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Report Template Version: V05
Report Template Revision Date: 2021-11-03

TEST REPORT

Report No.:	CQASZ20220200252E-02
Applicant:	shandong xiangzi kejifazhan youxiangongsi
Address of Applicant:	xijinshidaidasha Bzuo 1207 jinanshi huaiyinqu shandongsheng
Equipment Under Test (EUT):	
Product:	Video Game Console
Model No.:	Super Console X King
Test Model No.:	Super Console X King
Brand Name:	Kinhank
FCC ID:	2A44C-XKING
Standards:	47 CFR Part 15, Subpart C
Date of Receipt:	2022-2-24
Date of Test:	2022-2-24 to 2022-3-1
Date of Issue:	2022-3-9
Test Result :	**PASS***

***In the configuration tested, the EUT complied with the standards specified above**

Tested By: lewis zhou

(Lewis Zhou)

Reviewed By: Rock Huang

(Rock Huang)

Approved By:

(Jack Ai)

The test report is effective only with both signature and specialized stamp, The result(s) shown in this report refer only to the sample(s) tested. Without written approval of CQA, this report can't be reproduced except in full.

1 Version

Revision History Of Report

Report No.	Version	Description	Issue Date
CQASZ20220200251E-02	Rev.01	Initial report	2022-3-9

2 Test Summary

Test Item	Test Requirement	Test method	Result
Antenna Requirement	47 CFR Part 15, Subpart C Section 15.203/15.247 (c)	ANSI C63.10 2013	PASS
AC Power Line Conducted Emission	47 CFR Part 15, Subpart C Section 15.207	ANSI C63.10 2013	PASS
Conducted Peak & Average Output Power	47 CFR Part 15, Subpart C Section 15.247 (b)(3)	ANSI C63.10 2013	PASS
6dB Occupied Bandwidth	47 CFR Part 15, Subpart C Section 15.247 (a)(2)	ANSI C63.10 2013	PASS
Power Spectral Density	47 CFR Part 15, Subpart C Section 15.247 (e)	ANSI C63.10 2013	PASS
Band-edge for RF Conducted Emissions	47 CFR Part 15, Subpart C Section 15.247(d)	ANSI C63.10 2013	PASS
RF Conducted Spurious Emissions	47 CFR Part 15, Subpart C Section 15.247(d)	ANSI C63.10 2013	PASS
Radiated Spurious Emissions	47 CFR Part 15, Subpart C Section 15.205/15.209	ANSI C63.10 2013	PASS
Restricted bands around fundamental frequency (Radiated Emission)	47 CFR Part 15, Subpart C Section 15.205/15.209	ANSI C63.10 2013	PASS

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4 General Information

4.1 Client Information

Applicant:	shandong xiangzi kejifazhan youxiangongsi
Address of Applicant:	xijinshidaidasha Bzuo 1207 jinanshi huaiyinqu shandongsheng
Manufacturer:	shandong xiangzi kejifazhan youxiangongsi
Address of Manufacturer:	xijinshidaidasha Bzuo 1207 jinanshi huaiyinqu shandongsheng
Factory:	shandong xiangzi kejifazhan youxiangongsi
Address of Factory:	xijinshidaidasha Bzuo 1207 jinanshi huaiyinqu shandongsheng

4.2 General Description of EUT

Product Name:	Video Game Console
Model No.:	Super Console X King
Test Model No.:	Super Console X King
Trade Mark:	Kinhank
Software Version:	V1
Hardware Version:	V1
Power Supply:	INPUT:100-240V～ 50/60Hz 24W OUTPUT:12V⎓ 2A
EUT Supports Radios application:	BT:2402MHz~2480MHz 2.4GHz Wi-Fi: 802.11b/g/n(HT20): 2412MHz~2462MHz; 802.11n(HT40): 2422MHz~2452MHz

4.3 Product Specification subjective to this standard

Operation Frequency:	IEEE 802.11b/g/n(HT20): 2412MHz to 2462MHz IEEE 802.11n(HT40): 2422MHz to 2452MHz
Channel Numbers:	IEEE 802.11b/g, IEEE 802.11n HT20: 11 Channels IEEE 802.11n HT40: 7 Channels
Channel Separation:	5MHz
Type of Modulation:	IEEE for 802.11b: DSSS(CCK,DQPSK,DBPSK) IEEE for 802.11g : OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE for 802.11n(HT20 and HT40) : OFDM (64QAM, 16QAM, QPSK, BPSK)
Transfer Rate:	IEEE for 802.11b: 1Mbps/2Mbps/5.5Mbps/11Mbps IEEE for 802.11g : 6Mbps/9Mbps/12Mbps/18Mbps/24Mbps/36Mbps/48Mbps/54Mbps IEEE for 802.11n(HT20) : 6.5Mbps/13Mbps/19.5Mbps/26Mbps/39Mbps/52Mbps/58.5Mbps/65Mbps IEEE for 802.11n(HT40) : 13.5Mbps/27Mbps/40.5Mbps/54Mbps/81Mbps/108Mbps/121.5Mbps/135Mbps
Product Type:	☒ Mobile ☐ FPortable ☐ FFix Location
Test Software of EUT:	RF test Tool
Antenna Type:	FPC antenna
Antenna Gain:	0 dBi

Operation Frequency each of channel(802.11b/g/n HT20)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	2412MHz	4	2427MHz	7	2442MHz	10	2457MHz
2	2417MHz	5	2432MHz	8	2447MHz	11	2462MHz
3	2422MHz	6	2437MHz	9	2452MHz		

Operation Frequency each of channel(802.11n HT40)					
Channel	Frequency	Channel	Frequency	Channel	Frequency
3	2422MHz	6	2437MHz	9	2452MHz
4	2427MHz	7	2442MHz		
5	2432MHz	8	2447MHz		

Note:
In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

For 802.11b/g/n (HT20):

Channel	Frequency
The Lowest channel	2412MHz
The Middle channel	2437MHz
The Highest channel	2462MHz

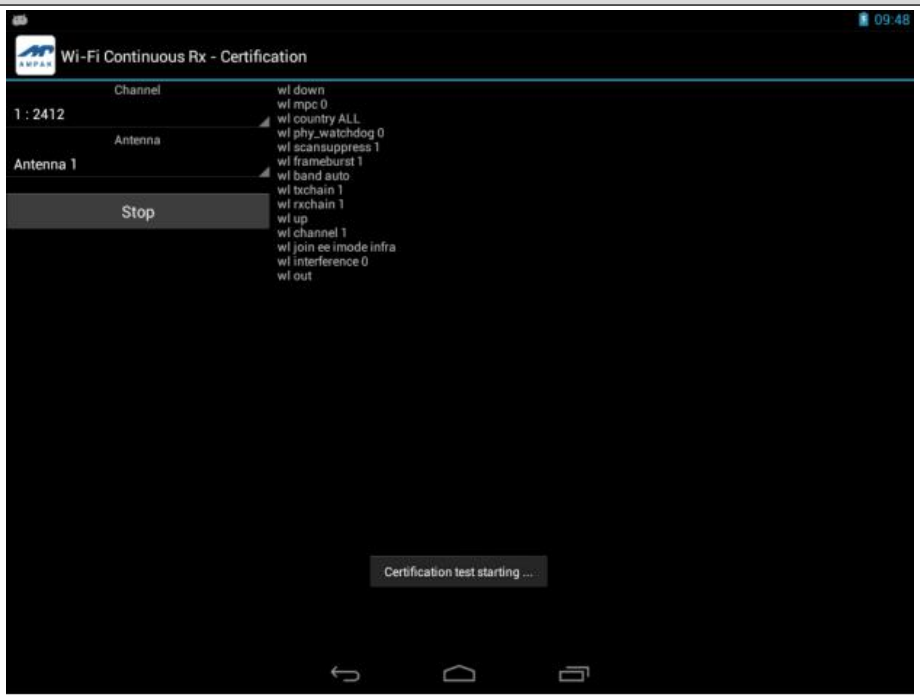
For 802.11n (HT40):

Channel	Frequency
The Lowest channel	2422MHz
The Middle channel	2437MHz
The Highest channel	2452MHz

Note:
Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

4.4 Test Environment and Mode

Operating Environment:	
Radiated Emissions:	
Temperature:	21.3 °C
Humidity:	54% RH
Atmospheric Pressure:	1009 mbar
Conducted Emissions:	
Temperature:	21.6 °C
Humidity:	59 % RH
Atmospheric Pressure:	1009 mbar
Radio conducted item test (RF Conducted test room):	
Temperature:	25.5 °C
Humidity:	52 % RH
Atmospheric Pressure:	1009 mbar
Test mode:	
Transmitting mode:	Keep the EUT in transmitting mode with all kind of modulation and all kind of data rate.
Run Software:	



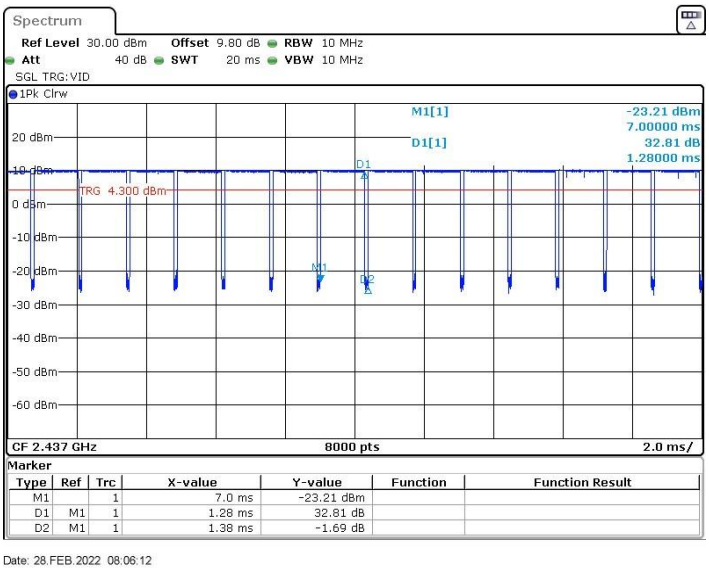
Operated Mode for Worst Duty Cycle:		
Test Mode	Duty Cycle(%)	Average correction factor(dB)
IEEE802.11b	92.09	0.36
IEEE802.11g	89.29	0.49
IEEE802.11n (HT20)	84.62	0.73
IEEE802.11n (HT40)	72.22	1.41

Remark:

1) Duty cycle= On Time/ Period;

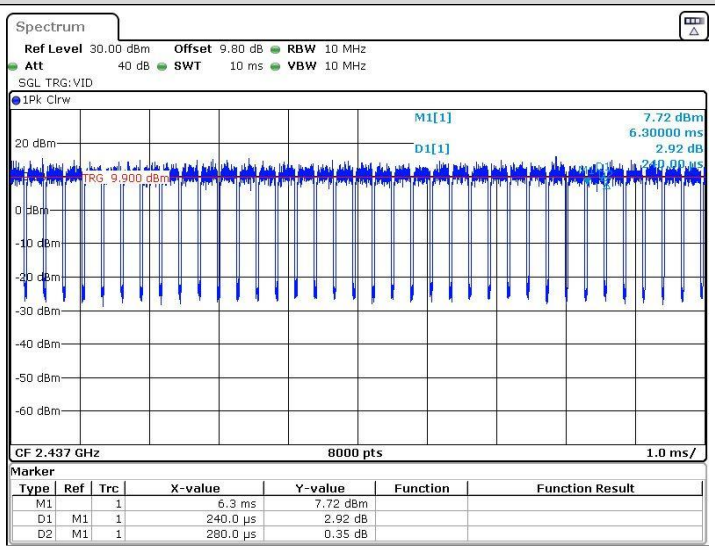
2) Duty Cycle factor = 10 * log(1/ Duty cycle);

Test Graph_IEEE802.11b Duty Cycle:



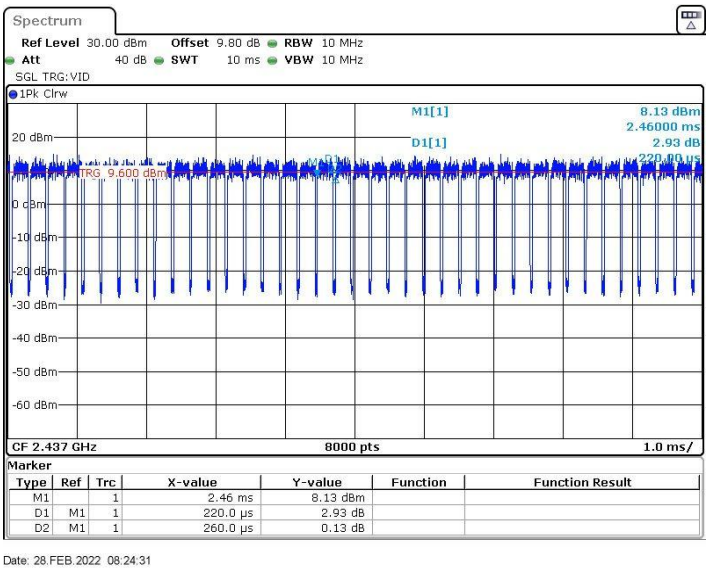
Date: 28.FEB.2022 08:06:12

Test Graph_IEEE802.11g Duty Cycle:

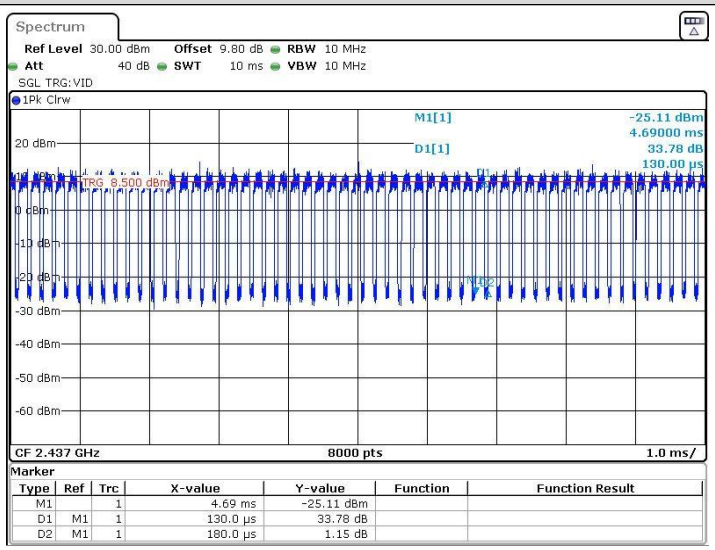


Date: 28.FEB.2022 08:13:51

Test Graph_IEEE802.11 n (HT20) Duty Cycle:



Test Graph_IEEE802.11 n (HT40) Duty Cycle:



4.5 Description of Support Units

The EUT has been tested with associated equipment below.

1) Support equipment

Description	Manufacturer	Model No.	Certification	Supplied by

2) Cable

Cable No.	Description	Manufacturer	Cable Type/Length	Supplied by
/	/	/	/	/

4.6 Test Location

All tests were performed at:

Shenzhen Huaxia Testing Technology Co., Ltd.

1F., Block A of Tongsheng Technology Building, Huahui Road, Dalang Street, Longhua New District, Shenzhen, Guangdong, China

4.7 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **A2LA (Certificate No. 4742.01)**

Shenzhen Huaxia Testing Technology Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 4742.01.

- **FCC Registration No.: 522263**

Shenzhen Huaxia Testing Technology Co., Ltd., Shenzhen 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. Registration No.:522263

4.8 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 within the calibration limits of the equipment and facilities.

The measurement uncertainty was calculated for all measurements listed in this test report acc. to CISPR 16 - 4 „Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements“ and is documented in the **Shenzhen Huaxia Testing Technology Co., Ltd.** quality system acc. to DIN EN 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.

Hereafter the best measurement capability for CQA laboratory is reported:

No.	Item	Uncertainty	Notes
1	Radiated Emission (Below 1GHz)	5.12dB	(1)
2	Radiated Emission (Above 1GHz)	4.60dB	(1)
3	Conducted Disturbance (0.15~30MHz)	3.34dB	(1)
4	Radio Frequency	3×10^{-8}	(1)
5	Duty cycle	0.6 %.	(1)
6	Occupied Bandwidth	1.1%	(1)
7	RF conducted power	0.86dB	(1)
8	RF power density	0.74	(1)
9	Conducted Spurious emissions	0.86dB	(1)
10	Temperature test	0.8℃	(1)
11	Humidity test	2.0%	(1)
12	Supply voltages	0.5 %.	(1)
13	Frequency Error	5.5 Hz	(1)

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

4.9 Deviation from Standards

None.

4.10 Abnormalities from Standard Conditions

None.

4.11 Other Information Requested by the Customer

None.

4.12 Equipment List

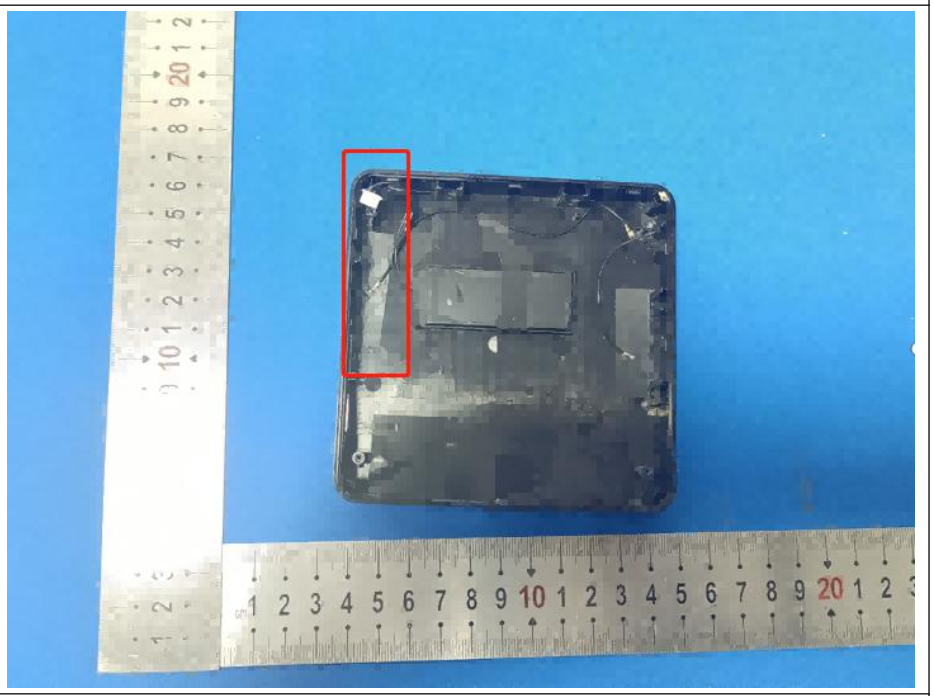
Test Equipment	Manufacturer	Model No.	Instrument No.	Calibration Date	Calibration Due Date
EMI Test Receiver	R&S	ESR7	CQA-005	2021/09/10	2022/09/09
Spectrum analyzer	R&S	FSU26	CQA-038	2021/09/10	2022/09/09
Spectrum analyzer	R&S	FSU40	CQA-075	2021/09/10	2022/09/09
Preamplifier	MITEQ	AFS4-00010300-18-10P-4	CQA-035	2021/09/10	2022/09/09
Preamplifier	MITEQ	AMF-6D-02001800-29-20P	CQA-036	2021/09/10	2022/09/09
Preamplifier	EMCI	EMC184055SE	CQA-089	2021/09/10	2022/09/09
Loop antenna	Schwarzbeck	FMZB1516	CQA-060	2021/09/16	2024/09/15
Bilog Antenna	R&S	HL562	CQA-011	2021/09/16	2024/09/15
Horn Antenna	R&S	HF906	CQA-012	2021/09/16	2024/09/15
Horn Antenna	Schwarzbeck	BBHA 9170	CQA-088	2021/09/16	2024/09/15
Coaxial Cable (Above 1GHz)	CQA	N/A	C007	2021/09/10	2022/09/09
Coaxial Cable (Below 1GHz)	CQA	N/A	C013	2021/09/10	2022/09/09
RF cable(9KHz~40GHz)	CQA	RF-01	CQA-079	2021/09/10	2022/09/09
Antenna Connector	CQA	RFC-01	CQA-080	2021/09/10	2022/09/09
Power Sensor	KEYSIGHT	U2021XA	CQA-30	2021/09/10	2022/09/09
N1918A Power Analysis Manager Power Panel	Agilent	N1918A	CQA-074	2021/09/10	2022/09/09
Power meter	R&S	NRVD	CQA-029	2021/09/10	2022/09/09
Power divider	MIDWEST	PWD-2533-02-SMA-79	CQA-067	2021/09/10	2022/09/09
EMI Test Receiver	R&S	ESR7	CQA-005	2021/09/10	2022/09/09
LISN	R&S	ENV216	CQA-003	2021/09/10	2022/09/09
Coaxial cable	CQA	N/A	CQA-C009	2021/09/10	2022/09/09
DC power	KEYSIGHT	E3631A	CQA-028	2021/09/10	2022/09/09

Test software:

	Manufacturer	Software brand
Radiated Emissions test software	Tonscend	JS1120-3
Conducted Emissions test software	Audix	e3
RF Conducted test software	Audix	e3

5 Test results and Measurement Data

5.1 Antenna Requirement

Standard requirement:	47 CFR Part 15C Section 15.203 /247(c)
15.203 requirement: 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. 15.247(b) (4) requirement: The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.	
EUT Antenna:	
The antenna is FPC antenna. The best case gain of the antenna is 0 dBi.	

5.2 Conducted Emissions

Test Requirement:	47 CFR Part 15C Section 15.207
Test Method:	ANSI C63.10: 2013
Test Frequency Range:	150kHz to 30MHz
Limit:	

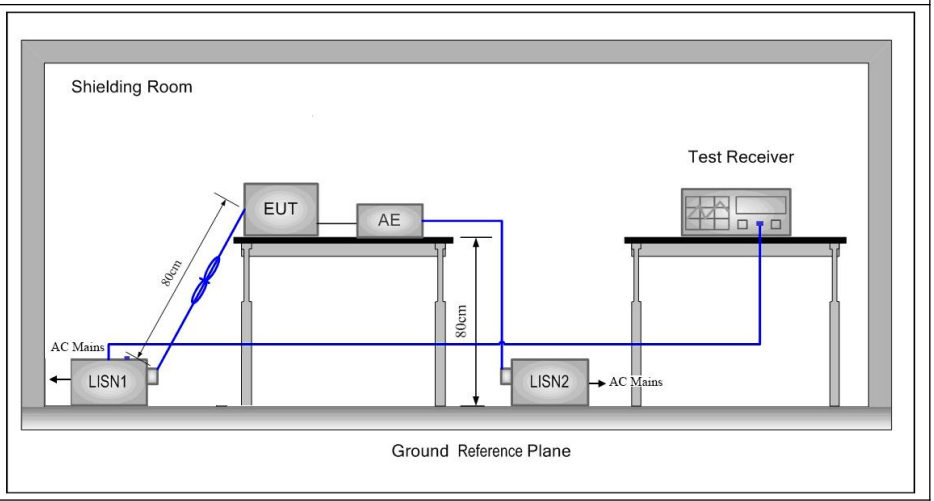
Frequency range (MHz)	Limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

* Decreases with the logarithm of the frequency.

Test Procedure:

1) The mains terminal disturbance voltage test was conducted in a shielded room.
2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50Ω/50μH + 5Ω linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.
3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane,
4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.
5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10: 2013 on conducted measurement.

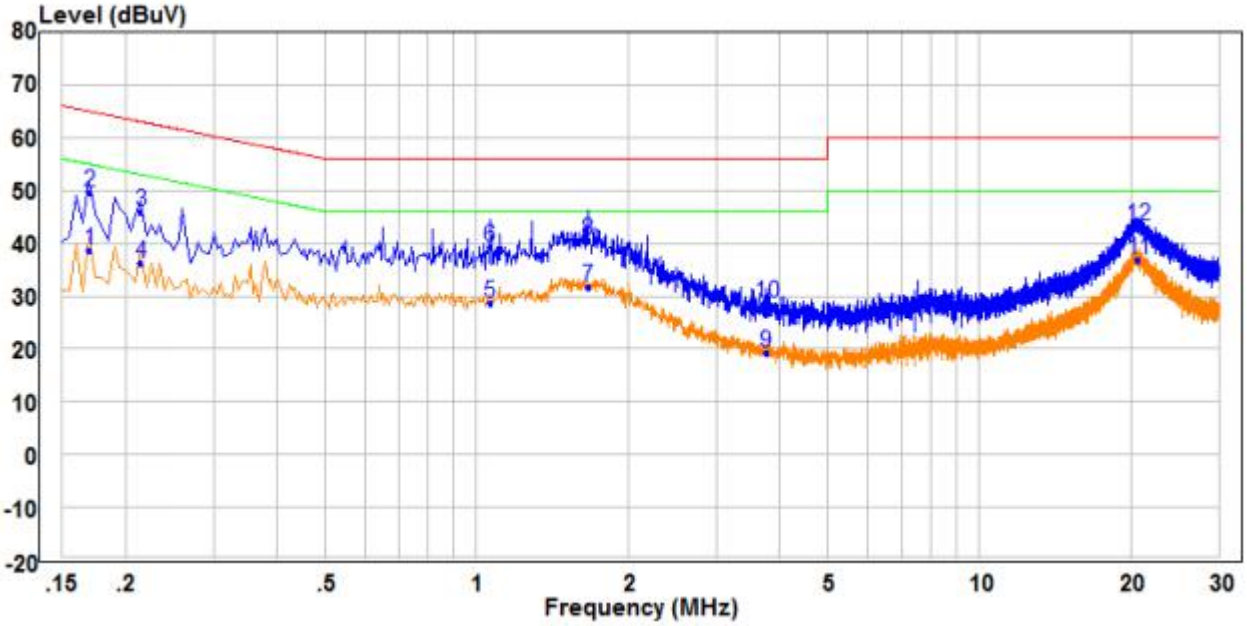
Test Setup:



Exploratory Test Mode:	Transmitting with all kind of modulations, data rates at lowest, middle and highest channel.
Final Test Mode:	Through Pre-scan, find the 1Mbps of rate of 802.11b at middle channel is the worst case. Only the worst case is recorded in the report.
Test Voltage:	AC120V/60Hz
Test Results:	Pass

Measurement Data

Live Line:

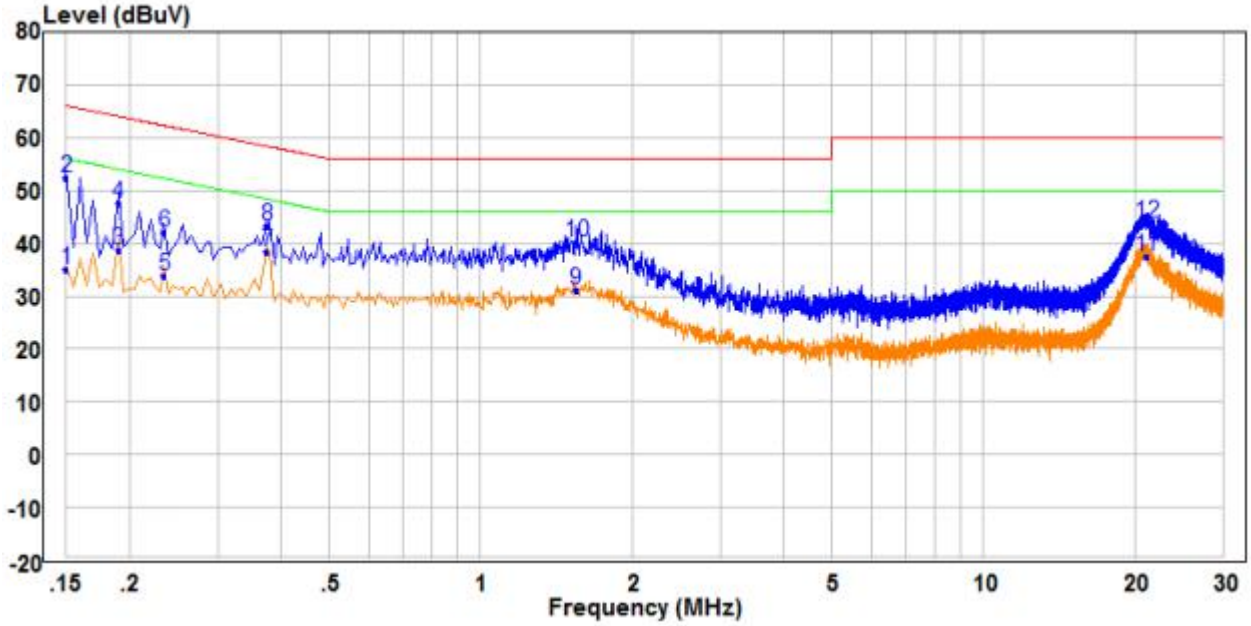


		Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.170	28.93	9.66	38.59	54.96	-16.37	Average	Line
2	QP	0.170	40.01	9.66	49.67	64.96	-15.29	QP	Line
3	PP	0.215	36.51	9.59	46.10	53.01	-6.91	Average	Line
4		0.215	26.69	9.59	36.28	63.01	-26.73	QP	Line
5		1.065	18.82	9.87	28.69	46.00	-17.31	Average	Line
6		1.065	29.34	9.87	39.21	56.00	-16.79	QP	Line
7		1.665	20.64	11.13	31.77	46.00	-14.23	Average	Line
8		1.665	29.37	11.13	40.50	56.00	-15.50	QP	Line
9		3.775	8.90	10.31	19.21	46.00	-26.79	Average	Line
10		3.775	18.35	10.31	28.66	56.00	-27.34	QP	Line
11		20.680	27.02	9.87	36.89	50.00	-13.11	Average	Line
12		20.680	33.34	9.87	43.21	60.00	-16.79	QP	Line

Remark:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.
3. If the Peak value under Average limit, the Average value is not recorded in the report.

Neutral Line:

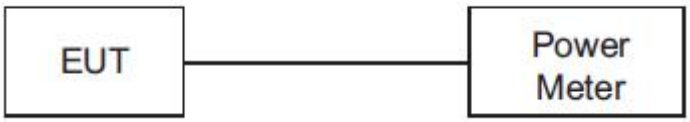


		Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.150	25.41	9.70	35.11	56.00	-20.89	Average	Neutral
2	QP	0.150	42.70	9.70	52.40	66.00	-13.60	QP	Neutral
3		0.190	29.06	9.62	38.68	54.04	-15.36	Average	Neutral
4		0.190	37.92	9.62	47.54	64.04	-16.50	QP	Neutral
5		0.235	24.20	9.56	33.76	52.27	-18.51	Average	Neutral
6		0.235	32.38	9.56	41.94	62.27	-20.33	QP	Neutral
7	PP	0.375	28.80	9.58	38.38	48.39	-10.01	Average	Neutral
8		0.375	33.54	9.58	43.12	58.39	-15.27	QP	Neutral
9		1.550	21.37	9.73	31.10	46.00	-14.90	Average	Neutral
10		1.550	30.57	9.73	40.30	56.00	-15.70	QP	Neutral
11		21.130	27.54	9.89	37.43	50.00	-12.57	Average	Neutral
12		21.130	33.90	9.89	43.79	60.00	-16.21	QP	Neutral

Remark:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.
3. If the Peak value under Average limit, the Average value is not recorded in the report.

5.3 Conducted Peak & Average Output Power

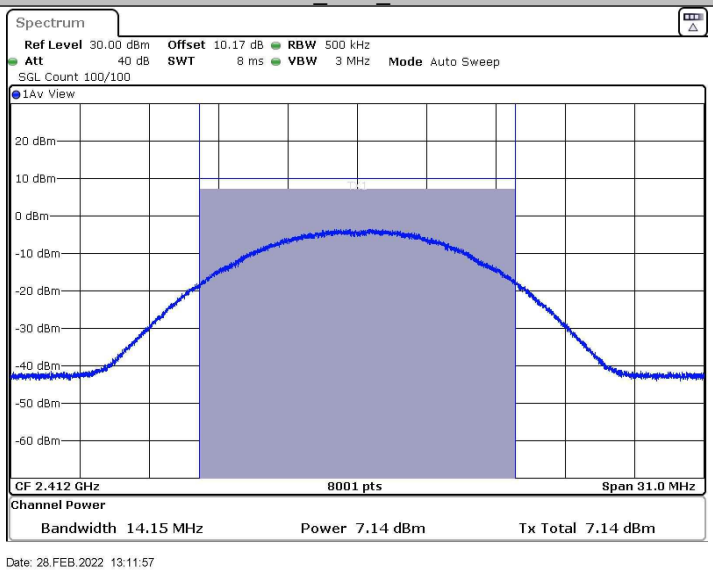
Test Requirement:	47 CFR Part 15C Section 15.247 (b)(3)
Test Method:	ANSI C63.10: 2013
Test Setup:	
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates
Final Test Mode:	Through Pre-scan, find the 1Mbps of rate is the worst case of 802.11b; 6Mbps of rate is the worst case of 802.11g; 6.5Mbps of rate is the worst case of 802.11n(HT20); 13.5Mbps of rate is the worst case of 802.11n(HT40). Only the worst case is recorded in the report.
Limit:	30dBm
Test Results:	Pass

Test Result

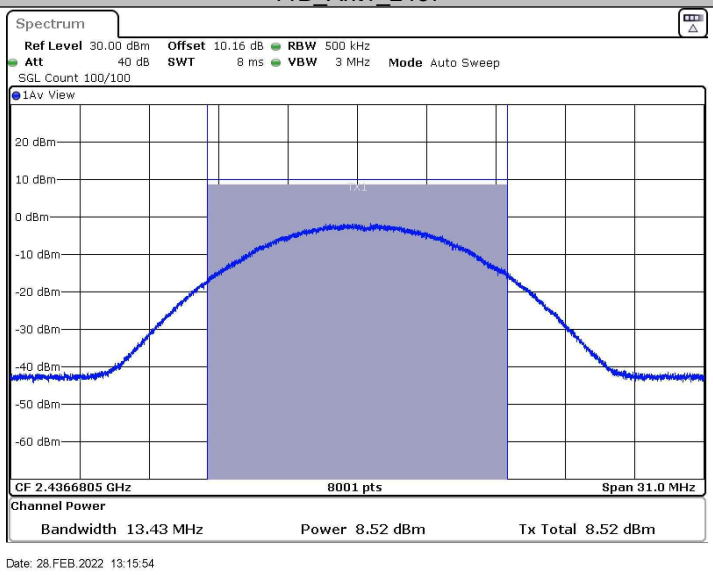
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	2412	7.14	≤30	PASS
		2437	8.52	≤30	PASS
		2462	7.76	≤30	PASS
11G	Ant1	2412	6.90	≤30	PASS
		2437	7.99	≤30	PASS
		2462	7.58	≤30	PASS
11N20SISO	Ant1	2412	7.13	≤30	PASS
		2437	8.16	≤30	PASS
		2462	7.42	≤30	PASS
11N40SISO	Ant1	2422	7.45	≤30	PASS
		2437	7.65	≤30	PASS
		2452	7.60	≤30	PASS

Test Graphs

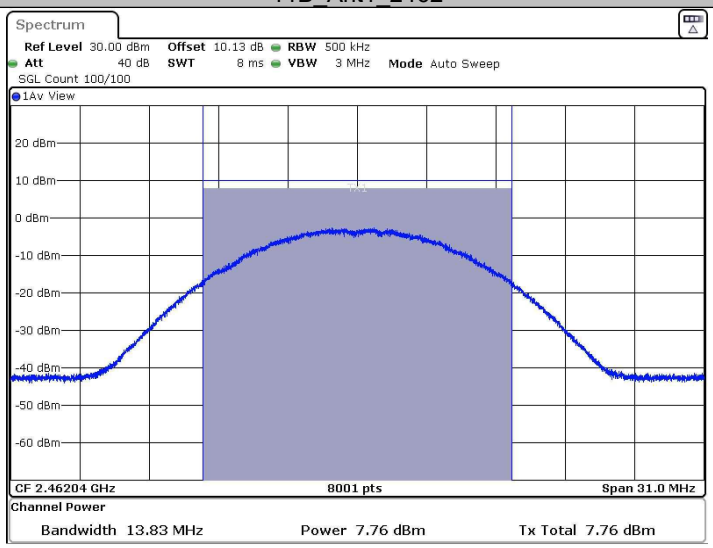
11B_Ant1_2412



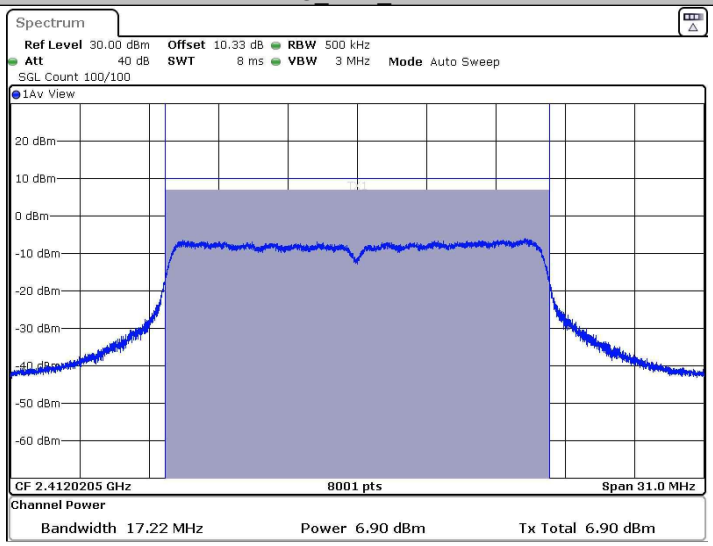
11B_Ant1_2437



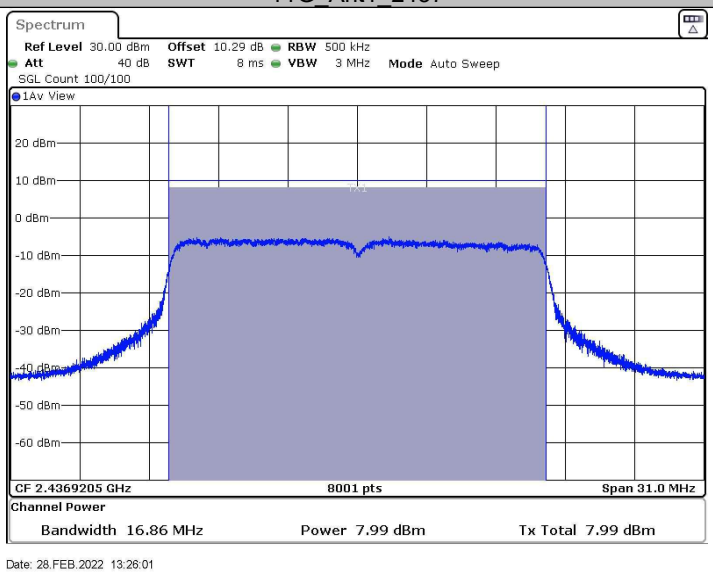
11B_Ant1_2462



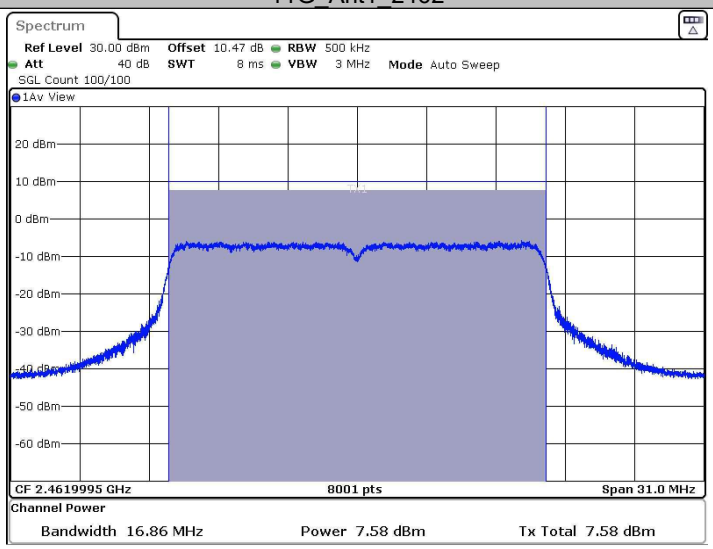
11G_Ant1_2412



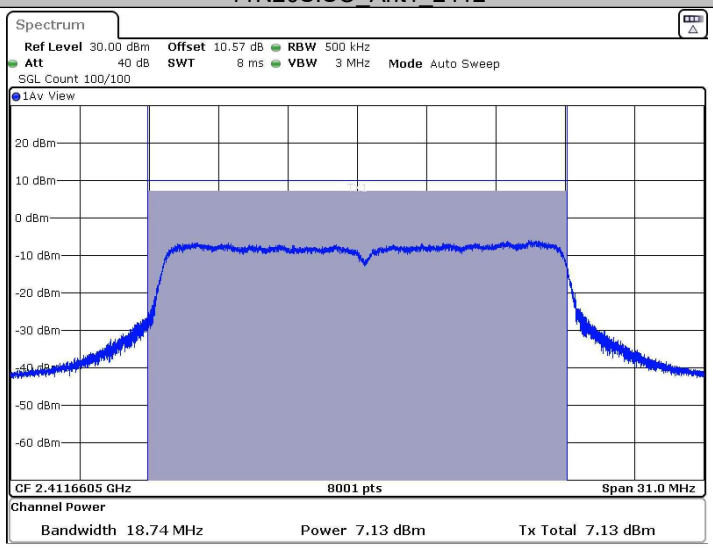
11G_Ant1_2437



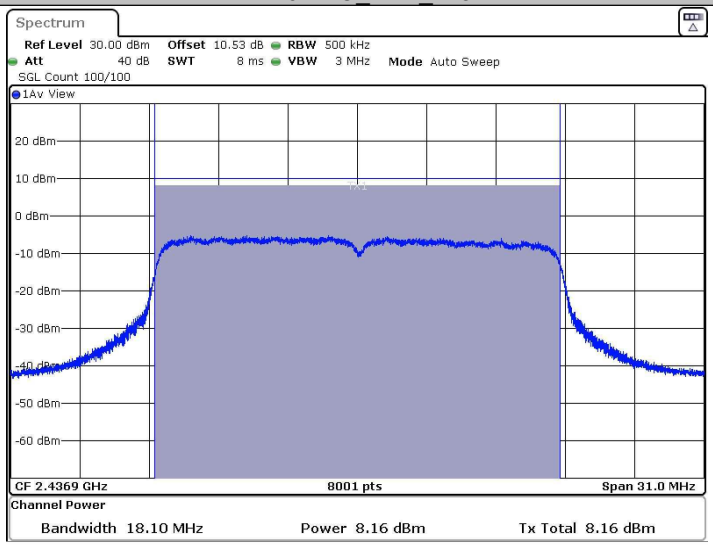
11G_Ant1_2462



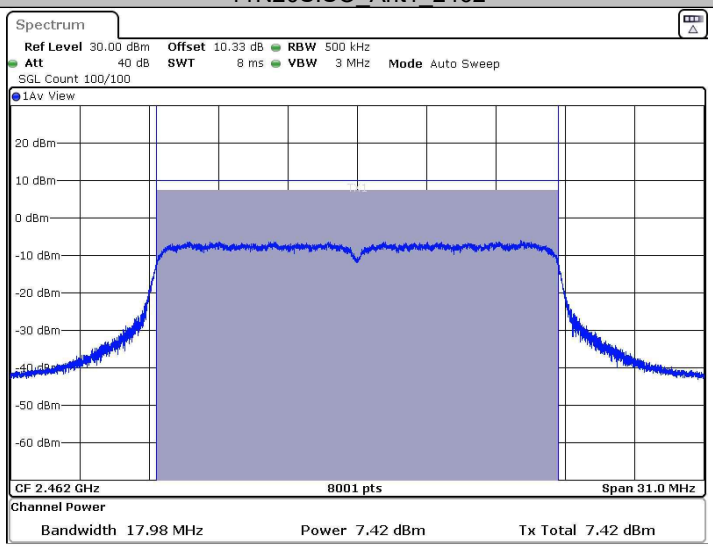
11N20SISO_Ant1_2412



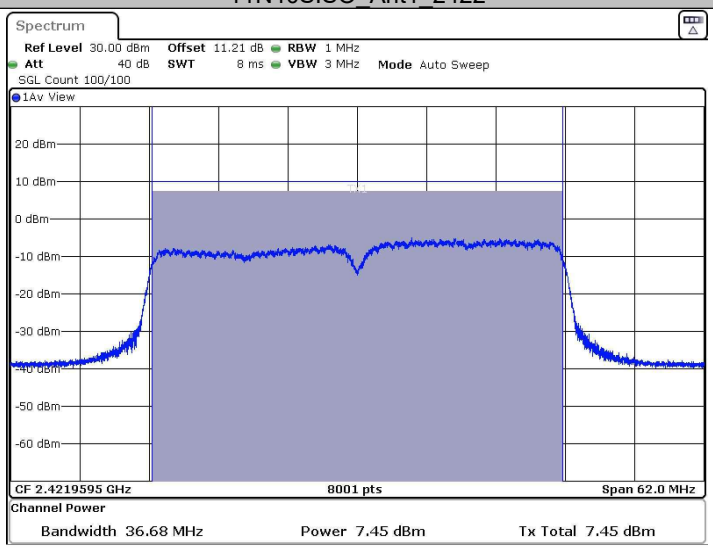
11N20SISO_Ant1_2437



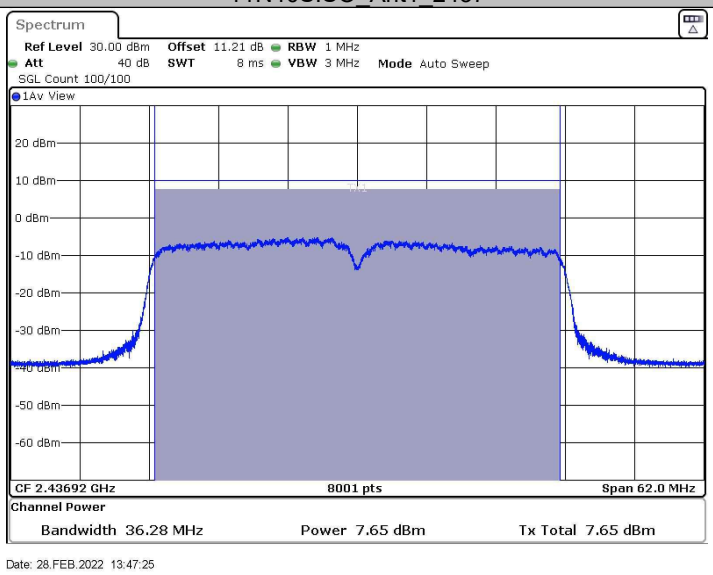
11N20SISO_Ant1_2462



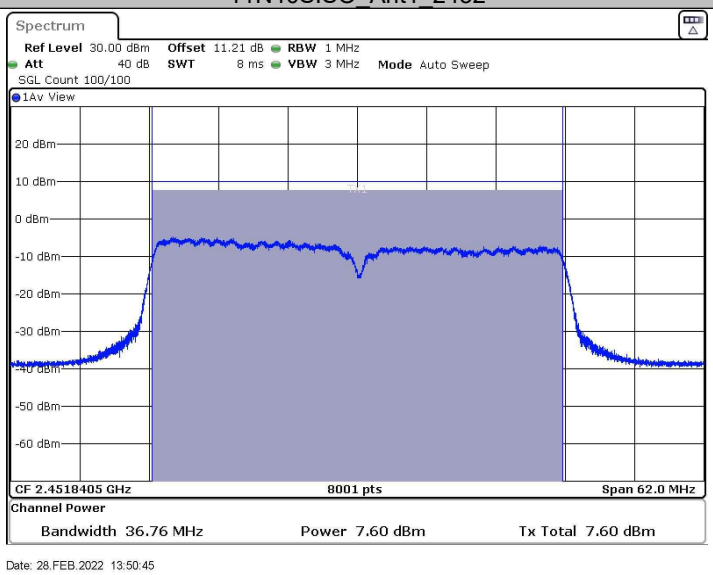
11N40SISO_Ant1_2422



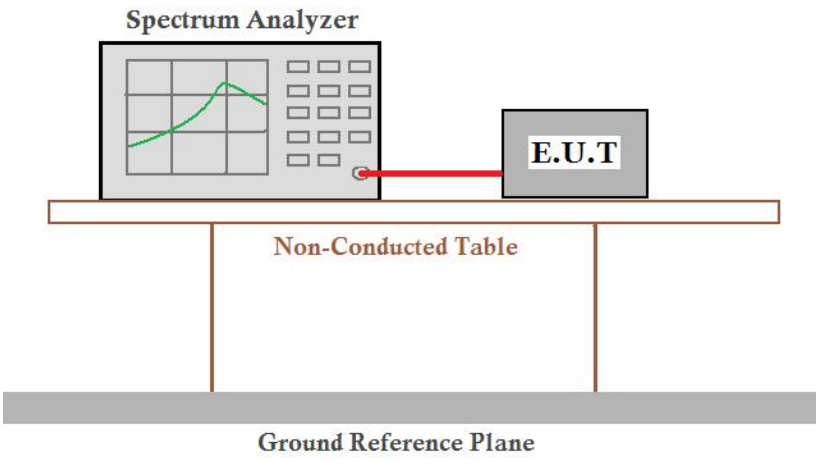
11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



5.4 6dB Occupy Bandwidth

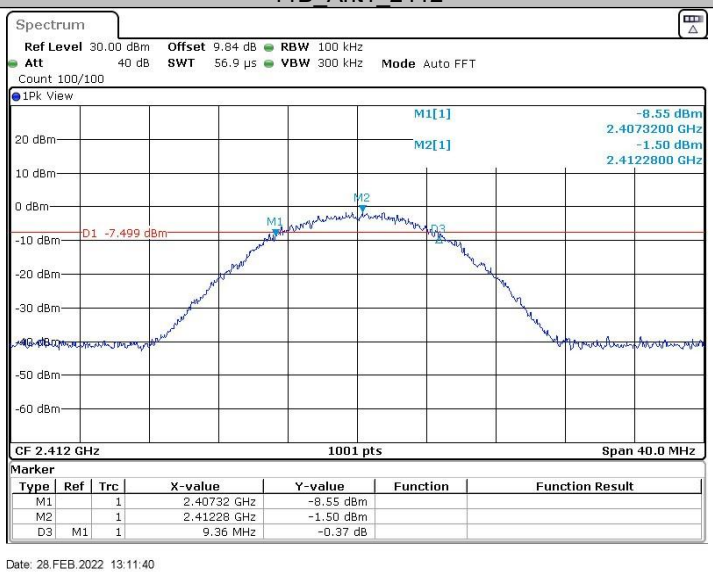
Test Requirement:	47 CFR Part 15C Section 15.247 (a)(2)
Test Method:	ANSI C63.10: 2013
Test Setup:	 Offset=cable loss+ attenuation factor
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates
Final Test Mode:	Through Pre-scan, find the 1Mbps of rate is the worst case of 802.11b; 6Mbps of rate is the worst case of 802.11g; 6.5Mbps of rate is the worst case of 802.11n(HT20); 13.5Mbps of rate is the worst case of 802.11n(HT40). Only the worst case is recorded in the report.
Limit:	≥ 500 kHz
Test Results:	Pass

Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.360	2407.320	2416.680	0.5	PASS
		2437	8.760	2432.520	2441.280	0.5	PASS
		2462	8.440	2457.920	2466.360	0.5	PASS
11G	Ant1	2412	16.600	2403.680	2420.280	0.5	PASS
		2437	16.560	2428.680	2445.240	0.5	PASS
		2462	16.600	2453.680	2470.280	0.5	PASS
11N20SISO	Ant1	2412	17.840	2403.040	2420.880	0.5	PASS
		2437	17.800	2428.040	2445.840	0.5	PASS
		2462	17.840	2453.040	2470.880	0.5	PASS
11N40SISO	Ant1	2422	36.640	2403.680	2440.320	0.5	PASS
		2437	36.160	2418.680	2454.840	0.5	PASS
		2452	36.240	2433.680	2469.920	0.5	PASS

Test Graphs

11B_Ant1_2412

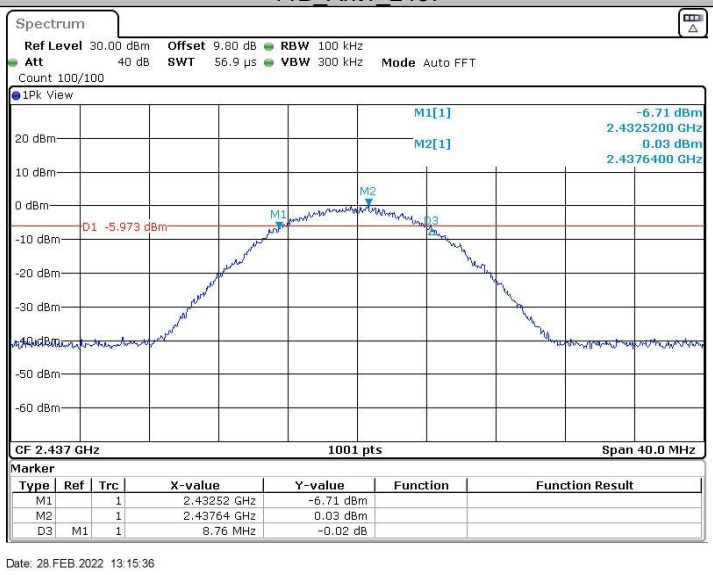


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.40732 GHz	-8.55 dBm		
M2		1	2.41228 GHz	-1.50 dBm		
D3	M1	1	9.36 MHz	-0.37 dB		

Date: 28.FEB.2022 13:11:40

11B_Ant1_2437

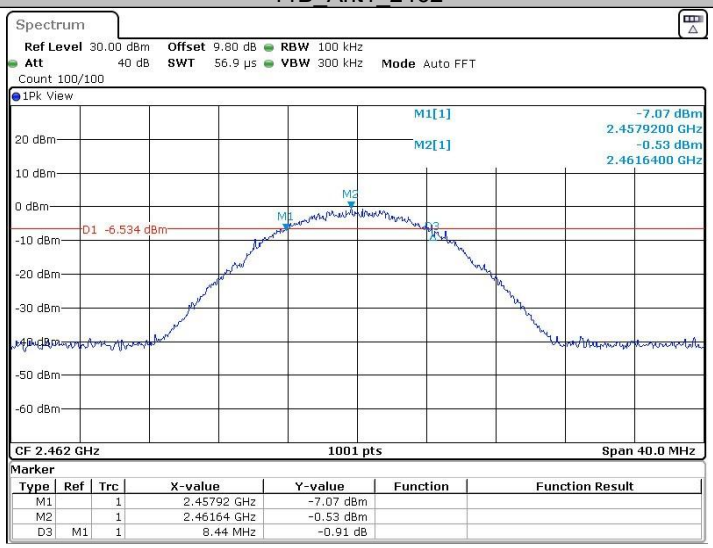


Marker

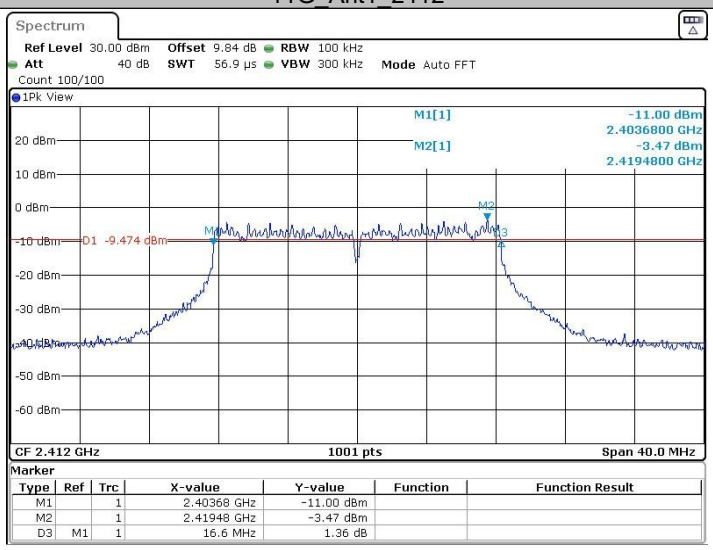
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.43252 GHz	-6.71 dBm		
M2		1	2.43764 GHz	0.03 dBm		
D3	M1	1	8.76 MHz	-0.02 dB		

Date: 28.FEB.2022 13:15:36

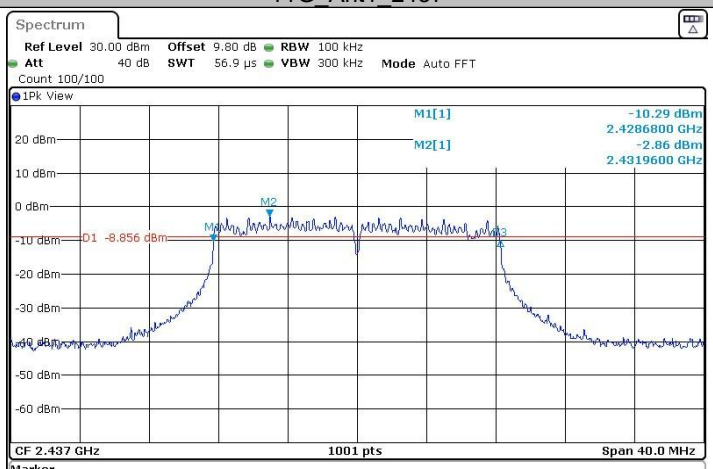
11B_Ant1_2462



11G_Ant1_2412



11G_Ant1_2437

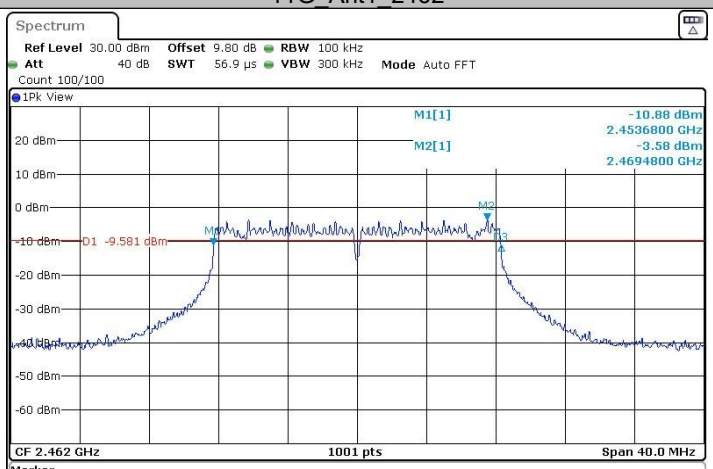


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.42868 GHz	-10.29 dBm		
M2		1	2.43196 GHz	-2.86 dBm		
D3	M1	1	16.56 MHz	0.22 dB		

Date: 28.FEB.2022 13:25:43

11G_Ant1_2462

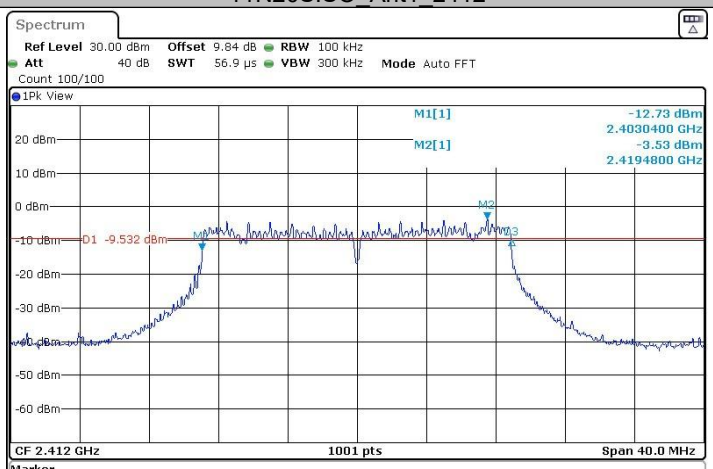


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.45368 GHz	-10.88 dBm		
M2		1	2.46948 GHz	-3.58 dBm		
D3	M1	1	16.6 MHz	-0.03 dB		

Date: 28.FEB.2022 13:27:55

11N20SISO_Ant1_2412

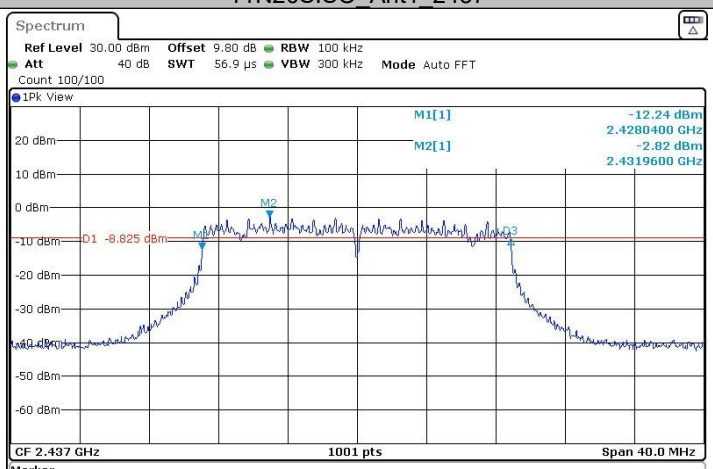


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.40304 GHz	-12.73 dBm		
M2		1	2.41948 GHz	-3.53 dBm		
D3	M1	1	17.84 MHz	2.92 dB		

Date: 28.FEB.2022 13:30:56

11N20SISO_Ant1_2437

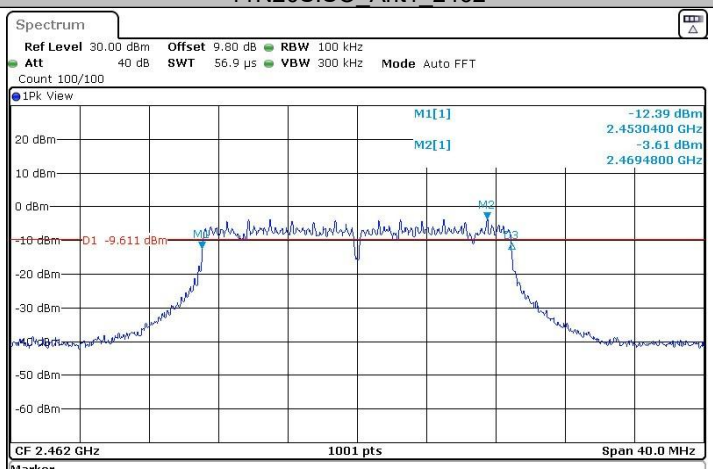


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.42804 GHz	-12.24 dBm		
M2		1	2.43196 GHz	-2.82 dBm		
D3	M1	1	17.8 MHz	3.17 dB		

Date: 28.FEB.2022 13:35:30

11N20SISO_Ant1_2462

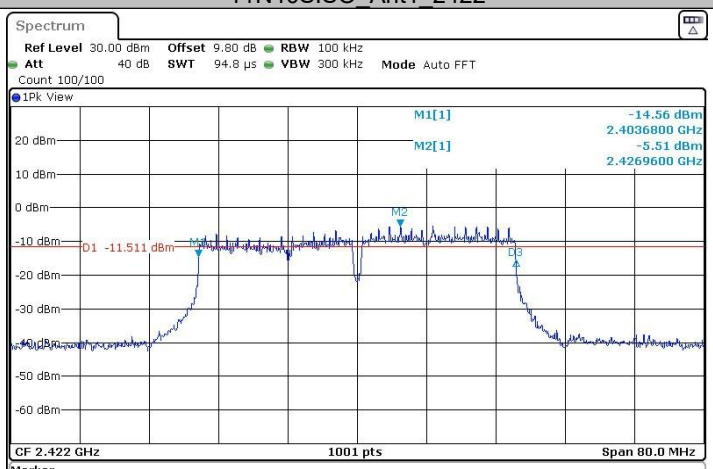


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.45304 GHz	-12.39 dBm		
M2		1	2.46948 GHz	-3.61 dBm		
D3	M1	1	17.84 MHz	1.78 dB		

Date: 28.FEB.2022 13:40:03

11N40SISO_Ant1_2422

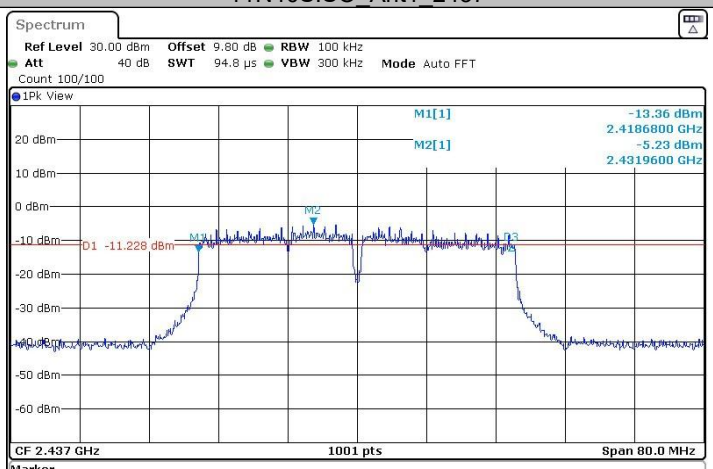


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.40368 GHz	-14.56 dBm		
M2		1	2.42696 GHz	-5.51 dBm		
D3	M1	1	36.64 MHz	-0.93 dB		

Date: 28.FEB.2022 13:44:04

11N40SISO_Ant1_2437

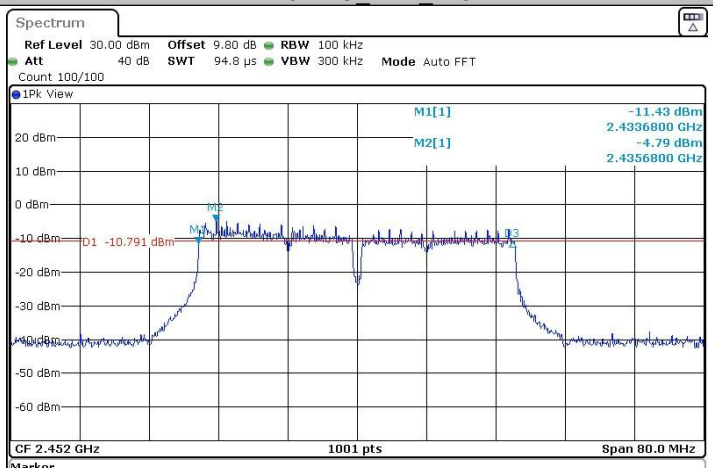


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.41868 GHz	-13.36 dBm		
M2		1	2.43196 GHz	-5.23 dBm		
D3	M1	1	36.16 MHz	2.02 dB		

Date: 28.FEB.2022 13:47:07

11N40SISO_Ant1_2452

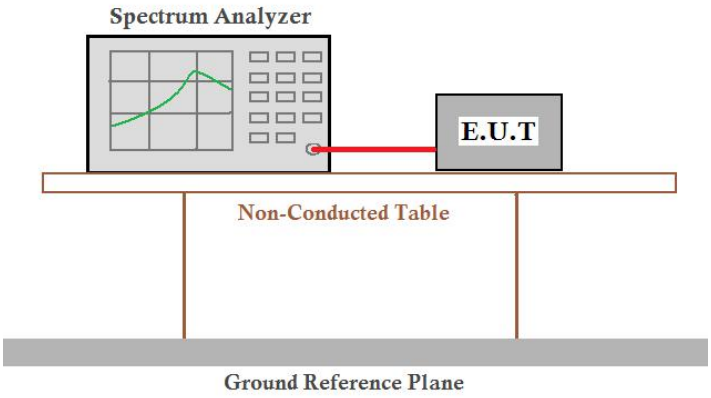


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.43368 GHz	-11.43 dBm		
M2		1	2.43568 GHz	-4.79 dBm		
D3	M1	1	36.24 MHz	0.62 dB		

Date: 28.FEB.2022 13:50:28

5.5 Power Spectral Density

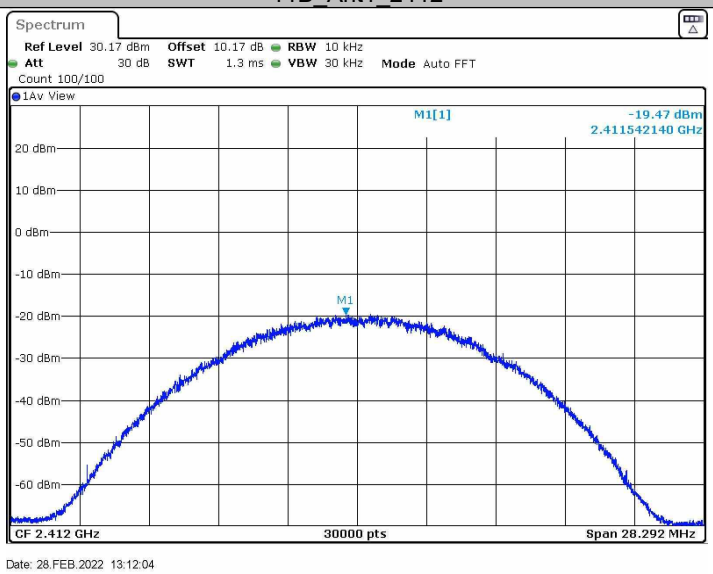
Test Requirement:	47 CFR Part 15C Section 15.247 (e)
Test Method:	ANSI C63.10: 2013
Test Setup:	 Offset=cable loss+ attenuation factor
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates
Final Test Mode:	Through Pre-scan, find the 1Mbps of rate is the worst case of 802.11b; 6Mbps of rate is the worst case of 802.11g; 6.5Mbps of rate is the worst case of 802.11n(HT20); 13.5Mbps of rate is the worst case of 802.11n(HT40). Only the worst case is recorded in the report.
Limit:	≤8.00dBm/3kHz
Test Results:	Pass

Test Result

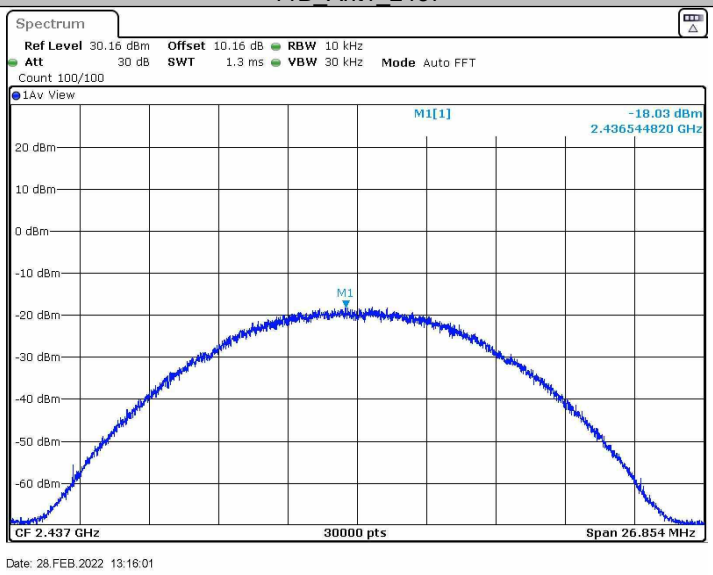
TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-19.47	≤8	PASS
		2437	-18.03	≤8	PASS
		2462	-18.85	≤8	PASS
11G	Ant1	2412	-20.2	≤8	PASS
		2437	-18.74	≤8	PASS
		2462	-20.12	≤8	PASS
11N20SISO	Ant1	2412	-17.86	≤8	PASS
		2437	-17.64	≤8	PASS
		2462	-17.9	≤8	PASS
11N40SISO	Ant1	2422	-19.51	≤8	PASS
		2437	-17.74	≤8	PASS
		2452	-18.23	≤8	PASS

Test Graphs

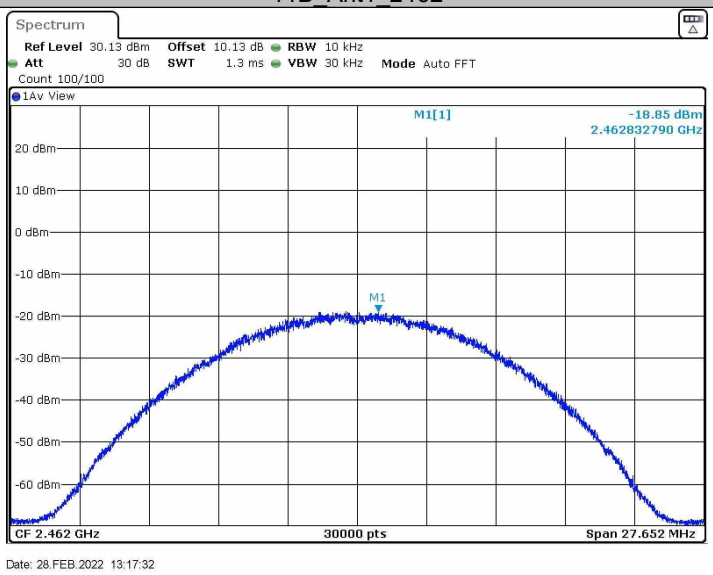
11B_Ant1_2412



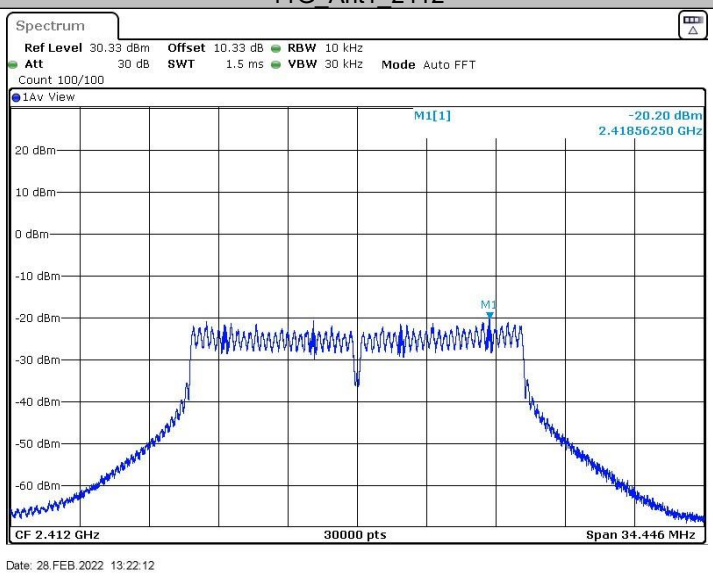
11B_Ant1_2437



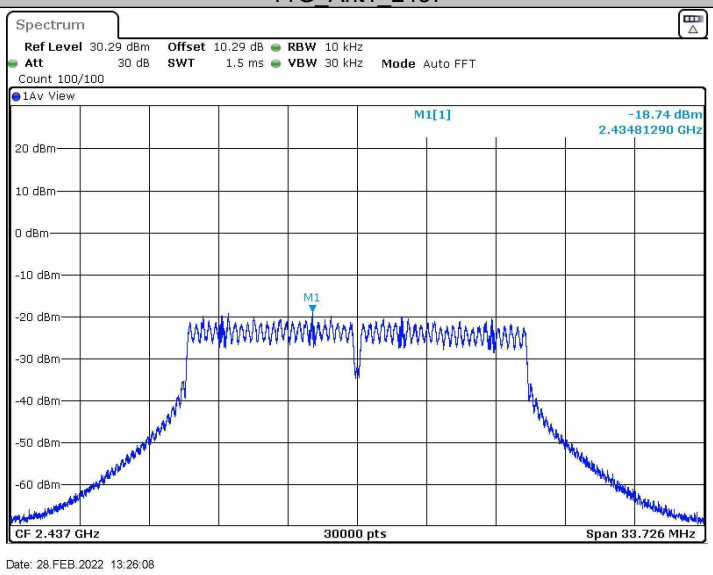
11B_Ant1_2462



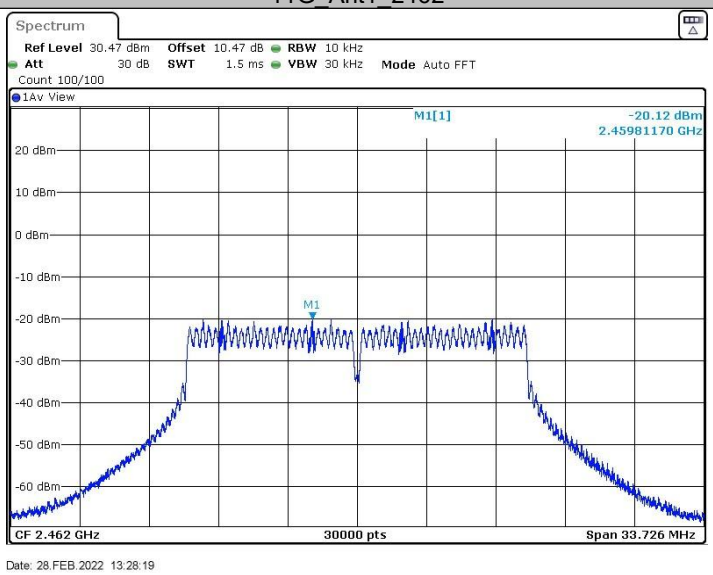
11G_Ant1_2412



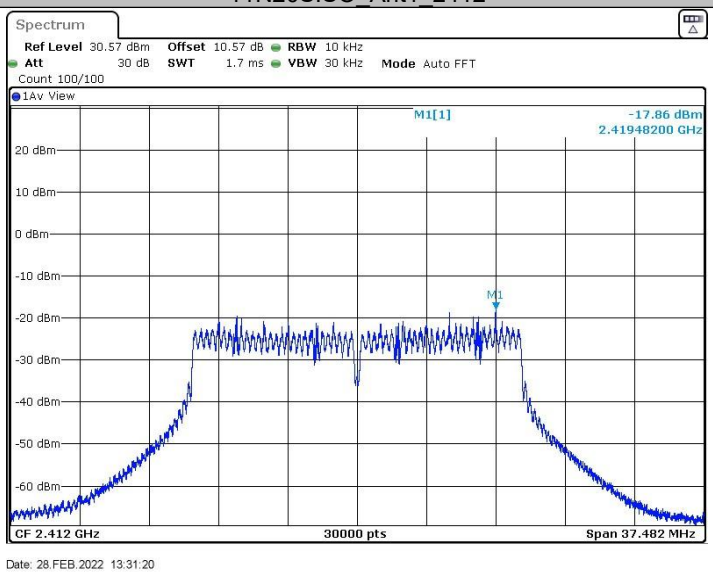
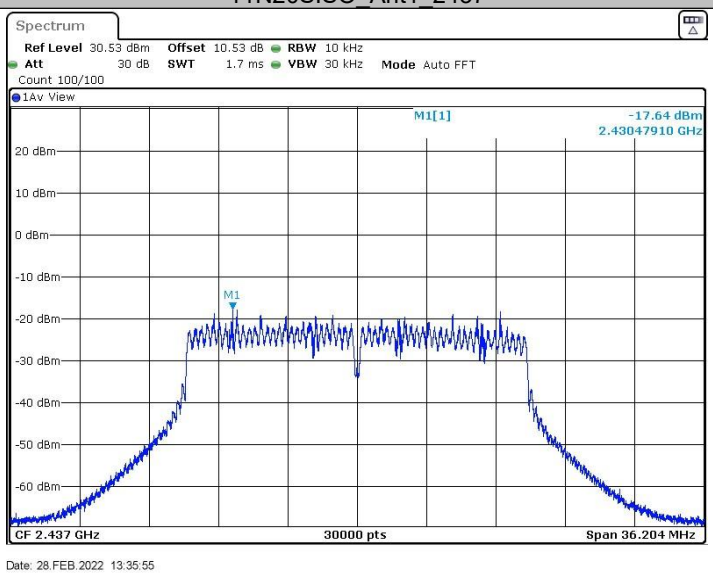
11G_Ant1_2437



11G_Ant1_2462



11N20SISO_Ant1_2412



11N20SISO_Ant1_2437