

Radio Test Report
For
AIR-AP1840I-B-K9

FCC ID: LDKSKMAA2017

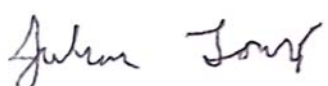
5470-5725 MHz

Against the following Specifications:

CFR47 Part 15.407



Cisco Systems
170 West Tasman Drive
San Jose, CA 95134

	
Author: Julian Land Tested By: Julian Land	Approved By: Gerard Thorpe Title: Compliance Manager Revision: 1.2

This report replaces any previously entered test report under EDCS – 17660839. This test report has been electronically authorized and archived using the CISCO Engineering Document Control system. Test Report Template EDCS# 1526150.

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Section 1: Overview

1.1 Test Summary

The samples were assessed against the tests detailed in section 3 under the requirements of the following specifications:

specifications
CFR47 Part 15.407

Section 2: Assessment Information

2.1 General

This report contains an assessment of an apparatus against Radio 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*%
- e) All AC testing was performed at one or more of the following supply voltages:

110V 60 Hz (+/-20%)

2.2 Units of Measurement

The units of measurements defined in the appendices are reported in specific terms, which are test dependent. Where radiated measurements are concerned these are defined at a particular distance. Basic voltage measurements are defined in units of [dBuV]

As an example, the basic calculation for all measurements is as follows:

Emission level [dBuV] = Indicated voltage level [dBuV] + Cable Loss [dB] + Other correction factors [dB]

The combinations of correction factors are dependent upon the exact test configurations [see test equipment lists for further details] and may include: -

Antenna Factors, Pre-Amplifier Gain, LISN Loss, Pulse Limiter Loss and Filter Insertion Loss...

Note: to convert the results from dBuV/m to uV/m use the following formula: -

Level in uV/m = Common Antilogarithm [(X dBuV/m)/20] = Y uV/m

Measurement Uncertainty Values

voltage and power measurements	± 2 dB
conducted EIRP measurements	± 1.4 dB
radiated measurements	± 3.2 dB
frequency measurements	$\pm 2.4 \cdot 10^{-7}$
temperature measurements	$\pm 0.54^\circ$
humidity measurements	$\pm 2.3\%$
DC and low frequency measurements	$\pm 2.5\%$

Where relevant measurement uncertainty levels have been estimated for tests performed on the apparatus. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.

Radiated emissions (expanded uncertainty, confidence interval 95%)

30 MHz - 300 MHz	+/- 3.8 dB
300 MHz - 1000 MHz	+/- 4.3 dB
1 GHz - 10 GHz	+/- 4.0 dB
10 GHz - 18GHz	+/- 8.2 dB
18GHz - 26.5GHz	+/- 4.1 dB
26.5GHz - 40GHz	+/- 3.9 dB

Conducted emissions (expanded uncertainty, confidence interval 95%)

30 MHz – 40GHz	+/- 0.38 dB
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A product is considered to comply with a requirement if the nominal measured value is below the limit line. The product is considered to not be in compliance in case the nominal measured value is above the limit line.

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2.3 Date of testing (initial sample receipt date to last date of testing)

March 6, 2019 – May 16, 2019

2.4 Report Issue Date

Cisco uses an electronic system to issue, store and control the revision of test reports. This system is called the Engineering Document Control System (EDCS). The actual report issue date is embedded into the original file on EDCS. Any copies of this report, either electronic or paper, that are not on EDCS must be considered uncontrolled

2.5 Testing facilities

This assessment was performed by:

Headquarters

Cisco Systems, Inc.,
170 West Tasman Drive
San Jose, CA 95134,
USA

Testing Laboratory

Cisco Systems, Inc.
125 West Tasman Drive (Building P)
San Jose, CA 95134
USA

Registration Numbers for ISED (Innovation, Science and Economic Development Canada)

Cisco System Site	Address	Site Identifier
Building P, 10m Chamber	125 West Tasman Drive San Jose, CA 95134 United States	Company #: 2461N-2
Building P, 5m Chamber	125 West Tasman Drive San Jose, CA 95134 United States	Company #: 2461N-1
Building I, 5m Chamber	285 W. Tasman Drive San Jose, California 95134 United States	Company #: 2461M-1
Building 7, 5m Chamber	425 E. Tasman Drive San Jose, California 95134 United States	Company #: 2461N-3

Test Engineers

Julian Land

2.6 Equipment Assessed (EUT)

AIR-AP1840I-B-K9

2.7 EUT Description

AIR-AP1840I is a dual band wireless access point which supports 802.11 a, b, g, n, ac. It features a 2x2 2.4GHz radio, a 4x4 5GHz radio, and a BLE radio.

The following antennas are supported by this product series.

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

Frequency	Port	Antenna Type	Highest Antenna Gain (dBi)
2.4GHz / 5GHz	Antenna 1	Internal dual band omni directional	4.4/5.6
2.4GHz / 5GHz	Antenna 2	Internal dual band omni directional	4/5.7
BLE / 5GHz	Antenna 3	Internal dual band omni directional	4.1/5.6
5GHz	Antenna 4	Internal single band omni directional	5.4

	Supported Channel	Bandwidth
Low	5500MHz	20MHz
Mid	5580MHz	20MHz
High	5720MHz	20MHz
Low	5510MHz	40MHz
Mid	5590MHz	40MHz
High	5710MHz	40MHz
Low	5530MHz	80MHz
Mid	5610MHz	80MHz
High	5690MHz	80MHz
Low	n/a	160MHz
Mid	n/a	160MHz
High	n/a	160MHz

Section 3: Result Summary

3.1 Results Summary Table

3.1.1 Radio Port Results

Basic Standard	Technical Requirements / Details	Result
FCC 15.407	99%- & 26-dB Bandwidth: The 99% 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. There is no limit for 99% OBW. The 26dB emission is the 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 26 dB relative to the maximum level measured in the fundamental emission.	Pass
FCC 15.407	Output Power: 15.407 (2) For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250mW or 11 dBm + 10 log B, where B is the 26-dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1-megahertz band. If transmitting antennas of directional gain greater than 6dBi 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 6dBi.	Pass
FCC 15.407	Power Spectral Density 15.407 (2) For the 5.25-5.35 GHz and 5.47-5.725 GHz bands...the maximum power spectral density shall not exceed 11 dBm in any 1-megahertz band. If transmitting antennas of directional gain greater than 6dBi 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 6dBi.	Pass
FCC 15.407	Conducted Spurious Emissions / Band-Edge: 15.407 (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz..	Pass
FCC 15.407 FCC 15.209 FCC 15.205	Restricted band: Unwanted emissions falling within the restricted bands, as defined in FCC 15.205 (a) must also comply with the radiated emission limits specified in FCC 15.209 (a)	Pass

3.1.2 Radiated Emissions (General Requirements)

Basic Standard	Technical Requirements / Details	Result
FCC 15.209	TX Spurious Emissions: Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the field strength limits table in this section.	Pass
FCC 15.207	AC conducted Emissions: Except when the requirements applicable to a given device state otherwise, for any radio apparatus equipped to operate from the public utility AC power supply, either directly or indirectly (such as with a battery charger), the radio frequency voltage of emissions conducted back onto the AC power lines in the frequency range of 0.15 MHz to 30 MHz shall not exceed the limits shown in the table in these sections. The more stringent limit applies at the frequency range boundaries.	NA (Unit is only powered by DC power - POE)

Section 4: 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.

4.1 Sample Details

Sample No.	Equipment Details	Manufacturer	Hardware Rev.	Firmware Rev.	Software Rev.	Serial Number
S01	AIR-AP1840I-B-K9	Cisco Systems, Inc.	V01	8cf8aa994fd2801c943d2471014f8c5f	8.8.1.10	PSZ22491KT9
S02	Catalyst 3850 48 PoE+	Cisco Systems, Inc.	T0	1.18	03.03.05SE	FCW1931C1U7

4.2 System Details

System #	Description	Samples
1	EUT and Power Supply (Conducted Tests)	S01 & S02

4.3 Mode of Operation Details

Mode#	Description	Comments
1	802.11a, OFDM	Receive and Transmit (1, 2, 3, or 4 chains)
2	Duplicate mode NonHT40	Receive and Transmit (1, 2, 3, or 4 chains)
3	Duplicate mode NonHT80	Receive and Transmit (1, 2, 3, or 4 chains)
4	802.11n20, OFDM	Receive and Transmit (1, 2, 3, or 4 chains)
5	802.11n40, OFDM	Receive and Transmit (1, 2, 3, or 4 chains)
6	802.11ac80, OFDM	Receive and Transmit (1, 2, 3, or 4 chains)

Section 5: Radio Port Results

5.1 Duty Cycle

5.1.1 Duty Cycle Test Requirement

From KDB 789033 D02 General UNII Test Procedures New Rules v01r02

B. Duty Cycle (x), Transmission Duration (T), and Maximum Power Control Level

1. All measurements are to be performed with the EUT transmitting at 100 percent duty cycle at its maximum power control level; however, if 100 percent duty cycle cannot be achieved, measurements of duty cycle, x , and maximum-power transmission duration, T , are required for each tested mode of operation.

5.1.2 Duty Cycle Test Method

From KDB 789033 D02 General UNII Test Procedures New Rules v01r02:

B. Duty Cycle (x), Transmission Duration (T), and Maximum Power Control Level

The zero-span mode on a spectrum analyzer or EMI receiver, if the response time and spacing between bins on the sweep are sufficient to permit accurate measurements of the on and off times of the transmitted signal. Set the center frequency of the instrument to the center frequency of the transmission. Set RBW $\geq$ EBW if possible; otherwise, set RBW to the largest available value. Set VBW $\geq$ RBW. Set detector = peak or average. The zero-span measurement method shall not be used unless both RBW and VBW are $> 50/T$, where T is defined in section II.B.1.a), and the number of sweep points across duration T exceeds 100. (For example, if VBW and/or RBW are limited to 3 MHz, then the zero-span method of measuring duty cycle shall not be used if $T \leq 16.7$ microseconds.)

5.1.3 Duty Cycle Test Information

Samples, Systems, and Modes

System Number	Description	Samples	System under test	Support equipment
1	EUT	S01	☒	☐
	Support	S02	☐	☒

Tested By: Julian Land	Date of testing: March 8, 2019 – March 25, 2019
Test Result: Pass	

Test Equipment

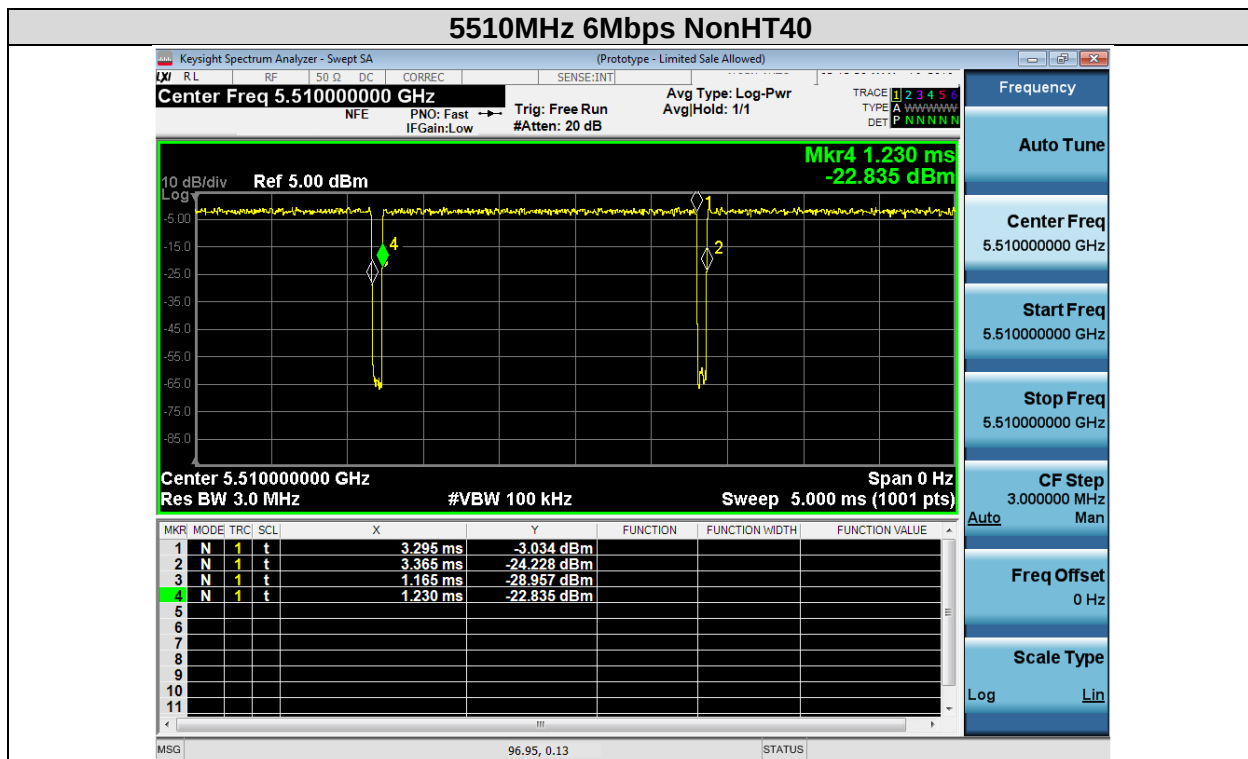
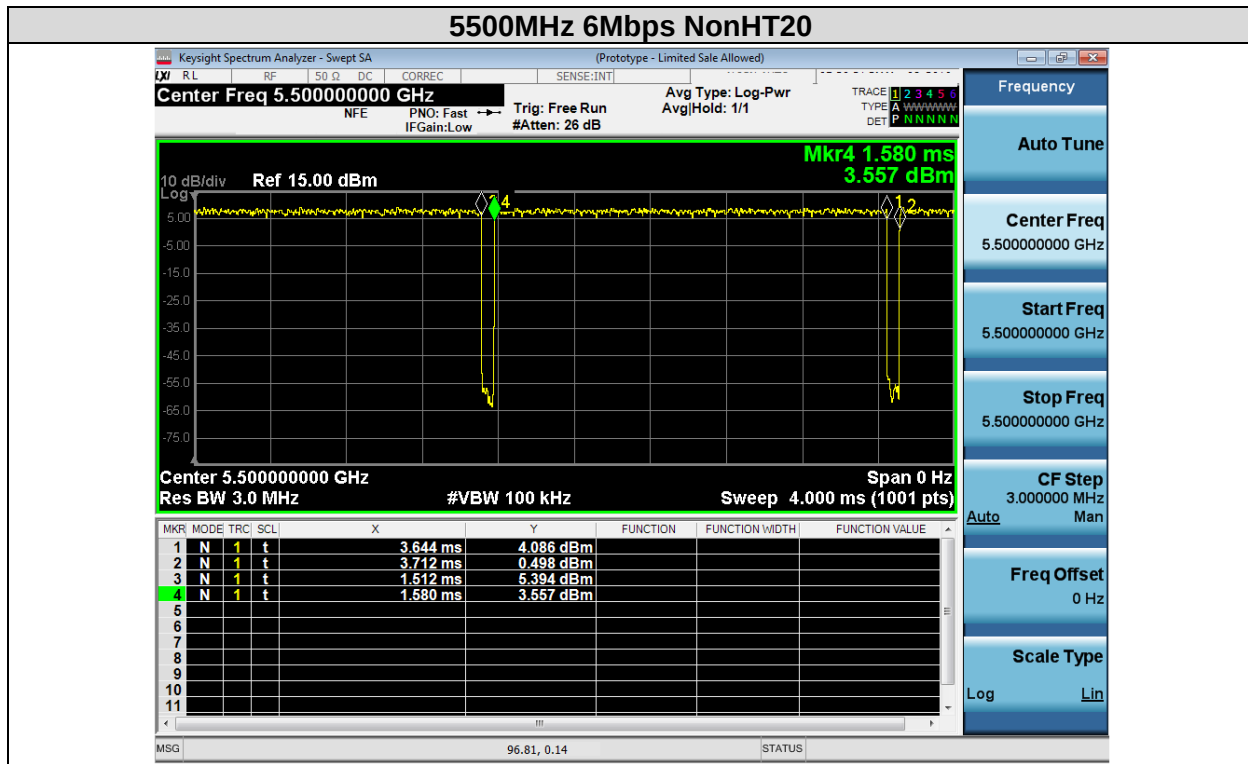
See Appendix A for list of test equipment

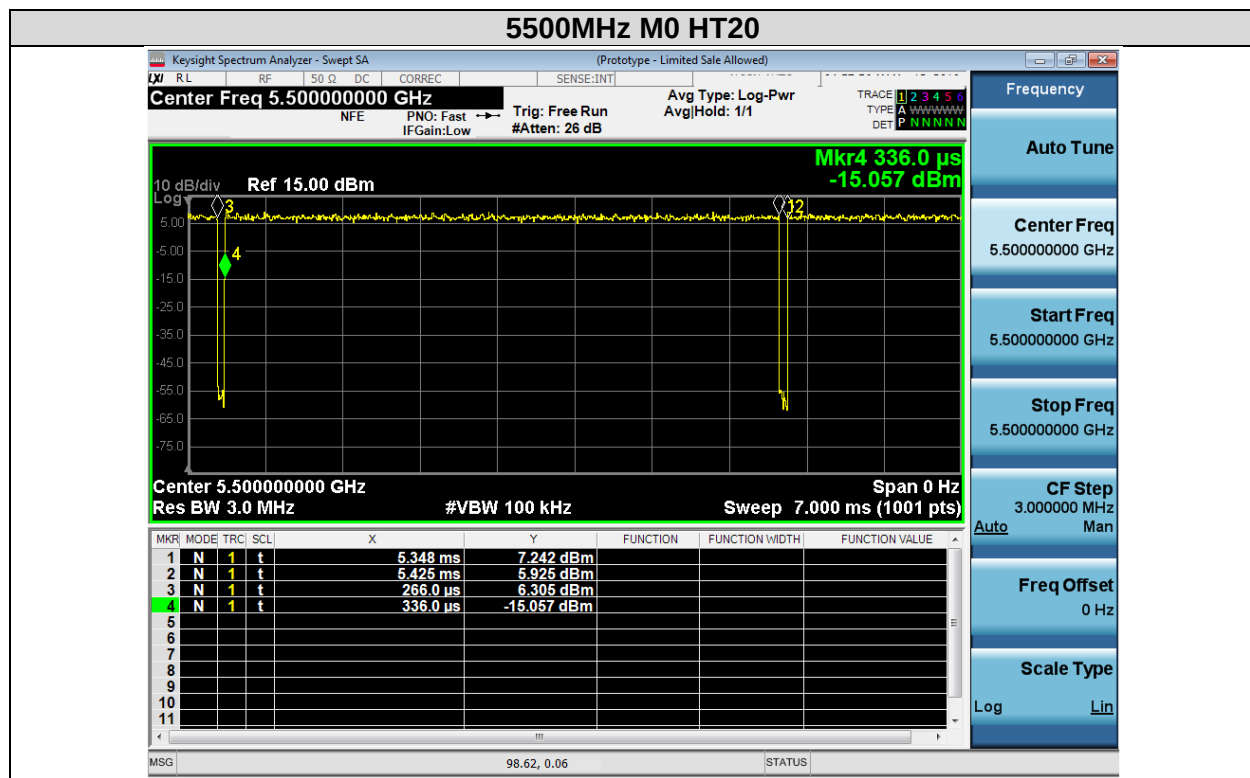
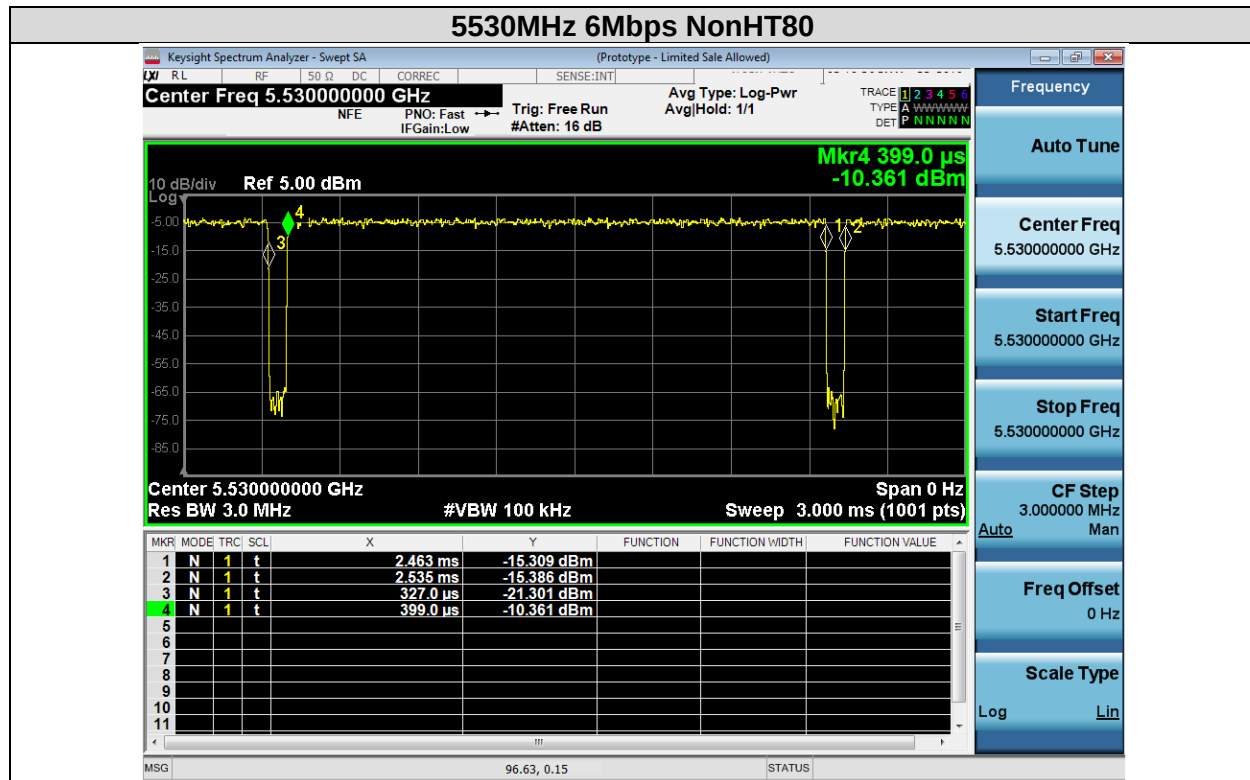
5.1.4 Duty Cycle Data Table

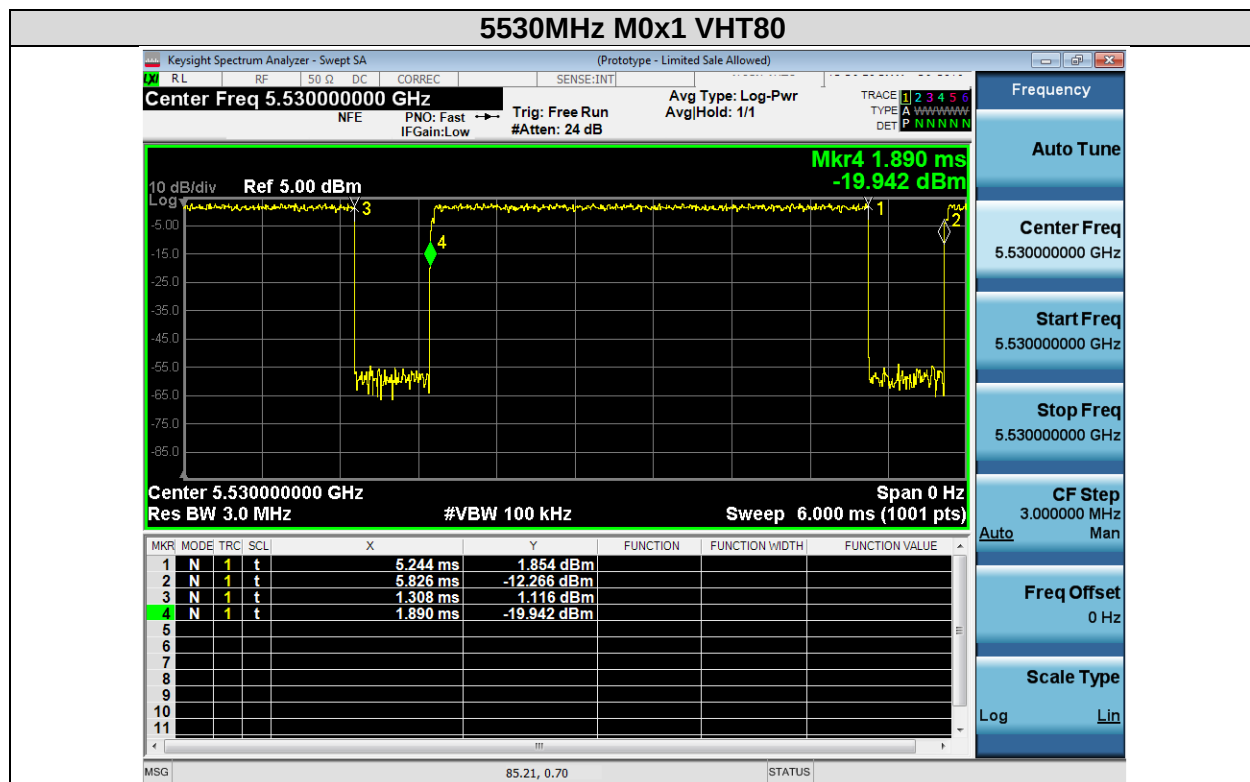
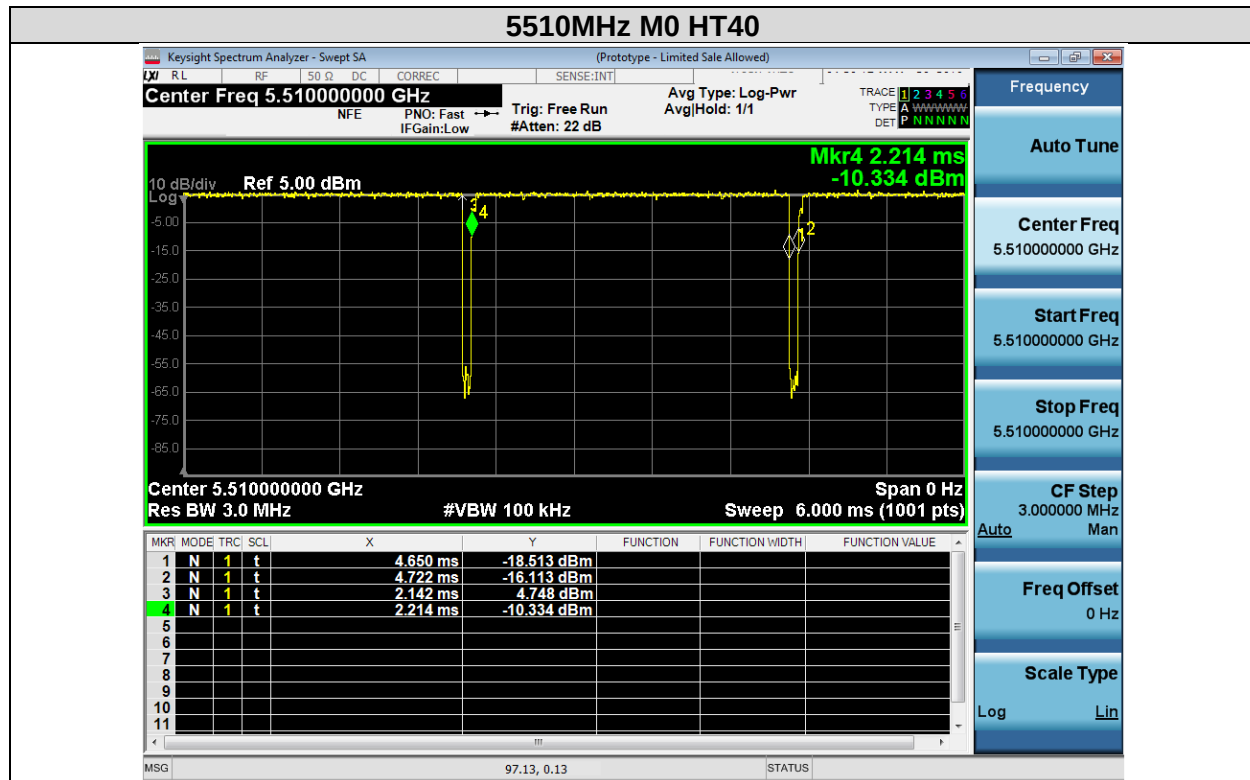
Duty Cycle table and screen captures are shown below for power/psd modes.

Mode	Data Rate	On-time (ms)	Total Time (ms)	Duty Cycle (%)	Correction Factor (dB)
NonHT20	6 to 54Mbps	2.064	2.132	96.811	0.14
NonHT40	6 to 54Mbps	2.065	2.130	96.948	0.13
NonHT80	6 to 54Mbps	2.064	2.136	96.629	0.15
HT20/VHT20	M0 to M31	5.012	5.082	98.623	0.06
HT40/VHT40	M0 to M31	2.436	2.508	97.129	0.13
VHT80	M0.1 to M9.4	3.354	3.936	85.213	0.70

5.1.5 Duty Cycle Data Screenshots







5.2 99% and 26dB Bandwidth

5.2.1 99% and 26dB Bandwidth Test Requirement

There is no requirement for the value of bandwidth. However, the 26dB BW (EBW) is used to calculate the power limits in 15.407 (a) (2). Power measurements are made using the 99% Bandwidth as the integration bandwidth.

5.2.2 99% and 26dB Bandwidth Test Procedure

Ref. KDB 789033 Section D. 99 Percent Occupied Bandwidth

99% BW
Test Parameters
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 $\geq 3 \cdot$ 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).

Ref KDB 789033 in Section C. Measurement Bandwidth, Section 1

26 BW
Test parameters
X dB BW = -26dB (using the OBW function of the spectrum analyzer) 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%.

5.2.3 99% Bandwidth Test Information

Samples, Systems, and Modes

System Number	Description	Samples	System under test	Support equipment
1	EUT	S01	☒	☐
	Support	S02	☐	☒

Tested By: Julian Land	Date of testing: March 6, 2019 – March 26, 2019
Test Result: PASS	

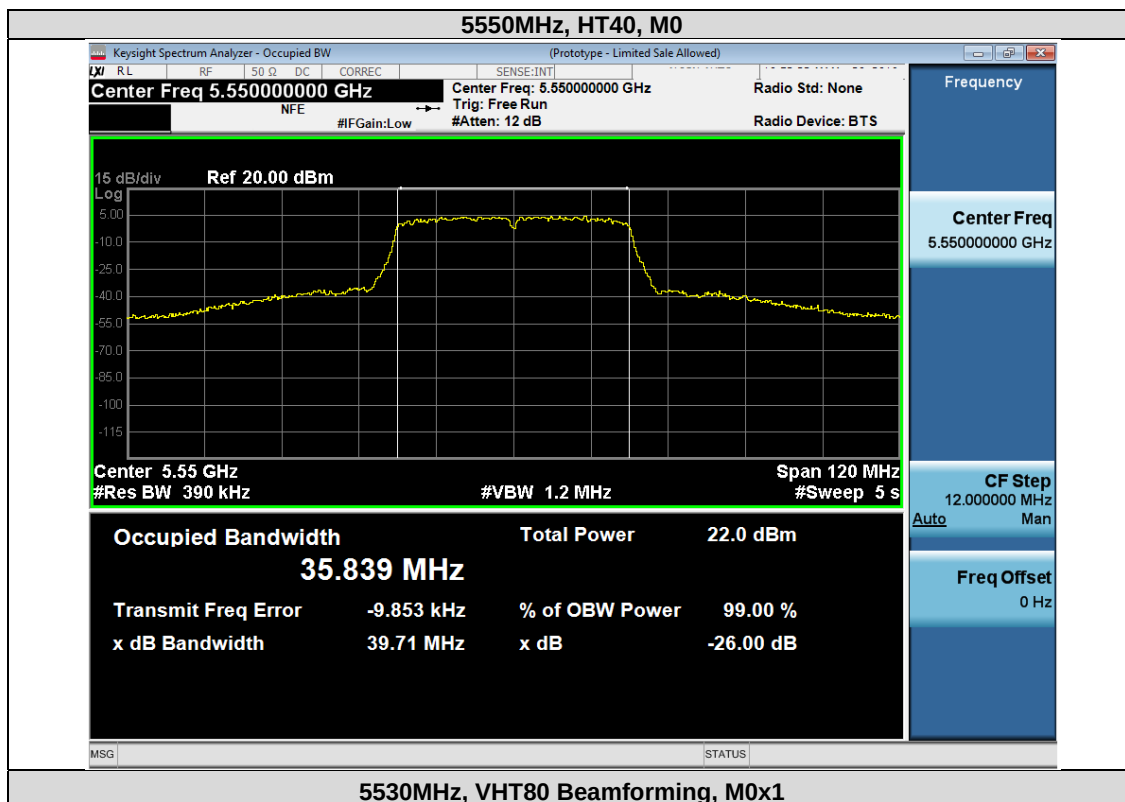
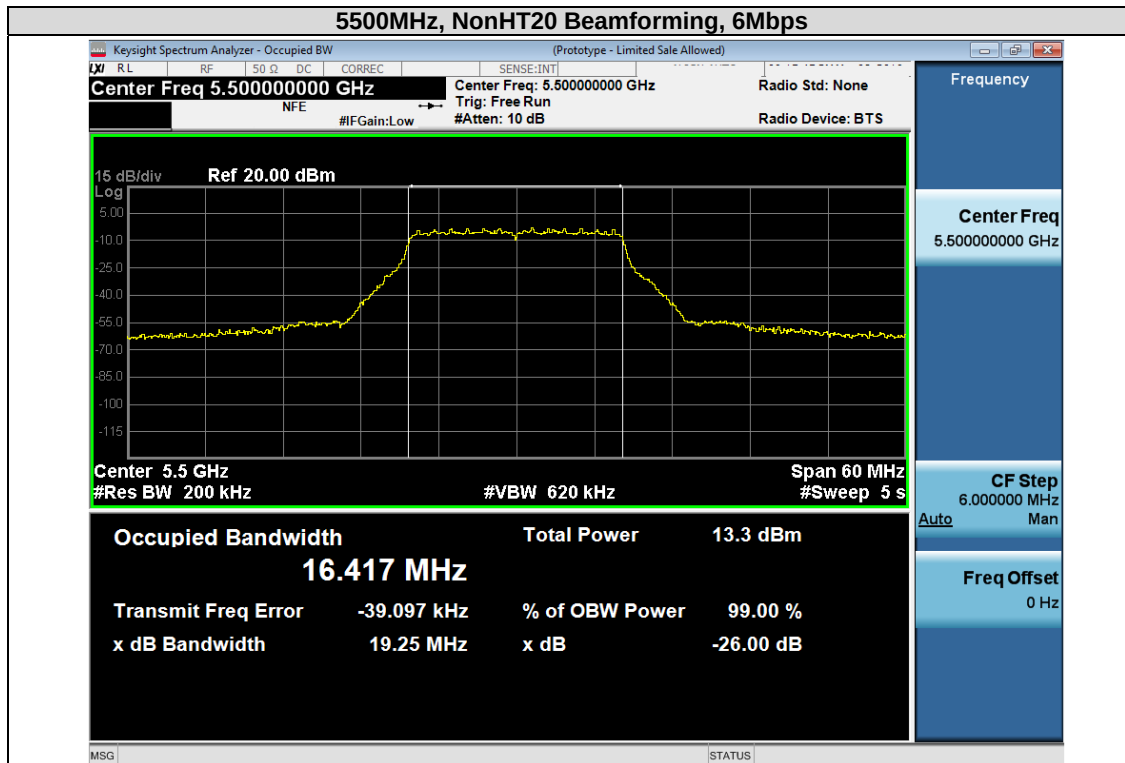
Test Equipment

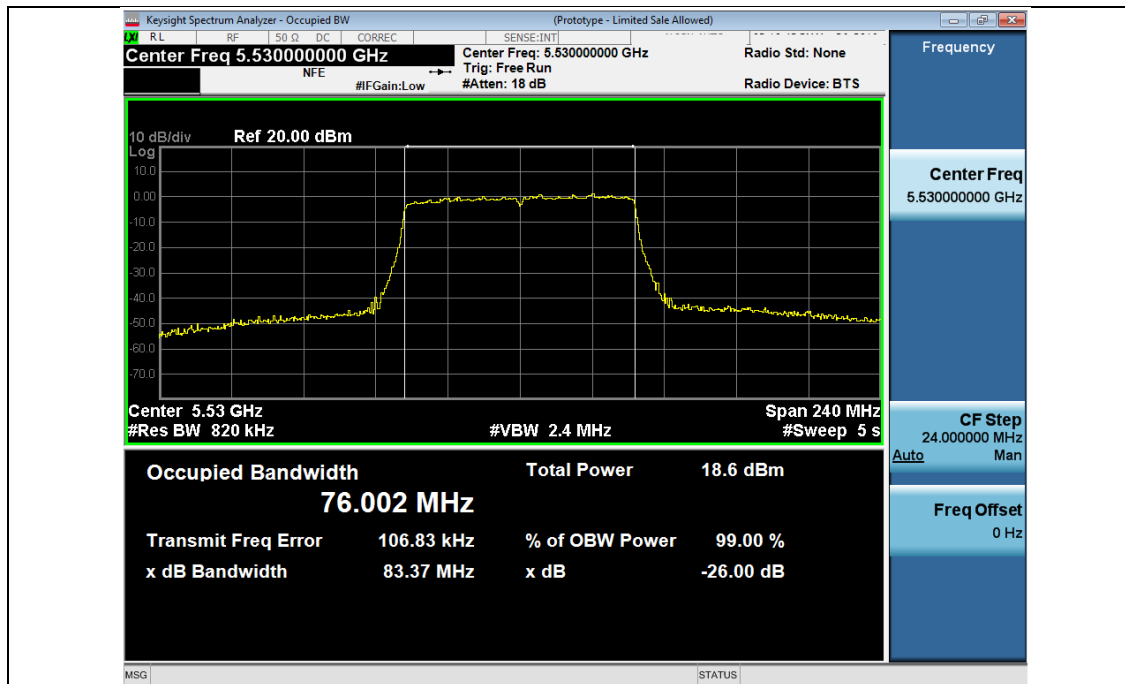
See Appendix A for list of test equipment

5.2.4 99% and 26dB Bandwidth Data Table

Frequency (MHz)	Mode	Index Power (dBm)	Data Rate (Mbps)	26dB BW (MHz)	99% BW (MHz)
5500	Non HT20 Beam Forming, 6 to 54 Mbps	8	6	19.3	16.417
	HT/VHT20 Beam Forming, M0 to M7	11	m0	20.1	17.575
5510	Non HT40, 6 to 54 Mbps	14	6	38.5	35.356
	HT/VHT40 Beam Forming, M0 to M7	11	m0	39.6	35.910
5530	Non HT80, 6 to 54 Mbps	14	6	83.6	75.744
	VHT80, M0 to M9 1ss	11	m0x1	83.4	76.002
5550	Non HT40, 6 to 54 Mbps	14	6	38.4	35.315
	HT/VHT40, M8 to M15	15	m0	39.7	35.839
5560	Non HT20, 6 to 54 Mbps	17	6	19.1	16.407
	HT/VHT20 Beam Forming, M0 to M7	11	m0	20	17.573
5610	Non HT80, 6 to 54 Mbps	17	6	83.4	75.749
	VHT80 Beam Forming, M0 to M9 1ss	8	m0x1	83.2	75.980
5690	Non HT80, 6 to 54 Mbps	16	6	82.9	75.743
	VHT80 Beam Forming, M0 to M9 1ss	14	m0x1	83.4	76.039
5700	Non HT20 Beam Forming, 6 to 54 Mbps	14	6	19.1	16.401
	HT/VHT20, M0 to M7	10	m0	20.1	17.572
5710	Non HT40, 6 to 54 Mbps	11	6	38.5	35.326
	HT/VHT40, M8 to M15	16	m0	39.7	35.846
5720	Non HT20 Beam Forming, 6 to 54 Mbps	8	6	14.6	13.241
	HT/VHT20, M16 to M23	15	m0	14.9	13.820

5.2.5 99% and 26dB Bandwidth Plots





5.3 Maximum Conducted Output Power

5.3.1 Maximum Conducted Output Power Test Requirement

15.407 (2)

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250mW or $11 \text{ dBm} + 10 \log B$, where B is the 26dB emission bandwidth in megahertz. If transmitting antennas of directional gain greater than 6dBi 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 6dBi.

5.3.2 Maximum Conducted Output Power Test Procedure

Ref. KDB 789033 D02 General UNII Test Procedures New Rules v01r02
ANSI C63.10: 2013

Maximum Conducted Output Power

Test Procedure

1. Set the radio in the continuous transmitting mode at full power
2. Compute power by integrating the spectrum across the EBW (or alternatively entire 99% OBW) of the signal using the instrument's band power measurement function. The integration shall be performed using the spectrum analyzer band-power measurement function with band limits set equal to the EBW or the OBW band edges.
3. Capture graphs and record pertinent measurement data.

Ref. KDB 789033 D02 General UNII Test Procedures New Rules v01r02

2. Measurement using a Spectrum Analyzer or EMI Receiver (SA), (d) Method SA-2

Maximum Conducted Output Power

Test parameters

Method SA-2 (trace averaging across on and off times of the EUT transmissions, followed by duty cycle correction).

- (i) Measure the duty cycle, x , of the transmitter output signal as described in section II.B.
- (ii) Set span to encompass the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal.
- (iii) Set RBW = 1MHz.
- (iv) Set VBW $\geq$ 3MHz.
- (v) Number of points in sweep $\geq$ 2 Span / RBW. (This ensures that bin-to-bin spacing is $\leq$ RBW/2, so that narrowband signals are not lost between frequency bins.)
- (vi) Sweep time = auto.
- (vii) Detector = RMS (i.e., power averaging), if available. Otherwise, use sample detector mode.
- (viii) Do not use sweep triggering. Allow the sweep to "free run".
- (ix) Trace average at least 100 traces in power averaging (i.e., RMS) mode; however, the number of traces to be averaged shall be increased above 100 as needed to ensure that the average accurately represents the true average over the on and off periods of the transmitter.
- (x) Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal using the instrument's band power measurement function with band limits set equal to the EBW (or occupied bandwidth)

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. ANSI C63.10 section 14.3.2.2

5.3.3 Maximum Conducted Output Power Test Information

Samples, Systems, and Modes

System Number	Description	Samples	System under test	Support equipment
1	EUT	S01	☒	☐
	Support	S02	☐	☒

Tested By: Julian Land	Date of testing: March 6, 2019 - March 26, 2019
Test Result: PASS	

Test Equipment

See Appendix A for list of test equipment

5.3.4 Maximum Conducted Output Power Data Table

Frequency (MHz)	Mode	Tx Paths	Index Power (dBm)	Correlated Antenna Gain (dBi)	Tx 1 Max Power (dBm)	Tx 2 Max Power (dBm)	Tx 3 Max Power (dBm)	Tx 4 Max Power (dBm)	Duty Cycle (dB)	Total Tx Channel Power (dBm)	Limit (dBm)	Margin (dB)
5500	Non HT20, 6 to 54 Mbps	1	17	6	16.2				0.14	16.3	24	7.7
	Non HT20, 6 to 54 Mbps	2	16	6	14.9	14.4			0.14	17.8	24	6.2
	Non HT20, 6 to 54 Mbps	3	13	6	12.1	11.4	10.7		0.14	16.3	24	7.7
	Non HT20, 6 to 54 Mbps	4	11	6	9.9	9.4	8.9	9.4	0.14	15.6	24	8.4
	Non HT20 Beam Forming, 6 to 54 Mbps	2	14	9	13	12.5			0.14	15.9	21	5.1
	Non HT20 Beam Forming, 6 to 54 Mbps	3	11	11	9.9	9.4	8.9		0.14	14.3	19	4.7
	Non HT20 Beam Forming, 6 to 54 Mbps	4	8	12	7.1	6.5	5.9	6.2	0.14	12.6	18	5.4
	HT/VHT20, M0 to M7	1	17	6	15.7				0.06	15.8	24	8.2
	HT/VHT20, M0 to M7	2	17	6	15.7	15.2			0.06	18.5	24	5.5
	HT/VHT20, M8 to M15	2	17	6	15.7	15.2			0.06	18.5	24	5.5
	HT/VHT20, M0 to M7	3	13	6	11.7	11.1	10.5		0.06	16.0	24	8.0
	HT/VHT20, M8 to M15	3	16	6	14.6	14.2	13.3		0.06	18.9	24	5.1
	HT/VHT20, M16 to M23	3	16	6	14.6	14.2	13.3		0.06	18.9	24	5.1
	HT/VHT20, M0 to M7	4	11	6	9.4	9.1	8.4	8.9	0.06	15.0	24	9.0
	HT/VHT20, M8 to M15	4	14	6	12.7	12.2	11.5	11.9	0.06	18.2	24	5.8
	HT/VHT20, M16 to M23	4	15	6	13.6	13.2	12.4	12.9	0.06	19.1	24	4.9
	HT/VHT20, M24 to M31	4	15	6	13.6	13.2	12.4	12.9	0.06	19.1	24	4.9
	HT/VHT20 Beam Forming, M0 to M7	2	14	9	12.7	12.2			0.06	15.5	21	5.5
	HT/VHT20 Beam Forming, M8 to M15	2	17	6	15.7	15.2			0.06	18.5	24	5.5
	HT/VHT20 Beam Forming, M0 to M7	3	11	11	9.4	9.1	8.4		0.06	13.8	19	5.2
	HT/VHT20 Beam Forming, M8 to M15	3	14	8	12.7	12.2	11.5		0.06	17.0	22	5.0
	HT/VHT20 Beam Forming, M16 to M23	3	16	6	14.6	14.2	13.3		0.06	18.9	24	5.1
	HT/VHT20 Beam Forming, M0 to M7	4	8	12	6.5	6	5.5	5.6	0.06	12.0	18	6.0
	HT/VHT20 Beam Forming, M8 to M15	4	11	9	9.4	9.1	8.4	8.9	0.06	15.0	21	6.0
	HT/VHT20 Beam Forming, M16 to M23	4	13	7	11.7	11.1	10.5	10.9	0.06	17.2	23	5.8
	HT/VHT20 Beam Forming, M24 to M31	4	15	6	13.6	13.2	12.4	12.9	0.06	19.1	24	4.9
	HT/VHT20 STBC, M0 to M7	2	17	6	15.7	15.2			0.06	18.5	24	5.5

	HT/VHT20 STBC, M0 to M7	3	16	6	14.6	14.2	13.3		0.06	18.9	24	5.1
	HT/VHT20 STBC, M0 to M7	4	14	6	12.7	12.2	11.5	11.9	0.06	18.2	24	5.8
5510	Non HT40, 6 to 54 Mbps	1	17	6	16.6				0.13	16.7	24	7.3
	Non HT40, 6 to 54 Mbps	2	16	6	15.6	15.1			0.13	18.5	24	5.5
	Non HT40, 6 to 54 Mbps	3	14	6	13.7	13.1	12.4		0.13	18.0	24	6.0
	Non HT40, 6 to 54 Mbps	4	12	6	11.6	10.9	10.5	10.8	0.13	17.1	24	6.9
	HT/VHT40, M0 to M7	1	15	6	15				0.13	15.1	24	8.9
	HT/VHT40, M0 to M7	2	15	6	15	14.4			0.13	17.9	24	6.1
	HT/VHT40, M8 to M15	2	15	6	15	14.4			0.13	17.9	24	6.1
	HT/VHT40, M0 to M7	3	14	6	14	13.4	12.7		0.13	18.3	24	5.7
	HT/VHT40, M8 to M15	3	14	6	14	13.4	12.7		0.13	18.3	24	5.7
	HT/VHT40, M16 to M23	3	14	6	14	13.4	12.7		0.13	18.3	24	5.7
	HT/VHT40, M0 to M7	4	13	6	12.9	12.2	11.7	12.1	0.13	18.4	24	5.6
	HT/VHT40, M8 to M15	4	13	6	12.9	12.2	11.7	12.1	0.13	18.4	24	5.6
	HT/VHT40, M16 to M23	4	13	6	12.9	12.2	11.7	12.1	0.13	18.4	24	5.6
	HT/VHT40, M24 to M31	4	13	6	12.9	12.2	11.7	12.1	0.13	18.4	24	5.6
	HT/VHT40 Beam Forming, M0 to M7	2	13	9	12.9	12.2			0.13	15.7	21	5.3
	HT/VHT40 Beam Forming, M8 to M15	2	15	6	15	14.4			0.13	17.9	24	6.1
	HT/VHT40 Beam Forming, M0 to M7	3	11	11	11	10.2	9.7		0.13	15.2	19	3.8
	HT/VHT40 Beam Forming, M8 to M15	3	13	8	12.9	12.2	11.7		0.13	17.2	22	4.8
	HT/VHT40 Beam Forming, M16 to M23	3	14	6	14	13.4	12.7		0.13	18.3	24	5.7
	HT/VHT40 Beam Forming, M0 to M7	4	8	12	7.8	7.3	6.7	7	0.13	13.4	18	4.6
	HT/VHT40 Beam Forming, M8 to M15	4	11	9	11	10.2	9.7	10.3	0.13	16.5	21	4.5
	HT/VHT40 Beam Forming, M16 to M23	4	13	7	12.9	12.2	11.7	12.1	0.13	18.4	23	4.6
	HT/VHT40 Beam Forming, M24 to M31	4	13	6	12.9	12.2	11.7	12.1	0.13	18.4	24	5.6
	HT/VHT40 STBC, M0 to M7	2	15	6	15	14.4			0.13	17.9	24	6.1
	HT/VHT40 STBC, M0 to M7	3	14	6	14	13.4	12.7		0.13	18.3	24	5.7
	HT/VHT40 STBC, M0 to M7	4	13	6	12.9	12.2	11.7	12.1	0.13	18.4	24	5.6
5530	Non HT80, 6 to 54 Mbps	1	14	6	13.9				0.15	14.1	24	10.0
	Non HT80, 6 to 54 Mbps	2	14	6	13.9	13.1			0.15	16.7	24	7.3
	Non HT80, 6 to 54 Mbps	3	13	6	12.7	12	11.4		0.15	17.0	24	7.0
	Non HT80, 6 to 54 Mbps	4	12	6	11.9	11	10.6	10.9	0.15	17.3	24	6.7
	VHT80, M0 to M9 1ss	1	14	6	13.9				0.7	14.6	24	9.4
	VHT80, M0 to M9 1ss	2	13	6	12.8	12			0.7	16.1	24	7.9
	VHT80, M0 to M9 2ss	2	13	6	12.8	12			0.7	16.1	24	7.9
	VHT80, M0 to M9 1ss	3	12	6	11.9	11.2	10.6		0.7	16.7	24	7.3
	VHT80, M0 to M9 2ss	3	12	6	11.9	11.2	10.6		0.7	16.7	24	7.3
	VHT80, M0 to M9 3ss	3	12	6	11.9	11.2	10.6		0.7	16.7	24	7.3
	VHT80, M0 to M9 1ss	4	11	6	10.8	10.1	9.6	10.1	0.7	16.9	24	7.1

	VHT80, M0 to M9 2ss	4	11	6	10.8	10.1	9.6	10.1	0.7	16.9	24	7.1
	VHT80, M0 to M9 3ss	4	11	6	10.8	10.1	9.6	10.1	0.7	16.9	24	7.1
	VHT80, M0 to M9 4ss	4	11	6	10.8	10.1	9.6	10.1	0.7	16.9	24	7.1
	VHT80 Beam Forming, M0 to M9 1ss	2	12	9	11.9	11.2			0.7	15.3	21	5.7
	VHT80 Beam Forming, M0 to M9 2ss	2	13	6	12.8	12			0.7	16.1	24	7.9
	VHT80 Beam Forming, M0 to M9 1ss	3	10	11	9.9	8.9	8.5		0.7	14.6	19	4.4
	VHT80 Beam Forming, M0 to M9 2ss	3	11	8	10.8	10.1	9.6		0.7	15.7	22	6.3
	VHT80 Beam Forming, M0 to M9 3ss	3	12	6	11.9	11.2	10.6		0.7	16.7	24	7.3
	VHT80 Beam Forming, M0 to M9 1ss	4	7	12	6.8	6.1	5.4	5.5	0.7	12.7	18	5.3
	VHT80 Beam Forming, M0 to M9 2ss	4	11	9	10.8	10.1	9.6	10.1	0.7	16.9	21	4.1
	VHT80 Beam Forming, M0 to M9 3ss	4	11	7	10.8	10.1	9.6	10.1	0.7	16.9	23	6.1
	VHT80 Beam Forming, M0 to M9 4ss	4	11	6	10.8	10.1	9.6	10.1	0.7	16.9	24	7.1
	VHT80 STBC, M0 to M9 1ss	2	13	6	12.8	12			0.7	16.1	24	7.9
	VHT80 STBC, M0 to M9 1ss	3	12	6	11.9	11.2	10.6		0.7	16.7	24	7.3
	VHT80 STBC, M0 to M9 1ss	4	11	6	10.8	10.1	9.6	10.1	0.7	16.9	24	7.1
5550	Non HT40, 6 to 54 Mbps	1	17	6	17.5				0.13	17.6	24	6.4
	Non HT40, 6 to 54 Mbps	2	17	6	17.5	16.8			0.13	20.3	24	3.7
	Non HT40, 6 to 54 Mbps	3	14	6	14.4	13.6	12.9		0.13	18.6	24	5.4
	Non HT40, 6 to 54 Mbps	4	11	6	11.6	10.5	9.9	10.4	0.13	16.8	24	7.2
	HT/VHT40, M0 to M7	1	17	6	17.7				0.13	17.8	24	6.2
	HT/VHT40, M0 to M7	2	17	6	17.7	17.1			0.13	20.6	24	3.4
	HT/VHT40, M8 to M15	2	17	6	17.7	17.1			0.13	20.6	24	3.4
	HT/VHT40, M0 to M7	3	14	6	14.9	14	13.5		0.13	19.1	24	4.9
	HT/VHT40, M8 to M15	3	16	6	16.7	16.1	15.5		0.13	21.0	24	3.0
	HT/VHT40, M16 to M23	3	16	6	16.7	16.1	15.5		0.13	21.0	24	3.0
	HT/VHT40, M0 to M7	4	12	6	12.9	11.9	11.4	12	0.13	18.2	24	5.8
	HT/VHT40, M8 to M15	4	15	6	15.8	15.1	14.5	14.8	0.13	21.2	24	2.8
	HT/VHT40, M16 to M23	4	15	6	15.8	15.1	14.5	14.8	0.13	21.2	24	2.8
	HT/VHT40, M24 to M31	4	15	6	15.8	15.1	14.5	14.8	0.13	21.2	24	2.8
	HT/VHT40 Beam Forming, M0 to M7	2	14	9	14.9	14			0.13	17.6	21	3.4
	HT/VHT40 Beam Forming, M8 to M15	2	17	6	17.7	17.1			0.13	20.6	24	3.4
	HT/VHT40 Beam Forming, M0 to M7	3	11	11	11.7	11.1	10.4		0.13	16.0	19	3.0
	HT/VHT40 Beam Forming, M8 to M15	3	14	8	14.9	14	13.5		0.13	19.1	22	2.9
	HT/VHT40 Beam Forming, M16 to M23	3	16	6	16.7	16.1	15.5		0.13	21.0	24	3.0
	HT/VHT40 Beam Forming, M0 to M7	4	8	12	8.5	7.8	7.4	7.6	0.13	14.0	18	4.0
	HT/VHT40 Beam Forming, M8 to M15	4	11	9	11.7	11.1	10.4	10.7	0.13	17.2	21	3.8
	HT/VHT40 Beam Forming, M16 to M23	4	13	7	13.8	13.1	12.2	12.7	0.13	19.1	23	3.9
	HT/VHT40 Beam Forming, M24 to M31	4	15	6	15.8	15.1	14.5	14.8	0.13	21.2	24	2.8
	HT/VHT40 STBC, M0 to M7	2	17	6	17.7	17.1			0.13	20.6	24	3.4
	HT/VHT40 STBC, M0 to M7	3	16	6	16.7	16.1	15.5		0.13	21.0	24	3.0

	HT/VHT40 STBC, M0 to M7	4	15	6	15.8	15.1	14.5	14.8	0.13	21.2	24	2.8
5560	Non HT20, 6 to 54 Mbps	1	17	6	17.4				0.14	17.5	24	6.5
	Non HT20, 6 to 54 Mbps	2	15	6	15.3	14.4			0.14	18.0	24	6.0
	Non HT20, 6 to 54 Mbps	3	12	6	12.2	11.1	10.9		0.14	16.3	24	7.7
	Non HT20, 6 to 54 Mbps	4	10	6	10	9.3	8.8	9	0.14	15.5	24	8.5
	Non HT20 Beam Forming, 6 to 54 Mbps	2	14	9	14	13.2			0.14	16.8	21	4.2
	Non HT20 Beam Forming, 6 to 54 Mbps	3	11	11	11.1	10.1	9.6		0.14	15.2	19	3.8
	Non HT20 Beam Forming, 6 to 54 Mbps	4	8	12	7.7	7.1	6.8	6.7	0.14	13.3	18	4.7
	HT/VHT20, M0 to M7	1	17	6	16.7				0.06	16.8	24	7.2
	HT/VHT20, M0 to M7	2	16	6	15.8	15			0.06	18.5	24	5.5
	HT/VHT20, M8 to M15	2	17	6	16.7	16.1			0.06	19.5	24	4.5
	HT/VHT20, M0 to M7	3	12	6	11.9	11	10.6		0.06	16.0	24	8.0
	HT/VHT20, M8 to M15	3	15	6	14.8	14	13.6		0.06	19.0	24	5.0
	HT/VHT20, M16 to M23	3	16	6	15.8	15	14.5		0.06	20.0	24	4.0
	HT/VHT20, M0 to M7	4	10	6	9.7	8.8	8.6	8.7	0.06	15.1	24	8.9
	HT/VHT20, M8 to M15	4	13	6	12.9	12.1	11.4	12	0.06	18.2	24	5.8
	HT/VHT20, M16 to M23	4	15	6	14.8	14	13.6	13.9	0.06	20.2	24	3.8
	HT/VHT20, M24 to M31	4	15	6	14.8	14	13.6	13.9	0.06	20.2	24	3.8
	HT/VHT20 Beam Forming, M0 to M7	2	14	9	13.9	13			0.06	16.5	21	4.5
	HT/VHT20 Beam Forming, M8 to M15	2	17	6	16.7	16.1			0.06	19.5	24	4.5
	HT/VHT20 Beam Forming, M0 to M7	3	11	11	10.8	10	9.5		0.06	15.0	19	4.0
	HT/VHT20 Beam Forming, M8 to M15	3	14	8	13.9	13	12.5		0.06	18.0	22	4.0
	HT/VHT20 Beam Forming, M16 to M23	3	16	6	15.8	15	14.5		0.06	20.0	24	4.0
	HT/VHT20 Beam Forming, M0 to M7	4	8	12	7.5	6.9	6.5	6.5	0.06	13.0	18	5.0
	HT/VHT20 Beam Forming, M8 to M15	4	11	9	10.8	10	9.5	9.7	0.06	16.1	21	4.9
	HT/VHT20 Beam Forming, M16 to M23	4	13	7	12.9	12.1	11.4	12	0.06	18.2	23	4.8
	HT/VHT20 Beam Forming, M24 to M31	4	15	6	14.8	14	13.6	13.9	0.06	20.2	24	3.8
	HT/VHT20 STBC, M0 to M7	2	17	6	16.7	16.1			0.06	19.5	24	4.5
	HT/VHT20 STBC, M0 to M7	3	15	6	14.8	14	13.6		0.06	19.0	24	5.0
	HT/VHT20 STBC, M0 to M7	4	13	6	12.9	12.1	11.4	12	0.06	18.2	24	5.8
5610	Non HT80, 6 to 54 Mbps	1	17	6	18				0.15	18.2	24	5.9
	Non HT80, 6 to 54 Mbps	2	17	6	18	17.2			0.15	20.8	24	3.2
	Non HT80, 6 to 54 Mbps	3	16	6	16.8	16.2	15.9		0.15	21.2	24	2.8
	Non HT80, 6 to 54 Mbps	4	15	6	15.8	15	14.9	15	0.15	21.4	24	2.6
	VHT80, M0 to M9 1ss	1	17	6	17.8				0.7	18.5	24	5.5
	VHT80, M0 to M9 1ss	2	17	6	17.8	17.2			0.7	21.2	24	2.8
	VHT80, M0 to M9 2ss	2	17	6	17.8	17.2			0.7	21.2	24	2.8
	VHT80, M0 to M9 1ss	3	16	6	16.8	15.9	15.8		0.7	21.7	24	2.3
	VHT80, M0 to M9 2ss	3	16	6	16.8	15.9	15.8		0.7	21.7	24	2.3

	VHT80, M0 to M9 3ss	3	16	6	16.8	15.9	15.8		0.7	21.7	24	2.3
	VHT80, M0 to M9 1ss	4	15	6	15.8	14.9	14.7	15.1	0.7	21.9	24	2.1
	VHT80, M0 to M9 2ss	4	15	6	15.8	14.9	14.7	15.1	0.7	21.9	24	2.1
	VHT80, M0 to M9 3ss	4	15	6	15.8	14.9	14.7	15.1	0.7	21.9	24	2.1
	VHT80, M0 to M9 4ss	4	15	6	15.8	14.9	14.7	15.1	0.7	21.9	24	2.1
	VHT80 Beam Forming, M0 to M9 1ss	2	14	9	14.7	13.8			0.7	18.0	21	3.0
	VHT80 Beam Forming, M0 to M9 2ss	2	17	6	17.8	17.2			0.7	21.2	24	2.8
	VHT80 Beam Forming, M0 to M9 1ss	3	11	11	11.6	11	10.9		0.7	16.6	19	2.4
	VHT80 Beam Forming, M0 to M9 2ss	3	14	8	14.7	13.8	13.7		0.7	19.6	22	2.4
	VHT80 Beam Forming, M0 to M9 3ss	3	16	6	16.8	15.9	15.8		0.7	21.7	24	2.3
	VHT80 Beam Forming, M0 to M9 1ss	4	8	12	8.6	7.9	7.9	7.7	0.7	14.8	18	3.2
	VHT80 Beam Forming, M0 to M9 2ss	4	11	9	11.6	11	10.9	11.1	0.7	17.9	21	3.1
	VHT80 Beam Forming, M0 to M9 3ss	4	13	7	13.7	12.9	12.7	12.8	0.7	19.8	23	3.2
	VHT80 Beam Forming, M0 to M9 4ss	4	15	6	15.8	14.9	14.7	15.1	0.7	21.9	24	2.1
	VHT80 STBC, M0 to M9 1ss	2	17	6	17.8	17.2			0.7	21.2	24	2.8
	VHT80 STBC, M0 to M9 1ss	3	16	6	16.8	15.9	15.8		0.7	21.7	24	2.3
	VHT80 STBC, M0 to M9 1ss	4	15	6	15.8	14.9	14.7	15.1	0.7	21.9	24	2.1
5690												
	Non HT80, 6 to 54 Mbps	1	17	6	17.2				0.15	17.4	24	6.7
	Non HT80, 6 to 54 Mbps	2	17	6	17.2	16.6			0.15	20.1	24	3.9
	Non HT80, 6 to 54 Mbps	3	16	6	16.2	15.6	15.1		0.15	20.6	24	3.4
	Non HT80, 6 to 54 Mbps	4	15	6	15.3	14.7	14	14.4	0.15	20.8	24	3.2
	VHT80, M0 to M9 1ss	1	17	6	16.9				0.7	17.6	24	6.4
	VHT80, M0 to M9 1ss	2	17	6	16.9	16.4			0.7	20.4	24	3.6
	VHT80, M0 to M9 2ss	2	17	6	16.9	16.4			0.7	20.4	24	3.6
	VHT80, M0 to M9 1ss	3	16	6	15.9	15.4	14.8		0.7	20.9	24	3.1
	VHT80, M0 to M9 2ss	3	16	6	15.9	15.4	14.8		0.7	20.9	24	3.1
	VHT80, M0 to M9 3ss	3	16	6	15.9	15.4	14.8		0.7	20.9	24	3.1
	VHT80, M0 to M9 1ss	4	15	6	15.1	14.2	13.7	14.2	0.7	21.1	24	2.9
	VHT80, M0 to M9 2ss	4	15	6	15.1	14.2	13.7	14.2	0.7	21.1	24	2.9
	VHT80, M0 to M9 3ss	4	15	6	15.1	14.2	13.7	14.2	0.7	21.1	24	2.9
	VHT80, M0 to M9 4ss	4	15	6	15.1	14.2	13.7	14.2	0.7	21.1	24	2.9
	VHT80 Beam Forming, M0 to M9 1ss	2	14	9	13.9	13.3			0.7	17.3	21	3.7
	VHT80 Beam Forming, M0 to M9 2ss	2	17	6	16.9	16.4			0.7	20.4	24	3.6
	VHT80 Beam Forming, M0 to M9 1ss	3	11	11	10.9	10.1	9.7		0.7	15.7	19	3.3
	VHT80 Beam Forming, M0 to M9 2ss	3	14	8	13.9	13.3	12.6		0.7	18.8	22	3.2
	VHT80 Beam Forming, M0 to M9 3ss	3	16	6	15.9	15.4	14.8		0.7	20.9	24	3.1
	VHT80 Beam Forming, M0 to M9 1ss	4	8	12	7.8	7.4	6.9	7	0.7	14.0	18	4.0
	VHT80 Beam Forming, M0 to M9 2ss	4	11	9	10.9	10.1	9.7	10.2	0.7	17.0	21	4.0
	VHT80 Beam Forming, M0 to M9 3ss	4	13	7	13	12.3	11.9	12.3	0.7	19.1	23	3.9
	VHT80 Beam Forming, M0 to M9 4ss	4	15	6	15.1	14.2	13.7	14.2	0.7	21.1	24	2.9

	VHT80 STBC, M0 to M9 1ss	2	17	6	16.9	16.4			0.7	20.4	24	3.6
	VHT80 STBC, M0 to M9 1ss	3	16	6	15.9	15.4	14.8		0.7	20.9	24	3.1
	VHT80 STBC, M0 to M9 1ss	4	15	6	15.1	14.2	13.7	14.2	0.7	21.1	24	2.9
5700	Non HT20, 6 to 54 Mbps	1	17	6	17				0.14	17.1	24	6.9
	Non HT20, 6 to 54 Mbps	2	16	6	16	15.3			0.14	18.8	24	5.2
	Non HT20, 6 to 54 Mbps	3	12	6	12.3	11.3	10.9		0.14	16.5	24	7.5
	Non HT20, 6 to 54 Mbps	4	10	6	10.1	9.5	9	9.2	0.14	15.6	24	8.4
	Non HT20 Beam Forming, 6 to 54 Mbps	2	14	9	14.2	13.3			0.14	16.9	21	4.1
	Non HT20 Beam Forming, 6 to 54 Mbps	3	11	11	11.2	10.4	9.9		0.14	15.4	19	3.6
	Non HT20 Beam Forming, 6 to 54 Mbps	4	8	12	7.8	7.2	6.8	7.1	0.14	13.4	18	4.6
	HT/VHT20, M0 to M7	1	17	6	16.9				0.06	17.0	24	7.0
	HT/VHT20, M0 to M7	2	16	6	15.6	14.7			0.06	18.2	24	5.8
	HT/VHT20, M8 to M15	2	16	6	15.6	14.7			0.06	18.2	24	5.8
	HT/VHT20, M0 to M7	3	13	6	12.9	11.8	11.6		0.06	17.0	24	7.0
	HT/VHT20, M8 to M15	3	16	6	15.6	14.7	14.2		0.06	19.7	24	4.3
	HT/VHT20, M16 to M23	3	16	6	15.6	14.7	14.2		0.06	19.7	24	4.3
	HT/VHT20, M0 to M7	4	10	6	9.9	9.2	8.6	8.9	0.06	15.3	24	8.7
	HT/VHT20, M8 to M15	4	13	6	12.9	11.8	11.6	11.9	0.06	18.2	24	5.8
	HT/VHT20, M16 to M23	4	15	6	14.9	14	13.5	14	0.06	20.2	24	3.8
	HT/VHT20, M24 to M31	4	15	6	14.9	14	13.5	14	0.06	20.2	24	3.8
	HT/VHT20 Beam Forming, M0 to M7	2	14	9	13.8	13.1			0.06	16.5	21	4.5
	HT/VHT20 Beam Forming, M8 to M15	2	16	6	15.6	14.7			0.06	18.2	24	5.8
	HT/VHT20 Beam Forming, M0 to M7	3	11	11	11	10.2	9.5		0.06	15.1	19	3.9
	HT/VHT20 Beam Forming, M8 to M15	3	14	8	13.8	13.1	12.6		0.06	18.0	22	4.0
	HT/VHT20 Beam Forming, M16 to M23	3	16	6	15.6	14.7	14.2		0.06	19.7	24	4.3
	HT/VHT20 Beam Forming, M0 to M7	4	8	12	7.5	6.8	6.6	6.7	0.06	13.0	18	5.0
	HT/VHT20 Beam Forming, M8 to M15	4	11	9	11	10.2	9.5	9.8	0.06	16.2	21	4.8
	HT/VHT20 Beam Forming, M16 to M23	4	13	7	12.9	11.8	11.6	11.9	0.06	18.2	23	4.8
	HT/VHT20 Beam Forming, M24 to M31	4	15	6	14.9	14	13.5	14	0.06	20.2	24	3.8
	HT/VHT20 STBC, M0 to M7	2	16	6	15.6	14.7			0.06	18.2	24	5.8
	HT/VHT20 STBC, M0 to M7	3	16	6	15.6	14.7	14.2		0.06	19.7	24	4.3
	HT/VHT20 STBC, M0 to M7	4	13	6	12.9	11.8	11.6	11.9	0.06	18.2	24	5.8
5710	Non HT40, 6 to 54 Mbps	1	17	6	17.1				0.13	17.2	24	6.8
	Non HT40, 6 to 54 Mbps	2	17	6	17.1	16.5			0.13	20.0	24	4.0
	Non HT40, 6 to 54 Mbps	3	14	6	14.2	13.3	13.1		0.13	18.5	24	5.5
	Non HT40, 6 to 54 Mbps	4	11	6	11.3	10.4	10.7	10.4	0.13	16.9	24	7.1
	HT/VHT40, M0 to M7	1	17	6	17.6				0.13	17.7	24	6.3
	HT/VHT40, M0 to M7	2	17	6	17.6	17			0.13	20.5	24	3.5
	HT/VHT40, M8 to M15	2	17	6	17.6	17			0.13	20.5	24	3.5

	HT/VHT40, M0 to M7	3	14	6	14.8	14	13.7		0.13	19.1	24	4.9
	HT/VHT40, M8 to M15	3	16	6	16.6	16.2	15.6		0.13	21.1	24	2.9
	HT/VHT40, M16 to M23	3	16	6	16.6	16.2	15.6		0.13	21.1	24	2.9
	HT/VHT40, M0 to M7	4	12	6	12.8	12.1	11.5	11.9	0.13	18.3	24	5.7
	HT/VHT40, M8 to M15	4	15	6	15.6	15.1	14.3	15	0.13	21.2	24	2.8
	HT/VHT40, M16 to M23	4	15	6	15.6	15.1	14.3	15	0.13	21.2	24	2.8
	HT/VHT40, M24 to M31	4	15	6	15.6	15.1	14.3	15	0.13	21.2	24	2.8
	HT/VHT40 Beam Forming, M0 to M7	2	14	9	14.8	14			0.13	17.6	21	3.4
	HT/VHT40 Beam Forming, M8 to M15	2	17	6	17.6	17			0.13	20.5	24	3.5
	HT/VHT40 Beam Forming, M0 to M7	3	11	11	11.8	11	10.6		0.13	16.1	19	2.9
	HT/VHT40 Beam Forming, M8 to M15	3	14	8	14.8	14	13.7		0.13	19.1	22	2.9
	HT/VHT40 Beam Forming, M16 to M23	3	16	6	16.6	16.2	15.6		0.13	21.1	24	2.9
	HT/VHT40 Beam Forming, M0 to M7	4	8	12	8.4	7.7	7.4	7.8	0.13	14.0	18	4.0
	HT/VHT40 Beam Forming, M8 to M15	4	11	9	11.8	11	10.6	10.8	0.13	17.2	21	3.8
	HT/VHT40 Beam Forming, M16 to M23	4	13	7	13.8	13	12.5	12.9	0.13	19.2	23	3.8
	HT/VHT40 Beam Forming, M24 to M31	4	15	6	15.6	15.1	14.3	15	0.13	21.2	24	2.8
	HT/VHT40 STBC, M0 to M7	2	17	6	17.6	17			0.13	20.5	24	3.5
	HT/VHT40 STBC, M0 to M7	3	16	6	16.6	16.2	15.6		0.13	21.1	24	2.9
	HT/VHT40 STBC, M0 to M7	4	15	6	15.6	15.1	14.3	15	0.13	21.2	24	2.8
5720	Non HT20, 6 to 54 Mbps	1	17	6	16.1				0.14	16.2	24	7.8
	Non HT20, 6 to 54 Mbps	2	16	6	15.1	14.4			0.14	17.9	24	6.1
	Non HT20, 6 to 54 Mbps	3	13	6	12.1	11.2	11		0.14	16.4	24	7.6
	Non HT20, 6 to 54 Mbps	4	10	6	9.2	8.5	8	8.5	0.14	14.7	24	9.3
	Non HT20 Beam Forming, 6 to 54 Mbps	2	14	9	13.2	12.3			0.14	15.9	21	5.1
	Non HT20 Beam Forming, 6 to 54 Mbps	3	11	11	10.1	9.4	8.9		0.14	14.4	19	4.6
	Non HT20 Beam Forming, 6 to 54 Mbps	4	8	12	6.8	6.1	5.8	6.3	0.14	12.4	18	5.6
	HT/VHT20, M0 to M7	1	17	6	15.7				0.06	15.8	24	8.2
	HT/VHT20, M0 to M7	2	16	6	14.7	13.9			0.06	17.4	24	6.6
	HT/VHT20, M8 to M15	2	17	6	15.7	14.9			0.06	18.4	24	5.6
	HT/VHT20, M0 to M7	3	13	6	11.9	10.8	10.6		0.06	16.0	24	8.0
	HT/VHT20, M8 to M15	3	16	6	14.7	13.9	13.5		0.06	18.9	24	5.1
	HT/VHT20, M16 to M23	3	16	6	14.7	13.9	13.5		0.06	18.9	24	5.1
	HT/VHT20, M0 to M7	4	9	6	7.7	7	6.5	6.9	0.06	13.1	24	10.9
	HT/VHT20, M8 to M15	4	14	6	12.8	12	11.6	12.1	0.06	18.2	24	5.8
	HT/VHT20, M16 to M23	4	15	6	13.8	13	12.4	13.1	0.06	19.2	24	4.8
	HT/VHT20, M24 to M31	4	15	6	13.8	13	12.4	13.1	0.06	19.2	24	4.8
	HT/VHT20 Beam Forming, M0 to M7	2	14	9	12.8	12			0.06	15.5	21	5.5
	HT/VHT20 Beam Forming, M8 to M15	2	17	6	15.7	14.9			0.06	18.4	24	5.6
	HT/VHT20 Beam Forming, M0 to M7	3	11	11	10	9	8.6		0.06	14.1	19	4.9
	HT/VHT20 Beam Forming, M8 to M15	3	14	8	12.8	12	11.6		0.06	17.0	22	5.0

HT/VHT20 Beam Forming, M16 to M23	3	16	6	14.7	13.9	13.5		0.06	18.9	24	5.1
HT/VHT20 Beam Forming, M0 to M7	4	8	12	6.5	5.8	5.4	6	0.06	12.0	18	6.0
HT/VHT20 Beam Forming, M8 to M15	4	11	9	10	9	8.6	9.2	0.06	15.3	21	5.7
HT/VHT20 Beam Forming, M16 to M23	4	13	7	11.9	10.8	10.6	11.1	0.06	17.2	23	5.8
HT/VHT20 Beam Forming, M24 to M31	4	15	6	13.8	13	12.4	13.1	0.06	19.2	24	4.8
HT/VHT20 STBC, M0 to M7	2	17	6	15.7	14.9			0.06	18.4	24	5.6
HT/VHT20 STBC, M0 to M7	3	16	6	14.7	13.9	13.5		0.06	18.9	24	5.1
HT/VHT20 STBC, M0 to M7	4	14	6	12.8	12	11.6	12.1	0.06	18.2	24	5.8

5.3.5 Maximum Conducted Output Power Plots



5.4 Power Spectral Density

5.4.1 Power Spectral Density Test Requirement

15.407

(2) For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250mW or $11 \text{ dBm} + 10 \log B$, where B is the 26dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1-megahertz band. If transmitting antennas of directional gain greater than 6dBi 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 6dBi.

5.4.2 Power Spectral Density Test Procedure

Ref. 789033 D02 General UNII Test Procedures New Rules v01r02

ANSI C63.10: 2013

Output Power
Test Procedure
1. Set the radio in the continuous transmitting mode at full power 2. Compute power by integrating the spectrum across the EBW (or alternatively entire 99% OBW) of the signal using the instrument's band power measurement function. The integration shall be performed using the spectrum analyzer band-power measurement function with band limits set equal to the EBW or the OBW band edges. 3. Capture graphs and record pertinent measurement data.

Ref. 789033 D02 General UNII Test Procedures New Rules v01r02

ANSI C63.10: 2013, section 12.3.2.2 Method SA-1

Output Power
Test parameters
Span = >1.5 times the OBW RBW = 1MHz VBW $\geq$ 3 x RBW Sweep = Auto couple Detector = Sample Trace = Trace Average 100

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. (ANSI C63.10: 2013, section 14.3.2.2)

5.4.3 Power Spectral Density Test Information

Samples, Systems, and Modes

System Number	Description	Samples	System under test	Support equipment
1	EUT	S01	☒	☐
	Support	S02	☐	☒

Tested By: Julian Land	Date of testing: March 6, 2019 - March 26, 2019
Test Result: PASS	

Test Equipment

See Appendix A for list of test equipment

5.4.4 Power Spectral Density Data Table

Frequency (MHz)	Mode	Tx Paths	Index Power (dBm)	Correlated Antenna Gain (dBi)	Tx 1 PSD (dBm/MHz)	Tx 2 PSD (dBm/MHz)	Tx 3 PSD (dBm/MHz)	Tx 4 PSD (dBm/MHz)	Duty Cycle (dB)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)
5500	Non HT20, 6 to 54 Mbps	1	17	6	5.4				0.14	5.5	11	5.5
	Non HT20, 6 to 54 Mbps	2	16	9	4.1	3.7			0.14	7.1	8	0.9
	Non HT20, 6 to 54 Mbps	3	13	11	1.5	0.7	0		0.14	5.7	6	0.3
	Non HT20, 6 to 54 Mbps	4	11	12	-0.6	-1.4	-1.9	-1.4	0.14	4.9	5	0.1
	Non HT20 Beam Forming, 6 to 54 Mbps	2	14	9	2.2	1.8			0.14	5.2	8	2.8
	Non HT20 Beam Forming, 6 to 54 Mbps	3	11	11	-0.6	-1.4	-1.9		0.14	3.6	6	2.4
	Non HT20 Beam Forming, 6 to 54 Mbps	4	8	12	-3.7	-4.1	-4.9	-4.4	0.14	1.9	5	3.1
	HT/VHT20, M0 to M7	1	17	6	4.8				0.06	4.9	11	6.1
	HT/VHT20, M0 to M7	2	17	9	4.8	4.5			0.06	7.7	8	0.3
	HT/VHT20, M8 to M15	2	17	6	4.8	4.5			0.06	7.7	11	3.3
	HT/VHT20, M0 to M7	3	13	11	1	0.3	-0.5		0.06	5.1	6	0.9
	HT/VHT20, M8 to M15	3	16	8	3.8	3.3	2.3		0.06	8.0	9	1.0
	HT/VHT20, M16 to M23	3	16	6	3.8	3.3	2.3		0.06	8.0	11	3.0
	HT/VHT20, M0 to M7	4	11	12	-1.5	-1.9	-2.1	-2.1	0.06	4.2	5	0.8
	HT/VHT20, M8 to M15	4	14	9	1.6	1.1	0.3	1.1	0.06	7.1	8	0.9
	HT/VHT20, M16 to M23	4	15	7	2.6	2.4	1.3	2.1	0.06	8.2	10	1.8
	HT/VHT20, M24 to M31	4	15	6	2.6	2.4	1.3	2.1	0.06	8.2	11	2.8
	HT/VHT20 Beam Forming, M0 to M7	2	14	9	1.6	1.1			0.06	4.4	8	3.6
	HT/VHT20 Beam Forming, M8 to M15	2	17	6	4.8	4.5			0.06	7.7	11	3.3
	HT/VHT20 Beam Forming, M0 to M7	3	11	11	-1.5	-1.9	-2.1		0.06	3.0	6	3.0
	HT/VHT20 Beam Forming, M8 to M15	3	14	8	1.6	1.1	0.3		0.06	5.9	9	3.1
	HT/VHT20 Beam Forming, M16 to M23	3	16	6	3.8	3.3	2.3		0.06	8.0	11	3.0
	HT/VHT20 Beam Forming, M0 to M7	4	8	12	-4.5	-5.1	-5.4	-5.4	0.06	1.0	5	4.0
	HT/VHT20 Beam Forming, M8 to M15	4	11	9	-1.5	-1.9	-2.1	-2.1	0.06	4.2	8	3.8
	HT/VHT20 Beam Forming, M16 to M23	4	13	7	1	0.3	-0.5	0.2	0.06	6.4	10	3.6

	HT/VHT20 Beam Forming, M24 to M31	4	15	6	2.6	2.4	1.3	2.1	0.06	8.2	11	2.8
	HT/VHT20 STBC, M0 to M7	2	17	6	4.8	4.5			0.06	7.7	11	3.3
	HT/VHT20 STBC, M0 to M7	3	16	8	3.8	3.3	2.3		0.06	8.0	9	1.0
	HT/VHT20 STBC, M0 to M7	4	14	9	1.6	1.1	0.3	1.1	0.06	7.1	8	0.9
5510	Non HT40, 6 to 54 Mbps	1	17	6	4.4				0.13	4.5	11	6.5
	Non HT40, 6 to 54 Mbps	2	16	9	3.1	2.3			0.13	5.9	8	2.1
	Non HT40, 6 to 54 Mbps	3	14	11	1.4	0.7	-0.2		0.13	5.6	6	0.4
	Non HT40, 6 to 54 Mbps	4	12	12	-1	-1.2	-2	-1.7	0.13	4.7	5	0.3
	HT/VHT40, M0 to M7	1	15	6	1.2				0.13	1.3	11	9.7
	HT/VHT40, M0 to M7	2	15	9	1.2	0.9			0.13	4.2	8	3.8
	HT/VHT40, M8 to M15	2	15	6	1.2	0.9			0.13	4.2	11	6.8
	HT/VHT40, M0 to M7	3	14	11	0.3	-0.4	-1.1		0.13	4.5	6	1.5
	HT/VHT40, M8 to M15	3	14	8	0.3	-0.4	-1.1		0.13	4.5	9	4.5
	HT/VHT40, M16 to M23	3	14	6	0.3	-0.4	-1.1		0.13	4.5	11	6.5
	HT/VHT40, M0 to M7	4	13	12	-0.7	-1.4	-2	-1.4	0.13	4.8	5	0.2
	HT/VHT40, M8 to M15	4	13	9	-0.7	-1.4	-2	-1.4	0.13	4.8	8	3.2
	HT/VHT40, M16 to M23	4	13	7	-0.7	-1.4	-2	-1.4	0.13	4.8	10	5.2
	HT/VHT40, M24 to M31	4	13	6	-0.7	-1.4	-2	-1.4	0.13	4.8	11	6.2
	HT/VHT40 Beam Forming, M0 to M7	2	13	9	-0.7	-1.4			0.13	2.1	8	5.9
	HT/VHT40 Beam Forming, M8 to M15	2	15	6	1.2	0.9			0.13	4.2	11	6.8
	HT/VHT40 Beam Forming, M0 to M7	3	11	11	-2.1	-3.6	-4.2		0.13	1.7	6	4.3
	HT/VHT40 Beam Forming, M8 to M15	3	13	8	-0.7	-1.4	-2		0.13	3.6	9	5.4
	HT/VHT40 Beam Forming, M16 to M23	3	14	6	0.3	-0.4	-1.1		0.13	4.5	11	6.5
	HT/VHT40 Beam Forming, M0 to M7	4	8	12	-5.6	-6.3	-7	-6.5	0.13	-0.2	5	5.2
	HT/VHT40 Beam Forming, M8 to M15	4	11	9	-2.1	-3.6	-4.2	-3.3	0.13	2.9	8	5.1
	HT/VHT40 Beam Forming, M16 to M23	4	13	7	-0.7	-1.4	-2	-1.4	0.13	4.8	10	5.2
	HT/VHT40 Beam Forming, M24 to M31	4	13	6	-0.7	-1.4	-2	-1.4	0.13	4.8	11	6.2
	HT/VHT40 STBC, M0 to M7	2	15	6	1.2	0.9			0.13	4.2	11	6.8
	HT/VHT40 STBC, M0 to M7	3	14	8	0.3	-0.4	-1.1		0.13	4.5	9	4.5
	HT/VHT40 STBC, M0 to M7	4	13	9	-0.7	-1.4	-2	-1.4	0.13	4.8	8	3.2
5530	Non HT80, 6 to 54 Mbps	1	14	6	-2.3				0.15	-2.2	11	13.2
	Non HT80, 6 to 54 Mbps	2	14	9	-2.3	-3.6			0.15	0.3	8	7.7
	Non HT80, 6 to 54 Mbps	3	13	11	-3.8	-4.6	-4.9		0.15	0.5	6	5.5
	Non HT80, 6 to 54 Mbps	4	12	12	-4.2	-5.5	-6	-5.8	0.15	0.9	5	4.1
	VHT80, M0 to M9 1ss	1	14	6	-3				0.7	-2.3	11	13.3
	VHT80, M0 to M9 1ss	2	13	9	-3.8	-5.2			0.7	-0.7	8	8.7
	VHT80, M0 to M9 2ss	2	13	6	-3.8	-5.2			0.7	-0.7	11	11.7
	VHT80, M0 to M9 1ss	3	12	11	-4.9	-5.6	-6.3		0.7	-0.1	6	6.1
	VHT80, M0 to M9 2ss	3	12	8	-4.9	-5.6	-6.3		0.7	-0.1	9	9.1

	VHT80, M0 to M9 3ss	3	12	6	-4.9	-5.6	-6.3		0.7	-0.1	11	11.1
	VHT80, M0 to M9 1ss	4	11	12	-6	-7.2	-7.8	-7.3	0.7	-0.3	5	5.3
	VHT80, M0 to M9 2ss	4	11	9	-6	-7.2	-7.8	-7.3	0.7	-0.3	8	8.3
	VHT80, M0 to M9 3ss	4	11	7	-6	-7.2	-7.8	-7.3	0.7	-0.3	10	10.3
	VHT80, M0 to M9 4ss	4	11	6	-6	-7.2	-7.8	-7.3	0.7	-0.3	11	11.3
	VHT80 Beam Forming, M0 to M9 1ss	2	12	9	-4.9	-5.6			0.7	-1.5	8	9.5
	VHT80 Beam Forming, M0 to M9 2ss	2	13	6	-3.8	-5.2			0.7	-0.7	11	11.7
	VHT80 Beam Forming, M0 to M9 1ss	3	10	11	-6.9	-8.2	-8.3		0.7	-2.3	6	8.3
	VHT80 Beam Forming, M0 to M9 2ss	3	11	8	-6	-7.2	-7.8		0.7	-1.5	9	10.5
	VHT80 Beam Forming, M0 to M9 3ss	3	12	6	-4.9	-5.6	-6.3		0.7	-0.1	11	11.1
	VHT80 Beam Forming, M0 to M9 1ss	4	7	12	-10.1	-11	-11.9	-11.6	0.7	-4.4	5	9.4
	VHT80 Beam Forming, M0 to M9 2ss	4	11	9	-6	-7.2	-7.8	-7.3	0.7	-0.3	8	8.3
	VHT80 Beam Forming, M0 to M9 3ss	4	11	7	-6	-7.2	-7.8	-7.3	0.7	-0.3	10	10.3
	VHT80 Beam Forming, M0 to M9 4ss	4	11	6	-6	-7.2	-7.8	-7.3	0.7	-0.3	11	11.3
	VHT80 STBC, M0 to M9 1ss	2	13	6	-3.8	-5.2			0.7	-0.7	11	11.7
	VHT80 STBC, M0 to M9 1ss	3	12	6	-4.9	-5.6	-6.3		0.7	-0.1	11	11.1
	VHT80 STBC, M0 to M9 1ss	4	11	6	-6	-7.2	-7.8	-7.3	0.7	-0.3	11	11.3
5550	Non HT40, 6 to 54 Mbps	1	17	6	4.9				0.13	5.0	11	6.0
	Non HT40, 6 to 54 Mbps	2	17	9	4.9	4.1			0.13	7.7	8	0.3
	Non HT40, 6 to 54 Mbps	3	14	11	2	0.9	-0.1		0.13	5.9	6	0.1
	Non HT40, 6 to 54 Mbps	4	11	12	-0.8	-1.9	-3.1	-2.4	0.13	4.2	5	0.8
	HT/VHT40, M0 to M7	1	17	6	4				0.13	4.1	11	6.9
	HT/VHT40, M0 to M7	2	17	9	4	3.4			0.13	6.9	8	1.1
	HT/VHT40, M8 to M15	2	17	6	4	3.4			0.13	6.9	11	4.1
	HT/VHT40, M0 to M7	3	14	11	1.7	0.5	-0.2		0.13	5.6	6	0.4
	HT/VHT40, M8 to M15	3	16	8	3.3	2.3	2		0.13	7.5	9	1.5
	HT/VHT40, M16 to M23	3	16	6	3.3	2.3	2		0.13	7.5	11	3.5
	HT/VHT40, M0 to M7	4	12	12	-0.9	-1.6	-2.3	-1.7	0.13	4.6	5	0.4
	HT/VHT40, M8 to M15	4	15	9	2.1	1.1	0.7	1.1	0.13	7.4	8	0.6
	HT/VHT40, M16 to M23	4	15	7	2.1	1.1	0.7	1.1	0.13	7.4	10	2.6
	HT/VHT40, M24 to M31	4	15	6	2.1	1.1	0.7	1.1	0.13	7.4	11	3.6
	HT/VHT40 Beam Forming, M0 to M7	2	14	9	1.7	0.5			0.13	4.3	8	3.7
	HT/VHT40 Beam Forming, M8 to M15	2	17	6	4	3.4			0.13	6.9	11	4.1
	HT/VHT40 Beam Forming, M0 to M7	3	11	11	-2	-2.5	-2.8		0.13	2.5	6	3.5
	HT/VHT40 Beam Forming, M8 to M15	3	14	8	1.7	0.5	-0.2		0.13	5.6	9	3.4
	HT/VHT40 Beam Forming, M16 to M23	3	16	6	3.3	2.3	2		0.13	7.5	11	3.5
	HT/VHT40 Beam Forming, M0 to M7	4	8	12	-5	-6.1	-6.1	-6	0.13	0.4	5	4.6
	HT/VHT40 Beam Forming, M8 to M15	4	11	9	-2	-2.5	-2.8	-2.9	0.13	3.6	8	4.4
	HT/VHT40 Beam Forming, M16 to M23	4	13	7	0.2	-0.7	-1.5	-0.9	0.13	5.5	10	4.5
	HT/VHT40 Beam Forming, M24 to M31	4	15	6	2.1	1.1	0.7	1.1	0.13	7.4	11	3.6

	HT/VHT40 STBC, M0 to M7	2	17	6	4	3.4			0.13	6.9	11	4.1
	HT/VHT40 STBC, M0 to M7	3	16	8	3.3	2.3	2		0.13	7.5	9	1.5
	HT/VHT40 STBC, M0 to M7	4	15	9	2.1	1.1	0.7	1.1	0.13	7.4	8	0.6
5560	Non HT20, 6 to 54 Mbps	1	17	6	6.7				0.14	6.8	11	4.2
	Non HT20, 6 to 54 Mbps	2	15	9	4.4	4.1			0.14	7.4	8	0.6
	Non HT20, 6 to 54 Mbps	3	12	11	1.7	0.6	0.3		0.14	5.8	6	0.2
	Non HT20, 6 to 54 Mbps	4	10	12	-0.7	-1.5	-2.3	-1.6	0.14	4.7	5	0.3
	Non HT20 Beam Forming, 6 to 54 Mbps	2	14	9	3.3	2.2			0.14	5.9	8	2.1
	Non HT20 Beam Forming, 6 to 54 Mbps	3	11	11	0.4	-0.7	-1.2		0.14	4.5	6	1.5
	Non HT20 Beam Forming, 6 to 54 Mbps	4	8	12	-3	-3.6	-4	-4.2	0.14	2.5	5	2.5
	HT/VHT20, M0 to M7	1	17	6	5.5				0.06	5.6	11	5.4
	HT/VHT20, M0 to M7	2	16	9	4.9	4.2			0.06	7.6	8	0.4
	HT/VHT20, M8 to M15	2	17	6	5.5	5.3			0.06	8.5	11	2.5
	HT/VHT20, M0 to M7	3	12	11	1	-0.1	-0.4		0.06	5.0	6	1.0
	HT/VHT20, M8 to M15	3	15	8	4.1	3.1	2.5		0.06	8.1	9	0.9
	HT/VHT20, M16 to M23	3	16	6	4.9	4.2	3.6		0.06	9.1	11	1.9
	HT/VHT20, M0 to M7	4	10	12	-1.4	-2.1	-2.5	-2.2	0.06	4.0	5	1.0
	HT/VHT20, M8 to M15	4	13	9	1.9	1	0.4	1.1	0.06	7.2	8	0.8
	HT/VHT20, M16 to M23	4	15	7	4.1	3.1	2.5	3	0.06	9.3	10	0.7
	HT/VHT20, M24 to M31	4	15	6	4.1	3.1	2.5	3	0.06	9.3	11	1.7
	HT/VHT20 Beam Forming, M0 to M7	2	14	9	3.1	1.8			0.06	5.6	8	2.4
	HT/VHT20 Beam Forming, M8 to M15	2	17	6	5.5	5.3			0.06	8.5	11	2.5
	HT/VHT20 Beam Forming, M0 to M7	3	11	11	-0.4	-0.9	-1.6		0.06	3.9	6	2.1
	HT/VHT20 Beam Forming, M8 to M15	3	14	8	3.1	1.8	1.6		0.06	7.1	9	1.9
	HT/VHT20 Beam Forming, M16 to M23	3	16	6	4.9	4.2	3.6		0.06	9.1	11	1.9
	HT/VHT20 Beam Forming, M0 to M7	4	8	12	-3.5	-4	-4.2	-4.6	0.06	2.0	5	3.0
	HT/VHT20 Beam Forming, M8 to M15	4	11	9	-0.4	-0.9	-1.6	-1.1	0.06	5.1	8	2.9
	HT/VHT20 Beam Forming, M16 to M23	4	13	7	1.9	1	0.4	1.1	0.06	7.2	10	2.8
	HT/VHT20 Beam Forming, M24 to M31	4	15	6	4.1	3.1	2.5	3	0.06	9.3	11	1.7
	HT/VHT20 STBC, M0 to M7	2	17	6	5.5	5.3			0.06	8.5	11	2.5
	HT/VHT20 STBC, M0 to M7	3	15	8	4.1	3.1	2.5		0.06	8.1	9	0.9
	HT/VHT20 STBC, M0 to M7	4	13	9	1.9	1	0.4	1.1	0.06	7.2	8	0.8
5610	Non HT80, 6 to 54 Mbps	1	17	6	1.2				0.15	1.4	11	9.7
	Non HT80, 6 to 54 Mbps	2	17	9	1.2	0.9			0.15	4.2	8	3.8
	Non HT80, 6 to 54 Mbps	3	16	11	0	-0.4	-0.3		0.15	4.7	6	1.3
	Non HT80, 6 to 54 Mbps	4	15	12	-0.7	-1.6	-1.5	-1.4	0.15	4.9	5	0.1
	VHT80, M0 to M9 1ss	1	17	6	0.6				0.7	1.3	11	9.7
	VHT80, M0 to M9 1ss	2	17	9	0.6	0.1			0.7	4.1	8	3.9
	VHT80, M0 to M9 2ss	2	17	6	0.6	0.1			0.7	4.1	11	6.9

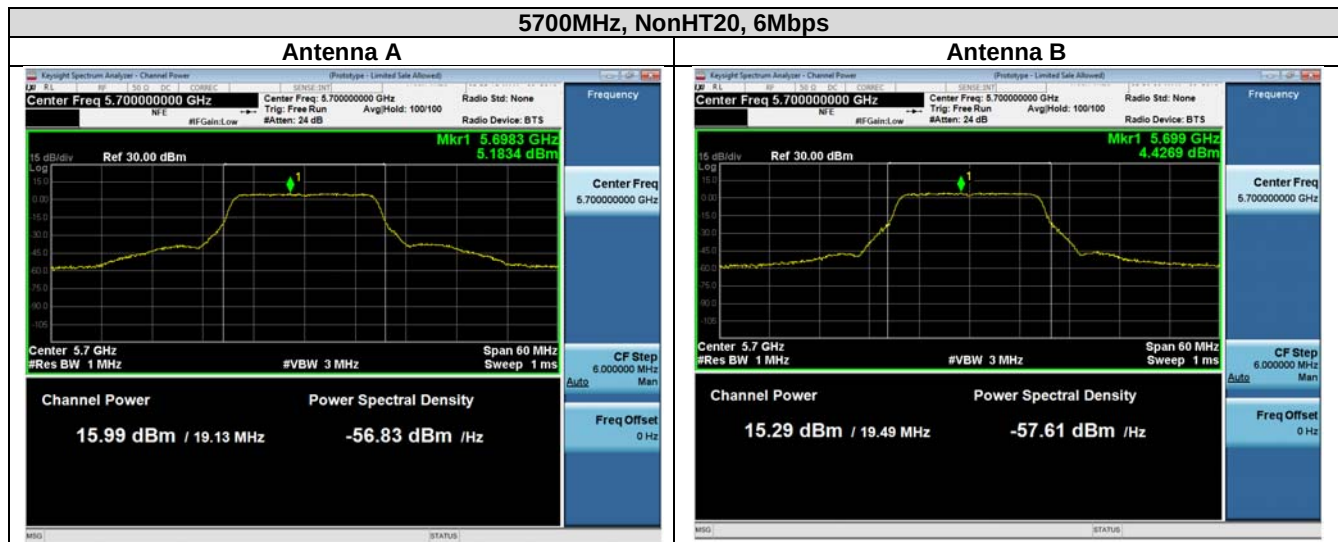
	VHT80, M0 to M9 1ss	3	16	11	0.1	-1.3	-1.3		0.7	4.7	6	1.3
	VHT80, M0 to M9 2ss	3	16	8	0.1	-1.3	-1.3		0.7	4.7	9	4.3
	VHT80, M0 to M9 3ss	3	16	6	0.1	-1.3	-1.3		0.7	4.7	11	6.3
	VHT80, M0 to M9 1ss	4	15	12	-1.3	-2.1	-2.6	-2	0.7	4.7	5	0.3
	VHT80, M0 to M9 2ss	4	15	9	-1.3	-2.1	-2.6	-2	0.7	4.7	8	3.3
	VHT80, M0 to M9 3ss	4	15	7	-1.3	-2.1	-2.6	-2	0.7	4.7	10	5.3
	VHT80, M0 to M9 4ss	4	15	6	-1.3	-2.1	-2.6	-2	0.7	4.7	11	6.3
	VHT80 Beam Forming, M0 to M9 1ss	2	14	9	-2	-3.5			0.7	1.0	8	7.0
	VHT80 Beam Forming, M0 to M9 2ss	2	17	6	0.6	0.1			0.7	4.1	11	6.9
	VHT80 Beam Forming, M0 to M9 1ss	3	11	11	-5.5	-6.2	-6.1		0.7	-0.5	6	6.5
	VHT80 Beam Forming, M0 to M9 2ss	3	14	8	-2	-3.5	-3.3		0.7	2.6	9	6.4
	VHT80 Beam Forming, M0 to M9 3ss	3	16	6	0.1	-1.3	-1.3		0.7	4.7	11	6.3
	VHT80 Beam Forming, M0 to M9 1ss	4	8	12	-8.7	-9.4	-9.4	-9.7	0.7	-2.6	5	7.6
	VHT80 Beam Forming, M0 to M9 2ss	4	11	9	-5.5	-6.2	-6.1	-5.9	0.7	0.8	8	7.2
	VHT80 Beam Forming, M0 to M9 3ss	4	13	7	-3.5	-4.3	-4.3	-4.4	0.7	2.6	10	7.4
	VHT80 Beam Forming, M0 to M9 4ss	4	15	6	-1.3	-2.1	-2.6	-2	0.7	4.7	11	6.3
	VHT80 STBC, M0 to M9 1ss	2	17	6	0.6	0.1			0.7	4.1	11	6.9
	VHT80 STBC, M0 to M9 1ss	3	16	6	0.1	-1.3	-1.3		0.7	4.7	11	6.3
	VHT80 STBC, M0 to M9 1ss	4	15	6	-1.3	-2.1	-2.6	-2	0.7	4.7	11	6.3
5690	Non HT80, 6 to 54 Mbps	1	17	6	0.6				0.15	0.8	11	10.3
	Non HT80, 6 to 54 Mbps	2	17	9	0.6	0.1			0.15	3.5	8	4.5
	Non HT80, 6 to 54 Mbps	3	16	11	-0.6	-0.7	-1.7		0.15	3.9	6	2.1
	Non HT80, 6 to 54 Mbps	4	15	12	-1.3	-1.9	-2.7	-2.4	0.15	4.1	5	0.9
	VHT80, M0 to M9 1ss	1	17	6	0				0.7	0.7	11	10.3
	VHT80, M0 to M9 1ss	2	17	9	0	-0.7			0.7	3.4	8	4.6
	VHT80, M0 to M9 2ss	2	17	6	0	-0.7			0.7	3.4	11	7.6
	VHT80, M0 to M9 1ss	3	16	11	-1.5	-1.7	-2.1		0.7	3.7	6	2.3
	VHT80, M0 to M9 2ss	3	16	8	-1.5	-1.7	-2.1		0.7	3.7	9	5.3
	VHT80, M0 to M9 3ss	3	16	6	-1.5	-1.7	-2.1		0.7	3.7	11	7.3
	VHT80, M0 to M9 1ss	4	15	12	-2	-2.9	-3.5	-2.8	0.7	4.0	5	1.0
	VHT80, M0 to M9 2ss	4	15	9	-2	-2.9	-3.5	-2.8	0.7	4.0	8	4.0
	VHT80, M0 to M9 3ss	4	15	7	-2	-2.9	-3.5	-2.8	0.7	4.0	10	6.0
	VHT80, M0 to M9 4ss	4	15	6	-2	-2.9	-3.5	-2.8	0.7	4.0	11	7.0
	VHT80 Beam Forming, M0 to M9 1ss	2	14	9	-3	-4			0.7	0.2	8	7.8
	VHT80 Beam Forming, M0 to M9 2ss	2	17	6	0	-0.7			0.7	3.4	11	7.6
	VHT80 Beam Forming, M0 to M9 1ss	3	11	11	-6.5	-6.9	-7.3		0.7	-1.4	6	7.4
	VHT80 Beam Forming, M0 to M9 2ss	3	14	8	-3	-4	-4.6		0.7	1.7	9	7.3
	VHT80 Beam Forming, M0 to M9 3ss	3	16	6	-1.5	-1.7	-2.1		0.7	3.7	11	7.3
	VHT80 Beam Forming, M0 to M9 1ss	4	8	12	-9.3	-10	-10.5	-10.2	0.7	-3.3	5	8.3
	VHT80 Beam Forming, M0 to M9 2ss	4	11	9	-6.5	-6.9	-7.3	-6.6	0.7	-0.1	8	8.1

	VHT80 Beam Forming, M0 to M9 3ss	4	13	7	-4.2	-4.7	-5.4	-5.2	0.7	1.9	10	8.1
	VHT80 Beam Forming, M0 to M9 4ss	4	15	6	-2	-2.9	-3.5	-2.8	0.7	4.0	11	7.0
	VHT80 STBC, M0 to M9 1ss	2	17	6	0	-0.7			0.7	3.4	11	7.6
	VHT80 STBC, M0 to M9 1ss	3	16	6	-1.5	-1.7	-2.1		0.7	3.7	11	7.3
	VHT80 STBC, M0 to M9 1ss	4	15	6	-2	-2.9	-3.5	-2.8	0.7	4.0	11	7.0
5700	Non HT20, 6 to 54 Mbps	1	17	6	6.3				0.14	6.4	11	4.6
	Non HT20, 6 to 54 Mbps	2	16	9	5.2	4.4			0.14	8.0	8	0.0
	Non HT20, 6 to 54 Mbps	3	12	11	1.3	0.5	0.1		0.14	5.6	6	0.4
	Non HT20, 6 to 54 Mbps	4	10	12	-0.6	-1.3	-2	-1.7	0.14	4.8	5	0.2
	Non HT20 Beam Forming, 6 to 54 Mbps	2	14	9	3.7	2.4			0.14	6.2	8	1.8
	Non HT20 Beam Forming, 6 to 54 Mbps	3	11	11	0.4	-0.5	-1		0.14	4.6	6	1.4
	Non HT20 Beam Forming, 6 to 54 Mbps	4	8	12	-3	-3.6	-3.9	-3.8	0.14	2.6	5	2.4
	HT/VHT20, M0 to M7	1	17	6	5.7				0.06	5.8	11	5.2
	HT/VHT20, M0 to M7	2	16	9	4.5	3.6			0.06	7.1	8	0.9
	HT/VHT20, M8 to M15	2	16	6	4.5	3.6			0.06	7.1	11	3.9
	HT/VHT20, M0 to M7	3	13	11	1.6	0.9	0.6		0.06	5.9	6	0.1
	HT/VHT20, M8 to M15	3	16	8	4.5	3.6	3.5		0.06	8.7	9	0.3
	HT/VHT20, M16 to M23	3	16	6	4.5	3.6	3.5		0.06	8.7	11	2.3
	HT/VHT20, M0 to M7	4	10	12	-0.9	-1.7	-2.2	-2	0.06	4.4	5	0.6
	HT/VHT20, M8 to M15	4	13	9	1.6	0.9	0.6	0.8	0.06	7.1	8	0.9
	HT/VHT20, M16 to M23	4	15	7	3.7	3	2.9	2.8	0.06	9.2	10	0.8
	HT/VHT20, M24 to M31	4	15	6	3.7	3	2.9	2.8	0.06	9.2	11	1.8
	HT/VHT20 Beam Forming, M0 to M7	2	14	9	2.8	1.9			0.06	5.4	8	2.6
	HT/VHT20 Beam Forming, M8 to M15	2	16	6	4.5	3.6			0.06	7.1	11	3.9
	HT/VHT20 Beam Forming, M0 to M7	3	11	11	-0.2	-0.9	-1.7		0.06	3.9	6	2.1
	HT/VHT20 Beam Forming, M8 to M15	3	14	8	2.8	1.9	1.6		0.06	7.0	9	2.0
	HT/VHT20 Beam Forming, M16 to M23	3	16	6	4.5	3.6	3.5		0.06	8.7	11	2.3
	HT/VHT20 Beam Forming, M0 to M7	4	8	12	-3.7	-3.9	-4.2	-4.3	0.06	2.1	5	2.9
	HT/VHT20 Beam Forming, M8 to M15	4	11	9	-0.2	-0.9	-1.7	-1.2	0.06	5.1	8	2.9
	HT/VHT20 Beam Forming, M16 to M23	4	13	7	1.6	0.9	0.6	0.8	0.06	7.1	10	2.9
	HT/VHT20 Beam Forming, M24 to M31	4	15	6	3.7	3	2.9	2.8	0.06	9.2	11	1.8
	HT/VHT20 STBC, M0 to M7	2	16	6	4.5	3.6			0.06	7.1	11	3.9
	HT/VHT20 STBC, M0 to M7	3	16	8	4.5	3.6	3.5		0.06	8.7	9	0.3
	HT/VHT20 STBC, M0 to M7	4	13	9	1.6	0.9	0.6	0.8	0.06	7.1	8	0.9
5710	Non HT40, 6 to 54 Mbps	1	17	6	4.5				0.13	4.6	11	6.4
	Non HT40, 6 to 54 Mbps	2	17	9	4.5	3.6			0.13	7.2	8	0.8
	Non HT40, 6 to 54 Mbps	3	14	11	1.5	0.6	0.4		0.13	5.8	6	0.2
	Non HT40, 6 to 54 Mbps	4	11	12	-1.4	-1.9	-1.8	-2	0.13	4.4	5	0.6
	HT/VHT40, M0 to M7	1	17	6	3.7				0.13	3.8	11	7.2

	HT/VHT40, M0 to M7	2	17	9	3.7	3.6			0.13	6.8	8	1.2
	HT/VHT40, M8 to M15	2	17	6	3.7	3.6			0.13	6.8	11	4.2
	HT/VHT40, M0 to M7	3	14	11	0.9	0.4	-0.2		0.13	5.3	6	0.7
	HT/VHT40, M8 to M15	3	16	8	2.9	2.4	1.4		0.13	7.2	9	1.8
	HT/VHT40, M16 to M23	3	16	6	2.9	2.4	1.4		0.13	7.2	11	3.8
	HT/VHT40, M0 to M7	4	12	12	-1	-1.5	-2.1	-1.8	0.13	4.6	5	0.4
	HT/VHT40, M8 to M15	4	15	9	1.6	1.3	0.7	1.3	0.13	7.4	8	0.6
	HT/VHT40, M16 to M23	4	15	7	1.6	1.3	0.7	1.3	0.13	7.4	10	2.6
	HT/VHT40, M24 to M31	4	15	6	1.6	1.3	0.7	1.3	0.13	7.4	11	3.6
	HT/VHT40 Beam Forming, M0 to M7	2	14	9	0.9	0.4			0.13	3.8	8	4.2
	HT/VHT40 Beam Forming, M8 to M15	2	17	6	3.7	3.6			0.13	6.8	11	4.2
	HT/VHT40 Beam Forming, M0 to M7	3	11	11	-1.7	-2.7	-3.3		0.13	2.4	6	3.6
	HT/VHT40 Beam Forming, M8 to M15	3	14	8	0.9	0.4	-0.2		0.13	5.3	9	3.7
	HT/VHT40 Beam Forming, M16 to M23	3	16	6	2.9	2.4	1.4		0.13	7.2	11	3.8
	HT/VHT40 Beam Forming, M0 to M7	4	8	12	-5.5	-6	-6.7	-6	0.13	0.1	5	4.9
	HT/VHT40 Beam Forming, M8 to M15	4	11	9	-1.7	-2.7	-3.3	-3	0.13	3.5	8	4.5
	HT/VHT40 Beam Forming, M16 to M23	4	13	7	0	-0.7	-1.1	-0.9	0.13	5.5	10	4.5
	HT/VHT40 Beam Forming, M24 to M31	4	15	6	1.6	1.3	0.7	1.3	0.13	7.4	11	3.6
	HT/VHT40 STBC, M0 to M7	2	17	6	3.7	3.6			0.13	6.8	11	4.2
	HT/VHT40 STBC, M0 to M7	3	16	8	2.9	2.4	1.4		0.13	7.2	9	1.8
	HT/VHT40 STBC, M0 to M7	4	15	9	1.6	1.3	0.7	1.3	0.13	7.4	8	0.6
5720	Non HT20, 6 to 54 Mbps	1	17	6	5.2				0.14	5.3	11	5.7
	Non HT20, 6 to 54 Mbps	2	16	9	4.4	3.3			0.14	7.0	8	1.0
	Non HT20, 6 to 54 Mbps	3	13	11	0.9	-0.2	0		0.14	5.2	6	0.8
	Non HT20, 6 to 54 Mbps	4	10	12	-2	-1.7	-2.4	-2.6	0.14	4.0	5	1.0
	Non HT20 Beam Forming, 6 to 54 Mbps	2	14	9	2.1	2.1			0.14	5.3	8	2.7
	Non HT20 Beam Forming, 6 to 54 Mbps	3	11	11	0.3	-0.9	-2		0.14	4.1	6	1.9
	Non HT20 Beam Forming, 6 to 54 Mbps	4	8	12	-3.6	-5	-5.3	-4.8	0.14	1.5	5	3.5
	HT/VHT20, M0 to M7	1	17	6	5.5				0.06	5.6	11	5.4
	HT/VHT20, M0 to M7	2	16	9	3.5	2.8			0.06	6.2	8	1.8
	HT/VHT20, M8 to M15	2	17	6	5.5	4.9			0.06	8.3	11	2.7
	HT/VHT20, M0 to M7	3	13	11	1.8	-0.2	-0.6		0.06	5.3	6	0.7
	HT/VHT20, M8 to M15	3	16	8	3.5	2.8	2.2		0.06	7.7	9	1.3
	HT/VHT20, M16 to M23	3	16	6	3.5	2.8	2.2		0.06	7.7	11	3.3
	HT/VHT20, M0 to M7	4	9	12	-3.3	-3.9	-3.7	-4.1	0.06	2.3	5	2.7
	HT/VHT20, M8 to M15	4	14	9	1	0.8	0.7	1.9	0.06	7.2	8	0.8
	HT/VHT20, M16 to M23	4	15	7	2.1	2.6	1.2	2	0.06	8.1	10	1.9
	HT/VHT20, M24 to M31	4	15	6	2.1	2.6	1.2	2	0.06	8.1	11	2.9
	HT/VHT20 Beam Forming, M0 to M7	2	14	9	1	0.8			0.06	4.0	8	4.0
	HT/VHT20 Beam Forming, M8 to M15	2	17	6	5.5	4.9			0.06	8.3	11	2.7

HT/VHT20 Beam Forming, M0 to M7	3	11	11	-1.2	-2.7	-0.9		0.06	3.3	6	2.7
HT/VHT20 Beam Forming, M8 to M15	3	14	8	1	0.8	0.7		0.06	5.7	9	3.3
HT/VHT20 Beam Forming, M16 to M23	3	16	6	3.5	2.8	2.2		0.06	7.7	11	3.3
HT/VHT20 Beam Forming, M0 to M7	4	8	12	-3.4	-5.7	-5.2	-6.2	0.06	1.1	5	3.9
HT/VHT20 Beam Forming, M8 to M15	4	11	9	-1.2	-2.7	-0.9	-1.9	0.06	4.5	8	3.5
HT/VHT20 Beam Forming, M16 to M23	4	13	7	1.8	-0.2	-0.6	0	0.06	6.4	10	3.6
HT/VHT20 Beam Forming, M24 to M31	4	15	6	2.1	2.6	1.2	2	0.06	8.1	11	2.9
HT/VHT20 STBC, M0 to M7	2	17	6	5.5	4.9			0.06	8.3	11	2.7
HT/VHT20 STBC, M0 to M7	3	16	8	3.5	2.8	2.2		0.06	7.7	9	1.3
HT/VHT20 STBC, M0 to M7	4	14	9	1	0.8	0.7	1.9	0.06	7.2	8	0.8

5.4.5 Power Spectral Density Plots



5.5 Conducted Spurious Emissions

5.5.1 Conducted Spurious Emissions Test Requirement

15.407(b)

Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

(3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(6) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209.

(7) The provisions of §15.205 apply to intentional radiators operating under this section.

15.205 / 15.209:

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

Use formula below to substitute conducted measurements in place of radiated measurements

$$E[\text{dB}\mu\text{V/m}] = \text{EIRP} [\text{dBm}] - 20 \log(d[\text{meters}]) + 104.77, \text{ where } E = \text{field strength and } d = 3 \text{ meter}$$

1) Average Plot, Limit= -41.25 dBm eirp

2) Peak plot, Limit = -21.25 dBm eirp

5.5.2 Conducted Spurious Emissions Test Procedure

Ref. 789033 D02 General UNII Test Procedures New Rules v01r02

ANSI C63.10: 2013

Conducted Spurious Emissions
Test Procedure
1. Connect the antenna port(s) to the spectrum analyzer input. 2. Place the radio in continuous transmit mode. Use the procedures in KDB 789033 D02 General UNII Test Procedures New Rules v01r02 to substitute conducted measurements in place of radiated measurements. 3. Configure Spectrum analyzer as per test parameters below (be sure to enter all losses between the transmitter output and the spectrum analyzer). 4. Record the marker waveform peak to spur difference. Also measure any emissions in the restricted bands. 5. 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. The worst-case output is recorded. 6. Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands 7. Capture graphs and record pertinent measurement data.

Ref. 789033 D02 General UNII Test Procedures New Rules v01r02

ANSI C63.10: 2013 section 12.7.7.3 and 12.7.6

Conducted Spurious Emissions
Test parameters
Span = 30MHz to 18GHz / 18GHz to 40GHz RBW = 1 MHz VBW $\geq$ 3 MHz for Peak, 1kHz for Average Sweep = Auto couple Detector = Peak Trace = Max Hold.

5.5.3 Conducted Spurious Emissions Test Information

Samples, Systems, and Modes

System Number	Description	Samples	System under test	Support equipment
1	EUT	S01	☒	☐
	Support	S02	☐	☒

Tested By: Julian Land	Date of testing: March 6, 2019 - March 26, 2019, May 16, 2019
Test Result: PASS	

Test Equipment

See Appendix A for list of test equipment

5.5.4 Conducted Spurious Emissions Data Table - Peak

Frequency (MHz)	Mode	Tx Paths	Index Power (dBm)	Correlated Antenna Gain (dBi)	Tx 1 Spur Power (dBm)	Tx 2 Spur Power (dBm)	Tx 3 Spur Power (dBm)	Tx 4 Spur Power (dBm)	Total Conducted Spur (dBm)	Limit (dB)	Margin (dB)
5500	Non HT20, 6 to 54 Mbps	1	17	6	-55.9				-49.8	-21.25	28.5
	Non HT20, 6 to 54 Mbps	2	16	6	-55.6	-55.5			-46.4	-21.25	25.1
	Non HT20, 6 to 54 Mbps	3	13	6	-58.7	-58.3	-58.5		-47.6	-21.25	26.3
	Non HT20, 6 to 54 Mbps	4	11	6	-59.4	-58.8	-59.7	-59.3	-47.1	-21.25	25.9
	Non HT20 Beam Forming, 6 to 54 Mbps	2	14	9	-58.4	-57.5			-45.8	-21.25	24.5
	Non HT20 Beam Forming, 6 to 54 Mbps	3	11	11	-59.4	-58.8	-59.7		-43.4	-21.25	22.1
	Non HT20 Beam Forming, 6 to 54 Mbps	4	8	12	-58.8	-59.9	-60.3	-62	-41.9	-21.25	20.7
	HT/VHT20, M0 to M7	1	17	6	-56.2				-50.1	-21.25	28.9
	HT/VHT20, M0 to M7	2	17	6	-56.2	-54.9			-46.4	-21.25	25.2
	HT/VHT20, M8 to M15	2	17	6	-56.2	-54.9			-46.4	-21.25	25.2
	HT/VHT20, M0 to M7	3	13	6	-58	-58.7	-59.1		-47.7	-21.25	26.5
	HT/VHT20, M8 to M15	3	16	6	-55.5	-55.2	-56.5		-44.9	-21.25	23.6
	HT/VHT20, M16 to M23	3	16	6	-55.5	-55.2	-56.5		-44.9	-21.25	23.6
	HT/VHT20, M0 to M7	4	11	6	-59.4	-58.4	-59.9	-59.6	-47.2	-21.25	26.0
	HT/VHT20, M8 to M15	4	14	6	-58.1	-58.7	-58.3	-58.9	-46.4	-21.25	25.2
	HT/VHT20, M16 to M23	4	15	6	-57.7	-58.5	-58.1	-59.2	-46.3	-21.25	25.0
	HT/VHT20, M24 to M31	4	15	6	-57.7	-58.5	-58.1	-59.2	-46.3	-21.25	25.0
	HT/VHT20 Beam Forming, M0 to M7	2	14	9	-58.1	-58.7			-46.3	-21.25	25.1
	HT/VHT20 Beam Forming, M8 to M15	2	17	6	-56.2	-54.9			-46.4	-21.25	25.2
	HT/VHT20 Beam Forming, M0 to M7	3	11	11	-59.4	-58.4	-59.9		-43.4	-21.25	22.1
	HT/VHT20 Beam Forming, M8 to M15	3	14	8	-58.1	-58.7	-58.3		-45.5	-21.25	24.3
	HT/VHT20 Beam Forming, M16 to M23	3	16	6	-55.5	-55.2	-56.5		-44.9	-21.25	23.6
	HT/VHT20 Beam Forming, M0 to M7	4	8	12	-59.7	-59.7	-59.5	-62.4	-42.1	-21.25	20.8
	HT/VHT20 Beam Forming, M8 to M15	4	11	9	-59.4	-58.4	-59.9	-59.6	-44.2	-21.25	23.0

	HT/VHT20 Beam Forming, M16 to M23	4	13	7	-58	-58.7	-59.1	-59.5	-45.7	-21.25	24.5
	HT/VHT20 Beam Forming, M24 to M31	4	15	6	-57.7	-58.5	-58.1	-59.2	-46.3	-21.25	25.0
	HT/VHT20 STBC, M0 to M7	2	17	6	-56.2	-54.9			-46.4	-21.25	25.2
	HT/VHT20 STBC, M0 to M7	3	16	6	-55.5	-55.2	-56.5		-44.9	-21.25	23.6
	HT/VHT20 STBC, M0 to M7	4	14	6	-58.1	-58.7	-58.3	-58.9	-46.4	-21.25	25.2
5510	Non HT40, 6 to 54 Mbps	1	17	6	-55				-48.9	-21.25	27.6
	Non HT40, 6 to 54 Mbps	2	16	6	-55.4	-54.9			-46.0	-21.25	24.8
	Non HT40, 6 to 54 Mbps	3	14	6	-56.1	-55.5	-56.3		-45.1	-21.25	23.8
	Non HT40, 6 to 54 Mbps	4	12	6	-58.2	-57.2	-59.2	-59.8	-46.3	-21.25	25.1
	HT/VHT40, M0 to M7	1	15	6	-55.1				-49.0	-21.25	27.7
	HT/VHT40, M0 to M7	2	15	6	-55.1	-55			-45.9	-21.25	24.7
	HT/VHT40, M8 to M15	2	15	6	-55.1	-55			-45.9	-21.25	24.7
	HT/VHT40, M0 to M7	3	14	6	-58	-55.4	-55.5		-45.2	-21.25	24.0
	HT/VHT40, M8 to M15	3	14	6	-58	-55.4	-55.5		-45.2	-21.25	24.0
	HT/VHT40, M16 to M23	3	14	6	-58	-55.4	-55.5		-45.2	-21.25	24.0
	HT/VHT40, M0 to M7	4	13	6	-56.9	-58	-58	-60.1	-46.0	-21.25	24.7
	HT/VHT40, M8 to M15	4	13	6	-56.9	-58	-58	-60.1	-46.0	-21.25	24.7
	HT/VHT40, M16 to M23	4	13	6	-56.9	-58	-58	-60.1	-46.0	-21.25	24.7
	HT/VHT40, M24 to M31	4	13	6	-56.9	-58	-58	-60.1	-46.0	-21.25	24.7
	HT/VHT40 Beam Forming, M0 to M7	2	13	9	-56.9	-58			-45.3	-21.25	24.0
	HT/VHT40 Beam Forming, M8 to M15	2	15	6	-55.1	-55			-45.9	-21.25	24.7
	HT/VHT40 Beam Forming, M0 to M7	3	11	11	-58	-57.6	-58.9		-42.2	-21.25	21.0
	HT/VHT40 Beam Forming, M8 to M15	3	13	8	-56.9	-58	-58		-44.7	-21.25	23.5
	HT/VHT40 Beam Forming, M16 to M23	3	14	6	-58	-55.4	-55.5		-45.2	-21.25	24.0
	HT/VHT40 Beam Forming, M0 to M7	4	8	12	-59.5	-60.1	-59.6	-59.1	-41.4	-21.25	20.2
	HT/VHT40 Beam Forming, M8 to M15	4	11	9	-58	-57.6	-58.9	-59.6	-43.3	-21.25	22.1
	HT/VHT40 Beam Forming, M16 to M23	4	13	7	-56.9	-58	-58	-60.1	-45.0	-21.25	23.7
	HT/VHT40 Beam Forming, M24 to M31	4	13	6	-56.9	-58	-58	-60.1	-46.0	-21.25	24.7
	HT/VHT40 STBC, M0 to M7	2	15	6	-55.1	-55			-45.9	-21.25	24.7
	HT/VHT40 STBC, M0 to M7	3	14	6	-58	-55.4	-55.5		-45.2	-21.25	24.0
	HT/VHT40 STBC, M0 to M7	4	13	6	-56.9	-58	-58	-60.1	-46.0	-21.25	24.7
5530	Non HT80, 6 to 54 Mbps	1	14	6	-56.5				-50.4	-21.25	29.1
	Non HT80, 6 to 54 Mbps	2	14	6	-56.5	-55.9			-47.0	-21.25	25.8
	Non HT80, 6 to 54 Mbps	3	13	6	-56.9	-55.1	-56.8		-45.3	-21.25	24.0
	Non HT80, 6 to 54 Mbps	4	12	6	-59.4	-59.2	-59.1	-60.3	-47.3	-21.25	26.1
	VHT80, M0 to M9 1ss	1	14	6	-55.9				-49.2	-21.25	28.0
	VHT80, M0 to M9 1ss	2	13	6	-56	-55.6			-46.1	-21.25	24.8
	VHT80, M0 to M9 2ss	2	13	6	-56	-55.6			-46.1	-21.25	24.8
	VHT80, M0 to M9 1ss	3	12	6	-59.3	-54.9	-56.3		-45.0	-21.25	23.8

	VHT80, M0 to M9 2ss	3	12	6	-59.3	-54.9	-56.3		-45.0	-21.25	23.8
	VHT80, M0 to M9 3ss	3	12	6	-59.3	-54.9	-56.3		-45.0	-21.25	23.8
	VHT80, M0 to M9 1ss	4	11	6	-58.6	-58	-59.2	-59.4	-46.0	-21.25	24.8
	VHT80, M0 to M9 2ss	4	11	6	-58.6	-58	-59.2	-59.4	-46.0	-21.25	24.8
	VHT80, M0 to M9 3ss	4	11	6	-58.6	-58	-59.2	-59.4	-46.0	-21.25	24.8
	VHT80, M0 to M9 4ss	4	11	6	-58.6	-58	-59.2	-59.4	-46.0	-21.25	24.8
	VHT80 Beam Forming, M0 to M9 1ss	2	12	9	-59.3	-54.9			-43.9	-21.25	22.6
	VHT80 Beam Forming, M0 to M9 2ss	2	13	6	-56	-55.6			-46.1	-21.25	24.8
	VHT80 Beam Forming, M0 to M9 1ss	3	10	11	-59	-58.3	-58.5		-42.1	-21.25	20.9
	VHT80 Beam Forming, M0 to M9 2ss	3	11	8	-58.6	-58	-59.2		-45.1	-21.25	23.9
	VHT80 Beam Forming, M0 to M9 3ss	3	12	6	-59.3	-54.9	-56.3		-45.0	-21.25	23.8
	VHT80 Beam Forming, M0 to M9 1ss	4	7	12	-60	-58.6	-60	-62.1	-41.3	-21.25	20.0
	VHT80 Beam Forming, M0 to M9 2ss	4	11	9	-58.6	-58	-59.2	-59.4	-43.0	-21.25	21.8
	VHT80 Beam Forming, M0 to M9 3ss	4	11	7	-58.6	-58	-59.2	-59.4	-45.0	-21.25	23.8
	VHT80 Beam Forming, M0 to M9 4ss	4	11	6	-58.6	-58	-59.2	-59.4	-46.0	-21.25	24.8
	VHT80 STBC, M0 to M9 1ss	2	13	6	-56	-55.6			-46.1	-21.25	24.8
	VHT80 STBC, M0 to M9 1ss	3	12	6	-59.3	-54.9	-56.3		-45.0	-21.25	23.8
	VHT80 STBC, M0 to M9 1ss	4	11	6	-58.6	-58	-59.2	-59.4	-46.0	-21.25	24.8
5550	Non HT40, 6 to 54 Mbps	1	17	6	-52.7				-46.6	-21.25	25.3
	Non HT40, 6 to 54 Mbps	2	17	6	-52.7	-55.2			-44.6	-21.25	23.4
	Non HT40, 6 to 54 Mbps	3	14	6	-57.2	-56.1	-56.9		-45.8	-21.25	24.6
	Non HT40, 6 to 54 Mbps	4	11	6	-58.4	-57.9	-56.4	-60.4	-45.9	-21.25	24.6
	HT/VHT40, M0 to M7	1	17	6	-54.9				-48.8	-21.25	27.5
	HT/VHT40, M0 to M7	2	17	6	-54.9	-55.6			-46.1	-21.25	24.8
	HT/VHT40, M8 to M15	2	17	6	-54.9	-55.6			-46.1	-21.25	24.8
	HT/VHT40, M0 to M7	3	14	6	-56.2	-56.6	-56.8		-45.6	-21.25	24.4
	HT/VHT40, M8 to M15	3	16	6	-55.5	-55.7	-56.6		-45.0	-21.25	23.8
	HT/VHT40, M16 to M23	3	16	6	-55.5	-55.7	-56.6		-45.0	-21.25	23.8
	HT/VHT40, M0 to M7	4	12	6	-58.1	-58.5	-58.8	-59	-46.4	-21.25	25.2
	HT/VHT40, M8 to M15	4	15	6	-55.5	-55.9	-56	-57.5	-44.0	-21.25	22.8
	HT/VHT40, M16 to M23	4	15	6	-55.5	-55.9	-56	-57.5	-44.0	-21.25	22.8
	HT/VHT40, M24 to M31	4	15	6	-55.5	-55.9	-56	-57.5	-44.0	-21.25	22.8
	HT/VHT40 Beam Forming, M0 to M7	2	14	9	-56.2	-56.6			-44.3	-21.25	23.0
	HT/VHT40 Beam Forming, M8 to M15	2	17	6	-54.9	-55.6			-46.1	-21.25	24.8
	HT/VHT40 Beam Forming, M0 to M7	3	11	11	-58.6	-58.9	-59.6		-43.1	-21.25	21.9
	HT/VHT40 Beam Forming, M8 to M15	3	14	8	-56.2	-56.6	-56.8		-43.6	-21.25	22.4
	HT/VHT40 Beam Forming, M16 to M23	3	16	6	-55.5	-55.7	-56.6		-45.0	-21.25	23.8
	HT/VHT40 Beam Forming, M0 to M7	4	8	12	-59.5	-59.1	-59.4	-62.3	-41.8	-21.25	20.5
	HT/VHT40 Beam Forming, M8 to M15	4	11	9	-58.6	-58.9	-59.6	-60.7	-44.2	-21.25	23.0
	HT/VHT40 Beam Forming, M16 to M23	4	13	7	-58.2	-58	-56.6	-56.3	-44.0	-21.25	22.8

	HT/VHT40 Beam Forming, M24 to M31	4	15	6	-55.5	-55.9	-56	-57.5	-44.0	-21.25	22.8
	HT/VHT40 STBC, M0 to M7	2	17	6	-54.9	-55.6			-46.1	-21.25	24.8
	HT/VHT40 STBC, M0 to M7	3	16	6	-55.5	-55.7	-56.6		-45.0	-21.25	23.8
	HT/VHT40 STBC, M0 to M7	4	15	6	-55.5	-55.9	-56	-57.5	-44.0	-21.25	22.8
5560	Non HT20, 6 to 54 Mbps	1	17	6	-55.1				-49.0	-21.25	27.7
	Non HT20, 6 to 54 Mbps	2	15	6	-58.5	-58.2			-49.2	-21.25	27.9
	Non HT20, 6 to 54 Mbps	3	12	6	-59	-58.2	-57.7		-47.4	-21.25	26.1
	Non HT20, 6 to 54 Mbps	4	10	6	-60.3	-59	-58.6	-61.5	-47.5	-21.25	26.3
	Non HT20 Beam Forming, 6 to 54 Mbps	2	14	9	-57.7	-57.9			-45.6	-21.25	24.4
	Non HT20 Beam Forming, 6 to 54 Mbps	3	11	11	-60	-58.1	-59.1		-43.1	-21.25	21.8
	Non HT20 Beam Forming, 6 to 54 Mbps	4	8	12	-59.7	-59.1	-60.7	-60.6	-41.8	-21.25	20.6
	HT/VHT20, M0 to M7	1	17	6	-55.4				-49.3	-21.25	28.1
	HT/VHT20, M0 to M7	2	16	6	-55.7	-57.3			-47.4	-21.25	26.1
	HT/VHT20, M8 to M15	2	17	6	-55.4	-56			-46.6	-21.25	25.4
	HT/VHT20, M0 to M7	3	12	6	-58.3	-58	-59.6		-47.7	-21.25	26.5
	HT/VHT20, M8 to M15	3	15	6	-58.6	-57.4	-57.2		-46.9	-21.25	25.6
	HT/VHT20, M16 to M23	3	16	6	-55.7	-57.3	-56.7		-45.7	-21.25	24.4
	HT/VHT20, M0 to M7	4	10	6	-59.6	-57.9	-59.6	-60.4	-47.2	-21.25	25.9
	HT/VHT20, M8 to M15	4	13	6	-59.5	-58.2	-57.2	-59.1	-46.3	-21.25	25.1
	HT/VHT20, M16 to M23	4	15	6	-58.6	-57.4	-57.2	-58.3	-45.8	-21.25	24.5
	HT/VHT20, M24 to M31	4	15	6	-58.6	-57.4	-57.2	-58.3	-45.8	-21.25	24.5
	HT/VHT20 Beam Forming, M0 to M7	2	14	9	-58.9	-57.6			-46.1	-21.25	24.9
	HT/VHT20 Beam Forming, M8 to M15	2	17	6	-55.4	-56			-46.6	-21.25	25.4
	HT/VHT20 Beam Forming, M0 to M7	3	11	11	-59.4	-58.5	-59.3		-43.2	-21.25	22.0
	HT/VHT20 Beam Forming, M8 to M15	3	14	8	-58.9	-57.6	-57.1		-45.0	-21.25	23.7
	HT/VHT20 Beam Forming, M16 to M23	3	16	6	-55.7	-57.3	-56.7		-45.7	-21.25	24.4
	HT/VHT20 Beam Forming, M0 to M7	4	8	12	-59.4	-58.8	-60	-60.5	-41.5	-21.25	20.3
	HT/VHT20 Beam Forming, M8 to M15	4	11	9	-59.4	-58.5	-59.3	-60.6	-44.3	-21.25	23.1
	HT/VHT20 Beam Forming, M16 to M23	4	13	7	-59.5	-58.2	-57.2	-59.1	-45.3	-21.25	24.1
	HT/VHT20 Beam Forming, M24 to M31	4	15	6	-58.6	-57.4	-57.2	-58.3	-45.8	-21.25	24.5
	HT/VHT20 STBC, M0 to M7	2	17	6	-55.4	-56			-46.6	-21.25	25.4
	HT/VHT20 STBC, M0 to M7	3	15	6	-58.6	-57.4	-57.2		-46.9	-21.25	25.6
	HT/VHT20 STBC, M0 to M7	4	13	6	-59.5	-58.2	-57.2	-59.1	-46.3	-21.25	25.1
5610	Non HT80, 6 to 54 Mbps	1	17	6	-56.4				-50.3	-21.25	29.0
	Non HT80, 6 to 54 Mbps	2	17	6	-56.4	-56.2			-47.1	-21.25	25.9
	Non HT80, 6 to 54 Mbps	3	16	6	-56	-56	-55.3		-44.8	-21.25	23.6
	Non HT80, 6 to 54 Mbps	4	15	6	-55.6	-55.9	-55.5	-56.5	-43.7	-21.25	22.4
	VHT80, M0 to M9 1ss	1	17	6	-56.3				-49.6	-21.25	28.4
	VHT80, M0 to M9 1ss	2	17	6	-56.3	-56.2			-46.5	-21.25	25.3

	VHT80, M0 to M9 2ss	2	17	6	-56.3	-56.2			-46.5	-21.25	25.3
	VHT80, M0 to M9 1ss	3	16	6	-56.3	-56.6	-54		-44.0	-21.25	22.7
	VHT80, M0 to M9 2ss	3	16	6	-56.3	-56.6	-54		-44.0	-21.25	22.7
	VHT80, M0 to M9 3ss	3	16	6	-56.3	-56.6	-54		-44.0	-21.25	22.7
	VHT80, M0 to M9 1ss	4	15	6	-56.2	-56.4	-54.7	-56.4	-43.1	-21.25	21.9
	VHT80, M0 to M9 2ss	4	15	6	-56.2	-56.4	-54.7	-56.4	-43.1	-21.25	21.9
	VHT80, M0 to M9 3ss	4	15	6	-56.2	-56.4	-54.7	-56.4	-43.1	-21.25	21.9
	VHT80, M0 to M9 4ss	4	15	6	-56.2	-56.4	-54.7	-56.4	-43.1	-21.25	21.9
	VHT80 Beam Forming, M0 to M9 1ss	2	14	9	-56.2	-56			-43.4	-21.25	22.1
	VHT80 Beam Forming, M0 to M9 2ss	2	17	6	-56.3	-56.2			-46.5	-21.25	25.3
	VHT80 Beam Forming, M0 to M9 1ss	3	11	11	-59.8	-57.8	-57.6		-41.8	-21.25	20.6
	VHT80 Beam Forming, M0 to M9 2ss	3	14	8	-56.2	-56	-55.6		-42.5	-21.25	21.2
	VHT80 Beam Forming, M0 to M9 3ss	3	16	6	-56.3	-56.6	-54		-44.0	-21.25	22.7
	VHT80 Beam Forming, M0 to M9 1ss	4	8	12	-60.8	-58.2	-59.3	-60.9	-40.9	-21.25	19.7
	VHT80 Beam Forming, M0 to M9 2ss	4	11	9	-59.8	-57.8	-57.6	-57.5	-42.4	-21.25	21.1
	VHT80 Beam Forming, M0 to M9 3ss	4	13	7	-56.5	-58.1	-54.6	-54.4	-41.9	-21.25	20.7
	VHT80 Beam Forming, M0 to M9 4ss	4	15	6	-56.2	-56.4	-54.7	-56.4	-43.1	-21.25	21.9
	VHT80 STBC, M0 to M9 1ss	2	17	6	-56.3	-56.2			-46.5	-21.25	25.3
	VHT80 STBC, M0 to M9 1ss	3	16	6	-56.3	-56.6	-54		-44.0	-21.25	22.7
	VHT80 STBC, M0 to M9 1ss	4	15	6	-56.2	-56.4	-54.7	-56.4	-43.1	-21.25	21.9
5690	Non HT80, 6 to 54 Mbps	1	17	6	-58.6				-52.5	-21.25	31.2
	Non HT80, 6 to 54 Mbps	2	17	6	-58.6	-56.2			-48.1	-21.25	26.8
	Non HT80, 6 to 54 Mbps	3	16	6	-58	-57.3	-56.8		-46.4	-21.25	25.2
	Non HT80, 6 to 54 Mbps	4	15	6	-57.9	-57	-56.5	-57.2	-45.0	-21.25	23.7
	VHT80, M0 to M9 1ss	1	17	6	-57.3				-50.6	-21.25	29.4
	VHT80, M0 to M9 1ss	2	17	6	-57.3	-57.4			-47.6	-21.25	26.4
	VHT80, M0 to M9 2ss	2	17	6	-57.3	-57.4			-47.6	-21.25	26.4
	VHT80, M0 to M9 1ss	3	16	6	-58.1	-56.7	-57.3		-45.9	-21.25	24.6
	VHT80, M0 to M9 2ss	3	16	6	-58.1	-56.7	-57.3		-45.9	-21.25	24.6
	VHT80, M0 to M9 3ss	3	16	6	-58.1	-56.7	-57.3		-45.9	-21.25	24.6
	VHT80, M0 to M9 1ss	4	15	6	-58.1	-57.4	-56.2	-57	-44.4	-21.25	23.1
	VHT80, M0 to M9 2ss	4	15	6	-58.1	-57.4	-56.2	-57	-44.4	-21.25	23.1
	VHT80, M0 to M9 3ss	4	15	6	-58.1	-57.4	-56.2	-57	-44.4	-21.25	23.1
	VHT80, M0 to M9 4ss	4	15	6	-58.1	-57.4	-56.2	-57	-44.4	-21.25	23.1
	VHT80 Beam Forming, M0 to M9 1ss	2	14	9	-57.6	-56.8			-44.5	-21.25	23.2
	VHT80 Beam Forming, M0 to M9 2ss	2	17	6	-57.3	-57.4			-47.6	-21.25	26.4
	VHT80 Beam Forming, M0 to M9 1ss	3	11	11	-59.4	-59	-58.1		-42.3	-21.25	21.1
	VHT80 Beam Forming, M0 to M9 2ss	3	14	8	-57.6	-56.8	-56.3		-43.4	-21.25	22.1
	VHT80 Beam Forming, M0 to M9 3ss	3	16	6	-58.1	-56.7	-57.3		-45.9	-21.25	24.6
	VHT80 Beam Forming, M0 to M9 1ss	4	8	12	-60.1	-59.7	-59.8	-61.6	-41.5	-21.25	20.3

	VHT80 Beam Forming, M0 to M9 2ss	4	11	9	-59.4	-59	-58.1	-60.3	-43.4	-21.25	22.2
	VHT80 Beam Forming, M0 to M9 3ss	4	13	7	-58.2	-58.6	-58.8	-57.5	-44.5	-21.25	23.3
	VHT80 Beam Forming, M0 to M9 4ss	4	15	6	-58.1	-57.4	-56.2	-57	-44.4	-21.25	23.1
	VHT80 STBC, M0 to M9 1ss	2	17	6	-57.3	-57.4			-47.6	-21.25	26.4
	VHT80 STBC, M0 to M9 1ss	3	16	6	-58.1	-56.7	-57.3		-45.9	-21.25	24.6
	VHT80 STBC, M0 to M9 1ss	4	15	6	-58.1	-57.4	-56.2	-57	-44.4	-21.25	23.1
5700											
	Non HT20, 6 to 54 Mbps	1	17	6	-58				-51.9	-21.25	30.6
	Non HT20, 6 to 54 Mbps	2	16	6	-60.3	-58.7			-50.3	-21.25	29.0
	Non HT20, 6 to 54 Mbps	3	12	6	-59.1	-60.3	-58.9		-48.5	-21.25	27.2
	Non HT20, 6 to 54 Mbps	4	10	6	-61.7	-59.6	-60.7	-62.3	-48.8	-21.25	27.5
	Non HT20 Beam Forming, 6 to 54 Mbps	2	14	9	-60.2	-59.5			-47.7	-21.25	26.4
	Non HT20 Beam Forming, 6 to 54 Mbps	3	11	11	-59.7	-60.6	-59.9		-44.1	-21.25	22.9
	Non HT20 Beam Forming, 6 to 54 Mbps	4	8	12	-62.1	-60.6	-60	-61.8	-42.9	-21.25	21.6
	HT/VHT20, M0 to M7	1	17	6	-58.3				-52.2	-21.25	31.0
	HT/VHT20, M0 to M7	2	16	6	-58.1	-57.7			-48.8	-21.25	27.6
	HT/VHT20, M8 to M15	2	16	6	-58.1	-57.7			-48.8	-21.25	27.6
	HT/VHT20, M0 to M7	3	13	6	-59.3	-59.2	-58.9		-48.3	-21.25	27.0
	HT/VHT20, M8 to M15	3	16	6	-58.1	-57.7	-58.9		-47.4	-21.25	26.1
	HT/VHT20, M16 to M23	3	16	6	-58.1	-57.7	-58.9		-47.4	-21.25	26.1
	HT/VHT20, M0 to M7	4	10	6	-60.3	-60.3	-60.5	-61	-48.4	-21.25	27.2
	HT/VHT20, M8 to M15	4	13	6	-59.3	-59.2	-58.9	-60.1	-47.3	-21.25	26.0
	HT/VHT20, M16 to M23	4	15	6	-60.4	-58.9	-58.4	-59.8	-47.2	-21.25	26.0
	HT/VHT20, M24 to M31	4	15	6	-60.4	-58.9	-58.4	-59.8	-47.2	-21.25	26.0
	HT/VHT20 Beam Forming, M0 to M7	2	14	9	-59.7	-58.3			-46.9	-21.25	25.6
	HT/VHT20 Beam Forming, M8 to M15	2	16	6	-58.1	-57.7			-48.8	-21.25	27.6
	HT/VHT20 Beam Forming, M0 to M7	3	11	11	-61.8	-59.6	-59.2		-44.2	-21.25	23.0
	HT/VHT20 Beam Forming, M8 to M15	3	14	8	-59.7	-58.3	-58.1		-45.8	-21.25	24.6
	HT/VHT20 Beam Forming, M16 to M23	3	16	6	-58.1	-57.7	-58.9		-47.4	-21.25	26.1
	HT/VHT20 Beam Forming, M0 to M7	4	8	12	-60.7	-59.5	-59.9	-62.1	-42.4	-21.25	21.1
	HT/VHT20 Beam Forming, M8 to M15	4	11	9	-61.8	-59.6	-59.2	-61.4	-45.3	-21.25	24.0
	HT/VHT20 Beam Forming, M16 to M23	4	13	7	-59.3	-59.2	-58.9	-60.1	-46.3	-21.25	25.0
	HT/VHT20 Beam Forming, M24 to M31	4	15	6	-60.4	-58.9	-58.4	-59.8	-47.2	-21.25	26.0
	HT/VHT20 STBC, M0 to M7	2	16	6	-58.1	-57.7			-48.8	-21.25	27.6
	HT/VHT20 STBC, M0 to M7	3	16	6	-58.1	-57.7	-58.9		-47.4	-21.25	26.1
	HT/VHT20 STBC, M0 to M7	4	13	6	-59.3	-59.2	-58.9	-60.1	-47.3	-21.25	26.0
5710											
	Non HT40, 6 to 54 Mbps	1	17	6	-57.8				-51.7	-21.25	30.4
	Non HT40, 6 to 54 Mbps	2	17	6	-57.8	-56.6			-48.0	-21.25	26.8
	Non HT40, 6 to 54 Mbps	3	14	6	-58.8	-56.7	-56.7		-46.4	-21.25	25.1
	Non HT40, 6 to 54 Mbps	4	11	6	-61	-58.3	-58.6	-59	-47.0	-21.25	25.7

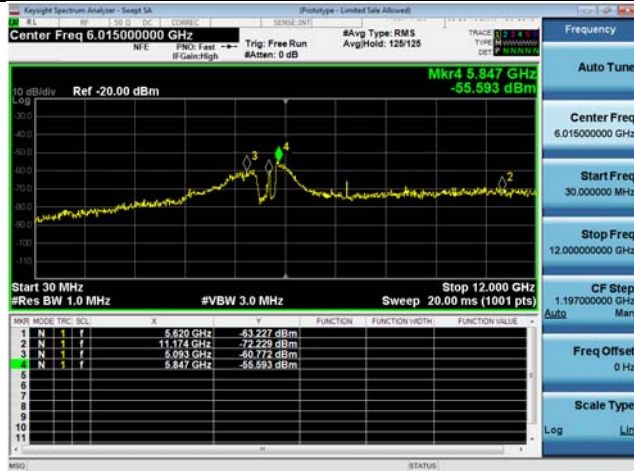
	HT/VHT40, M0 to M7	1	17	6	-58.3				-52.2	-21.25	30.9
	HT/VHT40, M0 to M7	2	17	6	-58.3	-57.3			-48.6	-21.25	27.4
	HT/VHT40, M8 to M15	2	17	6	-58.3	-57.3			-48.6	-21.25	27.4
	HT/VHT40, M0 to M7	3	14	6	-59	-58.1	-58.1		-47.5	-21.25	26.2
	HT/VHT40, M8 to M15	3	16	6	-58	-56.4	-56.6		-46.0	-21.25	24.8
	HT/VHT40, M16 to M23	3	16	6	-58	-56.4	-56.6		-46.0	-21.25	24.8
	HT/VHT40, M0 to M7	4	12	6	-60.6	-58.8	-58.4	-59.7	-47.1	-21.25	25.9
	HT/VHT40, M8 to M15	4	15	6	-58.3	-58.3	-56.9	-56.7	-45.3	-21.25	24.1
	HT/VHT40, M16 to M23	4	15	6	-58.3	-58.3	-56.9	-56.7	-45.3	-21.25	24.1
	HT/VHT40, M24 to M31	4	15	6	-58.3	-58.3	-56.9	-56.7	-45.3	-21.25	24.1
	HT/VHT40 Beam Forming, M0 to M7	2	14	9	-59	-58.1			-46.4	-21.25	25.1
	HT/VHT40 Beam Forming, M8 to M15	2	17	6	-58.3	-57.3			-48.6	-21.25	27.4
	HT/VHT40 Beam Forming, M0 to M7	3	11	11	-59.8	-59.3	-58.9		-43.4	-21.25	22.2
	HT/VHT40 Beam Forming, M8 to M15	3	14	8	-59	-58.1	-58.1		-45.5	-21.25	24.2
	HT/VHT40 Beam Forming, M16 to M23	3	16	6	-58	-56.4	-56.6		-46.0	-21.25	24.8
	HT/VHT40 Beam Forming, M0 to M7	4	8	12	-60.9	-60.1	-59.9	-61.5	-42.4	-21.25	21.2
	HT/VHT40 Beam Forming, M8 to M15	4	11	9	-59.8	-59.3	-58.9	-60.2	-44.4	-21.25	23.1
	HT/VHT40 Beam Forming, M16 to M23	4	13	7	-60.6	-58.1	-58.1	-60.7	-46.0	-21.25	24.8
	HT/VHT40 Beam Forming, M24 to M31	4	15	6	-58.3	-58.3	-56.9	-56.7	-45.3	-21.25	24.1
	HT/VHT40 STBC, M0 to M7	2	17	6	-58.3	-57.3			-48.6	-21.25	27.4
	HT/VHT40 STBC, M0 to M7	3	16	6	-58	-56.4	-56.6		-46.0	-21.25	24.8
	HT/VHT40 STBC, M0 to M7	4	15	6	-58.3	-58.3	-56.9	-56.7	-45.3	-21.25	24.1
5720	Non HT20, 6 to 54 Mbps	1	17	6	-57.3				-51.2	-21.25	29.9
	Non HT20, 6 to 54 Mbps	2	16	6	-59.9	-59.4			-50.5	-21.25	29.2
	Non HT20, 6 to 54 Mbps	3	13	6	-59.2	-60	-58.6		-48.3	-21.25	27.1
	Non HT20, 6 to 54 Mbps	4	10	6	-60	-58.8	-60.2	-61.5	-47.9	-21.25	26.6
	Non HT20 Beam Forming, 6 to 54 Mbps	2	14	9	-59.1	-59.1			-46.9	-21.25	25.7
	Non HT20 Beam Forming, 6 to 54 Mbps	3	11	11	-60.7	-59.8	-59.6		-44.1	-21.25	22.8
	Non HT20 Beam Forming, 6 to 54 Mbps	4	8	12	-62.2	-59.5	-58.9	-62.2	-42.3	-21.25	21.0
	HT/VHT20, M0 to M7	1	17	6	-58.2				-52.1	-21.25	30.9
	HT/VHT20, M0 to M7	2	16	6	-60.8	-58.1			-50.2	-21.25	28.9
	HT/VHT20, M8 to M15	2	17	6	-58.2	-58.8			-49.4	-21.25	28.2
	HT/VHT20, M0 to M7	3	13	6	-60.3	-60.2	-58.3		-48.7	-21.25	27.4
	HT/VHT20, M8 to M15	3	16	6	-60.8	-58.1	-59.1		-48.4	-21.25	27.1
	HT/VHT20, M16 to M23	3	16	6	-60.8	-58.1	-59.1		-48.4	-21.25	27.1
	HT/VHT20, M0 to M7	4	9	6	-61.3	-59.9	-59.6	-61.4	-48.4	-21.25	27.1
	HT/VHT20, M8 to M15	4	14	6	-60.4	-58.8	-58.8	-60.1	-47.4	-21.25	26.1
	HT/VHT20, M16 to M23	4	15	6	-60.8	-59	-59.2	-59.4	-47.5	-21.25	26.2
	HT/VHT20, M24 to M31	4	15	6	-60.8	-59	-59.2	-59.4	-47.5	-21.25	26.2
	HT/VHT20 Beam Forming, M0 to M7	2	14	9	-60.4	-58.8			-47.5	-21.25	26.2

HT/VHT20 Beam Forming, M8 to M15	2	17	6	-58.2	-58.8			-49.4	-21.25	28.2
HT/VHT20 Beam Forming, M0 to M7	3	11	11	-61.2	-59.6	-59.8		-44.3	-21.25	23.1
HT/VHT20 Beam Forming, M8 to M15	3	14	8	-60.4	-58.8	-58.8		-46.4	-21.25	25.2
HT/VHT20 Beam Forming, M16 to M23	3	16	6	-60.8	-58.1	-59.1		-48.4	-21.25	27.1
HT/VHT20 Beam Forming, M0 to M7	4	8	12	-61.9	-60.8	-60.3	-61.7	-43.0	-21.25	21.8
HT/VHT20 Beam Forming, M8 to M15	4	11	9	-61.2	-59.6	-59.8	-62.3	-45.5	-21.25	24.3
HT/VHT20 Beam Forming, M16 to M23	4	13	7	-60.3	-60.2	-58.3	-60.1	-46.6	-21.25	25.3
HT/VHT20 Beam Forming, M24 to M31	4	15	6	-60.8	-59	-59.2	-59.4	-47.5	-21.25	26.2
HT/VHT20 STBC, M0 to M7	2	17	6	-58.2	-58.8			-49.4	-21.25	28.2
HT/VHT20 STBC, M0 to M7	3	16	6	-60.8	-58.1	-59.1		-48.4	-21.25	27.1
HT/VHT20 STBC, M0 to M7	4	14	6	-60.4	-58.8	-58.8	-60.1	-47.4	-21.25	26.1

5.5.5 Conducted Spurious Emissions Plots – Peak 30MHz – 12GHz

VHT80 Beamforming, 5610MHz, M0x1

Antenna A



Antenna B



Antenna C



Antenna D



5.5.6 Conducted Spurious Emissions Data Table - Average

Frequency (MHz)	Mode	Tx Paths	Index Power (dBm)	Correlated Antenna Gain (dBi)	Tx 1 Spur Power (dBm)	Tx 2 Spur Power (dBm)	Tx 3 Spur Power (dBm)	Tx 4 Spur Power (dBm)	Total Conducted Spur (dBm)	Limit (dB)	Margin (dB)
5500	Non HT20, 6 to 54 Mbps	1	17	6	-65				-58.9	-41.25	17.6
	Non HT20, 6 to 54 Mbps	2	16	6	-64.8	-64.5			-55.5	-41.25	14.2
	Non HT20, 6 to 54 Mbps	3	13	6	-67.6	-68.1	-69.1		-57.3	-41.25	16.1
	Non HT20, 6 to 54 Mbps	4	11	6	-68.7	-68.1	-70.9	-69.1	-56.9	-41.25	15.7
	Non HT20 Beam Forming, 6 to 54 Mbps	2	14	9	-67.7	-68.2			-55.8	-41.25	14.5
	Non HT20 Beam Forming, 6 to 54 Mbps	3	11	11	-68.7	-68.1	-70.9		-53.2	-41.25	11.9
	Non HT20 Beam Forming, 6 to 54 Mbps	4	8	12	-68.6	-70	-70.9	-71.3	-51.9	-41.25	10.7
	HT/VHT20, M0 to M7	1	17	6	-64.8				-58.7	-41.25	17.5
	HT/VHT20, M0 to M7	2	17	6	-64.8	-64.6			-55.6	-41.25	14.4
	HT/VHT20, M8 to M15	2	17	6	-64.8	-64.6			-55.6	-41.25	14.4
	HT/VHT20, M0 to M7	3	13	6	-67.7	-68.2	-69.4		-57.5	-41.25	16.3
	HT/VHT20, M8 to M15	3	16	6	-65	-64.6	-66.5		-54.5	-41.25	13.2
	HT/VHT20, M16 to M23	3	16	6	-65	-64.6	-66.5		-54.5	-41.25	13.2
	HT/VHT20, M0 to M7	4	11	6	-68.4	-68.2	-70.8	-69.2	-57.0	-41.25	15.7
	HT/VHT20, M8 to M15	4	14	6	-67.8	-68.1	-69.5	-69	-56.5	-41.25	15.2
	HT/VHT20, M16 to M23	4	15	6	-67.7	-68.1	-69	-69	-56.3	-41.25	15.1
	HT/VHT20, M24 to M31	4	15	6	-67.7	-68.1	-69	-69	-56.3	-41.25	15.1
	HT/VHT20 Beam Forming, M0 to M7	2	14	9	-67.8	-68.1			-55.9	-41.25	14.6
	HT/VHT20 Beam Forming, M8 to M15	2	17	6	-64.8	-64.6			-55.6	-41.25	14.4
	HT/VHT20 Beam Forming, M0 to M7	3	11	11	-68.4	-68.2	-70.8		-53.2	-41.25	11.9
	HT/VHT20 Beam Forming, M8 to M15	3	14	8	-67.8	-68.1	-69.5		-55.6	-41.25	14.3
	HT/VHT20 Beam Forming, M16 to M23	3	16	6	-65	-64.6	-66.5		-54.5	-41.25	13.2
	HT/VHT20 Beam Forming, M0 to M7	4	8	12	-68.8	-69.9	-70.7	-71.3	-52.0	-41.25	10.7
	HT/VHT20 Beam Forming, M8 to M15	4	11	9	-68.4	-68.2	-70.8	-69.2	-54.0	-41.25	12.7
	HT/VHT20 Beam Forming, M16 to M23	4	13	7	-67.7	-68.2	-69.4	-69.1	-55.5	-41.25	14.2
	HT/VHT20 Beam Forming, M24 to M31	4	15	6	-67.7	-68.1	-69	-69	-56.3	-41.25	15.1

	HT/VHT20 STBC, M0 to M7	2	17	6	-64.8	-64.6			-55.6	-41.25	14.4
	HT/VHT20 STBC, M0 to M7	3	16	6	-65	-64.6	-66.5		-54.5	-41.25	13.2
	HT/VHT20 STBC, M0 to M7	4	14	6	-67.8	-68.1	-69.5	-69	-56.5	-41.25	15.2
5510	Non HT40, 6 to 54 Mbps	1	17	6	-65				-58.9	-41.25	17.6
	Non HT40, 6 to 54 Mbps	2	16	6	-65	-65			-55.9	-41.25	14.6
	Non HT40, 6 to 54 Mbps	3	14	6	-65.4	-65	-66.8		-54.8	-41.25	13.5
	Non HT40, 6 to 54 Mbps	4	12	6	-67.7	-68.3	-69.3	-69.1	-56.4	-41.25	15.2
	HT/VHT40, M0 to M7	1	15	6	-64.9				-58.8	-41.25	17.5
	HT/VHT40, M0 to M7	2	15	6	-64.9	-65			-55.8	-41.25	14.6
	HT/VHT40, M8 to M15	2	15	6	-64.9	-65			-55.8	-41.25	14.6
	HT/VHT40, M0 to M7	3	14	6	-67.9	-64.8	-66.8		-55.4	-41.25	14.2
	HT/VHT40, M8 to M15	3	14	6	-67.9	-64.8	-66.8		-55.4	-41.25	14.2
	HT/VHT40, M16 to M23	3	14	6	-67.9	-64.8	-66.8		-55.4	-41.25	14.2
	HT/VHT40, M0 to M7	4	13	6	-67.8	-68	-69.3	-69.2	-56.4	-41.25	15.1
	HT/VHT40, M8 to M15	4	13	6	-67.8	-68	-69.3	-69.2	-56.4	-41.25	15.1
	HT/VHT40, M16 to M23	4	13	6	-67.8	-68	-69.3	-69.2	-56.4	-41.25	15.1
	HT/VHT40, M24 to M31	4	13	6	-67.8	-68	-69.3	-69.2	-56.4	-41.25	15.1
	HT/VHT40 Beam Forming, M0 to M7	2	13	9	-67.8	-68			-55.8	-41.25	14.5
	HT/VHT40 Beam Forming, M8 to M15	2	15	6	-64.9	-65			-55.8	-41.25	14.6
	HT/VHT40 Beam Forming, M0 to M7	3	11	11	-68	-68.1	-69.3		-52.5	-41.25	11.3
	HT/VHT40 Beam Forming, M8 to M15	3	13	8	-67.8	-68	-69.3		-55.4	-41.25	14.2
	HT/VHT40 Beam Forming, M16 to M23	3	14	6	-67.9	-64.8	-66.8		-55.4	-41.25	14.2
	HT/VHT40 Beam Forming, M0 to M7	4	8	12	-68.7	-69.9	-71.1	-71.4	-52.0	-41.25	10.7
	HT/VHT40 Beam Forming, M8 to M15	4	11	9	-68	-68.1	-69.3	-69.2	-53.5	-41.25	12.2
	HT/VHT40 Beam Forming, M16 to M23	4	13	7	-67.8	-68	-69.3	-69.2	-55.4	-41.25	14.1
	HT/VHT40 Beam Forming, M24 to M31	4	13	6	-67.8	-68	-69.3	-69.2	-56.4	-41.25	15.1
	HT/VHT40 STBC, M0 to M7	2	15	6	-64.9	-65			-55.8	-41.25	14.6
	HT/VHT40 STBC, M0 to M7	3	14	6	-67.9	-64.8	-66.8		-55.4	-41.25	14.2
	HT/VHT40 STBC, M0 to M7	4	13	6	-67.8	-68	-69.3	-69.2	-56.4	-41.25	15.1
5530	Non HT80, 6 to 54 Mbps	1	14	6	-65				-58.9	-41.25	17.6
	Non HT80, 6 to 54 Mbps	2	14	6	-65	-64.5			-55.6	-41.25	14.3
	Non HT80, 6 to 54 Mbps	3	13	6	-65	-64.7	-65.7		-54.2	-41.25	12.9
	Non HT80, 6 to 54 Mbps	4	12	6	-66.5	-66.7	-68.2	-68.7	-55.3	-41.25	14.0
	VHT80, M0 to M9 1ss	1	14	6	-65.3				-58.6	-41.25	17.4
	VHT80, M0 to M9 1ss	2	13	6	-65.6	-65.1			-55.6	-41.25	14.4
	VHT80, M0 to M9 2ss	2	13	6	-65.6	-65.1			-55.6	-41.25	14.4
	VHT80, M0 to M9 1ss	3	12	6	-67.1	-64.9	-65.6		-54.3	-41.25	13.1
	VHT80, M0 to M9 2ss	3	12	6	-67.1	-64.9	-65.6		-54.3	-41.25	13.1
	VHT80, M0 to M9 3ss	3	12	6	-67.1	-64.9	-65.6		-54.3	-41.25	13.1

	VHT80, M0 to M9 1ss	4	11	6	-66.9	-67.9	-68.3	-68.4	-55.1	-41.25	13.9
	VHT80, M0 to M9 2ss	4	11	6	-66.9	-67.9	-68.3	-68.4	-55.1	-41.25	13.9
	VHT80, M0 to M9 3ss	4	11	6	-66.9	-67.9	-68.3	-68.4	-55.1	-41.25	13.9
	VHT80, M0 to M9 4ss	4	11	6	-66.9	-67.9	-68.3	-68.4	-55.1	-41.25	13.9
	VHT80 Beam Forming, M0 to M9 1ss	2	12	9	-67.1	-64.9			-53.2	-41.25	11.9
	VHT80 Beam Forming, M0 to M9 2ss	2	13	6	-65.6	-65.1			-55.6	-41.25	14.4
	VHT80 Beam Forming, M0 to M9 1ss	3	10	11	-66.9	-67.2	-68.7		-51.1	-41.25	9.8
	VHT80 Beam Forming, M0 to M9 2ss	3	11	8	-66.9	-67.9	-68.3		-54.2	-41.25	12.9
	VHT80 Beam Forming, M0 to M9 3ss	3	12	6	-67.1	-64.9	-65.6		-54.3	-41.25	13.1
	VHT80 Beam Forming, M0 to M9 1ss	4	7	12	-68.2	-69.3	-70.6	-71.3	-51.0	-41.25	9.7
	VHT80 Beam Forming, M0 to M9 2ss	4	11	9	-66.9	-67.9	-68.3	-68.4	-52.1	-41.25	10.9
	VHT80 Beam Forming, M0 to M9 3ss	4	11	7	-66.9	-67.9	-68.3	-68.4	-54.1	-41.25	12.9
	VHT80 Beam Forming, M0 to M9 4ss	4	11	6	-66.9	-67.9	-68.3	-68.4	-55.1	-41.25	13.9
	VHT80 STBC, M0 to M9 1ss	2	13	6	-65.6	-65.1			-55.6	-41.25	14.4
	VHT80 STBC, M0 to M9 1ss	3	12	6	-67.1	-64.9	-65.6		-54.3	-41.25	13.1
	VHT80 STBC, M0 to M9 1ss	4	11	6	-66.9	-67.9	-68.3	-68.4	-55.1	-41.25	13.9
5550	Non HT40, 6 to 54 Mbps	1	17	6	-62.4				-56.3	-41.25	15.0
	Non HT40, 6 to 54 Mbps	2	17	6	-62.4	-64.7			-54.3	-41.25	13.0
	Non HT40, 6 to 54 Mbps	3	14	6	-65.1	-64.8	-65.8		-54.3	-41.25	13.1
	Non HT40, 6 to 54 Mbps	4	11	6	-67.1	-67.1	-65.7	-68.5	-54.8	-41.25	13.6
	HT/VHT40, M0 to M7	1	17	6	-65.1				-59.0	-41.25	17.7
	HT/VHT40, M0 to M7	2	17	6	-65.1	-64.9			-55.9	-41.25	14.6
	HT/VHT40, M8 to M15	2	17	6	-65.1	-64.9			-55.9	-41.25	14.6
	HT/VHT40, M0 to M7	3	14	6	-65.6	-64.9	-66		-54.6	-41.25	13.3
	HT/VHT40, M8 to M15	3	16	6	-64.9	-64.9	-65.8		-54.3	-41.25	13.0
	HT/VHT40, M16 to M23	3	16	6	-64.9	-64.9	-65.8		-54.3	-41.25	13.0
	HT/VHT40, M0 to M7	4	12	6	-66.7	-67.3	-68.5	-68.6	-55.5	-41.25	14.3
	HT/VHT40, M8 to M15	4	15	6	-65.4	-65	-66.1	-65.3	-53.3	-41.25	12.0
	HT/VHT40, M16 to M23	4	15	6	-65.4	-65	-66.1	-65.3	-53.3	-41.25	12.0
	HT/VHT40, M24 to M31	4	15	6	-65.4	-65	-66.1	-65.3	-53.3	-41.25	12.0
	HT/VHT40 Beam Forming, M0 to M7	2	14	9	-65.6	-64.9			-53.1	-41.25	11.8
	HT/VHT40 Beam Forming, M8 to M15	2	17	6	-65.1	-64.9			-55.9	-41.25	14.6
	HT/VHT40 Beam Forming, M0 to M7	3	11	11	-66.9	-67.2	-68.5		-51.6	-41.25	10.3
	HT/VHT40 Beam Forming, M8 to M15	3	14	8	-65.6	-64.9	-66		-52.6	-41.25	11.3
	HT/VHT40 Beam Forming, M16 to M23	3	16	6	-64.9	-64.9	-65.8		-54.3	-41.25	13.0
	HT/VHT40 Beam Forming, M0 to M7	4	8	12	-68	-69.2	-70.5	-70.9	-51.3	-41.25	10.1
	HT/VHT40 Beam Forming, M8 to M15	4	11	9	-66.9	-67.2	-68.5	-68.2	-52.5	-41.25	11.2
	HT/VHT40 Beam Forming, M16 to M23	4	13	7	-66.8	-67.3	-66	-65.3	-53.1	-41.25	11.9
	HT/VHT40 Beam Forming, M24 to M31	4	15	6	-65.4	-65	-66.1	-65.3	-53.3	-41.25	12.0
	HT/VHT40 STBC, M0 to M7	2	17	6	-65.1	-64.9			-55.9	-41.25	14.6

	HT/VHT40 STBC, M0 to M7	3	16	6	-64.9	-64.9	-65.8		-54.3	-41.25	13.0
	HT/VHT40 STBC, M0 to M7	4	15	6	-65.4	-65	-66.1	-65.3	-53.3	-41.25	12.0
5560	Non HT20, 6 to 54 Mbps	1	17	6	-63.7				-57.6	-41.25	16.3
	Non HT20, 6 to 54 Mbps	2	15	6	-66.6	-66.3			-57.3	-41.25	16.0
	Non HT20, 6 to 54 Mbps	3	12	6	-66.7	-66.9	-68.4		-56.4	-41.25	15.1
	Non HT20, 6 to 54 Mbps	4	10	6	-67.7	-67	-68.4	-69.2	-55.8	-41.25	14.6
	Non HT20 Beam Forming, 6 to 54 Mbps	2	14	9	-66.4	-66.2			-54.1	-41.25	12.9
	Non HT20 Beam Forming, 6 to 54 Mbps	3	11	11	-67.8	-67.1	-68.4		-51.8	-41.25	10.6
	Non HT20 Beam Forming, 6 to 54 Mbps	4	8	12	-67.7	-69.8	-71.3	-69.4	-51.2	-41.25	9.9
	HT/VHT20, M0 to M7	1	17	6	-63.6				-57.5	-41.25	16.3
	HT/VHT20, M0 to M7	2	16	6	-63.8	-66.3			-55.8	-41.25	14.6
	HT/VHT20, M8 to M15	2	17	6	-63.6	-64.6			-55.0	-41.25	13.8
	HT/VHT20, M0 to M7	3	12	6	-66.8	-67	-68.7		-56.6	-41.25	15.3
	HT/VHT20, M8 to M15	3	15	6	-66.8	-66.3	-66.1		-55.6	-41.25	14.3
	HT/VHT20, M16 to M23	3	16	6	-63.8	-66.3	-66.2		-54.4	-41.25	13.2
	HT/VHT20, M0 to M7	4	10	6	-67.6	-66.7	-68.2	-69.3	-55.8	-41.25	14.5
	HT/VHT20, M8 to M15	4	13	6	-66.9	-66.9	-66.2	-67	-54.7	-41.25	13.4
	HT/VHT20, M16 to M23	4	15	6	-66.8	-66.3	-66.1	-66.8	-54.4	-41.25	13.2
	HT/VHT20, M24 to M31	4	15	6	-66.8	-66.3	-66.1	-66.8	-54.4	-41.25	13.2
	HT/VHT20 Beam Forming, M0 to M7	2	14	9	-66.9	-66.2			-54.5	-41.25	13.2
	HT/VHT20 Beam Forming, M8 to M15	2	17	6	-63.6	-64.6			-55.0	-41.25	13.8
	HT/VHT20 Beam Forming, M0 to M7	3	11	11	-67.5	-66.9	-68.2		-51.7	-41.25	10.4
	HT/VHT20 Beam Forming, M8 to M15	3	14	8	-66.9	-66.2	-66.1		-53.6	-41.25	12.3
	HT/VHT20 Beam Forming, M16 to M23	3	16	6	-63.8	-66.3	-66.2		-54.4	-41.25	13.2
	HT/VHT20 Beam Forming, M0 to M7	4	8	12	-67.5	-69.9	-71.3	-69.1	-51.2	-41.25	9.9
	HT/VHT20 Beam Forming, M8 to M15	4	11	9	-67.5	-66.9	-68.2	-69.1	-52.8	-41.25	11.5
	HT/VHT20 Beam Forming, M16 to M23	4	13	7	-66.9	-66.9	-66.2	-67	-53.7	-41.25	12.4
	HT/VHT20 Beam Forming, M24 to M31	4	15	6	-66.8	-66.3	-66.1	-66.8	-54.4	-41.25	13.2
	HT/VHT20 STBC, M0 to M7	2	17	6	-63.6	-64.6			-55.0	-41.25	13.8
	HT/VHT20 STBC, M0 to M7	3	15	6	-66.8	-66.3	-66.1		-55.6	-41.25	14.3
	HT/VHT20 STBC, M0 to M7	4	13	6	-66.9	-66.9	-66.2	-67	-54.7	-41.25	13.4
5610	Non HT80, 6 to 54 Mbps	1	17	6	-61.5				-55.4	-41.25	14.1
	Non HT80, 6 to 54 Mbps	2	17	6	-61.5	-62			-52.6	-41.25	11.3
	Non HT80, 6 to 54 Mbps	3	16	6	-61.4	-62.1	-61.6		-50.8	-41.25	9.5
	Non HT80, 6 to 54 Mbps	4	15	6	-61.6	-62.3	-61.7	-62.1	-49.7	-41.25	8.5
	VHT80, M0 to M9 1ss	1	17	6	-61.5				-54.8	-41.25	13.6
	VHT80, M0 to M9 1ss	2	17	6	-61.5	-62.5			-52.3	-41.25	11.0
	VHT80, M0 to M9 2ss	2	17	6	-61.5	-62.5			-52.3	-41.25	11.0
	VHT80, M0 to M9 1ss	3	16	6	-61.7	-62.4	-61.9		-50.5	-41.25	9.3

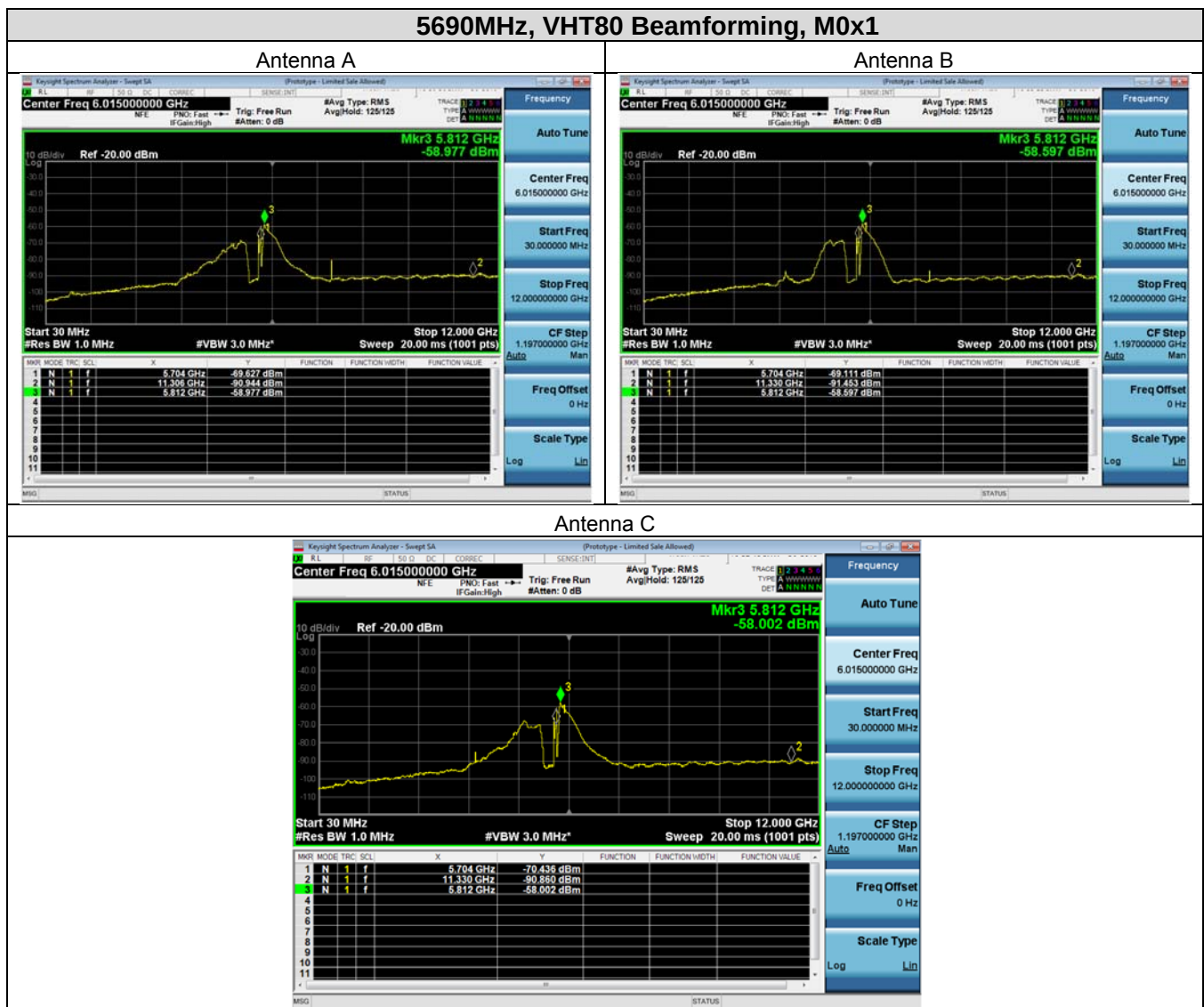
	VHT80, M0 to M9 2ss	3	16	6	-61.7	-62.4	-61.9		-50.5	-41.25	9.3
	VHT80, M0 to M9 3ss	3	16	6	-61.7	-62.4	-61.9		-50.5	-41.25	9.3
	VHT80, M0 to M9 1ss	4	15	6	-62	-62.7	-61.8	-62.9	-49.6	-41.25	8.4
	VHT80, M0 to M9 2ss	4	15	6	-62	-62.7	-61.8	-62.9	-49.6	-41.25	8.4
	VHT80, M0 to M9 3ss	4	15	6	-62	-62.7	-61.8	-62.9	-49.6	-41.25	8.4
	VHT80, M0 to M9 4ss	4	15	6	-62	-62.7	-61.8	-62.9	-49.6	-41.25	8.4
	VHT80 Beam Forming, M0 to M9 1ss	2	14	9	-62.2	-62.7			-49.7	-41.25	8.5
	VHT80 Beam Forming, M0 to M9 2ss	2	17	6	-61.5	-62.5			-52.3	-41.25	11.0
	VHT80 Beam Forming, M0 to M9 1ss	3	11	11	-65.1	-64.5	-64.6		-48.3	-41.25	7.0
	VHT80 Beam Forming, M0 to M9 2ss	3	14	8	-62.2	-62.7	-62.1		-48.9	-41.25	7.6
	VHT80 Beam Forming, M0 to M9 3ss	3	16	6	-61.7	-62.4	-61.9		-50.5	-41.25	9.3
	VHT80 Beam Forming, M0 to M9 1ss	4	8	12	-66.9	-66	-67.4	-68.7	-48.4	-41.25	7.2
	VHT80 Beam Forming, M0 to M9 2ss	4	11	9	-65.1	-64.5	-64.6	-66	-49.3	-41.25	8.0
	VHT80 Beam Forming, M0 to M9 3ss	4	13	7	-62.1	-64.4	-62.3	-62.6	-49.0	-41.25	7.8
	VHT80 Beam Forming, M0 to M9 4ss	4	15	6	-62	-62.7	-61.8	-62.9	-49.6	-41.25	8.4
	VHT80 STBC, M0 to M9 1ss	2	17	6	-61.5	-62.5			-52.3	-41.25	11.0
	VHT80 STBC, M0 to M9 1ss	3	16	6	-61.7	-62.4	-61.9		-50.5	-41.25	9.3
	VHT80 STBC, M0 to M9 1ss	4	15	6	-62	-62.7	-61.8	-62.9	-49.6	-41.25	8.4
5690	Non HT80, 6 to 54 Mbps	1	17	6	-54.7				-48.6	-41.25	7.3
	Non HT80, 6 to 54 Mbps	2	17	6	-54.7	-56.9			-46.5	-41.25	5.3
	Non HT80, 6 to 54 Mbps	3	16	6	-57.2	-57.6	-57.1		-46.4	-41.25	5.1
	Non HT80, 6 to 54 Mbps	4	15	6	-58	-57.8	-57.2	-58.1	-45.6	-41.25	4.3
	VHT80, M0 to M9 1ss	1	17	6	-54.7				-48.0	-41.25	6.8
	VHT80, M0 to M9 1ss	2	17	6	-54.7	-56.7			-45.9	-41.25	4.6
	VHT80, M0 to M9 2ss	2	17	6	-54.7	-56.7			-45.9	-41.25	4.6
	VHT80, M0 to M9 1ss	3	16	6	-57.6	-57.9	-57.7		-46.3	-41.25	5.0
	VHT80, M0 to M9 2ss	3	16	6	-57.6	-57.9	-57.7		-46.3	-41.25	5.0
	VHT80, M0 to M9 3ss	3	16	6	-57.6	-57.9	-57.7		-46.3	-41.25	5.0
	VHT80, M0 to M9 1ss	4	15	6	-58.7	-58.4	-57.9	-58.6	-45.7	-41.25	4.4
	VHT80, M0 to M9 2ss	4	15	6	-58.7	-58.4	-57.9	-58.6	-45.7	-41.25	4.4
	VHT80, M0 to M9 3ss	4	15	6	-58.7	-58.4	-57.9	-58.6	-45.7	-41.25	4.4
	VHT80, M0 to M9 4ss	4	15	6	-58.7	-58.4	-57.9	-58.6	-45.7	-41.25	4.4
	VHT80 Beam Forming, M0 to M9 1ss	2	14	9	-59	-58.6			-46.1	-41.25	4.8
	VHT80 Beam Forming, M0 to M9 2ss	2	17	6	-54.7	-56.7			-45.9	-41.25	4.6
	VHT80 Beam Forming, M0 to M9 1ss	3	11	11	-62	-61.5	-61.1		-45.0	-41.25	3.8
	VHT80 Beam Forming, M0 to M9 2ss	3	14	8	-59	-58.6	-58		-45.0	-41.25	3.8
	VHT80 Beam Forming, M0 to M9 3ss	3	16	6	-57.6	-57.9	-57.7		-46.3	-41.25	5.0
	VHT80 Beam Forming, M0 to M9 1ss	4	8	12	-64.3	-65	-65.3	-66.8	-46.5	-41.25	5.3
	VHT80 Beam Forming, M0 to M9 2ss	4	11	9	-62	-61.5	-61.1	-62.2	-46.0	-41.25	4.7
	VHT80 Beam Forming, M0 to M9 3ss	4	13	7	-58.6	-61.3	-60.9	-58.8	-46.0	-41.25	4.8

	VHT80 Beam Forming, M0 to M9 4ss	4	15	6	-58.7	-58.4	-57.9	-58.6	-45.7	-41.25	4.4
	VHT80 STBC, M0 to M9 1ss	2	17	6	-54.7	-56.7			-45.9	-41.25	4.6
	VHT80 STBC, M0 to M9 1ss	3	16	6	-57.6	-57.9	-57.7		-46.3	-41.25	5.0
	VHT80 STBC, M0 to M9 1ss	4	15	6	-58.7	-58.4	-57.9	-58.6	-45.7	-41.25	4.4
5700	Non HT20, 6 to 54 Mbps	1	17	6	-62.3				-56.2	-41.25	14.9
	Non HT20, 6 to 54 Mbps	2	16	6	-65.2	-63.8			-55.3	-41.25	14.0
	Non HT20, 6 to 54 Mbps	3	12	6	-65.2	-67	-63.6		-54.1	-41.25	12.9
	Non HT20, 6 to 54 Mbps	4	10	6	-66.7	-67	-66.4	-68.6	-54.9	-41.25	13.7
	Non HT20 Beam Forming, 6 to 54 Mbps	2	14	9	-65	-64.1			-52.4	-41.25	11.1
	Non HT20 Beam Forming, 6 to 54 Mbps	3	11	11	-66.6	-67	-66.5		-50.8	-41.25	9.5
	Non HT20 Beam Forming, 6 to 54 Mbps	4	8	12	-70.3	-70.1	-66.1	-68.6	-50.3	-41.25	9.0
	HT/VHT20, M0 to M7	1	17	6	-62				-55.9	-41.25	14.7
	HT/VHT20, M0 to M7	2	16	6	-62	-63.7			-53.7	-41.25	12.4
	HT/VHT20, M8 to M15	2	16	6	-62	-63.7			-53.7	-41.25	12.4
	HT/VHT20, M0 to M7	3	13	6	-65.3	-64	-63.7		-53.4	-41.25	12.2
	HT/VHT20, M8 to M15	3	16	6	-62	-63.7	-63.4		-52.1	-41.25	10.9
	HT/VHT20, M16 to M23	3	16	6	-62	-63.7	-63.4		-52.1	-41.25	10.9
	HT/VHT20, M0 to M7	4	10	6	-66.7	-67	-66.4	-68.6	-55.0	-41.25	13.8
	HT/VHT20, M8 to M15	4	13	6	-65.3	-64	-63.7	-65.1	-52.4	-41.25	11.1
	HT/VHT20, M16 to M23	4	15	6	-65.2	-64	-63.7	-65.1	-52.4	-41.25	11.1
	HT/VHT20, M24 to M31	4	15	6	-65.2	-64	-63.7	-65.1	-52.4	-41.25	11.1
	HT/VHT20 Beam Forming, M0 to M7	2	14	9	-65.2	-64			-52.5	-41.25	11.2
	HT/VHT20 Beam Forming, M8 to M15	2	16	6	-62	-63.7			-53.7	-41.25	12.4
	HT/VHT20 Beam Forming, M0 to M7	3	11	11	-66.6	-66.9	-66.3		-50.8	-41.25	9.5
	HT/VHT20 Beam Forming, M8 to M15	3	14	8	-65.2	-64	-63.8		-51.5	-41.25	10.2
	HT/VHT20 Beam Forming, M16 to M23	3	16	6	-62	-63.7	-63.4		-52.1	-41.25	10.9
	HT/VHT20 Beam Forming, M0 to M7	4	8	12	-66.7	-70.1	-66.4	-68.7	-49.6	-41.25	8.4
	HT/VHT20 Beam Forming, M8 to M15	4	11	9	-66.6	-66.9	-66.3	-68.7	-52.0	-41.25	10.7
	HT/VHT20 Beam Forming, M16 to M23	4	13	7	-65.3	-64	-63.7	-65.1	-51.4	-41.25	10.1
	HT/VHT20 Beam Forming, M24 to M31	4	15	6	-65.2	-64	-63.7	-65.1	-52.4	-41.25	11.1
	HT/VHT20 STBC, M0 to M7	2	16	6	-62	-63.7			-53.7	-41.25	12.4
	HT/VHT20 STBC, M0 to M7	3	16	6	-62	-63.7	-63.4		-52.1	-41.25	10.9
	HT/VHT20 STBC, M0 to M7	4	13	6	-65.3	-64	-63.7	-65.1	-52.4	-41.25	11.1
5710	Non HT40, 6 to 54 Mbps	1	17	6	-61.2				-55.1	-41.25	13.8
	Non HT40, 6 to 54 Mbps	2	17	6	-61.2	-60.8			-51.9	-41.25	10.6
	Non HT40, 6 to 54 Mbps	3	14	6	-61.3	-60.8	-60.2		-49.8	-41.25	8.6
	Non HT40, 6 to 54 Mbps	4	11	6	-64.5	-63.5	-63.5	-64.6	-51.8	-41.25	10.6
	HT/VHT40, M0 to M7	1	17	6	-61.5				-55.4	-41.25	14.1
	HT/VHT40, M0 to M7	2	17	6	-61.5	-61			-52.1	-41.25	10.9

	HT/VHT40, M8 to M15	2	17	6	-61.5	-61			-52.1	-41.25	10.9
	HT/VHT40, M0 to M7	3	14	6	-64.6	-63.9	-63.2		-53.0	-41.25	11.7
	HT/VHT40, M8 to M15	3	16	6	-61.5	-60.9	-60.5		-50.0	-41.25	8.8
	HT/VHT40, M16 to M23	3	16	6	-61.5	-60.9	-60.5		-50.0	-41.25	8.8
	HT/VHT40, M0 to M7	4	12	6	-64.7	-63.5	-63.4	-65	-51.9	-41.25	10.7
	HT/VHT40, M8 to M15	4	15	6	-61.7	-63.5	-60.5	-61.8	-49.6	-41.25	8.3
	HT/VHT40, M16 to M23	4	15	6	-61.7	-63.5	-60.5	-61.8	-49.6	-41.25	8.3
	HT/VHT40, M24 to M31	4	15	6	-61.7	-63.5	-60.5	-61.8	-49.6	-41.25	8.3
	HT/VHT40 Beam Forming, M0 to M7	2	14	9	-64.6	-63.9			-52.1	-41.25	10.8
	HT/VHT40 Beam Forming, M8 to M15	2	17	6	-61.5	-61			-52.1	-41.25	10.9
	HT/VHT40 Beam Forming, M0 to M7	3	11	11	-64.5	-63.6	-63.8		-48.0	-41.25	6.8
	HT/VHT40 Beam Forming, M8 to M15	3	14	8	-64.6	-63.9	-63.2		-51.0	-41.25	9.7
	HT/VHT40 Beam Forming, M16 to M23	3	16	6	-61.5	-60.9	-60.5		-50.0	-41.25	8.8
	HT/VHT40 Beam Forming, M0 to M7	4	8	12	-66.4	-66.9	-66.4	-68.5	-48.8	-41.25	7.6
	HT/VHT40 Beam Forming, M8 to M15	4	11	9	-64.5	-63.6	-63.8	-64.8	-49.0	-41.25	7.7
	HT/VHT40 Beam Forming, M16 to M23	4	13	7	-64.5	-63.6	-63.5	-64.8	-50.9	-41.25	9.7
	HT/VHT40 Beam Forming, M24 to M31	4	15	6	-61.7	-63.5	-60.5	-61.8	-49.6	-41.25	8.3
	HT/VHT40 STBC, M0 to M7	2	17	6	-61.5	-61			-52.1	-41.25	10.9
	HT/VHT40 STBC, M0 to M7	3	16	6	-61.5	-60.9	-60.5		-50.0	-41.25	8.8
	HT/VHT40 STBC, M0 to M7	4	15	6	-61.7	-63.5	-60.5	-61.8	-49.6	-41.25	8.3
5720	Non HT20, 6 to 54 Mbps	1	17	6	-61.8				-55.7	-41.25	14.4
	Non HT20, 6 to 54 Mbps	2	16	6	-64.6	-63.4			-54.8	-41.25	13.6
	Non HT20, 6 to 54 Mbps	3	13	6	-64.7	-66.8	-63.5		-53.9	-41.25	12.6
	Non HT20, 6 to 54 Mbps	4	10	6	-66.4	-66.7	-66.1	-68.3	-54.6	-41.25	13.4
	Non HT20 Beam Forming, 6 to 54 Mbps	2	14	9	-64.7	-63.5			-51.9	-41.25	10.7
	Non HT20 Beam Forming, 6 to 54 Mbps	3	11	11	-66.4	-66.7	-66.2		-50.5	-41.25	9.3
	Non HT20 Beam Forming, 6 to 54 Mbps	4	8	12	-70.1	-69.9	-66.1	-68.2	-50.1	-41.25	8.9
	HT/VHT20, M0 to M7	1	17	6	-61.7				-55.6	-41.25	14.4
	HT/VHT20, M0 to M7	2	16	6	-64.8	-63.4			-55.0	-41.25	13.7
	HT/VHT20, M8 to M15	2	17	6	-61.7	-63.2			-53.3	-41.25	12.1
	HT/VHT20, M0 to M7	3	13	6	-64.7	-66.9	-63.5		-54.0	-41.25	12.7
	HT/VHT20, M8 to M15	3	16	6	-64.8	-63.4	-63.1		-52.9	-41.25	11.6
	HT/VHT20, M16 to M23	3	16	6	-64.8	-63.4	-63.1		-52.9	-41.25	11.6
	HT/VHT20, M0 to M7	4	9	6	-66.3	-70	-66	-68.4	-55.3	-41.25	14.1
	HT/VHT20, M8 to M15	4	14	6	-64.6	-63.6	-63.4	-64.7	-52.0	-41.25	10.7
	HT/VHT20, M16 to M23	4	15	6	-64.7	-63.5	-63.2	-64.8	-51.9	-41.25	10.7
	HT/VHT20, M24 to M31	4	15	6	-64.7	-63.5	-63.2	-64.8	-51.9	-41.25	10.7
	HT/VHT20 Beam Forming, M0 to M7	2	14	9	-64.6	-63.6			-52.0	-41.25	10.8
	HT/VHT20 Beam Forming, M8 to M15	2	17	6	-61.7	-63.2			-53.3	-41.25	12.1
	HT/VHT20 Beam Forming, M0 to M7	3	11	11	-66.3	-66.8	-66.4		-50.7	-41.25	9.4

HT/VHT20 Beam Forming, M8 to M15	3	14	8	-64.6	-63.6	-63.4		-51.0	-41.25	9.8
HT/VHT20 Beam Forming, M16 to M23	3	16	6	-64.8	-63.4	-63.1		-52.9	-41.25	11.6
HT/VHT20 Beam Forming, M0 to M7	4	8	12	-70.2	-70	-66.2	-68.5	-50.3	-41.25	9.1
HT/VHT20 Beam Forming, M8 to M15	4	11	9	-66.3	-66.8	-66.4	-68.4	-51.8	-41.25	10.6
HT/VHT20 Beam Forming, M16 to M23	4	13	7	-64.7	-66.9	-63.5	-64.6	-51.7	-41.25	10.4
HT/VHT20 Beam Forming, M24 to M31	4	15	6	-64.7	-63.5	-63.2	-64.8	-51.9	-41.25	10.7
HT/VHT20 STBC, M0 to M7	2	17	6	-61.7	-63.2			-53.3	-41.25	12.1
HT/VHT20 STBC, M0 to M7	3	16	6	-64.8	-63.4	-63.1		-52.9	-41.25	11.6
HT/VHT20 STBC, M0 to M7	4	14	6	-64.6	-63.6	-63.4	-64.7	-52.0	-41.25	10.7

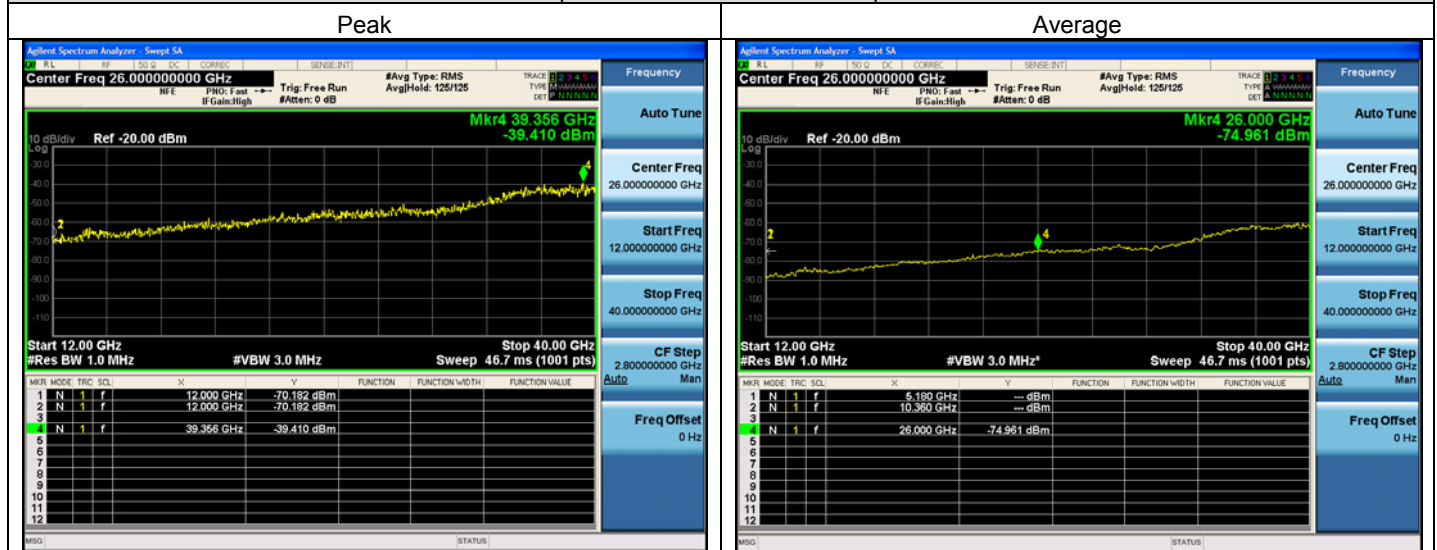
5.5.7 Conducted Spurious Emissions Plots – Average 30MHz – 12GHz



5.5.8 Conducted Spurious Emissions Plots 12-40GHz

Plots representative of all modes

Conducted Spurious 12GHz-40GHz index power 17dBm



5.6 Conducted Band Edge

5.6.1 Conducted Band Edge Test Requirement

15.407(b)

Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

(3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(6) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209.

(7) The provisions of §15.205 apply to intentional radiators operating under this section.

(8) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the upper and lower frequency band edges as the design of the equipment permits

15.205 / 15.209

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

Use formula below to substitute conducted measurements in place of radiated measurements

$E[\text{dB}\mu\text{V/m}] = \text{EIRP} [\text{dBm}] - 20 \log(d[\text{meters}]) + 104.77$, where E = field strength and d = 3 meter

1) Average Plot, Limit= -41.25 dBm eirp

2) Peak plot, Limit = -21.25 dBm eirp

KDB 789033 D02 General UNII Test Procedures New Rules v02r01

2. Unwanted Emissions that fall Outside of the Restricted Bands

a) For all measurements, follow the requirements in II.G.3. "General Requirements for Unwanted Emissions Measurements."

b) At frequencies below 1000 MHz, use the procedure described in II.G.4. "Procedure for Unwanted Emissions Measurements Below 1000 MHz."

c) At frequencies above 1000 MHz, use the procedure for maximum emissions described in II.G.5., "Procedure for Unwanted Emissions Measurements Above 1000 MHz."

(i) Sections 15.407(b) (1-3) specifies the unwanted emissions limit for the U-NII-1 and U-NII-2 bands. As specified, emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit of -27 dBm/MHz.

5.6.2 Conducted Band Edge Test Procedure

Ref. 789033 D02 General UNII Test Procedures New Rules v01r02
ANSI C63.10: 2013

Conducted Band edge
Test Procedure
1. Connect the antenna port(s) to the spectrum analyzer input. 2. Place the radio in continuous transmit mode. Use the procedures in 789033 D02 General UNII Test Procedures New Rules v01r02 to substitute conducted measurements in place of radiated measurements. 3. Configure Spectrum analyzer as per test parameters below (be sure to enter all losses between the transmitter output and the spectrum analyzer). 4. Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands. 5. 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. The worst-case output is recorded. 6. Place a marker at the end of the band edge closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands 7. Capture graphs and record pertinent measurement data.

Ref. 789033 D02 General UNII Test Procedures New Rules v01r02
ANSI C63.10: 2013 section 12.7.7.3 and section 12.7.6

Conducted Band edge
Test parameters restricted Band
RBW = 1 MHz VBW $\geq$ 3MHz for Peak, 100Hz for Average Sweep = Auto couple Detector = Peak Trace = Max Hold.

5.6.3 Conducted Band Edge Test Information

Samples, Systems, and Modes

System Number	Description	Samples	System under test	Support equipment
1	EUT	S01	☒	☐
	Support	S02	☐	☒

Tested By: Julian Land	Date of testing: March 6, 2019 - March 26, 2019
Test Result: PASS	

Test Equipment

See Appendix A for list of test equipment

5.6.4 Conducted Band Edge Data Tables – Peak

Frequency (MHz)	Mode	Tx Paths	Index Power (dBm)	Correlated Antenna Gain (dBi)	Tx 1 Band edge Level (dBm)	Tx 2 Band edge Level (dBm)	Tx 3 Band edge Level (dBm)	Tx 4 Band edge Level (dBm)	Total Tx Band edge Level (dBm)	Limit (dB)	Margin (dB)
5500	Non HT20, 6 to 54 Mbps	1	17	6	-44				-37.9	-21.25	16.6
	Non HT20, 6 to 54 Mbps	2	16	6	-40.9	-44.3			-33.1	-21.25	11.9
	Non HT20, 6 to 54 Mbps	3	13	6	-48	-49.7	-47.7		-37.5	-21.25	16.2
	Non HT20, 6 to 54 Mbps	4	11	6	-49.3	-48.8	-51.1	-51	-37.8	-21.25	16.5
	Non HT20 Beam Forming, 6 to 54 Mbps	2	14	9	-47.1	-47.7			-35.2	-21.25	14.0
	Non HT20 Beam Forming, 6 to 54 Mbps	3	11	11	-49.3	-48.8	-51.1		-33.7	-21.25	12.5
	Non HT20 Beam Forming, 6 to 54 Mbps	4	8	12	-51	-52.5	-52	-53.2	-33.9	-21.25	12.7
	HT/VHT20, M0 to M7	1	17	6	-43.4				-37.3	-21.25	16.1
	HT/VHT20, M0 to M7	2	17	6	-43.4	-45.3			-35.2	-21.25	13.9
	HT/VHT20, M8 to M15	2	17	6	-43.4	-45.3			-35.2	-21.25	13.9
	HT/VHT20, M0 to M7	3	13	6	-48.6	-49.5	-47.7		-37.7	-21.25	16.5
	HT/VHT20, M8 to M15	3	16	6	-44.9	-44.1	-43.9		-33.4	-21.25	12.2
	HT/VHT20, M16 to M23	3	16	6	-44.9	-44.1	-43.9		-33.4	-21.25	12.2
	HT/VHT20, M0 to M7	4	11	6	-46.1	-48.5	-49.4	-49.1	-36.0	-21.25	14.7
	HT/VHT20, M8 to M15	4	14	6	-48.3	-49	-47.4	-47.8	-36.0	-21.25	14.8
	HT/VHT20, M16 to M23	4	15	6	-46.1	-47.9	-45.9	-47.1	-34.6	-21.25	13.3
	HT/VHT20, M24 to M31	4	15	6	-46.1	-47.9	-45.9	-47.1	-34.6	-21.25	13.3
	HT/VHT20 Beam Forming, M0 to M7	2	14	9	-48.3	-49			-36.6	-21.25	15.3
	HT/VHT20 Beam Forming, M8 to M15	2	17	6	-43.4	-45.3			-35.2	-21.25	13.9
	HT/VHT20 Beam Forming, M0 to M7	3	11	11	-46.1	-48.5	-49.4		-31.9	-21.25	10.7
	HT/VHT20 Beam Forming, M8 to M15	3	14	8	-48.3	-49	-47.4		-35.4	-21.25	14.1
	HT/VHT20 Beam Forming, M16 to M23	3	16	6	-44.9	-44.1	-43.9		-33.4	-21.25	12.2
	HT/VHT20 Beam Forming, M0 to M7	4	8	12	-51.3	-50.7	-52	-53.2	-33.6	-21.25	12.4
	HT/VHT20 Beam Forming, M8 to M15	4	11	9	-46.1	-48.5	-49.4	-49.1	-33.0	-21.25	11.7
	HT/VHT20 Beam Forming, M16 to M23	4	13	7	-48.6	-49.5	-47.7	-49.5	-35.7	-21.25	14.4
	HT/VHT20 Beam Forming, M24 to M31	4	15	6	-46.1	-47.9	-45.9	-47.1	-34.6	-21.25	13.3
	HT/VHT20 STBC, M0 to M7	2	17	6	-43.4	-45.3			-35.2	-21.25	13.9
	HT/VHT20 STBC, M0 to M7	3	16	6	-44.9	-44.1	-43.9		-33.4	-21.25	12.2

	HT/VHT20 STBC, M0 to M7	4	14	6	-48.3	-49	-47.4	-47.8	-36.0	-21.25	14.8
5510	Non HT40, 6 to 54 Mbps	1	17	6	-35.3				-29.2	-21.25	7.9
	Non HT40, 6 to 54 Mbps	2	16	6	-40.8	-43			-32.6	-21.25	11.4
	Non HT40, 6 to 54 Mbps	3	14	6	-43.1	-44.7	-43.3		-32.7	-21.25	11.5
	Non HT40, 6 to 54 Mbps	4	12	6	-47	-49.2	-47.5	-48.7	-35.9	-21.25	14.6
	HT/VHT40, M0 to M7	1	15	6	-38.2				-32.1	-21.25	10.8
	HT/VHT40, M0 to M7	2	15	6	-38.2	-44.8			-31.2	-21.25	10.0
	HT/VHT40, M8 to M15	2	15	6	-38.2	-44.8			-31.2	-21.25	10.0
	HT/VHT40, M0 to M7	3	14	6	-41.8	-44.6	-43.2		-32.1	-21.25	10.9
	HT/VHT40, M8 to M15	3	14	6	-41.8	-44.6	-43.2		-32.1	-21.25	10.9
	HT/VHT40, M16 to M23	3	14	6	-41.8	-44.6	-43.2		-32.1	-21.25	10.9
	HT/VHT40, M0 to M7	4	13	6	-44.1	-48.2	-46.8	-47.1	-34.1	-21.25	12.9
	HT/VHT40, M8 to M15	4	13	6	-44.1	-48.2	-46.8	-47.1	-34.1	-21.25	12.9
	HT/VHT40, M16 to M23	4	13	6	-44.1	-48.2	-46.8	-47.1	-34.1	-21.25	12.9
	HT/VHT40, M24 to M31	4	13	6	-44.1	-48.2	-46.8	-47.1	-34.1	-21.25	12.9
	HT/VHT40 Beam Forming, M0 to M7	2	13	9	-44.1	-48.2			-33.5	-21.25	12.3
	HT/VHT40 Beam Forming, M8 to M15	2	15	6	-38.2	-44.8			-31.2	-21.25	10.0
	HT/VHT40 Beam Forming, M0 to M7	3	11	11	-46.8	-49.9	-48		-32.2	-21.25	10.9
	HT/VHT40 Beam Forming, M8 to M15	3	13	8	-44.1	-48.2	-46.8		-33.1	-21.25	11.9
	HT/VHT40 Beam Forming, M16 to M23	3	14	6	-41.8	-44.6	-43.2		-32.1	-21.25	10.9
	HT/VHT40 Beam Forming, M0 to M7	4	8	12	-53.6	-54.2	-53.4	-55.2	-35.9	-21.25	14.6
	HT/VHT40 Beam Forming, M8 to M15	4	11	9	-46.8	-49.9	-48	-50.5	-33.4	-21.25	12.1
	HT/VHT40 Beam Forming, M16 to M23	4	13	7	-44.1	-48.2	-46.8	-47.1	-33.1	-21.25	11.9
	HT/VHT40 Beam Forming, M24 to M31	4	13	6	-44.1	-48.2	-46.8	-47.1	-34.1	-21.25	12.9
	HT/VHT40 STBC, M0 to M7	2	15	6	-38.2	-44.8			-31.2	-21.25	10.0
	HT/VHT40 STBC, M0 to M7	3	14	6	-41.8	-44.6	-43.2		-32.1	-21.25	10.9
	HT/VHT40 STBC, M0 to M7	4	13	6	-44.1	-48.2	-46.8	-47.1	-34.1	-21.25	12.9
5530	Non HT80, 6 to 54 Mbps	1	14	6	-37.7				-31.6	-21.25	10.3
	Non HT80, 6 to 54 Mbps	2	14	6	-37.7	-43.8			-30.6	-21.25	9.3
	Non HT80, 6 to 54 Mbps	3	13	6	-38.8	-44.7	-39.7		-29.5	-21.25	8.2
	Non HT80, 6 to 54 Mbps	4	12	6	-43.7	-47.1	-43.5	-44.4	-32.3	-21.25	11.0
	VHT80, M0 to M9 1ss	1	14	6	-38.4				-31.7	-21.25	10.5
	VHT80, M0 to M9 1ss	2	13	6	-39.5	-43.3			-31.3	-21.25	10.0
	VHT80, M0 to M9 2ss	2	13	6	-39.5	-43.3			-31.3	-21.25	10.0
	VHT80, M0 to M9 1ss	3	12	6	-43.9	-44	-42.8		-32.1	-21.25	10.8
	VHT80, M0 to M9 2ss	3	12	6	-43.9	-44	-42.8		-32.1	-21.25	10.8
	VHT80, M0 to M9 3ss	3	12	6	-43.9	-44	-42.8		-32.1	-21.25	10.8
	VHT80, M0 to M9 1ss	4	11	6	-45.9	-46.9	-45.6	-46.6	-33.5	-21.25	12.2
	VHT80, M0 to M9 2ss	4	11	6	-45.9	-46.9	-45.6	-46.6	-33.5	-21.25	12.2

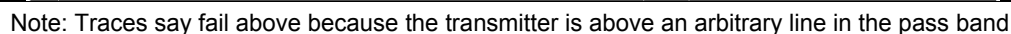
	VHT80, M0 to M9 3ss	4	11	6	-45.9	-46.9	-45.6	-46.6	-33.5	-21.25	12.2
	VHT80, M0 to M9 4ss	4	11	6	-45.9	-46.9	-45.6	-46.6	-33.5	-21.25	12.2
	VHT80 Beam Forming, M0 to M9 1ss	2	12	9	-43.9	-44			-31.2	-21.25	10.0
	VHT80 Beam Forming, M0 to M9 2ss	2	13	6	-39.5	-43.3			-31.3	-21.25	10.0
	VHT80 Beam Forming, M0 to M9 1ss	3	10	11	-48.5	-49.3	-46		-31.2	-21.25	10.0
	VHT80 Beam Forming, M0 to M9 2ss	3	11	8	-45.9	-46.9	-45.6		-32.6	-21.25	11.4
	VHT80 Beam Forming, M0 to M9 3ss	3	12	6	-43.9	-44	-42.8		-32.1	-21.25	10.8
	VHT80 Beam Forming, M0 to M9 1ss	4	7	12	-51.5	-52.5	-52.7	-52.4	-33.5	-21.25	12.3
	VHT80 Beam Forming, M0 to M9 2ss	4	11	9	-45.9	-46.9	-45.6	-46.6	-30.5	-21.25	9.2
	VHT80 Beam Forming, M0 to M9 3ss	4	11	7	-45.9	-46.9	-45.6	-46.6	-32.5	-21.25	11.2
	VHT80 Beam Forming, M0 to M9 4ss	4	11	6	-45.9	-46.9	-45.6	-46.6	-33.5	-21.25	12.2
	VHT80 STBC, M0 to M9 1ss	2	13	6	-39.5	-43.3			-31.3	-21.25	10.0
	VHT80 STBC, M0 to M9 1ss	3	12	6	-43.9	-44	-42.8		-32.1	-21.25	10.8
	VHT80 STBC, M0 to M9 1ss	4	11	6	-45.9	-46.9	-45.6	-46.6	-33.5	-21.25	12.2
5700	Non HT20, 6 to 54 Mbps	1	17	6	-36.4				-30.3	-21.25	9.0
	Non HT20, 6 to 54 Mbps	2	16	6	-40.2	-44.3			-32.6	-21.25	11.4
	Non HT20, 6 to 54 Mbps	3	12	6	-44.4	-49.6	-43.2		-34.1	-21.25	12.8
	Non HT20, 6 to 54 Mbps	4	10	6	-48.9	-51.2	-47	-51.5	-37.1	-21.25	15.8
	Non HT20 Beam Forming, 6 to 54 Mbps	2	14	9	-38.3	-46.8			-28.6	-21.25	7.3
	Non HT20 Beam Forming, 6 to 54 Mbps	3	11	11	-47.7	-46.4	-46.4		-30.9	-21.25	9.6
	Non HT20 Beam Forming, 6 to 54 Mbps	4	8	12	-54.6	-55.1	-52.2	-46.8	-32.6	-21.25	11.4
	HT/VHT20, M0 to M7	1	17	6	-34				-27.9	-21.25	6.7
	HT/VHT20, M0 to M7	2	16	6	-37.2	-43.7			-30.3	-21.25	9.0
	HT/VHT20, M8 to M15	2	16	6	-37.2	-43.7			-30.3	-21.25	9.0
	HT/VHT20, M0 to M7	3	13	6	-44.1	-43.4	-48.3		-34.0	-21.25	12.7
	HT/VHT20, M8 to M15	3	16	6	-37.2	-43.7	-43.9		-29.6	-21.25	8.3
	HT/VHT20, M16 to M23	3	16	6	-37.2	-43.7	-43.9		-29.6	-21.25	8.3
	HT/VHT20, M0 to M7	4	10	6	-49.8	-45.8	-51.3	-47.4	-36.0	-21.25	14.7
	HT/VHT20, M8 to M15	4	13	6	-44.1	-43.4	-48.3	-48.0	-33.3	-21.25	12.1
	HT/VHT20, M16 to M23	4	15	6	-42.5	-44.7	-44.7	-45.1	-32.0	-21.25	10.8
	HT/VHT20, M24 to M31	4	15	6	-42.5	-44.7	-44.7	-45.1	-32.0	-21.25	10.8
	HT/VHT20 Beam Forming, M0 to M7	2	14	9	-44.4	-46.3			-33.2	-21.25	11.9
	HT/VHT20 Beam Forming, M8 to M15	2	16	6	-37.2	-43.7			-30.3	-21.25	9.0
	HT/VHT20 Beam Forming, M0 to M7	3	11	11	-48.9	-50.5	-51		-34.2	-21.25	13.0
	HT/VHT20 Beam Forming, M8 to M15	3	14	8	-44.4	-46.3	-45.3		-32.4	-21.25	11.2
	HT/VHT20 Beam Forming, M16 to M23	3	16	6	-37.2	-43.7	-43.9		-29.6	-21.25	8.3
	HT/VHT20 Beam Forming, M0 to M7	4	8	12	-51.9	-53	-51.3	-53.6	-34.3	-21.25	13.0
	HT/VHT20 Beam Forming, M8 to M15	4	11	9	-48.9	-50.5	-51.0	-50.3	-35.0	-21.25	13.8
	HT/VHT20 Beam Forming, M16 to M23	4	13	7	-44.1	-43.4	-48.3	-48.0	-32.3	-21.25	11.1
	HT/VHT20 Beam Forming, M24 to M31	4	15	6	-42.5	-44.7	-44.7	-45.1	-32.0	-21.25	10.8

	HT/VHT20 STBC, M0 to M7	2	16	6	-37.2	-43.7			-30.3	-21.25	9.0
	HT/VHT20 STBC, M0 to M7	3	16	6	-37.2	-43.7	-43.9		-29.6	-21.25	8.3
	HT/VHT20 STBC, M0 to M7	4	13	6	-44.1	-43.4	-48.3	-48.0	-33.3	-21.25	12.1

5.6.5 Conducted Band Edge Plot – Peak

5700MHz, HT20, M0

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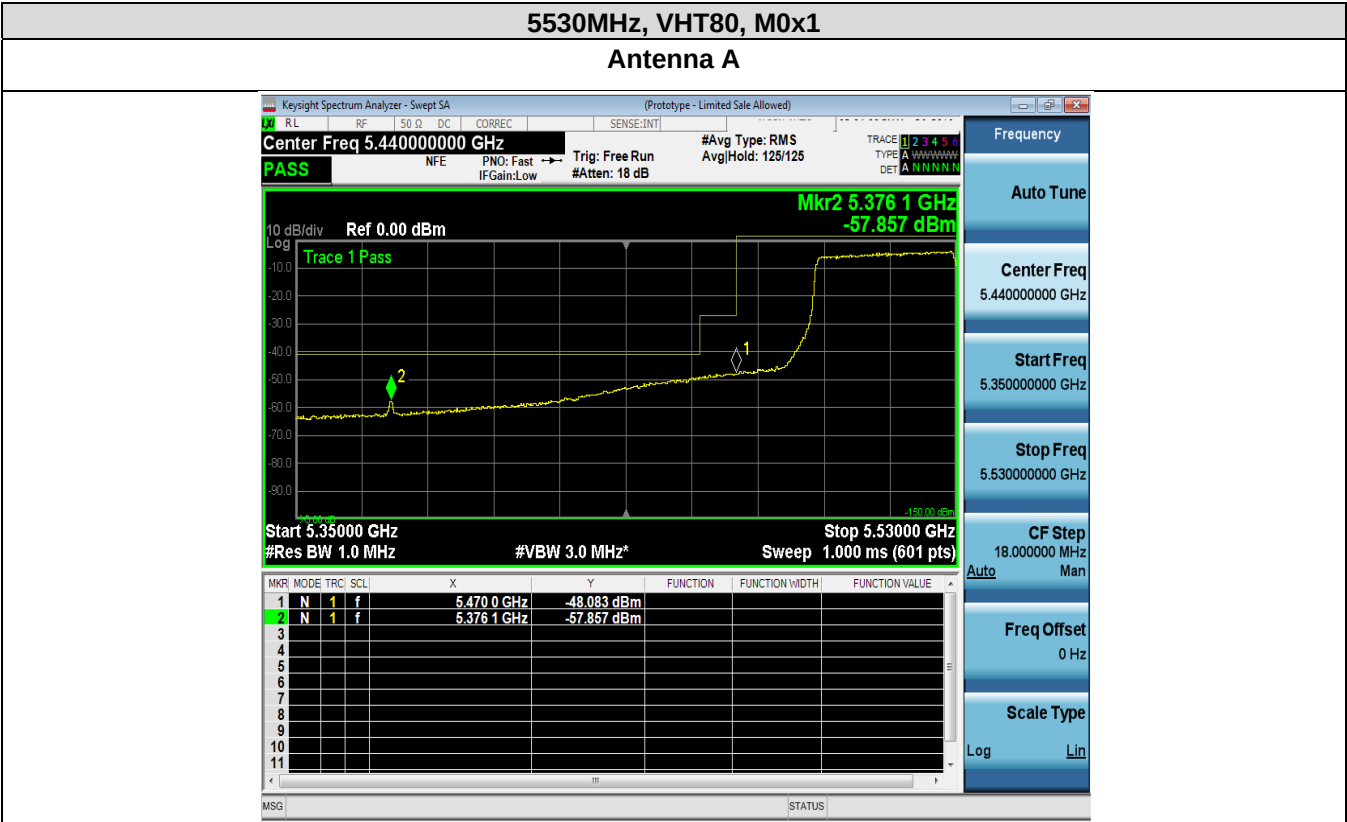


Frequency (MHz)	Mode	Tx Paths	Index Power (dBm)	Correlated Antenna Gain (dBi)	Tx 1 Band edge Level (dBm)	Tx 2 Band edge Level (dBm)	Tx 3 Band edge Level (dBm)	Tx 4 Band edge Level (dBm)	Total Tx Band edge Level (dBm)	Limit (dB)	Margin (dB)
5500	Non HT20, 6 to 54 Mbps	1	17	6	-56.6				-50.5	-41.25	9.2
	Non HT20, 6 to 54 Mbps	2	16	6	-56.5	-56.1			-47.1	-41.25	5.9
	Non HT20, 6 to 54 Mbps	3	13	6	-60.4	-61.1	-59.2		-49.3	-41.25	8.0
	Non HT20, 6 to 54 Mbps	4	11	6	-62.5	-60.5	-61.7	-61.8	-49.4	-41.25	8.2
	Non HT20 Beam Forming, 6 to 54 Mbps	2	14	9	-60.1	-61.2			-48.5	-41.25	7.2
	Non HT20 Beam Forming, 6 to 54 Mbps	3	11	11	-62.5	-60.5	-61.7		-45.6	-41.25	4.3
	Non HT20 Beam Forming, 6 to 54 Mbps	4	8	12	-62.1	-63.5	-62	-66.4	-45.0	-41.25	3.8
	HT/VHT20, M0 to M7	1	17	6	-56.9				-50.8	-41.25	9.6
	HT/VHT20, M0 to M7	2	17	6	-56.9	-56.1			-47.4	-41.25	6.2
	HT/VHT20, M8 to M15	2	17	6	-56.9	-56.1			-47.4	-41.25	6.2
	HT/VHT20, M0 to M7	3	13	6	-61	-61	-59		-49.4	-41.25	8.1
	HT/VHT20, M8 to M15	3	16	6	-57.3	-55.6	-54		-44.6	-41.25	3.3
	HT/VHT20, M16 to M23	3	16	6	-57.3	-55.6	-54		-44.6	-41.25	3.3
	HT/VHT20, M0 to M7	4	11	6	-62.4	-61.1	-61.5	-62	-49.6	-41.25	8.4
	HT/VHT20, M8 to M15	4	14	6	-60.4	-60.4	-58.2	-61.3	-47.8	-41.25	6.6
	HT/VHT20, M16 to M23	4	15	6	-59.6	-60.9	-59.4	-60.2	-47.9	-41.25	6.7
	HT/VHT20, M24 to M31	4	15	6	-59.6	-60.9	-59.4	-60.2	-47.9	-41.25	6.7
	HT/VHT20 Beam Forming, M0 to M7	2	14	9	-60.4	-60.4			-48.3	-41.25	7.1
	HT/VHT20 Beam Forming, M8 to M15	2	17	6	-56.9	-56.1			-47.4	-41.25	6.2
	HT/VHT20 Beam Forming, M0 to M7	3	11	11	-62.4	-61.1	-61.5		-45.8	-41.25	4.6
	HT/VHT20 Beam Forming, M8 to M15	3	14	8	-60.4	-60.4	-58.2		-46.7	-41.25	5.5
	HT/VHT20 Beam Forming, M16 to M23	3	16	6	-57.3	-55.6	-54		-44.6	-41.25	3.3
	HT/VHT20 Beam Forming, M0 to M7	4	8	12	-62.1	-64	-61.7	-66.3	-45.1	-41.25	3.8
	HT/VHT20 Beam Forming, M8 to M15	4	11	9	-62.4	-61.1	-61.5	-62	-46.6	-41.25	5.4
	HT/VHT20 Beam Forming, M16 to M23	4	13	7	-61	-61	-59	-61.1	-47.3	-41.25	6.1
	HT/VHT20 Beam Forming, M24 to M31	4	15	6	-59.6	-60.9	-59.4	-60.2	-47.9	-41.25	6.7
	HT/VHT20 STBC, M0 to M7	2	17	6	-56.9	-56.1			-47.4	-41.25	6.2

	HT/VHT20 STBC, M0 to M7	3	16	6	-57.3	-55.6	-54		-44.6	-41.25	3.3
	HT/VHT20 STBC, M0 to M7	4	14	6	-60.4	-60.4	-58.2	-61.3	-47.8	-41.25	6.6
5510	Non HT40, 6 to 54 Mbps	1	17	6	-48.3				-42.2	-41.25	0.9
	Non HT40, 6 to 54 Mbps	2	16	6	-49	-54.6			-41.8	-41.25	0.6
	Non HT40, 6 to 54 Mbps	3	14	6	-51.5	-55.4	-51.7		-41.6	-41.25	0.4
	Non HT40, 6 to 54 Mbps	4	12	6	-56.9	-60.5	-57.5	-58.6	-46.0	-41.25	4.8
	HT/VHT40, M0 to M7	1	15	6	-48.7				-42.6	-41.25	1.3
	HT/VHT40, M0 to M7	2	15	6	-48.7	-54.7			-41.6	-41.25	0.3
	HT/VHT40, M8 to M15	2	15	6	-48.7	-54.7			-41.6	-41.25	0.3
	HT/VHT40, M0 to M7	3	14	6	-51.5	-54.8	-52.6		-41.9	-41.25	0.6
	HT/VHT40, M8 to M15	3	14	6	-51.5	-54.8	-52.6		-41.9	-41.25	0.6
	HT/VHT40, M16 to M23	3	14	6	-51.5	-54.8	-52.6		-41.9	-41.25	0.6
	HT/VHT40, M0 to M7	4	13	6	-54.6	-58.3	-55.8	-57.8	-44.2	-41.25	3.0
	HT/VHT40, M8 to M15	4	13	6	-54.6	-58.3	-55.8	-57.8	-44.2	-41.25	3.0
	HT/VHT40, M16 to M23	4	13	6	-54.6	-58.3	-55.8	-57.8	-44.2	-41.25	3.0
	HT/VHT40, M24 to M31	4	13	6	-54.6	-58.3	-55.8	-57.8	-44.2	-41.25	3.0
	HT/VHT40 Beam Forming, M0 to M7	2	13	9	-54.6	-58.3			-43.9	-41.25	2.7
	HT/VHT40 Beam Forming, M8 to M15	2	15	6	-48.7	-54.7			-41.6	-41.25	0.3
	HT/VHT40 Beam Forming, M0 to M7	3	11	11	-58.9	-60.2	-58.3		-43.2	-41.25	1.9
	HT/VHT40 Beam Forming, M8 to M15	3	13	8	-54.6	-58.3	-55.8		-43.1	-41.25	1.8
	HT/VHT40 Beam Forming, M16 to M23	3	14	6	-51.5	-54.8	-52.6		-41.9	-41.25	0.6
	HT/VHT40 Beam Forming, M0 to M7	4	8	12	-62	-64.5	-61.6	-65.4	-44.9	-41.25	3.7
	HT/VHT40 Beam Forming, M8 to M15	4	11	9	-58.9	-60.2	-58.3	-60	-44.1	-41.25	2.9
	HT/VHT40 Beam Forming, M16 to M23	4	13	7	-54.6	-58.3	-55.8	-57.8	-43.2	-41.25	2.0
	HT/VHT40 Beam Forming, M24 to M31	4	13	6	-54.6	-58.3	-55.8	-57.8	-44.2	-41.25	3.0
	HT/VHT40 STBC, M0 to M7	2	15	6	-48.7	-54.7			-41.6	-41.25	0.3
	HT/VHT40 STBC, M0 to M7	3	14	6	-51.5	-54.8	-52.6		-41.9	-41.25	0.6
	HT/VHT40 STBC, M0 to M7	4	13	6	-54.6	-58.3	-55.8	-57.8	-44.2	-41.25	3.0
5530	Non HT80, 6 to 54 Mbps	1	14	6	-49.9				-43.8	-41.25	2.5
	Non HT80, 6 to 54 Mbps	2	14	6	-49.9	-54.1			-42.4	-41.25	1.1
	Non HT80, 6 to 54 Mbps	3	13	6	-52.6	-54.1	-52.5		-42.1	-41.25	0.8
	Non HT80, 6 to 54 Mbps	4	12	6	-55.5	-59.2	-55.1	-56.5	-44.1	-41.25	2.9
	VHT80, M0 to M9 1ss	1	14	6	-48.1				-41.4	-41.25	0.1
	VHT80, M0 to M9 1ss	2	13	6	-49.8	-54.6			-41.9	-41.25	0.6
	VHT80, M0 to M9 2ss	2	13	6	-49.8	-54.6			-41.9	-41.25	0.6
	VHT80, M0 to M9 1ss	3	12	6	-53.8	-54.9	-53.2		-42.4	-41.25	1.2
	VHT80, M0 to M9 2ss	3	12	6	-53.8	-54.9	-53.2		-42.4	-41.25	1.2
	VHT80, M0 to M9 3ss	3	12	6	-53.8	-54.9	-53.2		-42.4	-41.25	1.2
	VHT80, M0 to M9 1ss	4	11	6	-56.8	-58.1	-56.7	-58	-44.6	-41.25	3.4

VHT80, M0 to M9 2ss	4	11	6	-56.8	-58.1	-56.7	-58	-44.6	-41.25	3.4
VHT80, M0 to M9 3ss	4	11	6	-56.8	-58.1	-56.7	-58	-44.6	-41.25	3.4
VHT80, M0 to M9 4ss	4	11	6	-56.8	-58.1	-56.7	-58	-44.6	-41.25	3.4
VHT80 Beam Forming, M0 to M9 1ss	2	12	9	-53.8	-54.9			-41.6	-41.25	0.4
VHT80 Beam Forming, M0 to M9 2ss	2	13	6	-49.8	-54.6			-41.9	-41.25	0.6
VHT80 Beam Forming, M0 to M9 1ss	3	10	11	-58.6	-59.5	-57.5		-42.0	-41.25	0.7
VHT80 Beam Forming, M0 to M9 2ss	3	11	8	-56.8	-58.1	-56.7		-43.7	-41.25	2.4
VHT80 Beam Forming, M0 to M9 3ss	3	12	6	-53.8	-54.9	-53.2		-42.4	-41.25	1.2
VHT80 Beam Forming, M0 to M9 1ss	4	7	12	-62.9	-63.6	-61	-63.4	-43.9	-41.25	2.6
VHT80 Beam Forming, M0 to M9 2ss	4	11	9	-56.8	-58.1	-56.7	-58	-41.6	-41.25	0.4
VHT80 Beam Forming, M0 to M9 3ss	4	11	7	-56.8	-58.1	-56.7	-58	-43.6	-41.25	2.4
VHT80 Beam Forming, M0 to M9 4ss	4	11	6	-56.8	-58.1	-56.7	-58	-44.6	-41.25	3.4
VHT80 STBC, M0 to M9 1ss	2	13	6	-49.8	-54.6			-41.9	-41.25	0.6
VHT80 STBC, M0 to M9 1ss	3	12	6	-53.8	-54.9	-53.2		-42.4	-41.25	1.2
VHT80 STBC, M0 to M9 1ss	4	11	6	-56.8	-58.1	-56.7	-58	-44.6	-41.25	3.4

5.6.7 Conducted Band Edge Plots – Average



Section 6: Emission Test Results

6.1 Transmitter Radiated Spurious Emissions

Note: Results for Transmitter Radiated Spurious Emissions are in EDCS# 17643833.

6.2 AC Conducted Emissions

Note: Only DC power is supplied to the unit.

Appendix A: List of Test Equipment Used to perform the test

Equip#	Manufacturer/ Model	Description	Last Cal	Next Due
RF Conducted test equipment 3/12/2019 – 4/29/2019				

53614	Keysight (Agilent/HP) / N9030A-550	PXA Signal Analyzer, 3Hz to 50GHz	17 Jul. 2018	17 Jul. 2019
57475	Cisco	Automated Radio Testing Station	Verify Before Use	Verify Before Use
54237	Keysight (Agilent/HP) / 8710-1765	Preset Torque Wrench, 8in/lbs	14 Feb. 2019	14 Feb. 2020
06325	Lufft / 5063-33W	Dial Hygrometer	27 Aug. 2018	27 Aug. 2019
49516	Keysight (Agilent/HP)	PXA Signal Analyzer, 3Hz to 50GHz	29 Nov. 2018	29 Nov. 2019
57238	NATIONAL INSTRUMENTS / PXI-8115	Embedded Controller	Cal. not required	Cal. not required
57247	NATIONAL INSTRUMENTS / PXI-2796	40 GHz Dual 6x1 Multiplexer (SP6T)	Verify Before Use	Verify Before Use
57248	NATIONAL INSTRUMENTS / PXI-2799	Switch 1x1	Verify Before Use	Verify Before Use
56092	NATIONAL INSTRUMENTS / PXI-2796	40 GHz Dual 6x1 Multiplexer (SP6T)	Verify Before Use	Verify Before Use
57479	Cisco	Automated Radio Testing Station	Verify Before Use	Verify Before Use
57233	NATIONAL INSTRUMENTS / PXI-8115	Embedded Controller	Cal. not required	Cal. not required
57253	NATIONAL INSTRUMENTS / PXI-2796	40 GHz Dual 6x1 Multiplexer (SP6T)	Verify Before Use	Verify Before Use
57254	NATIONAL INSTRUMENTS / PXI-2799	Switch 1x1	Verify Before Use	Verify Before Use
56089	NATIONAL INSTRUMENTS / PXI-2796	40 GHz Dual 6x1 Multiplexer (SP6T)	Verify Before Use	Verify Before Use

Appendix B: Abbreviation Key and Definitions

The following table defines abbreviations used within this test report.

Abbreviation	Description	Abbreviation	Description
EMC	Electro Magnetic Compatibility	°F	Degrees Fahrenheit
EMI	Electro Magnetic Interference	°C	Degrees Celsius
EUT	Equipment Under Test	Temp	Temperature
ITE	Information Technology Equipment	S/N	Serial Number
TAP	Test Assessment Schedule	Qty	Quantity
ESD	Electro Static Discharge	emf	Electromotive force
EFT	Electric Fast Transient	RMS	Root mean square
EDCS	Engineering Document Control System	Qp	Quasi Peak
Config	Configuration	Av	Average
CIS#	Cisco Number (unique identification number for Cisco test equipment)	Pk	Peak
Cal	Calibration	kHz	Kilohertz (1×10^3)
EN	European Norm	MHz	MegaHertz (1×10^6)
IEC	International Electro technical Commission	GHz	Gigahertz (1×10^9)
CISPR	International Special Committee on Radio Interference	H	Horizontal
CDN	Coupling/Decoupling Network	V	Vertical
LISN	Line Impedance Stabilization Network	dB	decibel
PE	Protective Earth	V	Volt
GND	Ground	kV	Kilovolt (1×10^3)
L1	Line 1	μV	Microvolt (1×10^{-6})
L2	Line2	A	Amp
L3	Line 3	μA	Micro Amp (1×10^{-6})
DC	Direct Current	mS	Milli Second (1×10^{-3})
RAW	Uncorrected measurement value, as indicated by the measuring device	μS	Micro Second (1×10^{-6})
RF	Radio Frequency	μS	Micro Second (1×10^{-6})
SLCE	Signal Line Conducted Emissions	m	Meter
Meas dist	Measurement distance	Spec dist	Specification distance
N/A or NA	Not Applicable	SL	Signal Line (or Telecom Line)
P	Power Line	L	Live Line
N	Neutral Line	R	Return
S	Supply	AC	Alternating Current

Appendix C: Software Used to Perform Testing

Automated Testing Software: RF_Automation.vi version 46

Automated Testing Software: RF_Automation.vi version 49

Automated Testing Software: RF_Automation.vi version 51

Appendix D: Test Procedures

Measurements were made in accordance with

- KDB 789033 - D02 General UNII Test Procedures New Rules v01r02
- KDB 662911 - MIMO
- ANSI C63.4 2014 Unintentional Radiators
- ANSI C63.10 2013 Intentional Radiators

Test procedures are summarized below:

FCC 5GHz Test Procedures	EDCS # 1445048
FCC 5GHz RSE Test Procedures	EDCS # 1511600

Appendix E: Scope of Accreditation (A2LA certificate number 1178-01)

The scope of accreditation of Cisco Systems, Inc. can be found on the A2LA web page at:

<http://www.a2la.org/scopepdf/1178-01.pdf>

Appendix F: Test Assessment Plan

Test Plan EDCS# 13513665
Power Tables EDCS# 15952129