



Test Report

AIR-AP1852 and 1832 Series

FCC ID: LDK102095

Also Covers:

AIR-AP1852y-UXK9
AIR-AP1852y-B-K9
AIR-AP1832I-UXK9
AIR-AP1832I-B-K9

y =E (External Antenna) or I (Internal Antenna)

5150-5250 MHz

Against the following Specifications:

CFR47 Part 15.407

Cisco Systems
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Approved by:

A handwritten signature in blue ink that appears to read "Jim Nicholson".

Jim Nicholson
Technical Leader, Engineering

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Section 1: Overview

1.1 Test Summary

Samples were assessed against the under the requirements of the following specifications:

Emission	Immunity
CFR47 Part 15.407	N/A

The specifications listed above represent actual tests performed to demonstrate compliance against the specifications and basic standards listed on the front cover of this report. This list is not a one to one match to the front cover for one or more of the following reasons.

1. Basic standards call up many different test phenomena specifications such as the 61000-4-X series. The basic standards define which elements and levels shall be applied from these specifications and as such it is not appropriate to list the individual specifications on the front cover.
2. A Standard listed on the front cover may be required in a particular country but is not appropriate for the particular technologies included in the equipment under test. E.g. You cannot test a DC product to the mains Harmonics requirements in EN61000-3-2.
3. Test results against a particular standard or specification may be included in a different test report. Where appropriate, Cisco may have substituted a later revision of a basic standard to those referenced in the specification on the front sheet of this test report. This decision was based upon improved test methodology and repeatability and/or where the newer revision represented a more stringent test.
4. Where relevant, testing has been carried out to the requirements of both EN and IEC Specifications. This was possible because of the similarities of the test methods involved and the Cisco EMC test procedures.
5. Testing may have been performed to an equivalent test that satisfies the requirements of the standards and specifications listed on the front cover of the report.
6. Where radiated emissions testing has been performed to EN55022/CISPR22 the additional requirements of VCCI: V- 3/2006.04, EN55022: 1994 +A1/2 and CAN/CSA- CISPR 22-02 have also been evaluated unless otherwise stated.
7. Testing to the requirements of CFR47 Part 15 was performed against the CISPR22 limits. The results are therefore deemed satisfactory evidence of compliance with Industry Canada Interference Causing Equipment Standard ICES-003.
8. Where assessment has been performed to CISPR24, all the applicable test requirements may have not been covered. Refer to the results section for the tests performed.

Notes:

- 1) Where a specification listed on the front cover of this report has deviations from the basic standards listed above, the additional technical requirements of the specification were also assessed.
- 2) Where appropriate, Cisco may have substituted a later revision of a basic standard to those referenced in the specification on the front sheet of this test report. This decision was based upon improved test methodology and repeatability and/or where the newer revision represented a more stringent test.
- 3) Where relevant, testing has been carried out to the requirements of both EN and IEC Specifications. This was possible because of the similarities of the test methods involved and the Cisco EMC test procedures.



Section 2: Assessment Information

2.1 General

This report contains an assessment of an apparatus against Electromagnetic Compatibility Standards based upon tests carried out on the samples submitted. The testing was performed by and for the use of Cisco systems Inc:

With regard to this assessment, the following points should be noted:

- a) The results contained in this report relate only to the items tested and were obtained in the period between the date of the initial assessment and the date of issue of the report. Manufactured products will not necessarily give identical results due to production and measurement tolerances.
- b) The apparatus was set up and exercised using the configuration and modes of operation defined in this report only.
- c) Where relevant, the apparatus was only assessed using the susceptibility criteria defined in this report and the Test Assessment Plan (TAP).
- d) All testing was performed under the following environmental conditions:
 - Temperature 15°C to 35°C (54°F to 95°F)
 - Atmospheric Pressure 860mbar to 1060mbar (25.4" to 31.3")
 - Humidity 10% to 75*%

*[Where applicable] For ESD testing the humidity limits used were 30% to 60% and for EFT/B tests the humidity limits used were 25% to 75%.
- e) All AC testing was performed at one or more of the following supply voltages:
 - 110V 60 Hz (+/-20%)
 - 220V 50 Hz (+/-20%)

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2.2 Date of testing

28-February-2015

2.3 Report Issue Date

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2.4 Testing facilities

This assessment was performed by:

Testing Laboratory

Cisco Systems, Inc.,	Cisco Systems, Inc.
4125 Highlander Parkway	170 West Tasman Drive
Richfield, OH 44286	San Jose, CA 95134
USA	USA

All conducted testing performed in Richfield, OH using “accredited calibration” test equipment

Test Engineers

John Liscio

2.5 Equipment Assessed (EUT)

AIR-AP1852 Series



2.6 EUT Description

The AIR-AP1852 Series Cisco Aironet 802.11ac Radio Modules support the following modes of operation. The modes are further defined in the radio Theory of Operation. The modes included in this report represent the worst case data for all modes. Data is recorded at the lowest supported data rate for each mode

6 to 54 Mbps, One Antenna,
 6 to 54 Mbps, Two Antennas,
 6 to 54 Mbps, Three Antennas,
 6 to 54 Mbps, Four Antennas,

6 to 54 Mbps Beam Forming, Two Antennas,
 6 to 54 Mbps Beam Forming, Three Antennas,
 6 to 54 Mbps Beam Forming, Four Antennas,

HT/VHT20, One Antenna, M0 to M7, M0.0 to M9.0
 HT/VHT20, Two Antennas, M0 to M7, M0.0 to M9.0
 HT/VHT20, Three Antennas, M0 to M7, M0.0 to M9.0
 HT/VHT20, Four Antennas, M0 to M7, M0.0 to M9.0
 HT/VHT20, Two Antennas, M8 to M15, M0.0 to M9.0
 HT/VHT20, Three Antennas, M8 to M15, M0.0 to M9.0
 HT/VHT20, Four Antennas, M8 to M15, M0.0 to M9.0
 HT/VHT20, Three Antennas, M16 to M23, M0.0 to M9.0
 HT/VHT20, Four Antennas, M16 to M23, M0.0 to M9.0

VHT20, Four Antennas, M0 to M9 4ss

HT/VHT20 Beam Forming, Two Antennas, M0 to M7, M0.0 to M9.0
 HT/VHT20 Beam Forming, Three Antennas, M0 to M7, M0.0 to M9.0
 HT/VHT20 Beam Forming, Four Antennas, M0 to M7, M0.0 to M9.0
 HT/VHT20 Beam Forming, Two Antennas, M8 to M15, M0.0 to M9.0
 HT/VHT20 Beam Forming, Three Antennas, M8 to M15, M0.0 to M9.0
 HT/VHT20 Beam Forming, Four Antennas, M8 to M15, M0.0 to M9.0
 HT/VHT20 Beam Forming, Three Antennas, M16 to M23, M0.0 to M9.0
 HT/VHT20 Beam Forming, Four Antennas, M16 to M23, M0.0 to M9.0

VHT20 Beam Forming, Four Antennas, M0 to M9 4ss

HT/VHT20 STBC, Two Antennas, M0 to M7
 HT/VHT20 STBC, Three Antennas, M0 to M7
 HT/VHT20 STBC, Four Antennas, M0 to M7

Non HT40 Duplicate, One Antenna, 6 to 54 Mbps
 Non HT40 Duplicate, Two Antennas, 6 to 54 Mbps
 Non HT40 Duplicate, Three Antennas, 6 to 54 Mbps
 Non HT40 Duplicate, Four Antennas, 6 to 54 Mbps

HT/VHT40, One Antenna, M0 to M7, M0.0 to M9.0
 HT/VHT40, Two Antennas, M0 to M7, M0.0 to M9.0
 HT/VHT40, Three Antennas, M0 to M7, M0.0 to M9.0
 HT/VHT40, Four Antennas, M0 to M7, M0.0 to M9.0
 HT/VHT40, Two Antennas, M8 to M15, M0.0 to M9.0
 HT/VHT40, Three Antennas, M8 to M15, M0.0 to M9.0
 HT/VHT40, Four Antennas, M8 to M15, M0.0 to M9.0
 HT/VHT40, Three Antennas, M16 to M23, M0.0 to M9.0
 HT/VHT40, Four Antennas, M16 to M23, M0.0 to M9.0

VHT40, Four Antennas, M0 to M9 4ss



HT/VHT40 Beam Forming, Two Antennas, M0 to M7, M0.0 to M9.0
 HT/VHT40 Beam Forming, Three Antennas, M0 to M7, M0.0 to M9.0
 HT/VHT40 Beam Forming, Four Antennas, M0 to M7, M0.0 to M9.0
 HT/VHT40 Beam Forming, Two Antennas, M8 to M15, M0.0 to M9.0
 HT/VHT40 Beam Forming, Three Antennas, M8 to M15, M0.0 to M9.0
 HT/VHT40 Beam Forming, Four Antennas, M8 to M15, M0.0 to M9.0
 HT/VHT40 Beam Forming, Three Antennas, M16 to M23, M0.0 to M9.0
 HT/VHT40 Beam Forming, Four Antennas, M16 to M23, M0.0 to M9.0

VHT40 Beam Forming, Four Antennas, M0 to M9 4ss

HT/VHT40 STBC, Two Antennas, M0 to M7
 HT/VHT40 STBC, Three Antennas, M0 to M7
 HT/VHT40 STBC, Four Antennas, M0 to M7

Non HT80 Duplicate, One Antenna, 6 to 54 Mbps
 Non HT80 Duplicate, Two Antennas, 6 to 54 Mbps
 Non HT80 Duplicate, Three Antennas, 6 to 54 Mbps
 Non HT80 Duplicate, Four Antennas, 6 to 54 Mbps

VHT80, One Antenna, M0 to M9 1ss
 VHT80, Two Antennas, M0 to M9 1ss
 VHT80, Three Antennas, M0 to M9 1ss
 VHT80, Four Antennas, M0 to M9 1ss
 VHT80, Two Antennas, M0 to M9 2ss
 VHT80, Three Antennas, M0 to M9 2ss
 VHT80, Four Antennas, M0 to M9 2ss
 VHT80, Three Antennas, M0 to M9 3ss
 VHT80, Four Antennas, M0 to M9 4ss

VHT80 Beam Forming, Two Antennas, M0 to M9 1ss
 VHT80 Beam Forming, Three Antennas, M0 to M9 1ss
 VHT80 Beam Forming, Four Antennas, M0 to M9 1ss
 VHT80 Beam Forming, Two Antennas, M0 to M9 2ss
 VHT80 Beam Forming, Three Antennas, M0 to M9 2ss
 VHT80 Beam Forming, Four Antennas, M0 to M9 2ss
 VHT80 Beam Forming, Three Antennas, M0 to M9 3ss
 VHT80 Beam Forming, Four Antennas, M0 to M9 4ss

VHT80 STBC, Two Antennas, M0 to M9 2ss
 VHT80 STBC, Three Antennas, M0 to M9 2ss
 VHT80 STBC, Four Antennas, M0 to M9 2ss

The following antennas are supported by this product series.

The data included in this report represent the worst case data for all antennas.

Frequency	Part Number	Antenna Type	Antenna Gain (dBi)
2.4 / 5 GHz	AIR-ANT2524DB-R	Dual-resonant black dipole	2 / 4
	AIR-ANT2524DW-R	Dual-resonant white dipole	2 / 4
	AIR-ANT2524DG-R	Dual-resonant gray dipole	2 / 4
	AIR-ANT2524V4C-R	Dual-resonant ceiling mount omni (4-pack)	2 / 4
	AIR-ANT2535SDW-R	Dual-resonante "stubby" monopole	3 / 5
	Internal	Omni	3 / 5
	AIR-ANT2544V4M-R	Dual-resonant omni (4-pack)	4 / 4
	AIR-ANT2566D4M-R	Dual-resonant "directional" antenna (4-pack)	6 / 6
	AIR-ANT2566P4W-R	Dual-resonant "directional" antenna (4-pack)	6 / 6



Section 3: Sample Details

Note: Each sample was evaluated to ensure that its condition was suitable to be used as a test sample prior to the commencement of testing. Please also refer to the "Justification for worst Case test Configuration" section of this report for further details on the selection of EUT samples.

3.1 Sample Details

Sample No.	Equipment Details	Part Number	Manufacturer	Hardware Rev.	Firmware Rev.	Software Rev.	Serial Number
S01	AIR-AP1852 Series		Cisco Systems	NA	NA	NA	KWC1904 02MZ
S02	AIR-PWR-B	341-0306-02	Cisco Systems	NA	NA	NA	

3.2 System Details

System #	Description	Samples
1	EUT	S01, S02

3.3 Mode of Operation Details

Mode#	Description	Comments
1	Continuous Transmitting	Continuous Transmitting >= 98% duty cycle

All tests in this report were performed as described in ANSI C63.10, FCC KDB 662911 D01 and 789033 D02 General UNII Test Procedure New Rules v01

Appendix A: Emission Test Results

Testing Laboratory: Cisco Systems, Inc., 4125 Highlander Parkway, Richfield, OH, USA

Target Maximum Channel Power

The following table details the maximum supported Total Channel Power for all operating modes.

Operating Mode	Maximum Channel Power (dBm)	
	Frequency (MHz)	
	5180	5240
6 to 54 Mbps	20	21
6 to 54 Mbps Beam Forming	18	21
HT/VHT20, M0 to M23, M0 to M9 1-4ss	21	21
HT/VHT20 Beam Forming, M0 to M23, M0 to M9 1-4ss	21	21
HT/VHT20 STBC, M0 to M7	21	21
	5190	5230
Non HT40 Duplicate, 6 to 54 Mbps	19	21
HT/VHT40, M0 to M23, M0 to M9 1-4ss	21	21
HT/VHT40 Beam Forming, M0 to M23, M0 to M9 1-4ss	21	21
HT/VHT40 STBC, M0 to M7	21	21
	5210	
Non HT80 Duplicate, 6 to 54 Mbps	18	
VHT80, M0 to M9, M0 to M9 1-1ss	20	
VHT80 Beam Forming, M0 to M9, M0 to M9 1-1ss	20	
VHT80 STBC, M0 to M9 2ss	20	



99% and 26dB Bandwidth

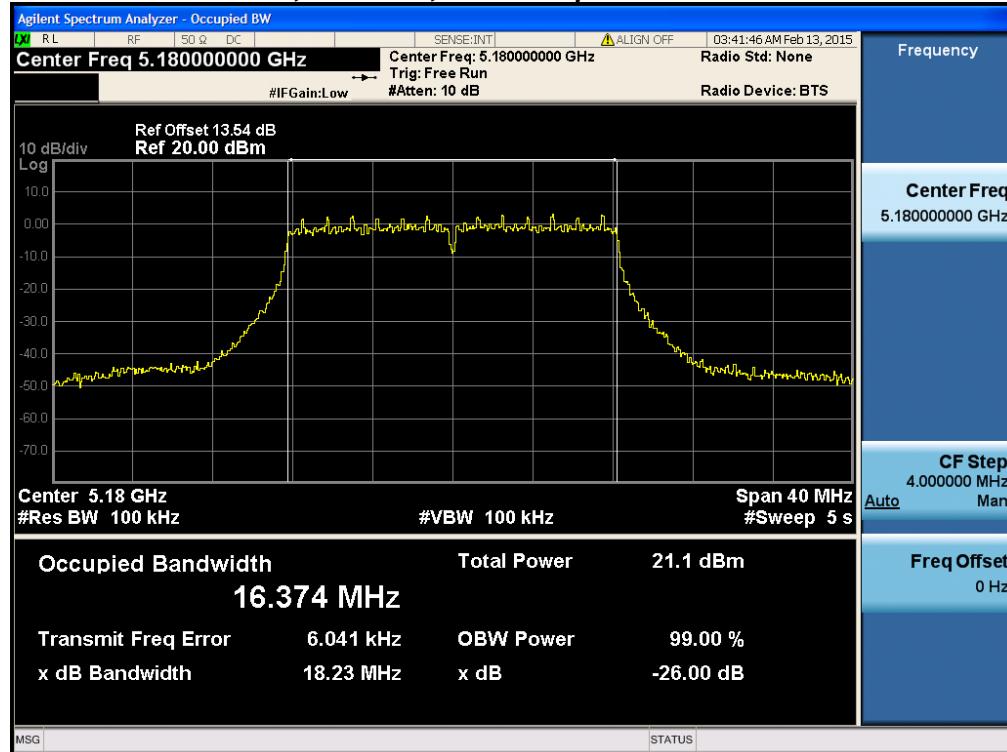
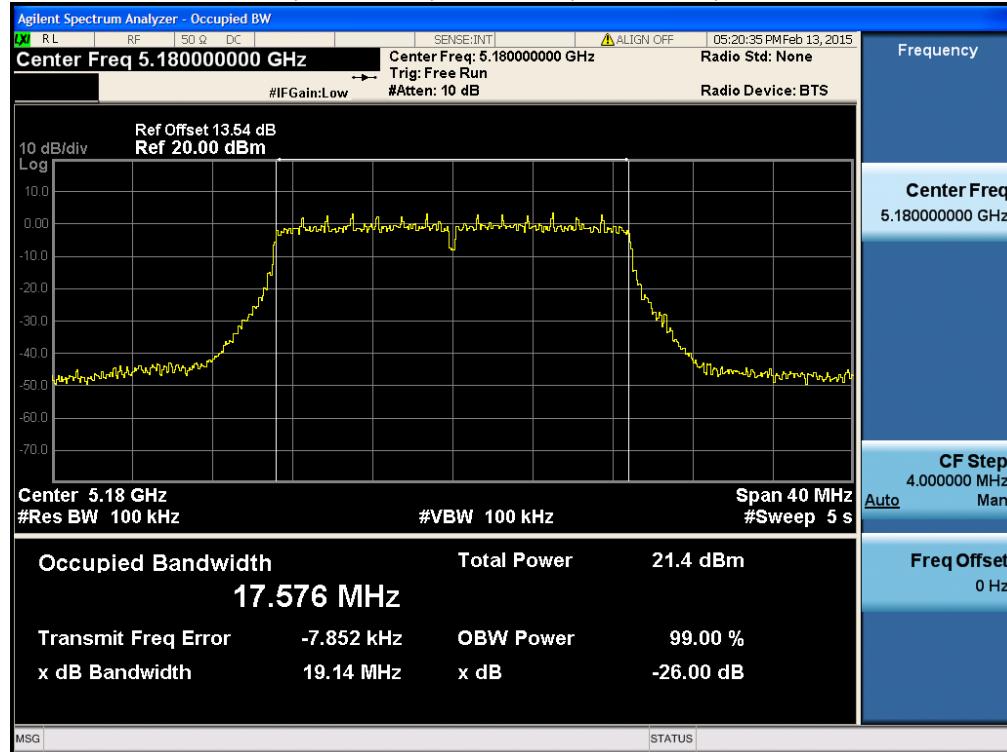
Connect the antenna port(s) to the spectrum analyzer input. Using the spectrum analyzer Channel Bandwidth mode, configure the spectrum analyzer as shown below (enter all losses between the transmitter output and the spectrum analyzer).

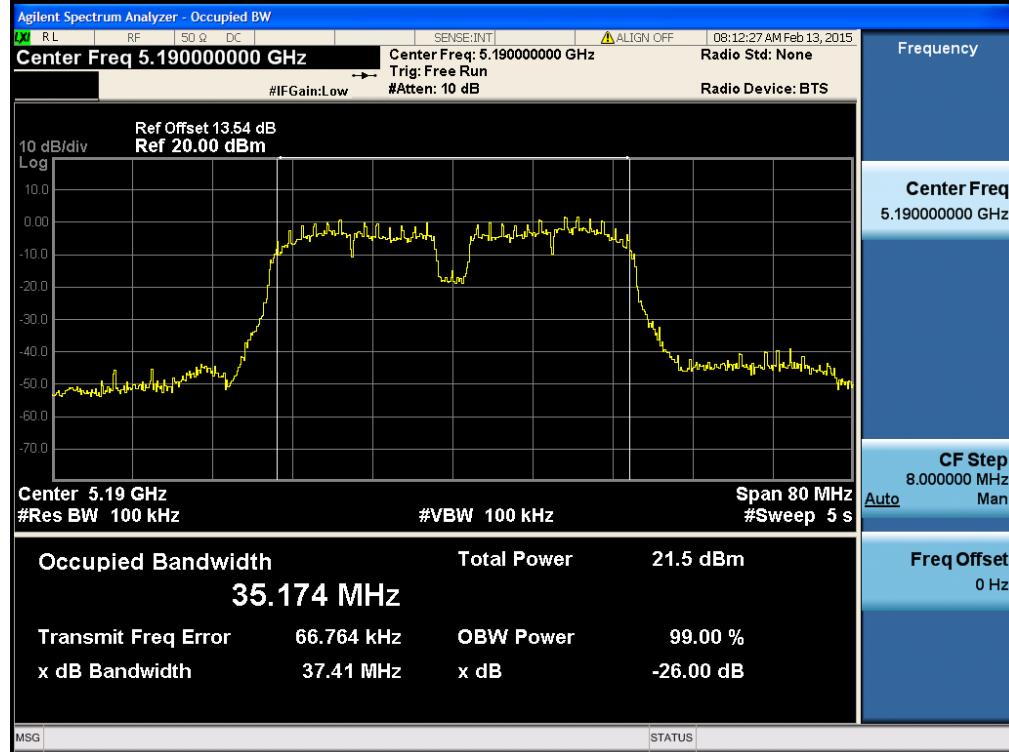
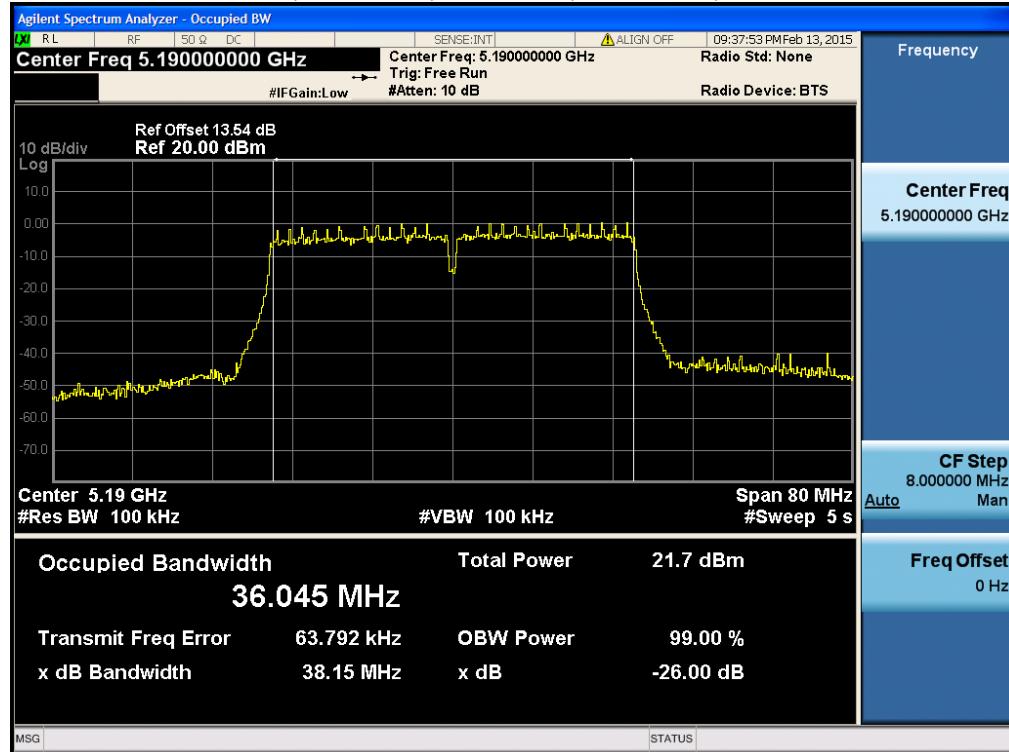
Center Frequency:	Frequency from table below
Span:	2 x Nominal Bandwidth (e.g. 40MHz for a 20MHz channel)
Reference Level:	20 dBm
Attenuation:	10 dB
Sweep Time:	5 s
Resolution Bandwidth:	1%-3% of 26 dB Bandwidth
Video Bandwidth:	\geq Resolution Bandwidth
X dB Bandwidth:	26 dB
Detector:	Peak
Trace:	Single

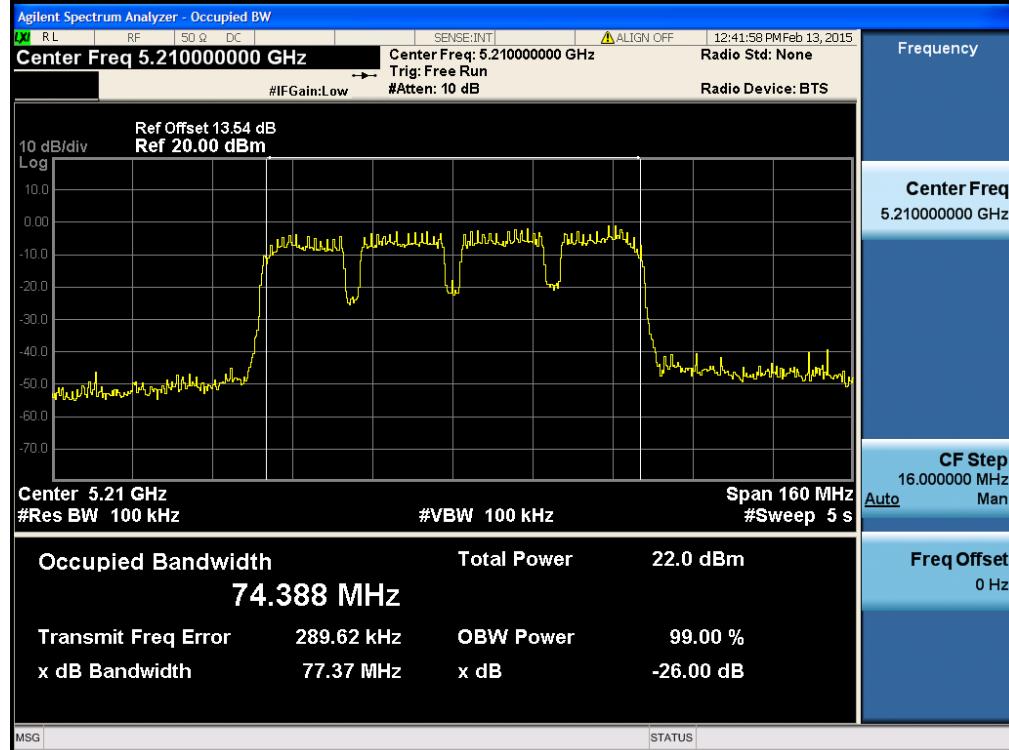
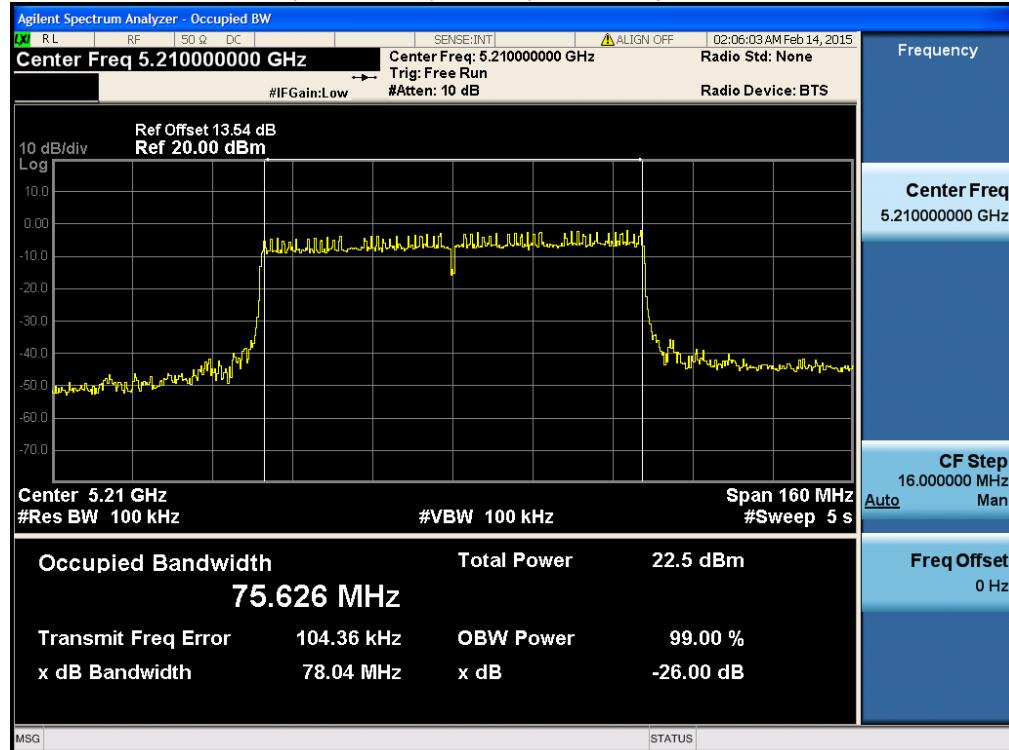
Place the radio in continuous transmit mode. View the transmitter waveform on the spectrum analyzer, and record the pertinent measurements:

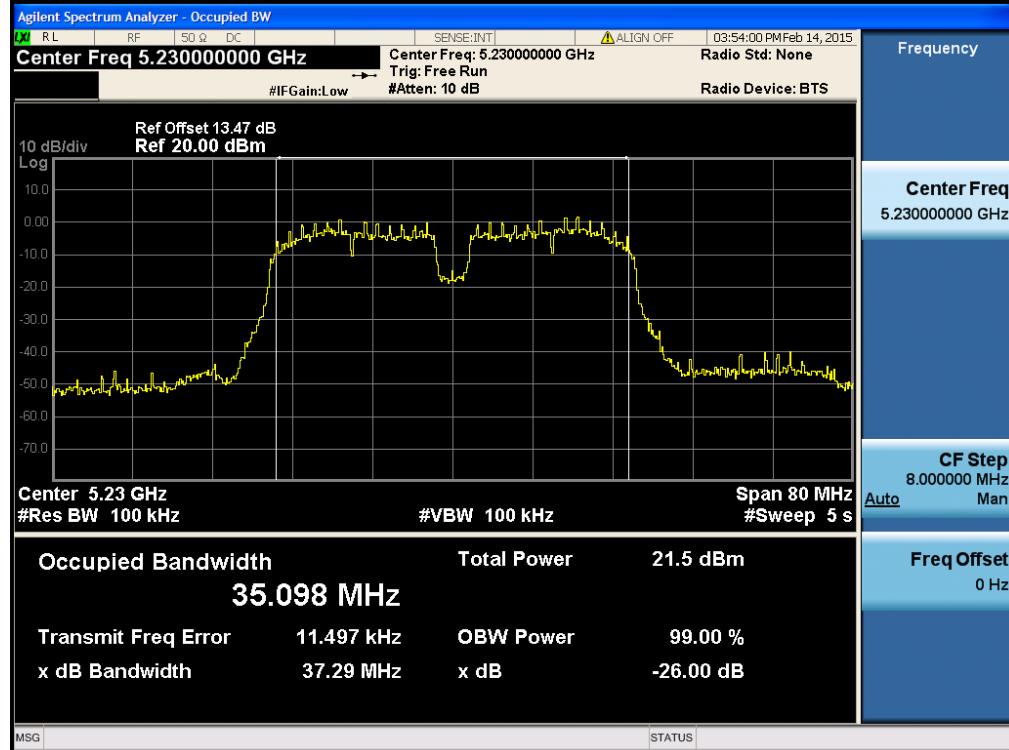
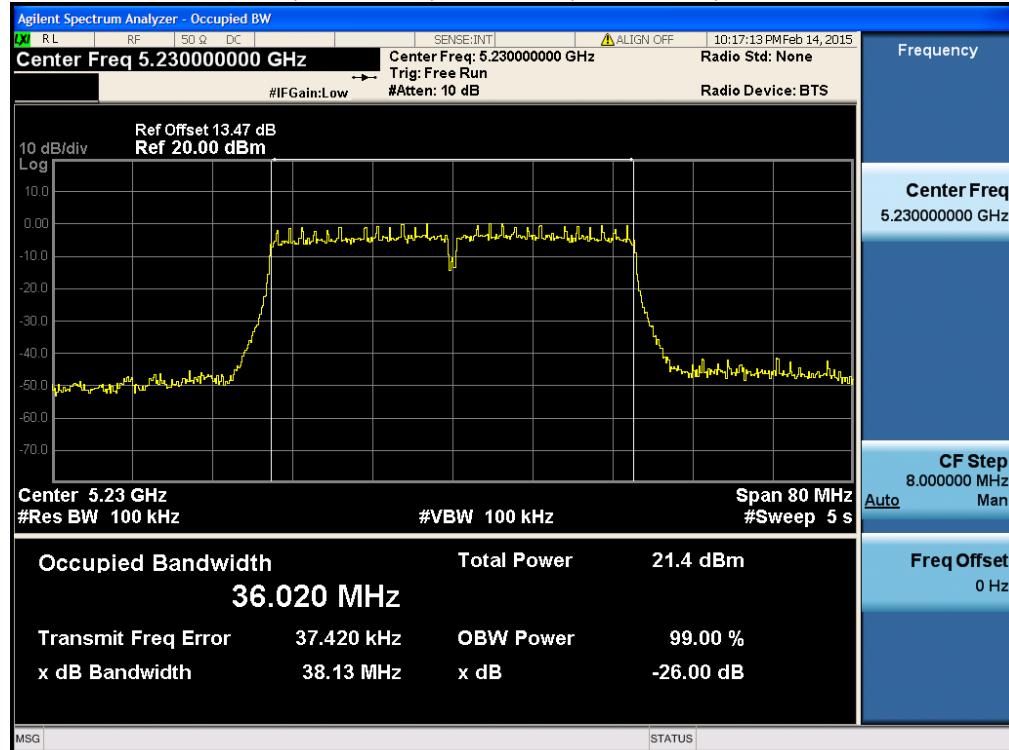


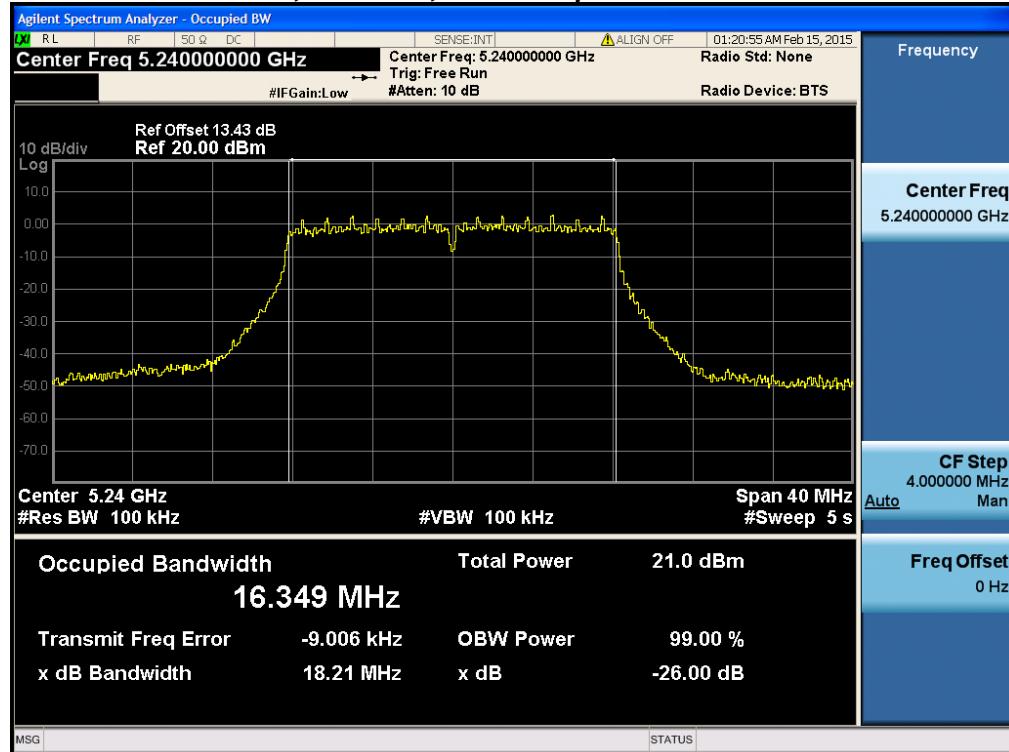
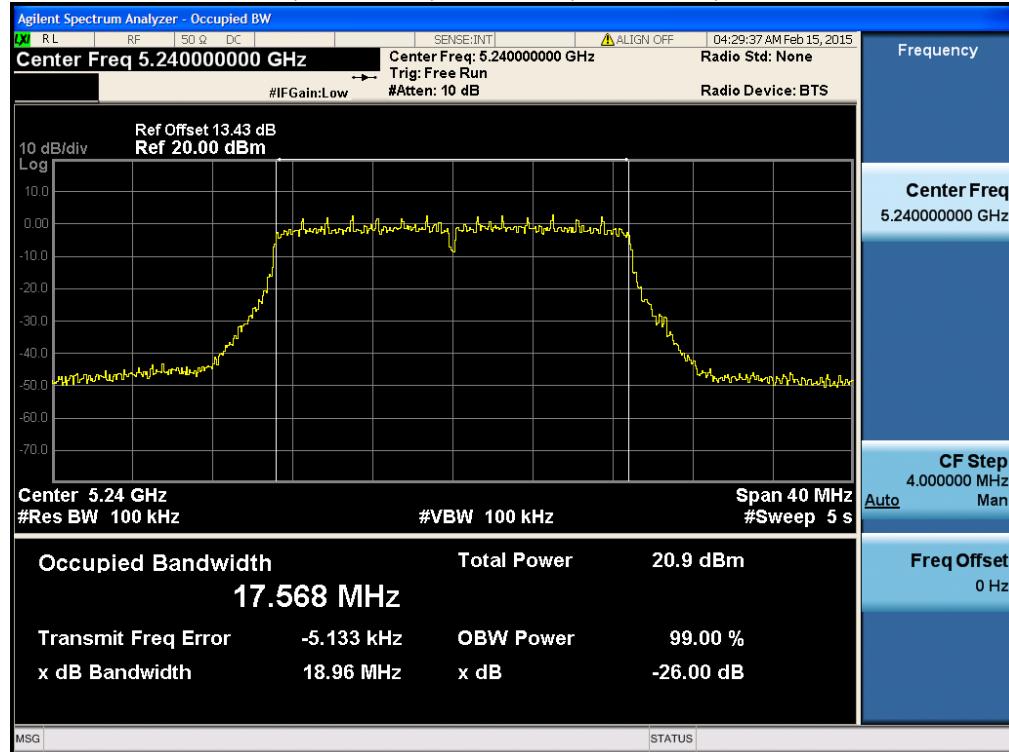
Frequency (MHz)	Mode	Data Rate (Mbps)	26dB BW (MHz)	99% BW (MHz)
5180	6 to 54 Mbps	6	18.2	16.4
	HT/VHT20, M0 to M23, M0 to M9 1-4ss	m0	19.1	17.6
5190	Non HT40 Duplicate, 6 to 54 Mbps	6	37.3	35.2
	HT/VHT40, M0 to M23, M0 to M9 1-4ss	m0	38.2	36
5210	Non HT80 Duplicate, 6 to 54 Mbps	6	77.3	74.2
	VHT80, M0 to M9, M0 to M9 1-1ss	m0x1	78	75.6
5230	Non HT40 Duplicate, 6 to 54 Mbps	6	37.3	35.1
	HT/VHT40, M0 to M23, M0 to M9 1-4ss	m0	38.1	36
5240	6 to 54 Mbps	6	18.2	16.4
	HT/VHT20, M0 to M23, M0 to M9 1-4ss	m0	19.1	17.6

26dB / 99% Bandwidth, 5180 MHz, 6 to 54 Mbps**26dB / 99% Bandwidth, 5180 MHz, HT/VHT20, M0 to M23, M0 to M9 1-4ss**

26dB / 99% Bandwidth, 5190 MHz, Non HT40 Duplicate, 6 to 54 Mbps**26dB / 99% Bandwidth, 5190 MHz, HT/VHT40, M0 to M23, M0 to M9 1-4ss**

26dB / 99% Bandwidth, 5210 MHz, Non HT80 Duplicate, 6 to 54 Mbps**26dB / 99% Bandwidth, 5210 MHz, VHT80, M0 to M9, M0 to M9 1-1ss**

26dB / 99% Bandwidth, 5230 MHz, Non HT40 Duplicate, 6 to 54 Mbps**26dB / 99% Bandwidth, 5230 MHz, HT/VHT40, M0 to M23, M0 to M9 1-4ss**

26dB / 99% Bandwidth, 5240 MHz, 6 to 54 Mbps**26dB / 99% Bandwidth, 5240 MHz, HT/VHT20, M0 to M23, M0 to M9 1-4ss**



Peak Output Power/ Power Spectral Density

15.407: For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

The maximum supported antenna gain is 6dBi. The peak correlated gain for each mode is listed in the table below.

The “measure-and-sum technique” is used for measuring in-band transmit power of a device. In the measure-and-sum approach, the conducted emission level is measured at each antenna port. The measured results at the various antenna ports are then summed mathematically to determine the total emission level from the device. Summing is performed in linear power units.



Connect the antenna port(s) to the spectrum analyzer input. Place the radio in continuous transmit mode.
Configure the spectrum analyzer as shown below.

Enable "Channel Power" function of analyzer
Center Frequency: Frequency from table below
Span: 20 MHz (must be greater than 26dB bandwidth, adjust as necessary)
Ref Level Offset: Correct for attenuator and cable loss.
Reference Level: 20 dBm
Attenuation: 20 dB
Sweep Time: 100ms, Single sweep
Resolution Bandwidth: 1 MHz
Video Bandwidth: 3 MHz
Detector: Sample
Trace: Trace Average 100 traces in Power Averaging Mode
Integration BW: =99 % BW from 99% Bandwidth Data

After averaging 100 traces of the transmitter waveform on the spectrum analyzer, record the spectrum analyzer Channel Power. Perform a Marker Peak Search function, and record this value as the Power Spectral Density.

Peak Output Power

Frequency (MHz)	Mode	Tx Paths	Correlated Antenna Gain (dBi)	Tx 1 Max Power (dBm)	Tx 2 Max Power (dBm)	Tx 3 Max Power (dBm)	Tx 4 Max Power (dBm)	Total Tx Channel Power (dBm)	Limit (dBm)	Margin (dB)
5180	6 to 54 Mbps	1	6	14.5				14.5	30.0	15.5
	6 to 54 Mbps	2	6	14.5	14.0			17.3	30.0	12.7
	6 to 54 Mbps	3	6	14.5	14.0	14.5		19.1	30.0	10.9
	6 to 54 Mbps	4	6	14.5	14.0	14.5	14.7	20.5	30.0	9.5
	6 to 54 Mbps Beam Forming	2	9	14.5	14.0			17.3	27.0	9.7
	6 to 54 Mbps Beam Forming	3	11	12.6	12.0	12.6		17.2	25.2	8.0
	6 to 54 Mbps Beam Forming	4	12	11.5	11.1	11.6	11.7	17.5	24.0	6.5
	HT/VHT20, M0 to M7, M0 to M9 1ss	1	6	14.6				14.6	30.0	15.4
	HT/VHT20, M0 to M7, M0 to M9 1ss	2	6	14.6	14.2			17.4	30.0	12.6
	HT/VHT20, M0 to M7, M0 to M9 1ss	3	6	14.6	14.2	14.7		19.3	30.0	10.7
	HT/VHT20, M0 to M7, M0 to M9 1ss	4	6	14.6	14.2	14.7	14.9	20.6	30.0	9.4
	HT/VHT20, M8 to M15, M0 to M9 2ss	2	6	14.6	14.2			17.4	30.0	12.6
	HT/VHT20, M8 to M15, M0 to M9 2ss	3	6	14.6	14.2	14.7		19.3	30.0	10.7
	HT/VHT20, M8 to M15, M0 to M9 2ss	4	6	14.6	14.2	14.7	14.9	20.6	30.0	9.4
	HT/VHT20, M16 to M23, M0 to M9 3ss	3	6	14.6	14.2	14.7		19.3	30.0	10.7
	HT/VHT20, M16 to M23, M0 to M9 3ss	4	6	14.6	14.2	14.7	14.9	20.6	30.0	9.4
	VHT20, M0 to M9 4ss	4	6	14.6	14.2	14.7	14.9	20.6	30.0	9.4
	HT/VHT20 Beam Forming, M0 to M7, M0 to M9 1ss	2	9	14.6	14.2			17.4	27.0	9.6
	HT/VHT20 Beam Forming, M0 to M7, M0 to M9 1ss	3	11	12.8	12.2	12.9		17.4	25.2	7.8
	HT/VHT20 Beam Forming, M0 to M7, M0 to M9 1ss	4	12	10.8	10.1	10.8	10.9	16.7	24.0	7.3
	HT/VHT20 Beam Forming, M8 to M15, M0 to M9 2ss	2	6	14.6	14.2			17.4	30.0	12.6
	HT/VHT20 Beam Forming, M8 to M15, M0 to M9 2ss	3	8	14.6	14.2	14.7		19.3	28.2	8.9
	HT/VHT20 Beam Forming, M8 to M15, M0 to M9 2ss	4	9	13.7	13.2	13.7	13.9	19.7	27.0	7.3
	HT/VHT20 Beam Forming, M16 to M23, M0 to M9 3ss	3	6	14.6	14.2	14.7		19.3	30.0	10.7
	HT/VHT20 Beam Forming, M16 to M23, M0 to M9 3ss	4	7	14.6	14.2	14.7	14.9	20.6	28.8	8.2
	VHT20 Beam Forming, M0 to M9 4ss	4	6	14.6	14.2	14.7	14.9	20.6	30.0	9.4
	HT/VHT20 STBC, M0 to M7	2	6	14.6	14.2			17.4	30.0	12.6
	HT/VHT20 STBC, M0 to M7	3	6	14.6	14.2	14.7		19.3	30.0	10.7
	HT/VHT20 STBC, M0 to M7	4	6	14.6	14.2	14.7	14.9	20.6	30.0	9.4

5190	Non HT40 Duplicate, 6 to 54 Mbps	1	6	14.3				14.3	30.0	15.7
	Non HT40 Duplicate, 6 to 54 Mbps	2	6	14.3	14.0			17.2	30.0	12.8
	Non HT40 Duplicate, 6 to 54 Mbps	3	6	14.3	14.0	14.2		18.9	30.0	11.1
	Non HT40 Duplicate, 6 to 54 Mbps	4	6	13.3	13.0	13.1	13.4	19.2	30.0	10.8
	HT/VHT40, M0 to M7, M0 to M9 1ss	1	6	14.7				14.7	30.0	15.3
	HT/VHT40, M0 to M7, M0 to M9 1ss	2	6	14.7	14.5			17.6	30.0	12.4
	HT/VHT40, M0 to M7, M0 to M9 1ss	3	6	14.7	14.5	14.7		19.4	30.0	10.6
	HT/VHT40, M0 to M7, M0 to M9 1ss	4	6	14.7	14.5	14.7	15.1	20.8	30.0	9.2
	HT/VHT40, M8 to M15, M0 to M9 2ss	2	6	14.7	14.5			17.6	30.0	12.4
	HT/VHT40, M8 to M15, M0 to M9 2ss	3	6	14.7	14.5	14.7		19.4	30.0	10.6
	HT/VHT40, M8 to M15, M0 to M9 2ss	4	6	14.7	14.5	14.7	15.1	20.8	30.0	9.2
	HT/VHT40, M16 to M23, M0 to M9 3ss	3	6	14.7	14.5	14.7		19.4	30.0	10.6
	HT/VHT40, M16 to M23, M0 to M9 3ss	4	6	14.7	14.5	14.7	15.1	20.8	30.0	9.2
	VHT40, M0 to M9 4ss	4	6	14.7	14.5	14.7	15.1	20.8	30.0	9.2
	HT/VHT40 Beam Forming, M0 to M7, M0 to M9 1ss	2	9	14.7	14.5			17.6	27.0	9.4
	HT/VHT40 Beam Forming, M0 to M7, M0 to M9 1ss	3	11	10.9	10.5	10.7		15.5	25.2	9.7
	HT/VHT40 Beam Forming, M0 to M7, M0 to M9 1ss	4	12	7.8	7.5	8.0	8.1	13.9	24.0	10.1
	HT/VHT40 Beam Forming, M8 to M15, M0 to M9 2ss	2	6	14.7	14.5			17.6	30.0	12.4
	HT/VHT40 Beam Forming, M8 to M15, M0 to M9 2ss	3	8	13.8	13.4	13.7		18.4	28.2	9.8
	HT/VHT40 Beam Forming, M8 to M15, M0 to M9 2ss	4	9	10.9	10.5	10.7	11.0	16.8	27.0	10.2
	HT/VHT40 Beam Forming, M16 to M23, M0 to M9 3ss	3	6	14.7	14.5	14.7		19.4	30.0	10.6
	HT/VHT40 Beam Forming, M16 to M23, M0 to M9 3ss	4	7	13.8	13.4	13.7	14.0	19.8	28.8	9.0
	VHT40 Beam Forming, M0 to M9 4ss	4	6	14.7	14.5	14.7	15.1	20.8	30.0	9.2
	HT/VHT40 STBC, M0 to M7	2	6	14.7	14.5			17.6	30.0	12.4
	HT/VHT40 STBC, M0 to M7	3	6	14.7	14.5	14.7		19.4	30.0	10.6
	HT/VHT40 STBC, M0 to M7	4	6	14.7	14.5	14.7	15.1	20.8	30.0	9.2

5210	Non HT80 Duplicate, 6 to 54 Mbps	1	6	14.5				14.5	30.0	15.5
	Non HT80 Duplicate, 6 to 54 Mbps	2	6	14.5	14.6			17.6	30.0	12.4
	Non HT80 Duplicate, 6 to 54 Mbps	3	6	13.5	13.5	13.3		18.2	30.0	11.8
	Non HT80 Duplicate, 6 to 54 Mbps	4	6	11.5	11.6	11.4	11.8	17.6	30.0	12.4
	VHT80, M0 to M9 1ss	1	6	14.8				14.8	30.0	15.2
	VHT80, M0 to M9 1ss	2	6	14.8	14.9			17.9	30.0	12.1
	VHT80, M0 to M9 1ss	3	6	13.9	13.9	13.7		18.6	30.0	11.4
	VHT80, M0 to M9 1ss	4	6	13.9	13.9	13.7	14.2	19.9	30.0	10.1
	VHT80, M0 to M9 2ss	2	6	14.8	14.9			17.9	30.0	12.1
	VHT80, M0 to M9 2ss	3	6	13.9	13.9	13.7		18.6	30.0	11.4
	VHT80, M0 to M9 2ss	4	6	13.9	13.9	13.7	14.2	19.9	30.0	10.1
	VHT80, M0 to M9 3ss	3	6	13.9	13.9	13.7		18.6	30.0	11.4
	VHT80, M0 to M9 3ss	4	6	13.9	13.9	13.7	14.2	19.9	30.0	10.1

	VHT80, M0 to M9 4ss	4	6	13.9	13.9	13.7	14.2	19.9	30.0	10.1
	VHT80 Beam Forming, M0 to M9 1ss	2	9	13.9	13.9			16.9	27.0	10.1
	VHT80 Beam Forming, M0 to M9 1ss	3	11	11.0	10.9	10.7		15.6	25.2	9.6
	VHT80 Beam Forming, M0 to M9 1ss	4	12	8.9	9.0	8.6	9.2	15.0	24.0	9.0
	VHT80 Beam Forming, M0 to M9 2ss	2	6	14.8	14.9			17.9	30.0	12.1
	VHT80 Beam Forming, M0 to M9 2ss	3	8	13.9	13.9	13.7		18.6	28.2	9.6
	VHT80 Beam Forming, M0 to M9 2ss	4	9	11.0	10.9	10.7	11.2	17.0	27.0	10.0
	VHT80 Beam Forming, M0 to M9 3ss	3	6	13.9	13.9	13.7		18.6	30.0	11.4
	VHT80 Beam Forming, M0 to M9 3ss	4	7	12.9	12.9	12.7	13.1	18.9	28.8	9.9
	VHT80 Beam Forming, M0 to M9 4ss	4	6	13.9	13.9	13.7	14.2	19.9	30.0	10.1
	VHT80 STBC, M0 to M9 2ss	2	6	14.8	14.9			17.9	30.0	12.1
	VHT80 STBC, M0 to M9 2ss	3	6	13.9	13.9	13.7		18.6	30.0	11.4
	VHT80 STBC, M0 to M9 2ss	4	6	13.9	13.9	13.7	14.2	19.9	30.0	10.1
5230	Non HT40 Duplicate, 6 to 54 Mbps	1	6	14.3				14.3	30.0	15.7
	Non HT40 Duplicate, 6 to 54 Mbps	2	6	14.3	14.7			17.5	30.0	12.5
	Non HT40 Duplicate, 6 to 54 Mbps	3	6	14.3	14.7	14.1		19.1	30.0	10.9
	Non HT40 Duplicate, 6 to 54 Mbps	4	6	14.3	14.7	14.1	14.8	20.5	30.0	9.5
	HT/VHT40, M0 to M7, M0 to M9 1ss	1	6	14.8				14.8	30.0	15.2
	HT/VHT40, M0 to M7, M0 to M9 1ss	2	6	14.8	15.2			18.0	30.0	12.0
	HT/VHT40, M0 to M7, M0 to M9 1ss	3	6	14.8	15.2	14.5		19.6	30.0	10.4
	HT/VHT40, M0 to M7, M0 to M9 1ss	4	6	14.8	15.2	14.5	15.2	21.0	30.0	9.0
	HT/VHT40, M8 to M15, M0 to M9 2ss	2	6	14.8	15.2			18.0	30.0	12.0
	HT/VHT40, M8 to M15, M0 to M9 2ss	3	6	14.8	15.2	14.5		19.6	30.0	10.4
	HT/VHT40, M8 to M15, M0 to M9 2ss	4	6	14.8	15.2	14.5	15.2	21.0	30.0	9.0
	HT/VHT40, M16 to M23, M0 to M9 3ss	3	6	14.8	15.2	14.5		19.6	30.0	10.4
	HT/VHT40, M16 to M23, M0 to M9 3ss	4	6	14.8	15.2	14.5	15.2	21.0	30.0	9.0
	VHT40, M0 to M9 4ss	4	6	14.8	15.2	14.5	15.2	21.0	30.0	9.0
	HT/VHT40 Beam Forming, M0 to M7, M0 to M9 1ss	2	9	14.8	15.2			18.0	27.0	9.0
	HT/VHT40 Beam Forming, M0 to M7, M0 to M9 1ss	3	11	14.8	15.2	14.5		19.6	25.2	5.6
	HT/VHT40 Beam Forming, M0 to M7, M0 to M9 1ss	4	12	14.8	15.2	14.5	15.2	21.0	24.0	3.0
	HT/VHT40 Beam Forming, M8 to M15, M0 to M9 2ss	2	6	14.8	15.2			18.0	30.0	12.0
	HT/VHT40 Beam Forming, M8 to M15, M0 to M9 2ss	3	8	14.8	15.2	14.5		19.6	28.2	8.6
	HT/VHT40 Beam Forming, M8 to M15, M0 to M9 2ss	4	9	14.8	15.2	14.5	15.2	21.0	27.0	6.0
	HT/VHT40 Beam Forming, M16 to M23, M0 to M9 3ss	3	6	14.8	15.2	14.5		19.6	30.0	10.4
	HT/VHT40 Beam Forming, M16 to M23, M0 to M9 3ss	4	7	14.8	15.2	14.5	15.2	21.0	28.8	7.8
	VHT40 Beam Forming, M0 to M9 4ss	4	6	14.8	15.2	14.5	15.2	21.0	30.0	9.0
	HT/VHT40 STBC, M0 to M7	2	6	14.8	15.2			18.0	30.0	12.0
	HT/VHT40 STBC, M0 to M7	3	6	14.8	15.2	14.5		19.6	30.0	10.4
	HT/VHT40 STBC, M0 to M7	4	6	14.8	15.2	14.5	15.2	21.0	30.0	9.0

5240	6 to 54 Mbps	1	6	14.4				14.4	30.0	15.6
	6 to 54 Mbps	2	6	14.4	15.0			17.7	30.0	12.3
	6 to 54 Mbps	3	6	14.4	15.0	14.5		19.4	30.0	10.6
	6 to 54 Mbps	4	6	14.4	15.0	14.5	14.8	20.7	30.0	9.3
	6 to 54 Mbps Beam Forming	2	9	14.4	15.0			17.7	27.0	9.3
	6 to 54 Mbps Beam Forming	3	11	14.4	15.0	14.5		19.4	25.2	5.8
	6 to 54 Mbps Beam Forming	4	12	14.4	15.0	14.5	14.8	20.7	24.0	3.3
	HT/VHT20, M0 to M7, M0 to M9 1ss	1	6	14.4				14.4	30.0	15.6
	HT/VHT20, M0 to M7, M0 to M9 1ss	2	6	14.4	15.0			17.7	30.0	12.3
	HT/VHT20, M0 to M7, M0 to M9 1ss	3	6	14.4	15.0	14.6		19.4	30.0	10.6
	HT/VHT20, M0 to M7, M0 to M9 1ss	4	6	14.4	15.0	14.6	14.9	20.8	30.0	9.2
	HT/VHT20, M8 to M15, M0 to M9 2ss	2	6	14.4	15.0			17.7	30.0	12.3
	HT/VHT20, M8 to M15, M0 to M9 2ss	3	6	14.4	15.0	14.6		19.4	30.0	10.6
	HT/VHT20, M8 to M15, M0 to M9 2ss	4	6	14.4	15.0	14.6	14.9	20.8	30.0	9.2
	HT/VHT20, M16 to M23, M0 to M9 3ss	3	6	14.4	15.0	14.6		19.4	30.0	10.6
	HT/VHT20, M16 to M23, M0 to M9 3ss	4	6	14.4	15.0	14.6	14.9	20.8	30.0	9.2
	VHT20, M0 to M9 4ss	4	6	14.4	15.0	14.6	14.9	20.8	30.0	9.2
	HT/VHT20 Beam Forming, M0 to M7, M0 to M9 1ss	2	9	14.4	15.0			17.7	27.0	9.3
	HT/VHT20 Beam Forming, M0 to M7, M0 to M9 1ss	3	11	14.4	15.0	14.6		19.4	25.2	5.8
	HT/VHT20 Beam Forming, M0 to M7, M0 to M9 1ss	4	12	14.4	15.0	14.6	14.9	20.8	24.0	3.2
	HT/VHT20 Beam Forming, M8 to M15, M0 to M9 2ss	2	6	14.4	15.0			17.7	30.0	12.3
	HT/VHT20 Beam Forming, M8 to M15, M0 to M9 2ss	3	8	14.4	15.0	14.6		19.4	28.2	8.8
	HT/VHT20 Beam Forming, M8 to M15, M0 to M9 2ss	4	9	14.4	15.0	14.6	14.9	20.8	27.0	6.2
	HT/VHT20 Beam Forming, M16 to M23, M0 to M9 3ss	3	6	14.4	15.0	14.6		19.4	30.0	10.6
	HT/VHT20 Beam Forming, M16 to M23, M0 to M9 3ss	4	7	14.4	15.0	14.6	14.9	20.8	28.8	8.0
	VHT20 Beam Forming, M0 to M9 4ss	4	6	14.4	15.0	14.6	14.9	20.8	30.0	9.2
	HT/VHT20 STBC, M0 to M7	2	6	14.4	15.0			17.7	30.0	12.3
	HT/VHT20 STBC, M0 to M7	3	6	14.4	15.0	14.6		19.4	30.0	10.6
	HT/VHT20 STBC, M0 to M7	4	6	14.4	15.0	14.6	14.9	20.8	30.0	9.2

Power Spectral Density

Frequency (MHz)	Mode	Tx Paths	Correlated Antenna Gain (dBi)	Tx 1 PSD (dBm/MHz)	Tx 2 PSD (dBm/MHz)	Tx 3 PSD (dBm/MHz)	Tx 4 PSD (dBm/MHz)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)
5180	6 to 54 Mbps	1	6	4.1				4.1	17.0	12.9
	6 to 54 Mbps	2	9	4.1	3.4			6.8	14.0	7.2
	6 to 54 Mbps	3	11	4.1	3.4	3.9		8.6	12.2	3.6
	6 to 54 Mbps	4	12	4.1	3.4	3.9	4.3	10.0	11.0	1.0
	6 to 54 Mbps Beam Forming	2	9	4.1	3.4			6.8	14.0	7.2
	6 to 54 Mbps Beam Forming	3	11	2.2	1.6	2.3		6.8	12.2	5.4
	6 to 54 Mbps Beam Forming	4	12	0.9	0.4	1.1	0.9	6.9	11.0	4.1
	HT/VHT20, M0 to M7, M0 to M9 1ss	1	6	3.7				3.7	17.0	13.3
	HT/VHT20, M0 to M7, M0 to M9 1ss	2	9	3.7	3.2			6.5	14.0	7.5
	HT/VHT20, M0 to M7, M0 to M9 1ss	3	11	3.7	3.2	3.8		8.3	12.2	3.9
	HT/VHT20, M0 to M7, M0 to M9 1ss	4	12	3.7	3.2	3.8	3.9	9.7	11.0	1.3
	HT/VHT20, M8 to M15, M0 to M9 2ss	2	6	3.7	3.2			6.5	17.0	10.5
	HT/VHT20, M8 to M15, M0 to M9 2ss	3	8	3.7	3.2	3.8		8.3	15.2	6.9
	HT/VHT20, M8 to M15, M0 to M9 2ss	4	9	3.7	3.2	3.8	3.9	9.7	14.0	4.3
	HT/VHT20, M16 to M23, M0 to M9 3ss	3	6	3.7	3.2	3.8		8.3	17.0	8.7
	HT/VHT20, M16 to M23, M0 to M9 3ss	4	7	3.7	3.2	3.8	3.9	9.7	15.8	6.1
	VHT20, M0 to M9 4ss	4	6	3.7	3.2	3.8	3.9	9.7	17.0	7.3
	HT/VHT20 Beam Forming, M0 to M7, M0 to M9 1ss	2	9	3.7	3.2			6.5	14.0	7.5
	HT/VHT20 Beam Forming, M0 to M7, M0 to M9 1ss	3	11	2.0	1.6	2.0		6.6	12.2	5.6
	HT/VHT20 Beam Forming, M0 to M7, M0 to M9 1ss	4	12	0.2	-0.8	-0.1	0.4	6.0	11.0	5.0
	HT/VHT20 Beam Forming, M8 to M15, M0 to M9 2ss	2	6	3.7	3.2			6.5	17.0	10.5
	HT/VHT20 Beam Forming, M8 to M15, M0 to M9 2ss	3	8	3.7	3.2	3.8		8.3	15.2	6.9
	HT/VHT20 Beam Forming, M8 to M15, M0 to M9 2ss	4	9	2.8	2.3	3.1	2.9	8.8	14.0	5.2
	HT/VHT20 Beam Forming, M16 to M23, M0 to M9 3ss	3	6	3.7	3.2	3.8		8.3	17.0	8.7
	HT/VHT20 Beam Forming, M16 to M23, M0 to M9 3ss	4	7	3.7	3.2	3.8	3.9	9.7	15.8	6.1
	VHT20 Beam Forming, M0 to M9 4ss	4	6	3.7	3.2	3.8	3.9	9.7	17.0	7.3
	HT/VHT20 STBC, M0 to M7	2	6	3.7	3.2			6.5	17.0	10.5
	HT/VHT20 STBC, M0 to M7	3	8	3.7	3.2	3.8		8.3	15.2	6.9
	HT/VHT20 STBC, M0 to M7	4	9	3.7	3.2	3.8	3.9	9.7	14.0	4.3

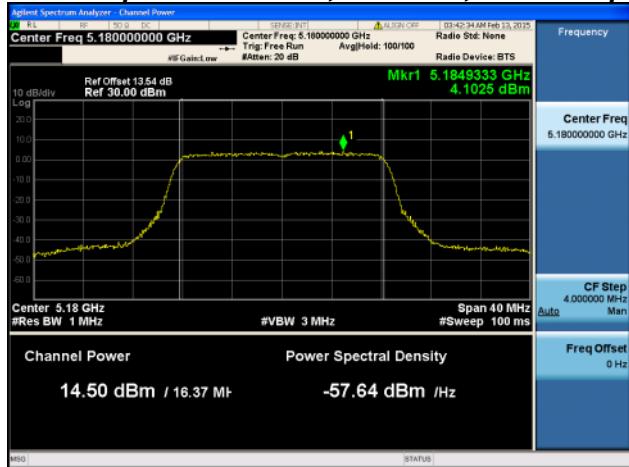
5190	Non HT40 Duplicate, 6 to 54 Mbps	1	6	2.4				2.4	17.0	14.6
	Non HT40 Duplicate, 6 to 54 Mbps	2	9	2.4	1.8			5.1	14.0	8.9
	Non HT40 Duplicate, 6 to 54 Mbps	3	11	2.4	1.8	1.8		6.8	12.2	5.4
	Non HT40 Duplicate, 6 to 54 Mbps	4	12	1.3	0.9	0.9	1.0	7.0	11.0	3.9
	HT/VHT40, M0 to M7, M0 to M9 1ss	1	6	0.8				0.8	17.0	16.2
	HT/VHT40, M0 to M7, M0 to M9 1ss	2	9	0.8	0.5			3.7	14.0	10.3
	HT/VHT40, M0 to M7, M0 to M9 1ss	3	11	0.8	0.5	0.9		5.5	12.2	6.7
	HT/VHT40, M0 to M7, M0 to M9 1ss	4	12	0.8	0.5	0.9	1.1	6.9	11.0	4.1
	HT/VHT40, M8 to M15, M0 to M9 2ss	2	6	0.8	0.5			3.7	17.0	13.3
	HT/VHT40, M8 to M15, M0 to M9 2ss	3	8	0.8	0.5	0.9		5.5	15.2	9.7
	HT/VHT40, M8 to M15, M0 to M9 2ss	4	9	0.8	0.5	0.9	1.1	6.9	14.0	7.1
	HT/VHT40, M16 to M23, M0 to M9 3ss	3	6	0.8	0.5	0.9		5.5	17.0	11.5
	HT/VHT40, M16 to M23, M0 to M9 3ss	4	7	0.8	0.5	0.9	1.1	6.9	15.8	8.9
	VHT40, M0 to M9 4ss	4	6	0.8	0.5	0.9	1.1	6.9	17.0	10.1
	HT/VHT40 Beam Forming, M0 to M7, M0 to M9 1ss	2	9	0.8	0.5			3.7	14.0	10.3
	HT/VHT40 Beam Forming, M0 to M7, M0 to M9 1ss	3	11	-2.6	-3.3	-2.9		1.8	12.2	10.4
	HT/VHT40 Beam Forming, M0 to M7, M0 to M9 1ss	4	12	-5.8	-6.0	-5.9	-5.6	0.2	11.0	10.8
	HT/VHT40 Beam Forming, M8 to M15, M0 to M9 2ss	2	6	0.8	0.5			3.7	17.0	13.3
	HT/VHT40 Beam Forming, M8 to M15, M0 to M9 2ss	3	8	0.0	-0.5	-0.2		4.5	15.2	10.7
	HT/VHT40 Beam Forming, M8 to M15, M0 to M9 2ss	4	9	-2.6	-3.3	-2.9	-2.9	3.1	14.0	10.9
	HT/VHT40 Beam Forming, M16 to M23, M0 to M9 3ss	3	6	0.8	0.5	0.9		5.5	17.0	11.5
	HT/VHT40 Beam Forming, M16 to M23, M0 to M9 3ss	4	7	0.0	-0.5	-0.2	0.1	5.9	15.8	9.9
	VHT40 Beam Forming, M0 to M9 4ss	4	6	0.8	0.5	0.9	1.1	6.9	17.0	10.1
	HT/VHT40 STBC, M0 to M7	2	6	0.8	0.5			3.7	17.0	13.3
	HT/VHT40 STBC, M0 to M7	3	8	0.8	0.5	0.9		5.5	15.2	9.7
	HT/VHT40 STBC, M0 to M7	4	9	0.8	0.5	0.9	1.1	6.9	14.0	7.1

5210	Non HT80 Duplicate, 6 to 54 Mbps	1	6	-0.7				-0.7	17.0	17.7
	Non HT80 Duplicate, 6 to 54 Mbps	2	9	-0.7	-1.1			2.1	14.0	11.9
	Non HT80 Duplicate, 6 to 54 Mbps	3	11	-1.6	-2.0	-2.3		2.8	12.2	9.4
	Non HT80 Duplicate, 6 to 54 Mbps	4	12	-3.7	-3.5	-3.9	-4.2	2.2	11.0	8.8
	VHT80, M0 to M9 1ss	1	6	-1.8				-1.8	17.0	18.8
	VHT80, M0 to M9 1ss	2	9	-1.8	-2.1			1.1	14.0	12.9
	VHT80, M0 to M9 1ss	3	11	-2.7	-2.9	-2.9		1.9	12.2	10.3
	VHT80, M0 to M9 1ss	4	12	-2.7	-2.9	-2.9	-3.0	3.1	11.0	7.8
	VHT80, M0 to M9 2ss	2	6	-1.8	-2.1			1.1	17.0	15.9
	VHT80, M0 to M9 2ss	3	8	-2.7	-2.9	-2.9		1.9	15.2	13.3
	VHT80, M0 to M9 2ss	4	9	-2.7	-2.9	-2.9	-3.0	3.1	14.0	10.8
	VHT80, M0 to M9 3ss	3	6	-2.7	-2.9	-2.9		1.9	17.0	15.1
	VHT80, M0 to M9 3ss	4	7	-2.7	-2.9	-2.9	-3.0	3.1	15.8	12.6

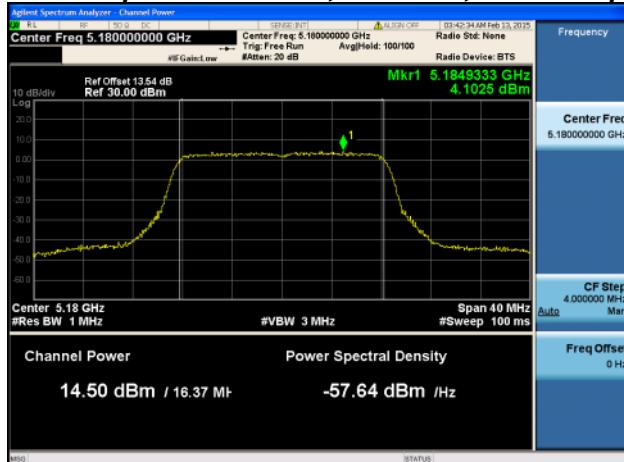
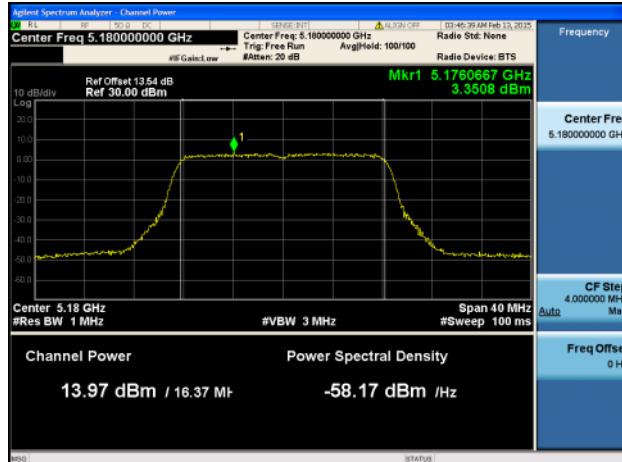
	VHT80, M0 to M9 4ss	4	6	-2.7	-2.9	-2.9	-3.0	3.1	17.0	13.9
	VHT80 Beam Forming, M0 to M9 1ss	2	9	-2.7	-2.9			0.2	14.0	13.8
	VHT80 Beam Forming, M0 to M9 1ss	3	11	-5.6	-5.8	-6.1		-1.1	12.2	13.3
	VHT80 Beam Forming, M0 to M9 1ss	4	12	-7.6	-7.9	-8.0	-7.8	-1.8	11.0	12.8
	VHT80 Beam Forming, M0 to M9 2ss	2	6	-1.8	-2.1			1.1	17.0	15.9
	VHT80 Beam Forming, M0 to M9 2ss	3	8	-2.7	-2.9	-2.9		1.9	15.2	13.3
	VHT80 Beam Forming, M0 to M9 2ss	4	9	-5.6	-5.8	-6.1	-5.5	0.3	14.0	13.7
	VHT80 Beam Forming, M0 to M9 3ss	3	6	-2.7	-2.9	-2.9		1.9	17.0	15.1
	VHT80 Beam Forming, M0 to M9 3ss	4	7	-3.9	-3.8	-4.2	-3.7	2.1	15.8	13.6
	VHT80 Beam Forming, M0 to M9 4ss	4	6	-2.7	-2.9	-2.9	-3.0	3.1	17.0	13.9
	VHT80 STBC, M0 to M9 2ss	2	6	-1.8	-2.1			1.1	17.0	15.9
	VHT80 STBC, M0 to M9 2ss	3	8	-2.7	-2.9	-2.9		1.9	15.2	13.3
	VHT80 STBC, M0 to M9 2ss	4	9	-2.7	-2.9	-2.9	-3.0	3.1	14.0	10.8
	<hr/>									
5230	Non HT40 Duplicate, 6 to 54 Mbps	1	6	1.9				1.9	17.0	15.1
	Non HT40 Duplicate, 6 to 54 Mbps	2	9	1.9	2.0			5.0	14.0	9.0
	Non HT40 Duplicate, 6 to 54 Mbps	3	11	1.9	2.0	1.3		6.5	12.2	5.7
	Non HT40 Duplicate, 6 to 54 Mbps	4	12	1.9	2.0	1.3	2.0	7.8	11.0	3.1
	HT/VHT40, M0 to M7, M0 to M9 1ss	1	6	0.9				0.9	17.0	16.1
	HT/VHT40, M0 to M7, M0 to M9 1ss	2	9	0.9	1.3			4.1	14.0	9.9
	HT/VHT40, M0 to M7, M0 to M9 1ss	3	11	0.9	1.3	0.6		5.7	12.2	6.5
	HT/VHT40, M0 to M7, M0 to M9 1ss	4	12	0.9	1.3	0.6	1.6	7.1	11.0	3.8
	HT/VHT40, M8 to M15, M0 to M9 2ss	2	6	0.9	1.3			4.1	17.0	12.9
	HT/VHT40, M8 to M15, M0 to M9 2ss	3	8	0.9	1.3	0.6		5.7	15.2	9.5
	HT/VHT40, M8 to M15, M0 to M9 2ss	4	9	0.9	1.3	0.6	1.6	7.1	14.0	6.9
	HT/VHT40, M16 to M23, M0 to M9 3ss	3	6	0.9	1.3	0.6		5.7	17.0	11.3
	HT/VHT40, M16 to M23, M0 to M9 3ss	4	7	0.9	1.3	0.6	1.6	7.1	15.8	8.6
	VHT40, M0 to M9 4ss	4	6	0.9	1.3	0.6	1.6	7.1	17.0	9.9
	HT/VHT40 Beam Forming, M0 to M7, M0 to M9 1ss	2	9	0.9	1.3			4.1	14.0	9.9
	HT/VHT40 Beam Forming, M0 to M7, M0 to M9 1ss	3	11	0.9	1.3	0.6		5.7	12.2	6.5
	HT/VHT40 Beam Forming, M0 to M7, M0 to M9 1ss	4	12	0.9	1.3	0.6	1.6	7.1	11.0	3.8
	HT/VHT40 Beam Forming, M8 to M15, M0 to M9 2ss	2	6	0.9	1.3			4.1	17.0	12.9
	HT/VHT40 Beam Forming, M8 to M15, M0 to M9 2ss	3	8	0.9	1.3	0.6		5.7	15.2	9.5
	HT/VHT40 Beam Forming, M8 to M15, M0 to M9 2ss	4	9	0.9	1.3	0.6	1.6	7.1	14.0	6.9
	HT/VHT40 Beam Forming, M16 to M23, M0 to M9 3ss	3	6	0.9	1.3	0.6		5.7	17.0	11.3
	HT/VHT40 Beam Forming, M16 to M23, M0 to M9 3ss	4	7	0.9	1.3	0.6	1.6	7.1	15.8	8.6
	VHT40 Beam Forming, M0 to M9 4ss	4	6	0.9	1.3	0.6	1.6	7.1	17.0	9.9
	HT/VHT40 STBC, M0 to M7	2	6	0.9	1.3			4.1	17.0	12.9
	HT/VHT40 STBC, M0 to M7	3	8	0.9	1.3	0.6		5.7	15.2	9.5
	HT/VHT40 STBC, M0 to M7	4	9	0.9	1.3	0.6	1.6	7.1	14.0	6.9

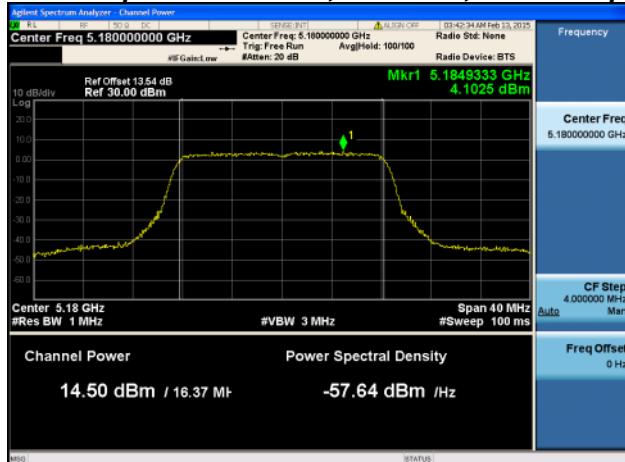
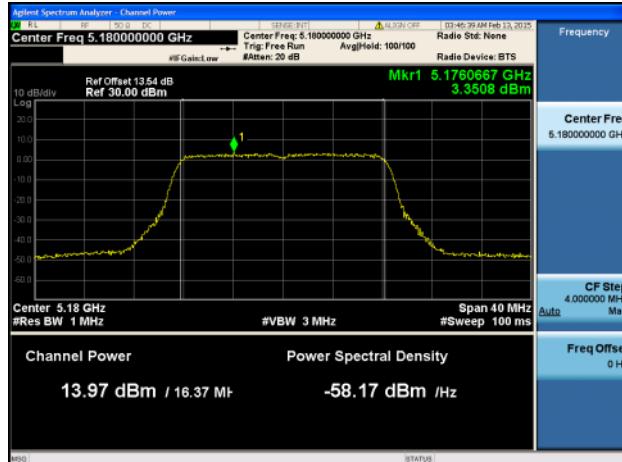
5240	6 to 54 Mbps	1	6	3.6				3.6	17.0	13.4
	6 to 54 Mbps	2	9	3.6	4.3			7.0	14.0	7.0
	6 to 54 Mbps	3	11	3.6	4.3	4.4		8.9	12.2	3.3
	6 to 54 Mbps	4	12	3.6	4.3	4.4	4.0	10.1	11.0	0.9
	6 to 54 Mbps Beam Forming	2	9	3.6	4.3			7.0	14.0	7.0
	6 to 54 Mbps Beam Forming	3	11	3.6	4.3	4.4		8.9	12.2	3.3
	6 to 54 Mbps Beam Forming	4	12	3.6	4.3	4.4	4.0	10.1	11.0	0.9
	HT/VHT20, M0 to M7, M0 to M9 1ss	1	6	3.9				3.9	17.0	13.1
	HT/VHT20, M0 to M7, M0 to M9 1ss	2	9	3.9	4.3			7.1	14.0	6.9
	HT/VHT20, M0 to M7, M0 to M9 1ss	3	11	3.9	4.3	3.7		8.7	12.2	3.5
	HT/VHT20, M0 to M7, M0 to M9 1ss	4	12	3.9	4.3	3.7	4.1	10.0	11.0	1.0
	HT/VHT20, M8 to M15, M0 to M9 2ss	2	6	3.9	4.3			7.1	17.0	9.9
	HT/VHT20, M8 to M15, M0 to M9 2ss	3	8	3.9	4.3	3.7		8.7	15.2	6.5
	HT/VHT20, M8 to M15, M0 to M9 2ss	4	9	3.9	4.3	3.7	4.1	10.0	14.0	4.0
	HT/VHT20, M16 to M23, M0 to M9 3ss	3	6	3.9	4.3	3.7		8.7	17.0	8.3
	HT/VHT20, M16 to M23, M0 to M9 3ss	4	7	3.9	4.3	3.7	4.1	10.0	15.8	5.7
	VHT20, M0 to M9 4ss	4	6	3.9	4.3	3.7	4.1	10.0	17.0	7.0
	HT/VHT20 Beam Forming, M0 to M7, M0 to M9 1ss	2	9	3.9	4.3			7.1	14.0	6.9
	HT/VHT20 Beam Forming, M0 to M7, M0 to M9 1ss	3	11	3.9	4.3	3.7		8.7	12.2	3.5
	HT/VHT20 Beam Forming, M0 to M7, M0 to M9 1ss	4	12	3.9	4.3	3.7	4.1	10.0	11.0	1.0
	HT/VHT20 Beam Forming, M8 to M15, M0 to M9 2ss	2	6	3.9	4.3			7.1	17.0	9.9
	HT/VHT20 Beam Forming, M8 to M15, M0 to M9 2ss	3	8	3.9	4.3	3.7		8.7	15.2	6.5
	HT/VHT20 Beam Forming, M8 to M15, M0 to M9 2ss	4	9	3.9	4.3	3.7	4.1	10.0	14.0	4.0
	HT/VHT20 Beam Forming, M16 to M23, M0 to M9 3ss	3	6	3.9	4.3	3.7		8.7	17.0	8.3
	HT/VHT20 Beam Forming, M16 to M23, M0 to M9 3ss	4	7	3.9	4.3	3.7	4.1	10.0	15.8	5.7
	VHT20 Beam Forming, M0 to M9 4ss	4	6	3.9	4.3	3.7	4.1	10.0	17.0	7.0
	HT/VHT20 STBC, M0 to M7	2	6	3.9	4.3			7.1	17.0	9.9
	HT/VHT20 STBC, M0 to M7	3	8	3.9	4.3	3.7		8.7	15.2	6.5
	HT/VHT20 STBC, M0 to M7	4	9	3.9	4.3	3.7	4.1	10.0	14.0	4.0

Peak Output Power / PSD, 5180 MHz, 6 to 54 Mbps

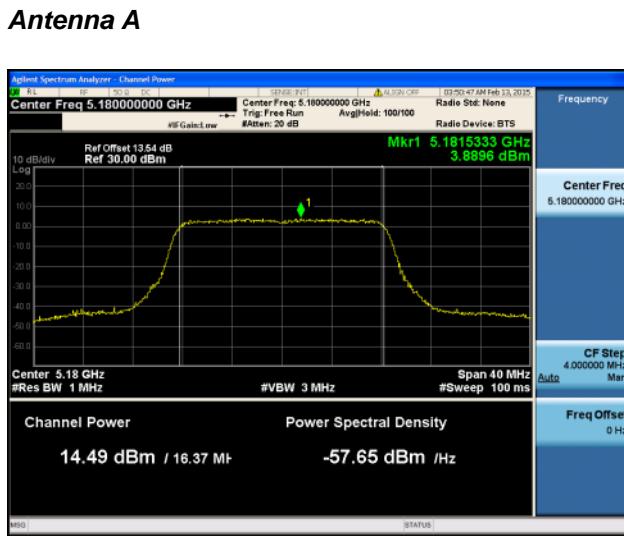
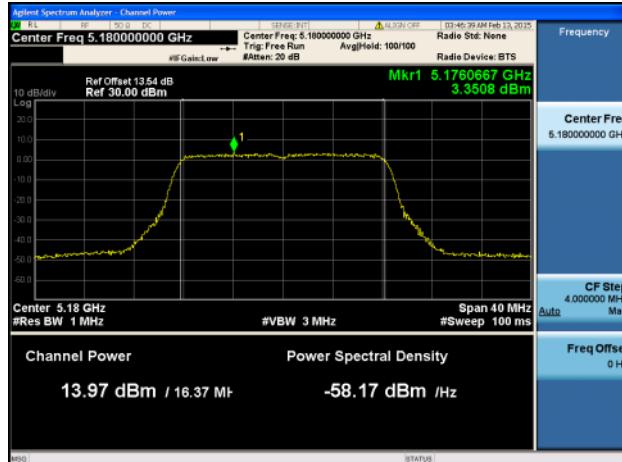
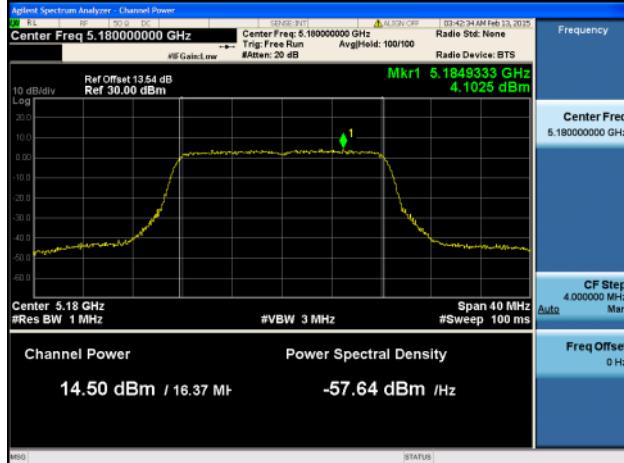


Antenna A

Peak Output Power / PSD, 5180 MHz, 6 to 54 Mbps
**Antenna A****Antenna B**

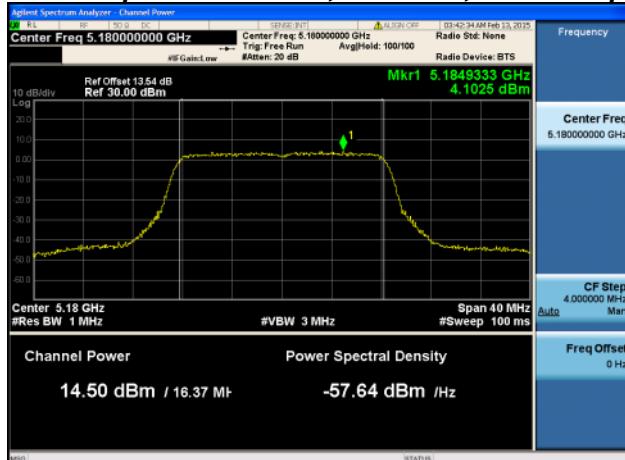
Peak Output Power / PSD, 5180 MHz, 6 to 54 Mbps**Antenna A****Antenna B****Antenna C**

Peak Output Power / PSD, 5180 MHz, 6 to 54 Mbps

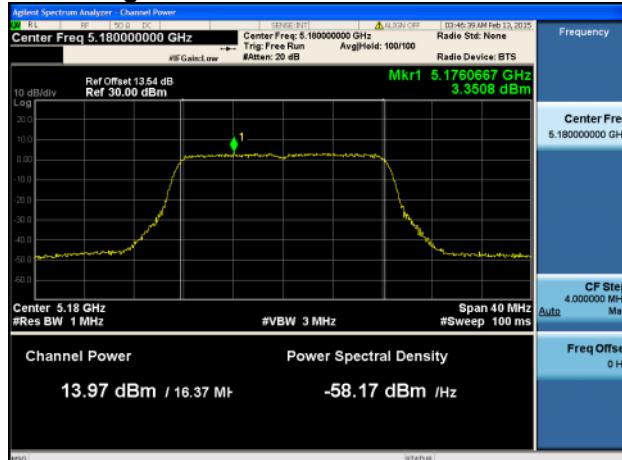




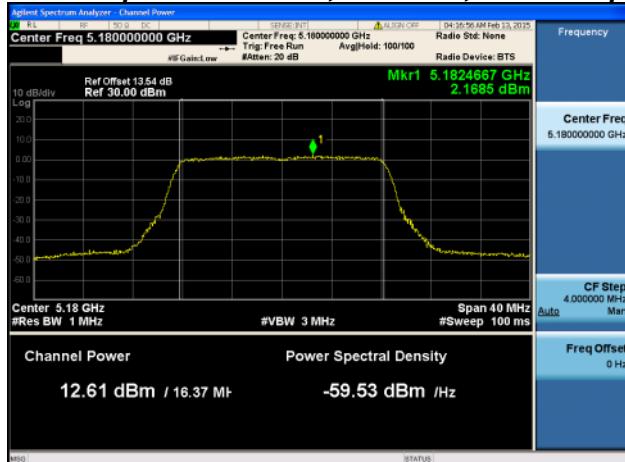
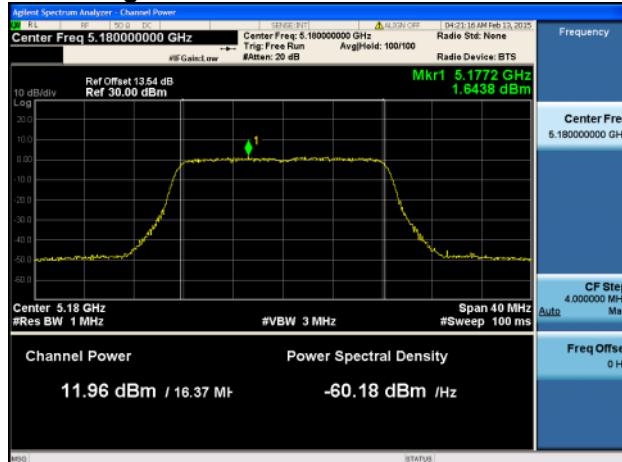
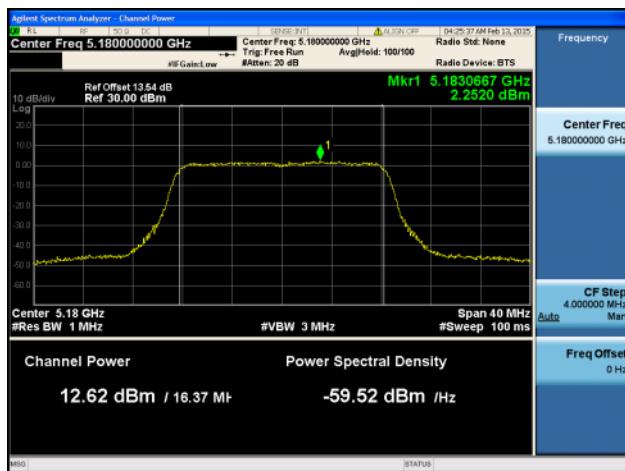
Peak Output Power / PSD, 5180 MHz, 6 to 54 Mbps Beam Forming



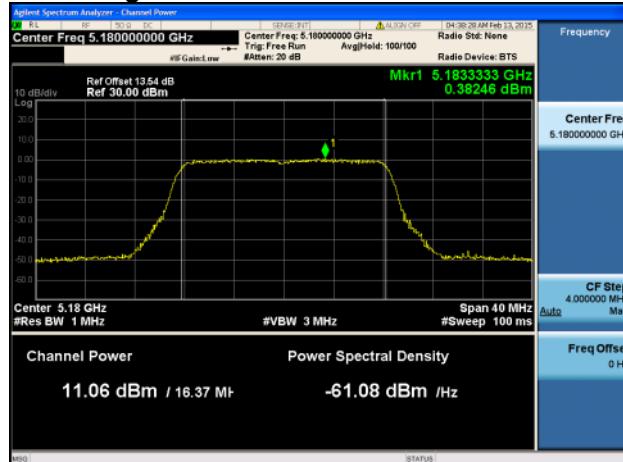
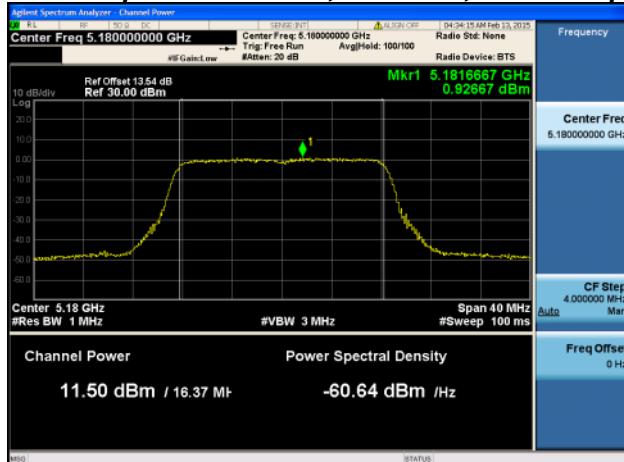
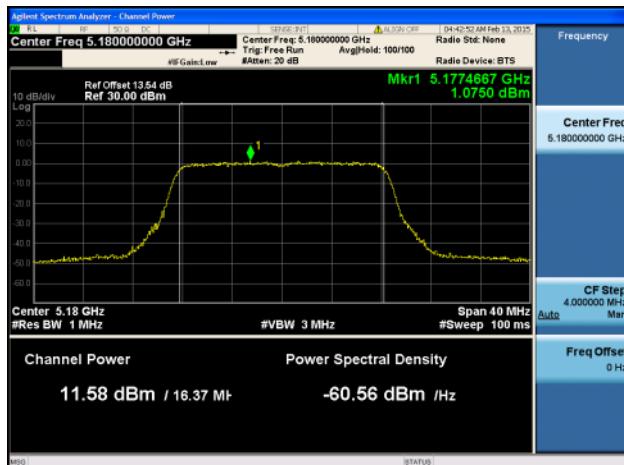
Antenna A



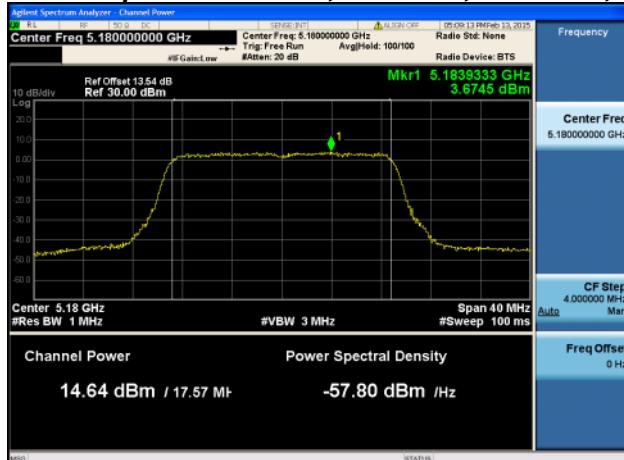
Antenna B

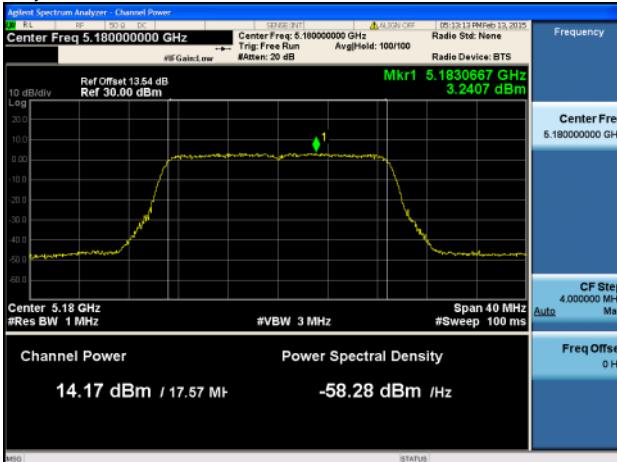
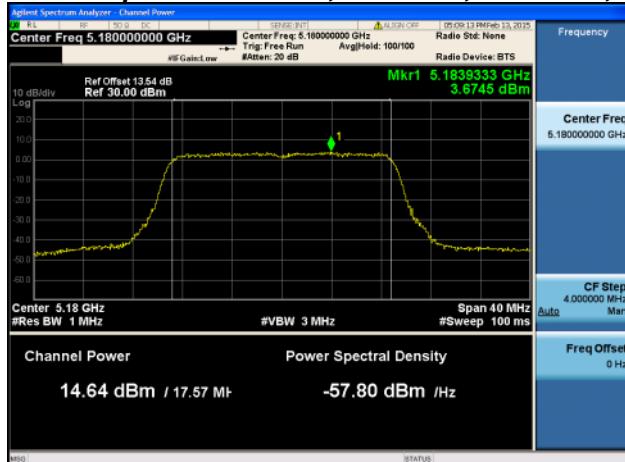
Peak Output Power / PSD, 5180 MHz, 6 to 54 Mbps Beam Forming
**Antenna A****Antenna B****Antenna C**

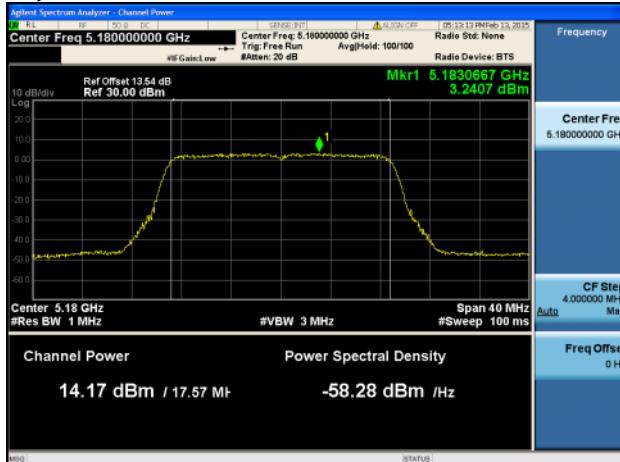
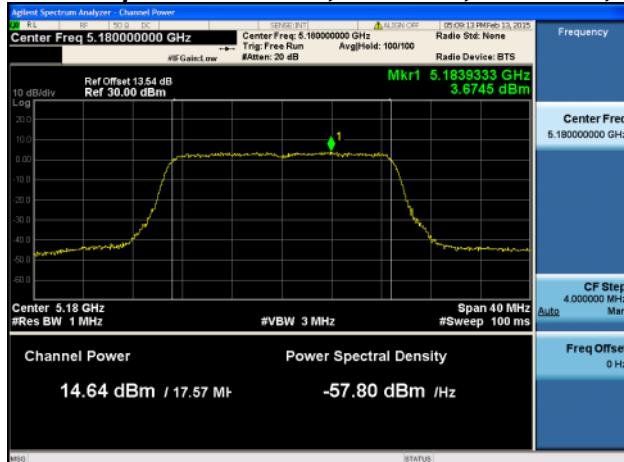
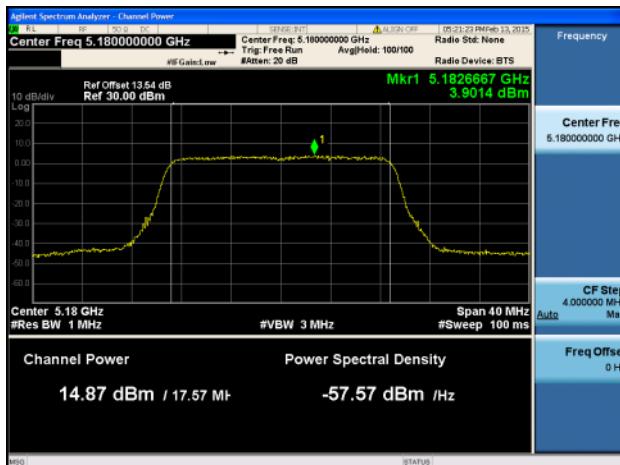
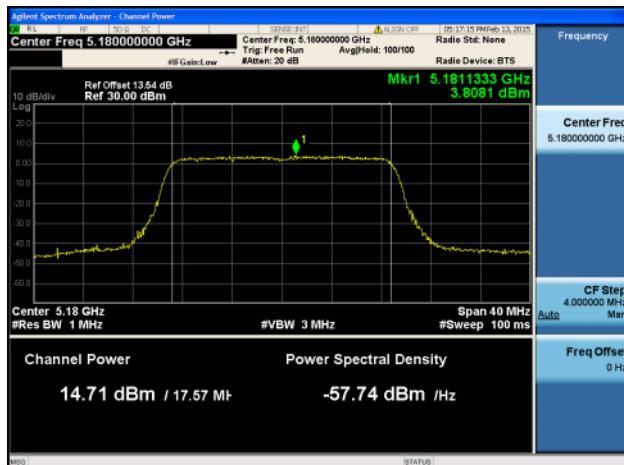
Peak Output Power / PSD, 5180 MHz, 6 to 54 Mbps Beam Forming

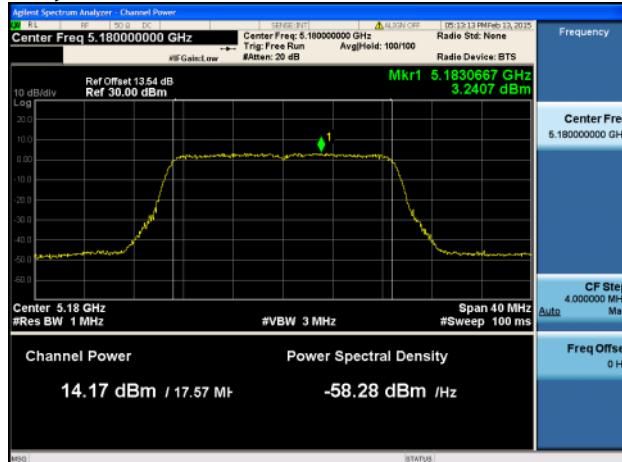
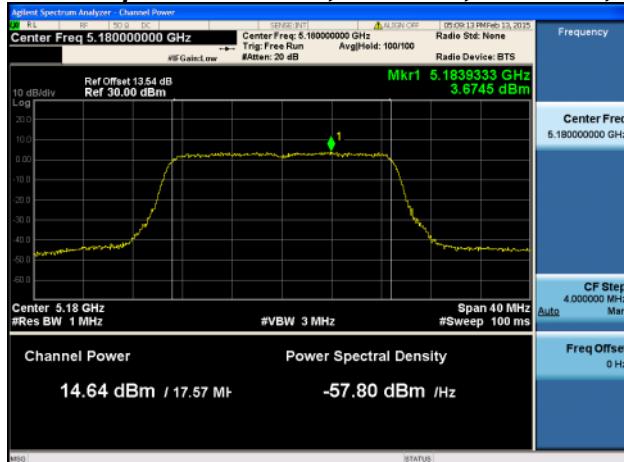
**Antenna A****Antenna B****Antenna C****Antenna D**

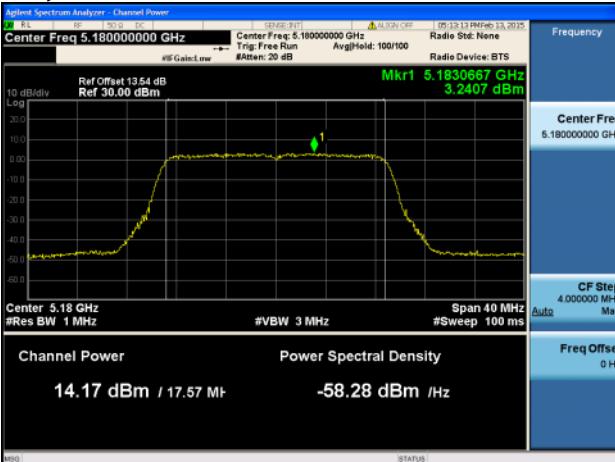
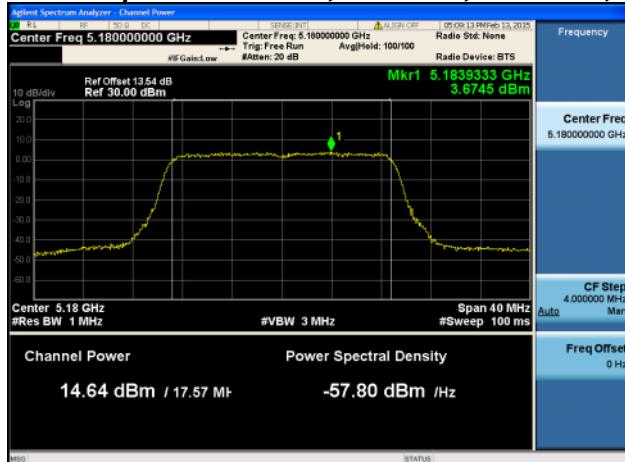
Peak Output Power / PSD, 5180 MHz, HT/VHT20, M0 to M7, M0 to M9 1ss
**Antenna A**

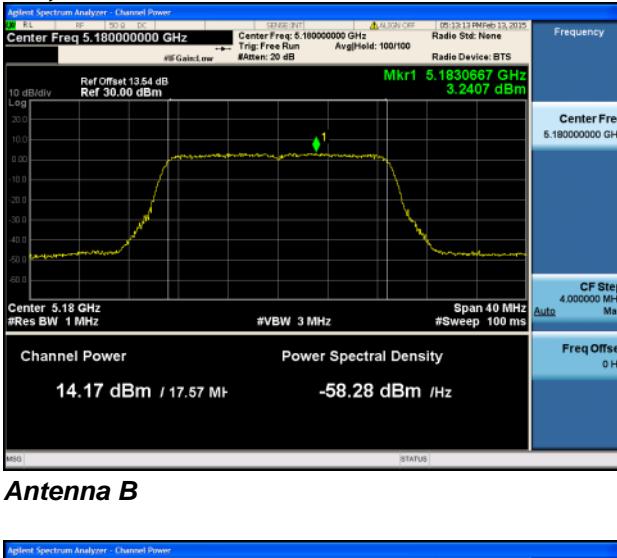
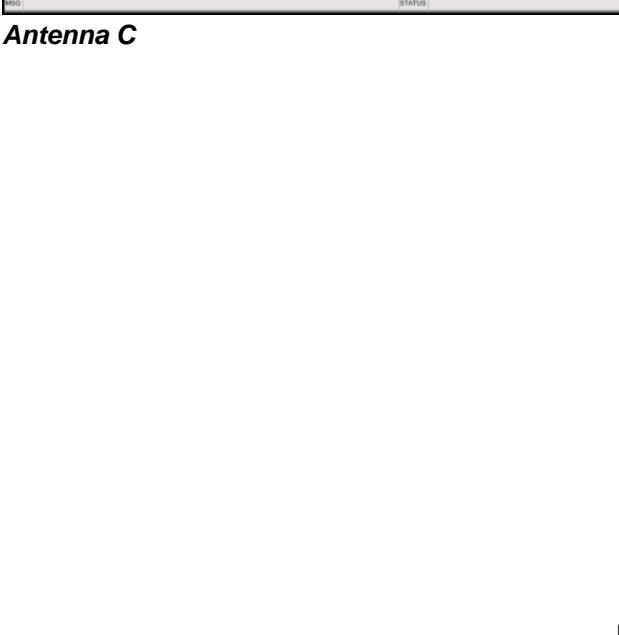
Peak Output Power / PSD, 5180 MHz, HT/VHT20, M0 to M7, M0 to M9 1ss
**Antenna A****Antenna B**

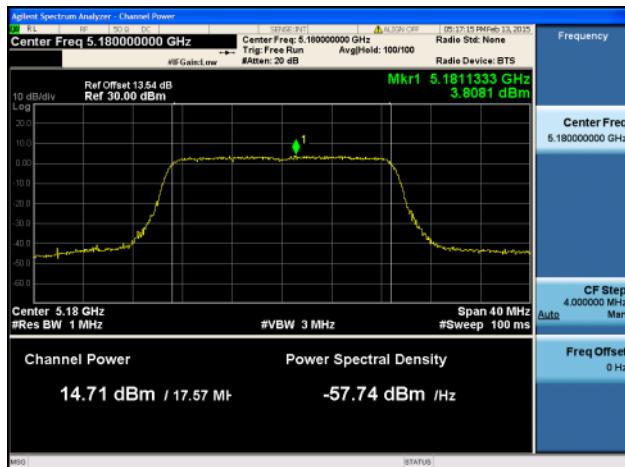
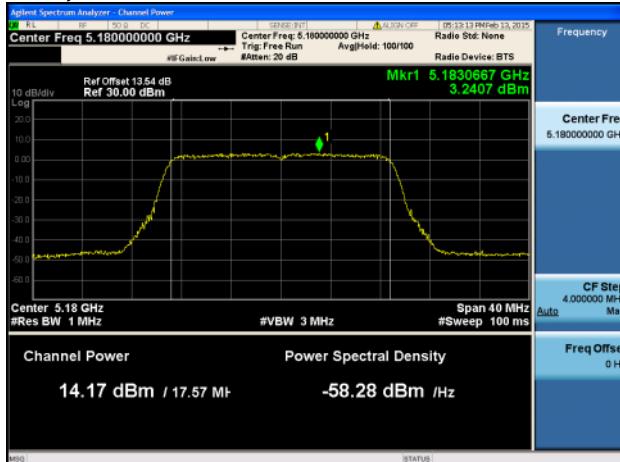
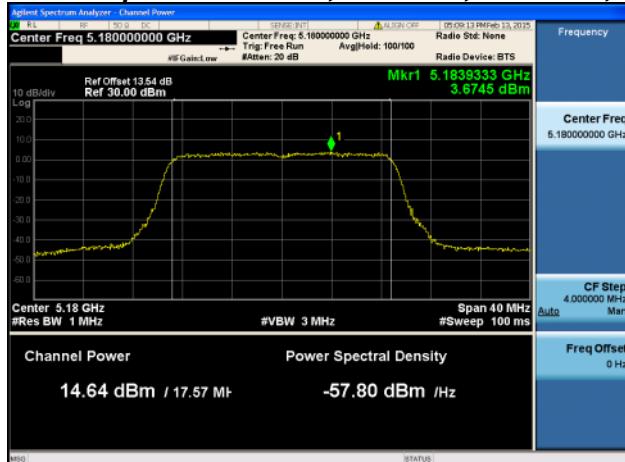
Peak Output Power / PSD, 5180 MHz, HT/VHT20, M0 to M7, M0 to M9 1ss
**Antenna C**

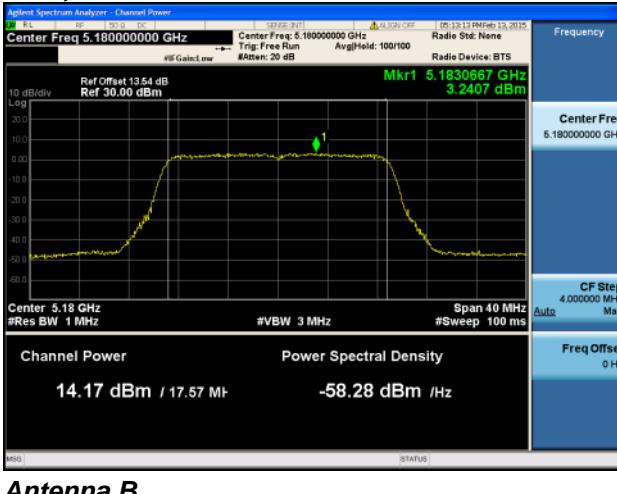
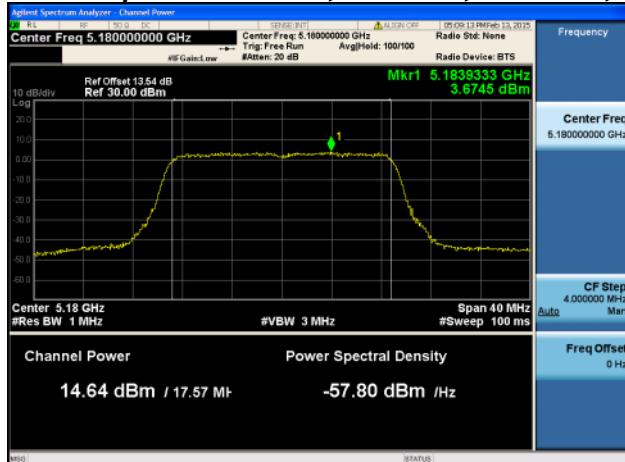
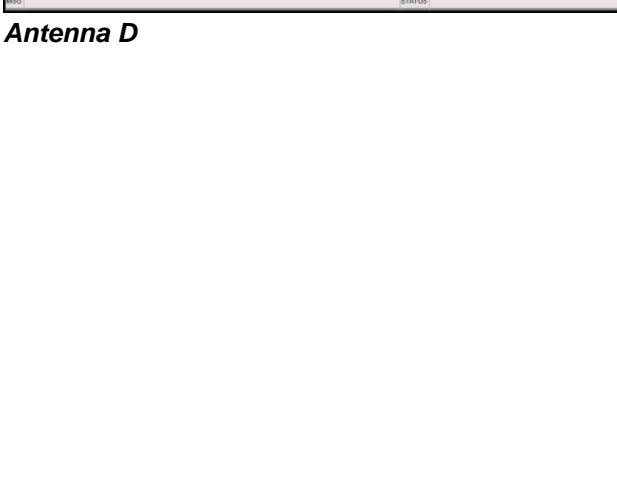
Peak Output Power / PSD, 5180 MHz, HT/VHT20, M0 to M7, M0 to M9 1ss
**Antenna A****Antenna B****Antenna C****Antenna D**

Peak Output Power / PSD, 5180 MHz, HT/VHT20, M8 to M15, M0 to M9 2ss


Peak Output Power / PSD, 5180 MHz, HT/VHT20, M8 to M15, M0 to M9 2ss


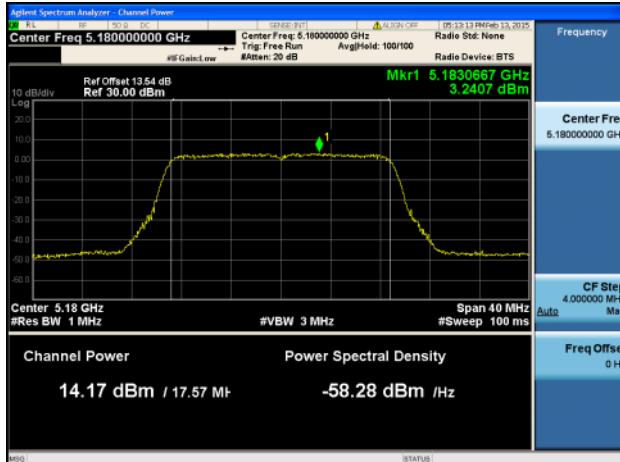
Peak Output Power / PSD, 5180 MHz, HT/VHT20, M8 to M15, M0 to M9 2ss

Antenna C


Peak Output Power / PSD, 5180 MHz, HT/VHT20, M16 to M23, M0 to M9 3ss


Peak Output Power / PSD, 5180 MHz, HT/VHT20, M16 to M23, M0 to M9 3ss

Antenna C


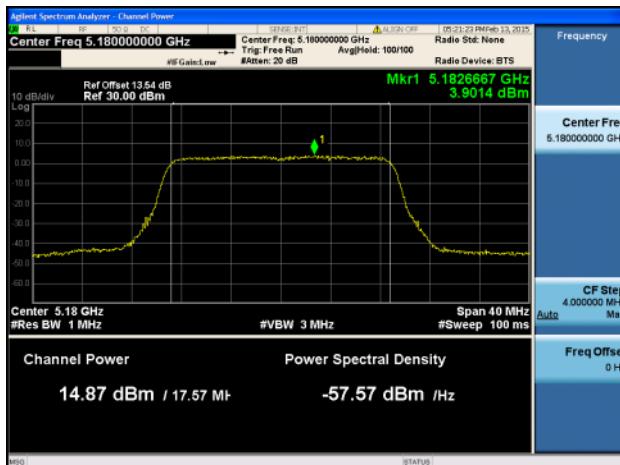
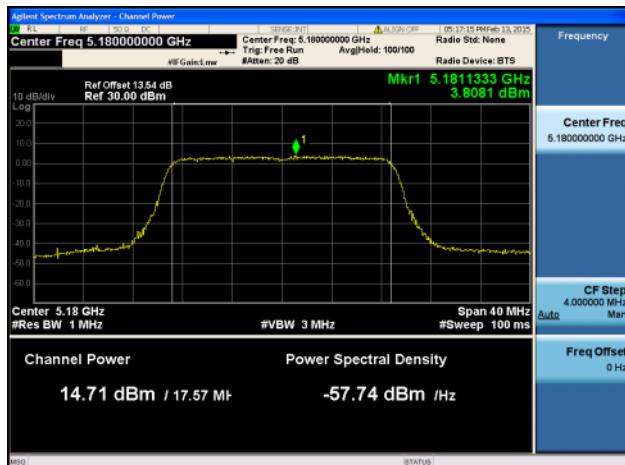


Peak Output Power / PSD, 5180 MHz, VHT20, M0 to M9 4ss



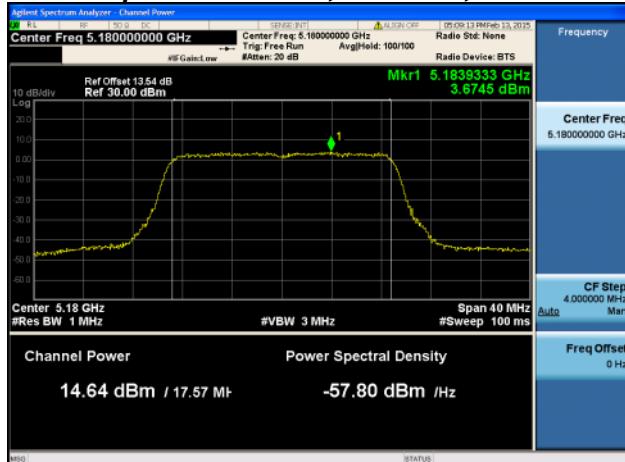
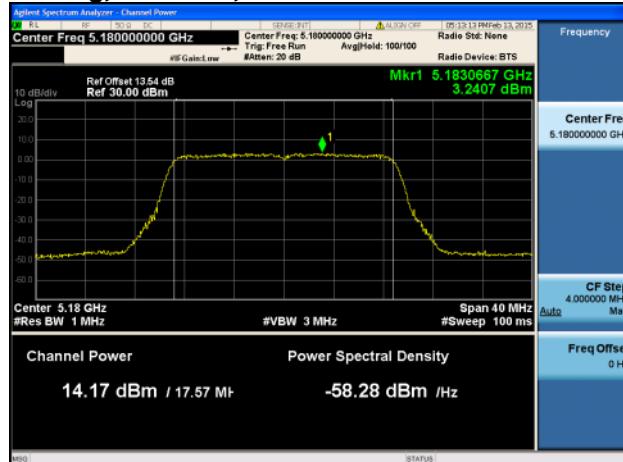
Antenna A

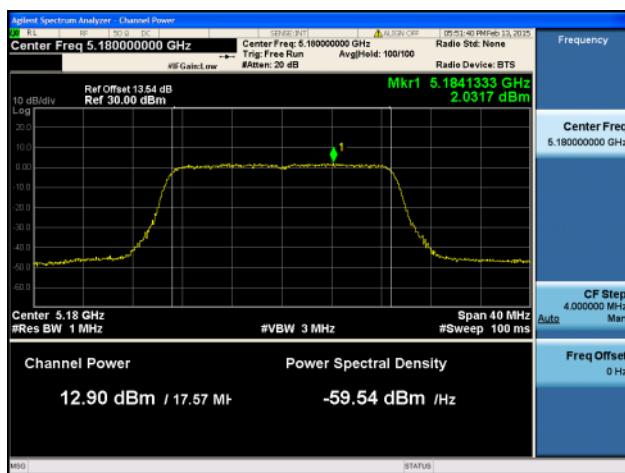
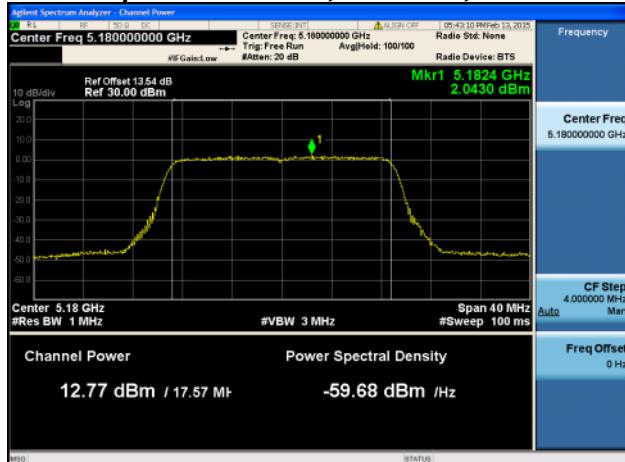
Antenna B

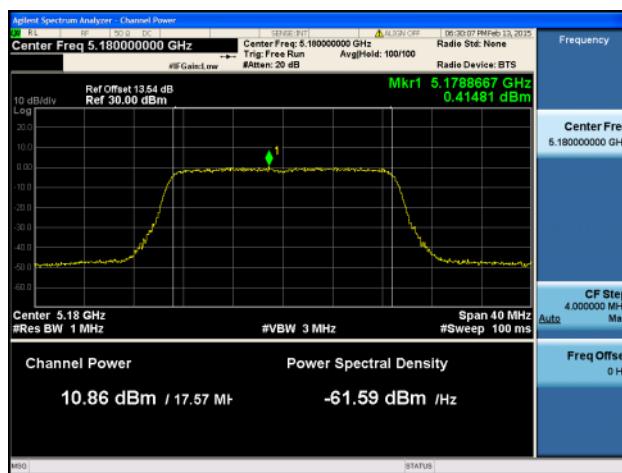
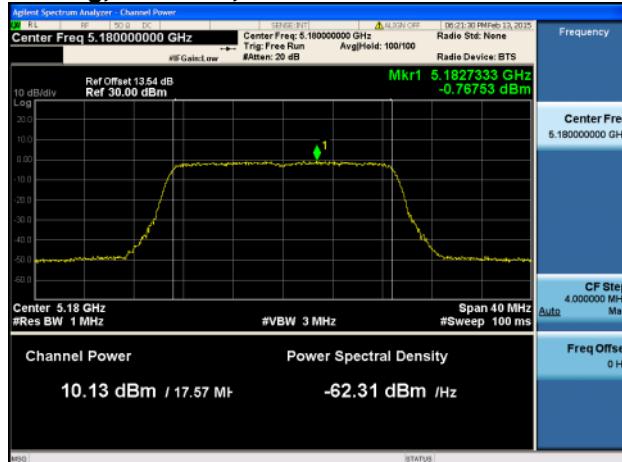
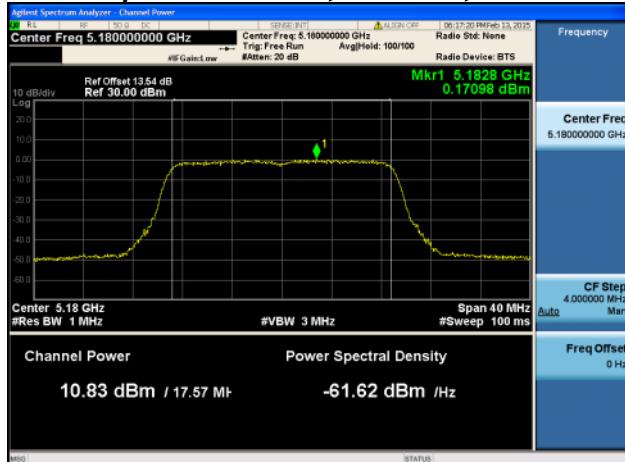


Antenna C

Antenna D

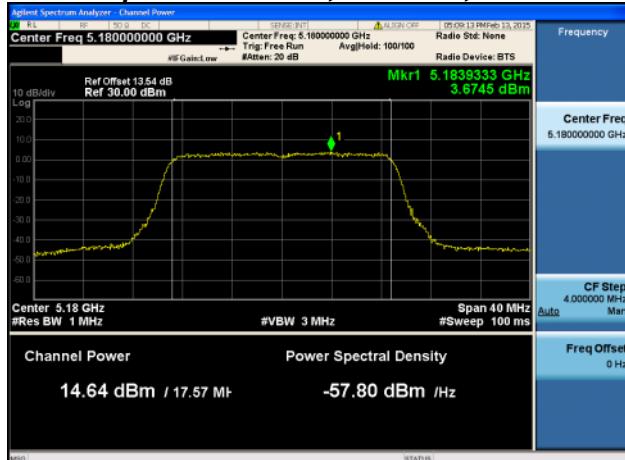
Peak Output Power / PSD, 5180 MHz, HT/VHT20 Beam Forming, M0 to M7, M0 to M9 1ss
**Antenna A****Antenna B**

Peak Output Power / PSD, 5180 MHz, HT/VHT20 Beam Forming, M0 to M7, M0 to M9 1ss

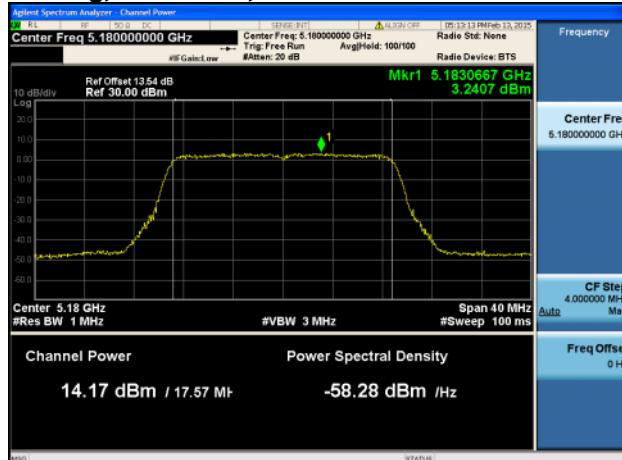
Peak Output Power / PSD, 5180 MHz, HT/VHT20 Beam Forming, M0 to M7, M0 to M9 1ss




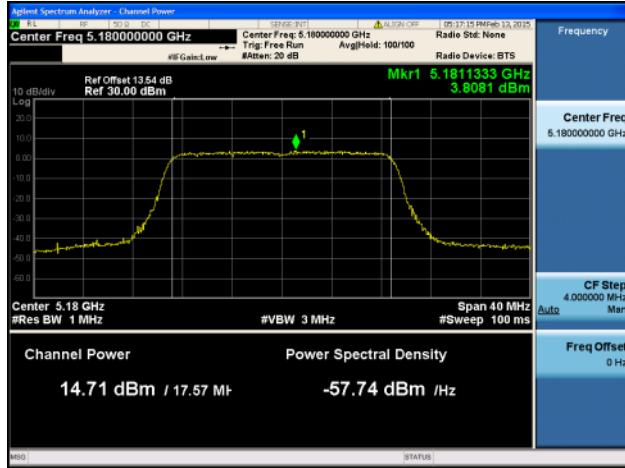
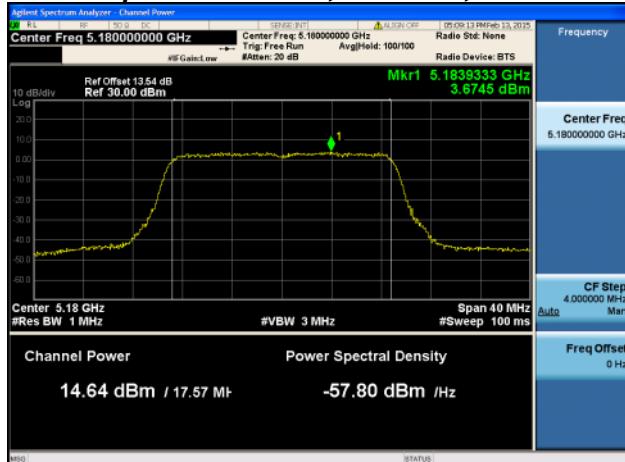
Peak Output Power / PSD, 5180 MHz, HT/VHT20 Beam Forming, M8 to M15, M0 to M9 2ss

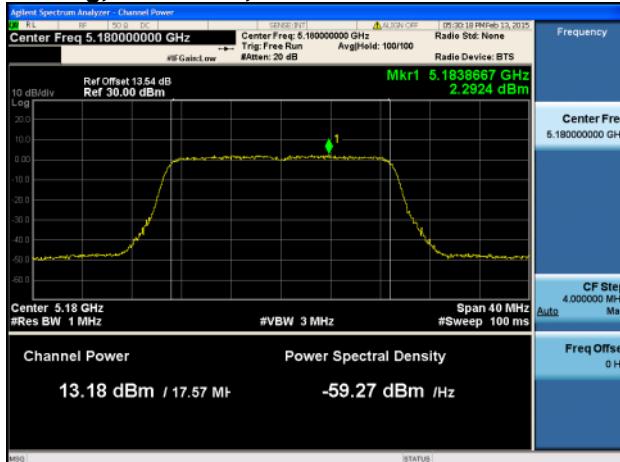
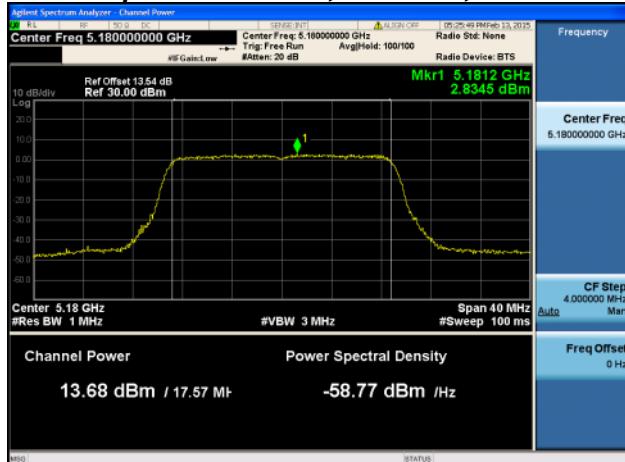


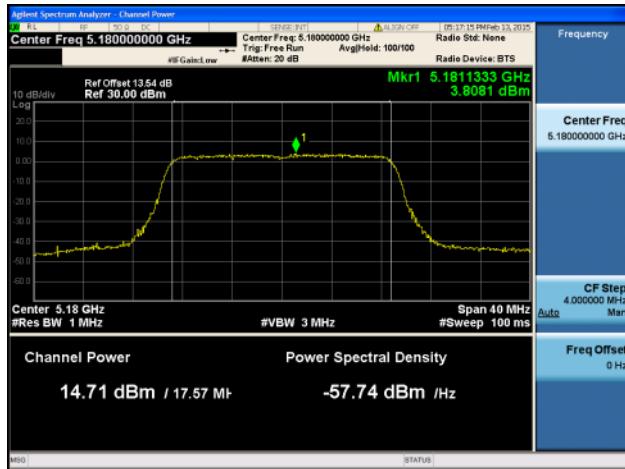
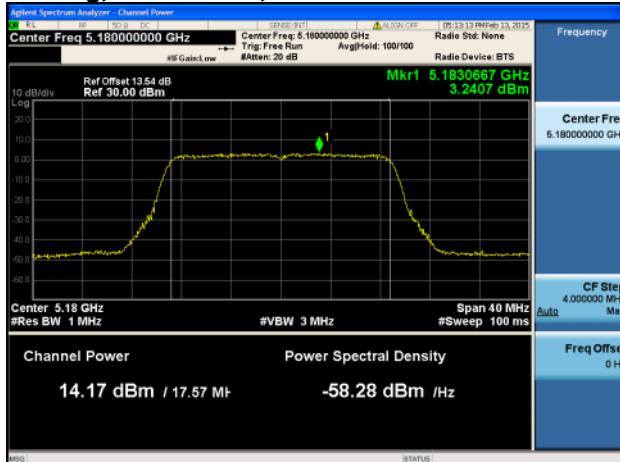
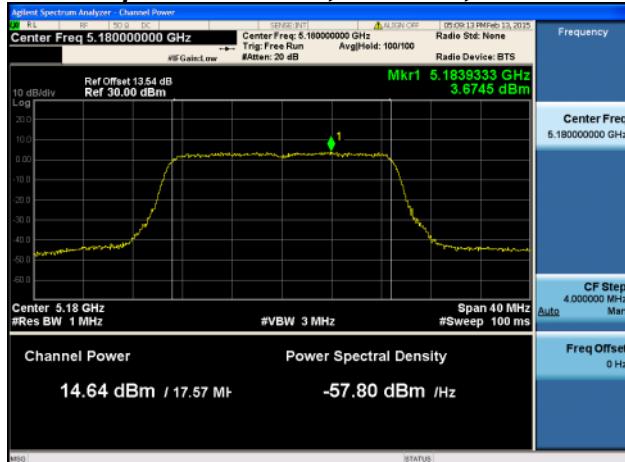
Antenna A

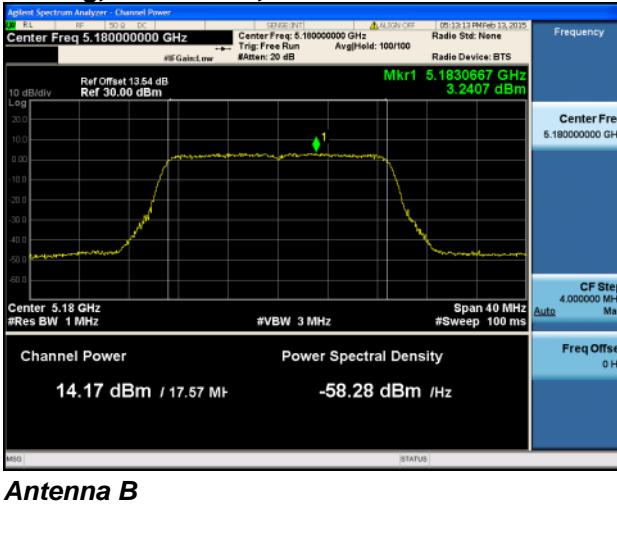
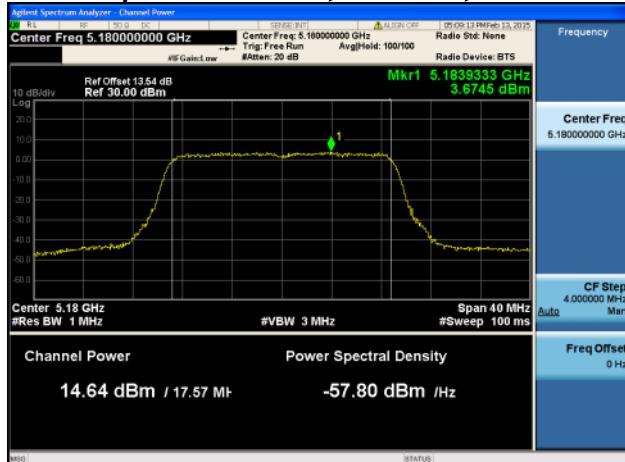
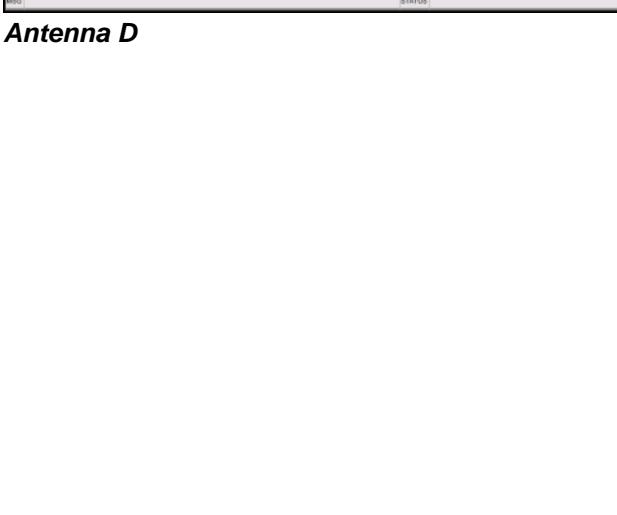


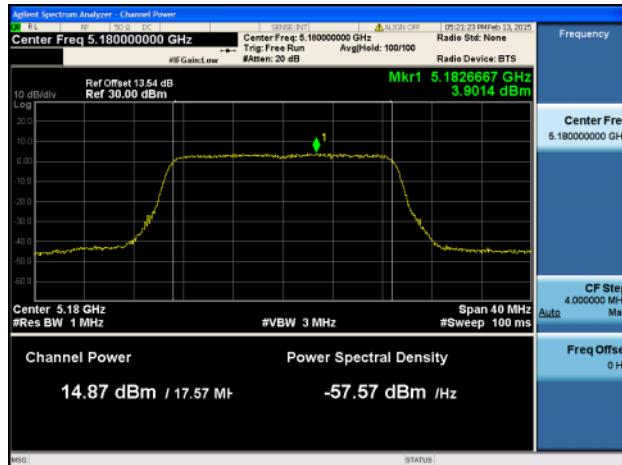
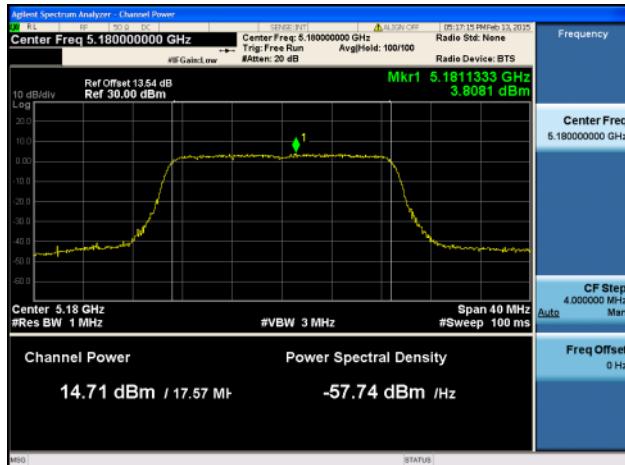
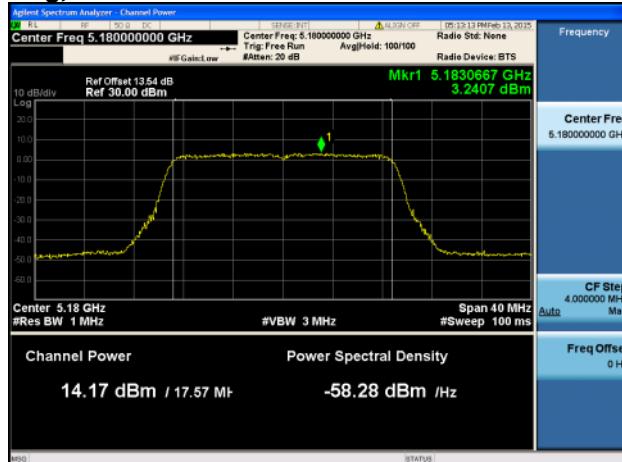
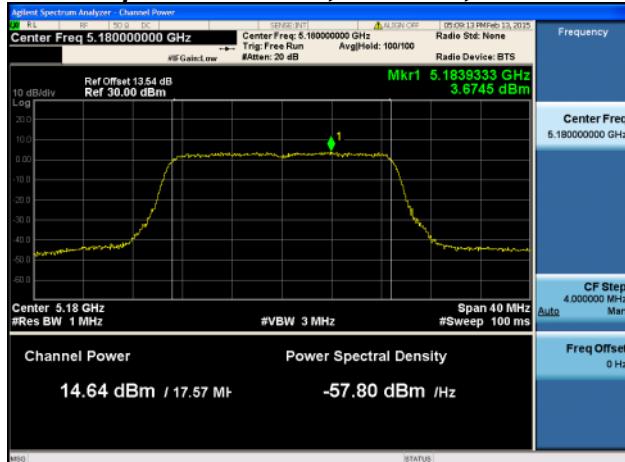
Antenna B

Peak Output Power / PSD, 5180 MHz, HT/VHT20 Beam Forming, M8 to M15, M0 to M9 2ss


Peak Output Power / PSD, 5180 MHz, HT/VHT20 Beam Forming, M8 to M15, M0 to M9 2ss
**Antenna A****Antenna B****Antenna C****Antenna D**

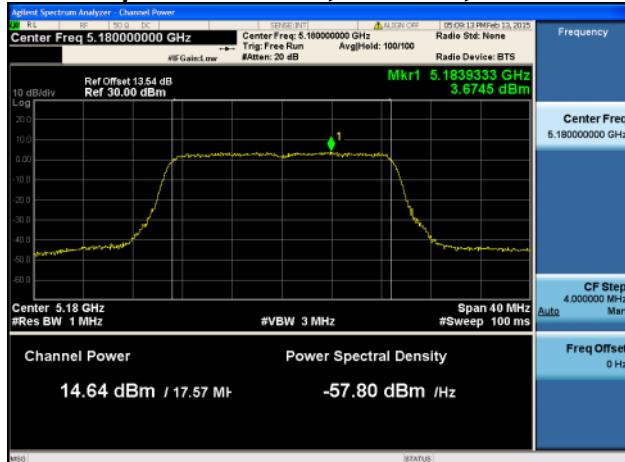
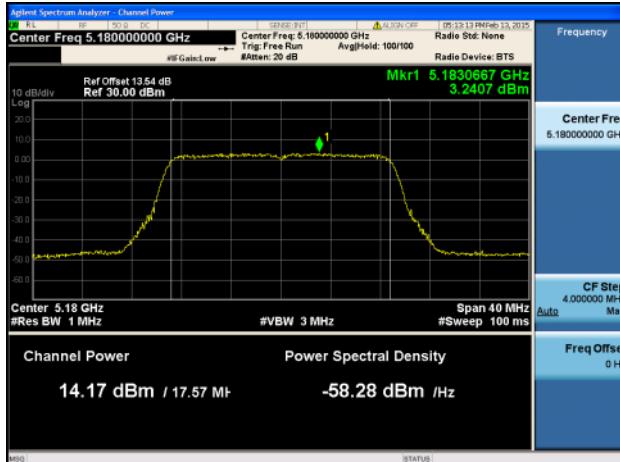
Peak Output Power / PSD, 5180 MHz, HT/VHT20 Beam Forming, M16 to M23, M0 to M9 3ss


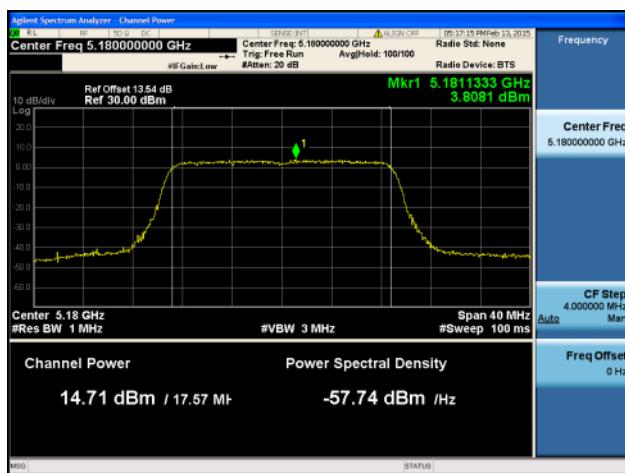
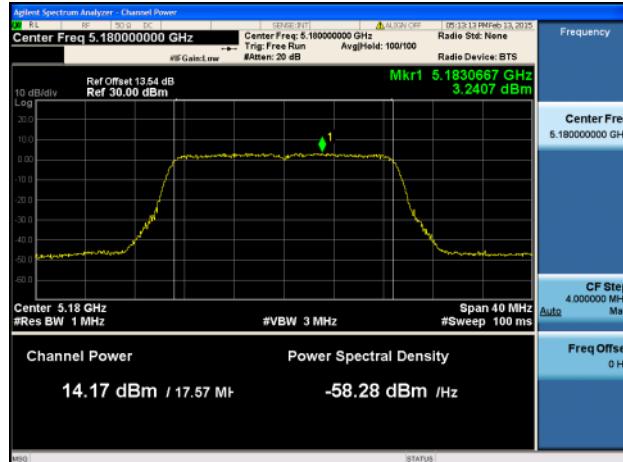
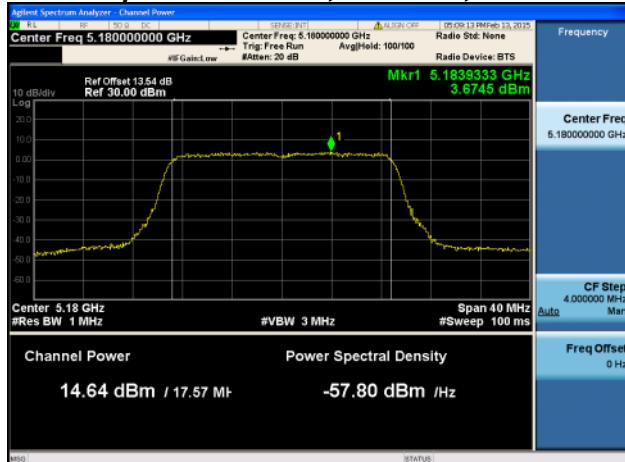
Peak Output Power / PSD, 5180 MHz, HT/VHT20 Beam Forming, M16 to M23, M0 to M9 3ss
**Antenna C**

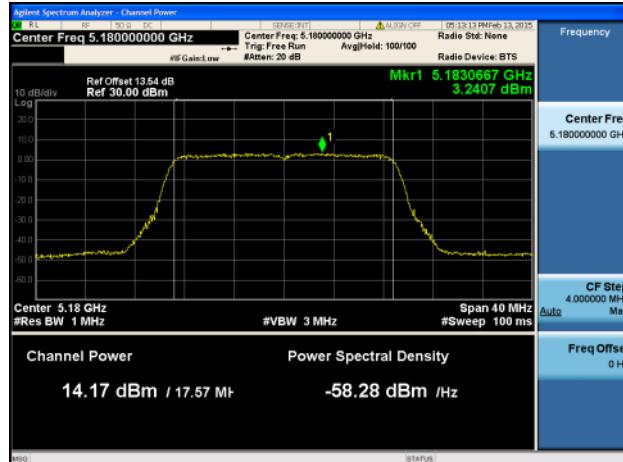
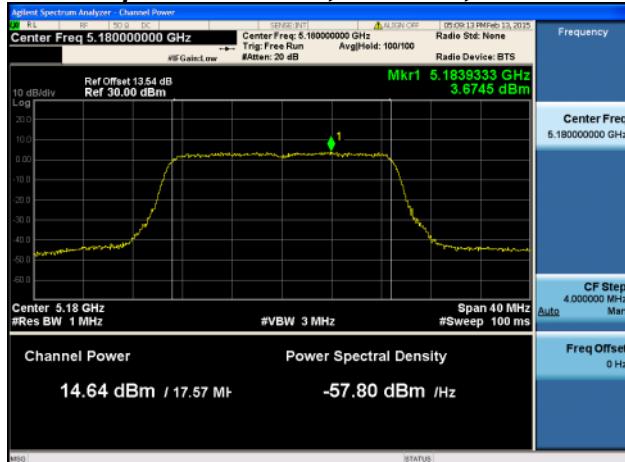
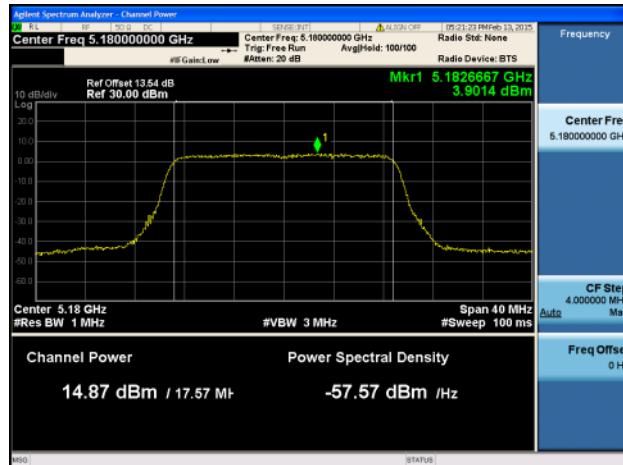
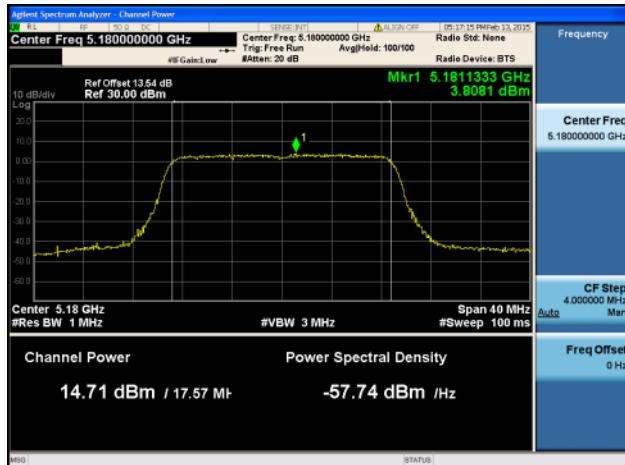
Peak Output Power / PSD, 5180 MHz, VHT20 Beam Forming, M0 to M9 4ss




Peak Output Power / PSD, 5180 MHz, HT/VHT20 STBC, M0 to M7

**Antenna A****Antenna B**

Peak Output Power / PSD, 5180 MHz, HT/VHT20 STBC, M0 to M7


Peak Output Power / PSD, 5180 MHz, HT/VHT20 STBC, M0 to M7

Antenna C


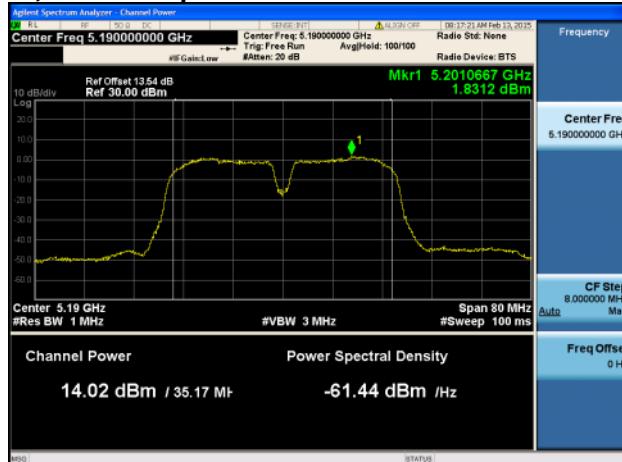
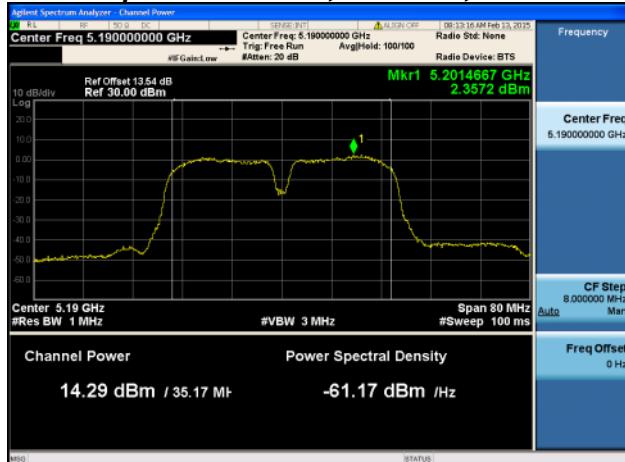
Peak Output Power / PSD, 5190 MHz, Non HT40 Duplicate, 6 to 54 Mbps

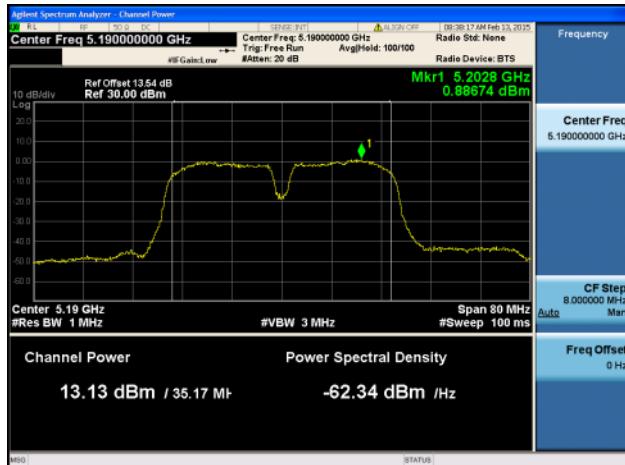
Antenna A



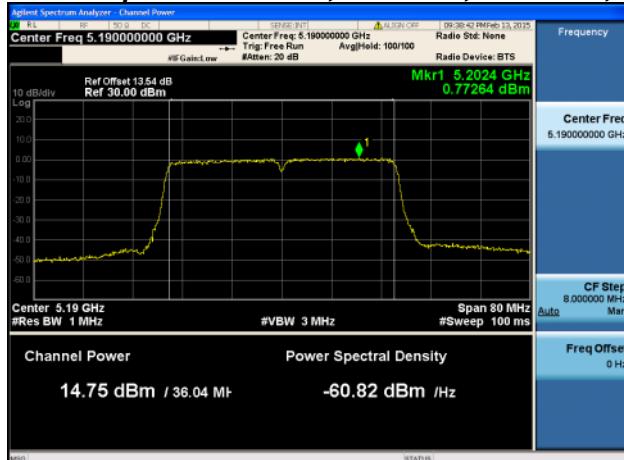
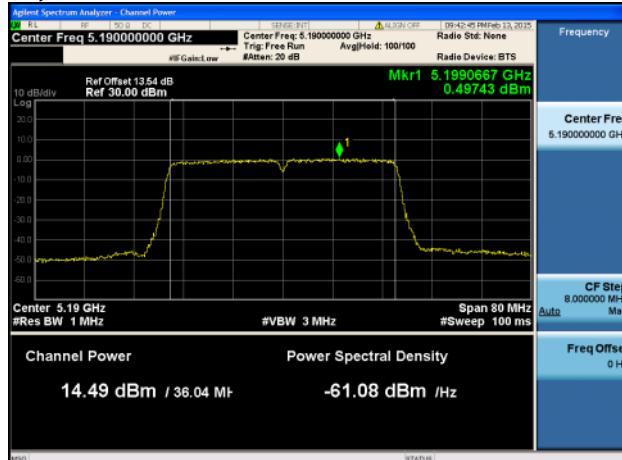
Peak Output Power / PSD, 5190 MHz, Non HT40 Duplicate, 6 to 54 Mbps

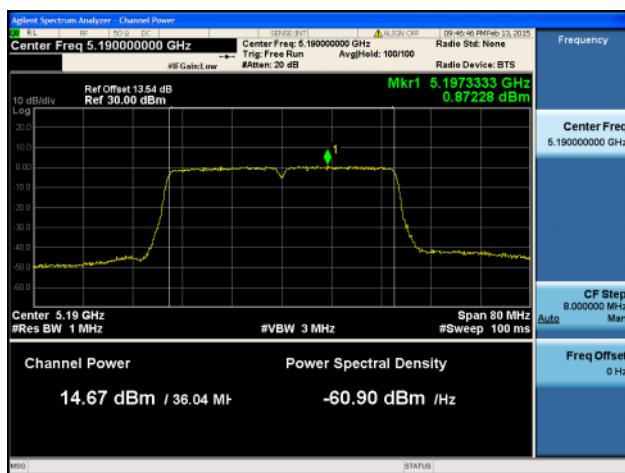
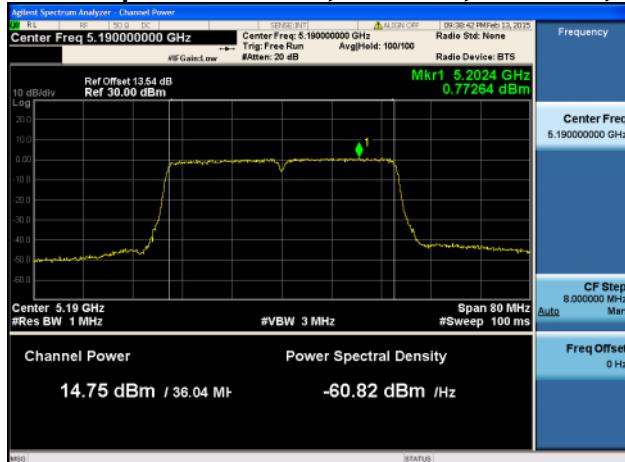


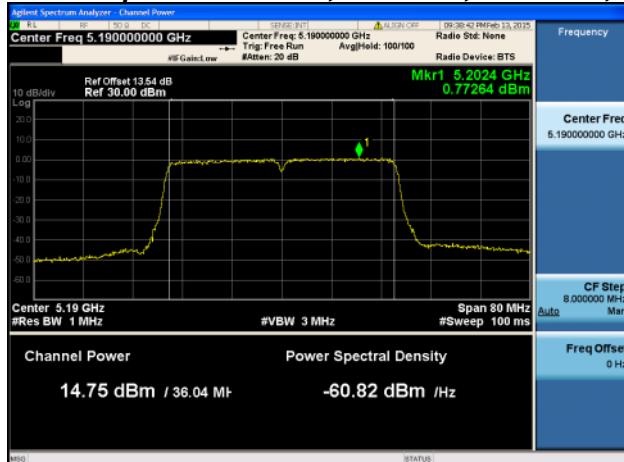
Peak Output Power / PSD, 5190 MHz, Non HT40 Duplicate, 6 to 54 Mbps


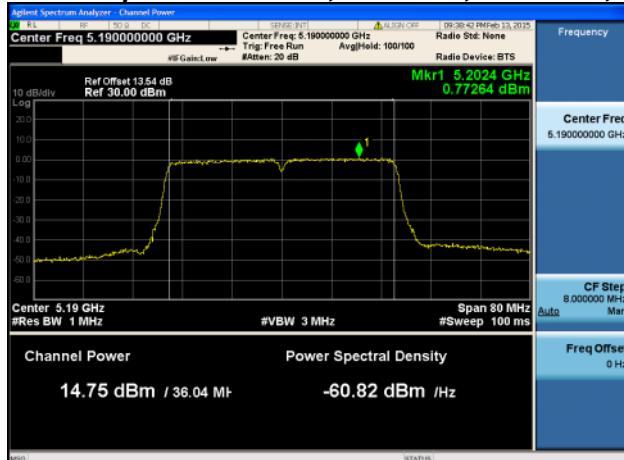
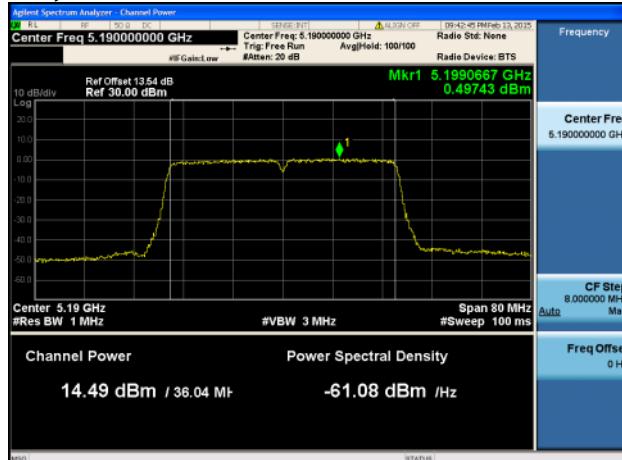
Peak Output Power / PSD, 5190 MHz, Non HT40 Duplicate, 6 to 54 Mbps
**Antenna C**

Peak Output Power / PSD, 5190 MHz, HT/VHT40, M0 to M7, M0 to M9 1ss
**Antenna A**

Peak Output Power / PSD, 5190 MHz, HT/VHT40, M0 to M7, M0 to M9 1ss
**Antenna A****Antenna B**

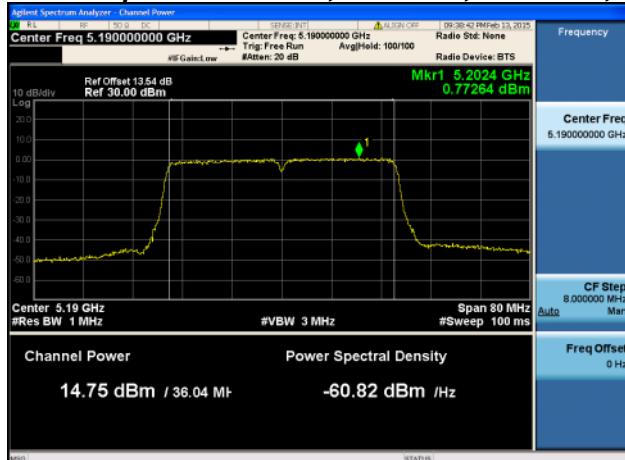
Peak Output Power / PSD, 5190 MHz, HT/VHT40, M0 to M7, M0 to M9 1ss


Peak Output Power / PSD, 5190 MHz, HT/VHT40, M0 to M7, M0 to M9 1ss
**Antenna A****Antenna B****Antenna C****Antenna D**

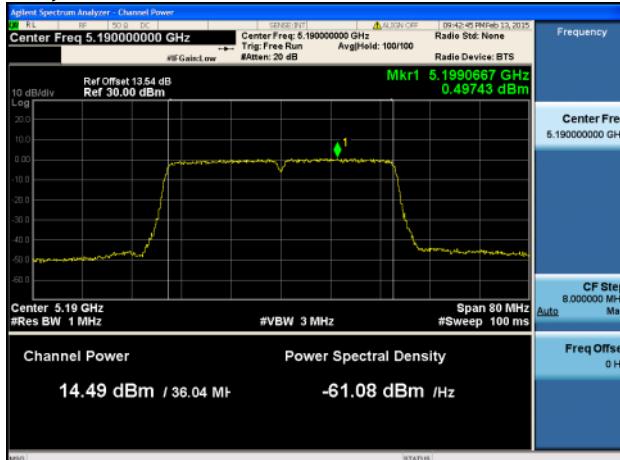
Peak Output Power / PSD, 5190 MHz, HT/VHT40, M8 to M15, M0 to M9 2ss
**Antenna A****Antenna B**



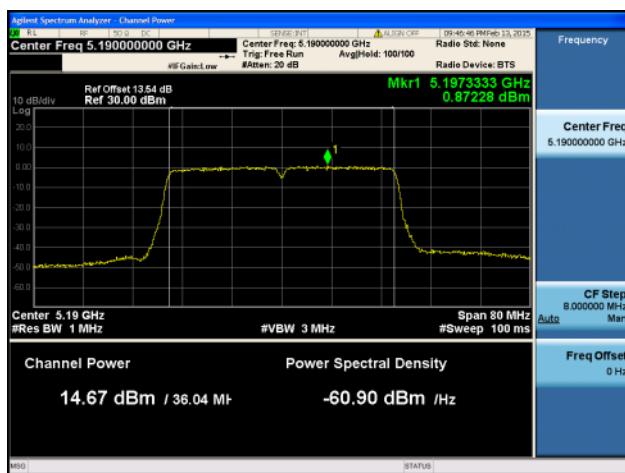
Peak Output Power / PSD, 5190 MHz, HT/VHT40, M8 to M15, M0 to M9 2ss



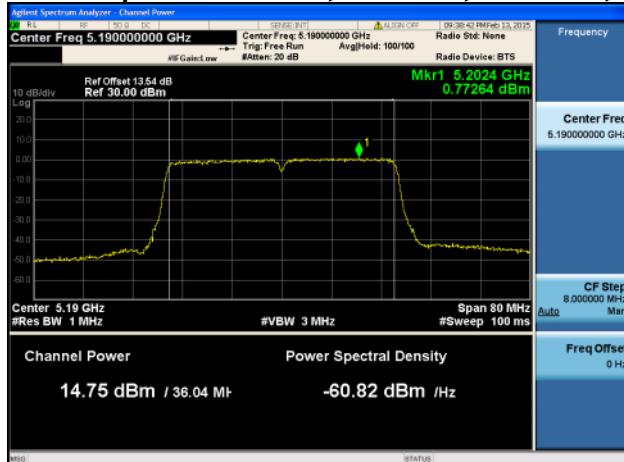
Antenna A

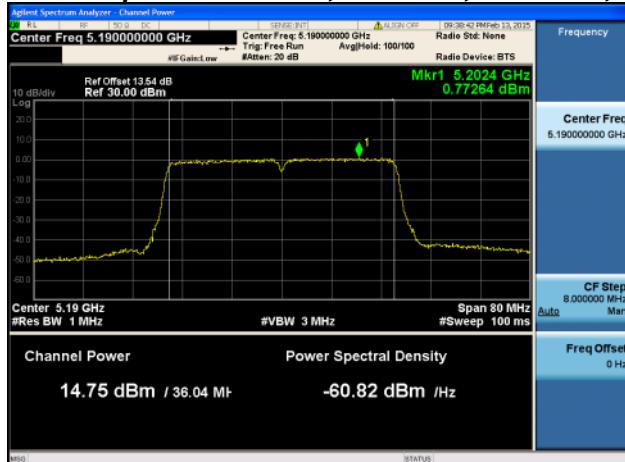


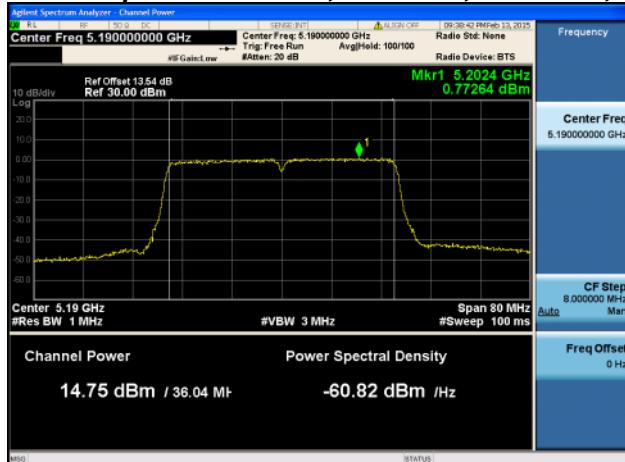
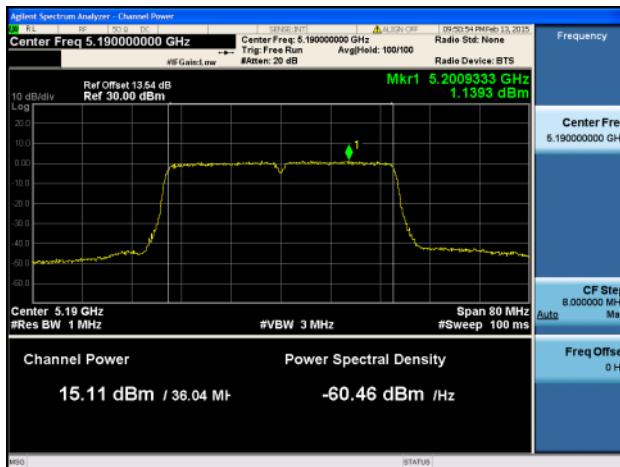
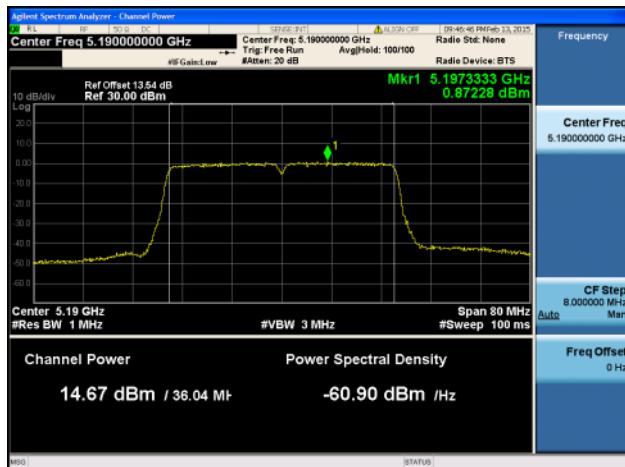
Antenna B

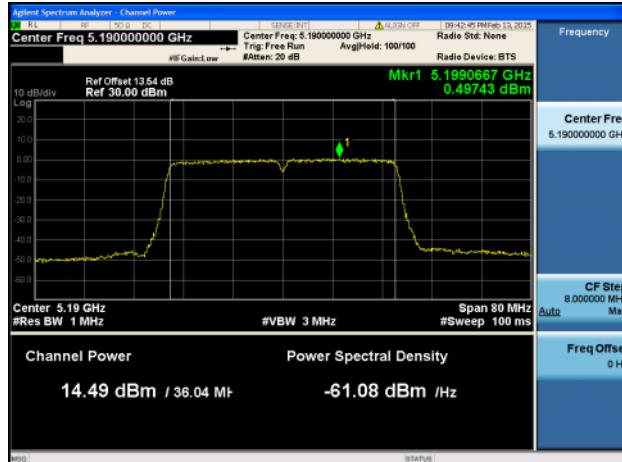
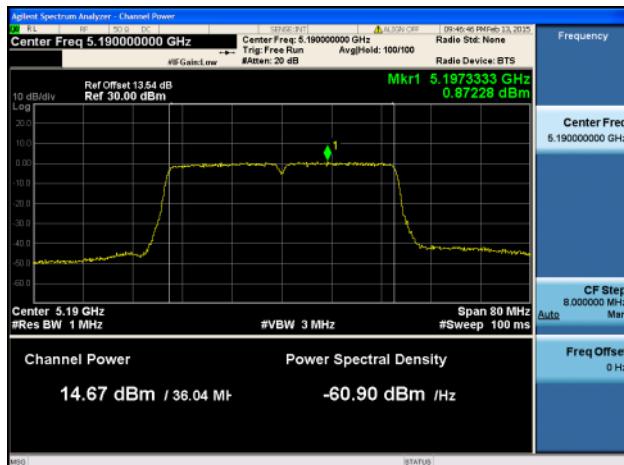


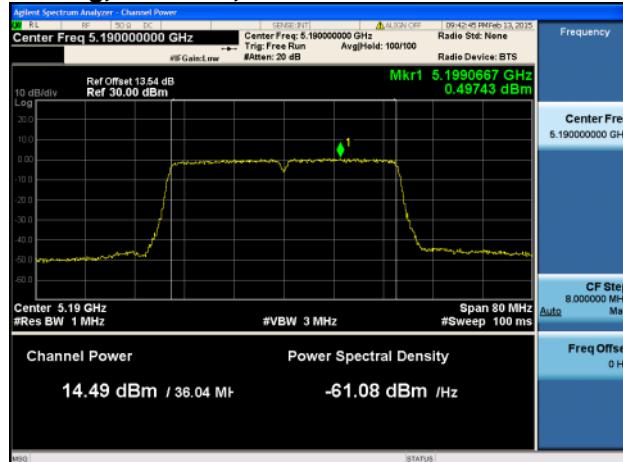
Antenna C

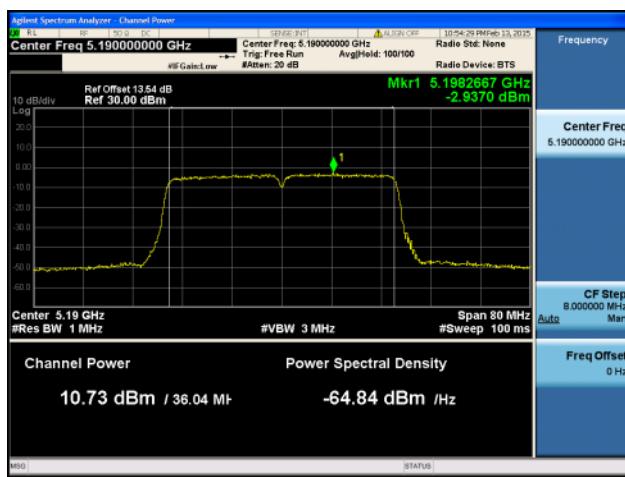
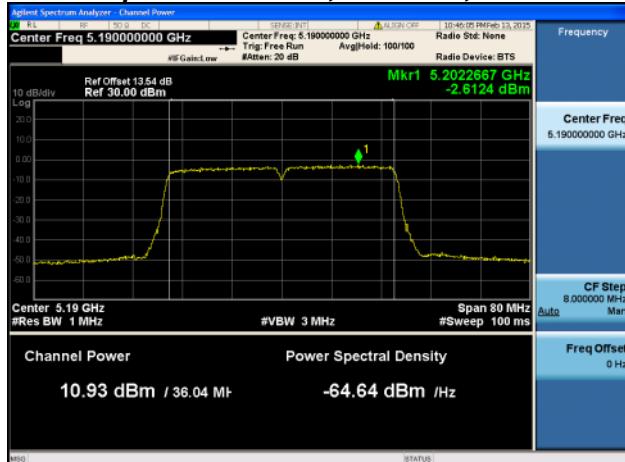
Peak Output Power / PSD, 5190 MHz, HT/VHT40, M8 to M15, M0 to M9 2ss
**Antenna A****Antenna B****Antenna C****Antenna D**

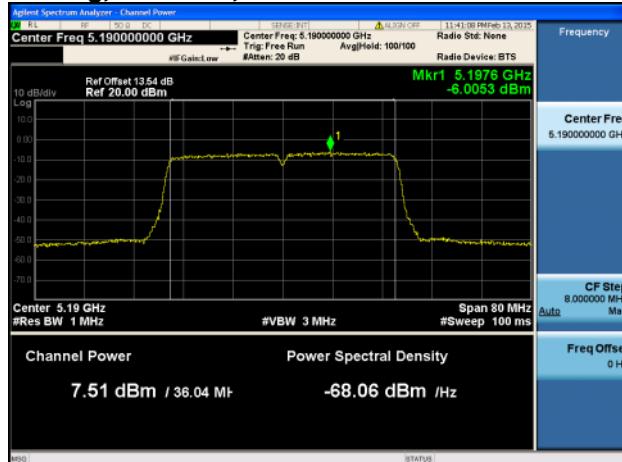
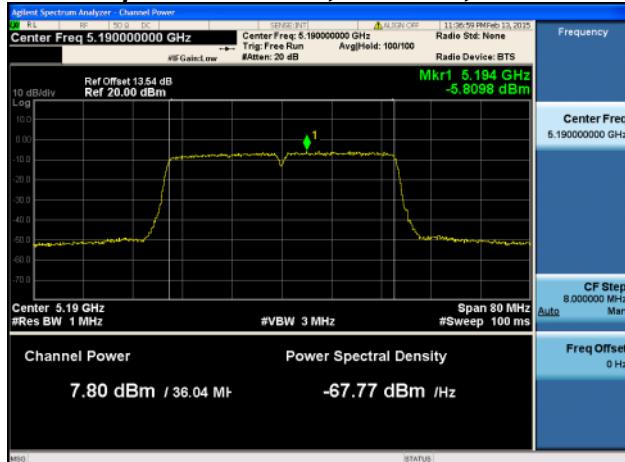
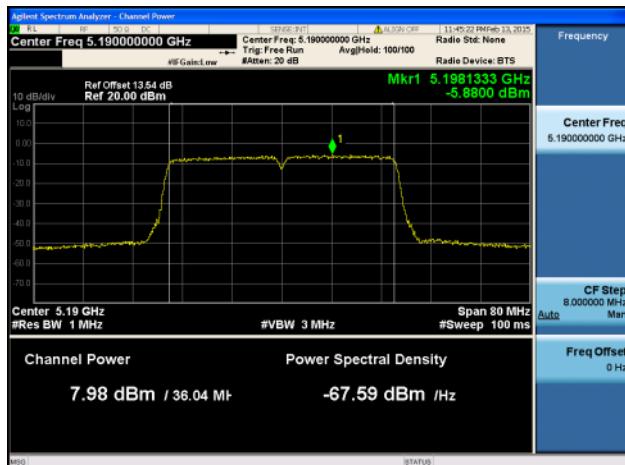
Peak Output Power / PSD, 5190 MHz, HT/VHT40, M16 to M23, M0 to M9 3ss


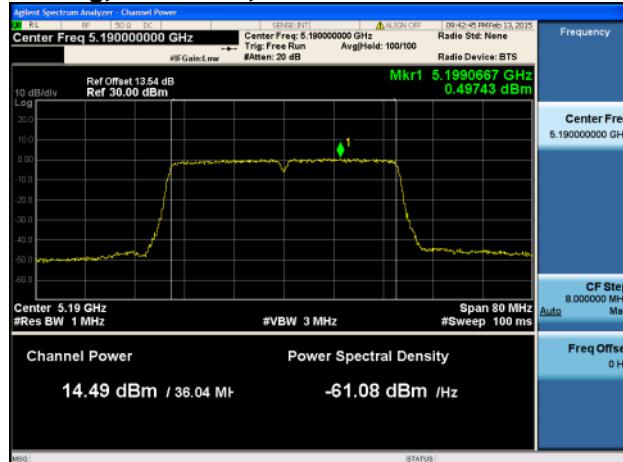
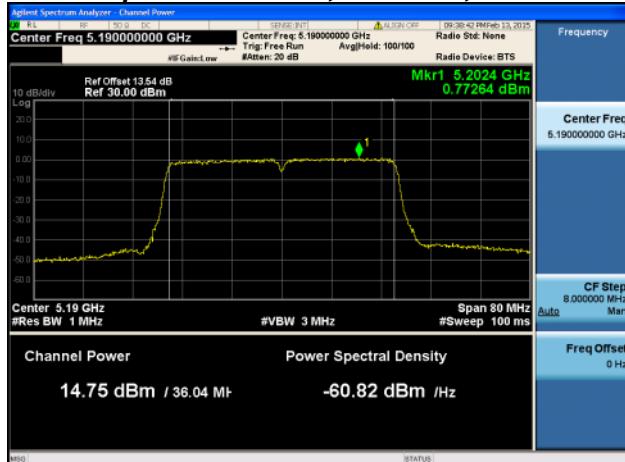
Peak Output Power / PSD, 5190 MHz, HT/VHT40, M16 to M23, M0 to M9 3ss
**Antenna A****Antenna B****Antenna C****Antenna D**

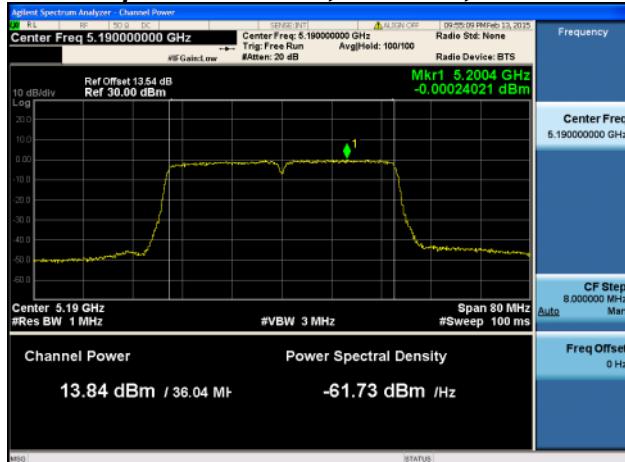
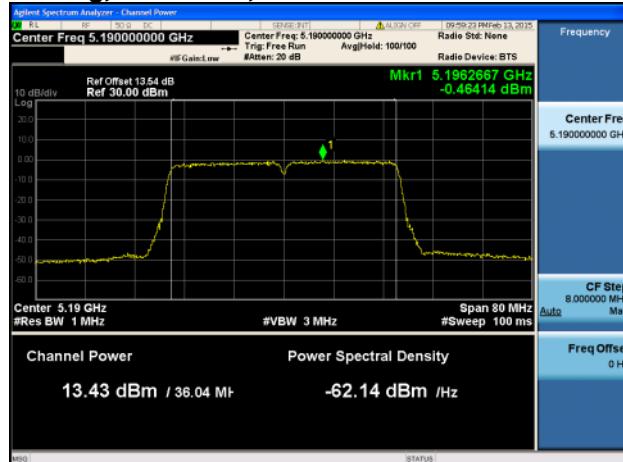
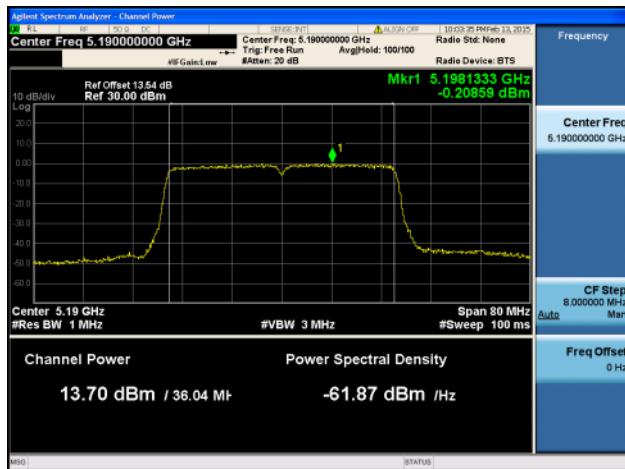
Peak Output Power / PSD, 5190 MHz, VHT40, M0 to M9 4ss
**Antenna A****Antenna B****Antenna C****Antenna D**

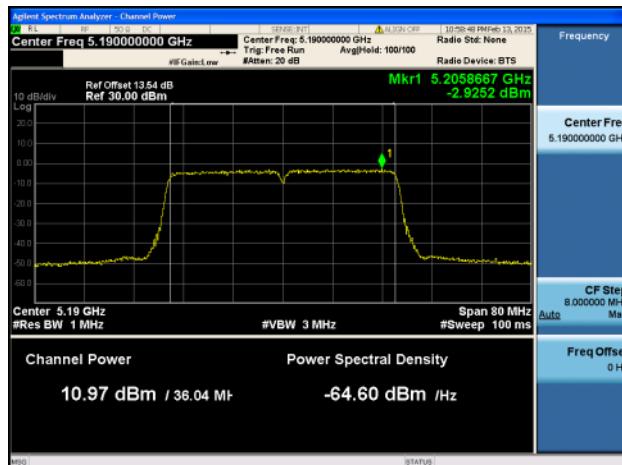
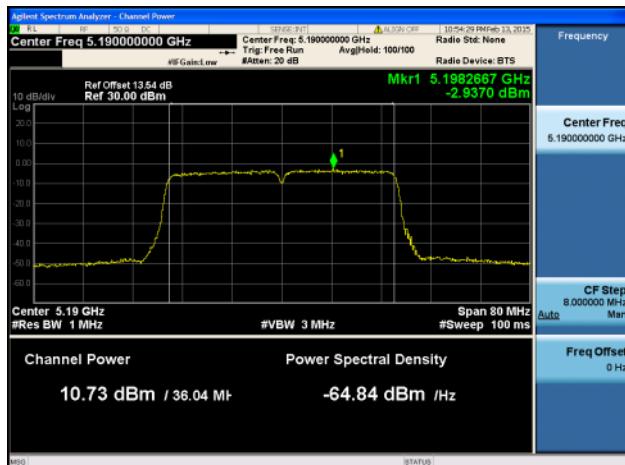
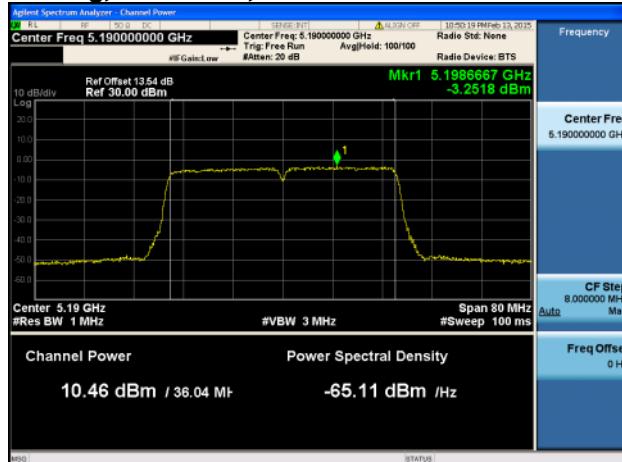
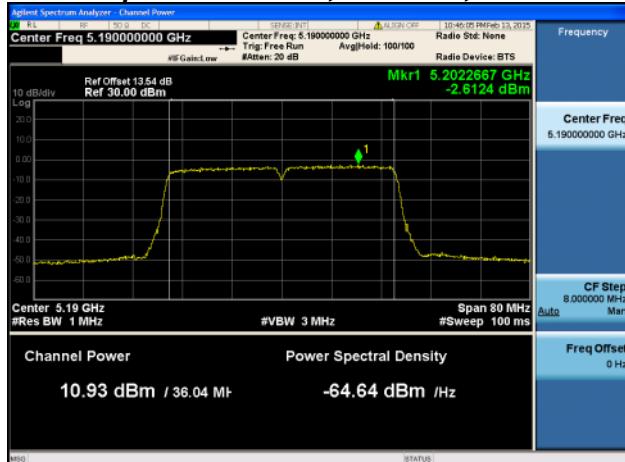
Peak Output Power / PSD, 5190 MHz, HT/VHT40 Beam Forming, M0 to M7, M0 to M9 1ss


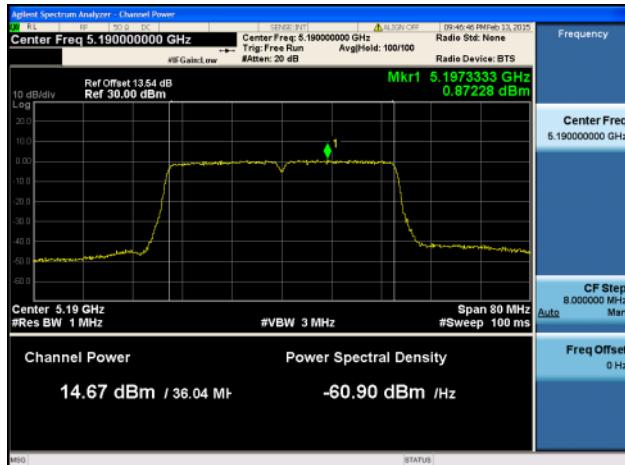
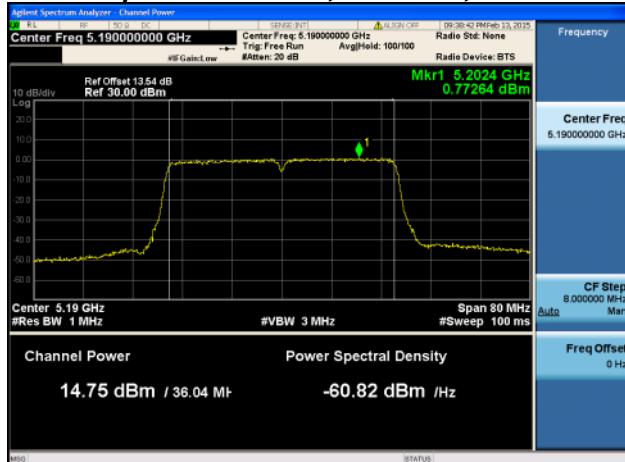
Peak Output Power / PSD, 5190 MHz, HT/VHT40 Beam Forming, M0 to M7, M0 to M9 1ss


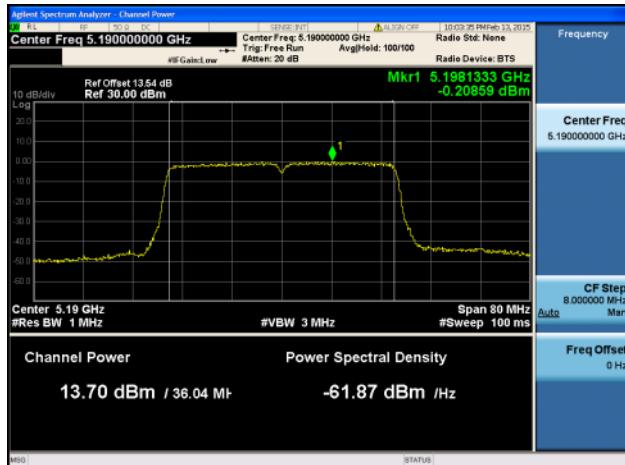
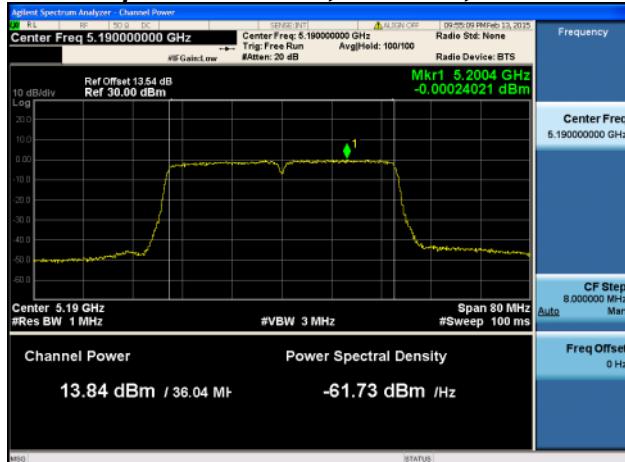
Peak Output Power / PSD, 5190 MHz, HT/VHT40 Beam Forming, M0 to M7, M0 to M9 1ss
**Antenna A****Antenna B****Antenna C****Antenna D**

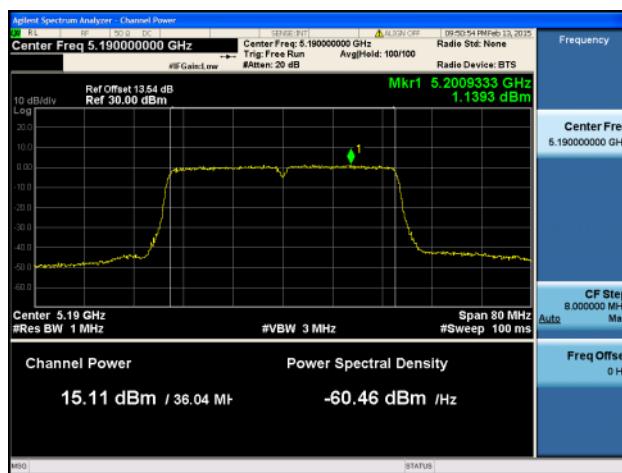
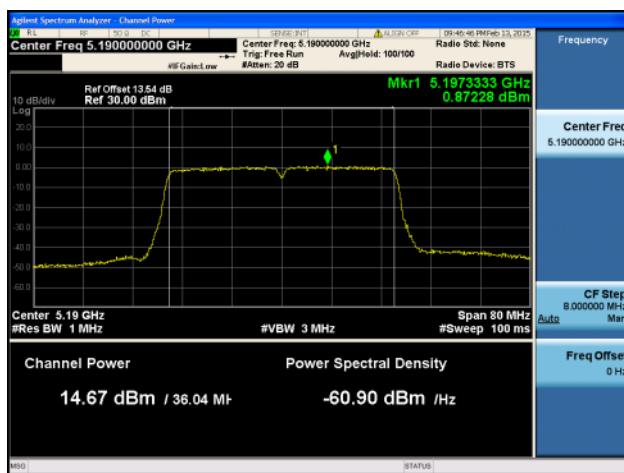
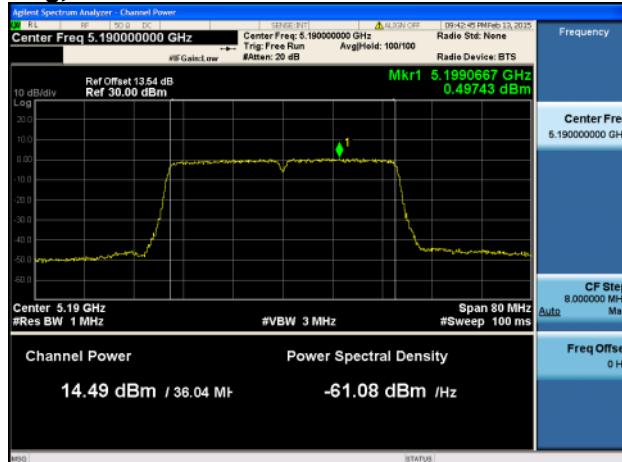
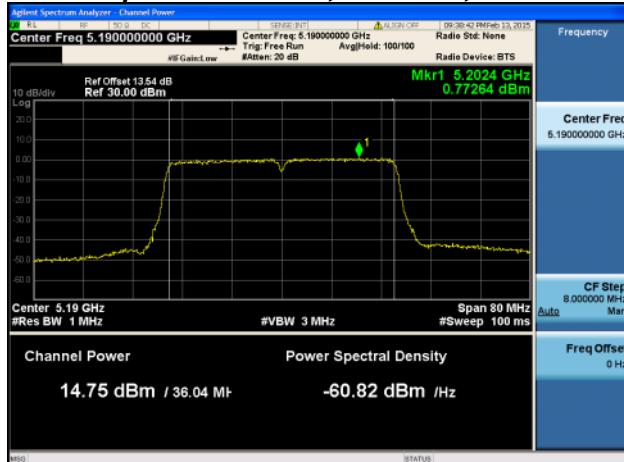
Peak Output Power / PSD, 5190 MHz, HT/VHT40 Beam Forming, M8 to M15, M0 to M9 2ss


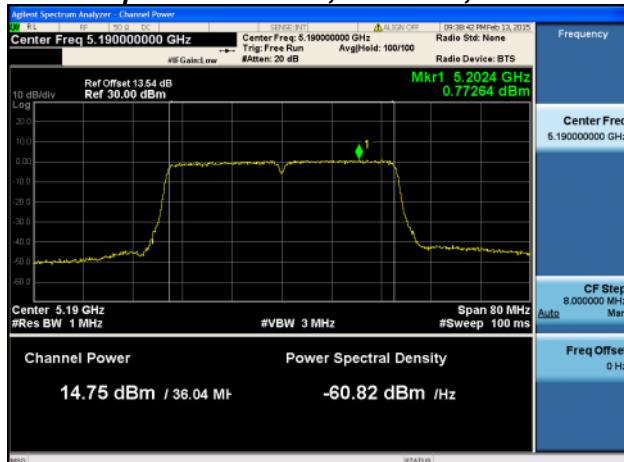
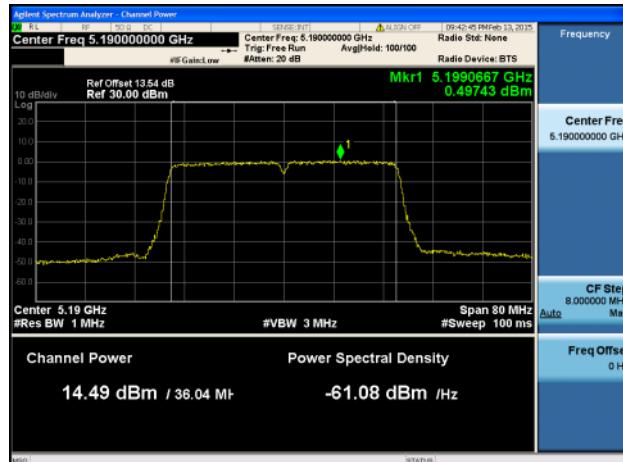
Peak Output Power / PSD, 5190 MHz, HT/VHT40 Beam Forming, M8 to M15, M0 to M9 2ss
**Antenna A****Antenna B****Antenna C**

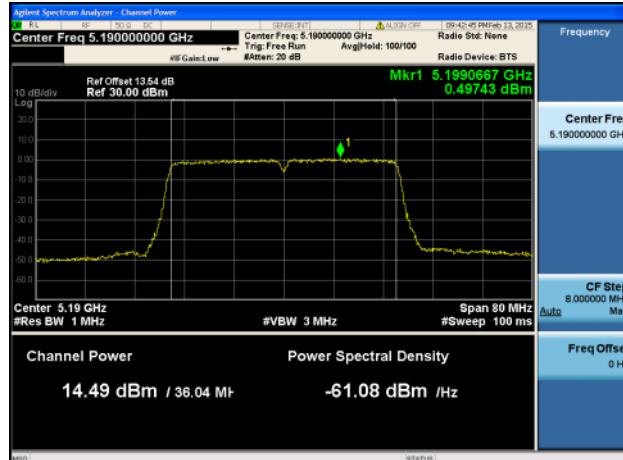
Peak Output Power / PSD, 5190 MHz, HT/VHT40 Beam Forming, M8 to M15, M0 to M9 2ss


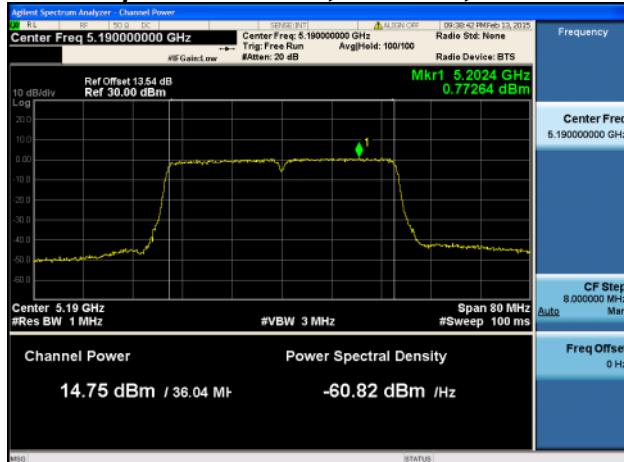
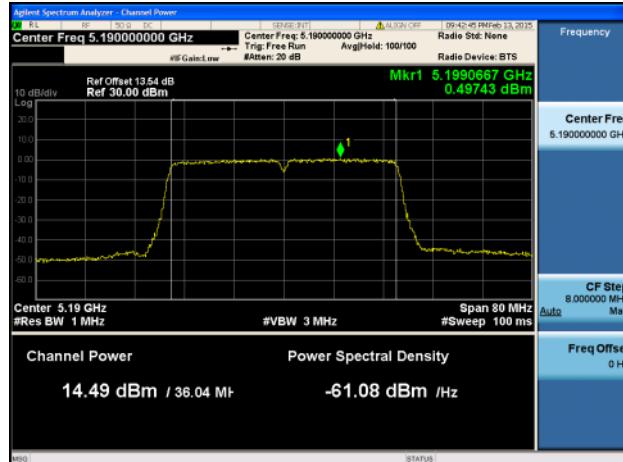
Peak Output Power / PSD, 5190 MHz, HT/VHT40 Beam Forming, M16 to M23, M0 to M9 3ss


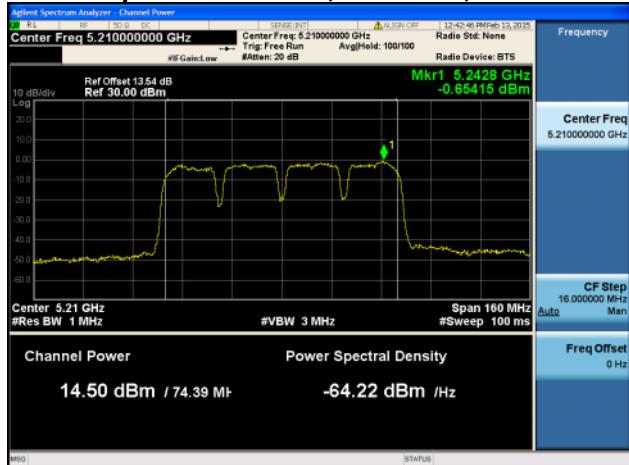
Peak Output Power / PSD, 5190 MHz, HT/VHT40 Beam Forming, M16 to M23, M0 to M9 3ss


Peak Output Power / PSD, 5190 MHz, VHT40 Beam Forming, M0 to M9 4ss


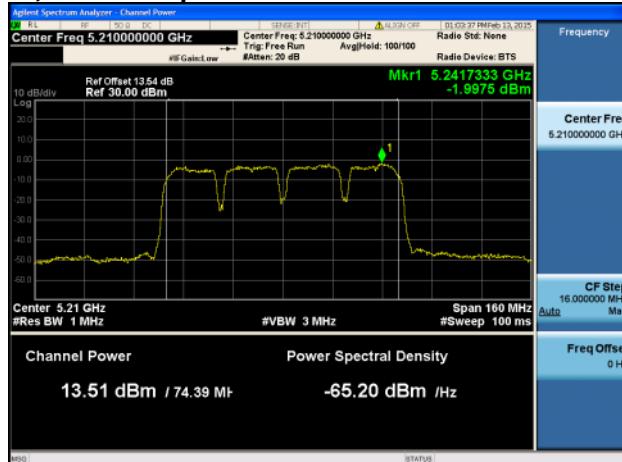
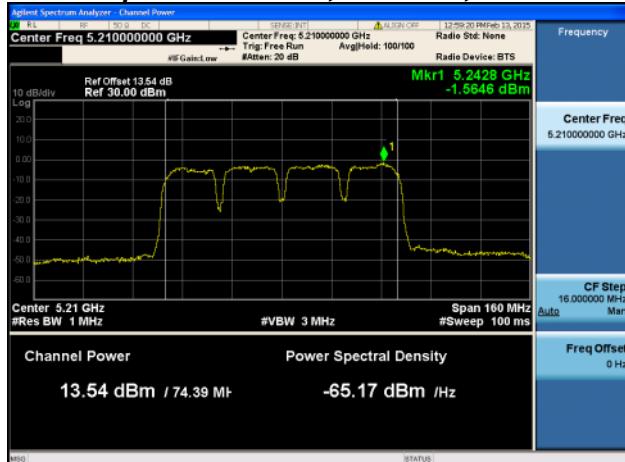
Peak Output Power / PSD, 5190 MHz, HT/VHT40 STBC, M0 to M7
**Antenna A****Antenna B**

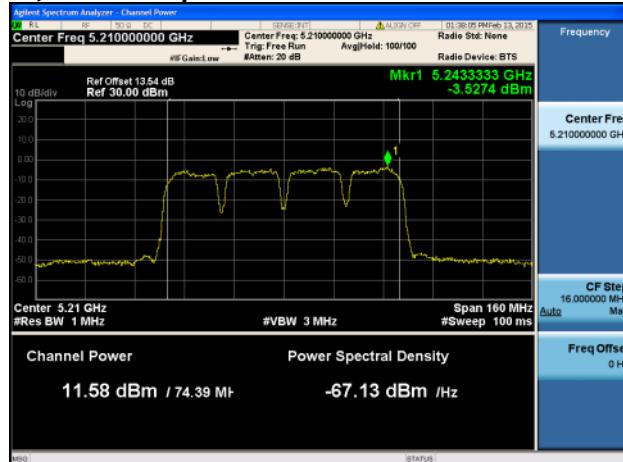
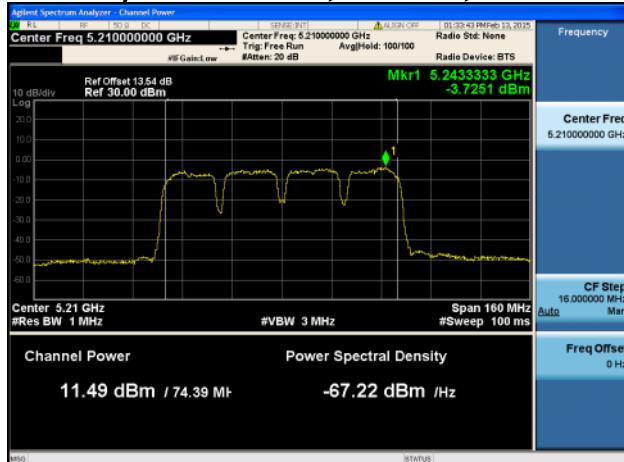
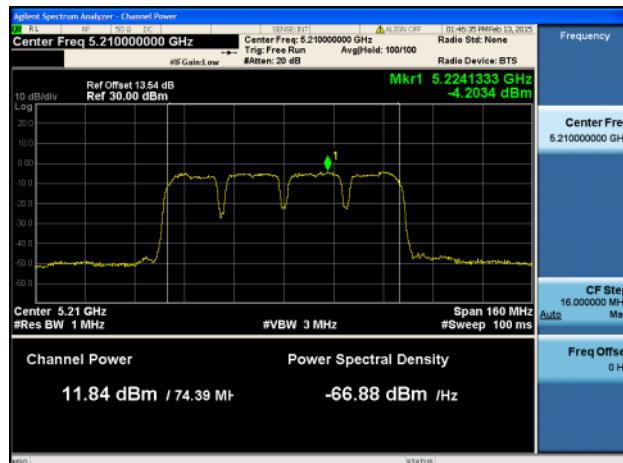
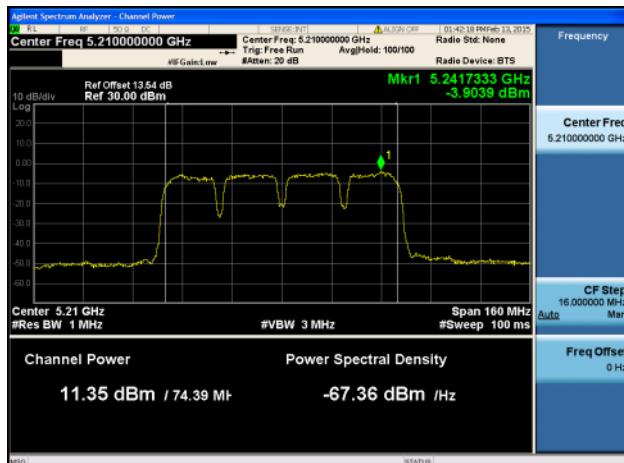
Peak Output Power / PSD, 5190 MHz, HT/VHT40 STBC, M0 to M7


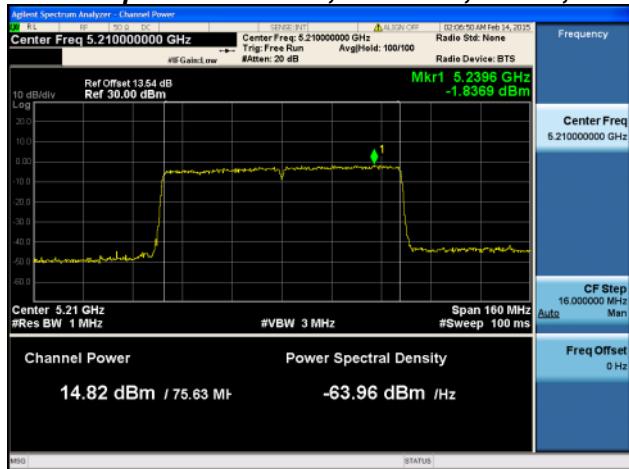
Peak Output Power / PSD, 5190 MHz, HT/VHT40 STBC, M0 to M7
**Antenna A****Antenna B****Antenna C****Antenna D**

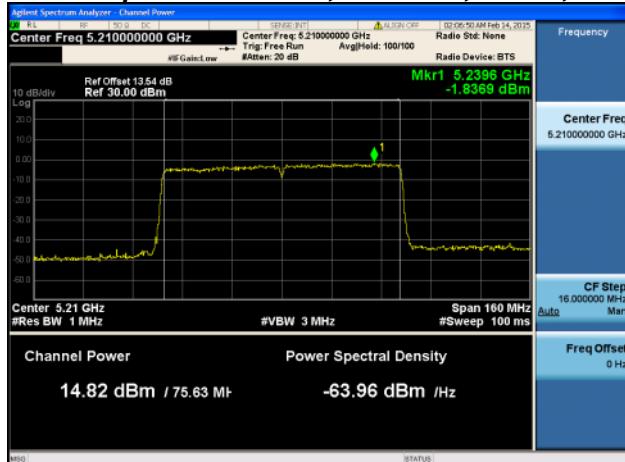
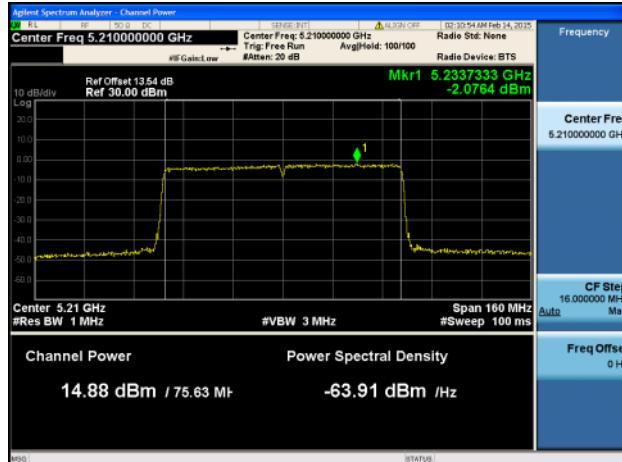
Peak Output Power / PSD, 5210 MHz, Non HT80 Duplicate, 6 to 54 Mbps

Antenna A

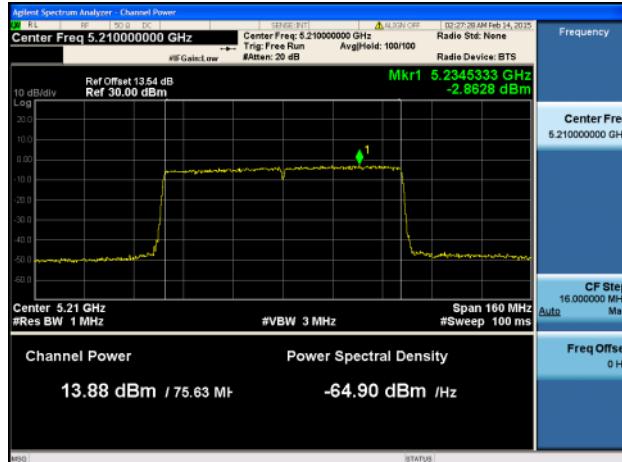
Peak Output Power / PSD, 5210 MHz, Non HT80 Duplicate, 6 to 54 Mbps

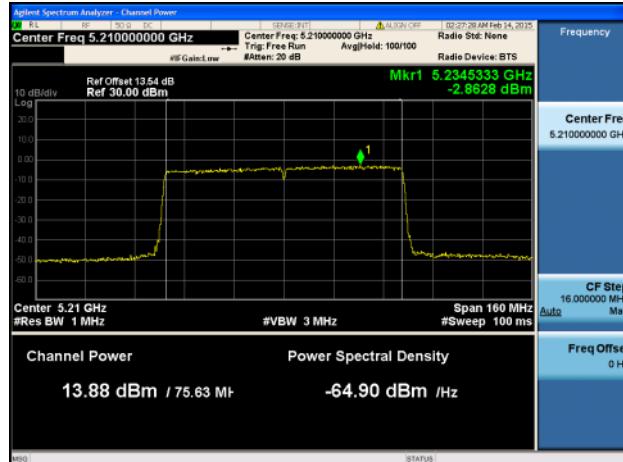
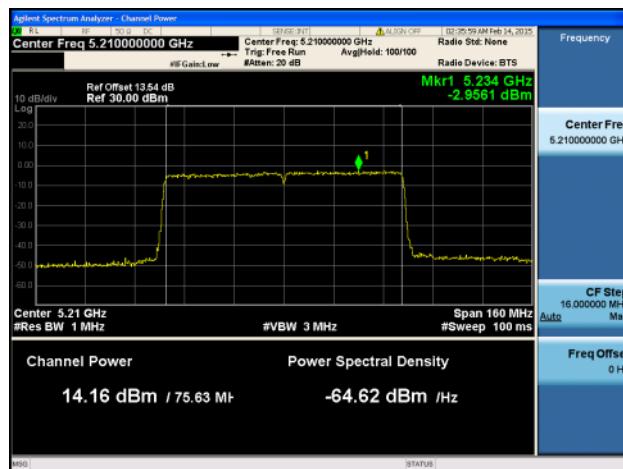

Peak Output Power / PSD, 5210 MHz, Non HT80 Duplicate, 6 to 54 Mbps


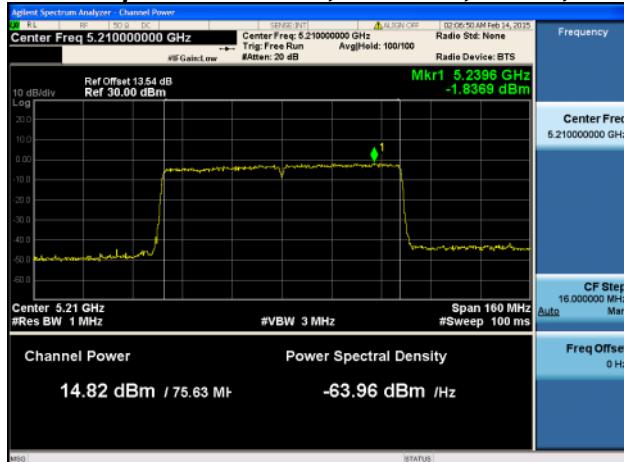
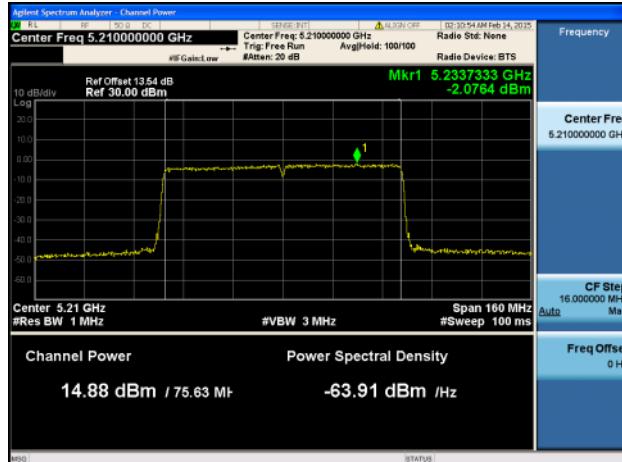
Peak Output Power / PSD, 5210 MHz, Non HT80 Duplicate, 6 to 54 Mbps
**Antenna A****Antenna B**

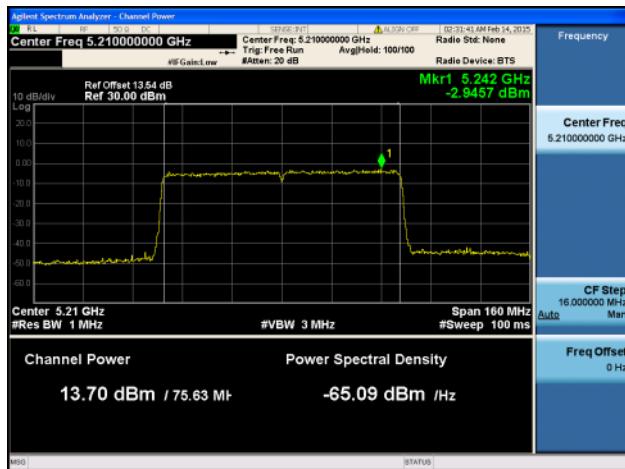
Peak Output Power / PSD, 5210 MHz, VHT80, M0 to M9 1ss

Antenna A

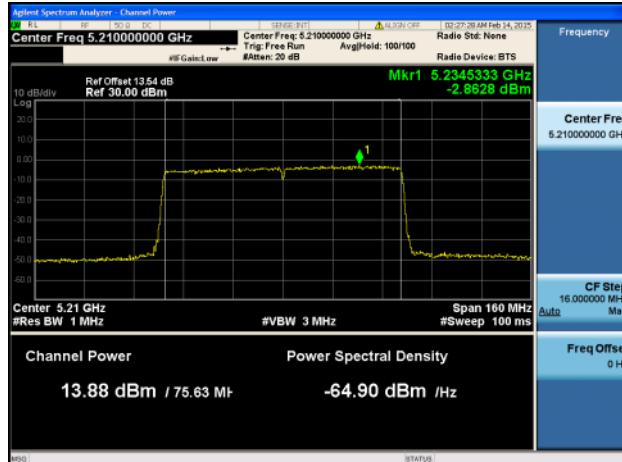
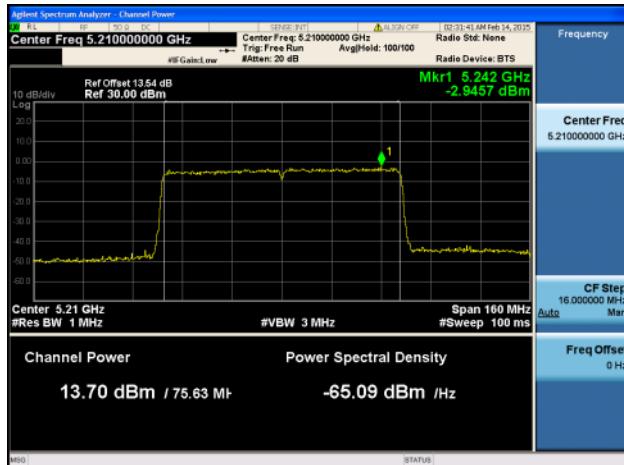
**Peak Output Power / PSD, 5210 MHz, VHT80, M0 to M9 1ss****Antenna A****Antenna B**

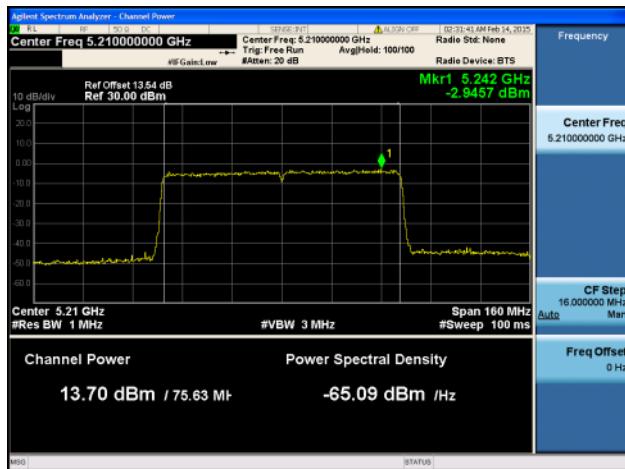
Peak Output Power / PSD, 5210 MHz, VHT80, M0 to M9 1ss**Antenna A****Antenna B****Antenna C**

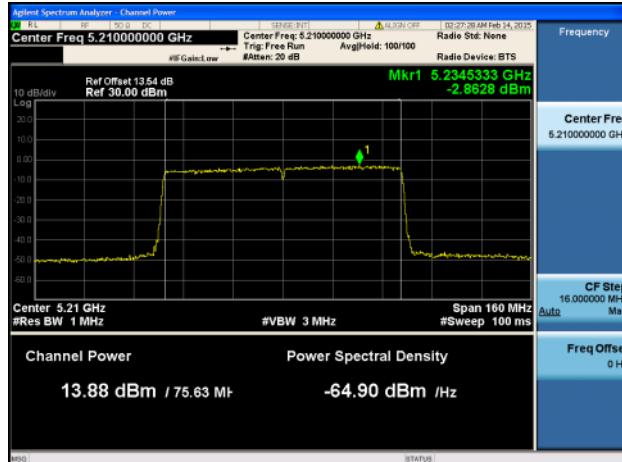
Peak Output Power / PSD, 5210 MHz, VHT80, M0 to M9 1ss**Antenna A****Antenna B****Antenna C****Antenna D**

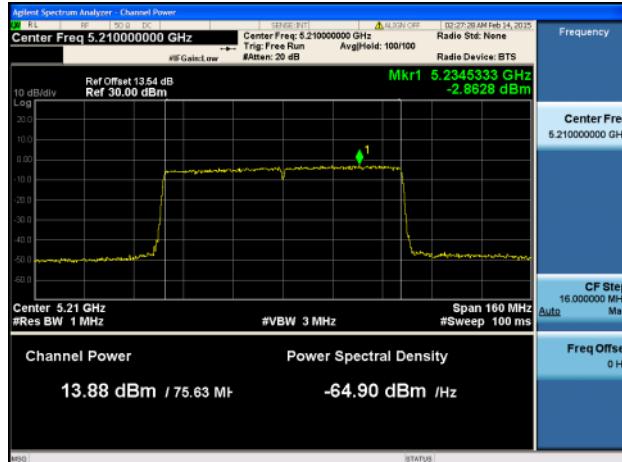
**Peak Output Power / PSD, 5210 MHz, VHT80, M0 to M9 2ss****Antenna A****Antenna B**

Peak Output Power / PSD, 5210 MHz, VHT80, M0 to M9 2ss**Antenna A****Antenna B****Antenna C**

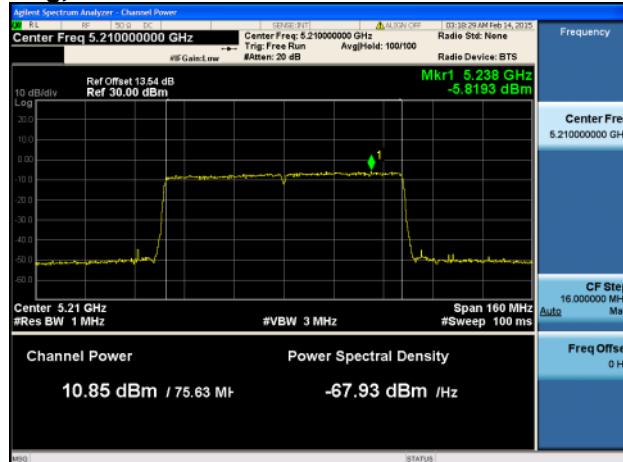
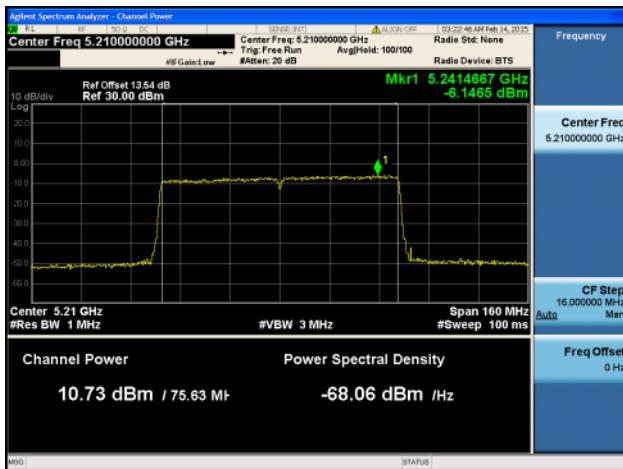
Peak Output Power / PSD, 5210 MHz, VHT80, M0 to M9 2ss

Antenna C


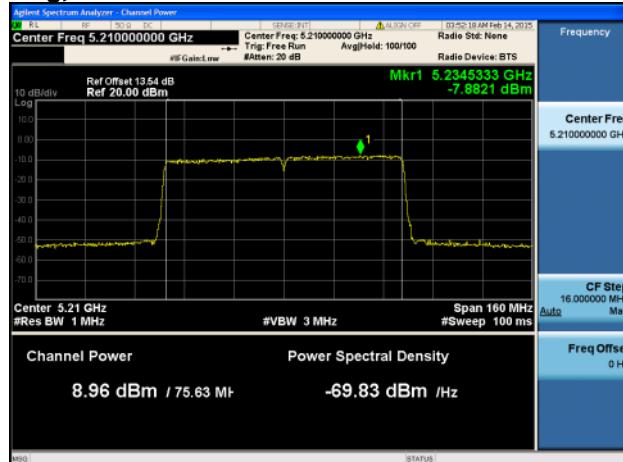
Peak Output Power / PSD, 5210 MHz, VHT80, M0 to M9 3ss**Antenna A****Antenna B****Antenna C**

Peak Output Power / PSD, 5210 MHz, VHT80, M0 to M9 3ss**Antenna C**

Peak Output Power / PSD, 5210 MHz, VHT80, M0 to M9 4ss**Antenna A****Antenna B****Antenna C****Antenna D**

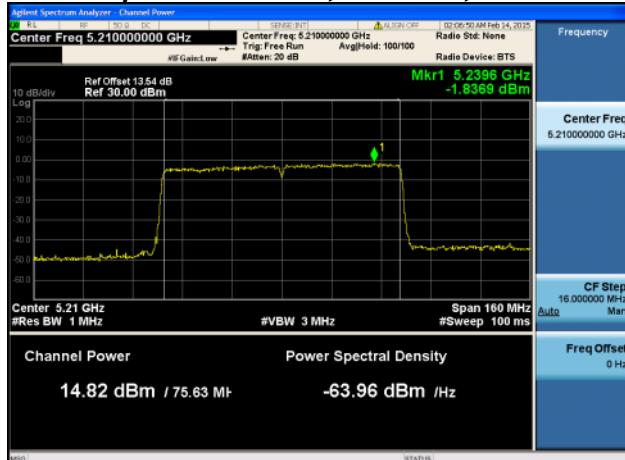
Peak Output Power / PSD, 5210 MHz, VHT80 Beam Forming, M0 to M9 1ss
**Antenna A****Antenna B**

Peak Output Power / PSD, 5210 MHz, VHT80 Beam Forming, M0 to M9 1ss
**Antenna A****Antenna B****Antenna C**

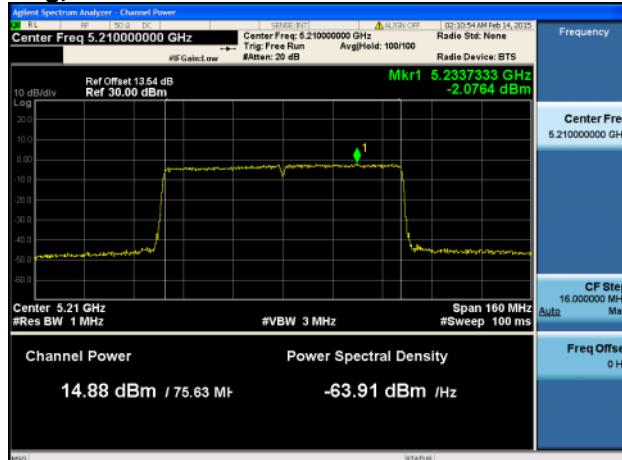
Peak Output Power / PSD, 5210 MHz, VHT80 Beam Forming, M0 to M9 1ss
**Antenna A****Antenna B****Antenna C****Antenna D**



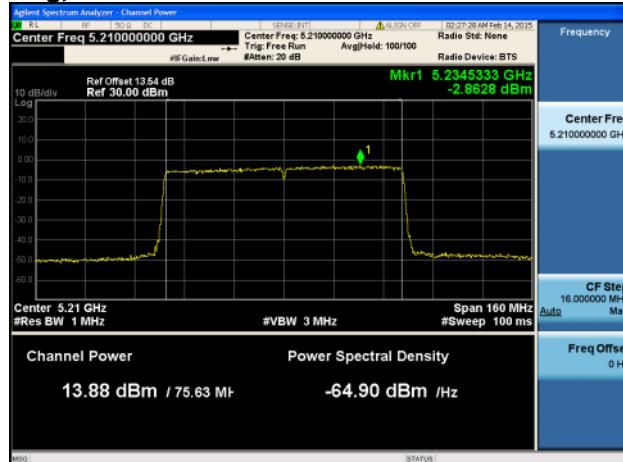
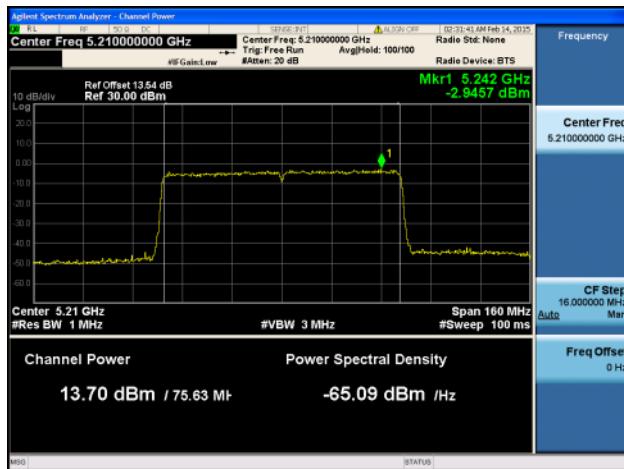
Peak Output Power / PSD, 5210 MHz, VHT80 Beam Forming, M0 to M9 2ss



Antenna A



Antenna B

Peak Output Power / PSD, 5210 MHz, VHT80 Beam Forming, M0 to M9 2ss
**Antenna A****Antenna B****Antenna C**