FCC PART 15.247

TEST REPORT

For

Huawei Technologies Co., Ltd.

Administration Building, Headquarters of Huawei Technologies Co., Ltd. Bantian, Longgang District, 518129 Shenzhen, PEOPLE'S REPUBLIC OF CHINA

FCC ID: QISAP7052DN

Report Type:	**Product Name:**
Original Report	Wireless LAN Access Point

Report Number:	RDG170921008-00B
Report Date:	2018-01-05
Reviewed By:	Jerry Zhang EMC Manager
Test Laboratory:	Bay Area Compliance Laboratories Corp. (Dongguan) No.69 Pulongcun, Puxinhu Industry Area, Tangxia, Dongguan, Guangdong, China Tel: +86-769-86858888 Fax: +86-769-86858891 www.baclcorp.com.cn

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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

The Huawei Technologies Co., Ltd.'s product, model number: AP7052DN ***(FCC ID:*** QISAP7052DN***)*** (the "EUT") in this report was a ***Wireless LAN Access Point***, which was measured approximately: 22.3 cm (H) x 21.9 cm (W) x 6.2 cm (D), rated input voltage: DC 48 V from AC/DC adapter or DC 48V form POE adapter.

**All measurement and test data in this report was gathered from production sample serial number: 170921008 (Assigned by BACL, Dongguan). The EUT was received on 2017-09-21.*

Objective

This report is prepared on behalf of ***Huawei Technologies Co., Ltd.*** in accordance with Part 2, Subpart J, Part 15, Subparts A, and C of the Federal Communications Commission's rules.

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

Related Submittal(s)/Grant(s)

FCC Part 15B JBP submissions with FCC ID: QISAP7052DN
FCC Part 15E NII submissions with FCC ID: QISAP7052DN

Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices and KDB 558074 D01 DTS Meas Guidance v04.

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

Measurement Uncertainty

Parameter	Measurement Uncertainty
Occupied Channel Bandwidth	±5 %
RF output power, conducted	±0.61dB
Power Spectral Density, conducted	±0.61 dB
Unwanted Emissions, radiated	30M~200MHz: 4.58 dB for Horizontal, 4.59 dB for Vertical 200M~1GHz: 4.83 dB for Horizontal, 5.85 dB for Vertical 1G~6GHz: 4.45 dB, 6G~26.5GHz: 5.23 dB
Unwanted Emissions, conducted	±1.5 dB
Temperature	±1℃
Humidity	±5%
DC and low frequency voltages	±0.4%
Duty Cycle	1%
AC Power Lines Conducted Emission	3.12 dB (150 kHz to 30 MHz)

Test Facility

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

The test site has been approved by the FCC under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 897218,the FCC Designation No. : CN1220.

The test site has been registered with ISED Canada under ISED Canada Registration Number 3062D.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

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

The device has 3 radios, radio 0 works in WLAN 5GHz Low band(5180-5320MHz), Radio 1 works in WLAN 2.4G band(2412-2462MHz) and 5G whole band(5180-5320MHz&5500-5825MHz), Radio 2 works in Bluetooth LE mode(2402-2480MHz).

For Bluetooth LE mode, 40 channels are provided for testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	2402	20	2442
1	2404	…	…
…	…	…	…
…	…	…	…
..	…	38	2478
19	2440	39	2480

EUT was tested with channel 0, 19 and 39

For WLAN 2.4G band, 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	/	/

The device support both beamforming mode and Non-beamforming mode for 2TX, 3TX and 4TX in 802.11b, 802.11g and 802.11n system.

The worst-case data rates are determined to be as follows for each mode based upon investigations by measuring the average power and PSD across all data rates bandwidths, and modulations. Preliminary tests were performed in difference data rate and all the possible configurations, the worst cases as below table and shown in the report.

Configurations	Test Mode	Data Rate	Channel	Antenna Chain
SISO	802.11b	1Mbps	1,6,11	0, 1, 2, 3
	802.11g	6Mbps	1,6,11	0, 1, 2, 3
	802.11 ht20	MCS0	1,6,11	0, 1, 2, 3
	802.11 ht40	MCS0	3,6,9	0, 1, 2, 3
2TX Non-beamforming	802.11b	1Mbps	1,6,11	0+1
	802.11g	6Mbps	1,6,11	0+1
	802.11 ht20	MCS0	1,6,11	0+1
	802.11 ht40	MCS0	3,6,9	0+1
3TX Non-beamforming	802.11b	1Mbps	1,6,11	0+1+2
	802.11g	6Mbps	1,6,11	0+1+2
	802.11 ht20	MCS0	1,6,11	0+1+2
	802.11 ht40	MCS0	3,6,9	0+1+2
4TX Non-beamforming	802.11b	1Mbps	1,6,11	0+1+2+3
	802.11g	6Mbps	1,6,11	0+1+2+3
	802.11 ht20	MCS0	1,6,11	0+1+2+3
	802.11 ht40	MCS0	3,6,9	0+1+2+3
2TX With beamforming	802.11b	1Mbps	1,6,11	0+1
	802.11g	6Mbps	1,6,11	0+1
	802.11 ht20	MCS0	1,6,11	0+1
	802.11 ht40	MCS0	3,6,9	0+1
3TX With beamforming	802.11b	1Mbps	1,6,11	0+1+2
	802.11g	6Mbps	1,6,11	0+1+2
	802.11 ht20	MCS0	1,6,11	0+1+2
	802.11 ht40	MCS0	3,6,9	0+1+2
4TX With beamforming	802.11b	1Mbps	1,6,11	0+1+2+3
	802.11g	6Mbps	1,6,11	0+1+2+3
	802.11 ht20	MCS0	1,6,11	0+1+2+3
	802.11 ht40	MCS0	3,6,9	0+1+2+3

Equipment Modifications

No modification was made to the EUT tested.

EUT Exercise Software

The IPOP.exe& QSPR.exe was used for testing, and the commands were provided by manufacturer. The maximum power and duty cycle was set by commands as following table:

1TX:

Software and version			QSPR.exe				
Mode	Channel	Frequency (MHz)	Data Rate (Mbps)	Power Level			
				Chain 0	Chain 1	Chain 2	Chain3
802.11 b	Low	2412	1	20	20	20	20
	Middle	2437	1	20	20	20	20
	High	2462	1	20	20	20	20
802.11 g	Low	2412	6	19	19	19	19
	Middle	2437	6	19	19	19	19
	High	2462	6	19	19	19	19
802.11 n20	Low	2412	MCS0	19	19	19	19
	Middle	2437	MCS0	19	19	19	19
	High	2462	MCS0	19	19	19	19
802.11 n40	Low	2422	MCS0	18	18	18	18
	Middle	2437	MCS0	18	18	18	18
	High	2452	MCS0	18	18	18	18

2TX Non-beamforming:

Software and version			QSPR.exe	
Mode	Channel	Frequency (MHz)	Data Rate (Mbps)	Power Level
				Chain 0&1
802.11 b	Low	2412	1	20
	Middle	2437	1	20
	High	2462	1	20
802.11 g	Low	2412	6	19
	Middle	2437	6	19
	High	2462	6	19
802.11 n20	Low	2412	MCS0	19
	Middle	2437	MCS0	19
	High	2462	MCS0	19
802.11 n40	Low	2422	MCS0	18
	Middle	2437	MCS0	18
	High	2452	MCS0	18

3TX Non-beamforming:

Software and version			QSPR.exe	
Mode	Channel	Frequency (MHz)	Data Rate (Mbps)	Power Level
				Chain 0&1&2
802.11 b	Low	2412	1	20
	Middle	2437	1	20
	High	2462	1	20
802.11 g	Low	2412	6	19
	Middle	2437	6	19
	High	2462	6	19
802.11 n20	Low	2412	MCS0	19
	Middle	2437	MCS0	19
	High	2462	MCS0	19
802.11 n40	Low	2422	MCS0	18
	Middle	2437	MCS0	18
	High	2452	MCS0	18

4TX Non-beamforming:

Software and version			QSPR.exe	
Mode	Channel	Frequency (MHz)	Data Rate (Mbps)	Power Level Chain 0&1&2&3
802.11 b	Low	2412	1	20
	Middle	2437	1	20
	High	2462	1	20
802.11 g	Low	2412	6	19
	Middle	2437	6	19
	High	2462	6	19
802.11 n20	Low	2412	MCS0	19
	Middle	2437	MCS0	19
	High	2462	MCS0	19
802.11 n40	Low	2422	MCS0	18
	Middle	2437	MCS0	18
	High	2452	MCS0	18

2TX with beamforming:

Software and version			QSPR.exe	
Mode	Channel	Frequency (MHz)	Data Rate (Mbps)	Power Level Chain 0&1
802.11 b	Low	2412	1	20
	Middle	2437	1	20
	High	2462	1	20
802.11 g	Low	2412	6	19
	Middle	2437	6	19
	High	2462	6	19
802.11 n20	Low	2412	MCS0	19
	Middle	2437	MCS0	19
	High	2462	MCS0	19
802.11 n40	Low	2422	MCS0	18
	Middle	2437	MCS0	18
	High	2452	MCS0	18

3TX with beamforming:

Software and version			QSPR.exe	
Mode	Channel	Frequency (MHz)	Data Rate (Mbps)	Power Level Chain 0&1&2
802.11 b	Low	2412	1	20
	Middle	2437	1	20
	High	2462	1	20
802.11 g	Low	2412	6	19
	Middle	2437	6	19
	High	2462	6	19
802.11 n20	Low	2412	MCS0	19
	Middle	2437	MCS0	19
	High	2462	MCS0	19
802.11 n40	Low	2422	MCS0	18
	Middle	2437	MCS0	18
	High	2452	MCS0	18

4TX with beamforming:

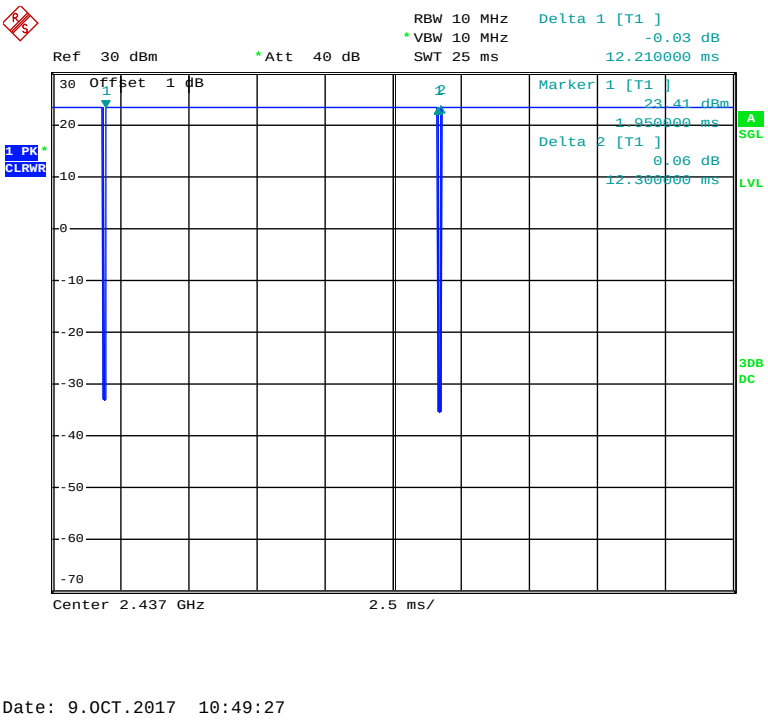
Software and version			QSPR.exe	
Mode	Channel	Frequency (MHz)	Data Rate (Mbps)	Power Level
				Chain 0&1&2&3
802.11 b	Low	2412	1	20
	Middle	2437	1	20
	High	2462	1	20
802.11 g	Low	2412	6	19
	Middle	2437	6	19
	High	2462	6	19
802.11 n20	Low	2412	MCS0	19
	Middle	2437	MCS0	19
	High	2462	MCS0	19
802.11 n40	Low	2422	MCS0	18
	Middle	2437	MCS0	18
	High	2452	MCS0	18

For BLE mode, the power configured as default setting by system, the software ' IPOP.exe' only used for channel channels.

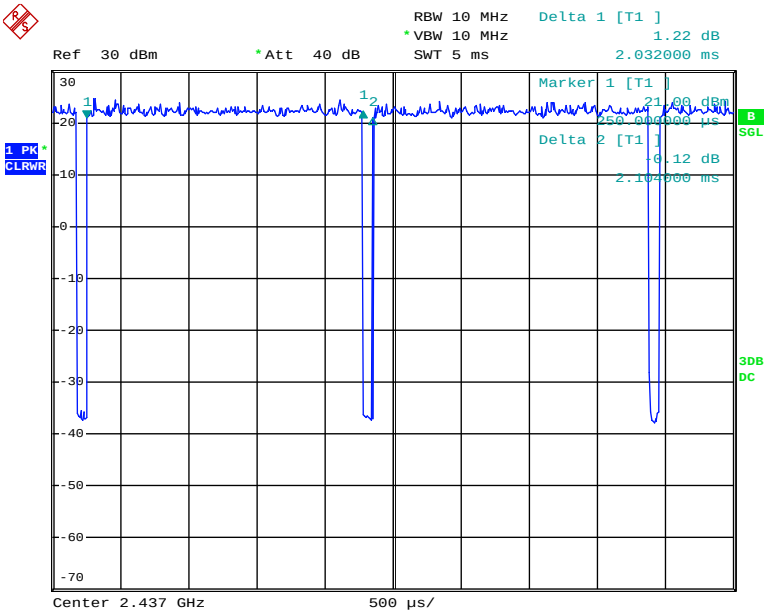
The duty cycle as below:

Mode	T_{on} (ms)	T_{on+off} (ms)	Duty Cycle (%)	Minimum Transmission Duration (T) (ms)
802.11b	12.21	12.30	99.27	12.21
802.11g	2.032	2.104	96.58	2.032
802.11n ht20	4.958	5.028	98.61	4.958
802.11n ht40	2.412	2.484	97.10	2.412
BLE	0.356	0.625	56.96	0.356

802.11b



802.11g



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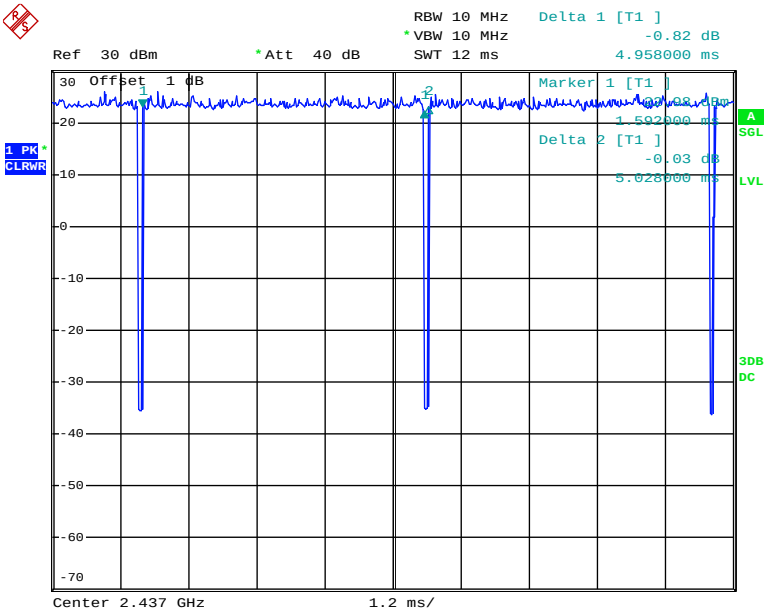
802.11n ht20



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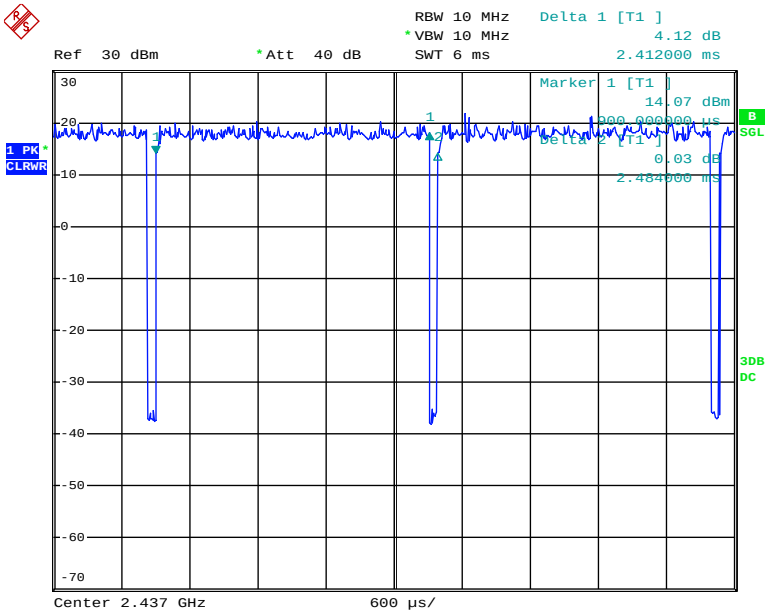
802.11n ht40



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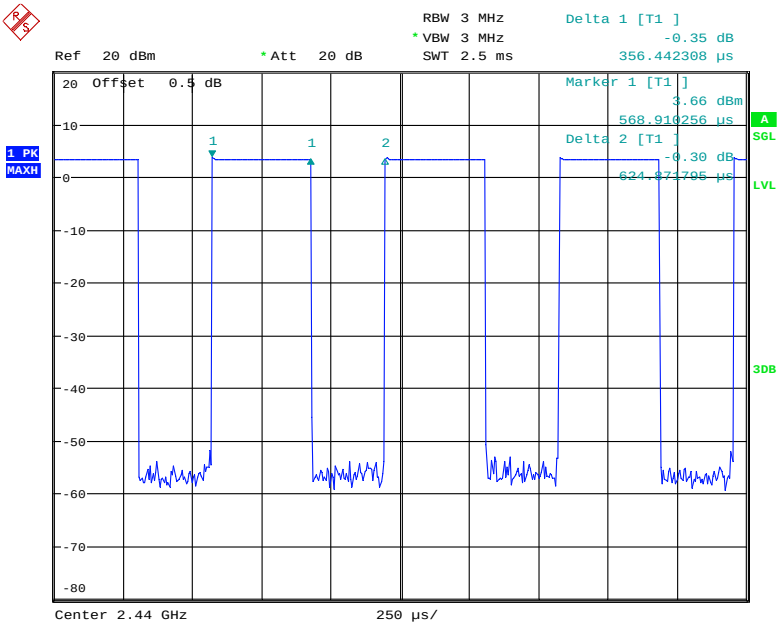
BLE



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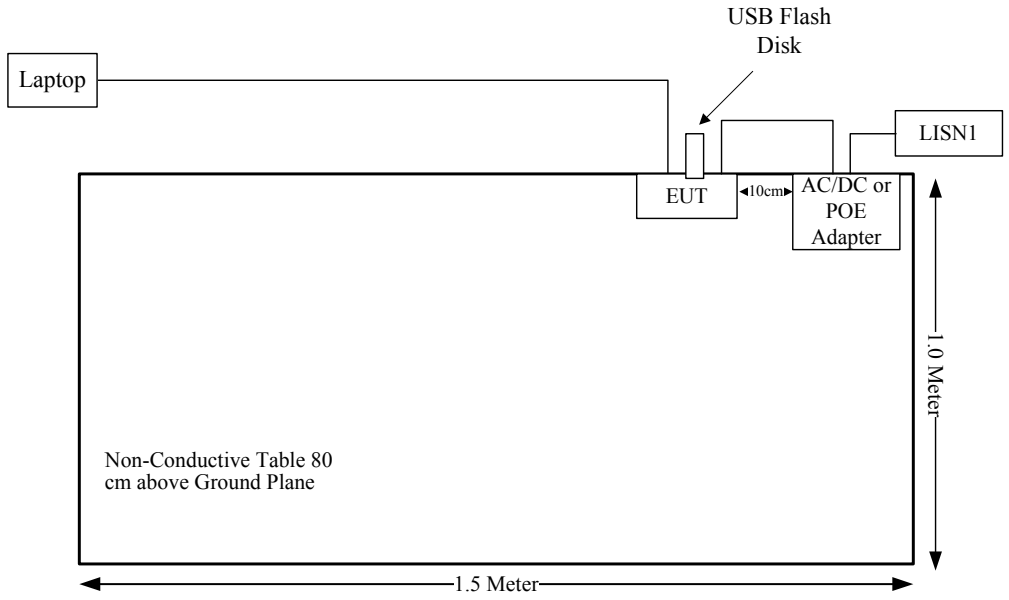
Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
HUAWEI	PoE Adapter	PoE35-54A	N/A
N/A	AC/DC Adapter	DC48A2	N/A
Lenovo	Laptop	ThinkPad E450	PF-0MRADG
Kingston	USB Flash Disk	4G	N/A

External Cable

Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
RJ45 Cable	yes	No	1.0	PoE Adapter	EUT
RJ45 Cable	yes	No	10	EUT	Laptop

Block Diagram of Test Setup



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
FCC §15.247 (i) & §1.1310 & §2.1091	Maximum Permissable Exposure (MPE)	Compliance
§15.203	Antenna Requirement	Compliant
§15.207 (a)	AC Line Conducted Emissions	Compliant
§15.205, §15.209, §15.247(d)	Spurious Emissions	Compliant
§15.247 (a)(2)	6 dB Emission Bandwidth	Compliant
§15.247(b)(3)	Maximum conducted output power	Compliant
§15.247(d)	100 kHz Bandwidth of Frequency Band Edge	Compliant
§15.247(e)	Power Spectral Density	Compliant

FCC §15.247 (i) & §1.1310 & §2.1091- MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Applicable Standard

According to subpart 15.247(i)and subpart §1.1310, 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.

Calculation formula:

Prediction of power density at the distance of the applicable MPE limit
$S = PG/4\pi R^2$ = 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);

For simultaneously transmit system, the calculated power density should comply with:

$$\sum_i \frac{S_i}{S_{Limit,i}} \leq 1$$

Calculated Data:

Radio	Description	Frequency (MHz)	Antenna Gain		Conducted output power including Tune-up Tolerance		Evaluation Distance (cm)	Power Density (mW/cm^2)	MPE Limit (mW/cm^2)
			(dBi)	(numeric)	(dBm)	(mW)			
0	WLAN 5G Low Band	5180-5240	2.8	1.91	22	158.49	20.00	0.06	1.0
1	WLAN 2.4G+5G Whole Band	2412-2462	2	1.58	30	1000.00	20.00	0.32	1.0
		5180-5825	2.8	1.91	25	316.23	20.00	0.12	1.0
2	BLE	2402-2480	4	2.51	3	2.00	20.00	0.001	1.0

Note:

The Radio 1(WLAN 2.4G+5G Band) can transmit in 2.4G band, or 5G band, or transmit in both band simultaneously. Radio 1(WLAN 2.4G+5G Band) and Radio 0 can`t transmit in 5150-5250MHz band simultaneously.

The 3 radios can transmit simultaneously, the maximum RF exposure condition as below:

$$\sum_i \frac{S_i}{S_{Limit,i}}$$

$=S_{Radio1\text{-}2.4G}/S_{limit\text{-}\ Radio1\text{-}2.4G} + S_{Radio1\text{-}5G}/S_{limit\text{-}Radio1\text{-}5G} + S_{Radio0\text{-}5G}/S_{limit\text{-}Radio0\text{-}5G}\ S_{Radio2}/S_{limit\text{-}\ Radio3}$

=0.06/1+0.32/1+0.12/1+0.001/1

=0.50

< 1.0

Result: The device meet FCC MPE at 20 cm distance

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.

Antenna Connector Construction

The EUT have 4 internal metal plate antennas for WLAN 2.4GHz+5G band, all the antenna gains are 2.0 dBi in 2.4GHz band and 2.8 dBi in 5GHz band. One internal PCB antenna for BLE, the antenna gain is 4.0 dBi. 4 internal PCB antennas for WLAN 5G Low Band (5150-5250MHz), all the antenna gains are 2.8 dBi. Please refer to the EUT photo.

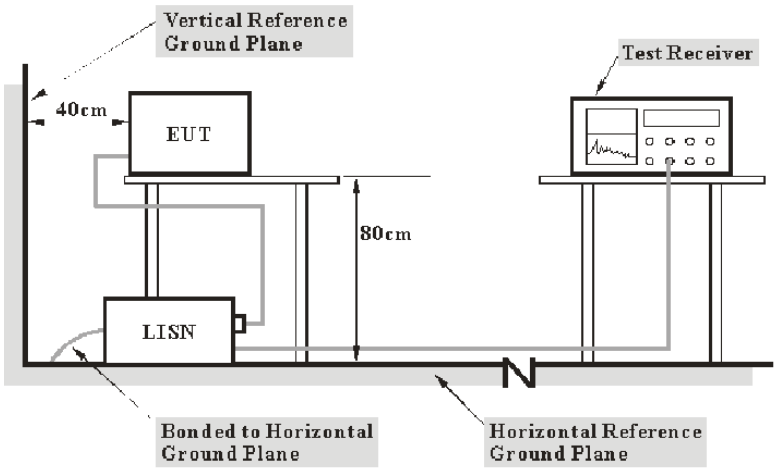
Result: Compliance.

FCC §15.207 (a) – AC LINE CONDUCTED EMISSIONS

Applicable Standard

FCC§15.207(a)

EUT Setup



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

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.207 limits.

The spacing between the peripherals was 10 cm.

The adapter was connected to the main lisn with AC 120 V/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 Procedure

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

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

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

Corrected Amplitude & Margin Calculation

The basic equation is as follows:

$V_C = V_R + A_C + VDF$
$C_f = A_C + VDF$

Herein,
V_C (cord. Reading): corrected voltage amplitude
V_R: reading voltage amplitude
A_c: attenuation caused by cable loss
VDF: voltage division factor of AMN
C_f: Correction Factor

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

Margin = Limit – Corrected Amplitude

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	EMI Test Receiver	ESCS 30	830245/006	2016-12-08	2017-12-08
R&S	L.I.S.N	ESH2-Z5	892107/021	2017-09-25	2018-09-25
R&S	Two-line V-network	ENV 216	3560.6550.12	2017-09-05	2018-09-05
R&S	Test Software	EMC32	Version8.53.0	N/A	N/A
Unknown	Coaxial Cable	C-NJNJ-50	C-0200-01	2017-09-05	2018-09-05

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

Test Data

Environmental Conditions

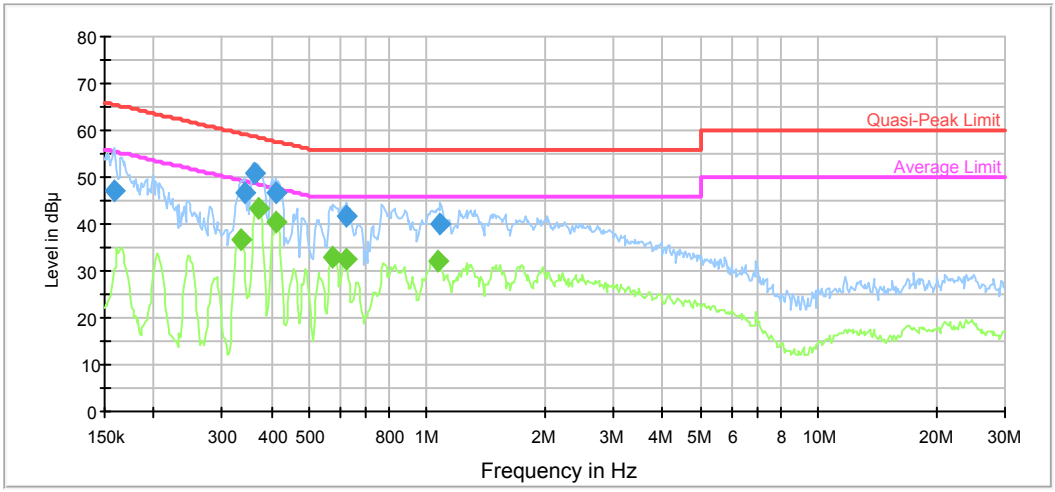
Temperature:	26.1 °C
Relative Humidity:	44 %
ATM Pressure:	101.4 kPa

The testing was performed by Alex You on 2017-12-01.

Test Mode: Transmitting

1) PoE Adapter:

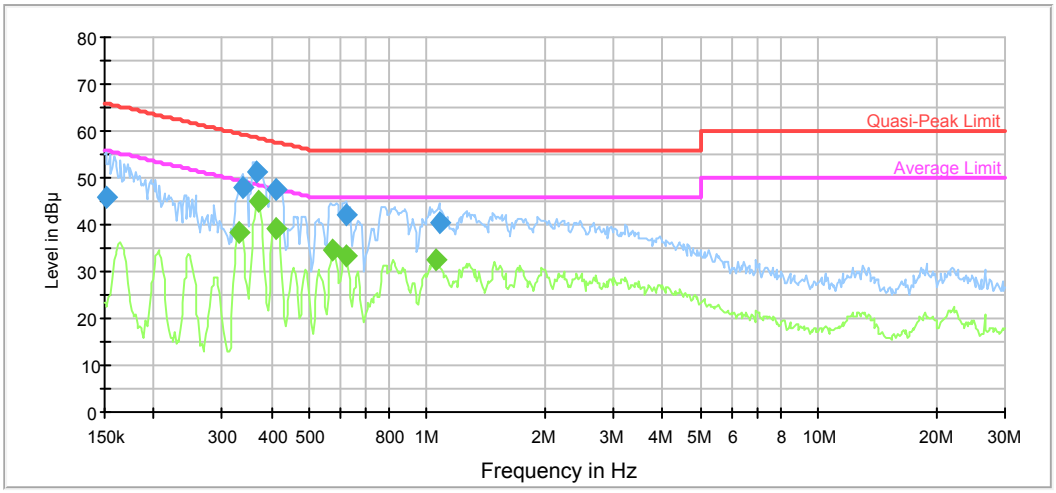
AC120 V, 60 Hz, Line:



Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.158604	47.0	9.000	L1	11.1	18.5	65.5	Compliance
0.340821	46.8	9.000	L1	10.1	12.4	59.2	Compliance
0.363254	51.1	9.000	L1	10.0	7.6	58.7	Compliance
0.409372	46.7	9.000	L1	10.0	11.0	57.7	Compliance
0.624492	41.5	9.000	L1	9.8	14.5	56.0	Compliance
1.082190	40.1	9.000	L1	9.8	15.9	56.0	Compliance

Frequency (MHz)	Average (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.335433	36.8	9.000	L1	10.1	12.5	49.3	Compliance
0.372042	43.2	9.000	L1	10.0	5.3	48.5	Compliance
0.409372	40.3	9.000	L1	10.0	7.4	47.7	Compliance
0.576662	32.9	9.000	L1	9.8	13.1	46.0	Compliance
0.624492	32.5	9.000	L1	9.8	13.5	46.0	Compliance
1.065081	32.2	9.000	L1	9.8	13.8	46.0	Compliance

AC120 V, 60 Hz, Neutral:

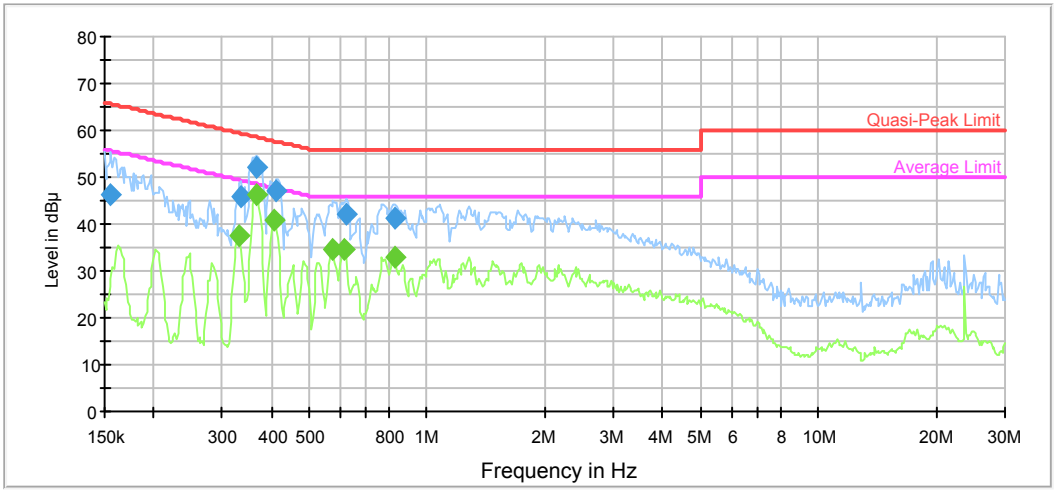


Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.151200	465.9	9.000	N	11.2	20.0	65.9	Compliance
0.338116	48.0	9.000	N	10.1	11.2	59.2	Compliance
0.366160	51.5	9.000	N	10.0	7.1	58.6	Compliance
0.409372	47.4	9.000	N	10.0	10.3	57.7	Compliance
0.619536	42.2	9.000	N	9.8	13.8	56.0	Compliance
1.073601	40.6	9.000	N	9.8	15.4	56.0	Compliance

Frequency (MHz)	Average (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.332770	38.3	9.000	N	10.1	11.1	49.4	Compliance
0.372042	45.1	9.000	N	10.0	3.4	48.5	Compliance
0.412647	39.3	9.000	N	10.0	8.3	47.6	Compliance
0.576662	34.7	9.000	N	9.8	11.3	46.0	Compliance
0.619536	33.4	9.000	N	9.8	12.6	46.0	Compliance
1.048242	32.3	9.000	N	9.8	13.7	46.0	Compliance

2) AC/DC Adapter:

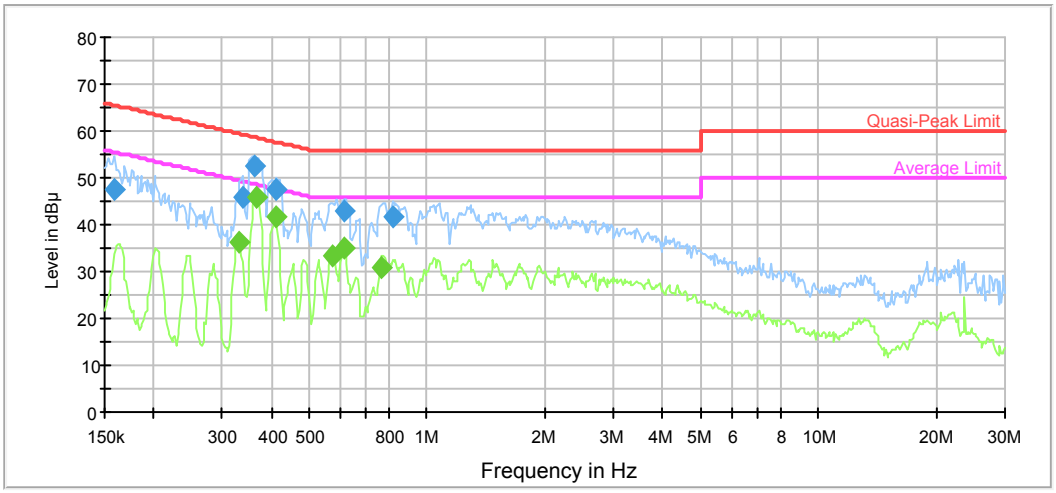
AC120 V, 60 Hz, Line:



Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.156097	46.5	9.000	L1	11.1	19.2	65.7	Compliance
0.335433	45.8	9.000	L1	10.1	13.5	59.3	Compliance
0.366160	52.1	9.000	L1	10.0	6.5	58.6	Compliance
0.412647	47.1	9.000	L1	10.0	10.5	57.6	Compliance
0.624492	42.1	9.000	L1	9.8	13.9	56.0	Compliance
0.825364	41.3	9.000	L1	9.8	14.7	56.0	Compliance

Frequency (MHz)	Average (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.330129	37.5	9.000	L1	10.1	11.9	49.4	Compliance
0.366160	46.3	9.000	L1	10.0	2.3	48.6	Compliance
0.406123	40.7	9.000	L1	10.0	7.0	47.7	Compliance
0.576662	34.7	9.000	L1	9.8	11.3	46.0	Compliance
0.614619	34.4	9.000	L1	9.8	11.6	46.0	Compliance
0.825364	33.0	9.000	L1	9.8	13.0	46.0	Compliance

AC120 V, 60 Hz, Neutral:



Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.158604	47.4	9.000	N	11.1	18.1	65.5	Compliance
0.338116	45.8	9.000	N	10.1	13.4	59.2	Compliance
0.363254	52.7	9.000	N	10.0	6.0	58.7	Compliance
0.412647	47.6	9.000	N	10.0	10.0	57.6	Compliance
0.614619	43.0	9.000	N	9.8	13.0	56.0	Compliance
0.818813	41.6	9.000	N	9.8	14.4	56.0	Compliance

Frequency (MHz)	Average (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.332770	36.4	9.000	N	10.1	13.0	49.4	Compliance
0.366160	45.6	9.000	N	10.0	3.0	48.6	Compliance
0.409372	41.9	9.000	N	10.0	5.8	47.7	Compliance
0.576662	33.5	9.000	N	9.8	12.5	46.0	Compliance
0.614619	35.1	9.000	N	9.8	10.9	46.0	Compliance
0.768247	30.6	9.000	N	9.8	15.4	46.0	Compliance

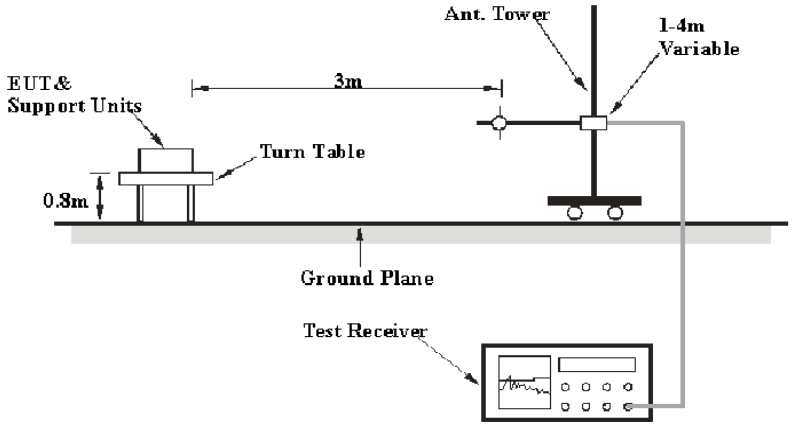
FCC §15.209, §15.205 & §15.247(d) - SPURIOUS EMISSIONS

Applicable Standard

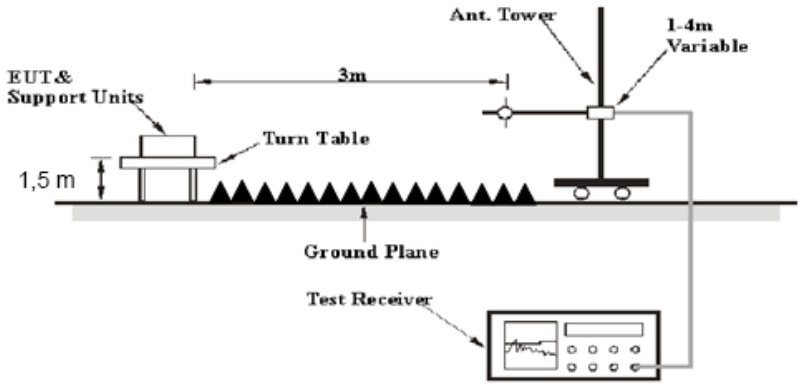
FCC §15.247 (d); §15.209; §15.205;

EUT Setup

Below 1GHz:



Above 1GHz:



The radiated emission tests were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.10-2013. 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.

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:

30MHz-1000MHz:

Measurement	RBW	Video B/W	IF B/W
QP	120 kHz	300 kHz	120kHz

1GHz- 25GHz:

Measurement	Duty cycle	RBW	Video B/W
PK	Any	1MHz	3 MHz
Ave.	>98%	1MHz	10 Hz
	<98%	1MHz	1/T

Note: T is minimum transmission duration

Test Procedure

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

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

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 Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	EMI Test Receiver	ESCI	100224	2017/9/1	2018/9/1
Sunol Sciences	Antenna	JB3	A060611-1	2017/11/10	2020/11/10
HP	Amplifier	8447D	2727A05902	2017/9/5	2018/9/5
Agilent	Spectrum Analyzer	E4440A	SG43360054	2016/12/8	2017/12/8
ETS-Lindgren	Horn Antenna	3115	000 527 35	2016/1/5	2019/1/5
MITEQ	Amplifier	AFS42-00101800-25-S-42	2001271	2017/9/5	2018/9/5
Quinstar	Amplifier	QLW-18405536-JO	15964001001	2017/6/27	2018/6/27
Ducommun Technolagies	Horn Antenna	ARH-4223-02	1007726-02 1304	2017/6/16	2020/6/15
N/A	Coaxial Cable	C-NJNJ-50	C-0400-01	2017/9/5	2018/9/5
N/A	Coaxial Cable	C-NJNJ-50	C-0075-01	2017/9/5	2018/9/5
N/A	Coaxial Cable	C-NJNJ-50	C-1000-01	2017/9/5	2018/9/5
N/A	Coaxial Cable	C-SJSJ-50	C-0800-01	2017/9/5	2018/9/5
Chengdu Ouli	Band Rejection Filter	2400-2483.5	002	2017-09-05	2018-09-05
Farad	Test Software	EZ-EMC	V1.1.42	N/A	N/A

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

Test Data

Environmental Conditions

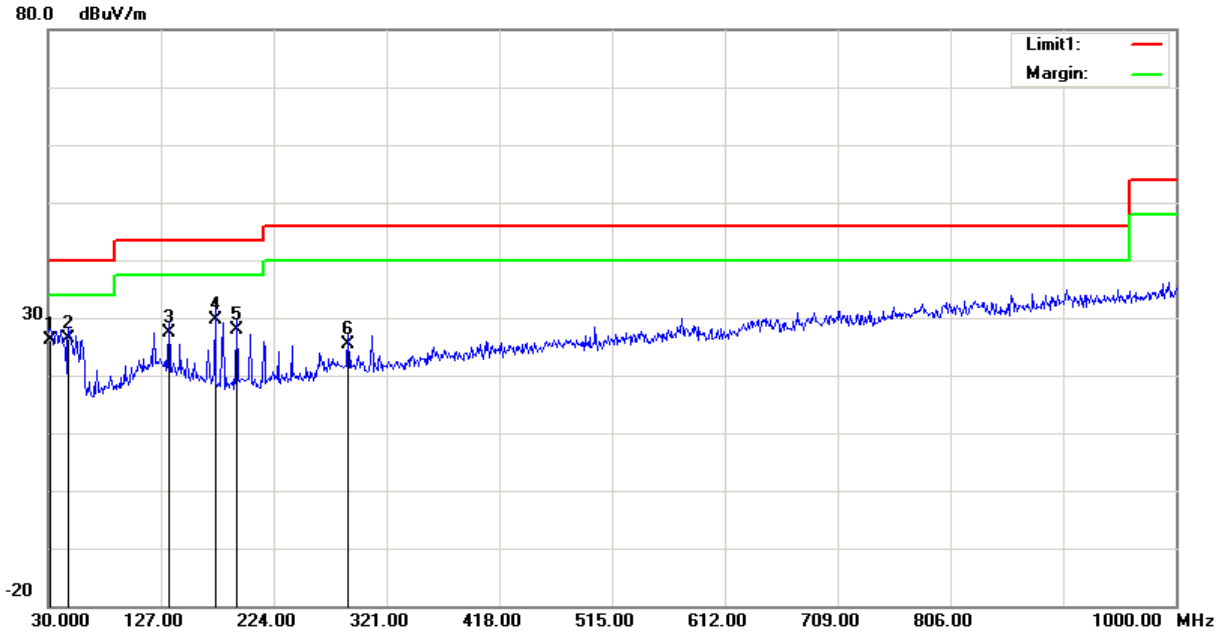
Temperature:	24.9~28.3 °C
Relative Humidity:	36~38 %
ATM Pressure:	100.6~101.3 kPa

** The testing was performed by Steven Zuo and Kakaxi Chen from 2017-10-12 to 2017-10-24.*

Test Mode: Transmitting(PoE adapter was the worst)

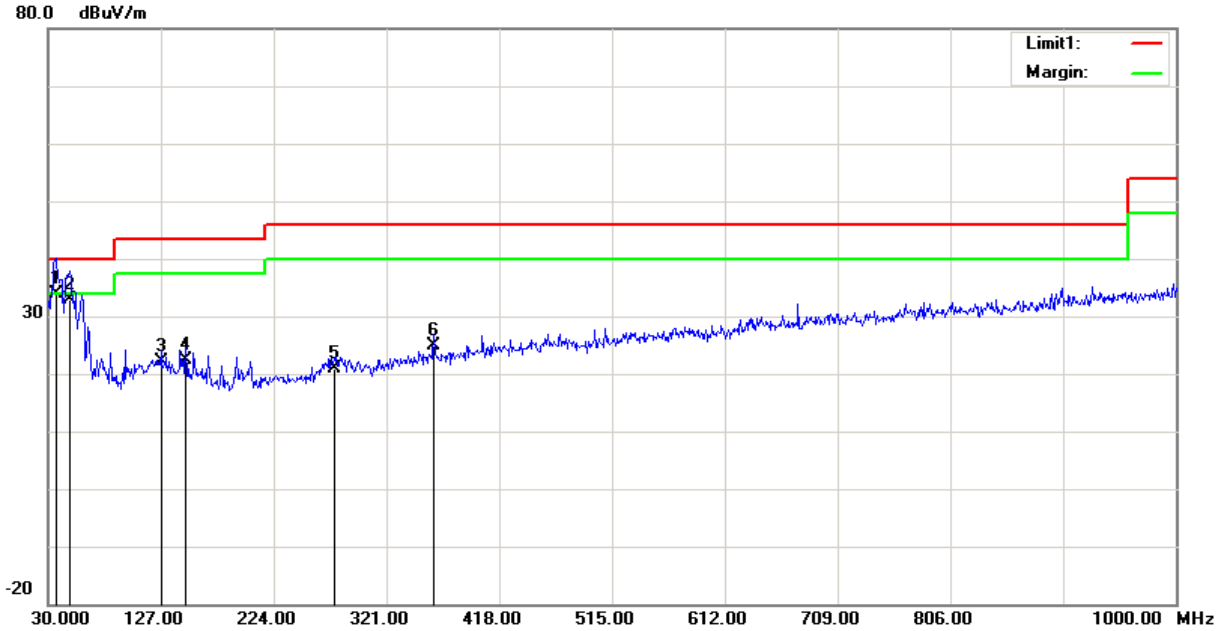
1) **Below 1GHz**(802.11 b mode 2437MHz 1TX +802.11a 5785MHz 1TX+BLE middle channel was the worst):

Horizontal



Frequency (MHz)	Receiver Reading (dBµV)	Detector	Correction Factor (dB/m)	Cord. Amp. (dBµV/m)	Limit (dBµV/m)	Margin (dB)
31.9400	26.55	QP	-0.35	26.20	40.00	13.80
47.4600	37.00	QP	-10.70	26.30	40.00	13.70
133.7900	32.81	QP	-5.41	27.40	43.50	16.10
173.5600	37.34	QP	-7.64	29.70	43.50	13.80
191.9900	35.32	QP	-7.52	27.80	43.50	15.70
288.0200	29.22	QP	-3.92	25.30	46.00	20.70

Vertical



Frequency (MHz)	Receiver Reading (dBµV)	Detector	Correction Factor (dB/m)	Cord. Amp. (dBµV/m)	Limit (dBµV/m)	Margin (dB)
36.7900	37.73	QP	-3.83	33.90	40.00	6.10
48.4300	43.89	QP	-11.09	32.80	40.00	7.20
127.0000	27.05	QP	-4.95	22.10	43.50	21.40
148.3400	29.00	QP	-6.50	22.50	43.50	21.00
276.3800	24.65	QP	-3.75	20.90	46.00	25.10
361.7400	27.80	QP	-2.90	24.90	46.00	21.10

SISO:
802.11b Mode (Chain 1 was the worst)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB)					
Low Channel: 2412 MHz									
2412.00	65.73	PK	H	28.12	1.81	0.00	95.66	N/A	N/A
2412.00	59.14	AV	H	28.12	1.81	0.00	89.07	N/A	N/A
2412.00	72.51	PK	V	28.12	1.81	0.00	102.44	N/A	N/A
2412.00	66.34	AV	V	28.12	1.81	0.00	96.27	N/A	N/A
2390.00	27.44	PK	V	28.08	1.80	0.00	57.32	74.00	16.68
2390.00	15.97	AV	V	28.08	1.80	0.00	45.85	54.00	8.15
4824.00	46.87	PK	V	32.95	3.19	37.20	45.81	74.00	28.19
4824.00	36.58	AV	V	32.95	3.19	37.20	35.52	54.00	18.48
7236.00	45.98	PK	V	35.81	4.77	37.27	49.29	74.00	24.71
7236.00	35.27	AV	V	35.81	4.77	37.27	38.58	54.00	15.42
4826.00	45.65	PK	V	32.95	3.20	37.20	44.6	74.00	29.4
4826.00	35.45	AV	V	32.95	3.20	37.20	34.4	54.00	19.6
Middle Channel: 2437 MHz									
2437.00	66.38	PK	H	28.17	1.82	0.00	96.37	N/A	N/A
2437.00	59.98	AV	H	28.17	1.82	0.00	89.97	N/A	N/A
2437.00	73.98	PK	V	28.17	1.82	0.00	103.97	N/A	N/A
2437.00	67.24	AV	V	28.17	1.82	0.00	97.23	N/A	N/A
4874.00	46.54	PK	V	33.05	3.26	37.21	45.64	74.00	28.36
4874.00	36.45	AV	V	33.05	3.26	37.21	35.55	54.00	18.45
7311.00	45.57	PK	V	36.01	4.64	37.36	48.86	74.00	25.14
7311.00	35.45	AV	V	36.01	4.64	37.36	38.74	54.00	15.26
5748.00	45.51	PK	V	34.20	3.69	37.32	46.08	74.00	27.92
5748.00	35.24	AV	V	34.20	3.69	37.32	35.81	54.00	18.19
5987.00	44.68	PK	V	34.29	3.82	37.32	45.47	74.00	28.53
5987.00	34.24	AV	V	34.29	3.82	37.32	35.03	54.00	18.97
High Channel: 2462 MHz									
2462.00	67.91	PK	H	28.22	1.83	0.00	97.96	N/A	N/A
2462.00	61.48	AV	H	28.22	1.83	0.00	91.53	N/A	N/A
2462.00	74.33	PK	V	28.22	1.83	0.00	104.38	N/A	N/A
2462.00	68.14	AV	V	28.22	1.83	0.00	98.19	N/A	N/A
2483.50	33.34	PK	V	28.27	1.84	0.00	63.45	74.00	10.55
2483.50	16.58	AV	V	28.27	1.84	0.00	46.69	54.00	7.31
4924.00	46.57	PK	V	33.15	3.27	37.22	45.77	74.00	28.23
4924.00	36.57	AV	V	33.15	3.27	37.22	35.77	54.00	18.23
7386.00	45.58	PK	V	36.20	4.51	37.46	48.83	74.00	25.17
7386.00	35.47	AV	V	36.20	4.51	37.46	38.72	54.00	15.28
6257.00	45.27	PK	V	34.25	4.30	37.20	46.62	74.00	27.38
6257.00	35.14	AV	V	34.25	4.30	37.20	36.49	54.00	17.51

802.11g Mode (Chain 1 was the worst)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Detector	Polar (H/V)	Factor (dB)					
Low Channel: 2412 MHz									
2412.00	64.05	PK	H	28.12	1.81	0.00	93.98	N/A	N/A
2412.00	53.65	AV	H	28.12	1.81	0.00	83.58	N/A	N/A
2412.00	70.88	PK	V	28.12	1.81	0.00	100.81	N/A	N/A
2412.00	60.14	AV	V	28.12	1.81	0.00	90.07	N/A	N/A
2390.00	35.68	PK	V	28.08	1.80	0.00	65.56	74.00	8.44
2390.00	21.67	AV	V	28.08	1.80	0.00	51.55	54.00	2.45
4824.00	46.58	PK	V	32.95	3.19	37.20	45.52	74.00	28.48
4824.00	36.25	AV	V	32.95	3.19	37.20	35.19	54.00	18.81
7236.00	45.98	PK	V	35.81	4.77	37.27	49.29	74.00	24.71
7236.00	35.47	AV	V	35.81	4.77	37.27	38.78	54.00	15.22
6587.00	46.24	PK	V	34.37	4.82	37.05	48.38	74.00	25.62
6587.00	36.45	AV	V	34.37	4.82	37.05	38.59	54.00	15.41
Middle Channel: 2437 MHz									
2437.00	65	PK	H	28.17	1.82	0.00	94.99	N/A	N/A
2437.00	54.65	AV	H	28.17	1.82	0.00	84.64	N/A	N/A
2437.00	72.58	PK	V	28.17	1.82	0.00	102.57	N/A	N/A
2437.00	62.45	AV	V	28.17	1.82	0.00	92.44	N/A	N/A
4874.00	46.87	PK	V	33.05	3.26	37.21	45.97	74.00	28.03
4874.00	35.47	AV	V	33.05	3.26	37.21	34.57	54.00	19.43
7311.00	45.25	PK	V	36.01	4.64	37.36	48.54	74.00	25.46
7311.00	35.14	AV	V	36.01	4.64	37.36	38.43	54.00	15.57
5789.00	45.67	PK	V	34.22	3.71	37.29	46.31	74.00	27.69
5789.00	35.14	AV	V	34.22	3.71	37.29	35.78	54.00	18.22
6025.00	45.67	PK	V	34.30	3.88	37.32	46.53	74.00	27.47
6025.00	35.24	AV	V	34.30	3.88	37.32	36.1	54.00	17.9
High Channel: 2462 MHz									
2462.00	66.39	PK	H	28.22	1.83	0.00	96.44	N/A	N/A
2462.00	55.25	AV	H	28.22	1.83	0.00	85.3	N/A	N/A
2462.00	72.72	PK	V	28.22	1.83	0.00	102.77	N/A	N/A
2462.00	62.15	AV	V	28.22	1.83	0.00	92.2	N/A	N/A
2483.50	37.45	PK	V	28.27	1.84	0.00	67.56	74.00	6.44
2483.50	21.45	AV	V	28.27	1.84	0.00	51.56	54.00	2.44
4924.00	46.57	PK	V	33.15	3.27	37.22	45.77	74.00	28.23
4924.00	36.47	AV	V	33.15	3.27	37.22	35.67	54.00	18.33
7386.00	45.98	PK	V	36.20	4.51	37.46	49.23	74.00	24.77
7386.00	35.47	AV	V	36.20	4.51	37.46	38.72	54.00	15.28
5781.00	45.38	PK	V	34.21	3.70	37.29	46	74.00	28
5781.00	35.27	AV	V	34.21	3.70	37.29	35.89	54.00	18.11

802.11 n ht20 Mode(Chain 1 was the worst)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB)					
Low Channel: 2412 MHz									
2412.00	63.7	PK	H	28.12	1.81	0.00	93.63	N/A	N/A
2412.00	53.47	AV	H	28.12	1.81	0.00	83.4	N/A	N/A
2412.00	70.51	PK	V	28.12	1.81	0.00	100.44	N/A	N/A
2412.00	60.15	AV	V	28.12	1.81	0.00	90.08	N/A	N/A
2390.00	36.14	PK	V	28.08	1.80	0.00	66.02	74.00	7.98
2390.00	21.98	AV	V	28.08	1.80	0.00	51.86	54.00	2.14
4824.00	46.84	PK	V	32.95	3.19	37.20	45.78	74.00	28.22
4824.00	36.25	AV	V	32.95	3.19	37.20	35.19	54.00	18.81
7236.00	45.78	PK	V	35.81	4.77	37.27	49.09	74.00	24.91
7236.00	35.46	AV	V	35.81	4.77	37.27	38.77	54.00	15.23
6257.00	46.57	PK	V	34.25	4.30	37.20	47.92	74.00	26.08
6257.00	36.14	AV	V	34.25	4.30	37.20	37.49	54.00	16.51
Middle Channel: 2437 MHz									
2437.00	63	PK	H	28.17	1.82	0.00	92.99	N/A	N/A
2437.00	52.59	AV	H	28.17	1.82	0.00	82.58	N/A	N/A
2437.00	73.1	PK	V	28.17	1.82	0.00	103.09	N/A	N/A
2437.00	62.58	AV	V	28.17	1.82	0.00	92.57	N/A	N/A
4874.00	46.74	PK	V	33.05	3.26	37.21	45.84	74.00	28.16
4874.00	36.52	AV	V	33.05	3.26	37.21	35.62	54.00	18.38
7311.00	45.68	PK	V	36.01	4.64	37.36	48.97	74.00	25.03
7311.00	35.47	AV	V	36.01	4.64	37.36	38.76	54.00	15.24
5747.00	46.25	PK	V	34.20	3.69	37.32	46.82	74.00	27.18
5747.00	36.58	AV	V	34.20	3.69	37.32	37.15	54.00	16.85
6325.00	45.54	PK	V	34.24	4.43	37.16	47.05	74.00	26.95
6325.00	35.26	AV	V	34.24	4.43	37.16	36.77	54.00	17.23
High Channel: 2462 MHz									
2462.00	65.07	PK	H	28.22	1.83	0.00	95.12	N/A	N/A
2462.00	54.89	AV	H	28.22	1.83	0.00	84.94	N/A	N/A
2462.00	71.07	PK	V	28.22	1.83	0.00	101.12	N/A	N/A
2462.00	61.71	AV	V	28.22	1.83	0.00	91.76	N/A	N/A
2483.50	36.25	PK	V	28.27	1.84	0.00	66.36	74.00	7.64
2483.50	21.67	AV	V	28.27	1.84	0.00	51.78	54.00	2.22
4924.00	46.45	PK	V	33.15	3.27	37.22	45.65	74.00	28.35
4924.00	36.25	AV	V	33.15	3.27	37.22	35.45	54.00	18.55
7386.00	45.74	PK	V	36.20	4.51	37.46	48.99	74.00	25.01
7386.00	35.25	AV	V	36.20	4.51	37.46	38.5	54.00	15.5
5478.00	45.57	PK	V	34.06	3.56	37.34	45.85	74.00	28.15
5478.00	35.28	AV	V	34.06	3.56	37.34	35.56	54.00	18.44

802.11 n ht40 Mode(Chain 1 was the worst)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB)					
Low Channel: 2422 MHz									
2422.00	59.5	PK	H	28.14	1.81	0.00	89.45	N/A	N/A
2422.00	49.12	AV	H	28.14	1.81	0.00	79.07	N/A	N/A
2422.00	66.33	PK	V	28.14	1.81	0.00	96.28	N/A	N/A
2422.00	56.14	AV	V	28.14	1.81	0.00	86.09	N/A	N/A
2390.00	35.15	PK	V	28.08	1.80	0.00	65.03	74.00	8.97
2390.00	21.87	AV	V	28.08	1.80	0.00	51.75	54.00	2.25
4844.00	46.87	PK	V	32.99	3.22	37.20	45.88	74.00	28.12
4844.00	36.25	AV	V	32.99	3.22	37.20	35.26	54.00	18.74
7266.00	45.87	PK	V	35.89	4.72	37.31	49.17	74.00	24.83
7266.00	35.28	AV	V	35.89	4.72	37.31	38.58	54.00	15.42
4215.00	47.15	PK	V	32.36	2.74	37.06	45.19	74.00	28.81
4215.00	37.25	AV	V	32.36	2.74	37.06	35.29	54.00	18.71
Middle Channel: 2437 MHz									
2437.00	59.7	PK	H	28.17	1.82	0.00	89.69	N/A	N/A
2437.00	49.24	AV	H	28.17	1.82	0.00	79.23	N/A	N/A
2437.00	66.27	PK	V	28.17	1.82	0.00	96.26	N/A	N/A
2437.00	56.34	AV	V	28.17	1.82	0.00	86.33	N/A	N/A
4874.00	46.87	PK	V	33.05	3.26	37.21	45.97	74.00	28.03
4874.00	35.97	AV	V	33.05	3.26	37.21	35.07	54.00	18.93
7311.00	46.25	PK	V	36.01	4.64	37.36	49.54	74.00	24.46
7311.00	36.14	AV	V	36.01	4.64	37.36	39.43	54.00	14.57
5689.00	45.68	PK	V	34.18	3.67	37.38	46.15	74.00	27.85
5689.00	35.25	AV	V	34.18	3.67	37.38	35.72	54.00	18.28
3665.00	47.25	PK	V	31.66	2.51	37.06	44.36	74.00	29.64
3665.00	36.64	AV	V	31.66	2.51	37.06	33.75	54.00	20.25
High Channel: 2452 MHz									
2452.00	59.21	PK	H	28.20	1.83	0.00	89.24	N/A	N/A
2452.00	49.12	AV	H	28.20	1.83	0.00	79.15	N/A	N/A
2452.00	66.63	PK	V	28.20	1.83	0.00	96.66	N/A	N/A
2452.00	56.54	AV	V	28.20	1.83	0.00	86.57	N/A	N/A
2483.50	35.24	PK	V	28.27	1.84	0.00	65.35	74.00	8.65
2483.50	21.81	AV	V	28.27	1.84	0.00	51.92	54.00	2.08
4904.00	46.54	PK	V	33.11	3.30	37.21	45.74	74.00	28.26
4904.00	35.45	AV	V	33.11	3.30	37.21	34.65	54.00	19.35
7356.00	45.45	PK	V	36.13	4.56	37.42	48.72	74.00	25.28
7356.00	34.67	AV	V	36.13	4.56	37.42	37.94	54.00	16.06
5646.00	47.45	PK	V	34.16	3.62	37.47	47.76	74.00	26.24
5646.00	35.64	AV	V	34.16	3.62	37.47	35.95	54.00	18.05

Non-beamforming 2TX
802.11b Mode (Chain 0+1 was the worst)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB)					
Low Channel: 2412 MHz									
2412.00	65.01	PK	H	28.12	1.81	0.00	94.94	N/A	N/A
2412.00	60.12	AV	H	28.12	1.81	0.00	90.05	N/A	N/A
2412.00	68.31	PK	V	28.12	1.81	0.00	98.24	N/A	N/A
2412.00	64.14	AV	V	28.12	1.81	0.00	94.07	N/A	N/A
2390.00	31.43	PK	V	28.08	1.80	0.00	61.31	74.00	12.69
2390.00	19.24	AV	V	28.08	1.80	0.00	49.12	54.00	4.88
4824.00	47.64	PK	V	32.95	3.19	37.20	46.58	74.00	27.42
4824.00	35.98	AV	V	32.95	3.19	37.20	34.92	54.00	19.08
7236.00	45.96	PK	V	35.81	4.77	37.27	49.27	74.00	24.73
7236.00	35.22	AV	V	35.81	4.77	37.27	38.53	54.00	15.47
5965.00	45.25	PK	V	34.29	3.82	37.29	46.07	74.00	27.93
5965.00	35.34	AV	V	34.29	3.82	37.29	36.16	54.00	17.84
Middle Channel: 2437 MHz									
2437.00	64.91	PK	H	28.17	1.82	0.00	94.9	N/A	N/A
2437.00	57.16	AV	H	28.17	1.82	0.00	87.15	N/A	N/A
2437.00	70.34	PK	V	28.17	1.82	0.00	100.33	N/A	N/A
2437.00	64.25	AV	V	28.17	1.82	0.00	94.24	N/A	N/A
4874.00	47.76	PK	V	33.05	3.26	37.21	46.86	74.00	27.14
4874.00	35.88	AV	V	33.05	3.26	37.21	34.98	54.00	19.02
7311.00	45.89	PK	V	36.01	4.64	37.36	49.18	74.00	24.82
7311.00	35.37	AV	V	36.01	4.64	37.36	38.66	54.00	15.34
5899.00	45.35	PK	V	34.26	3.79	37.22	46.18	74.00	27.82
5899.00	34.26	AV	V	34.26	3.79	37.22	35.09	54.00	18.91
6125.00	44.66	PK	V	34.28	4.06	37.27	45.73	74.00	28.27
6125.00	34.41	AV	V	34.28	4.06	37.27	35.48	54.00	18.52
High Channel: 2462 MHz									
2462.00	64.43	PK	H	28.22	1.83	0.00	94.48	N/A	N/A
2462.00	58.24	AV	H	28.22	1.83	0.00	88.29	N/A	N/A
2462.00	71.68	PK	V	28.22	1.83	0.00	101.73	N/A	N/A
2462.00	65.45	AV	V	28.22	1.83	0.00	95.5	N/A	N/A
2483.50	31.99	PK	V	28.27	1.84	0.00	62.1	74.00	11.9
2483.50	20.24	AV	V	28.27	1.84	0.00	50.35	54.00	3.65
4924.00	47.47	PK	V	33.15	3.27	37.22	46.67	74.00	27.33
4924.00	35.92	AV	V	33.15	3.27	37.22	35.12	54.00	18.88
7386.00	46.1	PK	V	36.20	4.51	37.46	49.35	74.00	24.65
7386.00	35.26	AV	V	36.20	4.51	37.46	38.51	54.00	15.49
5985.00	45.22	PK	V	34.29	3.82	37.31	46.02	74.00	27.98
5985.00	34.68	AV	V	34.29	3.82	37.31	35.48	54.00	18.52

802.11g Mode(Chain 0+1 was the worst)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB)					
Low Channel: 2412 MHz									
2412.00	67.92	PK	H	28.12	1.81	0.00	97.85	N/A	N/A
2412.00	57.05	AV	H	28.12	1.81	0.00	86.98	N/A	N/A
2412.00	73.85	PK	V	28.12	1.81	0.00	103.78	N/A	N/A
2412.00	62.47	AV	V	28.12	1.81	0.00	92.4	N/A	N/A
2390.00	31.42	PK	V	28.08	1.80	0.00	61.3	74.00	12.7
2390.00	20.62	AV	V	28.08	1.80	0.00	50.5	54.00	3.5
4824.00	47.12	PK	V	32.95	3.19	37.20	46.06	74.00	27.94
4824.00	36.42	AV	V	32.95	3.19	37.20	35.36	54.00	18.64
7236.00	45.55	PK	V	35.81	4.77	37.27	48.86	74.00	25.14
7236.00	34.97	AV	V	35.81	4.77	37.27	38.28	54.00	15.72
6659.00	44.56	PK	V	34.52	4.89	37.04	46.93	74.00	27.07
6659.00	33.59	AV	V	34.52	4.89	37.04	35.96	54.00	18.04
Middle Channel: 2437 MHz									
2437.00	67.54	PK	H	28.17	1.82	0.00	97.53	N/A	N/A
2437.00	57.84	AV	H	28.17	1.82	0.00	87.83	N/A	N/A
2437.00	73.64	PK	V	28.17	1.82	0.00	103.63	N/A	N/A
2437.00	63.47	AV	V	28.17	1.82	0.00	93.46	N/A	N/A
4874.00	46.95	PK	V	33.05	3.26	37.21	46.05	74.00	27.95
4874.00	36.5	AV	V	33.05	3.26	37.21	35.6	54.00	18.4
7311.00	45.56	PK	V	36.01	4.64	37.36	48.85	74.00	25.15
7311.00	34.77	AV	V	36.01	4.64	37.36	38.06	54.00	15.94
5236.00	44.56	PK	V	33.68	3.53	37.38	44.39	74.00	29.61
5236.00	34.57	AV	V	33.68	3.53	37.38	34.4	54.00	19.6
5999.00	45.28	PK	V	34.30	3.83	37.33	46.08	74.00	27.92
5999.00	35.64	AV	V	34.30	3.83	37.33	36.44	54.00	17.56
High Channel: 2462 MHz									
2462.00	67.64	PK	H	28.22	1.83	0.00	97.69	N/A	N/A
2462.00	56.28	AV	H	28.22	1.83	0.00	86.33	N/A	N/A
2462.00	72.59	PK	V	28.22	1.83	0.00	102.64	N/A	N/A
2462.00	63.57	AV	V	28.22	1.83	0.00	93.62	N/A	N/A
2483.50	34.05	PK	V	28.27	1.84	0.00	64.16	74.00	9.84
2483.50	20.59	AV	V	28.27	1.84	0.00	50.7	54.00	3.3
4924.00	47.2	PK	V	33.15	3.27	37.22	46.4	74.00	27.6
4924.00	36.3	AV	V	33.15	3.27	37.22	35.5	54.00	18.5
7386.00	45.38	PK	V	36.20	4.51	37.46	48.63	74.00	25.37
7386.00	34.79	AV	V	36.20	4.51	37.46	38.04	54.00	15.96
4569.00	44.34	PK	V	32.44	3.07	37.13	42.72	74.00	31.28
4569.00	34.23	AV	V	32.44	3.07	37.13	32.61	54.00	21.39

802.11 n ht20 Mode (Chain 0+1 was the worst)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB)					
Low Channel: 2412 MHz									
2412.00	68.68	PK	H	28.12	1.81	0.00	98.61	N/A	N/A
2412.00	58.14	AV	H	28.12	1.81	0.00	88.07	N/A	N/A
2412.00	75.31	PK	V	28.12	1.81	0.00	105.24	N/A	N/A
2412.00	63.74	AV	V	28.12	1.81	0.00	93.67	N/A	N/A
2390.00	37.11	PK	V	28.08	1.80	0.00	66.99	74.00	7.01
2390.00	21.24	AV	V	28.08	1.80	0.00	51.12	54.00	2.88
4824.00	47.31	PK	V	32.95	3.19	37.20	46.25	74.00	27.75
4824.00	36.2	AV	V	32.95	3.19	37.20	35.14	54.00	18.86
7236.00	45.99	PK	V	35.81	4.77	37.27	49.3	74.00	24.7
7236.00	35.39	AV	V	35.81	4.77	37.27	38.7	54.00	15.3
6257.00	44.74	PK	V	34.25	4.30	37.20	46.09	74.00	27.91
6257.00	33.62	AV	V	34.25	4.30	37.20	34.97	54.00	19.03
Middle Channel: 2437 MHz									
2437.00	68.25	PK	H	28.17	1.82	0.00	98.24	N/A	N/A
2437.00	57.34	AV	H	28.17	1.82	0.00	87.33	N/A	N/A
2437.00	74.22	PK	V	28.17	1.82	0.00	104.21	N/A	N/A
2437.00	64.47	AV	V	28.17	1.82	0.00	94.46	N/A	N/A
4874.00	47.57	PK	V	33.05	3.26	37.21	46.67	74.00	27.33
4874.00	36.28	AV	V	33.05	3.26	37.21	35.38	54.00	18.62
7311.00	45.68	PK	V	36.01	4.64	37.36	48.97	74.00	25.03
7311.00	35.28	AV	V	36.01	4.64	37.36	38.57	54.00	15.43
5688.00	45.29	PK	V	34.18	3.67	37.38	45.76	74.00	28.24
5688.00	35.36	AV	V	34.18	3.67	37.38	35.83	54.00	18.17
6321.00	45.88	PK	V	34.24	4.42	37.16	47.38	74.00	26.62
6321.00	34.66	AV	V	34.24	4.42	37.16	36.16	54.00	17.84
High Channel: 2462 MHz									
2462.00	68.14	PK	H	28.22	1.83	0.00	98.19	N/A	N/A
2462.00	57.92	AV	H	28.22	1.83	0.00	87.97	N/A	N/A
2462.00	73.39	PK	V	28.22	1.83	0.00	103.44	N/A	N/A
2462.00	62.97	AV	V	28.22	1.83	0.00	93.02	N/A	N/A
2483.50	37.11	PK	V	28.27	1.84	0.00	67.22	74.00	6.78
2483.50	20.47	AV	V	28.27	1.84	0.00	50.58	54.00	3.42
4924.00	47.22	PK	V	33.15	3.27	37.22	46.42	74.00	27.58
4924.00	36.22	AV	V	33.15	3.27	37.22	35.42	54.00	18.58
7386.00	45.87	PK	V	36.20	4.51	37.46	49.12	74.00	24.88
7386.00	35.29	AV	V	36.20	4.51	37.46	38.54	54.00	15.46
5546.00	44.68	PK	V	34.12	3.55	37.45	44.9	74.00	29.1
5546.00	33.57	AV	V	34.12	3.55	37.45	33.79	54.00	20.21

802.11 n ht40 Mode(Chain 0+1 was the worst)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB)					
Low Channel: 2422 MHz									
2422.00	63.54	PK	H	28.14	1.81	0.00	93.49	N/A	N/A
2422.00	52.67	AV	H	28.14	1.81	0.00	82.62	N/A	N/A
2422.00	70.61	PK	V	28.14	1.81	0.00	100.56	N/A	N/A
2422.00	60.58	AV	V	28.14	1.81	0.00	90.53	N/A	N/A
2390.00	31.72	PK	V	28.08	1.80	0.00	61.6	74.00	12.4
2390.00	20.94	AV	V	28.08	1.80	0.00	50.82	54.00	3.18
4844.00	47.45	PK	V	32.99	3.22	37.20	46.46	74.00	27.54
4844.00	36.55	AV	V	32.99	3.22	37.20	35.56	54.00	18.44
7266.00	46.24	PK	V	35.89	4.72	37.31	49.54	74.00	24.46
7266.00	35.68	AV	V	35.89	4.72	37.31	38.98	54.00	15.02
5465.00	45.47	PK	V	34.04	3.57	37.35	45.73	74.00	28.27
5465.00	35.69	AV	V	34.04	3.57	37.35	35.95	54.00	18.05
Middle Channel: 2437 MHz									
2437.00	63.18	PK	H	28.17	1.82	0.00	93.17	N/A	N/A
2437.00	52.85	AV	H	28.17	1.82	0.00	82.84	N/A	N/A
2437.00	71.64	PK	V	28.17	1.82	0.00	101.63	N/A	N/A
2437.00	61.01	AV	V	28.17	1.82	0.00	91	N/A	N/A
4874.00	47.25	PK	V	33.05	3.26	37.21	46.35	74.00	27.65
4874.00	36.59	AV	V	33.05	3.26	37.21	35.69	54.00	18.31
7311.00	45.28	PK	V	36.01	4.64	37.36	48.57	74.00	25.43
7311.00	35.91	AV	V	36.01	4.64	37.36	39.2	54.00	14.8
5326.00	44.65	PK	V	33.82	3.46	37.35	44.58	74.00	29.42
5326.00	34.25	AV	V	33.82	3.46	37.35	34.18	54.00	19.82
3336.00	45.32	PK	V	30.91	2.25	36.91	41.57	74.00	32.43
3336.00	35.77	AV	V	30.91	2.25	36.91	32.02	54.00	21.98
High Channel: 2452 MHz									
2452.00	61.47	PK	H	28.20	1.83	0.00	91.5	N/A	N/A
2452.00	52.14	AV	H	28.20	1.83	0.00	82.17	N/A	N/A
2452.00	70.37	PK	V	28.20	1.83	0.00	100.4	N/A	N/A
2452.00	60.03	AV	V	28.20	1.83	0.00	90.06	N/A	N/A
2483.50	33.21	PK	V	28.27	1.84	0.00	63.32	74.00	10.68
2483.50	20.44	AV	V	28.27	1.84	0.00	50.55	54.00	3.45
4904.00	47.35	PK	V	33.11	3.30	37.21	46.55	74.00	27.45
4904.00	36.45	AV	V	33.11	3.30	37.21	35.65	54.00	18.35
7356.00	46.34	PK	V	36.13	4.56	37.42	49.61	74.00	24.39
7356.00	35.25	AV	V	36.13	4.56	37.42	38.52	54.00	15.48
4569.00	45.24	PK	V	32.44	3.07	37.13	43.62	74.00	30.38
4569.00	35.78	AV	V	32.44	3.07	37.13	34.16	54.00	19.84

Non-beamforming 3TX
802.11b Mode(Chain 0+1+2 was the worst)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB)					
Low Channel: 2412 MHz									
2412.00	66.45	PK	H	28.12	1.81	0.00	96.38	N/A	N/A
2412.00	60.54	AV	H	28.12	1.81	0.00	90.47	N/A	N/A
2412.00	73.15	PK	V	28.12	1.81	0.00	103.08	N/A	N/A
2412.00	66.56	AV	V	28.12	1.81	0.00	96.49	N/A	N/A
2390.00	33.45	PK	V	28.08	1.80	0.00	63.33	74.00	10.67
2390.00	21.63	AV	V	28.08	1.80	0.00	51.51	54.00	2.49
4824.00	47.65	PK	V	32.95	3.19	37.20	46.59	74.00	27.41
4824.00	36.47	AV	V	32.95	3.19	37.20	35.41	54.00	18.59
7236.00	45.35	PK	V	35.81	4.77	37.27	48.66	74.00	25.34
7236.00	35.26	AV	V	35.81	4.77	37.27	38.57	54.00	15.43
5456.00	45.36	PK	V	34.03	3.58	37.35	45.62	74.00	28.38
5456.00	35.73	AV	V	34.03	3.58	37.35	35.99	54.00	18.01
Middle Channel: 2437 MHz									
2437.00	64.15	PK	H	28.17	1.82	0.00	94.14	N/A	N/A
2437.00	58.02	AV	H	28.17	1.82	0.00	88.01	N/A	N/A
2437.00	72.45	PK	V	28.17	1.82	0.00	102.44	N/A	N/A
2437.00	65.45	AV	V	28.17	1.82	0.00	95.44	N/A	N/A
4874.00	47.54	PK	V	33.05	3.26	37.21	46.64	74.00	27.36
4874.00	36.46	AV	V	33.05	3.26	37.21	35.56	54.00	18.44
7311.00	46.41	PK	V	36.01	4.64	37.36	49.7	74.00	24.3
7311.00	35.31	AV	V	36.01	4.64	37.36	38.6	54.00	15.4
5488.00	45.25	PK	V	34.08	3.55	37.34	45.54	74.00	28.46
5488.00	34.65	AV	V	34.08	3.55	37.34	34.94	54.00	19.06
6654.00	44.31	PK	V	34.51	4.88	37.04	46.66	74.00	27.34
6654.00	33.88	AV	V	34.51	4.88	37.04	36.23	54.00	17.77
High Channel: 2462 MHz									
2462.00	64.82	PK	H	28.22	1.83	0.00	94.87	N/A	N/A
2462.00	58.42	AV	H	28.22	1.83	0.00	88.47	N/A	N/A
2462.00	72.69	PK	V	28.22	1.83	0.00	102.74	N/A	N/A
2462.00	66.65	AV	V	28.22	1.83	0.00	96.7	N/A	N/A
2483.50	35.19	PK	V	28.27	1.84	0.00	65.3	74.00	8.7
2483.50	20.66	AV	V	28.27	1.84	0.00	50.77	54.00	3.23
4924.00	47.74	PK	V	33.15	3.27	37.22	46.94	74.00	27.06
4924.00	36.61	AV	V	33.15	3.27	37.22	35.81	54.00	18.19
7386.00	46.24	PK	V	36.20	4.51	37.46	49.49	74.00	24.51
7386.00	35.39	AV	V	36.20	4.51	37.46	38.64	54.00	15.36
3579.00	45.05	PK	V	31.47	2.39	37.09	41.82	74.00	32.18
3579.00	34.61	AV	V	31.47	2.39	37.09	31.38	54.00	22.62

802.11g Mode(Chain 0+1+2 was the worst)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Detector	Polar (H/V)	Factor (dB)					
Low Channel: 2412 MHz									
2412.00	68.21	PK	H	28.12	1.81	0.00	98.14	N/A	N/A
2412.00	59.55	AV	H	28.12	1.81	0.00	89.48	N/A	N/A
2412.00	74.48	PK	V	28.12	1.81	0.00	104.41	N/A	N/A
2412.00	63.45	AV	V	28.12	1.81	0.00	93.38	N/A	N/A
2390.00	35.21	PK	V	28.08	1.80	0.00	65.09	74.00	8.91
2390.00	20.65	AV	V	28.08	1.80	0.00	50.53	54.00	3.47
4824.00	47.64	PK	V	32.95	3.19	37.20	46.58	74.00	27.42
4824.00	36.58	AV	V	32.95	3.19	37.20	35.52	54.00	18.48
7236.00	46.25	PK	V	35.81	4.77	37.27	49.56	74.00	24.44
7236.00	35.74	AV	V	35.81	4.77	37.27	39.05	54.00	14.95
4123.00	45.31	PK	V	32.38	2.75	37.06	43.38	74.00	30.62
4123.00	35.24	AV	V	32.38	2.75	37.06	33.31	54.00	20.69
Middle Channel: 2437 MHz									
2437.00	68.98	PK	H	28.17	1.82	0.00	98.97	N/A	N/A
2437.00	59.55	AV	H	28.17	1.82	0.00	89.54	N/A	N/A
2437.00	75.71	PK	V	28.17	1.82	0.00	105.7	N/A	N/A
2437.00	68.68	AV	V	28.17	1.82	0.00	98.67	N/A	N/A
4874.00	47.76	PK	V	33.05	3.26	37.21	46.86	74.00	27.14
4874.00	36.76	AV	V	33.05	3.26	37.21	35.86	54.00	18.14
7311.00	46.25	PK	V	36.01	4.64	37.36	49.54	74.00	24.46
7311.00	35.72	AV	V	36.01	4.64	37.36	39.01	54.00	14.99
5236.00	45.48	PK	V	33.68	3.53	37.38	45.31	74.00	28.69
5236.00	35.17	AV	V	33.68	3.53	37.38	35	54.00	19
5999.00	45.31	PK	V	34.30	3.83	37.33	46.11	74.00	27.89
5999.00	34.57	AV	V	34.30	3.83	37.33	35.37	54.00	18.63
High Channel: 2462 MHz									
2462.00	68.56	PK	H	28.22	1.83	0.00	98.61	N/A	N/A
2462.00	58.45	AV	H	28.22	1.83	0.00	88.5	N/A	N/A
2462.00	76.82	PK	V	28.22	1.83	0.00	106.87	N/A	N/A
2462.00	67.45	AV	V	28.22	1.83	0.00	97.5	N/A	N/A
2483.50	37.21	PK	V	28.27	1.84	0.00	67.32	74.00	6.68
2483.50	21.54	AV	V	28.27	1.84	0.00	51.65	54.00	2.35
4924.00	47.63	PK	V	33.15	3.27	37.22	46.83	74.00	27.17
4924.00	36.56	AV	V	33.15	3.27	37.22	35.76	54.00	18.24
7386.00	46.29	PK	V	36.20	4.51	37.46	49.54	74.00	24.46
7386.00	35.55	AV	V	36.20	4.51	37.46	38.8	54.00	15.2
4569.00	45.64	PK	V	32.44	3.07	37.13	44.02	74.00	29.98
4569.00	35.09	AV	V	32.44	3.07	37.13	33.47	54.00	20.53

802.11 n ht20 Mode (Chain 0+1+2 was the worst)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB)					
Low Channel: 2412 MHz									
2412.00	70.24	PK	H	28.12	1.81	0.00	100.17	N/A	N/A
2412.00	60.47	AV	H	28.12	1.81	0.00	90.4	N/A	N/A
2412.00	76.24	PK	V	28.12	1.81	0.00	106.17	N/A	N/A
2412.00	66.54	AV	V	28.12	1.81	0.00	96.47	N/A	N/A
2390.00	36.01	PK	V	28.08	1.80	0.00	65.89	74.00	8.11
2390.00	21.56	AV	V	28.08	1.80	0.00	51.44	54.00	2.56
4824.00	47.25	PK	V	32.95	3.19	37.20	46.19	74.00	27.81
4824.00	36.58	AV	V	32.95	3.19	37.20	35.52	54.00	18.48
7236.00	45.36	PK	V	35.81	4.77	37.27	48.67	74.00	25.33
7236.00	35.45	AV	V	35.81	4.77	37.27	38.76	54.00	15.24
6629.00	45.34	PK	V	34.46	4.86	37.04	47.62	74.00	26.38
6629.00	34.57	AV	V	34.46	4.86	37.04	36.85	54.00	17.15
Middle Channel: 2437 MHz									
2437.00	67.54	PK	H	28.17	1.82	0.00	97.53	N/A	N/A
2437.00	58.67	AV	H	28.17	1.82	0.00	88.66	N/A	N/A
2437.00	75.66	PK	V	28.17	1.82	0.00	105.65	N/A	N/A
2437.00	66.14	AV	V	28.17	1.82	0.00	96.13	N/A	N/A
4874.00	47.07	PK	V	33.05	3.26	37.21	46.17	74.00	27.83
4874.00	36.38	AV	V	33.05	3.26	37.21	35.48	54.00	18.52
7311.00	45.38	PK	V	36.01	4.64	37.36	48.67	74.00	25.33
7311.00	35.58	AV	V	36.01	4.64	37.36	38.87	54.00	15.13
5688.00	45.43	PK	V	34.18	3.67	37.38	45.9	74.00	28.1
5688.00	34.64	AV	V	34.18	3.67	37.38	35.11	54.00	18.89
6321.00	45.32	PK	V	34.24	4.42	37.16	46.82	74.00	27.18
6321.00	34.67	AV	V	34.24	4.42	37.16	36.17	54.00	17.83
High Channel: 2462 MHz									
2462.00	68.32	PK	H	28.22	1.83	0.00	98.37	N/A	N/A
2462.00	59.24	AV	H	28.22	1.83	0.00	89.29	N/A	N/A
2462.00	76.42	PK	V	28.22	1.83	0.00	106.47	N/A	N/A
2462.00	67.12	AV	V	28.22	1.83	0.00	97.17	N/A	N/A
2483.50	35.44	PK	V	28.27	1.84	0.00	65.55	74.00	8.45
2483.50	21.67	AV	V	28.27	1.84	0.00	51.78	54.00	2.22
4924.00	47.11	PK	V	33.15	3.27	37.22	46.31	74.00	27.69
4924.00	36.76	AV	V	33.15	3.27	37.22	35.96	54.00	18.04
7386.00	45.25	PK	V	36.20	4.51	37.46	48.5	74.00	25.5
7386.00	35.25	AV	V	36.20	4.51	37.46	38.5	54.00	15.5
5546.00	45.19	PK	V	34.12	3.55	37.45	45.41	74.00	28.59
5546.00	34.43	AV	V	34.12	3.55	37.45	34.65	54.00	19.35

802.11 n ht40 Mode(Chain 0+1+2 was the worst)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB)					
Low Channel: 2422 MHz									
2422.00	65.7	PK	H	28.14	1.81	0.00	95.65	N/A	N/A
2422.00	55.47	AV	H	28.14	1.81	0.00	85.42	N/A	N/A
2422.00	73.33	PK	V	28.14	1.81	0.00	103.28	N/A	N/A
2422.00	63.24	AV	V	28.14	1.81	0.00	93.19	N/A	N/A
2390.00	35.76	PK	V	28.08	1.80	0.00	65.64	74.00	8.36
2390.00	20.55	AV	V	28.08	1.80	0.00	50.43	54.00	3.57
4844.00	47.26	PK	V	32.99	3.22	37.20	46.27	74.00	27.73
4844.00	36.25	AV	V	32.99	3.22	37.20	35.26	54.00	18.74
7266.00	46.25	PK	V	35.89	4.72	37.31	49.55	74.00	24.45
7266.00	35.46	AV	V	35.89	4.72	37.31	38.76	54.00	15.24
5878.00	45.56	PK	V	34.25	3.77	37.23	46.35	74.00	27.65
5878.00	35.47	AV	V	34.25	3.77	37.23	36.26	54.00	17.74
Middle Channel: 2437 MHz									
2437.00	67.13	PK	H	28.17	1.82	0.00	97.12	N/A	N/A
2437.00	57.21	AV	H	28.17	1.82	0.00	87.2	N/A	N/A
2437.00	74.55	PK	V	28.17	1.82	0.00	104.54	N/A	N/A
2437.00	65.45	AV	V	28.17	1.82	0.00	95.44	N/A	N/A
4874.00	47.2	PK	V	33.05	3.26	37.21	46.3	74.00	27.7
4874.00	36.52	AV	V	33.05	3.26	37.21	35.62	54.00	18.38
7311.00	45.59	PK	V	36.01	4.64	37.36	48.88	74.00	25.12
7311.00	35.21	AV	V	36.01	4.64	37.36	38.5	54.00	15.5
5546.00	45.06	PK	V	34.12	3.55	37.45	45.28	74.00	28.72
5546.00	34.68	AV	V	34.12	3.55	37.45	34.9	54.00	19.1
3565.00	45.54	PK	V	31.44	2.39	37.06	42.31	74.00	31.69
3565.00	35.22	AV	V	31.44	2.39	37.06	31.99	54.00	22.01
High Channel: 2452 MHz									
2452.00	66.75	PK	H	28.20	1.83	0.00	96.78	N/A	N/A
2452.00	56.32	AV	H	28.20	1.83	0.00	86.35	N/A	N/A
2452.00	74.87	PK	V	28.20	1.83	0.00	104.9	N/A	N/A
2452.00	63.25	AV	V	28.20	1.83	0.00	93.28	N/A	N/A
2483.50	35.01	PK	V	28.27	1.84	0.00	65.12	74.00	8.88
2483.50	20.58	AV	V	28.27	1.84	0.00	50.69	54.00	3.31
4904.00	47.35	PK	V	33.11	3.30	37.21	46.55	74.00	27.45
4904.00	36.54	AV	V	33.11	3.30	37.21	35.74	54.00	18.26
7356.00	45.65	PK	V	36.13	4.56	37.42	48.92	74.00	25.08
7356.00	35.33	AV	V	36.13	4.56	37.42	38.6	54.00	15.4
4435.00	45.21	PK	V	32.31	2.90	37.05	43.37	74.00	30.63
4435.00	34.56	AV	V	32.31	2.90	37.05	32.72	54.00	21.28

Non-beamforming 4TX

802.11b Mode(Chain 0+1+2+3)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB)					
Low Channel: 2412 MHz									
2412.00	69.12	PK	H	28.12	1.81	0.00	99.05	N/A	N/A
2412.00	63.01	AV	H	28.12	1.81	0.00	92.94	N/A	N/A
2412.00	74.12	PK	V	28.12	1.81	0.00	104.05	N/A	N/A
2412.00	68.21	AV	V	28.12	1.81	0.00	98.14	N/A	N/A
2390.00	33.14	PK	V	28.08	1.80	0.00	63.02	74.00	10.98
2390.00	20.21	AV	V	28.08	1.80	0.00	50.09	54.00	3.91
4824.00	47.24	PK	V	32.95	3.19	37.20	46.18	74.00	27.82
4824.00	37.54	AV	V	32.95	3.19	37.20	36.48	54.00	17.52
7236.00	46.71	PK	V	35.81	4.77	37.27	50.02	74.00	23.98
7236.00	36.58	AV	V	35.81	4.77	37.27	39.89	54.00	14.11
5569.00	45.32	PK	V	34.13	3.56	37.51	45.5	74.00	28.5
5569.00	35.29	AV	V	34.13	3.56	37.51	35.47	54.00	18.53
Middle Channel: 2437 MHz									
2437.00	69.32	PK	H	28.17	1.82	0.00	99.31	N/A	N/A
2437.00	63.64	AV	H	28.17	1.82	0.00	93.63	N/A	N/A
2437.00	75.34	PK	V	28.17	1.82	0.00	105.33	N/A	N/A
2437.00	69.57	AV	V	28.17	1.82	0.00	99.56	N/A	N/A
4874.00	47.06	PK	V	33.05	3.26	37.21	46.16	74.00	27.84
4874.00	37.46	AV	V	33.05	3.26	37.21	36.56	54.00	17.44
7311.00	46.79	PK	V	36.01	4.64	37.36	50.08	74.00	23.92
7311.00	36.42	AV	V	36.01	4.64	37.36	39.71	54.00	14.29
5488.00	45.4	PK	V	34.08	3.55	37.34	45.69	74.00	28.31
5488.00	35.41	AV	V	34.08	3.55	37.34	35.7	54.00	18.3
6321.00	45.12	PK	V	34.24	4.42	37.16	46.62	74.00	27.38
6321.00	35.27	AV	V	34.24	4.42	37.16	36.77	54.00	17.23
High Channel: 2462 MHz									
2462.00	68.14	PK	H	28.22	1.83	0.00	98.19	N/A	N/A
2462.00	62.15	AV	H	28.22	1.83	0.00	92.2	N/A	N/A
2462.00	75.52	PK	V	28.22	1.83	0.00	105.57	N/A	N/A
2462.00	68.23	AV	V	28.22	1.83	0.00	98.28	N/A	N/A
2483.50	34.54	PK	V	28.27	1.84	0.00	64.65	74.00	9.35
2483.50	20.96	AV	V	28.27	1.84	0.00	51.07	54.00	2.93
4924.00	47.35	PK	V	33.15	3.27	37.22	46.55	74.00	27.45
4924.00	37.47	AV	V	33.15	3.27	37.22	36.67	54.00	17.33
7386.00	46.58	PK	V	36.20	4.51	37.46	49.83	74.00	24.17
7386.00	36.46	AV	V	36.20	4.51	37.46	39.71	54.00	14.29
2123.00	45.21	PK	V	27.55	1.72	36.21	38.27	74.00	35.73
2123.00	35.02	AV	V	27.55	1.72	36.21	28.08	54.00	25.92

802.11g Mode(Chain 0+1+2+3)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB)					
Low Channel: 2412 MHz									
2412.00	67.12	PK	H	28.12	1.81	0.00	97.05	N/A	N/A
2412.00	57.34	AV	H	28.12	1.81	0.00	87.27	N/A	N/A
2412.00	76.12	PK	V	28.12	1.81	0.00	106.05	N/A	N/A
2412.00	66.45	AV	V	28.12	1.81	0.00	96.38	N/A	N/A
2390.00	35.64	PK	V	28.08	1.80	0.00	65.52	74.00	8.48
2390.00	20.69	AV	V	28.08	1.80	0.00	50.57	54.00	3.43
4824.00	47.32	PK	V	32.95	3.19	37.20	46.26	74.00	27.74
4824.00	37.14	AV	V	32.95	3.19	37.20	36.08	54.00	17.92
7236.00	46.47	PK	V	35.81	4.77	37.27	49.78	74.00	24.22
7236.00	36.28	AV	V	35.81	4.77	37.27	39.59	54.00	14.41
4123.00	45.44	PK	V	32.38	2.75	37.06	43.51	74.00	30.49
4123.00	35.17	AV	V	32.38	2.75	37.06	33.24	54.00	20.76
Middle Channel: 2437 MHz									
2437.00	68.56	PK	H	28.17	1.82	0.00	98.55	N/A	N/A
2437.00	58.45	AV	H	28.17	1.82	0.00	88.44	N/A	N/A
2437.00	77.91	PK	V	28.17	1.82	0.00	107.9	N/A	N/A
2437.00	67.21	AV	V	28.17	1.82	0.00	97.2	N/A	N/A
4874.00	47.24	PK	V	33.05	3.26	37.21	46.34	74.00	27.66
4874.00	36.87	AV	V	33.05	3.26	37.21	35.97	54.00	18.03
7311.00	46.54	PK	V	36.01	4.64	37.36	49.83	74.00	24.17
7311.00	35.47	AV	V	36.01	4.64	37.36	38.76	54.00	15.24
5236.00	45.34	PK	V	33.68	3.53	37.38	45.17	74.00	28.83
5236.00	35.21	AV	V	33.68	3.53	37.38	35.04	54.00	18.96
5755.00	45.22	PK	V	34.20	3.70	37.31	45.81	74.00	28.19
5755.00	34.59	AV	V	34.20	3.70	37.31	35.18	54.00	18.82
High Channel: 2462 MHz									
2462.00	68.65	PK	H	28.22	1.83	0.00	98.7	N/A	N/A
2462.00	58.87	AV	H	28.22	1.83	0.00	88.92	N/A	N/A
2462.00	75.47	PK	V	28.22	1.83	0.00	105.52	N/A	N/A
2462.00	65.23	AV	V	28.22	1.83	0.00	95.28	N/A	N/A
2483.50	35.14	PK	V	28.27	1.84	0.00	65.25	74.00	8.75
2483.50	21.02	AV	V	28.27	1.84	0.00	51.13	54.00	2.87
4924.00	47.54	PK	V	33.15	3.27	37.22	46.74	74.00	27.26
4924.00	35.87	AV	V	33.15	3.27	37.22	35.07	54.00	18.93
7386.00	46.88	PK	V	36.20	4.51	37.46	50.13	74.00	23.87
7386.00	35.97	AV	V	36.20	4.51	37.46	39.22	54.00	14.78
4523.00	45.22	PK	V	32.35	3.03	37.14	43.46	74.00	30.54
4523.00	35.26	AV	V	32.35	3.03	37.14	33.5	54.00	20.5

802.11 n ht20 Mode (Chain 0+1+2+3)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Detector	Polar (H/V)	Factor (dB)					
Low Channel: 2412 MHz									
2412.00	68.8	PK	H	28.12	1.81	0.00	98.73	N/A	N/A
2412.00	58.35	AV	H	28.12	1.81	0.00	88.28	N/A	N/A
2412.00	76.47	PK	V	28.12	1.81	0.00	106.4	N/A	N/A
2412.00	66.54	AV	V	28.12	1.81	0.00	96.47	N/A	N/A
2390.00	38.54	PK	V	28.08	1.80	0.00	68.42	74.00	5.58
2390.00	20.34	AV	V	28.08	1.80	0.00	50.22	54.00	3.78
4824.00	47.25	PK	V	32.95	3.19	37.20	46.19	74.00	27.81
4824.00	36.47	AV	V	32.95	3.19	37.20	35.41	54.00	18.59
7236.00	46.38	PK	V	35.81	4.77	37.27	49.69	74.00	24.31
7236.00	35.74	AV	V	35.81	4.77	37.27	39.05	54.00	14.95
5695.00	45.81	PK	V	34.18	3.67	37.36	46.3	74.00	27.7
5695.00	35.92	AV	V	34.18	3.67	37.36	36.41	54.00	17.59
Middle Channel: 2437 MHz									
2437.00	68.56	PK	H	28.17	1.82	0.00	98.55	N/A	N/A
2437.00	68.54	AV	H	28.17	1.82	0.00	98.53	N/A	N/A
2437.00	77.34	PK	V	28.17	1.82	0.00	107.33	N/A	N/A
2437.00	67.65	AV	V	28.17	1.82	0.00	97.64	N/A	N/A
4874.00	47.16	PK	V	33.05	3.26	37.21	46.26	74.00	27.74
4874.00	36.54	AV	V	33.05	3.26	37.21	35.64	54.00	18.36
7311.00	46.55	PK	V	36.01	4.64	37.36	49.84	74.00	24.16
7311.00	35.59	AV	V	36.01	4.64	37.36	38.88	54.00	15.12
5688.00	45.97	PK	V	34.18	3.67	37.38	46.44	74.00	27.56
5688.00	36.11	AV	V	34.18	3.67	37.38	36.58	54.00	17.42
6321.00	45.23	PK	V	34.24	4.42	37.16	46.73	74.00	27.27
6321.00	35.24	AV	V	34.24	4.42	37.16	36.74	54.00	17.26
High Channel: 2462 MHz									
2462.00	67.65	PK	H	28.22	1.83	0.00	97.7	N/A	N/A
2462.00	56.25	AV	H	28.22	1.83	0.00	86.3	N/A	N/A
2462.00	76.63	PK	V	28.22	1.83	0.00	106.68	N/A	N/A
2462.00	65.23	AV	V	28.22	1.83	0.00	95.28	N/A	N/A
2483.50	36.21	PK	V	28.27	1.84	0.00	66.32	74.00	7.68
2483.50	20.67	AV	V	28.27	1.84	0.00	50.78	54.00	3.22
4924.00	47.16	PK	V	33.15	3.27	37.22	46.36	74.00	27.64
4924.00	36.64	AV	V	33.15	3.27	37.22	35.84	54.00	18.16
7386.00	46.47	PK	V	36.20	4.51	37.46	49.72	74.00	24.28
7386.00	35.55	AV	V	36.20	4.51	37.46	38.8	54.00	15.2
5546.00	45.79	PK	V	34.12	3.55	37.45	46.01	74.00	27.99
5546.00	35.77	AV	V	34.12	3.55	37.45	35.99	54.00	18.01

802.11 n ht40 Mode(Chain 0+1+2+3)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB)					
Low Channel: 2422 MHz									
2422.00	70.12	PK	H	28.14	1.81	0.00	100.07	N/A	N/A
2422.00	60.21	AV	H	28.14	1.81	0.00	90.16	N/A	N/A
2422.00	75.14	PK	V	28.14	1.81	0.00	105.09	N/A	N/A
2422.00	65.25	AV	V	28.14	1.81	0.00	95.2	N/A	N/A
2390.00	27.45	PK	V	28.08	1.80	0.00	57.33	74.00	16.67
2390.00	15.65	AV	V	28.08	1.80	0.00	45.53	54.00	8.47
4844.00	47.11	PK	V	32.99	3.22	37.20	46.12	74.00	27.88
4844.00	36.36	AV	V	32.99	3.22	37.20	35.37	54.00	18.63
7266.00	46.29	PK	V	35.89	4.72	37.31	49.59	74.00	24.41
7266.00	35.54	AV	V	35.89	4.72	37.31	38.84	54.00	15.16
5878.00	45.97	PK	V	34.25	3.77	37.23	46.76	74.00	27.24
5878.00	35.84	AV	V	34.25	3.77	37.23	36.63	54.00	17.37
Middle Channel: 2437 MHz									
2437.00	70.34	PK	H	28.17	1.82	0.00	100.33	N/A	N/A
2437.00	60.31	AV	H	28.17	1.82	0.00	90.3	N/A	N/A
2437.00	75.14	PK	V	28.17	1.82	0.00	105.13	N/A	N/A
2437.00	64.92	AV	V	28.17	1.82	0.00	94.91	N/A	N/A
4874.00	47	PK	V	33.05	3.26	37.21	46.1	74.00	27.9
4874.00	36.31	AV	V	33.05	3.26	37.21	35.41	54.00	18.59
7311.00	46.23	PK	V	36.01	4.64	37.36	49.52	74.00	24.48
7311.00	35.66	AV	V	36.01	4.64	37.36	38.95	54.00	15.05
5546.00	46.05	PK	V	34.12	3.55	37.45	46.27	74.00	27.73
5546.00	35.67	AV	V	34.12	3.55	37.45	35.89	54.00	18.11
2569.00	45.14	PK	V	28.55	1.87	36.38	39.18	74.00	34.82
2569.00	35.24	AV	V	28.55	1.87	36.38	29.28	54.00	24.72
High Channel: 2452 MHz									
2452.00	70.18	PK	H	28.20	1.83	0.00	100.21	N/A	N/A
2452.00	59.47	AV	H	28.20	1.83	0.00	89.5	N/A	N/A
2452.00	75.29	PK	V	28.20	1.83	0.00	105.32	N/A	N/A
2452.00	64.88	AV	V	28.20	1.83	0.00	94.91	N/A	N/A
2483.50	33.14	PK	V	28.27	1.84	0.00	63.25	74.00	10.75
2483.50	19.74	AV	V	28.27	1.84	0.00	49.85	54.00	4.15
4904.00	47.34	PK	V	33.11	3.30	37.21	46.54	74.00	27.46
4904.00	36.54	AV	V	33.11	3.30	37.21	35.74	54.00	18.26
7356.00	45.35	PK	V	36.13	4.56	37.42	48.62	74.00	25.38
7356.00	35.44	AV	V	36.13	4.56	37.42	38.71	54.00	15.29
4235.00	45.32	PK	V	32.35	2.77	37.05	43.39	74.00	30.61
4235.00	35.14	AV	V	32.35	2.77	37.05	33.21	54.00	20.79

Beamforming 2TX

802.11b Mode (Chain 0+1 was the worst)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB)					
Low Channel: 2412 MHz									
2412.00	69.03	PK	H	28.12	1.81	0.00	98.96	N/A	N/A
2412.00	63.29	AV	H	28.12	1.81	0.00	93.22	N/A	N/A
2412.00	73.29	PK	V	28.12	1.81	0.00	103.22	N/A	N/A
2412.00	67.25	AV	V	28.12	1.81	0.00	97.18	N/A	N/A
2390.00	30.27	PK	V	28.08	1.80	0.00	60.15	74.00	13.85
2390.00	19.11	AV	V	28.08	1.80	0.00	48.99	54.00	5.01
4824.00	47.72	PK	V	32.95	3.19	37.20	46.66	74.00	27.34
4824.00	36.03	AV	V	32.95	3.19	37.20	34.97	54.00	19.03
7236.00	46.16	PK	V	35.81	4.77	37.27	49.47	74.00	24.53
7236.00	35.21	AV	V	35.81	4.77	37.27	38.52	54.00	15.48
5965.00	45.41	PK	V	34.29	3.82	37.29	46.23	74.00	27.77
5965.00	35.35	AV	V	34.29	3.82	37.29	36.17	54.00	17.83
Middle Channel: 2437 MHz									
2437.00	67.84	PK	H	28.17	1.82	0.00	97.83	N/A	N/A
2437.00	60.01	AV	H	28.17	1.82	0.00	90	N/A	N/A
2437.00	74.18	PK	V	28.17	1.82	0.00	104.17	N/A	N/A
2437.00	68.36	AV	V	28.17	1.82	0.00	98.35	N/A	N/A
4874.00	47.38	PK	V	33.05	3.26	37.21	46.48	74.00	27.52
4874.00	35.99	AV	V	33.05	3.26	37.21	35.09	54.00	18.91
7311.00	45.74	PK	V	36.01	4.64	37.36	49.03	74.00	24.97
7311.00	35.24	AV	V	36.01	4.64	37.36	38.53	54.00	15.47
5899.00	45.19	PK	V	34.26	3.79	37.22	46.02	74.00	27.98
5899.00	34.37	AV	V	34.26	3.79	37.22	35.2	54.00	18.8
6125.00	44.65	PK	V	34.28	4.06	37.27	45.72	74.00	28.28
6125.00	34.43	AV	V	34.28	4.06	37.27	35.5	54.00	18.5
High Channel: 2462 MHz									
2462.00	68.53	PK	H	28.22	1.83	0.00	98.58	N/A	N/A
2462.00	62.09	AV	H	28.22	1.83	0.00	92.14	N/A	N/A
2462.00	75.52	PK	V	28.22	1.83	0.00	105.57	N/A	N/A
2462.00	69.48	AV	V	28.22	1.83	0.00	99.53	N/A	N/A
2483.50	30.68	PK	V	28.27	1.84	0.00	60.79	74.00	13.21
2483.50	19.33	AV	V	28.27	1.84	0.00	49.44	54.00	4.56
4924.00	47.45	PK	V	33.15	3.27	37.22	46.65	74.00	27.35
4924.00	35.86	AV	V	33.15	3.27	37.22	35.06	54.00	18.94
7386.00	46.24	PK	V	36.20	4.51	37.46	49.49	74.00	24.51
7386.00	35.14	AV	V	36.20	4.51	37.46	38.39	54.00	15.61
5985.00	45.12	PK	V	34.29	3.82	37.31	45.92	74.00	28.08
5985.00	34.83	AV	V	34.29	3.82	37.31	35.63	54.00	18.37

802.11g Mode(Chain 0+1 was the worst)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Detector	Polar (H/V)	Factor (dB)					
Low Channel: 2412 MHz									
2412.00	65.95	PK	H	28.12	1.81	0.00	95.88	N/A	N/A
2412.00	57.21	AV	H	28.12	1.81	0.00	87.14	N/A	N/A
2412.00	73.18	PK	V	28.12	1.81	0.00	103.11	N/A	N/A
2412.00	63.11	AV	V	28.12	1.81	0.00	93.04	N/A	N/A
2390.00	30.26	PK	V	28.08	1.80	0.00	60.14	74.00	13.86
2390.00	19.36	AV	V	28.08	1.80	0.00	49.24	54.00	4.76
4824.00	47.64	PK	V	32.95	3.19	37.20	46.58	74.00	27.42
4824.00	36.17	AV	V	32.95	3.19	37.20	35.11	54.00	18.89
7236.00	46.34	PK	V	35.81	4.77	37.27	49.65	74.00	24.35
7236.00	35.31	AV	V	35.81	4.77	37.27	38.62	54.00	15.38
6659.00	45.37	PK	V	34.52	4.89	37.04	47.74	74.00	26.26
6659.00	35.42	AV	V	34.52	4.89	37.04	37.79	54.00	16.21
Middle Channel: 2437 MHz									
2437.00	67.94	PK	H	28.17	1.82	0.00	97.93	N/A	N/A
2437.00	57.15	AV	H	28.17	1.82	0.00	87.14	N/A	N/A
2437.00	75.24	PK	V	28.17	1.82	0.00	105.23	N/A	N/A
2437.00	65.31	AV	V	28.17	1.82	0.00	95.3	N/A	N/A
4874.00	47.35	PK	V	33.05	3.26	37.21	46.45	74.00	27.55
4874.00	35.81	AV	V	33.05	3.26	37.21	34.91	54.00	19.09
7311.00	45.68	PK	V	36.01	4.64	37.36	48.97	74.00	25.03
7311.00	35.41	AV	V	36.01	4.64	37.36	38.7	54.00	15.3
5236.00	45.06	PK	V	33.68	3.53	37.38	44.89	74.00	29.11
5236.00	34.42	AV	V	33.68	3.53	37.38	34.25	54.00	19.75
5999.00	44.73	PK	V	34.30	3.83	37.33	45.53	74.00	28.47
5999.00	34.49	AV	V	34.30	3.83	37.33	35.29	54.00	18.71
High Channel: 2462 MHz									
2462.00	65.62	PK	H	28.22	1.83	0.00	95.67	N/A	N/A
2462.00	55.26	AV	H	28.22	1.83	0.00	85.31	N/A	N/A
2462.00	72.71	PK	V	28.22	1.83	0.00	102.76	N/A	N/A
2462.00	62.34	AV	V	28.22	1.83	0.00	92.39	N/A	N/A
2483.50	31.59	PK	V	28.27	1.84	0.00	61.7	74.00	12.3
2483.50	19.43	AV	V	28.27	1.84	0.00	49.54	54.00	4.46
4924.00	47.56	PK	V	33.15	3.27	37.22	46.76	74.00	27.24
4924.00	35.96	AV	V	33.15	3.27	37.22	35.16	54.00	18.84
7386.00	46.41	PK	V	36.20	4.51	37.46	49.66	74.00	24.34
7386.00	35.19	AV	V	36.20	4.51	37.46	38.44	54.00	15.56
4569.00	45.18	PK	V	32.44	3.07	37.13	43.56	74.00	30.44
4569.00	34.89	AV	V	32.44	3.07	37.13	33.27	54.00	20.73

802.11 n ht20 Mode (Chain 0+1 was the worst)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB)					
Low Channel: 2412 MHz									
2412.00	68.21	PK	H	28.12	1.81	0.00	98.14	N/A	N/A
2412.00	58.52	AV	H	28.12	1.81	0.00	88.45	N/A	N/A
2412.00	73.34	PK	V	28.12	1.81	0.00	103.27	N/A	N/A
2412.00	63.33	AV	V	28.12	1.81	0.00	93.26	N/A	N/A
2390.00	31.29	PK	V	28.08	1.80	0.00	61.17	74.00	12.83
2390.00	19.19	AV	V	28.08	1.80	0.00	49.07	54.00	4.93
4824.00	47.76	PK	V	32.95	3.19	37.20	46.7	74.00	27.3
4824.00	36.13	AV	V	32.95	3.19	37.20	35.07	54.00	18.93
7236.00	46.24	PK	V	35.81	4.77	37.27	49.55	74.00	24.45
7236.00	35.26	AV	V	35.81	4.77	37.27	38.57	54.00	15.43
6257.00	45.22	PK	V	34.25	4.30	37.20	46.57	74.00	27.43
6257.00	35.36	AV	V	34.25	4.30	37.20	36.71	54.00	17.29
Middle Channel: 2437 MHz									
2437.00	67.02	PK	H	28.17	1.82	0.00	97.01	N/A	N/A
2437.00	57.21	AV	H	28.17	1.82	0.00	87.2	N/A	N/A
2437.00	73.14	PK	V	28.17	1.82	0.00	103.13	N/A	N/A
2437.00	63.21	AV	V	28.17	1.82	0.00	93.2	N/A	N/A
4874.00	47.25	PK	V	33.05	3.26	37.21	46.35	74.00	27.65
4874.00	35.87	AV	V	33.05	3.26	37.21	34.97	54.00	19.03
7311.00	45.94	PK	V	36.01	4.64	37.36	49.23	74.00	24.77
7311.00	35.22	AV	V	36.01	4.64	37.36	38.51	54.00	15.49
5688.00	45.05	PK	V	34.18	3.67	37.38	45.52	74.00	28.48
5688.00	34.38	AV	V	34.18	3.67	37.38	34.85	54.00	19.15
6321.00	44.61	PK	V	34.24	4.42	37.16	46.11	74.00	27.89
6321.00	34.62	AV	V	34.24	4.42	37.16	36.12	54.00	17.88
High Channel: 2462 MHz									
2462.00	67.69	PK	H	28.22	1.83	0.00	97.74	N/A	N/A
2462.00	57.15	AV	H	28.22	1.83	0.00	87.2	N/A	N/A
2462.00	72.47	PK	V	28.22	1.83	0.00	102.52	N/A	N/A
2462.00	62.41	AV	V	28.22	1.83	0.00	92.46	N/A	N/A
2483.50	31.7	PK	V	28.27	1.84	0.00	61.81	74.00	12.19
2483.50	19.52	AV	V	28.27	1.84	0.00	49.63	54.00	4.37
4924.00	47.27	PK	V	33.15	3.27	37.22	46.47	74.00	27.53
4924.00	35.81	AV	V	33.15	3.27	37.22	35.01	54.00	18.99
7386.00	46.44	PK	V	36.20	4.51	37.46	49.69	74.00	24.31
7386.00	34.95	AV	V	36.20	4.51	37.46	38.2	54.00	15.8
5546.00	45.07	PK	V	34.12	3.55	37.45	45.29	74.00	28.71
5546.00	35.02	AV	V	34.12	3.55	37.45	35.24	54.00	18.76

802.11 n ht40 Mode(Chain 0+1 was the worst)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB)					
Low Channel: 2422 MHz									
2422.00	65.73	PK	H	28.14	1.81	0.00	95.68	N/A	N/A
2422.00	55.26	AV	H	28.14	1.81	0.00	85.21	N/A	N/A
2422.00	73.84	PK	V	28.14	1.81	0.00	103.79	N/A	N/A
2422.00	63.77	AV	V	28.14	1.81	0.00	93.72	N/A	N/A
2390.00	27.91	PK	V	28.08	1.80	0.00	57.79	74.00	16.21
2390.00	16.13	AV	V	28.08	1.80	0.00	46.01	54.00	7.99
4844.00	47.64	PK	V	32.99	3.22	37.20	46.65	74.00	27.35
4844.00	36.74	AV	V	32.99	3.22	37.20	35.75	54.00	18.25
7266.00	46.43	PK	V	35.89	4.72	37.31	49.73	74.00	24.27
7266.00	35.87	AV	V	35.89	4.72	37.31	39.17	54.00	14.83
5465.00	45.66	PK	V	34.04	3.57	37.35	45.92	74.00	28.08
5465.00	35.88	AV	V	34.04	3.57	37.35	36.14	54.00	17.86
Middle Channel: 2437 MHz									
2437.00	65.37	PK	H	28.17	1.82	0.00	95.36	N/A	N/A
2437.00	55.04	AV	H	28.17	1.82	0.00	85.03	N/A	N/A
2437.00	73.83	PK	V	28.17	1.82	0.00	103.82	N/A	N/A
2437.00	63.24	AV	V	28.17	1.82	0.00	93.23	N/A	N/A
4874.00	47.44	PK	V	33.05	3.26	37.21	46.54	74.00	27.46
4874.00	36.78	AV	V	33.05	3.26	37.21	35.88	54.00	18.12
7311.00	45.47	PK	V	36.01	4.64	37.36	48.76	74.00	25.24
7311.00	36.19	AV	V	36.01	4.64	37.36	39.48	54.00	14.52
5326.00	44.84	PK	V	33.82	3.46	37.35	44.77	74.00	29.23
5326.00	34.44	AV	V	33.82	3.46	37.35	34.37	54.00	19.63
3336.00	45.51	PK	V	30.91	2.25	36.91	41.76	74.00	32.24
3336.00	35.96	AV	V	30.91	2.25	36.91	32.21	54.00	21.79
High Channel: 2452 MHz									
2452.00	65.66	PK	H	28.20	1.83	0.00	95.69	N/A	N/A
2452.00	55.43	AV	H	28.20	1.83	0.00	85.46	N/A	N/A
2452.00	73.56	PK	V	28.20	1.83	0.00	103.59	N/A	N/A
2452.00	63.22	AV	V	28.20	1.83	0.00	93.25	N/A	N/A
2483.50	33.34	PK	V	28.27	1.84	0.00	63.45	74.00	10.55
2483.50	19.63	AV	V	28.27	1.84	0.00	49.74	54.00	4.26
4904.00	47.54	PK	V	33.11	3.30	37.21	46.74	74.00	27.26
4904.00	36.64	AV	V	33.11	3.30	37.21	35.84	54.00	18.16
7356.00	46.53	PK	V	36.13	4.56	37.42	49.8	74.00	24.2
7356.00	35.44	AV	V	36.13	4.56	37.42	38.71	54.00	15.29
4569.00	45.43	PK	V	32.44	3.07	37.13	43.81	74.00	30.19
4569.00	35.97	AV	V	32.44	3.07	37.13	34.35	54.00	19.65

Wifi beamforming 3TX

802.11b Mode(Chain 0+1+2 was the worst)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB)					
Low Channel: 2412 MHz									
2412.00	66.56	PK	H	28.12	1.81	0.00	96.49	N/A	N/A
2412.00	60.12	AV	H	28.12	1.81	0.00	90.05	N/A	N/A
2412.00	74.68	PK	V	28.12	1.81	0.00	104.61	N/A	N/A
2412.00	68.39	AV	V	28.12	1.81	0.00	98.32	N/A	N/A
2390.00	35.96	PK	V	28.08	1.80	0.00	65.84	74.00	8.16
2390.00	19.24	AV	V	28.08	1.80	0.00	49.12	54.00	4.88
4824.00	47.54	PK	V	32.95	3.19	37.20	46.48	74.00	27.52
4824.00	36.83	AV	V	32.95	3.19	37.20	35.77	54.00	18.23
7236.00	46.31	PK	V	35.81	4.77	37.27	49.62	74.00	24.38
7236.00	35.84	AV	V	35.81	4.77	37.27	39.15	54.00	14.85
5456.00	45.35	PK	V	34.03	3.58	37.35	45.61	74.00	28.39
5456.00	34.97	AV	V	34.03	3.58	37.35	35.23	54.00	18.77
Middle Channel: 2437 MHz									
2437.00	66.16	PK	H	28.17	1.82	0.00	96.15	N/A	N/A
2437.00	60.08	AV	H	28.17	1.82	0.00	90.07	N/A	N/A
2437.00	74.52	PK	V	28.17	1.82	0.00	104.51	N/A	N/A
2437.00	68.39	AV	V	28.17	1.82	0.00	98.38	N/A	N/A
4874.00	47.57	PK	V	33.05	3.26	37.21	46.67	74.00	27.33
4874.00	36.49	AV	V	33.05	3.26	37.21	35.59	54.00	18.41
7311.00	46.35	PK	V	36.01	4.64	37.36	49.64	74.00	24.36
7311.00	35.27	AV	V	36.01	4.64	37.36	38.56	54.00	15.44
5488.00	45.24	PK	V	34.08	3.55	37.34	45.53	74.00	28.47
5488.00	34.37	AV	V	34.08	3.55	37.34	34.66	54.00	19.34
6654.00	44.27	PK	V	34.51	4.88	37.04	46.62	74.00	27.38
6654.00	33.78	AV	V	34.51	4.88	37.04	36.13	54.00	17.87
High Channel: 2462 MHz									
2462.00	66.58	PK	H	28.22	1.83	0.00	96.63	N/A	N/A
2462.00	60.19	AV	H	28.22	1.83	0.00	90.24	N/A	N/A
2462.00	74.71	PK	V	28.22	1.83	0.00	104.76	N/A	N/A
2462.00	68.41	AV	V	28.22	1.83	0.00	98.46	N/A	N/A
2483.50	35.93	PK	V	28.27	1.84	0.00	66.04	74.00	7.96
2483.50	19.34	AV	V	28.27	1.84	0.00	49.45	54.00	4.55
4924.00	47.49	PK	V	33.15	3.27	37.22	46.69	74.00	27.31
4924.00	36.87	AV	V	33.15	3.27	37.22	36.07	54.00	17.93
7386.00	46.45	PK	V	36.20	4.51	37.46	49.7	74.00	24.3
7386.00	35.83	AV	V	36.20	4.51	37.46	39.08	54.00	14.92
3579.00	45.38	PK	V	31.47	2.39	37.09	42.15	74.00	31.85
3579.00	34.94	AV	V	31.47	2.39	37.09	31.71	54.00	22.29

802.11g Mode(Chain 0+1+2 was the worst)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB)					
Low Channel: 2412 MHz									
2412.00	68.38	PK	H	28.12	1.81	0.00	98.31	N/A	N/A
2412.00	59.36	AV	H	28.12	1.81	0.00	89.29	N/A	N/A
2412.00	73.41	PK	V	28.12	1.81	0.00	103.34	N/A	N/A
2412.00	63.47	AV	V	28.12	1.81	0.00	93.4	N/A	N/A
2390.00	35.03	PK	V	28.08	1.80	0.00	64.91	74.00	9.09
2390.00	19.79	AV	V	28.08	1.80	0.00	49.67	54.00	4.33
4824.00	47.67	PK	V	32.95	3.19	37.20	46.61	74.00	27.39
4824.00	36.75	AV	V	32.95	3.19	37.20	35.69	54.00	18.31
7236.00	46.24	PK	V	35.81	4.77	37.27	49.55	74.00	24.45
7236.00	35.63	AV	V	35.81	4.77	37.27	38.94	54.00	15.06
4123.00	45.24	PK	V	32.38	2.75	37.06	43.31	74.00	30.69
4123.00	35.35	AV	V	32.38	2.75	37.06	33.42	54.00	20.58
Middle Channel: 2437 MHz									
2437.00	69.08	PK	H	28.17	1.82	0.00	99.07	N/A	N/A
2437.00	60.55	AV	H	28.17	1.82	0.00	90.54	N/A	N/A
2437.00	75.51	PK	V	28.17	1.82	0.00	105.5	N/A	N/A
2437.00	66.88	AV	V	28.17	1.82	0.00	96.87	N/A	N/A
4874.00	47.28	PK	V	33.05	3.26	37.21	46.38	74.00	27.62
4874.00	36.74	AV	V	33.05	3.26	37.21	35.84	54.00	18.16
7311.00	46.39	PK	V	36.01	4.64	37.36	49.68	74.00	24.32
7311.00	35.18	AV	V	36.01	4.64	37.36	38.47	54.00	15.53
5236.00	45.56	PK	V	33.68	3.53	37.38	45.39	74.00	28.61
5236.00	34.62	AV	V	33.68	3.53	37.38	34.45	54.00	19.55
5999.00	45.22	PK	V	34.30	3.83	37.33	46.02	74.00	27.98
5999.00	34.66	AV	V	34.30	3.83	37.33	35.46	54.00	18.54
High Channel: 2462 MHz									
2462.00	70.75	PK	H	28.22	1.83	0.00	100.8	N/A	N/A
2462.00	60.35	AV	H	28.22	1.83	0.00	90.4	N/A	N/A
2462.00	75.88	PK	V	28.22	1.83	0.00	105.93	N/A	N/A
2462.00	65.46	AV	V	28.22	1.83	0.00	95.51	N/A	N/A
2483.50	36.06	PK	V	28.27	1.84	0.00	66.17	74.00	7.83
2483.50	20.52	AV	V	28.27	1.84	0.00	50.63	54.00	3.37
4924.00	47.32	PK	V	33.15	3.27	37.22	46.52	74.00	27.48
4924.00	36.79	AV	V	33.15	3.27	37.22	35.99	54.00	18.01
7386.00	46.35	PK	V	36.20	4.51	37.46	49.6	74.00	24.4
7386.00	35.92	AV	V	36.20	4.51	37.46	39.17	54.00	14.83
4569.00	45.58	PK	V	32.44	3.07	37.13	43.96	74.00	30.04
4569.00	35.03	AV	V	32.44	3.07	37.13	33.41	54.00	20.59

802.11 n ht20 Mode(Chain 0+1+2 was the worst)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB)					
Low Channel: 2412 MHz									
2412.00	68.19	PK	H	28.12	1.81	0.00	98.12	N/A	N/A
2412.00	58.16	AV	H	28.12	1.81	0.00	88.09	N/A	N/A
2412.00	76.36	PK	V	28.12	1.81	0.00	106.29	N/A	N/A
2412.00	66.43	AV	V	28.12	1.81	0.00	96.36	N/A	N/A
2390.00	36.16	PK	V	28.08	1.80	0.00	66.04	74.00	7.96
2390.00	21.37	AV	V	28.08	1.80	0.00	51.25	54.00	2.75
4824.00	47.55	PK	V	32.95	3.19	37.20	46.49	74.00	27.51
4824.00	36.82	AV	V	32.95	3.19	37.20	35.76	54.00	18.24
7236.00	46.43	PK	V	35.81	4.77	37.27	49.74	74.00	24.26
7236.00	35.83	AV	V	35.81	4.77	37.27	39.14	54.00	14.86
6629.00	45.31	PK	V	34.46	4.86	37.04	47.59	74.00	26.41
6629.00	35.28	AV	V	34.46	4.86	37.04	37.56	54.00	16.44
Middle Channel: 2437 MHz									
2437.00	69.42	PK	H	28.17	1.82	0.00	99.41	N/A	N/A
2437.00	61.71	AV	H	28.17	1.82	0.00	91.7	N/A	N/A
2437.00	77.39	PK	V	28.17	1.82	0.00	107.38	N/A	N/A
2437.00	68.02	AV	V	28.17	1.82	0.00	98.01	N/A	N/A
4874.00	47.34	PK	V	33.05	3.26	37.21	46.44	74.00	27.56
4874.00	36.78	AV	V	33.05	3.26	37.21	35.88	54.00	18.12
7311.00	46.34	PK	V	36.01	4.64	37.36	49.63	74.00	24.37
7311.00	35.28	AV	V	36.01	4.64	37.36	38.57	54.00	15.43
5688.00	45.55	PK	V	34.18	3.67	37.38	46.02	74.00	27.98
5688.00	34.79	AV	V	34.18	3.67	37.38	35.26	54.00	18.74
6321.00	45.28	PK	V	34.24	4.42	37.16	46.78	74.00	27.22
6321.00	34.84	AV	V	34.24	4.42	37.16	36.34	54.00	17.66
High Channel: 2462 MHz									
2462.00	70.57	PK	H	28.22	1.83	0.00	100.62	N/A	N/A
2462.00	60.28	AV	H	28.22	1.83	0.00	90.33	N/A	N/A
2462.00	75.83	PK	V	28.22	1.83	0.00	105.88	N/A	N/A
2462.00	65.49	AV	V	28.22	1.83	0.00	95.54	N/A	N/A
2483.50	36.07	PK	V	28.27	1.84	0.00	66.18	74.00	7.82
2483.50	19.46	AV	V	28.27	1.84	0.00	49.57	54.00	4.43
4924.00	47.51	PK	V	33.15	3.27	37.22	46.71	74.00	27.29
4924.00	36.73	AV	V	33.15	3.27	37.22	35.93	54.00	18.07
7386.00	46.54	PK	V	36.20	4.51	37.46	49.79	74.00	24.21
7386.00	35.97	AV	V	36.20	4.51	37.46	39.22	54.00	14.78
5546.00	45.72	PK	V	34.12	3.55	37.45	45.94	74.00	28.06
5546.00	35.07	AV	V	34.12	3.55	37.45	35.29	54.00	18.71

802.11 n ht40 Mode(Chain 0+1+2 was the worst)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB)					
Low Channel: 2422 MHz									
2422.00	64.89	PK	H	28.14	1.81	0.00	94.84	N/A	N/A
2422.00	54.66	AV	H	28.14	1.81	0.00	84.61	N/A	N/A
2422.00	72.52	PK	V	28.14	1.81	0.00	102.47	N/A	N/A
2422.00	62.43	AV	V	28.14	1.81	0.00	92.38	N/A	N/A
2390.00	35.46	PK	V	28.08	1.80	0.00	65.34	74.00	8.66
2390.00	19.74	AV	V	28.08	1.80	0.00	49.62	54.00	4.38
4844.00	47.45	PK	V	32.99	3.22	37.20	46.46	74.00	27.54
4844.00	36.44	AV	V	32.99	3.22	37.20	35.45	54.00	18.55
7266.00	46.44	PK	V	35.89	4.72	37.31	49.74	74.00	24.26
7266.00	35.65	AV	V	35.89	4.72	37.31	38.95	54.00	15.05
5878.00	45.75	PK	V	34.25	3.77	37.23	46.54	74.00	27.46
5878.00	35.66	AV	V	34.25	3.77	37.23	36.45	54.00	17.55
Middle Channel: 2437 MHz									
2437.00	64.32	PK	H	28.17	1.82	0.00	94.31	N/A	N/A
2437.00	54.44	AV	H	28.17	1.82	0.00	84.43	N/A	N/A
2437.00	72.74	PK	V	28.17	1.82	0.00	102.73	N/A	N/A
2437.00	62.64	AV	V	28.17	1.82	0.00	92.63	N/A	N/A
4874.00	47.57	PK	V	33.05	3.26	37.21	46.67	74.00	27.33
4874.00	37.11	AV	V	33.05	3.26	37.21	36.21	54.00	17.79
7311.00	45.92	PK	V	36.01	4.64	37.36	49.21	74.00	24.79
7311.00	35.53	AV	V	36.01	4.64	37.36	38.82	54.00	15.18
5546.00	45.41	PK	V	34.12	3.55	37.45	45.63	74.00	28.37
5546.00	34.96	AV	V	34.12	3.55	37.45	35.18	54.00	18.82
3565.00	45.73	PK	V	31.44	2.39	37.06	42.5	74.00	31.5
3565.00	35.41	AV	V	31.44	2.39	37.06	32.18	54.00	21.82
High Channel: 2452 MHz									
2452.00	64.94	PK	H	28.20	1.83	0.00	94.97	N/A	N/A
2452.00	54.51	AV	H	28.20	1.83	0.00	84.54	N/A	N/A
2452.00	72.06	PK	V	28.20	1.83	0.00	102.09	N/A	N/A
2452.00	62.24	AV	V	28.20	1.83	0.00	92.27	N/A	N/A
2483.50	35.27	PK	V	28.27	1.84	0.00	65.38	74.00	8.62
2483.50	19.77	AV	V	28.27	1.84	0.00	49.88	54.00	4.12
4904.00	47.54	PK	V	33.11	3.30	37.21	46.74	74.00	27.26
4904.00	36.73	AV	V	33.11	3.30	37.21	35.93	54.00	18.07
7356.00	45.84	PK	V	36.13	4.56	37.42	49.11	74.00	24.89
7356.00	35.52	AV	V	36.13	4.56	37.42	38.79	54.00	15.21
4435.00	45.44	PK	V	32.31	2.90	37.05	43.6	74.00	30.4
4435.00	34.75	AV	V	32.31	2.90	37.05	32.91	54.00	21.09

Wifi beamforming 4TX
802.11b Mode(Chain 0+1+2+3)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB)					
Low Channel: 2412 MHz									
2412.00	68.09	PK	H	28.12	1.81	0.00	98.02	N/A	N/A
2412.00	62.21	AV	H	28.12	1.81	0.00	92.14	N/A	N/A
2412.00	75.03	PK	V	28.12	1.81	0.00	104.96	N/A	N/A
2412.00	69.14	AV	V	28.12	1.81	0.00	99.07	N/A	N/A
2390.00	30.16	PK	V	28.08	1.80	0.00	60.04	74.00	13.96
2390.00	18.15	AV	V	28.08	1.80	0.00	48.03	54.00	5.97
4824.00	47.24	PK	V	32.95	3.19	37.20	46.18	74.00	27.82
4824.00	37.48	AV	V	32.95	3.19	37.20	36.42	54.00	17.58
7236.00	46.74	PK	V	35.81	4.77	37.27	50.05	74.00	23.95
7236.00	36.45	AV	V	35.81	4.77	37.27	39.76	54.00	14.24
5569.00	45.17	PK	V	34.13	3.56	37.51	45.35	74.00	28.65
5569.00	35.39	AV	V	34.13	3.56	37.51	35.57	54.00	18.43
Middle Channel: 2437 MHz									
2437.00	68.14	PK	H	28.17	1.82	0.00	98.13	N/A	N/A
2437.00	61.63	AV	H	28.17	1.82	0.00	91.62	N/A	N/A
2437.00	75.19	PK	V	28.17	1.82	0.00	105.18	N/A	N/A
2437.00	68.59	AV	V	28.17	1.82	0.00	98.58	N/A	N/A
4874.00	46.95	PK	V	33.05	3.26	37.21	46.05	74.00	27.95
4874.00	37.17	AV	V	33.05	3.26	37.21	36.27	54.00	17.73
7311.00	46.55	PK	V	36.01	4.64	37.36	49.84	74.00	24.16
7311.00	36.19	AV	V	36.01	4.64	37.36	39.48	54.00	14.52
5488.00	45.29	PK	V	34.08	3.55	37.34	45.58	74.00	28.42
5488.00	35.19	AV	V	34.08	3.55	37.34	35.48	54.00	18.52
6321.00	45.24	PK	V	34.24	4.42	37.16	46.74	74.00	27.26
6321.00	35.22	AV	V	34.24	4.42	37.16	36.72	54.00	17.28
High Channel: 2462 MHz									
2462.00	67.31	PK	H	28.22	1.83	0.00	97.36	N/A	N/A
2462.00	61.11	AV	H	28.22	1.83	0.00	91.16	N/A	N/A
2462.00	76.54	PK	V	28.22	1.83	0.00	106.59	N/A	N/A
2462.00	69.06	AV	V	28.22	1.83	0.00	99.11	N/A	N/A
2483.50	34.58	PK	V	28.27	1.84	0.00	64.69	74.00	9.31
2483.50	18.98	AV	V	28.27	1.84	0.00	49.09	54.00	4.91
4924.00	47.27	PK	V	33.15	3.27	37.22	46.47	74.00	27.53
4924.00	37.32	AV	V	33.15	3.27	37.22	36.52	54.00	17.48
7386.00	46.79	PK	V	36.20	4.51	37.46	50.04	74.00	23.96
7386.00	36.47	AV	V	36.20	4.51	37.46	39.72	54.00	14.28
2123.00	45.32	PK	V	27.55	1.72	36.21	38.38	74.00	35.62
2123.00	34.85	AV	V	27.55	1.72	36.21	27.91	54.00	26.09

802.11g Mode(Chain 0+1+2+3)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB)					
Low Channel: 2412 MHz									
2412.00	68.09	PK	H	28.12	1.81	0.00	98.02	N/A	N/A
2412.00	58.05	AV	H	28.12	1.81	0.00	87.98	N/A	N/A
2412.00	75.21	PK	V	28.12	1.81	0.00	105.14	N/A	N/A
2412.00	64.11	AV	V	28.12	1.81	0.00	94.04	N/A	N/A
2390.00	34.06	PK	V	28.08	1.80	0.00	63.94	74.00	10.06
2390.00	20.16	AV	V	28.08	1.80	0.00	50.04	54.00	3.96
4824.00	47.27	PK	V	32.95	3.19	37.20	46.21	74.00	27.79
4824.00	37.65	AV	V	32.95	3.19	37.20	36.59	54.00	17.41
7236.00	46.64	PK	V	35.81	4.77	37.27	49.95	74.00	24.05
7236.00	36.51	AV	V	35.81	4.77	37.27	39.82	54.00	14.18
4123.00	45.28	PK	V	32.38	2.75	37.06	43.35	74.00	30.65
4123.00	35.54	AV	V	32.38	2.75	37.06	33.61	54.00	20.39
Middle Channel: 2437 MHz									
2437.00	68.08	PK	H	28.17	1.82	0.00	98.07	N/A	N/A
2437.00	57.76	AV	H	28.17	1.82	0.00	87.75	N/A	N/A
2437.00	75.15	PK	V	28.17	1.82	0.00	105.14	N/A	N/A
2437.00	64.42	AV	V	28.17	1.82	0.00	94.41	N/A	N/A
4874.00	47.05	PK	V	33.05	3.26	37.21	46.15	74.00	27.85
4874.00	37.04	AV	V	33.05	3.26	37.21	36.14	54.00	17.86
7311.00	46.65	PK	V	36.01	4.64	37.36	49.94	74.00	24.06
7311.00	36.29	AV	V	36.01	4.64	37.36	39.58	54.00	14.42
5236.00	45.17	PK	V	33.68	3.53	37.38	45	74.00	29
5236.00	35.31	AV	V	33.68	3.53	37.38	35.14	54.00	18.86
5755.00	45.23	PK	V	34.20	3.70	37.31	45.82	74.00	28.18
5755.00	35.06	AV	V	34.20	3.70	37.31	35.65	54.00	18.35
High Channel: 2462 MHz									
2462.00	67.34	PK	H	28.22	1.83	0.00	97.39	N/A	N/A
2462.00	57.27	AV	H	28.22	1.83	0.00	87.32	N/A	N/A
2462.00	75.72	PK	V	28.22	1.83	0.00	105.77	N/A	N/A
2462.00	63.96	AV	V	28.22	1.83	0.00	94.01	N/A	N/A
2483.50	34.77	PK	V	28.27	1.84	0.00	64.88	74.00	9.12
2483.50	20.18	AV	V	28.27	1.84	0.00	50.29	54.00	3.71
4924.00	47.38	PK	V	33.15	3.27	37.22	46.58	74.00	27.42
4924.00	37.18	AV	V	33.15	3.27	37.22	36.38	54.00	17.62
7386.00	46.61	PK	V	36.20	4.51	37.46	49.86	74.00	24.14
7386.00	36.42	AV	V	36.20	4.51	37.46	39.67	54.00	14.33
4523.00	46.57	PK	V	32.35	3.03	37.14	44.81	74.00	29.19
4523.00	33.28	AV	V	32.35	3.03	37.14	31.52	54.00	22.48

802.11 n ht20 Mode(Chain 0+1+2+3)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB)					
Low Channel: 2412 MHz									
2412.00	67.94	PK	H	28.12	1.81	0.00	97.87	N/A	N/A
2412.00	58.19	AV	H	28.12	1.81	0.00	88.12	N/A	N/A
2412.00	74.27	PK	V	28.12	1.81	0.00	104.2	N/A	N/A
2412.00	64.13	AV	V	28.12	1.81	0.00	94.06	N/A	N/A
2390.00	33.24	PK	V	28.08	1.80	0.00	63.12	74.00	10.88
2390.00	20.15	AV	V	28.08	1.80	0.00	50.03	54.00	3.97
4824.00	47.28	PK	V	32.95	3.19	37.20	46.22	74.00	27.78
4824.00	37.61	AV	V	32.95	3.19	37.20	36.55	54.00	17.45
7236.00	46.87	PK	V	35.81	4.77	37.27	50.18	74.00	23.82
7236.00	36.55	AV	V	35.81	4.77	37.27	39.86	54.00	14.14
5695.00	45.02	PK	V	34.18	3.67	37.36	45.51	74.00	28.49
5695.00	35.38	AV	V	34.18	3.67	37.36	35.87	54.00	18.13
Middle Channel: 2437 MHz									
2437.00	68.23	PK	H	28.17	1.82	0.00	98.22	N/A	N/A
2437.00	58.43	AV	H	28.17	1.82	0.00	88.42	N/A	N/A
2437.00	75.29	PK	V	28.17	1.82	0.00	105.28	N/A	N/A
2437.00	65.67	AV	V	28.17	1.82	0.00	95.66	N/A	N/A
4874.00	47.13	PK	V	33.05	3.26	37.21	46.23	74.00	27.77
4874.00	37.37	AV	V	33.05	3.26	37.21	36.47	54.00	17.53
7311.00	46.64	PK	V	36.01	4.64	37.36	49.93	74.00	24.07
7311.00	36.17	AV	V	36.01	4.64	37.36	39.46	54.00	14.54
5688.00	45.39	PK	V	34.18	3.67	37.38	45.86	74.00	28.14
5688.00	35.14	AV	V	34.18	3.67	37.38	35.61	54.00	18.39
6321.00	45.32	PK	V	34.24	4.42	37.16	46.82	74.00	27.18
6321.00	34.62	AV	V	34.24	4.42	37.16	36.12	54.00	17.88
High Channel: 2462 MHz									
2462.00	67.11	PK	H	28.22	1.83	0.00	97.16	N/A	N/A
2462.00	58.11	AV	H	28.22	1.83	0.00	88.16	N/A	N/A
2462.00	75.65	PK	V	28.22	1.83	0.00	105.7	N/A	N/A
2462.00	65.14	AV	V	28.22	1.83	0.00	95.19	N/A	N/A
2483.50	34.62	PK	V	28.27	1.84	0.00	64.73	74.00	9.27
2483.50	20.11	AV	V	28.27	1.84	0.00	50.22	54.00	3.78
4924.00	47.25	PK	V	33.15	3.27	37.22	46.45	74.00	27.55
4924.00	37.43	AV	V	33.15	3.27	37.22	36.63	54.00	17.37
7386.00	46.84	PK	V	36.20	4.51	37.46	50.09	74.00	23.91
7386.00	36.44	AV	V	36.20	4.51	37.46	39.69	54.00	14.31
5546.00	45.67	PK	V	34.12	3.55	37.45	45.89	74.00	28.11
5546.00	33.38	AV	V	34.12	3.55	37.45	33.6	54.00	20.4

802.11 n ht40 Mode(Chain 0+1+2+3)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Detector	Polar (H/V)	Factor (dB)					
Low Channel: 2422 MHz									
2422.00	66.05	PK	H	28.14	1.81	0.00	96	N/A	N/A
2422.00	56.34	AV	H	28.14	1.81	0.00	86.29	N/A	N/A
2422.00	74.99	PK	V	28.14	1.81	0.00	104.94	N/A	N/A
2422.00	63.19	AV	V	28.14	1.81	0.00	93.14	N/A	N/A
2390.00	30.16	PK	V	28.08	1.80	0.00	60.04	74.00	13.96
2390.00	20.01	AV	V	28.08	1.80	0.00	49.89	54.00	4.11
4844.00	47.43	PK	V	32.99	3.22	37.20	46.44	74.00	27.56
4844.00	37.43	AV	V	32.99	3.22	37.20	36.44	54.00	17.56
7266.00	46.7	PK	V	35.89	4.72	37.31	50	74.00	24
7266.00	36.32	AV	V	35.89	4.72	37.31	39.62	54.00	14.38
5878.00	45.36	PK	V	34.25	3.77	37.23	46.15	74.00	27.85
5878.00	35.5	AV	V	34.25	3.77	37.23	36.29	54.00	17.71
Middle Channel: 2437 MHz									
2437.00	66.12	PK	H	28.17	1.82	0.00	96.11	N/A	N/A
2437.00	56.56	AV	H	28.17	1.82	0.00	86.55	N/A	N/A
2437.00	74.15	PK	V	28.17	1.82	0.00	104.14	N/A	N/A
2437.00	64.56	AV	V	28.17	1.82	0.00	94.55	N/A	N/A
4874.00	47.14	PK	V	33.05	3.26	37.21	46.24	74.00	27.76
4874.00	37.01	AV	V	33.05	3.26	37.21	36.11	54.00	17.89
7311.00	46.72	PK	V	36.01	4.64	37.36	50.01	74.00	23.99
7311.00	36.1	AV	V	36.01	4.64	37.36	39.39	54.00	14.61
5546.00	45.31	PK	V	34.12	3.55	37.45	45.53	74.00	28.47
5546.00	35.2	AV	V	34.12	3.55	37.45	35.42	54.00	18.58
2569.00	45.05	PK	V	28.55	1.87	36.38	39.09	74.00	34.91
2569.00	35.15	AV	V	28.55	1.87	36.38	29.19	54.00	24.81
High Channel: 2452 MHz									
2452.00	65.51	PK	H	28.20	1.83	0.00	95.54	N/A	N/A
2452.00	55.02	AV	H	28.20	1.83	0.00	85.05	N/A	N/A
2452.00	74.38	PK	V	28.20	1.83	0.00	104.41	N/A	N/A
2452.00	63.08	AV	V	28.20	1.83	0.00	93.11	N/A	N/A
2483.50	34.39	PK	V	28.27	1.84	0.00	64.5	74.00	9.5
2483.50	20.84	AV	V	28.27	1.84	0.00	50.95	54.00	3.05
4904.00	47.47	PK	V	33.11	3.30	37.21	46.67	74.00	27.33
4904.00	37.13	AV	V	33.11	3.30	37.21	36.33	54.00	17.67
7356.00	46.84	PK	V	36.13	4.56	37.42	50.11	74.00	23.89
7356.00	36.45	AV	V	36.13	4.56	37.42	39.72	54.00	14.28
4235.00	45.26	PK	V	32.35	2.77	37.05	43.33	74.00	30.67
4235.00	33.74	AV	V	32.35	2.77	37.05	31.81	54.00	22.19

BLE:

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB)					
Low Channel: 2402 MHz									
2402.00	65.96	PK	H	28.10	1.80	0.00	95.86	N/A	N/A
2402.00	56.71	AV	H	28.10	1.80	0.00	86.61	N/A	N/A
2402.00	59.67	PK	V	28.10	1.80	0.00	89.57	N/A	N/A
2402.00	50.18	AV	V	28.10	1.80	0.00	80.08	N/A	N/A
2390.00	30.49	PK	H	28.08	1.80	0.00	60.37	74.00	13.63
2390.00	13.41	AV	H	28.08	1.80	0.00	43.29	54.00	10.71
4804.00	48.63	PK	H	32.91	3.17	37.20	47.51	74.00	26.49
4804.00	32.45	AV	H	32.91	3.17	37.20	31.33	54.00	22.67
7206.00	47.39	PK	H	35.74	4.82	37.23	50.72	74.00	23.28
7206.00	32.17	AV	H	35.74	4.82	37.23	35.5	54.00	18.5
5965.00	45.62	PK	H	34.29	3.82	37.29	46.44	74.00	27.56
5965.00	31.76	AV	H	34.29	3.82	37.29	32.58	54.00	21.42
Middle Channel: 2440 MHz									
2440.00	65.87	PK	H	28.18	1.82	0.00	95.87	N/A	N/A
2440.00	56.71	AV	H	28.18	1.82	0.00	86.71	N/A	N/A
2440.00	59.57	PK	V	28.18	1.82	0.00	89.57	N/A	N/A
2440.00	50.13	AV	V	28.18	1.82	0.00	80.13	N/A	N/A
4880.00	48.32	PK	H	33.06	3.27	37.21	47.44	74.00	26.56
4880.00	32.81	AV	H	33.06	3.27	37.21	31.93	54.00	22.07
7320.00	48.26	PK	H	36.03	4.62	37.37	51.54	74.00	22.46
7320.00	32.67	AV	H	36.03	4.62	37.37	35.95	54.00	18.05
5899.00	47.34	PK	H	34.26	3.79	37.22	48.17	74.00	25.83
5899.00	32.77	AV	H	34.26	3.79	37.22	33.6	54.00	20.4
6125.00	46.48	PK	H	34.28	4.06	37.27	47.55	74.00	26.45
6125.00	31.89	AV	H	34.28	4.06	37.27	32.96	54.00	21.04
High Channel: 2480 MHz									
2480.00	69.51	PK	H	28.26	1.84	0.00	99.61	N/A	N/A
2480.00	58.86	AV	H	28.26	1.84	0.00	88.96	N/A	N/A
2480.00	59.34	PK	V	28.26	1.84	0.00	89.44	N/A	N/A
2480.00	48.89	AV	V	28.26	1.84	0.00	78.99	N/A	N/A
2483.50	28.32	PK	H	28.27	1.84	0.00	58.43	74.00	15.57
2483.50	14.41	AV	H	28.27	1.84	0.00	44.52	54.00	9.48
4960.00	47.96	PK	H	33.22	3.23	37.25	47.16	74.00	26.84
4960.00	32.78	AV	H	33.22	3.23	37.25	31.98	54.00	22.02
7440.00	47.89	PK	H	36.34	4.41	37.52	51.12	74.00	22.88
7440.00	32.21	AV	H	36.34	4.41	37.52	35.44	54.00	18.56
5985.00	45.63	PK	H	34.29	3.82	37.31	46.43	74.00	27.57
5985.00	31.82	AV	H	34.29	3.82	37.31	32.62	54.00	21.38

Simultaneous Transmission (worst mode), 1-40GHz:

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB)					
BLE:2402 MHz+b mode 2437MHz 4Tx Non-beamforming mode+ Radio 1 5785MHz a mode 4Tx Non-beamforming mode									
3116.00	49.59	PK	V	30.38	2.26	37.01	45.22	74.00	28.78
3116.00	35.26	AV	V	30.38	2.26	37.01	30.89	54.00	23.11
3587.00	48.59	PK	V	31.49	2.39	37.10	45.37	74.00	28.63
3587.00	33.15	AV	V	31.49	2.39	37.10	29.93	54.00	24.07
3748.00	49.36	PK	H	31.85	2.53	37.01	46.73	74.00	27.27
3748.00	35.78	AV	H	31.85	2.53	37.01	33.15	54.00	20.85
3452.00	48.62	PK	H	31.18	2.39	36.93	45.26	74.00	28.74
3452.00	33.46	AV	H	31.18	2.39	36.93	30.10	54.00	23.9
7311.00	45.92	PK	V	36.01	4.64	37.36	49.21	74.00	24.79
7311.00	35.53	AV	V	36.01	4.64	37.36	38.82	54.00	15.18
4874.00	47.57	PK	V	33.05	3.26	37.21	46.67	74.00	27.33
4874.00	37.11	AV	V	33.05	3.26	37.21	36.21	54.00	17.79

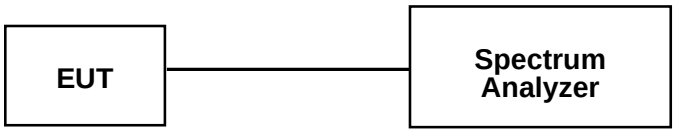
FCC §15.247(a) (2) – 6 dB EMISSION BANDWIDTH

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

a) Set RBW = 100 kHz.
b) Set the video bandwidth (VBW) ≥ 3×RBW.
c) Detector = Peak.
d) Trace mode = max hold.
e) Sweep = auto couple.
f) Allow the trace to stabilize.
g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.



Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	EMI Test Receiver	ESPI	100120	2016-12-08	2017-12-08
Unknown	Coaxial Cable	C-SJ00-0010	C0010/01	Each Time	/

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

Test Data

Environmental Conditions

Temperature:	26.6~27.8 °C
Relative Humidity:	47~52 %
ATM Pressure:	100.8~101 kPa

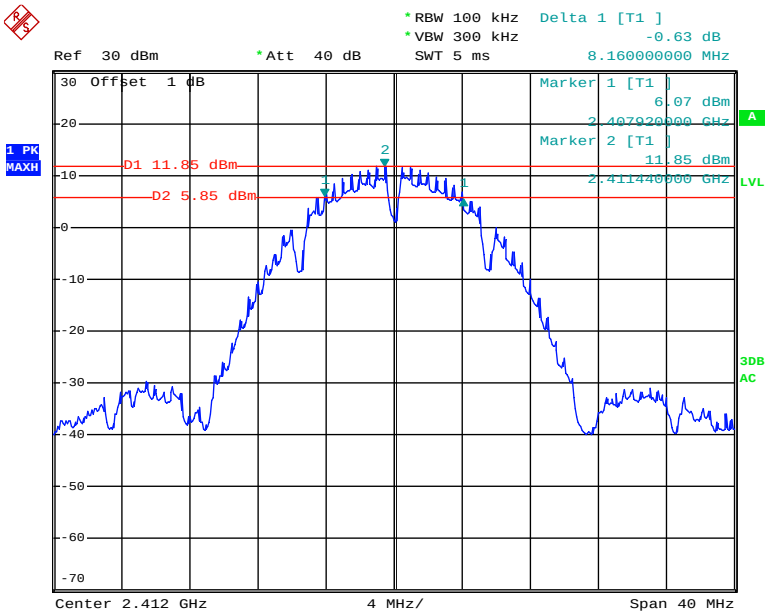
** The testing was performed by George Pang from 2017-09-30 to 2017-10-23.*

Test Mode: Transmitting (Test performed at SISO mode Chain 0)

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

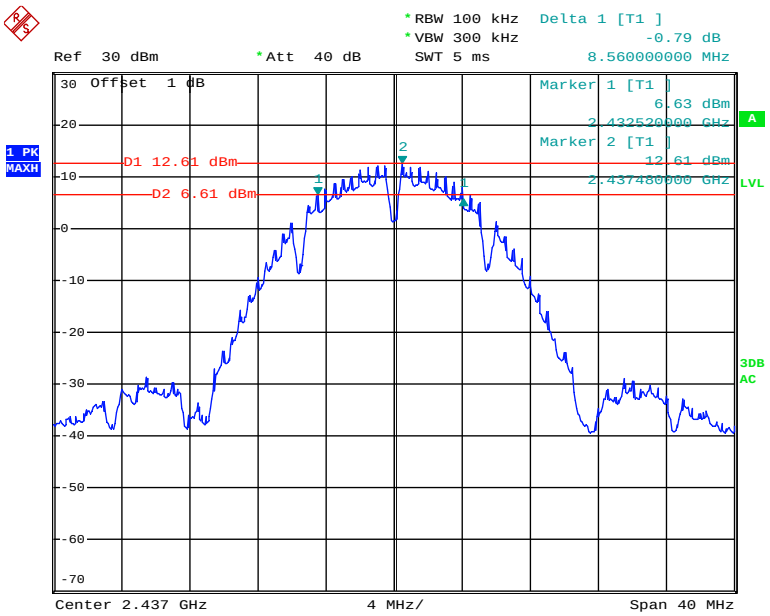
Test mode	Channel	Frequency (MHz)	6 dB Emission Bandwidth (MHz)	Limit (MHz)
802.11b	Low	2412	8.16	≥0.5
	Middle	2437	8.56	≥0.5
	High	2462	8.64	≥0.5
802.11g	Low	2412	16.48	≥0.5
	Middle	2437	16.40	≥0.5
	High	2462	16.48	≥0.5
802.11n ht20	Low	2412	17.68	≥0.5
	Middle	2437	17.60	≥0.5
	High	2462	17.60	≥0.5
802.11n ht40	Low	2422	36.48	≥0.5
	Middle	2437	36.48	≥0.5
	High	2452	36.48	≥0.5
BLE	Low	2402	0.64	≥0.5
	Middle	2440	0.64	≥0.5
	High	2480	0.66	≥0.5

802.11b Low Channel



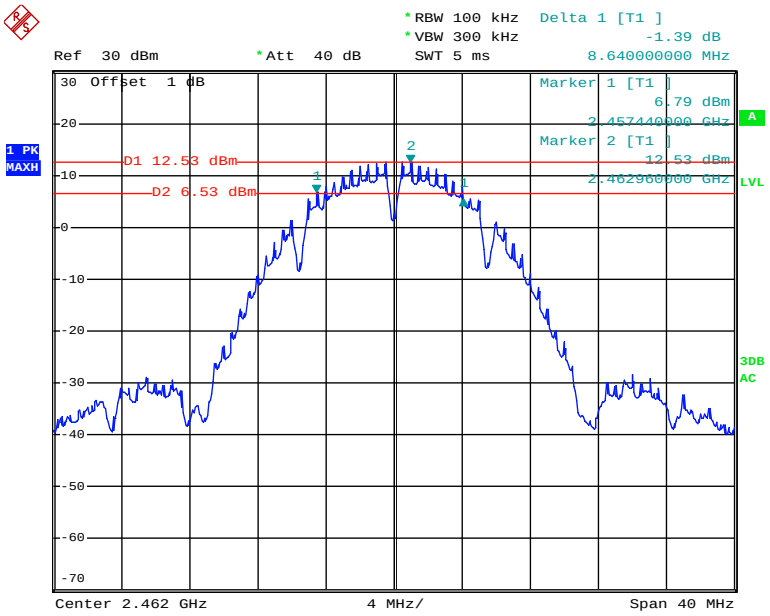
Date: 23.OCT.2017 13:13:52

802.11b Middle Channel



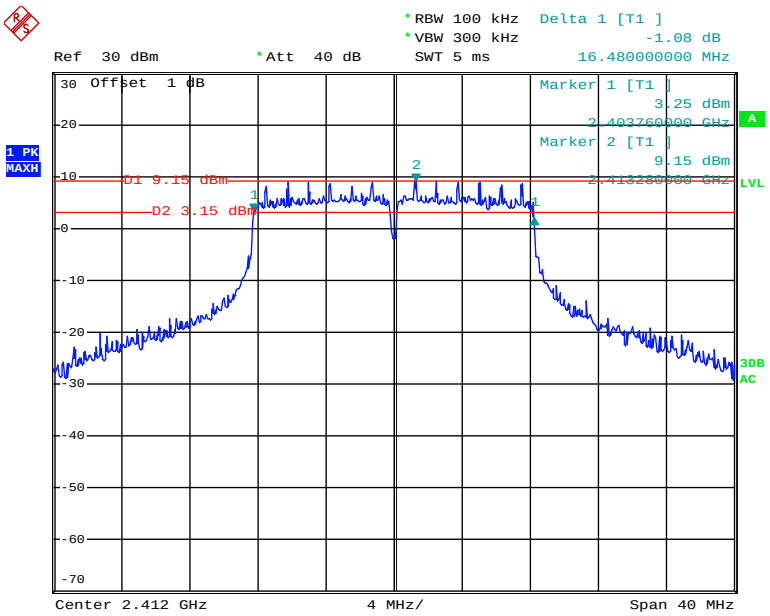
Date: 23.OCT.2017 13:25:58

802.11b High Channel



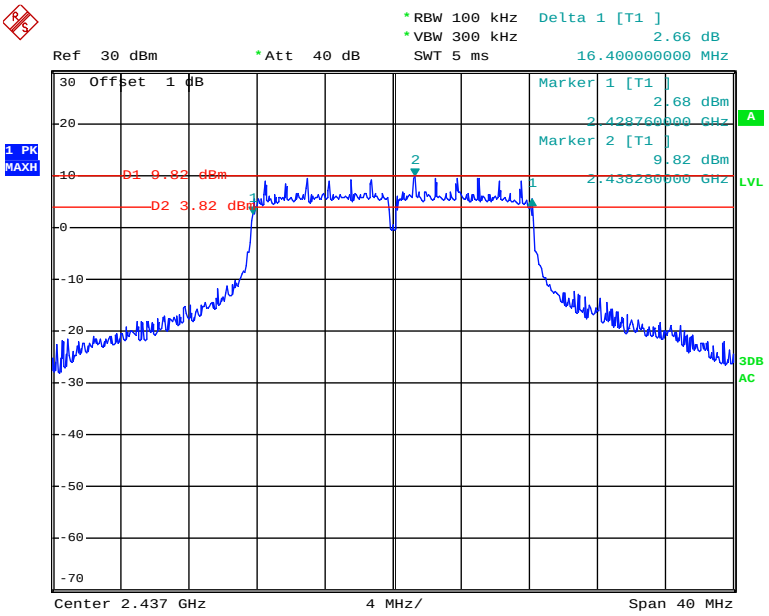
Date: 23.OCT.2017 13:24:10

802.11g Low Channel



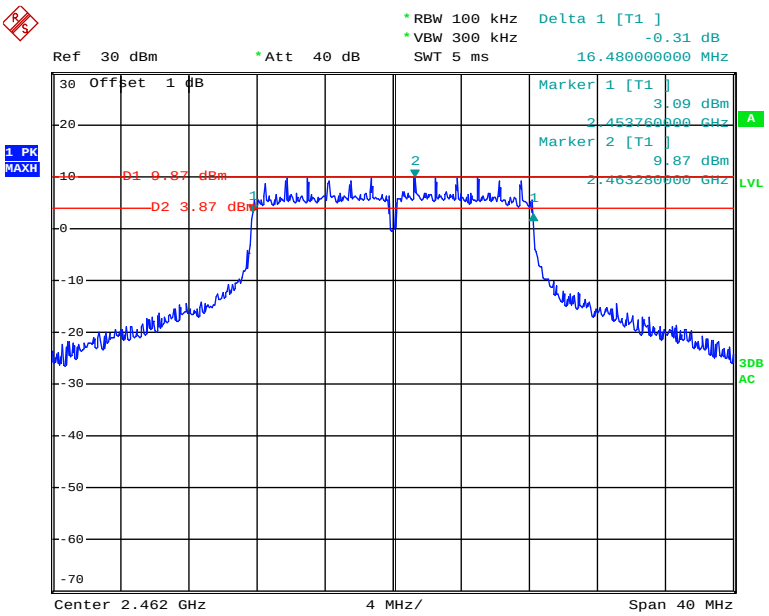
Date: 23.OCT.2017 13:48:01

802.11g Middle Channel



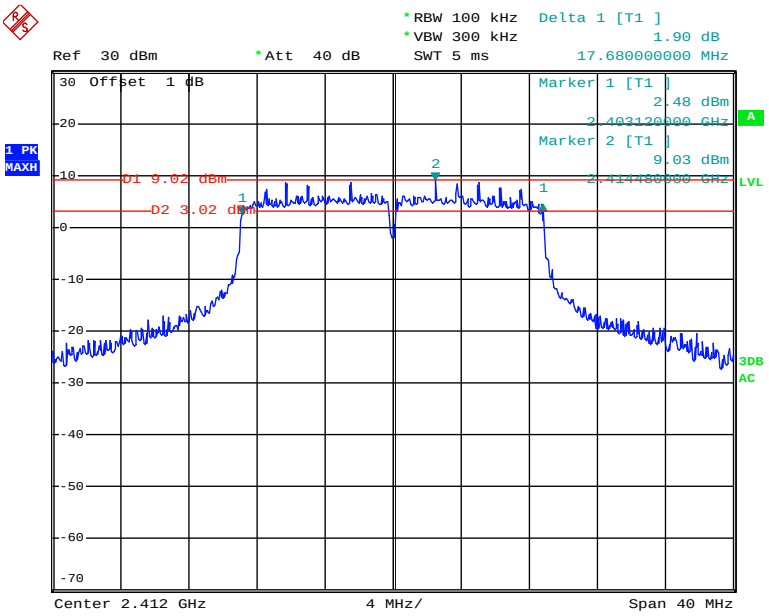
Date: 23.OCT.2017 13:50:04

802.11g High Channel



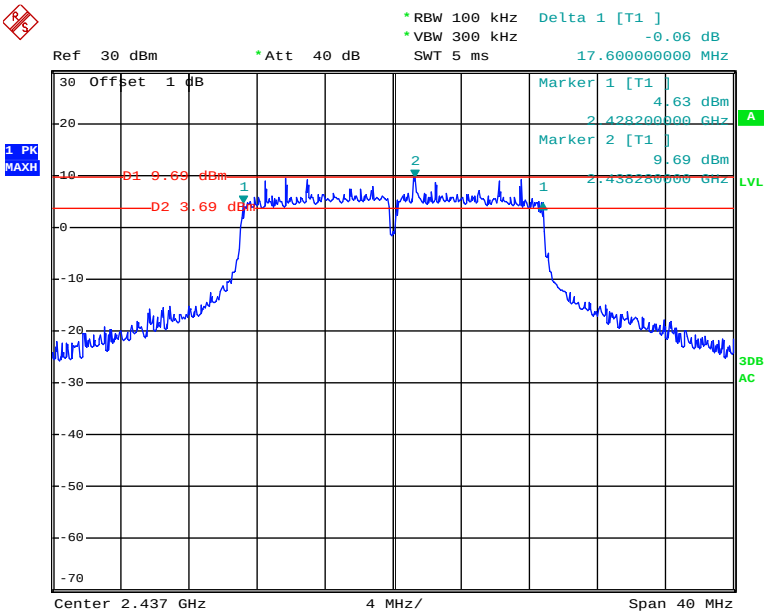
Date: 23.OCT.2017 13:51:45

802.11n ht20 Low Channel



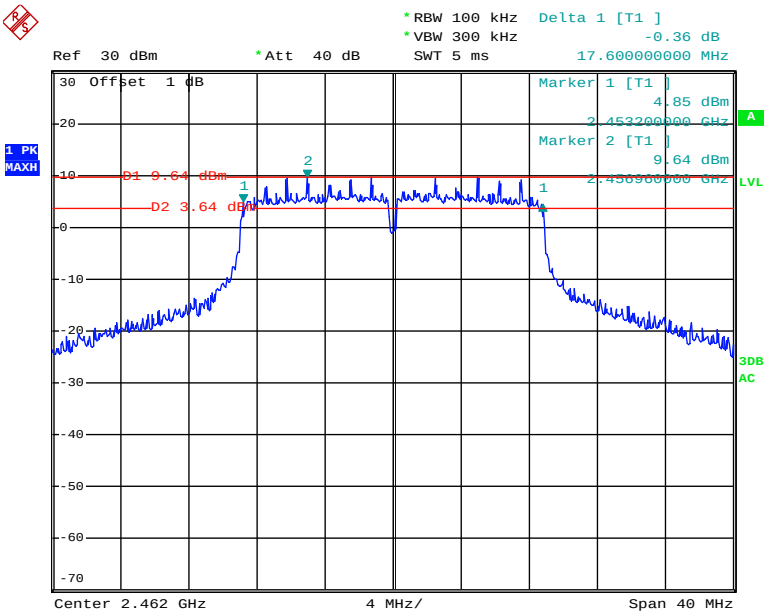
Date: 23.OCT.2017 13:58:47

802.11n ht20 Middle Channel



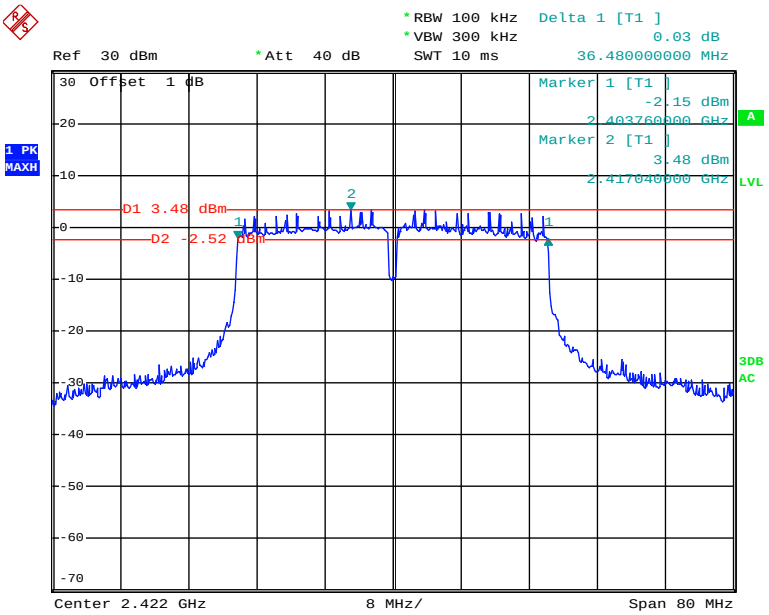
Date: 23.OCT.2017 14:01:02

802.11n ht20 High Channel



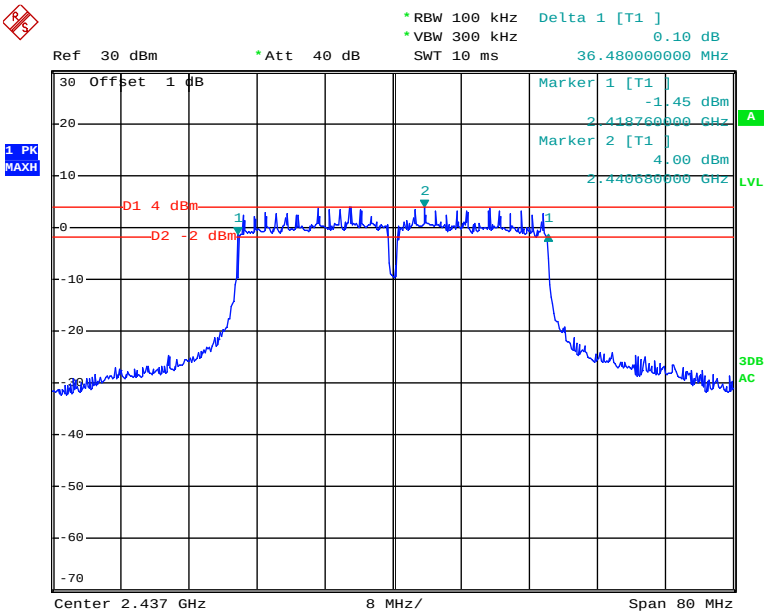
Date: 23.OCT.2017 14:02:49

802.11n ht40 Low Channel



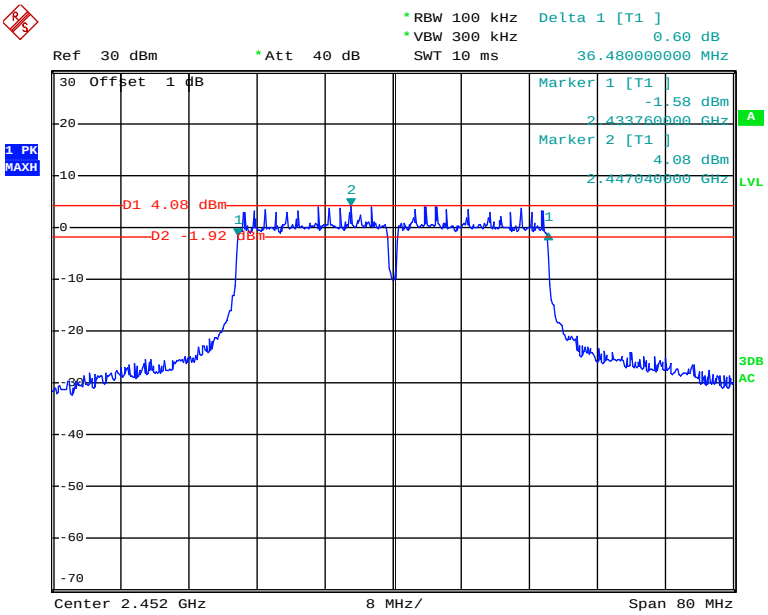
Date: 23.OCT.2017 14:08:34

802.11n ht40 Middle Channel



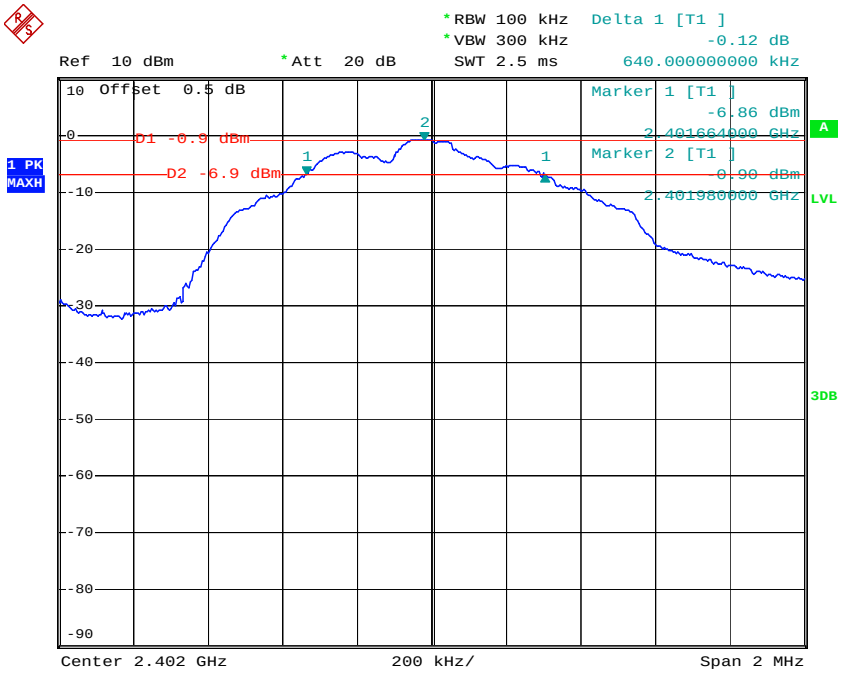
Date: 23.OCT.2017 14:12:48

802.11n ht40 High Channel



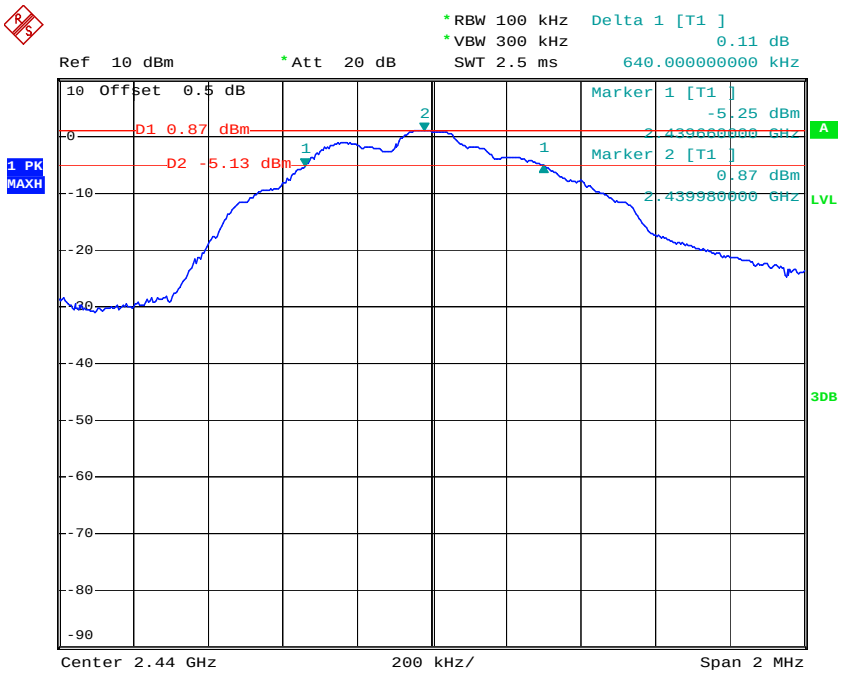
Date: 23.OCT.2017 14:15:55

BLE Low Channel



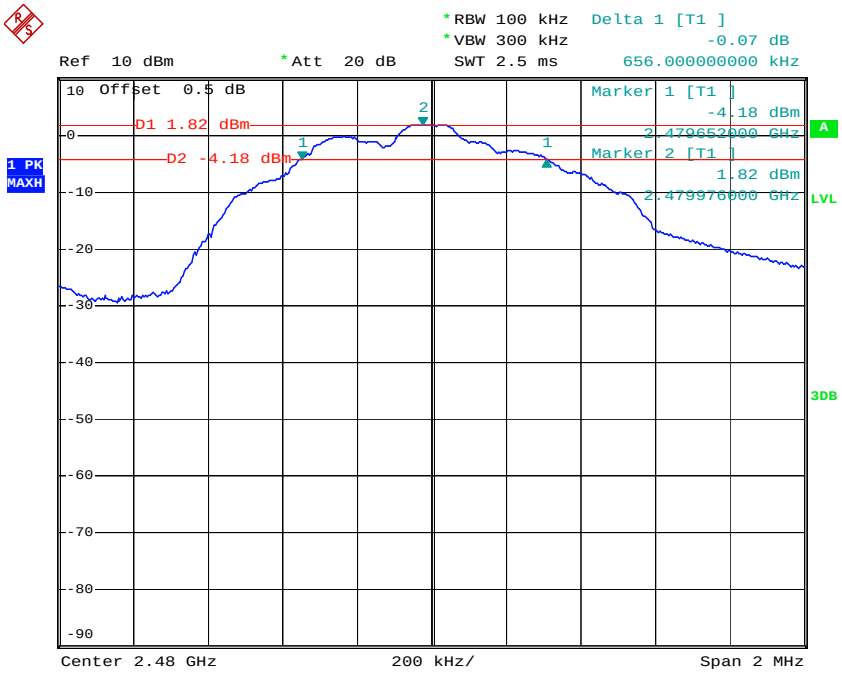
Date: 30.SEP.2017 16:20:50

BLE Middle Channel



Date: 30.SEP.2017 16:19:36

BLE High Channel



Date: 30.SEP.2017 16:18:00

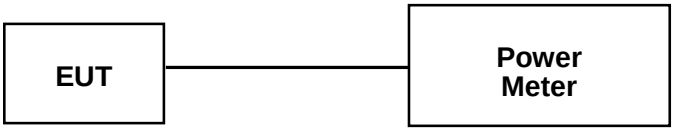
FCC §15.247(b) (3) - MAXIMUM CONDUCTED OUTPUT POWER

Applicable Standard

According to FCC §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 test equipment.
3. Add a correction factor to the display.
4. Set the power Meter to test Peak output power, record the result as peak power.



Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Agilent	Wideband Power Sensor	N1921A	MY54210016	2016-11-03	2017-11-03
Agilent	P-Series Power Meter	N1912A	MY5000448	2016-11-03	2017-11-03
Unknown	Coaxial Cable	C-SJ00-0010	C0010/01	Each Time	/

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

Test Data

Environmental Conditions

Temperature:	26.6 °C
Relative Humidity:	47 %
ATM Pressure:	101 kPa

** The testing was performed by George Pang on 2017-10-23.*

Test Mode: Transmitting

Test Result: Compliant. Please refer to the following table.

SISO:

Test mode	Channel	Frequency (MHz)	Max Conducted Average Output Power (dBm)				Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	
802.11b	Low	2412	19.12	19.25	19.35	19.36	30
	Middle	2437	19.21	19.33	19.54	19.41	30
	High	2462	19.84	19.33	19.79	19.23	30
802.11g	Low	2412	18.67	18.70	18.57	18.67	30
	Middle	2437	18.90	18.87	18.67	18.47	30
	High	2462	18.88	18.97	18.47	18.36	30
802.11n20	Low	2412	19.48	19.35	19.08	19.36	30
	Middle	2437	19.40	19.61	19.41	19.43	30
	High	2462	19.53	19.27	19.12	19.44	30
802.11n40	Low	2422	17.02	17.22	17.09	17.23	30
	Middle	2437	16.95	17.09	17.14	17.14	30
	High	2452	17.06	16.98	17.25	17.13	30

Non-beamforming 2TX:

Test mode	Channel	Frequency (MHz)	Max Conducted Average Output Power (dBm)		Total (dBm)	Limit (dBm)
			Chain 0	Chain 1		
802.11b	Low	2412	19.25	19.32	22.3	30
	Middle	2437	19.2	19.27	22.25	30
	High	2462	19.8	19.29	22.56	30
802.11g	Low	2412	18.93	18.89	21.92	30
	Middle	2437	19.19	19.11	22.16	30
	High	2462	18.68	19.26	21.99	30
802.11n20	Low	2412	19.33	19.31	22.33	30
	Middle	2437	19.49	19.46	22.49	30
	High	2462	19.56	19.27	22.43	30
802.11n40	Low	2422	17.24	17.49	20.38	30
	Middle	2437	17.24	17.21	20.24	30
	High	2452	16.76	17.19	19.99	30

Note: the maximum antenna gain is 2.0 dBi, the device employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power measurements on IEEE 802.11 devices:
Array Gain = 0 dB (i.e., no array gain) for NANT ≤ 4;
So:
Directional gain = G_{ANT} + Array Gain = 2.0dBi < 6dBi

Non-beamforming 3TX:

Test mode	Channel	Frequency (MHz)	Max Conducted Average Output Power (dBm)			Total (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2		
802.11b	Low	2412	19.02	19.51	19.3	24.05	30
	Middle	2437	19.14	19.17	19.82	24.16	30
	High	2462	19.65	19.4	19.71	24.36	30
802.11g	Low	2412	18.89	18.83	18.48	23.51	30
	Middle	2437	18.95	19	18.66	23.64	30
	High	2462	19.04	19.09	18.43	23.63	30
802.11n20	Low	2412	19.33	19.32	19.36	24.11	30
	Middle	2437	19.1	19.02	19.17	23.87	30
	High	2462	19.27	19.06	19.28	23.98	30
802.11n40	Low	2422	17.06	17.01	17.05	21.81	30
	Middle	2437	16.77	17.38	17.13	21.87	30
	High	2452	17.15	16.93	17.07	21.82	30

Note: the maximum antenna gain is 2.0 dBi, the device employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power measurements on IEEE 802.11 devices:
Array Gain = 0 dB (i.e., no array gain) for NANT ≤ 4;
So:
Directional gain = G_{ANT} + Array Gain = 2.0dBi < 6dBi

Non-beamforming 4TX:

Test mode	Channel	Frequency (MHz)	Max Conducted Average Output Power (dBm)				Total (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3		
802.11b	Low	2412	18.99	18.98	19.22	19.24	25.13	30
	Middle	2437	19.09	19.59	19.37	19.21	25.34	30
	High	2462	19.56	19.09	19.75	19.37	25.47	30
802.11g	Low	2412	18.52	18.53	18.44	18.41	24.5	30
	Middle	2437	18.87	18.65	18.79	18.42	24.71	30
	High	2462	19	19.22	18.53	18.51	24.85	30
802.11n20	Low	2412	19.08	18.96	18.74	18.88	24.94	30
	Middle	2437	19.25	19.11	19.04	18.97	25.11	30
	High	2462	18.91	19.08	19.05	18.97	25.02	30
802.11n40	Low	2422	16.83	17.03	16.96	17.45	23.09	30
	Middle	2437	16.67	17.06	17.06	16.85	22.93	30
	High	2452	16.77	17.15	17.01	17.08	23.03	30

Note: the maximum antenna gain is 2.0 dBi, the device employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power measurements on IEEE 802.11 devices:
Array Gain = 0 dB (i.e., no array gain) for NANT ≤ 4;
So:
Directional gain = G_{ANT} + Array Gain = 2.0dBi < 6dBi

With beamforming 2TX:

Test mode	Channel	Frequency (MHz)	Max Conducted Average Output Power (dBm)		Total (dBm)	Limit (dBm)
			Chain 0	Chain 1		
802.11b	Low	2412	19.26	19.18	22.23	30
	Middle	2437	19.04	19.12	22.09	30
	High	2462	19.39	19.48	22.45	30
802.11g	Low	2412	18.68	18.92	21.81	30
	Middle	2437	19.16	18.68	21.94	30
	High	2462	18.72	18.85	21.8	30
802.11n20	Low	2412	18.91	18.97	21.95	30
	Middle	2437	19.07	19.11	22.1	30
	High	2462	19.11	18.98	22.06	30
802.11n40	Low	2422	17.16	17.38	20.28	30
	Middle	2437	17.25	17.14	20.21	30
	High	2452	17.13	17.19	20.17	30

Note: the antenna maximum atenna gains are 2.0dBi, and employed beamforming for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power measurements on IEEE 802.11 devices:
Array Gain = 10 log(NANT/NSS) dB;
So:
Directional gain = GANT + Array Gain = 2.0dBi + 10 log(1) = 2dBi <6dBi

With beamforming 3TX:

Test mode	Channel	Frequency (MHz)	Max Conducted Average Output Power (dBm)			Total (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2		
802.11b	Low	2412	19.24	19.32	19.53	24.14	30
	Middle	2437	19.02	19.3	19.32	23.99	30
	High	2462	19.33	19.11	19.41	24.06	30
802.11g	Low	2412	18.79	18.48	18.48	23.36	30
	Middle	2437	19.17	18.94	18.78	23.74	30
	High	2462	18.94	18.84	18.4	23.5	30
802.11n20	Low	2412	19.39	19.11	18.94	23.92	30
	Middle	2437	18.99	19.06	19.14	23.83	30
	High	2462	19.05	19.14	18.93	23.81	30
802.11n40	Low	2422	17.15	17.15	17.1	21.9	30
	Middle	2437	17	17.25	17.09	21.89	30
	High	2452	16.92	16.93	17.14	21.77	30

Note: the antenna maximum atenna gains are 2.0dBi, and employed beamforming for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power measurements on IEEE 802.11 devices:
Array Gain = 10 log(NANT/NSS) dB;
So:
Directional gain = GANT + Array Gain = 2.0dBi + 10 log(1) = 2dBi <6dBi

With beamforming 4TX:

Test mode	Channel	Frequency (MHz)	Max Conducted Average Output Power (dBm)				Total (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3		
802.11b	Low	2412	18.94	19.02	18.87	18.89	24.95	30
	Middle	2437	18.85	18.32	18.35	18.74	24.59	30
	High	2462	18.94	19.03	18.62	18.24	24.74	30
802.11g	Low	2412	18.43	18.89	18.73	18.41	24.64	30
	Middle	2437	18.78	18.66	18.61	18.63	24.69	30
	High	2462	18.74	19.08	18.38	18.1	24.61	30
802.11n20	Low	2412	18.32	18.73	18.89	18.67	24.68	30
	Middle	2437	18.79	18.69	18.7	18.8	24.77	30
	High	2462	18.73	18.57	18.99	18.72	24.78	30
802.11n40	Low	2422	17.18	17.14	17	17.24	23.16	30
	Middle	2437	16.88	17.15	17.4	16.97	23.13	30
	High	2452	17.24	17.24	17.09	17.35	23.25	30

Note: the antenna maximum atenna gains are 2.0dBi, and employed beamforming for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power measurements on IEEE 802.11 devices:
Array Gain = 10 log(NANT/NSS) dB;
So:
Directional gain = GANT + Array Gain = 2.0dBi + 10 log(1) = 2dBi <6dBi

BLE:

Channel	Frequency (MHz)	Max Peak Conducted Output Power (dBm)	Limit (dBm)
Low	2402	-0.5	30
Middle	2440	1.33	30
High	2480	2.34	30

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 100 kHz and VBW of spectrum analyzer to 300 kHz with a convenient frequency span including 100 kHz bandwidth from band edge.
4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
5. Repeat above procedures until all measured frequencies were complete.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	EMI Test Receiver	ESPI	100120	2016-12-08	2017-12-08
Unknown	Coaxial Cable	C-SJ00-0010	C0010/01	Each Time	/

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

Test Data

Environmental Conditions

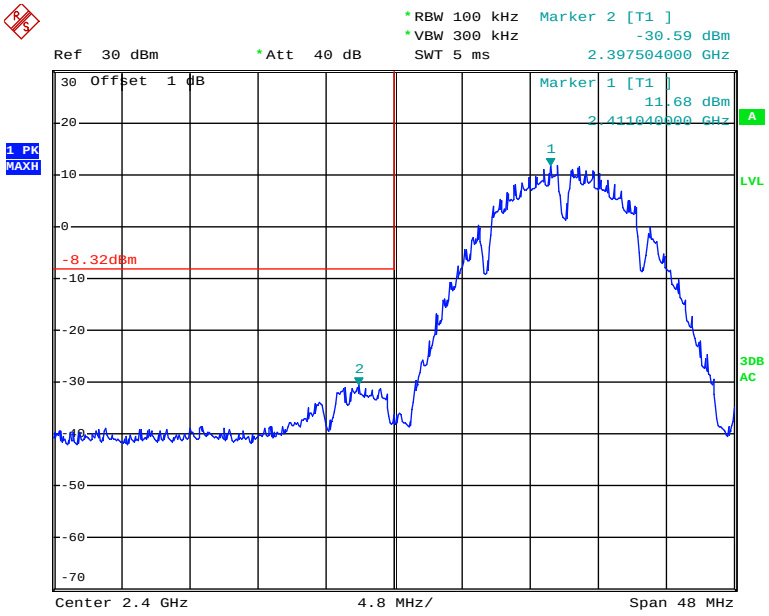
Temperature:	27.1~27.8 °C
Relative Humidity:	43~47 %
ATM Pressure:	100.8~101.7 kPa

** The testing was performed by George Pang from 2017-09-30 to 2017-10-30.*

Test mode: Transmitting

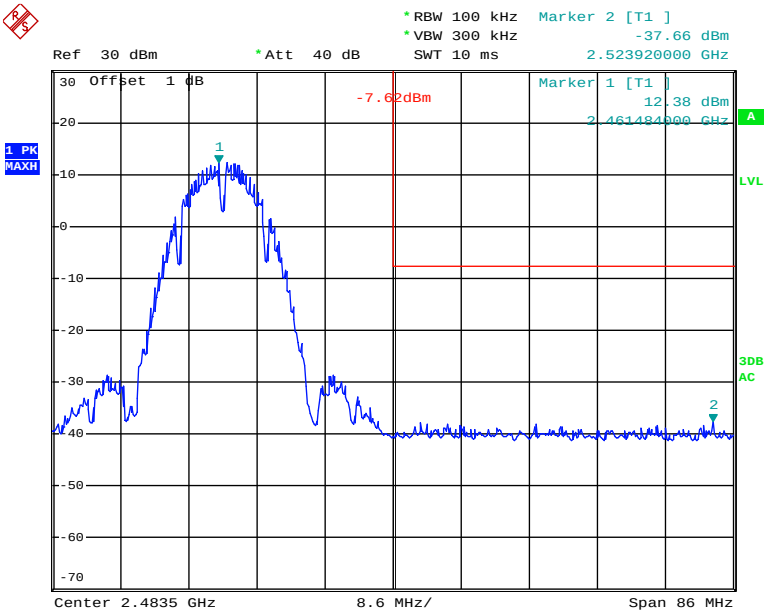
Test Result: Compliant. For WLAN, test was performed at 1TX mode since the maximum output power per chain. Please refer to following plots.

Chain 0, 802.11b: Band Edge, Left Side



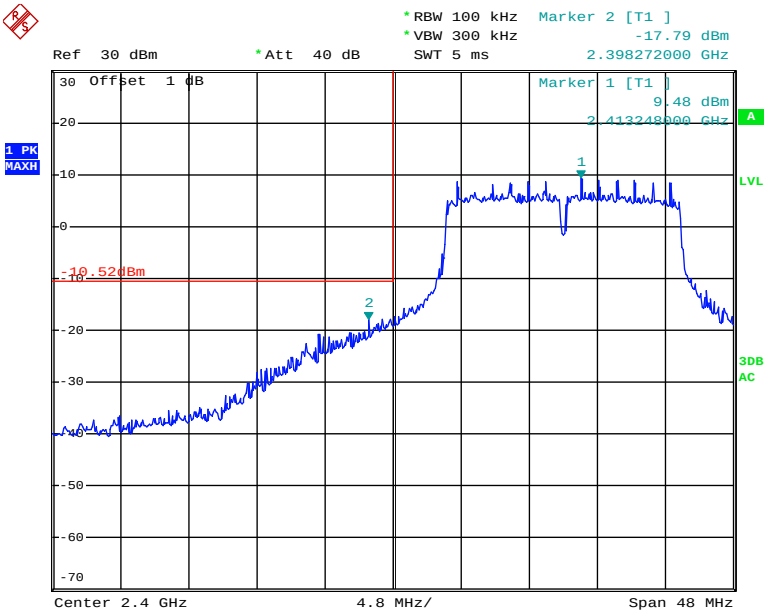
Date: 23.OCT.2017 13:14:52

Chain 0, 802.11b: Band Edge, Right Side



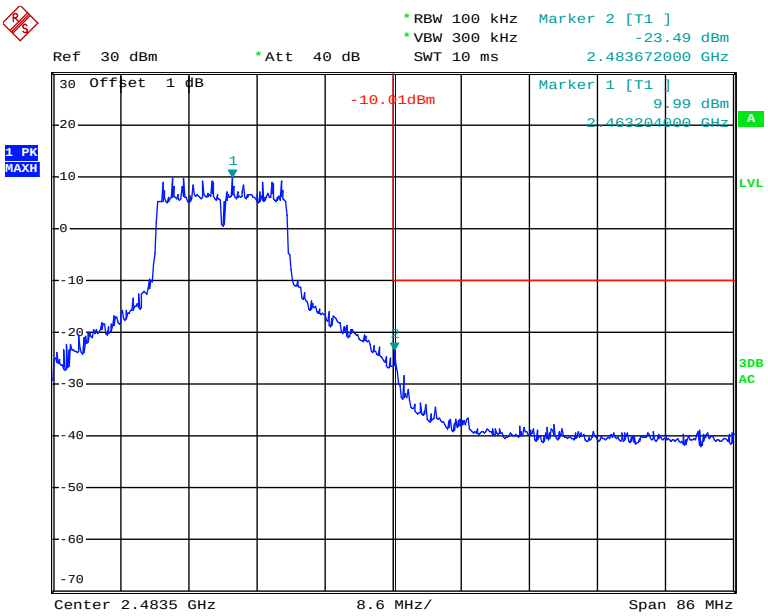
Date: 23.OCT.2017 13:25:16

Chain 0, 802.11g: Band Edge, Left Side



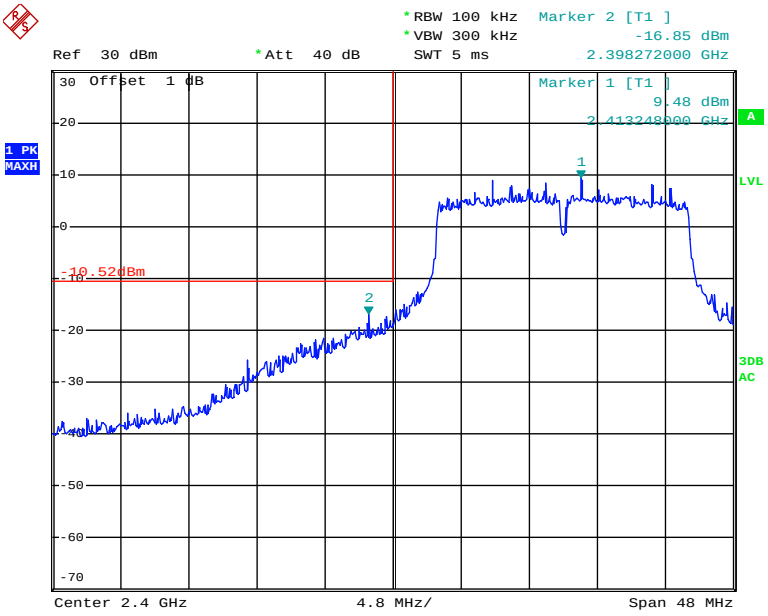
Date: 23.OCT.2017 13:49:13

Chain 0, 802.11g: Band Edge, Right Side



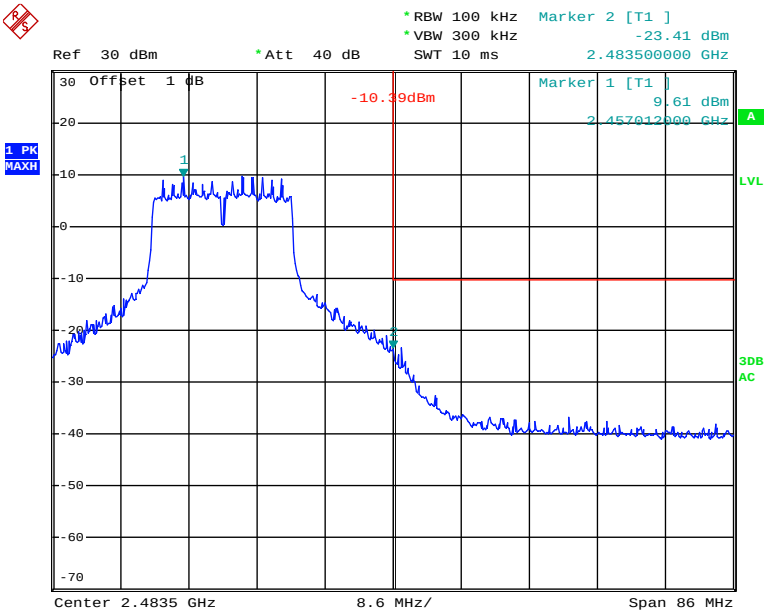
Date: 23.OCT.2017 13:52:47

Chain 0, 802.11n ht20 Band Edge, Left Side



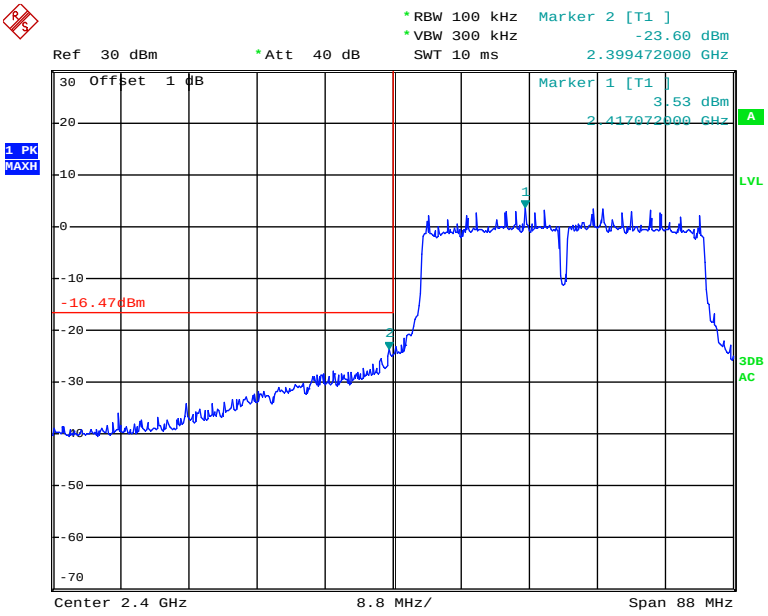
Date: 23.OCT.2017 13:59:51

Chain 0, 802.11n ht20 Band Edge, Right Side



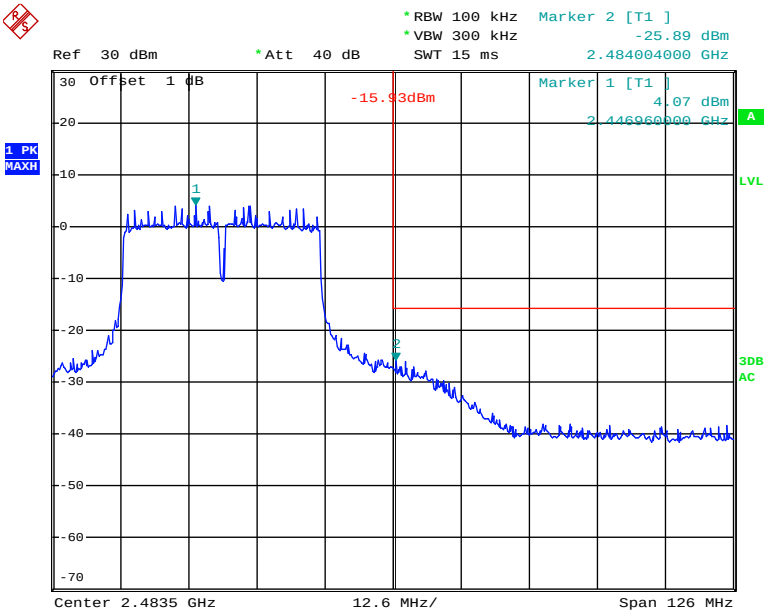
Date: 23.OCT.2017 14:04:07

Chain 0, 802.11n ht40 Band Edge, Left Side



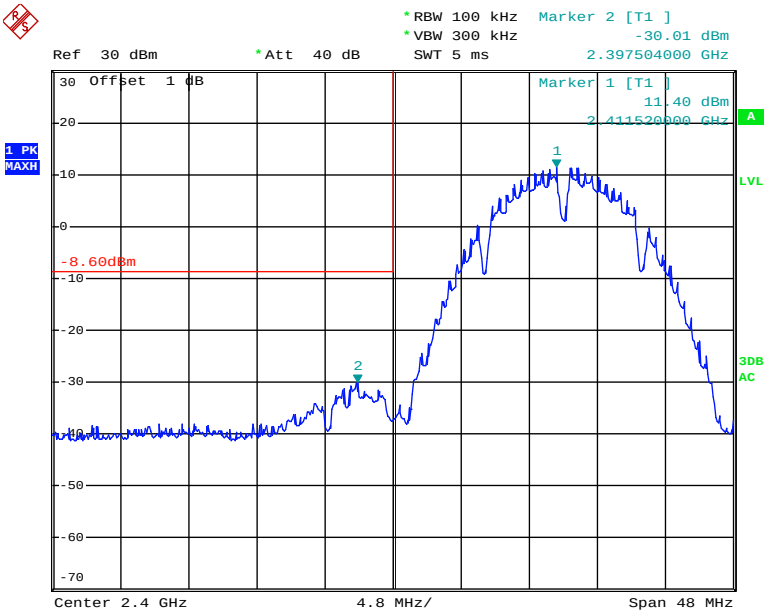
Date: 23.OCT.2017 14:10:05

Chain 0, 802.11n ht40 Band Edge, Right Side



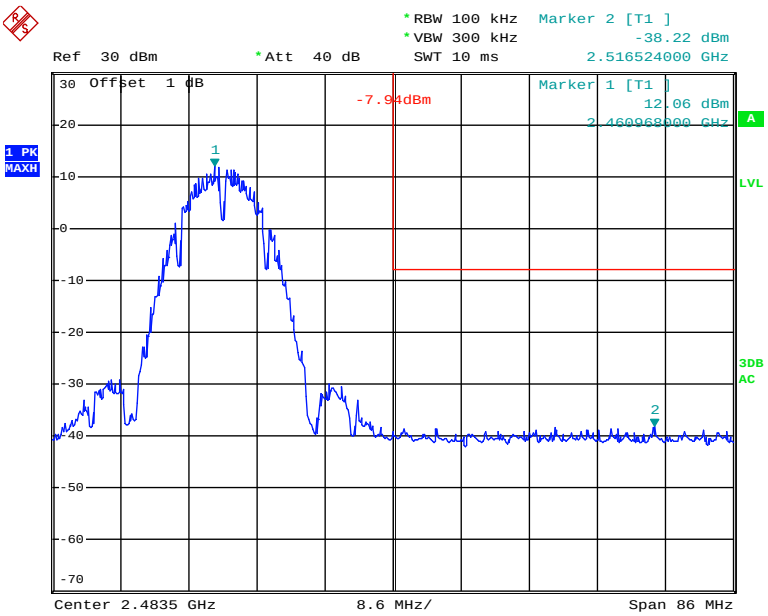
Date: 23.OCT.2017 14:15:17

Chain 1, 802.11b: Band Edge, Left Side



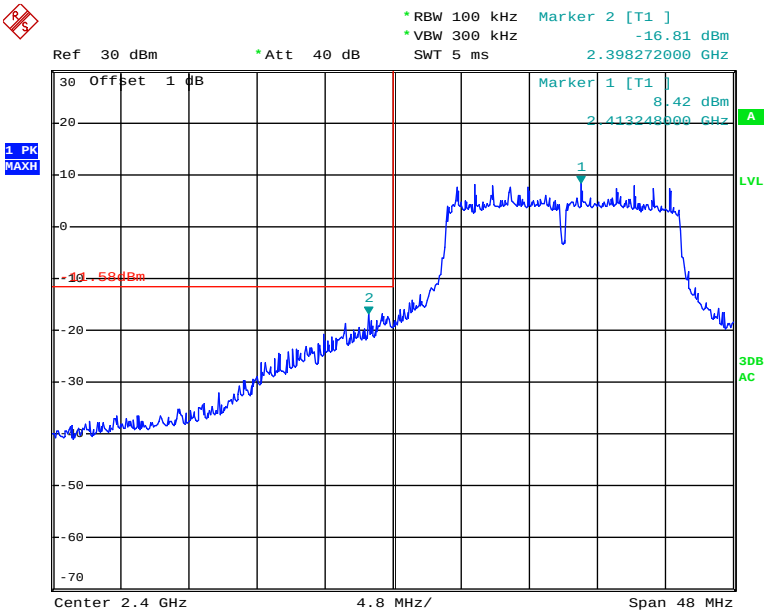
Date: 23.OCT.2017 14:21:50

Chain 1, 802.11b: Band Edge, Right Side



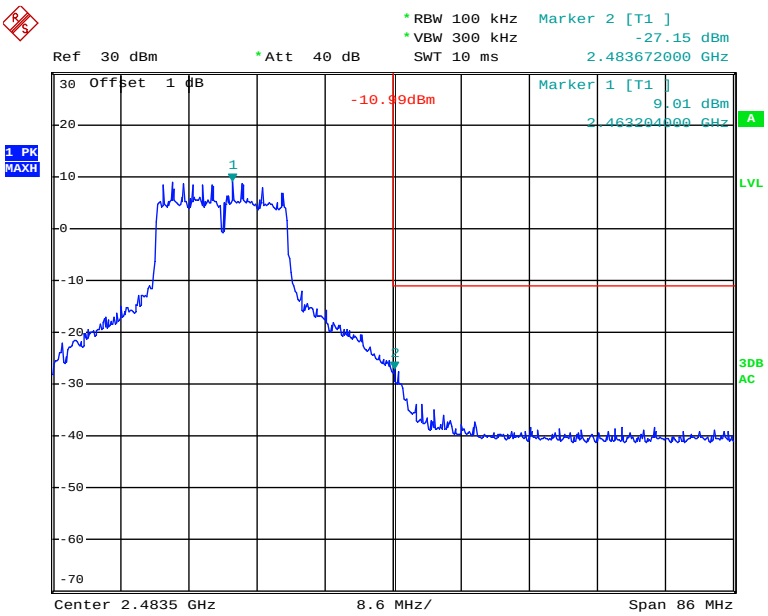
Date: 23.OCT.2017 14:25:03

Chain 1, 802.11g: Band Edge, Left Side



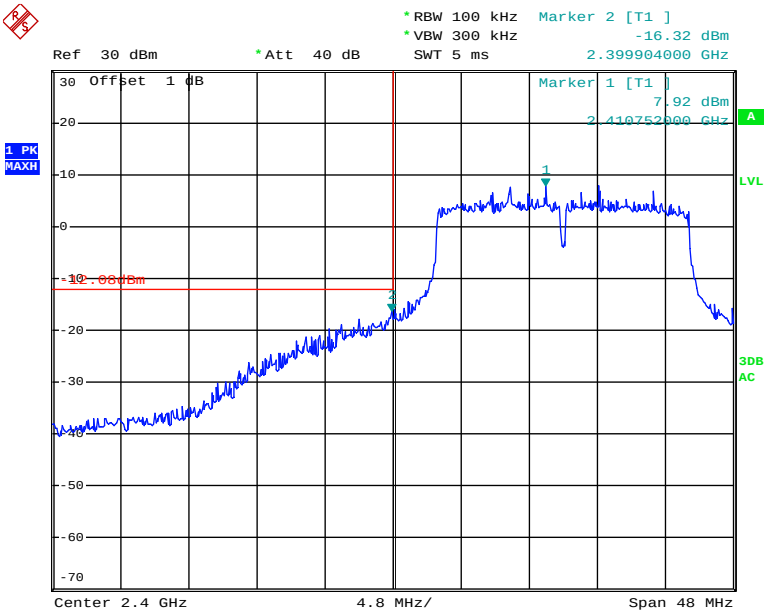
Date: 23.OCT.2017 14:27:12

Chain 1, 802.11g: Band Edge, Right Side



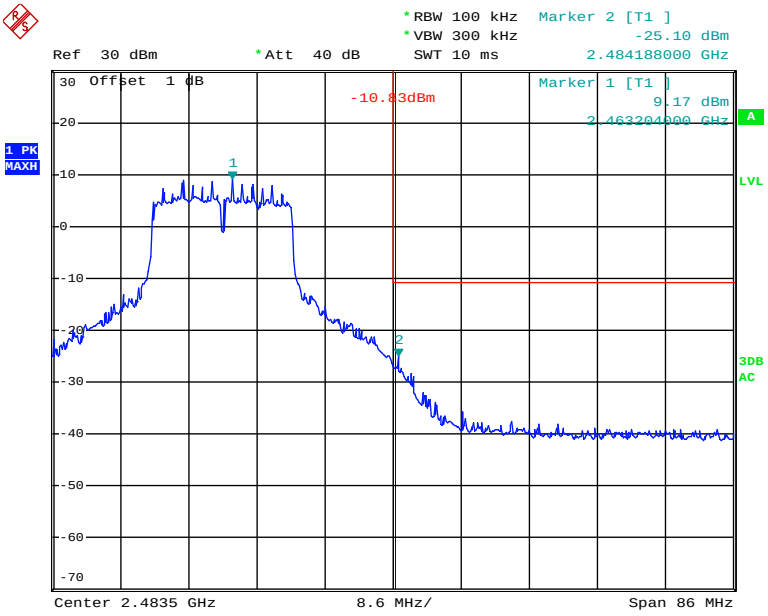
Date: 23.OCT.2017 14:30:31

Chain 1, 802.11n ht20 Band Edge, Left Side



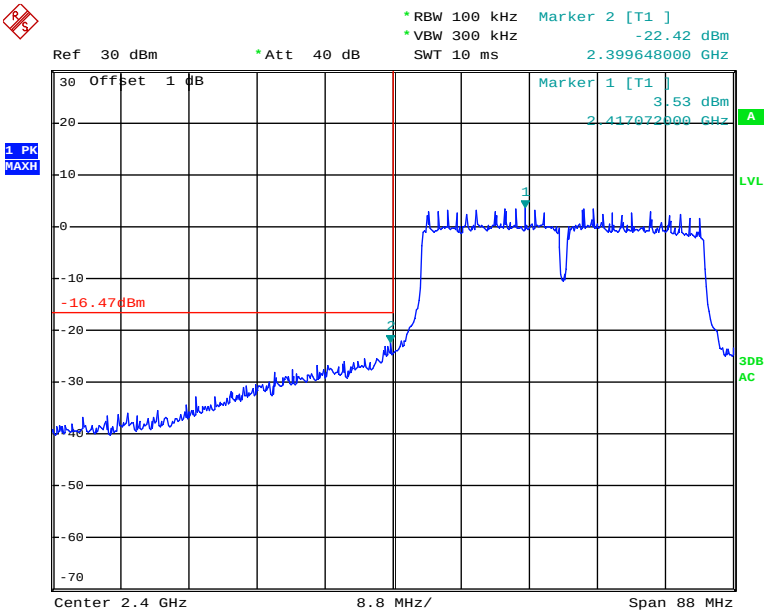
Date: 23.OCT.2017 14:32:42

Chain 1, 802.11n ht20 Band Edge, Right Side



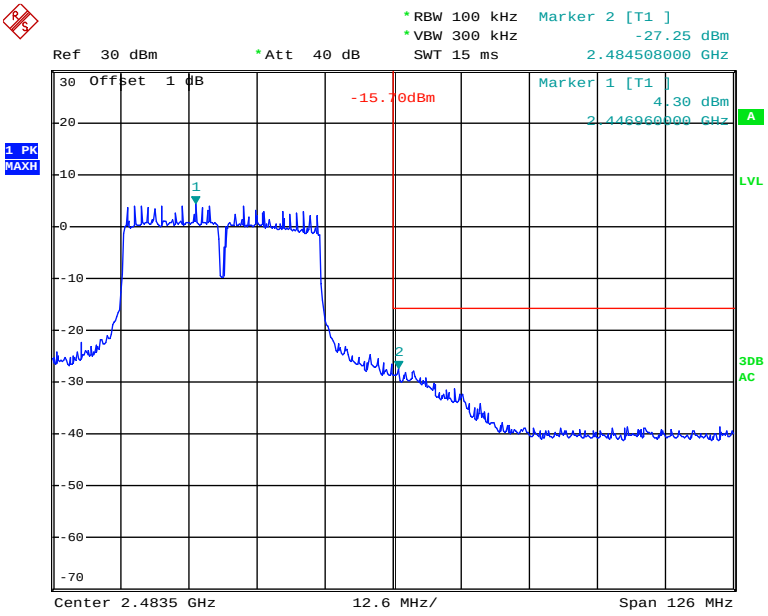
Date: 23.OCT.2017 14:42:36

Chain 1, 802.11n ht40 Band Edge, Left Side



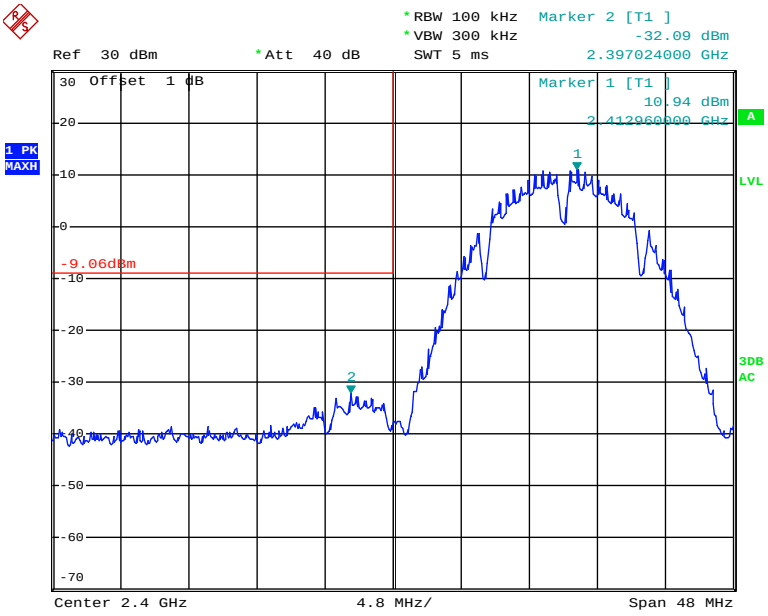
Date: 23.OCT.2017 14:45:38

Chain 1, 802.11n ht40 Band Edge, Right Side



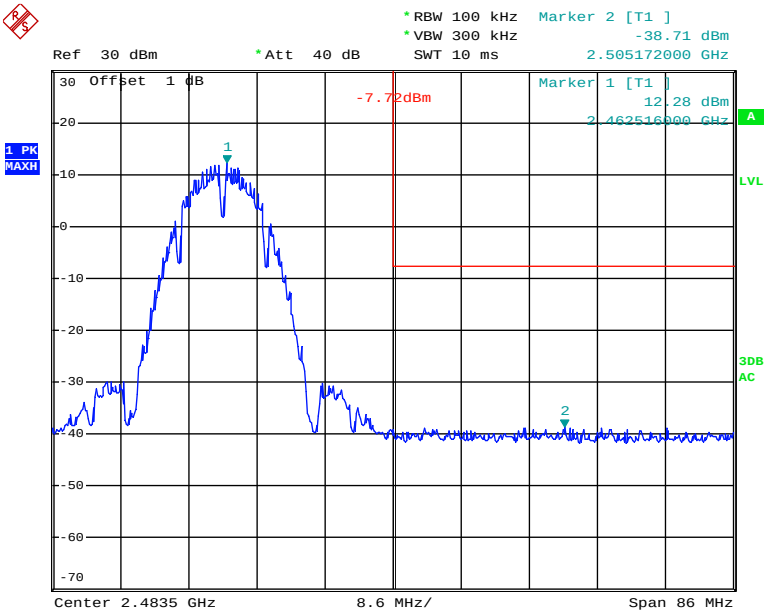
Date: 23.OCT.2017 14:49:32

Chain 2, 802.11b: Band Edge, Left Side



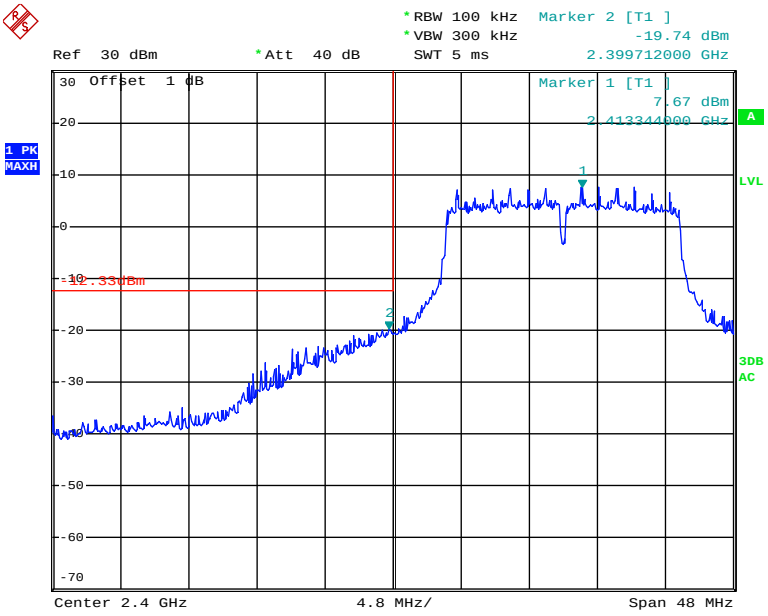
Date: 23.OCT.2017 14:53:12

Chain 2, 802.11b: Band Edge, Right Side



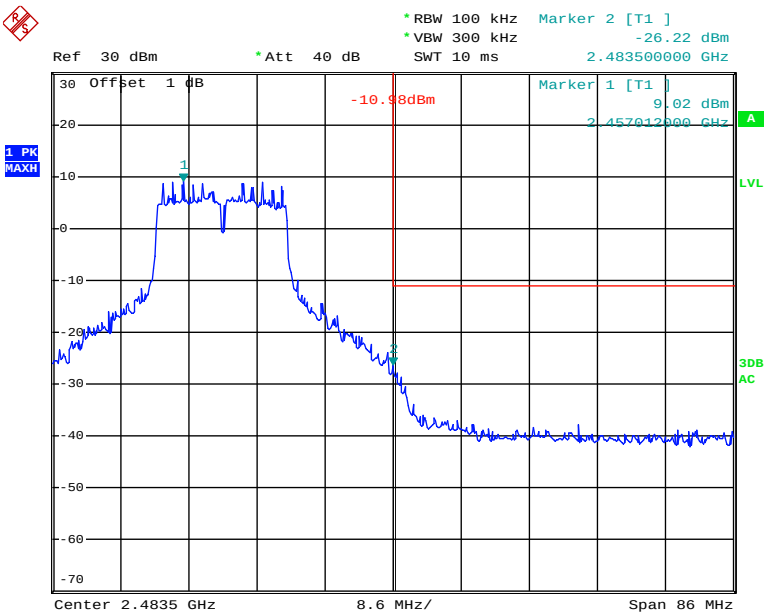
Date: 23.OCT.2017 14:56:18

Chain 2, 802.11g: Band Edge, Left Side



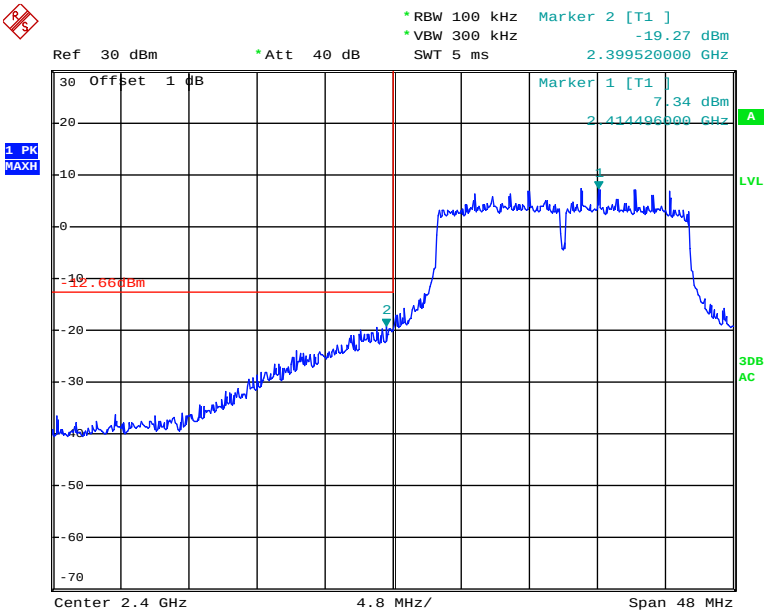
Date: 23.OCT.2017 14:58:18

Chain 2, 802.11g: Band Edge, Right Side



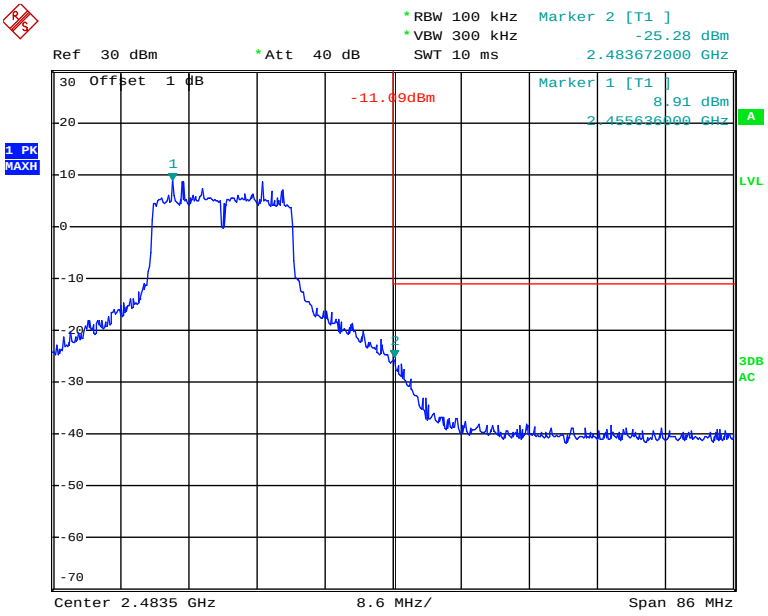
Date: 23.OCT.2017 15:01:56

Chain 2, 802.11n ht20 Band Edge, Left Side



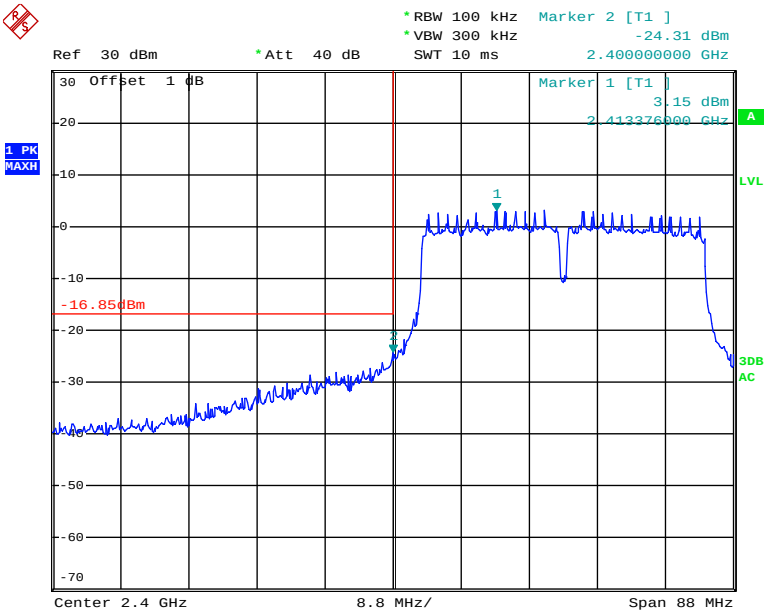
Date: 23.OCT.2017 15:07:56

Chain 2, 802.11n ht20 Band Edge, Right Side



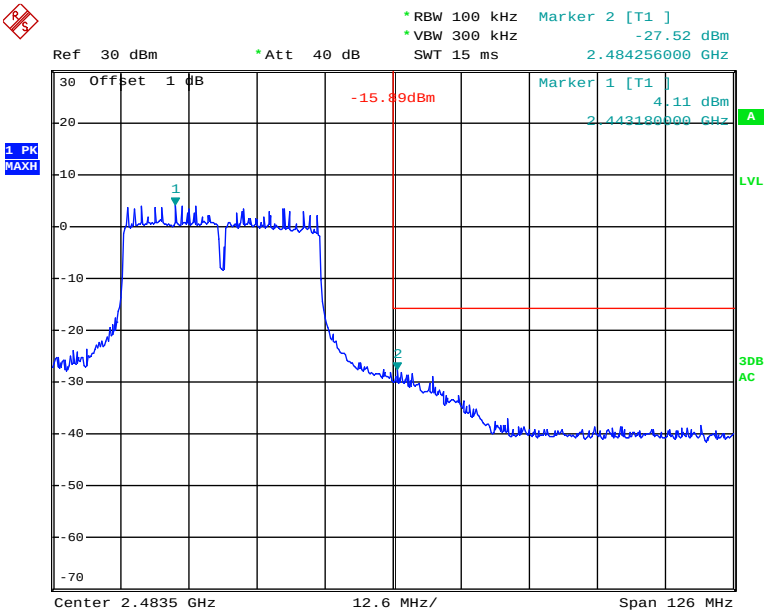
Date: 23.OCT.2017 15:11:39

Chain 2, 802.11n ht40 Band Edge, Left Side



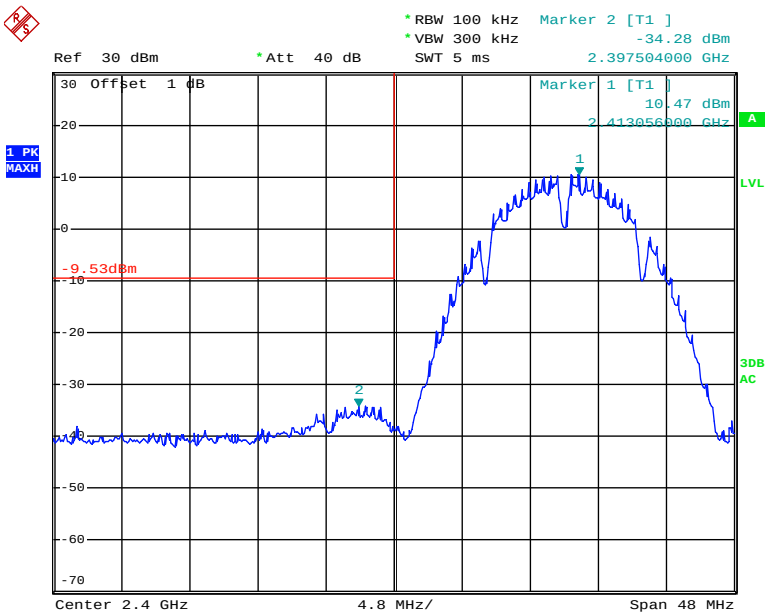
Date: 23.OCT.2017 15:14:11

Chain 2, 802.11n ht40 Band Edge, Right Side



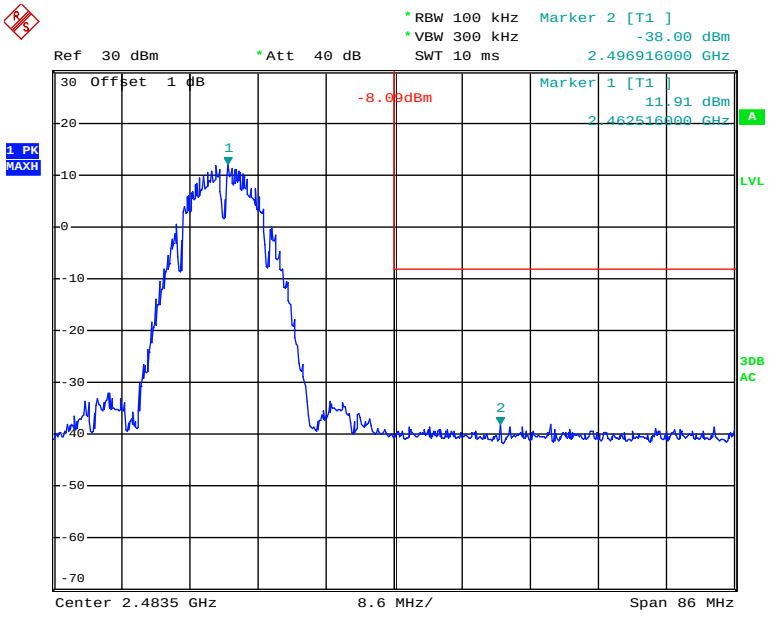
Date: 23.OCT.2017 15:18:00

Chain 3, 802.11b: Band Edge, Left Side



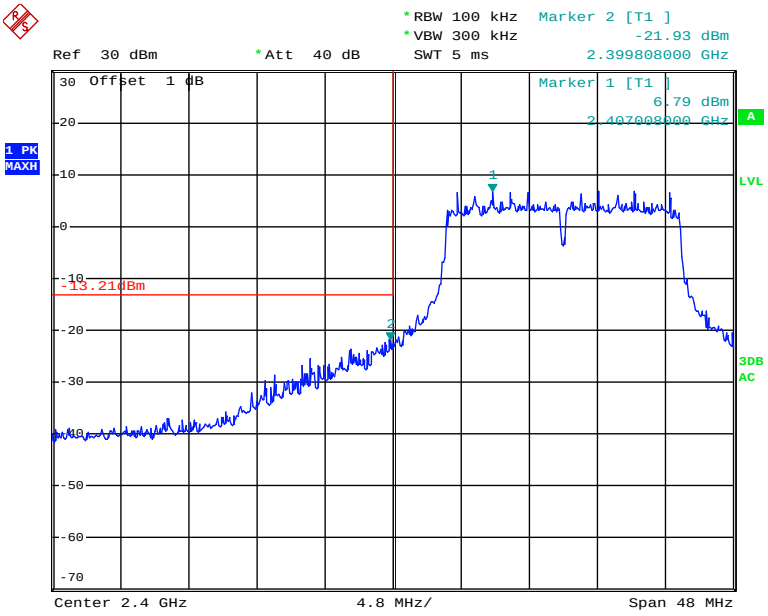
Date: 23.OCT.2017 15:20:20

Chain 3, 802.11b: Band Edge, Right Side



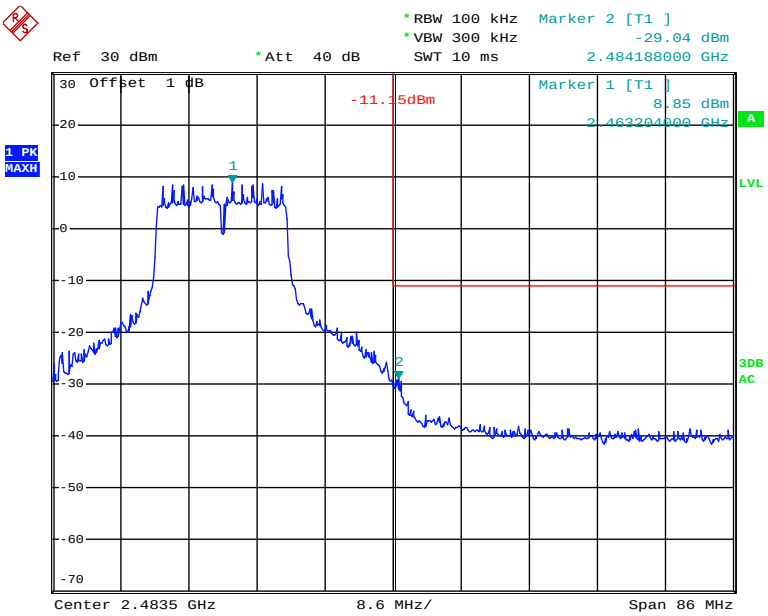
Date: 23.OCT.2017 15:23:53

Chain 3, 802.11g: Band Edge, Left Side



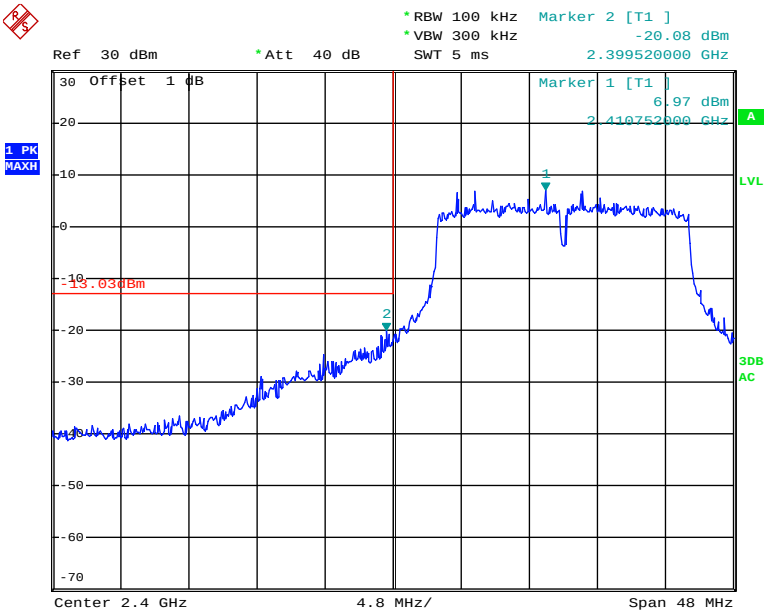
Date: 23.OCT.2017 15:26:11

Chain 3, 802.11g: Band Edge, Right Side



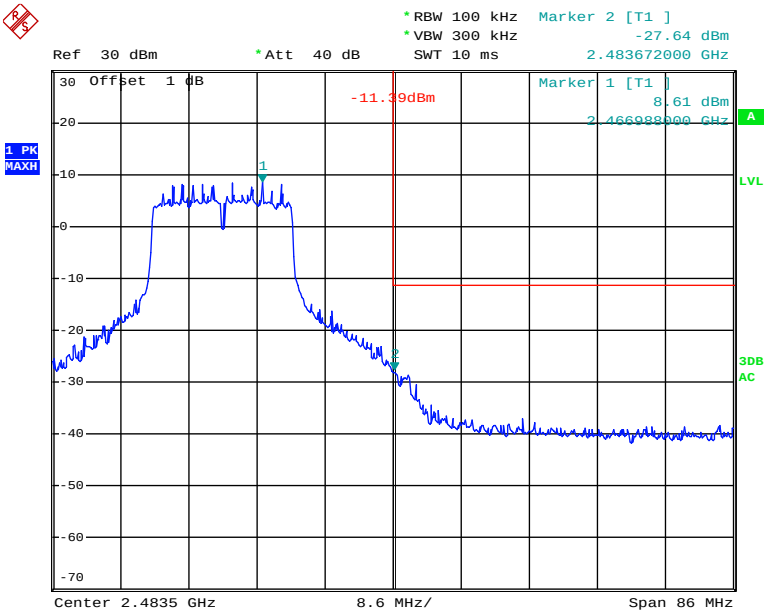
Date: 23.OCT.2017 15:29:31

Chain 3, 802.11n ht20 Band Edge, Left Side



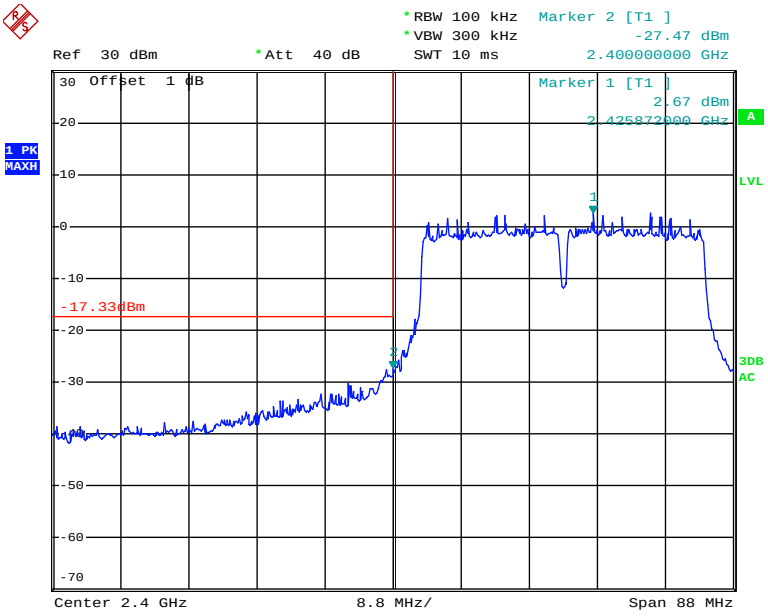
Date: 23.OCT.2017 15:32:02

Chain 3, 802.11n ht20 Band Edge, Right Side



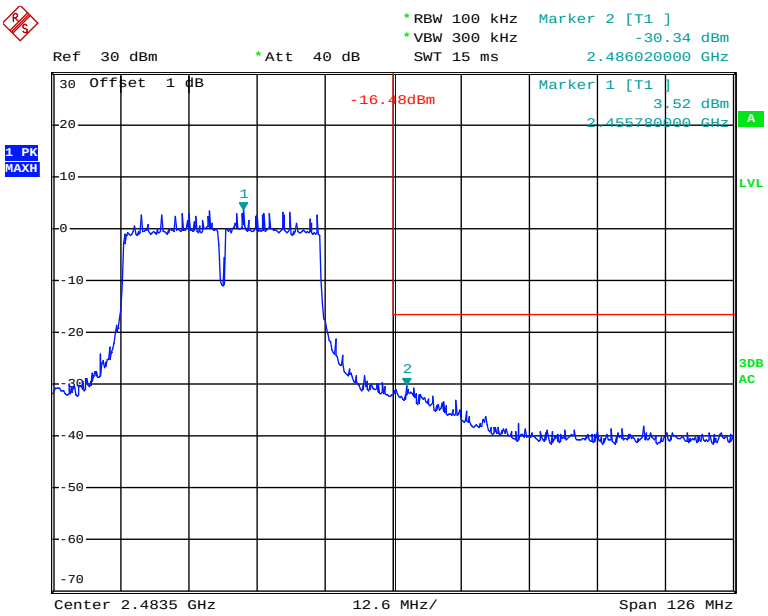
Date: 23.OCT.2017 15:35:35

Chain 3, 802.11n ht40 Band Edge, Left Side



Date: 23.OCT.2017 15:38:40

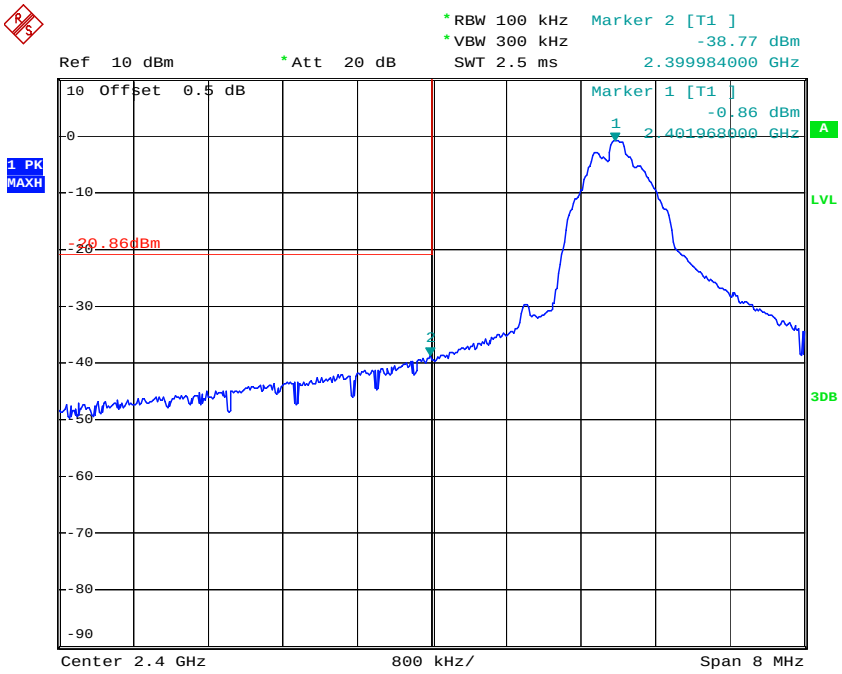
Chain 3, 802.11n ht40 Band Edge, Right Side



Date: 23.OCT.2017 15:42:33

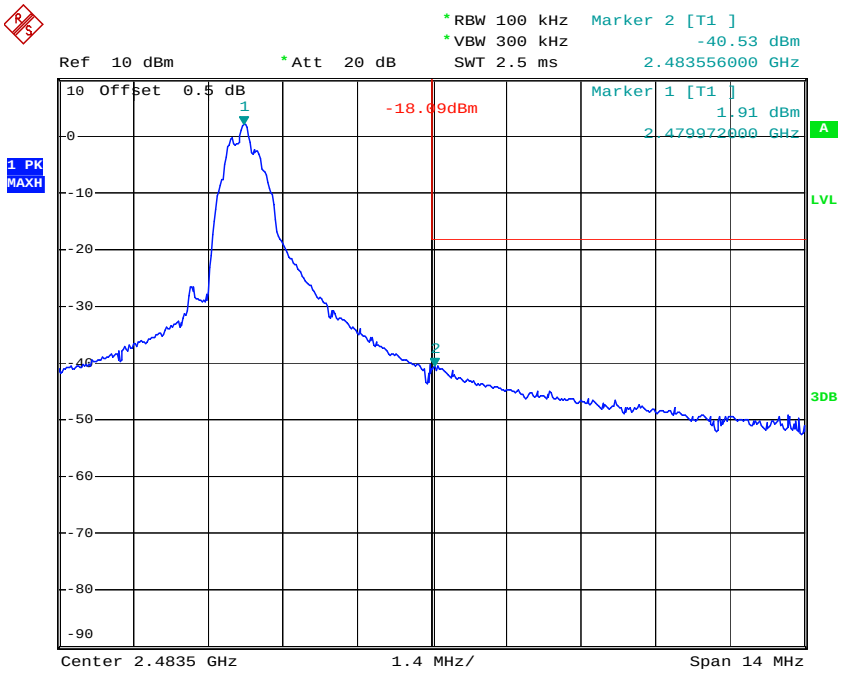
BLE:

Chain 0, Band Edge, Left Side



Date: 30.SEP.2017 16:21:52

Chain 0, Band Edge, Right Side



Date: 30.SEP.2017 16:18:50

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

a) Set analyzer center frequency to DTS channel center frequency.
b) Set the span to 1.5 times the DTS bandwidth.
c) Set the RBW to: 3 kHz ≤ RBW ≤ 100 kHz.
d) Set the VBW ≥ 3×RBW.
e) Detector = peak.
f) Sweep time = auto couple.
g) Trace mode = max hold.
h) Allow trace to fully stabilize.
i) Use the peak marker function to determine the maximum amplitude level within the RBW.
j) If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	EMI Test Receiver	ESPI	100120	2016-12-08	2017-12-08
Unknown	Coaxial Cable	C-SJ00-0010	C0010/01	Each Time	/

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

Test Data

Environmental Conditions

Temperature:	25.9~26.2 °C
Relative Humidity:	28~29 %
ATM Pressure:	101~101.1 kPa

** The testing was performed by Edison Hu from 2017-09-30 to 2017-10-23.*

Test Mode: Transmitting

Test Result: Compliant. For 1TX mode, the output power same as MIMO mode per chain, the PSD test for 1TX mode was reduced. For non-beamforming mode, the output power same as beamforming mode, the PSD test for beamforming mode was reduced. Please refer to the following table and plots

Non-beamforming 4TX mode:

Test mode	Channel	Frequency (MHz)	PSD (dBm/3kHz)				Total (dBm/3kHz)	Limit (dBm/3kHz)
			Chain 0	Chain 1	Chain 2	Chain 3		
802.11b	Low	2412	-1.53	-3.75	-2.45	-4.68	3.08	≤8
	Middle	2437	-2.54	-2.23	-2.43	-2.98	3.48	≤8
	High	2462	0.07	-2.66	-2.8	-2.13	4.31	≤8
802.11g	Low	2412	-4.74	-4.44	-4.77	-6.34	1.01	≤8
	Middle	2437	-3.32	-5.49	-5.99	-6.07	0.96	≤8
	High	2462	-5.16	-5.55	-4.95	-5.24	0.8	≤8
802.11n20	Low	2412	-4.93	-5.63	-5.23	-7.49	0.31	≤8
	Middle	2437	-4.65	-5.97	-6.93	-5.7	0.28	≤8
	High	2462	-4.63	-5.65	-6.07	-5.87	0.5	≤8
802.11n40	Low	2422	-11.26	-10.46	-9.85	-11.64	-4.73	≤8
	Middle	2437	-9.98	-9.73	-10.75	-10.62	-4.23	≤8
	High	2452	-9.37	-9.64	-9.67	-10.64	-3.78	≤8

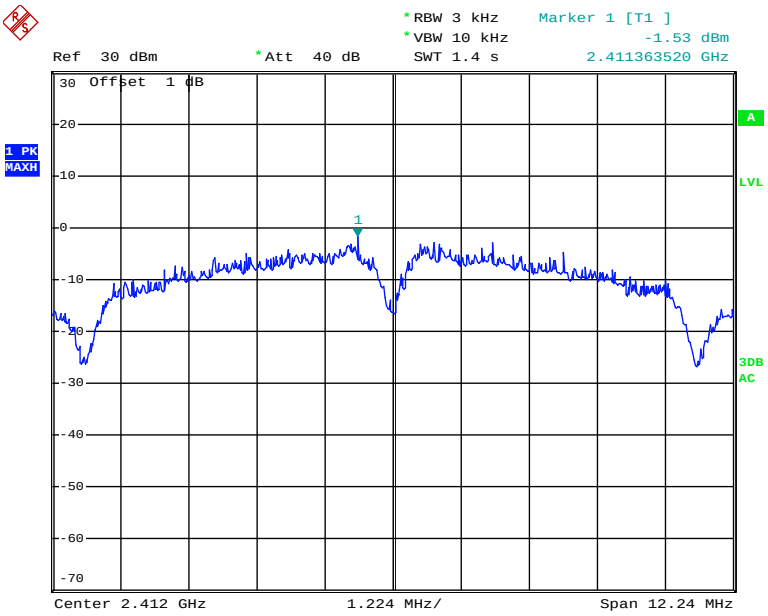
Note: the device is a master device. the antenna maximum atenna gain are 2.0dBi, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power spectral density (PSD) measurements on the devices:
Array Gain = 10 log(NANT/NSS) dB.
So:
Directional gain = GANT + Array Gain = 2.0+10*log(1) =2 dBi<6dBi

BLE:

Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)
Low	2402	-3.54	≤8
Middle	2440	-1.79	≤8
High	2480	-1.05	≤8

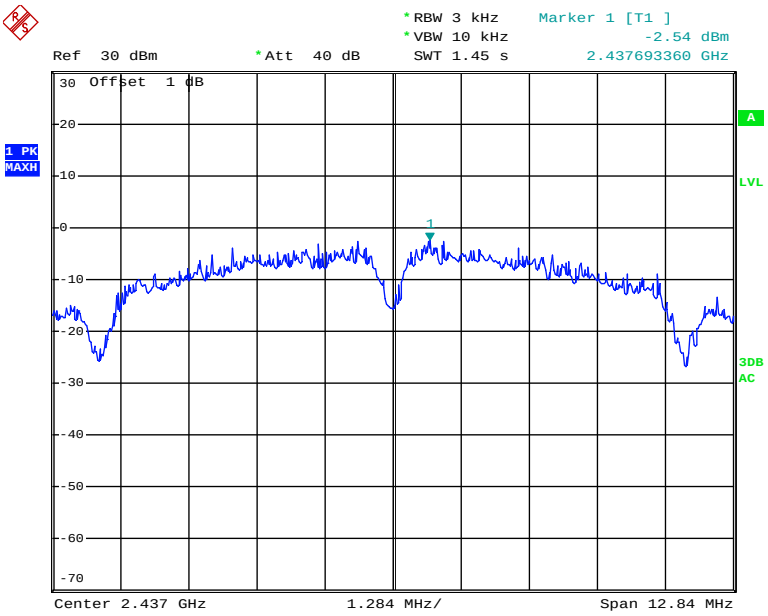
SISO

Chain 0, Power Spectral Density, 802.11b Low Channel



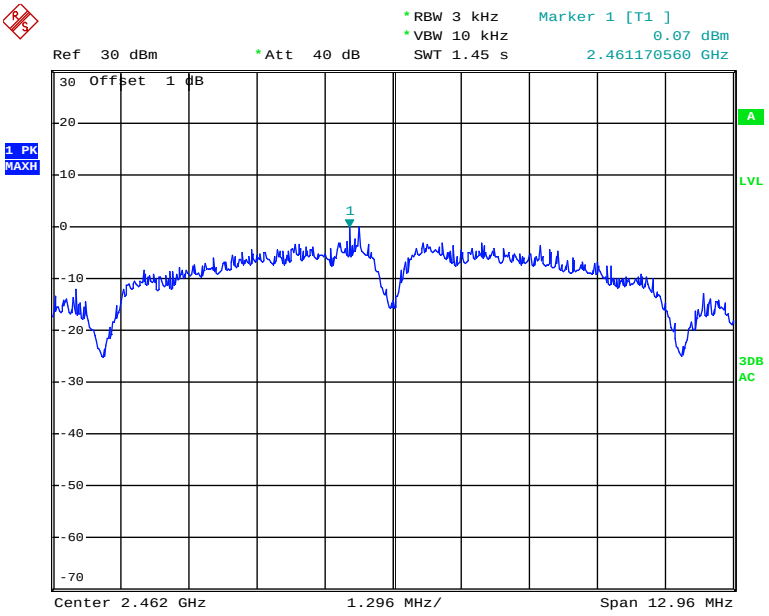
Date: 23.OCT.2017 13:14:37

Chain 0, Power Spectral Density, 802.11b Middle Channel



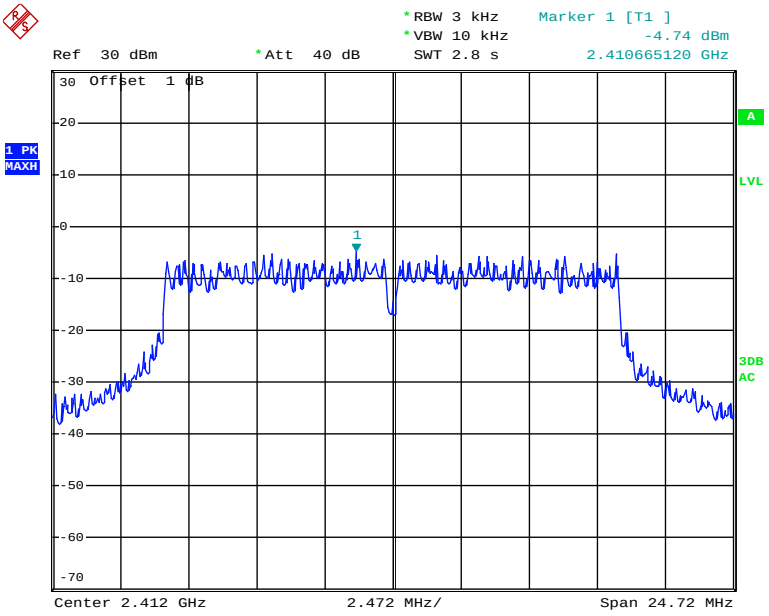
Date: 23.OCT.2017 13:26:40

Chain 0, Power Spectral Density, 802.11b High Channel



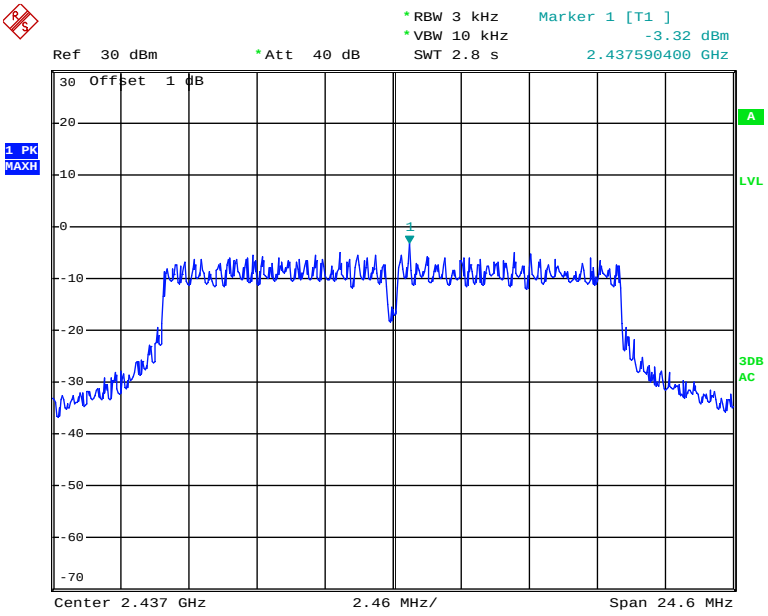
Date: 23.OCT.2017 13:24:54

Chain 0, Power Spectral Density, 802.11g Low Channel



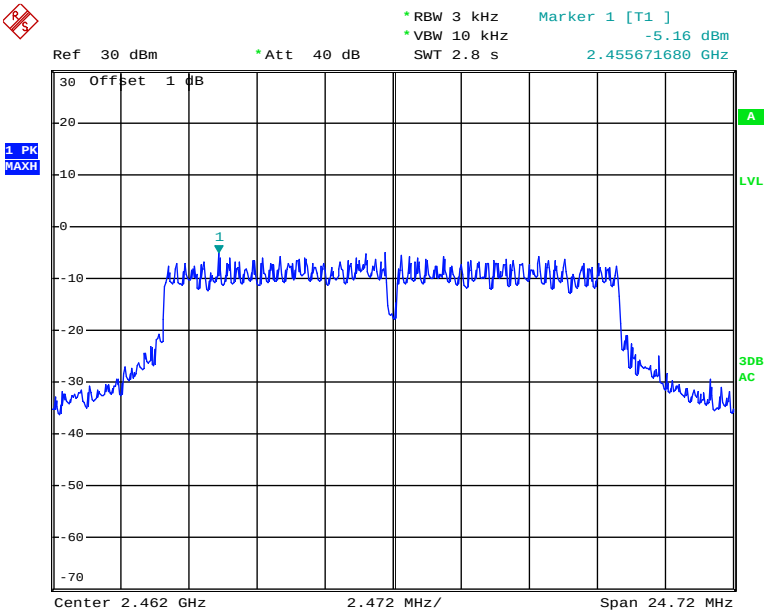
Date: 23.OCT.2017 13:48:52

Chain 0, Power Spectral Density, 802.11g Middle Channel



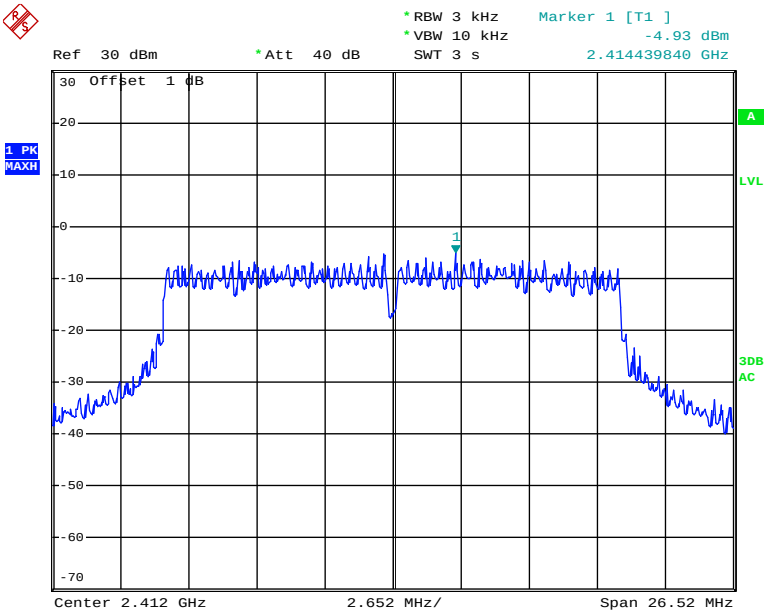
Date: 23.OCT.2017 13:50:57

Chain 0, Power Spectral Density, 802.11g High Channel



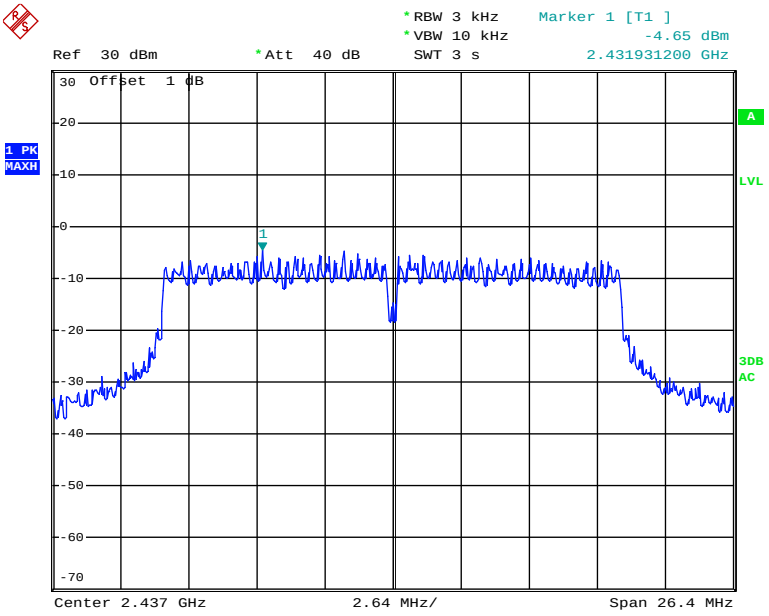
Date: 23.OCT.2017 13:52:32

Chain 0, Power Spectral Density, 802.11n ht20 Low Channel



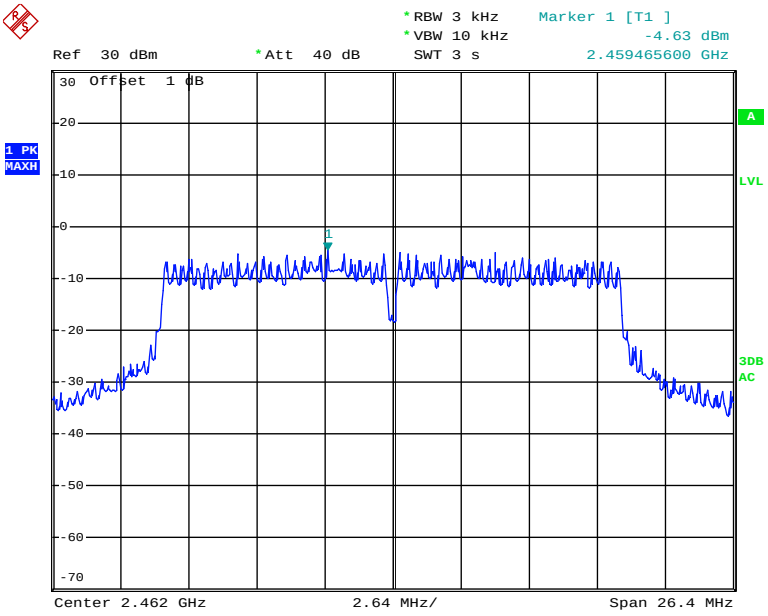
Date: 23.OCT.2017 13:59:35

Chain 0, Power Spectral Density, 802.11n ht20 Middle Channel



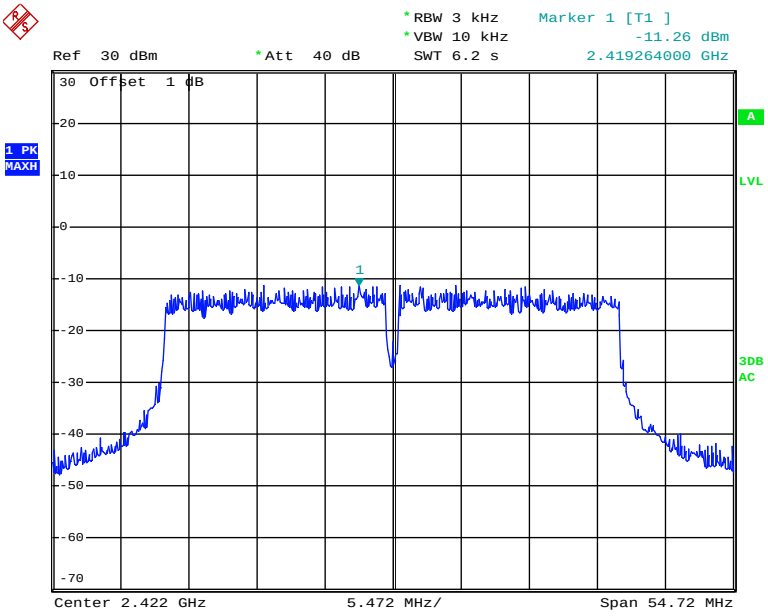
Date: 23.OCT.2017 14:01:59

Chain 0, Power Spectral Density, 802.11n ht20 High Channel



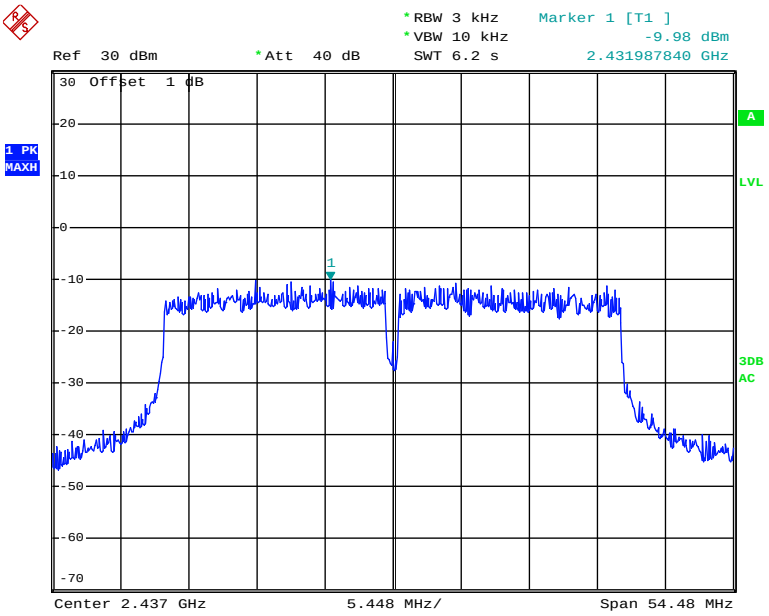
Date: 23.OCT.2017 14:03:40

Chain 0, Power Spectral Density, 802.11n ht40 Low Channel



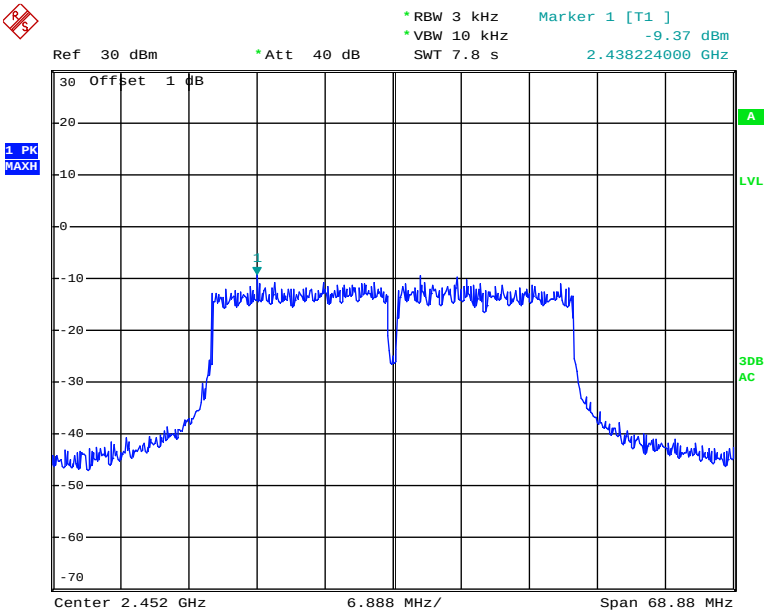
Date: 23.OCT.2017 14:09:43

Chain 0, Power Spectral Density, 802.11n ht40 Middle Channel



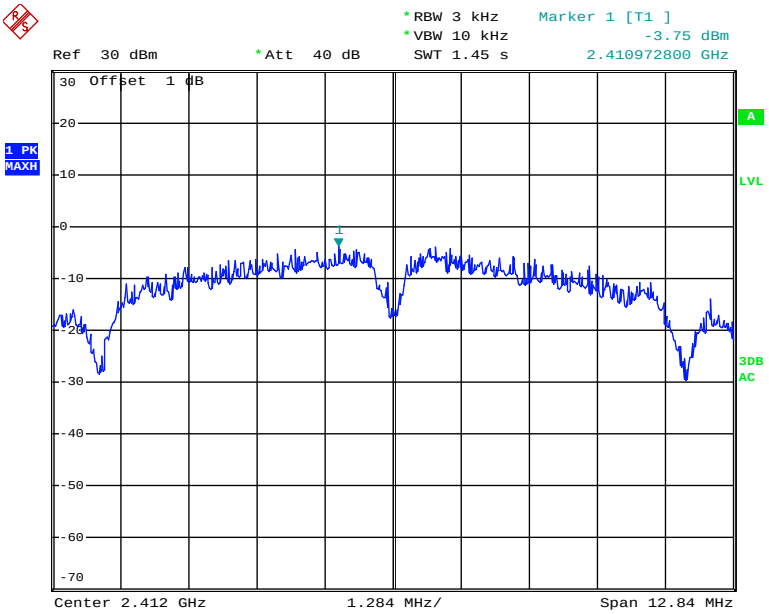
Date: 23.OCT.2017 14:12:04

Chain 0, Power Spectral Density, 802.11n ht40 High Channel



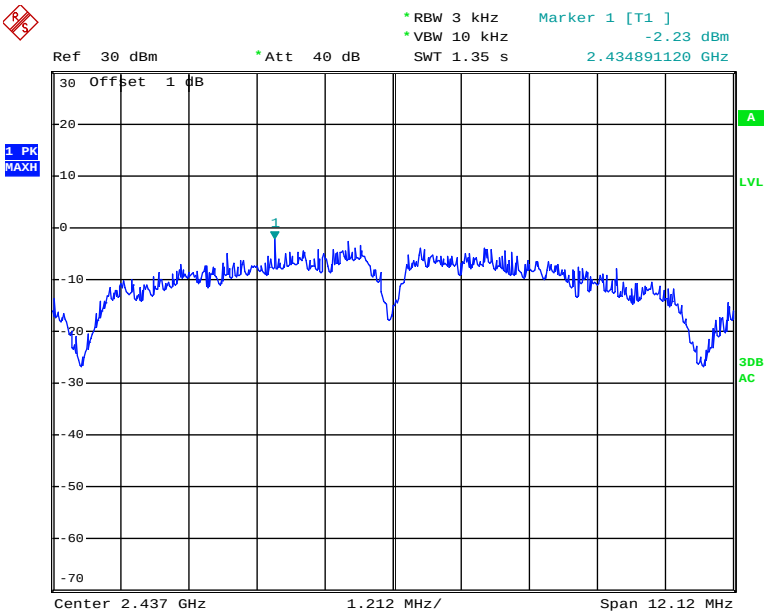
Date: 23.OCT.2017 14:15:01

Chain 1, Power Spectral Density, 802.11b Low Channel



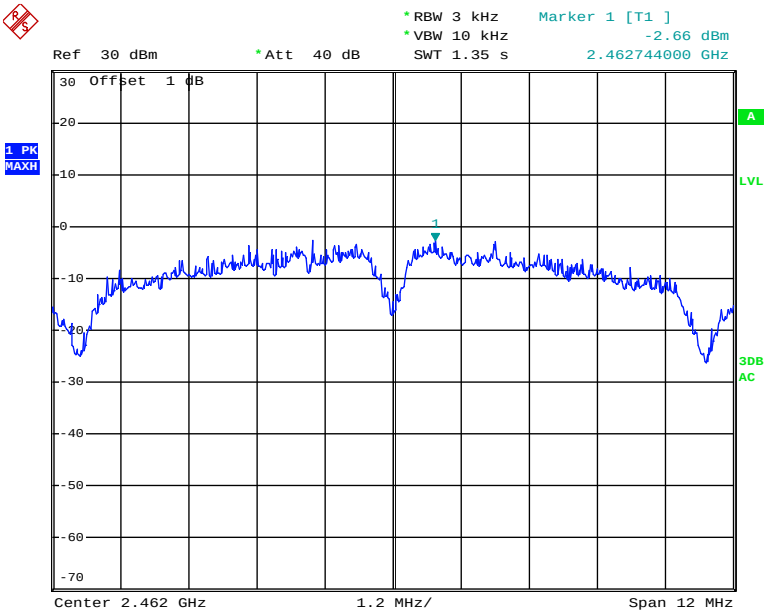
Date: 23.OCT.2017 14:21:24

Chain 1, Power Spectral Density, 802.11b Middle Channel



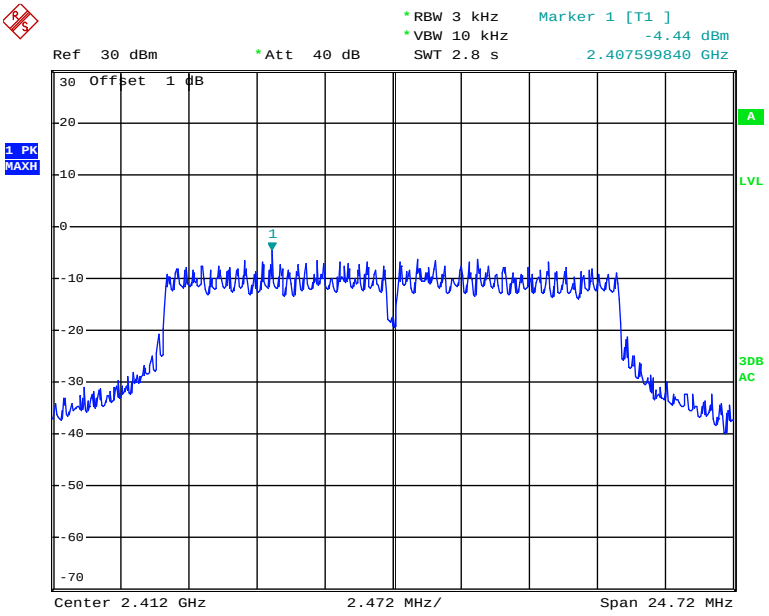
Date: 23.OCT.2017 14:23:25

Chain 1, Power Spectral Density, 802.11b High Channel



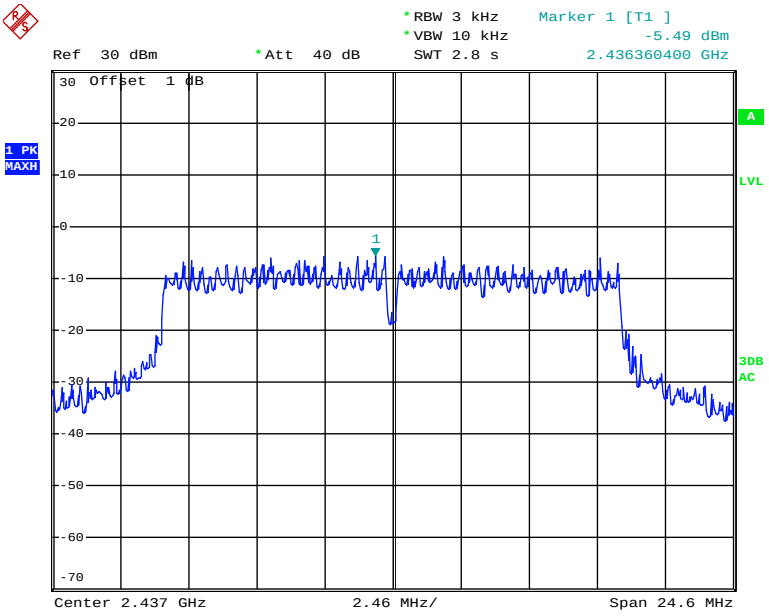
Date: 23.OCT.2017 14:24:48

Chain 1, Power Spectral Density, 802.11g Low Channel



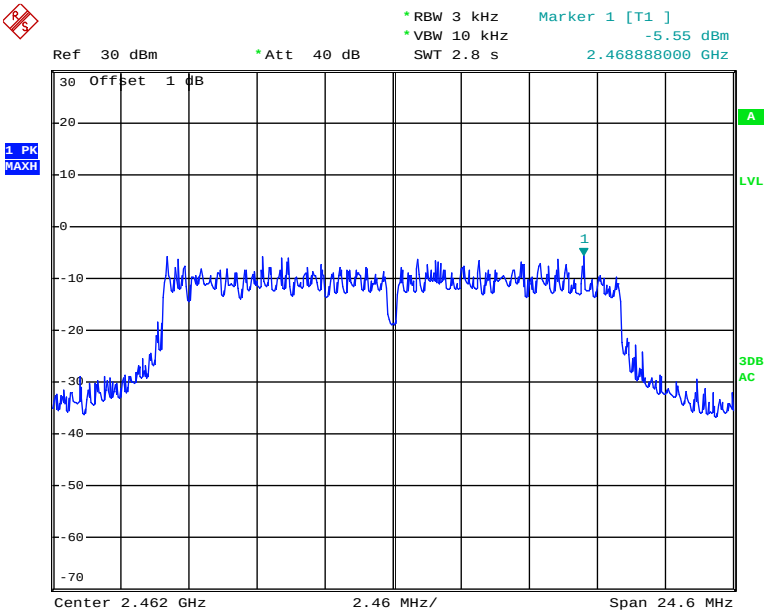
Date: 23.OCT.2017 14:26:57

Chain 1, Power Spectral Density, 802.11g Middle Channel



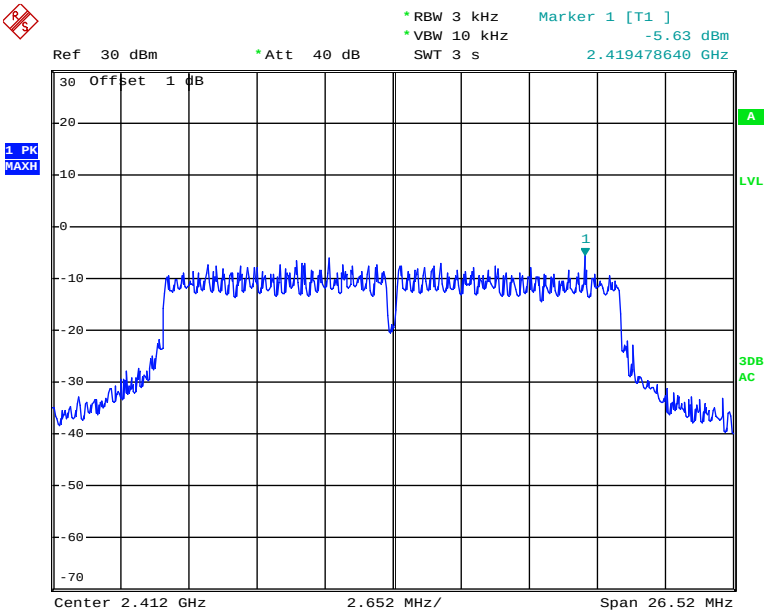
Date: 23.OCT.2017 14:28:47

Chain 1, Power Spectral Density, 802.11g High Channel



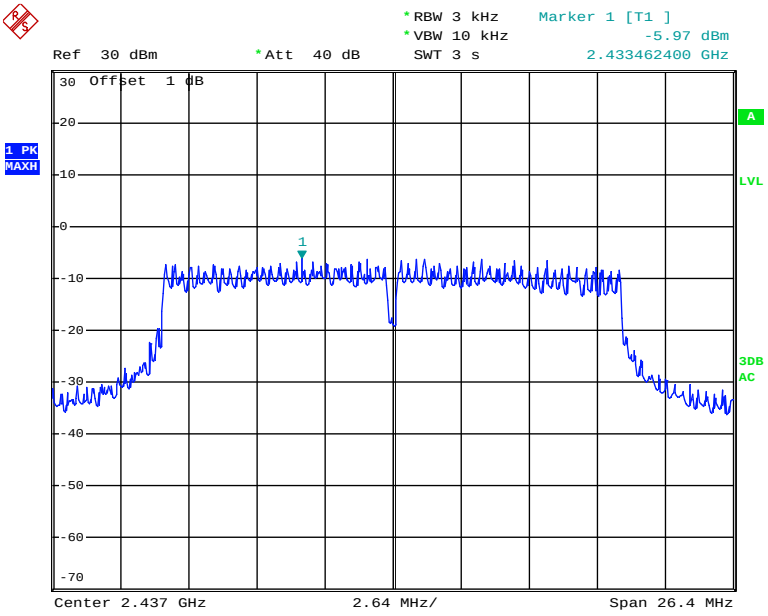
Date: 23.OCT.2017 14:30:16

Chain 1, Power Spectral Density, 802.11n ht20 Low Channel



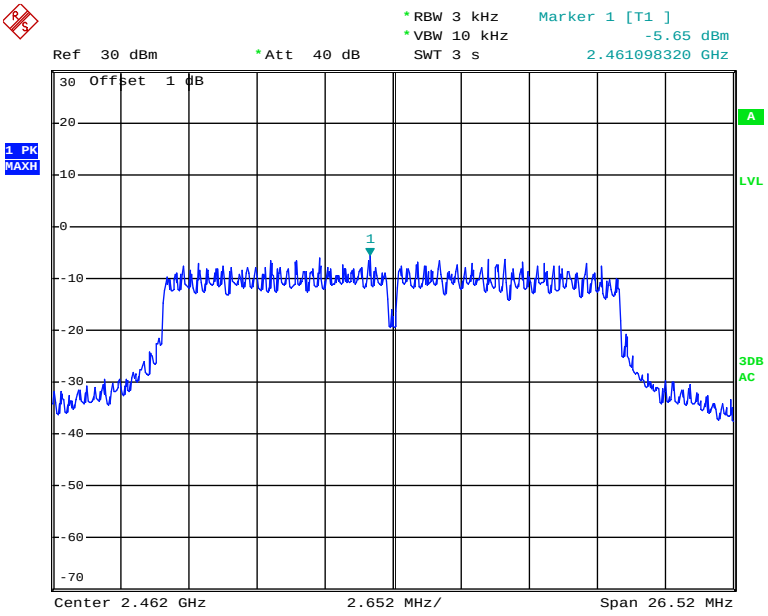
Date: 23.OCT.2017 14:32:27

Chain 1, Power Spectral Density, 802.11n ht20 Middle Channel



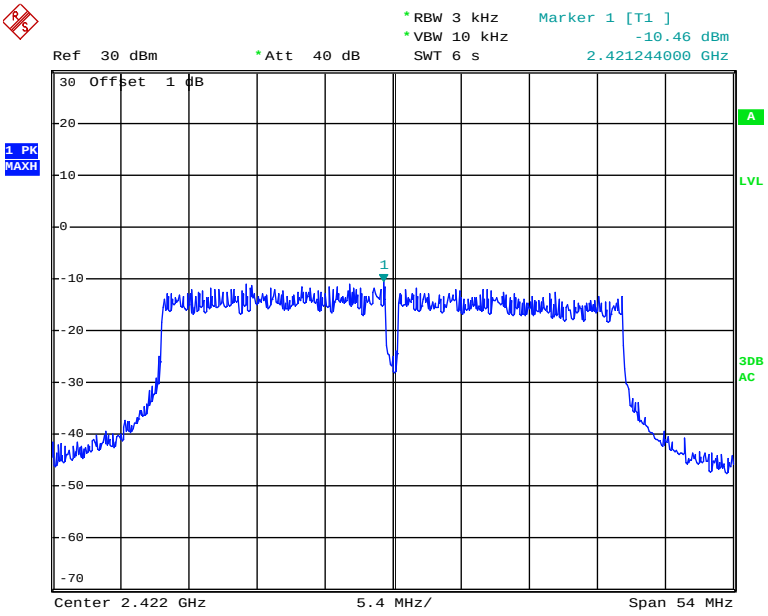
Date: 23.OCT.2017 14:34:21

Chain 1, Power Spectral Density, 802.11n ht20 High Channel



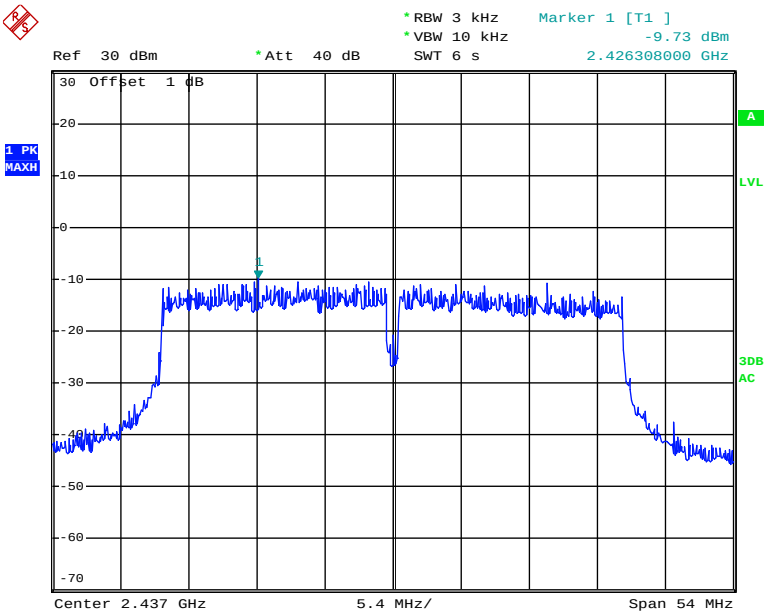
Date: 23.OCT.2017 14:42:14

Chain 1, Power Spectral Density, 802.11n ht40 Low Channel



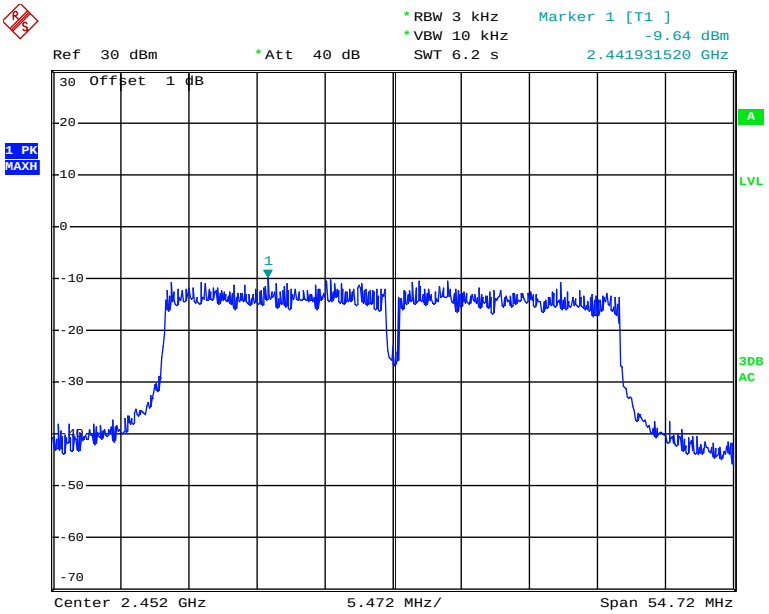
Date: 23.OCT.2017 14:45:17

Chain 1, Power Spectral Density, 802.11n ht40 Middle Channel



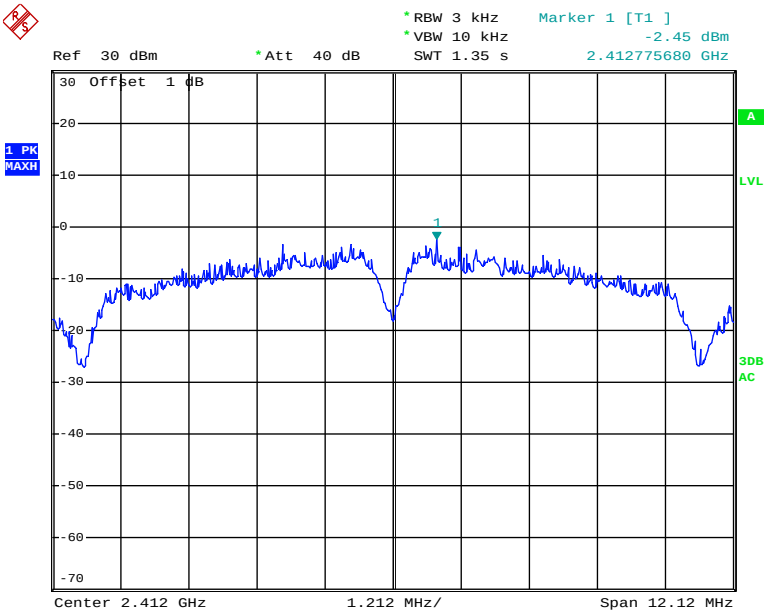
Date: 23.OCT.2017 14:47:22

Chain 1, Power Spectral Density, 802.11n ht40 High Channel



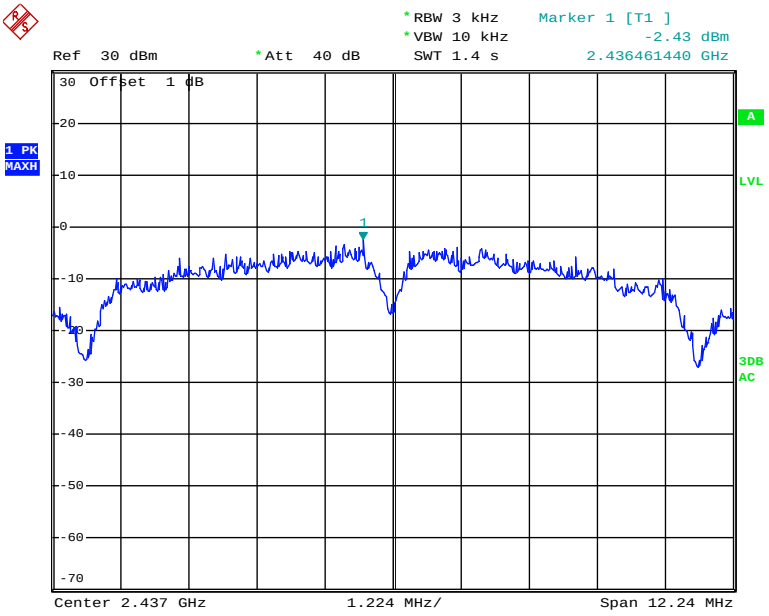
Date: 23.OCT.2017 14:49:11

Chain 2, Power Spectral Density, 802.11b Low Channel



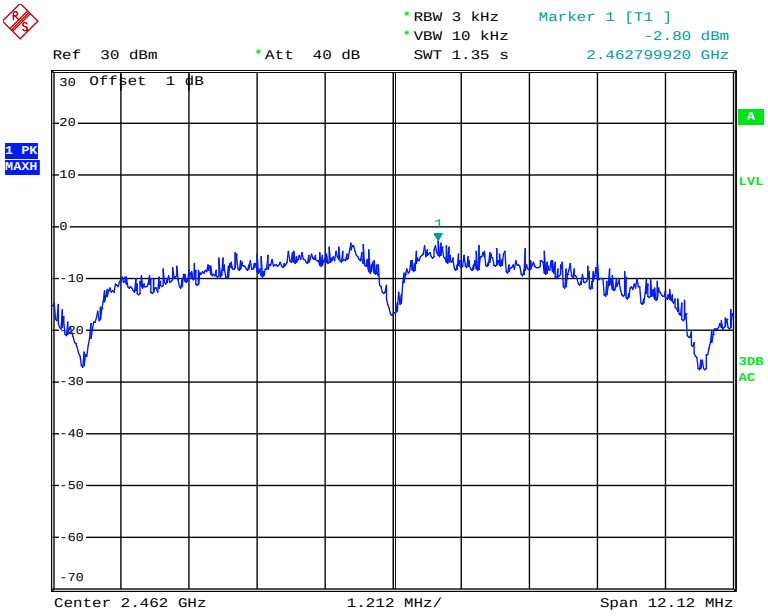
Date: 23.OCT.2017 14:52:57

Chain 2, Power Spectral Density, 802.11b Middle Channel



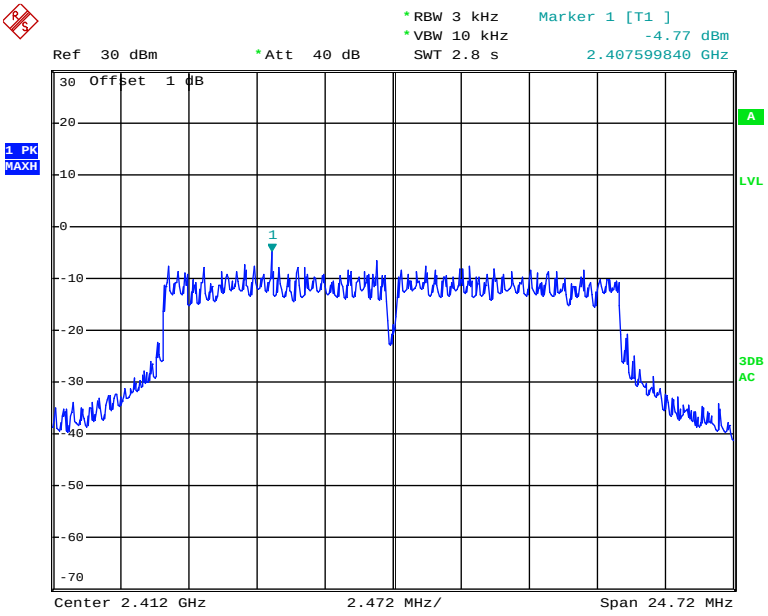
Date: 23.OCT.2017 14:54:41

Chain 2, Power Spectral Density, 802.11b High Channel



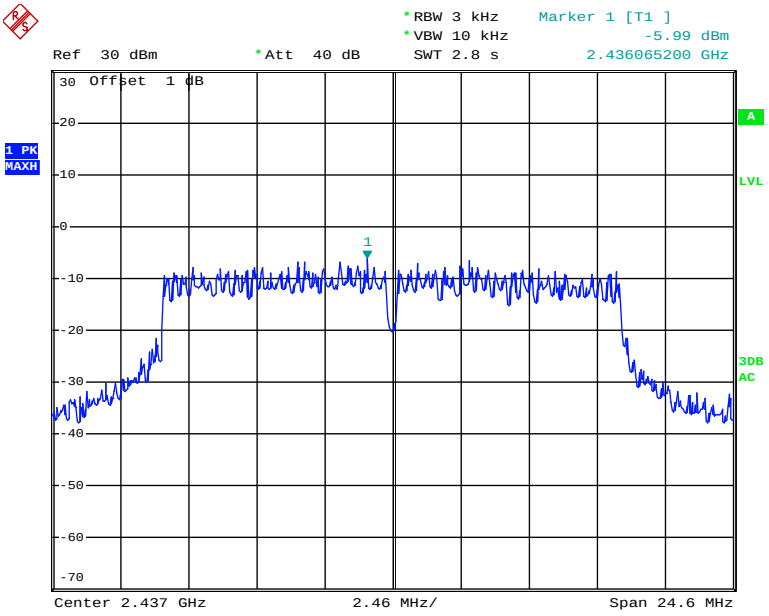
Date: 23.OCT.2017 14:56:03

Chain 2, Power Spectral Density, 802.11g Low Channel



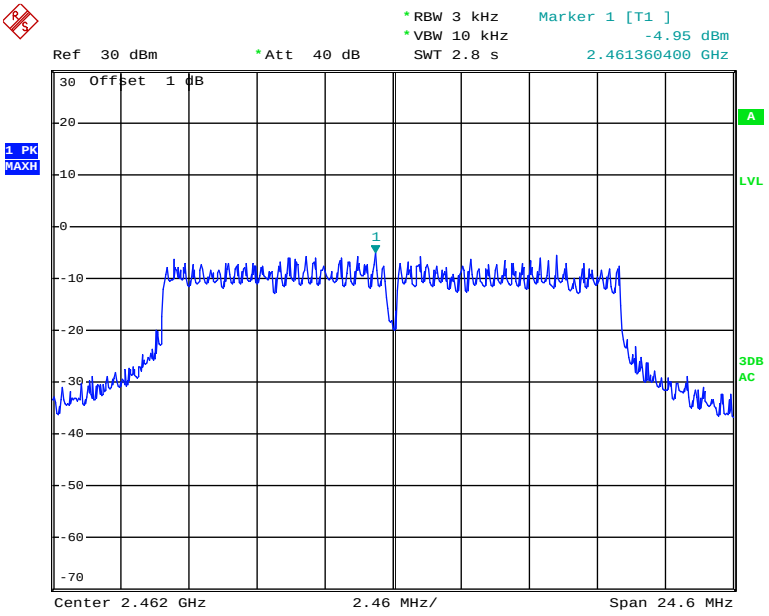
Date: 23.OCT.2017 14:57:58

Chain 2, Power Spectral Density, 802.11g Middle Channel



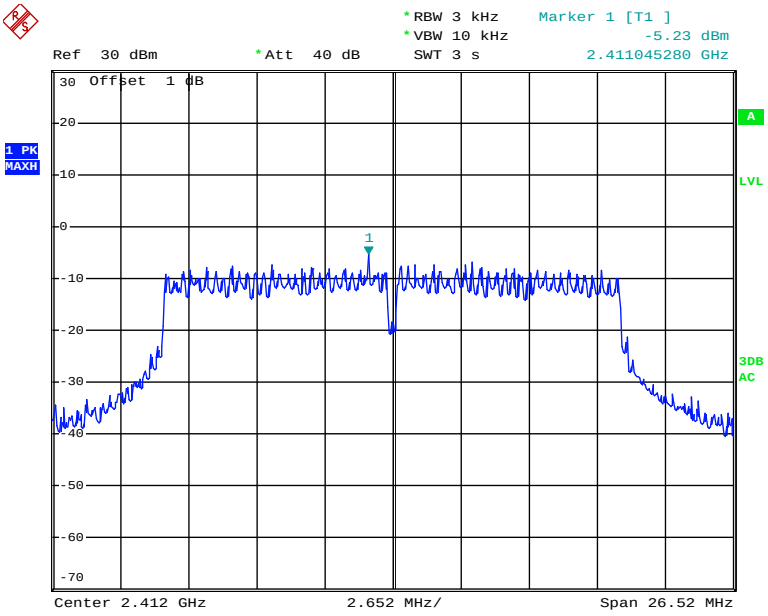
Date: 23.OCT.2017 14:59:58

Chain 2, Power Spectral Density, 802.11g High Channel



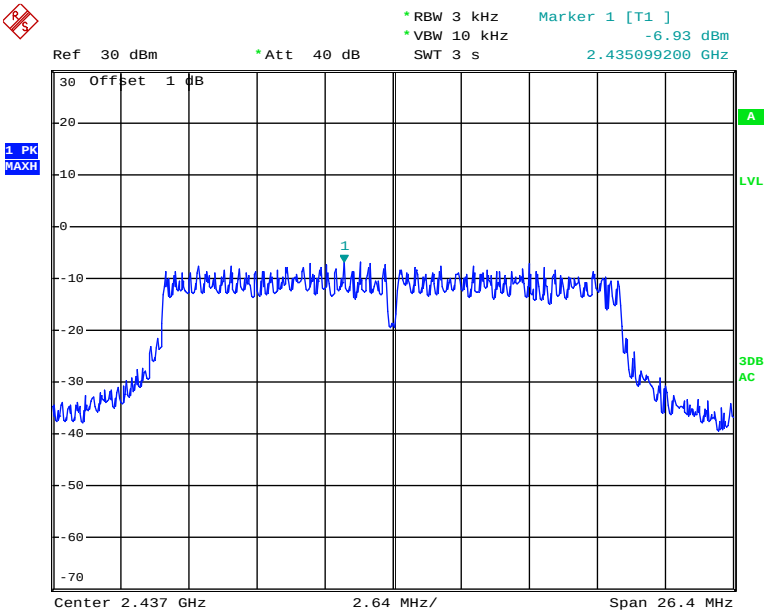
Date: 23.OCT.2017 15:01:41

Chain 2, Power Spectral Density, 802.11n ht20 Low Channel



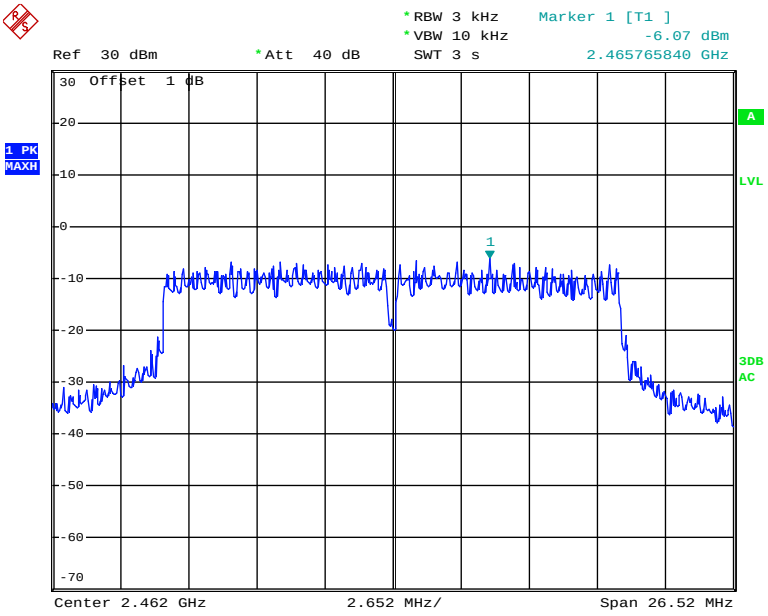
Date: 23.OCT.2017 15:07:41

Chain 2, Power Spectral Density, 802.11n ht20 Middle Channel



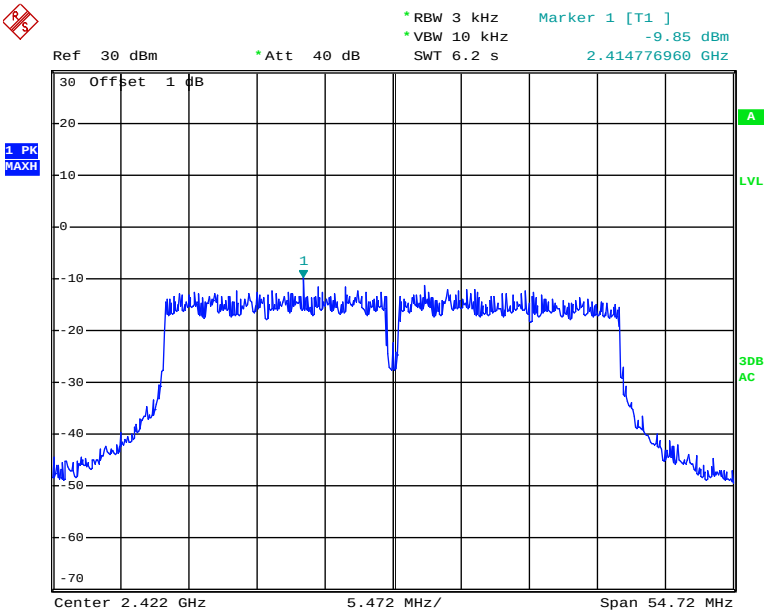
Date: 23.OCT.2017 15:09:48

Chain 2, Power Spectral Density, 802.11n ht20 High Channel



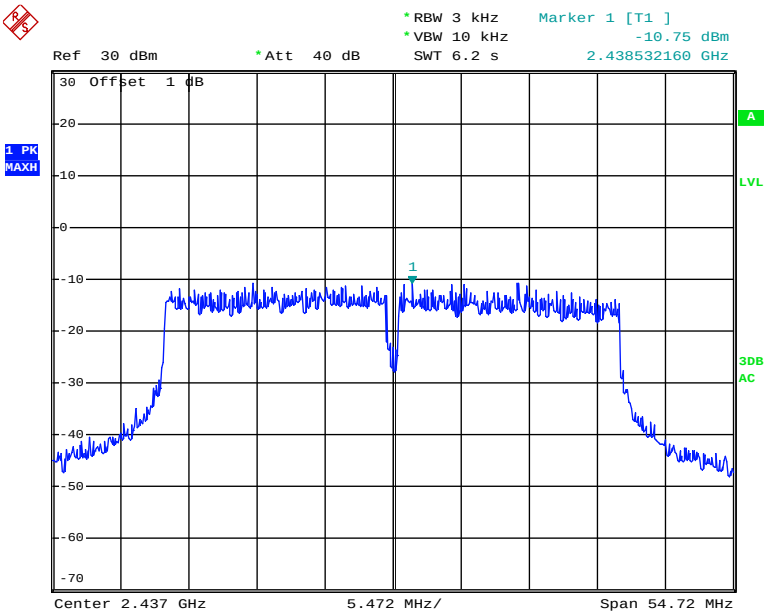
Date: 23.OCT.2017 15:11:23

Chain 2, Power Spectral Density, 802.11n ht40 Low Channel



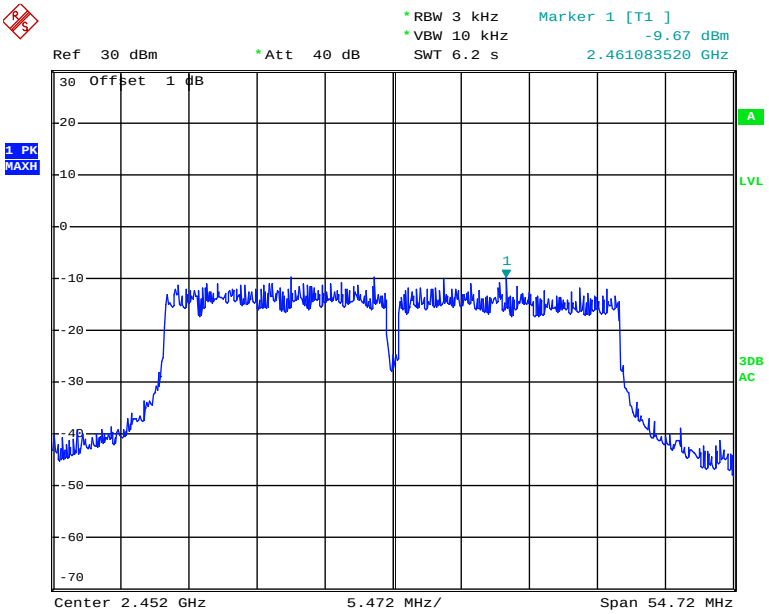
Date: 23.OCT.2017 15:13:38

Chain 2, Power Spectral Density, 802.11n ht40 Middle Channel



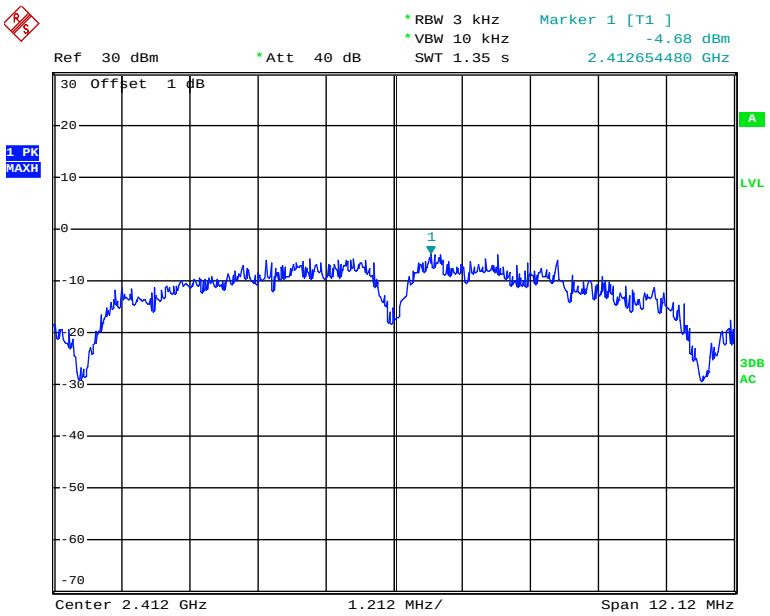
Date: 23.OCT.2017 15:15:54

Chain 2, Power Spectral Density, 802.11n ht40 High Channel



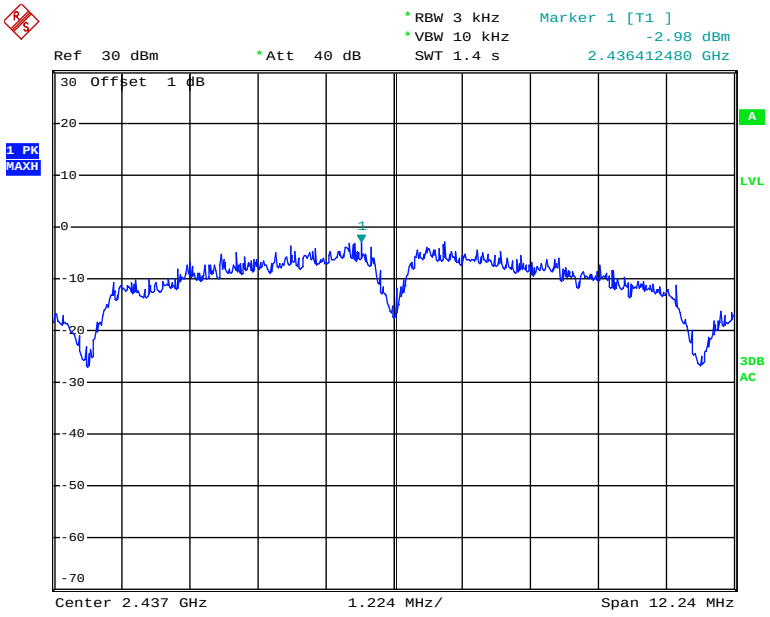
Date: 23.OCT.2017 15:17:38

Chain 3, Power Spectral Density, 802.11b Low Channel



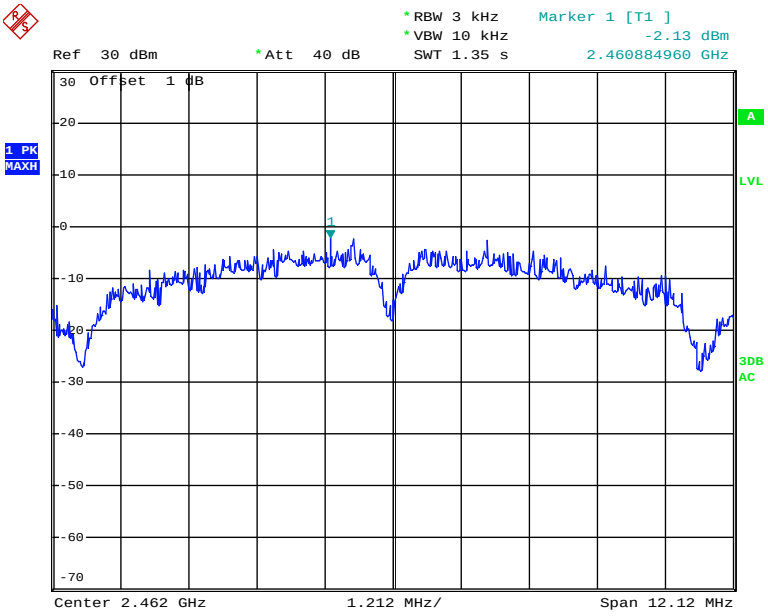
Date: 23.OCT.2017 15:19:59

Chain 3, Power Spectral Density, 802.11b Middle Channel



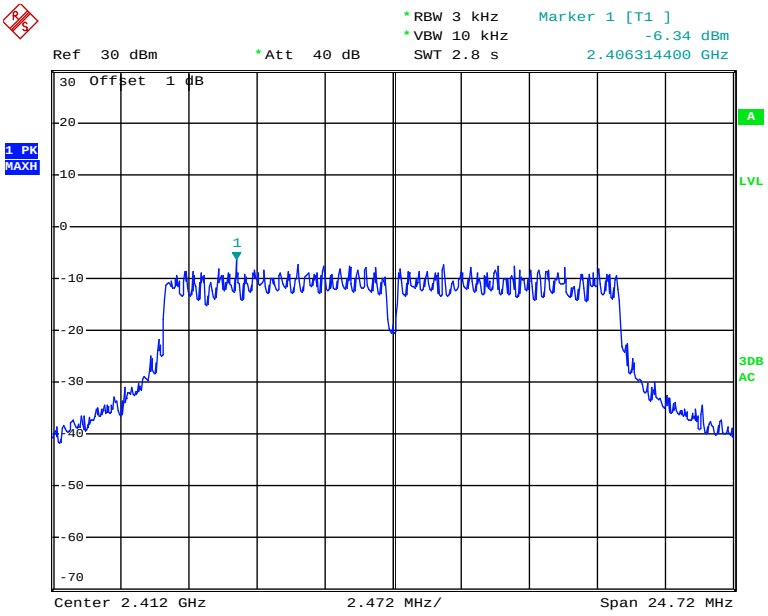
Date: 23.OCT.2017 15:21:50

Chain 3, Power Spectral Density, 802.11b High Channel



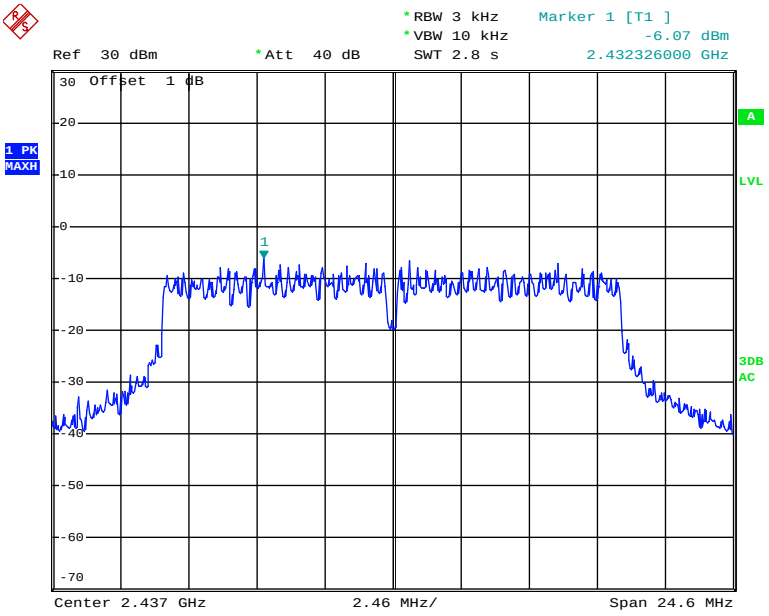
Date: 23.OCT.2017 15:23:36

Chain 3, Power Spectral Density, 802.11g Low Channel



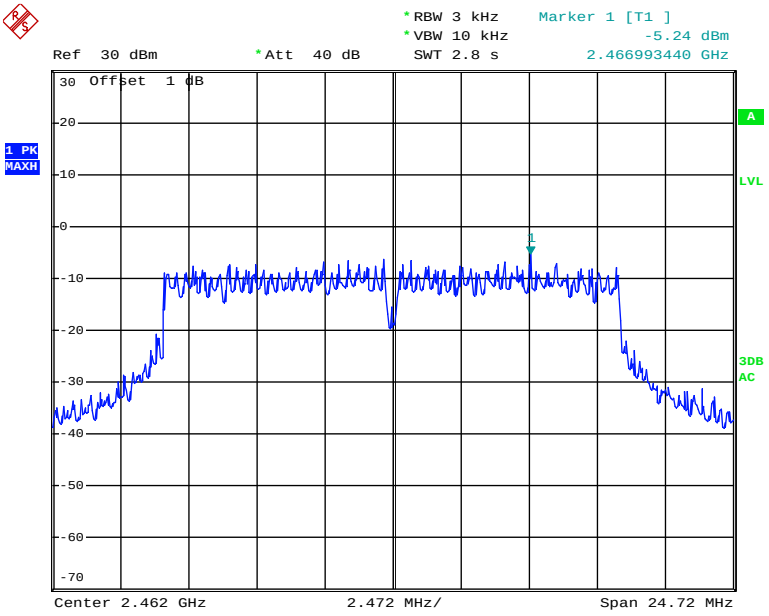
Date: 23.OCT.2017 15:25:55

Chain 3, Power Spectral Density, 802.11g Middle Channel



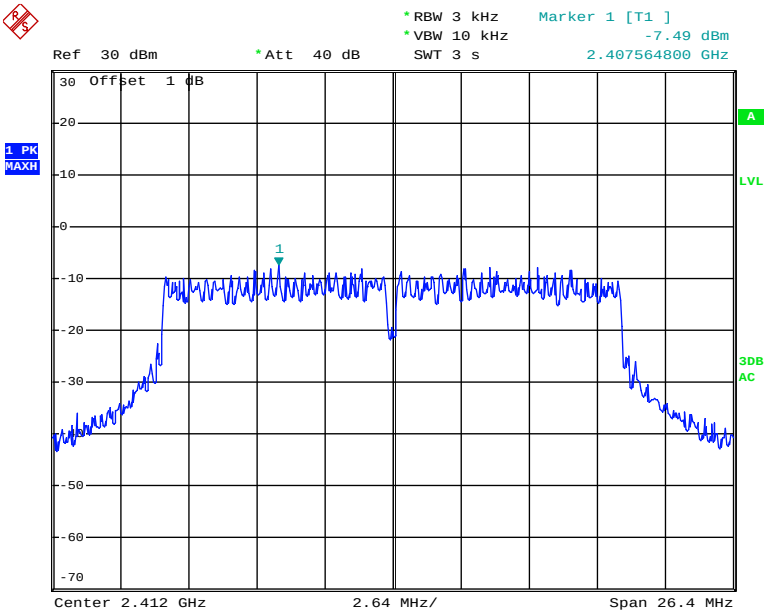
Date: 23.OCT.2017 15:27:32

Chain 3, Power Spectral Density, 802.11g High Channel



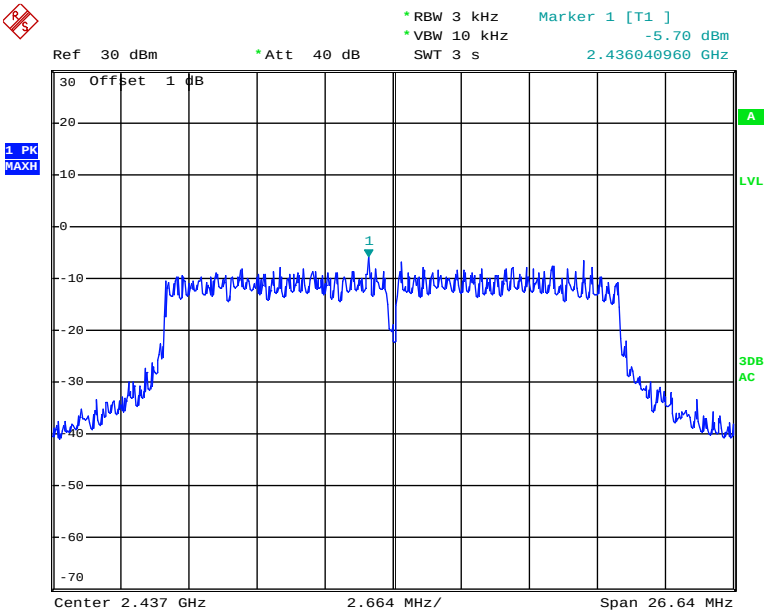
Date: 23.OCT.2017 15:29:09

Chain 3, Power Spectral Density, 802.11n ht20 Low Channel



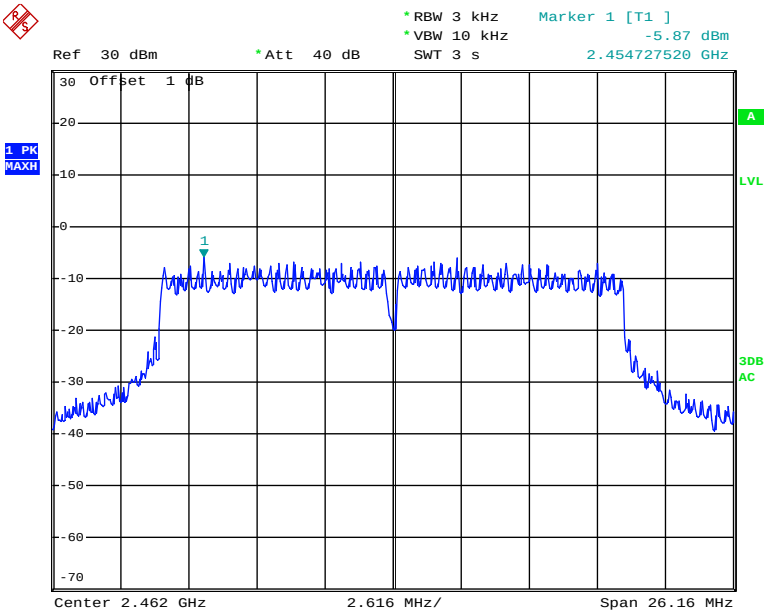
Date: 23.OCT.2017 15:31:47

Chain 3, Power Spectral Density, 802.11n ht20 Middle Channel



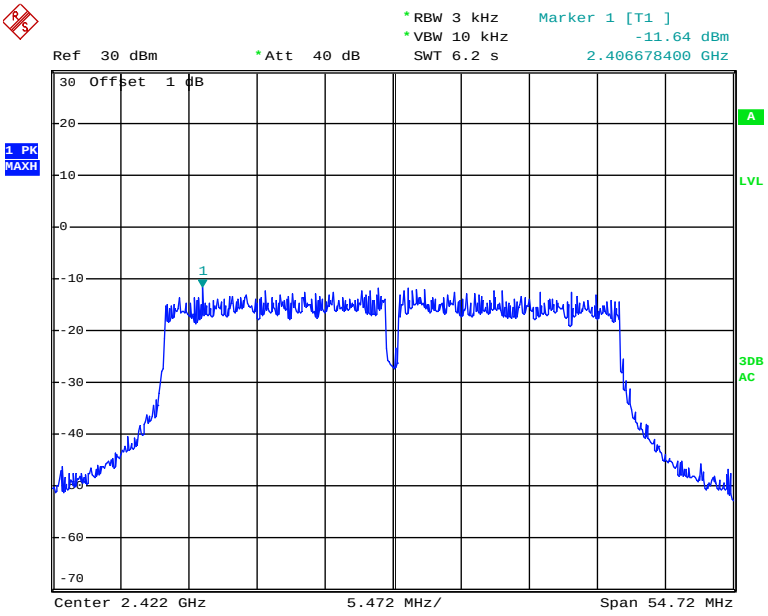
Date: 23.OCT.2017 15:33:32

Chain 3, Power Spectral Density, 802.11n ht20 High Channel



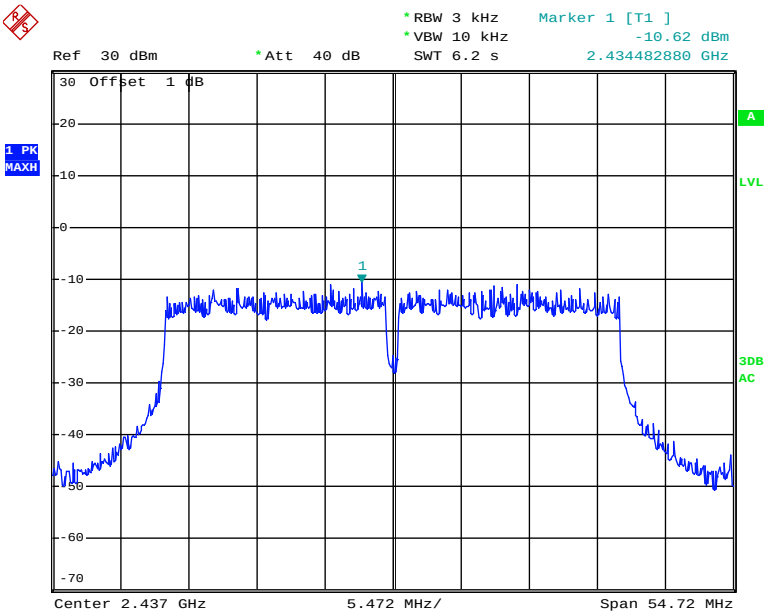
Date: 23.OCT.2017 15:35:15

Chain 3, Power Spectral Density, 802.11n ht40 Low Channel



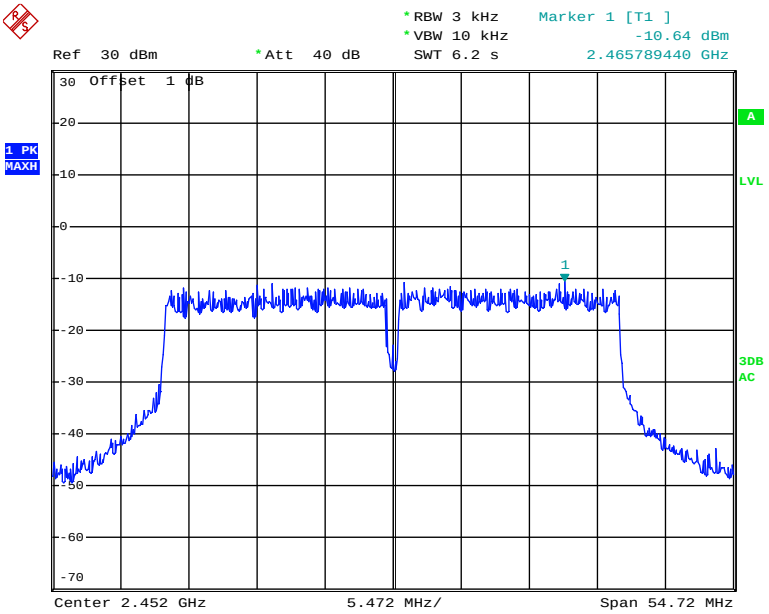
Date: 23.OCT.2017 15:38:26

Chain 3, Power Spectral Density, 802.11n ht40 Middle Channel



Date: 23.OCT.2017 15:40:28

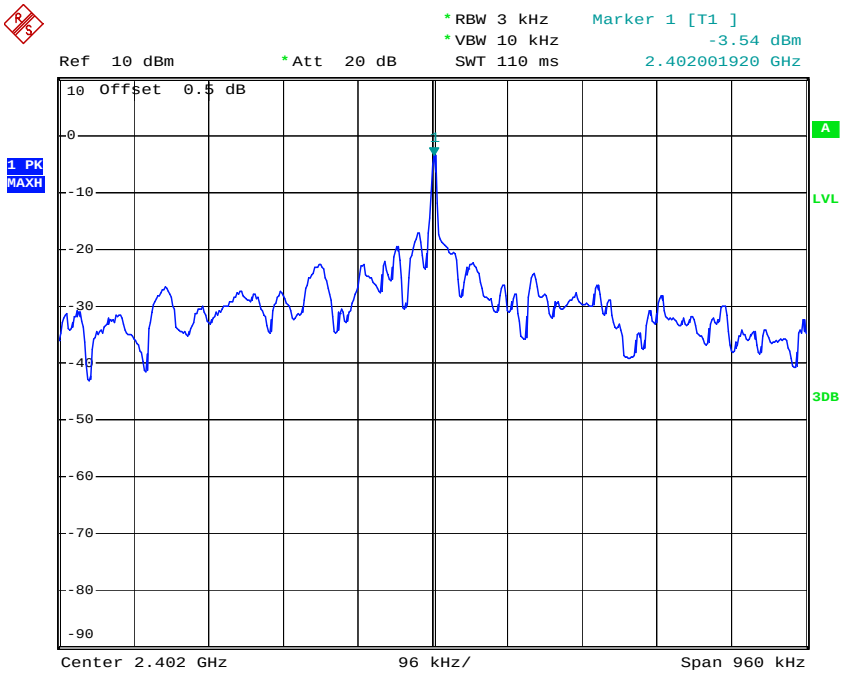
Chain 3, Power Spectral Density, 802.11n ht40 High Channel



Date: 23.OCT.2017 15:42:18

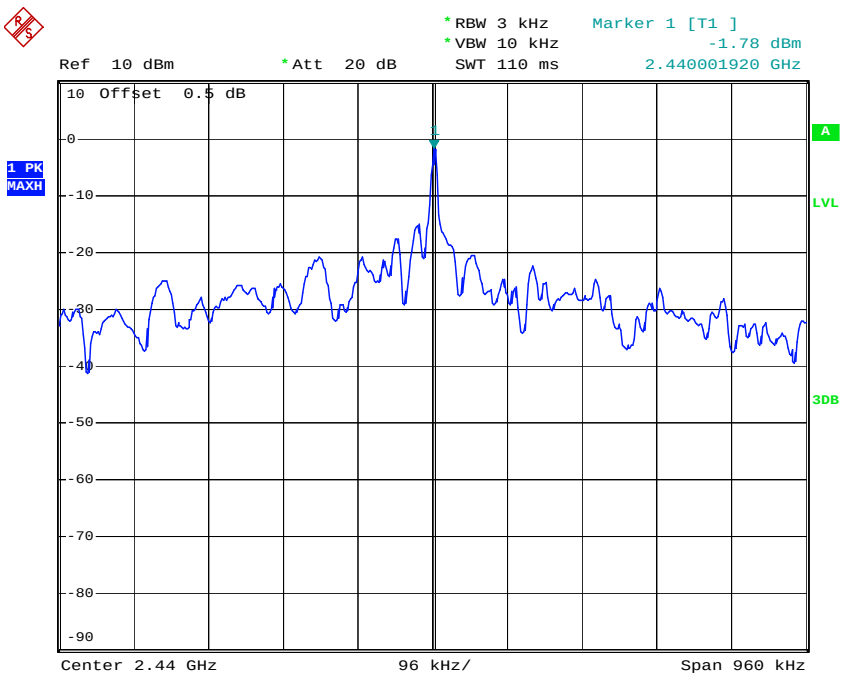
BLE:

Chain 0, Power Spectral Density, Low Channel



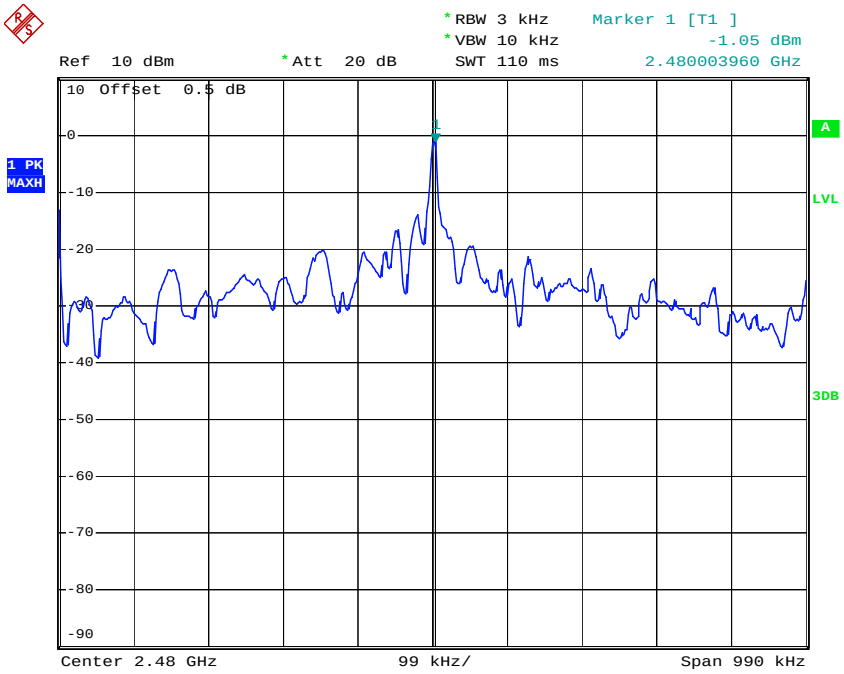
Date: 30.SEP.2017 16:21:30

Chain 0, Power Spectral Density, Middle Channel



Date: 30.SEP.2017 16:20:09

Chain 0, Power Spectral Density, High Channel



Date: 30.SEP.2017 16:18:33

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