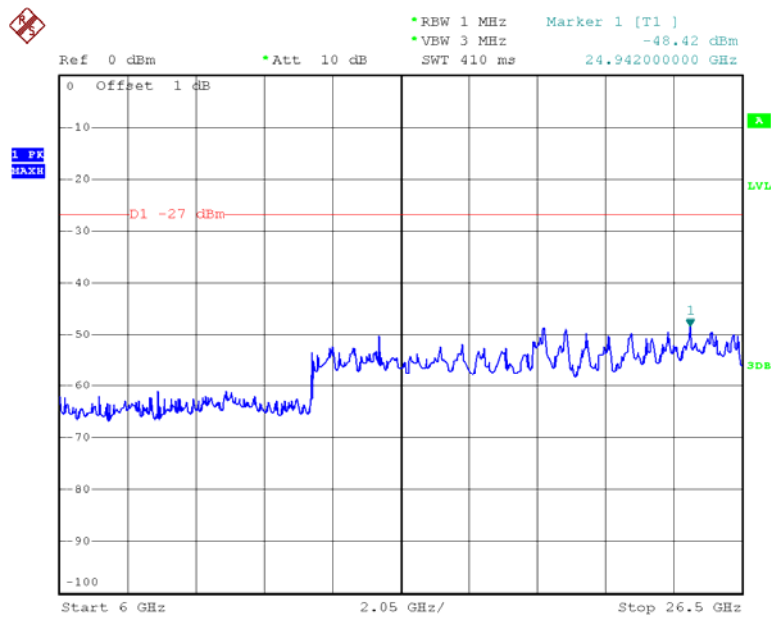


Date: 23.JUN.2015 12:46:29

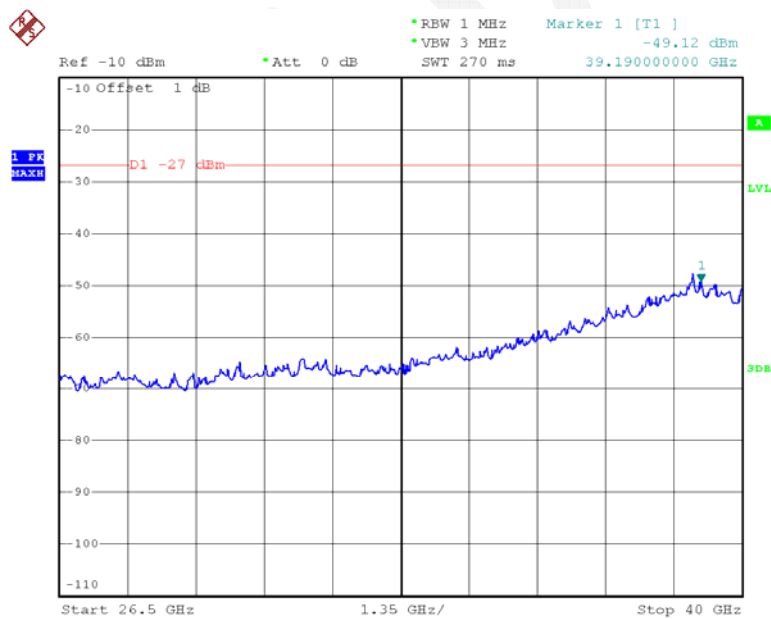


Fundamental

Date: 22.JUN.2015 20:16:59

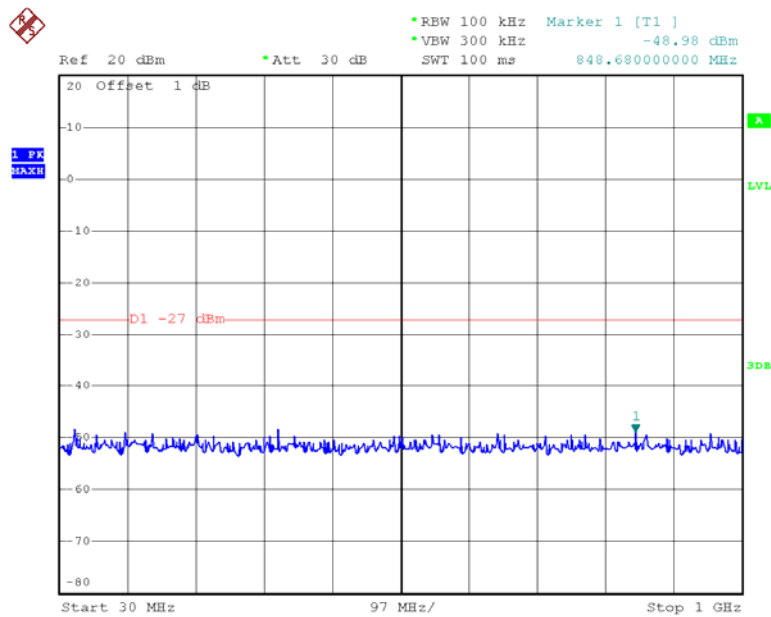


Date: 22.JUN.2015 21:12:20

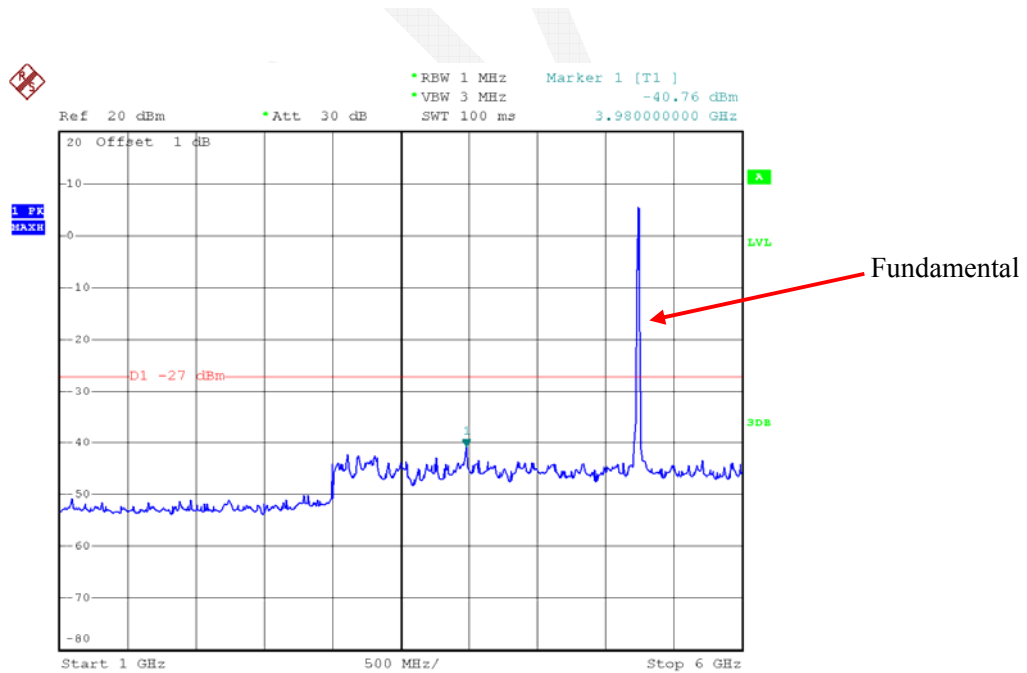


Date: 23.JUN.2015 13:06:16

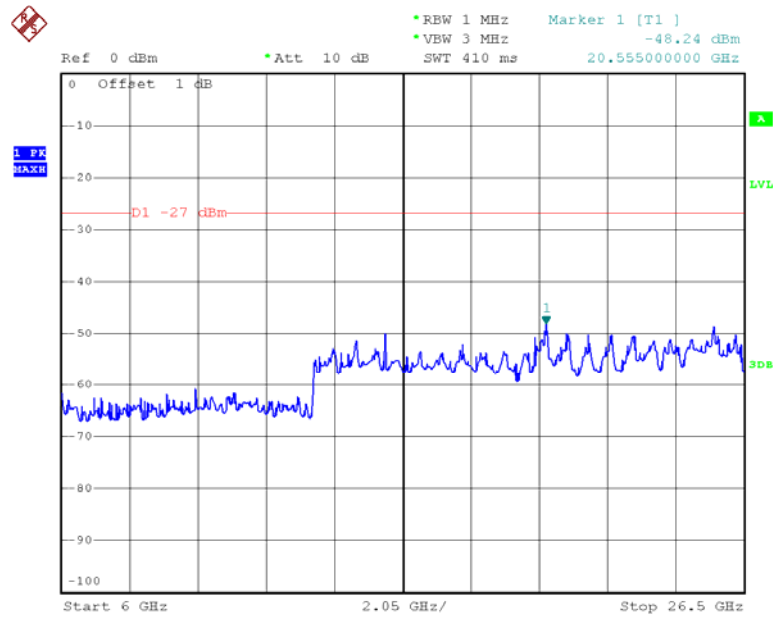
Chain 0:802.11n ht20 High Channel



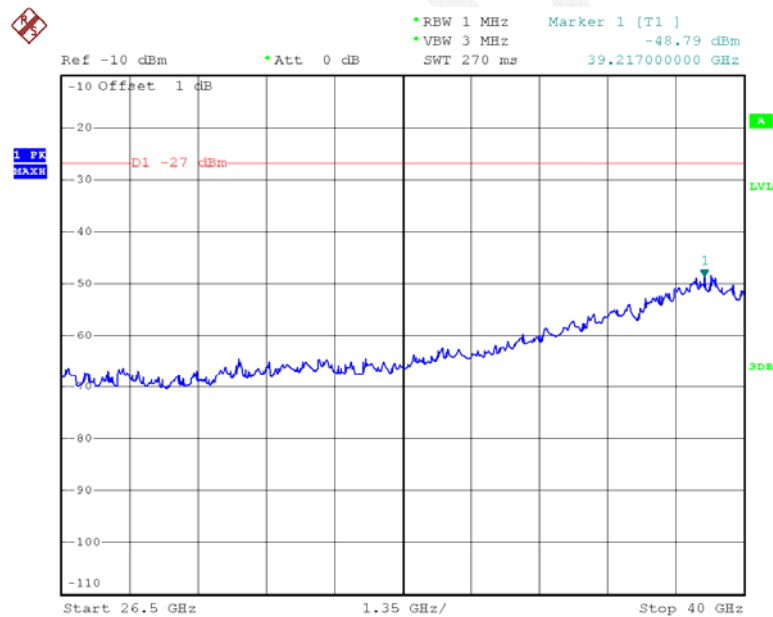
Date: 23.JUN.2015 12:46:34



Date: 22.JUN.2015 20:17:23

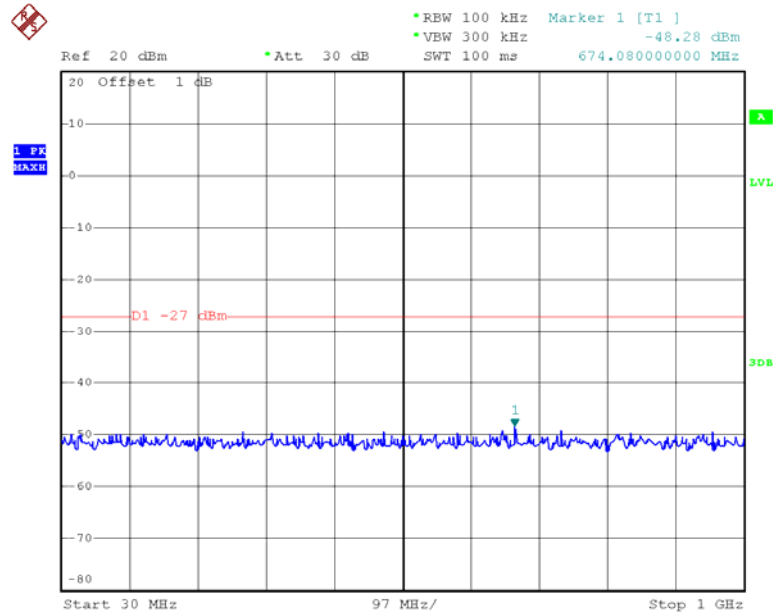


Date: 22.JUN.2015 21:12:39

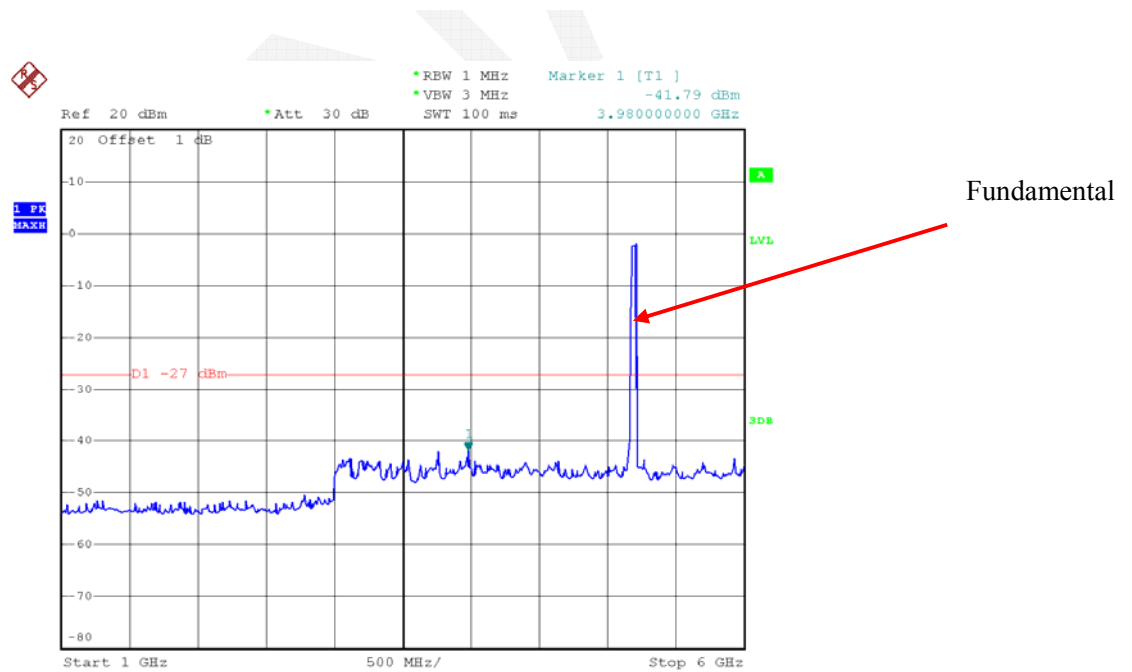


Date: 23.JUN.2015 13:06:45

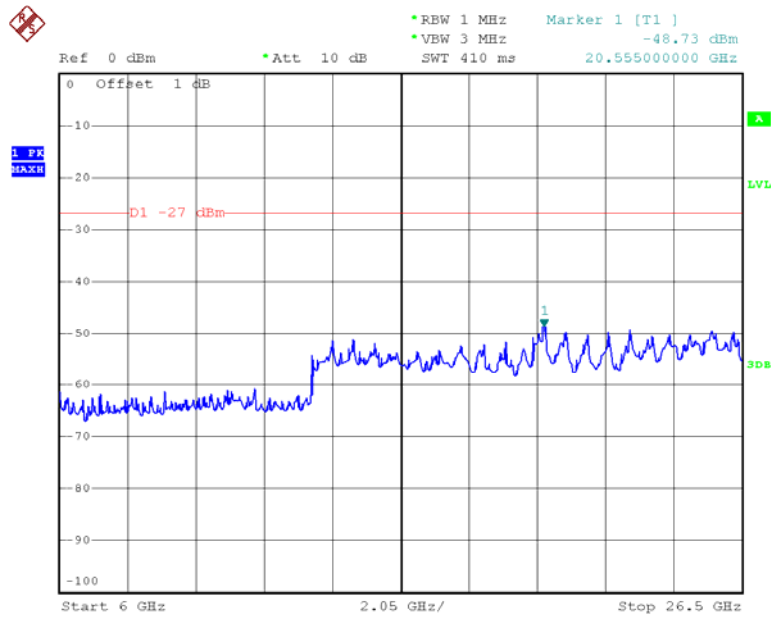
Chain 0:802.11n ht40 Low Channel



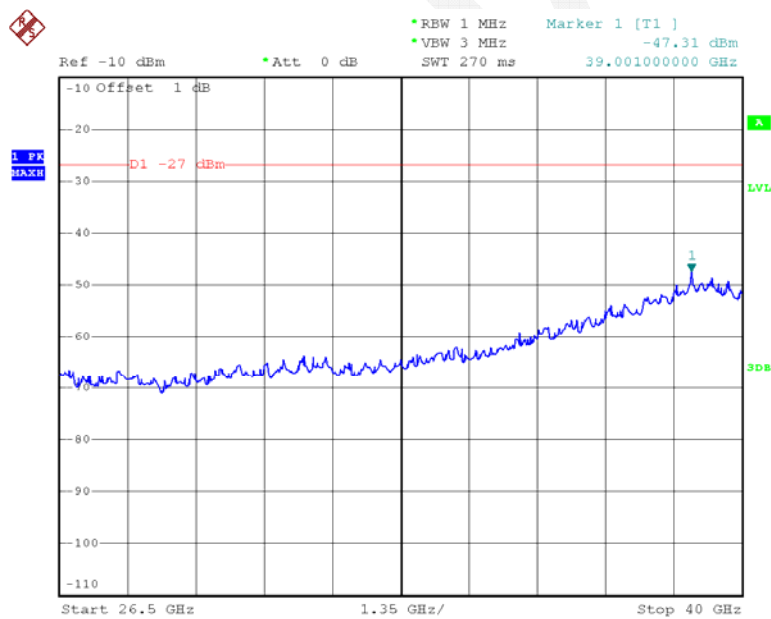
Date: 23.JUN.2015 12:48:46



Date: 22.JUN.2015 20:31:41

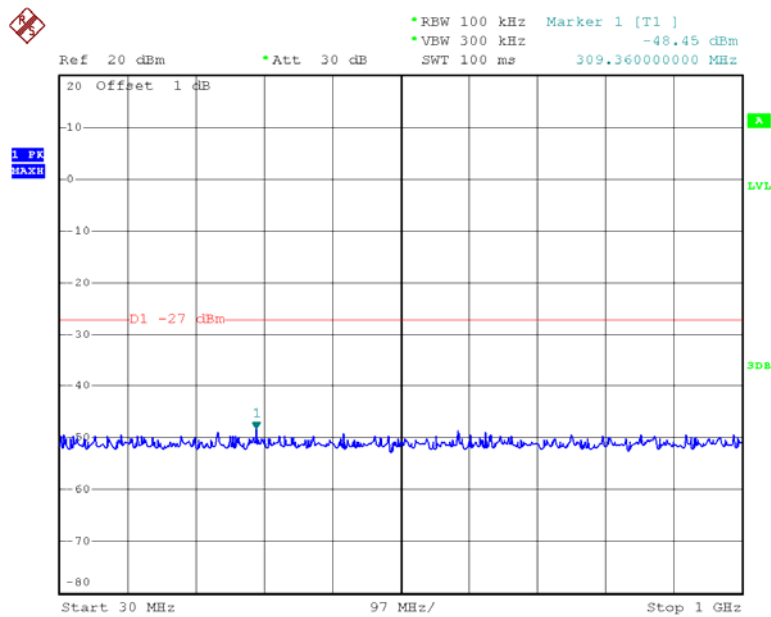


Date: 22.JUN.2015 21:21:16

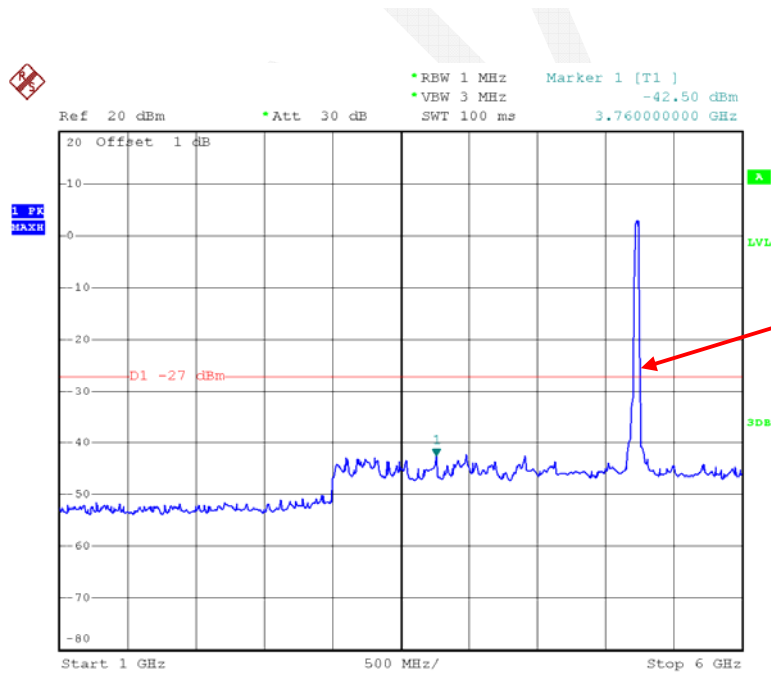


Date: 23.JUN.2015 13:11:26

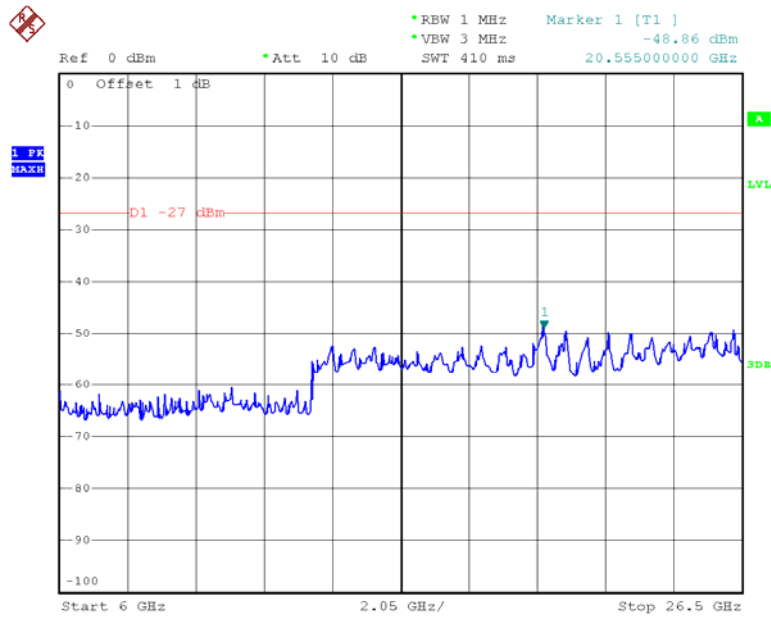
Chain 0:802.11n ht40 High Channel



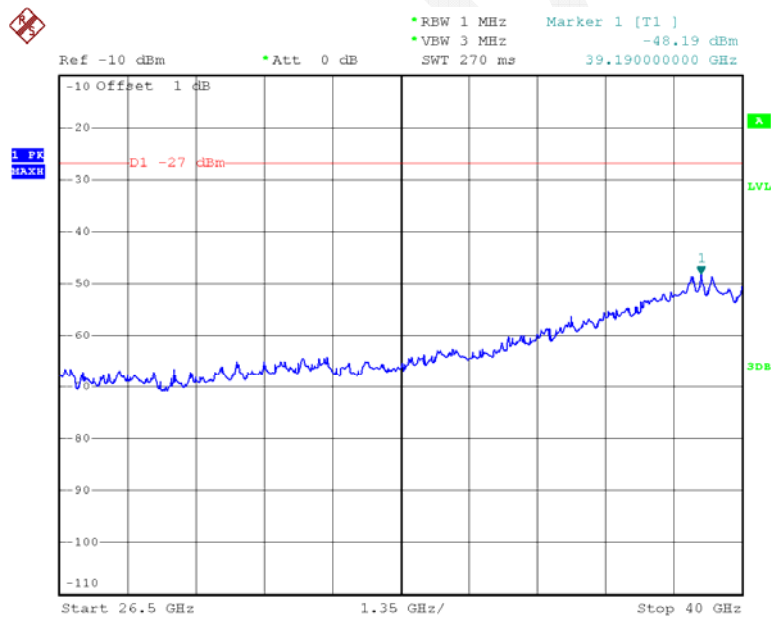
Date: 23.JUN.2015 12:48:56



Date: 22.JUN.2015 20:32:27

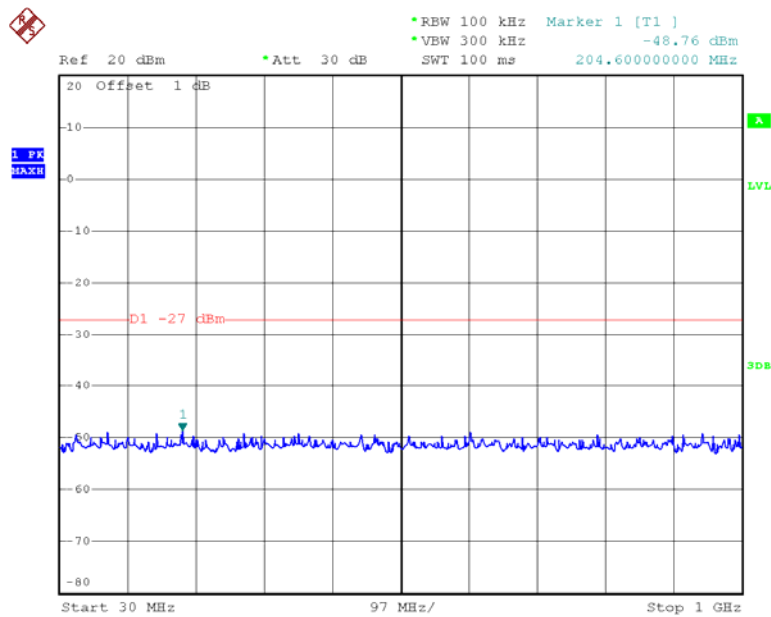


Date: 22.JUN.2015 21:22:57

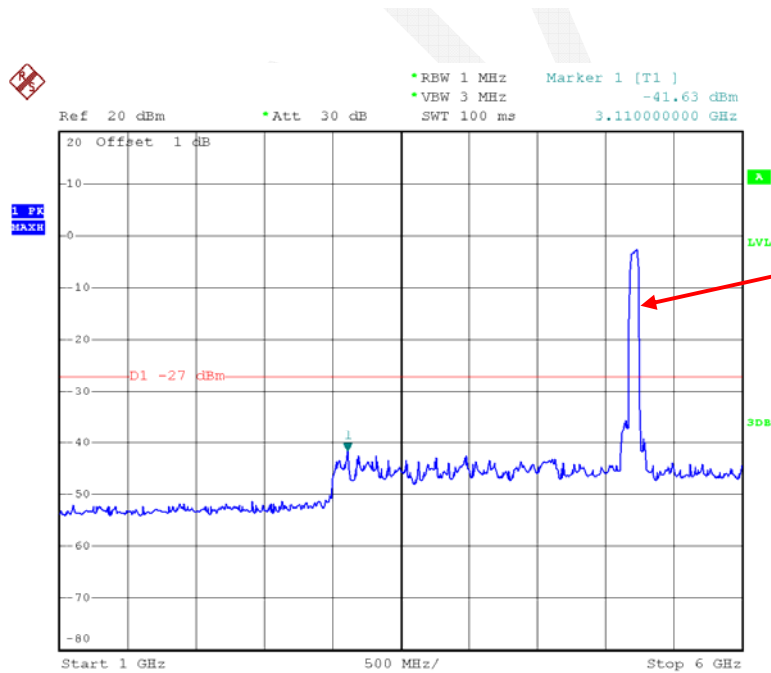


Date: 23.JUN.2015 13:12:10

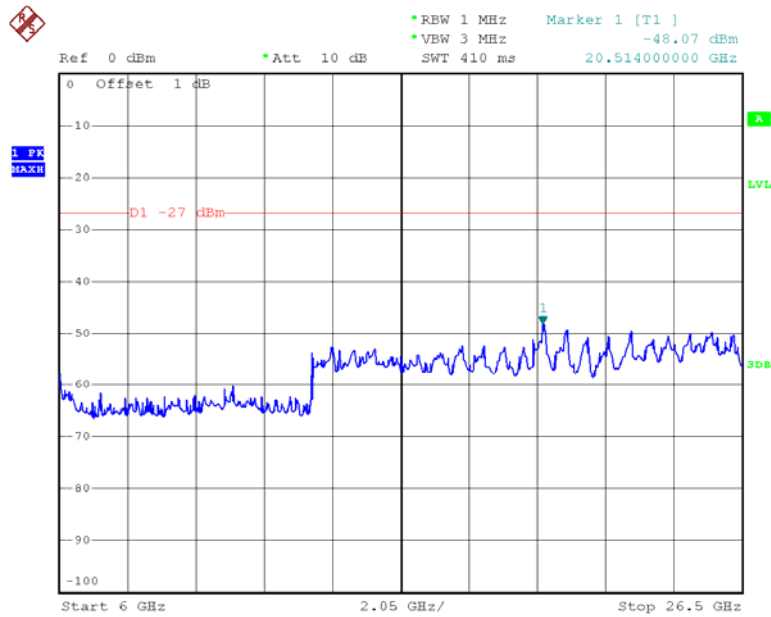
Chain 0:802.11n ac80 Middle Channel



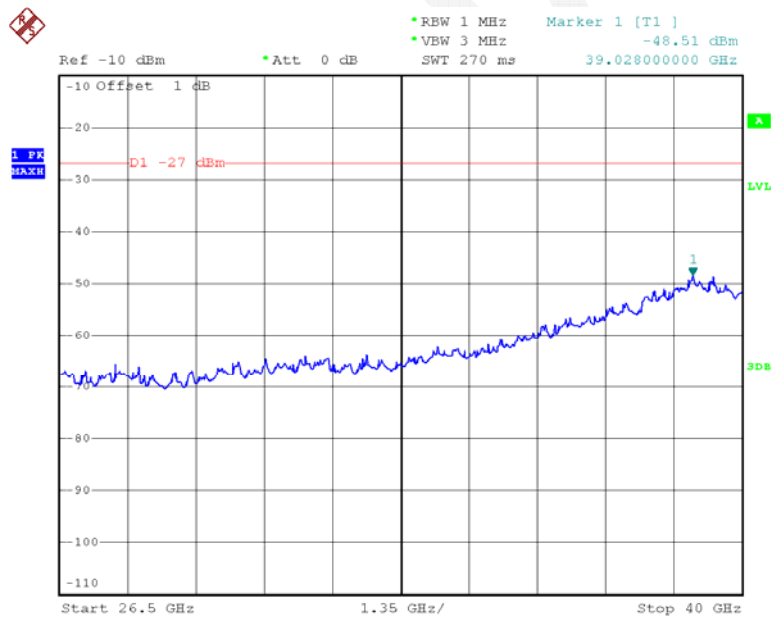
Date: 23.JUN.2015 12:50:07



Date: 22.JUN.2015 20:40:30

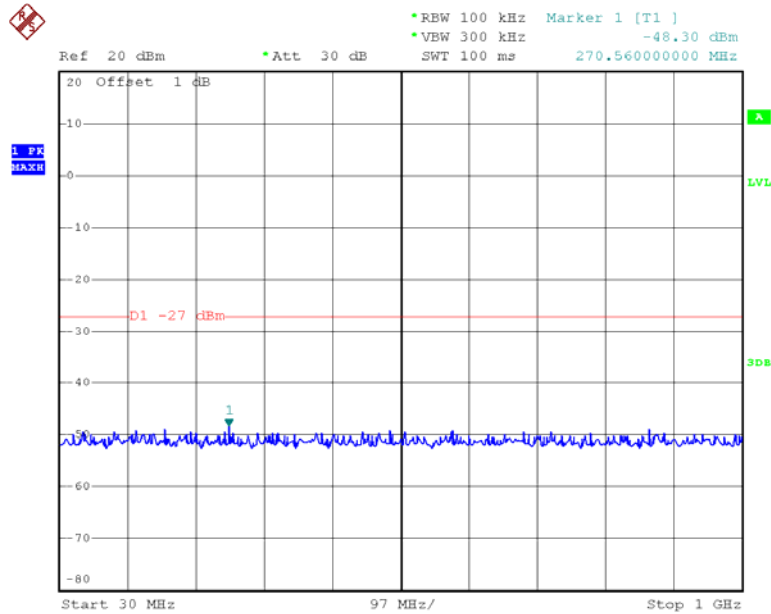


Date: 22.JUN.2015 21:29:12

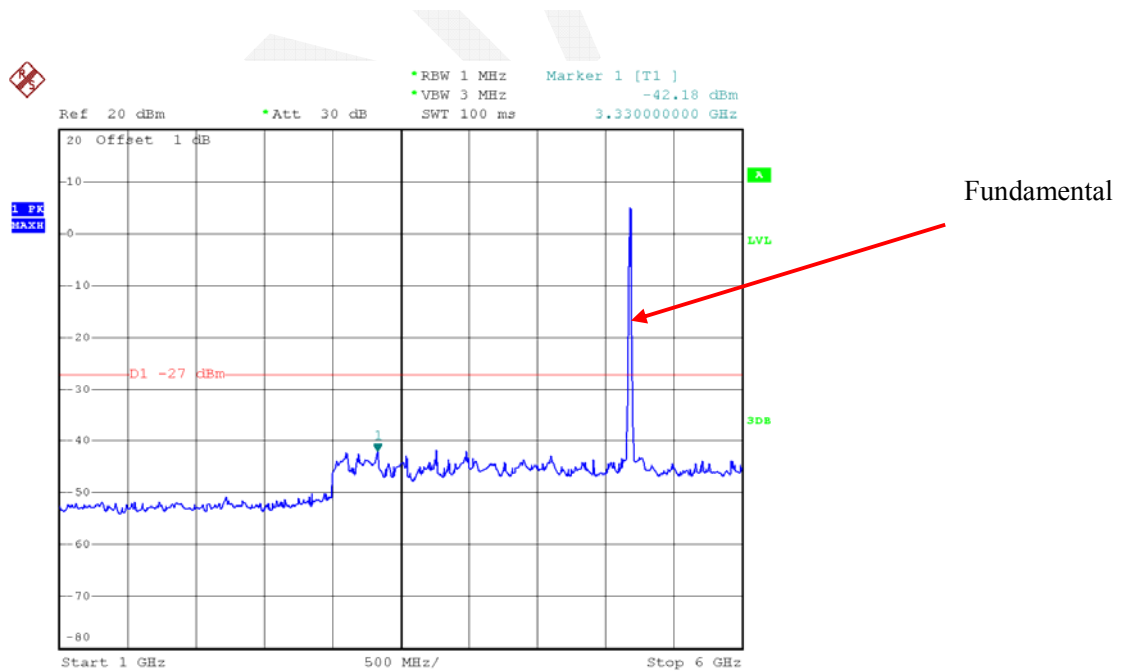


Date: 23.JUN.2015 13:16:29

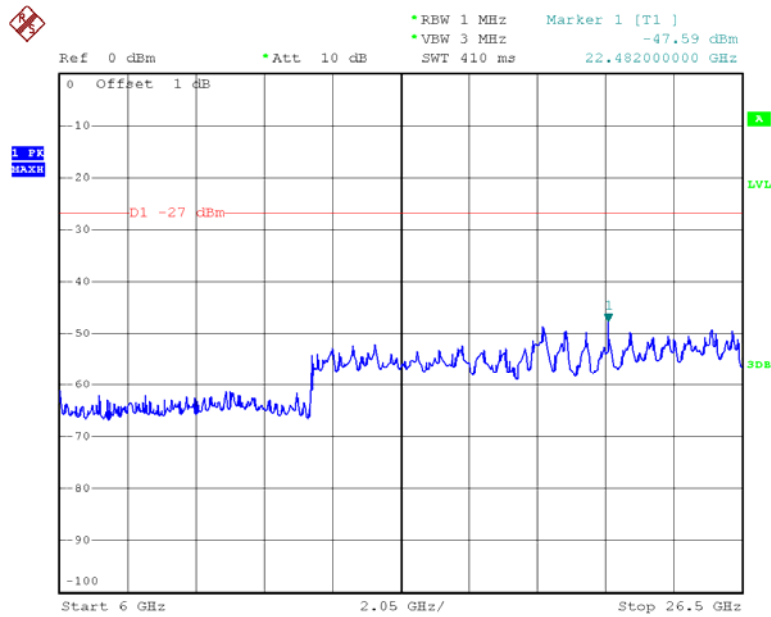
Chain 1:802.11a Low Channel



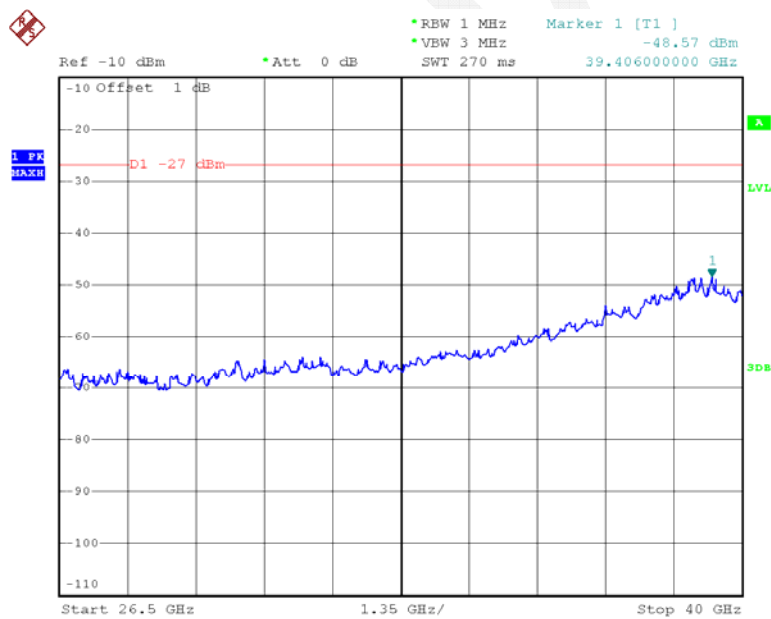
Date: 23.JUN.2015 12:51:31



Date: 22.JUN.2015 20:44:34

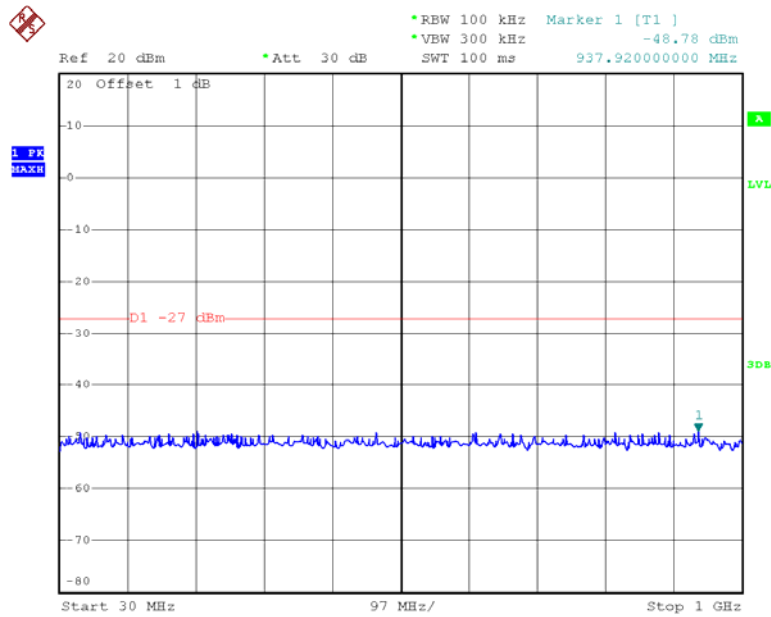


Date: 22.JUN.2015 21:02:30

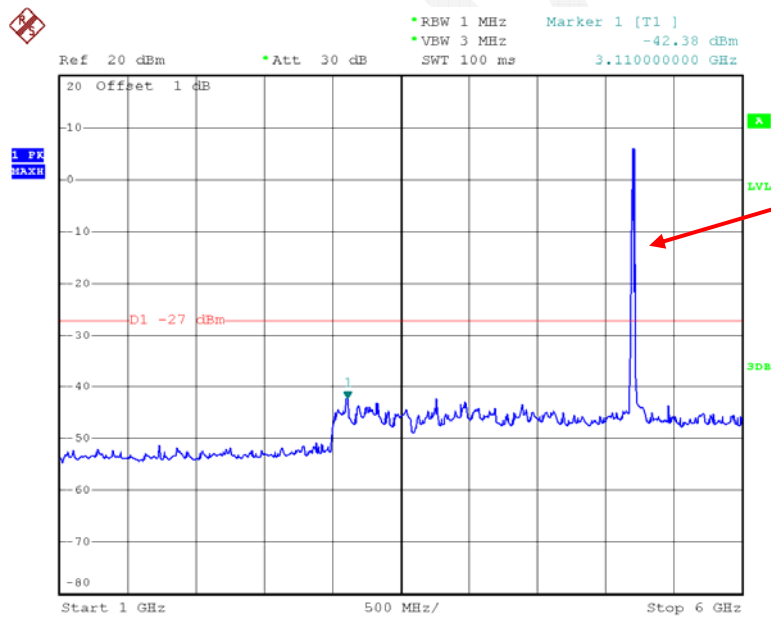


Date: 23.JUN.2015 13:01:53

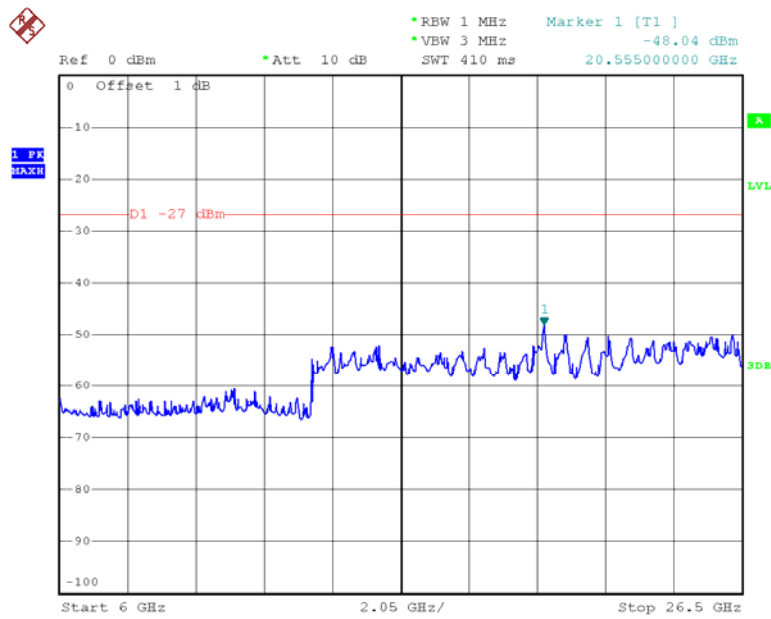
Chain 1:802.11a Middle Channel



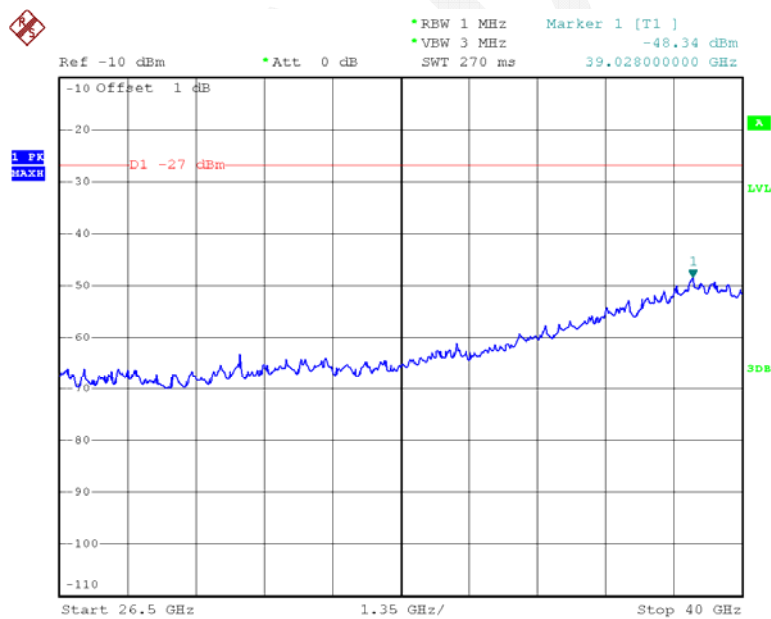
Date: 23.JUN.2015 12:51:39



Date: 22.JUN.2015 20:44:45

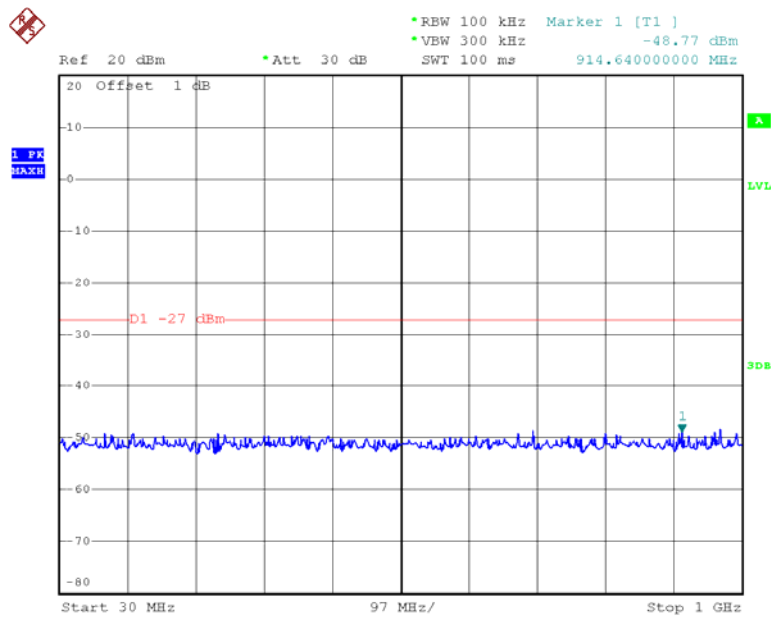


Date: 22.JUN.2015 21:02:54

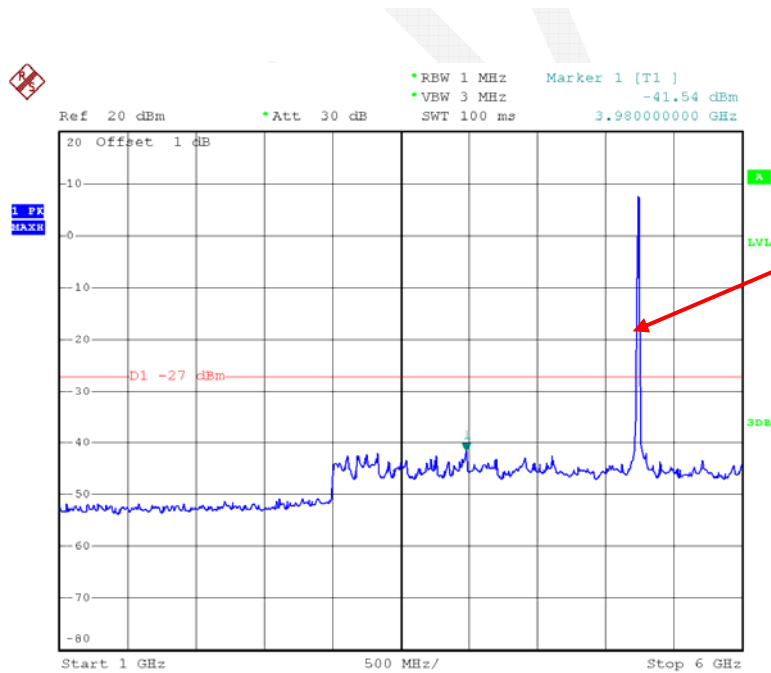


Date: 23.JUN.2015 13:02:07

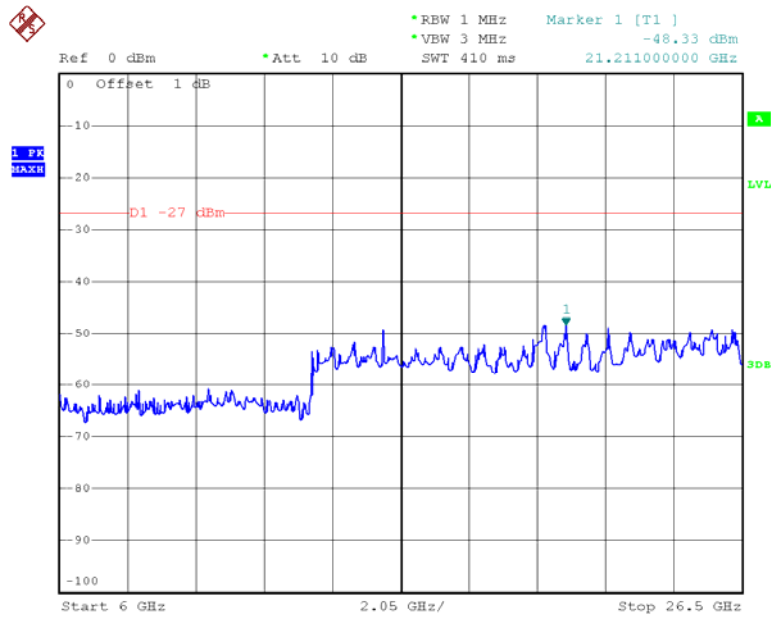
Chain 1:802.11a High Channel



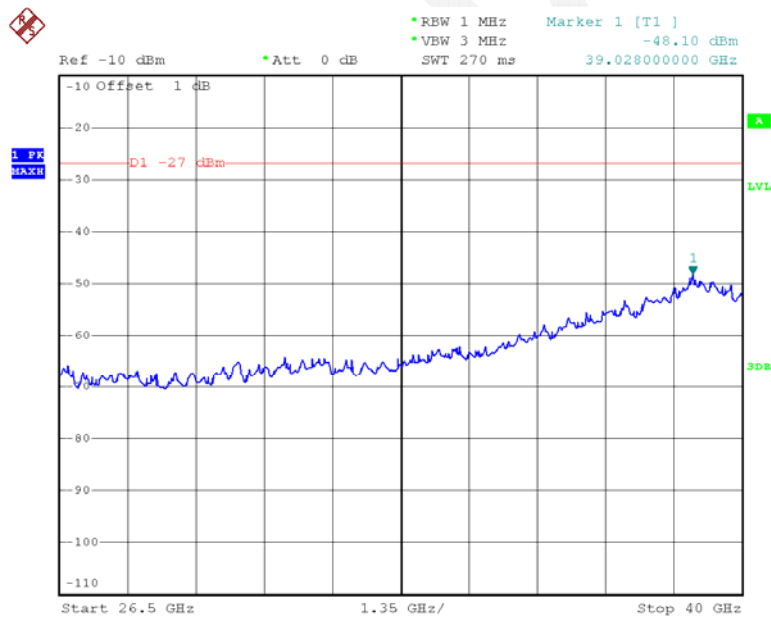
Date: 23.JUN.2015 12:51:47



Date: 22.JUN.2015 20:45:19

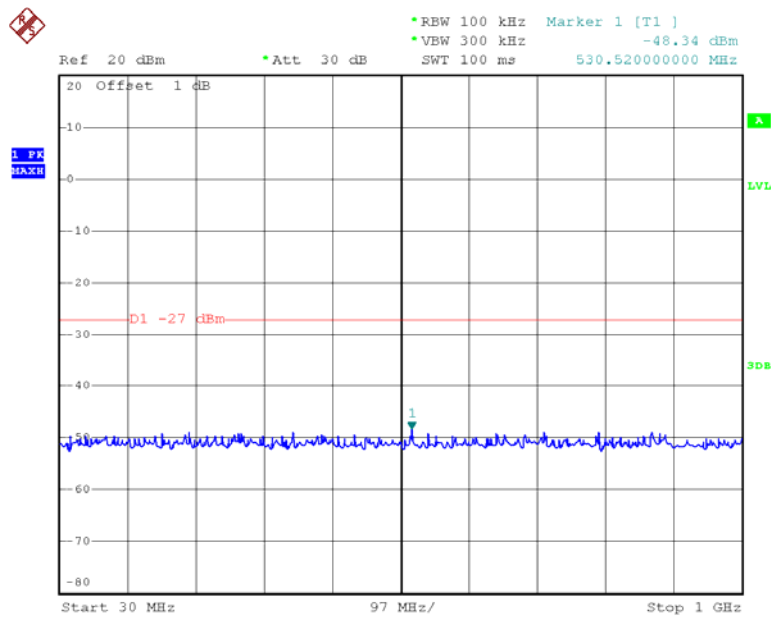


Date: 22.JUN.2015 21:03:37

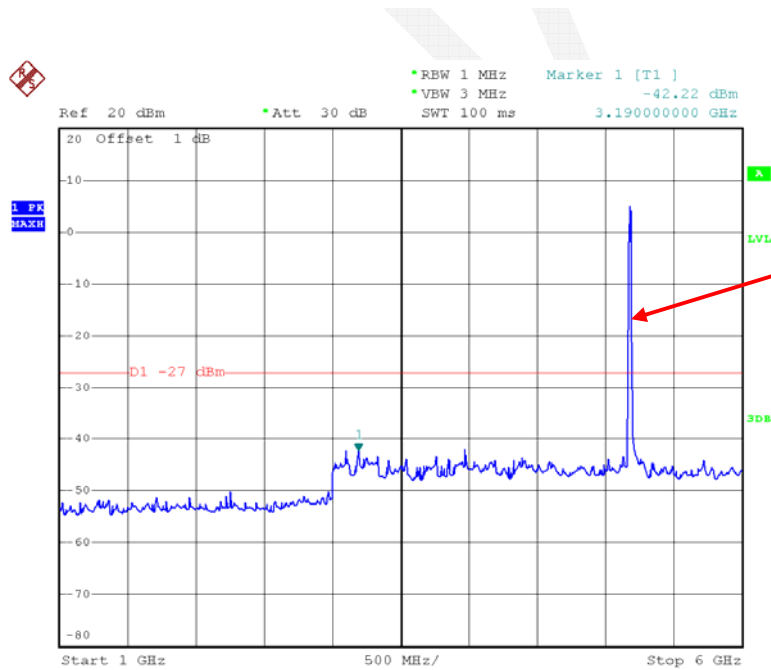


Date: 23.JUN.2015 13:02:25

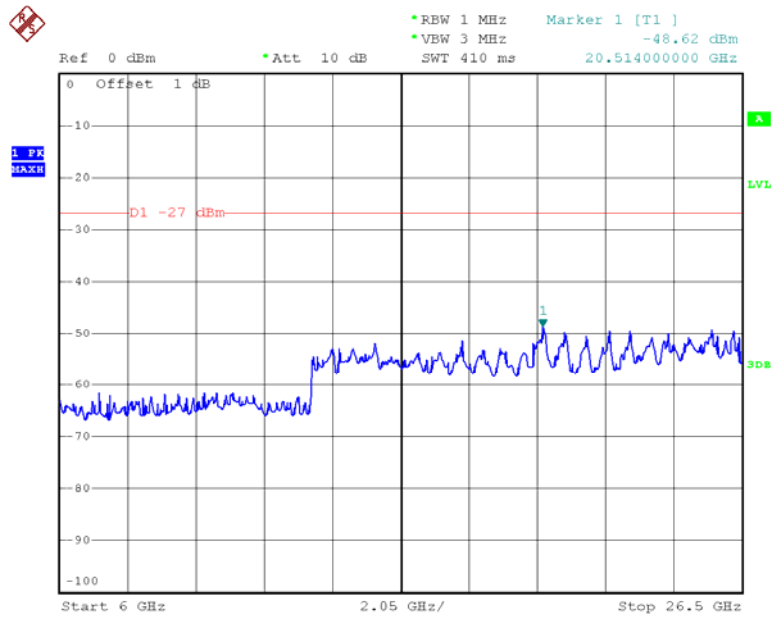
Chain 1:802.11n ht20 Low Channel



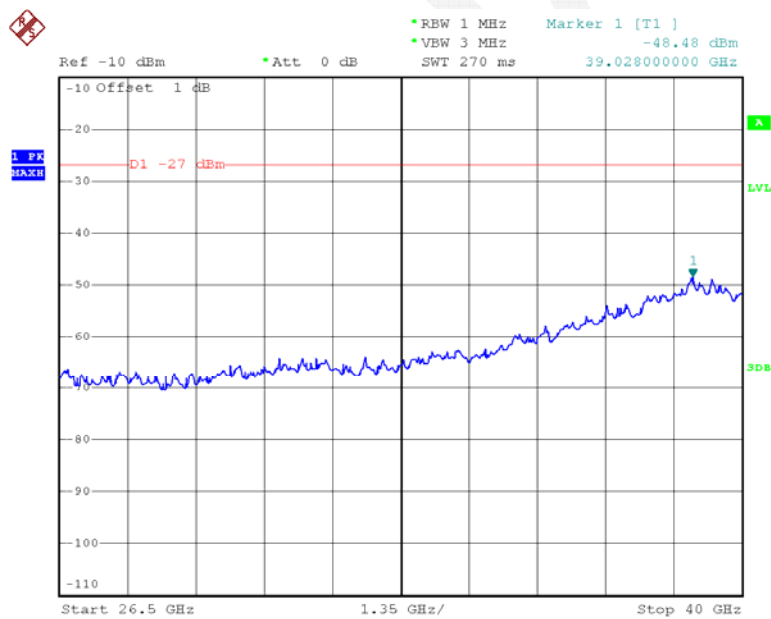
Date: 23.JUN.2015 12:52:50



Date: 22.JUN.2015 20:48:30

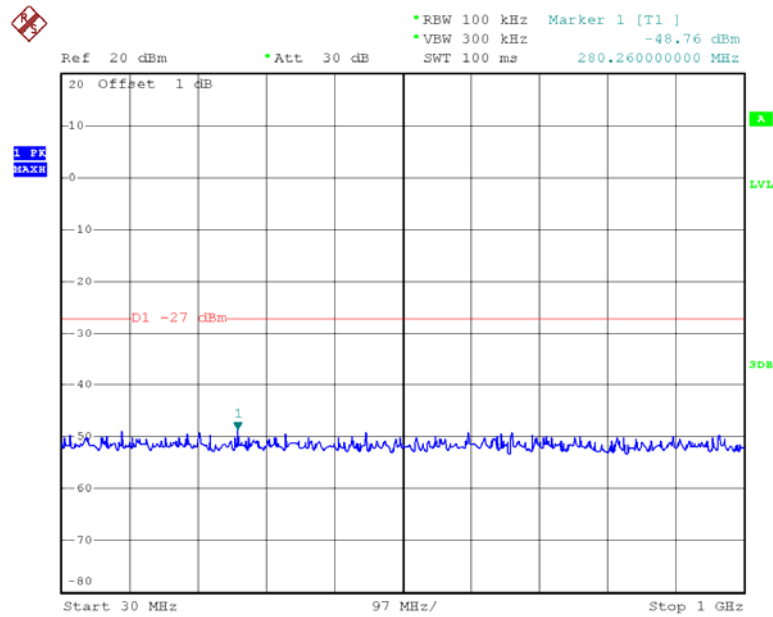


Date: 22.JUN.2015 21:11:56

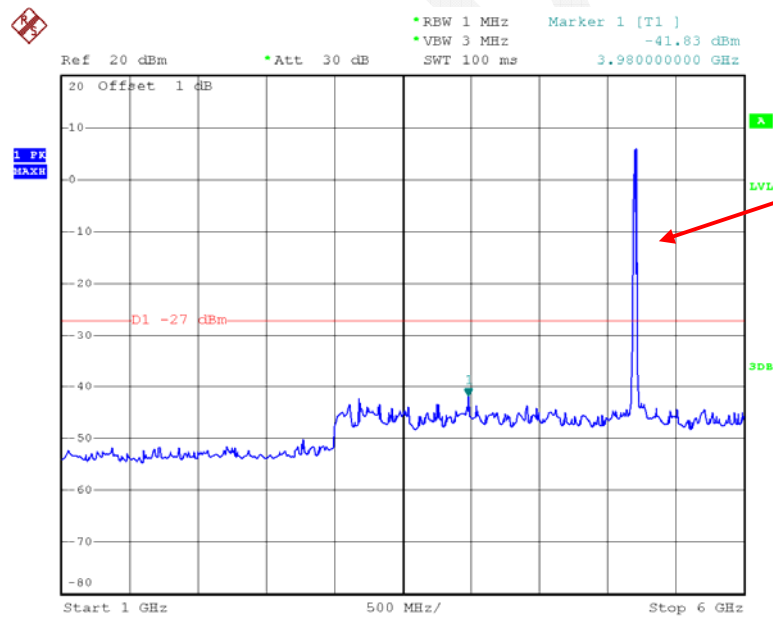


Date: 23.JUN.2015 13:06:11

Chain 1:802.11n ht20 Middle Channel

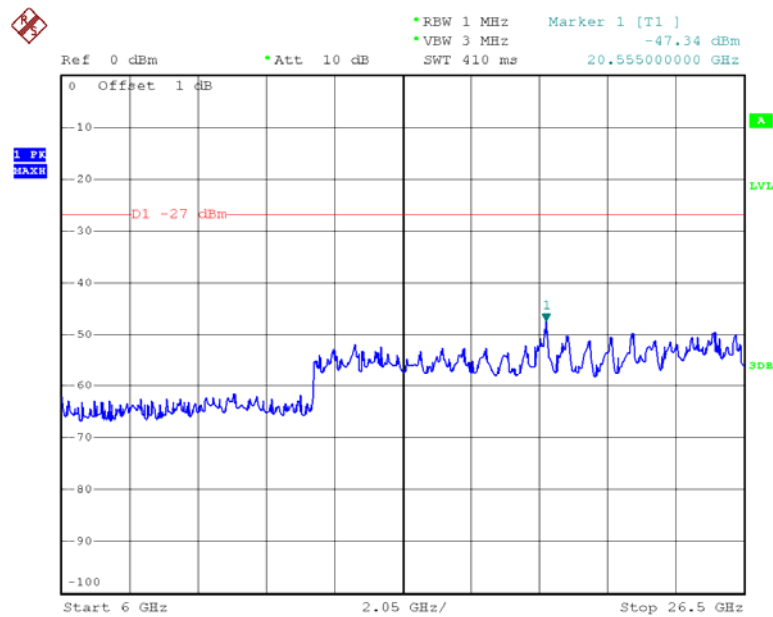


Date: 23.JUN.2015 12:52:55

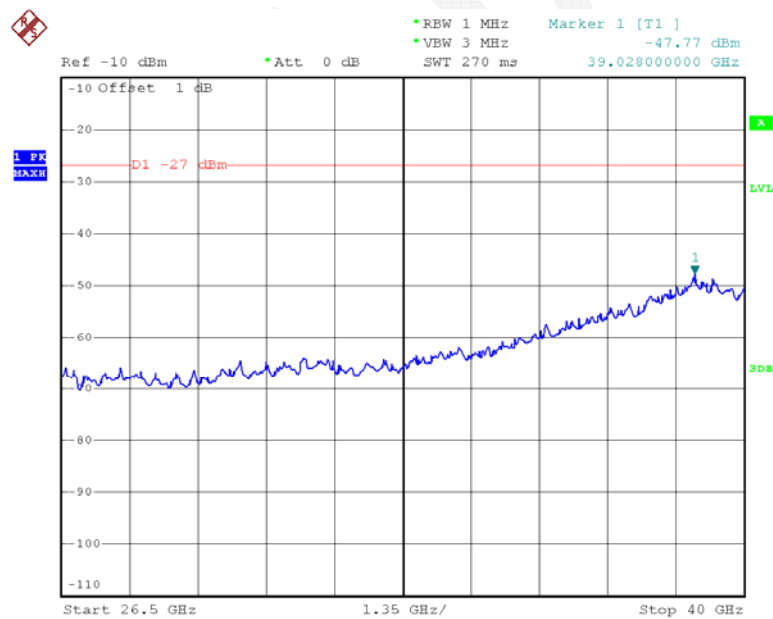


Fundamental

Date: 22.JUN.2015 20:48:41

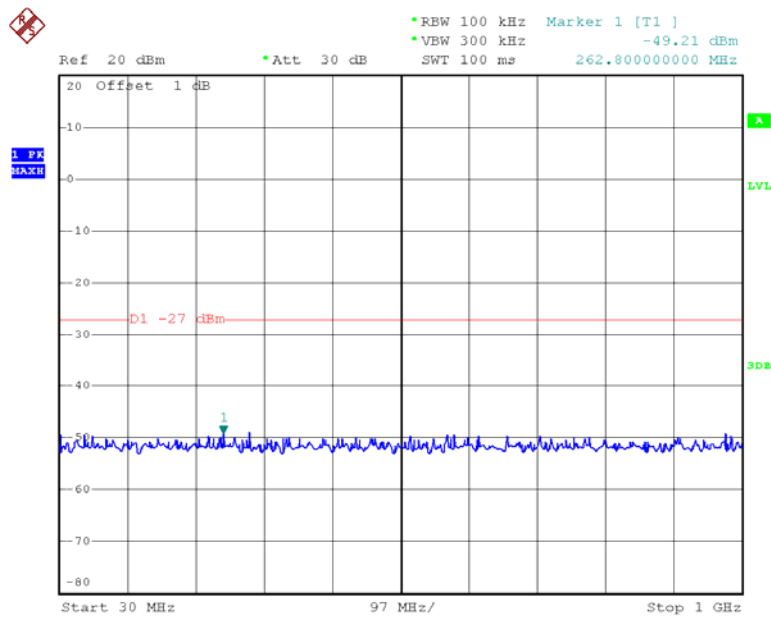


Date: 22.JUN.2015 21:12:27

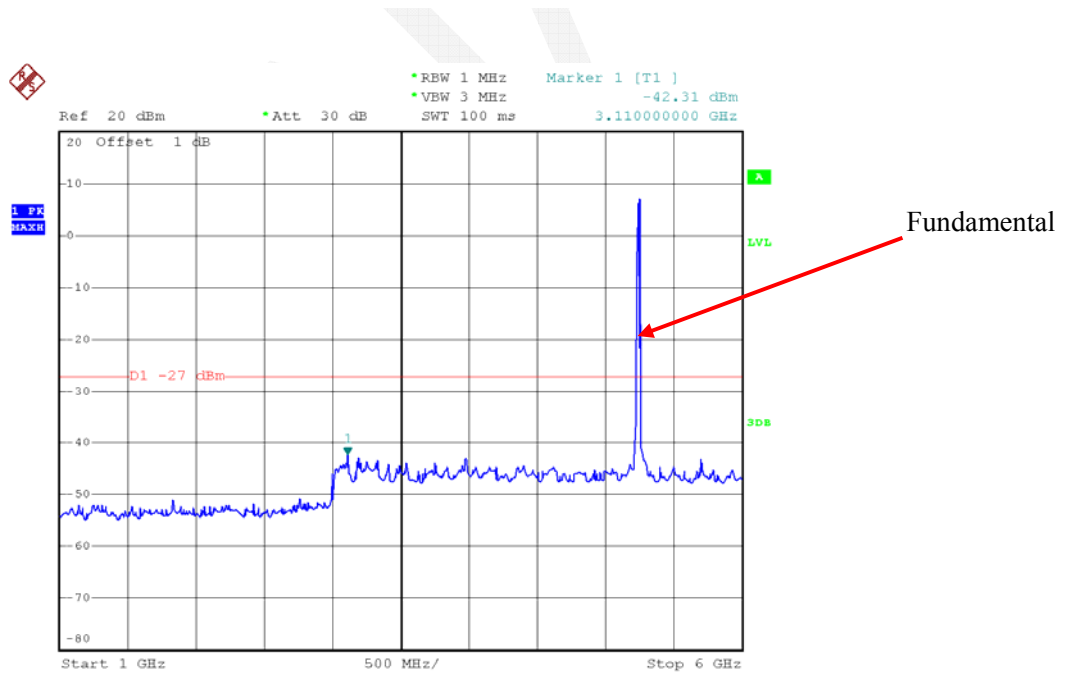


Date: 23.JUN.2015 13:06:23

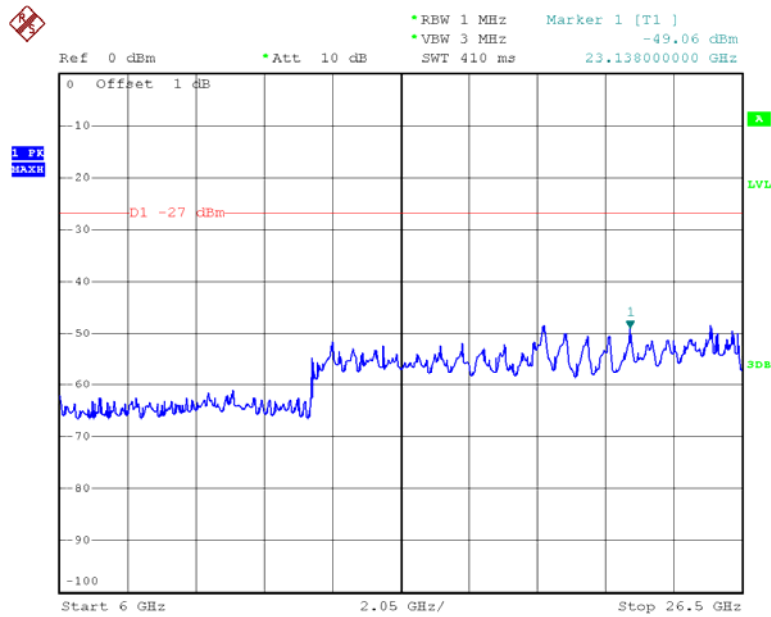
Chain 1:802.11n ht20 High Channel



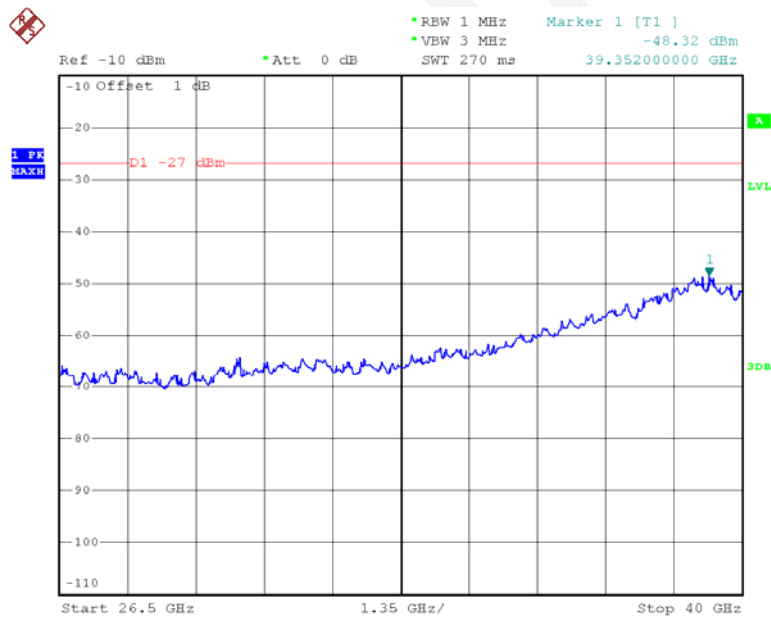
Date: 23.JUN.2015 12:53:01



Date: 22.JUN.2015 20:49:29

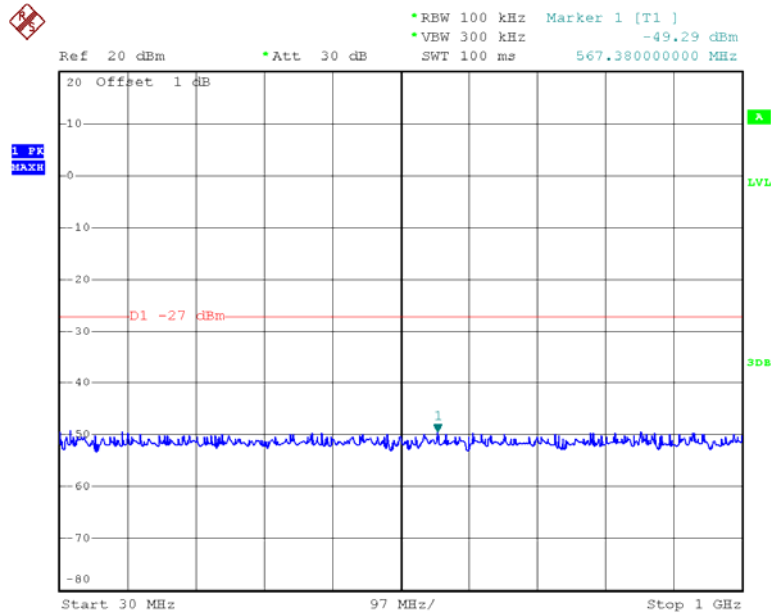


Date: 22.JUN.2015 21:12:59

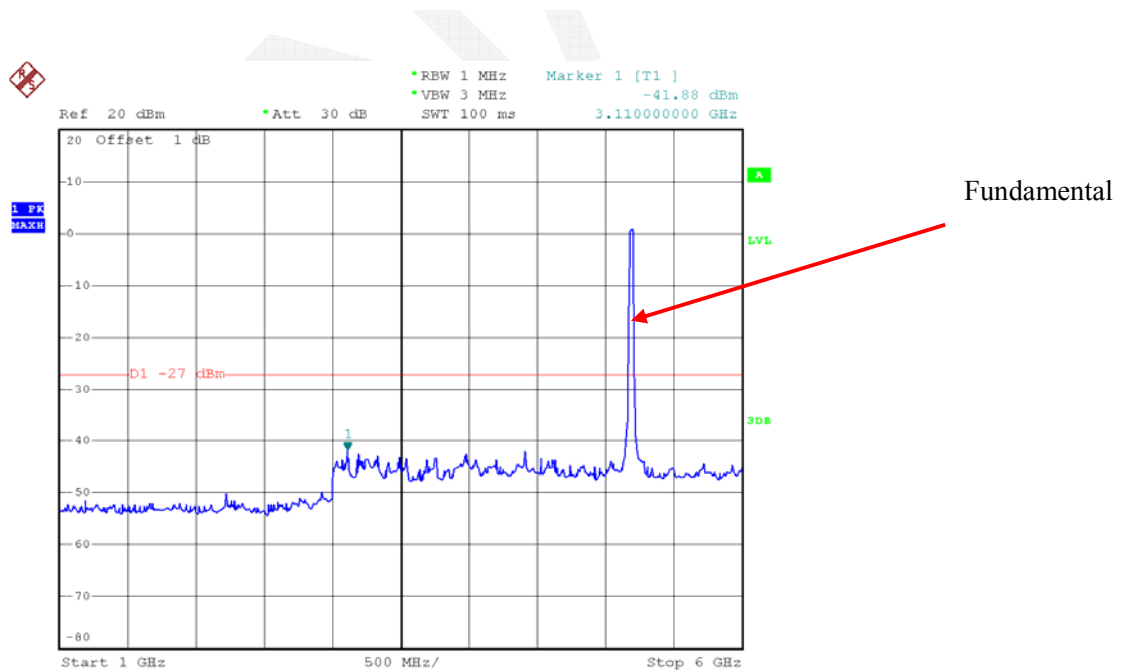


Date: 23.JUN.2015 13:06:47

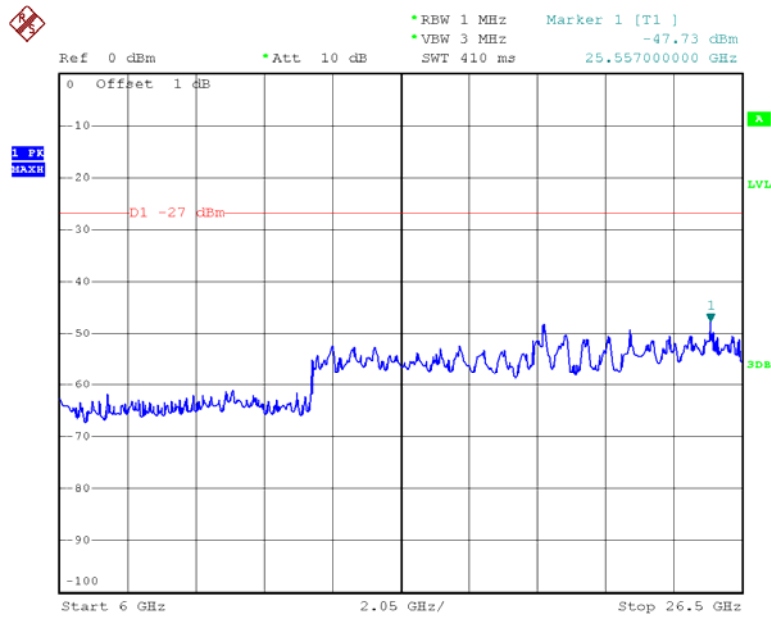
Chain 1:802.11n ht40 Low Channel



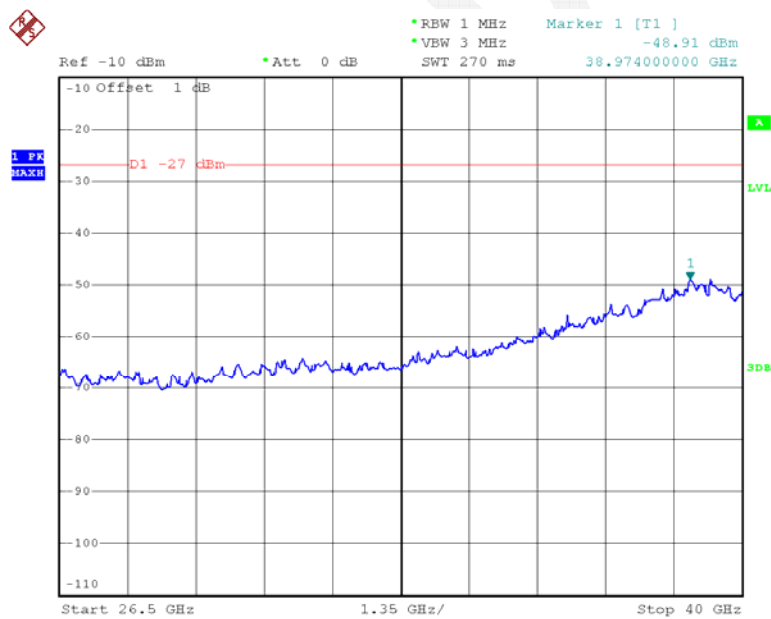
Date: 23.JUN.2015 12:55:33



Date: 22.JUN.2015 20:52:28

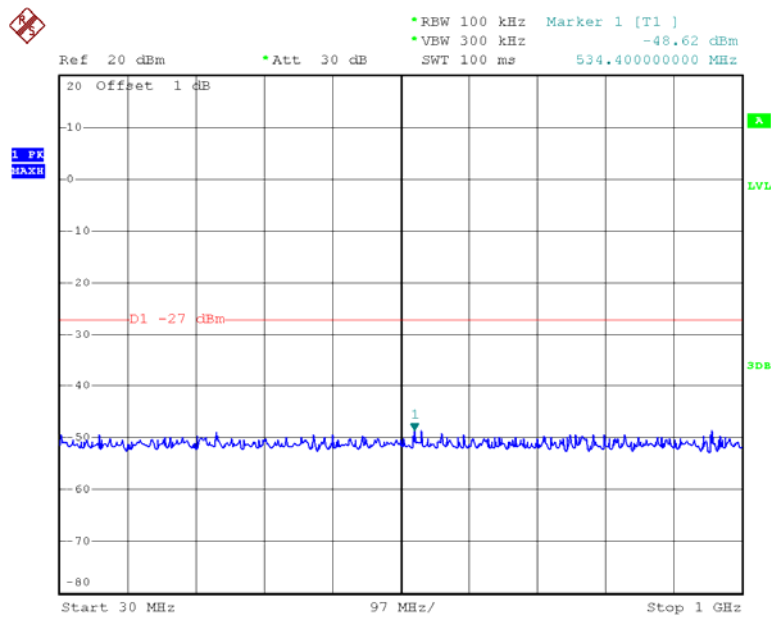


Date: 22.JUN.2015 21:22:07

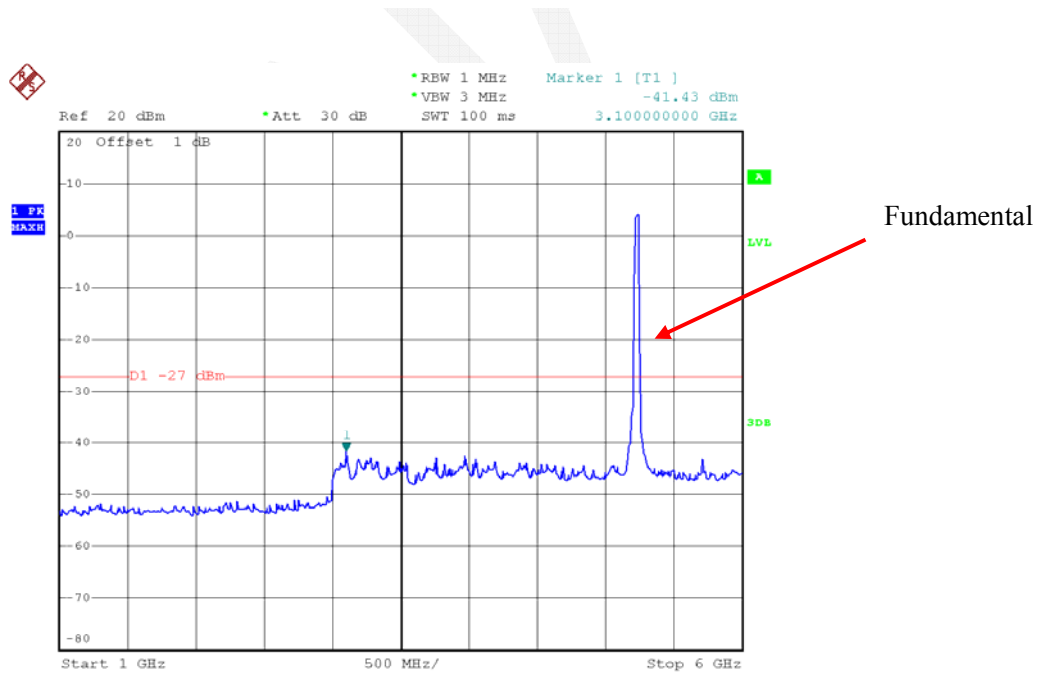


Date: 23.JUN.2015 13:11:43

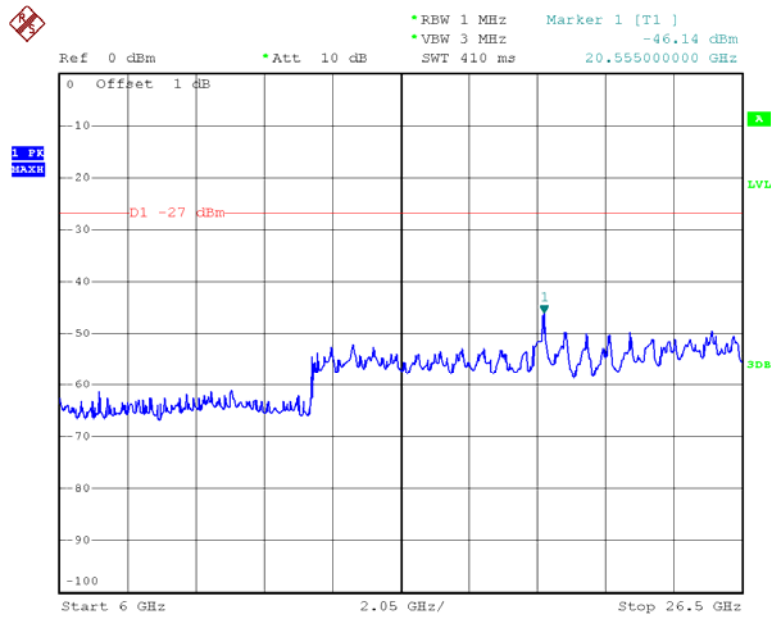
Chain 1:802.11n ht40 High Channel



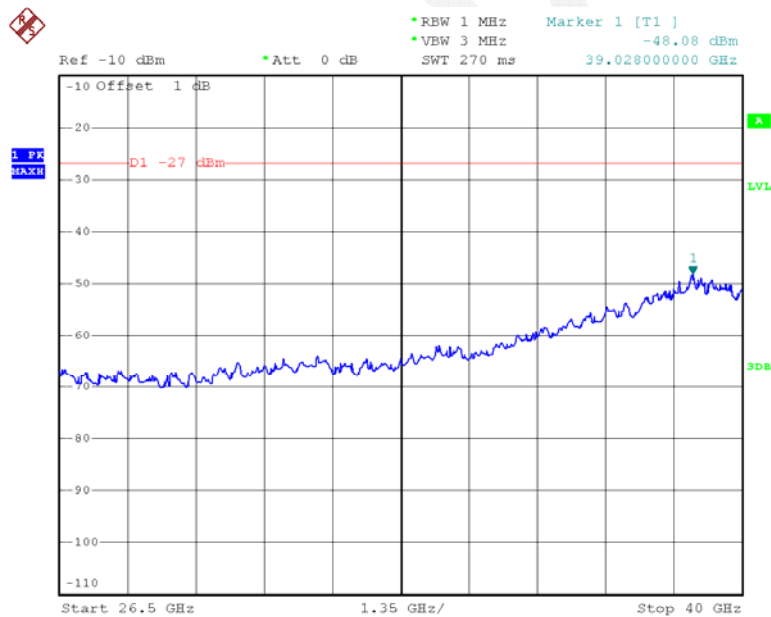
Date: 23.JUN.2015 12:55:41



Date: 22.JUN.2015 20:52:43

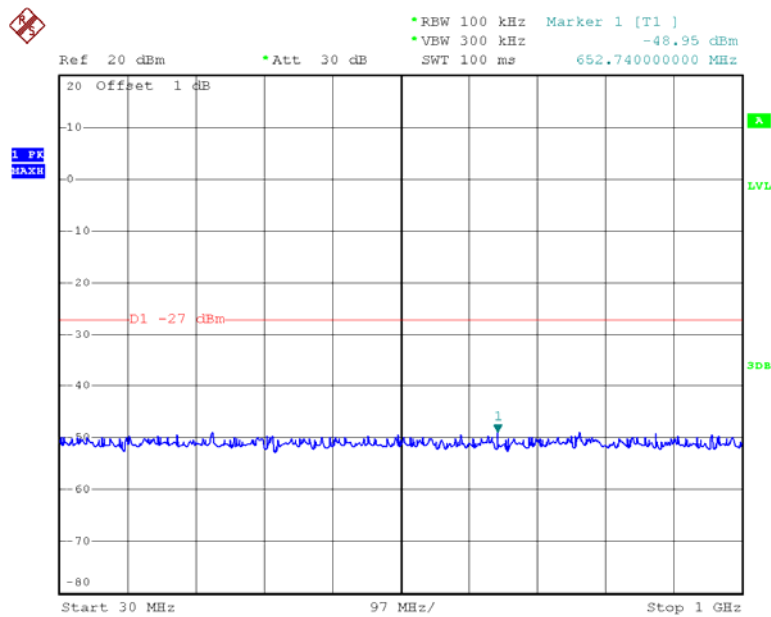


Date: 22.JUN.2015 21:23:03

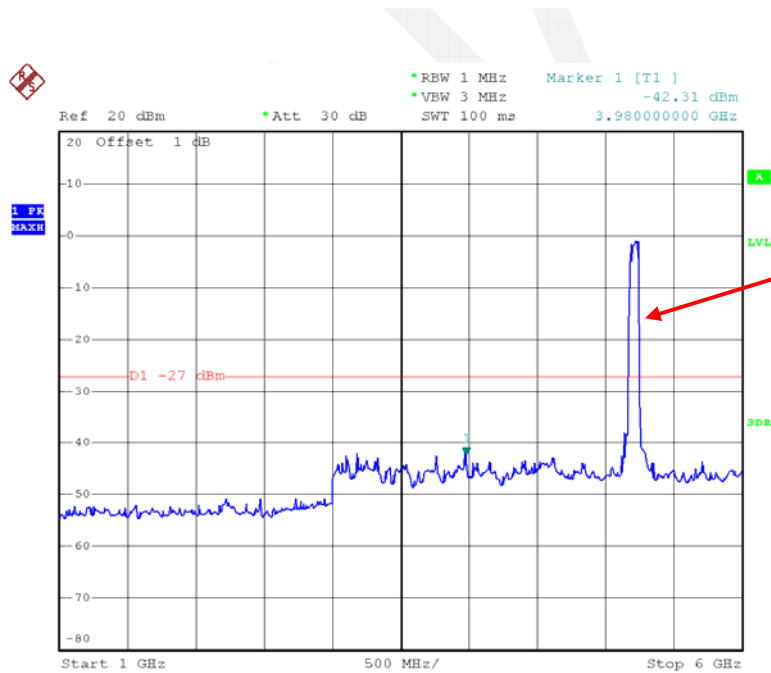


Date: 23.JUN.2015 13:12:27

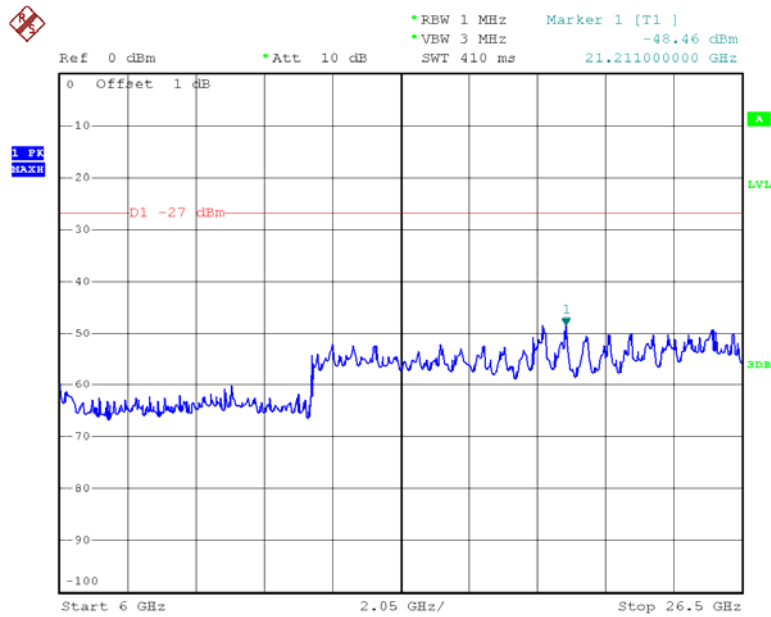
Chain 1:802.11n ac80 Middle Channel



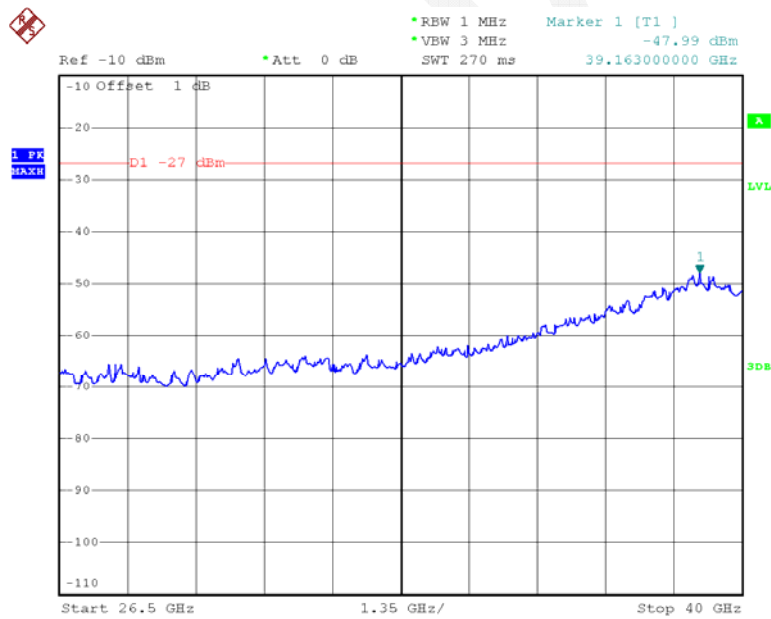
Date: 23.JUN.2015 12:56:40



Date: 22.JUN.2015 20:56:16



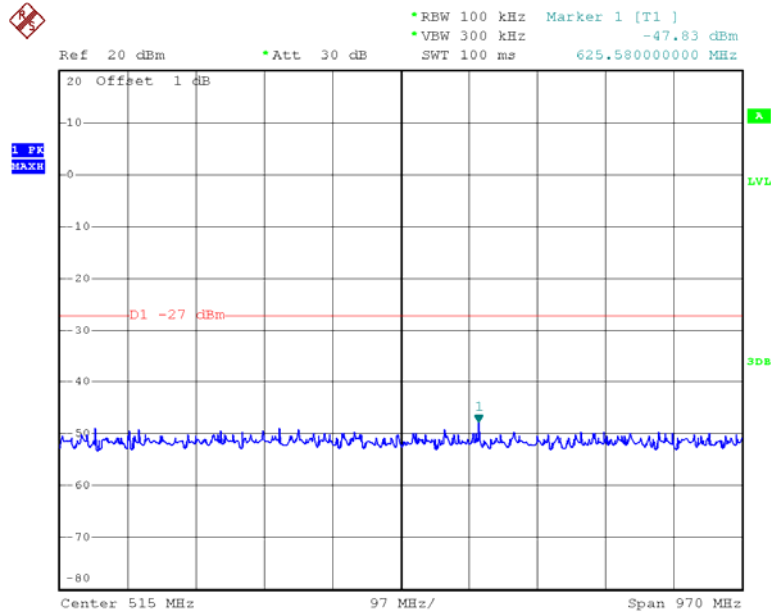
Date: 22.JUN.2015 21:29:21



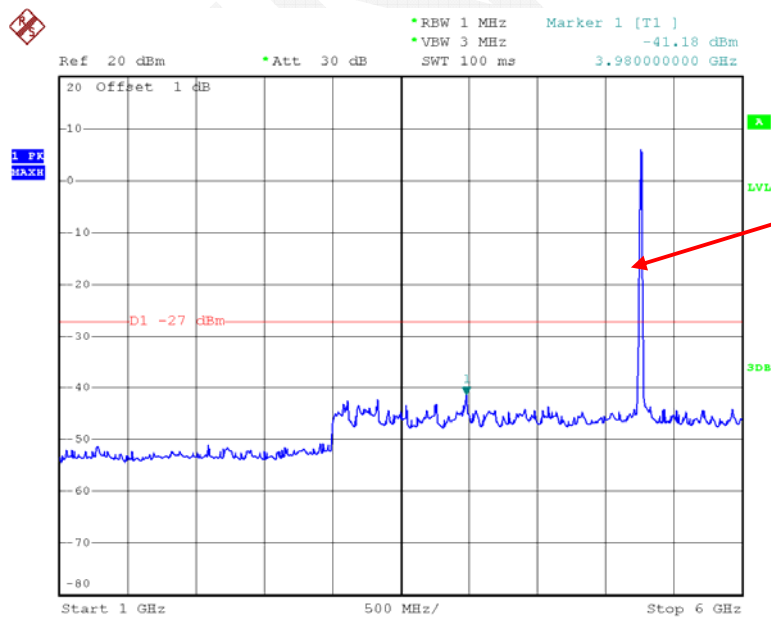
Date: 23.JUN.2015 13:16:37

5250-5350MHz:

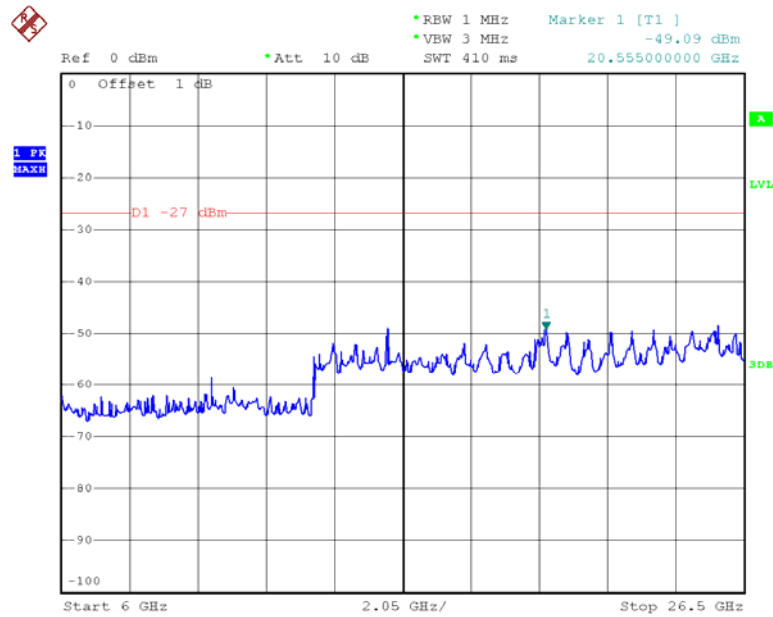
Chain 0:802.11a Low Channel



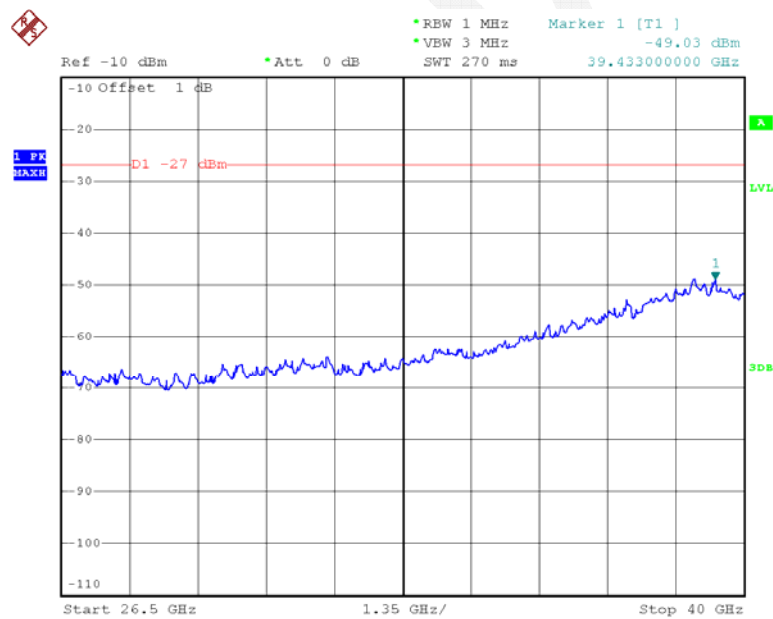
Date: 23.JUN.2015 12:42:47



Date: 22.JUN.2015 20:11:15

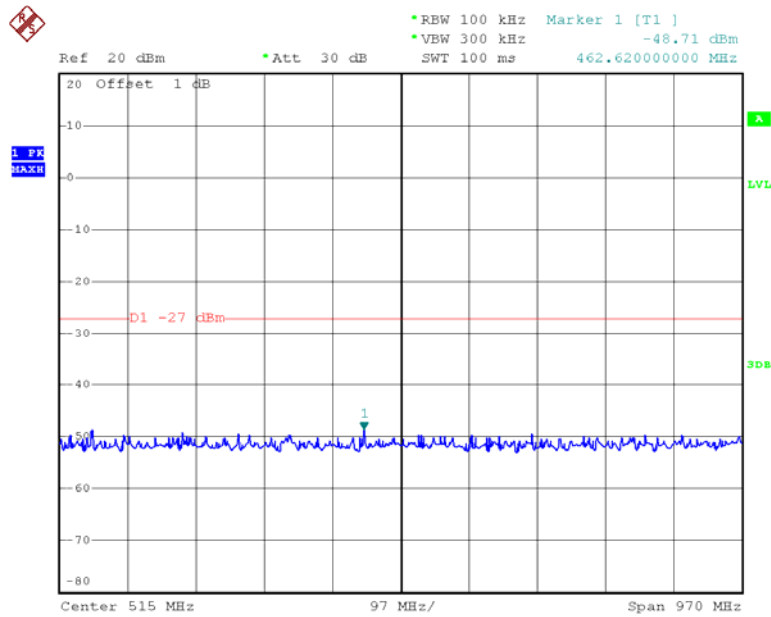


Date: 22.JUN.2015 21:03:53

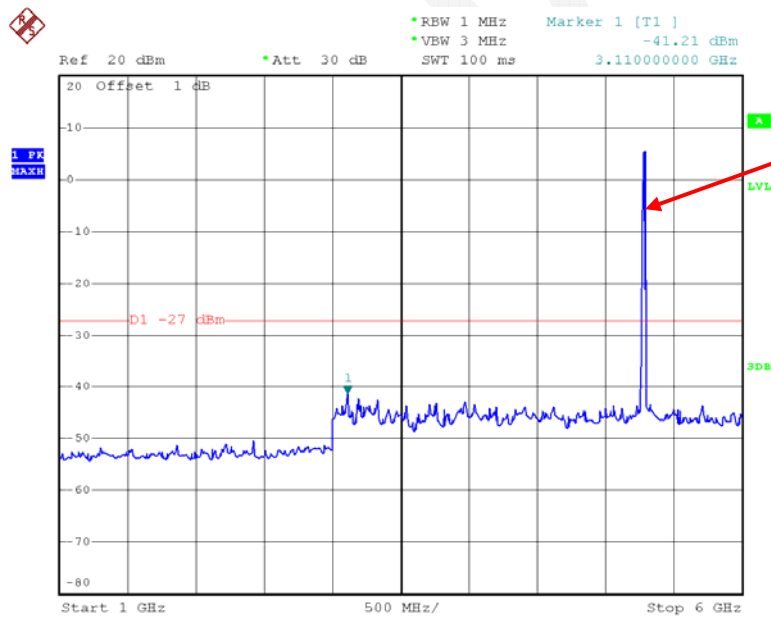


Date: 23.JUN.2015 13:02:35

Chain 0:802.11a Middle Channel

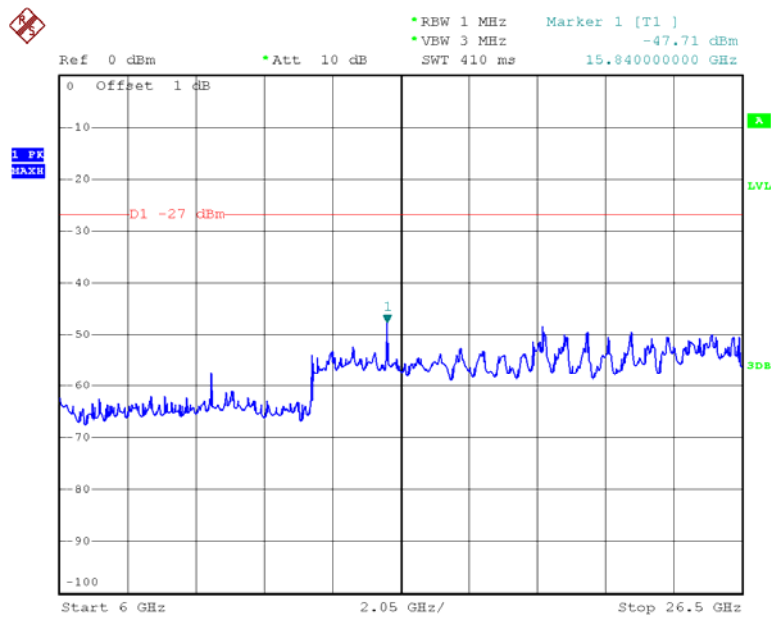


Date: 23.JUN.2015 12:42:53

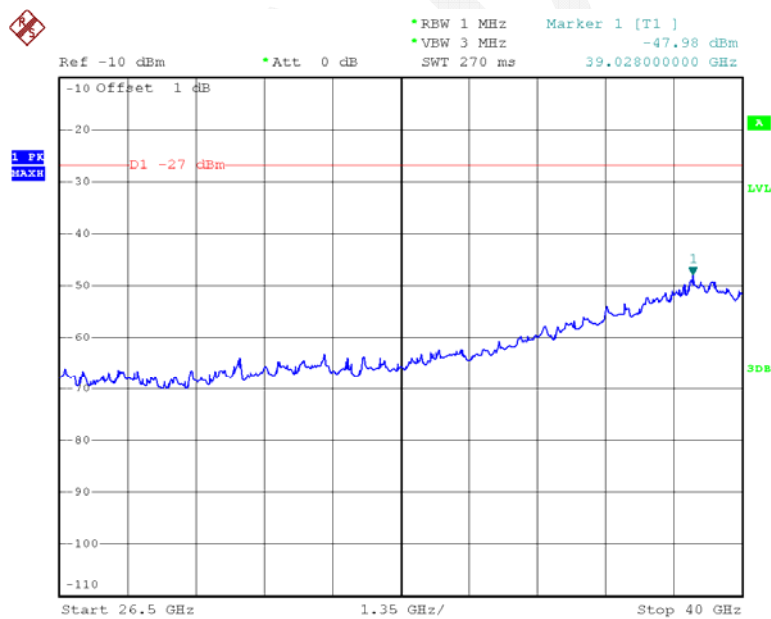


Fundamental

Date: 22.JUN.2015 20:11:33

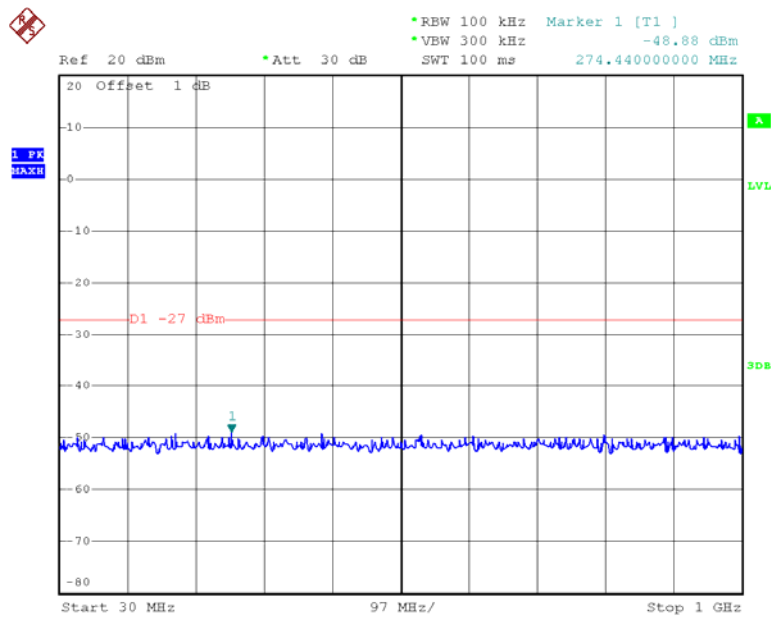


Date: 22.JUN.2015 21:04:26

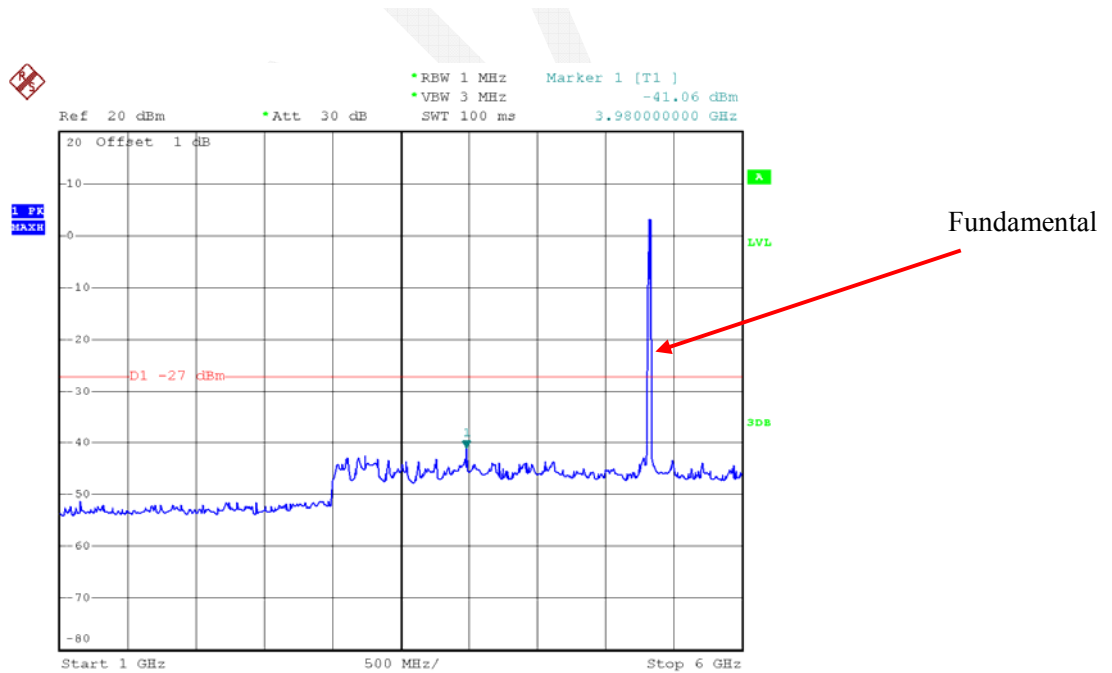


Date: 23.JUN.2015 13:03:00

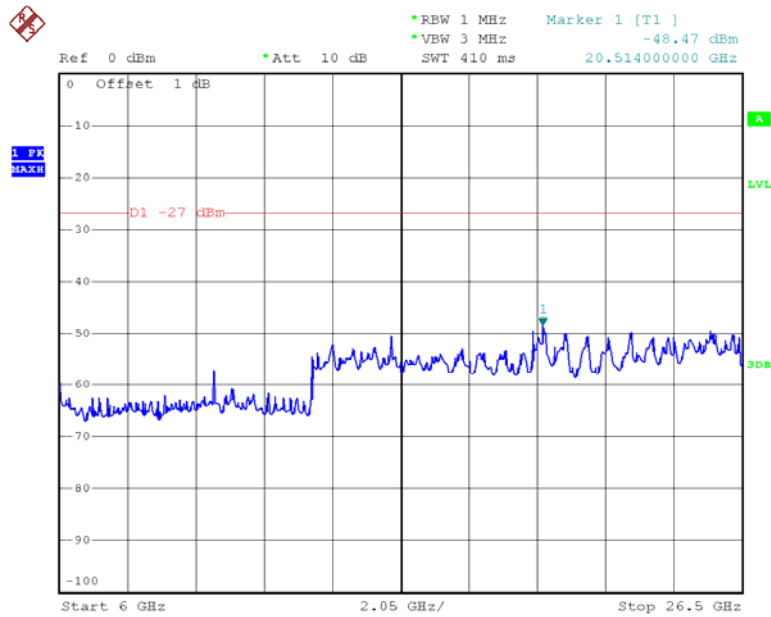
Chain 0:802.11a High Channel



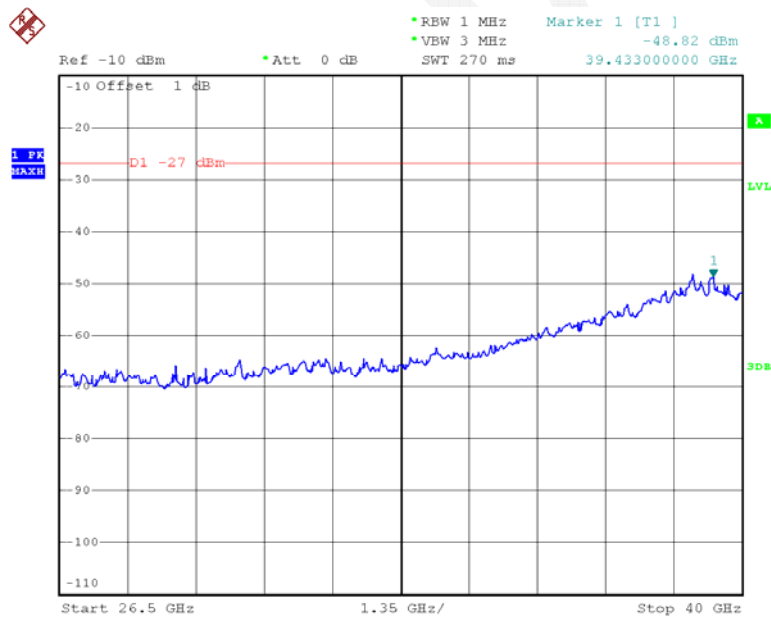
Date: 23.JUN.2015 12:43:11



Date: 22.JUN.2015 20:11:55

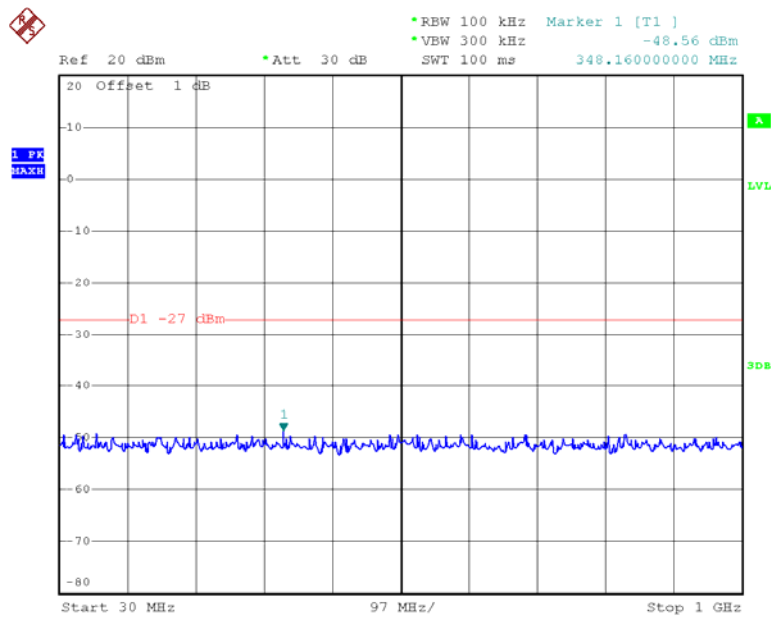


Date: 22.JUN.2015 21:04:50

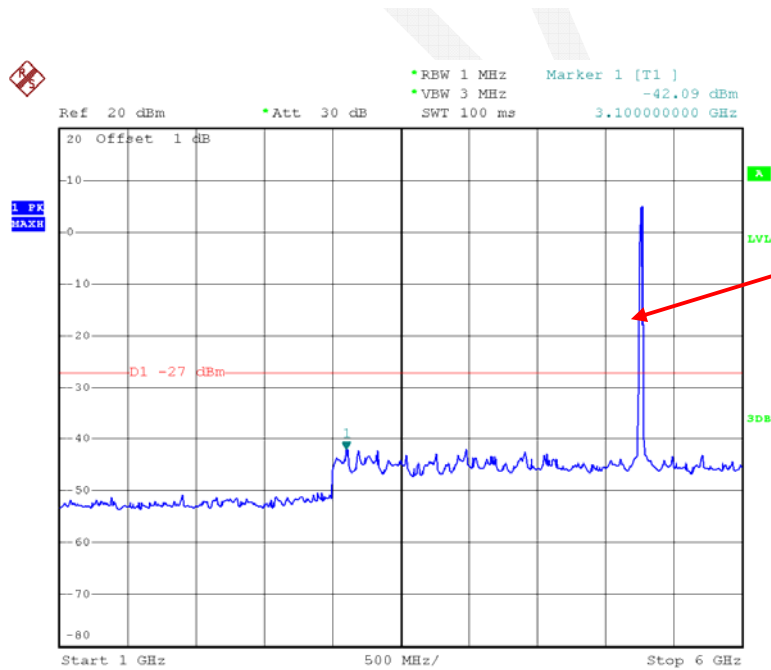


Date: 23.JUN.2015 13:03:28

Chain 0:802.11n ht20 Low Channel

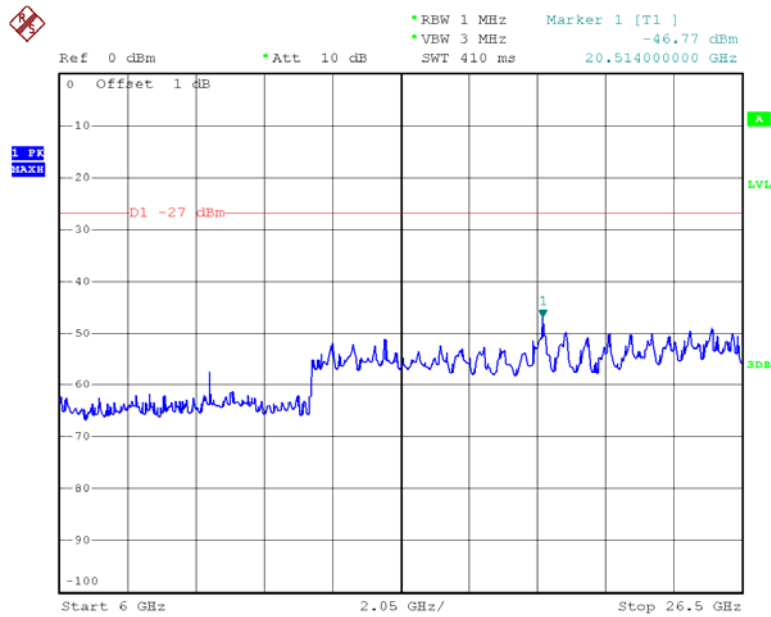


Date: 23.JUN.2015 12:46:40

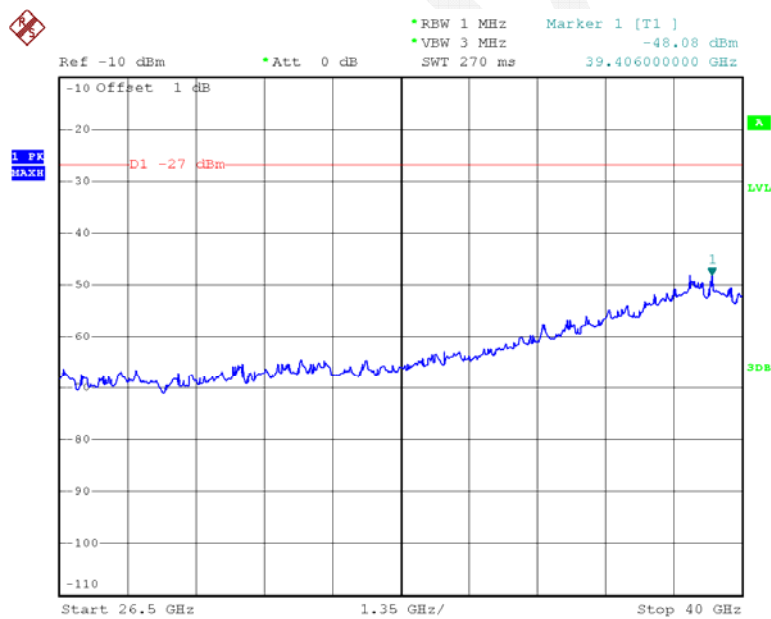


Fundamental

Date: 22.JUN.2015 20:18:06

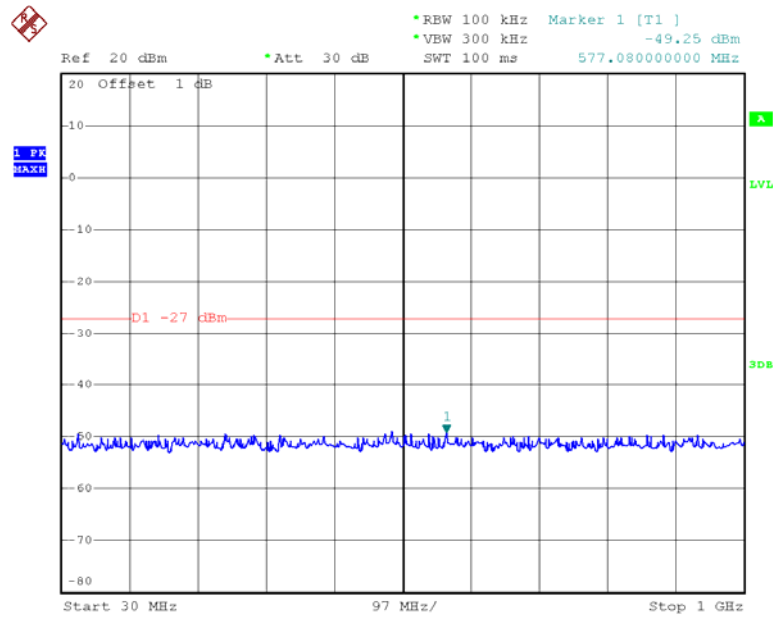


Date: 22.JUN.2015 21:13:20

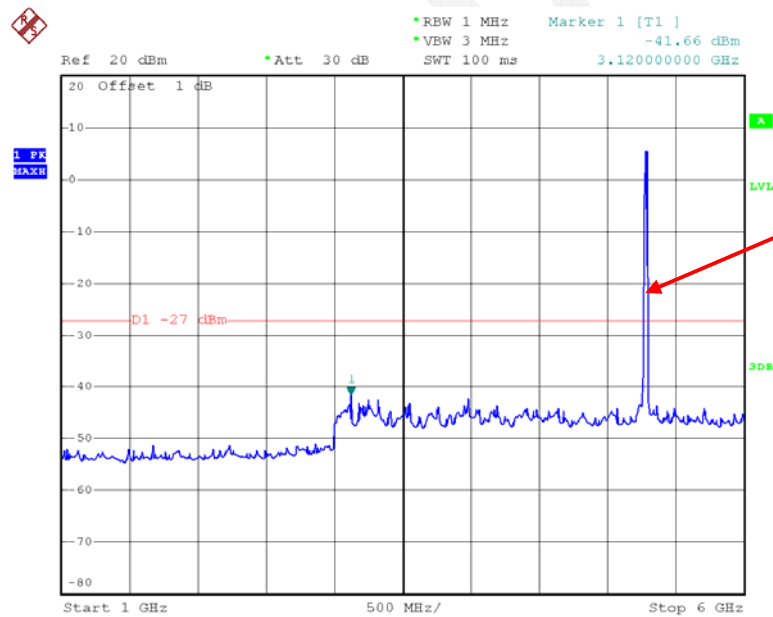


Date: 23.JUN.2015 13:06:52

Chain 0:802.11n ht20 Middle Channel

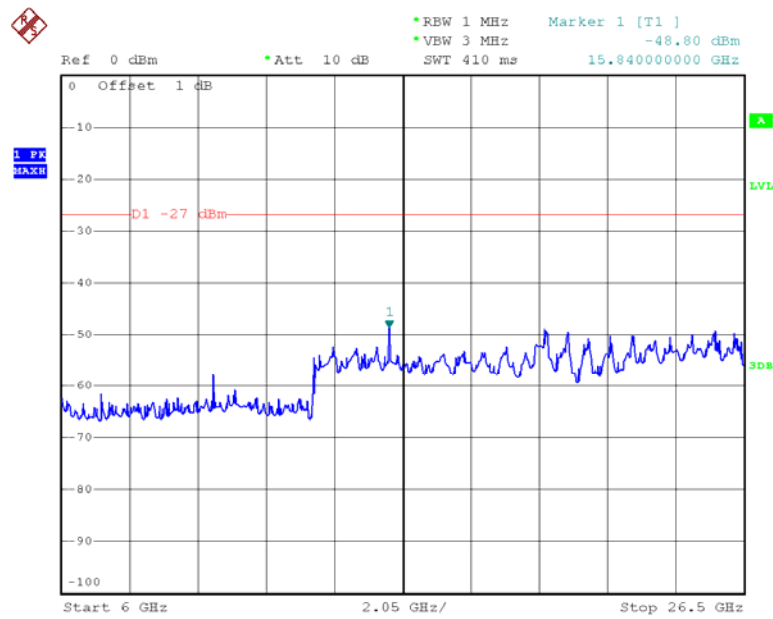


Date: 23.JUN.2015 12:46:46

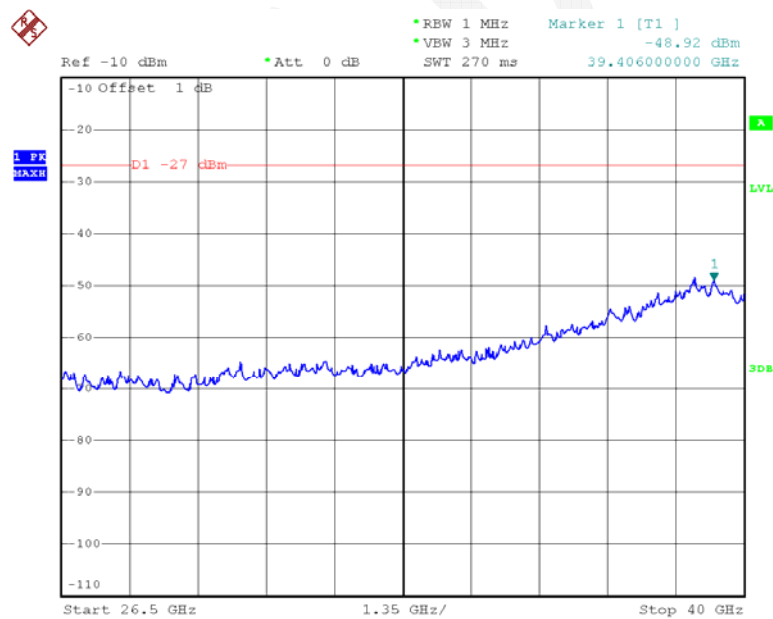


Fundamental

Date: 22.JUN.2015 20:18:22

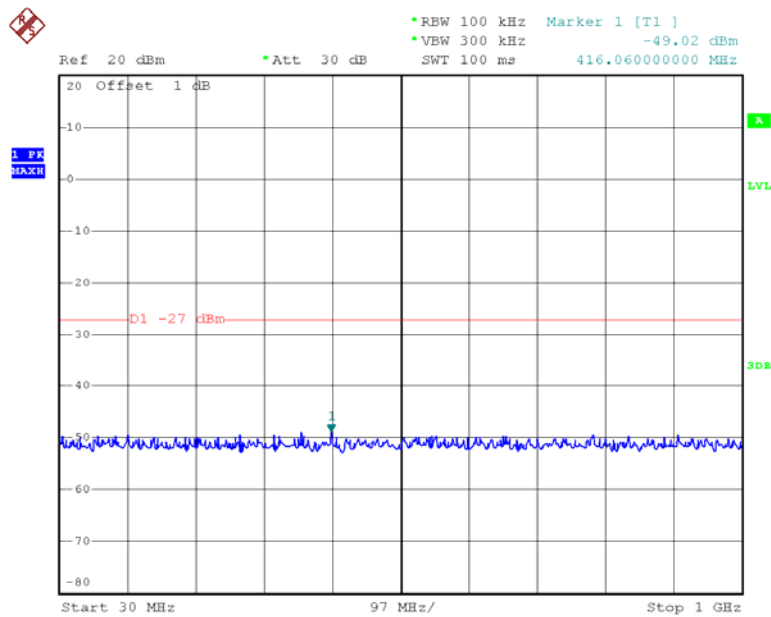


Date: 22.JUN.2015 21:14:47

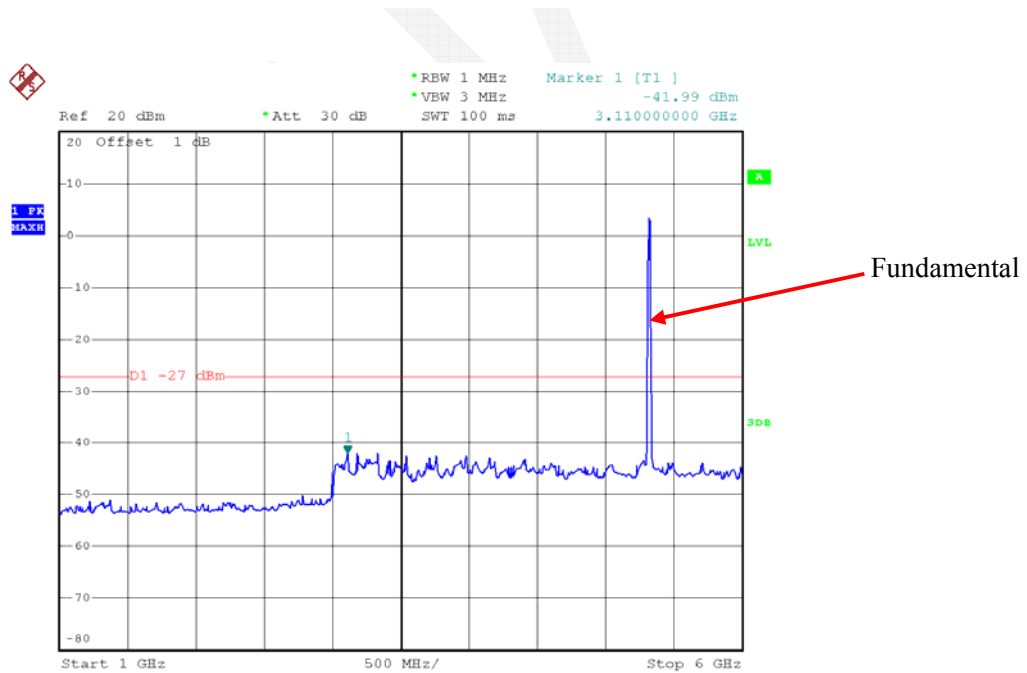


Date: 23.JUN.2015 13:07:06

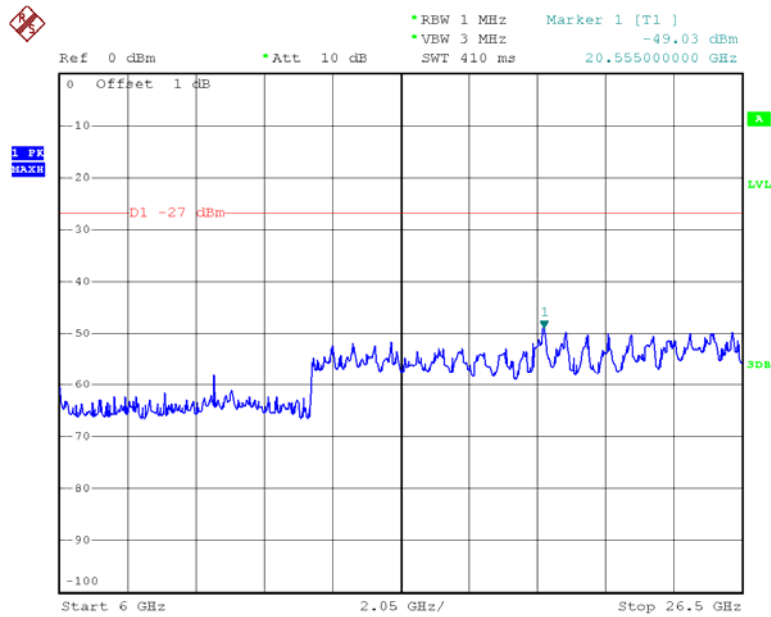
Chain 0:802.11n ht20 High Channel



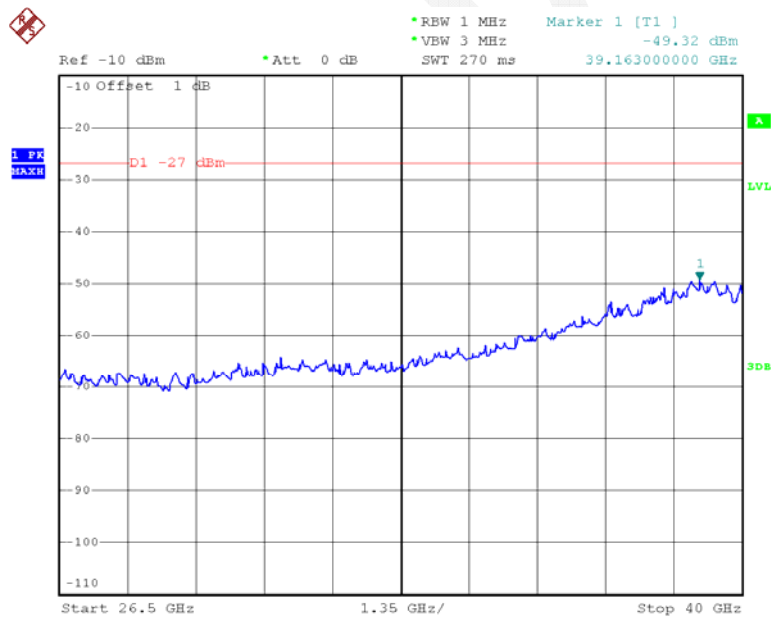
Date: 23.JUN.2015 12:46:53



Date: 22.JUN.2015 20:18:57

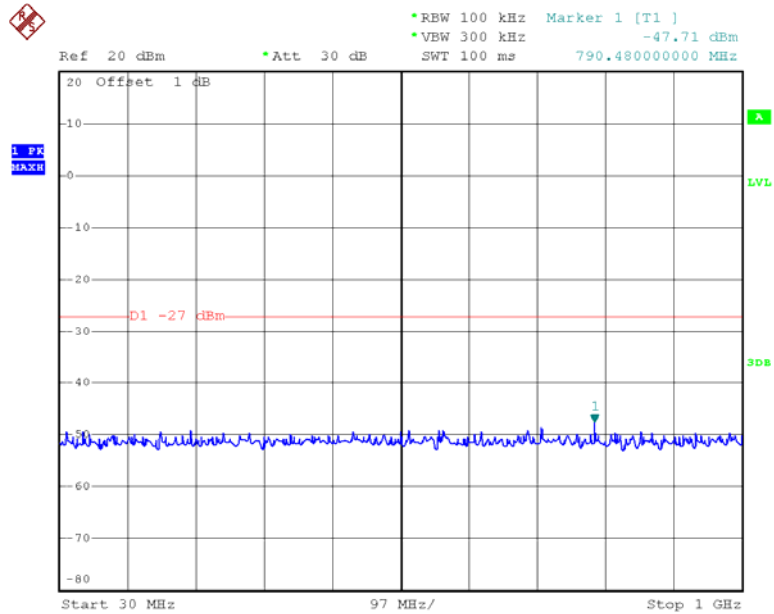


Date: 22.JUN.2015 21:15:19

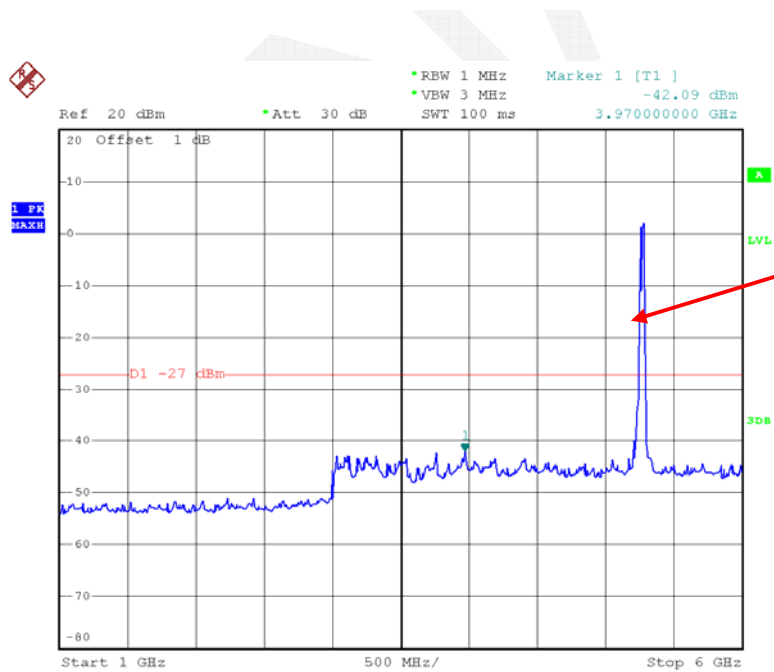


Date: 23.JUN.2015 13:07:34

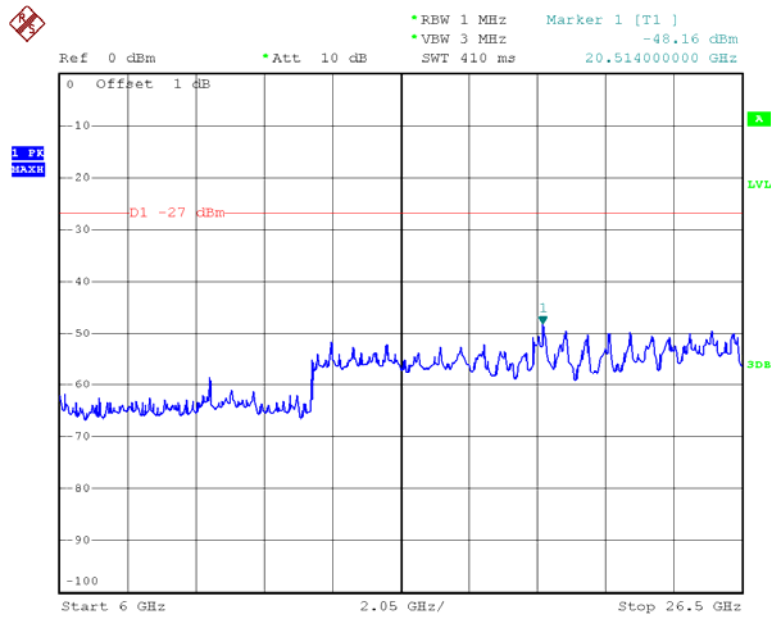
Chain 0:802.11n ht40 Low Channel



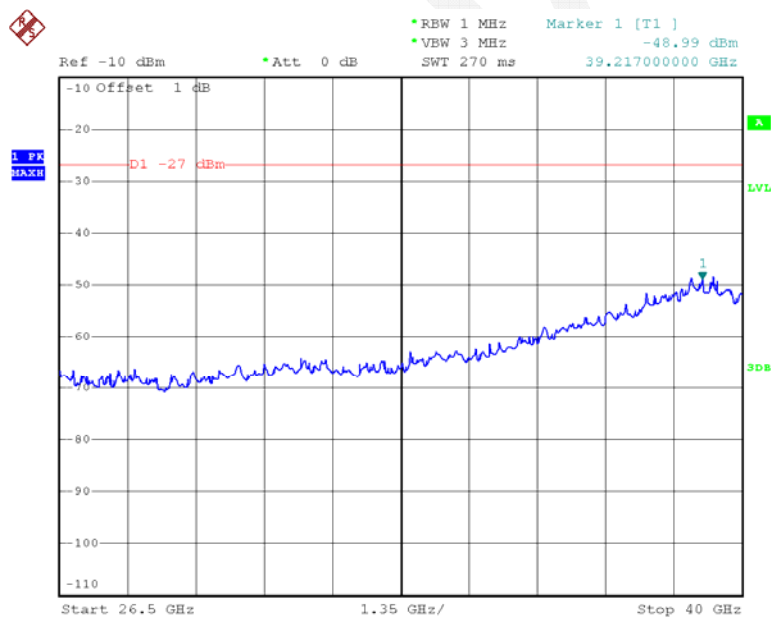
Date: 23.JUN.2015 12:49:07



Date: 22.JUN.2015 20:32:47

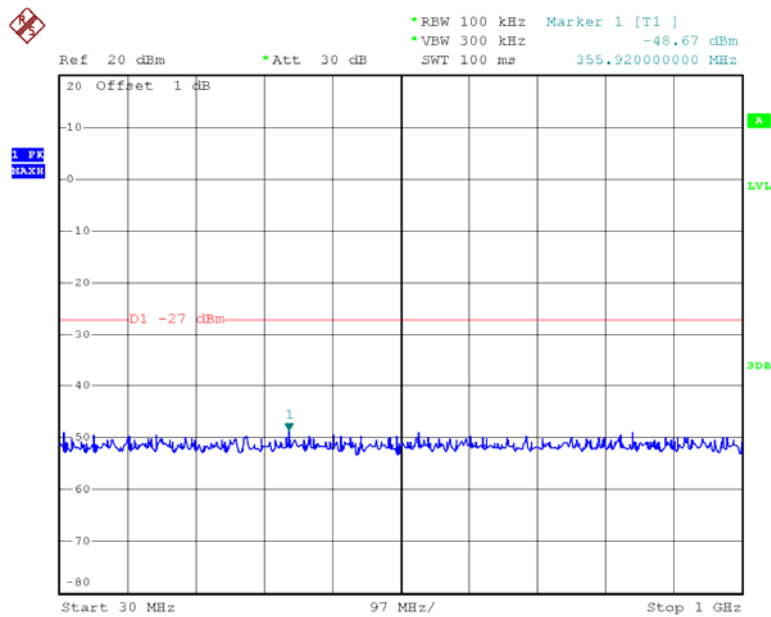


Date: 22.JUN.2015 21:23:38

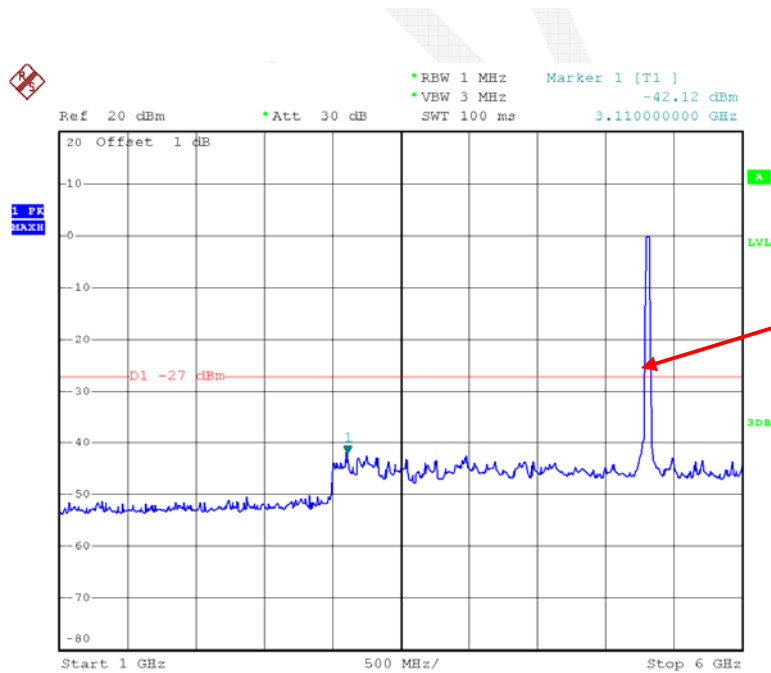


Date: 23.JUN.2015 13:12:33

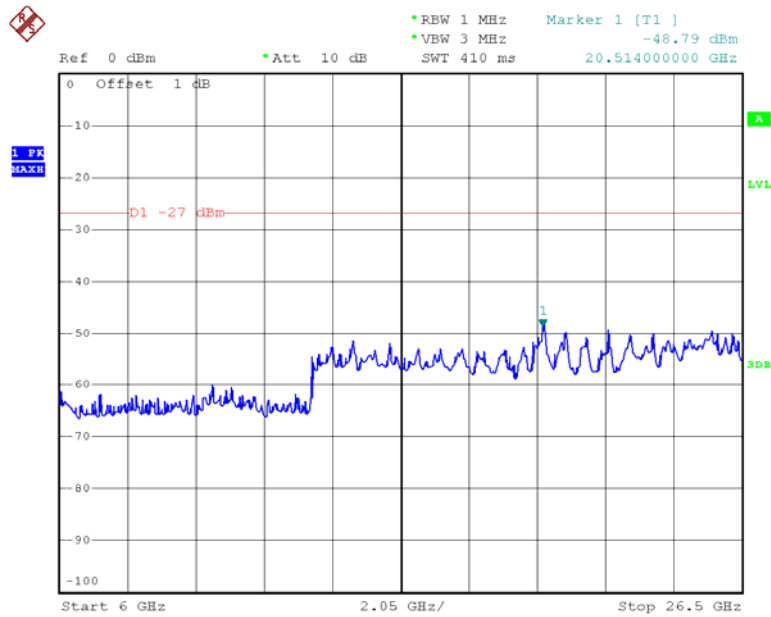
Chain 0:802.11n ht40 High Channel



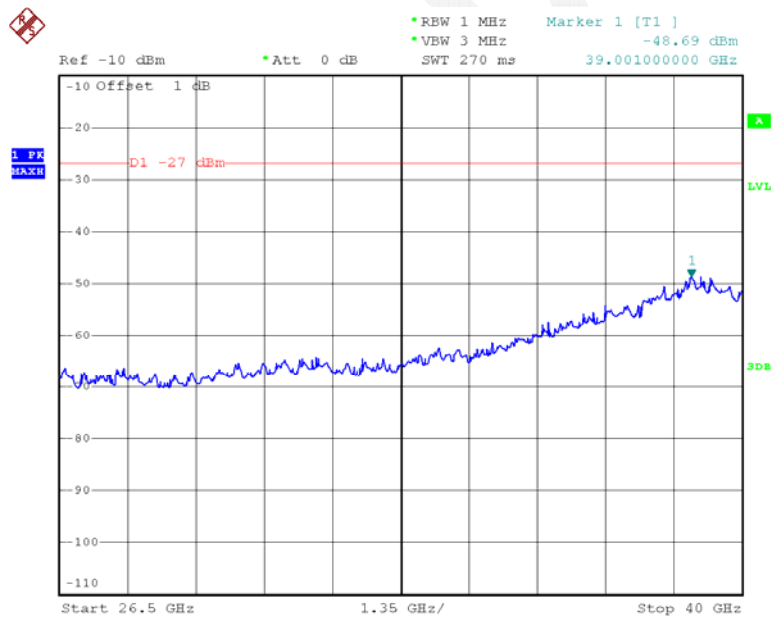
Date: 23.JUN.2015 12:49:20



Date: 22.JUN.2015 20:33:17

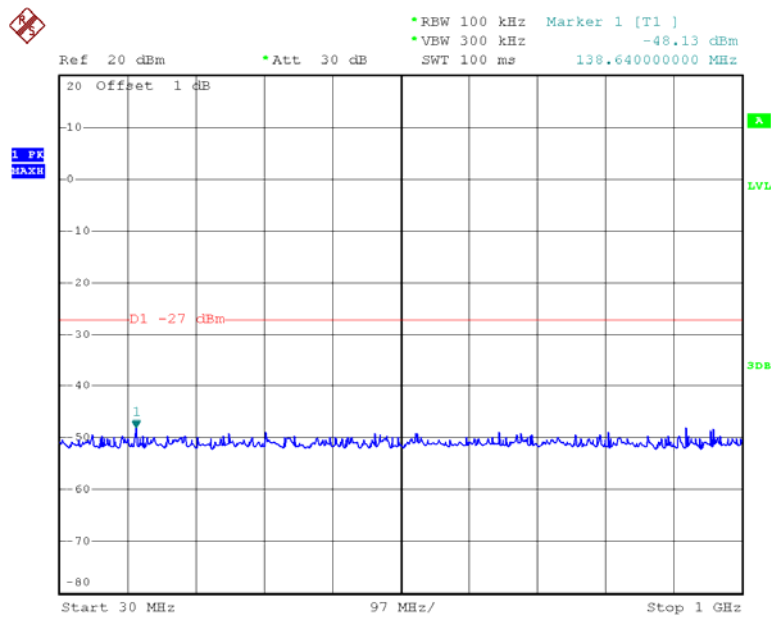


Date: 22.JUN.2015 21:24:18

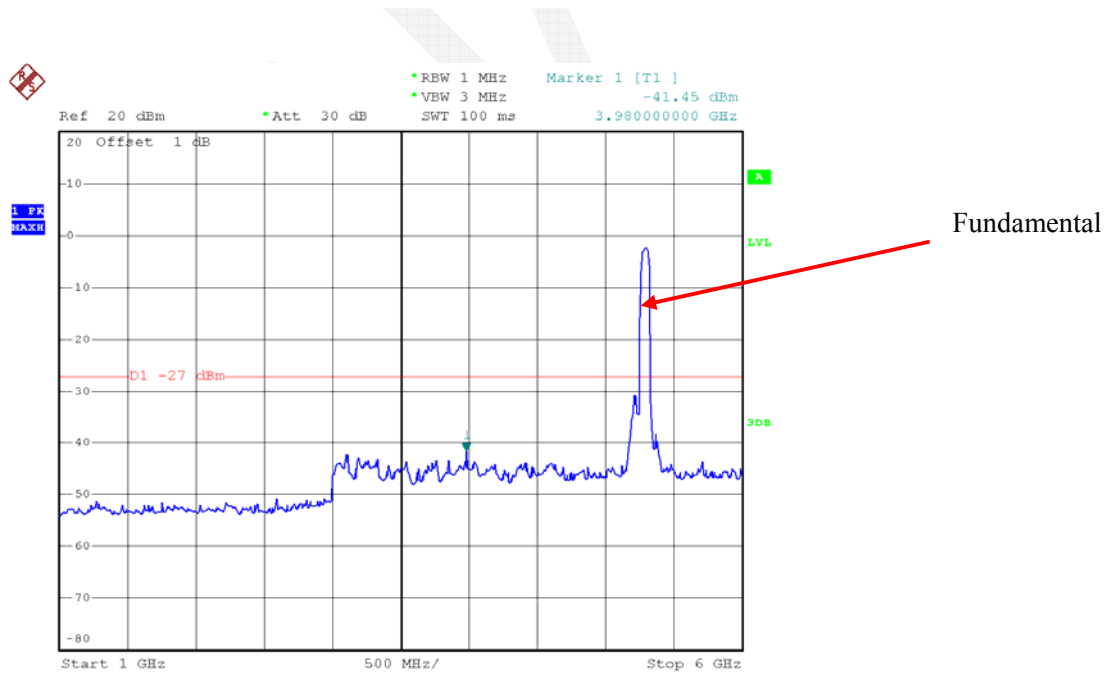


Date: 23.JUN.2015 13:12:45

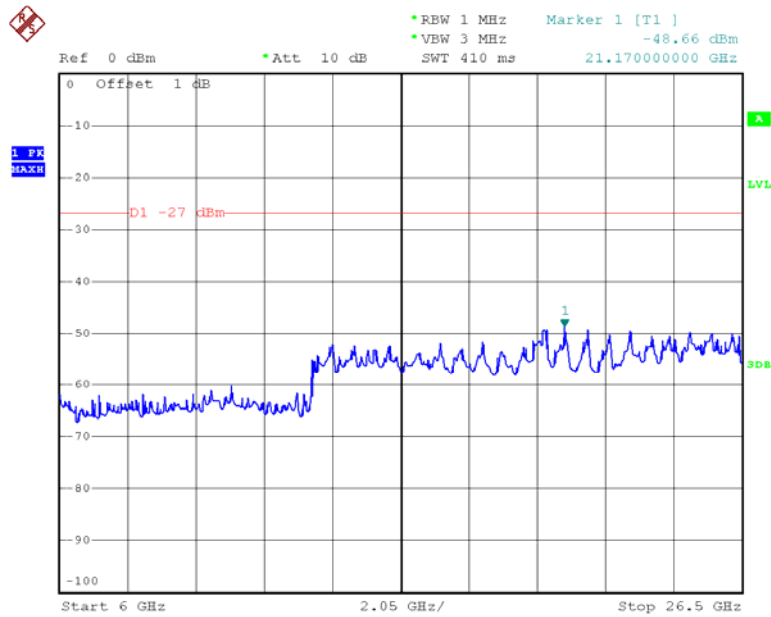
Chain 0:802.11n ac80 Middle Channel



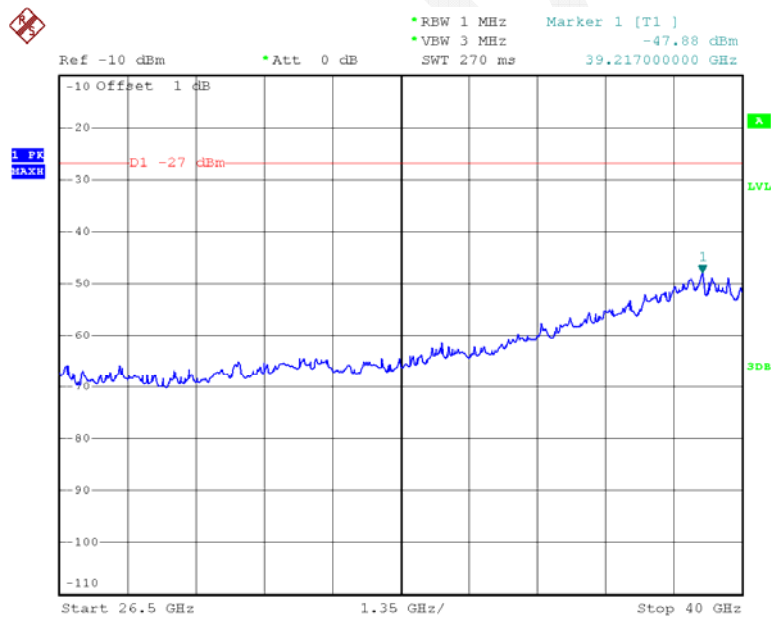
Date: 23.JUN.2015 12:51:07



Date: 22.JUN.2015 20:40:48

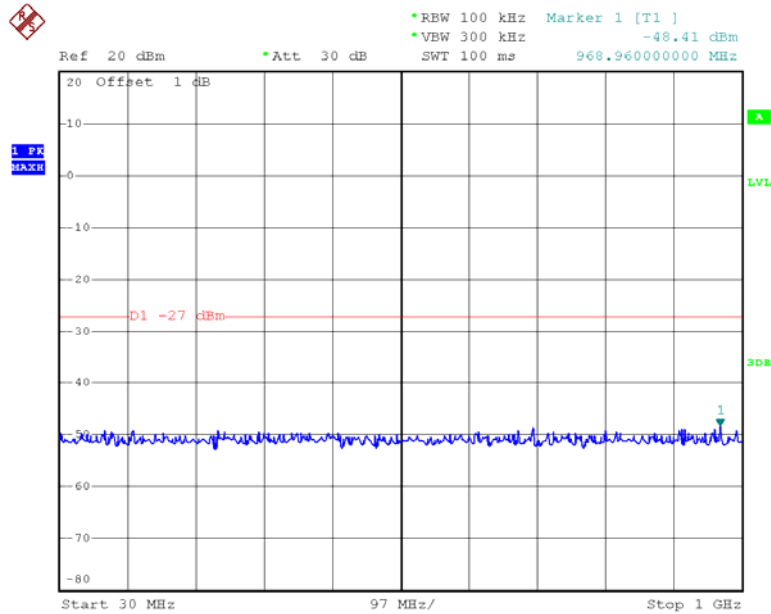


Date: 22.JUN.2015 21:29:35

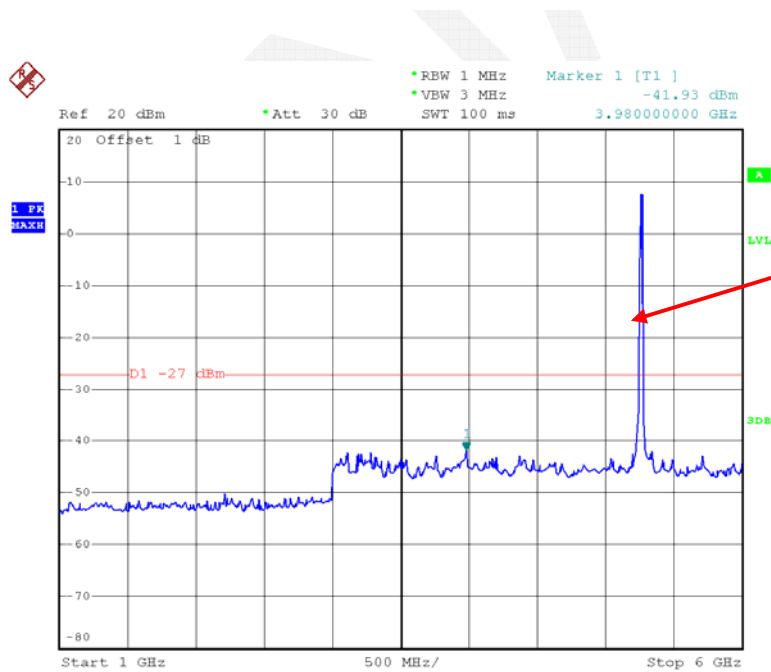


Date: 23.JUN.2015 13:16:45

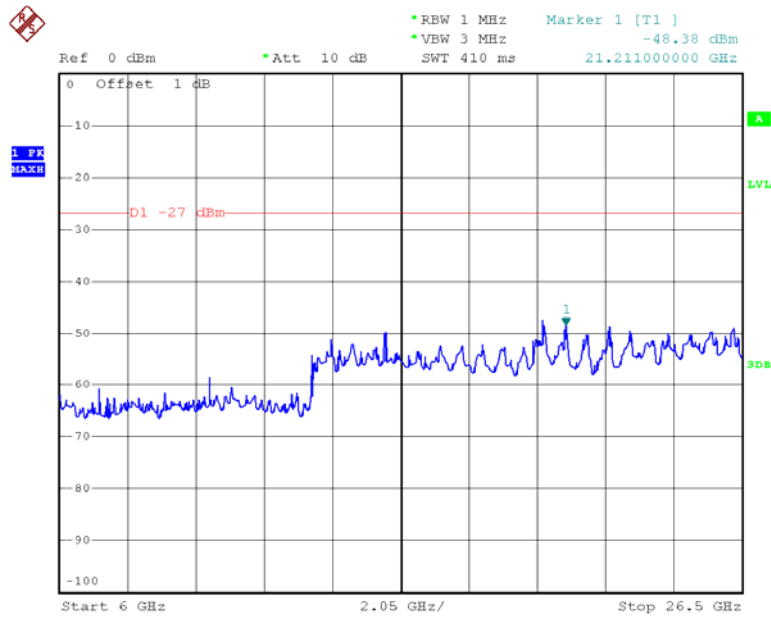
Chain 1:802.11a Low Channel 30MHz-1GHz



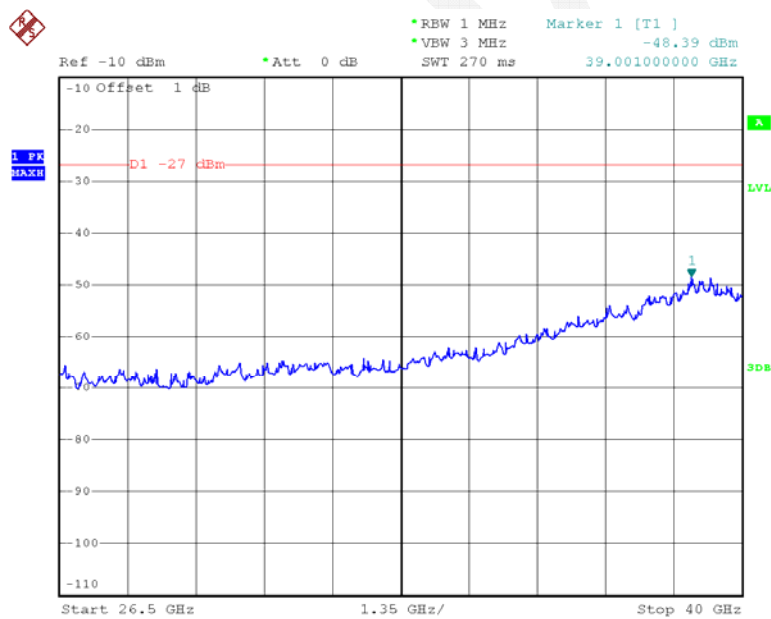
Date: 23.JUN.2015 12:51:51



Date: 22.JUN.2015 20:45:48

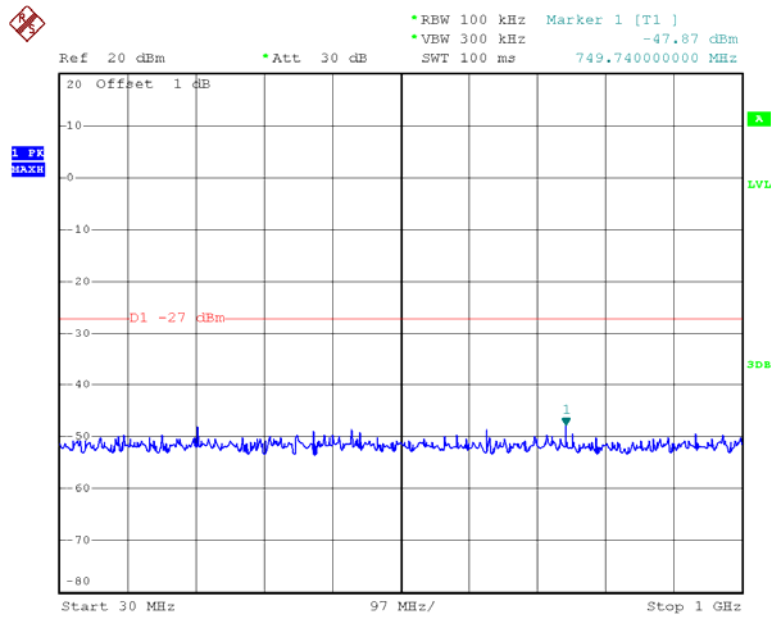


Date: 22.JUN.2015 21:04:13

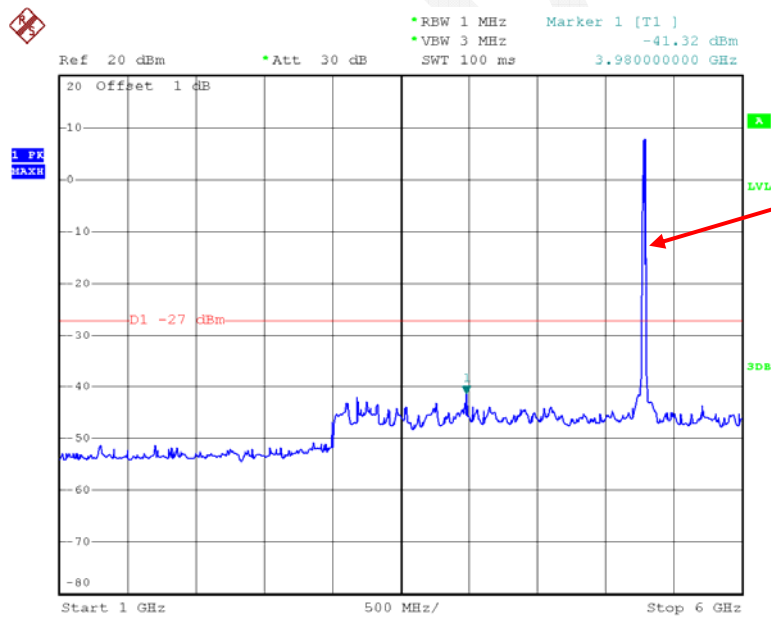


Date: 23.JUN.2015 13:02:42

Chain 1:802.11a Middle Channel

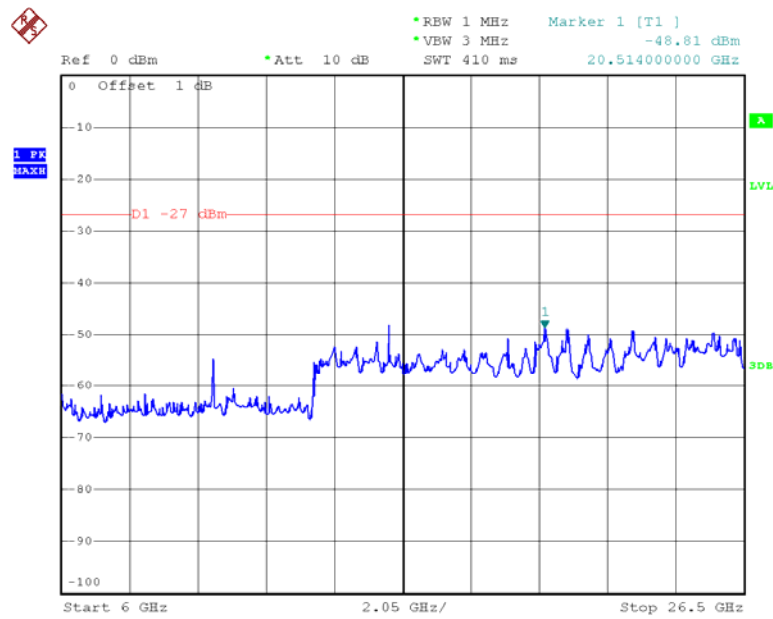


Date: 23.JUN.2015 12:51:56

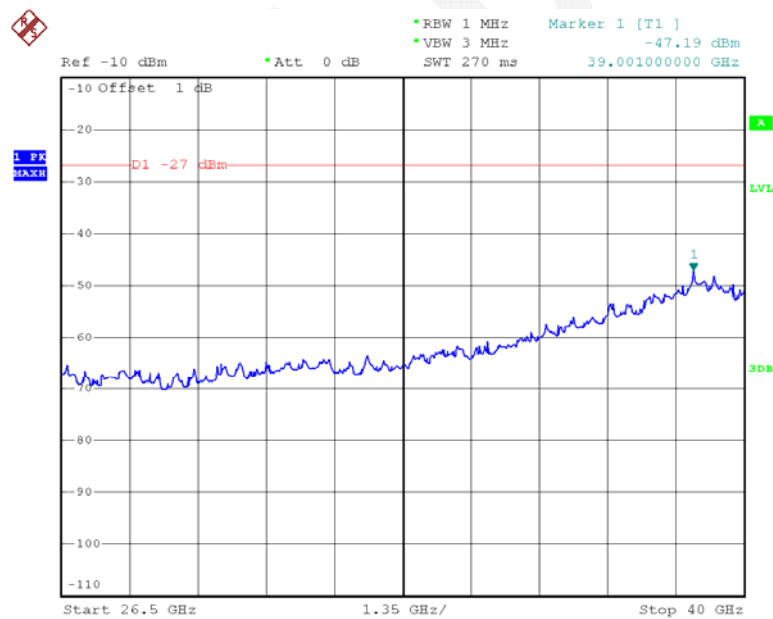


Fundamental

Date: 22.JUN.2015 20:46:01

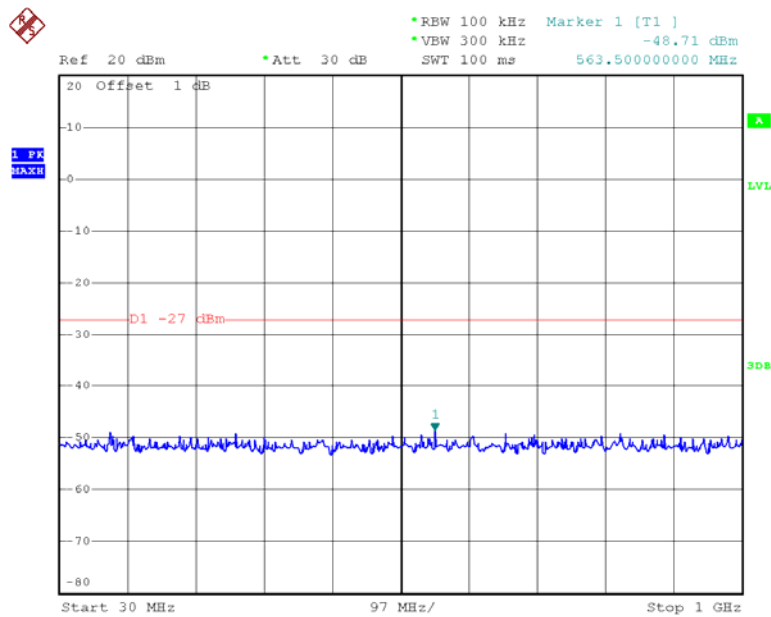


Date: 22.JUN.2015 21:04:37

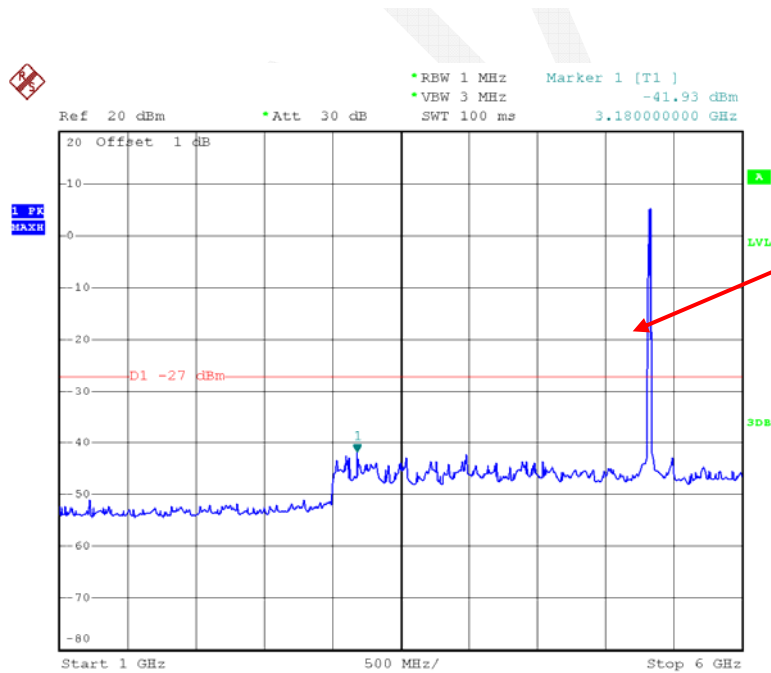


Date: 23.JUN.2015 13:03:17

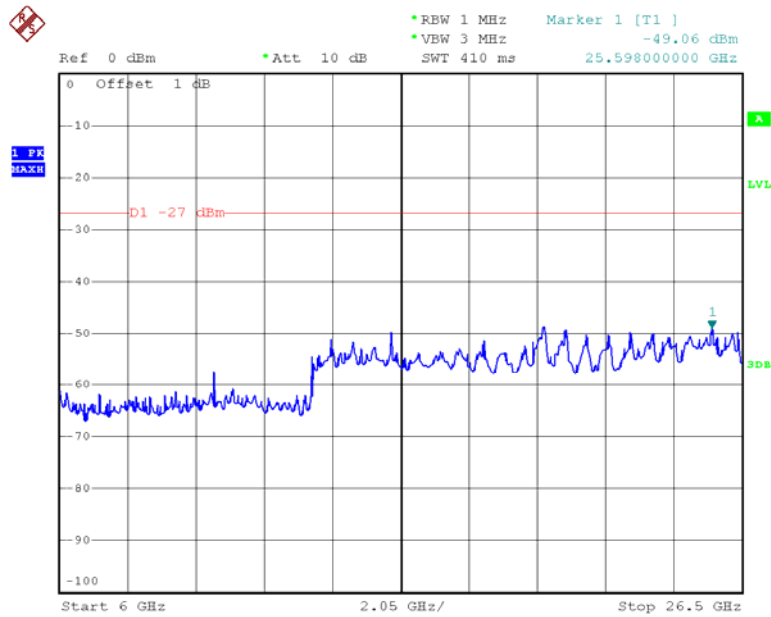
Chain 1:802.11a High Channel



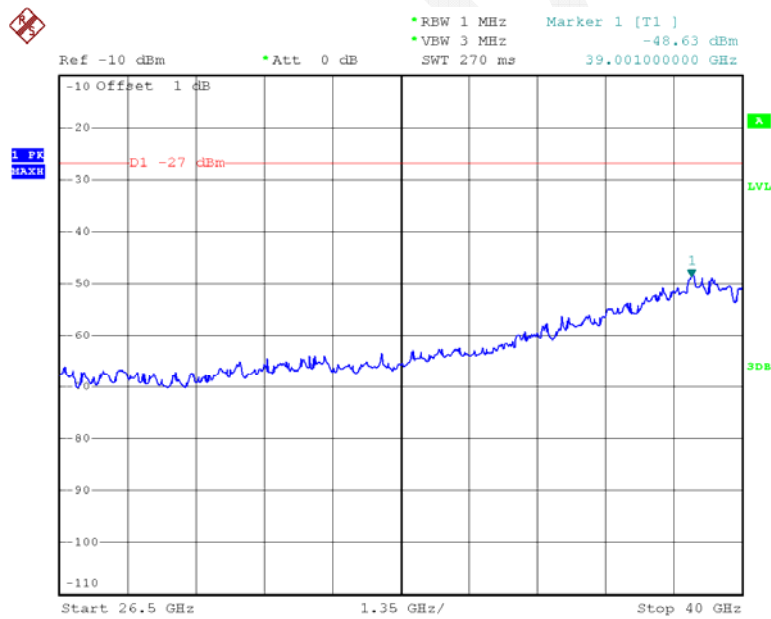
Date: 23.JUN.2015 12:52:02



Date: 22.JUN.2015 20:46:29

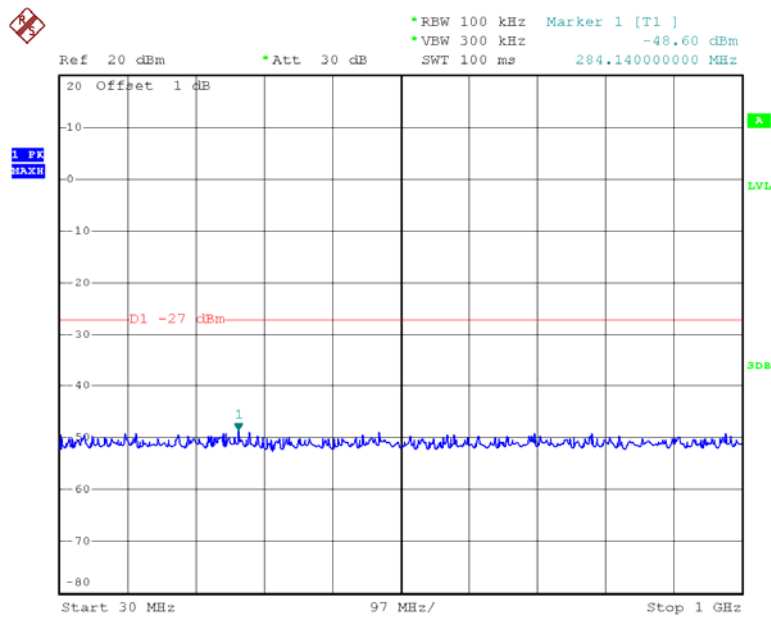


Date: 22.JUN.2015 21:05:09

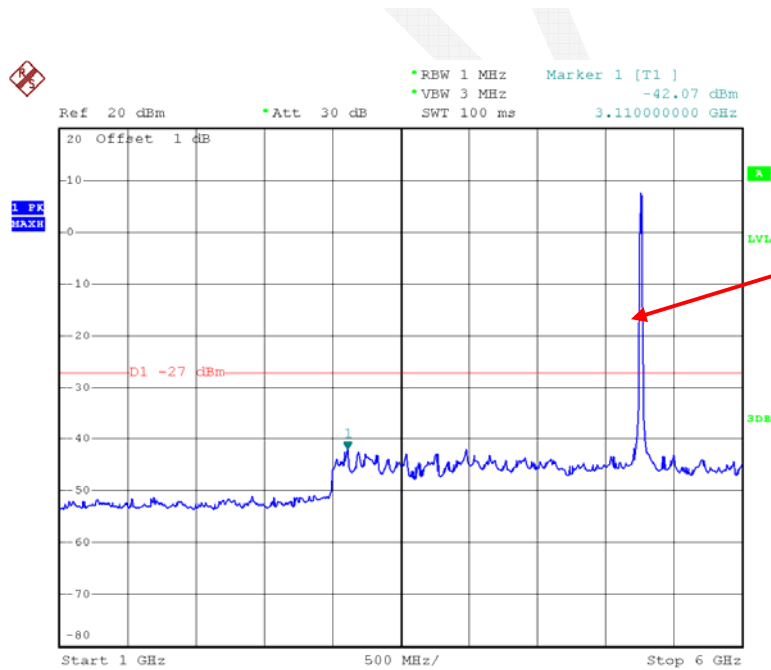


Date: 23.JUN.2015 13:03:38

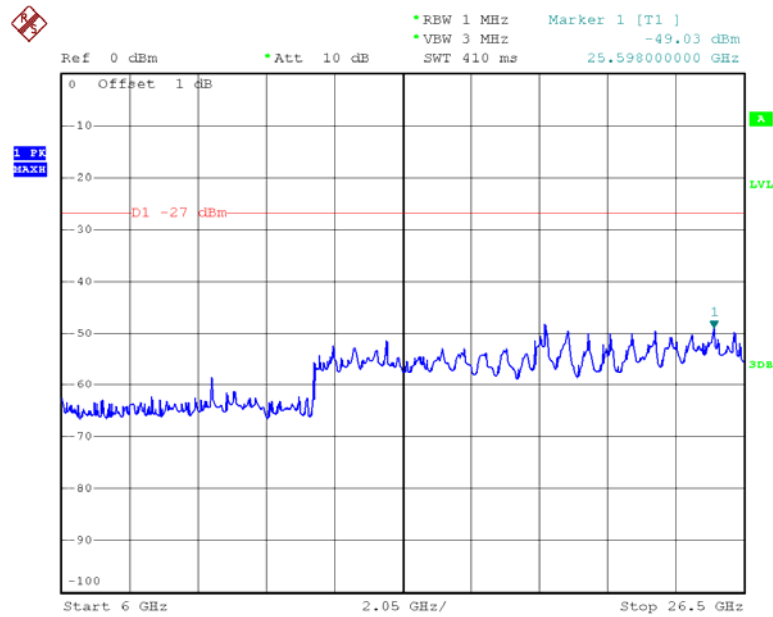
Chain 1:802.11n ht20 Low Channel



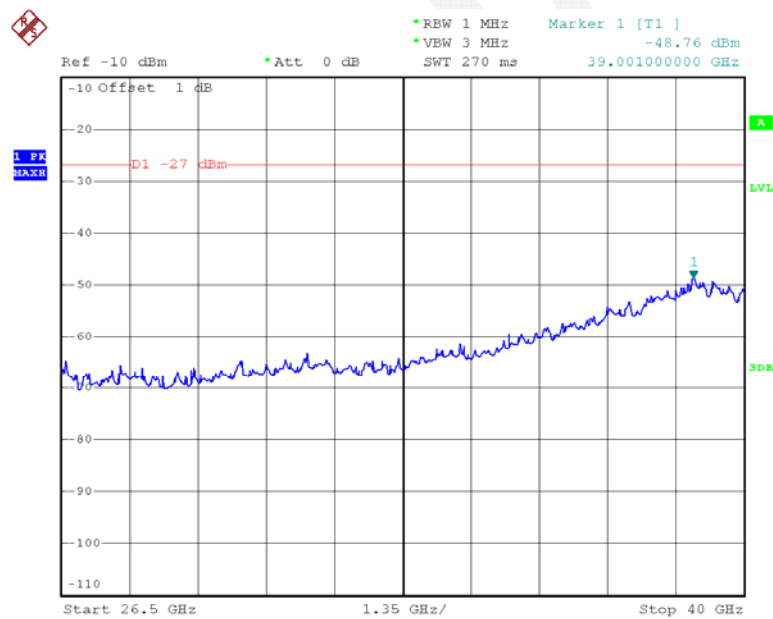
Date: 23.JUN.2015 12:53:06



Date: 22.JUN.2015 20:50:01

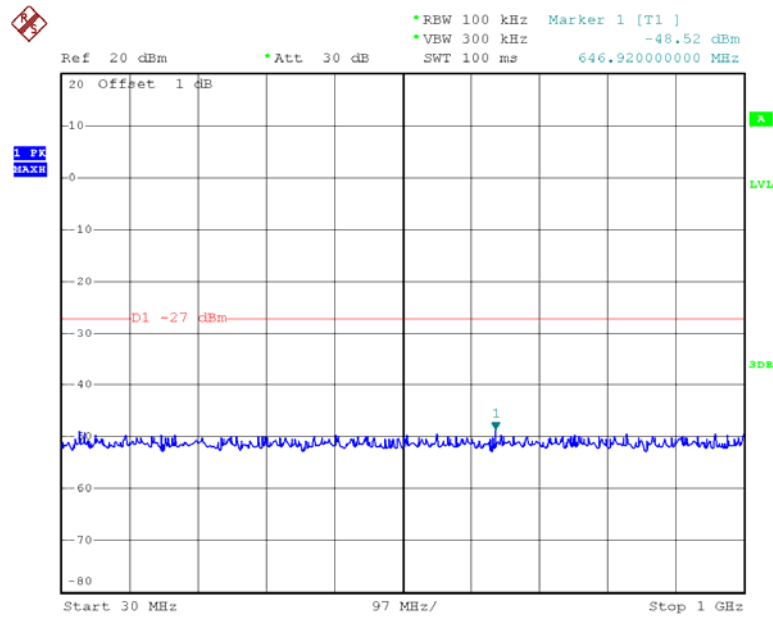


Date: 22.JUN.2015 21:13:32

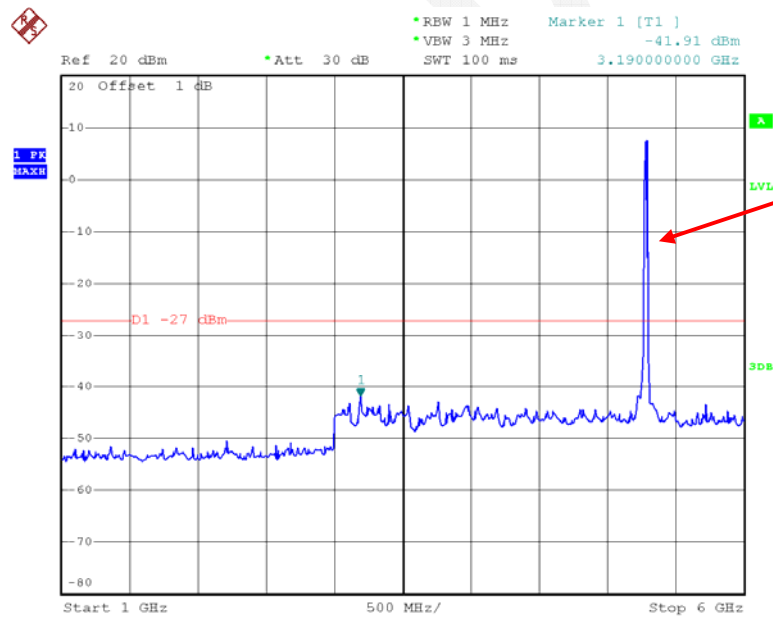


Date: 23.JUN.2015 13:07:01

Chain 1:802.11n ht20 Middle Channel

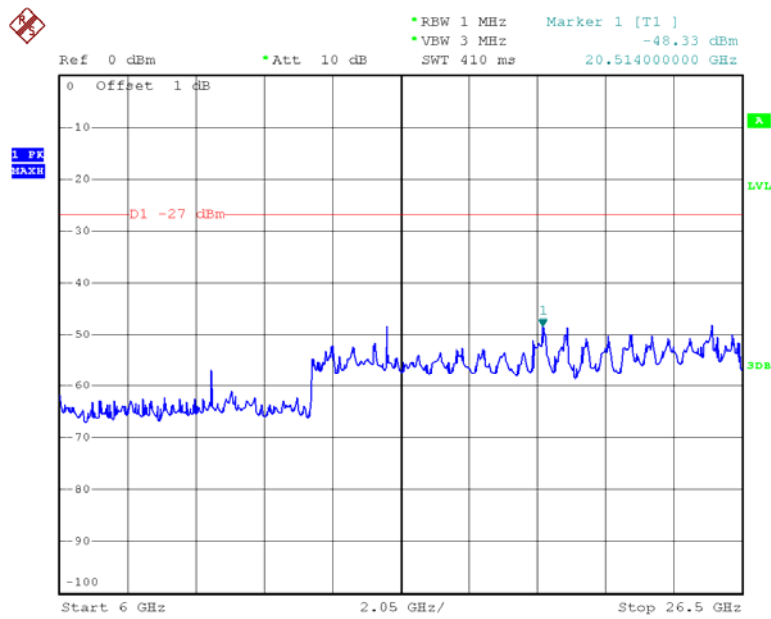


Date: 23.JUN.2015 12:53:14

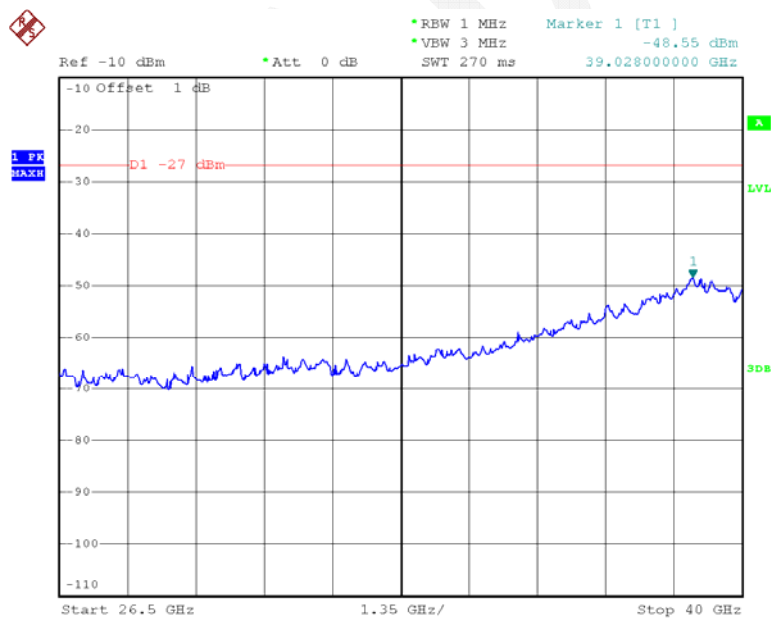


Fundamental

Date: 22.JUN.2015 20:50:14

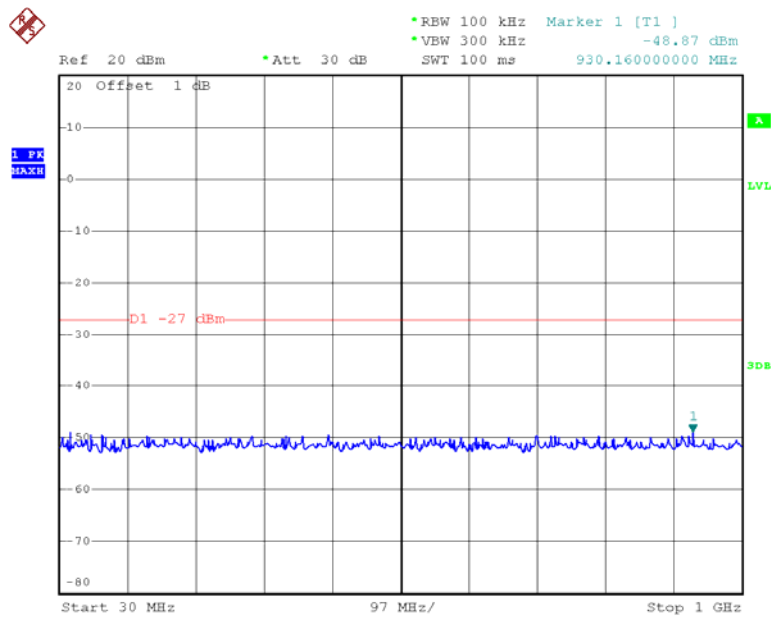


Date: 22.JUN.2015 21:15:02

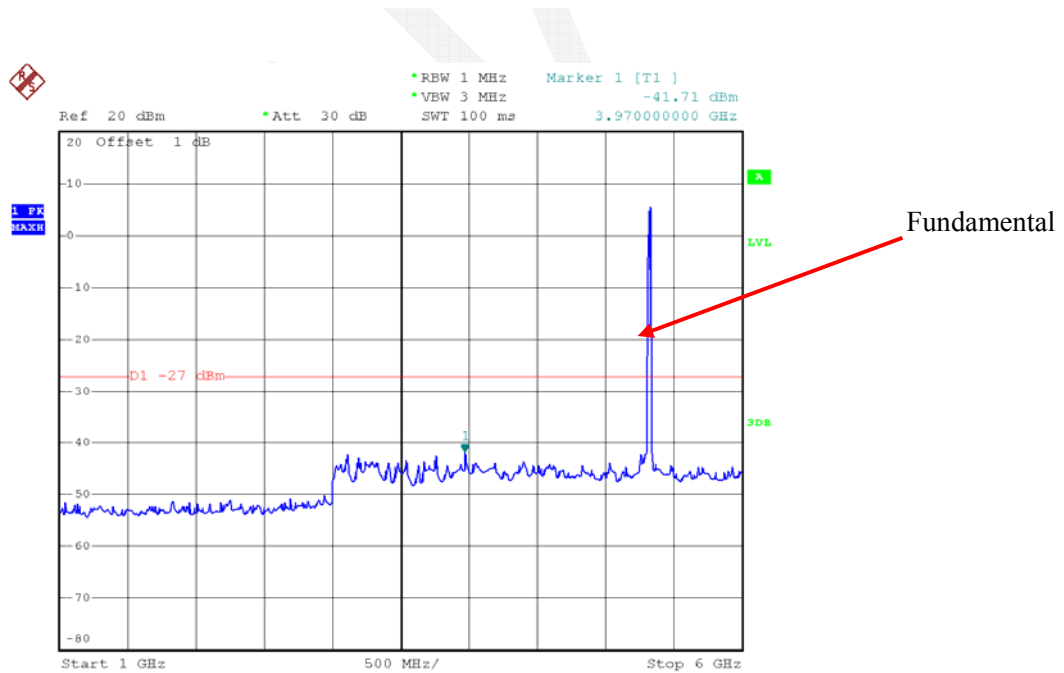


Date: 23.JUN.2015 13:07:24

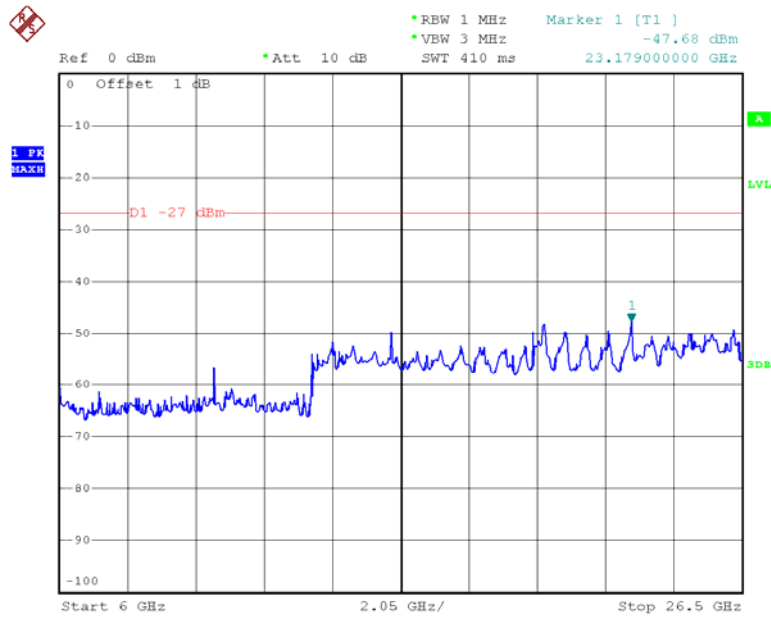
Chain 1:802.11n ht20 High Channel



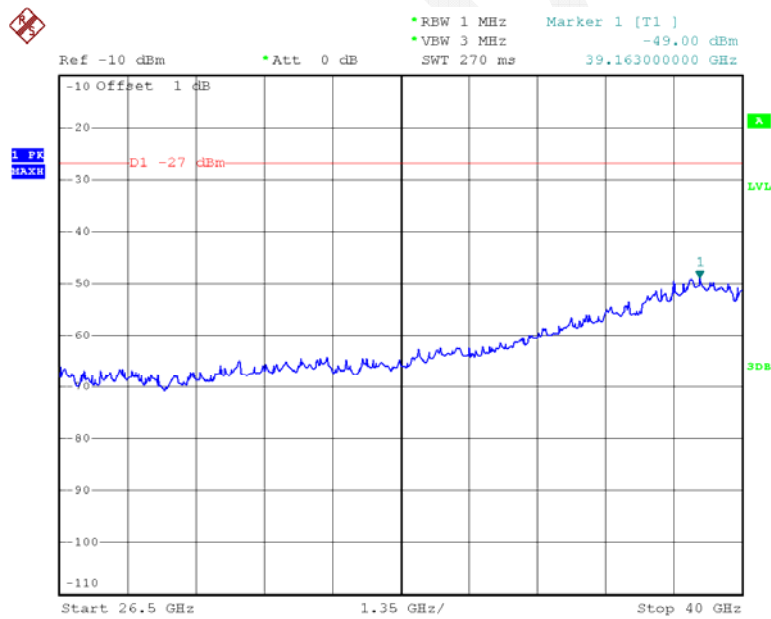
Date: 23.JUN.2015 12:53:22



Date: 22.JUN.2015 20:50:29

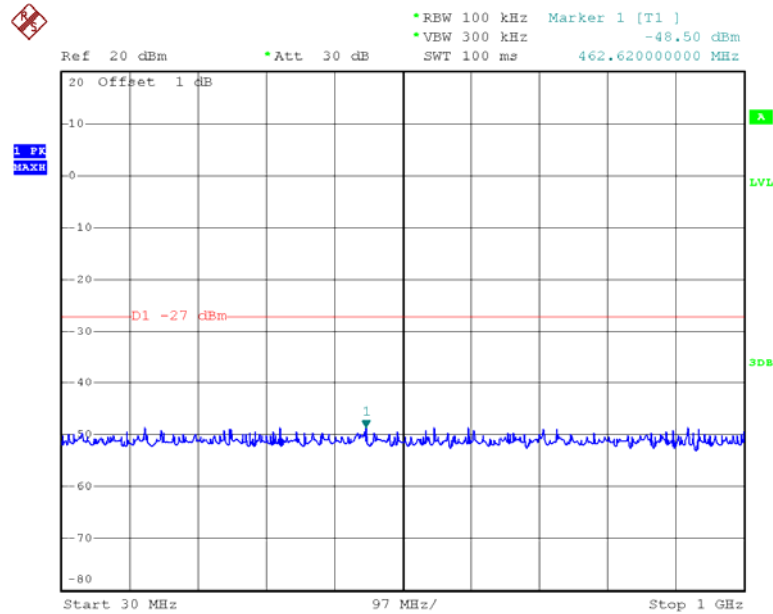


Date: 22.JUN.2015 21:15:37

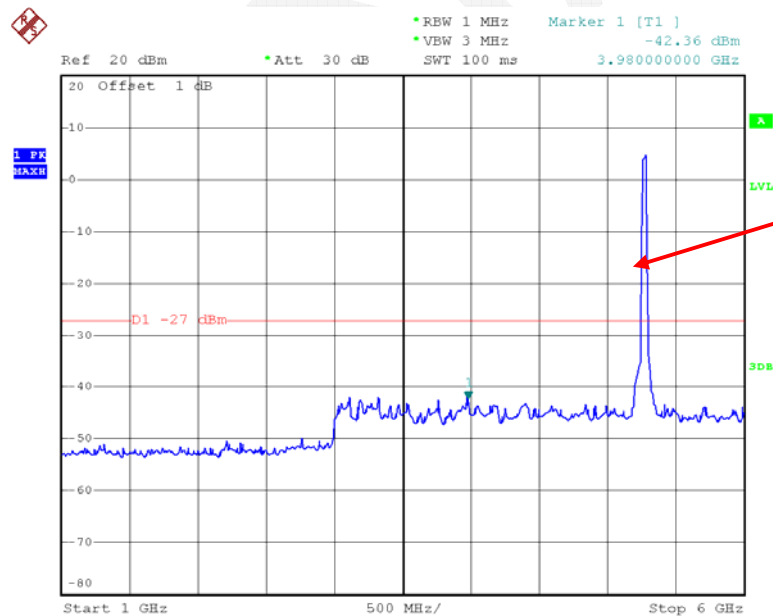


Date: 23.JUN.2015 13:07:42

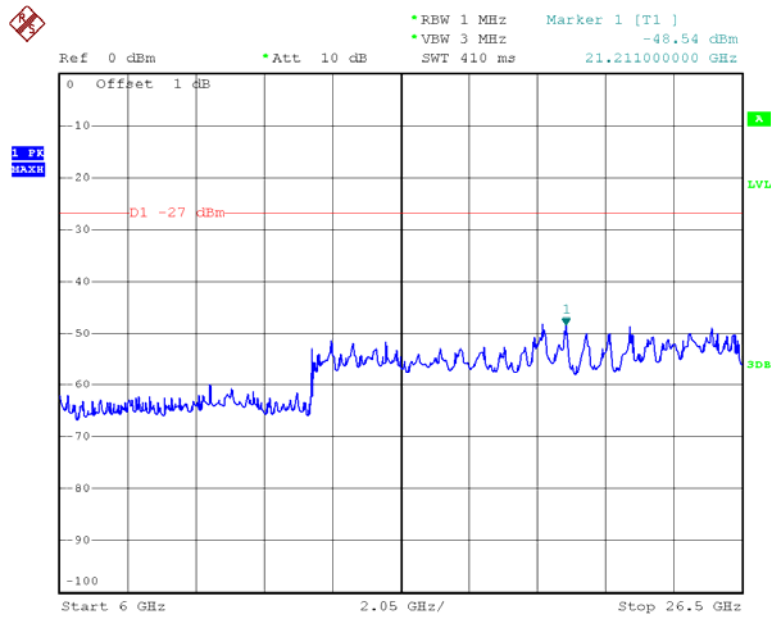
Chain 1:802.11n ht40 Low Channel



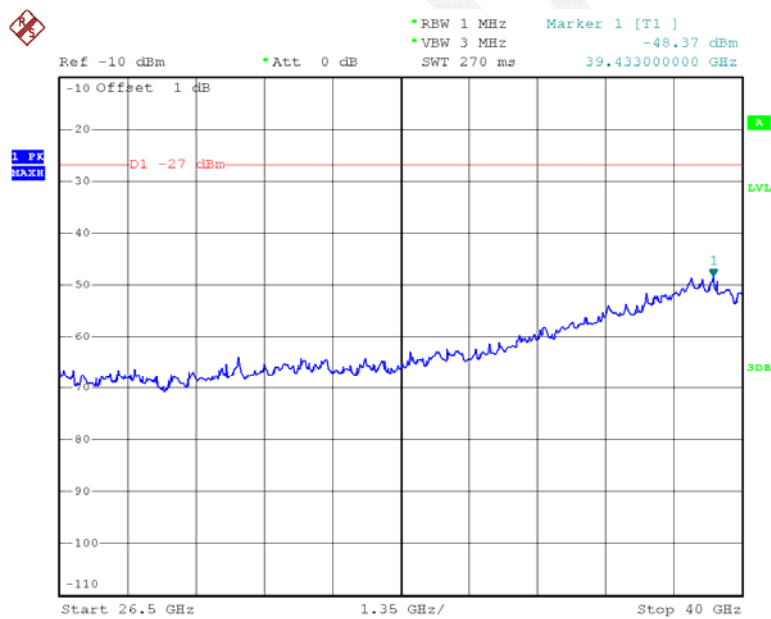
Date: 23.JUN.2015 12:55:49



Date: 22.JUN.2015 20:53:14

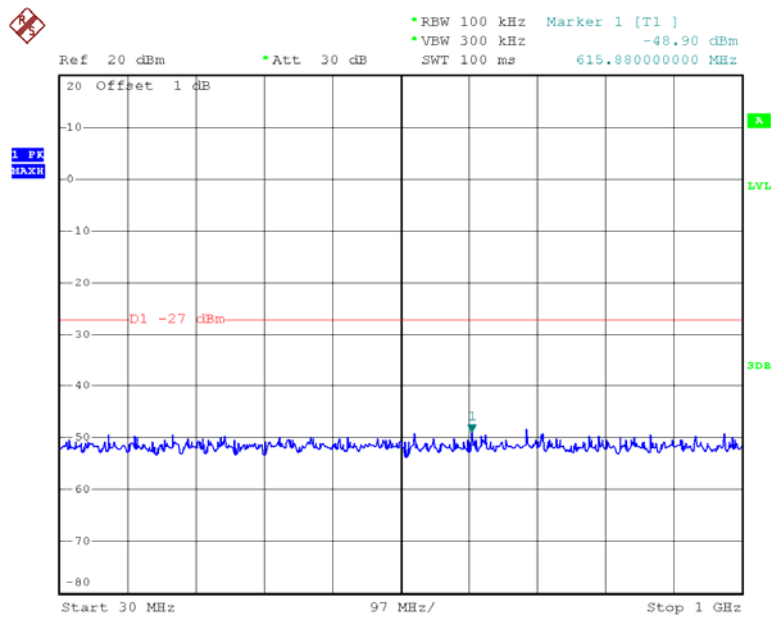


Date: 22.JUN.2015 21:24:00

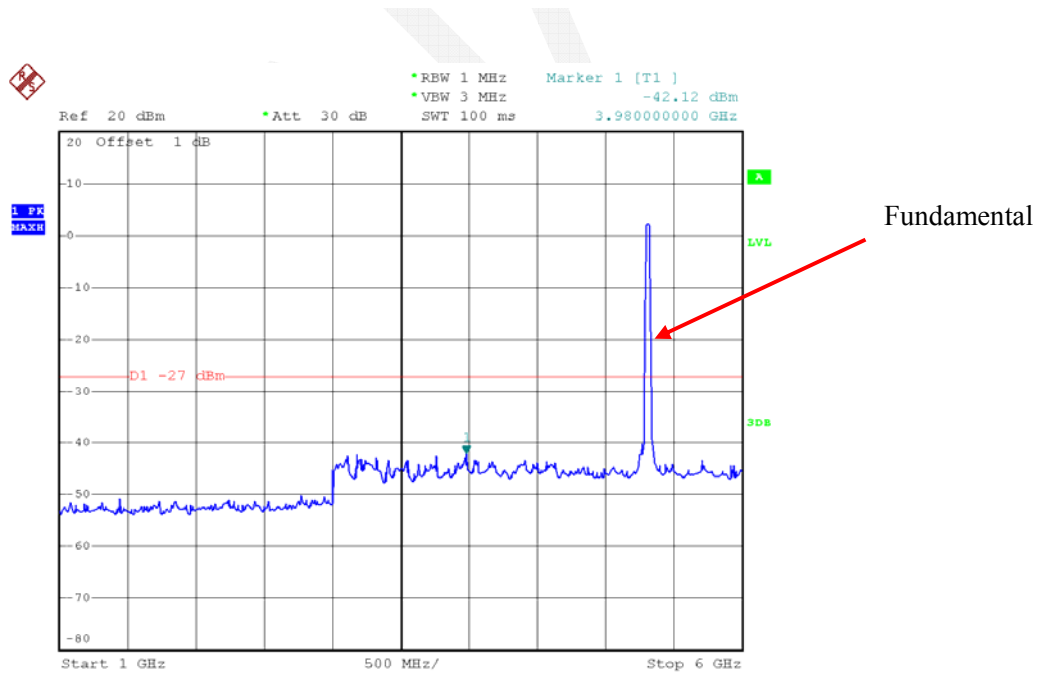


Date: 23.JUN.2015 13:12:37

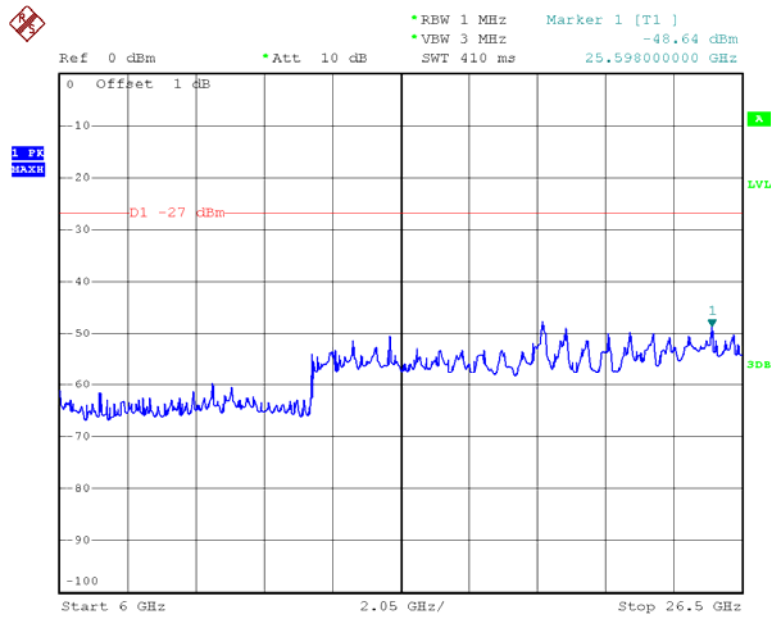
Chain 1:802.11n ht40 High Channel



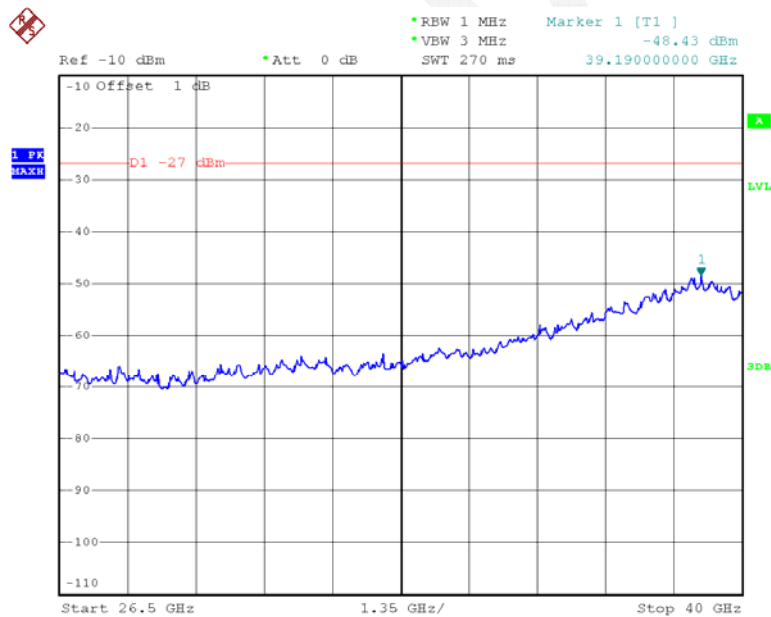
Date: 23.JUN.2015 12:55:54



Date: 22.JUN.2015 20:53:38

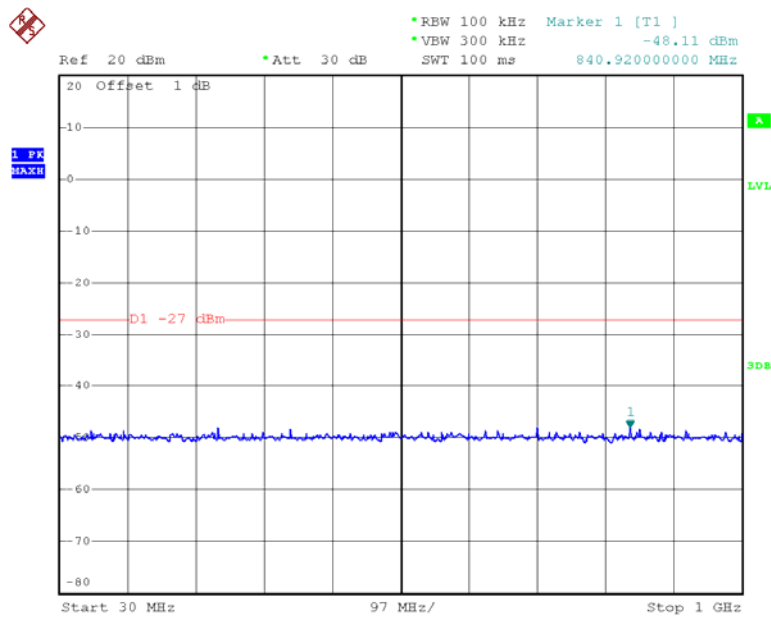


Date: 22.JUN.2015 21:24:24

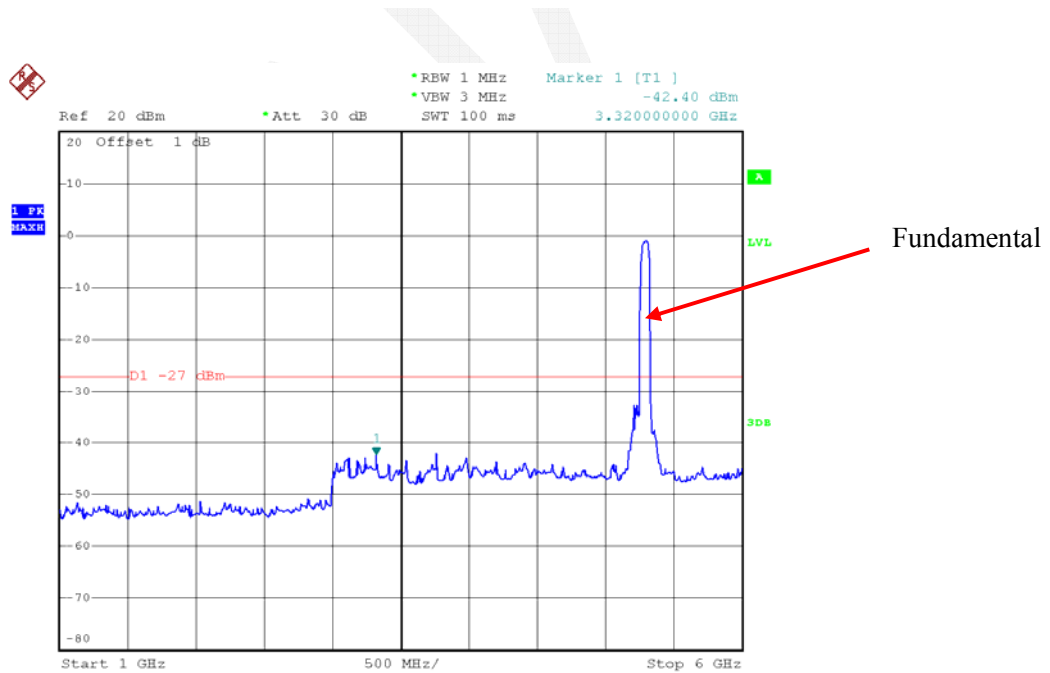


Date: 23.JUN.2015 13:12:54

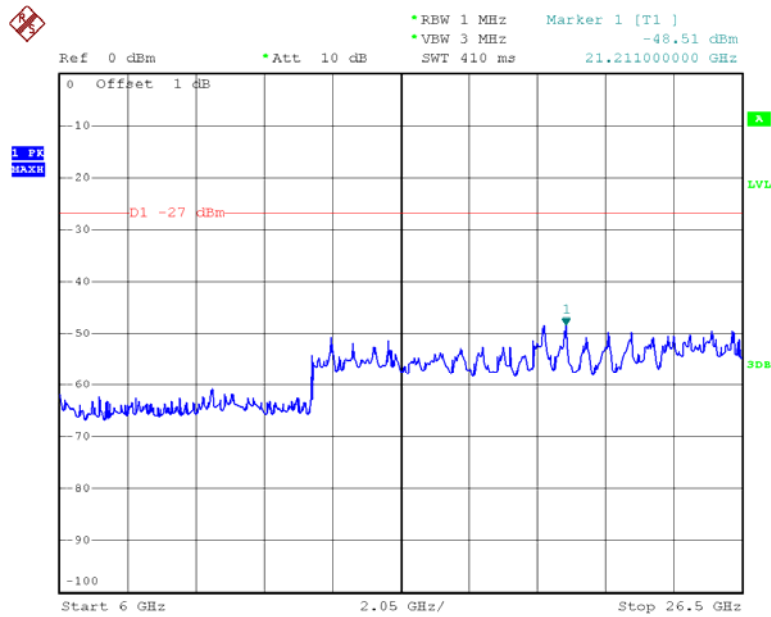
Chain 1:802.11n ac80 Middle Channel



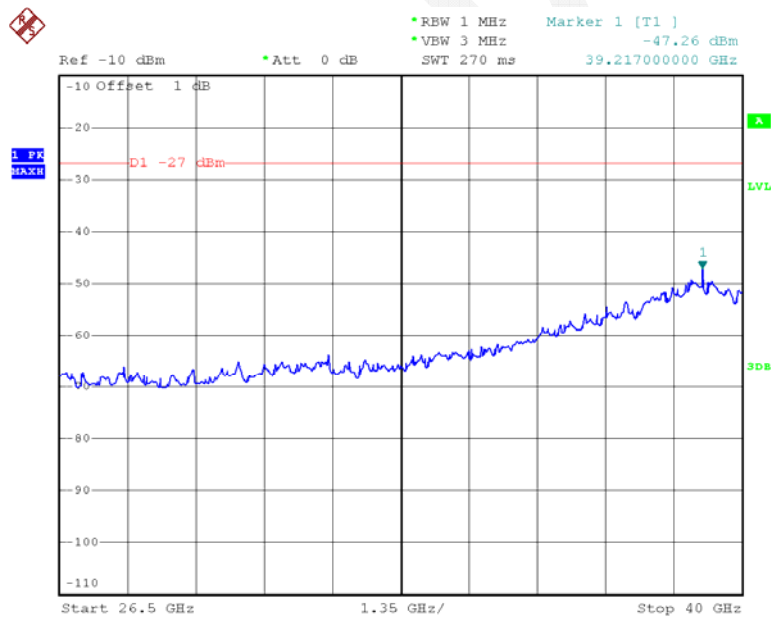
Date: 23.JUN.2015 12:57:32



Date: 22.JUN.2015 20:56:27



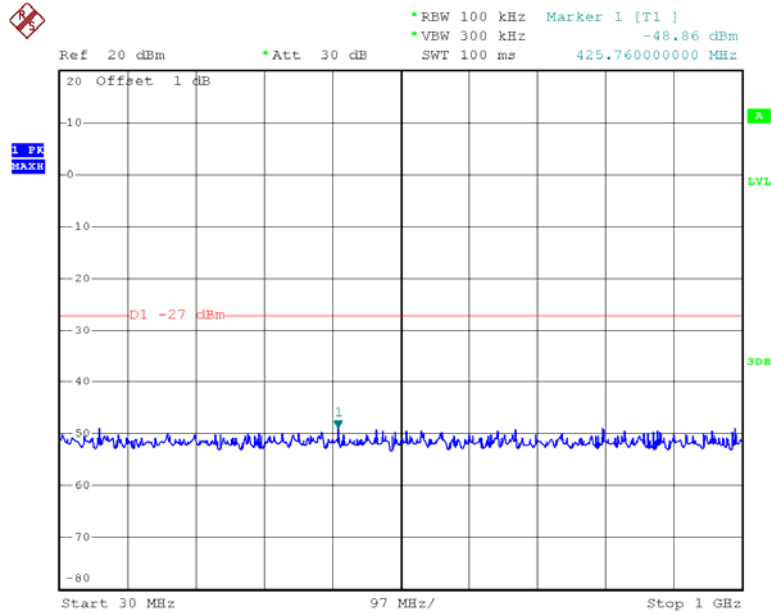
Date: 22.JUN.2015 21:29:42



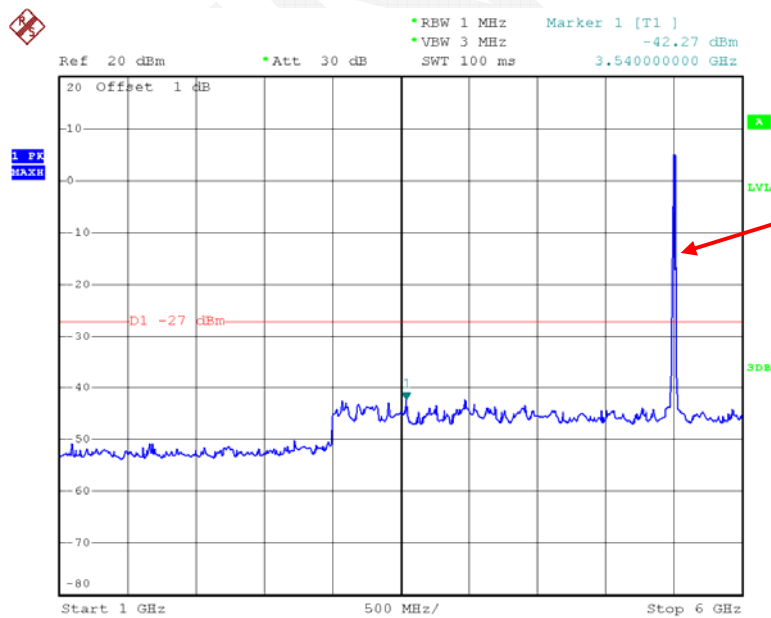
Date: 23.JUN.2015 13:16:51

5470-5725MHz:

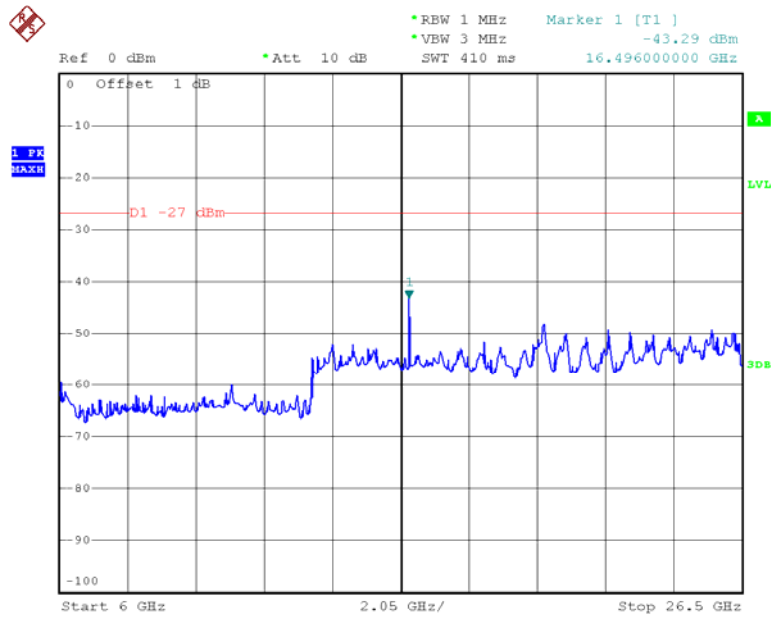
Chain 0:802.11a Low Channel



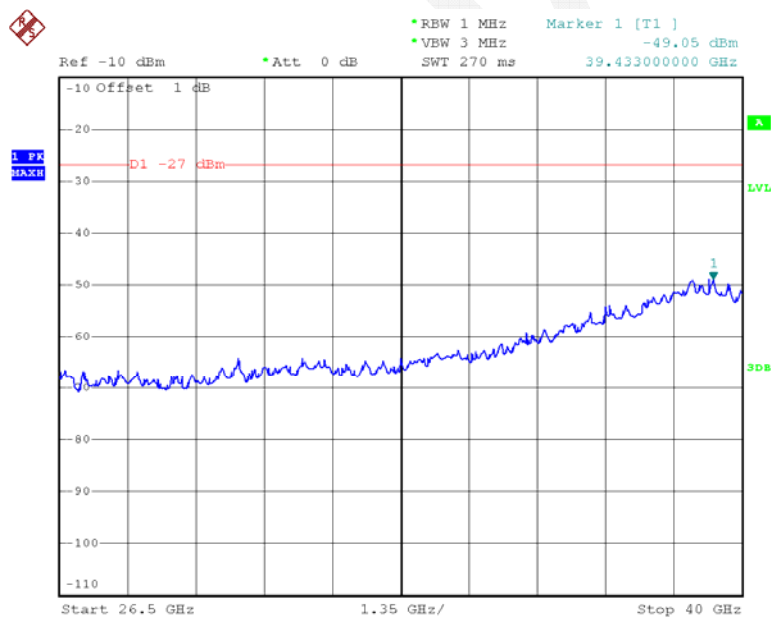
Date: 23.JUN.2015 12:43:17



Date: 22.JUN.2015 20:12:30

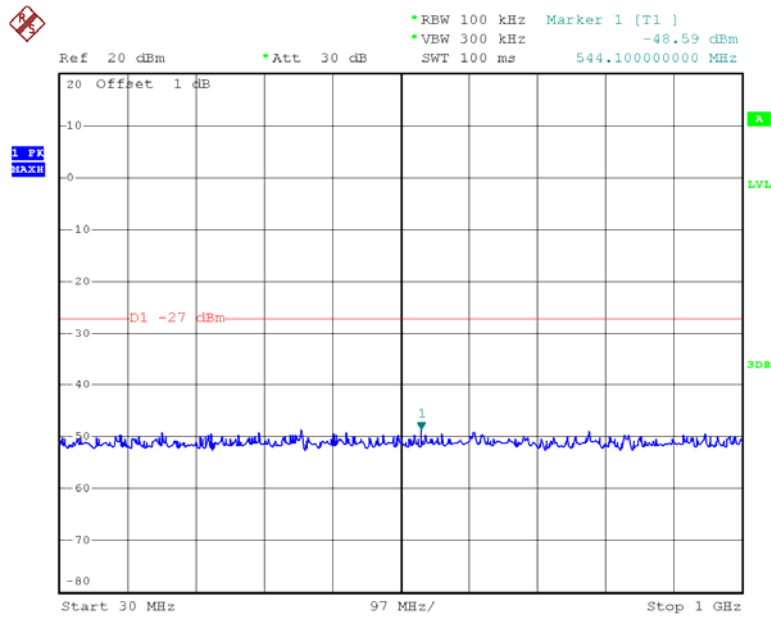


Date: 22.JUN.2015 21:05:20

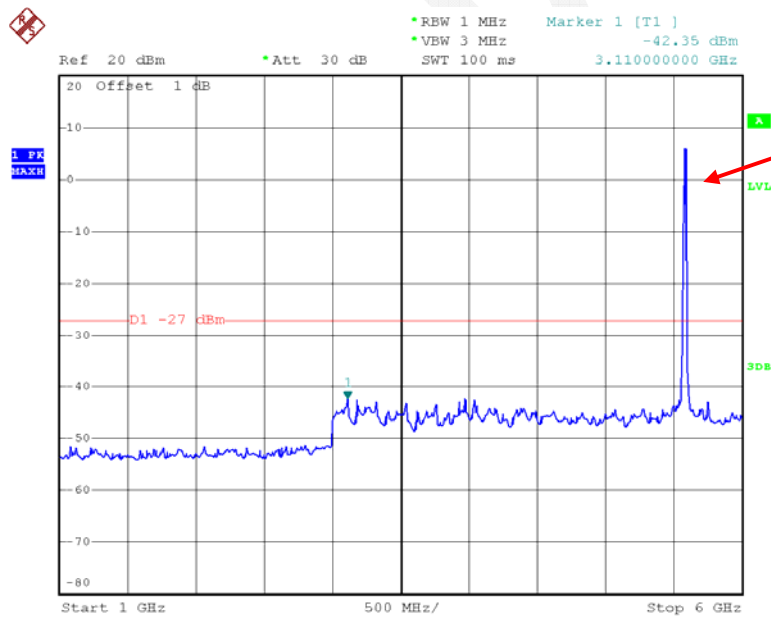


Date: 23.JUN.2015 13:03:44

Chain 0:802.11a Middle Channel

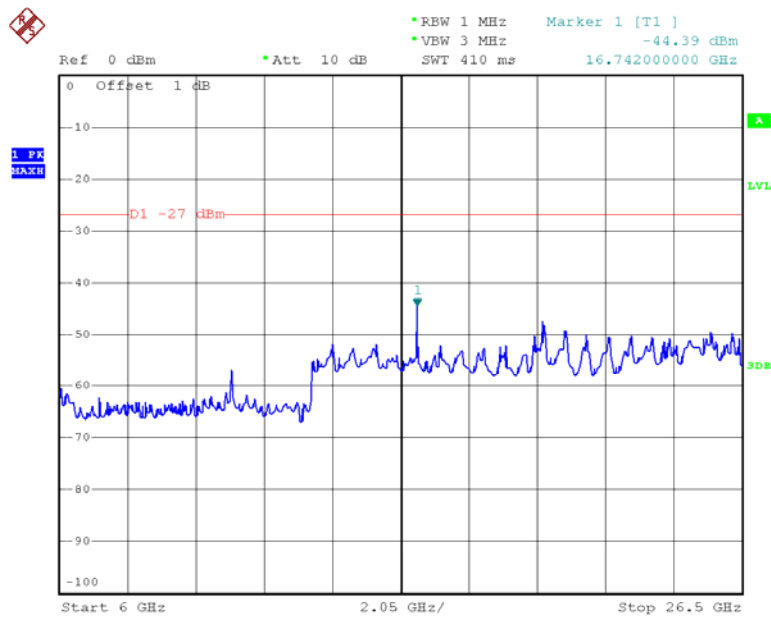


Date: 23.JUN.2015 12:43:26

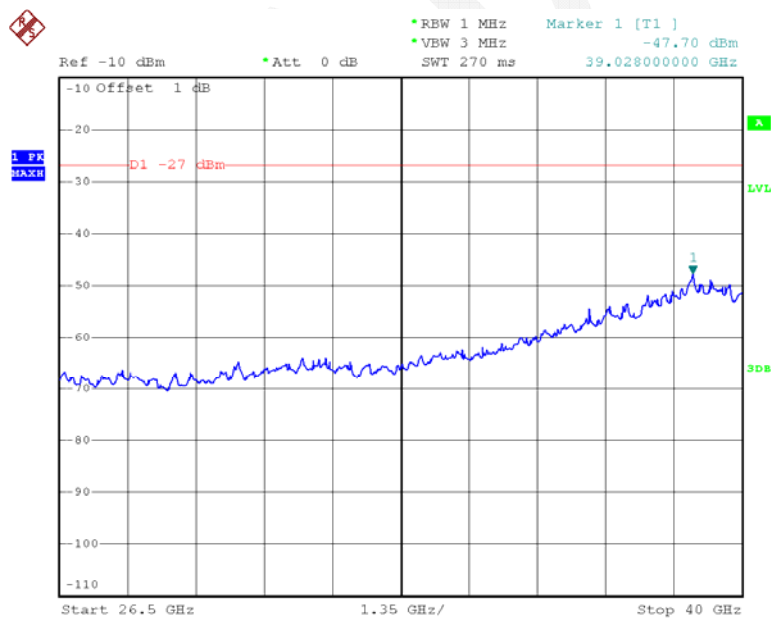


Fundamental

Date: 22.JUN.2015 20:12:52

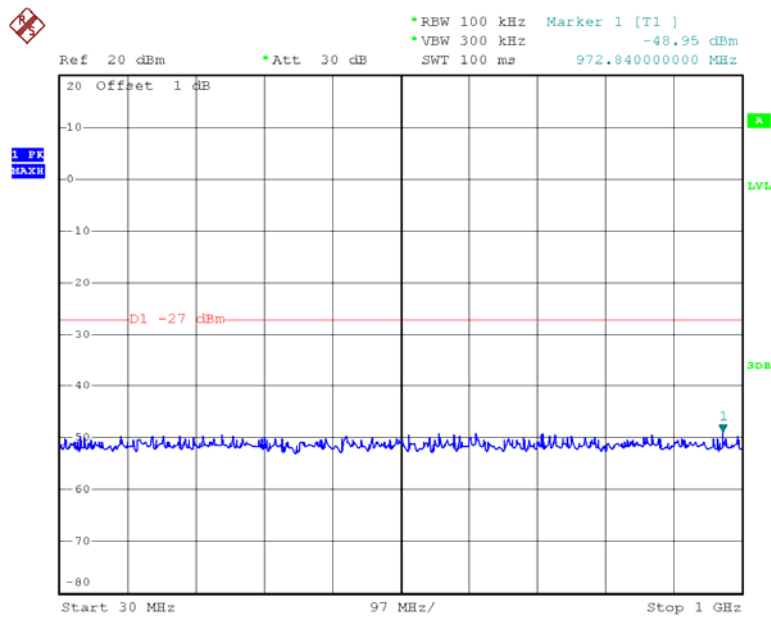


Date: 22.JUN.2015 21:07:24

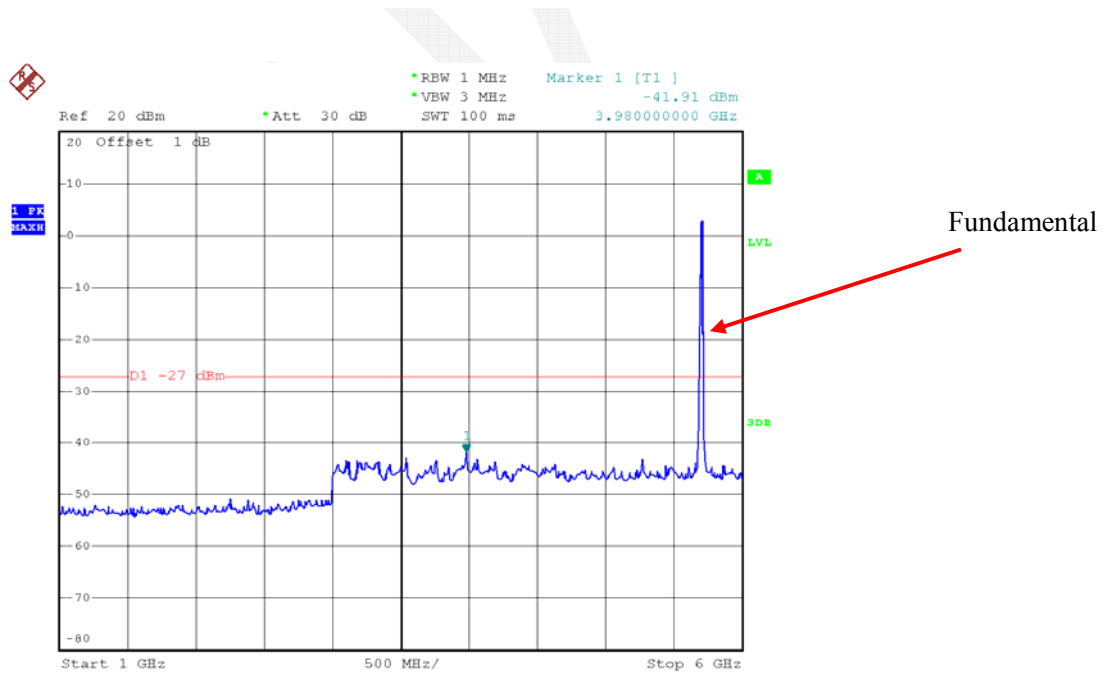


Date: 23.JUN.2015 13:04:00

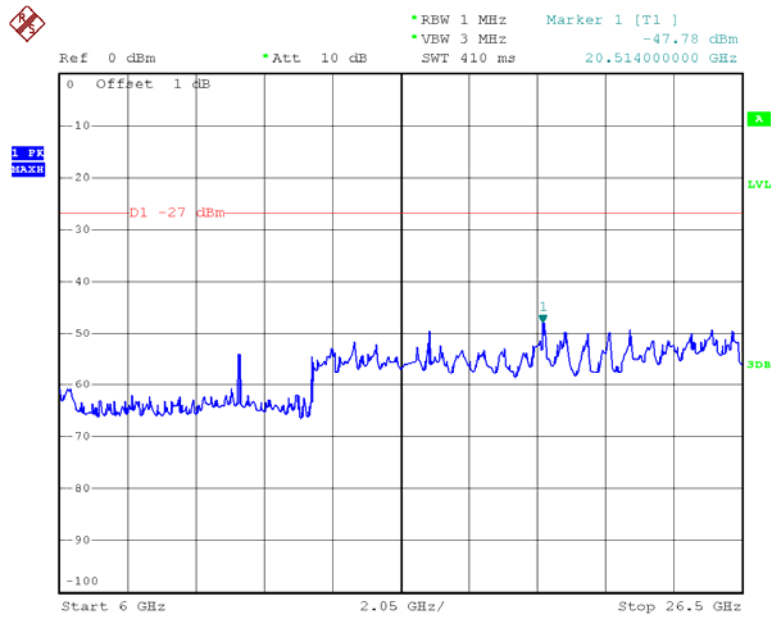
Chain 0:802.11a High Channel



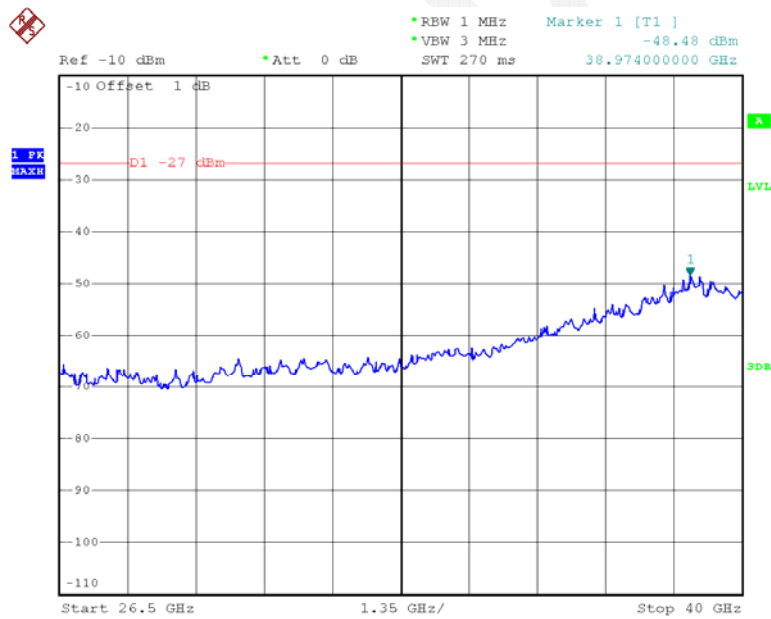
Date: 23.JUN.2015 12:45:03



Date: 22.JUN.2015 20:13:11

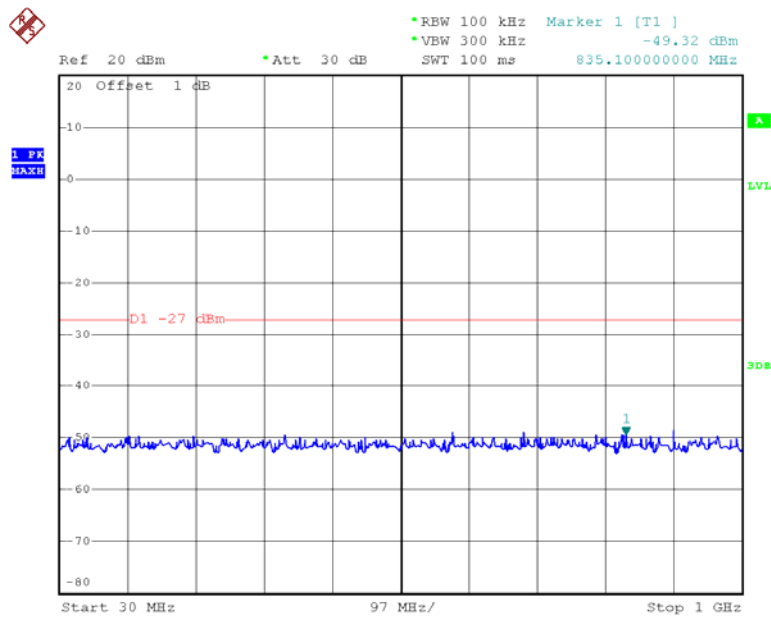


Date: 22.JUN.2015 21:08:29

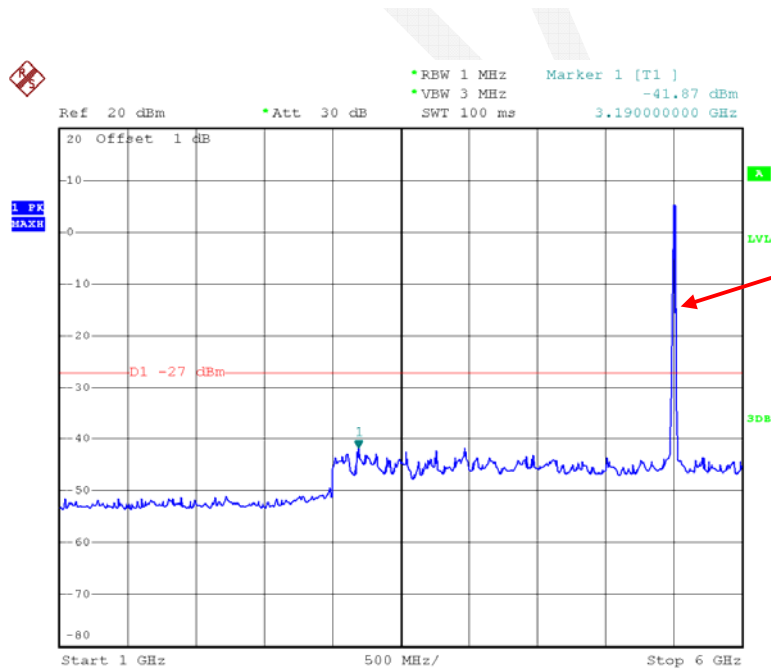


Date: 23.JUN.2015 13:04:14

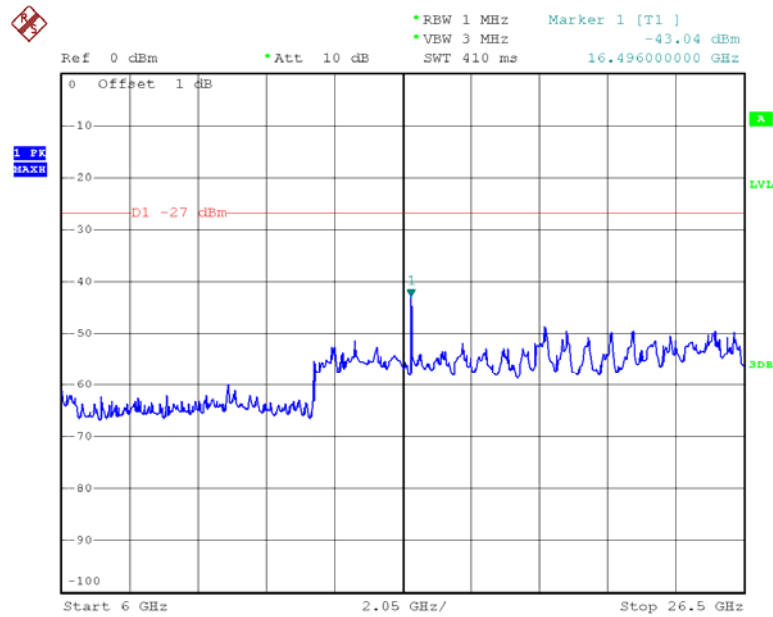
Chain 0:802.11n ht20 Low Channel



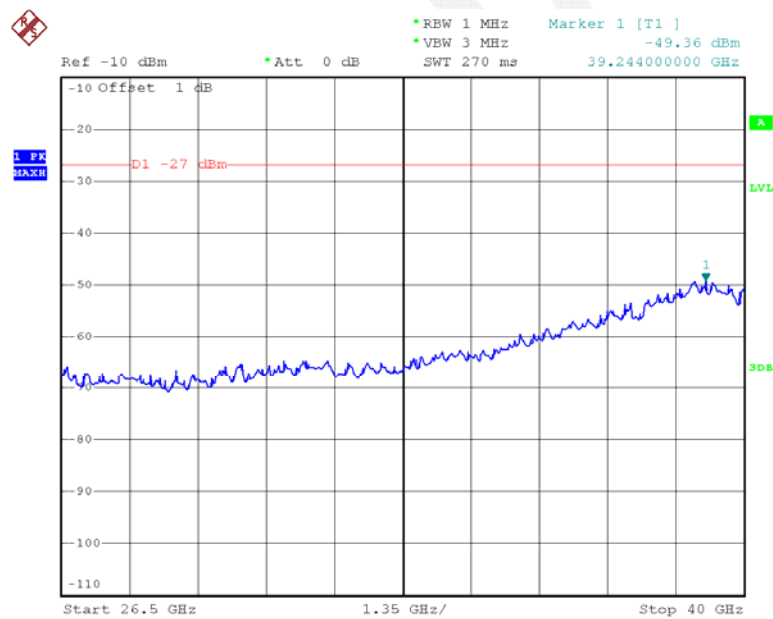
Date: 23.JUN.2015 12:46:59



Date: 22.JUN.2015 20:28:40

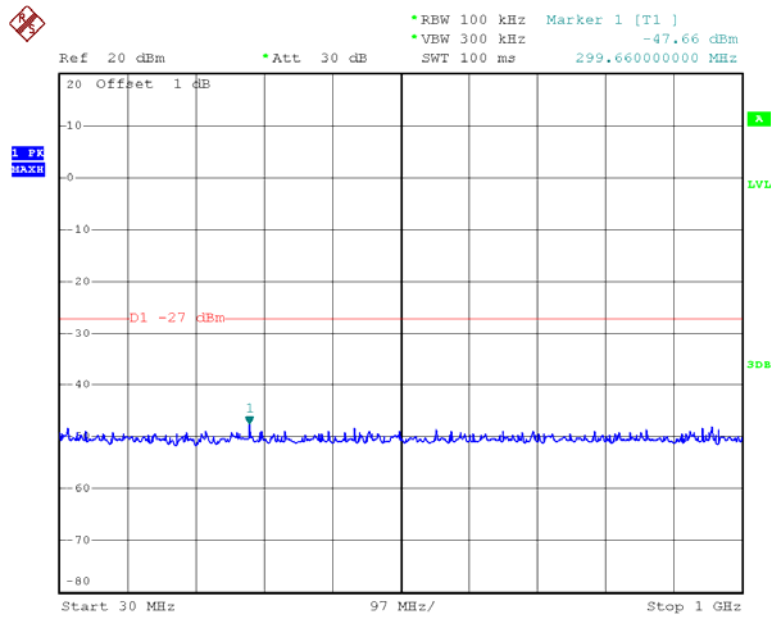


Date: 22.JUN.2015 21:16:04

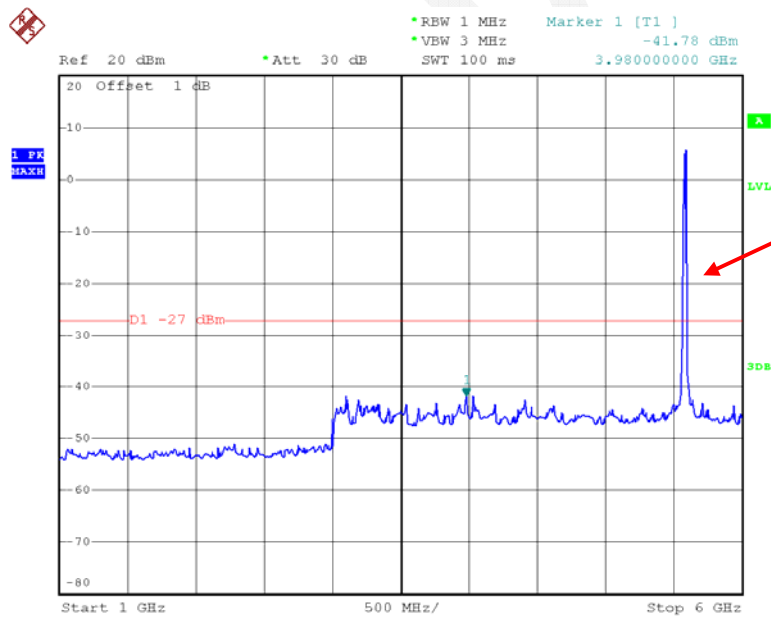


Date: 23.JUN.2015 13:08:02

Chain 0:802.11n ht20 Middle Channel

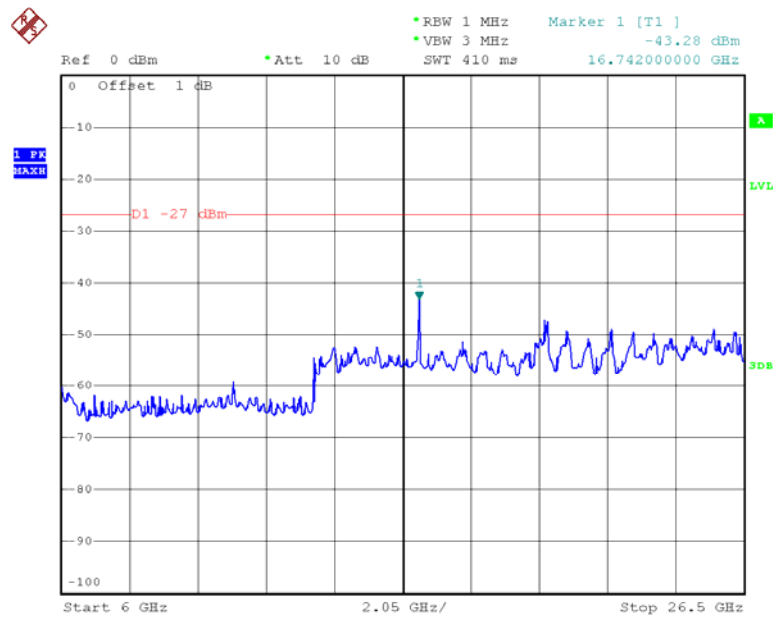


Date: 23.JUN.2015 12:47:30

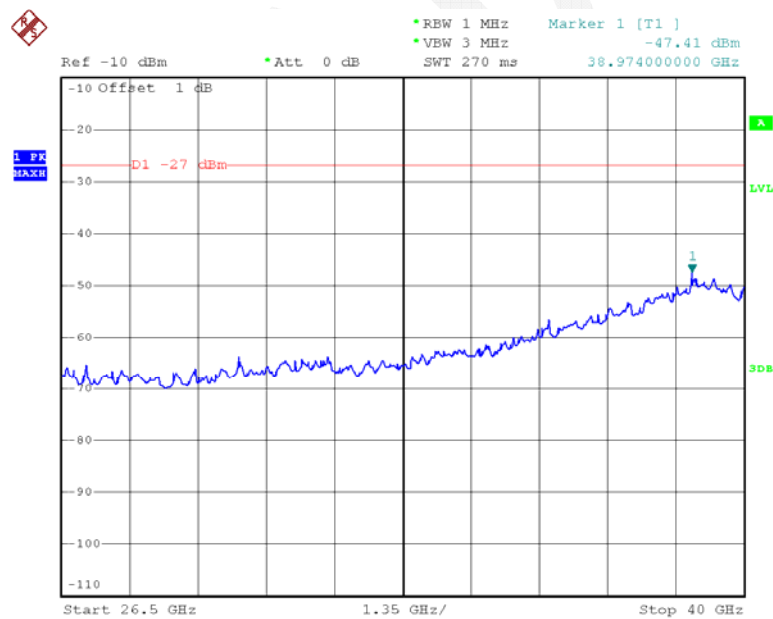


Fundamental

Date: 22.JUN.2015 20:29:01

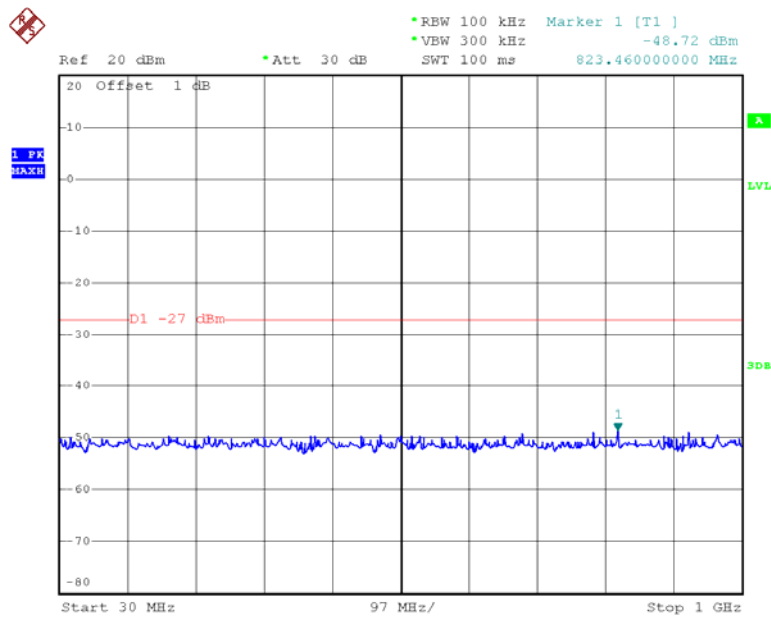


Date: 22.JUN.2015 21:16:50

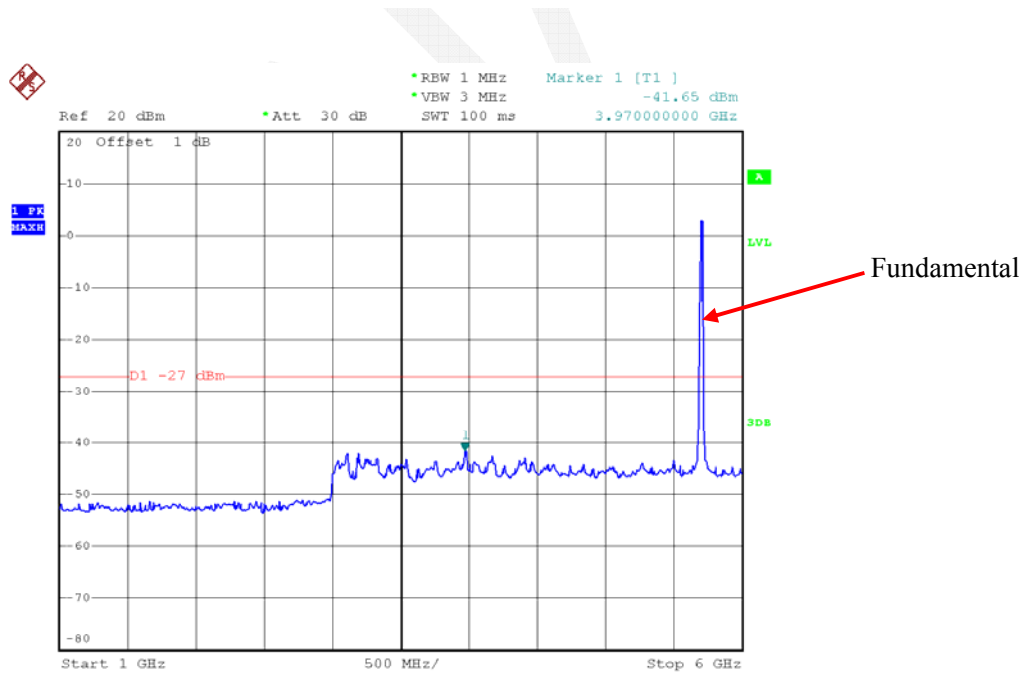


Date: 23.JUN.2015 13:08:48

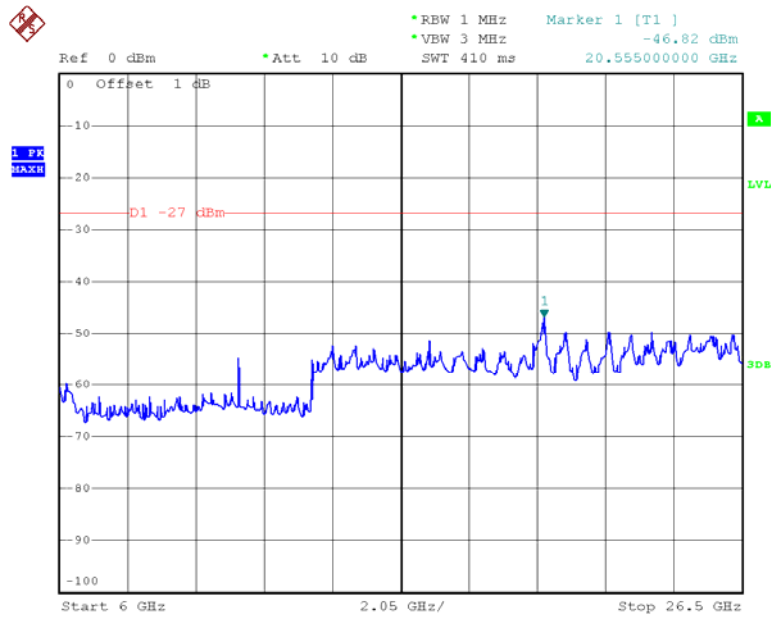
Chain 0:802.11n ht20 High Channel



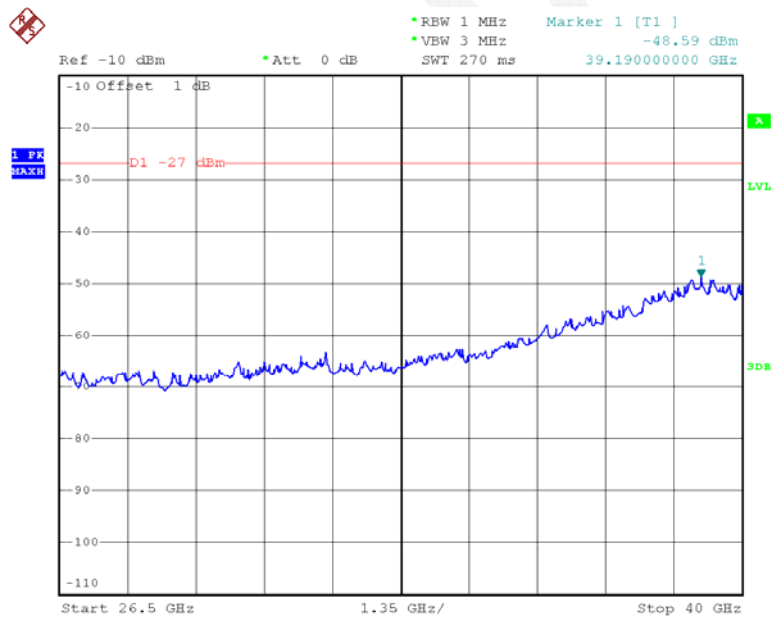
Date: 23.JUN.2015 12:47:36



Date: 22.JUN.2015 20:29:46

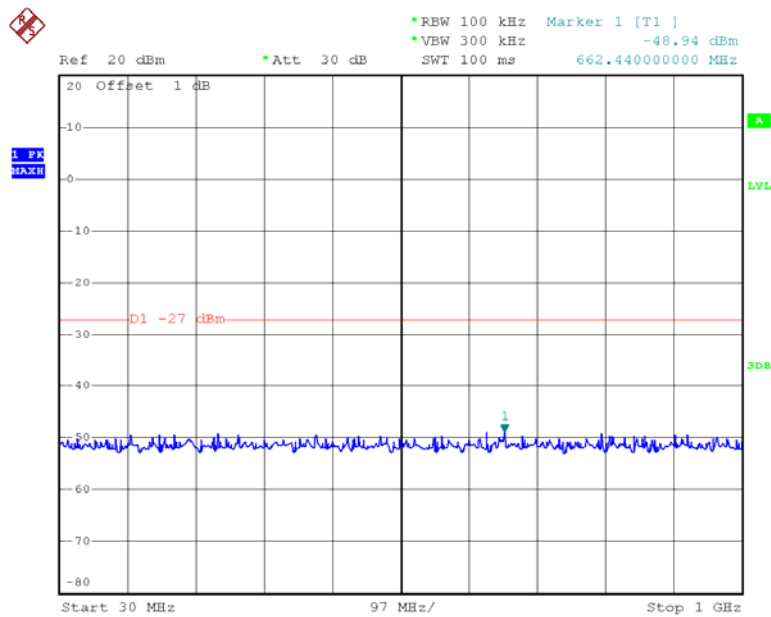


Date: 22.JUN.2015 21:17:50

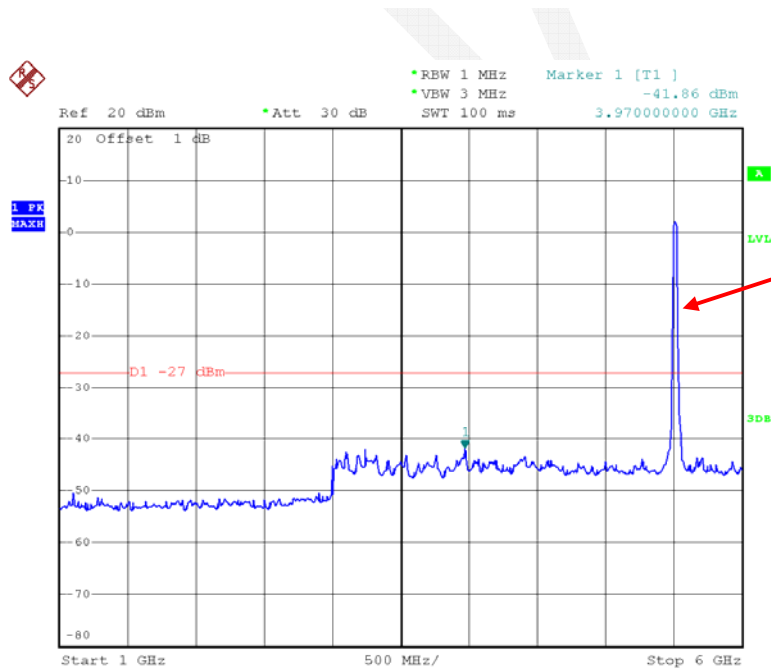


Date: 23.JUN.2015 13:09:17

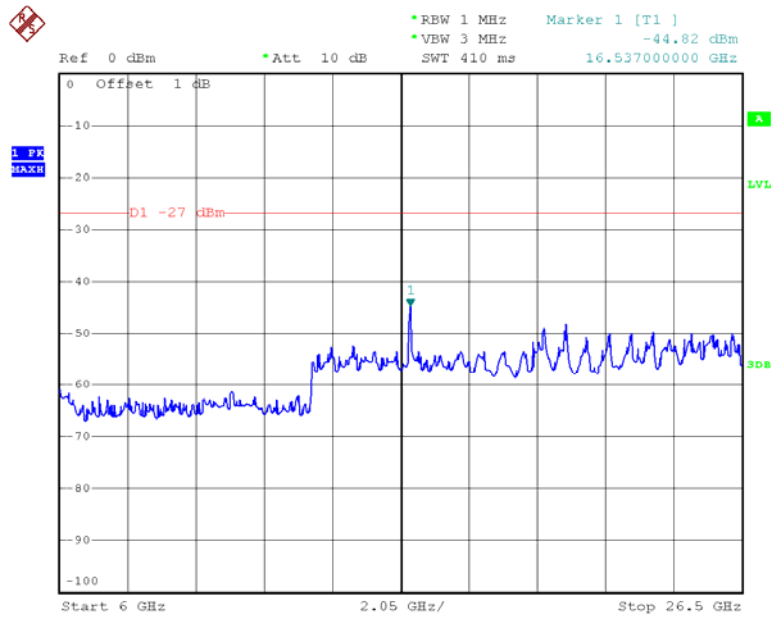
Chain 0:802.11n ht40 Low Channel



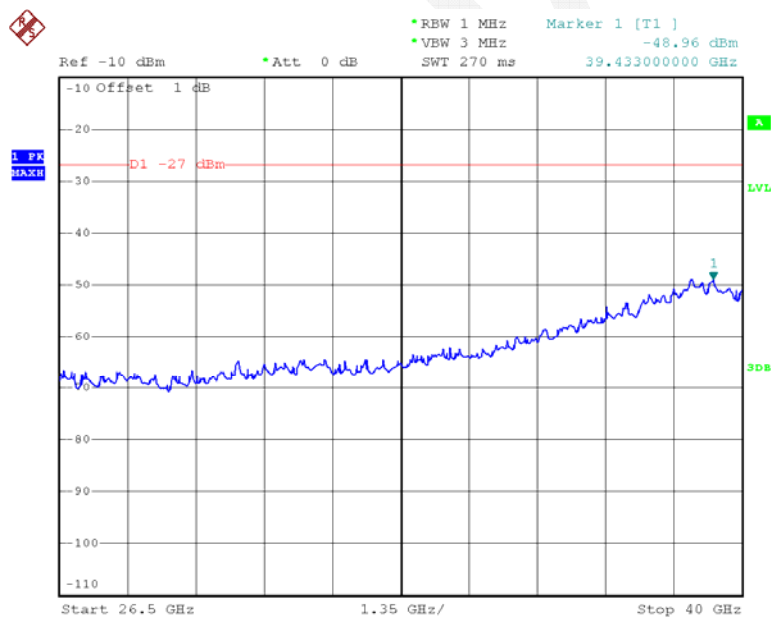
Date: 23.JUN.2015 12:49:25



Date: 22.JUN.2015 20:37:23

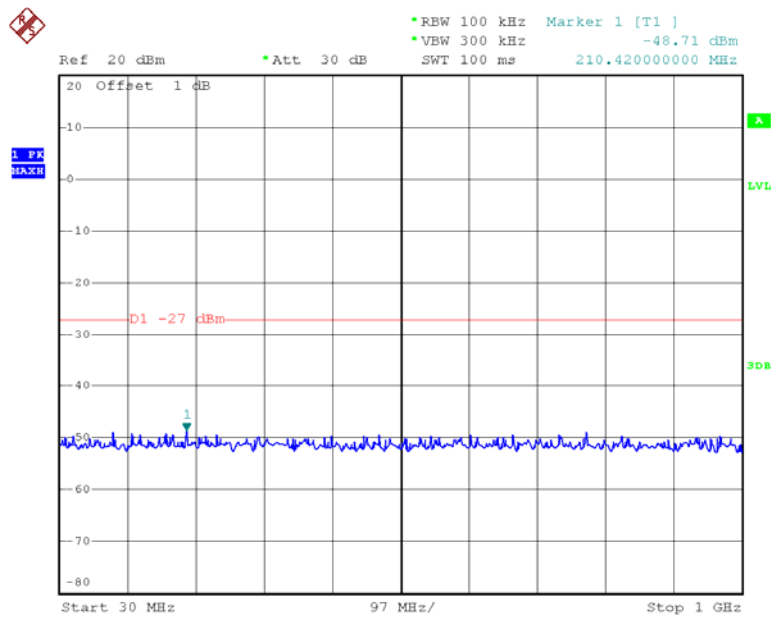


Date: 22.JUN.2015 21:24:41

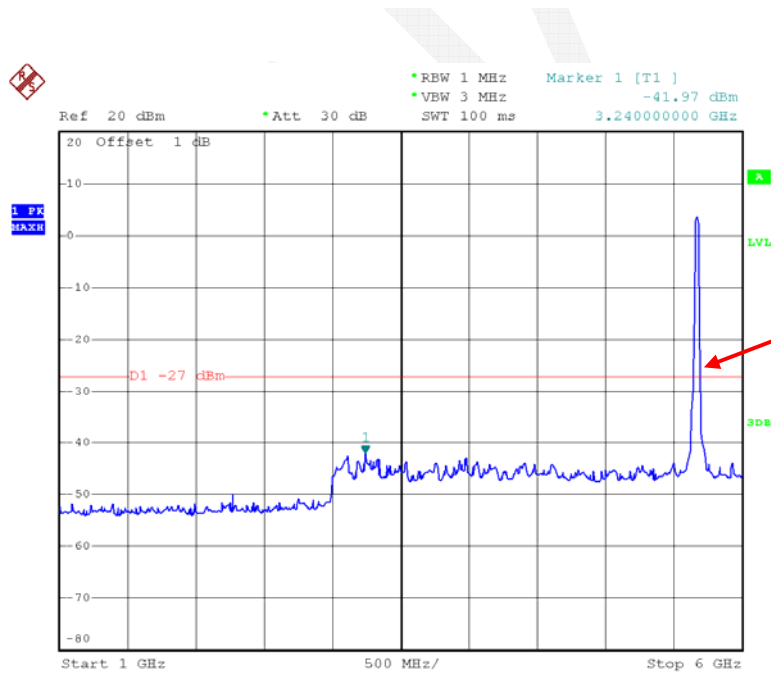


Date: 23.JUN.2015 13:13:02

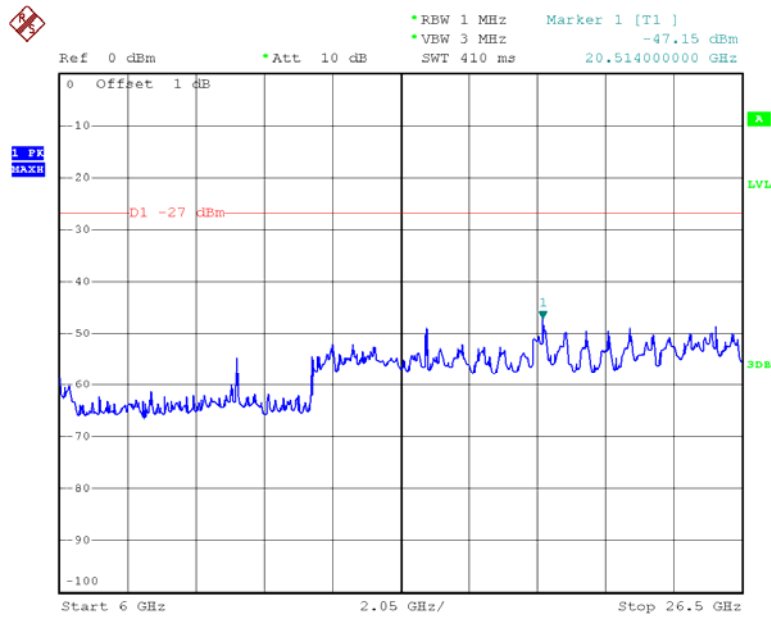
Chain 0:802.11n ht40 High Channel



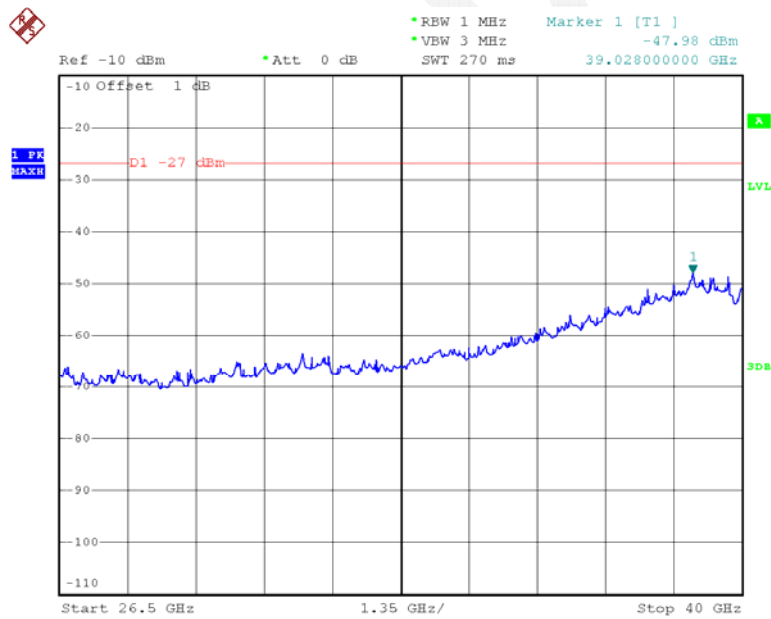
Date: 23.JUN.2015 12:49:41



Date: 22.JUN.2015 20:39:38

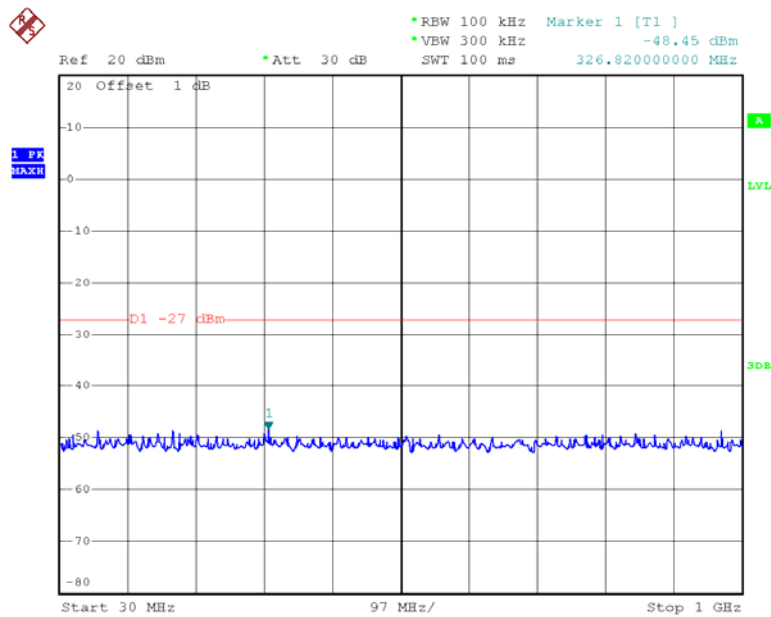


Date: 22.JUN.2015 21:27:28

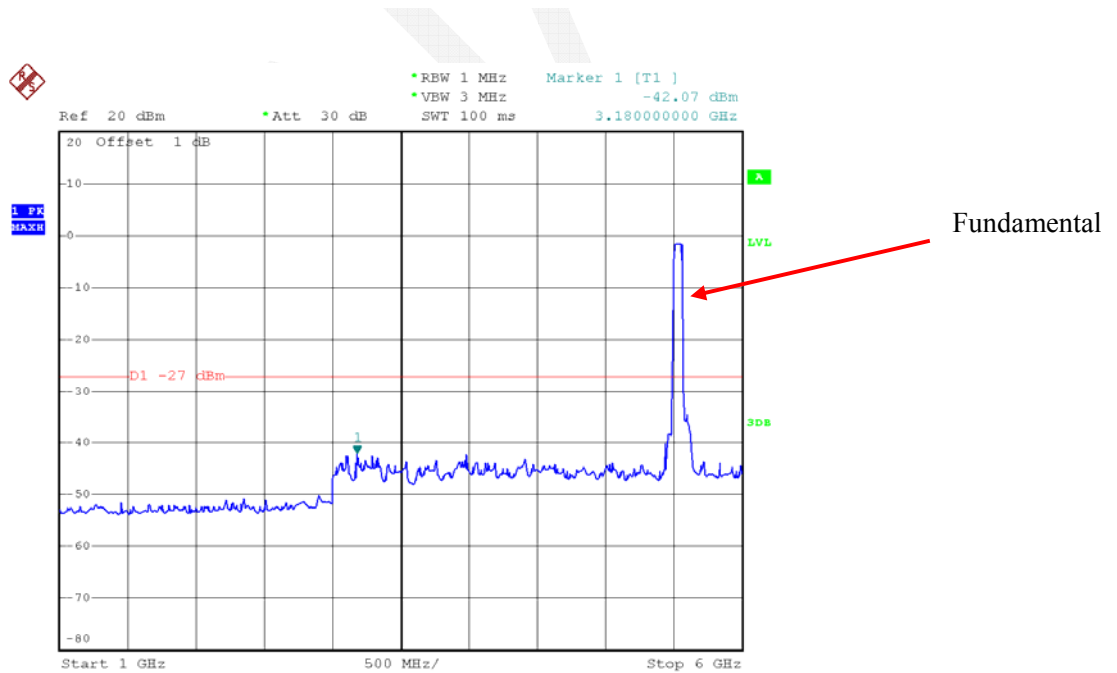


Date: 23.JUN.2015 13:13:46

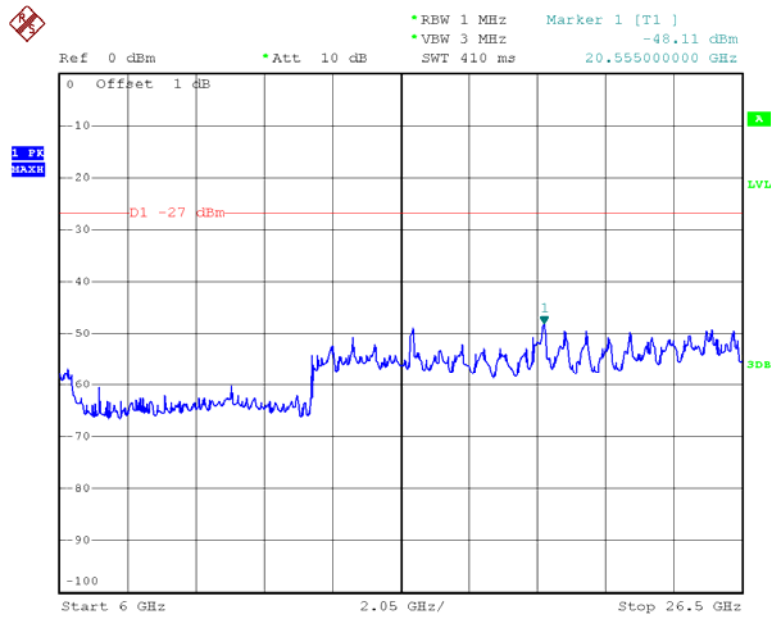
Chain 0:802.11n ac80 Middle Channel



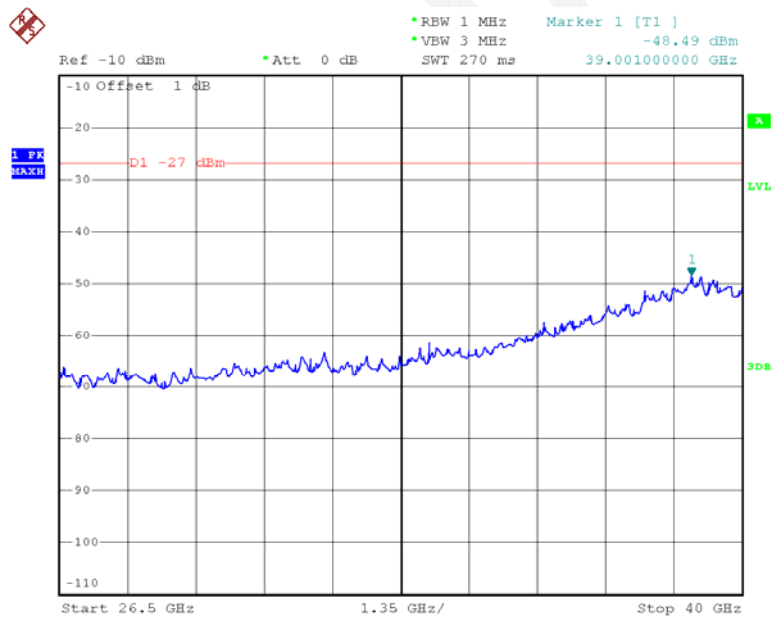
Date: 23.JUN.2015 12:51:14



Date: 22.JUN.2015 20:41:10

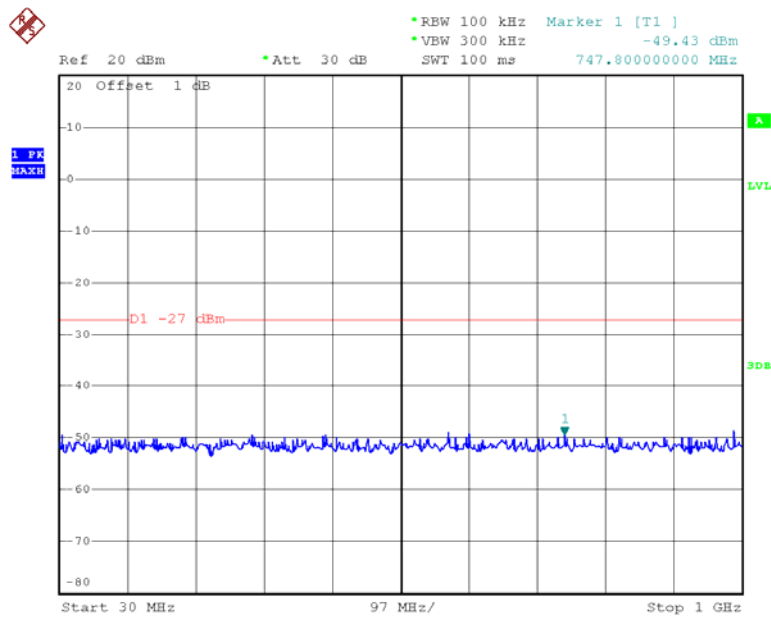


Date: 22.JUN.2015 21:29:56

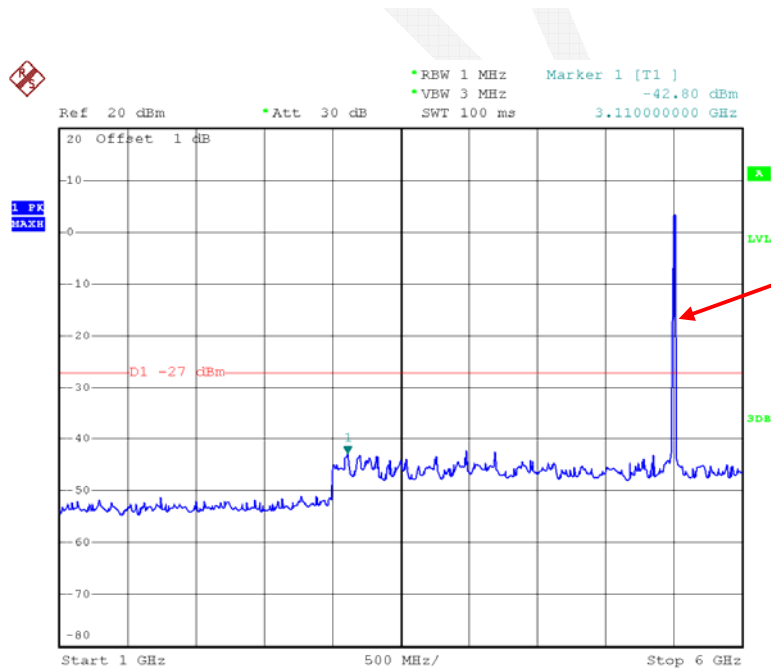


Date: 23.JUN.2015 13:17:23

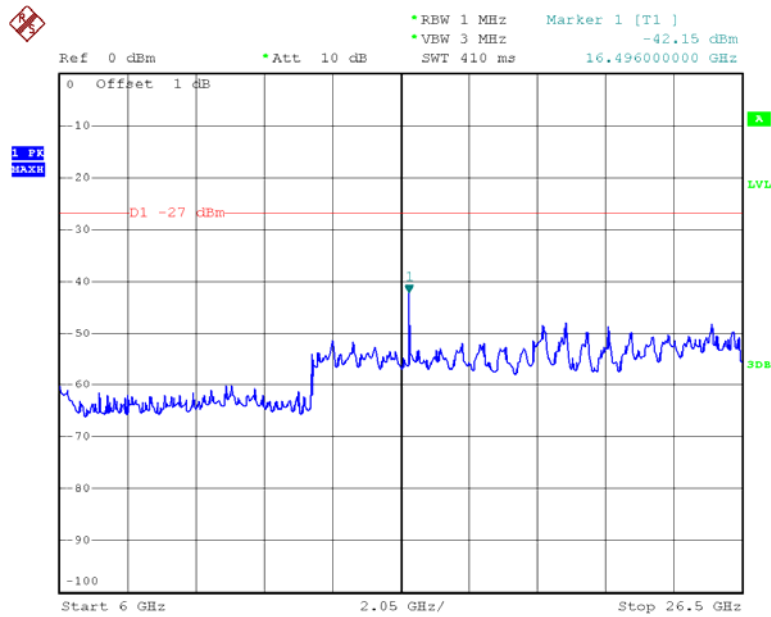
Chain 1:802.11a Low Channel



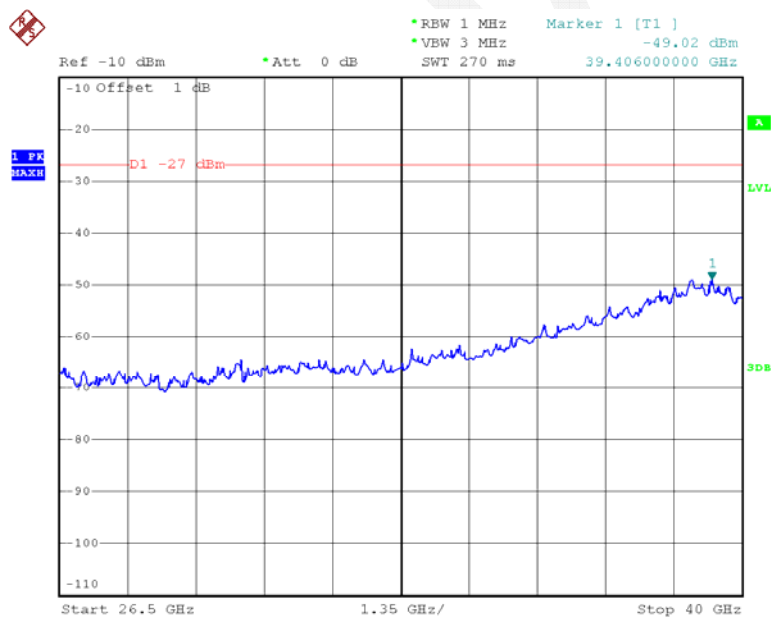
Date: 23.JUN.2015 12:52:07



Date: 22.JUN.2015 20:46:42

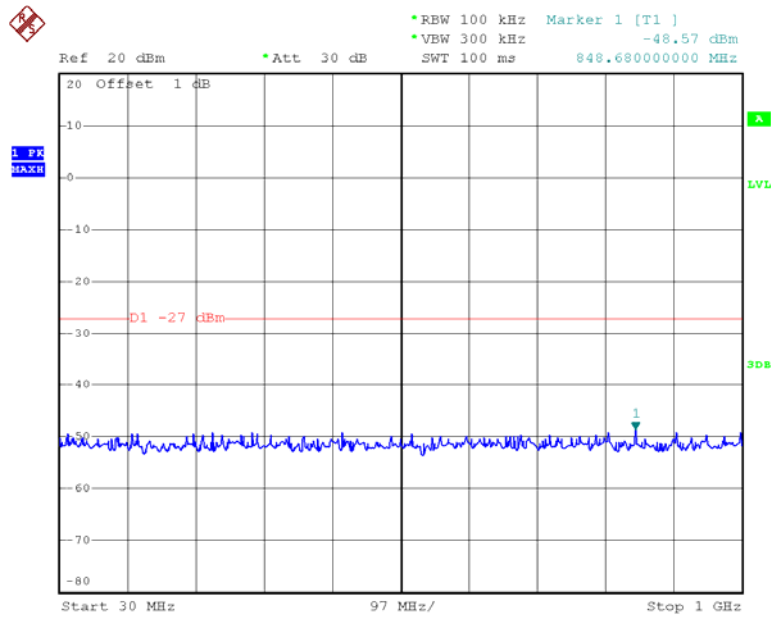


Date: 22.JUN.2015 21:07:06

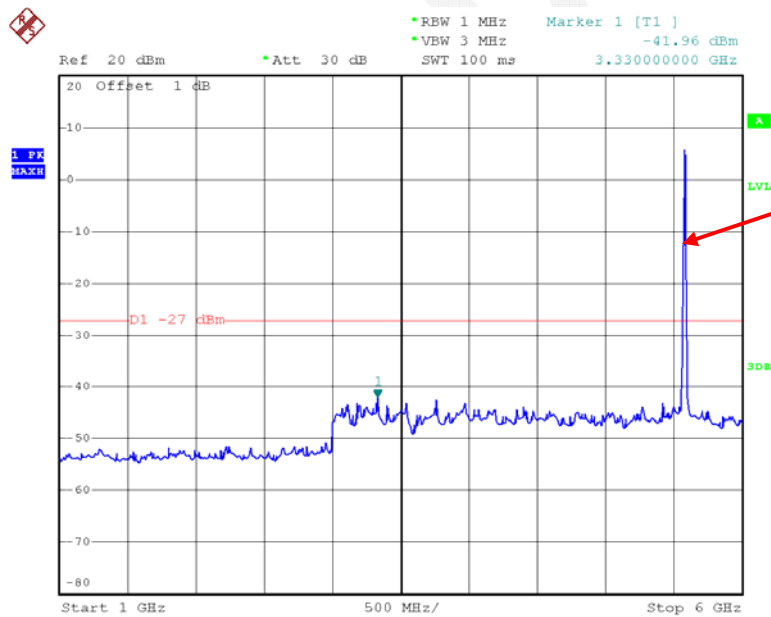


Date: 23.JUN.2015 13:03:52

Chain 1:802.11a Middle Channel

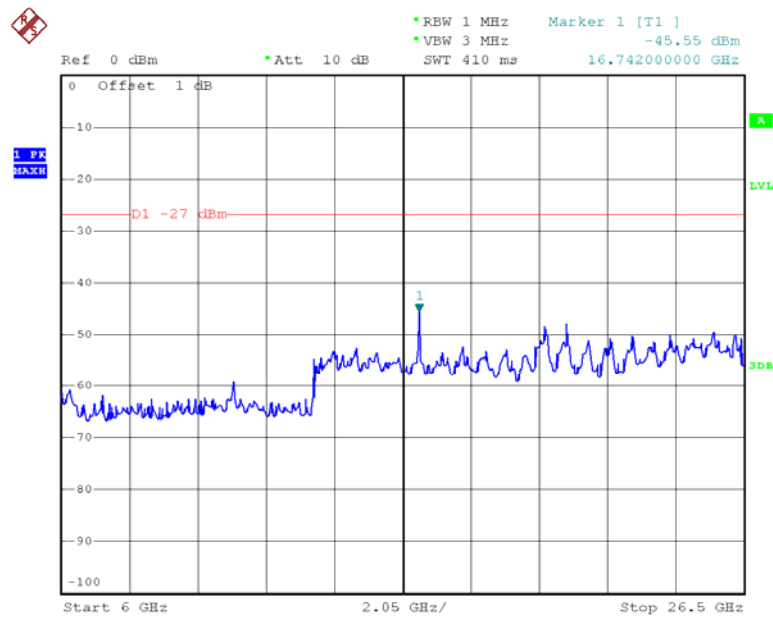


Date: 23.JUN.2015 12:52:12

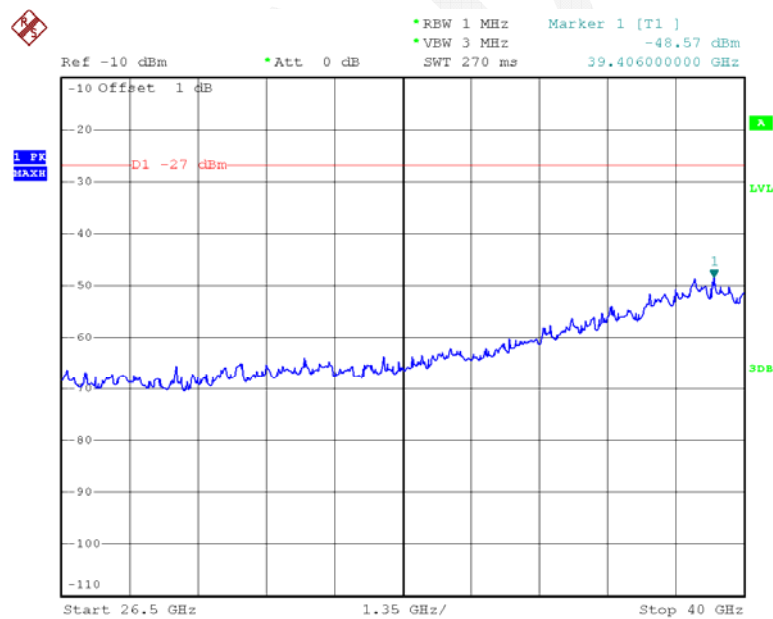


Fundamental

Date: 22.JUN.2015 20:46:57

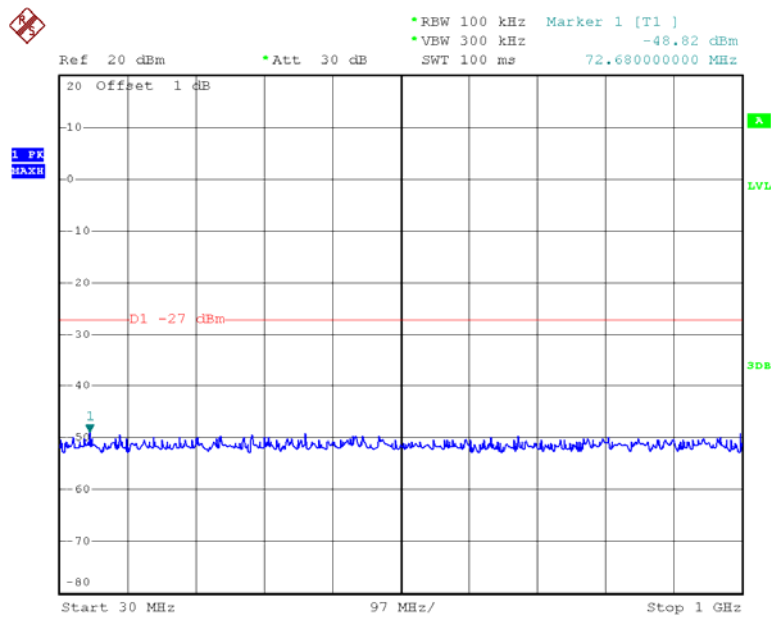


Date: 22.JUN.2015 21:08:10

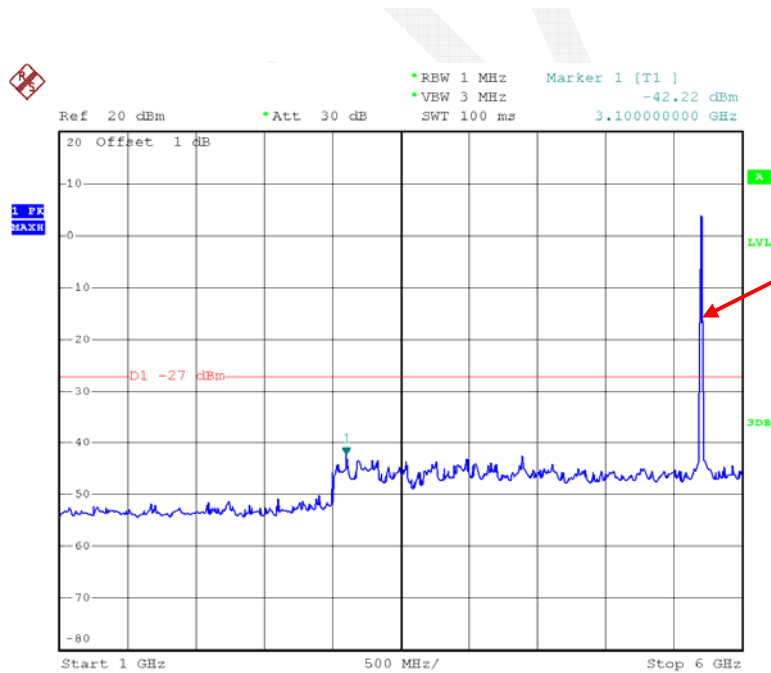


Date: 23.JUN.2015 13:04:06

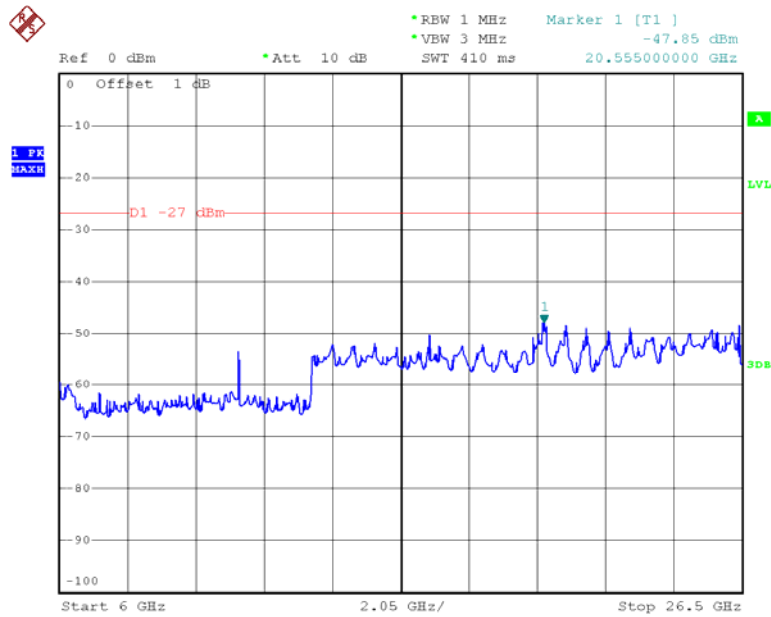
Chain 1:802.11a High Channel



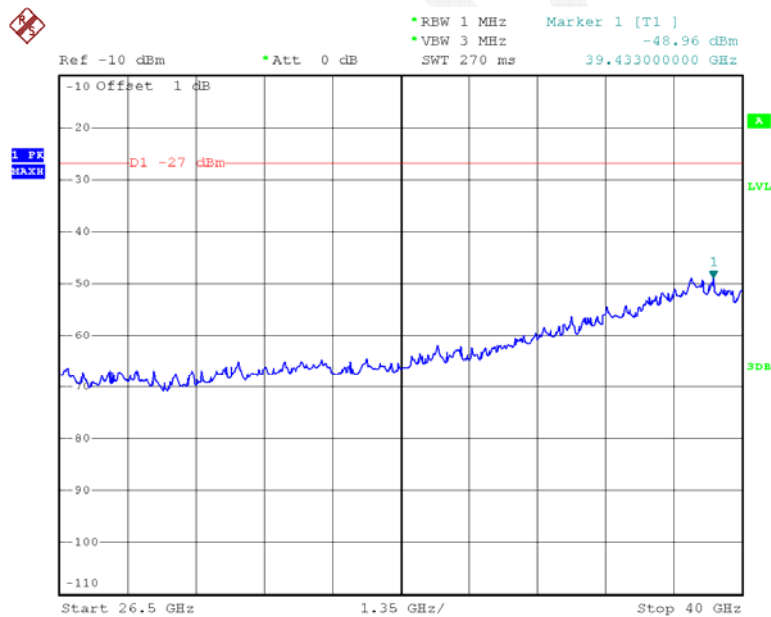
Date: 23.JUN.2015 12:52:19



Date: 22.JUN.2015 20:47:14

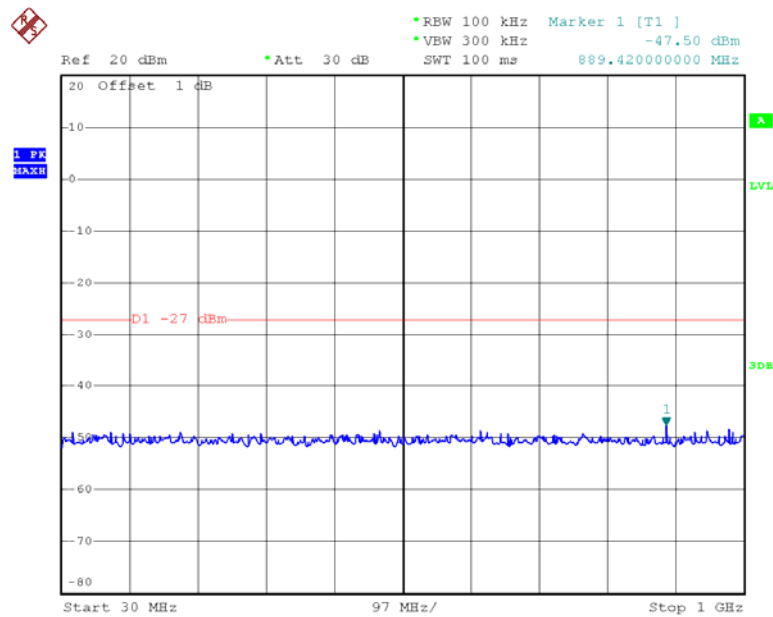


Date: 22.JUN.2015 21:08:48

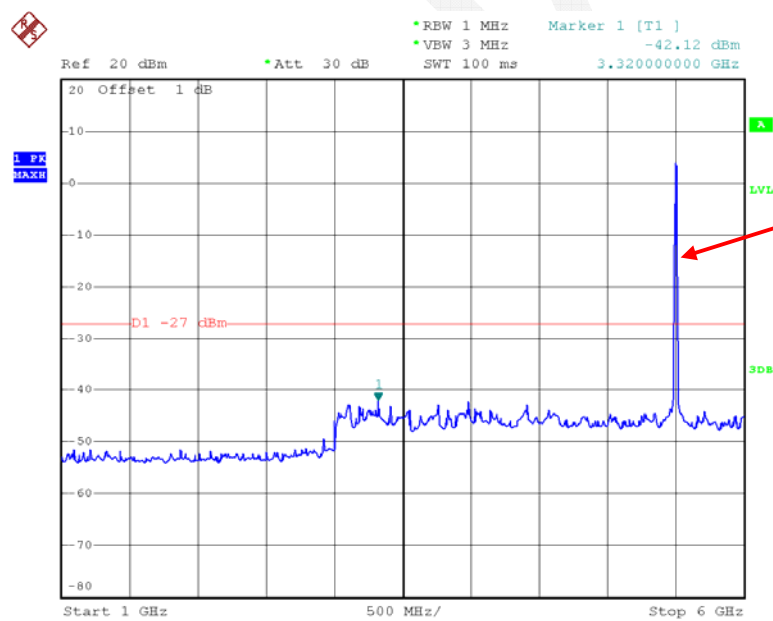


Date: 23.JUN.2015 13:04:22

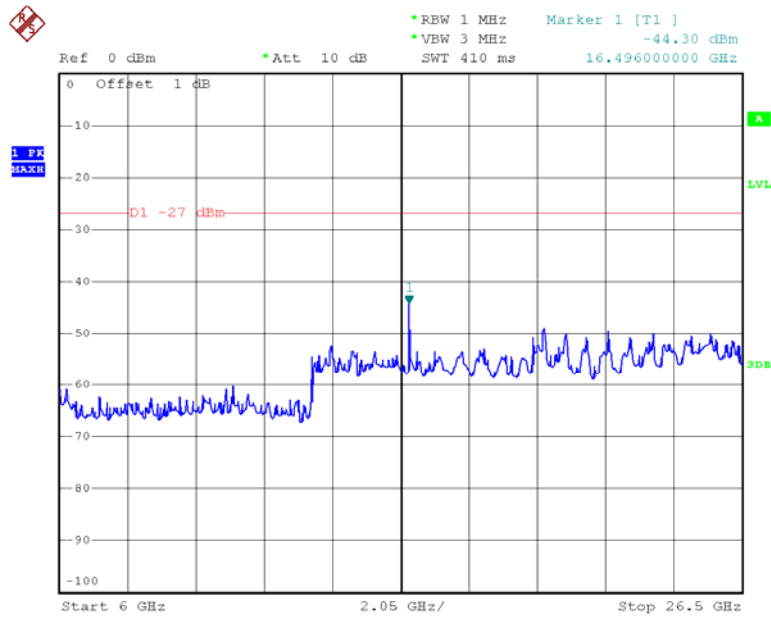
Chain 1:802.11n ht20 Low Channel



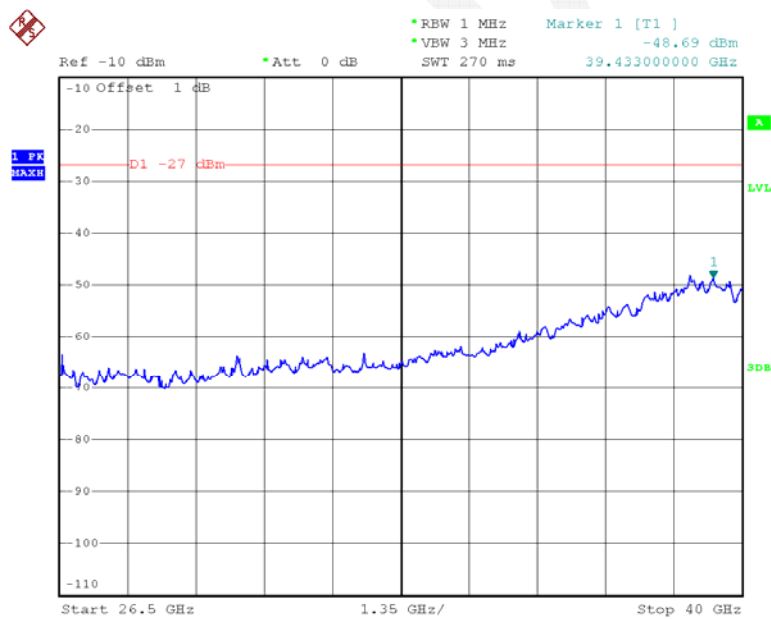
Date: 23.JUN.2015 12:53:36



Date: 22.JUN.2015 20:50:44

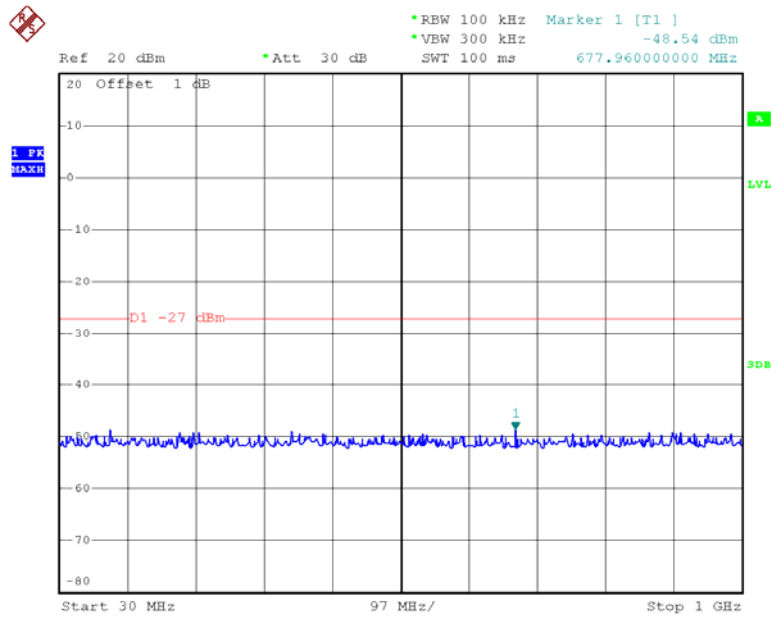


Date: 22.JUN.2015 21:16:14

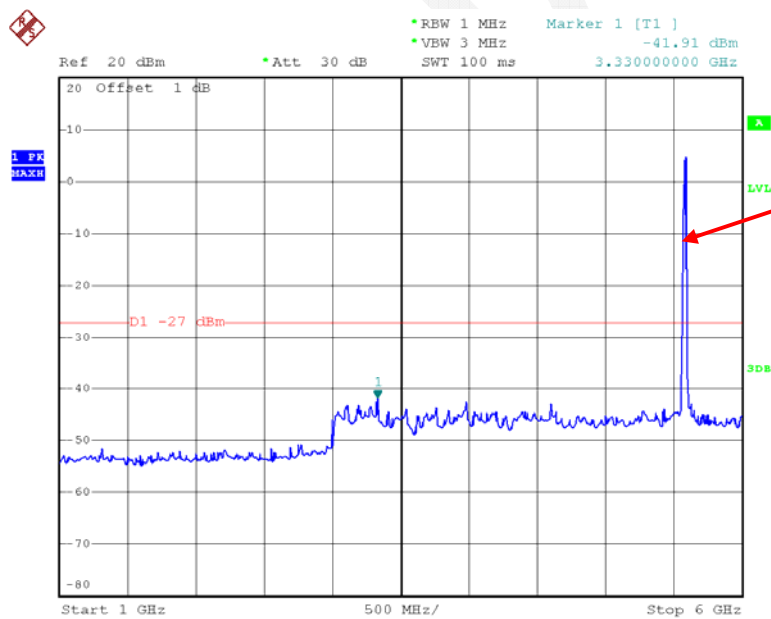


Date: 23.JUN.2015 13:08:26

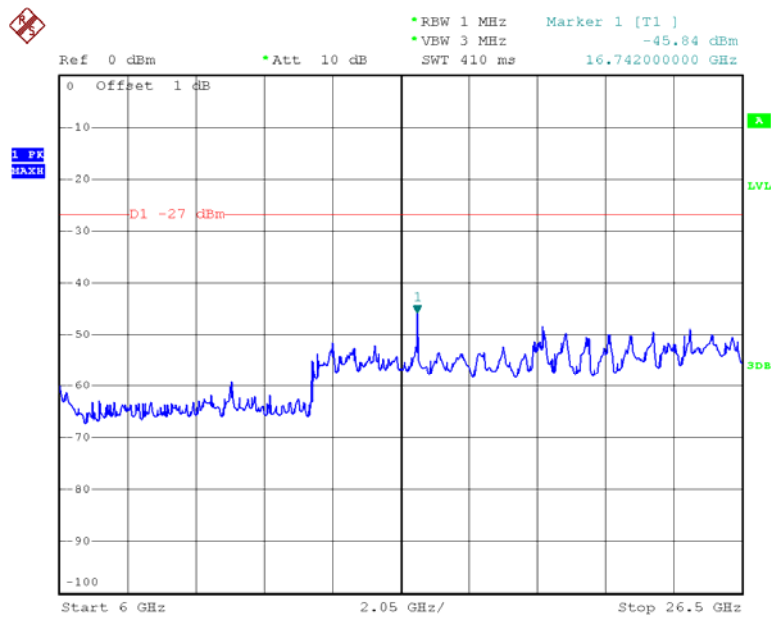
Chain 1:802.11n ht20 Middle Channel



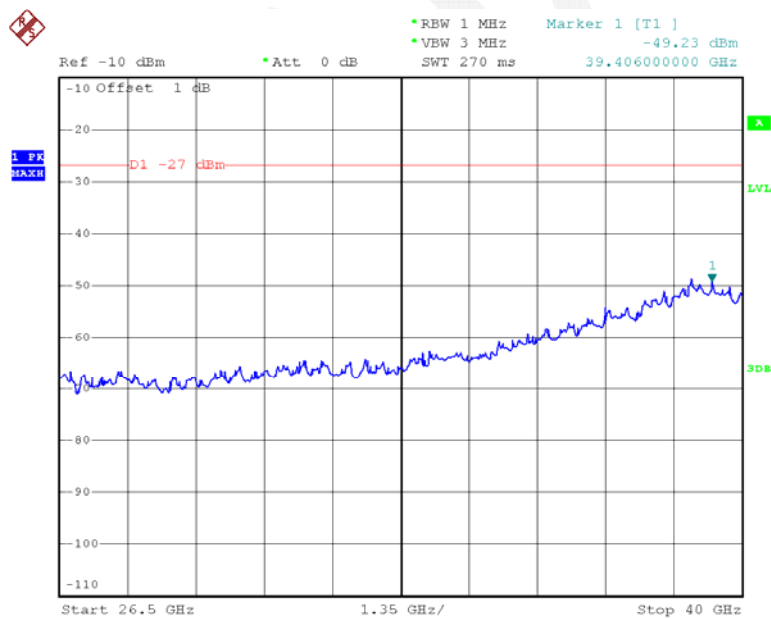
Date: 23.JUN.2015 12:53:46



Date: 22.JUN.2015 20:50:58

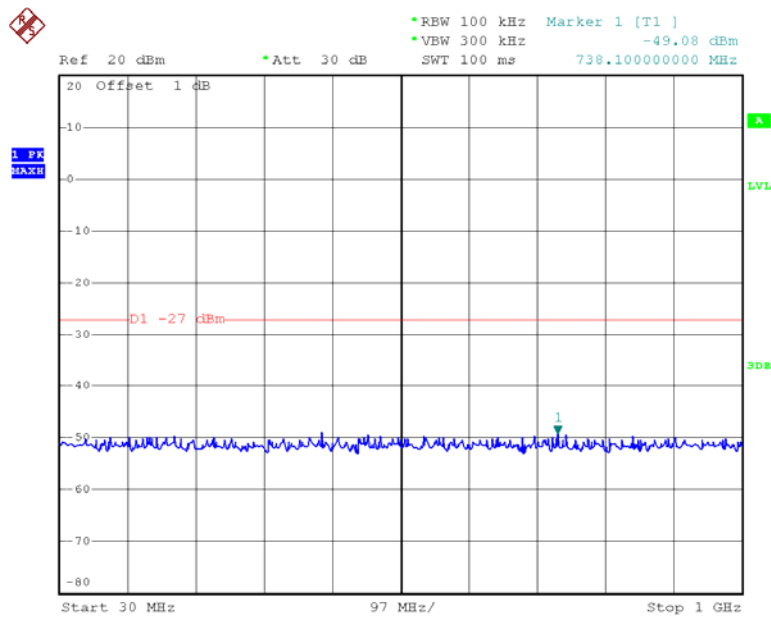


Date: 22.JUN.2015 21:17:28

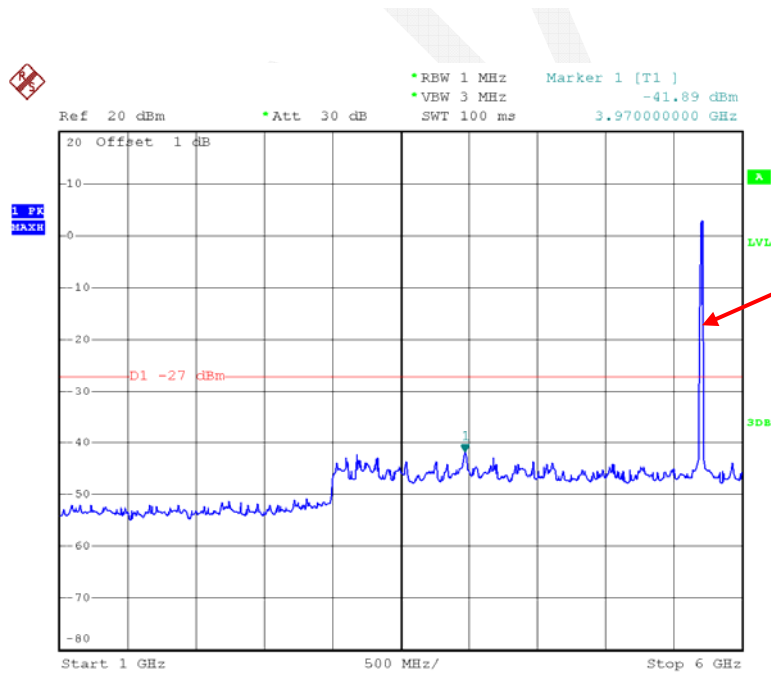


Date: 23.JUN.2015 13:09:11

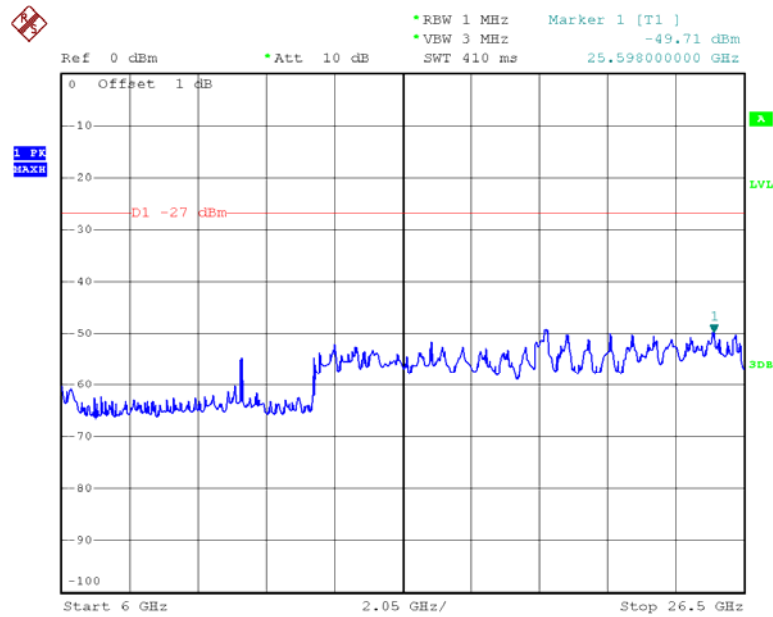
Chain 1:802.11n ht20 High Channel



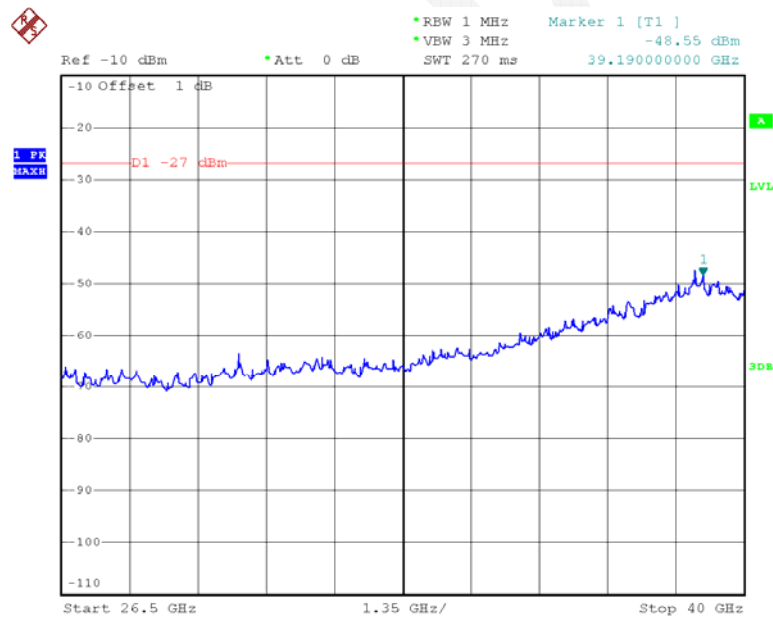
Date: 23.JUN.2015 12:53:56



Date: 22.JUN.2015 20:51:14



Date: 22.JUN.2015 21:17:57



Date: 23.JUN.2015 13:09:23