TEST REPORT

Product	:	WIFI Module
Trade mark	:	GSD
Model/Type reference	:	W2MM2510
Serial Number	:	N/A
Report Number	:	EED32L00378901
FCC ID	:	2AC23-W2M
Date of Issue	:	Jan. 16, 2020
Test Standards	:	47 CFR Part 15 Subpart C
Test result	:	PASS

Prepared for:

Hui Zhou Gaoshengda Technology Co., LTD
NO.75 Zhongkai Development Area, Huizhou, Guangdong, China

Prepared by:

Centre Testing International Group Co., Ltd.
Hongwei Industrial Zone, Bao'an 70 District,
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Tested By:	mark. chen.	Compiled by:	Smile Zhong
	Mark Chen		Smile Zhong
Reviewed by:	Ware Xin	Approved by:	Sam Chuang
	Ware Xin		Sam Chuang
Date:	Jan. 16, 2020		Check No.: 3096314301

CENTRE TESTING INTERNATIONAL GROUP CO.,LTD. Report Seal

2 Version

Version No.	Date	Description
00	Jan. 16, 2020	Original

3 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 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
Duty cycle	ANSI C63.10-2013	ANSI C63.10-2013	PASS

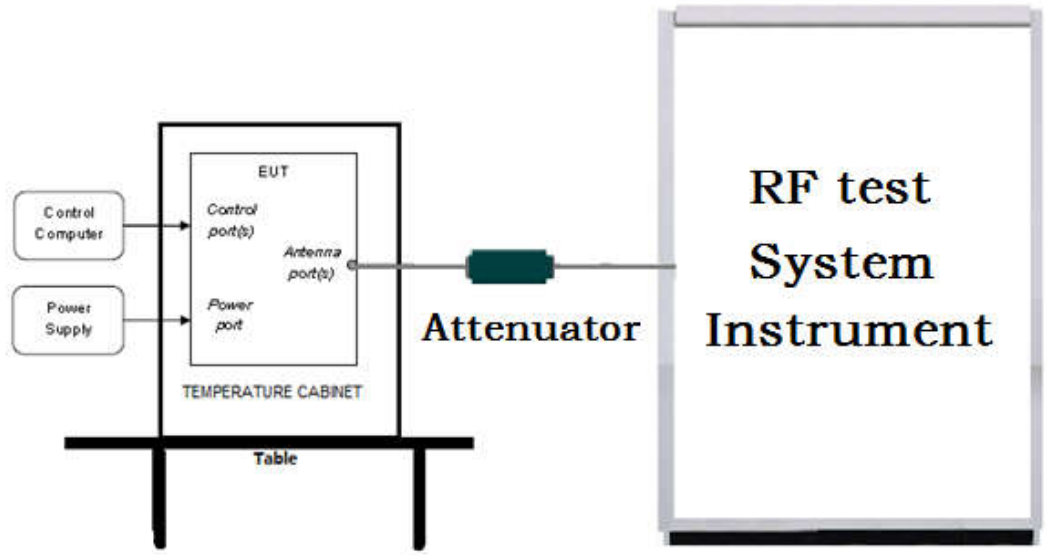
Remark:
Test according to ANSI C63.4-2014 & ANSI C63.10-2013.
The tested sample(s) and the sample information are provided by the client.

4 Content

5 Test Requirement

5.1 Test setup

5.1.1 For Conducted test setup



5.1.2 For Radiated Emissions test setup

Radiated Emissions setup:

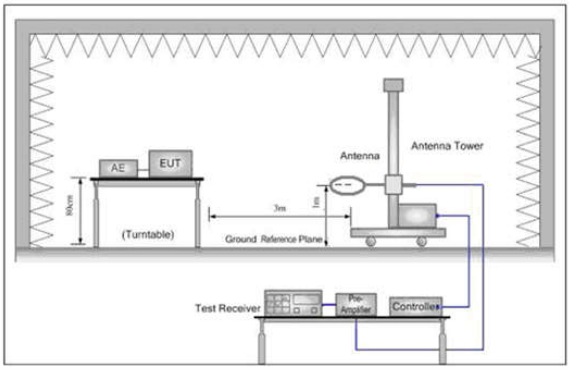


Figure 1. Below 30MHz

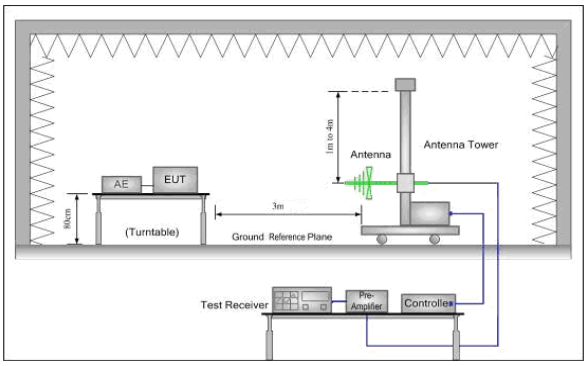


Figure 2. 30MHz to 1GHz

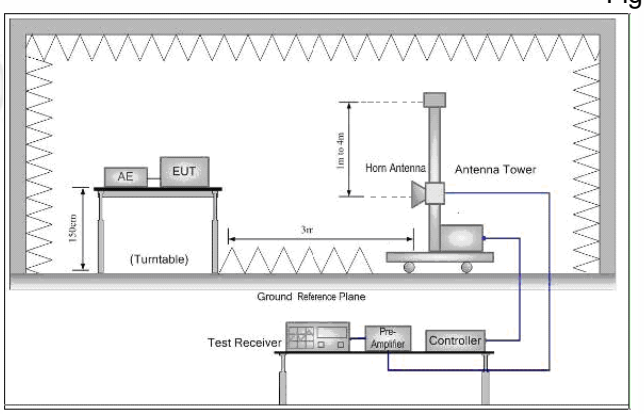
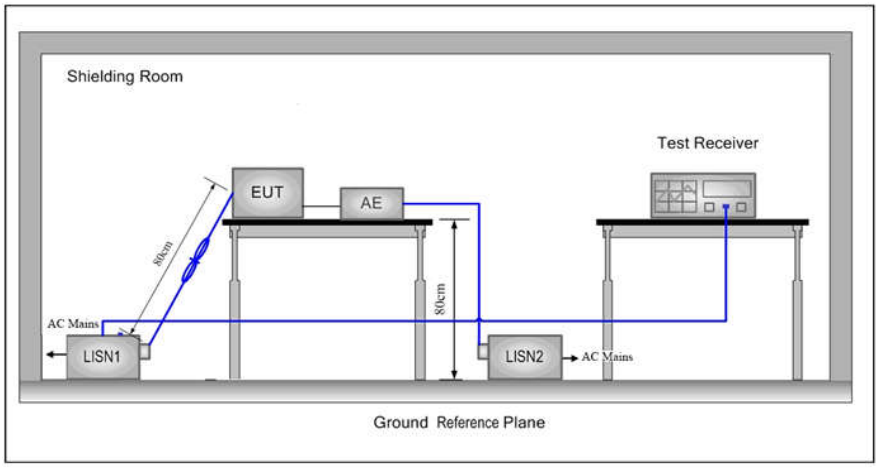


Figure 3. Above 1GHz

5.1.3 For Conducted Emissions test setup

Conducted Emissions setup



5.2 Test Environment

Operating Environment:	
Temperature:	23.0 °C
Humidity:	54 % RH
Atmospheric Pressure:	1010mbar

5.3 Test Condition

Test channel:

Test Mode	Tx/Rx	RF Channel		
		Low(L)	Middle(M)	High(H)
802.11b/g/n(HT20)	2412MHz ~2462 MHz	Channel 1	Channel 6	Channel11
		2412MHz	2437MHz	2462MHz
802.11n(HT40)	2422MHz ~2452 MHz	Channel 1	Channel 4	Channel7
		2422MHz	2437MHz	2452MHz
Transmitting mode:	Keep the EUT in transmitting mode with all kind of modulation and all kind of data rate.			

Test mode:

Pre-scan under all rate at lowest channel 1

Mode	802.11b			
Data Rate	1Mbps	2Mbps	5.5Mbps	11Mbps
Power(dBm)	17.90	17.92	17.94	17.96

Mode	802.11g							
Data Rate	6Mbps	9Mbps	12Mbps	18Mbps	24Mbps	36Mbps	48Mbps	54Mbps
Power(dBm)	20.97	20.95	20.93	20.91	20.89	20.87	20.85	20.83

Mode	802.11n (HT20)							
Data Rate	6.5Mbps	13Mbps	19.5Mbps	26Mbps	39Mbps	52Mbps	58.5Mbps	65Mbps
Power(dBm)	18.82	18.80	17.78	17.76	17.74	17.72	17.70	17.68
Mode	802.11n (HT40)							
Data Rate	13.5Mbps	27Mbps	40.5Mbps	54Mbps	81Mbps	108Mbps	121.5Mbps	135Mbps
Power(dBm)	19.9	19.88	18.86	18.84	18.82	18.80	18.78	18.76

Through Pre-scan, 11Mbps 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).

6 General Information

6.1 Client Information

Applicant:	Hui Zhou Gaoshengda Technology Co., LTD
Address of Applicant:	NO.75 Zhongkai Development Area, Huizhou, Guangdong, China
Manufacturer:	Hui Zhou Gaoshengda Technology Co., LTD
Address of Manufacturer:	NO.75 Zhongkai Development Area, Huizhou, Guangdong, China
Factory :	Hui Zhou Gaoshengda Technology Co., LTD
Address of Factory :	NO.75 Zhongkai Development Area, Huizhou, Guangdong, China

6.2 General Description of EUT

Product Name:	WIFI Module
Model No.(EUT):	W2MM2510
Trade Mark:	GSD
EUT Supports Radios application:	IEEE 802.11 b/g/n(HT20)(HT40): 2412MHz to 2462MHz
Power Supply:	DC 5V
Sample Received Date:	Dec. 16, 2019
Sample tested Date:	Dec. 16, 2019 to Jan. 07, 2020

6.3 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)
Test power grade	Reference Table
Test software of EUT	QATool_Dbg.exe
Antenna Type and Gain:	Type:FIPA Antenna Gain: 2dBi
Test Voltage:	DC 5V

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		

6.4 Description of Support Units

Associated equipment name		Manufacture	model	S/N serial number	Supplied by	Certification
AE1	Notebook	DELL	DELL 3490	D245DX2	DELL	CE&FCC

6.5 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd
Building C, Hongwei Industrial Park Block 70, Bao'an District, Shenzhen, China
Telephone: +86 (0) 755 33683668 Fax:+86 (0) 755 33683385
No tests were sub-contracted.
FCC Designation No.: CN1164

6.6 Deviation from Standards

None.

6.7 Abnormalities from Standard Conditions

None.

6.8 Other Information Requested by the Customer

None.

6.9 Measurement Uncertainty (95% confidence levels, k=2)

No.	Item	Measurement Uncertainty
1	Radio Frequency	7.9×10^{-8}
2	RF power, conducted	0.46dB (30MHz-1GHz)
		0.55dB (1GHz-18GHz)
3	Radiated Spurious emission test	4.3dB (30MHz-1GHz)
		4.5dB (1GHz-12.75GHz)
4	Conduction emission	3.5dB (9kHz to 150kHz)
		3.1dB (150kHz to 30MHz)
5	Temperature test	0.64°C
6	Humidity test	3.8%
7	DC power voltages	0.026%

7 Equipment List

RF test system					
Equipment	**Manufacturer**	**Mode No.**	**Serial Number**	**Cal. Date (mm-dd-yyyy)**	**Cal. Due date (mm-dd-yyyy)**
Spectrum Analyzer	Keysight	N9010A	MY54510339	03-01-2019	02-29-2020
Signal Generator	Keysight	N5182B	MY53051549	03-01-2019	02-29-2020
Temperature/ Humidity Indicator	biaozhi	HM10	1804186	07-26-2019	07-25-2020
High-pass filter	Sinoscite	FL3CX03WG18N M12-0398-002	---	01-09-2019	01-08-2020
High-pass filter	MICRO-TRONICS	SPA-F-63029-4	---	01-09-2019	01-08-2020
DC Power	Keysight	E3642A	MY56376072	03-01-2019	02-29-2020
PC-1	Lenovo	R4960d	---	03-01-2019	02-29-2020
BT&WI-FI Automatic control	R&S	OSP120	101374	03-01-2019	02-29-2020
RF control unit	JS Tonscend	JS0806-2	158060006	03-01-2019	02-29-2020
BT&WI-FI Automatic test software	JS Tonscend	JS1120-3	---	03-01-2019	02-29-2020

Conducted disturbance Test					
Equipment	**Manufacturer**	**Model No.**	**Serial Number**	**Cal. date (mm-dd-yyyy)**	**Cal. Due date (mm-dd-yyyy)**
Receiver	R&S	ESCI	100435	05-20-2019	05-19-2020
Temperature/ Humidity Indicator	Defu	TH128	/	06-14-2019	06-13-2020
LISN	R&S	ENV216	100098	05-08-2019	05-07-2020
Barometer	changchun	DYM3	1188	06-20-2019	06-19-2020

3M Semi/full-anechoic Chamber					
Equipment	**Manufacturer**	**Model No.**	**Serial Number**	**Cal. date (mm-dd-yyyy)**	**Cal. Due date (mm-dd-yyyy)**
3M Chamber & Accessory Equipment	TDK	SAC-3	---	05-24-2019	05-23-2022
TRILOG Broadband Antenna	Schwarzbeck	VULB9163	9163-618	07-26-2019	07-25-2020
Loop Antenna	Schwarzbeck	FMZB 1519B	1519B-076	04-25-2018	04-24-2021
Receiver	R&S	ESCI7	100938-003	10-21-2019	10-20-2020
Multi device Controller	maturo	NCD/070/10711112	---	01-09-2019	01-08-2020
Temperature/ Humidity Indicator	Shanghai qixiang	HM10	1804298	07-26-2019	07-25-2020
Cable line	Fulai(7M)	SF106	5219/6A	01-09-2019	01-08-2020
Cable line	Fulai(6M)	SF106	5220/6A	01-09-2019	01-08-2020
Cable line	Fulai(3M)	SF106	5216/6A	01-09-2019	01-08-2020
Cable line	Fulai(3M)	SF106	5217/6A	01-09-2019	01-08-2020

3M full-anechoic Chamber					
Equipment	**Manufacturer**	**Model No.**	**Serial Number**	**Cal. date (mm-dd-yyyy)**	**Cal. Due date (mm-dd-yyyy)**
RSE Automatic test software	JS Tonscend	JS36-RSE	10166	06-19-2019	06-18-2020
Receiver	Keysight	N9038A	MY57290136	03-27-2019	03-26-2020
Spectrum Analyzer	Keysight	N9020B	MY57111112	03-27-2019	03-26-2020
Spectrum Analyzer	Keysight	N9030B	MY57140871	03-27-2019	03-26-2020
TRILOG Broadband Antenna	Schwarzbeck	VULB 9163	9163-1148	04-25-2018	04-24-2021
Horn Antenna	Schwarzbeck	BBHA 9170	9170-832	04-25-2018	04-24-2021
Horn Antenna	ETS-LINDGREN	3117	00057407	07-10-2018	07-09-2021
Preamplifier	EMCI	EMC184055SE	980596	05-22-2019	05-21-2020
Preamplifier	EMCI	EMC001330	980563	05-08-2019	05-07-2020
Preamplifier	JS Tonscend	980380	EMC051845 SE	01-16-2019	01-15-2020
Temperature/ Humidity Indicator	biaozhi	GM1360	EE1186631	04-30-2019	04-29-2020
Fully Anechoic Chamber	TDK	FAC-3	---	01-17-2018	01-16-2021
Filter bank	JS Tonscend	JS0806-F	188060094	04-10-2018	04-09-2021
Cable line	Times	SFT205-NMSM-2.50M	394812-0001	01-09-2019	01-08-2020
Cable line	Times	SFT205-NMSM-2.50M	394812-0002	01-09-2019	01-08-2020
Cable line	Times	SFT205-NMSM-2.50M	394812-0003	01-09-2019	01-08-2020
Cable line	Times	SFT205-NMSM-2.50M	393495-0001	01-09-2019	01-08-2020
Cable line	Times	EMC104-NMNM-1000	SN160710	01-09-2019	01-08-2020
Cable line	Times	SFT205-NMSM-3.00M	394813-0001	01-09-2019	01-08-2020
Cable line	Times	SFT205-NMNM-1.50M	381964-0001	01-09-2019	01-08-2020
Cable line	Times	SFT205-NMSM-7.00M	394815-0001	01-09-2019	01-08-2020
Cable line	Times	HF160-KMKM-3.00M	393493-0001	01-09-2019	01-08-2020

8 Radio Technical Requirements Specification

Reference documents for testing:

No.	Identity	Document Title
1	FCC Part15C	Subpart C-Intentional Radiators
2	ANSI C63.10-2013	American National Standard for Testing Unlicesed Wireless Devices

Test Results List:

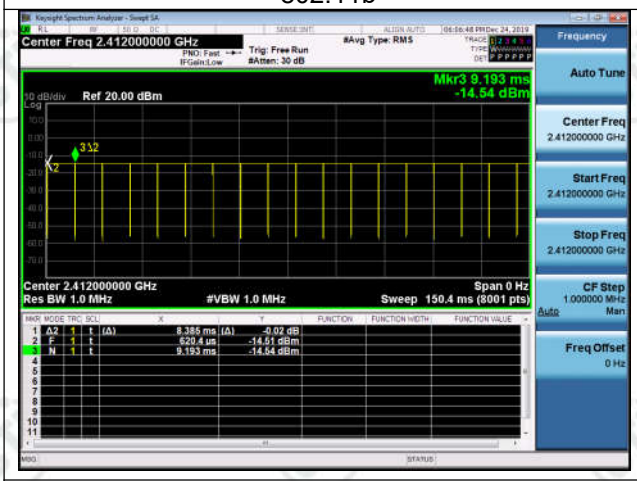
Test Requirement	Test method	Test item	Verdict	Note
Part15C Section 15.247 (b)(3)	ANSI C63.10	Conducted Peak Output Power	PASS	Appendix A)
Part15C Section 15.247 (a)(2)	ANSI C63.10	6dB Occupied Bandwidth	PASS	Appendix B)
Part15C Section 15.247(d)	ANSI C63.10	Band-edge for RF Conducted Emissions	PASS	Appendix C)
Part15C Section 15.247(d)	ANSI C63.10	RF Conducted Spurious Emissions	PASS	Appendix D)
Part15C Section 15.247 (e)	ANSI C63.10	Power Spectral Density	PASS	Appendix E)
Part15C Section 15.203/15.247 (c)	ANSI C63.10	Antenna Requirement	PASS	Appendix F)
Part15C Section 15.207	ANSI C63.10	AC Power Line Conducted Emission	PASS	Appendix G)
Part15C Section 15.205/15.209	ANSI C63.10	Restricted bands around fundamental frequency (Radiated Emission)	PASS	Appendix H)
Part15C Section 15.205/15.209	ANSI C63.10	Radiated Spurious Emissions	PASS	Appendix I)

EUT DUTY CYCLE

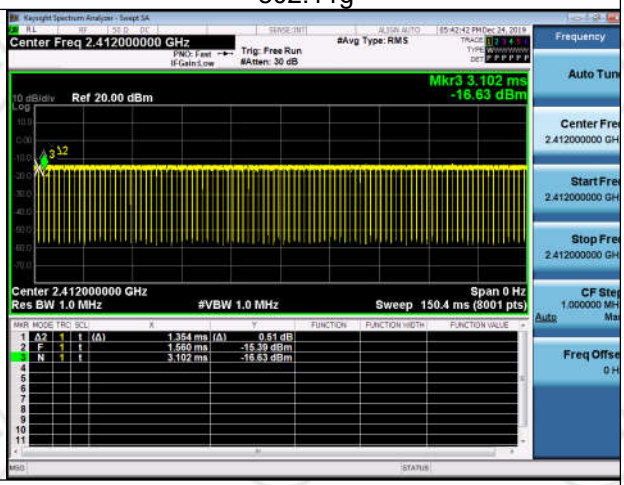
ANT1

Duty Cycle			
Configuration	TX ON(ms)	TX ALL(ms)	Duty Cycle(%)
802.11b	8.385	8.5726	97.81%
802.11g	1.354	1.542	87.8%
802.11n HT20	1.278	1.466	87.18%
802.11n HT40	0.6204	0.8088	76.71%

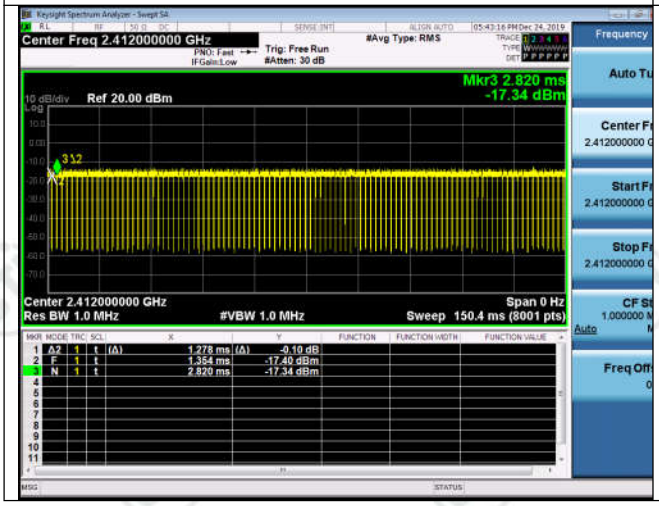
802.11b



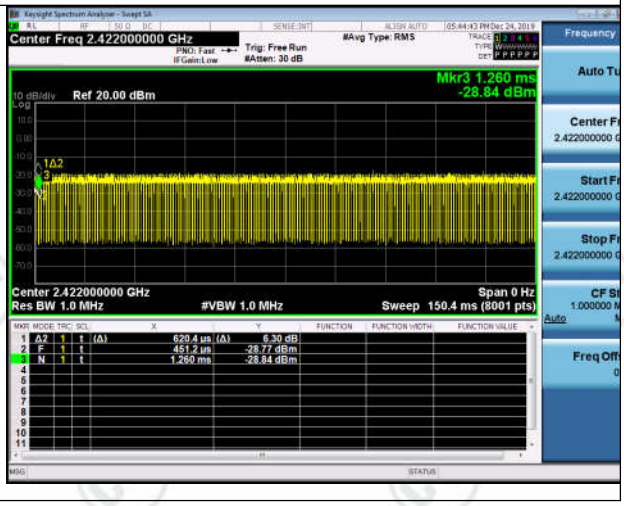
802.11g



802.11n HT20



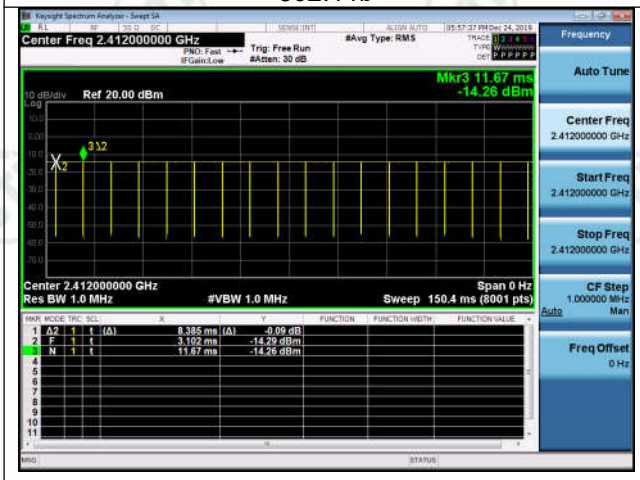
802.11n HT40



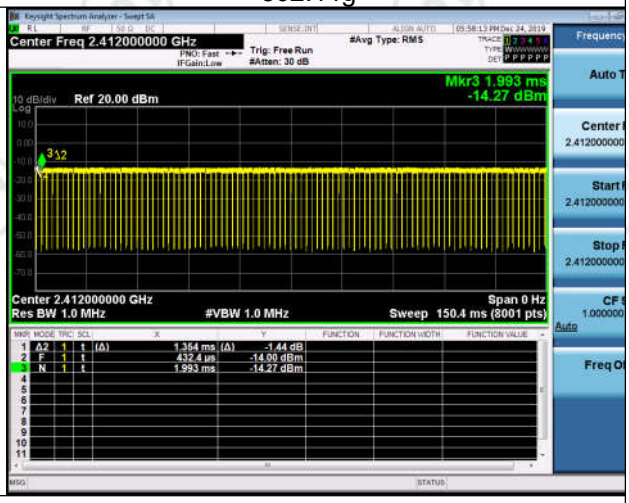
ANT2

Duty Cycle			
Configuration	TX ON(ms)	TX ALL(ms)	Duty Cycle(%)
802.11b	8.385	8.568	97.86%
802.11g	1.354	1.5606	86.8%
802.11n HT20	1.278	1.4668	87.73%
802.11n HT40	0.6016	0.8082	74.44%

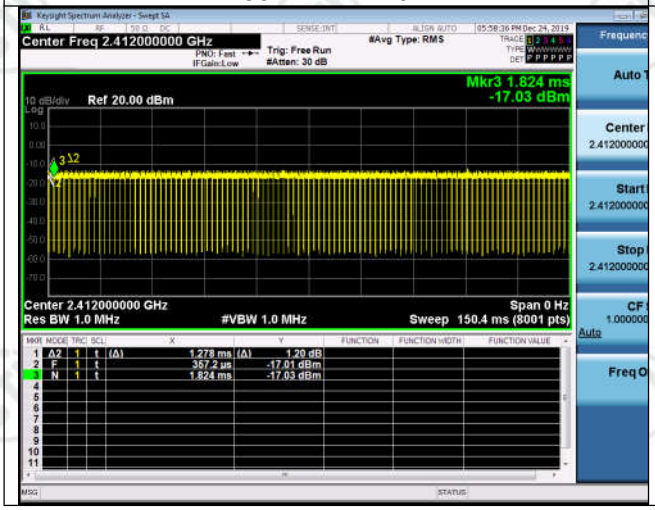
802.11b



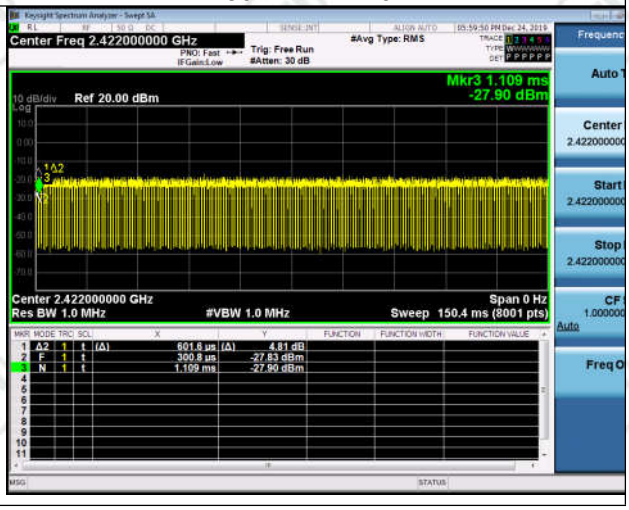
802.11g



802.11n HT20



802.11n HT40



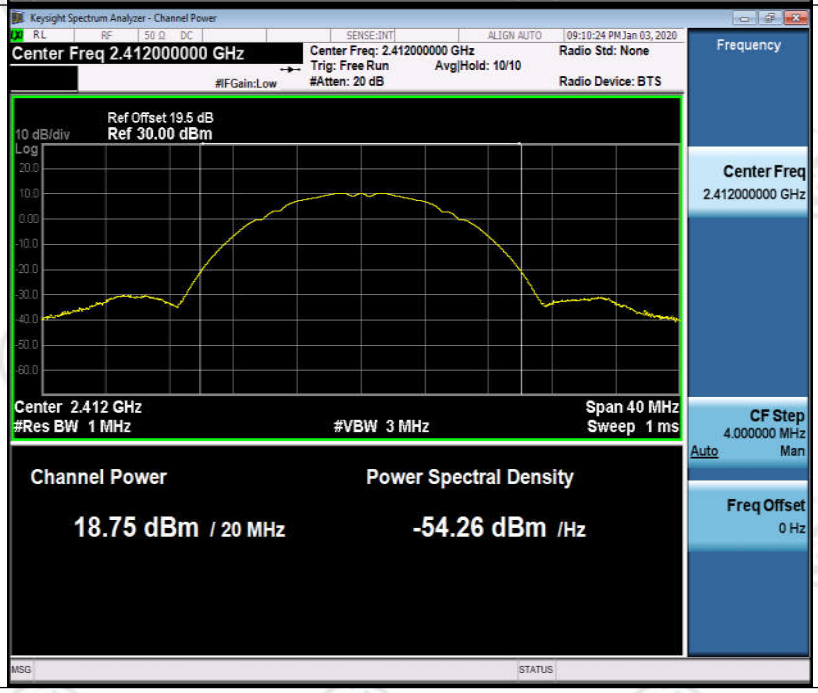
Appendix A): Conducted Peak Output Power

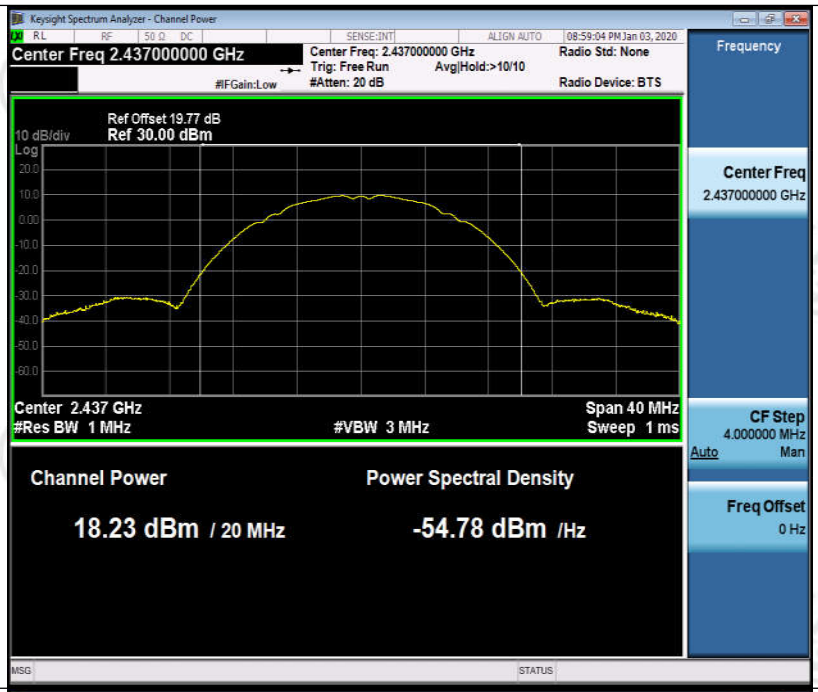
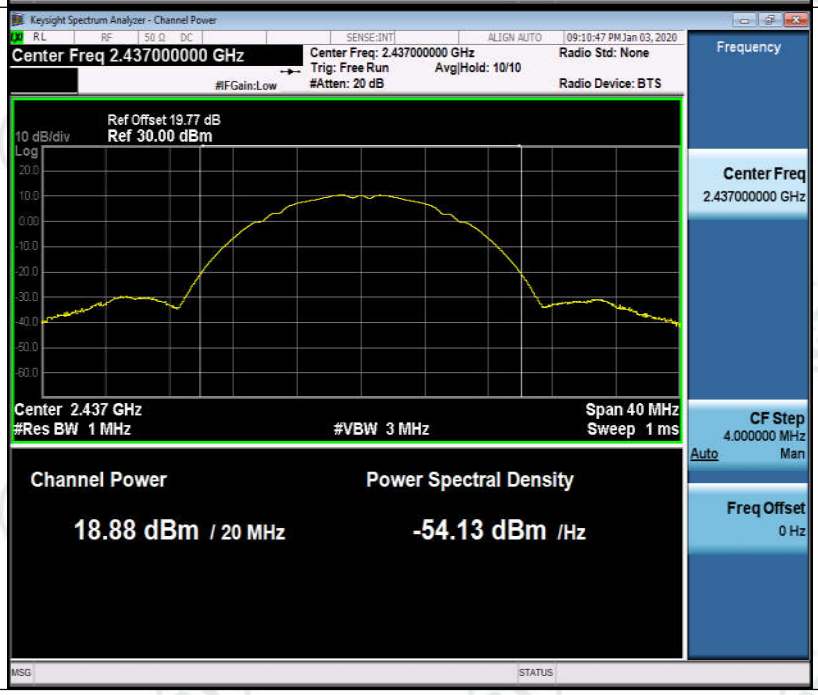
Result Table

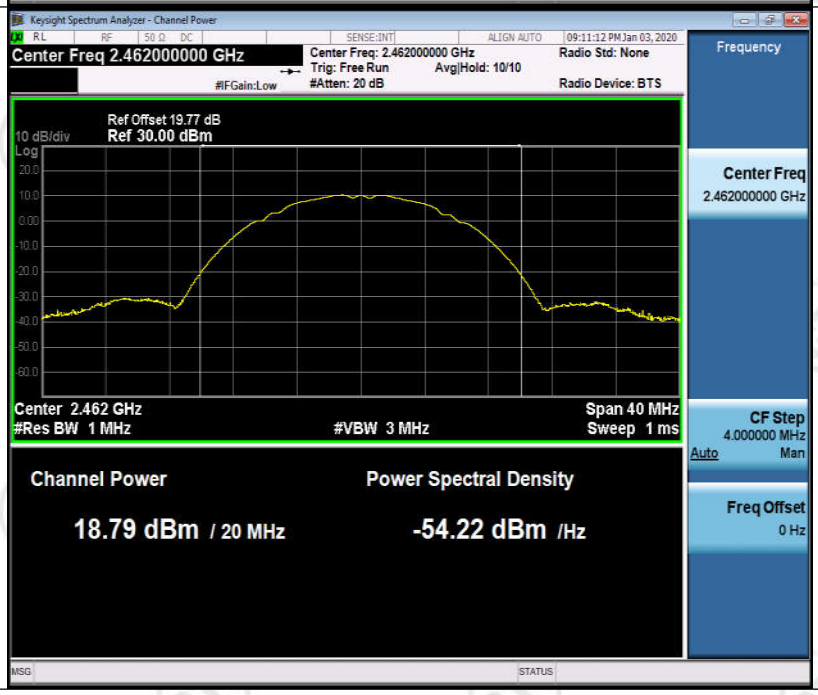
Mode	Antenna	Channel	Conducted Peak Output Power [dBm]	Verdict
11B	Ant1	LCH	17.96	PASS
11B	Ant2	LCH	18.75	PASS
11B	Ant1	MCH	18.23	PASS
11B	Ant2	MCH	18.88	PASS
11B	Ant1	HCH	18.16	PASS
11B	Ant2	HCH	18.79	PASS
11G	Ant1	LCH	20.97	PASS
11G	Ant2	LCH	21.94	PASS
11G	Ant1	MCH	21.39	PASS
11G	Ant2	MCH	22	PASS
11G	Ant1	HCH	21.34	PASS
11G	Ant2	HCH	22.16	PASS
11N20SISO	Ant1	LCH	18.82	PASS
11N20SISO	Ant2	LCH	19.65	PASS
11N20SISO	Ant1	MCH	19.31	PASS
11N20SISO	Ant2	MCH	19.85	PASS
11N20SISO	Ant1	HCH	19.48	PASS
11N20SISO	Ant2	HCH	19.88	PASS
11N20MIMO	Ant1	LCH	19.42	PASS
11N20MIMO	Ant2	LCH	20.16	PASS
11N20MIMO	Ant1+2	LCH	22.82	PASS
11N20MIMO	Ant1	MCH	19.8	PASS
11N20MIMO	Ant2	MCH	20.43	PASS
11N20MIMO	Ant1+2	MCH	23.14	PASS
11N20MIMO	Ant1	HCH	19.75	PASS
11N20MIMO	Ant2	HCH	20.32	PASS
11N20MIMO	Ant1+2	HCH	23.05	PASS
11N40SISO	Ant1	LCH	19.9	PASS
11N40SISO	Ant2	LCH	20.18	PASS
11N40SISO	Ant1	MCH	19.88	PASS
11N40SISO	Ant2	MCH	20.15	PASS

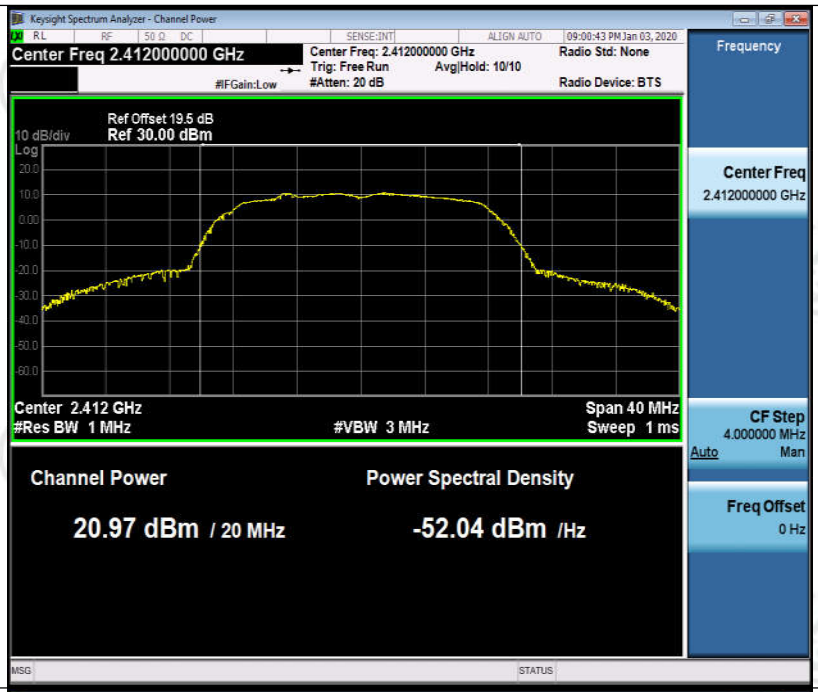
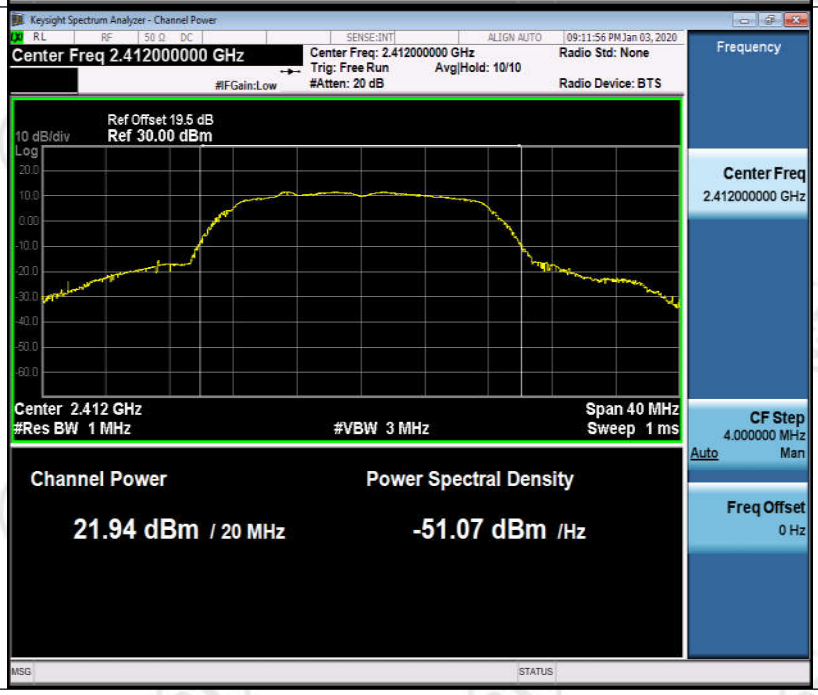
11N40SISO	Ant1	HCH	20.06	PASS
11N40SISO	Ant2	HCH	20.29	PASS
11N40MIMO	Ant1	LCH	20.48	PASS
11N40MIMO	Ant2	LCH	21.08	PASS
11N40MIMO	Ant1+2	LCH	23.80	PASS
11N40MIMO	Ant1	MCH	20.59	PASS
11N40MIMO	Ant2	MCH	21.03	PASS
11N40MIMO	Ant1+2	MCH	23.83	PASS
11N40MIMO	Ant1	HCH	20.6	PASS
11N40MIMO	Ant2	HCH	20.99	PASS
11N40MIMO	Ant1+2	HCH	23.81	PASS

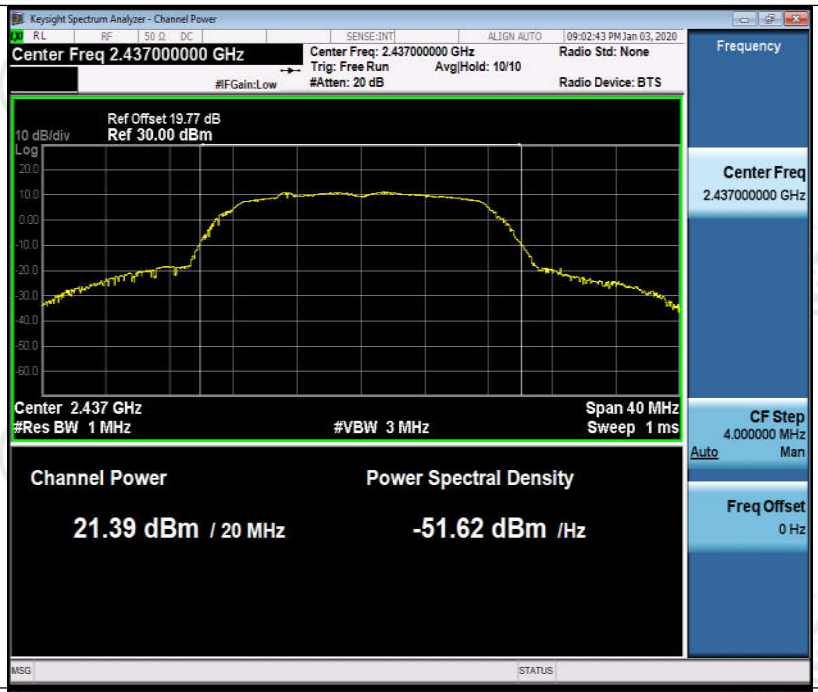
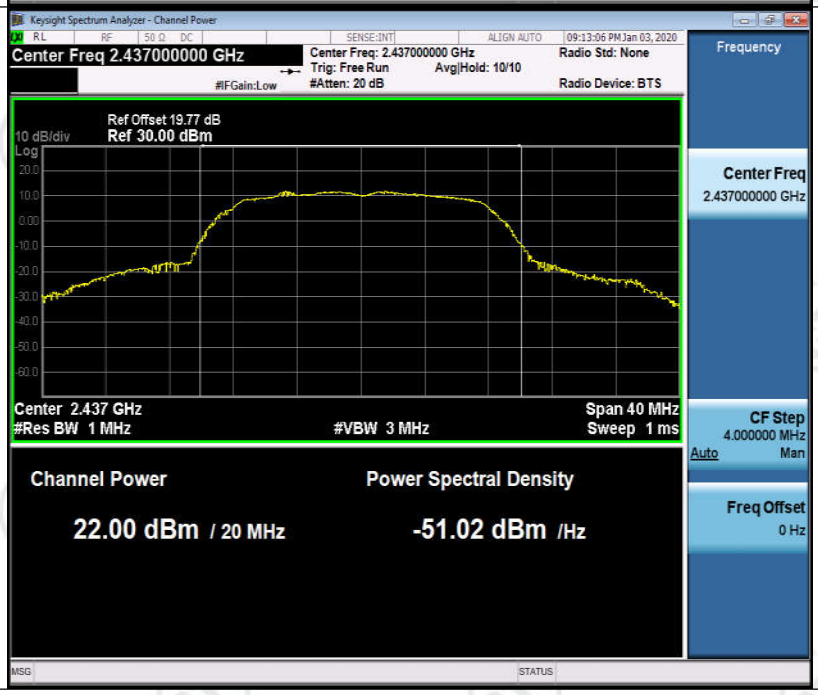
Test Graph

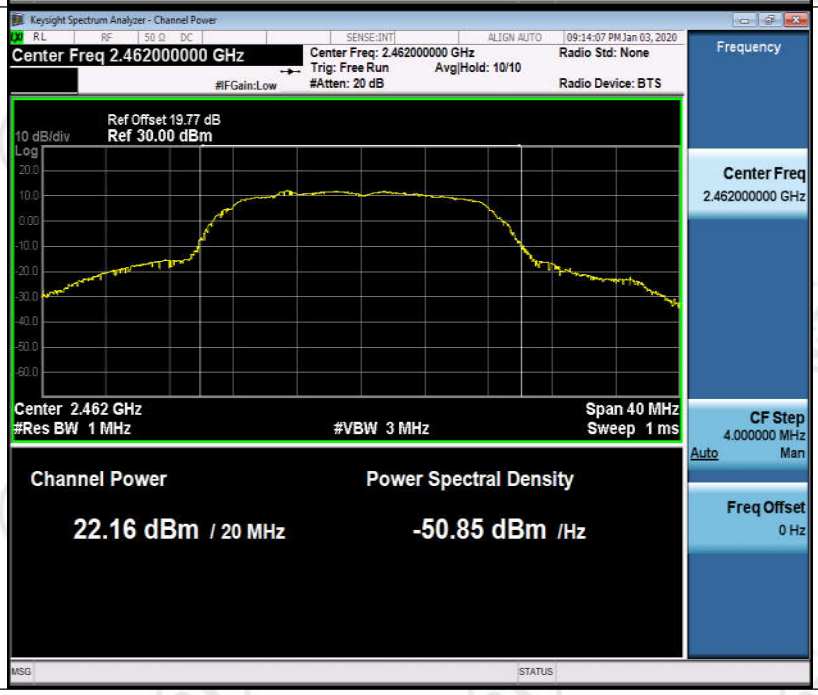
Graphs	
11B/LCH_Ant1	
11B/LCH_Ant2	

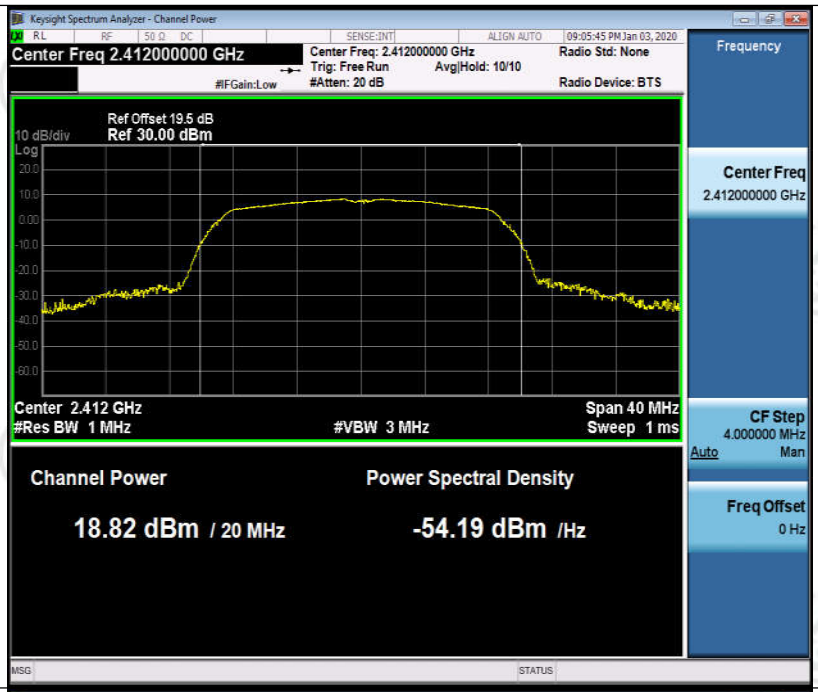
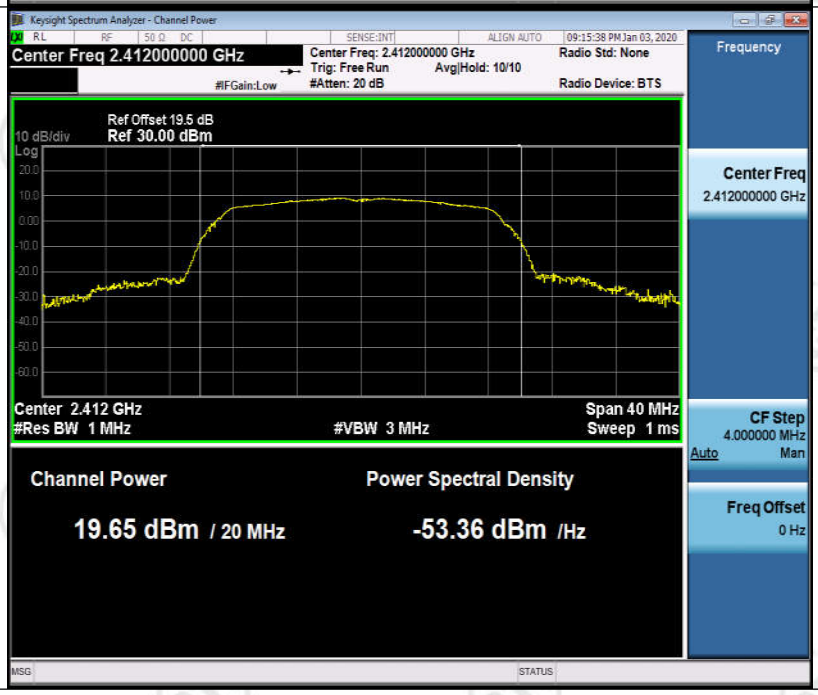
11B/MCH_Ant1	
11B/MCH_Ant2	

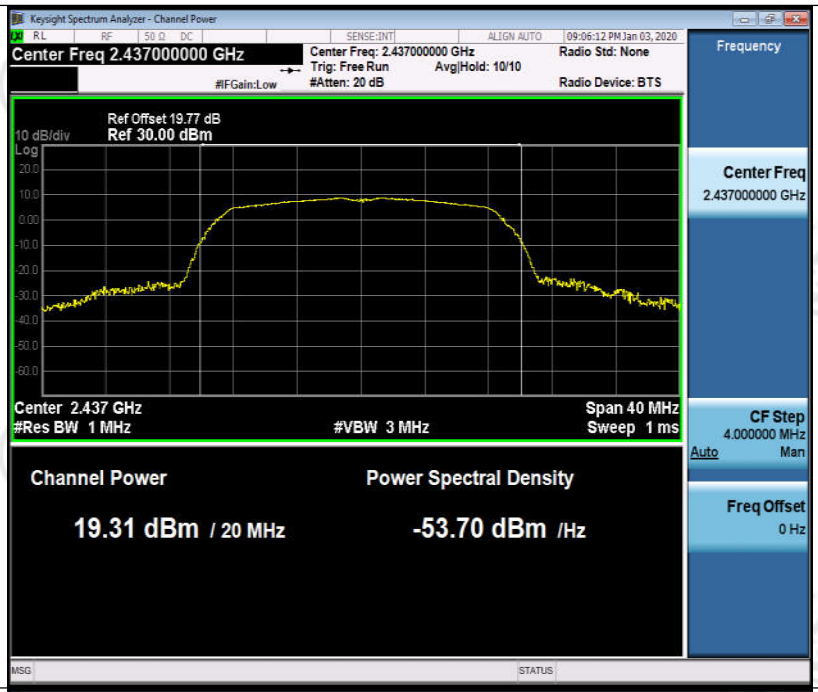
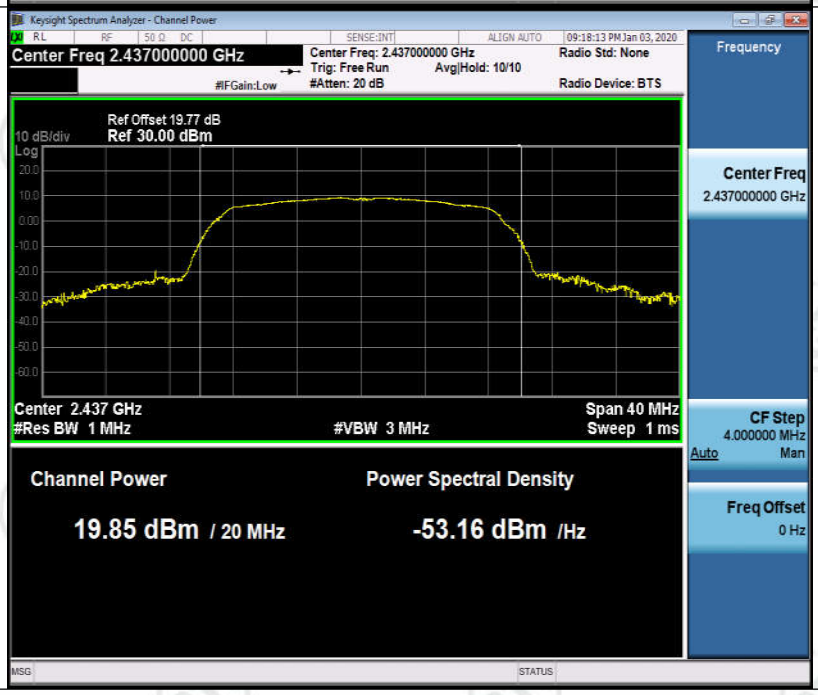
11B/HCH_Ant1	
11B/HCH_Ant2	

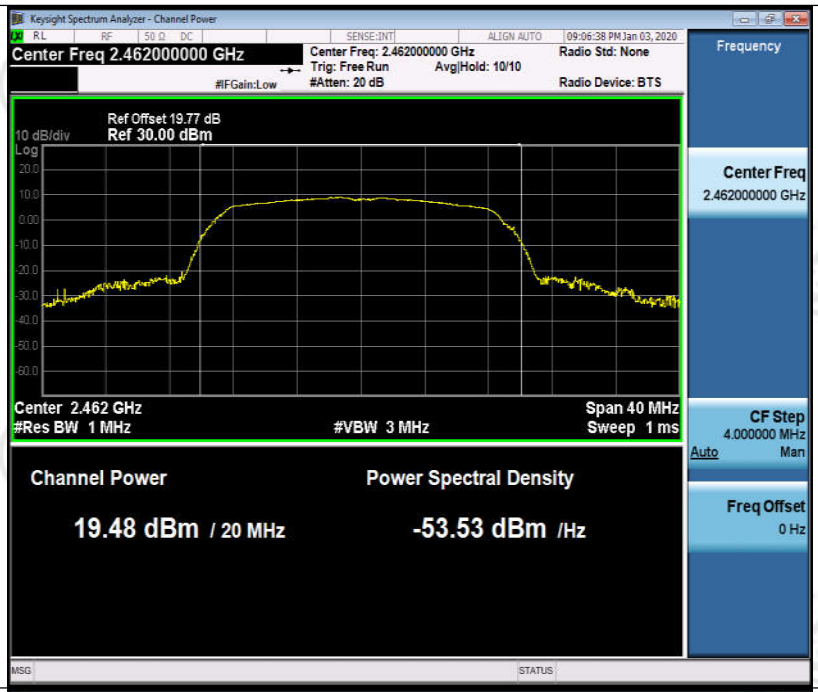
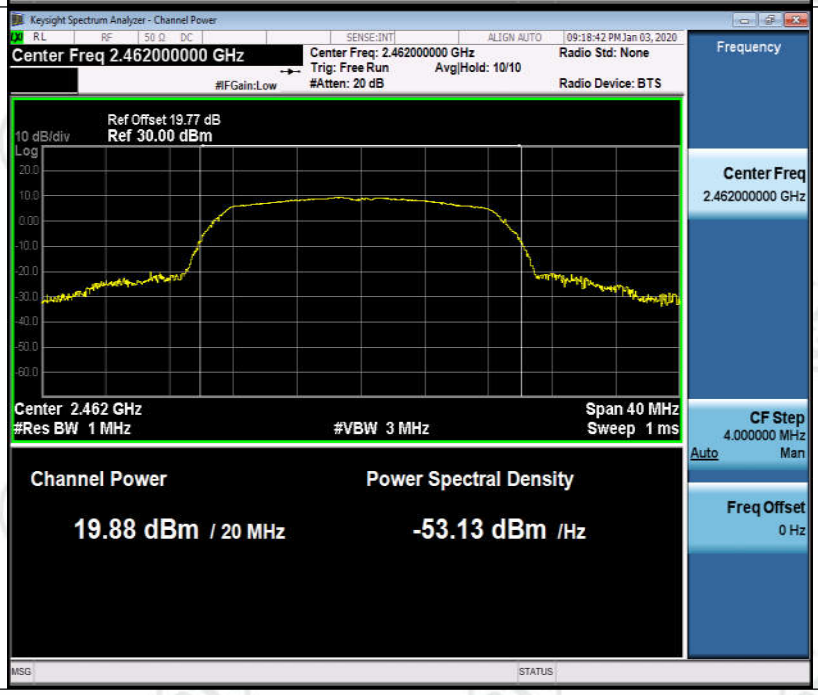
11G/LCH_Ant1	
11G/LCH_Ant2	

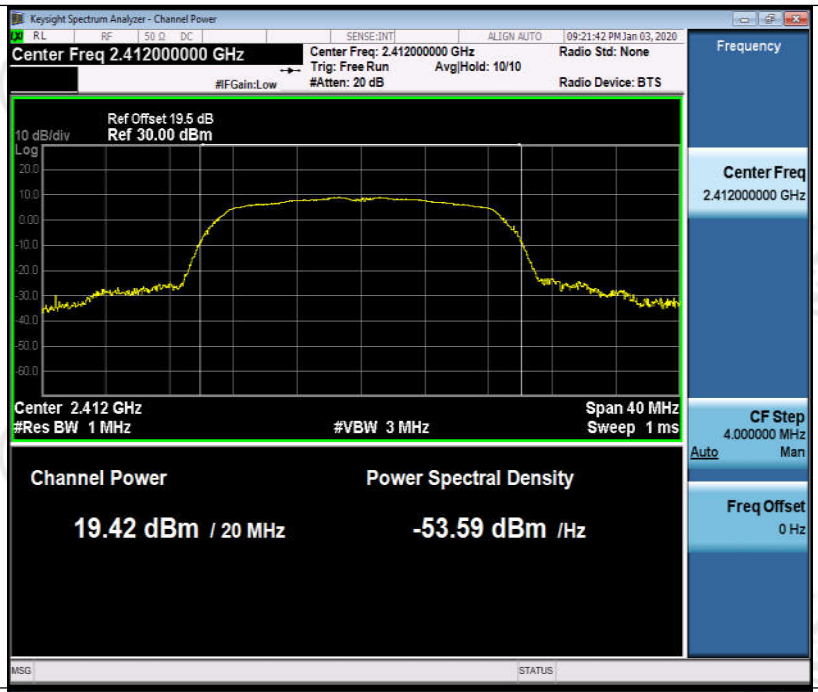
11G/MCH_Ant1	
11G/MCH_Ant2	

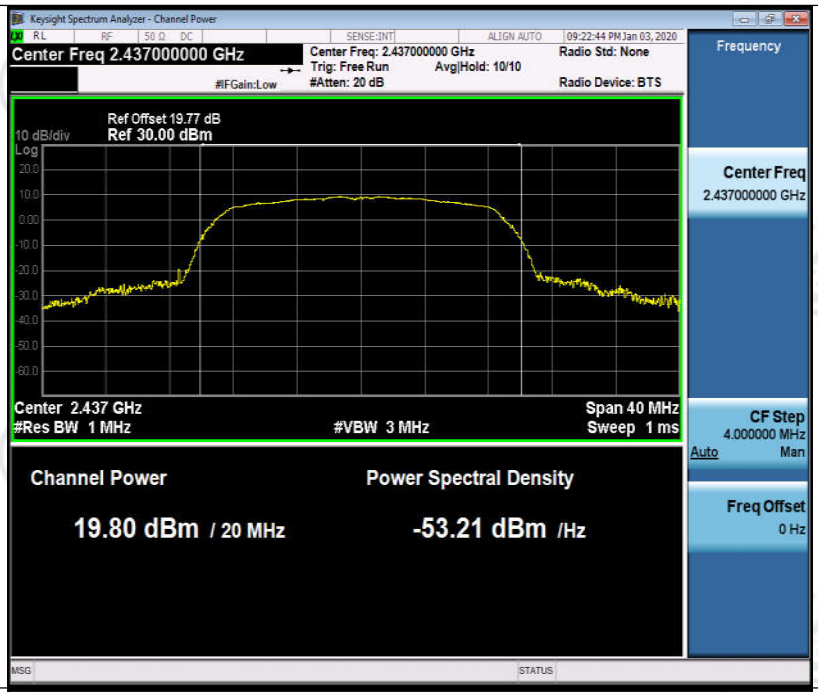
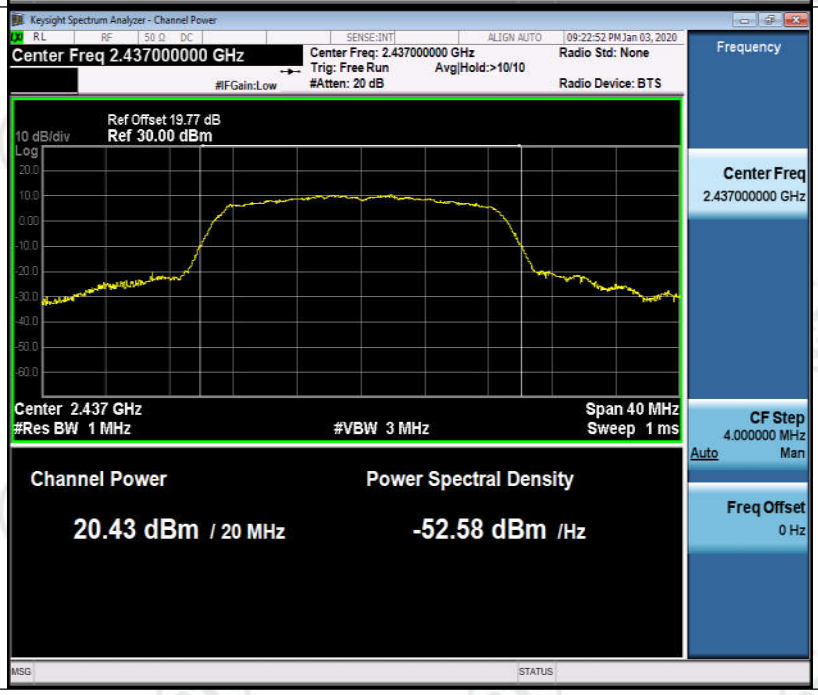
11G/HCH_Ant1	
11G/HCH_Ant2	

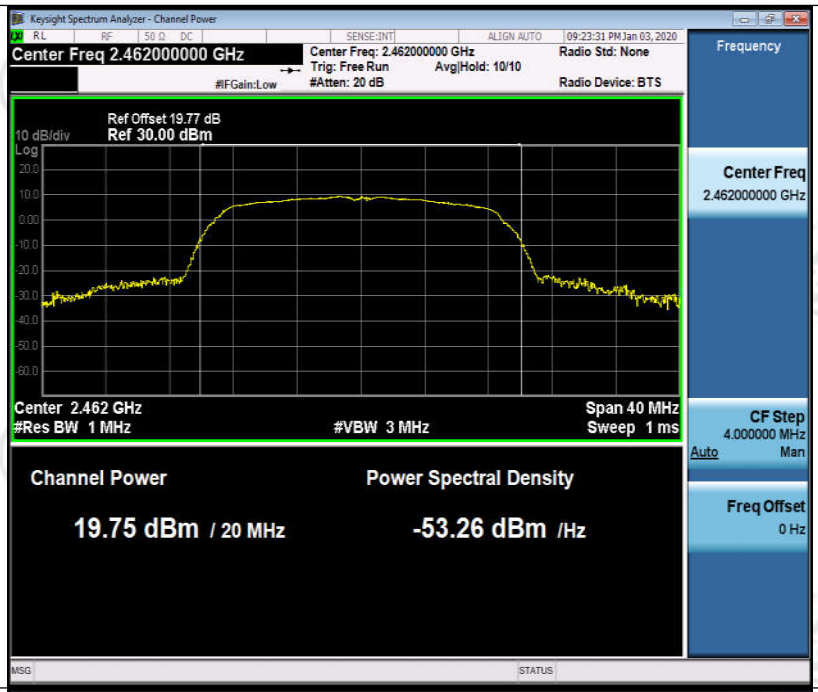
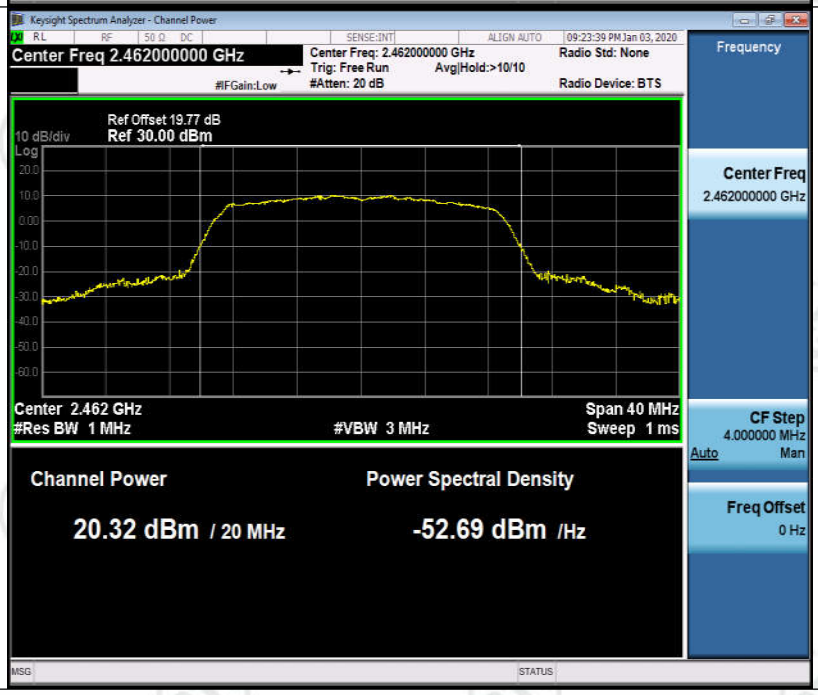
11N20SISO/LCH_Ant1	
11N20SISO/LCH_Ant2	

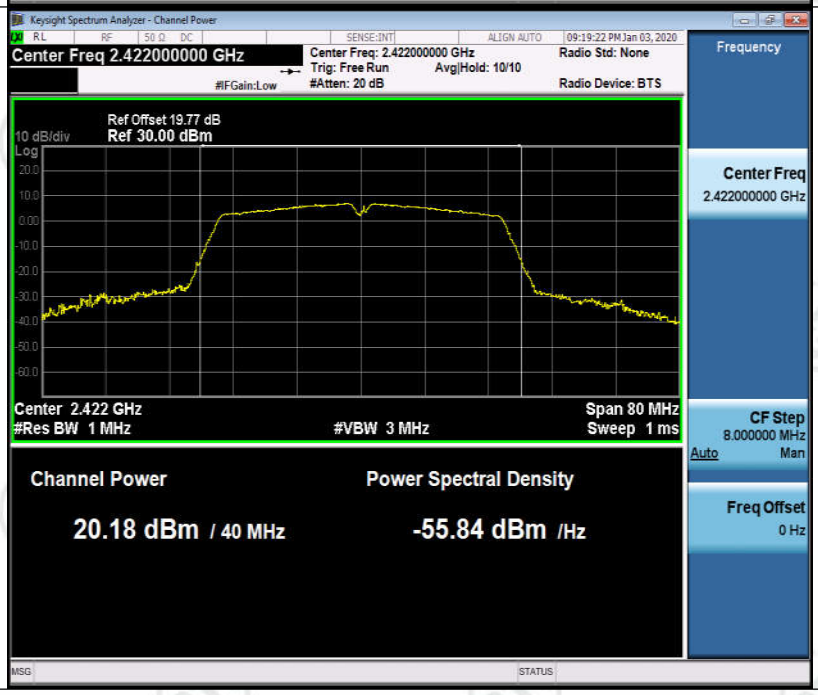
11N20SISO/MCH_Ant1	
11N20SISO/MCH_Ant2	

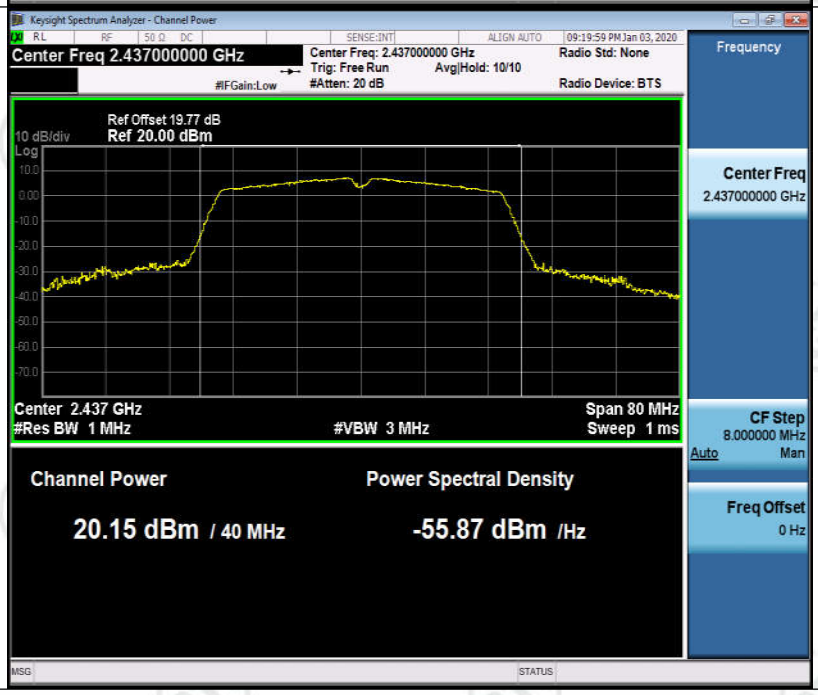
11N20SISO/HCH_Ant1	
11N20SISO/HCH_Ant2	

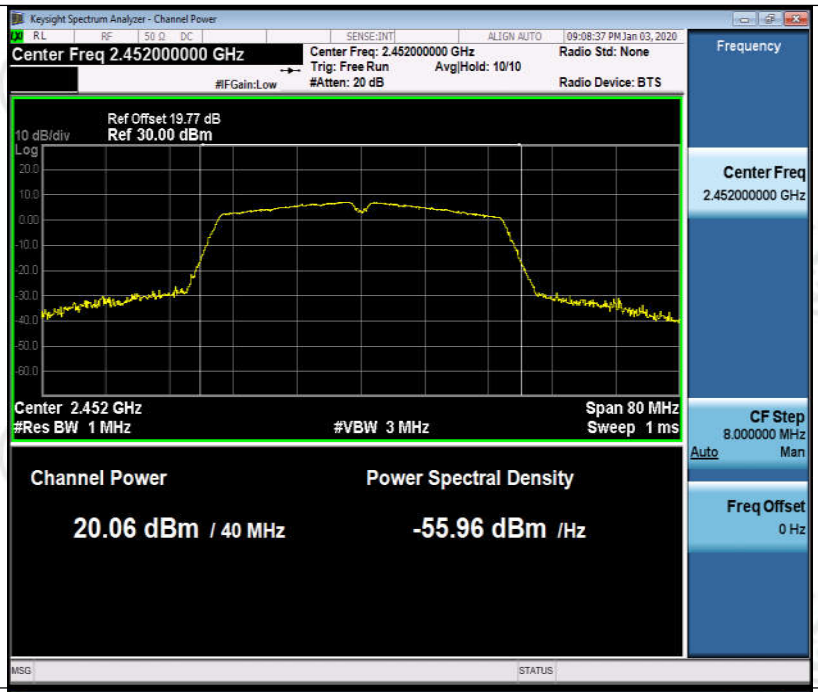
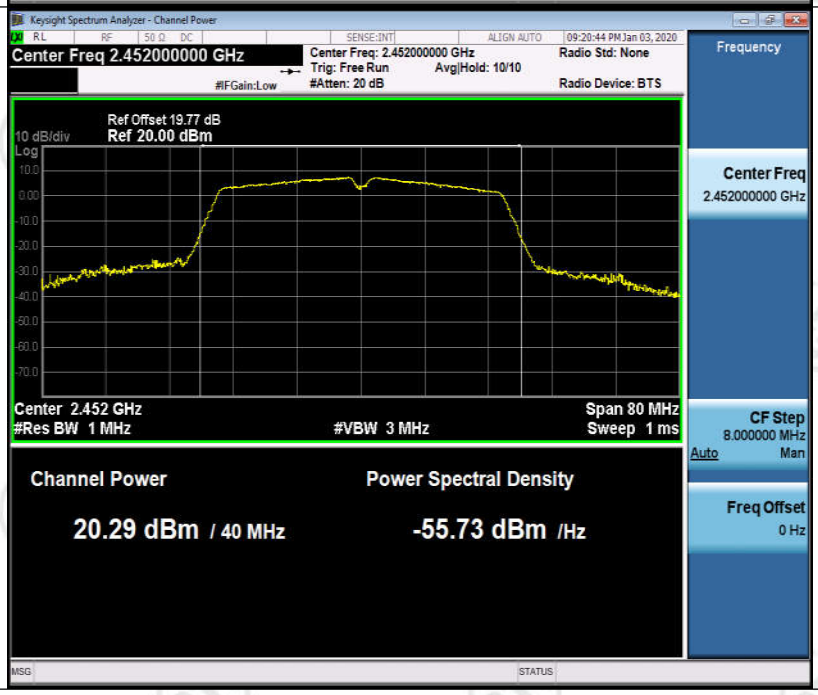
11N20MIMO/LCH_Ant1	
11N20MIMO/LCH_Ant2	

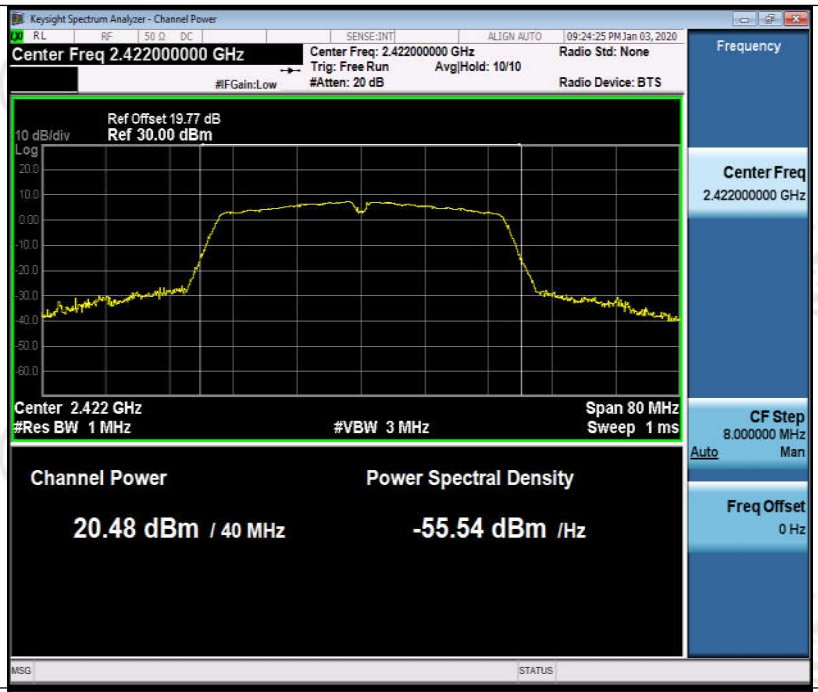
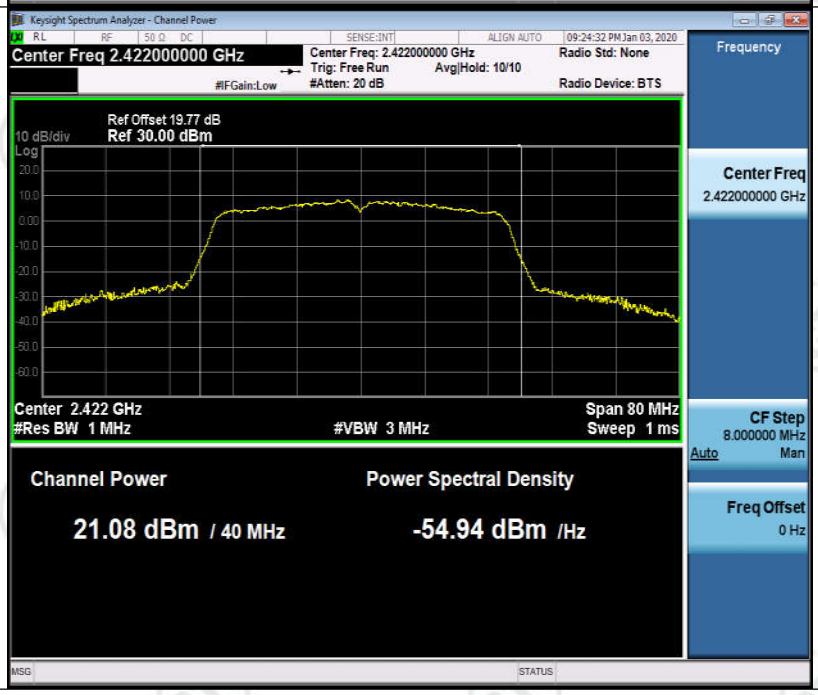
11N20MIMO/MCH_Ant1	
11N20MIMO/MCH_Ant2	

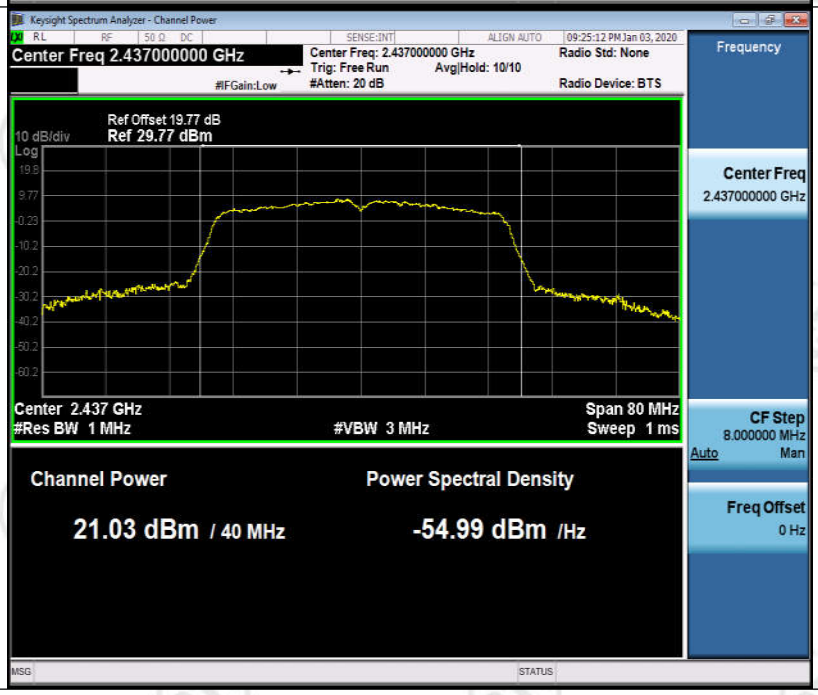
11N20MIMO/HCH_Ant1	
11N20MIMO/HCH_Ant2	

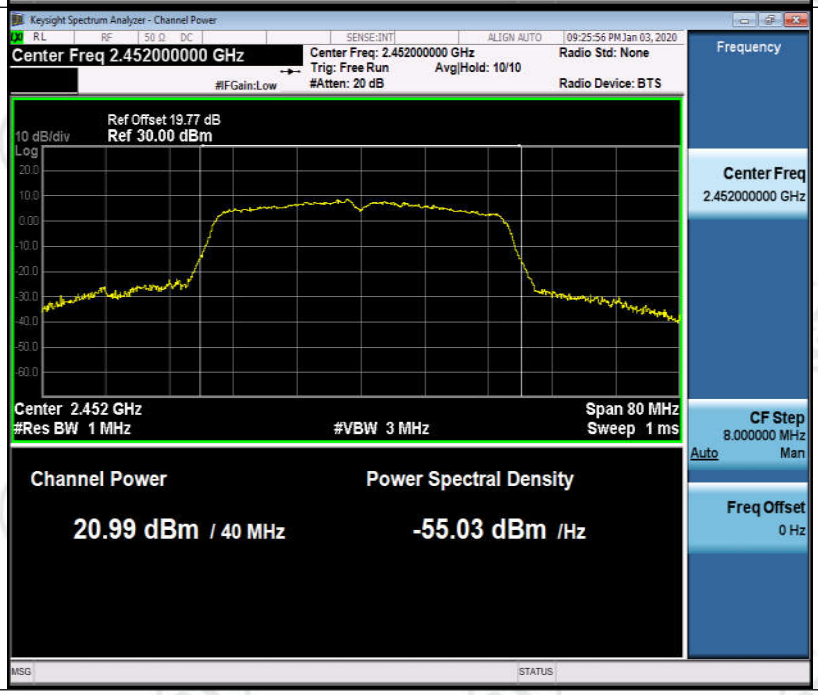
11N40SISO/LCH_Ant1	
11N40SISO/LCH_Ant2	

11N40SISO/MCH_Ant1	
11N40SISO/MCH_Ant2	

11N40SISO/HCH_Ant1	
11N40SISO/HCH_Ant2	

11N40MIMO/LCH_Ant1	
11N40MIMO/LCH_Ant2	

11N40MIMO/MCH_Ant1	
11N40MIMO/MCH_Ant2	

11N40MIMO/HCH_Ant1	
11N40MIMO/HCH_Ant2	

Appendix B): 6dB Occupied Bandwidth

Result Table For 6dB Occupied Bandwidth

Mode	Antenna	Channel	6dB Bandwidth [MHz]	Verdict
11B	Ant1	LCH	10.01	PASS
11B	Ant2	LCH	10.01	PASS
11B	Ant1	MCH	10.02	PASS
11B	Ant2	MCH	9.575	PASS
11B	Ant1	HCH	9.562	PASS
11B	Ant2	HCH	9.563	PASS
11G	Ant1	LCH	15.11	PASS
11G	Ant2	LCH	15.11	PASS
11G	Ant1	MCH	15.12	PASS
11G	Ant2	MCH	15.08	PASS
11G	Ant1	HCH	14.99	PASS
11G	Ant2	HCH	15.07	PASS
11N20SISO	Ant1	LCH	15.10	PASS
11N20SISO	Ant2	LCH	15.11	PASS
11N20SISO	Ant1	MCH	15.11	PASS
11N20SISO	Ant2	MCH	15.09	PASS
11N20SISO	Ant1	HCH	15.07	PASS
11N20SISO	Ant2	HCH	15.07	PASS
11N40SISO	Ant1	LCH	35.09	PASS
11N40SISO	Ant2	LCH	33.78	PASS
11N40SISO	Ant1	MCH	33.85	PASS
11N40SISO	Ant2	MCH	35.07	PASS
11N40SISO	Ant1	HCH	32.53	PASS
11N40SISO	Ant2	HCH	32.55	PASS

Result Table For 99% Occupied Bandwidth

Mode	Antenna	Channel	99% OBW [MHz]	Verdict
11B	Ant1	LCH	14.265	PASS
11B	Ant2	LCH	14.237	PASS
11B	Ant1	MCH	14.323	PASS
11B	Ant2	MCH	14.307	PASS
11B	Ant1	HCH	14.348	PASS
11B	Ant2	HCH	14.282	PASS
11G	Ant1	LCH	16.418	PASS
11G	Ant2	LCH	16.449	PASS
11G	Ant1	MCH	16.424	PASS
11G	Ant2	MCH	16.463	PASS
11G	Ant1	HCH	16.453	PASS
11G	Ant2	HCH	16.445	PASS
11N20SISO	Ant1	LCH	17.505	PASS
11N20SISO	Ant2	LCH	17.532	PASS
11N20SISO	Ant1	MCH	17.513	PASS
11N20SISO	Ant2	MCH	17.539	PASS
11N20SISO	Ant1	HCH	17.526	PASS
11N20SISO	Ant2	HCH	17.526	PASS
11N40SISO	Ant1	LCH	35.903	PASS
11N40SISO	Ant2	LCH	35.886	PASS
11N40SISO	Ant1	MCH	35.855	PASS
11N40SISO	Ant2	MCH	35.951	PASS
11N40SISO	Ant1	HCH	35.819	PASS
11N40SISO	Ant2	HCH	35.865	PASS

Test Graph For 6dB Occupied Bandwidth

Graphs	
11B/LCH_Ant1	
11B/LCH_Ant2	

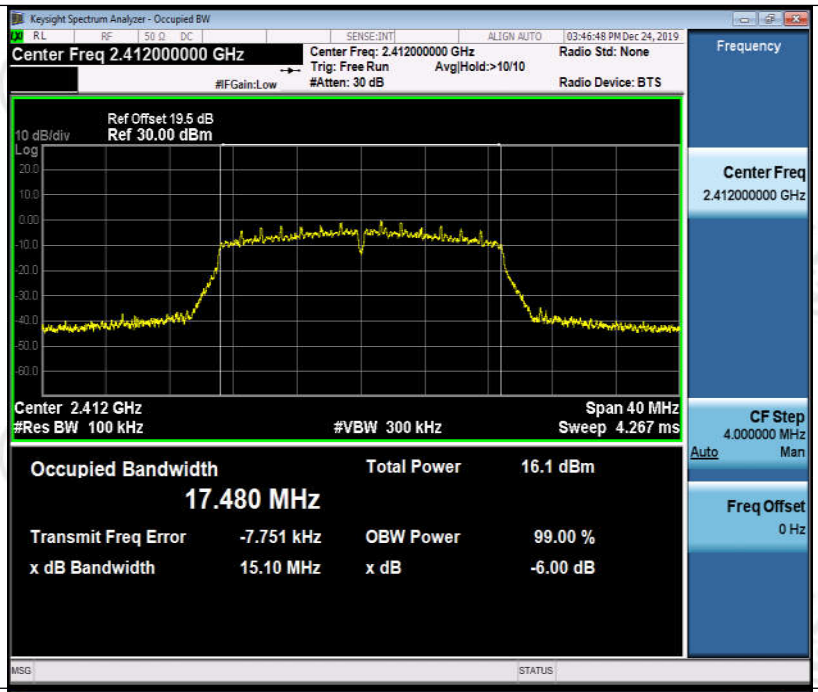
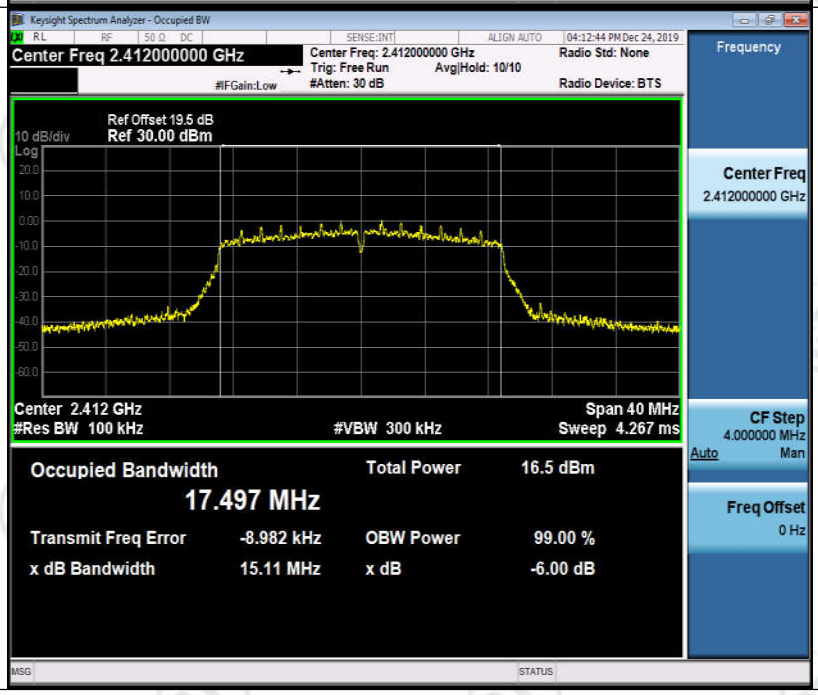
11B/MCH_Ant1	
11B/MCH_Ant2	

11B/HCH_Ant1	
11B/HCH_Ant2	

11G/LCH_Ant1	
11G/LCH_Ant2	

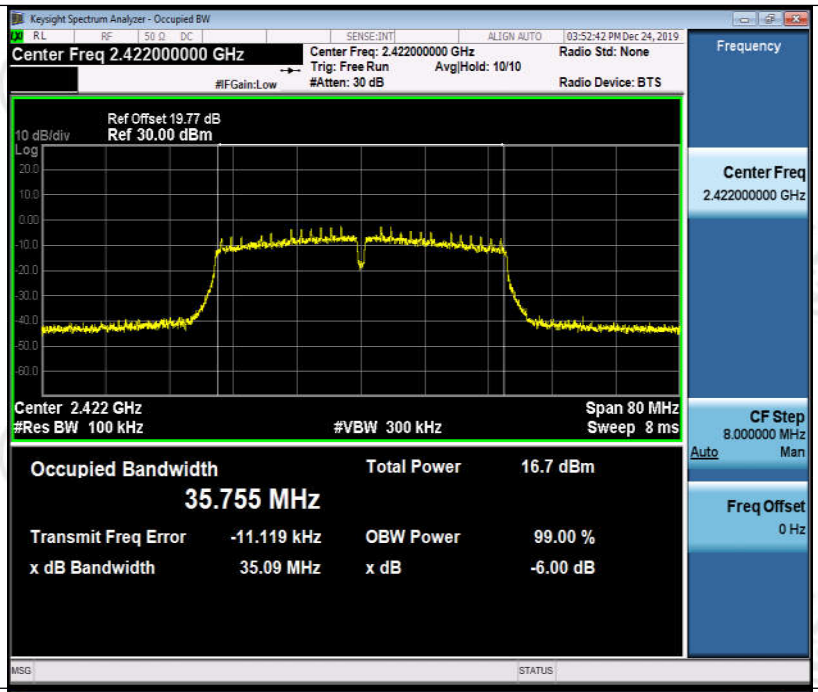
11G/MCH_Ant1	
11G/MCH_Ant2	

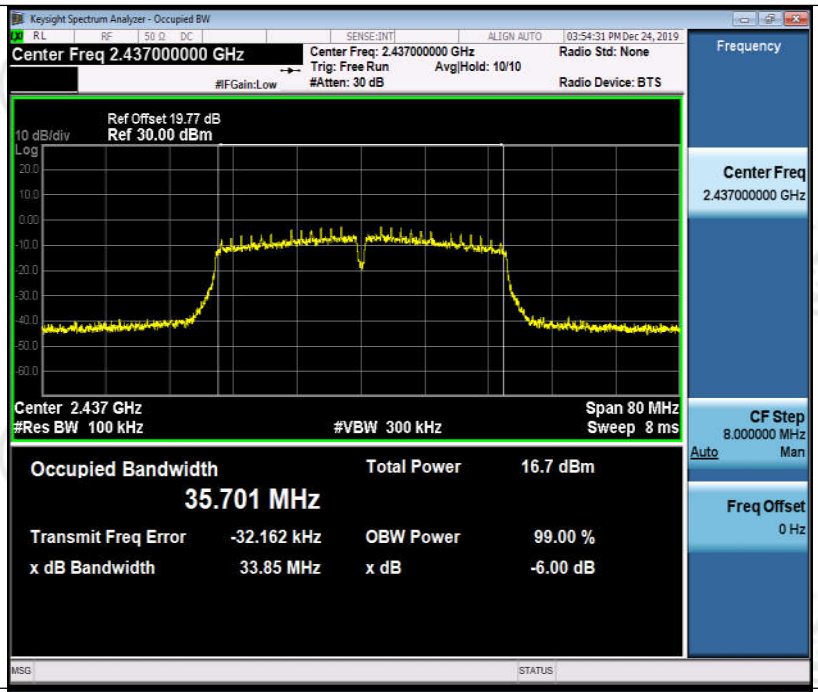
11G/HCH_Ant1	
11G/HCH_Ant2	

11N20SISO/LCH_Ant1	
11N20SISO/LCH_Ant2	

11N20SISO/MCH_Ant1	
11N20SISO/MCH_Ant2	

11N20SISO/HCH_Ant1	
11N20SISO/HCH_Ant2	

11N40SISO/LCH_Ant1	
11N40SISO/LCH_Ant2	

11N40SISO/MCH_Ant1	
11N40SISO/MCH_Ant2