TEST REPORT

Product Name : Tablet
Model Number : M082
FCC ID : 2BEA65081AP

Prepared for	:	Vantron Technology, Inc.
Address	:	48434 Milmont Drive Fremont, CA 94538-7324, USA
Prepared by	:	EMTEK (SHENZHEN) CO., LTD.
Address	:	Building 69, Majialong Industry Zone,Nanshan District, Shenzhen, Guangdong, China Tel: (0755) 26954280 Fax: (0755) 26954282
Report Number	:	ENS2404260261W00204R
Date(s) of Tests	:	May 1, 2024 to June 7, 2024
Date of issue	:	June 11, 2024

1 TEST RESULT CERTIFICATION

Applicant	:	Vantron Technology, Inc.
Address	:	48434 Milmont Drive Fremont, CA 94538-7324, USA
Manufacturer	:	Vantron Technology, Inc.
Address	:	48434 Milmont Drive Fremont, CA 94538-7324, USA
EUT	:	Tablet
Model Name	:	M082
Trademark	:	Vantron

Measurement Procedure Used:

APPLICABLE STANDARDS	
STANDARD	**TEST RESULT**
FCC 47 CFR Part 2, Subpart J FCC 47 CFR Part 15, Subpart E	**PASS**
IC RSS-GEN, Issue 5(04-2018)+A1(03-2019)+A2(02-2021) IC RSS-247 Issue 2(02-2017)	**PASS**

The above equipment was tested by EMTEK (SHENZHEN) CO., LTD. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10 (2013) and the energy emitted by the sample EUT tested as described in this report is in compliance with the requirements of FCC Rules Part 2, Part 15.407, IC RSS-247 Issue 2 and IC RSS-GEN, Issue 5.

The test results of this report relate only to the tested sample identified in this report.

Date of Test : May 1, 2024 to June 7, 2024

Prepared by : Una Yu /Editor

Reviewer : Joe Xia /Supervisor

Approve & Authorized Signer : Lisa Wang/Manager

EMTEK (SHENZHEN) CO., LTD. TESTING

Modified History

Version	Report No.	Revision Date	Summary
Ver.1.0	ENS2404260261W00204R	/	Original Report

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2 EUT TECHNICAL DESCRIPTION

Characteristics	Description
Product:	Tablet
Model Number:	M082
Sample Number:	2#
Wifi Type:	Wifi 5G with 5150MHz-5250MHz Band Wifi 5G with 5250MHz-5350MHz Band Wifi 5G with 5470MHz-5725MHz Band Wifi 5G with 5725MHz-5850MHz Band
WLAN Supported:	802.11a/n/ac
Data Rate :	802.11a: 54/48/36/24/18/12/9/6Mbps 802.11n: MCS0-MCS15 802.11ac: MCS0-MCS9
Modulation:	OFDM with BPSK/QPSK/16QAM/64QAM for 802.11a/n OFDM with BPSK/QPSK/16QAM/64QAM/256QAM for 802.11ac
Frequency Range:	UNII-1: 5150MHz-5250MHz Band 5180-5240MHz for 802.11a/n(HT20)/ac(VHT20) 5190-5230MHz for 802.11n(HT40)/ac(VHT40) 5210MHz for 802.11ac(VHT80)
	UNII-2A: 5250MHz-5350MHz Band 5260-5320MHz for 802.11a/n(HT20)/ac(VHT20) 5270-5310MHz for 802.11n(HT40)/ac(VHT40) 5290MHz for 802.11ac(VHT80)
	UNII-2C: 5470MHz-5725MHz Band 5500-5700MHz for 802.11a/n(HT20)/ac(VHT20) 5510-5670MHz for 802.11n(HT40)/ac(VHT40) 5530MHz for 802.11ac(VHT80)
	UNII-3 with 5725MHz-5850MHz Band 5745-5825MHz for 802.11a/n(HT20)/ac(VHT20) 5755-5795MHz for 802.11n(HT40)/ac(VHT40) 5775MHz for 802.11ac(VHT80);
TPC Function:	Not Applicable
Antenna Port:	☒ Antenna port 1
Antenna Type:	Internal Antenna
Antenna Gain:	ANT 1: 4.67 dBi
Transmit Power:(e.i.r.p)	UNII-1 Band: 12.3 dBm UNII-2A Band: 13.15 dBm UNII-2C Band: 13.2 dBm UNII-3 Band: 13.01 dBm

Power Supply:	DC 5V from adapter, DC 3.8V from Internal Li-ion battery
Adapter:	MODEL:MX15U-0503000UU INPUT:AC 100-240V~50/60Hz 0.5A OUTPUT:5V, 3.0A
Test Voltage:	AC 120V/60Hz, DC 3.8V from Internal Li-ion battery
Date of Received:	May 15, 2024
Temperature Range:	0° C ~ +60° C
Note: 1.For more details, please refer to the User's manual of the EUT.	

3 SUMMARY OF TEST RESULT

FCC PartClause	IC Part Clause	Test Parameter	Verdict	Remark
15.407 (a) 15.407 (e) 2.1049	RSS-247, 6.2 RSS-Gen 6.7	99% , 6dB and 26dB Bandwidth	PASS	
15.407 (a)	RSS-247, 6.2	Maximum Conducted Output Power	PASS	
15.407 (a)	RSS-247, 6.2	PeakPower Spectral Density	PASS	
15.407 (b) 15.209 15.205	RSS-247, 6.2 RSS-Gen 8.9 RSS-Gen 8.10 RSS-Gen 6.13	RadiatedSpurious Emission	PASS	
15.207	RSS-Gen 8.8	Power Line Conducted Emission	PASS	
15.407(a) 15.203	RSS-Gen 6.8	Antenna Application	PASS	
NOTE1:N/A (Not Applicable) NOTE2:According to FCC OET KDB 789033, the report use radiated measurements in the restricted frequency bands. In addition, the radiated test is also performed to ensure the emissions emanating from the device cabinet also comply with the applicable limits. NOTE3:The time on the test data photo is wrong,The correct test time is as described on the report.If there is fraud,we lab takes full responsibility.				

RELATED SUBMITTAL(S) / GRANT(S):

This submittal(s) (test report) is intended for **FCC ID:2BEA65081AP** filing to comply with Section 15.407 of the FCC Part 15, Subpart C Rules.

4 TEST METHODOLOGY

4.1 GENERAL DESCRIPTION OF APPLIED STANDARDS

According to its specifications, the EUT must comply with the requirements of the following standards:
FCC 47 CFR Part 2, Subpart J
FCC 47 CFR Part 15, Subpart E
IC RSS-GEN, Issue 5(04-2018)+A1(03-2019)+A2(02-2021)
IC RSS-247 Issue 2(02-2017)
FCC KDB 662911 D01 Multiple Transmitter Output v02r01
FCC KDB 789033 D2 General UNII Test Procedures New Rules v02r01

4.2 MEASUREMENT EQUIPMENT USED

Conducted Emission Test Equipment

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
EMI Test Receiver	Rohde & Schwarz	ESCI	101384	2024/5/11	1Year
AMN	Rohde & Schwarz	ENV216	101161	2024/5/10	1Year

For Spurious Emissions Test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
EMI Test Receiver	Rohde & Schwarz	ESU 26	100154	2024/5/10	1Year
Pre-Amplifie	Lunar EM	LNA30M3G-25	J10100000070	2024/5/10	1Year
Bilog Antenna	Schwarzbeck	VULB9163	660	2023/5/16	2 Year
Horn antenna	Schwarzbeck	BBHA9120D	9120D-1177	2023/5/12	2 Year
Pre-Amplifie	SKET	LNPA_0118G-45	SK2019051801	2024/5/10	1Year
Loop Antenna	Schwarzbeck	FMZB1519	1519-012	2023/5/12	2 Year
Spectrum Analyzer	Rohde & Schwarz	FSV40	100967	2024/5/10	1Year
Horn antenna	Schwarzbeck	BBHA9170	9170-399	2023/5/12	2 Year
Band reject Filter(50dB)	WI/DE	WRCGV-2400(2400-2485MHz)	2	2024/5/10	1 Year

For other test items:

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
Signal Analyzer	Agilent	N9010A	MY53470879	2024/5/10	1Year
Vector Signal Generater	Agilent	N5182B	MY53050878	2024/5/10	1Year
Analog Signal Generator	Agilent	N5171B	MY53050553	2024/5/10	1Year
RF Control Unit(Power Meter)	Tonscend	JS0806-2	\	2024/5/10	1Year
Temperature&Humidity Chamber	ESPEC	EL-02KA	12107166	2024/5/10	1Year

4.3 DESCRIPTION OF TEST MODES

The EUT has been tested under its typical operating condition.
The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.
The Transmitter was operated in the normal operating mode. The TX frequency was fixed which was for the purpose of the measurements.
Test of channel included the lowest and middle and highest frequency to perform the test, then record on this report.
Those data rates (802.11a: 54 Mbps; 802.11n(HT20): MCS0; 802.11ac(VHT20): MCS0; 802.11n(HT40): MCS0; 802.11ac(VHT40): MCS0; 802.11ac(VHT80): MCS0;)were used for all test.

Pre-defined engineering program for regulatory testing used to control the EUT for staying in continuous transmitting and receiving mode is programmed.

☒ Wifi 5G with U-NII - 1
Frequency and Channel list for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	44	5220		
40	5200	48	5240		

Frequency and Channel list for 802.11n (HT40), 802.11ac (VHT40):

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
38	5190	46	5230		

Frequency and Channel list for 802.11ac (VHT80):

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
42	5210				

Test Frequency and Channel for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

Lowest Frequency		Middle Frequency		Highest Frequency	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	40	5200	48	5240

Test Frequency and channel for 802.11n (HT40), 802.11ac (VHT40):

Lowest Frequency		Middle Frequency		Highest Frequency	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
38	5190	N/A	N/A	46	5230

Test Frequency and channel for 802.11ac (VHT80):

Lowest Frequency		Middle Frequency		Highest Frequency	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
42	5210	N/A	N/A	N/A	N/A

☒ Wifi 5G with U-NII -2A

Frequency and Channel list 802.11a, 802.11n (HT20), 802.11ac (VHT20):

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
52	5260	60	5300		
56	5280	64	5320		

Frequency and Channel list for 802.11n (HT40), 802.11ac (VHT40):

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
54	5270				
62	5310				

Frequency and Channel list for 802.11ac (VHT80):

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
58	5290				

Test Frequency and Channel for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

Lowest Frequency		Middle Frequency		Highest Frequency	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
52	5260	56	5280	64	5320

Test Frequency and channel for 802.11n (HT40), 802.11ac (VHT40):

Lowest Frequency		Middle Frequency		Highest Frequency	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
54	5270	N/A	N/A	62	5310

Test Frequency and channel for 802.11ac (VHT80):

Lowest Frequency		Middle Frequency		Highest Frequency	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
58	5290				

☒ Wifi 5G with U-NII -2C

Frequency and Channel list for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
100	5500	116	5580	132	5660
104	5520	120	5600	136	5680
108	5540	124	5620	140	5700
112	5560	128	5640		

Frequency and Channel list for 802.11n (HT40), 802.11ac (VHT40):

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
102	5510	118	5590	134	5670
110	5550	126	5630		

Frequency and Channel list for 802.11ac (VHT80):

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
106	5530	122	5610		

Test Frequency and Channel for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

Lowest Frequency		Middle Frequency		Highest Frequency	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
100	5500	120	5600	140	5700

Test Frequency and channel for 802.11n (HT40), 802.11ac (VHT40):

Lowest Frequency		Middle Frequency		Highest Frequency	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
102	5510			134	5670

Test Frequency and channel for 802.11ac (VHT80):

Lowest Frequency		Middle Frequency		Highest Frequency	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
106	5530				

☒ Wifi 5G with U-NII -3

Frequency and Channel list for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	157	5785	165	5825
153	5765	161	5805		

Frequency and Channel list for 802.11n (HT40), 802.11ac (VHT40):

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
151	5755	159	5795		

Frequency and Channel list for 802.11ac (VHT80):

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
155	5775				

Test Frequency and Channel for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

Lowest Frequency		Middle Frequency		Highest Frequency	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	157	5785	165	5825

Test Frequency and channel for 802.11n (HT40), 802.11ac (VHT40):

Lowest Frequency		Middle Frequency		Highest Frequency	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
151	5755	N/A	N/A	159	5795

Test Frequency and channel for 802.11ac (VHT80):

Lowest Frequency		Middle Frequency		Highest Frequency	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
155	5775				

Multi-antenna correlation:

☐	Transmit Signals are Correlated
	Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2 / N_{ANT}$] dBi
☐	All Transmit Signals are Completely Uncorrelated
	Directional gain = 10 log[$(10^{G1/10} + 10^{G2/10} + \ldots + 10^{GN/10}) / N_{ANT}$] dBi

Directional gain

5 FACILITIES AND ACCREDITATIONS

5.1 FACILITIES

All measurement facilities used to collect the measurement data are located at:

EMTEK (Shenzhen) Co., Ltd.
Building 69, Majialong Industry Zone District, Nanshan District, Shenzhen, China
The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 and CISPR Publication 22.

5.2 EQUIPMENT

Radiated emissions are measured with one or more of the following types of linearly polarized antennas: tuned dipole, biconical, log periodic, bi-log, and/or ridged waveguide, horn. Spectrum analyzers with preselectors and quasi-peak detectors are used to perform radiated measurements.

Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers.

Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements.

All receiving equipment conforms to CISPR Publication 16-1, “Radio Interference Measuring Apparatus and Measurement Methods.”

5.3 LABORATORY ACCREDITATIONS AND LISTINGS

Site Description		
EMC Lab.	:	**Accredited by CNAS** The Certificate Registration Number is L2291. The Laboratory has been assessed and proved to be in compliance with CNAS-CL01 (identical to ISO/IEC 17025:2017) **Accredited by FCC** Designation Number: CN1204 Test Firm Registration Number: 882943 **Accredited by A2LA** The Certificate Number is 4321.01. Accredited by Industry Canada The Conformity Assessment Body Identifier is CN0008
Name of Firm	:	EMTEK (SHENZHEN) CO., LTD.
Site Location	:	Building 69, Majialong Industry Zone, Nanshan District, Shenzhen, Guangdong, China

6 TEST SYSTEM UNCERTAINTY

The following measurement uncertainty levels have been estimated for tests performed on the apparatus:

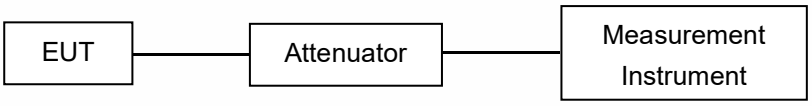
Test Parameter	Measurement Uncertainty
Frequency error	±20Hz
Occupied Bandwidth	±0.5KHz
Transmitter output power	±0.6dB
Conducted spurious emissions	±3.2dB
Radiated spurious emissions	±4.5dB
Temperature	±1.2℃
Humidity	±3%
DC voltages	±0.25V
Time	±1%

Measurement Uncertainty for a level of Confidence of 95%

7 SETUP OF EQUIPMENT UNDER TEST

7.1 RADIO FREQUENCY TEST SETUP

The WLAN component's antenna ports(s) of the EUT are connected to the measurement instrument per an appropriate attenuator. The EUT is controlled by PC/software to emit the specified signals for the purpose of measurements.



7.2 RADIO FREQUENCY TEST SETUP

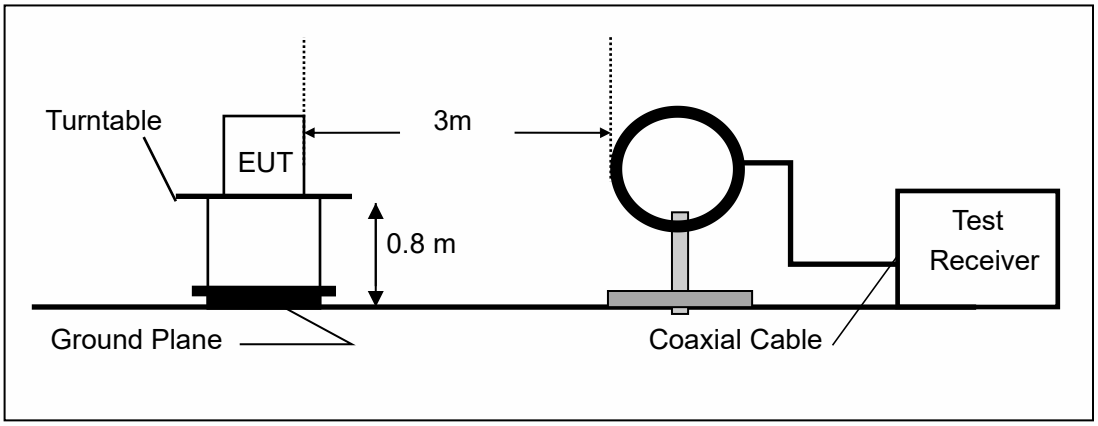
The test site semi-anechoic chamber has met the requirement of NSA tolerance 4 dB according to the standards: ANSI C63.10. The test distance is 3m.The setup is according to the requirements in Section 13.1.4.1 of ANSI C63.10-2013and CAN/CSA-CEI/IEC CISPR 22.

Below 30MHz：
The EUT is placed on a turntable 0.8 meters above the ground in the chamber, 3 meter away from the antenna (loop antenna). The Antenna should be positioned with its plane vertical at the specified distance from the EUT and rotated about its vertical axis for maximum response at each azimuth about the EUT. The center of the loop shall be 1 m above the ground. For certain applications, the loop antenna plane may also need to be positioned horizontally at the specified distance from the EUT.

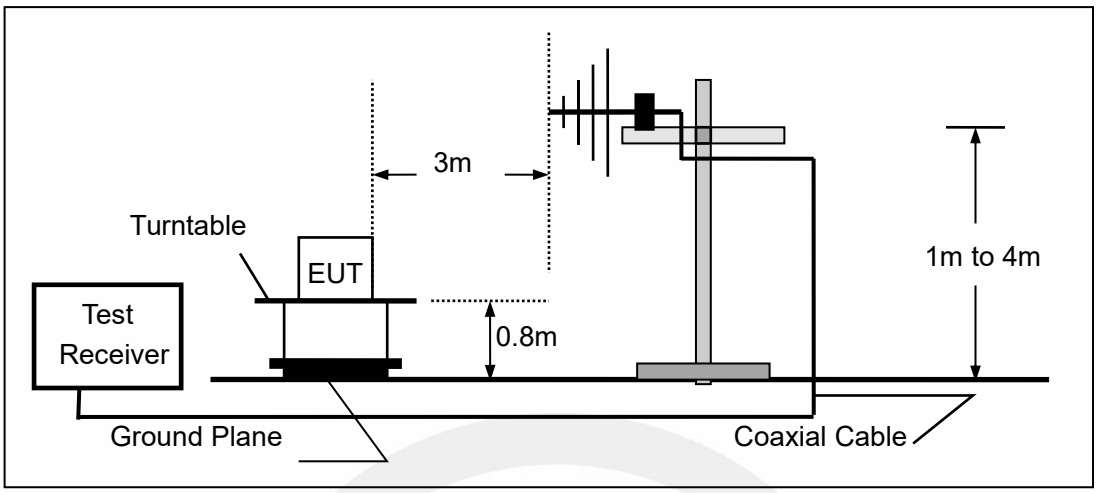
Above 30MHz：
The EUT is placed on a turntable 0.8 meters above the ground in the chamber, 3 meter away from the antenna. The maximal emission value is acquired by adjusting the antenna height, polarisation and turntable azimuth. Normally, the height range of antenna is 1 m to 4 m, the azimuth range of turntable is 0° to 360°, and the receive antenna has two polarizations Vertical (V) and Horizontal (H).

Above 1GHz：
(Note: the FCC's permission to use 1.5m as an alternative per TCBC Conf call of Dec. 2, 2014.)
The EUT is placed on a turntable 1.5 meters above the ground in the chamber, 3 meter away from the antenna. The maximal emission value is acquired by adjusting the antenna height, polarisation and turntable azimuth. Normally, the height range of antenna is 1 m to 4 m, the azimuth range of turntable is 0° to 360°, and the receive antenna has two polarizations Vertical (V) and Horizontal (H).

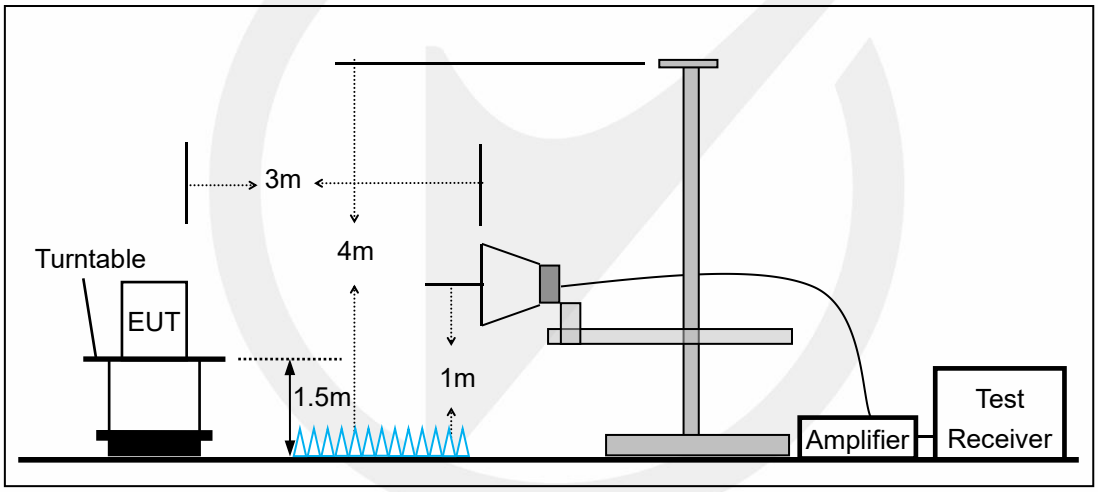
(a) Radiated Emission Test Set-Up, Frequency Below 30MHz



(b)Radiated Emission Test Set-Up, Frequency Below 1000MHz



(c) Radiated Emission Test Set-Up, Frequency above 1000MHz

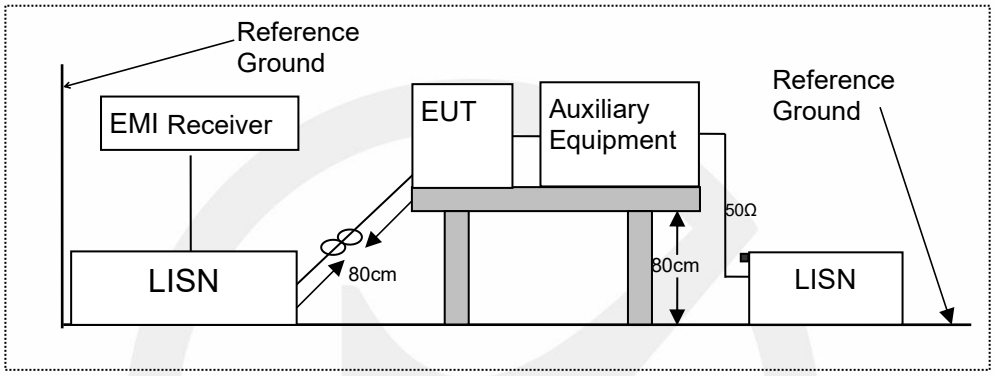


7.3 CONDUCTED EMISSION TEST SETUP

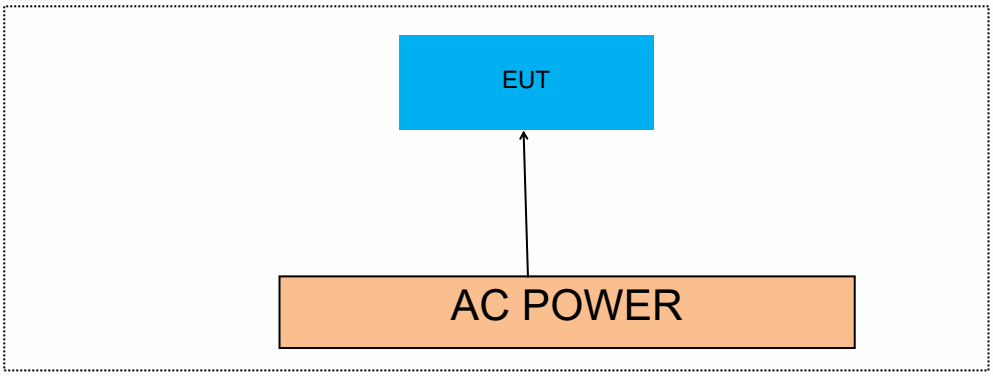
The mains cable of the EUT (maybe per AC/DC Adapter) must be connected to LISN. The LISN shall be placed 0.8 m from the boundary of EUT and bonded to a ground reference plane for LISN mounted on top of the ground reference plane. This distance is between the closest points of the LISN and the EUT. All other units of the EUT and associated equipment shall be at least 0.8m from the LISN.

Ground connections, where required for safety purposes, shall be connected to the reference ground point of the LISN and, where not otherwise provided or specified by the manufacturer, shall be of same length as the mains cable and run parallel to the mains connection at a separation distance of not more than 0.1 m.

According to the requirements in Section 13.1.4.1 of ANSI C63.10-2013 Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-Peak and average detector mode.



7.4 BLOCK DIAGRAM CONFIGURATION OF TEST SYSTEM



7.5 SUPPORT EQUIPMENT

EUT Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite
/	/	/	/

Auxiliary Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite
/	/	/	/

Auxiliary Equipment List and Details			
Description	Manufacturer	Model	Serial Number
/	/	/	/

Notes:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.

2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

8 TEST REQUIREMENTS

8.1 BANDWIDTHMEASUREMENT

8.1.1 Applicable Standard

According to FCC Part 15.407(a)(1) for UNIIBand I
According to FCC Part 15.407(a)(2) for UNIIBand II-A and UNIIBand II-C
According to FCC Part 15.407(a)(3) for UNIIBand III
According toFCC Part 15.407(e) for UNIIBand III
According to 789033 D02 SectionII(C)
According to 789033 D02 SectionII(D)
According to RSS-Gen6.6, RSS 247, 6.2

8.1.2 Conformance Limit

The 26dB bandwidth is used to determine the conducted power limits.
Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

8.1.3 Test Configuration

Test according to clause 7.1 radio frequency test setup

8.1.4 Test Procedure

According to 789033 D02 v02r01 section C&D, the following is the measurement procedure.

1. Emission Bandwidth (EBW)
a) Set RBW = approximately 1% of the emission bandwidth.
b) Set the VBW > RBW.
c) Detector = Peak.
d) Trace mode = max hold.
e) Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

2. Minimum Emission Bandwidth for the band 5.725-5.85 GHz
Section 15.407(e) specifies the minimum 6 dB emission bandwidth of at least 500 KHz for the band 5.715-5.85 GHz. The following procedure shall be used for measuring this bandwidth:
a) Set RBW = 100 kHz.
b) Set the video bandwidth (VBW) $\geqslant$ 3 $\times$ RBW.
c) Detector = Peak.
d) Trace mode = max hold.
e) Sweep = auto couple.
f) Allow the trace to stabilize.
g) 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.
Note: The automatic bandwidth measurement capability of a spectrum analyzer or EMI receiver may be employed if it implements the functionality described above.

D. 99 Percent Occupied Bandwidth
The 99-percent occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5 % of the total mean power of the given emission. Measurement of the 99-percent occupied bandwidth is required only as a condition for using the optional band-edge measurement techniques described in section II.G.3.d). Measurements of 99-percent occupied bandwidth may also optionally be used in lieu of the EBW to 789033 D02 v01r02 General UNII Test Procedures New Rules v01 define the minimum frequency range over which the spectrum is integrated when measuring maximum conducted output power as described in section II.E.

However, the EBW must be measured to determine bandwidth dependent limits on maximum conducted output power in accordance with 15.407(a).

The following procedure shall be used for measuring (99 %) power bandwidth:
1. Set center frequency to the nominal EUT channel center frequency.
2. Set span = 1.5 times to 5.0 times the OBW.
3. Set RBW = 1 % to 5 % of the OBW
4. Set VBW ≥ 3 • RBW
5. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
6. Use the 99 % power bandwidth function of the instrument (if available).
7. If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

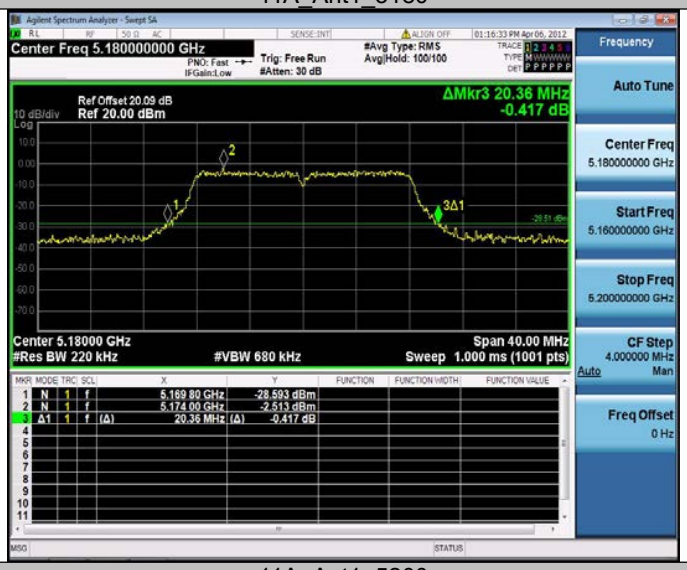
8.1.5 Test Results

Temperature:	25°C
Relative Humidity:	45%
ATM Pressure:	1011 mbar

Note: N/A

TestMode	Antenna	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	20.360	5169.800	5190.160	---	---
		5200	20.960	5189.640	5210.600	---	---
		5240	20.640	5229.560	5250.200	---	---
		5260	21.280	5249.560	5270.840	---	---
		5280	20.400	5269.920	5290.320	---	---
		5320	20.240	5309.760	5330.000	---	---
		5500	21.080	5489.720	5510.800	---	---
		5580	20.440	5569.800	5590.240	---	---
		5700	21.000	5689.640	5710.640	---	---
		5745	20.520	5734.560	5755.080	---	---
		5785	20.880	5774.600	5795.480	---	---
		5825	21.240	5814.120	5835.360	---	---
11N20SISO	Ant1	5180	20.840	5169.640	5190.480	---	---
		5200	21.600	5189.440	5211.040	---	---
		5240	21.800	5228.760	5250.560	---	---
		5260	21.680	5249.440	5271.120	---	---
		5280	21.200	5269.080	5290.280	---	---
		5320	21.400	5309.160	5330.560	---	---
		5500	21.120	5489.360	5510.480	---	---
		5580	21.240	5569.480	5590.720	---	---
		5700	21.680	5689.200	5710.880	---	---
		5745	21.240	5734.240	5755.480	---	---
		5785	22.040	5773.680	5795.720	---	---
		5825	21.000	5814.360	5835.360	---	---
11N40SISO	Ant1	5190	41.920	5169.120	5211.040	---	---
		5230	42.320	5209.200	5251.520	---	---
		5270	41.920	5249.120	5291.040	---	---
		5310	41.920	5289.120	5331.040	---	---
		5510	42.240	5488.720	5530.960	---	---
		5550	41.680	5528.960	5570.640	---	---
		5670	41.920	5649.120	5691.040	---	---
		5755	42.320	5733.560	5775.880	---	---
		5795	42.400	5774.040	5816.440	---	---
11AC20SISO	Ant1	5180	20.600	5169.720	5190.320	---	---
		5200	20.680	5189.400	5210.080	---	---
		5240	20.920	5229.600	5250.520	---	---
		5260	20.640	5249.680	5270.320	---	---
		5280	20.640	5269.600	5290.240	---	---
		5320	21.040	5309.320	5330.360	---	---
		5500	20.880	5489.520	5510.400	---	---
		5580	20.480	5569.680	5590.160	---	---
		5700	20.960	5689.600	5710.560	---	---
		5745	20.960	5734.600	5755.560	---	---
		5785	20.920	5774.480	5795.400	---	---

		5825	20.960	5814.240	5835.200	---	---
11AC40SISO	Ant1	5190	41.600	5169.440	5211.040	---	---
		5230	42.000	5208.960	5250.960	---	---
		5270	42.000	5248.800	5290.800	---	---
		5310	42.000	5289.040	5331.040	---	---
		5510	42.160	5488.880	5531.040	---	---
		5550	42.560	5528.640	5571.200	---	---
		5670	42.240	5648.800	5691.040	---	---
		5755	41.840	5733.720	5775.560	---	---
		5795	42.880	5773.640	5816.520	---	---
11AC80SISO	Ant1	5210	80.800	5170.000	5250.800	---	---
		5290	80.640	5249.840	5330.480	---	---
		5530	80.800	5489.840	5570.640	---	---
		5610	80.320	5570.000	5650.320	---	---
		5775	80.640	5734.840	5815.480	---	---

11A_Ant1_5180

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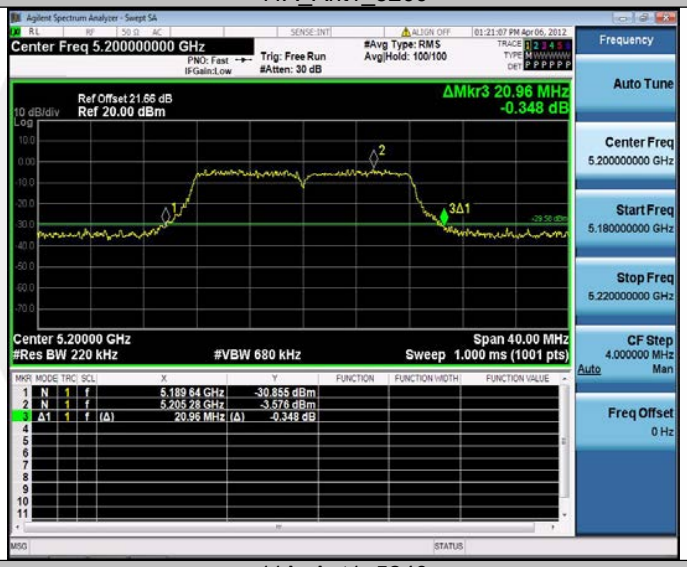
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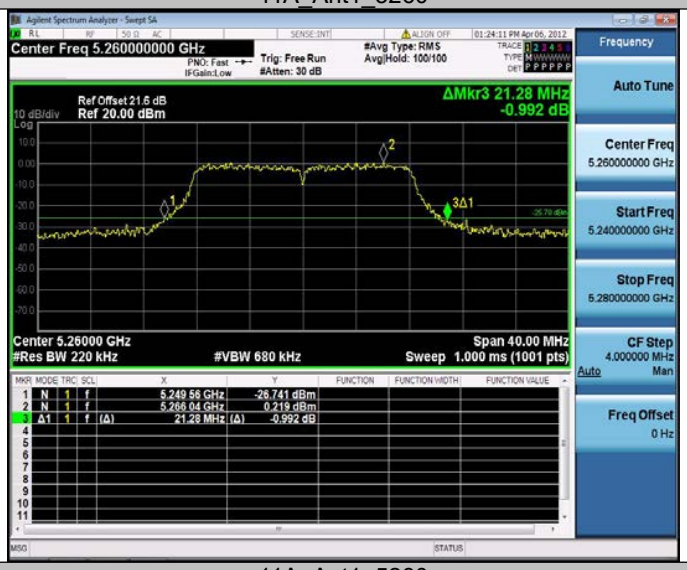
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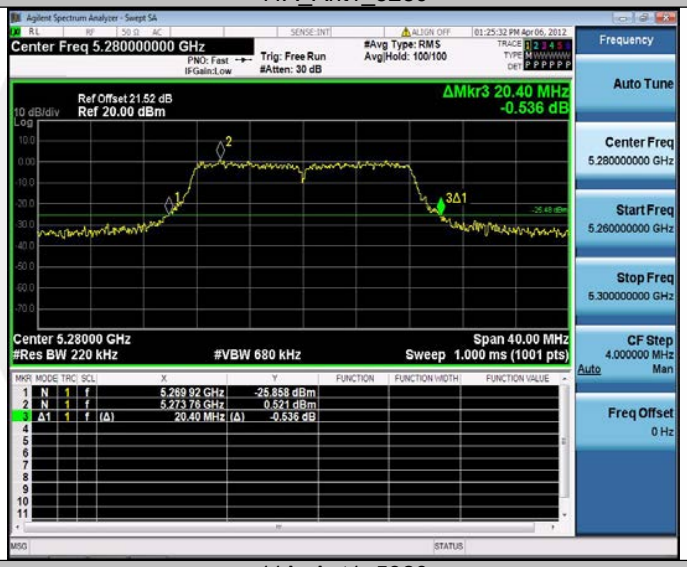
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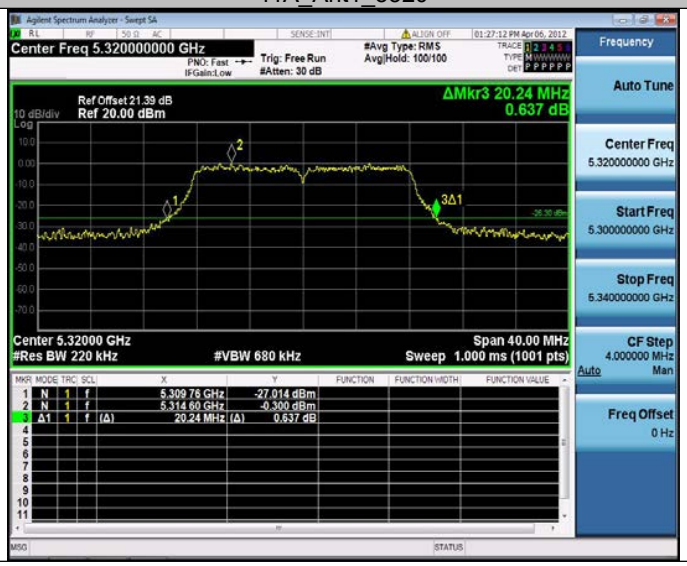

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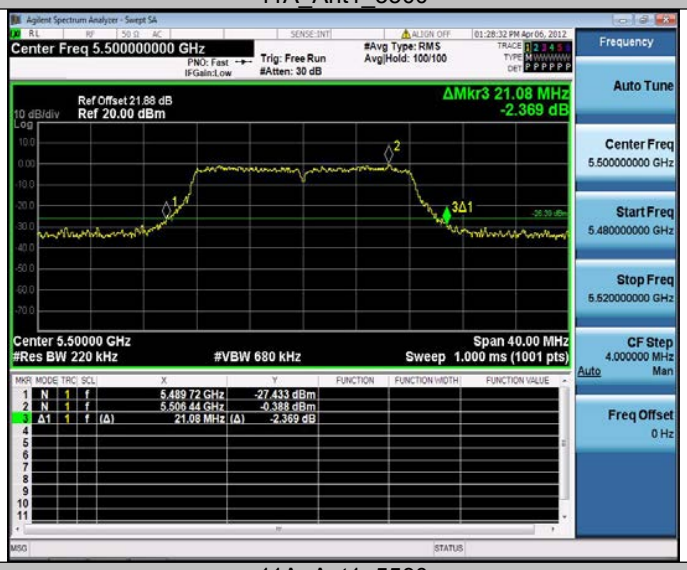
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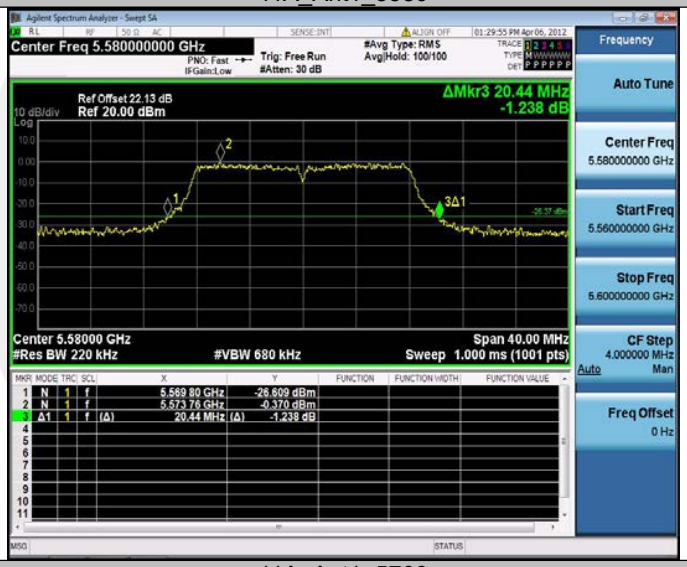
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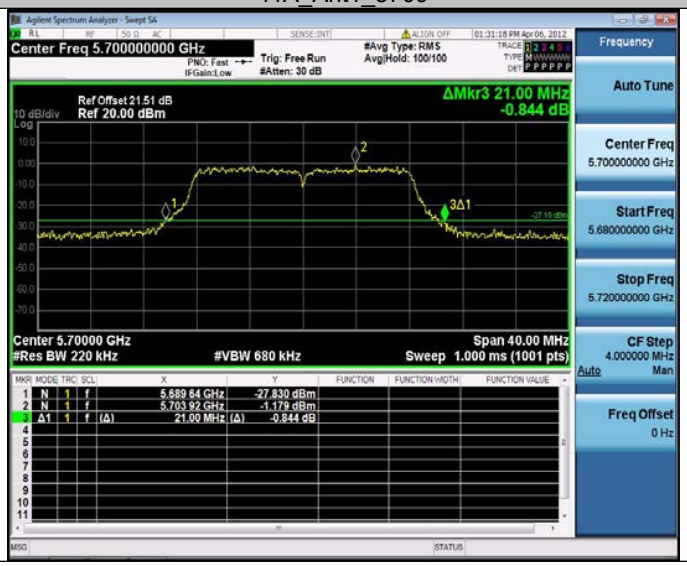

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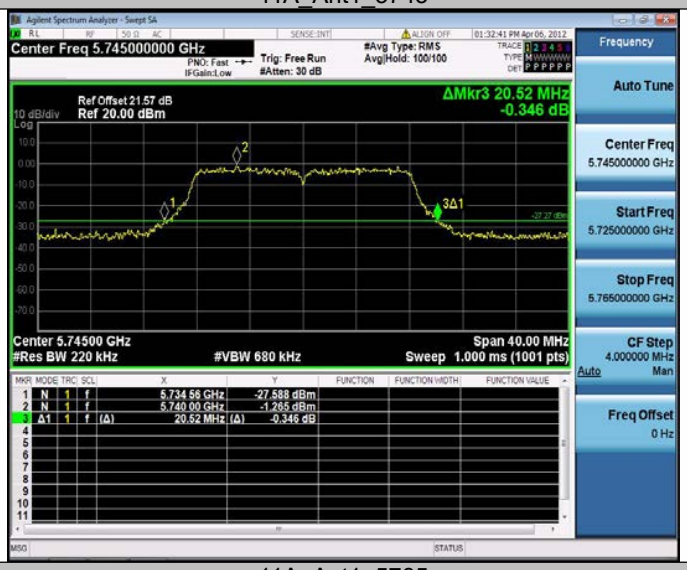
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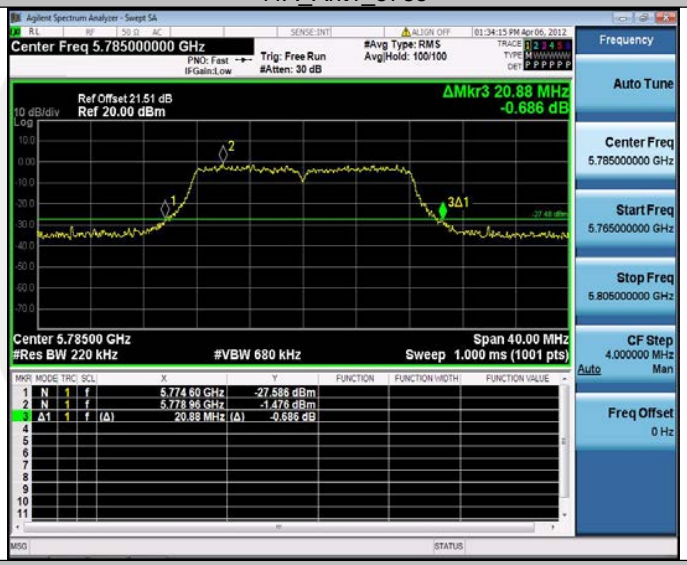
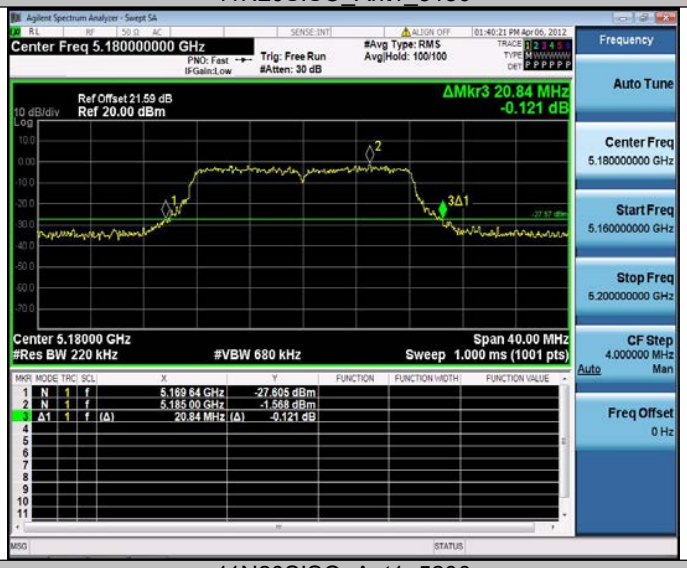

11A_Ant1_5825


11N20SISO_Ant1_5180

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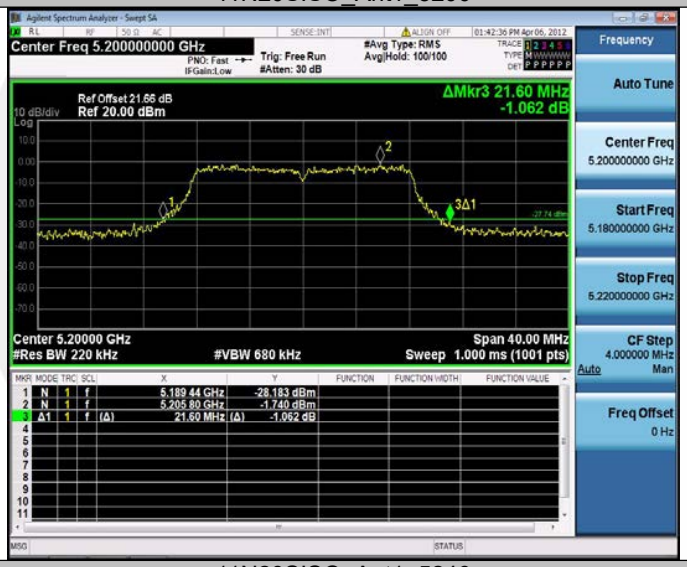
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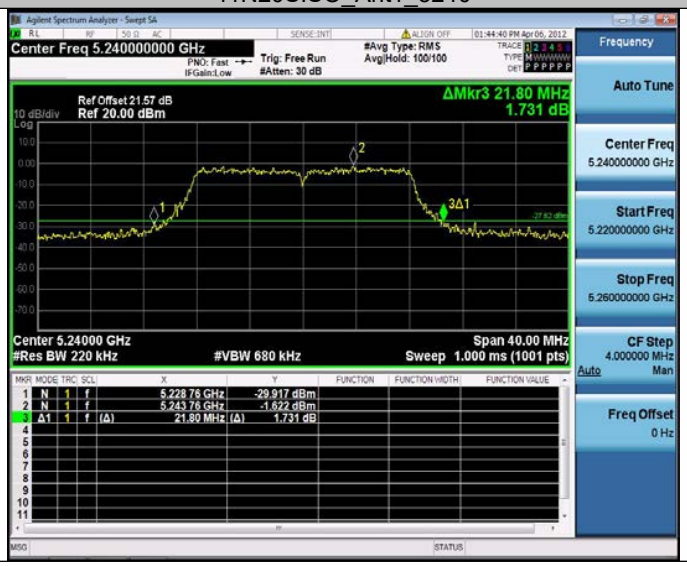
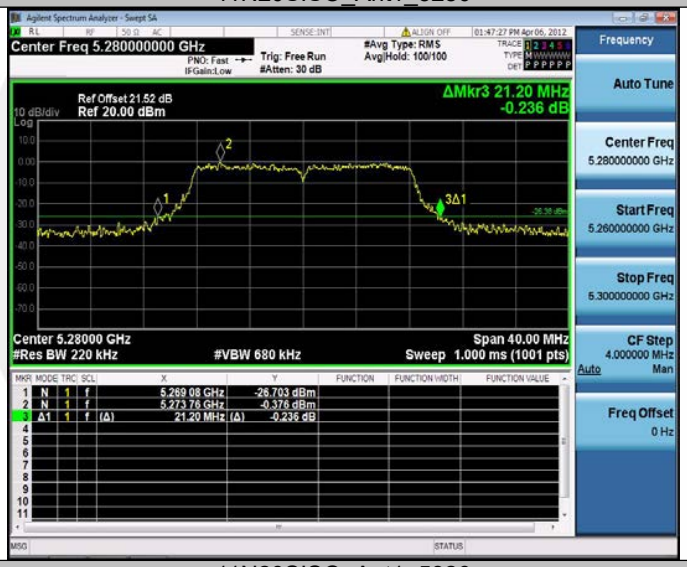


11N20SISO_Ant1_5260

11N20SISO_Ant1_5280

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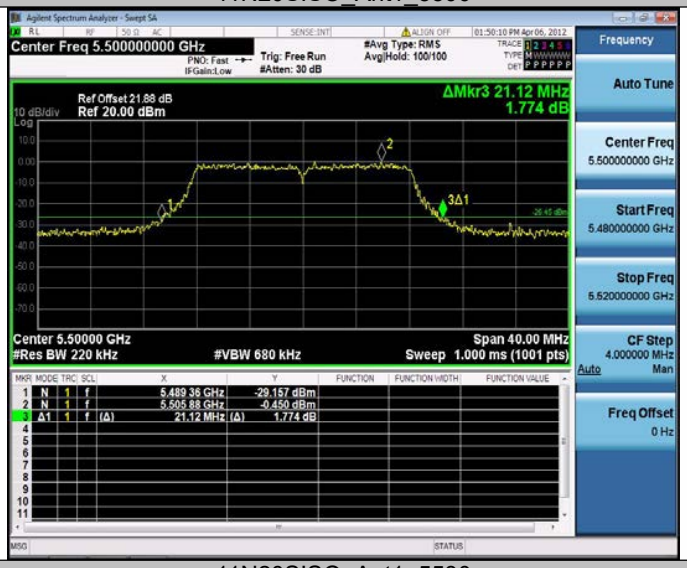
11N20SISO_Ant1_5500

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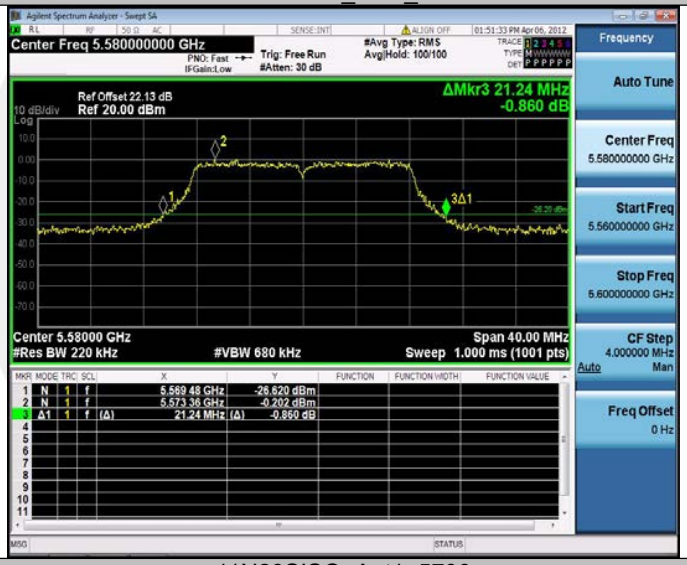
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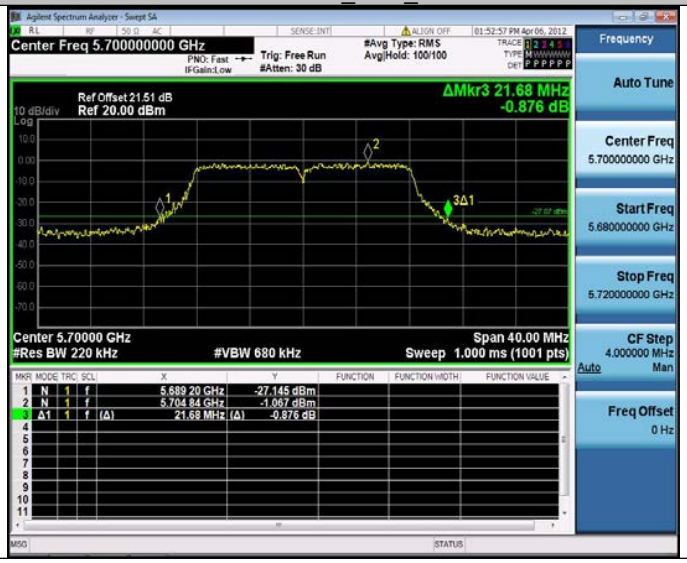

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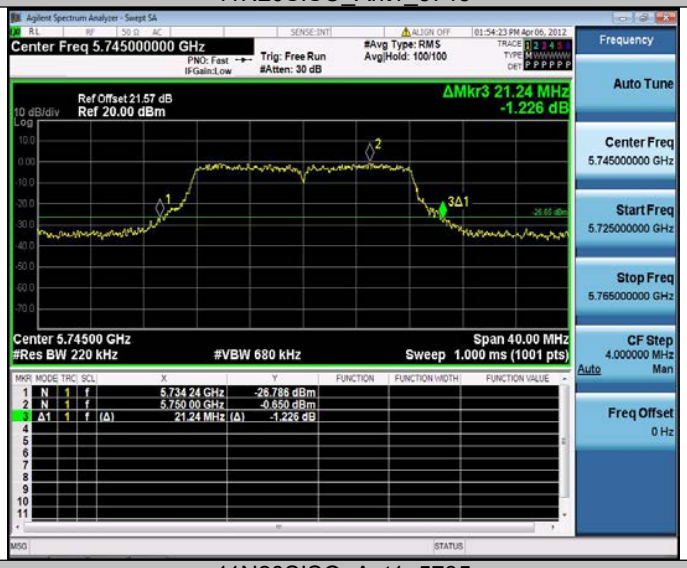
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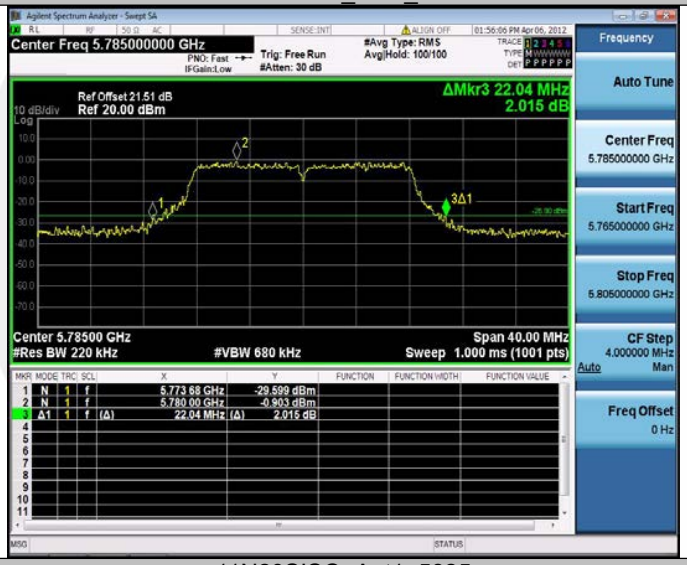
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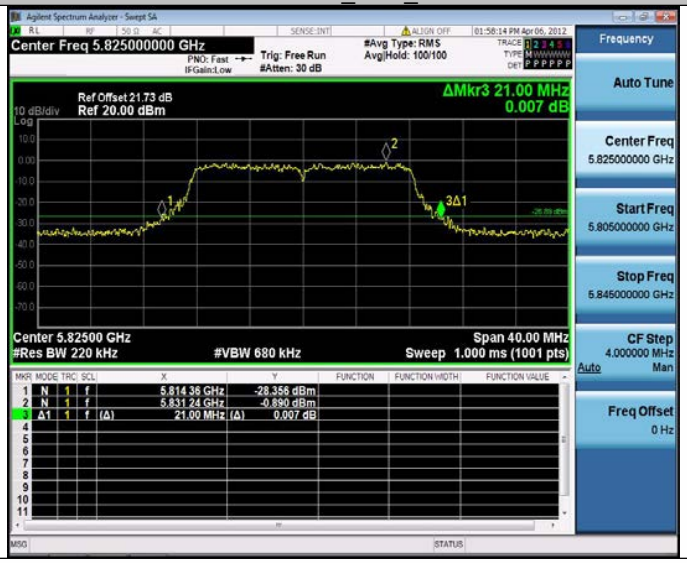
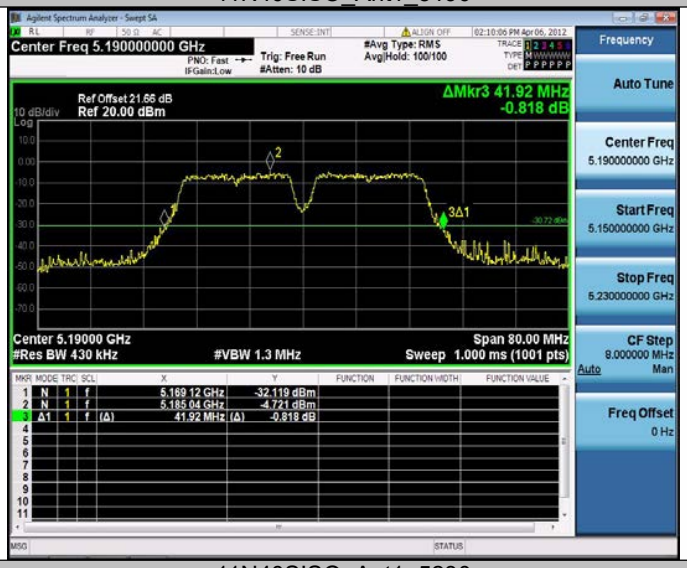
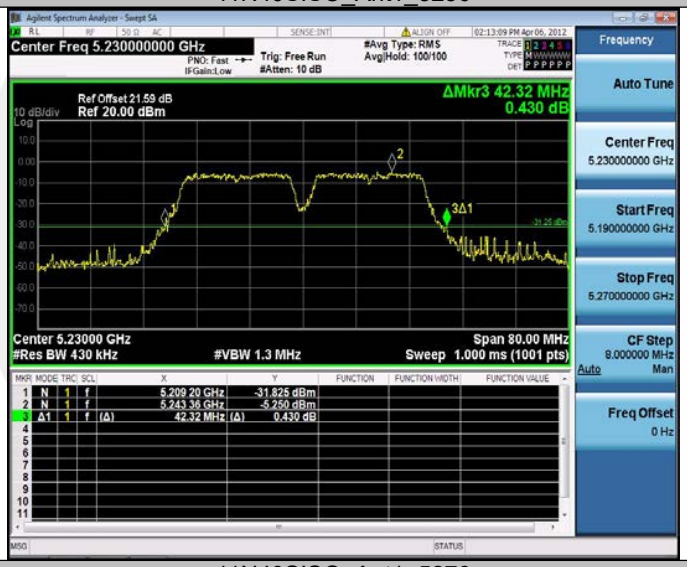
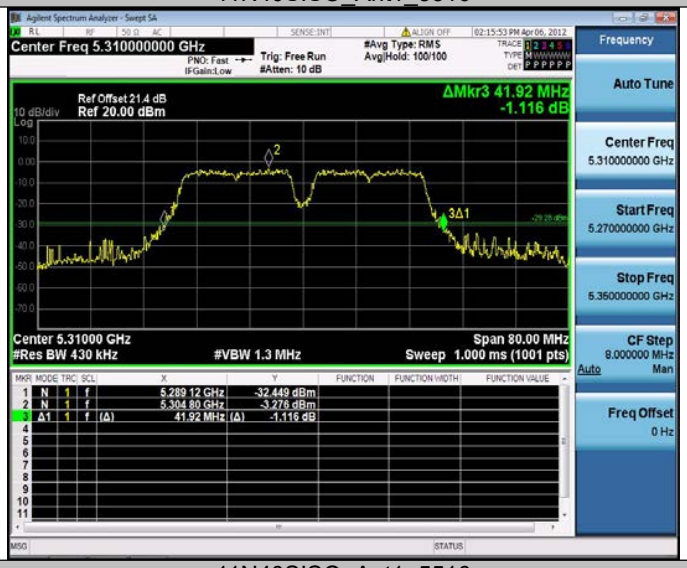
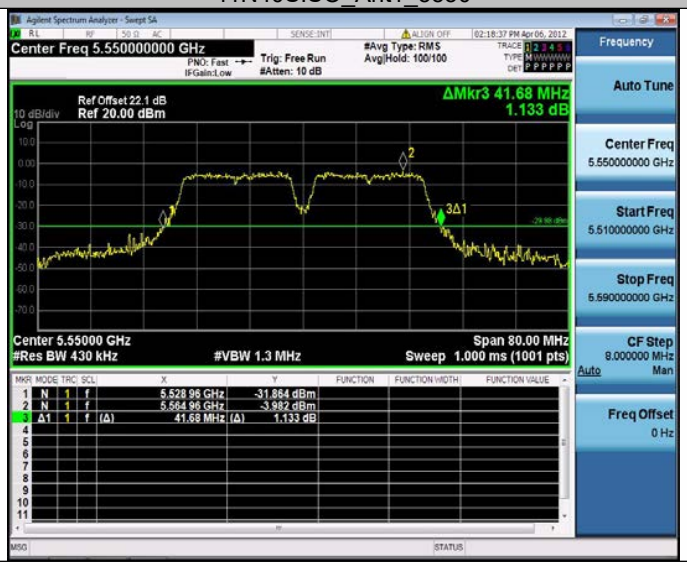
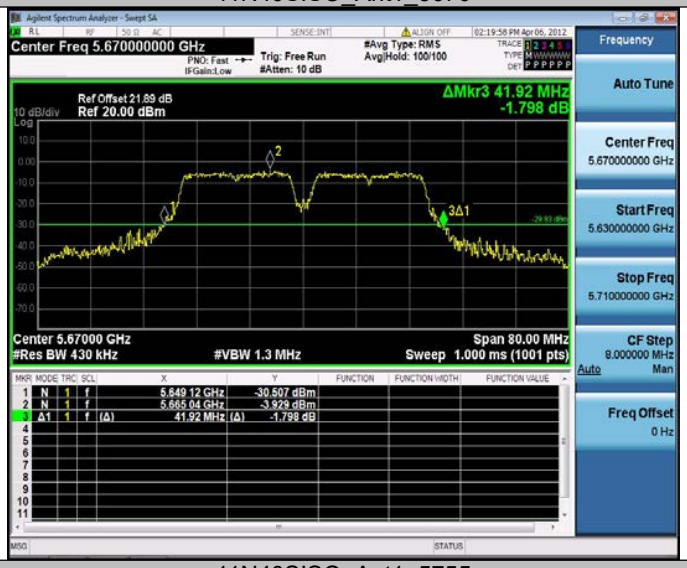


11N40SISO_Ant1_5190

11N40SISO_Ant1_5230

11N40SISO_Ant1_5270


11N40SISO_Ant1_5310

11N40SISO_Ant1_5510

11N40SISO_Ant1_5550


11N40SISO_Ant1_5670

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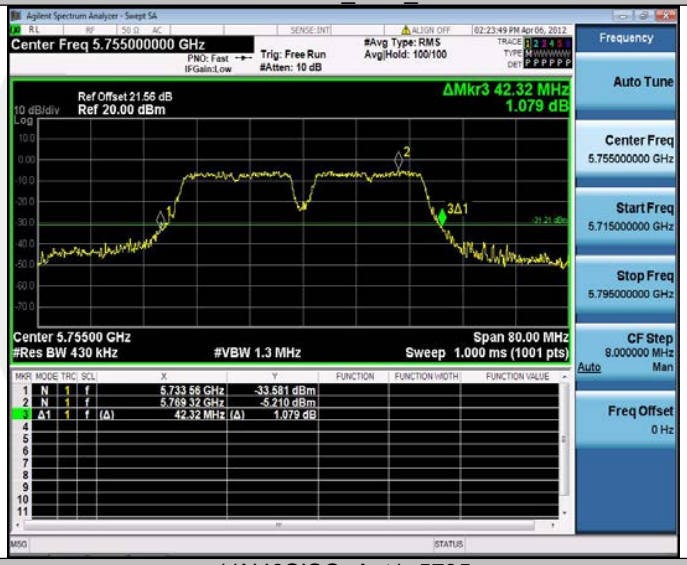
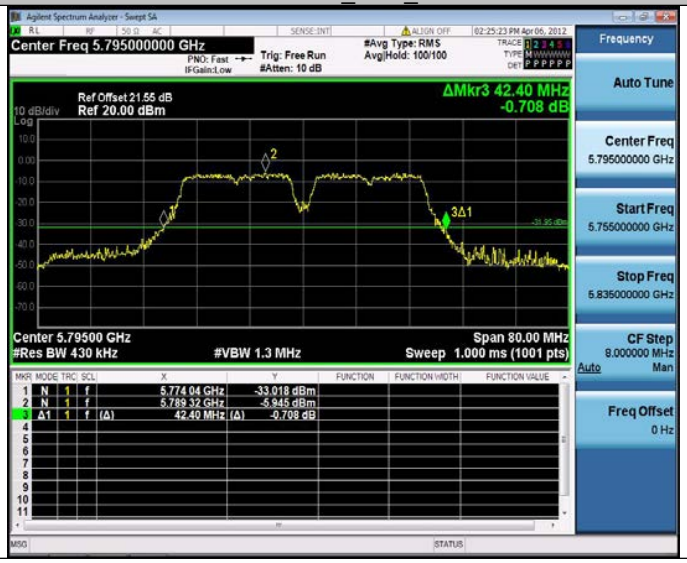
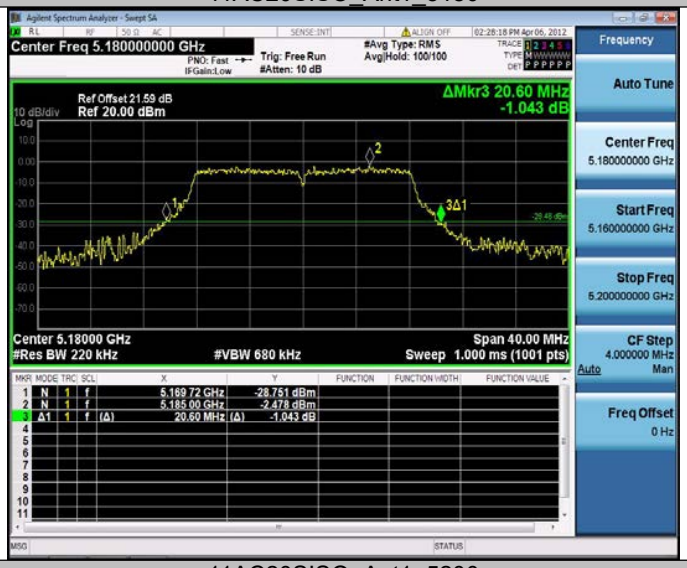

11N40SISO_Ant1_5795


11AC20SISO_Ant1_5180

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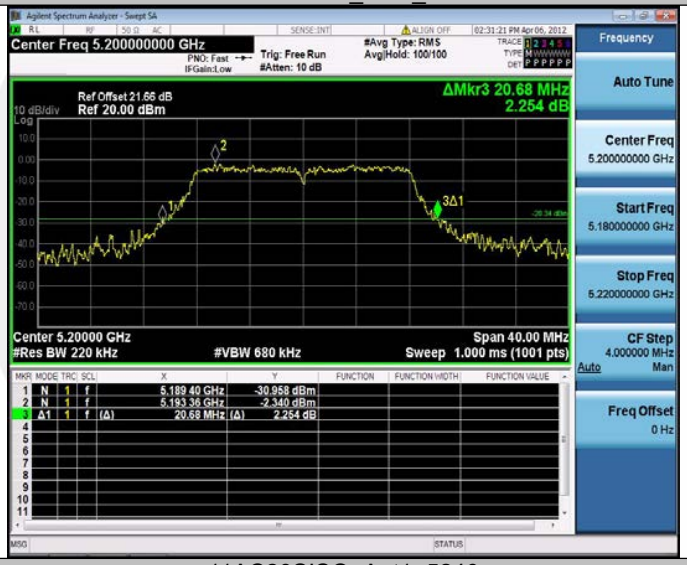
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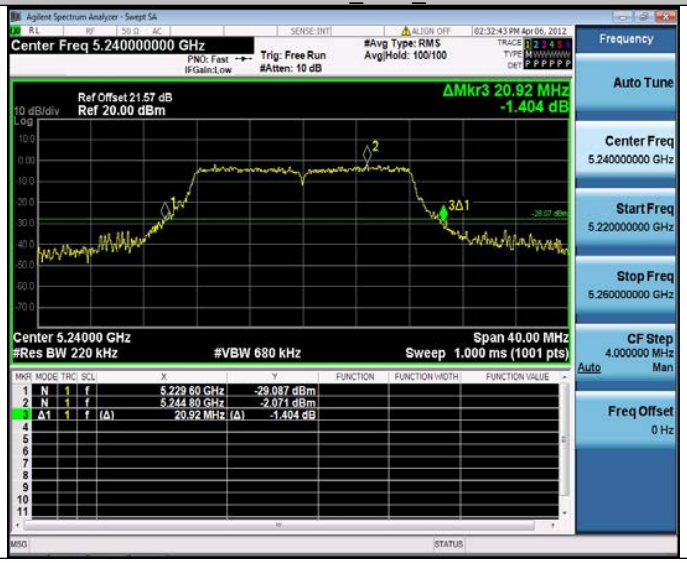

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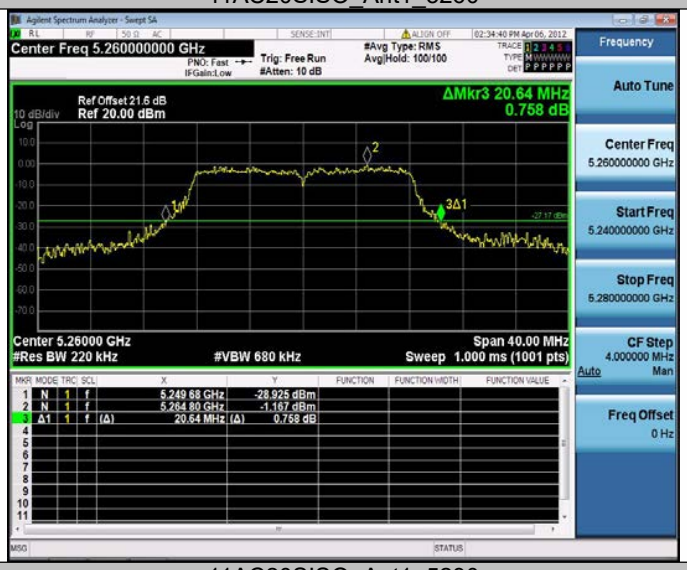
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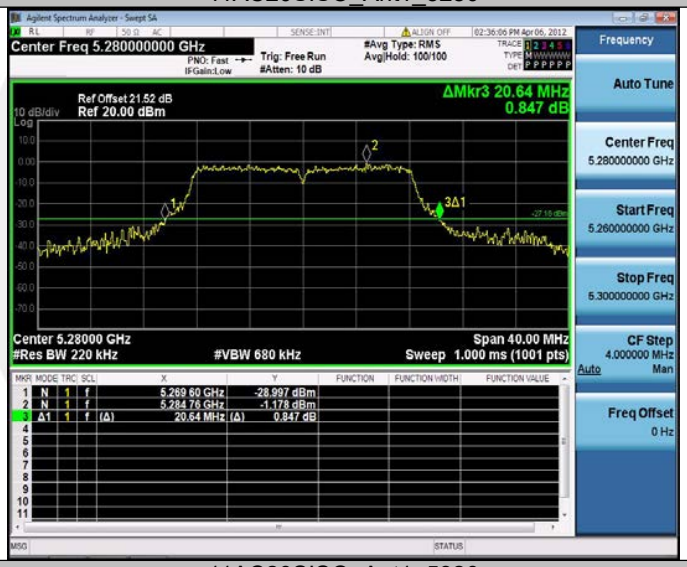
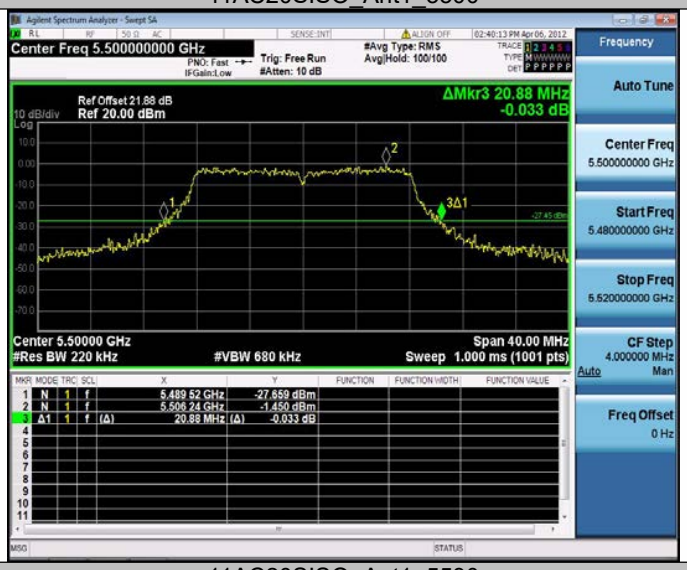

11AC20SISO_Ant1_5320


11AC20SISO_Ant1_5500

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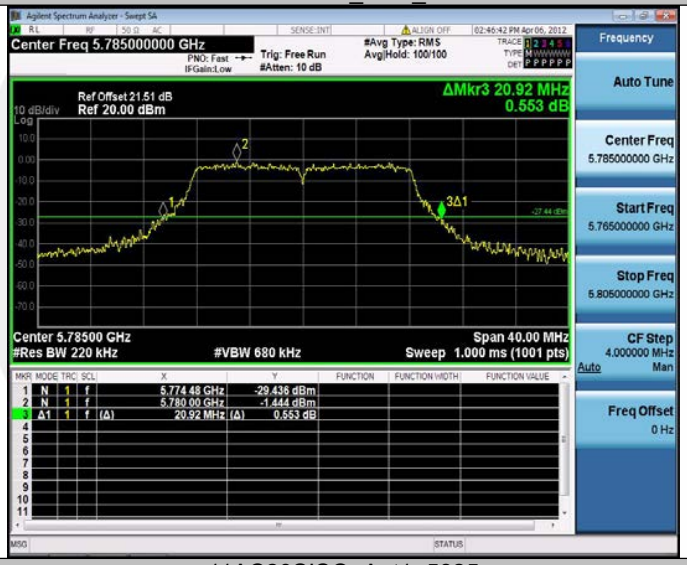
11AC20SISO_Ant1_5700


11AC20SISO_Ant1_5745

11AC20SISO_Ant1_5785

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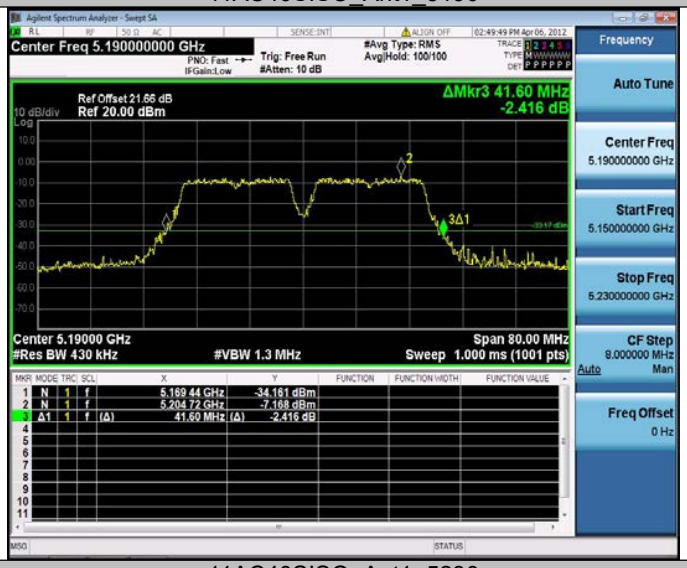
11AC40SISO_Ant1_5190

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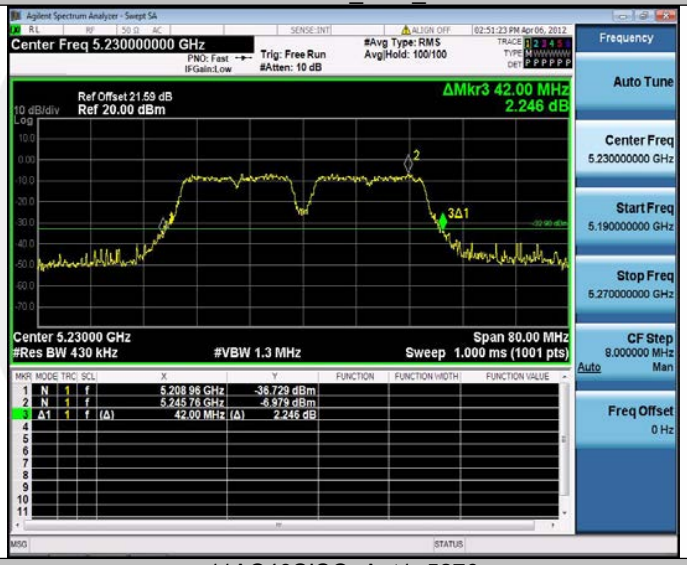
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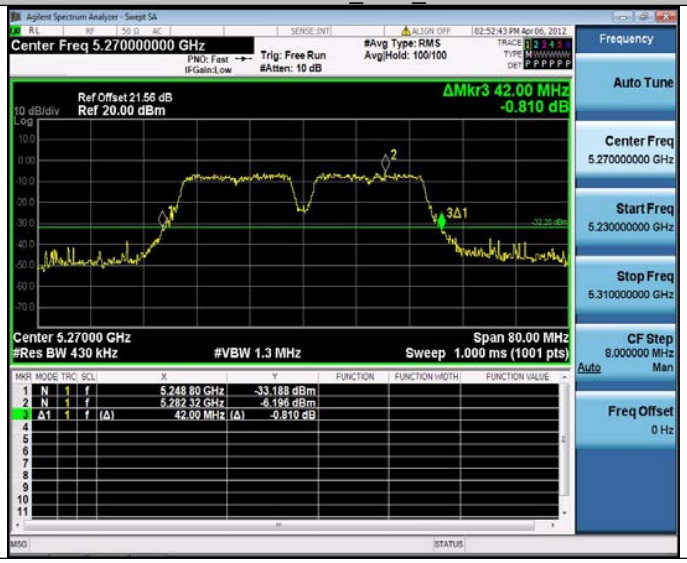
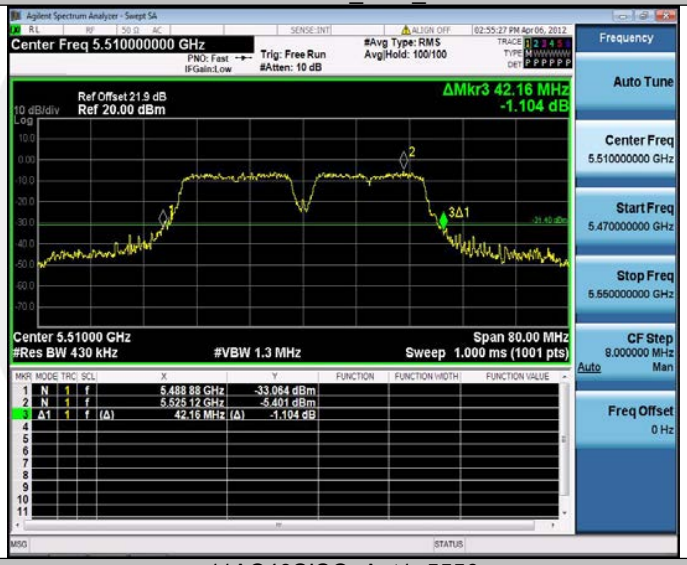


11AC40SISO_Ant1_5310

11AC40SISO_Ant1_5510

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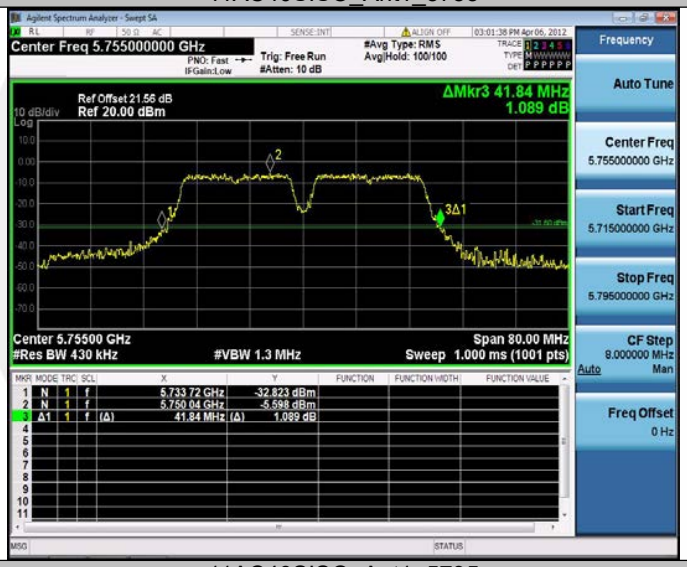
11AC40SISO_Ant1_5670

11AC40SISO_Ant1_5755

11AC40SISO_Ant1_5795


11AC80SISO_Ant1_5210

11AC80SISO_Ant1_5290

11AC80SISO_Ant1_5530


11AC80SISO_Ant1_5610

11AC80SISO_Ant1_5775


TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	17.284	5171.4161	5188.7001	---	---
		5200	17.359	5191.3920	5208.7510	---	---
		5240	17.370	5231.3898	5248.7598	---	---
		5260	17.137	5251.4789	5268.6159	---	---
		5280	17.122	5271.4682	5288.5902	---	---
		5320	17.123	5311.4580	5328.5810	---	---
		5500	17.107	5491.4529	5508.5599	---	---
		5580	17.102	5571.4560	5588.5580	---	---
		5700	17.112	5691.4586	5708.5706	---	---
		5745	17.089	5736.4702	5753.5592	---	---
		5785	17.105	5776.4513	5793.5563	---	---
		5825	17.216	5816.3228	5833.5388	---	---
11N20SISO	Ant1	5180	17.269	5171.3406	5188.6096	---	---
		5200	17.292	5191.3272	5208.6192	---	---
		5240	17.293	5231.3409	5248.6339	---	---
		5260	17.256	5251.3140	5268.5700	---	---
		5280	17.231	5271.3411	5288.5721	---	---
		5320	17.241	5311.3269	5328.5679	---	---
		5500	17.204	5491.3515	5508.5555	---	---
		5580	17.242	5571.3668	5588.6088	---	---
		5700	17.223	5691.3568	5708.5798	---	---
		5745	17.229	5736.3435	5753.5725	---	---
		5785	17.274	5776.2941	5793.5681	---	---
		5825	17.302	5816.2917	5833.5937	---	---
11N40SISO	Ant1	5190	37.389	5171.2865	5208.6755	---	---
		5230	37.357	5211.3045	5248.6615	---	---
		5270	37.145	5251.3818	5288.5268	---	---
		5310	37.251	5291.2966	5328.5476	---	---
		5510	37.345	5491.2450	5528.5900	---	---
		5550	37.393	5531.2721	5568.6651	---	---
		5670	37.487	5651.1510	5688.6380	---	---
		5755	37.399	5736.2509	5773.6499	---	---
		5795	37.568	5776.0902	5813.6582	---	---
11AC20SISO	Ant1	5180	17.285	5171.3169	5188.6019	---	---
		5200	17.345	5191.2877	5208.6327	---	---
		5240	17.242	5231.3498	5248.5918	---	---
		5260	17.276	5251.3370	5268.6130	---	---
		5280	17.284	5271.3028	5288.5868	---	---
		5320	17.292	5311.3119	5328.6039	---	---
		5500	17.277	5491.3086	5508.5856	---	---
		5580	17.266	5571.3311	5588.5971	---	---
		5700	17.302	5691.3055	5708.6075	---	---
		5745	17.240	5736.3416	5753.5816	---	---
		5785	17.258	5776.3205	5793.5785	---	---
		5825	17.265	5816.3355	5833.6005	---	---
11AC40SISO	Ant1	5190	38.166	5170.9637	5209.1297	---	---
		5230	37.880	5211.0384	5248.9184	---	---
		5270	37.675	5251.1291	5288.8041	---	---
		5310	37.734	5291.0806	5328.8146	---	---
		5510	37.716	5491.1310	5528.8470	---	---
		5550	37.648	5531.1370	5568.7850	---	---
		5670	37.680	5651.0860	5688.7660	---	---

		5755	37.410	5736.2046	5773.6146	---	---
		5795	37.455	5776.1576	5813.6126	---	---
11AC80SISO	Ant1	5210	76.016	5172.3220	5248.3380	---	---
		5290	76.026	5252.2742	5328.3002	---	---
		5530	75.838	5492.1041	5567.9421	---	---
		5610	75.734	5572.0870	5647.8210	---	---
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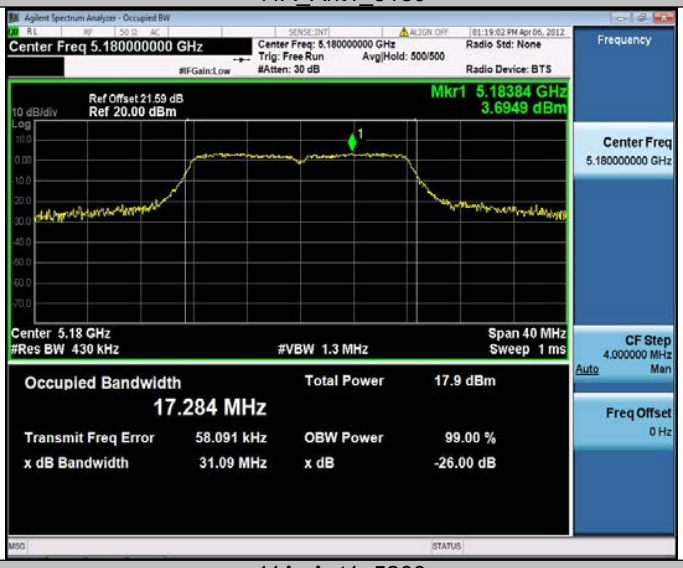
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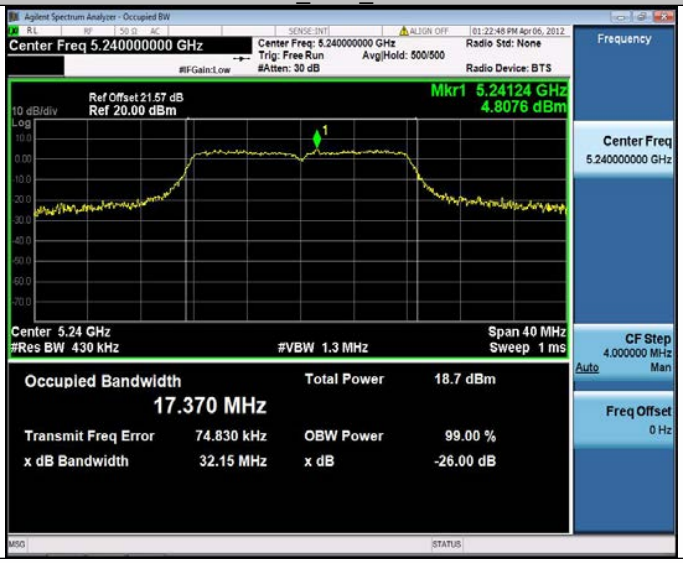

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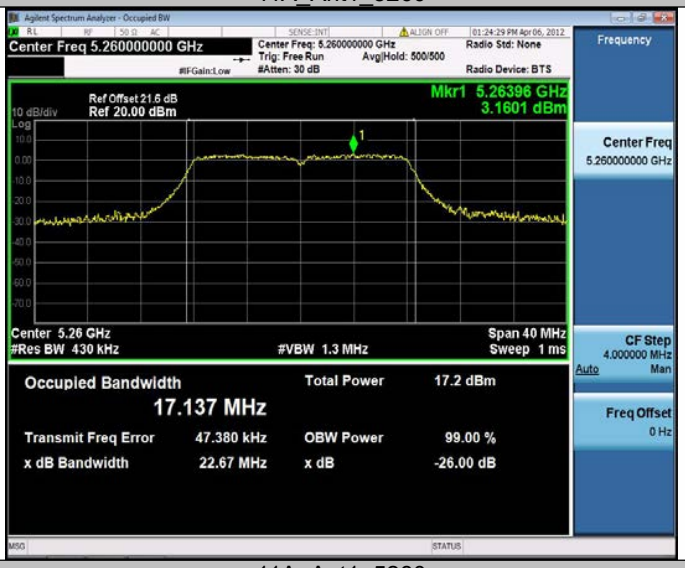
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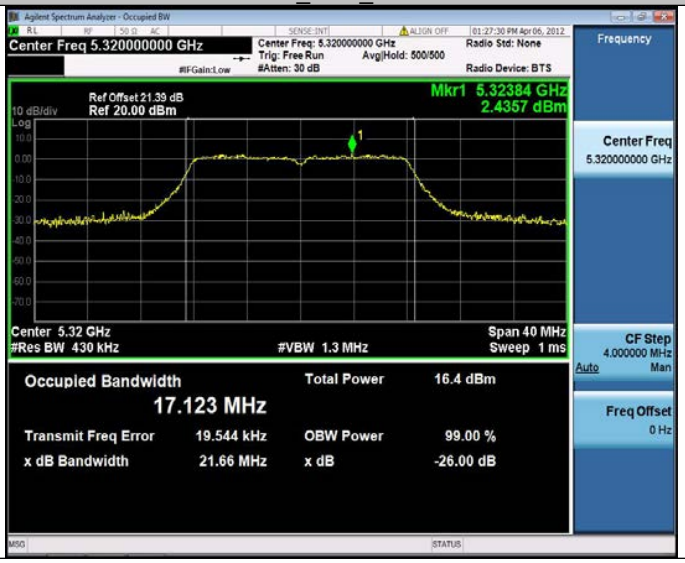

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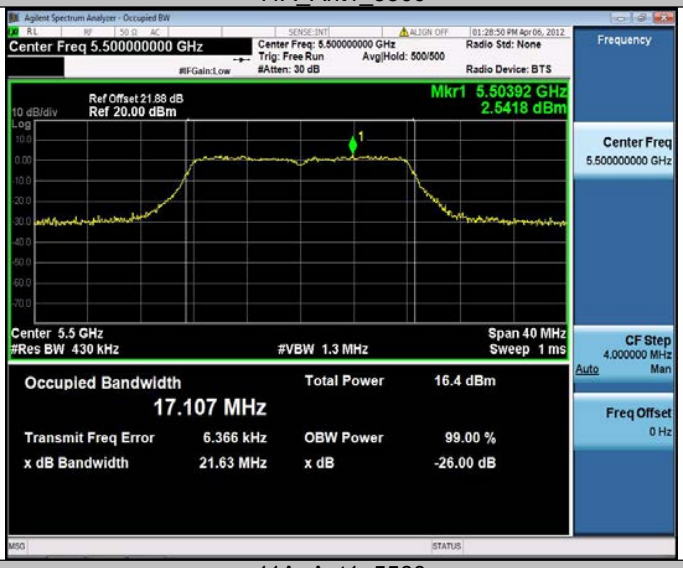
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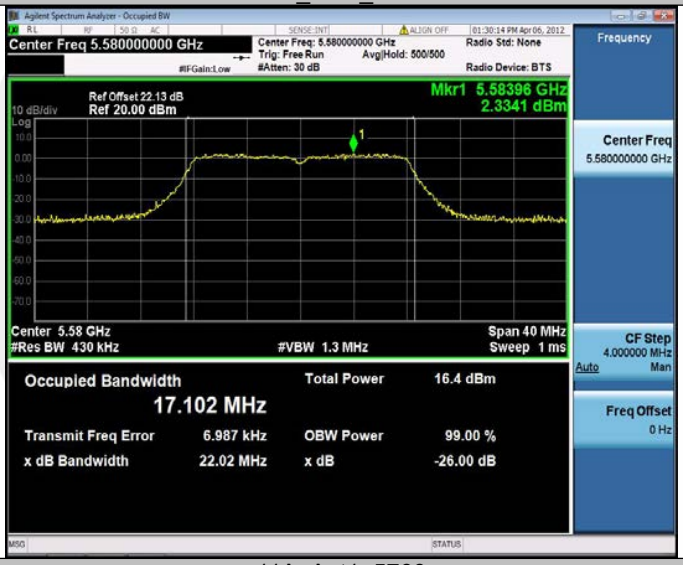
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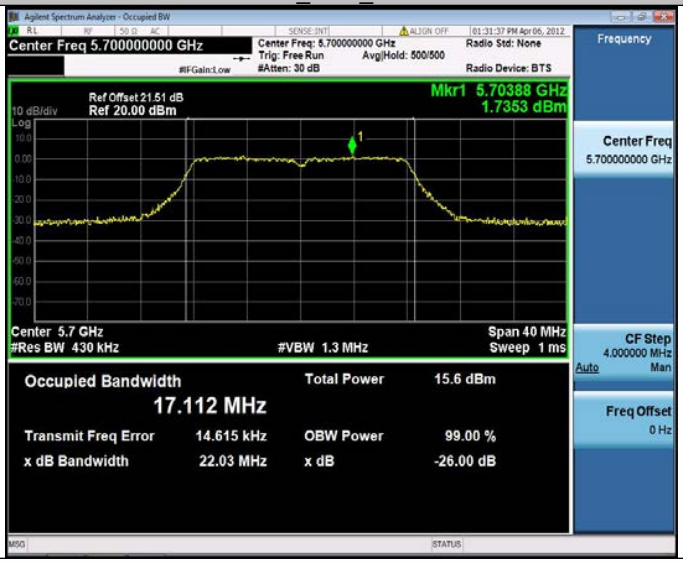

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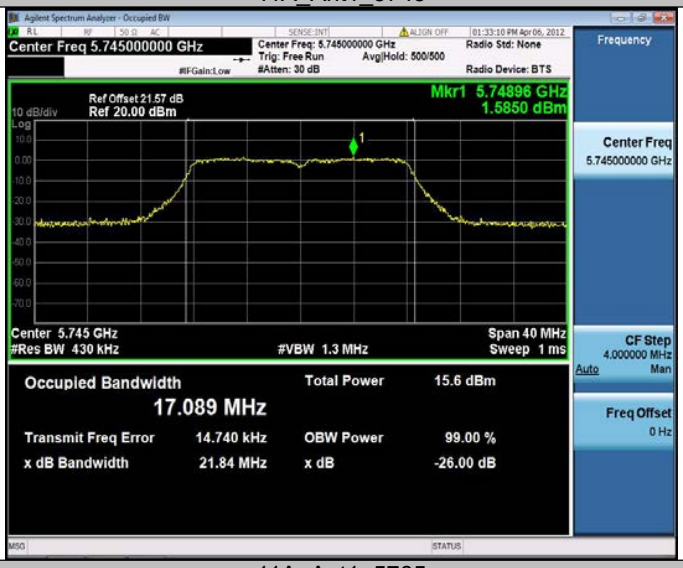

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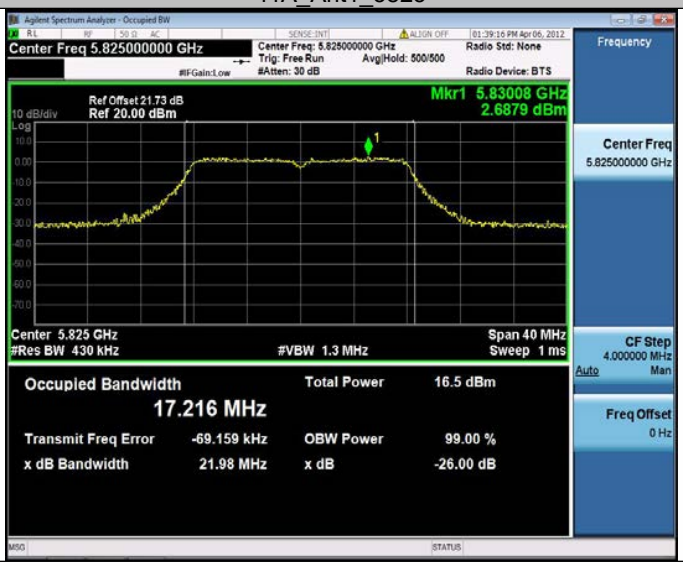

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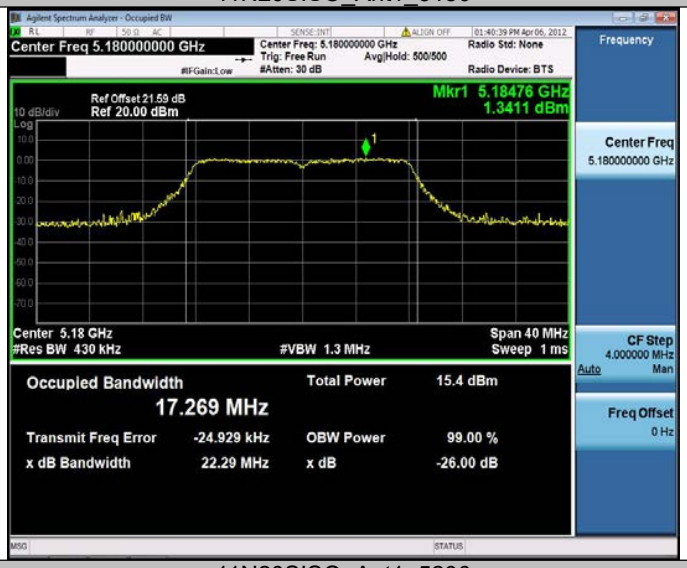
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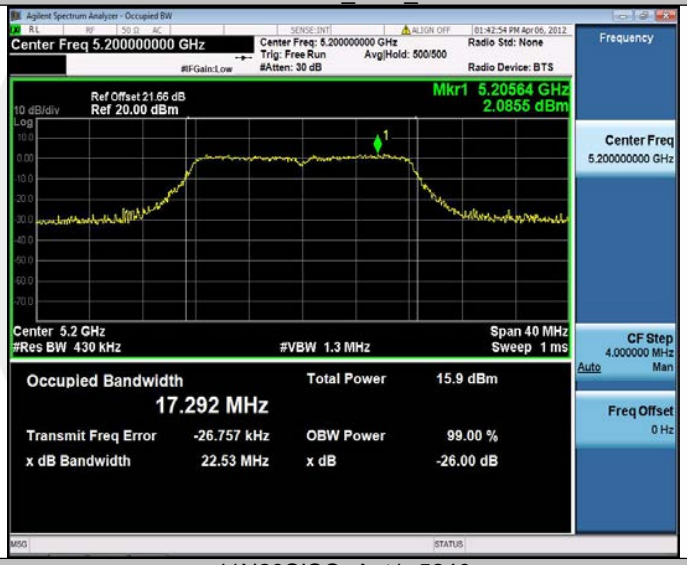
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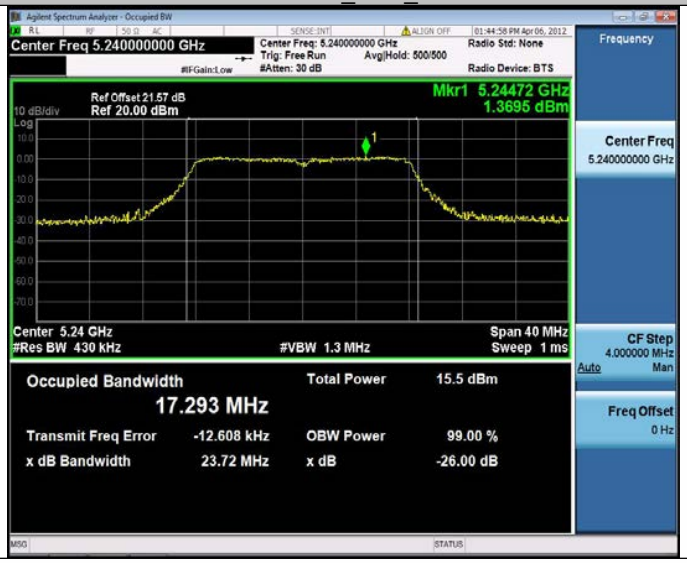

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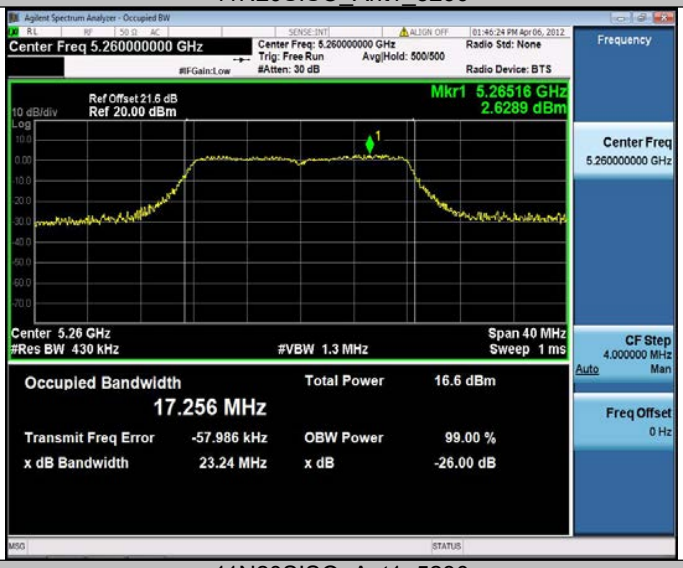
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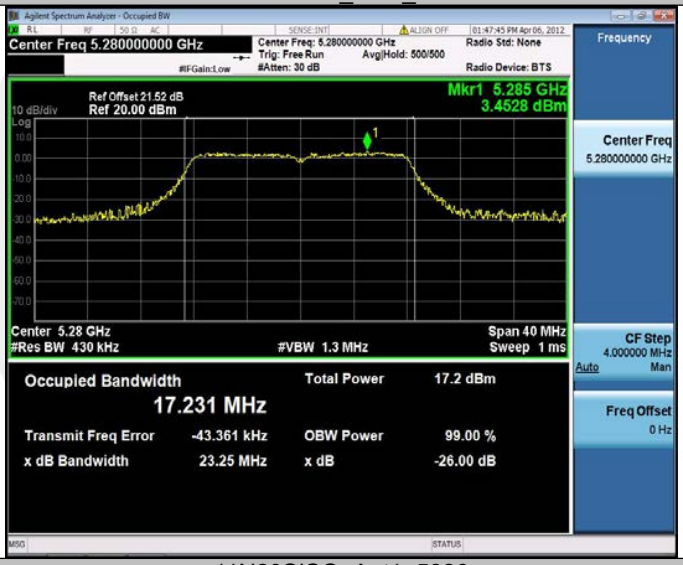
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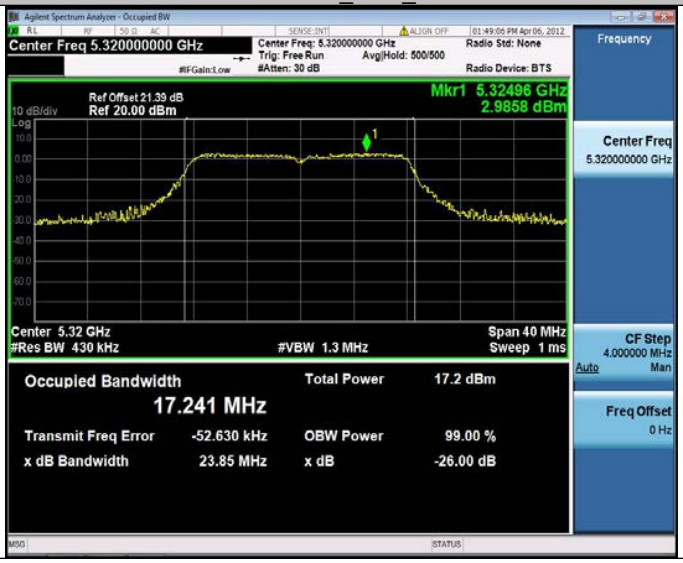

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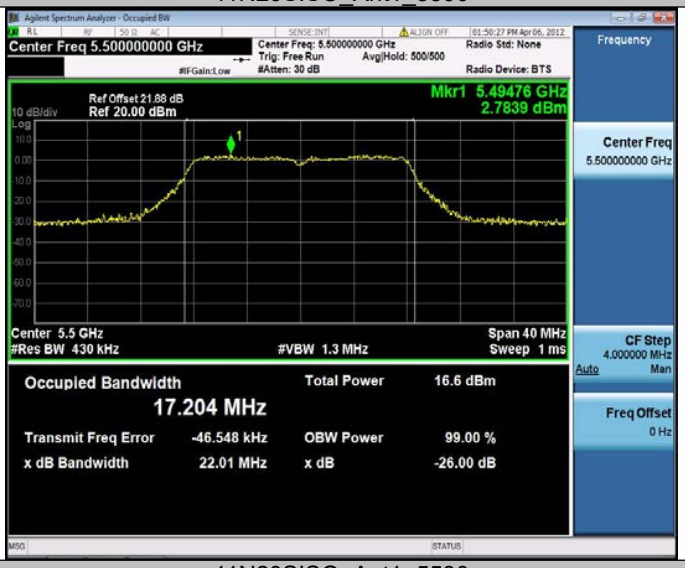
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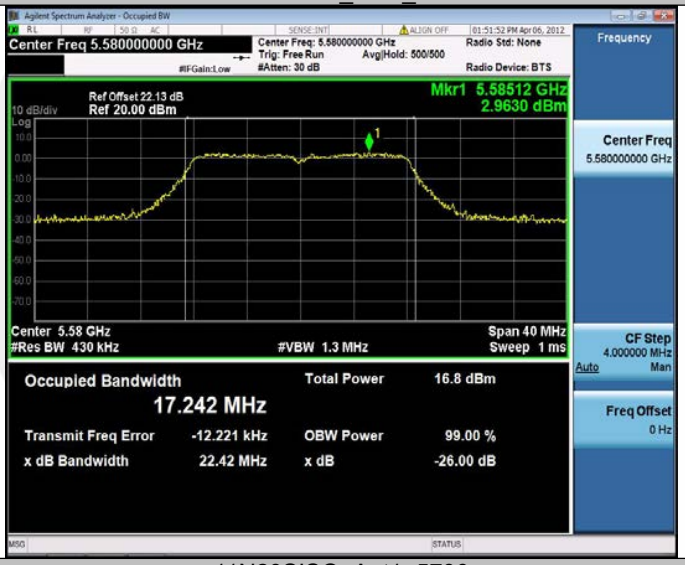
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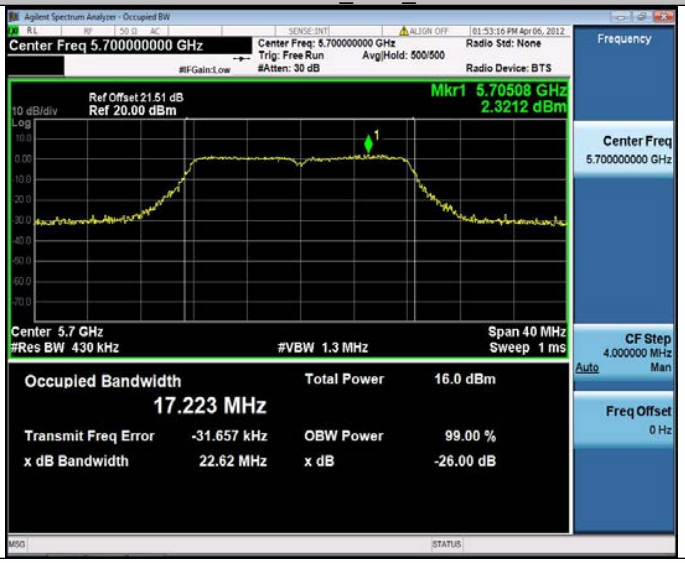

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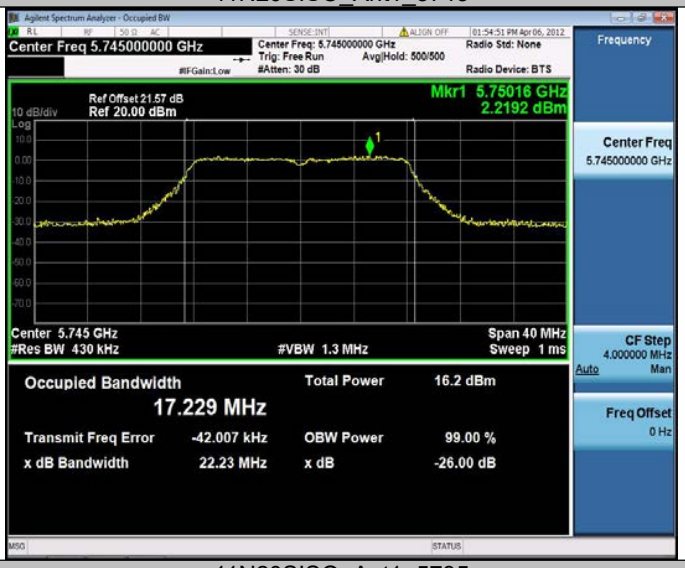
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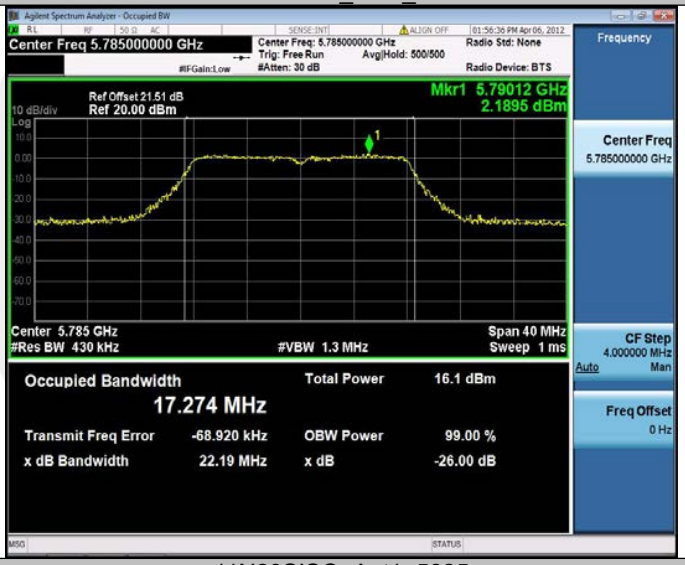
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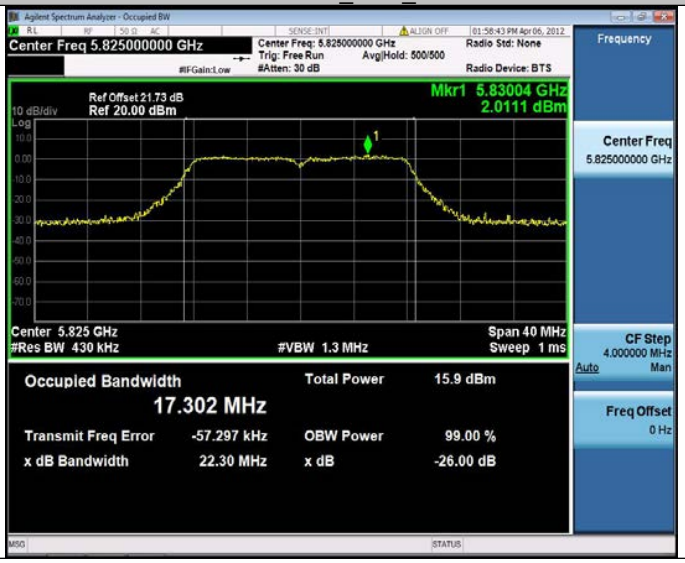

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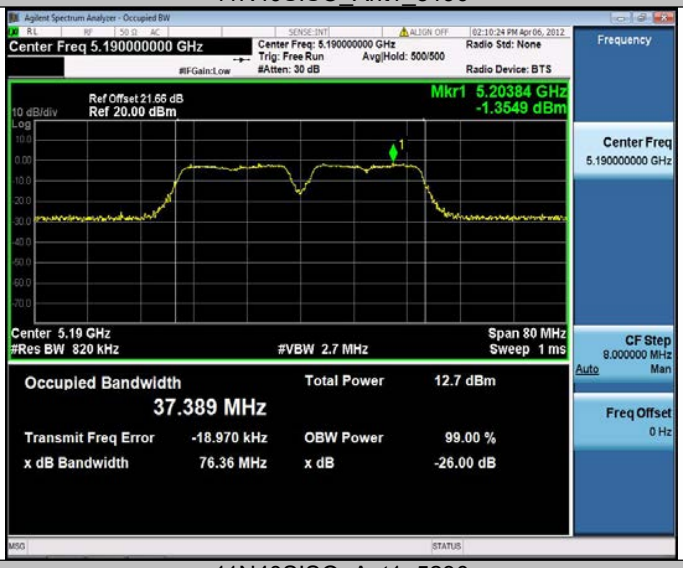
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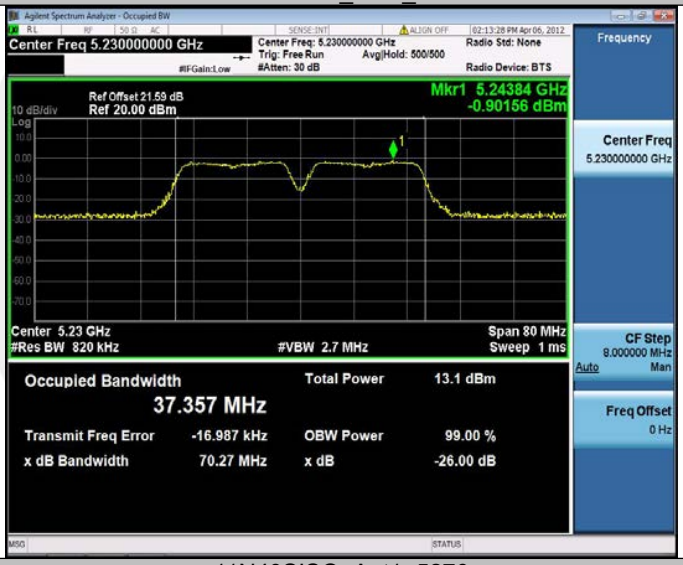
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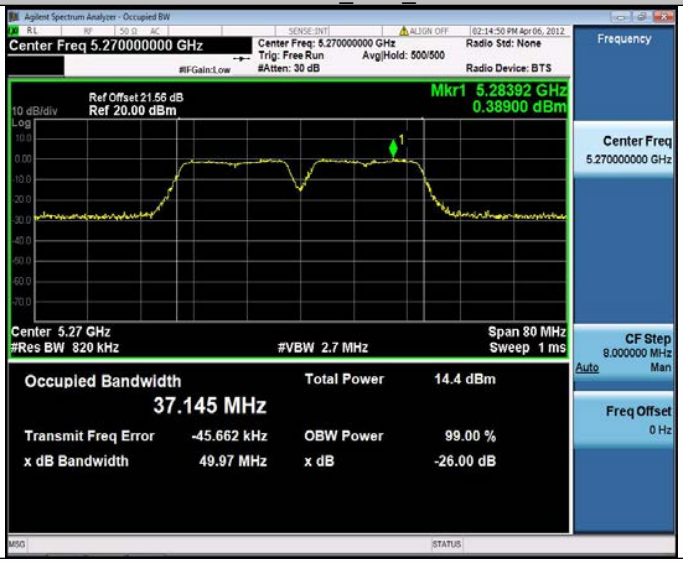

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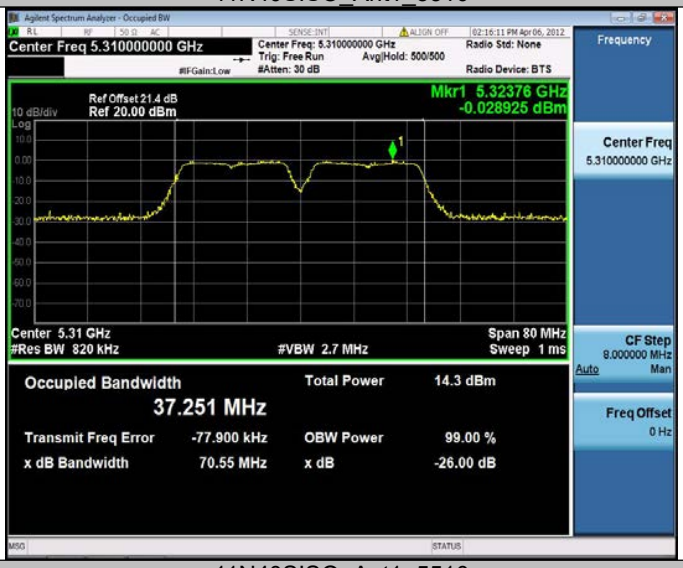

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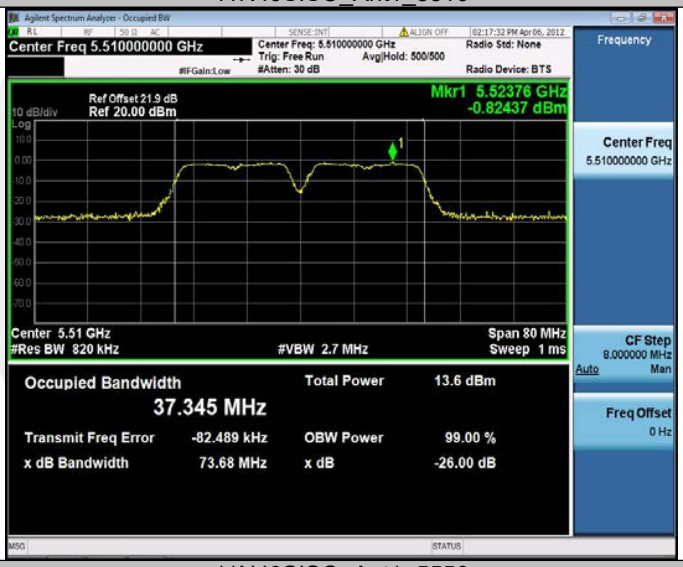

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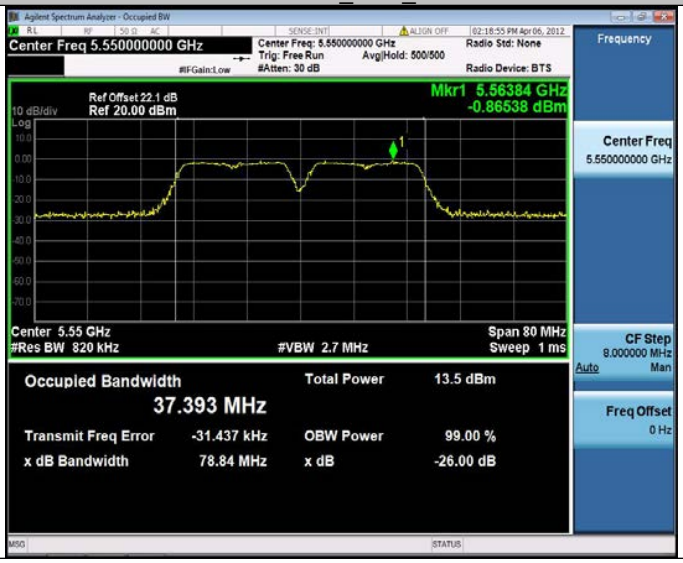

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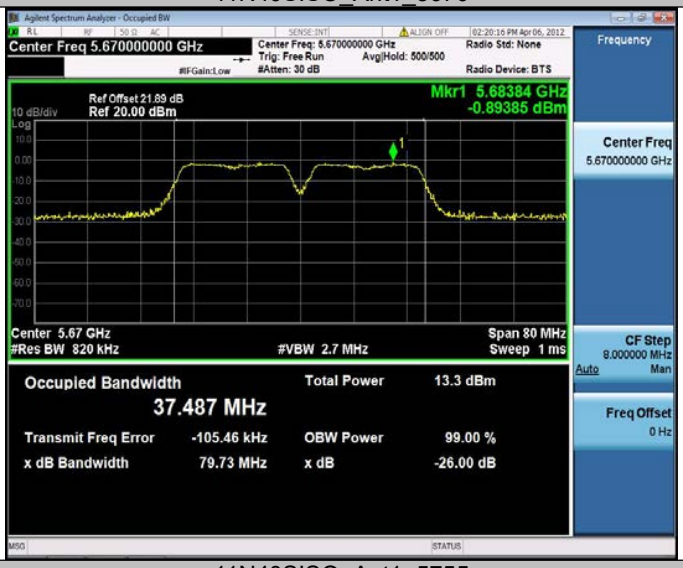
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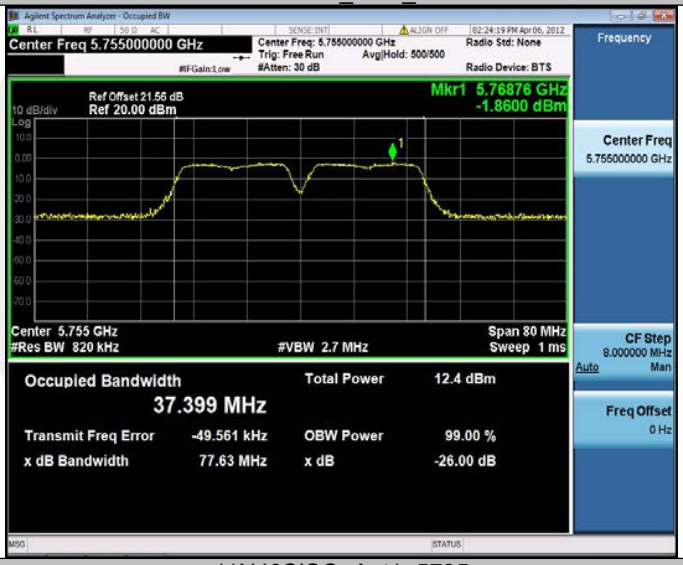
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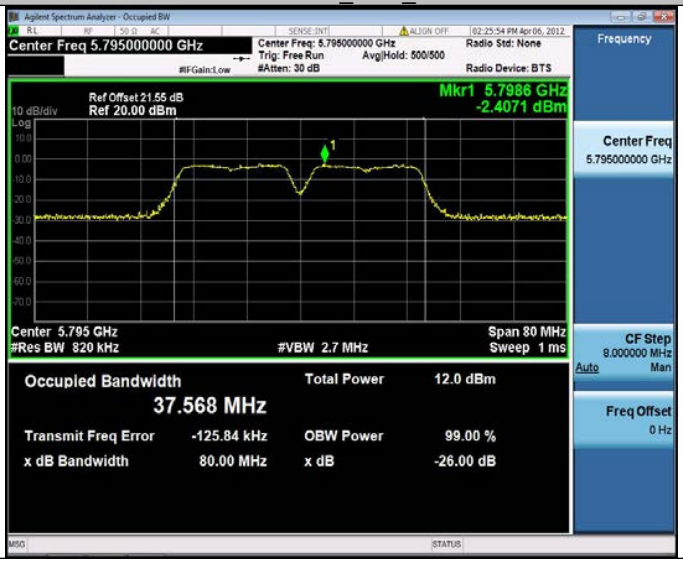

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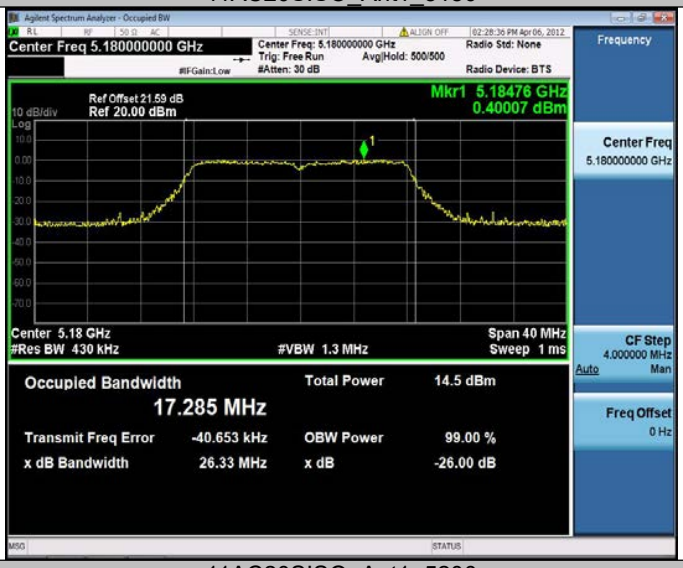
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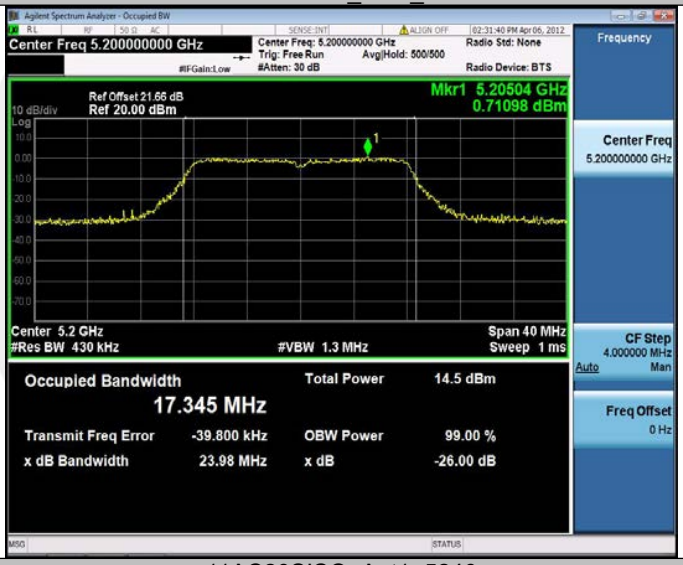
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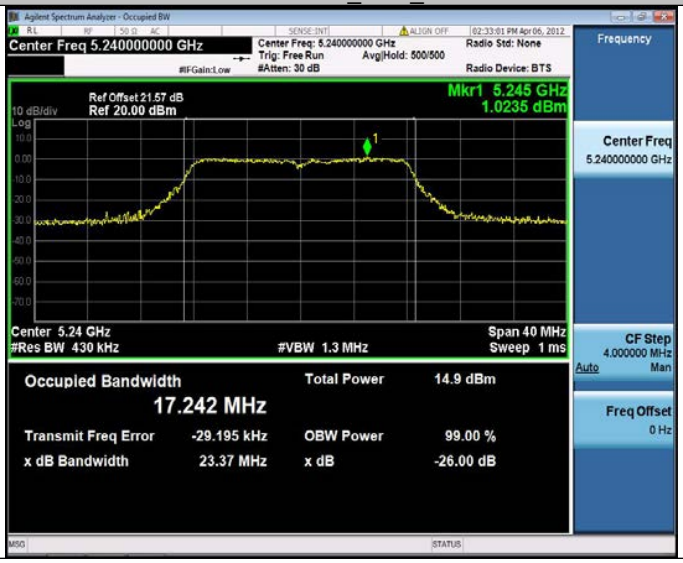

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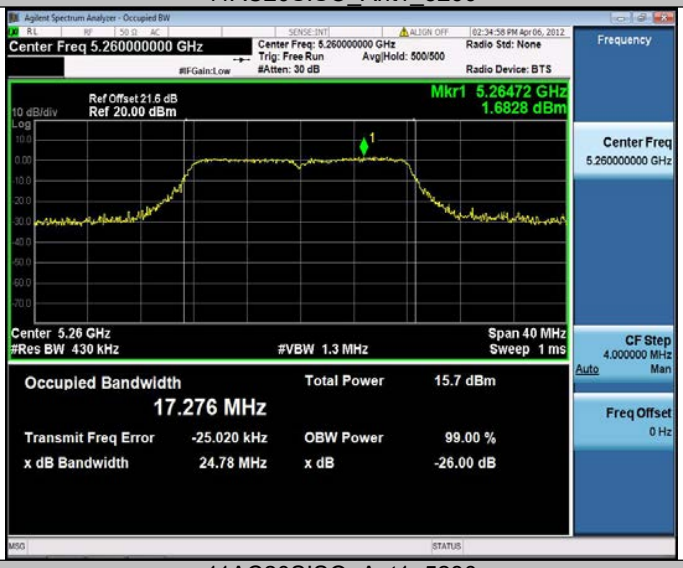

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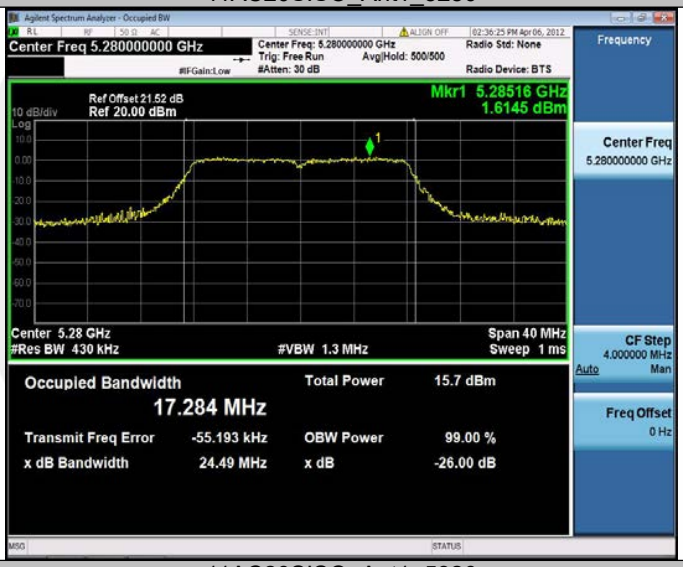

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