

Test Report

Model: C9120AXI-(X)

Cisco Catalyst C9120AX Series 802.11ax Access Point

(x=A, B, K, S)

FCC ID: LDKVCVER1937

IC: 2461N-VCVER1937

5725-5850 MHz

Against the following Specifications:

CFR47 Part 15.407

RSS-247



Cisco Systems

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San Jose, CA 95134

	
<p>Author: Chris Blair, Julian Land Tested By: Chris Blair</p>	<p>Approved By: Gerard Thorpe Title: Manager Revision: See EDCS</p>

This report replaces any previously entered test report under EDCS – 17656961. This test report has been electronically authorized and archived using the CISCO Engineering Document Control system.

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Section 1: Overview

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

Specifications:
CFR47 Part 15.407 RSS-247 Issue 2: Feb 2017

Measurements were made in accordance with

- ANSI C63.10:2013
- KDB 789033 D02 General UNII Test Procedures New Rules v02r01
- KDB 662911 D01 Multiple Transmitter Output v02r01

Section 2: Assessment Information

2.1 General

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

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

- a) The results contained in this report relate only to the items tested and were obtained in the period between the date of the initial assessment and the date of issue of the report. Manufactured products will not necessarily give identical results due to production and measurement tolerances.
- b) The apparatus was set up and exercised using the configuration and modes of operation defined in this report only.
- c) Where relevant, the apparatus was only assessed using the susceptibility criteria defined in this report and the Test Assessment Plan (TAP).
- d) All testing was performed under the following environmental conditions:
 - Temperature 15°C to 35°C (54°F to 95°F)
 - Atmospheric Pressure 860mbar to 1060mbar (25.4" to 31.3")
 - Humidity 10% to 75*%
- e) All AC testing was performed at one or more of the following supply voltages:
 - 110V 60 Hz (+/-20%)

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:

$$\text{Emission level [dBuV]} = \text{Indicated voltage level [dBuV]} + \text{Cable Loss [dB]} + \text{Other correction factors [dB]}$$

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:-

$$\text{Level in uV/m} = \text{Common Antilogarithm} [(X \text{ dBuV/m})/20] = Y \text{ uV/m}$$

Measurement Uncertainty Values

voltage and power measurements	± 2 dB
conducted EIRP measurements	± 1.4 dB
radiated measurements	± 3.2 dB
frequency measurements	± 2.4 10 ⁻⁷
temperature measurements	± 0.54°
humidity measurements	± 2.3%
DC and low frequency measurements	± 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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2.2 Date of testing

25-Mar-19 - 29-Mar-19

14-Mar-19 to 29-Mar-19 (duty cycle)

03-May-19 (upper CSE)

2.3 Report Issue Date

29-May-19

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.

2.4 Testing facilities

This assessment was performed by: Chris Blair

Testing Laboratory

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

Registration Numbers for Industry Canada

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

Test Engineers

Chris Blair

2.5 Equipment Assessed (EUT)

Catalyst C9120AXI-B

2.6 EUT Description

Mid-tier 8x8 802.11ax Access Point with Dual 4x4 MIMO with 4 Spatial Streams

The radio supports the following modes of operation. The modes are further defined in the radio Theory of Operation. The modes included in this report represent the worst-case data for all modes.

802.11a - Non HT20, Two Antennas, 6 to 54 Mbps, 1ss

802.11a - Non HT20, Three Antennas, 6 to 54 Mbps, 1ss

802.11a - Non HT20, Four Antennas, 6 to 54 Mbps, 1ss

802.11a - Non HT20 Beam Forming, Two Antennas, 6 to 54 Mbps, 1ss

802.11a - Non HT20 Beam Forming, Three Antennas, 6 to 54 Mbps, 1ss

802.11a - Non HT20 Beam Forming, Four Antennas, 6 to 54 Mbps, 1ss

802.11n/ac - HT/VHT20, One Antenna, M0 to M7, 1ss

802.11n/ac - HT/VHT20, Two Antennas, M0 to M7, 1ss

802.11n/ac - HT/VHT20, Two Antennas, M8 to M15, 2ss

802.11n/ac - HT/VHT20, Three Antennas, M0 to M7, 1ss

802.11n/ac - HT/VHT20, Three Antennas, M8 to M15, 2ss

802.11n/ac - HT/VHT20, Three Antennas, M16 to M23, 3ss

802.11n/ac - HT/VHT20, Four Antennas, M0 to M7, 1ss

802.11n/ac - HT/VHT20, Four Antennas, M8 to M15, 2ss

802.11n/ac - HT/VHT20, Four Antennas, M16 to M23, 3ss

802.11n/ac - HT/VHT20, Four Antennas, M24 to M31, 4ss

802.11n/ac - HT/VHT20 Beam Forming, Two Antennas, M0 to M7, 1ss

802.11n/ac - HT/VHT20 Beam Forming, Two Antennas, M8 to M15, 2ss

802.11n/ac - HT/VHT20 Beam Forming, Three Antennas, M0 to M7, 1ss

802.11n/ac - HT/VHT20 Beam Forming, Three Antennas, M8 to M15, 2ss

802.11n/ac - HT/VHT20 Beam Forming, Three Antennas, M16 to M23, 3ss

802.11n/ac - HT/VHT20 Beam Forming, Four Antennas, M0 to M7, 1ss

802.11n/ac - HT/VHT20 Beam Forming, Four Antennas, M8 to M15, 2ss

802.11n/ac - HT/VHT20 Beam Forming, Four Antennas, M16 to M23, 3ss

802.11n/ac - HT/VHT20 Beam Forming, Four Antennas, M24 to M31, 4ss

802.11n/ac - HT/VHT20 STBC, Two Antennas, M0 to M7, 2ss

802.11n/ac - HT/VHT20 STBC, Three Antennas, M0 to M7, 2ss

802.11n/ac - HT/VHT20 STBC, Four Antennas, M0 to M7, 2ss

802.11ax - HE20, One Antenna, M0 to M7, 1ss

802.11ax - HE20, Two Antennas, M0 to M7, 1ss

802.11ax - HE20, Two Antennas, M8 to M15, 2ss

802.11ax - HE20, Three Antennas, M0 to M7, 1ss

802.11ax - HE20, Three Antennas, M8 to M15, 2ss

802.11ax - HE20, Three Antennas, M16 to M23, 3ss

802.11ax - HE20, Four Antennas, M0 to M7, 1ss

802.11ax - HE20, Four Antennas, M8 to M15, 2ss

802.11ax - HE20, Four Antennas, M16 to M23, 3ss

802.11ax - HE20, Four Antennas, M24 to M31, 4ss

802.11ax - HE20 Beam Forming, Two Antennas, M0 to M7, 1ss
802.11ax - HE20 Beam Forming, Two Antennas, M8 to M15, 2ss
802.11ax - HE20 Beam Forming, Three Antennas, M0 to M7, 1ss
802.11ax - HE20 Beam Forming, Three Antennas, M8 to M15, 2ss
802.11ax - HE20 Beam Forming, Three Antennas, M16 to M23, 3ss
802.11ax - HE20 Beam Forming, Four Antennas, M0 to M7, 1ss
802.11ax - HE20 Beam Forming, Four Antennas, M8 to M15, 2ss
802.11ax - HE20 Beam Forming, Four Antennas, M16 to M23, 3ss
802.11ax - HE20 Beam Forming, Four Antennas, M24 to M31, 4ss

802.11ax - HE20 STBC, Two Antennas, M0 to M7, 2ss
802.11ax - HE20 STBC, Three Antennas, M0 to M7, 2ss
802.11ax - HE20 STBC, Four Antennas, M0 to M7, 2ss

802.11a - Non HT40, One Antenna, 6 to 54 Mbps, 1ss
802.11a - Non HT40, Two Antennas, 6 to 54 Mbps, 1ss
802.11a - Non HT40, Three Antennas, 6 to 54 Mbps, 1ss
802.11a - Non HT40, Four Antennas, 6 to 54 Mbps, 1ss

802.11n/ac - HT/VHT40, One Antenna, M0 to M7, 1ss
802.11n/ac - HT/VHT40, Two Antennas, M0 to M7, 1ss
802.11n/ac - HT/VHT40, Two Antennas, M8 to M15, 2ss
802.11n/ac - HT/VHT40, Three Antennas, M0 to M7, 1ss
802.11n/ac - HT/VHT40, Three Antennas, M8 to M15, 2ss
802.11n/ac - HT/VHT40, Three Antennas, M16 to M23, 3ss
802.11n/ac - HT/VHT40, Four Antennas, M0 to M7, 1ss
802.11n/ac - HT/VHT40, Four Antennas, M8 to M15, 2ss
802.11n/ac - HT/VHT40, Four Antennas, M16 to M23, 3ss
802.11n/ac - HT/VHT40, Four Antennas, M24 to M31, 4ss

802.11n/ac - HT/VHT40 Beam Forming, Two Antennas, M0 to M7, 1ss
802.11n/ac - HT/VHT40 Beam Forming, Two Antennas, M8 to M15, 2ss
802.11n/ac - HT/VHT40 Beam Forming, Three Antennas, M0 to M7, 1ss
802.11n/ac - HT/VHT40 Beam Forming, Three Antennas, M8 to M15, 2ss
802.11n/ac - HT/VHT40 Beam Forming, Three Antennas, M16 to M23, 3ss
802.11n/ac - HT/VHT40 Beam Forming, Four Antennas, M0 to M7, 1ss
802.11n/ac - HT/VHT40 Beam Forming, Four Antennas, M8 to M15, 2ss
802.11n/ac - HT/VHT40 Beam Forming, Four Antennas, M16 to M23, 3ss
802.11n/ac - HT/VHT40 Beam Forming, Four Antennas, M24 to M31, 4ss

802.11n/ac - HT/VHT40 STBC, Two Antennas, M0 to M7, 2ss
802.11n/ac - HT/VHT40 STBC, Three Antennas, M0 to M7, 2ss
802.11n/ac - HT/VHT40 STBC, Four Antennas, M0 to M7, 2ss

802.11ax - HE40, One Antenna, M0 to M7, 1ss
802.11ax - HE40, Two Antennas, M0 to M7, 1ss

802.11ax - HE40, Two Antennas, M8 to M15, 2ss
802.11ax - HE40, Three Antennas, M0 to M7, 1ss
802.11ax - HE40, Three Antennas, M8 to M15, 2ss
802.11ax - HE40, Three Antennas, M16 to M23, 3ss
802.11ax - HE40, Four Antennas, M0 to M7, 1ss
802.11ax - HE40, Four Antennas, M8 to M15, 2ss
802.11ax - HE40, Four Antennas, M16 to M23, 3ss
802.11ax - HE40, Four Antennas, M24 to M31, 4ss

802.11ax - HE40 Beam Forming, Two Antennas, M0 to M7, 1ss
802.11ax - HE40 Beam Forming, Two Antennas, M8 to M15, 2ss
802.11ax - HE40 Beam Forming, Three Antennas, M0 to M7, 1ss
802.11ax - HE40 Beam Forming, Three Antennas, M8 to M15, 2ss
802.11ax - HE40 Beam Forming, Three Antennas, M16 to M23, 3ss
802.11ax - HE40 Beam Forming, Four Antennas, M0 to M7, 1ss
802.11ax - HE40 Beam Forming, Four Antennas, M8 to M15, 2ss
802.11ax - HE40 Beam Forming, Four Antennas, M16 to M23, 3ss
802.11ax - HE40 Beam Forming, Four Antennas, M24 to M31, 4ss

802.11ax - HE40 STBC, Two Antennas, M0 to M7, 2ss
802.11ax - HE40 STBC, Three Antennas, M0 to M7, 2ss
802.11ax - HE40 STBC, Four Antennas, M0 to M7, 2ss

802.11a - Non HT80, One Antenna, 6 to 54 Mbps, 1ss
802.11a - Non HT80, Two Antennas, 6 to 54 Mbps, 1ss
802.11a - Non HT80, Three Antennas, 6 to 54 Mbps, 1ss
802.11a - Non HT80, Four Antennas, 6 to 54 Mbps, 1ss

802.11ac - VHT80, One Antenna, M0 to M9 1ss
802.11ac - VHT80, Two Antennas, M0 to M9 1ss
802.11ac - VHT80, Two Antennas, M0 to M9 2ss
802.11ac - VHT80, Three Antennas, M0 to M9 1ss
802.11ac - VHT80, Three Antennas, M0 to M9 2ss
802.11ac - VHT80, Three Antennas, M0 to M9 3ss
802.11ac - VHT80, Four Antennas, M0 to M9 1ss
802.11ac - VHT80, Four Antennas, M0 to M9 2ss
802.11ac - VHT80, Four Antennas, M0 to M9 3ss
802.11ac - VHT80, Four Antennas, M0 to M9 4ss

802.11ac - VHT80 Beam Forming, Two Antennas, M0 to M9 1ss
802.11ac - VHT80 Beam Forming, Two Antennas, M0 to M9 2ss
802.11ac - VHT80 Beam Forming, Three Antennas, M0 to M9 1ss
802.11ac - VHT80 Beam Forming, Three Antennas, M0 to M9 2ss
802.11ac - VHT80 Beam Forming, Three Antennas, M0 to M9 3ss
802.11ac - VHT80 Beam Forming, Four Antennas, M0 to M9 1ss
802.11ac - VHT80 Beam Forming, Four Antennas, M0 to M9 2ss
802.11ac - VHT80 Beam Forming, Four Antennas, M0 to M9 3ss
802.11ac - VHT80 Beam Forming, Four Antennas, M0 to M9 4ss



802.11ac - VHT80 STBC, Two Antennas, M0 to M9 2ss
802.11ac - VHT80 STBC, Three Antennas, M0 to M9 2ss
802.11ac - VHT80 STBC, Four Antennas, M0 to M9 2ss

802.11ax - HE80, One Antenna, M0 to M9 1ss
802.11ax - HE80, Two Antennas, M0 to M9 1ss
802.11ax - HE80, Two Antennas, M0 to M9 2ss
802.11ax - HE80, Three Antennas, M0 to M9 1ss
802.11ax - HE80, Three Antennas, M0 to M9 2ss
802.11ax - HE80, Three Antennas, M0 to M9 3ss
802.11ax - HE80, Four Antennas, M0 to M9 1ss
802.11ax - HE80, Four Antennas, M0 to M9 2ss
802.11ax - HE80, Four Antennas, M0 to M9 3ss
802.11ax - HE80, Four Antennas, M0 to M9 4ss

802.11ax - HE80 Beam Forming, Two Antennas, M0 to M9 1ss
802.11ax - HE80 Beam Forming, Two Antennas, M0 to M9 2ss
802.11ax - HE80 Beam Forming, Three Antennas, M0 to M9 1ss
802.11ax - HE80 Beam Forming, Three Antennas, M0 to M9 2ss
802.11ax - HE80 Beam Forming, Three Antennas, M0 to M9 3ss
802.11ax - HE80 Beam Forming, Four Antennas, M0 to M9 1ss
802.11ax - HE80 Beam Forming, Four Antennas, M0 to M9 2ss
802.11ax - HE80 Beam Forming, Four Antennas, M0 to M9 3ss
802.11ax - HE80 Beam Forming, Four Antennas, M0 to M9 4ss

802.11ax - HE80 STBC, Two Antennas, M0 to M9 2ss
802.11ax - HE80 STBC, Three Antennas, M0 to M9 2ss
802.11ax - HE80 STBC, Four Antennas, M0 to M9 2ss

802.11a - Non HT20, One Antenna, 6 to 54 Mbps, 1ss

802.11a - Non HT160, One Antenna, 6 to 54 Mbps, 1ss
802.11a - Non HT160, Two Antennas, 6 to 54 Mbps, 1ss
802.11a - Non HT160, Three Antennas, 6 to 54 Mbps, 1ss
802.11a - Non HT160, Four Antennas, 6 to 54 Mbps, 1ss

802.11ac - VHT160, One Antenna, M0 to M9 1ss
802.11ac - VHT160, Two Antennas, M0 to M9 1ss
802.11ac - VHT160, Two Antennas, M0 to M9 2ss
802.11ac - VHT160, Three Antennas, M0 to M9 1ss
802.11ac - VHT160, Three Antennas, M0 to M9 2ss
802.11ac - VHT160, Three Antennas, M0 to M9 3ss
802.11ac - VHT160, Four Antennas, M0 to M9 1ss
802.11ac - VHT160, Four Antennas, M0 to M9 2ss
802.11ac - VHT160, Four Antennas, M0 to M9 3ss
802.11ac - VHT160, Four Antennas, M0 to M9 4ss

802.11ac - VHT160 Beam Forming, Two Antennas, M0 to M9 1ss
 802.11ac - VHT160 Beam Forming, Two Antennas, M0 to M9 2ss
 802.11ac - VHT160 Beam Forming, Three Antennas, M0 to M9 1ss
 802.11ac - VHT160 Beam Forming, Three Antennas, M0 to M9 2ss
 802.11ac - VHT160 Beam Forming, Three Antennas, M0 to M9 3ss
 802.11ac - VHT160 Beam Forming, Four Antennas, M0 to M9 1ss
 802.11ac - VHT160 Beam Forming, Four Antennas, M0 to M9 2ss
 802.11ac - VHT160 Beam Forming, Four Antennas, M0 to M9 3ss
 802.11ac - VHT160 Beam Forming, Four Antennas, M0 to M9 4ss

802.11ac - VHT160 STBC, Two Antennas, M0 to M9 2ss
 802.11ac - VHT160 STBC, Three Antennas, M0 to M9 2ss
 802.11ac - VHT160 STBC, Four Antennas, M0 to M9 2ss

802.11ax - HE160, One Antenna, M0 to M9 1ss
 802.11ax - HE160, Two Antennas, M0 to M9 1ss
 802.11ax - HE160, Two Antennas, M0 to M9 2ss
 802.11ax - HE160, Three Antennas, M0 to M9 1ss
 802.11ax - HE160, Three Antennas, M0 to M9 2ss
 802.11ax - HE160, Three Antennas, M0 to M9 3ss
 802.11ax - HE160, Four Antennas, M0 to M9 1ss
 802.11ax - HE160, Four Antennas, M0 to M9 2ss
 802.11ax - HE160, Four Antennas, M0 to M9 3ss
 802.11ax - HE160, Four Antennas, M0 to M9 4ss

802.11ax - HE160 Beam Forming, Two Antennas, M0 to M9 1ss
 802.11ax - HE160 Beam Forming, Two Antennas, M0 to M9 2ss
 802.11ax - HE160 Beam Forming, Three Antennas, M0 to M9 1ss
 802.11ax - HE160 Beam Forming, Three Antennas, M0 to M9 2ss
 802.11ax - HE160 Beam Forming, Three Antennas, M0 to M9 3ss
 802.11ax - HE160 Beam Forming, Four Antennas, M0 to M9 1ss
 802.11ax - HE160 Beam Forming, Four Antennas, M0 to M9 2ss
 802.11ax - HE160 Beam Forming, Four Antennas, M0 to M9 3ss
 802.11ax - HE160 Beam Forming, Four Antennas, M0 to M9 4ss

802.11ax - HE160 STBC, Two Antennas, M0 to M9 2ss
 802.11ax - HE160 STBC, Three Antennas, M0 to M9 2ss
 802.11ax - HE160 STBC, Four Antennas, M0 to M9 2ss

The following antennas are supported by this product series.
 The data included in this report represent the worst-case data for all antennas.

Frequency	Part Number	Antenna Type	Antenna Gain (dBi)
5725-5850	-	Internal, Dual-band VPOL	5

Section 3: Result Summary

3.1 Results Summary Table

Conducted emissions

Basic Standard	Technical Requirements / Details	Result
FCC 15.407 RSS-247	6dB Bandwidth: Systems using digital modulation techniques may operate in the 2400-2483.5MHz band. The minimum 6dB bandwidth shall be at least 500 kHz.	Pass
FCC 15.407 RSS-GEN	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 26-dB 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 RSS-247	Output Power: For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.	Pass

FCC 15.407 RSS-247	Power Spectral Density: 15.407 The maximum power spectral density shall not exceed 30 dBm in any 500-kHz band.	Pass
FCC 15.407 RSS-247	Conducted Spurious Emissions / Band-Edge: For transmitters operating in the 5.725-5.85 GHz band: All emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of -17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of -27 dBm/MHz.	Pass
FCC 15.209 FCC 152.05 RSS-GEN	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

Radiated Emissions (General requirements)

Basic Standard	Technical Requirements / Details	Result
FCC 15.209 FCC 15.205 RSS-GEN	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 filed strength limits table in this section.	Not Tested
FCC 15.207 RSS-GEN	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.	Not Tested

* MPE calculation is recorded in a separate report

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	C9120AXI-B	Cisco Systems	P3C	svn base: 161d279e12e6ede43e1005ea511bed938de6923e commit: 161d279e12e6ede43e1005ea511bed938de6923e tree c433767fb7ea6e49ba91057416fbff23bdd54695	Fri Mar 1 03:06:48 PST 2019 cheetah-build6 /san2/BUILD/workspace/Nightly-Cheetah-axel-bcm-mfg-c8_9_throttle * (HEAD detached at 161d279e12)	FOC23070L5A
S02	AIR-PWRINJ6	Cisco	-	N/A	N/A	C18426663000003153
S03	C9120AXI-B	Cisco Systems	P3C	svn base: 161d279e12e6ede43e1005ea511bed938de6923e commit: 161d279e12e6ede43e1005ea511bed938de6923e tree c433767fb7ea6e49ba91057416fbff23bdd54695	Fri Mar 1 03:06:48 PST 2019 cheetah-build6 /san2/BUILD/workspace/Nightly-Cheetah-axel-bcm-mfg-c8_9_throttle * (HEAD detached at 161d279e12)	FOC23070L3Q
S04	AIR-PWRINJ6	Cisco	V01	N/A	N/A	C16036663000000272
S05	C9120AXI-B	Cisco Systems	P3C	svn base: 1f6f4048ecbb66599142da892931a7ad499a2ba2 commit: 1f6f4048ecbb66599142da892931a7ad499a2ba2 tree 1a99c087d0e4d3b13a635301797e24d54316c31d	Mon Apr 22 03:10:10 PDT 2019 cheetah-build6 /san2/BUILD/workspace/Nightly-Cheetah-axel-bcm-mfg-c8_9_throttle * (HEAD detached at 1f6f4048ec)	FOC23070L3Q

4.2 System Details

System #	Description	Samples
1	AP and PSU	S01+S02
2	AP and PSU – duty cycle	S03+S04
3	AP and PSU –upper band CSE	S05+S04

4.3 Mode of Operation Details

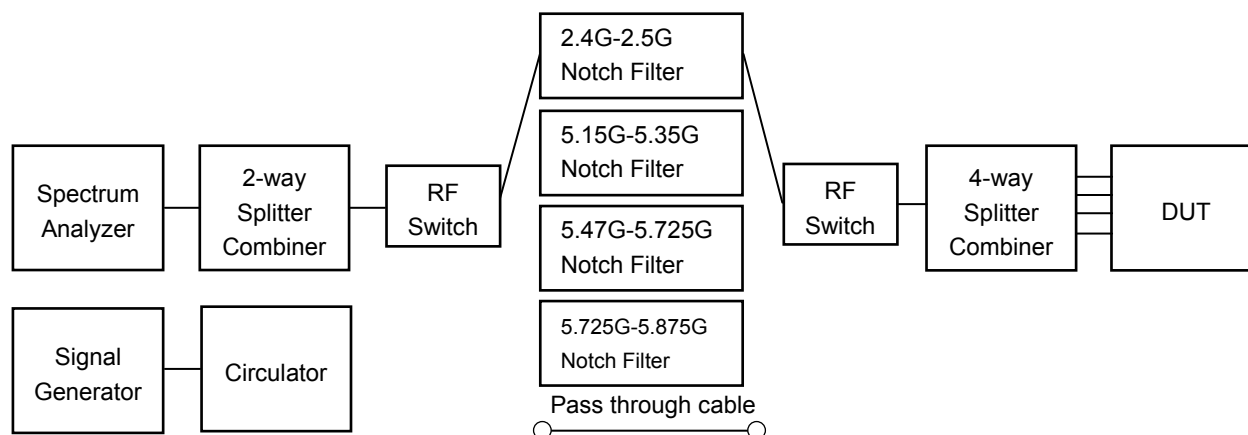
Mode#	Description	Comments
1	Continuous Transmitting	Continuous Transmitting

All measurements were made in accordance with

- ANSI C63.10:2013
- KDB 789033 D02 General UNII Test Procedures New Rules v02r01
- KDB 662911 D01 Multiple Transmitter Output v02r01

Appendix A: Emission Test Results

Conducted Test Setup Diagram



Target Maximum Channel Power

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

Operating Mode	Maximum Channel Power (dBm)		
	Frequency (MHz)		
	5720	5745	5785
Non HT20, 6 to 54 Mbps	10	21	23
Non HT20 Beam Forming, 6 to 54 Mbps	8	21	23
HT/VHT20, M0 to M31	14	23	23
HT/VHT20 Beam Forming, M0 to M31	14	23	23
HT/VHT20 STBC, M0 to M7	14	23	23
HE20, M0 to M9, M0 to M9 1-2ss	15	23	23
HE20 Beam Forming, M0 to M9, M0 to M9 1-2ss	15	23	23
HE20 STBC, M0 to M9 2ss	15	23	23
	5755	5795	
Non HT40, 6 to 54 Mbps	22	23	
HT/VHT40, M0 to M31	23	23	
HT/VHT40 Beam Forming, M0 to M31	23	23	
HT/VHT40 STBC, M0 to M7	23	23	
HE40, M0 to M9, M0 to M9 1-2ss	23	23	
HE40 Beam Forming, M0 to M9, M0 to M9 1-2ss	23	23	
HE40 STBC, M0 to M9 2ss	23	23	
	5775		
Non HT80, 6 to 54 Mbps	22		
VHT80, M0 to M9, M0 to M9 1-2ss	22		



VHT80 Beam Forming, M0 to M9, M0 to M9 1-2ss	22		
VHT80 STBC, M0 to M9 1ss	22		
HE80, M0 to M9, M0 to M9 1-2ss	22		
HE80 Beam Forming, M0 to M9, M0 to M9 1-2ss	22		
HE80 STBC, M0 to M9 1ss	22		

A.1 6dB Bandwidth

15.407 / RSS-247 Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

Test Procedure

Ref. KDB 789033 D02 General UNII Test Procedures New Rules v02r01
ANSI C63.10: 2013

6 BW
Test Procedure
<ol style="list-style-type: none"> 1. Set the radio in the continuous transmitting mode. 2. Allow the trace to stabilize. 3. Setting the x-dB bandwidth mode to -6dB within the measurement set up function. 4. Select the automatic OBW measurement function of an instrument to perform bandwidth measurement. 5. Capture graphs and record pertinent measurement data.

Ref. KDB 789033 D02 General UNII Test Procedures New Rules v02r01
ANSI C63.10: 2013 section 11.8.2 Option 2

6 BW
Test parameters
X dB BW = 6dB (using the OBW function of the spectrum analyzer) Span = Large enough to capture the entire EBW RBW = 100 KHz VBW ≥ 3 x RBW Sweep = Auto couple Detector = Peak or where practical sample shall be used Trace = Max. Hold

System Number	Description	Samples	System under test	Support equipment
1	EUT	S01	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Support	S02	<input type="checkbox"/>	<input checked="" type="checkbox"/>

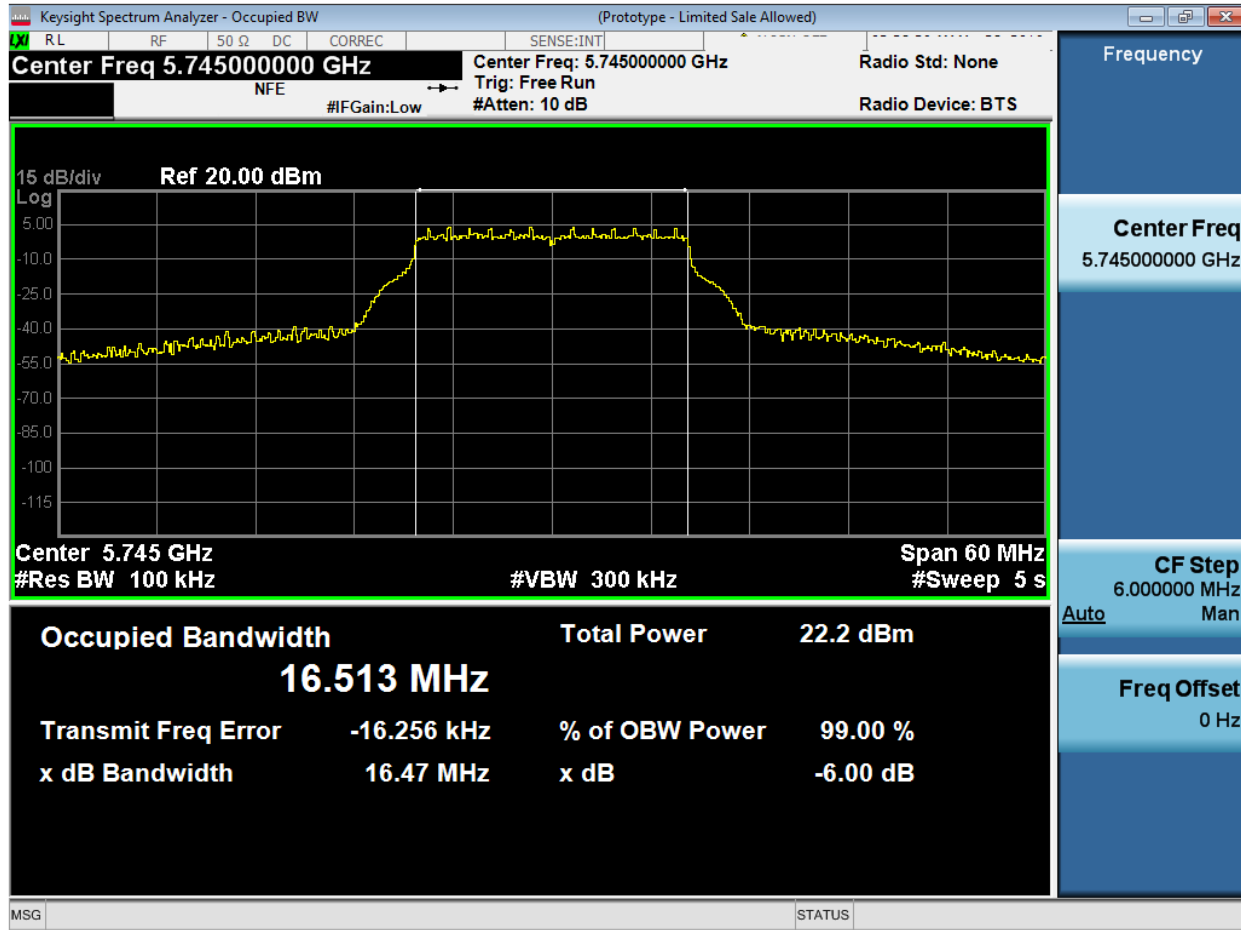
Tested By: Chris Blair	Date of testing: 25-Mar-19 - 29-Mar-19
Test Result: PASS	

See Appendix C for list of test equipment

Frequency (MHz)	Mode	Data Rate (Mbps)	6dB BW (MHz)	Limit (kHz)	Margin (MHz)
5745	Non HT20, 6 to 54 Mbps	6	16.5	>500	16.0
	HT/VHT20, M0 to M31	m0	17.7	>500	17.2
	HE20, M0 to M9, M0 to M9 1-2ss	m0h1	19.1	>500	18.6
5755	Non HT40, 6 to 54 Mbps	6	36.5	>500	36.0
	HT/VHT40, M0 to M31	m0	36.4	>500	35.9
	HE40, M0 to M9, M0 to M9 1-2ss	m0h1	37.4	>500	36.9
5775	Non HT80, 6 to 54 Mbps	6	75.9	>500	75.4
	VHT80, M0 to M9, M0 to M9 1-2ss	m0x1	75.8	>500	75.3
	HE80, M0 to M9, M0 to M9 1-2ss	m0h1	75.8	>500	75.3
5785	Non HT20, 6 to 54 Mbps	6	16.5	>500	16.0
	HT/VHT20, M0 to M31	m0	17.7	>500	17.2
	HE20, M0 to M9, M0 to M9 1-2ss	m0h1	19.1	>500	18.6
5795	Non HT40, 6 to 54 Mbps	6	36.5	>500	36.0
	HT/VHT40, M0 to M31	m0	36.0	>500	35.5
	HE40, M0 to M9, M0 to M9 1-2ss	m0h1	37.4	>500	36.9
5825	Non HT20, 6 to 54 Mbps	6	16.5	>500	16.0
	HT/VHT20, M0 to M31	m0	17.7	>500	17.2
	HE20, M0 to M9, M0 to M9 1-2ss	m0h1	19.1	>500	18.6



6dB Bandwidth, 5745 MHz, Non HT20, 6 to 54 Mbps



A.2 99% and 26dB Bandwidth

FCC 15.407 / RSS-GEN 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 26 dB 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.

Test Procedure

Ref. ANSI C63.10: 2013 Section 6.9.3

99% BW and EBW (-26dB)

Test Procedure

1. Set the radio in the continuous transmitting mode.
2. Allow the trace to stabilize.
3. Setting the x-dB bandwidth mode to -26dB and OBW power function to 99% within the measurement set up function.
4. Select the automatic OBW measurement function of an instrument to perform bandwidth measurement.
5. Capture graphs and record pertinent measurement data.

Ref. ANSI C63.10: 2013 Section 6.9.3

99% BW and EBW (-26dB)

Test parameters

Span = 1.5 x to 5.0 times OBW
 RBW = approx. 1% to 5% of the OBW
 VBW ≥ 3 x RBW
 Detector = Peak or where practical sample shall be used
 Trace = Max. Hold

System Number	Description	Samples	System under test	Support equipment
1	EUT	S01	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Support	S02	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Tested By:

Chris Blair

Date of testing:

25-Mar-19 - 29-Mar-19

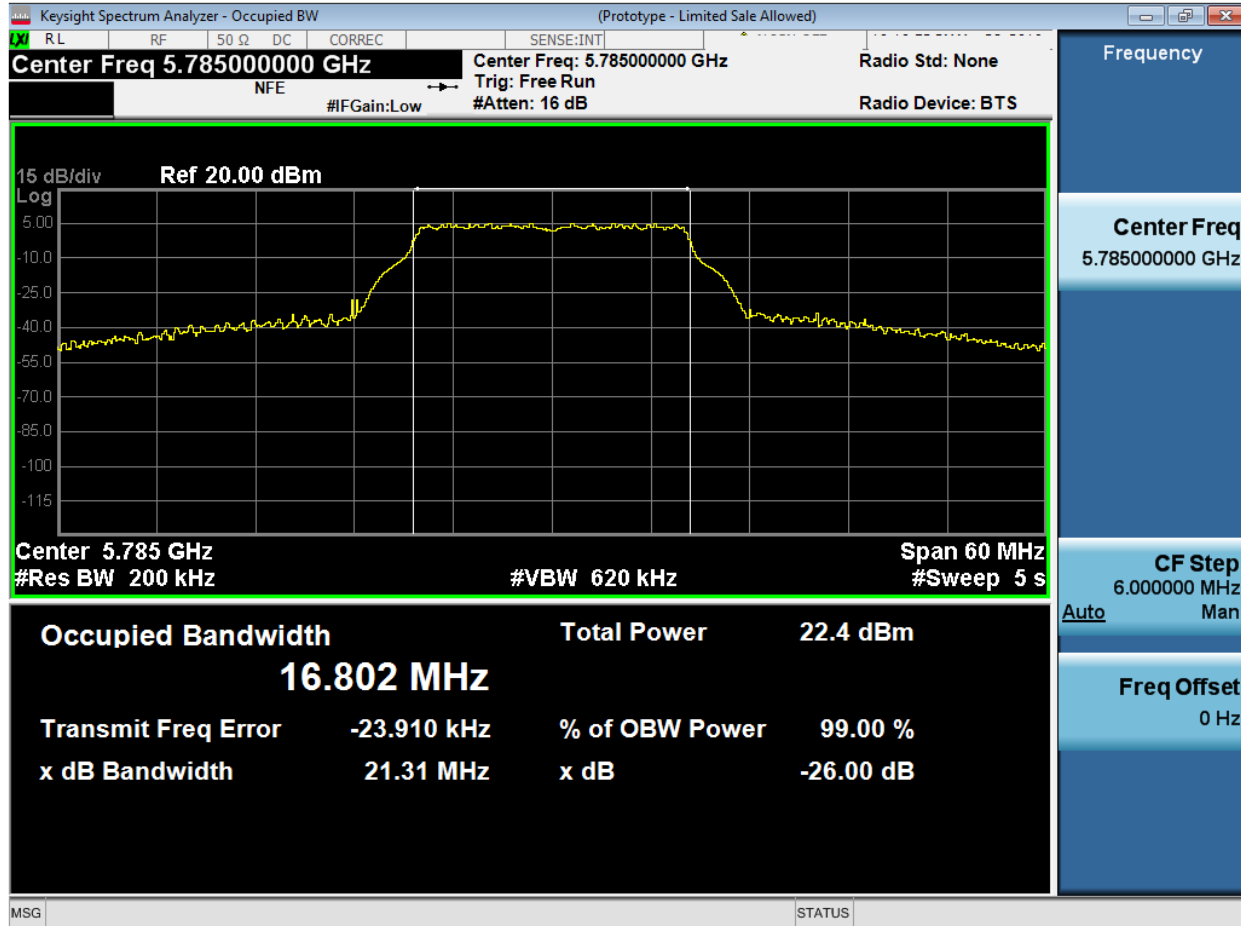
Test Result: PASS

See Appendix C for list of test equipment

Frequency (MHz)	Mode	Data Rate (Mbps)	26dB BW (MHz)	99% BW (MHz)
5745	Non HT20, 6 to 54 Mbps	6	21.3	16.804
	HT/VHT20, M0 to M31	m0	21.8	18.057
	HE20, M0 to M9, M0 to M9 1-2ss	m0h1	21.5	19.139
5755	Non HT40, 6 to 54 Mbps	6	39.8	36.360
	HT/VHT40, M0 to M31	m0	40.2	36.462
	HE40, M0 to M9, M0 to M9 1-2ss	m0h1	40.0	37.636
5775	Non HT80, 6 to 54 Mbps	6	82.3	76.266
	VHT80, M0 to M9, M0 to M9 1-2ss	m0x1	82.3	76.173
	HE80, M0 to M9, M0 to M9 1-2ss	m0h1	82.1	77.178
5785	Non HT20, 6 to 54 Mbps	6	21.3	16.802
	HT/VHT20, M0 to M31	m0	21.8	18.058
	HE20, M0 to M9, M0 to M9 1-2ss	m0h1	21.5	19.120
5795	Non HT40, 6 to 54 Mbps	6	39.8	36.351
	HT/VHT40, M0 to M31	m0	40.2	36.450
	HE40, M0 to M9, M0 to M9 1-2ss	m0h1	39.9	37.641
5825	Non HT20, 6 to 54 Mbps	6	21.2	16.783
	HT/VHT20, M0 to M31	m0	21.8	18.062
	HE20, M0 to M9, M0 to M9 1-2ss	m0h1	21.5	19.135



26dB / 99% Bandwidth, 5785 MHz, Non HT20, 6 to 54 Mbps



A.3 Maximum Conducted Output Power

15.407 / RSS-247 For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

The peak correlated gain for each mode is listed in the table below. See the Theory of Operation for details on the correlated gain for each mode.

Test Procedure

Ref. KDB 789033 D02 General UNII Test Procedures New Rules v02r01
ANSI C63.10: 2013

Output Power Test Procedure
<ol style="list-style-type: none"> 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 v02r01
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 ≥ 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. (See ANSI C63.10 section 14.3.2.2)

System Number	Description	Samples	System under test	Support equipment
1	EUT	S01	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Support	S02	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Tested By: Chris Blair	Date of testing: 25-Mar-19 - 29-Mar-19
Test Result: PASS	

Frequency (MHz)	Mode	Tx Paths	Correlated Antenna Gain (dBi)	Tx 1 Max Power (dBm)	Tx 2 Max Power (dBm)	Tx 3 Max Power (dBm)	Tx 4 Max Power (dBm)	Total Tx Channel Power (dBm)	Limit (dBm)	Margin (dB)
5745	Non HT20, 6 to 54 Mbps	1	5	16.1				16.1	30.0	13.9
	Non HT20, 6 to 54 Mbps	2	5	15.2	14.7			18.0	30.0	12.0
	Non HT20, 6 to 54 Mbps	3	5	15.2	14.7	15.9		20.1	30.0	9.9
	Non HT20, 6 to 54 Mbps	4	5	15.2	14.7	15.9	15.9	21.5	30.0	8.5
	Non HT20 Beam Forming, 6 to 54 Mbps	2	8	15.2	14.7			18.0	28.0	10.0
	Non HT20 Beam Forming, 6 to 54 Mbps	3	10	15.2	14.7	15.9		20.1	26.0	5.9
	Non HT20 Beam Forming, 6 to 54 Mbps	4	11	15.2	14.7	15.9	15.9	21.5	25.0	3.5
	HT/VHT20, M0 to M7	1	5	16.2				16.2	30.0	13.8
	HT/VHT20, M0 to M7	2	5	16.2	15.7			19.0	30.0	11.0
	HT/VHT20, M8 to M15	2	5	16.2	15.7			19.0	30.0	11.0
	HT/VHT20, M0 to M7	3	5	16.2	15.7	17.0		21.1	30.0	8.9
	HT/VHT20, M8 to M15	3	5	16.2	15.7	17.0		21.1	30.0	8.9
	HT/VHT20, M16 to M23	3	5	16.2	15.7	17.0		21.1	30.0	8.9
	HT/VHT20, M0 to M7	4	5	16.2	15.7	17.0	17.2	22.6	30.0	7.4
	HT/VHT20, M8 to M15	4	5	16.2	15.7	17.0	17.2	22.6	30.0	7.4
	HT/VHT20, M16 to M23	4	5	16.2	15.7	17.0	17.2	22.6	30.0	7.4
	HT/VHT20, M24 to M31	4	5	16.2	15.7	17.0	17.2	22.6	30.0	7.4
	HT/VHT20 Beam Forming, M0 to M7	2	8	16.2	15.7			19.0	28.0	9.0
	HT/VHT20 Beam Forming, M8 to M15	2	5	16.2	15.7			19.0	30.0	11.0
	HT/VHT20 Beam Forming, M0 to M7	3	10	16.2	15.7	17.0		21.1	26.0	4.9
	HT/VHT20 Beam Forming, M8 to M15	3	7	16.2	15.7	17.0		21.1	29.0	7.9
	HT/VHT20 Beam Forming, M16 to M23	3	5	16.2	15.7	17.0		21.1	30.0	8.9
	HT/VHT20 Beam Forming, M0 to M7	4	11	16.2	15.7	17.0	17.2	22.6	25.0	2.4
	HT/VHT20 Beam Forming, M8 to M15	4	8	16.2	15.7	17.0	17.2	22.6	28.0	5.4
	HT/VHT20 Beam Forming, M16 to M23	4	6	16.2	15.7	17.0	17.2	22.6	30.0	7.4
	HT/VHT20 Beam Forming, M24 to M31	4	5	16.2	15.7	17.0	17.2	22.6	30.0	7.4
	HT/VHT20 STBC, M0 to M7	2	5	16.2	15.7			19.0	30.0	11.0
	HT/VHT20 STBC, M0 to M7	3	5	16.2	15.7	17.0		21.1	30.0	8.9
	HT/VHT20 STBC, M0 to M7	4	5	16.2	15.7	17.0	17.2	22.6	30.0	7.4
	HE20, M0 to M9 1ss	1	5	16.6				16.6	30.0	13.4
	HE20, M0 to M9 1ss	2	5	16.6	16.1			19.4	30.0	10.6
	HE20, M0 to M9 2ss	2	5	16.6	16.1			19.4	30.0	10.6
	HE20, M0 to M9 1ss	3	5	16.6	16.1	17.4		21.5	30.0	8.5
	HE20, M0 to M9 2ss	3	5	16.6	16.1	17.4		21.5	30.0	8.5
	HE20, M0 to M9 3ss	3	5	16.6	16.1	17.4		21.5	30.0	8.5
	HE20, M0 to M9 1ss	4	5	16.6	16.1	17.4	17.5	23.0	30.0	7.0
HE20, M0 to M9 2ss	4	5	16.6	16.1	17.4	17.5	23.0	30.0	7.0	

	HE20, M0 to M9 3ss	4	5	16.6	16.1	17.4	17.5	23.0	30.0	7.0
	HE20, M0 to M9 4ss	4	5	16.6	16.1	17.4	17.5	23.0	30.0	7.0
	HE20 Beam Forming, M0 to M9 1ss	2	8	16.6	16.1			19.4	28.0	8.6
	HE20 Beam Forming, M0 to M9 2ss	2	5	16.6	16.1			19.4	30.0	10.6
	HE20 Beam Forming, M0 to M9 1ss	3	10	16.6	16.1	17.4		21.5	26.0	4.5
	HE20 Beam Forming, M0 to M9 2ss	3	7	16.6	16.1	17.4		21.5	29.0	7.5
	HE20 Beam Forming, M0 to M9 3ss	3	5	16.6	16.1	17.4		21.5	30.0	8.5
	HE20 Beam Forming, M0 to M9 1ss	4	11	16.6	16.1	17.4	17.5	23.0	25.0	2.0
	HE20 Beam Forming, M0 to M9 2ss	4	8	16.6	16.1	17.4	17.5	23.0	28.0	5.0
	HE20 Beam Forming, M0 to M9 3ss	4	6	16.6	16.1	17.4	17.5	23.0	30.0	7.0
	HE20 Beam Forming, M0 to M9 4ss	4	5	16.6	16.1	17.4	17.5	23.0	30.0	7.0
	HE20 STBC, M0 to M9 2ss	2	5	16.6	16.1			19.4	30.0	10.6
	HE20 STBC, M0 to M9 2ss	3	5	16.6	16.1	17.4		21.5	30.0	8.5
	HE20 STBC, M0 to M9 2ss	4	5	16.6	16.1	17.4	17.5	23.0	30.0	7.0
5755	Non HT40, 6 to 54 Mbps	1	5	15.5				15.5	30.0	14.5
	Non HT40, 6 to 54 Mbps	2	5	15.5	16.3			18.9	30.0	11.1
	Non HT40, 6 to 54 Mbps	3	5	15.5	16.3	16.5		20.9	30.0	9.1
	Non HT40, 6 to 54 Mbps	4	5	15.5	16.3	16.5	17.0	22.4	30.0	7.6
	HT/VHT40, M0 to M7	1	5	15.9				16.0	30.0	14.0
	HT/VHT40, M0 to M7	2	5	15.9	16.4			19.3	30.0	10.7
	HT/VHT40, M8 to M15	2	5	15.9	16.4			19.3	30.0	10.7
	HT/VHT40, M0 to M7	3	5	15.9	16.4	16.6		21.2	30.0	8.8
	HT/VHT40, M8 to M15	3	5	15.9	16.4	16.6		21.2	30.0	8.8
	HT/VHT40, M16 to M23	3	5	15.9	16.4	16.6		21.2	30.0	8.8
	HT/VHT40, M0 to M7	4	5	15.9	16.4	16.6	16.9	22.6	30.0	7.4
	HT/VHT40, M8 to M15	4	5	15.9	16.4	16.6	16.9	22.6	30.0	7.4
	HT/VHT40, M16 to M23	4	5	15.9	16.4	16.6	16.9	22.6	30.0	7.4
	HT/VHT40, M24 to M31	4	5	15.9	16.4	16.6	16.9	22.6	30.0	7.4
	HT/VHT40 Beam Forming, M0 to M7	2	8	15.9	16.4			19.3	28.0	8.7
	HT/VHT40 Beam Forming, M8 to M15	2	5	15.9	16.4			19.3	30.0	10.7
	HT/VHT40 Beam Forming, M0 to M7	3	10	15.9	16.4	16.6		21.2	26.0	4.8
	HT/VHT40 Beam Forming, M8 to M15	3	7	15.9	16.4	16.6		21.2	29.0	7.8
	HT/VHT40 Beam Forming, M16 to M23	3	5	15.9	16.4	16.6		21.2	30.0	8.8
	HT/VHT40 Beam Forming, M0 to M7	4	11	15.9	16.4	16.6	16.9	22.6	25.0	2.4
	HT/VHT40 Beam Forming, M8 to M15	4	8	15.9	16.4	16.6	16.9	22.6	28.0	5.4
	HT/VHT40 Beam Forming, M16 to M23	4	6	15.9	16.4	16.6	16.9	22.6	30.0	7.4
	HT/VHT40 Beam Forming, M24 to M31	4	5	15.9	16.4	16.6	16.9	22.6	30.0	7.4
	HT/VHT40 STBC, M0 to M7	2	5	15.9	16.4			19.3	30.0	10.7
	HT/VHT40 STBC, M0 to M7	3	5	15.9	16.4	16.6		21.2	30.0	8.8
	HT/VHT40 STBC, M0 to M7	4	5	15.9	16.4	16.6	16.9	22.6	30.0	7.4
	HE40, M0 to M9 1ss	1	5	16.3				16.4	30.0	13.6
	HE40, M0 to M9 1ss	2	5	16.3	16.6			19.6	30.0	10.4

	HE40, M0 to M9 2ss	2	5	16.3	16.6			19.6	30.0	10.4
	HE40, M0 to M9 1ss	3	5	16.3	16.6	17.0		21.5	30.0	8.5
	HE40, M0 to M9 2ss	3	5	16.3	16.6	17.0		21.5	30.0	8.5
	HE40, M0 to M9 3ss	3	5	16.3	16.6	17.0		21.5	30.0	8.5
	HE40, M0 to M9 1ss	4	5	16.3	16.6	17.0	17.2	22.9	30.0	7.1
	HE40, M0 to M9 2ss	4	5	16.3	16.6	17.0	17.2	22.9	30.0	7.1
	HE40, M0 to M9 3ss	4	5	16.3	16.6	17.0	17.2	22.9	30.0	7.1
	HE40, M0 to M9 4ss	4	5	16.3	16.6	17.0	17.2	22.9	30.0	7.1
	HE40 Beam Forming, M0 to M9 1ss	2	8	16.3	16.6			19.6	28.0	8.4
	HE40 Beam Forming, M0 to M9 2ss	2	5	16.3	16.6			19.6	30.0	10.4
	HE40 Beam Forming, M0 to M9 1ss	3	10	16.3	16.6	17.0		21.5	26.0	4.5
	HE40 Beam Forming, M0 to M9 2ss	3	7	16.3	16.6	17.0		21.5	29.0	7.5
	HE40 Beam Forming, M0 to M9 3ss	3	5	16.3	16.6	17.0		21.5	30.0	8.5
	HE40 Beam Forming, M0 to M9 1ss	4	11	16.3	16.6	17.0	17.2	22.9	25.0	2.1
	HE40 Beam Forming, M0 to M9 2ss	4	8	16.3	16.6	17.0	17.2	22.9	28.0	5.1
	HE40 Beam Forming, M0 to M9 3ss	4	6	16.3	16.6	17.0	17.2	22.9	30.0	7.1
	HE40 Beam Forming, M0 to M9 4ss	4	5	16.3	16.6	17.0	17.2	22.9	30.0	7.1
	HE40 STBC, M0 to M9 2ss	2	5	16.3	16.6			19.6	30.0	10.4
	HE40 STBC, M0 to M9 2ss	3	5	16.3	16.6	17.0		21.5	30.0	8.5
	HE40 STBC, M0 to M9 2ss	4	5	16.3	16.6	17.0	17.2	22.9	30.0	7.1
5775	Non HT80, 6 to 54 Mbps	1	5	15.5				15.5	30.0	14.5
	Non HT80, 6 to 54 Mbps	2	5	15.5	16.2			18.9	30.0	11.1
	Non HT80, 6 to 54 Mbps	3	5	15.5	16.2	16.6		20.9	30.0	9.1
	Non HT80, 6 to 54 Mbps	4	5	15.5	16.2	16.6	16.1	22.1	30.0	7.9
	VHT80, M0 to M9 1ss	1	5	15.3				15.5	30.0	14.5
	VHT80, M0 to M9 1ss	2	5	15.3	16.1			18.9	30.0	11.1
	VHT80, M0 to M9 2ss	2	5	15.3	16.1			18.9	30.0	11.1
	VHT80, M0 to M9 1ss	3	5	15.3	16.1	16.5		21.0	30.0	9.0
	VHT80, M0 to M9 2ss	3	5	15.3	16.1	16.5		21.0	30.0	9.0
	VHT80, M0 to M9 3ss	3	5	15.3	16.1	16.5		21.0	30.0	9.0
	VHT80, M0 to M9 1ss	4	5	15.3	16.1	16.5	16.0	22.2	30.0	7.8
	VHT80, M0 to M9 2ss	4	5	15.3	16.1	16.5	16.0	22.2	30.0	7.8
	VHT80, M0 to M9 3ss	4	5	15.3	16.1	16.5	16.0	22.2	30.0	7.8
	VHT80, M0 to M9 4ss	4	5	15.3	16.1	16.5	16.0	22.2	30.0	7.8
	VHT80 Beam Forming, M0 to M9 1ss	2	8	15.3	16.1			18.9	28.0	9.1
	VHT80 Beam Forming, M0 to M9 2ss	2	5	15.3	16.1			18.9	30.0	11.1
	VHT80 Beam Forming, M0 to M9 1ss	3	10	15.3	16.1	16.5		21.0	26.0	5.0
	VHT80 Beam Forming, M0 to M9 2ss	3	7	15.3	16.1	16.5		21.0	29.0	8.0
	VHT80 Beam Forming, M0 to M9 3ss	3	5	15.3	16.1	16.5		21.0	30.0	9.0
	VHT80 Beam Forming, M0 to M9 1ss	4	11	15.3	16.1	16.5	16.0	22.2	25.0	2.8
VHT80 Beam Forming, M0 to M9 2ss	4	8	15.3	16.1	16.5	16.0	22.2	28.0	5.8	
VHT80 Beam Forming, M0 to M9 3ss	4	6	15.3	16.1	16.5	16.0	22.2	30.0	7.8	

VHT80 Beam Forming, M0 to M9 4ss	4	5	15.3	16.1	16.5	16.0	22.2	30.0	7.8
VHT80 STBC, M0 to M9 1ss	2	5	15.3	16.1			18.9	30.0	11.1
VHT80 STBC, M0 to M9 1ss	3	5	15.3	16.1	16.5		21.0	30.0	9.0
VHT80 STBC, M0 to M9 1ss	4	5	15.3	16.1	16.5	16.0	22.2	30.0	7.8
HE80, M0 to M9 1ss	1	5	15.4				15.7	30.0	14.4
HE80, M0 to M9 1ss	2	5	15.4	16.1			19.0	30.0	11.0
HE80, M0 to M9 2ss	2	5	15.4	16.1			19.0	30.0	11.0
HE80, M0 to M9 1ss	3	5	15.4	16.1	16.7		21.1	30.0	8.9
HE80, M0 to M9 2ss	3	5	15.4	16.1	16.7		21.1	30.0	8.9
HE80, M0 to M9 3ss	3	5	15.4	16.1	16.7		21.1	30.0	8.9
HE80, M0 to M9 1ss	4	5	15.4	16.1	16.7	16.2	22.4	30.0	7.6
HE80, M0 to M9 2ss	4	5	15.4	16.1	16.7	16.2	22.4	30.0	7.6
HE80, M0 to M9 3ss	4	5	15.4	16.1	16.7	16.2	22.4	30.0	7.6
HE80, M0 to M9 4ss	4	5	15.4	16.1	16.7	16.2	22.4	30.0	7.6
HE80 Beam Forming, M0 to M9 1ss	2	8	15.4	16.1			19.0	28.0	9.0
HE80 Beam Forming, M0 to M9 2ss	2	5	15.4	16.1			19.0	30.0	11.0
HE80 Beam Forming, M0 to M9 1ss	3	10	15.4	16.1	16.7		21.1	26.0	4.9
HE80 Beam Forming, M0 to M9 2ss	3	7	15.4	16.1	16.7		21.1	29.0	7.9
HE80 Beam Forming, M0 to M9 3ss	3	5	15.4	16.1	16.7		21.1	30.0	8.9
HE80 Beam Forming, M0 to M9 1ss	4	11	15.4	16.1	16.7	16.2	22.4	25.0	2.6
HE80 Beam Forming, M0 to M9 2ss	4	8	15.4	16.1	16.7	16.2	22.4	28.0	5.6
HE80 Beam Forming, M0 to M9 3ss	4	6	15.4	16.1	16.7	16.2	22.4	30.0	7.6
HE80 Beam Forming, M0 to M9 4ss	4	5	15.4	16.1	16.7	16.2	22.4	30.0	7.6
HE80 STBC, M0 to M9 1ss	2	5	15.4	16.1			19.0	30.0	11.0
HE80 STBC, M0 to M9 1ss	3	5	15.4	16.1	16.7		21.1	30.0	8.9
HE80 STBC, M0 to M9 1ss	4	5	15.4	16.1	16.7	16.2	22.4	30.0	7.6
Non HT20, 6 to 54 Mbps	1	5	16.6				16.6	30.0	13.4
Non HT20, 6 to 54 Mbps	2	5	16.6	16.0			19.3	30.0	10.7
Non HT20, 6 to 54 Mbps	3	5	16.6	16.0	17.2		21.4	30.0	8.6
Non HT20, 6 to 54 Mbps	4	5	16.6	16.0	17.2	17.2	22.8	30.0	7.2
Non HT20 Beam Forming, 6 to 54 Mbps	2	8	16.6	16.0			19.3	28.0	8.7
Non HT20 Beam Forming, 6 to 54 Mbps	3	10	16.6	16.0	17.2		21.4	26.0	4.6
Non HT20 Beam Forming, 6 to 54 Mbps	4	11	16.6	16.0	17.2	17.2	22.8	25.0	2.2
HT/VHT20, M0 to M7	1	5	16.4				16.4	30.0	13.6
HT/VHT20, M0 to M7	2	5	16.4	15.9			19.2	30.0	10.8
HT/VHT20, M8 to M15	2	5	16.4	15.9			19.2	30.0	10.8
HT/VHT20, M0 to M7	3	5	16.4	15.9	17.2		21.3	30.0	8.7
HT/VHT20, M8 to M15	3	5	16.4	15.9	17.2		21.3	30.0	8.7
HT/VHT20, M16 to M23	3	5	16.4	15.9	17.2		21.3	30.0	8.7
HT/VHT20, M0 to M7	4	5	16.4	15.9	17.2	17.3	22.8	30.0	7.2
HT/VHT20, M8 to M15	4	5	16.4	15.9	17.2	17.3	22.8	30.0	7.2
HT/VHT20, M16 to M23	4	5	16.4	15.9	17.2	17.3	22.8	30.0	7.2

HT/VHT20, M24 to M31	4	5	16.4	15.9	17.2	17.3	22.8	30.0	7.2	
HT/VHT20 Beam Forming, M0 to M7	2	8	16.4	15.9			19.2	28.0	8.8	
HT/VHT20 Beam Forming, M8 to M15	2	5	16.4	15.9			19.2	30.0	10.8	
HT/VHT20 Beam Forming, M0 to M7	3	10	16.4	15.9	17.2		21.3	26.0	4.7	
HT/VHT20 Beam Forming, M8 to M15	3	7	16.4	15.9	17.2		21.3	29.0	7.7	
HT/VHT20 Beam Forming, M16 to M23	3	5	16.4	15.9	17.2		21.3	30.0	8.7	
HT/VHT20 Beam Forming, M0 to M7	4	11	16.4	15.9	17.2	17.3	22.8	25.0	2.2	
HT/VHT20 Beam Forming, M8 to M15	4	8	16.4	15.9	17.2	17.3	22.8	28.0	5.2	
HT/VHT20 Beam Forming, M16 to M23	4	6	16.4	15.9	17.2	17.3	22.8	30.0	7.2	
HT/VHT20 Beam Forming, M24 to M31	4	5	16.4	15.9	17.2	17.3	22.8	30.0	7.2	
HT/VHT20 STBC, M0 to M7	2	5	16.4	15.9			19.2	30.0	10.8	
HT/VHT20 STBC, M0 to M7	3	5	16.4	15.9	17.2		21.3	30.0	8.7	
HT/VHT20 STBC, M0 to M7	4	5	16.4	15.9	17.2	17.3	22.8	30.0	7.2	
HE20, M0 to M9 1ss	1	5	16.5				16.5	30.0	13.5	
HE20, M0 to M9 1ss	2	5	16.5	16.1			19.3	30.0	10.7	
HE20, M0 to M9 2ss	2	5	16.5	16.1			19.3	30.0	10.7	
HE20, M0 to M9 1ss	3	5	16.5	16.1	17.5		21.5	30.0	8.5	
HE20, M0 to M9 2ss	3	5	16.5	16.1	17.5		21.5	30.0	8.5	
HE20, M0 to M9 3ss	3	5	16.5	16.1	17.5		21.5	30.0	8.5	
HE20, M0 to M9 1ss	4	5	16.5	16.1	17.5	17.5	23.0	30.0	7.0	
HE20, M0 to M9 2ss	4	5	16.5	16.1	17.5	17.5	23.0	30.0	7.0	
HE20, M0 to M9 3ss	4	5	16.5	16.1	17.5	17.5	23.0	30.0	7.0	
HE20, M0 to M9 4ss	4	5	16.5	16.1	17.5	17.5	23.0	30.0	7.0	
HE20 Beam Forming, M0 to M9 1ss	2	8	16.5	16.1			19.3	28.0	8.7	
HE20 Beam Forming, M0 to M9 2ss	2	5	16.5	16.1			19.3	30.0	10.7	
HE20 Beam Forming, M0 to M9 1ss	3	10	16.5	16.1	17.5		21.5	26.0	4.5	
HE20 Beam Forming, M0 to M9 2ss	3	7	16.5	16.1	17.5		21.5	29.0	7.5	
HE20 Beam Forming, M0 to M9 3ss	3	5	16.5	16.1	17.5		21.5	30.0	8.5	
HE20 Beam Forming, M0 to M9 1ss	4	11	16.5	16.1	17.5	17.5	23.0	25.0	2.0	
HE20 Beam Forming, M0 to M9 2ss	4	8	16.5	16.1	17.5	17.5	23.0	28.0	5.0	
HE20 Beam Forming, M0 to M9 3ss	4	6	16.5	16.1	17.5	17.5	23.0	30.0	7.0	
HE20 Beam Forming, M0 to M9 4ss	4	5	16.5	16.1	17.5	17.5	23.0	30.0	7.0	
HE20 STBC, M0 to M9 2ss	2	5	16.5	16.1			19.3	30.0	10.7	
HE20 STBC, M0 to M9 2ss	3	5	16.5	16.1	17.5		21.5	30.0	8.5	
HE20 STBC, M0 to M9 2ss	4	5	16.5	16.1	17.5	17.5	23.0	30.0	7.0	
5795	Non HT40, 6 to 54 Mbps	1	5	15.7				15.7	30.0	14.3
	Non HT40, 6 to 54 Mbps	2	5	15.7	16.6			19.2	30.0	10.8
	Non HT40, 6 to 54 Mbps	3	5	15.7	16.6	16.6		21.1	30.0	8.9
	Non HT40, 6 to 54 Mbps	4	5	15.7	16.6	16.6	17.1	22.5	30.0	7.5
	HT/VHT40, M0 to M7	1	5	15.8				15.9	30.0	14.1
	HT/VHT40, M0 to M7	2	5	15.8	16.6			19.3	30.0	10.7
	HT/VHT40, M8 to M15	2	5	15.8	16.6			19.3	30.0	10.7

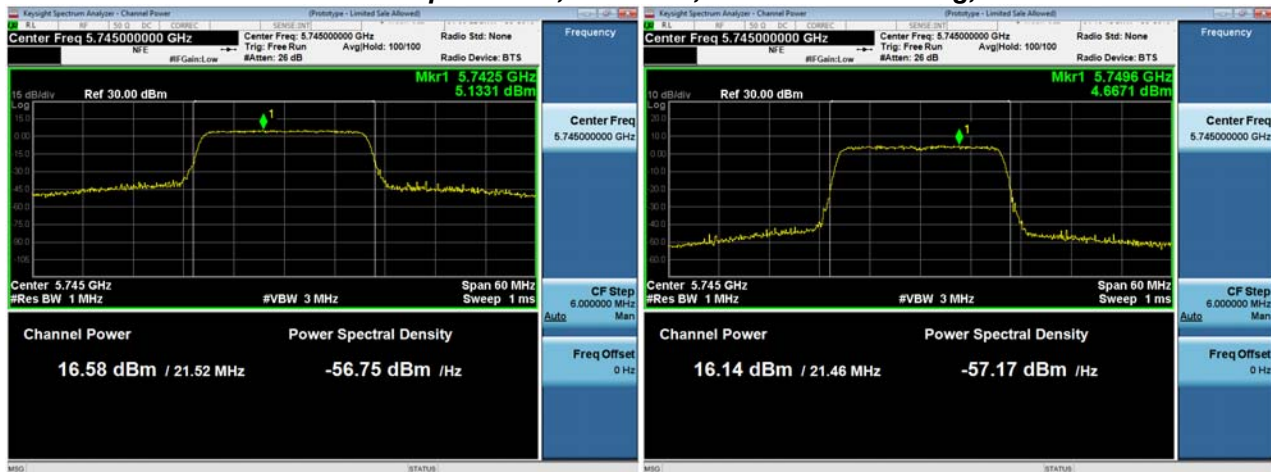
HT/VHT40, M0 to M7	3	5	15.8	16.6	16.6		21.2	30.0	8.8
HT/VHT40, M8 to M15	3	5	15.8	16.6	16.6		21.2	30.0	8.8
HT/VHT40, M16 to M23	3	5	15.8	16.6	16.6		21.2	30.0	8.8
HT/VHT40, M0 to M7	4	5	15.8	16.6	16.6	17.1	22.7	30.0	7.3
HT/VHT40, M8 to M15	4	5	15.8	16.6	16.6	17.1	22.7	30.0	7.3
HT/VHT40, M16 to M23	4	5	15.8	16.6	16.6	17.1	22.7	30.0	7.3
HT/VHT40, M24 to M31	4	5	15.8	16.6	16.6	17.1	22.7	30.0	7.3
HT/VHT40 Beam Forming, M0 to M7	2	8	15.8	16.6			19.3	28.0	8.7
HT/VHT40 Beam Forming, M8 to M15	2	5	15.8	16.6			19.3	30.0	10.7
HT/VHT40 Beam Forming, M0 to M7	3	10	15.8	16.6	16.6		21.2	26.0	4.8
HT/VHT40 Beam Forming, M8 to M15	3	7	15.8	16.6	16.6		21.2	29.0	7.8
HT/VHT40 Beam Forming, M16 to M23	3	5	15.8	16.6	16.6		21.2	30.0	8.8
HT/VHT40 Beam Forming, M0 to M7	4	11	15.8	16.6	16.6	17.1	22.7	25.0	2.3
HT/VHT40 Beam Forming, M8 to M15	4	8	15.8	16.6	16.6	17.1	22.7	28.0	5.3
HT/VHT40 Beam Forming, M16 to M23	4	6	15.8	16.6	16.6	17.1	22.7	30.0	7.3
HT/VHT40 Beam Forming, M24 to M31	4	5	15.8	16.6	16.6	17.1	22.7	30.0	7.3
HT/VHT40 STBC, M0 to M7	2	5	15.8	16.6			19.3	30.0	10.7
HT/VHT40 STBC, M0 to M7	3	5	15.8	16.6	16.6		21.2	30.0	8.8
HT/VHT40 STBC, M0 to M7	4	5	15.8	16.6	16.6	17.1	22.7	30.0	7.3
HE40, M0 to M9 1ss	1	5	16.3				16.4	30.0	13.6
HE40, M0 to M9 1ss	2	5	16.3	16.8			19.7	30.0	10.3
HE40, M0 to M9 2ss	2	5	16.3	16.8			19.7	30.0	10.3
HE40, M0 to M9 1ss	3	5	16.3	16.8	16.8		21.5	30.0	8.5
HE40, M0 to M9 2ss	3	5	16.3	16.8	16.8		21.5	30.0	8.5
HE40, M0 to M9 3ss	3	5	16.3	16.8	16.8		21.5	30.0	8.5
HE40, M0 to M9 1ss	4	5	16.3	16.8	16.8	17.4	23.0	30.0	7.0
HE40, M0 to M9 2ss	4	5	16.3	16.8	16.8	17.4	23.0	30.0	7.0
HE40, M0 to M9 3ss	4	5	16.3	16.8	16.8	17.4	23.0	30.0	7.0
HE40, M0 to M9 4ss	4	5	16.3	16.8	16.8	17.4	23.0	30.0	7.0
HE40 Beam Forming, M0 to M9 1ss	2	8	16.3	16.8			19.7	28.0	8.3
HE40 Beam Forming, M0 to M9 2ss	2	5	16.3	16.8			19.7	30.0	10.3
HE40 Beam Forming, M0 to M9 1ss	3	10	16.3	16.8	16.8		21.5	26.0	4.5
HE40 Beam Forming, M0 to M9 2ss	3	7	16.3	16.8	16.8		21.5	29.0	7.5
HE40 Beam Forming, M0 to M9 3ss	3	5	16.3	16.8	16.8		21.5	30.0	8.5
HE40 Beam Forming, M0 to M9 1ss	4	11	16.3	16.8	16.8	17.4	23.0	25.0	2.0
HE40 Beam Forming, M0 to M9 2ss	4	8	16.3	16.8	16.8	17.4	23.0	28.0	5.0
HE40 Beam Forming, M0 to M9 3ss	4	6	16.3	16.8	16.8	17.4	23.0	30.0	7.0
HE40 Beam Forming, M0 to M9 4ss	4	5	16.3	16.8	16.8	17.4	23.0	30.0	7.0
HE40 STBC, M0 to M9 2ss	2	5	16.3	16.8			19.7	30.0	10.3
HE40 STBC, M0 to M9 2ss	3	5	16.3	16.8	16.8		21.5	30.0	8.5
HE40 STBC, M0 to M9 2ss	4	5	16.3	16.8	16.8	17.4	23.0	30.0	7.0
∞ Non HT20, 6 to 54 Mbps	1	5	16.2				16.2	30.0	13.8

Non HT20, 6 to 54 Mbps	2	5	16.2	15.8			19.0	30.0	11.0
Non HT20, 6 to 54 Mbps	3	5	16.2	15.8	17.0		21.1	30.0	8.9
Non HT20, 6 to 54 Mbps	4	5	16.2	15.8	17.0	17.0	22.6	30.0	7.4
Non HT20 Beam Forming, 6 to 54 Mbps	2	8	16.2	15.8			19.0	28.0	9.0
Non HT20 Beam Forming, 6 to 54 Mbps	3	10	16.2	15.8	17.0		21.1	26.0	4.9
Non HT20 Beam Forming, 6 to 54 Mbps	4	11	16.2	15.8	17.0	17.0	22.6	25.0	2.4
HT/VHT20, M0 to M7	1	5	16.6				16.6	30.0	13.4
HT/VHT20, M0 to M7	2	5	16.6	15.8			19.2	30.0	10.8
HT/VHT20, M8 to M15	2	5	16.6	15.8			19.2	30.0	10.8
HT/VHT20, M0 to M7	3	5	16.6	15.8	16.9		21.2	30.0	8.8
HT/VHT20, M8 to M15	3	5	16.6	15.8	16.9		21.2	30.0	8.8
HT/VHT20, M16 to M23	3	5	16.6	15.8	16.9		21.2	30.0	8.8
HT/VHT20, M0 to M7	4	5	16.6	15.8	16.9	17.0	22.6	30.0	7.4
HT/VHT20, M8 to M15	4	5	16.6	15.8	16.9	17.0	22.6	30.0	7.4
HT/VHT20, M16 to M23	4	5	16.6	15.8	16.9	17.0	22.6	30.0	7.4
HT/VHT20, M24 to M31	4	5	16.6	15.8	16.9	17.0	22.6	30.0	7.4
HT/VHT20 Beam Forming, M0 to M7	2	8	16.6	15.8			19.2	28.0	8.8
HT/VHT20 Beam Forming, M8 to M15	2	5	16.6	15.8			19.2	30.0	10.8
HT/VHT20 Beam Forming, M0 to M7	3	10	16.6	15.8	16.9		21.2	26.0	4.8
HT/VHT20 Beam Forming, M8 to M15	3	7	16.6	15.8	16.9		21.2	29.0	7.8
HT/VHT20 Beam Forming, M16 to M23	3	5	16.6	15.8	16.9		21.2	30.0	8.8
HT/VHT20 Beam Forming, M0 to M7	4	11	16.6	15.8	16.9	17.0	22.6	25.0	2.4
HT/VHT20 Beam Forming, M8 to M15	4	8	16.6	15.8	16.9	17.0	22.6	28.0	5.4
HT/VHT20 Beam Forming, M16 to M23	4	6	16.6	15.8	16.9	17.0	22.6	30.0	7.4
HT/VHT20 Beam Forming, M24 to M31	4	5	16.6	15.8	16.9	17.0	22.6	30.0	7.4
HT/VHT20 STBC, M0 to M7	2	5	16.6	15.8			19.2	30.0	10.8
HT/VHT20 STBC, M0 to M7	3	5	16.6	15.8	16.9		21.2	30.0	8.8
HT/VHT20 STBC, M0 to M7	4	5	16.6	15.8	16.9	17.0	22.6	30.0	7.4
HE20, M0 to M9 1ss	1	5	16.8				16.8	30.0	13.2
HE20, M0 to M9 1ss	2	5	16.8	16.0			19.4	30.0	10.6
HE20, M0 to M9 2ss	2	5	16.8	16.0			19.4	30.0	10.6
HE20, M0 to M9 1ss	3	5	16.8	16.0	17.3		21.5	30.0	8.5
HE20, M0 to M9 2ss	3	5	16.8	16.0	17.3		21.5	30.0	8.5
HE20, M0 to M9 3ss	3	5	16.8	16.0	17.3		21.5	30.0	8.5
HE20, M0 to M9 1ss	4	5	16.8	16.0	17.3	17.3	22.9	30.0	7.1
HE20, M0 to M9 2ss	4	5	16.8	16.0	17.3	17.3	22.9	30.0	7.1
HE20, M0 to M9 3ss	4	5	16.8	16.0	17.3	17.3	22.9	30.0	7.1
HE20, M0 to M9 4ss	4	5	16.8	16.0	17.3	17.3	22.9	30.0	7.1
HE20 Beam Forming, M0 to M9 1ss	2	8	16.8	16.0			19.4	28.0	8.6
HE20 Beam Forming, M0 to M9 2ss	2	5	16.8	16.0			19.4	30.0	10.6
HE20 Beam Forming, M0 to M9 1ss	3	10	16.8	16.0	17.3		21.5	26.0	4.5
HE20 Beam Forming, M0 to M9 2ss	3	7	16.8	16.0	17.3		21.5	29.0	7.5
HE20 Beam Forming, M0 to M9 3ss	3	5	16.8	16.0	17.3		21.5	30.0	8.5



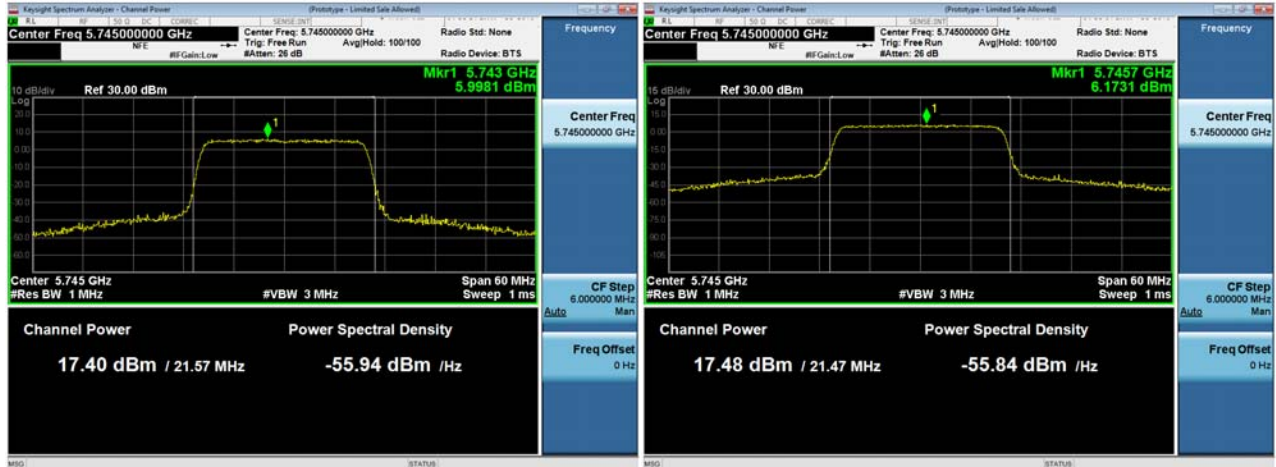
HE20 Beam Forming, M0 to M9 1ss	4	11	16.8	16.0	17.3	17.3	22.9	25.0	2.1
HE20 Beam Forming, M0 to M9 2ss	4	8	16.8	16.0	17.3	17.3	22.9	28.0	5.1
HE20 Beam Forming, M0 to M9 3ss	4	6	16.8	16.0	17.3	17.3	22.9	30.0	7.1
HE20 Beam Forming, M0 to M9 4ss	4	5	16.8	16.0	17.3	17.3	22.9	30.0	7.1
HE20 STBC, M0 to M9 2ss	2	5	16.8	16.0			19.4	30.0	10.6
HE20 STBC, M0 to M9 2ss	3	5	16.8	16.0	17.3		21.5	30.0	8.5
HE20 STBC, M0 to M9 2ss	4	5	16.8	16.0	17.3	17.3	22.9	30.0	7.1

Maximum Transmit Output Power, 5745 MHz, HE20 Beam Forming, M0 to M9 1ss



Antenna A

Antenna B



Antenna C

Antenna D

A.4 Power Spectral Density

15.407 / RSS-247 The power spectral density shall not exceed 30 dBm in any 500 kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Test Procedure

Ref. KDB 789033 D02 General UNII Test Procedures New Rules v01

Power Spectral Density Test Procedure
1. Connect the antenna port(s) to the spectrum analyzer input. 2. Set the radio in the continuous transmitting mode at full power 3. Configure Spectrum analyzer as per test parameters below and Peak search marker 4. Capture graphs and record pertinent measurement data.

Ref. KDB 789033 D02 v01 section F.5

Power Spectral Density Test parameters
Span = >1.5 times the OBW RBW = 500 kHz. VBW ≥ 3 x RBW Sweep = 10s Detector = Peak Trace = Single Sweep Marker = Peak Search

The “Measure and add 10 log(N) dB technique”, where N is the number of outputs, is used for measuring in-band Power Spectral Density. With this technique, spectrum measurements are performed at each output of the device, and the quantity 10 log(4) (or 6dB) is added to the worst case spectrum value before comparing to the emission limit. (ANSI C63.10 2013 section 14.3.2.3)

System Number	Description	Samples	System under test	Support equipment
1	EUT	S01	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Support	S02	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Tested By: Chris Blair	Date of testing: 25-Mar-19 - 29-Mar-19
Test Result: PASS	

See Appendix C for list of test equipment

Frequency (MHz)	Mode	Tx Paths	Correlated Antenna Gain (dBi)	Tx 1 PSD (dBm/500kHz)	Tx 2 PSD (dBm/500kHz)	Tx 3 PSD (dBm/500kHz)	Tx 4 PSD (dBm/500kHz)	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Margin (dB)	
5745	Non HT20, 6 to 54 Mbps	1	5	1.7				1.7	30.0	28.3	
	Non HT20, 6 to 54 Mbps	2	8	1.1	0.3			3.7	28.0	24.3	
	Non HT20, 6 to 54 Mbps	3	10	1.1	0.3	1.8		5.9	26.0	20.1	
	Non HT20, 6 to 54 Mbps	4	11	1.1	0.3	1.8	2.2	7.4	25.0	17.6	
	Non HT20 Beam Forming, 6 to 54 Mbps	2	8	1.1	0.3			3.7	28.0	24.3	
	Non HT20 Beam Forming, 6 to 54 Mbps	3	10	1.1	0.3	1.8		5.9	26.0	20.1	
	Non HT20 Beam Forming, 6 to 54 Mbps	4	11	1.1	0.3	1.8	2.2	7.4	25.0	17.6	
	HT/VHT20, M0 to M7	1	5	1.9					1.9	30.0	28.1
	HT/VHT20, M0 to M7	2	8	1.9	1.4				4.7	28.0	23.3
	HT/VHT20, M8 to M15	2	5	1.9	1.4				4.7	30.0	25.3
	HT/VHT20, M0 to M7	3	10	1.9	1.4	2.5			6.7	26.0	19.3
	HT/VHT20, M8 to M15	3	7	1.9	1.4	2.5			6.7	29.0	22.3
	HT/VHT20, M16 to M23	3	5	1.9	1.4	2.5			6.7	30.0	23.3
	HT/VHT20, M0 to M7	4	11	1.9	1.4	2.5	2.7		8.2	25.0	16.8
	HT/VHT20, M8 to M15	4	8	1.9	1.4	2.5	2.7		8.2	28.0	19.8
	HT/VHT20, M16 to M23	4	6	1.9	1.4	2.5	2.7		8.2	30.0	21.8
	HT/VHT20, M24 to M31	4	5	1.9	1.4	2.5	2.7		8.2	30.0	21.8
	HT/VHT20 Beam Forming, M0 to M7	2	8	1.9	1.4				4.7	28.0	23.3
	HT/VHT20 Beam Forming, M8 to M15	2	5	1.9	1.4				4.7	30.0	25.3
	HT/VHT20 Beam Forming, M0 to M7	3	10	1.9	1.4	2.5			6.7	26.0	19.3
	HT/VHT20 Beam Forming, M8 to M15	3	7	1.9	1.4	2.5			6.7	29.0	22.3
	HT/VHT20 Beam Forming, M16 to M23	3	5	1.9	1.4	2.5			6.7	30.0	23.3
	HT/VHT20 Beam Forming, M0 to M7	4	11	1.9	1.4	2.5	2.7		8.2	25.0	16.8
	HT/VHT20 Beam Forming, M8 to M15	4	8	1.9	1.4	2.5	2.7		8.2	28.0	19.8
	HT/VHT20 Beam Forming, M16 to M23	4	6	1.9	1.4	2.5	2.7		8.2	30.0	21.8
	HT/VHT20 Beam Forming, M24 to M31	4	5	1.9	1.4	2.5	2.7		8.2	30.0	21.8
	HT/VHT20 STBC, M0 to M7	2	5	1.9	1.4				4.7	30.0	25.3
	HT/VHT20 STBC, M0 to M7	3	7	1.9	1.4	2.5			6.7	29.0	22.3
	HT/VHT20 STBC, M0 to M7	4	8	1.9	1.4	2.5	2.7		8.2	28.0	19.8
	HE20, M0 to M9 1ss	1	5	2.2					2.2	30.0	27.8
	HE20, M0 to M9 1ss	2	8	2.2	1.6				4.9	28.0	23.1
	HE20, M0 to M9 2ss	2	5	2.2	1.6				4.9	30.0	25.1
HE20, M0 to M9 1ss	3	10	2.2	1.6	2.9			7.0	26.0	19.0	
HE20, M0 to M9 2ss	3	7	2.2	1.6	2.9			7.0	29.0	22.0	

	HE20, M0 to M9 3ss	3	5	2.2	1.6	2.9		7.0	30.0	23.0
	HE20, M0 to M9 1ss	4	11	2.2	1.6	2.9	2.9	8.5	25.0	16.5
	HE20, M0 to M9 2ss	4	8	2.2	1.6	2.9	2.9	8.5	28.0	19.5
	HE20, M0 to M9 3ss	4	6	2.2	1.6	2.9	2.9	8.5	30.0	21.5
	HE20, M0 to M9 4ss	4	5	2.2	1.6	2.9	2.9	8.5	30.0	21.5
	HE20 Beam Forming, M0 to M9 1ss	2	8	2.2	1.6			4.9	28.0	23.1
	HE20 Beam Forming, M0 to M9 2ss	2	5	2.2	1.6			4.9	30.0	25.1
	HE20 Beam Forming, M0 to M9 1ss	3	10	2.2	1.6	2.9		7.0	26.0	19.0
	HE20 Beam Forming, M0 to M9 2ss	3	7	2.2	1.6	2.9		7.0	29.0	22.0
	HE20 Beam Forming, M0 to M9 3ss	3	5	2.2	1.6	2.9		7.0	30.0	23.0
	HE20 Beam Forming, M0 to M9 1ss	4	11	2.2	1.6	2.9	2.9	8.5	25.0	16.5
	HE20 Beam Forming, M0 to M9 2ss	4	8	2.2	1.6	2.9	2.9	8.5	28.0	19.5
	HE20 Beam Forming, M0 to M9 3ss	4	6	2.2	1.6	2.9	2.9	8.5	30.0	21.5
	HE20 Beam Forming, M0 to M9 4ss	4	5	2.2	1.6	2.9	2.9	8.5	30.0	21.5
	HE20 STBC, M0 to M9 2ss	2	5	2.2	1.6			4.9	30.0	25.1
	HE20 STBC, M0 to M9 2ss	3	7	2.2	1.6	2.9		7.0	29.0	22.0
	HE20 STBC, M0 to M9 2ss	4	8	2.2	1.6	2.9	2.9	8.5	28.0	19.5
5755	Non HT40, 6 to 54 Mbps	1	5	-1.4				-1.4	30.0	31.4
	Non HT40, 6 to 54 Mbps	2	8	-1.4	-0.5			2.1	28.0	25.9
	Non HT40, 6 to 54 Mbps	3	10	-1.4	-0.5	-0.4		4.0	26.0	22.0
	Non HT40, 6 to 54 Mbps	4	11	-1.4	-0.5	-0.4	2.4	6.3	25.0	18.7
	HT/VHT40, M0 to M7	1	5	-1.6				-1.5	30.0	31.5
	HT/VHT40, M0 to M7	2	8	-1.6	-0.9			1.9	28.0	26.1
	HT/VHT40, M8 to M15	2	5	-1.6	-0.9			1.9	30.0	28.1
	HT/VHT40, M0 to M7	3	10	-1.6	-0.9	-0.7		3.8	26.0	22.2
	HT/VHT40, M8 to M15	3	7	-1.6	-0.9	-0.7		3.8	29.0	25.2
	HT/VHT40, M16 to M23	3	5	-1.6	-0.9	-0.7		3.8	30.0	26.2
	HT/VHT40, M0 to M7	4	11	-1.6	-0.9	-0.7	2.0	6.1	25.0	18.9
	HT/VHT40, M8 to M15	4	8	-1.6	-0.9	-0.7	2.0	6.1	28.0	21.9
	HT/VHT40, M16 to M23	4	6	-1.6	-0.9	-0.7	2.0	6.1	30.0	23.9
	HT/VHT40, M24 to M31	4	5	-1.6	-0.9	-0.7	2.0	6.1	30.0	23.9
	HT/VHT40 Beam Forming, M0 to M7	2	8	-1.6	-0.9			1.9	28.0	26.1
	HT/VHT40 Beam Forming, M8 to M15	2	5	-1.6	-0.9			1.9	30.0	28.1
	HT/VHT40 Beam Forming, M0 to M7	3	10	-1.6	-0.9	-0.7		3.8	26.0	22.2
	HT/VHT40 Beam Forming, M8 to M15	3	7	-1.6	-0.9	-0.7		3.8	29.0	25.2
	HT/VHT40 Beam Forming, M16 to M23	3	5	-1.6	-0.9	-0.7		3.8	30.0	26.2
	HT/VHT40 Beam Forming, M0 to M7	4	11	-1.6	-0.9	-0.7	2.0	6.1	25.0	18.9
	HT/VHT40 Beam Forming, M8 to M15	4	8	-1.6	-0.9	-0.7	2.0	6.1	28.0	21.9
	HT/VHT40 Beam Forming, M16 to M23	4	6	-1.6	-0.9	-0.7	2.0	6.1	30.0	23.9
	HT/VHT40 Beam Forming, M24 to M31	4	5	-1.6	-0.9	-0.7	2.0	6.1	30.0	23.9
HT/VHT40 STBC, M0 to M7	2	5	-1.6	-0.9			1.9	30.0	28.1	
HT/VHT40 STBC, M0 to M7	3	7	-1.6	-0.9	-0.7		3.8	29.0	25.2	

	HT/VHT40 STBC, M0 to M7	4	8	-1.6	-0.9	-0.7	2.0	6.1	28.0	21.9
	HE40, M0 to M9 1ss	1	5	-1.2				-1.1	30.0	31.1
	HE40, M0 to M9 1ss	2	8	-1.2	-0.7			2.2	28.0	25.8
	HE40, M0 to M9 2ss	2	5	-1.2	-0.7			2.2	30.0	27.8
	HE40, M0 to M9 1ss	3	10	-1.2	-0.7	-0.4		4.1	26.0	21.9
	HE40, M0 to M9 2ss	3	7	-1.2	-0.7	-0.4		4.1	29.0	24.9
	HE40, M0 to M9 3ss	3	5	-1.2	-0.7	-0.4		4.1	30.0	25.9
	HE40, M0 to M9 1ss	4	11	-1.2	-0.7	-0.4	2.9	6.6	25.0	18.4
	HE40, M0 to M9 2ss	4	8	-1.2	-0.7	-0.4	2.9	6.6	28.0	21.4
	HE40, M0 to M9 3ss	4	6	-1.2	-0.7	-0.4	2.9	6.6	30.0	23.4
	HE40, M0 to M9 4ss	4	5	-1.2	-0.7	-0.4	2.9	6.6	30.0	23.4
	HE40 Beam Forming, M0 to M9 1ss	2	8	-1.2	-0.7			2.2	28.0	25.8
	HE40 Beam Forming, M0 to M9 2ss	2	5	-1.2	-0.7			2.2	30.0	27.8
	HE40 Beam Forming, M0 to M9 1ss	3	10	-1.2	-0.7	-0.4		4.1	26.0	21.9
	HE40 Beam Forming, M0 to M9 2ss	3	7	-1.2	-0.7	-0.4		4.1	29.0	24.9
	HE40 Beam Forming, M0 to M9 3ss	3	5	-1.2	-0.7	-0.4		4.1	30.0	25.9
	HE40 Beam Forming, M0 to M9 1ss	4	11	-1.2	-0.7	-0.4	2.9	6.6	25.0	18.4
	HE40 Beam Forming, M0 to M9 2ss	4	8	-1.2	-0.7	-0.4	2.9	6.6	28.0	21.4
	HE40 Beam Forming, M0 to M9 3ss	4	6	-1.2	-0.7	-0.4	2.9	6.6	30.0	23.4
	HE40 Beam Forming, M0 to M9 4ss	4	5	-1.2	-0.7	-0.4	2.9	6.6	30.0	23.4
	HE40 STBC, M0 to M9 2ss	2	5	-1.2	-0.7			2.2	30.0	27.8
	HE40 STBC, M0 to M9 2ss	3	7	-1.2	-0.7	-0.4		4.1	29.0	24.9
	HE40 STBC, M0 to M9 2ss	4	8	-1.2	-0.7	-0.4	2.9	6.6	28.0	21.4
5775	Non HT80, 6 to 54 Mbps	1	5	-4.2				-4.2	30.0	34.2
	Non HT80, 6 to 54 Mbps	2	8	-4.2	-3.7			-0.9	28.0	28.9
	Non HT80, 6 to 54 Mbps	3	10	-4.2	-3.7	-3.0		1.2	26.0	24.8
	Non HT80, 6 to 54 Mbps	4	11	-4.2	-3.7	-3.0	0.6	3.9	25.0	21.1
	VHT80, M0 to M9 1ss	1	5	-4.9				-4.7	30.0	34.7
	VHT80, M0 to M9 1ss	2	8	-4.9	-4.2			-1.3	28.0	29.3
	VHT80, M0 to M9 2ss	2	5	-4.9	-4.2			-1.3	30.0	31.3
	VHT80, M0 to M9 1ss	3	10	-4.9	-4.2	-3.6		0.8	26.0	25.2
	VHT80, M0 to M9 2ss	3	7	-4.9	-4.2	-3.6		0.8	29.0	28.2
	VHT80, M0 to M9 3ss	3	5	-4.9	-4.2	-3.6		0.8	30.0	29.2
	VHT80, M0 to M9 1ss	4	11	-4.9	-4.2	-3.6	-0.4	3.3	25.0	21.7
	VHT80, M0 to M9 2ss	4	8	-4.9	-4.2	-3.6	-0.4	3.3	28.0	24.7
	VHT80, M0 to M9 3ss	4	6	-4.9	-4.2	-3.6	-0.4	3.3	30.0	26.7
	VHT80, M0 to M9 4ss	4	5	-4.9	-4.2	-3.6	-0.4	3.3	30.0	26.7
	VHT80 Beam Forming, M0 to M9 1ss	2	8	-4.9	-4.2			-1.3	28.0	29.3
	VHT80 Beam Forming, M0 to M9 2ss	2	5	-4.9	-4.2			-1.3	30.0	31.3
	VHT80 Beam Forming, M0 to M9 1ss	3	10	-4.9	-4.2	-3.6		0.8	26.0	25.2
	VHT80 Beam Forming, M0 to M9 2ss	3	7	-4.9	-4.2	-3.6		0.8	29.0	28.2
VHT80 Beam Forming, M0 to M9 3ss	3	5	-4.9	-4.2	-3.6		0.8	30.0	29.2	

	VHT80 Beam Forming, M0 to M9 1ss	4	11	-4.9	-4.2	-3.6	-0.4	3.3	25.0	21.7
	VHT80 Beam Forming, M0 to M9 2ss	4	8	-4.9	-4.2	-3.6	-0.4	3.3	28.0	24.7
	VHT80 Beam Forming, M0 to M9 3ss	4	6	-4.9	-4.2	-3.6	-0.4	3.3	30.0	26.7
	VHT80 Beam Forming, M0 to M9 4ss	4	5	-4.9	-4.2	-3.6	-0.4	3.3	30.0	26.7
	VHT80 STBC, M0 to M9 1ss	2	5	-4.9	-4.2			-1.3	30.0	31.3
	VHT80 STBC, M0 to M9 1ss	3	5	-4.9	-4.2	-3.6		0.8	30.0	29.2
	VHT80 STBC, M0 to M9 1ss	4	5	-4.9	-4.2	-3.6	-0.4	3.3	30.0	26.7
	HE80, M0 to M9 1ss	1	5	-4.7				-4.5	30.0	34.5
	HE80, M0 to M9 1ss	2	8	-4.7	-4.4			-1.3	28.0	29.3
	HE80, M0 to M9 2ss	2	5	-4.7	-4.4			-1.3	30.0	31.3
	HE80, M0 to M9 1ss	3	10	-4.7	-4.4	-3.3		0.9	26.0	25.1
	HE80, M0 to M9 2ss	3	7	-4.7	-4.4	-3.3		0.9	29.0	28.1
	HE80, M0 to M9 3ss	3	5	-4.7	-4.4	-3.3		0.9	30.0	29.1
	HE80, M0 to M9 1ss	4	11	-4.7	-4.4	-3.3	0.4	3.8	25.0	21.2
	HE80, M0 to M9 2ss	4	8	-4.7	-4.4	-3.3	0.4	3.8	28.0	24.2
	HE80, M0 to M9 3ss	4	6	-4.7	-4.4	-3.3	0.4	3.8	30.0	26.2
	HE80, M0 to M9 4ss	4	5	-4.7	-4.4	-3.3	0.4	3.8	30.0	26.2
	HE80 Beam Forming, M0 to M9 1ss	2	8	-4.7	-4.4			-1.3	28.0	29.3
	HE80 Beam Forming, M0 to M9 2ss	2	5	-4.7	-4.4			-1.3	30.0	31.3
	HE80 Beam Forming, M0 to M9 1ss	3	10	-4.7	-4.4	-3.3		0.9	26.0	25.1
	HE80 Beam Forming, M0 to M9 2ss	3	7	-4.7	-4.4	-3.3		0.9	29.0	28.1
	HE80 Beam Forming, M0 to M9 3ss	3	5	-4.7	-4.4	-3.3		0.9	30.0	29.1
	HE80 Beam Forming, M0 to M9 1ss	4	11	-4.7	-4.4	-3.3	0.4	3.8	25.0	21.2
	HE80 Beam Forming, M0 to M9 2ss	4	8	-4.7	-4.4	-3.3	0.4	3.8	28.0	24.2
	HE80 Beam Forming, M0 to M9 3ss	4	6	-4.7	-4.4	-3.3	0.4	3.8	30.0	26.2
	HE80 Beam Forming, M0 to M9 4ss	4	5	-4.7	-4.4	-3.3	0.4	3.8	30.0	26.2
	HE80 STBC, M0 to M9 1ss	2	5	-4.7	-4.4			-1.3	30.0	31.3
	HE80 STBC, M0 to M9 1ss	3	5	-4.7	-4.4	-3.3		0.9	30.0	29.1
	HE80 STBC, M0 to M9 1ss	4	5	-4.7	-4.4	-3.3	0.4	3.8	30.0	26.2
5785	Non HT20, 6 to 54 Mbps	1	5	2.3				2.3	30.0	27.7
	Non HT20, 6 to 54 Mbps	2	8	2.3	1.7			5.0	28.0	23.0
	Non HT20, 6 to 54 Mbps	3	10	2.3	1.7	2.9		7.1	26.0	18.9
	Non HT20, 6 to 54 Mbps	4	11	2.3	1.7	2.9	3.4	8.6	25.0	16.4
	Non HT20 Beam Forming, 6 to 54 Mbps	2	8	2.3	1.7			5.0	28.0	23.0
	Non HT20 Beam Forming, 6 to 54 Mbps	3	10	2.3	1.7	2.9		7.1	26.0	18.9
	Non HT20 Beam Forming, 6 to 54 Mbps	4	11	2.3	1.7	2.9	3.4	8.6	25.0	16.4
	HT/VHT20, M0 to M7	1	5	2.0				2.0	30.0	28.0
	HT/VHT20, M0 to M7	2	8	2.0	1.3			4.7	28.0	23.3
	HT/VHT20, M8 to M15	2	5	2.0	1.3			4.7	30.0	25.3
	HT/VHT20, M0 to M7	3	10	2.0	1.3	2.6		6.8	26.0	19.2
	HT/VHT20, M8 to M15	3	7	2.0	1.3	2.6		6.8	29.0	22.2
	HT/VHT20, M16 to M23	3	5	2.0	1.3	2.6		6.8	30.0	23.2

	HT/VHT20, M0 to M7	4	11	2.0	1.3	2.6	3.0	8.3	25.0	16.7
	HT/VHT20, M8 to M15	4	8	2.0	1.3	2.6	3.0	8.3	28.0	19.7
	HT/VHT20, M16 to M23	4	6	2.0	1.3	2.6	3.0	8.3	30.0	21.7
	HT/VHT20, M24 to M31	4	5	2.0	1.3	2.6	3.0	8.3	30.0	21.7
	HT/VHT20 Beam Forming, M0 to M7	2	8	2.0	1.3			4.7	28.0	23.3
	HT/VHT20 Beam Forming, M8 to M15	2	5	2.0	1.3			4.7	30.0	25.3
	HT/VHT20 Beam Forming, M0 to M7	3	10	2.0	1.3	2.6		6.8	26.0	19.2
	HT/VHT20 Beam Forming, M8 to M15	3	7	2.0	1.3	2.6		6.8	29.0	22.2
	HT/VHT20 Beam Forming, M16 to M23	3	5	2.0	1.3	2.6		6.8	30.0	23.2
	HT/VHT20 Beam Forming, M0 to M7	4	11	2.0	1.3	2.6	3.0	8.3	25.0	16.7
	HT/VHT20 Beam Forming, M8 to M15	4	8	2.0	1.3	2.6	3.0	8.3	28.0	19.7
	HT/VHT20 Beam Forming, M16 to M23	4	6	2.0	1.3	2.6	3.0	8.3	30.0	21.7
	HT/VHT20 Beam Forming, M24 to M31	4	5	2.0	1.3	2.6	3.0	8.3	30.0	21.7
	HT/VHT20 STBC, M0 to M7	2	5	2.0	1.3			4.7	30.0	25.3
	HT/VHT20 STBC, M0 to M7	3	7	2.0	1.3	2.6		6.8	29.0	22.2
	HT/VHT20 STBC, M0 to M7	4	8	2.0	1.3	2.6	3.0	8.3	28.0	19.7
	HE20, M0 to M9 1ss	1	5	2.0				2.0	30.0	28.0
	HE20, M0 to M9 1ss	2	8	2.0	1.4			4.7	28.0	23.3
	HE20, M0 to M9 2ss	2	5	2.0	1.4			4.7	30.0	25.3
	HE20, M0 to M9 1ss	3	10	2.0	1.4	2.8		6.9	26.0	19.1
	HE20, M0 to M9 2ss	3	7	2.0	1.4	2.8		6.9	29.0	22.1
	HE20, M0 to M9 3ss	3	5	2.0	1.4	2.8		6.9	30.0	23.1
	HE20, M0 to M9 1ss	4	11	2.0	1.4	2.8	3.6	8.6	25.0	16.4
	HE20, M0 to M9 2ss	4	8	2.0	1.4	2.8	3.6	8.6	28.0	19.4
	HE20, M0 to M9 3ss	4	6	2.0	1.4	2.8	3.6	8.6	30.0	21.4
	HE20, M0 to M9 4ss	4	5	2.0	1.4	2.8	3.6	8.6	30.0	21.4
	HE20 Beam Forming, M0 to M9 1ss	2	8	2.0	1.4			4.7	28.0	23.3
	HE20 Beam Forming, M0 to M9 2ss	2	5	2.0	1.4			4.7	30.0	25.3
	HE20 Beam Forming, M0 to M9 1ss	3	10	2.0	1.4	2.8		6.9	26.0	19.1
	HE20 Beam Forming, M0 to M9 2ss	3	7	2.0	1.4	2.8		6.9	29.0	22.1
	HE20 Beam Forming, M0 to M9 3ss	3	5	2.0	1.4	2.8		6.9	30.0	23.1
	HE20 Beam Forming, M0 to M9 1ss	4	11	2.0	1.4	2.8	3.6	8.6	25.0	16.4
	HE20 Beam Forming, M0 to M9 2ss	4	8	2.0	1.4	2.8	3.6	8.6	28.0	19.4
	HE20 Beam Forming, M0 to M9 3ss	4	6	2.0	1.4	2.8	3.6	8.6	30.0	21.4
	HE20 Beam Forming, M0 to M9 4ss	4	5	2.0	1.4	2.8	3.6	8.6	30.0	21.4
	HE20 STBC, M0 to M9 2ss	2	5	2.0	1.4			4.7	30.0	25.3
	HE20 STBC, M0 to M9 2ss	3	7	2.0	1.4	2.8		6.9	29.0	22.1
	HE20 STBC, M0 to M9 2ss	4	8	2.0	1.4	2.8	3.6	8.6	28.0	19.4
5795	Non HT40, 6 to 54 Mbps	1	5	-1.3				-1.3	30.0	31.3
	Non HT40, 6 to 54 Mbps	2	8	-1.3	-0.3			2.2	28.0	25.8
	Non HT40, 6 to 54 Mbps	3	10	-1.3	-0.3	-0.4		4.1	26.0	21.9
	Non HT40, 6 to 54 Mbps	4	11	-1.3	-0.3	-0.4	2.8	6.5	25.0	18.5

HT/VHT40, M0 to M7	1	5	-1.7					-1.6	30.0	31.6
HT/VHT40, M0 to M7	2	8	-1.7	-1.1				1.7	28.0	26.3
HT/VHT40, M8 to M15	2	5	-1.7	-1.1				1.7	30.0	28.3
HT/VHT40, M0 to M7	3	10	-1.7	-1.1	-0.7			3.7	26.0	22.3
HT/VHT40, M8 to M15	3	7	-1.7	-1.1	-0.7			3.7	29.0	25.3
HT/VHT40, M16 to M23	3	5	-1.7	-1.1	-0.7			3.7	30.0	26.3
HT/VHT40, M0 to M7	4	11	-1.7	-1.1	-0.7	2.3		6.1	25.0	18.9
HT/VHT40, M8 to M15	4	8	-1.7	-1.1	-0.7	2.3		6.1	28.0	21.9
HT/VHT40, M16 to M23	4	6	-1.7	-1.1	-0.7	2.3		6.1	30.0	23.9
HT/VHT40, M24 to M31	4	5	-1.7	-1.1	-0.7	2.3		6.1	30.0	23.9
HT/VHT40 Beam Forming, M0 to M7	2	8	-1.7	-1.1				1.7	28.0	26.3
HT/VHT40 Beam Forming, M8 to M15	2	5	-1.7	-1.1				1.7	30.0	28.3
HT/VHT40 Beam Forming, M0 to M7	3	10	-1.7	-1.1	-0.7			3.7	26.0	22.3
HT/VHT40 Beam Forming, M8 to M15	3	7	-1.7	-1.1	-0.7			3.7	29.0	25.3
HT/VHT40 Beam Forming, M16 to M23	3	5	-1.7	-1.1	-0.7			3.7	30.0	26.3
HT/VHT40 Beam Forming, M0 to M7	4	11	-1.7	-1.1	-0.7	2.3		6.1	25.0	18.9
HT/VHT40 Beam Forming, M8 to M15	4	8	-1.7	-1.1	-0.7	2.3		6.1	28.0	21.9
HT/VHT40 Beam Forming, M16 to M23	4	6	-1.7	-1.1	-0.7	2.3		6.1	30.0	23.9
HT/VHT40 Beam Forming, M24 to M31	4	5	-1.7	-1.1	-0.7	2.3		6.1	30.0	23.9
HT/VHT40 STBC, M0 to M7	2	5	-1.7	-1.1				1.7	30.0	28.3
HT/VHT40 STBC, M0 to M7	3	7	-1.7	-1.1	-0.7			3.7	29.0	25.3
HT/VHT40 STBC, M0 to M7	4	8	-1.7	-1.1	-0.7	2.3		6.1	28.0	21.9
HE40, M0 to M9 1ss	1	5	-1.0					-0.9	30.0	30.9
HE40, M0 to M9 1ss	2	8	-1.0	-0.6				2.3	28.0	25.7
HE40, M0 to M9 2ss	2	5	-1.0	-0.6				2.3	30.0	27.7
HE40, M0 to M9 1ss	3	10	-1.0	-0.6	-0.6			4.2	26.0	21.8
HE40, M0 to M9 2ss	3	7	-1.0	-0.6	-0.6			4.2	29.0	24.8
HE40, M0 to M9 3ss	3	5	-1.0	-0.6	-0.6			4.2	30.0	25.8
HE40, M0 to M9 1ss	4	11	-1.0	-0.6	-0.6	2.7		6.6	25.0	18.4
HE40, M0 to M9 2ss	4	8	-1.0	-0.6	-0.6	2.7		6.6	28.0	21.4
HE40, M0 to M9 3ss	4	6	-1.0	-0.6	-0.6	2.7		6.6	30.0	23.4
HE40, M0 to M9 4ss	4	5	-1.0	-0.6	-0.6	2.7		6.6	30.0	23.4
HE40 Beam Forming, M0 to M9 1ss	2	8	-1.0	-0.6				2.3	28.0	25.7
HE40 Beam Forming, M0 to M9 2ss	2	5	-1.0	-0.6				2.3	30.0	27.7
HE40 Beam Forming, M0 to M9 1ss	3	10	-1.0	-0.6	-0.6			4.2	26.0	21.8
HE40 Beam Forming, M0 to M9 2ss	3	7	-1.0	-0.6	-0.6			4.2	29.0	24.8
HE40 Beam Forming, M0 to M9 3ss	3	5	-1.0	-0.6	-0.6			4.2	30.0	25.8
HE40 Beam Forming, M0 to M9 1ss	4	11	-1.0	-0.6	-0.6	2.7		6.6	25.0	18.4
HE40 Beam Forming, M0 to M9 2ss	4	8	-1.0	-0.6	-0.6	2.7		6.6	28.0	21.4
HE40 Beam Forming, M0 to M9 3ss	4	6	-1.0	-0.6	-0.6	2.7		6.6	30.0	23.4
HE40 Beam Forming, M0 to M9 4ss	4	5	-1.0	-0.6	-0.6	2.7		6.6	30.0	23.4
HE40 STBC, M0 to M9 2ss	2	5	-1.0	-0.6				2.3	30.0	27.7
HE40 STBC, M0 to M9 2ss	3	7	-1.0	-0.6	-0.6			4.2	29.0	24.8

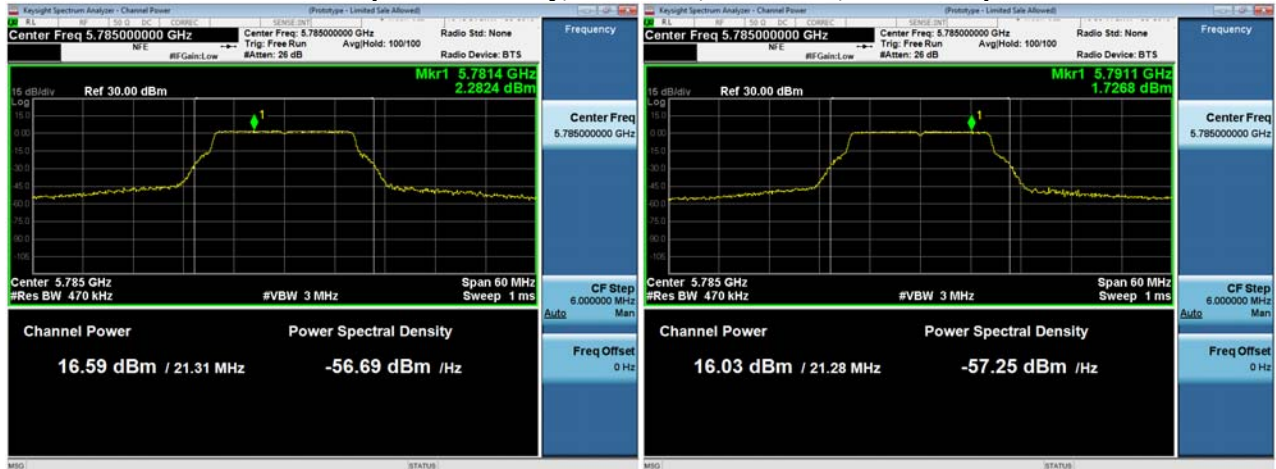
	HE40 STBC, M0 to M9 2ss	4	8	-1.0	-0.6	-0.6	2.7	6.6	28.0	21.4
5825	Non HT20, 6 to 54 Mbps	1	5	1.9				1.9	30.0	28.1
	Non HT20, 6 to 54 Mbps	2	8	1.9	1.5			4.7	28.0	23.3
	Non HT20, 6 to 54 Mbps	3	10	1.9	1.5	2.9		6.9	26.0	19.1
	Non HT20, 6 to 54 Mbps	4	11	1.9	1.5	2.9	3.3	8.5	25.0	16.5
	Non HT20 Beam Forming, 6 to 54 Mbps	2	8	1.9	1.5			4.7	28.0	23.3
	Non HT20 Beam Forming, 6 to 54 Mbps	3	10	1.9	1.5	2.9		6.9	26.0	19.1
	Non HT20 Beam Forming, 6 to 54 Mbps	4	11	1.9	1.5	2.9	3.3	8.5	25.0	16.5
	HT/VHT20, M0 to M7	1	5	2.1				2.1	30.0	27.9
	HT/VHT20, M0 to M7	2	8	2.1	1.4			4.8	28.0	23.2
	HT/VHT20, M8 to M15	2	5	2.1	1.4			4.8	30.0	25.2
	HT/VHT20, M0 to M7	3	10	2.1	1.4	2.3		6.7	26.0	19.3
	HT/VHT20, M8 to M15	3	7	2.1	1.4	2.3		6.7	29.0	22.3
	HT/VHT20, M16 to M23	3	5	2.1	1.4	2.3		6.7	30.0	23.3
	HT/VHT20, M0 to M7	4	11	2.1	1.4	2.3	3.2	8.3	25.0	16.7
	HT/VHT20, M8 to M15	4	8	2.1	1.4	2.3	3.2	8.3	28.0	19.7
	HT/VHT20, M16 to M23	4	6	2.1	1.4	2.3	3.2	8.3	30.0	21.7
	HT/VHT20, M24 to M31	4	5	2.1	1.4	2.3	3.2	8.3	30.0	21.7
	HT/VHT20 Beam Forming, M0 to M7	2	8	2.1	1.4			4.8	28.0	23.2
	HT/VHT20 Beam Forming, M8 to M15	2	5	2.1	1.4			4.8	30.0	25.2
	HT/VHT20 Beam Forming, M0 to M7	3	10	2.1	1.4	2.3		6.7	26.0	19.3
	HT/VHT20 Beam Forming, M8 to M15	3	7	2.1	1.4	2.3		6.7	29.0	22.3
	HT/VHT20 Beam Forming, M16 to M23	3	5	2.1	1.4	2.3		6.7	30.0	23.3
	HT/VHT20 Beam Forming, M0 to M7	4	11	2.1	1.4	2.3	3.2	8.3	25.0	16.7
	HT/VHT20 Beam Forming, M8 to M15	4	8	2.1	1.4	2.3	3.2	8.3	28.0	19.7
	HT/VHT20 Beam Forming, M16 to M23	4	6	2.1	1.4	2.3	3.2	8.3	30.0	21.7
	HT/VHT20 Beam Forming, M24 to M31	4	5	2.1	1.4	2.3	3.2	8.3	30.0	21.7
	HT/VHT20 STBC, M0 to M7	2	5	2.1	1.4			4.8	30.0	25.2
	HT/VHT20 STBC, M0 to M7	3	7	2.1	1.4	2.3		6.7	29.0	22.3
	HT/VHT20 STBC, M0 to M7	4	8	2.1	1.4	2.3	3.2	8.3	28.0	19.7
	HE20, M0 to M9 1ss	1	5	2.4				2.4	30.0	27.6
	HE20, M0 to M9 1ss	2	8	2.4	1.2			4.9	28.0	23.1
	HE20, M0 to M9 2ss	2	5	2.4	1.2			4.9	30.0	25.1
	HE20, M0 to M9 1ss	3	10	2.4	1.2	2.5		6.8	26.0	19.2
	HE20, M0 to M9 2ss	3	7	2.4	1.2	2.5		6.8	29.0	22.2
HE20, M0 to M9 3ss	3	5	2.4	1.2	2.5		6.8	30.0	23.2	
HE20, M0 to M9 1ss	4	11	2.4	1.2	2.5	2.9	8.3	25.0	16.7	
HE20, M0 to M9 2ss	4	8	2.4	1.2	2.5	2.9	8.3	28.0	19.7	
HE20, M0 to M9 3ss	4	6	2.4	1.2	2.5	2.9	8.3	30.0	21.7	
HE20, M0 to M9 4ss	4	5	2.4	1.2	2.5	2.9	8.3	30.0	21.7	
HE20 Beam Forming, M0 to M9 1ss	2	8	2.4	1.2			4.9	28.0	23.1	
HE20 Beam Forming, M0 to M9 2ss	2	5	2.4	1.2			4.9	30.0	25.1	



HE20 Beam Forming, M0 to M9 1ss	3	10	2.4	1.2	2.5		6.8	26.0	19.2
HE20 Beam Forming, M0 to M9 2ss	3	7	2.4	1.2	2.5		6.8	29.0	22.2
HE20 Beam Forming, M0 to M9 3ss	3	5	2.4	1.2	2.5		6.8	30.0	23.2
HE20 Beam Forming, M0 to M9 1ss	4	11	2.4	1.2	2.5	2.9	8.3	25.0	16.7
HE20 Beam Forming, M0 to M9 2ss	4	8	2.4	1.2	2.5	2.9	8.3	28.0	19.7
HE20 Beam Forming, M0 to M9 3ss	4	6	2.4	1.2	2.5	2.9	8.3	30.0	21.7
HE20 Beam Forming, M0 to M9 4ss	4	5	2.4	1.2	2.5	2.9	8.3	30.0	21.7
HE20 STBC, M0 to M9 2ss	2	5	2.4	1.2			4.9	30.0	25.1
HE20 STBC, M0 to M9 2ss	3	7	2.4	1.2	2.5		6.8	29.0	22.2
HE20 STBC, M0 to M9 2ss	4	8	2.4	1.2	2.5	2.9	8.3	28.0	19.7

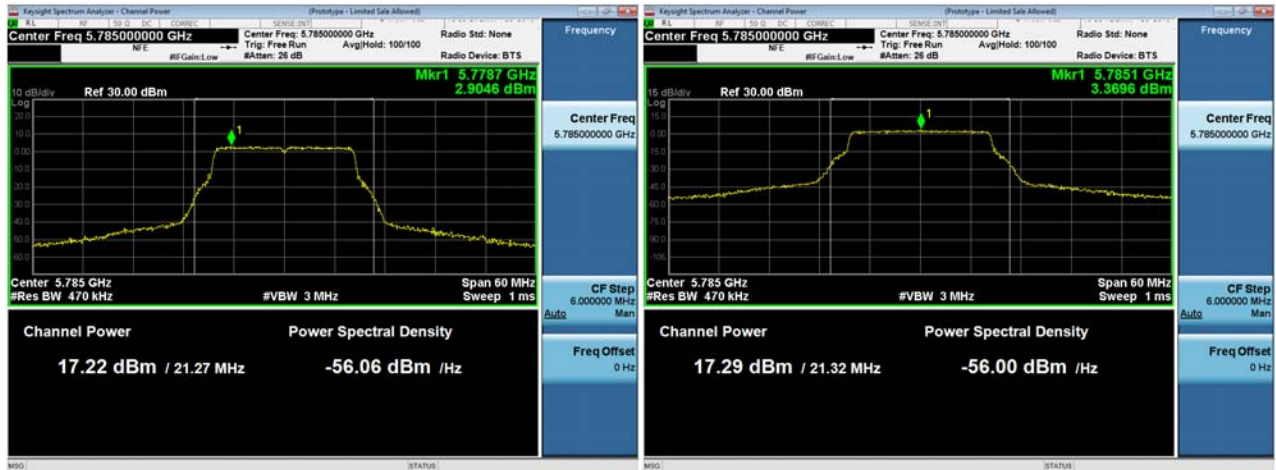


Power Spectral Density, 5785 MHz, Non HT20, 6 to 54 Mbps



Antenna A

Antenna B



Antenna C

Antenna D

A.5 Conducted Spurious Emissions

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)).

RSS-Gen 8.9: Except when the requirements applicable to a given device state otherwise, emissions from licence-exempt transmitters shall comply with the field strength limits shown in Table 4 and Table 5 below. Additionally, the level of any transmitter emission shall not exceed the level of the transmitter's fundamental emission.

RSS-Gen 8.10 (b) Unwanted emissions that fall into restricted bands of Table 6 shall comply with the limits specified in RSS-Gen; and **(c)** Unwanted emissions that do not fall within the restricted frequency bands of Table 6 shall comply either with the limits specified in the applicable RSS or with those specified in this RSS-Gen.

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

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

- 1) Average Plot, Limit= -41.25 dBm eirp
- 2) Peak plot, Limit = -21.25 dBm eirp

Test Procedure

Ref. KDB 789033 D02 General UNII Test Procedures New Rules v02r01
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 v02r01 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. Capture graphs and record pertinent measurement data.

Ref. KDB 789033 D02 General UNII Test Procedures New Rules v02r01
ANSI C63.10: 2013 section 12.7.7.3 (average) & 12.7.6 (peak)

Conducted Spurious Emissions

Test parameters

Span = 30MHz to 18GHz / 18GHz to 40GHz
RBW = 1 MHz
VBW ≥ 3 x RBW for Peak, 1kHz for Average
Sweep = Auto couple
Detector = Peak
Trace = Max Hold.



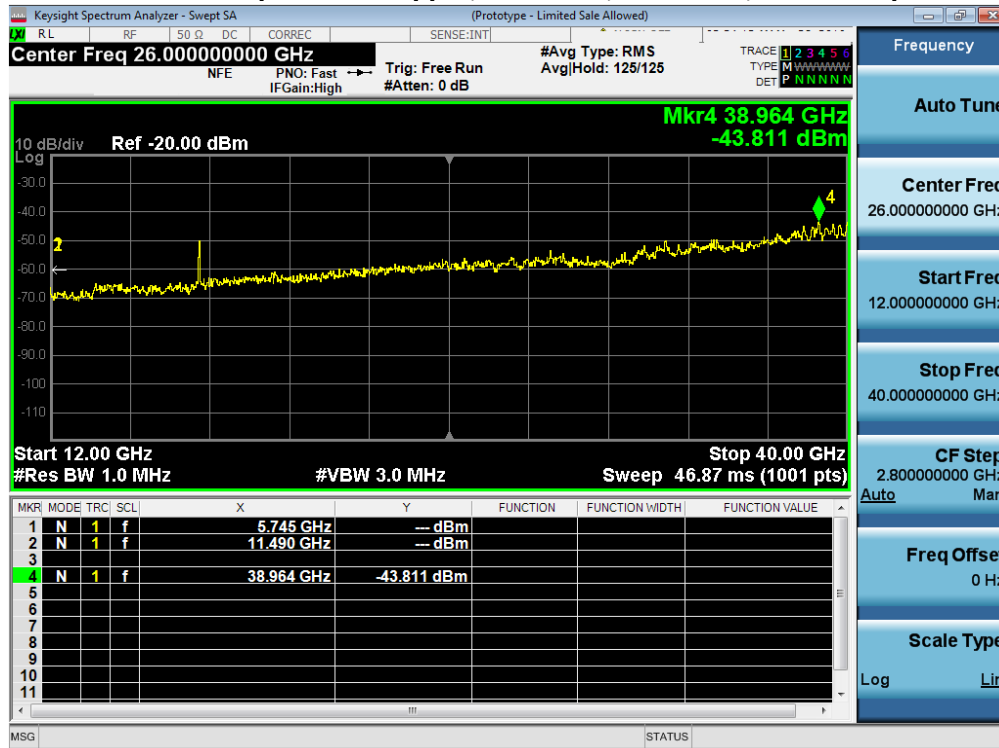
System Number	Description	Samples	System under test	Support equipment
1	EUT – lower band	S01	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Support	S02	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	EUT – upper band	S05	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Support	S04	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Tested By: Chris Blair	Date of testing: 25-Mar-19 - 29-Mar-19 03-May-19 (upper band)
Test Result: PASS	

See Appendix C for list of test equipment



Conducted Spurs Peak Upper, 5745 MHz, Non HT20, 6 to 54 Mbps



Conducted Spurs Average Upper, 5745 MHz, Non HT20, 6 to 54 Mbps



Frequency (MHz)	Mode	Tx Paths	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 (dBm)	Margin (dB)
5745	Non HT20, 6 to 54 Mbps	1	5	-60.9				-55.9	-41.25	14.7
	Non HT20, 6 to 54 Mbps	2	5	-61.3	-63.0			-54.1	-41.25	12.8
	Non HT20, 6 to 54 Mbps	3	5	-61.3	-63.0	-60.9		-51.9	-41.25	10.6
	Non HT20, 6 to 54 Mbps	4	5	-61.3	-63.0	-60.9	-61.3	-50.5	-41.25	9.3
	Non HT20 Beam Forming, 6 to 54 Mbps	2	8	-61.3	-63.0			-51.1	-41.25	9.8
	Non HT20 Beam Forming, 6 to 54 Mbps	3	10	-61.3	-63.0	-60.9		-46.9	-41.25	5.6
	Non HT20 Beam Forming, 6 to 54 Mbps	4	11	-61.3	-63.0	-60.9	-61.3	-44.5	-41.25	3.3
	HT/VHT20, M0 to M7	1	5	-60.8				-55.8	-41.25	14.6
	HT/VHT20, M0 to M7	2	5	-60.8	-62.5			-53.6	-41.25	12.3
	HT/VHT20, M8 to M15	2	5	-60.8	-62.5			-53.6	-41.25	12.3
	HT/VHT20, M0 to M7	3	5	-60.8	-62.5	-60.4		-51.4	-41.25	10.1
	HT/VHT20, M8 to M15	3	5	-60.8	-62.5	-60.4		-51.4	-41.25	10.1
	HT/VHT20, M16 to M23	3	5	-60.8	-62.5	-60.4		-51.4	-41.25	10.1
	HT/VHT20, M0 to M7	4	5	-60.8	-62.5	-60.4	-60.7	-50.0	-41.25	8.8
	HT/VHT20, M8 to M15	4	5	-60.8	-62.5	-60.4	-60.7	-50.0	-41.25	8.8
	HT/VHT20, M16 to M23	4	5	-60.8	-62.5	-60.4	-60.7	-50.0	-41.25	8.8
	HT/VHT20, M24 to M31	4	5	-60.8	-62.5	-60.4	-60.7	-50.0	-41.25	8.8
	HT/VHT20 Beam Forming, M0 to M7	2	8	-60.8	-62.5			-50.6	-41.25	9.3
	HT/VHT20 Beam Forming, M8 to M15	2	5	-60.8	-62.5			-53.6	-41.25	12.3
	HT/VHT20 Beam Forming, M0 to M7	3	10	-60.8	-62.5	-60.4		-46.4	-41.25	5.1
	HT/VHT20 Beam Forming, M8 to M15	3	7	-60.8	-62.5	-60.4		-49.4	-41.25	8.1
	HT/VHT20 Beam Forming, M16 to M23	3	5	-60.8	-62.5	-60.4		-51.4	-41.25	10.1
	HT/VHT20 Beam Forming, M0 to M7	4	11	-60.8	-62.5	-60.4	-60.7	-44.0	-41.25	2.8
	HT/VHT20 Beam Forming, M8 to M15	4	8	-60.8	-62.5	-60.4	-60.7	-47.0	-41.25	5.8
	HT/VHT20 Beam Forming, M16 to M23	4	6	-60.8	-62.5	-60.4	-60.7	-49.0	-41.25	7.8
	HT/VHT20 Beam Forming, M24 to M31	4	5	-60.8	-62.5	-60.4	-60.7	-50.0	-41.25	8.8
	HT/VHT20 STBC, M0 to M7	2	5	-60.8	-62.5			-53.6	-41.25	12.3
	HT/VHT20 STBC, M0 to M7	3	5	-60.8	-62.5	-60.4		-51.4	-41.25	10.1
	HT/VHT20 STBC, M0 to M7	4	5	-60.8	-62.5	-60.4	-60.7	-50.0	-41.25	8.8
	HE20, M0 to M9 1ss	1	5	-60.8				-55.8	-41.25	14.6
	HE20, M0 to M9 1ss	2	5	-60.8	-62.4			-53.5	-41.25	12.3
	HE20, M0 to M9 2ss	2	5	-60.8	-62.4			-53.5	-41.25	12.3
	HE20, M0 to M9 1ss	3	5	-60.8	-62.4	-60.4		-51.3	-41.25	10.1

	HE20, M0 to M9 2ss	3	5	-60.8	-62.4	-60.4		-51.3	-41.25	10.1
	HE20, M0 to M9 3ss	3	5	-60.8	-62.4	-60.4		-51.3	-41.25	10.1
	HE20, M0 to M9 1ss	4	5	-60.8	-62.4	-60.4	-60.4	-49.9	-41.25	8.7
	HE20, M0 to M9 2ss	4	5	-60.8	-62.4	-60.4	-60.4	-49.9	-41.25	8.7
	HE20, M0 to M9 3ss	4	5	-60.8	-62.4	-60.4	-60.4	-49.9	-41.25	8.7
	HE20, M0 to M9 4ss	4	5	-60.8	-62.4	-60.4	-60.4	-49.9	-41.25	8.7
	HE20 Beam Forming, M0 to M9 1ss	2	8	-60.8	-62.4			-50.5	-41.25	9.3
	HE20 Beam Forming, M0 to M9 2ss	2	5	-60.8	-62.4			-53.5	-41.25	12.3
	HE20 Beam Forming, M0 to M9 1ss	3	10	-60.8	-62.4	-60.4		-46.3	-41.25	5.1
	HE20 Beam Forming, M0 to M9 2ss	3	7	-60.8	-62.4	-60.4		-49.3	-41.25	8.1
	HE20 Beam Forming, M0 to M9 3ss	3	5	-60.8	-62.4	-60.4		-51.3	-41.25	10.1
	HE20 Beam Forming, M0 to M9 1ss	4	11	-60.8	-62.4	-60.4	-60.4	-43.9	-41.25	2.7
	HE20 Beam Forming, M0 to M9 2ss	4	8	-60.8	-62.4	-60.4	-60.4	-46.9	-41.25	5.7
	HE20 Beam Forming, M0 to M9 3ss	4	6	-60.8	-62.4	-60.4	-60.4	-48.9	-41.25	7.7
	HE20 Beam Forming, M0 to M9 4ss	4	5	-60.8	-62.4	-60.4	-60.4	-49.9	-41.25	8.7
	HE20 STBC, M0 to M9 2ss	2	5	-60.8	-62.4			-53.5	-41.25	12.3
	HE20 STBC, M0 to M9 2ss	3	5	-60.8	-62.4	-60.4		-51.3	-41.25	10.1
	HE20 STBC, M0 to M9 2ss	4	5	-60.8	-62.4	-60.4	-60.4	-49.9	-41.25	8.7
5755	Non HT40, 6 to 54 Mbps	1	5	-60.6				-55.6	-41.25	14.4
	Non HT40, 6 to 54 Mbps	2	5	-60.6	-60.9			-52.7	-41.25	11.5
	Non HT40, 6 to 54 Mbps	3	5	-60.6	-60.9	-59.8		-50.6	-41.25	9.4
	Non HT40, 6 to 54 Mbps	4	5	-60.6	-60.9	-59.8	-60.2	-49.3	-41.25	8.1
	HT/VHT40, M0 to M7	1	5	-60.8				-55.7	-41.25	14.5
	HT/VHT40, M0 to M7	2	5	-60.8	-61.0			-52.8	-41.25	11.5
	HT/VHT40, M8 to M15	2	5	-60.8	-61.0			-52.8	-41.25	11.5
	HT/VHT40, M0 to M7	3	5	-60.8	-61.0	-60.0		-50.7	-41.25	9.5
	HT/VHT40, M8 to M15	3	5	-60.8	-61.0	-60.0		-50.7	-41.25	9.5
	HT/VHT40, M16 to M23	3	5	-60.8	-61.0	-60.0		-50.7	-41.25	9.5
	HT/VHT40, M0 to M7	4	5	-60.8	-61.0	-60.0	-60.5	-49.4	-41.25	8.2
	HT/VHT40, M8 to M15	4	5	-60.8	-61.0	-60.0	-60.5	-49.4	-41.25	8.2
	HT/VHT40, M16 to M23	4	5	-60.8	-61.0	-60.0	-60.5	-49.4	-41.25	8.2
	HT/VHT40, M24 to M31	4	5	-60.8	-61.0	-60.0	-60.5	-49.4	-41.25	8.2
	HT/VHT40 Beam Forming, M0 to M7	2	8	-60.8	-61.0			-49.8	-41.25	8.5
	HT/VHT40 Beam Forming, M8 to M15	2	5	-60.8	-61.0			-52.8	-41.25	11.5
	HT/VHT40 Beam Forming, M0 to M7	3	10	-60.8	-61.0	-60.0		-45.7	-41.25	4.5
	HT/VHT40 Beam Forming, M8 to M15	3	7	-60.8	-61.0	-60.0		-48.7	-41.25	7.5
	HT/VHT40 Beam Forming, M16 to M23	3	5	-60.8	-61.0	-60.0		-50.7	-41.25	9.5
	HT/VHT40 Beam Forming, M0 to M7	4	11	-60.8	-61.0	-60.0	-60.5	-43.4	-41.25	2.2
	HT/VHT40 Beam Forming, M8 to M15	4	8	-60.8	-61.0	-60.0	-60.5	-46.4	-41.25	5.2
	HT/VHT40 Beam Forming, M16 to M23	4	6	-60.8	-61.0	-60.0	-60.5	-48.4	-41.25	7.2
	HT/VHT40 Beam Forming, M24 to M31	4	5	-60.8	-61.0	-60.0	-60.5	-49.4	-41.25	8.2
HT/VHT40 STBC, M0 to M7	2	5	-60.8	-61.0			-52.8	-41.25	11.5	

	HT/VHT40 STBC, M0 to M7	3	5	-60.8	-61.0	-60.0		-50.7	-41.25	9.5	
	HT/VHT40 STBC, M0 to M7	4	5	-60.8	-61.0	-60.0	-60.5	-49.4	-41.25	8.2	
	HE40, M0 to M9 1ss	1	5	-60.4				-55.3	-41.25	14.0	
	HE40, M0 to M9 1ss	2	5	-60.4	-61.1			-52.6	-41.25	11.3	
	HE40, M0 to M9 2ss	2	5	-60.4	-61.1			-52.6	-41.25	11.3	
	HE40, M0 to M9 1ss	3	5	-60.4	-61.1	-59.7		-50.5	-41.25	9.2	
	HE40, M0 to M9 2ss	3	5	-60.4	-61.1	-59.7		-50.5	-41.25	9.2	
	HE40, M0 to M9 3ss	3	5	-60.4	-61.1	-59.7		-50.5	-41.25	9.2	
	HE40, M0 to M9 1ss	4	5	-60.4	-61.1	-59.7	-60.2	-49.2	-41.25	7.9	
	HE40, M0 to M9 2ss	4	5	-60.4	-61.1	-59.7	-60.2	-49.2	-41.25	7.9	
	HE40, M0 to M9 3ss	4	5	-60.4	-61.1	-59.7	-60.2	-49.2	-41.25	7.9	
	HE40, M0 to M9 4ss	4	5	-60.4	-61.1	-59.7	-60.2	-49.2	-41.25	7.9	
	HE40 Beam Forming, M0 to M9 1ss	2	8	-60.4	-61.1			-49.6	-41.25	8.3	
	HE40 Beam Forming, M0 to M9 2ss	2	5	-60.4	-61.1			-52.6	-41.25	11.3	
	HE40 Beam Forming, M0 to M9 1ss	3	10	-60.4	-61.1	-59.7		-45.5	-41.25	4.2	
	HE40 Beam Forming, M0 to M9 2ss	3	7	-60.4	-61.1	-59.7		-48.5	-41.25	7.2	
	HE40 Beam Forming, M0 to M9 3ss	3	5	-60.4	-61.1	-59.7		-50.5	-41.25	9.2	
	HE40 Beam Forming, M0 to M9 1ss	4	11	-60.4	-61.1	-59.7	-60.2	-43.2	-41.25	1.9	
	HE40 Beam Forming, M0 to M9 2ss	4	8	-60.4	-61.1	-59.7	-60.2	-46.2	-41.25	4.9	
	HE40 Beam Forming, M0 to M9 3ss	4	6	-60.4	-61.1	-59.7	-60.2	-48.2	-41.25	6.9	
	HE40 Beam Forming, M0 to M9 4ss	4	5	-60.4	-61.1	-59.7	-60.2	-49.2	-41.25	7.9	
	HE40 STBC, M0 to M9 2ss	2	5	-60.4	-61.1			-52.6	-41.25	11.3	
	HE40 STBC, M0 to M9 2ss	3	5	-60.4	-61.1	-59.7		-50.5	-41.25	9.2	
	HE40 STBC, M0 to M9 2ss	4	5	-60.4	-61.1	-59.7	-60.2	-49.2	-41.25	7.9	
5775	Non HT80, 6 to 54 Mbps	1	5	-59.1				-54.1	-41.25	12.9	
	Non HT80, 6 to 54 Mbps	2	5	-59.1	-59.6			-51.3	-41.25	10.1	
	Non HT80, 6 to 54 Mbps	3	5	-59.1	-59.6	-57.9		-49.0	-41.25	7.8	
	Non HT80, 6 to 54 Mbps	4	5	-59.1	-59.6	-57.9	-59.5	-47.9	-41.25	6.7	
	VHT80, M0 to M9 1ss	1	5	-59.8				-54.6	-41.25	13.3	
	VHT80, M0 to M9 1ss	2	5	-59.8	-60.0			-51.7	-41.25	10.4	
	VHT80, M0 to M9 2ss	2	5	-59.8	-60.0			-51.7	-41.25	10.4	
	VHT80, M0 to M9 1ss	3	5	-59.8	-60.0	-58.7		-49.5	-41.25	8.2	
	VHT80, M0 to M9 2ss	3	5	-59.8	-60.0	-58.7		-49.5	-41.25	8.2	
	VHT80, M0 to M9 3ss	3	5	-59.8	-60.0	-58.7		-49.5	-41.25	8.2	
	VHT80, M0 to M9 1ss	4	5	-59.8	-60.0	-58.7	-60.1	-48.4	-41.25	7.1	
	VHT80, M0 to M9 2ss	4	5	-59.8	-60.0	-58.7	-60.1	-48.4	-41.25	7.1	
	VHT80, M0 to M9 3ss	4	5	-59.8	-60.0	-58.7	-60.1	-48.4	-41.25	7.1	
	VHT80, M0 to M9 4ss	4	5	-59.8	-60.0	-58.7	-60.1	-48.4	-41.25	7.1	
	VHT80 Beam Forming, M0 to M9 1ss	2	8	-59.8	-60.0			-48.7	-41.25	7.4	
	VHT80 Beam Forming, M0 to M9 2ss	2	5	-59.8	-60.0			-51.7	-41.25	10.4	
	VHT80 Beam Forming, M0 to M9 1ss	3	10	-59.8	-60.0	-58.7		-44.5	-41.25	3.2	
VHT80 Beam Forming, M0 to M9 2ss	3	7	-59.8	-60.0	-58.7		-47.5	-41.25	6.2		

	VHT80 Beam Forming, M0 to M9 3ss	3	5	-59.8	-60.0	-58.7		-49.5	-41.25	8.2
	VHT80 Beam Forming, M0 to M9 1ss	4	11	-59.8	-60.0	-58.7	-60.1	-42.4	-41.25	1.1
	VHT80 Beam Forming, M0 to M9 2ss	4	8	-59.8	-60.0	-58.7	-60.1	-45.4	-41.25	4.1
	VHT80 Beam Forming, M0 to M9 3ss	4	6	-59.8	-60.0	-58.7	-60.1	-47.4	-41.25	6.1
	VHT80 Beam Forming, M0 to M9 4ss	4	5	-59.8	-60.0	-58.7	-60.1	-48.4	-41.25	7.1
	VHT80 STBC, M0 to M9 1ss	2	5	-59.8	-60.0			-51.7	-41.25	10.4
	VHT80 STBC, M0 to M9 1ss	3	5	-59.8	-60.0	-58.7		-49.5	-41.25	8.2
	VHT80 STBC, M0 to M9 1ss	4	5	-59.8	-60.0	-58.7	-60.1	-48.4	-41.25	7.1
	HE80, M0 to M9 1ss	1	5	-60.0				-54.8	-41.25	13.5
	HE80, M0 to M9 1ss	2	5	-60.0	-59.9			-51.7	-41.25	10.4
	HE80, M0 to M9 2ss	2	5	-60.0	-59.9			-51.7	-41.25	10.4
	HE80, M0 to M9 1ss	3	5	-60.0	-59.9	-58.8		-49.5	-41.25	8.3
	HE80, M0 to M9 2ss	3	5	-60.0	-59.9	-58.8		-49.5	-41.25	8.3
	HE80, M0 to M9 3ss	3	5	-60.0	-59.9	-58.8		-49.5	-41.25	8.3
	HE80, M0 to M9 1ss	4	5	-60.0	-59.9	-58.8	-60.0	-48.4	-41.25	7.1
	HE80, M0 to M9 2ss	4	5	-60.0	-59.9	-58.8	-60.0	-48.4	-41.25	7.1
	HE80, M0 to M9 3ss	4	5	-60.0	-59.9	-58.8	-60.0	-48.4	-41.25	7.1
	HE80, M0 to M9 4ss	4	5	-60.0	-59.9	-58.8	-60.0	-48.4	-41.25	7.1
	HE80 Beam Forming, M0 to M9 1ss	2	8	-60.0	-59.9			-48.7	-41.25	7.4
	HE80 Beam Forming, M0 to M9 2ss	2	5	-60.0	-59.9			-51.7	-41.25	10.4
	HE80 Beam Forming, M0 to M9 1ss	3	10	-60.0	-59.9	-58.8		-44.5	-41.25	3.3
	HE80 Beam Forming, M0 to M9 2ss	3	7	-60.0	-59.9	-58.8		-47.5	-41.25	6.3
	HE80 Beam Forming, M0 to M9 3ss	3	5	-60.0	-59.9	-58.8		-49.5	-41.25	8.3
	HE80 Beam Forming, M0 to M9 1ss	4	11	-60.0	-59.9	-58.8	-60.0	-42.4	-41.25	1.1
	HE80 Beam Forming, M0 to M9 2ss	4	8	-60.0	-59.9	-58.8	-60.0	-45.4	-41.25	4.1
	HE80 Beam Forming, M0 to M9 3ss	4	6	-60.0	-59.9	-58.8	-60.0	-47.4	-41.25	6.1
	HE80 Beam Forming, M0 to M9 4ss	4	5	-60.0	-59.9	-58.8	-60.0	-48.4	-41.25	7.1
	HE80 STBC, M0 to M9 1ss	2	5	-60.0	-59.9			-51.7	-41.25	10.4
	HE80 STBC, M0 to M9 1ss	3	5	-60.0	-59.9	-58.8		-49.5	-41.25	8.3
	HE80 STBC, M0 to M9 1ss	4	5	-60.0	-59.9	-58.8	-60.0	-48.4	-41.25	7.1
5785	Non HT20, 6 to 54 Mbps	1	5	-60.9				-55.9	-41.25	14.7
	Non HT20, 6 to 54 Mbps	2	5	-60.9	-62.4			-53.6	-41.25	12.3
	Non HT20, 6 to 54 Mbps	3	5	-60.9	-62.4	-60.4		-51.4	-41.25	10.1
	Non HT20, 6 to 54 Mbps	4	5	-60.9	-62.4	-60.4	-60.4	-49.9	-41.25	8.7
	Non HT20 Beam Forming, 6 to 54 Mbps	2	8	-60.9	-62.4			-50.6	-41.25	9.3
	Non HT20 Beam Forming, 6 to 54 Mbps	3	10	-60.9	-62.4	-60.4		-46.4	-41.25	5.1
	Non HT20 Beam Forming, 6 to 54 Mbps	4	11	-60.9	-62.4	-60.4	-60.4	-43.9	-41.25	2.7
	HT/VHT20, M0 to M7	1	5	-61.2				-56.2	-41.25	15.0
	HT/VHT20, M0 to M7	2	5	-61.2	-62.5			-53.8	-41.25	12.5
	HT/VHT20, M8 to M15	2	5	-61.2	-62.5			-53.8	-41.25	12.5
	HT/VHT20, M0 to M7	3	5	-61.2	-62.5	-60.4		-51.5	-41.25	10.3
	HT/VHT20, M8 to M15	3	5	-61.2	-62.5	-60.4		-51.5	-41.25	10.3

	HT/VHT20, M16 to M23	3	5	-61.2	-62.5	-60.4		-51.5	-41.25	10.3
	HT/VHT20, M0 to M7	4	5	-61.2	-62.5	-60.4	-60.5	-50.1	-41.25	8.8
	HT/VHT20, M8 to M15	4	5	-61.2	-62.5	-60.4	-60.5	-50.1	-41.25	8.8
	HT/VHT20, M16 to M23	4	5	-61.2	-62.5	-60.4	-60.5	-50.1	-41.25	8.8
	HT/VHT20, M24 to M31	4	5	-61.2	-62.5	-60.4	-60.5	-50.1	-41.25	8.8
	HT/VHT20 Beam Forming, M0 to M7	2	8	-61.2	-62.5			-50.8	-41.25	9.5
	HT/VHT20 Beam Forming, M8 to M15	2	5	-61.2	-62.5			-53.8	-41.25	12.5
	HT/VHT20 Beam Forming, M0 to M7	3	10	-61.2	-62.5	-60.4		-46.5	-41.25	5.3
	HT/VHT20 Beam Forming, M8 to M15	3	7	-61.2	-62.5	-60.4		-49.5	-41.25	8.3
	HT/VHT20 Beam Forming, M16 to M23	3	5	-61.2	-62.5	-60.4		-51.5	-41.25	10.3
	HT/VHT20 Beam Forming, M0 to M7	4	11	-61.2	-62.5	-60.4	-60.5	-44.1	-41.25	2.8
	HT/VHT20 Beam Forming, M8 to M15	4	8	-61.2	-62.5	-60.4	-60.5	-47.1	-41.25	5.8
	HT/VHT20 Beam Forming, M16 to M23	4	6	-61.2	-62.5	-60.4	-60.5	-49.1	-41.25	7.8
	HT/VHT20 Beam Forming, M24 to M31	4	5	-61.2	-62.5	-60.4	-60.5	-50.1	-41.25	8.8
	HT/VHT20 STBC, M0 to M7	2	5	-61.2	-62.5			-53.8	-41.25	12.5
	HT/VHT20 STBC, M0 to M7	3	5	-61.2	-62.5	-60.4		-51.5	-41.25	10.3
	HT/VHT20 STBC, M0 to M7	4	5	-61.2	-62.5	-60.4	-60.5	-50.1	-41.25	8.8
	HE20, M0 to M9 1ss	1	5	-61.3				-56.3	-41.25	15.1
	HE20, M0 to M9 1ss	2	5	-61.3	-62.6			-53.9	-41.25	12.6
	HE20, M0 to M9 2ss	2	5	-61.3	-62.6			-53.9	-41.25	12.6
	HE20, M0 to M9 1ss	3	5	-61.3	-62.6	-60.3		-51.5	-41.25	10.3
	HE20, M0 to M9 2ss	3	5	-61.3	-62.6	-60.3		-51.5	-41.25	10.3
	HE20, M0 to M9 3ss	3	5	-61.3	-62.6	-60.3		-51.5	-41.25	10.3
	HE20, M0 to M9 1ss	4	5	-61.3	-62.6	-60.3	-60.5	-50.1	-41.25	8.8
	HE20, M0 to M9 2ss	4	5	-61.3	-62.6	-60.3	-60.5	-50.1	-41.25	8.8
	HE20, M0 to M9 3ss	4	5	-61.3	-62.6	-60.3	-60.5	-50.1	-41.25	8.8
	HE20, M0 to M9 4ss	4	5	-61.3	-62.6	-60.3	-60.5	-50.1	-41.25	8.8
	HE20 Beam Forming, M0 to M9 1ss	2	8	-61.3	-62.6			-50.9	-41.25	9.6
	HE20 Beam Forming, M0 to M9 2ss	2	5	-61.3	-62.6			-53.9	-41.25	12.6
	HE20 Beam Forming, M0 to M9 1ss	3	10	-61.3	-62.6	-60.3		-46.5	-41.25	5.3
	HE20 Beam Forming, M0 to M9 2ss	3	7	-61.3	-62.6	-60.3		-49.5	-41.25	8.3
	HE20 Beam Forming, M0 to M9 3ss	3	5	-61.3	-62.6	-60.3		-51.5	-41.25	10.3
	HE20 Beam Forming, M0 to M9 1ss	4	11	-61.3	-62.6	-60.3	-60.5	-44.1	-41.25	2.8
	HE20 Beam Forming, M0 to M9 2ss	4	8	-61.3	-62.6	-60.3	-60.5	-47.1	-41.25	5.8
	HE20 Beam Forming, M0 to M9 3ss	4	6	-61.3	-62.6	-60.3	-60.5	-49.1	-41.25	7.8
	HE20 Beam Forming, M0 to M9 4ss	4	5	-61.3	-62.6	-60.3	-60.5	-50.1	-41.25	8.8
	HE20 STBC, M0 to M9 2ss	2	5	-61.3	-62.6			-53.9	-41.25	12.6
	HE20 STBC, M0 to M9 2ss	3	5	-61.3	-62.6	-60.3		-51.5	-41.25	10.3
	HE20 STBC, M0 to M9 2ss	4	5	-61.3	-62.6	-60.3	-60.5	-50.1	-41.25	8.8
5795	Non HT40, 6 to 54 Mbps	1	5	-61.1				-56.1	-41.25	14.9
	Non HT40, 6 to 54 Mbps	2	5	-61.1	-61.6			-53.3	-41.25	12.1
	Non HT40, 6 to 54 Mbps	3	5	-61.1	-61.6	-60.3		-51.2	-41.25	9.9

Non HT40, 6 to 54 Mbps	4	5	-61.1	-61.6	-60.3	-59.8	-49.6	-41.25	8.4
HT/VHT40, M0 to M7	1	5	-61.1				-56.0	-41.25	14.8
HT/VHT40, M0 to M7	2	5	-61.1	-62.0			-53.4	-41.25	12.2
HT/VHT40, M8 to M15	2	5	-61.1	-62.0			-53.4	-41.25	12.2
HT/VHT40, M0 to M7	3	5	-61.1	-62.0	-60.8		-51.4	-41.25	10.1
HT/VHT40, M8 to M15	3	5	-61.1	-62.0	-60.8		-51.4	-41.25	10.1
HT/VHT40, M16 to M23	3	5	-61.1	-62.0	-60.8		-51.4	-41.25	10.1
HT/VHT40, M0 to M7	4	5	-61.1	-62.0	-60.8	-60.2	-49.9	-41.25	8.6
HT/VHT40, M8 to M15	4	5	-61.1	-62.0	-60.8	-60.2	-49.9	-41.25	8.6
HT/VHT40, M16 to M23	4	5	-61.1	-62.0	-60.8	-60.2	-49.9	-41.25	8.6
HT/VHT40, M24 to M31	4	5	-61.1	-62.0	-60.8	-60.2	-49.9	-41.25	8.6
HT/VHT40 Beam Forming, M0 to M7	2	8	-61.1	-62.0			-50.4	-41.25	9.2
HT/VHT40 Beam Forming, M8 to M15	2	5	-61.1	-62.0			-53.4	-41.25	12.2
HT/VHT40 Beam Forming, M0 to M7	3	10	-61.1	-62.0	-60.8		-46.4	-41.25	5.1
HT/VHT40 Beam Forming, M8 to M15	3	7	-61.1	-62.0	-60.8		-49.4	-41.25	8.1
HT/VHT40 Beam Forming, M16 to M23	3	5	-61.1	-62.0	-60.8		-51.4	-41.25	10.1
HT/VHT40 Beam Forming, M0 to M7	4	11	-61.1	-62.0	-60.8	-60.2	-43.9	-41.25	2.6
HT/VHT40 Beam Forming, M8 to M15	4	8	-61.1	-62.0	-60.8	-60.2	-46.9	-41.25	5.6
HT/VHT40 Beam Forming, M16 to M23	4	6	-61.1	-62.0	-60.8	-60.2	-48.9	-41.25	7.6
HT/VHT40 Beam Forming, M24 to M31	4	5	-61.1	-62.0	-60.8	-60.2	-49.9	-41.25	8.6
HT/VHT40 STBC, M0 to M7	2	5	-61.1	-62.0			-53.4	-41.25	12.2
HT/VHT40 STBC, M0 to M7	3	5	-61.1	-62.0	-60.8		-51.4	-41.25	10.1
HT/VHT40 STBC, M0 to M7	4	5	-61.1	-62.0	-60.8	-60.2	-49.9	-41.25	8.6
HE40, M0 to M9 1ss	1	5	-60.9				-55.8	-41.25	14.5
HE40, M0 to M9 1ss	2	5	-60.9	-62.0			-53.3	-41.25	12.0
HE40, M0 to M9 2ss	2	5	-60.9	-62.0			-53.3	-41.25	12.0
HE40, M0 to M9 1ss	3	5	-60.9	-62.0	-60.7		-51.3	-41.25	10.0
HE40, M0 to M9 2ss	3	5	-60.9	-62.0	-60.7		-51.3	-41.25	10.0
HE40, M0 to M9 3ss	3	5	-60.9	-62.0	-60.7		-51.3	-41.25	10.0
HE40, M0 to M9 1ss	4	5	-60.9	-62.0	-60.7	-59.8	-49.6	-41.25	8.4
HE40, M0 to M9 2ss	4	5	-60.9	-62.0	-60.7	-59.8	-49.6	-41.25	8.4
HE40, M0 to M9 3ss	4	5	-60.9	-62.0	-60.7	-59.8	-49.6	-41.25	8.4
HE40, M0 to M9 4ss	4	5	-60.9	-62.0	-60.7	-59.8	-49.6	-41.25	8.4
HE40 Beam Forming, M0 to M9 1ss	2	8	-60.9	-62.0			-50.3	-41.25	9.0
HE40 Beam Forming, M0 to M9 2ss	2	5	-60.9	-62.0			-53.3	-41.25	12.0
HE40 Beam Forming, M0 to M9 1ss	3	10	-60.9	-62.0	-60.7		-46.3	-41.25	5.0
HE40 Beam Forming, M0 to M9 2ss	3	7	-60.9	-62.0	-60.7		-49.3	-41.25	8.0
HE40 Beam Forming, M0 to M9 3ss	3	5	-60.9	-62.0	-60.7		-51.3	-41.25	10.0
HE40 Beam Forming, M0 to M9 1ss	4	11	-60.9	-62.0	-60.7	-59.8	-43.6	-41.25	2.4
HE40 Beam Forming, M0 to M9 2ss	4	8	-60.9	-62.0	-60.7	-59.8	-46.6	-41.25	5.4
HE40 Beam Forming, M0 to M9 3ss	4	6	-60.9	-62.0	-60.7	-59.8	-48.6	-41.25	7.4
HE40 Beam Forming, M0 to M9 4ss	4	5	-60.9	-62.0	-60.7	-59.8	-49.6	-41.25	8.4
HE40 STBC, M0 to M9 2ss	2	5	-60.9	-62.0			-53.3	-41.25	12.0

HE40 STBC, M0 to M9 2ss	3	5	-60.9	-62.0	-60.7		-51.3	-41.25	10.0
HE40 STBC, M0 to M9 2ss	4	5	-60.9	-62.0	-60.7	-59.8	-49.6	-41.25	8.4

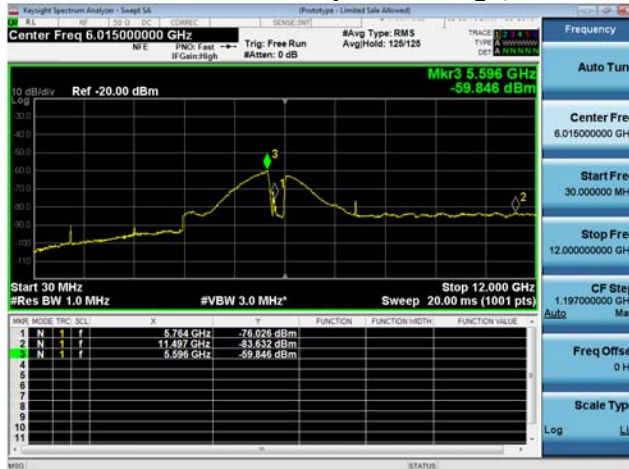
5825	Non HT20, 6 to 54 Mbps	1	5	-60.8				-55.8	-41.25	14.6
	Non HT20, 6 to 54 Mbps	2	5	-60.8	-62.5			-53.6	-41.25	12.3
	Non HT20, 6 to 54 Mbps	3	5	-60.8	-62.5	-60.4		-51.4	-41.25	10.1
	Non HT20, 6 to 54 Mbps	4	5	-60.8	-62.5	-60.4	-60.2	-49.9	-41.25	8.6
	Non HT20 Beam Forming, 6 to 54 Mbps	2	8	-60.8	-62.5			-50.6	-41.25	9.3
	Non HT20 Beam Forming, 6 to 54 Mbps	3	10	-60.8	-62.5	-60.4		-46.4	-41.25	5.1
	Non HT20 Beam Forming, 6 to 54 Mbps	4	11	-60.8	-62.5	-60.4	-60.2	-43.9	-41.25	2.6
	HT/VHT20, M0 to M7	1	5	-60.6				-55.6	-41.25	14.4
	HT/VHT20, M0 to M7	2	5	-60.6	-62.9			-53.6	-41.25	12.3
	HT/VHT20, M8 to M15	2	5	-60.6	-62.9			-53.6	-41.25	12.3
	HT/VHT20, M0 to M7	3	5	-60.6	-62.9	-60.6		-51.5	-41.25	10.2
	HT/VHT20, M8 to M15	3	5	-60.6	-62.9	-60.6		-51.5	-41.25	10.2
	HT/VHT20, M16 to M23	3	5	-60.6	-62.9	-60.6		-51.5	-41.25	10.2
	HT/VHT20, M0 to M7	4	5	-60.6	-62.9	-60.6	-60.1	-49.9	-41.25	8.7
	HT/VHT20, M8 to M15	4	5	-60.6	-62.9	-60.6	-60.1	-49.9	-41.25	8.7
	HT/VHT20, M16 to M23	4	5	-60.6	-62.9	-60.6	-60.1	-49.9	-41.25	8.7
	HT/VHT20, M24 to M31	4	5	-60.6	-62.9	-60.6	-60.1	-49.9	-41.25	8.7
	HT/VHT20 Beam Forming, M0 to M7	2	8	-60.6	-62.9			-50.6	-41.25	9.3
	HT/VHT20 Beam Forming, M8 to M15	2	5	-60.6	-62.9			-53.6	-41.25	12.3
	HT/VHT20 Beam Forming, M0 to M7	3	10	-60.6	-62.9	-60.6		-46.5	-41.25	5.2
	HT/VHT20 Beam Forming, M8 to M15	3	7	-60.6	-62.9	-60.6		-49.5	-41.25	8.2
	HT/VHT20 Beam Forming, M16 to M23	3	5	-60.6	-62.9	-60.6		-51.5	-41.25	10.2
	HT/VHT20 Beam Forming, M0 to M7	4	11	-60.6	-62.9	-60.6	-60.1	-43.9	-41.25	2.7
	HT/VHT20 Beam Forming, M8 to M15	4	8	-60.6	-62.9	-60.6	-60.1	-46.9	-41.25	5.7
	HT/VHT20 Beam Forming, M16 to M23	4	6	-60.6	-62.9	-60.6	-60.1	-48.9	-41.25	7.7
	HT/VHT20 Beam Forming, M24 to M31	4	5	-60.6	-62.9	-60.6	-60.1	-49.9	-41.25	8.7
	HT/VHT20 STBC, M0 to M7	2	5	-60.6	-62.9			-53.6	-41.25	12.3
	HT/VHT20 STBC, M0 to M7	3	5	-60.6	-62.9	-60.6		-51.5	-41.25	10.2
	HT/VHT20 STBC, M0 to M7	4	5	-60.6	-62.9	-60.6	-60.1	-49.9	-41.25	8.7
	HE20, M0 to M9 1ss	1	5	-60.6				-55.6	-41.25	14.4
	HE20, M0 to M9 1ss	2	5	-60.6	-62.7			-53.5	-41.25	12.3
	HE20, M0 to M9 2ss	2	5	-60.6	-62.7			-53.5	-41.25	12.3
	HE20, M0 to M9 1ss	3	5	-60.6	-62.7	-60.3		-51.3	-41.25	10.1
HE20, M0 to M9 2ss	3	5	-60.6	-62.7	-60.3		-51.3	-41.25	10.1	
HE20, M0 to M9 3ss	3	5	-60.6	-62.7	-60.3		-51.3	-41.25	10.1	
HE20, M0 to M9 1ss	4	5	-60.6	-62.7	-60.3	-60.2	-49.8	-41.25	8.6	
HE20, M0 to M9 2ss	4	5	-60.6	-62.7	-60.3	-60.2	-49.8	-41.25	8.6	
HE20, M0 to M9 3ss	4	5	-60.6	-62.7	-60.3	-60.2	-49.8	-41.25	8.6	
HE20, M0 to M9 4ss	4	5	-60.6	-62.7	-60.3	-60.2	-49.8	-41.25	8.6	
HE20 Beam Forming, M0 to M9 1ss	2	8	-60.6	-62.7			-50.5	-41.25	9.3	



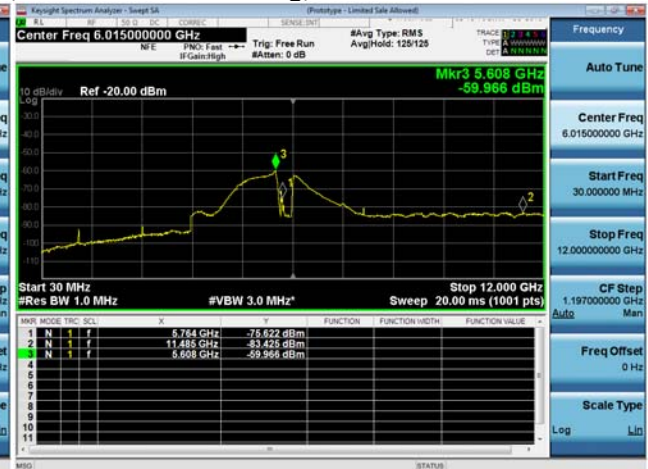
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HE20 Beam Forming, M0 to M9 1ss	3	10	-60.6	-62.7	-60.3		-46.3	-41.25	5.1
HE20 Beam Forming, M0 to M9 2ss	3	7	-60.6	-62.7	-60.3		-49.3	-41.25	8.1
HE20 Beam Forming, M0 to M9 3ss	3	5	-60.6	-62.7	-60.3		-51.3	-41.25	10.1
HE20 Beam Forming, M0 to M9 1ss	4	11	-60.6	-62.7	-60.3	-60.2	-43.8	-41.25	2.6
HE20 Beam Forming, M0 to M9 2ss	4	8	-60.6	-62.7	-60.3	-60.2	-46.8	-41.25	5.6
HE20 Beam Forming, M0 to M9 3ss	4	6	-60.6	-62.7	-60.3	-60.2	-48.8	-41.25	7.6
HE20 Beam Forming, M0 to M9 4ss	4	5	-60.6	-62.7	-60.3	-60.2	-49.8	-41.25	8.6
HE20 STBC, M0 to M9 2ss	2	5	-60.6	-62.7			-53.5	-41.25	12.3
HE20 STBC, M0 to M9 2ss	3	5	-60.6	-62.7	-60.3		-51.3	-41.25	10.1
HE20 STBC, M0 to M9 2ss	4	5	-60.6	-62.7	-60.3	-60.2	-49.8	-41.25	8.6



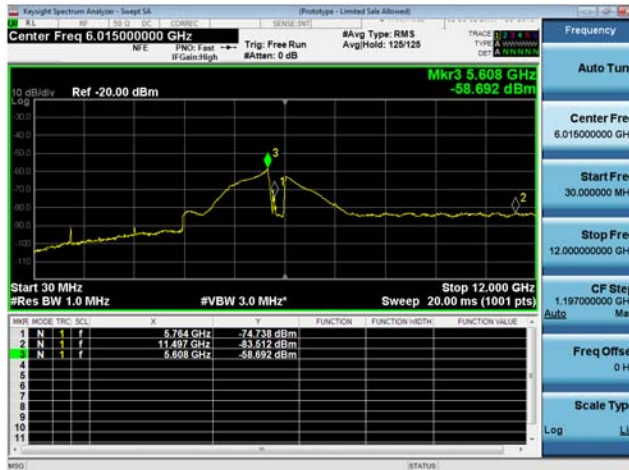
Conducted Spurs Average, 5775 MHz, VHT80 Beam Forming, M0 to M9 1ss



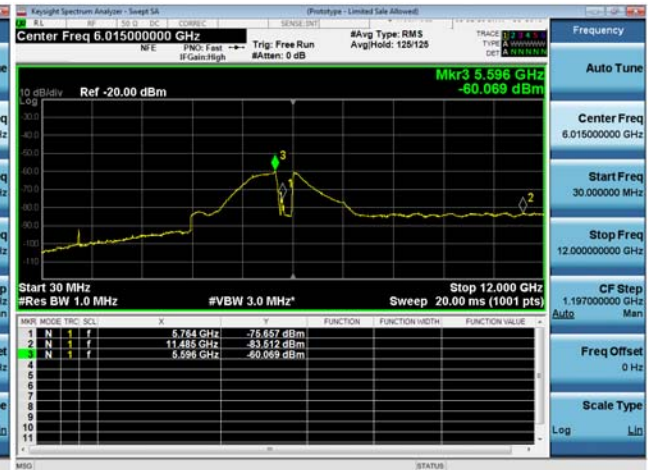
Antenna A



Antenna B



Antenna C



Antenna D

Frequency (MHz)	Mode	Tx Paths	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 (dBm)	Margin (dB)
5745	Non HT20, 6 to 54 Mbps	1	5	-51.0				-46.0	-21.25	24.8
	Non HT20, 6 to 54 Mbps	2	5	-50.9	-53.3			-43.9	-21.25	22.7
	Non HT20, 6 to 54 Mbps	3	5	-50.9	-53.3	-51.2		-41.9	-21.25	20.7
	Non HT20, 6 to 54 Mbps	4	5	-50.9	-53.3	-51.2	-51.0	-40.5	-21.25	19.2
	Non HT20 Beam Forming, 6 to 54 Mbps	2	8	-50.9	-53.3			-40.9	-21.25	19.7
	Non HT20 Beam Forming, 6 to 54 Mbps	3	10	-50.9	-53.3	-51.2		-36.9	-21.25	15.7
	Non HT20 Beam Forming, 6 to 54 Mbps	4	11	-50.9	-53.3	-51.2	-51.0	-34.5	-21.25	13.2
	HT/VHT20, M0 to M7	1	5	-50.6				-45.6	-21.25	24.4
	HT/VHT20, M0 to M7	2	5	-50.6	-52.4			-43.4	-21.25	22.1
	HT/VHT20, M8 to M15	2	5	-50.6	-52.4			-43.4	-21.25	22.1
	HT/VHT20, M0 to M7	3	5	-50.6	-52.4	-51.6		-41.7	-21.25	20.4
	HT/VHT20, M8 to M15	3	5	-50.6	-52.4	-51.6		-41.7	-21.25	20.4
	HT/VHT20, M16 to M23	3	5	-50.6	-52.4	-51.6		-41.7	-21.25	20.4
	HT/VHT20, M0 to M7	4	5	-50.6	-52.4	-51.6	-50.0	-40.0	-21.25	18.8
	HT/VHT20, M8 to M15	4	5	-50.6	-52.4	-51.6	-50.0	-40.0	-21.25	18.8
	HT/VHT20, M16 to M23	4	5	-50.6	-52.4	-51.6	-50.0	-40.0	-21.25	18.8
	HT/VHT20, M24 to M31	4	5	-50.6	-52.4	-51.6	-50.0	-40.0	-21.25	18.8
	HT/VHT20 Beam Forming, M0 to M7	2	8	-50.6	-52.4			-40.4	-21.25	19.1
	HT/VHT20 Beam Forming, M8 to M15	2	5	-50.6	-52.4			-43.4	-21.25	22.1
	HT/VHT20 Beam Forming, M0 to M7	3	10	-50.6	-52.4	-51.6		-36.7	-21.25	15.4
	HT/VHT20 Beam Forming, M8 to M15	3	7	-50.6	-52.4	-51.6		-39.7	-21.25	18.4
	HT/VHT20 Beam Forming, M16 to M23	3	5	-50.6	-52.4	-51.6		-41.7	-21.25	20.4
	HT/VHT20 Beam Forming, M0 to M7	4	11	-50.6	-52.4	-51.6	-50.0	-34.0	-21.25	12.8
	HT/VHT20 Beam Forming, M8 to M15	4	8	-50.6	-52.4	-51.6	-50.0	-37.0	-21.25	15.8
	HT/VHT20 Beam Forming, M16 to M23	4	6	-50.6	-52.4	-51.6	-50.0	-39.0	-21.25	17.8
	HT/VHT20 Beam Forming, M24 to M31	4	5	-50.6	-52.4	-51.6	-50.0	-40.0	-21.25	18.8
	HT/VHT20 STBC, M0 to M7	2	5	-50.6	-52.4			-43.4	-21.25	22.1
	HT/VHT20 STBC, M0 to M7	3	5	-50.6	-52.4	-51.6		-41.7	-21.25	20.4
	HT/VHT20 STBC, M0 to M7	4	5	-50.6	-52.4	-51.6	-50.0	-40.0	-21.25	18.8
	HE20, M0 to M9 1ss	1	5	-49.9				-44.9	-21.25	23.7
	HE20, M0 to M9 1ss	2	5	-49.9	-52.1			-42.9	-21.25	21.6
	HE20, M0 to M9 2ss	2	5	-49.9	-52.1			-42.9	-21.25	21.6
	HE20, M0 to M9 1ss	3	5	-49.9	-52.1	-50.8		-41.1	-21.25	19.8

	HE20, M0 to M9 2ss	3	5	-49.9	-52.1	-50.8		-41.1	-21.25	19.8
	HE20, M0 to M9 3ss	3	5	-49.9	-52.1	-50.8		-41.1	-21.25	19.8
	HE20, M0 to M9 1ss	4	5	-49.9	-52.1	-50.8	-48.9	-39.2	-21.25	18.0
	HE20, M0 to M9 2ss	4	5	-49.9	-52.1	-50.8	-48.9	-39.2	-21.25	18.0
	HE20, M0 to M9 3ss	4	5	-49.9	-52.1	-50.8	-48.9	-39.2	-21.25	18.0
	HE20, M0 to M9 4ss	4	5	-49.9	-52.1	-50.8	-48.9	-39.2	-21.25	18.0
	HE20 Beam Forming, M0 to M9 1ss	2	8	-49.9	-52.1			-39.9	-21.25	18.6
	HE20 Beam Forming, M0 to M9 2ss	2	5	-49.9	-52.1			-42.9	-21.25	21.6
	HE20 Beam Forming, M0 to M9 1ss	3	10	-49.9	-52.1	-50.8		-36.1	-21.25	14.8
	HE20 Beam Forming, M0 to M9 2ss	3	7	-49.9	-52.1	-50.8		-39.1	-21.25	17.8
	HE20 Beam Forming, M0 to M9 3ss	3	5	-49.9	-52.1	-50.8		-41.1	-21.25	19.8
	HE20 Beam Forming, M0 to M9 1ss	4	11	-49.9	-52.1	-50.8	-48.9	-33.2	-21.25	12.0
	HE20 Beam Forming, M0 to M9 2ss	4	8	-49.9	-52.1	-50.8	-48.9	-36.2	-21.25	15.0
	HE20 Beam Forming, M0 to M9 3ss	4	6	-49.9	-52.1	-50.8	-48.9	-38.2	-21.25	17.0
	HE20 Beam Forming, M0 to M9 4ss	4	5	-49.9	-52.1	-50.8	-48.9	-39.2	-21.25	18.0
	HE20 STBC, M0 to M9 2ss	2	5	-49.9	-52.1			-42.9	-21.25	21.6
	HE20 STBC, M0 to M9 2ss	3	5	-49.9	-52.1	-50.8		-41.1	-21.25	19.8
	HE20 STBC, M0 to M9 2ss	4	5	-49.9	-52.1	-50.8	-48.9	-39.2	-21.25	18.0
5755	Non HT40, 6 to 54 Mbps	1	5	-50.9				-45.9	-21.25	24.7
	Non HT40, 6 to 54 Mbps	2	5	-50.9	-51.6			-43.2	-21.25	22.0
	Non HT40, 6 to 54 Mbps	3	5	-50.9	-51.6	-51.0		-41.4	-21.25	20.1
	Non HT40, 6 to 54 Mbps	4	5	-50.9	-51.6	-51.0	-49.7	-39.7	-21.25	18.5
	HT/VHT40, M0 to M7	1	5	-51.4				-46.3	-21.25	25.1
	HT/VHT40, M0 to M7	2	5	-51.4	-51.4			-43.3	-21.25	22.0
	HT/VHT40, M8 to M15	2	5	-51.4	-51.4			-43.3	-21.25	22.0
	HT/VHT40, M0 to M7	3	5	-51.4	-51.4	-51.1		-41.4	-21.25	20.2
	HT/VHT40, M8 to M15	3	5	-51.4	-51.4	-51.1		-41.4	-21.25	20.2
	HT/VHT40, M16 to M23	3	5	-51.4	-51.4	-51.1		-41.4	-21.25	20.2
	HT/VHT40, M0 to M7	4	5	-51.4	-51.4	-51.1	-50.7	-40.0	-21.25	18.8
	HT/VHT40, M8 to M15	4	5	-51.4	-51.4	-51.1	-50.7	-40.0	-21.25	18.8
	HT/VHT40, M16 to M23	4	5	-51.4	-51.4	-51.1	-50.7	-40.0	-21.25	18.8
	HT/VHT40, M24 to M31	4	5	-51.4	-51.4	-51.1	-50.7	-40.0	-21.25	18.8
	HT/VHT40 Beam Forming, M0 to M7	2	8	-51.4	-51.4			-40.3	-21.25	19.0
	HT/VHT40 Beam Forming, M8 to M15	2	5	-51.4	-51.4			-43.3	-21.25	22.0
	HT/VHT40 Beam Forming, M0 to M7	3	10	-51.4	-51.4	-51.1		-36.4	-21.25	15.2
	HT/VHT40 Beam Forming, M8 to M15	3	7	-51.4	-51.4	-51.1		-39.4	-21.25	18.2
	HT/VHT40 Beam Forming, M16 to M23	3	5	-51.4	-51.4	-51.1		-41.4	-21.25	20.2
	HT/VHT40 Beam Forming, M0 to M7	4	11	-51.4	-51.4	-51.1	-50.7	-34.0	-21.25	12.8
	HT/VHT40 Beam Forming, M8 to M15	4	8	-51.4	-51.4	-51.1	-50.7	-37.0	-21.25	15.8
	HT/VHT40 Beam Forming, M16 to M23	4	6	-51.4	-51.4	-51.1	-50.7	-39.0	-21.25	17.8
	HT/VHT40 Beam Forming, M24 to M31	4	5	-51.4	-51.4	-51.1	-50.7	-40.0	-21.25	18.8
HT/VHT40 STBC, M0 to M7	2	5	-51.4	-51.4			-43.3	-21.25	22.0	

	HT/VHT40 STBC, M0 to M7	3	5	-51.4	-51.4	-51.1		-41.4	-21.25	20.2
	HT/VHT40 STBC, M0 to M7	4	5	-51.4	-51.4	-51.1	-50.7	-40.0	-21.25	18.8
	HE40, M0 to M9 1ss	1	5	-50.7				-45.6	-21.25	24.3
	HE40, M0 to M9 1ss	2	5	-50.7	-51.3			-42.8	-21.25	21.6
	HE40, M0 to M9 2ss	2	5	-50.7	-51.3			-42.8	-21.25	21.6
	HE40, M0 to M9 1ss	3	5	-50.7	-51.3	-50.2		-40.8	-21.25	19.6
	HE40, M0 to M9 2ss	3	5	-50.7	-51.3	-50.2		-40.8	-21.25	19.6
	HE40, M0 to M9 3ss	3	5	-50.7	-51.3	-50.2		-40.8	-21.25	19.6
	HE40, M0 to M9 1ss	4	5	-50.7	-51.3	-50.2	-50.3	-39.5	-21.25	18.2
	HE40, M0 to M9 2ss	4	5	-50.7	-51.3	-50.2	-50.3	-39.5	-21.25	18.2
	HE40, M0 to M9 3ss	4	5	-50.7	-51.3	-50.2	-50.3	-39.5	-21.25	18.2
	HE40, M0 to M9 4ss	4	5	-50.7	-51.3	-50.2	-50.3	-39.5	-21.25	18.2
	HE40 Beam Forming, M0 to M9 1ss	2	8	-50.7	-51.3			-39.8	-21.25	18.6
	HE40 Beam Forming, M0 to M9 2ss	2	5	-50.7	-51.3			-42.8	-21.25	21.6
	HE40 Beam Forming, M0 to M9 1ss	3	10	-50.7	-51.3	-50.2		-35.8	-21.25	14.6
	HE40 Beam Forming, M0 to M9 2ss	3	7	-50.7	-51.3	-50.2		-38.8	-21.25	17.6
	HE40 Beam Forming, M0 to M9 3ss	3	5	-50.7	-51.3	-50.2		-40.8	-21.25	19.6
	HE40 Beam Forming, M0 to M9 1ss	4	11	-50.7	-51.3	-50.2	-50.3	-33.5	-21.25	12.2
	HE40 Beam Forming, M0 to M9 2ss	4	8	-50.7	-51.3	-50.2	-50.3	-36.5	-21.25	15.2
	HE40 Beam Forming, M0 to M9 3ss	4	6	-50.7	-51.3	-50.2	-50.3	-38.5	-21.25	17.2
	HE40 Beam Forming, M0 to M9 4ss	4	5	-50.7	-51.3	-50.2	-50.3	-39.5	-21.25	18.2
	HE40 STBC, M0 to M9 2ss	2	5	-50.7	-51.3			-42.8	-21.25	21.6
	HE40 STBC, M0 to M9 2ss	3	5	-50.7	-51.3	-50.2		-40.8	-21.25	19.6
	HE40 STBC, M0 to M9 2ss	4	5	-50.7	-51.3	-50.2	-50.3	-39.5	-21.25	18.2
5775	Non HT80, 6 to 54 Mbps	1	5	-50.7				-45.7	-21.25	24.5
	Non HT80, 6 to 54 Mbps	2	5	-50.7	-50.8			-42.7	-21.25	21.5
	Non HT80, 6 to 54 Mbps	3	5	-50.7	-50.8	-50.9		-41.0	-21.25	19.8
	Non HT80, 6 to 54 Mbps	4	5	-50.7	-50.8	-50.9	-50.1	-39.6	-21.25	18.3
	VHT80, M0 to M9 1ss	1	5	-51.2				-46.0	-21.25	24.7
	VHT80, M0 to M9 1ss	2	5	-51.2	-52.2			-43.4	-21.25	22.2
	VHT80, M0 to M9 2ss	2	5	-51.2	-52.2			-43.4	-21.25	22.2
	VHT80, M0 to M9 1ss	3	5	-51.2	-52.2	-51.9		-41.8	-21.25	20.5
	VHT80, M0 to M9 2ss	3	5	-51.2	-52.2	-51.9		-41.8	-21.25	20.5
	VHT80, M0 to M9 3ss	3	5	-51.2	-52.2	-51.9		-41.8	-21.25	20.5
	VHT80, M0 to M9 1ss	4	5	-51.2	-52.2	-51.9	-49.9	-40.0	-21.25	18.7
	VHT80, M0 to M9 2ss	4	5	-51.2	-52.2	-51.9	-49.9	-40.0	-21.25	18.7
	VHT80, M0 to M9 3ss	4	5	-51.2	-52.2	-51.9	-49.9	-40.0	-21.25	18.7
	VHT80, M0 to M9 4ss	4	5	-51.2	-52.2	-51.9	-49.9	-40.0	-21.25	18.7
	VHT80 Beam Forming, M0 to M9 1ss	2	8	-51.2	-52.2			-40.4	-21.25	19.2
	VHT80 Beam Forming, M0 to M9 2ss	2	5	-51.2	-52.2			-43.4	-21.25	22.2
	VHT80 Beam Forming, M0 to M9 1ss	3	10	-51.2	-52.2	-51.9		-36.8	-21.25	15.5
VHT80 Beam Forming, M0 to M9 2ss	3	7	-51.2	-52.2	-51.9		-39.8	-21.25	18.5	

	VHT80 Beam Forming, M0 to M9 3ss	3	5	-51.2	-52.2	-51.9		-41.8	-21.25	20.5	
	VHT80 Beam Forming, M0 to M9 1ss	4	11	-51.2	-52.2	-51.9	-49.9	-34.0	-21.25	12.7	
	VHT80 Beam Forming, M0 to M9 2ss	4	8	-51.2	-52.2	-51.9	-49.9	-37.0	-21.25	15.7	
	VHT80 Beam Forming, M0 to M9 3ss	4	6	-51.2	-52.2	-51.9	-49.9	-39.0	-21.25	17.7	
	VHT80 Beam Forming, M0 to M9 4ss	4	5	-51.2	-52.2	-51.9	-49.9	-40.0	-21.25	18.7	
	VHT80 STBC, M0 to M9 1ss	2	5	-51.2	-52.2			-43.4	-21.25	22.2	
	VHT80 STBC, M0 to M9 1ss	3	5	-51.2	-52.2	-51.9		-41.8	-21.25	20.5	
	VHT80 STBC, M0 to M9 1ss	4	5	-51.2	-52.2	-51.9	-49.9	-40.0	-21.25	18.7	
	HE80, M0 to M9 1ss	1	5	-50.5				-45.3	-21.25	24.0	
	HE80, M0 to M9 1ss	2	5	-50.5	-52.6			-43.2	-21.25	21.9	
	HE80, M0 to M9 2ss	2	5	-50.5	-52.6			-43.2	-21.25	21.9	
	HE80, M0 to M9 1ss	3	5	-50.5	-52.6	-51.8		-41.5	-21.25	20.3	
	HE80, M0 to M9 2ss	3	5	-50.5	-52.6	-51.8		-41.5	-21.25	20.3	
	HE80, M0 to M9 3ss	3	5	-50.5	-52.6	-51.8		-41.5	-21.25	20.3	
	HE80, M0 to M9 1ss	4	5	-50.5	-52.6	-51.8	-50.4	-40.0	-21.25	18.7	
	HE80, M0 to M9 2ss	4	5	-50.5	-52.6	-51.8	-50.4	-40.0	-21.25	18.7	
	HE80, M0 to M9 3ss	4	5	-50.5	-52.6	-51.8	-50.4	-40.0	-21.25	18.7	
	HE80, M0 to M9 4ss	4	5	-50.5	-52.6	-51.8	-50.4	-40.0	-21.25	18.7	
	HE80 Beam Forming, M0 to M9 1ss	2	8	-50.5	-52.6			-40.2	-21.25	18.9	
	HE80 Beam Forming, M0 to M9 2ss	2	5	-50.5	-52.6			-43.2	-21.25	21.9	
	HE80 Beam Forming, M0 to M9 1ss	3	10	-50.5	-52.6	-51.8		-36.5	-21.25	15.3	
	HE80 Beam Forming, M0 to M9 2ss	3	7	-50.5	-52.6	-51.8		-39.5	-21.25	18.3	
	HE80 Beam Forming, M0 to M9 3ss	3	5	-50.5	-52.6	-51.8		-41.5	-21.25	20.3	
	HE80 Beam Forming, M0 to M9 1ss	4	11	-50.5	-52.6	-51.8	-50.4	-34.0	-21.25	12.7	
	HE80 Beam Forming, M0 to M9 2ss	4	8	-50.5	-52.6	-51.8	-50.4	-37.0	-21.25	15.7	
	HE80 Beam Forming, M0 to M9 3ss	4	6	-50.5	-52.6	-51.8	-50.4	-39.0	-21.25	17.7	
	HE80 Beam Forming, M0 to M9 4ss	4	5	-50.5	-52.6	-51.8	-50.4	-40.0	-21.25	18.7	
	HE80 STBC, M0 to M9 1ss	2	5	-50.5	-52.6			-43.2	-21.25	21.9	
	HE80 STBC, M0 to M9 1ss	3	5	-50.5	-52.6	-51.8		-41.5	-21.25	20.3	
	HE80 STBC, M0 to M9 1ss	4	5	-50.5	-52.6	-51.8	-50.4	-40.0	-21.25	18.7	
	5785	Non HT20, 6 to 54 Mbps	1	5	-50.7				-45.7	-21.25	24.5
		Non HT20, 6 to 54 Mbps	2	5	-50.7	-52.5			-43.5	-21.25	22.2
		Non HT20, 6 to 54 Mbps	3	5	-50.7	-52.5	-51.3		-41.7	-21.25	20.4
Non HT20, 6 to 54 Mbps		4	5	-50.7	-52.5	-51.3	-50.4	-40.1	-21.25	18.9	
Non HT20 Beam Forming, 6 to 54 Mbps		2	8	-50.7	-52.5			-40.5	-21.25	19.2	
Non HT20 Beam Forming, 6 to 54 Mbps		3	10	-50.7	-52.5	-51.3		-36.7	-21.25	15.4	
Non HT20 Beam Forming, 6 to 54 Mbps		4	11	-50.7	-52.5	-51.3	-50.4	-34.1	-21.25	12.9	
HT/VHT20, M0 to M7		1	5	-51.3				-46.3	-21.25	25.1	
HT/VHT20, M0 to M7		2	5	-51.3	-53.0			-44.1	-21.25	22.8	
HT/VHT20, M8 to M15		2	5	-51.3	-53.0			-44.1	-21.25	22.8	
HT/VHT20, M0 to M7		3	5	-51.3	-53.0	-50.9		-41.9	-21.25	20.6	
HT/VHT20, M8 to M15		3	5	-51.3	-53.0	-50.9		-41.9	-21.25	20.6	

	HT/VHT20, M16 to M23	3	5	-51.3	-53.0	-50.9		-41.9	-21.25	20.6
	HT/VHT20, M0 to M7	4	5	-51.3	-53.0	-50.9	-49.9	-40.1	-21.25	18.9
	HT/VHT20, M8 to M15	4	5	-51.3	-53.0	-50.9	-49.9	-40.1	-21.25	18.9
	HT/VHT20, M16 to M23	4	5	-51.3	-53.0	-50.9	-49.9	-40.1	-21.25	18.9
	HT/VHT20, M24 to M31	4	5	-51.3	-53.0	-50.9	-49.9	-40.1	-21.25	18.9
	HT/VHT20 Beam Forming, M0 to M7	2	8	-51.3	-53.0			-41.1	-21.25	19.8
	HT/VHT20 Beam Forming, M8 to M15	2	5	-51.3	-53.0			-44.1	-21.25	22.8
	HT/VHT20 Beam Forming, M0 to M7	3	10	-51.3	-53.0	-50.9		-36.9	-21.25	15.6
	HT/VHT20 Beam Forming, M8 to M15	3	7	-51.3	-53.0	-50.9		-39.9	-21.25	18.6
	HT/VHT20 Beam Forming, M16 to M23	3	5	-51.3	-53.0	-50.9		-41.9	-21.25	20.6
	HT/VHT20 Beam Forming, M0 to M7	4	11	-51.3	-53.0	-50.9	-49.9	-34.1	-21.25	12.9
	HT/VHT20 Beam Forming, M8 to M15	4	8	-51.3	-53.0	-50.9	-49.9	-37.1	-21.25	15.9
	HT/VHT20 Beam Forming, M16 to M23	4	6	-51.3	-53.0	-50.9	-49.9	-39.1	-21.25	17.9
	HT/VHT20 Beam Forming, M24 to M31	4	5	-51.3	-53.0	-50.9	-49.9	-40.1	-21.25	18.9
	HT/VHT20 STBC, M0 to M7	2	5	-51.3	-53.0			-44.1	-21.25	22.8
	HT/VHT20 STBC, M0 to M7	3	5	-51.3	-53.0	-50.9		-41.9	-21.25	20.6
	HT/VHT20 STBC, M0 to M7	4	5	-51.3	-53.0	-50.9	-49.9	-40.1	-21.25	18.9
	HE20, M0 to M9 1ss	1	5	-51.0				-46.0	-21.25	24.8
	HE20, M0 to M9 1ss	2	5	-51.0	-52.4			-43.6	-21.25	22.4
	HE20, M0 to M9 2ss	2	5	-51.0	-52.4			-43.6	-21.25	22.4
	HE20, M0 to M9 1ss	3	5	-51.0	-52.4	-50.8		-41.6	-21.25	20.3
	HE20, M0 to M9 2ss	3	5	-51.0	-52.4	-50.8		-41.6	-21.25	20.3
	HE20, M0 to M9 3ss	3	5	-51.0	-52.4	-50.8		-41.6	-21.25	20.3
	HE20, M0 to M9 1ss	4	5	-51.0	-52.4	-50.8	-50.3	-40.0	-21.25	18.8
	HE20, M0 to M9 2ss	4	5	-51.0	-52.4	-50.8	-50.3	-40.0	-21.25	18.8
	HE20, M0 to M9 3ss	4	5	-51.0	-52.4	-50.8	-50.3	-40.0	-21.25	18.8
	HE20, M0 to M9 4ss	4	5	-51.0	-52.4	-50.8	-50.3	-40.0	-21.25	18.8
	HE20 Beam Forming, M0 to M9 1ss	2	8	-51.0	-52.4			-40.6	-21.25	19.4
	HE20 Beam Forming, M0 to M9 2ss	2	5	-51.0	-52.4			-43.6	-21.25	22.4
	HE20 Beam Forming, M0 to M9 1ss	3	10	-51.0	-52.4	-50.8		-36.6	-21.25	15.3
	HE20 Beam Forming, M0 to M9 2ss	3	7	-51.0	-52.4	-50.8		-39.6	-21.25	18.3
	HE20 Beam Forming, M0 to M9 3ss	3	5	-51.0	-52.4	-50.8		-41.6	-21.25	20.3
	HE20 Beam Forming, M0 to M9 1ss	4	11	-51.0	-52.4	-50.8	-50.3	-34.0	-21.25	12.8
	HE20 Beam Forming, M0 to M9 2ss	4	8	-51.0	-52.4	-50.8	-50.3	-37.0	-21.25	15.8
	HE20 Beam Forming, M0 to M9 3ss	4	6	-51.0	-52.4	-50.8	-50.3	-39.0	-21.25	17.8
	HE20 Beam Forming, M0 to M9 4ss	4	5	-51.0	-52.4	-50.8	-50.3	-40.0	-21.25	18.8
	HE20 STBC, M0 to M9 2ss	2	5	-51.0	-52.4			-43.6	-21.25	22.4
	HE20 STBC, M0 to M9 2ss	3	5	-51.0	-52.4	-50.8		-41.6	-21.25	20.3
	HE20 STBC, M0 to M9 2ss	4	5	-51.0	-52.4	-50.8	-50.3	-40.0	-21.25	18.8
5795	Non HT40, 6 to 54 Mbps	1	5	-50.5				-45.5	-21.25	24.3
	Non HT40, 6 to 54 Mbps	2	5	-50.5	-51.4			-42.9	-21.25	21.7
	Non HT40, 6 to 54 Mbps	3	5	-50.5	-51.4	-52.2		-41.5	-21.25	20.3

Non HT40, 6 to 54 Mbps	4	5	-50.5	-51.4	-52.2	-50.3	-40.0	-21.25	18.8
HT/VHT40, M0 to M7	1	5	-51.2				-46.1	-21.25	24.9
HT/VHT40, M0 to M7	2	5	-51.2	-52.0			-43.5	-21.25	22.2
HT/VHT40, M8 to M15	2	5	-51.2	-52.0			-43.5	-21.25	22.2
HT/VHT40, M0 to M7	3	5	-51.2	-52.0	-51.0		-41.5	-21.25	20.3
HT/VHT40, M8 to M15	3	5	-51.2	-52.0	-51.0		-41.5	-21.25	20.3
HT/VHT40, M16 to M23	3	5	-51.2	-52.0	-51.0		-41.5	-21.25	20.3
HT/VHT40, M0 to M7	4	5	-51.2	-52.0	-51.0	-50.4	-40.0	-21.25	18.7
HT/VHT40, M8 to M15	4	5	-51.2	-52.0	-51.0	-50.4	-40.0	-21.25	18.7
HT/VHT40, M16 to M23	4	5	-51.2	-52.0	-51.0	-50.4	-40.0	-21.25	18.7
HT/VHT40, M24 to M31	4	5	-51.2	-52.0	-51.0	-50.4	-40.0	-21.25	18.7
HT/VHT40 Beam Forming, M0 to M7	2	8	-51.2	-52.0			-40.5	-21.25	19.2
HT/VHT40 Beam Forming, M8 to M15	2	5	-51.2	-52.0			-43.5	-21.25	22.2
HT/VHT40 Beam Forming, M0 to M7	3	10	-51.2	-52.0	-51.0		-36.5	-21.25	15.3
HT/VHT40 Beam Forming, M8 to M15	3	7	-51.2	-52.0	-51.0		-39.5	-21.25	18.3
HT/VHT40 Beam Forming, M16 to M23	3	5	-51.2	-52.0	-51.0		-41.5	-21.25	20.3
HT/VHT40 Beam Forming, M0 to M7	4	11	-51.2	-52.0	-51.0	-50.4	-34.0	-21.25	12.7
HT/VHT40 Beam Forming, M8 to M15	4	8	-51.2	-52.0	-51.0	-50.4	-37.0	-21.25	15.7
HT/VHT40 Beam Forming, M16 to M23	4	6	-51.2	-52.0	-51.0	-50.4	-39.0	-21.25	17.7
HT/VHT40 Beam Forming, M24 to M31	4	5	-51.2	-52.0	-51.0	-50.4	-40.0	-21.25	18.7
HT/VHT40 STBC, M0 to M7	2	5	-51.2	-52.0			-43.5	-21.25	22.2
HT/VHT40 STBC, M0 to M7	3	5	-51.2	-52.0	-51.0		-41.5	-21.25	20.3
HT/VHT40 STBC, M0 to M7	4	5	-51.2	-52.0	-51.0	-50.4	-40.0	-21.25	18.7
HE40, M0 to M9 1ss	1	5	-51.5				-46.4	-21.25	25.1
HE40, M0 to M9 1ss	2	5	-51.5	-51.7			-43.5	-21.25	22.2
HE40, M0 to M9 2ss	2	5	-51.5	-51.7			-43.5	-21.25	22.2
HE40, M0 to M9 1ss	3	5	-51.5	-51.7	-51.9		-41.8	-21.25	20.5
HE40, M0 to M9 2ss	3	5	-51.5	-51.7	-51.9		-41.8	-21.25	20.5
HE40, M0 to M9 3ss	3	5	-51.5	-51.7	-51.9		-41.8	-21.25	20.5
HE40, M0 to M9 1ss	4	5	-51.5	-51.7	-51.9	-50.6	-40.2	-21.25	19.0
HE40, M0 to M9 2ss	4	5	-51.5	-51.7	-51.9	-50.6	-40.2	-21.25	19.0
HE40, M0 to M9 3ss	4	5	-51.5	-51.7	-51.9	-50.6	-40.2	-21.25	19.0
HE40, M0 to M9 4ss	4	5	-51.5	-51.7	-51.9	-50.6	-40.2	-21.25	19.0
HE40 Beam Forming, M0 to M9 1ss	2	8	-51.5	-51.7			-40.5	-21.25	19.2
HE40 Beam Forming, M0 to M9 2ss	2	5	-51.5	-51.7			-43.5	-21.25	22.2
HE40 Beam Forming, M0 to M9 1ss	3	10	-51.5	-51.7	-51.9		-36.8	-21.25	15.5
HE40 Beam Forming, M0 to M9 2ss	3	7	-51.5	-51.7	-51.9		-39.8	-21.25	18.5
HE40 Beam Forming, M0 to M9 3ss	3	5	-51.5	-51.7	-51.9		-41.8	-21.25	20.5
HE40 Beam Forming, M0 to M9 1ss	4	11	-51.5	-51.7	-51.9	-50.6	-34.2	-21.25	13.0
HE40 Beam Forming, M0 to M9 2ss	4	8	-51.5	-51.7	-51.9	-50.6	-37.2	-21.25	16.0
HE40 Beam Forming, M0 to M9 3ss	4	6	-51.5	-51.7	-51.9	-50.6	-39.2	-21.25	18.0
HE40 Beam Forming, M0 to M9 4ss	4	5	-51.5	-51.7	-51.9	-50.6	-40.2	-21.25	19.0
HE40 STBC, M0 to M9 2ss	2	5	-51.5	-51.7			-43.5	-21.25	22.2

HE40 STBC, M0 to M9 2ss	3	5	-51.5	-51.7	-51.9		-41.8	-21.25	20.5
HE40 STBC, M0 to M9 2ss	4	5	-51.5	-51.7	-51.9	-50.6	-40.2	-21.25	19.0

5825	Non HT20, 6 to 54 Mbps	1	5	-51.3				-46.3	-21.25	25.1
	Non HT20, 6 to 54 Mbps	2	5	-51.3	-52.7			-43.9	-21.25	22.7
	Non HT20, 6 to 54 Mbps	3	5	-51.3	-52.7	-51.7		-42.1	-21.25	20.8
	Non HT20, 6 to 54 Mbps	4	5	-51.3	-52.7	-51.7	-50.7	-40.5	-21.25	19.3
	Non HT20 Beam Forming, 6 to 54 Mbps	2	8	-51.3	-52.7			-40.9	-21.25	19.7
	Non HT20 Beam Forming, 6 to 54 Mbps	3	10	-51.3	-52.7	-51.7		-37.1	-21.25	15.8
	Non HT20 Beam Forming, 6 to 54 Mbps	4	11	-51.3	-52.7	-51.7	-50.7	-34.5	-21.25	13.3
	HT/VHT20, M0 to M7	1	5	-50.6				-45.6	-21.25	24.4
	HT/VHT20, M0 to M7	2	5	-50.6	-53.2			-43.7	-21.25	22.4
	HT/VHT20, M8 to M15	2	5	-50.6	-53.2			-43.7	-21.25	22.4
	HT/VHT20, M0 to M7	3	5	-50.6	-53.2	-50.8		-41.6	-21.25	20.4
	HT/VHT20, M8 to M15	3	5	-50.6	-53.2	-50.8		-41.6	-21.25	20.4
	HT/VHT20, M16 to M23	3	5	-50.6	-53.2	-50.8		-41.6	-21.25	20.4
	HT/VHT20, M0 to M7	4	5	-50.6	-53.2	-50.8	-51.3	-40.3	-21.25	19.1
	HT/VHT20, M8 to M15	4	5	-50.6	-53.2	-50.8	-51.3	-40.3	-21.25	19.1
	HT/VHT20, M16 to M23	4	5	-50.6	-53.2	-50.8	-51.3	-40.3	-21.25	19.1
	HT/VHT20, M24 to M31	4	5	-50.6	-53.2	-50.8	-51.3	-40.3	-21.25	19.1
	HT/VHT20 Beam Forming, M0 to M7	2	8	-50.6	-53.2			-40.7	-21.25	19.4
	HT/VHT20 Beam Forming, M8 to M15	2	5	-50.6	-53.2			-43.7	-21.25	22.4
	HT/VHT20 Beam Forming, M0 to M7	3	10	-50.6	-53.2	-50.8		-36.6	-21.25	15.4
	HT/VHT20 Beam Forming, M8 to M15	3	7	-50.6	-53.2	-50.8		-39.6	-21.25	18.4
	HT/VHT20 Beam Forming, M16 to M23	3	5	-50.6	-53.2	-50.8		-41.6	-21.25	20.4
	HT/VHT20 Beam Forming, M0 to M7	4	11	-50.6	-53.2	-50.8	-51.3	-34.3	-21.25	13.1
	HT/VHT20 Beam Forming, M8 to M15	4	8	-50.6	-53.2	-50.8	-51.3	-37.3	-21.25	16.1
	HT/VHT20 Beam Forming, M16 to M23	4	6	-50.6	-53.2	-50.8	-51.3	-39.3	-21.25	18.1
	HT/VHT20 Beam Forming, M24 to M31	4	5	-50.6	-53.2	-50.8	-51.3	-40.3	-21.25	19.1
	HT/VHT20 STBC, M0 to M7	2	5	-50.6	-53.2			-43.7	-21.25	22.4
	HT/VHT20 STBC, M0 to M7	3	5	-50.6	-53.2	-50.8		-41.6	-21.25	20.4
	HT/VHT20 STBC, M0 to M7	4	5	-50.6	-53.2	-50.8	-51.3	-40.3	-21.25	19.1
	HE20, M0 to M9 1ss	1	5	-50.6				-45.6	-21.25	24.4
	HE20, M0 to M9 1ss	2	5	-50.6	-52.7			-43.5	-21.25	22.3
	HE20, M0 to M9 2ss	2	5	-50.6	-52.7			-43.5	-21.25	22.3
	HE20, M0 to M9 1ss	3	5	-50.6	-52.7	-51.5		-41.7	-21.25	20.5
	HE20, M0 to M9 2ss	3	5	-50.6	-52.7	-51.5		-41.7	-21.25	20.5
HE20, M0 to M9 3ss	3	5	-50.6	-52.7	-51.5		-41.7	-21.25	20.5	
HE20, M0 to M9 1ss	4	5	-50.6	-52.7	-51.5	-50.5	-40.2	-21.25	19.0	
HE20, M0 to M9 2ss	4	5	-50.6	-52.7	-51.5	-50.5	-40.2	-21.25	19.0	
HE20, M0 to M9 3ss	4	5	-50.6	-52.7	-51.5	-50.5	-40.2	-21.25	19.0	



HE20, M0 to M9 4ss	4	5	-50.6	-52.7	-51.5	-50.5	-40.2	-21.25	19.0
HE20 Beam Forming, M0 to M9 1ss	2	8	-50.6	-52.7			-40.5	-21.25	19.3
HE20 Beam Forming, M0 to M9 2ss	2	5	-50.6	-52.7			-43.5	-21.25	22.3
HE20 Beam Forming, M0 to M9 1ss	3	10	-50.6	-52.7	-51.5		-36.7	-21.25	15.5
HE20 Beam Forming, M0 to M9 2ss	3	7	-50.6	-52.7	-51.5		-39.7	-21.25	18.5
HE20 Beam Forming, M0 to M9 3ss	3	5	-50.6	-52.7	-51.5		-41.7	-21.25	20.5
HE20 Beam Forming, M0 to M9 1ss	4	11	-50.6	-52.7	-51.5	-50.5	-34.2	-21.25	13.0
HE20 Beam Forming, M0 to M9 2ss	4	8	-50.6	-52.7	-51.5	-50.5	-37.2	-21.25	16.0
HE20 Beam Forming, M0 to M9 3ss	4	6	-50.6	-52.7	-51.5	-50.5	-39.2	-21.25	18.0
HE20 Beam Forming, M0 to M9 4ss	4	5	-50.6	-52.7	-51.5	-50.5	-40.2	-21.25	19.0
HE20 STBC, M0 to M9 2ss	2	5	-50.6	-52.7			-43.5	-21.25	22.3
HE20 STBC, M0 to M9 2ss	3	5	-50.6	-52.7	-51.5		-41.7	-21.25	20.5
HE20 STBC, M0 to M9 2ss	4	5	-50.6	-52.7	-51.5	-50.5	-40.2	-21.25	19.0



Conducted Spurs Peak, 5745 MHz, HE20 Beam Forming, M0 to M9 1ss



Antenna A



Antenna B



Antenna C



Antenna D

A.6 Conducted Bandedge

15.205 / 15.247 / RSS-247 In any 100 kHz bandwidth outside the frequency band in which the digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 30 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.

Devices certified before March 2, 2018 with antenna gain of 10 dBi or less may demonstrate compliance with the emission limits in §15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease before March 2, 2020.

Test Procedure

Ref. KDB 558074 D01 DTS Meas Guidance v03r05
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 KDB 558074 D01 DTS Meas Guidance v03r05 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 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.

Conducted Bandedge

Test parameters non-restricted Band
KDB 558074 D01 v03r05 section 11.1b, 11.2-3, also see
ANSI C63.10: 2013 section 11.10.3

RBW = 100 kHz
VBW ≥ 3 x RBW
Sweep = Auto couple
Detector = Peak
Trace = Max Hold.

System Number	Description	Samples	System under test	Support equipment
1	EUT	S01	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Support	S02	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Tested By:

Chris Blair

Date of testing:

25-Mar-19 - 29-Mar-19

Test Result: **PASS**

See Appendix C for list of test equipment



Frequency (MHz)	Mode	Tx Paths	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 (dBm)	Margin (dB)
5745	Non HT20, 6 to 54 Mbps	1	5	-52.6				-47.6	-27.00	20.6
	Non HT20, 6 to 54 Mbps	2	5	-53.3	-54.5			-45.8	-27.00	18.8
	Non HT20, 6 to 54 Mbps	3	5	-53.3	-54.5	-52.3		-43.5	-27.00	16.5
	Non HT20, 6 to 54 Mbps	4	5	-53.3	-54.5	-52.3	-52.1	-41.9	-27.00	14.9
	Non HT20 Beam Forming, 6 to 54 Mbps	2	8	-53.3	-54.5			-42.8	-27.00	15.8
	Non HT20 Beam Forming, 6 to 54 Mbps	3	10	-53.3	-54.5	-52.3		-38.5	-27.00	11.5
	Non HT20 Beam Forming, 6 to 54 Mbps	4	11	-53.3	-54.5	-52.3	-52.1	-35.9	-27.00	8.9
	HT/VHT20, M0 to M7	1	5	-52.9				-47.9	-27.00	20.9
	HT/VHT20, M0 to M7	2	5	-52.9	-53.5			-45.2	-27.00	18.2
	HT/VHT20, M8 to M15	2	5	-52.9	-53.5			-45.2	-27.00	18.2
	HT/VHT20, M0 to M7	3	5	-52.9	-53.5	-51.8		-42.9	-27.00	15.9
	HT/VHT20, M8 to M15	3	5	-52.9	-53.5	-51.8		-42.9	-27.00	15.9
	HT/VHT20, M16 to M23	3	5	-52.9	-53.5	-51.8		-42.9	-27.00	15.9
	HT/VHT20, M0 to M7	4	5	-52.9	-53.5	-51.8	-51.8	-41.4	-27.00	14.4
	HT/VHT20, M8 to M15	4	5	-52.9	-53.5	-51.8	-51.8	-41.4	-27.00	14.4
	HT/VHT20, M16 to M23	4	5	-52.9	-53.5	-51.8	-51.8	-41.4	-27.00	14.4
	HT/VHT20, M24 to M31	4	5	-52.9	-53.5	-51.8	-51.8	-41.4	-27.00	14.4
	HT/VHT20 Beam Forming, M0 to M7	2	8	-52.9	-53.5			-42.2	-27.00	15.2
	HT/VHT20 Beam Forming, M8 to M15	2	5	-52.9	-53.5			-45.2	-27.00	18.2
	HT/VHT20 Beam Forming, M0 to M7	3	10	-52.9	-53.5	-51.8		-37.9	-27.00	10.9
	HT/VHT20 Beam Forming, M8 to M15	3	7	-52.9	-53.5	-51.8		-40.9	-27.00	13.9
	HT/VHT20 Beam Forming, M16 to M23	3	5	-52.9	-53.5	-51.8		-42.9	-27.00	15.9
	HT/VHT20 Beam Forming, M0 to M7	4	11	-52.9	-53.5	-51.8	-51.8	-35.4	-27.00	8.4
	HT/VHT20 Beam Forming, M8 to M15	4	8	-52.9	-53.5	-51.8	-51.8	-38.4	-27.00	11.4
	HT/VHT20 Beam Forming, M16 to M23	4	6	-52.9	-53.5	-51.8	-51.8	-40.4	-27.00	13.4
	HT/VHT20 Beam Forming, M24 to M31	4	5	-52.9	-53.5	-51.8	-51.8	-41.4	-27.00	14.4
	HT/VHT20 STBC, M0 to M7	2	5	-52.9	-53.5			-45.2	-27.00	18.2
	HT/VHT20 STBC, M0 to M7	3	5	-52.9	-53.5	-51.8		-42.9	-27.00	15.9
	HT/VHT20 STBC, M0 to M7	4	5	-52.9	-53.5	-51.8	-51.8	-41.4	-27.00	14.4
	HE20, M0 to M9 1ss	1	5	-52.8				-47.8	-27.00	20.8
	HE20, M0 to M9 1ss	2	5	-52.8	-52.5			-44.6	-27.00	17.6

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	HE20, M0 to M9 2ss	2	5	-52.8	-52.5			-44.6	-27.00	17.6
	HE20, M0 to M9 1ss	3	5	-52.8	-52.5	-51.8		-42.6	-27.00	15.6
	HE20, M0 to M9 2ss	3	5	-52.8	-52.5	-51.8		-42.6	-27.00	15.6
	HE20, M0 to M9 3ss	3	5	-52.8	-52.5	-51.8		-42.6	-27.00	15.6
	HE20, M0 to M9 1ss	4	5	-52.8	-52.5	-51.8	-51.6	-41.1	-27.00	14.1
	HE20, M0 to M9 2ss	4	5	-52.8	-52.5	-51.8	-51.6	-41.1	-27.00	14.1
	HE20, M0 to M9 3ss	4	5	-52.8	-52.5	-51.8	-51.6	-41.1	-27.00	14.1
	HE20, M0 to M9 4ss	4	5	-52.8	-52.5	-51.8	-51.6	-41.1	-27.00	14.1
	HE20 Beam Forming, M0 to M9 1ss	2	8	-52.8	-52.5			-41.6	-27.00	14.6
	HE20 Beam Forming, M0 to M9 2ss	2	5	-52.8	-52.5			-44.6	-27.00	17.6
	HE20 Beam Forming, M0 to M9 1ss	3	10	-52.8	-52.5	-51.8		-37.6	-27.00	10.6
	HE20 Beam Forming, M0 to M9 2ss	3	7	-52.8	-52.5	-51.8		-40.6	-27.00	13.6
	HE20 Beam Forming, M0 to M9 3ss	3	5	-52.8	-52.5	-51.8		-42.6	-27.00	15.6
	HE20 Beam Forming, M0 to M9 1ss	4	11	-52.8	-52.5	-51.8	-51.6	-35.1	-27.00	8.1
	HE20 Beam Forming, M0 to M9 2ss	4	8	-52.8	-52.5	-51.8	-51.6	-38.1	-27.00	11.1
	HE20 Beam Forming, M0 to M9 3ss	4	6	-52.8	-52.5	-51.8	-51.6	-40.1	-27.00	13.1
	HE20 Beam Forming, M0 to M9 4ss	4	5	-52.8	-52.5	-51.8	-51.6	-41.1	-27.00	14.1
	HE20 STBC, M0 to M9 2ss	2	5	-52.8	-52.5			-44.6	-27.00	17.6
	HE20 STBC, M0 to M9 2ss	3	5	-52.8	-52.5	-51.8		-42.6	-27.00	15.6
	HE20 STBC, M0 to M9 2ss	4	5	-52.8	-52.5	-51.8	-51.6	-41.1	-27.00	14.1
5755	Non HT40, 6 to 54 Mbps	1	5	-52.5				-47.5	-27.00	20.5
	Non HT40, 6 to 54 Mbps	2	5	-52.5	-52.4			-44.4	-27.00	17.4
	Non HT40, 6 to 54 Mbps	3	5	-52.5	-52.4	-51.7		-42.4	-27.00	15.4
	Non HT40, 6 to 54 Mbps	4	5	-52.5	-52.4	-51.7	-52.2	-41.2	-27.00	14.2
	HT/VHT40, M0 to M7	1	5	-53.3				-48.2	-27.00	21.2
	HT/VHT40, M0 to M7	2	5	-53.3	-52.3			-44.7	-27.00	17.7
	HT/VHT40, M8 to M15	2	5	-53.3	-52.3			-44.7	-27.00	17.7
	HT/VHT40, M0 to M7	3	5	-53.3	-52.3	-51.7		-42.5	-27.00	15.5
	HT/VHT40, M8 to M15	3	5	-53.3	-52.3	-51.7		-42.5	-27.00	15.5
	HT/VHT40, M16 to M23	3	5	-53.3	-52.3	-51.7		-42.5	-27.00	15.5
	HT/VHT40, M0 to M7	4	5	-53.3	-52.3	-51.7	-52.6	-41.3	-27.00	14.3
	HT/VHT40, M8 to M15	4	5	-53.3	-52.3	-51.7	-52.6	-41.3	-27.00	14.3
	HT/VHT40, M16 to M23	4	5	-53.3	-52.3	-51.7	-52.6	-41.3	-27.00	14.3
	HT/VHT40, M24 to M31	4	5	-53.3	-52.3	-51.7	-52.6	-41.3	-27.00	14.3
	HT/VHT40 Beam Forming, M0 to M7	2	8	-53.3	-52.3			-41.7	-27.00	14.7
	HT/VHT40 Beam Forming, M8 to M15	2	5	-53.3	-52.3			-44.7	-27.00	17.7
	HT/VHT40 Beam Forming, M0 to M7	3	10	-53.3	-52.3	-51.7		-37.5	-27.00	10.5
	HT/VHT40 Beam Forming, M8 to M15	3	7	-53.3	-52.3	-51.7		-40.5	-27.00	13.5
	HT/VHT40 Beam Forming, M16 to M23	3	5	-53.3	-52.3	-51.7		-42.5	-27.00	15.5
	HT/VHT40 Beam Forming, M0 to M7	4	11	-53.3	-52.3	-51.7	-52.6	-35.3	-27.00	8.3
HT/VHT40 Beam Forming, M8 to M15	4	8	-53.3	-52.3	-51.7	-52.6	-38.3	-27.00	11.3	
HT/VHT40 Beam Forming, M16 to M23	4	6	-53.3	-52.3	-51.7	-52.6	-40.3	-27.00	13.3	

	HT/VHT40 Beam Forming, M24 to M31	4	5	-53.3	-52.3	-51.7	-52.6	-41.3	-27.00	14.3
	HT/VHT40 STBC, M0 to M7	2	5	-53.3	-52.3			-44.7	-27.00	17.7
	HT/VHT40 STBC, M0 to M7	3	5	-53.3	-52.3	-51.7		-42.5	-27.00	15.5
	HT/VHT40 STBC, M0 to M7	4	5	-53.3	-52.3	-51.7	-52.6	-41.3	-27.00	14.3
	HE40, M0 to M9 1ss	1	5	-52.6				-47.5	-27.00	20.5
	HE40, M0 to M9 1ss	2	5	-52.6	-52.7			-44.5	-27.00	17.5
	HE40, M0 to M9 2ss	2	5	-52.6	-52.7			-44.5	-27.00	17.5
	HE40, M0 to M9 1ss	3	5	-52.6	-52.7	-51.7		-42.4	-27.00	15.4
	HE40, M0 to M9 2ss	3	5	-52.6	-52.7	-51.7		-42.4	-27.00	15.4
	HE40, M0 to M9 3ss	3	5	-52.6	-52.7	-51.7		-42.4	-27.00	15.4
	HE40, M0 to M9 1ss	4	5	-52.6	-52.7	-51.7	-52.1	-41.1	-27.00	14.1
	HE40, M0 to M9 2ss	4	5	-52.6	-52.7	-51.7	-52.1	-41.1	-27.00	14.1
	HE40, M0 to M9 3ss	4	5	-52.6	-52.7	-51.7	-52.1	-41.1	-27.00	14.1
	HE40, M0 to M9 4ss	4	5	-52.6	-52.7	-51.7	-52.1	-41.1	-27.00	14.1
	HE40 Beam Forming, M0 to M9 1ss	2	8	-52.6	-52.7			-41.5	-27.00	14.5
	HE40 Beam Forming, M0 to M9 2ss	2	5	-52.6	-52.7			-44.5	-27.00	17.5
	HE40 Beam Forming, M0 to M9 1ss	3	10	-52.6	-52.7	-51.7		-37.4	-27.00	10.4
	HE40 Beam Forming, M0 to M9 2ss	3	7	-52.6	-52.7	-51.7		-40.4	-27.00	13.4
	HE40 Beam Forming, M0 to M9 3ss	3	5	-52.6	-52.7	-51.7		-42.4	-27.00	15.4
	HE40 Beam Forming, M0 to M9 1ss	4	11	-52.6	-52.7	-51.7	-52.1	-35.1	-27.00	8.1
	HE40 Beam Forming, M0 to M9 2ss	4	8	-52.6	-52.7	-51.7	-52.1	-38.1	-27.00	11.1
	HE40 Beam Forming, M0 to M9 3ss	4	6	-52.6	-52.7	-51.7	-52.1	-40.1	-27.00	13.1
	HE40 Beam Forming, M0 to M9 4ss	4	5	-52.6	-52.7	-51.7	-52.1	-41.1	-27.00	14.1
	HE40 STBC, M0 to M9 2ss	2	5	-52.6	-52.7			-44.5	-27.00	17.5
	HE40 STBC, M0 to M9 2ss	3	5	-52.6	-52.7	-51.7		-42.4	-27.00	15.4
	HE40 STBC, M0 to M9 2ss	4	5	-52.6	-52.7	-51.7	-52.1	-41.1	-27.00	14.1
5775	Non HT80, 6 to 54 Mbps	1	5	-49.6				-44.6	-27.00	17.6
	Non HT80, 6 to 54 Mbps	2	5	-49.6	-49.6			-41.6	-27.00	14.6
	Non HT80, 6 to 54 Mbps	3	5	-49.6	-49.6	-48.1		-39.3	-27.00	12.3
	Non HT80, 6 to 54 Mbps	4	5	-49.6	-49.6	-48.1	-49.9	-38.2	-27.00	11.2
	VHT80, M0 to M9 1ss	1	5	-50.8				-45.6	-27.00	18.6
	VHT80, M0 to M9 1ss	2	5	-50.8	-50.6			-42.5	-27.00	15.5
	VHT80, M0 to M9 2ss	2	5	-50.8	-50.6			-42.5	-27.00	15.5
	VHT80, M0 to M9 1ss	3	5	-50.8	-50.6	-48.7		-39.9	-27.00	12.9
	VHT80, M0 to M9 2ss	3	5	-50.8	-50.6	-48.7		-39.9	-27.00	12.9
	VHT80, M0 to M9 3ss	3	5	-50.8	-50.6	-48.7		-39.9	-27.00	12.9
	VHT80, M0 to M9 1ss	4	5	-50.8	-50.6	-48.7	-51.2	-39.0	-27.00	12.0
	VHT80, M0 to M9 2ss	4	5	-50.8	-50.6	-48.7	-51.2	-39.0	-27.00	12.0
	VHT80, M0 to M9 3ss	4	5	-50.8	-50.6	-48.7	-51.2	-39.0	-27.00	12.0
	VHT80, M0 to M9 4ss	4	5	-50.8	-50.6	-48.7	-51.2	-39.0	-27.00	12.0
	VHT80 Beam Forming, M0 to M9 1ss	2	8	-50.8	-50.6			-39.5	-27.00	12.5
VHT80 Beam Forming, M0 to M9 2ss	2	5	-50.8	-50.6			-42.5	-27.00	15.5	

VHT80 Beam Forming, M0 to M9 1ss	3	10	-50.8	-50.6	-48.7		-34.9	-27.00	7.9
VHT80 Beam Forming, M0 to M9 2ss	3	7	-50.8	-50.6	-48.7		-37.9	-27.00	10.9
VHT80 Beam Forming, M0 to M9 3ss	3	5	-50.8	-50.6	-48.7		-39.9	-27.00	12.9
VHT80 Beam Forming, M0 to M9 1ss	4	11	-50.8	-50.6	-48.7	-51.2	-33.0	-27.00	6.0
VHT80 Beam Forming, M0 to M9 2ss	4	8	-50.8	-50.6	-48.7	-51.2	-36.0	-27.00	9.0
VHT80 Beam Forming, M0 to M9 3ss	4	6	-50.8	-50.6	-48.7	-51.2	-38.0	-27.00	11.0
VHT80 Beam Forming, M0 to M9 4ss	4	5	-50.8	-50.6	-48.7	-51.2	-39.0	-27.00	12.0
VHT80 STBC, M0 to M9 1ss	2	5	-50.8	-50.6			-42.5	-27.00	15.5
VHT80 STBC, M0 to M9 1ss	3	5	-50.8	-50.6	-48.7		-39.9	-27.00	12.9
VHT80 STBC, M0 to M9 1ss	4	5	-50.8	-50.6	-48.7	-51.2	-39.0	-27.00	12.0
HE80, M0 to M9 1ss	1	5	-51.0				-45.8	-27.00	18.8
HE80, M0 to M9 1ss	2	5	-51.0	-50.4			-42.4	-27.00	15.4
HE80, M0 to M9 2ss	2	5	-51.0	-50.4			-42.4	-27.00	15.4
HE80, M0 to M9 1ss	3	5	-51.0	-50.4	-49.1		-40.1	-27.00	13.1
HE80, M0 to M9 2ss	3	5	-51.0	-50.4	-49.1		-40.1	-27.00	13.1
HE80, M0 to M9 3ss	3	5	-51.0	-50.4	-49.1		-40.1	-27.00	13.1
HE80, M0 to M9 1ss	4	5	-51.0	-50.4	-49.1	-50.8	-39.0	-27.00	12.0
HE80, M0 to M9 2ss	4	5	-51.0	-50.4	-49.1	-50.8	-39.0	-27.00	12.0
HE80, M0 to M9 3ss	4	5	-51.0	-50.4	-49.1	-50.8	-39.0	-27.00	12.0
HE80, M0 to M9 4ss	4	5	-51.0	-50.4	-49.1	-50.8	-39.0	-27.00	12.0
HE80 Beam Forming, M0 to M9 1ss	2	8	-51.0	-50.4			-39.4	-27.00	12.4
HE80 Beam Forming, M0 to M9 2ss	2	5	-51.0	-50.4			-42.4	-27.00	15.4
HE80 Beam Forming, M0 to M9 1ss	3	10	-51.0	-50.4	-49.1		-35.1	-27.00	8.1
HE80 Beam Forming, M0 to M9 2ss	3	7	-51.0	-50.4	-49.1		-38.1	-27.00	11.1
HE80 Beam Forming, M0 to M9 3ss	3	5	-51.0	-50.4	-49.1		-40.1	-27.00	13.1
HE80 Beam Forming, M0 to M9 1ss	4	11	-51.0	-50.4	-49.1	-50.8	-33.0	-27.00	6.0
HE80 Beam Forming, M0 to M9 2ss	4	8	-51.0	-50.4	-49.1	-50.8	-36.0	-27.00	9.0
HE80 Beam Forming, M0 to M9 3ss	4	6	-51.0	-50.4	-49.1	-50.8	-38.0	-27.00	11.0
HE80 Beam Forming, M0 to M9 4ss	4	5	-51.0	-50.4	-49.1	-50.8	-39.0	-27.00	12.0
HE80 STBC, M0 to M9 1ss	2	5	-51.0	-50.4			-42.4	-27.00	15.4
HE80 STBC, M0 to M9 1ss	3	5	-51.0	-50.4	-49.1		-40.1	-27.00	13.1
HE80 STBC, M0 to M9 1ss	4	5	-51.0	-50.4	-49.1	-50.8	-39.0	-27.00	12.0

Conducted Bandedge Peak 15407L, 5775 MHz, VHT80 Beam Forming, M0 to M9 1ss	
Antenna A	Antenna B



Antenna C

Antenna D



Frequency (MHz)	Mode	Tx Paths	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 (dBm)	Margin (dB)	
5775	Non HT80, 6 to 54 Mbps	1	5	-50.1				-45.1	-27.00	18.1	
	Non HT80, 6 to 54 Mbps	2	5	-50.1	-48.7			-41.3	-27.00	14.3	
	Non HT80, 6 to 54 Mbps	3	5	-50.1	-48.7	-48.7		-39.3	-27.00	12.3	
	Non HT80, 6 to 54 Mbps	4	5	-50.1	-48.7	-48.7	-47.9	-37.8	-27.00	10.8	
	VHT80, M0 to M9 1ss	1	5	-51.3				-46.1	-27.00	19.1	
	VHT80, M0 to M9 1ss	2	5	-51.3	-49.1			-41.8	-27.00	14.8	
	VHT80, M0 to M9 2ss	2	5	-51.3	-49.1			-41.8	-27.00	14.8	
	VHT80, M0 to M9 1ss	3	5	-51.3	-49.1	-49.9		-40.0	-27.00	13.0	
	VHT80, M0 to M9 2ss	3	5	-51.3	-49.1	-49.9		-40.0	-27.00	13.0	
	VHT80, M0 to M9 3ss	3	5	-51.3	-49.1	-49.9		-40.0	-27.00	13.0	
	VHT80, M0 to M9 1ss	4	5	-51.3	-49.1	-49.9	-49.0	-38.5	-27.00	11.5	
	VHT80, M0 to M9 2ss	4	5	-51.3	-49.1	-49.9	-49.0	-38.5	-27.00	11.5	
	VHT80, M0 to M9 3ss	4	5	-51.3	-49.1	-49.9	-49.0	-38.5	-27.00	11.5	
	VHT80, M0 to M9 4ss	4	5	-51.3	-49.1	-49.9	-49.0	-38.5	-27.00	11.5	
	VHT80 Beam Forming, M0 to M9 1ss	2	8	-51.3	-49.1				-38.8	-27.00	11.8
	VHT80 Beam Forming, M0 to M9 2ss	2	5	-51.3	-49.1				-41.8	-27.00	14.8
	VHT80 Beam Forming, M0 to M9 1ss	3	10	-51.3	-49.1	-49.9			-35.0	-27.00	8.0
	VHT80 Beam Forming, M0 to M9 2ss	3	7	-51.3	-49.1	-49.9			-38.0	-27.00	11.0
	VHT80 Beam Forming, M0 to M9 3ss	3	5	-51.3	-49.1	-49.9			-40.0	-27.00	13.0
	VHT80 Beam Forming, M0 to M9 1ss	4	11	-51.3	-49.1	-49.9	-49.0		-32.5	-27.00	5.5
	VHT80 Beam Forming, M0 to M9 2ss	4	8	-51.3	-49.1	-49.9	-49.0		-35.5	-27.00	8.5
	VHT80 Beam Forming, M0 to M9 3ss	4	6	-51.3	-49.1	-49.9	-49.0		-37.5	-27.00	10.5
	VHT80 Beam Forming, M0 to M9 4ss	4	5	-51.3	-49.1	-49.9	-49.0		-38.5	-27.00	11.5
	VHT80 STBC, M0 to M9 1ss	2	5	-51.3	-49.1				-41.8	-27.00	14.8
	VHT80 STBC, M0 to M9 1ss	3	5	-51.3	-49.1	-49.9			-40.0	-27.00	13.0
	VHT80 STBC, M0 to M9 1ss	4	5	-51.3	-49.1	-49.9	-49.0		-38.5	-27.00	11.5
	HE80, M0 to M9 1ss	1	5	-51.0					-45.8	-27.00	18.8
	HE80, M0 to M9 1ss	2	5	-51.0	-49.2				-41.7	-27.00	14.7
	HE80, M0 to M9 2ss	2	5	-51.0	-49.2				-41.7	-27.00	14.7
	HE80, M0 to M9 1ss	3	5	-51.0	-49.2	-49.4			-39.8	-27.00	12.8

	HE80, M0 to M9 2ss	3	5	-51.0	-49.2	-49.4		-39.8	-27.00	12.8
	HE80, M0 to M9 3ss	3	5	-51.0	-49.2	-49.4		-39.8	-27.00	12.8
	HE80, M0 to M9 1ss	4	5	-51.0	-49.2	-49.4	-48.6	-38.2	-27.00	11.2
	HE80, M0 to M9 2ss	4	5	-51.0	-49.2	-49.4	-48.6	-38.2	-27.00	11.2
	HE80, M0 to M9 3ss	4	5	-51.0	-49.2	-49.4	-48.6	-38.2	-27.00	11.2
	HE80, M0 to M9 4ss	4	5	-51.0	-49.2	-49.4	-48.6	-38.2	-27.00	11.2
	HE80 Beam Forming, M0 to M9 1ss	2	8	-51.0	-49.2			-38.7	-27.00	11.7
	HE80 Beam Forming, M0 to M9 2ss	2	5	-51.0	-49.2			-41.7	-27.00	14.7
	HE80 Beam Forming, M0 to M9 1ss	3	10	-51.0	-49.2	-49.4		-34.8	-27.00	7.8
	HE80 Beam Forming, M0 to M9 2ss	3	7	-51.0	-49.2	-49.4		-37.8	-27.00	10.8
	HE80 Beam Forming, M0 to M9 3ss	3	5	-51.0	-49.2	-49.4		-39.8	-27.00	12.8
	HE80 Beam Forming, M0 to M9 1ss	4	11	-51.0	-49.2	-49.4	-48.6	-32.2	-27.00	5.2
	HE80 Beam Forming, M0 to M9 2ss	4	8	-51.0	-49.2	-49.4	-48.6	-35.2	-27.00	8.2
	HE80 Beam Forming, M0 to M9 3ss	4	6	-51.0	-49.2	-49.4	-48.6	-37.2	-27.00	10.2
	HE80 Beam Forming, M0 to M9 4ss	4	5	-51.0	-49.2	-49.4	-48.6	-38.2	-27.00	11.2
	HE80 STBC, M0 to M9 1ss	2	5	-51.0	-49.2			-41.7	-27.00	14.7
	HE80 STBC, M0 to M9 1ss	3	5	-51.0	-49.2	-49.4		-39.8	-27.00	12.8
	HE80 STBC, M0 to M9 1ss	4	5	-51.0	-49.2	-49.4	-48.6	-38.2	-27.00	11.2
5785	Non HT20, 6 to 54 Mbps	1	5	-52.8				-47.8	-27.00	20.8
	Non HT20, 6 to 54 Mbps	2	5	-52.8	-52.6			-44.7	-27.00	17.7
	Non HT20, 6 to 54 Mbps	3	5	-52.8	-52.6	-51.5		-42.5	-27.00	15.5
	Non HT20, 6 to 54 Mbps	4	5	-52.8	-52.6	-51.5	-50.1	-40.6	-27.00	13.6
	Non HT20 Beam Forming, 6 to 54 Mbps	2	8	-52.8	-52.6			-41.7	-27.00	14.7
	Non HT20 Beam Forming, 6 to 54 Mbps	3	10	-52.8	-52.6	-51.5		-37.5	-27.00	10.5
	Non HT20 Beam Forming, 6 to 54 Mbps	4	11	-52.8	-52.6	-51.5	-50.1	-34.6	-27.00	7.6
	HT/VHT20, M0 to M7	1	5	-51.9				-46.9	-27.00	19.9
	HT/VHT20, M0 to M7	2	5	-51.9	-52.1			-44.0	-27.00	17.0
	HT/VHT20, M8 to M15	2	5	-51.9	-52.1			-44.0	-27.00	17.0
	HT/VHT20, M0 to M7	3	5	-51.9	-52.1	-52.0		-42.2	-27.00	15.2
	HT/VHT20, M8 to M15	3	5	-51.9	-52.1	-52.0		-42.2	-27.00	15.2
	HT/VHT20, M16 to M23	3	5	-51.9	-52.1	-52.0		-42.2	-27.00	15.2
	HT/VHT20, M0 to M7	4	5	-51.9	-52.1	-52.0	-50.1	-40.4	-27.00	13.4
	HT/VHT20, M8 to M15	4	5	-51.9	-52.1	-52.0	-50.1	-40.4	-27.00	13.4
	HT/VHT20, M16 to M23	4	5	-51.9	-52.1	-52.0	-50.1	-40.4	-27.00	13.4
	HT/VHT20, M24 to M31	4	5	-51.9	-52.1	-52.0	-50.1	-40.4	-27.00	13.4
	HT/VHT20 Beam Forming, M0 to M7	2	8	-51.9	-52.1			-41.0	-27.00	14.0
	HT/VHT20 Beam Forming, M8 to M15	2	5	-51.9	-52.1			-44.0	-27.00	17.0
	HT/VHT20 Beam Forming, M0 to M7	3	10	-51.9	-52.1	-52.0		-37.2	-27.00	10.2
	HT/VHT20 Beam Forming, M8 to M15	3	7	-51.9	-52.1	-52.0		-40.2	-27.00	13.2
	HT/VHT20 Beam Forming, M16 to M23	3	5	-51.9	-52.1	-52.0		-42.2	-27.00	15.2
	HT/VHT20 Beam Forming, M0 to M7	4	11	-51.9	-52.1	-52.0	-50.1	-34.4	-27.00	7.4
HT/VHT20 Beam Forming, M8 to M15	4	8	-51.9	-52.1	-52.0	-50.1	-37.4	-27.00	10.4	

	HT/VHT20 Beam Forming, M16 to M23	4	6	-51.9	-52.1	-52.0	-50.1	-39.4	-27.00	12.4
	HT/VHT20 Beam Forming, M24 to M31	4	5	-51.9	-52.1	-52.0	-50.1	-40.4	-27.00	13.4
	HT/VHT20 STBC, M0 to M7	2	5	-51.9	-52.1			-44.0	-27.00	17.0
	HT/VHT20 STBC, M0 to M7	3	5	-51.9	-52.1	-52.0		-42.2	-27.00	15.2
	HT/VHT20 STBC, M0 to M7	4	5	-51.9	-52.1	-52.0	-50.1	-40.4	-27.00	13.4
	HE20, M0 to M9 1ss	1	5	-52.5				-47.5	-27.00	20.5
	HE20, M0 to M9 1ss	2	5	-52.5	-52.1			-44.3	-27.00	17.3
	HE20, M0 to M9 2ss	2	5	-52.5	-52.1			-44.3	-27.00	17.3
	HE20, M0 to M9 1ss	3	5	-52.5	-52.1	-52.1		-42.5	-27.00	15.5
	HE20, M0 to M9 2ss	3	5	-52.5	-52.1	-52.1		-42.5	-27.00	15.5
	HE20, M0 to M9 3ss	3	5	-52.5	-52.1	-52.1		-42.5	-27.00	15.5
	HE20, M0 to M9 1ss	4	5	-52.5	-52.1	-52.1	-49.8	-40.5	-27.00	13.5
	HE20, M0 to M9 2ss	4	5	-52.5	-52.1	-52.1	-49.8	-40.5	-27.00	13.5
	HE20, M0 to M9 3ss	4	5	-52.5	-52.1	-52.1	-49.8	-40.5	-27.00	13.5
	HE20, M0 to M9 4ss	4	5	-52.5	-52.1	-52.1	-49.8	-40.5	-27.00	13.5
	HE20 Beam Forming, M0 to M9 1ss	2	8	-52.5	-52.1			-41.3	-27.00	14.3
	HE20 Beam Forming, M0 to M9 2ss	2	5	-52.5	-52.1			-44.3	-27.00	17.3
	HE20 Beam Forming, M0 to M9 1ss	3	10	-52.5	-52.1	-52.1		-37.5	-27.00	10.5
	HE20 Beam Forming, M0 to M9 2ss	3	7	-52.5	-52.1	-52.1		-40.5	-27.00	13.5
	HE20 Beam Forming, M0 to M9 3ss	3	5	-52.5	-52.1	-52.1		-42.5	-27.00	15.5
	HE20 Beam Forming, M0 to M9 1ss	4	11	-52.5	-52.1	-52.1	-49.8	-34.5	-27.00	7.5
	HE20 Beam Forming, M0 to M9 2ss	4	8	-52.5	-52.1	-52.1	-49.8	-37.5	-27.00	10.5
	HE20 Beam Forming, M0 to M9 3ss	4	6	-52.5	-52.1	-52.1	-49.8	-39.5	-27.00	12.5
	HE20 Beam Forming, M0 to M9 4ss	4	5	-52.5	-52.1	-52.1	-49.8	-40.5	-27.00	13.5
	HE20 STBC, M0 to M9 2ss	2	5	-52.5	-52.1			-44.3	-27.00	17.3
	HE20 STBC, M0 to M9 2ss	3	5	-52.5	-52.1	-52.1		-42.5	-27.00	15.5
	HE20 STBC, M0 to M9 2ss	4	5	-52.5	-52.1	-52.1	-49.8	-40.5	-27.00	13.5
5795	Non HT40, 6 to 54 Mbps	1	5	-52.7				-47.7	-27.00	20.7
	Non HT40, 6 to 54 Mbps	2	5	-52.7	-51.0			-43.8	-27.00	16.8
	Non HT40, 6 to 54 Mbps	3	5	-52.7	-51.0	-51.5		-41.9	-27.00	14.9
	Non HT40, 6 to 54 Mbps	4	5	-52.7	-51.0	-51.5	-49.7	-40.1	-27.00	13.1
	HT/VHT40, M0 to M7	1	5	-52.4				-47.3	-27.00	20.3
	HT/VHT40, M0 to M7	2	5	-52.4	-51.2			-43.6	-27.00	16.6
	HT/VHT40, M8 to M15	2	5	-52.4	-51.2			-43.6	-27.00	16.6
	HT/VHT40, M0 to M7	3	5	-52.4	-51.2	-51.9		-41.9	-27.00	14.9
	HT/VHT40, M8 to M15	3	5	-52.4	-51.2	-51.9		-41.9	-27.00	14.9
	HT/VHT40, M16 to M23	3	5	-52.4	-51.2	-51.9		-41.9	-27.00	14.9
	HT/VHT40, M0 to M7	4	5	-52.4	-51.2	-51.9	-49.6	-40.0	-27.00	13.0
	HT/VHT40, M8 to M15	4	5	-52.4	-51.2	-51.9	-49.6	-40.0	-27.00	13.0
	HT/VHT40, M16 to M23	4	5	-52.4	-51.2	-51.9	-49.6	-40.0	-27.00	13.0
	HT/VHT40, M24 to M31	4	5	-52.4	-51.2	-51.9	-49.6	-40.0	-27.00	13.0
	HT/VHT40 Beam Forming, M0 to M7	2	8	-52.4	-51.2			-40.6	-27.00	13.6

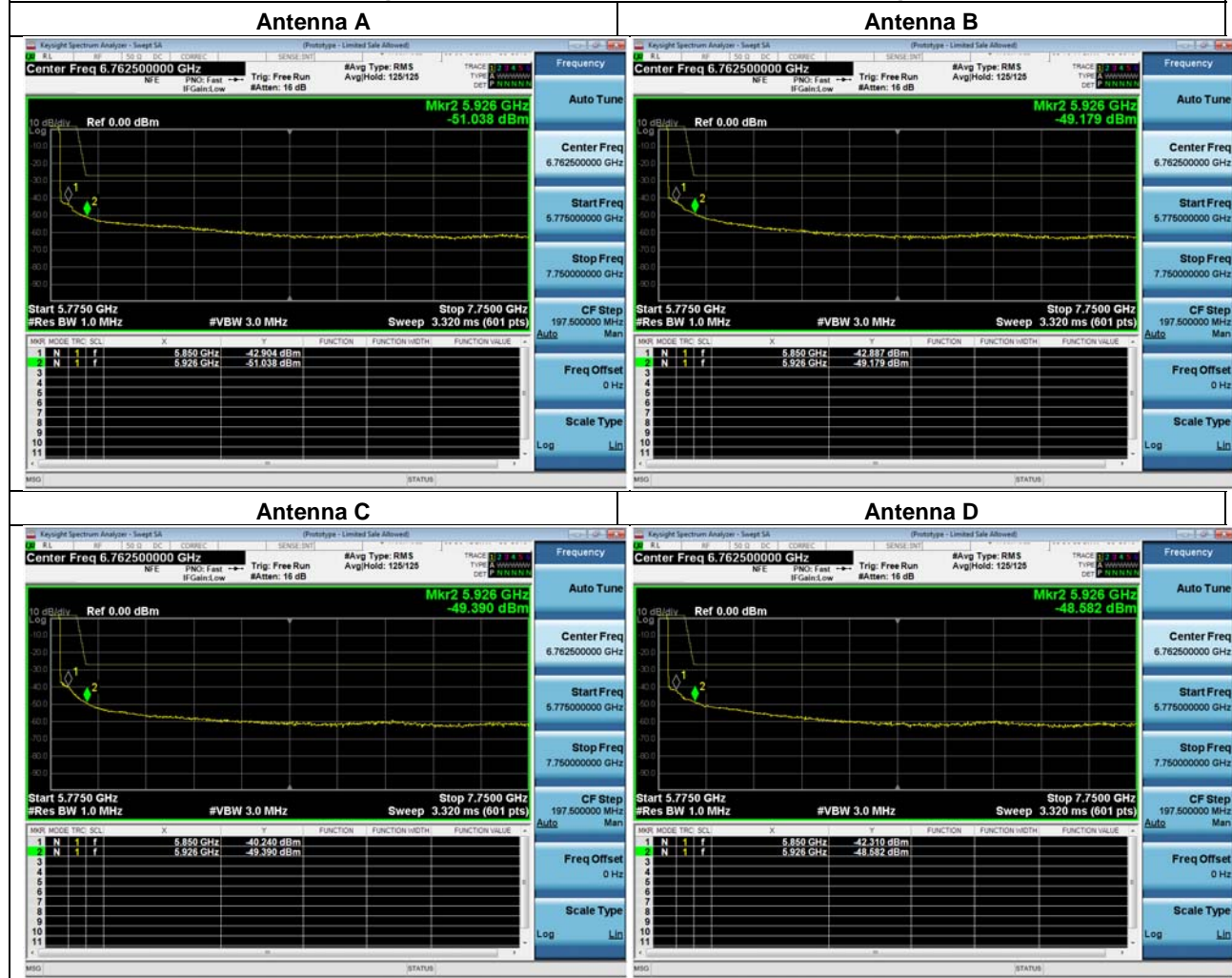
	HT/VHT40 Beam Forming, M8 to M15	2	5	-52.4	-51.2			-43.6	-27.00	16.6
	HT/VHT40 Beam Forming, M0 to M7	3	10	-52.4	-51.2	-51.9		-36.9	-27.00	9.9
	HT/VHT40 Beam Forming, M8 to M15	3	7	-52.4	-51.2	-51.9		-39.9	-27.00	12.9
	HT/VHT40 Beam Forming, M16 to M23	3	5	-52.4	-51.2	-51.9		-41.9	-27.00	14.9
	HT/VHT40 Beam Forming, M0 to M7	4	11	-52.4	-51.2	-51.9	-49.6	-34.0	-27.00	7.0
	HT/VHT40 Beam Forming, M8 to M15	4	8	-52.4	-51.2	-51.9	-49.6	-37.0	-27.00	10.0
	HT/VHT40 Beam Forming, M16 to M23	4	6	-52.4	-51.2	-51.9	-49.6	-39.0	-27.00	12.0
	HT/VHT40 Beam Forming, M24 to M31	4	5	-52.4	-51.2	-51.9	-49.6	-40.0	-27.00	13.0
	HT/VHT40 STBC, M0 to M7	2	5	-52.4	-51.2			-43.6	-27.00	16.6
	HT/VHT40 STBC, M0 to M7	3	5	-52.4	-51.2	-51.9		-41.9	-27.00	14.9
	HT/VHT40 STBC, M0 to M7	4	5	-52.4	-51.2	-51.9	-49.6	-40.0	-27.00	13.0
	HE40, M0 to M9 1ss	1	5	-52.3				-47.2	-27.00	20.2
	HE40, M0 to M9 1ss	2	5	-52.3	-50.8			-43.3	-27.00	16.3
	HE40, M0 to M9 2ss	2	5	-52.3	-50.8			-43.3	-27.00	16.3
	HE40, M0 to M9 1ss	3	5	-52.3	-50.8	-52.0		-41.7	-27.00	14.7
	HE40, M0 to M9 2ss	3	5	-52.3	-50.8	-52.0		-41.7	-27.00	14.7
	HE40, M0 to M9 3ss	3	5	-52.3	-50.8	-52.0		-41.7	-27.00	14.7
	HE40, M0 to M9 1ss	4	5	-52.3	-50.8	-52.0	-50.1	-40.1	-27.00	13.1
	HE40, M0 to M9 2ss	4	5	-52.3	-50.8	-52.0	-50.1	-40.1	-27.00	13.1
	HE40, M0 to M9 3ss	4	5	-52.3	-50.8	-52.0	-50.1	-40.1	-27.00	13.1
	HE40, M0 to M9 4ss	4	5	-52.3	-50.8	-52.0	-50.1	-40.1	-27.00	13.1
	HE40 Beam Forming, M0 to M9 1ss	2	8	-52.3	-50.8			-40.3	-27.00	13.3
	HE40 Beam Forming, M0 to M9 2ss	2	5	-52.3	-50.8			-43.3	-27.00	16.3
	HE40 Beam Forming, M0 to M9 1ss	3	10	-52.3	-50.8	-52.0		-36.7	-27.00	9.7
	HE40 Beam Forming, M0 to M9 2ss	3	7	-52.3	-50.8	-52.0		-39.7	-27.00	12.7
	HE40 Beam Forming, M0 to M9 3ss	3	5	-52.3	-50.8	-52.0		-41.7	-27.00	14.7
	HE40 Beam Forming, M0 to M9 1ss	4	11	-52.3	-50.8	-52.0	-50.1	-34.1	-27.00	7.1
	HE40 Beam Forming, M0 to M9 2ss	4	8	-52.3	-50.8	-52.0	-50.1	-37.1	-27.00	10.1
	HE40 Beam Forming, M0 to M9 3ss	4	6	-52.3	-50.8	-52.0	-50.1	-39.1	-27.00	12.1
	HE40 Beam Forming, M0 to M9 4ss	4	5	-52.3	-50.8	-52.0	-50.1	-40.1	-27.00	13.1
	HE40 STBC, M0 to M9 2ss	2	5	-52.3	-50.8			-43.3	-27.00	16.3
	HE40 STBC, M0 to M9 2ss	3	5	-52.3	-50.8	-52.0		-41.7	-27.00	14.7
	HE40 STBC, M0 to M9 2ss	4	5	-52.3	-50.8	-52.0	-50.1	-40.1	-27.00	13.1
5825	Non HT20, 6 to 54 Mbps	1	5	-51.8				-46.8	-27.00	19.8
	Non HT20, 6 to 54 Mbps	2	5	-51.8	-51.6			-43.7	-27.00	16.7
	Non HT20, 6 to 54 Mbps	3	5	-51.8	-51.6	-51.3		-41.8	-27.00	14.8
	Non HT20, 6 to 54 Mbps	4	5	-51.8	-51.6	-51.3	-50.0	-40.1	-27.00	13.1
	Non HT20 Beam Forming, 6 to 54 Mbps	2	8	-51.8	-51.6			-40.7	-27.00	13.7
	Non HT20 Beam Forming, 6 to 54 Mbps	3	10	-51.8	-51.6	-51.3		-36.8	-27.00	9.8
	Non HT20 Beam Forming, 6 to 54 Mbps	4	11	-51.8	-51.6	-51.3	-50.0	-34.1	-27.00	7.1
	HT/VHT20, M0 to M7	1	5	-51.4				-46.4	-27.00	19.4
	HT/VHT20, M0 to M7	2	5	-51.4	-52.0			-43.7	-27.00	16.7

HT/VHT20, M8 to M15	2	5	-51.4	-52.0			-43.7	-27.00	16.7
HT/VHT20, M0 to M7	3	5	-51.4	-52.0	-51.9		-42.0	-27.00	15.0
HT/VHT20, M8 to M15	3	5	-51.4	-52.0	-51.9		-42.0	-27.00	15.0
HT/VHT20, M16 to M23	3	5	-51.4	-52.0	-51.9		-42.0	-27.00	15.0
HT/VHT20, M0 to M7	4	5	-51.4	-52.0	-51.9	-50.4	-40.4	-27.00	13.4
HT/VHT20, M8 to M15	4	5	-51.4	-52.0	-51.9	-50.4	-40.4	-27.00	13.4
HT/VHT20, M16 to M23	4	5	-51.4	-52.0	-51.9	-50.4	-40.4	-27.00	13.4
HT/VHT20, M24 to M31	4	5	-51.4	-52.0	-51.9	-50.4	-40.4	-27.00	13.4
HT/VHT20 Beam Forming, M0 to M7	2	8	-51.4	-52.0			-40.7	-27.00	13.7
HT/VHT20 Beam Forming, M8 to M15	2	5	-51.4	-52.0			-43.7	-27.00	16.7
HT/VHT20 Beam Forming, M0 to M7	3	10	-51.4	-52.0	-51.9		-37.0	-27.00	10.0
HT/VHT20 Beam Forming, M8 to M15	3	7	-51.4	-52.0	-51.9		-40.0	-27.00	13.0
HT/VHT20 Beam Forming, M16 to M23	3	5	-51.4	-52.0	-51.9		-42.0	-27.00	15.0
HT/VHT20 Beam Forming, M0 to M7	4	11	-51.4	-52.0	-51.9	-50.4	-34.4	-27.00	7.4
HT/VHT20 Beam Forming, M8 to M15	4	8	-51.4	-52.0	-51.9	-50.4	-37.4	-27.00	10.4
HT/VHT20 Beam Forming, M16 to M23	4	6	-51.4	-52.0	-51.9	-50.4	-39.4	-27.00	12.4
HT/VHT20 Beam Forming, M24 to M31	4	5	-51.4	-52.0	-51.9	-50.4	-40.4	-27.00	13.4
HT/VHT20 STBC, M0 to M7	2	5	-51.4	-52.0			-43.7	-27.00	16.7
HT/VHT20 STBC, M0 to M7	3	5	-51.4	-52.0	-51.9		-42.0	-27.00	15.0
HT/VHT20 STBC, M0 to M7	4	5	-51.4	-52.0	-51.9	-50.4	-40.4	-27.00	13.4
HE20, M0 to M9 1ss	1	5	-51.4				-46.4	-27.00	19.4
HE20, M0 to M9 1ss	2	5	-51.4	-51.7			-43.5	-27.00	16.5
HE20, M0 to M9 2ss	2	5	-51.4	-51.7			-43.5	-27.00	16.5
HE20, M0 to M9 1ss	3	5	-51.4	-51.7	-51.3		-41.7	-27.00	14.7
HE20, M0 to M9 2ss	3	5	-51.4	-51.7	-51.3		-41.7	-27.00	14.7
HE20, M0 to M9 3ss	3	5	-51.4	-51.7	-51.3		-41.7	-27.00	14.7
HE20, M0 to M9 1ss	4	5	-51.4	-51.7	-51.3	-50.2	-40.1	-27.00	13.1
HE20, M0 to M9 2ss	4	5	-51.4	-51.7	-51.3	-50.2	-40.1	-27.00	13.1
HE20, M0 to M9 3ss	4	5	-51.4	-51.7	-51.3	-50.2	-40.1	-27.00	13.1
HE20, M0 to M9 4ss	4	5	-51.4	-51.7	-51.3	-50.2	-40.1	-27.00	13.1
HE20 Beam Forming, M0 to M9 1ss	2	8	-51.4	-51.7			-40.5	-27.00	13.5
HE20 Beam Forming, M0 to M9 2ss	2	5	-51.4	-51.7			-43.5	-27.00	16.5
HE20 Beam Forming, M0 to M9 1ss	3	10	-51.4	-51.7	-51.3		-36.7	-27.00	9.7
HE20 Beam Forming, M0 to M9 2ss	3	7	-51.4	-51.7	-51.3		-39.7	-27.00	12.7
HE20 Beam Forming, M0 to M9 3ss	3	5	-51.4	-51.7	-51.3		-41.7	-27.00	14.7
HE20 Beam Forming, M0 to M9 1ss	4	11	-51.4	-51.7	-51.3	-50.2	-34.1	-27.00	7.1
HE20 Beam Forming, M0 to M9 2ss	4	8	-51.4	-51.7	-51.3	-50.2	-37.1	-27.00	10.1
HE20 Beam Forming, M0 to M9 3ss	4	6	-51.4	-51.7	-51.3	-50.2	-39.1	-27.00	12.1
HE20 Beam Forming, M0 to M9 4ss	4	5	-51.4	-51.7	-51.3	-50.2	-40.1	-27.00	13.1
HE20 STBC, M0 to M9 2ss	2	5	-51.4	-51.7			-43.5	-27.00	16.5
HE20 STBC, M0 to M9 2ss	3	5	-51.4	-51.7	-51.3		-41.7	-27.00	14.7
HE20 STBC, M0 to M9 2ss	4	5	-51.4	-51.7	-51.3	-50.2	-40.1	-27.00	13.1





Conducted Bandedge Peak 15407R, 5775 MHz, HE80 Beam Forming, M0 to M9 1ss





Appendix B: Radiated Emission Test Results

Note: Results for Transmitter Radiated Spurious Emissions are in BAEL Report R1902193-407 (Cisco EDCS# 17740428).

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

Equip#	Manufacturer/ Model	Description	Last Cal	Next Due	Test Item
Test Equipment used for conducted tests					
57478	Cisco ATIL	Automation Test Insertion Loss	Cal Not Required		A1 thru A6
55096	PXI-1042 National Instruments	Chassis	Cal Not Required		A1 thru A6
55109	Agilent N9030A-550	PXA Signal Analyzer, 3Hz to 50GHz	29 Oct 2018	29 Oct 2019	A1 thru A6
57239	National Instruments PXI-8115	Embedded Controller	Cal Not Required		A1 thru A6
57250	National Instruments PXI-2796	40 GHz Dual 6x1 Multiplexer (SP6T)	Cal Not Required		A1 thru A6
56093	National Instruments PXI-2796	40 GHz Dual 6x1 Multiplexer (SP6T)	Cal Not Required		A1 thru A6
57251	National Instruments PXI-2799	Switch 1x1	Cal Not Required		A1 thru A6
56328	Pasternack PE5019-1	Torque wrench	14 Feb 2019	14 Feb 2020	A1 thru A6
6322	Lufft 5063-33W	Dial hygrometer	28 Dec 2018	28 Dec 2019	A1 thru A6
036772	Fluke 175	RMS multimeter	22 May 2018	22 May 2019	A1 thru A6
Test Equipment used for duty cycle and upper band CSE					
57475	Cisco ATIL	Automation Test Insertion Loss	Cal Not Required		A1 thru A6
55095	PXI-1042 National Instruments	Chassis	Cal Not Required		A1 thru A6
57236	National Instruments PXI-8115	Embedded Controller	Cal Not Required		A1 thru A6
56090	National Instruments PXI-2796	40 GHz Dual 6x1 Multiplexer (SP6T)	Cal Not Required		A1 thru A6
57242	National Instruments PXI-2796	40 GHz Dual 6x1 Multiplexer (SP6T)	Cal Not Required		A1 thru A6
57243	National Instruments PXI-2799	Switch 1x1	Cal Not Required		A1 thru A6
53614	Agilent N9030A-550	PXA Signal Analyzer, 3Hz to 50GHz	17 Jul 2018	17 Jul 2019	A1 thru A6

Appendix D: 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 (1x10 ³)
EN	European Norm	MHz	MegaHertz (1x10 ⁶)
IEC	International Electro technical Commission	GHz	Gigahertz (1x10 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 (1x10 ³)
L1	Line 1	μV	Microvolt (1x10 ⁻⁶)
L2	Line2	A	Amp
L3	Line 3	μA	Micro Amp (1x10 ⁻⁶)
DC	Direct Current	mS	Milli Second (1x10 ⁻³)
RAW	Uncorrected measurement value, as indicated by the measuring device	μS	Micro Second (1x10 ⁻⁶)
RF	Radio Frequency	μS	Micro Second (1x10 ⁻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 E: Photographs of Test Setups

EUT Photos have been omitted from this test report. Photos can be found in the supplementary exhibit included in the submission and EDCS# 17749029.

Appendix F: Software Used to Perform Testing

Cisco Internal LabView Radio Test Automation Software rev46, rev49

Cisco Internal LabView Radio Test Automation Report Generator Software rev21

Appendix G: Test Procedures

Measurements were made in accordance with

- KDB 789033 - D02 General UNII Test Procedures New Rules v02r01
- 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 H: Scope of Accreditation

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 I: Test Assessment Plan

Compliance Test Plan: EDCS:16915207

Target Power Tables EDCS# 16415414

Appendix J: UUT Software Info

APD4E8.8019.54E4#

APD4E8.8019.54E4#show ver

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Cisco AP Software, (ap1g7), [cheetah-build6:/san2/BUILD/workspace/Nightly-Cheetah-axel-bcm-mfg-c8_9_throttle]
Technical Support: <http://www.cisco.com/techsupport>
Copyright (c) 1986-2019 by Cisco Systems, Inc.
Compiled Fri Mar 1 03:06:48 PST 2019

ROM: Bootstrap program is U-Boot boot loader
BOOTLDR: U-Boot boot loader Version

APD4E8.8019.54E4 uptime is 0 days, 0 hours, 11 minutes
Last reload time : Sun Mar 3 00:02:55 UTC 2019
Last reload reason : unknown

cisco C9120AXI-B with 1776976/1109520K bytes of memory.
Processor board ID 0
AP Running Image : 8.8.1.10
Primary Boot Image : 8.8.1.10
Backup Boot Image : 0.0.0.0
Primary Boot Image Hash:
Backup Boot Image Hash:
1 Gigabit Ethernet interfaces
2 802.11 Radios
Radio FW version : 17.10 RC25.2101
NSS FW version : NA

Base ethernet MAC Address : D4:E8:80:19:54:E4
Part Number : 0-000000-00
PCA Assembly Number : 800-105698-01
PCA Revision Number : 08
PCB Serial Number : FOC23070L5A
Top Assembly Part Number : 800-105698-01
Top Assembly Serial Number : 0
Top Revision Number : 08
Product/Model Number : C9120AXI-B

APD4E8.8019.54E4#
APD4E8.8019.54E4#
APD4E8.8019.54E4#
APD4E8.8019.54E4#devs

EXITING CISCO SHELL. PLEASE EXECUTE EXIT IN DEVSHELL TO GET BACK TO CISCO SHELL.

BusyBox v1.23.2 (2019-03-01 02:34:16 PST) built-in shell (ash)

Welcome to Cisco.

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available at:

http://www.cisco.com/c/en/us/td/docs/general/warranty/English/EU1KEN_.html.

mD4E8801954E4:/#

mD4E8801954E4:/#

mD4E8801954E4:/# cat MERAKI_BUILD.extra

Fri Mar 1 03:06:48 PST 2019

cheetah-build6

/san2/BUILD/workspace/Nightly-Cheetah-axel-bcm-mfg-c8_9_throttle

* (HEAD detached at 161d279e12)

svn base: 161d279e12e6ede43e1005ea511bed938de6923e

commit: 161d279e12e6ede43e1005ea511bed938de6923e

tree c433767fb7ea6e49ba91057416fbff23bdd54695

mD4E8801954E4:/#

mD4E8801954E4:/#

mD4E8801954E4:/#

mD4E8801954E4:/# show_cookie

Part Number : 0-000000-00

Board Revision : 00

PCB Serial Number : FOC23070L5A

PCB Fab Part Number : 0-000000-00

Deviation Number : 0

MAC Address : D4:E8:80:19:54:E4

MAC Address Block Size : 4

Radio 0 MAC Address : D4:E8:80:19:D3:20

Radio 0 MAC Address Block Size : 16

Radio 1 MAC Address : D4:E8:80:19:D3:30

Radio 1 MAC Address Block Size : 16

PCA Assembly Number : 800-105698-01

PCA Revision Number : 08

Product/Model Number : C9120AXI-B

Top Assembly Part Number : 800-105698-01

Top Revision Number : 08

Top Assembly Serial Number : 0

RMA Test History : 00

RMA History : 00

RMA Number : 00-00-00-00

Device Type : 4C

Max Association Allowed : 2

Radio(2.4G) Carrier Set : 0000

Radio(2.4G) Max Transmit Power Level : 100

Radio(2.4G) Antenna Diversity Support: 01

Radio(2.4G) Encryption Ability : 0002

Radio(5G) Carrier Set : 0029
Radio(5G) Max Transmit Power Level : 100
Radio(5G) Antenna Diversity Support : 01
Radio(5G) Encryption Ability : 0002
Radio(802.11g) Radio Mode : 255
PEP Product Identifier (PID) : C9120AXI-B
PEP Version Identifier (VID) : V01

System Flags : 00
Controller Type : 0000
Host Controller Type : 0000
Mfr Service Date : 2019.03.01-47:59:59

Radio(49) Carrier Set : 0000
Radio(49) Max Transmit Power Level : 0
Radio(49) Antenna Diversity Support : 00
Radio(49) Encryption Ability : 0000

Radio(58) Carrier Set : 0029
Radio(58) Max Transmit Power Level : 100
Radio(58) Antenna Diversity Support : 01
Radio(58) Encryption Ability : 0002

ACT2 ID : C9120
Static AP Mode : 0
mD4E8801954E4:## cat /storage/rxtx_mode
tx
mD4E8801954E4:##
mD4E8801954E4:##
mD4E8801954E4:## cd /usr/bin/bcm/mfg
mD4E8801954E4:/usr/bin/bcm/mfg#
mD4E8801954E4:/usr/bin/bcm/mfg#
mD4E8801954E4:/usr/bin/bcm/mfg# ./dfstool.lua

Vanc dfstool
BOARD: Axel BCM !!!!!

Display config:

```
wl -i apr0v0 status | head -3  
"SSID: "apr0v0"  
Mode: <unknown> RSSI: 0 dBm SNR: 0 dB noise: 0 dBm Channel: 34  
BSSID: 00:00:00:00:00:00 Capability: "
```

Display config:

```
wl -i apr1v0 status | head -3  
"SSID: "apr1v0"  
Mode: <unknown> RSSI: 0 dBm SNR: 0 dB noise: 0 dBm Channel: 34  
BSSID: 00:00:00:00:00:00 Capability: "
```

```
show_carrier_cookies | grep -o '..$'  
rc:result="41"
```



```
show_carrier_cookies | cut -d ',' -f2  
rc:result="0"
```

```
wl -i apr1v0 country US  
wl -i apr0v0 country US  
>
```




UUT software info for CSE upper band test, May 2

PD4E8.8019.4B74#show ver
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Cisco AP Software, (ap1g7), [cheetah-build6:/san2/BUILD/workspace/Nightly-Cheetah-axel-bcm-mfg-c8_9_throttle]
Technical Support: <http://www.cisco.com/techsupport>
Copyright (c) 1986-2019 by Cisco Systems, Inc.
Compiled Mon Apr 22 03:10:10 PDT 2019

ROM: Bootstrap program is U-Boot boot loader
BOOTLDR: U-Boot boot loader Version

APD4E8.8019.4B74 uptime is 0 days, 0 hours, 8 minutes
Last reload time : Mon Apr 22 03:55:15 UTC 2019
Last reload reason : unknown

cisco C9120AXI-B with 1776976/1106088K bytes of memory.
Processor board ID 0
AP Running Image : 8.8.1.10
Primary Boot Image : 8.8.1.10
Backup Boot Image : 0.0.0.0
Primary Boot Image Hash:
Backup Boot Image Hash:
1 Gigabit Ethernet interfaces
2 802.11 Radios
Radio FW version : 17.10 RC25.2101
NSS FW version : NA

Base ethernet MAC Address : D4:E8:80:19:4B:74
Part Number : 0-000000-00
PCA Assembly Number : 800-105698-01
PCA Revision Number : 08
PCB Serial Number : FOC23070L3Q
Top Assembly Part Number : 800-105698-01
Top Assembly Serial Number : 0
Top Revision Number : 08
Product/Model Number : C9120AXI-B

APD4E8.8019.4B74#



```
APD4E8.8019.4B74#
APD4E8.8019.4B74#
APD4E8.8019.4B74#
APD4E8.8019.4B74#devs
EXITING CISCO SHELL. PLEASE EXECUTE EXIT IN DEVSHELL TO GET BACK TO CISCO SHELL.
```

BusyBox v1.23.2 (2019-04-22 02:37:53 PDT) built-in shell (ash)

Welcome to Cisco.

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http://www.cisco.com/c/en/us/td/docs/general/warranty/English/EU1KEN_.html.

```
mD4E880194B74:##
mD4E880194B74:##
mD4E880194B74:##
mD4E880194B74:##
mD4E880194B74:##
mD4E880194B74:##
mD4E880194B74:## cat MERAKI_BUILD.extra
Mon Apr 22 03:10:10 PDT 2019
cheetah-build6
/san2/BUILD/workspace/Nightly-Cheetah-axel-bcm-mfg-c8_9_throttle
```

* (HEAD detached at 1f6f4048ec)

```
svn base: 1f6f4048ecbb66599142da892931a7ad499a2ba2
commit: 1f6f4048ecbb66599142da892931a7ad499a2ba2
tree 1a99c087d0e4d3b13a635301797e24d54316c31d
mD4E880194B74:##
mD4E880194B74:##
mD4E880194B74:##
mD4E880194B74:##
mD4E880194B74:##
mD4E880194B74:## show_cookie
Part Number           : 0-000000-00
Board Revision         : 00
PCB Serial Number     : FOC23070L3Q
PCB Fab Part Number   : 0-000000-00
Deviation Number      : 0
MAC Address           : D4:E8:80:19:4B:74
MAC Address Block Size : 4
Radio 0 MAC Address   : D4:E8:80:19:87:A0
Radio 0 MAC Address Block Size : 16
Radio 1 MAC Address   : D4:E8:80:19:87:B0
Radio 1 MAC Address Block Size : 16
PCA Assembly Number   : 800-105698-01
```

PCA Revision Number : 08
Product/Model Number : C9120AXI-B
Top Assembly Part Number : 800-105698-01
Top Revision Number : 08
Top Assembly Serial Number : 0
RMA Test History : 00
RMA History : 00
RMA Number : 00-00-00-00
Device Type : 4C
Max Association Allowed : 2
Radio(2.4G) Carrier Set : 0000
Radio(2.4G) Max Transmit Power Level : 100
Radio(2.4G) Antenna Diversity Support: 01
Radio(2.4G) Encryption Ability : 0002
Radio(5G) Carrier Set : 0029
Radio(5G) Max Transmit Power Level : 100
Radio(5G) Antenna Diversity Support : 01
Radio(5G) Encryption Ability : 0002
Radio(802.11g) Radio Mode : 255
PEP Product Identifier (PID) : C9120AXI-B
PEP Version Identifier (VID) : V01
System Flags : 00
Controller Type : 0000
Host Controller Type : 0000
Mfr Service Date : 2019.02.21-47:59:59
Radio(49) Carrier Set : 0000
Radio(49) Max Transmit Power Level : 0
Radio(49) Antenna Diversity Support : 00
Radio(49) Encryption Ability : 0000
Radio(58) Carrier Set : 0029
Radio(58) Max Transmit Power Level : 100
Radio(58) Antenna Diversity Support : 01
Radio(58) Encryption Ability : 0002
ACT2 ID : C9120
Static AP Mode : 0
mD4E880194B74:##
mD4E880194B74:##
mD4E880194B74:##
mD4E880194B74:## cat /storage/rxtx_mode
tx
mD4E880194B74:## cd /usr/bin/bcm/mfg
mD4E880194B74:/usr/bin/bcm/mfg# ./dfstool.lua

Vanc dfstool
BOARD: Axel BCM !!!!!

Display config:
wl -i apr0v0 status | head -3



```
"SSID: "apr0v0"  
Mode: <unknown>      RSSI: 0 dBm      SNR: 0 dB      noise: 0 dBm      Channel: 34  
BSSID: 00:00:00:00:00:00 Capability: "
```

Display config:

```
wl -i apr1v0 status | head -3
```

```
"SSID: "apr1v0"  
Mode: <unknown>      RSSI: 0 dBm      SNR: 0 dB      noise: 0 dBm      Channel: 34  
BSSID: 00:00:00:00:00:00 Capability: "
```

```
show_carrier_cookies | grep -o '..$'  
rc:result="41"
```

```
show_carrier_cookies | cut -d ',' -f2  
rc:result="0"
```

```
wl -i apr1v0 country US  
wl -i apr0v0 country US
```

```
>
```



UUT software info for duty cycle, March 14-29

APD4E8.8019.4B74#Test watchdog monitoring off
APD4E8.8019.4B74#show ver
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Cisco AP Software, (ap1g7), [cheetah-build6:/san2/BUILD/workspace/Nightly-Cheetah-axel-bcm-mfg-c8_9_throttle]
Technical Support: <http://www.cisco.com/techsupport>
Copyright (c) 1986-2019 by Cisco Systems, Inc.
Compiled Fri Mar 1 03:06:48 PST 2019

ROM: Bootstrap program is U-Boot boot loader
BOOTLDR: U-Boot boot loader Version

APD4E8.8019.4B74 uptime is 0 days, 0 hours, 12 minutes
Last reload time : Fri Mar 1 04:54:13 UTC 2019
Last reload reason : unknown

cisco C9120AXI-B with 1776976/1104340K bytes of memory.
Processor board ID 0
AP Running Image : 8.8.1.10
Primary Boot Image : 8.8.1.10
Backup Boot Image : 0.0.0.0
Primary Boot Image Hash:
Backup Boot Image Hash:
1 Gigabit Ethernet interfaces
2 802.11 Radios
Radio FW version : 17.10 RC25.2101
NSS FW version : NA

Base ethernet MAC Address : D4:E8:80:19:4B:74
Part Number : 0-000000-00
PCA Assembly Number : 800-105698-01
PCA Revision Number : 08
PCB Serial Number : FOC23070L3Q
Top Assembly Part Number : 800-105698-01
Top Assembly Serial Number : 0
Top Revision Number : 08
Product/Model Number : C9120AXI-B



```
APD4E8.8019.4B74#
APD4E8.8019.4B74#
APD4E8.8019.4B74#
APD4E8.8019.4B74#
APD4E8.8019.4B74#devs
```

EXITING CISCO SHELL. PLEASE EXECUTE EXIT IN DEVSHELL TO GET BACK TO CISCO SHELL.

BusyBox v1.23.2 (2019-03-01 02:34:16 PST) built-in shell (ash)

Welcome to Cisco.

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http://www.cisco.com/c/en/us/td/docs/general/warranty/English/EU1KEN_.html.

```
mD4E880194B74:##
mD4E880194B74:##
mD4E880194B74:##
mD4E880194B74:## cat MERAKI_BUILD.extra
Fri Mar 1 03:06:48 PST 2019
cheetah-build6
/san2/BUILD/workspace/Nightly-Cheetah-axel-bcm-mfg-c8_9_throttle
```

* (HEAD detached at 161d279e12)

```
svn base: 161d279e12e6ede43e1005ea511bed938de6923e
commit: 161d279e12e6ede43e1005ea511bed938de6923e
tree c433767fb7ea6e49ba91057416fbff23bdd54695
```

```
mD4E880194B74:##
mD4E880194B74:##
mD4E880194B74:##
mD4E880194B74:## show_cookie
Part Number          : 0-000000-00
Board Revision       : 00
PCB Serial Number    : FOC23070L3Q
PCB Fab Part Number  : 0-000000-00
Deviation Number     : 0
MAC Address          : D4:E8:80:19:4B:74
MAC Address Block Size : 4
Radio 0 MAC Address  : D4:E8:80:19:87:A0
Radio 0 MAC Address Block Size : 16
Radio 1 MAC Address  : D4:E8:80:19:87:B0
Radio 1 MAC Address Block Size : 16
PCA Assembly Number  : 800-105698-01
PCA Revision Number  : 08
Product/Model Number : C9120AXI-B
Top Assembly Part Number : 800-105698-01
```




Top Revision Number : 08
Top Assembly Serial Number : 0
RMA Test History : 00
RMA History : 00
RMA Number : 00-00-00-00
Device Type : 4C
Max Association Allowed : 2
Radio(2.4G) Carrier Set : 0000
Radio(2.4G) Max Transmit Power Level : 100
Radio(2.4G) Antenna Diversity Support: 01
Radio(2.4G) Encryption Ability : 0002
Radio(5G) Carrier Set : 0029
Radio(5G) Max Transmit Power Level : 100
Radio(5G) Antenna Diversity Support : 01
Radio(5G) Encryption Ability : 0002
Radio(802.11g) Radio Mode : 255
PEP Product Identifier (PID) : C9120AXI-B
PEP Version Identifier (VID) : V01
System Flags : 00
Controller Type : 0000
Host Controller Type : 0000
Mfr Service Date : 2019.02.21-47:59:59
Radio(49) Carrier Set : 0000
Radio(49) Max Transmit Power Level : 0
Radio(49) Antenna Diversity Support : 00
Radio(49) Encryption Ability : 0000
Radio(58) Carrier Set : 0029
Radio(58) Max Transmit Power Level : 100
Radio(58) Antenna Diversity Support : 01
Radio(58) Encryption Ability : 0002
ACT2 ID : C9120
Static AP Mode : 0
mD4E880194B74:##
mD4E880194B74:##
mD4E880194B74:##
mD4E880194B74:## cat /storage/rxtx_mode
tx
mD4E880194B74:## cd /usr/bin/bcm/mfg
mD4E880194B74:/usr/bin/bcm/mfg# ./dfstool.lua

Vanc dfstool
BOARD: Axel BCM !!!!!

Display config:

wl -i apr0v0 status | head -3

"SSID: "apr0v0"

Mode: <unknown> RSSI: 0 dBm SNR: 0 dB noise: 0 dB Channel: 34

BSSID: 00:00:00:00:00:00 Capability: "



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```
wl -i apr1v0 status | head -3
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"SSID: "apr1v0"
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```
Mode: <unknown>      RSSI: 0 dBm      SNR: 0 dB      noise: 0 dBm      Channel: 34
```

```
BSSID: 00:00:00:00:00:00 Capability: "
```

```
show_carrier_cookies | grep -o '..$'
```

```
rc:result="41"
```

```
show_carrier_cookies | cut -d ',' -f2
```

```
rc:result="0"
```

```
wl -i apr1v0 country US
```

```
wl -i apr0v0 country US
```

End