FCC RF Test Report

For

SHENZHEN GIEC DIGITAL CO., LTD

Test Standards:	Part 15 Subpart E §15. 407
Product Description:	all in one
Tested Model:	GK-MWZE501
Additional Model No.:	WGC22T324S, TLGC22T324S
Brand Name:	N/A
FCC ID:	2AHYK09586AIO
Classification	(NII)Unlicensed National Information Infrastructure
Report No.:	GTS201901000080F05
Tested Date:	2019-02-14 to 2019-03-24
Issued Date:	2019-03-24
Prepared By:	
Approved By:	

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Report Revise Record

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	2019.03.24	Valid	Original Report

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Summary of Test Result

FCC Rule	Description	Limit	Result	Remark
15.407(a)	26dB & 99% Bandwidth	-	Pass	-
15.407(a)	Maximum Conducted Output Power	FCC≤24dBm	Pass	
15.407(a)	Power Spectral Density	FCC≤11dBm	Pass	
15.407(b)	Unwanted Emissions	15.407(b) 15.209(a)	Pass	Under limit 5.61 dB at 17475 MHz
15.207	AC Conducted Emission	15.207(a)	Pass	Under limit 5.05 dB at 4.926 MHz
15.407(g)	Frequency Stability	Within Operation Band	Pass	
15.407(c)	Automatically Discontinue Transmission	Discontinue Transmission	Pass	
15.203 & 15.407(a)	Antenna Requirement	N/A	Pass	

1 Test Laboratory

1.1 Test facility

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

● **FCC —Registration No.: 381383**

Global United Technology Services 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 files. Registration 381383.

● **Industry Canada (IC) —Registration No.: 9079A-2**

The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 9079A-2.

● **NVLAP (LAB CODE:600179-0)**

Global United Technology Services Co., Ltd., is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP). LAB CODE:600179-0

2 General Description

2.1 Applicant

SHENZHEN GIEC DIGITAL CO., LTD
1st&3rd Building，No.26 Puzai Road，Pingdi，Longgang District, Shenzhen, China

2.2 Manufacturer

SHENZHEN GIEC DIGITAL CO., LTD
1st&3rd Building，No.26 Puzai Road，Pingdi，Longgang District, Shenzhen, China

2.3 General Description Of EUT

PRODUCT	all in one
MODEL NO.	GK-MWZE501
Additional No.	WGC22T324S, TLGC22T324S
Difference Description	All above models are identical in the same PCB layout, interior structure and electrical circuits. The only differences are the colour and trade mark for commercial purpose.
FCC ID	2AHYK09586AIO
HW version	S156AWR220-A54C
SW version	JK-BI-21.5-S156AW220-207-D
POWER SUPPLY	120Vdc (adapter or host equipment)
MODULATION TECHNOLOGY	256QAM,64QAM, 16QAM, QPSK, BPSK for OFDM
MODULATION TYPE	802.11a/n/ac : OFDM
OPERATING FREQUENCY	U-NII-1:5150~5250MHz U-NII-2A:5250~5350MHz U-NII-2C:5470~5725MHz U-NII-3:5725~5850MHz
MAX. OUTPUT POWER	802.11a : 15.19 dBm (0.033 W) 802.11n HT20 : 14.45 dBm (0.0279 W) 802.11n HT40 : 14.37 dBm (0.0274 W) 802.11ac VHT20 : 14.74 dBm (0.0298 W) 802.11ac VHT40 : 14.52 dBm (0.0283 W) 802.11ac VHT80 : 15.43 dBm (0.0349 W)
ANTENNA 1	PIFA Antenna typewith 2.0±0.5dBi gain at U-NII-1 PIFA Antenna type with 2.0±0.5dBi gain at U-NII-2A PIFA Antenna type with 2.0±0.5dBi gain at U-NII-2C PIFA Antenna type with 2.0±0.5dBi gain at U-NII-3
ANTENNA 2	PIFA Antenna typewith 2.0±0.5dBi gain at U-NII-1 PIFA Antenna type with 2.0±0.5dBi gain at U-NII-2A PIFA Antenna type with 2.0±0.5dBi gain at U-NII-2C

	PIFA Antenna type with 2.0±0.5dBi gain at U-NII-3
I/O PORTS	Refer to user's manual

NOTE:

1. The EUT was powered by the following adapters:

ADAPTER 1	
BRAND:	N/A
MODEL:	TAA0361200300HU
INPUT:	AC 100-240V, 50/60Hz,1A
OUTPUT:	DC 12V, 3000mA
DC LINE:	N/A

2. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.

3. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.

4. Note: This product is a SISO device. Two antennas cannot transmit wifi signals at the same time. Only one antenna transmit a BT signal, and one antenna transmit a wifi signal.

5. The device has two antennas, the signals are sent by the same chip, both antennas are tested, and the test data is only the data of the worst mode ANT1.

2.4 Modification of EUT

No modifications are made to the EUT during all test items.

2.5 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC Part 15 Subpart E §15.407
- ANSI C63.10-2013
- FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01
- FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

Remark:

1. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

3 Test Configuration of Equipment Under Test

3.1 Carrier Frequency and Channel

U-NII-1

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
36	5180 MHz	44	5220 MHz
38	5190 MHz	46	5230 MHz
40	5200 MHz	48	5240 MHz
42	5210 MHz		

U-NII-2A

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
52	5260 MHz	60	5300 MHz
54	5270 MHz	62	5310 MHz
56	5280 MHz	64	5320 MHz
58	5290 MHz		

U-NII-2C

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
100	5500 MHz	112	5560 MHz
102	5510 MHz	116	5580 MHz
104	5520 MHz	132	5660 MHz
106	5530 MHz	134	5670 MHz
108	5540 MHz	136	5680 MHz
110	5550 MHz	140	5700 MHz

U-NII-3

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
149	5745MHz	161	5805MHz
151	5755MHz	165	5825MHz
153	5765MHz		
155	5775MHz		
157	5785MHz		
159	5795MHz		

TDWR

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
118	5590 MHz	124	5620 MHz
120	5600 MHz	126	5630 MHz
122	5610 MHz	128	5640 MHz

The transmitter has a maximum peak conducted output power as follows:

Mode	ANT	Output Power(dBm)
802.11a	1	15.19
802.11n HT20	1	14.45
802.11n HT40	1	14.37
802.11ac VHT20	1	14.74
802.11ac VHT40	1	14.52
802.11ac VHT80	1	15.43
802.11a	2	15.03
802.11n HT20	2	14.43
802.11n HT40	2	14.15
802.11ac VHT20	2	14.63
802.11ac VHT40	2	14.28
802.11ac VHT80	2	15.31

a. Based on the baseline scan, the worst‐case data rates were:

802.11a mode: 6 Mbps

802.11n HT20 mode: MCS0

802.11n HT40 mode: MCS0

802.11ac VHT20 mode: MCS0

802.11ac VHT40 mode: MCS0

802.11ac VHT80 mode: MCS0

b. Based on the pre-scan, the worst‐case Antenna were Ant 1.

3.2 Test Mode

3.2.1 Antenna Port Conducted Measurement

Summary table of Test Cases				
Test Item	**Modulation**			
	802.11 a	**802.11n HT20/ 802.11ac VHT20**	**802.11n HT40/ 802.11ac VHT40**	**802.11ac VHT80**
U-NII-1	Mode 1: CH36 Mode 2: CH44 Mode 3: CH48	Mode 1: CH36 Mode 2: CH44 Mode 3: CH48	Mode 1: CH38 Mode 2: CH46 Mode 3: -	Mode 1: CH42 Mode 2: - Mode 3: -

Summary table of Test Cases				
Test Item	**Modulation**			
	802.11 a	**802.11n HT20/ 802.11ac VHT20**	**802.11n HT40/ 802.11ac VHT40**	**802.11ac VHT80**
U-NII-2A	Mode 1: CH52 Mode 2: CH60 Mode 3: CH64	Mode 1: CH52 Mode 2: CH60 Mode 3: CH64	Mode 1: CH54 Mode 2: CH62 Mode 3: -	Mode 1: CH58 Mode 2: - Mode 3: -

Summary table of Test Cases				
Test Item	**Modulation**			
	802.11 a	**802.11n HT20/ 802.11ac VHT20**	**802.11n HT40/ 802.11ac VHT40**	**802.11ac VHT80**
U-NII-2C	Mode 1: CH100 Mode 2: CH116 Mode 3: CH140	Mode 1: CH100 Mode 2: CH116 Mode 3: CH140	Mode 1: CH102 Mode 2: CH110 Mode 3: CH134	Mode 1: CH106 Mode 2: - Mode 3: -

Summary table of Test Cases				
Test Item	**Modulation**			
	802.11 a	**802.11n HT20/ 802.11ac VHT20**	**802.11n HT40/ 802.11ac VHT40**	**802.11ac VHT80**
U-NII-3	Mode 1: CH149 Mode 2: CH157 Mode 3: CH165	Mode 1: CH149 Mode 2: CH157 Mode 3: CH165	Mode 1: CH151 Mode 2: CH159 Mode 3: -	Mode 1: CH155 Mode 2: - Mode 3: -

3.2.2 Radiated Emission Test (Below 1GHz)

Radiated Test Cases	
	Bluetooth Idle + WLAN Idle + Earphone + Cable (Charging from Adapter) + SD Card+USB flash disk+display

Note : 1. Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, XYZ axis, antenna ports (if EUT with antenna diversity architecture) and packet type. It was determined that Y orientation was worst-case orientation; therefore, all final radiated testing was performed with the EUT in Y orientation.

2. Following channel(s) was (were) selected for the final test as listed above

3.2.3 Radiated Bandedge and Radiated Emission Test (Above 1GHz)

Summary table of Test Cases				
Test Item	Modulation			
	802.11 a	802.11n HT20/ 802.11ac VHT20	802.11n HT40/ 802.11ac VHT40	802.11ac VHT80
U-NII-1	Mode 1: CH36 Mode 2: CH44 Mode 3: CH48	Mode 1: CH36 Mode 2: CH44 Mode 3: CH48	Mode 1: CH38 Mode 2: CH46 Mode 3: -	Mode 1: CH42 Mode 2: - Mode 3: -

Summary table of Test Cases				
Test Item	Modulation			
	802.11 a	802.11n HT20/ 802.11ac VHT20	802.11n HT40/ 802.11ac VHT40	802.11ac VHT80
U-NII-2A	Mode 1: CH52 Mode 2: CH60 Mode 3: CH64	Mode 1: CH52 Mode 2: CH60 Mode 3: CH64	Mode 1: CH54 Mode 2: CH62 Mode 3: -	Mode 1: CH58 Mode 2: - Mode 3: -

Summary table of Test Cases				
Test Item	Modulation			
	802.11 a	802.11n HT20/ 802.11ac VHT20	802.11n HT40/ 802.11ac VHT40	802.11ac VHT80
U-NII-2C	Mode 1: CH100 Mode 2: CH116 Mode 3: CH140	Mode 1: CH100 Mode 2: CH116 Mode 3: CH140	Mode 1: CH102 Mode 2: CH110 Mode 3: CH134	Mode 1: CH106 Mode 2: CH122 Mode 3: -

Summary table of Test Cases				
Test Item	Modulation			
	802.11 a	802.11n HT20/ 802.11ac VHT20	802.11n HT40/ 802.11ac VHT40	802.11ac VHT80
U-NII-3	Mode 1: CH149 Mode 2: CH157 Mode 3: CH165	Mode 1: CH149 Mode 2: CH157 Mode 3: CH165	Mode 1: CH151 Mode 2: CH159 Mode 3: -	Mode 1: CH155 Mode 2: - Mode 3: -

Note : 1. Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, XYZ axis, antenna ports (if EUT with antenna diversity architecture) and packet type. It was determined that Y orientation was worst-case orientation; therefore, all final radiated testing was performed with the EUT in Y orientation.

2. Following channel(s) was (were) selected for the final test as listed above

3.2.4 Power Line Conducted Emission Test:

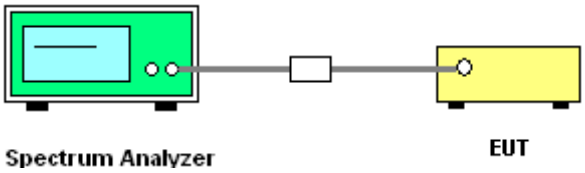
AC Conducted Emission	Mode 1 : Bluetooth Idle+ WLAN Idle + Earphone + Cable (Charging from Adapter) + SD Card+USB flash disk+ display

3.3 Support Equipment

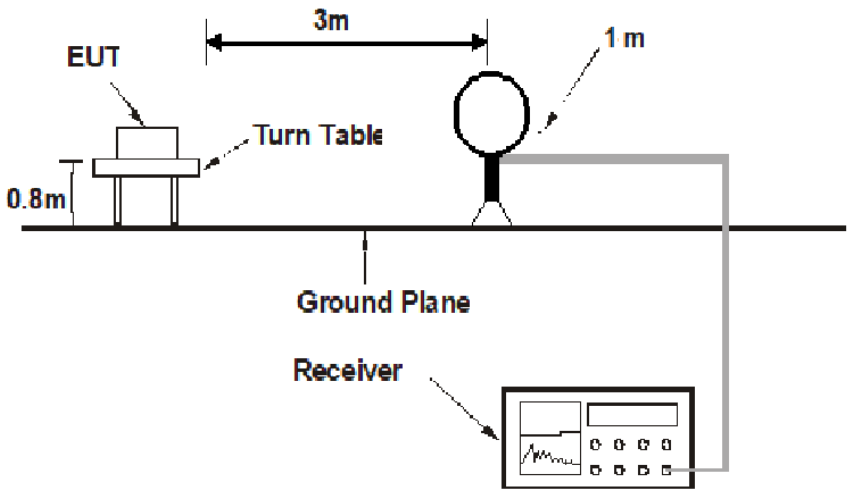
Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	System Simulator	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m
2.	Bluetooth Base Station	R&S	CBT	N/A	N/A	Unshielded, 1.8 m
3.	Bluetooth Earphone	Nokia	BH-108	PYAHS-107W	N/A	N/A
4.	WLAN AP	D-link	DIR-628	KA2DIR628A2	N/A	Unshielded, 1.8 m
5.	Micro SD Card	SanDisk	HC I	N/A	N/A	N/A
6.	USB flash disk	kingston	N/A	N/A	N/A	N/A
7.	displayer	DELL	P2317H	N/A	N/A	Unshielded, 1.8 m
8.	HDMI	UGREEN	N/A	N/A	Unshielded,1.5 m	N/A
9.	Notebook	Lenovo	Xiao xin cao 5000	N/A	N/A	shielded cable DC O/P 1.8 m unshielded AC I/P cable1.2 m

3.4 Test Setup

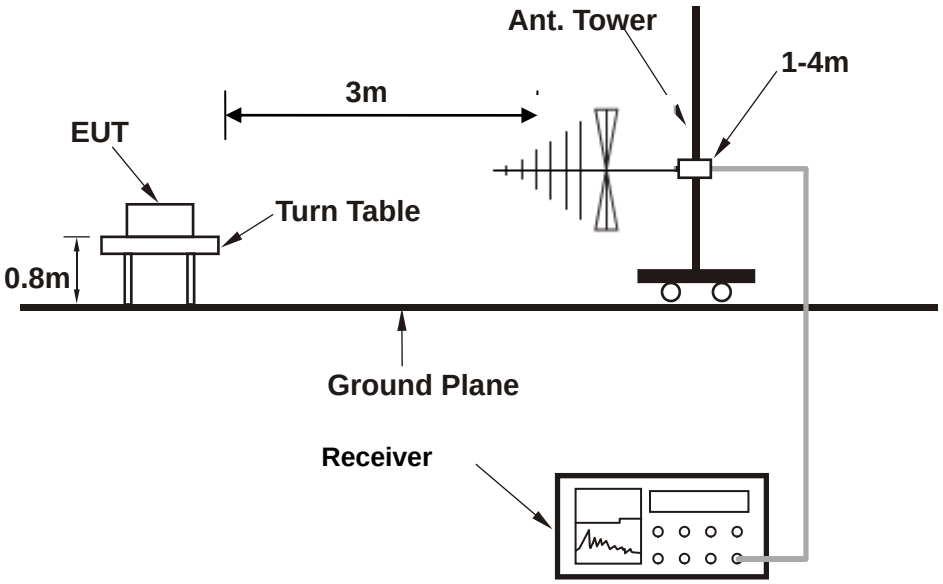
Setup diagram for Conducted Test



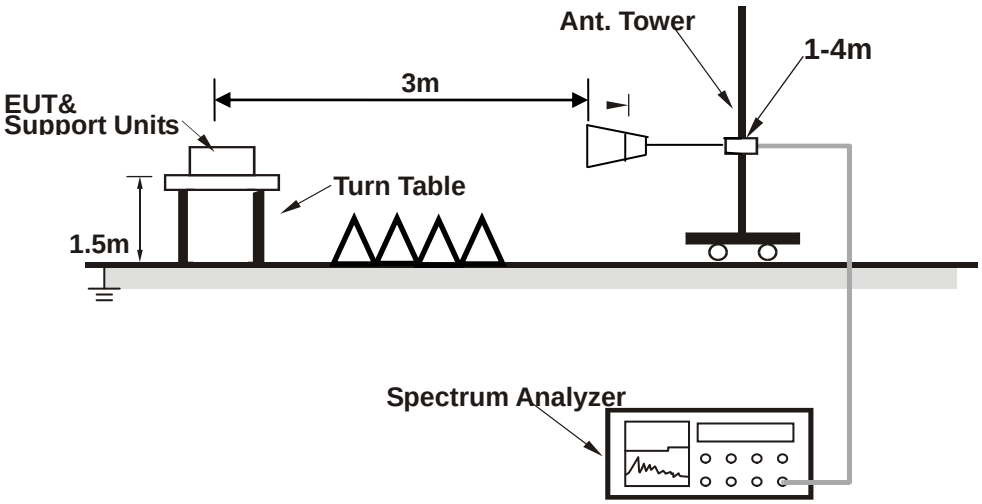
Setup diagram for Raidation(9KHz~30MHz) Test



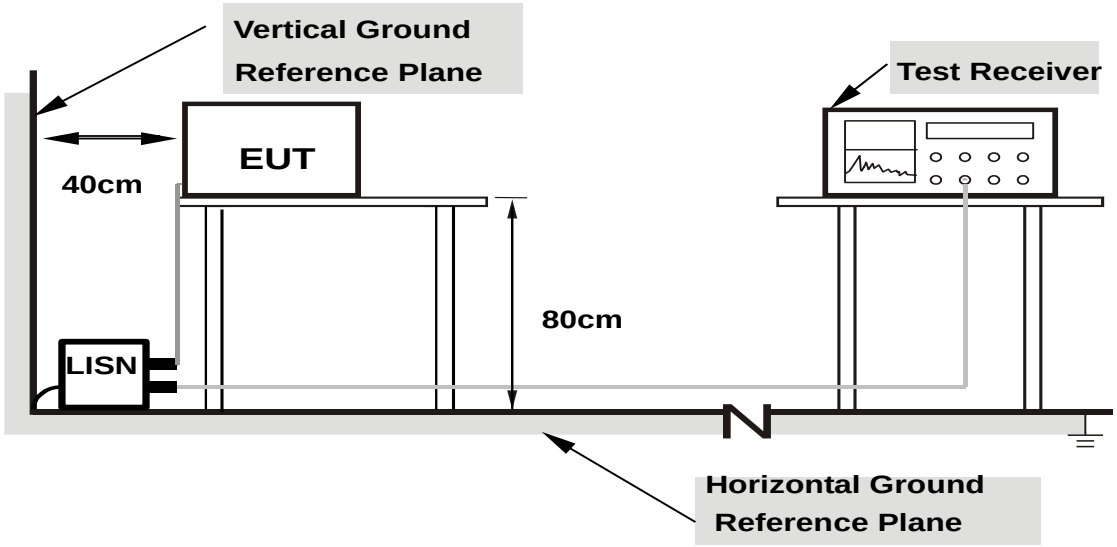
Setup diagram for Raidation(Below 1G) Test



Setup diagram for Raidation(Above1G) Test



Setup diagram for AC Conducted Emission Test



Note: 1.Support units were connected to second LISN.

2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

3.5 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

Example:

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 5 dB and 10dB attenuator.

Offset(dB) = RF cable loss(dB) + attenuator factor(dB).

= 5 + 10 = 15 (dB)

4 Test Result

4.1 26dB and 99% Occupied Bandwidth Measurement

4.1.1 Limit of 6dB and 99% Bandwidth

There is no limit bandwidth for U-NII-1, U-NII-2A and U-NII-2C. The minimum 6 dB bandwidth of U-NII-3 shall be at least 500 kHz.

4.1.2 Test Procedures

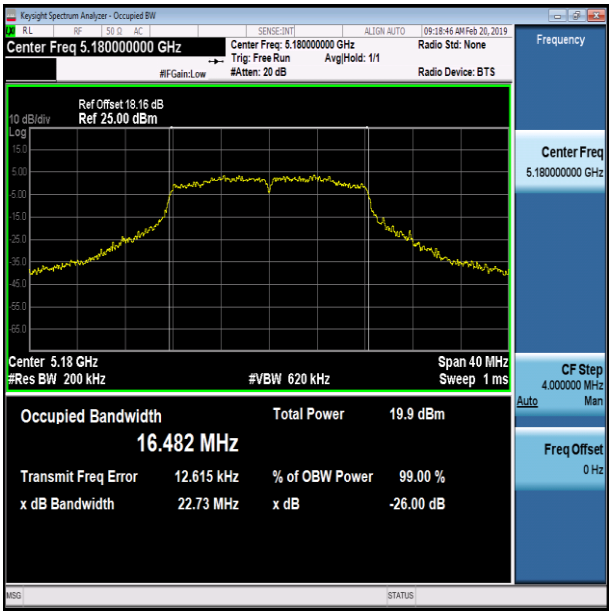
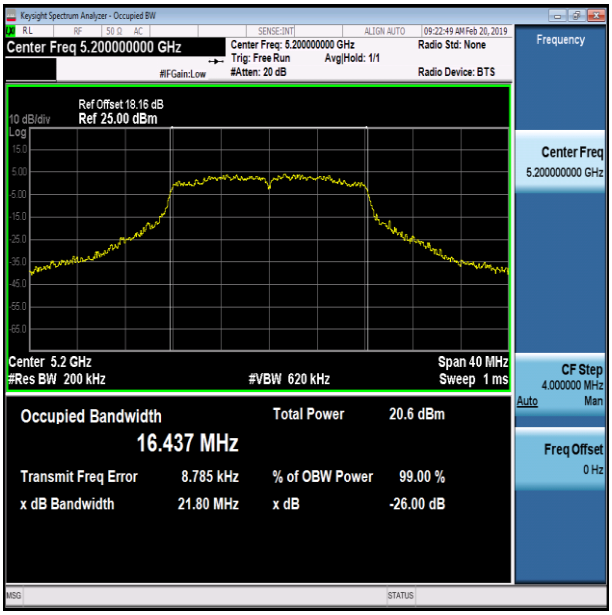
1. Place the EUT on the table and set it in transmitting mode.
2. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01 .
3. Remove the antenna from the EUT and then connect a low loss RF cable from the Antenna port to the spectrum analyzer.
4. 26dB Bandwidth Measurement: Set the spectrum analyzer as 1% of emission BW Sweep=auto,Detector = Peak, Trace Mode = Max Hold, Manually readjust RBW until the RBW/EBW ratio is 1% based on EBW as observed on the result of pre-sequence measurement.
5. Mark the peak frequency and –26dB (upper and lower) frequency.
6. 6dB Bandwidth Measurement: Set RBW = 100 kHz.
   Set the VBW ≥ [3 × RBW].
   Detector = peak.
   Trace mode = max hold, Sweep = auto couple.
   Allow the trace to stabilize.
   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.
7. Repeat the procedures as list above until all test default channels (low, middle, and high) are completed.
8. Measure and record the results in the test report.

4.1.3 Test Result of 26dB and 99% Bandwidth

Test Mode	Antenna	Channel	EBW[MHz]	OBW[MHz]	Verdict
11A	Ant1	5180	22.73	16.482	PASS
11A	Ant1	5200	21.80	16.437	PASS
11A	Ant1	5240	22.63	16.462	PASS
11A	Ant1	5260	22.11	16.477	PASS
11A	Ant1	5280	22.46	16.476	PASS
11A	Ant1	5320	23.19	16.546	PASS
11A	Ant1	5500	21.83	16.464	PASS
11A	Ant1	5580	22.08	16.443	PASS
11A	Ant1	5700	22.92	16.512	PASS
11A	Ant1	5745	15.12	16.396	PASS
11A	Ant1	5785	11.81	16.388	PASS
11A	Ant1	5825	15.16	16.392	PASS
11N20SISO	Ant1	5180	22.78	17.637	PASS
11N20SISO	Ant1	5200	21.90	17.623	PASS
11N20SISO	Ant1	5240	22.83	17.625	PASS
11N20SISO	Ant1	5260	22.54	17.626	PASS
11N20SISO	Ant1	5280	22.71	17.649	PASS
11N20SISO	Ant1	5320	23.47	17.656	PASS
11N20SISO	Ant1	5500	22.50	17.655	PASS
11N20SISO	Ant1	5580	22.02	17.631	PASS
11N20SISO	Ant1	5700	24.34	17.649	PASS
11N20SISO	Ant1	5745	13.85	17.602	PASS
11N20SISO	Ant1	5785	13.93	17.613	PASS
11N20SISO	Ant1	5825	14.98	17.576	PASS
11N40SISO	Ant1	5190	40.98	36.123	PASS
11N40SISO	Ant1	5230	41.11	36.078	PASS
11N40SISO	Ant1	5270	42.26	36.099	PASS
11N40SISO	Ant1	5310	42.85	36.117	PASS
11N40SISO	Ant1	5510	41.95	36.097	PASS

11N40SISO	Ant1	5550	41.37	36.049	PASS
11N40SISO	Ant1	5670	41.06	36.160	PASS
11N40SISO	Ant1	5755	35.19	35.893	PASS
11N40SISO	Ant1	5795	35.09	35.941	PASS
11AC20SISO	Ant1	5180	21.89	17.628	PASS
11AC20SISO	Ant1	5200	22.09	17.627	PASS
11AC20SISO	Ant1	5240	22.30	17.643	PASS
11AC20SISO	Ant1	5260	22.56	17.631	PASS
11AC20SISO	Ant1	5280	23.10	17.648	PASS
11AC20SISO	Ant1	5320	22.85	17.697	PASS
11AC20SISO	Ant1	5500	23.41	17.641	PASS
11AC20SISO	Ant1	5580	22.43	17.663	PASS
11AC20SISO	Ant1	5700	22.76	17.678	PASS
11AC20SISO	Ant1	5745	14.25	17.610	PASS
11AC20SISO	Ant1	5785	13.92	17.609	PASS
11AC20SISO	Ant1	5825	15.18	17.580	PASS
11AC40SISO	Ant1	5190	41.62	36.091	PASS
11AC40SISO	Ant1	5230	41.54	36.050	PASS
11AC40SISO	Ant1	5270	41.43	36.016	PASS
11AC40SISO	Ant1	5310	43.33	36.047	PASS
11AC40SISO	Ant1	5510	41.47	36.045	PASS
11AC40SISO	Ant1	5550	41.23	36.016	PASS
11AC40SISO	Ant1	5670	44.01	36.111	PASS
11AC40SISO	Ant1	5755	35.18	35.920	PASS
11AC40SISO	Ant1	5795	35.15	35.936	PASS
11AC80SISO	Ant1	5210	81.04	75.260	PASS
11AC80SISO	Ant1	5290	81.43	75.265	PASS
11AC80SISO	Ant1	5530	80.95	75.273	PASS
11AC80SISO	Ant1	5775	75.33	75.288	PASS

26dB and 99% Bandwidth Plot

11A-Ant1-5180	11A-Ant1-5200
	
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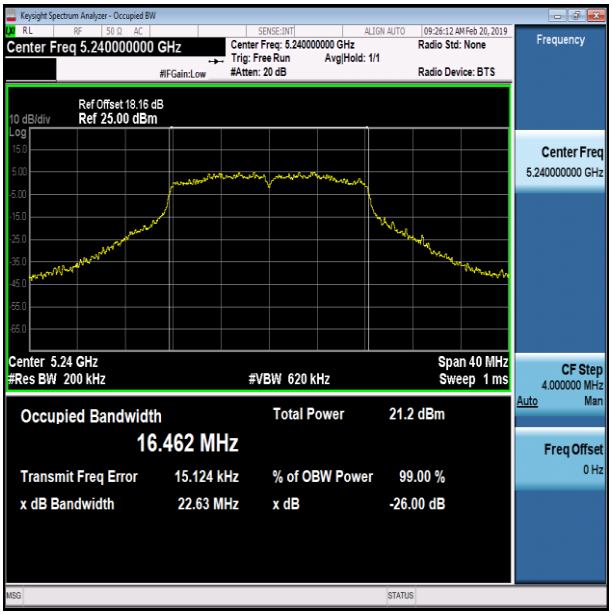	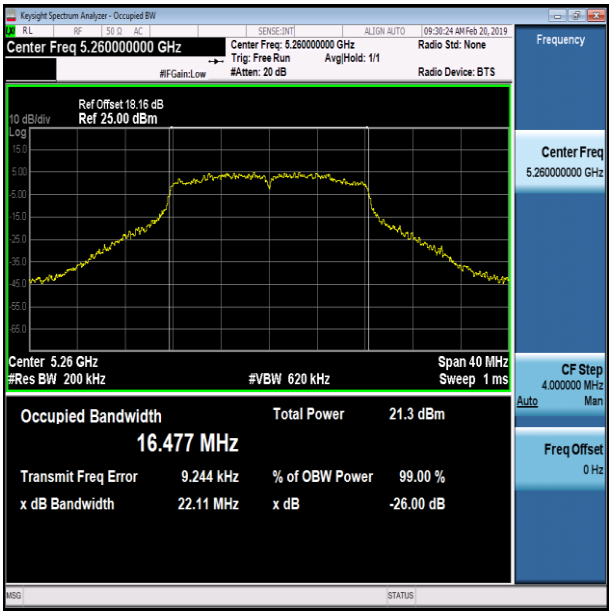

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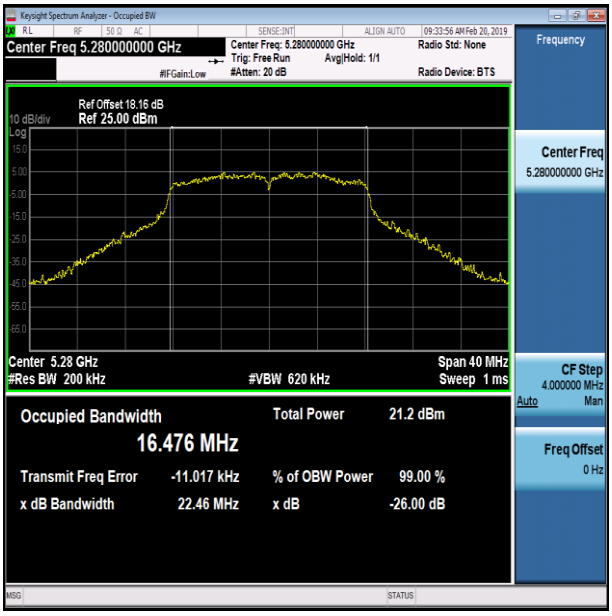	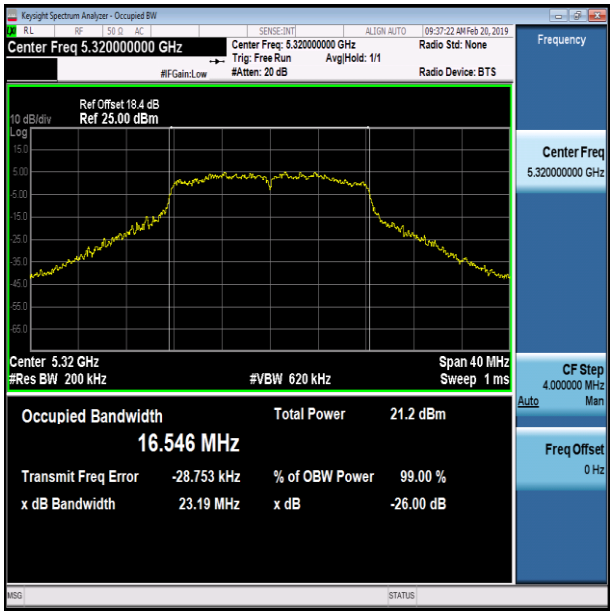
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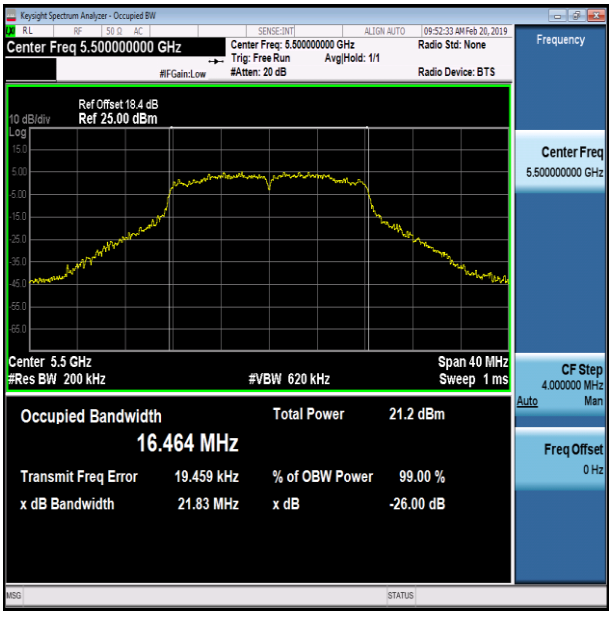	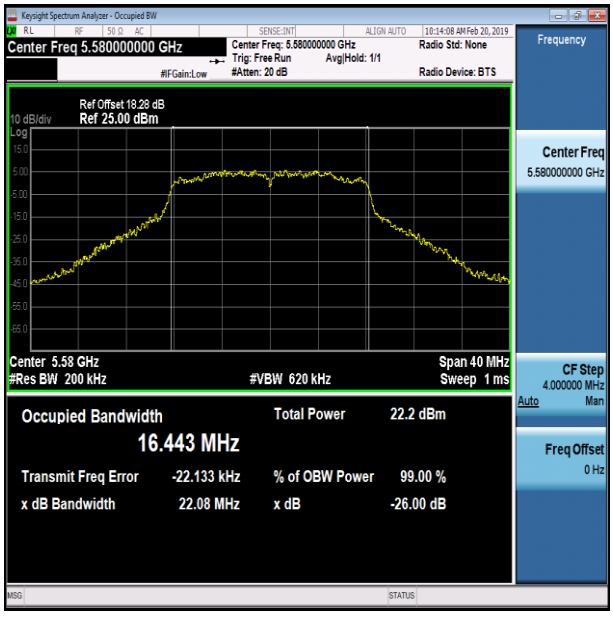

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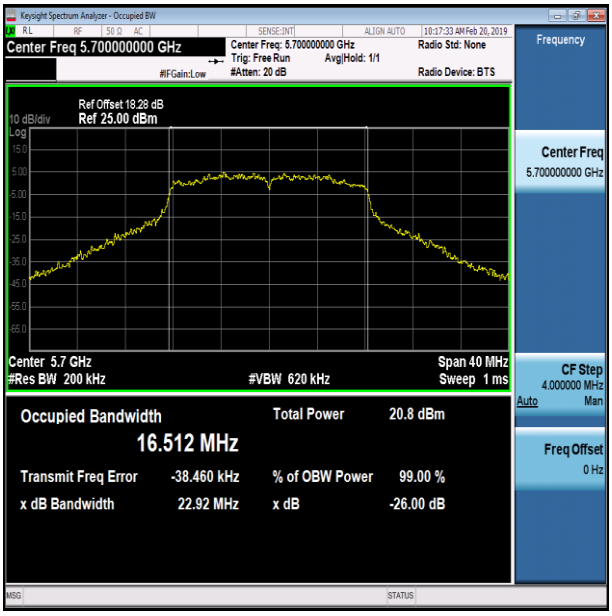	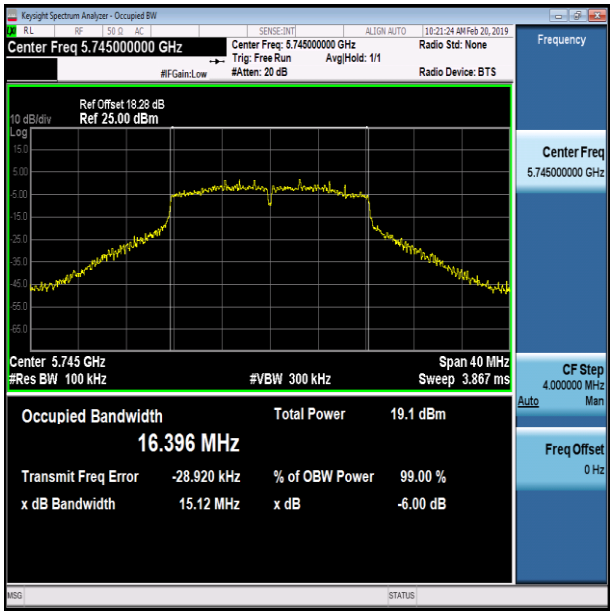
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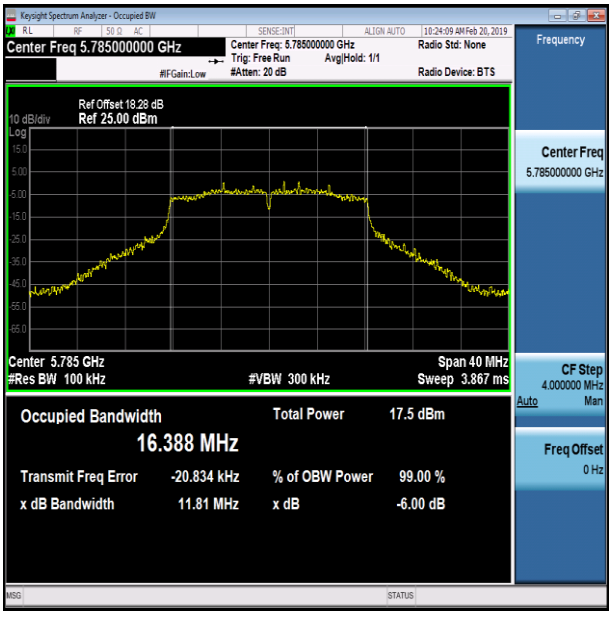	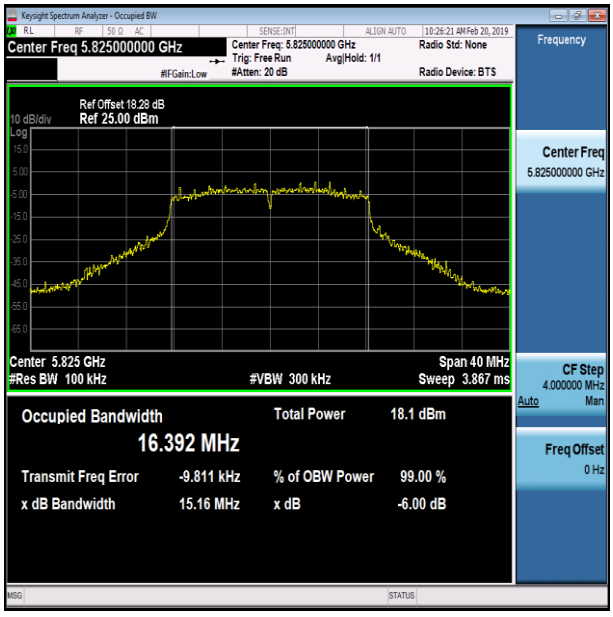

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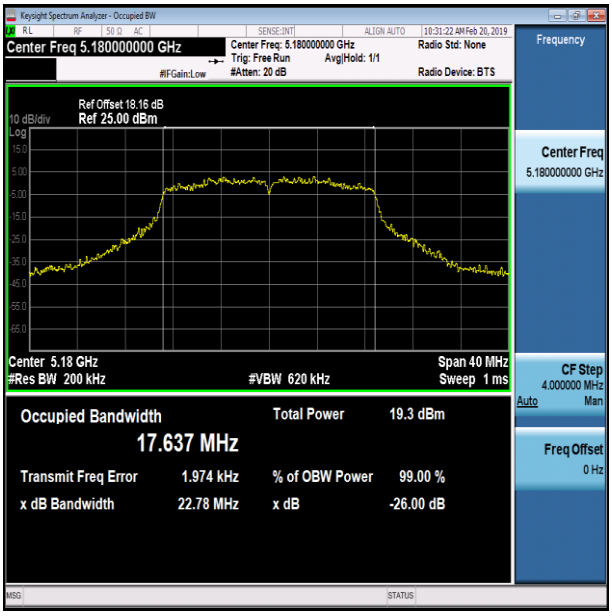	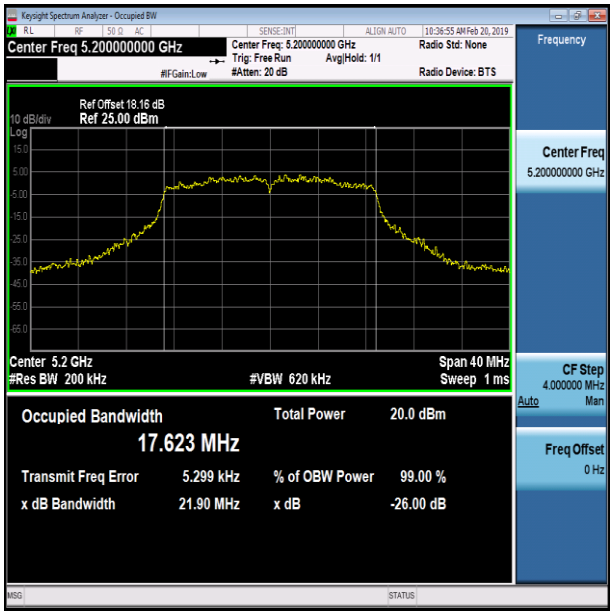
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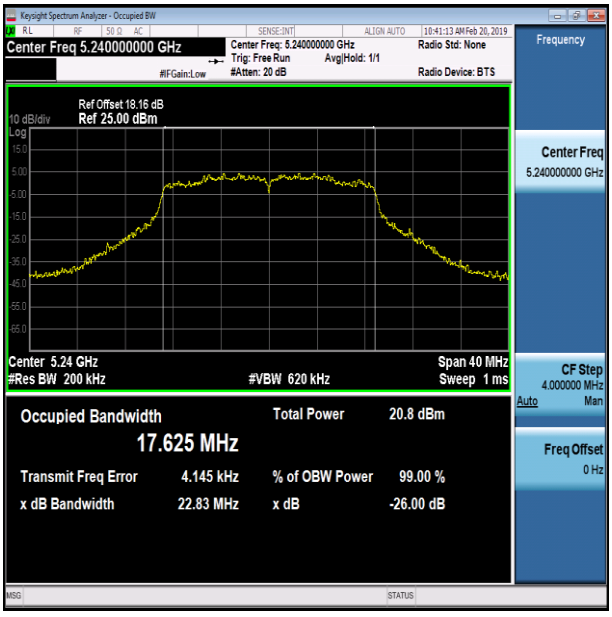	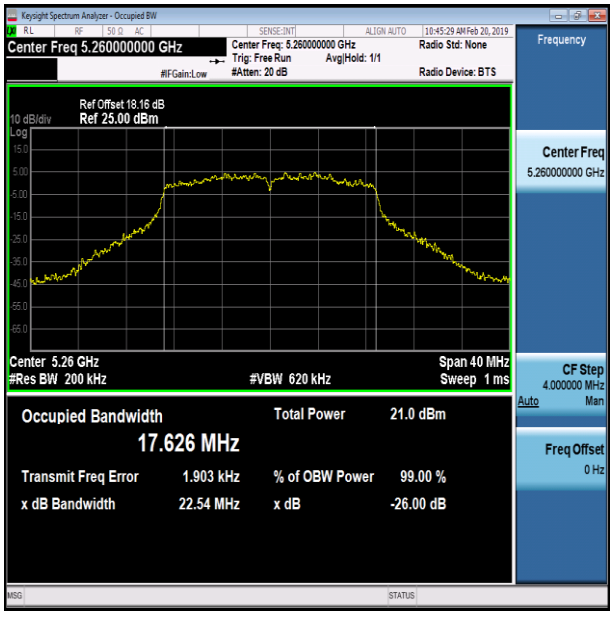

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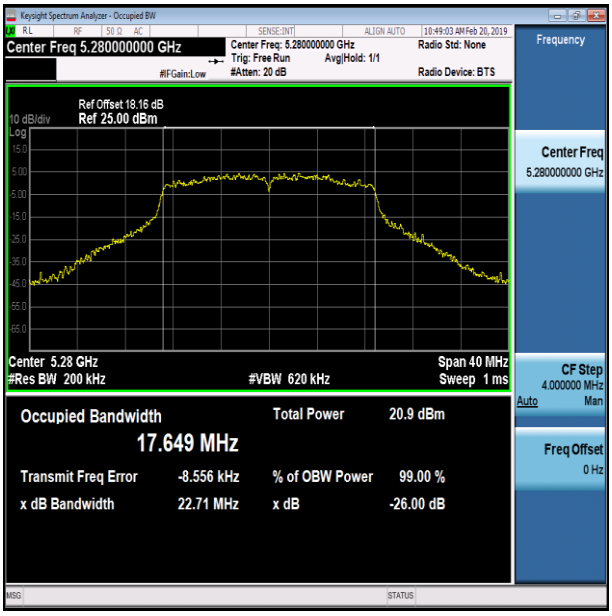	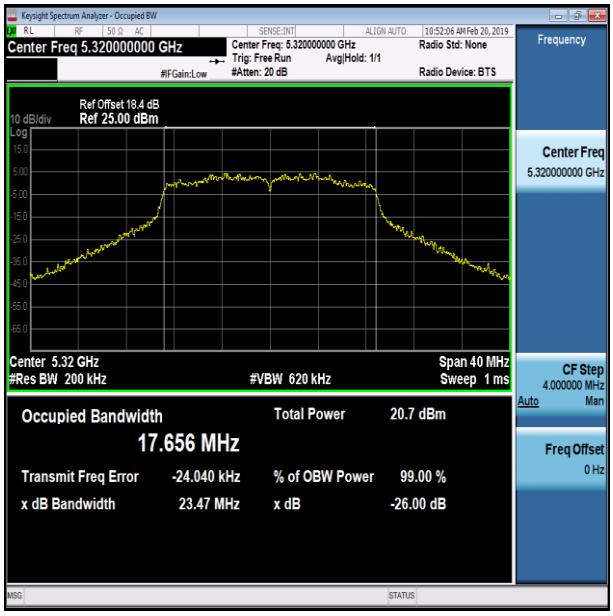
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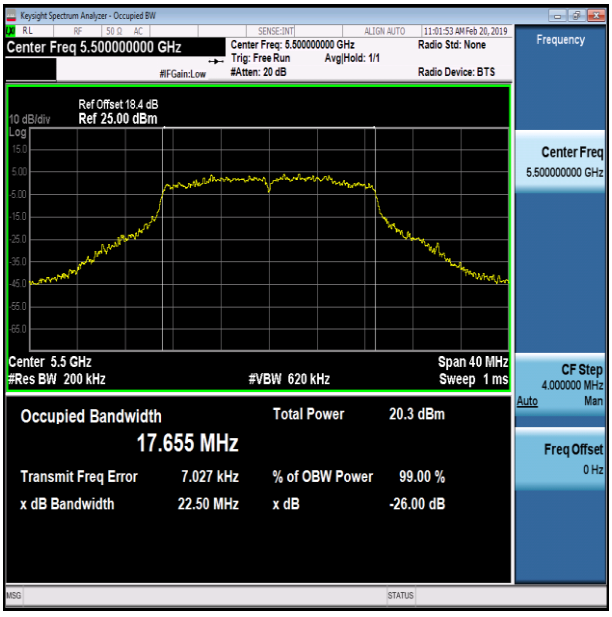	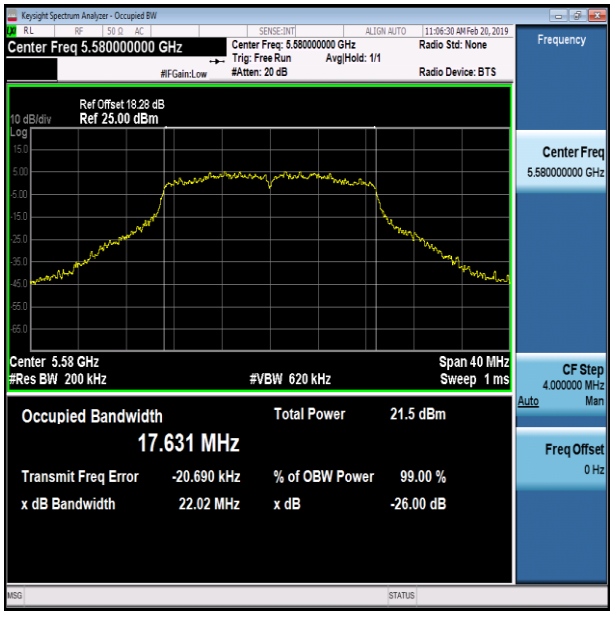

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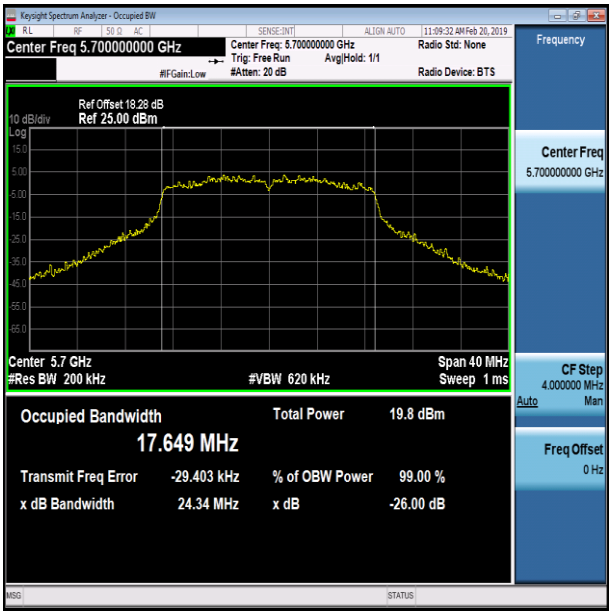	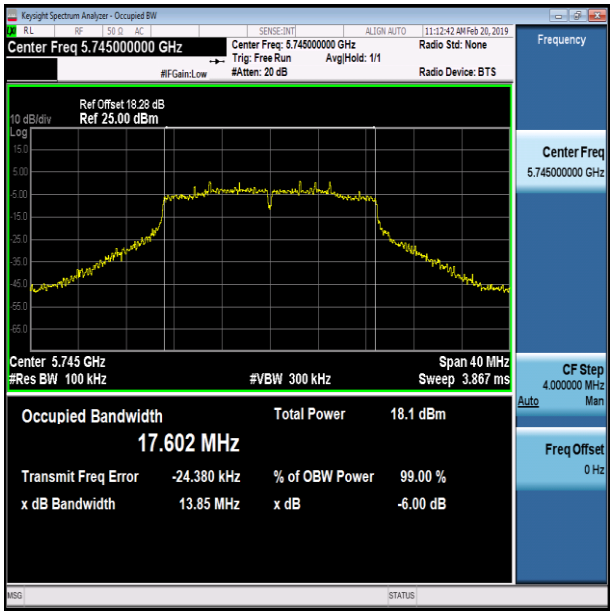
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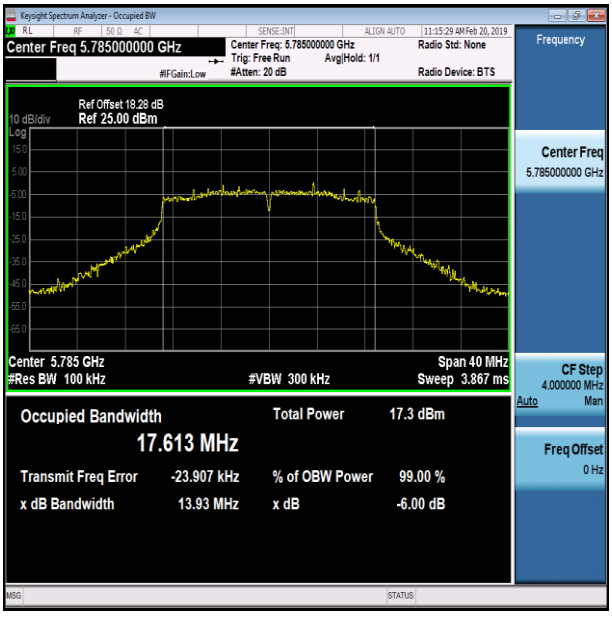	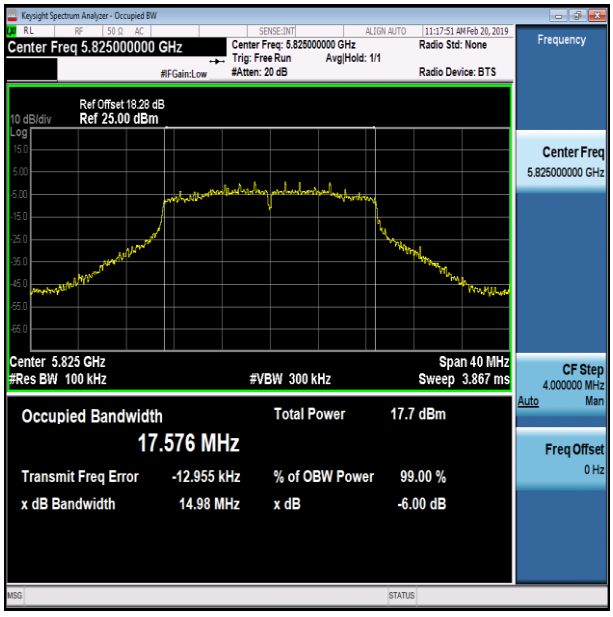

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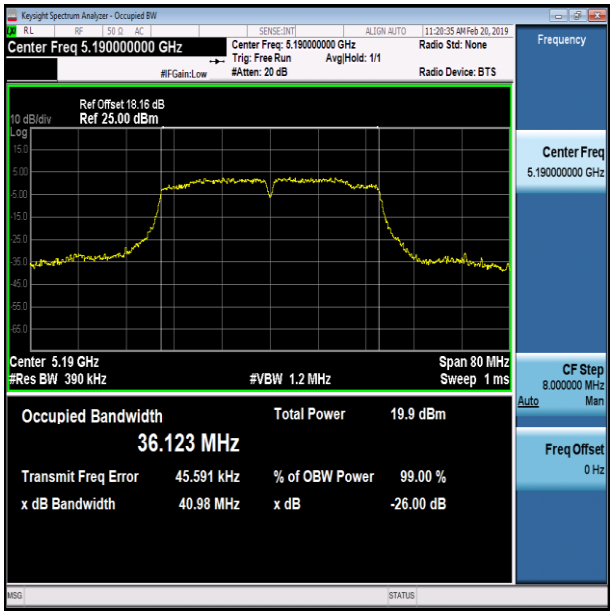	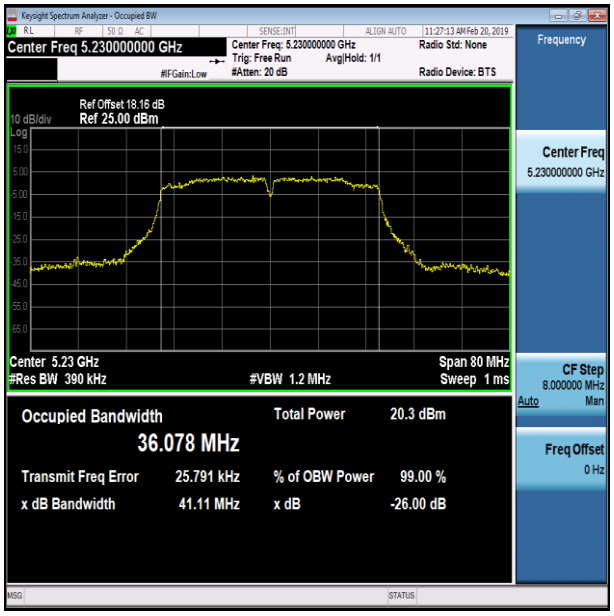
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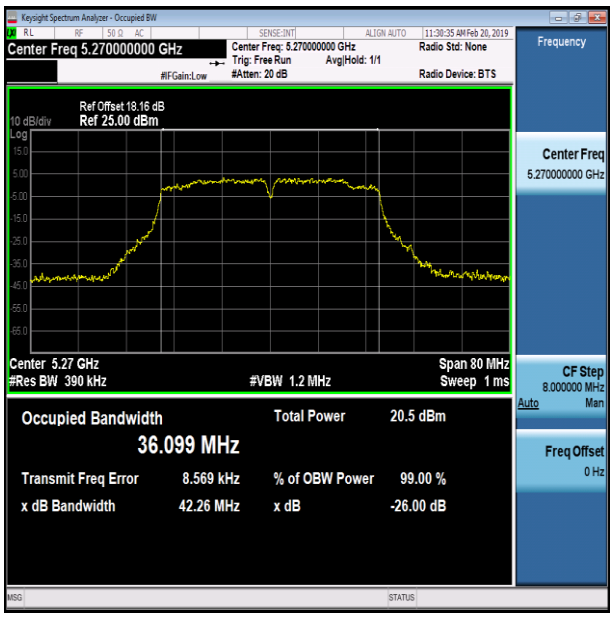	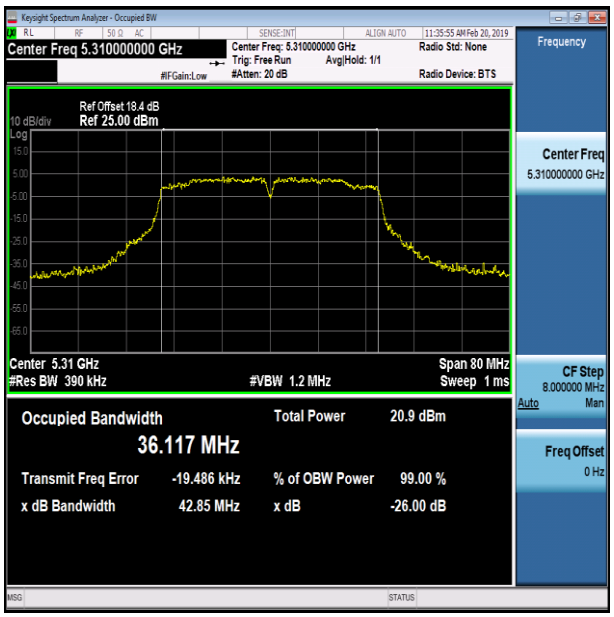

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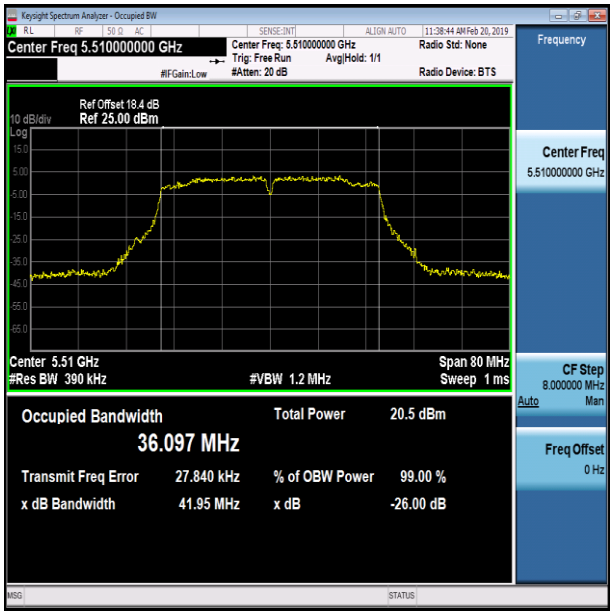	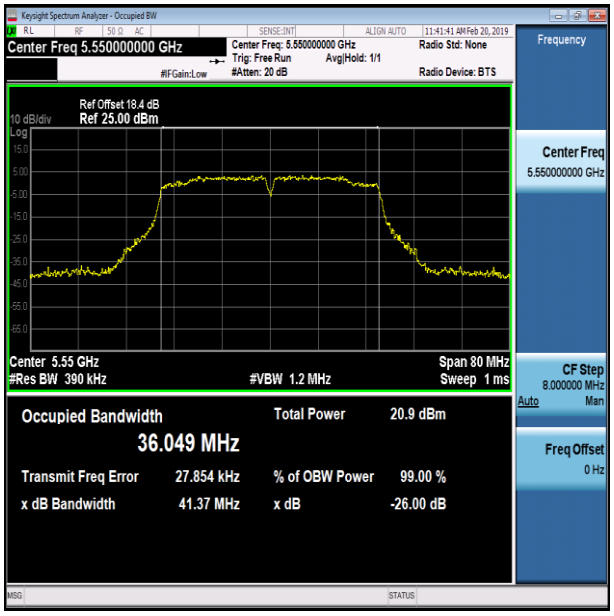
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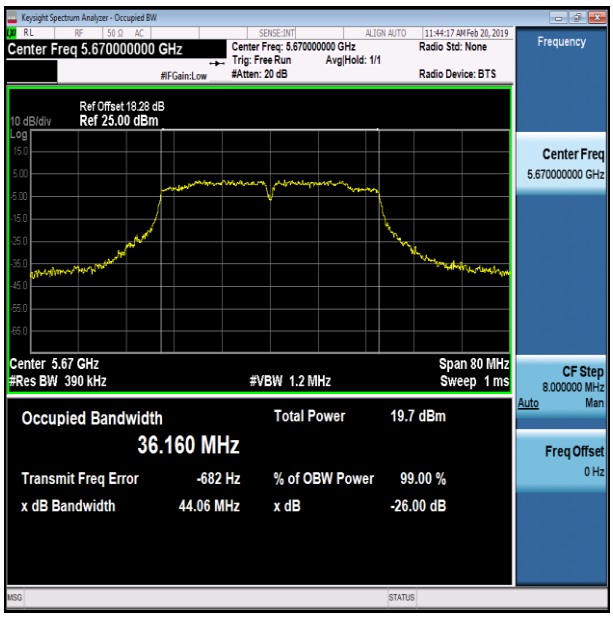	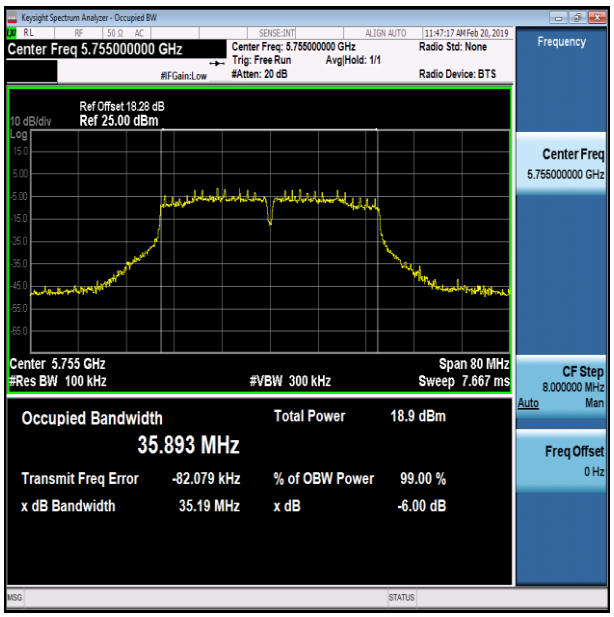

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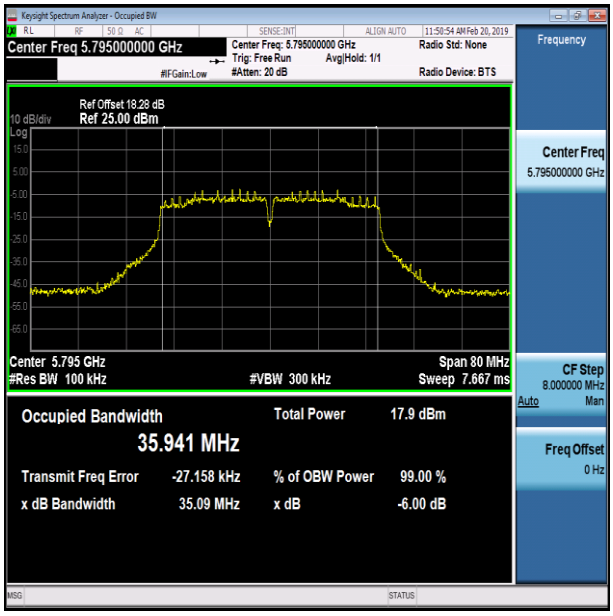	---

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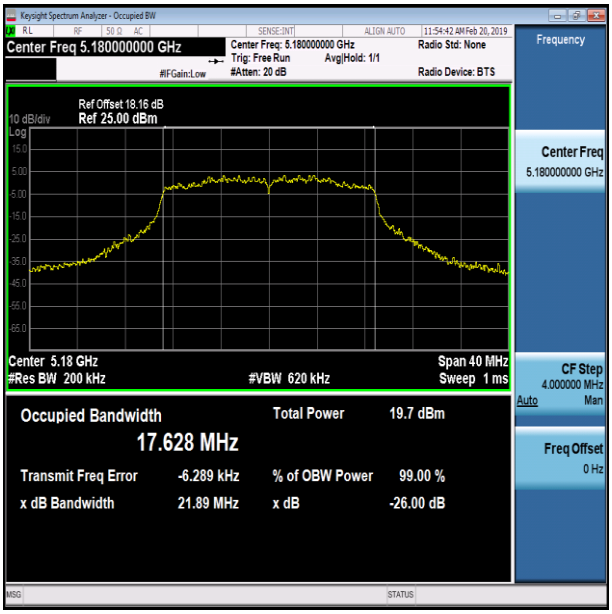	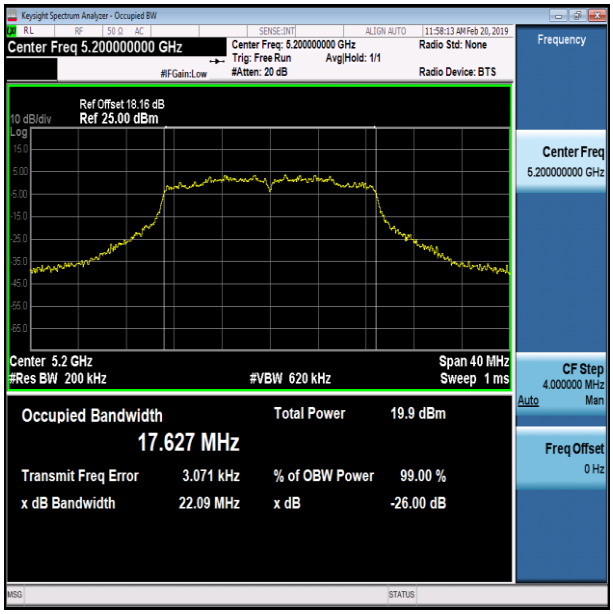

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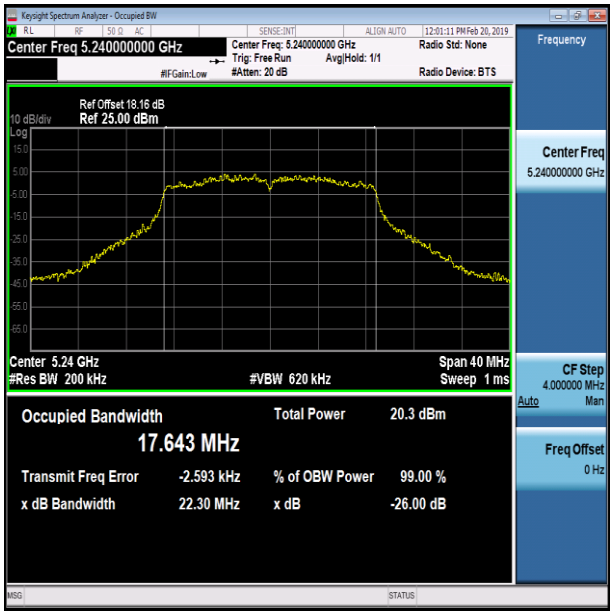	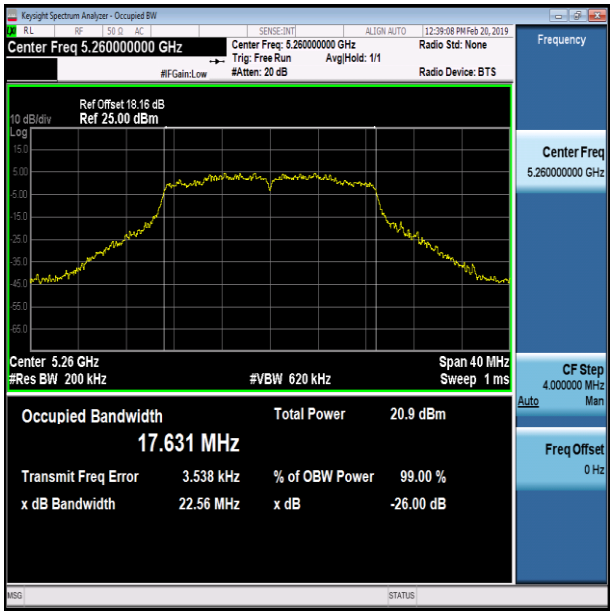
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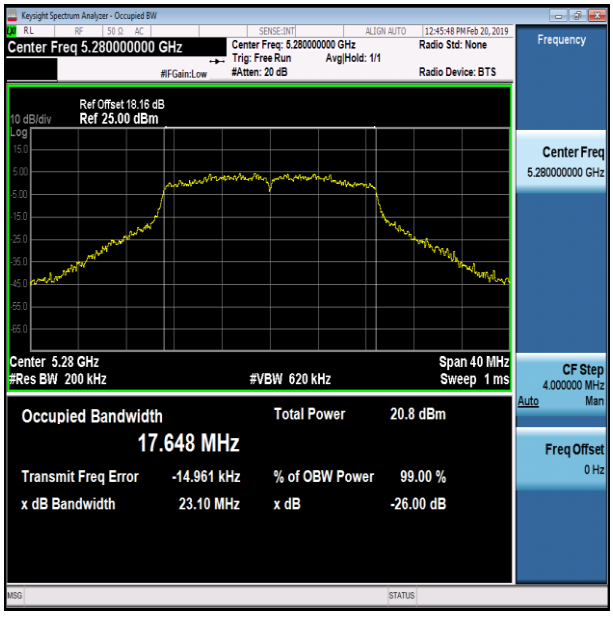	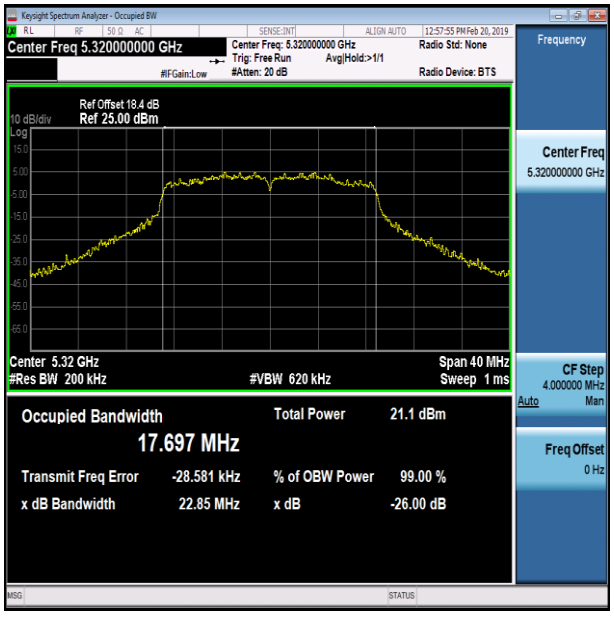

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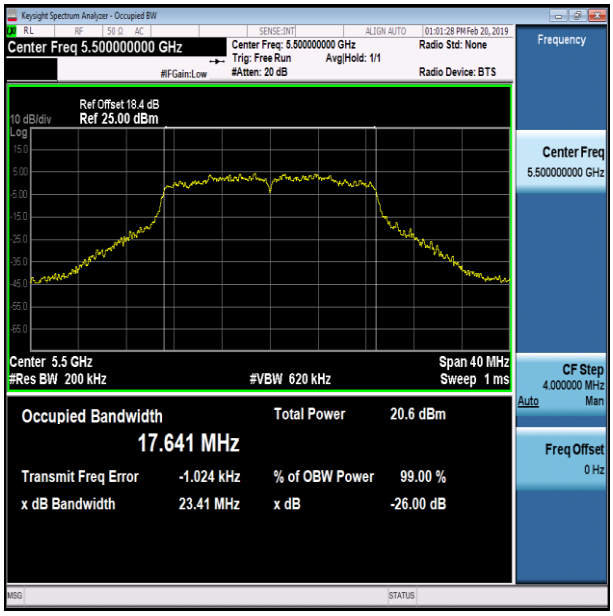	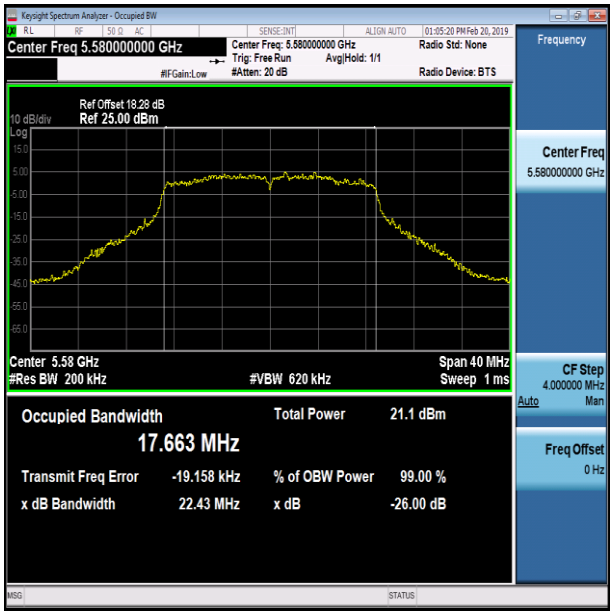
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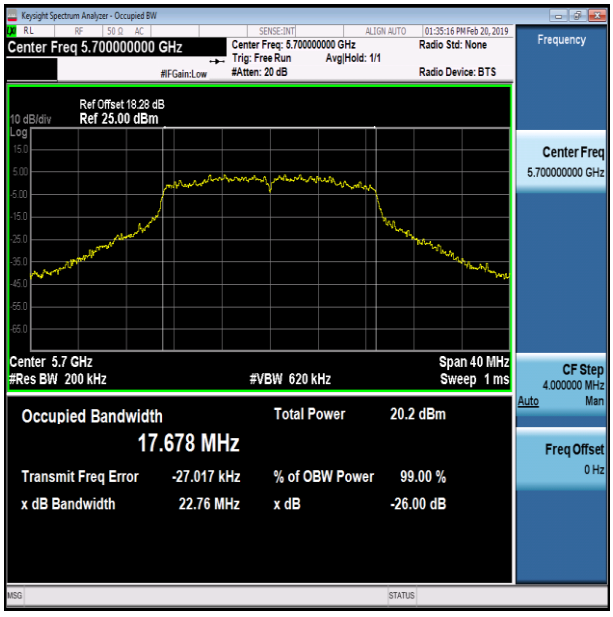	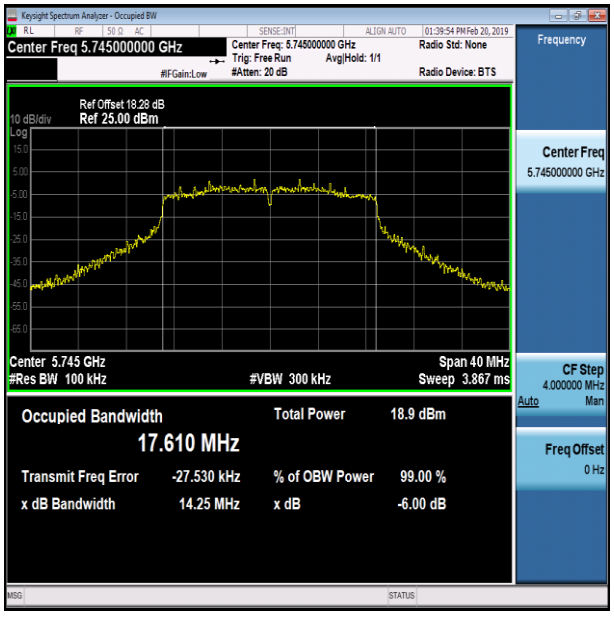

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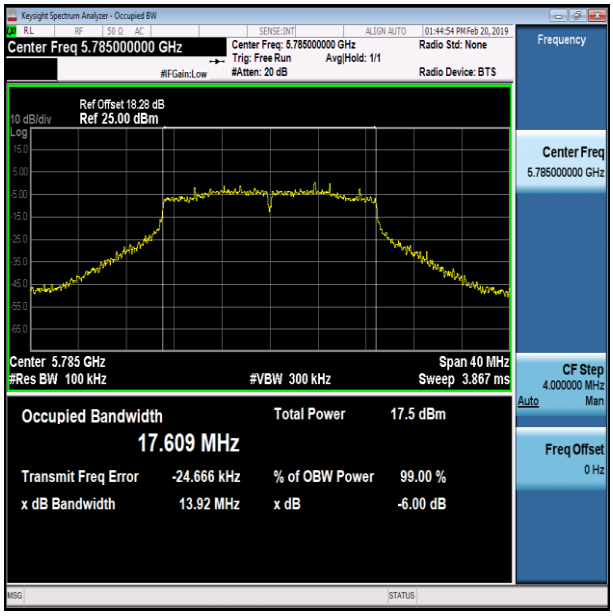	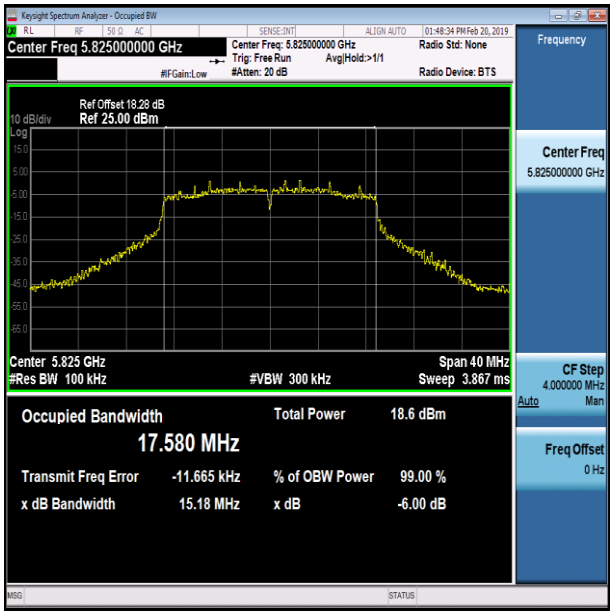

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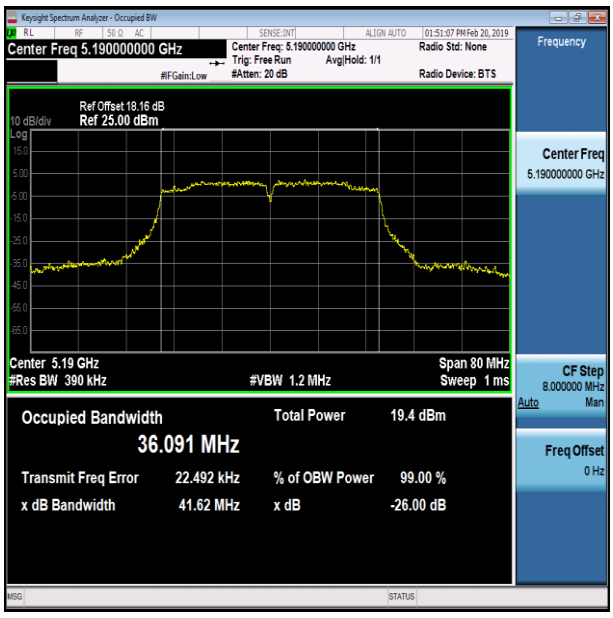	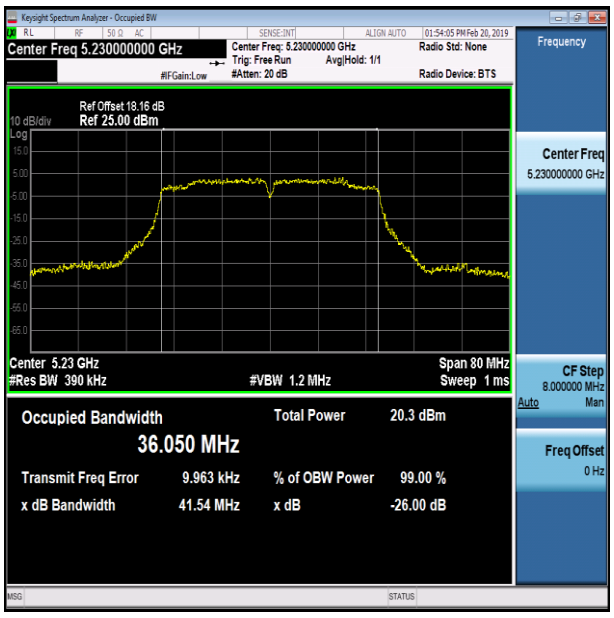

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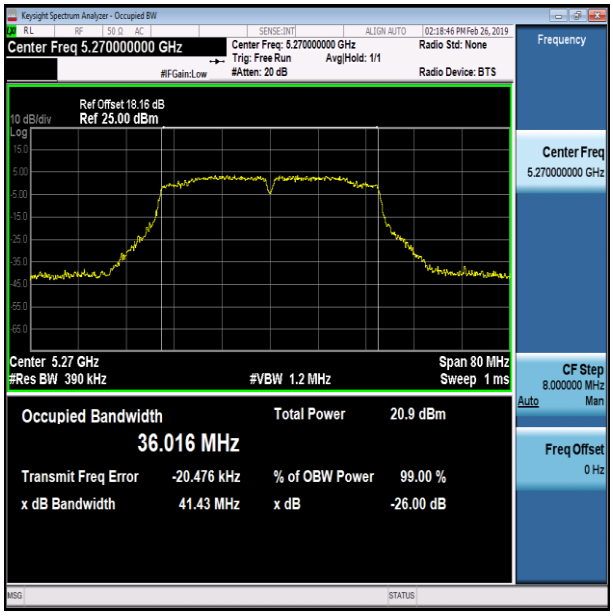	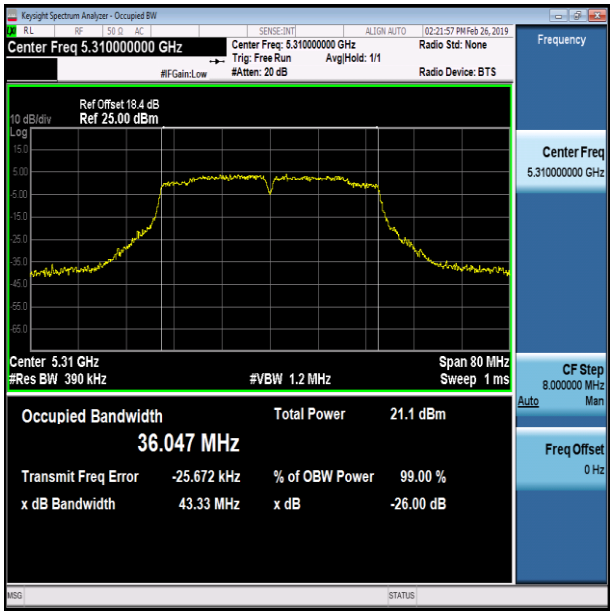
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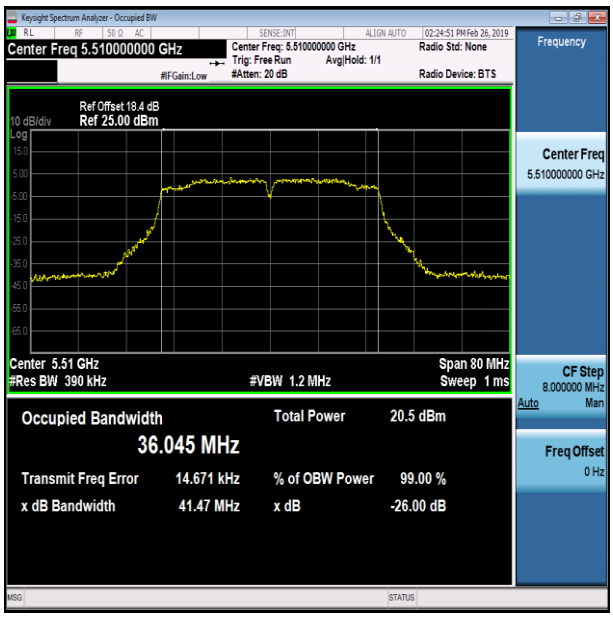	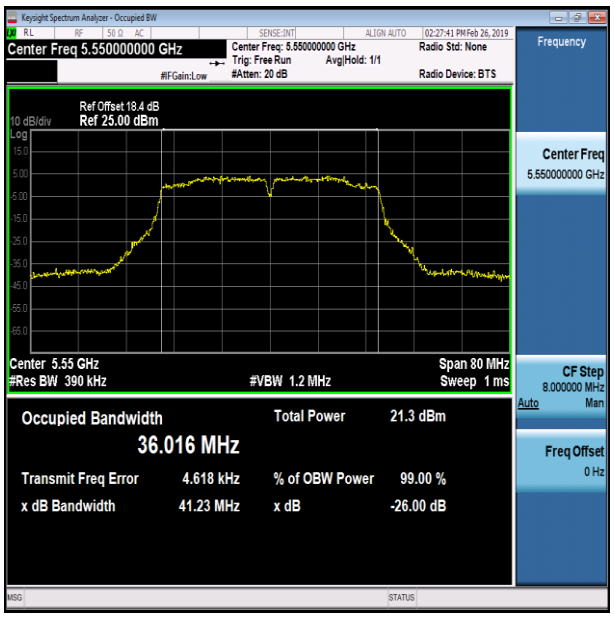

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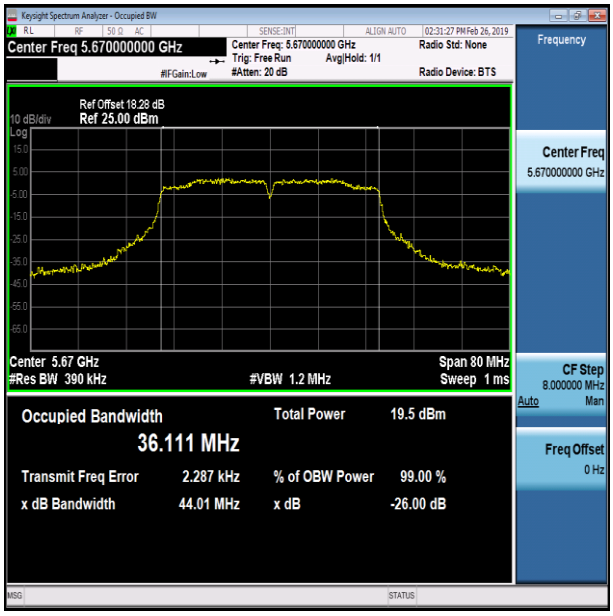	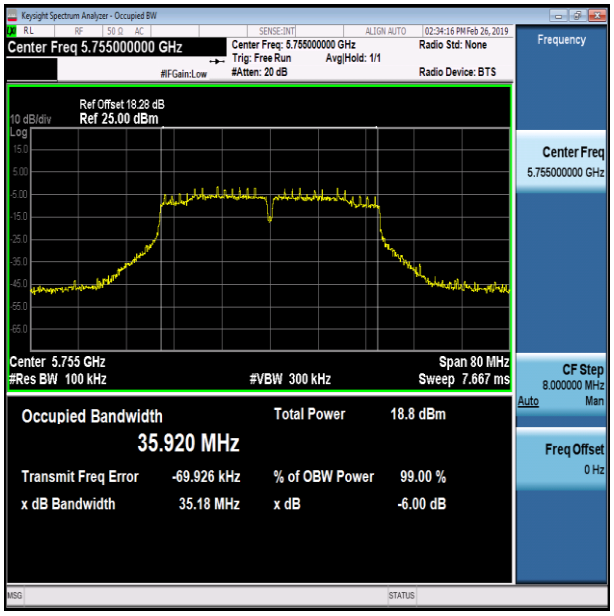
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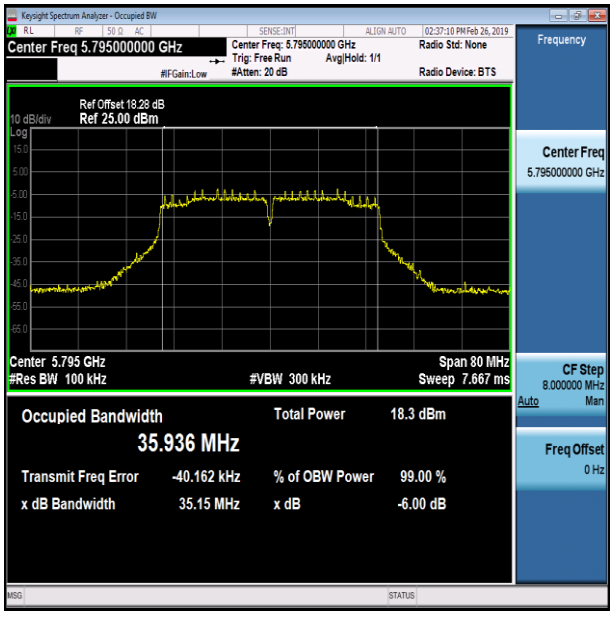	---

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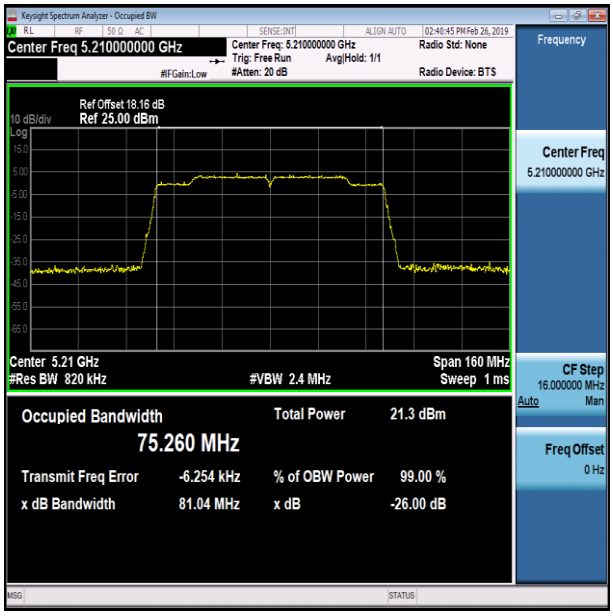	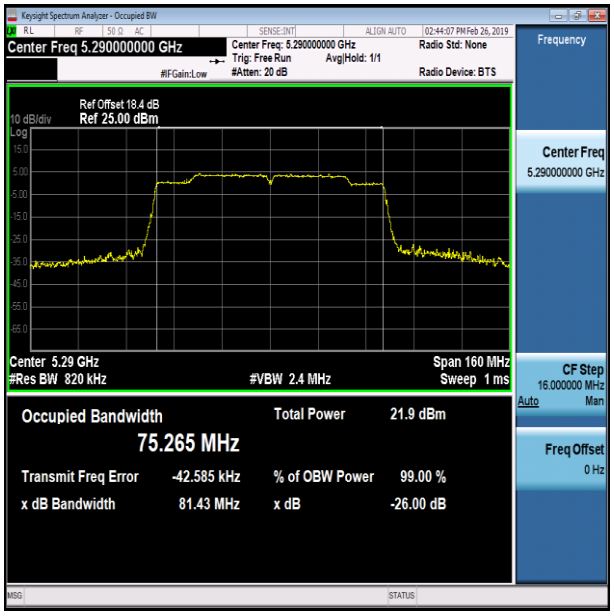
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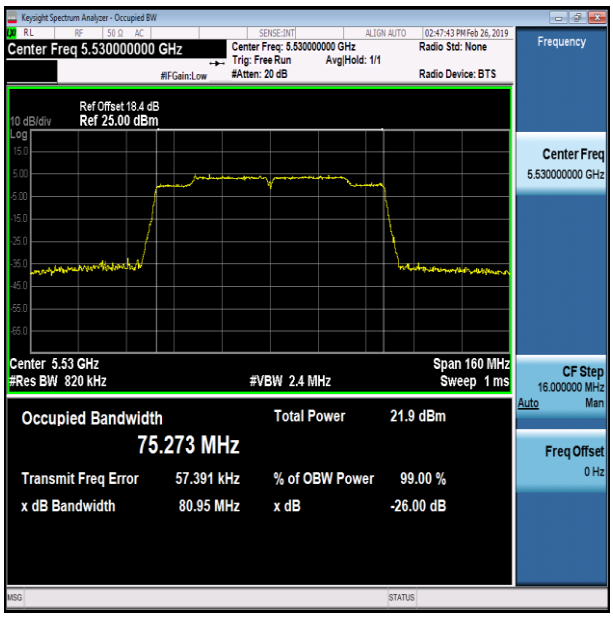	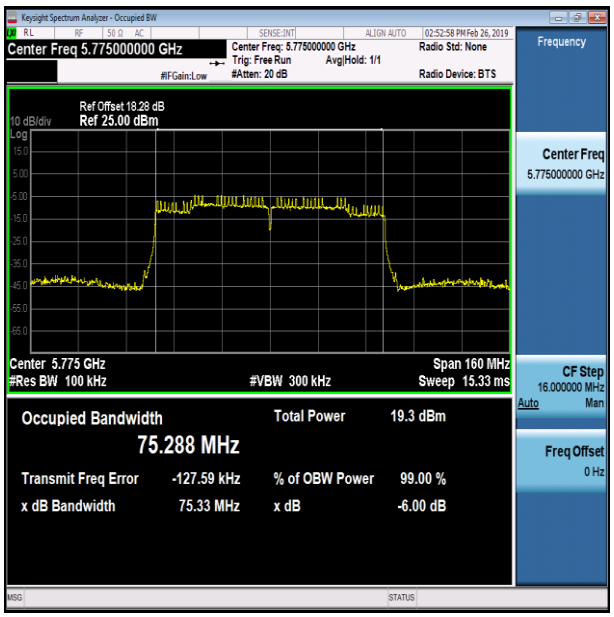

4.2 Maximum Conducted Output Power Measurement

4.2.1 Limit of Output Power

FCC

Operztion Band	EUT Category		Limit
U-NII-1		Access Point(Mater Device)	1 Watt(30dBm)
		Fixed point-to-point Acess Ponit	1 Watt(30dBm)
	√	Mobile and portable clinet device	250mW(23.98dBm)
U-NII-2A	√		250mW(23.98dBm) or 11dBm+10 log B
U-NII-2C	√		250mW(23.98dBm) or 11dBm+10 log B
U-NII-3	√		1 Watt(30dBm)

If transmitting antennas of directional gain greater than 6 dBi are used, both the transmit power and the power spectral density shall be reduced by the amount in dB that the direction-al gain of the antenna exceeds 6 dBi.

4.2.2 Test Procedures

1. Place the EUT on the table and set it in transmitting mode.
2. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01 .
3. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the Spectrum Analyzer.
4. Spectrum Analyzer is used as the auxiliary test equipment to conduct the output power measurement.
5. Set span to encompass the entire emission bandwidth (EBW) of the signal. Set sweep trigger to “free run.”, RBW = 1 MHz, Set VBW ≥3MHz, Sweep time = auto, Detector = rms.. Number of points in sweep ≥ 2 × span / RBW. (This ensures that bin-to-bin spacing is ≤ RBW/2, so that narrowband signals are not lost between frequency bins.)
6. Video filtering shall be applied to power signal (rms), it shall be set to operate on a linear voltage signal.
7. Trace average at least 100 traces in power averaging (rms) mode; however, the number of traces to be averaged shall be increased above 100 as needed to ensure that the average accurately represents the true average over the on and off periods of the transmitter.
8. Maximum Conducted Output Power = Conducted Output Power + Duty cycle factor [10 log (1/x)] where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times Repeat above procedures until all frequency (low, middle, and high channel) measured were complete.