FCC 47 CFR PART 15 SUBPART C AND ANSI C63.10:2013 TEST REPORT

For

Smart Touch Computer

Model: STC-1505

Trade Name: ADLINK TECHNOLOGY INC.

Issued for

ADLINK TECHNOLOGY INC.

9F, No.166, Jian Yi Rd., Zhonghe Dist., New Taipei City, 235 Taiwan

Issued by

Compliance Certification Services Inc.
Hsinchu Lab.
No.989-1, Wenshan Rd., Shangshan Village,
Qionglin Township, Hsinchu County 30741, Taiwan (R.O.C.)
TEL: +886-3-5921698
FAX: +886-3-5921108

http://www.ccsrf.com
E-Mail: service@ccsrf.com

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Revision History

Rev.	Issue Date	Revisions	Effect Page	Revised By
00	11/09/2015	Initial Issue	All Page 161	Michelle Chiu

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1. TEST REPORT CERTIFICATION

Applicant	:	ADLINK TECHNOLOGY INC.
Address	:	9F, No.166, Jian Yi Rd., Zhonghe Dist., New Taipei City, 235 Taiwan
Equipment Under Test	:	Smart Touch Computer
Model	:	STC-1505
Trade Name	:	ADLINK TECHNOLOGY INC.
Tested Date	:	June 29 ~ October 27, 2015

APPLICABLE STANDARD	
Standard	**Test Result**
FCC Part 15 Subpart C AND ANSI C63.10:2013	PASS

WE HEREBY CERTIFY THAT: The above equipment has been tested by Compliance Certification Services Inc., and found compliance with the requirements set forth in the technical standards mentioned above. The results of testing in this report apply only to the product/system, which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

Approved by:

Sb. Lu
Sr. Engineer

Reviewed by:

Gundam Lin
Sr. Engineer

2. EUT DESCRIPTION

Product Name	Smart Touch Computer
Model Number	STC-1505
Identify Number	T150629D01
Received Date	June 29, 2015
Frequency Range	IEEE 802.11b/g, 802.11gn HT20: 2412MHz ~ 2462MHz IEEE 802.11gn HT40: 2422MHz ~ 2452MHz Bluetooth 4.0 : 2402MHz ~ 2480MHz
Transmit Power	IEEE 802.11b mode: 23.34 dBm (0.2158 W) IEEE 802.11g mode: 26.08 dBm (0.4055 W) IEEE 802.11gn HT20 mode: 27.66 dBm (0.5834 W) IEEE 802.11gn HT40 mode: 25.13 dBm (0.3258 W) Bluetooth 4.0 : 1.88 dBm (0.0015 W)
Channel Spacing	IEEE 802.11b/g, 802.11gn HT20/HT40 : 5MHz Bluetooth 4.0 : 2MHz
Channel Number	IEEE 802.11b/g, 802.11gn HT20 : 11 Channels IEEE 802.11gn HT40 : 7 Channels Bluetooth 4.0 : 40 Channels
Transmit Data Rate	IEEE 802.11b mode: up to 11 Mbps IEEE 802.11g mode: up to 54 Mbps IEEE 802.11gn HT20 mode (800ns GI): up to 130 Mbps IEEE 802.11gn HT20 mode (400ns GI): up to 144.4 Mbps IEEE 802.11gn HT40 mode (800ns GI): up to 270 Mbps IEEE 802.11gn HT40 mode (400ns GI): up to 300 Mbps Bluetooth 4.0 : 1Mbps
Type of Modulation	IEEE 802.11b mode: DSSS (CCK, DQPSK, DBPSK) IEEE 802.11g mode: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11gn HT20/40 mode: OFDM (64QAM, 16QAM, QPSK, BPSK) Bluetooth 4.0 : GFSK
Antenna Type	Dipole Antenna × 2, Antenna 1 / Chain 0, Antenna Gain : 1.91 dBi Antenna 2 / Chain 1, Antenna Gain : 1.91 dBi
Power Rating	19Vdc
Test Voltage	120Vac, 60Hz
AC Power Cord Type	Non-shielded cable, 1.5m (Detachable)
DC Power Cable Type	Non-shielded cable, 1.5m (Non-detachable), with a ferrite core
I/O Port	Audio Port × 1, USB Port × 2, HDMI Port × 1, RS-232 Port × 2, RJ-45 Port × 2, Power Port × 1

Power Adapter:

No.	Manufacturer	Model No.	Power Input	Power Output
1	FSP	FSP065-REBN2	100-240Vac, 1.5A, 50-60Hz	19Vdc, 3.42A

Remark:

1. *The sample selected for test was engineering sample that approximated to production product and was provided by manufacturer.*
2. *For more details, please refer to the User's manual of the EUT.*
3. *This submittal(s) (test report) is intended for FCC ID: X4D-STC-1505 filing to comply with Section 15.207, 15.209 and 15.247 of the FCC Part 15, Subpart C Rules.*

3. DESCRIPTION OF TEST MODES

The EUT (STC-1505) had been tested under operating condition.

For IEEE 802.11b/g mode (1TX / 1RX) : Ant 1(Chain 0) transmit/receive.

For IEEE 802.11gn HT20/HT40 mode (2TX / 2RX) :

Ant 1(Chain 0) & Ant 2(Chain 1) transmit/receive.

For Bluetooth (1TX / 1RX) : Ant 1(Chain 0) transmit/receive.

Conducted Emission / Radiated Emission Test (Below 1 GHz)

1. The following test modes were scanned during the preliminary test:

No.	Pre-Test mode
1	TX Mode

2. After the preliminary scan, the following test mode was found to produce the highest emission level.

Final Test mode		
Emission	Radiated Emission	Mode 1
	Conducted Emission	Mode 1

Remark: *Then, the above highest emission mode of the configuration of the EUT and cable was chosen for all final test items.*

Conducted / Radiated Emission Test (Above 1 GHz)

IEEE 802.11b/g, 802.11gn HT20 mode:

The EUT had been tested under operating condition.

There are three channels have been tested as following:

Channel	Frequency (MHz)
Low	2412
Middle	2437
High	2462

IEEE 802.11b mode: 1Mbps data rate (worst case) was chosen for full testing.
IEEE 802.11g mode: 6Mbps data rate (worst case) was chosen for full testing.
IEEE 802.11gn HT20 mode: 6.5Mbps data rate (worst case) was chosen for full testing.

IEEE 802.11gn HT40 mode:

The EUT had been tested under operating condition.

There are three channels have been tested as following:

Channel	Frequency (MHz)
Low	2422
Middle	2437
High	2452

IEEE 802.11gn HT40 mode: 13.5Mbps data rate (worst case) was chosen for full testing.

Bluetooth 4.0 Mode

There are three channels have been tested as following :

Channel	Frequency (MHz)
Low	2402
Middle	2440
High	2480

Remark : *The field strength of spurious emission was measured in the following position: EUT stand-up position(Z axis), lie-down position(X, Y axis). The worst emission was found in stand-up position(Z axis) and the worst case was recorded.*

4. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.10:2013 and FCC CFR 47, 15.207, 15.209 and 15.247.

5. FACILITIES AND ACCREDITATION

5.1 FACILITIES

All measurement facilities used to collect the measurement data are located at

No.989-1, Wenshan Rd., Shangshan Village,
Qionglin Township, Hsinchu County 30741, Taiwan (R.O.C.)

The sites are constructed in conformance with the requirements of ANSI C63.10:2013 and CISPR 22. All receiving equipment conforms to CISPR 16-1-1, CISPR 16-1-2, CISPR 16-1-3, CISPR 16-1-4 and CISPR 16-1-5.

5.2 ACCREDITATIONS

Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025.

Taiwan	TAF

The measuring facility of laboratories has been authorized or registered by the following approval agencies.

Canada	INDUSTRY CANADA
Japan	VCCI
Taiwan	BSMI
USA	FCC MRA

Copies of granted accreditation certificates are available for downloading from our web site, http:///www.ccsrf.com

Remark: *FCC Designation Number TW1027.*

5.3 MEASUREMENT UNCERTAINTY

The following table is for the measurement uncertainty, which is calculated as per the document CISPR 16-4-2.

PARAMETER	UNCERTAINTY
Semi Anechoic Chamber (966 Chamber_B) / Radiated Emission, 30 to 1000 MHz	+/- 3.97
Semi Anechoic Chamber (966 Chamber_B) / Radiated Emission, 1 to 18GHz	+/- 3.58
Semi Anechoic Chamber (966 Chamber_B) / Radiated Emission, 18 to 26 GHz	+/- 3.59
Semi Anechoic Chamber (966 Chamber_B) / Radiated Emission, 26 to 40 GHz	+/- 3.81
Conducted Emission (Mains Terminals), 9kHz to 30MHz	+/- 2.48

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Consistent with industry standard (e.g. CISPR 22, clause 11, Measurement Uncertainty) determining compliance with the limits shall be base on the results of the compliance measurement. Consequently the measure emissions being less than the maximum allowed emission result in this be a compliant test or passing test.

The acceptable measurement uncertainty value without requiring revision of the compliance statement is base on conducted and radiated emissions being less than U_{CISPR} which is 3.6dB and 5.2dB respectively. CCS values (called U_{Lab} in CISPR 16-4-2) is less than U_{CISPR} as shown in the table above. Therefore, MU need not be considered for compliance.

6. SETUP OF EQUIPMENT UNDER TEST

SUPPORT EQUIPMENT

No.	Product	Manufacturer	Model No.	Serial No.
1	Notebook PC	HP	ProBook 4421s	CNF03242PJ

No.	Signal Cable Description
1	Non-shielded RJ-45 cable, 12m × 1

SETUP DIAGRAM FOR TESTS

EUT & peripherals setup diagram is shown in appendix setup photos.

EUT OPERATING CONDITION

WiFi

1. EUT & peripherals setup diagram is shown in appendix setup photos.
2. TX mode:
   - ⇨ **TX Data Rate:** 1Mbps Bandwidth 20 (IEEE 802.11b mode)
     6Mbps Bandwidth 20 (IEEE 802.11g mode)
     6.5Mbps Bandwidth 20 (IEEE 802.11gn HT20 mode)
     13.5Mbps Bandwidth 40 (IEEE 802.11gn HT40 mode)
   - ⇨ **Power control**
     IEEE 802.11b Channel Low (2412MHz) Chain 0 Power set 19.5
     IEEE 802.11b Channel Mid (2437MHz) Chain 0 Power set 21
     IEEE 802.11b Channel High (2462MHz) Chain 0 Power set 19.5
     IEEE 802.11g Channel Low (2412MHz) Chain 0 Power set 18
     IEEE 802.11g Channel Mid (2437MHz) Chain 0 Power set 20
     IEEE 802.11g Channel High (2462MHz) Chain 0 Power set 17
     IEEE 802.11gn HT20 Channel Low (2412MHz) Chain 0/1 Power set 15
     IEEE 802.11gn HT20 Channel Mid (2437MHz) Chain 0/1 Power set 17
     IEEE 802.11gn HT20 Channel High (2462MHz) Chain 0/1 Power set 10
     IEEE 802.11gn HT40 Channel Low (2422MHz) Chain 0/1 Power set 12
     IEEE 802.11gn HT40 Channel Mid (2437MHz) Chain 0/1 Power set 13.5
     IEEE 802.11gn HT40 Channel High (2452MHz) Chain 0/1 Power set 9
3. All of the functions are under run.
4. Start test.

Bluetooth 4.0

1. EUT & peripherals setup diagram is shown in appendix setup photos.
2. BLE TX Mode : Power default
   Frequency: 2402, 2440, 2480
3. All of the functions are under run
4. Start test.

7. FCC PART 15.247 REQUIREMENTS

7.1 6dB BANDWIDTH

LIMITS

§ 15.247(a) (2) For direct sequence systems, the minimum 6dB bandwidth shall be at least 500kHz.

TEST EQUIPMENT

Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	E4446A	MY43360132	06/04/2016

Remark: *Each piece of equipment is scheduled for calibration once a year.*

TEST SETUP

TEST PROCEDURE

1. The transmitter output was connected to a spectrum analyzer.
2. Set RBW = 100 kHz.
3. Set the video bandwidth (VBW) ≥ 3 x RBW.
4. Detector = Peak.
5. Trace mode = max hold.
6. Sweep = auto couple.
7. Allow the trace to stabilize.
8. 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 RESULTS

IEEE 802.11b mode

Channel	Channel Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (kHz)	Pass / Fail
		Chain 0		
Low	2412	10.0650	500	PASS
Middle	2437	10.0600	500	PASS
High	2462	10.0800	500	PASS

IEEE 802.11gmode

Channel	Channel Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (kHz)	Pass / Fail
		Chain 0		
Low	2412	16.3200	500	PASS
Middle	2437	16.3150	500	PASS
High	2462	16.3450	500	PASS

IEEE 802.11gn HT20 mode

Channel	Channel Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (kHz)	Pass / Fail
		Chain 0	Chain 1		
Low	2412	17.5500	17.5550	500	PASS
Middle	2437	17.1750	17.5800	500	PASS
High	2462	17.3250	17.5750	500	PASS

IEEE 802.11gn HT40 mode

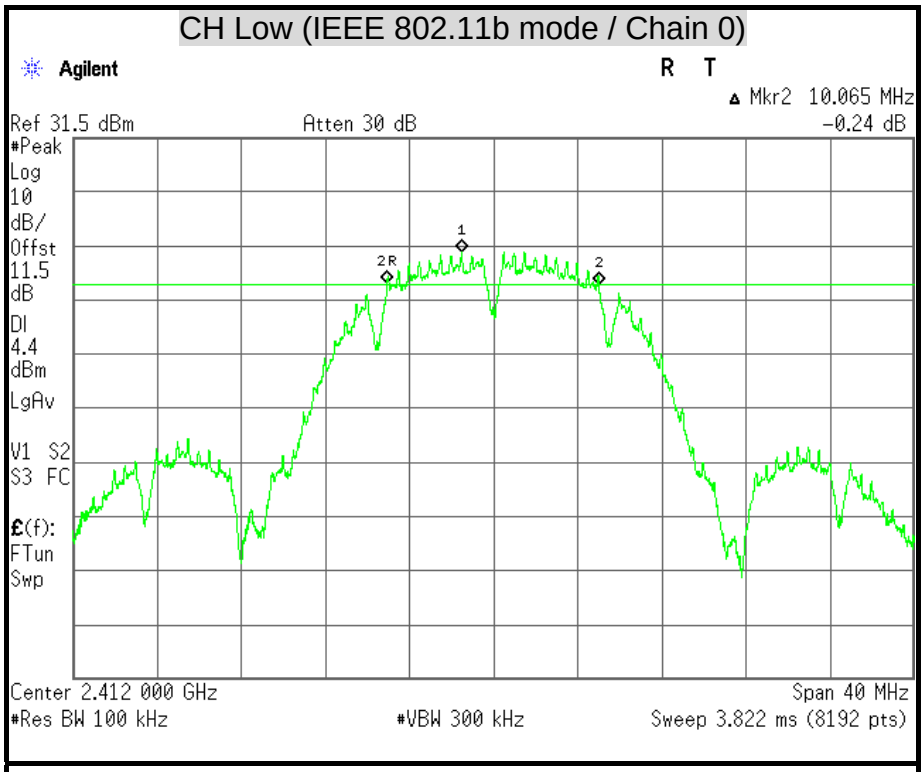
Channel	Channel Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (kHz)	Pass / Fail
		Chain 0	Chain 1		
Low	2422	36.3300	36.3400	500	PASS
Middle	2437	36.3400	35.9700	500	PASS
High	2452	36.3500	36.3400	500	PASS

Bluetooth 4.0 mode

Channel	Channel Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (kHz)	Pass / Fail
		Chain 0		
Low	2402	0.6636	500	PASS
Middle	2440	0.6483	500	PASS
High	2480	0.6585	500	PASS

6dB BANDWIDTH

CH Low (IEEE 802.11b mode / Chain 0)



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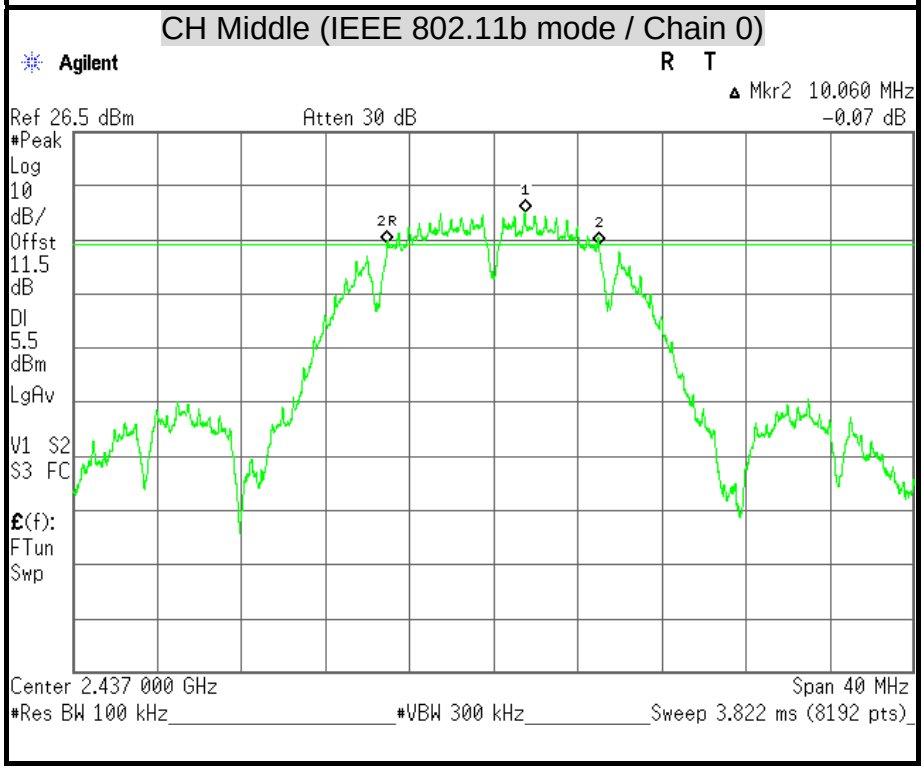
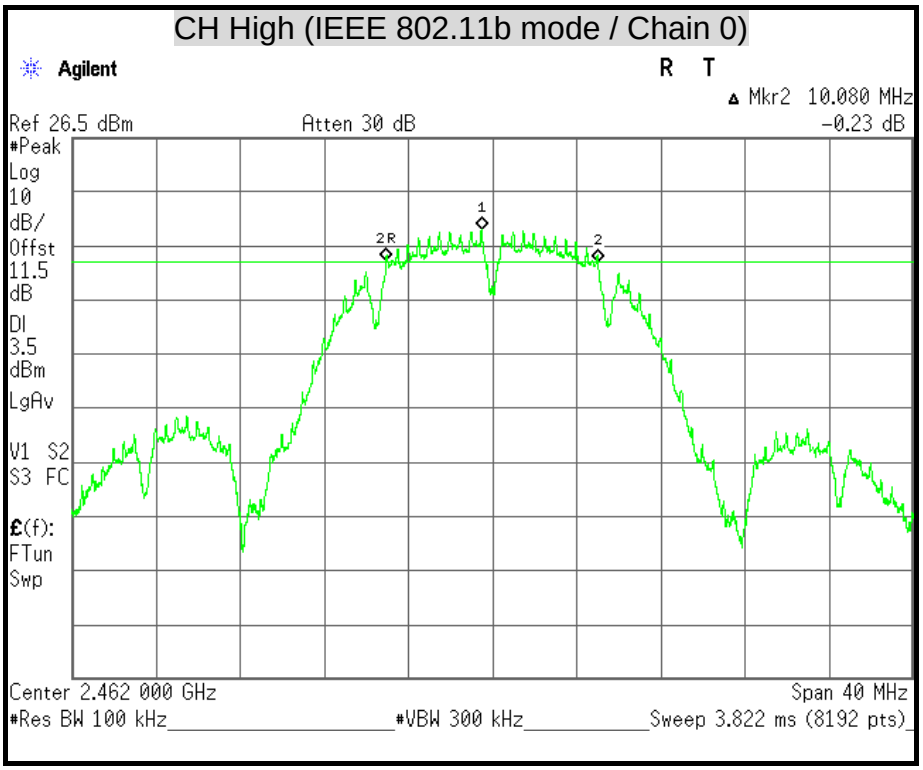


CH High (IEEE 802.11b mode / Chain 0)



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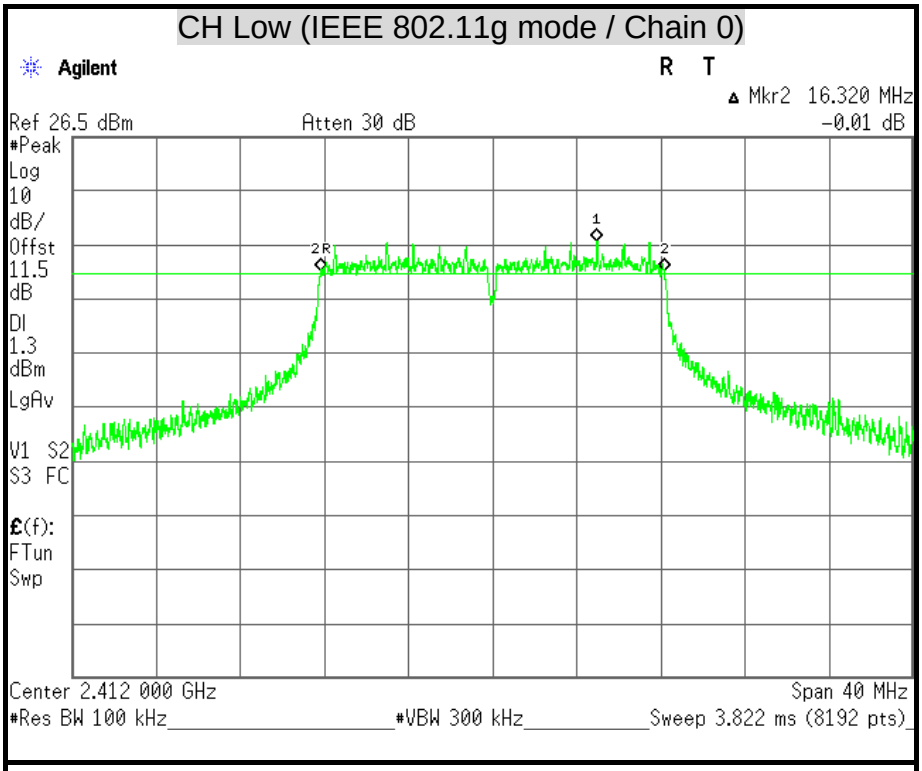
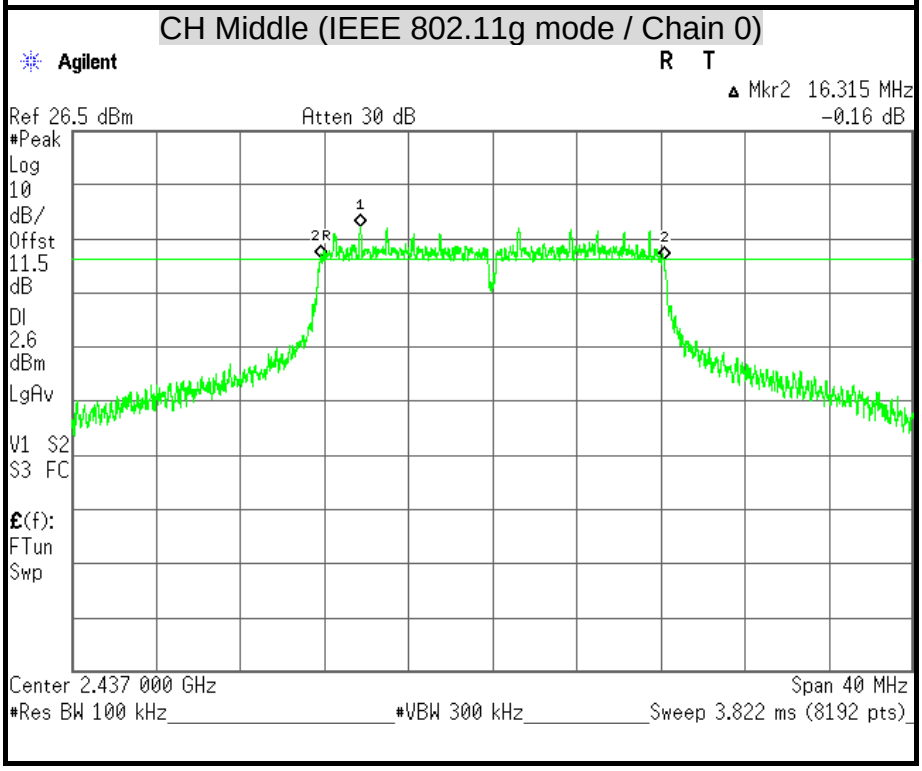
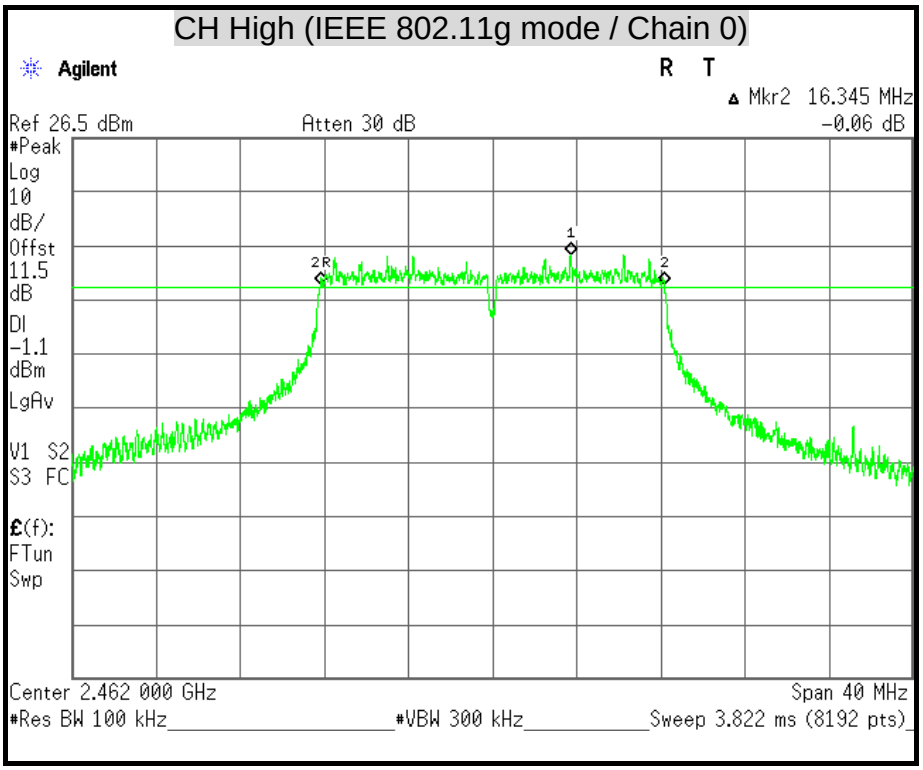


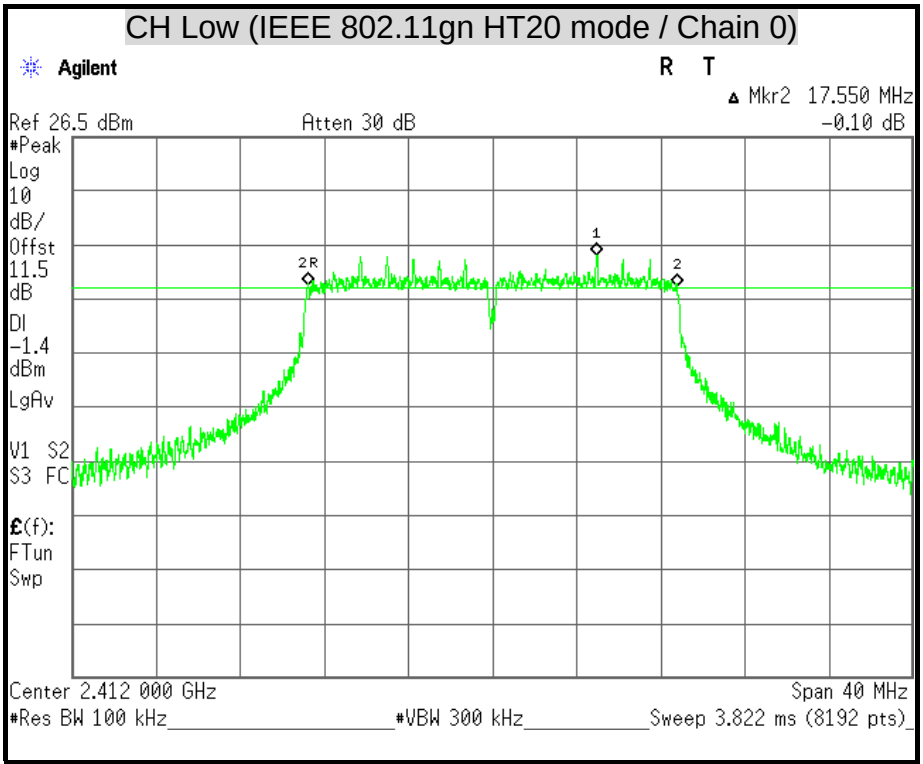
CH Middle (IEEE 802.11g mode / Chain 0)



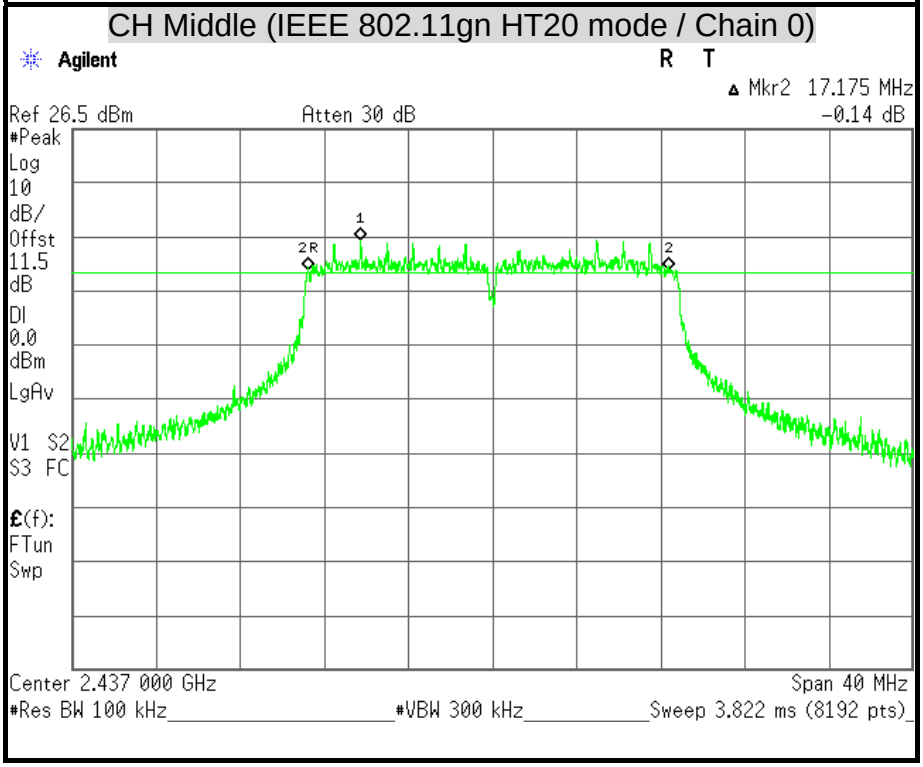
CH High (IEEE 802.11g mode / Chain 0)



CH Low (IEEE 802.11gn HT20 mode / Chain 0)



CH Middle (IEEE 802.11gn HT20 mode / Chain 0)



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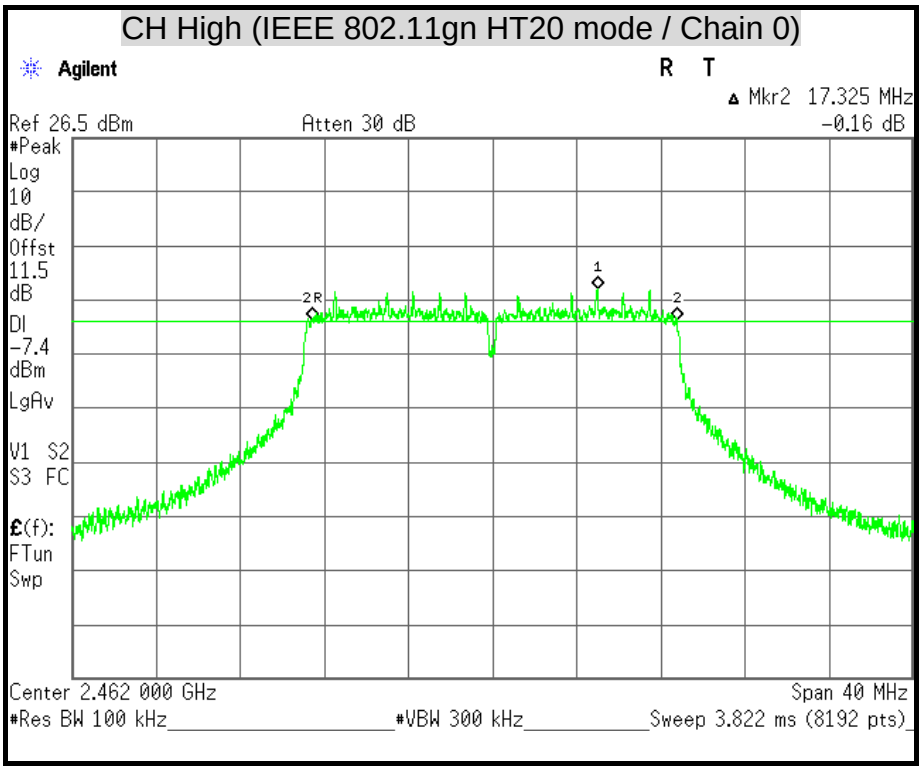
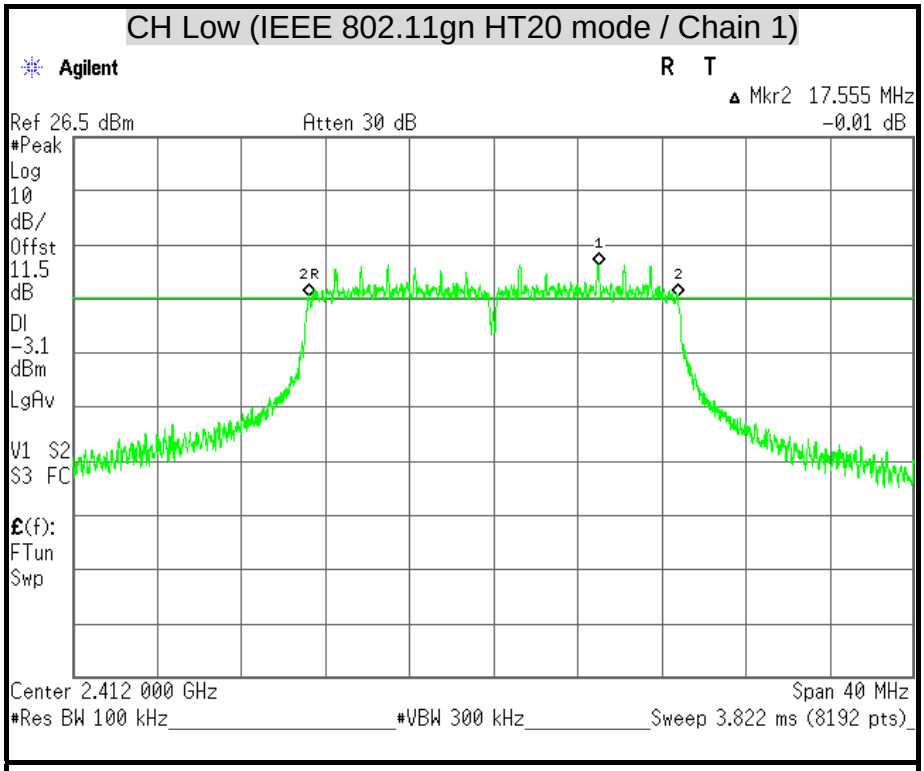
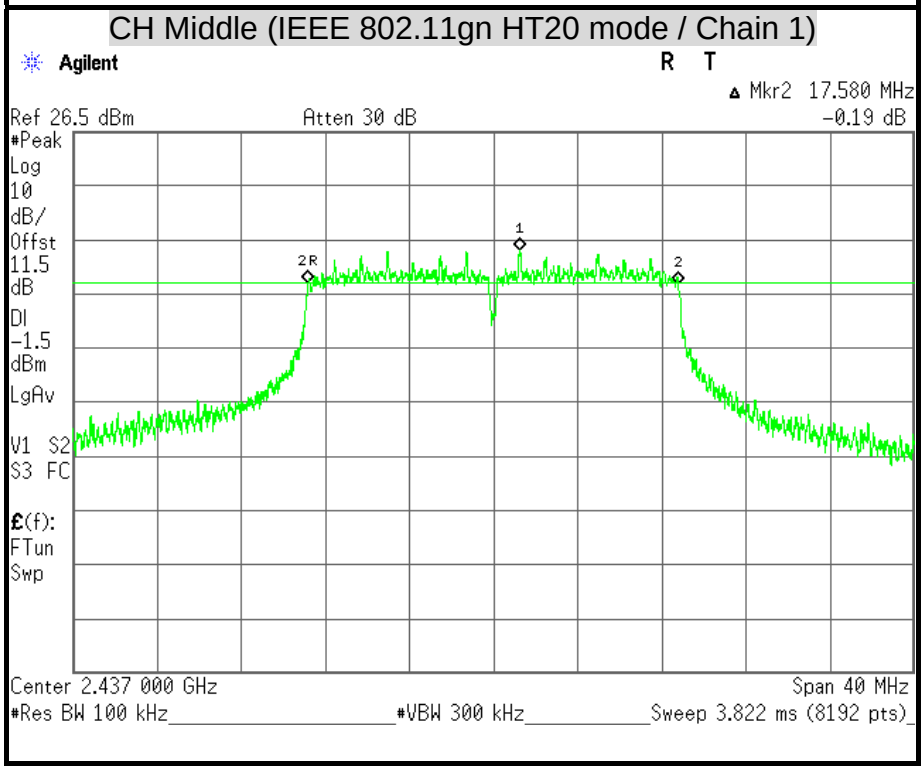


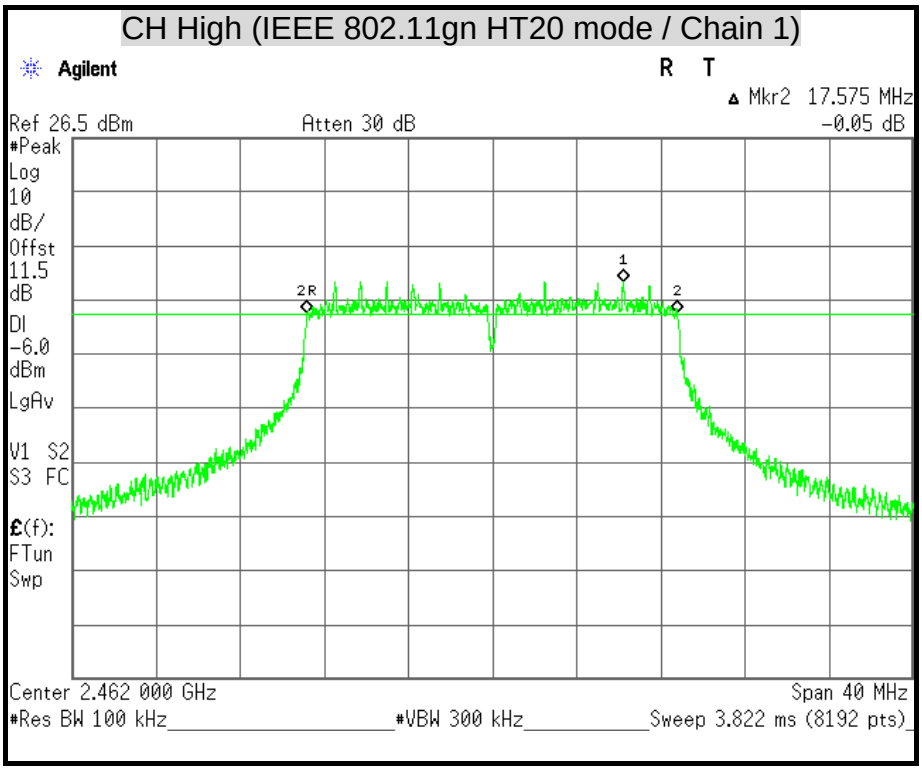
CH Low (IEEE 802.11gn HT20 mode / Chain 1)



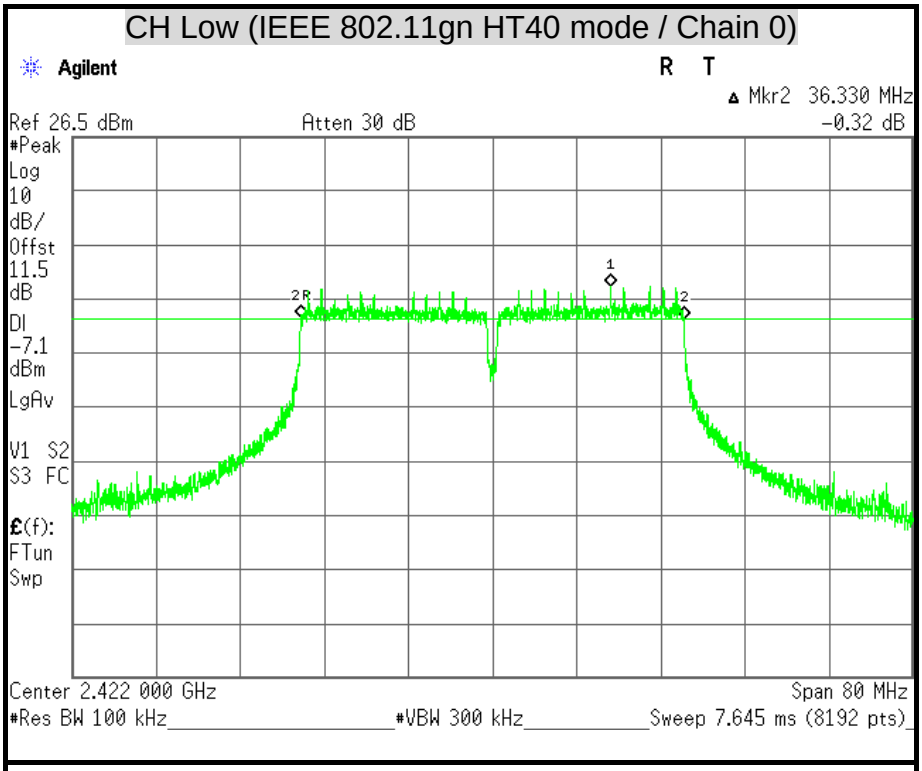
CH Middle (IEEE 802.11gn HT20 mode / Chain 1)



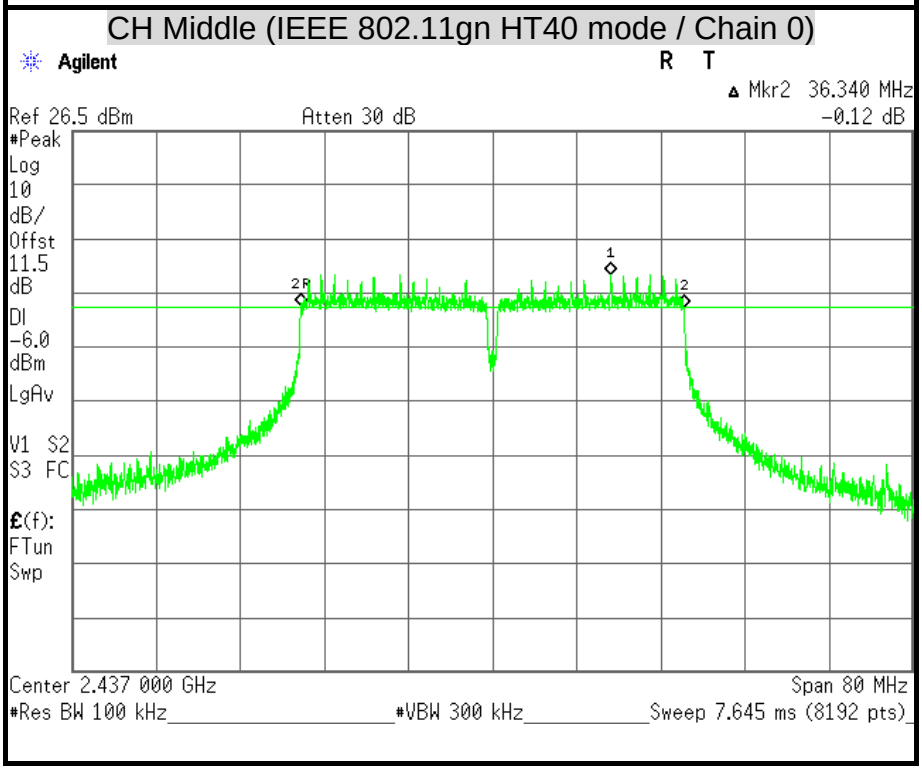
CH High (IEEE 802.11gn HT20 mode / Chain 1)



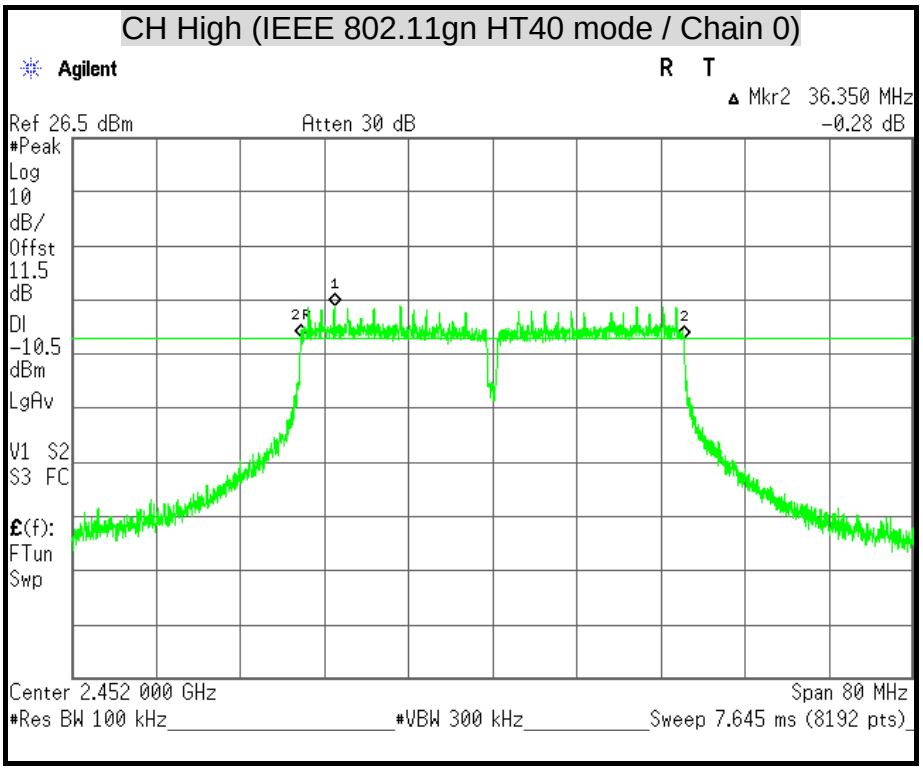
CH Low (IEEE 802.11gn HT40 mode / Chain 0)



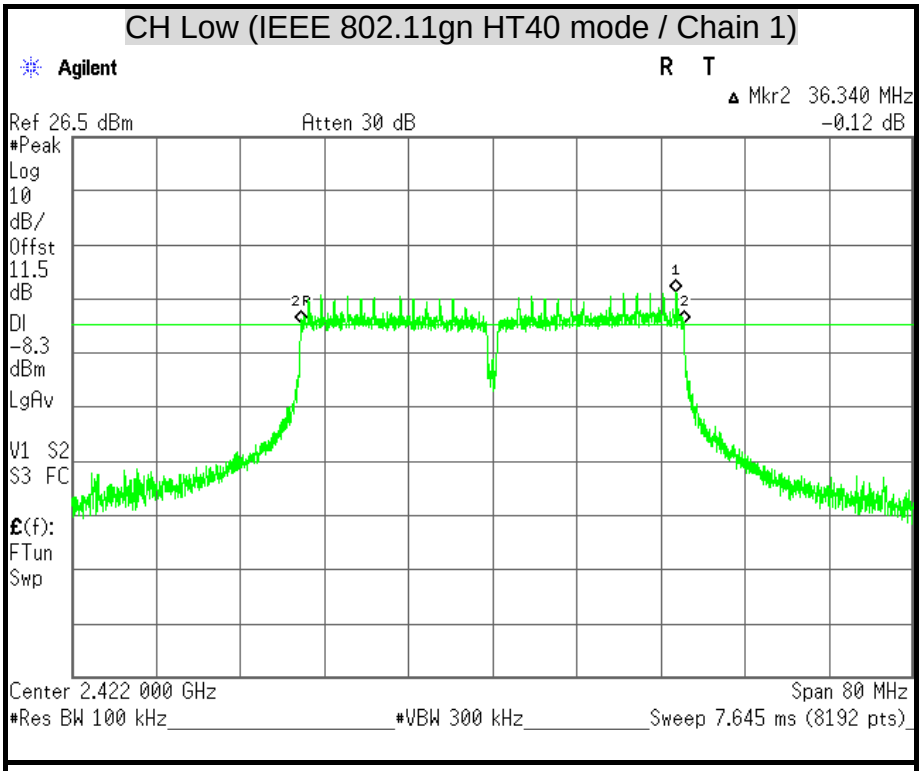
CH Middle (IEEE 802.11gn HT40 mode / Chain 0)



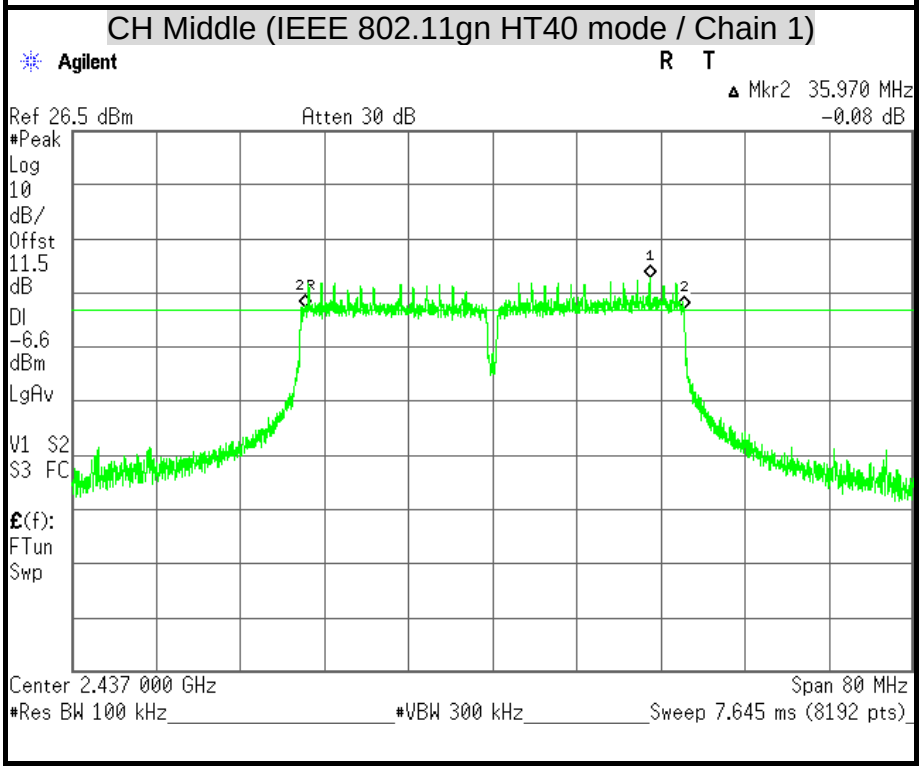
CH High (IEEE 802.11gn HT40 mode / Chain 0)



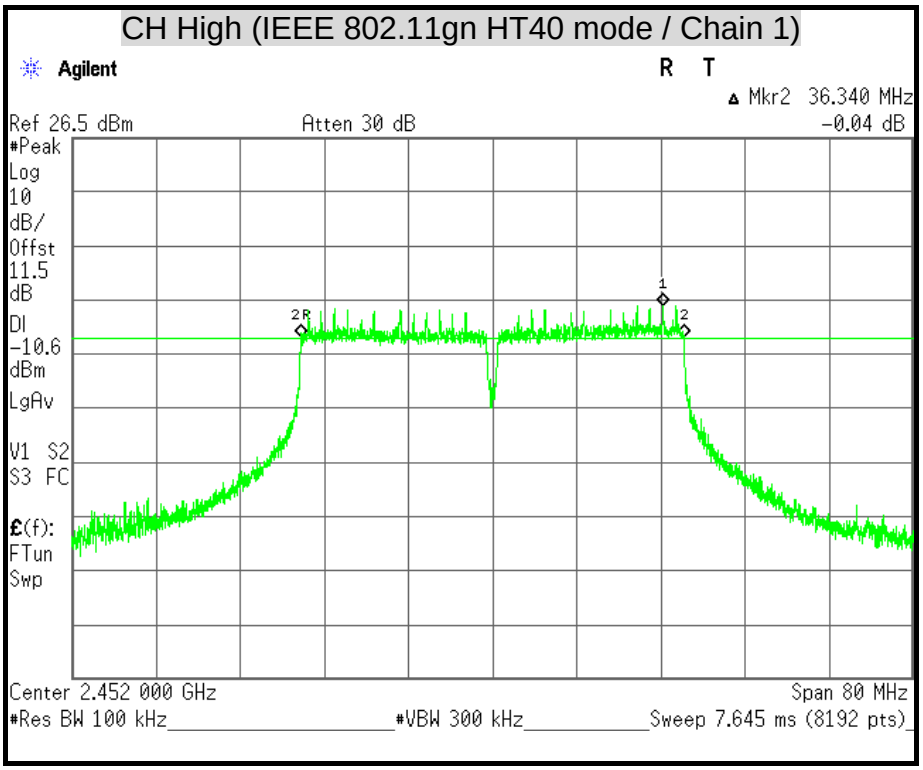
CH Low (IEEE 802.11gn HT40 mode / Chain 1)



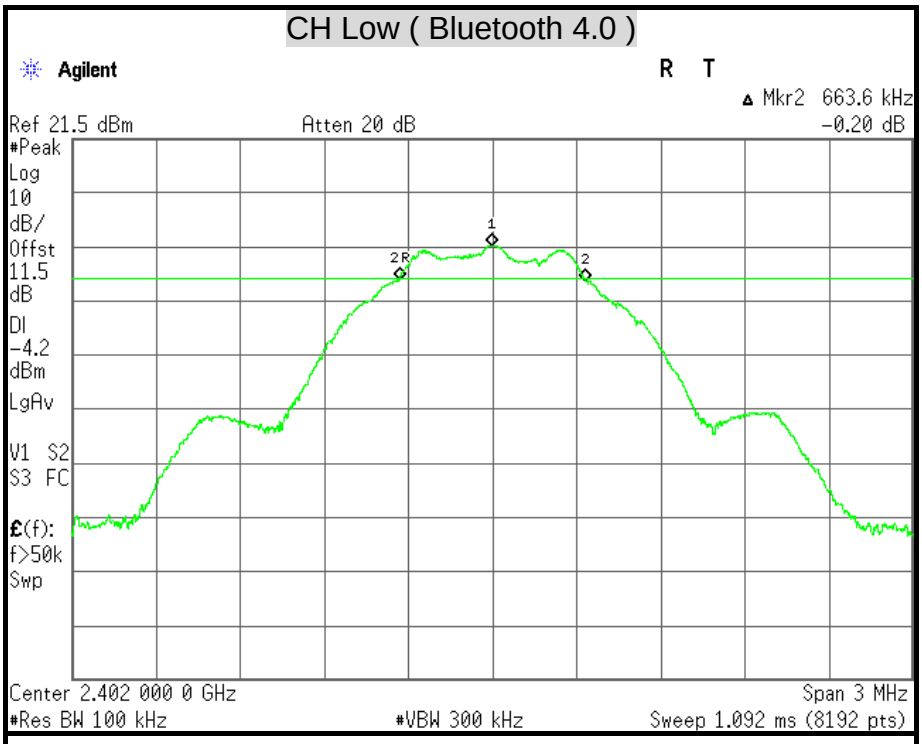
CH Middle (IEEE 802.11gn HT40 mode / Chain 1)



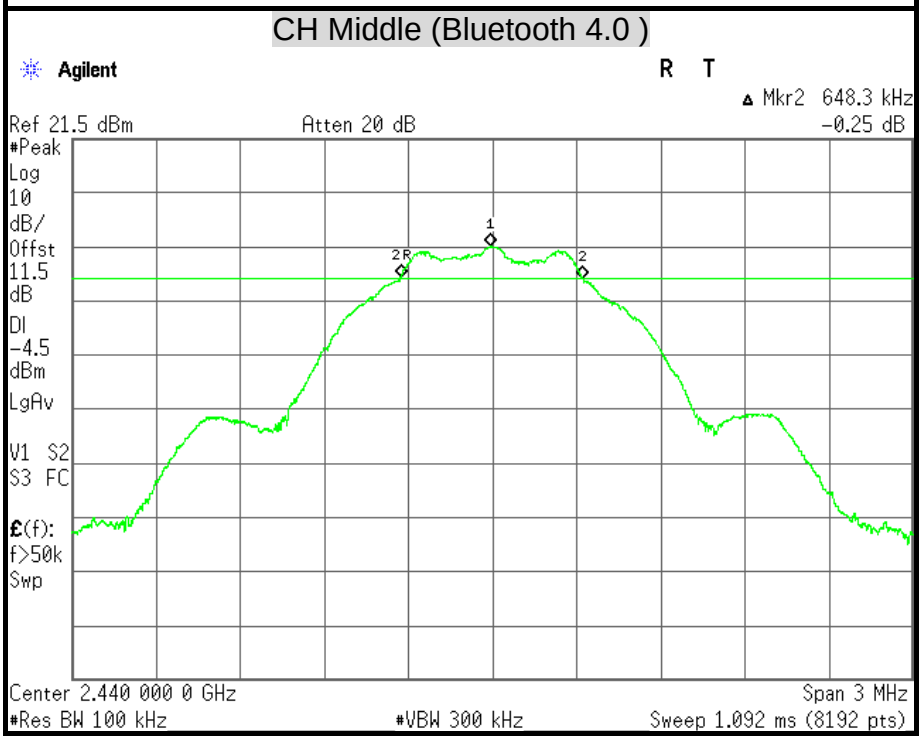
CH High (IEEE 802.11gn HT40 mode / Chain 1)



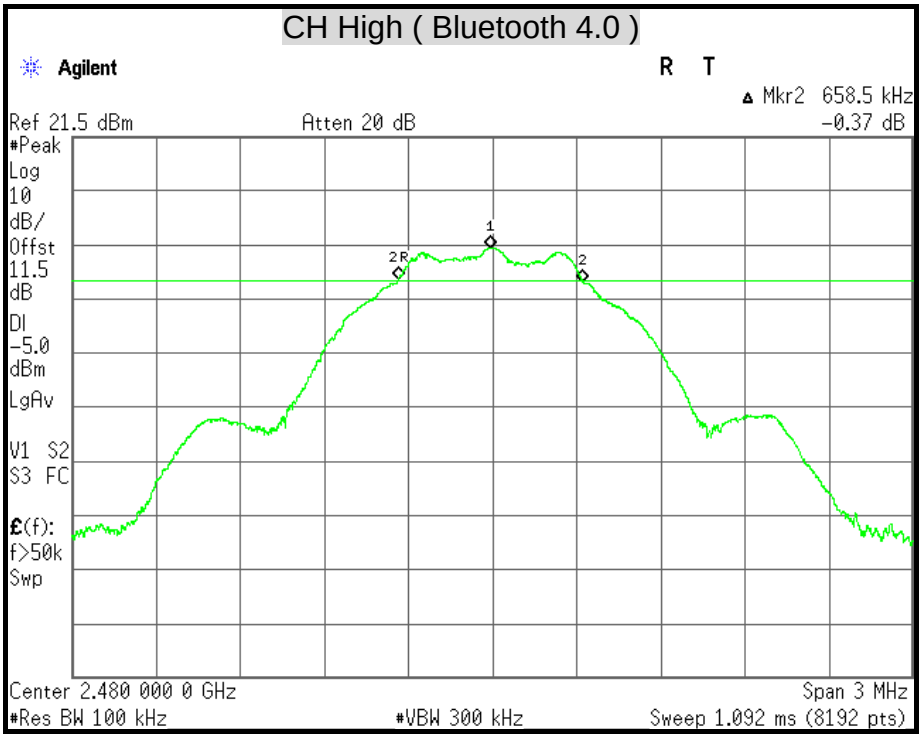
CH Low (Bluetooth 4.0)



CH Middle (Bluetooth 4.0)



CH High (Bluetooth 4.0)



7.2 MAXIMUM PEAK OUTPUT POWER

LIMITS

§ 15.247(b) The maximum peak output power of the intentional radiator shall not exceed the following:
§ 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.
§ 15.247(b) (4) Except as shown in paragraphs (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used the peak output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1) or (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

§ KDB 662911: For power measurements on IEEE 802.11 devices
Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;
Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT} ;
Array Gain = 5 log(N_{ANT}/N_{SS}) dB or 3 dB, whichever is less for 20-MHz channel widths with $N_{ANT} \geq 5$.

TEST EQUIPMENT

Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Power Meter	Anritsu	ML2495A	1149001	12/11/2015
Power Sensor	Anritsu	MA2411B	1126148	12/11/2015

Remark: *Each piece of equipment is scheduled for calibration once a year.*

TEST SETUP

TEST PROCEDURE

The transmitter output is connected to the power meter. The power meter is set to the peak power detection.

TEST RESULTS

IEEE 802.11b mode

Channel	Channel Frequency (MHz)	Peak Power Chain 0		Peak Power Limit		Pass / Fail
		(dBm)	(W)	(dBm)	(W)	
Low	2412	21.89	0.1545	30	1	PASS
Middle	2437	23.34	0.2158	30	1	PASS
High	2462	21.02	0.1265	30	1	PASS

Remark:
1. *At finial test to get the worst-case emission at 1Mbps.*
2. *The cable assembly insertion loss of 11.5 dB (including 10 dB pad and 1.5 dB cable) was entered as an offset in the power meter to allow for direct reading of power.*

IEEE 802.11g mode

Channel	Channel Frequency (MHz)	Peak Power Chain 0		Peak Power Limit		Pass / Fail
		(dBm)	(W)	(dBm)	(W)	
Low	2412	25.57	0.3606	30	1	PASS
Middle	2437	26.08	0.4055	30	1	PASS
High	2462	24.79	0.3013	30	1	PASS

Remark:
1. *At finial test to get the worst-case emission at 6Mbps.*
2. *The cable assembly insertion loss of 11.5 dB (including 10 dB pad and 1.5 dB cable) was entered as an offset in the power meter to allow for direct reading of power.*

IEEE 802.11gn HT20 mode

Channel	Channel Frequency (MHz)	Peak Power (dBm)		Peak Power Total		Peak Power Limit		Pass / Fail
		Chain 0	Chain 1	(dBm)	(W)	(dBm)	(W)	
Low	2412	23.63	22.51	26.12	0.4093	30	1	PASS
Middle	2437	24.98	24.30	27.66	0.5834	30	1	PASS
High	2462	17.90	19.54	21.81	0.1517	30	1	PASS

Remark:
1. *At finial test to get the worst-case emission at 6.5Mbps.*
2. *The cable assembly insertion loss of 11.5 dB (including 10 dB pad and 1.5 dB cable) was entered as an offset in the power meter to allow for direct reading of power.*
3. *Total peak power = Chain 0 + Chain 1.*
4. *Array gain = 0 dB for NANT ≤ 4, power limit do not reduce.*

IEEE 802.11gn HT40 mode

Channel	Channel Frequency (MHz)	Peak Power (dBm)		Peak Power Total		Peak Power Limit		Pass / Fail
		Chain 0	Chain 1	(dBm)	(W)	(dBm)	(W)	
Low	2422	21.52	20.20	23.92	0.2466	30	1	PASS
Middle	2437	22.61	21.57	25.13	0.3258	30	1	PASS
High	2452	18.10	17.84	20.98	0.1253	30	1	PASS

Remark:
1. *At finial test to get the worst-case emission at 13.5Mbps.*
2. *The cable assembly insertion loss of 11.5 dB (including 10 dB pad and 1.5 dB cable) was entered as an offset in the power meter to allow for direct reading of power.*
3. *Total peak power = Chain 0 + Chain 1.*
4. *Array gain = 0 dB for NANT ≤ 4, power limit do not reduce.*

Bluetooth 4.0 mode

Channel	Channel Frequency (MHz)	Peak Power Chain 0		Peak Power Limit		Pass / Fail
		(dBm)	(W)	(dBm)	(W)	
Low	2402	1.88	0.0015	30	1	PASS
Middle	2440	1.81	0.0015	30	1	PASS
High	2480	1.17	0.0013	30	1	PASS

Remark: *The cable assembly insertion loss of 11.5 dB (including 10 dB pad and 1.5 dB cable) was Entered as an offset in the power meter to allow for direct reading of power.*

7.3 AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST EQUIPMENT

Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Power Meter	ANRITSU	ML2495A	1149001	12/11/2015
Power Sensor	ANRITSU	MA2411B	1126148	12/11/2015

Remark: *Each piece of equipment is scheduled for calibration once a year.*

TEST SETUP

TEST PROCEDURE

The transmitter output is connected to the power meter. The power meter is set to the average power detection.

TEST RESULTS

IEEE 802.11b Mode

Channel	Channel Frequency (MHz)	Average Power (dBm)
		Chain 0
Low	2412	19.77
Middle	2437	21.22
High	2462	18.80

Remark:

1. At finial test to get the worst-case emission at 1Mbps.

2. The cable assembly insertion loss of 11.5 dB (including 10 dB pad and 1.5 dB cable) was Entered as an offset in the power meter to allow for direct reading of power.

IEEE 802.11g Mode

Channel	Channel Frequency (MHz)	Average Power (dBm)
		Chain 0
Low	2412	18.28
Middle	2437	19.91
High	2462	16.80

Remark:

1. At finial test to get the worst-case emission at 6Mbps.

2. The cable assembly insertion loss of 11.5 dB (including 10 dB pad and 1.5 dB cable) was Entered as an offset in the power meter to allow for direct reading of power.

IEEE 802.11gn HT20 Mode

Channel	Channel Frequency (MHz)	Average Power (dBm)	
		Chain 0	Chain 1
Low	2412	15.42	14.24
Middle	2437	17.21	16.01
High	2462	9.45	11.27

Remark:
1. *At finial test to get the worst-case emission at 6.5Mbps.*
2. *The cable assembly insertion loss of 11.5 dB (including 10 dB pad and 1.5 dB cable) was Entered as an offset in the power meter to allow for direct reading of power.*

IEEE 802.11gn HT40 Mode

Channel	Channel Frequency (MHz)	Average Power (dBm)	
		Chain 0	Chain 1
Low	2422	12.82	11.72
Middle	2437	14.07	12.96
High	2452	9.51	9.27

Remark:
1. *At finial test to get the worst-case emission at 13.5Mbps.*
2. *The cable assembly insertion loss of 11.5 dB (including 10 dB pad and 1.5 dB cable) was Entered as an offset in the power meter to allow for direct reading of power.*

Bluetooth 4.0 Mode

Channel	Channel Frequency (MHz)	Average Power (dBm)
		Chain 0
Low	2402	1.55
Middle	2440	1.49
High	2480	0.96

Remark: *The cable assembly insertion loss of 11.5 dB (including 10 dB pad and 1.5 dB cable) was Entered as an offset in the power meter to allow for direct reading of power.*

7.4 POWER SPECTRAL DENSITY

LIMITS

§ 15.247(e) For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

TEST EQUIPMENT

Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	E4446A	MY43360132	06/04/2016

Remark: *Each piece of equipment is scheduled for calibration once a year.*

TEST SETUP

TEST PROCEDURE

1. The transmitter output was connected to the spectrum analyzer.
2. Set analyzer center frequency to DTS channel center frequency.
3. Set the span to 1.5 times the DTS channel bandwidth.
4. Set the RBW to: 3 kHz ≤ RBW ≤ 100 kHz.
5. Set the VBW ≥ 3 x RBW.
6. Detector = peak.
7. Sweep time = auto couple.
8. Trace mode = max hold.
9. Allow trace to fully stabilize.
10. Use the peak marker function to determine the maximum amplitude level within the RBW.
11. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

TEST RESULTS

IEEE 802.11b mode

Channel	Channel Frequency (MHz)	Final RF Power Level in 3KHz BW (dBm)	Minimum Limit (dBm)	Pass / Fail
		Chain 0		
Low	2412	-3.68	8	PASS
Middle	2437	-3.12	8	PASS
High	2462	-4.62	8	PASS

Remark:

1. *At finial test to get the worst-case emission at 1Mbps.*
2. *The cable assembly insertion loss of 11.5 dB (including 10 dB pad and 1.5 dB cable) was entered as an offset in the spectrum analyzer to allow for direct reading of power.*

IEEE 802.11g mode

Channel	Channel Frequency (MHz)	Final RF Power Level in 3KHz BW (dBm)	Minimum Limit (dBm)	Pass / Fail
		Chain 0		
Low	2412	-7.00	8	PASS
Middle	2437	-5.84	8	PASS
High	2462	-7.63	8	PASS

Remark:

1. *At finial test to get the worst-case emission at 6Mbps.*
2. *The cable assembly insertion loss of 11.5 dB (including 10 dB pad and 1.5 dB cable) was entered as an offset in the spectrum analyzer to allow for direct reading of power.*

IEEE 802.11gn HT20 mode

Channel	Channel Frequency (MHz)	Final RF Power Level in 3KHz BW (dBm)		PSD Total (dBm)	Minimum Limit (dBm)	Pass / Fail
		Chain 0	Chain 1			
Low	2412	-10.15	-10.86	-7.48	8	PASS
Middle	2437	-8.45	-9.92	-6.11	8	PASS
High	2462	-15.94	-12.97	-11.20	8	PASS

Remark:

1. *At finial test to get the worst-case emission at 6.5Mbps.*
2. *The cable assembly insertion loss of 11.5 dB (including 10 dB pad and 1.5 dB cable) was entered as an offset in the spectrum analyzer to allow for direct reading of power.*
3. *Total power spectral density = Chain 0 + Chain 1*
4. *The maximum antenna gain is 4.92 dBi which is less than 6dBi, the limit should be 8dBm.*

IEEE 802.11gn HT40 mode

Channel	Channel Frequency (MHz)	Final RF Power Level in 3KHz BW (dBm)		PSD Total (dBm)	Minimum Limit (dBm)	Pass / Fail
		Chain 0	Chain 1			
Low	2422	-16.11	-17.71	-13.83	8	PASS
Middle	2437	-14.00	-14.83	-11.38	8	PASS
High	2452	-19.43	-19.93	-16.66	8	PASS

Remark:

1. *At finial test to get the worst-case emission at 13.5Mbps.*
2. *The cable assembly insertion loss of 11.5 dB (including 10 dB pad and 1.5 dB cable) was entered as an offset in the spectrum analyzer to allow for direct reading of power.*
3. *Total power spectral density = Chain 0 + Chain 1*
4. *The maximum antenna gain is 4.92 dBi which is less than 6dBi, the limit should be 8dBm.*

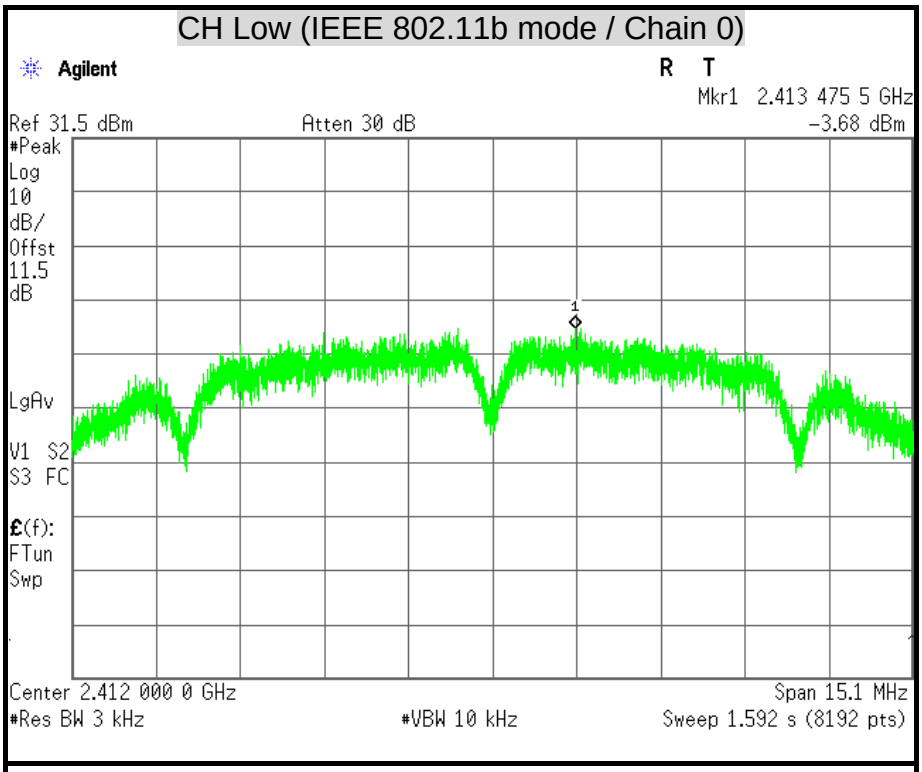
Bluetooth 4.0 mode

Channel	Channel Frequency (MHz)	Final RF Power Level in 3KHz BW (dBm)	Minimum Limit (dBm)	Pass / Fail
		Chain 0		
Low	2402	-8.01	8	PASS
Middle	2440	-8.19	8	PASS
High	2480	-8.68	8	PASS

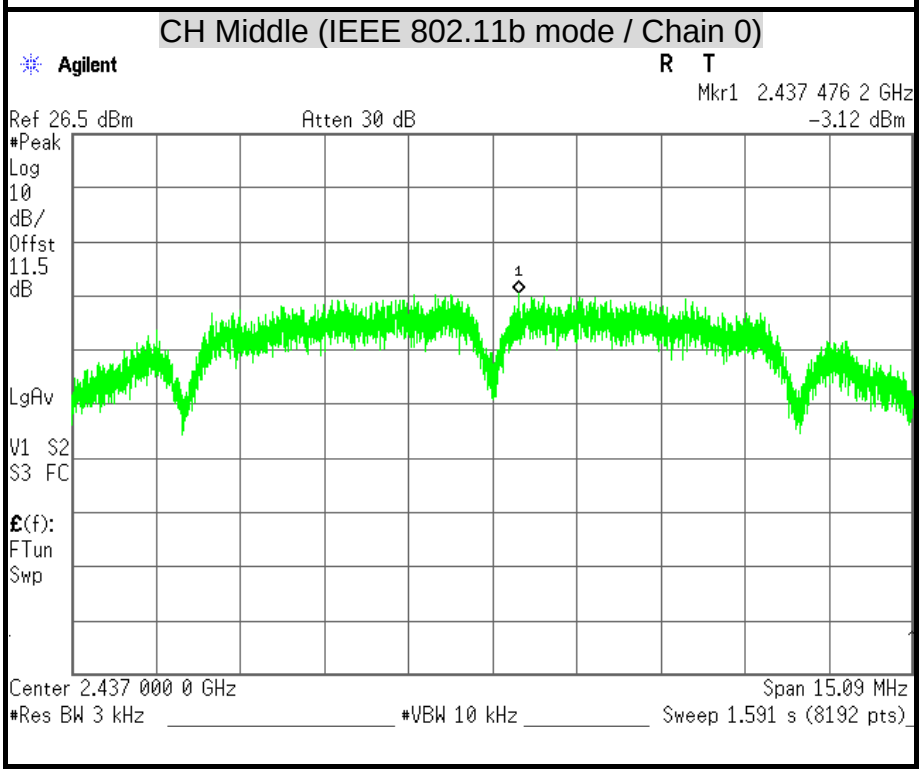
Remark: *The cable assembly insertion loss of 11.5 dB (including 10 dB pad and 1.5 dB cable) was entered as an offset in the spectrum analyzer to allow for direct reading of power.*

POWER SPECTRAL DENSITY

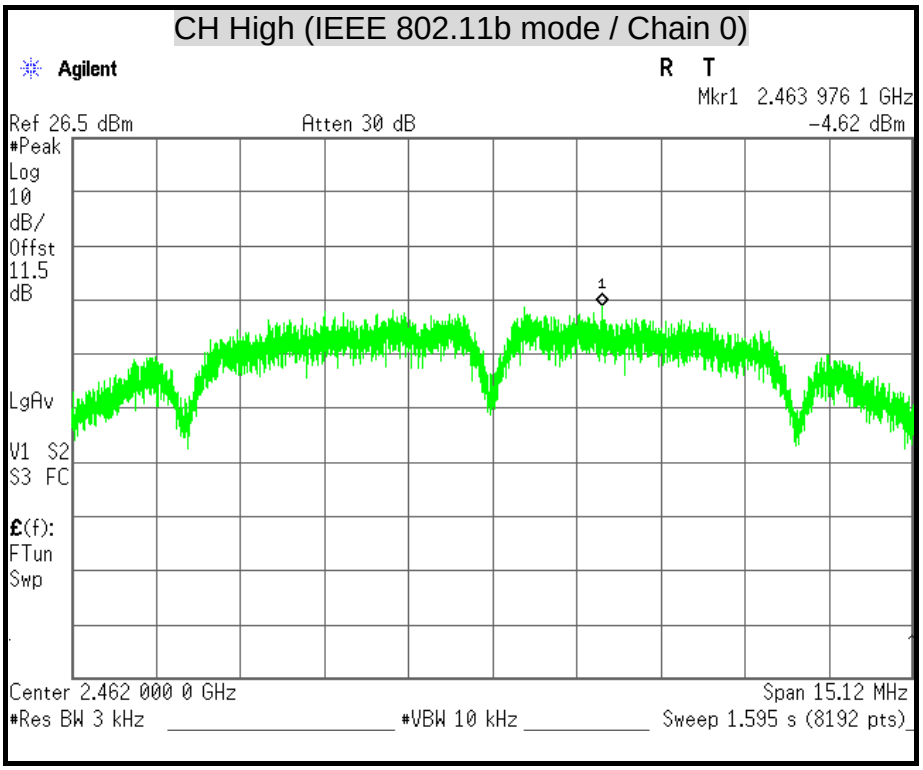
CH Low (IEEE 802.11b mode / Chain 0)



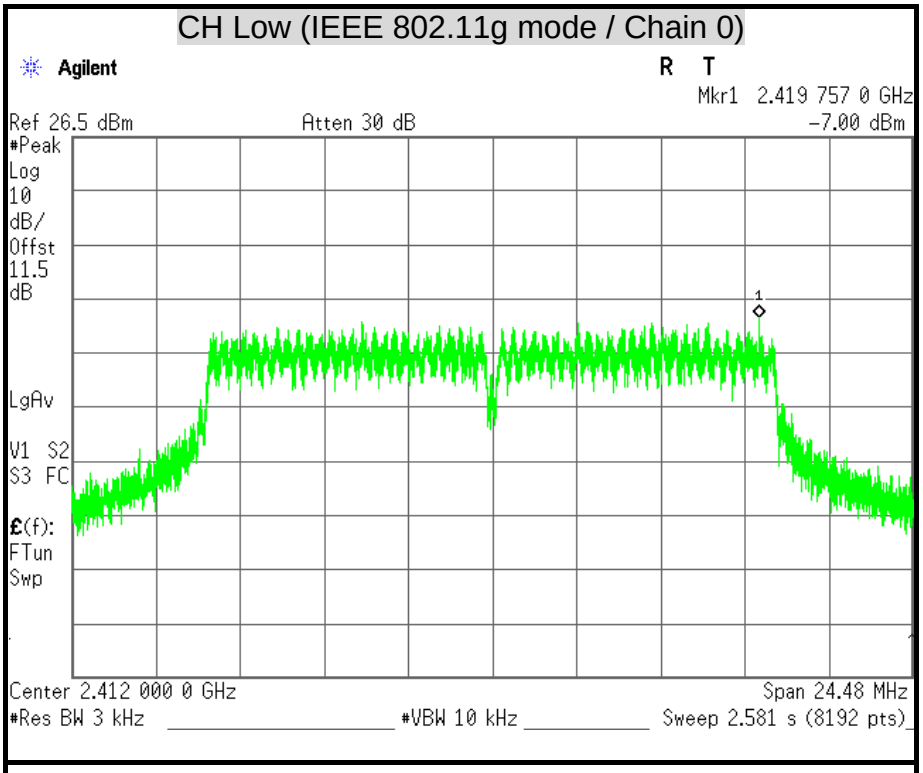
CH Middle (IEEE 802.11b mode / Chain 0)



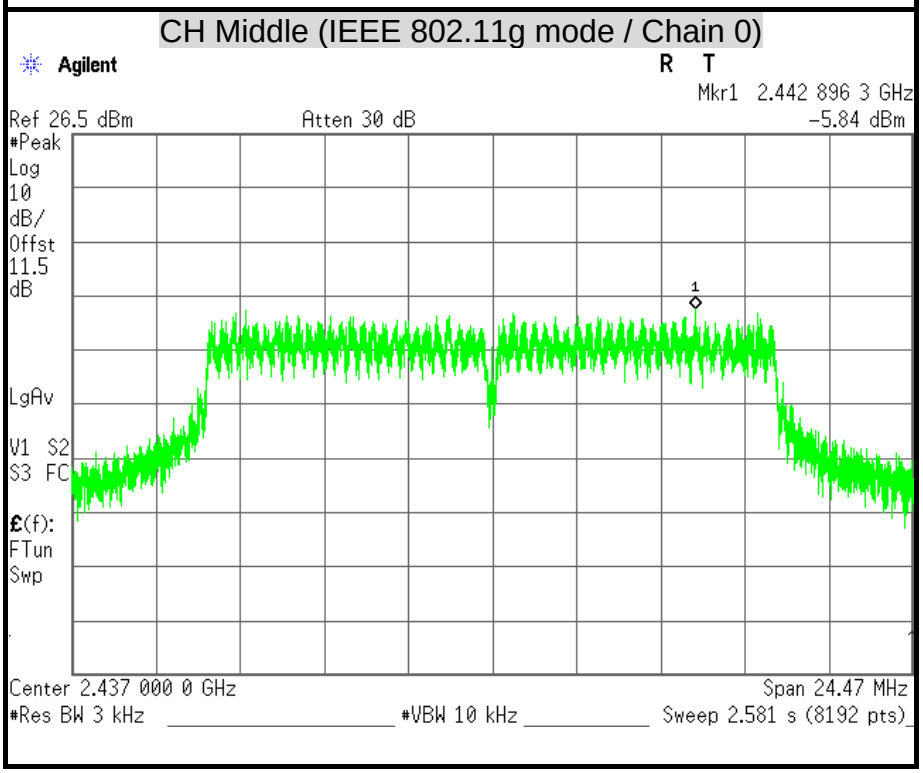
CH High (IEEE 802.11b mode / Chain 0)



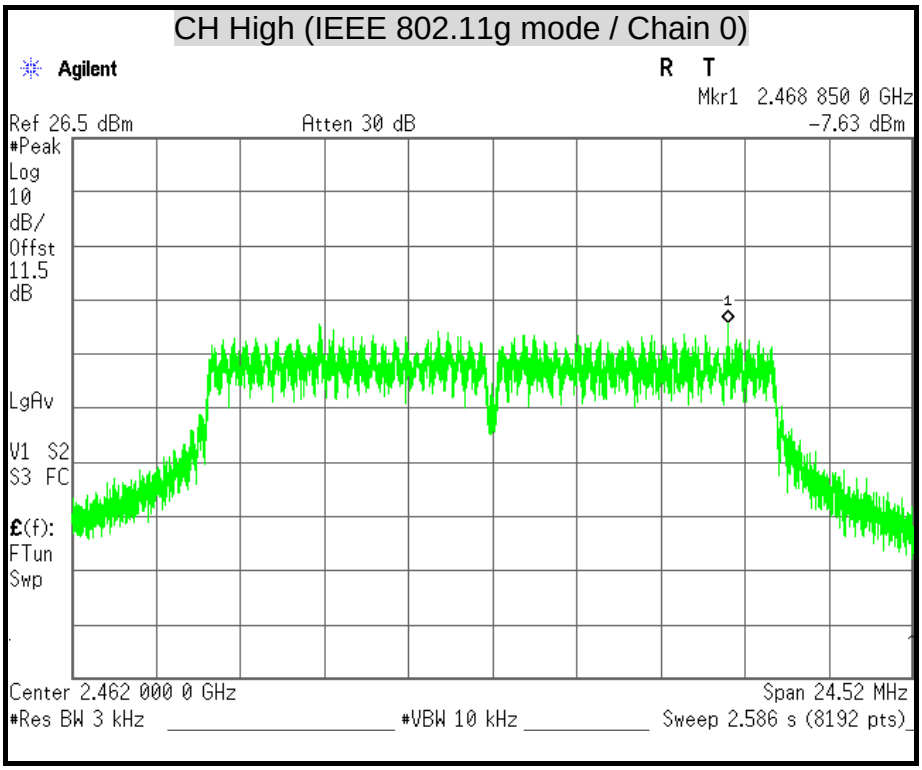
CH Low (IEEE 802.11g mode / Chain 0)



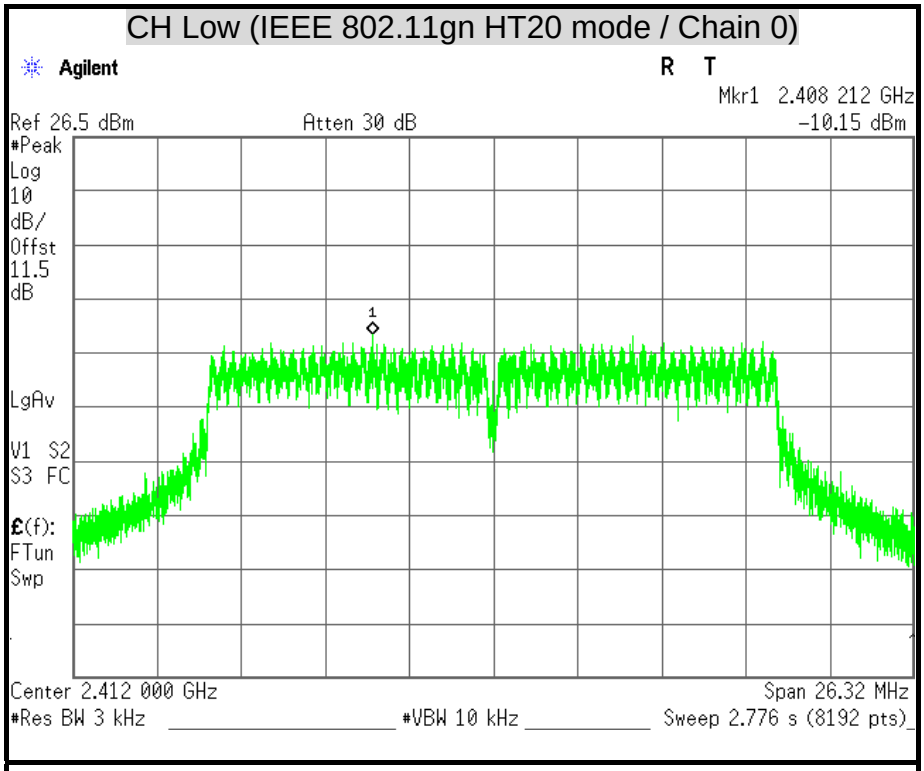
CH Middle (IEEE 802.11g mode / Chain 0)



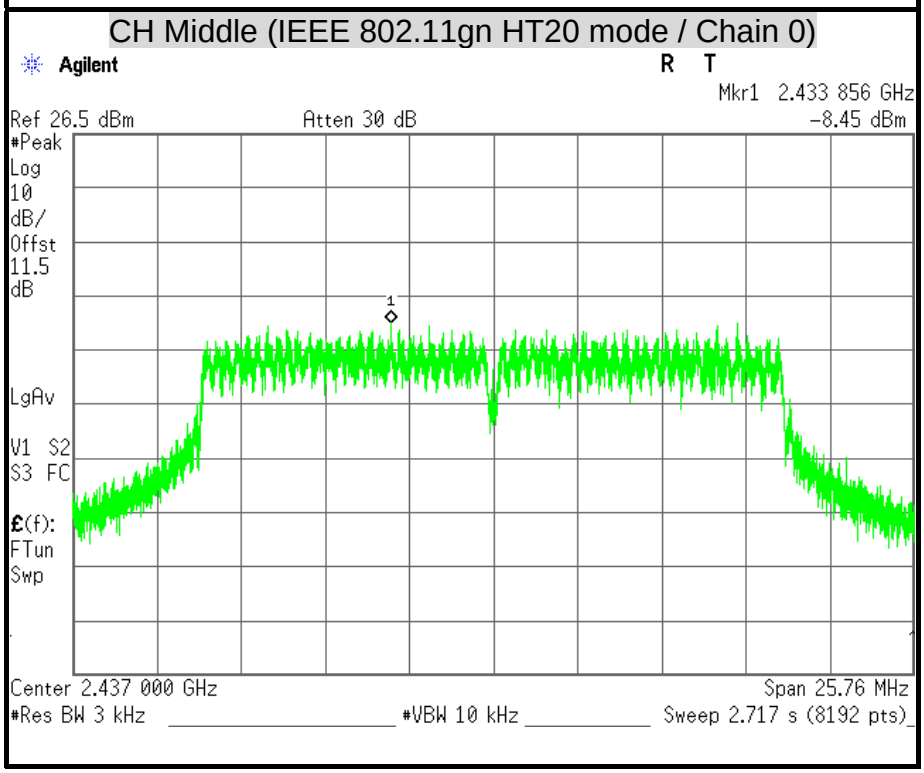
CH High (IEEE 802.11g mode / Chain 0)



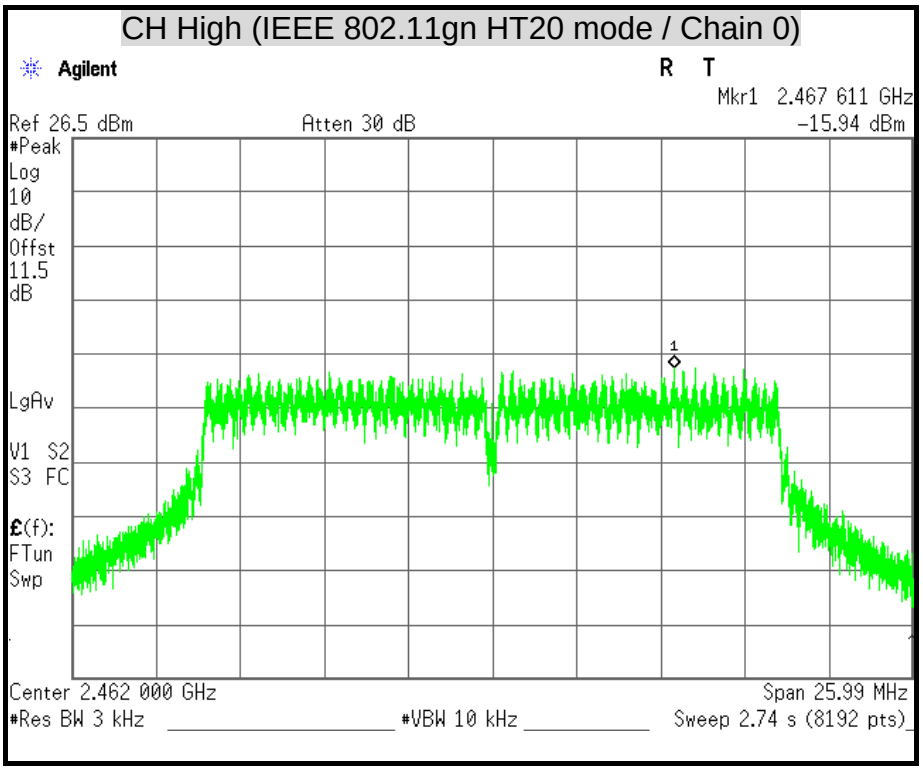
CH Low (IEEE 802.11gn HT20 mode / Chain 0)



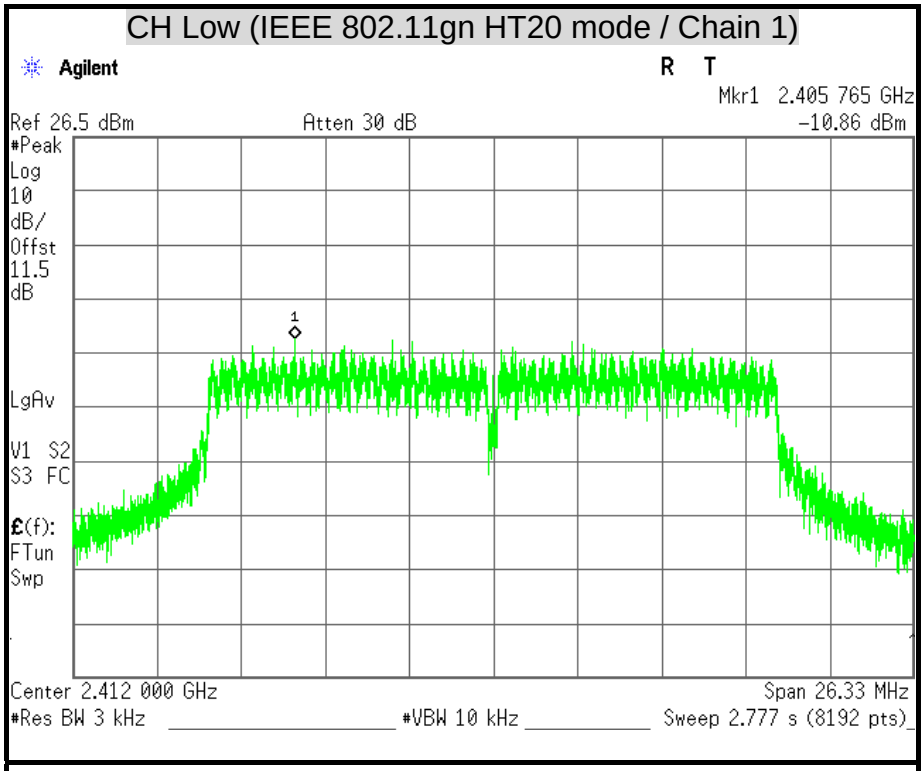
CH Middle (IEEE 802.11gn HT20 mode / Chain 0)



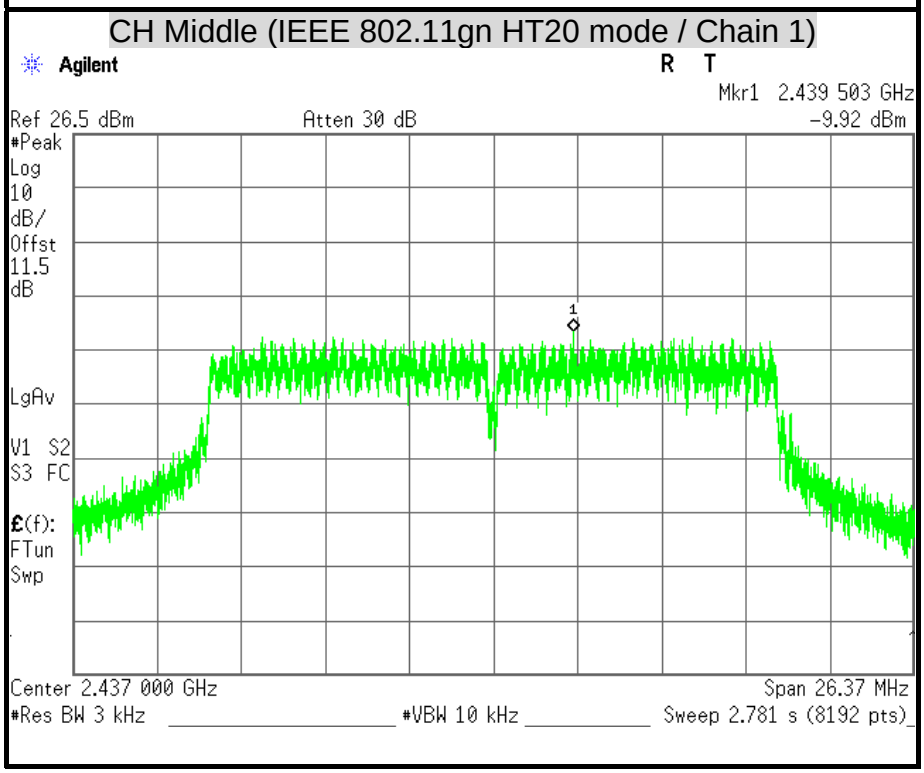
CH High (IEEE 802.11gn HT20 mode / Chain 0)



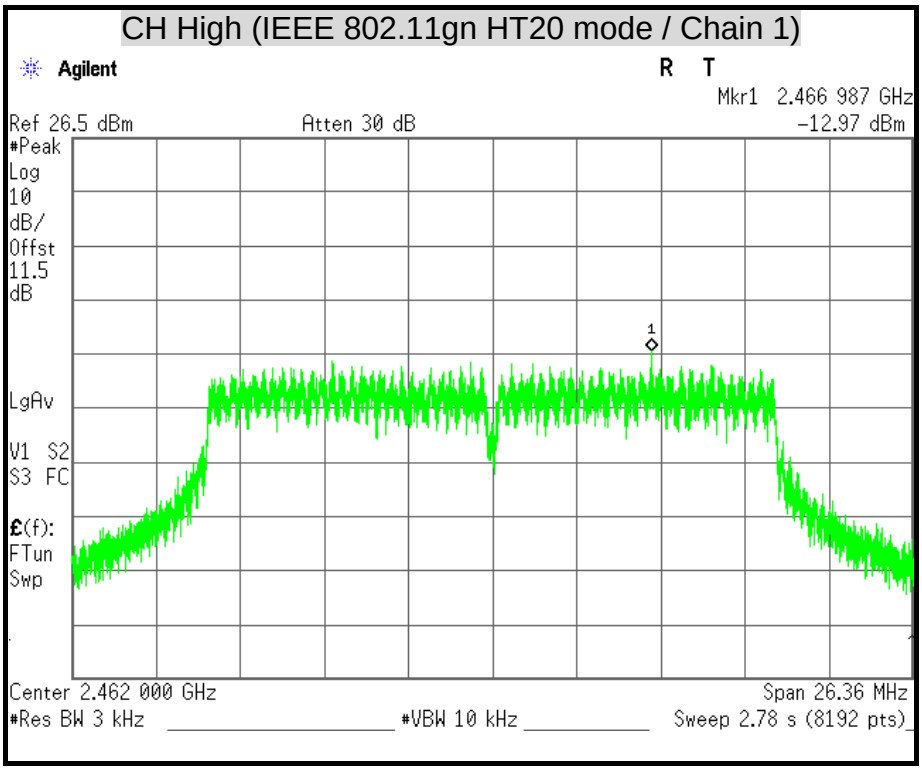
CH Low (IEEE 802.11gn HT20 mode / Chain 1)



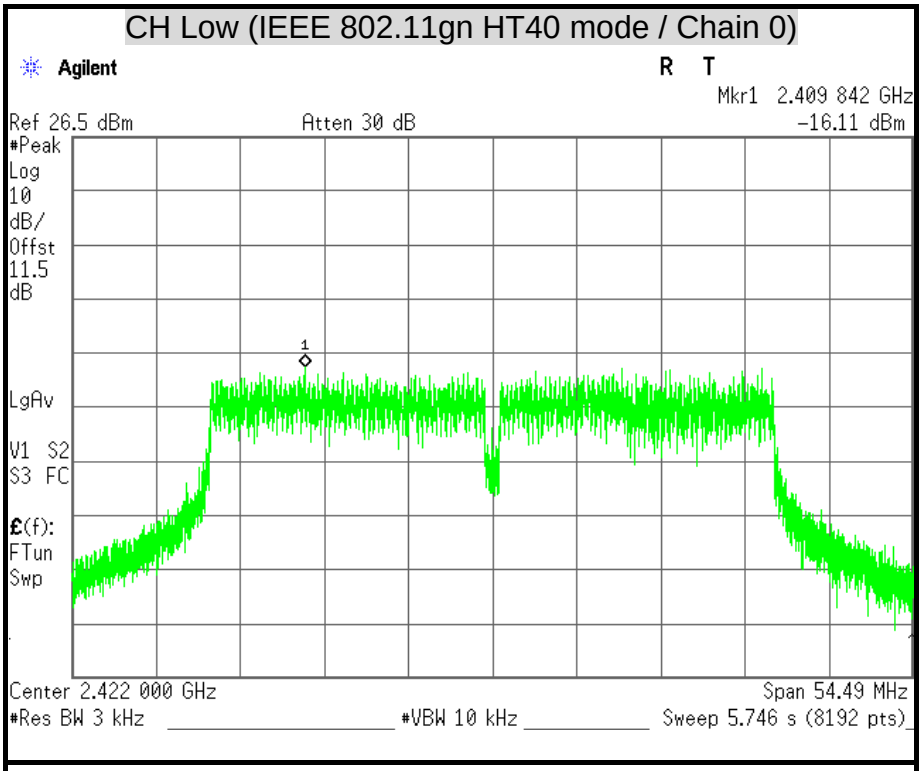
CH Middle (IEEE 802.11gn HT20 mode / Chain 1)



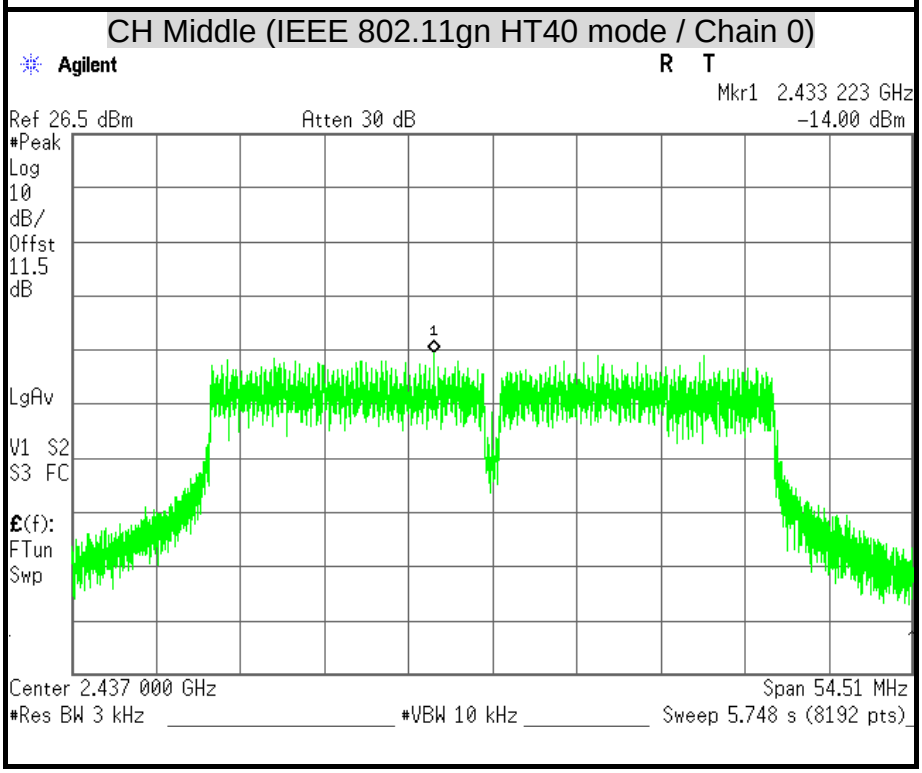
CH High (IEEE 802.11gn HT20 mode / Chain 1)



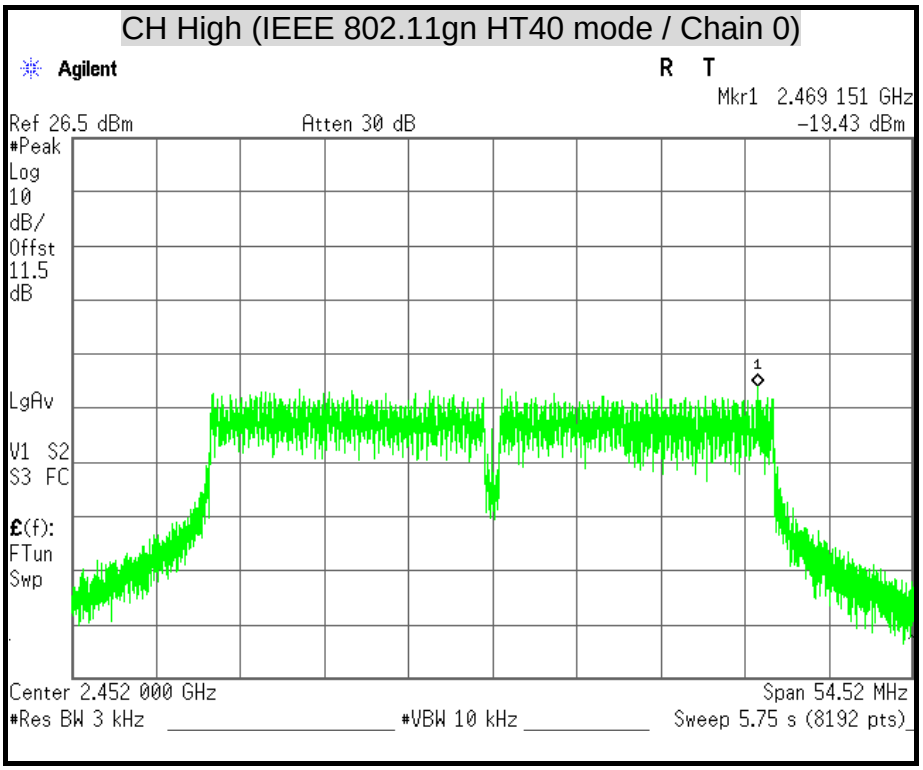
CH Low (IEEE 802.11gn HT40 mode / Chain 0)



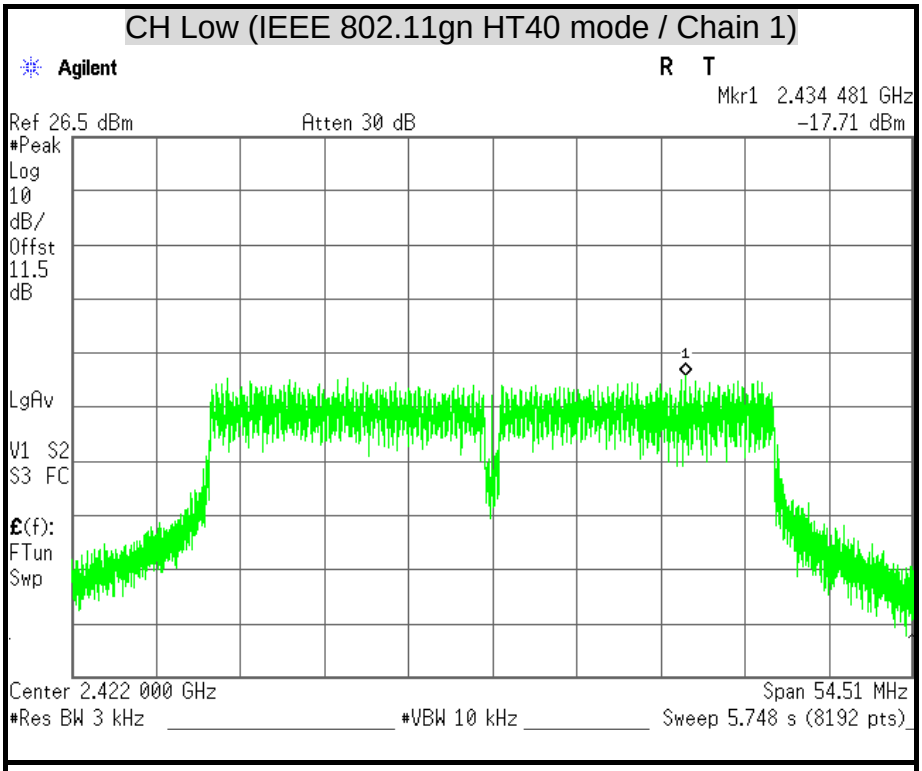
CH Middle (IEEE 802.11gn HT40 mode / Chain 0)



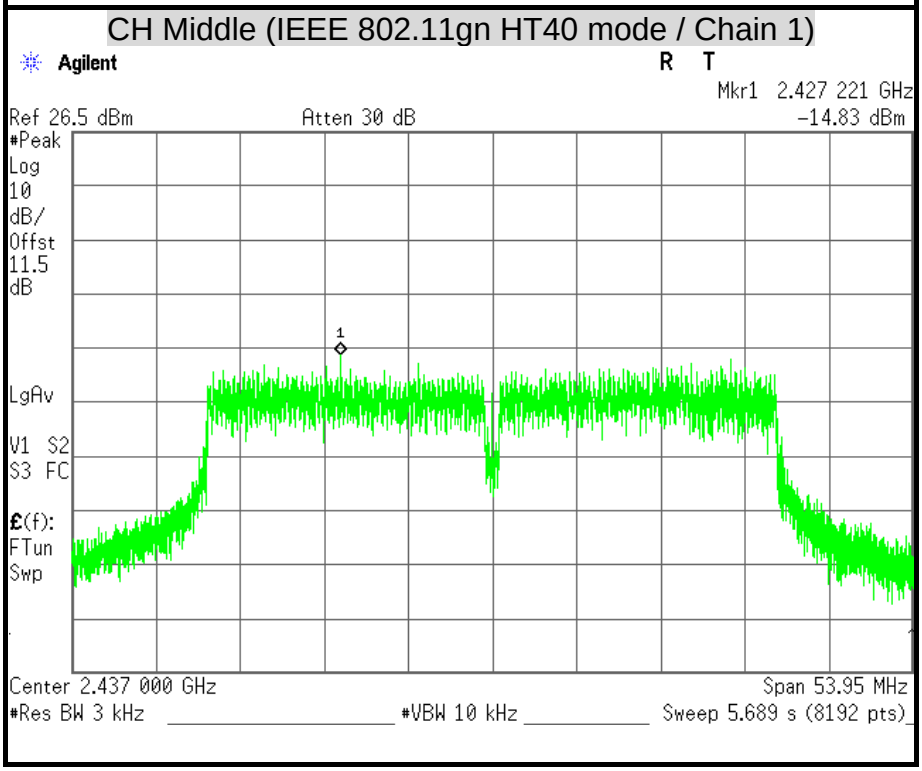
CH High (IEEE 802.11gn HT40 mode / Chain 0)



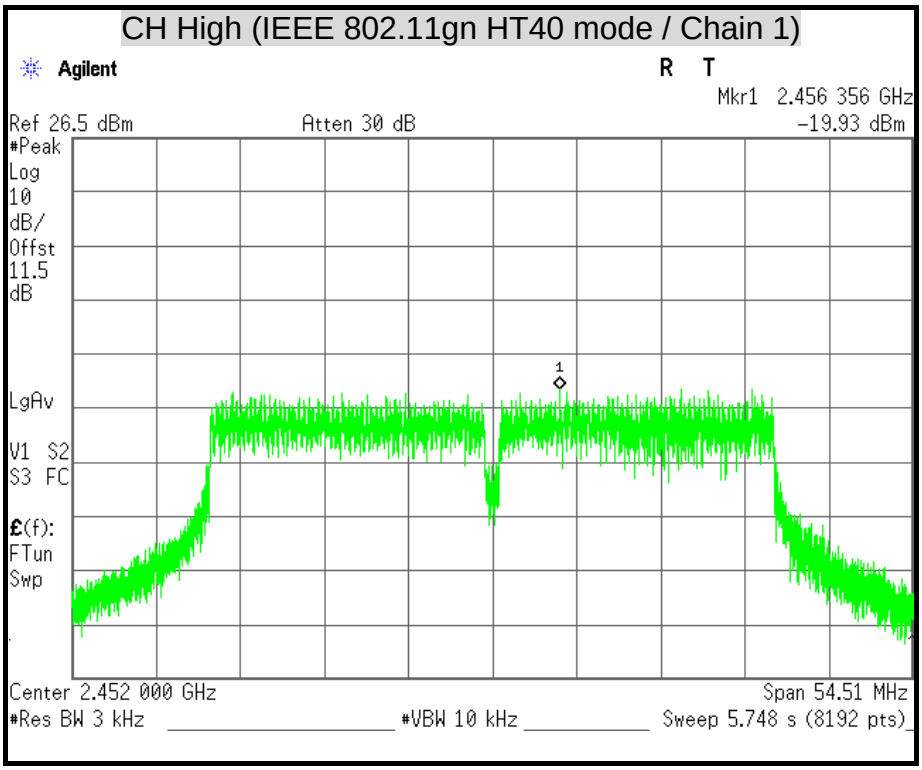
CH Low (IEEE 802.11gn HT40 mode / Chain 1)



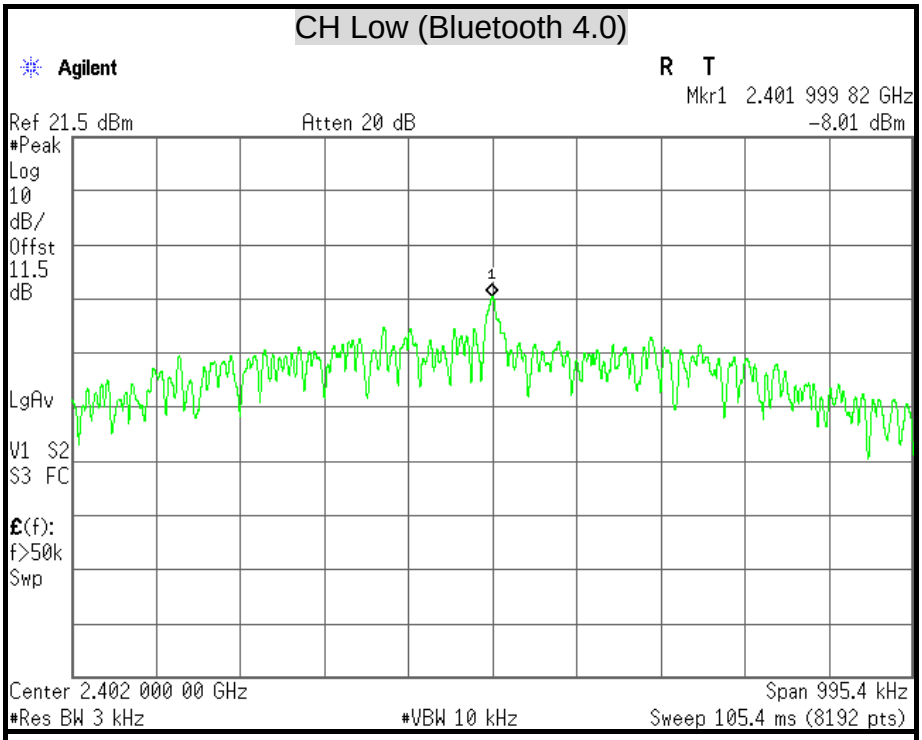
CH Middle (IEEE 802.11gn HT40 mode / Chain 1)



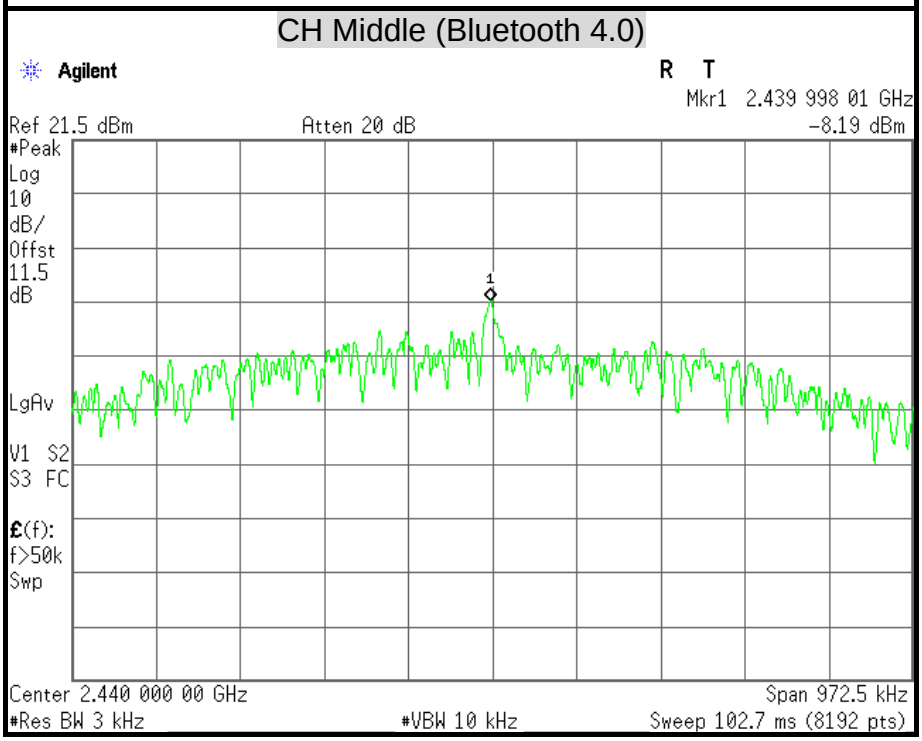
CH High (IEEE 802.11gn HT40 mode / Chain 1)



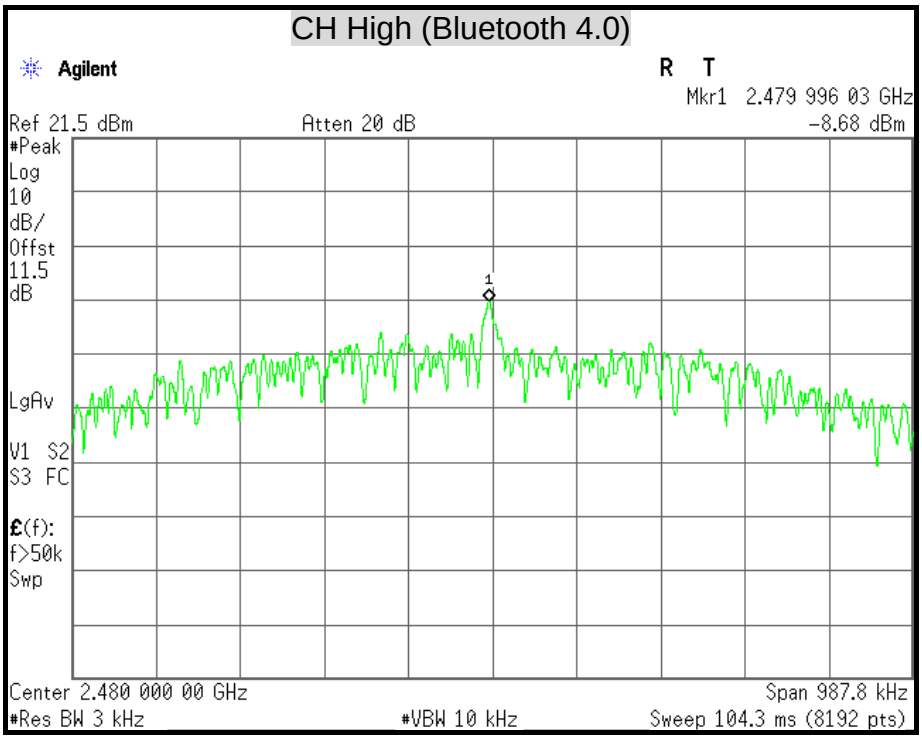
CH Low (Bluetooth 4.0)



CH Middle (Bluetooth 4.0)



CH High (Bluetooth 4.0)



7.5 CONDUCTED SPURIOUS EMISSION

LIMITS

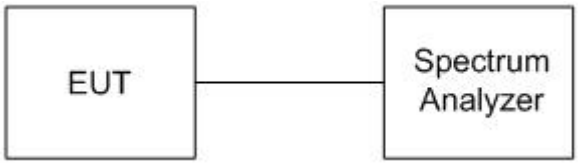
§ 15.247(d) In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the and that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in § 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 EQUIPMENT

Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	E4446A	MY43360132	06/04/2016

Remark: *Each piece of equipment is scheduled for calibration once a year.*

TEST SETUP



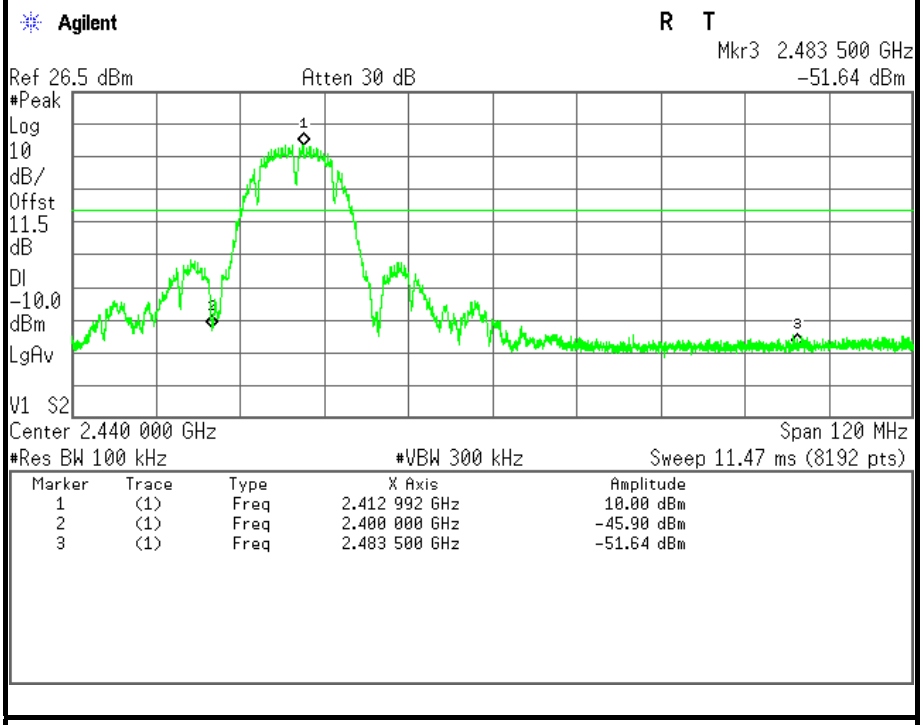
TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 300 kHz.
The spectrum from 30 MHz to 26.5 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in the 2.4 GHz band.

TEST RESULTS

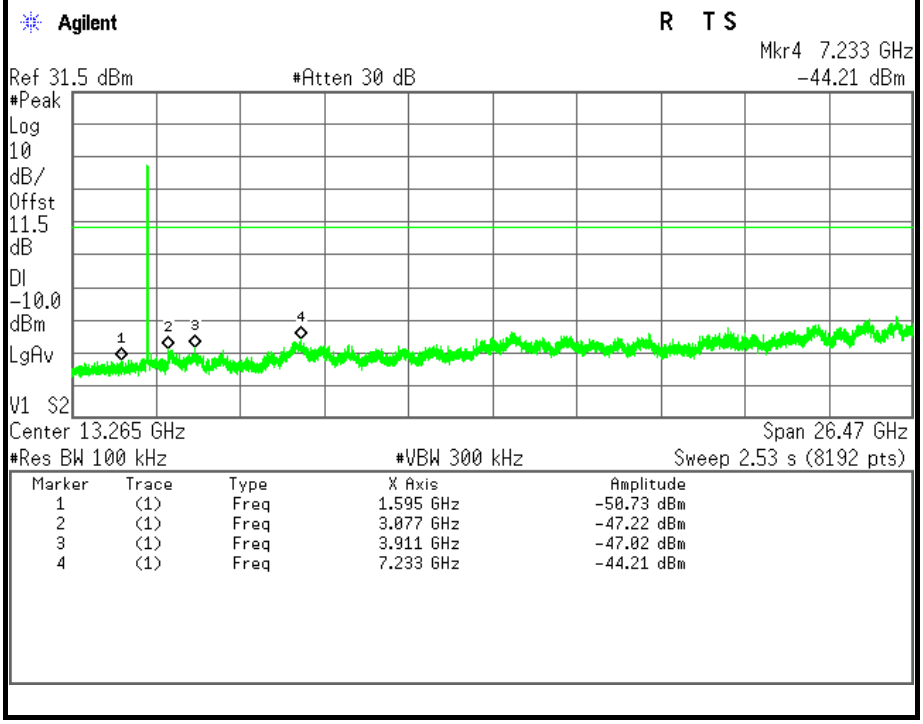
OUT-OF-BAND SPURIOUS EMISSIONS-CONDUCTED MEASUREMENT

CH Low (2.38GHz ~ 2.5GHz / IEEE 802.11b mode / Chain 0)



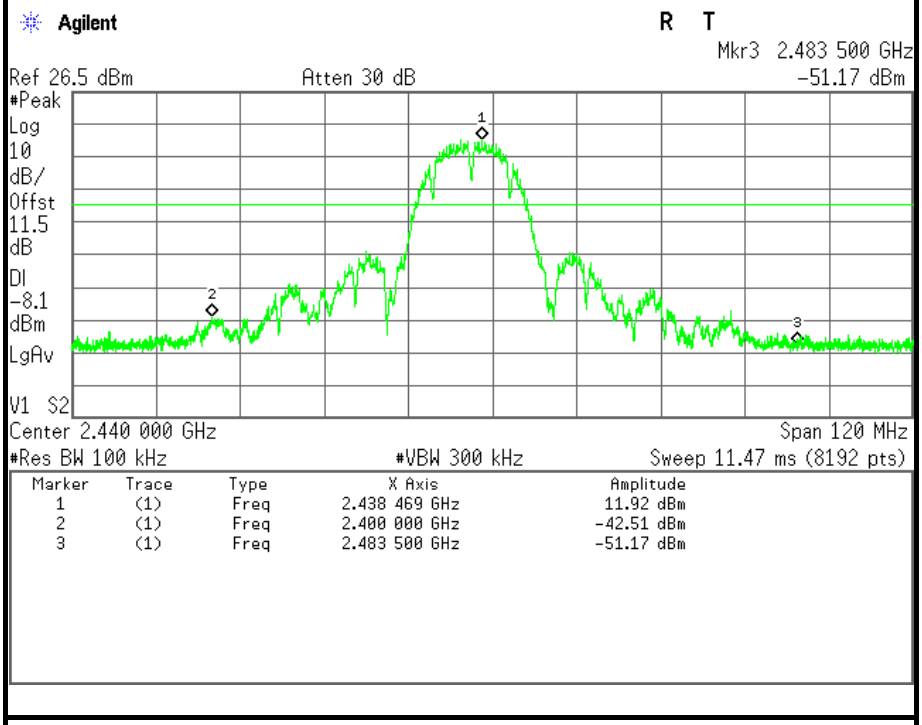
Marker	Trace	Type	X Axis	Amplitude
1	(1)	Freq	2.412 992 GHz	10.00 dBm
2	(1)	Freq	2.400 000 GHz	-45.90 dBm
3	(1)	Freq	2.483 500 GHz	-51.64 dBm

CH Low (30MHz ~ 26GHz / IEEE 802.11b mode / Chain 0)

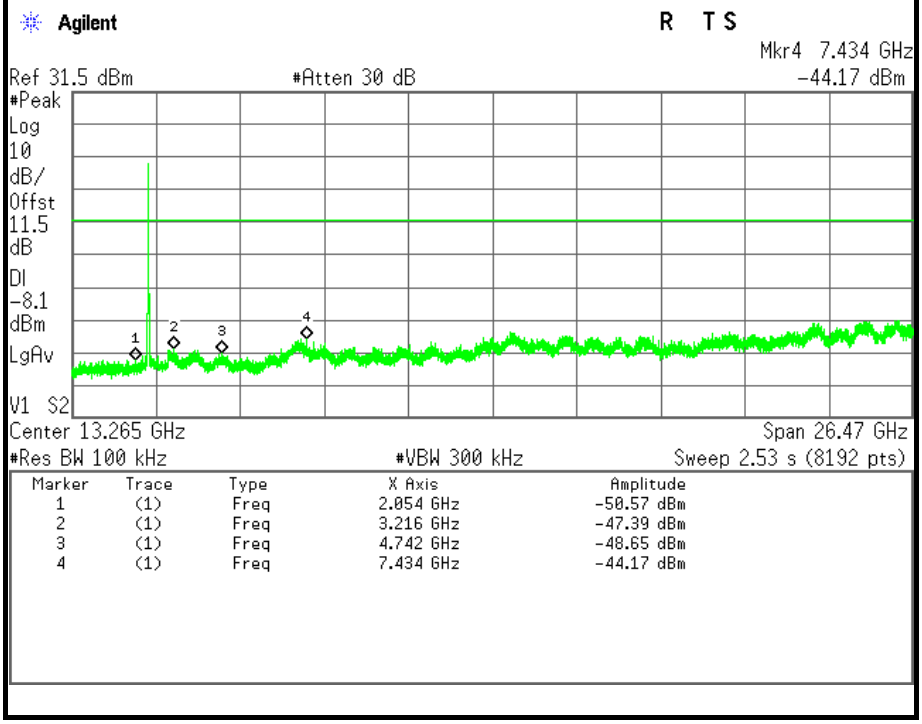


Marker	Trace	Type	X Axis	Amplitude
1	(1)	Freq	1.595 GHz	-50.73 dBm
2	(1)	Freq	3.077 GHz	-47.22 dBm
3	(1)	Freq	3.911 GHz	-47.02 dBm
4	(1)	Freq	7.233 GHz	-44.21 dBm

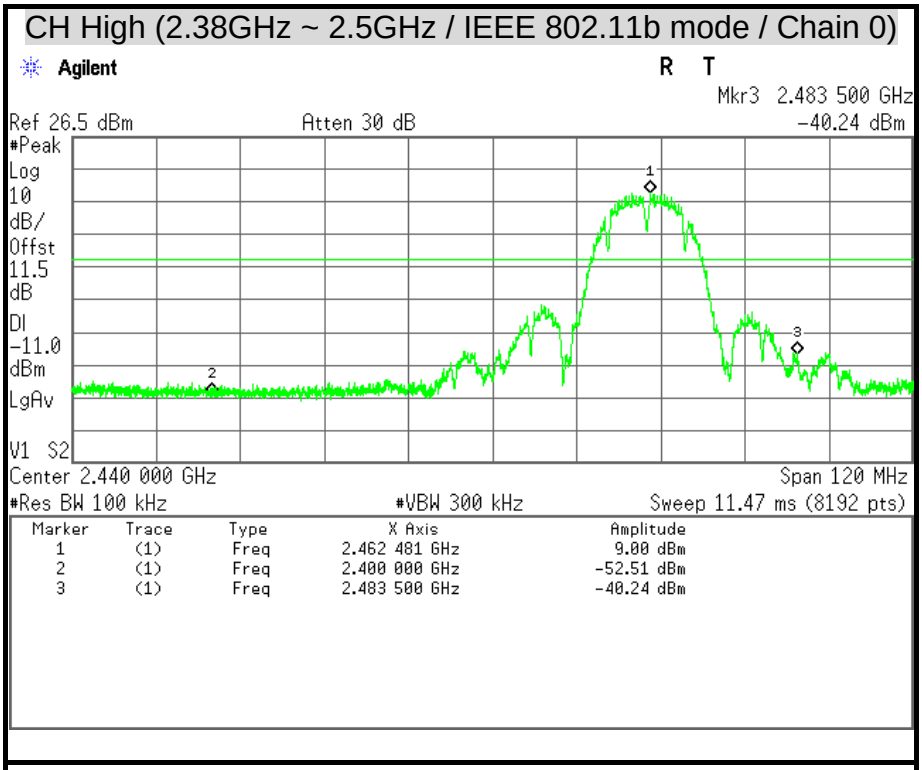
CH Middle (2.38GHz ~ 2.5GHz / IEEE 802.11b mode / Chain 0)



CH Middle (30MHz ~ 26GHz / IEEE 802.11b mode / Chain 0)

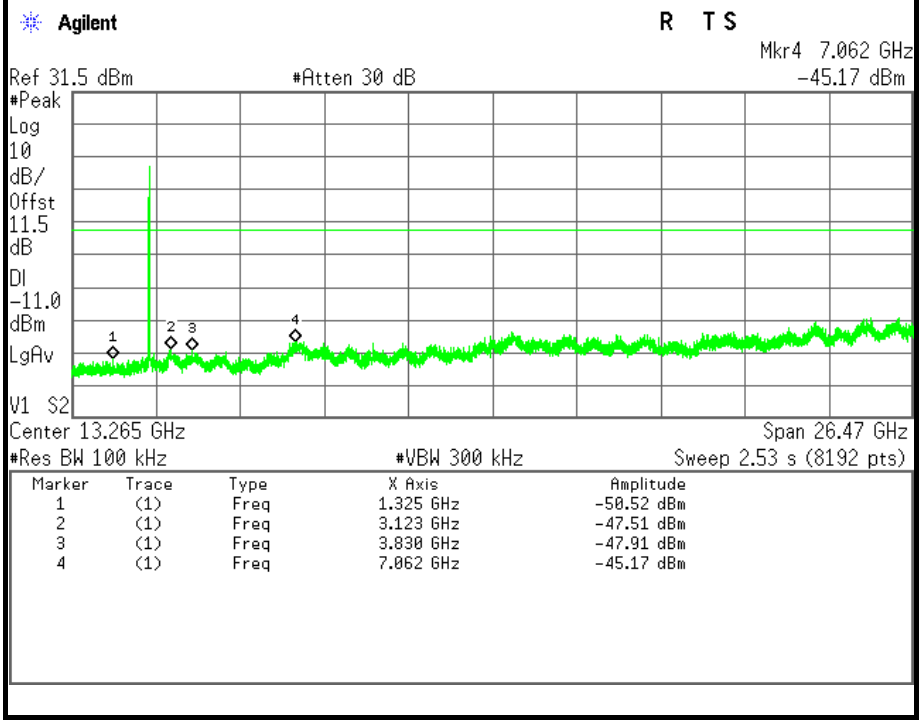


CH High (2.38GHz ~ 2.5GHz / IEEE 802.11b mode / Chain 0)



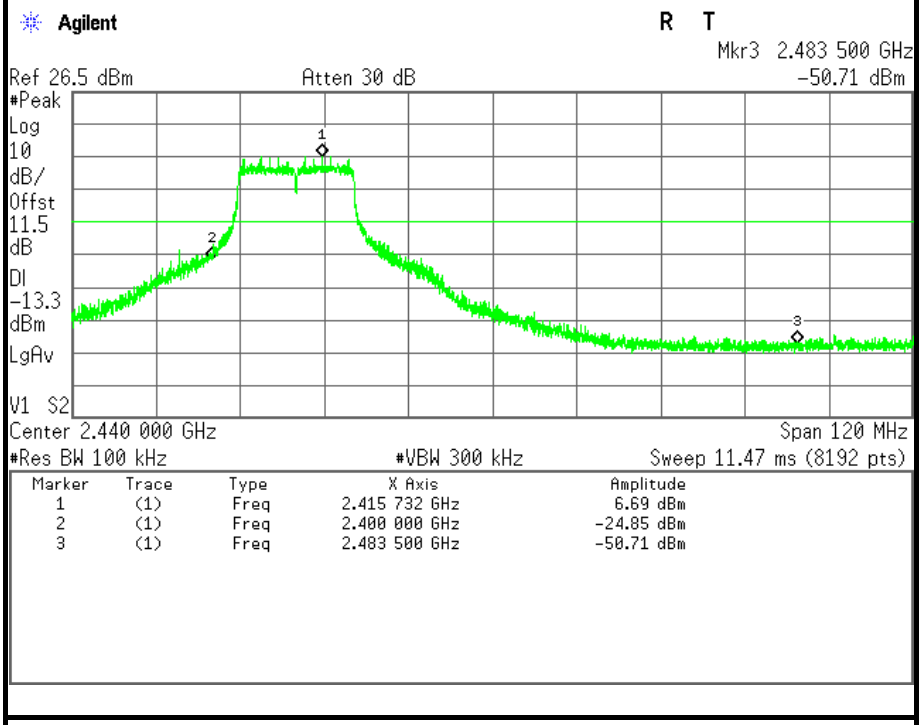
Marker	Trace	Type	X Axis	Amplitude
1	(1)	Freq	2.462 481 GHz	9.00 dBm
2	(1)	Freq	2.400 000 GHz	-52.51 dBm
3	(1)	Freq	2.483 500 GHz	-40.24 dBm

CH High (30MHz ~ 26GHz / IEEE 802.11b mode / Chain 0)



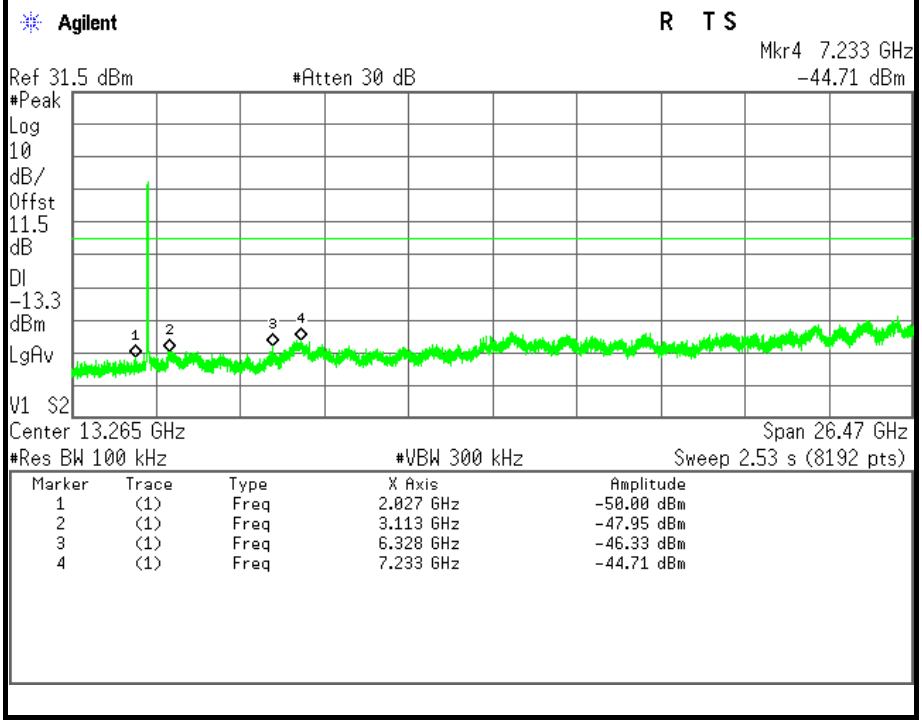
Marker	Trace	Type	X Axis	Amplitude
1	(1)	Freq	1.325 GHz	-50.52 dBm
2	(1)	Freq	3.123 GHz	-47.51 dBm
3	(1)	Freq	3.830 GHz	-47.91 dBm
4	(1)	Freq	7.062 GHz	-45.17 dBm

CH Low (2.38GHz ~ 2.5GHz / IEEE 802.11g mode / Chain 0)



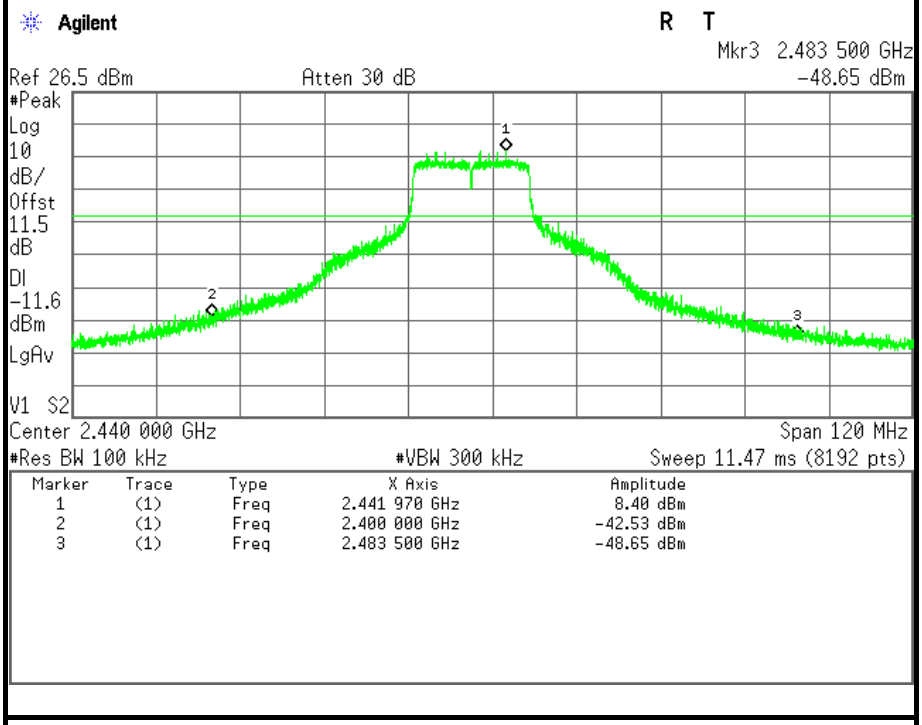
Marker	Trace	Type	X Axis	Amplitude
1	(1)	Freq	2.415 732 GHz	6.69 dBm
2	(1)	Freq	2.400 000 GHz	-24.85 dBm
3	(1)	Freq	2.483 500 GHz	-50.71 dBm

CH Low (30MHz ~ 26GHz / IEEE 802.11g mode / Chain 0)



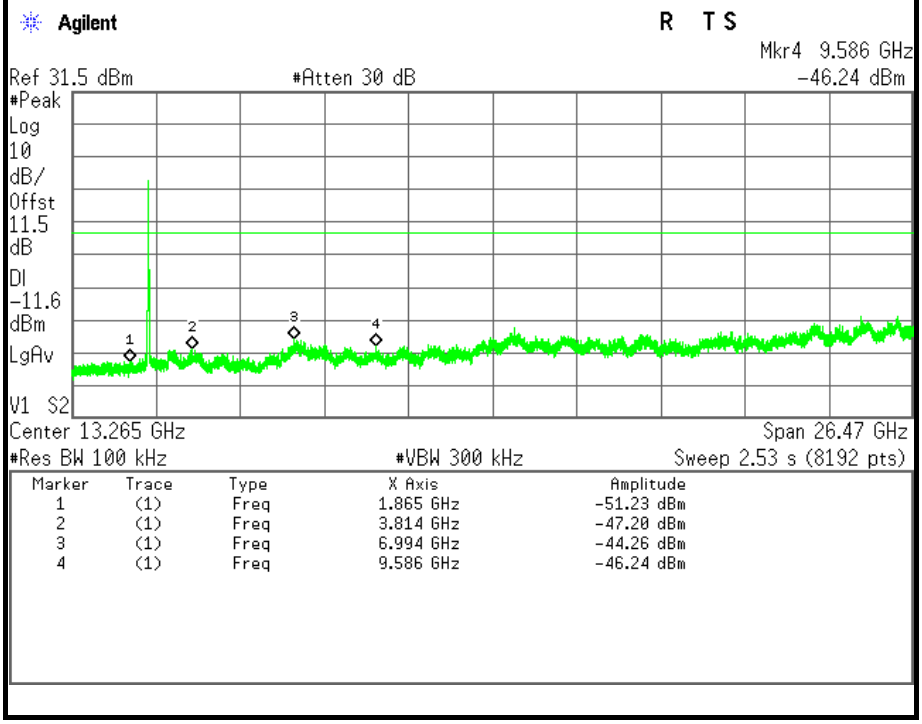
Marker	Trace	Type	X Axis	Amplitude
1	(1)	Freq	2.027 GHz	-50.00 dBm
2	(1)	Freq	3.113 GHz	-47.95 dBm
3	(1)	Freq	6.328 GHz	-46.33 dBm
4	(1)	Freq	7.233 GHz	-44.71 dBm

CH Middle (2.38GHz ~ 2.5GHz / IEEE 802.11g mode / Chain 0)



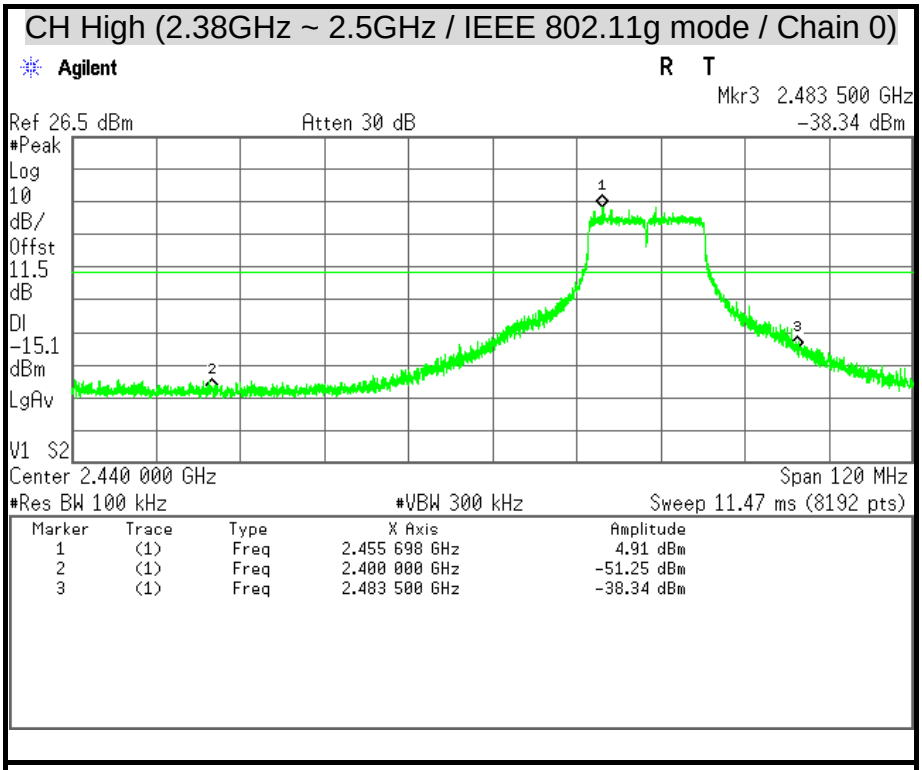
Marker	Trace	Type	X Axis	Amplitude
1	(1)	Freq	2.441 970 GHz	8.40 dBm
2	(1)	Freq	2.400 000 GHz	-42.53 dBm
3	(1)	Freq	2.483 500 GHz	-48.65 dBm

CH Middle (30MHz ~ 26GHz / IEEE 802.11g mode / Chain 0)

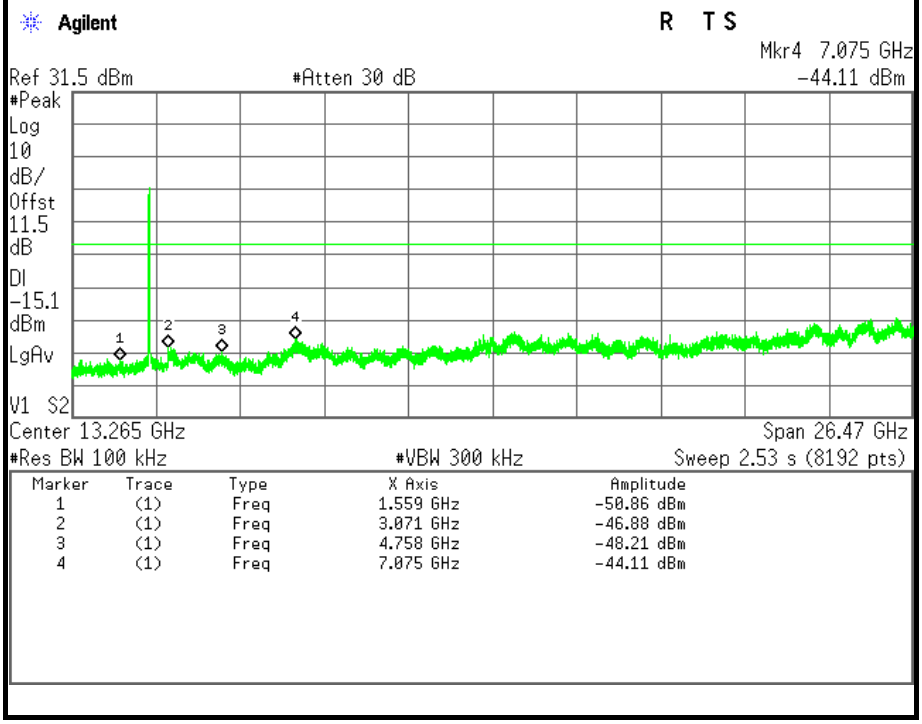


Marker	Trace	Type	X Axis	Amplitude
1	(1)	Freq	1.865 GHz	-51.23 dBm
2	(1)	Freq	3.814 GHz	-47.20 dBm
3	(1)	Freq	6.994 GHz	-44.26 dBm
4	(1)	Freq	9.586 GHz	-46.24 dBm

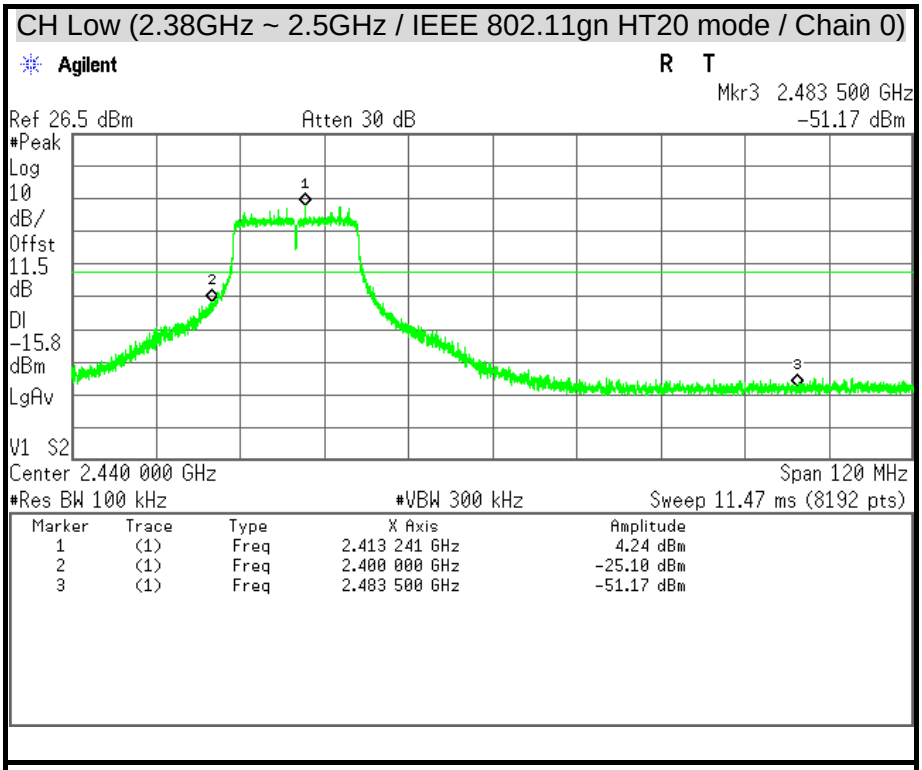
CH High (2.38GHz ~ 2.5GHz / IEEE 802.11g mode / Chain 0)



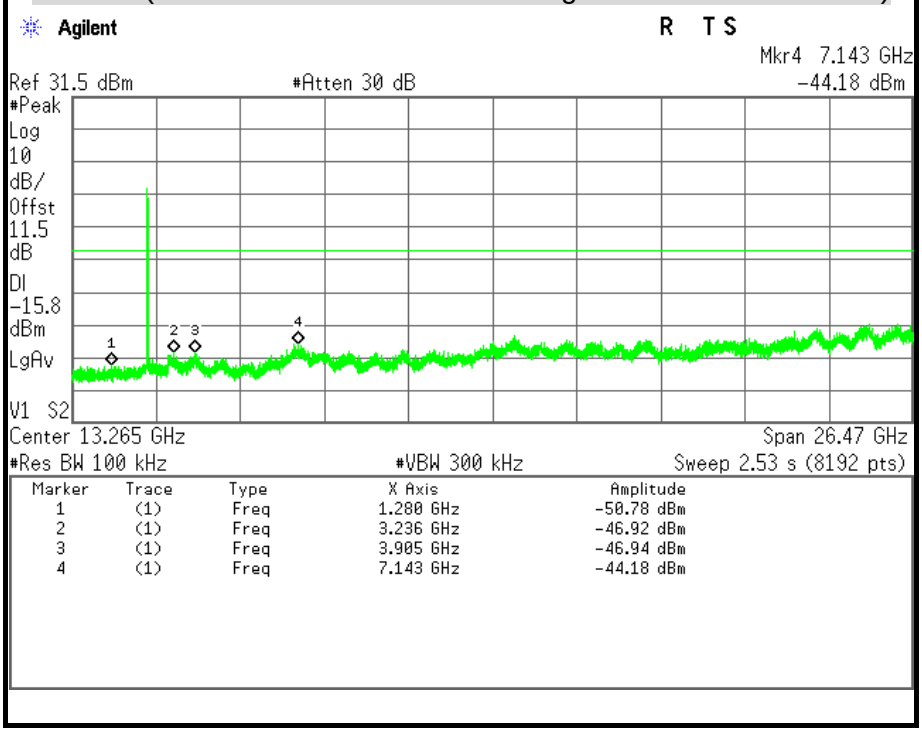
CH High (30MHz ~ 26GHz / IEEE 802.11g mode / Chain 0)



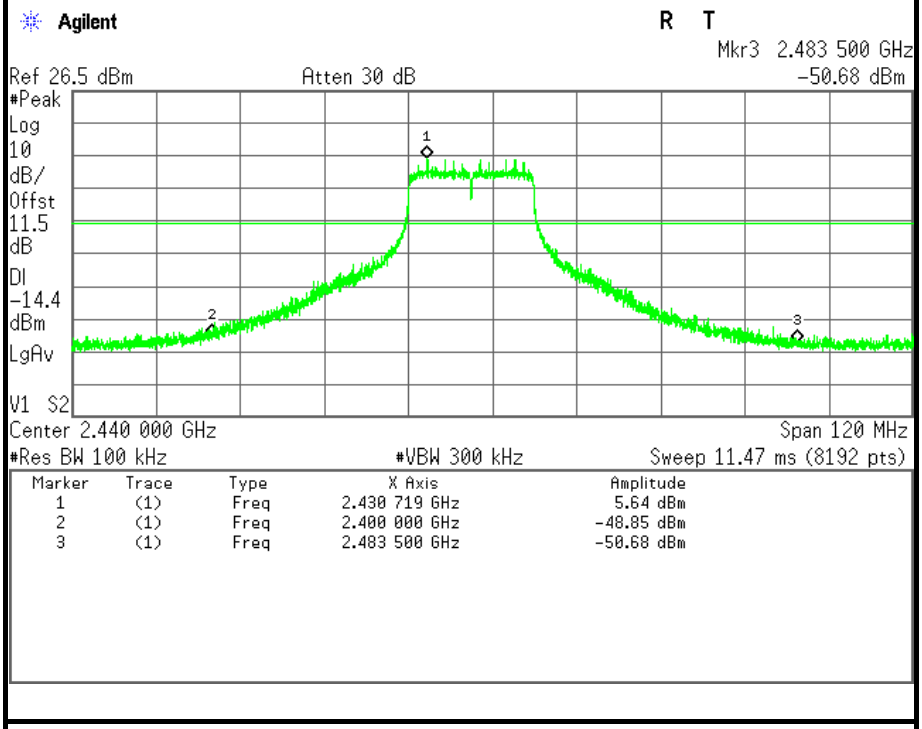
CH Low (2.38GHz ~ 2.5GHz / IEEE 802.11gn HT20 mode / Chain 0)



CH Low (30MHz ~ 26GHz / IEEE 802.11gn HT20 mode / Chain 0)

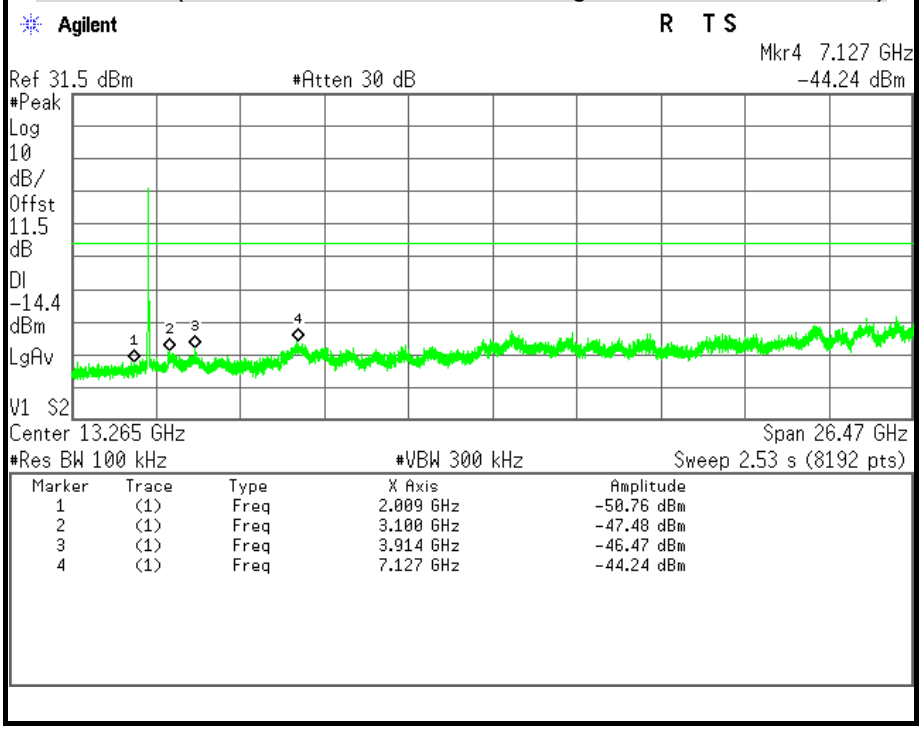


CH Middle (2.38GHz ~ 2.5GHz / IEEE 802.11gn HT20 mode / Chain 0)



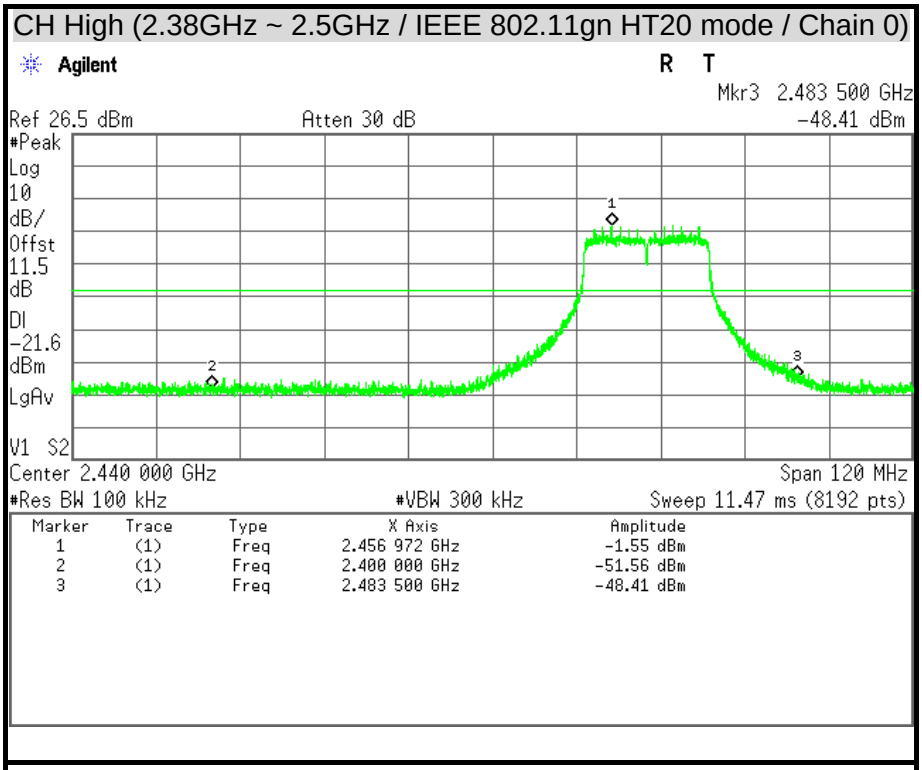
Marker	Trace	Type	X Axis	Amplitude
1	(1)	Freq	2.430 719 GHz	5.64 dBm
2	(1)	Freq	2.400 000 GHz	-48.85 dBm
3	(1)	Freq	2.483 500 GHz	-50.68 dBm

CH Middle (30MHz ~ 26GHz / IEEE 802.11gn HT20 mode / Chain 0)

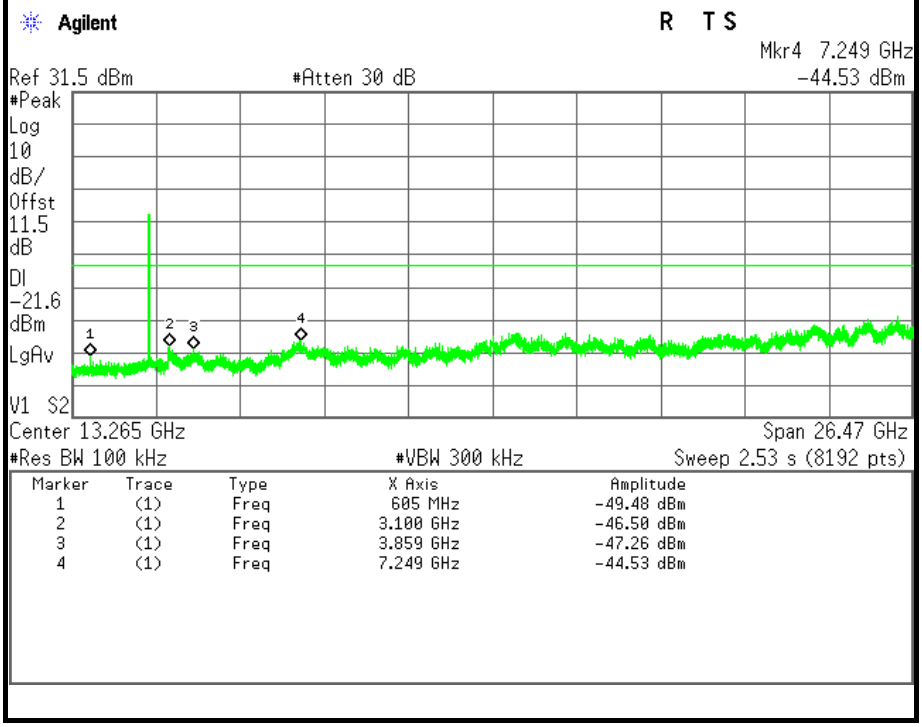


Marker	Trace	Type	X Axis	Amplitude
1	(1)	Freq	2.009 GHz	-50.76 dBm
2	(1)	Freq	3.100 GHz	-47.48 dBm
3	(1)	Freq	3.914 GHz	-46.47 dBm
4	(1)	Freq	7.127 GHz	-44.24 dBm

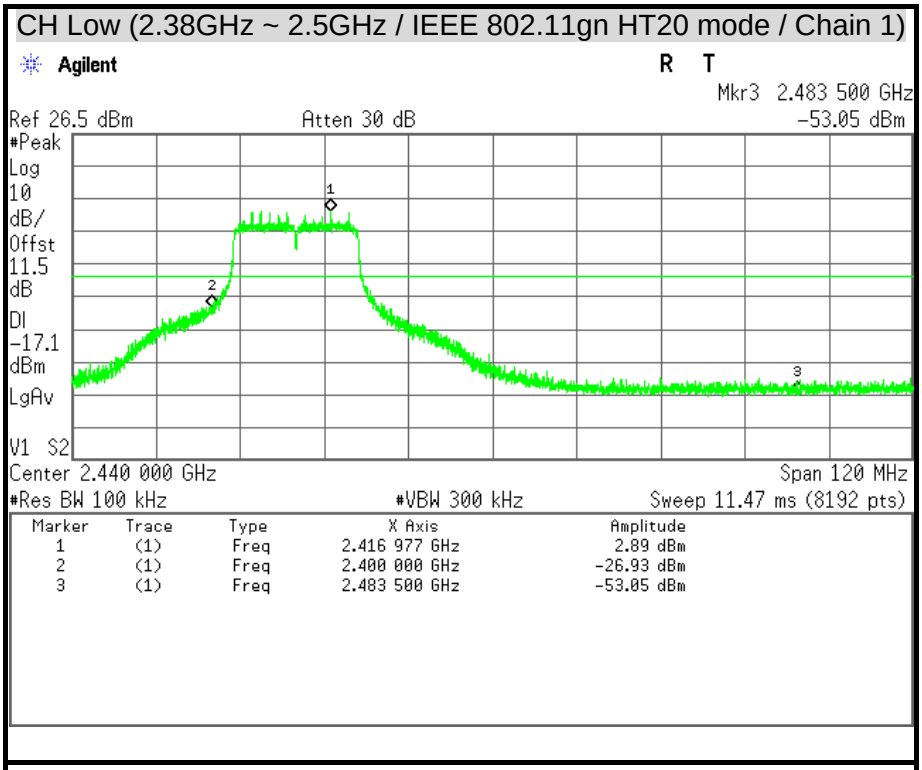
CH High (2.38GHz ~ 2.5GHz / IEEE 802.11gn HT20 mode / Chain 0)



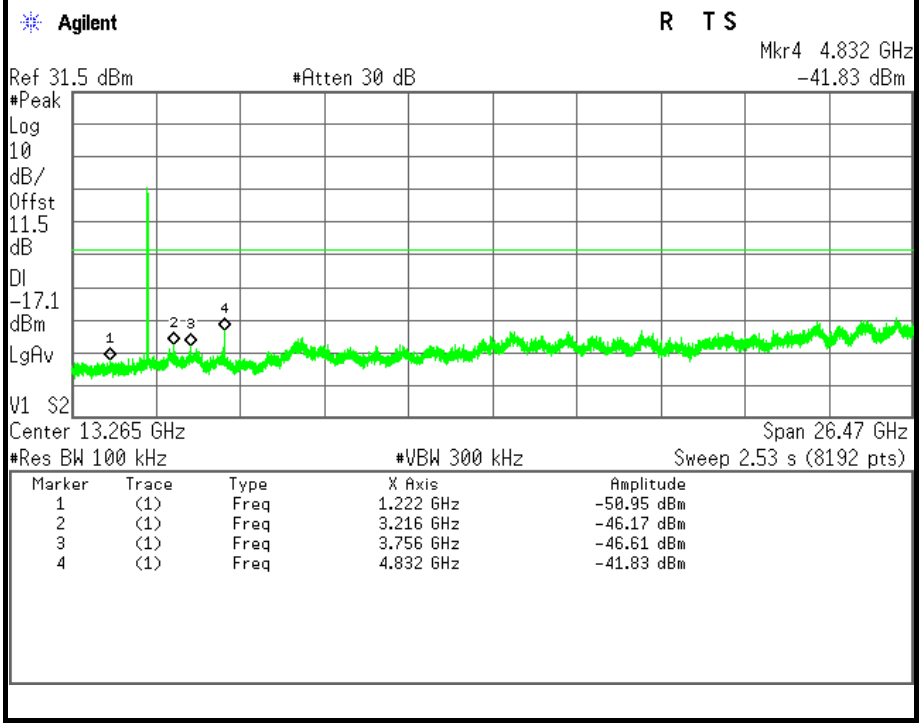
CH High (30MHz ~ 26GHz / IEEE 802.11gn HT20 mode / Chain 0)



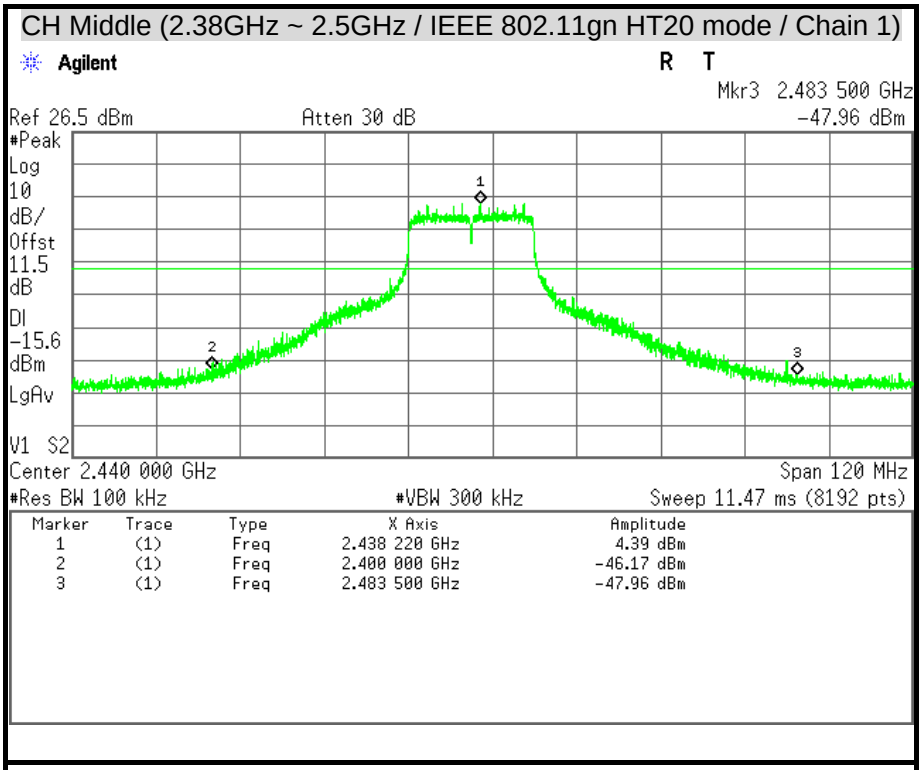
CH Low (2.38GHz ~ 2.5GHz / IEEE 802.11gn HT20 mode / Chain 1)



CH Low (30MHz ~ 26GHz / IEEE 802.11gn HT20 mode / Chain 1)

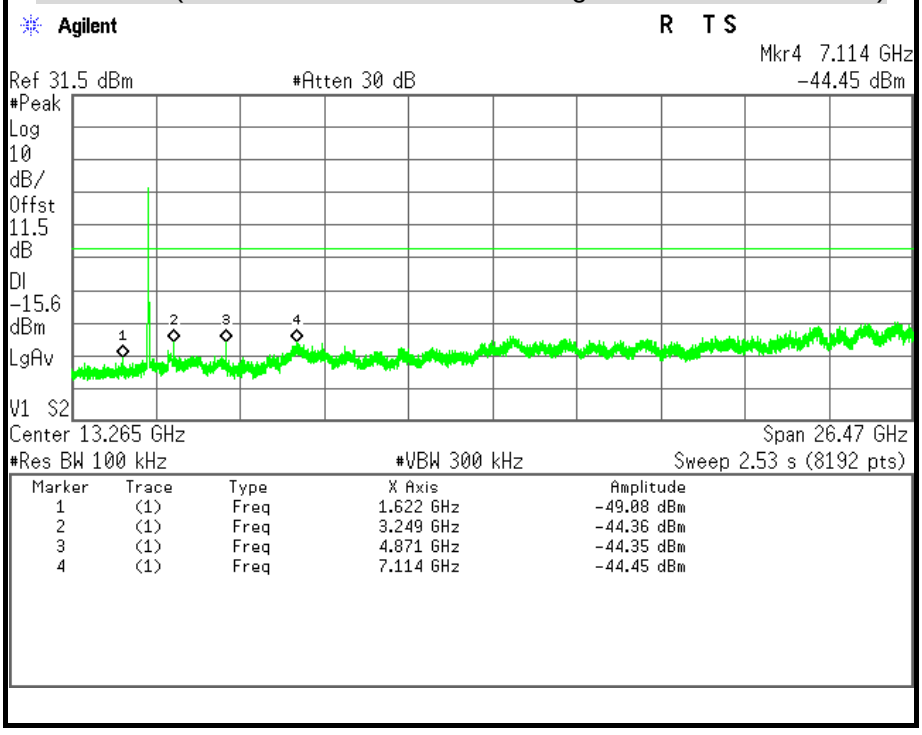


CH Middle (2.38GHz ~ 2.5GHz / IEEE 802.11gn HT20 mode / Chain 1)



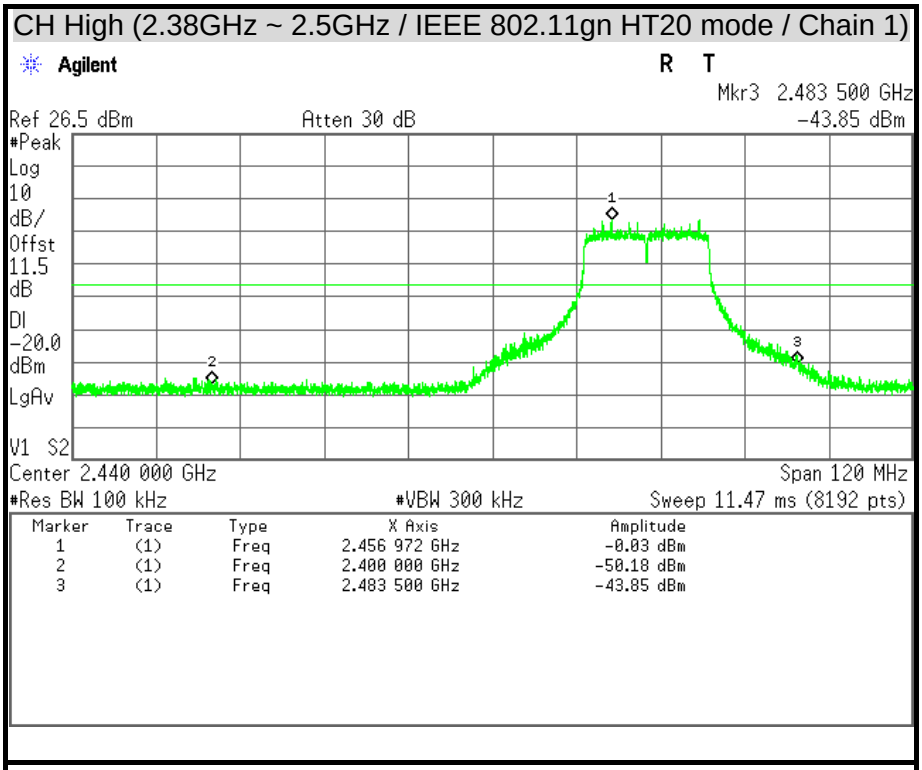
Marker	Trace	Type	X Axis	Amplitude
1	(1)	Freq	2.438 220 GHz	4.39 dBm
2	(1)	Freq	2.400 000 GHz	-46.17 dBm
3	(1)	Freq	2.483 500 GHz	-47.96 dBm

CH Middle (30MHz ~ 26GHz / IEEE 802.11gn HT20 mode / Chain 1)

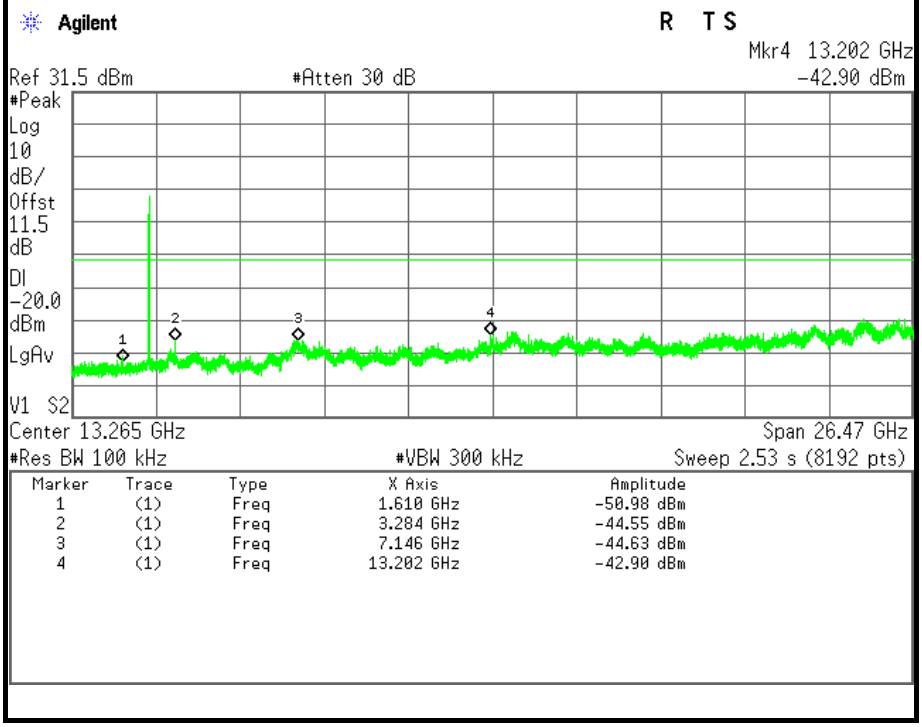


Marker	Trace	Type	X Axis	Amplitude
1	(1)	Freq	1.622 GHz	-49.08 dBm
2	(1)	Freq	3.249 GHz	-44.36 dBm
3	(1)	Freq	4.871 GHz	-44.35 dBm
4	(1)	Freq	7.114 GHz	-44.45 dBm

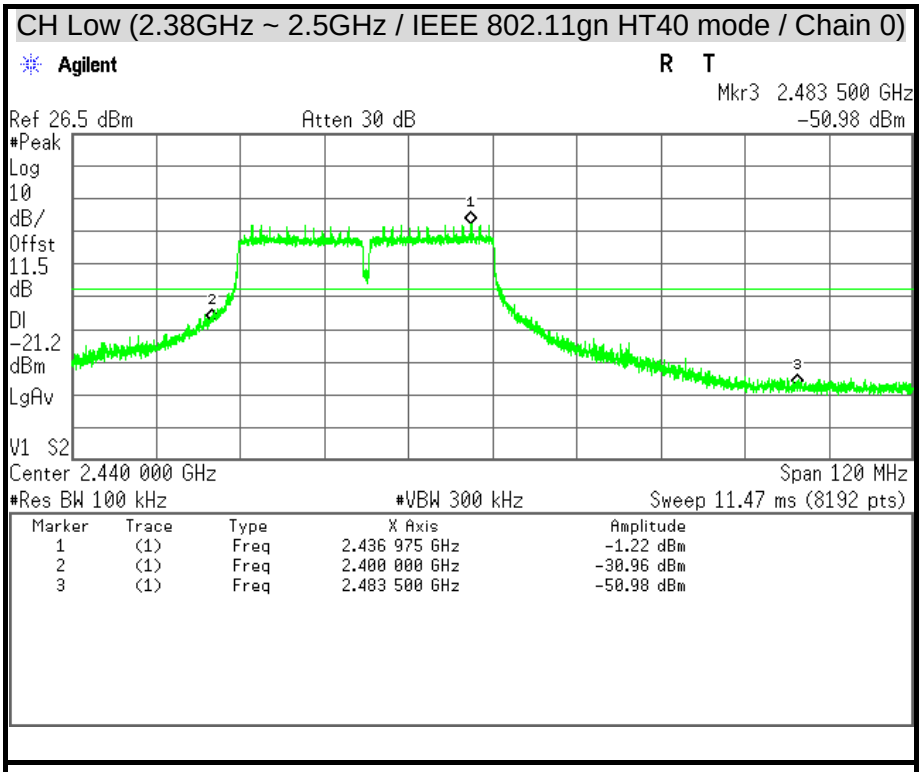
CH High (2.38GHz ~ 2.5GHz / IEEE 802.11gn HT20 mode / Chain 1)



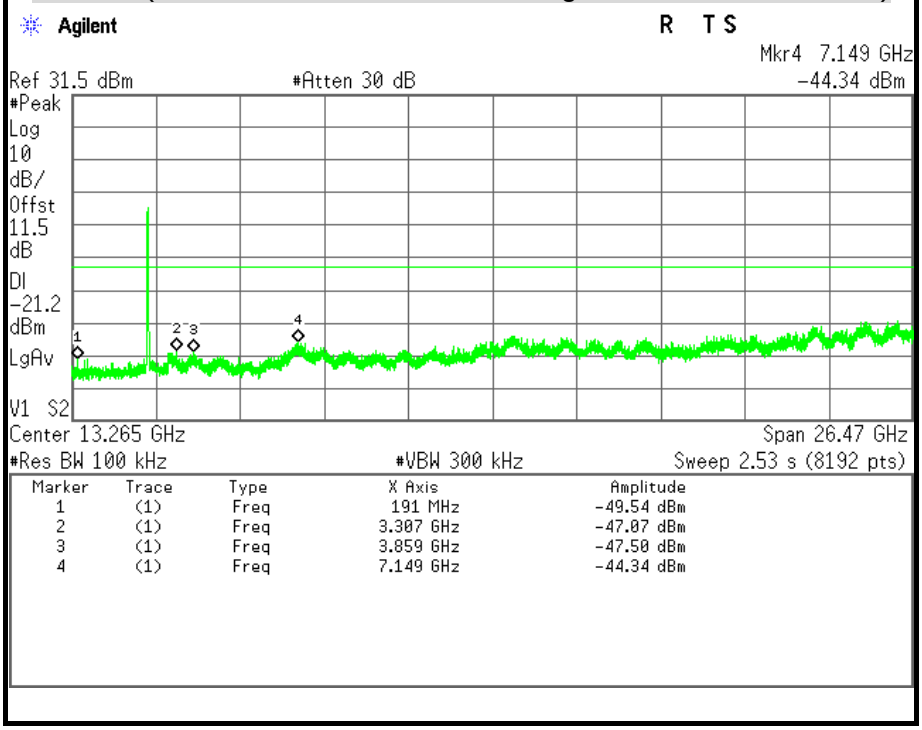
CH High (30MHz ~ 26GHz / IEEE 802.11gn HT20 mode / Chain 1)



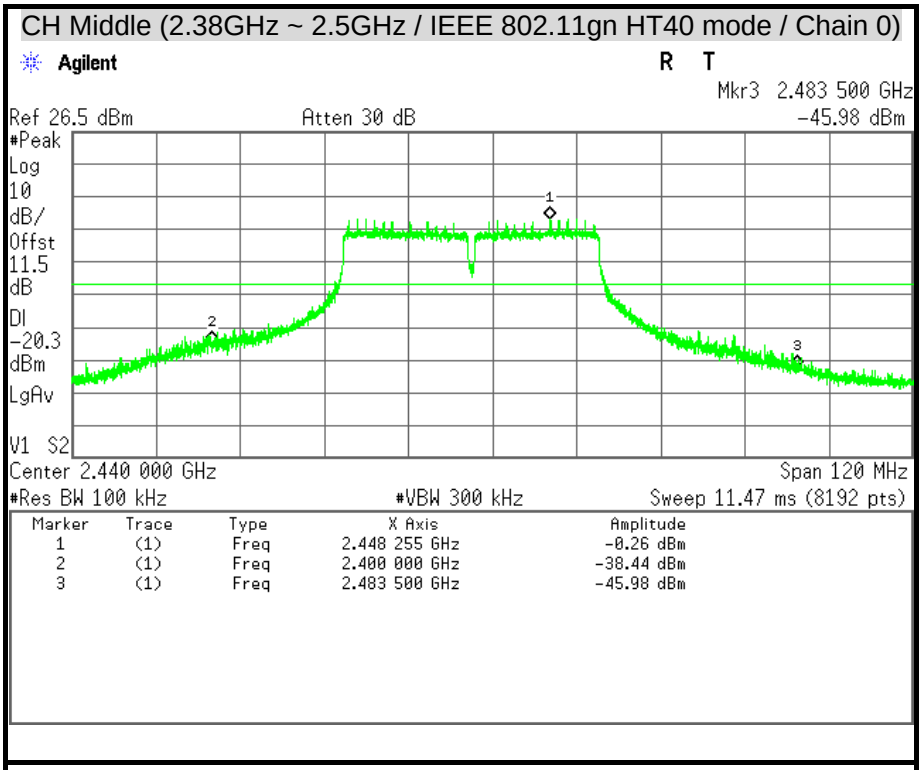
CH Low (2.38GHz ~ 2.5GHz / IEEE 802.11gn HT40 mode / Chain 0)



CH Low (30MHz ~ 26GHz / IEEE 802.11gn HT40 mode / Chain 0)

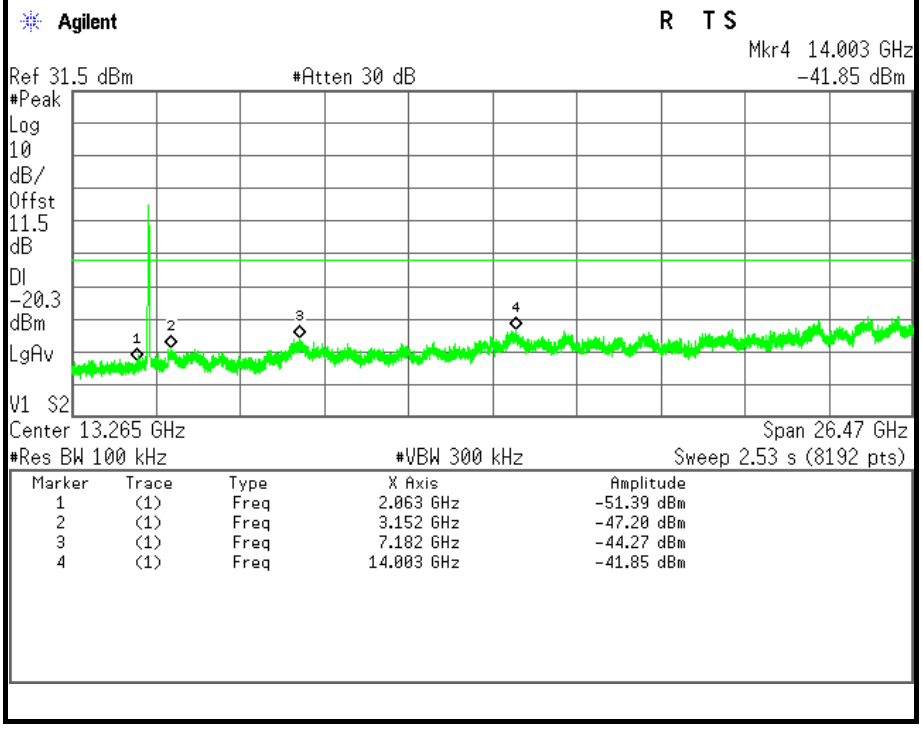


CH Middle (2.38GHz ~ 2.5GHz / IEEE 802.11gn HT40 mode / Chain 0)



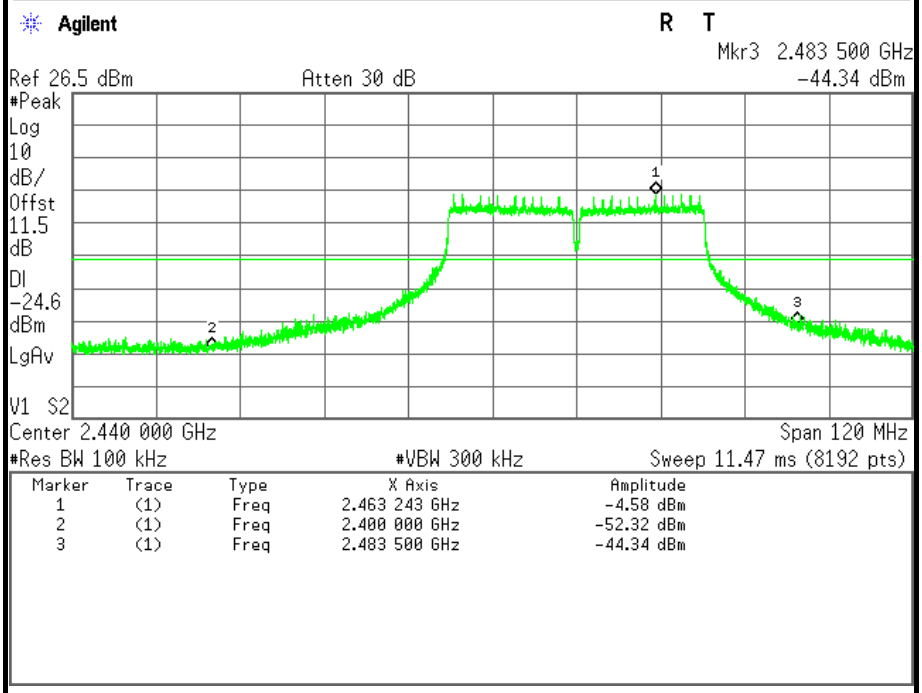
Marker	Trace	Type	X Axis	Amplitude
1	(1)	Freq	2.448 255 GHz	-0.26 dBm
2	(1)	Freq	2.400 000 GHz	-38.44 dBm
3	(1)	Freq	2.483 500 GHz	-45.98 dBm

CH Middle (30MHz ~ 26GHz / IEEE 802.11gn HT40 mode / Chain 0)



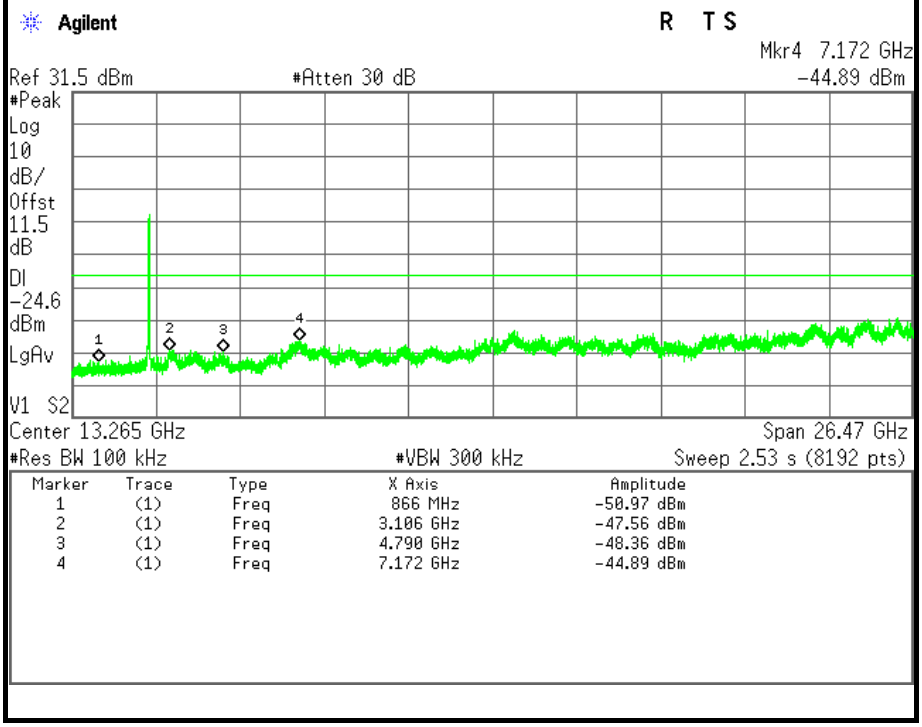
Marker	Trace	Type	X Axis	Amplitude
1	(1)	Freq	2.063 GHz	-51.39 dBm
2	(1)	Freq	3.152 GHz	-47.20 dBm
3	(1)	Freq	7.182 GHz	-44.27 dBm
4	(1)	Freq	14.003 GHz	-41.85 dBm

CH High (2.38GHz ~ 2.5GHz / IEEE 802.11gn HT40 mode / Chain 0)



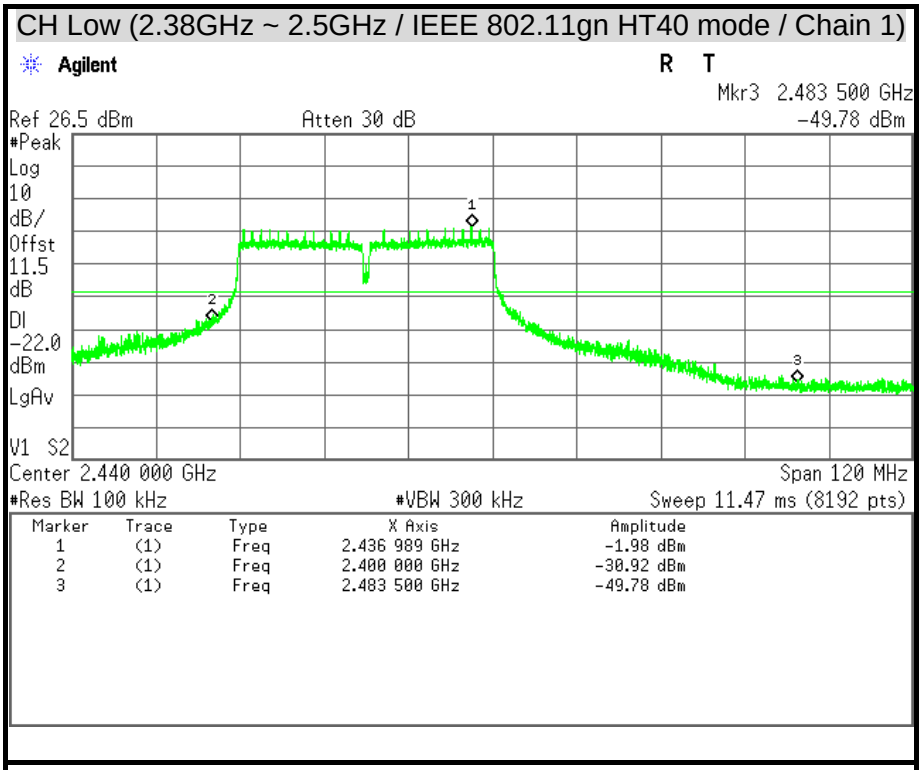
Marker	Trace	Type	X Axis	Amplitude
1	(1)	Freq	2.463 243 GHz	-4.58 dBm
2	(1)	Freq	2.400 000 GHz	-52.32 dBm
3	(1)	Freq	2.483 500 GHz	-44.34 dBm

CH High (30MHz ~ 26GHz / IEEE 802.11gn HT40 mode / Chain 0)



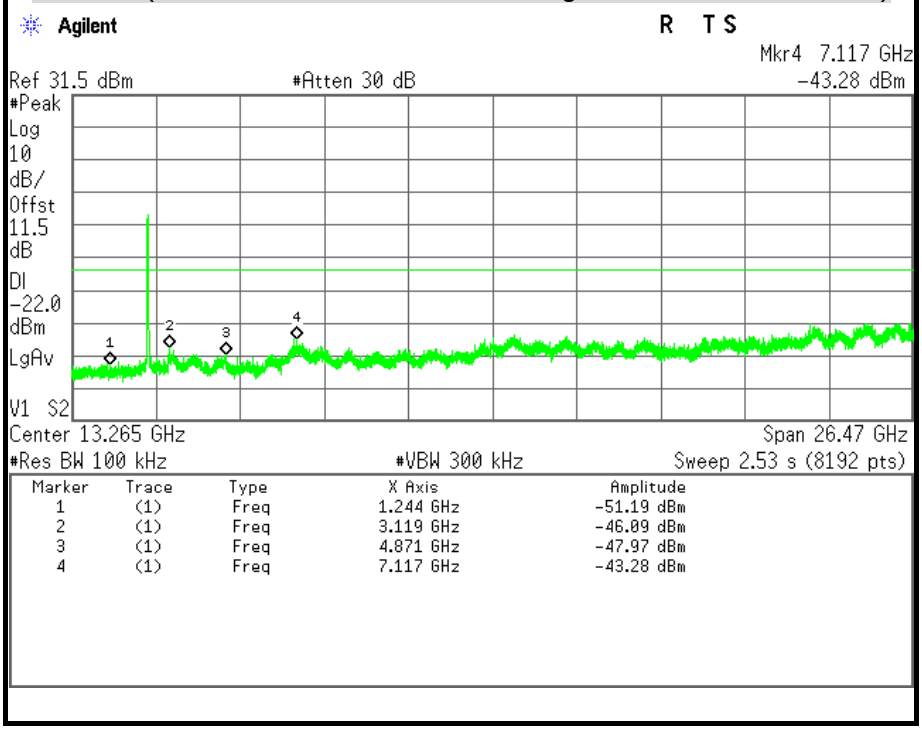
Marker	Trace	Type	X Axis	Amplitude
1	(1)	Freq	866 MHz	-50.97 dBm
2	(1)	Freq	3.106 GHz	-47.56 dBm
3	(1)	Freq	4.790 GHz	-48.36 dBm
4	(1)	Freq	7.172 GHz	-44.89 dBm

CH Low (2.38GHz ~ 2.5GHz / IEEE 802.11gn HT40 mode / Chain 1)



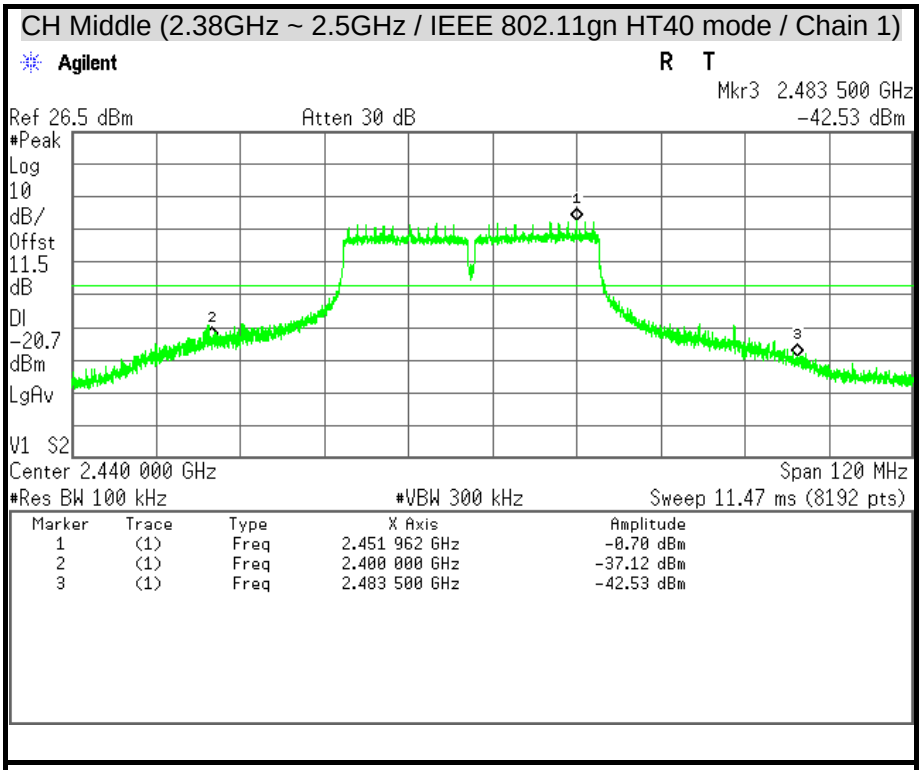
Marker	Trace	Type	X Axis	Amplitude
1	(1)	Freq	2.436 989 GHz	-1.98 dBm
2	(1)	Freq	2.400 000 GHz	-30.92 dBm
3	(1)	Freq	2.483 500 GHz	-49.78 dBm

CH Low (30MHz ~ 26GHz / IEEE 802.11gn HT40 mode / Chain 1)



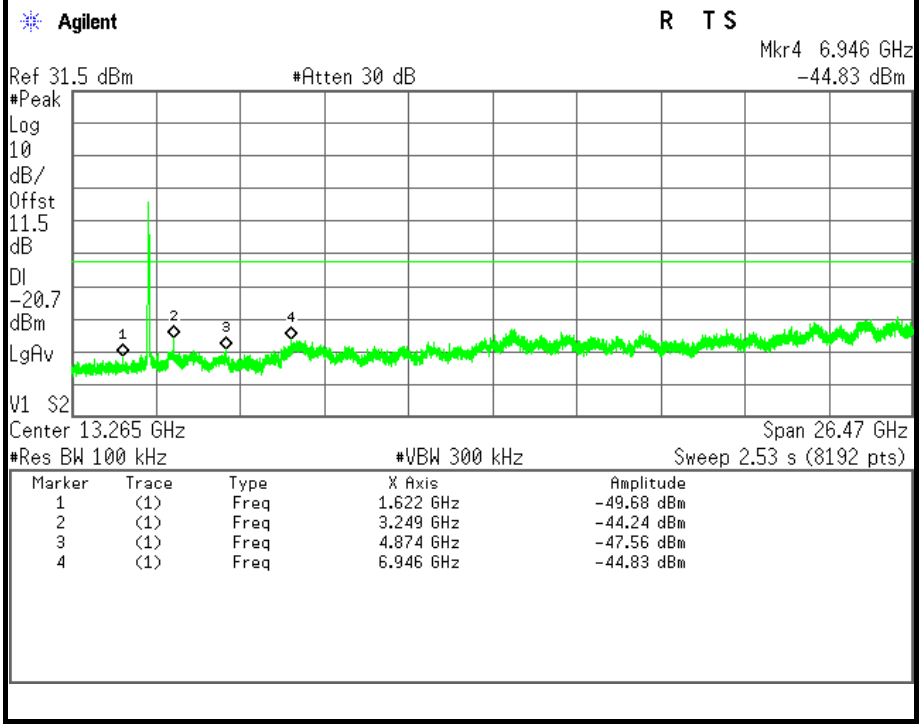
Marker	Trace	Type	X Axis	Amplitude
1	(1)	Freq	1.244 GHz	-51.19 dBm
2	(1)	Freq	3.119 GHz	-46.09 dBm
3	(1)	Freq	4.871 GHz	-47.97 dBm
4	(1)	Freq	7.117 GHz	-43.28 dBm

CH Middle (2.38GHz ~ 2.5GHz / IEEE 802.11gn HT40 mode / Chain 1)



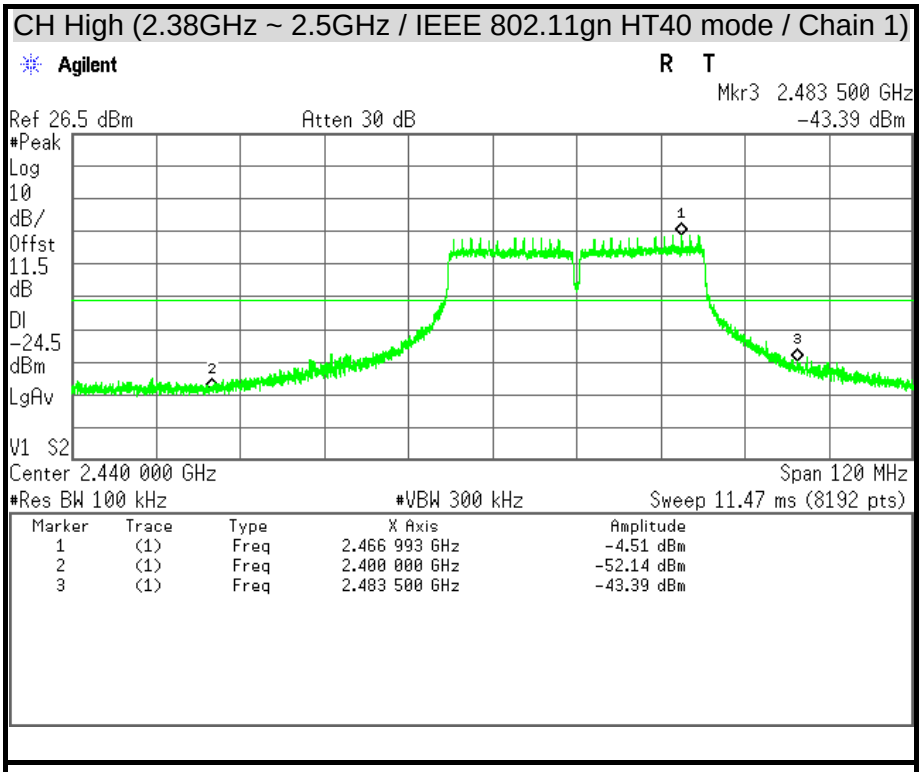
Marker	Trace	Type	X Axis	Amplitude
1	(1)	Freq	2.451 962 GHz	-0.70 dBm
2	(1)	Freq	2.400 000 GHz	-37.12 dBm
3	(1)	Freq	2.483 500 GHz	-42.53 dBm

CH Middle (30MHz ~ 26GHz / IEEE 802.11gn HT40 mode / Chain 1)

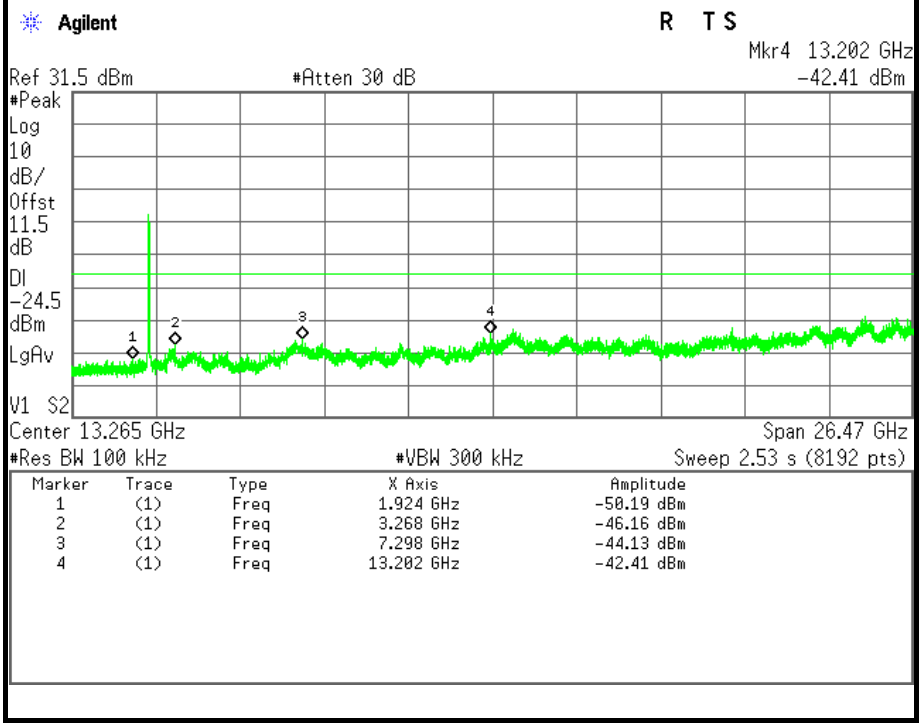


Marker	Trace	Type	X Axis	Amplitude
1	(1)	Freq	1.622 GHz	-49.68 dBm
2	(1)	Freq	3.249 GHz	-44.24 dBm
3	(1)	Freq	4.874 GHz	-47.56 dBm
4	(1)	Freq	6.946 GHz	-44.83 dBm

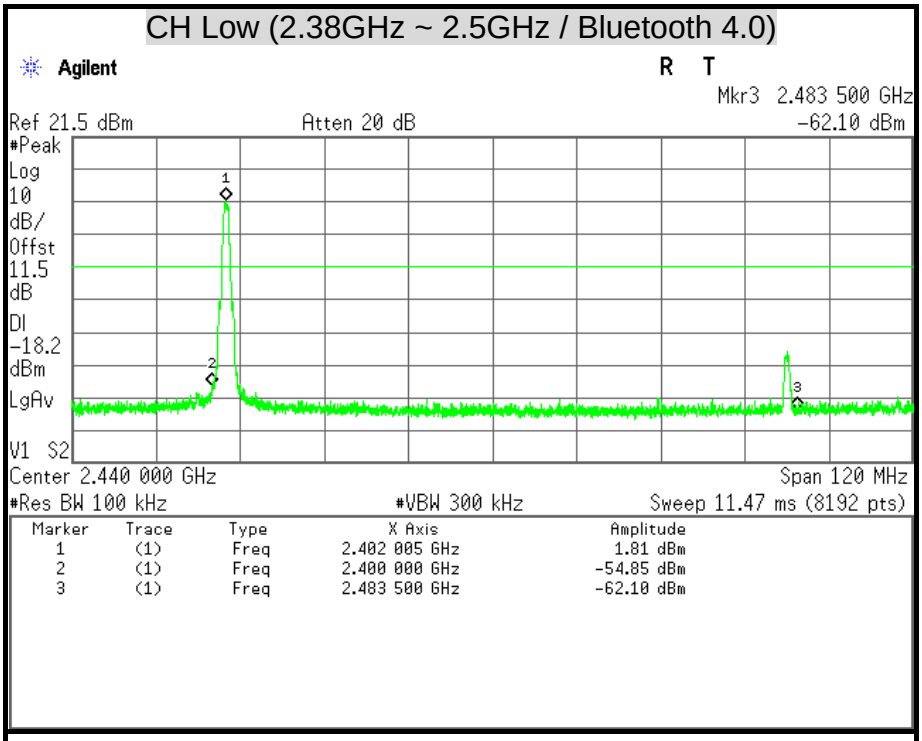
CH High (2.38GHz ~ 2.5GHz / IEEE 802.11gn HT40 mode / Chain 1)



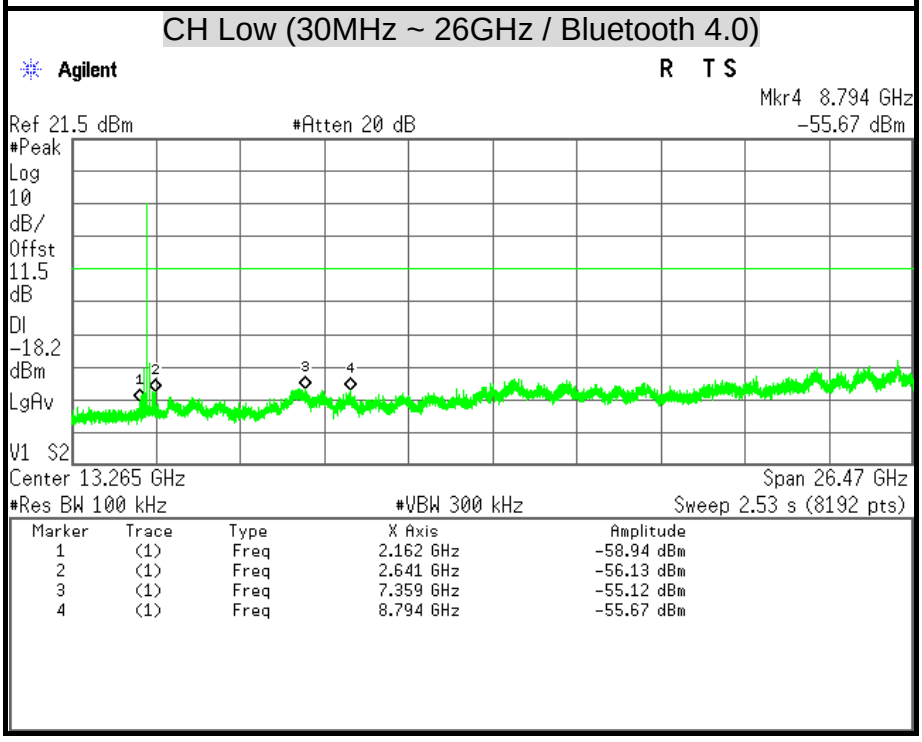
CH High (30MHz ~ 26GHz / IEEE 802.11gn HT40 mode / Chain 1)



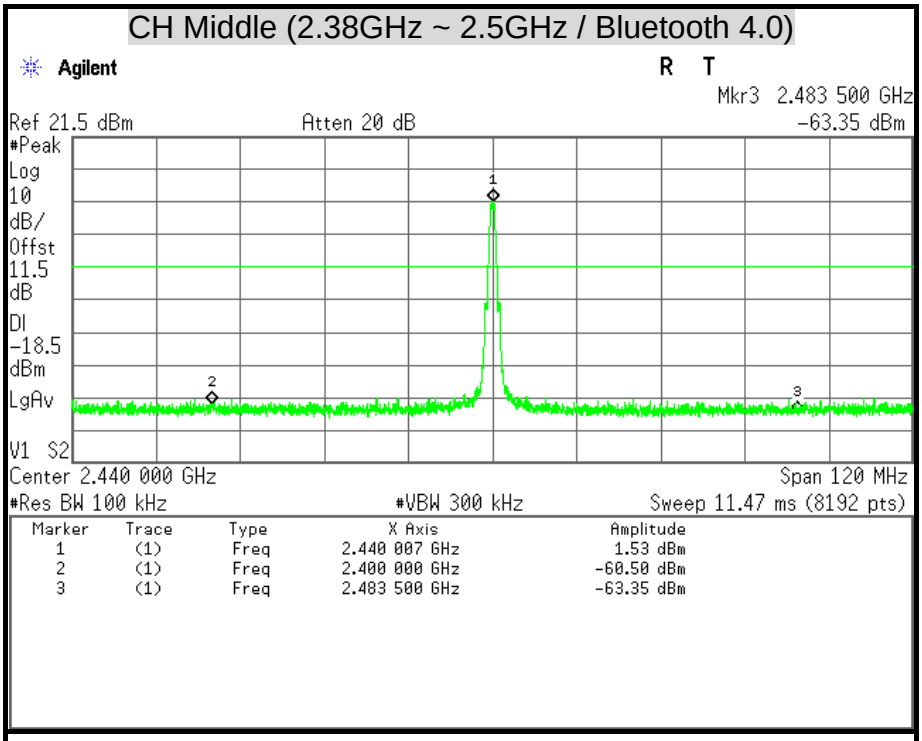
CH Low (2.38GHz ~ 2.5GHz / Bluetooth 4.0)



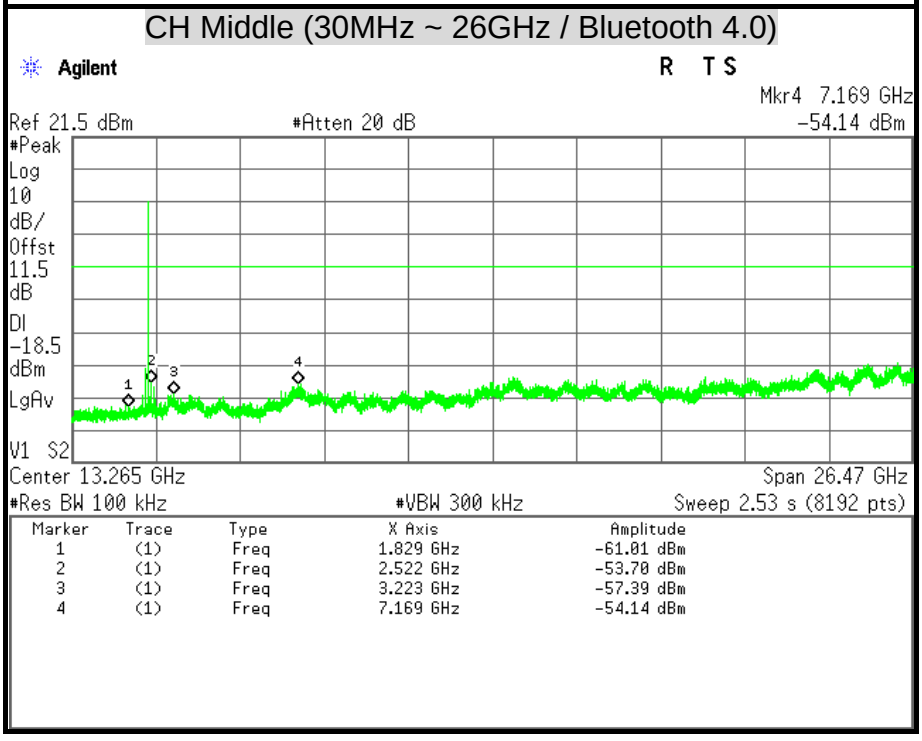
CH Low (30MHz ~ 26GHz / Bluetooth 4.0)



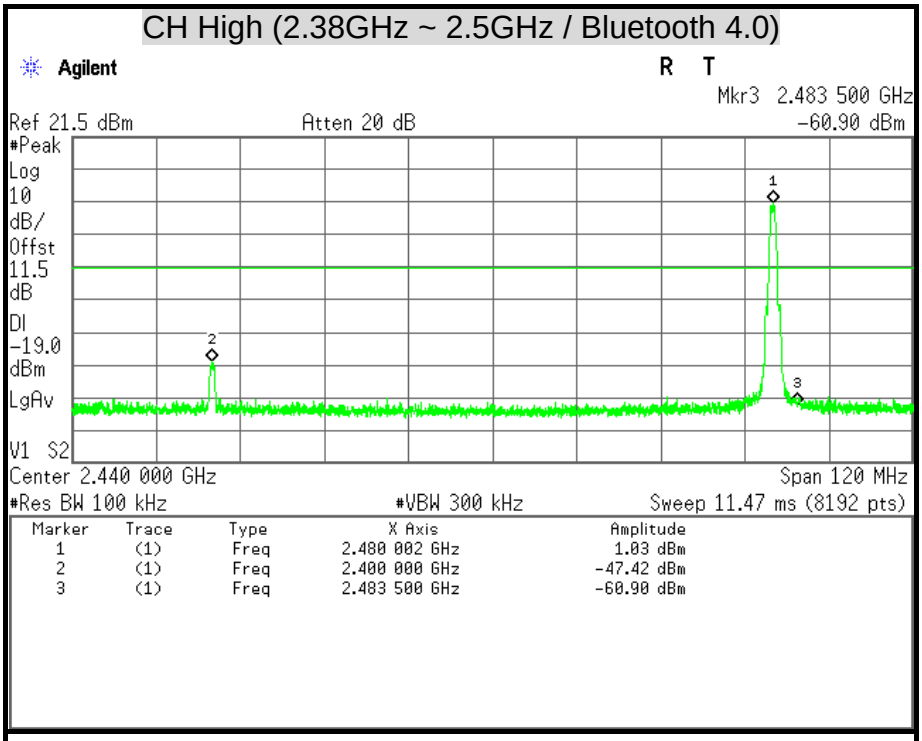
CH Middle (2.38GHz ~ 2.5GHz / Bluetooth 4.0)



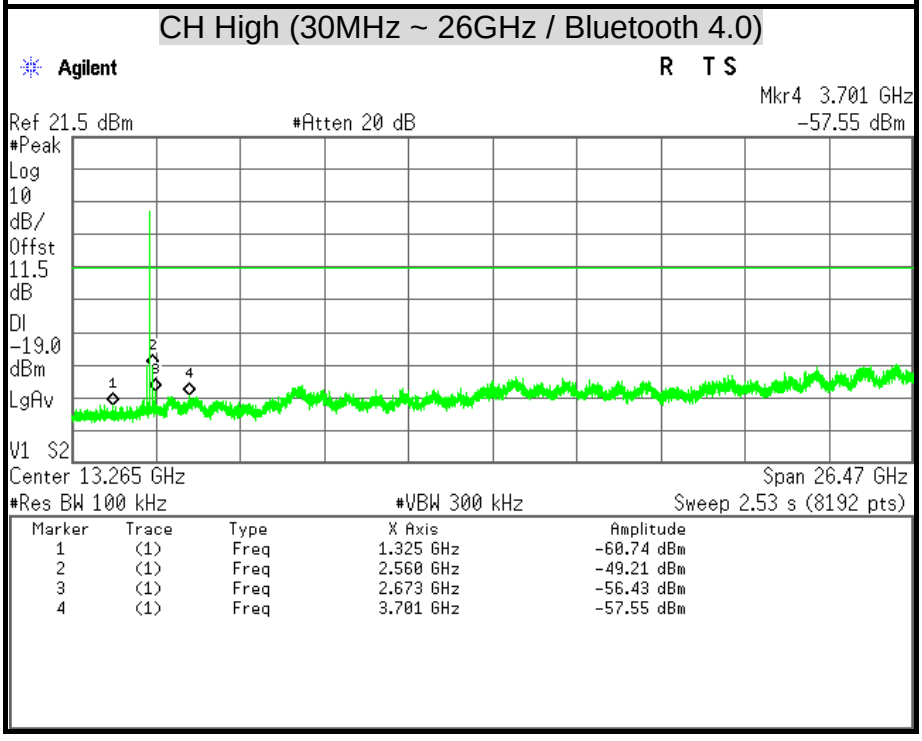
CH Middle (30MHz ~ 26GHz / Bluetooth 4.0)



CH High (2.38GHz ~ 2.5GHz / Bluetooth 4.0)



CH High (30MHz ~ 26GHz / Bluetooth 4.0)



7.6 RADIATED EMISSION

LIMITS

(1) According to § 15.205 (a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
[1]0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 -1710	10.6 -12.7
6.26775 - 6.26825	108 -121.94	1718.8 - 1722.2	13.25 -13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 – 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 -16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2655 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3338	36.43 - 36.5
12.57675 - 12.57725	322 -335.4	3600 - 4400	([2])
13.36 - 13.41			

Remark:
1. [1] Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.
2. [2] Above 38.6

(2) According to § 15.205 (b) Except as provided in paragraphs (d) and (e), the field strength of emissions appearing within these frequency bands shall not exceed the limits shown is Section 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

(3) According to § 15.209 (a) Except as provided elsewhere in this Subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 – 0.490	2400/F(KHz)	300
0.490 – 1.705	24000/F(KHz)	30
1.705 – 30.0	30	30
30 - 88	100 **	3
88 - 216	150 **	3
216 - 960	200 **	3
Above 960	500	3

Remark: ***Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.*

(4) According to § 15.209 (b) In the emission table above, the tighter limit applies at the band edges.

TEST EQUIPMENT

Radiated Emission / 966Chamber_B

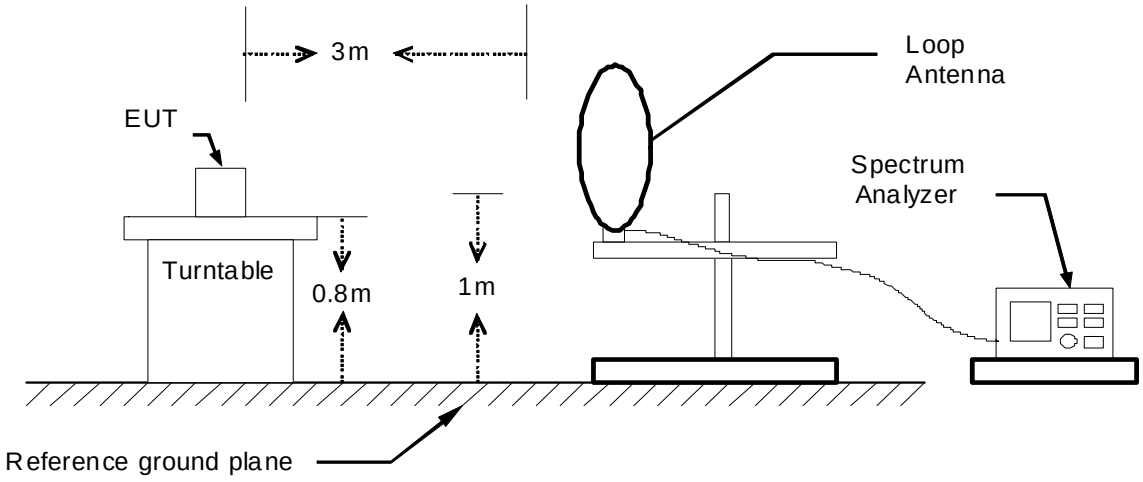
Name of Equipment	Manufacture	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	E4446A	MY46180323	04/14/2016
EMI Test Receiver	Rohde & Schwarz	ESCI	100221	04/22/2016
Bi-log Antenna	TESEQ	CBL 6112D	35403	08/04/2016
Double-Ridged Waveguide Horn	ETS-LINDGREN	3117	00078733	12/02/2015
Horn Antenna	COM-POWER	AH-840	03077	12/17/2015
Pre-Amplifier	Agilent	8447D	2944A10052	07/14/2016
Pre-Amplifier	Agilent	8449B	3008A01916	07/14/2016
LOOP Antenna	COM-POWER	AL-130	121060	05/24/2016

Remark: *Each piece of equipment is scheduled for calibration once a year.*

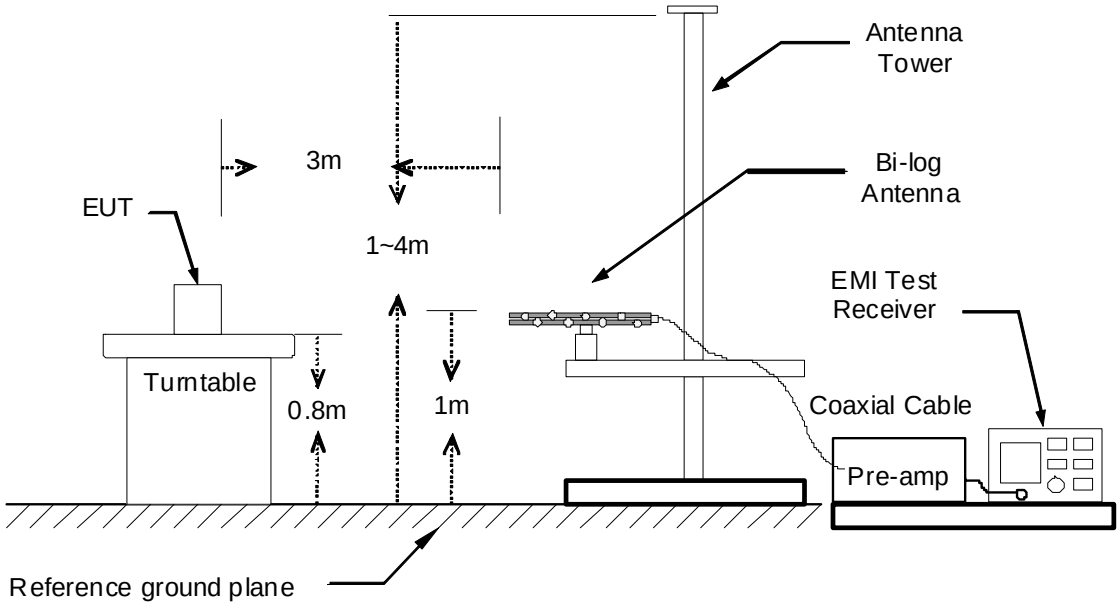
TEST SETUP

The diagram below shows the test setup that is utilized to make the measurements for emission below 1GHz.

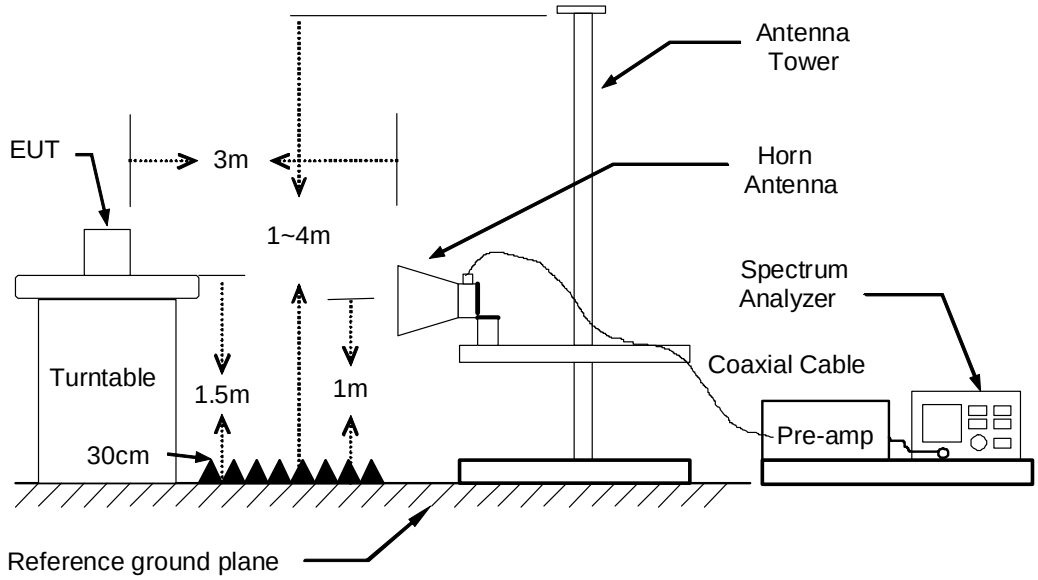
9kHz ~ 30MHz



30MHz ~ 1GHz



The diagram below shows the test setup that is utilized to make the measurements for emission above 1GHz.



TEST PROCEDURE

1. The EUT was placed on the top of a rotating table 0.8 and 1.5 meters above the ground. The table was rotated 360 degrees to determine the position of the highest radiation.
2. While measuring the radiated emission below 1GHz, the EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. While measuring the radiated emission above 1GHz, the EUT was set 3 meters away from the interference-receiving antenna.
3. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarization of the antenna are set to make the measurement.
4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the table was turned from 0 degrees to 360 degrees to find the maximum reading.
5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold mode.
6. If the emission level of the EUT in peak mode was 10 dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10 dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

Remark：

1. *The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 KHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.*
2. *The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz for Peak detection and frequency above 1GHz.*
3. *The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 10 Hz for Average detection (AV) at frequency above 1GHz.*

TEST RESULTS

Below 1 GHz (9kHz ~ 30MHz)

No emission found between lowest internal used/generated frequency to 30MHz.

Below 1 GHz (30MHz ~ 1GHz)

Product Name	Smart Touch Computer	Test By	Rex Chiu
Test Model	STC-1505	Test Date	2015/10/16
Test mode	WiFi / Mode 1	Temp. & Humidity	25°C, 50%

966Chamber_B at 3Meter / Horizontal

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
41.64	41.24	-14.92	26.32	40.00	-13.68	296	200	Peak
67.83	48.61	-20.69	27.92	40.00	-12.08	277	200	Peak
129.91	40.63	-14.50	26.13	43.50	-17.37	260	200	Peak
248.25	47.51	-12.85	34.66	46.00	-11.34	123	100	Peak
305.48	44.92	-11.38	33.54	46.00	-12.46	139	100	Peak
407.33	42.29	-9.05	33.24	46.00	-12.76	146	200	Peak
726.46	38.35	-5.35	33.00	46.00	-13.00	133	200	Peak

966Chamber_B at 3Meter / Vertical

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
34.85	47.50	-10.86	36.64	40.00	-3.36	63	100	QP
41.64	51.20	-14.92	36.28	40.00	-3.72	52	100	QP
54.25	56.30	-19.92	36.38	40.00	-3.62	195	100	Peak
67.83	55.44	-20.69	34.75	40.00	-5.25	198	200	Peak
236.61	47.40	-13.92	33.48	46.00	-12.52	72	100	Peak
519.85	44.74	-7.80	36.94	46.00	-9.06	4	100	Peak
649.83	40.55	-6.11	34.44	46.00	-11.56	56	100	Peak

Remark:

1. *Quasi-peak test would be performed if the peak result were greater than the quasi-peak limit.*
2. *Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – PreAmp.Gain (dB)*
3. *Result (dBuV/m) = Reading (dBuV) + Correction Factor (dB/m)*
4. *Margin (dB) = Remark result (dBuV/m) - Quasi-peak limit (dBuV/m).*

Product Name	Smart Touch Computer	Test By	Rex Chiu
Test Model	STC-1505	Test Date	2015/10/16
Test mode	Bluetooth 4.0 / Mode 1	Temp. & Humidity	25°C, 50%

966Chamber_B at 3Meter / Horizontal

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
66.86	49.34	-20.73	28.61	40.00	-11.39	245	200	Peak
109.54	39.67	-14.94	24.73	43.50	-18.77	283	200	Peak
248.25	47.84	-12.85	34.99	46.00	-11.01	120	100	Peak
305.48	45.82	-11.38	34.44	46.00	-11.56	131	100	Peak
390.84	40.25	-9.32	30.93	46.00	-15.07	131	100	Peak
667.29	35.71	-5.99	29.72	46.00	-16.28	96	100	Peak
726.46	37.63	-5.35	32.28	46.00	-13.72	136	200	Peak

966Chamber_B at 3Meter / Vertical

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
32.91	46.70	-9.78	36.92	40.00	-3.08	91	100	QP
40.67	50.10	-14.27	35.83	40.00	-4.17	64	100	QP
54.25	55.73	-19.92	35.81	40.00	-4.19	174	100	Peak
106.63	46.71	-15.14	31.57	43.50	-11.93	185	100	Peak
248.25	44.78	-12.85	31.93	46.00	-14.07	188	200	Peak
454.86	41.70	-8.65	33.05	46.00	-12.95	309	100	Peak
667.29	42.00	-5.99	36.01	46.00	-9.99	164	100	Peak

Remark:

5. *Quasi-peak test would be performed if the peak result were greater than the quasi-peak limit.*
6. *Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – PreAmp.Gain (dB)*
7. *Result (dBuV/m) = Reading (dBuV) + Correction Factor (dB/m)*
8. *Margin (dB) = Remark result (dBuV/m) - Quasi-peak limit (dBuV/m).*

Above 1 GHz

Product Name	Smart Touch Computer	Test By	Rex Chiu
Test Model	STC-1505	Test Date	2015/10/15
Test mode	IEEE 802.11b TX / CH Low	Temp. & Humidity	25°C, 50%

966Chamber_B at 3Meter / Horizontal

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2104.00	47.38	2.00	49.38	74.00	-24.62	20	200	Peak
2300.00	46.99	2.57	49.56	74.00	-24.44	95	200	Peak
2500.00	47.70	3.15	50.85	74.00	-23.15	122	100	Peak
4845.00	37.57	8.46	46.03	74.00	-27.97	186	100	Peak
7050.00	37.27	12.26	49.53	74.00	-24.47	13	100	Peak
10200.00	36.13	15.97	52.10	74.00	-21.90	273	100	Peak

966Chamber_B at 3Meter / Vertical

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2086.00	48.01	1.95	49.96	74.00	-24.04	260	200	Peak
2198.00	47.89	2.27	50.16	74.00	-23.84	157	200	Peak
2538.00	47.62	3.23	50.85	74.00	-23.15	220	100	Peak
4815.00	38.07	8.39	46.46	74.00	-27.54	114	200	Peak
7215.00	37.15	12.31	49.46	74.00	-24.54	334	100	Peak
9450.00	36.99	14.59	51.58	74.00	-22.42	226	200	Peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Average test would be performed if the peak result were greater than the average limit.*
3. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
4. *Result = Reading + Correction Factor*
   Margin = Result – Limit
   Remark Peak = Result(PK) – Limit(PK)
   Remark AVG = Result(AV) – Limit(AV)

Product Name	Smart Touch Computer	Test By	Rex Chiu
Test Model	STC-1505	Test Date	2015/10/15
Test mode	IEEE 802.11b TX / CH Middle	Temp. & Humidity	25°C, 50%

966Chamber_B at 3Meter / Horizontal

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2232.00	47.82	2.37	50.19	74.00	-23.81	264	100	Peak
2390.00	48.27	2.83	51.10	74.00	-22.90	120	100	Peak
2502.00	46.61	3.15	49.76	74.00	-24.24	190	100	Peak
4815.00	38.77	8.39	47.16	74.00	-26.84	153	100	Peak
7200.00	36.78	12.30	49.08	74.00	-24.92	344	100	Peak
9870.00	36.19	15.25	51.44	74.00	-22.56	38	100	Peak

966Chamber_B at 3Meter / Vertical

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2196.00	47.74	2.27	50.01	74.00	-23.99	217	100	Peak
2368.00	47.84	2.77	50.61	74.00	-23.39	180	100	Peak
2506.00	47.38	3.16	50.54	74.00	-23.46	71	200	Peak
4770.00	38.46	8.28	46.74	74.00	-27.26	290	200	Peak
7635.00	36.82	12.56	49.38	74.00	-24.62	6	100	Peak
9870.00	36.53	15.25	51.78	74.00	-22.22	32	200	Peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Average test would be performed if the peak result were greater than the average limit.*
3. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
4. *Result = Reading + Correction Factor*
   Margin = Result – Limit
   Remark Peak = Result(PK) – Limit(PK)
   Remark AVG = Result(AV) – Limit(AV)

Product Name	Smart Touch Computer	Test By	Rex Chiu
Test Model	STC-1505	Test Date	2015/10/15
Test mode	IEEE 802.11b TX / CH High	Temp. & Humidity	25°C, 50%

966Chamber_B at 3Meter / Horizontal

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
1988.00	47.68	1.60	49.28	74.00	-24.72	121	200	Peak
2154.00	48.45	2.15	50.60	74.00	-23.40	294	100	Peak
2630.00	47.44	3.41	50.85	74.00	-23.15	276	100	Peak
4920.00	37.95	8.63	46.58	74.00	-27.42	100	100	Peak
7770.00	37.40	12.75	50.15	74.00	-23.85	7	200	Peak
9825.00	36.11	15.19	51.30	74.00	-22.70	134	200	Peak

966Chamber_B at 3Meter / Vertical

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2062.00	47.70	1.88	49.58	74.00	-24.42	0	100	Peak
2346.00	47.28	2.70	49.98	74.00	-24.02	197	100	Peak
2650.00	47.82	3.45	51.27	74.00	-22.73	220	200	Peak
4995.00	38.15	8.81	46.96	74.00	-27.04	49	200	Peak
7095.00	37.81	12.27	50.08	74.00	-23.92	335	100	Peak
9660.00	36.07	14.96	51.03	74.00	-22.97	229	200	Peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Average test would be performed if the peak result were greater than the average limit.*
3. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
4. *Result = Reading + Correction Factor*
   Margin = Result – Limit
   Remark Peak = Result(PK) – Limit(PK)
   Remark AVG = Result(AV) – Limit(AV)

Product Name	Smart Touch Computer	Test By	Rex Chiu
Test Model	STC-1505	Test Date	2015/10/15
Test mode	IEEE 802.11g TX / CH Low	Temp. & Humidity	25°C, 50%

966Chamber_B at 3Meter / Horizontal

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
1982.00	47.71	1.54	49.25	74.00	-24.75	277	100	Peak
2136.00	47.63	2.09	49.72	74.00	-24.28	93	200	Peak
2496.00	47.13	3.14	50.27	74.00	-23.73	310	200	Peak
4935.00	38.16	8.67	46.83	74.00	-27.17	30	100	Peak
7260.00	36.67	12.32	48.99	74.00	-25.01	90	200	Peak
9645.00	36.34	14.94	51.28	74.00	-22.72	360	200	Peak

966Chamber_B at 3Meter / Vertical

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
1954.00	47.95	1.30	49.25	74.00	-24.75	153	100	Peak
2228.00	47.13	2.36	49.49	74.00	-24.51	111	200	Peak
2674.00	47.96	3.49	51.45	74.00	-22.55	171	100	Peak
4800.00	38.72	8.35	47.07	74.00	-26.93	70	200	Peak
7020.00	38.14	12.26	50.40	74.00	-23.60	137	200	Peak
9540.00	36.49	14.80	51.29	74.00	-22.71	134	100	Peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Average test would be performed if the peak result were greater than the average limit.*
3. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
4. *Result = Reading + Correction Factor*
   Margin = Result – Limit
   Remark Peak = Result(PK) – Limit(PK)
   Remark AVG = Result(AV) – Limit(AV)

Product Name	Smart Touch Computer	Test By	Rex Chiu
Test Model	STC-1505	Test Date	2015/10/15
Test mode	IEEE 802.11g TX / CH Middle	Temp. & Humidity	25°C, 50%

966Chamber_B at 3Meter / Horizontal

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2226.00	47.19	2.36	49.55	74.00	-24.45	360	100	Peak
2390.00	48.26	2.83	51.09	74.00	-22.91	222	100	Peak
2552.00	47.67	3.25	50.92	74.00	-23.08	38	200	Peak
4770.00	38.89	8.28	47.17	74.00	-26.83	358	100	Peak
7380.00	36.43	12.35	48.78	74.00	-25.22	360	200	Peak
9870.00	36.22	15.25	51.47	74.00	-22.53	195	200	Peak

966Chamber_B at 3Meter / Vertical

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2258.00	47.60	2.45	50.05	74.00	-23.95	192	200	Peak
2390.00	49.68	2.83	52.51	74.00	-21.49	142	100	Peak
2484.00	47.89	3.10	50.99	74.00	-23.01	162	200	Peak
5085.00	37.89	8.98	46.87	74.00	-27.13	39	200	Peak
7470.00	37.01	12.37	49.38	74.00	-24.62	317	100	Peak
9615.00	36.79	14.90	51.69	74.00	-22.31	245	100	Peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Average test would be performed if the peak result were greater than the average limit.*
3. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
4. *Result = Reading + Correction Factor*
   Margin = Result – Limit
   Remark Peak = Result(PK) – Limit(PK)
   Remark AVG = Result(AV) – Limit(AV)

Product Name	Smart Touch Computer	Test By	Rex Chiu
Test Model	STC-1505	Test Date	2015/10/15
Test mode	IEEE 802.11g TX / CH High	Temp. & Humidity	25°C, 50%

966Chamber_B at 3Meter / Horizontal

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2160.00	47.43	2.16	49.59	74.00	-24.41	209	100	Peak
2310.00	47.46	2.60	50.06	74.00	-23.94	190	200	Peak
2502.00	47.38	3.15	50.53	74.00	-23.47	118	100	Peak
4980.00	38.19	8.77	46.96	74.00	-27.04	29	100	Peak
7350.00	36.64	12.34	48.98	74.00	-25.02	208	200	Peak
9810.00	36.67	15.17	51.84	74.00	-22.16	320	100	Peak

966Chamber_B at 3Meter / Vertical

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2164.00	47.21	2.18	49.39	74.00	-24.61	117	200	Peak
2328.00	47.41	2.65	50.06	74.00	-23.94	165	200	Peak
2512.00	47.84	3.17	51.01	74.00	-22.99	160	200	Peak
4845.00	38.56	8.46	47.02	74.00	-26.98	210	200	Peak
7365.00	36.95	12.34	49.29	74.00	-24.71	9	200	Peak
9645.00	36.94	14.94	51.88	74.00	-22.12	147	100	Peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Average test would be performed if the peak result were greater than the average limit.*
3. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
4. *Result = Reading + Correction Factor*
   Margin = Result – Limit
   Remark Peak = Result(PK) – Limit(PK)
   Remark AVG = Result(AV) – Limit(AV)

Product Name	Smart Touch Computer	Test By	Rex Chiu
Test Model	STC-1505	Test Date	2015/10/15
Test mode	IEEE 802.11gn HT20 TX / CH Low	Temp. & Humidity	25°C, 50%

966Chamber_B at 3Meter / Horizontal

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2100.00	46.94	1.99	48.93	74.00	-25.07	187	200	Peak
2280.00	47.75	2.51	50.26	74.00	-23.74	251	200	Peak
2504.00	46.99	3.16	50.15	74.00	-23.85	140	200	Peak
4815.00	38.57	8.39	46.96	54.00	-7.04	103	100	Average
4815.00	48.14	8.39	56.53	74.00	-17.47	103	100	Peak
7155.00	37.79	12.29	50.08	74.00	-23.92	342	100	Peak
9540.00	36.44	14.80	51.24	74.00	-22.76	176	200	Peak

966Chamber_B at 3Meter / Vertical

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
1902.00	48.99	0.85	49.84	74.00	-24.16	237	100	Peak
2214.00	47.42	2.32	49.74	74.00	-24.26	192	100	Peak
2514.00	49.02	3.18	52.20	74.00	-21.80	185	200	Peak
4815.00	41.78	8.39	50.17	54.00	-3.83	224	200	Average
4815.00	50.17	8.39	58.56	74.00	-15.44	224	200	Peak
7050.00	37.53	12.26	49.79	74.00	-24.21	171	100	Peak
9795.00	36.01	15.15	51.16	74.00	-22.84	109	200	Peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Average test would be performed if the peak result were greater than the average limit.*
3. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
4. *Result = Reading + Correction Factor*
   Margin = Result – Limit
   Remark Peak = Result(PK) – Limit(PK)
   Remark AVG = Result(AV) – Limit(AV)

Product Name	Smart Touch Computer	Test By	Rex Chiu
Test Model	STC-1505	Test Date	2015/10/15
Test mode	IEEE 802.11gn HT20 TX / CH Middle	Temp. & Humidity	25°C, 50%

966Chamber_B at 3Meter / Horizontal

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2194.00	47.71	2.26	49.97	74.00	-24.03	359	200	Peak
2390.00	49.74	2.83	52.57	74.00	-21.43	234	200	Peak
2484.00	35.21	3.10	38.31	54.00	-15.69	144	100	Average
2484.00	54.53	3.10	57.63	74.00	-16.37	144	100	Peak
4875.00	36.50	8.53	45.03	54.00	-8.97	240	200	Average
4875.00	46.19	8.53	54.72	74.00	-19.28	240	200	Peak
6840.00	36.91	12.09	49.00	74.00	-25.00	49	100	Peak
9585.00	36.38	14.86	51.24	74.00	-22.76	318	100	Peak

966Chamber_B at 3Meter / Vertical

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2032.00	48.45	1.79	50.24	74.00	-23.76	289	100	Peak
2390.00	49.08	2.83	51.91	74.00	-22.09	203	100	Peak
2484.00	42.49	3.10	45.59	54.00	-8.41	204	200	Average
2484.00	59.29	3.10	62.39	74.00	-11.61	204	200	Peak
4860.00	39.45	8.49	47.94	54.00	-6.06	332	200	Average
4860.00	49.14	8.49	57.63	74.00	-16.37	332	200	Peak
7320.00	40.17	12.33	52.50	74.00	-21.50	232	200	Peak
9780.00	37.47	15.13	52.60	74.00	-21.40	107	200	Peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Average test would be performed if the peak result were greater than the average limit.*
3. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
4. *Result = Reading + Correction Factor*
   Margin = Result – Limit
   Remark Peak = Result(PK) – Limit(PK)
   Remark AVG = Result(AV) – Limit(AV)

Product Name	Smart Touch Computer	Test By	Rex Chiu
Test Model	STC-1505	Test Date	2015/10/15
Test mode	IEEE 802.11gn HT20 TX / CH High	Temp. & Humidity	25°C, 50%

966Chamber_B at 3Meter / Horizontal

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2086.00	47.56	1.95	49.51	74.00	-24.49	217	100	Peak
2314.00	47.49	2.61	50.10	74.00	-23.90	270	100	Peak
2508.00	40.20	3.17	43.37	54.00	-10.63	105	200	Average
2508.00	49.97	3.17	53.14	74.00	-20.86	105	200	Peak
4920.00	38.63	8.63	47.26	74.00	-26.74	69	100	Peak
7635.00	36.73	12.56	49.29	74.00	-24.71	356	200	Peak
9705.00	36.81	15.02	51.83	74.00	-22.17	260	200	Peak

966Chamber_B at 3Meter / Vertical

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2024.00	47.44	1.77	49.21	74.00	-24.79	37	200	Peak
2222.00	48.00	2.34	50.34	74.00	-23.66	278	100	Peak
2502.00	41.90	3.15	45.05	54.00	-8.95	221	200	Average
2502.00	51.68	3.15	54.83	74.00	-19.17	221	200	Peak
4920.00	39.91	8.63	48.54	74.00	-25.46	313	200	Peak
7380.00	37.33	12.35	49.68	74.00	-24.32	360	100	Peak
9585.00	36.79	14.86	51.65	74.00	-22.35	227	200	Peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Average test would be performed if the peak result were greater than the average limit.*
3. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
4. *Result = Reading + Correction Factor*
   Margin = Result – Limit
   Remark Peak = Result(PK) – Limit(PK)
   Remark AVG = Result(AV) – Limit(AV)

Product Name	Smart Touch Computer	Test By	Rex Chiu
Test Model	STC-1505	Test Date	2015/10/15
Test mode	IEEE 802.11gn HT40 TX / CH Low	Temp. & Humidity	25°C, 50%

966Chamber_B at 3Meter / Horizontal

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2002.00	47.35	1.71	49.06	74.00	-24.94	338	100	Peak
2190.00	48.05	2.25	50.30	74.00	-23.70	168	100	Peak
2502.00	48.53	3.15	51.68	74.00	-22.32	104	200	Peak
4845.00	43.38	8.46	51.84	74.00	-22.16	233	200	Peak
6930.00	37.07	12.18	49.25	74.00	-24.75	250	100	Peak
9450.00	36.69	14.59	51.28	74.00	-22.72	164	100	Peak

966Chamber_B at 3Meter / Vertical

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
1970.00	47.71	1.44	49.15	74.00	-24.85	61	200	Peak
2130.00	48.24	2.08	50.32	74.00	-23.68	264	200	Peak
2492.00	49.14	3.13	52.27	74.00	-21.73	177	200	Peak
4845.00	35.73	8.46	44.19	54.00	-9.81	37	200	Average
4845.00	45.28	8.46	53.74	74.00	-20.26	37	200	Peak
7035.00	36.97	12.26	49.23	74.00	-24.77	148	200	Peak
9825.00	36.31	15.19	51.50	74.00	-22.50	328	100	Peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Average test would be performed if the peak result were greater than the average limit.*
3. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
4. *Result = Reading + Correction Factor*
   Margin = Result – Limit
   Remark Peak = Result(PK) – Limit(PK)
   Remark AVG = Result(AV) – Limit(AV)

Product Name	Smart Touch Computer	Test By	Rex Chiu
Test Model	STC-1505	Test Date	2015/10/15
Test mode	IEEE 802.11gn HT40 TX / CH Middle	Temp. & Humidity	25°C, 50%

966Chamber_B at 3Meter / Horizontal

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2246.00	48.38	2.41	50.79	74.00	-23.21	256	100	Peak
2390.00	42.25	2.83	45.08	54.00	-8.92	120	100	Average
2390.00	51.29	2.83	54.12	74.00	-19.88	120	100	Peak
2484.00	46.98	3.10	50.08	54.00	-3.92	124	100	Average
2484.00	56.42	3.10	59.52	74.00	-14.48	124	100	Peak
4875.00	34.60	8.53	43.13	54.00	-10.87	238	200	Average
4875.00	44.26	8.53	52.79	74.00	-21.21	238	200	Peak
7560.00	37.12	12.46	49.58	74.00	-24.42	331	200	Peak
9465.00	36.66	14.64	51.30	74.00	-22.70	22	100	Peak

966Chamber_B at 3Meter / Vertical

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2250.00	47.57	2.43	50.00	74.00	-24.00	175	200	Peak
2390.00	45.03	2.83	47.86	54.00	-6.14	195	200	Average
2390.00	62.14	2.83	64.97	74.00	-9.03	195	200	Peak
2484.00	50.22	3.10	53.32	54.00	-0.68	195	200	Average
2484.00	67.79	3.10	70.89	74.00	-3.11	195	200	Peak
4875.00	34.80	8.53	43.33	54.00	-10.67	42	200	Average
4875.00	44.53	8.53	53.06	74.00	-20.94	42	200	Peak
6990.00	37.33	12.24	49.57	74.00	-24.43	188	100	Peak
9765.00	36.69	15.11	51.80	74.00	-22.20	308	200	Peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Average test would be performed if the peak result were greater than the average limit.*
3. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
4. *Result = Reading + Correction Factor*
   Margin = Result – Limit
   Remark Peak = Result(PK) – Limit(PK)
   Remark AVG = Result(AV) – Limit(AV)

Product Name	Smart Touch Computer	Test By	Rex Chiu
Test Model	STC-1505	Test Date	2015/10/15
Test mode	IEEE 802.11gn HT40 TX / CH High	Temp. & Humidity	25°C, 50%

966Chamber_B at 3Meter / Horizontal

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2044.00	47.45	1.83	49.28	74.00	-24.72	278	100	Peak
2240.00	47.16	2.40	49.56	74.00	-24.44	280	100	Peak
2502.00	49.00	3.15	52.15	74.00	-21.85	138	200	Peak
4890.00	38.35	8.56	46.91	74.00	-27.09	144	100	Peak
7245.00	37.02	12.31	49.33	74.00	-24.67	306	200	Peak
9690.00	36.83	15.00	51.83	74.00	-22.17	35	100	Peak

966Chamber_B at 3Meter / Vertical

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2214.00	47.59	2.32	49.91	74.00	-24.09	107	200	Peak
2372.00	48.01	2.78	50.79	74.00	-23.21	120	100	Peak
2502.00	50.67	3.15	53.82	74.00	-20.18	191	200	Peak
4875.00	39.12	8.53	47.65	74.00	-26.35	32	200	Peak
7065.00	37.93	12.27	50.20	74.00	-23.80	202	200	Peak
9675.00	36.60	14.98	51.58	74.00	-22.42	344	100	Peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Average test would be performed if the peak result were greater than the average limit.*
3. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
4. *Result = Reading + Correction Factor*
   Margin = Result – Limit
   Remark Peak = Result(PK) – Limit(PK)
   Remark AVG = Result(AV) – Limit(AV)

Product Name	Smart Touch Computer	Test By	Rex Chiu
Test Model	STC-1505	Test Date	2015/10/15
Test mode	Bluetooth 4.0 / TX mode / CH Low	Temp. & Humidity	25°C, 50%

966Chamber_B at 3Meter / Horizontal

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2022.00	41.93	1.76	43.69	74.00	-30.31	297	200	Peak
2194.00	42.76	2.26	45.02	74.00	-28.98	24	100	Peak
2578.00	41.35	3.30	44.65	74.00	-29.35	58	100	Peak
4845.00	37.81	8.46	46.27	74.00	-27.73	283	100	Peak
7050.00	36.90	12.26	49.16	74.00	-24.84	360	100	Peak
9690.00	36.64	15.00	51.64	74.00	-22.36	141	200	Peak

966Chamber_B at 3Meter / Vertical

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2056.00	41.87	1.86	43.73	74.00	-30.27	104	200	Peak
2266.00	42.14	2.47	44.61	74.00	-29.39	312	200	Peak
2616.00	41.03	3.38	44.41	74.00	-29.59	11	100	Peak
4830.00	38.15	8.42	46.57	74.00	-27.43	164	200	Peak
7035.00	36.41	12.26	48.67	74.00	-25.33	291	200	Peak
9780.00	36.49	15.13	51.62	74.00	-22.38	164	200	Peak

Remark:

5. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
6. *Average test would be performed if the peak result were greater than the average limit.*
7. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
8. *Result = Reading + Correction Factor*
   Margin = Result – Limit
   Remark Peak = Result(PK) – Limit(PK)
   Remark AVG = Result(AV) – Limit(AV)

Product Name	Smart Touch Computer	Test By	Rex Chiu
Test Model	STC-1505	Test Date	2015/10/15
Test mode	Bluetooth 4.0 / TX mode / CH Middle	Temp. & Humidity	25°C, 50%

966Chamber_B at 3Meter / Horizontal

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
1908.00	42.91	0.90	43.81	74.00	-30.19	302	100	Peak
2372.00	41.31	2.78	44.09	74.00	-29.91	225	200	Peak
2488.00	42.18	3.12	45.30	74.00	-28.70	346	100	Peak
4785.00	39.34	8.32	47.66	74.00	-26.34	0	100	Peak
7215.00	37.44	12.31	49.75	74.00	-24.25	39	100	Peak
9780.00	36.30	15.13	51.43	74.00	-22.57	243	100	Peak

966Chamber_B at 3Meter / Vertical

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
1948.00	42.40	1.25	43.65	74.00	-30.35	214	100	Peak
2302.00	42.23	2.58	44.81	74.00	-29.19	291	100	Peak
2520.00	42.43	3.19	45.62	74.00	-28.38	206	200	Peak
5145.00	37.46	9.09	46.55	74.00	-27.45	292	200	Peak
7230.00	37.01	12.31	49.32	74.00	-24.68	72	100	Peak
9360.00	37.23	14.32	51.55	74.00	-22.45	83	200	Peak

Remark:

5. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
6. *Average test would be performed if the peak result were greater than the average limit.*
7. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
8. *Result = Reading + Correction Factor*
   Margin = Result – Limit
   Remark Peak = Result(PK) – Limit(PK)
   Remark AVG = Result(AV) – Limit(AV)

Product Name	Smart Touch Computer	Test By	Rex Chiu
Test Model	STC-1505	Test Date	2015/10/15
Test mode	Bluetooth 4.0 / TX mode / CH High	Temp. & Humidity	25°C, 50%

966Chamber_B at 3Meter / Horizontal

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
1452.00	45.93	-2.69	43.24	74.00	-30.76	188	100	Peak
2382.00	41.99	2.81	44.80	74.00	-29.20	178	200	Peak
2672.00	42.49	3.49	45.98	74.00	-28.02	156	100	Peak
4785.00	39.30	8.32	47.62	74.00	-26.38	39	200	Peak
7230.00	37.57	12.31	49.88	74.00	-24.12	190	100	Peak
9645.00	36.19	14.94	51.13	74.00	-22.87	225	100	Peak

966Chamber_B at 3Meter / Vertical

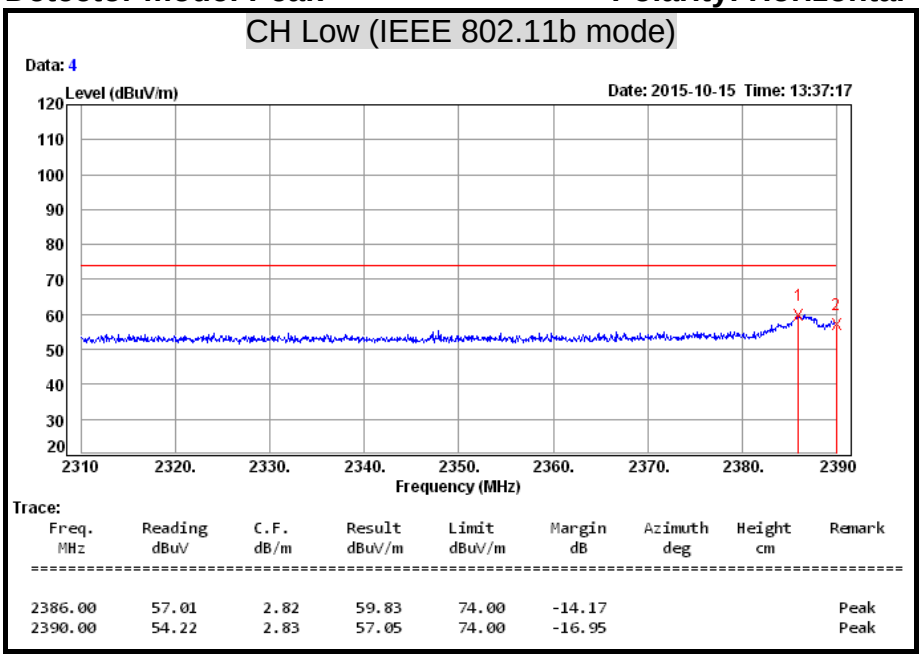
Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
1444.00	46.64	-2.69	43.95	74.00	-30.05	213	200	Peak
2272.00	41.40	2.49	43.89	74.00	-30.11	15	200	Peak
2560.00	42.27	3.27	45.54	74.00	-28.46	168	200	Peak
5025.00	37.66	8.87	46.53	74.00	-27.47	252	100	Peak
6480.00	37.31	11.71	49.02	74.00	-24.98	180	100	Peak
9660.00	36.94	14.96	51.90	74.00	-22.10	284	100	Peak

Remark:

5. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
6. *Average test would be performed if the peak result were greater than the average limit.*
7. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
8. *Result = Reading + Correction Factor*
   Margin = Result – Limit
   Remark Peak = Result(PK) – Limit(PK)
   Remark AVG = Result(AV) – Limit(AV)

Restricted Band Edges

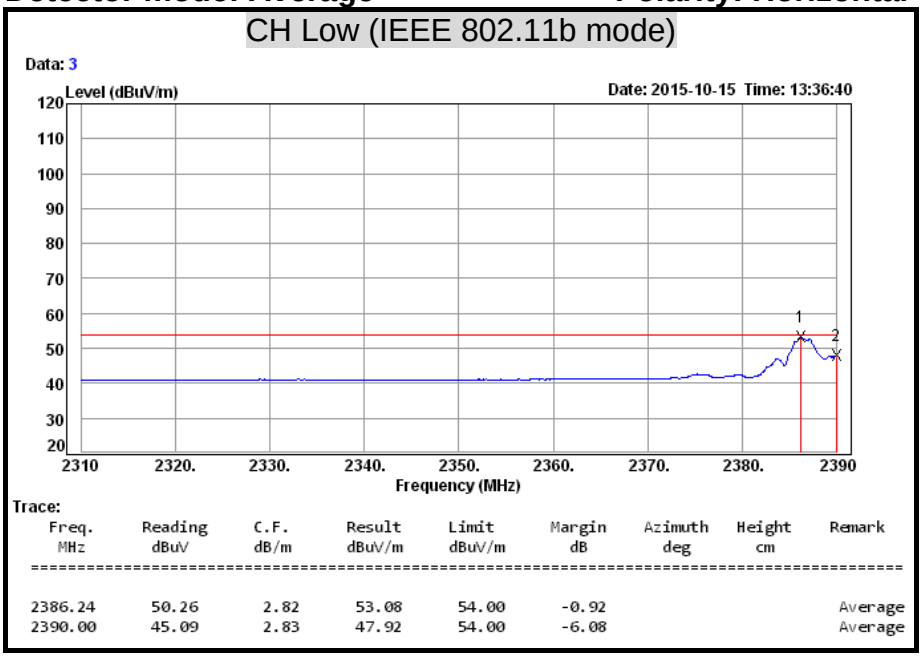
Detector mode: Peak **Polarity: Horizontal**



Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2386.00	57.01	2.82	59.83	74.00	-14.17			Peak
2390.00	54.22	2.83	57.05	74.00	-16.95			Peak

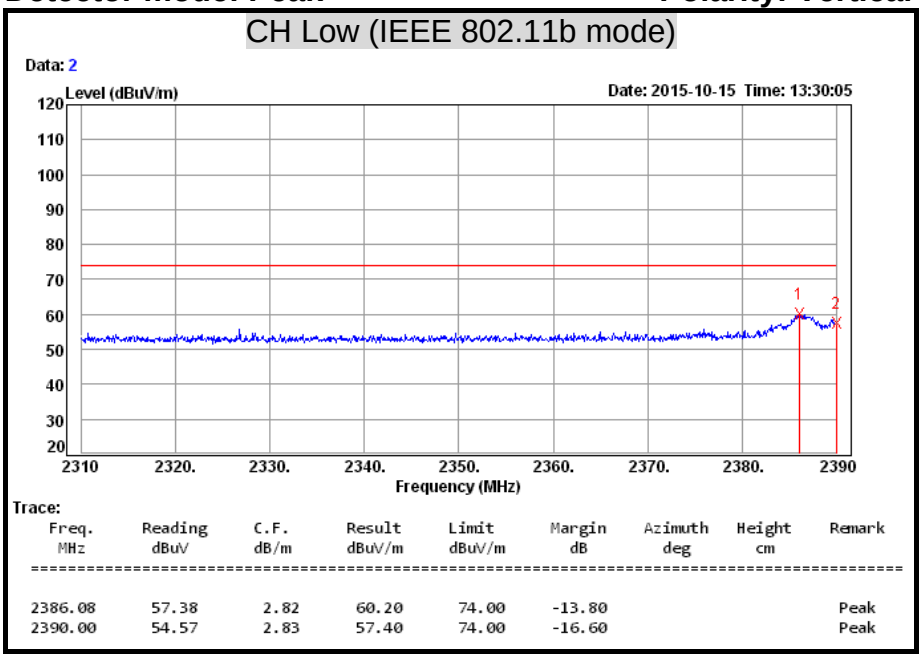
Detector mode: Average **Polarity: Horizontal**



Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2386.24	50.26	2.82	53.08	54.00	-0.92			Average
2390.00	45.09	2.83	47.92	54.00	-6.08			Average

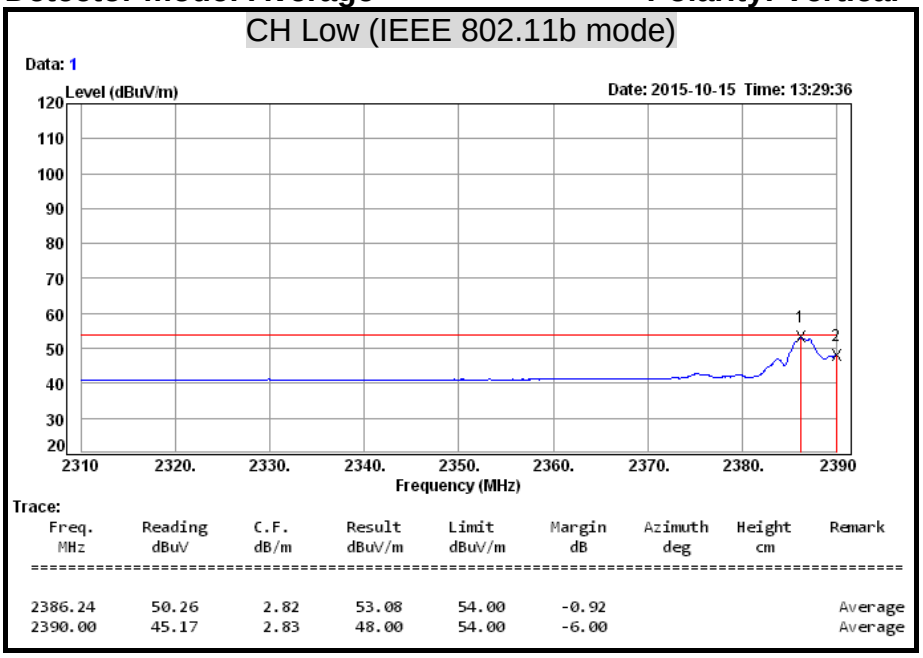
Detector mode: Peak **Polarity: Vertical**



Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2386.08	57.38	2.82	60.20	74.00	-13.80			Peak
2390.00	54.57	2.83	57.40	74.00	-16.60			Peak

Detector mode: Average **Polarity: Vertical**

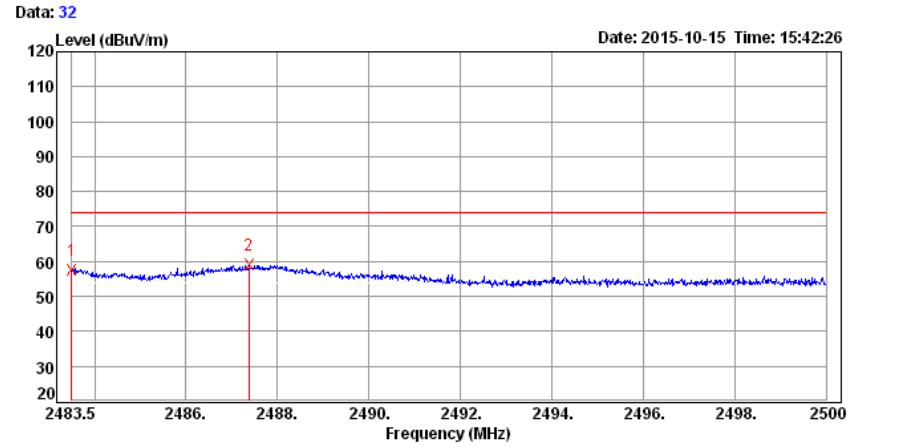


Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2386.24	50.26	2.82	53.08	54.00	-0.92			Average
2390.00	45.17	2.83	48.00	54.00	-6.00			Average

Detector mode: Peak **Polarity: Horizontal**

CH High (IEEE 802.11b mode)

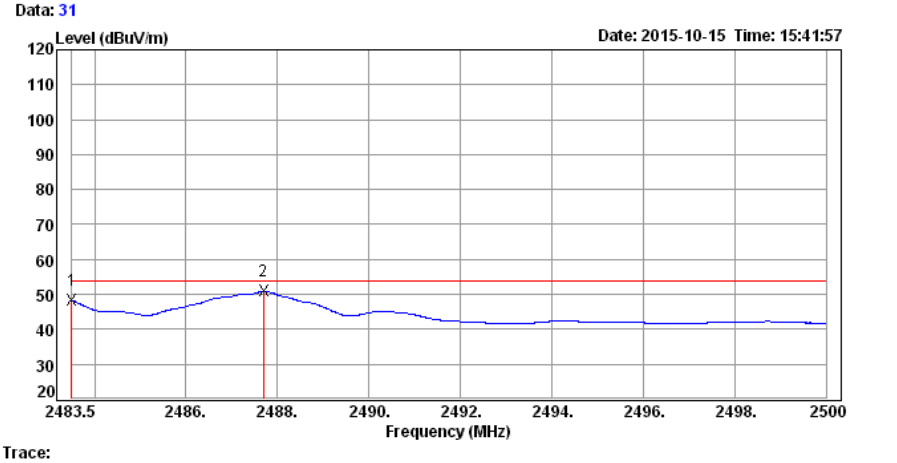


Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2483.50	54.19	3.10	57.29	74.00	-16.71			Peak
2487.38	55.78	3.11	58.89	74.00	-15.11			Peak

Detector mode: Average **Polarity: Horizontal**

CH High (IEEE 802.11b mode)

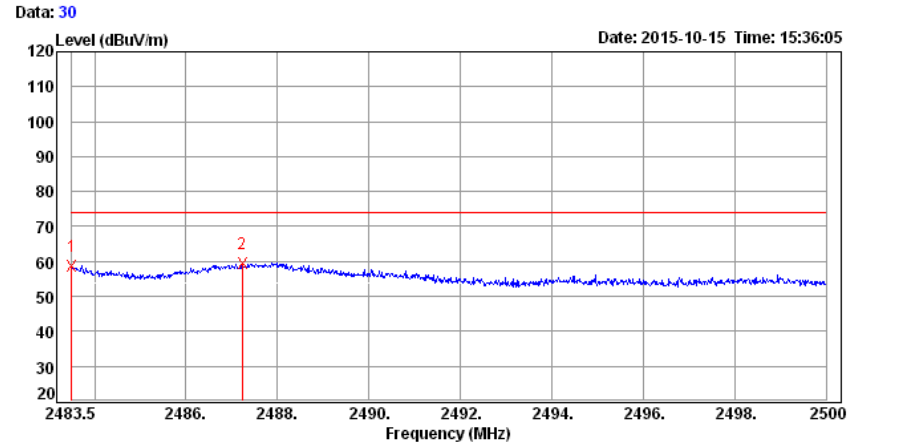


Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2483.50	45.18	3.10	48.28	54.00	-5.72			Average
2487.69	47.71	3.11	50.82	54.00	-3.18			Average

Detector mode: Peak **Polarity: Vertical**

CH High (IEEE 802.11b mode)

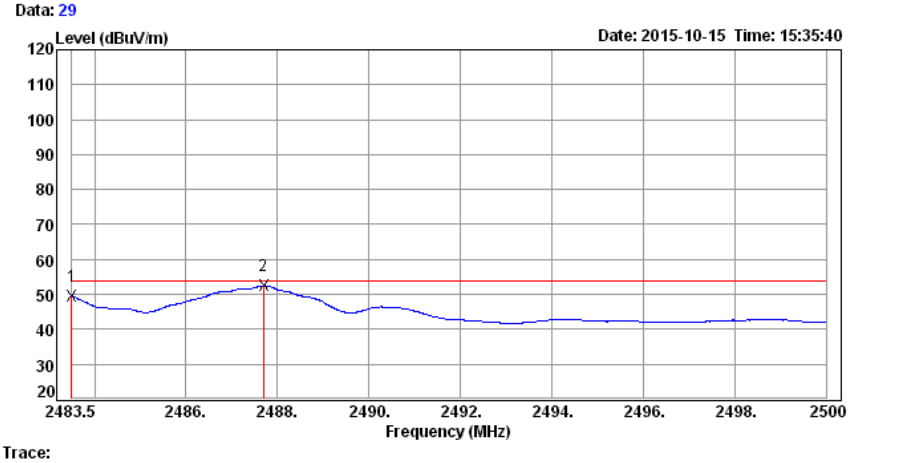


Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2483.50	55.55	3.10	58.65	74.00	-15.35			Peak
2487.23	56.39	3.11	59.50	74.00	-14.50			Peak

Detector mode: Average **Polarity: Vertical**

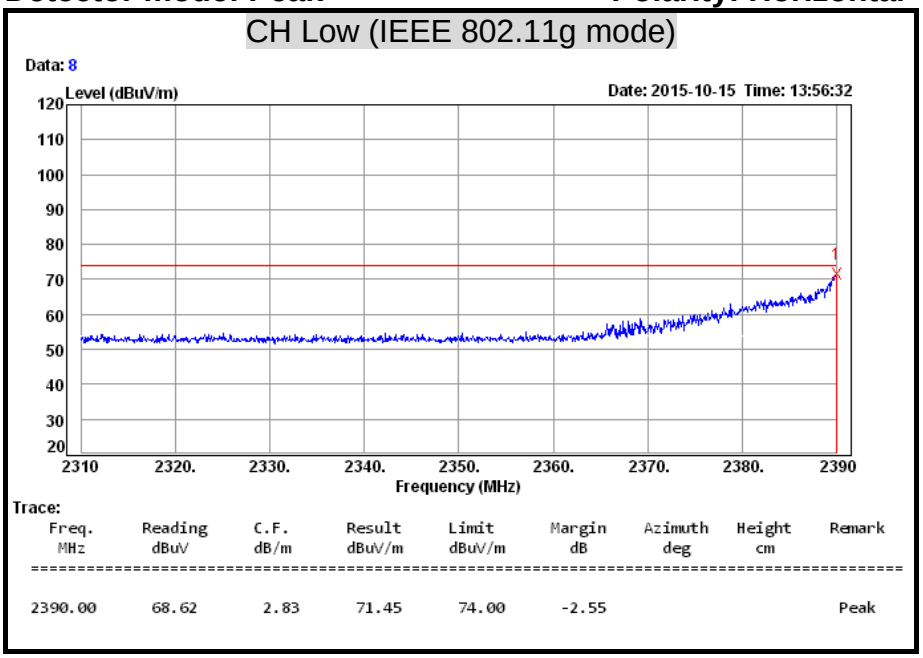
CH High (IEEE 802.11b mode)



Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2483.50	46.55	3.10	49.65	54.00	-4.35			Average
2487.69	49.41	3.11	52.52	54.00	-1.48			Average

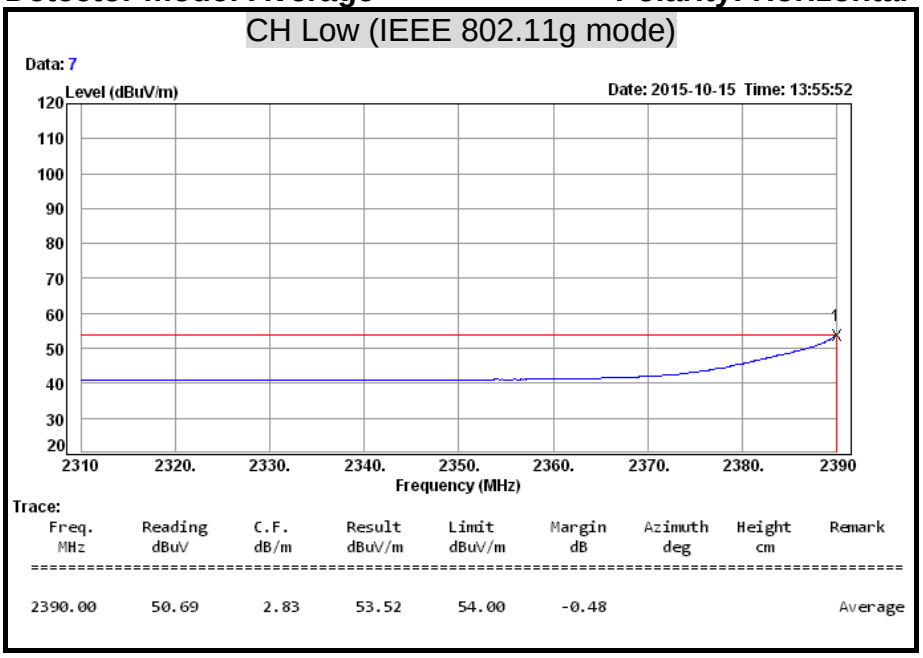
Detector mode: Peak **Polarity: Horizontal**



Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2390.00	68.62	2.83	71.45	74.00	-2.55			Peak

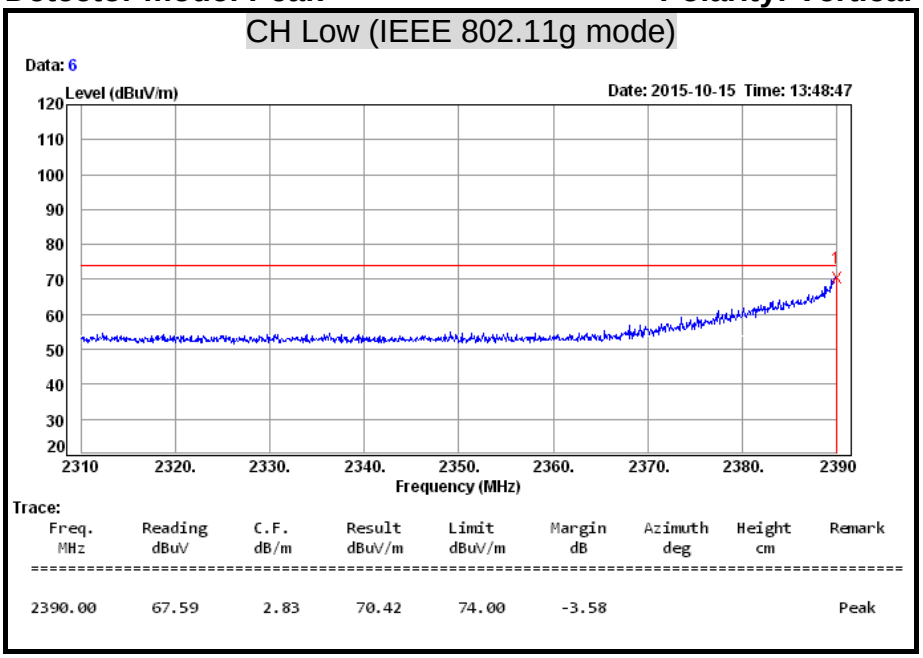
Detector mode: Average **Polarity: Horizontal**



Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2390.00	50.69	2.83	53.52	54.00	-0.48			Average

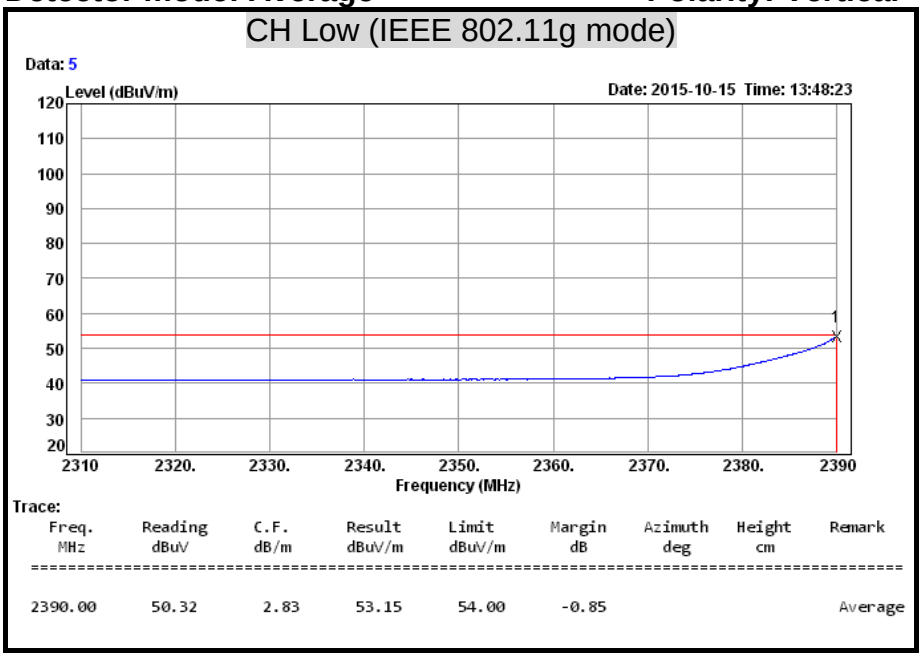
Detector mode: Peak **Polarity: Vertical**



Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2390.00	67.59	2.83	70.42	74.00	-3.58			Peak

Detector mode: Average **Polarity: Vertical**

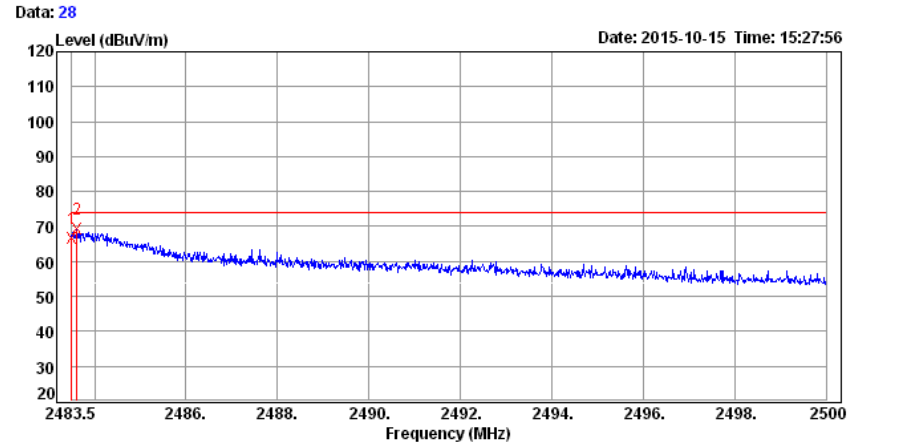


Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2390.00	50.32	2.83	53.15	54.00	-0.85			Average

Detector mode: Peak **Polarity: Horizontal**

CH High (IEEE 802.11g mode)

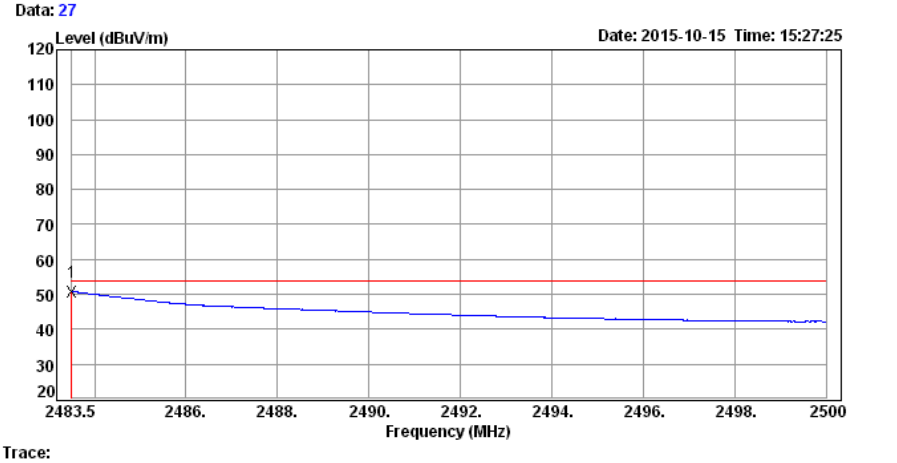


Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2483.50	63.48	3.10	66.58	74.00	-7.42			Peak
2483.62	66.09	3.10	69.19	74.00	-4.81			Peak

Detector mode: Average **Polarity: Horizontal**

CH High (IEEE 802.11g mode)

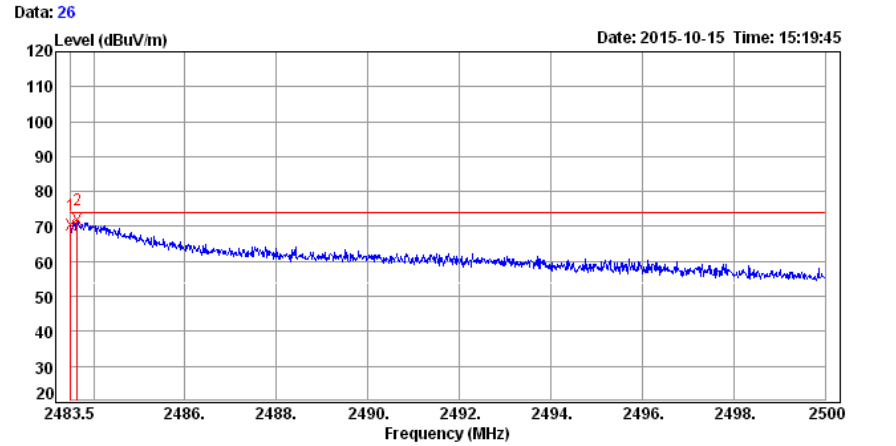


Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2483.50	47.66	3.10	50.76	54.00	-3.24			Average

Detector mode: Peak **Polarity: Vertical**

CH High (IEEE 802.11g mode)

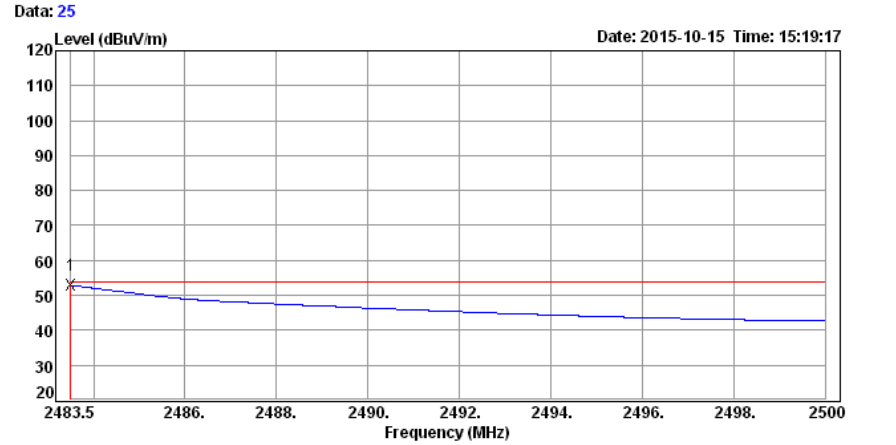


Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2483.50	67.15	3.10	70.25	74.00	-3.75			Peak
2483.65	68.83	3.10	71.93	74.00	-2.07			Peak

Detector mode: Average **Polarity: Vertical**

CH High (IEEE 802.11g mode)

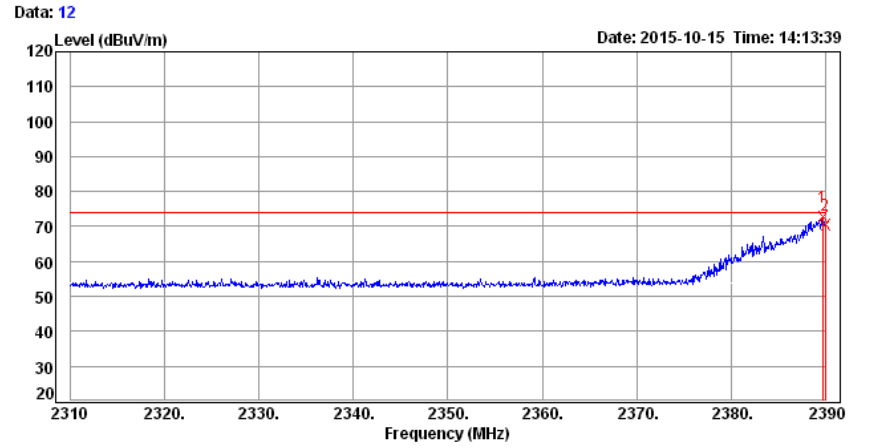


Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2483.50	49.81	3.10	52.91	54.00	-1.09			Average

Detector mode: Peak **Polarity: Horizontal**

CH Low (IEEE 802.11gn HT20 mode)

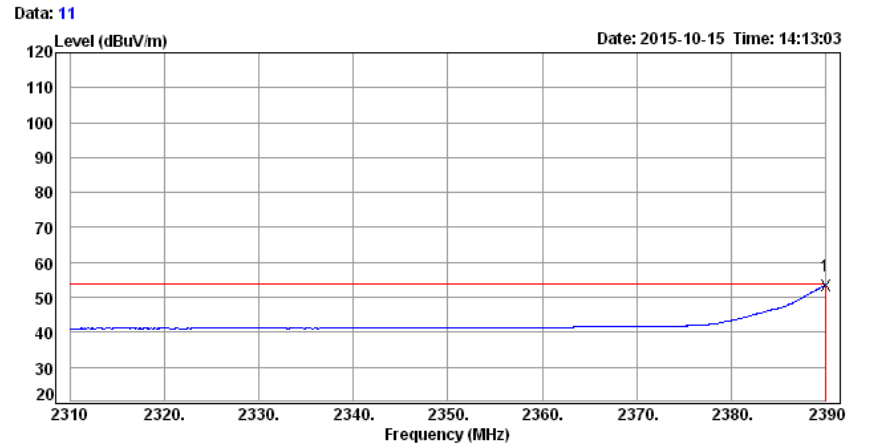


Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2389.76	69.99	2.83	72.82	74.00	-1.18			Peak
2390.00	67.58	2.83	70.41	74.00	-3.59			Peak

Detector mode: Average **Polarity: Horizontal**

CH Low (IEEE 802.11gn HT20 mode)

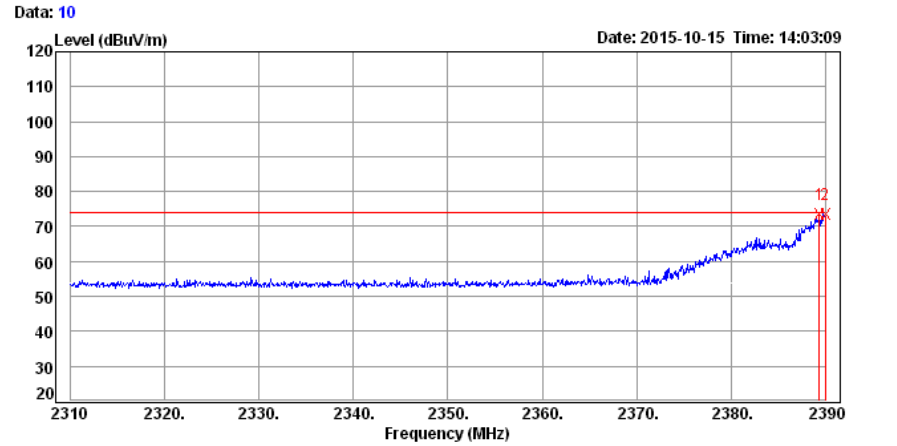


Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2390.00	50.49	2.83	53.32	54.00	-0.68			Average

Detector mode: Peak **Polarity: Vertical**

CH Low (IEEE 802.11gn HT20 mode)

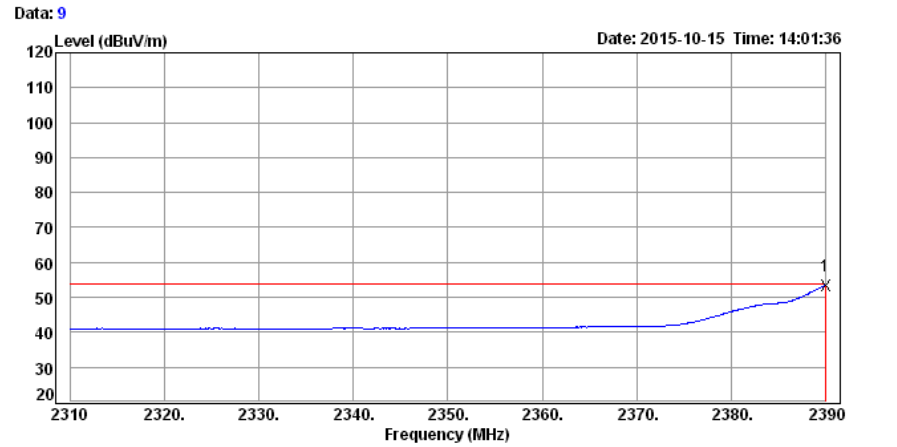


Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2389.36	70.73	2.83	73.56	74.00	-0.44			Peak
2390.00	70.56	2.83	73.39	74.00	-0.61			Peak

Detector mode: Average **Polarity: Vertical**

CH Low (IEEE 802.11gn HT20 mode)

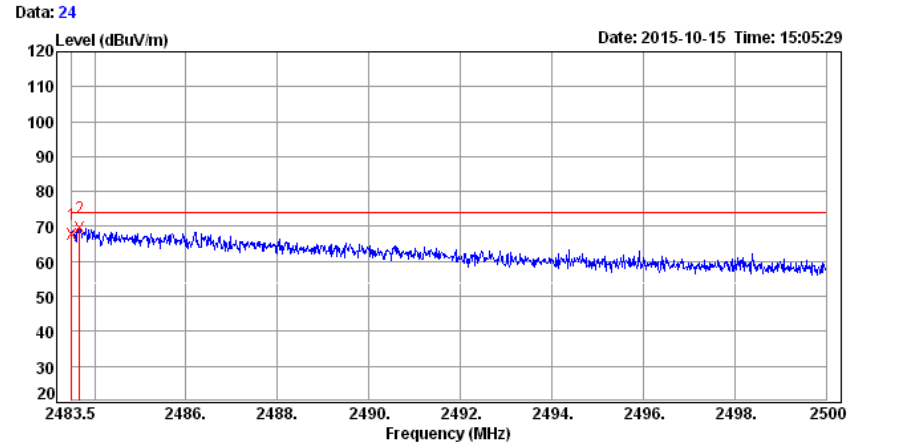


Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2390.00	50.46	2.83	53.29	54.00	-0.71			Average

Detector mode: Peak **Polarity: Horizontal**

CH High (IEEE 802.11gn HT20 mode)

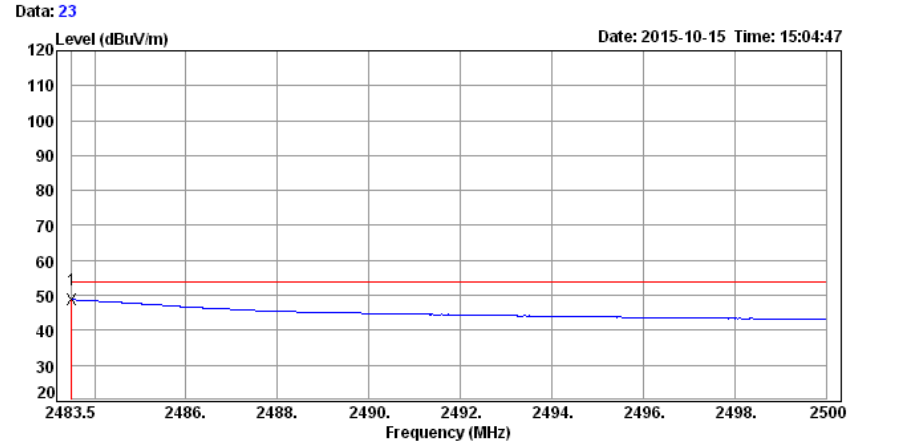


Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2483.50	64.69	3.10	67.79	74.00	-6.21			Peak
2483.67	66.65	3.10	69.75	74.00	-4.25			Peak

Detector mode: Average **Polarity: Horizontal**

CH High (IEEE 802.11gn HT20 mode)

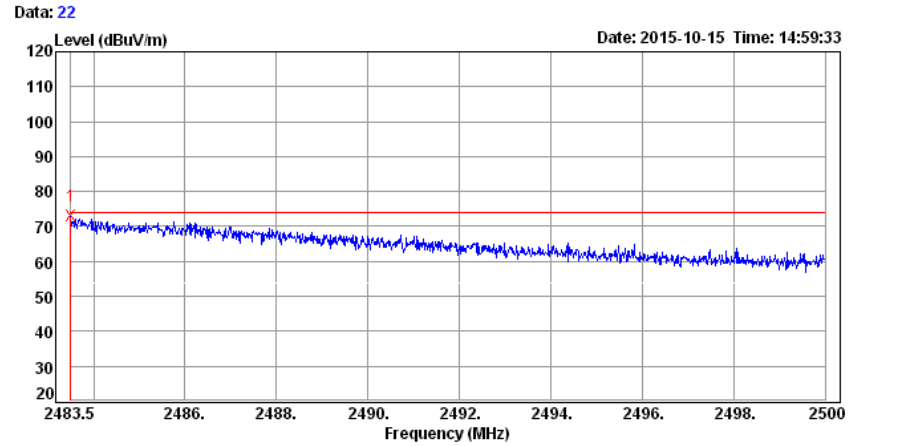


Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2483.50	45.67	3.10	48.77	54.00	-5.23			Average

Detector mode: Peak **Polarity: Vertical**

CH High (IEEE 802.11gn HT20 mode)

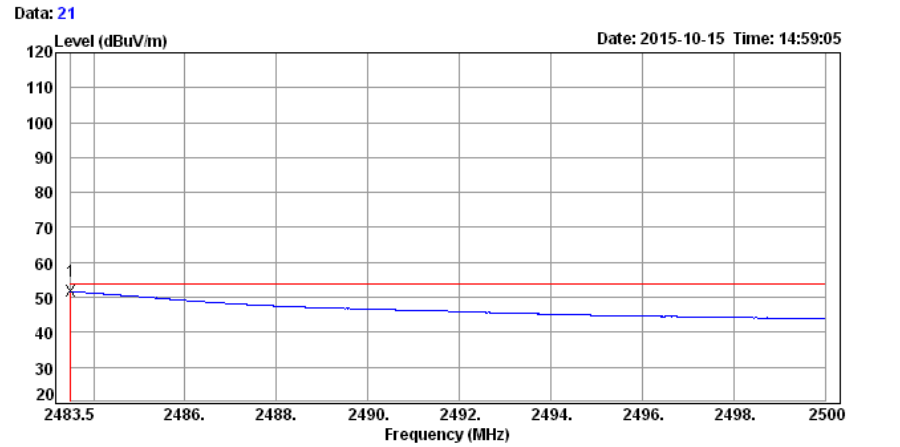


Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2483.50	69.76	3.10	72.86	74.00	-1.14			Peak

Detector mode: Average **Polarity: Vertical**

CH High (IEEE 802.11gn HT20 mode)

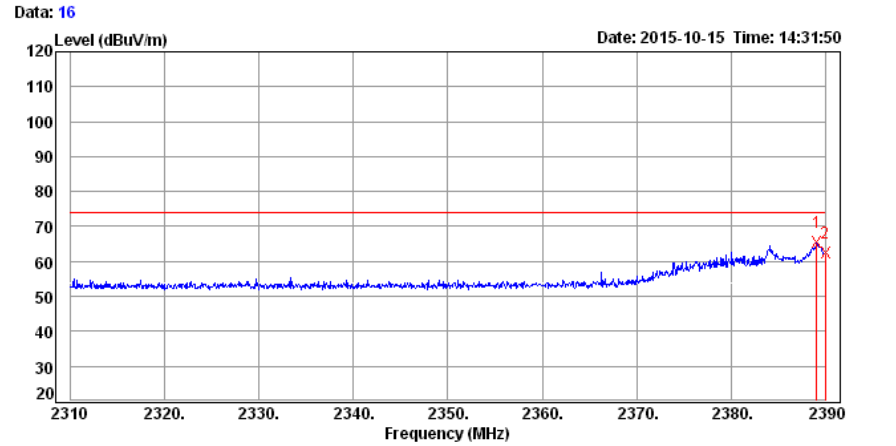


Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2483.50	48.51	3.10	51.61	54.00	-2.39			Average

Detector mode: Peak **Polarity: Horizontal**

CH Low (IEEE 802.11gn HT40 mode)

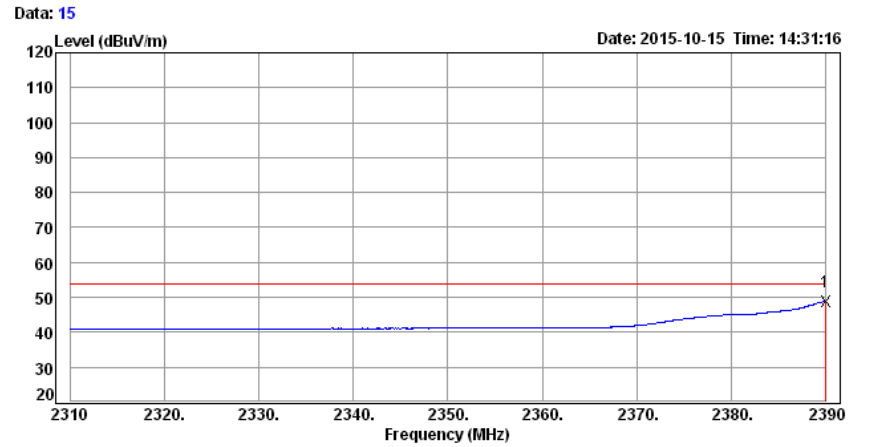


Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2389.12	62.51	2.83	65.34	74.00	-8.66			Peak
2390.00	59.48	2.83	62.31	74.00	-11.69			Peak

Detector mode: Average **Polarity: Horizontal**

CH Low (IEEE 802.11gn HT40 mode)

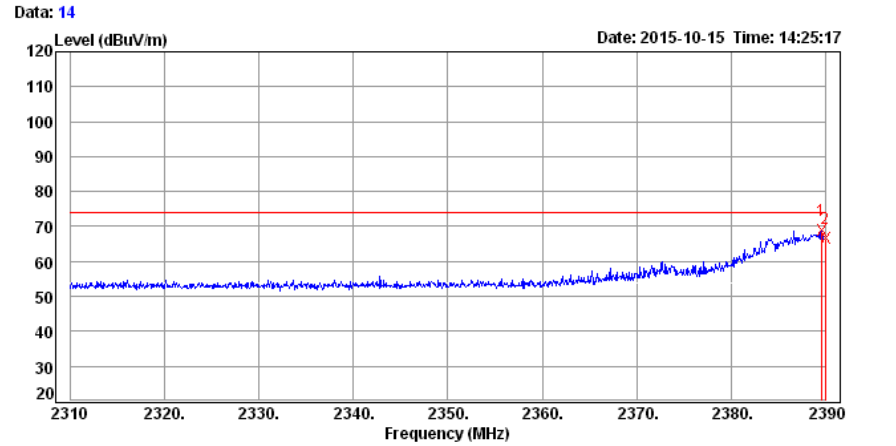


Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2390.00	46.00	2.83	48.83	54.00	-5.17			Average

Detector mode: Peak **Polarity: Vertical**

CH Low (IEEE 802.11gn HT40 mode)

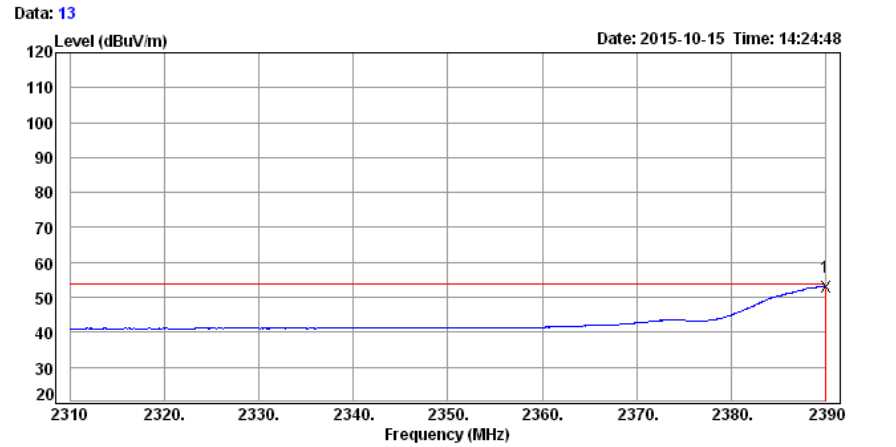


Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2389.60	65.85	2.83	68.68	74.00	-5.32			Peak
2390.00	63.73	2.83	66.56	74.00	-7.44			Peak

Detector mode: Average **Polarity: Vertical**

CH Low (IEEE 802.11gn HT40 mode)

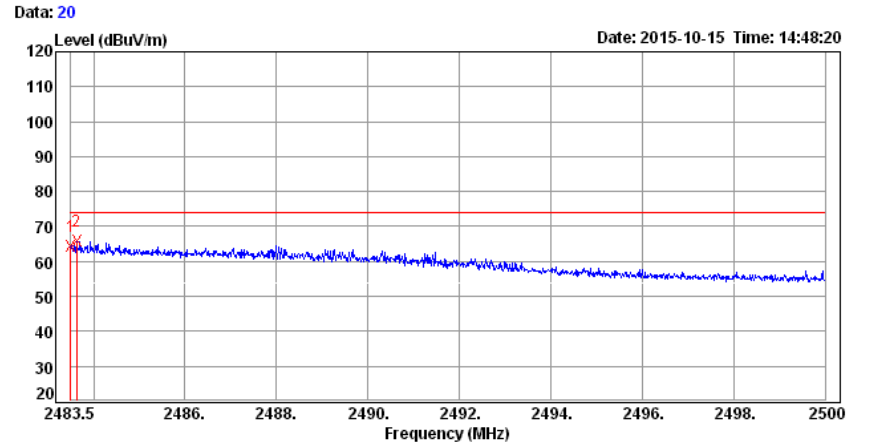


Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2390.00	50.18	2.83	53.01	54.00	-0.99			Average

Detector mode: Peak **Polarity: Horizontal**

CH High (IEEE 802.11gn HT40 mode)

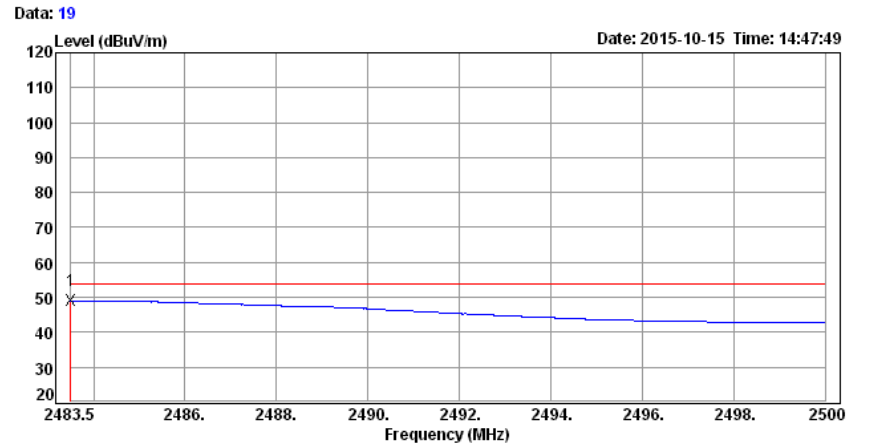


Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2483.50	61.02	3.10	64.12	74.00	-9.88			Peak
2483.63	62.60	3.10	65.70	74.00	-8.30			Peak

Detector mode: Average **Polarity: Horizontal**

CH High (IEEE 802.11gn HT40 mode)

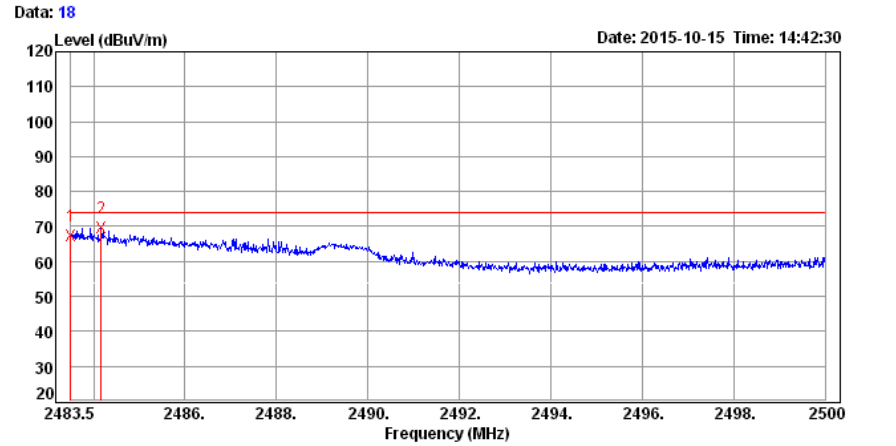


Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2483.50	45.90	3.10	49.00	54.00	-5.00			Average

Detector mode: Peak **Polarity: Vertical**

CH High (IEEE 802.11gn HT40 mode)

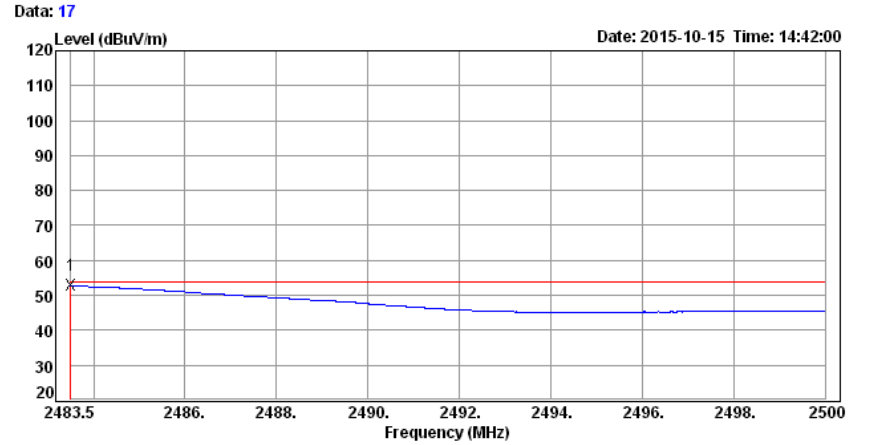


Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2483.50	64.28	3.10	67.38	74.00	-6.62			Peak
2484.16	66.39	3.10	69.49	74.00	-4.51			Peak

Detector mode: Average **Polarity: Vertical**

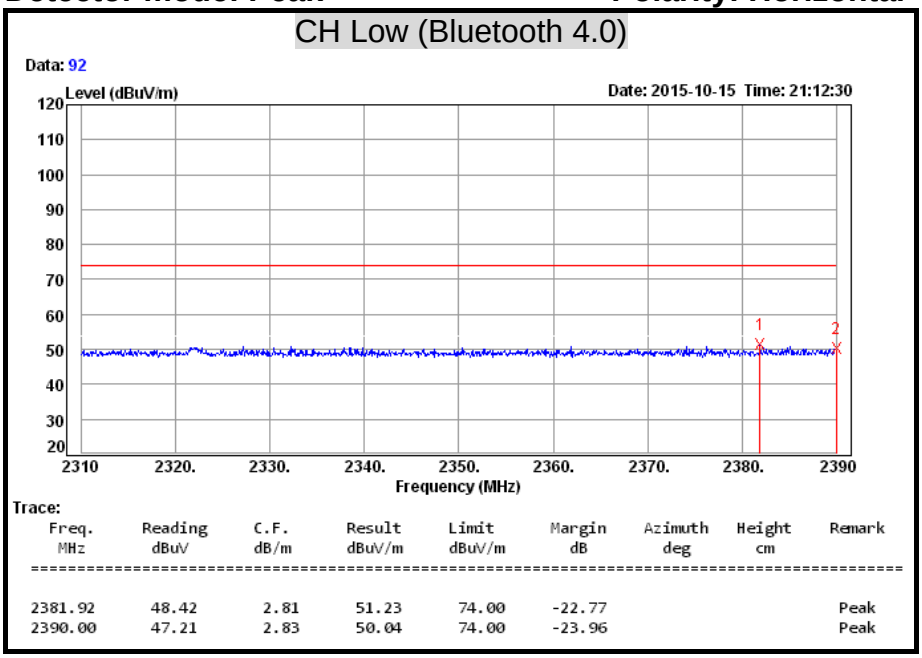
CH High (IEEE 802.11gn HT40 mode)



Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2483.50	49.66	3.10	52.76	54.00	-1.24			Average

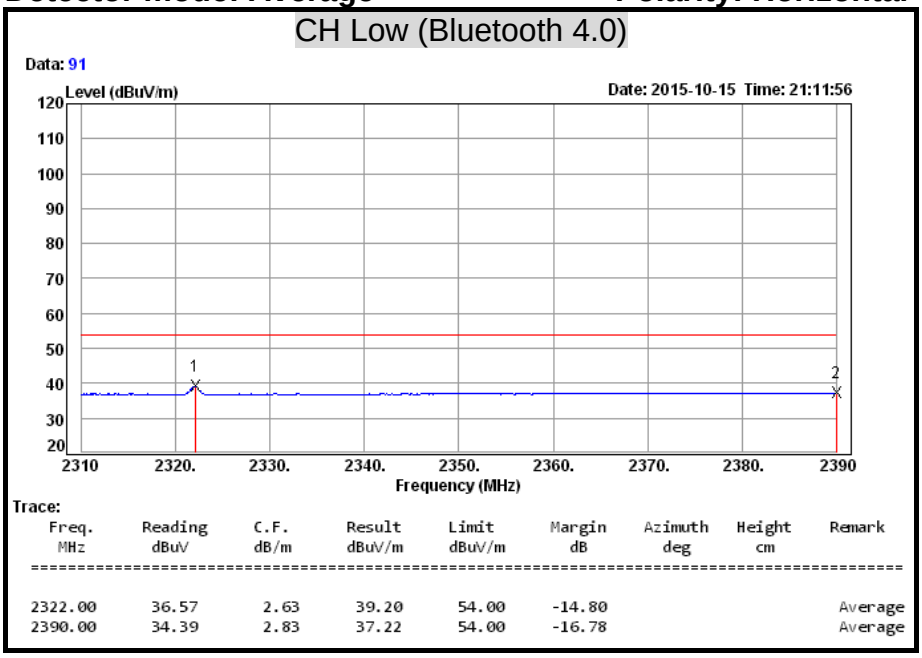
Detector mode: Peak **Polarity: Horizontal**



Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2381.92	48.42	2.81	51.23	74.00	-22.77			Peak
2390.00	47.21	2.83	50.04	74.00	-23.96			Peak

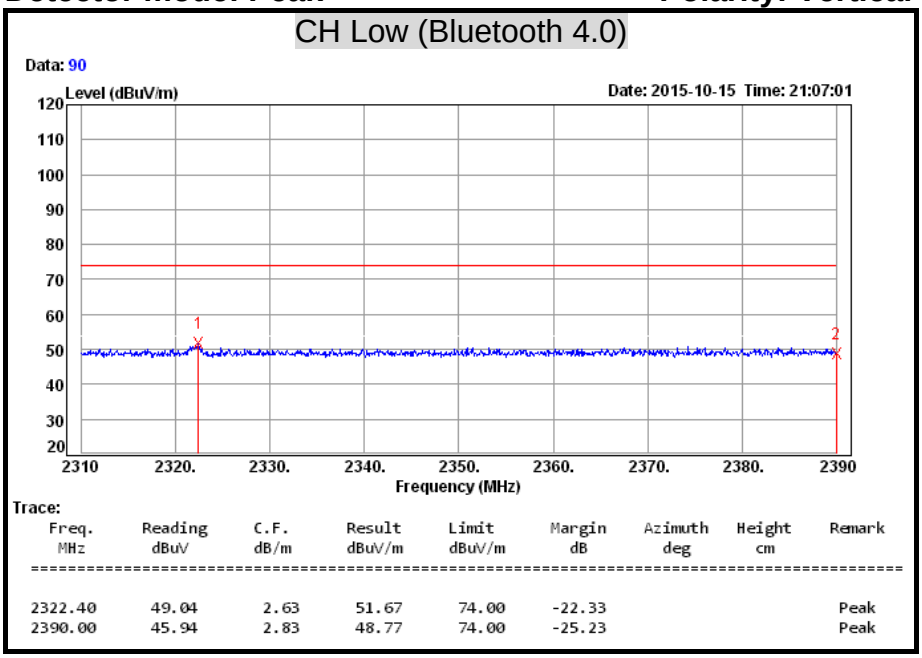
Detector mode: Average **Polarity: Horizontal**



Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2322.00	36.57	2.63	39.20	54.00	-14.80			Average
2390.00	34.39	2.83	37.22	54.00	-16.78			Average

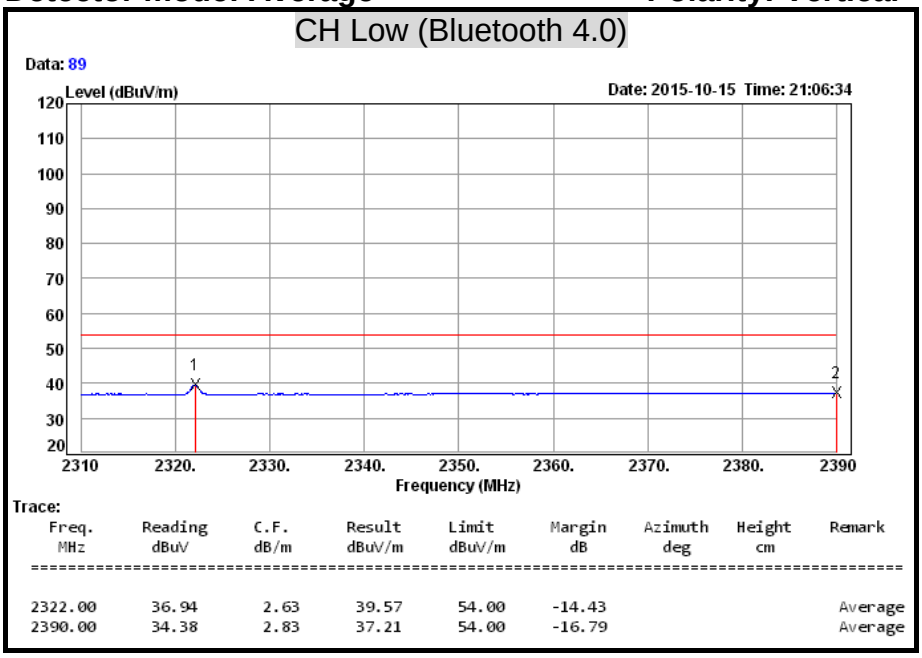
Detector mode: Peak **Polarity: Vertical**



Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2322.40	49.04	2.63	51.67	74.00	-22.33			Peak
2390.00	45.94	2.83	48.77	74.00	-25.23			Peak

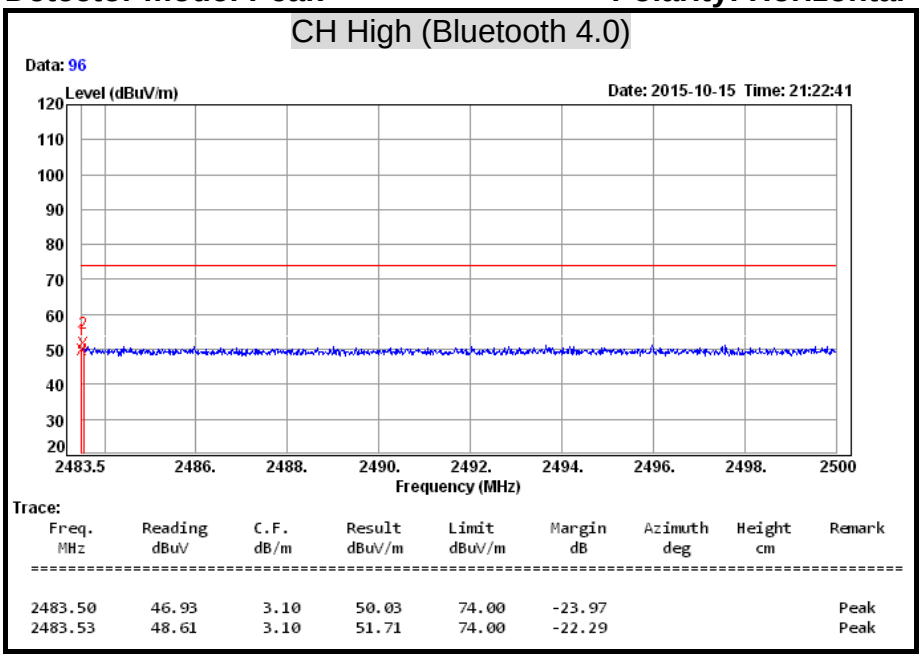
Detector mode: Average **Polarity: Vertical**



Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2322.00	36.94	2.63	39.57	54.00	-14.43			Average
2390.00	34.38	2.83	37.21	54.00	-16.79			Average

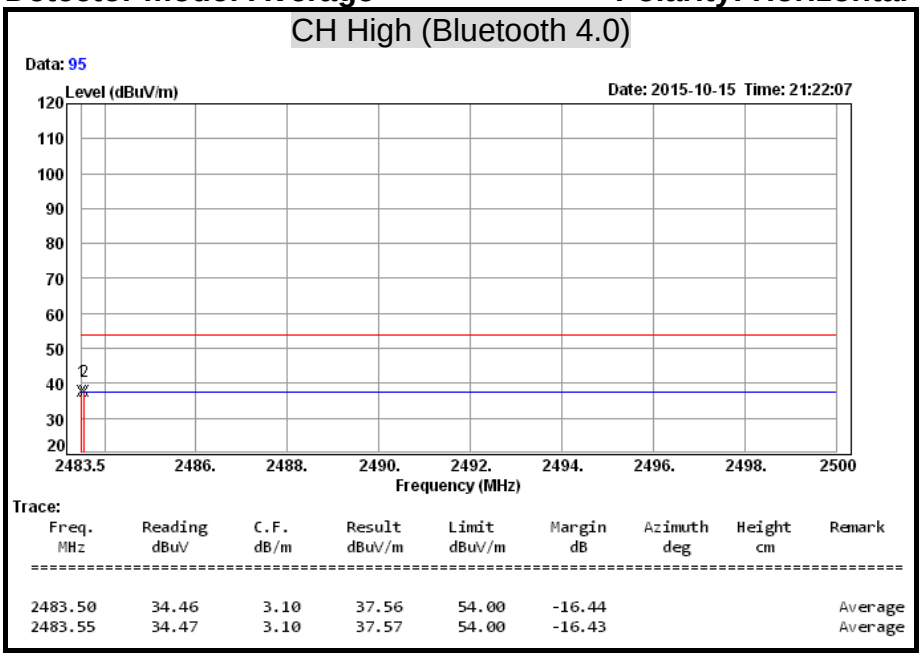
Detector mode: Peak **Polarity: Horizontal**



Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2483.50	46.93	3.10	50.03	74.00	-23.97			Peak
2483.53	48.61	3.10	51.71	74.00	-22.29			Peak

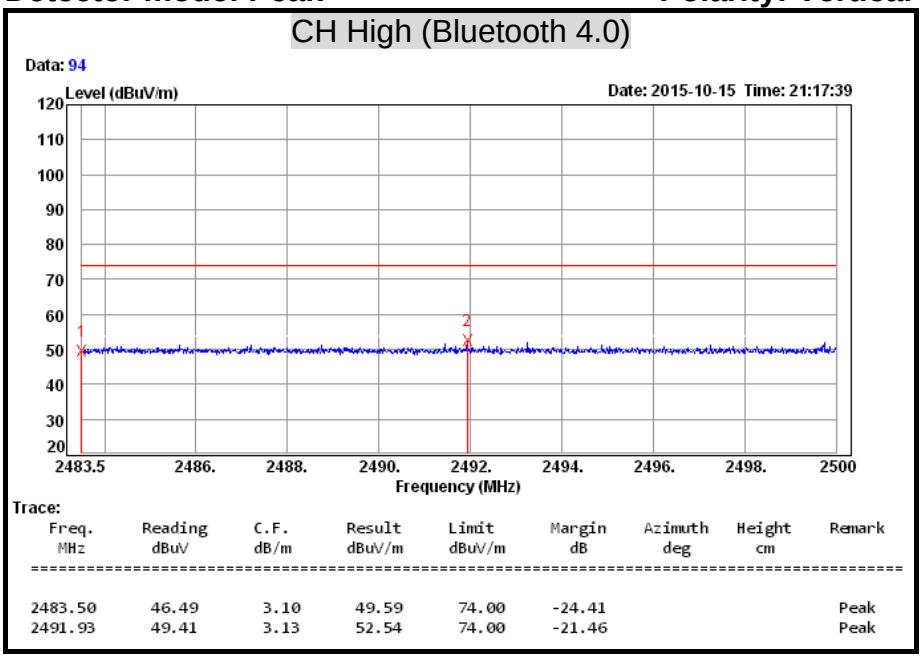
Detector mode: Average **Polarity: Horizontal**



Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2483.50	34.46	3.10	37.56	54.00	-16.44			Average
2483.55	34.47	3.10	37.57	54.00	-16.43			Average

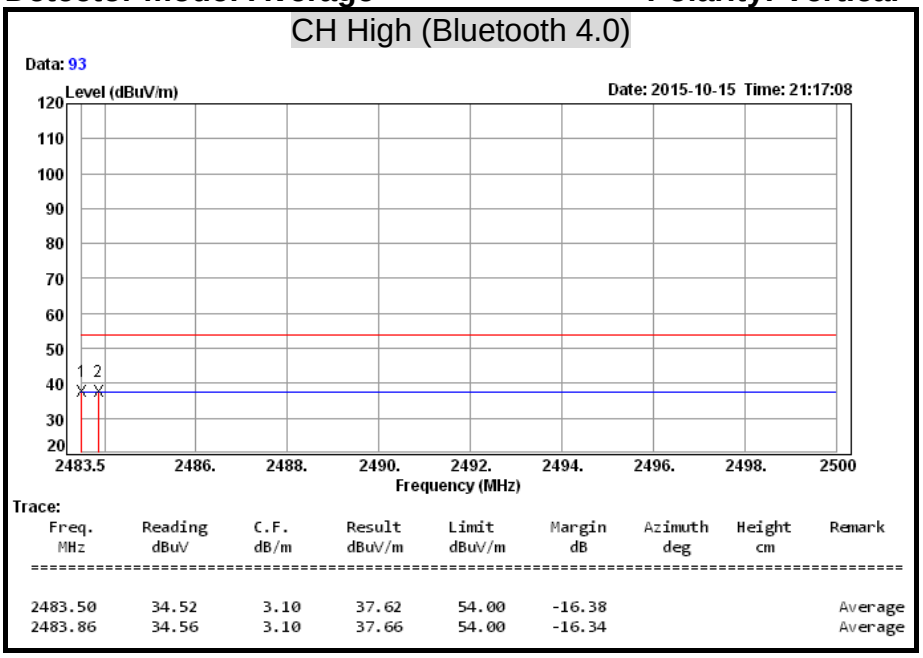
Detector mode: Peak **Polarity: Vertical**



Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2483.50	46.49	3.10	49.59	74.00	-24.41			Peak
2491.93	49.41	3.13	52.54	74.00	-21.46			Peak

Detector mode: Average **Polarity: Vertical**



Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2483.50	34.52	3.10	37.62	54.00	-16.38			Average
2483.86	34.56	3.10	37.66	54.00	-16.34			Average

7.7 CONDUCTED EMISSION

LIMITS

§ 15.207 (a) Except as shown in paragraph (b) and (c) this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 μH/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal.

The lower limit applies at the boundary between the frequency ranges.

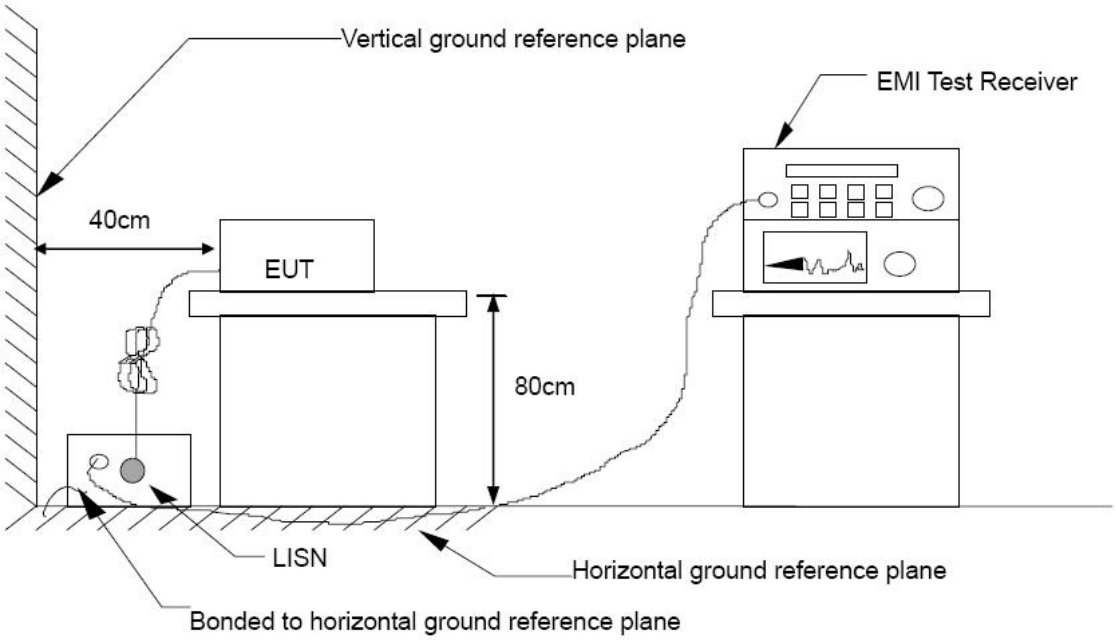
Frequency Range (MHz)	Conducted Limit (dBμv)	
	Quasi-peak	Average
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5.00	56	46
5.00 - 30.0	60	50

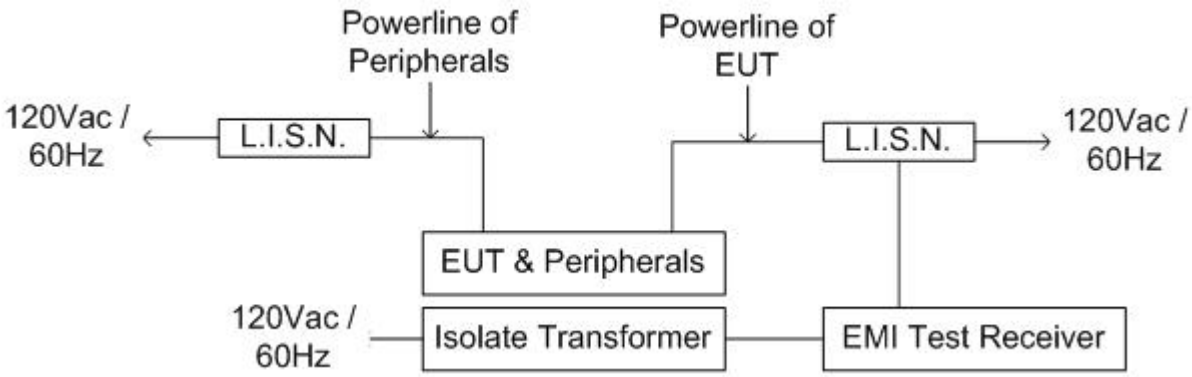
TEST EQUIPMENT

Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
L.I.S.N	Schwarzbeck	NSLK 8127	8127465	08/05/2016
L.I.S.N	Schwarzbeck	NSLK 8127	8127473	03/09/2016
EMI Test Receiver	Rohde & Schwarz	ESHS 30	838550/003	11/02/2015
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100111	06/28/2016

Remark: *Each piece of equipment is scheduled for calibration once a year.*

TEST SETUP





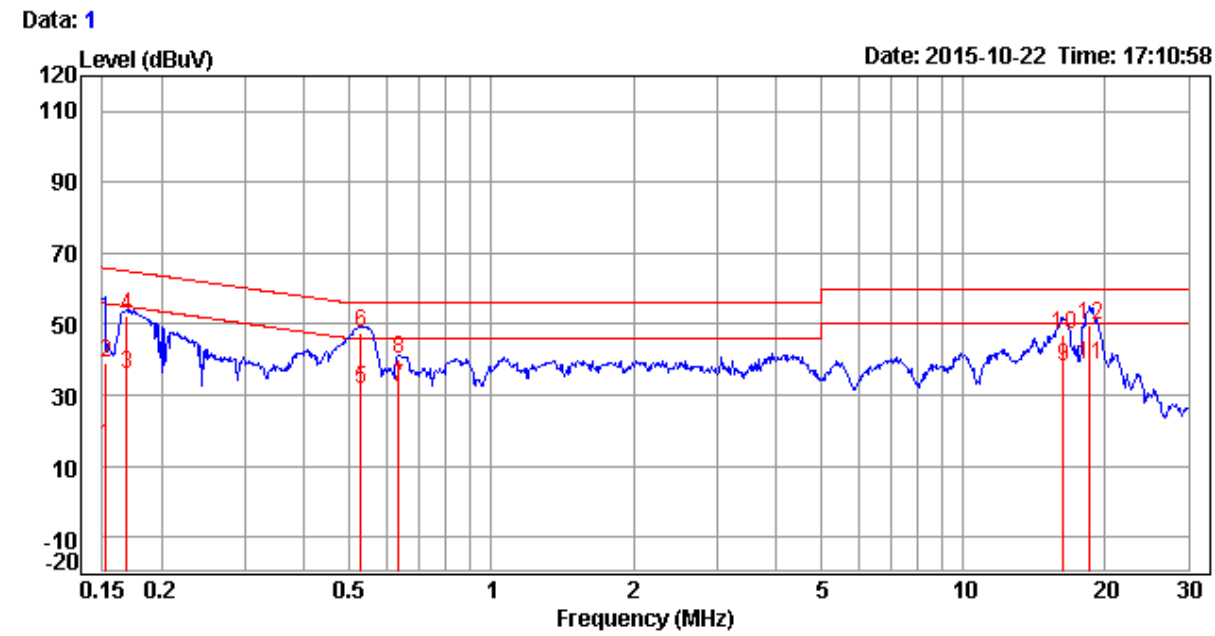
TEST PROCEDURE

The basic test procedure was in accordance with ANSI C63.10:2013.
The test procedure is performed in a 4m × 3m × 2.4m (L×W×H) shielded room.
The EUT along with its peripherals were placed on a 1.0m (W) × 1.5m (L) and 0.8m in height wooden table and the EUT was adjusted to maintain a 0.4 meter space from a vertical reference plane.
The EUT was connected to power mains through a line impedance stabilization network (LISN) which provides 50 ohm coupling impedance for measuring instrument and the chassis ground was bounded to the horizontal ground plane of shielded room. All peripherals were connected to the second LISN and the chassis ground also bounded to the horizontal ground plane of shielded room.
The EUT was located so that the distance between the boundary of the EUT and the closest surface of the LISN is 0.8 m. Where a mains flexible cord was provided by the manufacturer shall be 1 m long, or if in excess of 1 m, the excess cable was folded back and forth as far as possible so as to form a bundle not exceeding 0.4 m in length.

TEST RESULTS

Product Name	Smart Touch Computer	Test By	Jey Li
Test Model	STC-1505	Test Date	2015/10/22
Test mode	Mode 1	Temp. & Humidity	25°C, 59%

LINE



Trace:

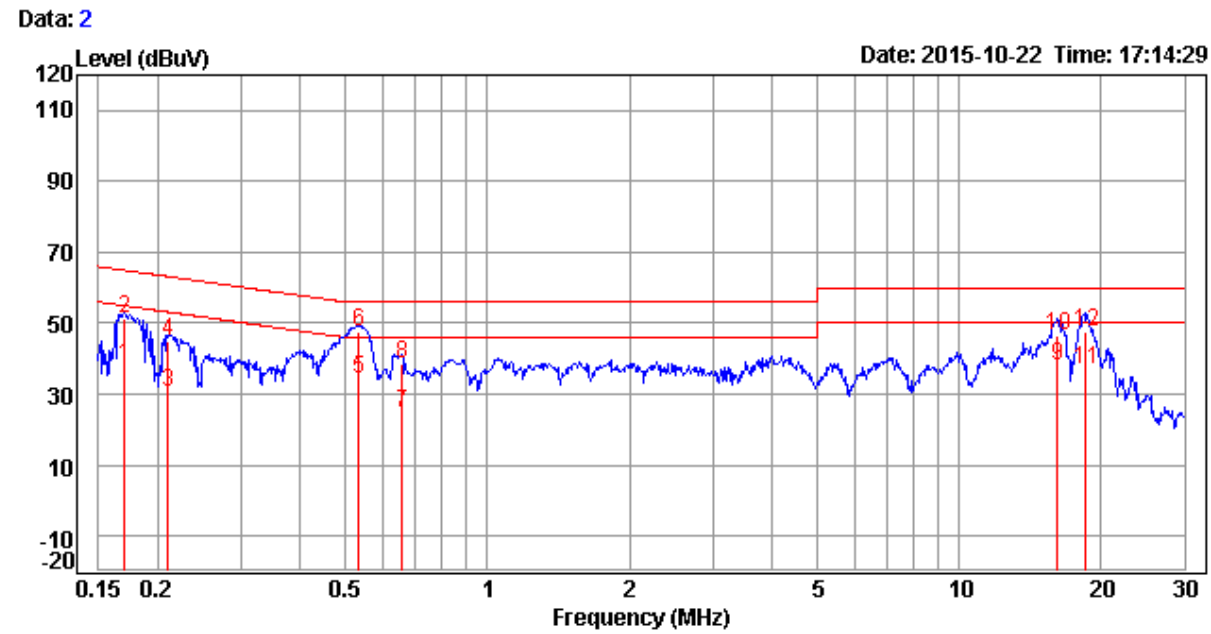
Freq. MHz	Reading dBuV Q.P.	Reading dBuV AV.	C.F. dB	Result dBuV Q.P.	Result dBuV AV.	Limit dBuV Q.P.	Limit dBuV AV.	Margin dB Q.P.	Margin dB AV.
0.152	29.32	5.73	9.96	39.28	15.69	65.91	55.91	-26.63	-40.22
0.168	42.32	26.03	9.97	52.29	36.00	65.08	55.08	-12.79	-19.08
0.529	37.49	21.73	10.00	47.49	31.73	56.00	46.00	-8.51	-14.27
0.637	29.89	22.12	10.00	39.89	32.12	56.00	46.00	-16.11	-13.88
16.312	36.42	27.37	10.66	47.08	38.03	60.00	50.00	-12.92	-11.97
18.524	38.86	27.79	10.75	49.61	38.54	60.00	50.00	-10.39	-11.46

Remark:

1. *Correction Factor = Insertion loss + Cable loss*
2. *Result level = Reading Value + Correction factor*
3. *Margin value = Result level – Limit value*

Product Name	Smart Touch Computer	Test By	Jey Li
Test Model	STC-1505	Test Date	2015/10/22
Test Mode	Mode 1	Temp. & Humidity	25°C, 59%

NEUTRAL



Trace:

Freq. MHz	Reading dBuV Q.P.	Reading dBuV AV.	C.F. dB	Result dBuV Q.P.	Result dBuV AV.	Limit dBuV Q.P.	Limit dBuV AV.	Margin dB Q.P.	Margin dB AV.
0.170	41.38	28.25	9.99	51.37	38.24	64.94	54.94	-13.57	-16.70
0.209	34.83	20.70	10.00	44.83	30.70	63.23	53.23	-18.40	-22.53
0.535	37.75	24.23	10.02	47.77	34.25	56.00	46.00	-8.23	-11.75
0.658	28.40	14.53	10.02	38.42	24.55	56.00	46.00	-17.58	-21.45
16.140	36.06	27.52	10.48	46.54	38.00	60.00	50.00	-13.46	-12.00
18.426	37.14	26.62	10.53	47.67	37.15	60.00	50.00	-12.33	-12.85

Remark:

1. *Correction Factor = Insertion loss + Cable loss*
2. *Result level = Reading Value + Correction factor*
3. *Margin value = Result level – Limit value*