
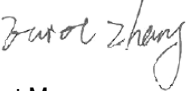



Prüfbericht-Nr.: <i>Test Report No.:</i>	50080306 001	Auftrags-Nr.: <i>Order No.:</i>	154243386	Seite 1 von 85 <i>Page 1 of 85</i>	
Kunden-Referenz-Nr.: <i>Client Reference No.:</i>	52195766	Auftragsdatum: <i>Order date:</i>	04.25.2017		
Auftraggeber: <i>Client:</i>	Lightcomm Technology Co.,Ltd. RM 1808 18/F, FO TAN INDUSTRIAL CENTRE, NOS. 26-28 AU PUI WAN STREET, FO TAN SHATIN NEW TERRITORIES, HONGKONG				
Prüfgegenstand: <i>Test item:</i>	MID				
Bezeichnung / Typ-Nr.: <i>Identification / Type No.:</i>	MID8006-L, DL8006, DL80XXXXXX (x=0-9, A-Z, a-z, - or blank, for market purpose only, all models are identical except the model number, brand or color) FCC ID: XMF-MID8006L				
Auftrags-Inhalt: <i>Order content:</i>	Complete test				
Prüfgrundlage: <i>Test specification:</i>	FCC CFR47 Part 15, Subpart C Section 15.247 ANSI C63.10: 2013				
Wareneingangsdatum: <i>Date of receipt:</i>	04.01.2017				
Prüfmuster-Nr.: <i>Test sample No.:</i>	A000567056-001				
Prüfzeitraum: <i>Testing period:</i>	04.01.2017 to 07.04.2017				
Ort der Prüfung: <i>Place of testing:</i>	MRT Technology(Suzhou) Co., Ltd.				
Prüflaboratorium: <i>Testing laboratory:</i>	TÜV Rheinland (Shanghai) Co., Ltd.				
Prüfergebnis*: <i>Test result*:</i>	Pass				
geprüft von / tested by:		kontrolliert von / reviewed by:			
07.06.2017 Elliot Zhang / Assistant Project Manager		07.06.2017 Shi Li / Department Manager			
Datum <i>Date</i>	Name / Stellung <i>Name / Position</i>	Unterschrift <i>Signature</i>	Datum <i>Date</i>	Name / Stellung <i>Name / Position</i>	Unterschrift <i>Signature</i>
Sonstiges / Other Only evaluate the 2.4GHz Wi-Fi 802.11b/g/n-HT20/n-HT40 function in this test report. FCC ID: XMF-MID8006L					
Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of the test item at delivery:</i>			Prüfmuster vollständig und unbeschädigt <i>Test item complete and undamaged</i>		
* Legende: 1 = sehr gut 2 = gut 3 = befriedigend 4 = ausreichend 5 = mangelhaft P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet <i>Legend: 1 = very good 2 = good 3 = satisfactory 4 = sufficient 5 = poor</i> P(ass) = passed a.m. test specification(s) F(ail) = failed a.m. test specification(s) N/A = not applicable N/T = not tested					
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i>					

TEST SUMMARY

5.1.1 ANTENNA REQUIREMENT*RESULT: Pass***5.1.2 PEAK OUTPUT POWER***RESULT: Pass***5.1.3 6dB BANDWIDTH***RESULT: Pass***5.1.4 CONDUCTED SPURIOUS EMISSIONS***RESULT: Pass***5.1.5 POWER SPECTRAL DENSITY***RESULT: Pass***5.1.6 SPURIOUS EMISSION***RESULT: Pass*

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1. General Remarks

1.1 Complementary Materials

Null

2. Test Sites

2.1 Test Facilities

MRT Technology (Suzhou) Co., Ltd.

D8 Building, Youxin Industrial Park, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China

The used test equipment is in accordance with CISPR 16 for measurement of radio interference.

The Federal Communications Commission has reviewed the technical characteristics of the radiated and conducted emission facility, and has found these test facilities to be in compliance with the requirements of section 2.948 of the FCC rules. The description of the test facility is listed under FCC registration number 809388.

The Industry Canada has reviewed the technical characteristics of the radiated and conducted emission facility, and has found these test facilities to be in compliance. The description of the test facility is listed under chambers filing number 11384A.

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment
Conducted Emissions

Instrument	Manufacturer	Type No.	Serial No.	Cali. Interval	Cali. Due Date
EMI Test Receiver	R&S	ESR7	MRTSUE06001	1 year	2017/06/20
EMI Test Receiver	R&S	ESR7	MRTSUE06001	1 year	2018/06/20
Two-Line V-Network	R&S	ENV216	MRTSUE06002	1 year	2017/06/20
Two-Line V-Network	R&S	ENV216	MRTSUE06002	1 year	2018/06/20
Two-Line V-Network	R&S	ENV216	MRTSUE06003	1 year	2017/06/20
Two-Line V-Network	R&S	ENV216	MRTSUE06003	1 year	2018/06/20
Temperature/ Meter Humidity	Ouleinuo	N/A	MRTSUE06114	1 year	2017/12/20

Radiated Emission

Spectrum Analyzer	Agilent	E4447A	MRTSUE06028	1 year	2017/12/08
EMI Test Receiver	R&S	ESR7	MRTSUE06001	1 year	2017/11/03
Preamplifier	Agilent	83017A	MRTSUE06020	1 year	2018/03/29
Preamplifier	Schwarzbeck	BBV9721	MRTSUE06121	1 year	2018/04/16
Loop Antenna	Schwarzbeck	FMZB1519	MRTSUE06025	1 year	2017/11/07
TRILOG Antenna	Schwarzbeck	VULB9162	MRTSUE06022	1 year	2017/11/07
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	MRTSUE06023	1 year	2017/11/07
Broadband Horn Antenna	Schwarzbeck	BBHA9170	MRTSUE06024	1 year	2018/01/05
Temperature/Humidity Meter	Ouleinuo	N/A	MRTSUE06115	1 year	2017/11/20

Conducted Test Equipment

Spectrum Analyzer	Agilent	N9020A	MRTSUE06106	1 year	2018/05/08
USB Wideband Power Sensor	Boonton	55006	MRTSUE06109	1 year	2018/05/08
Temperature/Humidity Meter	Ouleinuo	N/A	MRTSUE06114	1 year	2017/11/20

2.3 Traceability

All measurement equipment calibrations are traceable to NIST or where calibration is performed outside the United States, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basis using in house standards or comparisons.

2.5 Measurement Uncertainty

Table 2: Measurement Uncertainty

AC Conducted Emission Measurement
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 150kHz~30MHz: $\pm 3.46\text{dB}$
Radiated Emission Measurement
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 9kHz ~ 1GHz: $\pm 4.18\text{dB}$ 1GHz ~ 40GHz: $\pm 4.76\text{dB}$
Output Power
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 1.13dB
Power Spectrum Density
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 1.15dB
Occupied Bandwidth
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 0.28%

3. General Product Information

3.1 Product Function and Intended Use

The EUT (Equipment Under Test) is a 'Tablet PC' device. It supports Bluetooth 4.0 (Dual mode) & 2.4GHz Wi-Fi 802.11 b/g/n(HT20)/n(HT40) & 5GHz Wi-Fi 802.11 a wireless technology.

The 2.4GHz WIFI, 5GHz WIFI and Bluetooth can TX simultaneously

For details refer to the User Manual and Circuit Diagram.

3.2 Ratings and System Details

Kind of Equipment	Tablet PC
Type Designation	MID8006-L, DL8006, DL80XXXXXX(x=0-9, A-Z, a-z, - or blank, for market purpose only, all models are identical except the model number, brand or color)
Wireless Technology	2.4GHz Wi-Fi 802.11b/g/n 5GHz Wi-Fi 802.11a
Operating Frequency band	2412 ~ 2462MHz, 5180 ~ 5240MHz, 5745 ~ 5825MHz
Channel Separation	5MHz for 2.4GHz; 20MHz for 5GHz
Modulation	802.11b: DSSS(DBPSK/DQPSK/CCK) 802.11a/g/n: OFDM(BPSK/QPSK/16QAM/64QAM)
Antenna Type	PIFA Antenna
Antenna Gain	1.28 dBi for 2.4GHz; 1.12 dBi for 5GHz
Extreme Temperature Range	0 ~ 40°C
Operation Voltage	DC 3.7V 6000mAh via internal rechargeable Li-Poly battery DC 5.0V 2.5A via AC/DC adapter for charging

Table 3: Carrier Frequency of 2.4GHz WLAN

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
2400 – 2483.5 MHz	1	2412 MHz	7	2442 MHz
	2	2417 MHz	8	2447 MHz
	3	2422 MHz	9	2452 MHz
	4	2427 MHz	10	2457 MHz
	5	2432 MHz	11	2462 MHz
	6	2437 MHz	/	/

Remark:

1. Test frequencies are lowest channel: 2412 MHz, middle channel: 2437 MHz and highest channel: 2462 MHz for 802.11b/g/n(HT20)

2. Test frequencies are lowest channel: 2422 MHz, middle channel: 2437 MHz and highest channel: 2452 MHz for 802.11n(HT40)

3.3 Independent Operation Modes

Test Mode	Operation Mode	Channel
TM1	802.11b	01
TM2	802.11b	06
TM3	802.11b	11
TM4	802.11g	01
TM5	802.11g	06
TM6	802.11g	11
TM7	802.11n-HT20	01
TM8	802.11n-HT20	06
TM9	802.11n-HT20	11
TM10	802.11n-HT40	03
TM11	802.11n-HT40	06
TM12	802.11n-HT40	09
TM13	802.11b	Normal Operation

3.4 Noise Generating and Noise Suppressing Parts

Refer to the Circuit Diagram.

3.5 Submitted Documents

- Application Form
- Circuit Diagram
- ID Label and Location Info
- Photo Document
- Operation Description
- Block Diagram
- PCB Layout
- Model Difference Letter
- Schematics
- User Manual

4. Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

Radio Spectrum: The equipment under test (EUT) was configured at its highest power output in order to measure its highest possible radiation and conducted level. The test modes were adapted accordingly in reference to the instructions for use.

Emission: The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5. All testing were performed according to the procedures in ANSI C63.10: 2013.

Software used for testing: MTK Engineer.app

This software was running on the EUT. It was used to enable the test operation modes listed in section 3.3 as appropriate for conducted test.

Mode	Data Rate (Mbps)	Worst Case
802.11b	1, 2, 5, 11	1 Mbps
802.11g	6, 9, 12, 18, 24, 36, 48, 54	6 Mbps
802.11n(HT20)	6.5, 13.0, 19.5, 26.0, 39.0, 52.0, 58.5, 65.0 (MCS0 ~ MCS7)	6.5 Mbps
802.11n(HT40)	13.5, 27.0, 40.5, 54.0, 81.0, 108.0, 121.5, 135.0 (MCS0 ~ MCS7)	13.5 Mbps

All modes of operation and data rates were investigated, but only worst case data rate was executed for all test requirements.

4.3 Special Accessories and Auxiliary Equipment

The EUT was tested together with the following accessories:

Description	Manufacturer	Part No.	S/N
N/A	N/A	N/A	N/A

4.4 Countermeasures to achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Constructional Data Form or the Technical Construction File. No additional measures were employed to achieve compliance.

5. Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

RESULT:
Pass

Test standard : FCC Part 15.247(b)(4) and Part 15.203
 Limit : The use of antennas with directional gains that do not exceed 6dBi

According to the manufacturer declared, the EUT has one PIFA antenna, the directional gain of 2.4GHz antenna is 1.28dBi and the PIFA antenna is designed with permanent attachment and no consideration of replacement. Therefore the EUT is considered sufficient to comply with the provision.

FCC 15.203 – Antenna Requirement 1		Pass
FCC Requirement: No antenna other than that furnished by the responsible party shall be used with the device		
Results:	Antenna type:	Fixed Integral wire antenna
Verdict:	Pass	

FCC 15.204 – Antenna Requirement 2		Pass
FCC Requirement: An intentional radiator may be operated only with the antenna with which it is authorized. If an antenna is marketed with the intentional radiator, it shall be of a type which is authorized with the intentional radiator.		
Results:	Only one integral antenna can be used.	
Verdict:	N/A	

5.1.2 Peak Output Power

RESULT:
Pass

Test date : 2017-04-01
 Test standard : FCC Part 15.247(b)(3)
 Basic standard : ANSI C63.10: 2013
 Clause 9.1 of KDB 558074 D01v04
 Limit : 1W
 Kind of test site : Shielded room

Test setup

Test Channel : Low/ Middle/ High
 Operation Mode : TM1 ~ TM12
 Ambient temperature : 25°C
 Relative humidity : 52%
 Atmospheric pressure : 101kPa

Table 4: Test result of Peak Output Power of Wi-Fi (802.11b)

Channel	Channel Frequency (MHz)	Peak Output Power (dBm)	Limit (dBm)
Low Channel	2412	17.86	30
Middle Channel	2437	18.09	30
High Channel	2462	18.43	30

Table 5: Test result of Peak Output Power of Wi-Fi (802.11g)

Channel	Channel Frequency (MHz)	Peak Output Power (dBm)	Limit (dBm)
Low Channel	2412	21.23	30
Middle Channel	2437	22.37	30
High Channel	2462	22.39	30

Table 6: Test result of Peak Output Power of Wi-Fi (802.11n-HT20)

Channel	Channel Frequency (MHz)	Peak Output Power (dBm)	Limit (dBm)
Low Channel	2412	21.09	30
Middle Channel	2437	22.14	30
High Channel	2462	21.62	30

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*Page 13 of 85***Table 7: Test result of Peak Output Power of Wi-Fi (802.11n-HT40)**

Channel	Channel Frequency (MHz)	Peak Output Power (dBm)	Limit (dBm)
Low Channel	2422	21.07	30
Middle Channel	2437	22.02	30
High Channel	2452	21.01	30

5.1.3 6dB Bandwidth Bandwidth

RESULT:
Pass

Date of testing : 2017-04-02
 Test standard : FCC Part 15.247(a)(2)
 Basic standard : ANSI C63.10: 2013
 Clause 8 of KDB 558074 D01v04
 Limit : $\geq 500\text{kHz}$ for 6dB Bandwidth
 Kind of test site : Shielded room

Test setup

Test Channel : Low/ Middle/ High
 Operation Mode : TM1 ~ TM12
 Ambient temperature : 25°C
 Relative humidity : 52%
 Atmospheric pressure : 101kPa

Table 8: Test result of 6dB Bandwidth of Wi-Fi (802.11b)

Channel	Channel Frequency (MHz)	6dB Bandwidth (MHz)	Limit (kHz)
Low Channel	2412	10.06	$\geq 500\text{kHz}$
Mid Channel	2437	10.04	$\geq 500\text{kHz}$
High Channel	2462	10.06	$\geq 500\text{kHz}$

Table 9: Test result of 6dB Bandwidth of Wi-Fi (802.11g)

Channel	Channel Frequency (MHz)	6dB Bandwidth (MHz)	Limit (kHz)
Low Channel	2412	15.51	$\geq 500\text{kHz}$
Mid Channel	2437	15.18	$\geq 500\text{kHz}$
High Channel	2462	15.18	$\geq 500\text{kHz}$

Table 10: Test result of 6dB Bandwidth of Wi-Fi (802.11n-HT20)

Channel	Channel Frequency (MHz)	6dB Bandwidth (MHz)	Limit (kHz)
Low Channel	2412	15.46	$\geq 500\text{kHz}$
Mid Channel	2437	15.50	$\geq 500\text{kHz}$
High Channel	2462	15.99	$\geq 500\text{kHz}$

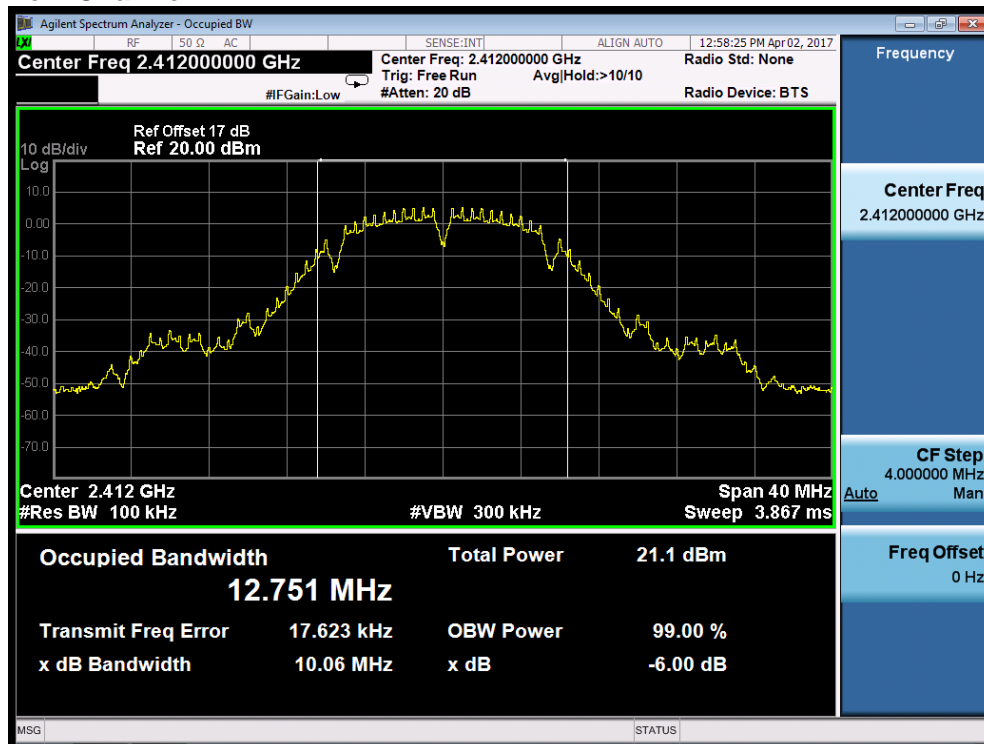
Table 11: Test result of 6dB Bandwidth of Wi-Fi (802.11n-HT40)

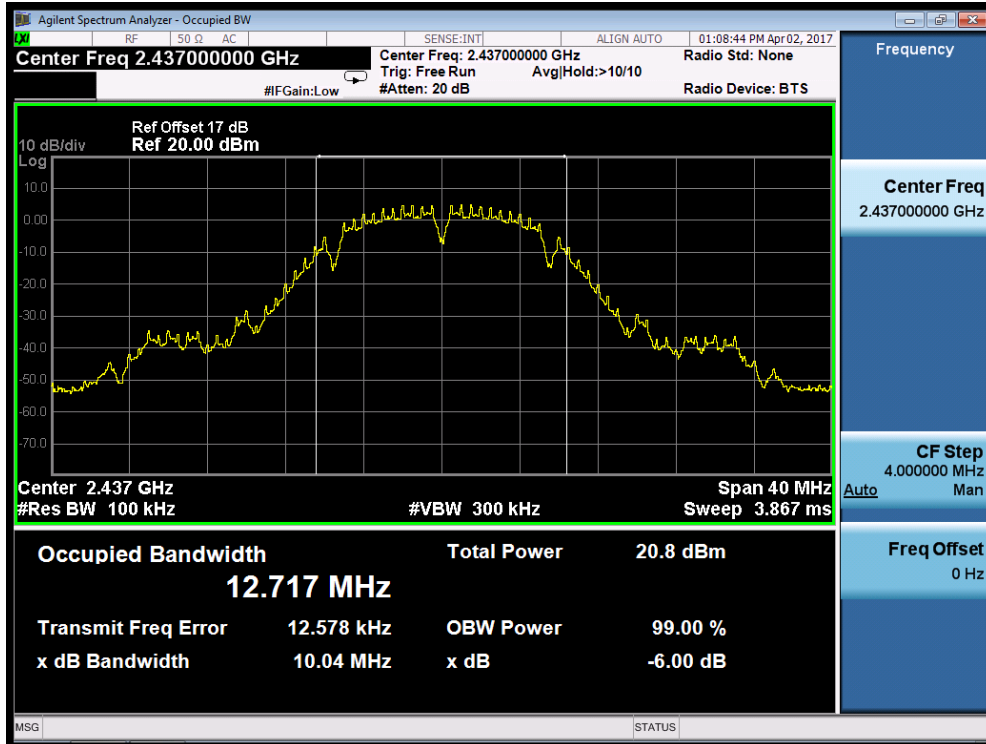
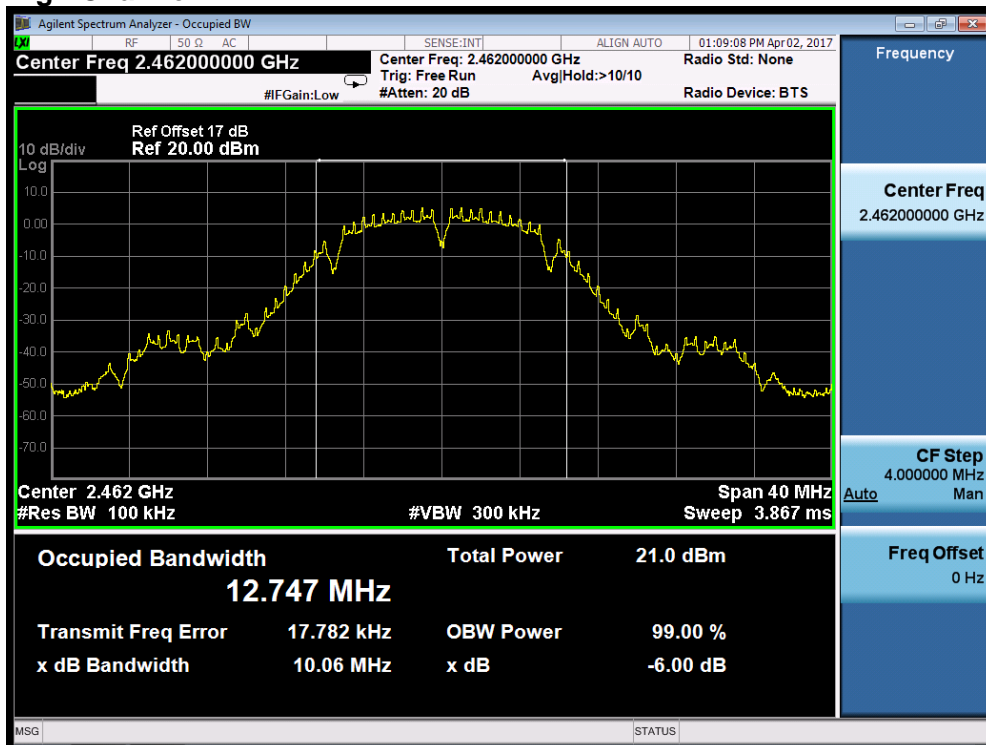
Channel	Channel Frequency (MHz)	6dB Bandwidth (MHz)	Limit (kHz)
Low Channel	2412	35.26	≥500kHz
Mid Channel	2437	35.26	≥500kHz
High Channel	2462	35.25	≥500kHz

For details refer to following test plot.

Test Plot of 6dB Bandwidth measured of 802.11b mode

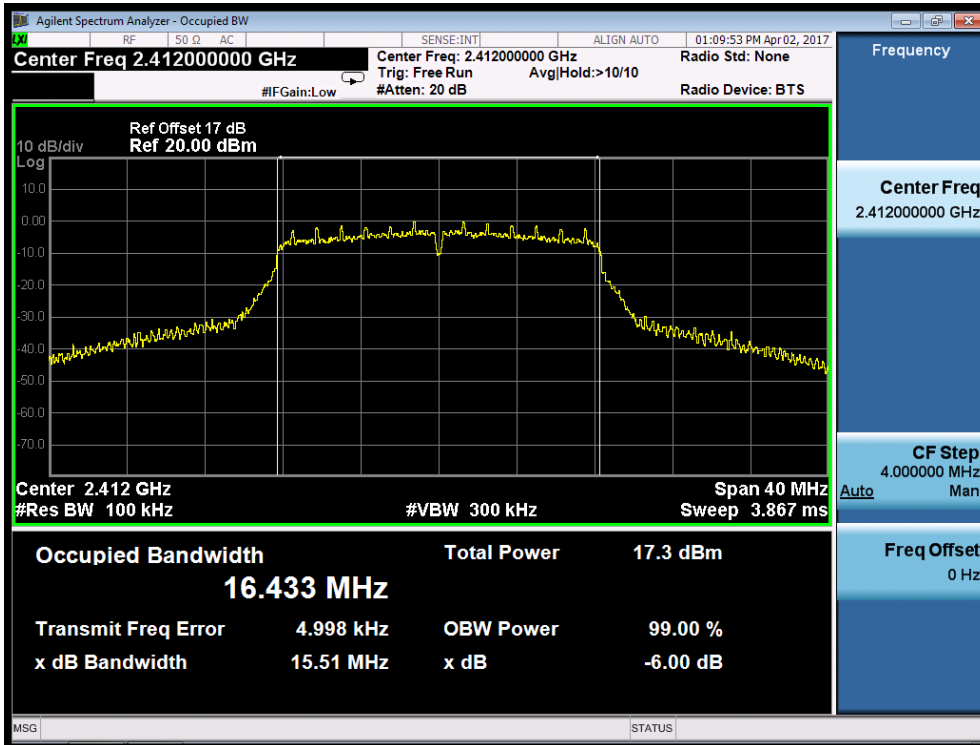
Low Channel



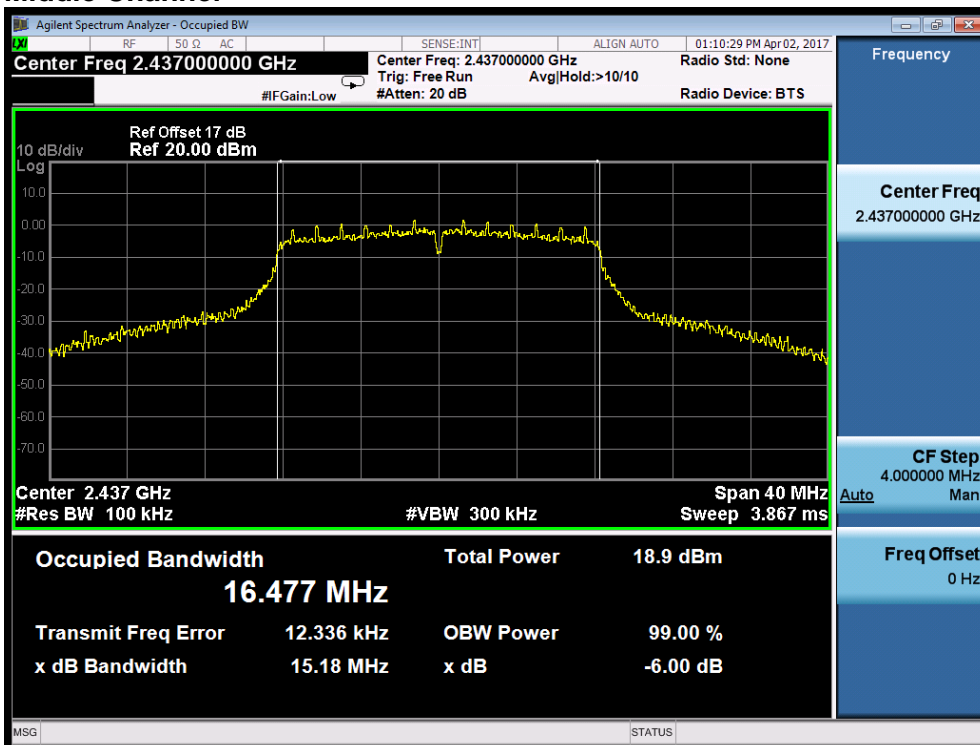
Middle Channel

High Channel


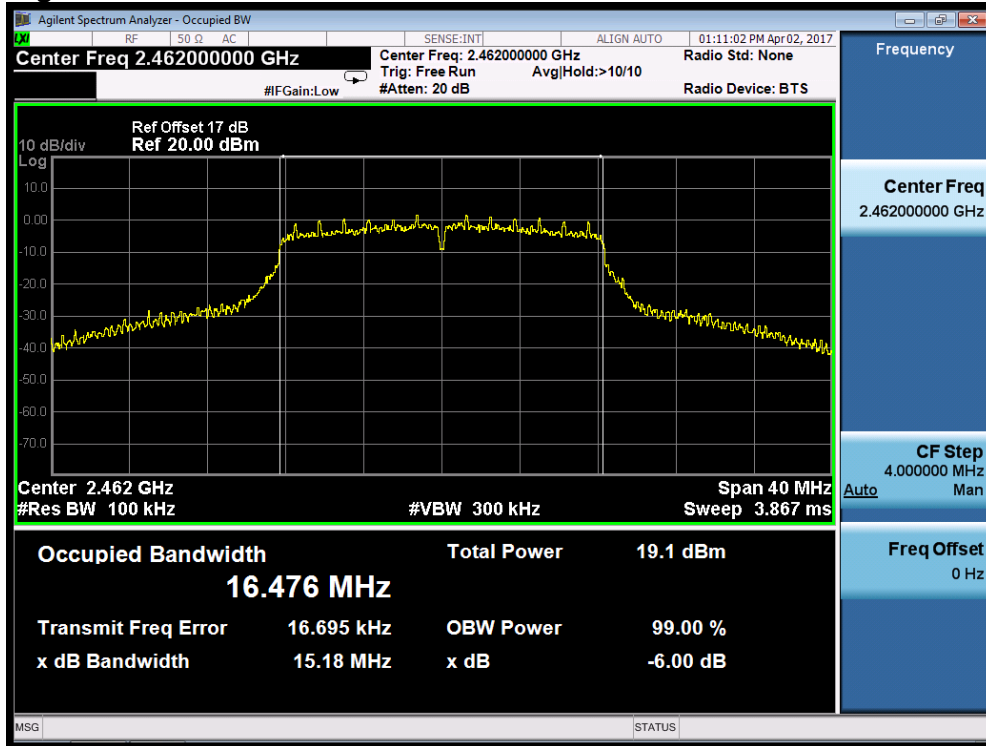
Test Plot of 6dB Bandwidth measured of 802.11g mode

Low Channel



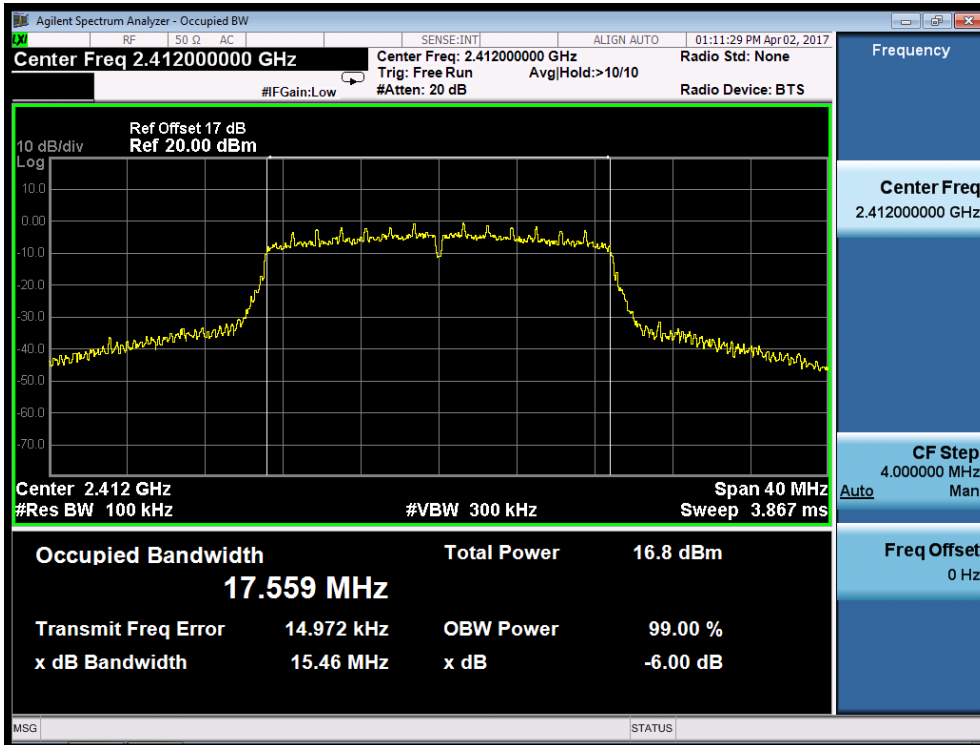
Middle Channel



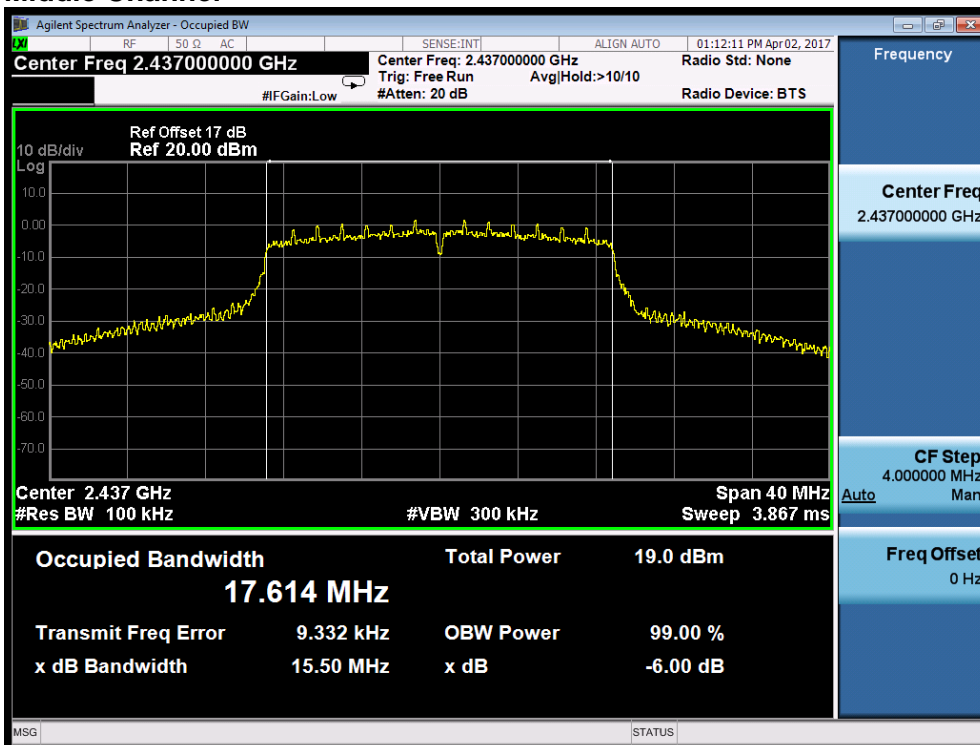
High Channel


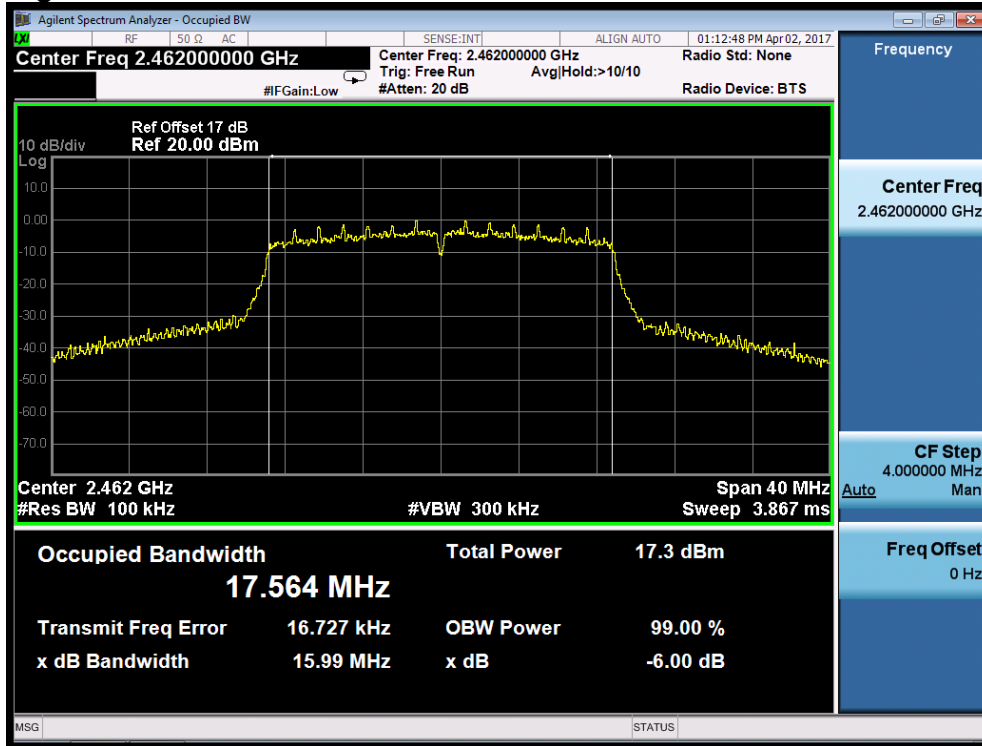
Test Plot of 6dB Bandwidth measured of 802.11n-HT20 mode

Low Channel



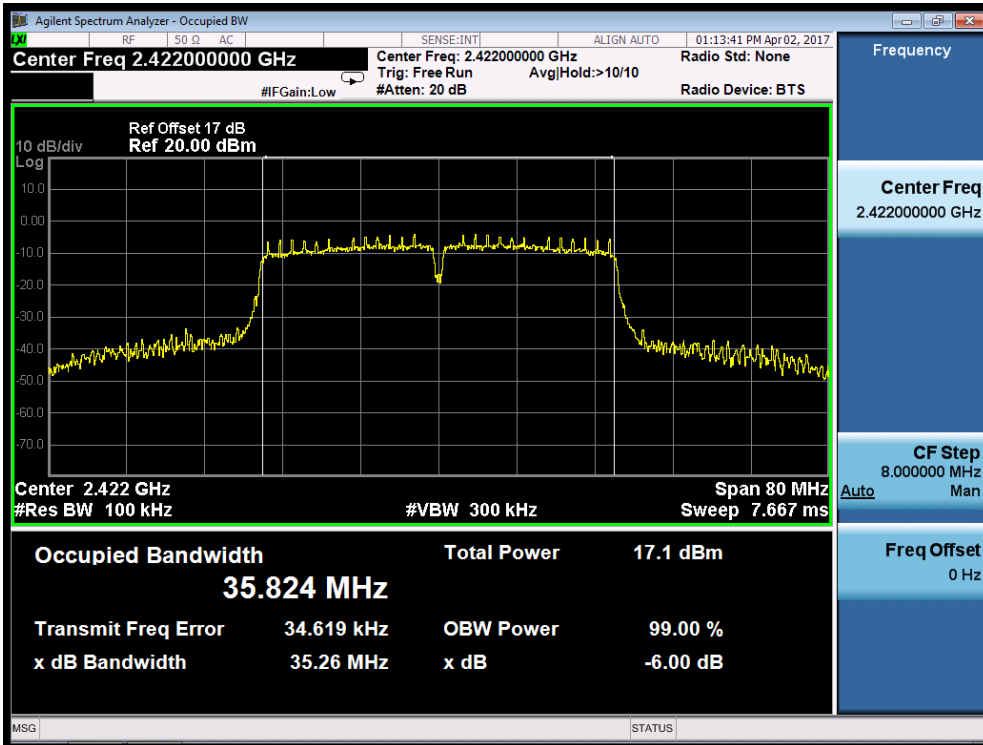
Middle Channel



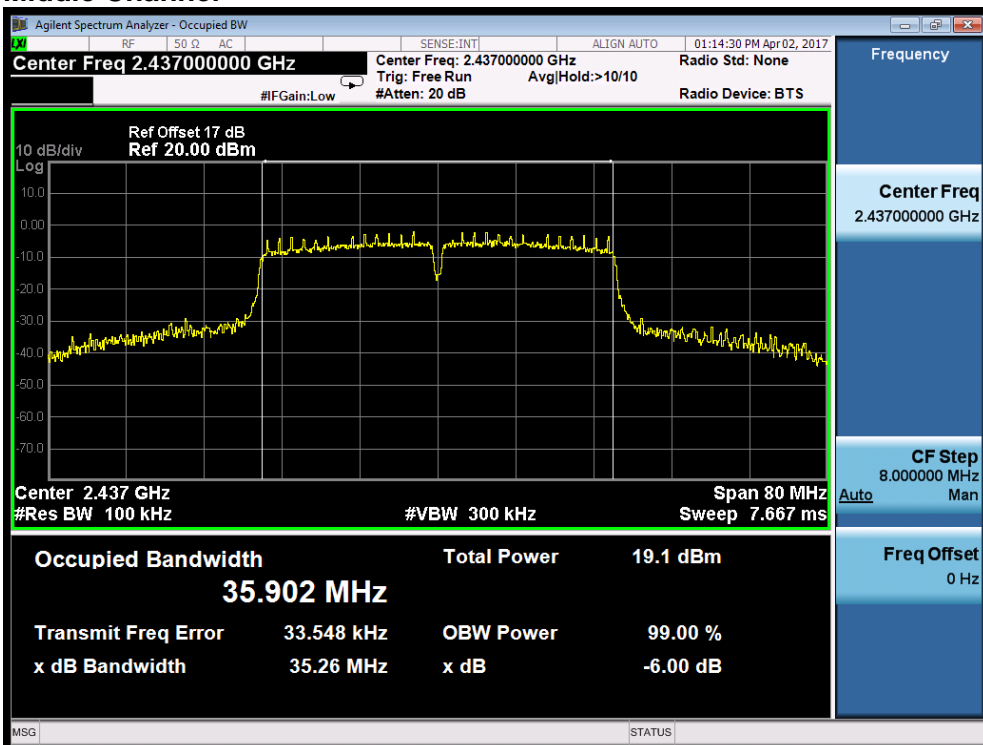
High Channel


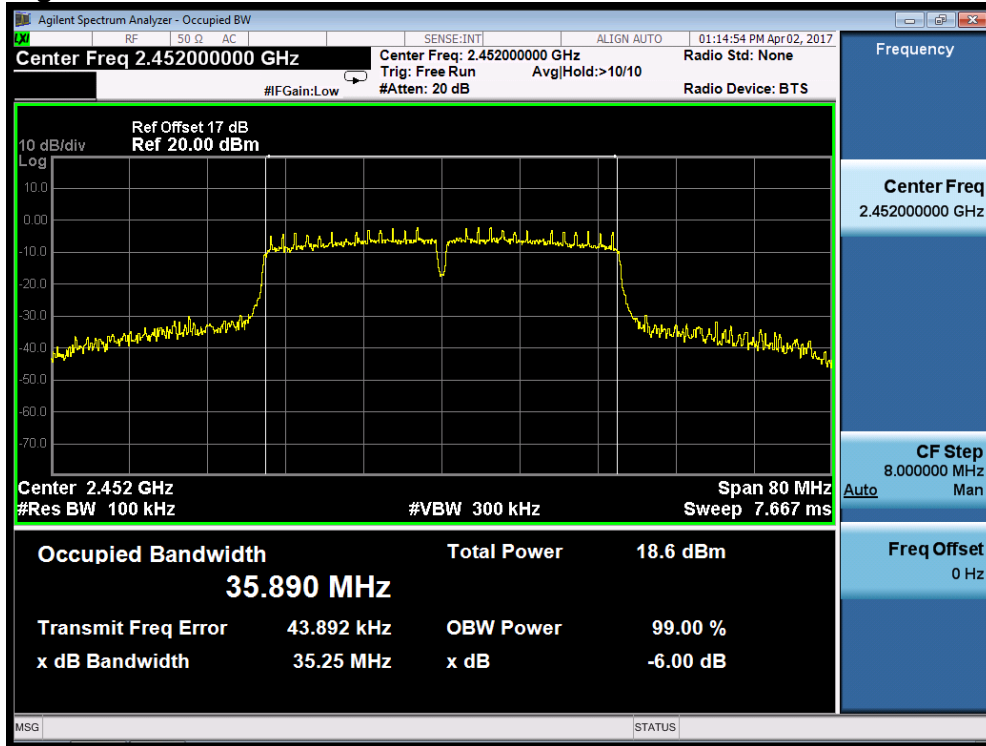
Test Plot of 6dB Bandwidth measured of 802.11n-HT40 mode

Low Channel



Middle Channel



High Channel


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5.1.4 Conducted Spurious Emissions

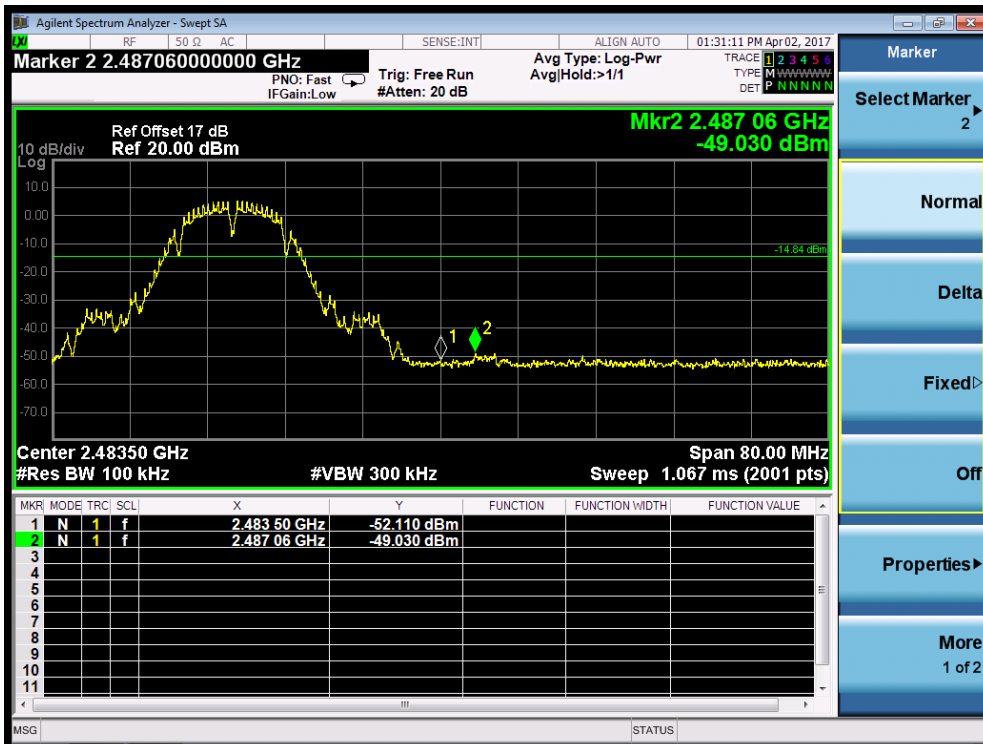
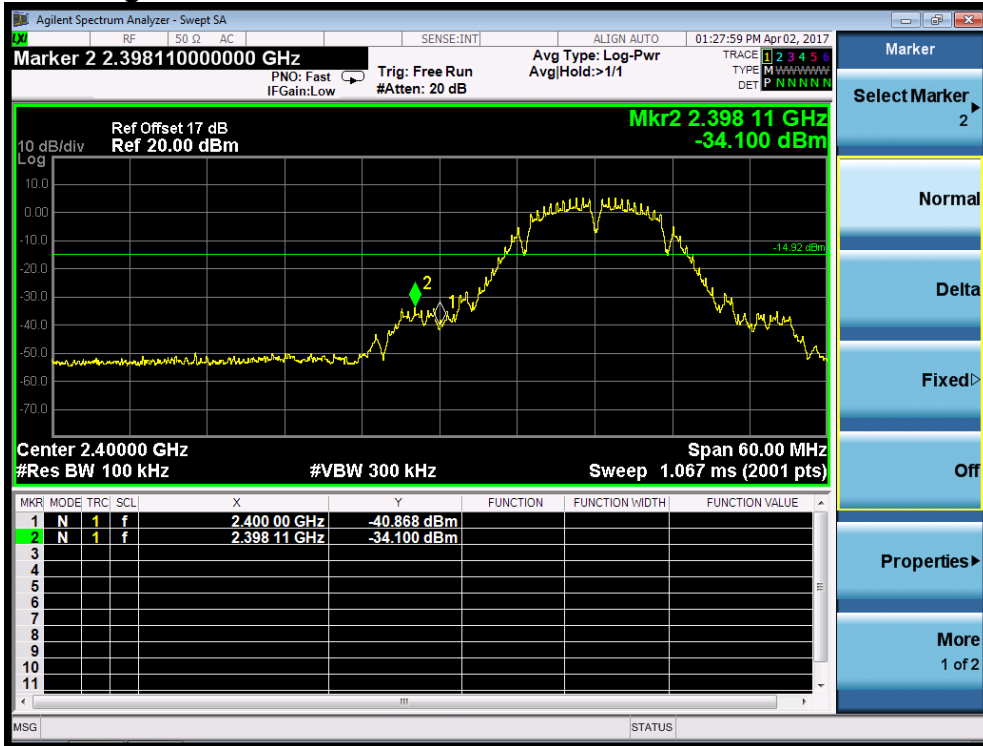
RESULT:**Pass**

Date of testing : 2017-04-02
Test standard : FCC part 15.247(d)
Basic standard : ANSI C63.10: 2013
Limit : 20dB (below that in the 100kHz bandwidth within
the band that contains the highest level of the
desired power)
Kind of test site : Shield room

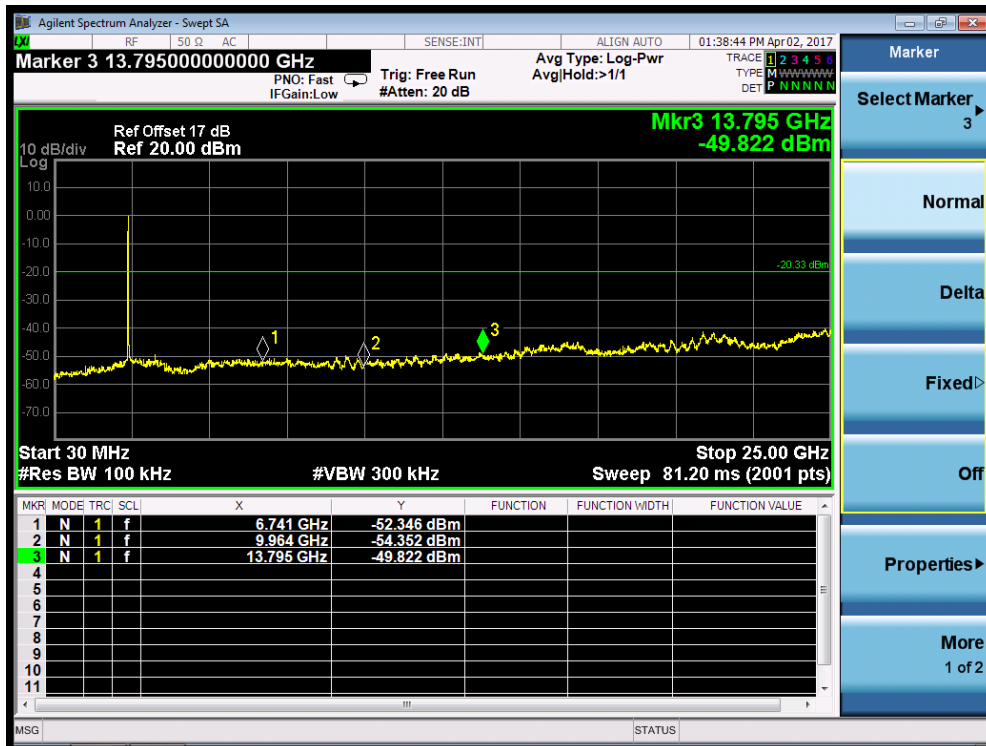
Test setup

Test Channel : Low/ Middle/ High
Operation mode : TM1 ~ TM12
Ambient temperature : 25°C
Relative humidity : 52%
Atmospheric pressure : 101kPa

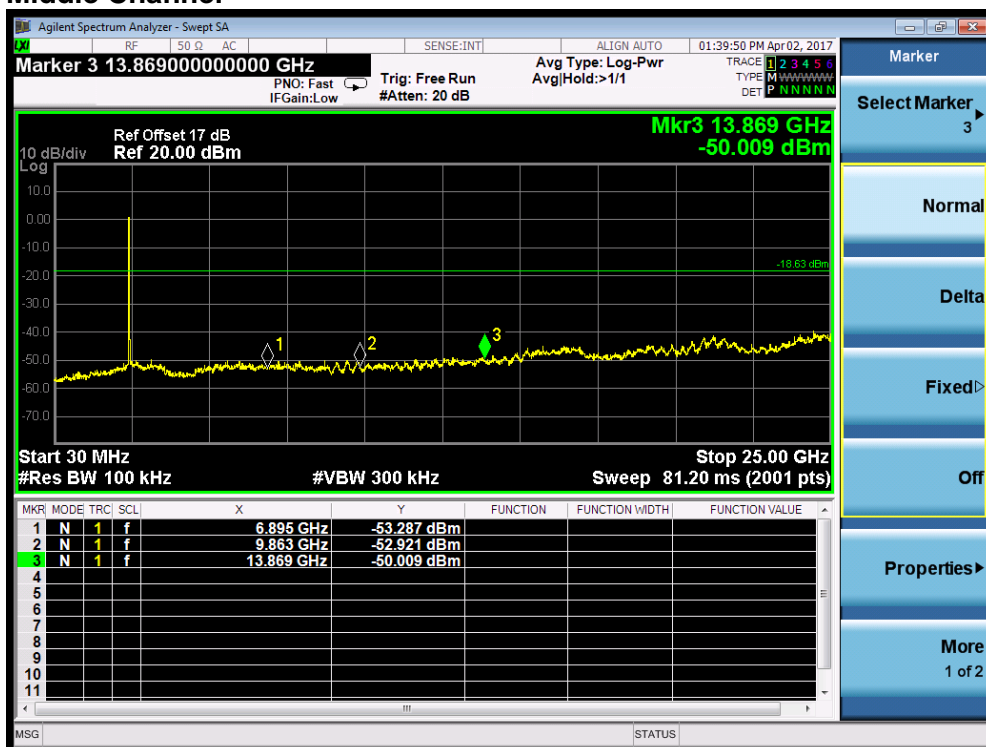
For details refer to following test plot.

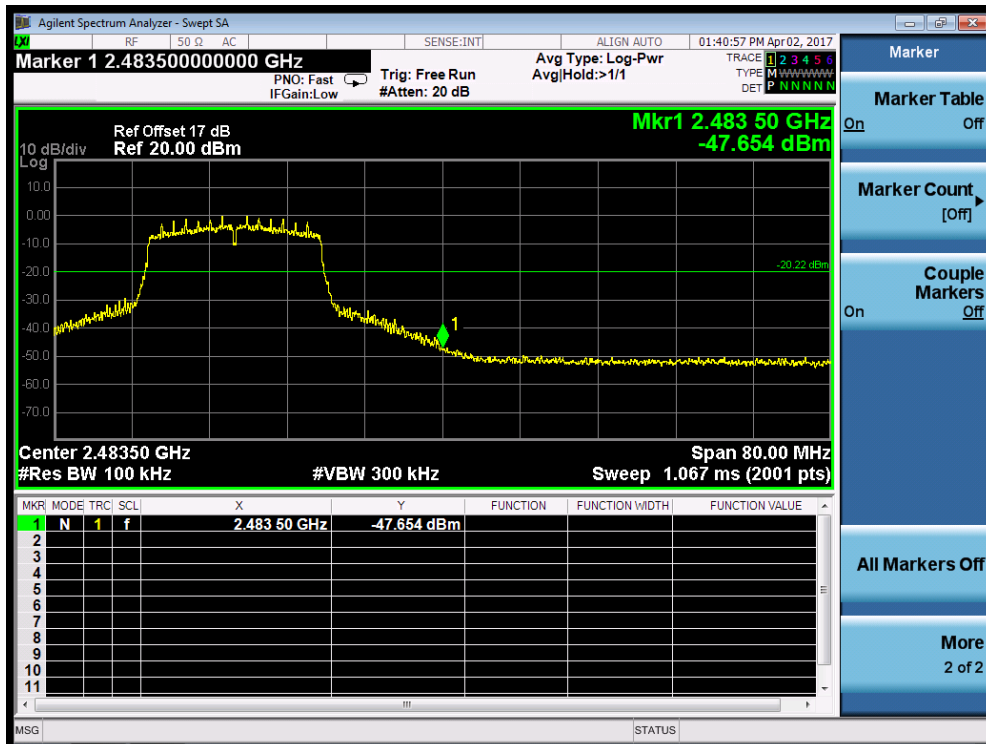
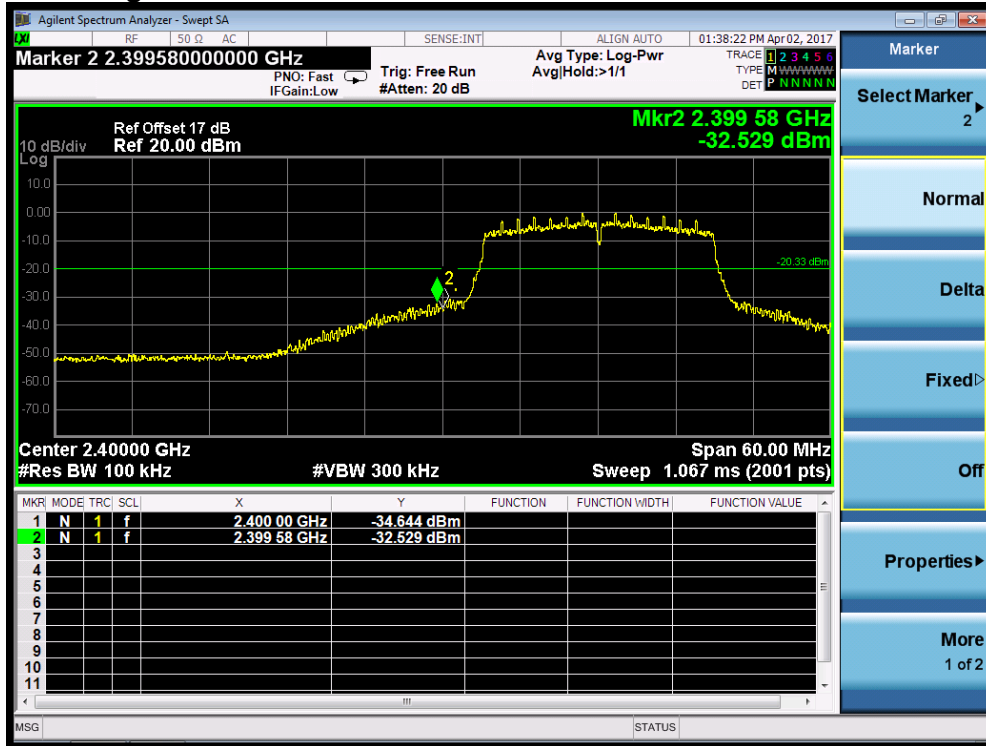
Band Edge


Test Plot of Conducted spurious emissions measured of 802.11n-HT20 mode Low Channel

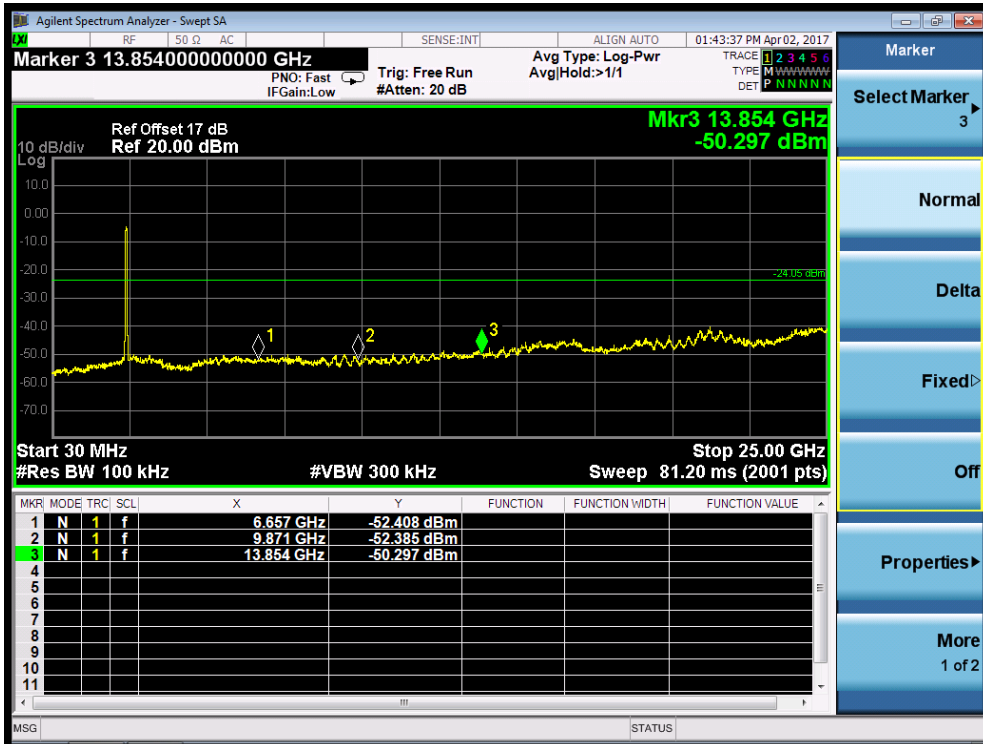


Middle Channel

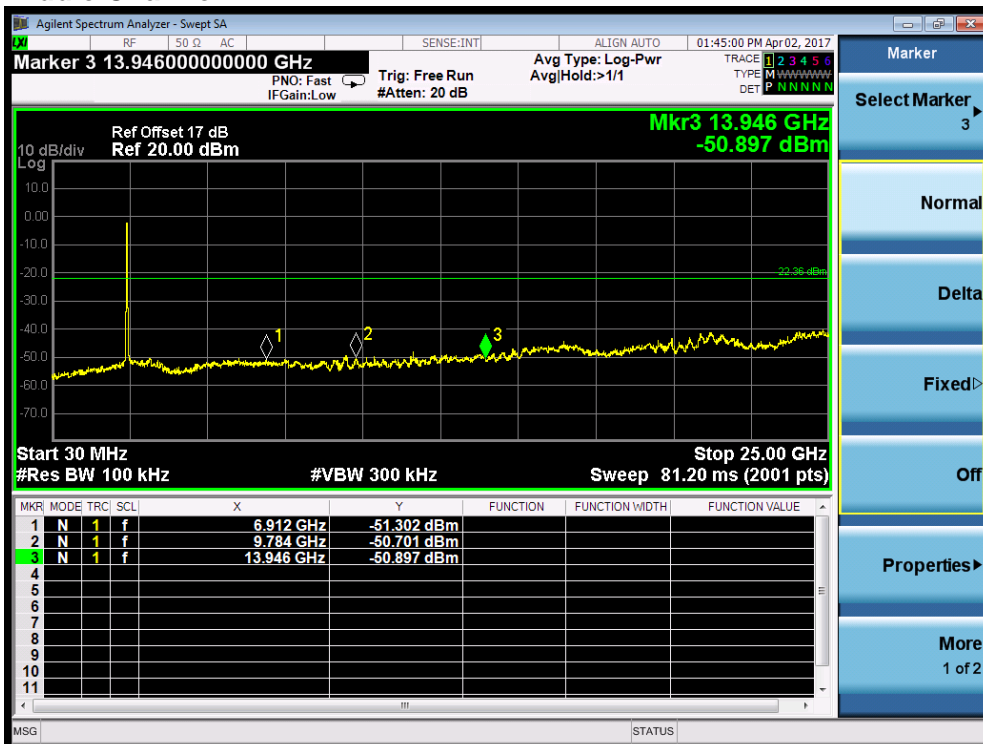


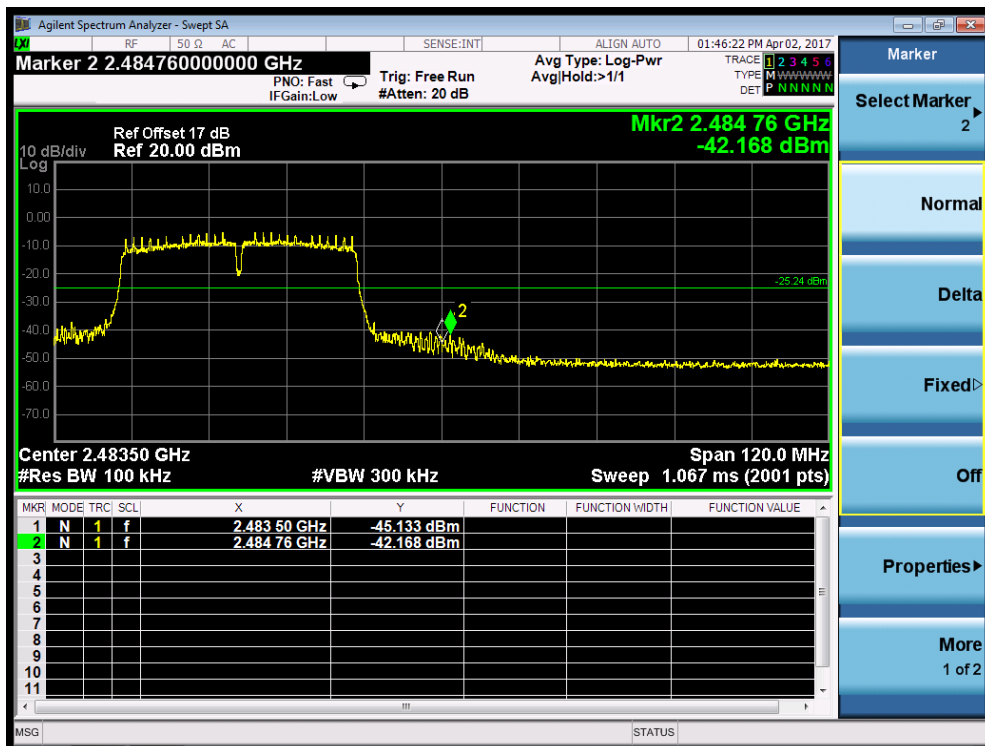
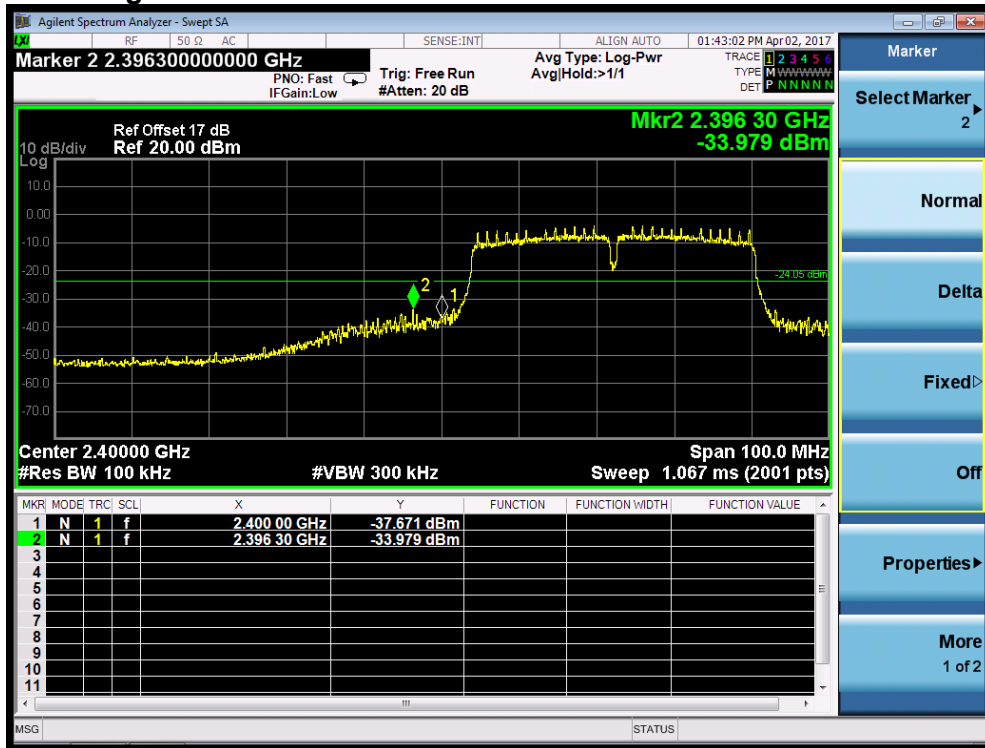
Band Edge


Test Plot of Conducted spurious emissions measured of 802.11n-HT40 mode Low Channel



Middle Channel



Band Edge


5.1.5 Power spectral density

RESULT:
Pass

Date of testing : 2017-04-07
 Test standard : FCC part 15.247(e)
 Basic standard : ANSI C63.10: 2013
 : Clause 10 of KDB 558074 D01v04
 Limit : 8dBm/3kHz
 Kind of test site : Shielded room

Test setup

Test Channel : Low/ Middle/ High
 Operation mode : TM1 ~ TM12
 Ambient temperature : 25°C
 Relative humidity : 52%
 Atmospheric pressure : 101kPa

Table 12: Test result of Power Spectral Density of Wi-Fi (802.11b)

Channel (MHz)	Result (dBm/3kHz)	Limit (dBm/3kHz)
2412	6.33	8
2437	6.58	8
2462	6.78	8

Table 13: Test result of Power Spectral Density of Wi-Fi (802.11g)

Channel (MHz)	Result (dBm/3kHz)	Limit (dBm/3kHz)
2412	-9.48	8
2437	-7.81	8
2462	-8.04	8

Table 14: Test result of Power Spectral Density of Wi-Fi (802.11n-HT20)

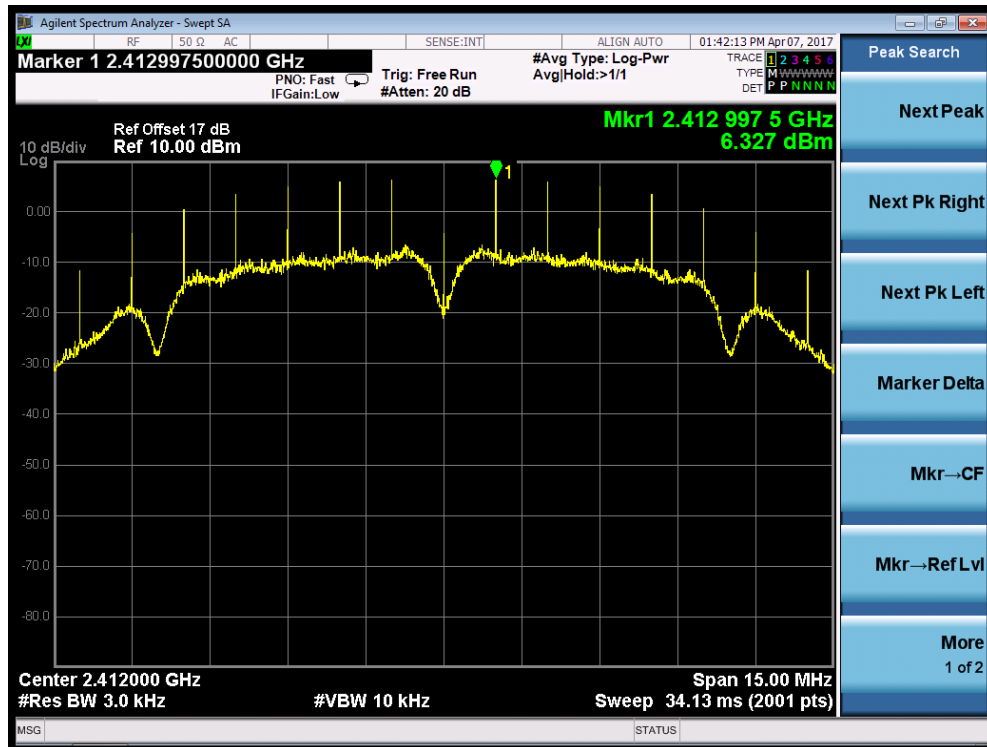
Channel (MHz)	Result (dBm/3kHz)	Limit (dBm/3kHz)
2412	-10.35	8
2437	-8.37	8
2462	-9.76	8

Table 13: Test result of Power Spectral Density of Wi-Fi (802.11n-HT40)

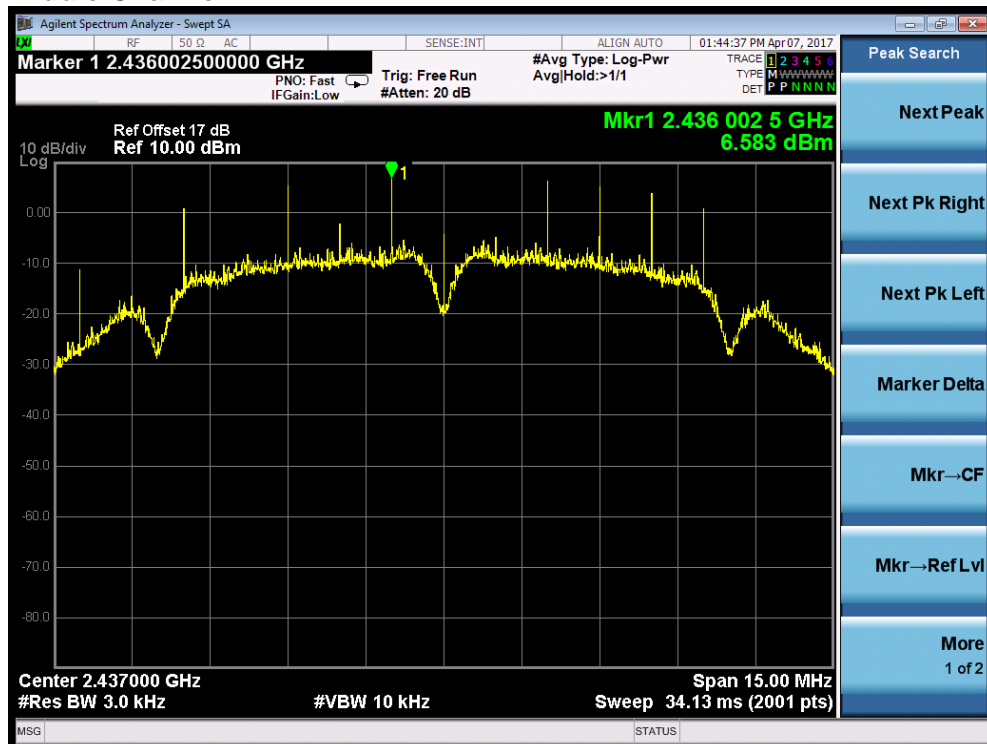
Channel (MHz)	Result (dBm/3kHz)	Limit (dBm/3kHz)
2422	-14.21	8
2437	-12.63	8
2452	-15.30	8

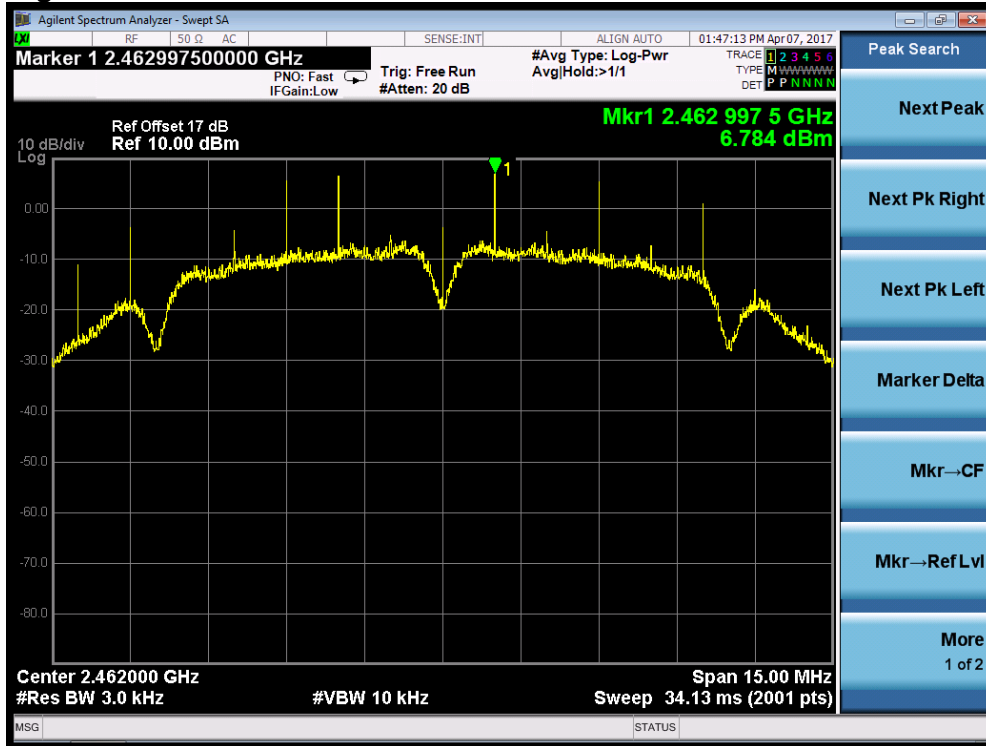
For details refer to following test plot.

Test Plot of Power spectral density measured of 802.11b mode Low Channel

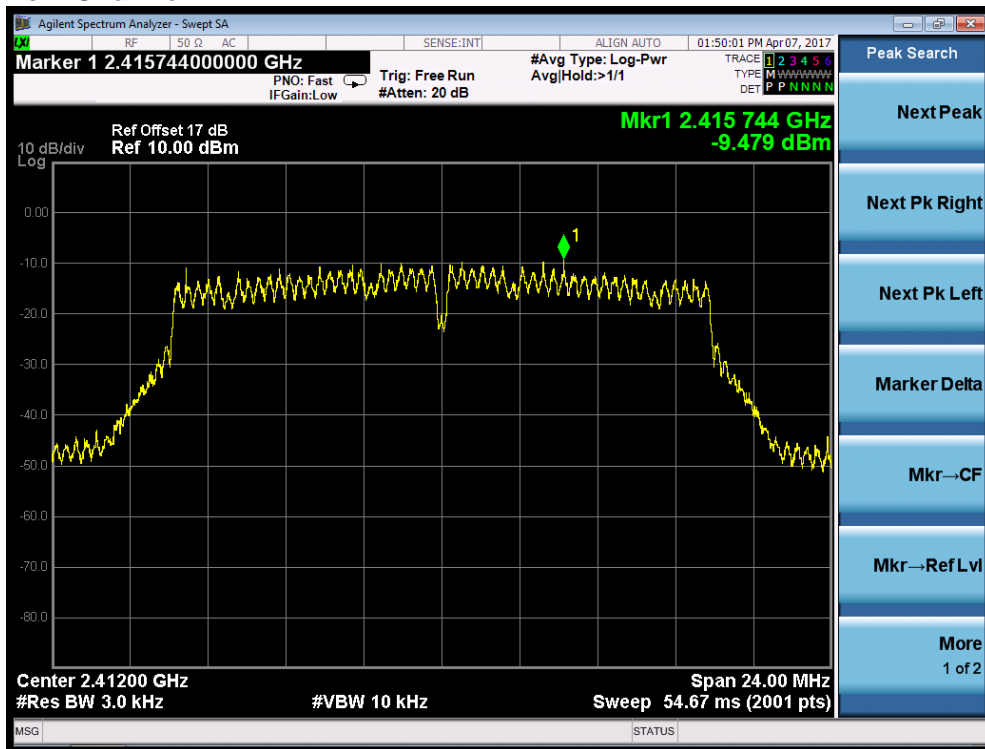


Middle Channel

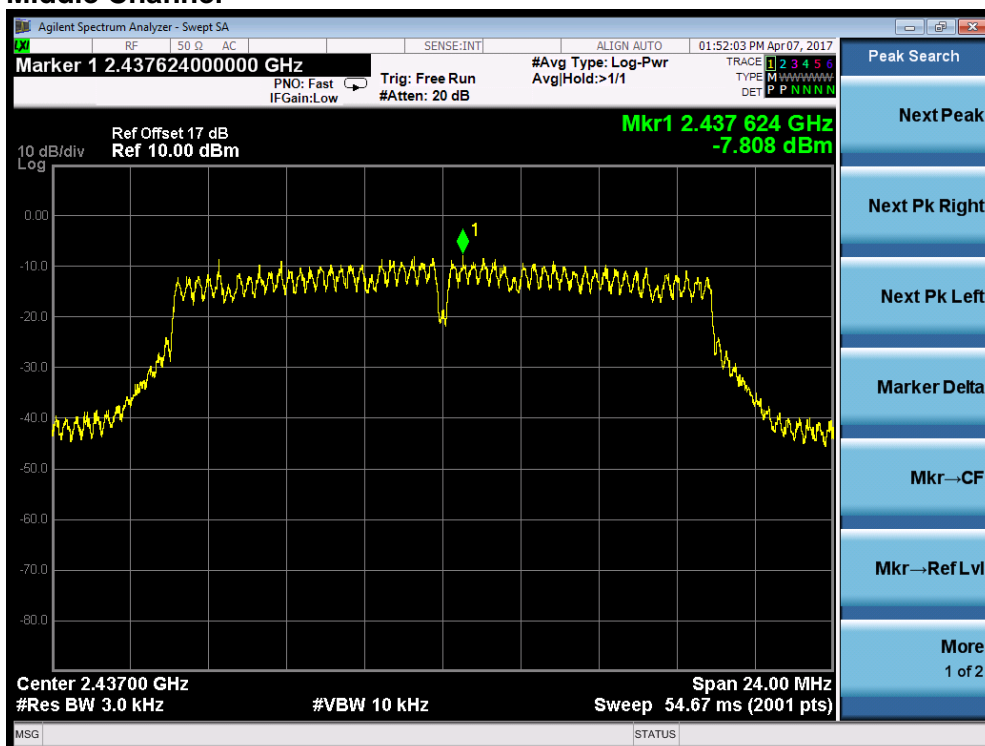


High Channel


Test Plot of Power spectral density measured of 802.11g mode Low Channel

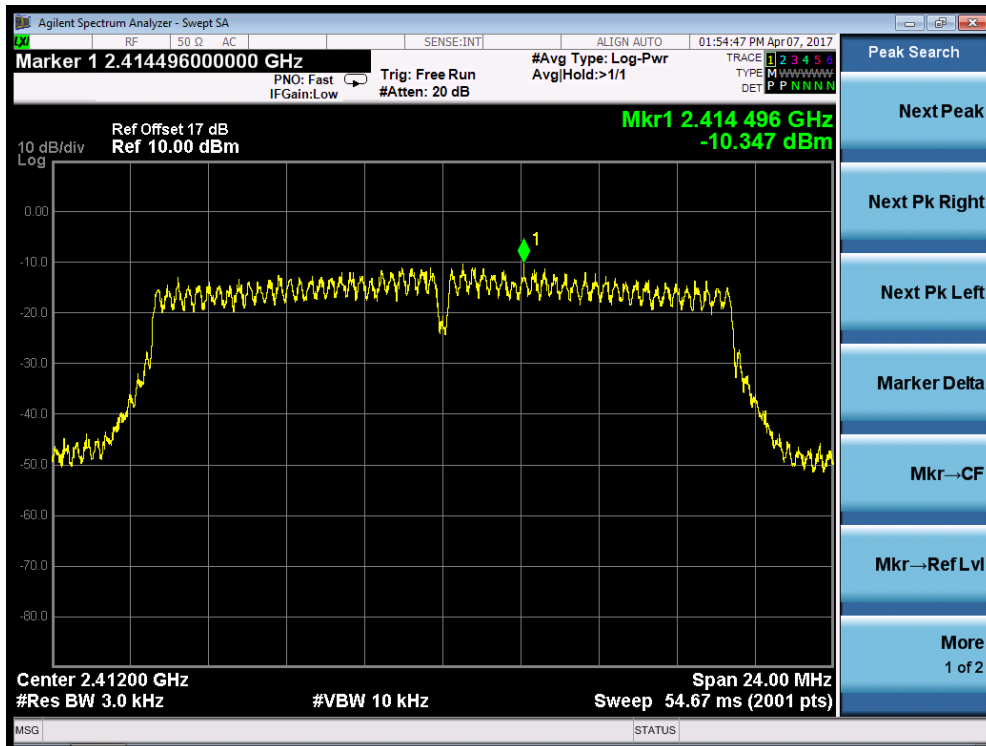


Middle Channel

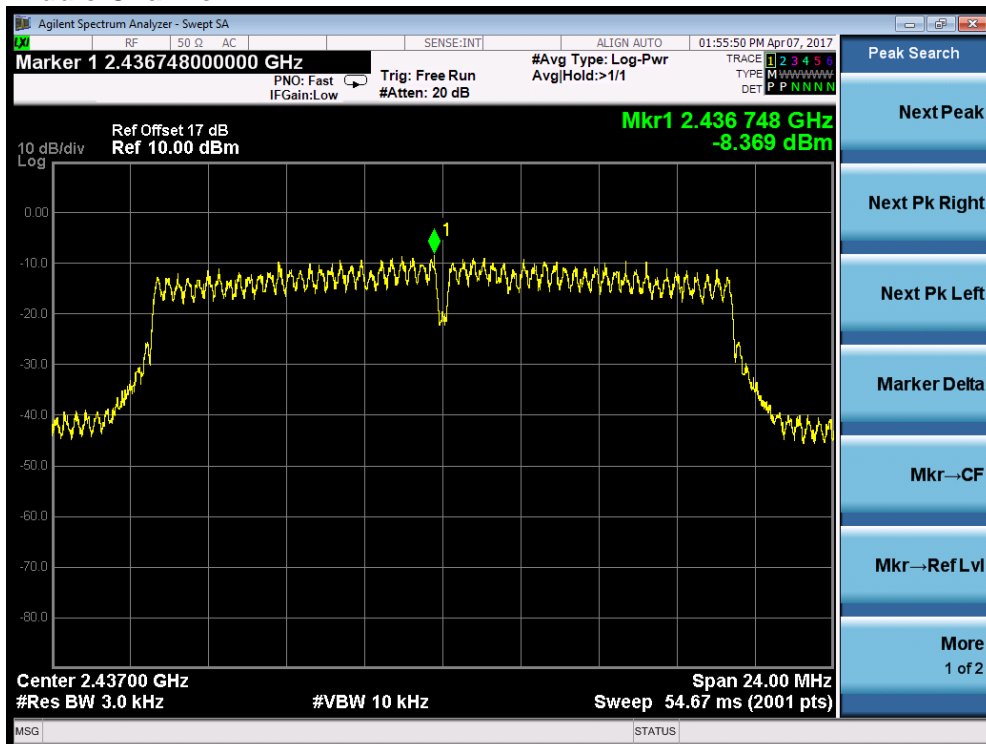


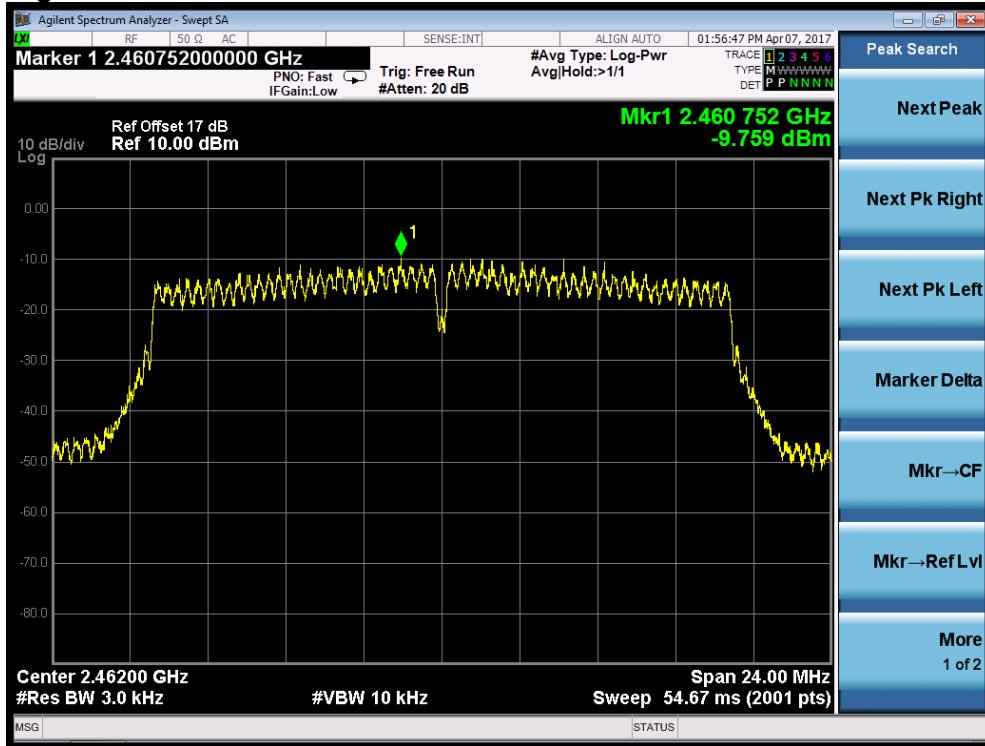
Test Plot of Power spectral density measured of 802.11n-HT20 mode

Low Channel



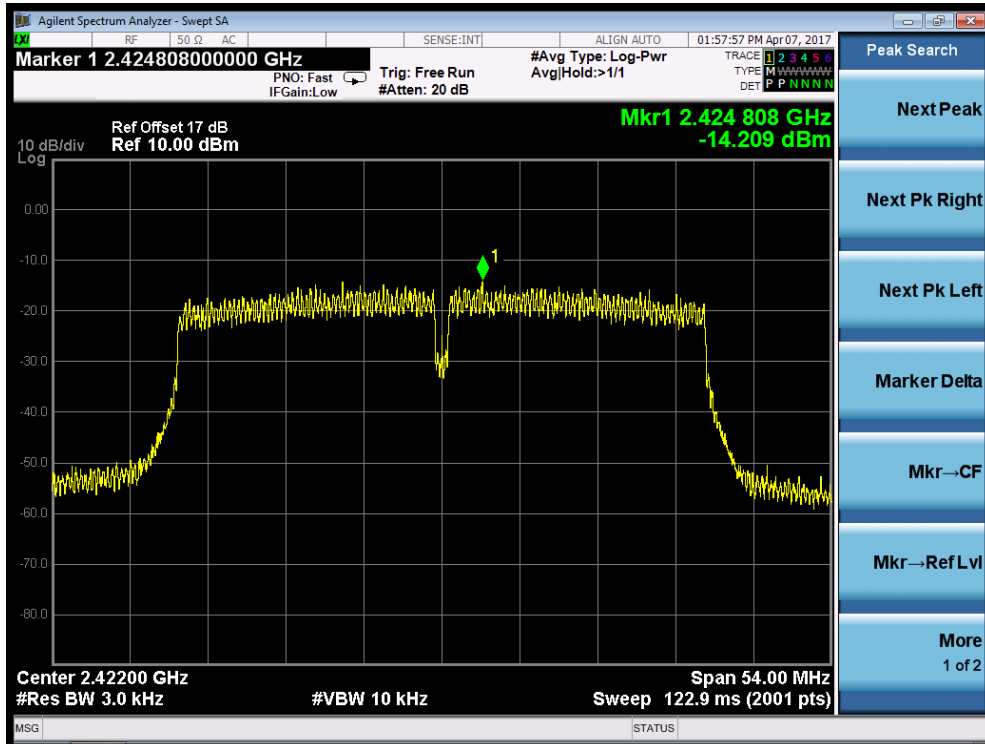
Middle Channel



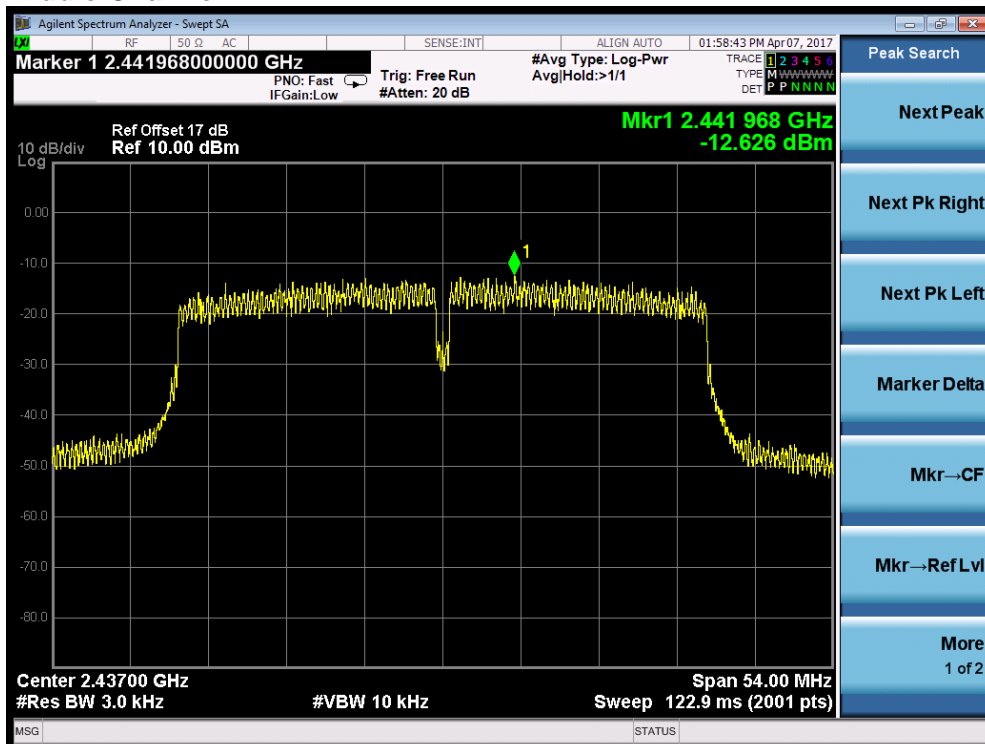
High Channel


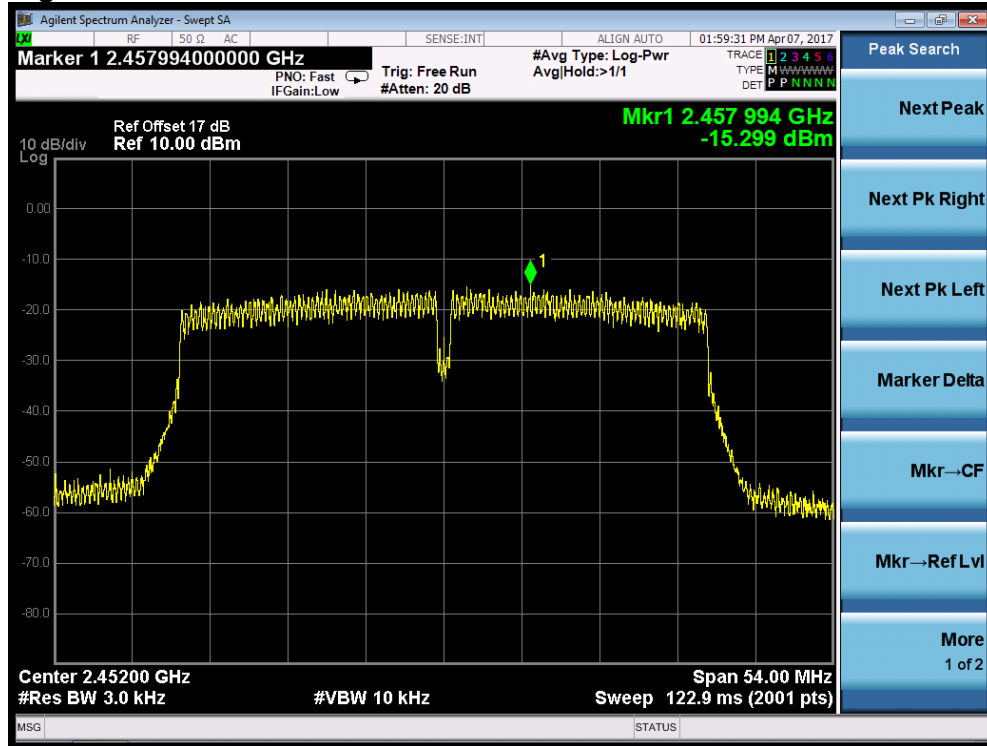
Test Plot of Power spectral density measured of 802.11n-HT40 mode

Low Channel



Middle Channel



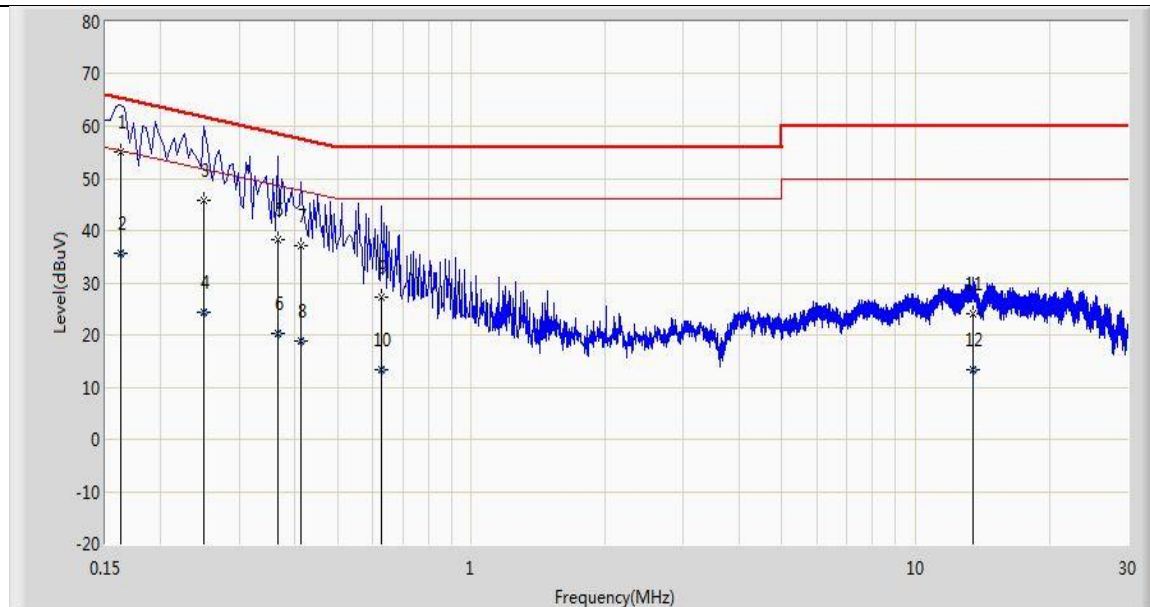
High Channel


5.1.6 Conducted Emission

RESULT:
PASS

Date of testing : 2017/07/04
 Test standard : FCC Part 15.207 (a)
 Test procedure : ANSI C63.10: 2013
 Limit : FCC Part 15.207(a)
 Kind of test site : Shielded room

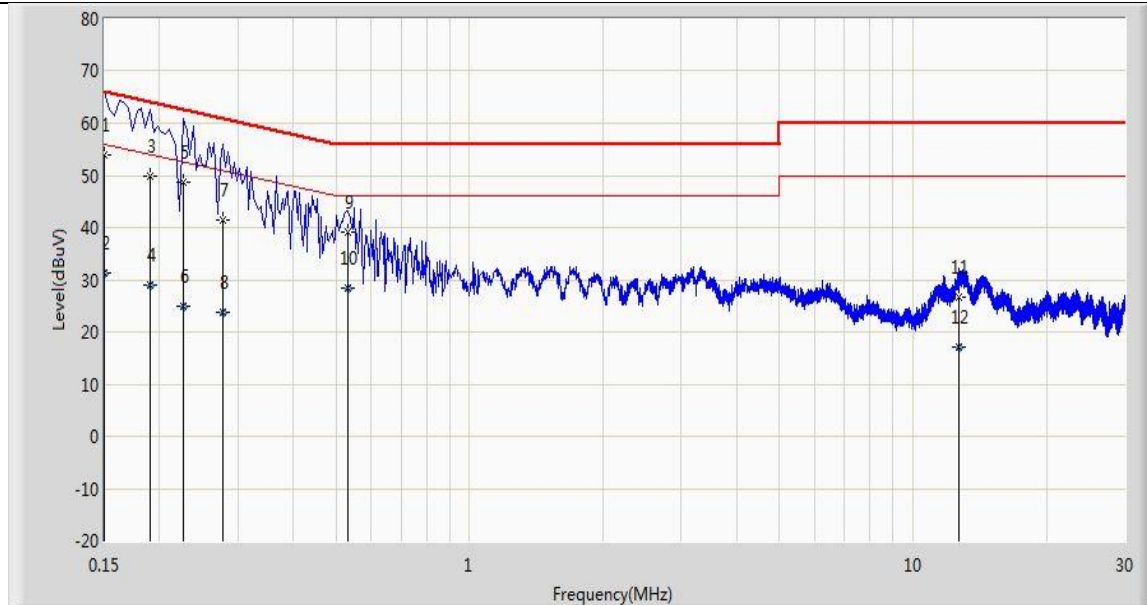
Limit: FCC_Part15.207_CE_AC Power	Engineer: Bacon Dong
Probe: ENV216_101683_Filter On	Polarity: Line
EUT: MID	Power: AC 120V/60Hz
Test Mode 13	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		*	0.162	55.072	44.975	-10.288	65.361	10.097	QP
2			0.162	35.719	25.622	-19.642	55.361	10.097	AV
3			0.250	45.852	35.888	-15.905	61.757	9.964	QP
4			0.250	24.380	14.416	-27.377	51.757	9.964	AV
5			0.366	38.395	28.338	-20.196	58.591	10.058	QP
6			0.366	20.267	10.209	-28.325	48.591	10.058	AV
7			0.414	37.211	27.114	-20.357	57.568	10.097	QP
8			0.414	18.897	8.800	-28.671	47.568	10.097	AV
9			0.626	27.284	17.182	-28.716	56.000	10.101	QP
10			0.626	13.412	3.311	-32.588	46.000	10.101	AV
11			13.434	24.017	13.951	-35.983	60.000	10.065	QP
12			13.434	13.464	3.398	-36.536	50.000	10.065	AV

Note: Measure Level (dBμV) = Reading Level (dBμV) + Factor (dB)
 Factor (dB) = Cable Loss (dB) + LISN Factor (dB).

Limit: FCC_Part15.207_CE_AC Power	Engineer: Bacon Dong
Probe: ENV216_101683_Filter On	Polarity: Neutral
EUT: MID	Power: AC 120V/60Hz
Test Mode 13	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		*	0.150	53.827	42.685	-12.173	66.000	11.142	QP
2			0.150	31.263	20.121	-24.737	56.000	11.142	AV
3			0.190	49.917	39.889	-14.120	64.037	10.028	QP
4			0.190	28.969	18.941	-25.067	54.037	10.028	AV
5			0.226	48.772	38.789	-13.823	62.595	9.982	QP
6			0.226	24.844	14.862	-27.751	52.595	9.982	AV
7			0.278	41.367	31.346	-19.508	60.875	10.022	QP
8			0.278	23.773	13.752	-27.102	50.875	10.022	AV
9			0.530	39.201	29.031	-16.799	56.000	10.169	QP
10			0.530	28.420	18.251	-17.580	46.000	10.169	AV
11			12.710	26.577	16.456	-33.423	60.000	10.121	QP
12			12.710	17.237	7.116	-32.763	50.000	10.121	AV

Note: Measure Level (dBμV) = Reading Level (dBμV) + Factor (dB)
 Factor (dB) = Cable Loss (dB) + LISN Factor (dB).

5.1.7 Spurious Emission

RESULT:**Pass**

Date of testing : 2017-04-18
Test standard : FCC part 15.247(d)
Basic standard : ANSI C63.10: 2013
Clause 11 & 12 of KDB 558074 D01v04
Limits : FCC part 15.209(a)
Kind of test site : 3m Semi-Anechoic Chamber

Test setup

Test Channel : Low/ Middle/ High
Operation mode : TM1 ~ TM12
Ambient temperature : 25°C
Relative humidity : 52%
Atmospheric pressure : 101kPa

Note: There is no additional emission generated due to simultaneous-transmission operations compared to standalone operations testing

Table 15: Test result of Spurious Emission of Wi-Fi (802.11b)

Channel	Freq. (MHz)	Reading (dB μ V)	Correct Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polar
Low	4825.000	44.399	2.676	47.075	74.000	-26.925	PK	H
	7494.000	35.412	11.016	46.428	74.000	-27.572	PK	
	8905.000	35.806	11.965	47.771	74.000	-26.229	PK	
	10367.000	36.101	14.940	51.041	74.000	-22.959	PK	
	4094.000	38.356	0.030	38.386	74.000	-35.614	PK	V
	4825.000	50.282	2.676	52.958	74.000	-21.042	PK	
	7239.000	36.749	10.644	47.392	74.000	-26.608	PK	
	8913.500	35.573	11.856	47.428	74.000	-26.572	PK	
Middle	4867.500	43.864	2.566	46.430	74.000	-27.570	PK	H
	7621.500	35.950	10.579	46.530	74.000	-27.470	PK	
	8769.000	35.735	11.825	47.560	74.000	-26.440	PK	
	9950.500	35.300	13.450	48.750	74.000	-25.250	PK	
	4867.500	49.435	2.566	52.001	74.000	-21.999	PK	V
	7307.000	36.465	10.688	47.154	74.000	-26.846	PK	
	8760.500	34.882	11.630	46.512	74.000	-27.488	PK	
	9857.000	35.360	13.018	48.378	74.000	-25.622	PK	
High	4918.500	42.570	2.551	45.122	74.000	-28.878	PK	H
	7451.500	35.814	10.921	46.735	74.000	-27.265	PK	
	8769.000	35.115	11.825	46.940	74.000	-27.060	PK	
	9840.000	35.349	13.483	48.832	74.000	-25.168	PK	
	4918.500	49.362	2.551	51.914	74.000	-22.086	PK	V
	7383.500	36.604	10.737	47.341	74.000	-26.659	PK	
	8820.000	35.366	11.698	47.064	74.000	-26.936	PK	
	9925.000	35.625	13.331	48.956	74.000	-25.044	PK	

Table 16: Test result of Spurious Emission of Wi-Fi (802.11g)

Channel	Freq. (MHz)	Reading (dBμ V)	Correct Factor (dB)	Measure Level (dBμ V/m)	Limit (dBμ V/m)	Margin (dB)	Detector	Polar
Low	4825.000	39.180	2.676	41.856	74.000	-32.144	PK	H
	7519.500	35.736	10.932	46.668	74.000	-27.332	PK	
	8718.000	35.666	11.426	47.092	74.000	-26.908	PK	
	9984.500	36.183	13.155	49.338	74.000	-24.662	PK	
	4825.000	43.782	2.676	46.458	74.000	-27.542	PK	V
	7460.000	34.676	11.070	45.745	74.000	-28.255	PK	
	8879.500	35.368	11.431	46.799	74.000	-27.201	PK	
	10001.500	35.572	13.465	49.037	74.000	-24.963	PK	
Middle	4867.500	40.263	2.566	42.829	74.000	-31.171	PK	H
	7621.500	36.422	10.579	47.002	74.000	-26.998	PK	
	8786.000	36.159	11.820	47.978	74.000	-26.022	PK	
	10001.500	35.258	13.465	48.723	74.000	-25.277	PK	
	4876.000	46.207	2.612	48.819	74.000	-25.181	PK	V
	7307.000	34.801	10.688	45.490	74.000	-28.510	PK	
	8709.500	34.798	11.325	46.123	74.000	-27.877	PK	
	9899.500	34.896	13.348	48.244	74.000	-25.756	PK	
High	4927.000	39.536	2.632	42.168	74.000	-31.832	PK	H
	7468.500	35.846	10.958	46.804	74.000	-27.196	PK	
	8769.000	35.181	11.825	47.006	74.000	-26.994	PK	
	9925.000	35.459	13.331	48.790	74.000	-25.210	PK	
	4918.500	44.716	2.551	47.268	74.000	-26.732	PK	V
	7647.000	36.394	10.557	46.951	74.000	-27.049	PK	
	8896.500	35.643	11.727	47.370	74.000	-26.630	PK	
	9882.500	36.489	13.288	49.777	74.000	-24.223	PK	

Table 17: Test result of Spurious Emission of Wi-Fi (802.11n-HT20)

Channel	Freq. (MHz)	Reading (dB μ V)	Correct Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polar
Low	4825.000	38.096	2.676	40.772	74.000	-33.228	PK	H
	7417.500	35.642	10.785	46.427	74.000	-27.573	PK	
	8837.000	35.158	11.635	46.793	74.000	-27.207	PK	
	9899.500	35.038	13.348	48.386	74.000	-25.614	PK	
	4026.000	38.544	-0.360	38.183	74.000	-35.817	PK	V
	4825.000	44.129	2.676	46.805	74.000	-27.195	PK	
	7239.000	34.904	10.644	45.547	74.000	-28.453	PK	
	8616.000	35.528	11.179	46.708	74.000	-27.292	PK	
Middle	4867.500	39.649	2.566	42.215	74.000	-31.785	PK	H
	7587.500	36.264	10.815	47.079	74.000	-26.921	PK	
	8769.000	34.909	11.825	46.734	74.000	-27.266	PK	
	9899.500	35.608	13.348	48.956	74.000	-25.044	PK	
	4876.000	46.263	2.612	48.875	74.000	-25.125	PK	V
	7502.500	34.850	11.046	45.896	74.000	-28.104	PK	
	8607.500	35.591	11.099	46.691	74.000	-27.309	PK	
	9857.000	35.452	13.018	48.470	74.000	-25.530	PK	
High	4918.500	39.242	2.551	41.794	74.000	-32.206	PK	H
	7613.000	36.316	10.788	47.104	74.000	-26.896	PK	
	8913.500	35.464	11.856	47.319	74.000	-26.681	PK	
	9899.500	34.944	13.348	48.292	74.000	-25.708	PK	
	4927.000	42.606	2.632	45.238	74.000	-28.762	PK	V
	7519.500	35.513	10.932	46.445	74.000	-27.555	PK	
	8845.500	36.404	11.709	48.113	74.000	-25.887	PK	
	10010.000	35.437	13.384	48.821	74.000	-25.179	PK	

Table 18: Test result of Spurious Emission of Wi-Fi (802.11n-HT40)

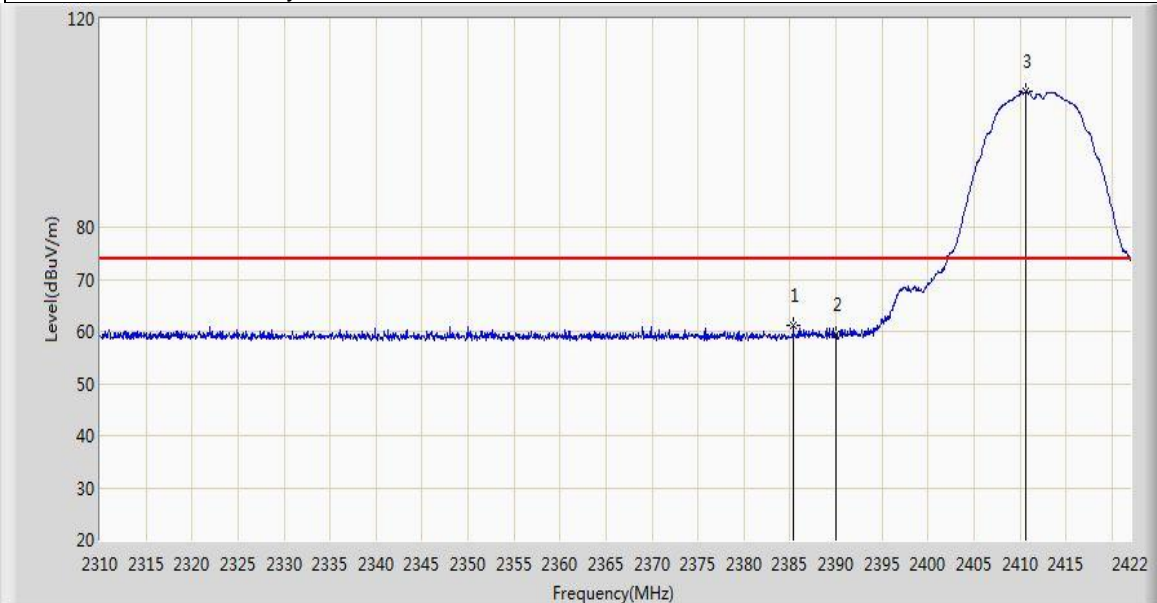
Channel	Freq. (MHz)	Reading (dBμ V)	Correct Factor (dB)	Measure Level (dBμ V/m)	Limit (dBμ V/m)	Margin (dB)	Detector	Polar
Low	4850.500	37.217	2.664	39.881	74.000	-34.119	PK	H
	7502.500	35.723	11.046	46.769	74.000	-27.231	PK	
	8718.000	35.615	11.426	47.041	74.000	-26.959	PK	
	9840.000	34.892	13.483	48.375	74.000	-25.625	PK	
	4842.000	42.357	2.866	45.224	74.000	-28.776	PK	V
	7630.000	35.628	10.462	46.089	74.000	-27.911	PK	
	8845.500	35.524	11.709	47.233	74.000	-26.767	PK	
	9840.000	34.794	13.483	48.277	74.000	-25.723	PK	
Middle	4867.500	38.571	2.566	41.137	74.000	-32.863	PK	H
	7698.000	36.172	10.282	46.455	74.000	-27.545	PK	
	8905.000	34.944	11.965	46.909	74.000	-27.091	PK	
	9967.500	35.508	13.241	48.749	74.000	-25.251	PK	
	4876.000	43.844	2.612	46.456	74.000	-27.544	PK	V
	7468.500	35.132	10.958	46.090	74.000	-27.910	PK	
	8735.000	34.940	11.613	46.553	74.000	-27.447	PK	
	9942.000	35.057	13.295	48.352	74.000	-25.648	PK	
High	4808.000	36.882	2.660	39.541	74.000	-34.459	PK	H
	7655.500	35.979	10.579	46.558	74.000	-27.442	PK	
	8913.500	35.544	11.856	47.399	74.000	-26.601	PK	
	9865.500	35.757	13.198	48.955	74.000	-25.045	PK	
	4842.000	36.954	2.866	39.821	74.000	-34.179	PK	V
	7460.000	35.364	11.070	46.433	74.000	-27.567	PK	
	8760.500	36.006	11.630	47.636	74.000	-26.364	PK	
	9848.500	35.097	13.273	48.371	74.000	-25.629	PK	

Notes:

1. *Transmit mode comply with the field strength within the restricted bands. There is no spurious found below 30MHz.*
2. *There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report.*
3. *Due to the peak measure values also meet the average limit (54dBm), the average measurement is not tested based on technical judgment.*

Test Plot of Frequency Band Edge of 802.11b mode

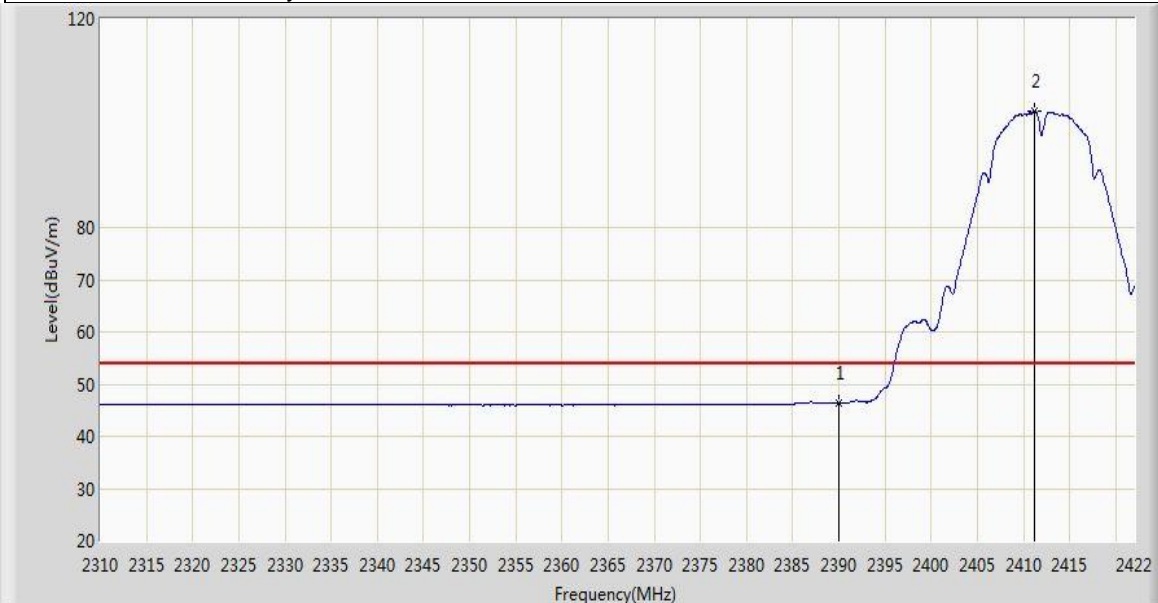
Site: AC2	Time: 2017/04/01 - 21:26
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: MID	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at Channel 2412MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2385.376	61.212	28.960	-12.788	74.000	32.252	PK
2			2390.000	59.288	27.010	-14.712	74.000	32.278	PK
3		*	2410.632	105.952	73.707	N/A	N/A	32.245	PK

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)
 Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

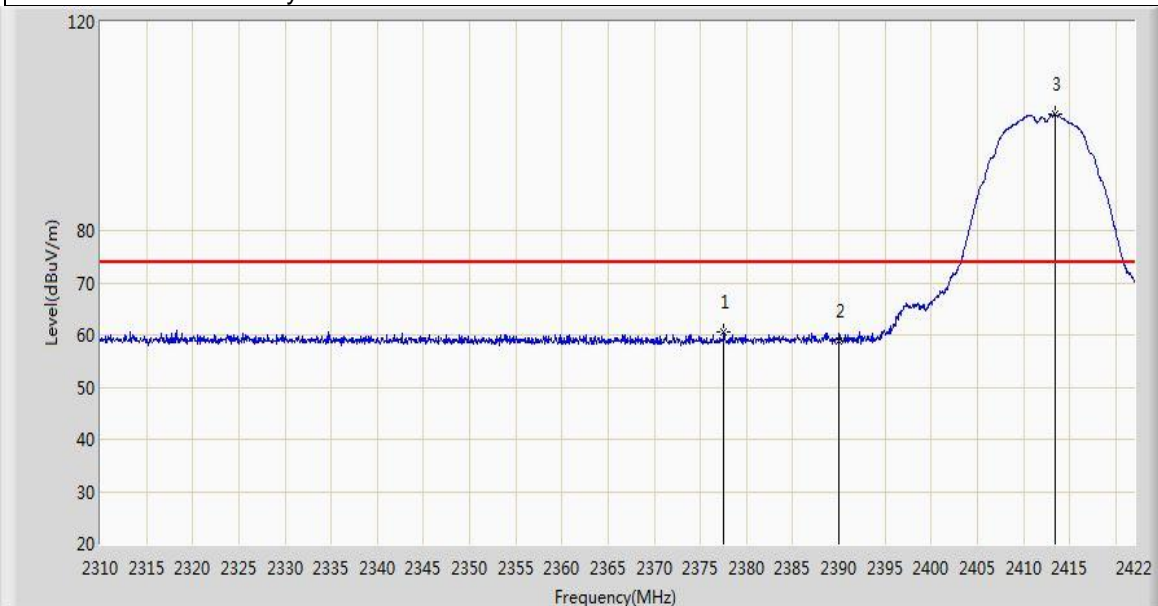
Site: AC2	Time: 2017/04/01 - 21:29
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: MID	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at Channel 2412MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	46.355	14.077	-7.645	54.000	32.278	AV
2		*	2411.248	102.312	70.069	N/A	N/A	32.243	AV

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)
 Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

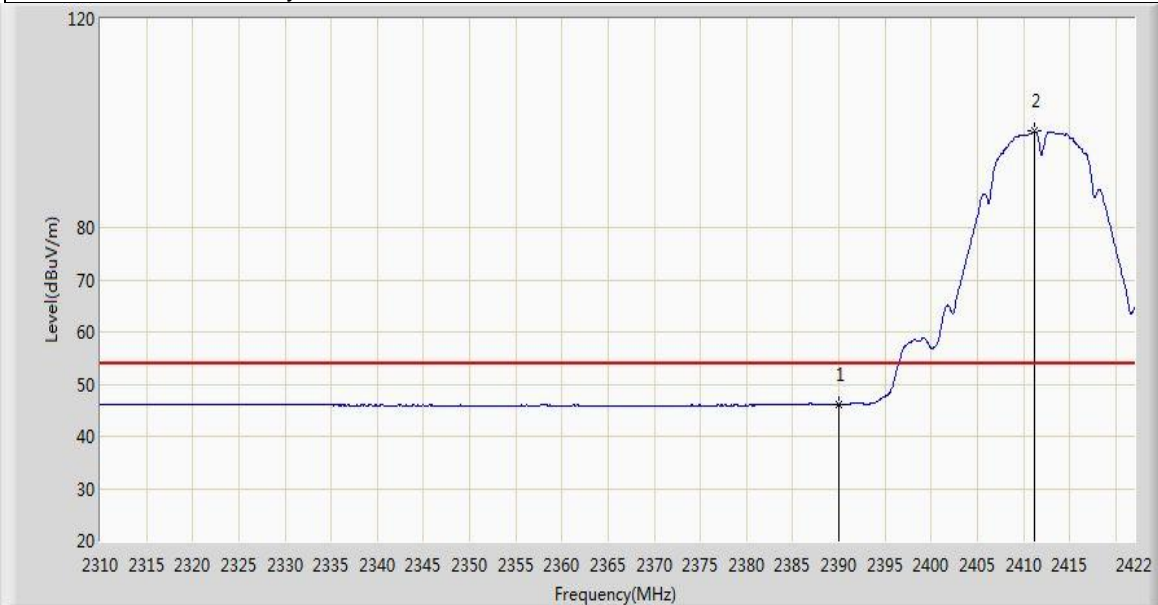
Site: AC2	Time: 2017/04/01 - 21:30
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: MID	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at Channel 2412MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2377.536	60.472	28.263	-13.528	74.000	32.208	PK
2			2390.000	58.981	26.703	-15.019	74.000	32.278	PK
3		*	2413.376	102.183	69.949	N/A	N/A	32.234	PK

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)
 Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/04/01 - 21:34
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: MID	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at Channel 2412MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	46.096	13.818	-7.904	54.000	32.278	AV
2		*	2411.192	98.464	66.221	N/A	N/A	32.243	AV

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)
 Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

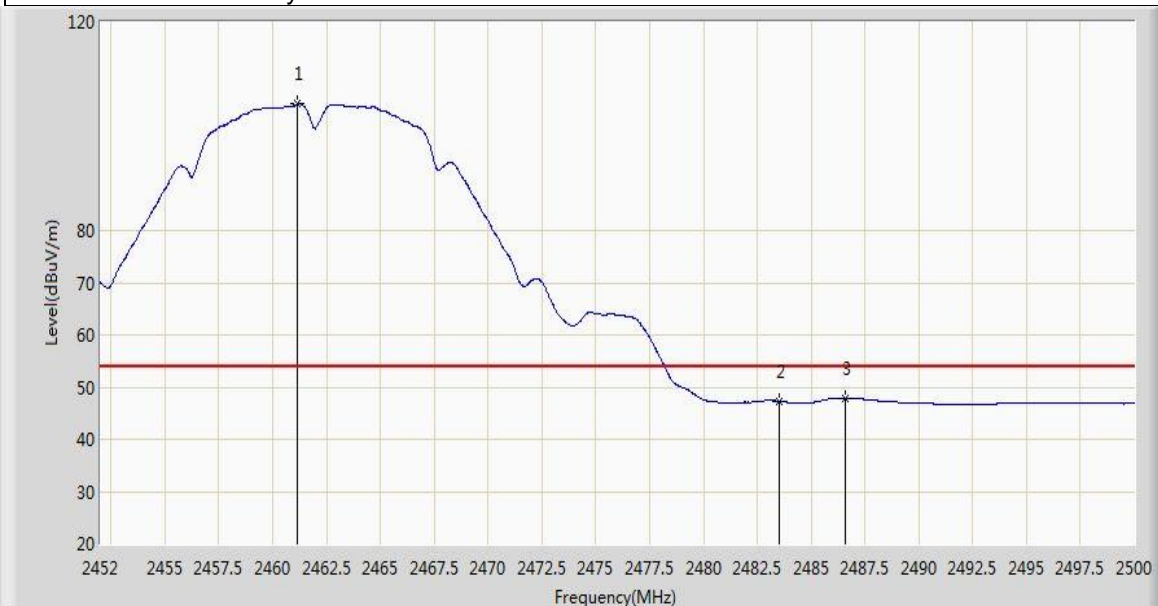
Site: AC2	Time: 2017/04/01 - 21:35
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: MID	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at Channel 2462MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2463.352	108.089	75.850	N/A	N/A	32.240	PK
2			2483.500	59.694	27.413	-14.306	74.000	32.282	PK
3			2486.992	62.357	30.064	-11.643	74.000	32.293	PK

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)
 Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

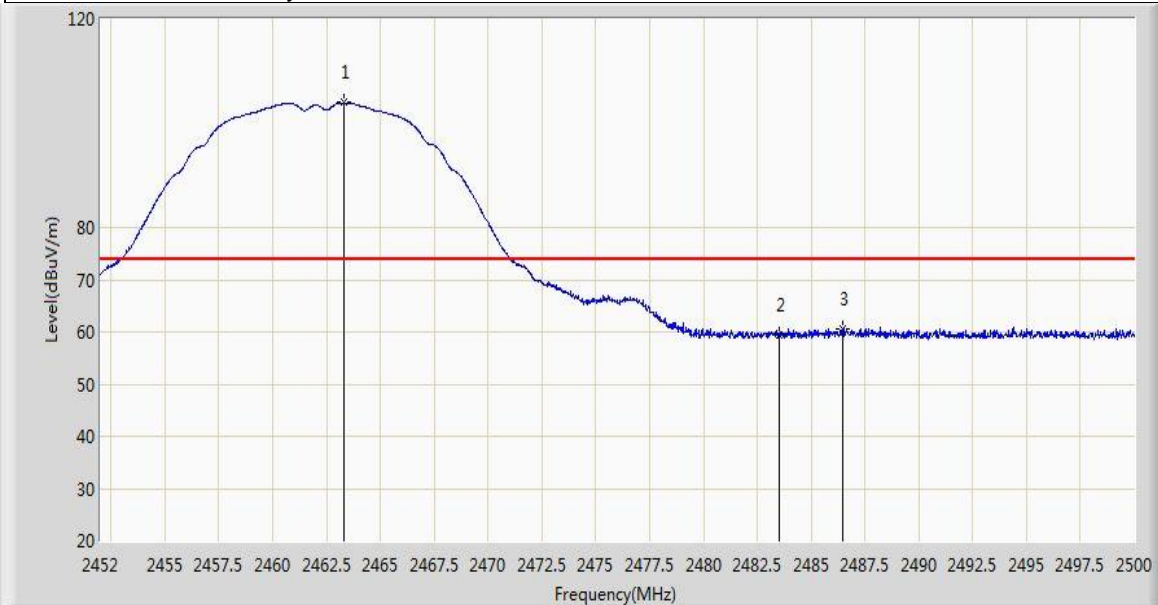
Site: AC2	Time: 2017/04/01 - 21:40
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: MID	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at Channel 2462MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2461.168	104.269	72.034	N/A	N/A	32.235	AV
2			2483.500	47.363	15.082	-6.637	54.000	32.282	AV
3			2486.608	47.875	15.583	-6.125	54.000	32.292	AV

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)
 Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/04/01 - 21:41
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: MID	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at Channel 2462MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2463.304	103.916	71.677	N/A	N/A	32.240	PK
2			2483.500	59.319	27.038	-14.681	74.000	32.282	PK
3			2486.440	60.636	28.345	-13.364	74.000	32.291	PK

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)
 Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/04/01 - 21:45
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: MID	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at Channel 2462MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2461.216	100.153	67.918	N/A	N/A	32.235	AV
2			2483.500	46.451	14.170	-7.549	54.000	32.282	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)
 Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Test Plot of Frequency Band Edge of 802.11g mode

Site: AC2	Time: 2017/04/01 - 21:46
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: MID	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at Channel 2412MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.968	65.890	33.612	-8.110	74.000	32.278	PK
2			2390.000	64.324	32.046	-9.676	74.000	32.278	PK
3		*	2414.160	106.171	73.940	N/A	N/A	32.231	PK

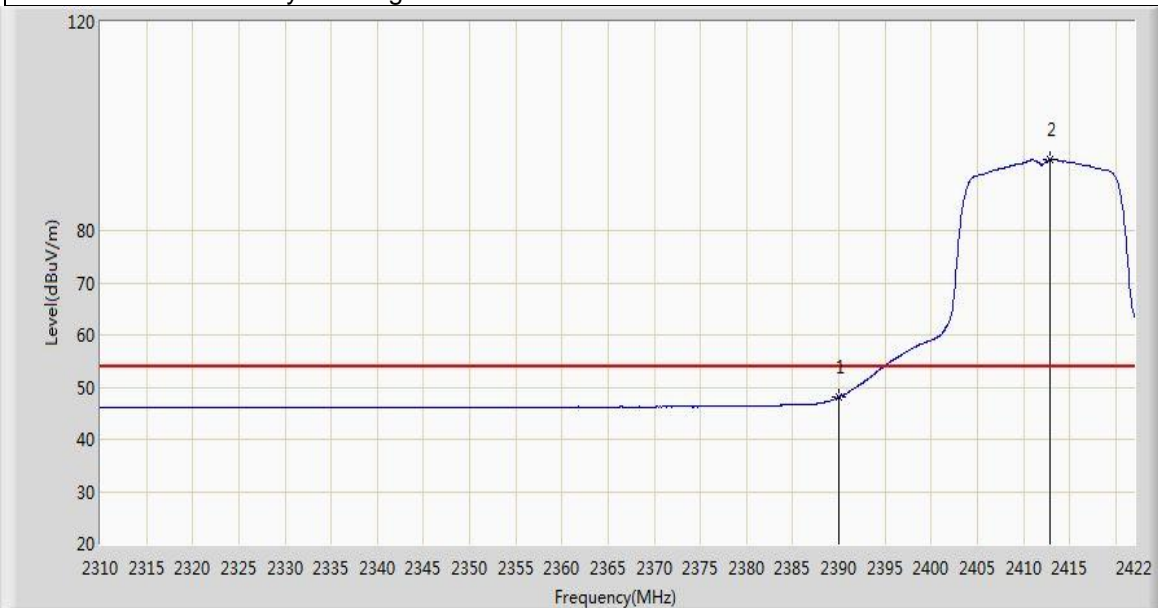
Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)
 Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

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Site: AC2	Time: 2017/04/01 - 21:49
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: MID	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at Channel 2412MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	48.094	15.816	-5.906	54.000	32.278	AV
2		*	2412.872	93.622	61.386	N/A	N/A	32.236	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

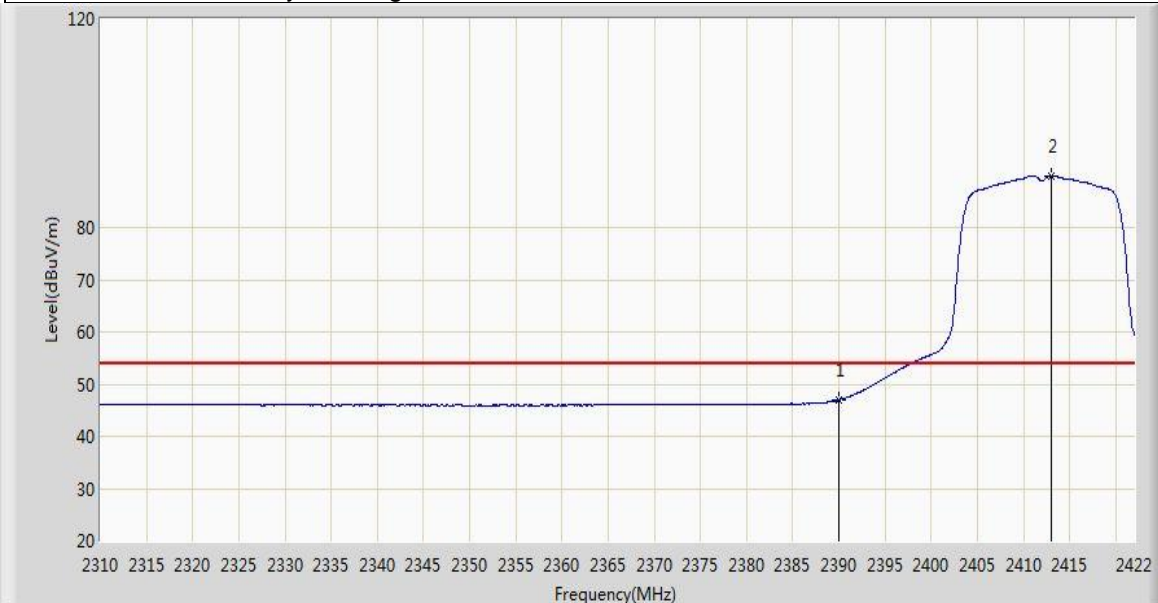
Site: AC2	Time: 2017/04/01 - 21:50
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: MID	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at Channel 2412MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.744	63.267	30.990	-10.733	74.000	32.276	PK
2			2390.000	61.334	29.056	-12.666	74.000	32.278	PK
3		*	2414.048	102.041	69.810	N/A	N/A	32.231	PK

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)
 Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/04/01 - 21:53
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: MID	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at Channel 2412MHz	

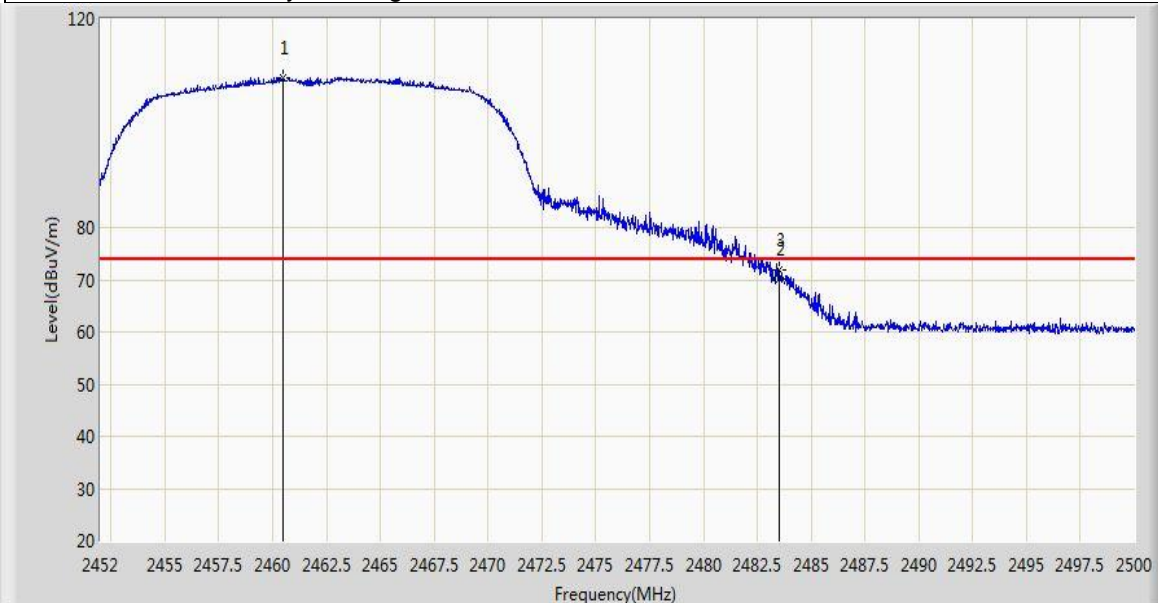


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	46.951	14.673	-7.049	54.000	32.278	AV
2		*	2413.040	89.965	57.730	N/A	N/A	32.235	AV

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

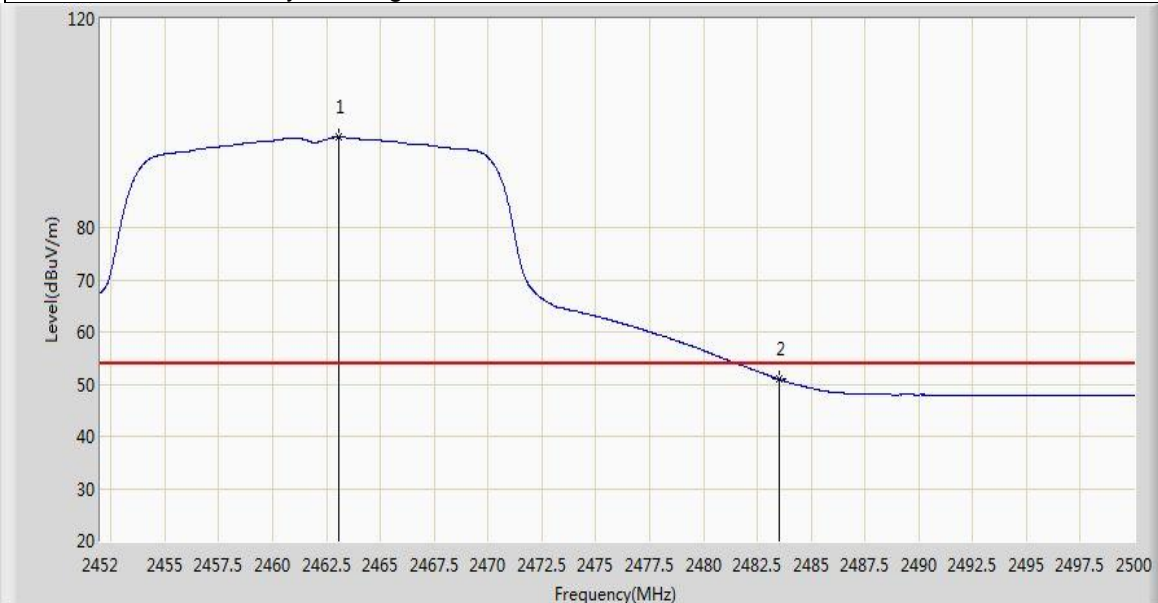
Site: AC2	Time: 2017/04/01 - 21:58
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: MID	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at Channel 2462MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2460.496	108.840	76.608	N/A	N/A	32.232	PK
2			2483.500	70.021	37.740	-3.979	74.000	32.282	PK
3			2483.536	71.756	39.475	-2.244	74.000	32.282	PK

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)
 Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

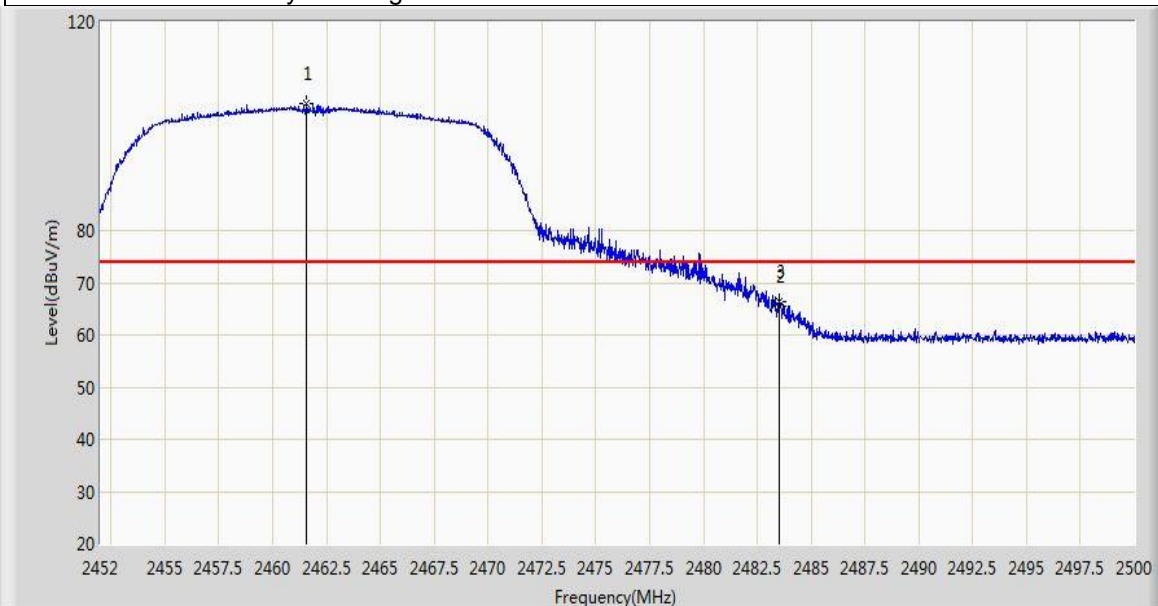
Site: AC2	Time: 2017/04/01 - 22:02
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: MID	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at Channel 2462MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2463.088	97.367	65.128	N/A	N/A	32.239	AV
2			2483.500	50.952	18.671	-3.048	54.000	32.282	AV

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)
 Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/04/01 - 22:03
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: MID	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at Channel 2462MHz	

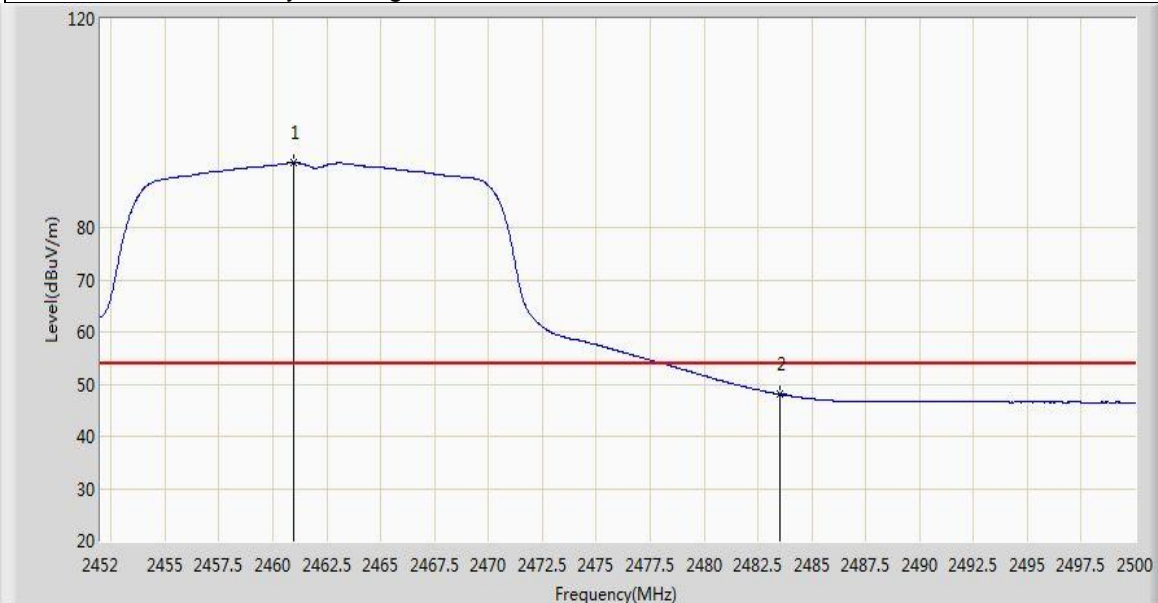


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2461.552	104.312	72.076	N/A	N/A	32.236	PK
2			2483.500	65.471	33.190	-8.529	74.000	32.282	PK
3			2483.536	66.400	34.119	-7.600	74.000	32.282	PK

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/04/01 - 22:05
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: MID	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at Channel 2462MHz	

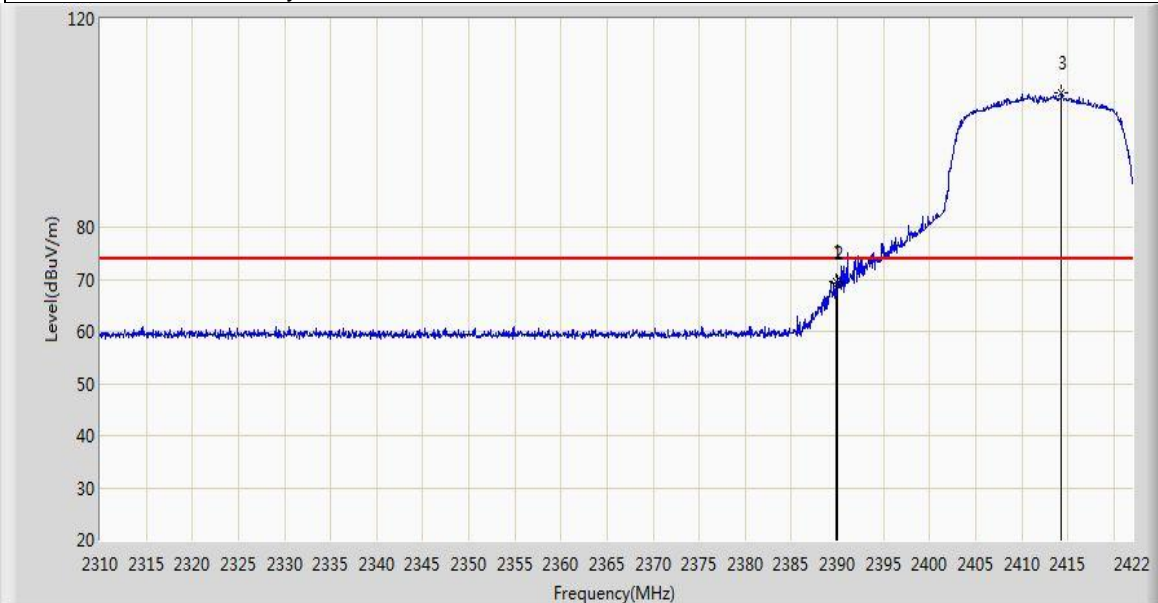


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2460.952	92.403	60.169	N/A	N/A	32.233	AV
2			2483.500	48.039	15.758	-5.961	54.000	32.282	AV

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)
 Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Test Plot of Frequency Band Edge of 802.11n-HT20 mode

Site: AC2	Time: 2017/04/01 - 22:06
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: MID	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at Channel 2412MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.912	69.624	37.346	-4.376	74.000	32.278	PK
2			2390.000	69.267	36.989	-4.733	74.000	32.278	PK
3		*	2414.272	105.759	73.529	N/A	N/A	32.231	PK

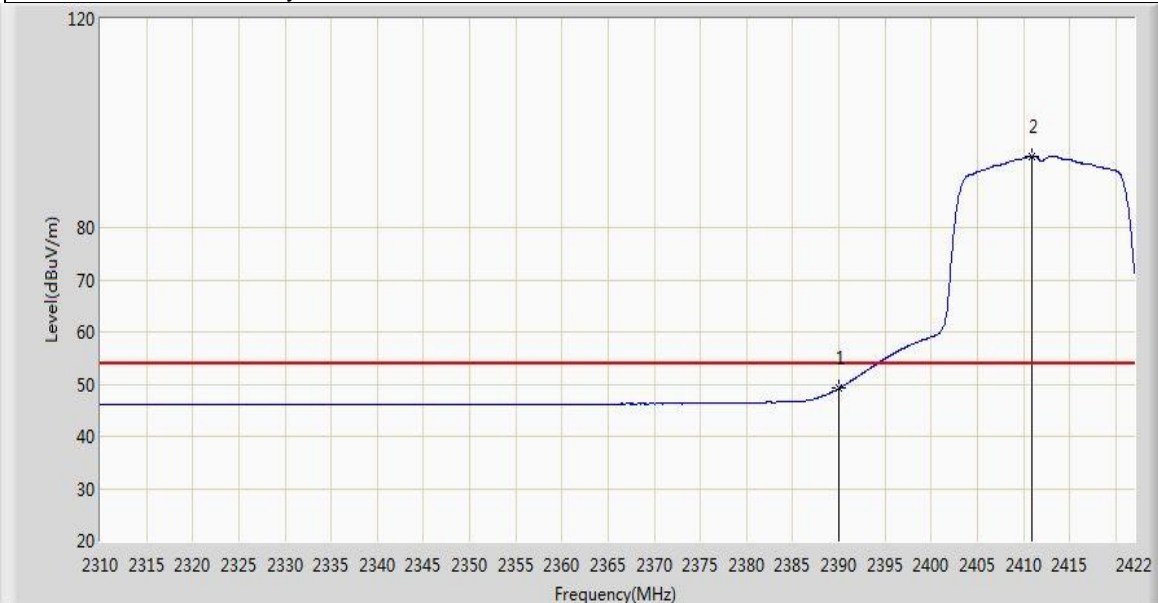
Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)
 Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

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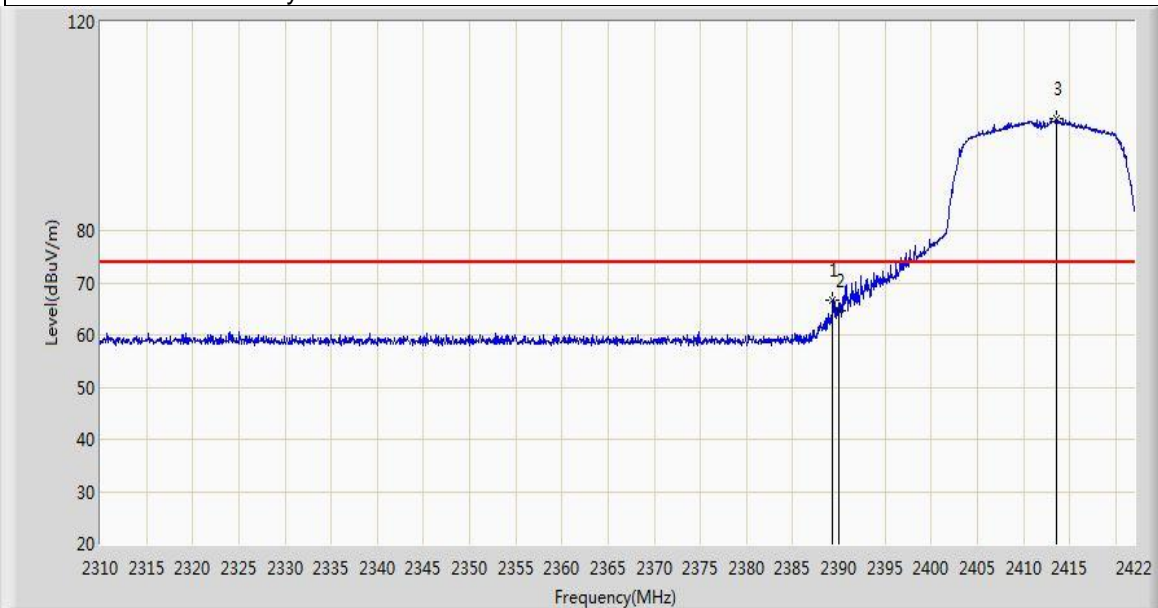
Site: AC2	Time: 2017/04/01 - 22:17
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: MID	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at Channel 2412MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	49.188	16.910	-4.812	54.000	32.278	AV
2		*	2410.912	93.748	61.504	N/A	N/A	32.244	AV

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

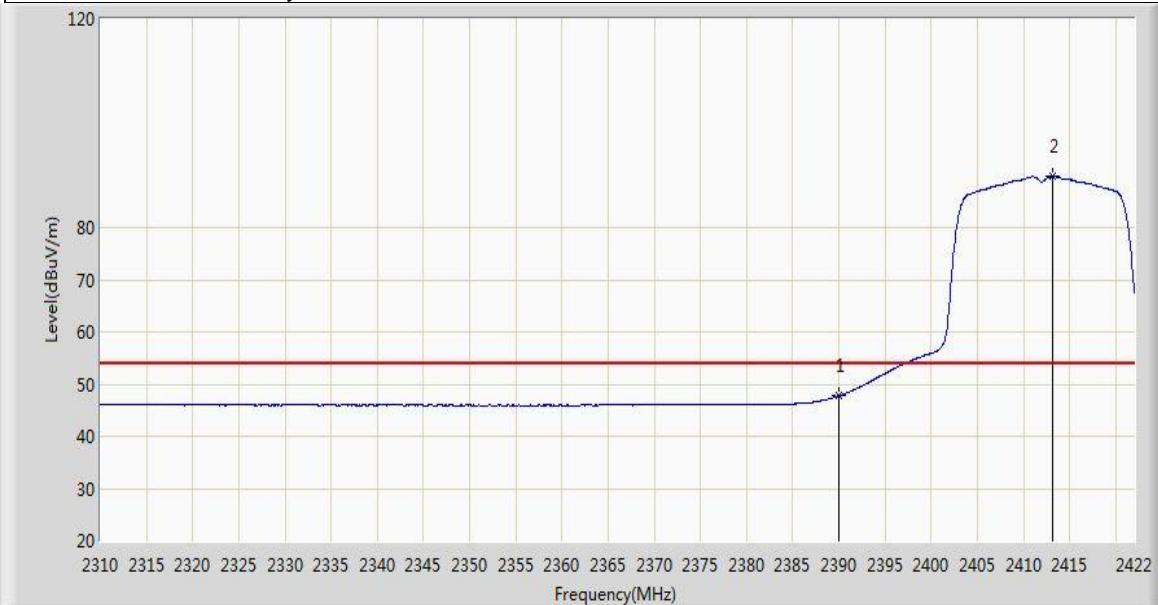
Site: AC2	Time: 2017/04/01 - 22:17
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: MID	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at Channel 2412MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.296	66.688	34.414	-7.312	74.000	32.275	PK
2			2390.000	64.650	32.372	-9.350	74.000	32.278	PK
3		*	2413.544	101.349	69.116	N/A	N/A	32.233	PK

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)
 Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

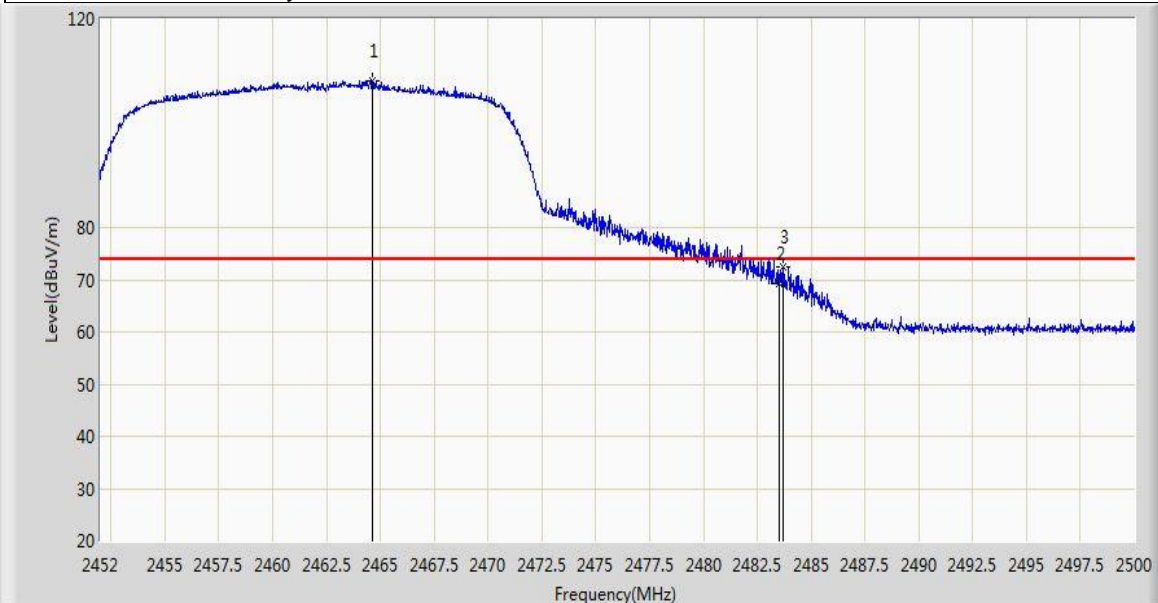
Site: AC2	Time: 2017/04/01 - 22:20
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: MID	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at Channel 2412MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	47.749	15.471	-6.251	54.000	32.278	AV
2		*	2413.208	89.791	57.556	N/A	N/A	32.235	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)
 Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

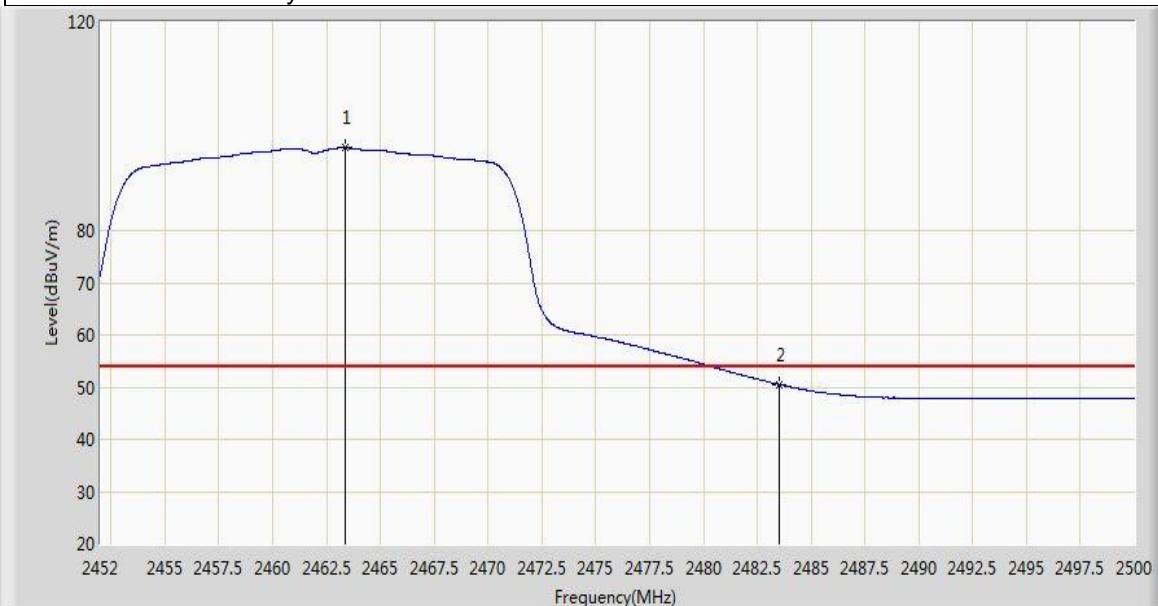
Site: AC2	Time: 2017/04/01 - 22:31
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: MID	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at Channel 2462MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2464.624	108.119	75.878	N/A	N/A	32.241	PK
2			2483.500	69.132	36.851	-4.868	74.000	32.282	PK
3			2483.728	72.542	40.260	-1.458	74.000	32.282	PK

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)
 Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

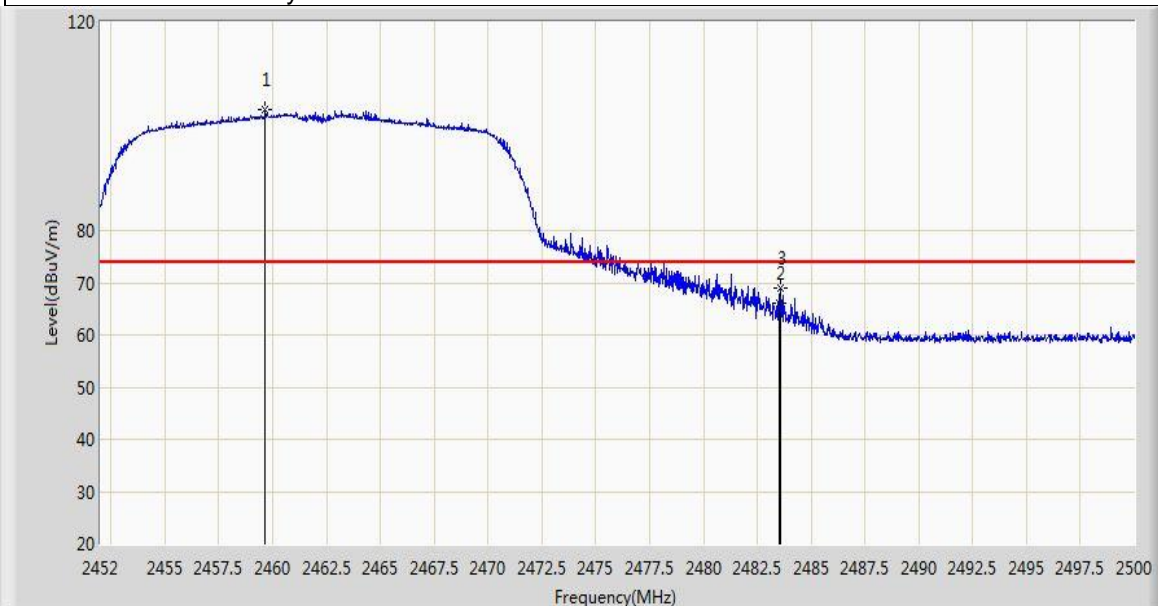
Site: AC2	Time: 2017/04/01 - 22:33
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: MID	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at Channel 2462MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2463.352	95.856	63.617	N/A	N/A	32.240	AV
2			2483.500	50.552	18.271	-3.448	54.000	32.282	AV

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)
 Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

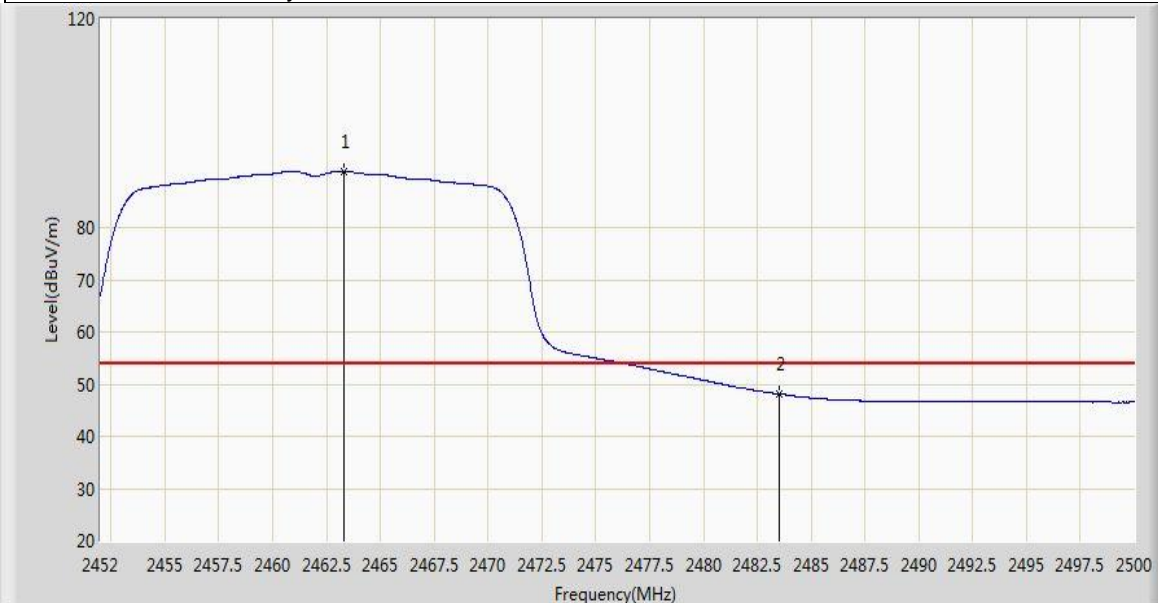
Site: AC2	Time: 2017/04/01 - 22:34
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: MID	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at Channel 2462MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2459.656	103.143	70.915	N/A	N/A	32.228	PK
2			2483.500	66.203	33.922	-7.797	74.000	32.282	PK
3			2483.560	68.977	36.696	-5.023	74.000	32.282	PK

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)
 Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/04/01 - 22:37
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: MID	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at Channel 2462MHz	



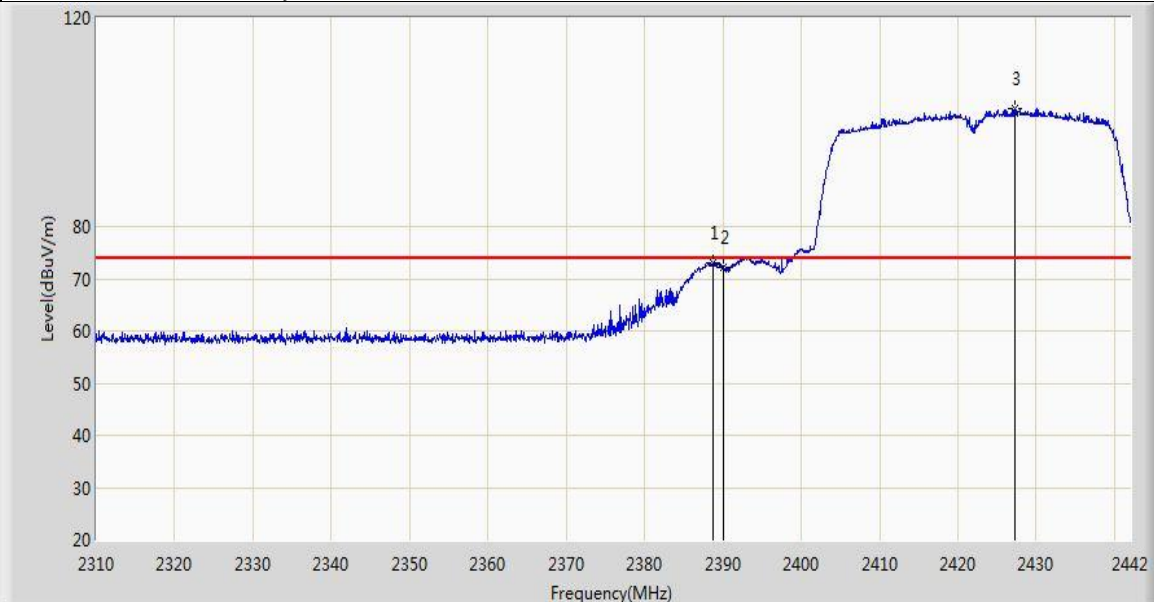
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2463.304	90.774	58.535	N/A	N/A	32.240	AV
2			2483.500	48.091	15.810	-5.909	54.000	32.282	AV

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Test Plot of Frequency Band Edge of 802.11n-HT40 mode

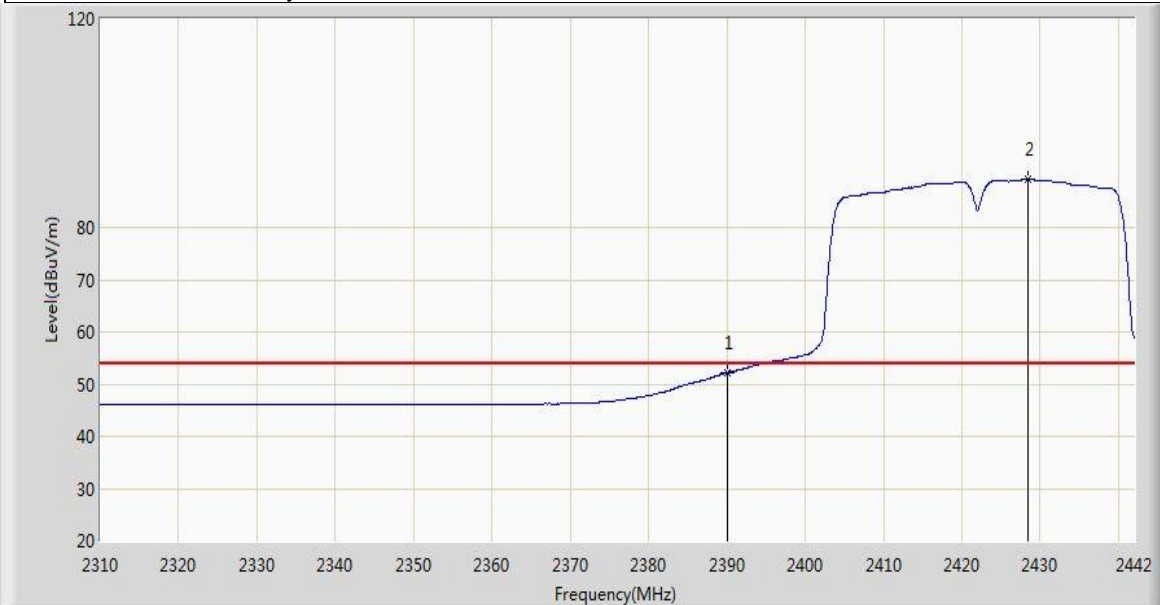
Site: AC2	Time: 2017/04/01 - 22:48
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: MID	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at Channel 2422MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2388.804	73.154	40.883	-0.846	74.000	32.272	PK
2			2390.000	72.299	40.021	-1.701	74.000	32.278	PK
3		*	2427.216	102.583	70.407	N/A	N/A	32.177	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)
 Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

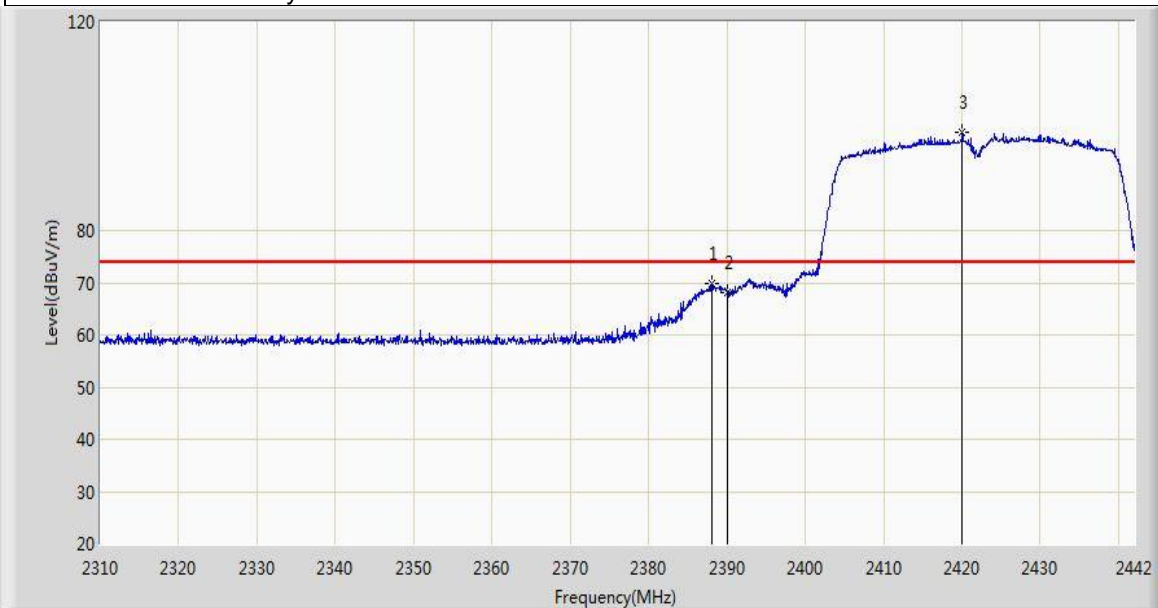
Site: AC2	Time: 2017/04/01 - 22:50
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: MID	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at Channel 2422MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	52.145	19.867	-1.855	54.000	32.278	AV
2		*	2428.404	89.267	57.094	N/A	N/A	32.173	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)
 Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

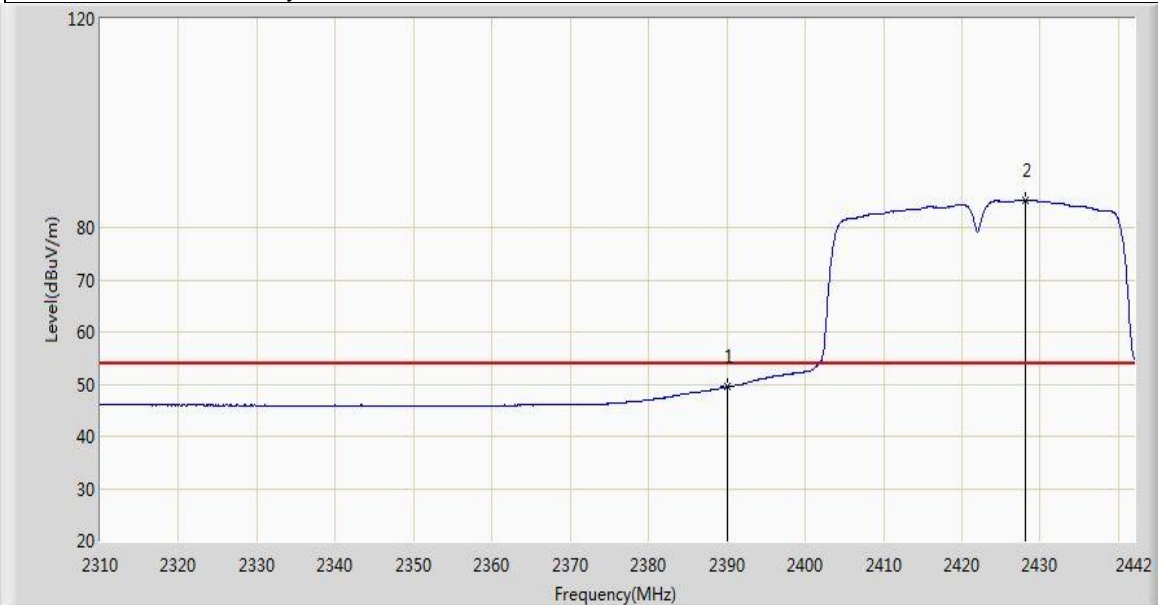
Site: AC2	Time: 2017/04/01 - 22:51
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: MID	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at Channel 2422MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2388.078	69.990	37.723	-4.010	74.000	32.268	PK
2			2390.000	68.125	35.847	-5.875	74.000	32.278	PK
3		*	2420.022	98.841	66.635	N/A	N/A	32.206	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)
 Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

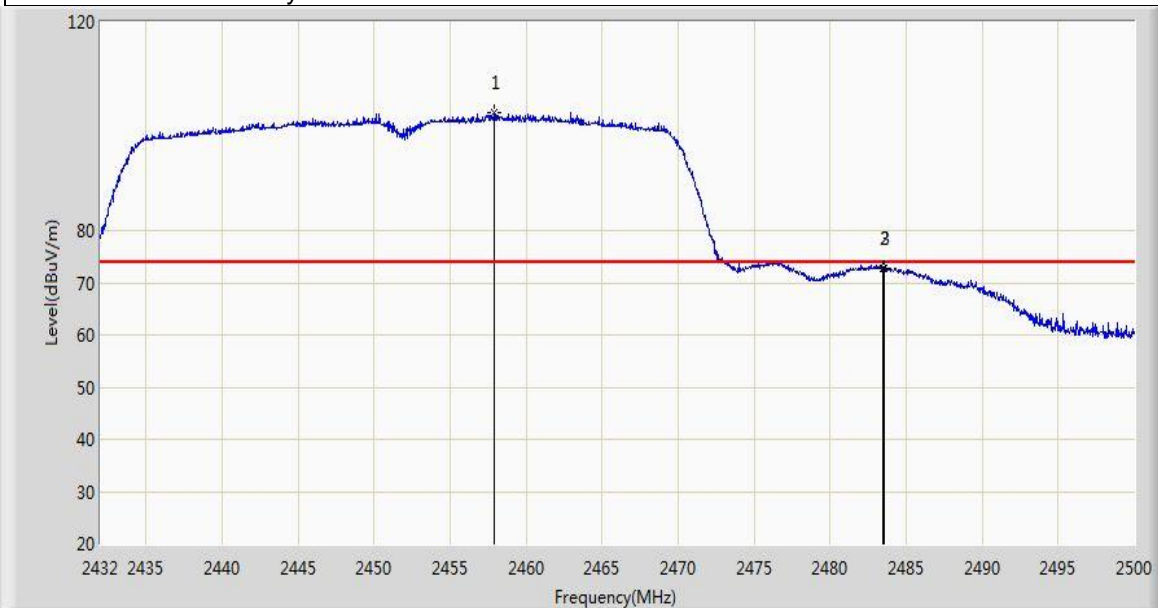
Site: AC2	Time: 2017/04/01 - 22:53
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: MID	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at Channel 2422MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	49.438	17.160	-4.562	54.000	32.278	AV
2		*	2428.140	85.314	53.141	N/A	N/A	32.174	AV

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)
 Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

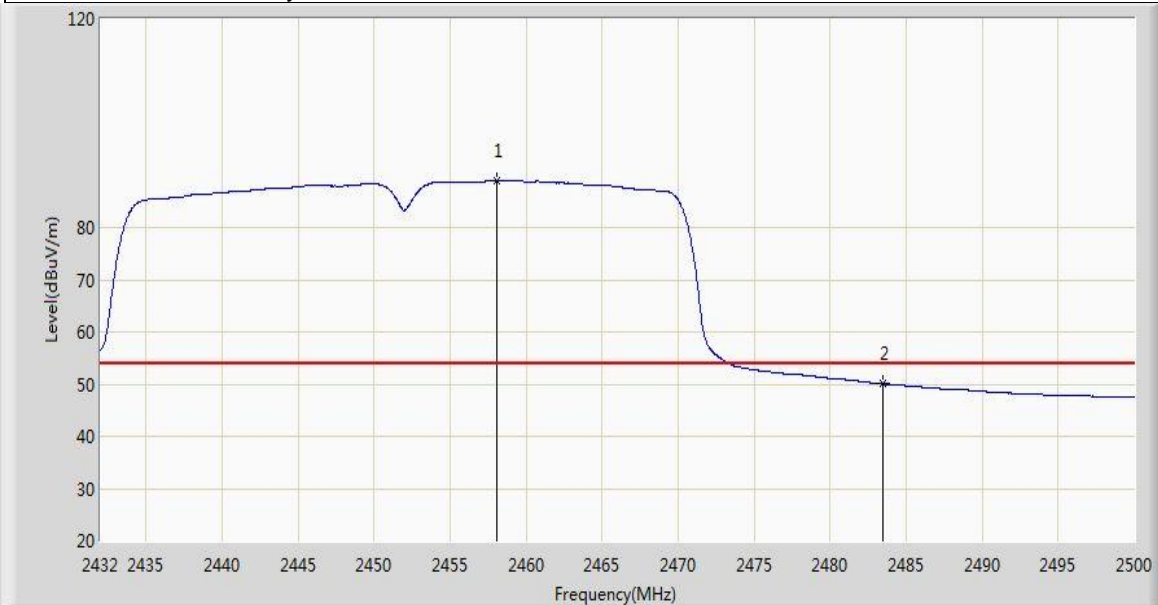
Site: AC2	Time: 2017/04/01 - 23:02
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: MID	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at Channel 2452MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2457.908	102.498	70.277	N/A	N/A	32.221	PK
2			2483.500	72.751	40.470	-1.249	74.000	32.282	PK
3			2483.578	72.813	40.532	-1.187	74.000	32.282	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)
 Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

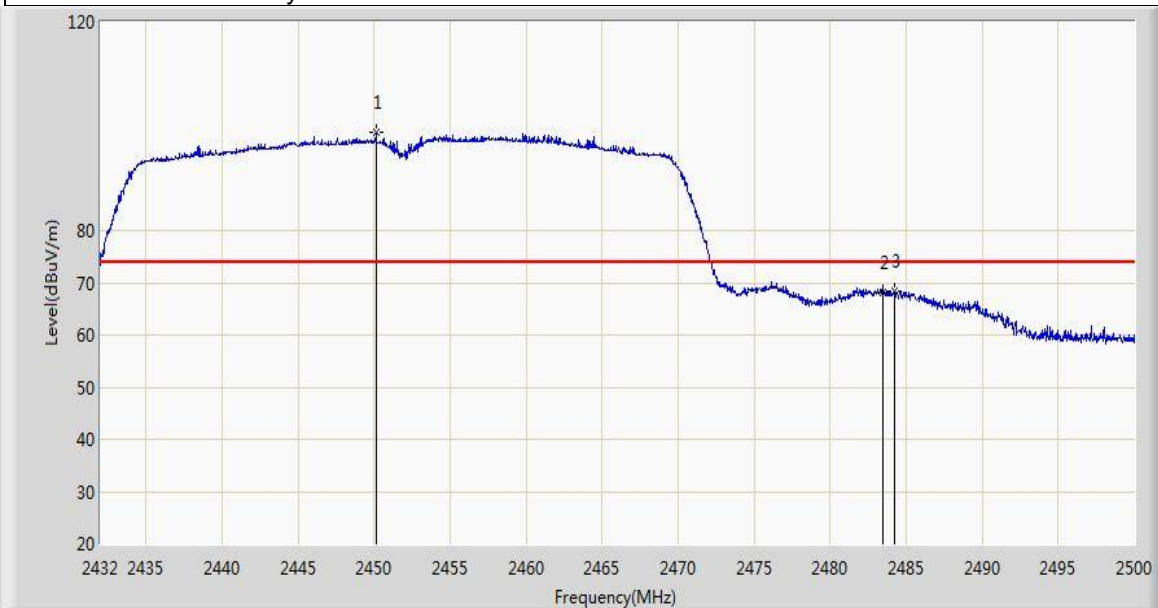
Site: AC2	Time: 2017/04/01 - 23:04
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: MID	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at Channel 2452MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2458.112	89.103	56.881	N/A	N/A	32.222	AV
2			2483.500	50.062	17.781	-3.938	54.000	32.282	AV

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)
 Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

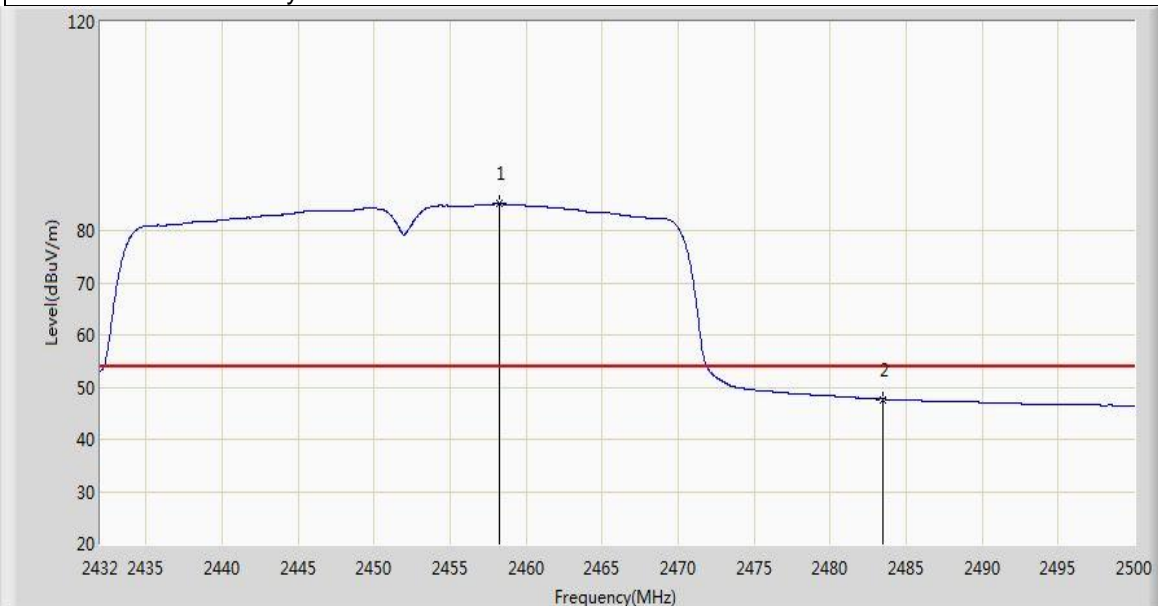
Site: AC2	Time: 2017/04/01 - 23:04
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: MID	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at Channel 2452MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2450.156	98.748	66.561	N/A	N/A	32.188	PK
2			2483.500	68.040	35.759	-5.960	74.000	32.282	PK
3			2484.258	68.265	35.981	-5.735	74.000	32.284	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)
 Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: AC2	Time: 2017/04/01 - 23:07
Limit: FCC_Part15.209_RE(3m)	Engineer: Jone Zhang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: MID	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at Channel 2452MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2458.214	85.144	52.922	N/A	N/A	32.222	AV
2			2483.500	47.681	15.400	-6.319	54.000	32.282	AV

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

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