Lab Code: 200707-0

FCC PART 15.247

MEASUREMENT AND TEST REPORT

For

Deliberant LLC

138 Mountain Brook Dr Canton, GA 30115 United States

FCC ID: UB8-FWBD0501

Report Type:	Product Type:
Original Report	Broadband Digital Transmission System

Test Engineer:	Tiger Ye
Report Number:	RSZ120906004-00
Report Date:	2012-11-07
Reviewed By:	Alvin Huang RF Leader
Test Laboratory:	Bay Area Compliance Laboratories Corp. (Shenzhen) 6/F, the 3rd Phase of WanLi Industrial Building ShiHua Road, FuTian Free Trade Zone Shenzhen, Guangdong, China Tel: +86-755-33320018 Fax: +86-755-33320008 www.baclcorp.com.cn

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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

The *Deliberant LLC's* product, model number: *FWBD0501 (FCC ID: UB8-FWBD0501)* or the "EUT" as referred to in this report was *Broadband Digital Transmission System*, which was measured approximately: 11.0 cm(L)x 8.4 cm (W) x 1.3 cm (H), rated input voltage: DC 18V (AC adapter or PoE Power adapter).

AC Adapter Information:
MODEL: VA16A-180100
INPUT: 100-240V~50/60Hz 0.5A
OUTPUT: 18V DC 1.0A

PoE Power Adapter Information:
MODEL: FAS1800070-C44
INPUT: 100-240V~50/60Hz 0.27A
OUTPUT: 18V DC 0.7A

Note: The product, model FWBD0501 has two types, the difference between them is only the location of the antenna interface, all the others are same.

** All measurement and test data in this report was gathered from production sample serial number: 1209023 (Assigned by BACL, Shenzhen). The EUT supplied by the applicant was received on 2012-09-06.*

Objective

This report is prepared on behalf of *Deliberant LLC in* accordance with Part 2-Subpart J, Part 15-Subparts A, B and C of the Federal Communication Commissions rules.

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

Related Submittal(s)/Grant(s)

No related submittal(s).

Test Methodology

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

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

Test Facility

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

Test site at Bay Area Compliance Laboratories Corp. (Shenzhen) has been fully described in reports submitted to the Federal Communication Commission (FCC). The details of these reports have been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on December 06, 2010. 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.: 382179. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

Additionally, Bay Area Compliance Laboratories Corp. (Shenzhen) is a National Institute of Standards and Technology (NIST) accredited laboratory, under the National Voluntary Laboratory Accredited Program (Lab Code 200707-0).

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

SYSTEM TEST CONFIGURATION

Description of Test Configuration

For 802.11b, 802.11g and 802.11n-HT20 mode, 11 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	7	2442
2	2417	8	2447
3	2422	9	2452
4	2427	10	2457
5	2432	11	2462
6	2437	/	/

EUT for 802.11b, 802.11g and 802.11n-HT20 modes were tested with Channel 1, 6 and 11.

For 802.11n40 mode, 7 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2422	6	2447
2	2427	7	2452
3	2432	/	/
4	2437	/	/
5	2442	/	/

EUT was tested with Channel 1, 4 and 7.

EUT Exercise Software

All test items in this report, the transmit power level seted as follows:

Test software: Microsoft CMD.exe
The test was performed under:
802.11b: Data rate: 1 Mbps.
802.11g: Data rate: 6 Mbps.
802.11n-HT20: Data rate: MCS7.
802.11n-HT40: Data rate: MCS7.

Set the transmit power level commend as “iwpriv ra0 set TxPower=A”
‘A’ on behalf of:

	Low channel	Middle channel	High channel	Antenna type
802.11b	20	25	20	Omni Antenna 3dBi
802.11g	18	23	18	
802.11n-HT20	18	20	18	
802.11n-HT40	16	18	16	
802.11b	19	24	19	Directional antenna 8dBi
802.11g	17	22	17	
802.11n-HT20	17	19	17	
802.11n-HT40	15	17	15	
802.11b	18	23	18	Omni Directional Antenna 12dBi
802.11g	16	21	16	
802.11n-HT20	16	18	16	
802.11n-HT40	14	16	14	
802.11b	17	22	17	Directional antenna 14dBi
802.11g	15	20	15	
802.11n-HT20	15	17	15	
802.11n-HT40	13	15	13	
802.11b	16	21	16	Directional antenna 16dBi
802.11g	14	19	14	
802.11n-HT20	14	16	14	
802.11n-HT40	12	14	12	
802.11b	14	19	14	Directional antenna 24dBi
802.11g	12	17	12	
802.11n-HT20	12	14	12	
802.11n-HT40	10	12	10	

Example:
When test the middle channel of 802.11 b for 3dBi antenna, the commend is “iwpriv ra0 set TxPower=25”

Equipment Modifications

No modification was made to the EUT tested.

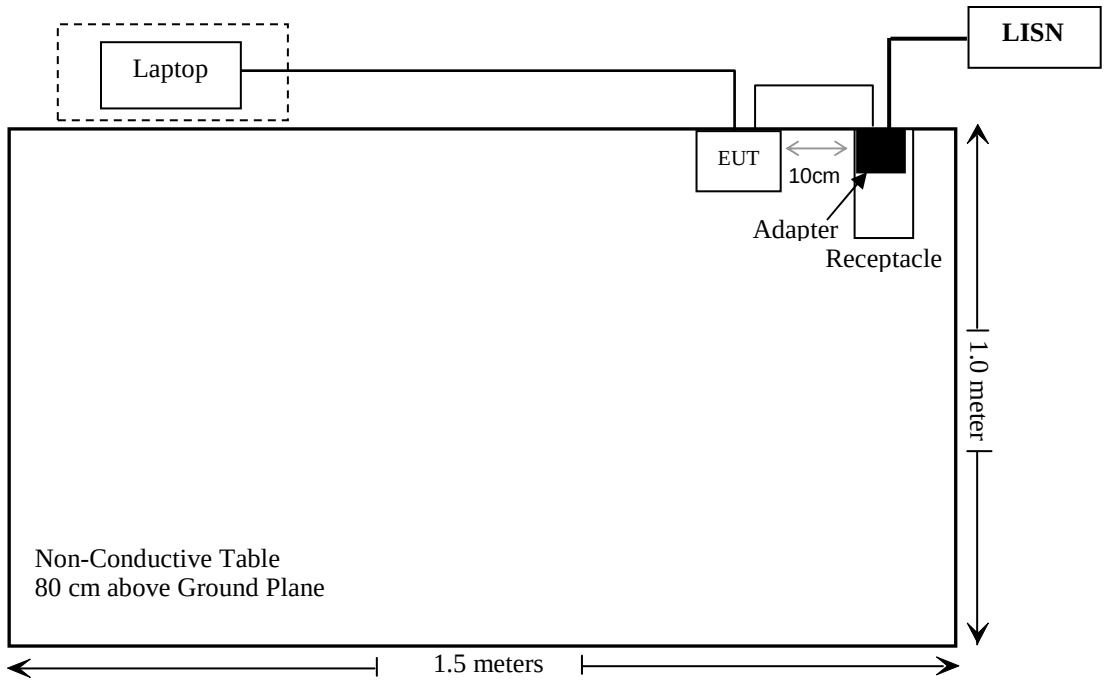
Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
IBM	Laptop	2371	N/A

External I/O Cable

Cable Description	Length (m)	From/Port	To
Unshielded Detachable RJ45 Cable	10.0	EUT	Laptop
Unshielded Detachable DC Power Cable	2.0	Adapter	EUT

Block Diagram of Test Setup



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§15.247 (i), §1.1307 (b)(1), §2.1091	Maximum Permissible exposure (MPE)	Compliance
§15.203	Antenna Requirement	Compliance
§15.207 (a),	Conducted Emissions	Compliance
§15.247(d)	Spurious Emissions at Antenna Port	Compliance
§15.205, §15.209, §15.247(d)	Spurious Emissions	Compliance
§15.247 (a)(2)	6 dB Bandwidth	Compliance
§15.247(b)(3)	Maximum Peak Output Power	Compliance
§15.247(d)	100kHz Bandwidth of Frequency Band Edge	Compliance
§15.247(e)	Power Spectral Density	Compliance

FCC §15.247 (i) & §1.1307 (b) (1) & §2.1091- MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Applicable Standard

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

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

(B) Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	**Electric Field Strength (V/m)**	**Magnetic Field Strength (A/m)**	**Power Density (mW/cm^2)**	**Averaging Time (minutes)**
0.3–1.34	614	1.63	*(100)	30
1.34–30	824/f	2.19/f	*(180/f²)	30
30–300	27.5	0.073	0.2	30
300–1500	/	/	f/1500	30
1500–100,000	/	/	1.0	30

f = frequency in MHz; * = Plane-wave equivalent power density;

According to §1.1310 and §2.1091 RF exposure is calculated.

Calculated Formulary:

Predication of MPE limit at a given distance
$S = PG/4\pi R^2$ = power density (in appropriate units, e.g. mW/cm^2);
P = power input to the antenna (in appropriate units, e.g., mW);
G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;
R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

Calculated Data:

3dBi Gain Omni antenna

Mode	Frequency (MHz)	Antenna Gain			Conducted Power		Evaluation Distance (cm)	Power Density (mW/cm^2)	MPE Limit (mW/cm^2)
		Ant.port	(dBi)	(numeric)	(dBm)	(mW)			
802.11b	2437	0	3	2.0	29.07	807.24	100	0.0129	1
	2437	1	3	2.0	29.15	822.24	100	0.0131	1
802.11g	2437	0	3	2.0	29.18	827.94	100	0.0132	1
	2437	1	3	2.0	29.10	812.83	100	0.0129	1
802.11n-HT20	2437	0&1	3	2.0	29.22	835.60	100	0.0133	1
802.11n-HT40	2437	0&1	3	2.0	29.25	841.40	100	0.0134	1

8dBi Gain Directional antenna

Mode	Frequency (MHz)	Antenna Gain			Conducted Power		Evaluation Distance (cm)	Power Density (mW/cm^2)	MPE Limit (mW/cm^2)
		Ant.port	(dBi)	(numeric)	(dBm)	(mW)			
802.11b	2437	0	8	6.3	28.10	645.65	100	0.032	1
	2437	1	8	6.3	27.94	622.30	100	0.031	1
802.11g	2437	0	8	6.3	28.02	633.87	100	0.032	1
	2437	1	8	6.3	27.93	620.87	100	0.031	1
802.11n-HT20	2437	0&1	8	6.3	28.11	647.14	100	0.032	1
802.11n-HT40	2437	0&1	8	6.3	28.18	657.66	100	0.033	1

12dBi Gain Directional Omni antenna

Mode	Frequency (MHz)	Antenna Gain			Conducted Power		Evaluation Distance (cm)	Power Density (mW/cm^2)	MPE Limit (mW/cm^2)
		Ant.port	(dBi)	(numeric)	(dBm)	(mW)			
802.11b	2437	0	12	15.8	26.87	486.41	100	0.061	1
	2437	1	12	15.8	26.69	466.66	100	0.059	1
802.11g	2437	0	12	15.8	27.06	508.16	100	0.064	1
	2437	1	12	15.8	26.99	500.03	100	0.063	1
802.11n-HT20	2437	0&1	12	15.8	27.02	503.50	100	0.063	1
802.11n-HT40	2437	0&1	12	15.8	27.00	501.19	100	0.063	1

14dBi Gain Directional antenna

Mode	Frequency (MHz)	Antenna Gain			Conducted Power		Evaluation Distance (cm)	Power Density (mW/cm^2)	MPE Limit (mW/cm^2)
		Ant.port	(dBi)	(numeric)	(dBm)	(mW)			
802.11b	2437	0	14	25.1	26.02	399.94	100	0.080	1
	2437	1	14	25.1	26.00	398.11	100	0.080	1
802.11g	2437	0	14	25.1	26.06	403.65	100	0.081	1
	2437	1	14	25.1	26.00	398.11	100	0.080	1
802.11n-HT20	2437	0&1	14	25.1	26.51	447.71	100	0.089	1
802.11n-HT40	2437	0&1	14	25.1	26.02	399.94	100	0.080	1

16dBi Gain Directional antenna

Mode	Frequency (MHz)	Antenna Gain			Conducted Power		Evaluation Distance (cm)	Power Density (mW/cm^2)	MPE Limit (mW/cm^2)
		Ant.port	(dBi)	(numeric)	(dBm)	(mW)			
802.11b	2437	0	16	39.8	25.08	322.11	100	0.102	1
	2437	1	16	39.8	24.90	309.03	100	0.098	1
802.11g	2437	0	16	39.8	25.11	324.34	100	0.103	1
	2437	1	16	39.8	25.07	321.37	100	0.102	1
802.11n-HT20	2437	0&1	16	39.8	25.05	319.89	100	0.101	1
802.11n-HT40	2437	0&1	16	39.8	25.09	322.85	100	0.102	1

24dBi Gain Directional antenna

Mode	Frequency (MHz)	Antenna Gain			Conducted Power		Evaluation Distance (cm)	Power Density (mW/cm^2)	MPE Limit (mW/cm^2)
		Ant.port	(dBi)	(numeric)	(dBm)	(mW)			
802.11b	2437	0	24	251.2	23.18	207.97	100	0.416	1
	2437	1	24	251.2	23.14	206.06	100	0.412	1
802.11g	2437	0	24	251.2	23.13	205.59	100	0.411	1
	2437	1	24	251.2	23.17	207.49	100	0.415	1
802.11n-HT20	2437	0&1	24	251.2	23.27	212.32	100	0.425	1
802.11n-HT40	2437	0&1	24	251.2	23.22	209.89	100	0.420	1

Note: The device meets FCC MPE limit at 100 cm distance.

Result: Compliance

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 user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

a. Antenna must be permanently attached to the unit.
b. Antenna must use a unique type of connector to attach to the EUT.

Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

And according to FCC 47 CFR section 15.247 (b), if the transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Antenna Connector Construction

This product used two 2.4 GHz TX/RX antennas which were connected to the mainboard with I-PEX socket, this product can be equipped with six kinds of different types of antennas,as follows and please refer to the EUT photos.

Antenna specifications:

1: Rubber Duck Omni Antenna (RPSMA)	3 dBi
2: Directional antenna (FWA-24)	8 dBi
3: Omni Directional Antenna (EXTRALINK)	12 dBi
4: Directional antenna (FWA18)	14 dBi
5: Directional antenna (FWMP-10)	16 dBi
6: Directional antenna (Dish RocketDish)	24 dBi

This product is professionally installed equipment; The Installer should configure the output power level of antenna, according to country regulations and per antenna type

Result: Compliant.

FCC §15.207 (a) - CONDUCTED EMISSIONS

Applicable Standard

FCC§15.207

Measurement Uncertainty

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

Based on CISPR 16-4-4, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any conducted emissions measurement at Bay Area Compliance Laboratory Corp. (Shenzhen) is 2.4 dB (k=2, 95% level of confidence), and the uncertainty will not be taken into consideration for all the test data recorded in the report.
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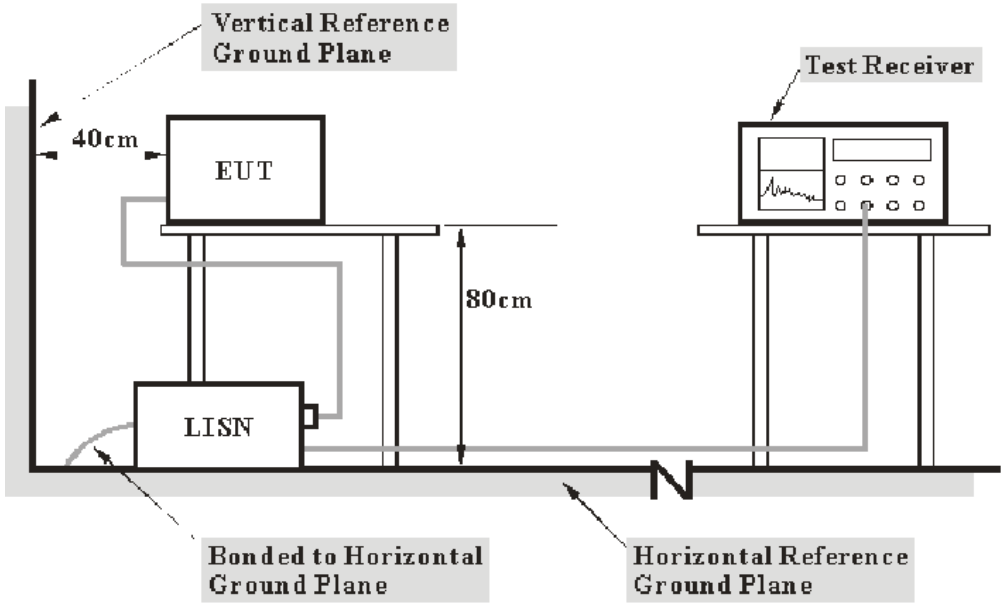
EUT Setup



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

The measurement procedure of EUT setup is according with per ANSI C63.4-2009. The related limit was specified in FCC Part 15.207.

The spacing between the peripherals was 10 cm.

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

EMI Test Receiver Setup

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

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

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

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	EMI Test Receiver	ESCS30	100176	2011-11-24	2012-11-23
Rohde & Schwarz	L.I.S.N.	ESH2-Z5	892107/021	2011-11-17	2012-11-16
Rohde & Schwarz	Pulse limiter	ESH3Z2	DE25985	2012-07-08	2013-07-07
BACL	CE Test software	BACL-CE	V1.0	-	-

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

Test Procedure

During the conducted emission test, the receptacle was connected to the LISN.

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

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

Test Results Summary

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

13.68 dB at **24.175 MHz** in the **Neutral** conducted mode for PoE power

Test Data

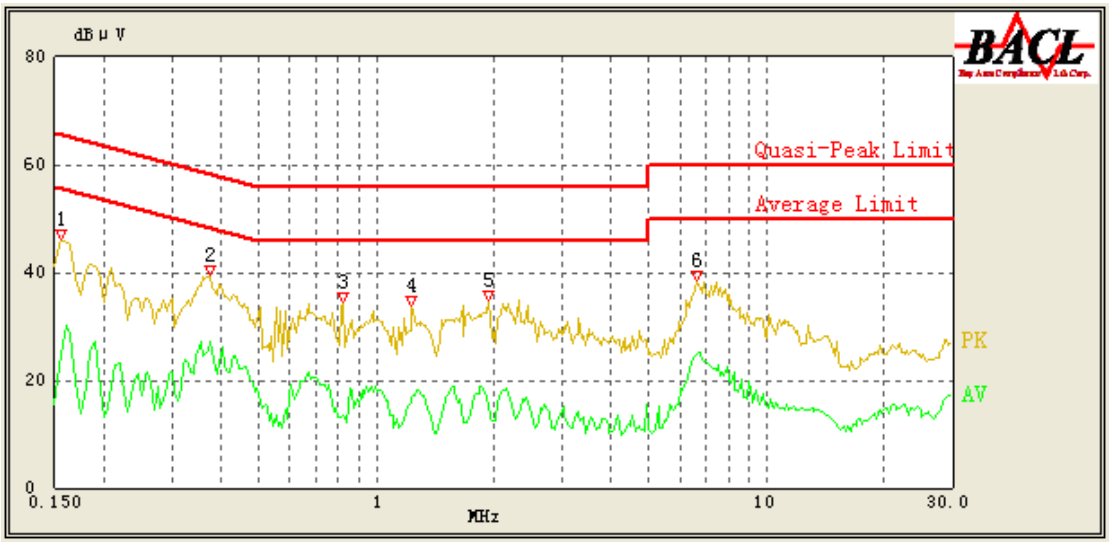
Environmental Conditions

Temperature:	25 ℃
Relative Humidity:	56 %
ATM Pressure:	100.0 kPa

The testing was performed by Tiger Ye on 2012-09-22.

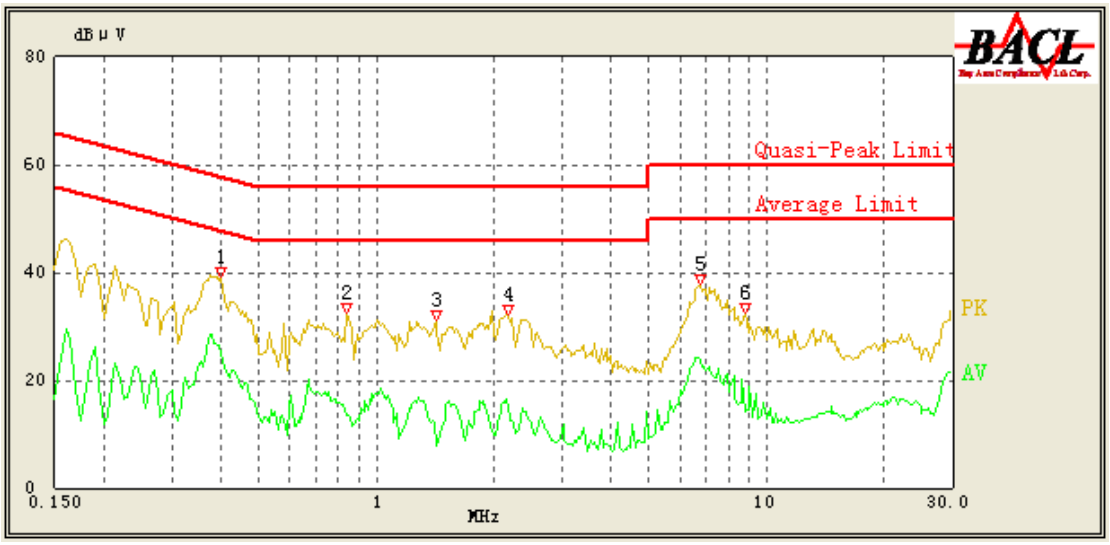
Test Mode: Transmitting (Adapter Power)

AC 120V / 60Hz, Line



Frequency (MHz)	Corrected Result (dBµV)	Corrected Factor (dB)	Limit (dBµV)	Margin (dB)	Detector (PK /QP/Ave.)
0.375	27.18	10.26	49.57	22.39	Ave.
0.155	42.35	10.27	65.86	23.51	QP
0.375	35.78	10.26	59.57	23.79	QP
6.635	24.73	10.36	50.00	25.27	Ave.
6.655	31.63	10.36	60.00	28.37	QP
1.235	27.06	10.18	56.00	28.94	QP
1.235	16.88	10.18	46.00	29.12	Ave.
1.940	26.16	10.20	56.00	29.84	QP
1.940	15.46	10.20	46.00	30.54	Ave.
0.155	24.89	10.27	55.86	30.97	Ave.
0.820	13.52	10.20	46.00	32.48	Ave.
0.820	22.80	10.20	56.00	33.20	QP

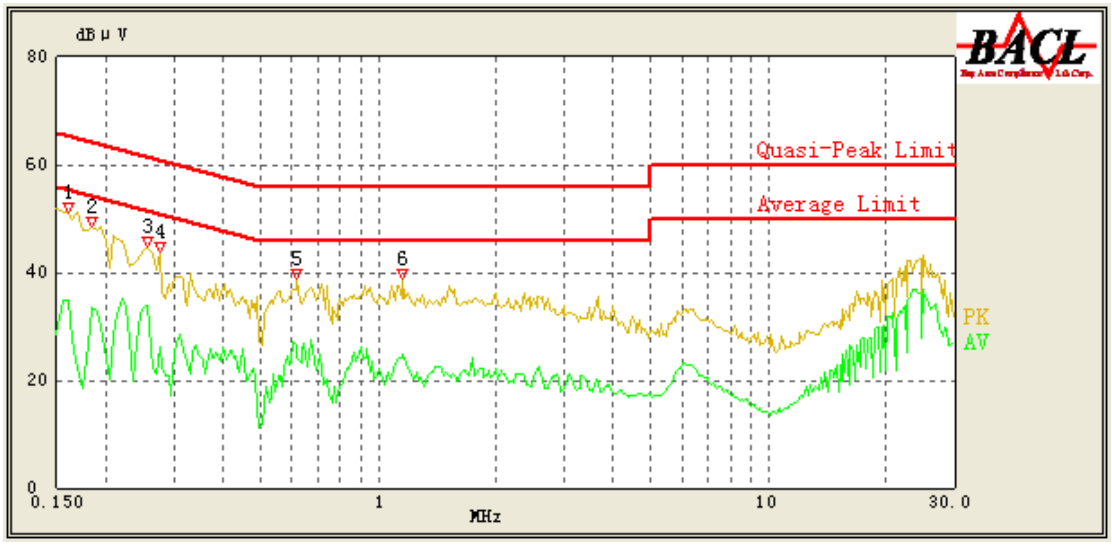
AC 120V / 60Hz, Neutral:



Frequency (MHz)	Corrected Result (dBμV)	Corrected Factor (dB)	Limit (dBμV)	Margin (dB)	Detector (PK /QP/Ave.)
0.400	25.22	10.25	48.86	23.64	Ave.
0.400	35.11	10.25	58.86	23.75	QP
6.785	23.86	10.36	50.00	26.14	Ave.
2.175	28.08	10.21	56.00	27.92	QP
6.755	30.86	10.36	60.00	29.14	QP
2.165	16.37	10.20	46.00	29.63	Ave.
0.840	13.51	10.19	46.00	32.49	Ave.
1.425	23.29	10.18	56.00	32.71	QP
1.410	12.05	10.18	46.00	33.95	Ave.
0.840	21.39	10.19	56.00	34.61	QP
8.805	14.32	10.44	50.00	35.68	Ave.
8.810	23.17	10.44	60.00	36.83	QP

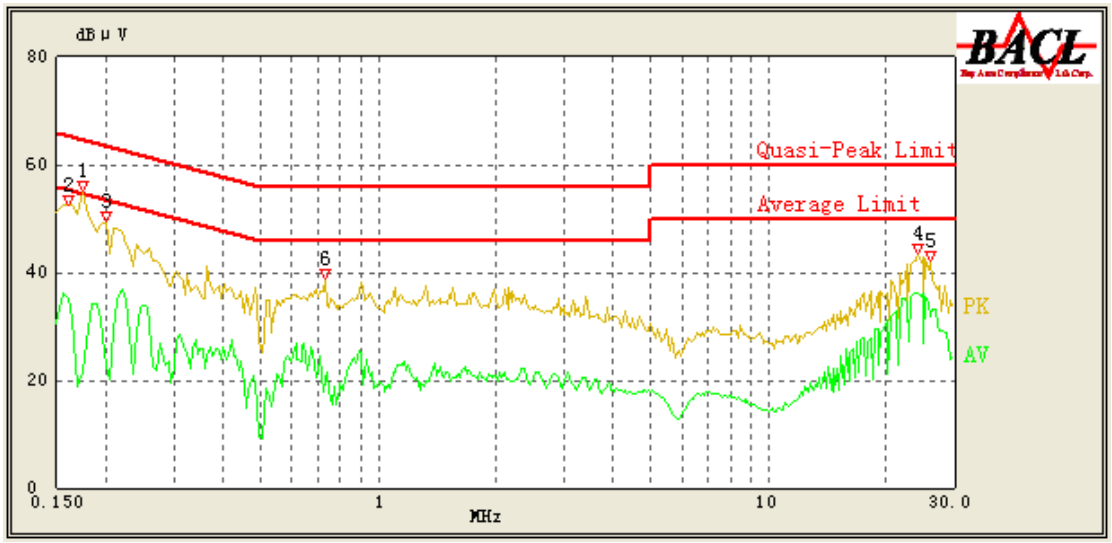
Test Mode: Transmitting (PoE Power)

AC 120V / 60Hz, Line



Frequency (MHz)	Corrected Result (dBµV)	Corrected Factor (dB)	Limit (dBµV)	Margin (dB)	Detector (PK /QP/Ave.)
0.160	48.42	10.27	65.71	17.29	QP
0.255	33.73	10.26	53.00	19.27	Ave.
0.185	45.45	10.27	65.00	19.55	QP
0.160	34.84	10.27	55.71	20.87	Ave.
1.155	24.93	10.18	46.00	21.07	Ave.
0.185	33.39	10.27	55.00	21.61	Ave.
0.255	41.38	10.26	63.00	21.62	QP
0.620	24.02	10.23	46.00	21.98	Ave.
0.620	33.41	10.23	56.00	22.59	QP
1.155	32.58	10.18	56.00	23.42	QP
0.275	26.06	10.26	52.43	26.37	Ave.
0.275	35.76	10.26	62.43	26.67	QP

AC 120V / 60Hz, Neutral:



Frequency (MHz)	Corrected Result (dBµV)	Corrected Factor (dB)	Limit (dBµV)	Margin (dB)	Detector (PK /QP/Ave.)
24.175	36.32	12.12	50.00	13.68	Ave.
0.160	49.01	10.24	65.71	16.70	QP
26.010	31.93	11.82	50.00	18.07	Ave.
0.160	35.09	10.24	55.71	20.62	Ave.
24.180	37.23	12.12	60.00	22.77	QP
26.015	35.43	11.82	60.00	24.57	QP
0.175	39.68	10.24	65.29	25.61	QP
0.735	30.38	10.21	56.00	25.62	QP
0.200	38.94	10.24	64.57	25.63	QP
0.735	20.13	10.21	46.00	25.87	Ave.
0.200	22.35	10.24	54.57	32.22	Ave.
0.175	21.40	10.24	55.29	33.89	Ave.

Note:
1) Corrected Amplitude = Reading + Correction Factor
2) Correction Factor =LISN/ISN VDF (Voltage Division Factor) + Cable Loss + Pulse Limiter Attenuation
   The corrected factor has been input into the transducer of the test software.
3) Margin = Limit – Corrected Amplitude

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

Applicable Standard

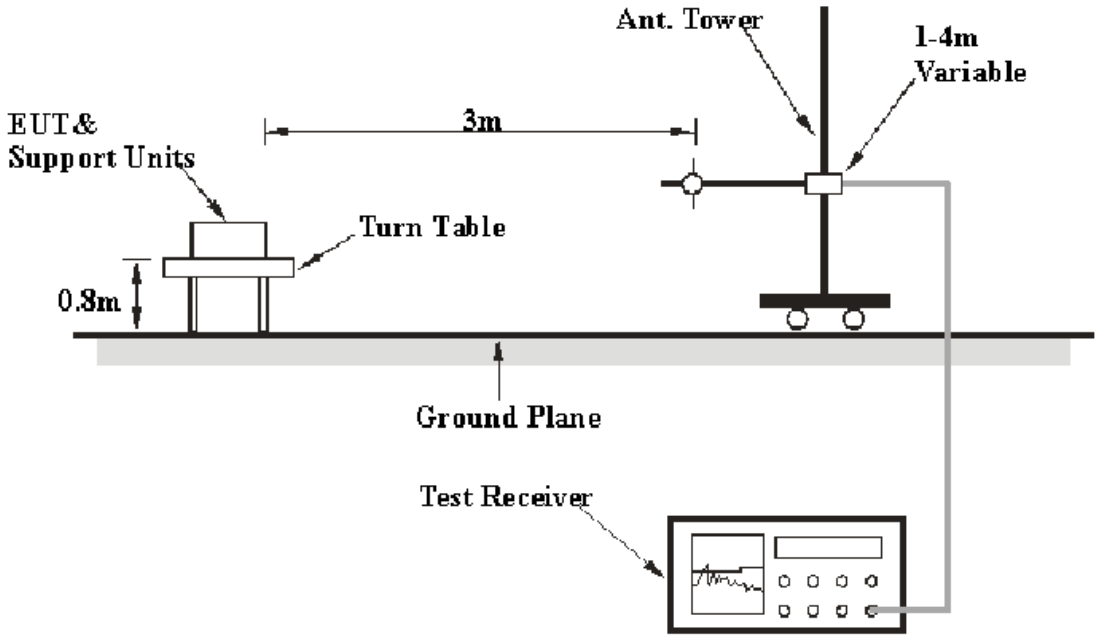
FCC §15.247 (d); §15.209; §15.205;

Measurement Uncertainty

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

Based on CISPR 16-4-4, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of a radiation emissions measurement at Bay Area Compliance Laboratories Corp. (Shenzhen) is 4.0 dB(k=2, 95% level of confidence), and the uncertainty will not be taken into consideration for all the test data recorded in the report.

EUT Setup



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

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

The spacing between the peripherals was 10 cm.

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

EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 30 MHz to 25 GHz.

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

Frequency Range	***RBW***	***Video B/W***	***Detector***
30MHz – 1000 MHz	100 kHz	300 kHz	QP
1000 MHz – 25 GHz	1 MHz	3 MHz	PK
1000 MHz – 25 GHz	1 MHz	10 Hz	Ave.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
HP	Amplifier	8447E	1937A01046	2011-11-24	2012-11-23
Rohde & Schwarz	EMI Test Receiver	ESCI	101122	2012-08-08	2013-08-07
Sunol Sciences	Broadband Antenna	JB1	A040904-2	2011-11-28	2012-11-27
Mini-Circuits	Amplifier	ZVA-213+	N/A	2011-11-24	2012-11-23
Sunol Sciences	Horn Antenna	DRH-118	A052304	2011-12-01	2012-11-30
Rohde & Schwarz	Signal Analyzer	FSIQ26	8386001028	2011-11-24	2012-11-23
Agilent	Spectrum Analyzer	8564E	3943A01781	2012-05-17	2013-05-16
the electro-Mechanics Co.	Horn Antenna	3116	9510-2270	2011-10-14	2012-10-13
R&S	Auto test Software	EMC32	V6.30	-	-

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

Test Procedure

For the radiated emissions test, the adapter and other relevant equipments were connected to the 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 and peak and Average detection modes for frequencies above 1 GHz.

Corrected Amplitude & Margin Calculation

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

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

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

Margin = Limit – Corrected Amplitude

Test Results Summary

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

2.28 dB at **2388.4 MHz** in the **Horizontal** polarization for 802.11n-HT40 mode

Test Data

Environmental Conditions

Temperature:	23~25 ° C
Relative Humidity:	50~56 %
ATM Pressure:	100.0 kPa

The testing was performed by Tiger Yeu from 2012-09-11 to 2012-09-22

Test Mode: Transmitting

30 MHz-25 GHz (Scan with AC adapter and PoE power adapter, the worst case is PoE power adapter)

3.0 dBi Antenna, Maximum conducted power is 30dBm

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/15.205/15.209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H / V)			Limit (dBμV/m)	Margin (dB)
802.11b Mode, Low Channel (2412 MHz)									
2412.0	103.39	PK	36	1.2	H	6.13	109.52	/	/
2412.0	93.27	Ave.	36	1.2	H	6.13	99.40	/	/
2412.0	90.63	PK	55	1.3	V	6.13	96.76	/	/
2412.0	82.96	Ave.	55	1.3	V	6.13	89.09	/	/
4824.0	37.86	Ave.	24	1.2	H	12.40	50.26	54	3.74*
220.4	55.82	QP	100	1.10	V	-15.80	40.02	46	5.98
829.6	43.21	QP	183	1.20	H	-5.00	38.21	46	7.79
2389.2	38.41	Ave.	88	1.2	H	6.13	44.54	54	9.46
2492.9	35.88	Ave.	87	1.3	V	6.81	42.69	54	11.31
2335.8	34.71	Ave.	95	1.3	V	5.48	40.19	54	13.81
9648.0	17.42	Ave.	55	1.2	V	19.29	36.71	54	17.29
4824.0	43.69	PK	24	1.2	H	12.40	56.09	74	17.91
2389.2	49.87	PK	88	1.2	H	6.13	56.00	74	18.00
7236.0	17.39	Ave.	212	1.2	H	16.62	34.01	54	19.99
2492.9	46.98	PK	87	1.3	V	6.81	53.79	74	20.21
9648.0	33.51	PK	55	1.2	V	19.29	52.80	74	21.20
2335.8	45.29	PK	95	1.3	V	5.48	50.77	74	23.23
7236.0	33.87	PK	212	1.2	H	16.62	50.49	74	23.51
802.11b Mode, Middle Channel (2437 MHz)									
2437.0	108.63	PK	36	1.2	V	6.13	114.76	/	/
2437.0	97.83	Ave.	36	1.2	H	6.13	103.96	/	/
2437.0	90.22	PK	99	1.2	V	6.13	96.35	/	/
2437.0	82.57	Ave.	99	1.2	V	6.13	88.70	/	/
4874.0	39.59	Ave.	45	1.3	H	12.46	52.05	54	1.95*
220.4	56.32	QP	100	1.10	V	-15.80	40.52	46	5.48
829.6	43.32	QP	183	1.20	H	-5.00	38.32	46	7.68
2483.5	34.52	Ave.	113	1.3	V	6.81	41.33	54	12.67
2390.0	34.29	Ave.	99	1.3	H	6.13	40.42	54	13.58
2335.7	33.98	Ave.	42	1.3	V	5.48	39.46	54	14.54
4874.0	45.97	PK	45	1.3	H	12.46	58.43	74	15.57
9748.0	17.85	Ave.	77	1.1	V	19.40	37.25	54	16.75
7311.0	17.92	Ave.	87	1.2	H	16.49	34.41	54	19.59
9748.0	33.95	PK	77	1.1	V	19.40	53.35	74	20.65
2483.5	45.05	PK	113	1.3	V	6.81	51.86	74	22.14
2390.0	45.28	PK	99	1.3	H	6.13	51.41	74	22.59
7311.0	33.98	PK	87	1.2	H	16.49	50.47	74	23.53
2335.7	44.26	PK	42	1.3	V	5.48	49.74	74	24.26

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/15.205/15.209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H / V)			Limit (dBμV/m)	Margin (dB)
802.11b Mode, High Channel (2462 MHz)									
2462.0	89.45	PK	25	1.3	H	6.81	96.26	/	/
2462.0	82.77	Ave.	25	1.3	H	6.81	89.58	/	/
2462.0	102.19	PK	121	1.3	V	6.81	109.00	/	/
2462.0	92.46	Ave.	121	1.3	V	6.81	99.27	/	/
4924.0	38.63	Ave.	66	1.2	H	12.50	51.13	54	2.87*
220.4	55.84	QP	100	1.10	V	-15.80	40.04	46	5.96
829.6	43.56	QP	183	1.20	H	-5.00	38.56	46	7.44
4924.0	44.38	PK	66	1.2	H	12.50	56.88	74	17.12
9848.0	17.19	Ave.	33	1.2	V	19.39	36.58	54	17.42
2489.4	29.04	Ave.	2	1.1	V	6.81	35.85	54	18.15
7386.0	18.29	Ave.	96	1.1	H	15.91	34.20	54	19.80
9848.0	32.87	PK	33	1.2	V	19.39	52.26	74	21.74
2489.4	45.41	PK	2	1.1	V	6.81	52.22	74	21.78
2390.0	25.01	Ave.	32	1.2	H	6.13	31.14	54	22.86
2338.7	24.74	Ave.	125	1.2	V	5.48	30.22	54	23.78
7386.0	33.26	PK	96	1.1	H	15.91	49.17	74	24.83
2390.0	41.22	PK	32	1.2	H	6.13	47.35	74	26.65
2338.7	40.26	PK	125	1.2	V	5.48	45.74	74	28.26
802.11g Mode, Low Channel (2412 MHz)									
2412.0	95.93	PK	85	1.2	H	6.13	102.06	/	/
2412.0	78.29	Ave.	85	1.2	H	6.13	84.42	/	/
2412.0	101.39	PK	44	1.3	V	6.13	107.52	/	/
2412.0	87.72	Ave.	44	1.3	V	6.13	93.85	/	/
220.4	56.84	QP	100	1.10	V	-15.80	41.04	46	4.96
829.6	43.12	QP	183	1.20	H	-5.00	38.12	46	7.88
2390.0	35.88	Ave.	99	1.2	H	6.13	42.01	54	11.99
2390.0	54.69	PK	99	1.2	H	6.13	60.82	74	13.18
2490.2	31.16	Ave.	8	1.1	V	6.81	37.97	54	16.03
2490.2	50.27	PK	8	1.1	V	6.81	57.08	74	16.92
9648.0	17.55	Ave.	45	1.2	V	19.29	36.84	54	17.16
2338.1	31.29	Ave.	36	1.3	V	5.48	36.77	54	17.23
2338.1	50.11	PK	36	1.3	V	5.48	55.59	74	18.41
7236.0	18.52	Ave.	225	1.2	H	16.62	35.14	54	18.86
4824.0	21.89	Ave.	75	1.2	H	12.40	34.29	54	19.71
9648.0	33.29	PK	45	1.2	V	19.29	52.58	74	21.42
7236.0	34.01	PK	225	1.2	H	16.62	50.63	74	23.37
4824.0	36.78	PK	75	1.2	H	12.40	49.18	74	24.82

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBµV/m)	FCC Part 15.247/15.205/15.209	
	Reading (dBµV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H / V)			Limit (dBµV/m)	Margin (dB)
802.11g Mode, Middle Channel (2437 MHz)									
2437.0	98.22	PK	336	1.2	H	6.13	104.35	/	/
2437.0	81.35	Ave.	336	1.2	H	6.13	87.48	/	/
2437.0	107.03	PK	25	1.3	V	6.13	113.16	/	/
2437.0	91.72	Ave.	25	1.3	V	6.13	97.85	/	/
220.4	55.74	QP	100	1.10	V	-15.80	39.94	46	6.06
829.6	43.12	QP	183	1.20	H	-5.00	38.12	46	7.88
2483.5	31.26	Ave.	99	1.2	V	6.81	38.07	54	15.93
9748.0	17.46	Ave.	95	1.3	V	19.40	36.86	54	17.14
4874.0	23.76	Ave.	114	1.3	H	12.46	36.22	54	17.78
2483.5	48.73	PK	99	1.2	V	6.81	55.54	74	18.46
7311.0	18.64	Ave.	85	1.1	H	16.49	35.13	54	18.87
2338.1	28.46	Ave.	47	1.2	V	5.48	33.94	54	20.06
2389.3	27.62	Ave.	36	1.2	H	6.13	33.75	54	20.25
9748.0	32.88	PK	95	1.3	V	19.40	52.28	74	21.72
4874.0	38.93	PK	114	1.3	H	12.46	51.39	74	22.61
2338.1	45.26	PK	47	1.2	V	5.48	50.74	74	23.26
2389.3	44.16	PK	36	1.2	H	6.13	50.29	74	23.71
7311.0	33.28	PK	85	1.1	H	16.49	49.77	74	24.23
802.11g Mode, High Channel (2462 MHz)									
2462.0	94.76	PK	112	1.3	H	6.81	101.57	/	/
2462.0	77.29	Ave.	112	1.3	H	6.81	84.1	/	/
2462.0	99.89	PK	58	1.3	V	6.81	106.70	/	/
2462.0	85.22	Ave.	58	1.3	V	6.81	92.03	/	/
220.4	55.91	QP	100	1.10	V	-15.80	40.11	46	5.89
829.6	43.10	QP	183	1.20	H	-5.00	38.10	46	7.90
2483.5	32.65	Ave.	74	1.1	V	6.81	39.46	54	14.54
9848.0	17.87	Ave.	96	1.2	V	19.39	37.26	54	16.74
2483.5	49.35	PK	74	1.1	V	6.81	56.16	74	17.84
2390.1	29.64	Ave.	7	1.3	H	6.13	35.77	54	18.23
7386.0	18.32	Ave.	25	1.3	H	15.91	34.23	54	19.77
4924.0	21.22	Ave.	36	1.2	H	12.50	33.72	54	20.28
2390.0	46.99	PK	7	1.3	H	6.13	53.12	74	20.88
2339.1	26.94	Ave.	88	1.2	V	5.48	32.42	54	21.58
9848.0	32.99	PK	96	1.2	V	19.39	52.38	74	21.62
7386.0	33.58	PK	25	1.3	H	15.91	49.49	74	24.51
4924.0	36.39	PK	36	1.2	H	12.50	48.89	74	25.11
2339.1	43.22	PK	88	1.2	V	5.48	48.70	74	25.30

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/15.205/15.209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H / V)			Limit (dBμV/m)	Margin (dB)
802.11n-HT20 Mode, Low Channel (2412 MHz)									
2412.0	94.27	PK	22	1.2	H	6.13	100.40	/	/
2412.0	78.03	Ave.	22	1.2	H	6.13	84.16	/	/
2412.0	99.33	PK	9	1.3	V	6.13	105.46	/	/
2412.0	87.68	Ave.	9	1.3	V	6.13	93.81	/	/
220.4	55.21	QP	100	1.10	V	-15.80	39.41	46	6.59
829.6	42.98	QP	183	1.20	H	-5.00	37.98	46	8.02
2390.0	36.29	Ave.	87	1.2	H	6.13	42.42	54	11.58
2390.0	55.64	PK	87	1.2	H	6.13	61.77	74	12.23
9648.0	18.03	Ave.	23	1.2	V	19.29	37.32	54	16.68
2331.7	31.69	Ave.	85	1.2	V	5.48	37.17	54	16.83
2483.5	30.21	Ave.	93	1.1	V	6.81	37.02	54	16.98
2483.5	49.63	PK	93	1.1	V	6.81	56.44	74	17.56
2331.7	50.12	PK	85	1.2	V	5.48	55.60	74	18.40
7236.0	18.55	Ave.	1	1.3	H	16.62	35.17	54	18.83
4824.0	22.71	Ave.	55	1.3	H	12.40	35.11	54	18.89
9648.0	32.96	PK	23	1.2	V	19.29	52.25	74	21.75
7236.0	33.96	PK	1	1.3	H	16.62	50.58	74	23.42
4824.0	37.36	PK	55	1.3	H	12.40	49.76	74	24.24
802.11n-HT20 Mode, Middle Channel (2437 MHz)									
2437.0	98.91	PK	69	1.3	H	6.13	105.04	/	/
2437.0	82.36	Ave.	69	1.3	H	6.13	88.49	/	/
2437.0	105.22	PK	33	1.3	V	6.13	111.35	/	/
2437.0	90.87	Ave.	33	1.3	V	6.13	97.00	/	/
220.4	55.87	QP	100	1.10	V	-15.80	40.07	46	5.93
829.6	43.51	QP	183	1.20	H	-5.00	38.51	46	7.49
2483.5	32.36	Ave.	22	1.1	V	6.81	39.17	54	14.83
9748.0	17.55	Ave.	99	1.2	V	19.40	36.95	54	17.05
4874.0	23.91	Ave.	85	1.2	H	12.46	36.37	54	17.63
2389.1	30.22	Ave.	4	1.3	H	6.13	36.35	54	17.65
2334.2	29.68	Ave.	36	1.3	V	5.48	35.16	54	18.84
7311.0	18.01	Ave.	114	1.2	H	16.49	34.50	54	19.50
2483.5	47.66	PK	22	1.1	V	6.81	54.47	74	19.53
9748.0	32.98	PK	99	1.2	V	19.40	52.38	74	21.62
4874.0	39.04	PK	85	1.2	H	12.46	51.50	74	22.50
2389.1	45.28	PK	4	1.3	H	6.13	51.41	74	22.59
7311.0	33.96	PK	114	1.2	H	16.49	50.45	74	23.55
2334.2	44.15	PK	36	1.3	V	5.48	49.63	74	24.37

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBµV/m)	FCC Part 15.247/15.205/15.209	
	Reading (dBµV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H / V)			Limit (dBµV/m)	Margin (dB)
802.11n-HT20 Mode, High Channel (2462 MHz)									
2462.0	92.69	PK	21	1.2	H	6.81	99.50	/	/
2462.0	77.36	Ave.	21	1.2	H	6.81	84.17	/	/
2462.0	98.78	PK	112	1.1	V	6.81	105.59	/	/
2462.0	85.69	Ave.	112	1.1	V	6.81	92.50	/	/
220.4	55.74	QP	100	1.10	V	-15.80	39.94	46	6.06
829.6	43.61	QP	183	1.20	H	-5.00	38.61	46	7.39
2483.5	35.29	Ave.	25	1.2	V	6.81	42.10	54	11.90
2483.5	51.89	PK	25	1.2	V	6.81	58.70	74	15.30
2389.3	32.26	Ave.	69	1.3	H	6.13	38.39	54	15.61
9848.0	17.85	Ave.	47	1.2	V	19.39	37.24	54	16.76
2335.8	29.68	Ave.	255	1.2	V	5.48	35.16	54	18.84
2389.3	48.57	PK	69	1.3	H	6.13	54.70	74	19.30
7386.0	17.85	Ave.	55	1.2	H	15.91	33.76	54	20.24
4924.0	21.03	Ave.	101	1.2	H	12.50	33.53	54	20.47
9848.0	32.67	PK	47	1.2	V	19.39	52.06	74	21.94
2335.8	45.96	PK	255	1.2	V	5.48	51.44	74	22.56
7386.0	33.26	PK	55	1.2	H	15.91	49.17	74	24.83
4924.0	36.13	PK	101	1.2	H	12.50	48.63	74	25.37
802.11n-HT40 Mode, Low Channel (2422 MHz)									
2422.0	93.96	PK	33	1.1	H	6.13	100.09	/	/
2422.0	74.26	Ave.	33	1.1	H	6.13	80.39	/	/
2422.0	100.07	PK	114	1.1	V	6.13	106.20	/	/
2422.0	82.39	Ave.	114	1.1	V	6.13	88.52	/	/
220.4	56.24	QP	100	1.10	V	-15.80	40.44	46	5.56
2389.7	40.81	Ave.	55	1.3	H	6.13	46.94	54	7.06
829.6	43.21	QP	183	1.20	H	-5.00	38.21	46	7.79
2389.7	57.71	PK	55	1.3	H	6.13	63.84	74	10.16
2339.1	35.69	Ave.	69	1.2	V	5.48	41.17	54	12.83
2483.5	33.29	Ave.	5	1.2	V	6.81	40.10	54	13.90
2339.1	52.14	PK	69	1.3	V	5.48	57.62	74	16.38
9688.0	17.85	Ave.	58	1.3	V	19.29	37.14	54	16.86
2483.5	50.12	PK	5	1.2	V	6.81	56.93	74	17.07
7266.0	18.03	Ave.	7	1.3	H	16.62	34.65	54	19.35
4844.0	21.83	Ave.	5	1.2	H	12.40	34.23	54	19.77
9688.0	32.26	PK	58	1.2	V	19.29	51.55	74	22.45
7266.0	33.68	PK	7	1.3	H	16.62	50.30	74	23.70
4844.0	36.19	PK	5	1.2	H	12.40	48.59	74	25.41

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBµV/m)	FCC Part 15.247/15.205/15.209	
	Reading (dBµV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H / V)			Limit (dBµV/m)	Margin (dB)
802.11n-HT40 Mode, Middle Channel (2437 MHz)									
2437.0	96.73	PK	25	1.2	H	6.13	102.86	/	/
2437.0	77.37	Ave.	25	1.2	H	6.13	83.50	/	/
2437.0	102.75	PK	115	1.3	V	6.13	108.88	/	/
2437.0	86.39	Ave.	115	1.3	V	6.13	92.52	/	/
220.4	56.74	QP	100	1.10	V	-15.80	40.94	46	5.06
829.6	43.41	QP	183	1.20	H	-5.00	38.41	46	7.59
2483.5	32.28	Ave.	48	1.2	V	6.81	39.09	54	14.91
2483.5	50.39	PK	48	1.2	V	6.81	57.20	74	16.80
9748.0	17.45	Ave.	2	1.3	V	19.40	36.85	54	17.15
2389.1	30.06	Ave.	77	1.2	H	6.13	36.19	54	17.81
7311.0	18.47	Ave.	25	1.2	H	16.49	34.96	54	19.04
4874.0	22.26	Ave.	36	1.2	H	12.46	34.72	54	19.28
2389.1	48.52	PK	77	1.2	H	6.13	54.65	74	19.35
9748.0	32.96	PK	2	1.3	V	19.40	52.36	74	21.64
2335.4	26.69	Ave.	22	1.2	V	5.48	32.17	54	21.83
4874.0	38.29	PK	36	1.2	H	12.46	50.75	74	23.25
7311.0	33.68	PK	25	1.2	H	16.49	50.17	74	23.83
2335.4	44.15	PK	22	1.2	V	5.48	49.63	74	24.37
802.11n-HT40 Mode, High Channel (2452 MHz)									
2452.0	92.89	PK	226	1.2	H	6.81	99.70	/	/
2452.0	73.96	Ave.	226	1.2	H	6.81	80.77	/	/
2452.0	98.63	PK	36	1.3	V	6.81	105.44	/	/
2452.0	81.69	Ave.	36	1.3	V	6.81	88.50	/	/
220.4	56.54	QP	100	1.10	V	-15.80	40.74	46	5.26
829.6	43.51	QP	183	1.20	H	-5.00	38.51	46	7.49
2483.5	35.78	Ave.	96	1.2	V	6.81	42.59	54	11.41
2483.5	52.65	PK	96	1.2	V	6.81	59.46	74	14.54
2390.0	31.29	Ave.	33	1.3	H	6.13	37.42	54	16.58
9808.0	18.06	Ave.	66	1.3	V	19.29	37.35	54	16.65
2390.0	48.62	PK	33	1.3	H	6.13	54.75	74	19.25
2337.2	28.66	Ave.	25	1.2	V	5.48	34.14	54	19.86
4904.0	21.39	Ave.	9	1.2	H	12.46	33.85	54	20.15
7356.0	17.44	Ave.	112	1.2	H	15.91	33.35	54	20.65
9808.0	33.69	PK	66	1.3	V	19.29	52.98	74	21.02
2337.2	45.22	PK	25	1.2	V	5.48	50.70	74	23.30
4904.0	36.35	PK	9	1.2	H	12.46	48.81	74	25.19
7356.0	32.85	PK	112	1.2	H	15.91	48.76	74	25.24

8.0 dBi Antenna, Maximum conducted power is 29dBm

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/15.205/15.209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H / V)			Limit (dBμV/m)	Margin (dB)
802.11b Mode, Low Channel (2412 MHz)									
2412.0	91.25	PK	69	1.2	H	6.13	97.38	/	/
2412.0	84.33	Ave.	69	1.2	H	6.13	90.46	/	/
2412.0	89.76	PK	88	1.3	V	6.13	95.89	/	/
2412.0	82.84	Ave.	88	1.3	V	6.13	88.97	/	/
220.4	56.27	QP	100	1.10	V	-15.80	40.47	46	5.53
4824.0	34.59	Ave.	35	1.2	H	12.40	46.99	54	7.01
829.6	41.23	QP	183	1.20	H	-5.00	36.23	46	9.77
9648.0	18.06	Ave.	15	1.2	V	19.29	37.35	54	16.65
2390.0	29.33	Ave.	221	1.2	H	6.13	35.46	54	18.54
2491.3	27.71	Ave.	15	1.3	V	6.81	34.52	54	19.48
7236.0	17.44	Ave.	77	1.1	H	16.62	34.06	54	19.94
4824.0	40.23	PK	35	1.2	H	12.40	52.63	74	21.37
2335.1	26.94	Ave.	11	1.1	V	5.48	32.42	54	21.58
9648.0	32.93	PK	15	1.2	V	19.29	52.22	74	21.78
7236.0	33.28	PK	77	1.1	H	16.62	49.90	74	24.10
2390.0	42.37	PK	221	1.2	H	6.13	48.50	74	25.50
2491.3	40.18	PK	15	1.3	V	6.81	46.99	74	27.01
2335.1	39.66	PK	11	1.1	V	5.48	45.14	74	28.86
802.11b Mode, Middle Channel (2437 MHz)									
2437.0	107.65	PK	2	1.3	H	6.13	113.78	/	/
2437.0	89.03	Ave.	2	1.3	H	6.13	95.16	/	/
2437.0	93.87	PK	14	1.3	V	6.13	100.00	/	/
2437.0	86.63	Ave.	14	1.3	V	6.13	92.76	/	/
4874.0	37.54	Ave.	36	1.3	H	12.46	50.00	54	4.00
220.4	55.62	QP	100	1.10	V	-15.80	39.82	46	6.18
829.6	43.21	QP	183	1.20	H	-5.00	38.21	46	7.79
9748.0	17.49	Ave.	1	1.2	V	19.40	36.89	54	17.11
4874.0	43.13	PK	36	1.3	H	12.46	55.59	74	18.41
2483.5	28.12	Ave.	56	1.3	V	6.81	34.93	54	19.07
7311.0	18.24	Ave.	225	1.1	H	16.49	34.73	54	19.27
9748.0	32.96	PK	1	1.2	V	19.40	52.36	74	21.64
2390.0	25.38	Ave.	77	1.2	H	6.13	31.51	54	22.49
2339.3	25.87	Ave.	88	1.1	V	5.48	31.35	54	22.65
7311.0	33.55	PK	225	1.1	H	16.49	50.04	74	23.96
2483.5	41.06	PK	56	1.3	V	6.81	47.87	74	26.13
2390.0	39.68	PK	77	1.2	H	6.13	45.81	74	28.19
2339.3	39.67	PK	88	1.1	V	5.48	45.15	74	28.85

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBµV/m)	FCC Part 15.247/15.205/15.209	
	Reading (dBµV/m)	Detector (PK/QP/Ave.)		Height (m)	Polar (H / V)			Limit (dBµV/m)	Margin (dB)
802.11b Mode, High Channel (2462 MHz)									
2462.0	99.25	PK	99	1.2	H	7.21	106.46	/	/
2462.0	84.61	Ave.	99	1.2	H	6.81	91.42	/	/
2462.0	88.64	PK	8	1.1	V	6.81	95.45	/	/
2462.0	81.93	Ave.	8	1.1	V	6.81	88.74	/	/
220.4	55.79	QP	100	1.10	V	-15.80	39.99	46	6.01
4924.0	34.69	Ave.	55	1.2	H	12.50	47.19	54	6.81
829.6	42.85	QP	183	1.20	H	-5.00	37.85	46	8.15
9848.0	17.52	Ave.	36	1.2	V	19.39	36.91	54	17.09
2488.4	29.13	Ave.	141	1.3	V	6.81	35.94	54	18.06
2389.3	27.49	Ave.	12	1.2	H	6.13	33.62	54	20.38
9848.0	33.96	PK	36	1.2	V	19.39	53.35	74	20.65
7386.0	17.26	Ave.	65	1.3	H	15.91	33.17	54	20.83
4924.0	40.25	PK	55	1.2	H	12.50	52.75	74	21.25
2334.1	25.87	Ave.	14	1.3	V	5.48	31.35	54	22.65
7386.0	33.68	PK	65	1.3	H	15.91	49.59	74	24.41
2488.4	42.28	PK	141	1.3	V	6.81	49.09	74	24.91
2389.3	40.83	PK	12	1.2	H	6.13	46.96	74	27.04
2334.1	39.66	PK	14	1.3	V	5.48	45.14	74	28.86
802.11g Mode, Low Channel (2412 MHz)									
2412.0	92.33	PK	33	1.3	H	6.13	98.46	/	/
2412.0	83.89	Ave.	33	1.3	H	6.13	90.02	/	/
2412.0	90.27	PK	55	1.2	V	6.13	96.40	/	/
2412.0	81.43	Ave.	55	1.2	V	6.13	87.56	/	/
220.4	55.97	QP	100	1.10	V	-15.80	40.17	46	5.83
829.6	44.12	QP	183	1.20	H	-5.00	39.12	46	6.88
9648.0	17.45	Ave.	1	1.2	V	19.29	36.74	54	17.26
7236.0	18.26	Ave.	44	1.1	H	16.62	34.88	54	19.12
2390.0	28.51	Ave.	36	1.2	H	6.13	34.64	54	19.36
2493.3	26.93	Ave.	98	1.3	V	6.81	33.74	54	20.26
9648.0	32.99	PK	1	1.2	V	19.29	52.28	74	21.72
4824.0	19.86	Ave.	47	1.2	H	12.40	32.26	54	21.74
2338.2	26.68	Ave.	6	1.2	V	5.48	32.16	54	21.84
7236.0	33.85	PK	44	1.1	H	16.62	50.47	74	23.53
4824.0	36.97	PK	47	1.2	H	12.40	49.37	74	24.63
2390.0	42.96	PK	36	1.2	H	6.13	49.09	74	24.91
2493.3	40.18	PK	98	1.3	V	6.81	46.99	74	27.01
2338.2	40.22	PK	6	1.2	V	5.48	45.70	74	28.30

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/15.205/15.209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H / V)			Limit (dBμV/m)	Margin (dB)
802.11g Mode, Middle Channel (2437 MHz)									
2437.0	105.88	PK	54	1.2	H	6.13	112.01	/	/
2437.0	86.39	Ave.	54	1.2	H	6.13	92.52	/	/
2437.0	94.56	PK	5	1.1	V	6.13	100.69	/	/
2437.0	84.92	Ave.	5	1.1	V	6.13	91.05	/	/
220.4	56.36	QP	100	1.10	V	-15.80	40.56	46	5.44
829.6	45.21	QP	183	1.20	H	-5.00	40.21	46	5.79
9748.0	17.36	Ave.	95	1.2	V	19.40	36.76	54	17.24
7311.0	18.36	Ave.	69	1.2	H	16.49	34.85	54	19.15
4874.0	21.25	Ave.	85	1.2	H	12.46	33.71	54	20.29
2483.5	26.53	Ave.	66	1.3	V	6.81	33.34	54	20.66
9748.0	32.55	PK	95	1.2	V	19.40	51.95	74	22.05
4874.0	38.29	PK	85	1.2	H	12.46	50.75	74	23.25
7311.0	33.95	PK	69	1.2	H	16.49	50.44	74	23.56
2389.2	23.67	Ave.	7	1.2	H	6.13	29.80	54	24.20
2337.1	22.15	Ave.	8	1.3	V	5.48	27.63	54	26.37
2483.5	40.77	PK	66	1.3	V	6.81	47.58	74	26.42
2389.2	37.19	PK	7	1.2	H	6.13	43.32	74	30.68
2337.1	36.35	PK	8	1.3	V	5.48	41.83	74	32.17
802.11g Mode, High Channel (2462 MHz)									
2462.0	98.62	PK	2	1.1	H	7.21	105.83	/	/
2462.0	84.06	Ave.	2	1.1	H	6.81	90.87	/	/
2462.0	90.22	PK	55	1.1	V	6.81	97.03	/	/
2462.0	81.43	Ave.	55	1.1	V	6.81	88.24	/	/
220.4	56.24	QP	100	1.10	V	-15.80	40.44	46	5.56
829.6	42.59	QP	183	1.20	H	-5.00	37.59	46	8.41
9848.0	17.44	Ave.	85	1.2	V	19.39	36.83	54	17.17
2487.9	29.27	Ave.	38	1.3	V	6.81	36.08	54	17.92
7386.0	18.55	Ave.	95	1.3	H	15.91	34.46	54	19.54
9848.0	33.67	PK	85	1.2	V	19.39	53.06	74	20.94
2390.1	26.91	Ave.	66	1.2	H	6.13	33.04	54	20.96
4924.0	19.15	Ave.	36	1.2	H	12.50	31.65	54	22.35
2487.9	43.69	PK	38	1.3	V	6.81	50.50	74	23.50
2334.2	24.55	Ave.	8	1.1	V	5.48	30.03	54	23.97
7386.0	33.96	PK	95	1.3	H	15.91	49.87	74	24.13
4924.0	36.37	PK	36	1.2	H	12.50	48.87	74	25.13
2390.0	40.28	PK	66	1.2	H	6.13	46.41	74	27.59
2334.2	39.61	PK	8	1.1	V	5.48	45.09	74	28.91

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/15.205/15.209	
	Reading (dBμV/m)	Detector (PK/QP/Ave.)		Height (m)	Polar (H / V)			Limit (dBμV/m)	Margin (dB)
802.11n-HT20 Mode, Low Channel (2412 MHz)									
2412.0	97.83	PK	21	1.2	H	6.13	103.96	/	/
2412.0	79.57	Ave.	21	1.2	H	6.13	85.70	/	/
2412.0	93.06	PK	3	1.1	V	6.13	99.19	/	/
2412.0	78.09	Ave.	3	1.1	V	6.13	84.22	/	/
220.4	56.31	QP	100	1.10	V	-15.80	40.51	46	5.49
829.6	43.57	QP	183	1.20	H	-5.00	38.57	46	7.43
9648.0	17.83	Ave.	72	1.2	V	19.29	37.12	54	16.88
7236.0	18.54	Ave.	55	1.3	H	16.62	35.16	54	18.84
2390.0	28.34	Ave.	26	1.2	H	6.13	34.47	54	19.53
2487.1	25.91	Ave.	26	1.2	V	6.81	32.72	54	21.28
4824.0	20.19	Ave.	37	1.3	H	12.40	32.59	54	21.41
9648.0	32.99	PK	72	1.2	V	19.29	52.28	74	21.72
2338.6	25.69	Ave.	15	1.1	V	5.48	31.17	54	22.83
7236.0	33.67	PK	55	1.3	H	16.62	50.29	74	23.71
4824.0	37.73	PK	37	1.3	H	12.40	50.13	74	23.87
2390.0	43.29	PK	26	1.2	H	6.13	49.42	74	24.58
2487.1	40.18	PK	26	1.2	V	6.81	46.99	74	27.01
2338.6	40.11	PK	15	1.1	V	5.48	45.59	74	28.41
802.11n-HT20 Mode, Middle Channel (2437 MHz)									
2437.0	104.79	PK	63	1.1	H	6.13	110.92	/	/
2437.0	82.99	Ave.	63	1.1	H	6.13	89.12	/	/
2437.0	96.83	PK	24	1.3	V	6.13	102.96	/	/
2437.0	81.77	Ave.	24	1.3	V	6.13	87.90	/	/
220.4	57.21	QP	100	1.10	V	-15.80	41.41	46	4.59
829.6	44.21	QP	183	1.20	H	-5.00	39.21	46	6.79
9748.0	17.22	Ave.	121	1.2	V	19.40	36.62	54	17.38
7311.0	18.29	Ave.	5	1.2	H	16.49	34.78	54	19.22
4874.0	21.64	Ave.	115	1.2	H	12.46	34.10	54	19.90
2486.3	26.76	Ave.	14	1.3	V	6.81	33.57	54	20.43
9748.0	32.85	PK	121	1.2	V	19.40	52.25	74	21.75
2389.7	25.69	Ave.	6	1.2	H	6.13	31.82	54	22.18
4874.0	38.29	PK	115	1.2	H	12.46	50.75	74	23.25
7311.0	33.68	PK	5	1.2	H	16.49	50.17	74	23.83
2337.2	23.58	Ave.	33	1.1	V	5.48	29.06	54	24.94
2486.3	41.53	PK	14	1.3	V	6.81	48.34	74	25.66
2389.7	40.15	PK	6	1.2	H	6.13	46.28	74	27.72
2337.2	39.62	PK	33	1.1	V	5.48	45.10	74	28.90

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/15.205/15.209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H / V)			Limit (dBμV/m)	Margin (dB)
802.11n-HT20 Mode, High Channel (2462 MHz)									
2462.0	93.97	PK	25	1.2	H	6.81	100.78	/	/
2462.0	78.19	Ave.	25	1.2	H	6.81	85.00	/	/
2462.0	93.68	PK	36	1.1	V	6.81	100.49	/	/
2462.0	78.25	Ave.	36	1.1	V	6.81	85.06	/	/
220.4	56.75	QP	100	1.10	V	-15.80	40.95	46	5.05
829.6	43.87	QP	183	1.20	H	-5.00	38.87	46	7.13
9848.0	17.88	Ave.	114	1.2	V	19.39	37.27	54	16.73
2486.9	29.73	Ave.	22	1.3	V	6.81	36.54	54	17.46
7386.0	18.57	Ave.	96	1.3	H	15.91	34.48	54	19.52
2389.7	26.37	Ave.	3	1.2	H	6.13	32.50	54	21.50
4924.0	19.72	Ave.	21	1.3	H	12.50	32.22	54	21.78
9848.0	32.67	PK	114	1.2	V	19.39	52.06	74	21.94
2486.9	44.85	PK	22	1.3	V	6.81	51.66	74	22.34
2339.3	25.96	Ave.	25	1.1	V	5.48	31.44	54	22.56
7386.0	33.96	PK	96	1.3	H	15.91	49.87	74	24.13
4924.0	36.87	PK	21	1.3	H	12.50	49.37	74	24.63
2389.7	41.22	PK	3	1.2	H	6.13	47.35	74	26.65
2339.3	40.15	PK	25	1.1	V	5.48	45.63	74	28.37
802.11n-HT40 Mode, Low Channel (2422 MHz)									
2422.0	91.83	PK	25	1.3	H	6.13	97.96	/	/
2422.0	77.48	Ave.	25	1.3	H	6.13	83.61	/	/
2422.0	90.96	PK	6	1.1	V	6.13	97.09	/	/
2422.0	76.34	Ave.	6	1.1	V	6.13	82.47	/	/
220.4	57.31	QP	100	1.10	V	-15.80	41.51	46	4.49
829.6	43.69	QP	183	1.20	H	-5.00	38.69	46	7.31
9688.0	17.06	Ave.	5	1.2	V	19.29	36.35	54	17.65
2390.0	29.22	Ave.	33	1.2	H	6.13	35.35	54	18.65
7266.0	18.26	Ave.	44	1.3	H	16.62	34.88	54	19.12
4844.0	21.89	Ave.	5	1.2	H	12.40	34.29	54	19.71
2485.9	26.98	Ave.	6	1.3	V	6.81	33.79	54	20.21
2336.6	26.33	Ave.	114	1.2	V	5.48	31.81	54	22.19
9688.0	32.15	PK	5	1.2	V	19.29	51.44	74	22.56
7266.0	33.68	PK	44	1.3	H	16.62	50.30	74	23.70
2390.0	43.03	PK	33	1.2	H	6.13	49.16	74	24.84
4844.0	36.12	PK	5	1.2	H	12.40	48.52	74	25.48
2485.9	40.17	PK	6	1.3	V	6.81	46.98	74	27.02
2336.6	40.16	PK	114	1.2	V	5.48	45.64	74	28.36

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/15.205/15.209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H / V)			Limit (dBμV/m)	Margin (dB)
802.11n-HT40 Mode, Middle Channel (2437 MHz)									
2437.0	99.97	PK	99	1.2	H	6.13	106.10	/	/
2437.0	81.25	Ave.	99	1.2	H	6.13	87.38	/	/
2437.0	94.63	PK	55	1.2	V	6.13	100.76	/	/
2437.0	80.39	Ave.	55	1.2	V	6.13	86.52	/	/
220.4	55.97	QP	100	1.10	V	-15.80	40.17	46	5.83
829.6	43.75	QP	183	1.20	H	-5.00	38.75	46	7.25
9748.0	17.22	Ave.	11	1.2	V	19.40	36.62	54	17.38
4874.0	22.67	Ave.	8	1.3	H	12.46	35.13	54	18.87
7311.0	18.27	Ave.	4	1.3	H	16.49	34.76	54	19.24
2485.3	27.39	Ave.	69	1.2	V	6.81	34.20	54	19.80
9748.0	32.67	PK	11	1.2	V	19.40	52.07	74	21.93
4874.0	37.84	PK	8	1.3	H	12.46	50.30	74	23.70
2389.5	24.11	Ave.	33	1.2	H	6.13	30.24	54	23.76
7311.0	33.68	PK	4	1.3	H	16.49	50.17	74	23.83
2485.3	42.67	PK	69	1.2	V	6.81	49.48	74	24.52
2339.7	23.28	Ave.	26	1.3	V	5.48	28.76	54	25.24
2389.5	39.67	PK	33	1.2	H	6.13	45.80	74	28.20
2339.7	38.51	PK	26	1.3	V	5.48	43.99	74	30.01
802.11n-HT40 Mode, High Channel (2452 MHz)									
2452.0	90.89	PK	33	1.2	H	6.81	97.70	/	/
2452.0	77.03	Ave.	33	1.2	H	6.81	83.84	/	/
2452.0	92.71	PK	112	1.3	V	6.81	99.52	/	/
2452.0	76.37	Ave.	112	1.3	V	6.81	83.18	/	/
220.4	56.84	QP	100	1.10	V	-15.80	41.04	46	4.96
829.6	43.56	QP	183	1.20	H	-5.00	38.56	46	7.44
2485.7	29.97	Ave.	223	1.3	V	6.81	36.78	54	17.22
9808.0	17.22	Ave.	88	1.2	V	19.39	36.61	54	17.39
7356.0	18.26	Ave.	9	1.2	H	15.91	34.17	54	19.83
4904.0	21.57	Ave.	95	1.3	H	12.50	34.07	54	19.93
2390.0	26.99	Ave.	26	1.2	H	6.13	33.12	54	20.88
9808.0	32.85	PK	88	1.2	V	19.39	52.24	74	21.76
2485.7	44.76	PK	223	1.3	V	6.81	51.57	74	22.43
2335.1	24.19	Ave.	33	1.1	V	5.48	29.67	54	24.33
7356.0	33.68	PK	9	1.2	H	15.91	49.59	74	24.41
4904.0	36.73	PK	95	1.3	H	12.50	49.23	74	24.77
2390.0	41.96	PK	26	1.2	H	6.13	48.09	74	25.91
2335.1	40.15	PK	33	1.1	V	5.48	45.63	74	28.37

12.0 dBi Antenna, Maximum conducted power is 28dBm

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/15.205/15.209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H / V)			Limit (dBμV/m)	Margin (dB)
802.11b Mode, Low Channel (2412 MHz)									
2412.0	91.18	PK	121	1.2	H	6.13	97.31	/	/
2412.0	81.31	Ave.	121	1.2	H	6.13	87.44	/	/
2412.0	109.72	PK	55	1.3	V	6.13	115.85	/	/
2412.0	99.45	Ave.	55	1.3	V	6.13	105.58	/	/
2390.0	47.25	Ave.	5	1.1	H	6.13	53.38	54	0.62*
220.4	56.27	QP	100	1.10	V	-15.80	40.47	46	5.53
2483.5	38.76	Ave.	36	1.2	V	6.81	45.57	54	8.43
2338.2	39.87	Ave.	51	1.2	V	5.48	45.35	54	8.65
829.6	41.23	QP	183	1.20	H	-5.00	36.23	46	9.77
4824.0	31.83	Ave.	14	1.2	H	12.40	44.23	54	9.77
2390.0	56.18	PK	5	1.1	H	6.13	62.31	74	11.69
9648.0	18.44	Ave.	2	1.2	V	19.29	37.73	54	16.27
2483.5	49.63	PK	36	1.2	V	6.81	56.44	74	17.56
2338.2	50.22	PK	51	1.2	V	5.48	55.70	74	18.30
7236.0	18.25	Ave.	12	1.3	H	16.62	34.87	54	19.13
9648.0	32.96	PK	2	1.2	V	19.29	52.25	74	21.75
4824.0	38.94	PK	14	1.2	H	12.40	51.34	74	22.66
7236.0	33.96	PK	12	1.3	H	16.62	50.58	74	23.42
802.11b Mode, Middle Channel (2437 MHz)									
2437.0	93.75	PK	58	1.3	H	6.13	99.88	/	/
2437.0	83.06	Ave.	58	1.3	H	6.13	89.19	/	/
2437.0	110.89	PK	33	1.3	V	6.13	117.02	/	/
2437.0	101.81	Ave.	33	1.3	V	6.13	107.94	/	/
2390.0	42.86	Ave.	65	1.1	H	6.13	48.99	54	5.01
220.4	55.62	QP	100	1.10	V	-15.80	39.82	46	6.18
4874.0	35.14	Ave.	65	1.2	H	12.46	47.60	54	6.40
829.6	44.21	QP	183	1.20	H	-5.00	39.21	46	6.79
2483.5	39.67	Ave.	47	1.2	V	6.81	46.48	54	7.52
2334.3	39.69	Ave.	63	1.2	V	5.48	45.17	54	8.83
2390.0	53.73	PK	65	1.1	H	6.13	59.86	74	14.14
2483.5	50.11	PK	47	1.2	V	6.81	56.92	74	17.08
9748.0	17.44	Ave.	9	1.1	V	19.40	36.84	54	17.16
2334.3	50.12	PK	63	1.2	V	5.48	55.60	74	18.40
4874.0	42.38	PK	65	1.2	H	12.46	54.84	74	19.16
7311.0	18.26	Ave.	25	1.3	H	16.49	34.75	54	19.25
9748.0	32.98	PK	9	1.1	V	19.40	52.38	74	21.62
7311.0	33.68	PK	25	1.3	H	16.49	50.17	74	23.83

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBµV/m)	FCC Part 15.247/15.205/15.209	
	Reading (dBµV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H / V)			Limit (dBµV/m)	Margin (dB)
802.11b Mode, High Channel (2462 MHz)									
2462.0	90.26	PK	28	1.1	H	6.81	97.07	/	/
2462.0	80.17	Ave.	28	1.1	H	6.81	86.98	/	/
2462.0	107.89	PK	99	1.3	V	6.81	114.70	/	/
2462.0	98.94	Ave.	99	1.3	V	6.81	105.75	/	/
2390.0	46.18	Ave.	69	1.1	H	6.13	52.31	54	1.69*
2487.5	41.97	Ave.	8	1.2	V	6.81	48.78	54	5.22
220.4	56.23	QP	100	1.10	V	-15.80	40.43	46	5.57
829.6	42.98	QP	183	1.20	H	-5.00	37.98	46	8.02
4924.0	32.57	Ave.	36	1.3	H	12.50	45.07	54	8.93
2332.9	39.36	Ave.	75	1.1	V	5.48	44.84	54	9.16
2390.0	54.17	PK	69	1.1	H	6.13	60.30	74	13.70
2487.5	52.09	PK	8	1.2	V	6.81	58.90	74	15.10
9848.0	17.29	Ave.	85	1.2	V	19.39	36.68	54	17.32
2332.9	50.01	PK	75	1.1	V	5.48	55.49	74	18.51
7386.0	18.25	Ave.	88	1.3	H	15.91	34.16	54	19.84
4924.0	39.68	PK	36	1.3	H	12.50	52.18	74	21.82
9848.0	32.67	PK	85	1.2	V	19.39	52.06	74	21.94
7386.0	33.66	PK	88	1.3	H	15.91	49.57	74	24.43
802.11g Mode, Low Channel (2412 MHz)									
2412.0	90.78	PK	22	1.2	H	6.13	96.91	/	/
2412.0	74.39	Ave.	22	1.2	H	6.13	80.52	/	/
2412.0	108.62	PK	230	1.3	V	6.13	114.75	/	/
2412.0	92.73	Ave.	230	1.3	V	6.13	98.86	/	/
220.4	56.29	QP	100	1.10	V	-15.80	40.49	46	5.51
2390.0	41.74	Ave.	14	1.1	H	6.13	47.87	54	6.13
829.6	43.51	QP	183	1.20	H	-5.00	38.51	46	7.49
2390.0	56.65	PK	14	1.1	H	6.13	62.78	74	11.22
2332.2	35.69	Ave.	13	1.2	V	5.48	41.17	54	12.83
2483.5	33.29	Ave.	11	1.2	V	6.81	40.10	54	13.90
9648.0	17.41	Ave.	125	1.2	V	19.29	36.70	54	17.30
2332.2	50.11	PK	13	1.2	V	5.48	55.59	74	18.41
2483.5	48.61	PK	11	1.2	V	6.81	55.42	74	18.58
7236.0	18.22	Ave.	114	1.3	H	16.62	34.84	54	19.16
4824.0	21.83	Ave.	125	1.2	H	12.40	34.23	54	19.77
4824.0	39.65	PK	125	1.2	H	12.40	52.05	74	21.95
9648.0	32.57	PK	125	1.2	V	19.29	51.86	74	22.14
7236.0	33.26	PK	114	1.3	H	16.62	49.88	74	24.12

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBµV/m)	FCC Part 15.247/15.205/15.209	
	Reading (dBµV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H / V)			Limit (dBµV/m)	Margin (dB)
802.11g Mode, Middle Channel (2437 MHz)									
2437.0	93.18	PK	12	1.1	H	6.13	99.31	/	/
2437.0	76.93	Ave.	12	1.1	H	6.13	83.06	/	/
2437.0	108.94	PK	6	1.3	V	6.13	115.07	/	/
2437.0	94.81	Ave.	6	1.3	V	6.13	100.94	/	/
220.4	55.67	QP	100	1.10	V	-15.80	39.87	46	6.13
829.6	44.51	QP	183	1.20	H	-5.00	39.51	46	6.49
2390.0	38.22	Ave.	3	1.2	H	6.13	44.35	54	9.65
2483.5	33.29	Ave.	6	1.2	V	6.81	40.10	54	13.90
2390.0	53.89	PK	3	1.2	H	6.13	60.02	74	13.98
2335.1	33.87	Ave.	55	1.2	V	5.48	39.35	54	14.65
4874.0	24.96	Ave.	9	1.3	H	12.46	37.42	54	16.58
9748.0	17.22	Ave.	5	1.2	V	19.40	36.62	54	17.38
2483.5	48.27	PK	6	1.2	V	6.81	55.08	74	18.92
7311.0	18.54	Ave.	44	1.3	H	16.49	35.03	54	18.97
4874.0	42.02	PK	9	1.3	H	12.46	54.48	74	19.52
2335.1	48.57	PK	55	1.2	V	5.48	54.05	74	19.95
9748.0	32.59	PK	5	1.2	V	19.40	51.99	74	22.01
7311.0	33.69	PK	44	1.3	H	16.49	50.18	74	23.82
802.11g Mode, High Channel (2462 MHz)									
2462.0	90.19	PK	88	1.2	H	6.81	97.00	/	/
2462.0	74.38	Ave.	88	1.2	H	6.81	81.19	/	/
2462.0	108.89	PK	9	1.3	V	6.81	115.70	/	/
2462.0	92.35	Ave.	9	1.3	V	6.81	99.16	/	/
220.4	57.31	QP	100	1.10	V	-15.80	41.51	46	4.49
829.6	43.51	QP	183	1.20	H	-5.00	38.51	46	7.49
2390.0	39.87	Ave.	22	1.3	H	6.13	46.00	54	8.00
2483.5	36.79	Ave.	15	1.2	V	6.81	43.60	54	10.40
2390.0	54.94	PK	22	1.3	H	6.13	61.07	74	12.93
2334.3	35.29	Ave.	7	1.1	V	5.48	40.77	54	13.23
2483.5	51.36	PK	15	1.2	V	6.81	58.17	74	15.83
9848.0	17.44	Ave.	88	1.3	V	19.39	36.83	54	17.17
2334.3	50.11	PK	7	1.1	V	5.48	55.59	74	18.41
4924.0	22.37	Ave.	56	1.3	H	12.50	34.87	54	19.13
7386.0	18.39	Ave.	36	1.3	H	15.91	34.30	54	19.70
4924.0	40.83	PK	56	1.3	H	12.50	53.33	74	20.67
9848.0	32.15	PK	88	1.3	V	19.39	51.54	74	22.46
7386.0	33.58	PK	36	1.3	H	15.91	49.49	74	24.51

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/15.205/15.209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H / V)			Limit (dBμV/m)	Margin (dB)
802.11n-HT20 Mode, Low Channel (2412 MHz)									
2412.0	91.29	PK	3	1.1	H	6.13	97.42	/	/
2412.0	75.83	Ave.	3	1.1	H	6.13	81.96	/	/
2412.0	108.77	PK	14	1.3	V	6.13	114.90	/	/
2412.0	92.17	Ave.	14	1.3	V	6.13	98.30	/	/
2390.0	43.76	Ave.	14	1.3	H	6.13	49.89	54	4.11
220.4	55.84	QP	100	1.10	V	-15.80	40.04	46	5.96
829.6	43.24	QP	183	1.20	H	-5.00	38.24	46	7.76
2483.5	39.31	Ave.	62	1.1	V	6.81	46.12	54	7.88
2390.0	58.25	PK	14	1.3	H	6.13	64.38	74	9.62
2335.1	36.33	Ave.	1	1.1	V	5.48	41.81	54	12.19
2483.5	54.17	PK	62	1.1	V	6.81	60.98	74	13.02
9648.0	17.44	Ave.	55	1.3	V	19.29	36.73	54	17.27
2335.1	51.24	PK	1	1.1	V	5.48	56.72	74	17.28
7236.0	18.57	Ave.	9	1.1	H	16.62	35.19	54	18.81
9648.0	32.99	PK	55	1.3	V	19.29	52.28	74	21.72
4824.0	19.87	Ave.	85	1.3	H	12.40	32.27	54	21.73
7236.0	33.26	PK	9	1.1	H	16.62	49.88	74	24.12
4824.0	35.36	PK	85	1.3	H	12.40	47.76	74	26.24
802.11n-HT20 Mode, Middle Channel (2437 MHz)									
2437.0	93.89	PK	36	1.2	H	6.13	100.02	/	/
2437.0	77.69	Ave.	36	1.2	H	6.13	83.82	/	/
2437.0	107.25	PK	88	1.2	V	6.13	113.38	/	/
2437.0	94.73	Ave.	88	1.2	V	6.13	100.86	/	/
220.4	56.71	QP	100	1.10	V	-15.80	40.91	46	5.09
829.6	43.21	QP	183	1.20	H	-5.00	38.21	46	7.79
2390.0	37.85	Ave.	99	1.3	H	6.13	43.98	54	10.02
2483.6	33.23	Ave.	6	1.2	V	6.81	40.04	54	13.96
2390.0	52.97	PK	99	1.3	H	6.13	59.10	74	14.90
2338.1	33.25	Ave.	5	1.1	V	5.48	38.73	54	15.27
9748.0	17.44	Ave.	36	1.2	V	19.40	36.84	54	17.16
4874.0	22.93	Ave.	7	1.3	H	12.46	35.39	54	18.61
7311.0	18.87	Ave.	96	1.3	H	16.49	35.36	54	18.64
2483.6	48.44	PK	6	1.2	V	6.81	55.25	74	18.75
2338.1	48.76	PK	5	1.1	V	5.48	54.24	74	19.76
9748.0	32.59	PK	36	1.2	V	19.40	51.99	74	22.01
4874.0	38.22	PK	7	1.3	H	12.46	50.68	74	23.32
7311.0	33.28	PK	96	1.3	H	16.49	49.77	74	24.23

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBµV/m)	FCC Part 15.247/15.205/15.209	
	Reading (dBµV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H / V)			Limit (dBµV/m)	Margin (dB)
802.11n-HT20 Mode, High Channel (2462 MHz)									
2462.0	90.73	PK	14	1.2	H	6.81	97.54	/	/
2462.0	74.33	Ave.	14	1.2	H	6.81	81.14	/	/
2462.0	107.16	PK	5	1.1	V	6.81	113.97	/	/
2462.0	91.88	Ave.	5	1.1	V	6.81	98.69	/	/
220.4	55.89	QP	100	1.10	V	-15.80	40.09	46	5.91
829.6	43.51	QP	183	1.20	H	-5.00	38.51	46	7.49
2390.0	40.19	Ave.	36	1.3	H	6.13	46.32	54	7.68
2483.5	36.55	Ave.	88	1.2	V	6.81	43.36	54	10.64
2390.0	55.73	PK	36	1.3	H	6.13	61.86	74	12.14
2332.8	35.22	Ave.	33	1.1	V	5.48	40.70	54	13.30
2483.5	52.73	PK	88	1.2	V	6.81	59.54	74	14.46
9848.0	17.05	Ave.	96	1.3	V	19.39	36.44	54	17.56
2332.8	50.13	PK	33	1.1	V	5.48	55.61	74	18.39
7386.0	18.43	Ave.	85	1.1	H	15.91	34.34	54	19.66
4924.0	20.16	Ave.	22	1.3	H	12.50	32.66	54	21.34
9848.0	32.11	PK	96	1.1	V	19.39	51.50	74	22.50
7386.0	33.25	PK	85	1.3	H	15.91	49.16	74	24.84
4924.0	35.71	PK	22	1.3	H	12.50	48.21	74	25.79
802.11n-HT40 Mode, Low Channel (2422 MHz)									
2422.0	90.68	PK	175	1.2	H	6.13	96.81	/	/
2422.0	75.37	Ave.	175	1.2	H	6.13	81.50	/	/
2422.0	106.54	PK	155	1.3	V	6.13	112.67	/	/
2422.0	90.67	Ave.	155	1.3	V	6.13	96.80	/	/
2390.0	43.57	Ave.	9	1.3	H	6.13	49.70	54	4.30
220.4	56.74	QP	100	1.10	V	-15.80	40.94	46	5.06
829.6	43.51	QP	183	1.20	H	-5.00	38.51	46	7.49
2390.0	59.39	PK	9	1.3	H	6.13	65.52	74	8.48
2483.5	34.03	Ave.	44	1.3	V	6.81	40.84	54	13.16
2338.6	34.22	Ave.	6	1.1	V	5.48	39.70	54	14.30
9688.0	18.03	Ave.	55	1.3	V	19.29	37.32	54	16.68
2338.6	50.14	PK	6	1.1	V	5.48	55.62	74	18.38
2483.5	48.37	PK	44	1.3	V	6.81	55.18	74	18.82
7266.0	18.22	Ave.	58	1.1	H	16.62	34.84	54	19.16
4844.0	20.29	Ave.	55	1.3	H	12.40	32.69	54	21.31
9688.0	32.99	PK	55	1.1	V	19.29	52.28	74	21.72
7266.0	33.25	PK	58	1.3	H	16.62	49.87	74	24.13
4844.0	35.87	PK	55	1.3	H	12.40	48.27	74	25.73

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBµV/m)	FCC Part 15.247/15.205/15.209	
	Reading (dBµV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H / V)			Limit (dBµV/m)	Margin (dB)
802.11n-HT40 Mode, Middle Channel (2437 MHz)									
2437.0	91.89	PK	141	1.2	H	6.13	98.02	/	/
2437.0	76.25	Ave.	141	1.2	H	6.13	82.38	/	/
2437.0	105.96	PK	55	1.1	V	6.13	110.09	/	/
2437.0	92.77	Ave.	55	1.1	V	6.13	98.90	/	/
220.4	56.74	QP	100	1.10	V	-15.80	40.94	46	5.06
829.6	43.74	QP	183	1.20	H	-5.00	38.74	46	7.26
2390.0	37.82	Ave.	71	1.2	H	6.13	43.95	54	10.05
2483.5	34.06	Ave.	45	1.2	V	6.81	40.87	54	13.13
2390.0	53.87	PK	71	1.2	H	6.13	60.00	74	14.00
2335.1	33.29	Ave.	6	1.1	V	5.48	38.77	54	15.23
2483.5	50.28	PK	45	1.2	V	6.81	57.09	74	16.91
9748.0	17.11	Ave.	33	1.2	V	19.40	36.51	54	17.49
4874.0	23.31	Ave.	95	1.2	H	12.46	35.77	54	18.23
2335.1	49.66	PK	6	1.1	V	5.48	55.14	74	18.86
7311.0	18.33	Ave.	25	1.1	H	16.49	34.82	54	19.18
9748.0	32.87	PK	33	1.2	V	19.40	52.27	74	21.73
4874.0	38.91	PK	95	1.2	H	12.46	51.37	74	22.63
7311.0	33.69	PK	25	1.3	H	16.49	50.18	74	23.82
802.11n-HT40 Mode, High Channel (2452 MHz)									
2452.0	90.18	PK	66	1.2	H	6.81	96.99	/	/
2452.0	75.39	Ave.	66	1.2	H	6.81	82.20	/	/
2452.0	105.83	PK	25	1.1	V	6.81	112.64	/	/
2452.0	89.72	Ave.	25	1.1	V	6.81	96.53	/	/
220.4	55.97	QP	100	1.10	V	-15.80	40.17	46	5.83
829.6	43.51	QP	183	1.20	H	-5.00	38.51	46	7.49
2390.0	40.26	Ave.	22	1.2	H	6.13	46.39	54	7.61
2483.5	36.83	Ave.	102	1.2	V	6.81	43.64	54	10.36
2390.0	55.31	PK	22	1.2	H	6.13	61.44	74	12.56
2337.2	35.08	Ave.	43	1.1	V	5.48	40.56	54	13.44
2483.5	52.69	PK	102	1.2	V	6.81	59.50	74	14.50
9808.0	17.09	Ave.	4	1.3	V	19.29	36.38	54	17.62
2337.2	50.03	PK	43	1.1	V	5.48	55.51	74	18.49
7356.0	18.55	Ave.	7	1.1	H	15.91	34.46	54	19.54
4904.0	20.16	Ave.	2	1.2	H	12.46	32.62	54	21.38
9808.0	32.57	PK	4	1.1	V	19.29	51.86	74	22.14
7356.0	33.29	PK	7	1.2	H	15.91	49.20	74	24.80
4904.0	35.73	PK	2	1.3	H	12.46	48.19	74	25.81

14.0 dBi Antenna, Maximum conducted power is 27dBm

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/15.205/15.209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H / V)			Limit (dBμV/m)	Margin (dB)
802.11b Mode, Low Channel (2412 MHz)									
2412.0	111.02	PK	112	1.2	H	6.13	117.15	/	/
2412.0	103.19	Ave.	112	1.2	H	6.13	109.32	/	/
2412.0	109.03	PK	136	1.3	V	6.13	115.16	/	/
2412.0	101.36	Ave.	136	1.3	V	6.13	107.49	/	/
4824.0	41.79	Ave.	42	1.2	H	12.40	53.19	54	0.79
2390.0	46.72	Ave.	85	1.1	H	6.13	52.85	54	1.15
220.4	57.64	QP	100	1.10	V	-15.80	41.84	46	4.16
2483.5	39.29	Ave.	74	1.2	V	6.81	46.10	54	7.90
2334.2	39.68	Ave.	33	1.2	V	5.48	45.16	54	8.84
829.6	42.14	QP	183	1.20	H	-5.00	37.14	46	8.86
2390.0	58.68	PK	85	1.1	H	6.13	64.81	74	9.19
4824.0	48.09	PK	42	1.2	H	12.40	60.49	74	13.51
2483.5	50.12	PK	74	1.2	V	6.81	56.93	74	17.07
2334.2	51.26	PK	33	1.2	V	5.48	56.74	74	17.26
9648.0	17.25	Ave.	69	1.1	V	19.29	36.54	54	17.46
7236.0	18.55	Ave.	52	1.2	H	16.62	35.17	54	18.83
9648.0	32.99	PK	69	1.1	V	19.29	52.28	74	21.72
7236.0	33.69	PK	52	1.2	H	16.62	50.31	74	23.69
802.11b Mode, Middle Channel (2437 MHz)									
2437.0	112.68	PK	69	1.1	H	6.13	118.81	/	/
2437.0	106.37	Ave.	69	1.1	H	6.13	112.50	/	/
2437.0	112.83	PK	33	1.3	V	6.13	118.96	/	/
2437.0	103.83	Ave.	33	1.3	V	6.13	109.96	/	/
4874.0	40.79	Ave.	85	1.2	H	12.46	53.25	54	0.75*
2483.5	42.58	Ave.	102	1.2	V	6.81	49.39	54	4.61
220.4	56.97	QP	100	1.10	V	-15.80	41.17	46	4.83
829.6	45.21	QP	183	1.20	H	-5.00	40.21	46	5.79
2390.0	41.48	Ave.	33	1.1	H	6.13	47.61	54	6.39
2339.1	41.26	Ave.	25	1.2	V	5.48	46.74	54	7.26
4874.0	48.09	PK	85	1.2	H	12.46	60.55	74	13.45
2483.5	53.22	PK	102	1.2	V	6.81	60.03	74	13.97
2390.0	52.69	PK	33	1.1	H	6.13	58.82	74	15.18
2339.1	52.36	PK	25	1.2	V	5.48	57.84	74	16.16
9748.0	17.46	Ave.	11	1.1	V	19.40	36.86	54	17.14
7311.0	18.25	Ave.	26	1.1	H	16.49	34.74	54	19.26
9748.0	32.58	PK	11	1.1	V	19.40	51.98	74	22.02
7311.0	33.69	PK	26	1.1	H	16.49	50.18	74	23.82

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/15.205/15.209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H / V)			Limit (dBμV/m)	Margin (dB)
802.11b Mode, High Channel (2462 MHz)									
2462.0	109.45	PK	22	1.2	H	6.81	116.26	/	/
2462.0	100.16	Ave.	22	1.2	H	6.81	106.97	/	/
2462.0	109.66	PK	36	1.3	V	6.81	116.47	/	/
2462.0	101.24	Ave.	36	1.3	V	6.81	108.05	/	/
4924.0	40.25	Ave.	99	1.2	H	12.50	55.75	54	1.25*
2390.0	44.19	Ave.	22	1.1	H	6.13	50.32	54	3.68
220.4	57.59	QP	100	1.10	V	-15.80	41.79	46	4.21
2483.5	41.78	Ave.	8	1.3	V	6.81	48.59	54	5.41
829.6	43.95	QP	183	1.20	H	-5.00	38.95	46	7.05
2338.5	39.68	Ave.	55	1.2	V	5.48	45.16	54	8.84
2390.0	55.41	PK	22	1.1	H	6.13	61.54	74	12.46
4924.0	48.37	PK	99	1.2	H	12.50	60.87	74	13.13
2483.5	52.42	PK	8	1.3	V	6.81	59.23	74	14.77
9848.0	17.49	Ave.	54	1.3	V	19.39	36.88	54	17.12
2338.5	50.12	PK	55	1.2	V	5.48	55.60	74	18.40
7386.0	18.55	Ave.	85	1.2	H	15.91	34.46	54	19.54
9848.0	32.97	PK	54	1.3	V	19.39	52.36	74	21.64
7386.0	33.25	PK	85	1.2	H	15.91	49.16	74	24.84
802.11g Mode, Low Channel (2412 MHz)									
2412.0	111.07	PK	99	1.3	H	6.13	117.20	/	/
2412.0	95.29	Ave.	99	1.3	H	6.13	101.42	/	/
2412.0	110.25	PK	8	1.3	V	6.13	116.38	/	/
2412.0	94.52	Ave.	8	1.3	V	6.13	100.65	/	/
2390.0	44.55	Ave.	9	1.3	H	6.13	50.68	54	3.32*
220.4	57.66	QP	100	1.10	V	-15.80	41.86	46	4.14
2390.0	63.24	PK	9	1.3	H	6.13	69.37	74	4.63
829.6	44.49	QP	183	1.20	H	-5.00	39.49	46	6.51
2334.7	41.17	Ave.	2	1.2	V	5.48	46.65	54	7.35
4824.0	33.29	Ave.	5	1.2	H	12.40	45.69	54	8.31
2334.7	60.02	PK	2	1.2	V	5.48	65.50	74	8.50
4824.0	51.06	PK	5	1.2	H	12.40	63.46	74	10.54
2483.5	30.28	Ave.	85	1.3	V	6.81	37.09	54	16.91
9648.0	17.08	Ave.	36	1.3	V	19.29	36.37	54	17.63
2483.5	48.75	PK	85	1.3	V	6.81	55.56	74	18.44
7236.0	18.87	Ave.	14	1.3	H	16.62	35.49	54	18.51
9648.0	32.99	PK	36	1.3	V	19.29	52.28	74	21.72
7236.0	33.58	PK	14	1.3	H	16.62	50.20	74	23.80

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/15.205/15.209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H / V)			Limit (dBμV/m)	Margin (dB)
802.11g Mode, Middle Channel (2437 MHz)									
2437.0	115.83	PK	32	1.1	H	6.13	121.96	/	/
2437.0	100.11	Ave.	32	1.1	H	6.13	106.24	/	/
2437.0	109.94	PK	112	1.3	V	6.13	116.07	/	/
2437.0	98.89	Ave.	112	1.3	V	6.13	105.02	/	/
4874.0	36.98	Ave.	8	1.1	H	12.46	49.44	54	4.56
220.4	57.02	QP	100	1.10	V	-15.80	41.22	46	4.78
829.6	45.52	QP	183	1.20	H	-5.00	40.52	46	5.48
4874.0	54.59	PK	8	1.1	H	12.46	67.05	74	6.95
2390.0	35.74	Ave.	25	1.1	H	6.13	41.87	54	12.13
2483.5	34.77	Ave.	88	1.3	V	6.81	41.58	54	12.42
2335.6	34.58	Ave.	33	1.2	V	5.48	40.06	54	13.94
2483.5	52.68	PK	88	1.3	V	6.81	59.49	74	14.51
2390.0	53.29	PK	25	1.1	H	6.13	59.42	74	14.58
2335.6	52.69	PK	33	1.2	V	5.48	58.17	74	15.83
9748.0	17.44	Ave.	96	1.1	V	19.40	36.84	54	17.16
7311.0	18.54	Ave.	25	1.2	H	16.49	35.03	54	18.97
9748.0	32.87	PK	96	1.1	V	19.40	52.27	74	21.73
7311.0	33.58	PK	25	1.2	H	16.49	50.07	74	23.93
802.11g Mode, High Channel (2462 MHz)									
2462.0	100.67	PK	12	1.3	H	6.81	107.48	/	/
2462.0	94.93	Ave.	12	1.3	H	6.81	101.74	/	/
2462.0	110.89	PK	235	1.3	V	6.81	117.70	/	/
2462.0	95.29	Ave.	235	1.3	V	6.81	102.10	/	/
220.4	58.71	QP	100	1.10	V	-15.80	42.91	46	3.09*
2483.5	40.93	Ave.	44	1.3	V	6.81	47.74	54	6.26
829.6	44.49	QP	183	1.20	H	-5.00	39.49	46	6.51
2390.0	40.15	Ave.	96	1.2	H	6.13	46.28	54	7.72
4924.0	33.69	Ave.	2	1.2	H	12.50	46.19	54	7.81
2483.5	59.33	PK	44	1.3	V	6.81	66.14	74	7.86
2390.0	58.96	PK	96	1.2	H	6.13	65.09	74	8.91
4924.0	51.28	PK	2	1.2	H	12.50	63.78	74	10.22
2338.5	37.48	Ave.	66	1.2	V	5.48	42.96	54	11.04
2338.5	55.29	PK	66	1.2	V	5.48	60.77	74	13.23
9848.0	17.49	Ave.	32	1.3	V	19.39	36.88	54	17.12
7386.0	18.78	Ave.	7	1.3	H	15.91	34.69	54	19.31
9848.0	32.68	PK	32	1.3	V	19.39	52.07	74	21.93
7386.0	33.98	PK	7	1.3	H	15.91	49.89	74	24.11

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/15.205/15.209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H / V)			Limit (dBμV/m)	Margin (dB)
802.11n-HT20 Mode, Low Channel (2412 MHz)									
2412.0	110.91	PK	85	1.2	H	6.13	117.04	/	/
2412.0	94.05	Ave.	85	1.2	H	6.13	100.18	/	/
2412.0	109.96	PK	36	1.2	V	6.13	116.09	/	/
2412.0	93.89	Ave.	36	1.2	V	6.13	100.02	/	/
2390.0	45.88	Ave.	333	1.2	H	6.13	52.01	54	1.99*
2390.0	64.58	PK	333	1.2	H	6.13	70.71	74	3.29*
2483.5	43.22	Ave.	25	1.1	V	6.81	50.03	54	3.97*
220.4	57.19	QP	100	1.10	V	-15.80	41.39	46	4.61
2483.5	62.15	PK	25	1.1	V	6.81	68.96	74	5.04
829.6	44.21	QP	183	1.20	H	-5.00	39.21	46	6.79
2335.1	41.39	Ave.	58	1.2	V	5.48	46.87	54	7.13
2335.1	60.39	PK	58	1.2	V	5.48	65.87	74	8.13
4824.0	32.89	Ave.	88	1.2	H	12.40	45.29	54	8.71
4824.0	52.07	PK	88	1.2	H	12.40	64.47	74	9.53
9648.0	17.46	Ave.	88	1.3	V	19.29	36.75	54	17.25
7236.0	18.97	Ave.	77	1.3	H	16.62	35.59	54	18.41
9648.0	32.88	PK	88	1.3	V	19.29	52.17	74	21.83
7236.0	33.29	PK	77	1.3	H	16.62	49.91	74	24.09
802.11n-HT20 Mode, Middle Channel (2437 MHz)									
2437.0	108.18	PK	85	1.1	H	6.13	114.31	/	/
2437.0	97.39	Ave.	85	1.1	H	6.13	103.52	/	/
2437.0	111.09	PK	7	1.3	V	6.13	117.22	/	/
2437.0	97.82	Ave.	7	1.3	V	6.13	103.95	/	/
220.4	58.09	QP	100	1.10	V	-15.80	42.29	46	3.71*
4874.0	35.74	Ave.	6	1.2	H	12.46	48.20	54	5.80
829.6	44.18	QP	183	1.20	H	-5.00	39.18	46	6.82
4874.0	54.39	PK	6	1.2	H	12.46	66.85	74	7.15
2390.0	35.09	Ave.	36	1.3	H	6.13	41.22	54	12.78
2483.6	33.96	Ave.	85	1.3	V	6.81	40.77	54	13.23
2390.0	54.15	PK	36	1.3	H	6.13	60.28	74	13.72
2339.3	34.57	Ave.	55	1.2	V	5.48	40.05	54	13.95
2483.6	52.44	PK	85	1.3	V	6.81	59.25	74	14.75
2339.3	53.66	PK	55	1.2	V	5.48	59.14	74	14.86
9748.0	17.09	Ave.	32	1.3	V	19.40	36.49	54	17.51
7311.0	18.87	Ave.	11	1.1	H	16.49	35.36	54	18.64
9748.0	32.93	PK	32	1.3	V	19.40	52.33	74	21.67
7311.0	33.98	PK	11	1.1	H	16.49	50.47	74	23.53

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBµV/m)	FCC Part 15.247/15.205/15.209	
	Reading (dBµV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H / V)			Limit (dBµV/m)	Margin (dB)
802.11n-HT20 Mode, High Channel (2462 MHz)									
2462.0	111.29	PK	33	1.2	H	6.81	118.10	/	/
2462.0	95.83	Ave.	33	1.2	H	6.81	102.64	/	/
2462.0	110.06	PK	25	1.3	V	6.81	116.87	/	/
2462.0	94.15	Ave.	25	1.3	V	6.81	100.96	/	/
220.4	57.24	QP	100	1.10	V	-15.80	41.44	46	4.56
4924.0	35.73	Ave.	96	1.1	H	12.50	48.23	54	5.77
829.6	44.49	QP	183	1.20	H	-5.00	39.49	46	6.51
2390.0	41.25	Ave.	88	1.2	H	6.13	47.38	54	6.62
4924.0	53.27	PK	96	1.1	H	12.50	65.77	74	8.23
2390.0	58.47	PK	88	1.2	H	6.13	64.60	74	9.40
2483.5	37.37	Ave.	96	1.2	V	6.81	44.18	54	9.82
2335.6	38.06	Ave.	23	1.2	V	5.48	43.54	54	10.46
2483.5	54.89	PK	96	1.2	V	6.81	61.70	74	12.30
2335.6	55.14	PK	23	1.2	V	5.48	60.62	74	13.38
9848.0	18.02	Ave.	66	1.3	V	19.39	37.41	54	16.59
7386.0	18.77	Ave.	66	1.3	H	15.91	34.68	54	19.32
9848.0	32.99	PK	66	1.3	V	19.39	52.38	74	21.62
7386.0	33.68	PK	66	1.3	H	15.91	49.59	74	24.41
802.11n-HT40 Mode, Low Channel (2422 MHz)									
2422.0	110.07	PK	22	1.1	H	6.13	116.20	/	/
2422.0	91.28	Ave.	22	1.1	H	6.13	97.41	/	/
2422.0	109.99	PK	36	1.3	V	6.13	116.12	/	/
2422.0	90.37	Ave.	36	1.3	V	6.13	96.50	/	/
2390.0	65.29	PK	66	1.2	H	6.13	71.42	74	2.58*
2390.0	45.22	Ave.	66	1.2	H	6.13	51.35	54	2.65*
220.4	58.12	QP	100	1.10	V	-15.80	42.32	46	3.68*
829.6	44.49	QP	183	1.20	H	-5.00	39.49	46	6.51
2338.7	60.28	PK	15	1.2	V	5.48	65.76	74	8.24
2338.7	40.18	Ave.	15	1.2	V	5.48	45.66	54	8.34
4844.0	48.76	PK	9	1.1	H	12.40	61.16	74	12.84
4844.0	28.11	Ave.	9	1.1	H	12.40	40.51	54	13.49
9688.0	18.01	Ave.	4	1.3	V	19.29	37.30	54	16.70
2483.5	30.22	Ave.	9	1.2	V	6.81	37.03	54	16.97
2483.5	48.55	PK	9	1.2	V	6.81	55.36	74	18.64
7266.0	18.57	Ave.	55	1.1	H	16.62	35.19	54	18.81
9688.0	32.55	PK	4	1.3	V	19.29	51.84	74	22.16
7266.0	33.98	PK	55	1.1	H	16.62	50.60	74	23.40

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBµV/m)	FCC Part 15.247/15.205/15.209	
	Reading (dBµV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H / V)			Limit (dBµV/m)	Margin (dB)
802.11n-HT40 Mode, Middle Channel (2437 MHz)									
2437.0	105.02	PK	25	1.3	H	6.13	111.15	/	/
2437.0	94.28	Ave.	25	1.3	H	6.13	100.41	/	/
2437.0	112.47	PK	62	1.3	V	6.13	118.60	/	/
2437.0	93.22	Ave.	62	1.3	V	6.13	99.35	/	/
220.4	58.12	QP	100	1.10	V	-15.80	42.32	46	3.68*
829.6	44.73	QP	183	1.20	H	-5.00	39.73	46	6.27
4874.0	31.39	Ave.	53	1.1	H	12.46	43.85	54	10.15
4874.0	51.25	PK	53	1.1	H	12.46	63.71	74	10.29
2390.0	36.02	Ave.	22	1.2	H	6.13	42.15	54	11.85
2390.0	55.98	PK	22	1.2	H	6.13	62.11	74	11.89
2337.7	55.29	PK	26	1.2	V	5.48	60.77	74	13.23
2337.7	35.21	Ave.	26	1.2	V	5.48	40.69	54	13.31
2483.5	52.14	PK	85	1.1	V	6.81	58.95	74	15.05
2483.5	32.01	Ave.	85	1.1	V	6.81	38.82	54	15.18
9748.0	17.06	Ave.	11	1.3	V	19.40	36.46	54	17.54
7311.0	18.57	Ave.	29	1.2	H	16.49	35.06	54	18.94
9748.0	32.11	PK	11	1.3	V	19.40	51.51	74	22.49
7311.0	33.65	PK	29	1.2	H	16.49	50.14	74	23.86
802.11n-HT40 Mode, High Channel (2452 MHz)									
2452.0	110.03	PK	11	1.2	H	6.81	116.84	/	/
2452.0	90.29	Ave.	11	1.2	H	6.81	97.10	/	/
2452.0	110.09	PK	45	1.3	V	6.81	116.90	/	/
2452.0	90.96	Ave.	45	1.3	V	6.81	97.77	/	/
220.4	57.33	QP	100	1.10	V	-15.80	41.53	46	4.47
2390.0	42.87	Ave.	87	1.2	H	6.13	49.00	54	5.00
829.6	44.49	QP	183	1.20	H	-5.00	39.49	46	6.51
2390.0	60.37	PK	87	1.2	H	6.13	66.50	74	7.50
2483.5	56.89	PK	22	1.3	V	6.81	63.70	74	10.30
2483.5	36.38	Ave.	22	1.3	V	6.81	43.19	54	10.81
4904.0	29.36	Ave.	25	1.2	H	12.50	41.86	54	12.14
4904.0	49.28	PK	25	1.2	H	12.50	61.78	74	12.22
2338.3	55.28	PK	36	1.2	V	5.48	60.76	74	13.24
2338.3	35.28	Ave.	36	1.2	V	5.48	40.76	54	13.24
9808.0	18.05	Ave.	66	1.3	V	19.39	37.44	54	16.56
7356.0	18.14	Ave.	9	1.3	H	15.91	34.05	54	19.95
9808.0	32.99	PK	66	1.3	V	19.39	52.38	74	21.62
7356.0	33.25	PK	9	1.3	H	15.91	49.16	74	24.84

16.0 dBi Antenna, Maximum conducted power is 26dBm

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/15.205/15.209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H / V)			Limit (dBμV/m)	Margin (dB)
802.11b Mode, Low Channel (2412 MHz)									
2412.0	104.53	PK	22	1.2	H	6.13	110.66	/	/
2412.0	96.25	Ave.	22	1.2	H	6.13	102.38	/	/
2412.0	107.05	PK	3	1.3	V	6.13	113.18	/	/
2412.0	99.89	Ave.	3	1.3	V	6.13	106.02	/	/
2390.0	44.89	Ave.	3	1.2	H	6.13	51.02	54	2.98*
4824.0	37.65	Ave.	66	1.1	H	12.40	50.05	54	3.95*
220.4	55.79	QP	100	1.10	V	-15.80	39.99	46	6.01
2483.5	39.67	Ave.	55	1.1	V	6.81	46.48	54	7.52
2336.3	39.61	Ave.	41	1.3	V	5.48	45.09	54	8.91
829.6	41.77	QP	183	1.20	H	-5.00	36.77	46	9.23
2390.0	55.32	PK	3	1.2	H	6.13	61.45	74	12.55
2483.5	50.82	PK	55	1.1	V	6.81	57.63	74	16.37
9648.0	17.15	Ave.	52	1.2	V	19.29	36.44	54	17.56
4824.0	43.59	PK	66	1.1	H	12.40	55.99	74	18.01
2336.3	50.14	PK	41	1.3	V	5.48	55.62	74	18.38
7236.0	18.29	Ave.	26	1.2	H	16.62	34.91	54	19.09
9648.0	32.54	PK	52	1.2	V	19.29	51.83	74	22.17
7236.0	33.67	PK	26	1.2	H	16.62	50.29	74	23.71
802.11b Mode, Middle Channel (2437 MHz)									
2437.0	107.69	PK	87	1.3	H	6.13	113.82	/	/
2437.0	99.18	Ave.	87	1.3	H	6.13	105.31	/	/
2437.0	113.19	PK	99	1.3	V	6.13	119.32	/	/
2437.0	102.67	Ave.	99	1.3	V	6.13	108.80	/	/
4874.0	41.33	Ave.	85	1.2	H	12.46	53.79	54	0.21*
2390.0	42.74	Ave.	11	1.2	H	6.13	48.87	54	5.13
220.4	56.44	QP	100	1.10	V	-15.80	40.64	46	5.36
829.6	44.81	QP	183	1.20	H	-5.00	39.81	46	6.19
2483.5	39.36	Ave.	23	1.1	V	6.81	46.17	54	7.83
2338.8	37.58	Ave.	25	1.3	V	5.48	43.06	54	10.94
2390.0	53.89	PK	11	1.2	H	6.13	60.02	74	13.98
4874.0	47.55	PK	85	1.2	H	12.46	60.01	74	13.99
2483.5	50.29	PK	23	1.1	V	6.81	57.10	74	16.90
9748.0	17.59	Ave.	63	1.3	V	19.40	36.99	54	17.01
7311.0	18.25	Ave.	47	1.2	H	16.49	34.74	54	19.26
2338.8	48.69	PK	25	1.3	V	5.48	54.17	74	19.83
9748.0	32.67	PK	63	1.3	V	19.40	52.07	74	21.93
7311.0	33.68	PK	47	1.2	H	16.49	50.17	74	23.83

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBµV/m)	FCC Part 15.247/15.205/15.209	
	Reading (dBµV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H / V)			Limit (dBµV/m)	Margin (dB)
802.11b Mode, High Channel (2462 MHz)									
2462.0	103.29	PK	14	1.2	H	6.81	110.10	/	/
2462.0	95.18	Ave.	14	1.2	H	6.81	101.99	/	/
2462.0	105.81	PK	11	1.2	V	6.81	112.62	/	/
2462.0	97.32	Ave.	11	1.2	V	6.81	104.13	/	/
4924.0	37.19	Ave.	14	1.1	H	12.50	49.69	54	4.31
220.4	57.13	QP	100	1.10	V	-15.80	41.33	46	4.67
2390.0	42.15	Ave.	36	1.2	H	6.13	48.28	54	5.72
829.6	44.09	QP	183	1.20	H	-5.00	39.09	46	6.91
2337.3	36.96	Ave.	62	1.3	V	5.48	42.44	54	11.56
2390.0	55.29	PK	36	1.2	H	6.13	61.42	74	12.58
2483.5	32.67	Ave.	11	1.1	V	6.81	39.48	54	14.52
9848.0	17.44	Ave.	52	1.2	V	19.39	36.83	54	17.17
4924.0	43.67	PK	14	1.1	H	12.50	56.17	74	17.83
2337.3	50.26	PK	62	1.3	V	5.48	55.74	74	18.26
7386.0	18.56	Ave.	225	1.3	H	15.91	34.47	54	19.53
9848.0	32.96	PK	52	1.2	V	19.39	52.35	74	21.65
2483.5	44.73	PK	11	1.1	V	6.81	51.54	74	22.46
7386.0	33.68	PK	225	1.3	H	15.91	49.59	74	24.41
802.11g Mode, Low Channel (2412 MHz)									
2412.0	106.78	PK	32	1.2	H	6.13	112.91	/	/
2412.0	91.69	Ave.	32	1.2	H	6.13	97.82	/	/
2412.0	108.81	PK	25	1.3	V	6.13	114.94	/	/
2412.0	93.62	Ave.	25	1.3	V	6.13	99.75	/	/
220.4	57.06	QP	100	1.10	V	-15.80	41.26	46	4.74
2390.0	41.28	Ave.	14	1.2	H	6.13	47.41	54	6.59
829.6	43.12	QP	183	1.20	H	-5.00	38.12	46	7.88
2390.0	55.89	PK	14	1.2	H	6.13	62.02	74	11.98
2337.2	35.98	Ave.	6	1.2	V	5.48	41.46	54	12.54
4824.0	26.07	Ave.	36	1.1	H	12.40	38.47	54	15.53
4824.0	45.83	PK	36	1.1	H	12.40	58.23	74	15.77
9648.0	17.42	Ave.	36	1.2	V	19.29	36.71	54	17.29
2337.2	50.26	PK	6	1.2	V	5.48	55.74	74	18.26
7236.0	18.54	Ave.	12	1.2	H	16.62	35.16	54	18.84
2483.5	26.98	Ave.	12	1.2	V	6.81	33.79	54	20.21
9648.0	32.55	PK	36	1.2	V	19.29	51.84	74	22.16
7236.0	33.69	PK	12	1.2	H	16.62	50.31	74	23.69
2483.5	40.32	PK	12	1.2	V	6.81	47.13	74	26.87

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBµV/m)	FCC Part 15.247/15.205/15.209	
	Reading (dBµV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H / V)			Limit (dBµV/m)	Margin (dB)
802.11g Mode, Middle Channel (2437 MHz)									
2437.0	109.73	PK	14	1.3	H	6.13	115.86	/	/
2437.0	94.06	Ave.	14	1.3	H	6.13	100.19	/	/
2437.0	111.89	PK	11	1.2	V	6.13	118.02	/	/
2437.0	96.85	Ave.	11	1.2	V	6.13	102.98	/	/
220.4	56.49	QP	100	1.10	V	-15.80	40.69	46	5.31
829.6	45.11	QP	183	1.20	H	-5.00	40.11	46	5.89
2389.9	40.35	Ave.	36	1.2	H	6.13	46.48	54	7.52
2483.5	35.96	Ave.	22	1.2	V	6.81	42.77	54	11.23
2332.5	35.97	Ave.	3	1.2	V	5.48	41.45	54	12.55
4874.0	28.72	Ave.	12	1.1	H	12.46	41.18	54	12.82
2389.9	54.28	PK	36	1.2	H	6.13	60.41	74	13.59
4874.0	47.03	PK	12	1.1	H	12.46	59.49	74	14.51
9748.0	17.94	Ave.	226	1.2	V	19.40	37.34	54	16.66
2483.5	50.29	PK	22	1.2	V	6.81	57.10	74	16.90
2332.5	50.14	PK	3	1.2	V	5.48	55.62	74	18.38
7311.0	18.75	Ave.	25	1.3	H	16.49	35.24	54	18.76
9748.0	32.69	PK	226	1.2	V	19.40	52.09	74	21.91
7311.0	33.95	PK	25	1.3	H	16.49	50.44	74	23.56
802.11g Mode, High Channel (2462 MHz)									
2462.0	107.79	PK	85	1.2	H	6.81	114.60	/	/
2462.0	92.84	Ave.	85	1.2	H	6.81	99.65	/	/
2462.0	108.09	PK	95	1.2	V	6.81	114.90	/	/
2462.0	93.65	Ave.	95	1.2	V	6.81	100.46	/	/
220.4	57.53	QP	100	1.10	V	-15.80	41.73	46	4.27
2390.0	41.06	Ave.	96	1.2	H	6.13	47.19	54	6.81
829.6	44.09	QP	183	1.20	H	-5.00	39.09	46	6.91
2483.5	39.69	Ave.	66	1.3	V	6.81	46.50	54	7.50
2334.6	36.98	Ave.	3	1.3	V	5.48	42.46	54	11.54
2390.0	55.17	PK	96	1.2	H	6.13	61.30	74	12.70
2483.5	53.62	PK	66	1.3	V	6.81	60.43	74	13.57
4924.0	25.69	Ave.	44	1.1	H	12.50	38.19	54	15.81
4924.0	44.27	PK	44	1.1	H	12.50	56.77	74	17.23
9848.0	17.34	Ave.	6	1.3	V	19.39	36.73	54	17.27
2334.6	50.26	PK	3	1.3	V	5.48	55.74	74	18.26
7386.0	18.26	Ave.	55	1.3	H	15.91	34.17	54	19.83
9848.0	32.57	PK	6	1.3	V	19.39	51.96	74	22.04
7386.0	33.68	PK	55	1.3	H	15.91	49.59	74	24.41

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/15.205/15.209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H / V)			Limit (dBμV/m)	Margin (dB)
802.11n-HT20 Mode, Low Channel (2412 MHz)									
2412.0	107.83	PK	33	1.4	H	6.13	113.96	/	/
2412.0	91.25	Ave.	33	1.4	H	6.13	97.38	/	/
2412.0	109.72	PK	85	1.2	V	6.13	115.85	/	/
2412.0	93.89	Ave.	85	1.2	V	6.13	100.02	/	/
220.4	57.55	QP	100	1.10	V	-15.80	41.75	46	4.25
2390.0	41.68	Ave.	8	1.2	H	6.13	47.81	54	6.19
829.6	43.20	QP	183	1.20	H	-5.00	38.20	46	7.80
2390.0	56.58	PK	8	1.2	H	6.13	62.71	74	11.29
2331.7	34.52	Ave.	99	1.3	V	5.48	40.00	54	14.00
4824.0	26.79	Ave.	36	1.3	H	12.40	39.19	54	14.81
4824.0	45.94	PK	36	1.3	H	12.40	58.34	74	15.66
2488.8	30.28	Ave.	77	1.1	V	6.81	37.09	54	16.91
9648.0	17.64	Ave.	78	1.2	V	19.29	36.93	54	17.07
2331.7	49.68	PK	99	1.3	V	5.48	55.16	74	18.84
7236.0	18.25	Ave.	88	1.3	H	16.62	34.87	54	19.13
9648.0	32.57	PK	78	1.2	V	19.29	51.86	74	22.14
2488.8	44.12	PK	77	1.1	V	6.81	50.93	74	23.07
7236.0	33.65	PK	88	1.3	H	16.62	50.27	74	23.73
802.11n-HT20 Mode, Middle Channel (2437 MHz)									
2437.0	110.89	PK	32	1.2	H	6.13	117.02	/	/
2437.0	94.06	Ave.	32	1.2	H	6.13	100.19	/	/
2437.0	109.63	PK	96	1.2	V	6.13	115.76	/	/
2437.0	96.83	Ave.	96	1.2	V	6.13	102.96	/	/
220.4	57.55	QP	100	1.10	V	-15.80	41.75	46	4.25
829.6	43.79	QP	183	1.20	H	-5.00	38.79	46	7.21
2390.0	38.93	Ave.	88	1.2	H	6.13	45.06	54	8.94
2483.6	35.96	Ave.	85	1.3	V	6.81	42.77	54	11.23
4874.0	29.21	Ave.	14	1.3	H	12.46	41.67	54	12.33
2390.0	54.78	PK	88	1.2	H	6.13	60.91	74	13.09
4874.0	48.06	PK	14	1.3	H	12.46	60.52	74	13.48
2483.6	51.47	PK	85	1.3	V	6.81	58.28	74	15.72
2335.2	32.25	Ave.	96	1.2	V	5.48	37.73	54	16.27
9748.0	17.46	Ave.	33	1.3	V	19.40	36.86	54	17.14
7311.0	18.52	Ave.	22	1.3	H	16.49	35.01	54	18.99
2335.2	48.56	PK	96	1.2	V	5.48	54.04	74	19.96
9748.0	32.91	PK	33	1.3	V	19.40	52.31	74	21.69
7311.0	33.69	PK	22	1.3	H	16.49	50.18	74	23.82

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBµV/m)	FCC Part 15.247/15.205/15.209	
	Reading (dBµV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H / V)			Limit (dBµV/m)	Margin (dB)
802.11n-HT20 Mode, High Channel (2462 MHz)									
2462.0	107.83	PK	9	1.1	H	6.81	114.64	/	/
2462.0	91.09	Ave.	9	1.1	H	6.81	97.90	/	/
2462.0	108.88	PK	14	1.2	V	6.81	115.69	/	/
2462.0	92.74	Ave.	14	1.2	V	6.81	99.55	/	/
220.4	56.72	QP	100	1.10	V	-15.80	40.92	46	5.08
2390.0	41.29	Ave.	85	1.2	H	6.13	47.42	54	6.58
2483.5	40.37	Ave.	25	1.2	V	6.81	47.18	54	6.82
829.6	44.09	QP	183	1.20	H	-5.00	39.09	46	6.91
2483.5	55.59	PK	25	1.2	V	6.81	62.40	74	11.60
2390.0	56.11	PK	85	1.2	H	6.13	62.24	74	11.76
2335.8	35.99	Ave.	98	1.2	V	5.48	41.47	54	12.53
4924.0	26.38	Ave.	2	1.3	H	12.50	38.88	54	15.12
4924.0	45.72	PK	2	1.3	H	12.50	58.22	74	15.78
9848.0	17.99	Ave.	77	1.3	V	19.39	37.38	54	16.62
2335.8	50.28	PK	98	1.2	V	5.48	55.76	74	18.24
7386.0	18.57	Ave.	36	1.3	H	15.91	34.48	54	19.52
9848.0	32.87	PK	77	1.3	V	19.39	52.26	74	21.74
7386.0	33.69	PK	36	1.3	H	15.91	49.60	74	24.40
802.11n-HT40 Mode, Low Channel (2422 MHz)									
2422.0	106.33	PK	33	1.1	H	6.13	112.46	/	/
2422.0	86.86	Ave.	33	1.1	H	6.13	92.99	/	/
2422.0	107.59	PK	74	1.2	V	6.13	113.72	/	/
2422.0	87.39	Ave.	74	1.2	V	6.13	93.52	/	/
2390.0	43.88	Ave.	69	1.2	H	6.13	50.01	54	3.99
2390.0	63.17	PK	69	1.2	H	6.13	69.30	74	4.70
220.4	55.73	QP	100	1.10	V	-15.80	39.93	46	6.07
829.6	44.09	QP	183	1.20	H	-5.00	39.09	46	6.91
2337.1	38.74	Ave.	9	1.3	V	5.48	44.22	54	9.78
2337.1	58.69	PK	9	1.3	V	5.48	64.17	74	9.83
2483.5	30.26	Ave.	55	1.2	V	6.81	37.07	54	16.93
9688.0	17.03	Ave.	6	1.3	V	19.29	36.32	54	17.68
7266.0	18.97	Ave.	5	1.3	H	16.62	35.59	54	18.41
2483.5	47.73	PK	55	1.2	V	6.81	54.54	74	19.46
4844.0	40.25	PK	112	1.2	H	12.40	52.65	74	21.35
4844.0	19.81	Ave.	112	1.2	H	12.40	32.21	54	21.79
9688.0	32.68	PK	6	1.3	V	19.29	51.97	74	22.03
7266.0	34.26	PK	5	1.3	H	16.62	50.88	74	23.12

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/15.205/15.209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H / V)			Limit (dBμV/m)	Margin (dB)
802.11n-HT40 Mode, Middle Channel (2437 MHz)									
2437.0	105.87	PK	22	1.2	H	6.13	112.00	/	/
2437.0	89.74	Ave.	22	1.2	H	6.13	95.87	/	/
2437.0	110.79	PK	5	1.2	V	6.13	116.92	/	/
2437.0	90.25	Ave.	5	1.2	V	6.13	96.38	/	/
220.4	55.88	QP	100	1.10	V	-15.80	40.08	46	5.92
829.6	44.33	QP	183	1.20	H	-5.00	39.33	46	6.67
2390.0	40.76	Ave.	7	1.2	H	6.13	46.89	54	7.11
2390.0	60.54	PK	7	1.2	H	6.13	66.67	74	7.33
2483.5	30.97	Ave.	9	1.1	V	6.81	37.78	54	16.22
2483.5	50.22	PK	9	1.1	V	6.81	57.03	74	16.97
9748.0	17.44	Ave.	25	1.3	V	19.40	36.84	54	17.16
2336.8	50.29	PK	4	1.3	V	5.48	55.77	74	18.23
2336.8	30.25	Ave.	4	1.3	V	5.48	35.73	54	18.27
7311.0	18.93	Ave.	69	1.3	H	16.49	35.42	54	18.58
4874.0	42.67	PK	33	1.3	H	12.46	55.13	74	18.87
4874.0	21.39	Ave.	33	1.3	H	12.46	33.85	54	20.15
9748.0	32.57	PK	25	1.3	V	19.40	51.97	74	22.03
7311.0	33.85	PK	69	1.3	H	16.49	50.34	74	23.66
802.11n-HT40 Mode, High Channel (2452 MHz)									
2452.0	106.83	PK	36	1.2	H	6.81	113.64	/	/
2452.0	86.23	Ave.	36	1.2	H	6.81	93.04	/	/
2452.0	107.51	PK	25	1.2	V	6.81	114.32	/	/
2452.0	87.91	Ave.	25	1.2	V	6.81	94.72	/	/
220.4	56.80	QP	100	1.10	V	-15.80	41.00	46	5.00
829.6	44.09	QP	183	1.20	H	-5.00	39.09	46	6.91
2483.5	38.77	Ave.	113	1.1	V	6.81	45.58	54	8.42
2483.5	58.47	PK	113	1.1	V	6.81	65.28	74	8.72
2390.0	36.94	Ave.	8	1.2	H	6.13	43.07	54	10.93
2390.0	56.72	PK	8	1.2	H	6.13	62.85	74	11.15
9808.0	17.44	Ave.	96	1.3	V	19.29	36.73	54	17.27
2335.2	30.29	Ave.	22	1.2	V	5.48	35.77	54	18.23
2335.2	50.14	PK	22	1.2	V	5.48	55.62	74	18.38
7356.0	18.56	Ave.	33	1.3	H	15.91	34.47	54	19.53
4904.0	40.53	PK	42	1.1	H	12.46	52.99	74	21.01
4904.0	19.82	Ave.	42	1.1	H	12.46	32.28	54	21.72
9808.0	32.87	PK	96	1.3	V	19.29	52.16	74	21.84
7356.0	33.95	PK	33	1.3	H	15.91	49.86	74	24.14

24.0 dBi Antenna, Maximum conducted power is 24dBm

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/15.205/15.209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H / V)			Limit (dBμV/m)	Margin (dB)
802.11b Mode, Low Channel (2412 MHz)									
2412.0	95.39	PK	81	1.2	H	6.13	101.52	/	/
2412.0	87.68	Ave.	81	1.2	H	6.13	93.81	/	/
2412.0	109.95	PK	136	1.2	V	6.13	116.08	/	/
2412.0	103.37	Ave.	136	1.2	V	6.13	109.50	/	/
2390.0	47.57	Ave.	53	1.1	H	6.13	53.70	54	0.30*
2338.2	46.08	Ave.	87	1.2	V	5.48	51.56	54	2.44
220.4	56.49	QP	100	1.10	V	-15.80	40.69	46	5.31
2390.0	61.84	PK	53	1.1	H	6.13	67.97	74	6.03
2483.5	39.03	Ave.	14	1.2	V	6.81	45.84	54	8.16
829.6	42.42	QP	183	1.20	H	-5.00	37.42	46	8.58
2338.2	55.23	PK	87	1.2	V	5.48	60.71	74	13.29
9648.0	17.15	Ave.	99	1.2	V	19.29	36.44	54	17.56
2483.5	48.55	PK	14	1.2	V	6.81	55.36	74	18.64
7236.0	18.55	Ave.	2	1.3	H	16.62	35.17	54	18.83
4824.0	22.63	Ave.	15	1.1	H	12.40	35.03	54	18.97
9648.0	32.29	PK	99	1.2	V	19.29	51.58	74	22.42
7236.0	33.22	PK	2	1.3	H	16.62	49.84	74	24.16
4824.0	31.19	PK	15	1.1	H	12.40	43.59	74	30.41
802.11b Mode, Middle Channel (2437 MHz)									
2437.0	99.96	PK	112	1.3	H	6.13	106.09	/	/
2437.0	91.06	Ave.	112	1.3	H	6.13	97.19	/	/
2437.0	117.37	PK	18	1.2	V	6.13	123.50	/	/
2437.0	106.97	Ave.	18	1.2	V	6.13	113.10	/	/
2335.1	45.28	Ave.	8	1.2	V	5.48	50.76	54	3.24
2483.5	43.02	Ave.	93	1.2	V	6.81	49.83	54	4.17
220.4	56.49	QP	100	1.10	V	-15.80	40.69	46	5.31
2390.0	42.28	Ave.	77	1.3	H	6.13	48.41	54	5.59
829.6	43.00	QP	183	1.20	H	-5.00	38.00	46	8.00
2335.1	55.26	PK	8	1.2	V	5.48	60.74	74	13.26
2483.5	52.22	PK	93	1.2	V	6.81	59.03	74	14.97
2390.0	52.03	PK	77	1.3	H	6.13	58.16	74	15.84
4874.0	24.69	Ave.	94	1.3	H	12.46	37.15	54	16.85
9748.0	17.22	Ave.	15	1.2	V	19.40	36.62	54	17.38
7311.0	18.47	Ave.	25	1.3	H	16.49	34.96	54	19.04
9748.0	32.26	PK	15	1.2	V	19.40	51.66	74	22.34
7311.0	33.29	PK	25	1.3	H	16.49	49.78	74	24.22
4874.0	33.77	PK	94	1.3	H	12.46	46.23	74	27.77

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/15.205/15.209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H / V)			Limit (dBμV/m)	Margin (dB)
802.11b Mode, High Channel (2462 MHz)									
2462.0	96.38	PK	44	1.2	H	6.81	103.19	/	/
2462.0	87.99	Ave.	44	1.2	H	6.81	94.80	/	/
2462.0	109.88	PK	85	1.3	V	6.81	116.69	/	/
2462.0	103.73	Ave.	85	1.3	V	6.81	110.54	/	/
2390.0	47.37	Ave.	36	1.1	H	6.13	55.50	54	0.50
2485.4	46.53	Ave.	28	1.3	V	6.81	53.34	54	0.66
220.4	56.07	QP	100	1.10	V	-15.80	40.27	46	5.73
2390.0	60.98	PK	36	1.1	H	6.13	67.11	74	6.89
829.6	43.30	QP	183	1.20	H	-5.00	38.30	46	7.70
2336.5	40.15	Ave.	126	1.2	V	5.48	45.63	54	8.37
2485.4	57.35	PK	28	1.3	V	6.81	64.16	74	9.84
9848.0	17.11	Ave.	11	1.2	V	19.39	36.50	54	17.50
2336.5	50.26	PK	126	1.2	V	5.48	55.74	74	18.26
4924.0	22.83	Ave.	76	1.1	H	12.50	35.33	54	18.67
7386.0	18.21	Ave.	8	1.2	H	15.91	34.12	54	19.88
9848.0	32.17	PK	11	1.2	V	19.39	51.56	74	22.44
7386.0	33.61	PK	8	1.2	H	15.91	49.52	74	24.48
4924.0	31.29	PK	76	1.1	H	12.50	43.79	74	30.21
802.11g Mode, Low Channel (2412 MHz)									
2412.0	98.29	PK	33	1.1	H	6.13	104.42	/	/
2412.0	82.33	Ave.	33	1.1	H	6.13	88.46	/	/
2412.0	112.08	PK	6	1.3	V	6.13	118.21	/	/
2412.0	96.85	Ave.	6	1.3	V	6.13	102.98	/	/
2390.0	47.73	Ave.	63	1.2	H	6.13	53.86	54	0.14
2390.0	63.93	PK	63	1.2	H	6.13	70.06	74	3.94
220.4	55.45	QP	100	1.10	V	-15.80	39.65	46	6.35
829.6	44.30	QP	183	1.20	H	-5.00	39.30	46	6.70
2483.5	34.72	Ave.	26	1.3	V	6.81	41.53	54	12.47
2337.3	34.25	Ave.	135	1.2	V	5.48	39.73	54	14.27
2483.5	50.22	PK	26	1.3	V	6.81	57.03	74	16.97
9648.0	17.01	Ave.	116	1.2	V	19.29	36.30	54	17.70
2337.3	50.02	PK	135	1.2	V	5.48	55.50	74	18.50
7236.0	18.25	Ave.	42	1.1	H	16.62	34.87	54	19.13
9648.0	32.01	PK	116	1.2	V	19.29	51.30	74	22.70
7236.0	33.26	PK	42	1.1	H	16.62	49.88	74	24.12
4824.0	17.03	Ave.	65	1.1	H	12.40	29.43	54	24.57
4824.0	32.96	PK	65	1.1	H	12.40	45.36	74	28.64

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBµV/m)	FCC Part 15.247/15.205/15.209	
	Reading (dBµV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H / V)			Limit (dBµV/m)	Margin (dB)
802.11g Mode, Middle Channel (2437 MHz)									
2437.0	103.61	PK	92	1.3	H	6.13	109.74	/	/
2437.0	86.33	Ave.	92	1.3	H	6.13	92.46	/	/
2437.0	116.83	PK	15	1.3	V	6.13	122.96	/	/
2437.0	100.21	Ave.	15	1.3	V	6.13	106.34	/	/
220.4	54.85	QP	100	1.10	V	-15.80	39.05	46	6.95
829.6	43.53	QP	183	1.20	H	-5.00	38.53	46	7.47
2483.5	37.88	Ave.	26	1.2	V	6.81	44.69	54	9.31
2390.0	38.06	Ave.	31	1.1	H	6.13	44.19	54	9.81
2338.2	37.47	Ave.	152	1.3	V	5.48	42.95	54	11.05
2390.0	54.22	PK	31	1.1	H	6.13	60.35	74	13.65
2483.5	53.26	PK	26	1.2	V	6.81	60.07	74	13.93
2338.2	53.26	PK	152	1.3	V	5.48	58.74	74	15.26
9748.0	17.22	Ave.	43	1.2	V	19.40	36.62	54	17.38
7311.0	18.47	Ave.	44	1.2	H	16.49	34.96	54	19.04
9748.0	32.26	PK	43	1.2	V	19.40	51.66	74	22.34
4874.0	18.03	Ave.	5	1.1	H	12.46	30.49	54	23.51
7311.0	33.25	PK	44	1.2	H	16.49	49.74	74	24.26
4874.0	33.69	PK	5	1.1	H	12.46	46.15	74	27.85
802.11g Mode, High Channel (2462 MHz)									
2462.0	99.25	PK	95	1.2	H	6.81	106.06	/	/
2462.0	83.06	Ave.	95	1.2	H	6.81	89.87	/	/
2462.0	112.67	PK	11	1.2	V	6.81	119.48	/	/
2462.0	96.83	Ave.	11	1.2	V	6.81	103.64	/	/
2485.3	42.39	Ave.	85	1.2	V	6.81	49.20	54	4.80
220.4	55.75	QP	100	1.10	V	-15.80	39.95	46	6.05
2390.0	40.89	Ave.	99	1.1	H	6.13	47.02	54	6.98
2485.3	59.83	PK	85	1.2	V	6.81	66.64	74	7.36
829.6	43.30	QP	183	1.20	H	-5.00	38.30	46	7.70
2338.9	38.55	Ave.	8	1.3	V	5.48	44.03	54	9.97
2390.0	57.66	PK	99	1.1	H	6.13	63.79	74	10.21
2338.9	55.26	PK	8	1.3	V	5.48	60.74	74	13.26
9848.0	17.44	Ave.	37	1.2	V	19.39	36.83	54	17.17
7386.0	18.62	Ave.	77	1.3	H	15.91	34.53	54	19.47
9848.0	32.57	PK	37	1.2	V	19.39	51.96	74	22.04
4924.0	17.22	Ave.	12	1.1	H	12.50	29.72	54	24.28
7386.0	33.22	PK	77	1.3	H	15.91	49.13	74	24.87
4924.0	32.87	PK	12	1.1	H	12.50	45.37	74	28.63

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBµV/m)	FCC Part 15.247/15.205/15.209	
	Reading (dBµV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H / V)			Limit (dBµV/m)	Margin (dB)
802.11n-HT20 Mode, Low Channel (2412 MHz)									
2412.0	96.38	PK	23	1.3	H	6.13	102.51	/	/
2412.0	81.22	Ave.	23	1.3	H	6.13	87.35	/	/
2412.0	110.69	PK	12	1.2	V	6.13	116.82	/	/
2412.0	95.84	Ave.	12	1.2	V	6.13	101.97	/	/
2390.0	47.63	Ave.	46	1.1	H	6.13	53.76	54	0.24*
2390.0	64.33	PK	46	1.1	H	6.13	70.46	74	3.54*
220.4	57.15	QP	100	1.10	V	-15.80	41.35	46	4.65
2335.4	43.25	Ave.	5	1.3	V	5.48	48.73	54	5.27
829.6	45.65	QP	183	1.20	H	-5.00	40.65	46	5.35
2335.4	60.25	PK	5	1.3	V	5.48	65.73	74	8.27
2483.5	33.26	Ave.	87	1.3	V	6.81	40.07	54	13.93
9648.0	17.44	Ave.	87	1.3	V	19.29	36.73	54	17.27
2483.5	48.58	PK	87	1.3	V	6.81	55.39	74	18.61
7236.0	18.25	Ave.	39	1.3	H	16.62	34.87	54	19.13
9648.0	32.11	PK	87	1.3	V	19.29	51.40	74	22.60
7236.0	33.66	PK	39	1.3	H	16.62	50.28	74	23.72
4824.0	17.33	Ave.	85	1.1	H	12.40	29.73	54	24.27
4824.0	32.06	PK	85	1.1	H	12.40	44.46	74	29.54
802.11n-HT20 Mode, Middle Channel (2437 MHz)									
2437.0	100.89	PK	26	1.2	H	6.13	107.02	/	/
2437.0	85.06	Ave.	26	1.2	H	6.13	91.19	/	/
2437.0	114.25	PK	85	1.3	V	6.13	120.38	/	/
2437.0	100.91	Ave.	85	1.3	V	6.13	107.04	/	/
220.4	58.20	QP	100	1.10	V	-15.80	42.40	46	3.60*
2390.0	43.36	Ave.	91	1.2	H	6.13	49.49	54	4.51
2483.6	41.19	Ave.	78	1.3	V	6.81	48.00	54	6.00
829.6	44.62	QP	183	1.20	H	-5.00	39.62	46	6.38
2335.3	41.19	Ave.	3	1.3	V	5.48	46.67	54	7.33
2390.0	60.28	PK	91	1.2	H	6.13	66.41	74	7.59
2483.6	58.77	PK	78	1.3	V	6.81	65.58	74	8.42
2335.3	58.33	PK	3	1.3	V	5.48	63.81	74	10.19
9748.0	17.03	Ave.	21	1.2	V	19.40	36.43	54	17.57
7311.0	18.26	Ave.	78	1.3	H	16.49	34.75	54	19.25
9748.0	32.25	PK	21	1.2	V	19.40	51.65	74	22.35
4874.0	18.97	Ave.	9	1.2	H	12.46	31.43	54	22.57
7311.0	33.22	PK	78	1.3	H	16.49	49.71	74	24.29
4874.0	34.59	PK	9	1.2	H	12.46	47.05	74	26.95

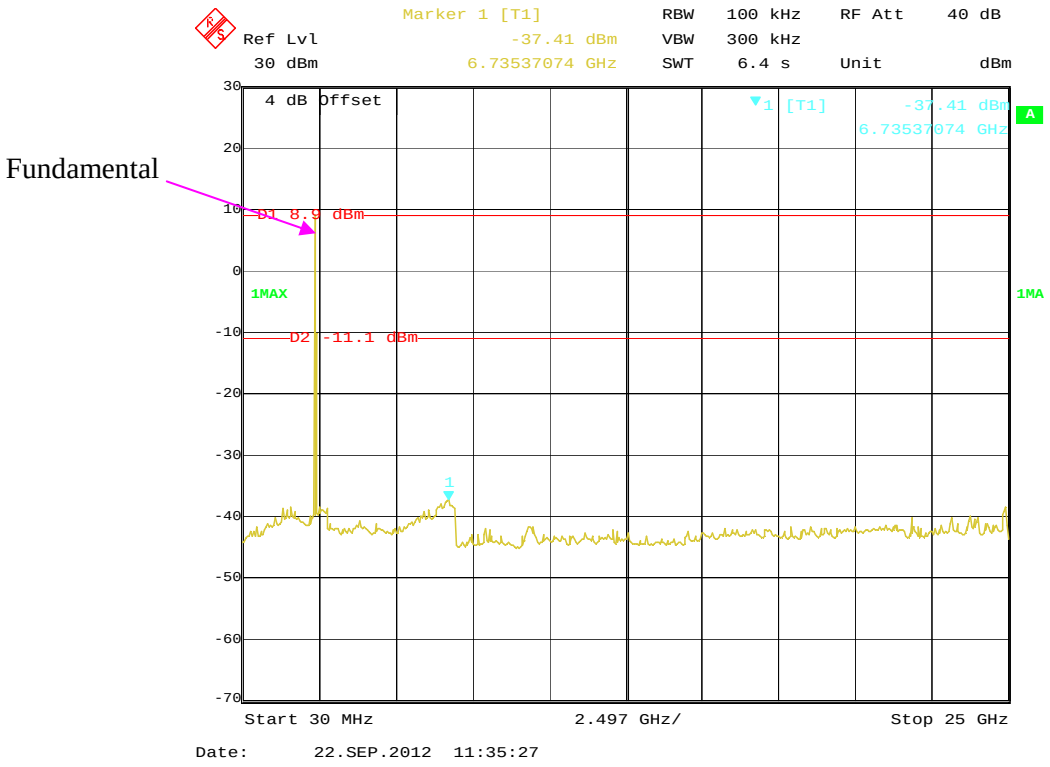
Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/15.205/15.209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H / V)			Limit (dBμV/m)	Margin (dB)
802.11n-HT20 Mode, High Channel (2462 MHz)									
2462.0	97.03	PK	282	1.1	H	6.81	103.84	/	/
2462.0	81.29	Ave.	282	1.1	H	6.81	88.10	/	/
2462.0	111.26	PK	7	1.2	V	6.81	118.07	/	/
2462.0	96.07	Ave.	7	1.2	V	6.81	102.88	/	/
220.4	58.22	QP	100	1.10	V	-15.80	42.42	46	3.58*
2390.0	41.23	Ave.	9	1.1	H	6.13	47.36	54	6.64
829.6	43.72	QP	183	1.20	H	-5.00	38.72	46	7.28
2390.0	58.75	PK	9	1.1	H	6.13	64.88	74	9.12
2483.5	37.61	Ave.	14	1.2	V	6.81	44.42	54	9.58
2332.7	37.44	Ave.	15	1.2	V	5.48	42.92	54	11.08
2483.5	53.77	PK	14	1.2	V	6.81	60.58	74	13.42
2332.7	53.39	PK	15	1.2	V	5.48	58.87	74	15.13
9848.0	17.08	Ave.	87	1.2	V	19.39	36.47	54	17.53
7386.0	18.87	Ave.	33	1.3	H	15.91	34.78	54	19.22
9848.0	32.66	PK	87	1.2	V	19.39	52.05	74	21.95
4924.0	17.25	Ave.	15	1.3	H	12.50	29.75	54	24.25
7386.0	33.69	PK	33	1.3	H	15.91	49.60	74	24.40
4924.0	32.67	PK	15	1.3	H	12.50	45.17	74	28.83
802.11n-HT40 Mode, Low Channel (2422 MHz)									
2422.0	93.39	PK	19	1.1	H	6.13	99.52	/	/
2422.0	77.37	Ave.	19	1.1	H	6.13	83.50	/	/
2422.0	111.82	PK	26	1.3	V	6.13	117.95	/	/
2422.0	92.46	Ave.	26	1.3	V	6.13	98.59	/	/
2390.0	47.07	Ave.	95	1.3	H	6.13	53.20	54	0.80*
2332.1	44.97	Ave.	36	1.2	V	5.48	50.45	54	3.55
220.4	58.22	QP	100	1.10	V	-15.80	42.42	46	3.58
2390.0	63.12	PK	95	1.3	H	6.13	69.25	74	4.75
829.6	44.31	QP	183	1.20	H	-5.00	39.31	46	6.69
2332.1	60.22	PK	36	1.2	V	5.48	65.70	74	8.30
2483.5	33.37	Ave.	135	1.2	V	6.81	40.18	54	13.82
9688.0	17.25	Ave.	75	1.3	V	19.29	36.54	54	17.46
2483.5	49.66	PK	135	1.2	V	6.81	56.47	74	17.53
7266.0	18.87	Ave.	114	1.3	H	16.62	35.49	54	18.51
9688.0	32.97	PK	75	1.3	V	19.29	52.26	74	21.74
7266.0	33.66	PK	114	1.3	H	16.62	50.28	74	23.72
4844.0	17.09	Ave.	58	1.3	H	12.40	29.49	54	24.51
4844.0	33.79	PK	58	1.3	H	12.40	46.19	74	27.81

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/15.205/15.209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H / V)			Limit (dBμV/m)	Margin (dB)
802.11n-HT40 Mode, Middle Channel (2437 MHz)									
2437.0	100.83	PK	26	1.2	H	6.13	106.96	/	/
2437.0	81.28	Ave.	26	1.2	H	6.13	87.41	/	/
2437.0	112.69	PK	8	1.2	V	6.13	118.82	/	/
2437.0	96.35	Ave.	8	1.2	V	6.13	102.48	/	/
220.4	56.38	QP	100	1.10	V	-15.80	40.58	46	5.42
829.6	44.62	QP	183	1.20	H	-5.00	39.62	46	6.38
2390.0	39.97	Ave.	8	1.3	H	6.13	46.10	54	7.90
2483.5	38.82	Ave.	15	1.2	V	6.81	45.63	54	8.37
2338.1	39.58	Ave.	26	1.2	V	5.48	45.06	54	8.94
2390.0	58.67	PK	8	1.3	H	6.13	64.80	74	9.20
2483.5	57.21	PK	15	1.2	V	6.81	64.02	74	9.98
2338.1	57.56	PK	26	1.2	V	5.48	63.04	74	10.96
9748.0	17.15	Ave.	333	1.2	V	19.40	36.55	54	17.45
7311.0	18.87	Ave.	42	1.3	H	16.49	35.36	54	18.64
9748.0	32.29	PK	333	1.2	V	19.40	51.69	74	22.31
4874.0	18.63	Ave.	75	1.1	H	12.46	31.09	54	22.91
7311.0	33.96	PK	42	1.3	H	16.49	50.45	74	23.55
4874.0	35.27	PK	75	1.1	H	12.46	47.73	74	26.27
802.11n-HT40 Mode, High Channel (2452 MHz)									
2452.0	96.39	PK	36	1.2	H	6.81	103.20	/	/
2452.0	77.81	Ave.	36	1.2	H	6.81	84.62	/	/
2452.0	111.93	PK	46	1.3	V	6.81	118.74	/	/
2452.0	92.87	Ave.	46	1.3	V	6.81	99.68	/	/
220.4	57.38	QP	100	1.10	V	-15.80	41.58	46	4.42
829.6	44.62	QP	183	1.20	H	-5.00	39.62	46	6.38
2390.0	39.82	Ave.	136	1.1	H	6.13	45.95	54	8.05
2390.0	57.69	PK	136	1.1	H	6.13	63.82	74	10.18
2337.5	37.41	Ave.	25	1.2	V	5.48	42.89	54	11.11
2337.5	55.28	PK	25	1.2	V	5.48	60.76	74	13.24
2483.5	31.22	Ave.	28	1.3	V	6.81	38.03	54	15.97
2483.5	50.14	PK	28	1.3	V	6.81	56.95	74	17.05
9808.0	17.03	Ave.	95	1.2	V	19.29	36.32	54	17.68
7356.0	18.54	Ave.	77	1.2	H	15.91	34.45	54	19.55
9808.0	32.29	PK	95	1.2	V	19.29	51.58	74	22.42
7356.0	33.65	PK	77	1.2	H	15.91	49.56	74	24.44
4904.0	17.03	Ave.	58	1.3	H	12.46	29.49	54	24.51
4904.0	33.96	PK	58	1.3	H	12.46	46.42	74	27.58

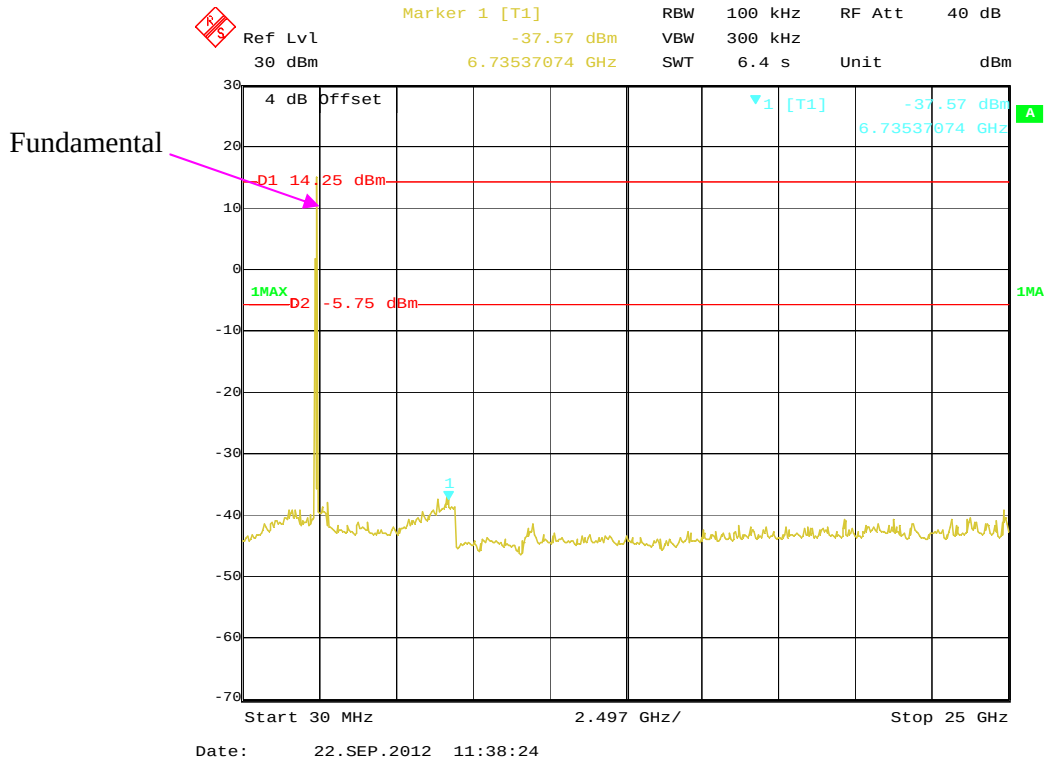
Note: Corrected Amplitude = Receiver Reading + Cable loss + Antenna Factor – Amplifier Gain
Margin = Limit- Corrected Amplitude
*Within measurement uncertainty.

Antenna Port Conducted Spurious Emissions:

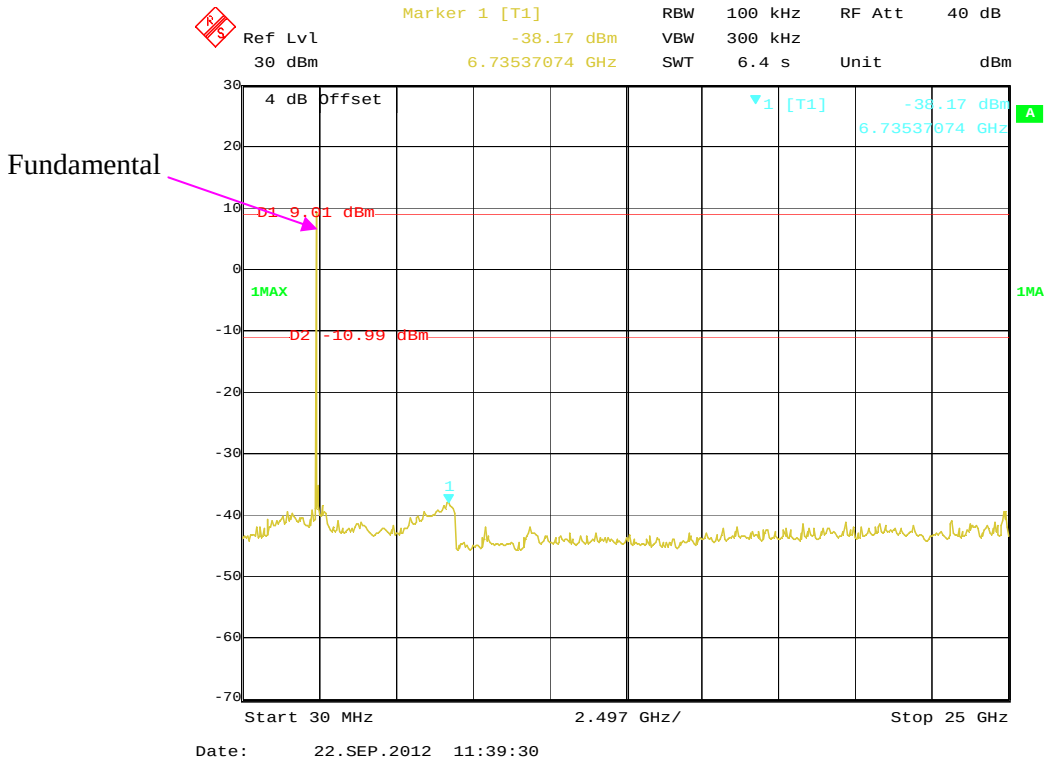
802.11b Low Channel, Antenna 0



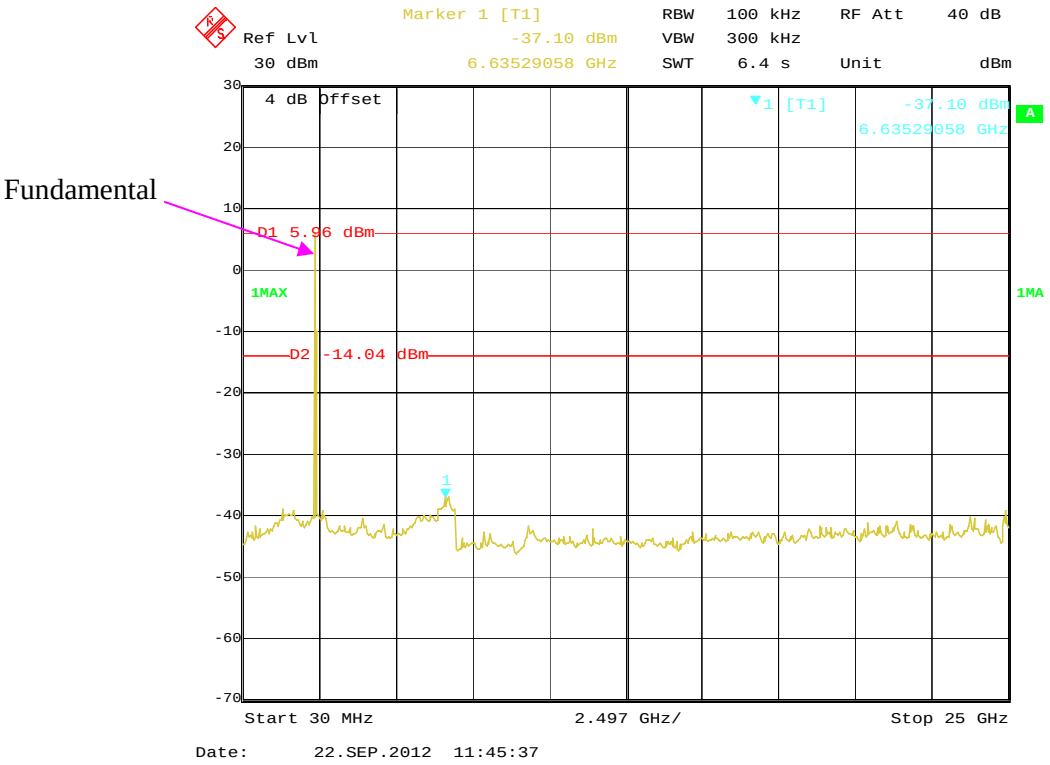
802.11b Middle Channel, Antenna 0



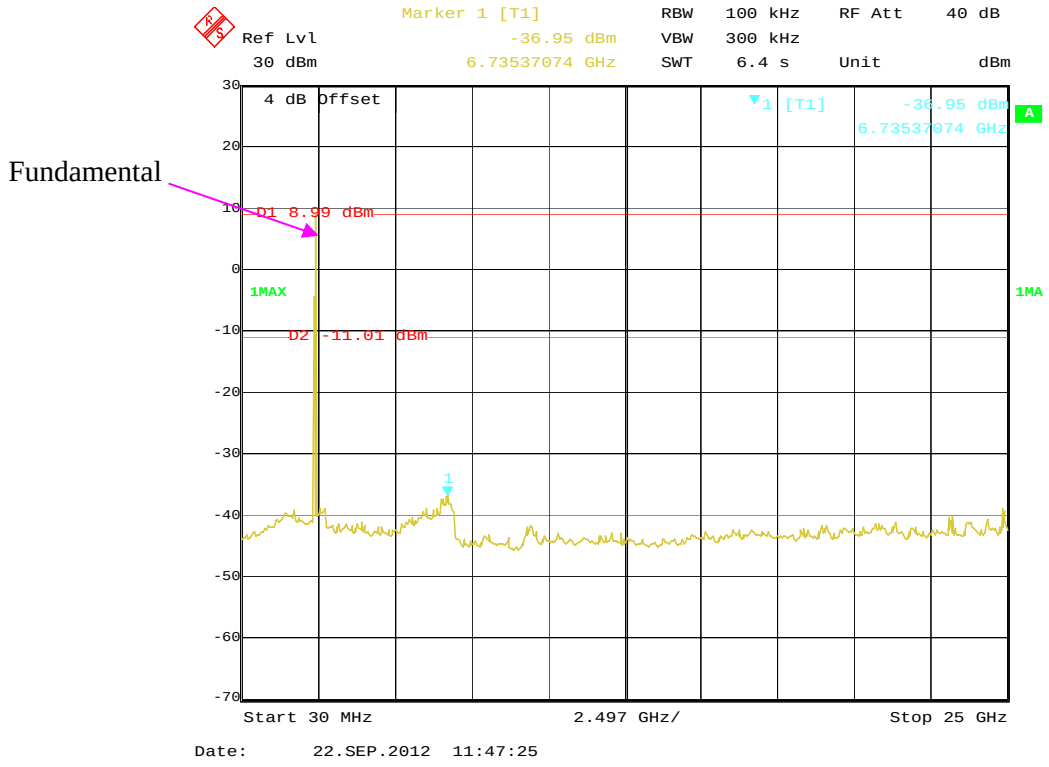
802.11b High Channel, Antenna 0



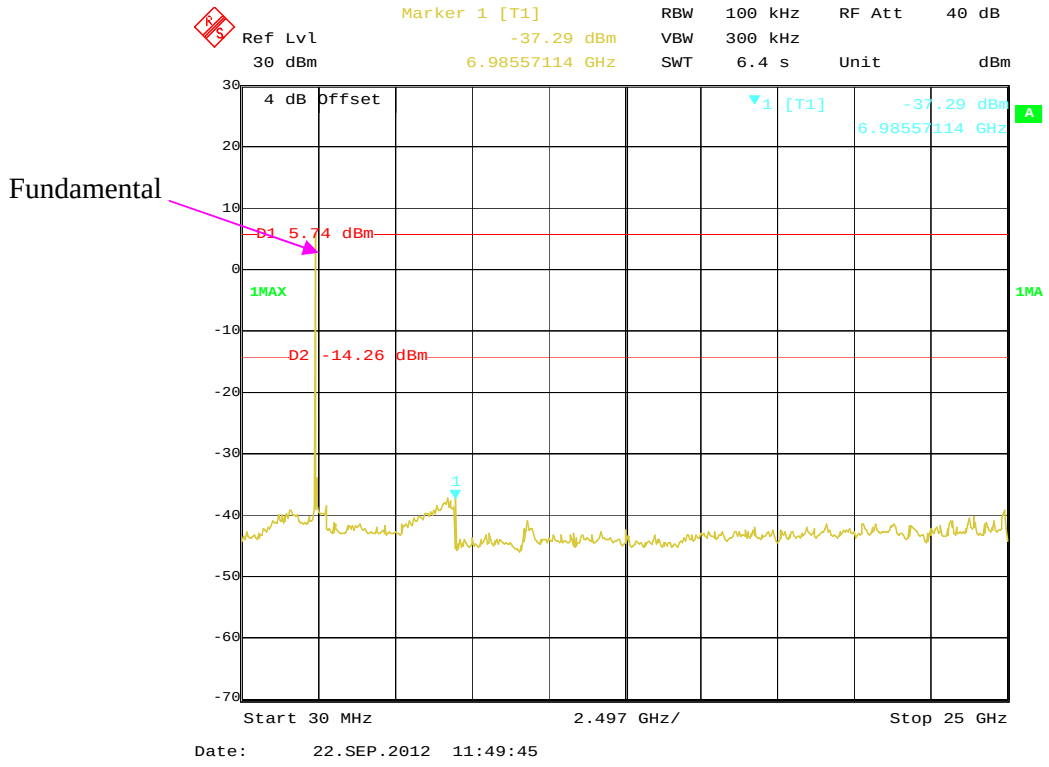
802.11g Low Channel, Antenna 0



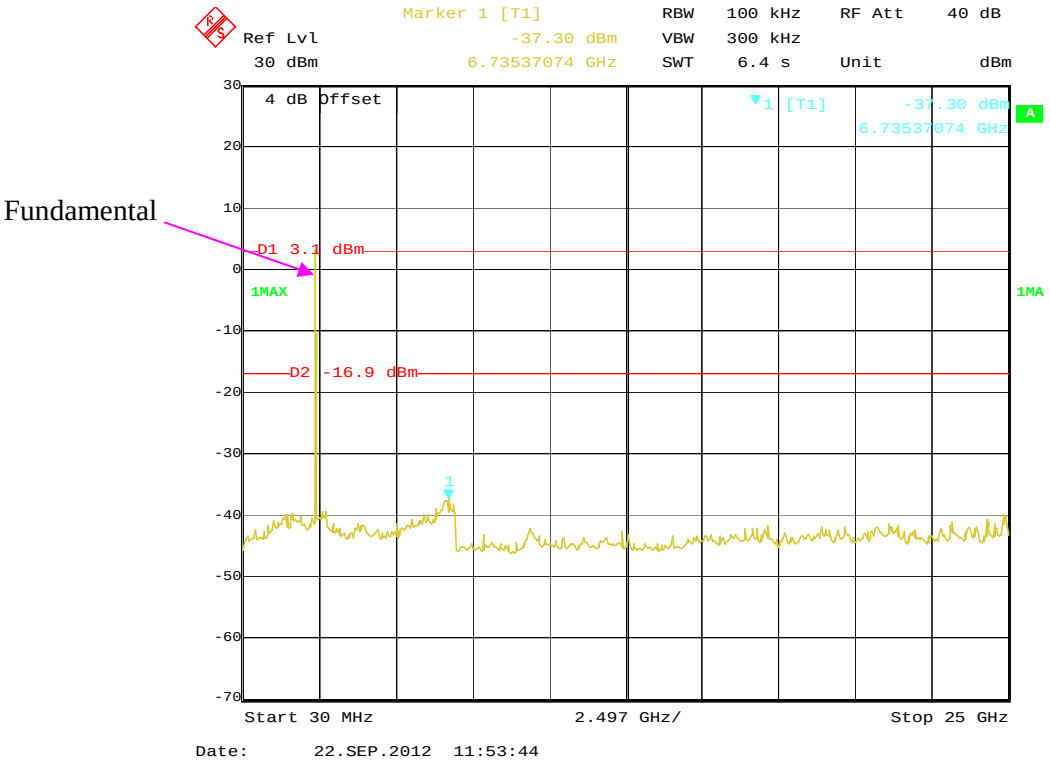
802.11g Middle Channel, Antenna 0



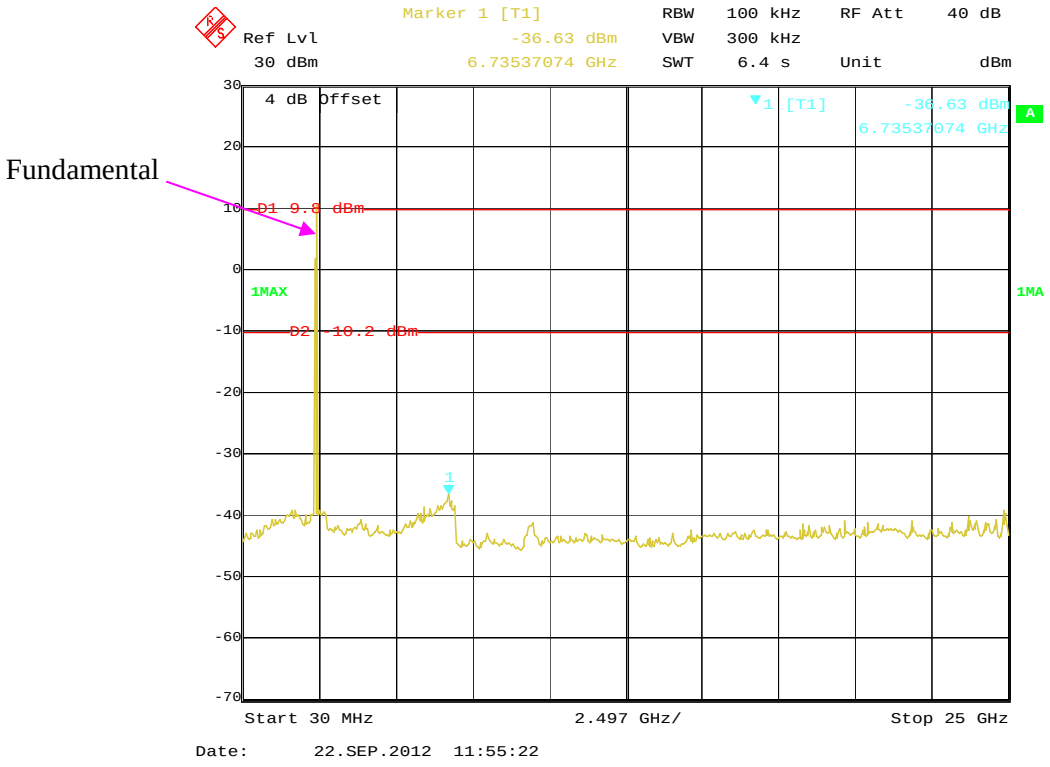
802.11g High Channel, Antenna 0



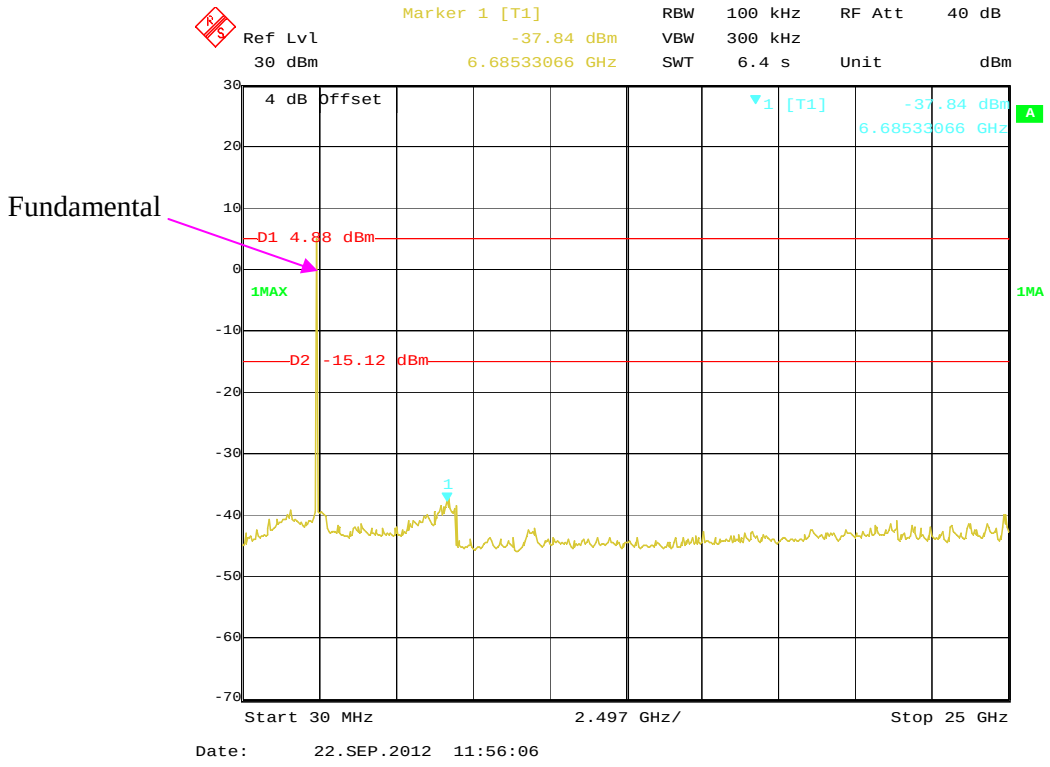
802.11n-HT20 Low Channel, Antenna 0



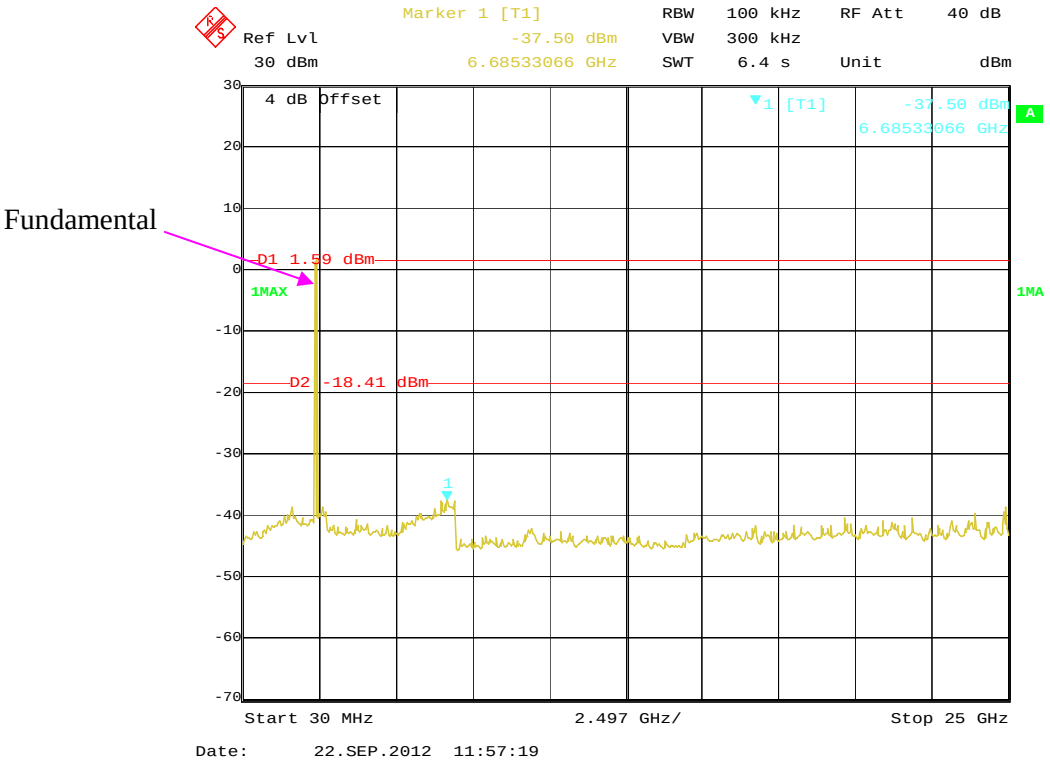
802.11n-HT20 Middle Channel, Antenna 0



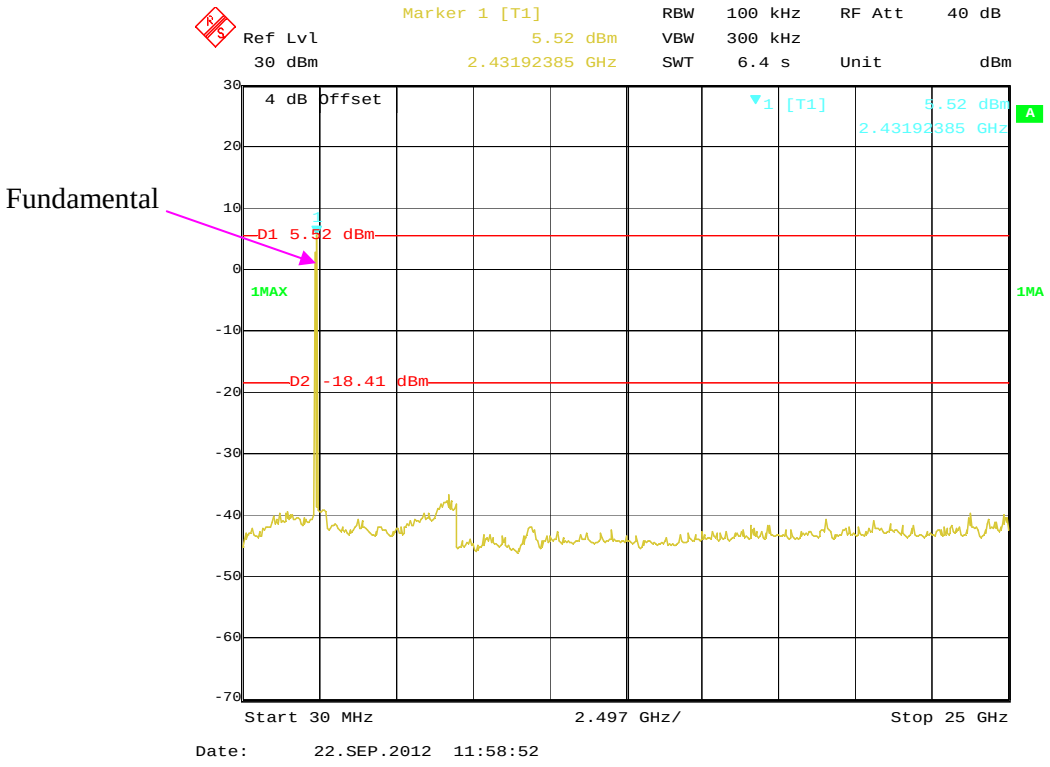
802.11n-HT20 High Channel, Antenna 0



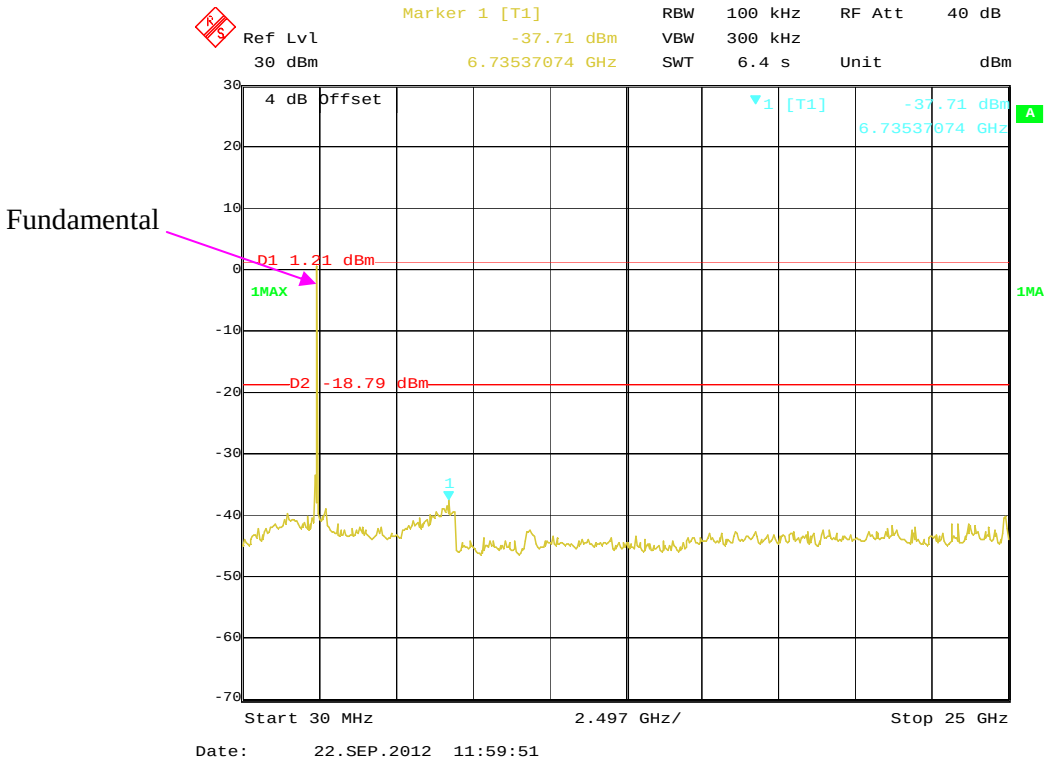
802.11n-HT40 Low Channel, Antenna 0



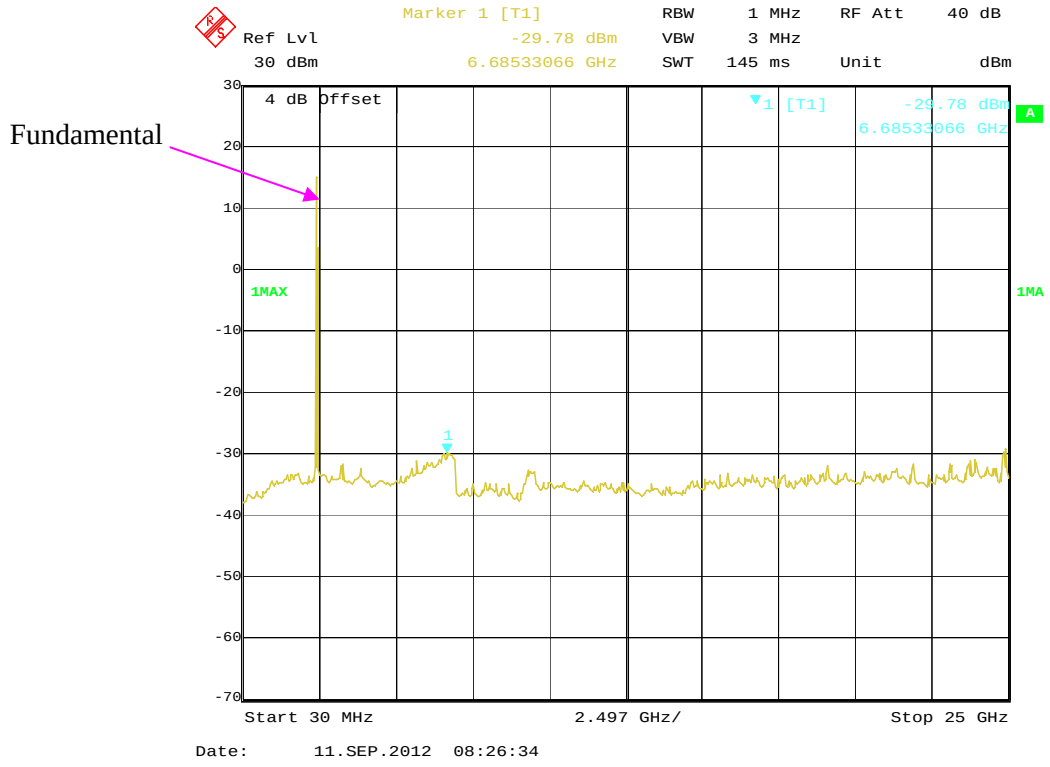
802.11n-HT40 Middle Channel, Antenna 0



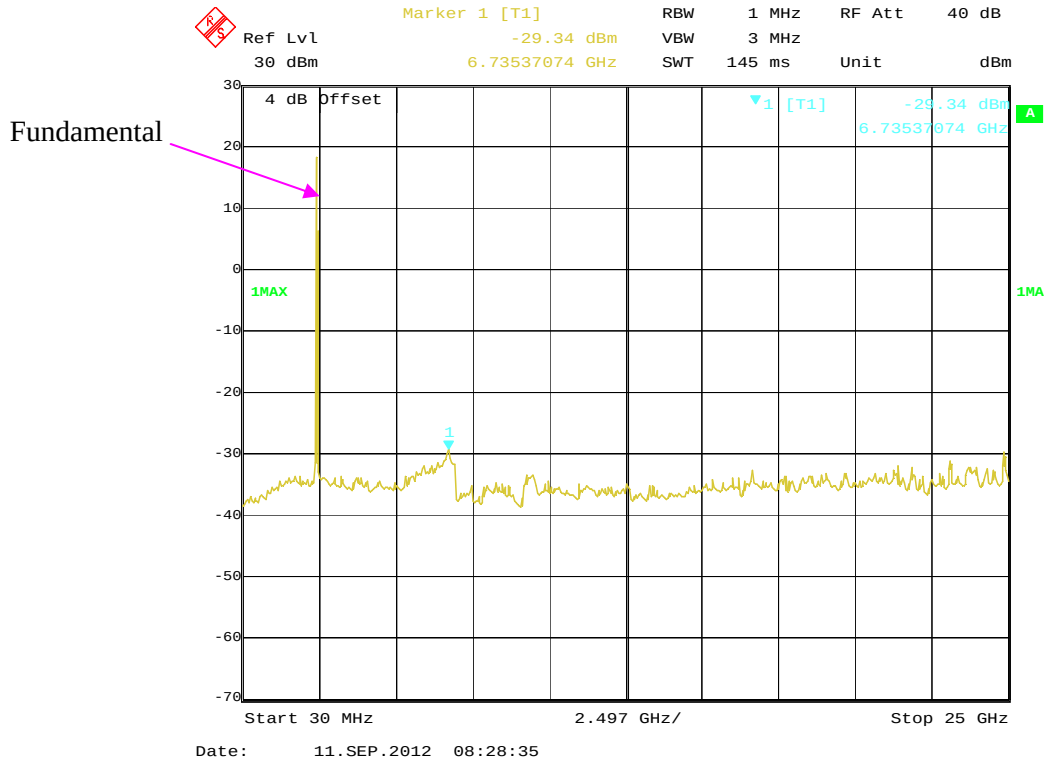
802.11n-HT40 High Channel, Antenna 0



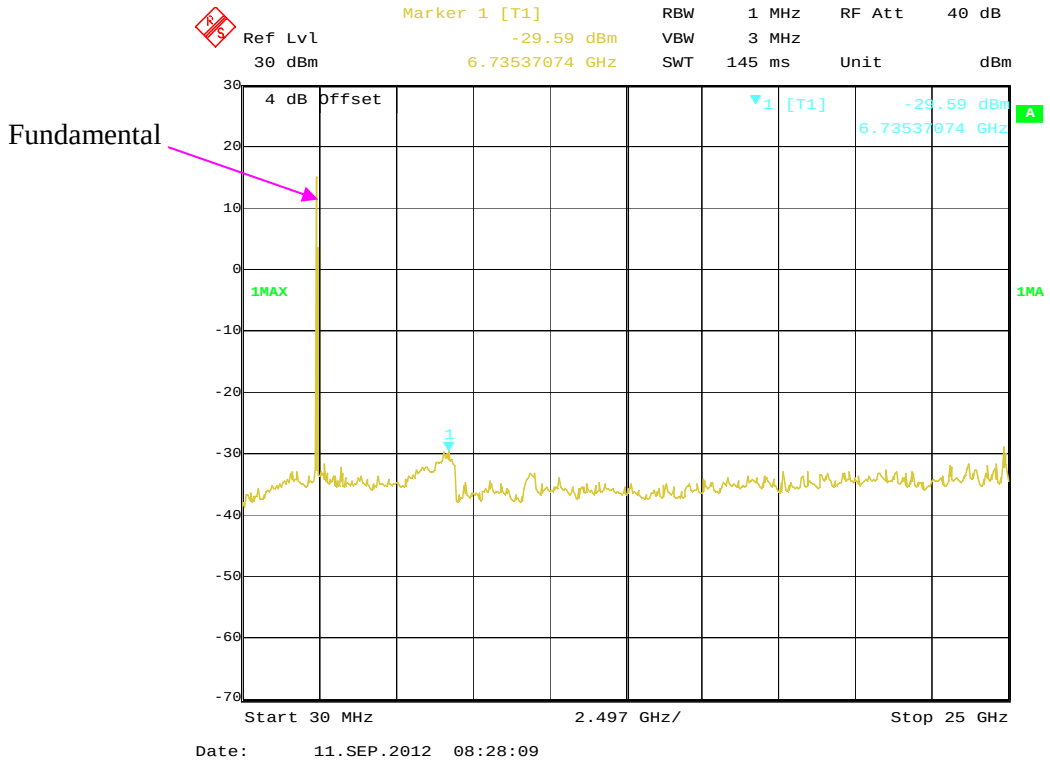
802.11b Low Channel, Antenna 1



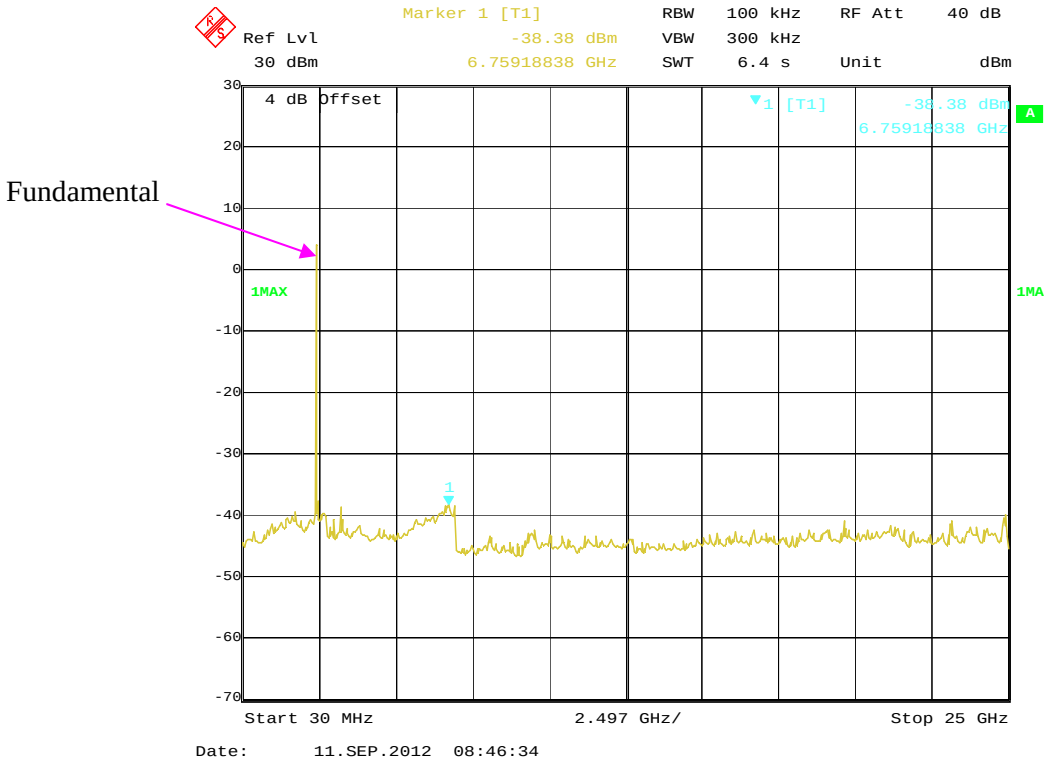
802.11b Middle Channel, Antenna 1



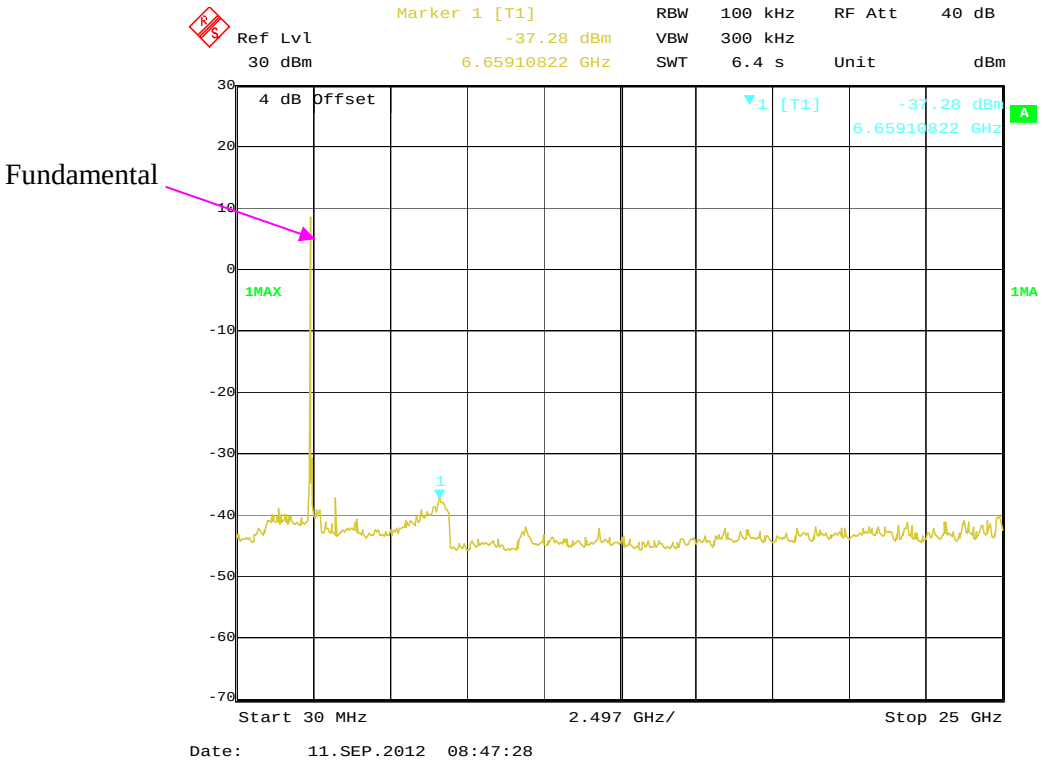
802.11b High Channel, Antenna 1



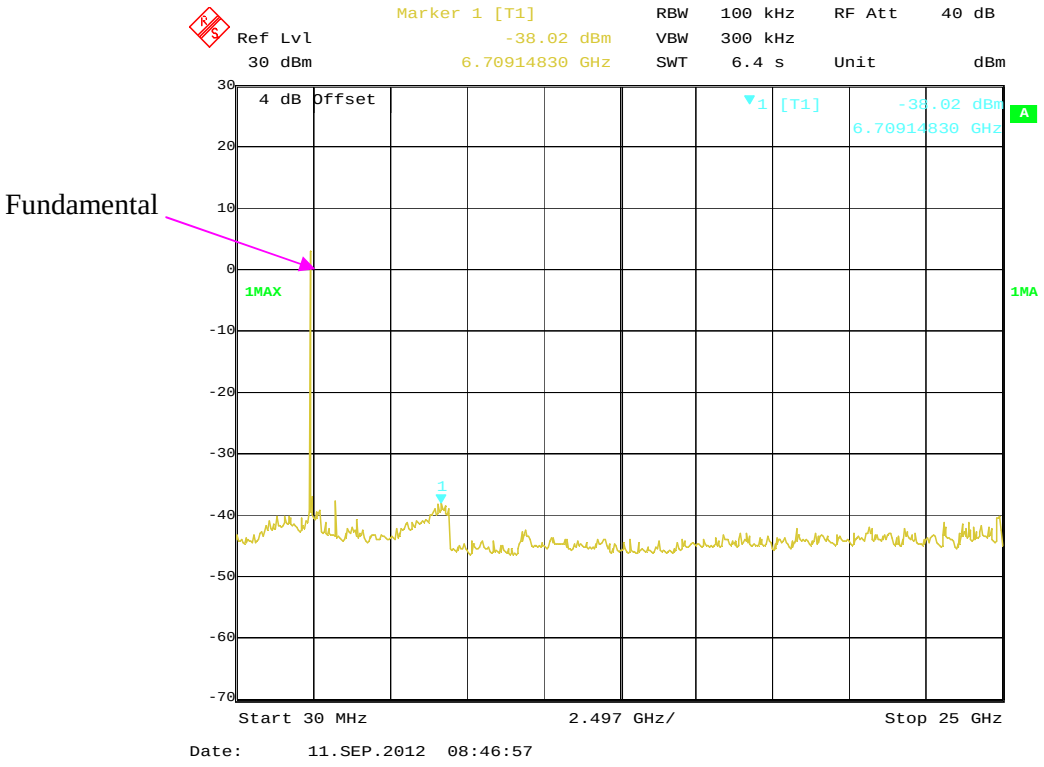
802.11g Low Channel, Antenna 1



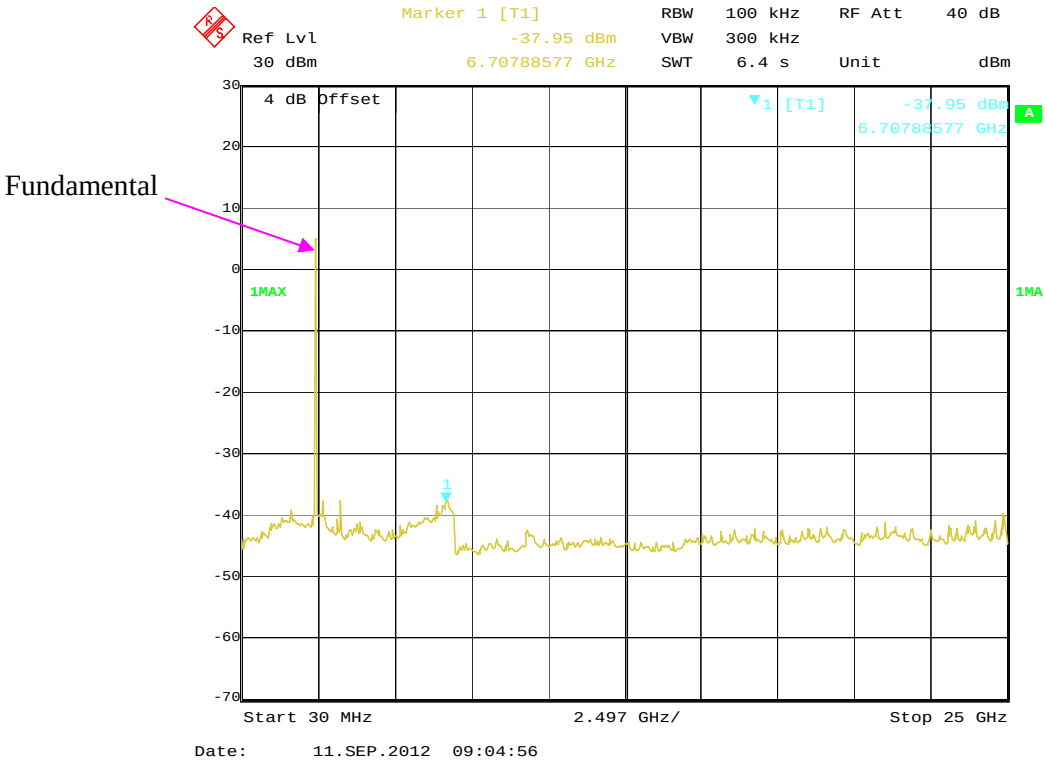
802.11g Middle Channel, Antenna 1



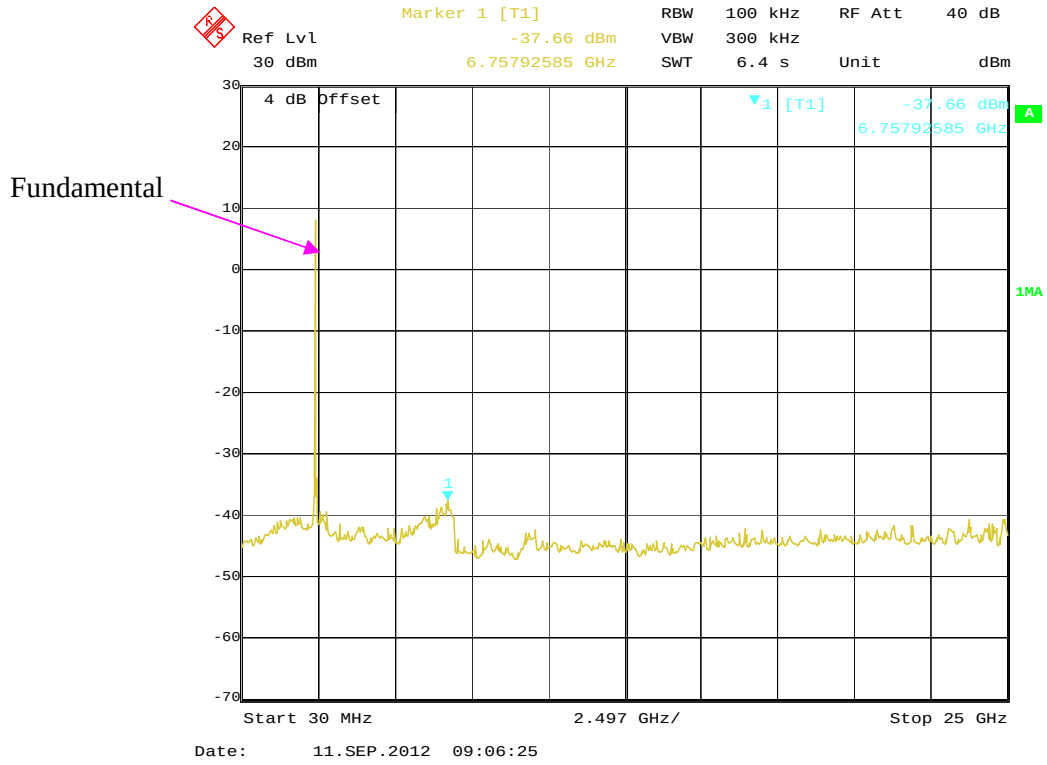
802.11g High Channel, Antenna 1



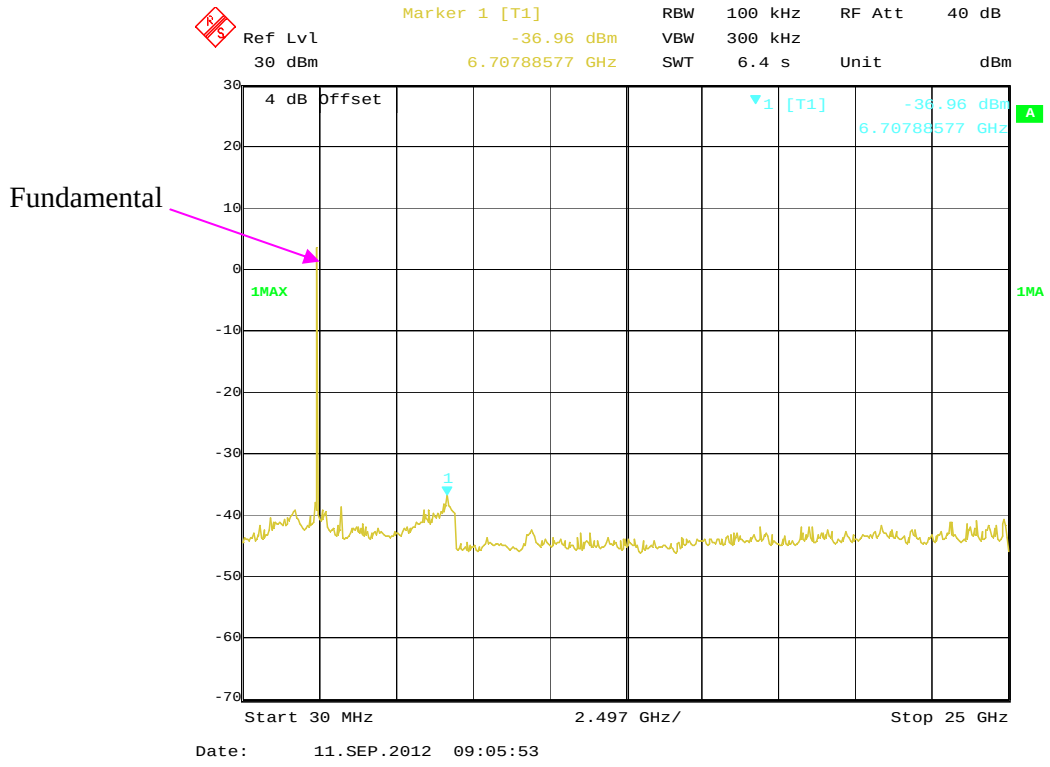
802.11n-HT20 Low Channel, Antenna 1



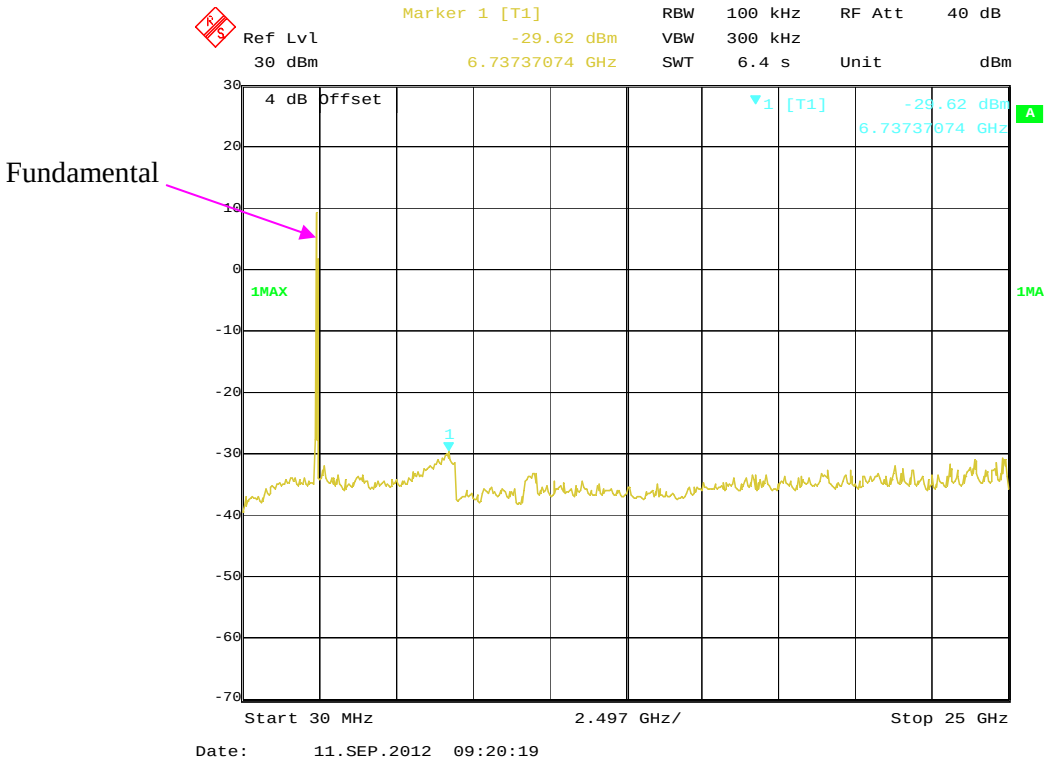
802.11n-HT20 Middle Channel, Antenna 1



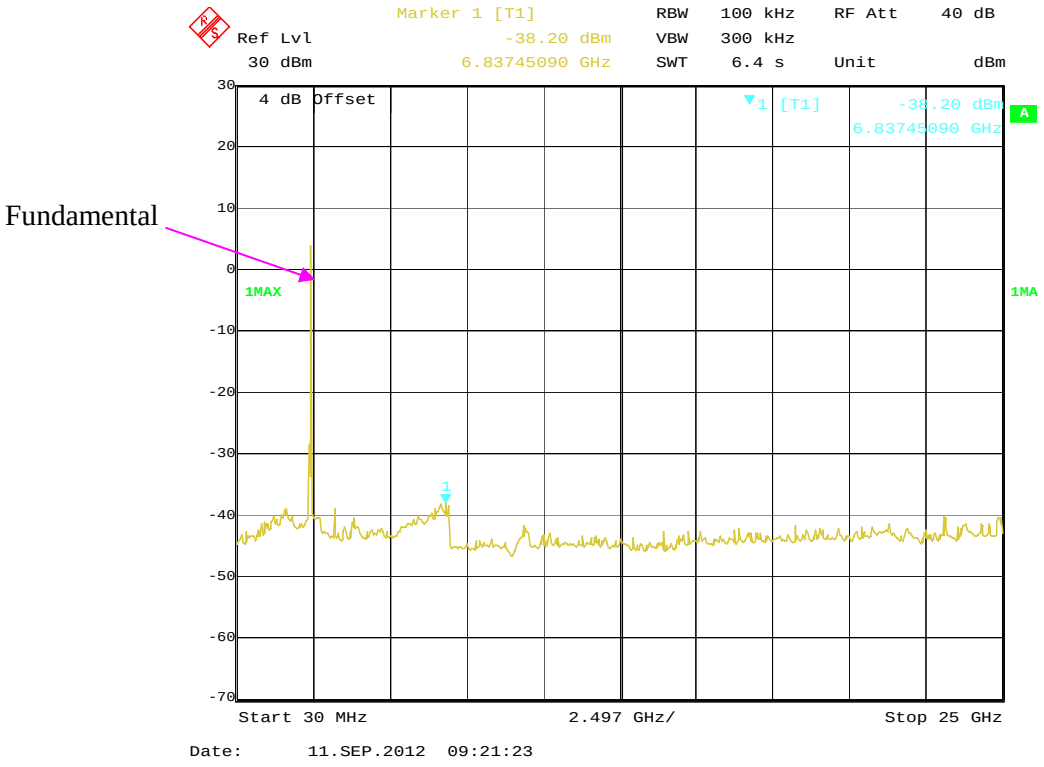
802.11n-HT20 High Channel, Antenna 1



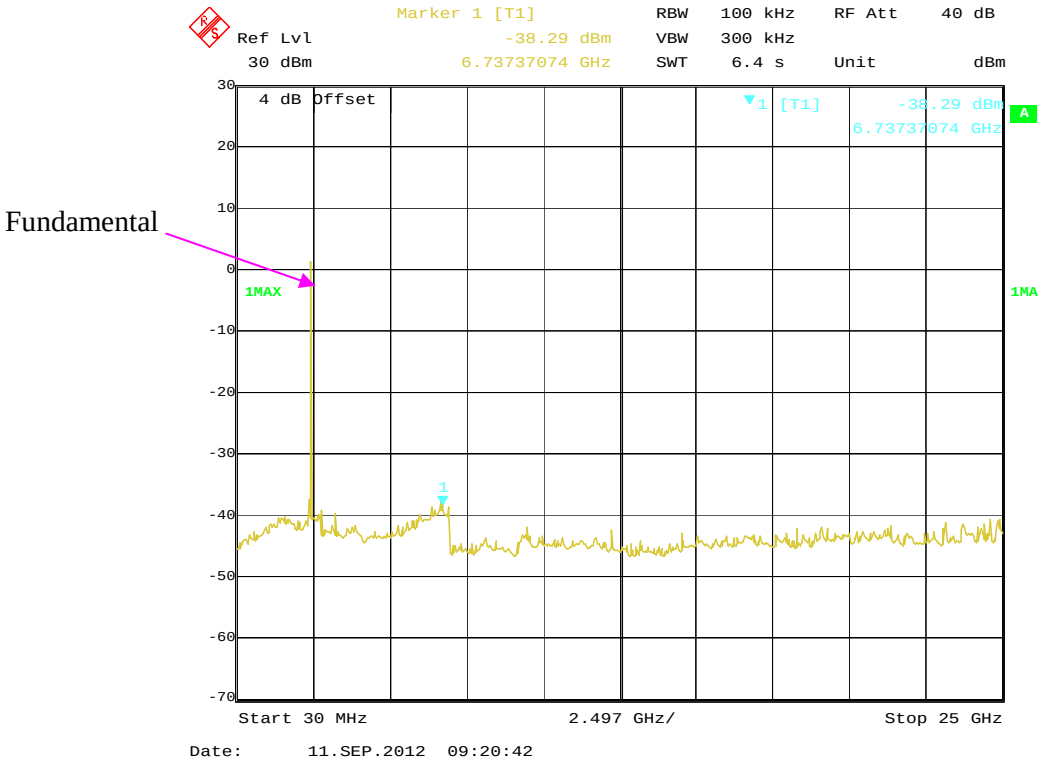
802.11n-HT40 Low Channel, Antenna 1



802.11n-HT40 Middle Channel, Antenna 1



802.11n-HT40 High Channel, Antenna 1



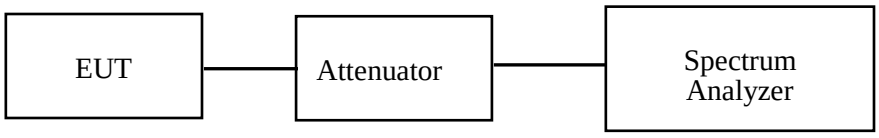
FCC §15.247(a) (2) – 6 dB BANDWIDTH TESTING

Applicable Standard

Systems using digital modulation techniques may operate in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

Test Procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect it to measurement instrument. Then set it to any one convenient frequency within its operating range. Set a reference level on the measuring instrument equal to the highest peak value.
3. Measure the frequency difference of two frequencies that were attenuated 6 dB from the reference level. Record the frequency difference as the emission bandwidth.
4. Repeat above procedures until all frequencies measured were complete.



Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	Signal Analyzer	FSIQ26	8386001028	2011-11-24	2012-11-23

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

Test Data

Environmental Conditions

Temperature:	23~25 °C
Relative Humidity:	50~56 %
ATM Pressure:	100.0 kPa

The testing was performed by Tiger Yeu on 2012-10-16 and 2012-10-17.

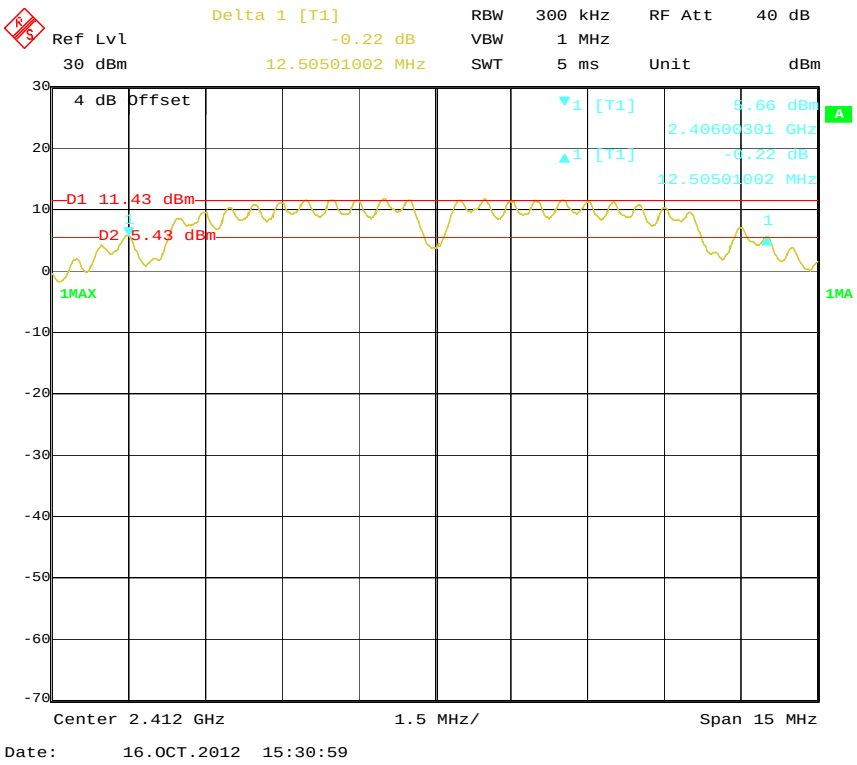
Test Mode: Transmitting

Test Result: Pass.

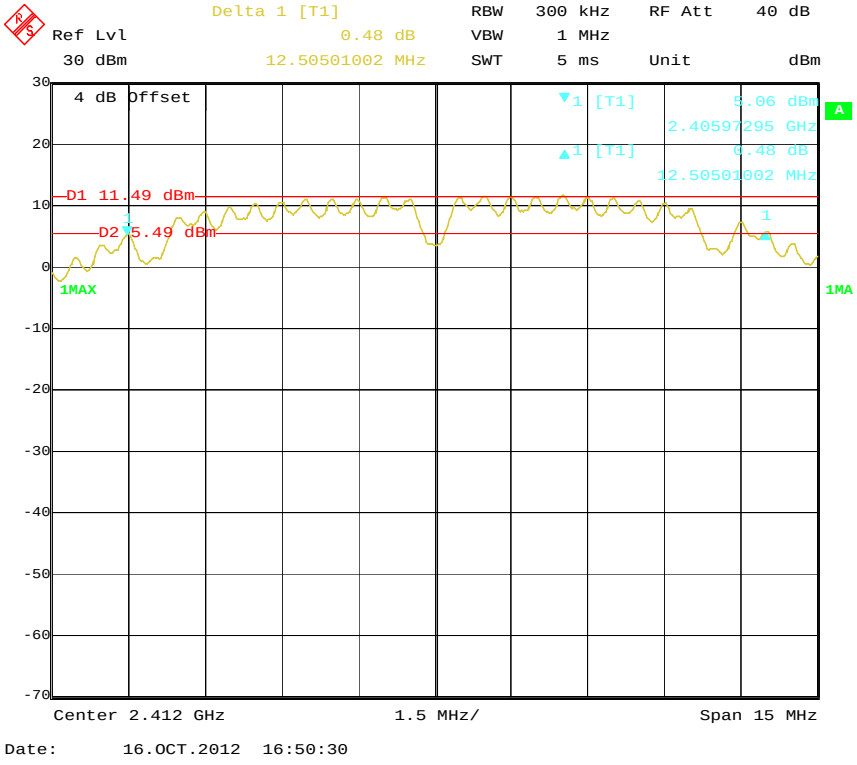
Please refer to the following tables and plots.

Channel	Frequency (MHz)	6dB bandwidth (MHz)		Limit (kHz)	Result
		Antenna port 0	Antenna port 1		
802.11b mode					
Low	2412	12.50	12.50	≥500	Pass
Middle	2437	11.81	12.56	≥500	Pass
High	2462	11.81	12.17	≥500	Pass
802.11g mode					
Low	2412	16.30	16.37	≥500	Pass
Middle	2437	16.30	16.34	≥500	Pass
High	2462	16.30	16.37	≥500	Pass
802.11n-HT20 mode					
Low	2412	17.31	17.31	≥500	Pass
Middle	2437	17.30	17.31	≥500	Pass
High	2462	17.31	16.95	≥500	Pass
802.11n-HT40 mode					
Low	2422	35.67	35.67	≥500	Pass
Middle	2437	35.67	35.67	≥500	Pass
High	2452	35.19	35.27	≥500	Pass

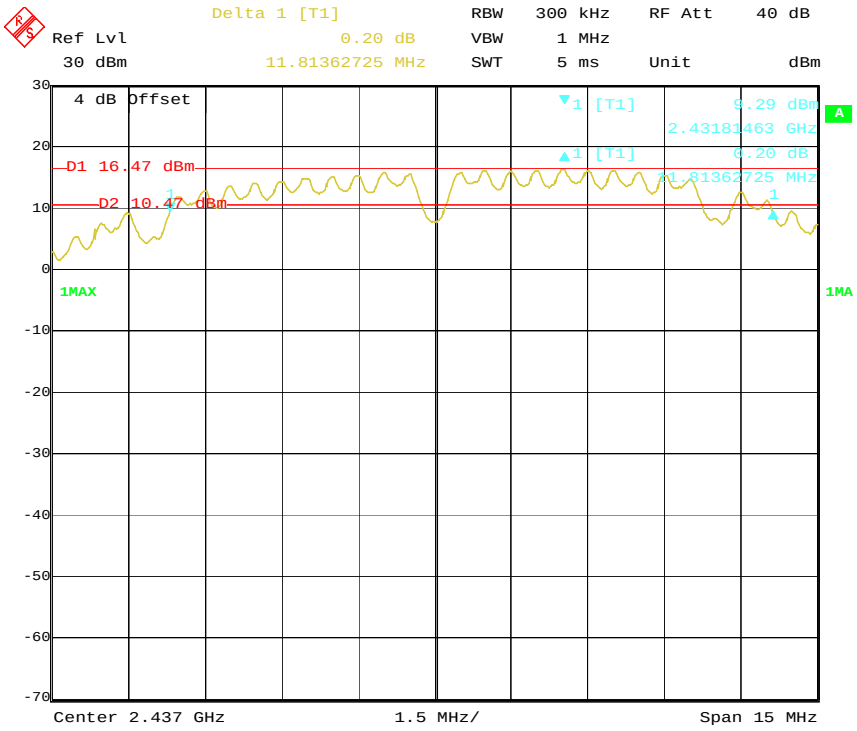
802.11b Low Channel, Antenna 0



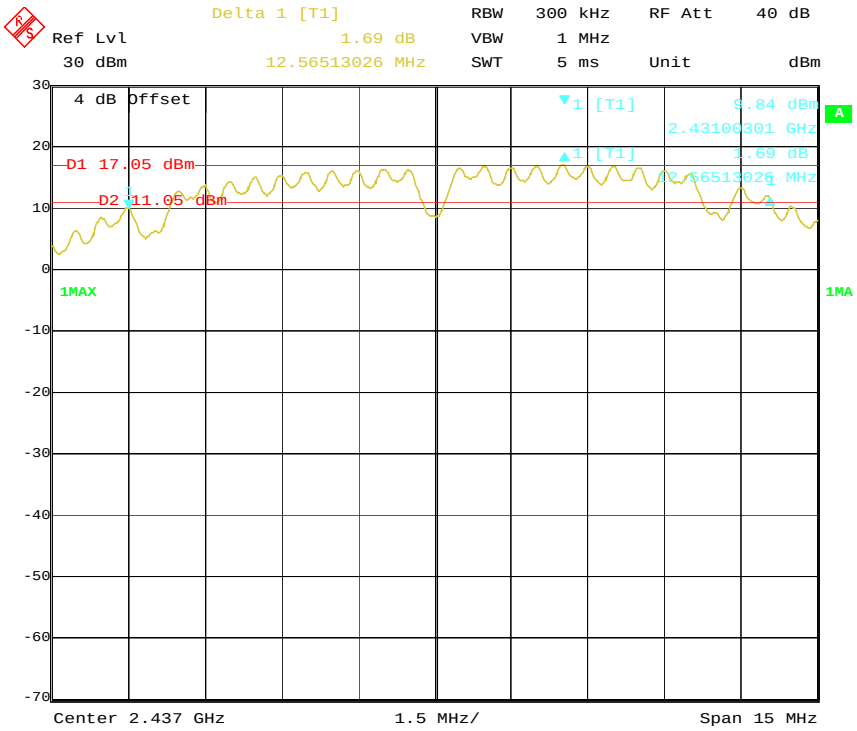
802.11b Low Channel, Antenna 1



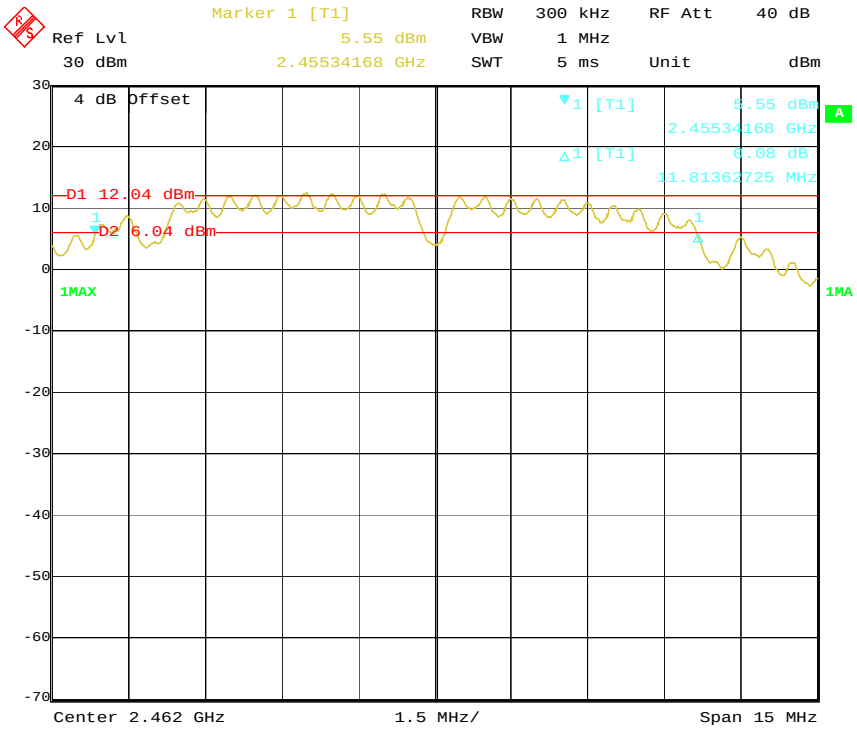
802.11b Middle Channel, Antenna 0



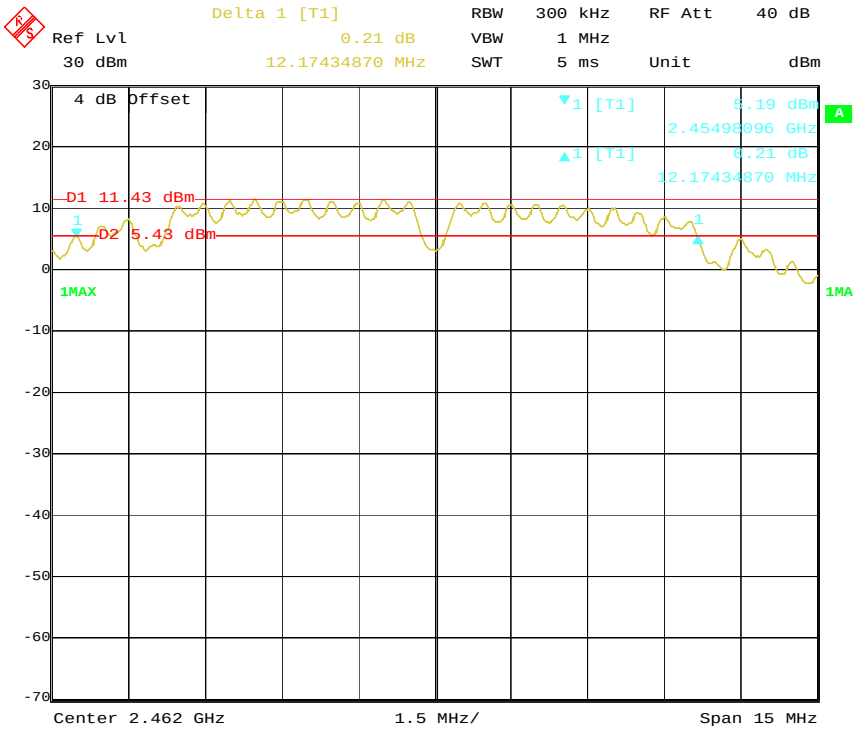
802.11b Middle Channel, Antenna 1



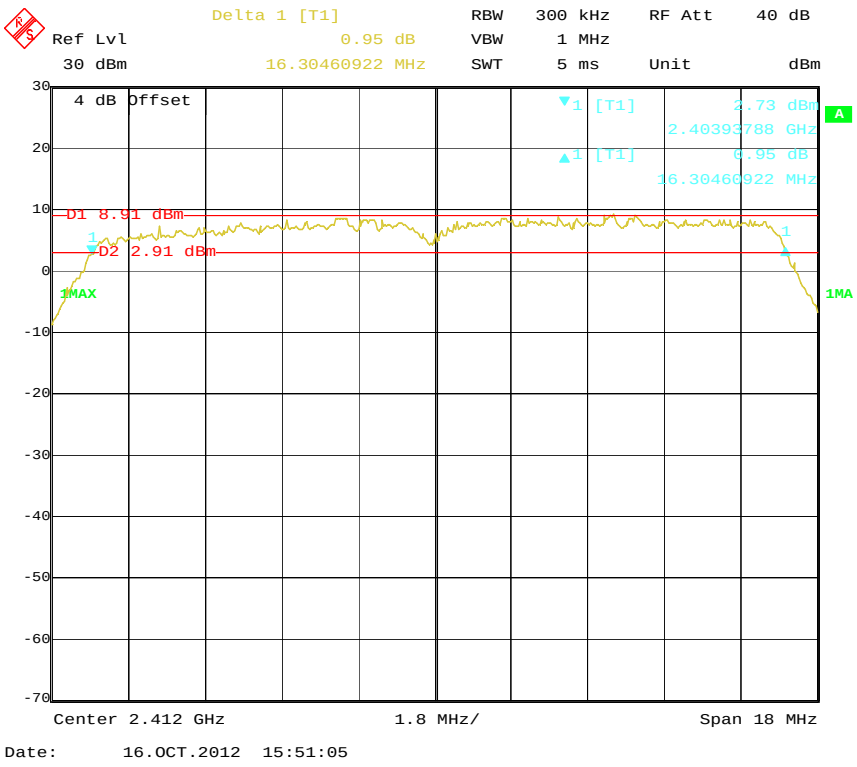
802.11b High Channel, Antenna 0



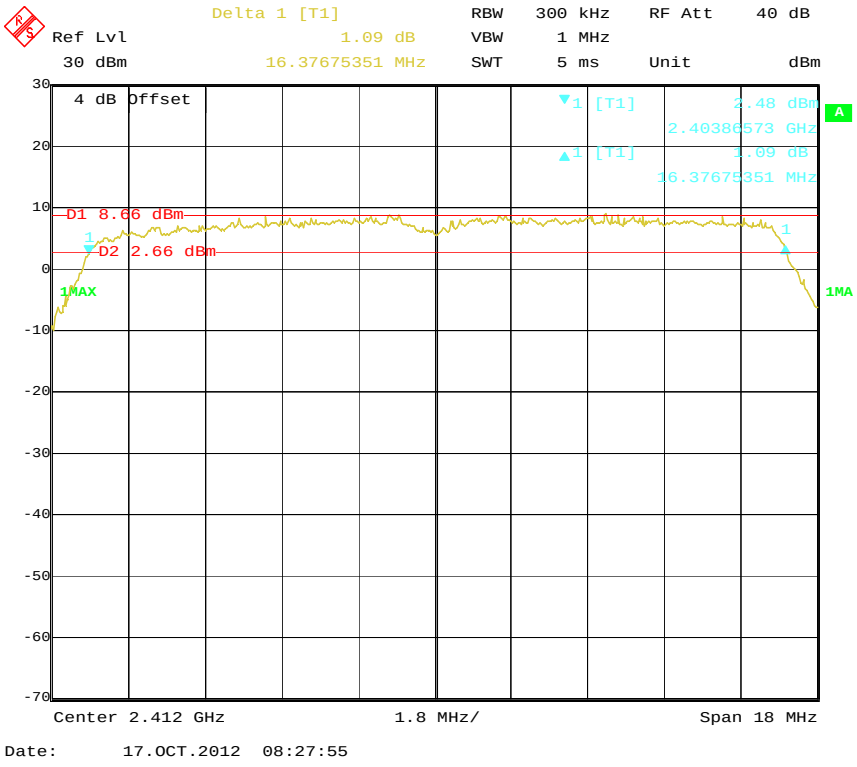
802.11b High Channel, Antenna 1



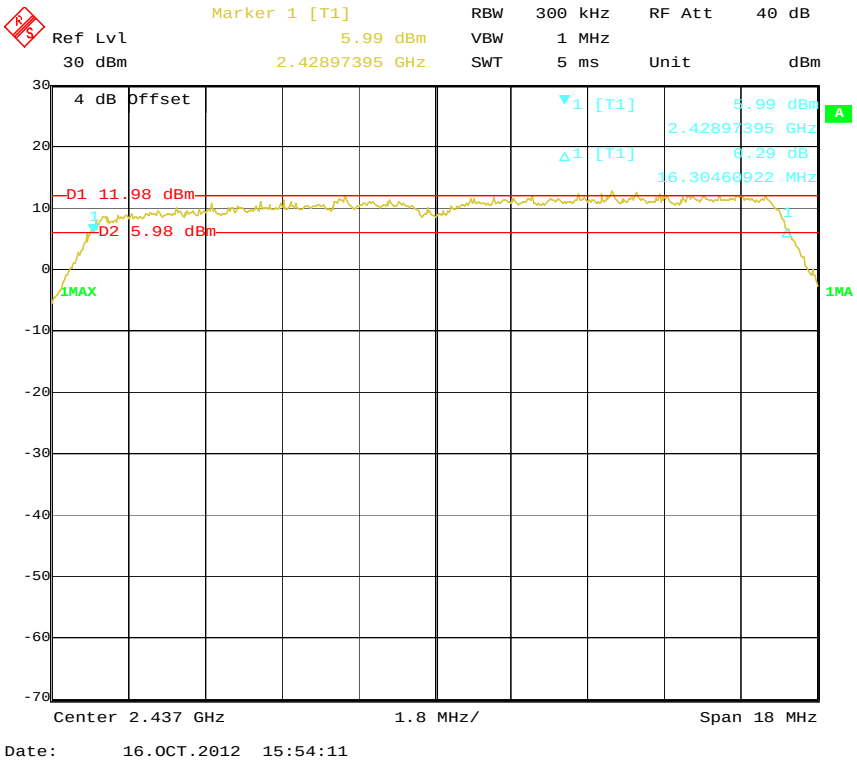
802.11g Low Channel, Antenna 0



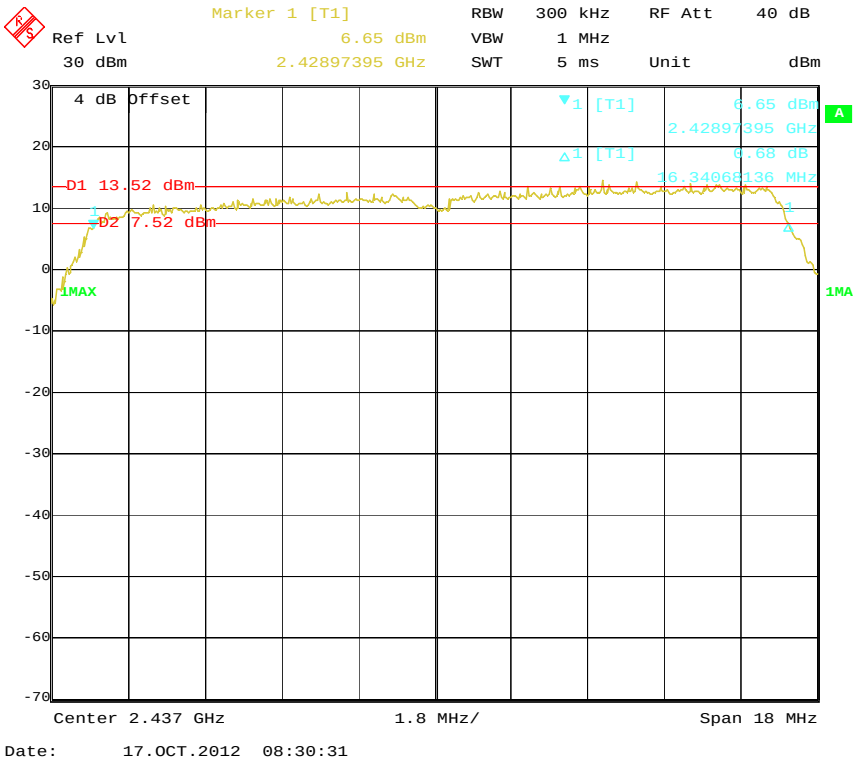
802.11g Low Channel, Antenna 1



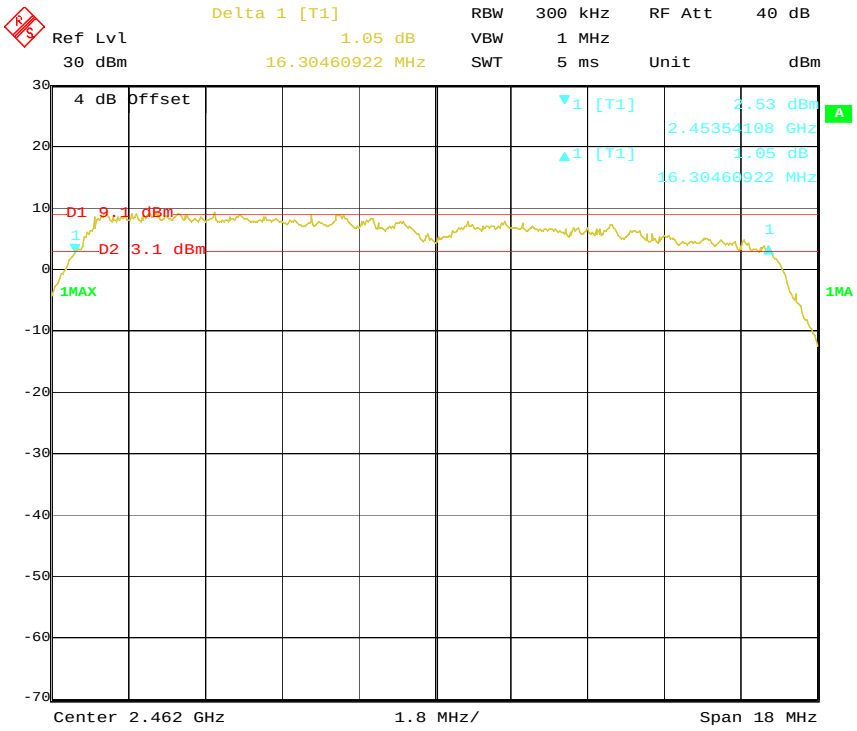
802.11g Middle Channel, Antenna 0



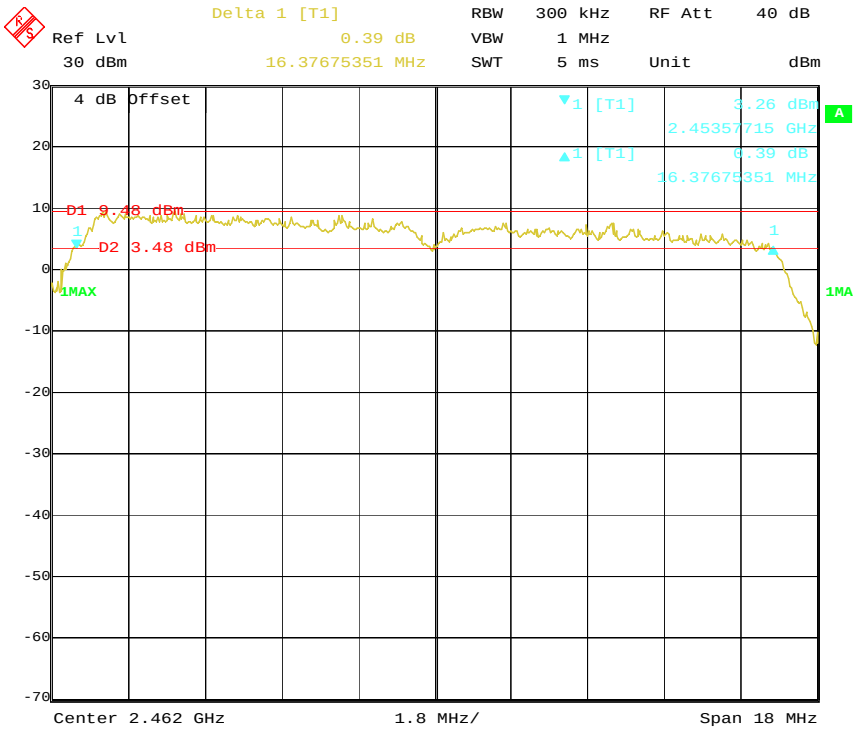
802.11g Middle Channel, Antenna 1



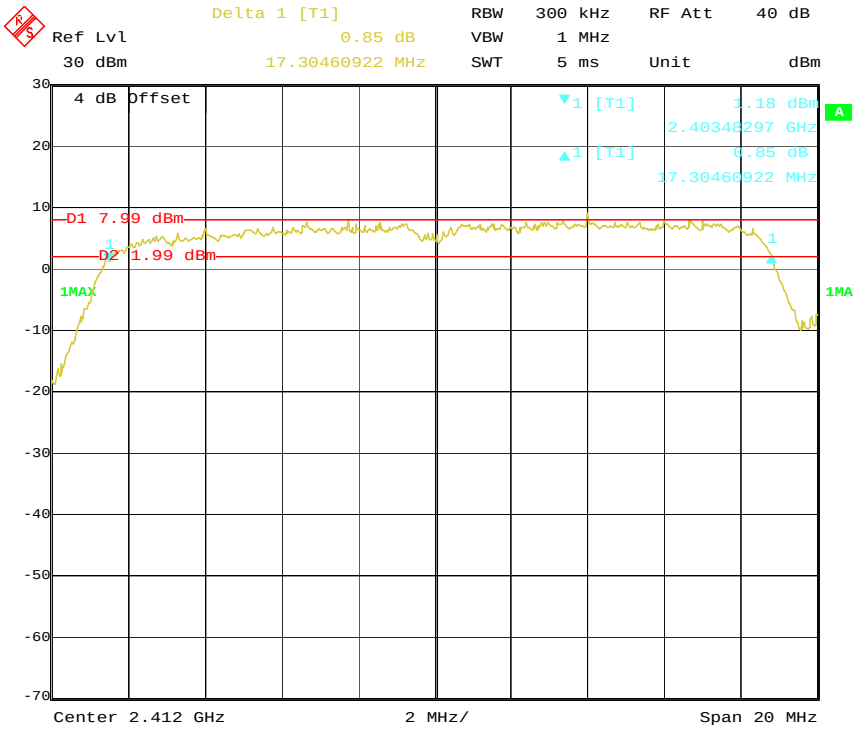
802.11g High Channel, Antenna 0



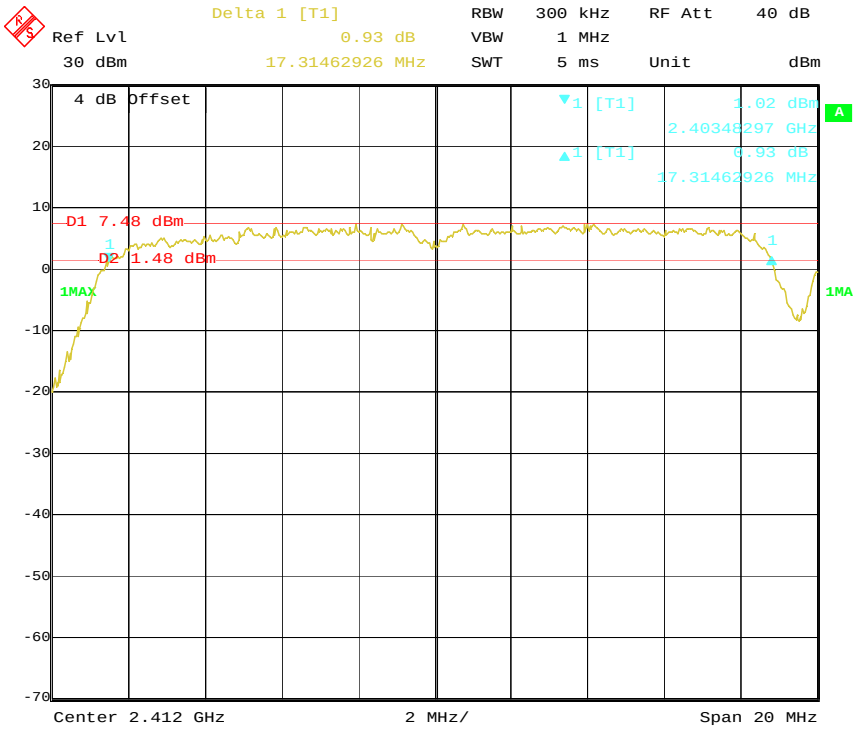
802.11g High Channel, Antenna 1



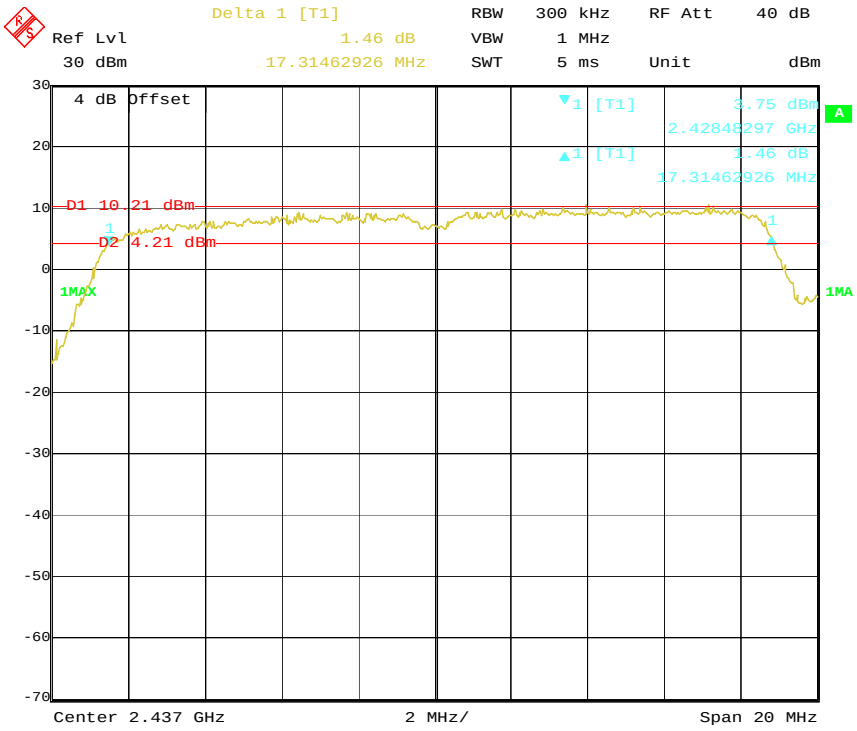
802.11n-HT20 Low Channel, Antenna 0



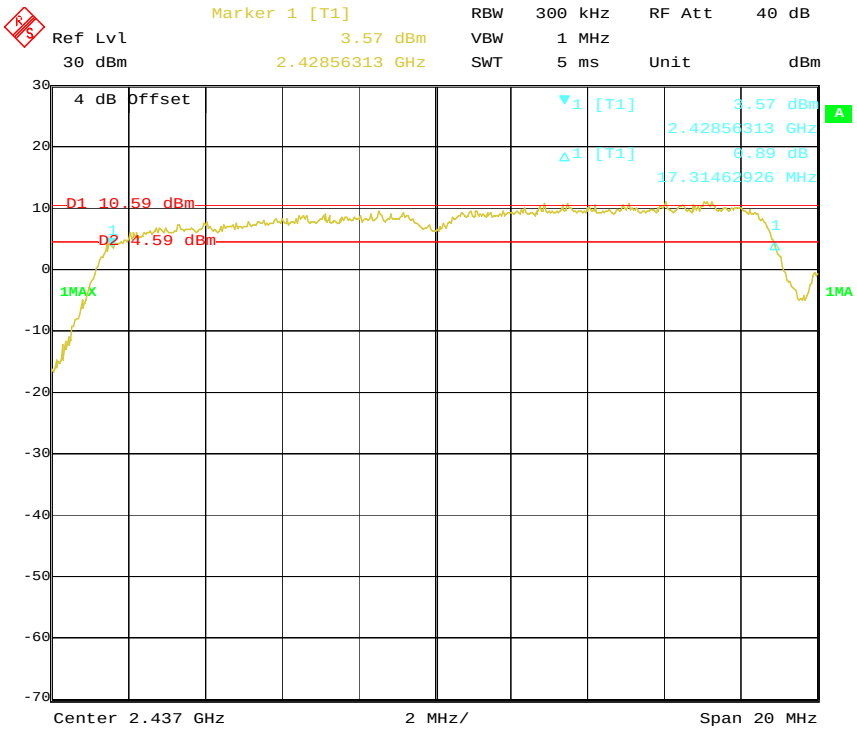
802.11n-HT20 Low Channel, Antenna 1



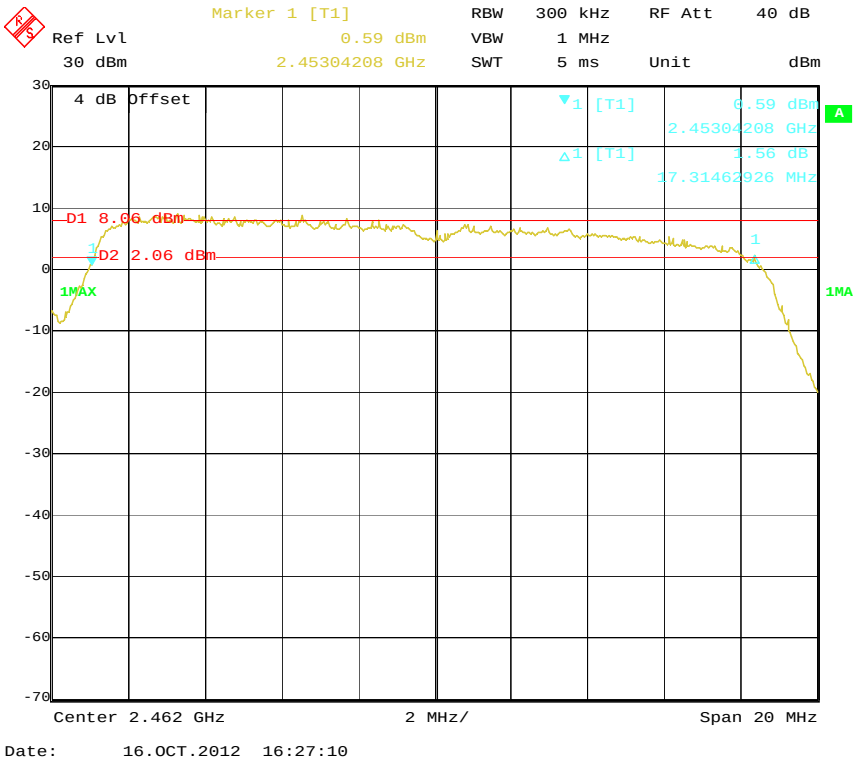
802.11n-HT20 Middle Channel, Antenna 0



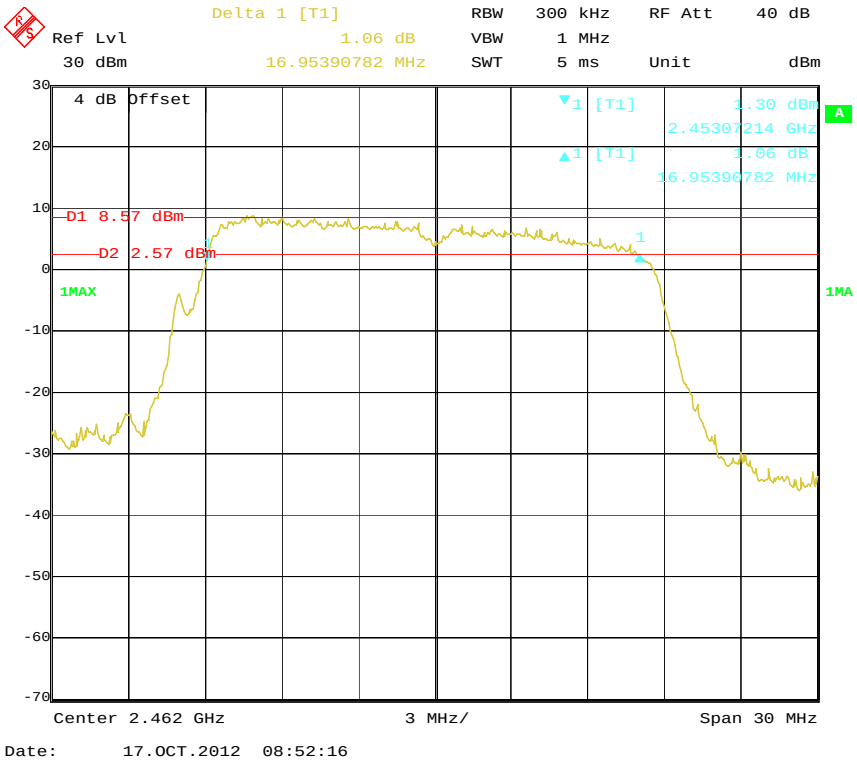
802.11n-HT20 Middle Channel, Antenna 1



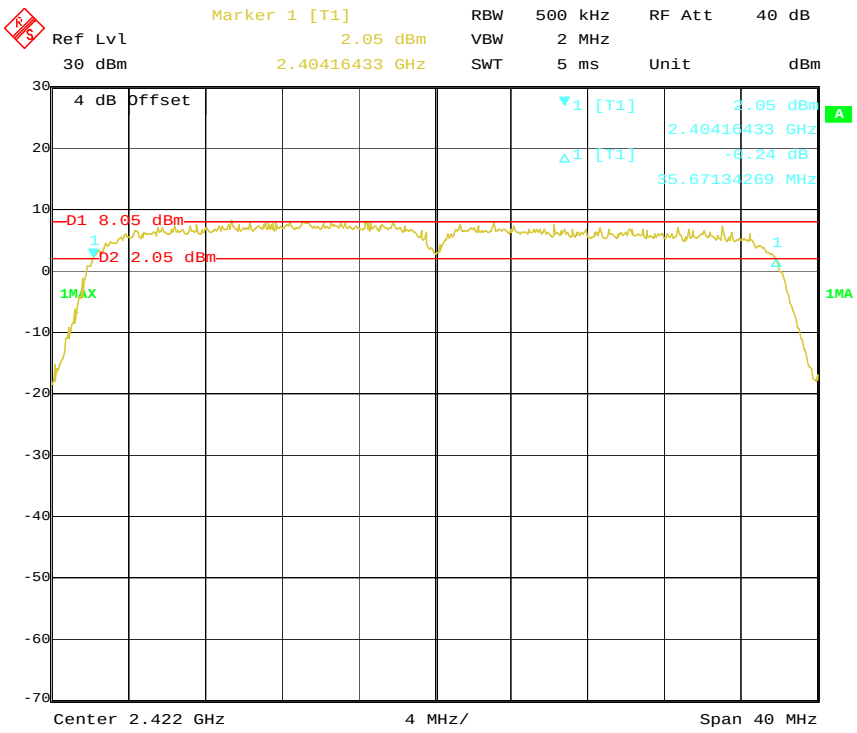
802.11n-HT20 High Channel, Antenna 0



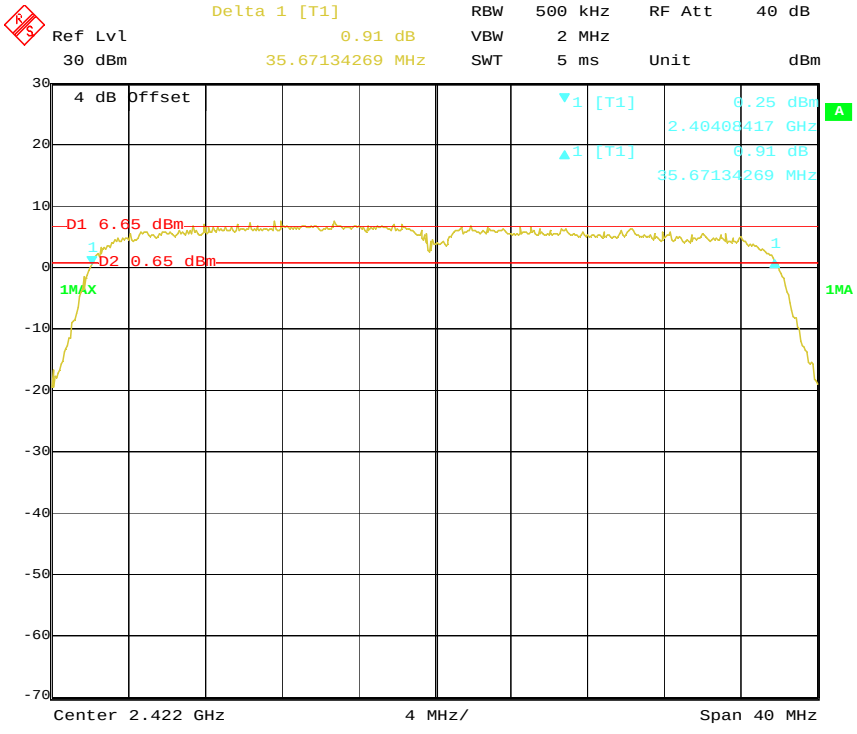
802.11n-HT20 High Channel, Antenna 1



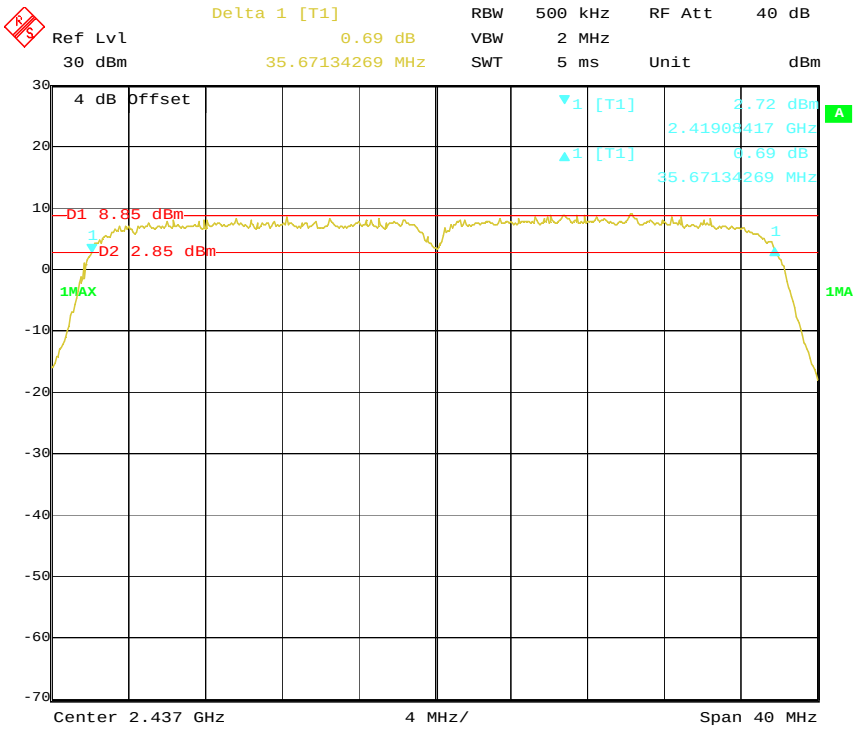
802.11n-HT40 Low Channel, Antenna 0



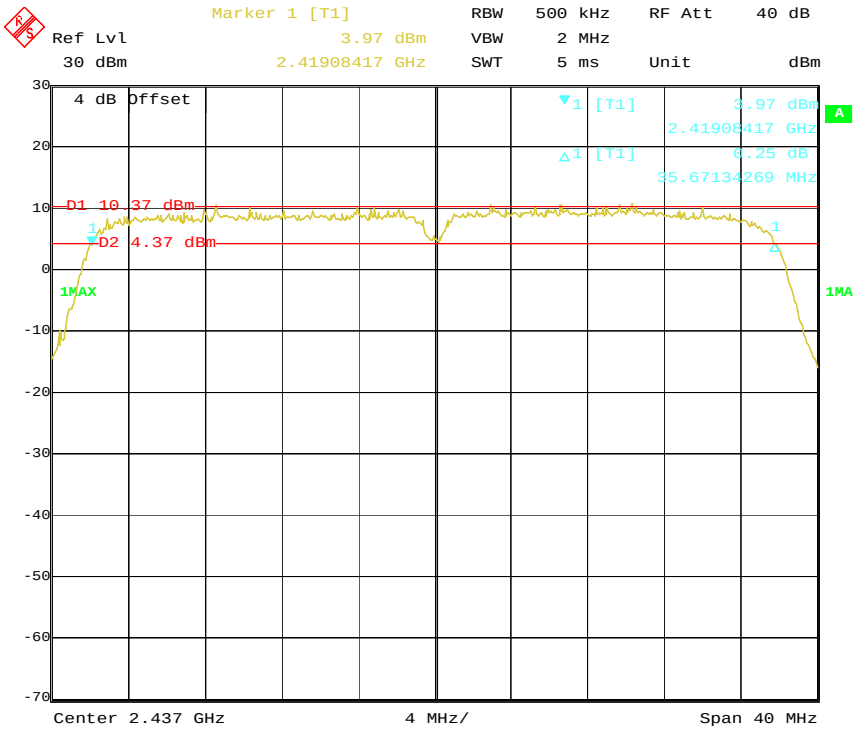
802.11n-HT40 Low Channel, Antenna 1



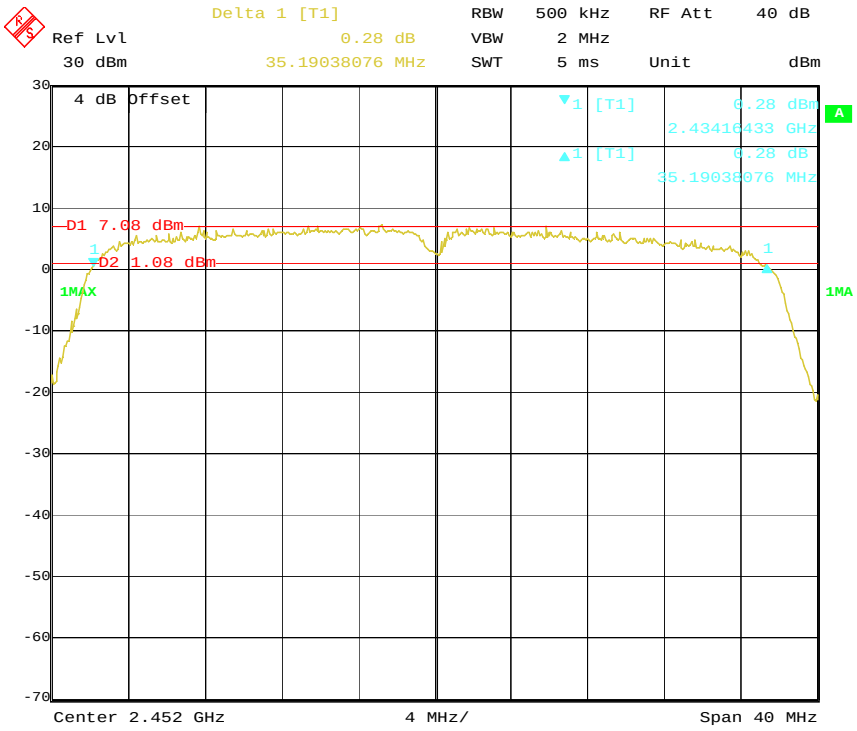
802.11n-HT40 Middle Channel, Antenna 0



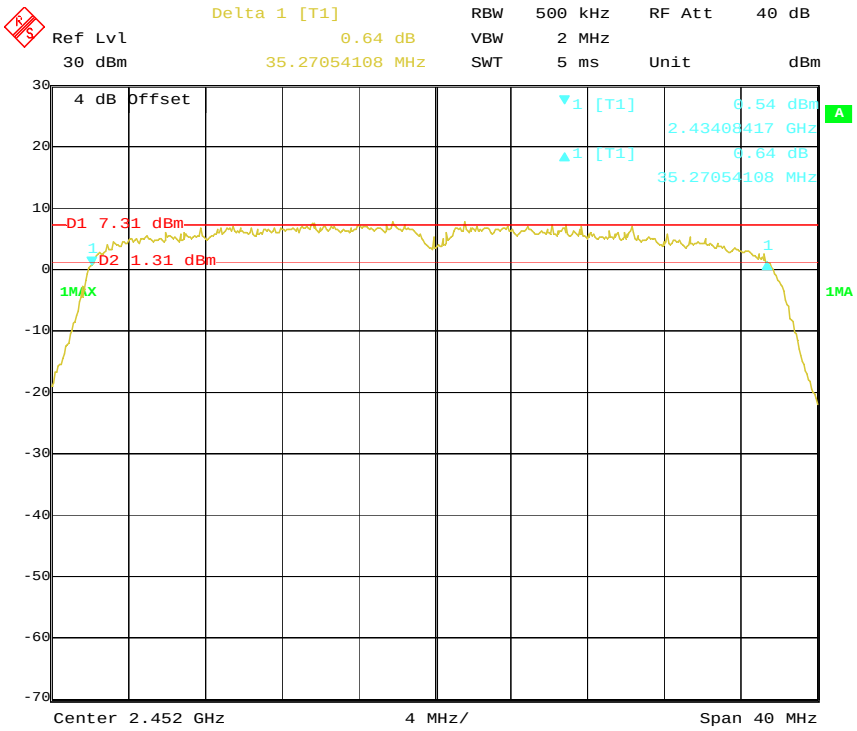
802.11n-HT40 Middle Channel, Antenna 1



802.11n-HT40 High Channel, Antenna 0



802.11n-HT40 High Channel, Antenna 1



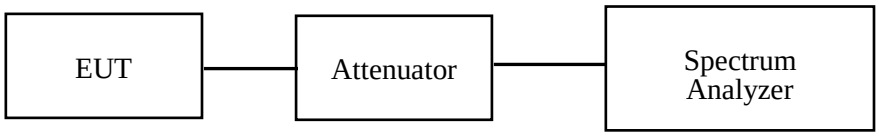
FCC §15.247(b) (3) - MAXIMUM PEAK OUTPUT POWER

Applicable Standard

According to §15.247(b) (3), for systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.

Test Procedure

1. Place the EUT on a bench and set it in transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to an EMI Test Receiver.
3. Add a correction factor to the display.



Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	Signal Analyzer	FSIQ26	8386001028	2011-11-24	2012-11-23

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

Test Data

Environmental Conditions

Temperature:	23~25 ℃
Relative Humidity:	50~56 %
ATM Pressure:	100.0 kPa

The testing was performed by Tiger Ye on 2012-10-16 to 2012-11-07.

Test Mode: Transmitting

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

Note:

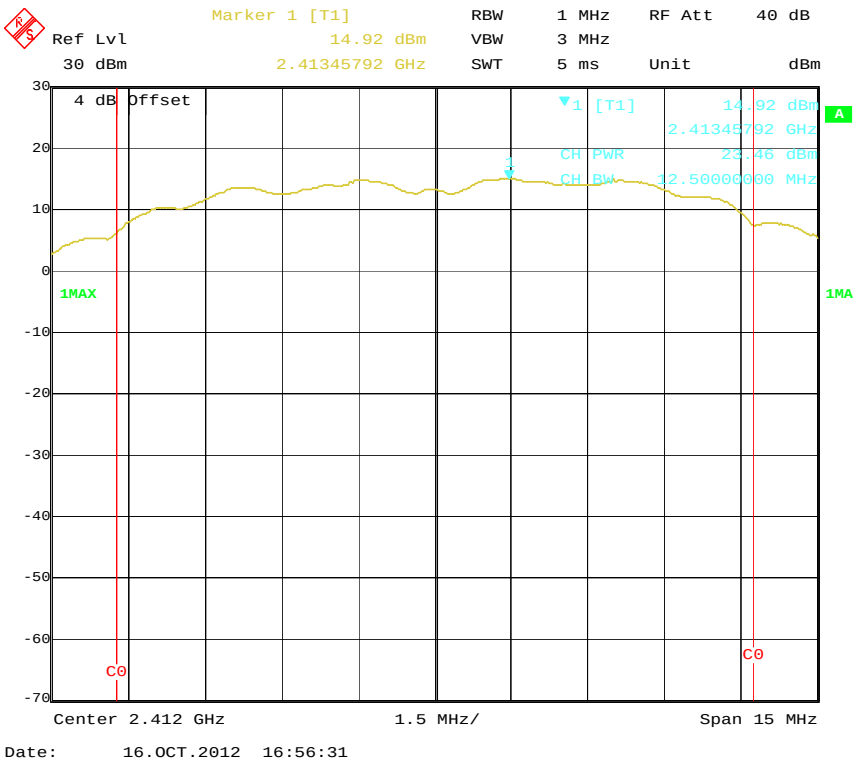
1: According to FCC 47 CFR section 15.247 (b)(4), the transmitting antennas of directional gain greater than 6dBi are used,compare to the limit 30 dBm ,the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

2: According to FCC 47 CFR section 15.247 (b) (4) (i), if the antenna are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6 dBi provided the maximum peak output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.

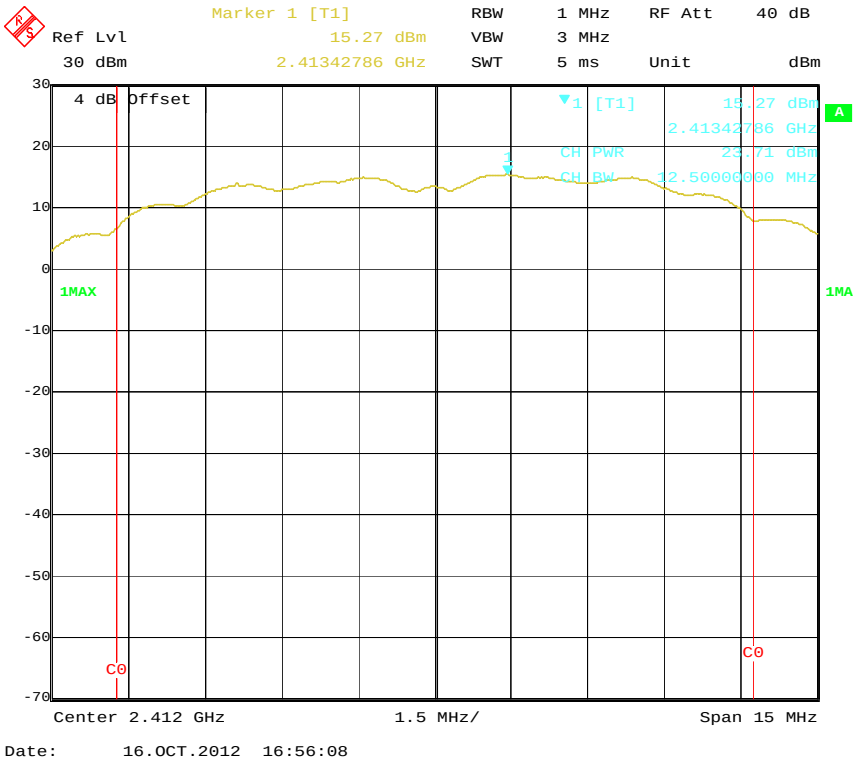
3dBi Gain Omni antenna

Channel	Frequency (MHz)	Antenna Port	Output Power (dBm)		Limit (dBm)
802.11b mode					
Low	2412	0	23.46		30
		1	23.71		
Middle	2437	0	29.07		30
		1	29.15		
High	2462	0	24.23		30
		1	23.80		
802.11g mode					
Low	2412	0	24.65		30
		1	24.70		
Middle	2437	0	29.18		30
		1	29.10		
High	2462	0	24.31		30
		1	24.60		
802.11n-HT20 mode					
Low	2412	0	23.80	26.71	30
		1	23.60		
Middle	2437	0	26.06	29.22	30
		1	26.36		
High	2462	0	23.89	26.76	30
		1	23.61		
802.11n-HT40 mode					
Low	2422	0	24.49	27.35	30
		1	24.18		
Middle	2437	0	26.14	29.25	30
		1	26.34		
High	2452	0	23.60	27.03	30
		1	24.41		

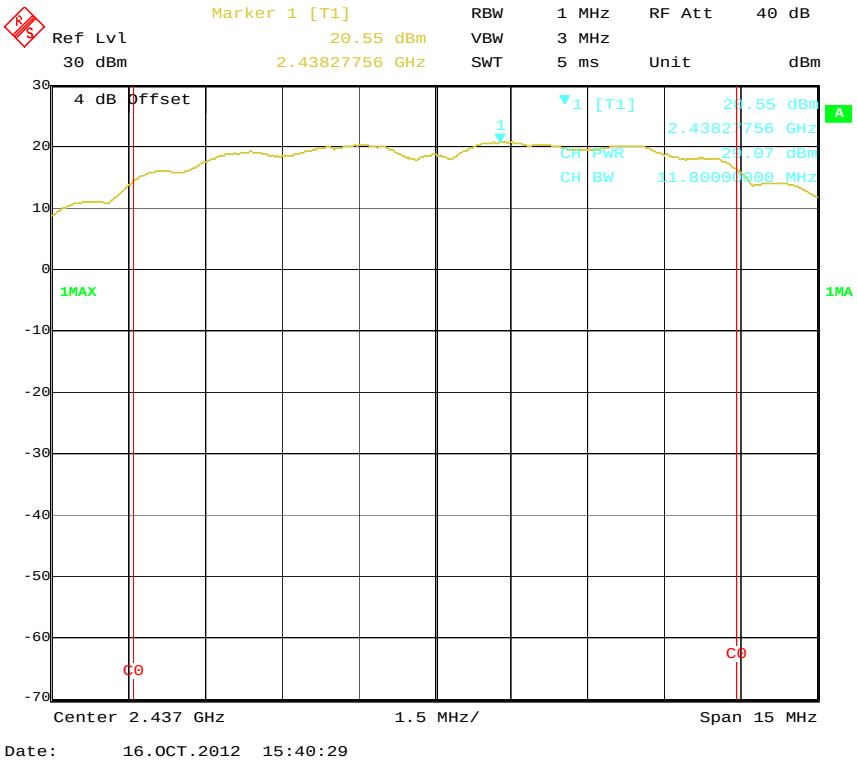
802.11b RF Output Power, Low Channel, Antenna 0



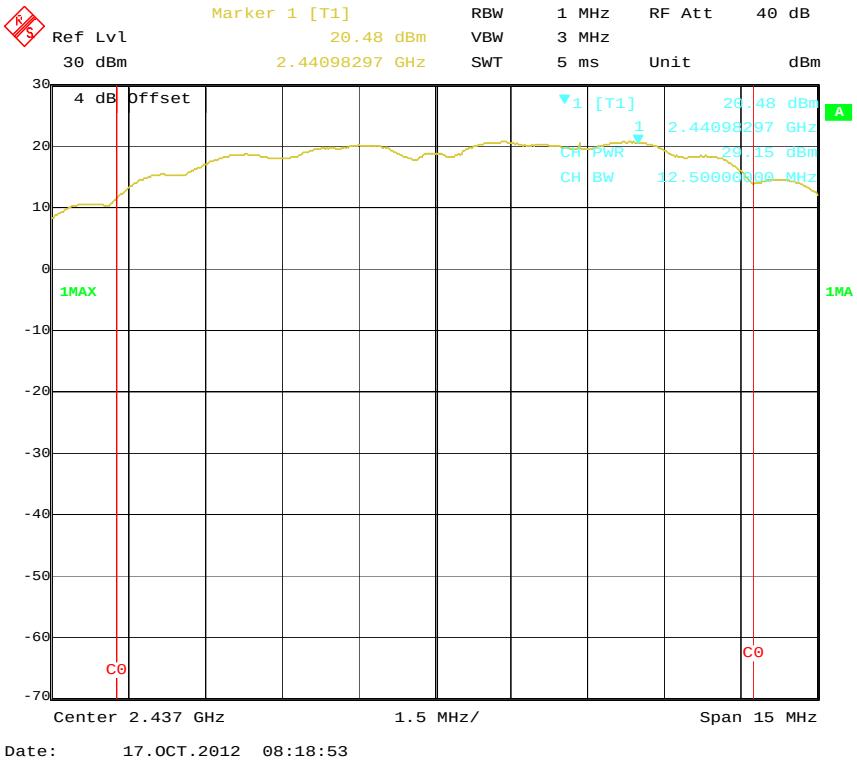
802.11b RF Output Power, Low Channel, Antenna 1



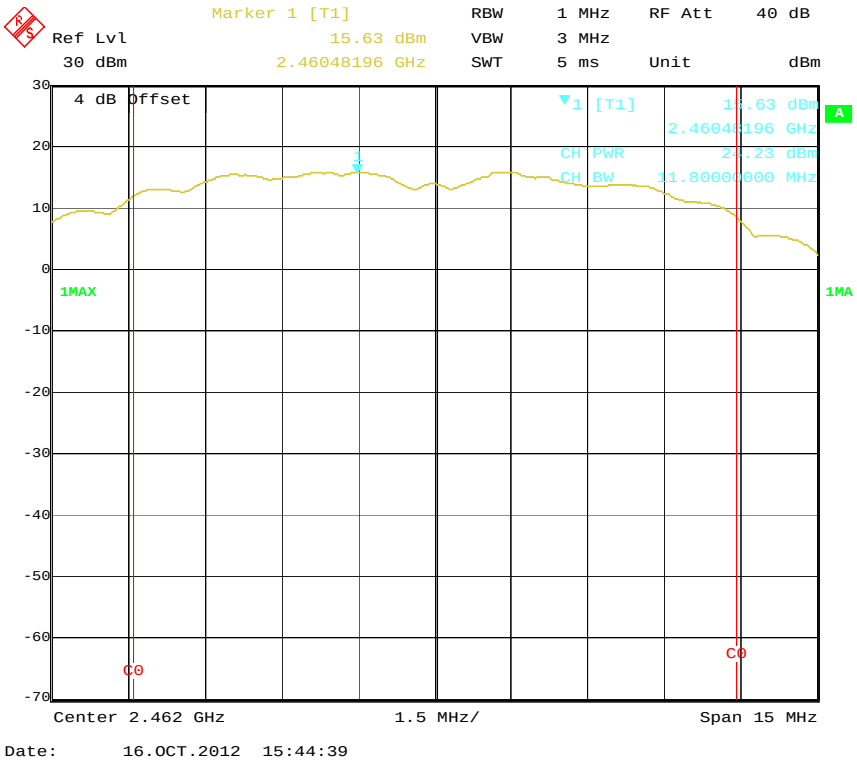
802.11b RF Output Power, Middle Channel, Antenna 0



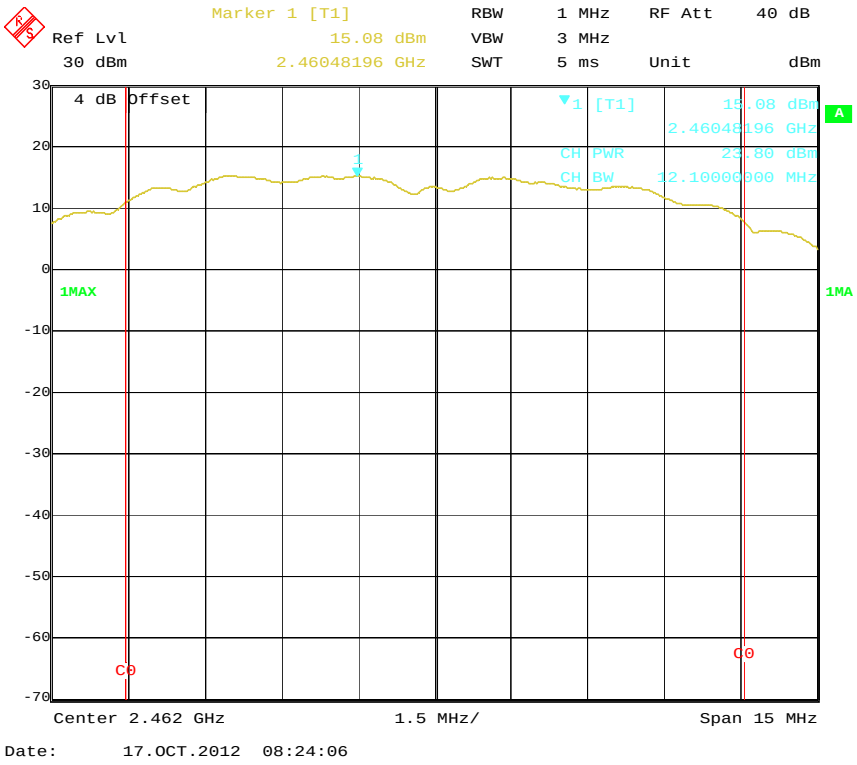
802.11b RF Output Power, Middle Channel, Antenna 1



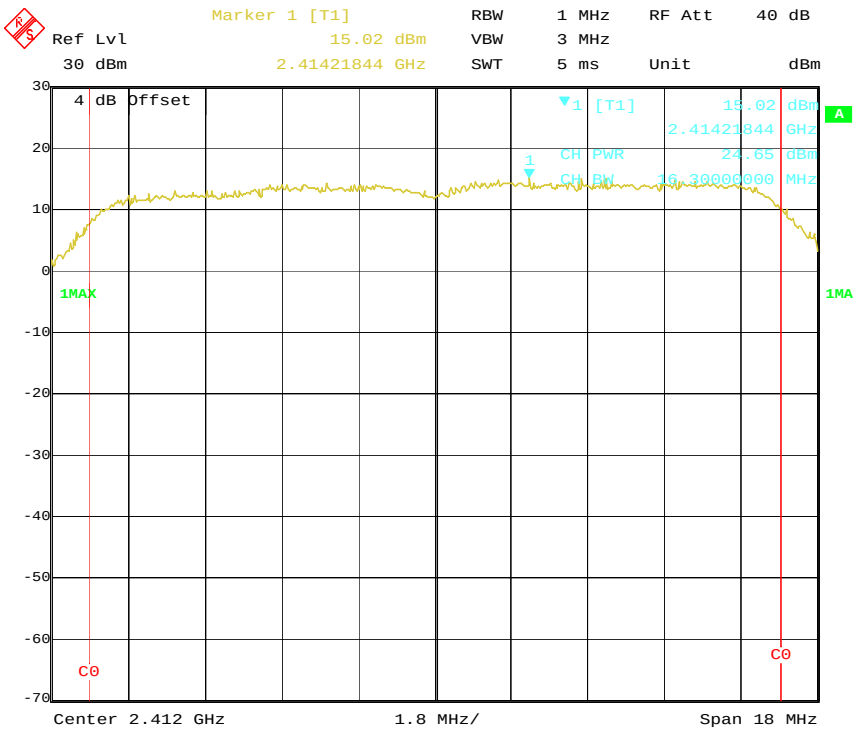
802.11b RF Output Power, High Channel, Antenna 0



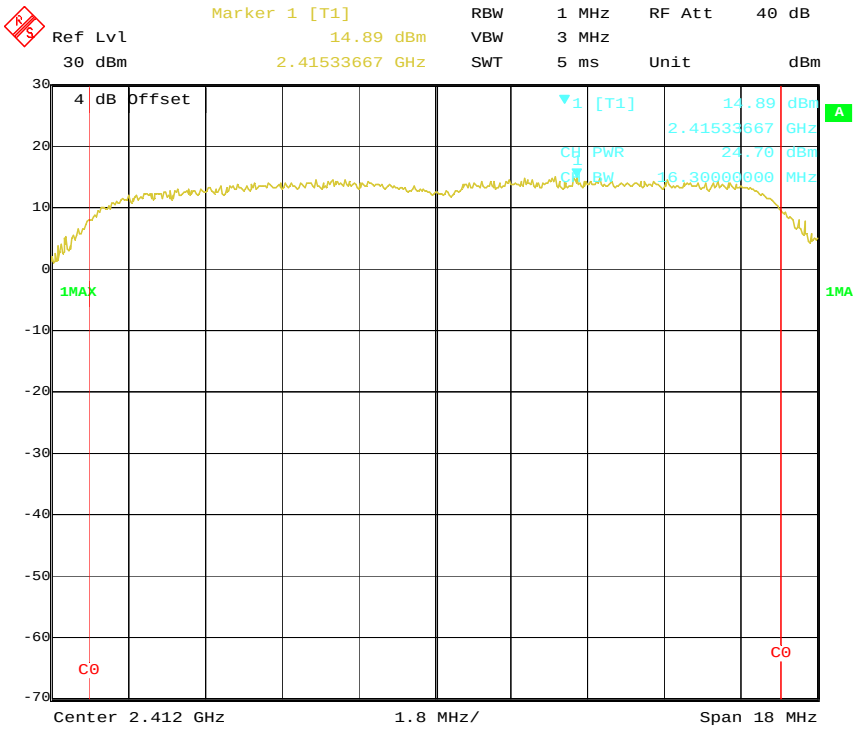
802.11b RF Output Power, High Channel, Antenna 1



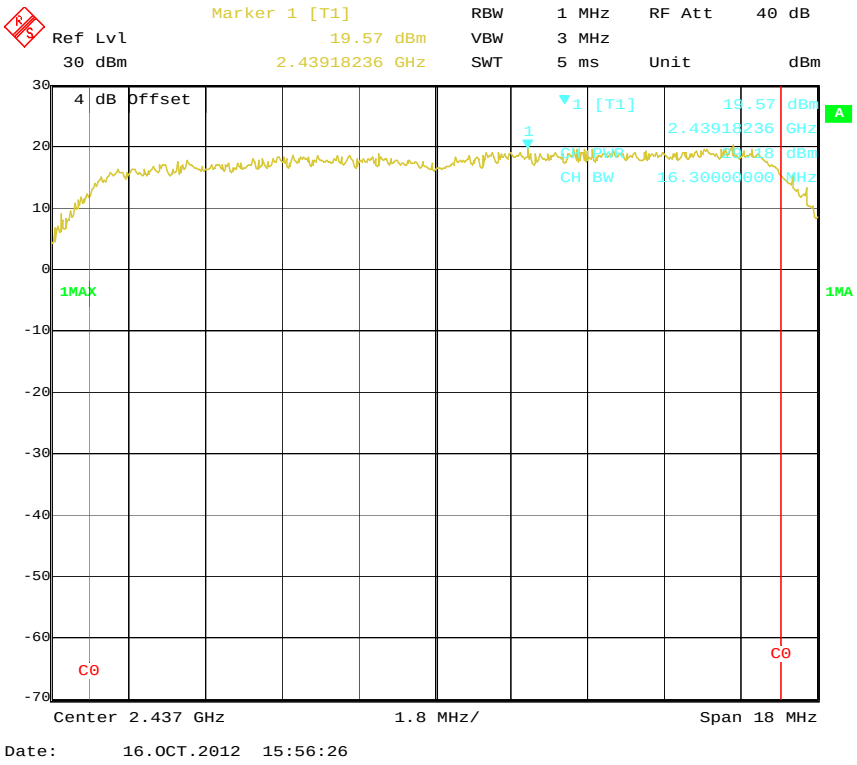
802.11g RF Output Power, Low Channel, Antenna 0



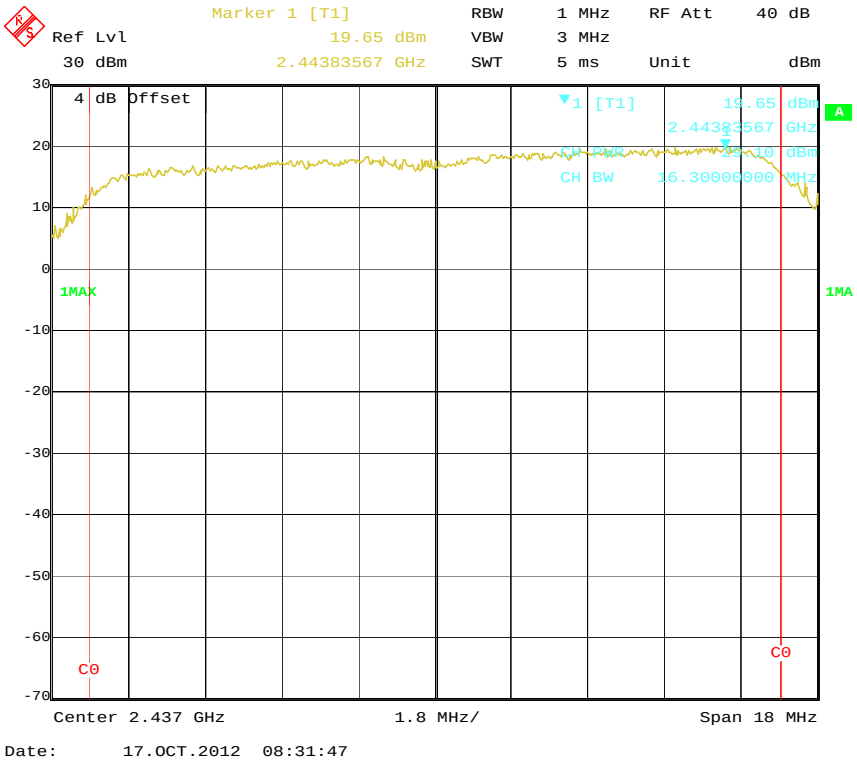
802.11g RF Output Power, Low Channel, Antenna 1



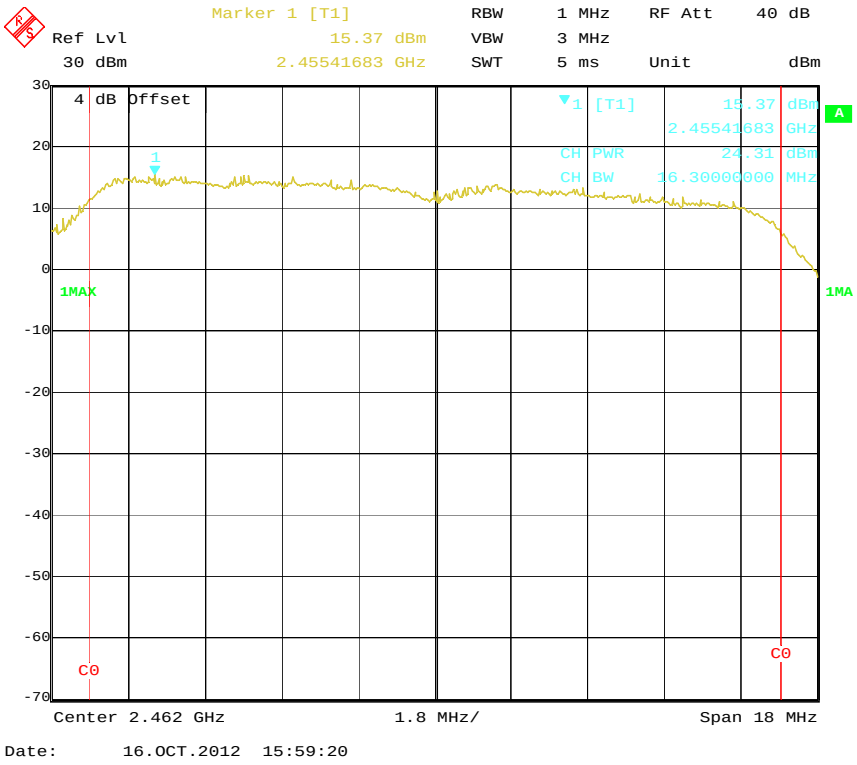
802.11g RF Output Power, Middle Channel, Antenna 0



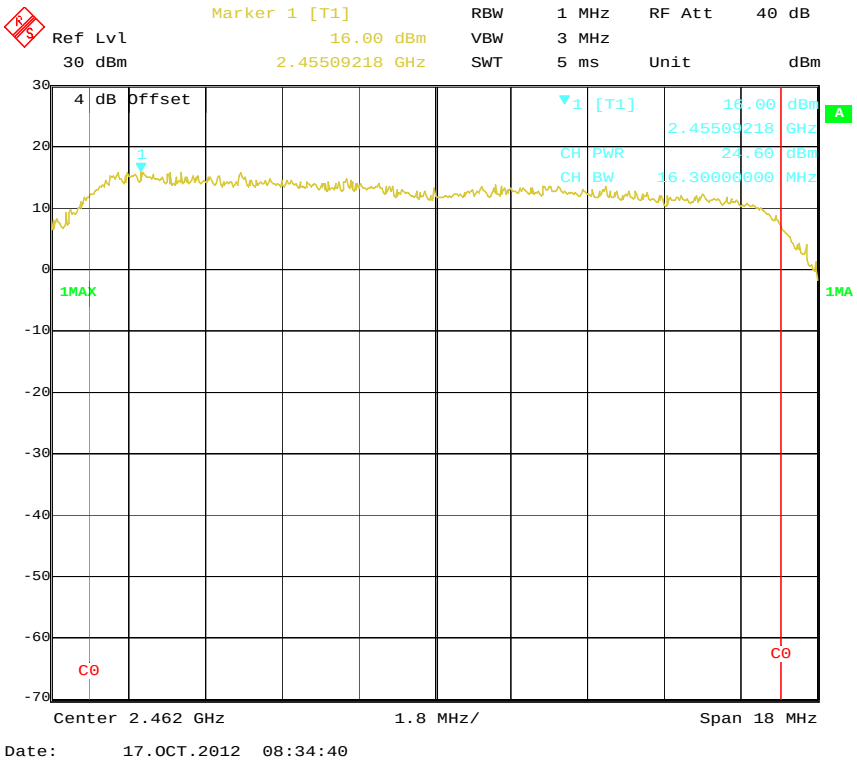
802.11g RF Output Power, Middle Channel, Antenna 1



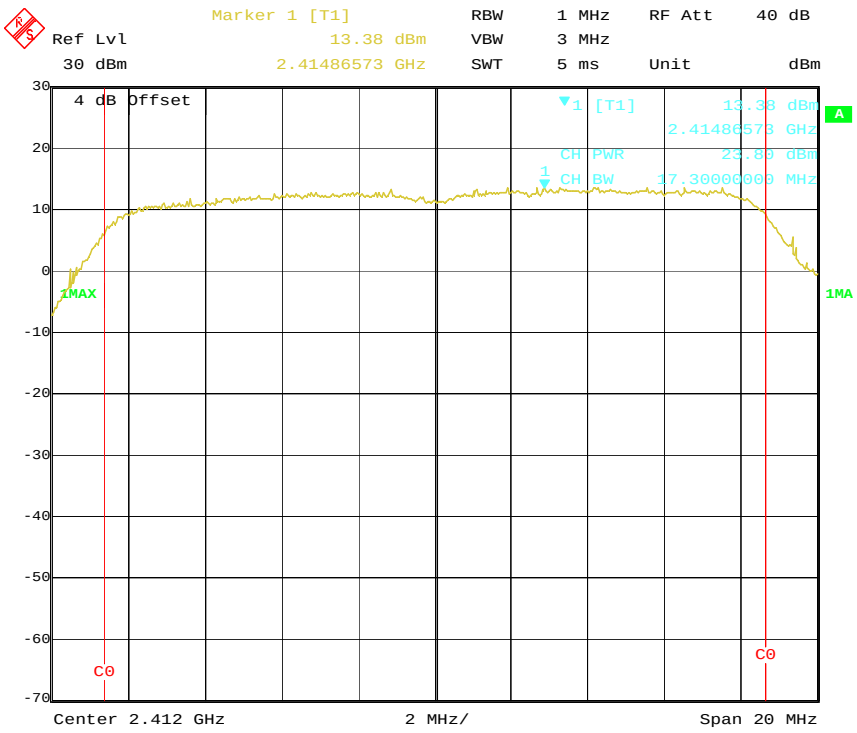
802.11g RF Output Power, High Channel, Antenna 0



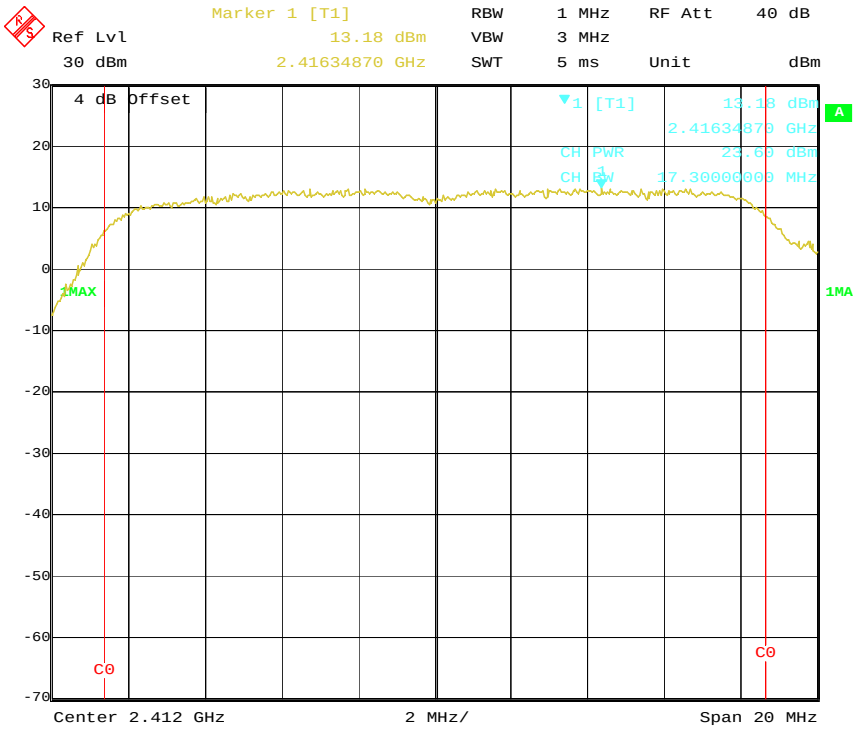
802.11g RF Output Power, High Channel, Antenna 1



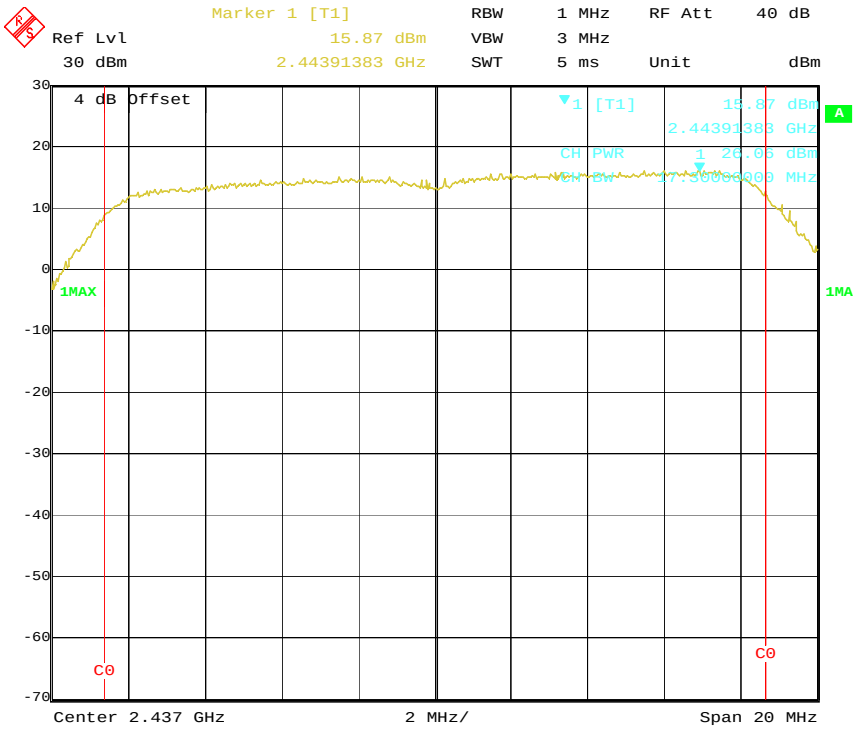
802.11n-HT20 RF Output Power, Low Channel, Antenna 0



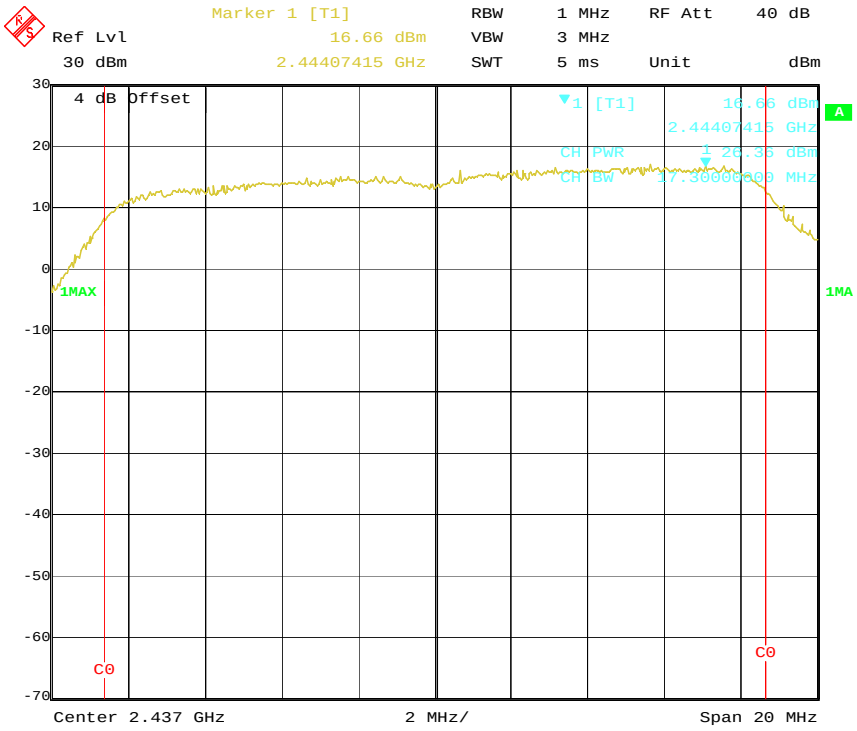
802.11n-HT20 RF Output Power, Low Channel, Antenna 1



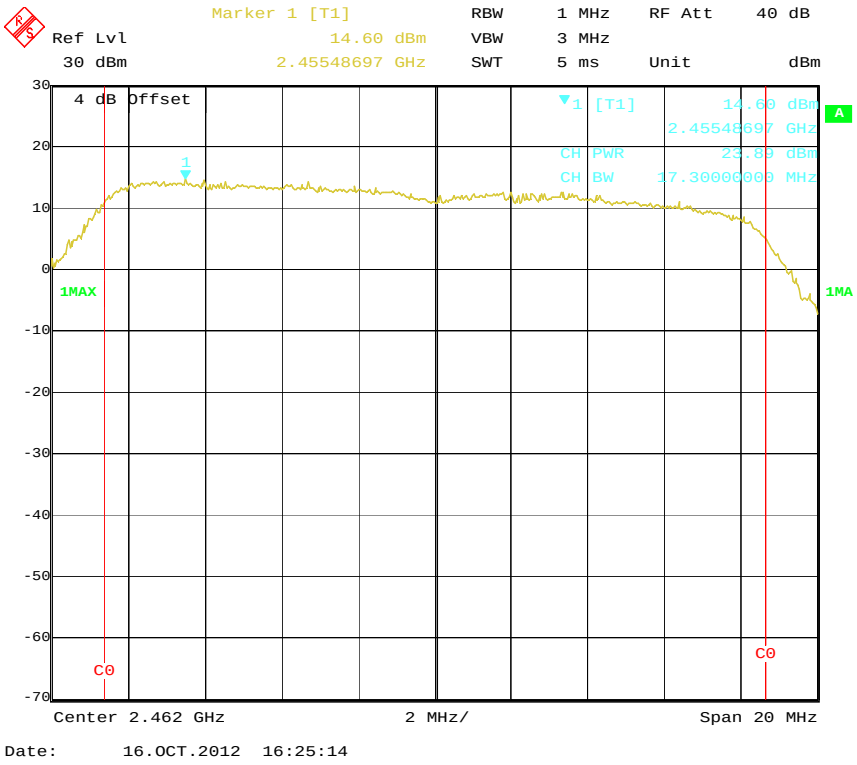
802.11n-HT20 RF Output Power, Middle Channel, Antenna 0



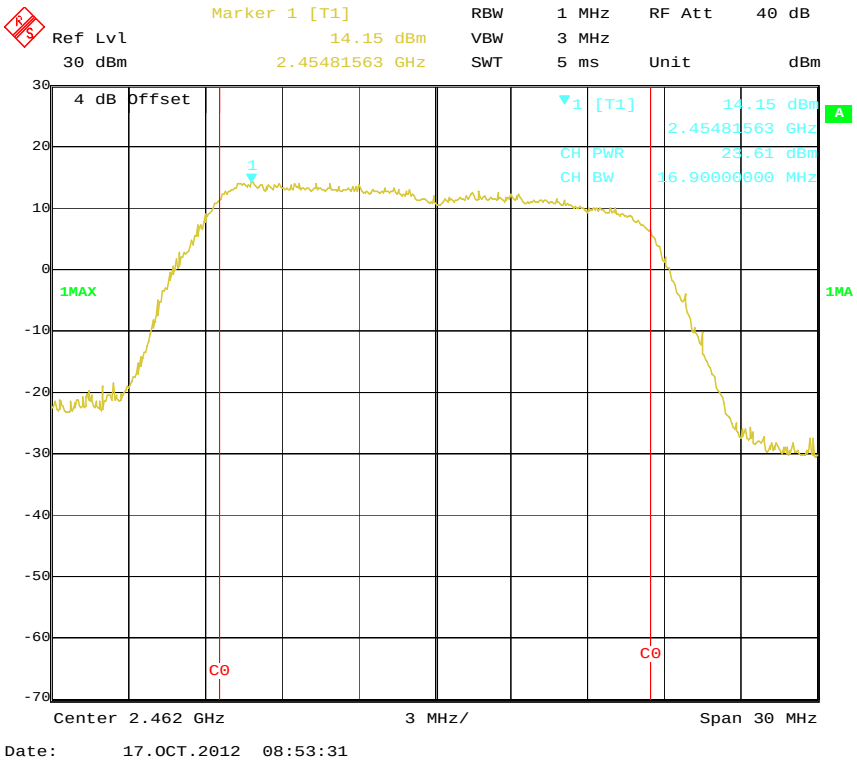
802.11n-HT20 RF Output Power, Middle Channel, Antenna 1



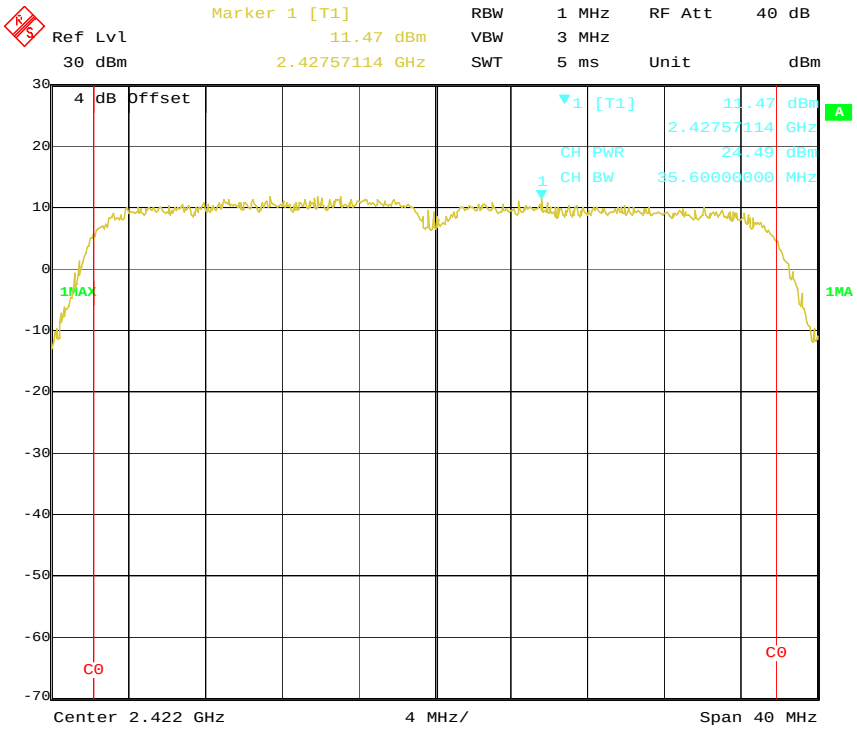
802.11n-HT20 RF Output Power, High Channel, Antenna 0



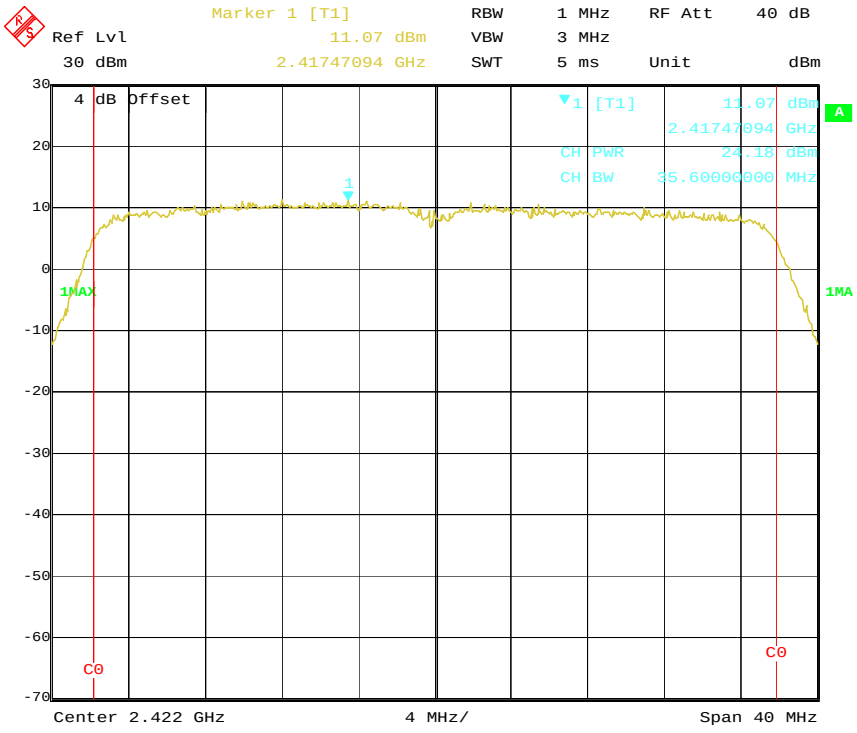
802.11n-HT20 RF Output Power, High Channel, Antenna 1



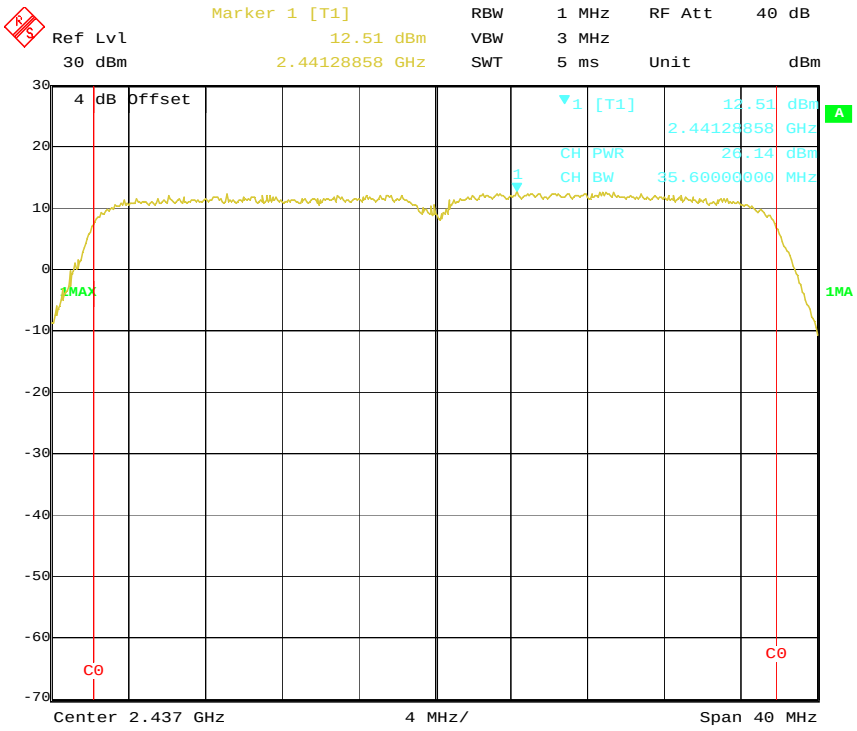
802.11n-HT40 RF Output Power, Low Channel, Antenna 0



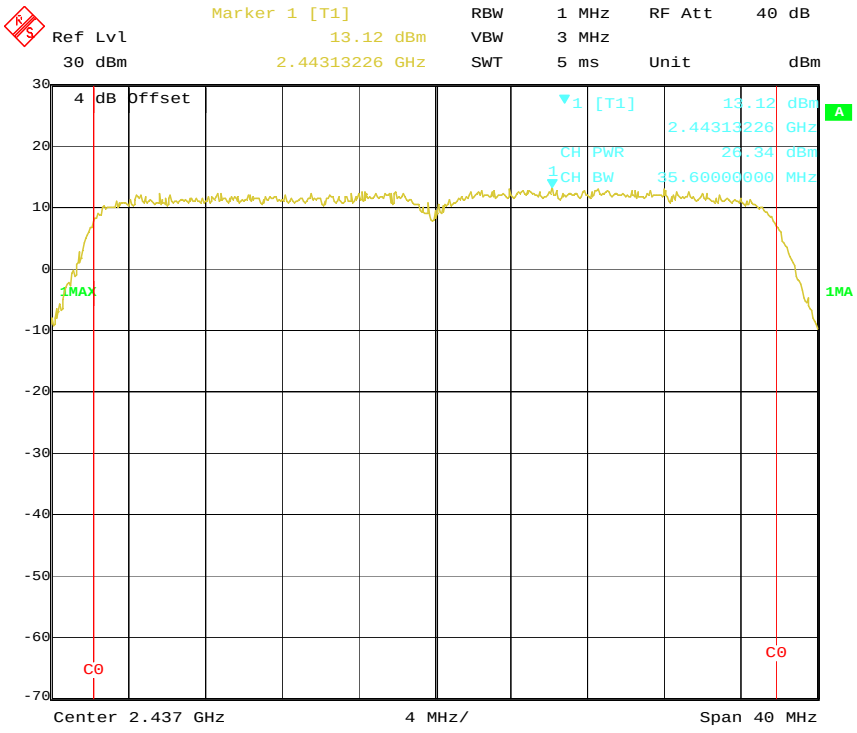
802.11n-HT40 RF Output Power, Low Channel, Antenna 1



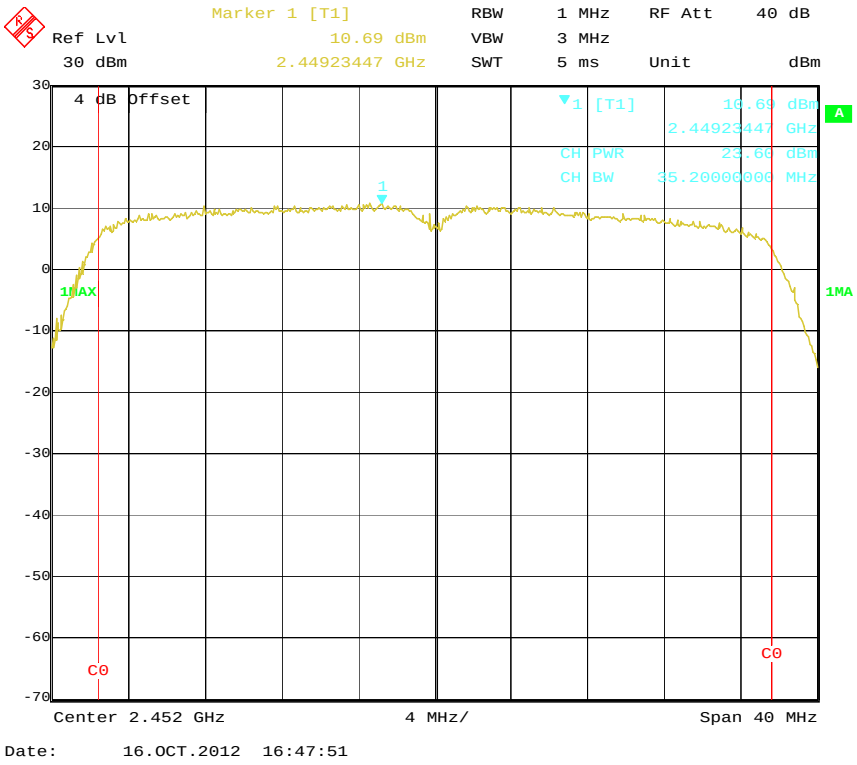
802.11n-HT40 RF Output Power, Middle Channel, Antenna 0



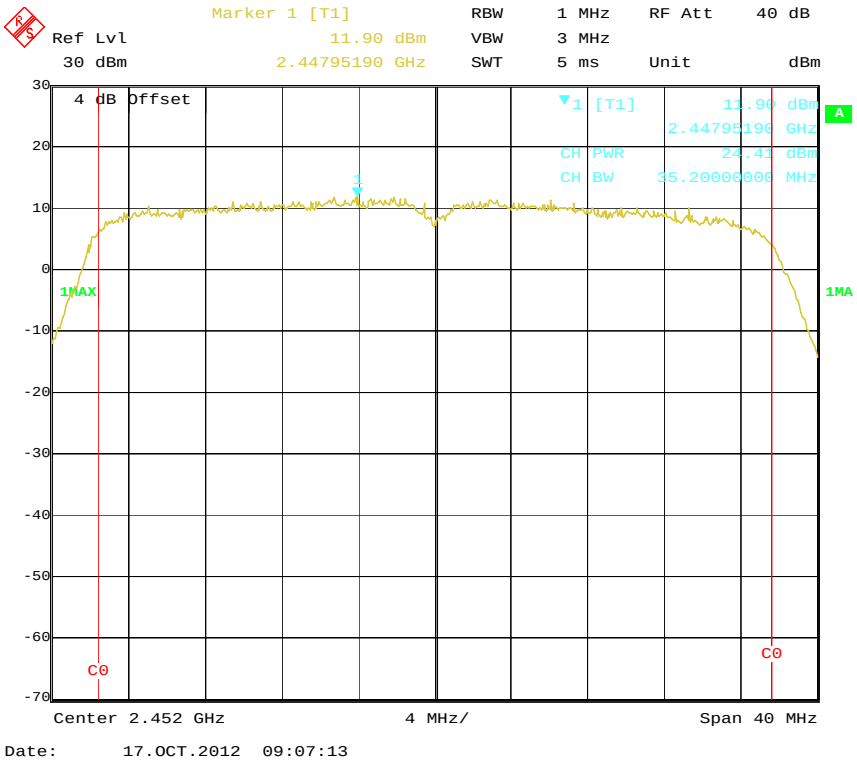
802.11n-HT40 RF Output Power, Middle Channel, Antenna 1



802.11n-HT40 RF Output Power, High Channel, Antenna 0



802.11n-HT40 RF Output Power, High Channel, Antenna 1



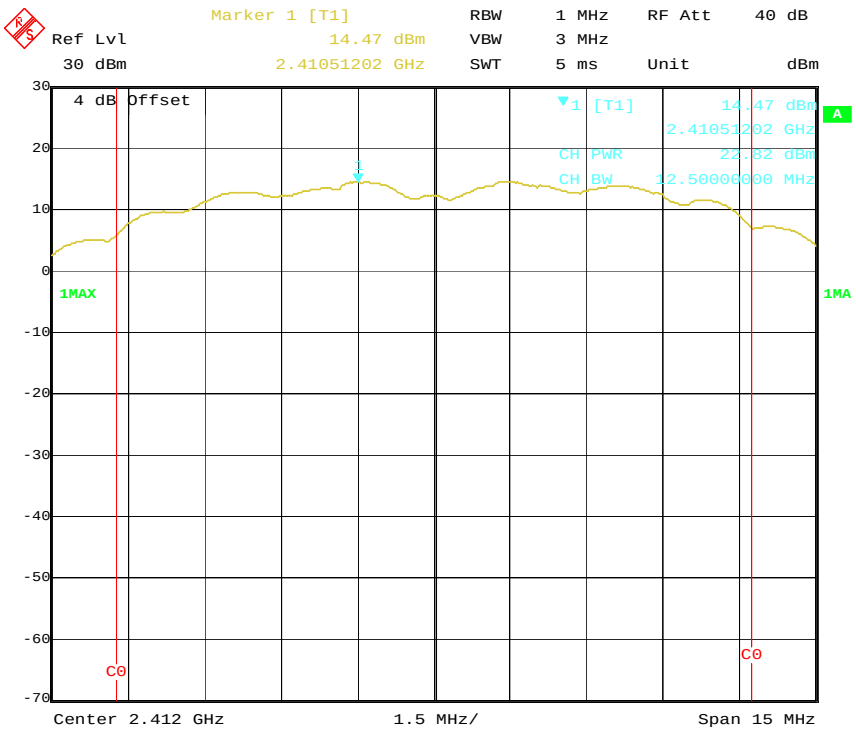
8dBi Gain Directional antenna

Channel	Frequency (MHz)	Antenna Port	Output Power (dBm)		Limit (dBm)
802.11b mode					
Low	2412	0	22.82		29
		1	22.52		
Middle	2437	0	28.10		29
		1	27.94		
High	2462	0	22.69		29
		1	22.35		
802.11g mode					
Low	2412	0	23.60		29
		1	23.58		
Middle	2437	0	28.02		29
		1	27.93		
High	2462	0	23.25		29
		1	23.24		
802.11n-HT20 mode					
Low	2412	0	22.84	25.84	29
		1	22.81		
Middle	2437	0	25.11	28.11	29
		1	25.09		
High	2462	0	23.10	26.08	29
		1	23.04		
802.11n-HT40 mode					
Low	2422	0	23.11	26.06	29
		1	22.99		
Middle	2437	0	25.22	28.18	29
		1	25.11		
High	2452	0	22.85	25.81	29
		1	22.75		

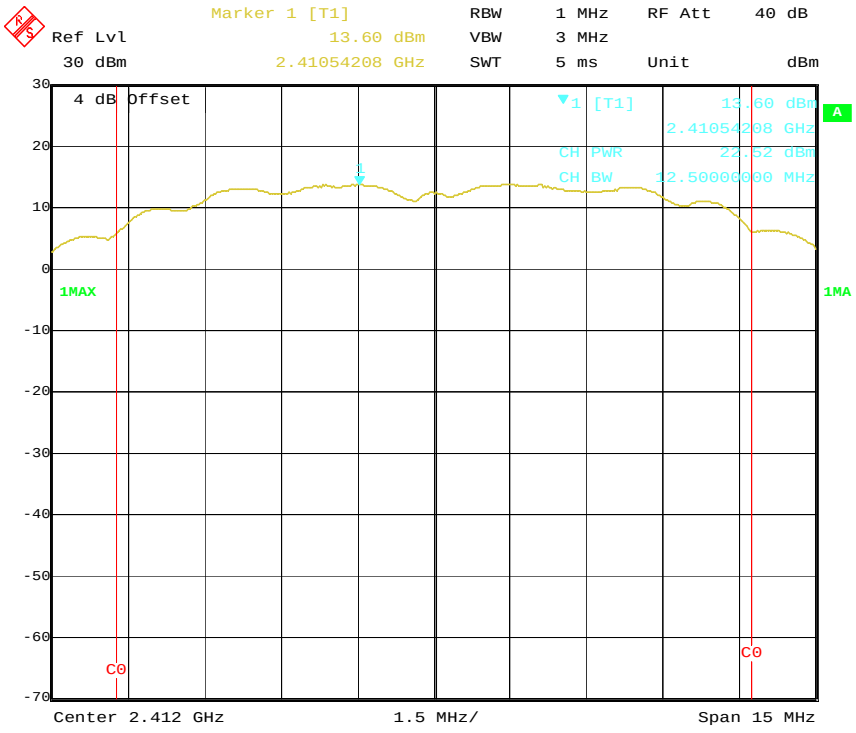
Note:

According with FCC 15.247 (c) (1) (i), the limit of the maximum conducted output power is 29 dBm

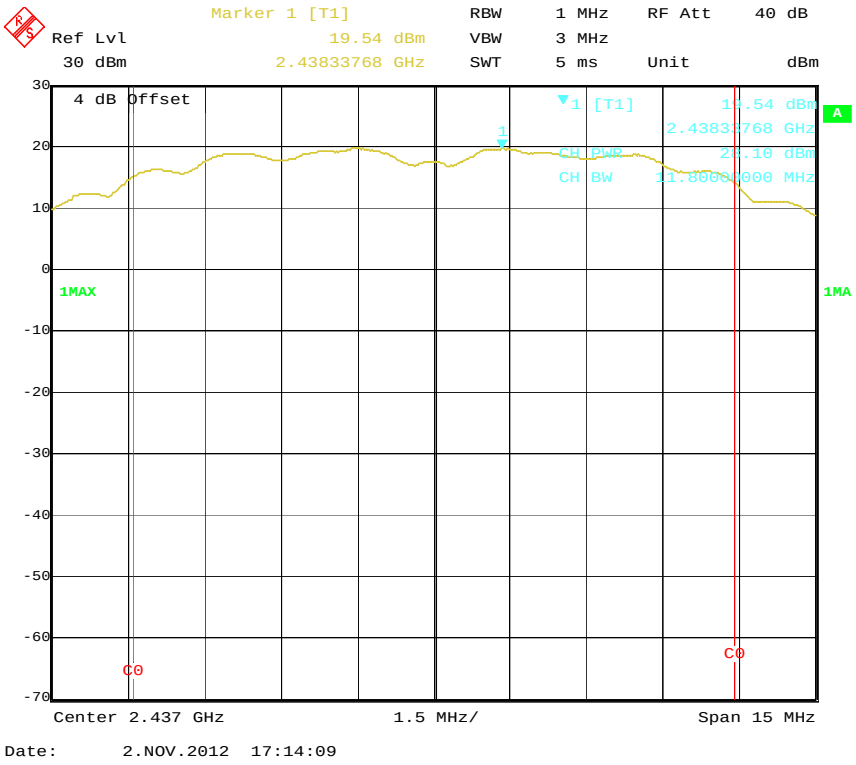
802.11b RF Output Power, Low Channel, Antenna 0



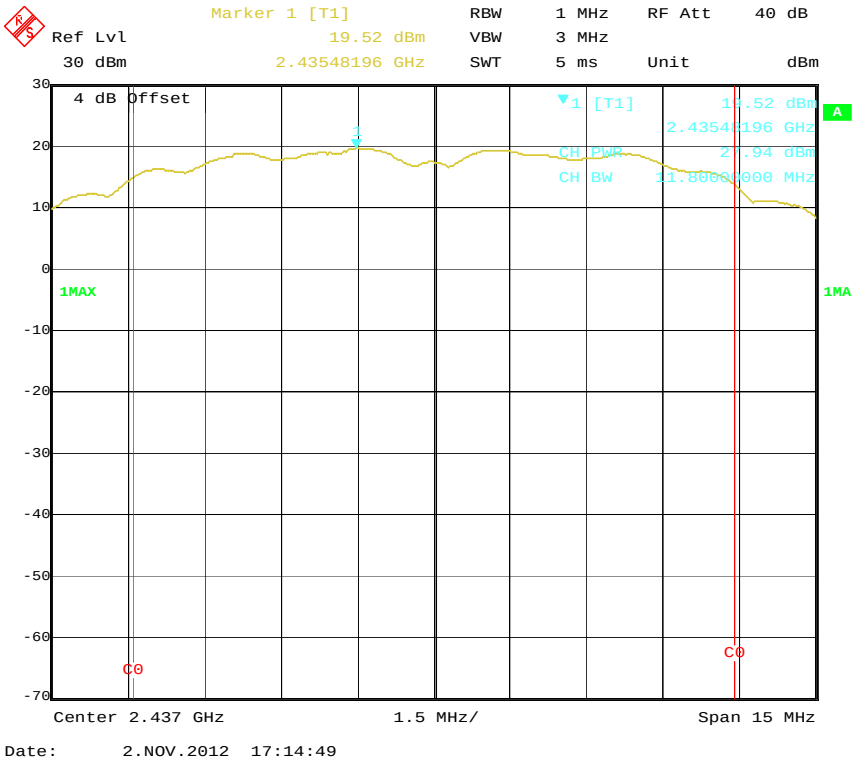
802.11b RF Output Power, Low Channel, Antenna 1



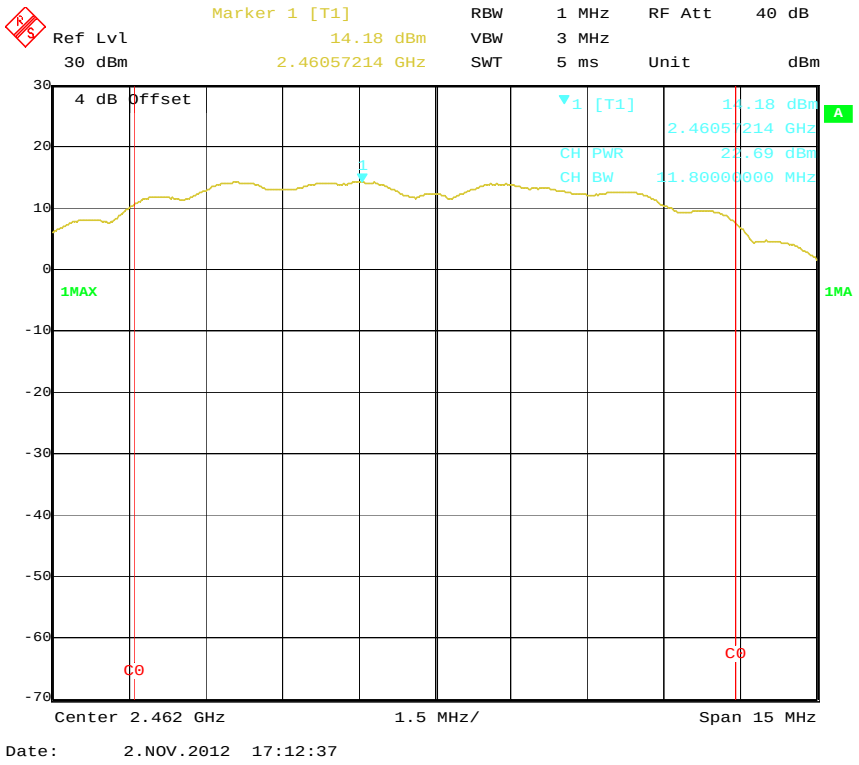
802.11b RF Output Power, Middle Channel, Antenna 0



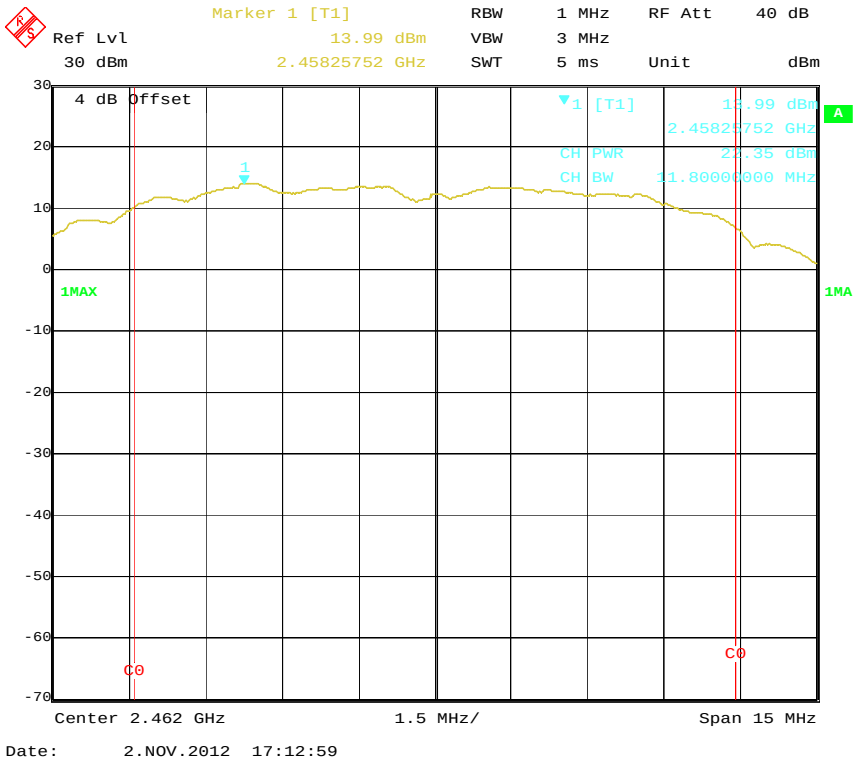
802.11b RF Output Power, Middle Channel, Antenna 1



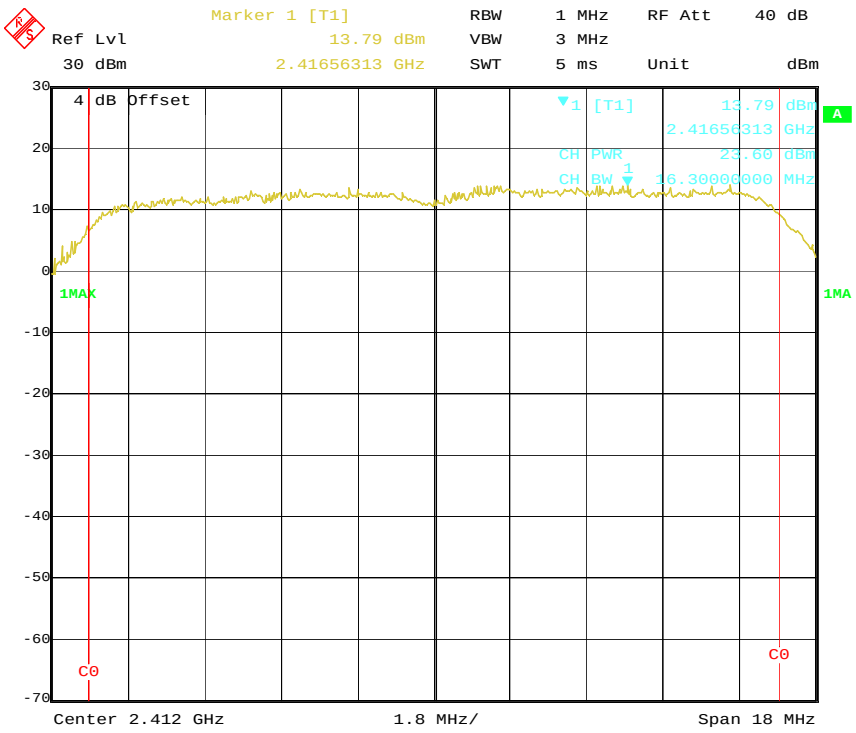
802.11b RF Output Power, High Channel, Antenna 0



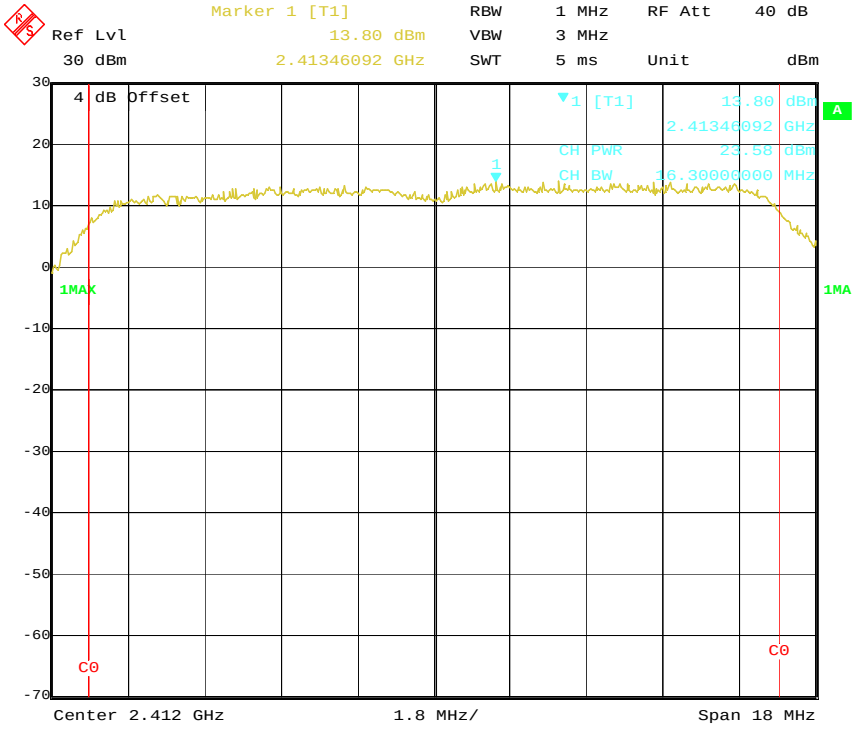
802.11b RF Output Power, High Channel, Antenna 1



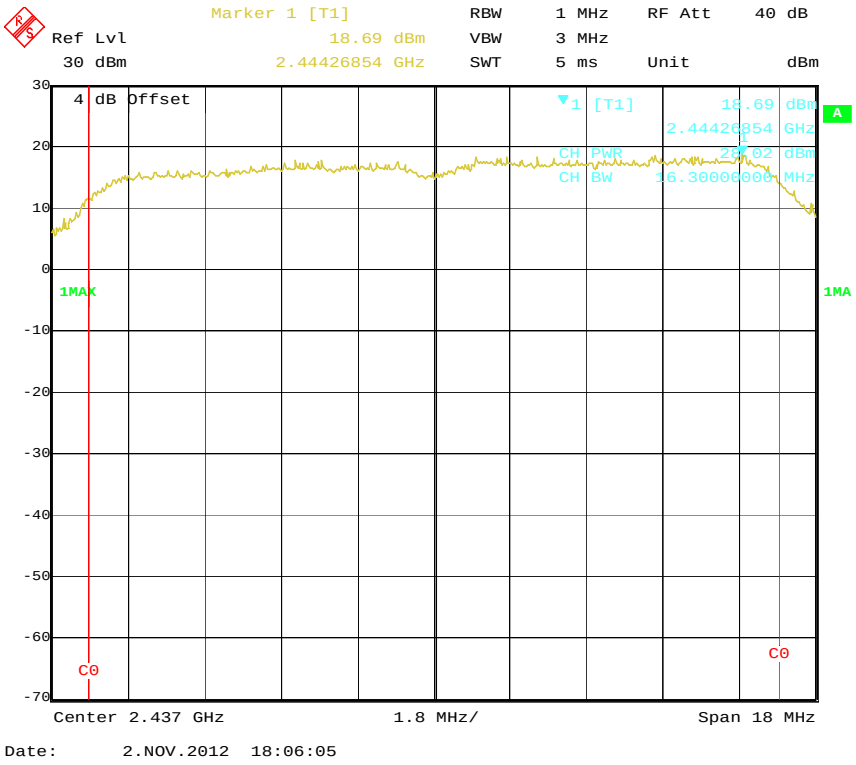
802.11g RF Output Power, Low Channel, Antenna 0



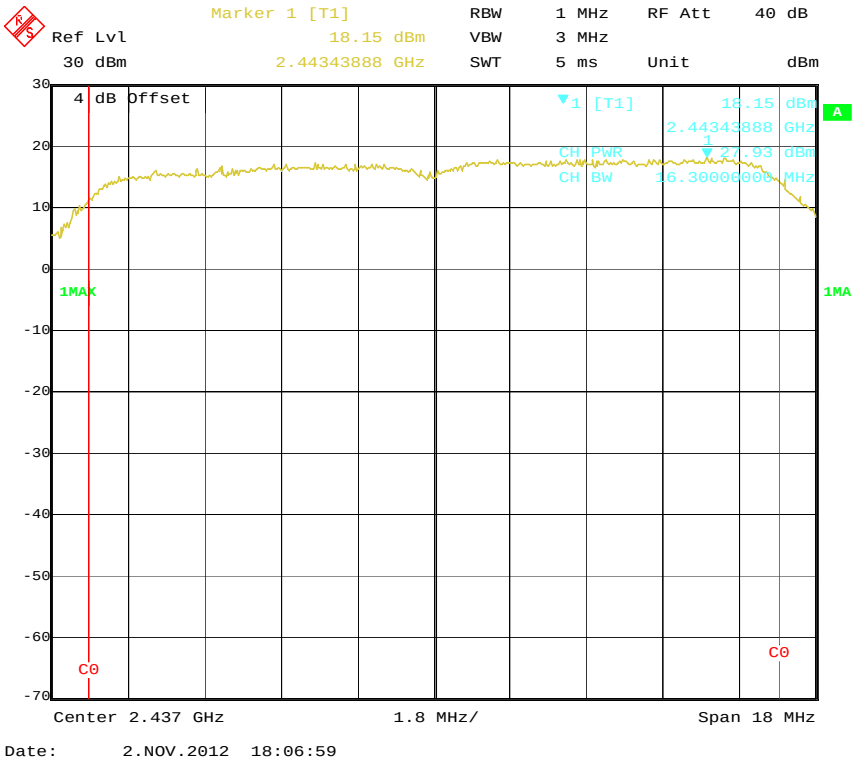
802.11g RF Output Power, Low Channel, Antenna 1



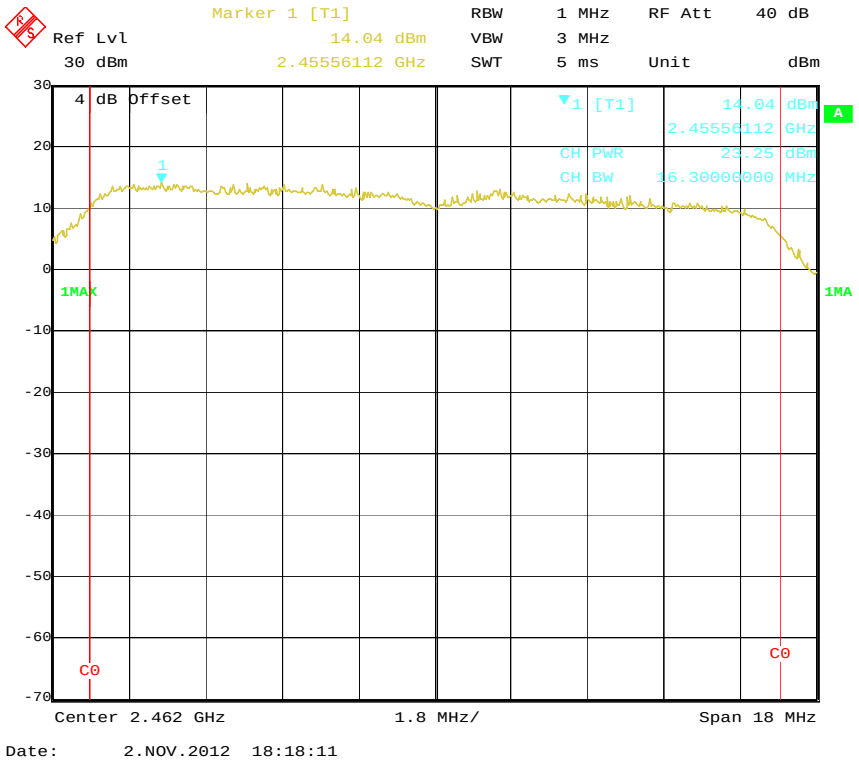
802.11g RF Output Power, Middle Channel, Antenna 0



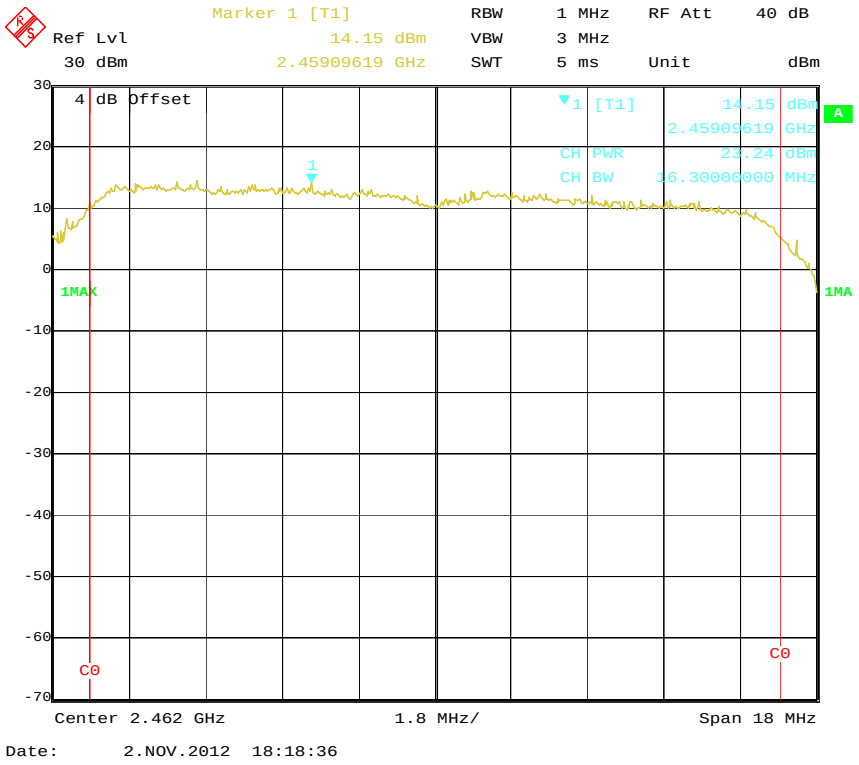
802.11g RF Output Power, Middle Channel, Antenna 1



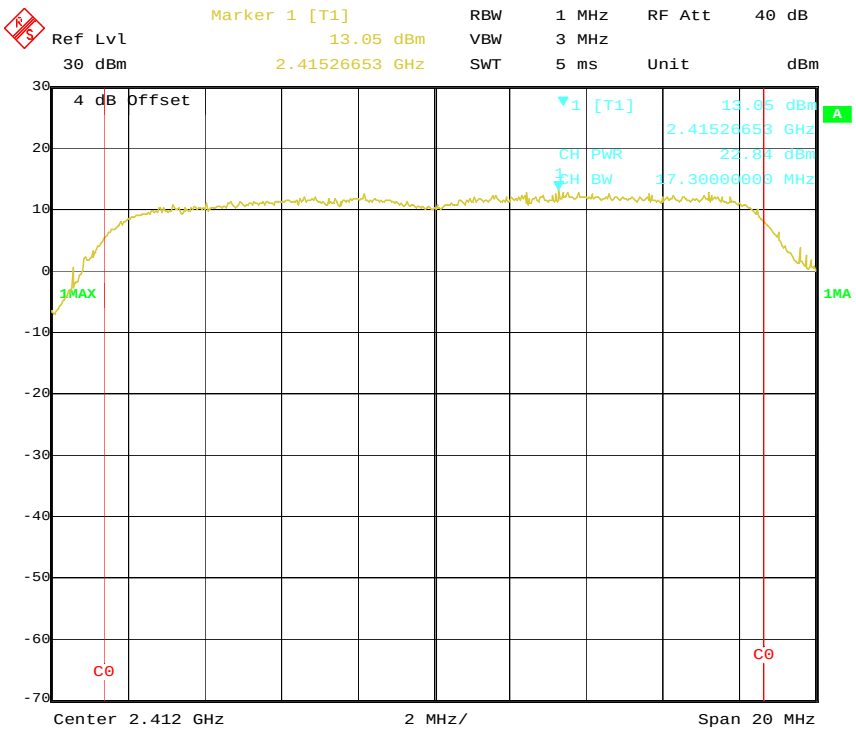
802.11g RF Output Power, High Channel, Antenna 0



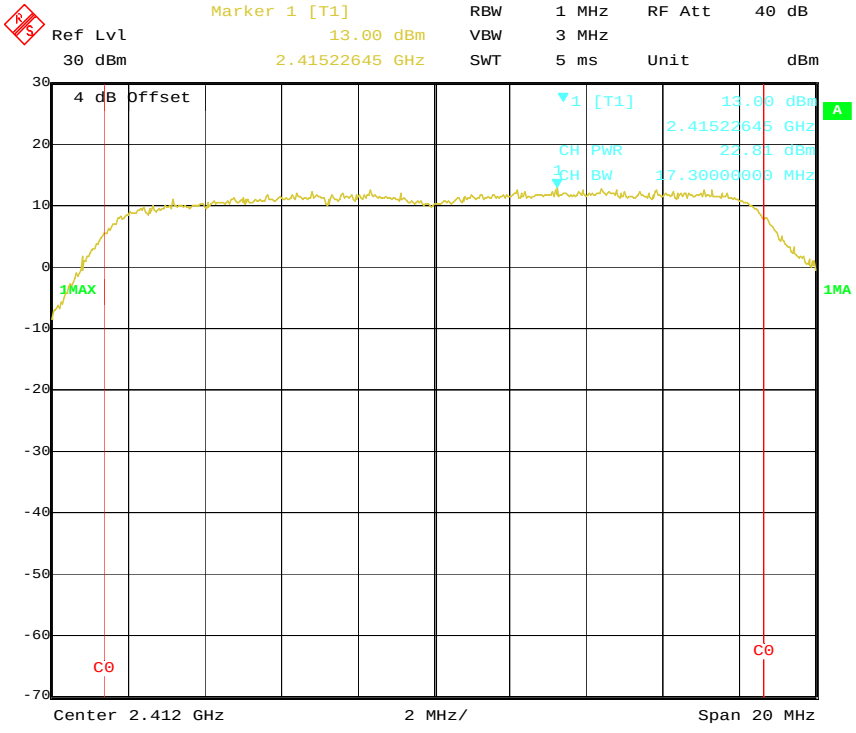
802.11g RF Output Power, High Channel, Antenna 1



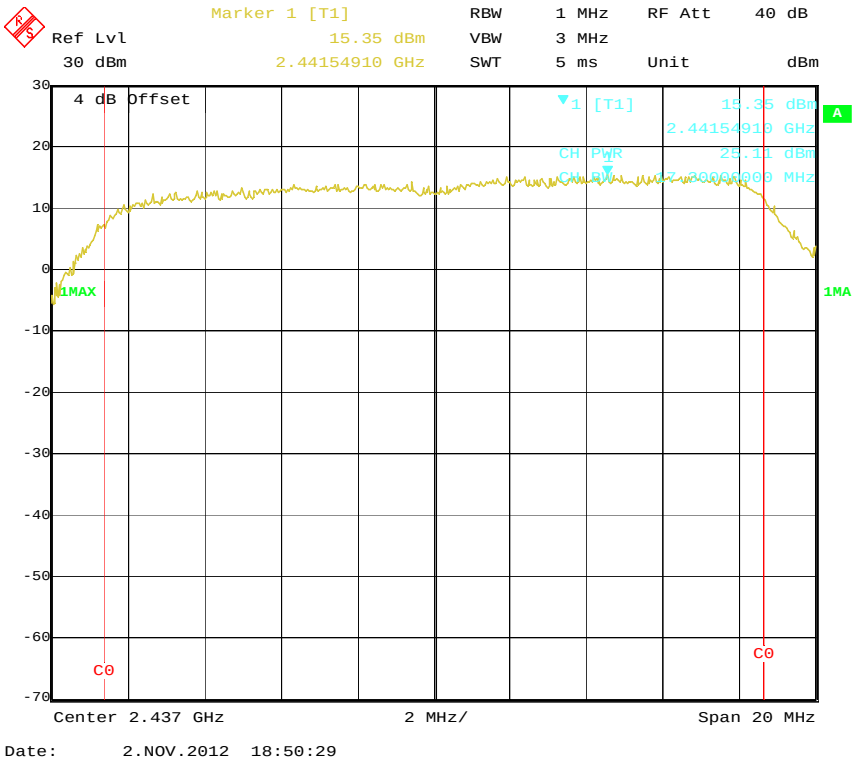
802.11n-HT20 RF Output Power, Low Channel, Antenna 0



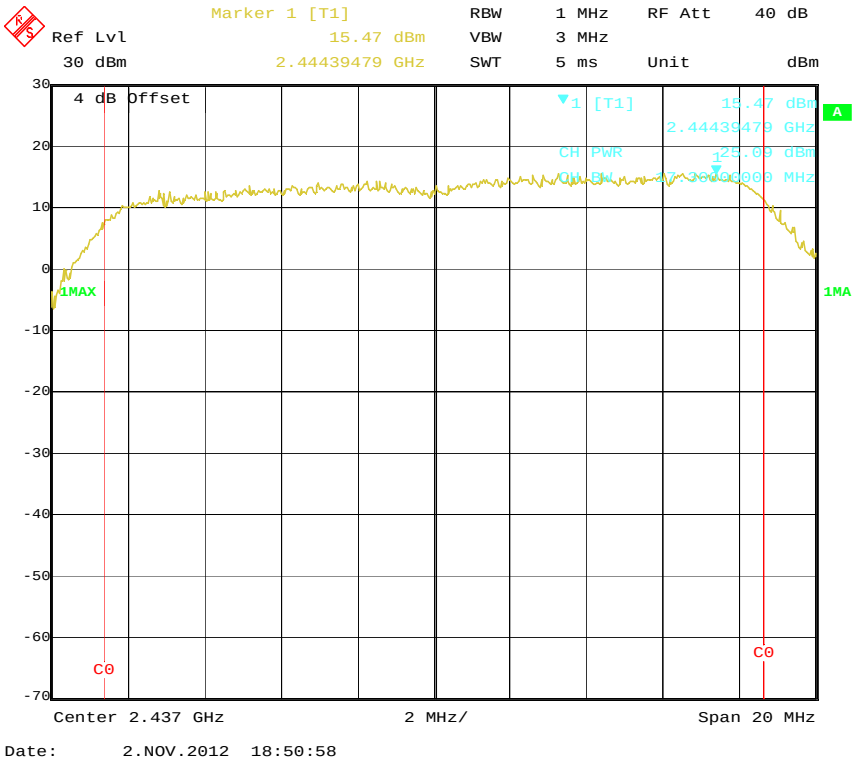
802.11n-HT20 RF Output Power, Low Channel, Antenna 1



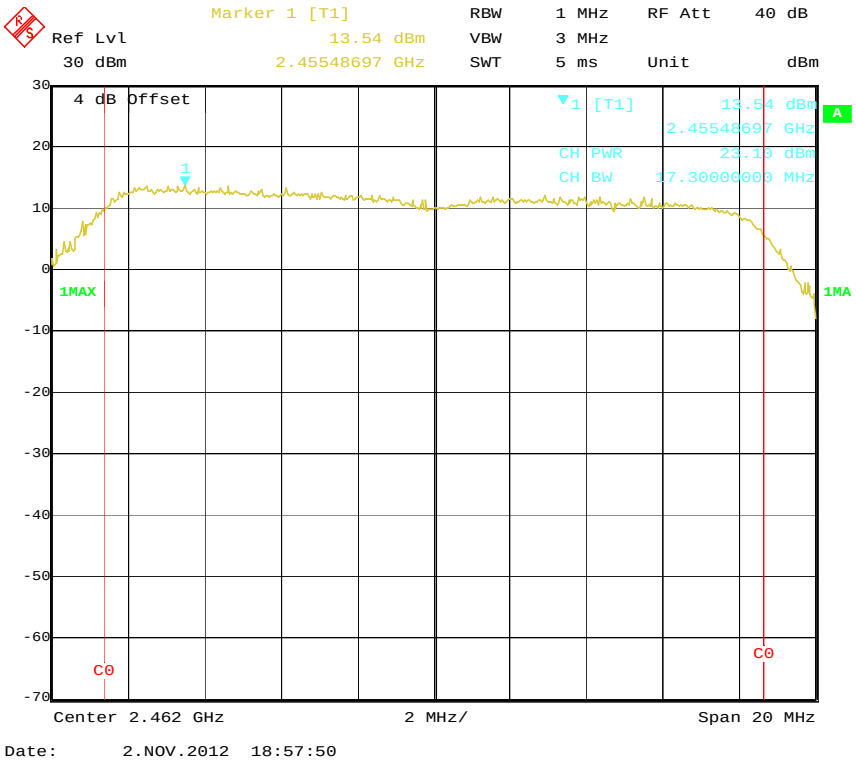
802.11n-HT20 RF Output Power, Middle Channel, Antenna 0



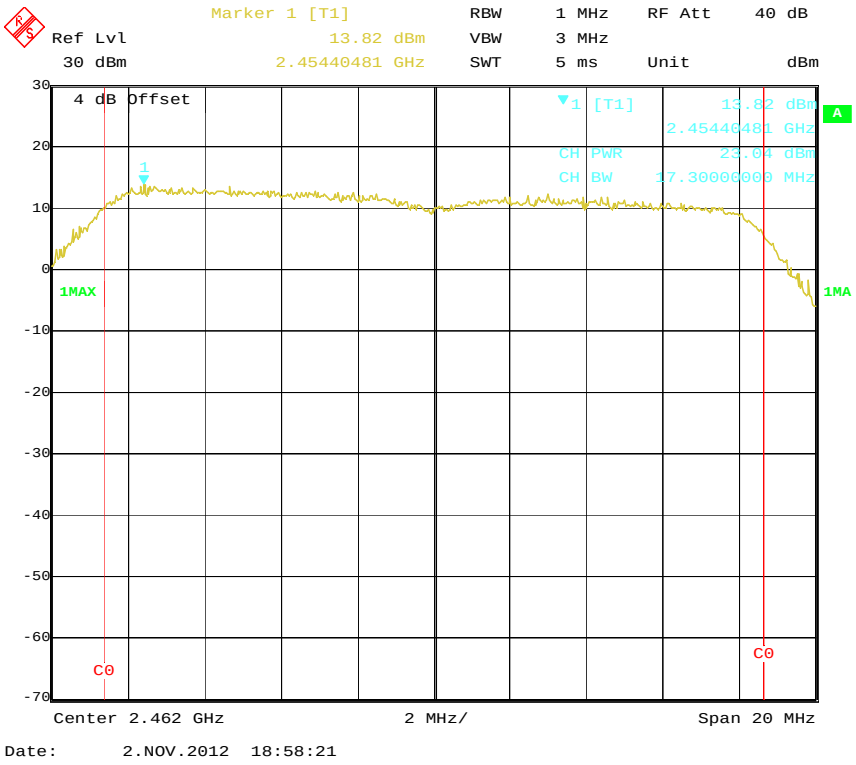
802.11n-HT20 RF Output Power, Middle Channel, Antenna 1



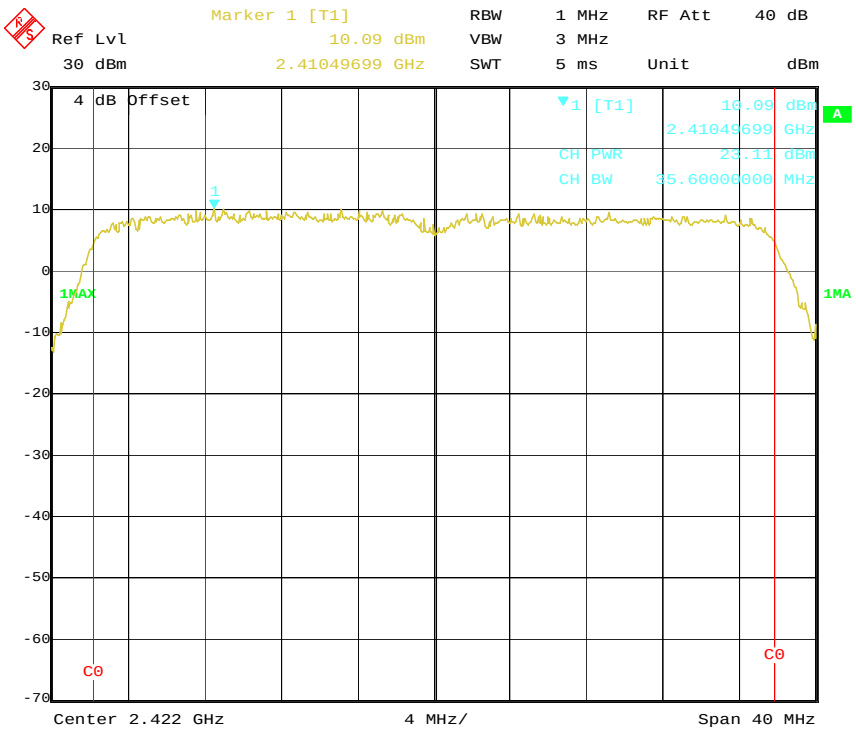
802.11n-HT20 RF Output Power, High Channel, Antenna 0



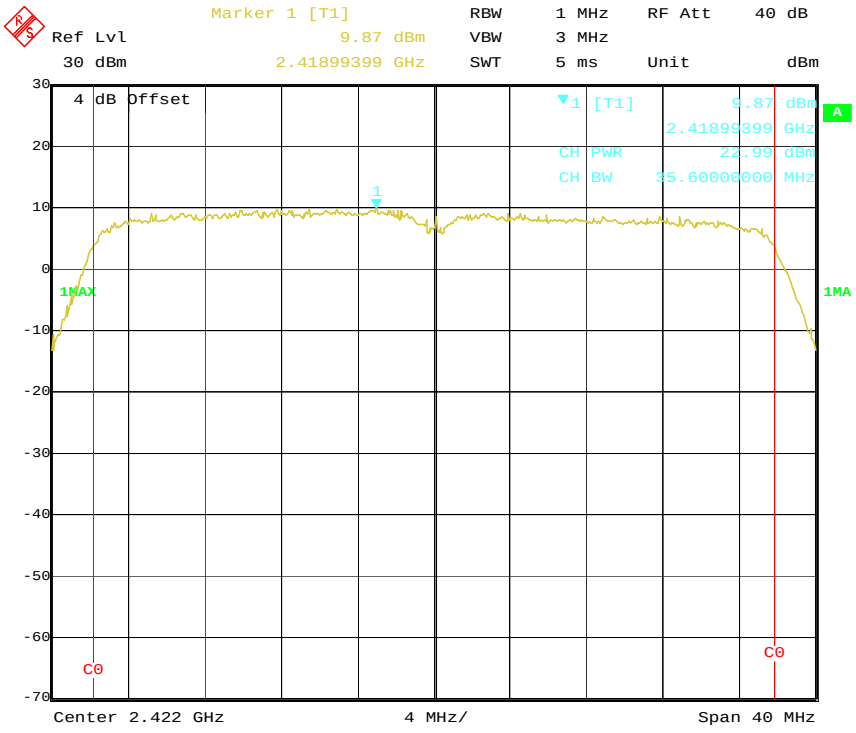
802.11n-HT20 RF Output Power, High Channel, Antenna 1



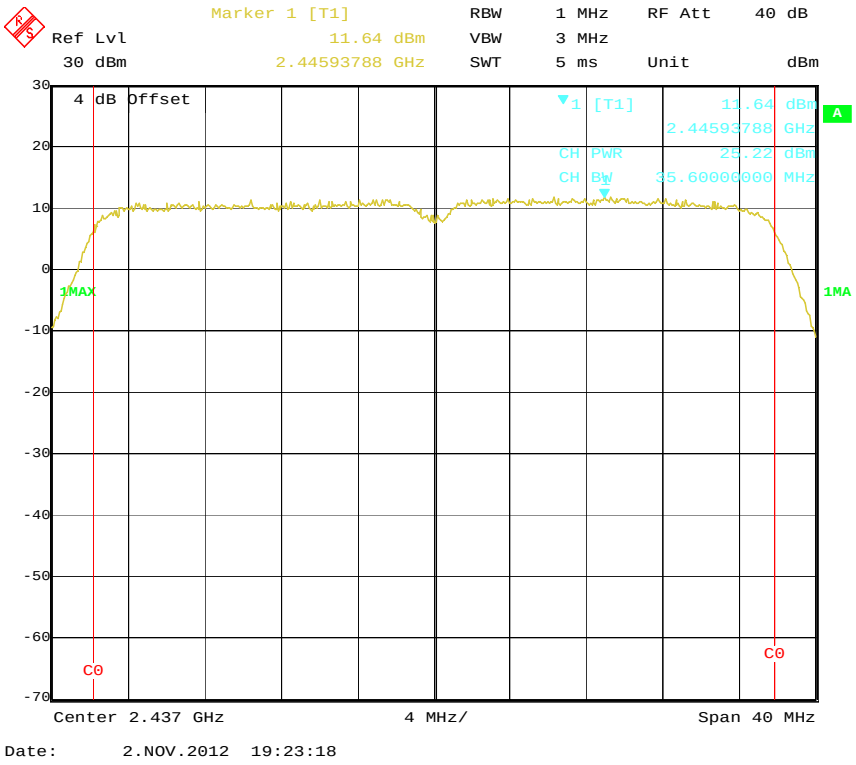
802.11n-HT40 RF Output Power, Low Channel, Antenna 0



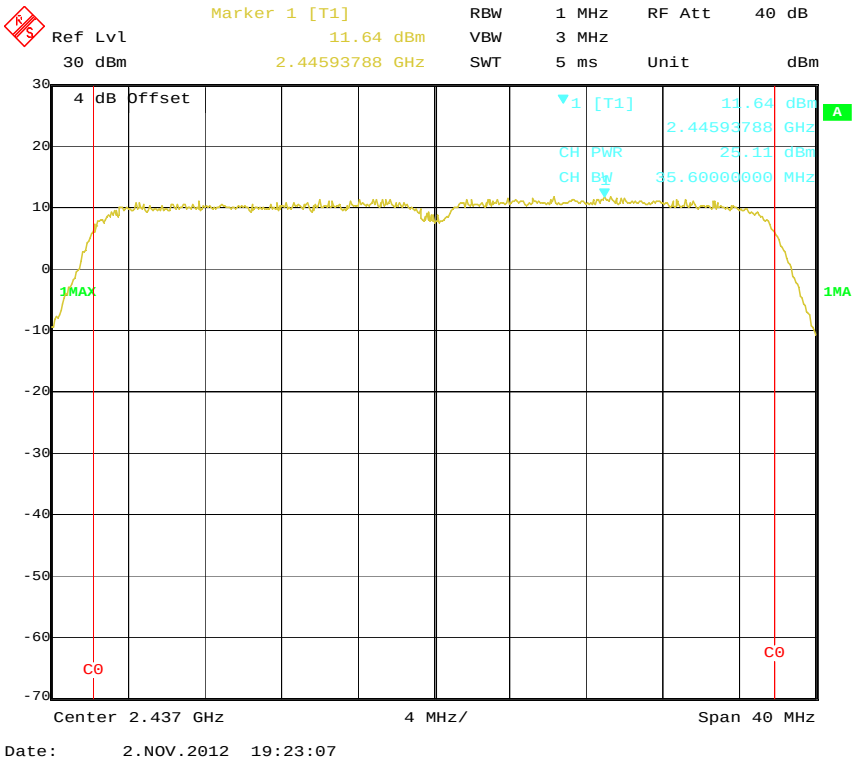
802.11n-HT40 RF Output Power, Low Channel, Antenna 1



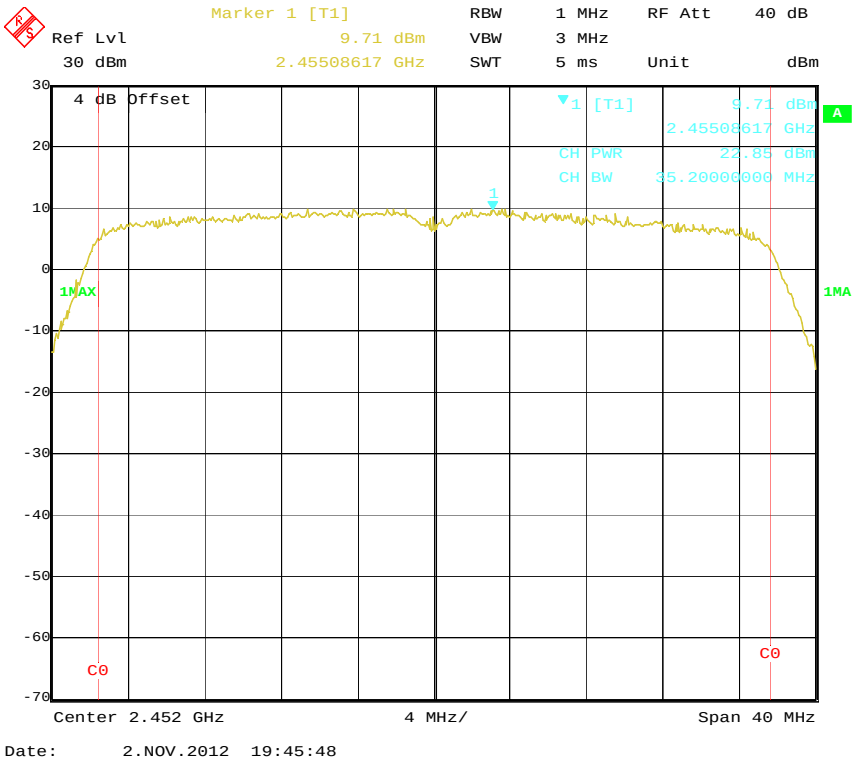
802.11n-HT40 RF Output Power, Middle Channel, Antenna 0



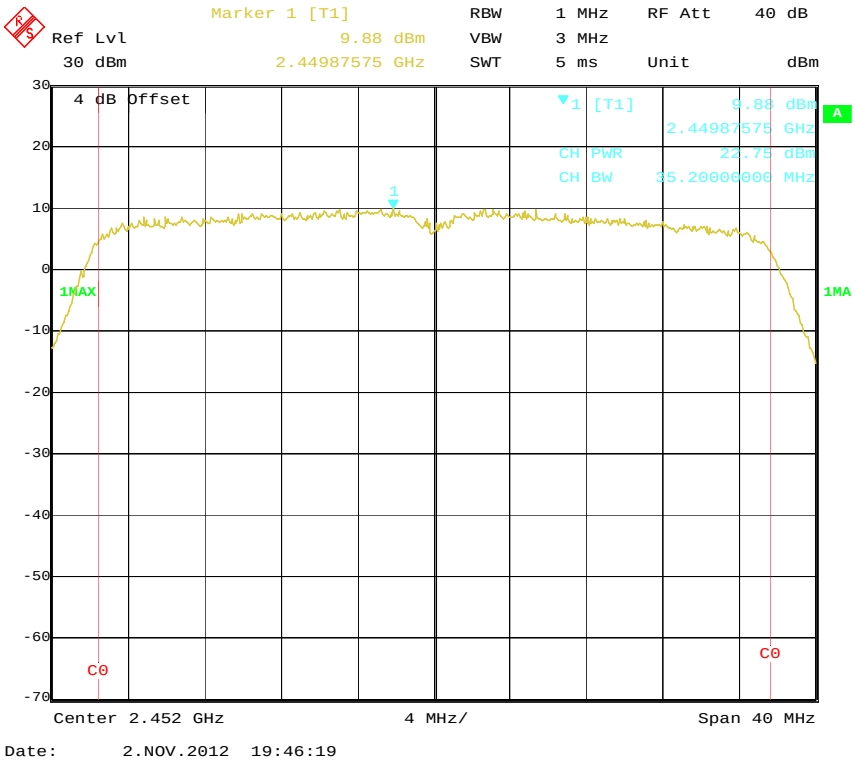
802.11n-HT40 RF Output Power, Middle Channel, Antenna 1



802.11n-HT40 RF Output Power, High Channel, Antenna 0



802.11n-HT40 RF Output Power, High Channel, Antenna 1



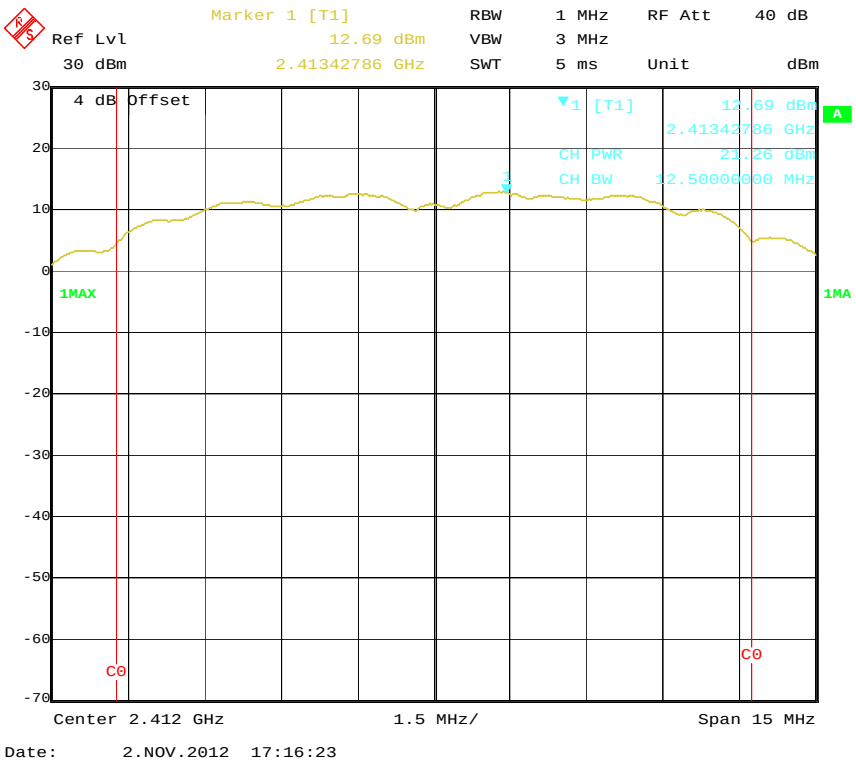
12dBi Gain Omni Directional antenna

Channel	Frequency (MHz)	Antenna Port	Output Power (dBm)		Limit (dBm)
802.11b mode					
Low	2412	0	21.26		28
		1	21.03		
Middle	2437	0	26.87		28
		1	26.69		
High	2462	0	21.60		28
		1	21.52		
802.11g mode					
Low	2412	0	22.61		28
		1	22.58		
Middle	2437	0	27.06		28
		1	26.99		
High	2462	0	22.17		28
		1	22.09		
802.11n-HT20 mode					
Low	2412	0	21.86	24.92	28
		1	21.95		
Middle	2437	0	24.05	27.02	28
		1	23.96		
High	2462	0	21.94	24.88	28
		1	21.80		
802.11n-HT40 mode					
Low	2422	0	21.95	24.91	28
		1	21.85		
Middle	2437	0	24.09	27.00	28
		1	23.89		
High	2452	0	22.18	25.07	28
		1	21.94		

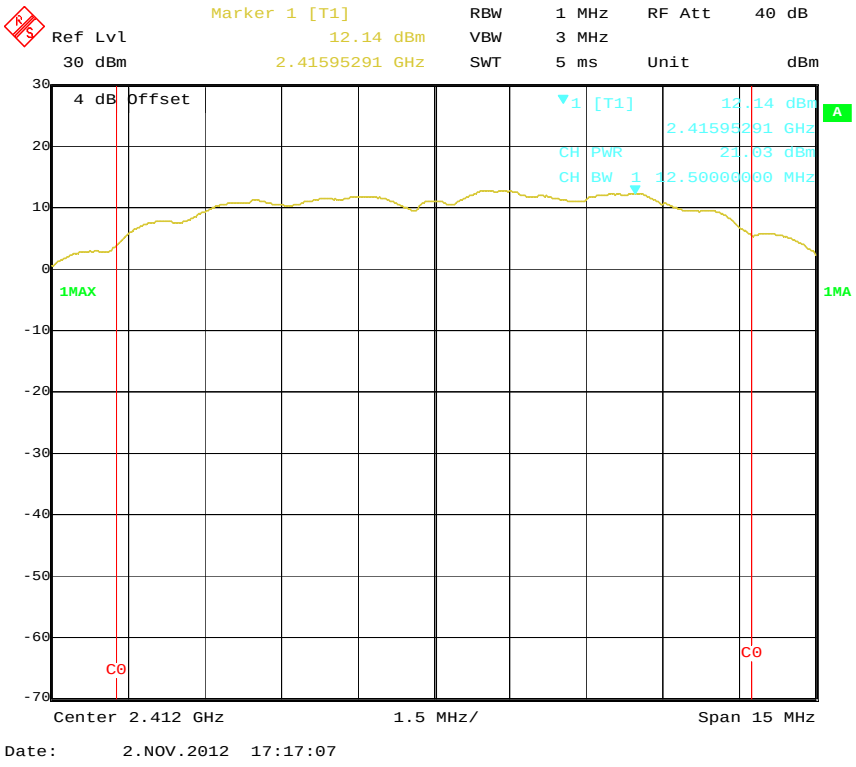
Note:

According with FCC 15.247 (c) (1) (i), the limit of the maximum conducted output power is 28 dBm

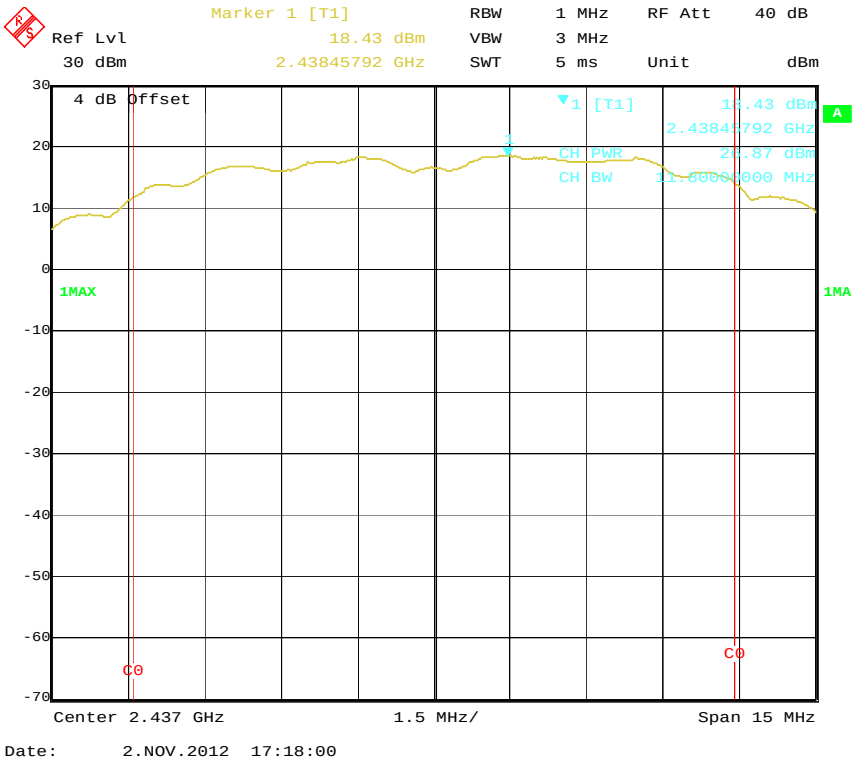
802.11b RF Output Power, Low Channel, Antenna 0



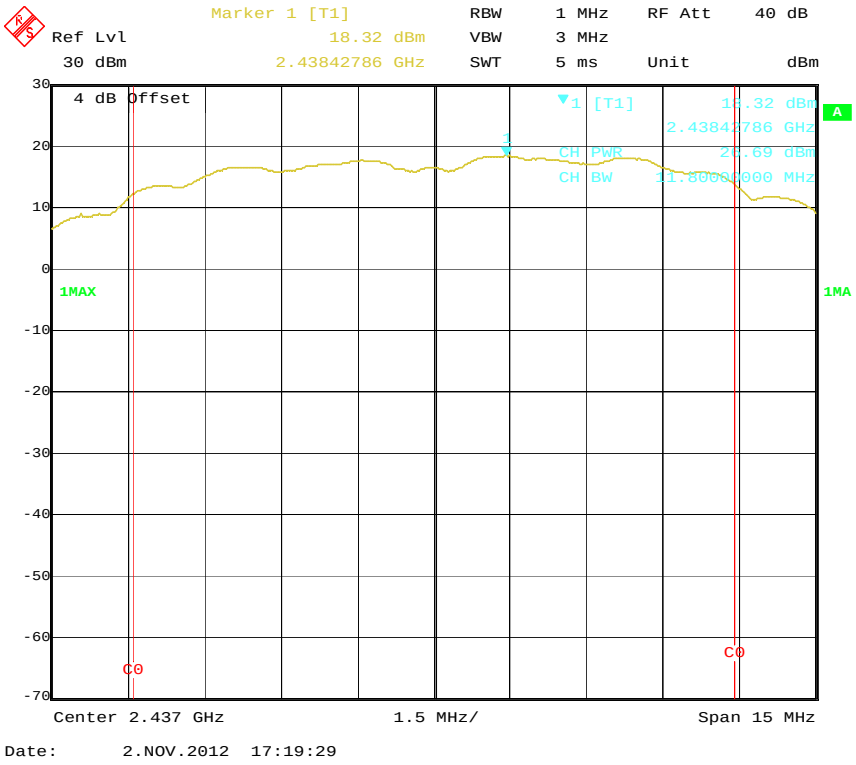
802.11b RF Output Power, Low Channel, Antenna 1



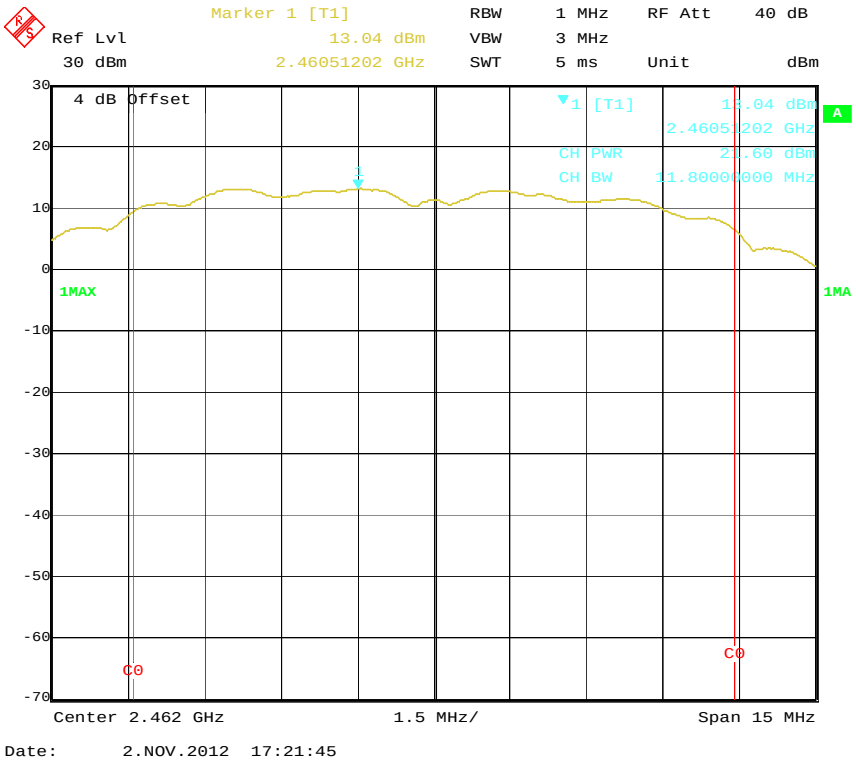
802.11b RF Output Power, Middle Channel, Antenna 0



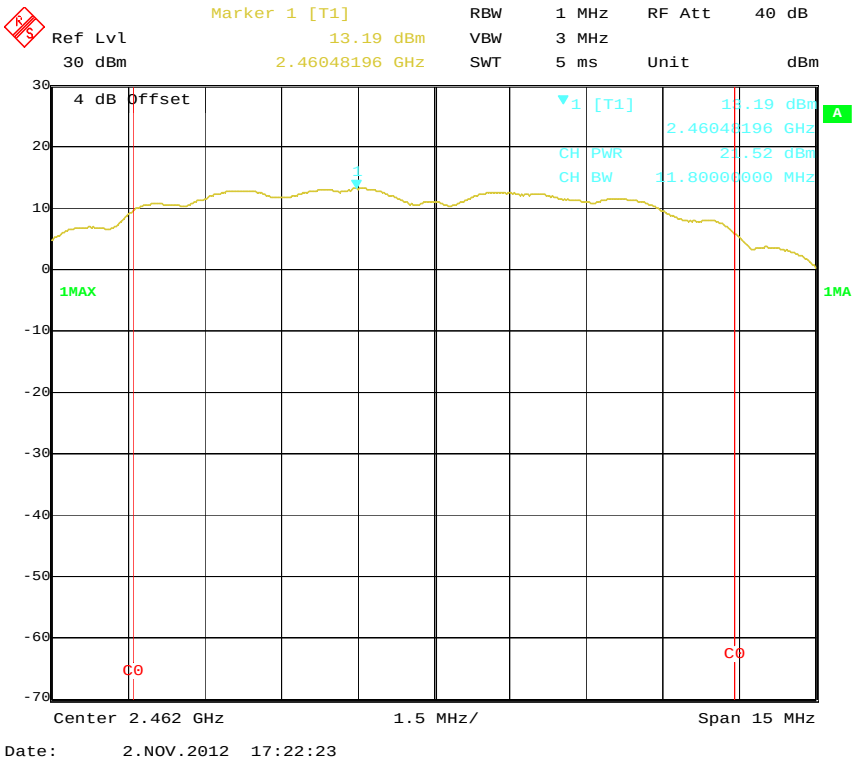
802.11b RF Output Power, Middle Channel, Antenna 1



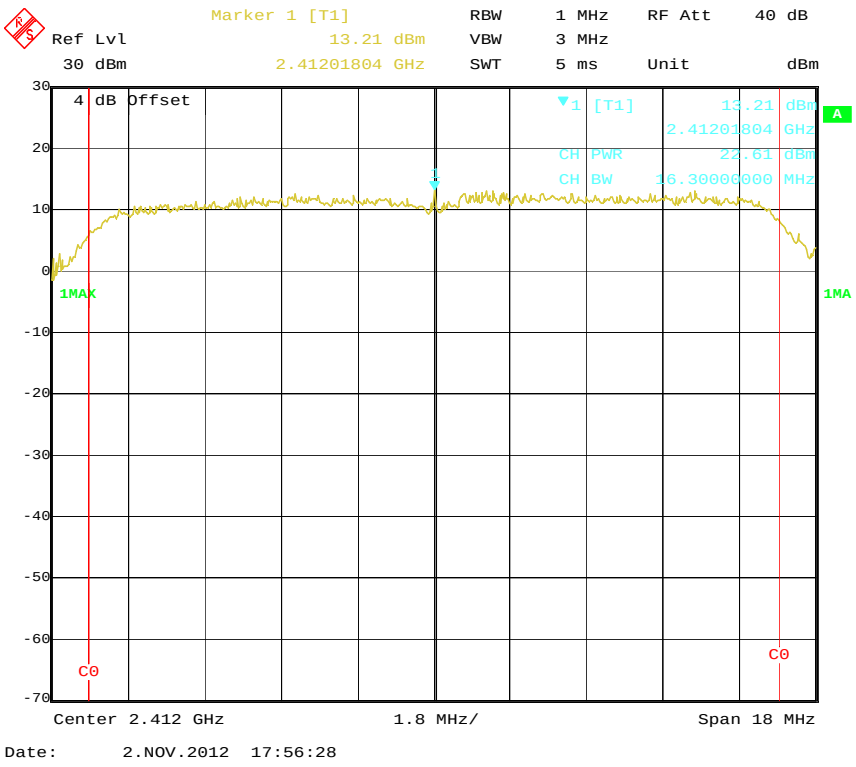
802.11b RF Output Power, High Channel, Antenna 0



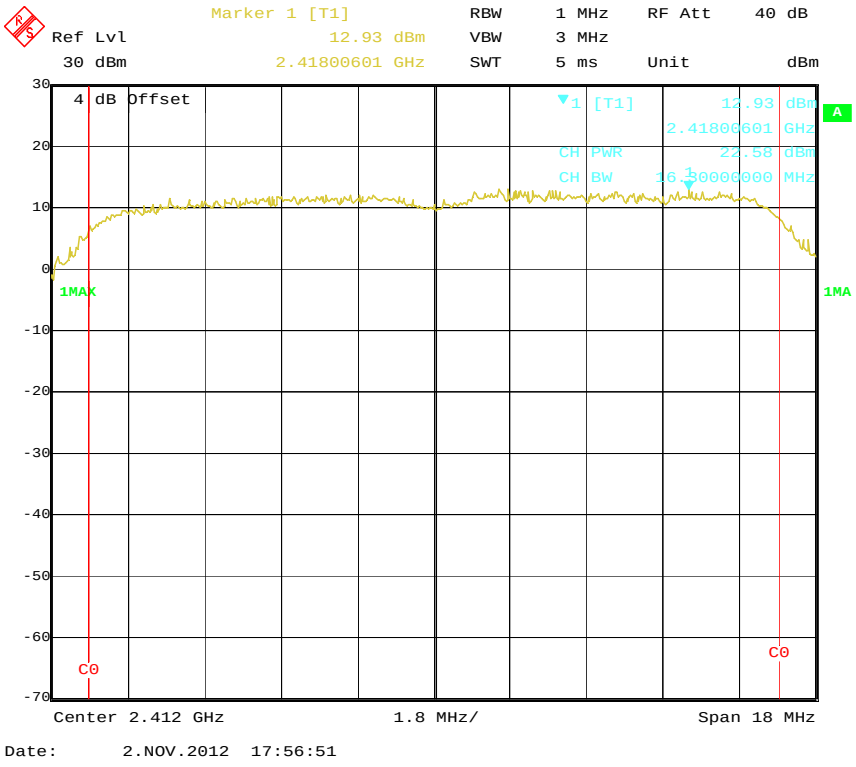
802.11b RF Output Power, High Channel, Antenna 1



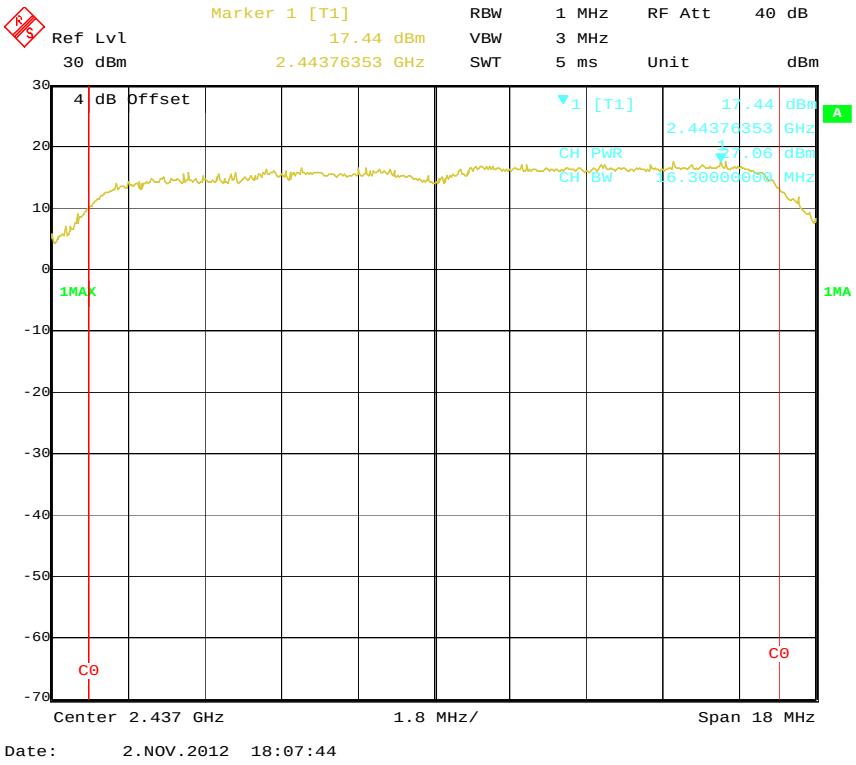
802.11g RF Output Power, Low Channel, Antenna 0



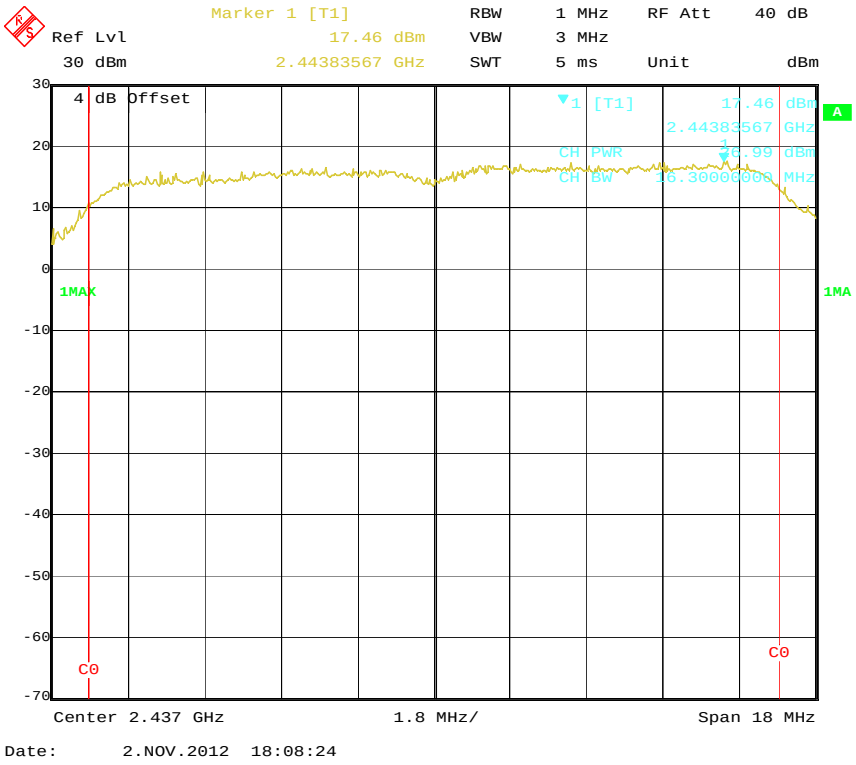
802.11g RF Output Power, Low Channel, Antenna 1



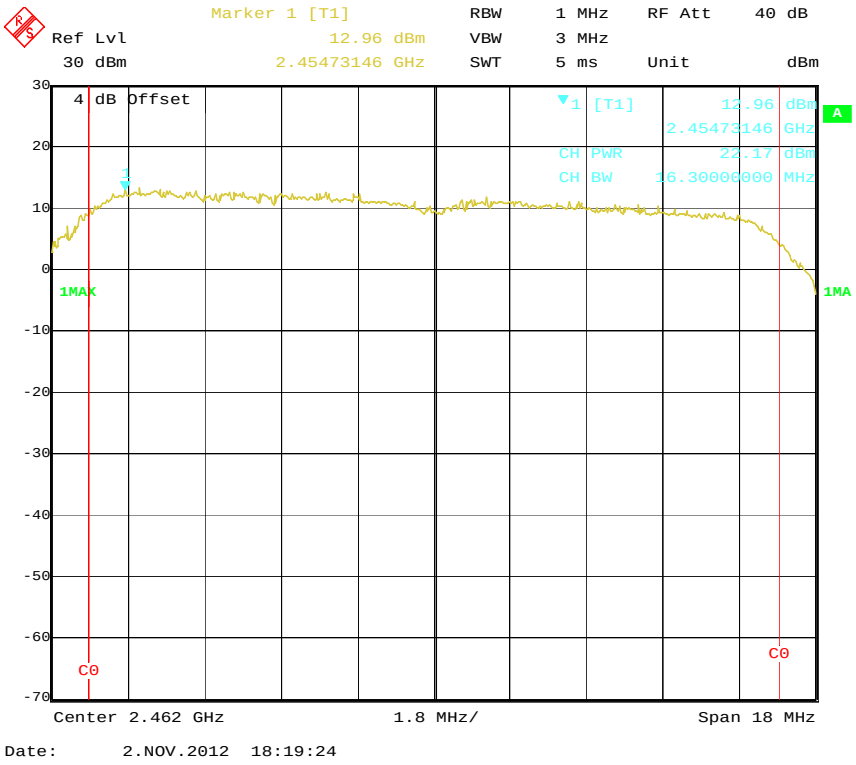
802.11g RF Output Power, Middle Channel, Antenna 0



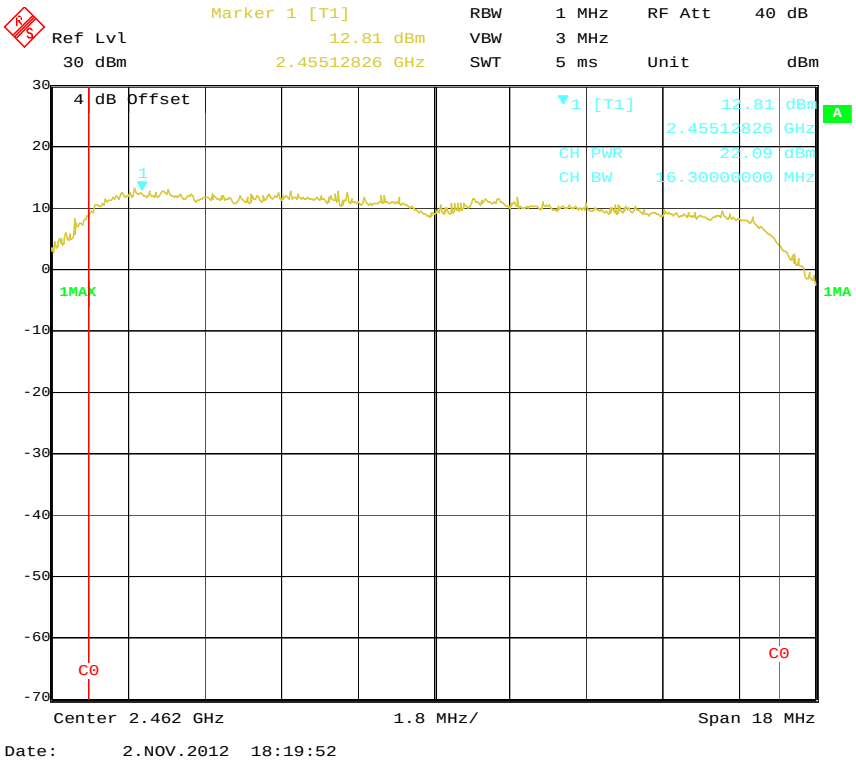
802.11g RF Output Power, Middle Channel, Antenna 1



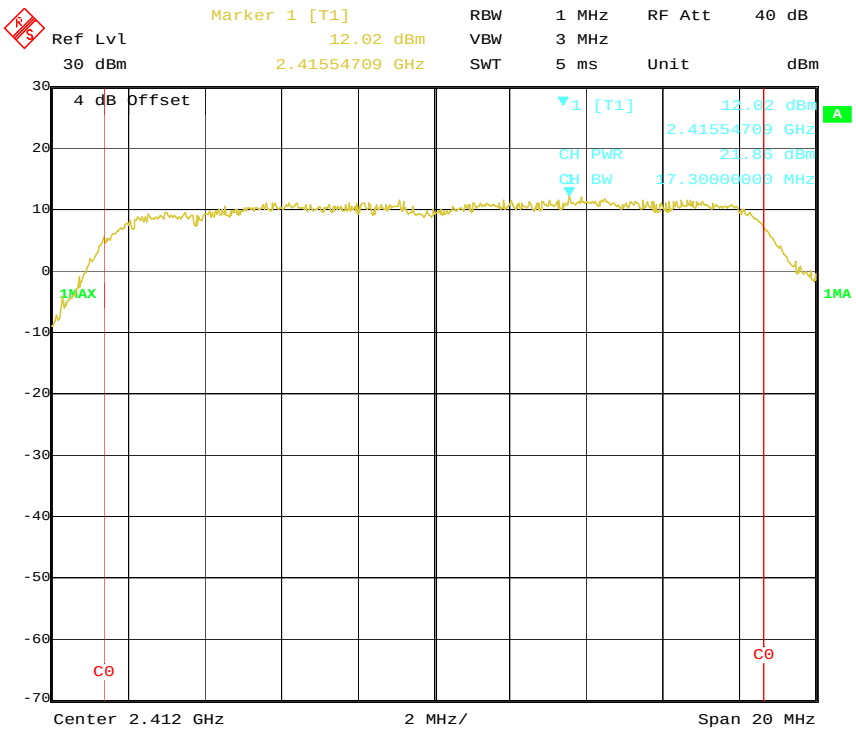
802.11g RF Output Power, High Channel, Antenna 0



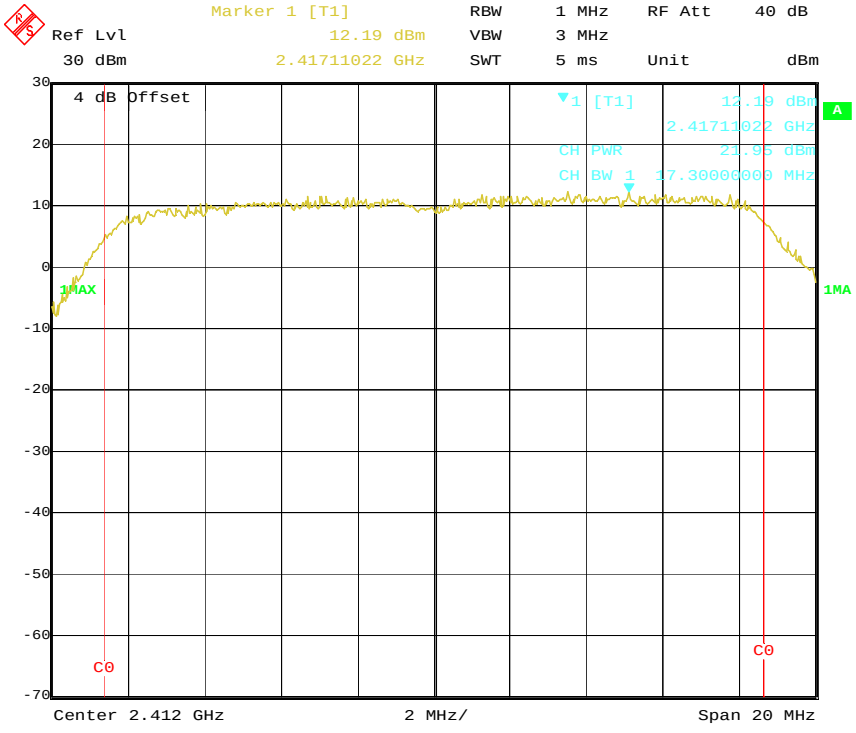
802.11g RF Output Power, High Channel, Antenna 1



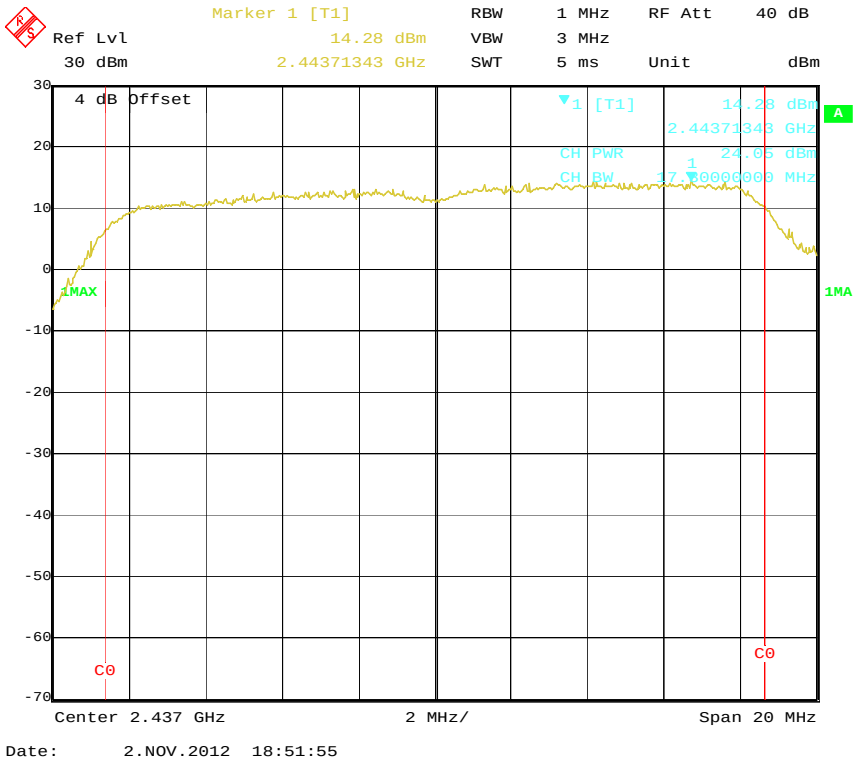
802.11n-HT20 RF Output Power, Low Channel, Antenna 0



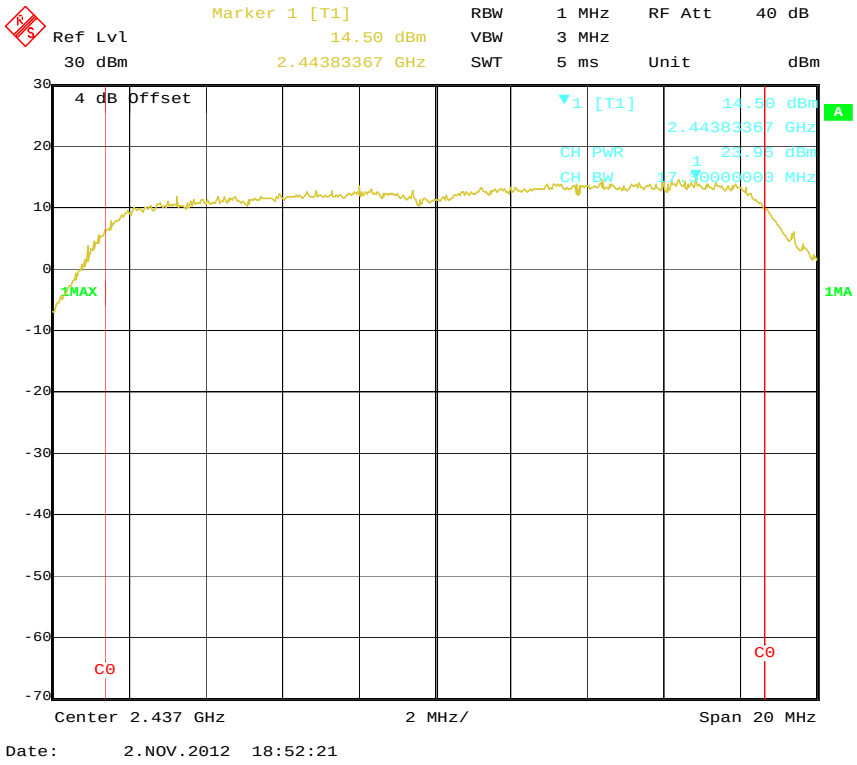
802.11n-HT20 RF Output Power, Low Channel, Antenna 1



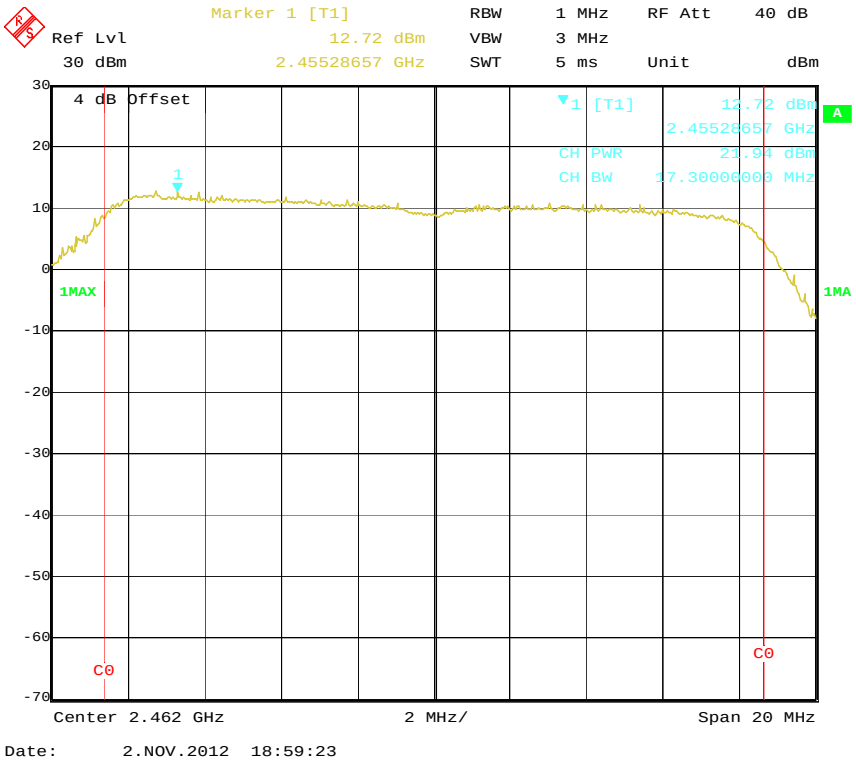
802.11n-HT20 RF Output Power, Middle Channel, Antenna 0



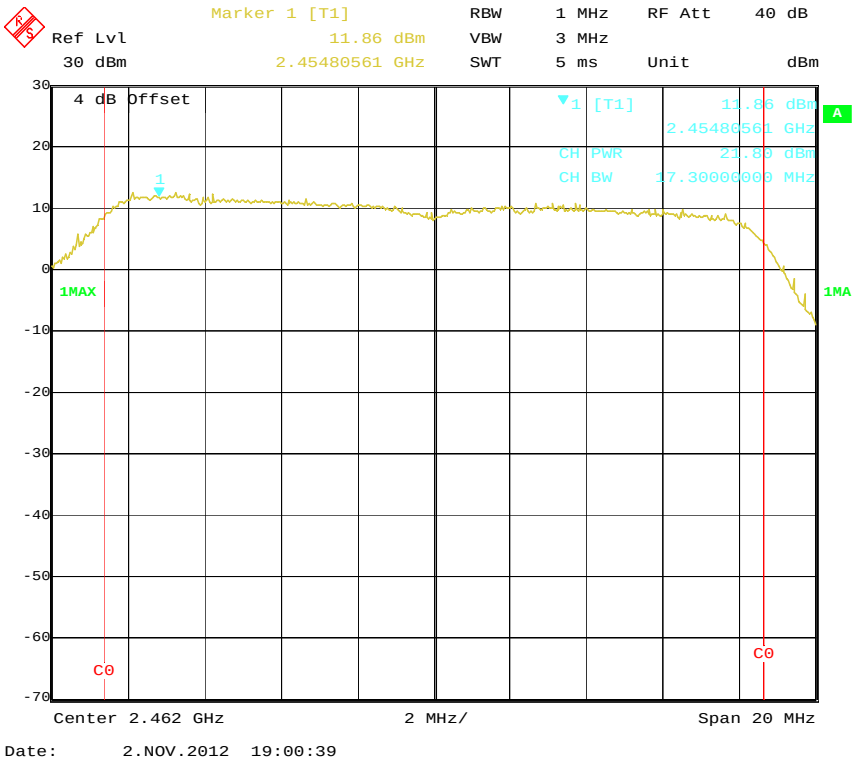
802.11n-HT20 RF Output Power, Middle Channel, Antenna 1



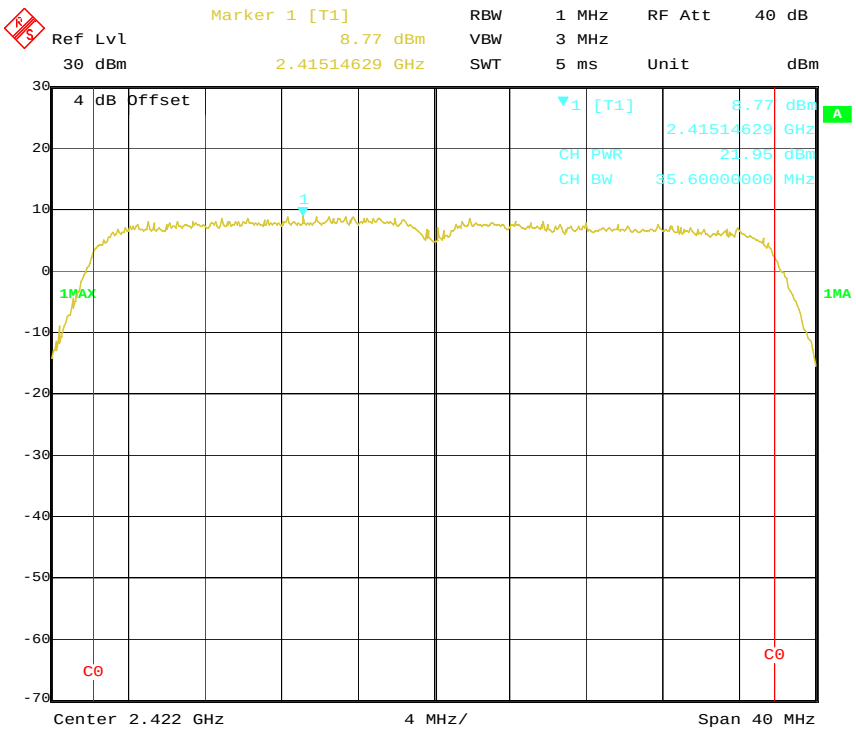
802.11n-HT20 RF Output Power, High Channel, Antenna 0



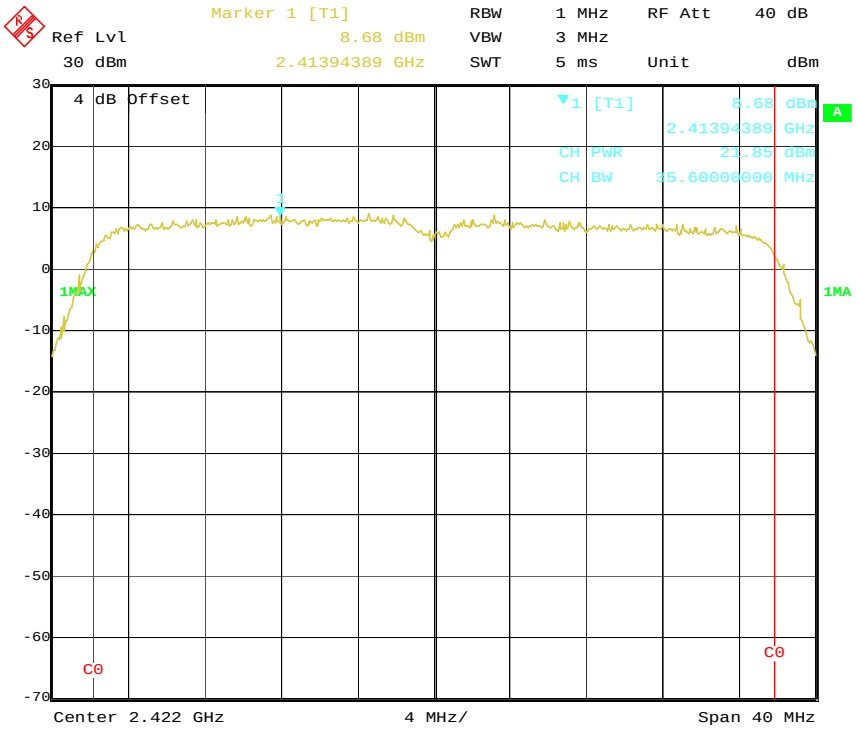
802.11n-HT20 RF Output Power, High Channel, Antenna 1



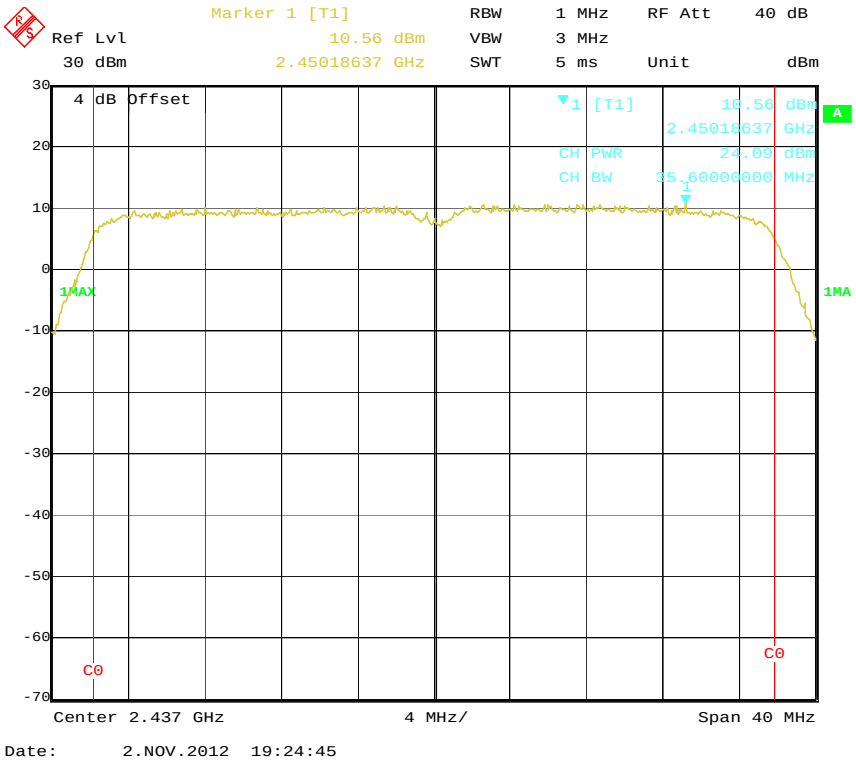
802.11n-HT40 RF Output Power, Low Channel, Antenna 0



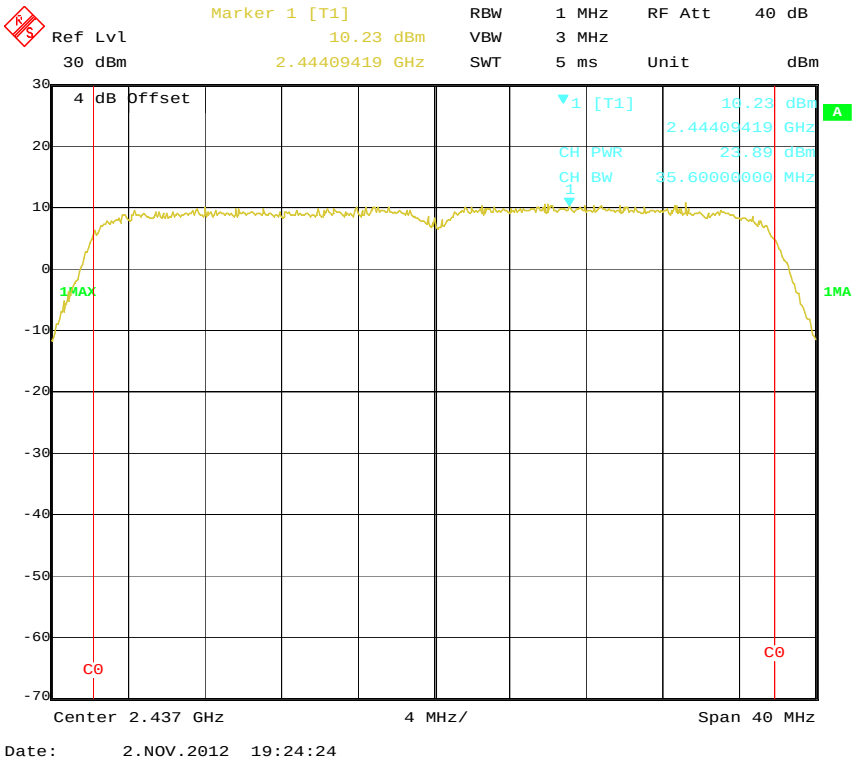
802.11n-HT40 RF Output Power, Low Channel, Antenna 1



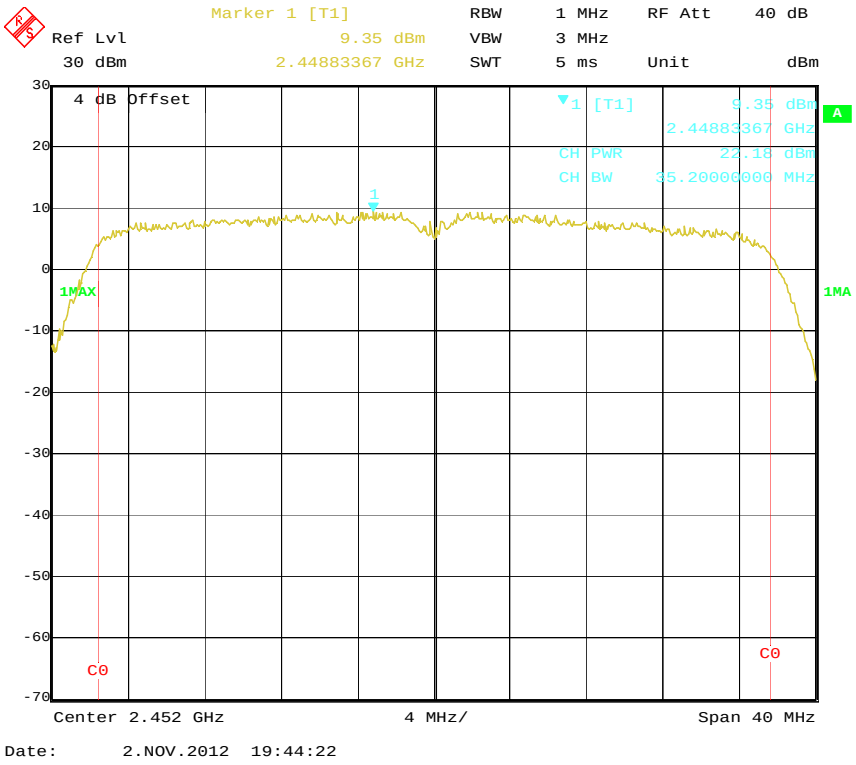
802.11n-HT40 RF Output Power, Middle Channel, Antenna 0



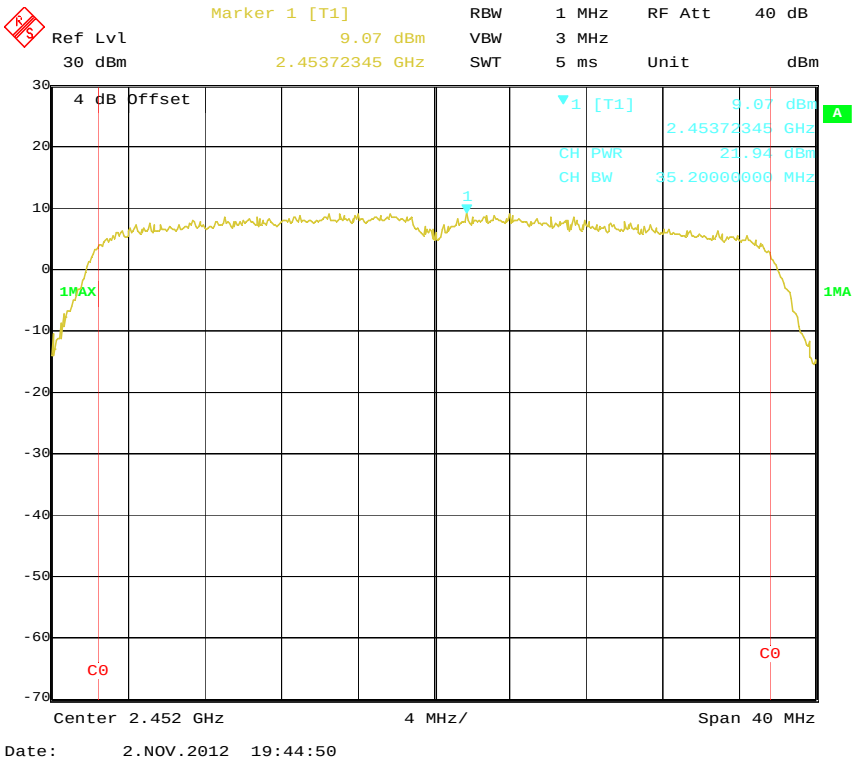
802.11n-HT40 RF Output Power, Middle Channel, Antenna 1



802.11n-HT40 RF Output Power, High Channel, Antenna 0



802.11n-HT40 RF Output Power, High Channel, Antenna 1



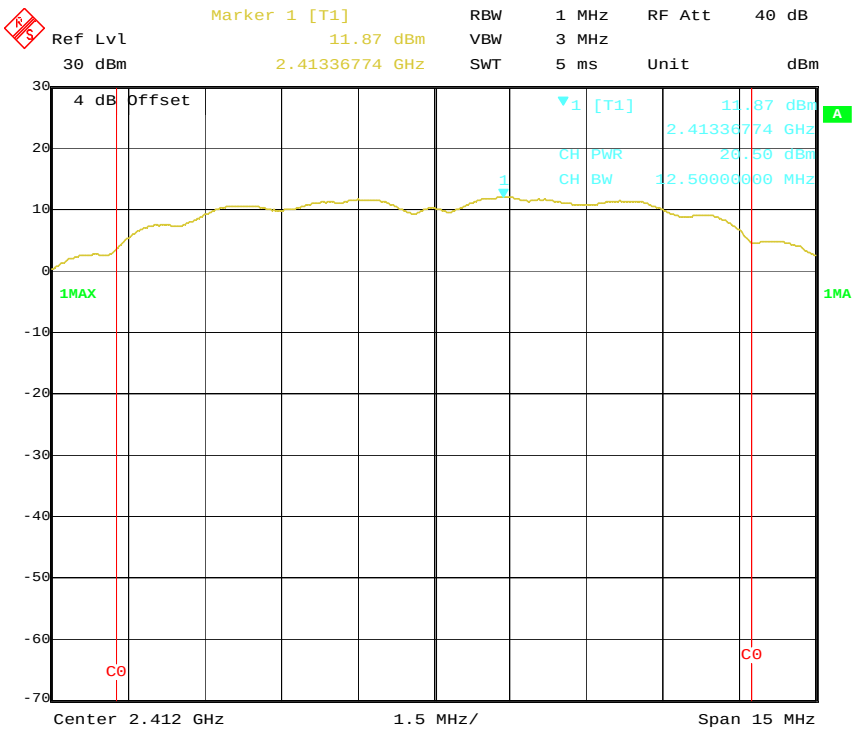
14dBi Gain Directional antenna

Channel	Frequency (MHz)	Antenna Port	Output Power (dBm)		Limit (dBm)
802.11b mode					
Low	2412	0	20.50		27
		1	20.40		
Middle	2437	0	26.02		27
		1	26.00		
High	2462	0	20.84		27
		1	20.62		
802.11g mode					
Low	2412	0	21.70		27
		1	21.73		
Middle	2437	0	26.06		27
		1	26.00		
High	2462	0	21.27		27
		1	21.13		
802.11n-HT20 mode					
Low	2412	0	20.93	23.92	27
		1	20.89		
Middle	2437	0	23.04	26.51	27
		1	23.03		
High	2462	0	20.97	23.93	27
		1	20.87		
802.11n-HT40 mode					
Low	2422	0	20.85	23.84	27
		1	20.80		
Middle	2437	0	23.11	26.02	27
		1	22.90		
High	2452	0	21.00	23.98	27
		1	20.94		

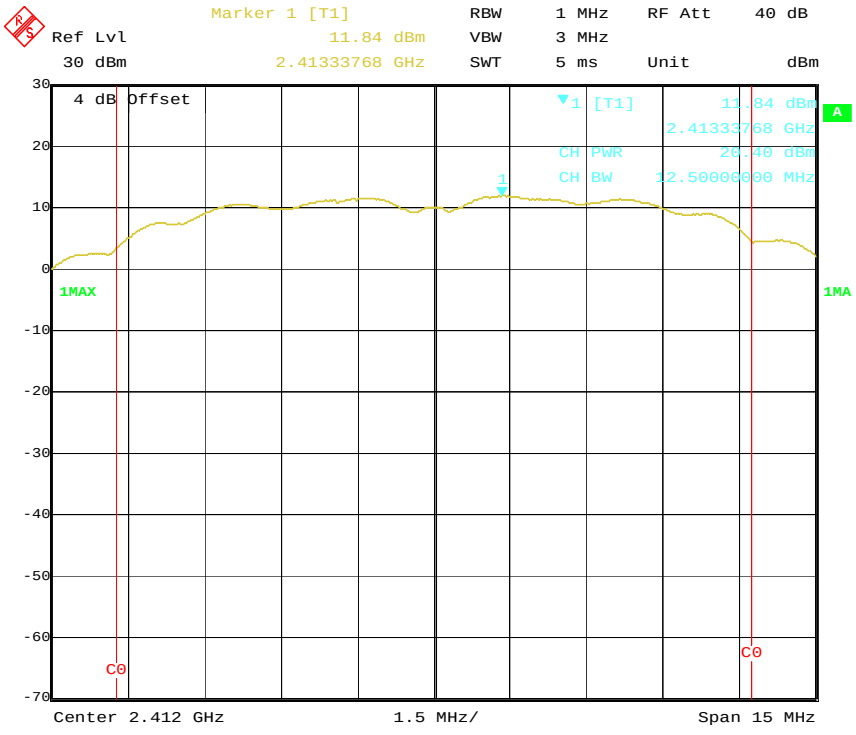
Note:

According with FCC 15.247 (c) (1) (i), the limit of the maximum conducted output power is 27 dBm

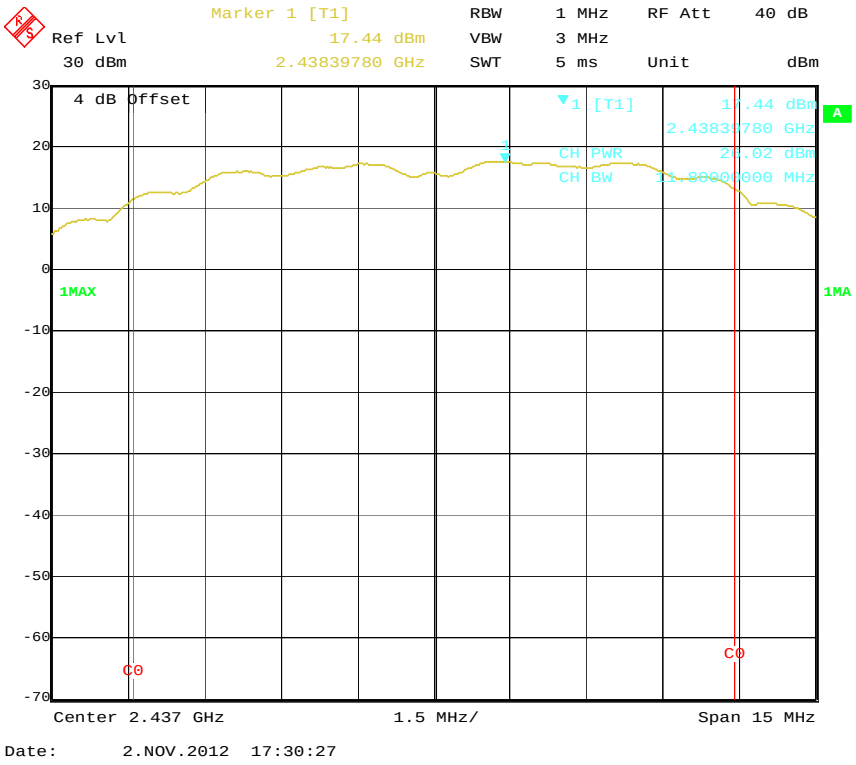
802.11b RF Output Power, Low Channel, Antenna 0



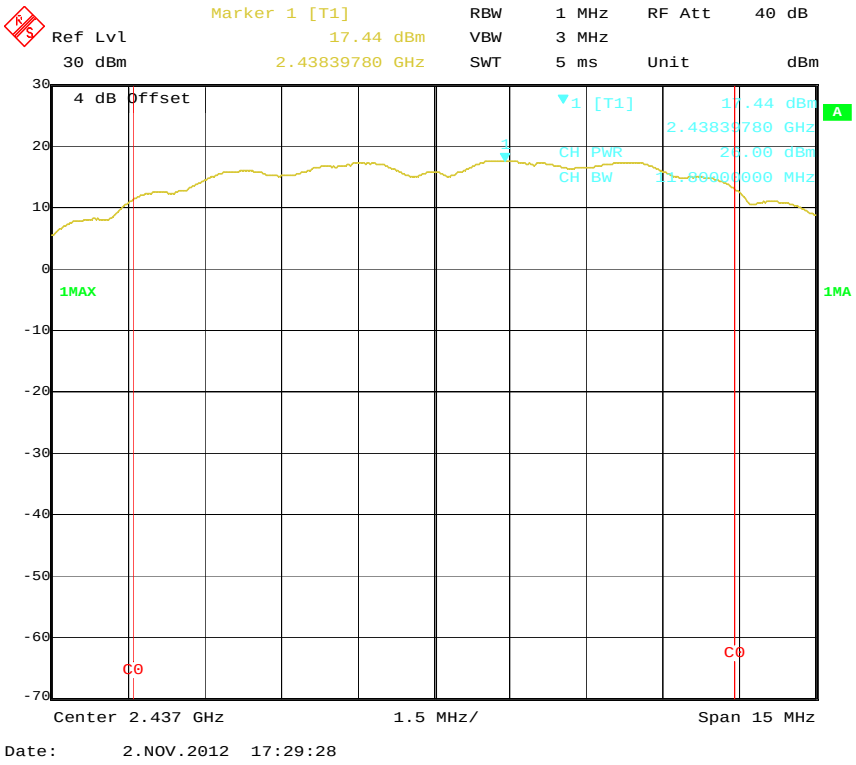
802.11b RF Output Power, Low Channel, Antenna 1



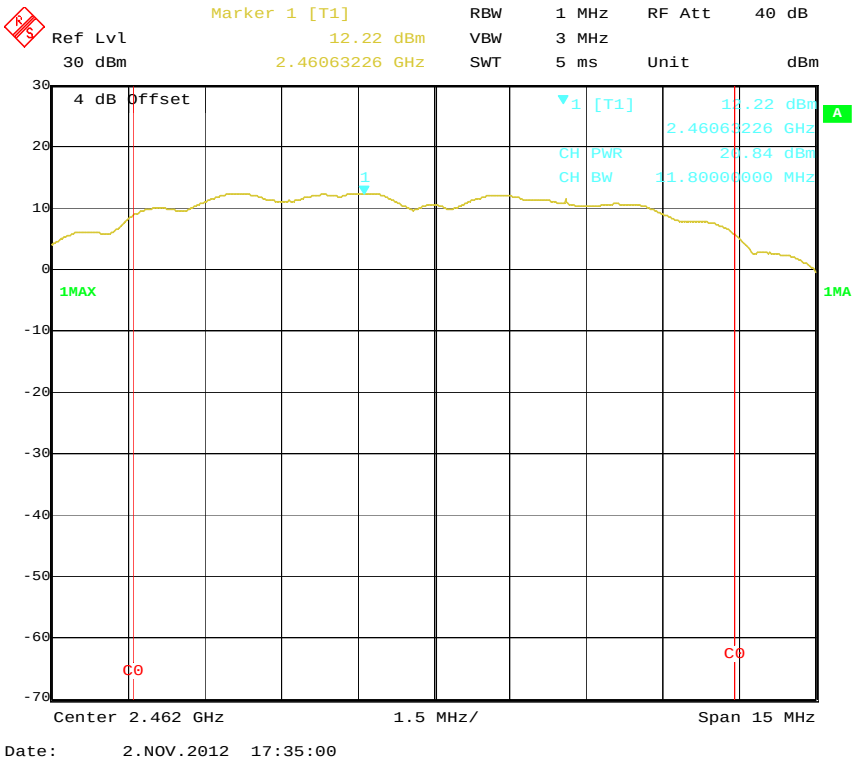
802.11b RF Output Power, Middle Channel, Antenna 0



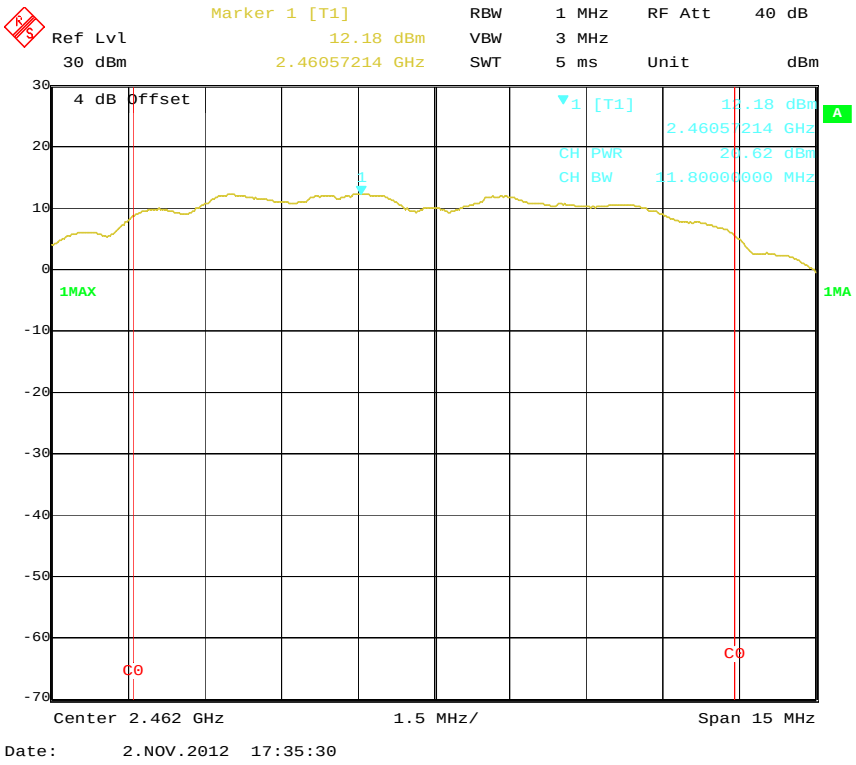
802.11b RF Output Power, Middle Channel, Antenna 1



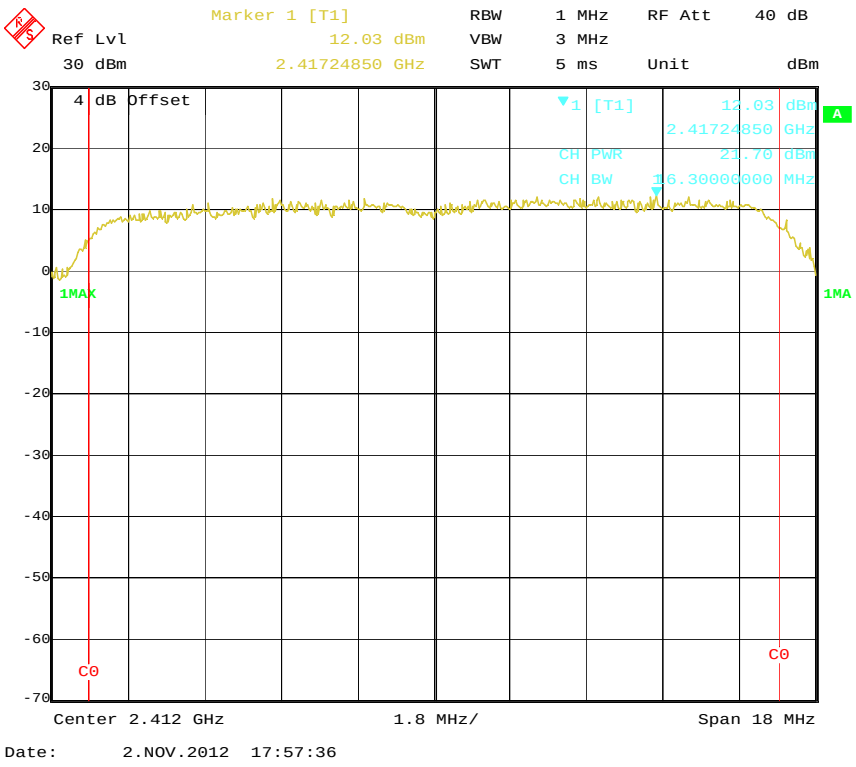
802.11b RF Output Power, High Channel, Antenna 0



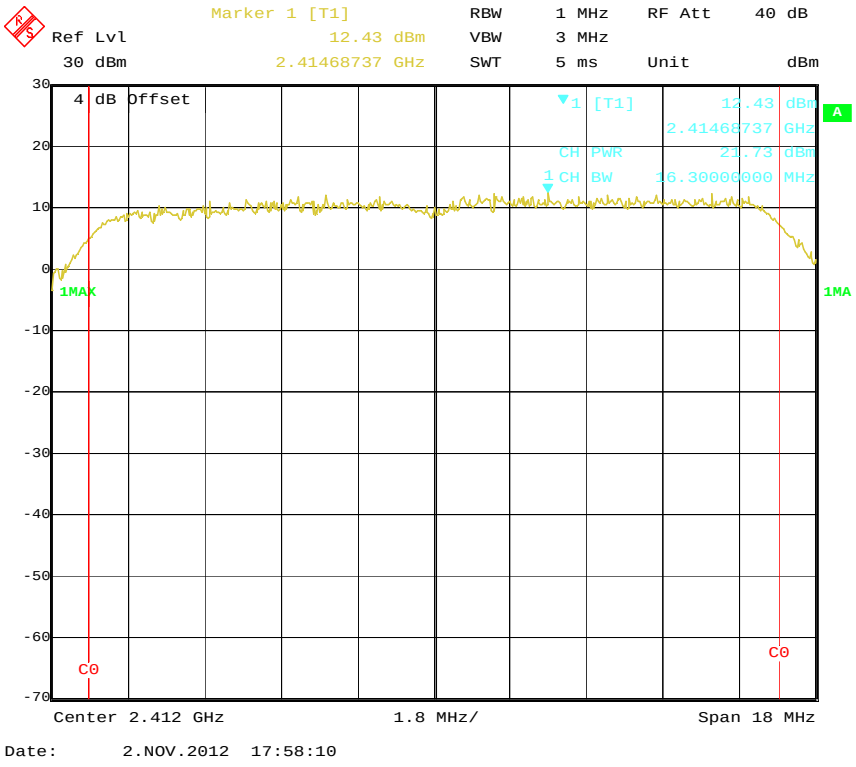
802.11b RF Output Power, High Channel, Antenna 1



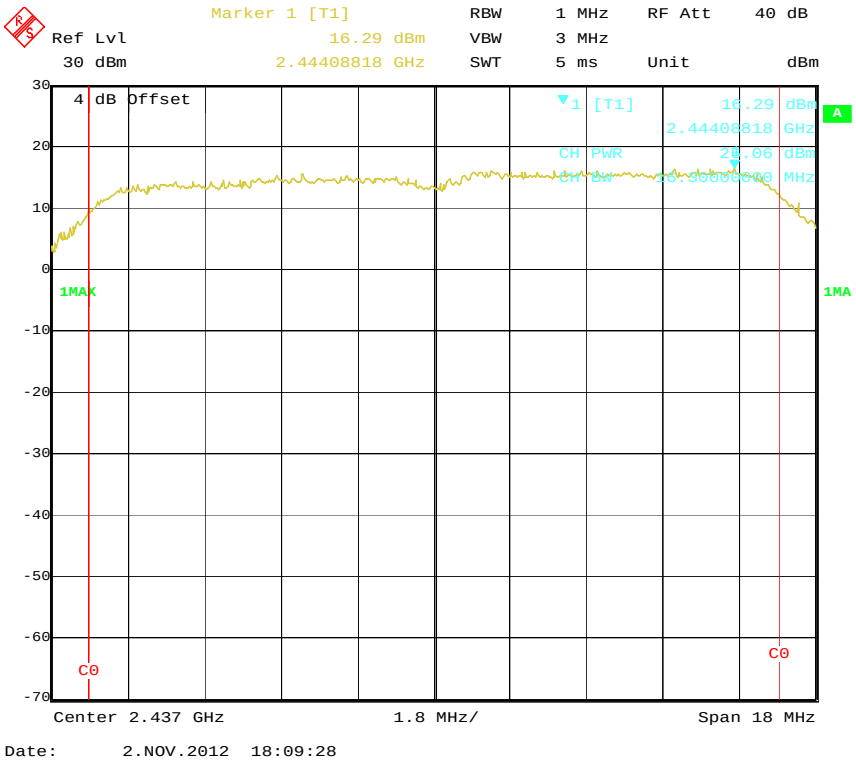
802.11g RF Output Power, Low Channel, Antenna 0



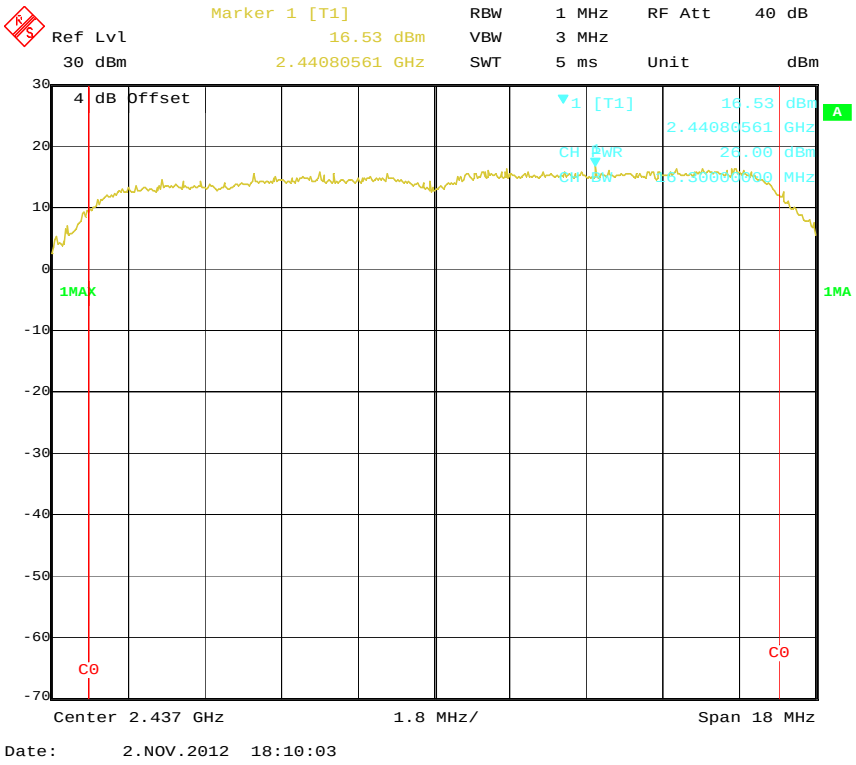
802.11g RF Output Power, Low Channel, Antenna 1



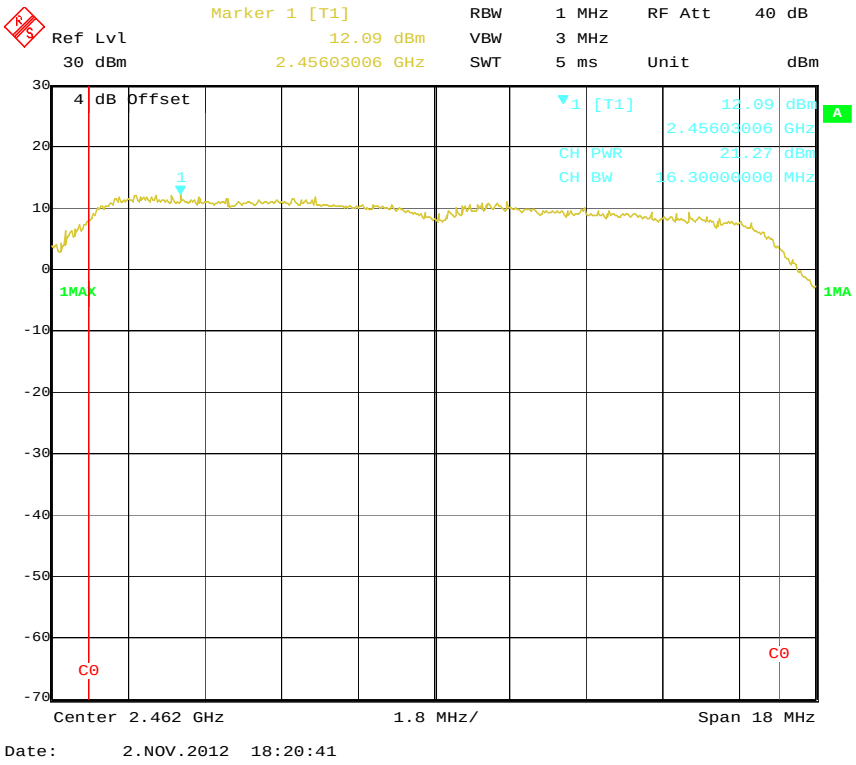
802.11g RF Output Power, Middle Channel, Antenna 0



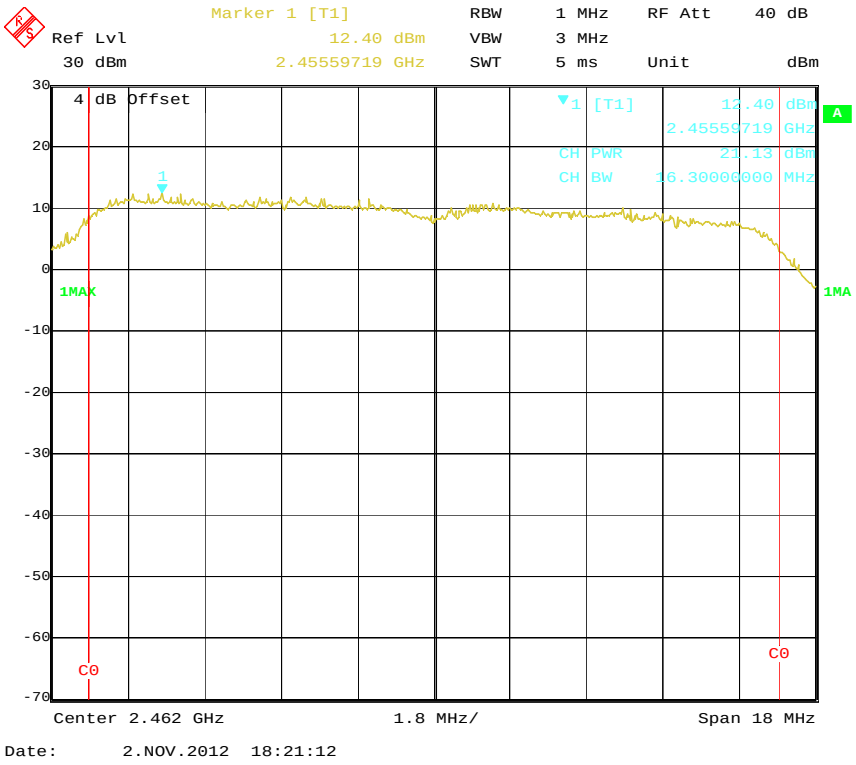
802.11g RF Output Power, Middle Channel, Antenna 1



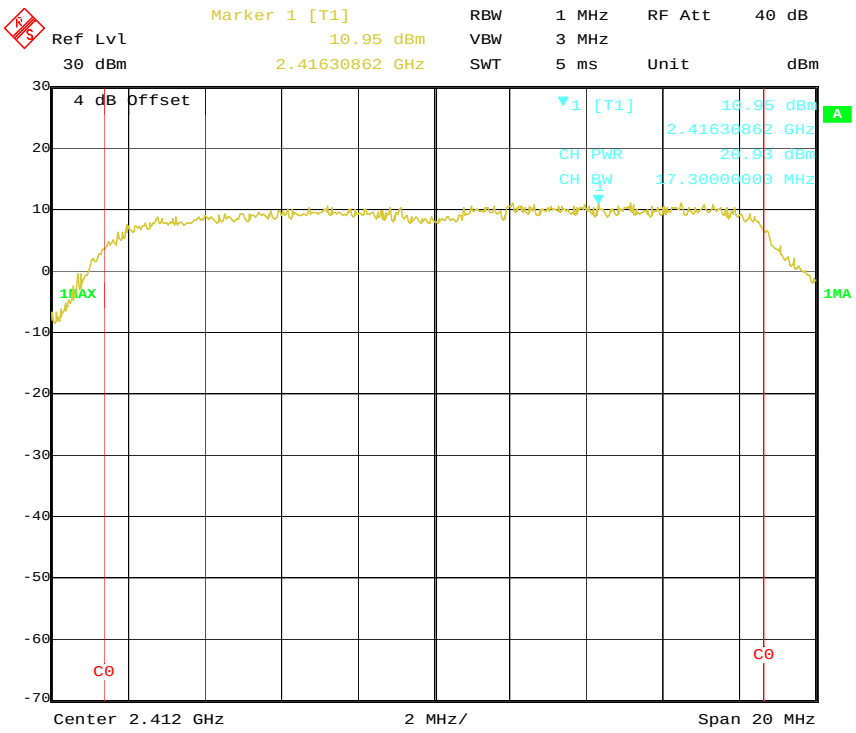
802.11g RF Output Power, High Channel, Antenna 0



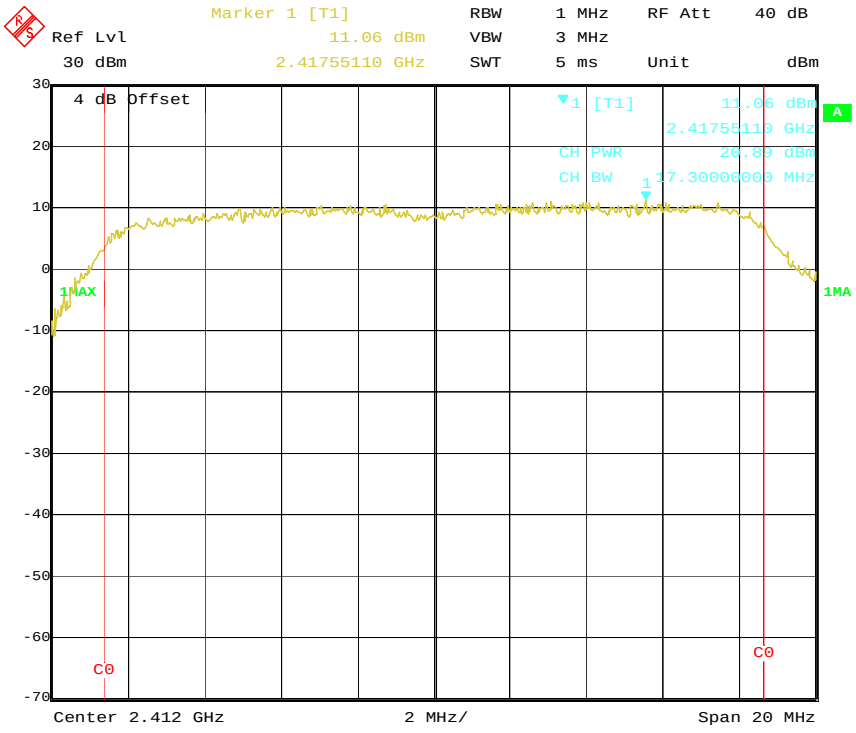
802.11g RF Output Power, High Channel, Antenna 1



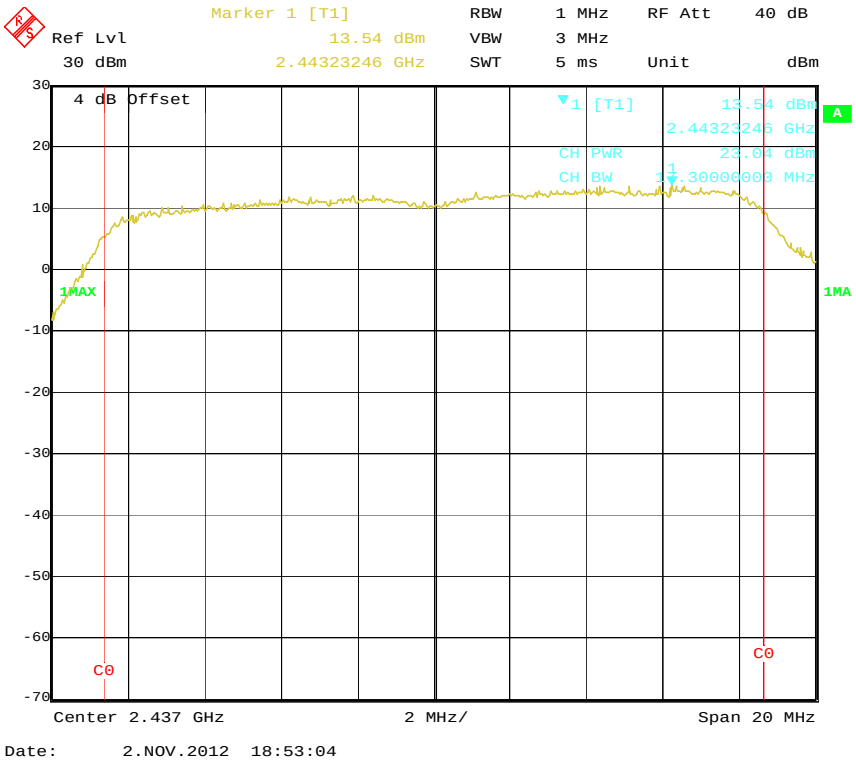
802.11n-HT20 RF Output Power, Low Channel, Antenna 0



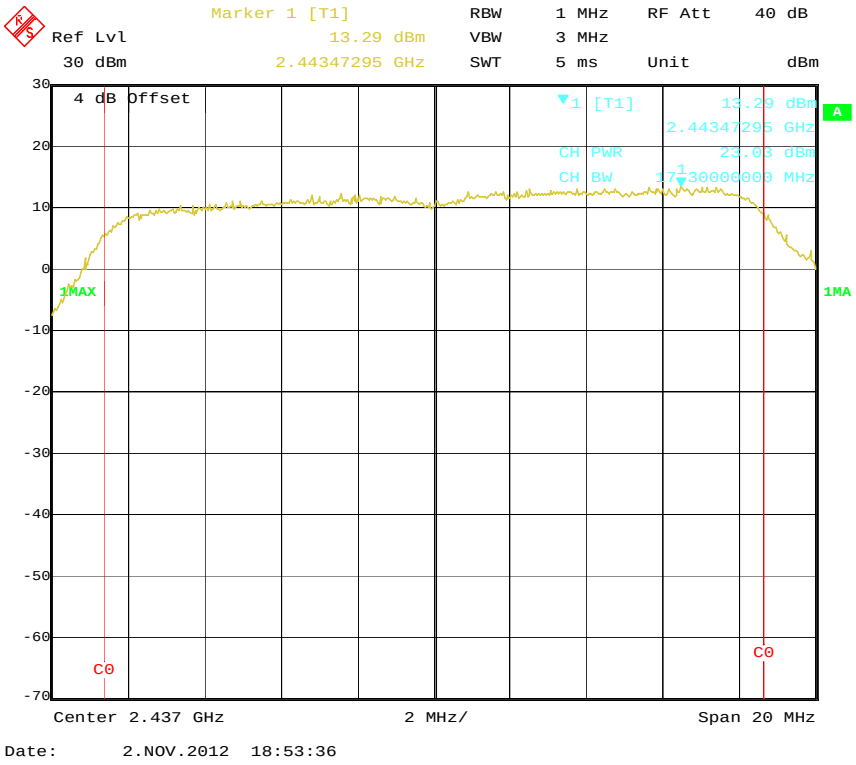
802.11n-HT20 RF Output Power, Low Channel, Antenna 1



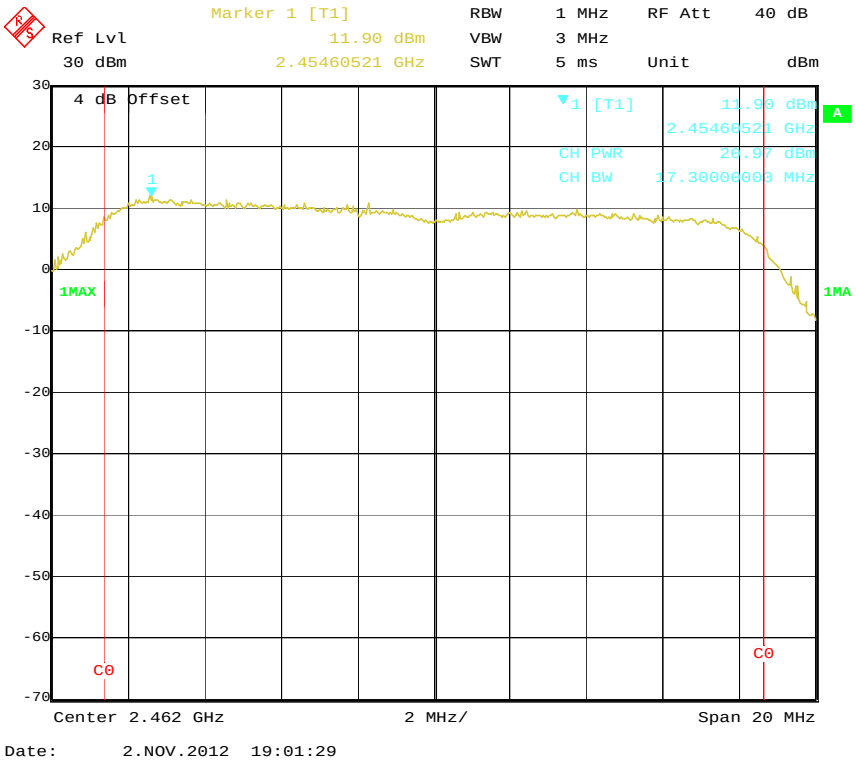
802.11n-HT20 RF Output Power, Middle Channel, Antenna 0



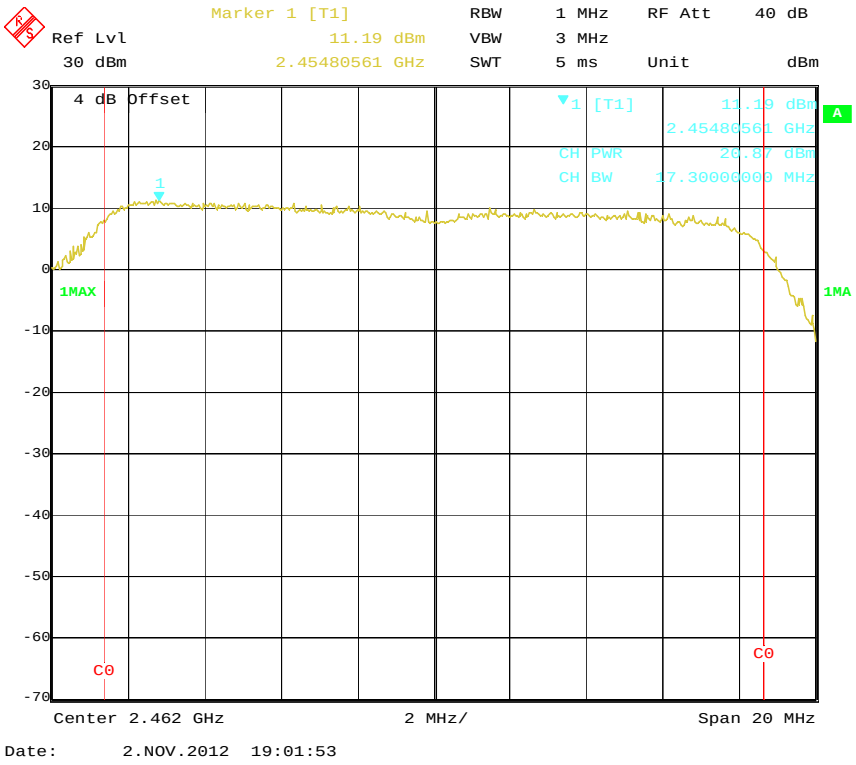
802.11n-HT20 RF Output Power, Middle Channel, Antenna 1



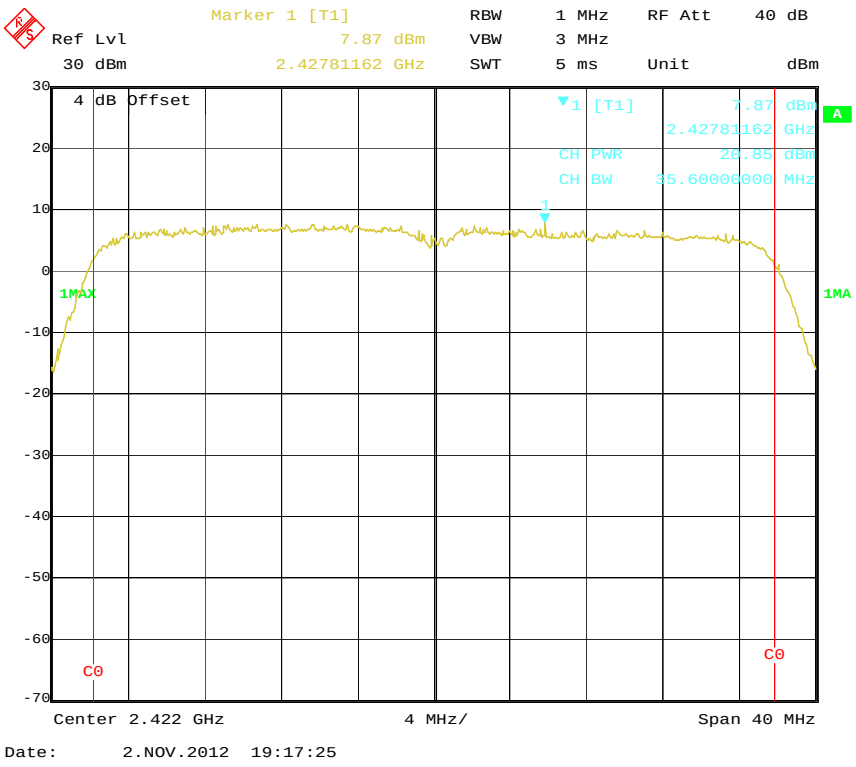
802.11n-HT20 RF Output Power, High Channel, Antenna 0



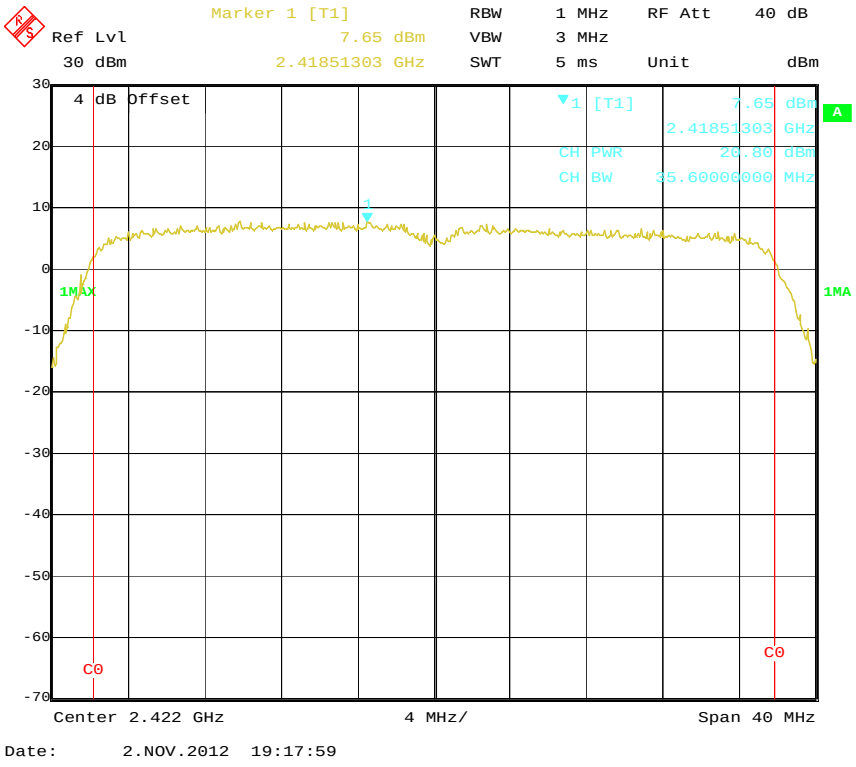
802.11n-HT20 RF Output Power, High Channel, Antenna 1



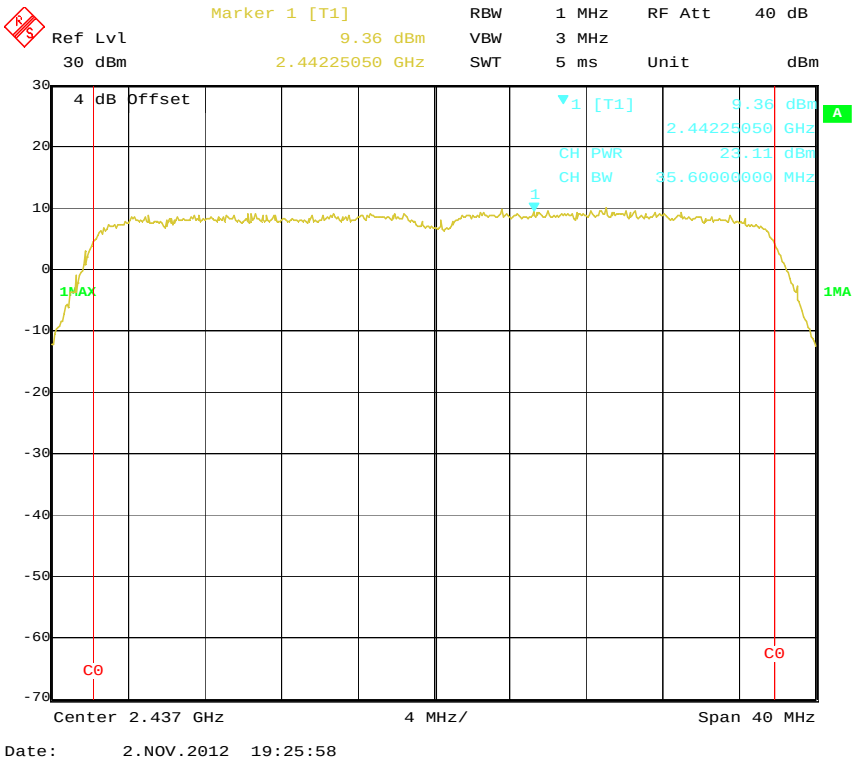
802.11n-HT40 RF Output Power, Low Channel, Antenna 0



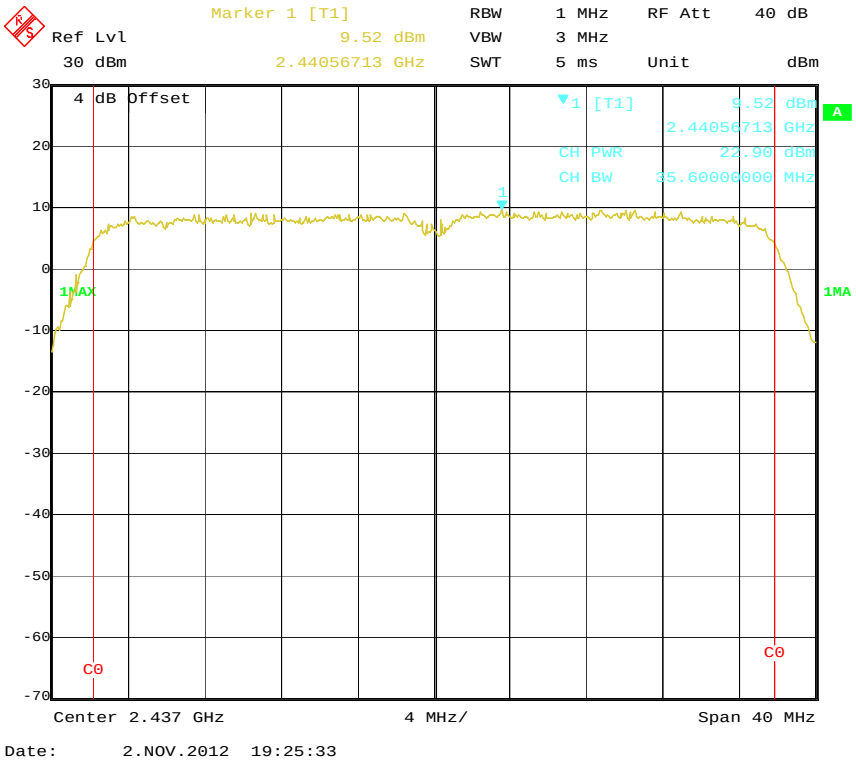
802.11n-HT40 RF Output Power, Low Channel, Antenna 1



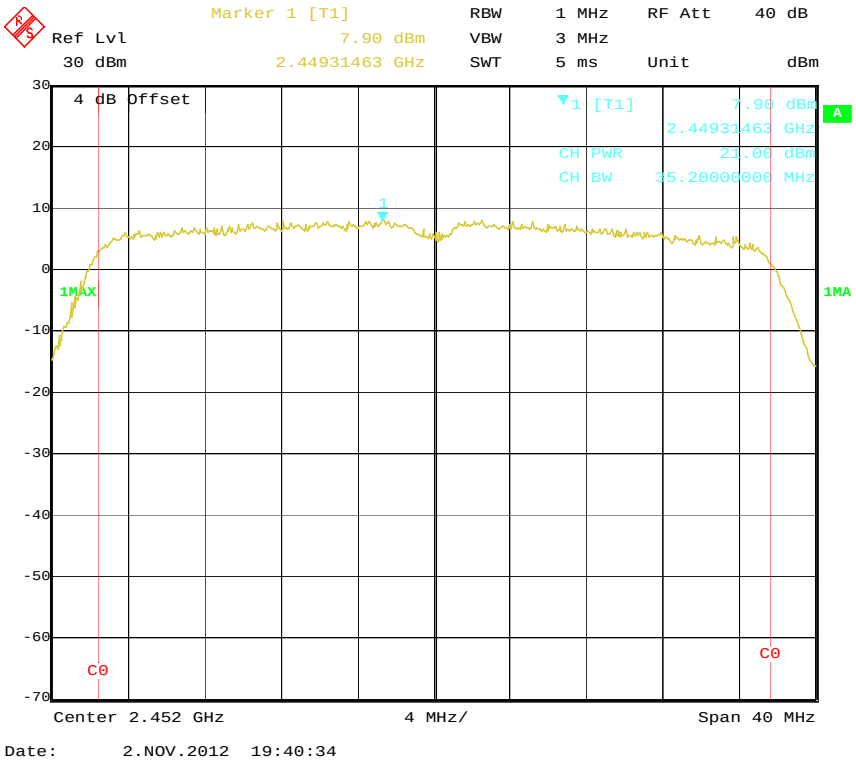
802.11n-HT40 RF Output Power, Middle Channel, Antenna 0



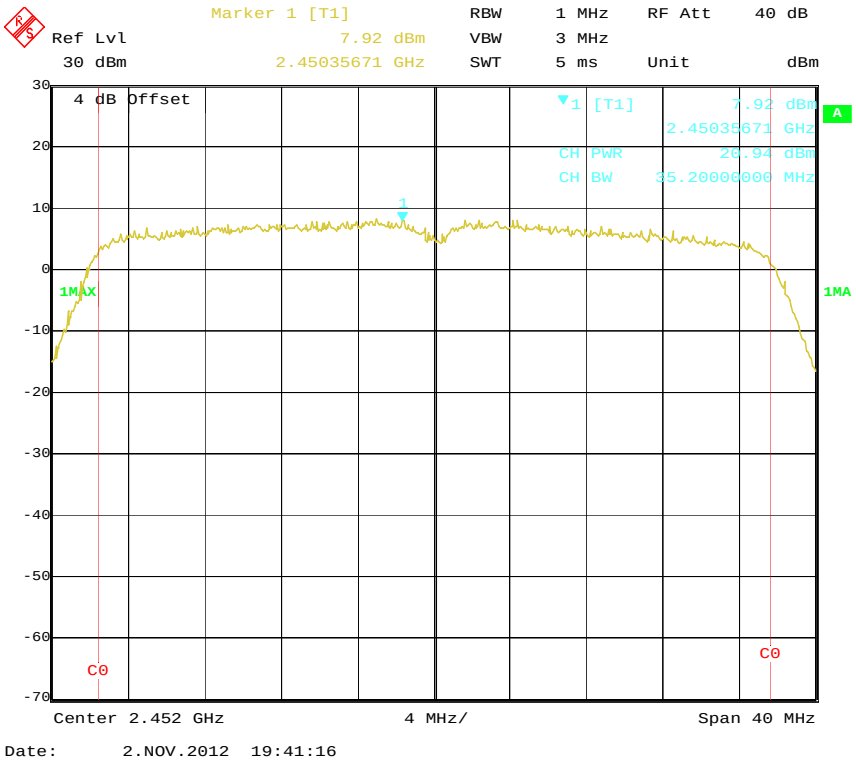
802.11n-HT40 RF Output Power, Middle Channel, Antenna 1



802.11n-HT40 RF Output Power, High Channel, Antenna 0



802.11n-HT40 RF Output Power, High Channel, Antenna 1



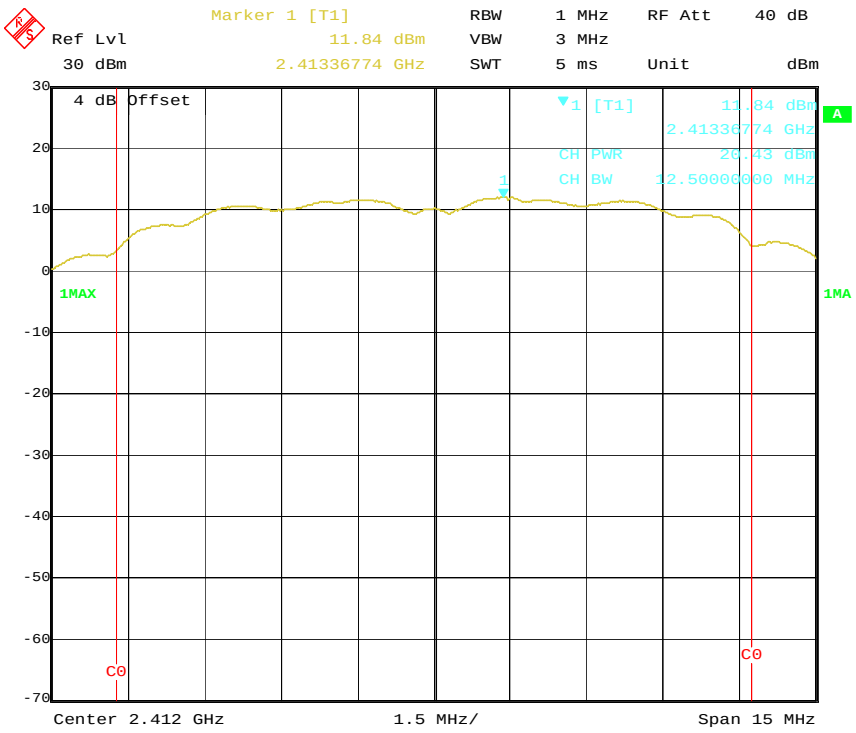
16dBi Gain Directional antenna

Channel	Frequency (MHz)	Antenna Port	Output Power (dBm)		Limit (dBm)
802.11b mode					
Low	2412	0	20.43		26
		1	20.37		
Middle	2437	0	25.08		26
		1	24.90		
High	2462	0	19.70		26
		1	19.59		
802.11g mode					
Low	2412	0	20.43		26
		1	20.36		
Middle	2437	0	25.11		26
		1	25.07		
High	2462	0	20.41		26
		1	20.38		
802.11n-HT20 mode					
Low	2412	0	19.96	22.96	26
		1	19.93		
Middle	2437	0	22.07	25.05	26
		1	22.00		
High	2462	0	19.84	22.83	26
		1	19.80		
802.11n-HT40 mode					
Low	2422	0	19.83	22.81	26
		1	19.77		
Middle	2437	0	22.12	25.09	26
		1	22.03		
High	2452	0	20.04	22.92	26
		1	19.78		

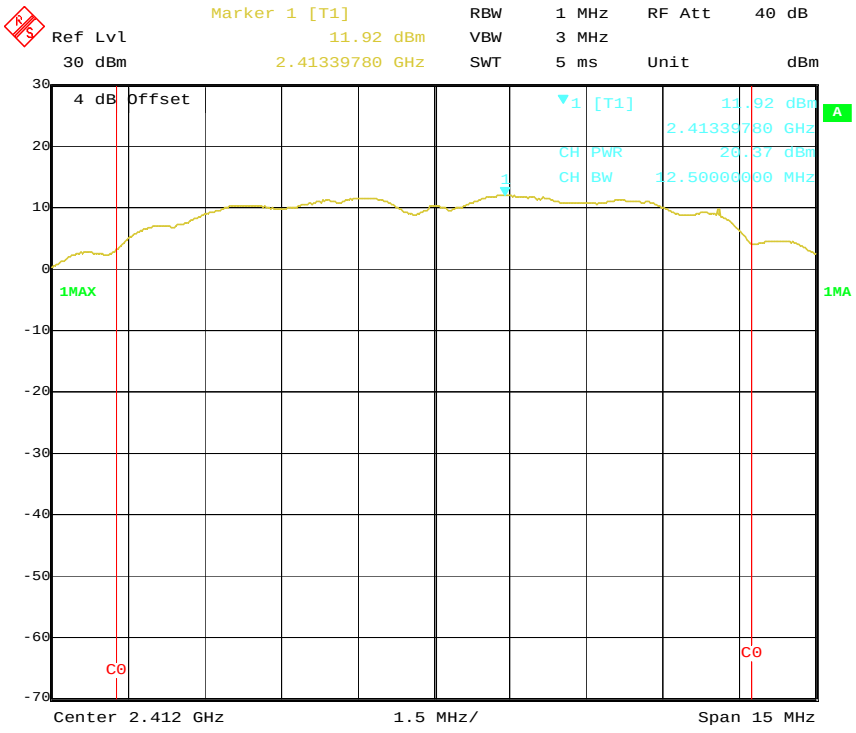
Note:

According with FCC 15.247 (c) (1) (i), the limit of the maximum conducted output power is 26 dBm

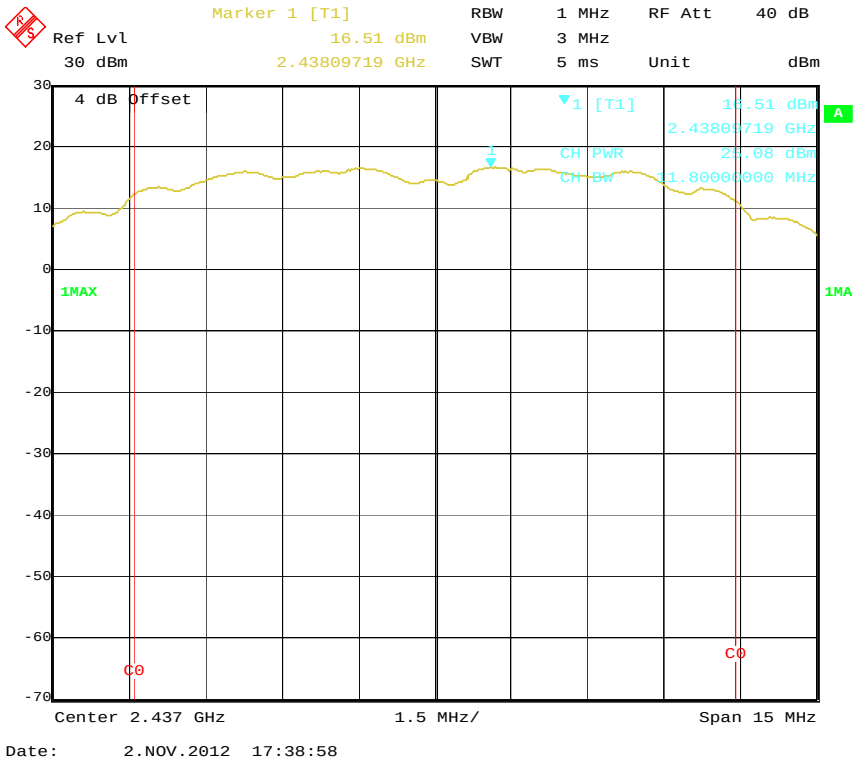
802.11b RF Output Power, Low Channel, Antenna 0



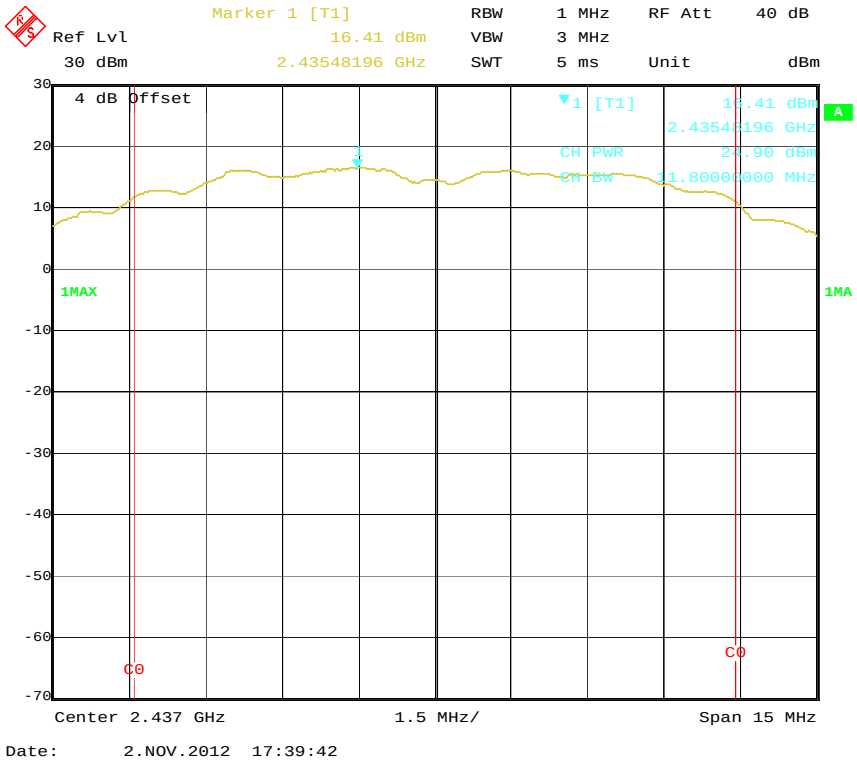
802.11b RF Output Power, Low Channel, Antenna 1



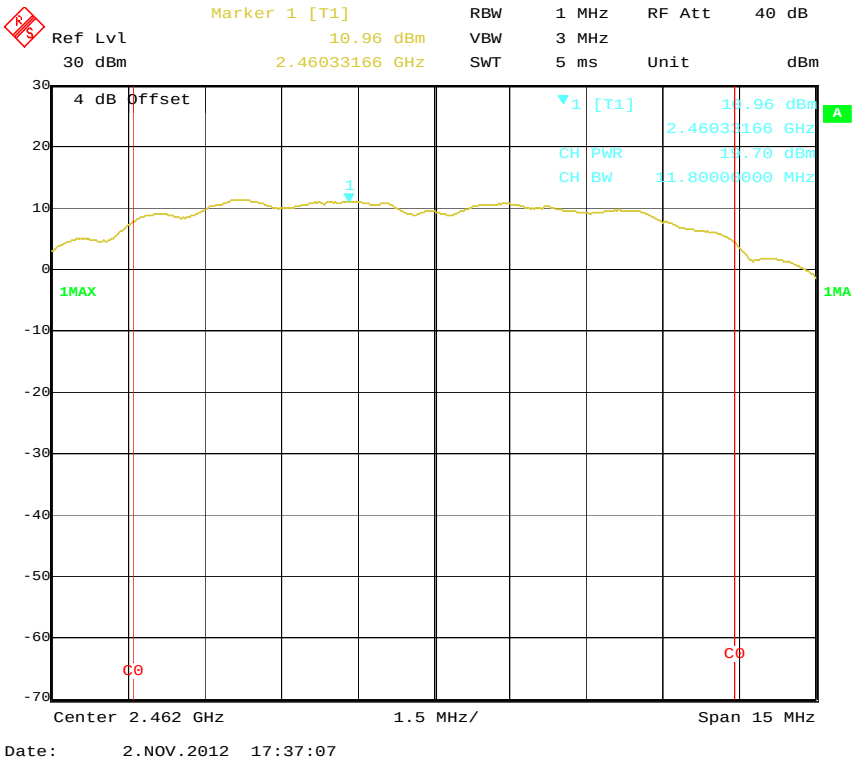
802.11b RF Output Power, Middle Channel, Antenna 0



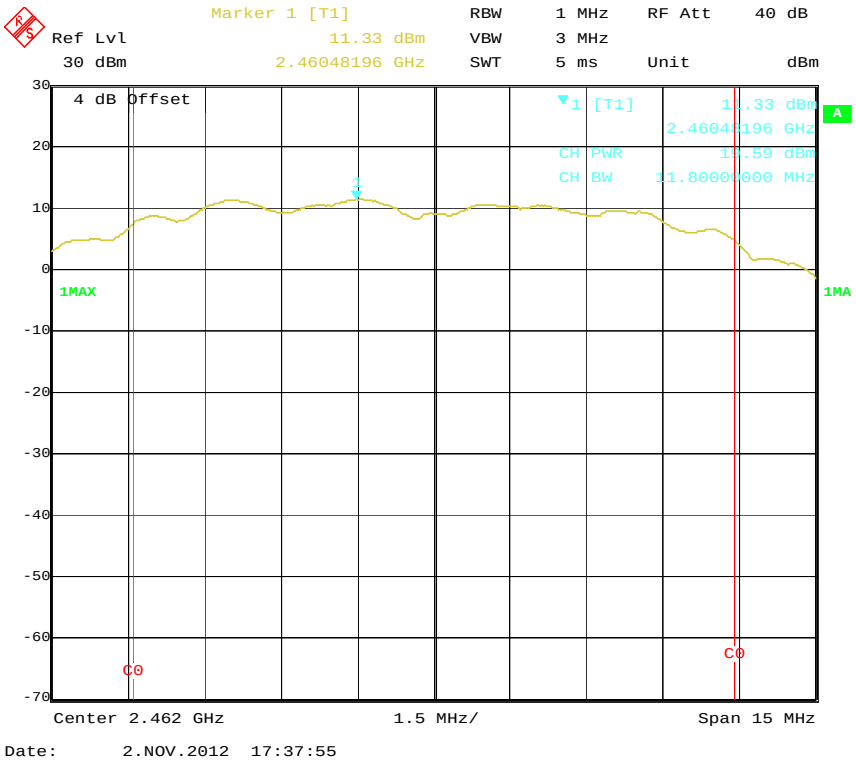
802.11b RF Output Power, Middle Channel, Antenna 1



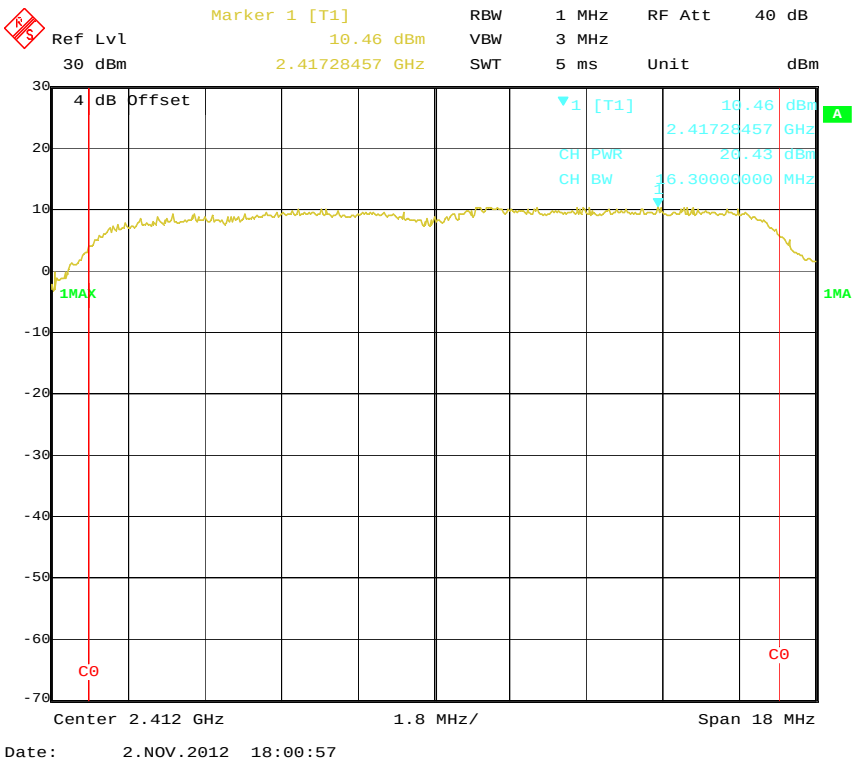
802.11b RF Output Power, High Channel, Antenna 0



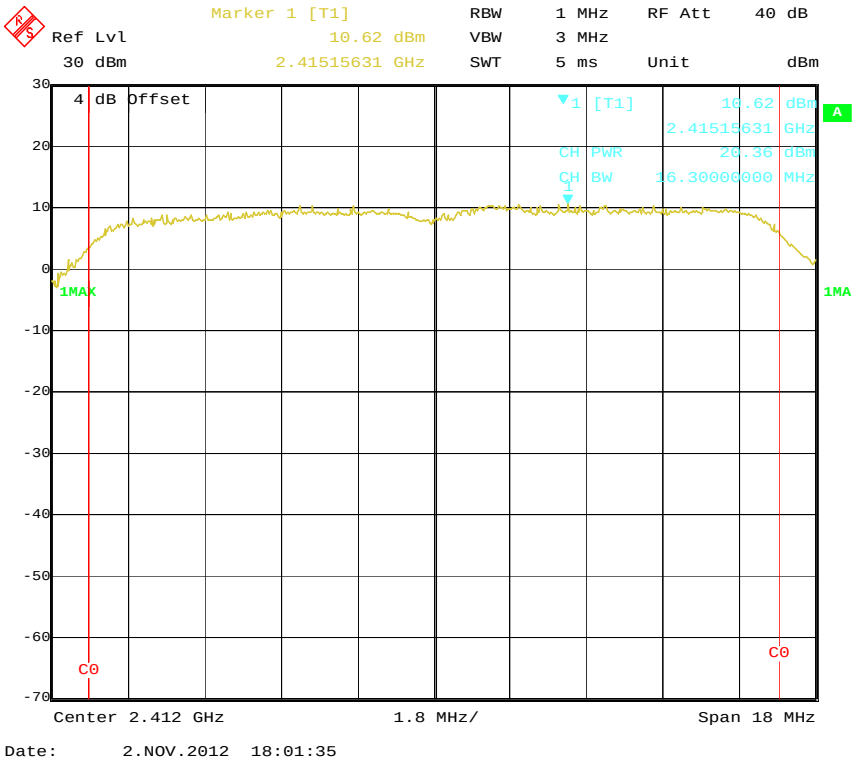
802.11b RF Output Power, High Channel, Antenna 1



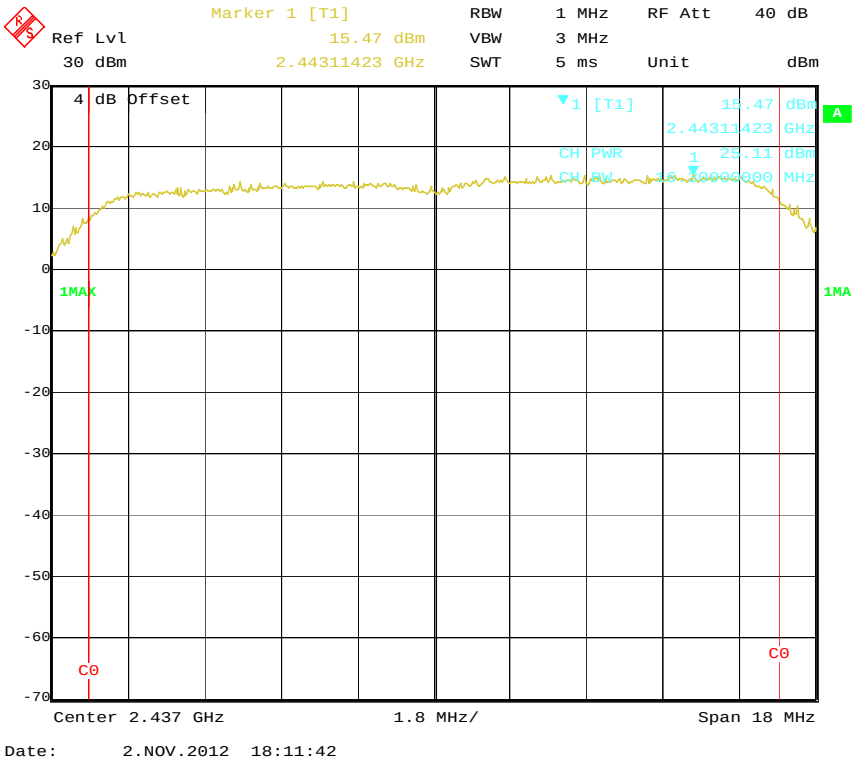
802.11g RF Output Power, Low Channel, Antenna 0



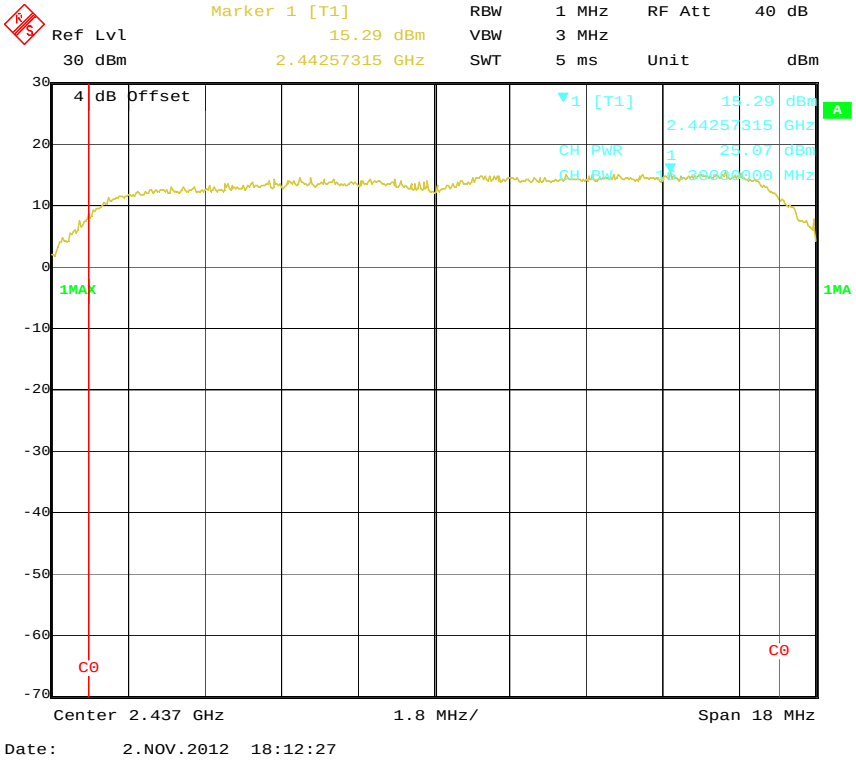
802.11g RF Output Power, Low Channel, Antenna 1



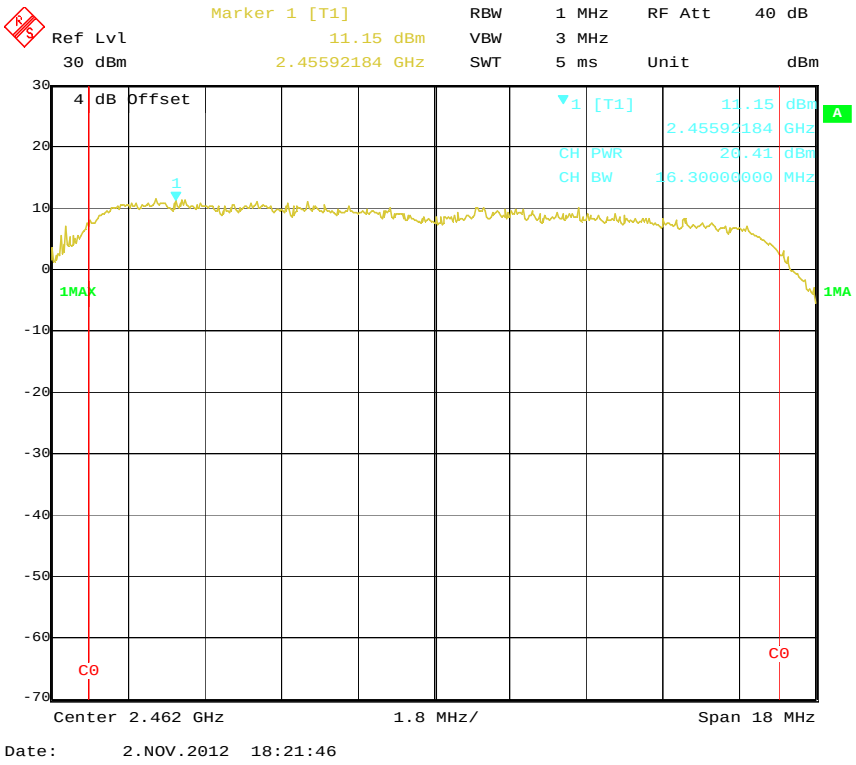
802.11g RF Output Power, Middle Channel, Antenna 0



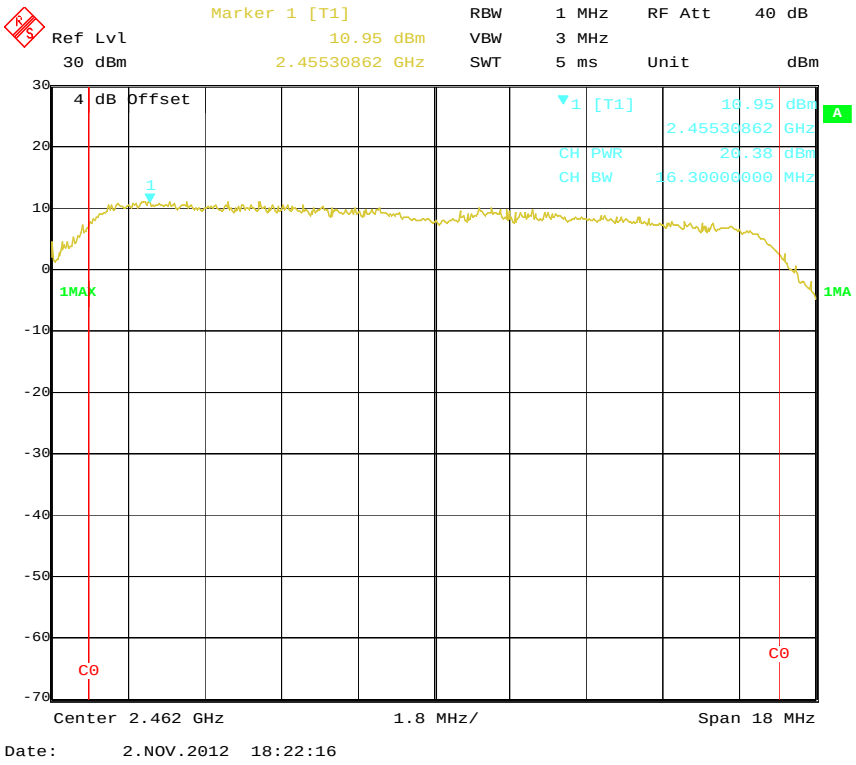
802.11g RF Output Power, Middle Channel, Antenna 1



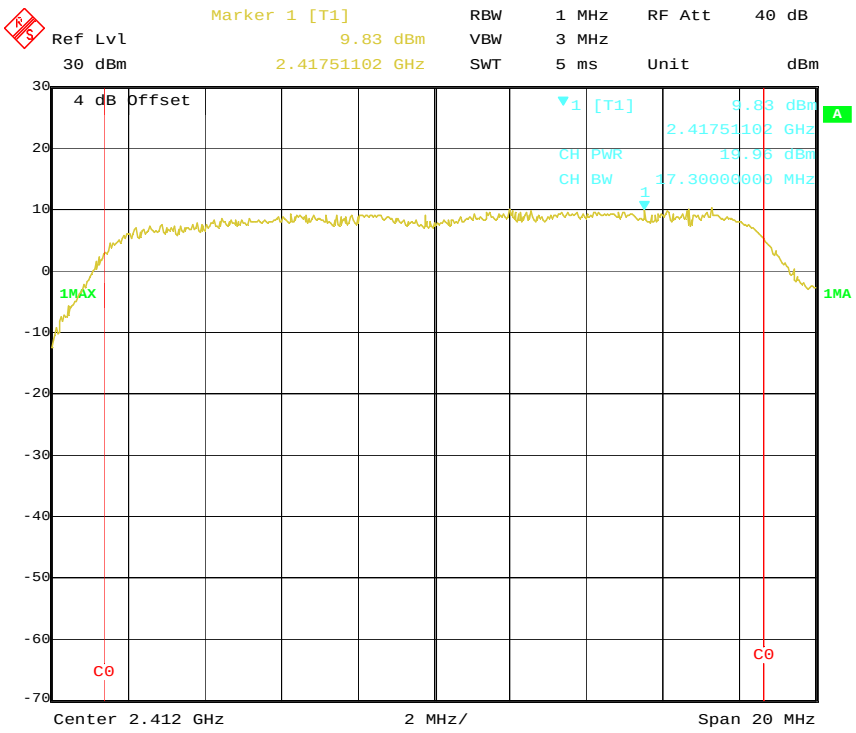
802.11g RF Output Power, High Channel, Antenna 0



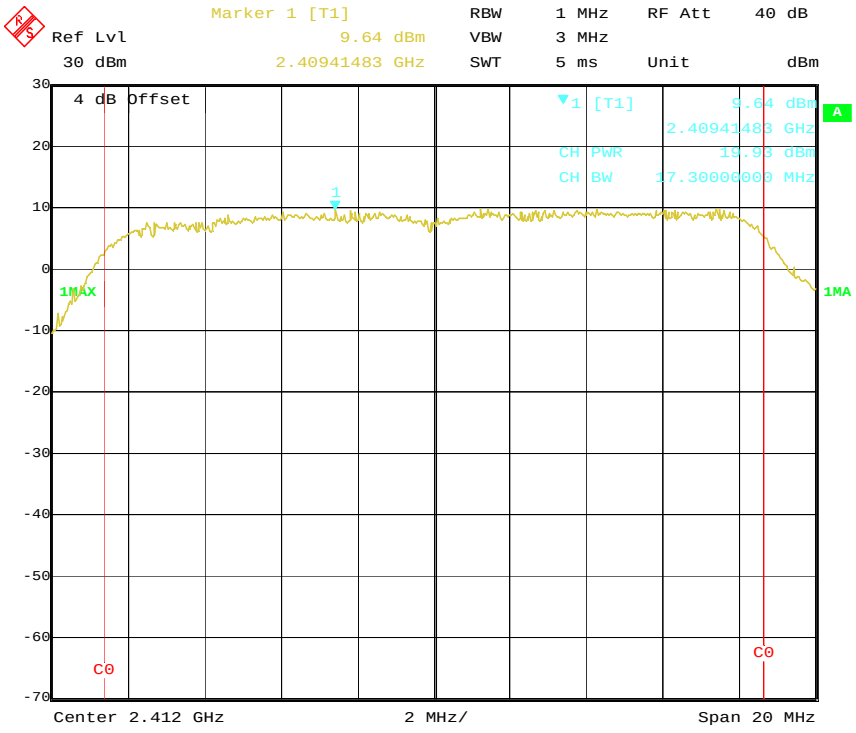
802.11g RF Output Power, High Channel, Antenna 1



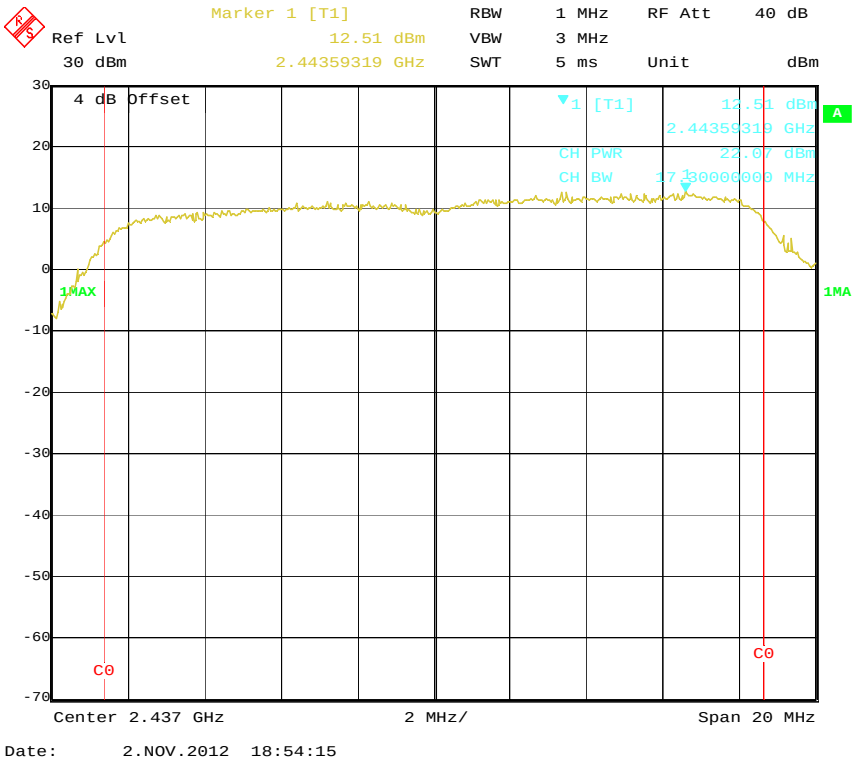
802.11n-HT20 RF Output Power, Low Channel, Antenna 0



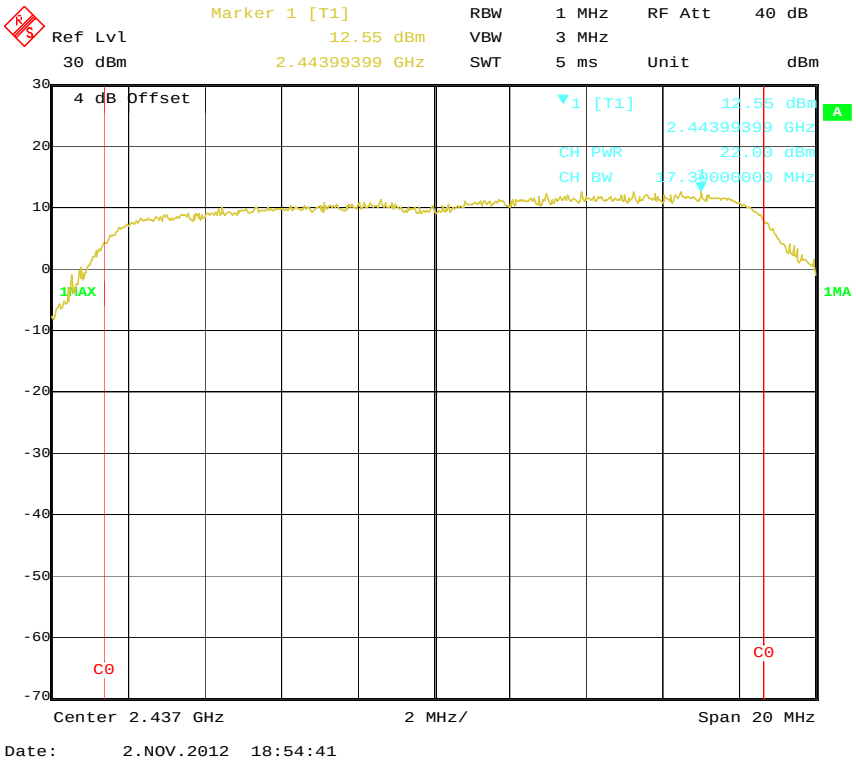
802.11n-HT20 RF Output Power, Low Channel, Antenna 1



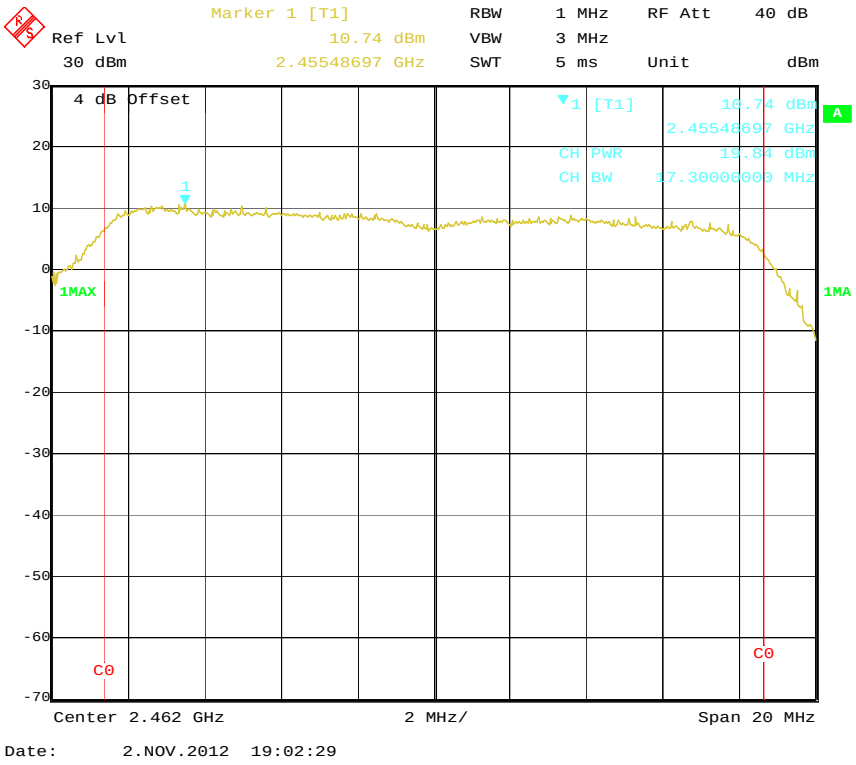
802.11n-HT20 RF Output Power, Middle Channel, Antenna 0



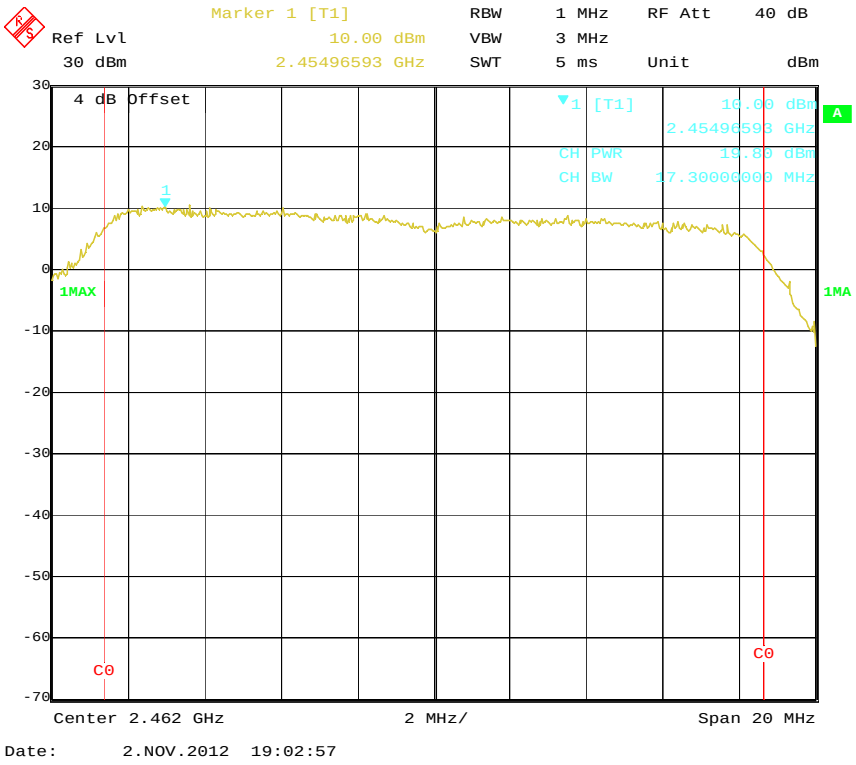
802.11n-HT20 RF Output Power, Middle Channel, Antenna 1



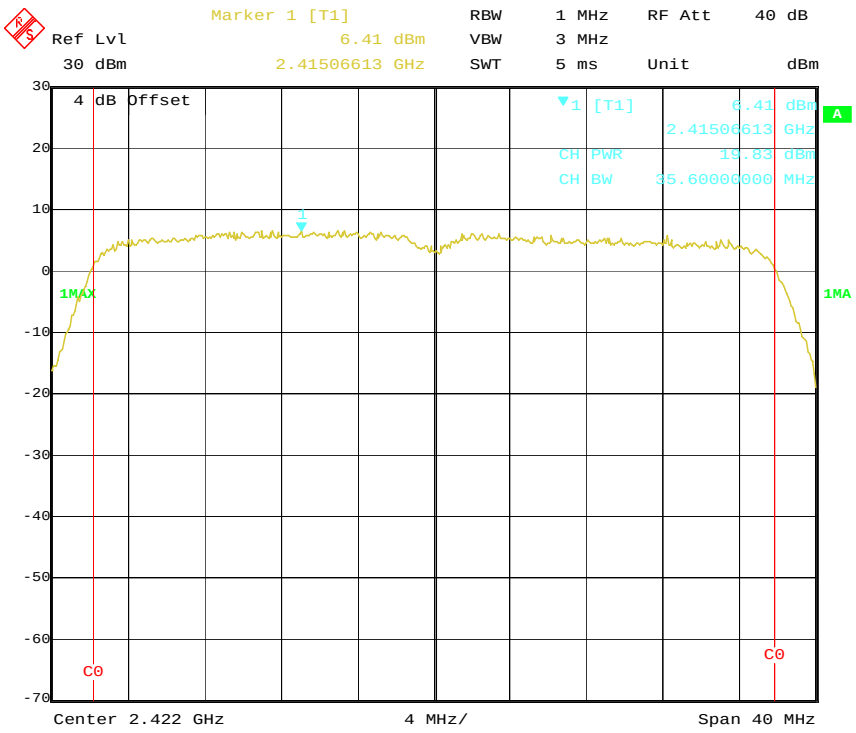
802.11n-HT20 RF Output Power, High Channel, Antenna 0



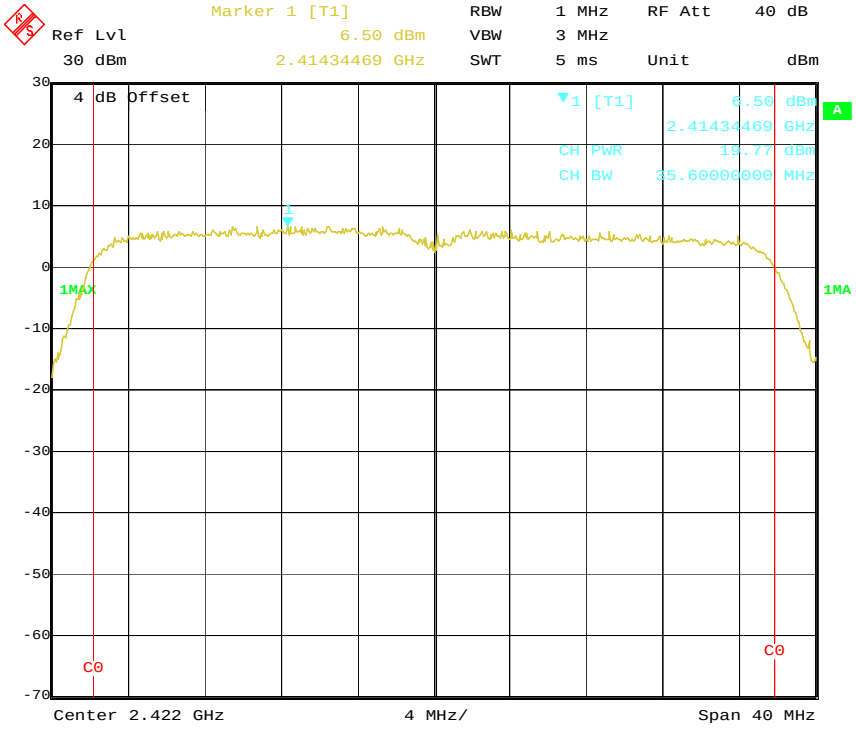
802.11n-HT20 RF Output Power, High Channel, Antenna 1



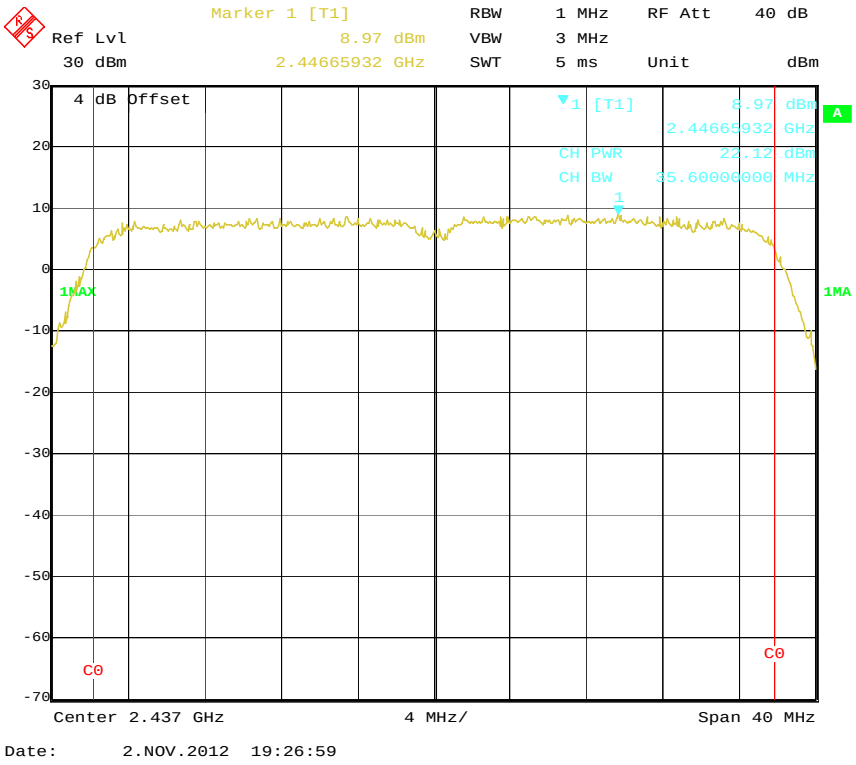
802.11n-HT40 RF Output Power, Low Channel, Antenna 0



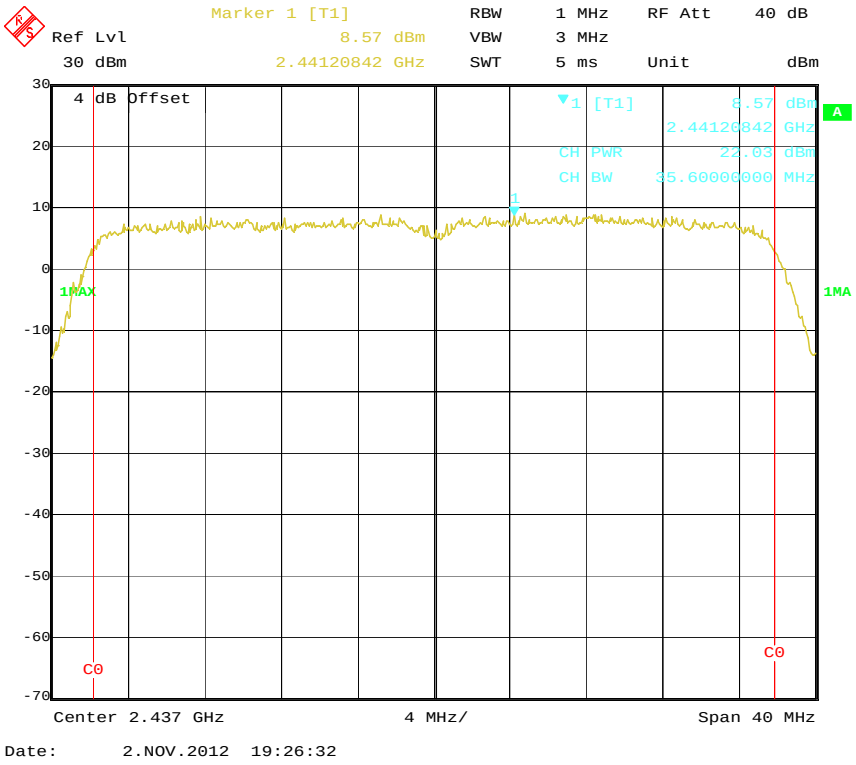
802.11n-HT40 RF Output Power, Low Channel, Antenna 1



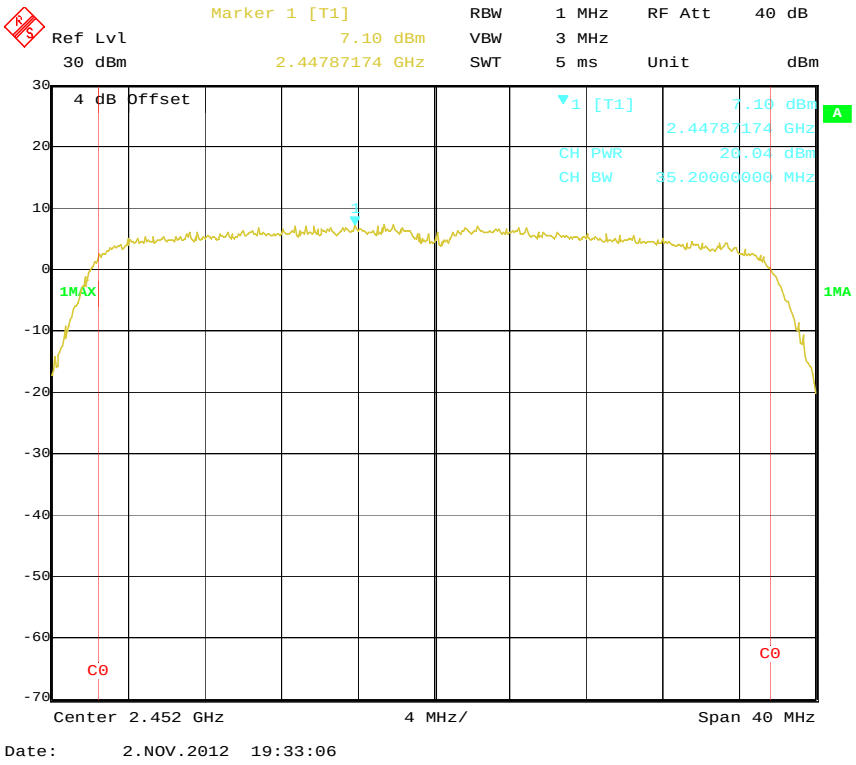
802.11n-HT40 RF Output Power, Middle Channel, Antenna 0



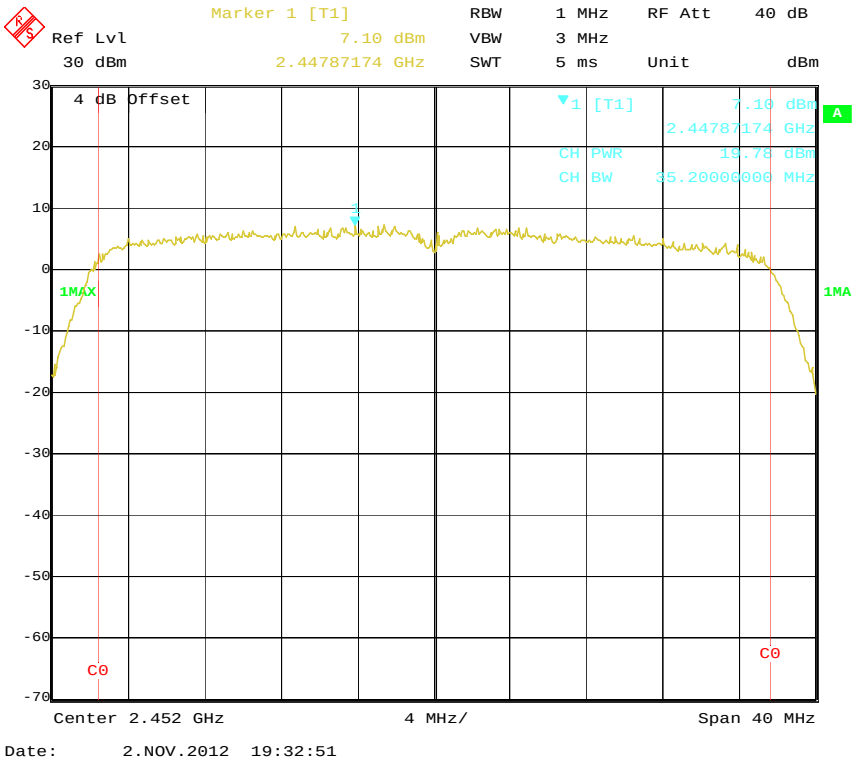
802.11n-HT40 RF Output Power, Middle Channel, Antenna 1



802.11n-HT40 RF Output Power, High Channel, Antenna 0



802.11n-HT40 RF Output Power, High Channel, Antenna 1



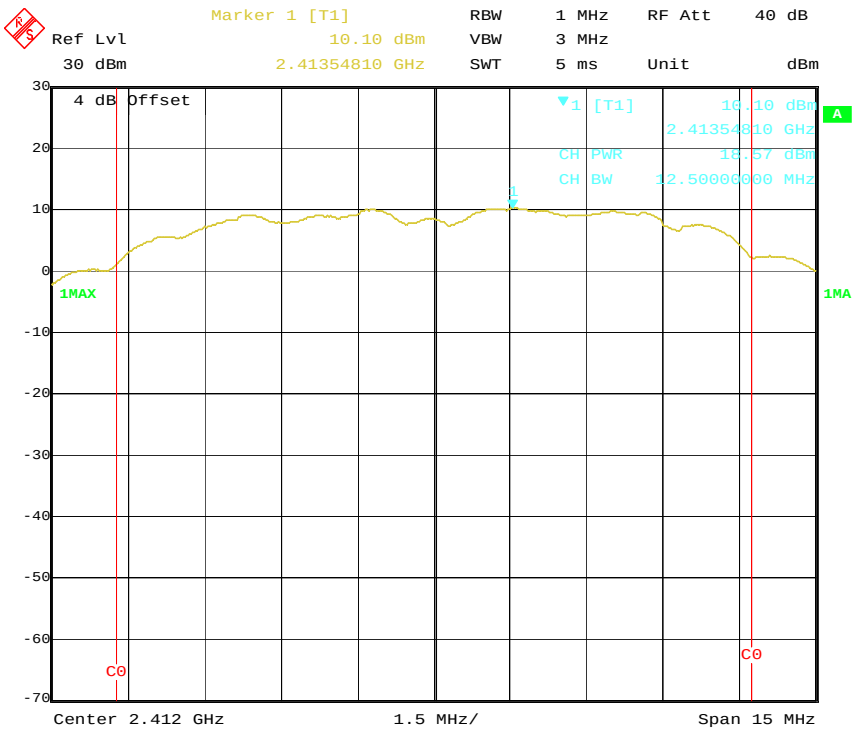
24dBi Gain Directional antenna

Channel	Frequency (MHz)	Antenna Port	Output Power (dBm)		Limit (dBm)
802.11b mode					
Low	2412	0	18.57		24
		1	18.45		
Middle	2437	0	23.18		24
		1	23.14		
High	2462	0	18.66		24
		1	18.37		
802.11g mode					
Low	2412	0	18.52		24
		1	18.54		
Middle	2437	0	23.13		24
		1	23.17		
High	2462	0	18.34		24
		1	18.34		
802.11n-HT20 mode					
Low	2412	0	17.92	20.88	24
		1	17.82		
Middle	2437	0	20.22	23.27	24
		1	20.30		
High	2462	0	18.10	21.14	24
		1	18.15		
802.11n-HT40 mode					
Low	2422	0	18.16	21.01	24
		1	17.84		
Middle	2437	0	20.24	23.22	24
		1	20.17		
High	2452	0	17.96	20.93	24
		1	17.87		

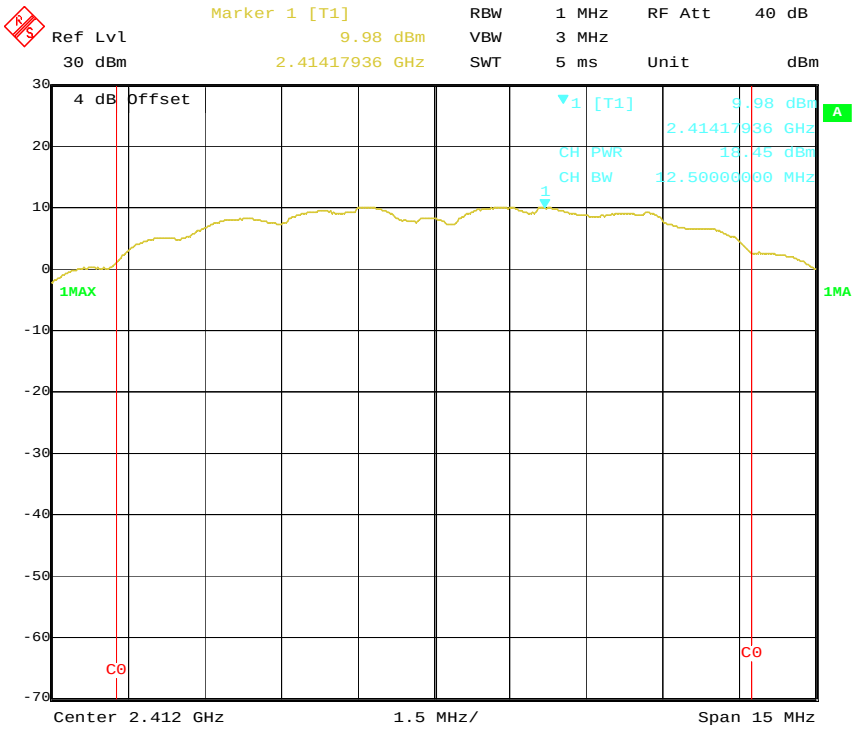
Note:

According with FCC 15.247 (c) (1) (i), the limit of the maximum conducted output power is 24 dBm

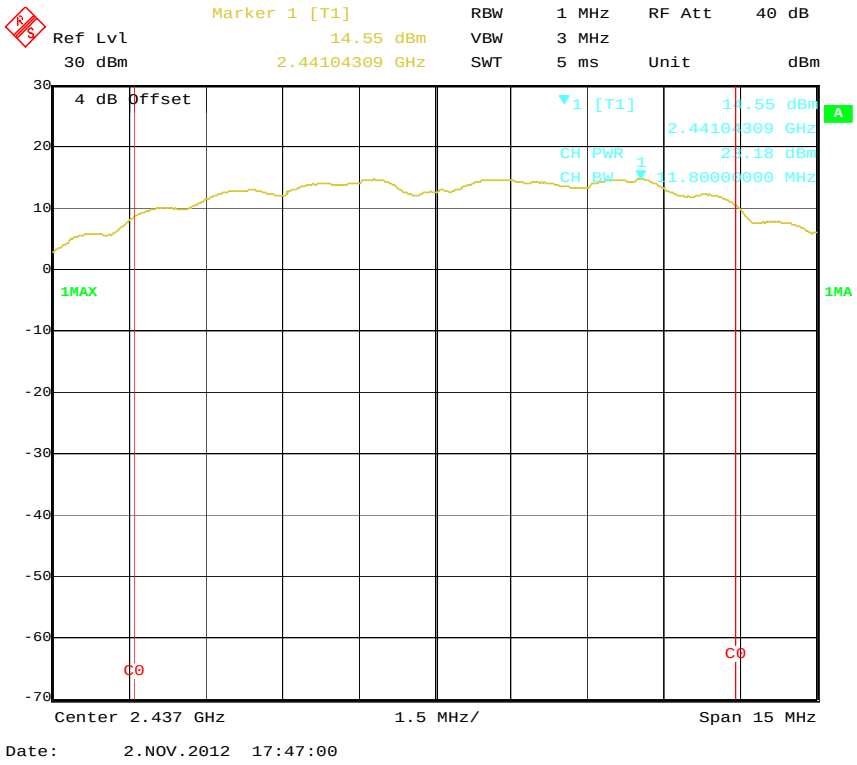
802.11b RF Output Power, Low Channel, Antenna 0



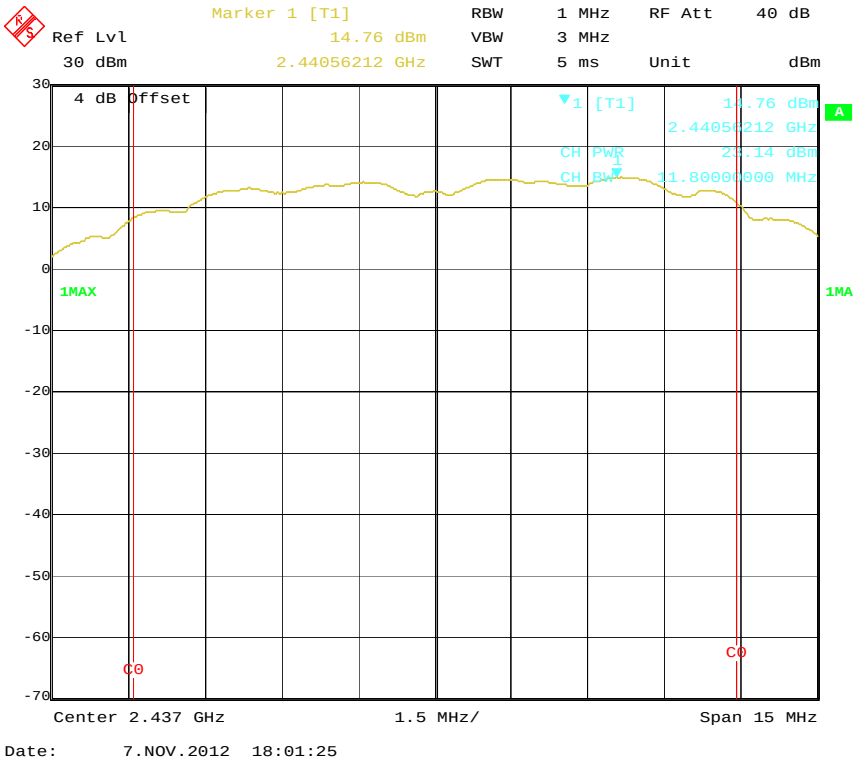
802.11b RF Output Power, Low Channel, Antenna 1



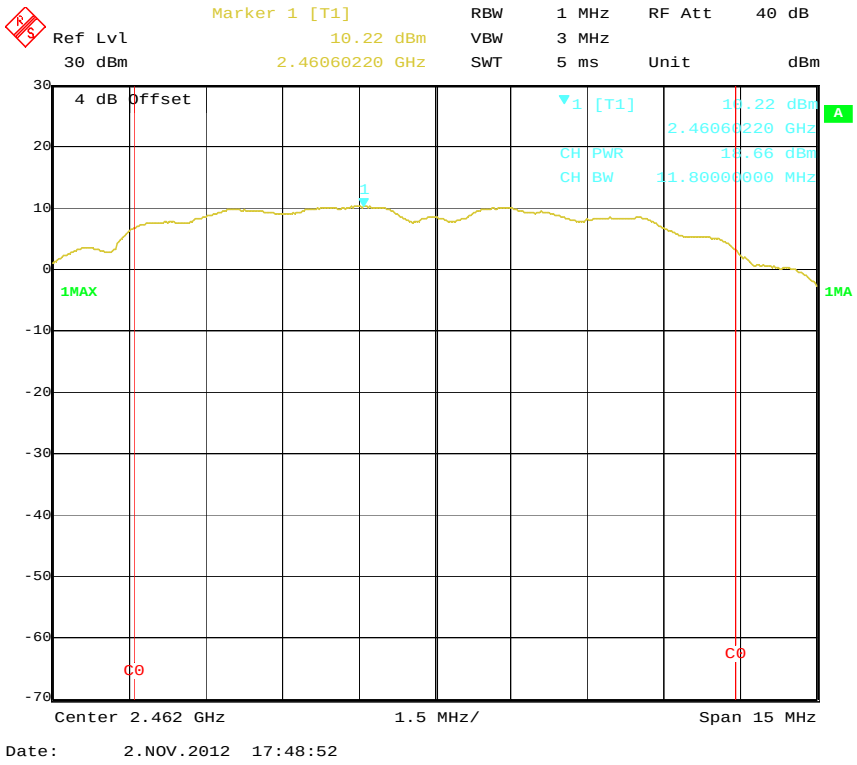
802.11b RF Output Power, Middle Channel, Antenna 0



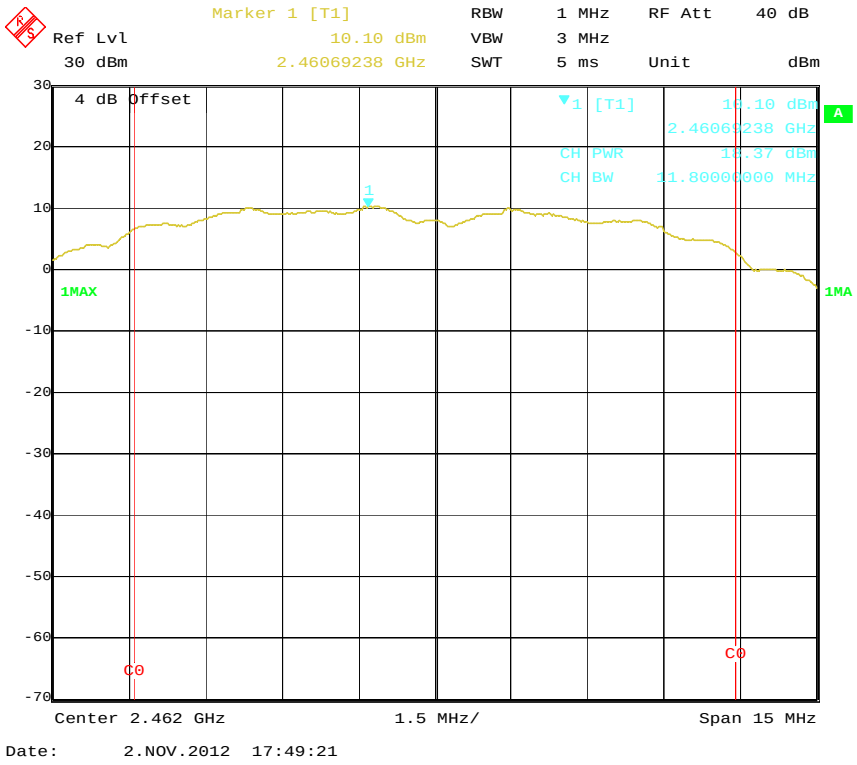
802.11b RF Output Power, Middle Channel, Antenna 1



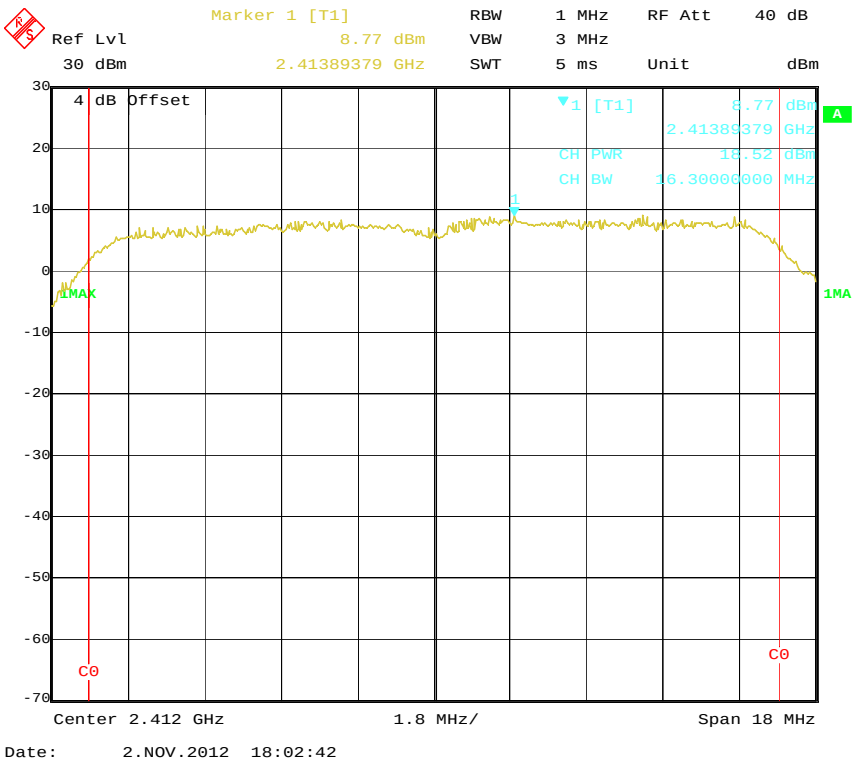
802.11b RF Output Power, High Channel, Antenna 0



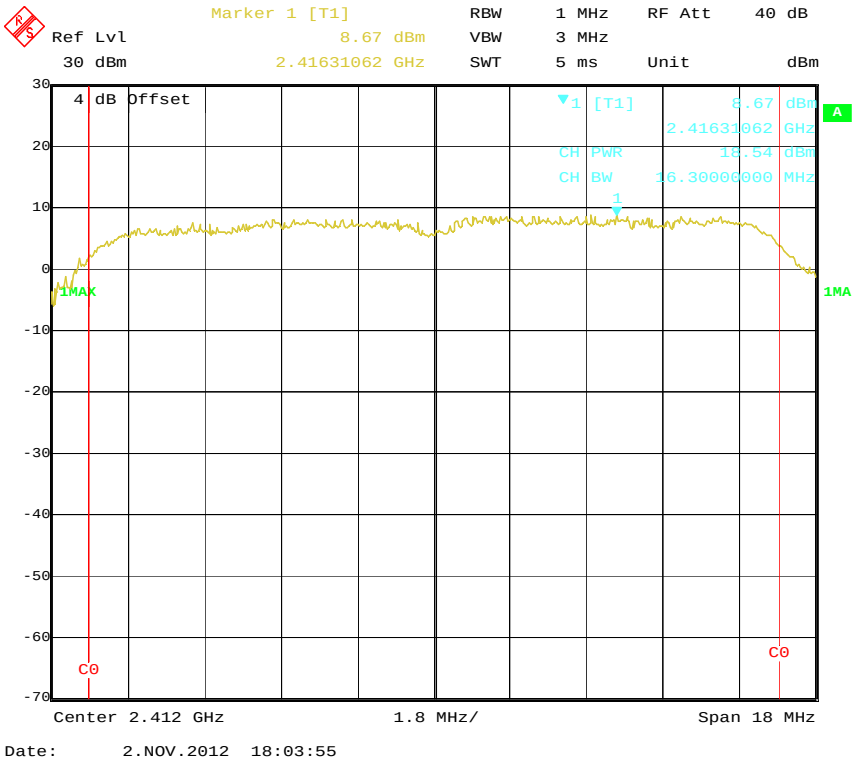
802.11b RF Output Power, High Channel, Antenna 1



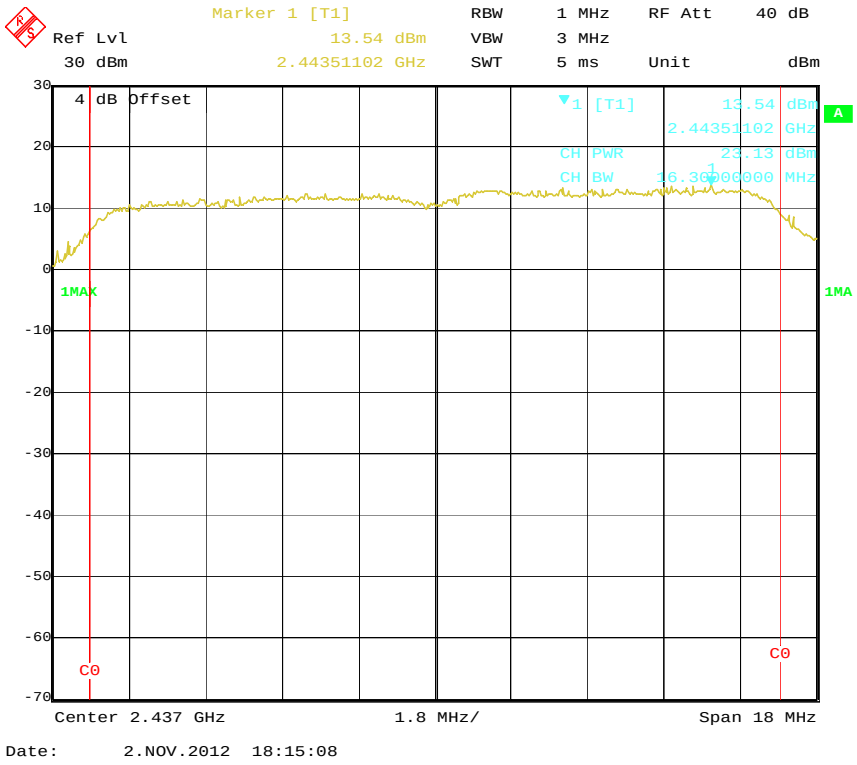
802.11g RF Output Power, Low Channel, Antenna 0



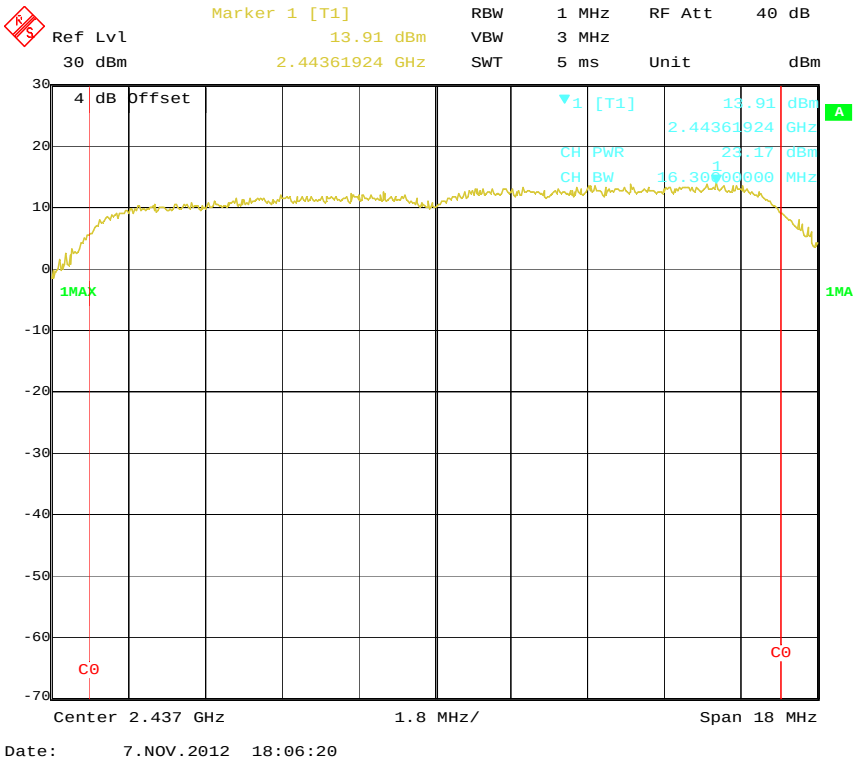
802.11g RF Output Power, Low Channel, Antenna 1



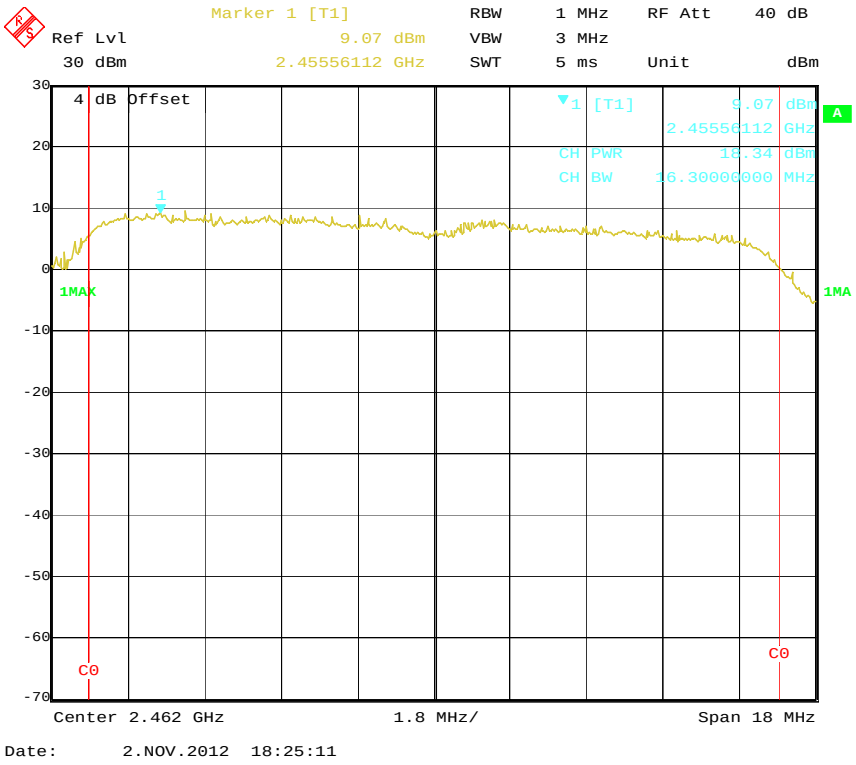
802.11g RF Output Power, Middle Channel, Antenna 0



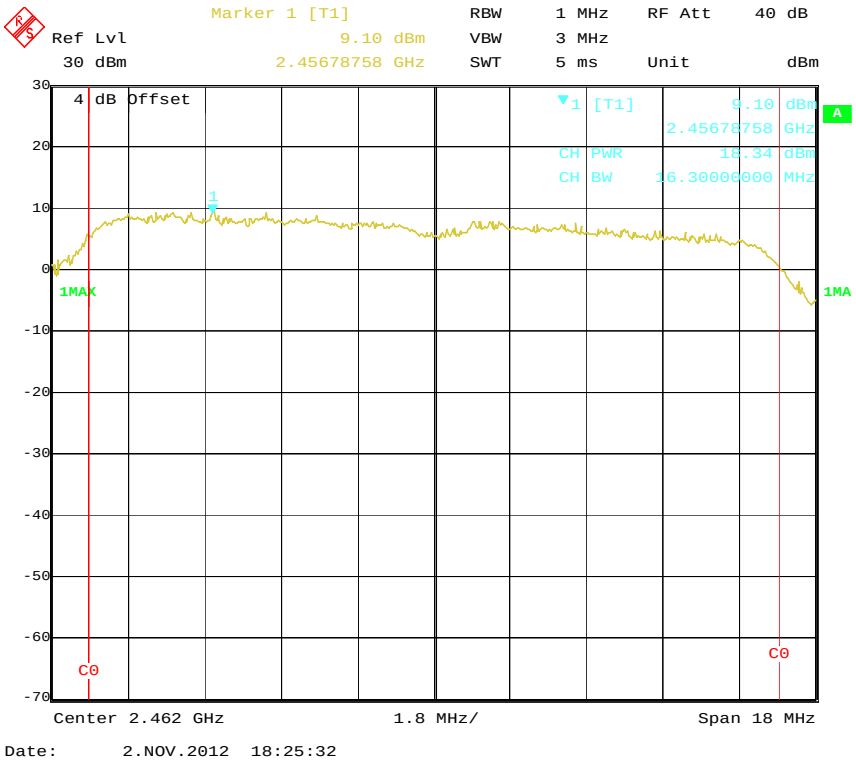
802.11g RF Output Power, Middle Channel, Antenna 1



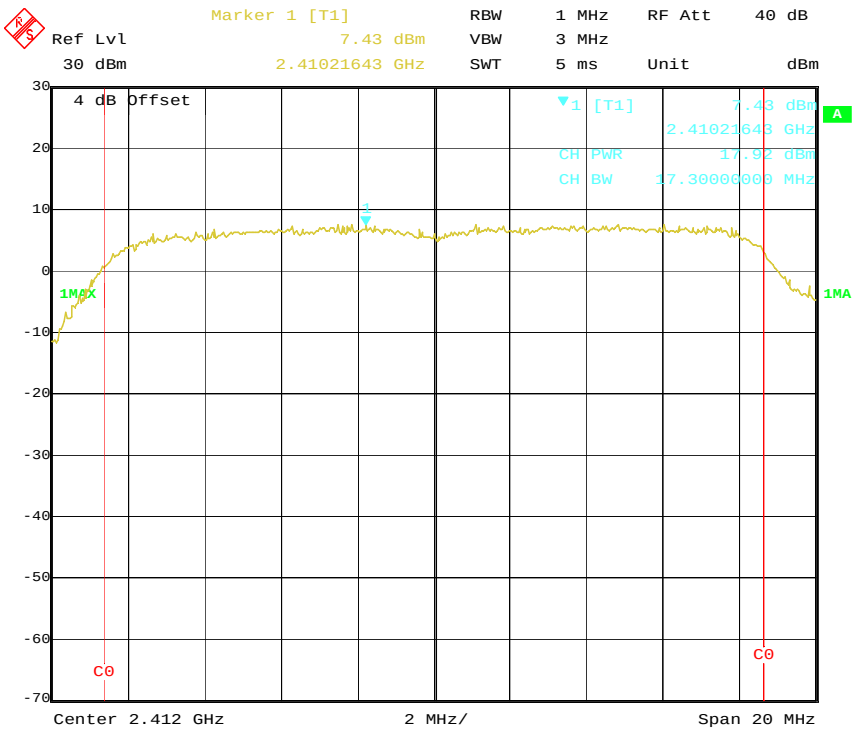
802.11g RF Output Power, High Channel, Antenna 0



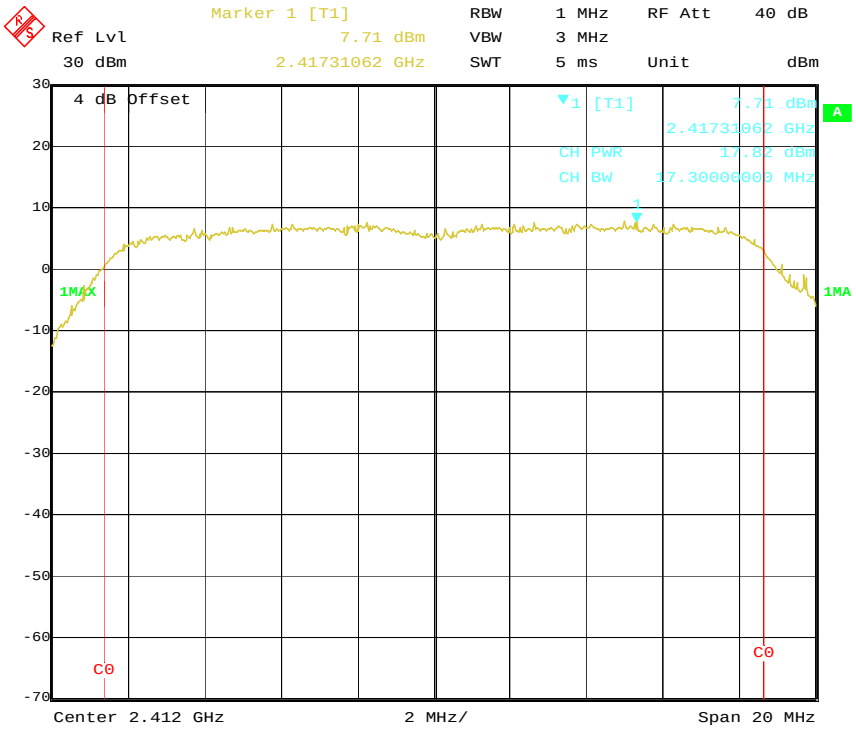
802.11g RF Output Power, High Channel, Antenna 1



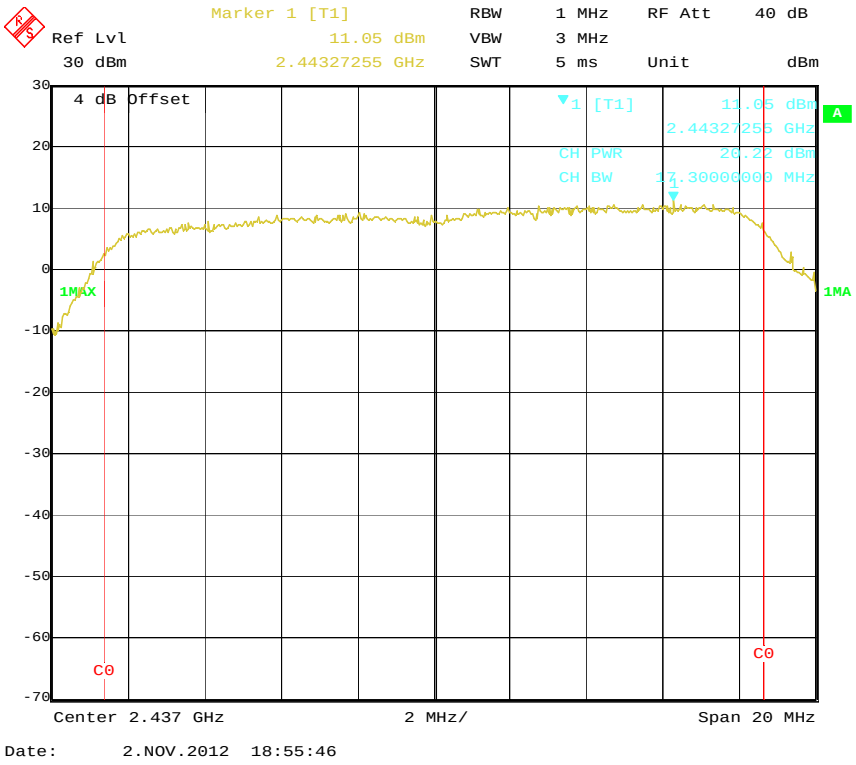
802.11n-HT20 RF Output Power, Low Channel, Antenna 0



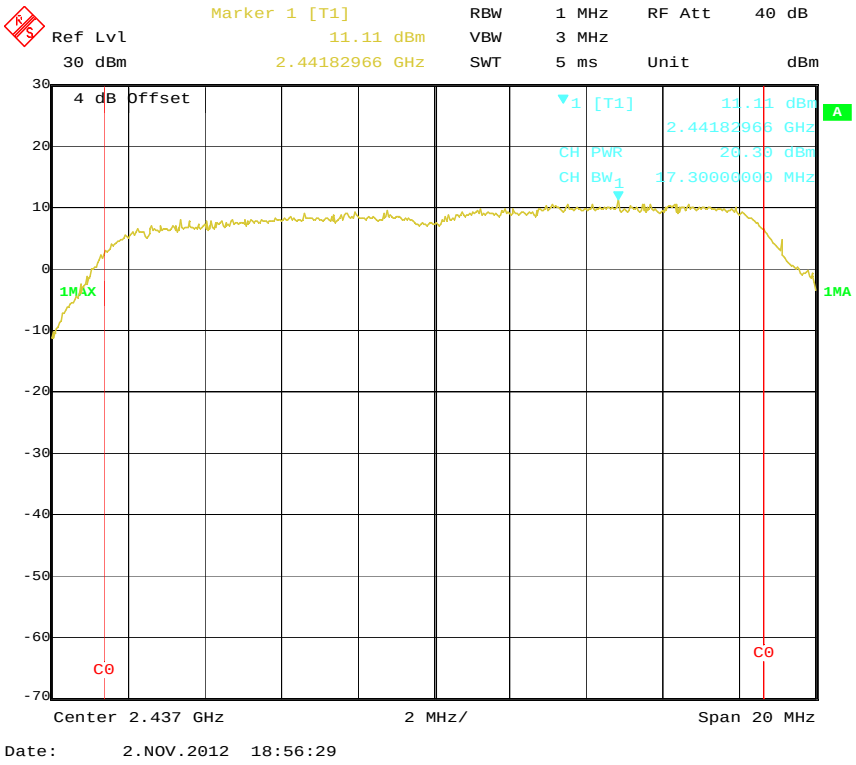
802.11n-HT20 RF Output Power, Low Channel, Antenna 1



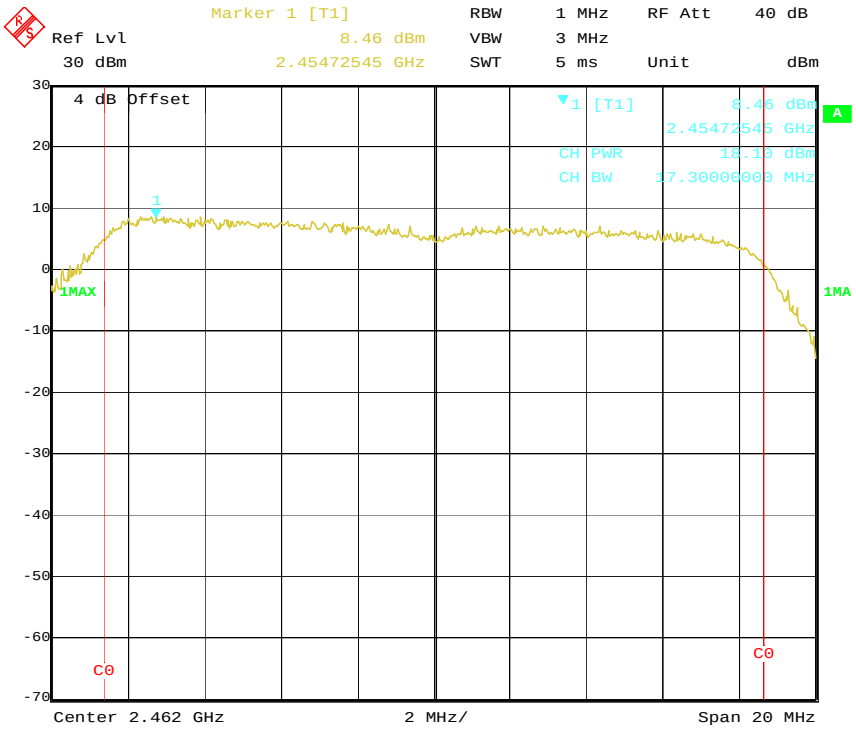
802.11n-HT20 RF Output Power, Middle Channel, Antenna 0



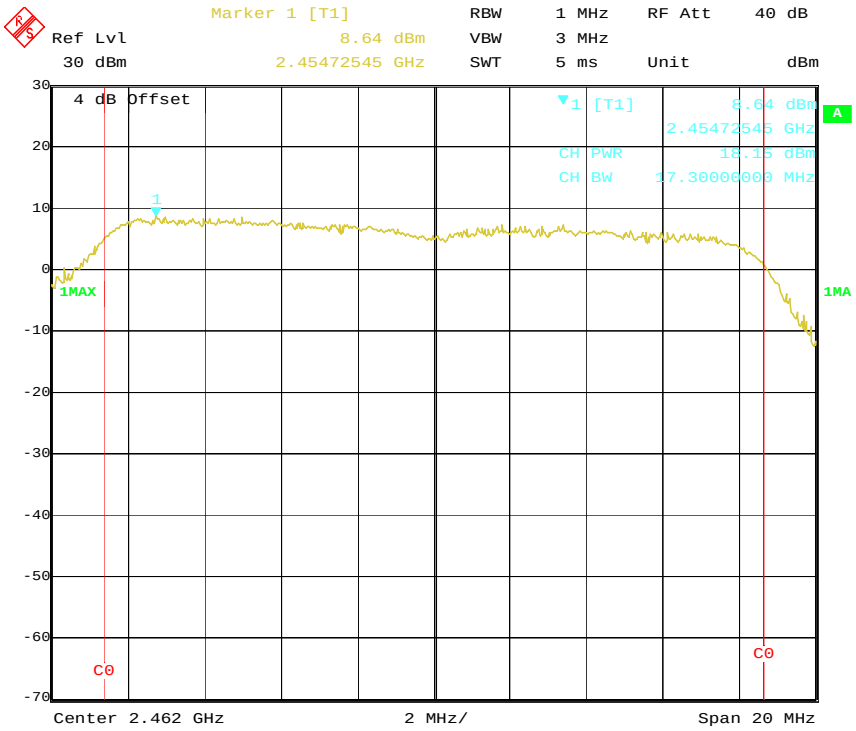
802.11n-HT20 RF Output Power, Middle Channel, Antenna 1



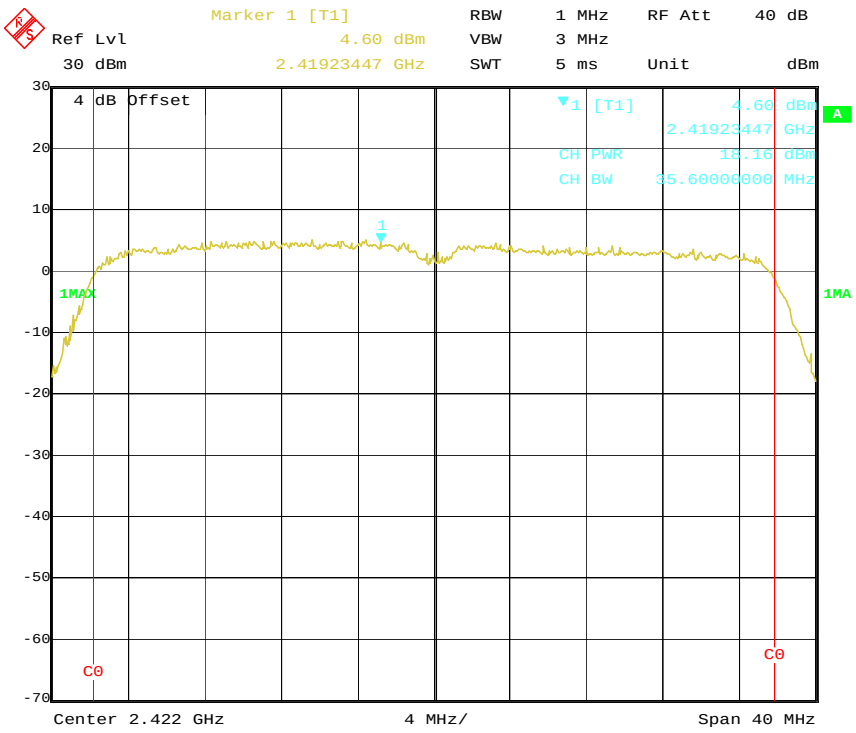
802.11n-HT20 RF Output Power, High Channel, Antenna 0



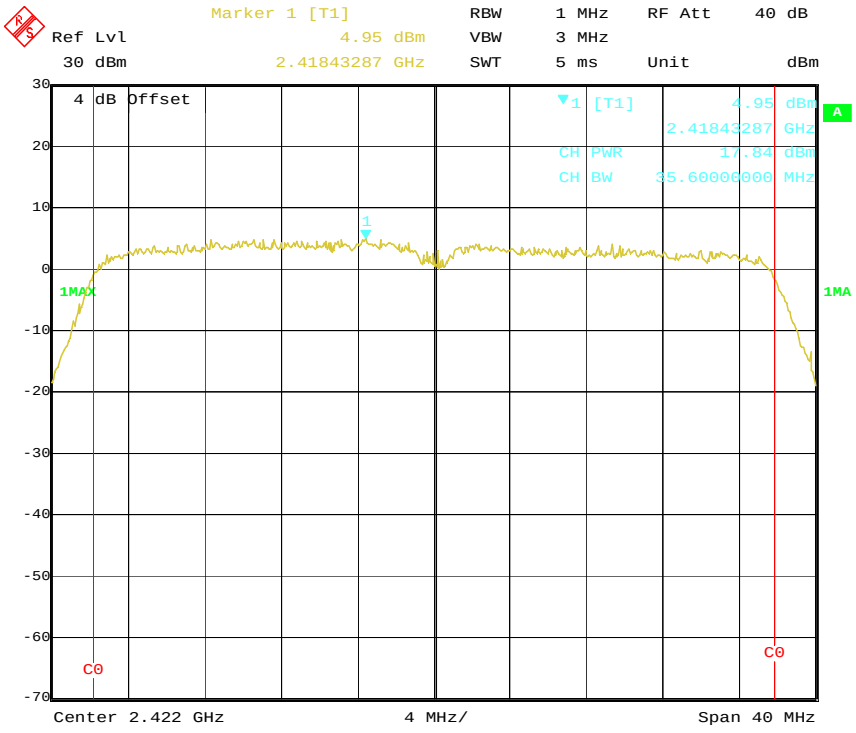
802.11n-HT20 RF Output Power, High Channel, Antenna 1



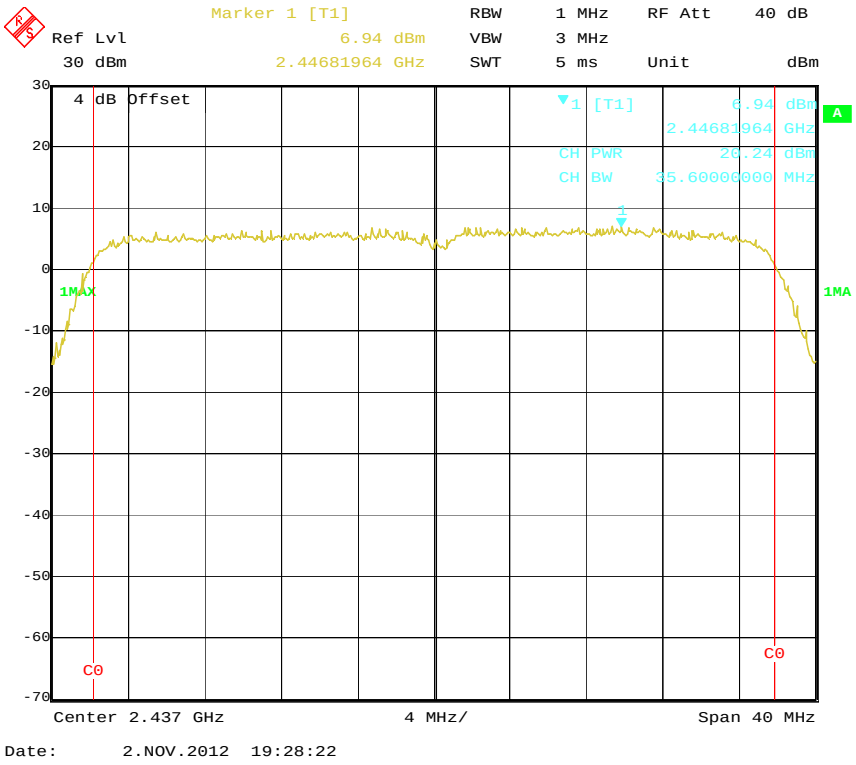
802.11n-HT40 RF Output Power, Low Channel, Antenna 0



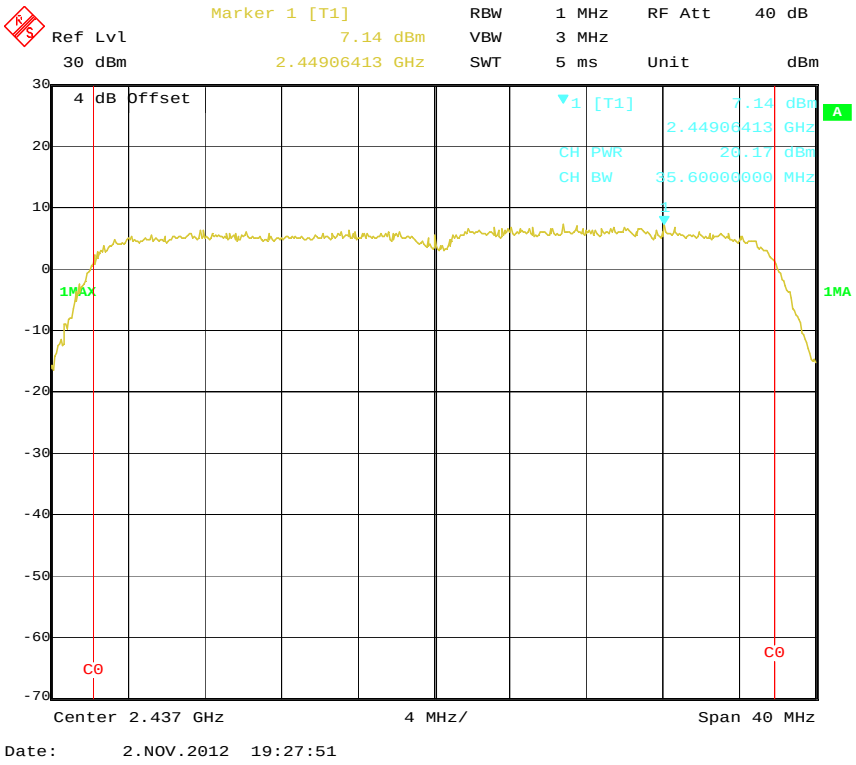
802.11n-HT40 RF Output Power, Low Channel, Antenna 1



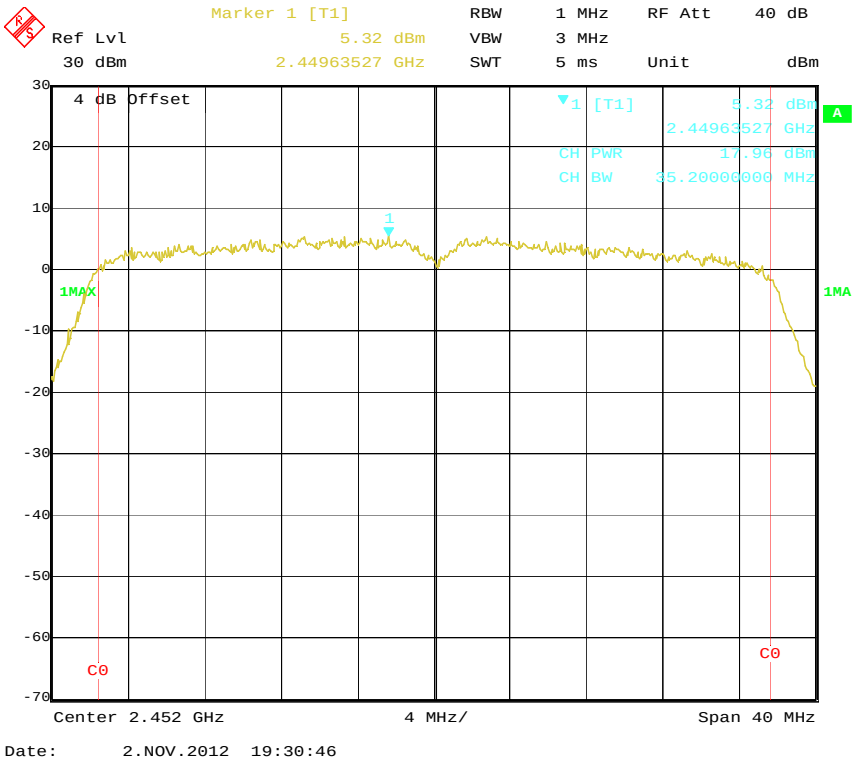
802.11n-HT40 RF Output Power, Middle Channel, Antenna 0



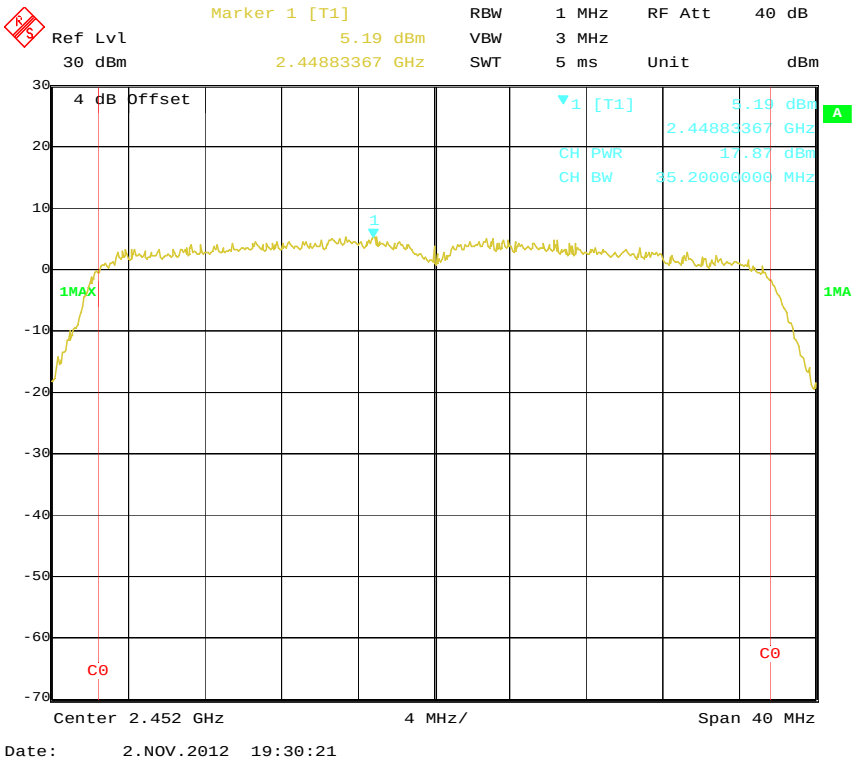
802.11n-HT40 RF Output Power, Middle Channel, Antenna 1



802.11n-HT40 RF Output Power, High Channel, Antenna 0



802.11n-HT40 RF Output Power, High Channel, Antenna 1



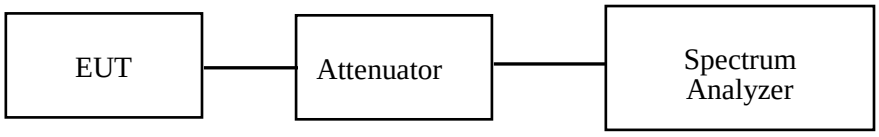
FCC §15.247(d) – 100 kHz BANDWIDTH OF FREQUENCY BAND EDGE

Applicable Standard

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

Test Procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
3. Set RBW to 1 MHz and VBW of spectrum analyzer to 3 MHz with a convenient frequency span including 100 kHz bandwidth from band edge.
4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
5. Repeat above procedures until all measured frequencies were complete.



Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	Signal Analyzer	FSIQ26	8386001028	2011-11-24	2012-11-23

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

Test Data

Environmental Conditions

Temperature:	23~25 ℃
Relative Humidity:	50~56 %
ATM Pressure:	100.0 kPa

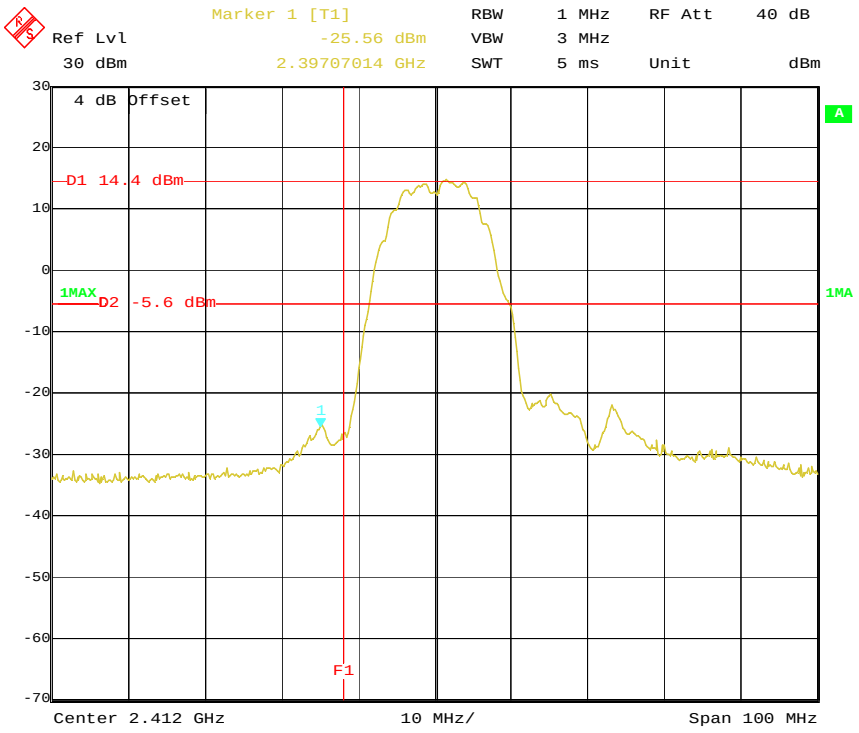
The testing was performed by Tiger Yeu from 2012-09-11 to 2012-09-24.

Test mode: Transmitting

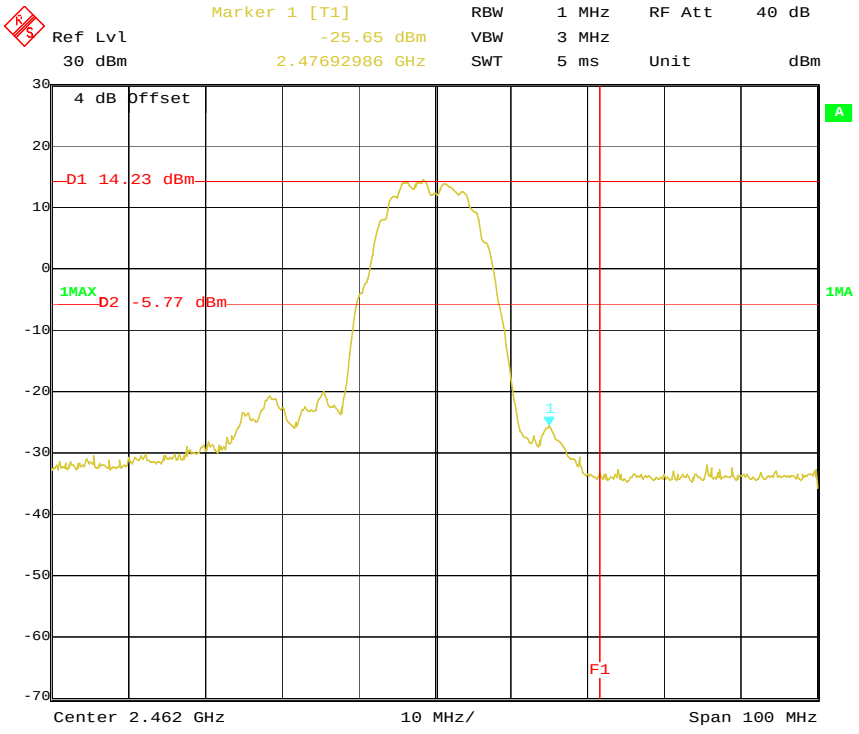
Test Result: Compliance.Please refer to the following table and plots:

Band edge	Antenna Port	Delta Peak to Band Emission (dBc)	Delta Limit (dBc)	Result
802.11b mode				
Left side	0	39.96	20	Pass
Right side	0	39.88		
Left side	1	40.19	20	Pass
Right side	1	47.65		
802.11g mode				
Left side	0	38.51	20	Pass
Right side	0	48.17		
Left side	1	34.62	20	Pass
Right side	1	48.20		
802.11n-HT20 mode				
Left side	0	38.48	20	Pass
Right side	0	48.33		
Left side	1	33.68	20	Pass
Right side	1	47.23		
802.11n-HT40 mode				
Left side	0	37.50	20	Pass
Right side	0	42.87		
Left side	1	35.38	20	Pass
Right side	1	42.30		

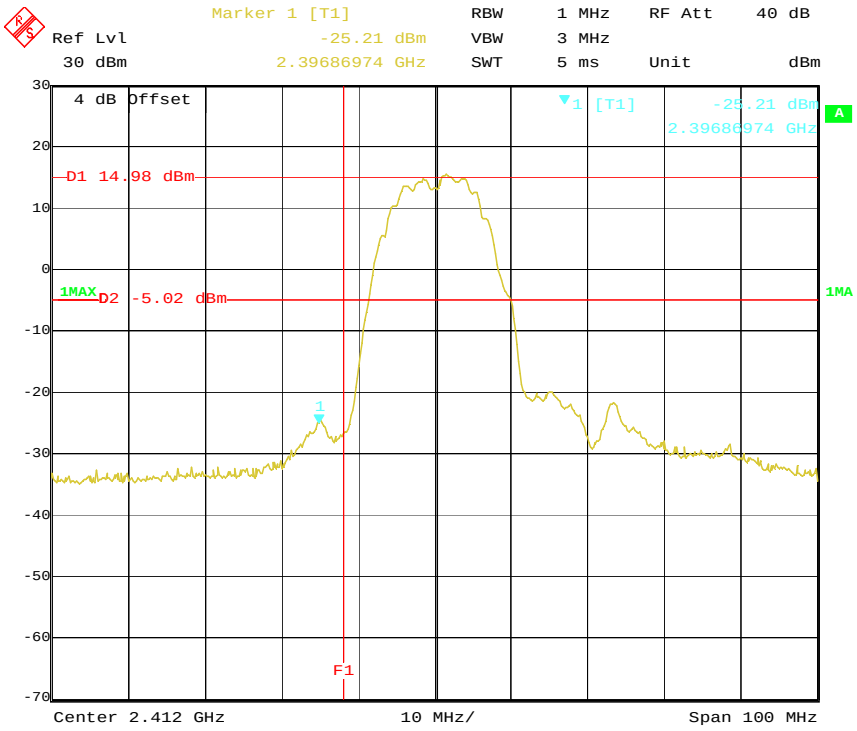
802.11b Band Edge, Left Side, Antenna 0



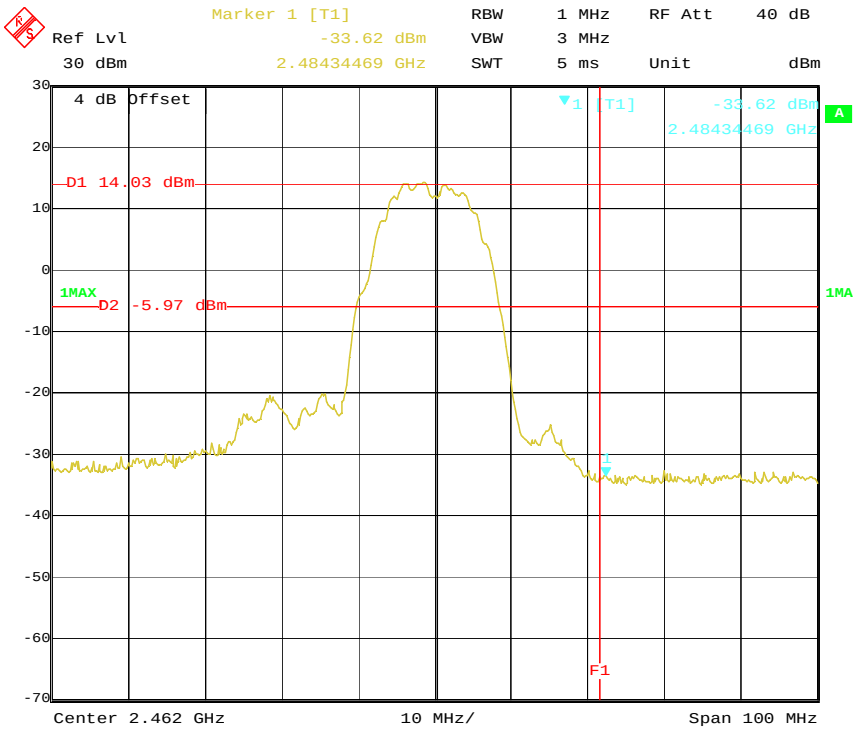
802.11b Band Edge, Right Side, Antenna 0



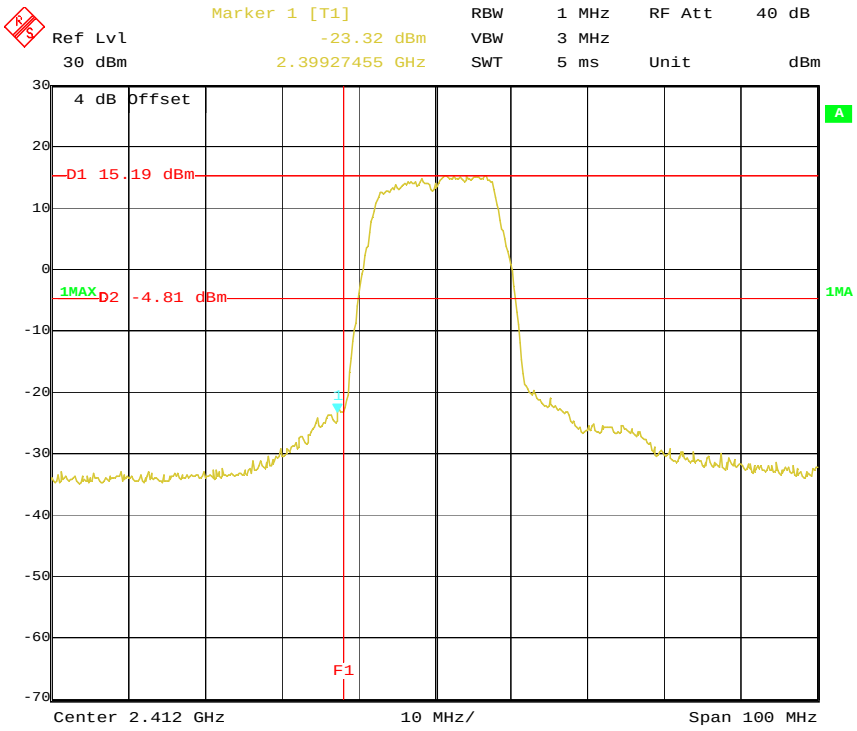
802.11b Band Edge, Left Side, Antenna 1



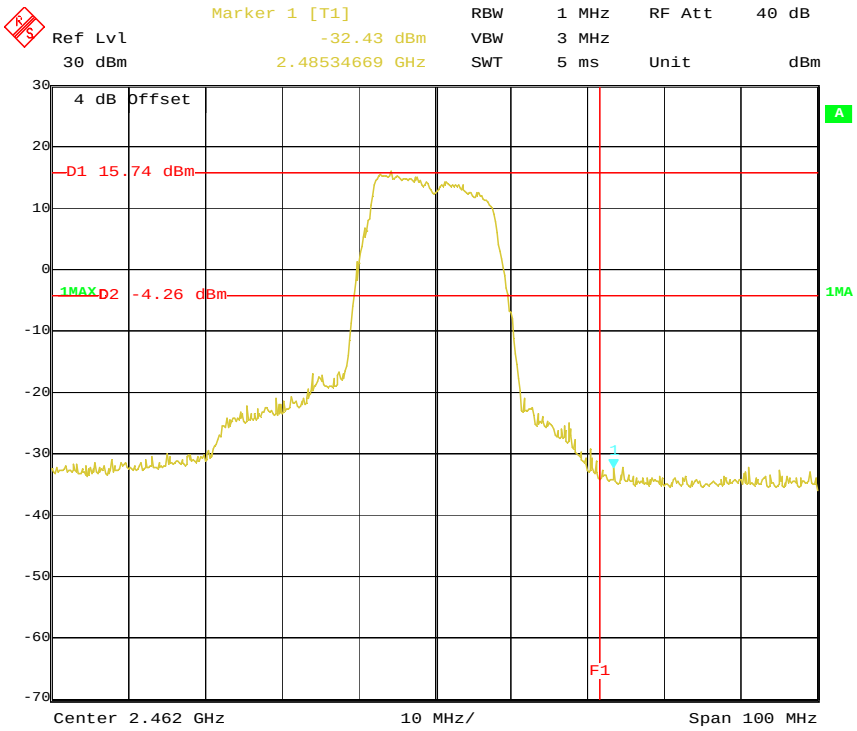
802.11b Band Edge, Right Side, Antenna 1



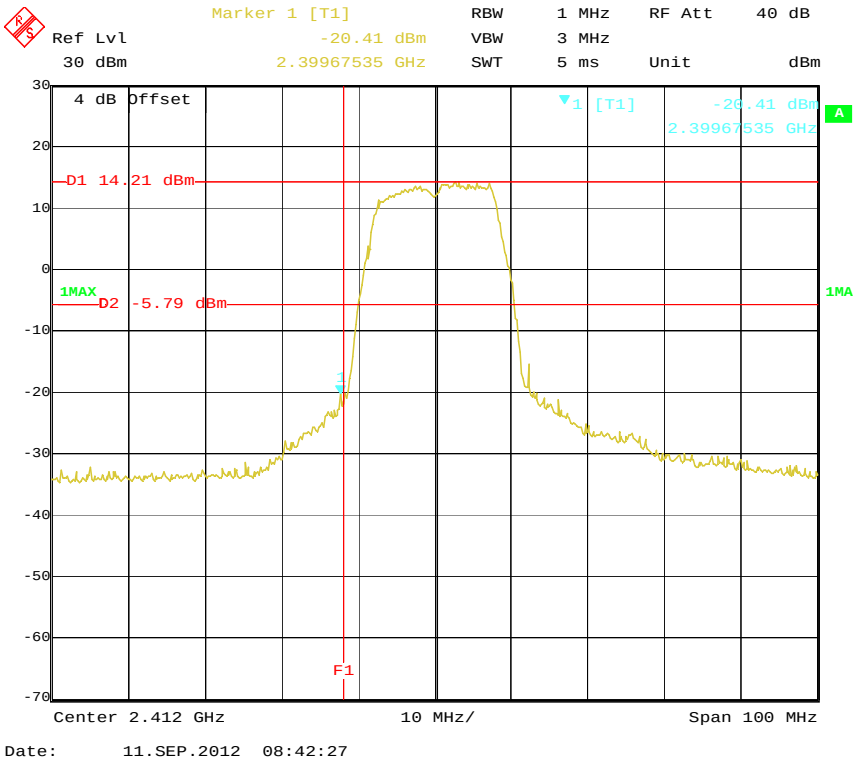
802.11g Band Edge, Left Side, Antenna 0



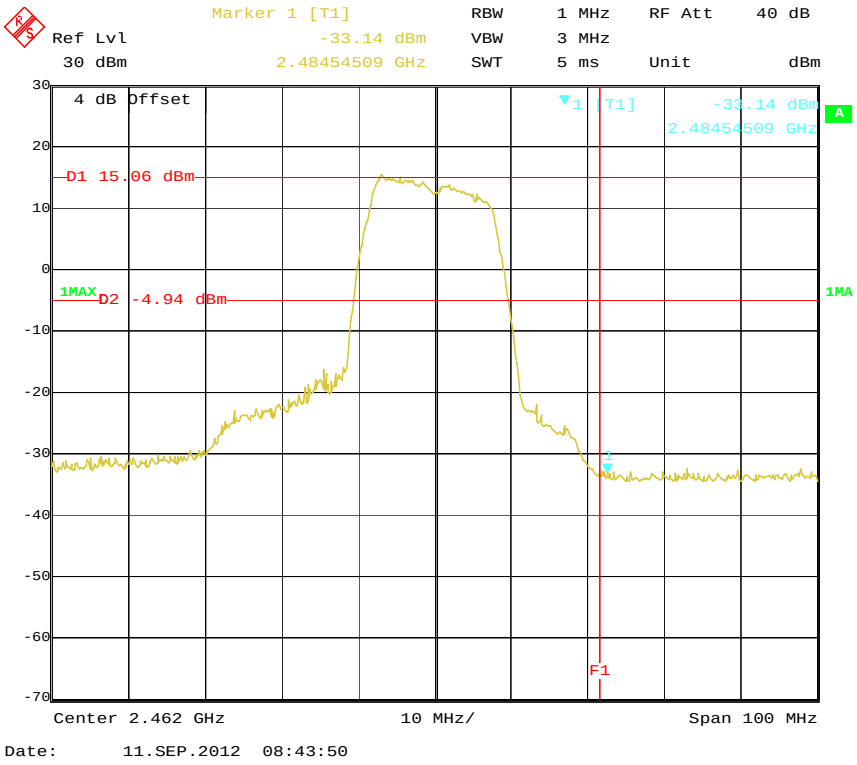
802.11g Band Edge, Right Side, Antenna 0



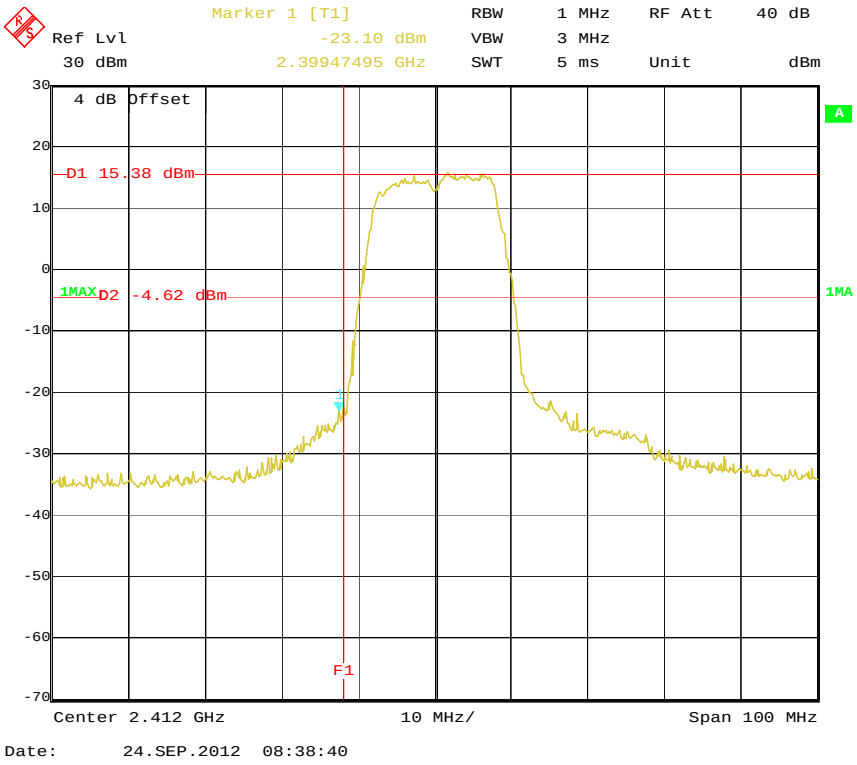
802.11g Band Edge, Left Side, Antenna 1



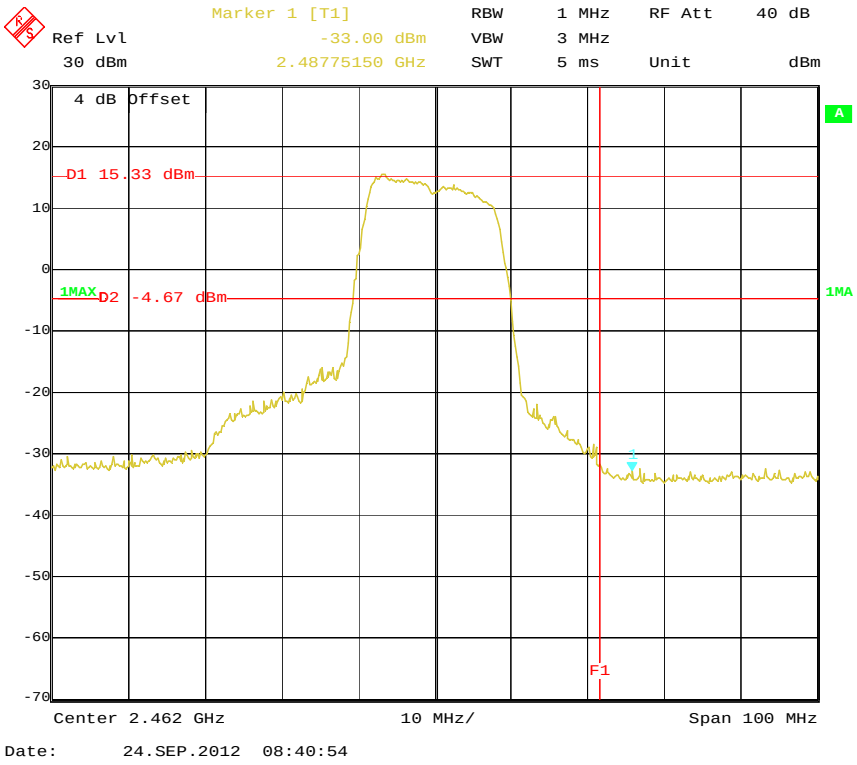
802.11g Band Edge, Right Side, Antenna 1



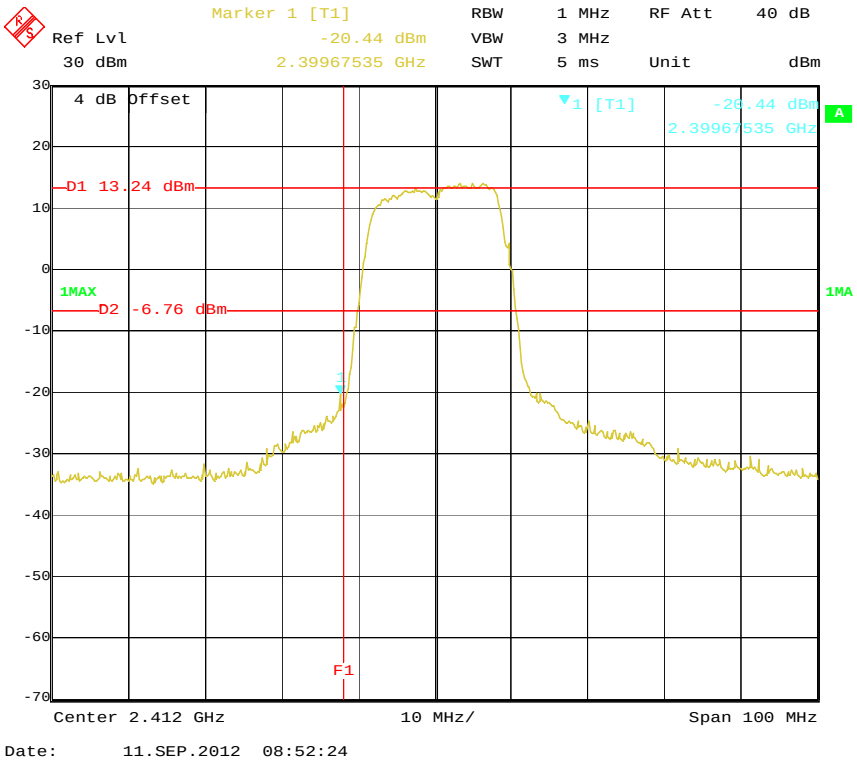
802.11n-HT20 Band Edge, Left Side, Antenna 0



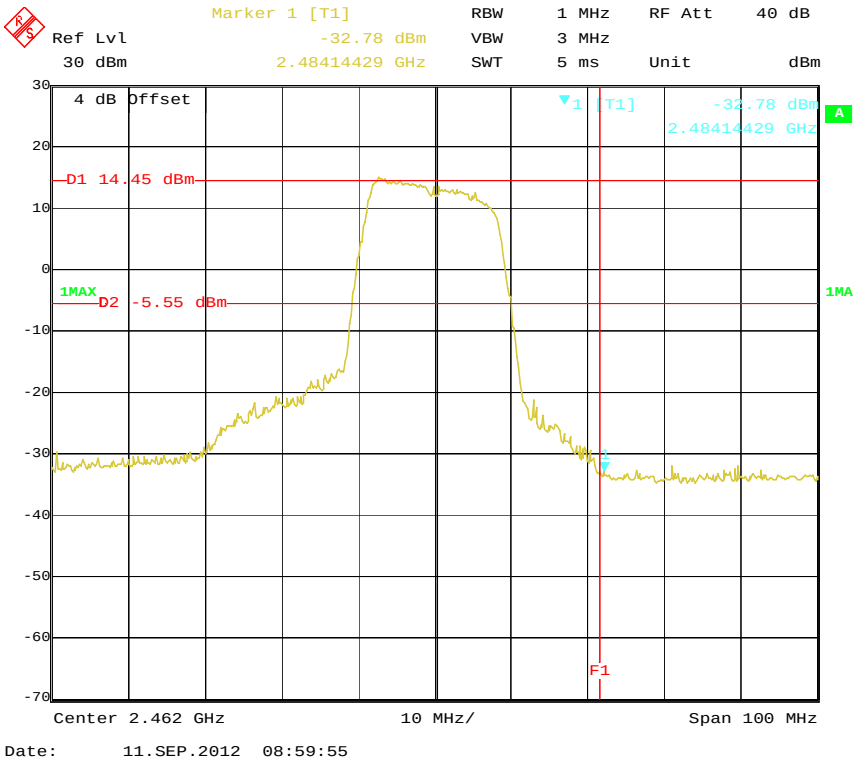
802.11n-HT20 Band Edge, Right Side, Antenna 0



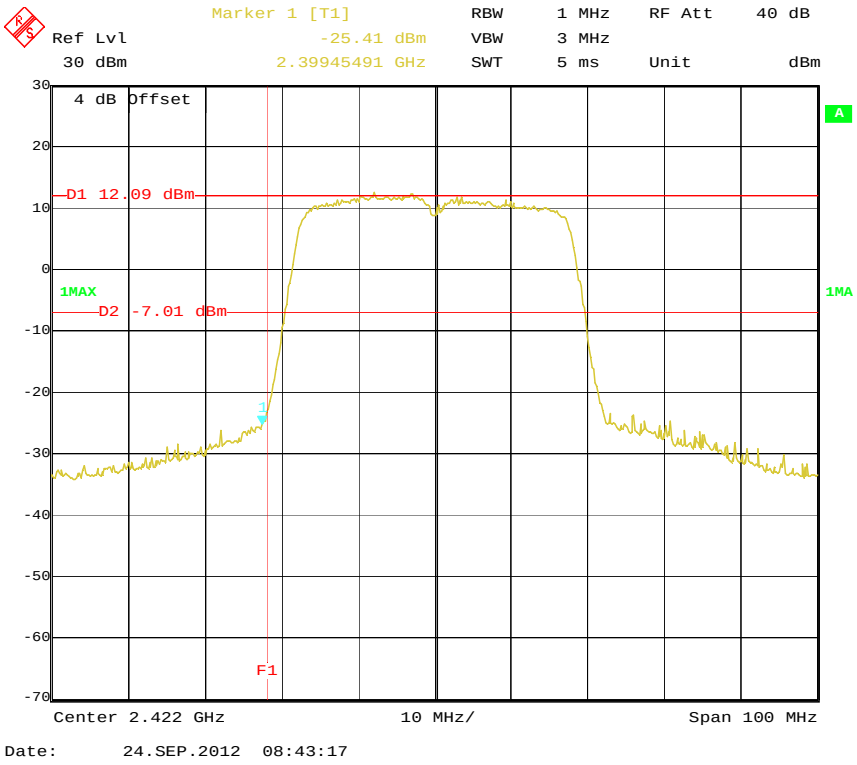
802.11n-HT20 Band Edge, Left Side, Antenna 1



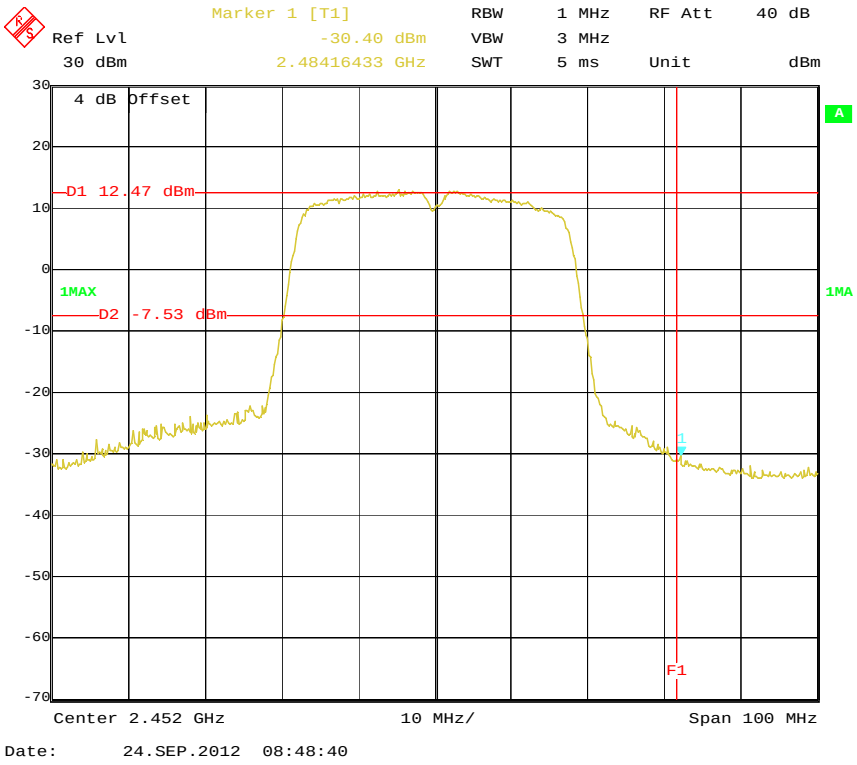
802.11n-HT20 Band Edge, Right Side, Antenna 1



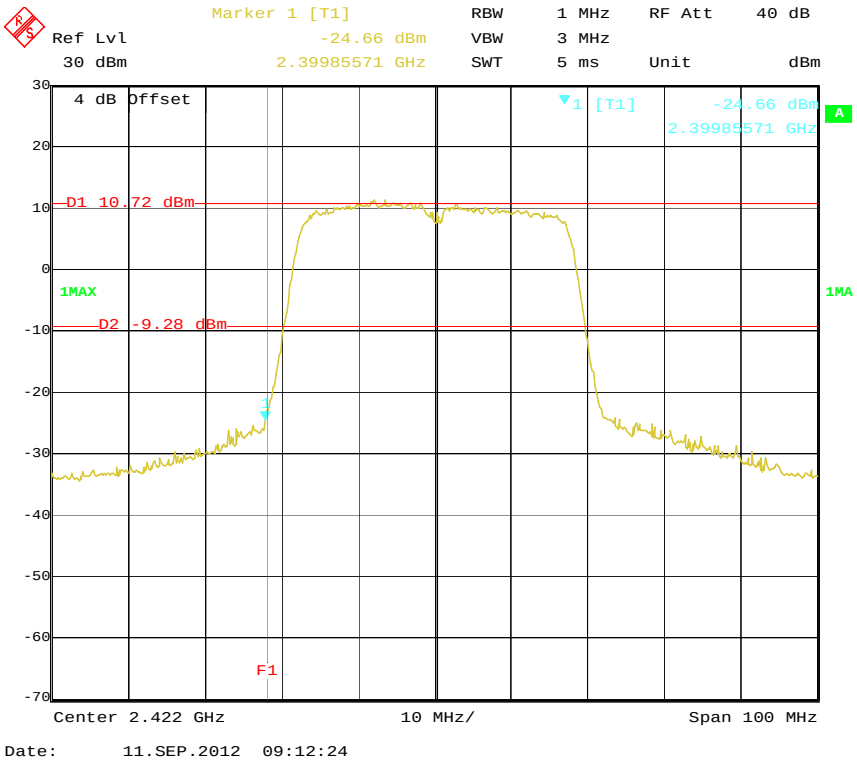
802.11n-HT40 Band Edge, Left Side, Antenna 0



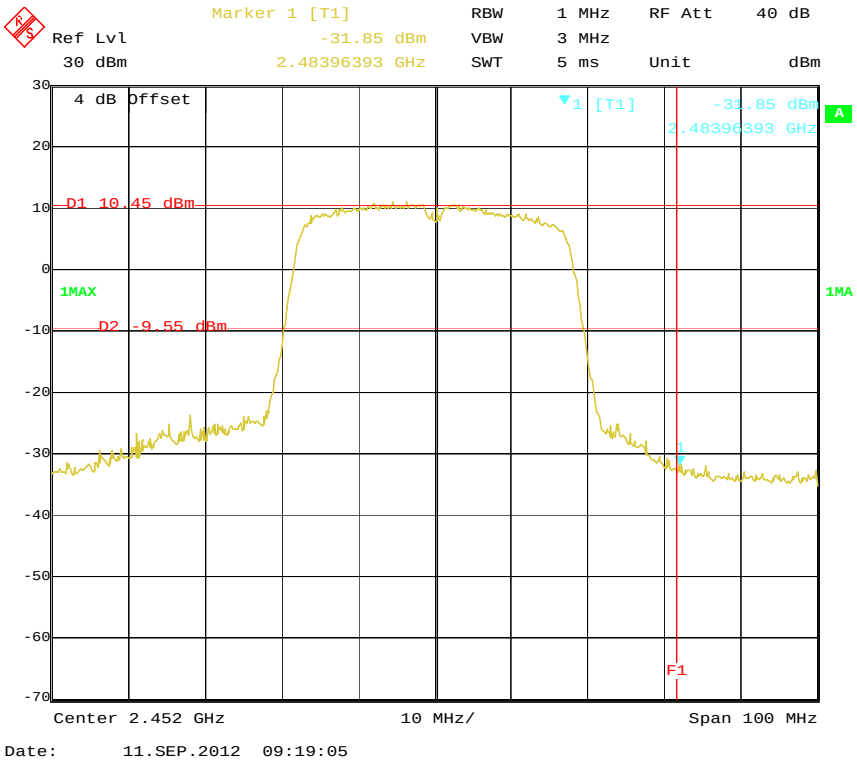
802.11n-HT40 Band Edge, Right Side, Antenna 0



802.11n-HT40 Band Edge, Left Side, Antenna 1



802.11n-HT40 Band Edge, Right Side, Antenna 1



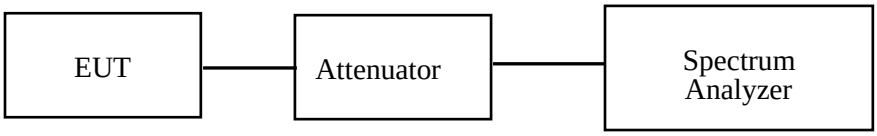
FCC §15.247(e) - POWER SPECTRAL DENSITY

Applicable Standard

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

Test Procedure

1. Use this procedure when the maximum peak conducted output power in the fundamental emission is used to demonstrate compliance.
2. Set the RBW = 100 kHz.
3. Set the VBW ≥ 300 kHz.
4. Set the span to 5-30 % greater than the EBW.
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.
10. Scale the observed power level to an equivalent value in 3 kHz by adjusting (reducing) the measured power by a bandwidth correction factor (BWCF) where BWCF = 10log (3 kHz/100 kHz = -15.2 dB).
11. The resulting peak PSD level must be ≤ 8 dBm.



Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	Signal Analyzer	FSIQ26	8386001028	2011-11-24	2012-11-23

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

Test Data

Environmental Conditions

Temperature:	23~25 ℃
Relative Humidity:	50~56 %
ATM Pressure:	100.0 kPa

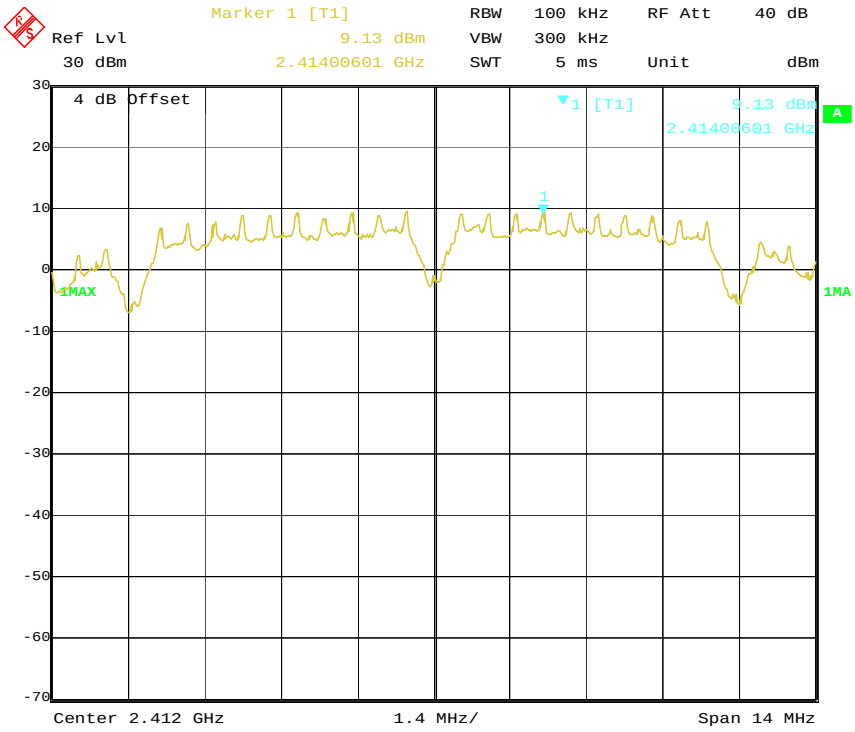
The testing was performed by Tiger Ye from 2012-09-11 to 2012-09-22.

Test Mode: Transmitting

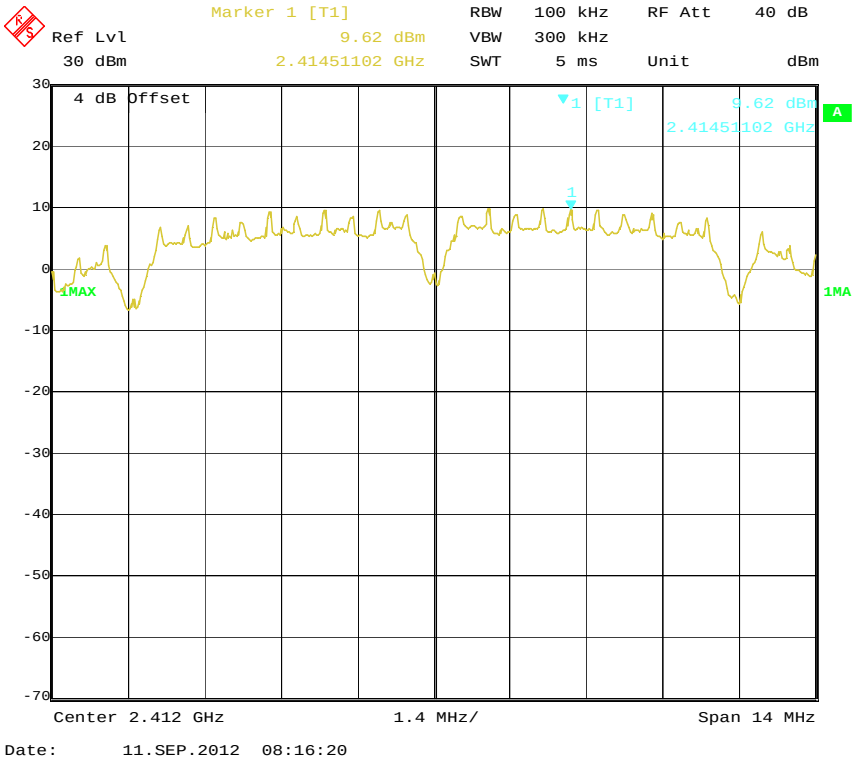
Test Result: Pass

Channel	Frequency (MHz)	Antenna Port	Power spectral density (dBm/100kHz)	BWCF (dB)	Power spectral density (dBm/3kHz)		Limit (dBm/3kHz)
802.11b mode							
Low	2412	0	9.13	-15.2	-6.07		≤8
		1	9.62	-15.2	-5.58		
Middle	2437	0	15.54	-15.2	0.34		≤8
		1	15.15	-15.2	-0.05		
High	2462	0	9.65	-15.2	-5.55		≤8
		1	8.83	-15.2	-6.37		
802.11g mode							
Low	2412	0	6.66	-15.2	-8.54		≤8
		1	6.25	-15.2	-8.95		
Middle	2437	0	9.90	-15.2	-5.30		≤8
		1	10.26	-15.2	-4.94		
High	2462	0	6.66	-15.2	-8.54		≤8
		1	6.70	-15.2	-8.50		
802.11n-HT20 mode							
Low	2412	0	6.08	-15.2	-9.12	-6.53	≤8
		1	5.20	-15.2	-10.00		
Middle	2437	0	7.75	-15.2	-7.45	-4.15	≤8
		1	8.04	-15.2	-7.16		
High	2462	0	6.70	-15.2	-8.50	-5.72	≤8
		1	6.47	-15.2	-8.73		
802.11n-HT40 mode							
Low	2422	0	3.26	-15.2	-11.94	-8.79	≤8
		1	3.40	-15.2	-11.80		
Middle	2437	0	4.92	-15.2	-10.28	-7.17	≤8
		1	5.02	-15.2	-10.18		
High	2452	0	3.94	-15.2	-11.26	-9.80	≤8
		1	2.39	-15.2	-12.81		

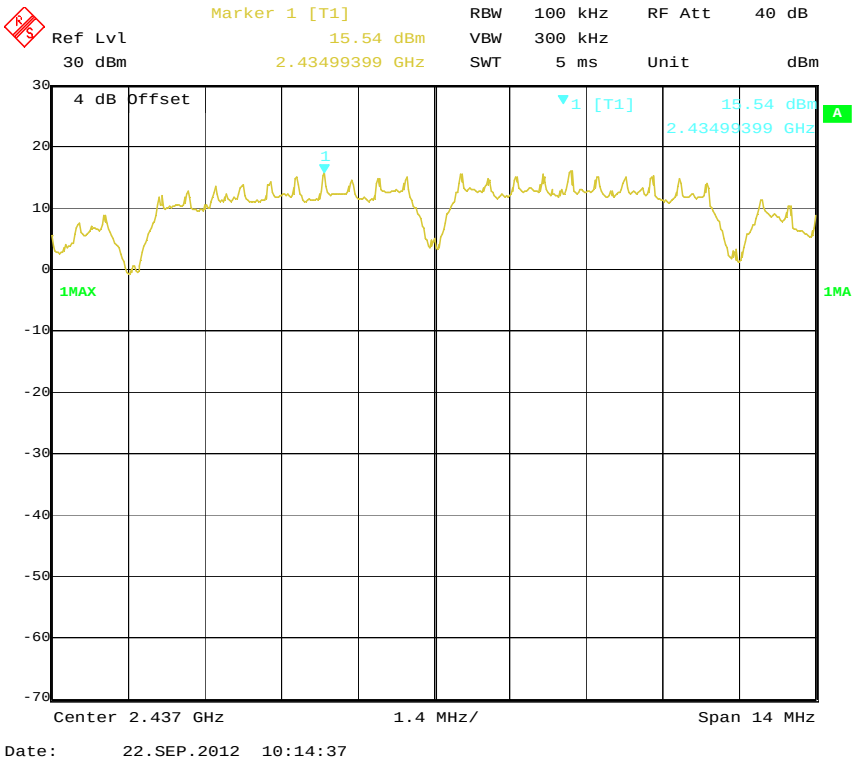
Power Spectral Density, 802.11b Low Channel, Antenna 0



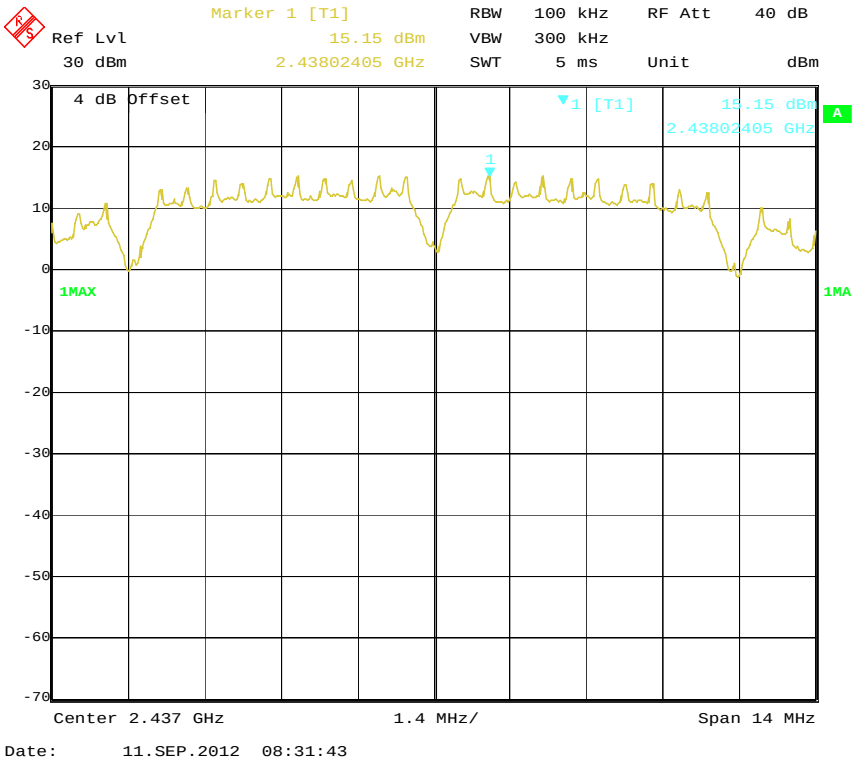
Power Spectral Density, 802.11b Low Channel, Antenna 1



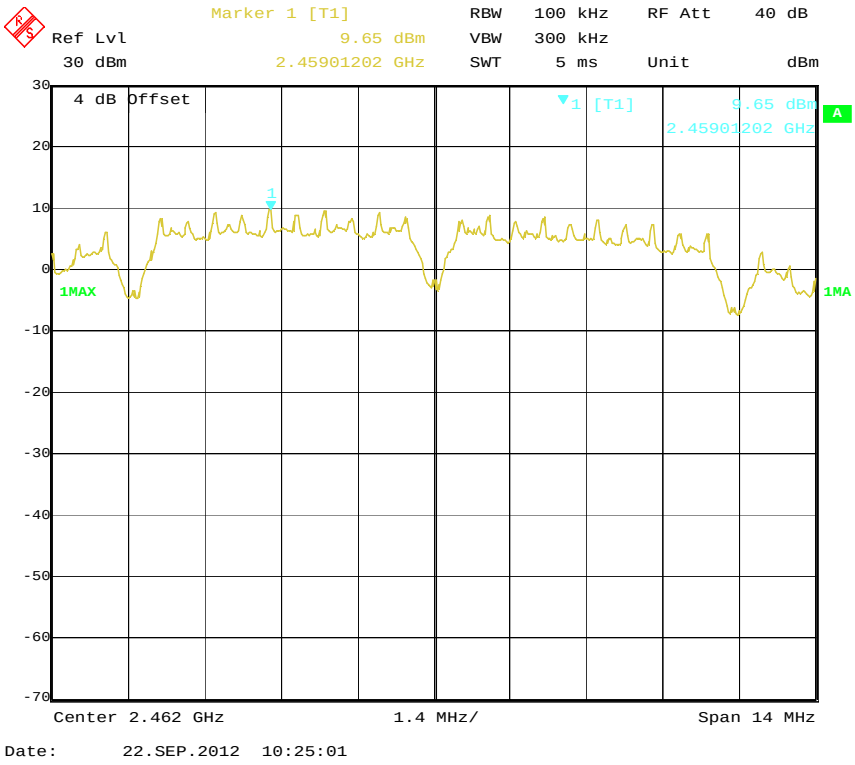
Power Spectral Density, 802.11b Middle Channel, Antenna 0



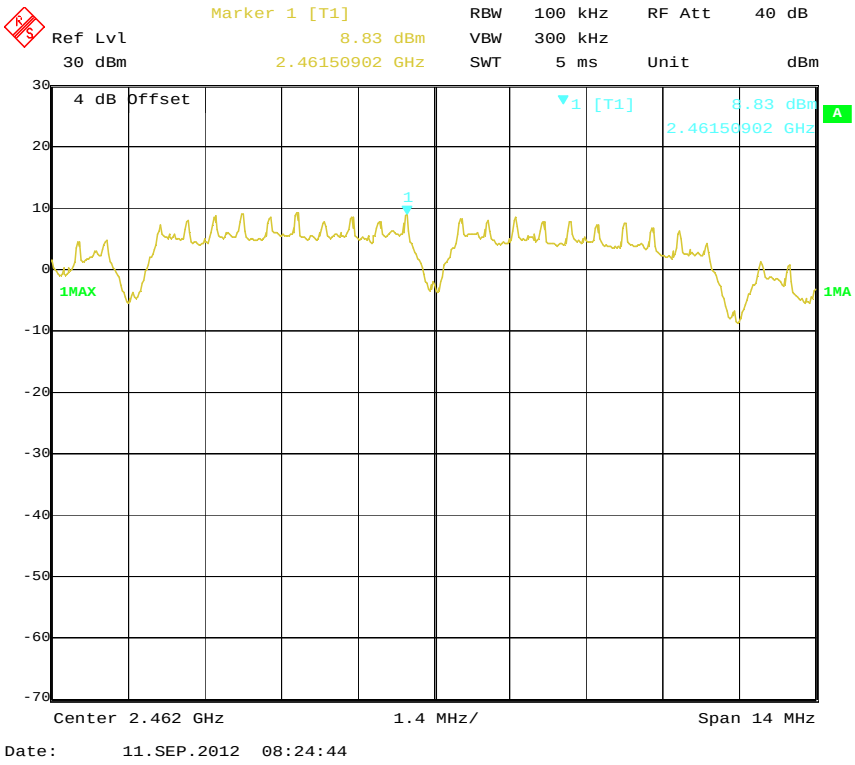
Power Spectral Density, 802.11b Middle Channel, Antenna 1



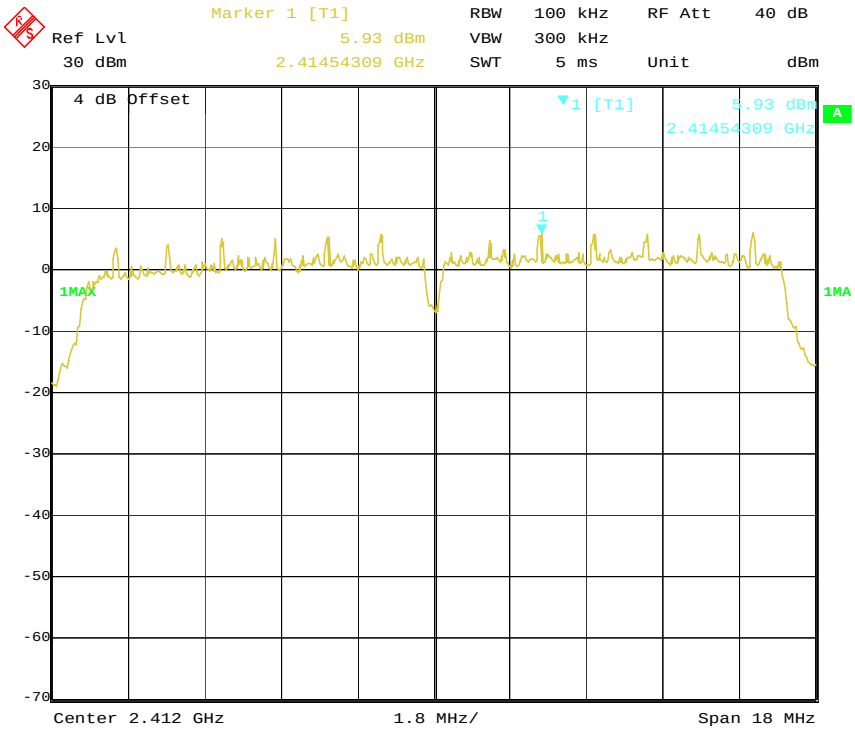
Power Spectral Density, 802.11b High Channel, Antenna 0



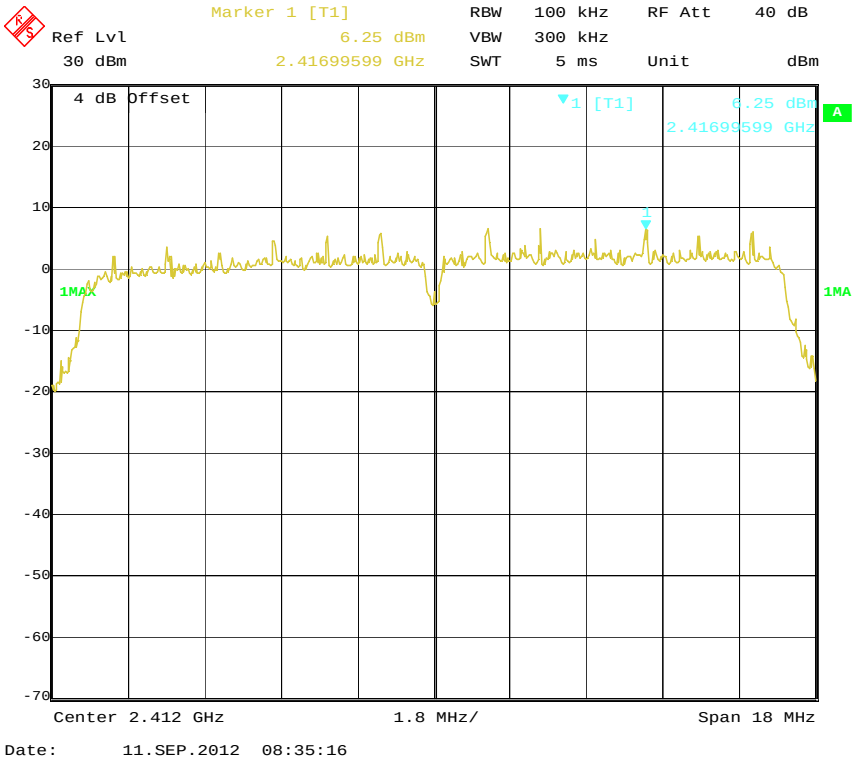
Power Spectral Density, 802.11b High Channel, Antenna 1



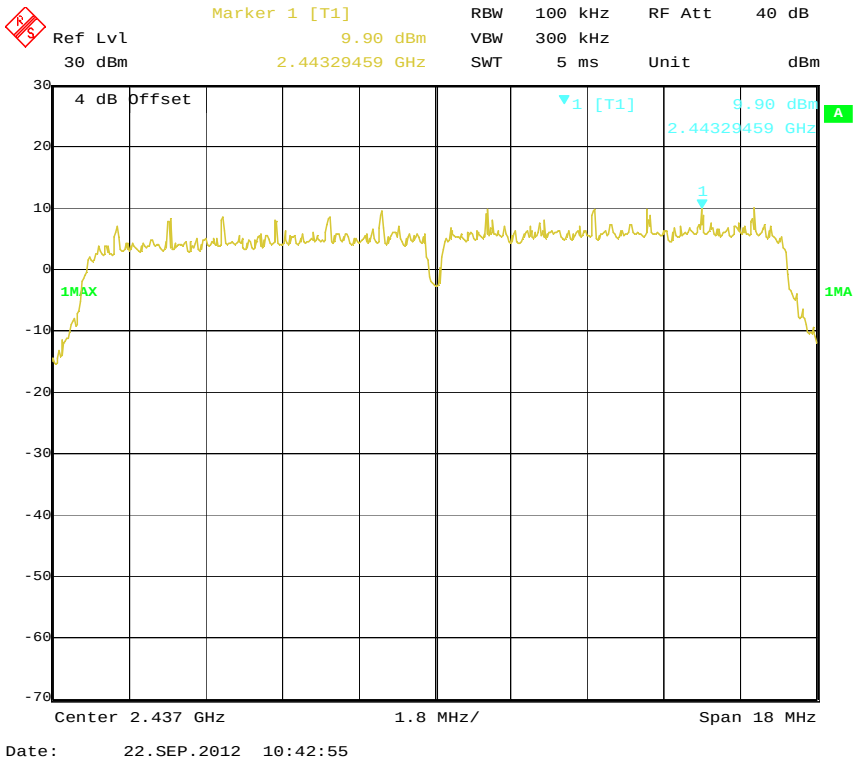
Power Spectral Density, 802.11g Low Channel, Antenna 0



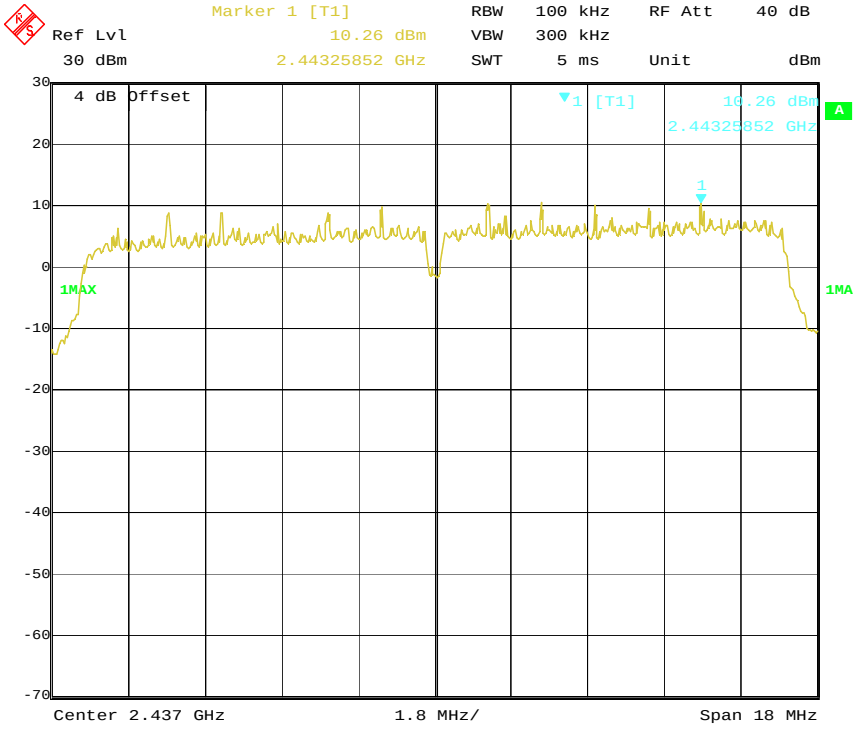
Power Spectral Density, 802.11g Low Channel, Antenna 1



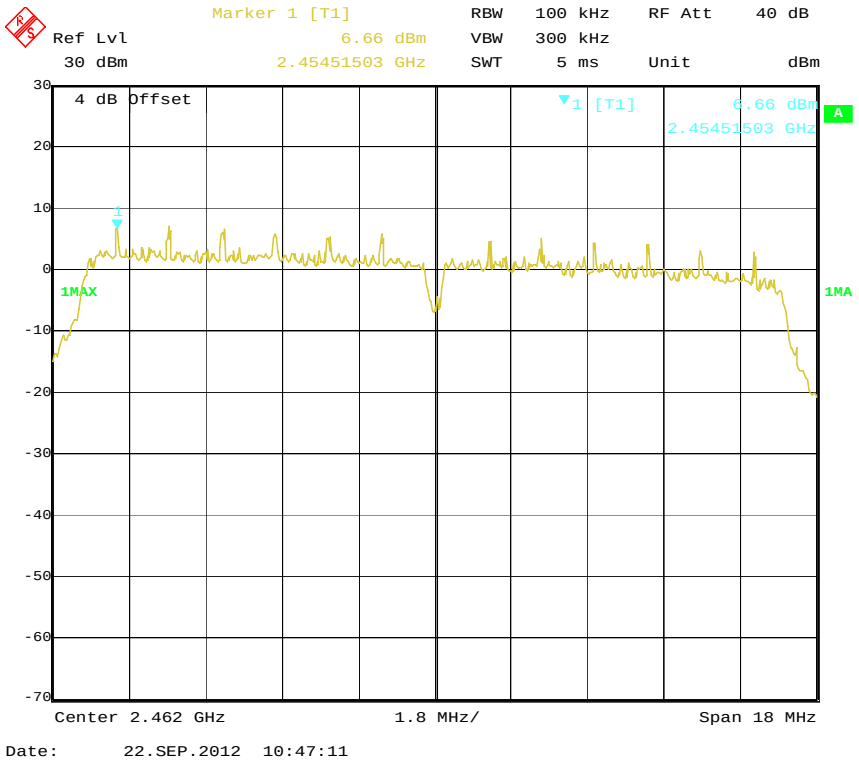
Power Spectral Density, 802.11g Middle Channel, Antenna 0



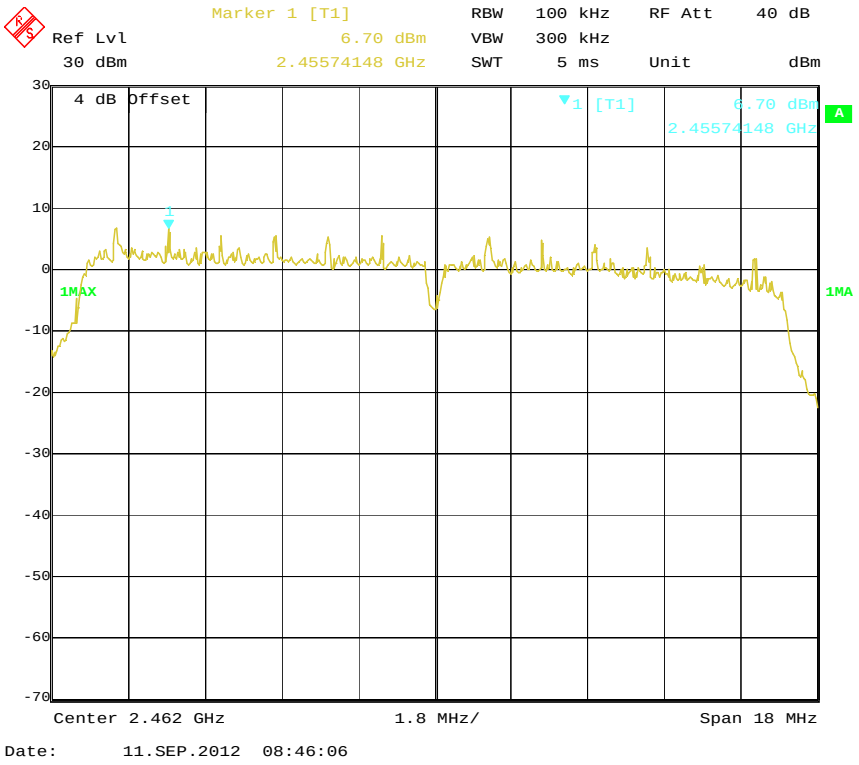
Power Spectral Density, 802.11g Middle Channel, Antenna 1



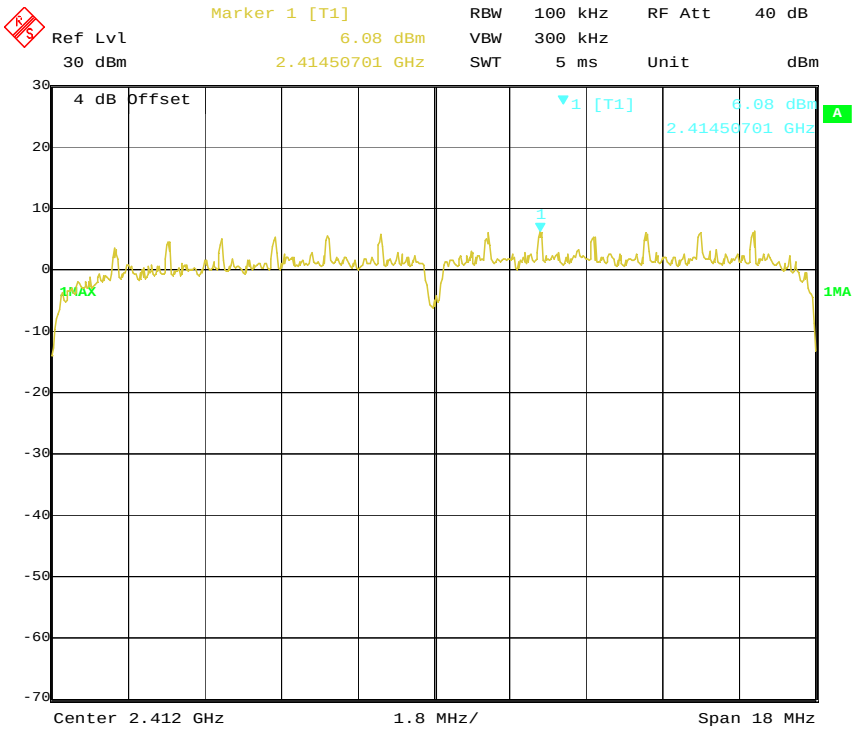
Power Spectral Density, 802.11g High Channel, Antenna 0



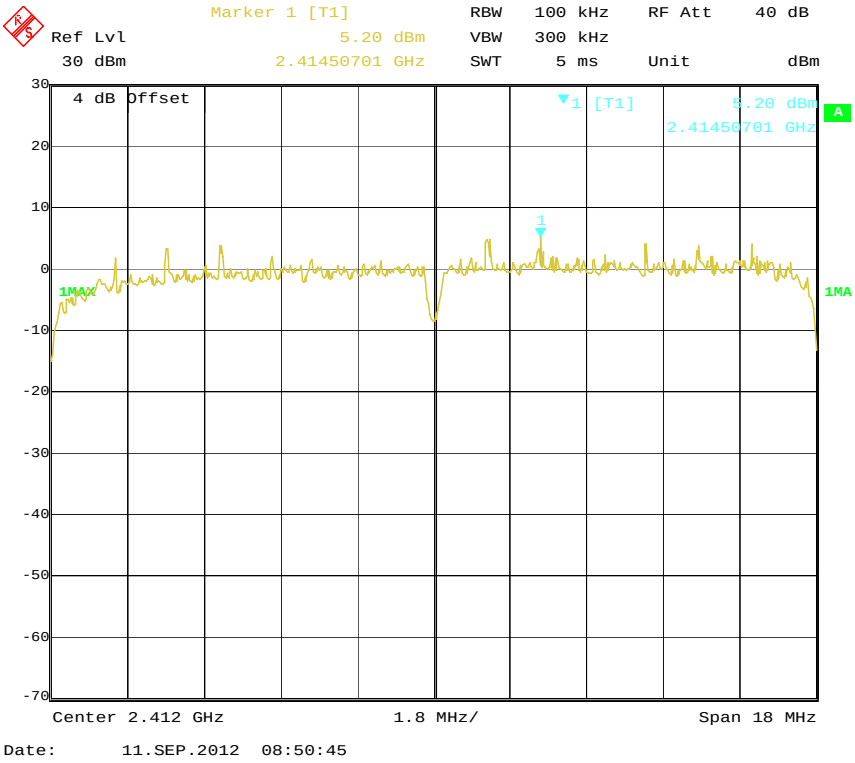
Power Spectral Density, 802.11g High Channel, Antenna 1



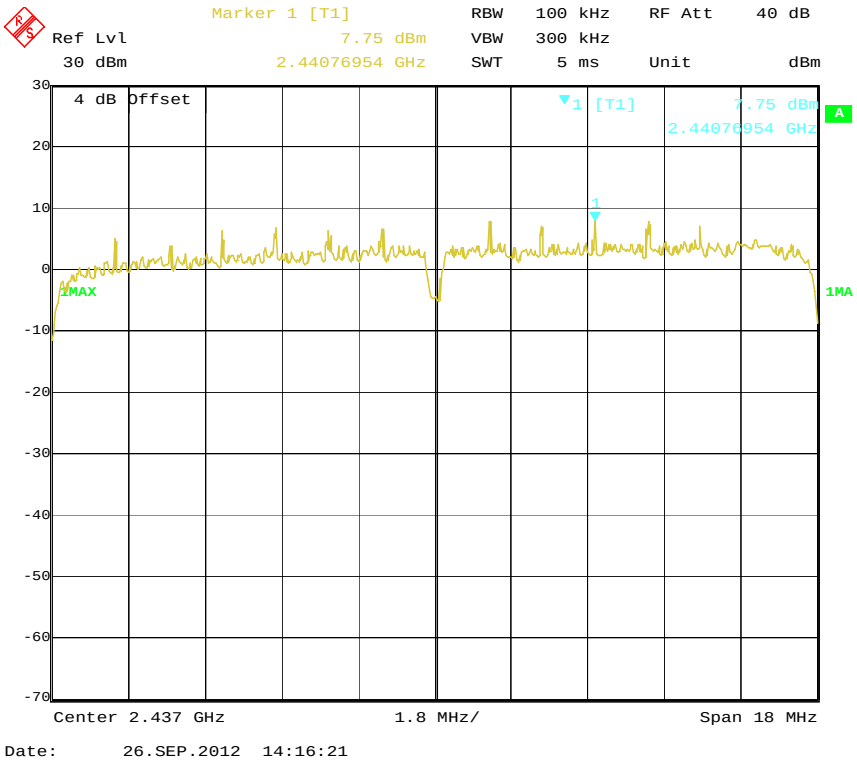
Power Spectral Density, 802.11n-HT20 Low Channel, Antenna 0



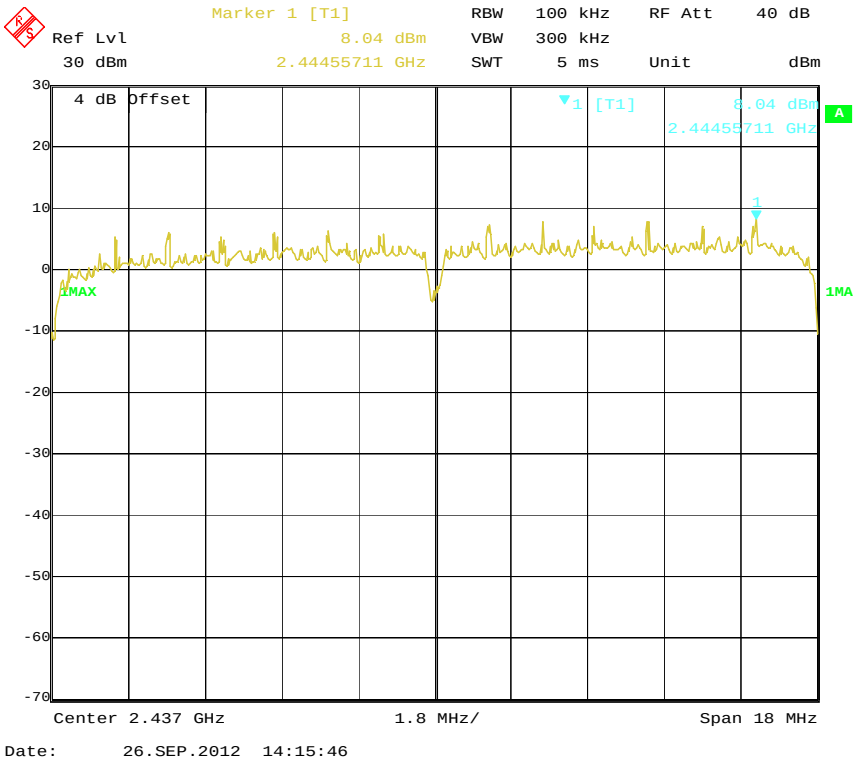
Power Spectral Density, 802.11n-HT20 Low Channel, Antenna 1



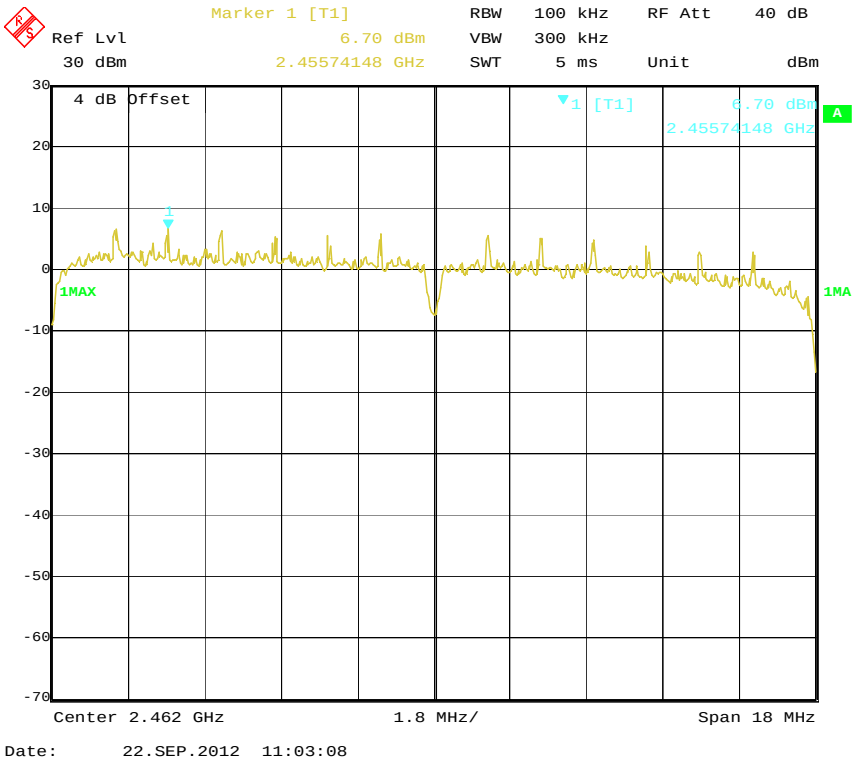
Power Spectral Density, 802.11n-HT20 Middle Channel, Antenna 0



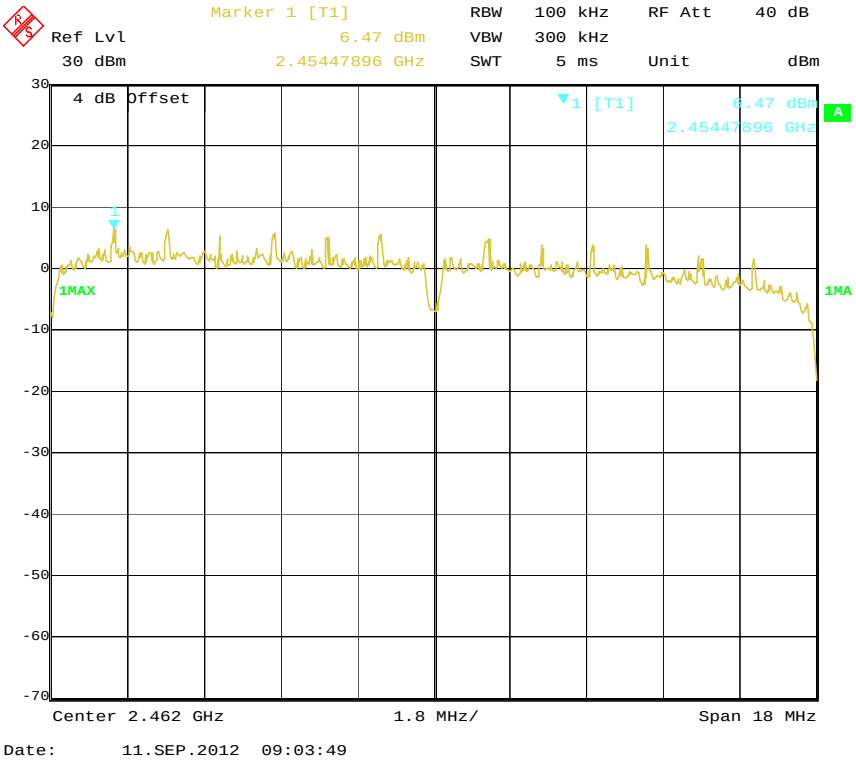
Power Spectral Density, 802.11n-HT20 Middle Channel, Antenna 1



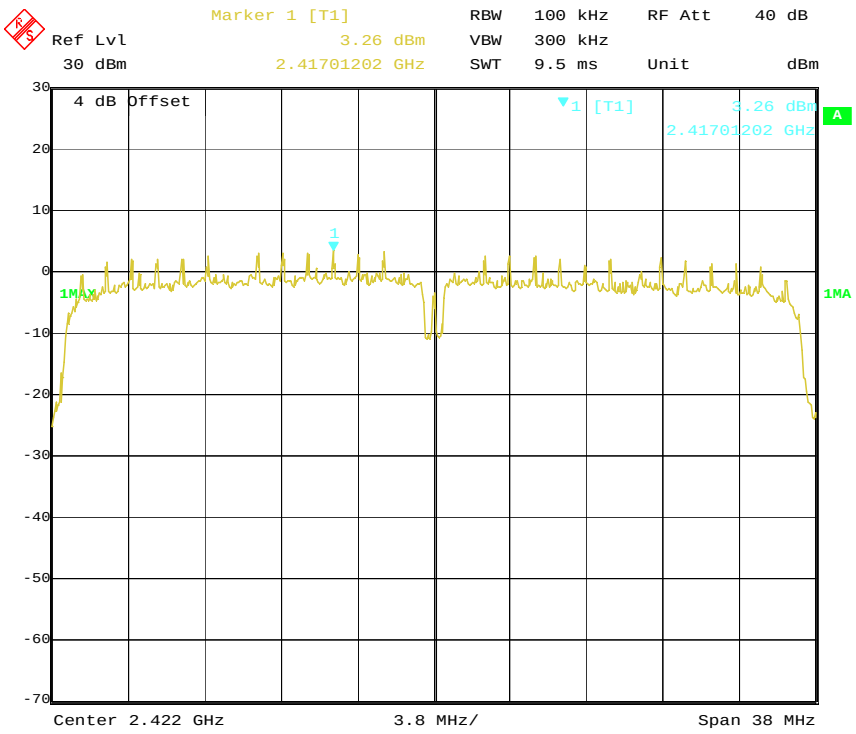
Power Spectral Density, 802.11n-HT20 High Channel, Antenna 0



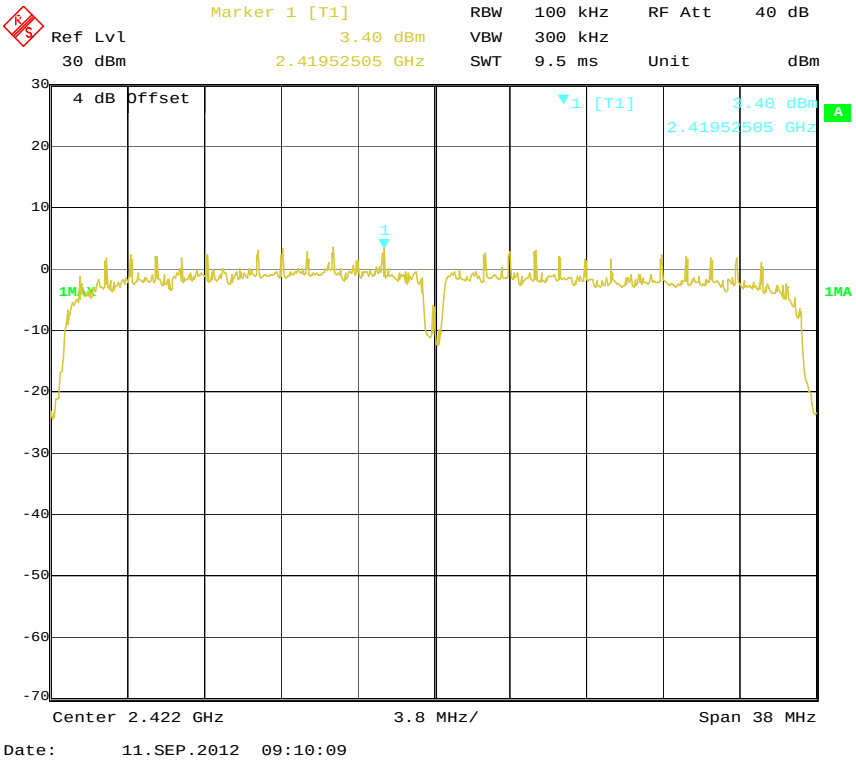
Power Spectral Density, 802.11n-HT20 High Channel, Antenna 1



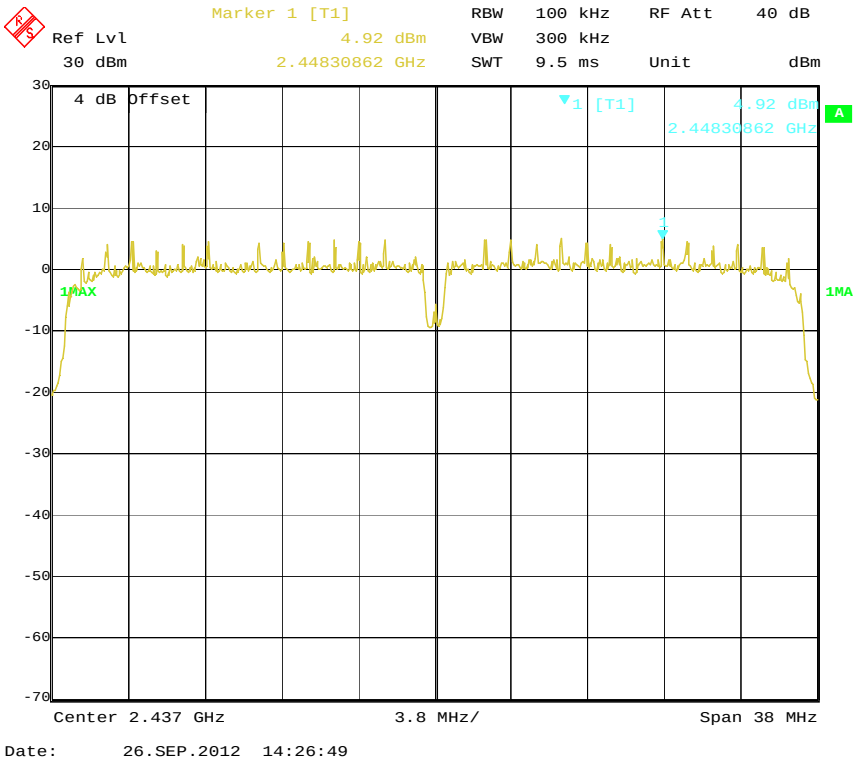
Power Spectral Density, 802.11n-HT40 Low Channe1, Antenna 0



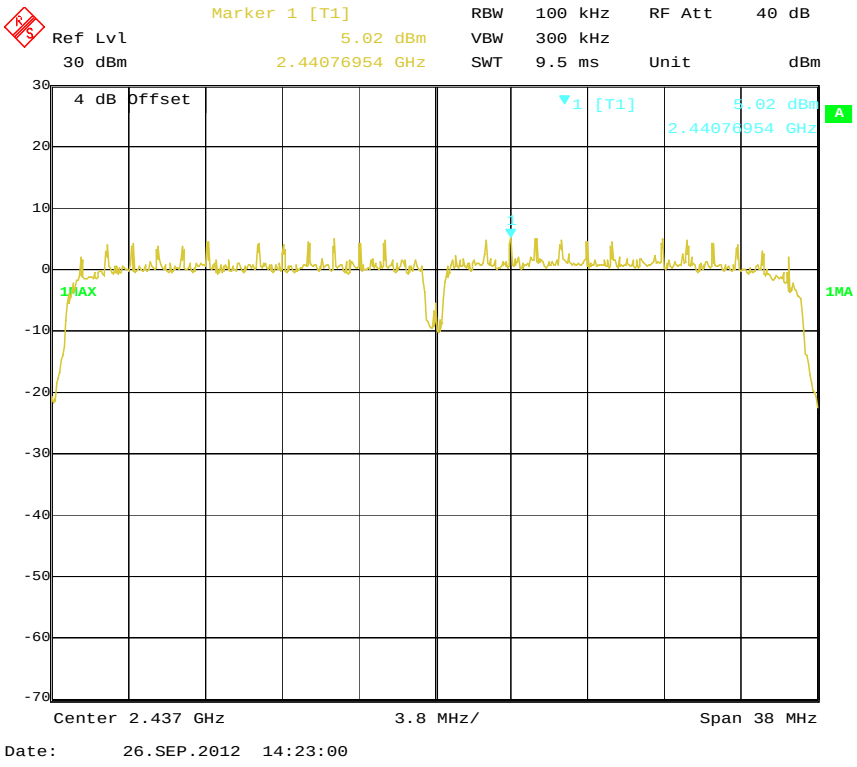
Power Spectral Density, 802.11n-HT40 Low Channel, Antenna 1



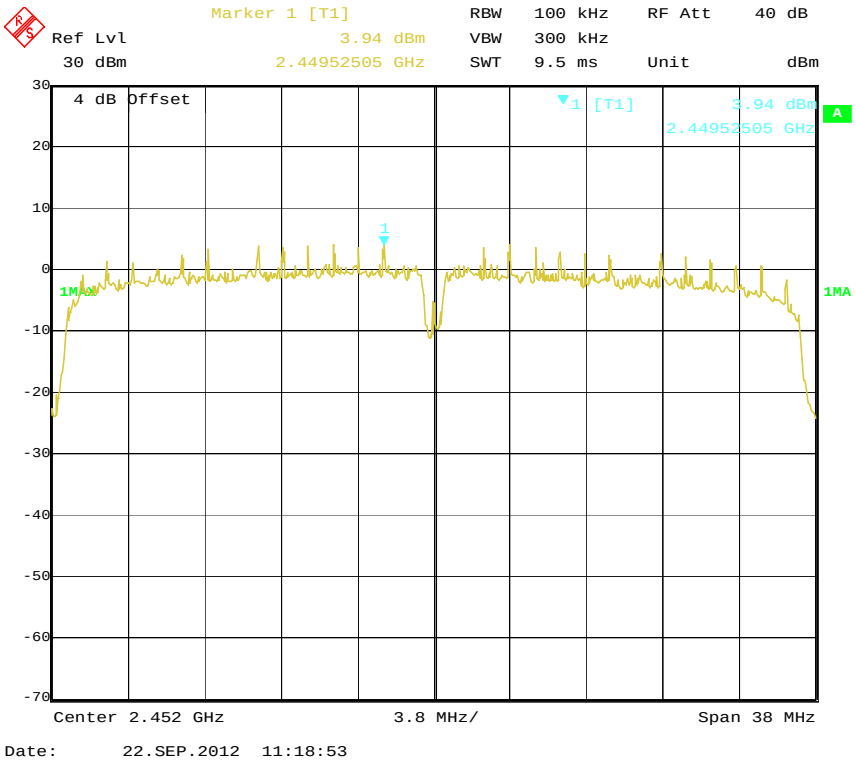
Power Spectral Density, 802.11n-HT40 Middle Channel, Antenna 0



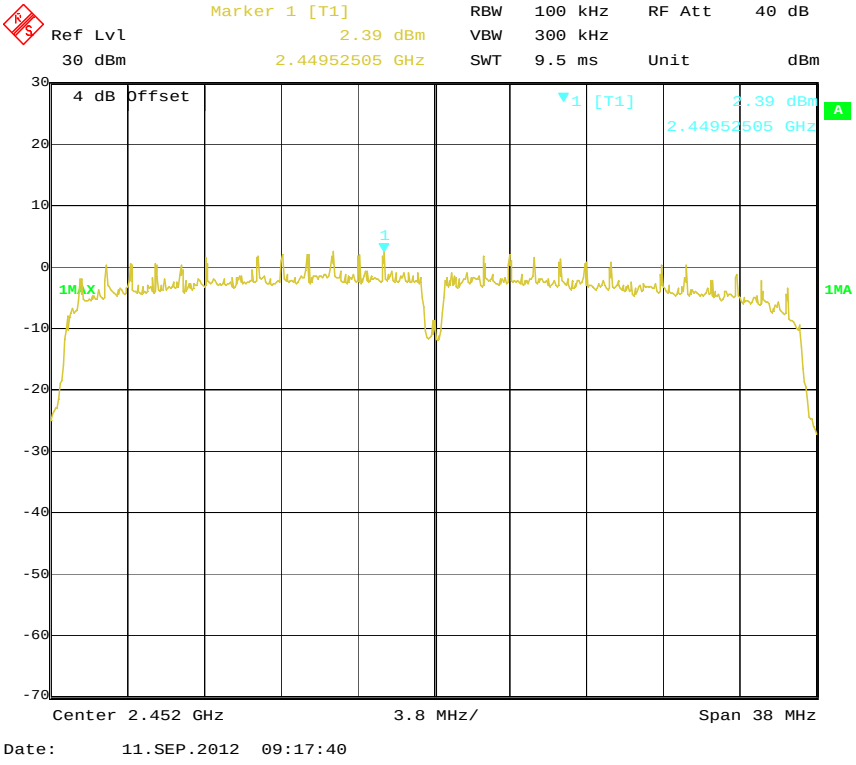
Power Spectral Density, 802.11n-HT40 Middle Channel, Antenna 1



Power Spectral Density, 802.11n-HT40 High Channel, Antenna 0



Power Spectral Density, 802.11n-HT40 High Channel, Antenna 1



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