




TEST REPORT

Report No. : **CHTEW19080147** Report Verification: 

Project No. : **SHT1907087904EW**

FCC ID : **2AUD2-M001**

Applicant's name : **BEIJING MORE HEATH TECHNOLOGY GROUP CO.,LTD.**

Address : 2/F TOWER AB, A12 XIDAWANG ROAD CHAOYANG DISTRICT BEIJING 100022 CHINA

Manufacturer : BEIJING MORE HEATH TECHNOLOGY GROUP CO.,LTD.

Address : 2/F TOWER AB, A12 XIDAWANG ROAD CHAOYANG DISTRICT BEIJING 100022 CHINA

Test item description : **Health Information Kiosk**

Trade Mark : -

Model/Type reference : M001

Listed Model(s) : -

Standard : **FCC CFR Title 47 Part 15 Subpart C Section 15.247**

Date of receipt of test sample : Aug.01, 2019

Date of testing : Aug.01, 2019- Aug.23, 2019

Date of issue : Aug.26, 2019

Result : **PASS**

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Approved by
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Testing Laboratory Name : **Shenzhen Huatongwei International Inspection Co., Ltd.**

Address : 1/F, Bldg 3, Hongfa Hi-tech Industrial Park, Genyu Road, Tianliao, Gongming, Shenzhen, China

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The test report merely correspond to the test sample.

Contents

<u>1.</u>	<u>TEST STANDARDS AND REPORT VERSION</u>	<u>3</u>
1.1.	Test Standards	3
1.2.	Report version	3
<u>2.</u>	<u>TEST DESCRIPTION</u>	<u>4</u>
<u>3.</u>	<u>SUMMARY</u>	<u>5</u>
3.1.	Client Information	5
3.2.	Product Description	5
3.3.	Operation state	6
3.4.	EUT configuration	6
3.5.	Modifications	6
<u>4.</u>	<u>TEST ENVIRONMENT</u>	<u>7</u>
4.1.	Address of the test laboratory	7
4.2.	Test Facility	7
4.3.	Environmental conditions	8
4.4.	Statement of the measurement uncertainty	8
4.5.	Equipments Used during the Test	9
<u>5.</u>	<u>TEST CONDITIONS AND RESULTS</u>	<u>11</u>
5.1.	Antenna requirement	11
5.2.	Conducted Emissions (AC Main)	12
5.3.	Conducted Peak Output Power	15
5.4.	Power Spectral Density	16
5.5.	6dB bandwidth	22
5.6.	Restricted band	28
5.7.	Band edge and Spurious Emissions (conducted)	37
5.8.	Spurious Emissions (radiated)	54
<u>6.</u>	<u>TEST SETUP PHOTOS</u>	<u>61</u>
<u>7.</u>	<u>EXTERANAL AND INTERNAL PHOTOS</u>	<u>63</u>

1. TEST STANDARDS AND REPORT VERSION

1.1. Test Standards

The tests were performed according to following standards:

[FCC Rules Part 15.247](#): Frequency Hopping, Direct Spread Spectrum and Hybrid Systems that are in operation within the bands of 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz.

[ANSI C63.10:2013](#): American National Standard for Testing Unlicensed Wireless Devices

[KDB 558074 D01 15.247 Meas Guidance v05r02](#): Guidance for Compliance Measurements on Digital Transmission System, Frequency Hopping Spread Spectrum System, and Hybrid System Devices Operating under Section 15.247 of The FCC Rules

1.2. Report version

Revision No.	Date of issue	Description
N/A	2019-08-26	Original

2. TEST DESCRIPTION

Test Item	FCC Rule	Result	Test Engineer
Antenna requirement	15.203/15.247(c)	PASS	JiongSheng.Feng
Line Conducted Emissions (AC Main)	15.207	PASS	Pan xie
Conducted Peak Output Power	15.247(b)(3)	PASS	JiongSheng.Feng
Power Spectral Density	15.247(e)	PASS	JiongSheng.Feng
6dB Bandwidth	15.247(a)(2)	PASS	JiongSheng.Feng
Restricted band	15.247(d)/15.205	PASS	Pan xie
Spurious Emissions	15.247(d)/15.209	PASS	Pan xie

Note: The measurement uncertainty is not included in the test result.

3. SUMMARY

3.1. Client Information

Applicant:	BEIJING MORE HEATH TECHNOLOGY GROUP CO.,LTD.
Address:	2/F TOWER AB,A12 XIDAWANG ROAD CHAOYANG DISTRICT BEIJING 100022 CHINA
Manufacturer:	BEIJING MORE HEATH TECHNOLOGY GROUP CO.,LTD.
Address:	2/F TOWER AB,A12 XIDAWANG ROAD CHAOYANG DISTRICT BEIJING 100022 CHINA

3.2. Product Description

Name of EUT:	Health Information Kiosk
Trade Mark:	-
Model No.:	M001
Listed Model(s):	-
IMEI:	
Power supply:	AC110V-240V
Hardware version:	-
Software version:	-
WIFI	
Supported type:	802.11b/802.11g/802.11n(HT20)/802.11n(HT40)
Modulation:	DSSS for 802.11b OFDM for 802.11g/802.11n(HT20)/802.11n(HT40)
Operation frequency:	2412MHz~2462MHz for 802.11b/802.11g/802.11n(HT20) 2422MHz~2452MHz for 802.11n(HT40)
Channel number:	11 for 802.11b/802.11g/802.11n(HT20) 7 for 802.11n(HT40)
Channel separation:	5MHz
Antenna type:	stick antenna
Antenna gain:	5dBi

3.3. Operation state

➤ Test frequency list

According to section 15.31(m), regards to the operating frequency range over 10 MHz, must select three channel which were tested. the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, please see the above gray bottom.

802.11b/g/n(HT20)		802.11n(HT40)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2412	01	-
02	2417	02	-
03	2422	03	2422
04	2427	04	2427
05	2432	05	2432
06	2437	06	2437
07	2442	07	2442
08	2447	08	2447
09	2452	09	2452
10	2457	10	-
11	2462	11	-

➤ Test mode

For RF test items
The engineering test program was provided and enabled to make EUT continuous transmit (duty cycle>98%).
For AC power line conducted emissions:
The EUT was set to connect with the WLAN AP under large package sizes transmission.
For Radiated suprious emissions test item:
The engineering test program was provided and enabled to make EUT continuous transmit(duty cycle>98%). The EUT in each of three orthogonal axis emissions had been tested ,but only the worst case (X axis) data Recorded in the report.

3.4. EUT configuration

The following peripheral devices and interface cables were connected during the measurement:

- - supplied by the manufacturer
- - supplied by the lab

○	/	Manufacturer:	/
		Model No.:	/
○	/	Manufacturer:	/
		Model No.:	/

3.5. Modifications

No modifications were implemented to meet testing criteria.

4. TEST ENVIRONMENT

4.1. Address of the test laboratory

Laboratory: Shenzhen Huatongwei International Inspection Co., Ltd.

Address: 1/F, Bldg 3, Hongfa Hi-tech Industrial Park, Genyu Road, Tianliao, Gongming, Shenzhen, China

4.2. Test Facility

CNAS-Lab Code: L1225

Shenzhen Huatongwei International Inspection Co., Ltd. has been assessed and proved to be in compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC17025: 2005 General Requirements) for the Competence of Testing and Calibration Laboratories.

A2LA-Lab Cert. No.: 3902.01

Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

FCC-Registration No.: 762235

Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files.

IC-Registration No.:5377A

Two 3m Alternate Test Site of Shenzhen Huatongwei International Inspection Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No.: 5377A.

ACA

Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory can also perform testing for the Australian C-Tick mark as a result of our A2LA accreditation.

4.3. Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature:	15~35°C
Relative Humidity:	30~60 %
Air Pressure:	950~1050mba

4.4. Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors in calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report according to TR-100028-01 "Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics; Part 1" and TR-100028-02 "Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics; Part 2" and is documented in the Shenzhen Huatongwei International Inspection Co., Ltd. quality system according to ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Here after the best measurement capability for Shenzhen Huatongwei International Inspection Co., Ltd. is reported:

Test Items	Measurement Uncertainty	Notes
Transmitter power conducted	0.51 dB	(1)
Conducted spurious emissions 9kHz~40GHz	0.51 dB	(1)
Conducted Disturbance 150kHz~30MHz	3.02 dB	(1)
Radiated Emissions below 1GHz	4.90 dB	(1)
Radiated Emissions above 1GHz	4.96 dB	(1)
Occupied Bandwidth	70 Hz	(1)

(1) This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=1.96$.

4.5. Equipments Used during the Test

● Conducted Emission						
Used	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
●	Shielded Room	Albatross projects	N/A	N/A	2018/09/28	2023/09/27
●	EMI Test Receiver	R&S	ESCI	101247	2018/10/27	2019/10/26
●	Artificial Mains	SCHWARZBECK	NNLK 8121	573	2018/10/27	2019/10/26
●	Pulse Limiter	R&S	ESH3-Z2	100499	2018/10/27	2019/10/26
●	RF Connection Cable	HUBER+SUHNER	EF400	N/A	2018/11/15	2019/11/14
●	Test Software	R&S	ES-K1	N/A	N/A	N/A
○	Single Balanced Telecom Pair ISN	FCC	FCC-TLISN-T2-02	20371	2018/10/28	2019/10/27
○	Two Balanced Telecom Pairs ISN	FCC	FCC-TLISN-T4-02	20373	2018/10/28	2019/10/27
○	Four Balanced Telecom Pairs ISN	FCC	FCC-TLISN-T8-02	20375	2018/10/28	2019/10/27
○	V-Network	R&S	ESH3-Z6	100211	2018/10/27	2019/10/26
○	V-Network	R&S	ESH3-Z6	100210	2018/10/27	2019/10/26
○	2-Line V-Network	R&S	ESH3-Z5	100049	2018/10/27	2019/10/26

● Radiated Emission-6th test site						
Used	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
●	Semi-Anechoic Chamber	Albatross projects	SAC-3m-02	N/A	2018/09/30	2021/09/29
●	EMI Test Receiver	R&S	ESCI	100900	2018/10/28	2019/10/27
●	Loop Antenna	R&S	HFH2-Z2	100020	2017/11/20	2020/11/19
●	Ultra-Broadband Antenna	SCHWARZBECK	VULB9163	546	2017/04/05	2020/04/04
●	Pre-Amplifier	SCHWARZBECK	BBV 9742	N/A	2018/11/15	2019/11/14
●	RF Connection Cable	HUBER+SUHNER	N/A	N/A	2018/09/28	2019/09/27
●	RF Connection Cable	HUBER+SUHNER	SUCOFLEX104	501184/4	2018/09/28	2019/09/27
●	Test Software	R&S	ES-K1	N/A	N/A	N/A
●	Turntable	Maturo Germany	TT2.0-1T	N/A	N/A	N/A
●	Antenna Mast	Maturo Germany	CAM-4.0-P-12	N/A	N/A	N/A

● Radiated emission-7th test site						
Used	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
●	Semi-Anechoic Chamber	Albatross projects	SAC-3m-01	N/A	2018/09/30	2021/09/29
●	Spectrum Analyzer	R&S	FSP40	100597	2018/10/27	2019/10/26
●	Horn Antenna	SCHWARZBECK	9120D	1011	2017/03/27	2020/03/26
●	Pre-amplifier	BONN	BLWA0160-2M	1811887	2018/11/14	2019/11/13
●	Pre-amplifier	CD	PAP-0102	12004	2018/11/14	2019/11/13
●	Broadband Pre-amplifier	SCHWARZBECK	BBV 9718	9718-248	2019/04/26	2020/04/25
●	RF Connection Cable	HUBER+SUHNER	RE-7-FH	N/A	2018/11/15	2019/11/14
●	RF Connection Cable	HUBER+SUHNER	RE-7-FL	N/A	2018/11/15	2019/11/14
●	Test Software	Audix	E3	N/A	N/A	N/A

●	Turntable	Maturo Germany	TT2.0-1T	N/A	N/A	N/A
●	Antenna Mast	Maturo Germany	CAM-4.0-P-12	N/A	N/A	N/A

● **RF Conducted Method**

Used	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
●	Signal and spectrum Analyzer	R&S	FSV40	100048	2018/10/28	2019/10/27
●	Spectrum Analyzer	Agilent	N9020A	MY50510187	2018/09/29	2019/09/28
●	OSP	R&S	OSP120	101317	N/A	N/A
○	Radio communication tester	R&S	CMW500	137688-Lv	2018/09/29	2019/09/28
○	Test software	Tonscend	JS1120-1(LTE)	N/A	N/A	N/A
○	Test software	Tonscend	JS1120-2(WIFI)	N/A	N/A	N/A
○	Test software	Tonscend	JS1120-3(WCDMA)	N/A	N/A	N/A
○	Test software	Tonscend	JS1120-4(GSM)	N/A	N/A	N/A

5. TEST CONDITIONS AND RESULTS

5.1. Antenna requirement

REQUIREMENT:

FCC CFR Title 47 Part 15 Subpart C Section 15.203:

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

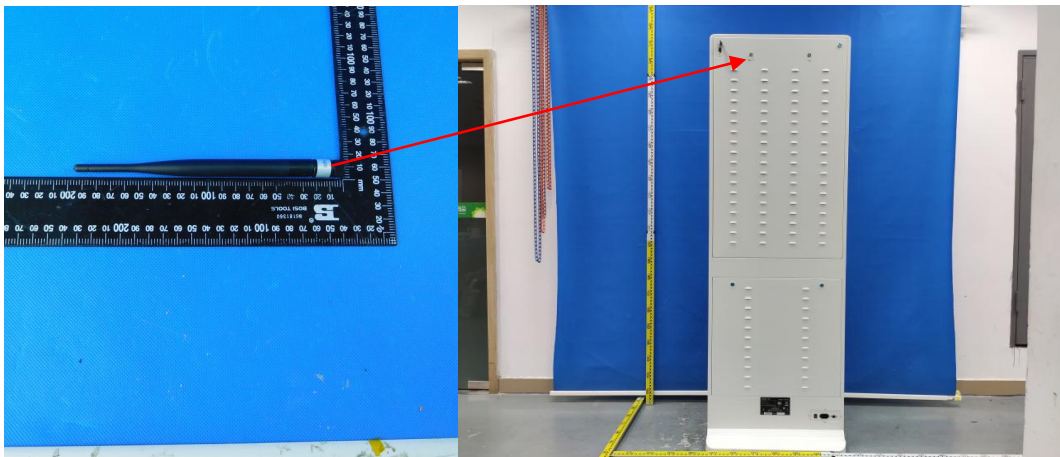
FCC CFR Title 47 Part 15 Subpart C Section 15.247(c) (1)(i):

(i) Systems operating in the 2400~2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6 dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.

TEST RESULTS

☒ Passed ☐ Not Applicable

The directional gain of the antenna less than 5 dBi, please refer to the below antenna photo.



5.2. Conducted Emissions (AC Main)

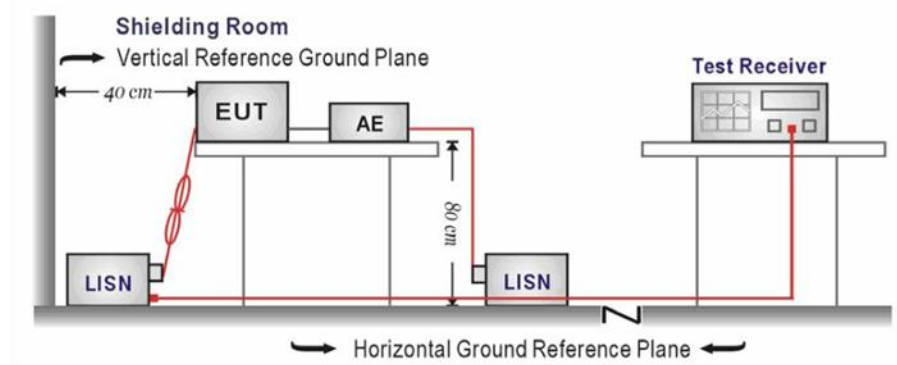
LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.207:

Frequency range (MHz)	Limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

* Decreases with the logarithm of the frequency.

TEST CONFIGURATION



TEST PROCEDURE

1. The EUT was setup according to ANSI C63.10:2013 requirements.
2. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface.
3. The EUT and simulators are connected to the main power through a line impedances stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment.
4. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs)
5. Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.
6. The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.
7. Conducted Emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.
8. During the above scans, the emissions were maximized by cable manipulation.

TEST MODE:

Please refer to the clause 3.3

TEST RESULTS

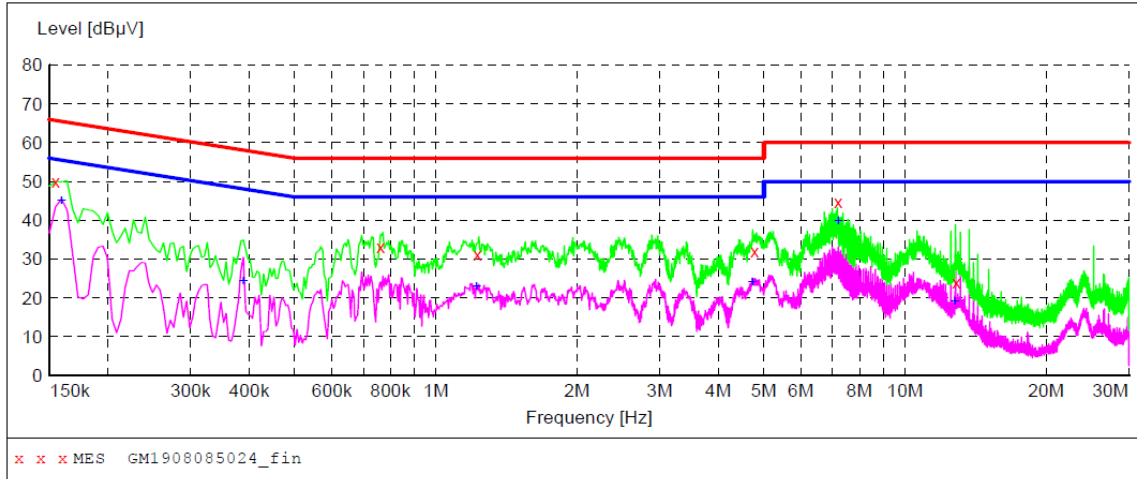
☒ Passed ☐ Not Applicable

Note:

- 1) Transd=Cable lose+ Pulse Limiter Factor + Artificial Mains Factor
- 2) Margin= Limit -Level

Test Line:

L

**MEASUREMENT RESULT: "GM1908085024_fin"**

8/8/2019 2:18PM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.154500	50.10	9.9	66	15.7	QP	L1	GND
0.762000	33.10	9.9	56	22.9	QP	L1	GND
1.225500	31.10	9.9	56	24.9	QP	L1	GND
4.776000	32.10	9.9	56	23.9	QP	L1	GND
7.201500	44.80	10.0	60	15.2	QP	L1	GND
12.858000	24.10	10.1	60	35.9	QP	L1	GND

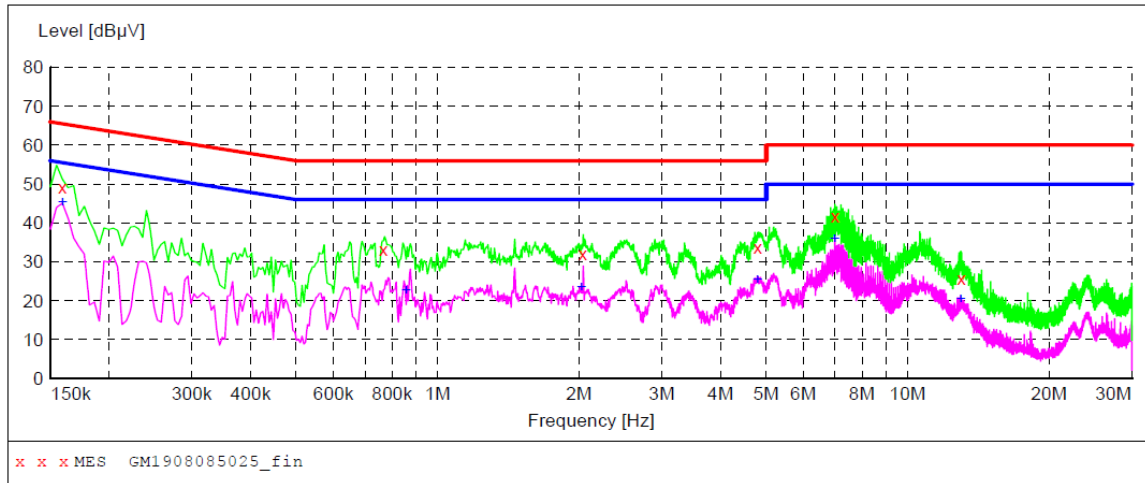
MEASUREMENT RESULT: "GM1908085024_fin2"

8/8/2019 2:18PM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.159000	45.10	9.9	56	10.4	AV	L1	GND
0.388500	24.30	9.9	48	23.8	AV	L1	GND
1.221000	23.00	9.9	46	23.0	AV	L1	GND
4.726500	24.00	9.9	46	22.0	AV	L1	GND
7.206000	39.70	10.0	50	10.3	AV	L1	GND
12.768000	19.10	10.1	50	30.9	AV	L1	GND

Test Line:

N

**MEASUREMENT RESULT: "GM1908085025_fin"**

8/8/2019 2:21PM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.159000	49.30	9.9	66	16.2	QP	N	GND
0.766500	33.10	9.9	56	22.9	QP	N	GND
2.035500	32.10	9.9	56	23.9	QP	N	GND
4.794000	33.70	9.9	56	22.3	QP	N	GND
6.999000	41.70	10.0	60	18.3	QP	N	GND
13.006500	25.60	10.1	60	34.4	QP	N	GND

MEASUREMENT RESULT: "GM1908085025_fin2"

8/8/2019 2:21PM

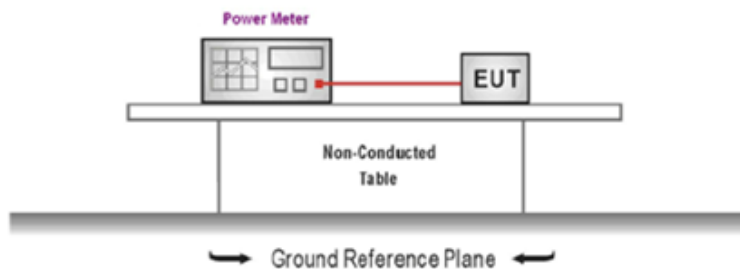
Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.159000	45.30	9.9	56	10.2	AV	N	GND
0.856500	22.60	9.9	46	23.4	AV	N	GND
2.022000	23.40	9.9	46	22.6	AV	N	GND
4.794000	25.50	9.9	46	20.5	AV	N	GND
6.994500	35.80	10.0	50	14.2	AV	N	GND
12.970500	20.30	10.1	50	29.7	AV	N	GND

5.3. Conducted Peak Output Power

LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (b)(3): 30dBm

TEST CONFIGURATION



TEST PROCEDURE

1. The EUT was tested according to ANSI C63.10: 2013 and KDB 558074 D01 for compliance to FCC 47 CFR 15.247 requirements.
2. The maximum peak conducted output power may be measured using a broadband peak RF power meter.
3. The power meter shall have a video bandwidth that is greater than or equal to the DTS bandwidth and shall utilize a fast-responding diode detector
4. Record the measurement data.

TEST MODE:

Please refer to the clause 3.3

TEST RESULTS

☒ Passed ☐ Not Applicable

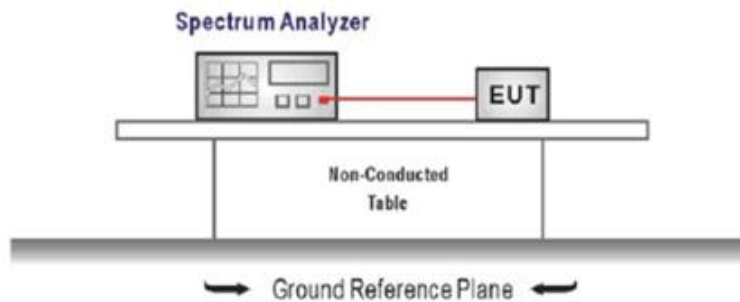
Type	Channel	Peak Output power (dBm)	Limit (dBm)	Result
802.11b	01	17.60	≤30.00	Pass
	06	16.53		
	11	16.12		
802.11g	01	19.93	≤30.00	Pass
	06	19.12		
	11	18.73		
802.11n(HT20)	01	20.01	≤30.00	Pass
	06	19.17		
	11	18.83		
802.11n(HT40)	03	19.13	≤30.00	Pass
	06	18.68		
	09	18.30		

5.4. Power Spectral Density

LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (e):For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

TEST CONFIGURATION



TEST PROCEDURE

1. Connect the antenna port(s) to the spectrum analyzer input,
2. Configure the spectrum analyzer as shown below:
Center frequency=DTS channel center frequency
Span =1.5 times the DTS bandwidth
 $RBW = 3 \text{ kHz} \leq RBW \leq 100 \text{ kHz}$, $VBW \geq 3 \times RBW$
Sweep time = auto couple
Detector = peak
Trace mode = max hold
3. Place the radio in continuous transmit mode, allow the trace to stabilize, view the transmitter wave form on the spectrum analyzer.
4. Use the peak marker function to determine the maximum amplitude level within the RBW.
5. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

TEST MODE:

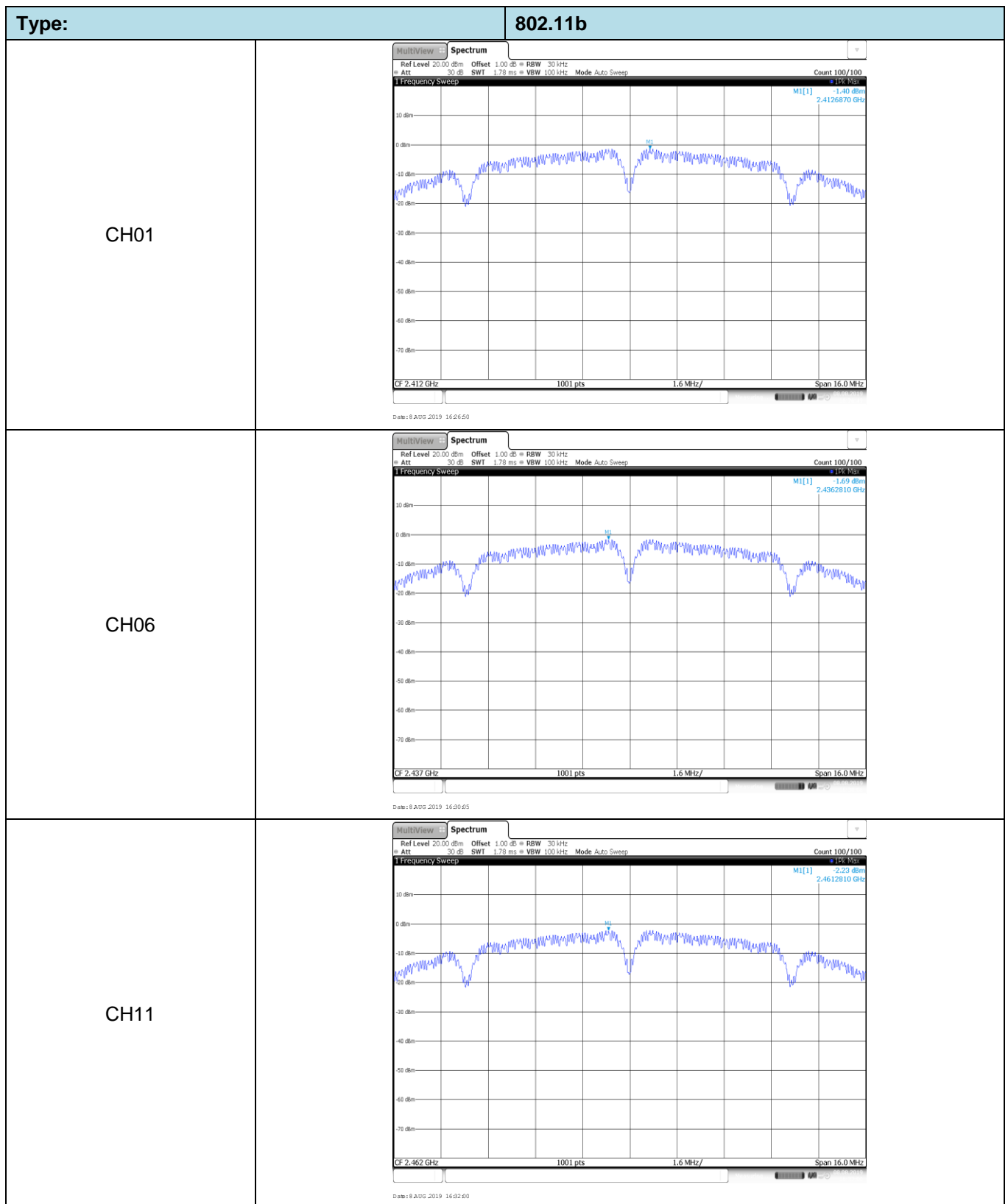
Please refer to the clause 3.3

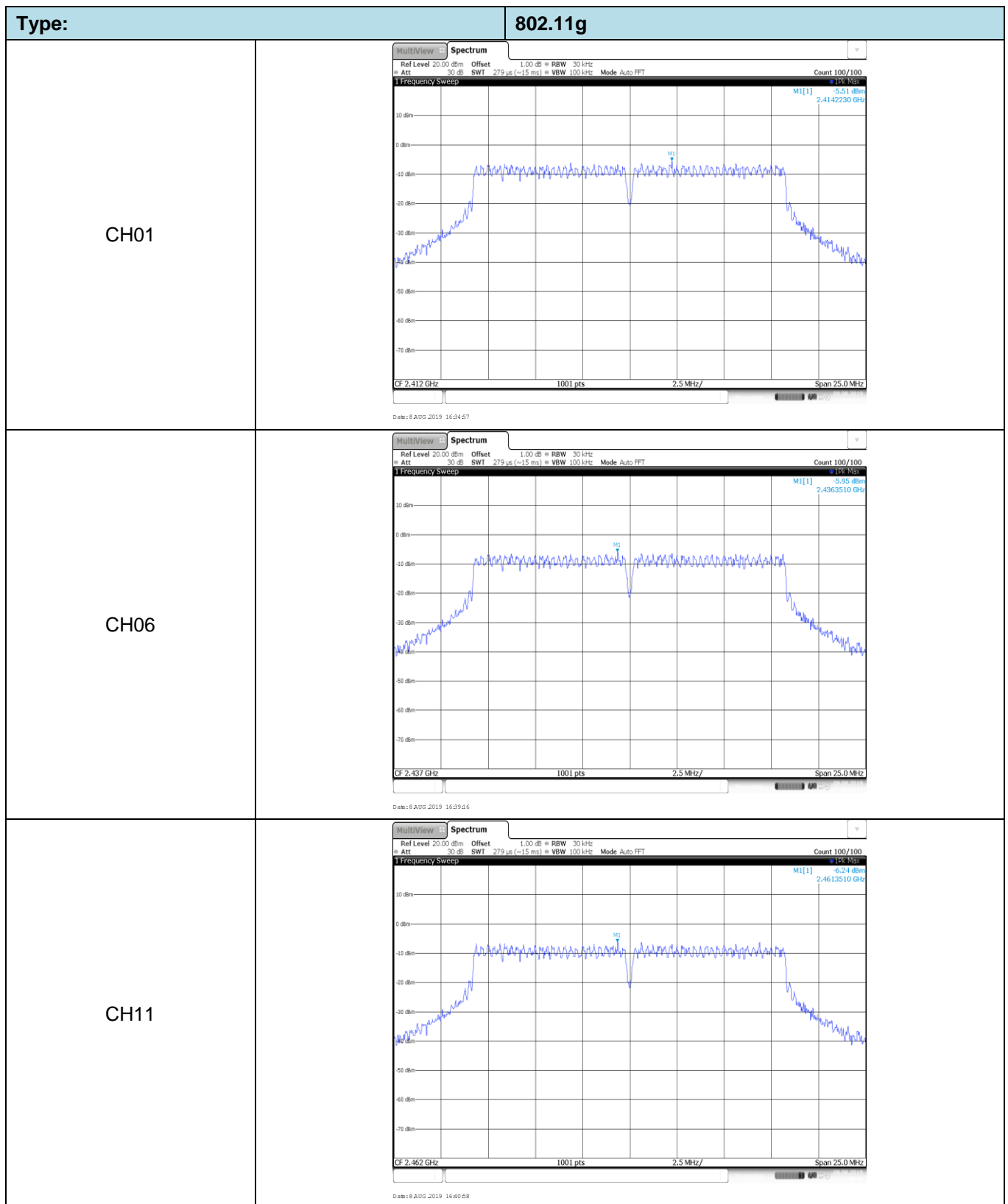
TEST RESULTS

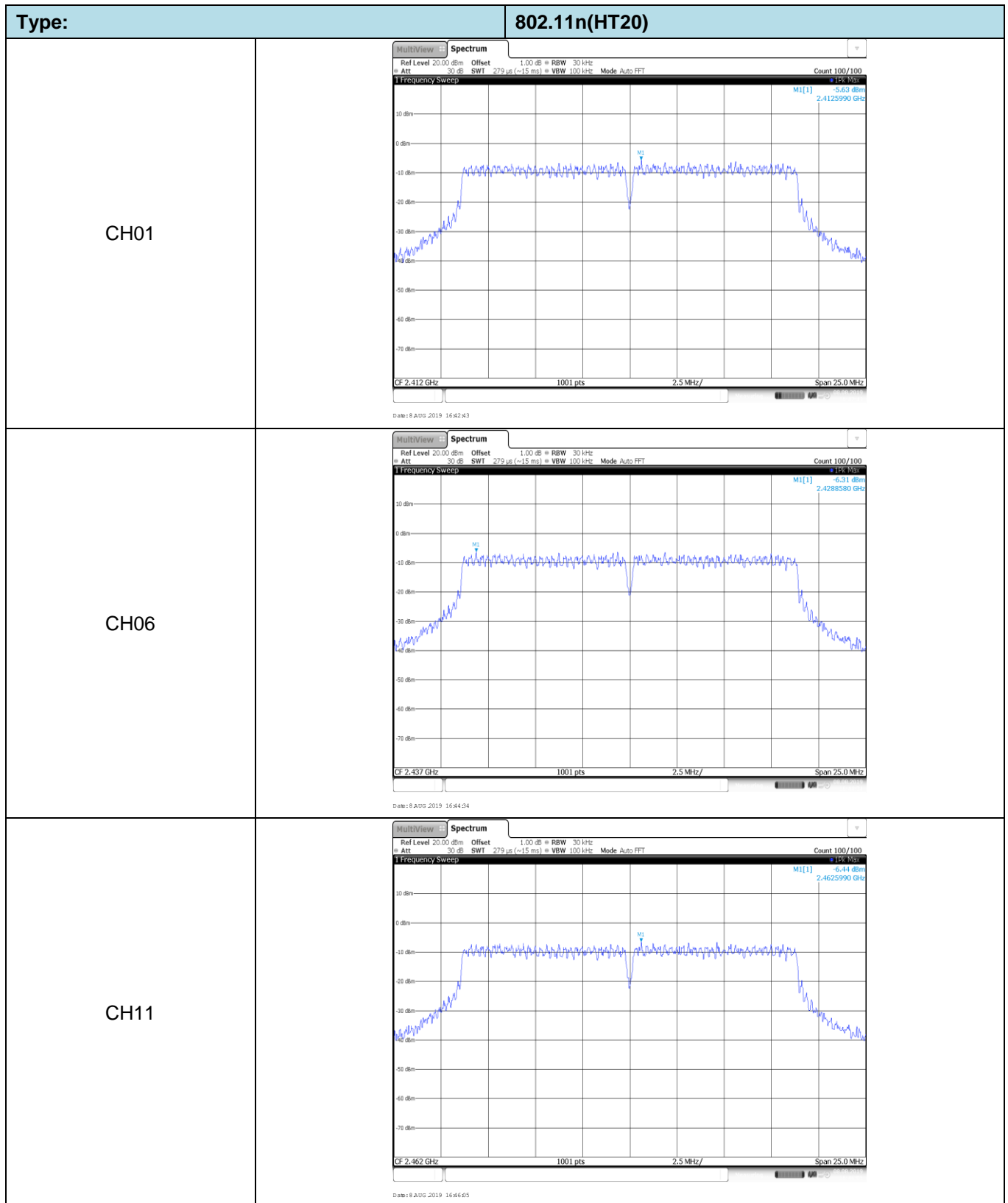
☒ Passed ☐ Not Applicable

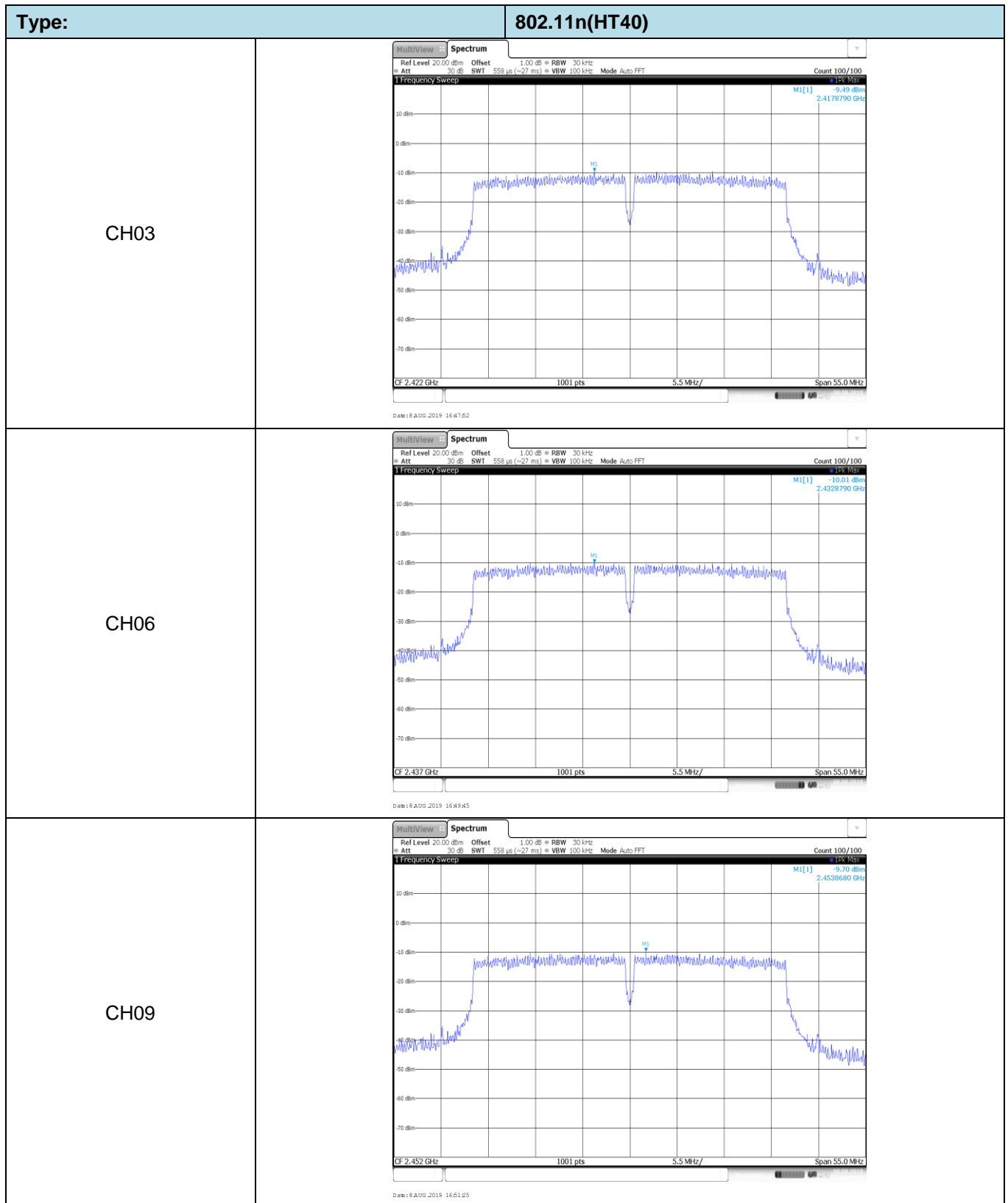
Type	Channel	Power Spectral Density (dBm/30KHz)	Limit (dBm/3KHz)	Result
802.11b	01	-1.40	≤8.00	Pass
	06	-1.69		
	11	-2.23		
802.11g	01	-5.51	≤8.00	Pass
	06	-5.95		
	11	-6.24		
802.11n(HT20)	01	-5.63	≤8.00	Pass
	06	-6.31		
	11	-6.44		
802.11n(HT40)	03	-9.49	≤8.00	Pass
	06	-10.01		
	09	-9.70		

Test plot as follows:









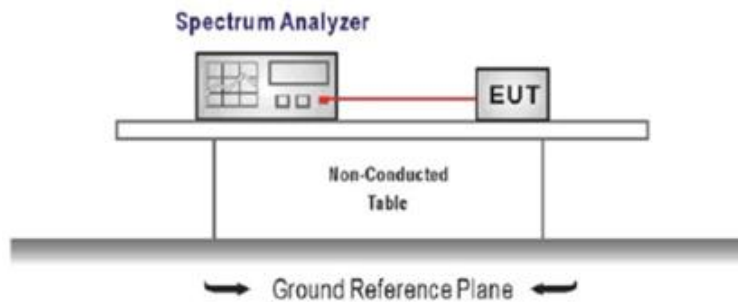
5.5. 6dB bandwidth

LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (a)(2):

For digital modulation systems, the minimum 6 dB bandwidth shall be at least 500 kHz.

TEST CONFIGURATION



TEST PROCEDURE

1. Connect the antenna port(s) to the spectrum analyzer input.
2. Configure the spectrum analyzer as shown below (enter all losses between the transmitter output and the spectrum analyzer).
Center Frequency = DTS channel center frequency
Span = 2 x DTS bandwidth
RBW = 100 kHz, VBW $\geq 3 \times$ RBW
Sweep time = auto couple
Detector = Peak
Trace mode = max hold
3. Place the radio in continuous transmit mode, allow the trace to stabilize, view the transmitter wave form on the spectrum analyzer.
4. 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, and record the pertinent measurements.

TEST MODE:

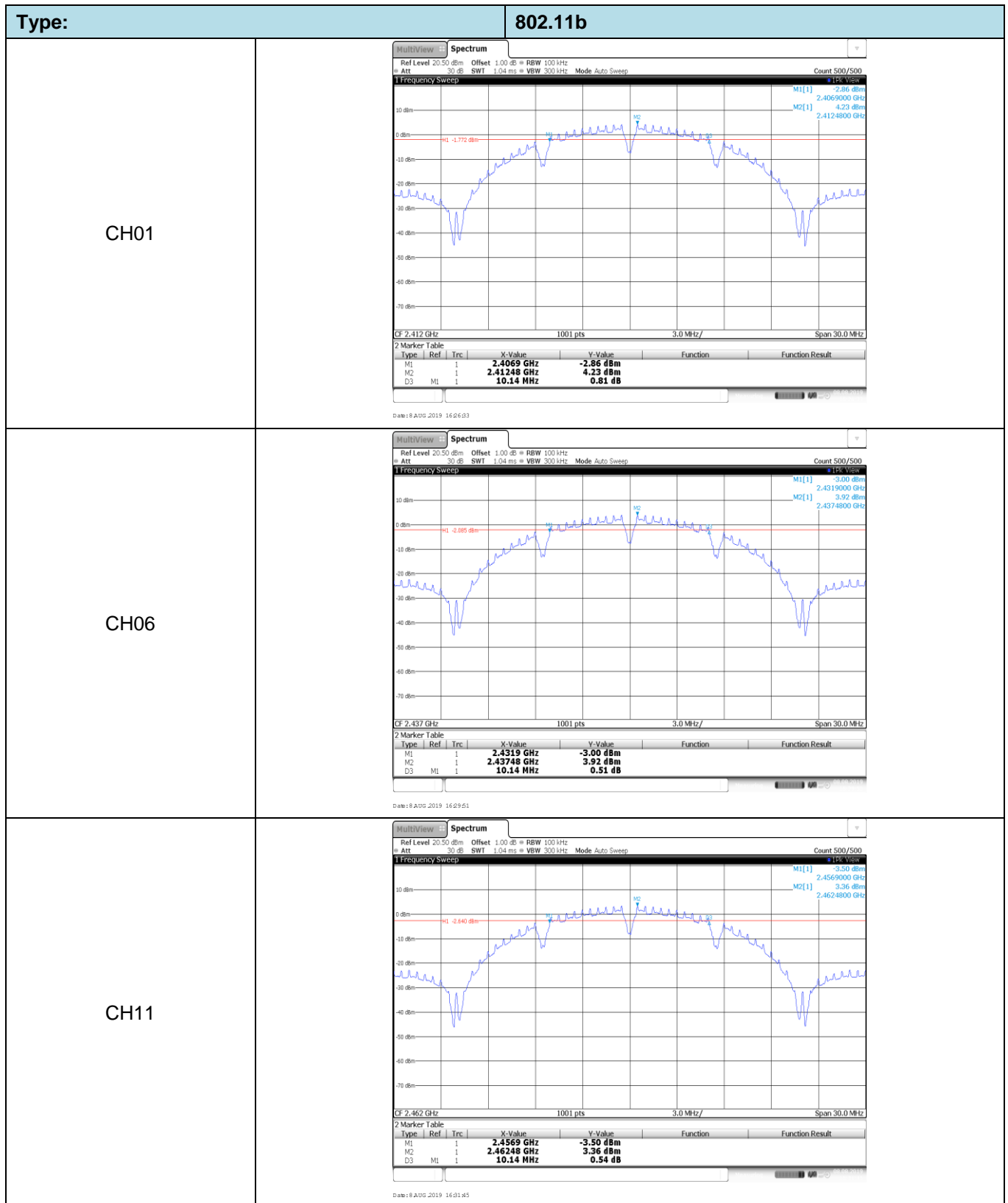
Please refer to the clause 3.3

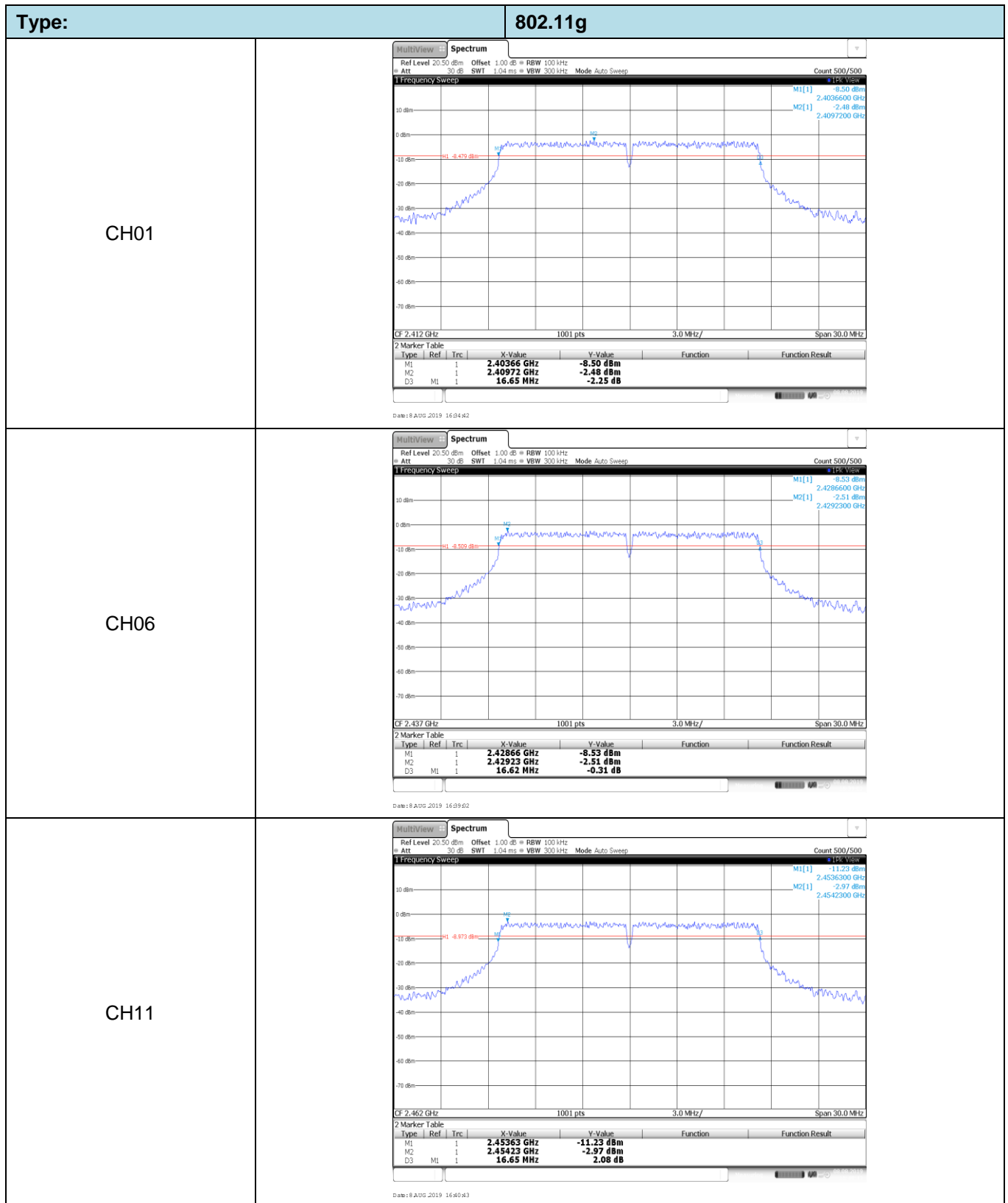
TEST RESULTS

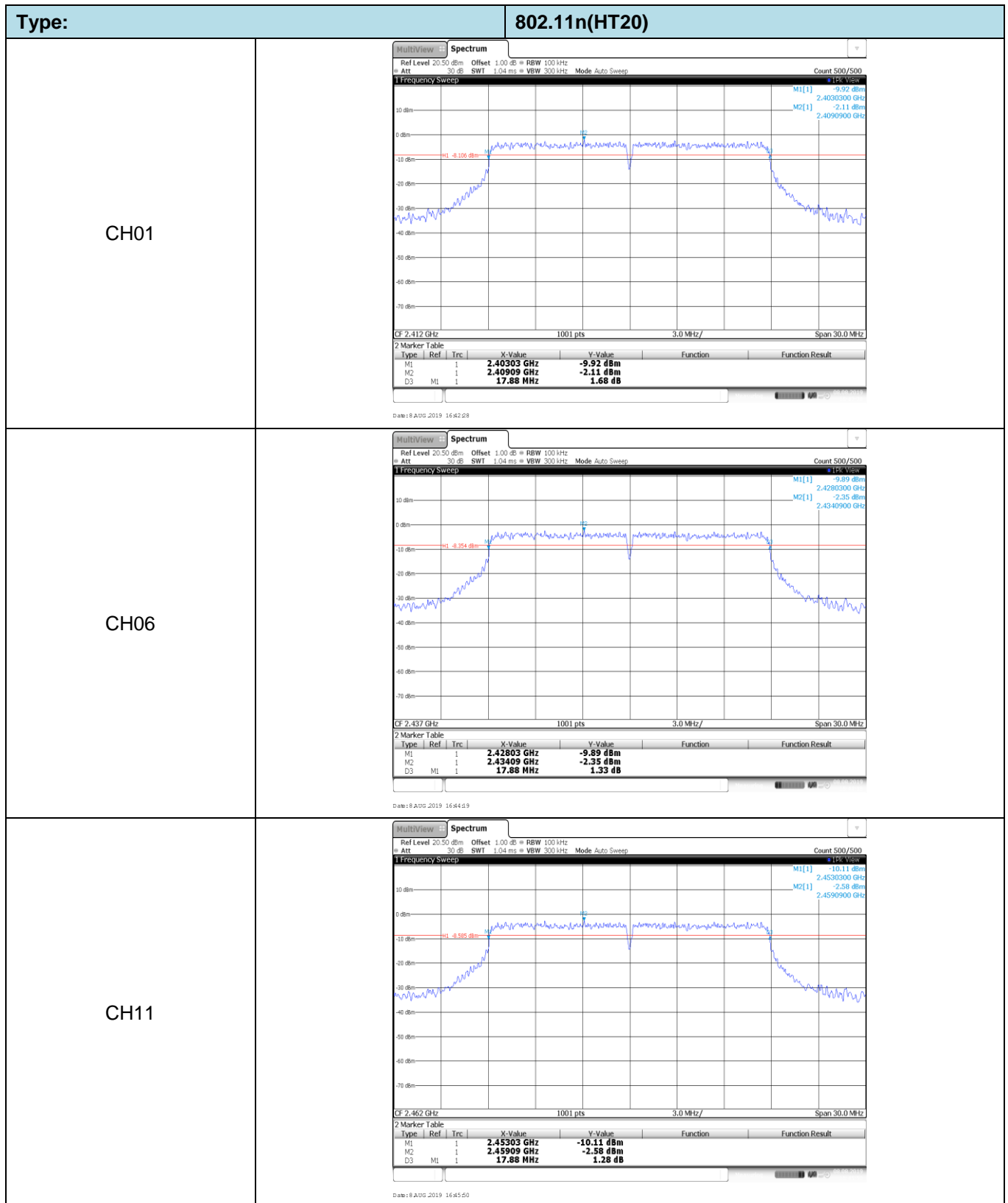
☒ Passed ☐ Not Applicable

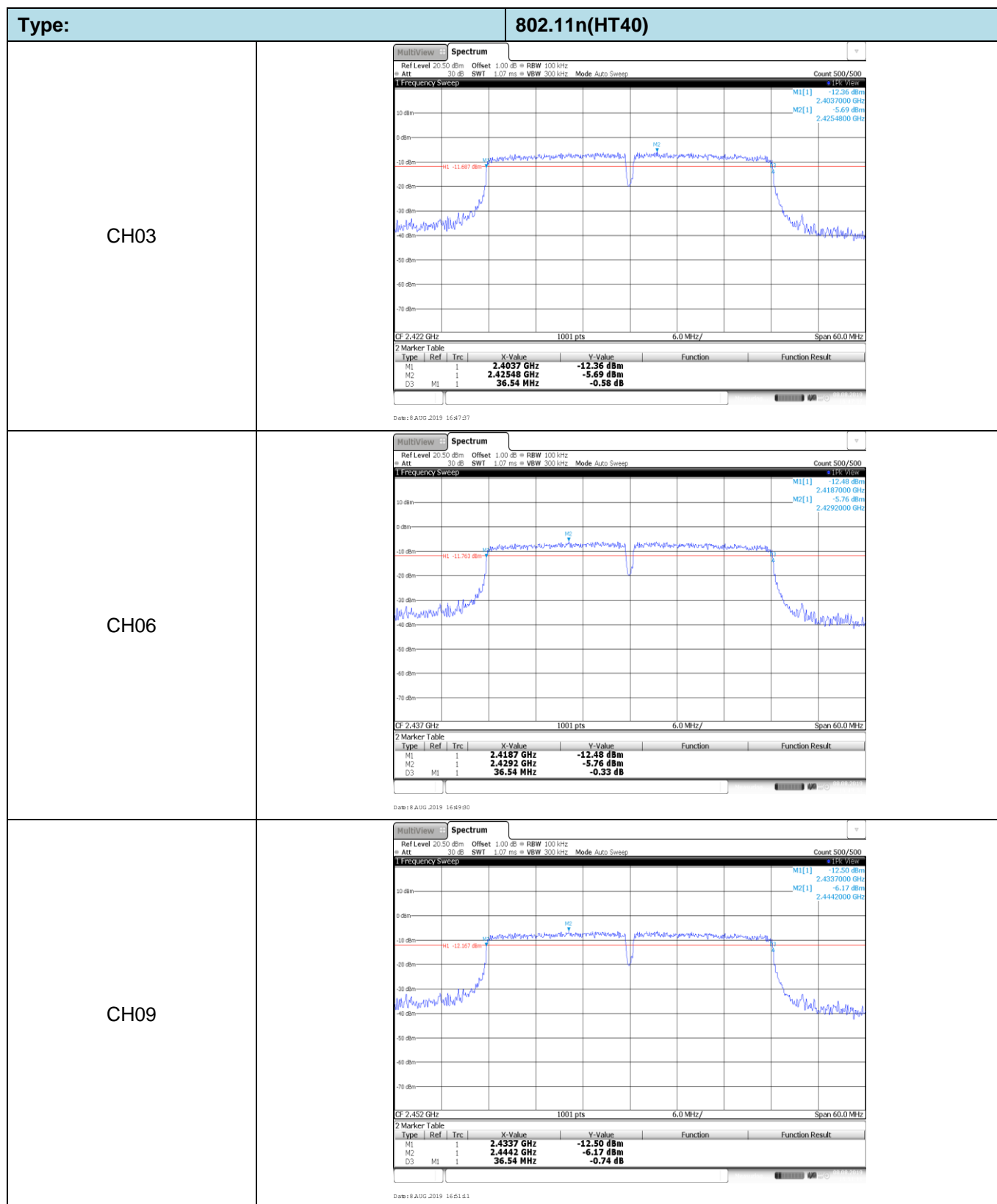
Type	Channel	6dB Bandwidth (MHz)	Limit (kHz)	Result
802.11b	01	10.14	≥500	Pass
	06	10.14		
	11	10.14		
802.11g	01	16.65	≥500	Pass
	06	16.62		
	11	16.65		
802.11n(HT20)	01	17.88	≥500	Pass
	06	17.88		
	11	17.88		
802.11n(HT40)	03	36.54	≥500	Pass
	06	36.54		
	09	36.54		

Test plot as follows:









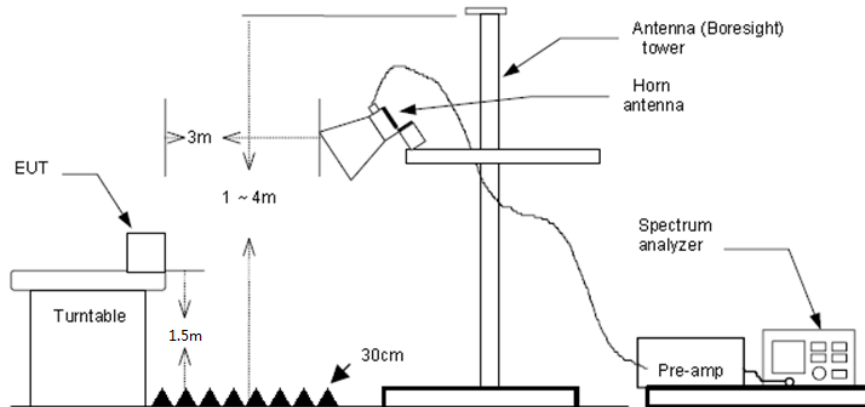
5.6. Restricted band

LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (d):

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, Radiated Emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the Radiated Emissions limits specified in §15.209(a) (see §15.205(c)).

TEST CONFIGURATION



TEST PROCEDURE

- 1) The EUT was setup and tested according to ANSI C63.10:2013 for compliance to FCC 47CFR 15.247 requirements.
- 2) The EUT is placed on a turn table which is 1.5 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
- 3) The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
- 4) The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10:2013 on radiated measurement.
- 5) The receiver set as follow:
 RBW=1MHz, VBW=3MHz PEAK detector for Peak value.
 RBW=1MHz, VBW=3MHz RMS detector for Average value.

TEST MODE:

Please refer to the clause 3.3

TEST RESULTS

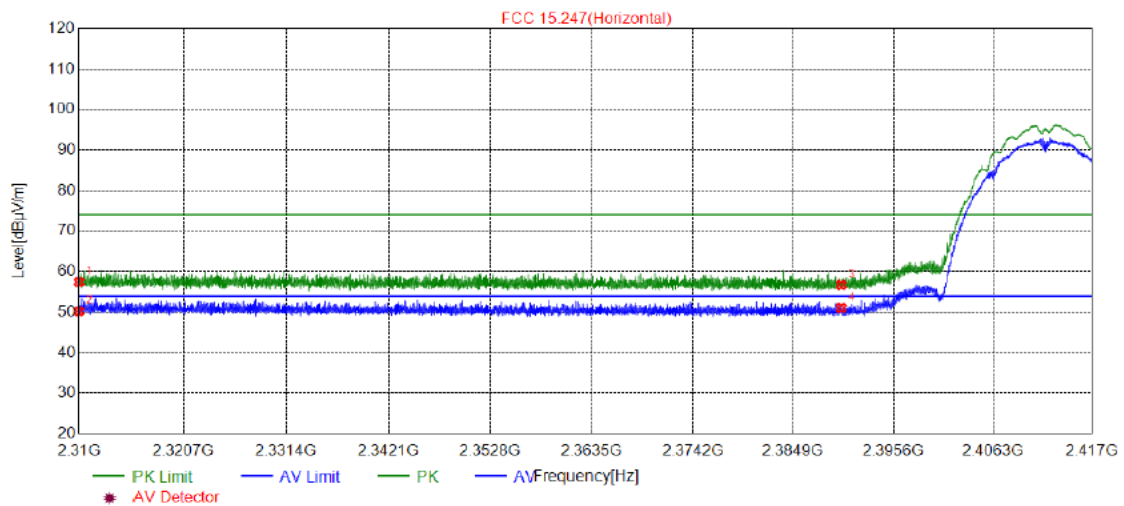
☒ Passed ☐ Not Applicable

Note:

- 1) Final level= Read level + Antenna Factor+ Cable Loss- Preamp Factor

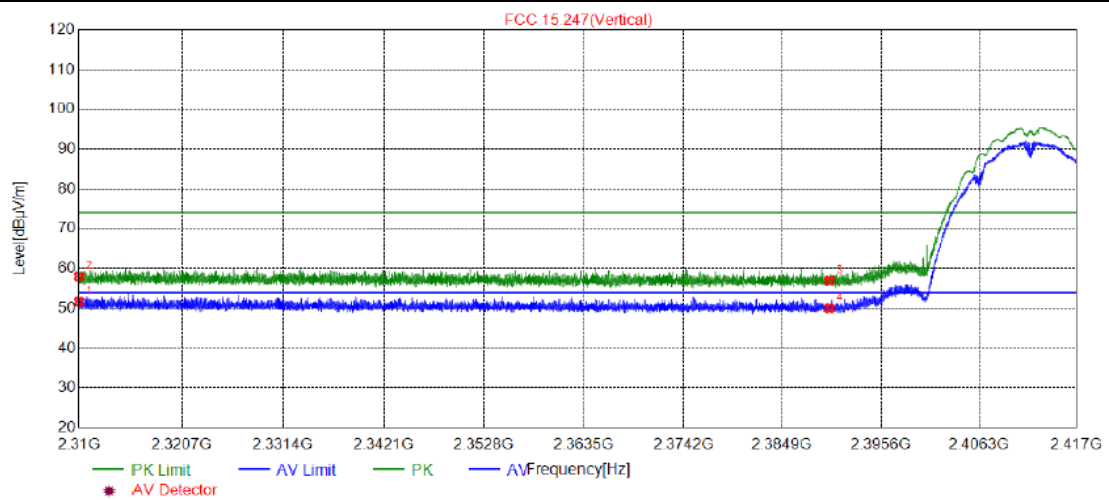
802.11b

CH01



Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
1	2310.000	21.68	35.78	57.46	74.00	16.54	Horizontal	PK
2	2310.000	14.45	35.78	50.23	54.00	3.77	Horizontal	AV
3	2390.009	21.24	35.50	56.74	74.00	17.26	Horizontal	PK
4	2390.009	15.53	35.50	51.03	54.00	2.97	Horizontal	AV

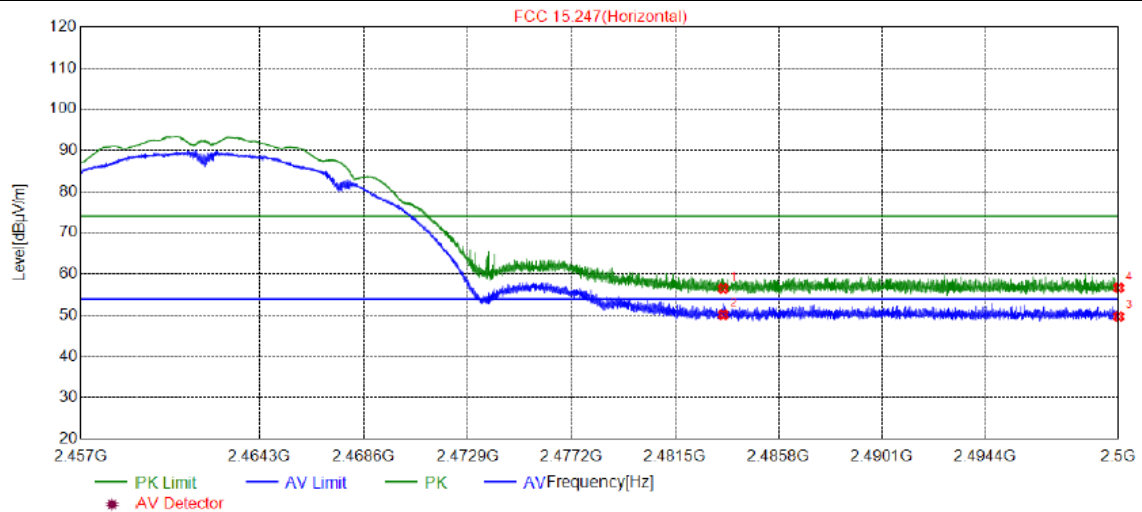


Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
1	2310.000	15.92	35.78	51.70	54.00	2.30	Vertical	AV
2	2310.000	22.24	35.78	58.02	74.00	15.98	Vertical	PK
3	2390.009	21.48	35.50	56.98	74.00	17.02	Vertical	PK
4	2390.009	14.54	35.50	50.04	54.00	3.96	Vertical	AV

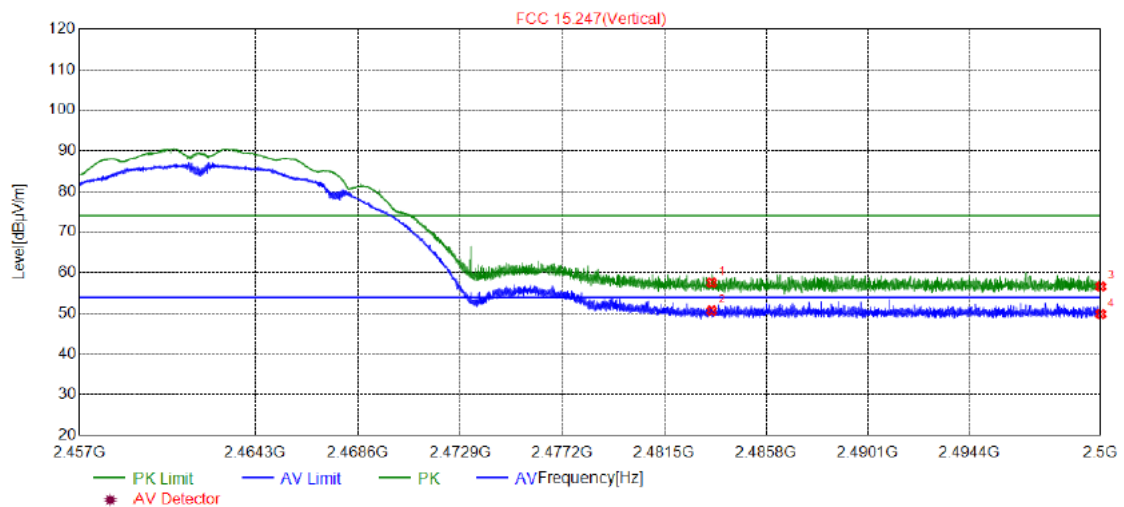
802.11b

CH11



Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
1	2483.504	21.18	35.31	56.49	74.00	17.51	Horizontal	PK
2	2483.504	14.87	35.31	50.18	54.00	3.82	Horizontal	AV
3	2500.000	14.44	35.28	49.72	54.00	4.28	Horizontal	AV
4	2500.000	21.40	35.28	56.68	74.00	17.32	Horizontal	PK

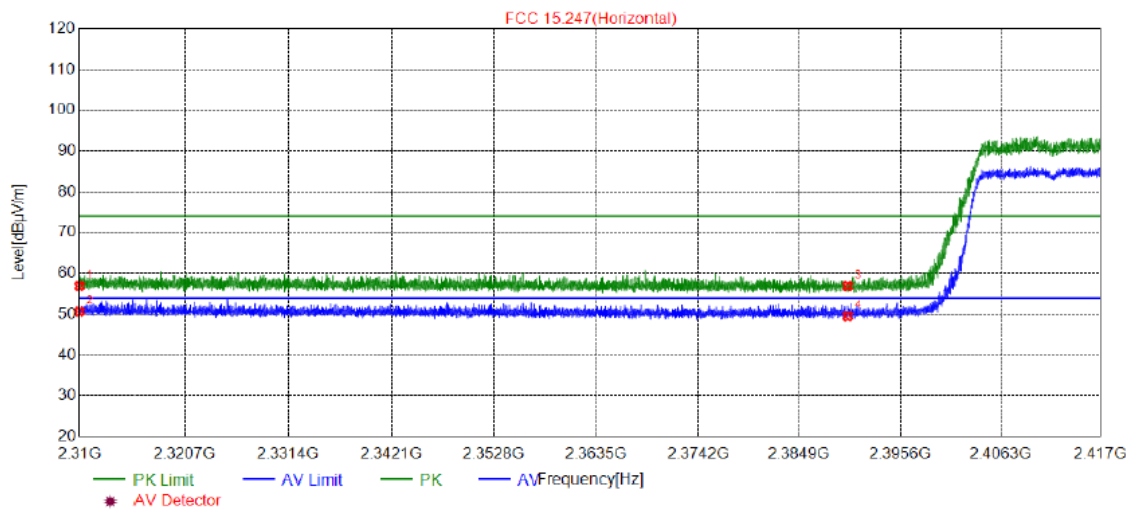


Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
1	2483.504	22.27	35.31	57.58	74.00	16.42	Vertical	PK
2	2483.504	15.36	35.31	50.67	54.00	3.33	Vertical	AV
3	2500.000	21.35	35.28	56.63	74.00	17.37	Vertical	PK
4	2500.000	14.58	35.28	49.86	54.00	4.14	Vertical	AV

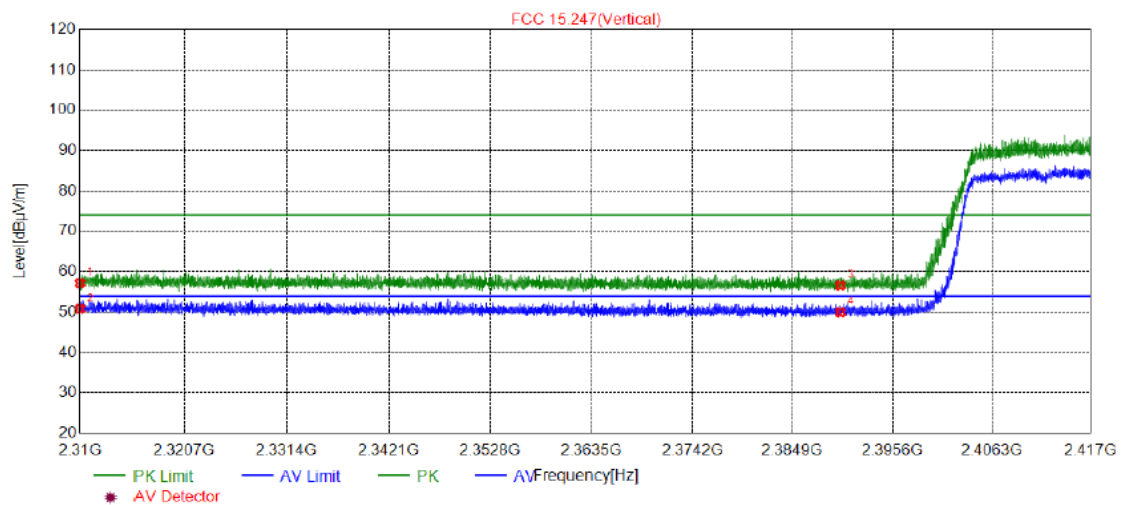
802.11g

CH01



Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
1	2310.000	21.14	35.78	56.92	74.00	17.08	Horizontal	PK
2	2310.000	14.86	35.78	50.64	54.00	3.36	Horizontal	AV
3	2390.009	21.41	35.50	56.91	74.00	17.09	Horizontal	PK
4	2390.009	14.04	35.50	49.54	54.00	4.46	Horizontal	AV

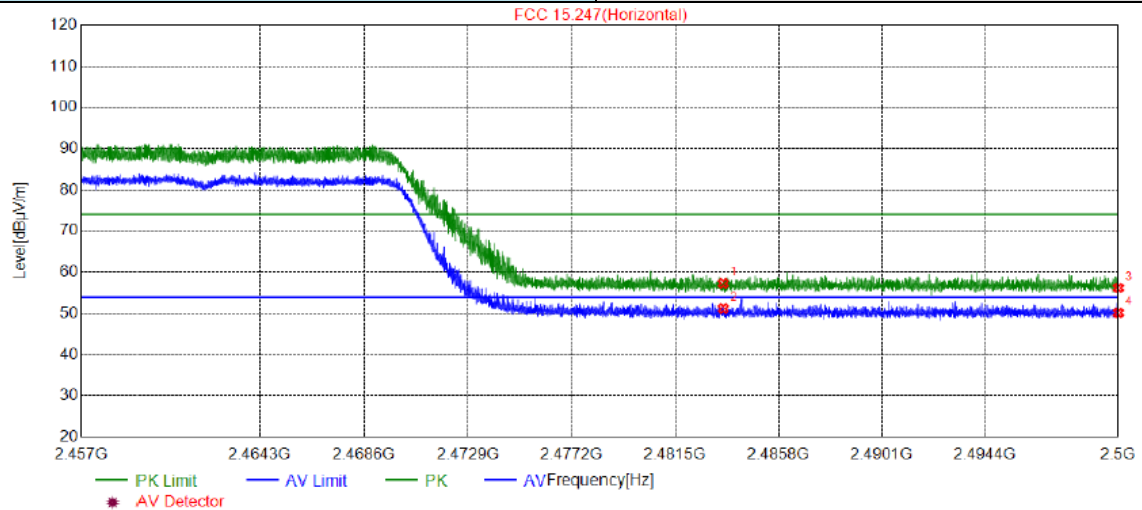


Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
1	2310.000	21.41	35.78	57.19	74.00	16.81	Vertical	PK
2	2310.000	15.04	35.78	50.82	54.00	3.18	Vertical	AV
3	2390.009	21.09	35.50	56.59	74.00	17.41	Vertical	PK
4	2390.009	14.49	35.50	49.99	54.00	4.01	Vertical	AV

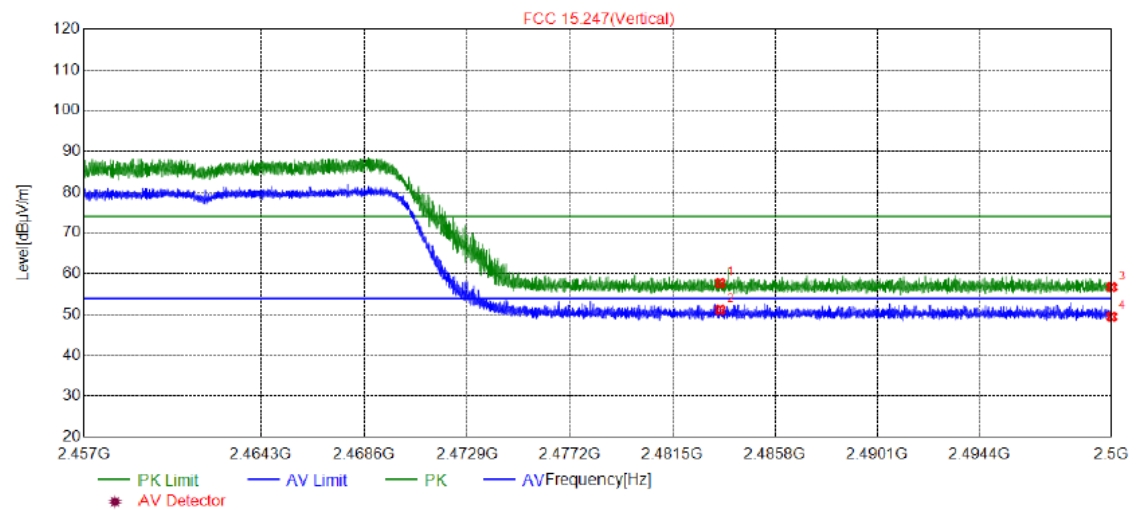
802.11g

CH11



Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
1	2483.504	22.00	35.31	57.31	74.00	16.69	Horizontal	PK
2	2483.504	15.87	35.31	51.18	54.00	2.82	Horizontal	AV
3	2500.000	20.93	35.28	56.21	74.00	17.79	Horizontal	PK
4	2500.000	14.89	35.28	50.17	54.00	3.83	Horizontal	AV

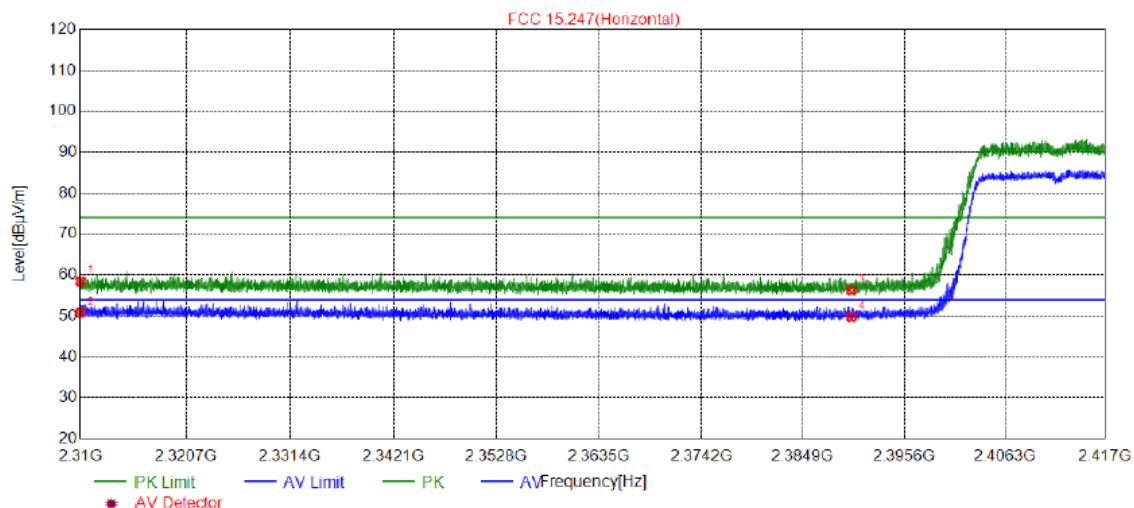


Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
1	2483.504	22.44	35.31	57.75	74.00	16.25	Vertical	PK
2	2483.504	15.84	35.31	51.15	54.00	2.85	Vertical	AV
3	2500.000	21.45	35.28	56.73	74.00	17.27	Vertical	PK
4	2500.000	14.22	35.28	49.50	54.00	4.50	Vertical	AV

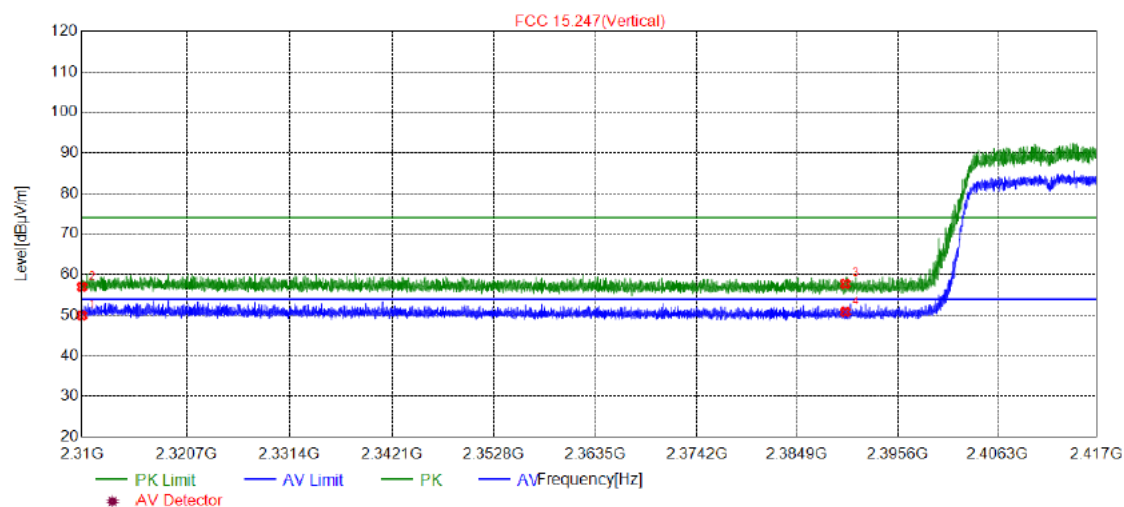
802.11n(HT20)

CH01



Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
1	2310.000	22.70	35.78	58.48	74.00	15.52	Horizontal	PK
2	2310.000	15.01	35.78	50.79	54.00	3.21	Horizontal	AV
3	2390.009	20.74	35.50	56.24	74.00	17.76	Horizontal	PK
4	2390.009	14.28	35.50	49.78	54.00	4.22	Horizontal	AV

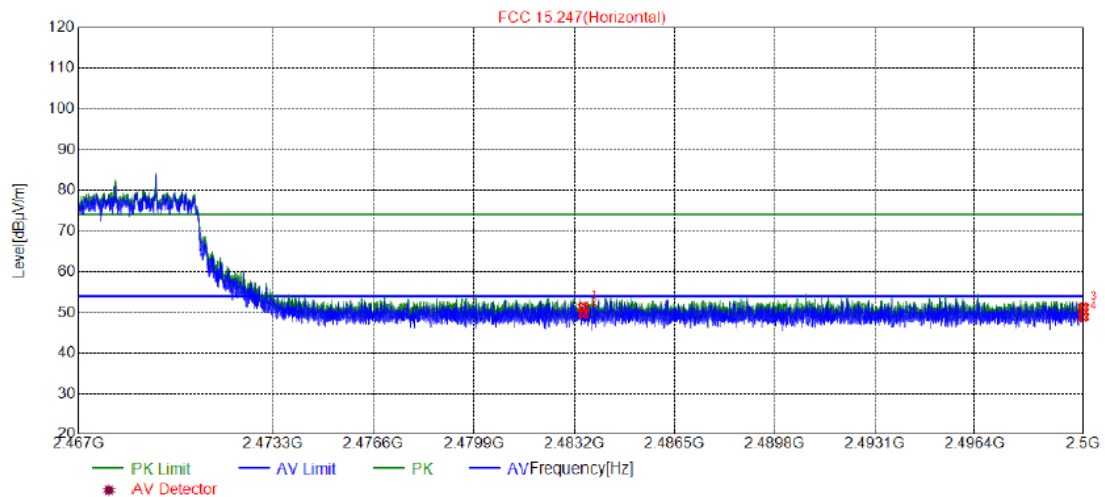


Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
1	2310.000	14.16	35.78	49.94	54.00	4.06	Vertical	AV
2	2310.000	21.21	35.78	56.99	74.00	17.01	Vertical	PK
3	2390.009	22.27	35.50	57.77	74.00	16.23	Vertical	PK
4	2390.009	15.31	35.50	50.81	54.00	3.19	Vertical	AV

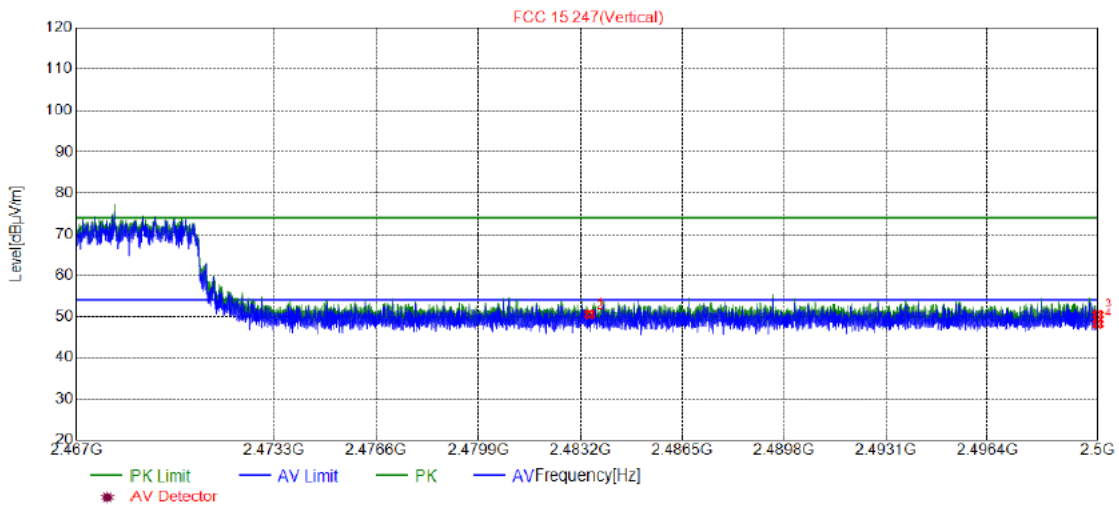
802.11n(HT20)

CH11



Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
1	2483.500	16.08	35.31	51.39	74.00	22.61	Horizontal	PK
2	2483.500	14.51	35.31	49.82	54.00	4.18	Horizontal	AV
3	2500.000	16.03	35.28	51.31	74.00	22.69	Horizontal	PK
4	2500.000	13.72	35.28	49.00	54.00	5.00	Horizontal	AV

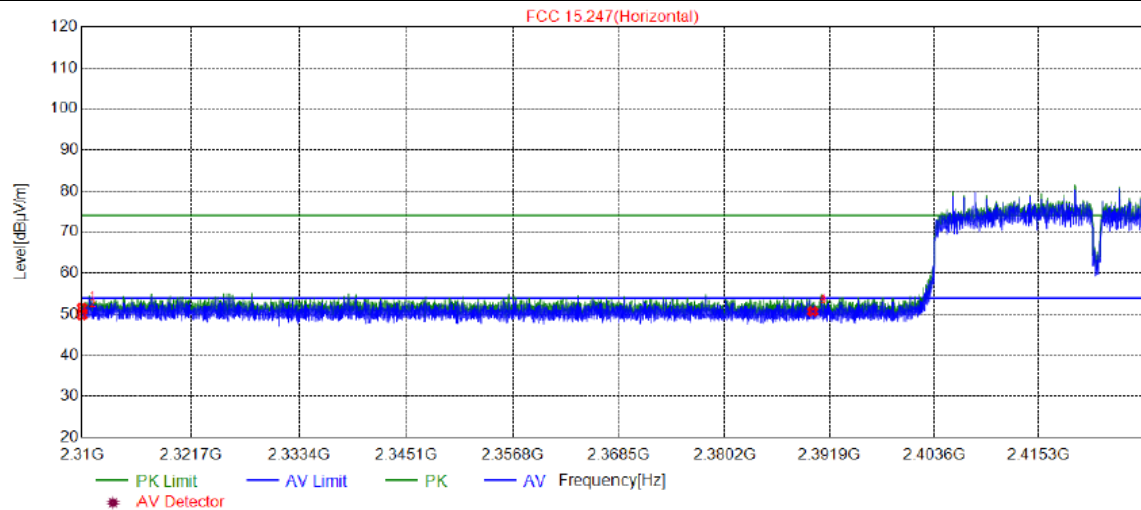


Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
1	2483.500	15.21	35.31	50.52	74.00	23.48	Vertical	PK
2	2483.500	14.66	35.31	49.97	54.00	4.03	Vertical	AV
3	2500.000	15.11	35.28	50.39	74.00	23.61	Vertical	PK
4	2500.000	12.90	35.28	48.18	54.00	5.82	Vertical	AV

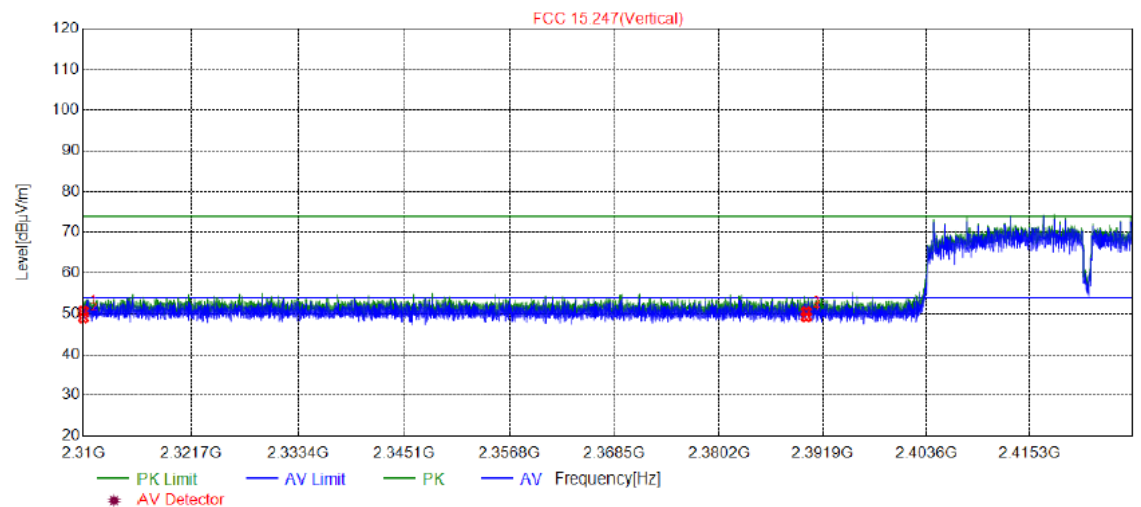
802.11n(HT40)

CH03



Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
1	2310.000	15.77	35.78	51.55	74.00	22.45	Horizontal	PK
2	2310.000	14.01	35.78	49.79	54.00	4.21	Horizontal	AV
3	2390.013	15.17	35.50	50.67	54.00	3.33	Horizontal	AV
4	2390.013	15.53	35.50	51.03	74.00	22.97	Horizontal	PK

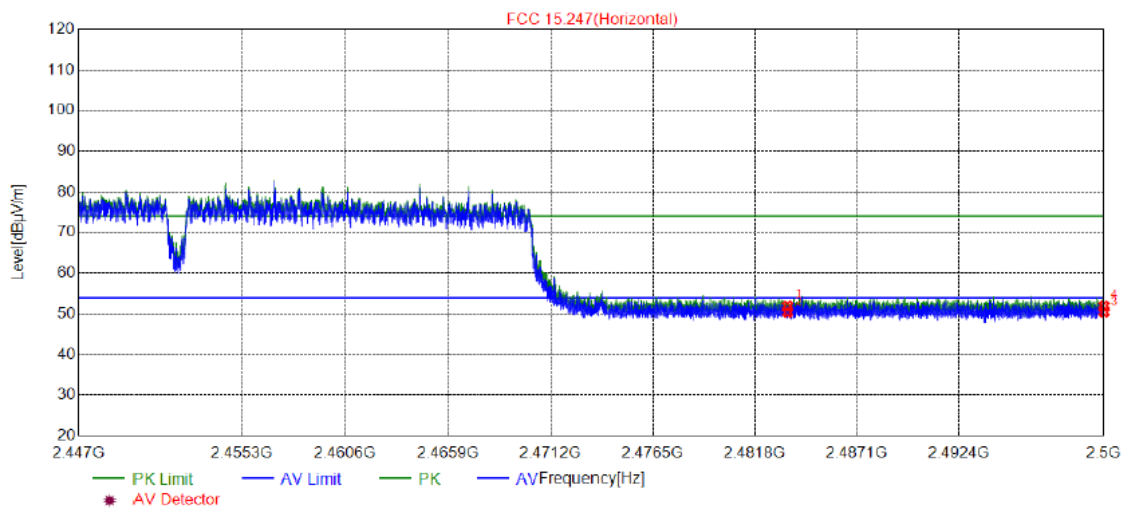


Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
1	2310.000	14.98	35.78	50.76	74.00	23.24	Vertical	PK
2	2310.000	13.13	35.78	48.91	54.00	5.09	Vertical	AV
3	2390.013	15.08	35.50	50.58	74.00	23.42	Vertical	PK
4	2390.013	13.67	35.50	49.17	54.00	4.83	Vertical	AV

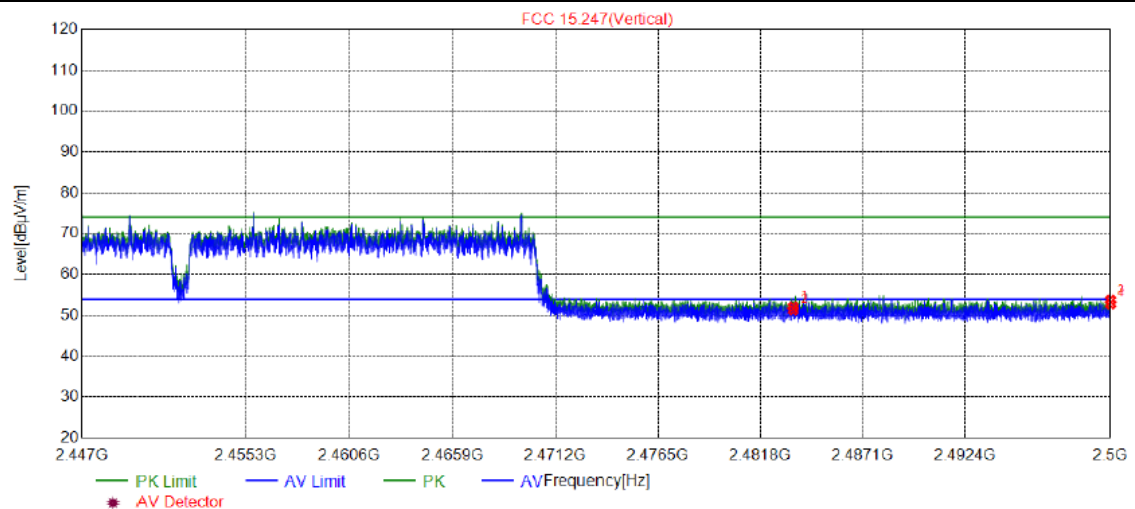
802.11n(HT40)

CH09



Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
1	2483.503	16.70	35.31	52.01	74.00	21.99	Horizontal	PK
2	2483.503	15.05	35.31	50.36	54.00	3.64	Horizontal	AV
3	2500.000	15.11	35.28	50.39	54.00	3.61	Horizontal	AV
4	2500.000	16.75	35.28	52.03	74.00	21.97	Horizontal	PK



Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
1	2483.503	16.80	35.31	52.11	74.00	21.89	Vertical	PK
2	2483.503	15.98	35.31	51.29	54.00	2.71	Vertical	AV
3	2500.000	18.50	35.28	53.78	74.00	20.22	Vertical	PK
4	2500.000	17.47	35.28	52.75	54.00	1.25	Vertical	AV

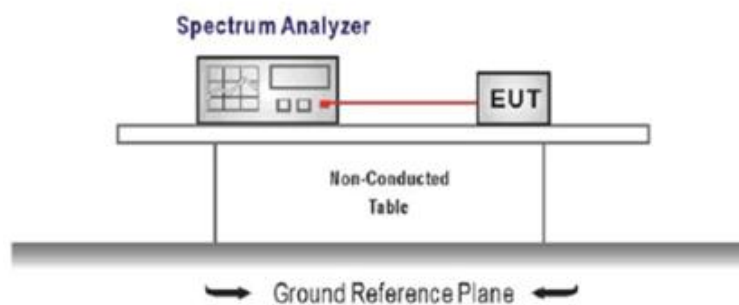
5.7. Band edge and Spurious Emissions (conducted)

LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 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 band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

TEST CONFIGURATION



TEST PROCEDURE

1. Connect the antenna port(s) to the spectrum analyzer input.
2. Establish a reference level by using the following procedure
Center frequency=DTS channel center frequency
The span = 1.5 times the DTS bandwidth.
RBW = 100 kHz, VBW $\geq 3 \times$ RBW
Detector = peak, Sweep time = auto couple, Trace mode = max hold
Allow trace to fully stabilize
Use the peak marker function to determine the maximum PSD level

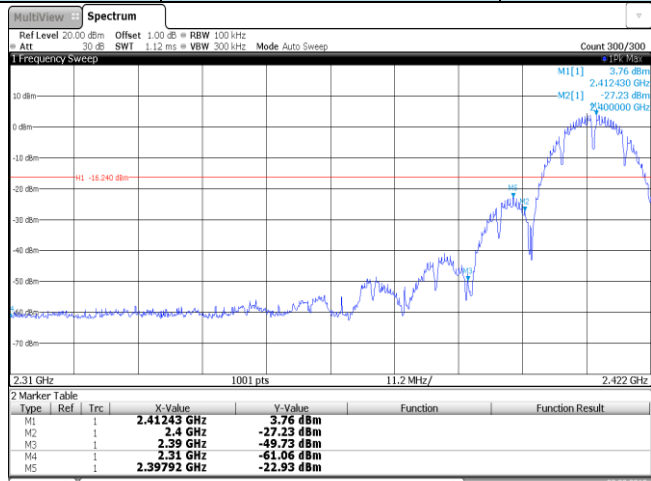
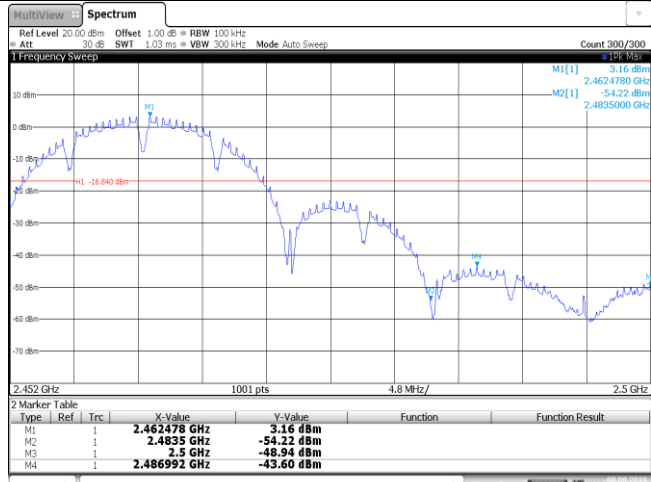
Note: the channel found to contain the maximum PSD level can be used to establish the reference level.
3. Emission level measurement
Set the center frequency and span to encompass frequency range to be measured
RBW = 100 kHz, VBW $\geq 3 \times$ RBW
Detector = peak, Sweep time = auto couple, Trace mode = max hold
Allow trace to fully stabilize
Use the peak marker function to determine the maximum amplitude level.
4. Place the radio in continuous transmit mode, allow the trace to stabilize, view the transmitter waveform on the spectrum analyzer.
5. Ensure that the amplitude of all unwanted emission outside of the authorized frequency band excluding restricted frequency bands) are attenuated by at least the minimum requirements specified (at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz). Report the three highest emission relative to the limit.

TEST MODE:

Please refer to the clause 3.3

TEST RESULTS

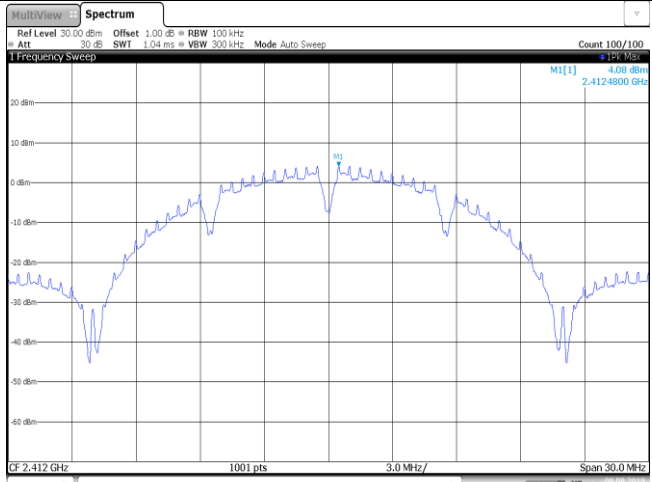
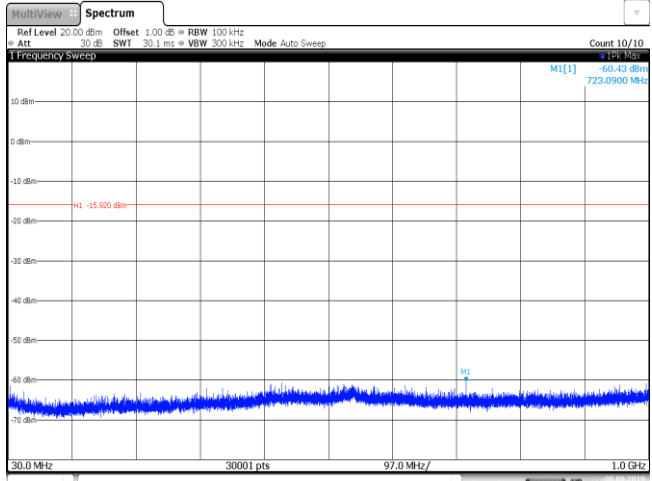
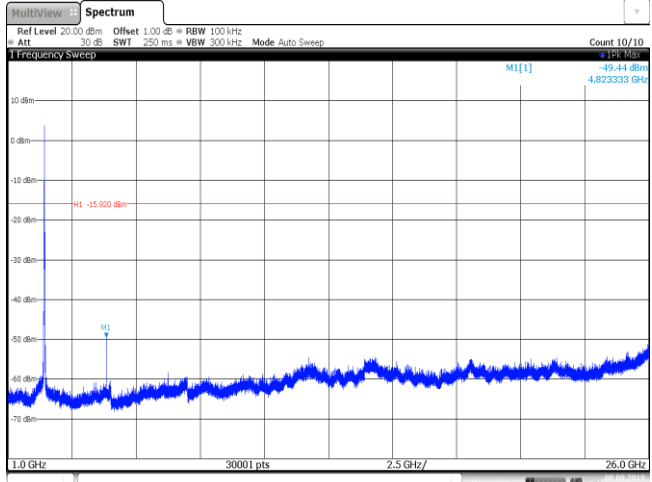
☒ Passed ☐ Not Applicable

Test Item:	Bandedge	Type:	802.11b																																										
CH01	<div><div>MultiviewSpectrum</div><div>Ref Level 20.00 dBm Offset 1.00 dB BW 100 kHz ATT 30 dB SWI 1.12 ms VBW 300 kHz Mode Auto Sweep Count 200/200</div><div>1 Frequency Sweep</div><div></div><div>2.31 GHz 1001 pts 11.2 MHz/ 2.422 GHz</div><div>2 Marker Table</div><table><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-Value</th><th>Y-Value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td>1</td><td></td><td>2.41243 GHz</td><td>3.76 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4 GHz</td><td>-27.23 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.39 GHz</td><td>-49.73 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.31 GHz</td><td>-61.06 dBm</td><td></td><td></td></tr><tr><td>M5</td><td>1</td><td></td><td>2.39792 GHz</td><td>-22.93 dBm</td><td></td><td></td></tr></table><div>Date: 8 AUG 2019 16:29:04</div></div>			Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.41243 GHz	3.76 dBm			M2	1		2.4 GHz	-27.23 dBm			M3	1		2.39 GHz	-49.73 dBm			M4	1		2.31 GHz	-61.06 dBm			M5	1		2.39792 GHz	-22.93 dBm		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																																							
M1	1		2.41243 GHz	3.76 dBm																																									
M2	1		2.4 GHz	-27.23 dBm																																									
M3	1		2.39 GHz	-49.73 dBm																																									
M4	1		2.31 GHz	-61.06 dBm																																									
M5	1		2.39792 GHz	-22.93 dBm																																									
CH11	<div><div>MultiviewSpectrum</div><div>Ref Level 20.00 dBm Offset 1.00 dB BW 100 kHz ATT 30 dB SWI 1.03 ms VBW 300 kHz Mode Auto Sweep Count 300/300</div><div>1 Frequency Sweep</div><div></div><div>2.452 GHz 1001 pts 4.8 MHz/ 2.5 GHz</div><div>2 Marker Table</div><table><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-Value</th><th>Y-Value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td>1</td><td></td><td>2.462478 GHz</td><td>3.16 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4835 GHz</td><td>-54.22 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.5 GHz</td><td>-48.94 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.486992 GHz</td><td>-43.60 dBm</td><td></td><td></td></tr></table><div>Date: 8 AUG 2019 16:29:41</div></div>			Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.462478 GHz	3.16 dBm			M2	1		2.4835 GHz	-54.22 dBm			M3	1		2.5 GHz	-48.94 dBm			M4	1		2.486992 GHz	-43.60 dBm									
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																																							
M1	1		2.462478 GHz	3.16 dBm																																									
M2	1		2.4835 GHz	-54.22 dBm																																									
M3	1		2.5 GHz	-48.94 dBm																																									
M4	1		2.486992 GHz	-43.60 dBm																																									

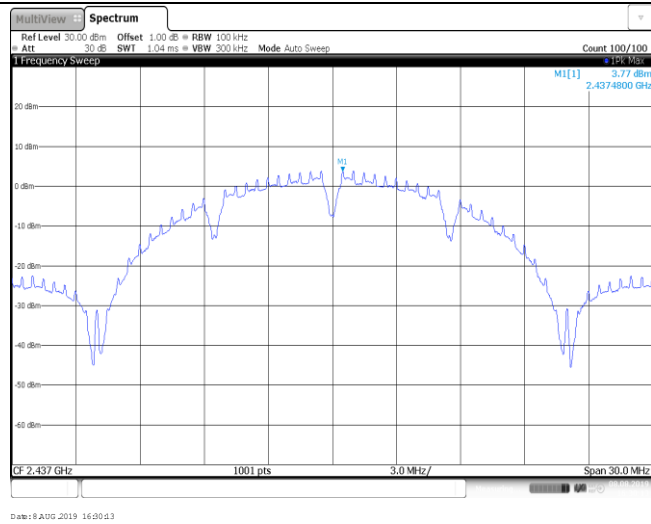
Test Item:	Bandedge	Type:	802.11g																																										
CH01	<div><div><div>MultiView</div><div>Spectrum</div><div>Ref Level 20.00 dBm Offset 1.00 dB BW 100 kHz Att 30 dB SW 1.12 ms VBW 300 kHz Mode Auto Sweep</div><div>Count 200/200</div><div>1 Frequency Sweep</div><div><div>10 dBm</div><div>0 dBm</div><div>-10 dBm</div><div>-20 dBm</div><div>-30 dBm</div><div>-40 dBm</div><div>-50 dBm</div><div>-60 dBm</div><div>-70 dBm</div></div><div><div>2.31 GHz</div><div>1001 pts</div><div>11.2 MHz/</div><div>2.422 GHz</div></div><div><div>M1[1]</div><div>-2.61 dBm</div><div>2.416130 GHz</div><div>M2[1]</div><div>-31.99 dBm</div><div>2.400000 GHz</div></div><div><div>2.31 GHz</div><div>1001 pts</div><div>11.2 MHz/</div><div>2.422 GHz</div></div><div><div>2 Marker Table</div><div><table><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-Value</th><th>Y-Value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td>1</td><td></td><td>2.41613 GHz</td><td>-2.61 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4 GHz</td><td>-31.99 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.39 GHz</td><td>-42.08 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.31 GHz</td><td>-58.81 dBm</td><td></td><td></td></tr><tr><td>M5</td><td>1</td><td></td><td>2.399936 GHz</td><td>-31.74 dBm</td><td></td><td></td></tr></table></div></div><div>Date: 8 AUG 2019 16:26:31</div></div></div>			Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.41613 GHz	-2.61 dBm			M2	1		2.4 GHz	-31.99 dBm			M3	1		2.39 GHz	-42.08 dBm			M4	1		2.31 GHz	-58.81 dBm			M5	1		2.399936 GHz	-31.74 dBm		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																																							
M1	1		2.41613 GHz	-2.61 dBm																																									
M2	1		2.4 GHz	-31.99 dBm																																									
M3	1		2.39 GHz	-42.08 dBm																																									
M4	1		2.31 GHz	-58.81 dBm																																									
M5	1		2.399936 GHz	-31.74 dBm																																									
CH11	<div><div><div>MultiView</div><div>Spectrum</div><div>Ref Level 20.00 dBm Offset 1.00 dB BW 100 kHz Att 30 dB SW 1.03 ms VBW 300 kHz Mode Auto Sweep</div><div>Count 300/300</div><div>1 Frequency Sweep</div><div><div>10 dBm</div><div>0 dBm</div><div>-10 dBm</div><div>-20 dBm</div><div>-30 dBm</div><div>-40 dBm</div><div>-50 dBm</div><div>-60 dBm</div><div>-70 dBm</div></div><div><div>2.452 GHz</div><div>1001 pts</div><div>4.8 MHz/</div><div>2.5 GHz</div></div><div><div>M1[1]</div><div>-3.02 dBm</div><div>2.4661220 GHz</div><div>M2[1]</div><div>-43.28 dBm</div><div>2.4835000 GHz</div></div><div><div>2.452 GHz</div><div>1001 pts</div><div>4.8 MHz/</div><div>2.5 GHz</div></div><div><div>2 Marker Table</div><div><table><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-Value</th><th>Y-Value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td>1</td><td></td><td>2.466122 GHz</td><td>-3.02 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4835 GHz</td><td>-43.28 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.5 GHz</td><td>-51.28 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.48512 GHz</td><td>-39.75 dBm</td><td></td><td></td></tr></table></div></div><div>Date: 8 AUG 2019 16:41:09</div></div></div>			Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.466122 GHz	-3.02 dBm			M2	1		2.4835 GHz	-43.28 dBm			M3	1		2.5 GHz	-51.28 dBm			M4	1		2.48512 GHz	-39.75 dBm									
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																																							
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M2	1		2.4835 GHz	-43.28 dBm																																									
M3	1		2.5 GHz	-51.28 dBm																																									
M4	1		2.48512 GHz	-39.75 dBm																																									

Test Item:	Bandedge	Type:	802.11n(HT20)																																										
CH01	<div><div><div><div>MultiView</div><div>Spectrum</div></div><div><div>Ref Level 20.00 dBm</div><div>Offset 1.00 dB</div><div>RBW 100 kHz</div><div>Att 30 dB</div><div>SWT 1.12 ms</div><div>VBW 300 kHz</div><div>Mode Auto Sweep</div><div>Count 200/200</div><div>1 Frequency Sweep</div><div><div><div>10 dBm</div><div>0 dBm</div><div>-10 dBm</div><div>-20 dBm</div><div>-30 dBm</div><div>-40 dBm</div><div>-50 dBm</div><div>-60 dBm</div><div>-70 dBm</div></div><div><div>2.31 GHz</div><div>1001 pts</div><div>11.2 MHz/</div><div>2.422 GHz</div></div></div><div><div>M1[1]</div><div>-2.46 dBm</div><div>2.409080 GHz</div><div>-30.70 dBm</div><div>M2[1]</div><div>2.400000 GHz</div></div></div><div><table><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-Value</th><th>Y-Value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td>1</td><td></td><td>2.40908 GHz</td><td>-2.46 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4 GHz</td><td>-30.70 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.39 GHz</td><td>-38.65 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.31 GHz</td><td>-60.15 dBm</td><td></td><td></td></tr><tr><td>M5</td><td>1</td><td></td><td>2.399152 GHz</td><td>-30.20 dBm</td><td></td><td></td></tr></table></div></div><div>Date: 8 AUG 2019 16:42:54</div></div>			Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.40908 GHz	-2.46 dBm			M2	1		2.4 GHz	-30.70 dBm			M3	1		2.39 GHz	-38.65 dBm			M4	1		2.31 GHz	-60.15 dBm			M5	1		2.399152 GHz	-30.20 dBm		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																																							
M1	1		2.40908 GHz	-2.46 dBm																																									
M2	1		2.4 GHz	-30.70 dBm																																									
M3	1		2.39 GHz	-38.65 dBm																																									
M4	1		2.31 GHz	-60.15 dBm																																									
M5	1		2.399152 GHz	-30.20 dBm																																									
CH11	<div><div><div><div>MultiView</div><div>Spectrum</div></div><div><div>Ref Level 20.00 dBm</div><div>Offset 1.00 dB</div><div>RBW 100 kHz</div><div>Att 30 dB</div><div>SWT 1.03 ms</div><div>VBW 300 kHz</div><div>Mode Auto Sweep</div><div>Count 300/300</div><div>1 Frequency Sweep</div><div><div><div>10 dBm</div><div>0 dBm</div><div>-10 dBm</div><div>-20 dBm</div><div>-30 dBm</div><div>-40 dBm</div><div>-50 dBm</div><div>-60 dBm</div><div>-70 dBm</div></div><div><div>2.452 GHz</div><div>1001 pts</div><div>4.8 MHz/</div><div>2.5 GHz</div></div></div><div><div>M1[1]</div><div>-2.80 dBm</div><div>2.4590730 GHz</div><div>-39.26 dBm</div><div>M2[1]</div><div>2.4835000 GHz</div></div></div><div><table><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-Value</th><th>Y-Value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td>1</td><td></td><td>2.459073 GHz</td><td>-2.80 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4835 GHz</td><td>-39.26 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.5 GHz</td><td>-51.31 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.483584 GHz</td><td>-38.93 dBm</td><td></td><td></td></tr></table></div></div><div>Date: 8 AUG 2019 16:46:16</div></div>			Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.459073 GHz	-2.80 dBm			M2	1		2.4835 GHz	-39.26 dBm			M3	1		2.5 GHz	-51.31 dBm			M4	1		2.483584 GHz	-38.93 dBm									
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																																							
M1	1		2.459073 GHz	-2.80 dBm																																									
M2	1		2.4835 GHz	-39.26 dBm																																									
M3	1		2.5 GHz	-51.31 dBm																																									
M4	1		2.483584 GHz	-38.93 dBm																																									

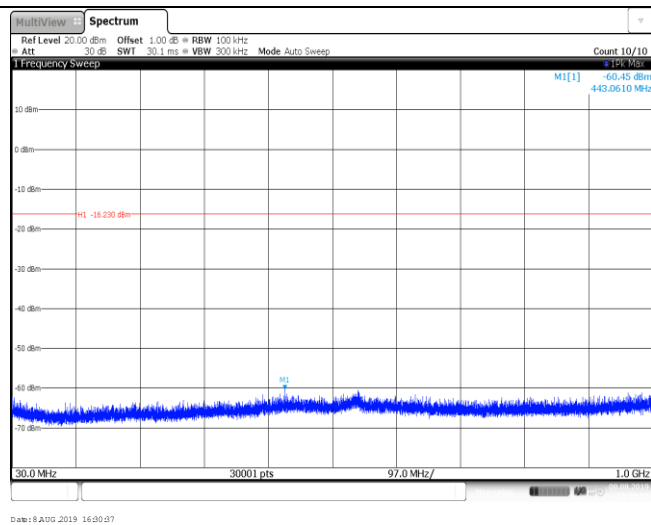
Test Item:	Bandedge	Type:	802.11n(HT40)																																										
CH03	<div><div><div>MultiView</div><div>Spectrum</div></div><div><div>Ref Level 20.00 dBm</div><div>Offset 1.00 dB</div><div>RBW 100 kHz</div><div>Att 30 dB</div><div>SWT 1.00 ms</div><div>VBW 300 kHz</div><div>Mode Auto Sweep</div><div>Count 200/200</div><div>1 Frequency Sweep</div><div><div>30 dBm</div><div>0 dBm</div><div>-10 dBm</div><div>-20 dBm</div><div>-30 dBm</div><div>-40 dBm</div><div>-50 dBm</div><div>-60 dBm</div><div>-70 dBm</div></div><div><div>2.31 GHz</div><div>1001 pts</div><div>13.2 MHz/</div><div>2.442 GHz</div></div><div><div>M1[1] -5.97 dBm</div><div>M2[1] -32.41 dBm</div><div>M2[1] 2.414240 GHz</div><div>M2[1] 2.400000 GHz</div></div><div><div>2 Marker Table</div><table><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-Value</th><th>Y-Value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td>1</td><td></td><td>2.41424 GHz</td><td>-5.97 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4 GHz</td><td>-32.41 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.39 GHz</td><td>-36.23 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.31 GHz</td><td>-58.15 dBm</td><td></td><td></td></tr><tr><td>M5</td><td>1</td><td></td><td>2.39778 GHz</td><td>-32.05 dBm</td><td></td><td></td></tr></table></div></div><div>Date: 8 AUG 2019 16:48:03</div></div>			Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.41424 GHz	-5.97 dBm			M2	1		2.4 GHz	-32.41 dBm			M3	1		2.39 GHz	-36.23 dBm			M4	1		2.31 GHz	-58.15 dBm			M5	1		2.39778 GHz	-32.05 dBm		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																																							
M1	1		2.41424 GHz	-5.97 dBm																																									
M2	1		2.4 GHz	-32.41 dBm																																									
M3	1		2.39 GHz	-36.23 dBm																																									
M4	1		2.31 GHz	-58.15 dBm																																									
M5	1		2.39778 GHz	-32.05 dBm																																									
CH09	<div><div><div>MultiView</div><div>Spectrum</div></div><div><div>Ref Level 20.00 dBm</div><div>Offset 1.00 dB</div><div>RBW 100 kHz</div><div>Att 30 dB</div><div>SWT 1.1 ms</div><div>VBW 300 kHz</div><div>Mode Auto Sweep</div><div>Count 300/300</div><div>1 Frequency Sweep</div><div><div>30 dBm</div><div>0 dBm</div><div>-10 dBm</div><div>-20 dBm</div><div>-30 dBm</div><div>-40 dBm</div><div>-50 dBm</div><div>-60 dBm</div><div>-70 dBm</div></div><div><div>2.432 GHz</div><div>1001 pts</div><div>6.8 MHz/</div><div>2.5 GHz</div></div><div><div>M1[1] -6.11 dBm</div><div>M2[1] -38.55 dBm</div><div>M2[1] 2.4441940 GHz</div><div>M2[1] 2.4835000 GHz</div></div><div><div>2 Marker Table</div><table><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-Value</th><th>Y-Value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td>1</td><td></td><td>2.444194 GHz</td><td>-6.11 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4835 GHz</td><td>-38.55 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.5 GHz</td><td>-46.89 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.484496 GHz</td><td>-37.66 dBm</td><td></td><td></td></tr></table></div></div><div>Date: 8 AUG 2019 16:51:06</div></div>			Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.444194 GHz	-6.11 dBm			M2	1		2.4835 GHz	-38.55 dBm			M3	1		2.5 GHz	-46.89 dBm			M4	1		2.484496 GHz	-37.66 dBm									
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																																							
M1	1		2.444194 GHz	-6.11 dBm																																									
M2	1		2.4835 GHz	-38.55 dBm																																									
M3	1		2.5 GHz	-46.89 dBm																																									
M4	1		2.484496 GHz	-37.66 dBm																																									

Test Item:	SE	Type:	802.11b
CH01 Reference level	 <p>Ref Level 30.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWI 1.04 ms VBW 300 kHz Mode Auto Sweep Count 100/100 M1[1] 4.08 dBm 2.412800 GHz CF 2.412 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz</p> <p>Date: 8 AUG 2019 16:27:10</p>		
CH01 30MHz~1000MHz	 <p>Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWI 30.1 ms VBW 300 kHz Mode Auto Sweep Count 10/10 M1[1] -60.43 dBm 723.0900 MHz H1 -15.920 dBm 30.0 MHz 30001 pts 97.0 MHz/ 1.0 GHz</p> <p>Date: 8 AUG 2019 16:27:11</p>		
CH01 1GHz~26GHz	 <p>Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWI 250 ms VBW 300 kHz Mode Auto Sweep Count 10/10 M1[1] -49.44 dBm 4.823333 GHz H1 -15.920 dBm 1.0 GHz 30001 pts 2.5 GHz/ 26.0 GHz</p> <p>Date: 8 AUG 2019 16:28:04</p>		

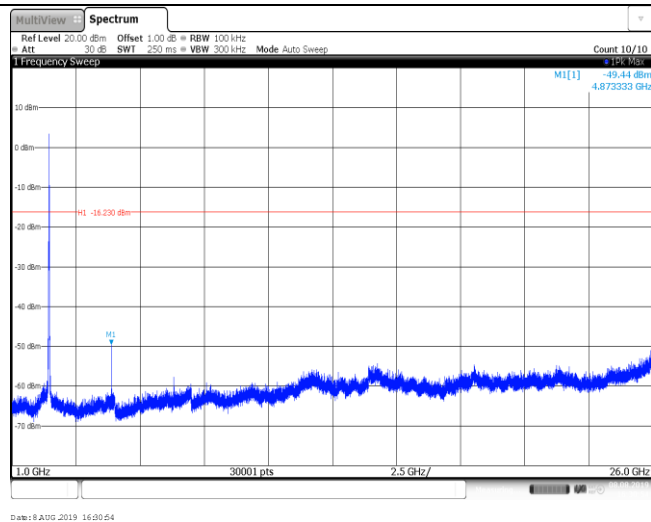
CH06
Reference level



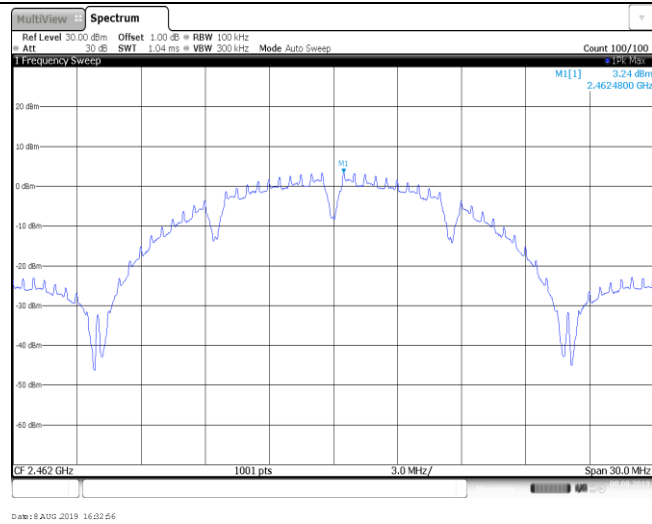
CH06
30MHz~1000MHz



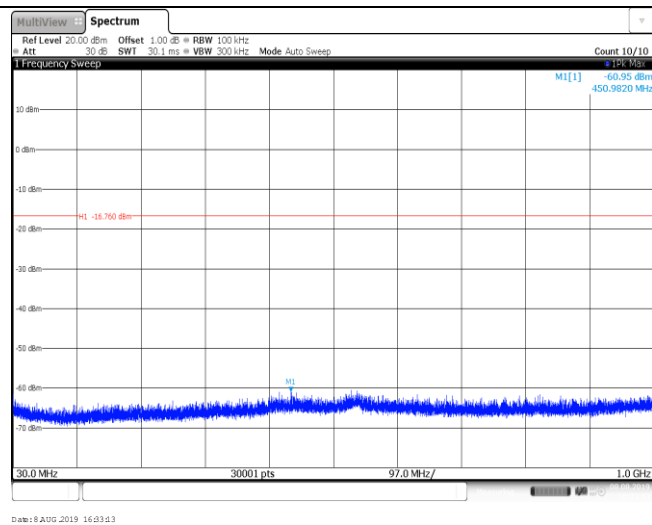
CH06
1GHz~26GHz



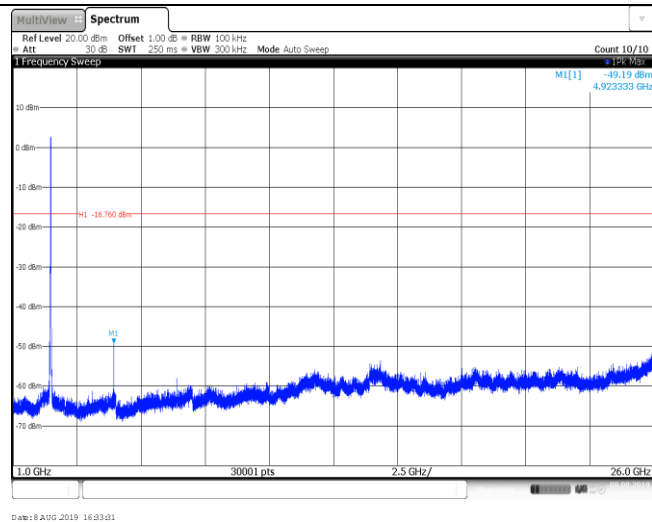
CH11
Reference level

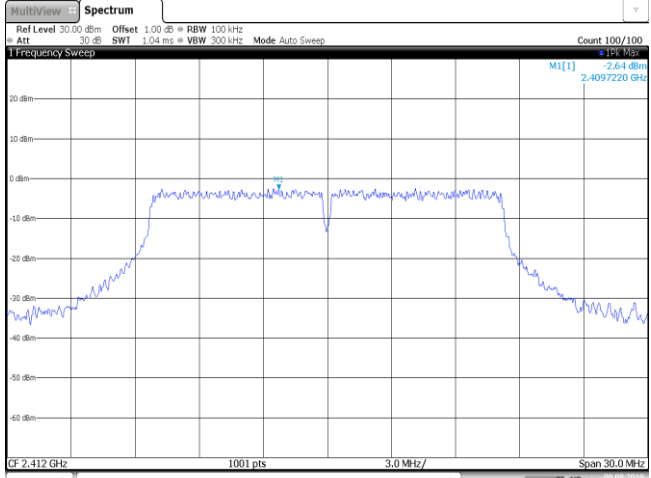
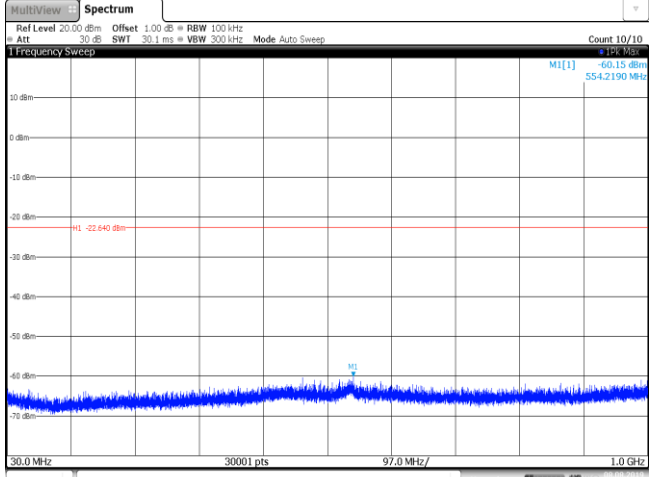
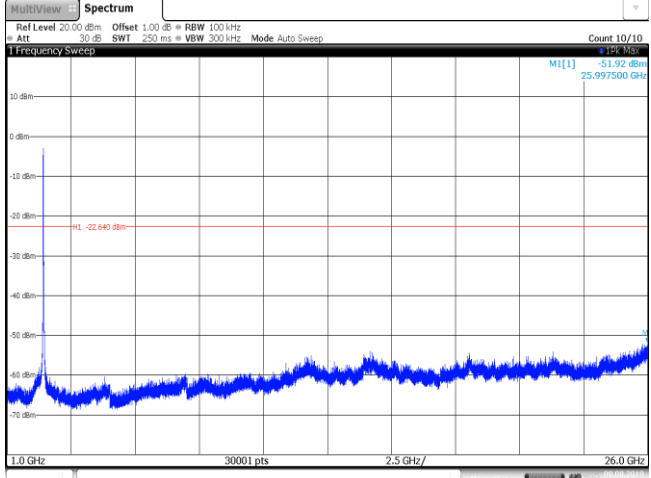


CH11
30MHz~1000MHz

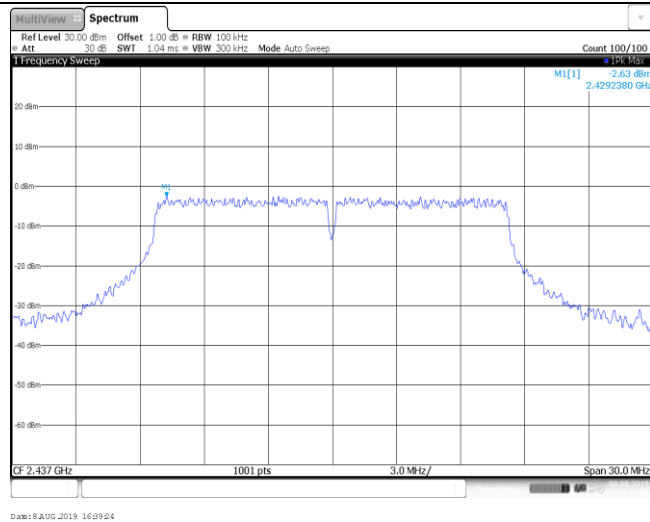


CH11
1GHz~26GHz

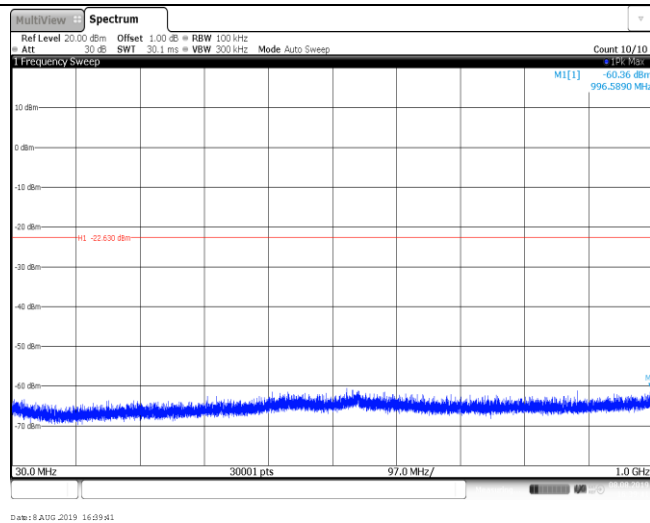


Test Item:	SE	Type:	802.11g
CH01 Reference level	 <p>Ref Level 30.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWI 1.04 ms VBW 300 kHz Mode Auto Sweep Count 100/100 M1[1] -2.64 dBm 2.4097220 GHz Span 30.0 MHz 1001 pts 3.0 MHz/</p>		
CH01 30MHz~1000MHz	 <p>Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWI 30.1 ms VBW 300 kHz Mode Auto Sweep Count 10/10 M1[1] -60.15 dBm 554.2190 MHz Span 97.0 MHz 30001 pts 97.0 MHz/</p>		
CH01 1GHz~26GHz	 <p>Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWI 250 ms VBW 300 kHz Mode Auto Sweep Count 10/10 M1[1] -51.92 dBm 25.997500 GHz Span 2.5 GHz 30001 pts 2.5 GHz/</p>		

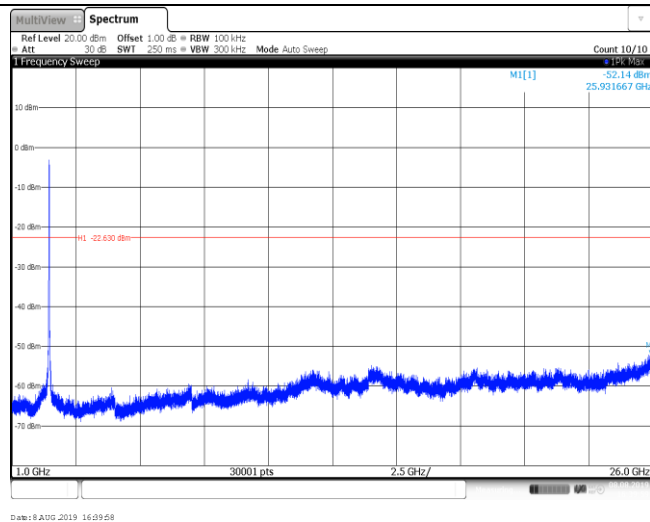
CH06
Reference level



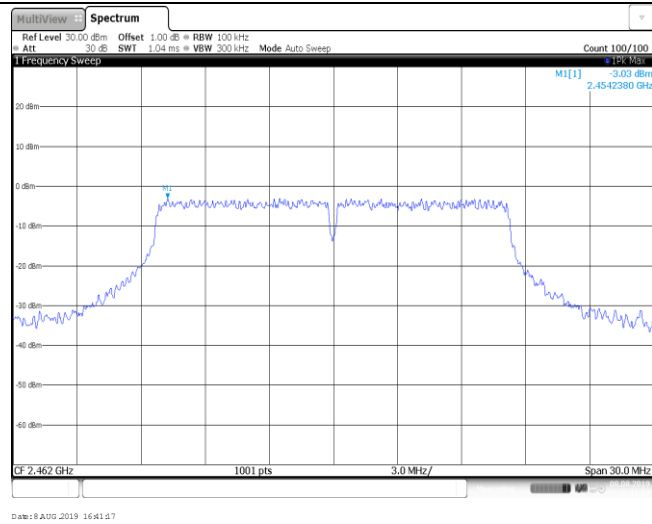
CH06
30MHz~1000MHz



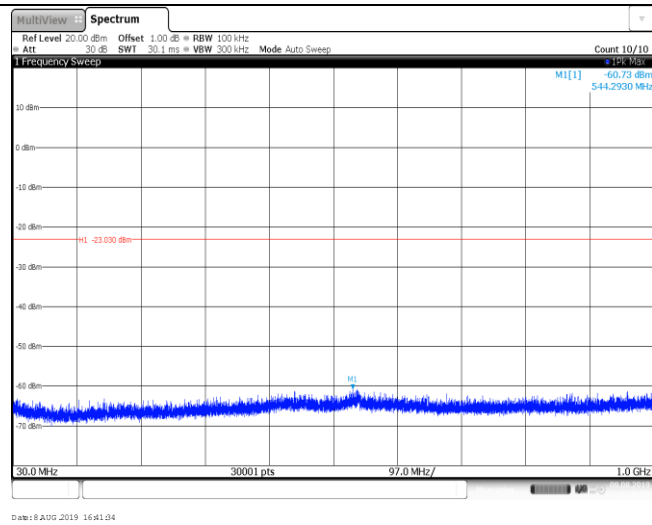
CH06
1GHz~26GHz



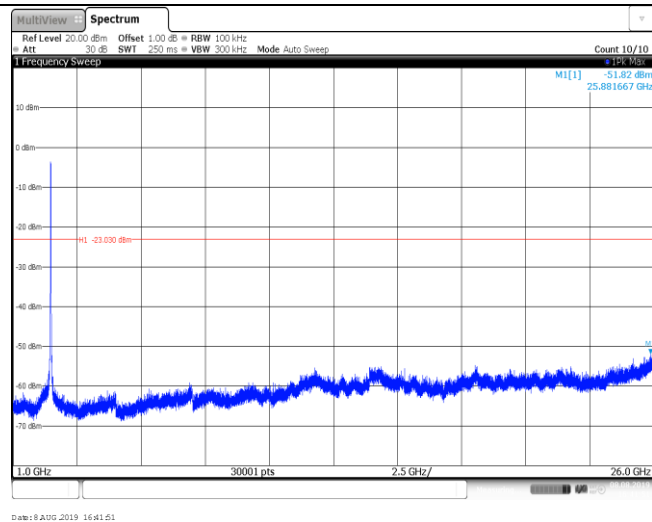
CH11
Reference level

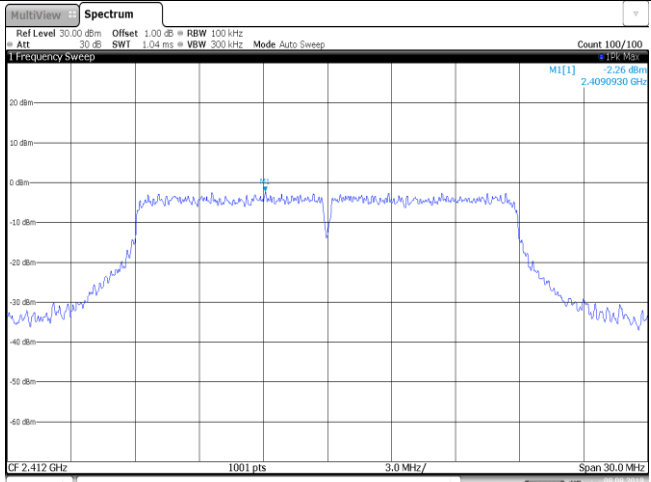
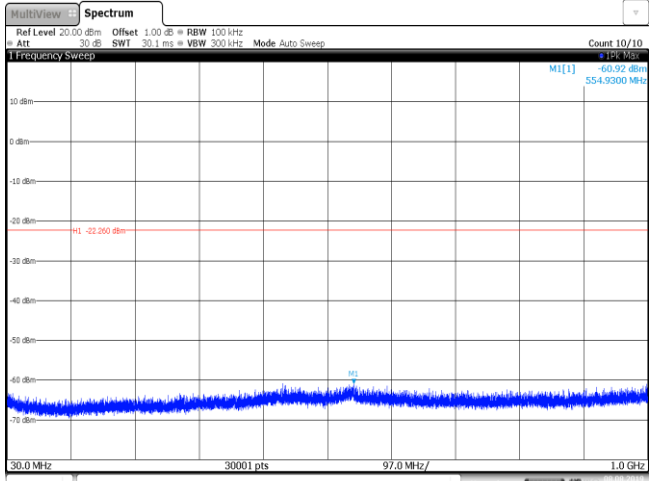
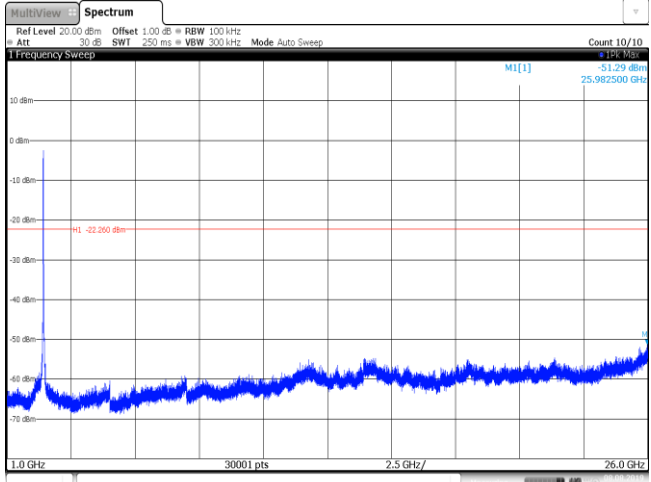


CH11
30MHz~1000MHz

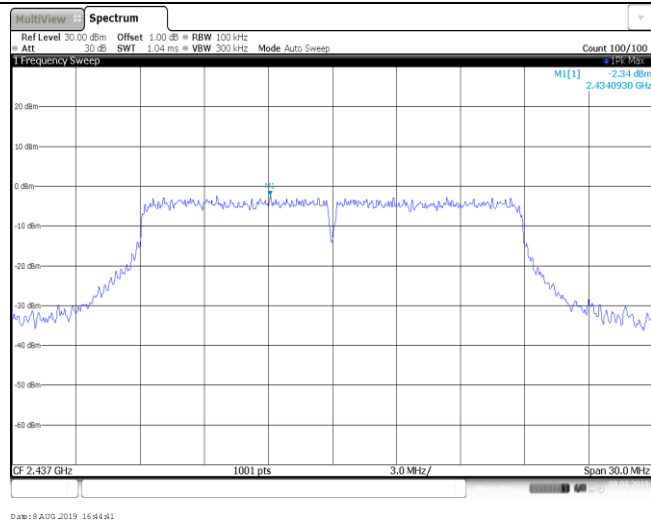


CH11
1GHz~26GHz

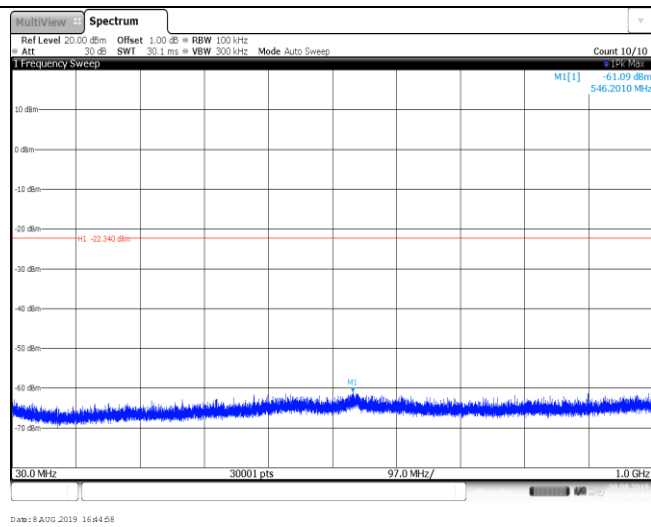


Test Item:	SE	Type:	802.11n(HT20)
CH01 Reference level	 <p>Ref Level 30.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWI 1.04 ms VBW 300 kHz Mode Auto Sweep Count 100/100 MI[1] -2.26 dBm 2.4090930 GHz CF 2.412 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz</p> <p>Date: 8 AUG 2019 16:43:01</p>		
CH01 30MHz~1000MHz	 <p>Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWI 30.1 ms VBW 300 kHz Mode Auto Sweep Count 10/10 MI[1] -60.92 dBm 554.9300 MHz h1 -22.260 dBm 30.0 MHz 30001 pts 97.0 MHz/ 1.0 GHz</p> <p>Date: 8 AUG 2019 16:43:18</p>		
CH01 1GHz~26GHz	 <p>Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWI 250 ms VBW 300 kHz Mode Auto Sweep Count 10/10 MI[1] -51.29 dBm 25.982500 GHz h1 -22.260 dBm 1.0 GHz 30001 pts 2.5 GHz/ 26.0 GHz</p> <p>Date: 8 AUG 2019 16:43:26</p>		

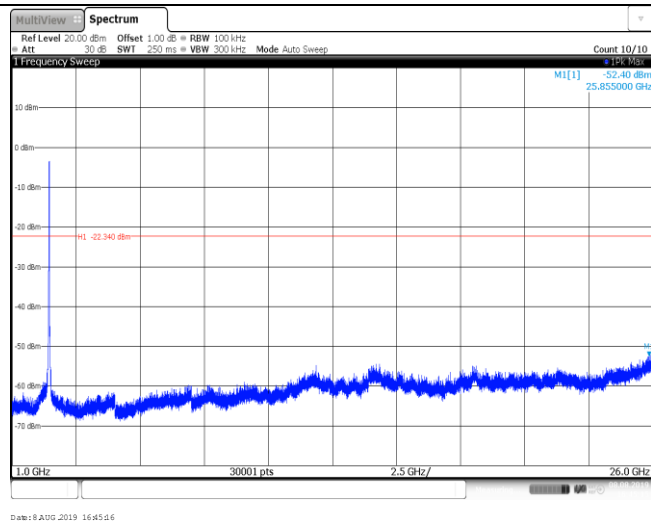
CH06
Reference level



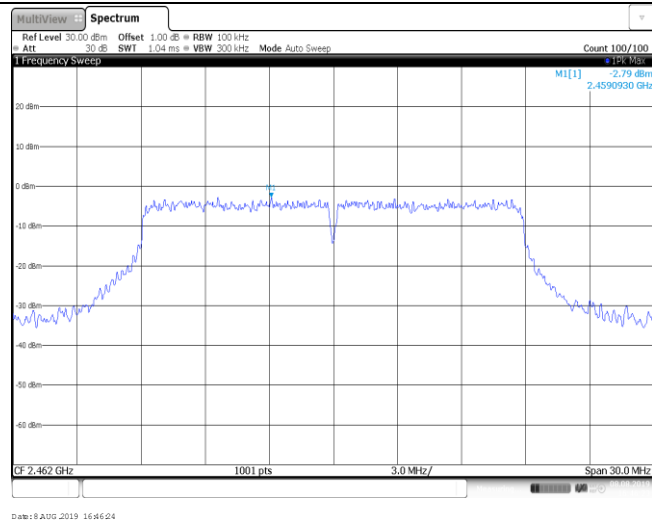
CH06
30MHz~1000MHz



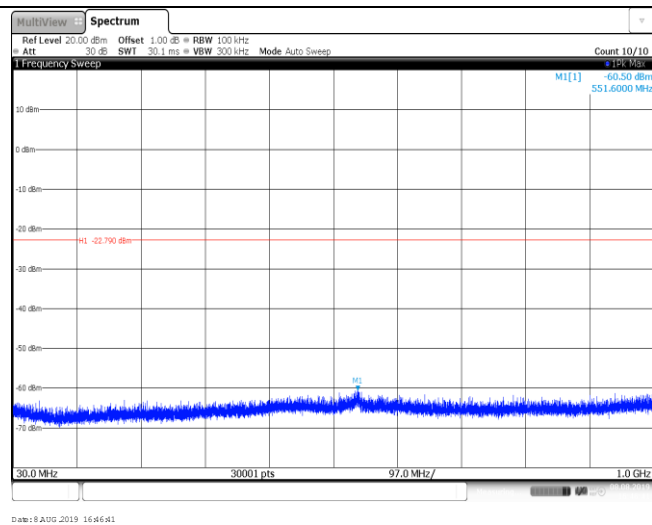
CH06
1GHz~26GHz



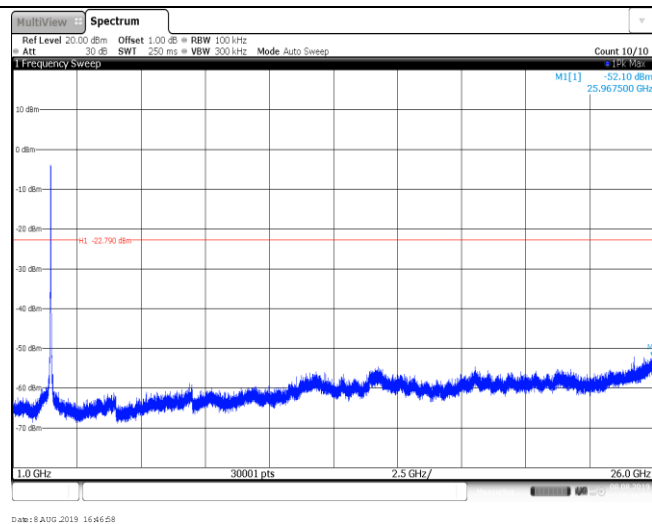
CH11
Reference level

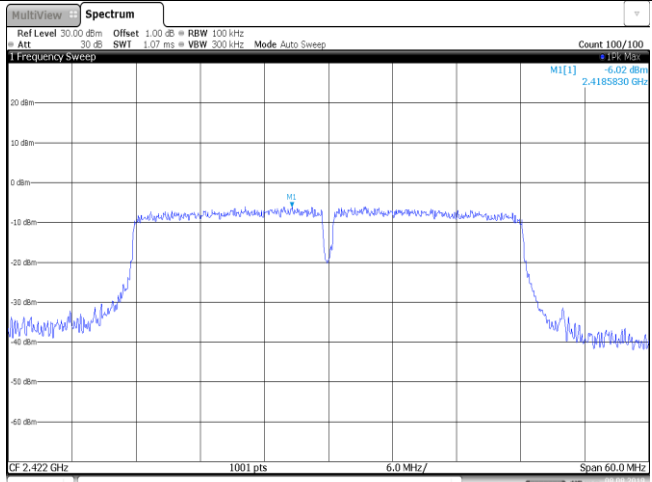
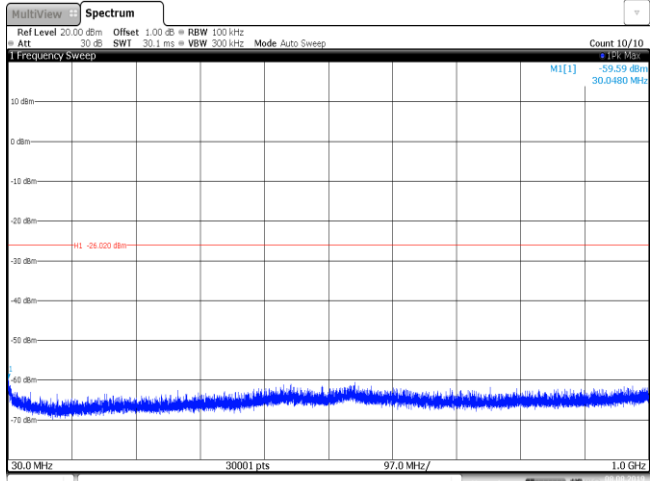
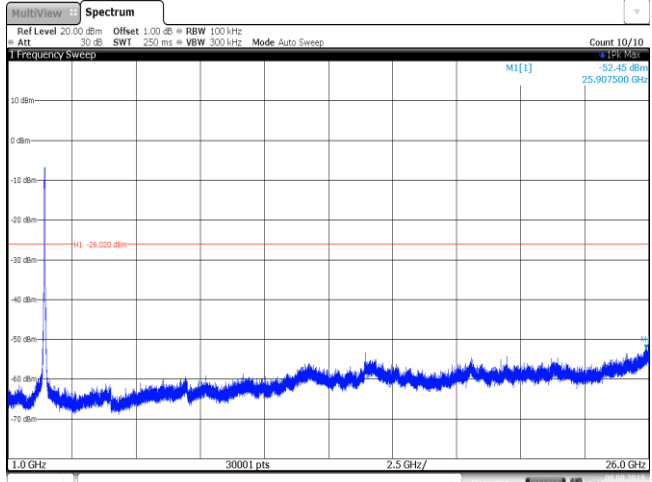


CH11
30MHz~1000MHz

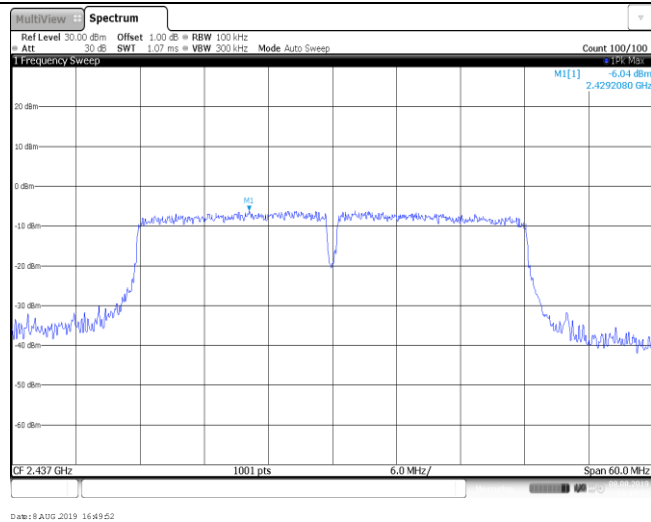


CH11
1GHz~26GHz

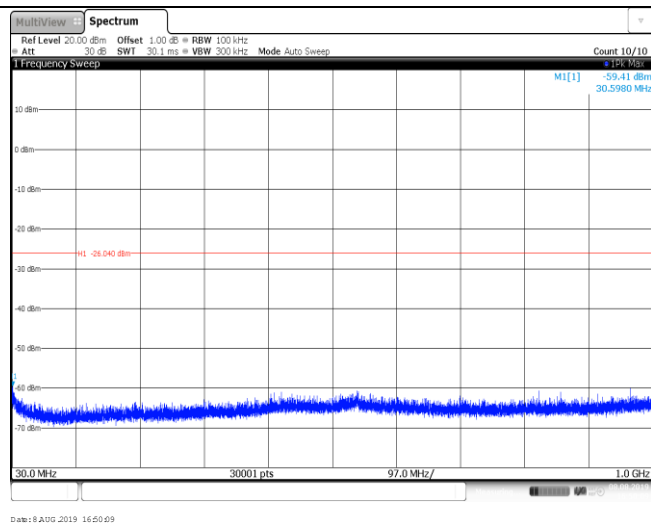


Test Item:	SE	Type:	802.11n(HT40)
CH03 Reference level	 <p>Ref Level 30.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWI 1.07 ms VBW 300 kHz Mode Auto Sweep Count 100/100 M1[1] -6.02 dBm 2.4185830 GHz CF 2.422 GHz 1001 pts 6.0 MHz/ Span 60.0 MHz Date: 8 AUG 2019 16:48:11</p>		
CH03 30MHz~1000MHz	 <p>Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWI 30.1 ms VBW 300 kHz Mode Auto Sweep Count 10/10 M1[1] -59.59 dBm 30.0480 MHz 30.0 MHz 30001 pts 97.0 MHz/ 1.0 GHz Date: 8 AUG 2019 16:48:28</p>		
CH03 1GHz~26GHz	 <p>Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWI 250 ms VBW 300 kHz Mode Auto Sweep Count 10/10 M1[1] -52.45 dBm 25.907500 GHz 1.0 GHz 30001 pts 2.5 GHz/ 26.0 GHz Date: 8 AUG 2019 16:48:45</p>		

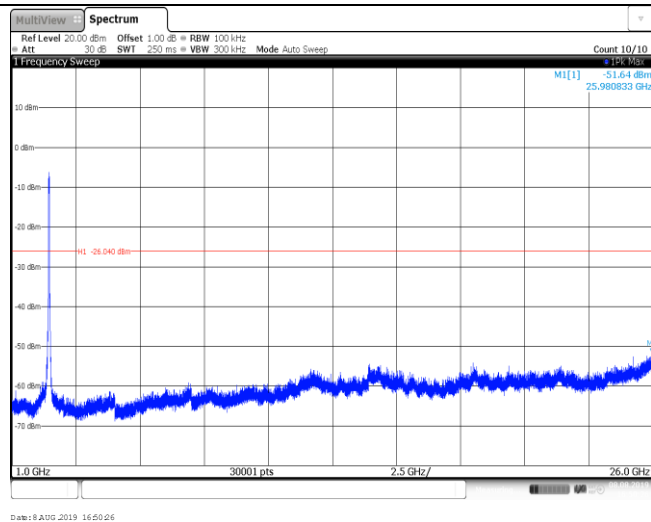
CH06
Reference level



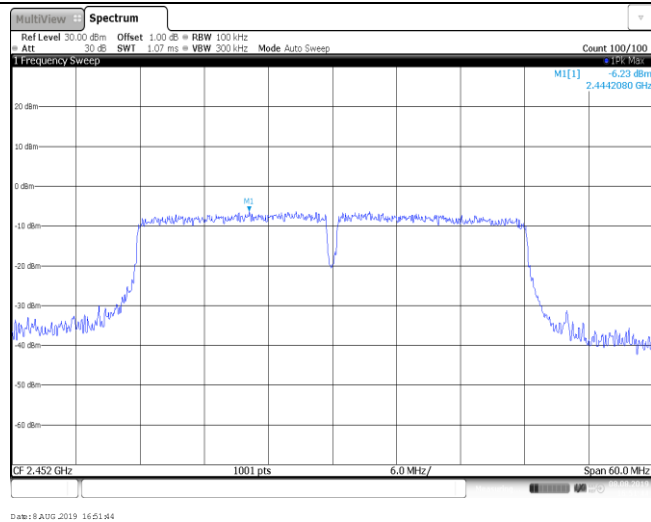
CH06
30MHz~1000MHz



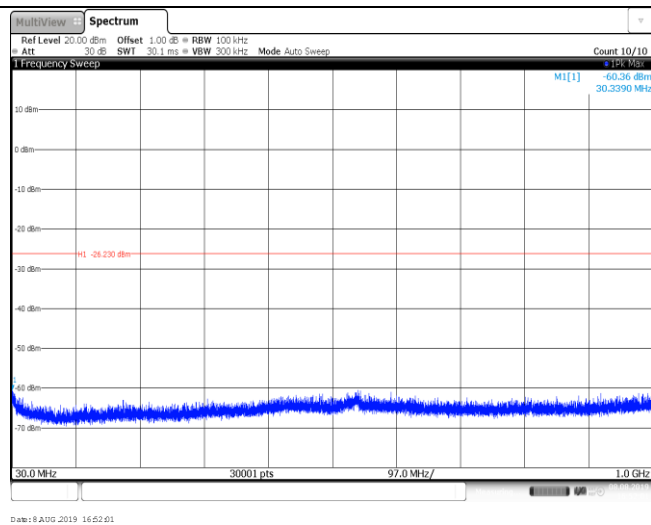
CH06
1GHz~26GHz



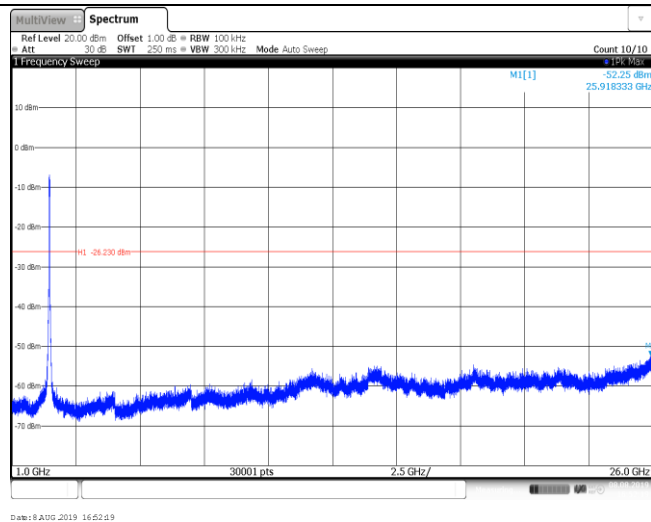
CH09
Reference level



CH09
30MHz~1000MHz



CH09
1GHz~26GHz



5.8. Spurious Emissions (radiated)

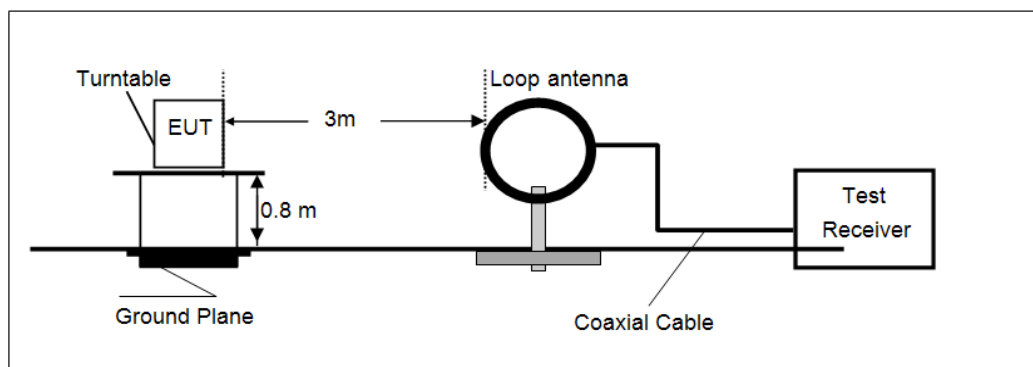
LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.209

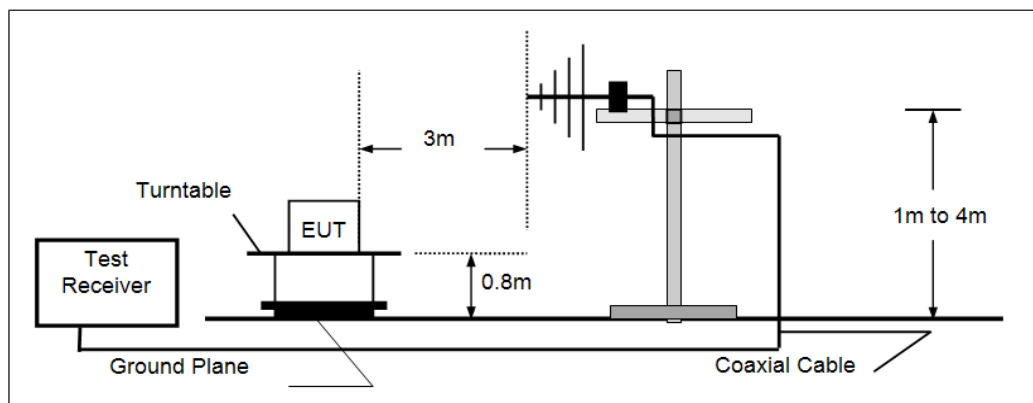
Frequency	Limit (dBuV/m @3m)	Value
30MHz-88MHz	40.00	Quasi-peak
88MHz-216MHz	43.50	Quasi-peak
216MHz-960MHz	46.00	Quasi-peak
960MHz-1GHz	54.00	Quasi-peak
Above 1GHz	54.00	Average
	74.00	Peak

TEST CONFIGURATION

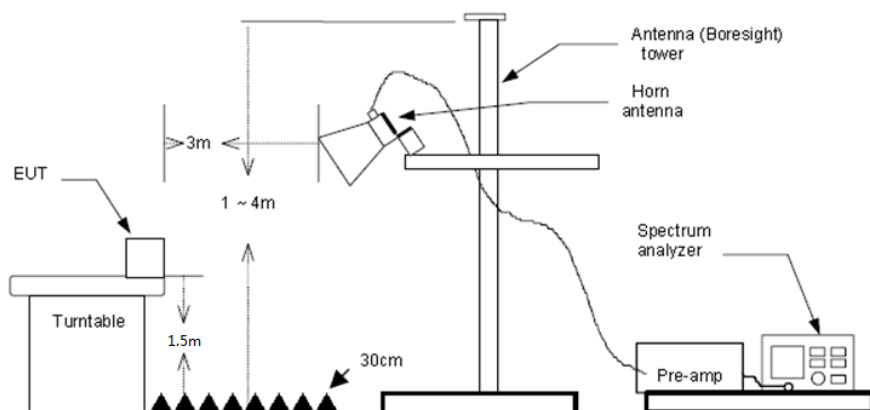
➤ 9kHz ~30MHz



➤ 30MHz ~ 1GHz



➤ Above 1GHz



TEST PROCEDURE

1. The EUT was setup and tested according to ANSI C63.10:2013 for compliance to FCC 47CFR 15.247 requirements.
2. The EUT is placed on a turn table which is 0.8 meter above ground for below 1 GHz, and 1.5 m for above 1 GHz. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
3. The EUT was set 3 meters from the receiving antenna, which was mounted on the top of a variable height antenna tower.
4. For each suspected emission, the EUT was arranged to its worst case and then tune the Antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level to comply with the guidelines.
5. Set to the maximum power setting and enable the EUT transmit continuously.
6. Use the following spectrum analyzer settings
 - (1) Span shall wide enough to fully capture the emission being measured;
 - (2) Below 1 GHz:
RBW=120 kHz, VBW=300 kHz, Sweep=auto, Detector function=peak, Trace=max hold;
If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
 - (3) From 1 GHz to 10th harmonic:
RBW=1MHz, VBW=3MHz Peak detector for Peak value.
RBW=1MHz, VBW=3MHz RMS detector for Average value.

TEST MODE:

Please refer to the clause 3.3

TEST RESULTS

☒ **Passed** ☐ **Not Applicable**

Note:

- 1) Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
- 2) The emission levels of other frequencies are very lower than the limit and not show in test report.

➤ **9kHz ~ 30MHz**

The EUT was pre-scanned the frequency band (9kHz~30MHz), found the radiated level lower than the limit, so don't show on the report.

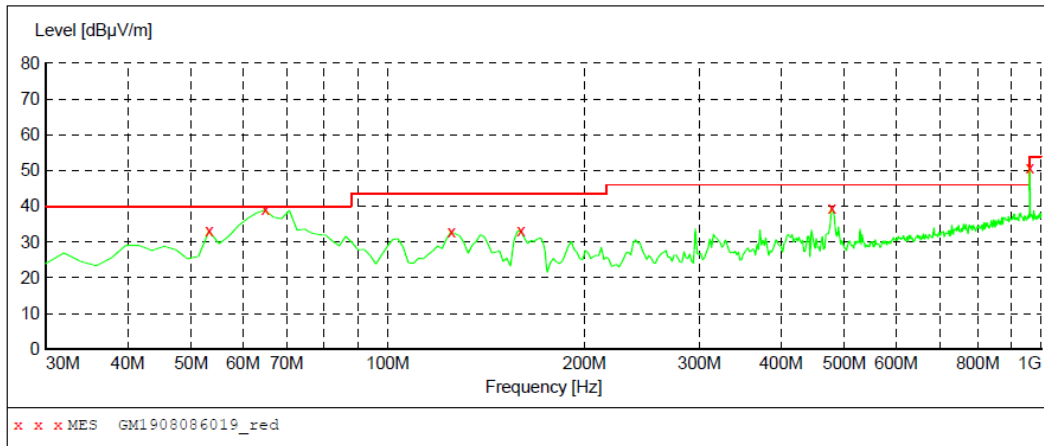
➤ **30MHz ~1000MHz**

Have pre-scan all modulation mode, found the 802.11b mode CH01 which it was worst case, so only the worst case's data on the test report.

➤ 30MHz ~ 1GHz

Polarization:

Vertical

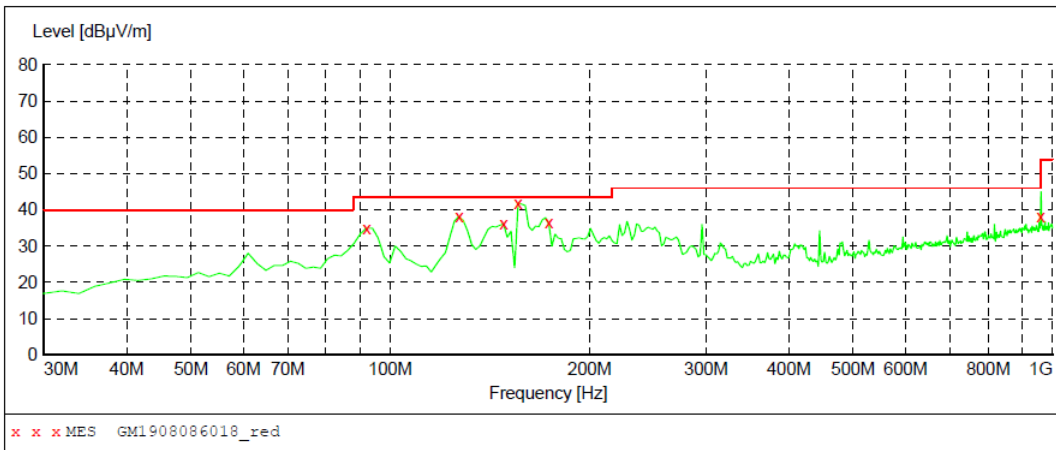
**MEASUREMENT RESULT: "GM1908086019_red"**

8/8/2019 10:57AM

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
53.280000	33.10	-5.1	40.0	6.9	QP	100.0	176.00	VERTICAL
64.920000	39.00	-7.5	40.0	1.0	QP	100.0	191.00	VERTICAL
125.060000	32.80	-9.1	43.5	10.7	QP	100.0	191.00	VERTICAL
159.980000	33.20	-9.6	43.5	10.3	QP	100.0	0.00	VERTICAL
478.140000	39.40	1.1	46.0	6.6	QP	100.0	191.00	VERTICAL
961.200000	50.80	11.0	53.9	3.1	QP	100.0	176.00	VERTICAL

Polarization:

Horizontal

**MEASUREMENT RESULT: "GM1908086018_red"**

8/8/2019 10:55AM

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
92.080000	34.90	-8.2	43.5	8.6	QP	300.0	360.00	HORIZONTAL
127.000000	38.20	-9.2	43.5	5.3	QP	300.0	171.00	HORIZONTAL
148.340000	36.10	-10.1	43.5	7.4	QP	100.0	238.00	HORIZONTAL
156.100000	41.90	-9.8	43.5	1.6	QP	100.0	144.00	HORIZONTAL
173.560000	36.40	-9.0	43.5	7.1	QP	100.0	209.00	HORIZONTAL
959.260000	38.10	10.9	46.0	7.9	QP	100.0	169.00	HORIZONTAL

➤ 1 GHz ~ 25 GHz

802.11b					CH01		
Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
2969.593	37.73	0.06	37.79	74.00	36.21	Horizontal	PK
4307.625	39.81	3.86	43.67	74.00	30.33	Horizontal	PK
5047.875	38.27	8.30	46.57	74.00	27.43	Horizontal	PK
8060.281	30.99	18.28	49.27	74.00	24.73	Horizontal	PK
Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
3859.656	39.31	2.40	41.71	74.00	32.29	Vertical	PK
4223.906	38.64	3.81	42.45	74.00	31.55	Vertical	PK
5347.500	34.57	8.53	43.10	74.00	30.90	Vertical	PK
8029.437	31.60	18.23	49.83	74.00	24.17	Vertical	PK

802.11b					CH06		
Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
4157.812	40.12	3.58	43.70	74.00	30.30	Horizontal	PK
4306.156	39.69	3.84	43.53	74.00	30.47	Horizontal	PK
5049.343	40.23	8.32	48.55	74.00	25.45	Horizontal	PK
7983.906	31.02	18.05	49.07	74.00	24.93	Horizontal	PK
Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
3861.125	40.56	2.41	42.97	74.00	31.03	Vertical	PK
4306.156	37.54	3.84	41.38	74.00	32.62	Vertical	PK
5049.343	35.07	8.32	43.39	74.00	30.61	Vertical	PK
7995.656	31.74	18.15	49.89	74.00	24.11	Vertical	PK

802.11b					CH11		
Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
3564.437	38.10	1.31	39.41	74.00	34.59	Horizontal	PK
4602.843	37.51	5.79	43.30	74.00	30.70	Horizontal	PK
5344.562	38.47	8.53	47.00	74.00	27.00	Horizontal	PK
8038.250	30.70	18.25	48.95	74.00	25.05	Horizontal	PK
Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
3862.593	39.26	2.42	41.68	74.00	32.32	Vertical	PK
4454.500	36.27	5.15	41.42	74.00	32.58	Vertical	PK
5050.812	34.63	8.33	42.96	74.00	31.04	Vertical	PK
8008.875	31.32	18.20	49.52	74.00	24.48	Vertical	PK

Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The peak level is lower than average limit(54 dBuV/m), this data is the too weak instrument of signal is unable to test.
3. The emission levels of other frequencies(test frequency band is 1GHz to 25GHz) are very lower than the limit and not show in test report.

802.11g					CH01		
Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
3564.437	38.03	1.31	39.34	74.00	34.66	Horizontal	PK
4306.156	39.29	3.84	43.13	74.00	30.87	Horizontal	PK
5196.218	37.01	8.97	45.98	74.00	28.02	Horizontal	PK
8020.625	31.12	18.22	49.34	74.00	24.66	Horizontal	PK
Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
3861.125	36.17	2.41	38.58	74.00	35.42	Vertical	PK
4455.968	35.83	5.16	40.99	74.00	33.01	Vertical	PK
5047.875	33.96	8.30	42.26	74.00	31.74	Vertical	PK
7953.062	31.64	17.78	49.42	74.00	24.58	Vertical	PK

802.11g					CH06		
Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
3861.125	37.65	2.41	40.06	74.00	33.94	Horizontal	PK
4306.156	39.11	3.84	42.95	74.00	31.05	Horizontal	PK
5346.031	38.58	8.53	47.11	74.00	26.89	Horizontal	PK
7798.843	31.81	17.28	49.09	74.00	24.91	Horizontal	PK
Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
3861.125	38.59	2.41	41.00	74.00	33.00	Vertical	PK
4454.500	35.42	5.15	40.57	74.00	33.43	Vertical	PK
5197.687	33.75	8.98	42.73	74.00	31.27	Vertical	PK
8073.500	31.31	18.30	49.61	74.00	24.39	Vertical	PK

802.11g					CH11		
Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
3416.093	39.38	0.04	39.42	74.00	34.58	Horizontal	PK
4156.343	41.07	3.57	44.64	74.00	29.36	Horizontal	PK
5047.875	41.32	8.30	49.62	74.00	24.38	Horizontal	PK
8022.093	31.08	18.22	49.30	74.00	24.70	Horizontal	PK
Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
3861.125	38.22	2.41	40.63	74.00	33.37	Vertical	PK
4454.500	35.62	5.15	40.77	74.00	33.23	Vertical	PK
5047.875	35.01	8.30	43.31	74.00	30.69	Vertical	PK
8126.375	31.21	18.25	49.46	74.00	24.54	Vertical	PK

Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The peak level is lower than average limit(54 dBuV/m), this data is the too weak instrument of signal is unable to test.
3. The emission levels of other frequencies(test frequency band is 1GHz to 25GHz) are very lower than the limit and not show in test report.

802.11n(HT20)					CH01		
Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
3266.281	38.35	0.05	38.40	74.00	35.60	Horizontal	PK
4157.812	39.02	3.58	42.60	74.00	31.40	Horizontal	PK
5046.406	39.87	8.29	48.16	74.00	25.84	Horizontal	PK
8008.875	31.37	18.20	49.57	74.00	24.43	Horizontal	PK
Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
2969.593	36.05	0.06	36.11	74.00	37.89	Vertical	PK
4306.156	38.33	3.84	42.17	74.00	31.83	Vertical	PK
5346.031	35.16	8.53	43.69	74.00	30.31	Vertical	PK
7942.781	31.42	17.69	49.11	74.00	24.89	Vertical	PK

802.11n(HT20)					CH06		
Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
3861.125	38.56	2.41	40.97	74.00	33.03	Horizontal	PK
4156.343	39.38	3.57	42.95	74.00	31.05	Horizontal	PK
5050.812	39.10	8.33	47.43	74.00	26.57	Horizontal	PK
8136.656	32.52	18.22	50.74	74.00	23.26	Horizontal	PK
Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
3859.656	37.35	2.40	39.75	74.00	34.25	Vertical	PK
4306.156	36.48	3.84	40.32	74.00	33.68	Vertical	PK
5049.343	35.31	8.32	43.63	74.00	30.37	Vertical	PK
8004.468	31.14	18.20	49.34	74.00	24.66	Vertical	PK

802.11n(HT20)					CH11		
Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
3166.406	35.58	0.67	36.25	74.00	37.75	Horizontal	PK
5347.500	32.42	8.53	40.95	74.00	33.05	Horizontal	PK
7129.093	31.71	15.59	47.30	74.00	26.70	Horizontal	PK
9179.468	31.62	18.69	50.31	74.00	23.69	Horizontal	PK
Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
3861.125	37.19	2.41	39.60	74.00	34.40	Vertical	PK
4454.500	35.63	5.15	40.78	74.00	33.22	Vertical	PK
5049.343	34.84	8.32	43.16	74.00	30.84	Vertical	PK
7898.718	30.87	17.31	48.18	74.00	25.82	Vertical	PK

Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The peak level is lower than average limit(54 dBuV/m), this data is the too weak instrument of signal is unable to test.
3. The emission levels of other frequencies(test frequency band is 1GHz to 25GHz) are very lower than the limit and not show in test report.

802.11n(HT40)					CH03		
Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
3179.625	34.63	0.73	35.36	74.00	38.64	Horizontal	PK
4049.125	33.89	3.13	37.02	74.00	36.98	Horizontal	PK
5113.968	31.70	8.83	40.53	74.00	33.47	Horizontal	PK
7657.843	31.13	17.21	48.34	74.00	25.66	Horizontal	PK
Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
3006.312	36.07	-0.09	35.98	74.00	38.02	Vertical	PK
3693.687	35.28	1.58	36.86	74.00	37.14	Vertical	PK
5052.281	32.01	8.35	40.36	74.00	33.64	Vertical	PK
7462.500	31.10	16.40	47.50	74.00	26.50	Vertical	PK

802.11n(HT40)					CH06		
Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
3160.531	35.00	0.63	35.63	74.00	38.37	Horizontal	PK
5119.843	31.22	8.84	40.06	74.00	33.94	Horizontal	PK
6691.406	30.31	13.44	43.75	74.00	30.25	Horizontal	PK
8072.031	31.22	18.30	49.52	74.00	24.48	Horizontal	PK
Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
3182.562	35.22	0.75	35.97	74.00	38.03	Vertical	PK
5137.468	31.54	8.87	40.41	74.00	33.59	Vertical	PK
6763.375	31.12	13.30	44.42	74.00	29.58	Vertical	PK
7963.343	31.14	17.87	49.01	74.00	24.99	Vertical	PK

802.11n(HT40)					CH09		
Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
1752.000	34.76	-5.94	28.82	74.00	45.18	Horizontal	PK
3041.562	34.97	0.06	35.03	74.00	38.97	Horizontal	PK
5212.375	31.82	8.91	40.73	74.00	33.27	Horizontal	PK
7014.531	30.56	15.21	45.77	74.00	28.23	Horizontal	PK
Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector
1179.187	35.88	-6.05	29.83	74.00	44.17	Vertical	PK
3958.062	33.80	2.87	36.67	74.00	37.33	Vertical	PK
5610.406	31.24	8.84	40.08	74.00	33.92	Vertical	PK
7994.187	31.17	18.14	49.31	74.00	24.69	Vertical	PK

Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The peak level is lower than average limit(54 dBuV/m), this data is the too weak instrument of signal is unable to test.
3. The emission levels of other frequencies(test frequency band is 1GHz to 25GHz) are very lower than the limit and not show in test report.