Shenzhen Huatongwei International Inspection Co., Ltd.
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TEST REPORT

Report No. ..... :	**CHTEW19090079**	Report verification **:**
Project No..... :	**SHT1908021801EW**	
FCC ID..... :	**2AUHIMBL-L6**	
Applicant's name..... :	**Shenzhen Maibaole Industrial Co., Ltd.**	
Address.....:	Seven Floor,Po Yun Logistics Center Building(Three), Xixiang Street, Baoan District, Shenzhen, China	
Manufacturer.....:	Shenzhen Maibaole Industrial Co., Ltd.	
Address.....:	Seven Floor,Po Yun Logistics Center Building(Three), Xixiang Street, Baoan District, Shenzhen, China	
Test item description ..... :	**Intelligent commercial cash register**	
Trade Mark .....:	MBLCBM	
Model/Type reference.....:	MBL-L6	
Listed Model(s) .....:	MBL-E200, MBL-E300, MBL-E400, MBL-E500, MBL-M7, MBL-M9, MBL-B7, MBL-B9, MBL-M6	
Standard ..... :	**FCC CFR Title 47 Part 15 Subpart C Section 15.247**	
Date of receipt of test sample.....:	Aug.30, 2019	
Date of testing.....:	Aug.30, 2019- Sept.10, 2019	
Date of issue.....:	Sept.11, 2019	
Result.....:	**PASS**	

Compiled by (position+printedname+signature)...:	File administrators Echo Wei	Echo Wei
Supervised by (position+printedname+signature)....:	Project Engineer Edward Pan	Edward Pan
Approved by (position+printedname+signature)....:	RF Manager Hans Hu	Hans Hu

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

Contents

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 forTesting 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	2019-09-11	Original

2. TEST DESCRIPTION

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

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

3. SUMMARY

3.1. Client Information

Applicant:	Shenzhen Maibaole Industrial Co., Ltd.
Address:	Seven Floor,Po Yun Logistics Center Building(Three), Xixiang Street, Baoan District, Shenzhen, China
Manufacturer:	Shenzhen Maibaole Industrial Co., Ltd.
Address:	Seven Floor,Po Yun Logistics Center Building(Three), Xixiang Street, Baoan District, Shenzhen, China

3.2. Product Description

Name of EUT:	Intelligent commercial cash register
Trade Mark:	MBLCBM
Model No.:	MBL-L6
Listed Model(s):	MBL-E200, MBL-E300, MBL-E400, MBL-E500, MBL-M7, MBL-M9, MBL-B7, MBL-B9, MBL-M6
Power supply:	DC 12V
Adapter information:	Model:ADP-90H12 Input:100-240Va.c.,50/60Hz,1.5A MAX Output:12Vd.c.,7A
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:	Internal
Antenna gain:	1.5dBi

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

○	Monitor	Manufacturer:	DELL
		Model No.:	E1912Hf
○	Keyboard	Manufacturer:	DELL
		Model No.:	SK8115
○	Mouse	Manufacturer:	DELL
		Model No.:	MS111-T

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-Amplifer	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 anantenna 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.

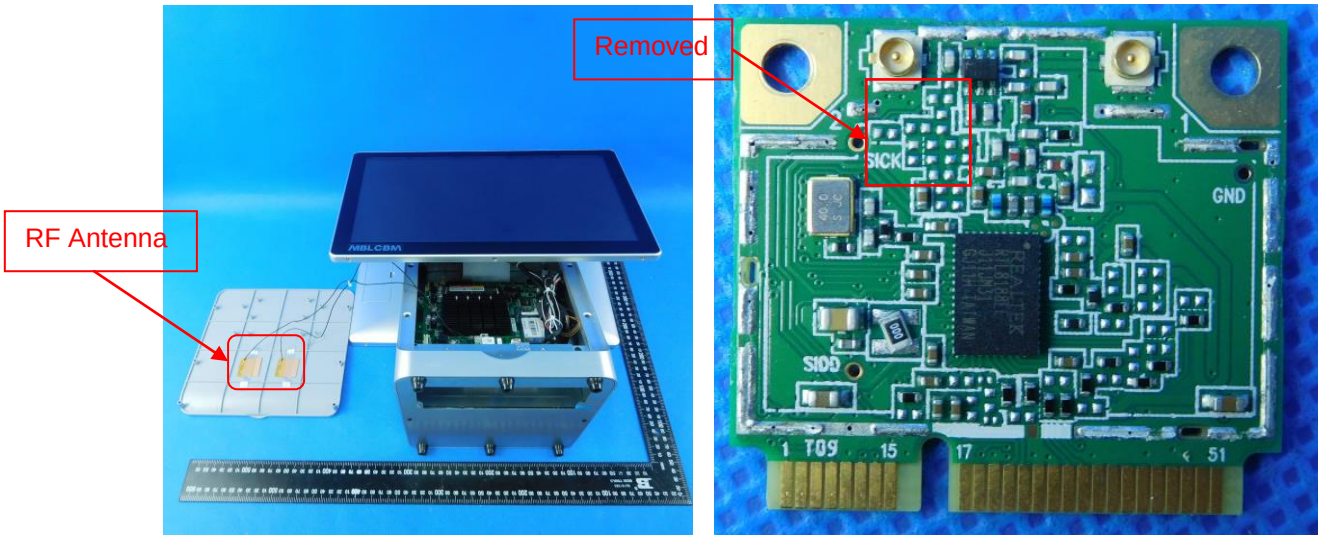
FCC CFR Title 47 Part 15 Subpart C Section 15.247(c) (1)(i):

(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 6 dBi, please refer to the below antenna photo.



Note: Although this product has two antennas, but the components from the other antenna part of the module have been removed. So this is a single antenna transmit product.

5.2. Conducted Emissions (AC Main)

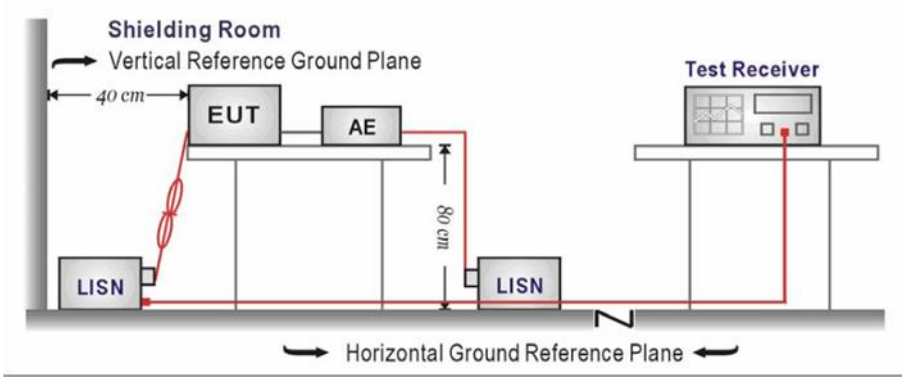
LIMIT

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

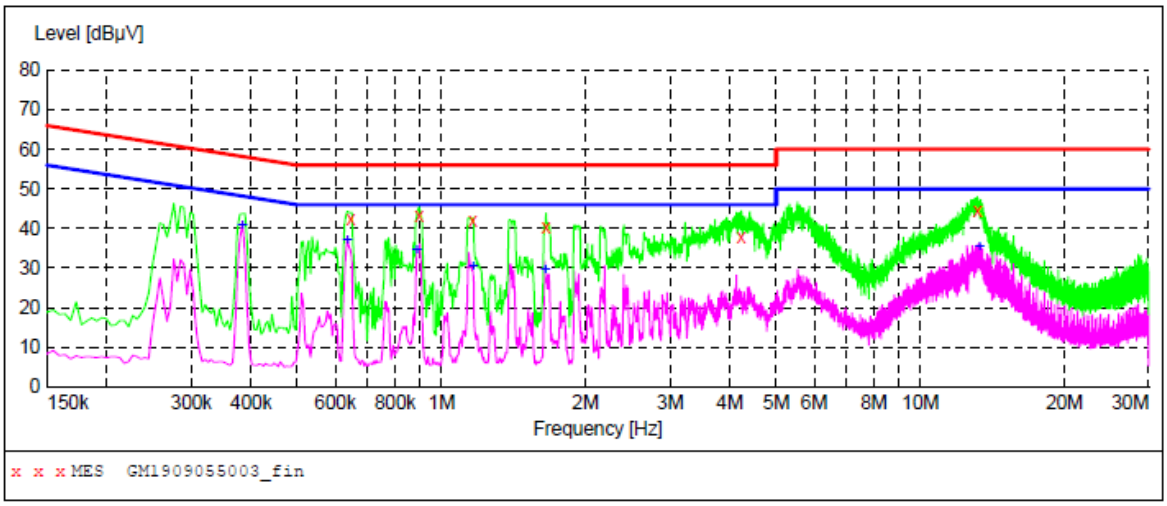
TEST RESULTS

☒ **Passed** ☐ **Not Applicable**

Note:

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

Test Line:	L



MEASUREMENT RESULT: "GM1909055003_fin"

9/5/2019 9:04AM

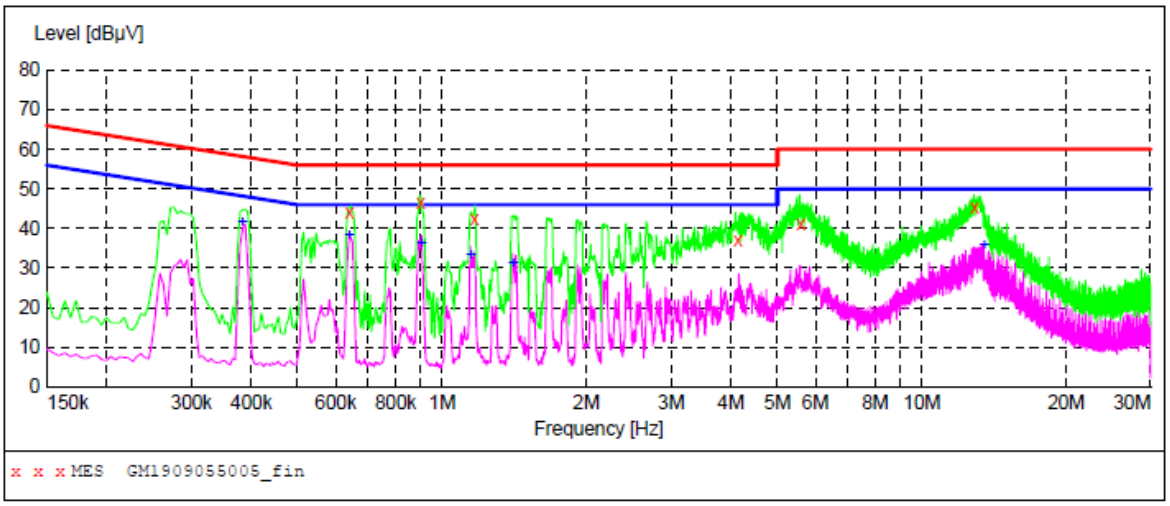
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.645000	42.30	9.9	56	13.7	QP	L1	GND
0.897000	43.10	9.9	56	12.9	QP	L1	GND
1.162500	42.00	9.9	56	14.0	QP	L1	GND
1.653000	40.50	9.9	56	15.5	QP	L1	GND
4.227000	37.90	9.9	56	18.1	QP	L1	GND
13.155000	44.30	10.1	60	15.7	QP	L1	GND

MEASUREMENT RESULT: "GM1909055003_fin2"

9/5/2019 9:04AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.384000	40.90	9.9	48	7.3	AV	L1	GND
0.636000	37.10	9.9	46	8.9	AV	L1	GND
0.888000	34.40	9.9	46	11.6	AV	L1	GND
1.162500	30.20	9.9	46	15.8	AV	L1	GND
1.644000	29.60	9.9	46	16.4	AV	L1	GND
13.285500	35.40	10.1	50	14.6	AV	L1	GND

Test Line:	N



MEASUREMENT RESULT: "GM1909055005_fin"

9/5/2019 9:17AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.640500	44.00	9.9	56	12.0	QP	N	GND
0.901500	46.60	9.9	56	9.4	QP	N	GND
1.167000	42.30	9.9	56	13.7	QP	N	GND
4.132500	37.00	9.9	56	19.0	QP	N	GND
5.599500	41.10	10.0	60	18.9	QP	N	GND
12.871500	45.20	10.1	60	14.8	QP	N	GND

MEASUREMENT RESULT: "GM1909055005_fin2"

9/5/2019 9:17AM

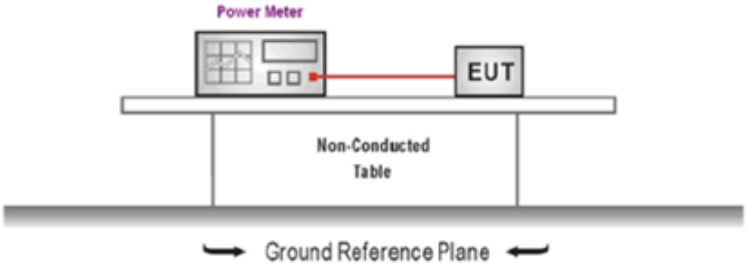
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.384000	41.50	9.9	48	6.7	AV	N	GND
0.640500	38.20	9.9	46	7.8	AV	N	GND
0.906000	36.00	9.9	46	10.0	AV	N	GND
1.149000	33.40	9.9	46	12.6	AV	N	GND
1.405500	31.20	9.9	46	14.8	AV	N	GND
13.483500	35.60	10.1	50	14.4	AV	N	GND

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**

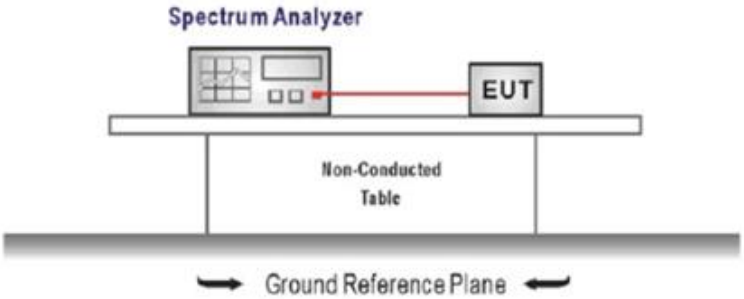
Type	Channel	Peak Output power (dBm)	Limit (dBm)	Result
802.11b	01	16.04	≤30.00	Pass
	06	16.30		
	11	16.54		
802.11g	01	14.32	≤30.00	Pass
	06	14.67		
	11	14.92		
802.11n(HT20)	01	13.36	≤30.00	Pass
	06	13.79		
	11	14.01		
802.11n(HT40)	03	13.51	≤30.00	Pass
	06	13.34		
	09	13.58		

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 kHz ≤ RBW ≤ 100 kHz, VBW ≥ 3 × 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:

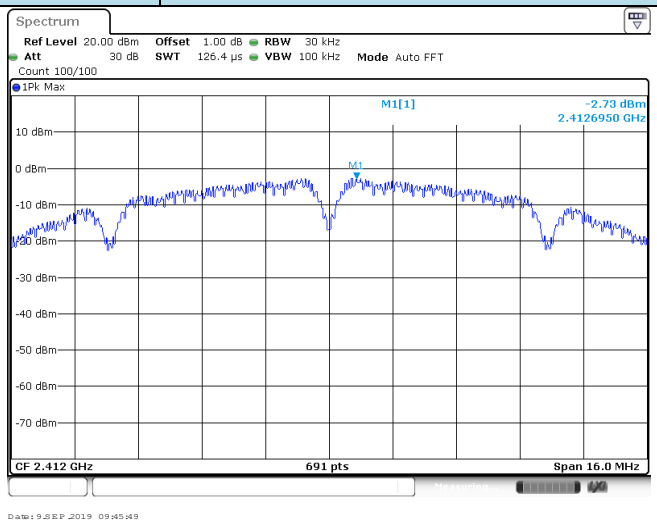
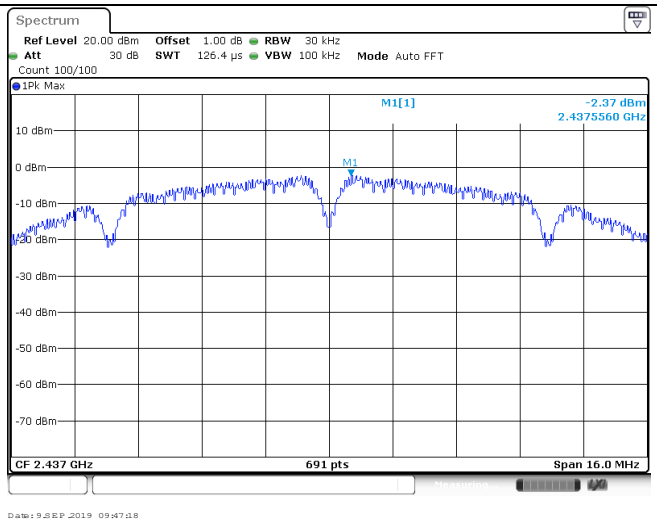
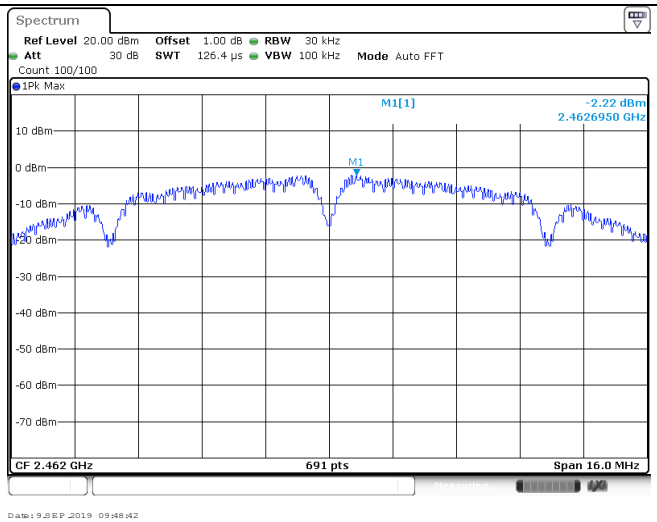
Please refer to the clause 3.3

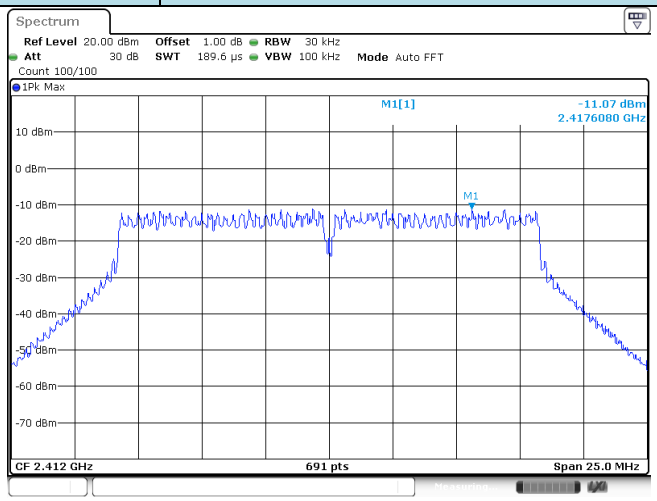
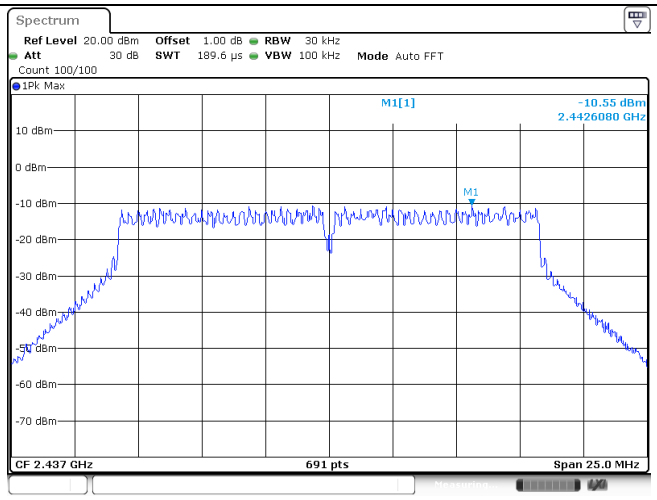
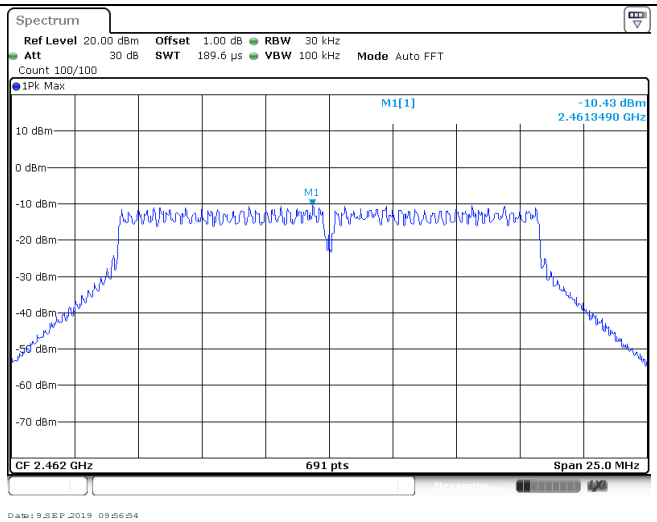
TEST RESULTS

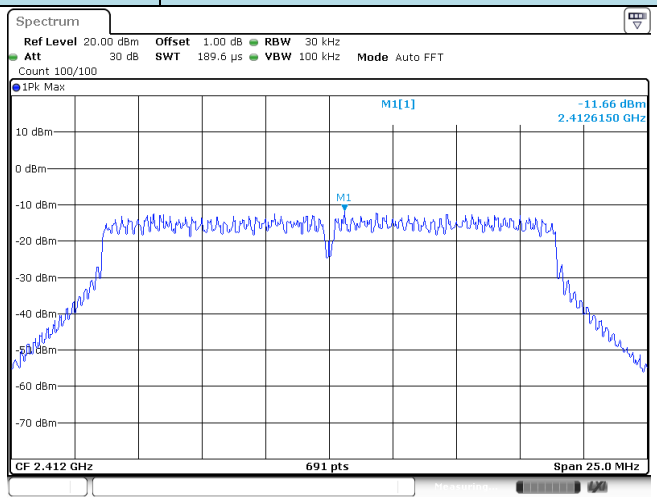
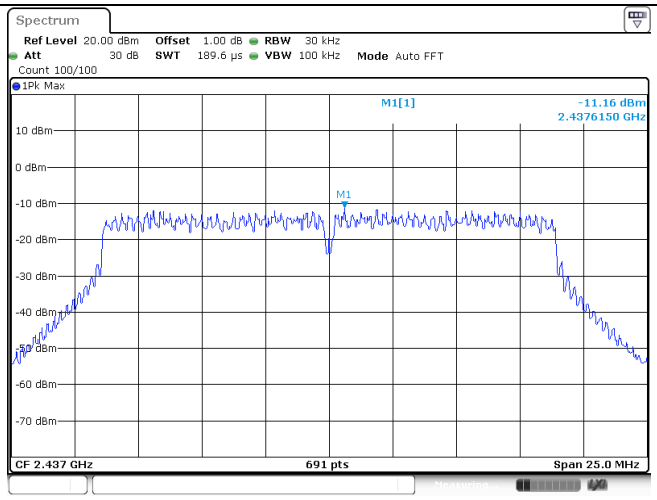
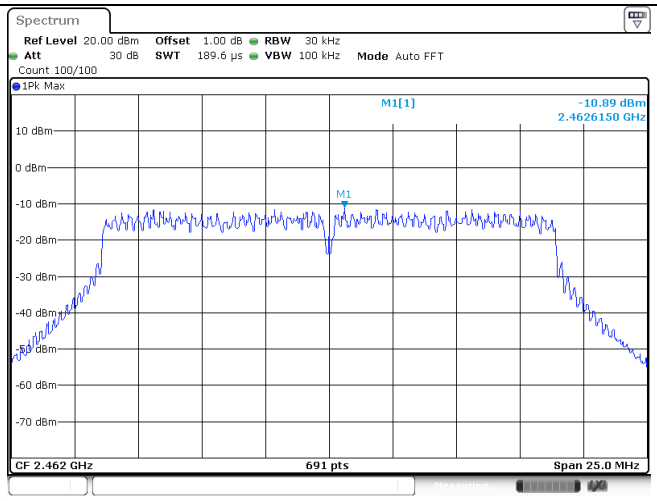
☒ **Passed** ☐ **Not Applicable**

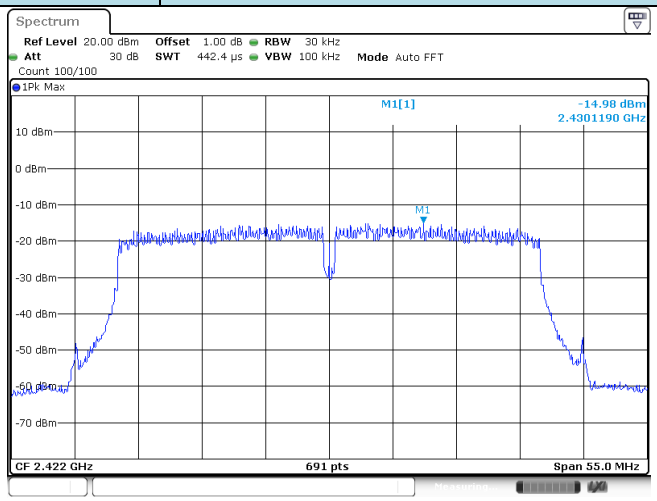
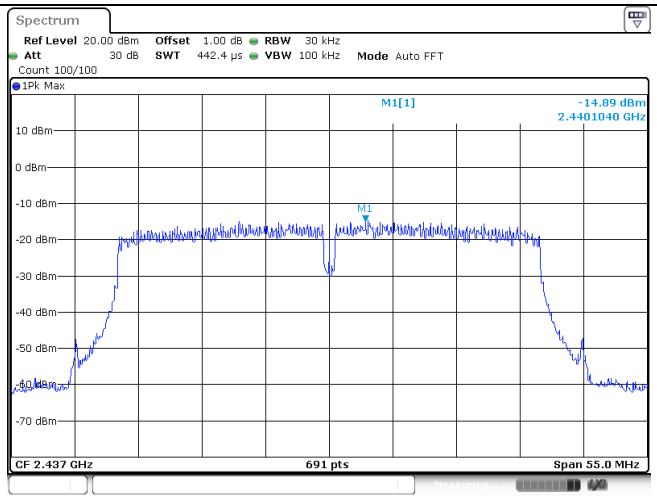
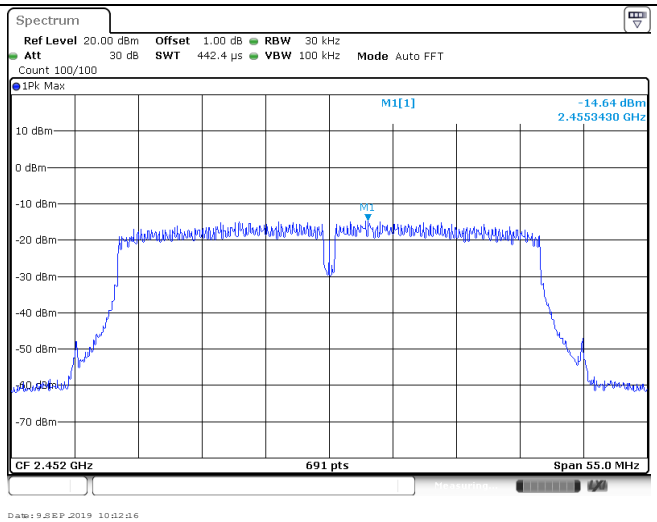
Type	Channel	Power Spectral Density (dBm/30KHz)	Limit (dBm/3KHz)	Result
802.11b	01	-2.73	≤8.00	Pass
	06	-2.37		
	11	-2.22		
802.11g	01	-11.07	≤8.00	Pass
	06	-10.55		
	11	-10.43		
802.11n(HT20)	01	-11.66	≤8.00	Pass
	06	-11.16		
	11	-10.89		
802.11n(HT40)	03	-14.90	≤8.00	Pass
	06	-14.89		
	09	-14.64		

Test plot as follows:

Type:	802.11b
CH01	
CH06	
CH11	

Type:	802.11g
CH01	
CH06	
CH11	

Type:	802.11n(HT20)
CH01	
CH06	
CH11	

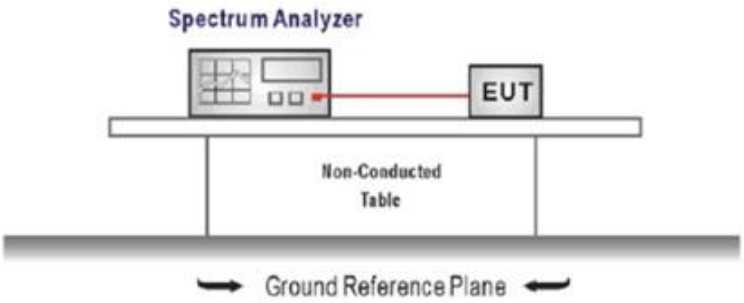
Type:	802.11n(HT40)
CH03	
CH06	
CH09	

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 ≥ 3 × 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:

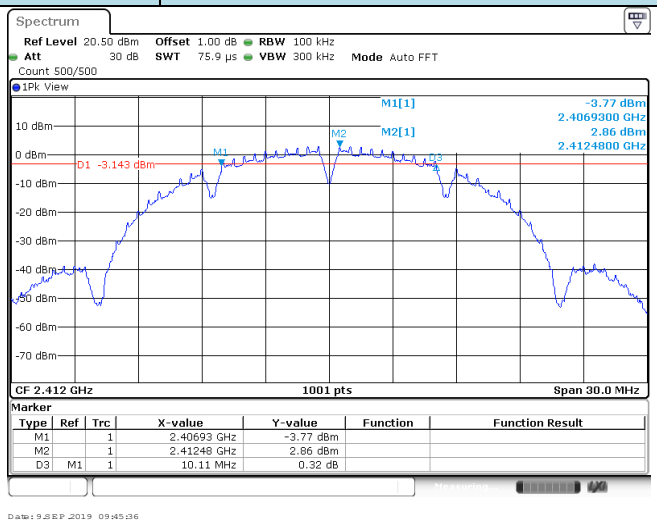
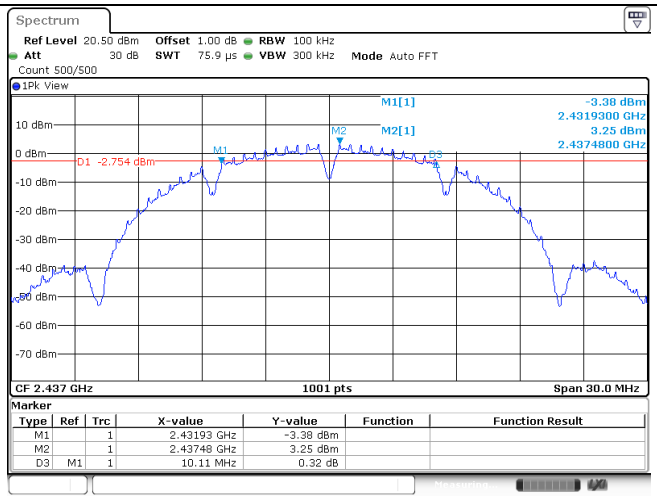
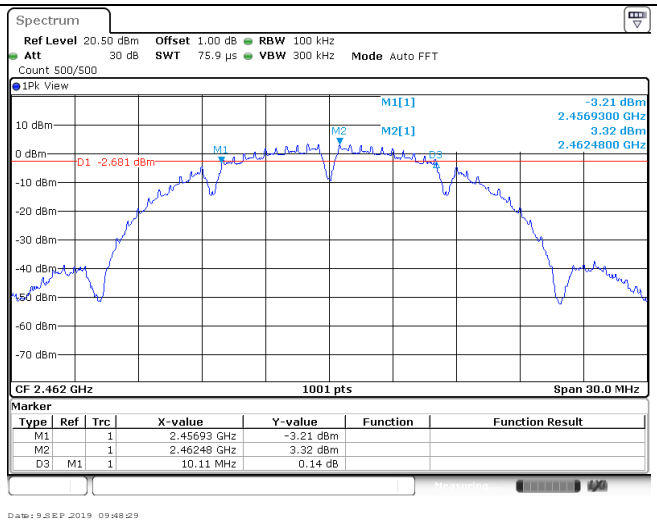
Please refer to the clause 3.3

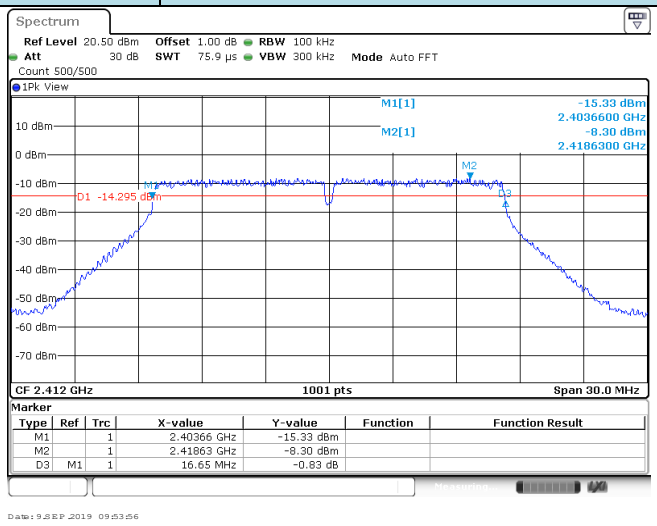
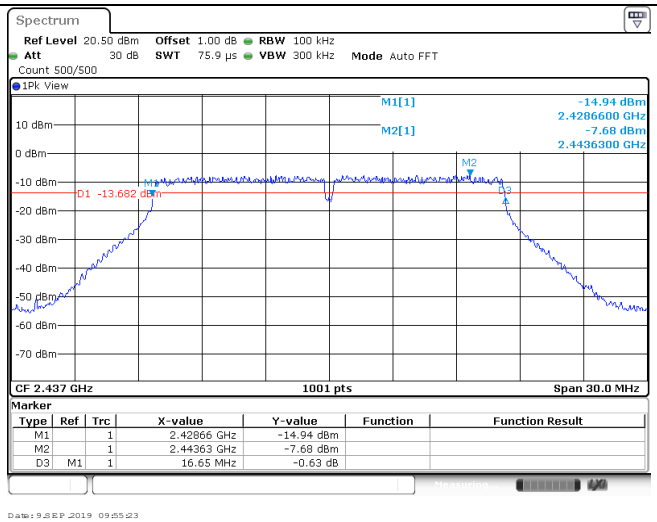
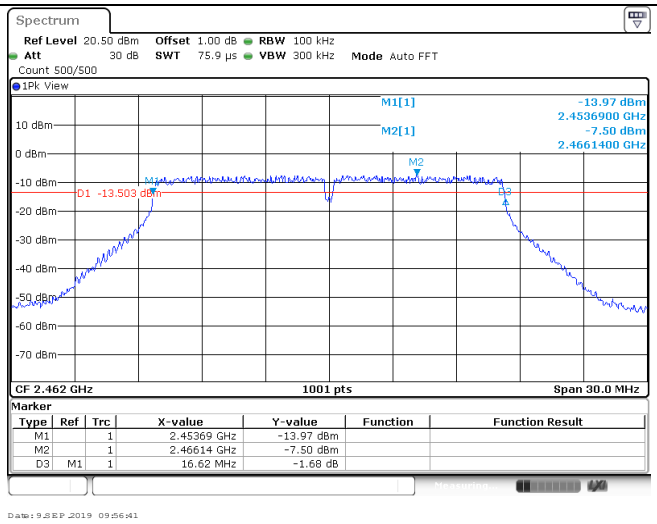
TEST RESULTS

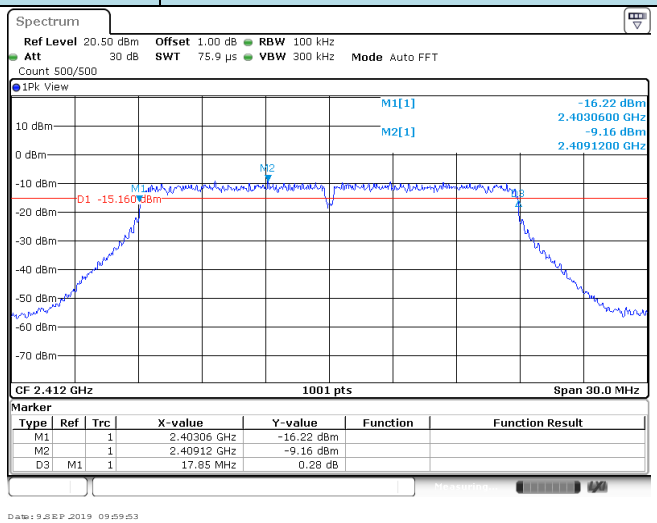
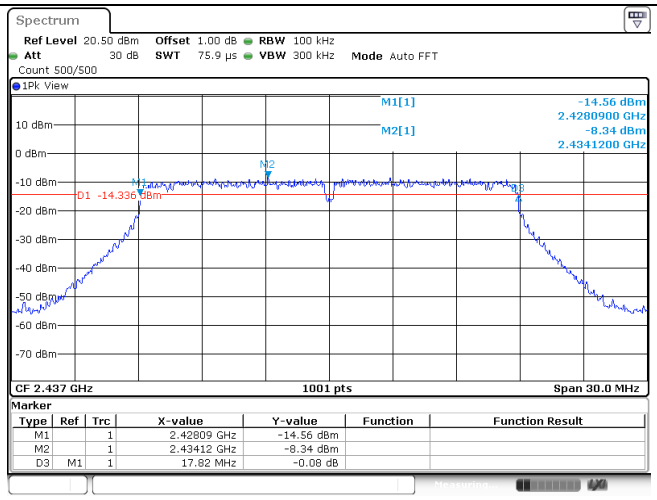
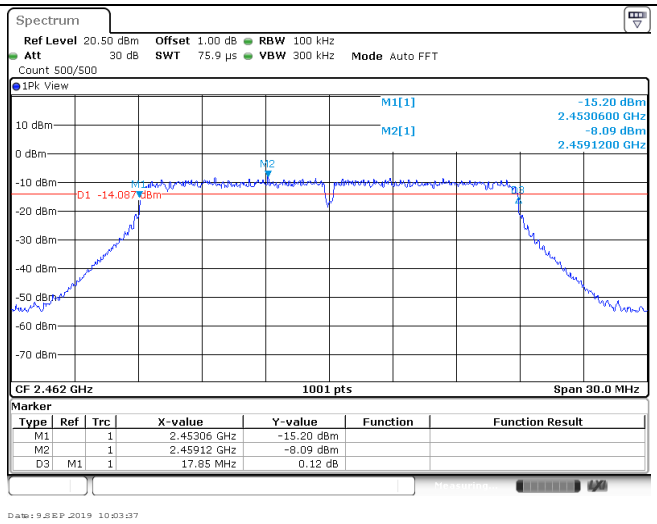
☒ **Passed** ☐ **Not Applicable**

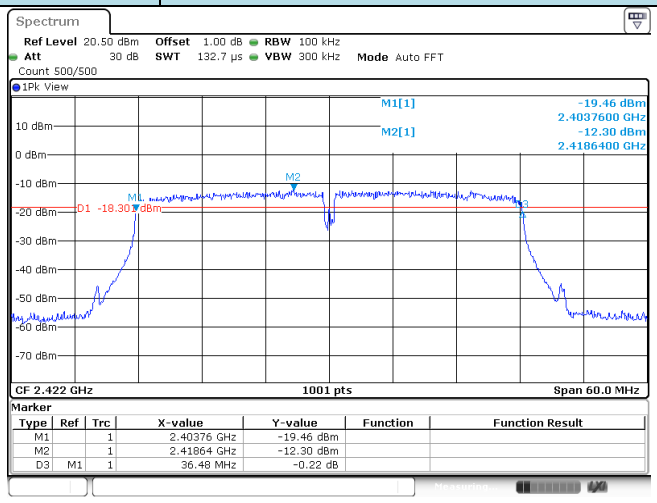
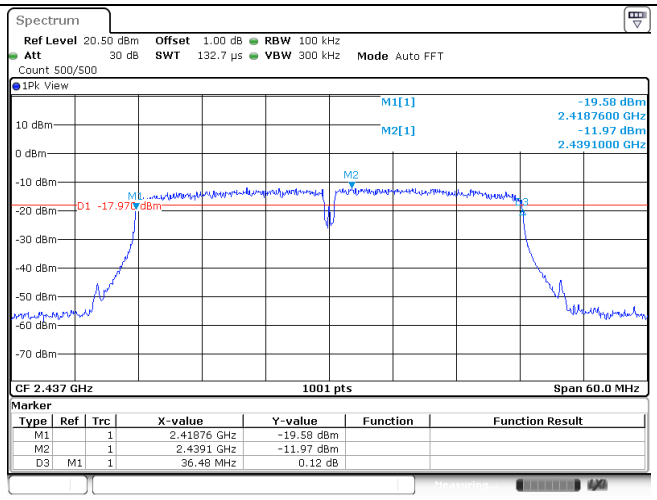
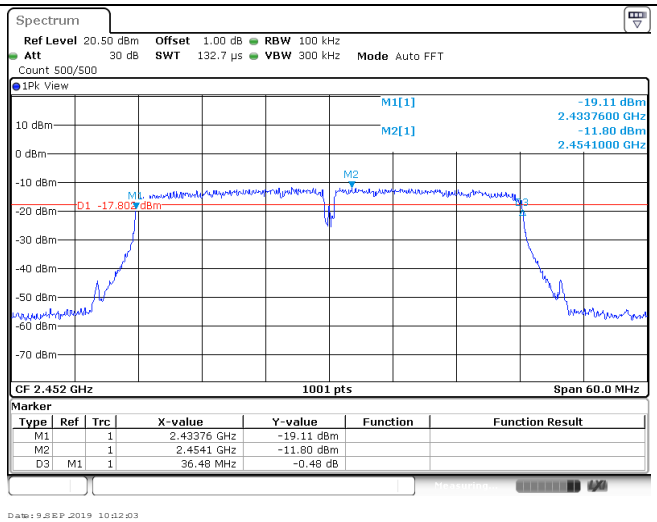
Type	Channel	6dB Bandwidth (MHz)	Limit (kHz)	Result
802.11b	01	10.11	≥500	Pass
	06	10.11		
	11	10.11		
802.11g	01	16.65	≥500	Pass
	06	16.65		
	11	16.62		
802.11n(HT20)	01	17.85	≥500	Pass
	06	17.82		
	11	17.85		
802.11n(HT40)	03	36.48	≥500	Pass
	06	36.48		
	09	36.48		

Test plot as follows:

Type:	802.11b
CH01	
CH06	
CH11	

Type:	802.11g
CH01	
CH06	
CH11	

Type:	802.11n(HT20)
CH01	
CH06	
CH11	

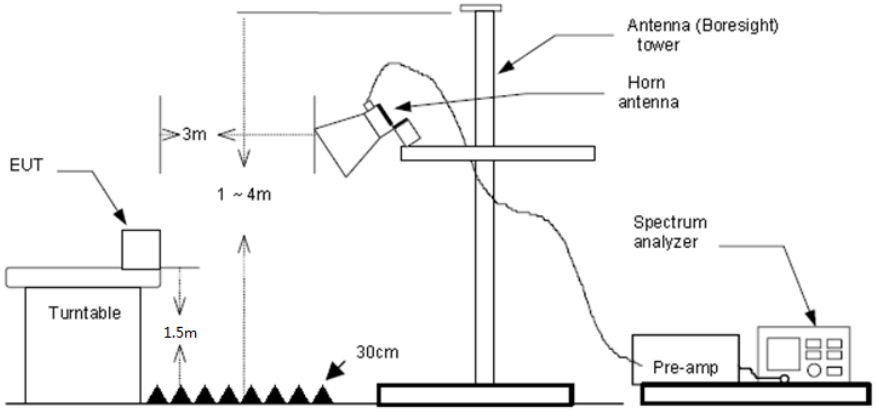
Type:	802.11n(HT40)
CH03	
CH06	
CH09	

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 waspositioned 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. Thisis repeated for both horizontal and vertical polarization of the antenna. In order to find themaximum 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			
Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity	Detector
2310.000	13.44	35.78	49.22	54.00	4.78	Horizontal	AV
2310.000	21.90	35.78	57.68	74.00	16.32	Horizontal	PK
2390.009	22.21	35.50	57.71	74.00	16.29	Horizontal	PK
2390.009	15.12	35.50	50.62	54.00	3.38	Horizontal	AV
2310.000	22.34	35.78	58.12	74.00	15.88	Vertical	PK
2310.000	14.13	35.78	49.91	54.00	4.09	Vertical	AV
2390.009	21.32	35.50	56.82	74.00	17.18	Vertical	PK
2390.009	14.98	35.50	50.48	54.00	3.52	Vertical	AV

802.11b				CH11			
Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity	Detector
2483.504	20.61	35.31	55.92	74.00	18.08	Horizontal	PK
2483.504	14.62	35.31	49.93	54.00	4.07	Horizontal	AV
2500.000	14.95	35.28	50.23	54.00	3.77	Horizontal	AV
2500.000	21.53	35.28	56.81	74.00	17.19	Horizontal	PK
2483.504	21.16	35.31	56.47	74.00	17.53	Vertical	PK
2483.504	15.22	35.31	50.53	54.00	3.47	Vertical	AV
2500.000	21.19	35.28	56.47	74.00	17.53	Vertical	PK
2500.000	14.11	35.28	49.39	54.00	4.61	Vertical	AV

802.11g				CH01			
Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity	Detector
2310.000	21.45	35.78	57.23	74.00	16.77	Horizontal	PK
2310.000	13.83	35.78	49.61	54.00	4.39	Horizontal	AV
2390.009	21.18	35.50	56.68	74.00	17.32	Horizontal	PK
2390.009	14.57	35.50	50.07	54.00	3.93	Horizontal	AV
2310.000	22.99	35.78	58.77	74.00	15.23	Vertical	PK
2310.000	14.17	35.78	49.95	54.00	4.05	Vertical	AV
2390.009	22.36	35.50	57.86	74.00	16.14	Vertical	PK
2390.009	14.87	35.50	50.37	54.00	3.63	Vertical	AV

802.11g				CH11			
Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity	Detector
2483.504	21.47	35.31	56.78	74.00	17.22	Horizontal	PK
2483.504	13.68	35.31	48.99	54.00	5.01	Horizontal	AV
2500.000	21.84	35.28	57.12	74.00	16.88	Horizontal	PK
2500.000	15.55	35.28	50.83	54.00	3.17	Horizontal	AV
2483.504	15.27	35.31	50.58	54.00	3.42	Vertical	AV
2483.504	21.27	35.31	56.58	74.00	17.42	Vertical	PK
2500.000	21.61	35.28	56.89	74.00	17.11	Vertical	PK
2500.000	14.62	35.28	49.90	54.00	4.10	Vertical	AV

802.11n(HT20)				CH01			
Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity	Detector
2310.000	22.20	35.78	57.98	74.00	16.02	Horizontal	PK
2310.000	15.18	35.78	50.96	54.00	3.04	Horizontal	AV
2390.009	20.67	35.50	56.17	74.00	17.83	Horizontal	PK
2390.009	14.37	35.50	49.87	54.00	4.13	Horizontal	AV
2310.000	21.28	35.78	57.06	74.00	16.94	Vertical	PK
2310.000	15.15	35.78	50.93	54.00	3.07	Vertical	AV
2390.009	22.84	35.50	58.34	74.00	15.66	Vertical	PK
2390.009	14.42	35.50	49.92	54.00	4.08	Vertical	AV

802.11n(HT20)				CH11			
Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity	Detector
2483.504	20.17	35.31	55.48	74.00	18.52	Horizontal	PK
2483.504	13.88	35.31	49.19	54.00	4.81	Horizontal	AV
2500.000	21.38	35.28	56.66	74.00	17.34	Horizontal	PK
2500.000	14.40	35.28	49.68	54.00	4.32	Horizontal	AV
2483.504	20.94	35.31	56.25	74.00	17.75	Vertical	PK
2483.504	14.87	35.31	50.18	54.00	3.82	Vertical	AV
2500.000	21.94	35.28	57.22	74.00	16.78	Vertical	PK
2500.000	14.36	35.28	49.64	54.00	4.36	Vertical	AV

802.11n(HT40)				CH03			
Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity	Detector
2310.000	14.27	35.78	50.05	54.00	3.95	Horizontal	AV
2310.000	16.88	35.78	52.66	74.00	21.34	Horizontal	PK
2390.013	15.27	35.50	50.77	74.00	23.23	Horizontal	PK
2390.013	12.98	35.50	48.48	54.00	5.52	Horizontal	AV
2310.000	16.23	35.78	52.01	74.00	21.99	Vertical	PK
2310.000	14.79	35.78	50.57	54.00	3.43	Vertical	AV
2390.013	15.50	35.50	51.00	54.00	3.00	Vertical	AV
2390.013	16.42	35.50	51.92	74.00	22.08	Vertical	PK

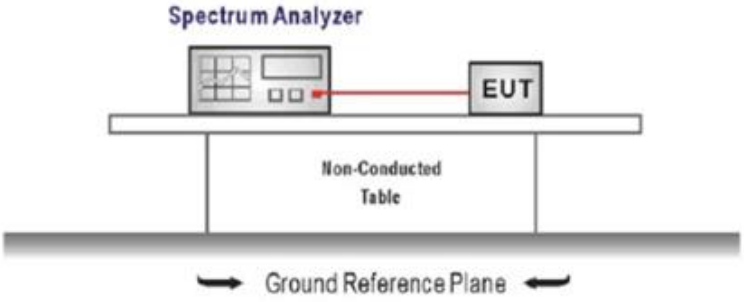
802.11n(HT40)				CH09			
Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity	Detector
2483.503	15.06	35.31	50.37	74.00	23.63	Horizontal	PK
2483.503	14.50	35.31	49.81	54.00	4.19	Horizontal	AV
2500.000	11.95	35.28	47.23	54.00	6.77	Horizontal	AV
2500.000	14.68	35.28	49.96	74.00	24.04	Horizontal	PK
2483.503	15.64	35.31	50.95	74.00	23.05	Vertical	PK
2483.503	14.57	35.31	49.88	54.00	4.12	Vertical	AV
2500.000	15.24	35.28	50.52	74.00	23.48	Vertical	PK
2500.000	14.55	35.28	49.83	54.00	4.17	Vertical	AV

5.7. Band edge and Spurious Emissions (conducted)

LIMIT

FCC CFR Title 47 Part 15 Subpart C Section15.247 (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 ≥ 3 x 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

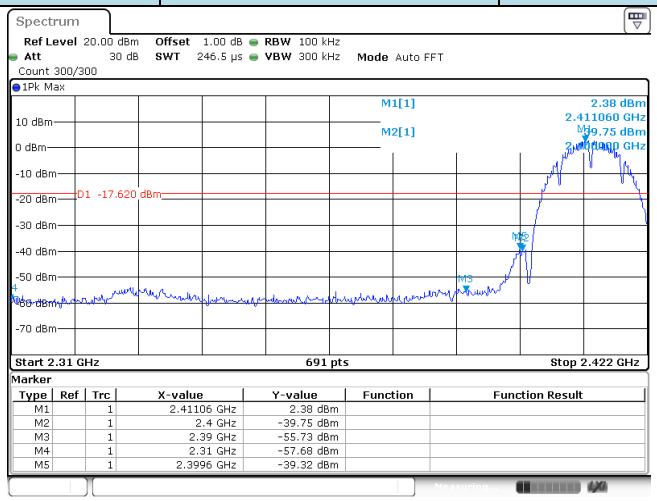
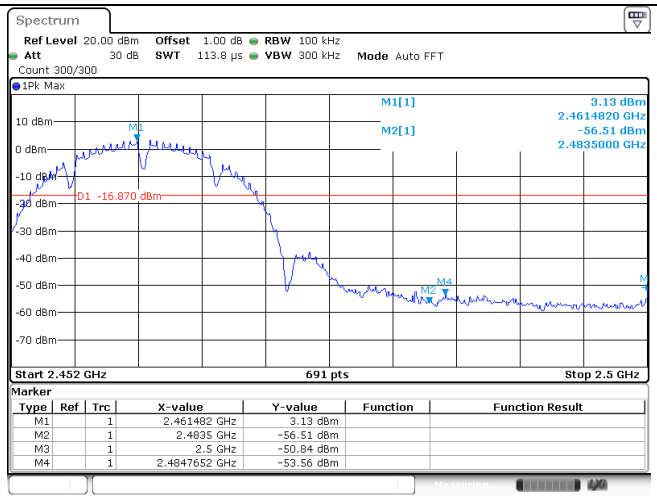
   Note: the channel found to contain the maximum PSD level can be used to establish the reference level.
3. Emission level measurement
   Set the center frequency and span to encompass frequency range to be measured
   RBW = 100 kHz, VBW ≥ 3 x RBW
   Detector = peak, Sweep time = auto couple, Trace mode = 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.

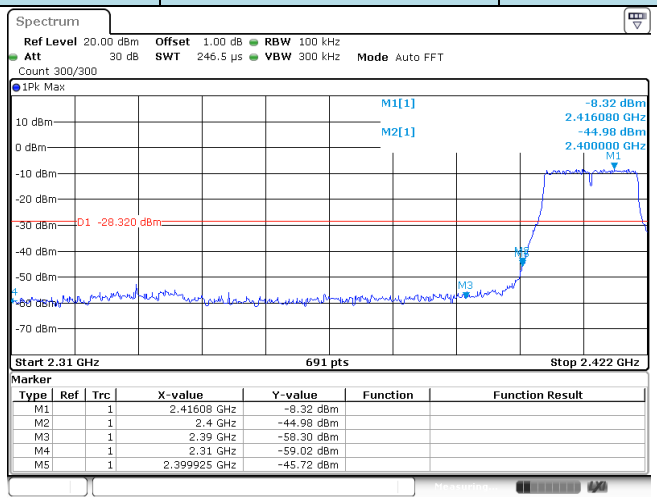
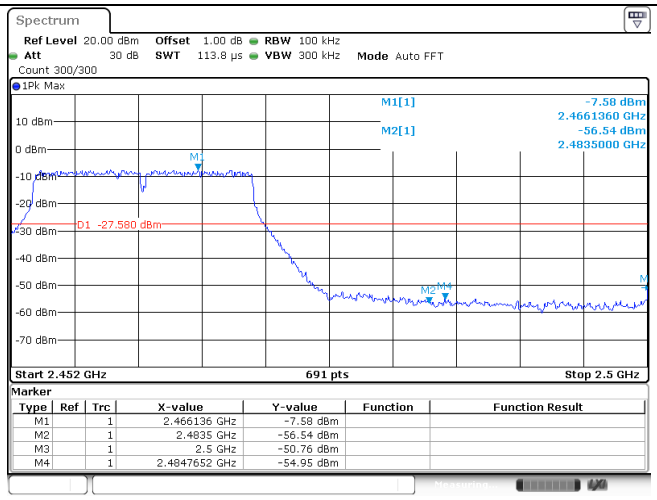
TEST MODE:

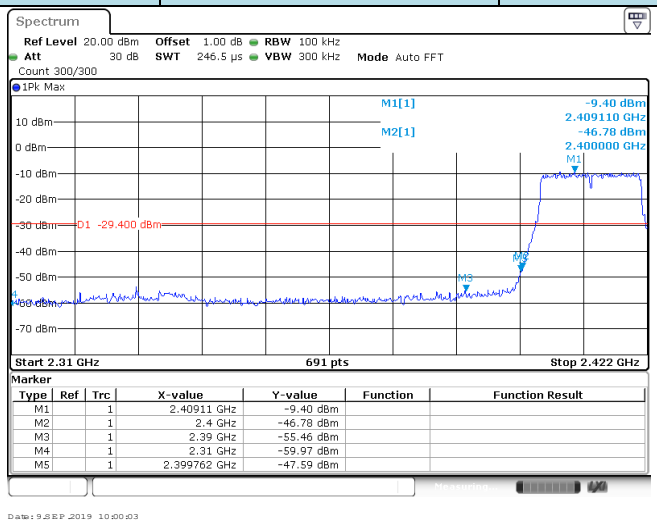
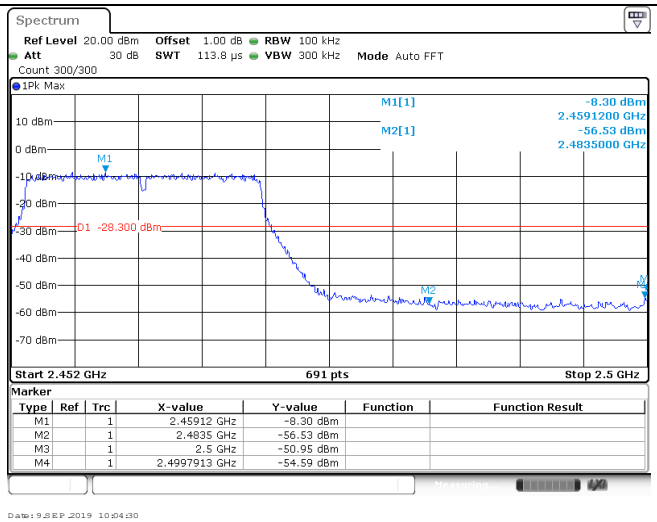
Please refer to the clause 3.3

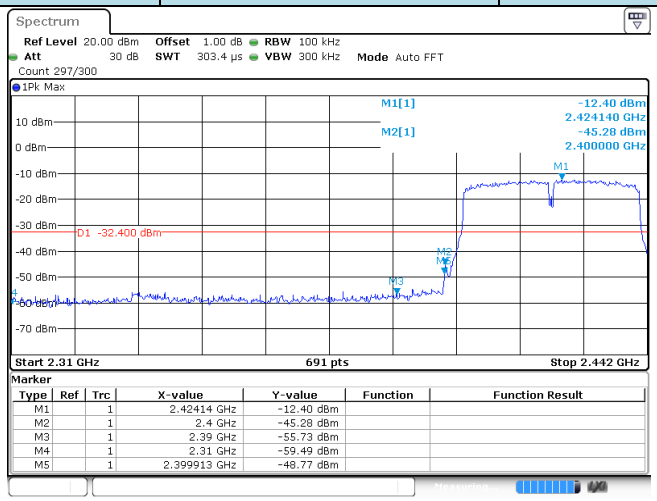
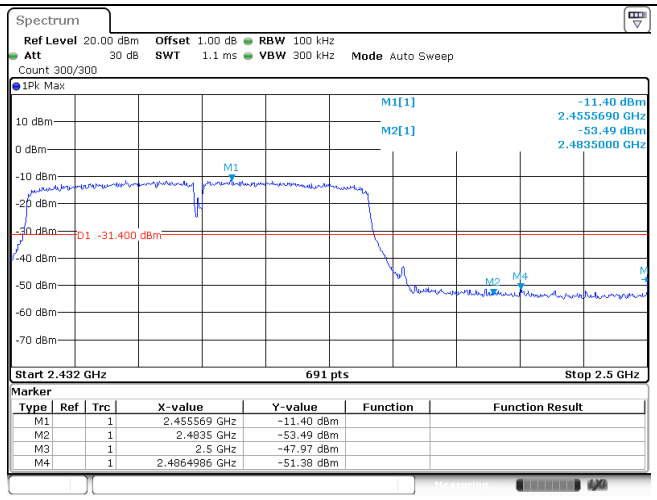
TEST RESULTS

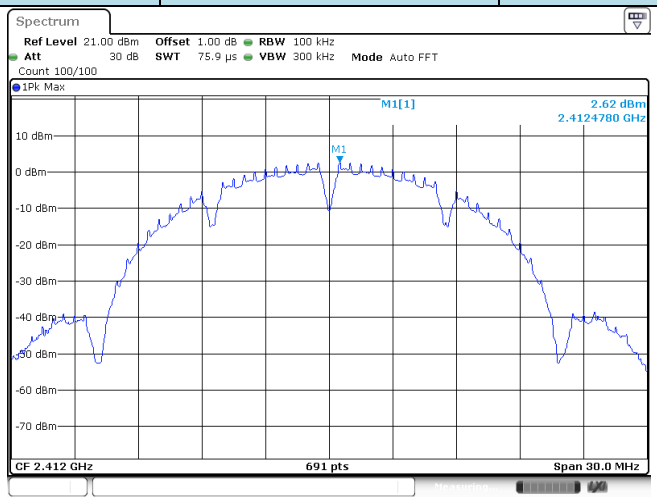
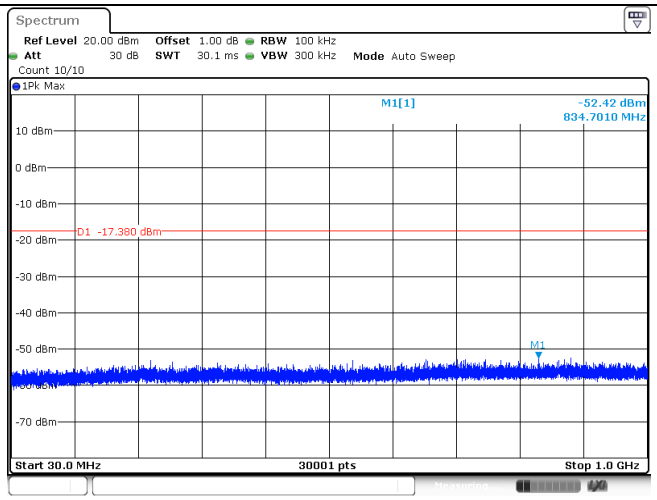
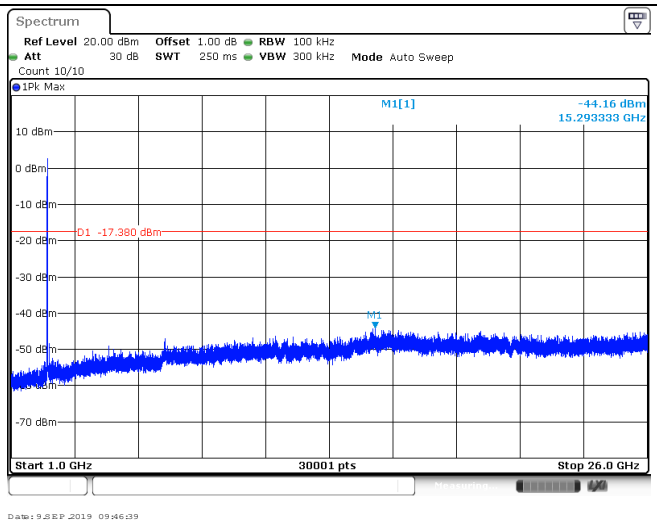
☒ **Passed** ☐ **Not Applicable**

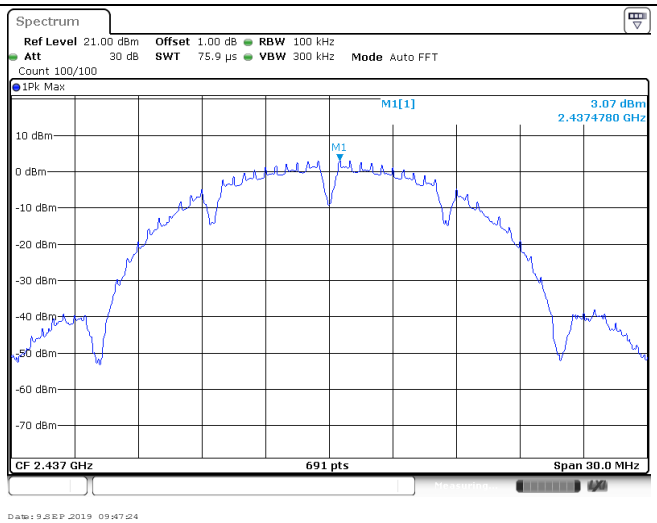
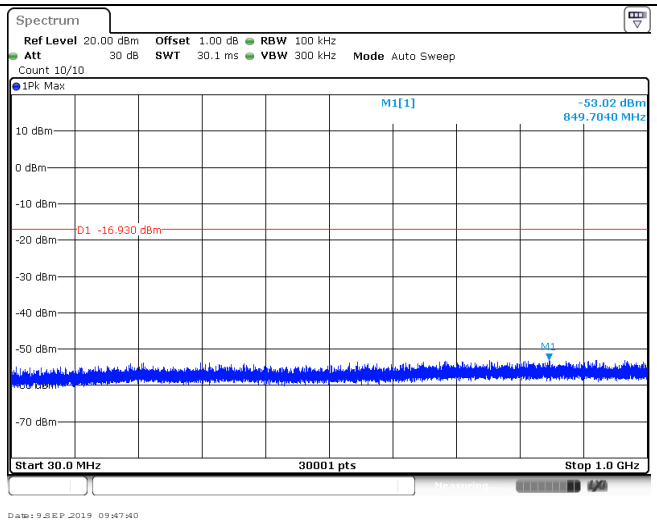
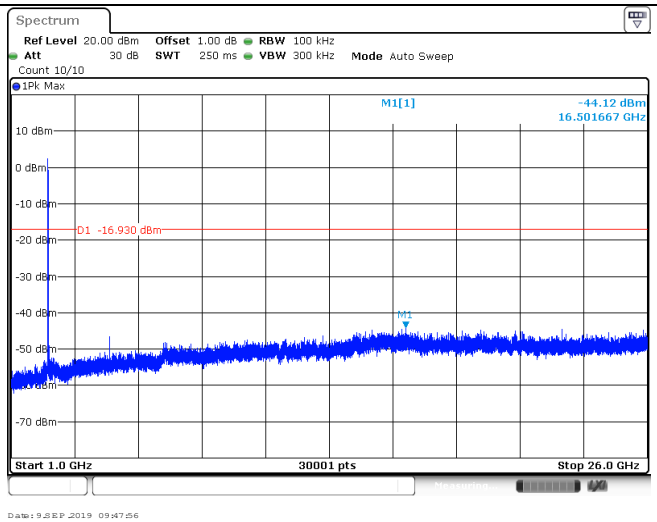
Test Item:	Bandedge	Type:	802.11b
CH01			
CH11			

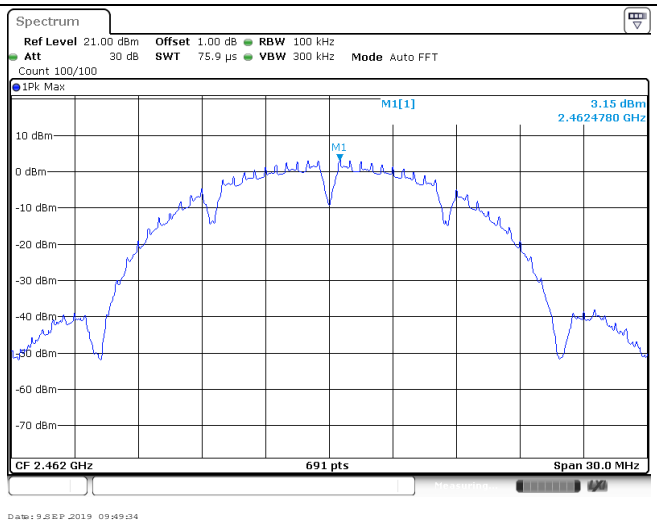
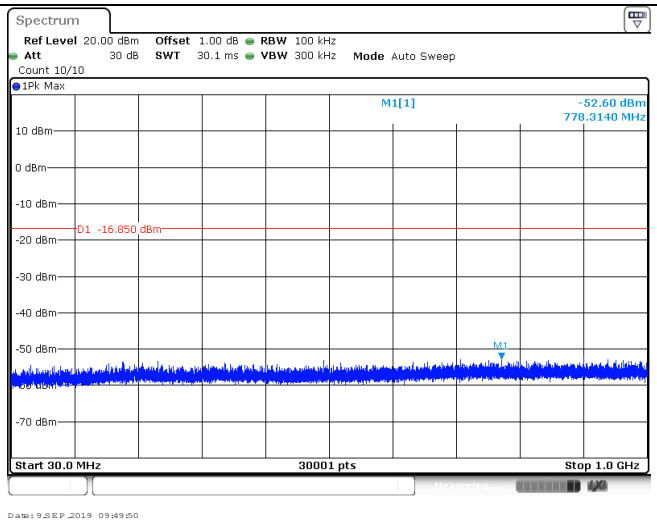
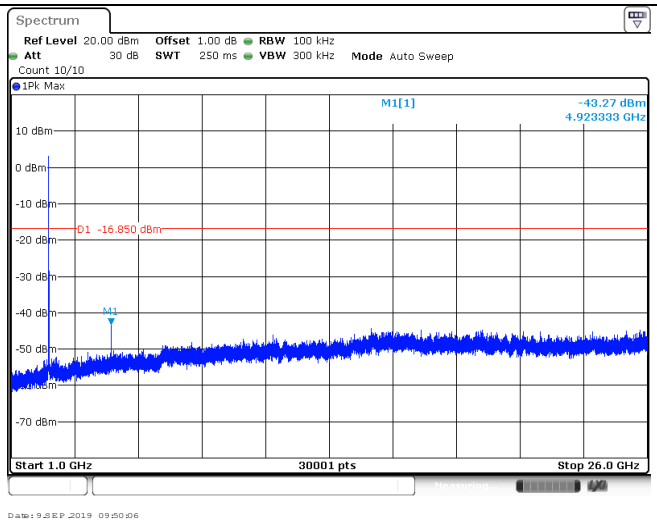
Test Item:	Bandedge	Type:	802.11g
CH01			
CH11			

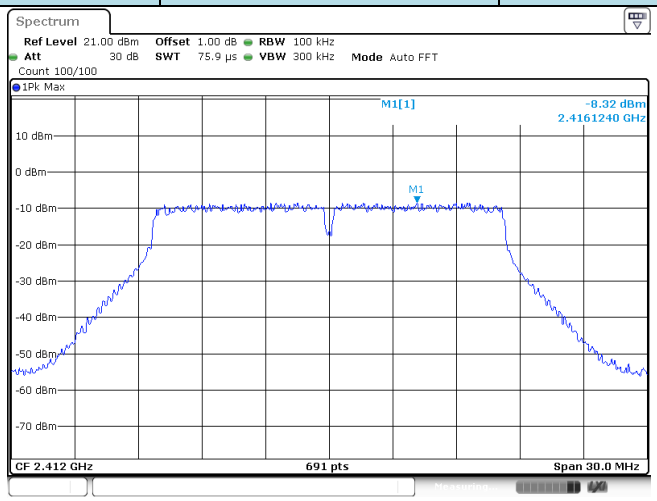
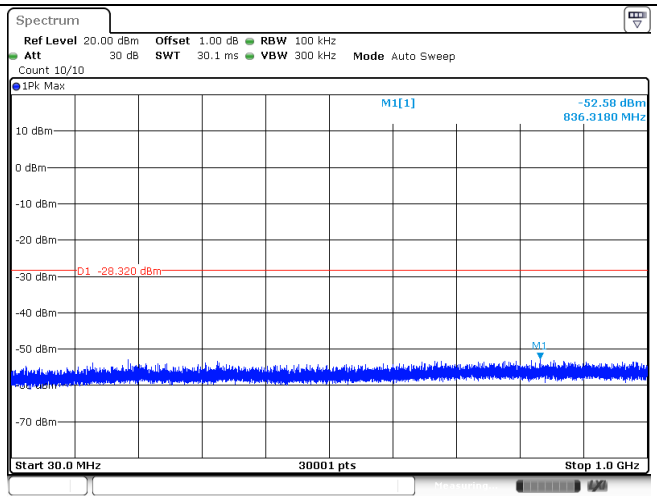
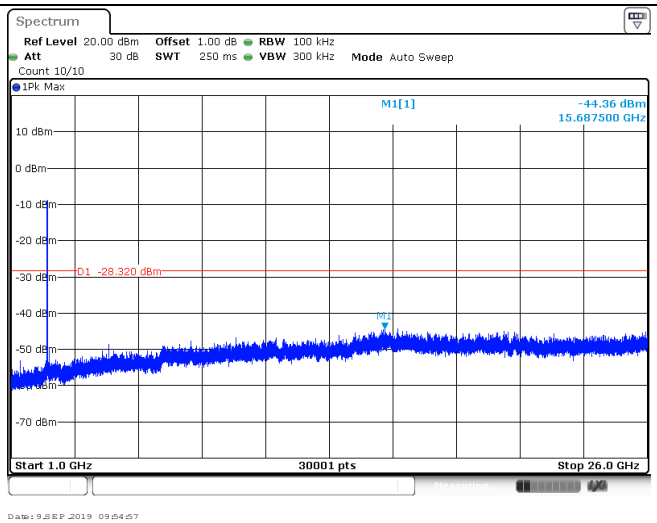
Test Item:	Bandedge	Type:	802.11n(HT20)
CH01			
CH11			

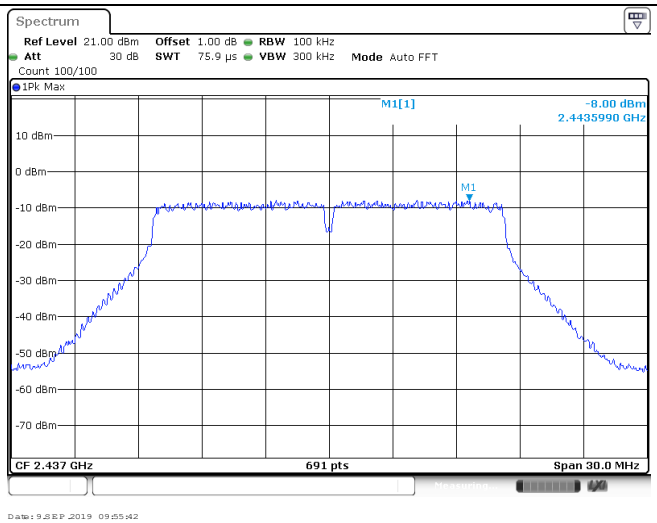
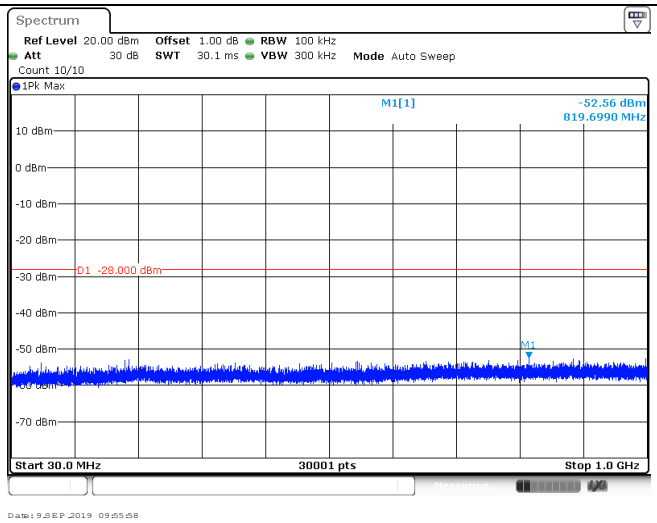
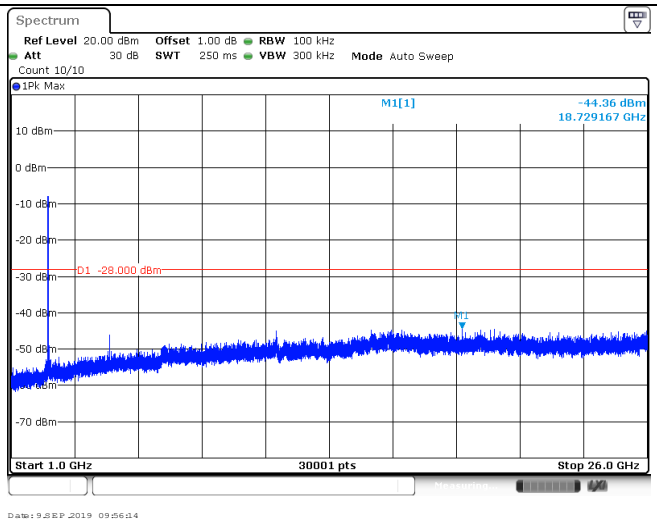
Test Item:	Bandedge	Type:	802.11n(HT40)
CH03			
CH09			

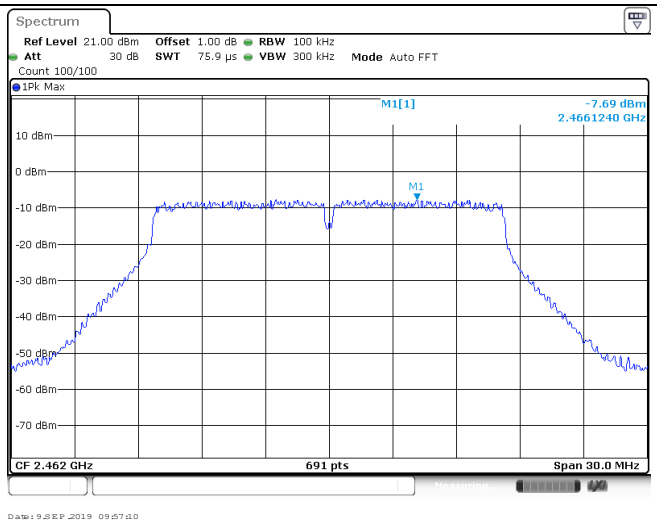
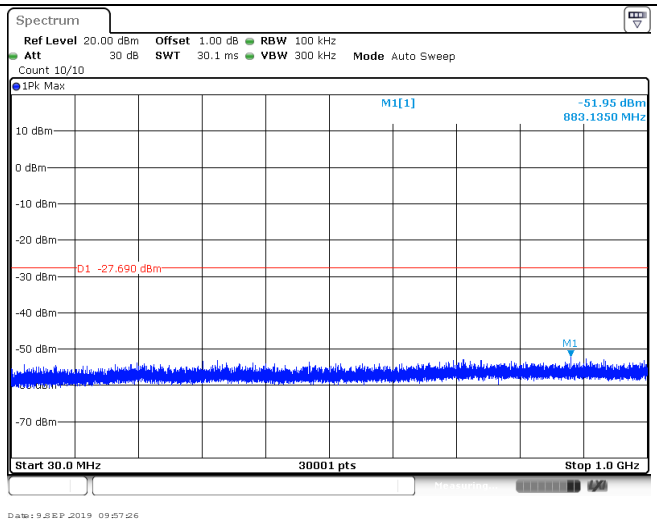
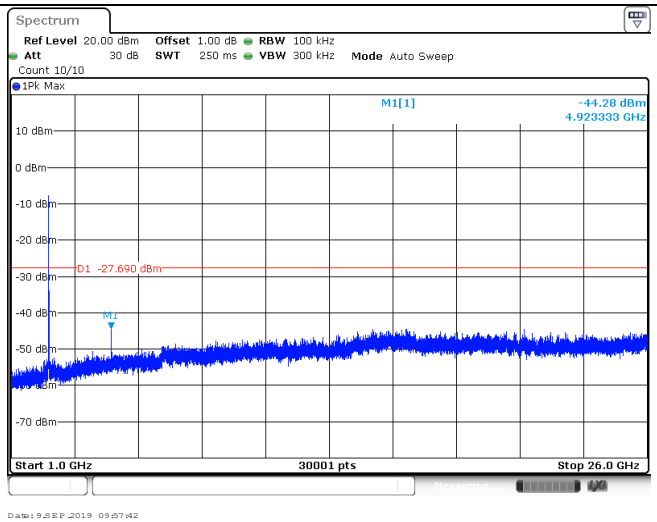
Test Item:	SE	Type:	802.11b
CH01 Reference level			
CH01 30MHz~1000MHz			
CH01 1GHz~26GHz			

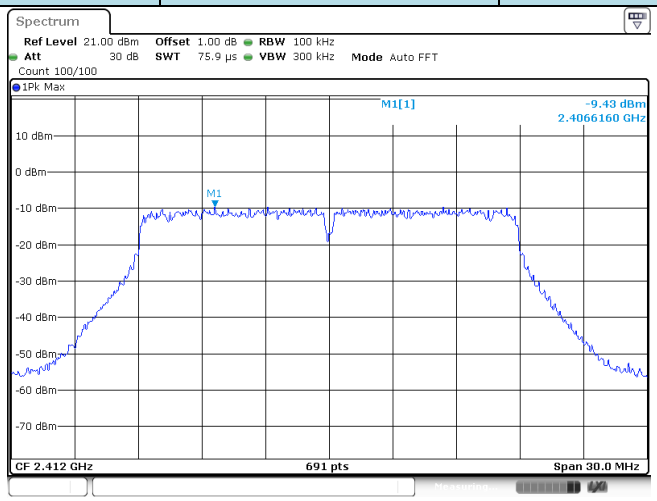
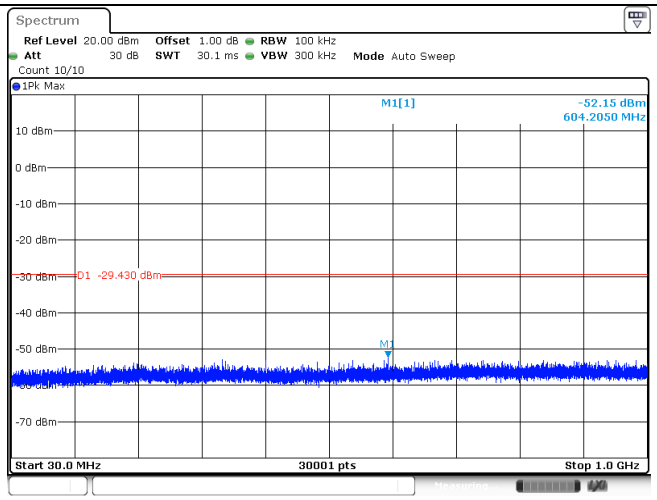
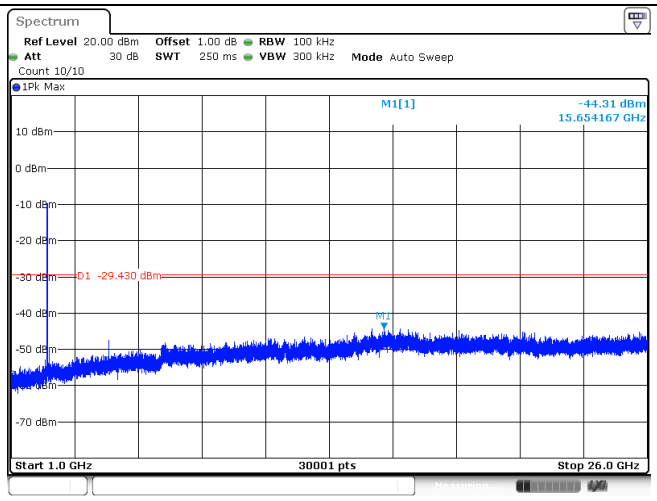
CH06 Reference level	
CH06 30MHz~1000MHz	
CH06 1GHz~26GHz	

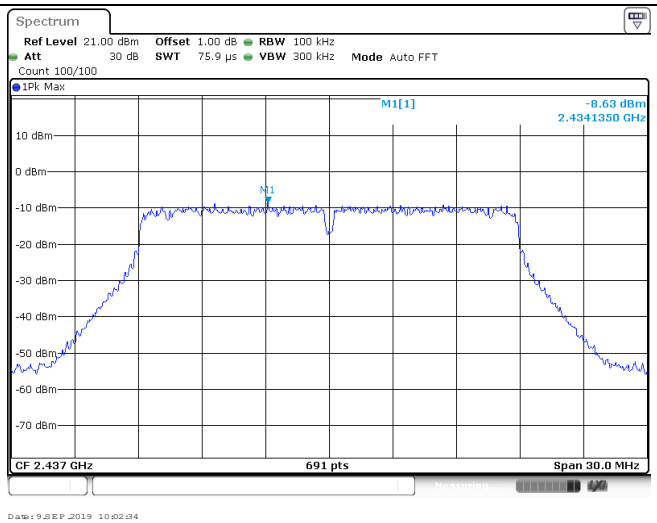
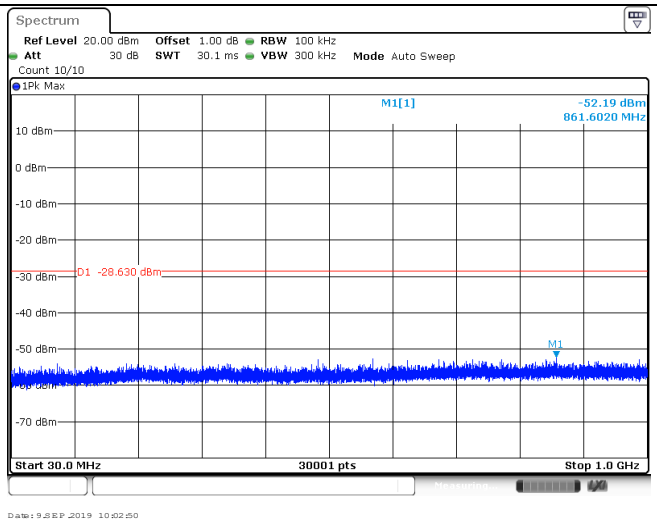
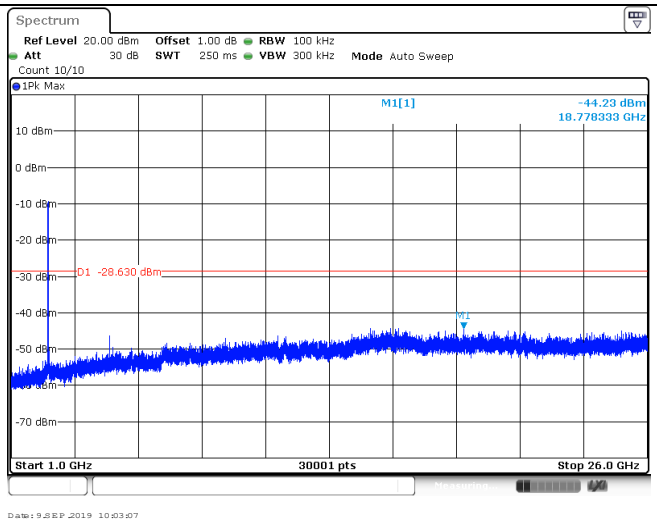
CH11 Reference level	
CH11 30MHz~1000MHz	
CH11 1GHz~26GHz	

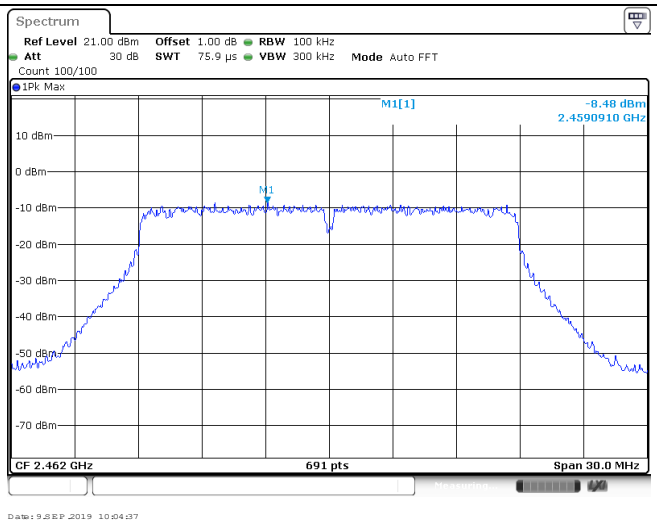
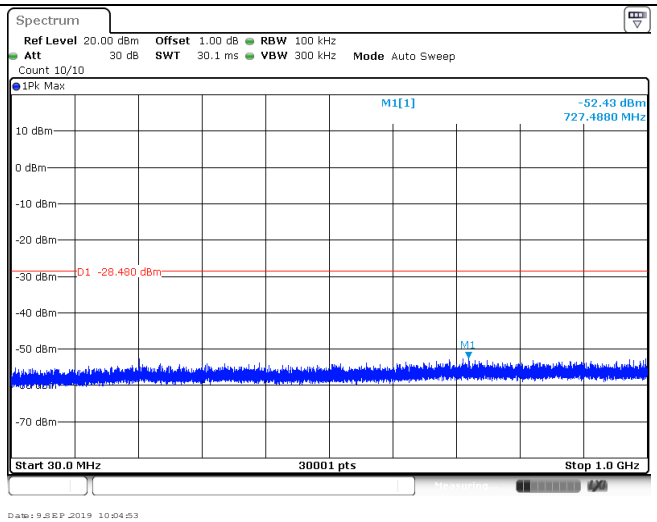
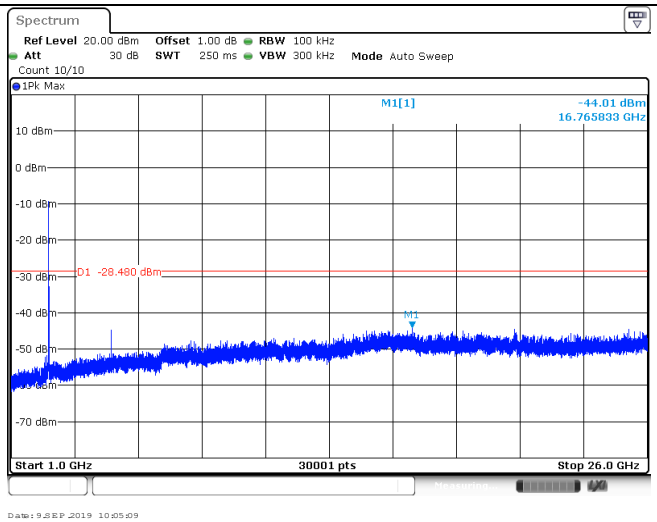
Test Item:	SE	Type:	802.11g
CH01 Reference level			
CH01 30MHz~1000MHz			
CH01 1GHz~26GHz			

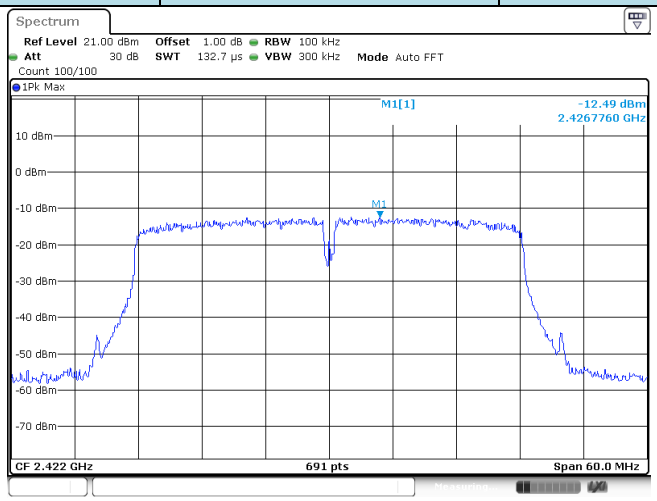
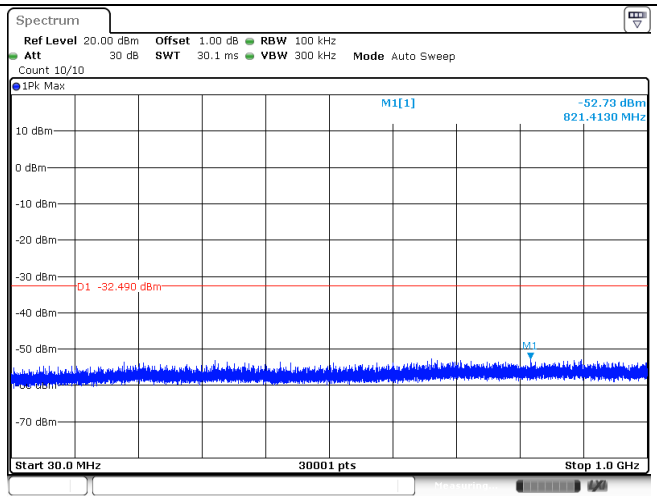
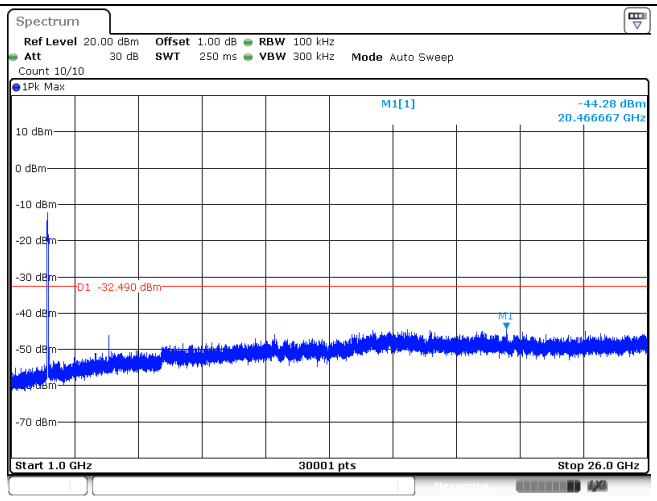
CH06 Reference level	
CH06 30MHz~1000MHz	
CH06 1GHz~26GHz	

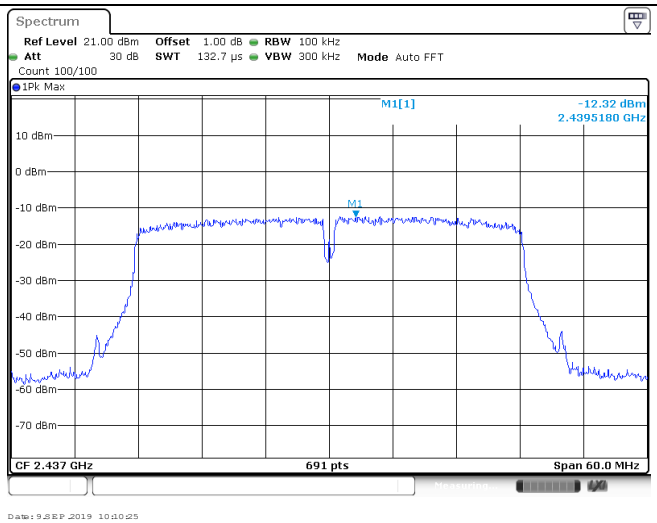
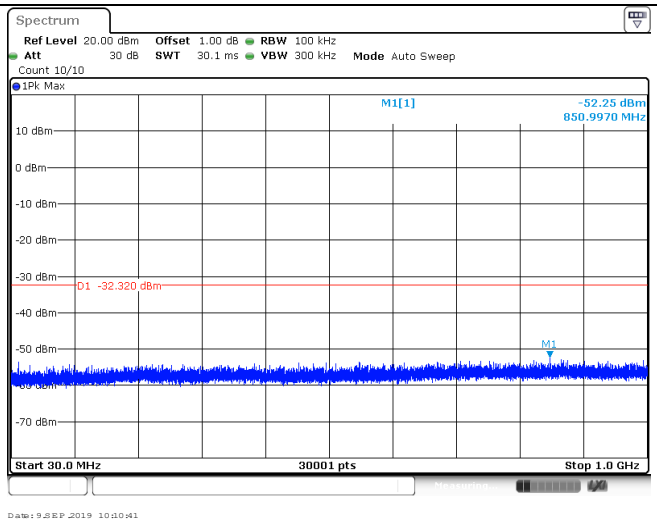
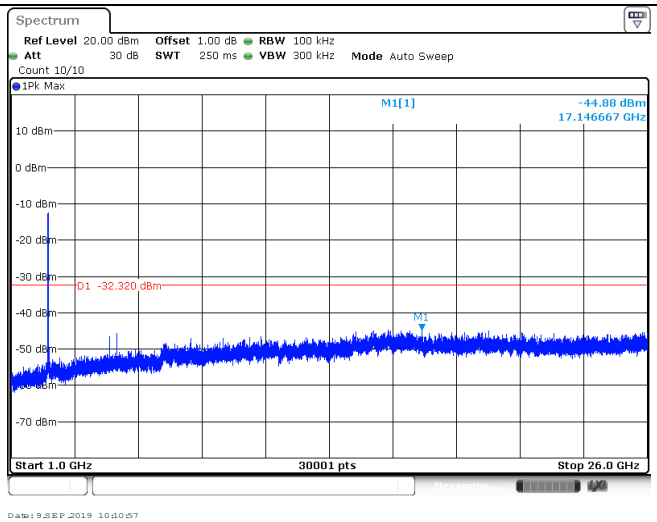
CH11 Reference level	
CH11 30MHz~1000MHz	
CH11 1GHz~26GHz	

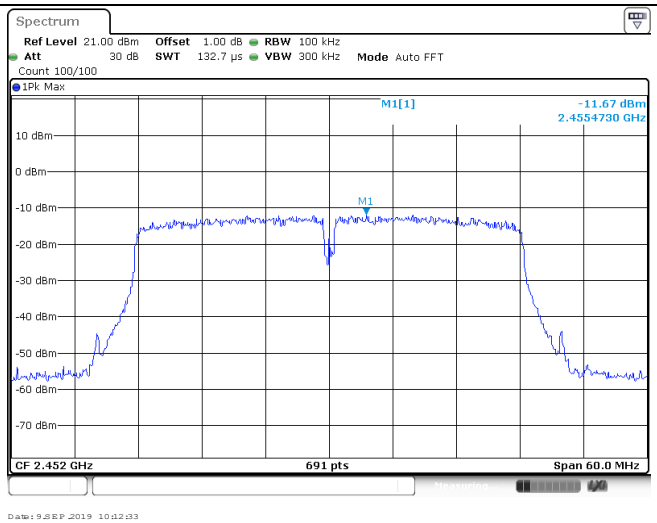
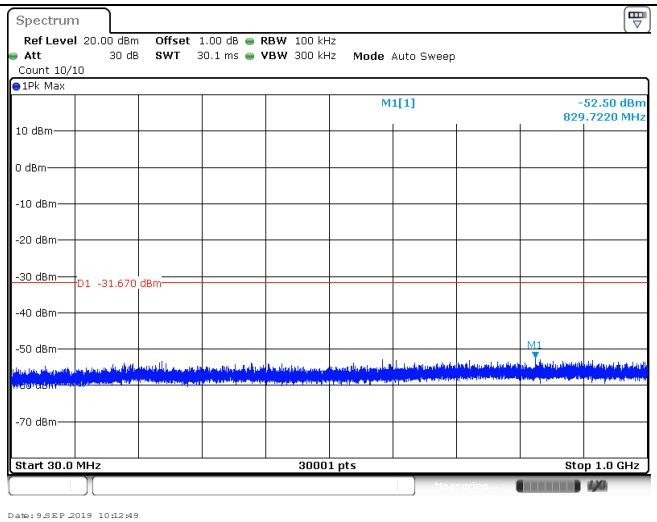
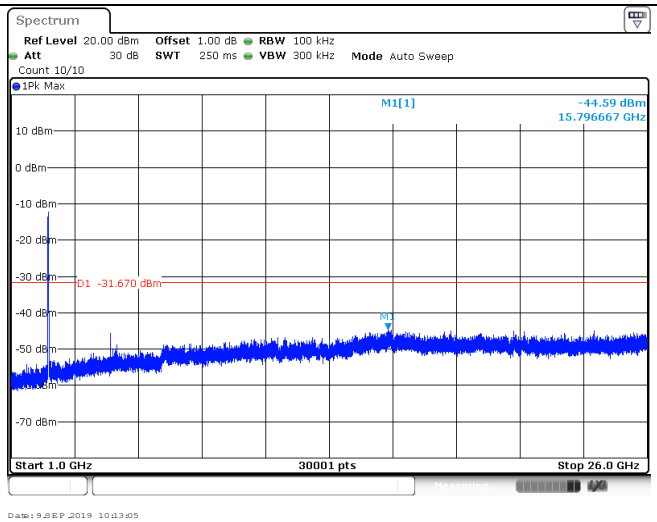
Test Item:	SE	Type:	802.11n(HT20)
CH01 Reference level			
CH01 30MHz~1000MHz			
CH01 1GHz~26GHz			

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			
CH03 30MHz~1000MHz			
CH03 1GHz~26GHz			

CH06 Reference level	
CH06 30MHz~1000MHz	
CH06 1GHz~26GHz	

CH09 Reference level	
CH09 30MHz~1000MHz	
CH09 1GHz~26GHz	

5.8. Spurious Emissions (radiated)

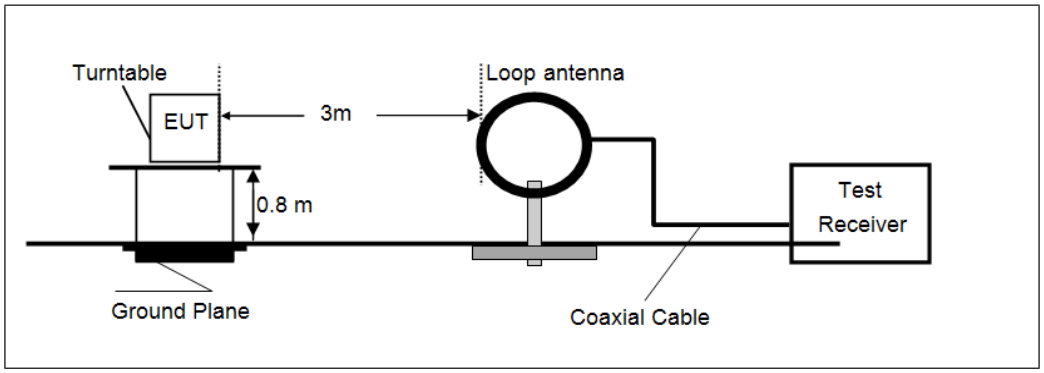
LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.209

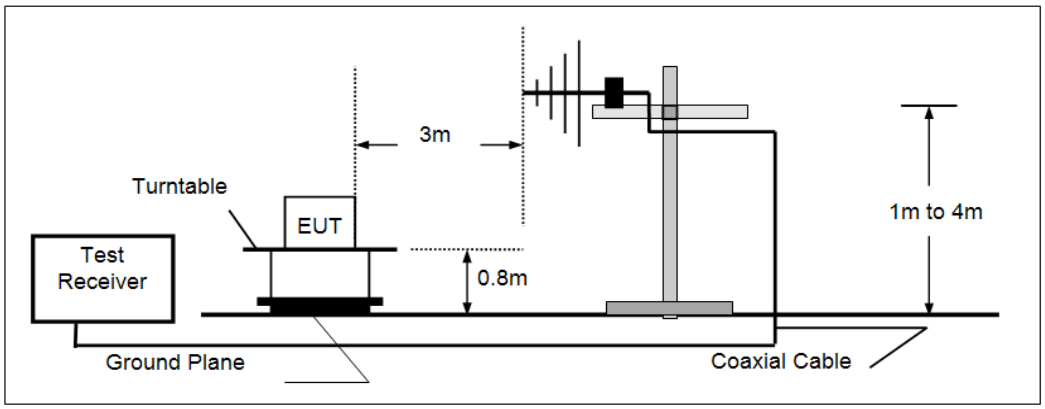
Frequency	Limit (dBuV/m @3m)	Value
30MHz-88MHz	40.00	Quasi-peak
88MHz-216MHz	43.50	Quasi-peak
216MHz-960MHz	46.00	Quasi-peak
960MHz-1GHz	54.00	Quasi-peak
Above 1GHz	54.00	Average
	74.00	Peak

TEST CONFIGURATION

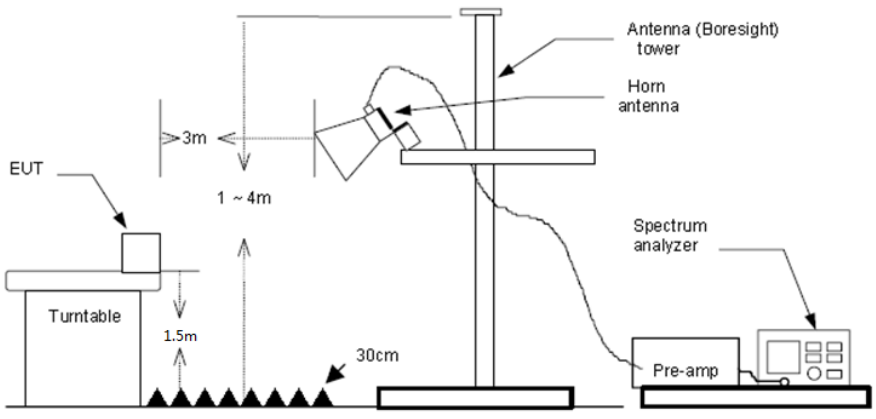
➢ 9kHz ~30MHz



➢ 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 10^{th} 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**

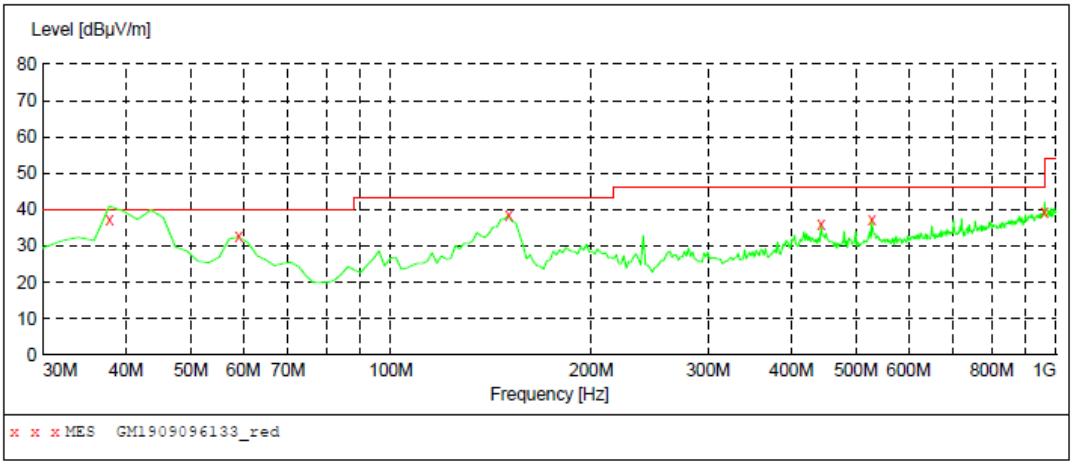
Note:
1) Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2) The emission levels of other frequencies are very lower than the limit and not show in test report.

- **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

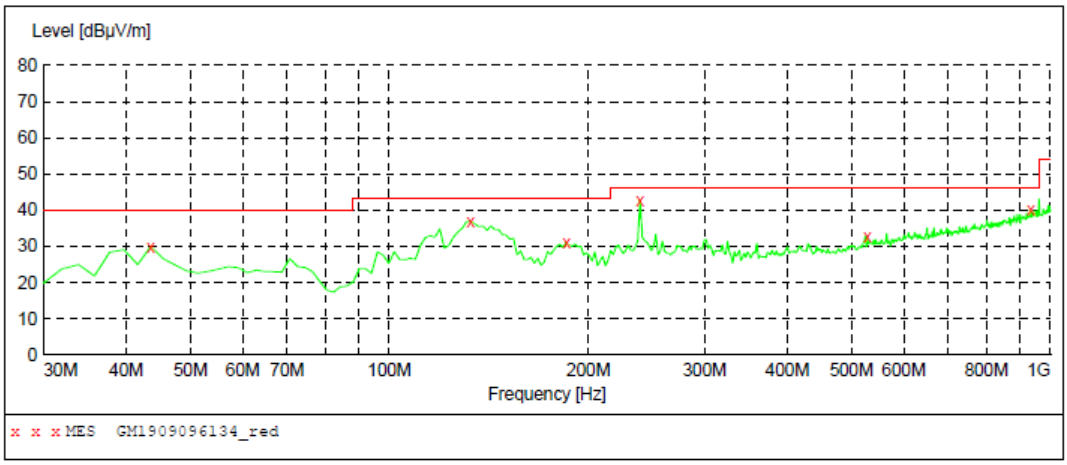


MEASUREMENT RESULT: "GM1909096133_red"

9/10/2019 3:52AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
37.760000	37.00	-6.4	40.0	3.0	QP	100.0	104.00	VERTICAL
59.100000	32.50	-5.1	40.0	7.5	QP	100.0	62.00	VERTICAL
150.280000	38.40	-9.4	43.5	5.1	QP	100.0	73.00	VERTICAL
443.220000	35.80	1.4	46.0	10.2	QP	100.0	281.00	VERTICAL
528.580000	37.40	3.5	46.0	8.6	QP	100.0	169.00	VERTICAL
959.260000	39.20	12.4	46.0	6.8	QP	100.0	360.00	VERTICAL

Polarization:	Horizontal



MEASUREMENT RESULT: "GM1909096134_red"

9/10/2019 4:04AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
43.580000	30.00	-4.7	40.0	10.0	QP	300.0	213.00	HORIZONTAL
132.820000	37.00	-9.2	43.5	6.5	QP	300.0	106.00	HORIZONTAL
185.200000	31.10	-7.2	43.5	12.4	QP	100.0	325.00	HORIZONTAL
239.520000	42.70	-4.5	46.0	3.3	QP	100.0	106.00	HORIZONTAL
528.580000	32.90	3.5	46.0	13.1	QP	300.0	189.00	HORIZONTAL
934.040000	40.10	11.9	46.0	5.9	QP	100.0	148.00	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
1220.312	35.95	-5.78	30.17	74.00	43.83	Horizontal	PK
3026.875	35.27	0.00	35.27	74.00	38.73	Horizontal	PK
3896.375	33.28	2.65	35.93	74.00	38.07	Horizontal	PK
4823.156	31.67	7.08	38.75	74.00	35.25	Horizontal	PK
1271.718	35.86	-5.64	30.22	74.00	43.78	Vertical	PK
1732.906	35.93	-6.00	29.93	74.00	44.07	Vertical	PK
3332.375	36.66	-0.29	36.37	74.00	37.63	Vertical	PK
4823.156	35.30	7.08	42.38	74.00	31.62	Vertical	PK

802.11b	CH06						
Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity	Detector
1158.625	35.85	-6.27	29.58	74.00	44.42	Horizontal	PK
3333.843	35.73	-0.28	35.45	74.00	38.55	Horizontal	PK
4873.093	32.41	7.15	39.56	74.00	34.44	Horizontal	PK
6653.218	31.01	13.32	44.33	74.00	29.67	Horizontal	PK
1185.062	36.79	-5.99	30.80	74.00	43.20	Vertical	PK
1737.312	34.68	-5.99	28.69	74.00	45.31	Vertical	PK
3332.375	36.53	-0.29	36.24	74.00	37.76	Vertical	PK
4874.562	34.48	7.15	41.63	74.00	32.37	Vertical	PK

802.11b	CH11						
Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity	Detector
1192.406	35.93	-5.91	30.02	74.00	43.98	Horizontal	PK
3679.000	35.11	1.56	36.67	74.00	37.33	Horizontal	PK
4924.500	33.29	7.34	40.63	74.00	33.37	Horizontal	PK
6635.593	30.60	13.26	43.86	74.00	30.14	Horizontal	PK
1193.875	35.47	-5.89	29.58	74.00	44.42	Vertical	PK
3332.375	38.27	-0.29	37.98	74.00	36.02	Vertical	PK
4924.500	37.50	7.34	44.84	74.00	29.16	Vertical	PK
6711.968	31.54	13.44	44.98	74.00	29.02	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
1174.781	36.32	-6.10	30.22	74.00	43.78	Horizontal	PK
3207.531	35.33	0.75	36.08	74.00	37.92	Horizontal	PK
4823.156	32.01	7.08	39.09	74.00	34.91	Horizontal	PK
7500.687	31.92	16.41	48.33	74.00	25.67	Horizontal	PK
1235.000	35.21	-5.74	29.47	74.00	44.53	Vertical	PK
3332.375	36.51	-0.29	36.22	74.00	37.78	Vertical	PK
4823.156	37.91	7.08	44.99	74.00	29.01	Vertical	PK
6604.750	31.63	13.17	44.80	74.00	29.20	Vertical	PK

802.11g				CH06			
Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity	Detector
1207.093	35.79	-5.81	29.98	74.00	44.02	Horizontal	PK
3364.687	35.30	-0.22	35.08	74.00	38.92	Horizontal	PK
4583.750	32.64	5.70	38.34	74.00	35.66	Horizontal	PK
6562.156	31.39	12.91	44.30	74.00	29.70	Horizontal	PK
1207.093	35.88	-5.81	30.07	74.00	43.93	Vertical	PK
3332.375	37.27	-0.29	36.98	74.00	37.02	Vertical	PK
4873.093	35.81	7.15	42.96	74.00	31.04	Vertical	PK
6688.468	31.78	13.43	45.21	74.00	28.79	Vertical	PK

802.11g				CH11			
Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity	Detector
1227.656	36.07	-5.76	30.31	74.00	43.69	Horizontal	PK
3504.218	37.69	1.07	38.76	74.00	35.24	Horizontal	PK
4924.500	32.10	7.34	39.44	74.00	34.56	Horizontal	PK
7040.968	31.35	15.28	46.63	74.00	27.37	Horizontal	PK
1270.250	35.41	-5.65	29.76	74.00	44.24	Vertical	PK
3332.375	36.93	-0.29	36.64	74.00	37.36	Vertical	PK
4924.500	39.20	7.34	46.54	74.00	27.46	Vertical	PK
6707.562	31.01	13.45	44.46	74.00	29.54	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
1165.968	36.15	-6.19	29.96	74.00	44.04	Horizontal	PK
3319.156	36.84	-0.31	36.53	74.00	37.47	Horizontal	PK
4823.156	32.06	7.08	39.14	74.00	34.86	Horizontal	PK
6673.781	31.45	13.39	44.84	74.00	29.16	Horizontal	PK
1243.812	35.57	-5.72	29.85	74.00	44.15	Vertical	PK
3332.375	36.68	-0.29	36.39	74.00	37.61	Vertical	PK
4823.156	35.72	7.08	42.80	74.00	31.20	Vertical	PK
6833.875	31.49	13.50	44.99	74.00	29.01	Vertical	PK
802.11n(HT20)				CH06			
Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity	Detector
1220.312	35.40	-5.78	29.62	74.00	44.38	Horizontal	PK
3332.375	35.82	-0.29	35.53	74.00	38.47	Horizontal	PK
4948.000	31.82	7.50	39.32	74.00	34.68	Horizontal	PK
6694.343	31.16	13.45	44.61	74.00	29.39	Horizontal	PK
1189.468	36.27	-5.94	30.33	74.00	43.67	Vertical	PK
3379.375	36.80	-0.19	36.61	74.00	37.39	Vertical	PK
4873.093	36.04	7.15	43.19	74.00	30.81	Vertical	PK
7020.406	31.64	15.22	46.86	74.00	27.14	Vertical	PK
802.11n(HT20)				CH11			
Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity	Detector
1237.937	35.27	-5.73	29.54	74.00	44.46	Horizontal	PK
3330.906	35.57	-0.29	35.28	74.00	38.72	Horizontal	PK
4924.500	31.98	7.34	39.32	74.00	34.68	Horizontal	PK
6916.125	30.34	14.27	44.61	74.00	29.39	Horizontal	PK
1170.375	35.76	-6.14	29.62	74.00	44.38	Vertical	PK
3332.375	35.87	-0.29	35.58	74.00	38.42	Vertical	PK
4923.031	39.57	7.33	46.90	74.00	27.10	Vertical	PK
6666.437	30.75	13.36	44.11	74.00	29.89	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
1226.187	35.85	-5.76	30.09	74.00	43.91	Horizontal	PK
3517.437	35.22	1.12	36.34	74.00	37.66	Horizontal	PK
4843.718	32.35	7.11	39.46	74.00	34.54	Horizontal	PK
7167.281	30.83	15.81	46.64	74.00	27.36	Horizontal	PK
1164.500	35.85	-6.21	29.64	74.00	44.36	Vertical	PK
3138.500	35.00	0.52	35.52	74.00	38.48	Vertical	PK
4843.718	35.54	7.11	42.65	74.00	31.35	Vertical	PK
6133.281	31.25	10.77	42.02	74.00	31.98	Vertical	PK

802.11n(HT40)				CH06			
Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity	Detector
1243.812	35.66	-5.72	29.94	74.00	44.06	Horizontal	PK
3166.406	35.06	0.67	35.73	74.00	38.27	Horizontal	PK
5074.312	32.30	8.56	40.86	74.00	33.14	Horizontal	PK
6645.875	31.39	13.30	44.69	74.00	29.31	Horizontal	PK
1214.437	35.16	-5.79	29.37	74.00	44.63	Vertical	PK
3332.375	36.74	-0.29	36.45	74.00	37.55	Vertical	PK
4874.562	35.47	7.15	42.62	74.00	31.38	Vertical	PK
7243.656	31.48	16.02	47.50	74.00	26.50	Vertical	PK

802.11n(HT40)				CH09			
Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity	Detector
1207.093	35.38	-5.81	29.57	74.00	44.43	Horizontal	PK
3496.875	34.33	1.01	35.34	74.00	38.66	Horizontal	PK
4903.937	31.85	7.21	39.06	74.00	34.94	Horizontal	PK
5999.625	31.77	10.46	42.23	74.00	31.77	Horizontal	PK
1189.468	35.58	-5.94	29.64	74.00	44.36	Vertical	PK
3332.375	36.83	-0.29	36.54	74.00	37.46	Vertical	PK
4903.937	37.36	7.21	44.57	74.00	29.43	Vertical	PK
7023.343	32.01	15.23	47.24	74.00	26.76	Vertical	PK

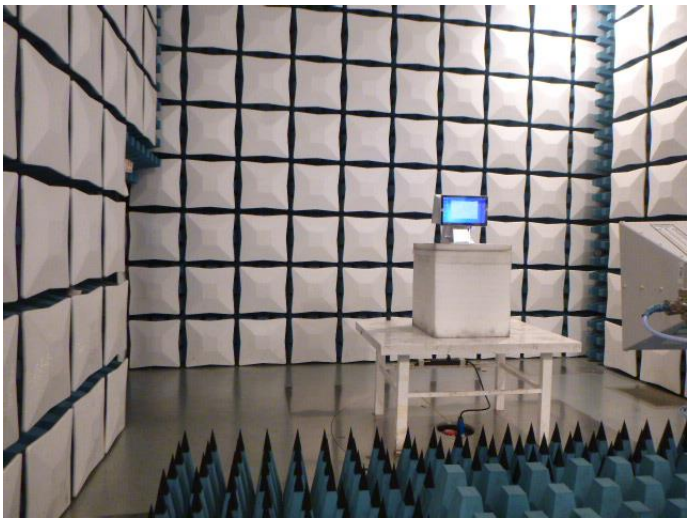
Remark:

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.

6. TEST SETUP PHOTOS

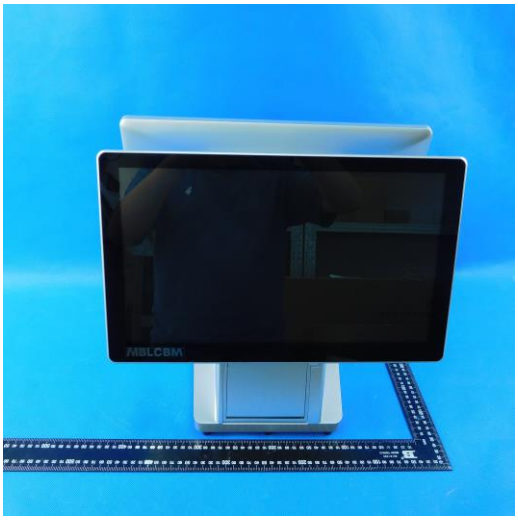
Conducted Emissions

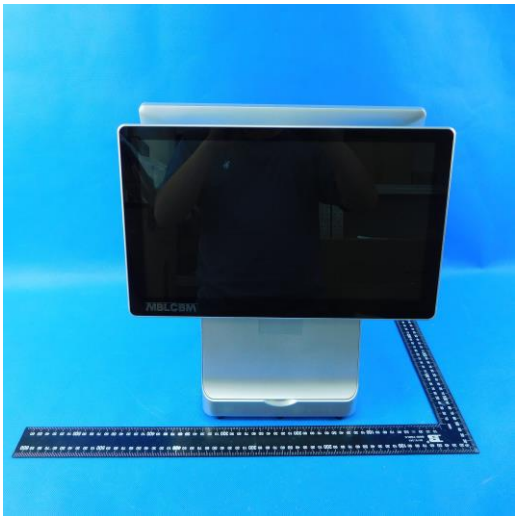
Radiated Emissions

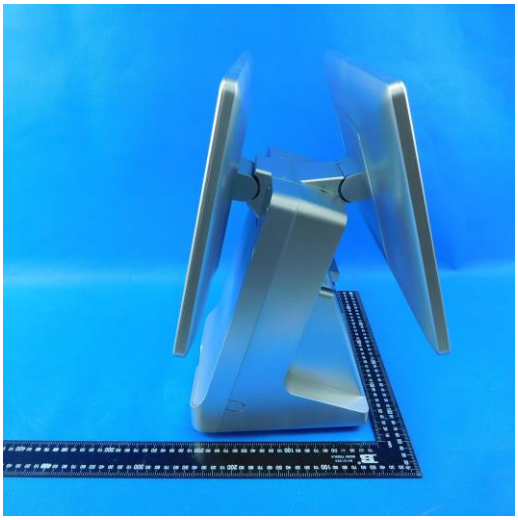


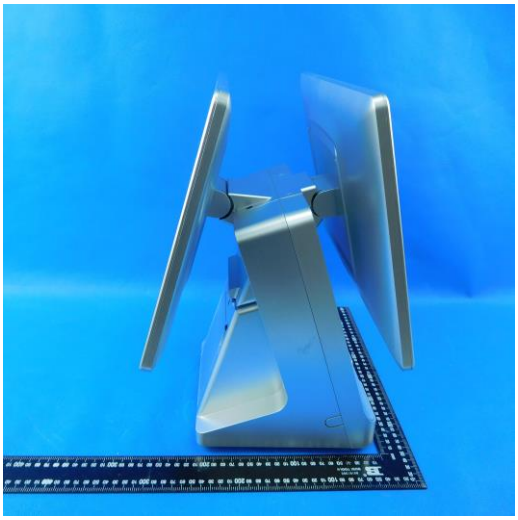
7. EXTERANAL AND INTERNAL PHOTOS

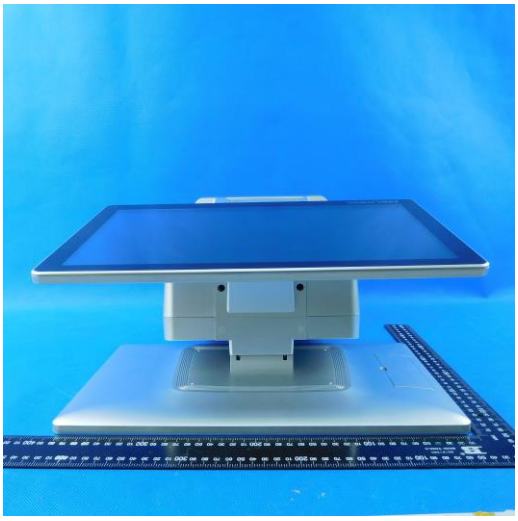
External Photos

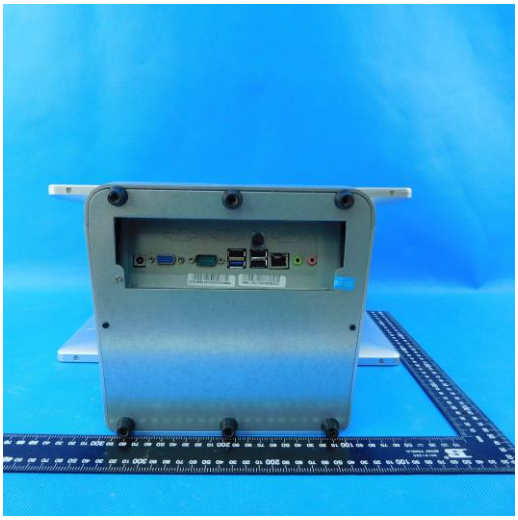






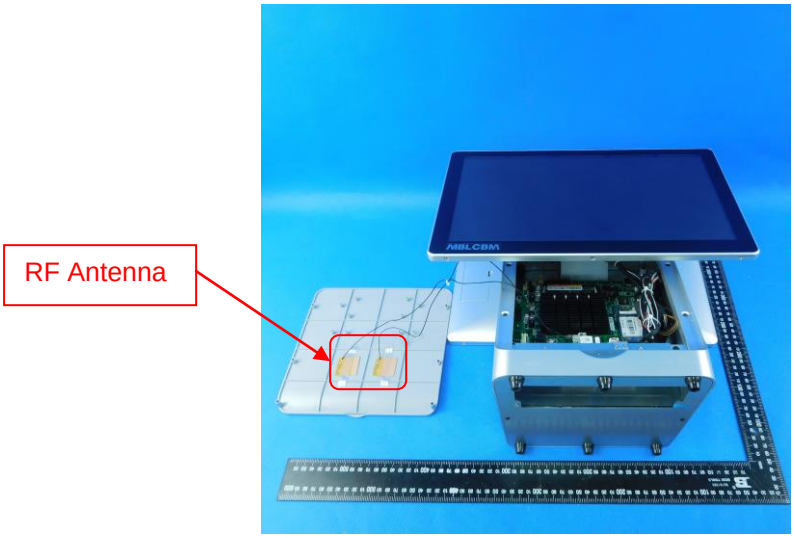


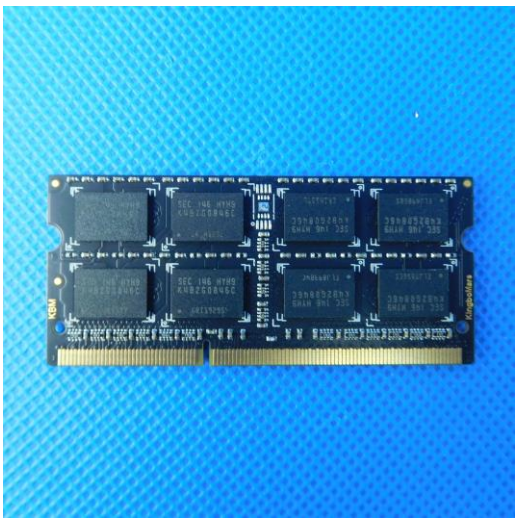





DAJING 大井
AC ADAPTER/电源适配器
型号(model): ADP-90H12
输入 input:100-240V~ 50/60Hz 1.5A MAX
输出 output : +12V 7A
警告：非专业人员请勿自行开启此盖。
CAUTION
衡阳市迪曼电子产品有限公司
Hengyang Dimension Electronic Co.,Ltd
中国制造 (MADE IN CHINA)

Internal Photos



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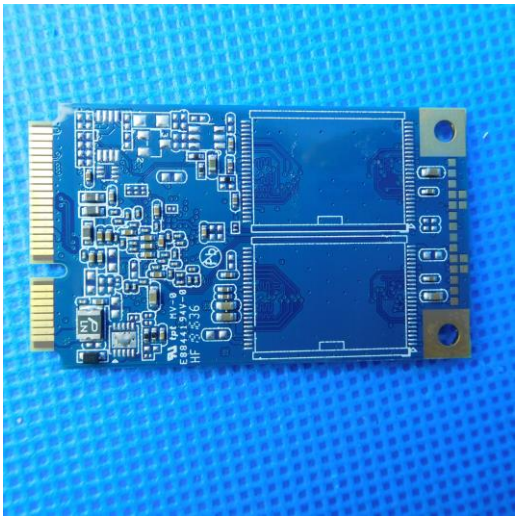


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SICK
GND
SIDO


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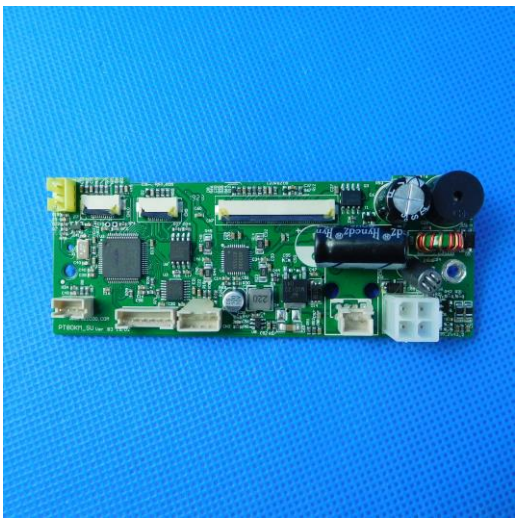
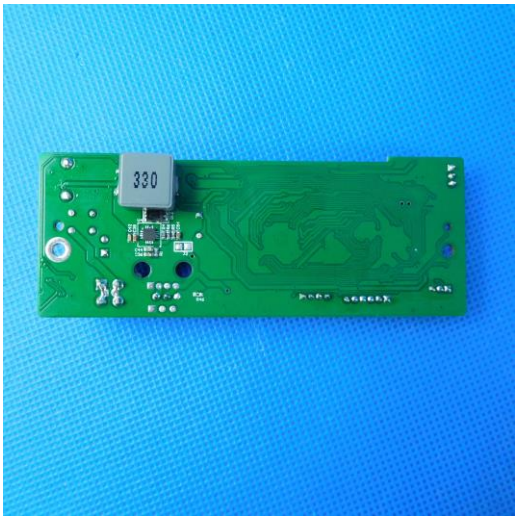
SICKU

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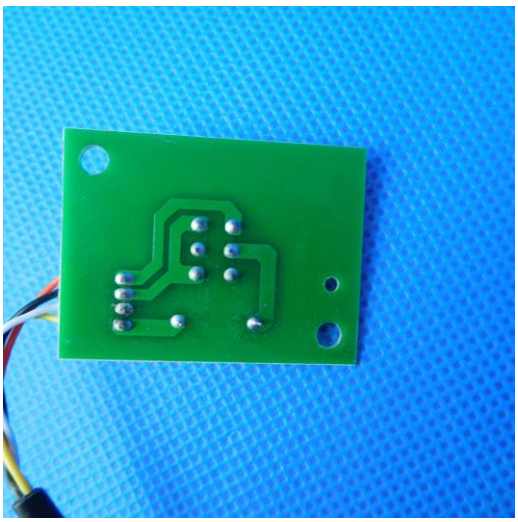
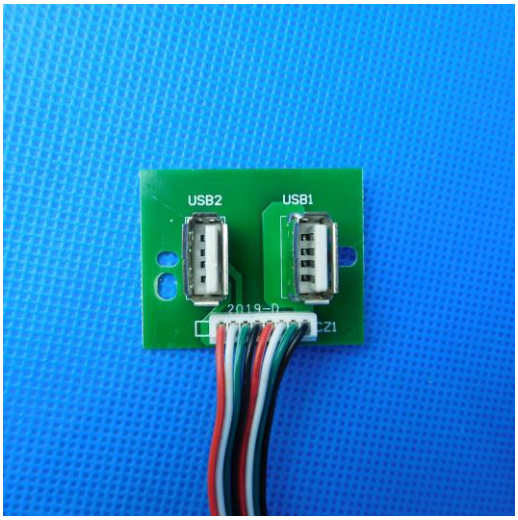
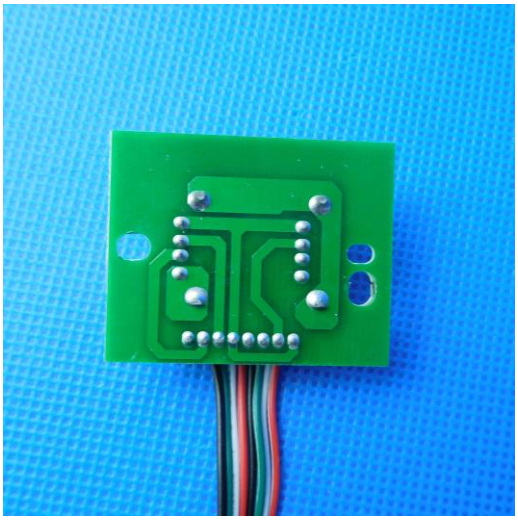
KUUES-018-12-30







--------End of Report--------