# Test Report

# C9120AXE-T

## Cisco Catalyst 9120AX Series Access Points

## Main 5GHz Radio + 6dBi Antenna

FCC ID: LDKEDAC92157

## 5250-5350 MHz

**Against the following Specifications:**

**LP0002-2018**

**CFR47 Part 15.407**

ACCREDITED

**Cisco Systems, Inc.**

**Brand: Cisco**

**170 West Tasman Drive**

**San Jose, CA 95134**

| | |
|---|---|
| **Author:** Chris Blair<br>**Tested By: Chris Blair** | **Approved By:** Gez Thorpe<br>**Title:** Radio Compliance Manager<br>**Revision:** See EDCS |

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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 |



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## 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*% |

### Units of Measurement

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

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

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

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

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

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

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



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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 | ± 0.54º |
| 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 |

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**

30-Aug-19 - 15-Sep-19

**2.3 Report Issue Date**

7-Oct-2019

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**2.4 Testing facilities**

This assessment was performed by:

A NIST Designated Phase-I and Phase-II Conformity Assessment Body (CAB) for the following economies and regulatory authorities under the terms of the stated MRAs/Treaties: NCC (National Communications Commission) APEC Tel MRA -Phase I:

**Headquarters**

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San Jose, CA 95134,
USA

**Testing Laboratory**

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

**Registration Numbers for Industry Canada**

| Cisco System Site | Address | Site Identifier |
|---|---|---|
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| Building P, 5m Chamber | 125 West Tasman Dr<br>San Jose, CA 95134 | Company #: 2461N-1 |
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**Test Engineers**

Chris Blair



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### 2.5 Equipment Assessed (EUT)

C9120AXE-T

### 2.6 EUT Description

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, One Antenna, 6 to 54 Mbps, 1ss
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

802.11b - HE20, One Antenna, M0 to M9 1ss
802.11b - HE20, Two Antennas, M0 to M9 1ss
802.11b - HE20, Two Antennas, M0 to M9 2ss
802.11b - HE20, Three Antennas, M0 to M9 1ss
802.11b - HE20, Three Antennas, M0 to M9 2ss



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802.11b - HE20, Three Antennas, M0 to M9 3ss
802.11b - HE20, Four Antennas, M0 to M9 1ss
802.11b - HE20, Four Antennas, M0 to M9 2ss
802.11b - HE20, Four Antennas, M0 to M9 3ss
802.11b - HE20, Four Antennas, M0 to M9 4ss

802.11b - HE20 Beam Forming, Two Antennas, M0 to M9 1ss
802.11b - HE20 Beam Forming, Two Antennas, M0 to M9 2ss
802.11b - HE20 Beam Forming, Three Antennas, M0 to M9 1ss
802.11b - HE20 Beam Forming, Three Antennas, M0 to M9 2ss
802.11b - HE20 Beam Forming, Three Antennas, M0 to M9 3ss
802.11b - HE20 Beam Forming, Four Antennas, M0 to M9 1ss
802.11b - HE20 Beam Forming, Four Antennas, M0 to M9 2ss
802.11b - HE20 Beam Forming, Four Antennas, M0 to M9 3ss
802.11b - HE20 Beam Forming, Four Antennas, M0 to M9 4ss

802.11b - HE20 STBC, Two Antennas, M0 to M9 2ss
802.11b - HE20 STBC, Three Antennas, M0 to M9 2ss
802.11b - HE20 STBC, Four Antennas, M0 to M9 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



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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

802.11b - HE40, One Antenna, M0 to M9 1ss
802.11b - HE40, Two Antennas, M0 to M9 1ss
802.11b - HE40, Two Antennas, M0 to M9 2ss
802.11b - HE40, Three Antennas, M0 to M9 1ss
802.11b - HE40, Three Antennas, M0 to M9 2ss
802.11b - HE40, Three Antennas, M0 to M9 3ss
802.11b - HE40, Four Antennas, M0 to M9 1ss
802.11b - HE40, Four Antennas, M0 to M9 2ss
802.11b - HE40, Four Antennas, M0 to M9 3ss
802.11b - HE40, Four Antennas, M0 to M9 4ss

802.11b - HE40 Beam Forming, Two Antennas, M0 to M9 1ss
802.11b - HE40 Beam Forming, Two Antennas, M0 to M9 2ss
802.11b - HE40 Beam Forming, Three Antennas, M0 to M9 1ss
802.11b - HE40 Beam Forming, Three Antennas, M0 to M9 2ss
802.11b - HE40 Beam Forming, Three Antennas, M0 to M9 3ss
802.11b - HE40 Beam Forming, Four Antennas, M0 to M9 1ss
802.11b - HE40 Beam Forming, Four Antennas, M0 to M9 2ss
802.11b - HE40 Beam Forming, Four Antennas, M0 to M9 3ss
802.11b - HE40 Beam Forming, Four Antennas, M0 to M9 4ss

802.11b - HE40 STBC, Two Antennas, M0 to M9 2ss
802.11b - HE40 STBC, Three Antennas, M0 to M9 2ss
802.11b - HE40 STBC, Four Antennas, M0 to M9 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



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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

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

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

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



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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

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

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

802.11b - HE160 STBC, Two Antennas, M0 to M9 2ss



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802.11b - HE160 STBC, Three Antennas, M0 to M9 2ss
802.11b - 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 | Brand | Part Number | Antenna Type | Antenna Gain (dBi) |
|---|---|---|---|---|
| 2.4GHz&5GHz | Cisco | AIR-ANT2524DB-R/= | 2.4 GHz 2 dBi/5 GHz 4 dBi Dipole Ant., Black, connectors RP-TNC | 2dBi@2.4GHz 4dBi@5GHz |
| 2.4GHz&5GHz | Cisco | AIR-ANT2524DG-R/= | 2.4 GHz 2 dBi/5 GHz 4 dBi Dipole Ant., Gray, connectors RP-TNC | 2dBi@2.4GHz 4dBi@5GHz |
| 2.4GHz&5GHz | Cisco | AIR-ANT2524DW-R/= | 2.4 GHz 2 dBi/5 GHz 4 dBi Dipole Ant., White, connectors RP-TNC | 2dBi@2.4GHz 4dBi@5GHz |
| 2.4GHz&5GHz | Cisco | AIR-ANT2524DW-RS= | Dipole Self-Identifying Antenna, White, with RP-TNC connectors. | 2dBi@2.4GHz 4dBi@5GHz |
| 2.4GHz&5GHz | Cisco | AIR-ANT2535SDW-R | 2.4 GHz 3dBi/5 GHz 5 dBi Low Profile Antenna, White, connectors RP-TNC | 3dBi@2.4GHz 5dBi@5GHz |
| 2.4GHz&5GHz | Cisco | AIR-ANT2535SDW-RS= | Low Profile Self-Identifying Antenna, White, with RP-TNC connectors. | 3dBi@2.4GHz 5dBi@5GHz |
| 2.4GHz&5GHz | Cisco | AIR-ANT2566P4W-R= | 2.4 GHz 6 dBi/5 GHz 6 dBi Directionnel Ant., 4-port, connectors RP-TNC | 6dBi@2.4GHz 6dBi@5GHz |
| 2.4GHz&5GHz | Cisco | AIR-ANT2566P4W-DS= | Directional Self-Identifying Antenna, 4-port, with 4DART connector. | 6dBi@2.4GHz 6dBi@5GHz |
| 2.4GHz&5GHz | Cisco | AIR-ANT2566P4W-RS= | Directional Self-Identifying Antenna, 4-port, with RP-TNC connectors. | 6dBi@2.4GHz 6dBi@5GHz |

| Frequency | Brand | Part Number | Antenna Type | Antenna Gain (dBi) |
|---|---|---|---|---|
| 2.4GHz&5GHz | Cisco | AIR-ANT2524V4C-RS= | Ceiling Mount Omni Self-Identifying Antenna, 4-port, with RP-TNC connectors. | 2dBi@2.4GHz 4dBi@5GHz |
| 2.4GHz&5GHz | Cisco | AIR-ANT2544V4M-R= | 2.4GHz 4 dBi/5GHz 4 dBi Wall Mount Omni Ant., 4-port, connectors RP-TNC | 4dBi@2.4GHz 4dBi@5GHz |
| 2.4GHz&5GHz | Cisco | AIR-ANT2544V4M-RS= | Wall Mount Omni Self-Identifying Antenna, 4-port, with RP-TNC connectors. | 4dBi@2.4GHz 4dBi@5GHz |
| 2.4GHz&5GHz | Cisco | AIR-ANT2566D4M-R= | 2.4 GHz 6 dBi/5 GHz 6 dBi 60 Deg. Patch Ant., 4-port, RP-TNC | 6dBi@2.4GHz 6dBi@5GHz |
| 2.4GHz&5GHz | Cisco | AIR-ANT2566D4M-RS= | 60° Patch Self-Identifying Antenna, 4-port, with RP-TNC connectors. | 6dBi@2.4GHz 6dBi@5GHz |
| 2.4GHz&5GHz | Cisco | AIR-ANT2566D4M-DS= | 60° Patch Self-Identifying Antenna, 4-port, with 4DART connector. | 6dBi@2.4GHz 6dBi@5GHz |



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## Section 3: Result Summary

### 3.1 Results Summary Table

**Conducted emissions**

| Basic Standard | Technical Requirements / Details | Result |
|---|---|---|
| 15.407<br>LP0002 | **99% & 26 dB Bandwidth**:<br>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.<br><br>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 |
| 15.407<br>LP0002 | **Output Power**:<br>For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz.<br>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. | Pass |
| 15.407<br>LP0002 | **Power Spectral Density**<br>The maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. | Pass |
| 15.407<br>LP0002 | **Conducted Spurious Emissions / Band-Edge**:<br>2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz. | Pass |
| 15.407<br>15.205<br>15.209<br>LP0002 | **Restricted band**:<br>Unwanted emissions must comply with the general field strength limits set forth in §15.209. | Pass |



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**Radiated Emissions (General requirements)**

| Basic Standard | Technical Requirements / Details | Result |
|---|---|---|
| 15.407<br>15.205<br>15.209<br>LP0002 | **TX Spurious Emissions:**<br>Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the field strength limits table in this section. | Pass<br>Refer to R1909242-407 |
| 15.207<br>LP0002 | **AC conducted Emissions:**<br>U-NII devices using an AC power line are required to comply also with the conducted limits set forth in §15.207. | Pass<br>Refer to R1909242-407 |



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## 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 | C9120AXE-B | Foxconn | P2-2 | 1268.14948.r 14702 14702 | Cisco AP Software, (ap1g7), [cheetah-build6:/san2/BUILD/workspace/Nightly-Cheetah-axel-bcm-mfg-c8_10_throttle] Compiled Wed Aug 21 08:08:55 PDT 2019 | FOC23302F06 |
| | | | | | | |

### 4.2 System Details

| System # | Description | Samples |
|---|---|---|
| 1 | C9120AXE-B | S01 |
| | | |

### 4.3 Mode of Operation Details

| Mode# | Description | Comments |
|---|---|---|
| 1 | Continuously Transmitting | Constant duty cycle |



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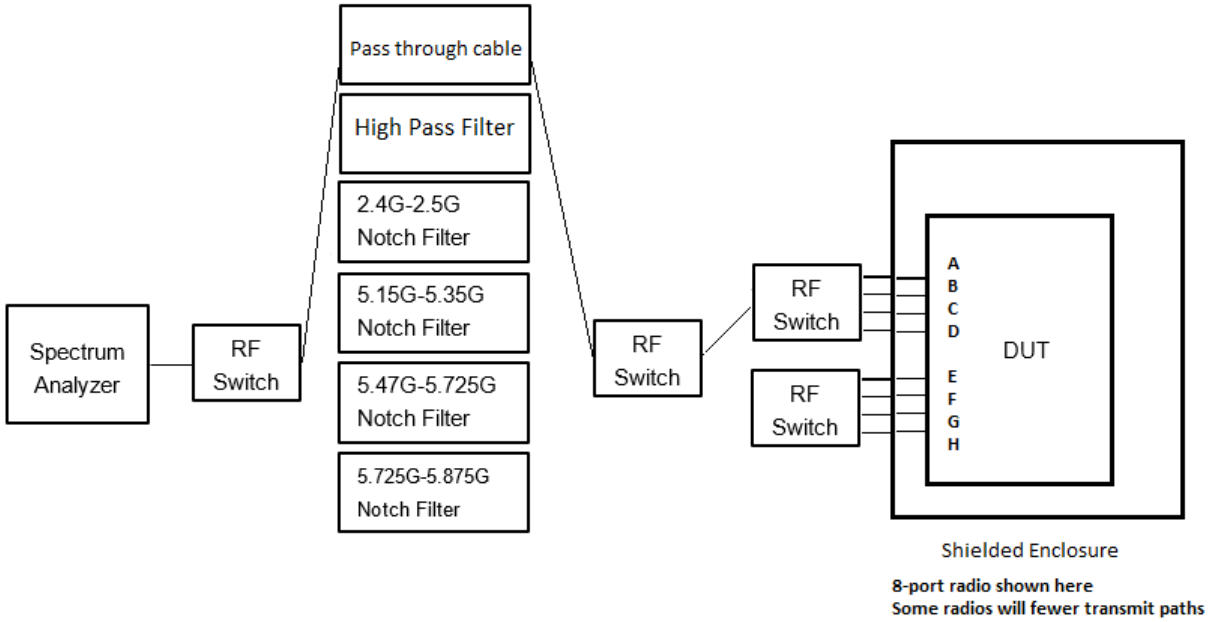
**Appendix A: Emission Test Results**

## Conducted Test Setup Diagram




## Target Maximum Channel Power

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

| | Maximum Channel Power (dBm) | | | |
|---|---|---|---|---|
| | Frequency (MHz) | | | |
| **Operating Mode** | **5250** | | | |
| **Non HT160, 6 to 54 Mbps** | **15** | | | |
| **VHT160, M0 to M9, M0 to M9 1-2ss** | **15** | | | |
| **VHT160 Beam Forming, M0 to M9, M0 to M9 1-2ss** | **15** | | | |
| **VHT160 STBC, M0 to M9 1ss** | **15** | | | |
| **HE160, M0 to M9, M0 to M9 1-2ss** | **17** | | | |
| **HE160 Beam Forming, M0 to M9, M0 to M9 1-2ss** | **17** | | | |
| **HE160 STBC, M0 to M9 1ss** | **17** | | | |
| | **5260** | **5300** | **5320** | |
| **Non HT20, 6 to 54 Mbps** | **18** | **18** | **18** | |
| **Non HT20 Beam Forming, 6 to 54 Mbps** | **18** | **18** | **18** | |
| **HT/VHT20, M0 to M31** | **22** | **22** | **19** | |
| **HT/VHT20 Beam Forming, M0 to M31** | **22** | **22** | **19** | |
| **HT/VHT20 STBC, M0 to M7** | **20** | **20** | **19** | |
| **HE20, M0 to M9, M0 to M9 1-2ss** | **22** | **22** | **20** | |



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| | | | | |
|---|---|---|---|---|
| **HE20 Beam Forming, M0 to M9, M0 to M9 1-2ss** | **22** | **22** | **20** | |
| **HE20 STBC, M0 to M9 2ss** | **20** | **20** | **19** | |
| | **5270** | **5310** | | |
| **Non HT40, 6 to 54 Mbps** | **20** | **18** | | |
| **HT/VHT40, M0 to M31** | **23** | **18** | | |
| **HT/VHT40 Beam Forming, M0 to M31** | **23** | **18** | | |
| **HT/VHT40 STBC, M0 to M7** | **22** | **18** | | |
| **HE40, M0 to M9, M0 to M9 1-2ss** | **23** | **18** | | |
| **HE40 Beam Forming, M0 to M9, M0 to M9 1-2ss** | **23** | **18** | | |
| **HE40 STBC, M0 to M9 2ss** | **22** | **18** | | |
| | **5290** | | | |
| **Non HT80, 6 to 54 Mbps** | **16** | | | |
| **VHT80, M0 to M9, M0 to M9 1-2ss** | **17** | | | |
| **VHT80 Beam Forming, M0 to M9, M0 to M9 1-2ss** | **17** | | | |
| **VHT80 STBC, M0 to M9 1ss** | **17** | | | |
| **HE80, M0 to M9, M0 to M9 1-2ss** | **17** | | | |
| **HE80 Beam Forming, M0 to M9, M0 to M9 1-2ss** | **17** | | | |
| **HE80 STBC, M0 to M9 1ss** | **17** | | | |



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# A.1 Duty Cycle

## Duty Cycle Test Requirement

**From KDB 789033 D02 General UNII Test Procedures New Rules v02r01**

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

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

## Duty Cycle Test Method

**From KDB 789033 D02 General UNII Test Procedures New Rules v02r01:**

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

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

## Duty Cycle Test Information

| **Tested By :** | **Date of testing:** |
|---|---|
| Chris Blair | 30-Aug-19 - 15-Sep-19 |
| **Test Result : PASS** | |

**Test Equipment**

See Appendix C for list of test equipment

**Samples, Systems, and Modes**

| System Number | Description | Samples | System under test | Support equipment |
|---|---|---|---|---|
| 1 | EUT | S01 | ☑ | ☐ |
| | Support | | ☐ | ☑ |



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## Duty Cycle Data Table

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

| Frequency | Mode | Data Rate | Duty Cycle correction (dB) |
|---|---|---|---|
| 5260 | Non HT20, 6 to 54 Mbps | 6 | 0.1 |
| | HT/VHT20, M0 to M31 | m0 | 0.1 |
| | HE20, M0 to M9, M0 to M9 1-2ss | m0h1 | 0.1 |
| | | | |
| 5270 | Non HT40, 6 to 54 Mbps | 6 | 0.0 |
| | HT/VHT40, M0 to M31 | m0 | 0.1 |
| | HE40, M0 to M9, M0 to M9 1-2ss | m0h1 | 0.1 |
| | | | |
| 5290 | Non HT80, 6 to 54 Mbps | 6 | 0.1 |
| | VHT80, M0 to M9, M0 to M9 1-2ss | m0x1 | 0.2 |
| | **HE80, M0 to M9, M0 to M9 1-2ss** | **m0h1** | **0.3** |
| | | | |
| 5300 | Non HT20, 6 to 54 Mbps | 6 | 0.1 |
| | HT/VHT20, M0 to M31 | m0 | 0.1 |
| | HE20, M0 to M9, M0 to M9 1-2ss | m0h1 | 0.1 |
| | | | |
| 5310 | Non HT40, 6 to 54 Mbps | 6 | 0.1 |
| | HT/VHT40, M0 to M31 | m0 | 0.1 |
| | HE40, M0 to M9, M0 to M9 1-2ss | m0h1 | 0.1 |
| | | | |
| 5320 | Non HT20, 6 to 54 Mbps | 6 | 0.1 |
| | HT/VHT20, M0 to M31 | m0 | 0.1 |
| | HE20, M0 to M9, M0 to M9 1-2ss | m0h1 | 0.1 |
| | | | |
| 5250 | Non HT160, 6 to 54 Mbps | 6 | 0.1 |
| | VHT160, M0 to M9, M0 to M9 1-2ss | m0x1 | 0.1 |
| | HE160, M0 to M9, M0 to M9 1-2ss | m0h1 | 0.1 |



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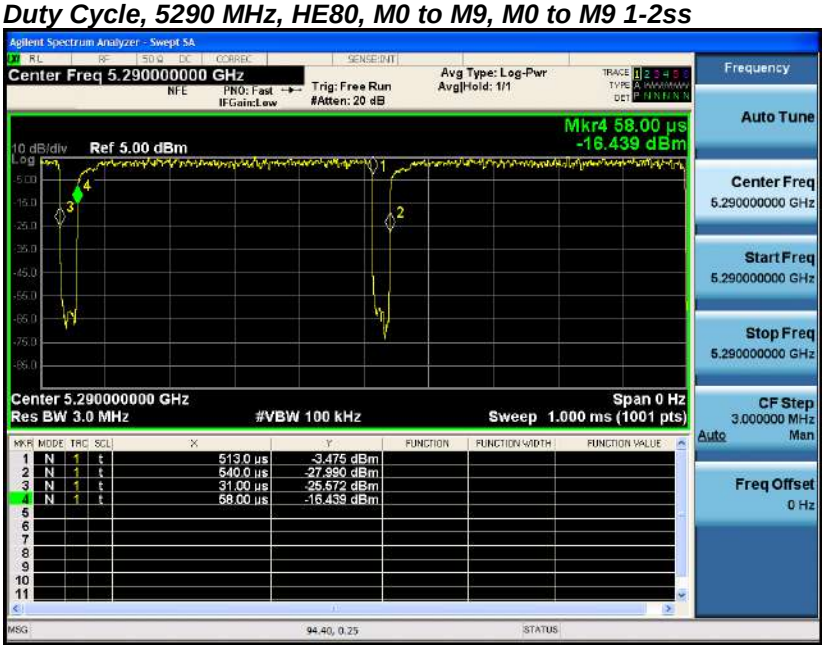
***Duty Cycle, 5290 MHz, HE80, M0 to M9, M0 to M9 1-2ss***



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# A.2 99% and 26dB Bandwidth

## 99% and 26dB Bandwidth Test Requirement

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

## 99% and 26dB Bandwidth Test Procedure

The 99-percent occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5 % of the total mean power of the given emission. Measurement of the 99-percent occupied bandwidth is required only as a condition for using the optional band-edge measurement techniques described in section II.G.3.d). Measurements of 99-percent occupied bandwidth may also optionally be used in lieu of the EBW to define the minimum frequency range over which the spectrum is integrated when measuring maximum conducted output power as described in section II.E. However, the EBW must be measured to determine bandwidth dependent limits on maximum conducted output power in accordance with 15.407(a).

**Ref. KDB 789033 D02 General UNII Test Procedures New Rules v02r01**
**Section D. 99 Percent Occupied Bandwidth**
**ANSI C63.10: 2013**

| **99% BW**<br>Test Parameters |
|---|
| 1. Set center frequency to the nominal EUT channel center frequency.<br>2. Set span = 1.5 times to 5.0 times the OBW.<br>3. Set RBW = 1 % to 5 % of the OBW<br>4. Set VBW ≥ 3 · RBW<br>5. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.<br>6. Use the 99 % power bandwidth function of the instrument (if available). |

**Ref KDB 789033 D02 General UNII Test Procedures New Rules v02r01**
**Section C. Measurement Bandwidth, Section 1**

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

**Samples, Systems, and Modes**



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| System Number | Description | Samples | System under test | Support equipment |
|---|---|---|---|---|
| 1 | EUT | S01 | ☑ | ☐ |
| | Support | | ☐ | ☑ |

| Tested By : | Date of testing: |
|---|---|
| Chris Blair | 30-Aug-19 - 15-Sep-19 |
| **Test Result : PASS** | |

**Test Equipment**

See Appendix C for list of test equipment



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| Frequency (MHz) | Mode | Data Rate (Mbps) | 26dB BW (MHz) | 99% BW (MHz) |
|---|---|---|---|---|
| 5260 | Non HT20, 6 to 54 Mbps | 6 | 21.2 | 16.757 |
| | HT/VHT20, M0 to M31 | m0 | 21.8 | 18.020 |
| | HE20, M0 to M9, M0 to M9 1-2ss | m0h1 | 21.5 | 19.120 |
| | | | | |
| 5270 | Non HT40, 6 to 54 Mbps | 6 | 39.8 | 36.355 |
| | HT/VHT40, M0 to M31 | m0 | 40.1 | 36.435 |
| | HE40, M0 to M9, M0 to M9 1-2ss | m0h1 | 39.9 | 37.598 |
| | | | | |
| 5290 | Non HT80, 6 to 54 Mbps | 6 | 82.0 | 76.239 |
| | VHT80, M0 to M9, M0 to M9 1-2ss | m0x1 | 82.5 | 76.002 |
| | HE80, M0 to M9, M0 to M9 1-2ss | m0h1 | 82.1 | 77.017 |
| | | | | |
| 5300 | Non HT20, 6 to 54 Mbps | 6 | 21.2 | 16.758 |
| | HT/VHT20, M0 to M31 | m0 | 21.7 | 18.013 |
| | HE20, M0 to M9, M0 to M9 1-2ss | m0h1 | 21.5 | 19.119 |
| | | | | |
| 5310 | Non HT40, 6 to 54 Mbps | 6 | 39.6 | 36.349 |
| | HT/VHT40, M0 to M31 | m0 | 40.1 | 36.429 |
| | HE40, M0 to M9, M0 to M9 1-2ss | m0h1 | 39.9 | 37.584 |
| | | | | |
| **5320** | **Non HT20, 6 to 54 Mbps** | **6** | **21.2** | **16.750** |
| | HT/VHT20, M0 to M31 | m0 | 21.7 | 18.015 |
| | HE20, M0 to M9, M0 to M9 1-2ss | m0h1 | 21.4 | 19.109 |
| | | | | |
| 5250 | Non HT160, 6 to 54 Mbps | 6 | 163.6 | 154.112 |
| | VHT160, M0 to M9, M0 to M9 1-2ss | m0x1 | 164.9 | 154.678 |
| | HE160, M0 to M9, M0 to M9 1-2ss | m0h1 | 164.5 | 154.982 |



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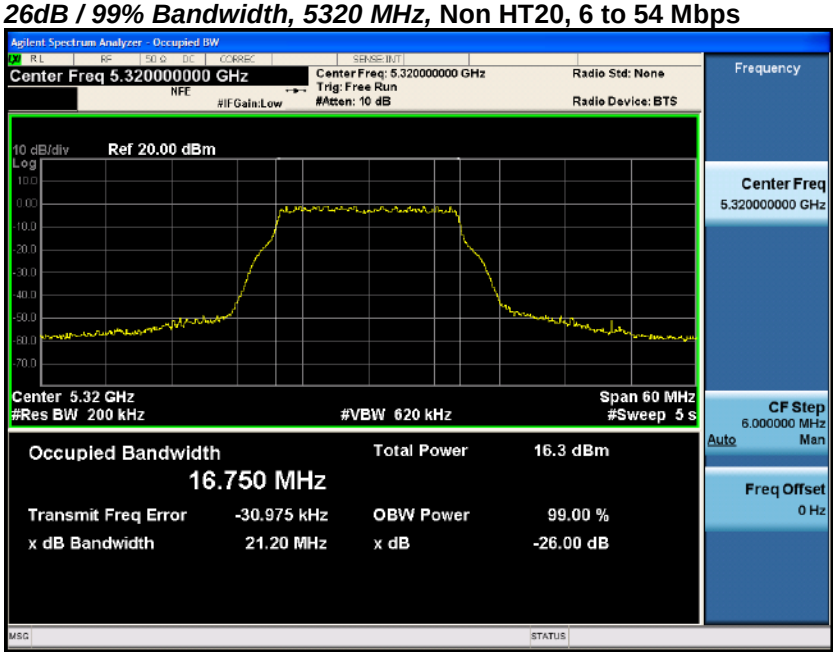
***26dB / 99% Bandwidth, 5320 MHz,* Non HT20, 6 to 54 Mbps**



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# A.3 Maximum Conducted Output Power

## Maximum Conducted Output Power Test Requirement

**15.407 (2)** For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz. … 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.

**15.407** (5) The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test. If the device cannot be connected directly, alternative techniques acceptable to the Commission may be used. Measurements in the 5.15-5.25 GHz, 5.25-5.35 GHz, and the 5.47-5.725 GHz bands are made over a bandwidth of 1 MHz or the 26 dB emission bandwidth of the device, whichever is less. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full reference bandwidth.

Referencing "644545 D03 Guidance for IEEE 802.11ac v01", covering signals that cross the boundary between two adjacent UNII bands, the FCC describes a procedure to measure EBW, power, and PSD in each UNII band. For the case of a 160MHz signal equally distributed between UNII-1 and UNII-2a, we apply the following alternate procedure.

Rather than measure:

- The half of the signal in UNII-1, measured against the 30dBm power / 17dBm/MHz PSD limits
- The half of the signal in UNII-2a, measured against the 24dBm power / 11dBm/MHz PSD limits

If a 160MHz signal (equally distributed between the two bands) produces a total power of 27dBm across the entire 160 MHz EBW, the total power in each band would be half of the total, or 24dBm (which meets both the UNII-1 and UNII-2a limits), and would have a PSD no greater than 11dBm/MHz in either sub-band.

Given these facts, we have measured the complete 160 MHz EBW (across both sub-bands) against 27dBm power and 11dBm/MHz PSD limits, rather than individual sub band measurements against the individual sub band limits."

## Maximum Conducted Output Power Test Procedure

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

| **Maximum Conducted Output Power**<br>Test Procedure |
|---|
| 1. Set the radio in the continuous transmitting mode at full power<br>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.<br>3. Capture graphs and record pertinent measurement data. |

**Ref. KDB 789033 D02 General UNII Test Procedures New Rules v02r01**
**2. Measurement using a Spectrum Analyzer or EMI Receiver (SA), (d) Method SA-2**

| **Maximum Conducted Output Power**<br>Test parameters |
|---|



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

The "measure-and-sum technique" is used for measuring in-band transmit power of a device. In the measure-and-sum approach, the conducted emission level is measured at each antenna port. The measured results at the various antenna ports are then summed mathematically to determine the total emission level from the device. Summing is performed in linear power units. ANSI C63.10 section 14.3.2.2

**Samples, Systems, and Modes**

| System Number | Description | Samples | System under test | Support equipment |
|---|---|---|---|---|
| 1 | EUT | S01 | ☑ | ☐ |
| | Support | | ☐ | ☑ |

| **Tested By :** | **Date of testing:** |
|---|---|
| Chris Blair | 30-Aug-19 - 15-Sep-19 |
| **Test Result : PASS** | |

**Test Equipment**

See Appendix C for list of test equipment



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**Maximum Output Power**

| Frequency (MHz) | Mode | Tx Paths | Correlated Antenna Gain (dBi) | Tx 1 Max Power (dBm) | Tx 2 Max Power (dBm) | Tx 3 Max Power (dBm) | Tx 4 Max Power (dBm) | Duty Cycle Correction (dB) | Total Tx Channel Power (dBm) | Limit (dBm) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5260 | Non HT20, 6 to 54 Mbps | 1 | 6 | 17.3 | | | | 0.1 | 17.4 | 24.0 | 6.65 |
| | Non HT20, 6 to 54 Mbps | 2 | 6 | 15.2 | 14.7 | | | 0.1 | 18.0 | 24.0 | 5.98 |
| | Non HT20, 6 to 54 Mbps | 3 | 6 | 12.1 | 11.6 | 11.0 | | 0.1 | 16.4 | 24.0 | 7.59 |
| | Non HT20, 6 to 54 Mbps | 4 | 6 | 10.1 | 9.4 | 9.1 | 8.7 | 0.1 | 15.4 | 24.0 | 8.57 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 2 | 9 | 15.2 | 14.7 | | | 0.1 | 18.0 | 21.0 | 2.98 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 3 | 11 | 12.1 | 11.6 | 11.0 | | 0.1 | 16.4 | 19.0 | 2.59 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 4 | 12 | 10.1 | 9.4 | 9.1 | 8.7 | 0.1 | 15.4 | 18.0 | 2.57 |
| | HT/VHT20, M0 to M7 | 1 | 6 | 17.3 | | | | 0.1 | 17.4 | 24.0 | 6.65 |
| | HT/VHT20, M0 to M7 | 2 | 6 | 16.2 | 15.7 | | | 0.1 | 19.0 | 24.0 | 4.98 |
| | HT/VHT20, M8 to M15 | 2 | 6 | 17.3 | 16.9 | | | 0.1 | 20.2 | 24.0 | 3.83 |
| | HT/VHT20, M0 to M7 | 3 | 6 | 11.9 | 11.6 | 11.0 | | 0.1 | 16.3 | 24.0 | 7.66 |
| | HT/VHT20, M8 to M15 | 3 | 6 | 15.2 | 14.9 | 13.9 | | 0.1 | 19.5 | 24.0 | 4.48 |
| | HT/VHT20, M16 to M23 | 3 | 6 | 17.3 | 16.9 | 15.9 | | 0.1 | 21.6 | 24.0 | 2.44 |
| | HT/VHT20, M0 to M7 | 4 | 6 | 10.0 | 9.6 | 9.0 | 8.8 | 0.1 | 15.4 | 24.0 | 8.55 |
| | HT/VHT20, M8 to M15 | 4 | 6 | 13.2 | 12.6 | 11.8 | 11.7 | 0.1 | 18.4 | 24.0 | 5.56 |
| | HT/VHT20, M16 to M23 | 4 | 6 | 15.2 | 14.9 | 13.9 | 14.0 | 0.1 | 20.6 | 24.0 | 3.39 |
| | HT/VHT20, M24 to M31 | 4 | 6 | 16.2 | 15.7 | 14.9 | 14.8 | 0.1 | 21.5 | 24.0 | 2.49 |
| | HT/VHT20 Beam Forming, M0 to M7 | 2 | 9 | 16.2 | 15.7 | | | 0.1 | 19.0 | 21.0 | 1.98 |
| | HT/VHT20 Beam Forming, M8 to M15 | 2 | 6 | 17.3 | 16.9 | | | 0.1 | 20.2 | 24.0 | 3.83 |
| | HT/VHT20 Beam Forming, M0 to M7 | 3 | 11 | 11.9 | 11.6 | 11.0 | | 0.1 | 16.3 | 19.0 | 2.66 |
| | HT/VHT20 Beam Forming, M8 to M15 | 3 | 8 | 15.2 | 14.9 | 13.9 | | 0.1 | 19.5 | 22.0 | 2.48 |
| | HT/VHT20 Beam Forming, M16 to M23 | 3 | 6 | 17.3 | 16.9 | 15.9 | | 0.1 | 21.6 | 24.0 | 2.44 |
| | HT/VHT20 Beam Forming, M0 to M7 | 4 | 12 | 10.0 | 9.6 | 9.0 | 8.8 | 0.1 | 15.4 | 18.0 | 2.55 |
| | HT/VHT20 Beam Forming, M8 to M15 | 4 | 9 | 13.2 | 12.6 | 11.8 | 11.7 | 0.1 | 18.4 | 21.0 | 2.56 |
| | HT/VHT20 Beam Forming, M16 to M23 | 4 | 7 | 15.2 | 14.9 | 13.9 | 14.0 | 0.1 | 20.6 | 23.0 | 2.39 |
| | HT/VHT20 Beam Forming, M24 to M31 | 4 | 6 | 16.2 | 15.7 | 14.9 | 14.8 | 0.1 | 21.5 | 24.0 | 2.49 |
| | HT/VHT20 STBC, M0 to M7 | 2 | 6 | 17.3 | 16.9 | | | 0.1 | 20.2 | 24.0 | 3.83 |
| | HT/VHT20 STBC, M0 to M7 | 3 | 6 | 15.2 | 14.9 | 13.9 | | 0.1 | 19.5 | 24.0 | 4.48 |
| | HT/VHT20 STBC, M0 to M7 | 4 | 6 | 13.2 | 12.6 | 11.8 | 11.7 | 0.1 | 18.4 | 24.0 | 5.56 |
| | HE20, M0 to M9 1ss | 1 | 6 | 17.5 | | | | 0.1 | 17.6 | 24.0 | 6.43 |
| | HE20, M0 to M9 1ss | 2 | 6 | 15.5 | 15.0 | | | 0.1 | 18.3 | 24.0 | 5.66 |



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|---|---|---|---|---|---|---|---|---|---|---|---|
| | HE20, M0 to M9 2ss | 2 | 6 | 17.5 | 17.1 | | | 0.1 | 20.4 | 24.0 | 3.62 |
| | HE20, M0 to M9 1ss | 3 | 6 | 12.2 | 11.9 | 11.4 | | 0.1 | 16.7 | 24.0 | 7.32 |
| | HE20, M0 to M9 2ss | 3 | 6 | 15.5 | 15.0 | 14.2 | | 0.1 | 19.8 | 24.0 | 4.23 |
| | HE20, M0 to M9 3ss | 3 | 6 | 17.5 | 17.1 | 16.1 | | 0.1 | 21.8 | 24.0 | 2.22 |
| | HE20, M0 to M9 1ss | 4 | 6 | 10.4 | 9.8 | 9.3 | 9.1 | 0.1 | 15.8 | 24.0 | 8.23 |
| | HE20, M0 to M9 2ss | 4 | 6 | 13.6 | 12.9 | 12.2 | 12.0 | 0.1 | 18.8 | 24.0 | 5.19 |
| | HE20, M0 to M9 3ss | 4 | 6 | 15.5 | 15.0 | 14.2 | 14.2 | 0.1 | 20.8 | 24.0 | 3.15 |
| | HE20, M0 to M9 4ss | 4 | 6 | 16.5 | 16.1 | 15.4 | 15.1 | 0.1 | 21.9 | 24.0 | 2.10 |
| | HE20 Beam Forming, M0 to M9 1ss | 2 | 9 | 15.5 | 15.0 | | | 0.1 | 18.3 | 21.0 | 2.66 |
| | HE20 Beam Forming, M0 to M9 2ss | 2 | 6 | 17.5 | 17.1 | | | 0.1 | 20.4 | 24.0 | 3.62 |
| | HE20 Beam Forming, M0 to M9 1ss | 3 | 11 | 12.2 | 11.9 | 11.4 | | 0.1 | 16.7 | 19.0 | 2.32 |
| | HE20 Beam Forming, M0 to M9 2ss | 3 | 8 | 15.5 | 15.0 | 14.2 | | 0.1 | 19.8 | 22.0 | 2.23 |
| | HE20 Beam Forming, M0 to M9 3ss | 3 | 6 | 17.5 | 17.1 | 16.1 | | 0.1 | 21.8 | 24.0 | 2.22 |
| | HE20 Beam Forming, M0 to M9 1ss | 4 | 12 | 10.4 | 9.8 | 9.3 | 9.1 | 0.1 | 15.8 | 18.0 | 2.23 |
| | HE20 Beam Forming, M0 to M9 2ss | 4 | 9 | 13.6 | 12.9 | 12.2 | 12.0 | 0.1 | 18.8 | 21.0 | 2.19 |
| | HE20 Beam Forming, M0 to M9 3ss | 4 | 7 | 15.5 | 15.0 | 14.2 | 14.2 | 0.1 | 20.8 | 23.0 | 2.15 |
| | HE20 Beam Forming, M0 to M9 4ss | 4 | 6 | 16.5 | 16.1 | 15.4 | 15.1 | 0.1 | 21.9 | 24.0 | 2.10 |
| | HE20 STBC, M0 to M9 2ss | 2 | 6 | 17.5 | 17.1 | | | 0.1 | 20.4 | 24.0 | 3.62 |
| | HE20 STBC, M0 to M9 2ss | 3 | 6 | 15.5 | 15.0 | 14.2 | | 0.1 | 19.8 | 24.0 | 4.23 |
| | HE20 STBC, M0 to M9 2ss | 4 | 6 | 13.6 | 12.9 | 12.2 | 12.0 | 0.1 | 18.8 | 24.0 | 5.19 |
| | | | | | | | | | | | |
| 5270 | Non HT40, 6 to 54 Mbps | 1 | 6 | 17.1 | | | | 0.0 | 17.1 | 24.0 | 6.86 |
| | Non HT40, 6 to 54 Mbps | 2 | 6 | 17.1 | 17.6 | | | 0.0 | 20.4 | 24.0 | 3.59 |
| | Non HT40, 6 to 54 Mbps | 3 | 6 | 15.1 | 15.6 | 13.9 | | 0.0 | 19.7 | 24.0 | 4.26 |
| | Non HT40, 6 to 54 Mbps | 4 | 6 | 13.1 | 13.4 | 11.8 | 11.9 | 0.0 | 18.7 | 24.0 | 5.33 |
| | HT/VHT40, M0 to M7 | 1 | 6 | 17.2 | | | | 0.1 | 17.3 | 24.0 | 6.70 |
| | HT/VHT40, M0 to M7 | 2 | 6 | 17.2 | 17.6 | | | 0.1 | 20.5 | 24.0 | 3.48 |
| | HT/VHT40, M8 to M15 | 2 | 6 | 17.2 | 17.6 | | | 0.1 | 20.5 | 24.0 | 3.48 |
| | HT/VHT40, M0 to M7 | 3 | 6 | 15.3 | 15.6 | 13.9 | | 0.1 | 19.9 | 24.0 | 4.13 |
| | HT/VHT40, M8 to M15 | 3 | 6 | 17.2 | 17.6 | 15.9 | | 0.1 | 21.8 | 24.0 | 2.17 |
| | HT/VHT40, M16 to M23 | 3 | 6 | 17.2 | 17.6 | 15.9 | | 0.1 | 21.8 | 24.0 | 2.17 |
| | HT/VHT40, M0 to M7 | 4 | 6 | 13.2 | 13.3 | 12.0 | 11.8 | 0.1 | 18.8 | 24.0 | 5.25 |
| | HT/VHT40, M8 to M15 | 4 | 6 | 16.2 | 16.6 | 15.2 | 14.8 | 0.1 | 21.9 | 24.0 | 2.12 |
| | HT/VHT40, M16 to M23 | 4 | 6 | 17.2 | 17.6 | 15.9 | 15.9 | 0.1 | 22.8 | 24.0 | 1.16 |
| | HT/VHT40, M24 to M31 | 4 | 6 | 17.2 | 17.6 | 15.9 | 15.9 | 0.1 | 22.8 | 24.0 | 1.16 |
| | HT/VHT40 Beam Forming, M0 to M7 | 2 | 9 | 17.2 | 17.6 | | | 0.1 | 20.5 | 21.0 | 0.48 |
| | HT/VHT40 Beam Forming, M8 to M15 | 2 | 6 | 17.2 | 17.6 | | | 0.1 | 20.5 | 24.0 | 3.48 |
| | HT/VHT40 Beam Forming, M0 to M7 | 3 | 11 | 14.3 | 14.4 | 12.9 | | 0.1 | 18.8 | 19.0 | 0.21 |
| | HT/VHT40 Beam Forming, M8 to M15 | 3 | 8 | 17.2 | 17.6 | 15.9 | | 0.1 | 21.8 | 22.0 | 0.17 |
| | HT/VHT40 Beam Forming, M16 to M23 | 3 | 6 | 17.2 | 17.6 | 15.9 | | 0.1 | 21.8 | 24.0 | 2.17 |
| | HT/VHT40 Beam Forming, M0 to M7 | 4 | 12 | 12.2 | 12.2 | 11.1 | 10.8 | 0.1 | 17.7 | 18.0 | 0.26 |
| | **HT/VHT40 Beam Forming, M8 to M15** | **4** | **9** | **15.3** | **15.6** | **13.9** | **13.9** | **0.1** | **20.9** | **21.0** | **0.13** |



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|---|---|---|---|---|---|---|---|---|---|---|---|
| | HT/VHT40 Beam Forming, M16 to M23 | 4 | 7 | 17.2 | 17.6 | 15.9 | 15.9 | 0.1 | 22.8 | 23.0 | 0.16 |
| | HT/VHT40 Beam Forming, M24 to M31 | 4 | 6 | 17.2 | 17.6 | 15.9 | 15.9 | 0.1 | 22.8 | 24.0 | 1.16 |
| | HT/VHT40 STBC, M0 to M7 | 2 | 6 | 17.2 | 17.6 | | | 0.1 | 20.5 | 24.0 | 3.48 |
| | HT/VHT40 STBC, M0 to M7 | 3 | 6 | 17.2 | 17.6 | 15.9 | | 0.1 | 21.8 | 24.0 | 2.17 |
| | HT/VHT40 STBC, M0 to M7 | 4 | 6 | 15.3 | 15.6 | 13.9 | 13.9 | 0.1 | 20.9 | 24.0 | 3.13 |
| | HE40, M0 to M9 1ss | 1 | 6 | 17.4 | | | | 0.1 | 17.5 | 24.0 | 6.47 |
| | HE40, M0 to M9 1ss | 2 | 6 | 17.4 | 17.8 | | | 0.1 | 20.7 | 24.0 | 3.26 |
| | HE40, M0 to M9 2ss | 2 | 6 | 17.4 | 17.8 | | | 0.1 | 20.7 | 24.0 | 3.26 |
| | HE40, M0 to M9 1ss | 3 | 6 | 15.5 | 15.8 | 14.2 | | 0.1 | 20.1 | 24.0 | 3.88 |
| | HE40, M0 to M9 2ss | 3 | 6 | 17.4 | 17.8 | 16.1 | | 0.1 | 22.1 | 24.0 | 1.95 |
| | HE40, M0 to M9 3ss | 3 | 6 | 17.4 | 17.8 | 16.1 | | 0.1 | 22.1 | 24.0 | 1.95 |
| | HE40, M0 to M9 1ss | 4 | 6 | 13.4 | 13.7 | 12.1 | 12.1 | 0.1 | 19.0 | 24.0 | 4.97 |
| | HE40, M0 to M9 2ss | 4 | 6 | 16.4 | 16.8 | 15.3 | 15.1 | 0.1 | 22.1 | 24.0 | 1.89 |
| | HE40, M0 to M9 3ss | 4 | 6 | 17.4 | 17.8 | 16.1 | 16.2 | 0.1 | 23.1 | 24.0 | 0.92 |
| | HE40, M0 to M9 4ss | 4 | 6 | 17.4 | 17.8 | 16.1 | 16.2 | 0.1 | 23.1 | 24.0 | 0.92 |
| | HE40 Beam Forming, M0 to M9 1ss | 2 | 9 | 17.4 | 17.8 | | | 0.1 | 20.7 | 21.0 | 0.26 |
| | HE40 Beam Forming, M0 to M9 2ss | 2 | 6 | 17.4 | 17.8 | | | 0.1 | 20.7 | 24.0 | 3.26 |
| | HE40 Beam Forming, M0 to M9 1ss | 3 | 11 | 13.4 | 13.7 | 12.1 | | 0.1 | 18.0 | 19.0 | 0.98 |
| | HE40 Beam Forming, M0 to M9 2ss | 3 | 8 | 16.4 | 16.8 | 15.3 | | 0.1 | 21.1 | 22.0 | 0.89 |
| | HE40 Beam Forming, M0 to M9 3ss | 3 | 6 | 17.4 | 17.8 | 16.1 | | 0.1 | 22.1 | 24.0 | 1.95 |
| | HE40 Beam Forming, M0 to M9 1ss | 4 | 12 | 11.4 | 11.7 | 10.3 | 10.0 | 0.1 | 17.1 | 18.0 | 0.95 |
| | HE40 Beam Forming, M0 to M9 2ss | 4 | 9 | 14.4 | 14.6 | 13.2 | 13.1 | 0.1 | 20.0 | 21.0 | 0.98 |
| | HE40 Beam Forming, M0 to M9 3ss | 4 | 7 | 16.4 | 16.8 | 15.3 | 15.1 | 0.1 | 22.1 | 23.0 | 0.89 |
| | HE40 Beam Forming, M0 to M9 4ss | 4 | 6 | 17.4 | 17.8 | 16.1 | 16.2 | 0.1 | 23.1 | 24.0 | 0.92 |
| | HE40 STBC, M0 to M9 2ss | 2 | 6 | 17.4 | 17.8 | | | 0.1 | 20.7 | 24.0 | 3.26 |
| | HE40 STBC, M0 to M9 2ss | 3 | 6 | 17.4 | 17.8 | 16.1 | | 0.1 | 22.1 | 24.0 | 1.95 |
| | HE40 STBC, M0 to M9 2ss | 4 | 6 | 15.5 | 15.8 | 14.2 | 14.0 | 0.1 | 21.1 | 24.0 | 2.91 |
| | | | | | | | | | | | |
| 5290 | Non HT80, 6 to 54 Mbps | 1 | 6 | 11.7 | | | | 0.1 | 11.8 | 24.0 | 12.25 |
| | Non HT80, 6 to 54 Mbps | 2 | 6 | 11.7 | 11.3 | | | 0.1 | 14.6 | 24.0 | 9.43 |
| | Non HT80, 6 to 54 Mbps | 3 | 6 | 10.8 | 10.3 | 10.3 | | 0.1 | 15.3 | 24.0 | 8.70 |
| | Non HT80, 6 to 54 Mbps | 4 | 6 | 10.8 | 10.3 | 10.3 | 9.9 | 0.1 | 16.4 | 24.0 | 7.59 |
| | VHT80, M0 to M9 1ss | 1 | 6 | 12.7 | | | | 0.2 | 12.9 | 24.0 | 11.08 |
| | VHT80, M0 to M9 1ss | 2 | 6 | 11.7 | 11.1 | | | 0.2 | 14.6 | 24.0 | 9.36 |
| | VHT80, M0 to M9 2ss | 2 | 6 | 11.7 | 11.1 | | | 0.2 | 14.6 | 24.0 | 9.36 |
| | VHT80, M0 to M9 1ss | 3 | 6 | 11.7 | 11.1 | 11.0 | | 0.2 | 16.3 | 24.0 | 7.74 |
| | VHT80, M0 to M9 2ss | 3 | 6 | 11.7 | 11.1 | 11.0 | | 0.2 | 16.3 | 24.0 | 7.74 |
| | VHT80, M0 to M9 3ss | 3 | 6 | 11.7 | 11.1 | 11.0 | | 0.2 | 16.3 | 24.0 | 7.74 |
| | VHT80, M0 to M9 1ss | 4 | 6 | 11.7 | 11.1 | 11.0 | 10.7 | 0.2 | 17.4 | 24.0 | 6.62 |
| | VHT80, M0 to M9 2ss | 4 | 6 | 11.7 | 11.1 | 11.0 | 10.7 | 0.2 | 17.4 | 24.0 | 6.62 |
| | VHT80, M0 to M9 3ss | 4 | 6 | 11.7 | 11.1 | 11.0 | 10.7 | 0.2 | 17.4 | 24.0 | 6.62 |
| | VHT80, M0 to M9 4ss | 4 | 6 | 11.7 | 11.1 | 11.0 | 10.7 | 0.2 | 17.4 | 24.0 | 6.62 |



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|---|---|---|---|---|---|---|---|---|---|---|---|
| | VHT80 Beam Forming, M0 to M9 1ss | 2 | 9 | 10.7 | 10.1 | | | 0.2 | 13.6 | 21.0 | 7.36 |
| | VHT80 Beam Forming, M0 to M9 2ss | 2 | 6 | 11.7 | 11.1 | | | 0.2 | 14.6 | 24.0 | 9.36 |
| | VHT80 Beam Forming, M0 to M9 1ss | 3 | 11 | 9.6 | 9.0 | 9.1 | | 0.2 | 14.2 | 19.0 | 4.77 |
| | VHT80 Beam Forming, M0 to M9 2ss | 3 | 8 | 10.7 | 10.1 | 10.0 | | 0.2 | 15.3 | 22.0 | 6.74 |
| | VHT80 Beam Forming, M0 to M9 3ss | 3 | 6 | 11.7 | 11.1 | 11.0 | | 0.2 | 16.3 | 24.0 | 7.74 |
| | VHT80 Beam Forming, M0 to M9 1ss | 4 | 12 | 7.7 | 7.1 | 7.2 | 6.8 | 0.2 | 13.4 | 18.0 | 4.55 |
| | VHT80 Beam Forming, M0 to M9 2ss | 4 | 9 | 9.6 | 9.0 | 9.1 | 8.7 | 0.2 | 15.3 | 21.0 | 5.65 |
| | VHT80 Beam Forming, M0 to M9 3ss | 4 | 7 | 10.7 | 10.1 | 10.0 | 9.9 | 0.2 | 16.4 | 23.0 | 6.58 |
| | VHT80 Beam Forming, M0 to M9 4ss | 4 | 6 | 11.7 | 11.1 | 11.0 | 10.7 | 0.2 | 17.4 | 24.0 | 6.62 |
| | VHT80 STBC, M0 to M9 1ss | 2 | 6 | 11.7 | 11.1 | | | 0.2 | 14.6 | 24.0 | 9.36 |
| | VHT80 STBC, M0 to M9 1ss | 3 | 6 | 11.7 | 11.1 | 11.0 | | 0.2 | 16.3 | 24.0 | 7.74 |
| | VHT80 STBC, M0 to M9 1ss | 4 | 6 | 11.7 | 11.1 | 11.0 | 10.7 | 0.2 | 17.4 | 24.0 | 6.62 |
| | HE80, M0 to M9 1ss | 1 | 6 | 11.8 | | | | 0.3 | 12.1 | 24.0 | 11.95 |
| | HE80, M0 to M9 1ss | 2 | 6 | 11.8 | 11.3 | | | 0.3 | 14.8 | 24.0 | 9.18 |
| | HE80, M0 to M9 2ss | 2 | 6 | 11.8 | 11.3 | | | 0.3 | 14.8 | 24.0 | 9.18 |
| | HE80, M0 to M9 1ss | 3 | 6 | 11.8 | 11.3 | 11.3 | | 0.3 | 16.5 | 24.0 | 7.51 |
| | HE80, M0 to M9 2ss | 3 | 6 | 11.8 | 11.3 | 11.3 | | 0.3 | 16.5 | 24.0 | 7.51 |
| | HE80, M0 to M9 3ss | 3 | 6 | 11.8 | 11.3 | 11.3 | | 0.3 | 16.5 | 24.0 | 7.51 |
| | HE80, M0 to M9 1ss | 4 | 6 | 10.8 | 10.4 | 10.3 | 10.0 | 0.3 | 16.7 | 24.0 | 7.34 |
| | HE80, M0 to M9 2ss | 4 | 6 | 10.8 | 10.4 | 10.3 | 10.0 | 0.3 | 16.7 | 24.0 | 7.34 |
| | HE80, M0 to M9 3ss | 4 | 6 | 10.8 | 10.4 | 10.3 | 10.0 | 0.3 | 16.7 | 24.0 | 7.34 |
| | HE80, M0 to M9 4ss | 4 | 6 | 10.8 | 10.4 | 10.3 | 10.0 | 0.3 | 16.7 | 24.0 | 7.34 |
| | HE80 Beam Forming, M0 to M9 1ss | 2 | 9 | 10.8 | 10.4 | | | 0.3 | 13.9 | 21.0 | 7.13 |
| | HE80 Beam Forming, M0 to M9 2ss | 2 | 6 | 11.8 | 11.3 | | | 0.3 | 14.8 | 24.0 | 9.18 |
| | HE80 Beam Forming, M0 to M9 1ss | 3 | 11 | 9.1 | 8.3 | 8.5 | | 0.3 | 13.7 | 19.0 | 5.33 |
| | HE80 Beam Forming, M0 to M9 2ss | 3 | 8 | 10.8 | 10.4 | 10.3 | | 0.3 | 15.5 | 22.0 | 6.47 |
| | HE80 Beam Forming, M0 to M9 3ss | 3 | 6 | 11.8 | 11.3 | 11.3 | | 0.3 | 16.5 | 24.0 | 7.51 |
| | HE80 Beam Forming, M0 to M9 1ss | 4 | 12 | 7.8 | 7.3 | 7.5 | 7.0 | 0.3 | 13.7 | 18.0 | 4.32 |
| | HE80 Beam Forming, M0 to M9 2ss | 4 | 9 | 9.9 | 9.4 | 9.3 | 9.0 | 0.3 | 15.7 | 21.0 | 5.32 |
| | HE80 Beam Forming, M0 to M9 3ss | 4 | 7 | 10.8 | 10.4 | 10.3 | 10.0 | 0.3 | 16.7 | 23.0 | 6.34 |
| | HE80 Beam Forming, M0 to M9 4ss | 4 | 6 | 10.8 | 10.4 | 10.3 | 10.0 | 0.3 | 16.7 | 24.0 | 7.34 |
| | HE80 STBC, M0 to M9 1ss | 2 | 6 | 11.8 | 11.3 | | | 0.3 | 14.8 | 24.0 | 9.18 |
| | HE80 STBC, M0 to M9 1ss | 3 | 6 | 11.8 | 11.3 | 11.3 | | 0.3 | 16.5 | 24.0 | 7.51 |
| | HE80 STBC, M0 to M9 1ss | 4 | 6 | 10.8 | 10.4 | 10.3 | 10.0 | 0.3 | 16.7 | 24.0 | 7.34 |
| | | | | | | | | | | | |
| 5300 | Non HT20, 6 to 54 Mbps | 1 | 6 | 17.3 | | | | 0.1 | 17.4 | 24.0 | 6.65 |
| | Non HT20, 6 to 54 Mbps | 2 | 6 | 15.2 | 14.8 | | | 0.1 | 18.1 | 24.0 | 5.93 |
| | Non HT20, 6 to 54 Mbps | 3 | 6 | 12.1 | 11.7 | 11.0 | | 0.1 | 16.4 | 24.0 | 7.55 |
| | Non HT20, 6 to 54 Mbps | 4 | 6 | 10.2 | 9.6 | 9.0 | 8.8 | 0.1 | 15.5 | 24.0 | 8.49 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 2 | 9 | 15.2 | 14.8 | | | 0.1 | 18.1 | 21.0 | 2.93 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 3 | 11 | 12.1 | 11.7 | 11.0 | | 0.1 | 16.4 | 19.0 | 2.55 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 4 | 12 | 10.2 | 9.6 | 9.0 | 8.8 | 0.1 | 15.5 | 18.0 | 2.49 |



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|---|---|---|---|---|---|---|---|---|---|---|
| HT/VHT20, M0 to M7 | 1 | 6 | 17.2 | | | | 0.1 | 17.3 | 24.0 | 6.75 |
| HT/VHT20, M0 to M7 | 2 | 6 | 16.3 | 15.7 | | | 0.1 | 19.1 | 24.0 | 4.93 |
| HT/VHT20, M8 to M15 | 2 | 6 | 17.2 | 16.9 | | | 0.1 | 20.1 | 24.0 | 3.88 |
| HT/VHT20, M0 to M7 | 3 | 6 | 12.1 | 11.7 | 11.0 | | 0.1 | 16.4 | 24.0 | 7.55 |
| HT/VHT20, M8 to M15 | 3 | 6 | 15.1 | 14.8 | 13.8 | | 0.1 | 19.4 | 24.0 | 4.58 |
| HT/VHT20, M16 to M23 | 3 | 6 | 17.2 | 16.9 | 15.9 | | 0.1 | 21.5 | 24.0 | 2.48 |
| HT/VHT20, M0 to M7 | 4 | 6 | 10.2 | 9.5 | 9.1 | 8.9 | 0.1 | 15.5 | 24.0 | 8.47 |
| HT/VHT20, M8 to M15 | 4 | 6 | 13.2 | 12.6 | 11.9 | 11.9 | 0.1 | 18.5 | 24.0 | 5.49 |
| HT/VHT20, M16 to M23 | 4 | 6 | 15.1 | 14.8 | 13.8 | 14.1 | 0.1 | 20.6 | 24.0 | 3.45 |
| HT/VHT20, M24 to M31 | 4 | 6 | 16.3 | 15.7 | 14.9 | 14.9 | 0.1 | 21.6 | 24.0 | 2.44 |
| HT/VHT20 Beam Forming, M0 to M7 | 2 | 9 | 16.3 | 15.7 | | | 0.1 | 19.1 | 21.0 | 1.93 |
| HT/VHT20 Beam Forming, M8 to M15 | 2 | 6 | 17.2 | 16.9 | | | 0.1 | 20.1 | 24.0 | 3.88 |
| HT/VHT20 Beam Forming, M0 to M7 | 3 | 11 | 12.1 | 11.7 | 11.0 | | 0.1 | 16.4 | 19.0 | 2.55 |
| HT/VHT20 Beam Forming, M8 to M15 | 3 | 8 | 15.1 | 14.8 | 13.8 | | 0.1 | 19.4 | 22.0 | 2.58 |
| HT/VHT20 Beam Forming, M16 to M23 | 3 | 6 | 17.2 | 16.9 | 15.9 | | 0.1 | 21.5 | 24.0 | 2.48 |
| HT/VHT20 Beam Forming, M0 to M7 | 4 | 12 | 10.2 | 9.5 | 9.1 | 8.9 | 0.1 | 15.5 | 18.0 | 2.47 |
| HT/VHT20 Beam Forming, M8 to M15 | 4 | 9 | 13.2 | 12.6 | 11.9 | 11.9 | 0.1 | 18.5 | 21.0 | 2.49 |
| HT/VHT20 Beam Forming, M16 to M23 | 4 | 7 | 15.1 | 14.8 | 13.8 | 14.1 | 0.1 | 20.6 | 23.0 | 2.45 |
| HT/VHT20 Beam Forming, M24 to M31 | 4 | 6 | 16.3 | 15.7 | 14.9 | 14.9 | 0.1 | 21.6 | 24.0 | 2.44 |
| HT/VHT20 STBC, M0 to M7 | 2 | 6 | 17.2 | 16.9 | | | 0.1 | 20.1 | 24.0 | 3.88 |
| HT/VHT20 STBC, M0 to M7 | 3 | 6 | 15.1 | 14.8 | 13.8 | | 0.1 | 19.4 | 24.0 | 4.58 |
| HT/VHT20 STBC, M0 to M7 | 4 | 6 | 13.2 | 12.6 | 11.9 | 11.9 | 0.1 | 18.5 | 24.0 | 5.49 |
| HE20, M0 to M9 1ss | 1 | 6 | 17.5 | | | | 0.1 | 17.6 | 24.0 | 6.43 |
| HE20, M0 to M9 1ss | 2 | 6 | 15.3 | 15.1 | | | 0.1 | 18.3 | 24.0 | 5.72 |
| HE20, M0 to M9 2ss | 2 | 6 | 17.5 | 17.2 | | | 0.1 | 20.4 | 24.0 | 3.57 |
| HE20, M0 to M9 1ss | 3 | 6 | 12.4 | 11.9 | 11.4 | | 0.1 | 16.8 | 24.0 | 7.24 |
| HE20, M0 to M9 2ss | 3 | 6 | 15.3 | 15.1 | 14.2 | | 0.1 | 19.7 | 24.0 | 4.27 |
| HE20, M0 to M9 3ss | 3 | 6 | 17.5 | 17.2 | 16.2 | | 0.1 | 21.8 | 24.0 | 2.16 |
| HE20, M0 to M9 1ss | 4 | 6 | 10.5 | 9.8 | 9.4 | 9.2 | 0.1 | 15.8 | 24.0 | 8.16 |
| HE20, M0 to M9 2ss | 4 | 6 | 13.6 | 13.0 | 12.2 | 12.2 | 0.1 | 18.9 | 24.0 | 5.12 |
| HE20, M0 to M9 3ss | 4 | 6 | 15.3 | 15.1 | 14.2 | 14.4 | 0.1 | 20.9 | 24.0 | 3.14 |
| HE20, M0 to M9 4ss | 4 | 6 | 16.6 | 16.1 | 15.2 | 15.0 | 0.1 | 21.9 | 24.0 | 2.14 |
| HE20 Beam Forming, M0 to M9 1ss | 2 | 9 | 15.3 | 15.1 | | | 0.1 | 18.3 | 21.0 | 2.72 |
| HE20 Beam Forming, M0 to M9 2ss | 2 | 6 | 17.5 | 17.2 | | | 0.1 | 20.4 | 24.0 | 3.57 |
| HE20 Beam Forming, M0 to M9 1ss | 3 | 11 | 12.4 | 11.9 | 11.4 | | 0.1 | 16.8 | 19.0 | 2.24 |
| HE20 Beam Forming, M0 to M9 2ss | 3 | 8 | 15.3 | 15.1 | 14.2 | | 0.1 | 19.7 | 22.0 | 2.27 |
| HE20 Beam Forming, M0 to M9 3ss | 3 | 6 | 17.5 | 17.2 | 16.2 | | 0.1 | 21.8 | 24.0 | 2.16 |
| HE20 Beam Forming, M0 to M9 1ss | 4 | 12 | 10.5 | 9.8 | 9.4 | 9.2 | 0.1 | 15.8 | 18.0 | 2.16 |
| HE20 Beam Forming, M0 to M9 2ss | 4 | 9 | 13.6 | 13.0 | 12.2 | 12.2 | 0.1 | 18.9 | 21.0 | 2.12 |
| HE20 Beam Forming, M0 to M9 3ss | 4 | 7 | 15.3 | 15.1 | 14.2 | 14.4 | 0.1 | 20.9 | 23.0 | 2.14 |
| HE20 Beam Forming, M0 to M9 4ss | 4 | 6 | 16.6 | 16.1 | 15.2 | 15.0 | 0.1 | 21.9 | 24.0 | 2.14 |
| HE20 STBC, M0 to M9 2ss | 2 | 6 | 17.5 | 17.2 | | | 0.1 | 20.4 | 24.0 | 3.57 |



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|---|---|---|---|---|---|---|---|---|---|---|---|
| | HE20 STBC, M0 to M9 2ss | 3 | 6 | 15.3 | 15.1 | 14.2 | | 0.1 | 19.7 | 24.0 | 4.27 |
| | HE20 STBC, M0 to M9 2ss | 4 | 6 | 13.6 | 13.0 | 12.2 | 12.2 | 0.1 | 18.9 | 24.0 | 5.12 |
| | | | | | | | | | | | |
| 5310 | Non HT40, 6 to 54 Mbps | 1 | 6 | 12.9 | | | | 0.1 | 13.0 | 24.0 | 11.05 |
| | Non HT40, 6 to 54 Mbps | 2 | 6 | 12.0 | 12.2 | | | 0.1 | 15.2 | 24.0 | 8.84 |
| | Non HT40, 6 to 54 Mbps | 3 | 6 | 12.0 | 12.2 | 11.2 | | 0.1 | 16.6 | 24.0 | 7.36 |
| | Non HT40, 6 to 54 Mbps | 4 | 6 | 12.0 | 12.2 | 11.2 | 11.0 | 0.1 | 17.7 | 24.0 | 6.30 |
| | HT/VHT40, M0 to M7 | 1 | 6 | 13.2 | | | | 0.1 | 13.3 | 24.0 | 10.75 |
| | HT/VHT40, M0 to M7 | 2 | 6 | 13.2 | 13.4 | | | 0.1 | 16.4 | 24.0 | 7.64 |
| | HT/VHT40, M8 to M15 | 2 | 6 | 13.2 | 13.4 | | | 0.1 | 16.4 | 24.0 | 7.64 |
| | HT/VHT40, M0 to M7 | 3 | 6 | 13.2 | 13.4 | 11.9 | | 0.1 | 17.7 | 24.0 | 6.29 |
| | HT/VHT40, M8 to M15 | 3 | 6 | 13.2 | 13.4 | 11.9 | | 0.1 | 17.7 | 24.0 | 6.29 |
| | HT/VHT40, M16 to M23 | 3 | 6 | 13.2 | 13.4 | 11.9 | | 0.1 | 17.7 | 24.0 | 6.29 |
| | HT/VHT40, M0 to M7 | 4 | 6 | 12.2 | 12.3 | 11.1 | 11.0 | 0.1 | 17.8 | 24.0 | 6.24 |
| | HT/VHT40, M8 to M15 | 4 | 6 | 12.2 | 12.3 | 11.1 | 11.0 | 0.1 | 17.8 | 24.0 | 6.24 |
| | HT/VHT40, M16 to M23 | 4 | 6 | 12.2 | 12.3 | 11.1 | 11.0 | 0.1 | 17.8 | 24.0 | 6.24 |
| | HT/VHT40, M24 to M31 | 4 | 6 | 12.2 | 12.3 | 11.1 | 11.0 | 0.1 | 17.8 | 24.0 | 6.24 |
| | HT/VHT40 Beam Forming, M0 to M7 | 2 | 9 | 12.2 | 12.3 | | | 0.1 | 15.3 | 21.0 | 5.69 |
| | HT/VHT40 Beam Forming, M8 to M15 | 2 | 6 | 13.2 | 13.4 | | | 0.1 | 16.4 | 24.0 | 7.64 |
| | HT/VHT40 Beam Forming, M0 to M7 | 3 | 11 | 10.1 | 10.1 | 9.2 | | 0.1 | 14.6 | 19.0 | 4.36 |
| | HT/VHT40 Beam Forming, M8 to M15 | 3 | 8 | 12.2 | 12.3 | 11.1 | | 0.1 | 16.7 | 22.0 | 5.28 |
| | HT/VHT40 Beam Forming, M16 to M23 | 3 | 6 | 13.2 | 13.4 | 11.9 | | 0.1 | 17.7 | 24.0 | 6.29 |
| | HT/VHT40 Beam Forming, M0 to M7 | 4 | 12 | 9.1 | 9.2 | 8.3 | 7.8 | 0.1 | 14.7 | 18.0 | 3.29 |
| | HT/VHT40 Beam Forming, M8 to M15 | 4 | 9 | 11.0 | 11.4 | 10.1 | 9.7 | 0.1 | 16.7 | 21.0 | 4.32 |
| | HT/VHT40 Beam Forming, M16 to M23 | 4 | 7 | 12.2 | 12.3 | 11.1 | 11.0 | 0.1 | 17.8 | 23.0 | 5.24 |
| | HT/VHT40 Beam Forming, M24 to M31 | 4 | 6 | 12.2 | 12.3 | 11.1 | 11.0 | 0.1 | 17.8 | 24.0 | 6.24 |
| | HT/VHT40 STBC, M0 to M7 | 2 | 6 | 13.2 | 13.4 | | | 0.1 | 16.4 | 24.0 | 7.64 |
| | HT/VHT40 STBC, M0 to M7 | 3 | 6 | 13.2 | 13.4 | 11.9 | | 0.1 | 17.7 | 24.0 | 6.29 |
| | HT/VHT40 STBC, M0 to M7 | 4 | 6 | 12.2 | 12.3 | 11.1 | 11.0 | 0.1 | 17.8 | 24.0 | 6.24 |
| | HE40, M0 to M9 1ss | 1 | 6 | 12.4 | | | | 0.1 | 12.5 | 24.0 | 11.53 |
| | HE40, M0 to M9 1ss | 2 | 6 | 12.4 | 12.5 | | | 0.1 | 15.5 | 24.0 | 8.47 |
| | HE40, M0 to M9 2ss | 2 | 6 | 12.4 | 12.5 | | | 0.1 | 15.5 | 24.0 | 8.47 |
| | HE40, M0 to M9 1ss | 3 | 6 | 12.4 | 12.5 | 11.2 | | 0.1 | 16.9 | 24.0 | 7.09 |
| | HE40, M0 to M9 2ss | 3 | 6 | 12.4 | 12.5 | 11.2 | | 0.1 | 16.9 | 24.0 | 7.09 |
| | HE40, M0 to M9 3ss | 3 | 6 | 12.4 | 12.5 | 11.2 | | 0.1 | 16.9 | 24.0 | 7.09 |
| | HE40, M0 to M9 1ss | 4 | 6 | 12.4 | 12.5 | 11.2 | 11.1 | 0.1 | 17.9 | 24.0 | 6.06 |
| | HE40, M0 to M9 2ss | 4 | 6 | 12.4 | 12.5 | 11.2 | 11.1 | 0.1 | 17.9 | 24.0 | 6.06 |
| | HE40, M0 to M9 3ss | 4 | 6 | 12.4 | 12.5 | 11.2 | 11.1 | 0.1 | 17.9 | 24.0 | 6.06 |
| | HE40, M0 to M9 4ss | 4 | 6 | 12.4 | 12.5 | 11.2 | 11.1 | 0.1 | 17.9 | 24.0 | 6.06 |
| | HE40 Beam Forming, M0 to M9 1ss | 2 | 9 | 11.3 | 11.6 | | | 0.1 | 14.5 | 21.0 | 6.47 |
| | HE40 Beam Forming, M0 to M9 2ss | 2 | 6 | 12.4 | 12.5 | | | 0.1 | 15.5 | 24.0 | 8.47 |
| | HE40 Beam Forming, M0 to M9 1ss | 3 | 11 | 10.4 | 10.3 | 9.4 | | 0.1 | 14.9 | 19.0 | 4.10 |



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|---|---|---|---|---|---|---|---|---|---|---|---|
| | HE40 Beam Forming, M0 to M9 2ss | 3 | 8 | 11.3 | 11.6 | 10.3 | | 0.1 | 15.9 | 22.0 | 6.06 |
| | HE40 Beam Forming, M0 to M9 3ss | 3 | 6 | 12.4 | 12.5 | 11.2 | | 0.1 | 16.9 | 24.0 | 7.09 |
| | HE40 Beam Forming, M0 to M9 1ss | 4 | 12 | 8.1 | 8.4 | 7.4 | 7.1 | 0.1 | 13.9 | 18.0 | 4.13 |
| | HE40 Beam Forming, M0 to M9 2ss | 4 | 9 | 10.4 | 10.3 | 9.4 | 9.2 | 0.1 | 15.9 | 21.0 | 5.05 |
| | HE40 Beam Forming, M0 to M9 3ss | 4 | 7 | 11.3 | 11.6 | 10.3 | 9.9 | 0.1 | 16.9 | 23.0 | 6.08 |
| | HE40 Beam Forming, M0 to M9 4ss | 4 | 6 | 12.4 | 12.5 | 11.2 | 11.1 | 0.1 | 17.9 | 24.0 | 6.06 |
| | HE40 STBC, M0 to M9 2ss | 2 | 6 | 12.4 | 12.5 | | | 0.1 | 15.5 | 24.0 | 8.47 |
| | HE40 STBC, M0 to M9 2ss | 3 | 6 | 12.4 | 12.5 | 11.2 | | 0.1 | 16.9 | 24.0 | 7.09 |
| | HE40 STBC, M0 to M9 2ss | 4 | 6 | 12.4 | 12.5 | 11.2 | 11.1 | 0.1 | 17.9 | 24.0 | 6.06 |
| | | | | | | | | | | | |
| 5320 | Non HT20, 6 to 54 Mbps | 1 | 6 | 15.9 | | | | 0.1 | 16.0 | 24.0 | 8.05 |
| | Non HT20, 6 to 54 Mbps | 2 | 6 | 14.9 | 14.6 | | | 0.1 | 17.8 | 24.0 | 6.19 |
| | Non HT20, 6 to 54 Mbps | 3 | 6 | 12.0 | 11.5 | 11.1 | | 0.1 | 16.4 | 24.0 | 7.63 |
| | Non HT20, 6 to 54 Mbps | 4 | 6 | 9.9 | 9.3 | 9.0 | 8.8 | 0.1 | 15.3 | 24.0 | 8.66 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 2 | 9 | 14.9 | 14.6 | | | 0.1 | 17.8 | 21.0 | 3.19 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 3 | 11 | 12.0 | 11.5 | 11.1 | | 0.1 | 16.4 | 19.0 | 2.63 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 4 | 12 | 9.9 | 9.3 | 9.0 | 8.8 | 0.1 | 15.3 | 18.0 | 2.66 |
| | HT/VHT20, M0 to M7 | 1 | 6 | 15.0 | | | | 0.1 | 15.1 | 24.0 | 8.95 |
| | HT/VHT20, M0 to M7 | 2 | 6 | 15.0 | 14.8 | | | 0.1 | 18.0 | 24.0 | 6.04 |
| | HT/VHT20, M8 to M15 | 2 | 6 | 15.0 | 14.8 | | | 0.1 | 18.0 | 24.0 | 6.04 |
| | HT/VHT20, M0 to M7 | 3 | 6 | 11.9 | 11.4 | 11.1 | | 0.1 | 16.3 | 24.0 | 7.70 |
| | HT/VHT20, M8 to M15 | 3 | 6 | 15.0 | 14.8 | 14.1 | | 0.1 | 19.5 | 24.0 | 4.53 |
| | HT/VHT20, M16 to M23 | 3 | 6 | 15.0 | 14.8 | 14.1 | | 0.1 | 19.5 | 24.0 | 4.53 |
| | HT/VHT20, M0 to M7 | 4 | 6 | 9.9 | 9.4 | 9.1 | 8.9 | 0.1 | 15.4 | 24.0 | 8.59 |
| | HT/VHT20, M8 to M15 | 4 | 6 | 13.0 | 12.5 | 11.9 | 12.0 | 0.1 | 18.4 | 24.0 | 5.55 |
| | HT/VHT20, M16 to M23 | 4 | 6 | 14.0 | 13.4 | 12.9 | 13.0 | 0.1 | 19.4 | 24.0 | 4.58 |
| | HT/VHT20, M24 to M31 | 4 | 6 | 14.0 | 13.4 | 12.9 | 13.0 | 0.1 | 19.4 | 24.0 | 4.58 |
| | HT/VHT20 Beam Forming, M0 to M7 | 2 | 9 | 14.0 | 13.4 | | | 0.1 | 16.8 | 21.0 | 4.23 |
| | HT/VHT20 Beam Forming, M8 to M15 | 2 | 6 | 15.0 | 14.8 | | | 0.1 | 18.0 | 24.0 | 6.04 |
| | HT/VHT20 Beam Forming, M0 to M7 | 3 | 11 | 11.9 | 11.4 | 11.1 | | 0.1 | 16.3 | 19.0 | 2.70 |
| | HT/VHT20 Beam Forming, M8 to M15 | 3 | 8 | 14.0 | 13.4 | 12.9 | | 0.1 | 18.3 | 22.0 | 3.72 |
| | HT/VHT20 Beam Forming, M16 to M23 | 3 | 6 | 15.0 | 14.8 | 14.1 | | 0.1 | 19.5 | 24.0 | 4.53 |
| | HT/VHT20 Beam Forming, M0 to M7 | 4 | 12 | 9.9 | 9.4 | 9.1 | 8.9 | 0.1 | 15.4 | 18.0 | 2.59 |
| | HT/VHT20 Beam Forming, M8 to M15 | 4 | 9 | 13.0 | 12.5 | 11.9 | 12.0 | 0.1 | 18.4 | 21.0 | 2.55 |
| | HT/VHT20 Beam Forming, M16 to M23 | 4 | 7 | 14.0 | 13.4 | 12.9 | 13.0 | 0.1 | 19.4 | 23.0 | 3.58 |
| | HT/VHT20 Beam Forming, M24 to M31 | 4 | 6 | 14.0 | 13.4 | 12.9 | 13.0 | 0.1 | 19.4 | 24.0 | 4.58 |
| | HT/VHT20 STBC, M0 to M7 | 2 | 6 | 15.0 | 14.8 | | | 0.1 | 18.0 | 24.0 | 6.04 |
| | HT/VHT20 STBC, M0 to M7 | 3 | 6 | 15.0 | 14.8 | 14.1 | | 0.1 | 19.5 | 24.0 | 4.53 |
| | HT/VHT20 STBC, M0 to M7 | 4 | 6 | 13.0 | 12.5 | 11.9 | 12.0 | 0.1 | 18.4 | 24.0 | 5.55 |
| | HE20, M0 to M9 1ss | 1 | 6 | 14.4 | | | | 0.1 | 14.5 | 24.0 | 9.53 |
| | HE20, M0 to M9 1ss | 2 | 6 | 14.4 | 13.8 | | | 0.1 | 17.2 | 24.0 | 6.81 |
| | HE20, M0 to M9 2ss | 2 | 6 | 14.4 | 13.8 | | | 0.1 | 17.2 | 24.0 | 6.81 |



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|---|---|---|---|---|---|---|---|---|---|---|---|
| | HE20, M0 to M9 1ss | 3 | 6 | 12.1 | 11.8 | 11.5 | | 0.1 | 16.6 | 24.0 | 7.35 |
| | HE20, M0 to M9 2ss | 3 | 6 | 14.4 | 13.8 | 13.3 | | 0.1 | 18.7 | 24.0 | 5.30 |
| | HE20, M0 to M9 3ss | 3 | 6 | 14.4 | 13.8 | 13.3 | | 0.1 | 18.7 | 24.0 | 5.30 |
| | HE20, M0 to M9 1ss | 4 | 6 | 10.2 | 9.6 | 9.4 | 9.3 | 0.1 | 15.7 | 24.0 | 8.27 |
| | HE20, M0 to M9 2ss | 4 | 6 | 13.2 | 12.8 | 12.2 | 12.3 | 0.1 | 18.7 | 24.0 | 5.27 |
| | HE20, M0 to M9 3ss | 4 | 6 | 14.4 | 13.8 | 13.3 | 13.4 | 0.1 | 19.8 | 24.0 | 4.16 |
| | HE20, M0 to M9 4ss | 4 | 6 | 14.4 | 13.8 | 13.3 | 13.4 | 0.1 | 19.8 | 24.0 | 4.16 |
| | HE20 Beam Forming, M0 to M9 1ss | 2 | 9 | 13.2 | 12.8 | | | 0.1 | 16.1 | 21.0 | 4.92 |
| | HE20 Beam Forming, M0 to M9 2ss | 2 | 6 | 14.4 | 13.8 | | | 0.1 | 17.2 | 24.0 | 6.81 |
| | HE20 Beam Forming, M0 to M9 1ss | 3 | 11 | 12.1 | 11.8 | 11.5 | | 0.1 | 16.6 | 19.0 | 2.35 |
| | HE20 Beam Forming, M0 to M9 2ss | 3 | 8 | 13.2 | 12.8 | 12.2 | | 0.1 | 17.6 | 22.0 | 4.41 |
| | HE20 Beam Forming, M0 to M9 3ss | 3 | 6 | 14.4 | 13.8 | 13.3 | | 0.1 | 18.7 | 24.0 | 5.30 |
| | HE20 Beam Forming, M0 to M9 1ss | 4 | 12 | 10.2 | 9.6 | 9.4 | 9.3 | 0.1 | 15.7 | 18.0 | 2.27 |
| | HE20 Beam Forming, M0 to M9 2ss | 4 | 9 | 13.2 | 12.8 | 12.2 | 12.3 | 0.1 | 18.7 | 21.0 | 2.27 |
| | HE20 Beam Forming, M0 to M9 3ss | 4 | 7 | 13.2 | 12.8 | 12.2 | 12.3 | 0.1 | 18.7 | 23.0 | 4.27 |
| | HE20 Beam Forming, M0 to M9 4ss | 4 | 6 | 14.4 | 13.8 | 13.3 | 13.4 | 0.1 | 19.8 | 24.0 | 4.16 |
| | HE20 STBC, M0 to M9 2ss | 2 | 6 | 14.4 | 13.8 | | | 0.1 | 17.2 | 24.0 | 6.81 |
| | HE20 STBC, M0 to M9 2ss | 3 | 6 | 14.4 | 13.8 | 13.3 | | 0.1 | 18.7 | 24.0 | 5.30 |
| | HE20 STBC, M0 to M9 2ss | 4 | 6 | 13.2 | 12.8 | 12.2 | 12.3 | 0.1 | 18.7 | 24.0 | 5.27 |
| | | | | | | | | | | | |
| 5250 | Non HT160, 6 to 54 Mbps | 1 | 6 | 9.8 | | | | 0.1 | 9.9 | 24.0 | 14.15 |
| | Non HT160, 6 to 54 Mbps | 2 | 6 | 9.8 | 9.7 | | | 0.1 | 12.8 | 24.0 | 11.19 |
| | Non HT160, 6 to 54 Mbps | 3 | 6 | 9.8 | 9.7 | 8.9 | | 0.1 | 14.3 | 24.0 | 9.69 |
| | Non HT160, 6 to 54 Mbps | 4 | 6 | 9.8 | 9.7 | 8.9 | 9.0 | 0.1 | 15.4 | 24.0 | 8.56 |
| | VHT160, M0 to M9 1ss | 1 | 6 | 10.6 | | | | 0.1 | 10.7 | 24.0 | 13.35 |
| | VHT160, M0 to M9 1ss | 2 | 6 | 10.6 | 10.7 | | | 0.1 | 13.7 | 24.0 | 10.29 |
| | VHT160, M0 to M9 2ss | 2 | 6 | 10.6 | 10.7 | | | 0.1 | 13.7 | 24.0 | 10.29 |
| | VHT160, M0 to M9 1ss | 3 | 6 | 10.6 | 10.7 | 9.6 | | 0.1 | 15.2 | 24.0 | 8.85 |
| | VHT160, M0 to M9 2ss | 3 | 6 | 10.6 | 10.7 | 9.6 | | 0.1 | 15.2 | 24.0 | 8.85 |
| | VHT160, M0 to M9 3ss | 3 | 6 | 10.6 | 10.7 | 9.6 | | 0.1 | 15.2 | 24.0 | 8.85 |
| | VHT160, M0 to M9 1ss | 4 | 6 | 9.6 | 9.4 | 8.8 | 8.8 | 0.1 | 15.2 | 24.0 | 8.76 |
| | VHT160, M0 to M9 2ss | 4 | 6 | 9.6 | 9.4 | 8.8 | 8.8 | 0.1 | 15.2 | 24.0 | 8.76 |
| | VHT160, M0 to M9 3ss | 4 | 6 | 9.6 | 9.4 | 8.8 | 8.8 | 0.1 | 15.2 | 24.0 | 8.76 |
| | VHT160, M0 to M9 4ss | 4 | 6 | 9.6 | 9.4 | 8.8 | 8.8 | 0.1 | 15.2 | 24.0 | 8.76 |
| | VHT160 Beam Forming, M0 to M9 1ss | 2 | 9 | 9.6 | 9.4 | | | 0.1 | 12.6 | 21.0 | 8.43 |
| | VHT160 Beam Forming, M0 to M9 2ss | 2 | 6 | 10.6 | 10.7 | | | 0.1 | 13.7 | 24.0 | 10.29 |
| | VHT160 Beam Forming, M0 to M9 1ss | 3 | 11 | 8.6 | 8.3 | 7.9 | | 0.1 | 13.1 | 19.0 | 5.90 |
| | VHT160 Beam Forming, M0 to M9 2ss | 3 | 8 | 9.6 | 9.4 | 8.8 | | 0.1 | 14.1 | 22.0 | 7.89 |
| | VHT160 Beam Forming, M0 to M9 3ss | 3 | 6 | 10.6 | 10.7 | 9.6 | | 0.1 | 15.2 | 24.0 | 8.85 |
| | VHT160 Beam Forming, M0 to M9 1ss | 4 | 12 | 7.7 | 7.4 | 7.0 | 6.8 | 0.1 | 13.3 | 18.0 | 4.69 |
| | VHT160 Beam Forming, M0 to M9 2ss | 4 | 9 | 8.6 | 8.3 | 7.9 | 7.5 | 0.1 | 14.2 | 21.0 | 6.83 |
| | VHT160 Beam Forming, M0 to M9 3ss | 4 | 7 | 9.6 | 9.4 | 8.8 | 8.8 | 0.1 | 15.2 | 23.0 | 7.76 |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | VHT160 Beam Forming, M0 to M9 4ss | 4 | 6 | 9.6 | 9.4 | 8.8 | 8.8 | 0.1 | 15.2 | 24.0 | 8.76 |
| | VHT160 STBC, M0 to M9 1ss | 2 | 6 | 10.6 | 10.7 | | | 0.1 | 13.7 | 24.0 | 10.29 |
| | VHT160 STBC, M0 to M9 1ss | 3 | 6 | 10.6 | 10.7 | 9.6 | | 0.1 | 15.2 | 24.0 | 8.85 |
| | VHT160 STBC, M0 to M9 1ss | 4 | 6 | 9.6 | 9.4 | 8.8 | 8.8 | 0.1 | 15.2 | 24.0 | 8.76 |
| | HE160, M0 to M9 1ss | 1 | 6 | 12.9 | | | | 0.1 | 13.0 | 24.0 | 11.03 |
| | HE160, M0 to M9 1ss | 2 | 6 | 11.8 | 11.6 | | | 0.1 | 14.8 | 24.0 | 9.22 |
| | HE160, M0 to M9 2ss | 2 | 6 | 11.8 | 11.6 | | | 0.1 | 14.8 | 24.0 | 9.22 |
| | HE160, M0 to M9 1ss | 3 | 6 | 11.8 | 11.6 | 10.9 | | 0.1 | 16.3 | 24.0 | 7.71 |
| | HE160, M0 to M9 2ss | 3 | 6 | 11.8 | 11.6 | 10.9 | | 0.1 | 16.3 | 24.0 | 7.71 |
| | HE160, M0 to M9 3ss | 3 | 6 | 11.8 | 11.6 | 10.9 | | 0.1 | 16.3 | 24.0 | 7.71 |
| | HE160, M0 to M9 1ss | 4 | 6 | 11.8 | 11.6 | 10.9 | 11.0 | 0.1 | 17.4 | 24.0 | 6.57 |
| | HE160, M0 to M9 2ss | 4 | 6 | 11.8 | 11.6 | 10.9 | 11.0 | 0.1 | 17.4 | 24.0 | 6.57 |
| | HE160, M0 to M9 3ss | 4 | 6 | 11.8 | 11.6 | 10.9 | 11.0 | 0.1 | 17.4 | 24.0 | 6.57 |
| | HE160, M0 to M9 4ss | 4 | 6 | 11.8 | 11.6 | 10.9 | 11.0 | 0.1 | 17.4 | 24.0 | 6.57 |
| | HE160 Beam Forming, M0 to M9 1ss | 2 | 9 | 10.9 | 10.7 | | | 0.1 | 13.9 | 21.0 | 7.12 |
| | HE160 Beam Forming, M0 to M9 2ss | 2 | 6 | 11.8 | 11.6 | | | 0.1 | 14.8 | 24.0 | 9.22 |
| | HE160 Beam Forming, M0 to M9 1ss | 3 | 11 | 9.8 | 9.6 | 8.9 | | 0.1 | 14.3 | 19.0 | 4.71 |
| | HE160 Beam Forming, M0 to M9 2ss | 3 | 8 | 10.9 | 10.7 | 10.0 | | 0.1 | 15.4 | 22.0 | 6.61 |
| | HE160 Beam Forming, M0 to M9 3ss | 3 | 6 | 11.8 | 11.6 | 10.9 | | 0.1 | 16.3 | 24.0 | 7.71 |
| | HE160 Beam Forming, M0 to M9 1ss | 4 | 12 | 8.8 | 8.7 | 8.2 | 7.8 | 0.1 | 14.5 | 18.0 | 3.52 |
| | HE160 Beam Forming, M0 to M9 2ss | 4 | 9 | 9.8 | 9.6 | 8.9 | 8.9 | 0.1 | 15.4 | 21.0 | 5.59 |
| | HE160 Beam Forming, M0 to M9 3ss | 4 | 7 | 10.9 | 10.7 | 10.0 | 10.0 | 0.1 | 16.5 | 23.0 | 6.49 |
| | HE160 Beam Forming, M0 to M9 4ss | 4 | 6 | 11.8 | 11.6 | 10.9 | 11.0 | 0.1 | 17.4 | 24.0 | 6.57 |
| | HE160 STBC, M0 to M9 1ss | 2 | 6 | 11.8 | 11.6 | | | 0.1 | 14.8 | 24.0 | 9.22 |
| | HE160 STBC, M0 to M9 1ss | 3 | 6 | 11.8 | 11.6 | 10.9 | | 0.1 | 16.3 | 24.0 | 7.71 |
| | HE160 STBC, M0 to M9 1ss | 4 | 6 | 11.8 | 11.6 | 10.9 | 11.0 | 0.1 | 17.4 | 24.0 | 6.57 |



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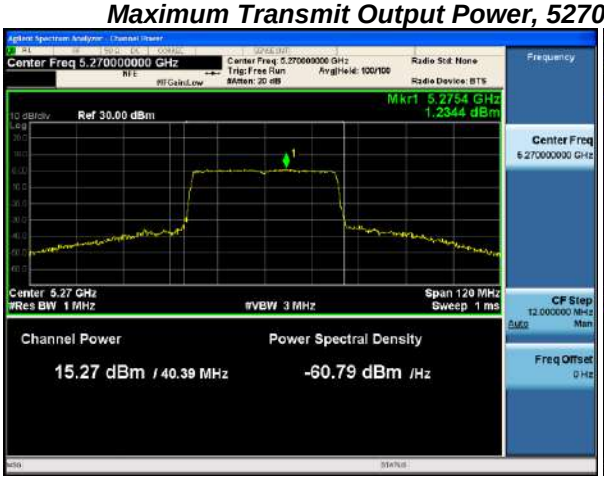
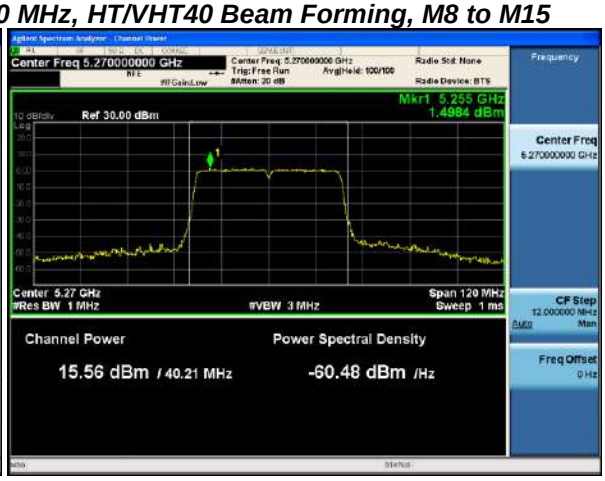
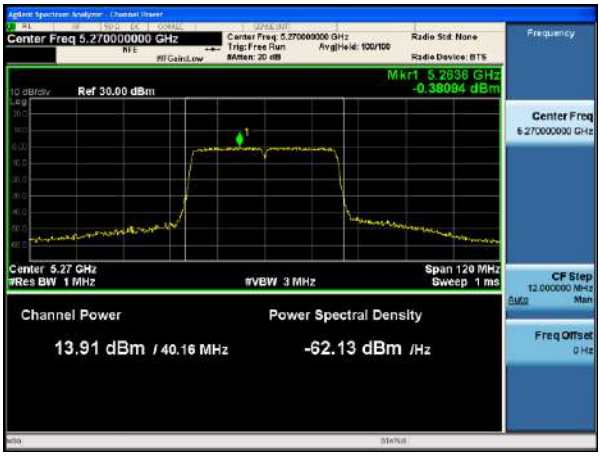
***Maximum Transmit Output Power, 5270 MHz, HT/VHT40 Beam Forming, M8 to M15***



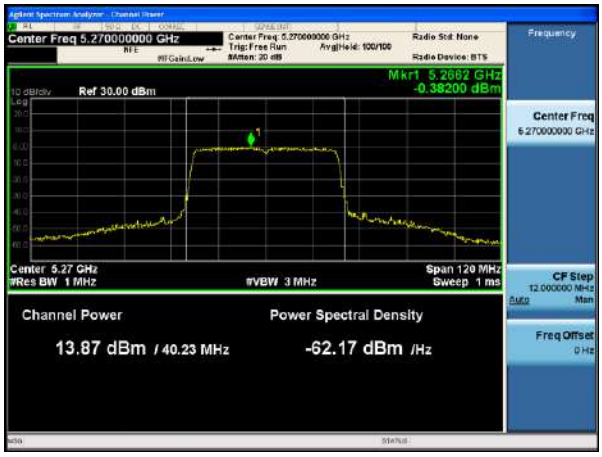

***Antenna A***




***Antenna B***




***Antenna C***




***Antenna D***



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# A.4 Power Spectral Density

## Power Spectral Density Test Requirement

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

**15.407** (5) The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test. If the device cannot be connected directly, alternative techniques acceptable to the Commission may be used. Measurements in the 5.15-5.25 GHz, 5.25-5.35 GHz, and the 5.47-5.725 GHz bands are made over a bandwidth of 1 MHz or the 26 dB emission bandwidth of the device, whichever is less. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full reference bandwidth.

Referencing "644545 D03 Guidance for IEEE 802.11ac v01", covering signals that cross the boundary between two adjacent UNII bands, the FCC describes a procedure to measure EBW, power, and PSD in each UNII band. For the case of a 160MHz signal equally distributed between UNII-1 and UNII-2a, we apply the following alternate procedure.

Rather than measure:

- The half of the signal in UNII-1, measured against the 30dBm power / 17dBm/MHz PSD limits
- The half of the signal in UNII-2a, measured against the 24dBm power / 11dBm/MHz PSD limits

If a 160MHz signal (equally distributed between the two bands) produces a total power of 27dBm across the entire 160 MHz EBW, the total power in each band would be half of the total, or 24dBm (which meets both the UNII-1 and UNII-2a limits), and would have a PSD no greater than 11dBm/MHz in either sub-band.

Given these facts, we have measured the complete 160 MHz EBW (across both sub-bands) against 27dBm power and 11dBm/MHz PSD limits, rather than individual sub band measurements against the individual sub band limits."

## Power Spectral Density Test Procedure

**Ref. KDB 789033 D02 General UNII Test Procedures New Rules v02r01**
**F. Maximum Power Spectral Density (PSD)**

| **Power Spectral Density**<br>Test Procedure |
|---|
| The rules requires "maximum power spectral density" measurements where the intent is to measure the maximum value of the time average of the power spectral density measured during a period of continuous transmission.<br>1. Create an average power spectrum for the EUT operating mode being tested by following the instructions in section II.E.2. for measuring maximum conducted output power using a spectrum analyzer or EMI receiver: select the appropriate test method (SA-1, SA-2, SA-3, or alternatives to each) and apply it up to, but not including, the step labeled, "Compute power…". (This procedure is required even if the maximum conducted output power measurement was performed using a power meter, method PM.)<br>2. Use the peak search function on the instrument to find the peak of the spectrum and record its value.<br>3. Make the following adjustments to the peak value of the spectrum, if applicable: a) If Method SA-2 or SA-2 Alternative was used, add 10 log(1/x), where x is the duty cycle, to the peak of the spectrum.<br>b) If Method SA-3 Alternative was used and the linear mode was used in step II.E.2.g)(viii), add 1 dB to the final result to compensate for the difference between linear averaging and power averaging.<br><br>4. The result is the Maximum PSD over 1 MHz reference bandwidth. |



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**Ref. KDB 789033 D02 General UNII Test Procedures New Rules v02r01**
**2. Measurement using a Spectrum Analyzer or EMI Receiver (SA), (d) Method SA-2**

| **Power Spectral Density**<br>Test parameters |
|---|
| Method SA-2 (trace averaging across on and off times of the EUT transmissions, followed by duty cycle correction).<br>(i) Measure the duty cycle, x, of the transmitter output signal as described in section II.B.<br>(ii) Set span to encompass the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal.<br>(iii) Set RBW = 1 MHz.<br>(iv) Set VBW ≥ 3 MHz.<br>(v) Number of points in sweep ≥ 2 Span / RBW. (This ensures that bin-to-bin spacing is ≤ RBW/2, so that narrowband signals are not lost between frequency bins.)<br>(vi) Sweep time = auto.<br>(vii) Detector = RMS (i.e., power averaging), if available. Otherwise, use sample detector mode.<br>(viii) Do not use sweep triggering. Allow the sweep to "free run".<br>(ix) Trace average at least 100 traces in power averaging (i.e., RMS) mode; however, the number of traces to be averaged shall be increased above 100 as needed to ensure that the average accurately represents the true average over the on and off periods of the transmitter.<br>(x) Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal using the instrument's band power measurement function with band limits set equal to the EBW (or occupied bandwidth)<br>**F. Maximum Power Spectral Density (PSD)**<br>2. Use the peak search function on the instrument to find the peak of the spectrum and record its value.<br>3. Make the following adjustments to the peak value of the spectrum, if applicable: a) If Method SA-2 or SA-2 Alternative was used, add 10 log(1/x), where x is the duty cycle, to the peak of the spectrum. |

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)

**Samples, Systems, and Modes**

| System Number | Description | Samples | System under test | Support equipment |
|---|---|---|---|---|
| 1 | EUT | S01 | ☑ | ☐ |
| | Support | | ☐ | ☑ |

| **Tested By :** | **Date of testing:** |
|---|---|
| Chris Blair | 30-Aug-19 - 15-Sep-19 |
| **Test Result : PASS** | |

**Test Equipment**

See Appendix C for list of test equipment



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**Power Spectral Density**

| Frequency (MHz) | Mode | Tx Paths | Correlated Antenna Gain (dBi) | Tx 1 PSD (dBm/MHz) | Tx 2 PSD (dBm/MHz) | Tx 3 PSD (dBm/MHz) | Tx 4 PSD (dBm/MHz) | Duty Cycle Correction (dB) | Total PSD (dBm/MHz) | Limit (dBm/MHz) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5260 | Non HT20, 6 to 54 Mbps | 1 | 6 | 6.4 | | | | 0.1 | 6.5 | 11.0 | 4.55 |
| | Non HT20, 6 to 54 Mbps | 2 | 9 | 4.3 | 4.0 | | | 0.1 | 7.2 | 8.0 | 0.79 |
| | Non HT20, 6 to 54 Mbps | 3 | 11 | 1.2 | 0.6 | 0.1 | | 0.1 | 5.5 | 6.0 | 0.52 |
| | Non HT20, 6 to 54 Mbps | 4 | 12 | -0.9 | -1.5 | -1.6 | -2.2 | 0.1 | 4.5 | 5.0 | 0.45 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 2 | 9 | 4.3 | 4.0 | | | 0.1 | 7.2 | 8.0 | 0.79 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 3 | 11 | 1.2 | 0.6 | 0.1 | | 0.1 | 5.5 | 6.0 | 0.52 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 4 | 12 | -0.9 | -1.5 | -1.6 | -2.2 | 0.1 | 4.5 | 5.0 | 0.45 |
| | HT/VHT20, M0 to M7 | 1 | 6 | 6.0 | | | | 0.1 | 6.1 | 11.0 | 4.95 |
| | HT/VHT20, M0 to M7 | 2 | 9 | 4.9 | 4.5 | | | 0.1 | 7.8 | 8.0 | 0.23 |
| | HT/VHT20, M8 to M15 | 2 | 6 | 6.0 | 6.1 | | | 0.1 | 9.1 | 11.0 | 1.89 |
| | HT/VHT20, M0 to M7 | 3 | 11 | 0.8 | 0.4 | -0.3 | | 0.1 | 5.1 | 6.0 | 0.85 |
| | HT/VHT20, M8 to M15 | 3 | 8 | 3.9 | 3.7 | 2.9 | | 0.1 | 8.3 | 9.0 | 0.66 |
| | HT/VHT20, M16 to M23 | 3 | 6 | 6.0 | 6.1 | 4.7 | | 0.1 | 10.5 | 11.0 | 0.53 |
| | HT/VHT20, M0 to M7 | 4 | 12 | -1.3 | -1.6 | -2.1 | -2.3 | 0.1 | 4.3 | 5.0 | 0.73 |
| | HT/VHT20, M8 to M15 | 4 | 9 | 2.0 | 1.4 | 0.6 | 0.4 | 0.1 | 7.2 | 8.0 | 0.78 |
| | HT/VHT20, M16 to M23 | 4 | 7 | 3.9 | 3.7 | 2.9 | 2.5 | 0.1 | 9.4 | 10.0 | 0.64 |
| | HT/VHT20, M24 to M31 | 4 | 6 | 4.9 | 4.5 | 3.9 | 3.4 | 0.1 | 10.3 | 11.0 | 0.71 |
| | HT/VHT20 Beam Forming, M0 to M7 | 2 | 9 | 4.9 | 4.5 | | | 0.1 | 7.8 | 8.0 | 0.23 |
| | HT/VHT20 Beam Forming, M8 to M15 | 2 | 6 | 6.0 | 6.1 | | | 0.1 | 9.1 | 11.0 | 1.89 |
| | HT/VHT20 Beam Forming, M0 to M7 | 3 | 11 | 0.8 | 0.4 | -0.3 | | 0.1 | 5.1 | 6.0 | 0.85 |
| | HT/VHT20 Beam Forming, M8 to M15 | 3 | 8 | 3.9 | 3.7 | 2.9 | | 0.1 | 8.3 | 9.0 | 0.66 |
| | HT/VHT20 Beam Forming, M16 to M23 | 3 | 6 | 6.0 | 6.1 | 4.7 | | 0.1 | 10.5 | 11.0 | 0.53 |
| | HT/VHT20 Beam Forming, M0 to M7 | 4 | 12 | -1.3 | -1.6 | -2.1 | -2.3 | 0.1 | 4.3 | 5.0 | 0.73 |
| | HT/VHT20 Beam Forming, M8 to M15 | 4 | 9 | 2.0 | 1.4 | 0.6 | 0.4 | 0.1 | 7.2 | 8.0 | 0.78 |
| | HT/VHT20 Beam Forming, M16 to M23 | 4 | 7 | 3.9 | 3.7 | 2.9 | 2.5 | 0.1 | 9.4 | 10.0 | 0.64 |
| | HT/VHT20 Beam Forming, M24 to M31 | 4 | 6 | 4.9 | 4.5 | 3.9 | 3.4 | 0.1 | 10.3 | 11.0 | 0.71 |
| | HT/VHT20 STBC, M0 to M7 | 2 | 6 | 6.0 | 6.1 | | | 0.1 | 9.1 | 11.0 | 1.89 |
| | HT/VHT20 STBC, M0 to M7 | 3 | 8 | 3.9 | 3.7 | 2.9 | | 0.1 | 8.3 | 9.0 | 0.66 |
| | HT/VHT20 STBC, M0 to M7 | 4 | 9 | 2.0 | 1.4 | 0.6 | 0.4 | 0.1 | 7.2 | 8.0 | 0.78 |
| | HE20, M0 to M9 1ss | 1 | 6 | 6.0 | | | | 0.1 | 6.1 | 11.0 | 4.93 |
| | HE20, M0 to M9 1ss | 2 | 9 | 4.3 | 3.5 | | | 0.1 | 7.0 | 8.0 | 1.00 |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | HE20, M0 to M9 2ss | 2 | 6 | 6.0 | 5.7 | | | 0.1 | 8.9 | 11.0 | 2.07 |
| | HE20, M0 to M9 1ss | 3 | 11 | 1.2 | 0.2 | 0.1 | | 0.1 | 5.4 | 6.0 | 0.63 |
| | HE20, M0 to M9 2ss | 3 | 8 | 4.3 | 3.5 | 2.7 | | 0.1 | 8.4 | 9.0 | 0.61 |
| | HE20, M0 to M9 3ss | 3 | 6 | 6.0 | 5.7 | 4.7 | | 0.1 | 10.3 | 11.0 | 0.66 |
| | HE20, M0 to M9 1ss | 4 | 12 | -0.8 | -1.7 | -1.8 | -2.0 | 0.1 | 4.5 | 5.0 | 0.46 |
| | HE20, M0 to M9 2ss | 4 | 9 | 2.2 | 1.3 | 0.8 | 0.9 | 0.1 | 7.4 | 8.0 | 0.58 |
| | HE20, M0 to M9 3ss | 4 | 7 | 4.3 | 3.5 | 2.7 | 2.7 | 0.1 | 9.4 | 10.0 | 0.56 |
| | HE20, M0 to M9 4ss | 4 | 6 | 5.0 | 4.9 | 4.2 | 3.4 | 0.1 | 10.5 | 11.0 | 0.49 |
| | HE20 Beam Forming, M0 to M9 1ss | 2 | 9 | 4.3 | 3.5 | | | 0.1 | 7.0 | 8.0 | 1.00 |
| | HE20 Beam Forming, M0 to M9 2ss | 2 | 6 | 6.0 | 5.7 | | | 0.1 | 8.9 | 11.0 | 2.07 |
| | HE20 Beam Forming, M0 to M9 1ss | 3 | 11 | 1.2 | 0.2 | 0.1 | | 0.1 | 5.4 | 6.0 | 0.63 |
| | HE20 Beam Forming, M0 to M9 2ss | 3 | 8 | 4.3 | 3.5 | 2.7 | | 0.1 | 8.4 | 9.0 | 0.61 |
| | HE20 Beam Forming, M0 to M9 3ss | 3 | 6 | 6.0 | 5.7 | 4.7 | | 0.1 | 10.3 | 11.0 | 0.66 |
| | HE20 Beam Forming, M0 to M9 1ss | 4 | 12 | -0.8 | -1.7 | -1.8 | -2.0 | 0.1 | 4.5 | 5.0 | 0.46 |
| | HE20 Beam Forming, M0 to M9 2ss | 4 | 9 | 2.2 | 1.3 | 0.8 | 0.9 | 0.1 | 7.4 | 8.0 | 0.58 |
| | HE20 Beam Forming, M0 to M9 3ss | 4 | 7 | 4.3 | 3.5 | 2.7 | 2.7 | 0.1 | 9.4 | 10.0 | 0.56 |
| | HE20 Beam Forming, M0 to M9 4ss | 4 | 6 | 5.0 | 4.9 | 4.2 | 3.4 | 0.1 | 10.5 | 11.0 | 0.49 |
| | HE20 STBC, M0 to M9 2ss | 2 | 6 | 6.0 | 5.7 | | | 0.1 | 8.9 | 11.0 | 2.07 |
| | HE20 STBC, M0 to M9 2ss | 3 | 8 | 4.3 | 3.5 | 2.7 | | 0.1 | 8.4 | 9.0 | 0.61 |
| | HE20 STBC, M0 to M9 2ss | 4 | 9 | 2.2 | 1.3 | 0.8 | 0.9 | 0.1 | 7.4 | 8.0 | 0.58 |
| | | | | | | | | | | | |
| 5270 | Non HT40, 6 to 54 Mbps | 1 | 6 | 3.6 | | | | 0.0 | 3.6 | 11.0 | 7.36 |
| | Non HT40, 6 to 54 Mbps | 2 | 9 | 3.6 | 3.9 | | | 0.0 | 6.8 | 8.0 | 1.19 |
| | **Non HT40, 6 to 54 Mbps** | **3** | **11** | **1.1** | **2.1** | **-0.1** | | **0.0** | **5.9** | **6.0** | **0.06** |
| | Non HT40, 6 to 54 Mbps | 4 | 12 | -0.7 | -0.2 | -2.2 | -1.9 | 0.0 | 4.9 | 5.0 | 0.11 |
| | HT/VHT40, M0 to M7 | 1 | 6 | 2.7 | | | | 0.1 | 2.8 | 11.0 | 8.20 |
| | HT/VHT40, M0 to M7 | 2 | 9 | 2.7 | 3.6 | | | 0.1 | 6.3 | 8.0 | 1.71 |
| | HT/VHT40, M8 to M15 | 2 | 6 | 2.7 | 3.6 | | | 0.1 | 6.3 | 11.0 | 4.71 |
| | HT/VHT40, M0 to M7 | 3 | 11 | 1.2 | 1.5 | -0.4 | | 0.1 | 5.7 | 6.0 | 0.28 |
| | HT/VHT40, M8 to M15 | 3 | 8 | 2.7 | 3.6 | 1.9 | | 0.1 | 7.7 | 9.0 | 1.34 |
| | HT/VHT40, M16 to M23 | 3 | 6 | 2.7 | 3.6 | 1.9 | | 0.1 | 7.7 | 11.0 | 3.34 |
| | HT/VHT40, M0 to M7 | 4 | 12 | -1.0 | -0.8 | -2.2 | -2.5 | 0.1 | 4.6 | 5.0 | 0.44 |
| | HT/VHT40, M8 to M15 | 4 | 9 | 2.0 | 2.5 | 1.3 | 0.9 | 0.1 | 7.8 | 8.0 | 0.16 |
| | HT/VHT40, M16 to M23 | 4 | 7 | 2.7 | 3.6 | 1.9 | 1.7 | 0.1 | 8.7 | 10.0 | 1.34 |
| | HT/VHT40, M24 to M31 | 4 | 6 | 2.7 | 3.6 | 1.9 | 1.7 | 0.1 | 8.7 | 11.0 | 2.34 |
| | HT/VHT40 Beam Forming, M0 to M7 | 2 | 9 | 2.7 | 3.6 | | | 0.1 | 6.3 | 8.0 | 1.71 |
| | HT/VHT40 Beam Forming, M8 to M15 | 2 | 6 | 2.7 | 3.6 | | | 0.1 | 6.3 | 11.0 | 4.71 |
| | HT/VHT40 Beam Forming, M0 to M7 | 3 | 11 | 0.4 | 0.2 | -1.4 | | 0.1 | 4.7 | 6.0 | 1.32 |
| | HT/VHT40 Beam Forming, M8 to M15 | 3 | 8 | 2.7 | 3.6 | 1.9 | | 0.1 | 7.7 | 9.0 | 1.34 |
| | HT/VHT40 Beam Forming, M16 to M23 | 3 | 6 | 2.7 | 3.6 | 1.9 | | 0.1 | 7.7 | 11.0 | 3.34 |
| | HT/VHT40 Beam Forming, M0 to M7 | 4 | 12 | -2.1 | -1.8 | -3.2 | -3.2 | 0.1 | 3.6 | 5.0 | 1.41 |
| | HT/VHT40 Beam Forming, M8 to M15 | 4 | 9 | 1.2 | 1.5 | -0.4 | -0.4 | 0.1 | 6.7 | 8.0 | 1.31 |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | HT/VHT40 Beam Forming, M16 to M23 | 4 | 7 | 2.7 | 3.6 | 1.9 | 1.7 | 0.1 | 8.7 | 10.0 | 1.34 |
| | HT/VHT40 Beam Forming, M24 to M31 | 4 | 6 | 2.7 | 3.6 | 1.9 | 1.7 | 0.1 | 8.7 | 11.0 | 2.34 |
| | HT/VHT40 STBC, M0 to M7 | 2 | 6 | 2.7 | 3.6 | | | 0.1 | 6.3 | 11.0 | 4.71 |
| | HT/VHT40 STBC, M0 to M7 | 3 | 8 | 2.7 | 3.6 | 1.9 | | 0.1 | 7.7 | 9.0 | 1.34 |
| | HT/VHT40 STBC, M0 to M7 | 4 | 9 | 1.2 | 1.5 | -0.4 | -0.4 | 0.1 | 6.7 | 8.0 | 1.31 |
| | HE40, M0 to M9 1ss | 1 | 6 | 3.1 | | | | 0.1 | 3.2 | 11.0 | 7.77 |
| | HE40, M0 to M9 1ss | 2 | 9 | 3.1 | 3.5 | | | 0.1 | 6.4 | 8.0 | 1.56 |
| | HE40, M0 to M9 2ss | 2 | 6 | 3.1 | 3.5 | | | 0.1 | 6.4 | 11.0 | 4.56 |
| | HE40, M0 to M9 1ss | 3 | 11 | 1.2 | 1.6 | -0.3 | | 0.1 | 5.8 | 6.0 | 0.20 |
| | HE40, M0 to M9 2ss | 3 | 8 | 3.1 | 3.5 | 1.6 | | 0.1 | 7.7 | 9.0 | 1.30 |
| | HE40, M0 to M9 3ss | 3 | 6 | 3.1 | 3.5 | 1.6 | | 0.1 | 7.7 | 11.0 | 3.30 |
| | HE40, M0 to M9 1ss | 4 | 12 | -0.8 | -0.3 | -2.2 | -1.8 | 0.1 | 4.9 | 5.0 | 0.06 |
| | HE40, M0 to M9 2ss | 4 | 9 | 2.1 | 2.8 | 1.0 | 0.9 | 0.1 | 7.9 | 8.0 | 0.08 |
| | HE40, M0 to M9 3ss | 4 | 7 | 3.1 | 3.5 | 1.6 | 2.1 | 0.1 | 8.8 | 10.0 | 1.21 |
| | HE40, M0 to M9 4ss | 4 | 6 | 3.1 | 3.5 | 1.6 | 2.1 | 0.1 | 8.8 | 11.0 | 2.21 |
| | HE40 Beam Forming, M0 to M9 1ss | 2 | 9 | 3.1 | 3.5 | | | 0.1 | 6.4 | 8.0 | 1.56 |
| | HE40 Beam Forming, M0 to M9 2ss | 2 | 6 | 3.1 | 3.5 | | | 0.1 | 6.4 | 11.0 | 4.56 |
| | HE40 Beam Forming, M0 to M9 1ss | 3 | 11 | -0.8 | -0.3 | -2.2 | | 0.1 | 3.9 | 6.0 | 2.13 |
| | HE40 Beam Forming, M0 to M9 2ss | 3 | 8 | 2.1 | 2.8 | 1.0 | | 0.1 | 6.9 | 9.0 | 2.07 |
| | HE40 Beam Forming, M0 to M9 3ss | 3 | 6 | 3.1 | 3.5 | 1.6 | | 0.1 | 7.7 | 11.0 | 3.30 |
| | HE40 Beam Forming, M0 to M9 1ss | 4 | 12 | -2.5 | -2.3 | -4.0 | -4.2 | 0.1 | 3.0 | 5.0 | 2.02 |
| | HE40 Beam Forming, M0 to M9 2ss | 4 | 9 | 0.0 | 0.4 | -1.1 | -1.1 | 0.1 | 5.7 | 8.0 | 2.25 |
| | HE40 Beam Forming, M0 to M9 3ss | 4 | 7 | 2.1 | 2.8 | 1.0 | 0.9 | 0.1 | 7.9 | 10.0 | 2.08 |
| | HE40 Beam Forming, M0 to M9 4ss | 4 | 6 | 3.1 | 3.5 | 1.6 | 2.1 | 0.1 | 8.8 | 11.0 | 2.21 |
| | HE40 STBC, M0 to M9 2ss | 2 | 6 | 3.1 | 3.5 | | | 0.1 | 6.4 | 11.0 | 4.56 |
| | HE40 STBC, M0 to M9 2ss | 3 | 8 | 3.1 | 3.5 | 1.6 | | 0.1 | 7.7 | 9.0 | 1.30 |
| | HE40 STBC, M0 to M9 2ss | 4 | 9 | 1.2 | 1.6 | -0.3 | -0.3 | 0.1 | 6.8 | 8.0 | 1.22 |
| | | | | | | | | | | | |
| 5290 | Non HT80, 6 to 54 Mbps | 1 | 6 | -5.1 | | | | 0.1 | -5.0 | 11.0 | 16.05 |
| | Non HT80, 6 to 54 Mbps | 2 | 9 | -5.1 | -5.2 | | | 0.1 | -2.1 | 8.0 | 10.09 |
| | Non HT80, 6 to 54 Mbps | 3 | 11 | -5.7 | -6.2 | -6.3 | | 0.1 | -1.2 | 6.0 | 7.24 |
| | Non HT80, 6 to 54 Mbps | 4 | 12 | -5.7 | -6.2 | -6.3 | -6.6 | 0.1 | -0.1 | 5.0 | 5.12 |
| | VHT80, M0 to M9 1ss | 1 | 6 | -4.5 | | | | 0.2 | -4.3 | 11.0 | 15.28 |
| | VHT80, M0 to M9 1ss | 2 | 9 | -5.4 | -6.1 | | | 0.2 | -2.5 | 8.0 | 10.51 |
| | VHT80, M0 to M9 2ss | 2 | 6 | -5.4 | -6.1 | | | 0.2 | -2.5 | 11.0 | 13.51 |
| | VHT80, M0 to M9 1ss | 3 | 11 | -5.4 | -6.1 | -6.0 | | 0.2 | -0.8 | 6.0 | 6.84 |
| | VHT80, M0 to M9 2ss | 3 | 8 | -5.4 | -6.1 | -6.0 | | 0.2 | -0.8 | 9.0 | 9.84 |
| | VHT80, M0 to M9 3ss | 3 | 6 | -5.4 | -6.1 | -6.0 | | 0.2 | -0.8 | 11.0 | 11.84 |
| | VHT80, M0 to M9 1ss | 4 | 12 | -5.4 | -6.1 | -6.0 | -6.4 | 0.2 | 0.3 | 5.0 | 4.72 |
| | VHT80, M0 to M9 2ss | 4 | 9 | -5.4 | -6.1 | -6.0 | -6.4 | 0.2 | 0.3 | 8.0 | 7.72 |
| | VHT80, M0 to M9 3ss | 4 | 7 | -5.4 | -6.1 | -6.0 | -6.4 | 0.2 | 0.3 | 10.0 | 9.72 |
| | VHT80, M0 to M9 4ss | 4 | 6 | -5.4 | -6.1 | -6.0 | -6.4 | 0.2 | 0.3 | 11.0 | 10.72 |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | VHT80 Beam Forming, M0 to M9 1ss | 2 | 9 | -6.0 | -7.1 | | | 0.2 | -3.3 | 8.0 | 11.29 |
| | VHT80 Beam Forming, M0 to M9 2ss | 2 | 6 | -5.4 | -6.1 | | | 0.2 | -2.5 | 11.0 | 13.51 |
| | VHT80 Beam Forming, M0 to M9 1ss | 3 | 11 | -7.8 | -8.2 | -8.0 | | 0.2 | -3.0 | 6.0 | 9.01 |
| | VHT80 Beam Forming, M0 to M9 2ss | 3 | 8 | -6.0 | -7.1 | -7.4 | | 0.2 | -1.8 | 9.0 | 10.80 |
| | VHT80 Beam Forming, M0 to M9 3ss | 3 | 6 | -5.4 | -6.1 | -6.0 | | 0.2 | -0.8 | 11.0 | 11.84 |
| | VHT80 Beam Forming, M0 to M9 1ss | 4 | 12 | -9.5 | -9.8 | -9.8 | -10.2 | 0.2 | -3.6 | 5.0 | 8.58 |
| | VHT80 Beam Forming, M0 to M9 2ss | 4 | 9 | -7.8 | -8.2 | -8.0 | -7.9 | 0.2 | -1.7 | 8.0 | 9.74 |
| | VHT80 Beam Forming, M0 to M9 3ss | 4 | 7 | -6.0 | -7.1 | -7.4 | -7.1 | 0.2 | -0.6 | 10.0 | 10.63 |
| | VHT80 Beam Forming, M0 to M9 4ss | 4 | 6 | -5.4 | -6.1 | -6.0 | -6.4 | 0.2 | 0.3 | 11.0 | 10.72 |
| | VHT80 STBC, M0 to M9 1ss | 2 | 6 | -5.4 | -6.1 | | | 0.2 | -2.5 | 11.0 | 13.51 |
| | VHT80 STBC, M0 to M9 1ss | 3 | 6 | -5.4 | -6.1 | -6.0 | | 0.2 | -0.8 | 11.0 | 11.84 |
| | VHT80 STBC, M0 to M9 1ss | 4 | 6 | -5.4 | -6.1 | -6.0 | -6.4 | 0.2 | 0.3 | 11.0 | 10.72 |
| | HE80, M0 to M9 1ss | 1 | 6 | -5.1 | | | | 0.3 | -4.8 | 11.0 | 15.85 |
| | HE80, M0 to M9 1ss | 2 | 9 | -5.1 | -5.9 | | | 0.3 | -2.2 | 8.0 | 10.22 |
| | HE80, M0 to M9 2ss | 2 | 6 | -5.1 | -5.9 | | | 0.3 | -2.2 | 11.0 | 13.22 |
| | HE80, M0 to M9 1ss | 3 | 11 | -5.1 | -5.9 | -5.7 | | 0.3 | -0.5 | 6.0 | 6.53 |
| | HE80, M0 to M9 2ss | 3 | 8 | -5.1 | -5.9 | -5.7 | | 0.3 | -0.5 | 9.0 | 9.53 |
| | HE80, M0 to M9 3ss | 3 | 6 | -5.1 | -5.9 | -5.7 | | 0.3 | -0.5 | 11.0 | 11.53 |
| | HE80, M0 to M9 1ss | 4 | 12 | -5.4 | -6.4 | -6.4 | -7.1 | 0.3 | 0.0 | 5.0 | 5.01 |
| | HE80, M0 to M9 2ss | 4 | 9 | -5.4 | -6.4 | -6.4 | -7.1 | 0.3 | 0.0 | 8.0 | 8.01 |
| | HE80, M0 to M9 3ss | 4 | 7 | -5.4 | -6.4 | -6.4 | -7.1 | 0.3 | 0.0 | 10.0 | 10.01 |
| | HE80, M0 to M9 4ss | 4 | 6 | -5.4 | -6.4 | -6.4 | -7.1 | 0.3 | 0.0 | 11.0 | 11.01 |
| | HE80 Beam Forming, M0 to M9 1ss | 2 | 9 | -5.4 | -6.4 | | | 0.3 | -2.6 | 8.0 | 10.61 |
| | HE80 Beam Forming, M0 to M9 2ss | 2 | 6 | -5.1 | -5.9 | | | 0.3 | -2.2 | 11.0 | 13.22 |
| | HE80 Beam Forming, M0 to M9 1ss | 3 | 11 | -7.5 | -8.7 | -8.5 | | 0.3 | -3.2 | 6.0 | 9.18 |
| | HE80 Beam Forming, M0 to M9 2ss | 3 | 8 | -5.4 | -6.4 | -6.4 | | 0.3 | -1.0 | 9.0 | 10.02 |
| | HE80 Beam Forming, M0 to M9 3ss | 3 | 6 | -5.1 | -5.9 | -5.7 | | 0.3 | -0.5 | 11.0 | 11.53 |
| | HE80 Beam Forming, M0 to M9 1ss | 4 | 12 | -9.1 | -9.7 | -9.9 | -10.2 | 0.3 | -3.4 | 5.0 | 8.44 |
| | HE80 Beam Forming, M0 to M9 2ss | 4 | 9 | -7.3 | -7.6 | -7.7 | -8.0 | 0.3 | -1.4 | 8.0 | 9.37 |
| | HE80 Beam Forming, M0 to M9 3ss | 4 | 7 | -5.4 | -6.4 | -6.4 | -7.1 | 0.3 | 0.0 | 10.0 | 10.01 |
| | HE80 Beam Forming, M0 to M9 4ss | 4 | 6 | -5.4 | -6.4 | -6.4 | -7.1 | 0.3 | 0.0 | 11.0 | 11.01 |
| | HE80 STBC, M0 to M9 1ss | 2 | 6 | -5.1 | -5.9 | | | 0.3 | -2.2 | 11.0 | 13.22 |
| | HE80 STBC, M0 to M9 1ss | 3 | 6 | -5.1 | -5.9 | -5.7 | | 0.3 | -0.5 | 11.0 | 11.53 |
| | HE80 STBC, M0 to M9 1ss | 4 | 6 | -5.4 | -6.4 | -6.4 | -7.1 | 0.3 | 0.0 | 11.0 | 11.01 |
| | | | | | | | | | | | |
| 5300 | Non HT20, 6 to 54 Mbps | 1 | 6 | 6.6 | | | | 0.1 | 6.7 | 11.0 | 4.35 |
| | Non HT20, 6 to 54 Mbps | 2 | 9 | 4.0 | 3.9 | | | 0.1 | 7.0 | 8.0 | 0.99 |
| | Non HT20, 6 to 54 Mbps | 3 | 11 | 1.1 | 1.0 | 0.2 | | 0.1 | 5.6 | 6.0 | 0.39 |
| | Non HT20, 6 to 54 Mbps | 4 | 12 | -0.7 | -1.2 | -1.6 | -2.0 | 0.1 | 4.7 | 5.0 | 0.28 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 2 | 9 | 4.0 | 3.9 | | | 0.1 | 7.0 | 8.0 | 0.99 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 3 | 11 | 1.1 | 1.0 | 0.2 | | 0.1 | 5.6 | 6.0 | 0.39 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 4 | 12 | -0.7 | -1.2 | -1.6 | -2.0 | 0.1 | 4.7 | 5.0 | 0.28 |



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|---|---|---|---|---|---|---|---|---|---|---|
| HT/VHT20, M0 to M7 | 1 | 6 | 6.2 | | | | 0.1 | 6.3 | 11.0 | 4.75 |
| HT/VHT20, M0 to M7 | 2 | 9 | 5.1 | 4.5 | | | 0.1 | 7.9 | 8.0 | 0.13 |
| HT/VHT20, M8 to M15 | 2 | 6 | 6.2 | 5.7 | | | 0.1 | 9.0 | 11.0 | 1.98 |
| HT/VHT20, M0 to M7 | 3 | 11 | 0.8 | 0.6 | 0.0 | | 0.1 | 5.3 | 6.0 | 0.70 |
| HT/VHT20, M8 to M15 | 3 | 8 | 3.7 | 3.6 | 3.0 | | 0.1 | 8.3 | 9.0 | 0.73 |
| HT/VHT20, M16 to M23 | 3 | 6 | 6.2 | 5.7 | 4.9 | | 0.1 | 10.5 | 11.0 | 0.54 |
| HT/VHT20, M0 to M7 | 4 | 12 | -1.0 | -1.7 | -1.8 | -2.4 | 0.1 | 4.4 | 5.0 | 0.62 |
| HT/VHT20, M8 to M15 | 4 | 9 | 2.0 | 1.7 | 1.0 | 0.7 | 0.1 | 7.5 | 8.0 | 0.55 |
| HT/VHT20, M16 to M23 | 4 | 7 | 3.7 | 3.6 | 3.0 | 2.8 | 0.1 | 9.4 | 10.0 | 0.64 |
| HT/VHT20, M24 to M31 | 4 | 6 | 5.1 | 4.5 | 3.7 | 3.6 | 0.1 | 10.3 | 11.0 | 0.66 |
| HT/VHT20 Beam Forming, M0 to M7 | 2 | 9 | 5.1 | 4.5 | | | 0.1 | 7.9 | 8.0 | 0.13 |
| HT/VHT20 Beam Forming, M8 to M15 | 2 | 6 | 6.2 | 5.7 | | | 0.1 | 9.0 | 11.0 | 1.98 |
| HT/VHT20 Beam Forming, M0 to M7 | 3 | 11 | 0.8 | 0.6 | 0.0 | | 0.1 | 5.3 | 6.0 | 0.70 |
| HT/VHT20 Beam Forming, M8 to M15 | 3 | 8 | 3.7 | 3.6 | 3.0 | | 0.1 | 8.3 | 9.0 | 0.73 |
| HT/VHT20 Beam Forming, M16 to M23 | 3 | 6 | 6.2 | 5.7 | 4.9 | | 0.1 | 10.5 | 11.0 | 0.54 |
| HT/VHT20 Beam Forming, M0 to M7 | 4 | 12 | -1.0 | -1.7 | -1.8 | -2.4 | 0.1 | 4.4 | 5.0 | 0.62 |
| HT/VHT20 Beam Forming, M8 to M15 | 4 | 9 | 2.0 | 1.7 | 1.0 | 0.7 | 0.1 | 7.5 | 8.0 | 0.55 |
| HT/VHT20 Beam Forming, M16 to M23 | 4 | 7 | 3.7 | 3.6 | 3.0 | 2.8 | 0.1 | 9.4 | 10.0 | 0.64 |
| HT/VHT20 Beam Forming, M24 to M31 | 4 | 6 | 5.1 | 4.5 | 3.7 | 3.6 | 0.1 | 10.3 | 11.0 | 0.66 |
| HT/VHT20 STBC, M0 to M7 | 2 | 6 | 6.2 | 5.7 | | | 0.1 | 9.0 | 11.0 | 1.98 |
| HT/VHT20 STBC, M0 to M7 | 3 | 8 | 3.7 | 3.6 | 3.0 | | 0.1 | 8.3 | 9.0 | 0.73 |
| HT/VHT20 STBC, M0 to M7 | 4 | 9 | 2.0 | 1.7 | 1.0 | 0.7 | 0.1 | 7.5 | 8.0 | 0.55 |
| HE20, M0 to M9 1ss | 1 | 6 | 6.1 | | | | 0.1 | 6.2 | 11.0 | 4.83 |
| HE20, M0 to M9 1ss | 2 | 9 | 3.8 | 3.7 | | | 0.1 | 6.8 | 8.0 | 1.17 |
| HE20, M0 to M9 2ss | 2 | 6 | 6.1 | 6.3 | | | 0.1 | 9.3 | 11.0 | 1.72 |
| HE20, M0 to M9 1ss | 3 | 11 | 0.9 | 0.7 | -0.1 | | 0.1 | 5.4 | 6.0 | 0.64 |
| HE20, M0 to M9 2ss | 3 | 8 | 3.8 | 3.7 | 2.8 | | 0.1 | 8.3 | 9.0 | 0.70 |
| HE20, M0 to M9 3ss | 3 | 6 | 6.1 | 6.3 | 4.7 | | 0.1 | 10.6 | 11.0 | 0.40 |
| HE20, M0 to M9 1ss | 4 | 12 | -0.9 | -1.3 | -1.9 | -2.3 | 0.1 | 4.5 | 5.0 | 0.48 |
| HE20, M0 to M9 2ss | 4 | 9 | 2.0 | 1.4 | 0.9 | 1.0 | 0.1 | 7.4 | 8.0 | 0.56 |
| HE20, M0 to M9 3ss | 4 | 7 | 3.8 | 3.7 | 2.8 | 3.4 | 0.1 | 9.5 | 10.0 | 0.47 |
| HE20, M0 to M9 4ss | 4 | 6 | 5.6 | 5.1 | 3.9 | 4.0 | 0.1 | 10.8 | 11.0 | 0.20 |
| HE20 Beam Forming, M0 to M9 1ss | 2 | 9 | 3.8 | 3.7 | | | 0.1 | 6.8 | 8.0 | 1.17 |
| HE20 Beam Forming, M0 to M9 2ss | 2 | 6 | 6.1 | 6.3 | | | 0.1 | 9.3 | 11.0 | 1.72 |
| HE20 Beam Forming, M0 to M9 1ss | 3 | 11 | 0.9 | 0.7 | -0.1 | | 0.1 | 5.4 | 6.0 | 0.64 |
| HE20 Beam Forming, M0 to M9 2ss | 3 | 8 | 3.8 | 3.7 | 2.8 | | 0.1 | 8.3 | 9.0 | 0.70 |
| HE20 Beam Forming, M0 to M9 3ss | 3 | 6 | 6.1 | 6.3 | 4.7 | | 0.1 | 10.6 | 11.0 | 0.40 |
| HE20 Beam Forming, M0 to M9 1ss | 4 | 12 | -0.9 | -1.3 | -1.9 | -2.3 | 0.1 | 4.5 | 5.0 | 0.48 |
| HE20 Beam Forming, M0 to M9 2ss | 4 | 9 | 2.0 | 1.4 | 0.9 | 1.0 | 0.1 | 7.4 | 8.0 | 0.56 |
| HE20 Beam Forming, M0 to M9 3ss | 4 | 7 | 3.8 | 3.7 | 2.8 | 3.4 | 0.1 | 9.5 | 10.0 | 0.47 |
| HE20 Beam Forming, M0 to M9 4ss | 4 | 6 | 5.6 | 5.1 | 3.9 | 4.0 | 0.1 | 10.8 | 11.0 | 0.20 |
| HE20 STBC, M0 to M9 2ss | 2 | 6 | 6.1 | 6.3 | | | 0.1 | 9.3 | 11.0 | 1.72 |



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|---|---|---|---|---|---|---|---|---|---|---|---|
| | HE20 STBC, M0 to M9 2ss | 3 | 8 | 3.8 | 3.7 | 2.8 | | 0.1 | 8.3 | 9.0 | 0.70 |
| | HE20 STBC, M0 to M9 2ss | 4 | 9 | 2.0 | 1.4 | 0.9 | 1.0 | 0.1 | 7.4 | 8.0 | 0.56 |
| | | | | | | | | | | | |
| 5310 | Non HT40, 6 to 54 Mbps | 1 | 6 | -1.1 | | | | 0.1 | -1.0 | 11.0 | 12.05 |
| | Non HT40, 6 to 54 Mbps | 2 | 9 | -1.9 | -1.7 | | | 0.1 | 1.3 | 8.0 | 6.74 |
| | Non HT40, 6 to 54 Mbps | 3 | 11 | -1.9 | -1.7 | -2.8 | | 0.1 | 2.7 | 6.0 | 3.29 |
| | Non HT40, 6 to 54 Mbps | 4 | 12 | -1.9 | -1.7 | -2.8 | -2.4 | 0.1 | 3.9 | 5.0 | 1.11 |
| | HT/VHT40, M0 to M7 | 1 | 6 | -0.7 | | | | 0.1 | -0.6 | 11.0 | 11.65 |
| | HT/VHT40, M0 to M7 | 2 | 9 | -0.7 | -0.7 | | | 0.1 | 2.4 | 8.0 | 5.64 |
| | HT/VHT40, M8 to M15 | 2 | 6 | -0.7 | -0.7 | | | 0.1 | 2.4 | 11.0 | 8.64 |
| | HT/VHT40, M0 to M7 | 3 | 11 | -0.7 | -0.7 | -2.3 | | 0.1 | 3.7 | 6.0 | 2.35 |
| | HT/VHT40, M8 to M15 | 3 | 8 | -0.7 | -0.7 | -2.3 | | 0.1 | 3.7 | 9.0 | 5.35 |
| | HT/VHT40, M16 to M23 | 3 | 6 | -0.7 | -0.7 | -2.3 | | 0.1 | 3.7 | 11.0 | 7.35 |
| | HT/VHT40, M0 to M7 | 4 | 12 | -2.1 | -1.9 | -3.3 | -3.4 | 0.1 | 3.5 | 5.0 | 1.55 |
| | HT/VHT40, M8 to M15 | 4 | 9 | -2.1 | -1.9 | -3.3 | -3.4 | 0.1 | 3.5 | 8.0 | 4.55 |
| | HT/VHT40, M16 to M23 | 4 | 7 | -2.1 | -1.9 | -3.3 | -3.4 | 0.1 | 3.5 | 10.0 | 6.55 |
| | HT/VHT40, M24 to M31 | 4 | 6 | -2.1 | -1.9 | -3.3 | -3.4 | 0.1 | 3.5 | 11.0 | 7.55 |
| | HT/VHT40 Beam Forming, M0 to M7 | 2 | 9 | -2.1 | -1.9 | | | 0.1 | 1.1 | 8.0 | 6.94 |
| | HT/VHT40 Beam Forming, M8 to M15 | 2 | 6 | -0.7 | -0.7 | | | 0.1 | 2.4 | 11.0 | 8.64 |
| | HT/VHT40 Beam Forming, M0 to M7 | 3 | 11 | -3.7 | -4.2 | -5.2 | | 0.1 | 0.5 | 6.0 | 5.50 |
| | HT/VHT40 Beam Forming, M8 to M15 | 3 | 8 | -2.1 | -1.9 | -3.3 | | 0.1 | 2.4 | 9.0 | 6.57 |
| | HT/VHT40 Beam Forming, M16 to M23 | 3 | 6 | -0.7 | -0.7 | -2.3 | | 0.1 | 3.7 | 11.0 | 7.35 |
| | HT/VHT40 Beam Forming, M0 to M7 | 4 | 12 | -5.0 | -5.0 | -5.9 | -6.4 | 0.1 | 0.5 | 5.0 | 4.46 |
| | HT/VHT40 Beam Forming, M8 to M15 | 4 | 9 | -2.8 | -2.7 | -3.8 | -4.5 | 0.1 | 2.7 | 8.0 | 5.31 |
| | HT/VHT40 Beam Forming, M16 to M23 | 4 | 7 | -2.1 | -1.9 | -3.3 | -3.4 | 0.1 | 3.5 | 10.0 | 6.55 |
| | HT/VHT40 Beam Forming, M24 to M31 | 4 | 6 | -2.1 | -1.9 | -3.3 | -3.4 | 0.1 | 3.5 | 11.0 | 7.55 |
| | HT/VHT40 STBC, M0 to M7 | 2 | 6 | -0.7 | -0.7 | | | 0.1 | 2.4 | 11.0 | 8.64 |
| | HT/VHT40 STBC, M0 to M7 | 3 | 8 | -0.7 | -0.7 | -2.3 | | 0.1 | 3.7 | 9.0 | 5.35 |
| | HT/VHT40 STBC, M0 to M7 | 4 | 9 | -2.1 | -1.9 | -3.3 | -3.4 | 0.1 | 3.5 | 8.0 | 4.55 |
| | HE40, M0 to M9 1ss | 1 | 6 | -1.8 | | | | 0.1 | -1.7 | 11.0 | 12.73 |
| | HE40, M0 to M9 1ss | 2 | 9 | -1.8 | -2.0 | | | 0.1 | 1.2 | 8.0 | 6.82 |
| | HE40, M0 to M9 2ss | 2 | 6 | -1.8 | -2.0 | | | 0.1 | 1.2 | 11.0 | 9.82 |
| | HE40, M0 to M9 1ss | 3 | 11 | -1.8 | -2.0 | -3.2 | | 0.1 | 2.5 | 6.0 | 3.45 |
| | HE40, M0 to M9 2ss | 3 | 8 | -1.8 | -2.0 | -3.2 | | 0.1 | 2.5 | 9.0 | 6.45 |
| | HE40, M0 to M9 3ss | 3 | 6 | -1.8 | -2.0 | -3.2 | | 0.1 | 2.5 | 11.0 | 8.45 |
| | HE40, M0 to M9 1ss | 4 | 12 | -1.8 | -2.0 | -3.2 | -3.4 | 0.1 | 3.5 | 5.0 | 1.45 |
| | HE40, M0 to M9 2ss | 4 | 9 | -1.8 | -2.0 | -3.2 | -3.4 | 0.1 | 3.5 | 8.0 | 4.45 |
| | HE40, M0 to M9 3ss | 4 | 7 | -1.8 | -2.0 | -3.2 | -3.4 | 0.1 | 3.5 | 10.0 | 6.45 |
| | HE40, M0 to M9 4ss | 4 | 6 | -1.8 | -2.0 | -3.2 | -3.4 | 0.1 | 3.5 | 11.0 | 7.45 |
| | HE40 Beam Forming, M0 to M9 1ss | 2 | 9 | -2.9 | -2.5 | | | 0.1 | 0.4 | 8.0 | 7.62 |
| | HE40 Beam Forming, M0 to M9 2ss | 2 | 6 | -1.8 | -2.0 | | | 0.1 | 1.2 | 11.0 | 9.82 |
| | HE40 Beam Forming, M0 to M9 1ss | 3 | 11 | -3.7 | -3.7 | -4.9 | | 0.1 | 0.8 | 6.0 | 5.23 |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | HE40 Beam Forming, M0 to M9 2ss | 3 | 8 | -2.9 | -2.5 | -3.9 | | 0.1 | 1.8 | 9.0 | 7.22 |
| | HE40 Beam Forming, M0 to M9 3ss | 3 | 6 | -1.8 | -2.0 | -3.2 | | 0.1 | 2.5 | 11.0 | 8.45 |
| | HE40 Beam Forming, M0 to M9 1ss | 4 | 12 | -6.1 | -6.1 | -7.1 | -7.0 | 0.1 | -0.5 | 5.0 | 5.46 |
| | HE40 Beam Forming, M0 to M9 2ss | 4 | 9 | -3.7 | -3.7 | -4.9 | -4.9 | 0.1 | 1.8 | 8.0 | 6.17 |
| | HE40 Beam Forming, M0 to M9 3ss | 4 | 7 | -2.9 | -2.5 | -3.9 | -4.4 | 0.1 | 2.7 | 10.0 | 7.27 |
| | HE40 Beam Forming, M0 to M9 4ss | 4 | 6 | -1.8 | -2.0 | -3.2 | -3.4 | 0.1 | 3.5 | 11.0 | 7.45 |
| | HE40 STBC, M0 to M9 2ss | 2 | 6 | -1.8 | -2.0 | | | 0.1 | 1.2 | 11.0 | 9.82 |
| | HE40 STBC, M0 to M9 2ss | 3 | 8 | -1.8 | -2.0 | -3.2 | | 0.1 | 2.5 | 9.0 | 6.45 |
| | HE40 STBC, M0 to M9 2ss | 4 | 9 | -1.8 | -2.0 | -3.2 | -3.4 | 0.1 | 3.5 | 8.0 | 4.45 |
| | | | | | | | | | | | |
| 5320 | Non HT20, 6 to 54 Mbps | 1 | 6 | 5.1 | | | | 0.1 | 5.2 | 11.0 | 5.85 |
| | Non HT20, 6 to 54 Mbps | 2 | 9 | 4.3 | 3.5 | | | 0.1 | 7.0 | 8.0 | 1.02 |
| | Non HT20, 6 to 54 Mbps | 3 | 11 | 1.2 | 0.5 | 0.4 | | 0.1 | 5.5 | 6.0 | 0.46 |
| | Non HT20, 6 to 54 Mbps | 4 | 12 | -0.7 | -1.6 | -1.8 | -2.1 | 0.1 | 4.6 | 5.0 | 0.45 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 2 | 9 | 4.3 | 3.5 | | | 0.1 | 7.0 | 8.0 | 1.02 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 3 | 11 | 1.2 | 0.5 | 0.4 | | 0.1 | 5.5 | 6.0 | 0.46 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 4 | 12 | -0.7 | -1.6 | -1.8 | -2.1 | 0.1 | 4.6 | 5.0 | 0.45 |
| | HT/VHT20, M0 to M7 | 1 | 6 | 3.7 | | | | 0.1 | 3.8 | 11.0 | 7.25 |
| | HT/VHT20, M0 to M7 | 2 | 9 | 3.7 | 3.5 | | | 0.1 | 6.7 | 8.0 | 1.34 |
| | HT/VHT20, M8 to M15 | 2 | 6 | 3.7 | 3.5 | | | 0.1 | 6.7 | 11.0 | 4.34 |
| | HT/VHT20, M0 to M7 | 3 | 11 | 0.6 | 0.2 | 0.0 | | 0.1 | 5.1 | 6.0 | 0.90 |
| | HT/VHT20, M8 to M15 | 3 | 8 | 3.7 | 3.5 | 3.0 | | 0.1 | 8.2 | 9.0 | 0.77 |
| | HT/VHT20, M16 to M23 | 3 | 6 | 3.7 | 3.5 | 3.0 | | 0.1 | 8.2 | 11.0 | 2.77 |
| | HT/VHT20, M0 to M7 | 4 | 12 | -1.5 | -2.0 | -2.1 | -2.4 | 0.1 | 4.1 | 5.0 | 0.91 |
| | HT/VHT20, M8 to M15 | 4 | 9 | 1.8 | 1.4 | 0.7 | 0.8 | 0.1 | 7.3 | 8.0 | 0.73 |
| | HT/VHT20, M16 to M23 | 4 | 7 | 3.0 | 2.4 | 1.7 | 1.9 | 0.1 | 8.4 | 10.0 | 1.65 |
| | HT/VHT20, M24 to M31 | 4 | 6 | 3.0 | 2.4 | 1.7 | 1.9 | 0.1 | 8.4 | 11.0 | 2.65 |
| | HT/VHT20 Beam Forming, M0 to M7 | 2 | 9 | 3.0 | 2.4 | | | 0.1 | 5.8 | 8.0 | 2.23 |
| | HT/VHT20 Beam Forming, M8 to M15 | 2 | 6 | 3.7 | 3.5 | | | 0.1 | 6.7 | 11.0 | 4.34 |
| | HT/VHT20 Beam Forming, M0 to M7 | 3 | 11 | 0.6 | 0.2 | 0.0 | | 0.1 | 5.1 | 6.0 | 0.90 |
| | HT/VHT20 Beam Forming, M8 to M15 | 3 | 8 | 3.0 | 2.4 | 1.7 | | 0.1 | 7.2 | 9.0 | 1.78 |
| | HT/VHT20 Beam Forming, M16 to M23 | 3 | 6 | 3.7 | 3.5 | 3.0 | | 0.1 | 8.2 | 11.0 | 2.77 |
| | HT/VHT20 Beam Forming, M0 to M7 | 4 | 12 | -1.5 | -2.0 | -2.1 | -2.4 | 0.1 | 4.1 | 5.0 | 0.91 |
| | HT/VHT20 Beam Forming, M8 to M15 | 4 | 9 | 1.8 | 1.4 | 0.7 | 0.8 | 0.1 | 7.3 | 8.0 | 0.73 |
| | HT/VHT20 Beam Forming, M16 to M23 | 4 | 7 | 3.0 | 2.4 | 1.7 | 1.9 | 0.1 | 8.4 | 10.0 | 1.65 |
| | HT/VHT20 Beam Forming, M24 to M31 | 4 | 6 | 3.0 | 2.4 | 1.7 | 1.9 | 0.1 | 8.4 | 11.0 | 2.65 |
| | HT/VHT20 STBC, M0 to M7 | 2 | 6 | 3.7 | 3.5 | | | 0.1 | 6.7 | 11.0 | 4.34 |
| | HT/VHT20 STBC, M0 to M7 | 3 | 8 | 3.7 | 3.5 | 3.0 | | 0.1 | 8.2 | 9.0 | 0.77 |
| | HT/VHT20 STBC, M0 to M7 | 4 | 9 | 1.8 | 1.4 | 0.7 | 0.8 | 0.1 | 7.3 | 8.0 | 0.73 |
| | HE20, M0 to M9 1ss | 1 | 6 | 3.1 | | | | 0.1 | 3.2 | 11.0 | 7.83 |
| | HE20, M0 to M9 1ss | 2 | 9 | 3.1 | 2.3 | | | 0.1 | 5.8 | 8.0 | 2.20 |
| | HE20, M0 to M9 2ss | 2 | 6 | 3.1 | 2.3 | | | 0.1 | 5.8 | 11.0 | 5.20 |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | HE20, M0 to M9 1ss | 3 | 11 | 0.6 | 0.7 | 0.0 | | 0.1 | 5.3 | 6.0 | 0.72 |
| | HE20, M0 to M9 2ss | 3 | 8 | 3.1 | 2.3 | 1.9 | | 0.1 | 7.3 | 9.0 | 1.70 |
| | HE20, M0 to M9 3ss | 3 | 6 | 3.1 | 2.3 | 1.9 | | 0.1 | 7.3 | 11.0 | 3.70 |
| | HE20, M0 to M9 1ss | 4 | 12 | -1.4 | -1.8 | -1.9 | -2.2 | 0.1 | 4.3 | 5.0 | 0.73 |
| | HE20, M0 to M9 2ss | 4 | 9 | 2.0 | 1.3 | 0.8 | 0.8 | 0.1 | 7.3 | 8.0 | 0.66 |
| | HE20, M0 to M9 3ss | 4 | 7 | 3.1 | 2.3 | 1.9 | 2.1 | 0.1 | 8.5 | 10.0 | 1.54 |
| | HE20, M0 to M9 4ss | 4 | 6 | 3.1 | 2.3 | 1.9 | 2.1 | 0.1 | 8.5 | 11.0 | 2.54 |
| | HE20 Beam Forming, M0 to M9 1ss | 2 | 9 | 2.0 | 1.3 | | | 0.1 | 4.7 | 8.0 | 3.26 |
| | HE20 Beam Forming, M0 to M9 2ss | 2 | 6 | 3.1 | 2.3 | | | 0.1 | 5.8 | 11.0 | 5.20 |
| | HE20 Beam Forming, M0 to M9 1ss | 3 | 11 | 0.6 | 0.7 | 0.0 | | 0.1 | 5.3 | 6.0 | 0.72 |
| | HE20 Beam Forming, M0 to M9 2ss | 3 | 8 | 2.0 | 1.3 | 0.8 | | 0.1 | 6.2 | 9.0 | 2.77 |
| | HE20 Beam Forming, M0 to M9 3ss | 3 | 6 | 3.1 | 2.3 | 1.9 | | 0.1 | 7.3 | 11.0 | 3.70 |
| | HE20 Beam Forming, M0 to M9 1ss | 4 | 12 | -1.4 | -1.8 | -1.9 | -2.2 | 0.1 | 4.3 | 5.0 | 0.73 |
| | HE20 Beam Forming, M0 to M9 2ss | 4 | 9 | 2.0 | 1.3 | 0.8 | 0.8 | 0.1 | 7.3 | 8.0 | 0.66 |
| | HE20 Beam Forming, M0 to M9 3ss | 4 | 7 | 2.0 | 1.3 | 0.8 | 0.8 | 0.1 | 7.3 | 10.0 | 2.66 |
| | HE20 Beam Forming, M0 to M9 4ss | 4 | 6 | 3.1 | 2.3 | 1.9 | 2.1 | 0.1 | 8.5 | 11.0 | 2.54 |
| | HE20 STBC, M0 to M9 2ss | 2 | 6 | 3.1 | 2.3 | | | 0.1 | 5.8 | 11.0 | 5.20 |
| | HE20 STBC, M0 to M9 2ss | 3 | 8 | 3.1 | 2.3 | 1.9 | | 0.1 | 7.3 | 9.0 | 1.70 |
| | HE20 STBC, M0 to M9 2ss | 4 | 9 | 2.0 | 1.3 | 0.8 | 0.8 | 0.1 | 7.3 | 8.0 | 0.66 |
| | | | | | | | | | | | |
| 5250 | Non HT160, 6 to 54 Mbps | 1 | 6 | -5.1 | | | | 0.1 | -5.0 | 11.0 | 16.05 |
| | Non HT160, 6 to 54 Mbps | 2 | 9 | -5.1 | -9.5 | | | 0.1 | -3.7 | 8.0 | 11.70 |
| | Non HT160, 6 to 54 Mbps | 3 | 11 | -5.1 | -9.5 | -10.2 | | 0.1 | -2.8 | 6.0 | 8.82 |
| | Non HT160, 6 to 54 Mbps | 4 | 12 | -5.1 | -9.5 | -10.2 | -8.5 | 0.1 | -1.8 | 5.0 | 6.77 |
| | VHT160, M0 to M9 1ss | 1 | 6 | -6.5 | | | | 0.1 | -6.4 | 11.0 | 17.45 |
| | VHT160, M0 to M9 1ss | 2 | 9 | -6.5 | -9.4 | | | 0.1 | -4.6 | 8.0 | 12.65 |
| | VHT160, M0 to M9 2ss | 2 | 6 | -6.5 | -9.4 | | | 0.1 | -4.6 | 11.0 | 15.65 |
| | VHT160, M0 to M9 1ss | 3 | 11 | -6.5 | -9.4 | -10.1 | | 0.1 | -3.5 | 6.0 | 9.55 |
| | VHT160, M0 to M9 2ss | 3 | 8 | -6.5 | -9.4 | -10.1 | | 0.1 | -3.5 | 9.0 | 12.55 |
| | VHT160, M0 to M9 3ss | 3 | 6 | -6.5 | -9.4 | -10.1 | | 0.1 | -3.5 | 11.0 | 14.55 |
| | VHT160, M0 to M9 1ss | 4 | 12 | -7.7 | -10.4 | -10.7 | -11.2 | 0.1 | -3.7 | 5.0 | 8.69 |
| | VHT160, M0 to M9 2ss | 4 | 9 | -7.7 | -10.4 | -10.7 | -11.2 | 0.1 | -3.7 | 8.0 | 11.69 |
| | VHT160, M0 to M9 3ss | 4 | 7 | -7.7 | -10.4 | -10.7 | -11.2 | 0.1 | -3.7 | 10.0 | 13.69 |
| | VHT160, M0 to M9 4ss | 4 | 6 | -7.7 | -10.4 | -10.7 | -11.2 | 0.1 | -3.7 | 11.0 | 14.69 |
| | VHT160 Beam Forming, M0 to M9 1ss | 2 | 9 | -7.7 | -10.4 | | | 0.1 | -5.8 | 8.0 | 13.78 |
| | VHT160 Beam Forming, M0 to M9 2ss | 2 | 6 | -6.5 | -9.4 | | | 0.1 | -4.6 | 11.0 | 15.65 |
| | VHT160 Beam Forming, M0 to M9 1ss | 3 | 11 | -8.9 | -11.6 | -12.0 | | 0.1 | -5.8 | 6.0 | 11.78 |
| | VHT160 Beam Forming, M0 to M9 2ss | 3 | 8 | -7.7 | -10.4 | -10.7 | | 0.1 | -4.6 | 9.0 | 13.55 |
| | VHT160 Beam Forming, M0 to M9 3ss | 3 | 6 | -6.5 | -9.4 | -10.1 | | 0.1 | -3.5 | 11.0 | 14.55 |
| | VHT160 Beam Forming, M0 to M9 1ss | 4 | 12 | -9.8 | -12.5 | -12.7 | -13.2 | 0.1 | -5.8 | 5.0 | 10.75 |
| | VHT160 Beam Forming, M0 to M9 2ss | 4 | 9 | -8.9 | -11.6 | -12.0 | -12.4 | 0.1 | -4.9 | 8.0 | 12.91 |
| | VHT160 Beam Forming, M0 to M9 3ss | 4 | 7 | -7.7 | -10.4 | -10.7 | -11.2 | 0.1 | -3.7 | 10.0 | 13.69 |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | VHT160 Beam Forming, M0 to M9 4ss | 4 | 6 | -7.7 | -10.4 | -10.7 | -11.2 | 0.1 | -3.7 | 11.0 | 14.69 |
| | VHT160 STBC, M0 to M9 1ss | 2 | 6 | -6.5 | -9.4 | | | 0.1 | -4.6 | 11.0 | 15.65 |
| | VHT160 STBC, M0 to M9 1ss | 3 | 6 | -6.5 | -9.4 | -10.1 | | 0.1 | -3.5 | 11.0 | 14.55 |
| | VHT160 STBC, M0 to M9 1ss | 4 | 6 | -7.7 | -10.4 | -10.7 | -11.2 | 0.1 | -3.7 | 11.0 | 14.69 |
| | HE160, M0 to M9 1ss | 1 | 6 | -4.9 | | | | 0.1 | -4.8 | 11.0 | 15.83 |
| | HE160, M0 to M9 1ss | 2 | 9 | -5.5 | -8.5 | | | 0.1 | -3.7 | 8.0 | 11.67 |
| | HE160, M0 to M9 2ss | 2 | 6 | -5.5 | -8.5 | | | 0.1 | -3.7 | 11.0 | 14.67 |
| | HE160, M0 to M9 1ss | 3 | 11 | -5.5 | -8.5 | -8.8 | | 0.1 | -2.5 | 6.0 | 8.49 |
| | HE160, M0 to M9 2ss | 3 | 8 | -5.5 | -8.5 | -8.8 | | 0.1 | -2.5 | 9.0 | 11.49 |
| | HE160, M0 to M9 3ss | 3 | 6 | -5.5 | -8.5 | -8.8 | | 0.1 | -2.5 | 11.0 | 13.49 |
| | HE160, M0 to M9 1ss | 4 | 12 | -5.5 | -8.5 | -8.8 | -8.7 | 0.1 | -1.5 | 5.0 | 6.54 |
| | HE160, M0 to M9 2ss | 4 | 9 | -5.5 | -8.5 | -8.8 | -8.7 | 0.1 | -1.5 | 8.0 | 9.54 |
| | HE160, M0 to M9 3ss | 4 | 7 | -5.5 | -8.5 | -8.8 | -8.7 | 0.1 | -1.5 | 10.0 | 11.54 |
| | HE160, M0 to M9 4ss | 4 | 6 | -5.5 | -8.5 | -8.8 | -8.7 | 0.1 | -1.5 | 11.0 | 12.54 |
| | HE160 Beam Forming, M0 to M9 1ss | 2 | 9 | -6.3 | -8.8 | | | 0.1 | -4.3 | 8.0 | 12.29 |
| | HE160 Beam Forming, M0 to M9 2ss | 2 | 6 | -5.5 | -8.5 | | | 0.1 | -3.7 | 11.0 | 14.67 |
| | HE160 Beam Forming, M0 to M9 1ss | 3 | 11 | -7.1 | -10.2 | -10.9 | | 0.1 | -4.2 | 6.0 | 10.23 |
| | HE160 Beam Forming, M0 to M9 2ss | 3 | 8 | -6.3 | -8.8 | -9.9 | | 0.1 | -3.2 | 9.0 | 12.22 |
| | HE160 Beam Forming, M0 to M9 3ss | 3 | 6 | -5.5 | -8.5 | -8.8 | | 0.1 | -2.5 | 11.0 | 13.49 |
| | HE160 Beam Forming, M0 to M9 1ss | 4 | 12 | -8.6 | -11.0 | -11.7 | -12.1 | 0.1 | -4.5 | 5.0 | 9.53 |
| | HE160 Beam Forming, M0 to M9 2ss | 4 | 9 | -7.1 | -10.2 | -10.9 | -11.0 | 0.1 | -3.4 | 8.0 | 11.39 |
| | HE160 Beam Forming, M0 to M9 3ss | 4 | 7 | -6.3 | -8.8 | -9.9 | -9.8 | 0.1 | -2.3 | 10.0 | 12.35 |
| | HE160 Beam Forming, M0 to M9 4ss | 4 | 6 | -5.5 | -8.5 | -8.8 | -8.7 | 0.1 | -1.5 | 11.0 | 12.54 |
| | HE160 STBC, M0 to M9 1ss | 2 | 6 | -5.5 | -8.5 | | | 0.1 | -3.7 | 11.0 | 14.67 |
| | HE160 STBC, M0 to M9 1ss | 3 | 6 | -5.5 | -8.5 | -8.8 | | 0.1 | -2.5 | 11.0 | 13.49 |
| | HE160 STBC, M0 to M9 1ss | 4 | 6 | -5.5 | -8.5 | -8.8 | -8.7 | 0.1 | -1.5 | 11.0 | 12.54 |



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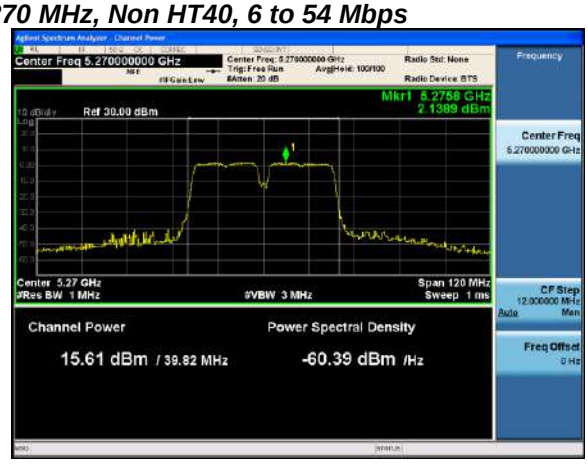
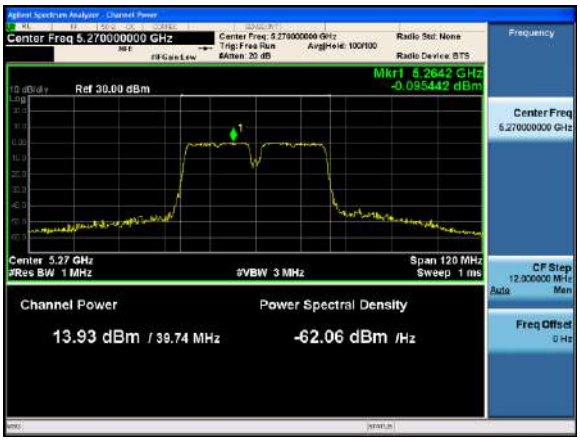
***Power Spectral Density, 5270 MHz, Non HT40, 6 to 54 Mbps***

***Antenna A***




***Antenna B***




***Antenna C***



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# A.5 Conducted Spurious Emissions

## Conducted Spurious Emissions Test Requirement

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

> **(2)** For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.
>
> **(6)** Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209.
>
> (**7)** The provisions of §15.205 apply to intentional radiators operating under this section.

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

> E[dBµV/m] = EIRP[dBm] - 20 log(d[meters]) + 104.77, where E = field strength and d = 3 meter
>
> 1) Average Plot, Limit= -41.25 dBm eirp
> 2) Peak plot, Limit = -21.25 dBm eirp

## Conducted Spurious Emissions Test Procedure

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

| **Conducted Spurious Emissions**<br>Test Procedure |
|---|
| 1. Connect the antenna port(s) to the spectrum analyzer input.<br>2. Place the radio in continuous transmit mode<br>3. Configure Spectrum analyzer as per test parameters below (be sure to enter all losses between the transmitter output and the spectrum analyzer).<br>4. Use the peak marker function to determine the maximum spurs amplitude level.<br>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. (see ANSI C63.10:2013 section 14.3.2.2)<br>6. Capture graphs and record pertinent measurement data. |

**Ref. ANSI C63.10: 2013 section 12.7.6 (Peak) and 12.7.7.2 (Average)**
**KDB 789033 D02 General UNII Test Procedures New Rules v02r01, Sec. 5 (Peak), Sec. 6 (Average Method AD)**

| **Conducted Spurious Emissions**<br>Test parameters | |
|---|---|
| **Peak**<br>RBW = 1 MHz<br>VBW ≥ 3 MHz<br>Sweep = Auto | **Average**<br>RBW = 1 MHz<br>VBW ≥ 3 MHz<br>Sweep = Auto |



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| | |
|---|---|
| Detector = Peak<br>Trace = Max Hold. | Detector = RMS<br>Power Averaging |

Add the max antenna gain + ground reflection factor (4.7 dB for frequencies between 30 MHz and 1000 MHz, and 0 dB for frequencies > 1000 MHz).

**Samples, Systems, and Modes**

| System Number | Description | Samples | System under test | Support equipment |
|---|---|---|---|---|
| 1 | EUT | S01 | ☑ | ☐ |
| | Support | | ☐ | ☑ |

| | |
|---|---|
| **Tested By :**<br>Chris Blair | **Date of testing:**<br>30-Aug-19 - 15-Sep-19 |
| **Test Result : PASS** | |

**Test Equipment**

See Appendix C for list of test equipment



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***Conducted Spurs Average Upper, 5260 MHz, Non HT20, 6 to 54 Mbps***

***Conducted Spurs Peak Upper, 5260 MHz, Non HT20, 6 to 54 Mbps***

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| 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) | Duty Cycle Correction (dB) | Total Conducted Spur (dBm) | Limit (dBm) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5260 | Non HT20, 6 to 54 Mbps | 1 | 6 | -60.6 | | | | 0.1 | -54.5 | -41.25 | 13.30 |
| | Non HT20, 6 to 54 Mbps | 2 | 6 | -62.4 | -57.9 | | | 0.1 | -50.5 | -41.25 | 9.28 |
| | Non HT20, 6 to 54 Mbps | 3 | 6 | -64.1 | -60.9 | -62.9 | | 0.1 | -51.6 | -41.25 | 10.36 |
| | Non HT20, 6 to 54 Mbps | 4 | 6 | -66.2 | -61.9 | -64.3 | -64.2 | 0.1 | -51.8 | -41.25 | 10.56 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 2 | 9 | -62.4 | -57.9 | | | 0.1 | -47.5 | -41.25 | 6.28 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 3 | 11 | -64.1 | -60.9 | -62.9 | | 0.1 | -46.6 | -41.25 | 5.36 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 4 | 12 | -66.2 | -61.9 | -64.3 | -64.2 | 0.1 | -45.8 | -41.25 | 4.56 |
| | HT/VHT20, M0 to M7 | 1 | 6 | -60.6 | | | | 0.1 | -54.5 | -41.25 | 13.30 |
| | HT/VHT20, M0 to M7 | 2 | 6 | -61.2 | -57.4 | | | 0.1 | -49.8 | -41.25 | 8.58 |
| | HT/VHT20, M8 to M15 | 2 | 6 | -60.6 | -56.7 | | | 0.1 | -49.2 | -41.25 | 7.91 |
| | HT/VHT20, M0 to M7 | 3 | 6 | -64.2 | -60.6 | -63.0 | | 0.1 | -51.5 | -41.25 | 10.26 |
| | HT/VHT20, M8 to M15 | 3 | 6 | -62.6 | -58.0 | -60.1 | | 0.1 | -49.0 | -41.25 | 7.77 |
| | HT/VHT20, M16 to M23 | 3 | 6 | -60.6 | -56.7 | -59.0 | | 0.1 | -47.6 | -41.25 | 6.40 |
| | HT/VHT20, M0 to M7 | 4 | 6 | -66.3 | -61.8 | -64.2 | -64.1 | 0.1 | -51.7 | -41.25 | 10.49 |
| | HT/VHT20, M8 to M15 | 4 | 6 | -63.5 | -59.2 | -61.5 | -62.4 | 0.1 | -49.3 | -41.25 | 8.03 |
| | HT/VHT20, M16 to M23 | 4 | 6 | -62.6 | -58.0 | -60.1 | -60.3 | 0.1 | -47.9 | -41.25 | 6.63 |
| | HT/VHT20, M24 to M31 | 4 | 6 | -61.2 | -57.4 | -59.8 | -59.7 | 0.1 | -47.2 | -41.25 | 5.98 |
| | HT/VHT20 Beam Forming, M0 to M7 | 2 | 9 | -61.2 | -57.4 | | | 0.1 | -46.8 | -41.25 | 5.58 |
| | HT/VHT20 Beam Forming, M8 to M15 | 2 | 6 | -60.6 | -56.7 | | | 0.1 | -49.2 | -41.25 | 7.91 |
| | HT/VHT20 Beam Forming, M0 to M7 | 3 | 11 | -64.2 | -60.6 | -63.0 | | 0.1 | -46.5 | -41.25 | 5.26 |
| | HT/VHT20 Beam Forming, M8 to M15 | 3 | 8 | -62.6 | -58.0 | -60.1 | | 0.1 | -47.0 | -41.25 | 5.77 |
| | HT/VHT20 Beam Forming, M16 to M23 | 3 | 6 | -60.6 | -56.7 | -59.0 | | 0.1 | -47.6 | -41.25 | 6.40 |
| | HT/VHT20 Beam Forming, M0 to M7 | 4 | 12 | -66.3 | -61.8 | -64.2 | -64.1 | 0.1 | -45.7 | -41.25 | 4.49 |
| | HT/VHT20 Beam Forming, M8 to M15 | 4 | 9 | -63.5 | -59.2 | -61.5 | -62.4 | 0.1 | -46.3 | -41.25 | 5.03 |
| | HT/VHT20 Beam Forming, M16 to M23 | 4 | 7 | -62.6 | -58.0 | -60.1 | -60.3 | 0.1 | -46.9 | -41.25 | 5.63 |
| | HT/VHT20 Beam Forming, M24 to M31 | 4 | 6 | -61.2 | -57.4 | -59.8 | -59.7 | 0.1 | -47.2 | -41.25 | 5.98 |
| | HT/VHT20 STBC, M0 to M7 | 2 | 6 | -60.6 | -56.7 | | | 0.1 | -49.2 | -41.25 | 7.91 |
| | HT/VHT20 STBC, M0 to M7 | 3 | 6 | -62.6 | -58.0 | -60.1 | | 0.1 | -49.0 | -41.25 | 7.77 |
| | HT/VHT20 STBC, M0 to M7 | 4 | 6 | -63.5 | -59.2 | -61.5 | -62.4 | 0.1 | -49.3 | -41.25 | 8.03 |
| | HE20, M0 to M9 1ss | 1 | 6 | -60.8 | | | | 0.1 | -54.7 | -41.25 | 13.48 |
| | HE20, M0 to M9 1ss | 2 | 6 | -62.6 | -58.0 | | | 0.1 | -50.6 | -41.25 | 9.39 |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | HE20, M0 to M9 2ss | 2 | 6 | -60.8 | -56.6 | | | 0.1 | -49.1 | -41.25 | 7.88 |
| | HE20, M0 to M9 1ss | 3 | 6 | -64.2 | -60.7 | -63.0 | | 0.1 | -51.5 | -41.25 | 10.30 |
| | HE20, M0 to M9 2ss | 3 | 6 | -62.6 | -58.0 | -60.2 | | 0.1 | -49.0 | -41.25 | 7.78 |
| | HE20, M0 to M9 3ss | 3 | 6 | -60.8 | -56.6 | -58.8 | | 0.1 | -47.6 | -41.25 | 6.31 |
| | HE20, M0 to M9 1ss | 4 | 6 | -66.5 | -61.9 | -63.9 | -63.9 | 0.1 | -51.7 | -41.25 | 10.42 |
| | HE20, M0 to M9 2ss | 4 | 6 | -63.6 | -59.1 | -61.3 | -62.3 | 0.1 | -49.2 | -41.25 | 7.92 |
| | HE20, M0 to M9 3ss | 4 | 6 | -62.6 | -58.0 | -60.2 | -60.2 | 0.1 | -47.9 | -41.25 | 6.61 |
| | HE20, M0 to M9 4ss | 4 | 6 | -61.2 | -57.5 | -59.4 | -59.7 | 0.1 | -47.2 | -41.25 | 5.91 |
| | HE20 Beam Forming, M0 to M9 1ss | 2 | 9 | -62.6 | -58.0 | | | 0.1 | -47.6 | -41.25 | 6.39 |
| | HE20 Beam Forming, M0 to M9 2ss | 2 | 6 | -60.8 | -56.6 | | | 0.1 | -49.1 | -41.25 | 7.88 |
| | HE20 Beam Forming, M0 to M9 1ss | 3 | 11 | -64.2 | -60.7 | -63.0 | | 0.1 | -46.5 | -41.25 | 5.30 |
| | HE20 Beam Forming, M0 to M9 2ss | 3 | 8 | -62.6 | -58.0 | -60.2 | | 0.1 | -47.0 | -41.25 | 5.78 |
| | HE20 Beam Forming, M0 to M9 3ss | 3 | 6 | -60.8 | -56.6 | -58.8 | | 0.1 | -47.6 | -41.25 | 6.31 |
| | HE20 Beam Forming, M0 to M9 1ss | 4 | 12 | -66.5 | -61.9 | -63.9 | -63.9 | 0.1 | -45.7 | -41.25 | 4.42 |
| | HE20 Beam Forming, M0 to M9 2ss | 4 | 9 | -63.6 | -59.1 | -61.3 | -62.3 | 0.1 | -46.2 | -41.25 | 4.92 |
| | HE20 Beam Forming, M0 to M9 3ss | 4 | 7 | -62.6 | -58.0 | -60.2 | -60.2 | 0.1 | -46.9 | -41.25 | 5.61 |
| | HE20 Beam Forming, M0 to M9 4ss | 4 | 6 | -61.2 | -57.5 | -59.4 | -59.7 | 0.1 | -47.2 | -41.25 | 5.91 |
| | HE20 STBC, M0 to M9 2ss | 2 | 6 | -60.8 | -56.6 | | | 0.1 | -49.1 | -41.25 | 7.88 |
| | HE20 STBC, M0 to M9 2ss | 3 | 6 | -62.6 | -58.0 | -60.2 | | 0.1 | -49.0 | -41.25 | 7.78 |
| | HE20 STBC, M0 to M9 2ss | 4 | 6 | -63.6 | -59.1 | -61.3 | -62.3 | 0.1 | -49.2 | -41.25 | 7.92 |
| | | | | | | | | | | | |
| 5270 | Non HT40, 6 to 54 Mbps | 1 | 6 | -61.1 | | | | 0.0 | -55.1 | -41.25 | 13.81 |
| | Non HT40, 6 to 54 Mbps | 2 | 6 | -61.1 | -56.0 | | | 0.0 | -48.8 | -41.25 | 7.54 |
| | Non HT40, 6 to 54 Mbps | 3 | 6 | -62.5 | -57.7 | -60.0 | | 0.0 | -48.8 | -41.25 | 7.57 |
| | Non HT40, 6 to 54 Mbps | 4 | 6 | -63.9 | -58.8 | -61.1 | -61.2 | 0.0 | -48.8 | -41.25 | 7.57 |
| | HT/VHT40, M0 to M7 | 1 | 6 | -60.8 | | | | 0.1 | -54.7 | -41.25 | 13.45 |
| | HT/VHT40, M0 to M7 | 2 | 6 | -60.8 | -56.6 | | | 0.1 | -49.1 | -41.25 | 7.85 |
| | HT/VHT40, M8 to M15 | 2 | 6 | -60.8 | -56.6 | | | 0.1 | -49.1 | -41.25 | 7.85 |
| | HT/VHT40, M0 to M7 | 3 | 6 | -62.9 | -57.8 | -60.2 | | 0.1 | -48.9 | -41.25 | 7.70 |
| | HT/VHT40, M8 to M15 | 3 | 6 | -60.8 | -56.6 | -58.6 | | 0.1 | -47.5 | -41.25 | 6.21 |
| | HT/VHT40, M16 to M23 | 3 | 6 | -60.8 | -56.6 | -58.6 | | 0.1 | -47.5 | -41.25 | 6.21 |
| | HT/VHT40, M0 to M7 | 4 | 6 | -63.8 | -59.0 | -61.3 | -62.4 | 0.1 | -49.1 | -41.25 | 7.89 |
| | HT/VHT40, M8 to M15 | 4 | 6 | -61.5 | -57.1 | -59.6 | -59.7 | 0.1 | -47.1 | -41.25 | 5.81 |
| | HT/VHT40, M16 to M23 | 4 | 6 | -60.8 | -56.6 | -58.6 | -58.9 | 0.1 | -46.3 | -41.25 | 5.10 |
| | HT/VHT40, M24 to M31 | 4 | 6 | -60.8 | -56.6 | -58.6 | -58.9 | 0.1 | -46.3 | -41.25 | 5.10 |
| | HT/VHT40 Beam Forming, M0 to M7 | 2 | 9 | -60.8 | -56.6 | | | 0.1 | -46.1 | -41.25 | 4.85 |
| | HT/VHT40 Beam Forming, M8 to M15 | 2 | 6 | -60.8 | -56.6 | | | 0.1 | -49.1 | -41.25 | 7.85 |
| | HT/VHT40 Beam Forming, M0 to M7 | 3 | 11 | -63.2 | -58.4 | -60.8 | | 0.1 | -44.5 | -41.25 | 3.25 |
| | HT/VHT40 Beam Forming, M8 to M15 | 3 | 8 | -60.8 | -56.6 | -58.6 | | 0.1 | -45.5 | -41.25 | 4.21 |
| | HT/VHT40 Beam Forming, M16 to M23 | 3 | 6 | -60.8 | -56.6 | -58.6 | | 0.1 | -47.5 | -41.25 | 6.21 |
| | **HT/VHT40 Beam Forming, M0 to M7** | **4** | **12** | **-64.3** | **-60.2** | **-63.0** | **-62.9** | **0.1** | **-44.2** | **-41.25** | **2.95** |
| | HT/VHT40 Beam Forming, M8 to M15 | 4 | 9 | -62.9 | -57.8 | -60.2 | -60.1 | 0.1 | -44.8 | -41.25 | 3.51 |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | HT/VHT40 Beam Forming, M16 to M23 | 4 | 7 | -60.8 | -56.6 | -58.6 | -58.9 | 0.1 | -45.3 | -41.25 | 4.10 |
| | HT/VHT40 Beam Forming, M24 to M31 | 4 | 6 | -60.8 | -56.6 | -58.6 | -58.9 | 0.1 | -46.3 | -41.25 | 5.10 |
| | HT/VHT40 STBC, M0 to M7 | 2 | 6 | -60.8 | -56.6 | | | 0.1 | -49.1 | -41.25 | 7.85 |
| | HT/VHT40 STBC, M0 to M7 | 3 | 6 | -60.8 | -56.6 | -58.6 | | 0.1 | -47.5 | -41.25 | 6.21 |
| | HT/VHT40 STBC, M0 to M7 | 4 | 6 | -62.9 | -57.8 | -60.2 | -60.1 | 0.1 | -47.8 | -41.25 | 6.51 |
| | HE40, M0 to M9 1ss | 1 | 6 | -60.9 | | | | 0.1 | -54.8 | -41.25 | 13.52 |
| | HE40, M0 to M9 1ss | 2 | 6 | -60.9 | -56.1 | | | 0.1 | -48.7 | -41.25 | 7.48 |
| | HE40, M0 to M9 2ss | 2 | 6 | -60.9 | -56.1 | | | 0.1 | -48.7 | -41.25 | 7.48 |
| | HE40, M0 to M9 1ss | 3 | 6 | -62.6 | -57.9 | -60.1 | | 0.1 | -48.9 | -41.25 | 7.64 |
| | HE40, M0 to M9 2ss | 3 | 6 | -60.9 | -56.1 | -58.7 | | 0.1 | -47.2 | -41.25 | 5.98 |
| | HE40, M0 to M9 3ss | 3 | 6 | -60.9 | -56.1 | -58.7 | | 0.1 | -47.2 | -41.25 | 5.98 |
| | HE40, M0 to M9 1ss | 4 | 6 | -63.8 | -59.0 | -61.0 | -61.6 | 0.1 | -48.9 | -41.25 | 7.63 |
| | HE40, M0 to M9 2ss | 4 | 6 | -61.3 | -57.1 | -59.4 | -59.5 | 0.1 | -46.9 | -41.25 | 5.67 |
| | HE40, M0 to M9 3ss | 4 | 6 | -60.9 | -56.1 | -58.7 | -58.6 | 0.1 | -46.1 | -41.25 | 4.85 |
| | HE40, M0 to M9 4ss | 4 | 6 | -60.9 | -56.1 | -58.7 | -58.6 | 0.1 | -46.1 | -41.25 | 4.85 |
| | HE40 Beam Forming, M0 to M9 1ss | 2 | 9 | -60.9 | -56.1 | | | 0.1 | -45.7 | -41.25 | 4.48 |
| | HE40 Beam Forming, M0 to M9 2ss | 2 | 6 | -60.9 | -56.1 | | | 0.1 | -48.7 | -41.25 | 7.48 |
| | HE40 Beam Forming, M0 to M9 1ss | 3 | 11 | -63.8 | -59.0 | -61.0 | | 0.1 | -44.9 | -41.25 | 3.70 |
| | HE40 Beam Forming, M0 to M9 2ss | 3 | 8 | -61.3 | -57.1 | -59.4 | | 0.1 | -46.0 | -41.25 | 4.78 |
| | HE40 Beam Forming, M0 to M9 3ss | 3 | 6 | -60.9 | -56.1 | -58.7 | | 0.1 | -47.2 | -41.25 | 5.98 |
| | HE40 Beam Forming, M0 to M9 1ss | 4 | 12 | -64.7 | -61.0 | -63.5 | -63.2 | 0.1 | -44.7 | -41.25 | 3.49 |
| | HE40 Beam Forming, M0 to M9 2ss | 4 | 9 | -63.5 | -58.2 | -60.7 | -60.6 | 0.1 | -45.2 | -41.25 | 3.96 |
| | HE40 Beam Forming, M0 to M9 3ss | 4 | 7 | -61.3 | -57.1 | -59.4 | -59.5 | 0.1 | -45.9 | -41.25 | 4.67 |
| | HE40 Beam Forming, M0 to M9 4ss | 4 | 6 | -60.9 | -56.1 | -58.7 | -58.6 | 0.1 | -46.1 | -41.25 | 4.85 |
| | HE40 STBC, M0 to M9 2ss | 2 | 6 | -60.9 | -56.1 | | | 0.1 | -48.7 | -41.25 | 7.48 |
| | HE40 STBC, M0 to M9 2ss | 3 | 6 | -60.9 | -56.1 | -58.7 | | 0.1 | -47.2 | -41.25 | 5.98 |
| | HE40 STBC, M0 to M9 2ss | 4 | 6 | -62.6 | -57.9 | -60.1 | -60.2 | 0.1 | -47.7 | -41.25 | 6.49 |
| | | | | | | | | | | | |
| 5290 | Non HT80, 6 to 54 Mbps | 1 | 6 | -64.5 | | | | 0.1 | -58.4 | -41.25 | 17.20 |
| | Non HT80, 6 to 54 Mbps | 2 | 6 | -64.5 | -60.4 | | | 0.1 | -52.9 | -41.25 | 11.67 |
| | Non HT80, 6 to 54 Mbps | 3 | 6 | -64.7 | -61.3 | -63.1 | | 0.1 | -52.0 | -41.25 | 10.74 |
| | Non HT80, 6 to 54 Mbps | 4 | 6 | -64.7 | -61.3 | -63.1 | -62.7 | 0.1 | -50.7 | -41.25 | 9.46 |
| | VHT80, M0 to M9 1ss | 1 | 6 | -64.1 | | | | 0.2 | -57.9 | -41.25 | 16.63 |
| | VHT80, M0 to M9 1ss | 2 | 6 | -64.6 | -61.4 | | | 0.2 | -53.5 | -41.25 | 12.24 |
| | VHT80, M0 to M9 2ss | 2 | 6 | -64.6 | -61.4 | | | 0.2 | -53.5 | -41.25 | 12.24 |
| | VHT80, M0 to M9 1ss | 3 | 6 | -64.6 | -61.4 | -61.7 | | 0.2 | -51.4 | -41.25 | 10.11 |
| | VHT80, M0 to M9 2ss | 3 | 6 | -64.6 | -61.4 | -61.7 | | 0.2 | -51.4 | -41.25 | 10.11 |
| | VHT80, M0 to M9 3ss | 3 | 6 | -64.6 | -61.4 | -61.7 | | 0.2 | -51.4 | -41.25 | 10.11 |
| | VHT80, M0 to M9 1ss | 4 | 6 | -64.6 | -61.4 | -61.7 | -62.6 | 0.2 | -50.2 | -41.25 | 8.92 |
| | VHT80, M0 to M9 2ss | 4 | 6 | -64.6 | -61.4 | -61.7 | -62.6 | 0.2 | -50.2 | -41.25 | 8.92 |
| | VHT80, M0 to M9 3ss | 4 | 6 | -64.6 | -61.4 | -61.7 | -62.6 | 0.2 | -50.2 | -41.25 | 8.92 |
| | VHT80, M0 to M9 4ss | 4 | 6 | -64.6 | -61.4 | -61.7 | -62.6 | 0.2 | -50.2 | -41.25 | 8.92 |



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|---|---|---|---|---|---|---|---|---|---|---|---|
| | VHT80 Beam Forming, M0 to M9 1ss | 2 | 9 | -65.2 | -61.7 | | | 0.2 | -50.9 | -41.25 | 9.63 |
| | VHT80 Beam Forming, M0 to M9 2ss | 2 | 6 | -64.6 | -61.4 | | | 0.2 | -53.5 | -41.25 | 12.24 |
| | VHT80 Beam Forming, M0 to M9 1ss | 3 | 11 | -66.8 | -62.5 | -64.0 | | 0.2 | -48.1 | -41.25 | 6.85 |
| | VHT80 Beam Forming, M0 to M9 2ss | 3 | 8 | -65.2 | -61.7 | -63.4 | | 0.2 | -50.2 | -41.25 | 8.97 |
| | VHT80 Beam Forming, M0 to M9 3ss | 3 | 6 | -64.6 | -61.4 | -61.7 | | 0.2 | -51.4 | -41.25 | 10.11 |
| | VHT80 Beam Forming, M0 to M9 1ss | 4 | 12 | -67.9 | -63.0 | -65.0 | -64.5 | 0.2 | -46.5 | -41.25 | 5.28 |
| | VHT80 Beam Forming, M0 to M9 2ss | 4 | 9 | -66.8 | -62.5 | -64.0 | -63.7 | 0.2 | -48.8 | -41.25 | 7.50 |
| | VHT80 Beam Forming, M0 to M9 3ss | 4 | 7 | -65.2 | -61.7 | -63.4 | -62.9 | 0.2 | -49.9 | -41.25 | 8.64 |
| | VHT80 Beam Forming, M0 to M9 4ss | 4 | 6 | -64.6 | -61.4 | -61.7 | -62.6 | 0.2 | -50.2 | -41.25 | 8.92 |
| | VHT80 STBC, M0 to M9 1ss | 2 | 6 | -64.6 | -61.4 | | | 0.2 | -53.5 | -41.25 | 12.24 |
| | VHT80 STBC, M0 to M9 1ss | 3 | 6 | -64.6 | -61.4 | -61.7 | | 0.2 | -51.4 | -41.25 | 10.11 |
| | VHT80 STBC, M0 to M9 1ss | 4 | 6 | -64.6 | -61.4 | -61.7 | -62.6 | 0.2 | -50.2 | -41.25 | 8.92 |
| | HE80, M0 to M9 1ss | 1 | 6 | -64.8 | | | | 0.3 | -58.5 | -41.25 | 17.30 |
| | HE80, M0 to M9 1ss | 2 | 6 | -64.8 | -61.0 | | | 0.3 | -53.2 | -41.25 | 11.99 |
| | HE80, M0 to M9 2ss | 2 | 6 | -64.8 | -61.0 | | | 0.3 | -53.2 | -41.25 | 11.99 |
| | HE80, M0 to M9 1ss | 3 | 6 | -64.8 | -61.0 | -61.6 | | 0.3 | -51.2 | -41.25 | 9.91 |
| | HE80, M0 to M9 2ss | 3 | 6 | -64.8 | -61.0 | -61.6 | | 0.3 | -51.2 | -41.25 | 9.91 |
| | HE80, M0 to M9 3ss | 3 | 6 | -64.8 | -61.0 | -61.6 | | 0.3 | -51.2 | -41.25 | 9.91 |
| | HE80, M0 to M9 1ss | 4 | 6 | -65.2 | -61.4 | -63.5 | -63.2 | 0.3 | -50.8 | -41.25 | 9.60 |
| | HE80, M0 to M9 2ss | 4 | 6 | -65.2 | -61.4 | -63.5 | -63.2 | 0.3 | -50.8 | -41.25 | 9.60 |
| | HE80, M0 to M9 3ss | 4 | 6 | -65.2 | -61.4 | -63.5 | -63.2 | 0.3 | -50.8 | -41.25 | 9.60 |
| | HE80, M0 to M9 4ss | 4 | 6 | -65.2 | -61.4 | -63.5 | -63.2 | 0.3 | -50.8 | -41.25 | 9.60 |
| | HE80 Beam Forming, M0 to M9 1ss | 2 | 9 | -65.2 | -61.4 | | | 0.3 | -50.6 | -41.25 | 9.39 |
| | HE80 Beam Forming, M0 to M9 2ss | 2 | 6 | -64.8 | -61.0 | | | 0.3 | -53.2 | -41.25 | 11.99 |
| | HE80 Beam Forming, M0 to M9 1ss | 3 | 11 | -67.4 | -62.5 | -64.4 | | 0.3 | -48.3 | -41.25 | 7.06 |
| | HE80 Beam Forming, M0 to M9 2ss | 3 | 8 | -65.2 | -61.4 | -63.5 | | 0.3 | -50.1 | -41.25 | 8.82 |
| | HE80 Beam Forming, M0 to M9 3ss | 3 | 6 | -64.8 | -61.0 | -61.6 | | 0.3 | -51.2 | -41.25 | 9.91 |
| | HE80 Beam Forming, M0 to M9 1ss | 4 | 12 | -67.9 | -62.8 | -65.0 | -64.1 | 0.3 | -46.3 | -41.25 | 5.06 |
| | HE80 Beam Forming, M0 to M9 2ss | 4 | 9 | -67.0 | -62.1 | -63.8 | -63.6 | 0.3 | -48.5 | -41.25 | 7.27 |
| | HE80 Beam Forming, M0 to M9 3ss | 4 | 7 | -65.2 | -61.4 | -63.5 | -63.2 | 0.3 | -49.8 | -41.25 | 8.60 |
| | HE80 Beam Forming, M0 to M9 4ss | 4 | 6 | -65.2 | -61.4 | -63.5 | -63.2 | 0.3 | -50.8 | -41.25 | 9.60 |
| | HE80 STBC, M0 to M9 1ss | 2 | 6 | -64.8 | -61.0 | | | 0.3 | -53.2 | -41.25 | 11.99 |
| | HE80 STBC, M0 to M9 1ss | 3 | 6 | -64.8 | -61.0 | -61.6 | | 0.3 | -51.2 | -41.25 | 9.91 |
| | HE80 STBC, M0 to M9 1ss | 4 | 6 | -65.2 | -61.4 | -63.5 | -63.2 | 0.3 | -50.8 | -41.25 | 9.60 |
| | | | | | | | | | | | |
| 5300 | Non HT20, 6 to 54 Mbps | 1 | 6 | -60.2 | | | | 0.1 | -54.1 | -41.25 | 12.90 |
| | Non HT20, 6 to 54 Mbps | 2 | 6 | -61.8 | -57.2 | | | 0.1 | -49.9 | -41.25 | 8.61 |
| | Non HT20, 6 to 54 Mbps | 3 | 6 | -63.6 | -59.3 | -62.3 | | 0.1 | -50.5 | -41.25 | 9.27 |
| | Non HT20, 6 to 54 Mbps | 4 | 6 | -66.0 | -61.2 | -63.8 | -63.6 | 0.1 | -51.2 | -41.25 | 10.00 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 2 | 9 | -61.8 | -57.2 | | | 0.1 | -46.9 | -41.25 | 5.61 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 3 | 11 | -63.6 | -59.3 | -62.3 | | 0.1 | -45.5 | -41.25 | 4.27 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 4 | 12 | -66.0 | -61.2 | -63.8 | -63.6 | 0.1 | -45.2 | -41.25 | 4.00 |



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|---|---|---|---|---|---|---|---|---|---|---|---|
| | HT/VHT20, M0 to M7 | 1 | 6 | -60.2 | | | | 0.1 | -54.1 | -41.25 | 12.90 |
| | HT/VHT20, M0 to M7 | 2 | 6 | -61.3 | -56.5 | | | 0.1 | -49.2 | -41.25 | 7.96 |
| | HT/VHT20, M8 to M15 | 2 | 6 | -60.2 | -55.8 | | | 0.1 | -48.4 | -41.25 | 7.15 |
| | HT/VHT20, M0 to M7 | 3 | 6 | -64.0 | -60.0 | -62.6 | | 0.1 | -51.1 | -41.25 | 9.80 |
| | HT/VHT20, M8 to M15 | 3 | 6 | -62.1 | -57.2 | -59.9 | | 0.1 | -48.5 | -41.25 | 7.20 |
| | HT/VHT20, M16 to M23 | 3 | 6 | -60.2 | -55.8 | -58.6 | | 0.1 | -47.0 | -41.25 | 5.74 |
| | HT/VHT20, M0 to M7 | 4 | 6 | -65.9 | -61.3 | -63.8 | -63.7 | 0.1 | -51.3 | -41.25 | 10.05 |
| | HT/VHT20, M8 to M15 | 4 | 6 | -63.1 | -58.8 | -61.1 | -61.9 | 0.1 | -48.9 | -41.25 | 7.61 |
| | HT/VHT20, M16 to M23 | 4 | 6 | -62.1 | -57.2 | -59.9 | -59.9 | 0.1 | -47.3 | -41.25 | 6.10 |
| | HT/VHT20, M24 to M31 | 4 | 6 | -61.3 | -56.5 | -59.3 | -59.4 | 0.1 | -46.7 | -41.25 | 5.45 |
| | HT/VHT20 Beam Forming, M0 to M7 | 2 | 9 | -61.3 | -56.5 | | | 0.1 | -46.2 | -41.25 | 4.96 |
| | HT/VHT20 Beam Forming, M8 to M15 | 2 | 6 | -60.2 | -55.8 | | | 0.1 | -48.4 | -41.25 | 7.15 |
| | HT/VHT20 Beam Forming, M0 to M7 | 3 | 11 | -64.0 | -60.0 | -62.6 | | 0.1 | -46.1 | -41.25 | 4.80 |
| | HT/VHT20 Beam Forming, M8 to M15 | 3 | 8 | -62.1 | -57.2 | -59.9 | | 0.1 | -46.5 | -41.25 | 5.20 |
| | HT/VHT20 Beam Forming, M16 to M23 | 3 | 6 | -60.2 | -55.8 | -58.6 | | 0.1 | -47.0 | -41.25 | 5.74 |
| | HT/VHT20 Beam Forming, M0 to M7 | 4 | 12 | -65.9 | -61.3 | -63.8 | -63.7 | 0.1 | -45.3 | -41.25 | 4.05 |
| | HT/VHT20 Beam Forming, M8 to M15 | 4 | 9 | -63.1 | -58.8 | -61.1 | -61.9 | 0.1 | -45.9 | -41.25 | 4.61 |
| | HT/VHT20 Beam Forming, M16 to M23 | 4 | 7 | -62.1 | -57.2 | -59.9 | -59.9 | 0.1 | -46.3 | -41.25 | 5.10 |
| | HT/VHT20 Beam Forming, M24 to M31 | 4 | 6 | -61.3 | -56.5 | -59.3 | -59.4 | 0.1 | -46.7 | -41.25 | 5.45 |
| | HT/VHT20 STBC, M0 to M7 | 2 | 6 | -60.2 | -55.8 | | | 0.1 | -48.4 | -41.25 | 7.15 |
| | HT/VHT20 STBC, M0 to M7 | 3 | 6 | -62.1 | -57.2 | -59.9 | | 0.1 | -48.5 | -41.25 | 7.20 |
| | HT/VHT20 STBC, M0 to M7 | 4 | 6 | -63.1 | -58.8 | -61.1 | -61.9 | 0.1 | -48.9 | -41.25 | 7.61 |
| | HE20, M0 to M9 1ss | 1 | 6 | -60.2 | | | | 0.1 | -54.1 | -41.25 | 12.88 |
| | HE20, M0 to M9 1ss | 2 | 6 | -62.0 | -56.9 | | | 0.1 | -49.7 | -41.25 | 8.41 |
| | HE20, M0 to M9 2ss | 2 | 6 | -60.2 | -55.9 | | | 0.1 | -48.5 | -41.25 | 7.21 |
| | HE20, M0 to M9 1ss | 3 | 6 | -64.0 | -59.9 | -62.5 | | 0.1 | -51.0 | -41.25 | 9.71 |
| | HE20, M0 to M9 2ss | 3 | 6 | -62.0 | -56.9 | -59.7 | | 0.1 | -48.2 | -41.25 | 6.95 |
| | HE20, M0 to M9 3ss | 3 | 6 | -60.2 | -55.9 | -58.3 | | 0.1 | -46.9 | -41.25 | 5.69 |
| | HE20, M0 to M9 1ss | 4 | 6 | -66.0 | -61.2 | -63.6 | -63.7 | 0.1 | -51.2 | -41.25 | 9.96 |
| | HE20, M0 to M9 2ss | 4 | 6 | -62.9 | -58.5 | -60.8 | -62.0 | 0.1 | -48.6 | -41.25 | 7.38 |
| | HE20, M0 to M9 3ss | 4 | 6 | -62.0 | -56.9 | -59.7 | -59.9 | 0.1 | -47.1 | -41.25 | 5.90 |
| | HE20, M0 to M9 4ss | 4 | 6 | -61.3 | -56.3 | -59.1 | -59.3 | 0.1 | -46.5 | -41.25 | 5.29 |
| | HE20 Beam Forming, M0 to M9 1ss | 2 | 9 | -62.0 | -56.9 | | | 0.1 | -46.7 | -41.25 | 5.41 |
| | HE20 Beam Forming, M0 to M9 2ss | 2 | 6 | -60.2 | -55.9 | | | 0.1 | -48.5 | -41.25 | 7.21 |
| | HE20 Beam Forming, M0 to M9 1ss | 3 | 11 | -64.0 | -59.9 | -62.5 | | 0.1 | -46.0 | -41.25 | 4.71 |
| | HE20 Beam Forming, M0 to M9 2ss | 3 | 8 | -62.0 | -56.9 | -59.7 | | 0.1 | -46.2 | -41.25 | 4.95 |
| | HE20 Beam Forming, M0 to M9 3ss | 3 | 6 | -60.2 | -55.9 | -58.3 | | 0.1 | -46.9 | -41.25 | 5.69 |
| | HE20 Beam Forming, M0 to M9 1ss | 4 | 12 | -66.0 | -61.2 | -63.6 | -63.7 | 0.1 | -45.2 | -41.25 | 3.96 |
| | HE20 Beam Forming, M0 to M9 2ss | 4 | 9 | -62.9 | -58.5 | -60.8 | -62.0 | 0.1 | -45.6 | -41.25 | 4.38 |
| | HE20 Beam Forming, M0 to M9 3ss | 4 | 7 | -62.0 | -56.9 | -59.7 | -59.9 | 0.1 | -46.1 | -41.25 | 4.90 |
| | HE20 Beam Forming, M0 to M9 4ss | 4 | 6 | -61.3 | -56.3 | -59.1 | -59.3 | 0.1 | -46.5 | -41.25 | 5.29 |
| | HE20 STBC, M0 to M9 2ss | 2 | 6 | -60.2 | -55.9 | | | 0.1 | -48.5 | -41.25 | 7.21 |



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|---|---|---|---|---|---|---|---|---|---|---|---|
| | HE20 STBC, M0 to M9 2ss | 3 | 6 | -62.0 | -56.9 | -59.7 | | 0.1 | -48.2 | -41.25 | 6.95 |
| | HE20 STBC, M0 to M9 2ss | 4 | 6 | -62.9 | -58.5 | -60.8 | -62.0 | 0.1 | -48.6 | -41.25 | 7.38 |
| | | | | | | | | | | | |
| 5310 | Non HT40, 6 to 54 Mbps | 1 | 6 | -63.7 | | | | 0.1 | -57.6 | -41.25 | 16.40 |
| | Non HT40, 6 to 54 Mbps | 2 | 6 | -64.2 | -59.3 | | | 0.1 | -52.0 | -41.25 | 10.78 |
| | Non HT40, 6 to 54 Mbps | 3 | 6 | -64.2 | -59.3 | -61.5 | | 0.1 | -50.4 | -41.25 | 9.15 |
| | Non HT40, 6 to 54 Mbps | 4 | 6 | -64.2 | -59.3 | -61.5 | -62.2 | 0.1 | -49.4 | -41.25 | 8.13 |
| | HT/VHT40, M0 to M7 | 1 | 6 | -63.7 | | | | 0.1 | -57.6 | -41.25 | 16.40 |
| | HT/VHT40, M0 to M7 | 2 | 6 | -63.7 | -58.8 | | | 0.1 | -51.5 | -41.25 | 10.28 |
| | HT/VHT40, M8 to M15 | 2 | 6 | -63.7 | -58.8 | | | 0.1 | -51.5 | -41.25 | 10.28 |
| | HT/VHT40, M0 to M7 | 3 | 6 | -63.7 | -58.8 | -61.0 | | 0.1 | -49.9 | -41.25 | 8.65 |
| | HT/VHT40, M8 to M15 | 3 | 6 | -63.7 | -58.8 | -61.0 | | 0.1 | -49.9 | -41.25 | 8.65 |
| | HT/VHT40, M16 to M23 | 3 | 6 | -63.7 | -58.8 | -61.0 | | 0.1 | -49.9 | -41.25 | 8.65 |
| | HT/VHT40, M0 to M7 | 4 | 6 | -64.1 | -59.2 | -62.7 | -62.6 | 0.1 | -49.7 | -41.25 | 8.42 |
| | HT/VHT40, M8 to M15 | 4 | 6 | -64.1 | -59.2 | -62.7 | -62.6 | 0.1 | -49.7 | -41.25 | 8.42 |
| | HT/VHT40, M16 to M23 | 4 | 6 | -64.1 | -59.2 | -62.7 | -62.6 | 0.1 | -49.7 | -41.25 | 8.42 |
| | HT/VHT40, M24 to M31 | 4 | 6 | -64.1 | -59.2 | -62.7 | -62.6 | 0.1 | -49.7 | -41.25 | 8.42 |
| | HT/VHT40 Beam Forming, M0 to M7 | 2 | 9 | -64.1 | -59.2 | | | 0.1 | -48.9 | -41.25 | 7.68 |
| | HT/VHT40 Beam Forming, M8 to M15 | 2 | 6 | -63.7 | -58.8 | | | 0.1 | -51.5 | -41.25 | 10.28 |
| | HT/VHT40 Beam Forming, M0 to M7 | 3 | 11 | -66.5 | -61.4 | -63.8 | | 0.1 | -47.6 | -41.25 | 6.35 |
| | HT/VHT40 Beam Forming, M8 to M15 | 3 | 8 | -64.1 | -59.2 | -62.7 | | 0.1 | -48.7 | -41.25 | 7.42 |
| | HT/VHT40 Beam Forming, M16 to M23 | 3 | 6 | -63.7 | -58.8 | -61.0 | | 0.1 | -49.9 | -41.25 | 8.65 |
| | HT/VHT40 Beam Forming, M0 to M7 | 4 | 12 | -67.1 | -61.9 | -64.4 | -64.2 | 0.1 | -46.0 | -41.25 | 4.70 |
| | HT/VHT40 Beam Forming, M8 to M15 | 4 | 9 | -64.8 | -61.0 | -63.4 | -63.1 | 0.1 | -47.8 | -41.25 | 6.53 |
| | HT/VHT40 Beam Forming, M16 to M23 | 4 | 7 | -64.1 | -59.2 | -62.7 | -62.6 | 0.1 | -48.7 | -41.25 | 7.42 |
| | HT/VHT40 Beam Forming, M24 to M31 | 4 | 6 | -64.1 | -59.2 | -62.7 | -62.6 | 0.1 | -49.7 | -41.25 | 8.42 |
| | HT/VHT40 STBC, M0 to M7 | 2 | 6 | -63.7 | -58.8 | | | 0.1 | -51.5 | -41.25 | 10.28 |
| | HT/VHT40 STBC, M0 to M7 | 3 | 6 | -63.7 | -58.8 | -61.0 | | 0.1 | -49.9 | -41.25 | 8.65 |
| | HT/VHT40 STBC, M0 to M7 | 4 | 6 | -64.1 | -59.2 | -62.7 | -62.6 | 0.1 | -49.7 | -41.25 | 8.42 |
| | HE40, M0 to M9 1ss | 1 | 6 | -64.2 | | | | 0.1 | -58.1 | -41.25 | 16.88 |
| | HE40, M0 to M9 1ss | 2 | 6 | -64.2 | -59.3 | | | 0.1 | -52.0 | -41.25 | 10.76 |
| | HE40, M0 to M9 2ss | 2 | 6 | -64.2 | -59.3 | | | 0.1 | -52.0 | -41.25 | 10.76 |
| | HE40, M0 to M9 1ss | 3 | 6 | -64.2 | -59.3 | -62.8 | | 0.1 | -50.8 | -41.25 | 9.50 |
| | HE40, M0 to M9 2ss | 3 | 6 | -64.2 | -59.3 | -62.8 | | 0.1 | -50.8 | -41.25 | 9.50 |
| | HE40, M0 to M9 3ss | 3 | 6 | -64.2 | -59.3 | -62.8 | | 0.1 | -50.8 | -41.25 | 9.50 |
| | HE40, M0 to M9 1ss | 4 | 6 | -64.2 | -59.3 | -62.8 | -62.6 | 0.1 | -49.7 | -41.25 | 8.48 |
| | HE40, M0 to M9 2ss | 4 | 6 | -64.2 | -59.3 | -62.8 | -62.6 | 0.1 | -49.7 | -41.25 | 8.48 |
| | HE40, M0 to M9 3ss | 4 | 6 | -64.2 | -59.3 | -62.8 | -62.6 | 0.1 | -49.7 | -41.25 | 8.48 |
| | HE40, M0 to M9 4ss | 4 | 6 | -64.2 | -59.3 | -62.8 | -62.6 | 0.1 | -49.7 | -41.25 | 8.48 |
| | HE40 Beam Forming, M0 to M9 1ss | 2 | 9 | -64.8 | -60.8 | | | 0.1 | -50.3 | -41.25 | 9.03 |
| | HE40 Beam Forming, M0 to M9 2ss | 2 | 6 | -64.2 | -59.3 | | | 0.1 | -52.0 | -41.25 | 10.76 |
| | HE40 Beam Forming, M0 to M9 1ss | 3 | 11 | -66.6 | -61.5 | -63.9 | | 0.1 | -47.7 | -41.25 | 6.43 |



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|---|---|---|---|---|---|---|---|---|---|---|---|
| | HE40 Beam Forming, M0 to M9 2ss | 3 | 8 | -64.8 | -60.8 | -63.3 | | 0.1 | -49.8 | -41.25 | 8.56 |
| | HE40 Beam Forming, M0 to M9 3ss | 3 | 6 | -64.2 | -59.3 | -62.8 | | 0.1 | -50.8 | -41.25 | 9.50 |
| | HE40 Beam Forming, M0 to M9 1ss | 4 | 12 | -67.6 | -62.4 | -64.9 | -64.5 | 0.1 | -46.4 | -41.25 | 5.14 |
| | HE40 Beam Forming, M0 to M9 2ss | 4 | 9 | -66.6 | -61.5 | -63.9 | -63.7 | 0.1 | -48.5 | -41.25 | 7.23 |
| | HE40 Beam Forming, M0 to M9 3ss | 4 | 7 | -64.8 | -60.8 | -63.3 | -63.0 | 0.1 | -49.6 | -41.25 | 8.39 |
| | HE40 Beam Forming, M0 to M9 4ss | 4 | 6 | -64.2 | -59.3 | -62.8 | -62.6 | 0.1 | -49.7 | -41.25 | 8.48 |
| | HE40 STBC, M0 to M9 2ss | 2 | 6 | -64.2 | -59.3 | | | 0.1 | -52.0 | -41.25 | 10.76 |
| | HE40 STBC, M0 to M9 2ss | 3 | 6 | -64.2 | -59.3 | -62.8 | | 0.1 | -50.8 | -41.25 | 9.50 |
| | HE40 STBC, M0 to M9 2ss | 4 | 6 | -64.2 | -59.3 | -62.8 | -62.6 | 0.1 | -49.7 | -41.25 | 8.48 |
| | | | | | | | | | | | |
| 5320 | Non HT20, 6 to 54 Mbps | 1 | 6 | -61.7 | | | | 0.1 | -55.6 | -41.25 | 14.40 |
| | Non HT20, 6 to 54 Mbps | 2 | 6 | -62.7 | -58.1 | | | 0.1 | -50.8 | -41.25 | 9.51 |
| | Non HT20, 6 to 54 Mbps | 3 | 6 | -64.5 | -60.9 | -62.8 | | 0.1 | -51.7 | -41.25 | 10.41 |
| | Non HT20, 6 to 54 Mbps | 4 | 6 | -66.7 | -62.2 | -64.2 | -63.6 | 0.1 | -51.8 | -41.25 | 10.57 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 2 | 9 | -62.7 | -58.1 | | | 0.1 | -47.8 | -41.25 | 6.51 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 3 | 11 | -64.5 | -60.9 | -62.8 | | 0.1 | -46.7 | -41.25 | 5.41 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 4 | 12 | -66.7 | -62.2 | -64.2 | -63.6 | 0.1 | -45.8 | -41.25 | 4.57 |
| | HT/VHT20, M0 to M7 | 1 | 6 | -62.9 | | | | 0.1 | -56.8 | -41.25 | 15.60 |
| | HT/VHT20, M0 to M7 | 2 | 6 | -62.9 | -58.3 | | | 0.1 | -51.0 | -41.25 | 9.70 |
| | HT/VHT20, M8 to M15 | 2 | 6 | -62.9 | -58.3 | | | 0.1 | -51.0 | -41.25 | 9.70 |
| | HT/VHT20, M0 to M7 | 3 | 6 | -64.6 | -61.2 | -62.9 | | 0.1 | -51.9 | -41.25 | 10.61 |
| | HT/VHT20, M8 to M15 | 3 | 6 | -62.9 | -58.3 | -59.9 | | 0.1 | -49.2 | -41.25 | 7.90 |
| | HT/VHT20, M16 to M23 | 3 | 6 | -62.9 | -58.3 | -59.9 | | 0.1 | -49.2 | -41.25 | 7.90 |
| | HT/VHT20, M0 to M7 | 4 | 6 | -66.8 | -62.4 | -64.4 | -63.8 | 0.1 | -52.0 | -41.25 | 10.75 |
| | HT/VHT20, M8 to M15 | 4 | 6 | -63.9 | -60.8 | -61.2 | -61.2 | 0.1 | -49.5 | -41.25 | 8.29 |
| | HT/VHT20, M16 to M23 | 4 | 6 | -63.4 | -59.1 | -60.6 | -60.6 | 0.1 | -48.6 | -41.25 | 7.35 |
| | HT/VHT20, M24 to M31 | 4 | 6 | -63.4 | -59.1 | -60.6 | -60.6 | 0.1 | -48.6 | -41.25 | 7.35 |
| | HT/VHT20 Beam Forming, M0 to M7 | 2 | 9 | -63.4 | -59.1 | | | 0.1 | -48.7 | -41.25 | 7.43 |
| | HT/VHT20 Beam Forming, M8 to M15 | 2 | 6 | -62.9 | -58.3 | | | 0.1 | -51.0 | -41.25 | 9.70 |
| | HT/VHT20 Beam Forming, M0 to M7 | 3 | 11 | -64.6 | -61.2 | -62.9 | | 0.1 | -46.9 | -41.25 | 5.61 |
| | HT/VHT20 Beam Forming, M8 to M15 | 3 | 8 | -63.4 | -59.1 | -60.6 | | 0.1 | -47.9 | -41.25 | 6.62 |
| | HT/VHT20 Beam Forming, M16 to M23 | 3 | 6 | -62.9 | -58.3 | -59.9 | | 0.1 | -49.2 | -41.25 | 7.90 |
| | HT/VHT20 Beam Forming, M0 to M7 | 4 | 12 | -66.8 | -62.4 | -64.4 | -63.8 | 0.1 | -46.0 | -41.25 | 4.75 |
| | HT/VHT20 Beam Forming, M8 to M15 | 4 | 9 | -63.9 | -60.8 | -61.2 | -61.2 | 0.1 | -46.5 | -41.25 | 5.29 |
| | HT/VHT20 Beam Forming, M16 to M23 | 4 | 7 | -63.4 | -59.1 | -60.6 | -60.6 | 0.1 | -47.6 | -41.25 | 6.35 |
| | HT/VHT20 Beam Forming, M24 to M31 | 4 | 6 | -63.4 | -59.1 | -60.6 | -60.6 | 0.1 | -48.6 | -41.25 | 7.35 |
| | HT/VHT20 STBC, M0 to M7 | 2 | 6 | -62.9 | -58.3 | | | 0.1 | -51.0 | -41.25 | 9.70 |
| | HT/VHT20 STBC, M0 to M7 | 3 | 6 | -62.9 | -58.3 | -59.9 | | 0.1 | -49.2 | -41.25 | 7.90 |
| | HT/VHT20 STBC, M0 to M7 | 4 | 6 | -63.9 | -60.8 | -61.2 | -61.2 | 0.1 | -49.5 | -41.25 | 8.29 |
| | HE20, M0 to M9 1ss | 1 | 6 | -63.5 | | | | 0.1 | -57.4 | -41.25 | 16.18 |
| | HE20, M0 to M9 1ss | 2 | 6 | -63.5 | -58.9 | | | 0.1 | -51.5 | -41.25 | 10.29 |
| | HE20, M0 to M9 2ss | 2 | 6 | -63.5 | -58.9 | | | 0.1 | -51.5 | -41.25 | 10.29 |



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|---|---|---|---|---|---|---|---|---|---|---|---|
| | HE20, M0 to M9 1ss | 3 | 6 | -64.4 | -61.0 | -62.8 | | 0.1 | -51.7 | -41.25 | 10.42 |
| | HE20, M0 to M9 2ss | 3 | 6 | -63.5 | -58.9 | -60.5 | | 0.1 | -49.7 | -41.25 | 8.49 |
| | HE20, M0 to M9 3ss | 3 | 6 | -63.5 | -58.9 | -60.5 | | 0.1 | -49.7 | -41.25 | 8.49 |
| | HE20, M0 to M9 1ss | 4 | 6 | -66.5 | -62.3 | -64.2 | -63.6 | 0.1 | -51.8 | -41.25 | 10.56 |
| | HE20, M0 to M9 2ss | 4 | 6 | -63.9 | -60.5 | -61.1 | -61.3 | 0.1 | -49.4 | -41.25 | 8.19 |
| | HE20, M0 to M9 3ss | 4 | 6 | -63.5 | -58.9 | -60.5 | -60.7 | 0.1 | -48.5 | -41.25 | 7.27 |
| | HE20, M0 to M9 4ss | 4 | 6 | -63.5 | -58.9 | -60.5 | -60.7 | 0.1 | -48.5 | -41.25 | 7.27 |
| | HE20 Beam Forming, M0 to M9 1ss | 2 | 9 | -63.9 | -60.5 | | | 0.1 | -49.8 | -41.25 | 8.55 |
| | HE20 Beam Forming, M0 to M9 2ss | 2 | 6 | -63.5 | -58.9 | | | 0.1 | -51.5 | -41.25 | 10.29 |
| | HE20 Beam Forming, M0 to M9 1ss | 3 | 11 | -64.4 | -61.0 | -62.8 | | 0.1 | -46.7 | -41.25 | 5.42 |
| | HE20 Beam Forming, M0 to M9 2ss | 3 | 8 | -63.9 | -60.5 | -61.1 | | 0.1 | -48.8 | -41.25 | 7.51 |
| | HE20 Beam Forming, M0 to M9 3ss | 3 | 6 | -63.5 | -58.9 | -60.5 | | 0.1 | -49.7 | -41.25 | 8.49 |
| | HE20 Beam Forming, M0 to M9 1ss | 4 | 12 | -66.5 | -62.3 | -64.2 | -63.6 | 0.1 | -45.8 | -41.25 | 4.56 |
| | HE20 Beam Forming, M0 to M9 2ss | 4 | 9 | -63.9 | -60.5 | -61.1 | -61.3 | 0.1 | -46.4 | -41.25 | 5.19 |
| | HE20 Beam Forming, M0 to M9 3ss | 4 | 7 | -63.9 | -60.5 | -61.1 | -61.3 | 0.1 | -48.4 | -41.25 | 7.19 |
| | HE20 Beam Forming, M0 to M9 4ss | 4 | 6 | -63.5 | -58.9 | -60.5 | -60.7 | 0.1 | -48.5 | -41.25 | 7.27 |
| | HE20 STBC, M0 to M9 2ss | 2 | 6 | -63.5 | -58.9 | | | 0.1 | -51.5 | -41.25 | 10.29 |
| | HE20 STBC, M0 to M9 2ss | 3 | 6 | -63.5 | -58.9 | -60.5 | | 0.1 | -49.7 | -41.25 | 8.49 |
| | HE20 STBC, M0 to M9 2ss | 4 | 6 | -63.9 | -60.5 | -61.1 | -61.3 | 0.1 | -49.4 | -41.25 | 8.19 |
| | | | | | | | | | | | |
| 5250 | Non HT160, 6 to 54 Mbps | 1 | 6 | -63.0 | | | | 0.1 | -56.9 | -41.25 | 15.70 |
| | Non HT160, 6 to 54 Mbps | 2 | 6 | -63.0 | -58.7 | | | 0.1 | -51.3 | -41.25 | 10.03 |
| | Non HT160, 6 to 54 Mbps | 3 | 6 | -63.0 | -58.7 | -59.5 | | 0.1 | -49.2 | -41.25 | 7.97 |
| | Non HT160, 6 to 54 Mbps | 4 | 6 | -63.0 | -58.7 | -59.5 | -59.6 | 0.1 | -47.9 | -41.25 | 6.60 |
| | VHT160, M0 to M9 1ss | 1 | 6 | -63.6 | | | | 0.1 | -57.5 | -41.25 | 16.30 |
| | VHT160, M0 to M9 1ss | 2 | 6 | -63.6 | -60.2 | | | 0.1 | -52.5 | -41.25 | 11.26 |
| | VHT160, M0 to M9 2ss | 2 | 6 | -63.6 | -60.2 | | | 0.1 | -52.5 | -41.25 | 11.26 |
| | VHT160, M0 to M9 1ss | 3 | 6 | -63.6 | -60.2 | -61.2 | | 0.1 | -50.6 | -41.25 | 9.37 |
| | VHT160, M0 to M9 2ss | 3 | 6 | -63.6 | -60.2 | -61.2 | | 0.1 | -50.6 | -41.25 | 9.37 |
| | VHT160, M0 to M9 3ss | 3 | 6 | -63.6 | -60.2 | -61.2 | | 0.1 | -50.6 | -41.25 | 9.37 |
| | VHT160, M0 to M9 1ss | 4 | 6 | -64.8 | -61.0 | -62.2 | -61.9 | 0.1 | -50.2 | -41.25 | 8.94 |
| | VHT160, M0 to M9 2ss | 4 | 6 | -64.8 | -61.0 | -62.2 | -61.9 | 0.1 | -50.2 | -41.25 | 8.94 |
| | VHT160, M0 to M9 3ss | 4 | 6 | -64.8 | -61.0 | -62.2 | -61.9 | 0.1 | -50.2 | -41.25 | 8.94 |
| | VHT160, M0 to M9 4ss | 4 | 6 | -64.8 | -61.0 | -62.2 | -61.9 | 0.1 | -50.2 | -41.25 | 8.94 |
| | VHT160 Beam Forming, M0 to M9 1ss | 2 | 9 | -64.8 | -61.0 | | | 0.1 | -50.4 | -41.25 | 9.18 |
| | VHT160 Beam Forming, M0 to M9 2ss | 2 | 6 | -63.6 | -60.2 | | | 0.1 | -52.5 | -41.25 | 11.26 |
| | VHT160 Beam Forming, M0 to M9 1ss | 3 | 11 | -66.2 | -61.8 | -62.4 | | 0.1 | -47.3 | -41.25 | 6.00 |
| | VHT160 Beam Forming, M0 to M9 2ss | 3 | 8 | -64.8 | -61.0 | -62.2 | | 0.1 | -49.6 | -41.25 | 8.32 |
| | VHT160 Beam Forming, M0 to M9 3ss | 3 | 6 | -63.6 | -60.2 | -61.2 | | 0.1 | -50.6 | -41.25 | 9.37 |
| | VHT160 Beam Forming, M0 to M9 1ss | 4 | 12 | -67.0 | -62.2 | -63.4 | -63.1 | 0.1 | -45.5 | -41.25 | 4.27 |
| | VHT160 Beam Forming, M0 to M9 2ss | 4 | 9 | -66.2 | -61.8 | -62.4 | -62.5 | 0.1 | -47.9 | -41.25 | 6.60 |
| | VHT160 Beam Forming, M0 to M9 3ss | 4 | 7 | -64.8 | -61.0 | -62.2 | -61.9 | 0.1 | -49.2 | -41.25 | 7.94 |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | VHT160 Beam Forming, M0 to M9 4ss | 4 | 6 | -64.8 | -61.0 | -62.2 | -61.9 | 0.1 | -50.2 | -41.25 | 8.94 |
| | VHT160 STBC, M0 to M9 1ss | 2 | 6 | -63.6 | -60.2 | | | 0.1 | -52.5 | -41.25 | 11.26 |
| | VHT160 STBC, M0 to M9 1ss | 3 | 6 | -63.6 | -60.2 | -61.2 | | 0.1 | -50.6 | -41.25 | 9.37 |
| | VHT160 STBC, M0 to M9 1ss | 4 | 6 | -64.8 | -61.0 | -62.2 | -61.9 | 0.1 | -50.2 | -41.25 | 8.94 |
| | HE160, M0 to M9 1ss | 1 | 6 | -61.4 | | | | 0.1 | -55.3 | -41.25 | 14.08 |
| | HE160, M0 to M9 1ss | 2 | 6 | -63.0 | -58.8 | | | 0.1 | -51.3 | -41.25 | 10.08 |
| | HE160, M0 to M9 2ss | 2 | 6 | -63.0 | -58.8 | | | 0.1 | -51.3 | -41.25 | 10.08 |
| | HE160, M0 to M9 1ss | 3 | 6 | -63.0 | -58.8 | -59.4 | | 0.1 | -49.2 | -41.25 | 7.96 |
| | HE160, M0 to M9 2ss | 3 | 6 | -63.0 | -58.8 | -59.4 | | 0.1 | -49.2 | -41.25 | 7.96 |
| | HE160, M0 to M9 3ss | 3 | 6 | -63.0 | -58.8 | -59.4 | | 0.1 | -49.2 | -41.25 | 7.96 |
| | HE160, M0 to M9 1ss | 4 | 6 | -63.0 | -58.8 | -59.4 | -59.5 | 0.1 | -47.8 | -41.25 | 6.57 |
| | HE160, M0 to M9 2ss | 4 | 6 | -63.0 | -58.8 | -59.4 | -59.5 | 0.1 | -47.8 | -41.25 | 6.57 |
| | HE160, M0 to M9 3ss | 4 | 6 | -63.0 | -58.8 | -59.4 | -59.5 | 0.1 | -47.8 | -41.25 | 6.57 |
| | HE160, M0 to M9 4ss | 4 | 6 | -63.0 | -58.8 | -59.4 | -59.5 | 0.1 | -47.8 | -41.25 | 6.57 |
| | HE160 Beam Forming, M0 to M9 1ss | 2 | 9 | -63.8 | -60.0 | | | 0.1 | -49.4 | -41.25 | 8.17 |
| | HE160 Beam Forming, M0 to M9 2ss | 2 | 6 | -63.0 | -58.8 | | | 0.1 | -51.3 | -41.25 | 10.08 |
| | HE160 Beam Forming, M0 to M9 1ss | 3 | 11 | -64.4 | -61.0 | -62.1 | | 0.1 | -46.4 | -41.25 | 5.19 |
| | HE160 Beam Forming, M0 to M9 2ss | 3 | 8 | -63.8 | -60.0 | -61.2 | | 0.1 | -48.6 | -41.25 | 7.31 |
| | HE160 Beam Forming, M0 to M9 3ss | 3 | 6 | -63.0 | -58.8 | -59.4 | | 0.1 | -49.2 | -41.25 | 7.96 |
| | HE160 Beam Forming, M0 to M9 1ss | 4 | 12 | -66.2 | -61.8 | -62.7 | -62.2 | 0.1 | -44.8 | -41.25 | 3.59 |
| | HE160 Beam Forming, M0 to M9 2ss | 4 | 9 | -64.4 | -61.0 | -62.1 | -61.5 | 0.1 | -47.0 | -41.25 | 5.73 |
| | HE160 Beam Forming, M0 to M9 3ss | 4 | 7 | -63.8 | -60.0 | -61.2 | -60.6 | 0.1 | -48.1 | -41.25 | 6.84 |
| | HE160 Beam Forming, M0 to M9 4ss | 4 | 6 | -63.0 | -58.8 | -59.4 | -59.5 | 0.1 | -47.8 | -41.25 | 6.57 |
| | HE160 STBC, M0 to M9 1ss | 2 | 6 | -63.0 | -58.8 | | | 0.1 | -51.3 | -41.25 | 10.08 |
| | HE160 STBC, M0 to M9 1ss | 3 | 6 | -63.0 | -58.8 | -59.4 | | 0.1 | -49.2 | -41.25 | 7.96 |
| | HE160 STBC, M0 to M9 1ss | 4 | 6 | -63.0 | -58.8 | -59.4 | -59.5 | 0.1 | -47.8 | -41.25 | 6.57 |



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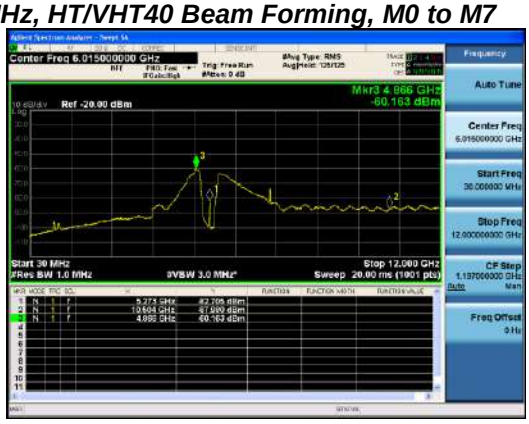
***Conducted Spurs Average, 5270 MHz, HT/VHT40 Beam Forming, M0 to M7***

***Antenna A***




***Antenna B***

***Antenna C***

***Antenna D***



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| 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) | Tx 5 Spur Power (dBm) | Total Conducted Spur (dBm) | Limit (dBm) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5260 | Non HT20, 6 to 54 Mbps | 1 | 6 | -50.0 | | | | 0.1 | -43.9 | -21.25 | 22.70 |
| | Non HT20, 6 to 54 Mbps | 2 | 6 | -52.3 | -47.5 | | | 0.1 | -40.2 | -21.25 | 18.96 |
| | Non HT20, 6 to 54 Mbps | 3 | 6 | -52.3 | -49.9 | -53.0 | | 0.1 | -40.7 | -21.25 | 19.45 |
| | Non HT20, 6 to 54 Mbps | 4 | 6 | -55.4 | -51.4 | -53.4 | -53.4 | 0.1 | -41.1 | -21.25 | 19.85 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 2 | 9 | -52.3 | -47.5 | | | 0.1 | -37.2 | -21.25 | 15.96 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 3 | 11 | -52.3 | -49.9 | -53.0 | | 0.1 | -35.7 | -21.25 | 14.45 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 4 | 12 | -55.4 | -51.4 | -53.4 | -53.4 | 0.1 | -35.1 | -21.25 | 13.85 |
| | HT/VHT20, M0 to M7 | 1 | 6 | -49.8 | | | | 0.1 | -43.7 | -21.25 | 22.50 |
| | HT/VHT20, M0 to M7 | 2 | 6 | -50.8 | -47.3 | | | 0.1 | -39.6 | -21.25 | 18.39 |
| | HT/VHT20, M8 to M15 | 2 | 6 | -49.8 | -44.9 | | | 0.1 | -37.6 | -21.25 | 16.38 |
| | HT/VHT20, M0 to M7 | 3 | 6 | -53.7 | -50.1 | -51.8 | | 0.1 | -40.8 | -21.25 | 19.55 |
| | HT/VHT20, M8 to M15 | 3 | 6 | -52.1 | -47.3 | -49.5 | | 0.1 | -38.4 | -21.25 | 17.13 |
| | HT/VHT20, M16 to M23 | 3 | 6 | -49.8 | -44.9 | -48.4 | | 0.1 | -36.4 | -21.25 | 15.12 |
| | HT/VHT20, M0 to M7 | 4 | 6 | -55.9 | -52.0 | -53.0 | -53.2 | 0.1 | -41.2 | -21.25 | 19.98 |
| | HT/VHT20, M8 to M15 | 4 | 6 | -53.0 | -47.9 | -51.1 | -52.4 | 0.1 | -38.5 | -21.25 | 17.29 |
| | HT/VHT20, M16 to M23 | 4 | 6 | -52.1 | -47.3 | -49.5 | -49.1 | 0.1 | -37.1 | -21.25 | 15.86 |
| | HT/VHT20, M24 to M31 | 4 | 6 | -50.8 | -47.3 | -49.0 | -48.5 | 0.1 | -36.7 | -21.25 | 15.40 |
| | HT/VHT20 Beam Forming, M0 to M7 | 2 | 9 | -50.8 | -47.3 | | | 0.1 | -36.6 | -21.25 | 15.39 |
| | HT/VHT20 Beam Forming, M8 to M15 | 2 | 6 | -49.8 | -44.9 | | | 0.1 | -37.6 | -21.25 | 16.38 |
| | HT/VHT20 Beam Forming, M0 to M7 | 3 | 11 | -53.7 | -50.1 | -51.8 | | 0.1 | -35.8 | -21.25 | 14.55 |
| | HT/VHT20 Beam Forming, M8 to M15 | 3 | 8 | -52.1 | -47.3 | -49.5 | | 0.1 | -36.4 | -21.25 | 15.13 |
| | HT/VHT20 Beam Forming, M16 to M23 | 3 | 6 | -49.8 | -44.9 | -48.4 | | 0.1 | -36.4 | -21.25 | 15.12 |
| | HT/VHT20 Beam Forming, M0 to M7 | 4 | 12 | -55.9 | -52.0 | -53.0 | -53.2 | 0.1 | -35.2 | -21.25 | 13.98 |
| | HT/VHT20 Beam Forming, M8 to M15 | 4 | 9 | -53.0 | -47.9 | -51.1 | -52.4 | 0.1 | -35.5 | -21.25 | 14.29 |
| | HT/VHT20 Beam Forming, M16 to M23 | 4 | 7 | -52.1 | -47.3 | -49.5 | -49.1 | 0.1 | -36.1 | -21.25 | 14.86 |
| | HT/VHT20 Beam Forming, M24 to M31 | 4 | 6 | -50.8 | -47.3 | -49.0 | -48.5 | 0.1 | -36.7 | -21.25 | 15.40 |
| | HT/VHT20 STBC, M0 to M7 | 2 | 6 | -49.8 | -44.9 | | | 0.1 | -37.6 | -21.25 | 16.38 |
| | HT/VHT20 STBC, M0 to M7 | 3 | 6 | -52.1 | -47.3 | -49.5 | | 0.1 | -38.4 | -21.25 | 17.13 |
| | HT/VHT20 STBC, M0 to M7 | 4 | 6 | -53.0 | -47.9 | -51.1 | -52.4 | 0.1 | -38.5 | -21.25 | 17.29 |
| | HE20, M0 to M9 1ss | 1 | 6 | -50.4 | | | | 0.1 | -44.3 | -21.25 | 23.08 |
| | HE20, M0 to M9 1ss | 2 | 6 | -51.7 | -47.4 | | | 0.1 | -40.0 | -21.25 | 18.71 |
| | HE20, M0 to M9 2ss | 2 | 6 | -50.4 | -46.1 | | | 0.1 | -38.7 | -21.25 | 17.41 |



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|---|---|---|---|---|---|---|---|---|---|---|---|
| | HE20, M0 to M9 1ss | 3 | 6 | -53.5 | -49.4 | -51.9 | | 0.1 | -40.4 | -21.25 | 19.18 |
| | HE20, M0 to M9 2ss | 3 | 6 | -51.7 | -47.4 | -49.0 | | 0.1 | -38.2 | -21.25 | 16.94 |
| | HE20, M0 to M9 3ss | 3 | 6 | -50.4 | -46.1 | -47.8 | | 0.1 | -36.9 | -21.25 | 15.67 |
| | HE20, M0 to M9 1ss | 4 | 6 | -55.9 | -50.9 | -53.1 | -53.6 | 0.1 | -40.9 | -21.25 | 19.68 |
| | HE20, M0 to M9 2ss | 4 | 6 | -52.5 | -49.0 | -49.8 | -51.2 | 0.1 | -38.3 | -21.25 | 17.09 |
| | HE20, M0 to M9 3ss | 4 | 6 | -51.7 | -47.4 | -49.0 | -49.3 | 0.1 | -37.0 | -21.25 | 15.75 |
| | HE20, M0 to M9 4ss | 4 | 6 | -50.8 | -46.0 | -48.2 | -48.1 | 0.1 | -35.9 | -21.25 | 14.62 |
| | HE20 Beam Forming, M0 to M9 1ss | 2 | 9 | -51.7 | -47.4 | | | 0.1 | -37.0 | -21.25 | 15.71 |
| | HE20 Beam Forming, M0 to M9 2ss | 2 | 6 | -50.4 | -46.1 | | | 0.1 | -38.7 | -21.25 | 17.41 |
| | HE20 Beam Forming, M0 to M9 1ss | 3 | 11 | -53.5 | -49.4 | -51.9 | | 0.1 | -35.4 | -21.25 | 14.18 |
| | HE20 Beam Forming, M0 to M9 2ss | 3 | 8 | -51.7 | -47.4 | -49.0 | | 0.1 | -36.2 | -21.25 | 14.94 |
| | HE20 Beam Forming, M0 to M9 3ss | 3 | 6 | -50.4 | -46.1 | -47.8 | | 0.1 | -36.9 | -21.25 | 15.67 |
| | HE20 Beam Forming, M0 to M9 1ss | 4 | 12 | -55.9 | -50.9 | -53.1 | -53.6 | 0.1 | -34.9 | -21.25 | 13.68 |
| | HE20 Beam Forming, M0 to M9 2ss | 4 | 9 | -52.5 | -49.0 | -49.8 | -51.2 | 0.1 | -35.3 | -21.25 | 14.09 |
| | HE20 Beam Forming, M0 to M9 3ss | 4 | 7 | -51.7 | -47.4 | -49.0 | -49.3 | 0.1 | -36.0 | -21.25 | 14.75 |
| | HE20 Beam Forming, M0 to M9 4ss | 4 | 6 | -50.8 | -46.0 | -48.2 | -48.1 | 0.1 | -35.9 | -21.25 | 14.62 |
| | HE20 STBC, M0 to M9 2ss | 2 | 6 | -50.4 | -46.1 | | | 0.1 | -38.7 | -21.25 | 17.41 |
| | HE20 STBC, M0 to M9 2ss | 3 | 6 | -51.7 | -47.4 | -49.0 | | 0.1 | -38.2 | -21.25 | 16.94 |
| | HE20 STBC, M0 to M9 2ss | 4 | 6 | -52.5 | -49.0 | -49.8 | -51.2 | 0.1 | -38.3 | -21.25 | 17.09 |
| | | | | | | | | | | | |
| 5270 | Non HT40, 6 to 54 Mbps | 1 | 6 | -50.4 | | | | 0.0 | -44.4 | -21.25 | 23.11 |
| | Non HT40, 6 to 54 Mbps | 2 | 6 | -50.4 | -45.5 | | | 0.0 | -38.2 | -21.25 | 16.99 |
| | Non HT40, 6 to 54 Mbps | 3 | 6 | -52.4 | -47.2 | -48.7 | | 0.0 | -38.1 | -21.25 | 16.87 |
| | Non HT40, 6 to 54 Mbps | 4 | 6 | -52.5 | -48.6 | -49.8 | -50.2 | 0.0 | -38.0 | -21.25 | 16.75 |
| | HT/VHT40, M0 to M7 | 1 | 6 | -50.6 | | | | 0.1 | -44.5 | -21.25 | 23.25 |
| | HT/VHT40, M0 to M7 | 2 | 6 | -50.6 | -46.0 | | | 0.1 | -38.6 | -21.25 | 17.35 |
| | HT/VHT40, M8 to M15 | 2 | 6 | -50.6 | -46.0 | | | 0.1 | -38.6 | -21.25 | 17.35 |
| | HT/VHT40, M0 to M7 | 3 | 6 | -52.2 | -47.0 | -49.5 | | 0.1 | -38.2 | -21.25 | 16.94 |
| | HT/VHT40, M8 to M15 | 3 | 6 | -50.6 | -46.0 | -48.1 | | 0.1 | -37.0 | -21.25 | 15.72 |
| | HT/VHT40, M16 to M23 | 3 | 6 | -50.6 | -46.0 | -48.1 | | 0.1 | -37.0 | -21.25 | 15.72 |
| | HT/VHT40, M0 to M7 | 4 | 6 | -53.6 | -49.2 | -50.1 | -51.5 | 0.1 | -38.7 | -21.25 | 17.43 |
| | HT/VHT40, M8 to M15 | 4 | 6 | -50.4 | -46.1 | -48.4 | -49.2 | 0.1 | -36.1 | -21.25 | 14.86 |
| | HT/VHT40, M16 to M23 | 4 | 6 | -50.6 | -46.0 | -48.1 | -48.0 | 0.1 | -35.8 | -21.25 | 14.51 |
| | HT/VHT40, M24 to M31 | 4 | 6 | -50.6 | -46.0 | -48.1 | -48.0 | 0.1 | -35.8 | -21.25 | 14.51 |
| | HT/VHT40 Beam Forming, M0 to M7 | 2 | 9 | -50.6 | -46.0 | | | 0.1 | -35.6 | -21.25 | 14.35 |
| | HT/VHT40 Beam Forming, M8 to M15 | 2 | 6 | -50.6 | -46.0 | | | 0.1 | -38.6 | -21.25 | 17.35 |
| | HT/VHT40 Beam Forming, M0 to M7 | 3 | 11 | -52.4 | -48.1 | -50.2 | | 0.1 | -34.0 | -21.25 | 12.76 |
| | HT/VHT40 Beam Forming, M8 to M15 | 3 | 8 | -50.6 | -46.0 | -48.1 | | 0.1 | -35.0 | -21.25 | 13.72 |
| | HT/VHT40 Beam Forming, M16 to M23 | 3 | 6 | -50.6 | -46.0 | -48.1 | | 0.1 | -37.0 | -21.25 | 15.72 |
| | HT/VHT40 Beam Forming, M0 to M7 | 4 | 12 | -53.1 | -49.9 | -52.1 | -52.6 | 0.1 | -33.6 | -21.25 | 12.37 |
| | HT/VHT40 Beam Forming, M8 to M15 | 4 | 9 | -52.2 | -47.0 | -49.5 | -48.7 | 0.1 | -33.8 | -21.25 | 12.60 |
| | HT/VHT40 Beam Forming, M16 to M23 | 4 | 7 | -50.6 | -46.0 | -48.1 | -48.0 | 0.1 | -34.8 | -21.25 | 13.51 |



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|---|---|---|---|---|---|---|---|---|---|---|---|
| | HT/VHT40 Beam Forming, M24 to M31 | 4 | 6 | -50.6 | -46.0 | -48.1 | -48.0 | 0.1 | -35.8 | -21.25 | 14.51 |
| | HT/VHT40 STBC, M0 to M7 | 2 | 6 | -50.6 | -46.0 | | | 0.1 | -38.6 | -21.25 | 17.35 |
| | HT/VHT40 STBC, M0 to M7 | 3 | 6 | -50.6 | -46.0 | -48.1 | | 0.1 | -37.0 | -21.25 | 15.72 |
| | HT/VHT40 STBC, M0 to M7 | 4 | 6 | -52.2 | -47.0 | -49.5 | -48.7 | 0.1 | -36.8 | -21.25 | 15.60 |
| | HE40, M0 to M9 1ss | 1 | 6 | -50.6 | | | | 0.1 | -44.5 | -21.25 | 23.22 |
| | HE40, M0 to M9 1ss | 2 | 6 | -50.6 | -45.9 | | | 0.1 | -38.5 | -21.25 | 17.26 |
| | HE40, M0 to M9 2ss | 2 | 6 | -50.6 | -45.9 | | | 0.1 | -38.5 | -21.25 | 17.26 |
| | HE40, M0 to M9 1ss | 3 | 6 | -51.9 | -47.2 | -49.3 | | 0.1 | -38.2 | -21.25 | 16.91 |
| | HE40, M0 to M9 2ss | 3 | 6 | -50.6 | -45.9 | -47.7 | | 0.1 | -36.8 | -21.25 | 15.52 |
| | HE40, M0 to M9 3ss | 3 | 6 | -50.6 | -45.9 | -47.7 | | 0.1 | -36.8 | -21.25 | 15.52 |
| | HE40, M0 to M9 1ss | 4 | 6 | -53.5 | -47.9 | -50.2 | -50.3 | 0.1 | -37.9 | -21.25 | 16.65 |
| | HE40, M0 to M9 2ss | 4 | 6 | -50.6 | -45.5 | -48.5 | -49.3 | 0.1 | -35.9 | -21.25 | 14.65 |
| | HE40, M0 to M9 3ss | 4 | 6 | -50.6 | -45.9 | -47.7 | -48.0 | 0.1 | -35.6 | -21.25 | 14.35 |
| | HE40, M0 to M9 4ss | 4 | 6 | -50.6 | -45.9 | -47.7 | -48.0 | 0.1 | -35.6 | -21.25 | 14.35 |
| | HE40 Beam Forming, M0 to M9 1ss | 2 | 9 | -50.6 | -45.9 | | | 0.1 | -35.5 | -21.25 | 14.26 |
| | HE40 Beam Forming, M0 to M9 2ss | 2 | 6 | -50.6 | -45.9 | | | 0.1 | -38.5 | -21.25 | 17.26 |
| | HE40 Beam Forming, M0 to M9 1ss | 3 | 11 | -53.5 | -47.9 | -50.2 | | 0.1 | -34.1 | -21.25 | 12.82 |
| | HE40 Beam Forming, M0 to M9 2ss | 3 | 8 | -50.6 | -45.5 | -48.5 | | 0.1 | -34.8 | -21.25 | 13.55 |
| | HE40 Beam Forming, M0 to M9 3ss | 3 | 6 | -50.6 | -45.9 | -47.7 | | 0.1 | -36.8 | -21.25 | 15.52 |
| | HE40 Beam Forming, M0 to M9 1ss | 4 | 12 | -54.2 | -49.9 | -53.3 | -53.1 | 0.1 | -34.1 | -21.25 | 12.89 |
| | HE40 Beam Forming, M0 to M9 2ss | 4 | 9 | -52.2 | -47.6 | -49.7 | -50.0 | 0.1 | -34.4 | -21.25 | 13.18 |
| | HE40 Beam Forming, M0 to M9 3ss | 4 | 7 | -50.6 | -45.5 | -48.5 | -49.3 | 0.1 | -34.9 | -21.25 | 13.65 |
| | HE40 Beam Forming, M0 to M9 4ss | 4 | 6 | -50.6 | -45.9 | -47.7 | -48.0 | 0.1 | -35.6 | -21.25 | 14.35 |
| | HE40 STBC, M0 to M9 2ss | 2 | 6 | -50.6 | -45.9 | | | 0.1 | -38.5 | -21.25 | 17.26 |
| | HE40 STBC, M0 to M9 2ss | 3 | 6 | -50.6 | -45.9 | -47.7 | | 0.1 | -36.8 | -21.25 | 15.52 |
| | HE40 STBC, M0 to M9 2ss | 4 | 6 | -51.9 | -47.2 | -49.3 | -49.5 | 0.1 | -37.0 | -21.25 | 15.77 |
| | | | | | | | | | | | |
| 5290 | Non HT80, 6 to 54 Mbps | 1 | 6 | -54.0 | | | | 0.1 | -47.9 | -21.25 | 26.70 |
| | Non HT80, 6 to 54 Mbps | 2 | 6 | -54.0 | -49.2 | | | 0.1 | -41.9 | -21.25 | 20.66 |
| | Non HT80, 6 to 54 Mbps | 3 | 6 | -54.7 | -50.8 | -52.3 | | 0.1 | -41.5 | -21.25 | 20.25 |
| | Non HT80, 6 to 54 Mbps | 4 | 6 | -54.7 | -50.8 | -52.3 | -52.0 | 0.1 | -40.2 | -21.25 | 18.91 |
| | VHT80, M0 to M9 1ss | 1 | 6 | -52.9 | | | | 0.2 | -46.7 | -21.25 | 25.43 |
| | VHT80, M0 to M9 1ss | 2 | 6 | -54.3 | -50.2 | | | 0.2 | -42.6 | -21.25 | 21.31 |
| | VHT80, M0 to M9 2ss | 2 | 6 | -54.3 | -50.2 | | | 0.2 | -42.6 | -21.25 | 21.31 |
| | VHT80, M0 to M9 1ss | 3 | 6 | -54.3 | -50.2 | -50.2 | | 0.2 | -40.2 | -21.25 | 18.95 |
| | VHT80, M0 to M9 2ss | 3 | 6 | -54.3 | -50.2 | -50.2 | | 0.2 | -40.2 | -21.25 | 18.95 |
| | VHT80, M0 to M9 3ss | 3 | 6 | -54.3 | -50.2 | -50.2 | | 0.2 | -40.2 | -21.25 | 18.95 |
| | VHT80, M0 to M9 1ss | 4 | 6 | -54.3 | -50.2 | -50.2 | -51.7 | 0.2 | -39.1 | -21.25 | 17.82 |
| | VHT80, M0 to M9 2ss | 4 | 6 | -54.3 | -50.2 | -50.2 | -51.7 | 0.2 | -39.1 | -21.25 | 17.82 |
| | VHT80, M0 to M9 3ss | 4 | 6 | -54.3 | -50.2 | -50.2 | -51.7 | 0.2 | -39.1 | -21.25 | 17.82 |
| | VHT80, M0 to M9 4ss | 4 | 6 | -54.3 | -50.2 | -50.2 | -51.7 | 0.2 | -39.1 | -21.25 | 17.82 |
| | VHT80 Beam Forming, M0 to M9 1ss | 2 | 9 | -54.6 | -51.4 | | | 0.2 | -40.5 | -21.25 | 19.24 |



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|---|---|---|---|---|---|---|---|---|---|---|---|
| | VHT80 Beam Forming, M0 to M9 2ss | 2 | 6 | -54.3 | -50.2 | | | 0.2 | -42.6 | -21.25 | 21.31 |
| | VHT80 Beam Forming, M0 to M9 1ss | 3 | 11 | -56.1 | -51.5 | -52.6 | | 0.2 | -37.0 | -21.25 | 15.76 |
| | VHT80 Beam Forming, M0 to M9 2ss | 3 | 8 | -54.6 | -51.4 | -52.8 | | 0.2 | -39.8 | -21.25 | 18.50 |
| | VHT80 Beam Forming, M0 to M9 3ss | 3 | 6 | -54.3 | -50.2 | -50.2 | | 0.2 | -40.2 | -21.25 | 18.95 |
| | VHT80 Beam Forming, M0 to M9 1ss | 4 | 12 | -56.9 | -52.1 | -53.5 | -53.7 | 0.2 | -35.5 | -21.25 | 14.24 |
| | VHT80 Beam Forming, M0 to M9 2ss | 4 | 9 | -56.1 | -51.5 | -52.6 | -53.0 | 0.2 | -37.8 | -21.25 | 16.51 |
| | VHT80 Beam Forming, M0 to M9 3ss | 4 | 7 | -54.6 | -51.4 | -52.8 | -51.7 | 0.2 | -39.2 | -21.25 | 17.97 |
| | VHT80 Beam Forming, M0 to M9 4ss | 4 | 6 | -54.3 | -50.2 | -50.2 | -51.7 | 0.2 | -39.1 | -21.25 | 17.82 |
| | VHT80 STBC, M0 to M9 1ss | 2 | 6 | -54.3 | -50.2 | | | 0.2 | -42.6 | -21.25 | 21.31 |
| | VHT80 STBC, M0 to M9 1ss | 3 | 6 | -54.3 | -50.2 | -50.2 | | 0.2 | -40.2 | -21.25 | 18.95 |
| | VHT80 STBC, M0 to M9 1ss | 4 | 6 | -54.3 | -50.2 | -50.2 | -51.7 | 0.2 | -39.1 | -21.25 | 17.82 |
| | HE80, M0 to M9 1ss | 1 | 6 | -53.7 | | | | 0.3 | -47.4 | -21.25 | 26.20 |
| | HE80, M0 to M9 1ss | 2 | 6 | -53.7 | -50.1 | | | 0.3 | -42.3 | -21.25 | 21.03 |
| | HE80, M0 to M9 2ss | 2 | 6 | -53.7 | -50.1 | | | 0.3 | -42.3 | -21.25 | 21.03 |
| | HE80, M0 to M9 1ss | 3 | 6 | -53.7 | -50.1 | -50.7 | | 0.3 | -40.2 | -21.25 | 18.97 |
| | HE80, M0 to M9 2ss | 3 | 6 | -53.7 | -50.1 | -50.7 | | 0.3 | -40.2 | -21.25 | 18.97 |
| | HE80, M0 to M9 3ss | 3 | 6 | -53.7 | -50.1 | -50.7 | | 0.3 | -40.2 | -21.25 | 18.97 |
| | HE80, M0 to M9 1ss | 4 | 6 | -54.8 | -51.4 | -52.3 | -53.0 | 0.3 | -40.4 | -21.25 | 19.18 |
| | HE80, M0 to M9 2ss | 4 | 6 | -54.8 | -51.4 | -52.3 | -53.0 | 0.3 | -40.4 | -21.25 | 19.18 |
| | HE80, M0 to M9 3ss | 4 | 6 | -54.8 | -51.4 | -52.3 | -53.0 | 0.3 | -40.4 | -21.25 | 19.18 |
| | HE80, M0 to M9 4ss | 4 | 6 | -54.8 | -51.4 | -52.3 | -53.0 | 0.3 | -40.4 | -21.25 | 19.18 |
| | HE80 Beam Forming, M0 to M9 1ss | 2 | 9 | -54.8 | -51.4 | | | 0.3 | -40.5 | -21.25 | 19.26 |
| | HE80 Beam Forming, M0 to M9 2ss | 2 | 6 | -53.7 | -50.1 | | | 0.3 | -42.3 | -21.25 | 21.03 |
| | HE80 Beam Forming, M0 to M9 1ss | 3 | 11 | -56.3 | -52.4 | -53.0 | | 0.3 | -37.6 | -21.25 | 16.32 |
| | HE80 Beam Forming, M0 to M9 2ss | 3 | 8 | -54.8 | -51.4 | -52.3 | | 0.3 | -39.6 | -21.25 | 18.34 |
| | HE80 Beam Forming, M0 to M9 3ss | 3 | 6 | -53.7 | -50.1 | -50.7 | | 0.3 | -40.2 | -21.25 | 18.97 |
| | HE80 Beam Forming, M0 to M9 1ss | 4 | 12 | -57.3 | -51.8 | -53.8 | -53.3 | 0.3 | -35.4 | -21.25 | 14.12 |
| | HE80 Beam Forming, M0 to M9 2ss | 4 | 9 | -56.9 | -51.4 | -53.0 | -52.5 | 0.3 | -37.8 | -21.25 | 16.51 |
| | HE80 Beam Forming, M0 to M9 3ss | 4 | 7 | -54.8 | -51.4 | -52.3 | -53.0 | 0.3 | -39.4 | -21.25 | 18.18 |
| | HE80 Beam Forming, M0 to M9 4ss | 4 | 6 | -54.8 | -51.4 | -52.3 | -53.0 | 0.3 | -40.4 | -21.25 | 19.18 |
| | HE80 STBC, M0 to M9 1ss | 2 | 6 | -53.7 | -50.1 | | | 0.3 | -42.3 | -21.25 | 21.03 |
| | HE80 STBC, M0 to M9 1ss | 3 | 6 | -53.7 | -50.1 | -50.7 | | 0.3 | -40.2 | -21.25 | 18.97 |
| | HE80 STBC, M0 to M9 1ss | 4 | 6 | -54.8 | -51.4 | -52.3 | -53.0 | 0.3 | -40.4 | -21.25 | 19.18 |
| | | | | | | | | | | | |
| 5300 | Non HT20, 6 to 54 Mbps | 1 | 6 | -49.6 | | | | 0.1 | -43.5 | -21.25 | 22.30 |
| | Non HT20, 6 to 54 Mbps | 2 | 6 | -51.9 | -46.7 | | | 0.1 | -39.5 | -21.25 | 18.25 |
| | Non HT20, 6 to 54 Mbps | 3 | 6 | -53.1 | -48.6 | -51.8 | | 0.1 | -39.9 | -21.25 | 18.67 |
| | Non HT20, 6 to 54 Mbps | 4 | 6 | -55.3 | -50.4 | -51.9 | -52.5 | 0.1 | -40.1 | -21.25 | 18.87 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 2 | 9 | -51.9 | -46.7 | | | 0.1 | -36.5 | -21.25 | 15.25 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 3 | 11 | -53.1 | -48.6 | -51.8 | | 0.1 | -34.9 | -21.25 | 13.67 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 4 | 12 | -55.3 | -50.4 | -51.9 | -52.5 | 0.1 | -34.1 | -21.25 | 12.87 |
| | HT/VHT20, M0 to M7 | 1 | 6 | -50.2 | | | | 0.1 | -44.1 | -21.25 | 22.90 |



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|---|---|---|---|---|---|---|---|---|---|---|---|
| | HT/VHT20, M0 to M7 | 2 | 6 | -51.0 | -44.9 | | | 0.1 | -37.9 | -21.25 | 16.64 |
| | HT/VHT20, M8 to M15 | 2 | 6 | -50.2 | -44.5 | | | 0.1 | -37.4 | -21.25 | 16.16 |
| | HT/VHT20, M0 to M7 | 3 | 6 | -53.9 | -49.6 | -52.3 | | 0.1 | -40.7 | -21.25 | 19.49 |
| | HT/VHT20, M8 to M15 | 3 | 6 | -51.3 | -46.7 | -49.8 | | 0.1 | -38.0 | -21.25 | 16.76 |
| | HT/VHT20, M16 to M23 | 3 | 6 | -50.2 | -44.5 | -47.0 | | 0.1 | -35.8 | -21.25 | 14.57 |
| | HT/VHT20, M0 to M7 | 4 | 6 | -54.1 | -50.6 | -52.1 | -52.9 | 0.1 | -40.2 | -21.25 | 18.91 |
| | HT/VHT20, M8 to M15 | 4 | 6 | -52.9 | -48.4 | -50.2 | -50.1 | 0.1 | -38.0 | -21.25 | 16.80 |
| | HT/VHT20, M16 to M23 | 4 | 6 | -51.3 | -46.7 | -49.8 | -49.1 | 0.1 | -36.8 | -21.25 | 15.57 |
| | HT/VHT20, M24 to M31 | 4 | 6 | -51.0 | -44.9 | -48.1 | -48.8 | 0.1 | -35.6 | -21.25 | 14.31 |
| | HT/VHT20 Beam Forming, M0 to M7 | 2 | 9 | -51.0 | -44.9 | | | 0.1 | -34.9 | -21.25 | 13.64 |
| | HT/VHT20 Beam Forming, M8 to M15 | 2 | 6 | -50.2 | -44.5 | | | 0.1 | -37.4 | -21.25 | 16.16 |
| | HT/VHT20 Beam Forming, M0 to M7 | 3 | 11 | -53.9 | -49.6 | -52.3 | | 0.1 | -35.7 | -21.25 | 14.49 |
| | HT/VHT20 Beam Forming, M8 to M15 | 3 | 8 | -51.3 | -46.7 | -49.8 | | 0.1 | -36.0 | -21.25 | 14.76 |
| | HT/VHT20 Beam Forming, M16 to M23 | 3 | 6 | -50.2 | -44.5 | -47.0 | | 0.1 | -35.8 | -21.25 | 14.57 |
| | HT/VHT20 Beam Forming, M0 to M7 | 4 | 12 | -54.1 | -50.6 | -52.1 | -52.9 | 0.1 | -34.2 | -21.25 | 12.91 |
| | HT/VHT20 Beam Forming, M8 to M15 | 4 | 9 | -52.9 | -48.4 | -50.2 | -50.1 | 0.1 | -35.0 | -21.25 | 13.80 |
| | HT/VHT20 Beam Forming, M16 to M23 | 4 | 7 | -51.3 | -46.7 | -49.8 | -49.1 | 0.1 | -35.8 | -21.25 | 14.57 |
| | HT/VHT20 Beam Forming, M24 to M31 | 4 | 6 | -51.0 | -44.9 | -48.1 | -48.8 | 0.1 | -35.6 | -21.25 | 14.31 |
| | HT/VHT20 STBC, M0 to M7 | 2 | 6 | -50.2 | -44.5 | | | 0.1 | -37.4 | -21.25 | 16.16 |
| | HT/VHT20 STBC, M0 to M7 | 3 | 6 | -51.3 | -46.7 | -49.8 | | 0.1 | -38.0 | -21.25 | 16.76 |
| | HT/VHT20 STBC, M0 to M7 | 4 | 6 | -52.9 | -48.4 | -50.2 | -50.1 | 0.1 | -38.0 | -21.25 | 16.80 |
| | HE20, M0 to M9 1ss | 1 | 6 | -49.8 | | | | 0.1 | -43.7 | -21.25 | 22.48 |
| | HE20, M0 to M9 1ss | 2 | 6 | -51.6 | -46.8 | | | 0.1 | -39.5 | -21.25 | 18.24 |
| | HE20, M0 to M9 2ss | 2 | 6 | -49.8 | -43.7 | | | 0.1 | -36.7 | -21.25 | 15.43 |
| | HE20, M0 to M9 1ss | 3 | 6 | -53.7 | -48.8 | -51.2 | | 0.1 | -39.9 | -21.25 | 18.70 |
| | HE20, M0 to M9 2ss | 3 | 6 | -51.6 | -46.8 | -48.9 | | 0.1 | -37.8 | -21.25 | 16.59 |
| | HE20, M0 to M9 3ss | 3 | 6 | -49.8 | -43.7 | -47.6 | | 0.1 | -35.4 | -21.25 | 14.20 |
| | HE20, M0 to M9 1ss | 4 | 6 | -54.9 | -50.2 | -52.6 | -52.8 | 0.1 | -40.2 | -21.25 | 18.97 |
| | HE20, M0 to M9 2ss | 4 | 6 | -52.9 | -48.1 | -50.3 | -50.6 | 0.1 | -38.1 | -21.25 | 16.81 |
| | HE20, M0 to M9 3ss | 4 | 6 | -51.6 | -46.8 | -48.9 | -49.2 | 0.1 | -36.7 | -21.25 | 15.46 |
| | HE20, M0 to M9 4ss | 4 | 6 | -49.7 | -46.0 | -48.4 | -48.8 | 0.1 | -35.9 | -21.25 | 14.66 |
| | HE20 Beam Forming, M0 to M9 1ss | 2 | 9 | -51.6 | -46.8 | | | 0.1 | -36.5 | -21.25 | 15.24 |
| | HE20 Beam Forming, M0 to M9 2ss | 2 | 6 | -49.8 | -43.7 | | | 0.1 | -36.7 | -21.25 | 15.43 |
| | HE20 Beam Forming, M0 to M9 1ss | 3 | 11 | -53.7 | -48.8 | -51.2 | | 0.1 | -34.9 | -21.25 | 13.70 |
| | HE20 Beam Forming, M0 to M9 2ss | 3 | 8 | -51.6 | -46.8 | -48.9 | | 0.1 | -35.8 | -21.25 | 14.59 |
| | HE20 Beam Forming, M0 to M9 3ss | 3 | 6 | -49.8 | -43.7 | -47.6 | | 0.1 | -35.4 | -21.25 | 14.20 |
| | HE20 Beam Forming, M0 to M9 1ss | 4 | 12 | -54.9 | -50.2 | -52.6 | -52.8 | 0.1 | -34.2 | -21.25 | 12.97 |
| | HE20 Beam Forming, M0 to M9 2ss | 4 | 9 | -52.9 | -48.1 | -50.3 | -50.6 | 0.1 | -35.1 | -21.25 | 13.81 |
| | HE20 Beam Forming, M0 to M9 3ss | 4 | 7 | -51.6 | -46.8 | -48.9 | -49.2 | 0.1 | -35.7 | -21.25 | 14.46 |
| | HE20 Beam Forming, M0 to M9 4ss | 4 | 6 | -49.7 | -46.0 | -48.4 | -48.8 | 0.1 | -35.9 | -21.25 | 14.66 |
| | HE20 STBC, M0 to M9 2ss | 2 | 6 | -49.8 | -43.7 | | | 0.1 | -36.7 | -21.25 | 15.43 |
| | HE20 STBC, M0 to M9 2ss | 3 | 6 | -51.6 | -46.8 | -48.9 | | 0.1 | -37.8 | -21.25 | 16.59 |



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|---|---|---|---|---|---|---|---|---|---|---|---|
| | HE20 STBC, M0 to M9 2ss | 4 | 6 | -52.9 | -48.1 | -50.3 | -50.6 | 0.1 | -38.1 | -21.25 | 16.81 |
| | | | | | | | | | | | |
| 5310 | Non HT40, 6 to 54 Mbps | 1 | 6 | -52.0 | | | | 0.1 | -45.9 | -21.25 | 24.70 |
| | Non HT40, 6 to 54 Mbps | 2 | 6 | -53.9 | -49.3 | | | 0.1 | -42.0 | -21.25 | 20.71 |
| | Non HT40, 6 to 54 Mbps | 3 | 6 | -53.9 | -49.3 | -50.8 | | 0.1 | -40.1 | -21.25 | 18.87 |
| | Non HT40, 6 to 54 Mbps | 4 | 6 | -53.9 | -49.3 | -50.8 | -52.0 | 0.1 | -39.1 | -21.25 | 17.86 |
| | HT/VHT40, M0 to M7 | 1 | 6 | -53.4 | | | | 0.1 | -47.3 | -21.25 | 26.10 |
| | HT/VHT40, M0 to M7 | 2 | 6 | -53.4 | -48.1 | | | 0.1 | -40.9 | -21.25 | 19.67 |
| | HT/VHT40, M8 to M15 | 2 | 6 | -53.4 | -48.1 | | | 0.1 | -40.9 | -21.25 | 19.67 |
| | HT/VHT40, M0 to M7 | 3 | 6 | -53.4 | -48.1 | -50.9 | | 0.1 | -39.4 | -21.25 | 18.20 |
| | HT/VHT40, M8 to M15 | 3 | 6 | -53.4 | -48.1 | -50.9 | | 0.1 | -39.4 | -21.25 | 18.20 |
| | HT/VHT40, M16 to M23 | 3 | 6 | -53.4 | -48.1 | -50.9 | | 0.1 | -39.4 | -21.25 | 18.20 |
| | HT/VHT40, M0 to M7 | 4 | 6 | -53.4 | -49.4 | -51.6 | -51.7 | 0.1 | -39.2 | -21.25 | 17.97 |
| | HT/VHT40, M8 to M15 | 4 | 6 | -53.4 | -49.4 | -51.6 | -51.7 | 0.1 | -39.2 | -21.25 | 17.97 |
| | HT/VHT40, M16 to M23 | 4 | 6 | -53.4 | -49.4 | -51.6 | -51.7 | 0.1 | -39.2 | -21.25 | 17.97 |
| | HT/VHT40, M24 to M31 | 4 | 6 | -53.4 | -49.4 | -51.6 | -51.7 | 0.1 | -39.2 | -21.25 | 17.97 |
| | HT/VHT40 Beam Forming, M0 to M7 | 2 | 9 | -53.4 | -49.4 | | | 0.1 | -38.9 | -21.25 | 17.64 |
| | HT/VHT40 Beam Forming, M8 to M15 | 2 | 6 | -53.4 | -48.1 | | | 0.1 | -40.9 | -21.25 | 19.67 |
| | HT/VHT40 Beam Forming, M0 to M7 | 3 | 11 | -56.0 | -50.8 | -53.2 | | 0.1 | -37.0 | -21.25 | 15.76 |
| | HT/VHT40 Beam Forming, M8 to M15 | 3 | 8 | -53.4 | -49.4 | -51.6 | | 0.1 | -38.3 | -21.25 | 17.09 |
| | HT/VHT40 Beam Forming, M16 to M23 | 3 | 6 | -53.4 | -48.1 | -50.9 | | 0.1 | -39.4 | -21.25 | 18.20 |
| | HT/VHT40 Beam Forming, M0 to M7 | 4 | 12 | -56.6 | -50.7 | -53.4 | -53.5 | 0.1 | -35.0 | -21.25 | 13.74 |
| | HT/VHT40 Beam Forming, M8 to M15 | 4 | 9 | -53.9 | -49.5 | -53.1 | -52.0 | 0.1 | -36.7 | -21.25 | 15.46 |
| | HT/VHT40 Beam Forming, M16 to M23 | 4 | 7 | -53.4 | -49.4 | -51.6 | -51.7 | 0.1 | -38.2 | -21.25 | 16.97 |
| | HT/VHT40 Beam Forming, M24 to M31 | 4 | 6 | -53.4 | -49.4 | -51.6 | -51.7 | 0.1 | -39.2 | -21.25 | 17.97 |
| | HT/VHT40 STBC, M0 to M7 | 2 | 6 | -53.4 | -48.1 | | | 0.1 | -40.9 | -21.25 | 19.67 |
| | HT/VHT40 STBC, M0 to M7 | 3 | 6 | -53.4 | -48.1 | -50.9 | | 0.1 | -39.4 | -21.25 | 18.20 |
| | HT/VHT40 STBC, M0 to M7 | 4 | 6 | -53.4 | -49.4 | -51.6 | -51.7 | 0.1 | -39.2 | -21.25 | 17.97 |
| | HE40, M0 to M9 1ss | 1 | 6 | -53.8 | | | | 0.1 | -47.7 | -21.25 | 26.48 |
| | HE40, M0 to M9 1ss | 2 | 6 | -53.8 | -49.0 | | | 0.1 | -41.7 | -21.25 | 20.44 |
| | HE40, M0 to M9 2ss | 2 | 6 | -53.8 | -49.0 | | | 0.1 | -41.7 | -21.25 | 20.44 |
| | HE40, M0 to M9 1ss | 3 | 6 | -53.8 | -49.0 | -51.8 | | 0.1 | -40.2 | -21.25 | 19.00 |
| | HE40, M0 to M9 2ss | 3 | 6 | -53.8 | -49.0 | -51.8 | | 0.1 | -40.2 | -21.25 | 19.00 |
| | HE40, M0 to M9 3ss | 3 | 6 | -53.8 | -49.0 | -51.8 | | 0.1 | -40.2 | -21.25 | 19.00 |
| | HE40, M0 to M9 1ss | 4 | 6 | -53.8 | -49.0 | -51.8 | -50.9 | 0.1 | -38.9 | -21.25 | 17.70 |
| | HE40, M0 to M9 2ss | 4 | 6 | -53.8 | -49.0 | -51.8 | -50.9 | 0.1 | -38.9 | -21.25 | 17.70 |
| | HE40, M0 to M9 3ss | 4 | 6 | -53.8 | -49.0 | -51.8 | -50.9 | 0.1 | -38.9 | -21.25 | 17.70 |
| | HE40, M0 to M9 4ss | 4 | 6 | -53.8 | -49.0 | -51.8 | -50.9 | 0.1 | -38.9 | -21.25 | 17.70 |
| | HE40 Beam Forming, M0 to M9 1ss | 2 | 9 | -54.3 | -50.3 | | | 0.1 | -39.8 | -21.25 | 18.53 |
| | HE40 Beam Forming, M0 to M9 2ss | 2 | 6 | -53.8 | -49.0 | | | 0.1 | -41.7 | -21.25 | 20.44 |
| | HE40 Beam Forming, M0 to M9 1ss | 3 | 11 | -56.1 | -51.4 | -52.8 | | 0.1 | -37.2 | -21.25 | 15.94 |
| | HE40 Beam Forming, M0 to M9 2ss | 3 | 8 | -54.3 | -50.3 | -52.5 | | 0.1 | -39.2 | -21.25 | 17.97 |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | HE40 Beam Forming, M0 to M9 3ss | 3 | 6 | -53.8 | -49.0 | -51.8 | | 0.1 | -40.2 | -21.25 | 19.00 |
| | HE40 Beam Forming, M0 to M9 1ss | 4 | 12 | -56.1 | -51.4 | -54.1 | -53.3 | 0.1 | -35.3 | -21.25 | 14.07 |
| | HE40 Beam Forming, M0 to M9 2ss | 4 | 9 | -56.1 | -51.4 | -52.8 | -51.7 | 0.1 | -37.6 | -21.25 | 16.32 |
| | HE40 Beam Forming, M0 to M9 3ss | 4 | 7 | -54.3 | -50.3 | -52.5 | -53.0 | 0.1 | -39.2 | -21.25 | 17.94 |
| | HE40 Beam Forming, M0 to M9 4ss | 4 | 6 | -53.8 | -49.0 | -51.8 | -50.9 | 0.1 | -38.9 | -21.25 | 17.70 |
| | HE40 STBC, M0 to M9 2ss | 2 | 6 | -53.8 | -49.0 | | | 0.1 | -41.7 | -21.25 | 20.44 |
| | HE40 STBC, M0 to M9 2ss | 3 | 6 | -53.8 | -49.0 | -51.8 | | 0.1 | -40.2 | -21.25 | 19.00 |
| | HE40 STBC, M0 to M9 2ss | 4 | 6 | -53.8 | -49.0 | -51.8 | -50.9 | 0.1 | -38.9 | -21.25 | 17.70 |
| | | | | | | | | | | | |
| 5320 | Non HT20, 6 to 54 Mbps | 1 | 6 | -51.1 | | | | 0.1 | -45.0 | -21.25 | 23.80 |
| | Non HT20, 6 to 54 Mbps | 2 | 6 | -52.2 | -47.2 | | | 0.1 | -40.0 | -21.25 | 18.71 |
| | Non HT20, 6 to 54 Mbps | 3 | 6 | -54.1 | -50.0 | -52.6 | | 0.1 | -41.1 | -21.25 | 19.82 |
| | Non HT20, 6 to 54 Mbps | 4 | 6 | -56.1 | -52.3 | -52.9 | -53.6 | 0.1 | -41.4 | -21.25 | 20.19 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 2 | 9 | -52.2 | -47.2 | | | 0.1 | -37.0 | -21.25 | 15.71 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 3 | 11 | -54.1 | -50.0 | -52.6 | | 0.1 | -36.1 | -21.25 | 14.82 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 4 | 12 | -56.1 | -52.3 | -52.9 | -53.6 | 0.1 | -35.4 | -21.25 | 14.19 |
| | HT/VHT20, M0 to M7 | 1 | 6 | -51.4 | | | | 0.1 | -45.3 | -21.25 | 24.10 |
| | HT/VHT20, M0 to M7 | 2 | 6 | -51.4 | -48.2 | | | 0.1 | -40.4 | -21.25 | 19.20 |
| | HT/VHT20, M8 to M15 | 2 | 6 | -51.4 | -48.2 | | | 0.1 | -40.4 | -21.25 | 19.20 |
| | HT/VHT20, M0 to M7 | 3 | 6 | -54.1 | -51.2 | -52.4 | | 0.1 | -41.6 | -21.25 | 20.33 |
| | HT/VHT20, M8 to M15 | 3 | 6 | -51.4 | -48.2 | -49.8 | | 0.1 | -38.8 | -21.25 | 17.53 |
| | HT/VHT20, M16 to M23 | 3 | 6 | -51.4 | -48.2 | -49.8 | | 0.1 | -38.8 | -21.25 | 17.53 |
| | HT/VHT20, M0 to M7 | 4 | 6 | -56.6 | -52.0 | -54.4 | -52.9 | 0.1 | -41.6 | -21.25 | 20.33 |
| | HT/VHT20, M8 to M15 | 4 | 6 | -53.0 | -51.0 | -50.9 | -51.0 | 0.1 | -39.3 | -21.25 | 18.07 |
| | HT/VHT20, M16 to M23 | 4 | 6 | -53.0 | -49.1 | -50.9 | -50.6 | 0.1 | -38.6 | -21.25 | 17.36 |
| | HT/VHT20, M24 to M31 | 4 | 6 | -53.0 | -49.1 | -50.9 | -50.6 | 0.1 | -38.6 | -21.25 | 17.36 |
| | HT/VHT20 Beam Forming, M0 to M7 | 2 | 9 | -53.0 | -49.1 | | | 0.1 | -38.6 | -21.25 | 17.31 |
| | HT/VHT20 Beam Forming, M8 to M15 | 2 | 6 | -51.4 | -48.2 | | | 0.1 | -40.4 | -21.25 | 19.20 |
| | HT/VHT20 Beam Forming, M0 to M7 | 3 | 11 | -54.1 | -51.2 | -52.4 | | 0.1 | -36.6 | -21.25 | 15.33 |
| | HT/VHT20 Beam Forming, M8 to M15 | 3 | 8 | -53.0 | -49.1 | -50.9 | | 0.1 | -37.9 | -21.25 | 16.64 |
| | HT/VHT20 Beam Forming, M16 to M23 | 3 | 6 | -51.4 | -48.2 | -49.8 | | 0.1 | -38.8 | -21.25 | 17.53 |
| | HT/VHT20 Beam Forming, M0 to M7 | 4 | 12 | -56.6 | -52.0 | -54.4 | -52.9 | 0.1 | -35.6 | -21.25 | 14.33 |
| | HT/VHT20 Beam Forming, M8 to M15 | 4 | 9 | -53.0 | -51.0 | -50.9 | -51.0 | 0.1 | -36.3 | -21.25 | 15.07 |
| | HT/VHT20 Beam Forming, M16 to M23 | 4 | 7 | -53.0 | -49.1 | -50.9 | -50.6 | 0.1 | -37.6 | -21.25 | 16.36 |
| | HT/VHT20 Beam Forming, M24 to M31 | 4 | 6 | -53.0 | -49.1 | -50.9 | -50.6 | 0.1 | -38.6 | -21.25 | 17.36 |
| | HT/VHT20 STBC, M0 to M7 | 2 | 6 | -51.4 | -48.2 | | | 0.1 | -40.4 | -21.25 | 19.20 |
| | HT/VHT20 STBC, M0 to M7 | 3 | 6 | -51.4 | -48.2 | -49.8 | | 0.1 | -38.8 | -21.25 | 17.53 |
| | HT/VHT20 STBC, M0 to M7 | 4 | 6 | -53.0 | -51.0 | -50.9 | -51.0 | 0.1 | -39.3 | -21.25 | 18.07 |
| | HE20, M0 to M9 1ss | 1 | 6 | -53.3 | | | | 0.1 | -47.2 | -21.25 | 25.98 |
| | HE20, M0 to M9 1ss | 2 | 6 | -53.3 | -48.1 | | | 0.1 | -40.9 | -21.25 | 19.64 |
| | HE20, M0 to M9 2ss | 2 | 6 | -53.3 | -48.1 | | | 0.1 | -40.9 | -21.25 | 19.64 |
| | HE20, M0 to M9 1ss | 3 | 6 | -54.0 | -51.1 | -52.7 | | 0.1 | -41.6 | -21.25 | 20.35 |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | HE20, M0 to M9 2ss | 3 | 6 | -53.3 | -48.1 | -49.3 | | 0.1 | -38.9 | -21.25 | 17.64 |
| | HE20, M0 to M9 3ss | 3 | 6 | -53.3 | -48.1 | -49.3 | | 0.1 | -38.9 | -21.25 | 17.64 |
| | HE20, M0 to M9 1ss | 4 | 6 | -56.1 | -51.6 | -53.5 | -52.9 | 0.1 | -41.2 | -21.25 | 19.90 |
| | HE20, M0 to M9 2ss | 4 | 6 | -53.7 | -49.4 | -50.9 | -51.1 | 0.1 | -38.9 | -21.25 | 17.68 |
| | HE20, M0 to M9 3ss | 4 | 6 | -53.3 | -48.1 | -49.3 | -50.2 | 0.1 | -37.8 | -21.25 | 16.51 |
| | HE20, M0 to M9 4ss | 4 | 6 | -53.3 | -48.1 | -49.3 | -50.2 | 0.1 | -37.8 | -21.25 | 16.51 |
| | HE20 Beam Forming, M0 to M9 1ss | 2 | 9 | -53.7 | -49.4 | | | 0.1 | -39.0 | -21.25 | 17.71 |
| | HE20 Beam Forming, M0 to M9 2ss | 2 | 6 | -53.3 | -48.1 | | | 0.1 | -40.9 | -21.25 | 19.64 |
| | HE20 Beam Forming, M0 to M9 1ss | 3 | 11 | -54.0 | -51.1 | -52.7 | | 0.1 | -36.6 | -21.25 | 15.35 |
| | HE20 Beam Forming, M0 to M9 2ss | 3 | 8 | -53.7 | -49.4 | -50.9 | | 0.1 | -38.2 | -21.25 | 16.90 |
| | HE20 Beam Forming, M0 to M9 3ss | 3 | 6 | -53.3 | -48.1 | -49.3 | | 0.1 | -38.9 | -21.25 | 17.64 |
| | HE20 Beam Forming, M0 to M9 1ss | 4 | 12 | -56.1 | -51.6 | -53.5 | -52.9 | 0.1 | -35.2 | -21.25 | 13.90 |
| | HE20 Beam Forming, M0 to M9 2ss | 4 | 9 | -53.7 | -49.4 | -50.9 | -51.1 | 0.1 | -35.9 | -21.25 | 14.68 |
| | HE20 Beam Forming, M0 to M9 3ss | 4 | 7 | -53.7 | -49.4 | -50.9 | -51.1 | 0.1 | -37.9 | -21.25 | 16.68 |
| | HE20 Beam Forming, M0 to M9 4ss | 4 | 6 | -53.3 | -48.1 | -49.3 | -50.2 | 0.1 | -37.8 | -21.25 | 16.51 |
| | HE20 STBC, M0 to M9 2ss | 2 | 6 | -53.3 | -48.1 | | | 0.1 | -40.9 | -21.25 | 19.64 |
| | HE20 STBC, M0 to M9 2ss | 3 | 6 | -53.3 | -48.1 | -49.3 | | 0.1 | -38.9 | -21.25 | 17.64 |
| | HE20 STBC, M0 to M9 2ss | 4 | 6 | -53.7 | -49.4 | -50.9 | -51.1 | 0.1 | -38.9 | -21.25 | 17.68 |
| | | | | | | | | | | | |
| 5250 | Non HT160, 6 to 54 Mbps | 1 | 6 | -52.2 | | | | 0.1 | -46.1 | -21.25 | 24.90 |
| | Non HT160, 6 to 54 Mbps | 2 | 6 | -52.2 | -47.4 | | | 0.1 | -40.1 | -21.25 | 18.86 |
| | Non HT160, 6 to 54 Mbps | 3 | 6 | -52.2 | -47.4 | -49.4 | | 0.1 | -38.4 | -21.25 | 17.17 |
| | Non HT160, 6 to 54 Mbps | 4 | 6 | -52.2 | -47.4 | -49.4 | -49.1 | 0.1 | -37.1 | -21.25 | 15.89 |
| | VHT160, M0 to M9 1ss | 1 | 6 | -49.2 | | | | 0.1 | -43.1 | -21.25 | 21.90 |
| | VHT160, M0 to M9 1ss | 2 | 6 | -49.2 | -49.7 | | | 0.1 | -40.4 | -21.25 | 19.13 |
| | VHT160, M0 to M9 2ss | 2 | 6 | -49.2 | -49.7 | | | 0.1 | -40.4 | -21.25 | 19.13 |
| | VHT160, M0 to M9 1ss | 3 | 6 | -49.2 | -49.7 | -51.0 | | 0.1 | -39.1 | -21.25 | 17.83 |
| | VHT160, M0 to M9 2ss | 3 | 6 | -49.2 | -49.7 | -51.0 | | 0.1 | -39.1 | -21.25 | 17.83 |
| | VHT160, M0 to M9 3ss | 3 | 6 | -49.2 | -49.7 | -51.0 | | 0.1 | -39.1 | -21.25 | 17.83 |
| | VHT160, M0 to M9 1ss | 4 | 6 | -51.7 | -49.3 | -51.7 | -51.2 | 0.1 | -38.8 | -21.25 | 17.53 |
| | VHT160, M0 to M9 2ss | 4 | 6 | -51.7 | -49.3 | -51.7 | -51.2 | 0.1 | -38.8 | -21.25 | 17.53 |
| | VHT160, M0 to M9 3ss | 4 | 6 | -51.7 | -49.3 | -51.7 | -51.2 | 0.1 | -38.8 | -21.25 | 17.53 |
| | VHT160, M0 to M9 4ss | 4 | 6 | -51.7 | -49.3 | -51.7 | -51.2 | 0.1 | -38.8 | -21.25 | 17.53 |
| | VHT160 Beam Forming, M0 to M9 1ss | 2 | 9 | -51.7 | -49.3 | | | 0.1 | -38.3 | -21.25 | 17.02 |
| | VHT160 Beam Forming, M0 to M9 2ss | 2 | 6 | -49.2 | -49.7 | | | 0.1 | -40.4 | -21.25 | 19.13 |
| | VHT160 Beam Forming, M0 to M9 1ss | 3 | 11 | -54.5 | -51.0 | -51.3 | | 0.1 | -36.2 | -21.25 | 14.93 |
| | VHT160 Beam Forming, M0 to M9 2ss | 3 | 8 | -51.7 | -49.3 | -51.7 | | 0.1 | -37.9 | -21.25 | 16.67 |
| | VHT160 Beam Forming, M0 to M9 3ss | 3 | 6 | -49.2 | -49.7 | -51.0 | | 0.1 | -39.1 | -21.25 | 17.83 |
| | VHT160 Beam Forming, M0 to M9 1ss | 4 | 12 | -56.1 | -50.9 | -51.6 | -52.4 | 0.1 | -34.3 | -21.25 | 13.03 |
| | VHT160 Beam Forming, M0 to M9 2ss | 4 | 9 | -54.5 | -51.0 | -51.3 | -52.1 | 0.1 | -37.0 | -21.25 | 15.70 |
| | VHT160 Beam Forming, M0 to M9 3ss | 4 | 7 | -51.7 | -49.3 | -51.7 | -51.2 | 0.1 | -37.8 | -21.25 | 16.53 |
| | VHT160 Beam Forming, M0 to M9 4ss | 4 | 6 | -51.7 | -49.3 | -51.7 | -51.2 | 0.1 | -38.8 | -21.25 | 17.53 |



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|---|---|---|---|---|---|---|---|---|---|---|---|
| | VHT160 STBC, M0 to M9 1ss | 2 | 6 | -49.2 | -49.7 | | | 0.1 | -40.4 | -21.25 | 19.13 |
| | VHT160 STBC, M0 to M9 1ss | 3 | 6 | -49.2 | -49.7 | -51.0 | | 0.1 | -39.1 | -21.25 | 17.83 |
| | VHT160 STBC, M0 to M9 1ss | 4 | 6 | -51.7 | -49.3 | -51.7 | -51.2 | 0.1 | -38.8 | -21.25 | 17.53 |
| | HE160, M0 to M9 1ss | 1 | 6 | -47.5 | | | | 0.1 | -41.4 | -21.25 | 20.18 |
| | HE160, M0 to M9 1ss | 2 | 6 | -49.4 | -48.6 | | | 0.1 | -39.9 | -21.25 | 18.65 |
| | HE160, M0 to M9 2ss | 2 | 6 | -49.4 | -48.6 | | | 0.1 | -39.9 | -21.25 | 18.65 |
| | HE160, M0 to M9 1ss | 3 | 6 | -49.4 | -48.6 | -49.3 | | 0.1 | -38.2 | -21.25 | 17.00 |
| | HE160, M0 to M9 2ss | 3 | 6 | -49.4 | -48.6 | -49.3 | | 0.1 | -38.2 | -21.25 | 17.00 |
| | HE160, M0 to M9 3ss | 3 | 6 | -49.4 | -48.6 | -49.3 | | 0.1 | -38.2 | -21.25 | 17.00 |
| | HE160, M0 to M9 1ss | 4 | 6 | -49.4 | -48.6 | -49.3 | -48.7 | 0.1 | -36.9 | -21.25 | 15.65 |
| | HE160, M0 to M9 2ss | 4 | 6 | -49.4 | -48.6 | -49.3 | -48.7 | 0.1 | -36.9 | -21.25 | 15.65 |
| | HE160, M0 to M9 3ss | 4 | 6 | -49.4 | -48.6 | -49.3 | -48.7 | 0.1 | -36.9 | -21.25 | 15.65 |
| | HE160, M0 to M9 4ss | 4 | 6 | -49.4 | -48.6 | -49.3 | -48.7 | 0.1 | -36.9 | -21.25 | 15.65 |
| | HE160 Beam Forming, M0 to M9 1ss | 2 | 9 | -51.6 | -49.0 | | | 0.1 | -38.0 | -21.25 | 16.78 |
| | HE160 Beam Forming, M0 to M9 2ss | 2 | 6 | -49.4 | -48.6 | | | 0.1 | -39.9 | -21.25 | 18.65 |
| | HE160 Beam Forming, M0 to M9 1ss | 3 | 11 | -52.6 | -49.9 | -51.0 | | 0.1 | -35.2 | -21.25 | 13.94 |
| | HE160 Beam Forming, M0 to M9 2ss | 3 | 8 | -51.6 | -49.0 | -50.3 | | 0.1 | -37.3 | -21.25 | 16.08 |
| | HE160 Beam Forming, M0 to M9 3ss | 3 | 6 | -49.4 | -48.6 | -49.3 | | 0.1 | -38.2 | -21.25 | 17.00 |
| | **HE160 Beam Forming, M0 to M9 1ss** | **4** | **12** | **-54.4** | **-49.9** | **-52.2** | **-50.4** | **0.1** | **-33.3** | **-21.25** | **12.06** |
| | HE160 Beam Forming, M0 to M9 2ss | 4 | 9 | -52.6 | -49.9 | -51.0 | -50.6 | 0.1 | -35.8 | -21.25 | 14.58 |
| | HE160 Beam Forming, M0 to M9 3ss | 4 | 7 | -51.6 | -49.0 | -50.3 | -50.4 | 0.1 | -37.1 | -21.25 | 15.89 |
| | HE160 Beam Forming, M0 to M9 4ss | 4 | 6 | -49.4 | -48.6 | -49.3 | -48.7 | 0.1 | -36.9 | -21.25 | 15.65 |
| | HE160 STBC, M0 to M9 1ss | 2 | 6 | -49.4 | -48.6 | | | 0.1 | -39.9 | -21.25 | 18.65 |
| | HE160 STBC, M0 to M9 1ss | 3 | 6 | -49.4 | -48.6 | -49.3 | | 0.1 | -38.2 | -21.25 | 17.00 |
| | HE160 STBC, M0 to M9 1ss | 4 | 6 | -49.4 | -48.6 | -49.3 | -48.7 | 0.1 | -36.9 | -21.25 | 15.65 |



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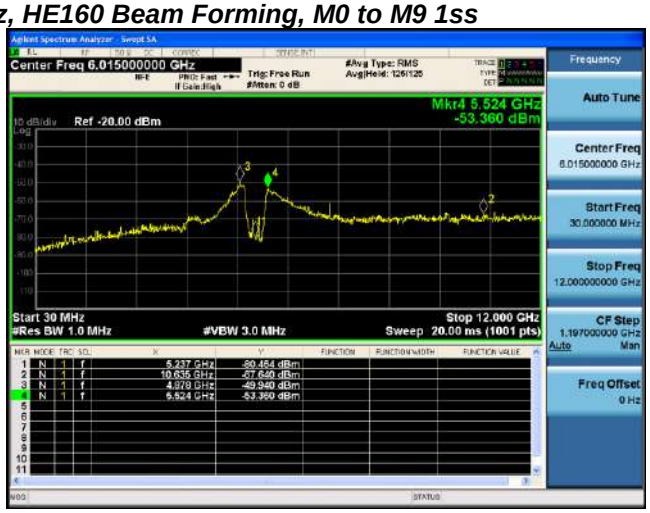
***Conducted Spurs Peak, 5250 MHz, HE160 Beam Forming, M0 to M9 1ss***

***Antenna A***




***Antenna B***

***Antenna C***

***Antenna D***



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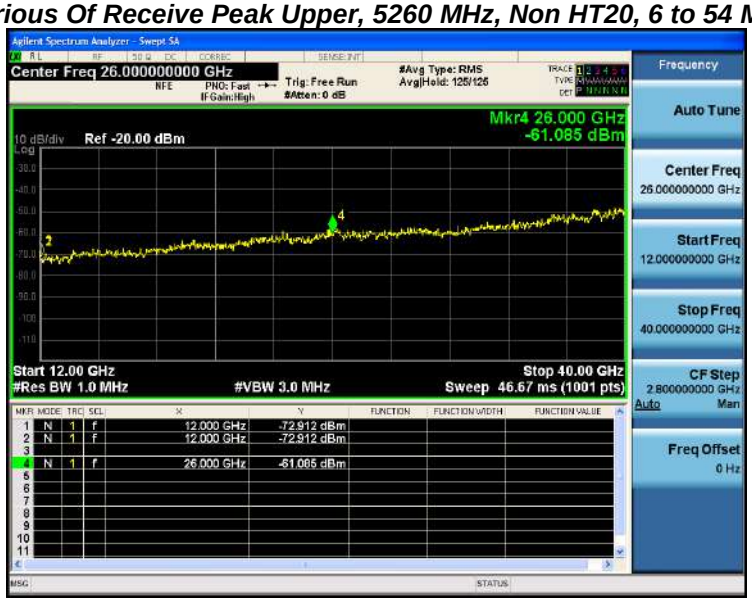
# A.6 Conducted Receiver Spurious Emissions

***Spurious Of Receive Average Upp, 5260 MHz, Non HT20, 6 to 54 Mbps***

***Spurious Of Receive Peak Upper, 5260 MHz, Non HT20, 6 to 54 Mbps***



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| Frequency (MHz) | Mode | Tx Paths | Correlated Antenna Gain (dBi) | Rx 1 Spur Power (dBm) | Rx 2 Spur Power (dBm) | Rx 3 Spur Power (dBm) | Rx 4 Spur Power (dBm) | Duty Cycle Correction (dB) | Total Conducted Spur (dBm) | Limit (dBm) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5260 | Non HT20, 6 to 54 Mbps | 4 | 6 | -86.4 | -86.7 | -86.7 | -86.6 | 0.1 | -74.5 | -41.25 | 33.28 |
| | HT/VHT20, M0 to M7 | 4 | 6 | -86.1 | -86.2 | -86.7 | -86.5 | 0.1 | -74.3 | -41.25 | 33.05 |
| | HE20, M0 to M9 1ss | 4 | 6 | -86.4 | -86.6 | -86.6 | -86.1 | 0.1 | -74.3 | -41.25 | 33.08 |
| | | | | | | | | | | | |
| 5270 | Non HT40, 6 to 54 Mbps | 4 | 6 | -86.4 | -86.7 | -86.8 | -86.7 | 0.0 | -74.6 | -41.25 | 33.33 |
| | HT/VHT40, M0 to M7 | 4 | 6 | -86.5 | -86.8 | -86.7 | -86.5 | 0.1 | -74.5 | -41.25 | 33.25 |
| | HE40, M0 to M9 1ss | 4 | 6 | -86.0 | -86.3 | -87.1 | -86.4 | 0.1 | -74.3 | -41.25 | 33.04 |
| | | | | | | | | | | | |
| 5290 | Non HT80, 6 to 54 Mbps | 4 | 6 | -86.4 | -86.5 | -86.8 | -86.8 | 0.1 | -74.6 | -41.25 | 33.30 |
| | VHT80, M0 to M9 1ss | 4 | 6 | -86.5 | -86.9 | -86.7 | -86.7 | 0.2 | -74.5 | -41.25 | 33.21 |
| | HE80, M0 to M9 1ss | 4 | 6 | -86.2 | -86.6 | -86.9 | -86.7 | 0.3 | -74.3 | -41.25 | 33.07 |
| | | | | | | | | | | | |
| 5300 | Non HT20, 6 to 54 Mbps | 4 | 6 | -86.1 | -86.4 | -86.9 | -86.3 | 0.1 | -74.3 | -41.25 | 33.09 |
| | **HT/VHT20, M0 to M7** | **4** | **6** | **-86.1** | **-86.1** | **-86.4** | **-86.2** | **0.1** | **-74.1** | **-41.25** | **32.88** |
| | HE20, M0 to M9 1ss | 4 | 6 | -86.3 | -86.5 | -86.6 | -86.0 | 0.1 | -74.3 | -41.25 | 33.01 |
| | | | | | | | | | | | |
| 5310 | Non HT40, 6 to 54 Mbps | 4 | 6 | -86.2 | -86.6 | -86.8 | -86.6 | 0.1 | -74.5 | -41.25 | 33.22 |
| | HT/VHT40, M0 to M7 | 4 | 6 | -85.9 | -86.7 | -86.7 | -86.5 | 0.1 | -74.4 | -41.25 | 33.11 |
| | HE40, M0 to M9 1ss | 4 | 6 | -86.3 | -86.4 | -86.5 | -86.3 | 0.1 | -74.3 | -41.25 | 33.04 |
| | | | | | | | | | | | |
| 5320 | Non HT20, 6 to 54 Mbps | 4 | 6 | -86.4 | -86.5 | -86.5 | -86.3 | 0.1 | -74.4 | -41.25 | 33.10 |
| | HT/VHT20, M0 to M7 | 4 | 6 | -86.1 | -86.5 | -86.7 | -86.5 | 0.1 | -74.4 | -41.25 | 33.12 |
| | HE20, M0 to M9 1ss | 4 | 6 | -86.2 | -86.4 | -86.3 | -86.1 | 0.1 | -74.2 | -41.25 | 32.91 |
| | | | | | | | | | | | |
| 5250 | Non HT160, 6 to 54 Mbps | 4 | 6 | -86.4 | -86.3 | -86.7 | -86.4 | 0.1 | -74.4 | -41.25 | 33.13 |
| | VHT160, M0 to M9 1ss | 4 | 6 | -86.3 | -86.6 | -86.6 | -86.5 | 0.1 | -74.4 | -41.25 | 33.17 |
| | HE160, M0 to M9 1ss | 4 | 6 | -86.1 | -86.3 | -86.5 | -86.4 | 0.1 | -74.2 | -41.25 | 32.98 |



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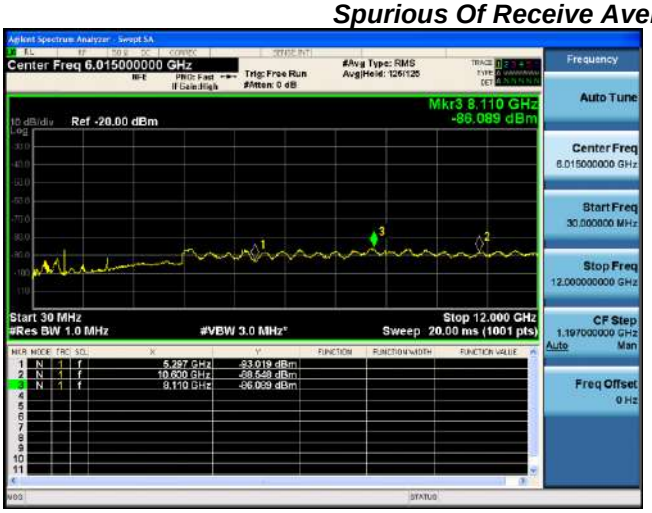
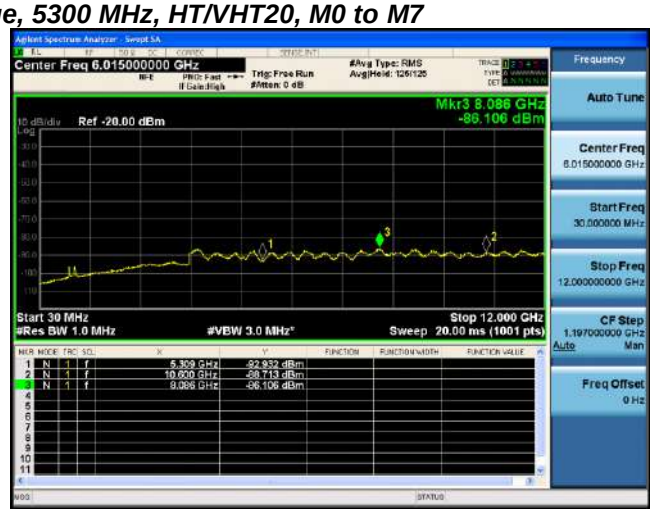
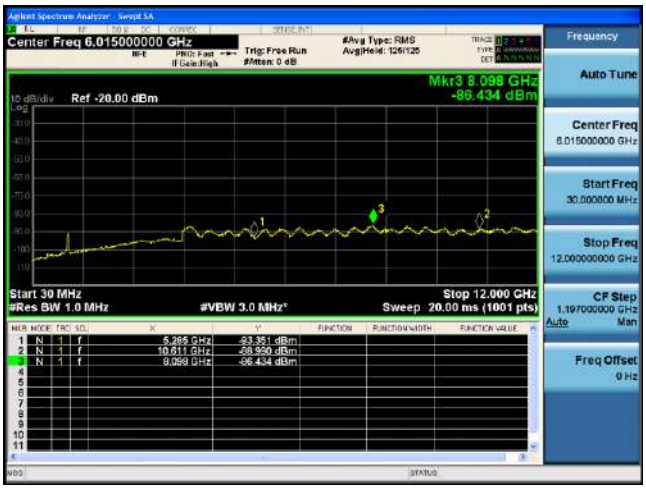
***Spurious Of Receive Average, 5300 MHz, HT/VHT20, M0 to M7***




***Antenna A***




***Antenna B***




***Antenna C***

***Antenna D***



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| Frequency (MHz) | Mode | Tx Paths | Correlated Antenna Gain (dBi) | Rx 1 Spur Power (dBm) | Rx 2 Spur Power (dBm) | Rx 3 Spur Power (dBm) | Rx 4 Spur Power (dBm) | Total Conducted Spur (dBm) | Limit (dBm) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 5260 | Non HT20, 6 to 54 Mbps | 4 | 6 | -68.6 | -68.7 | -69.6 | -69.1 | -56.9 | -21.25 | 35.66 |
| | HT/VHT20, M0 to M7 | 4 | 6 | -69.2 | -68.9 | -68.9 | -68.2 | -56.7 | -21.25 | 35.46 |
| | HE20, M0 to M9 1ss | 4 | 6 | -68.3 | -69.7 | -69.7 | -70.0 | -57.3 | -21.25 | 36.03 |
| 5270 | Non HT40, 6 to 54 Mbps | 4 | 6 | -68.7 | -69.1 | -69.8 | -68.6 | -57.0 | -21.25 | 35.71 |
| | HT/VHT40, M0 to M7 | 4 | 6 | -69.8 | -68.4 | -69.6 | -69.3 | -57.1 | -21.25 | 35.87 |
| | HE40, M0 to M9 1ss | 4 | 6 | -69.2 | -68.9 | -69.5 | -68.3 | -56.8 | -21.25 | 35.56 |
| 5290 | Non HT80, 6 to 54 Mbps | 4 | 6 | -68.9 | -69.6 | -69.6 | -68.9 | -57.2 | -21.25 | 35.91 |
| | **VHT80, M0 to M9 1ss** | **4** | **6** | **-69.0** | **-67.7** | **-68.3** | **-68.4** | **-56.1** | **-21.25** | **34.84** |
| | HE80, M0 to M9 1ss | 4 | 6 | -68.9 | -68.8 | -69.2 | -69.2 | -56.8 | -21.25 | 35.50 |
| 5300 | Non HT20, 6 to 54 Mbps | 4 | 6 | -69.4 | -69.6 | -67.8 | -68.9 | -56.8 | -21.25 | 35.55 |
| | HT/VHT20, M0 to M7 | 4 | 6 | -69.0 | -69.4 | -69.5 | -69.2 | -57.2 | -21.25 | 35.95 |
| | HE20, M0 to M9 1ss | 4 | 6 | -69.0 | -68.8 | -69.7 | -68.6 | -56.9 | -21.25 | 35.67 |
| 5310 | Non HT40, 6 to 54 Mbps | 4 | 6 | -69.2 | -68.9 | -68.9 | -69.0 | -56.9 | -21.25 | 35.68 |
| | HT/VHT40, M0 to M7 | 4 | 6 | -68.7 | -69.5 | -69.6 | -68.4 | -56.9 | -21.25 | 35.70 |
| | HE40, M0 to M9 1ss | 4 | 6 | -68.7 | -69.5 | -69.7 | -69.1 | -57.1 | -21.25 | 35.89 |
| 5320 | Non HT20, 6 to 54 Mbps | 4 | 6 | -67.4 | -69.6 | -69.7 | -69.2 | -56.8 | -21.25 | 35.55 |
| | HT/VHT20, M0 to M7 | 4 | 6 | -68.7 | -69.3 | -69.6 | -69.4 | -57.2 | -21.25 | 35.91 |
| | HE20, M0 to M9 1ss | 4 | 6 | -68.0 | -67.9 | -69.3 | -69.8 | -56.6 | -21.25 | 35.34 |
| 5250 | Non HT160, 6 to 54 Mbps | 4 | 6 | -69.0 | -69.6 | -69.3 | -68.9 | -57.1 | -21.25 | 35.87 |
| | VHT160, M0 to M9 1ss | 4 | 6 | -68.4 | -69.4 | -69.3 | -69.6 | -57.1 | -21.25 | 35.83 |
| | HE160, M0 to M9 1ss | 4 | 6 | -68.7 | -69.0 | -69.6 | -69.2 | -57.0 | -21.25 | 35.77 |



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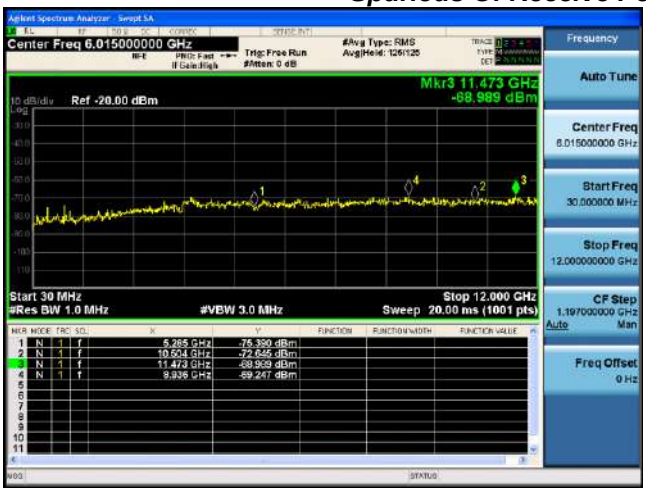
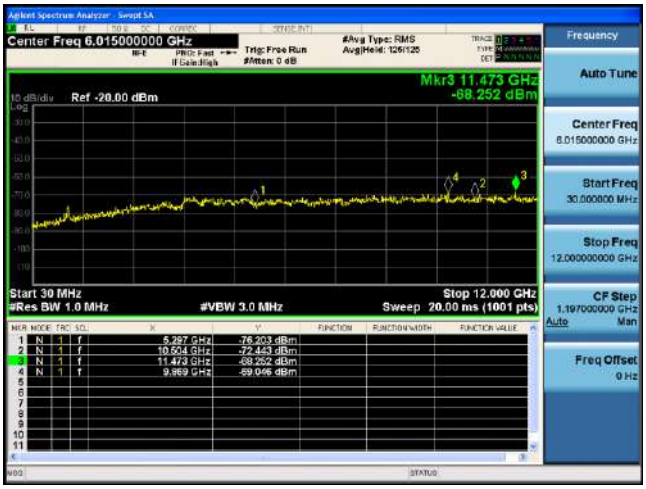
***Spurious Of Receive Peak, 5290 MHz, VHT80, M0 to M9 1ss***




***Antenna A***

***Antenna B***




***Antenna C***

***Antenna D***



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# A.7 Conducted Bandedge

## Conducted Band Edge Test Requirement

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

**(2)** For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.
**(6)** Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209.
(**7)** The provisions of §15.205 apply to intentional radiators operating under this section.
**(8)** When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the upper and lower frequency band edges as the design of the equipment permits.

**KDB 789033 D02 General UNII Test Procedures New Rules v02r01**

**2. Unwanted Emissions that fall Outside of the Restricted Bands**

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

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

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

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

## Conducted Band Edge Test Procedure

**KDB 789033 D02 General UNII Test Procedures New Rules v02r01**

**Ref.** ANSI C63.10: 2013

| **Conducted Spurious Emissions**<br>Test Procedure |
|---|
| 1. Connect the antenna port(s) to the spectrum analyzer input.<br>2. Place the radio in continuous transmit mode<br>3. Configure Spectrum analyzer as per test parameters below (be sure to enter all losses between the transmitter output and the spectrum analyzer).<br>4. Use the peak marker function to determine the maximum spurs amplitude level.<br>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. (see ANSI C63.10:2013 section 14.3.2.2)<br>6. Capture graphs and record pertinent measurement data. |

**Ref. ANSI C63.10: 2013 section 12.7.6 (Peak) and 12.7.7.2 (Average)**
**KDB 789033 D02 General UNII Test Procedures New Rules v02r01, Sec. 5 (Peak), Sec. 6 (Average Method AD)**

| **Conducted Spurious Emissions**<br>Test parameters |
|---|



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| **Peak** | **Average** |
|---|---|
| RBW = 1 MHz<br>VBW ≥ 3 MHz<br>Sweep = Auto<br>Detector = Peak<br>Trace = Max Hold. | RBW = 1 MHz<br>VBW ≥ 3 MHz<br>Sweep = Auto<br>Detector = RMS<br>Power Averaging |

**Samples, Systems, and Modes**

| System Number | Description | Samples | System under test | Support equipment |
|---|---|---|---|---|
| 1 | EUT | S01 | ☑ | ☐ |
| | Support | S02 | ☐ | ☑ |

| **Tested By :** | **Date of testing:** |
|---|---|
| Chris Blair | 30-Aug-19 - 15-Sep-19 |
| **Test Result : PASS** | |

**Test Equipment**

See Appendix C for list of test equipment



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| Frequency (MHz) | Mode | Tx Paths | Correlated Antenna Gain (dBi) | Tx 1 Bandedge Level (dBm) | Tx 2 Bandedge Level (dBm) | Tx 3 Bandedge Level (dBm) | Tx 4 Bandedge Level (dBm) | Duty Cycle Correction (dB) | Total Tx Bandedge Level (dBm) | Limit (dBm) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5290 | Non HT80, 6 to 54 Mbps | 1 | 6 | -49.2 | | | | 0.1 | -43.1 | -41.25 | 1.90 |
| | Non HT80, 6 to 54 Mbps | 2 | 6 | -49.2 | -55.9 | | | 0.1 | -42.3 | -41.25 | 1.06 |
| | Non HT80, 6 to 54 Mbps | 3 | 6 | -52.4 | -57.0 | -55.0 | | 0.1 | -43.6 | -41.25 | 2.32 |
| | Non HT80, 6 to 54 Mbps | 4 | 6 | -52.4 | -57.0 | -55.0 | -56.9 | 0.1 | -42.8 | -41.25 | 1.58 |
| | VHT80, M0 to M9 1ss | 1 | 6 | -47.8 | | | | 0.2 | -41.6 | -41.25 | 0.33 |
| | VHT80, M0 to M9 1ss | 2 | 6 | -50.5 | -55.8 | | | 0.2 | -43.2 | -41.25 | 1.91 |
| | VHT80, M0 to M9 2ss | 2 | 6 | -50.5 | -55.8 | | | 0.2 | -43.2 | -41.25 | 1.91 |
| | VHT80, M0 to M9 1ss | 3 | 6 | -50.5 | -55.8 | -54.7 | | 0.2 | -42.0 | -41.25 | 0.79 |
| | VHT80, M0 to M9 2ss | 3 | 6 | -50.5 | -55.8 | -54.7 | | 0.2 | -42.0 | -41.25 | 0.79 |
| | VHT80, M0 to M9 3ss | 3 | 6 | -50.5 | -55.8 | -54.7 | | 0.2 | -42.0 | -41.25 | 0.79 |
| | **VHT80, M0 to M9 1ss** | **4** | **6** | **-50.5** | **-55.8** | **-54.7** | **-55.3** | **0.2** | **-41.3** | **-41.25** | **0.01** |
| | VHT80, M0 to M9 2ss | 4 | 6 | -50.5 | -55.8 | -54.7 | -55.3 | 0.2 | -41.3 | -41.25 | 0.01 |
| | VHT80, M0 to M9 3ss | 4 | 6 | -50.5 | -55.8 | -54.7 | -55.3 | 0.2 | -41.3 | -41.25 | 0.01 |
| | VHT80, M0 to M9 4ss | 4 | 6 | -50.5 | -55.8 | -54.7 | -55.3 | 0.2 | -41.3 | -41.25 | 0.01 |
| | VHT80 Beam Forming, M0 to M9 1ss | 2 | 9 | -53.6 | -56.9 | | | 0.2 | -42.7 | -41.25 | 1.47 |
| | VHT80 Beam Forming, M0 to M9 2ss | 2 | 6 | -50.5 | -55.8 | | | 0.2 | -43.2 | -41.25 | 1.91 |
| | VHT80 Beam Forming, M0 to M9 1ss | 3 | 11 | -56.5 | -58.7 | -58.0 | | 0.2 | -41.6 | -41.25 | 0.40 |
| | VHT80 Beam Forming, M0 to M9 2ss | 3 | 8 | -53.6 | -56.9 | -56.5 | | 0.2 | -42.4 | -41.25 | 1.17 |
| | VHT80 Beam Forming, M0 to M9 3ss | 3 | 6 | -50.5 | -55.8 | -54.7 | | 0.2 | -42.0 | -41.25 | 0.79 |
| | VHT80 Beam Forming, M0 to M9 1ss | 4 | 12 | -59.5 | -61.4 | -59.8 | -61.3 | 0.2 | -42.2 | -41.25 | 0.93 |
| | VHT80 Beam Forming, M0 to M9 2ss | 4 | 9 | -56.5 | -58.7 | -58.0 | -58.9 | 0.2 | -42.7 | -41.25 | 1.43 |
| | VHT80 Beam Forming, M0 to M9 3ss | 4 | 7 | -53.6 | -56.9 | -56.5 | -56.3 | 0.2 | -42.4 | -41.25 | 1.12 |
| | VHT80 Beam Forming, M0 to M9 4ss | 4 | 6 | -50.5 | -55.8 | -54.7 | -55.3 | 0.2 | -41.3 | -41.25 | 0.01 |
| | VHT80 STBC, M0 to M9 1ss | 2 | 6 | -50.5 | -55.8 | | | 0.2 | -43.2 | -41.25 | 1.91 |
| | VHT80 STBC, M0 to M9 1ss | 3 | 6 | -50.5 | -55.8 | -54.7 | | 0.2 | -42.0 | -41.25 | 0.79 |
| | VHT80 STBC, M0 to M9 1ss | 4 | 6 | -50.5 | -55.8 | -54.7 | -55.3 | 0.2 | -41.3 | -41.25 | 0.01 |
| | HE80, M0 to M9 1ss | 1 | 6 | -50.6 | | | | 0.3 | -44.3 | -41.25 | 3.10 |
| | HE80, M0 to M9 1ss | 2 | 6 | -50.6 | -56.7 | | | 0.3 | -43.4 | -41.25 | 2.15 |
| | HE80, M0 to M9 2ss | 2 | 6 | -50.6 | -56.7 | | | 0.3 | -43.4 | -41.25 | 2.15 |
| | HE80, M0 to M9 1ss | 3 | 6 | -50.6 | -56.7 | -54.1 | | 0.3 | -42.1 | -41.25 | 0.82 |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | HE80, M0 to M9 2ss | 3 | 6 | -50.6 | -56.7 | -54.1 | | 0.3 | -42.1 | -41.25 | 0.82 |
| | HE80, M0 to M9 3ss | 3 | 6 | -50.6 | -56.7 | -54.1 | | 0.3 | -42.1 | -41.25 | 0.82 |
| | HE80, M0 to M9 1ss | 4 | 6 | -53.1 | -57.2 | -55.8 | -56.9 | 0.3 | -43.2 | -41.25 | 1.90 |
| | HE80, M0 to M9 2ss | 4 | 6 | -53.1 | -57.2 | -55.8 | -56.9 | 0.3 | -43.2 | -41.25 | 1.90 |
| | HE80, M0 to M9 3ss | 4 | 6 | -53.1 | -57.2 | -55.8 | -56.9 | 0.3 | -43.2 | -41.25 | 1.90 |
| | HE80, M0 to M9 4ss | 4 | 6 | -53.1 | -57.2 | -55.8 | -56.9 | 0.3 | -43.2 | -41.25 | 1.90 |
| | HE80 Beam Forming, M0 to M9 1ss | 2 | 9 | -53.1 | -57.2 | | | 0.3 | -42.4 | -41.25 | 1.17 |
| | HE80 Beam Forming, M0 to M9 2ss | 2 | 6 | -50.6 | -56.7 | | | 0.3 | -43.4 | -41.25 | 2.15 |
| | HE80 Beam Forming, M0 to M9 1ss | 3 | 11 | -57.6 | -59.9 | -58.4 | | 0.3 | -42.5 | -41.25 | 1.26 |
| | HE80 Beam Forming, M0 to M9 2ss | 3 | 8 | -53.1 | -57.2 | -55.8 | | 0.3 | -42.0 | -41.25 | 0.75 |
| | HE80 Beam Forming, M0 to M9 3ss | 3 | 6 | -50.6 | -56.7 | -54.1 | | 0.3 | -42.1 | -41.25 | 0.82 |
| | HE80 Beam Forming, M0 to M9 1ss | 4 | 12 | -59.5 | -60.3 | -59.7 | -60.9 | 0.3 | -41.8 | -41.25 | 0.55 |
| | HE80 Beam Forming, M0 to M9 2ss | 4 | 9 | -55.3 | -58.0 | -57.3 | -58.1 | 0.3 | -41.7 | -41.25 | 0.50 |
| | HE80 Beam Forming, M0 to M9 3ss | 4 | 7 | -53.1 | -57.2 | -55.8 | -56.9 | 0.3 | -42.2 | -41.25 | 0.90 |
| | HE80 Beam Forming, M0 to M9 4ss | 4 | 6 | -53.1 | -57.2 | -55.8 | -56.9 | 0.3 | -43.2 | -41.25 | 1.90 |
| | HE80 STBC, M0 to M9 1ss | 2 | 6 | -50.6 | -56.7 | | | 0.3 | -43.4 | -41.25 | 2.15 |
| | HE80 STBC, M0 to M9 1ss | 3 | 6 | -50.6 | -56.7 | -54.1 | | 0.3 | -42.1 | -41.25 | 0.82 |
| | HE80 STBC, M0 to M9 1ss | 4 | 6 | -53.1 | -57.2 | -55.8 | -56.9 | 0.3 | -43.2 | -41.25 | 1.90 |
| | | | | | | | | | | | |
| 5310 | Non HT40, 6 to 54 Mbps | 1 | 6 | -48.2 | | | | 0.1 | -42.1 | -41.25 | 0.90 |
| | Non HT40, 6 to 54 Mbps | 2 | 6 | -51.1 | -55.4 | | | 0.1 | -43.7 | -41.25 | 2.43 |
| | Non HT40, 6 to 54 Mbps | 3 | 6 | -51.1 | -55.4 | -56.1 | | 0.1 | -42.8 | -41.25 | 1.53 |
| | Non HT40, 6 to 54 Mbps | 4 | 6 | -51.1 | -55.4 | -56.1 | -55.6 | 0.1 | -41.9 | -41.25 | 0.70 |
| | HT/VHT40, M0 to M7 | 1 | 6 | -49.4 | | | | 0.1 | -43.3 | -41.25 | 2.10 |
| | HT/VHT40, M0 to M7 | 2 | 6 | -49.4 | -54.1 | | | 0.1 | -42.1 | -41.25 | 0.83 |
| | HT/VHT40, M8 to M15 | 2 | 6 | -49.4 | -54.1 | | | 0.1 | -42.1 | -41.25 | 0.83 |
| | HT/VHT40, M0 to M7 | 3 | 6 | -49.4 | -54.1 | -55.5 | | 0.1 | -41.3 | -41.25 | 0.10 |
| | HT/VHT40, M8 to M15 | 3 | 6 | -49.4 | -54.1 | -55.5 | | 0.1 | -41.3 | -41.25 | 0.10 |
| | HT/VHT40, M16 to M23 | 3 | 6 | -49.4 | -54.1 | -55.5 | | 0.1 | -41.3 | -41.25 | 0.10 |
| | HT/VHT40, M0 to M7 | 4 | 6 | -52.0 | -56.1 | -56.9 | -56.4 | 0.1 | -42.8 | -41.25 | 1.53 |
| | HT/VHT40, M8 to M15 | 4 | 6 | -52.0 | -56.1 | -56.9 | -56.4 | 0.1 | -42.8 | -41.25 | 1.53 |
| | HT/VHT40, M16 to M23 | 4 | 6 | -52.0 | -56.1 | -56.9 | -56.4 | 0.1 | -42.8 | -41.25 | 1.53 |
| | HT/VHT40, M24 to M31 | 4 | 6 | -52.0 | -56.1 | -56.9 | -56.4 | 0.1 | -42.8 | -41.25 | 1.53 |
| | HT/VHT40 Beam Forming, M0 to M7 | 2 | 9 | -52.0 | -56.1 | | | 0.1 | -41.5 | -41.25 | 0.27 |
| | HT/VHT40 Beam Forming, M8 to M15 | 2 | 6 | -49.4 | -54.1 | | | 0.1 | -42.1 | -41.25 | 0.83 |
| | HT/VHT40 Beam Forming, M0 to M7 | 3 | 11 | -57.7 | -58.3 | -59.3 | | 0.1 | -42.6 | -41.25 | 1.31 |
| | HT/VHT40 Beam Forming, M8 to M15 | 3 | 8 | -52.0 | -56.1 | -56.9 | | 0.1 | -41.6 | -41.25 | 0.36 |
| | HT/VHT40 Beam Forming, M16 to M23 | 3 | 6 | -49.4 | -54.1 | -55.5 | | 0.1 | -41.3 | -41.25 | 0.10 |
| | HT/VHT40 Beam Forming, M0 to M7 | 4 | 12 | -59.0 | -59.2 | -60.3 | -61.3 | 0.1 | -41.8 | -41.25 | 0.53 |
| | HT/VHT40 Beam Forming, M8 to M15 | 4 | 9 | -54.7 | -56.9 | -58.3 | -58.9 | 0.1 | -41.8 | -41.25 | 0.56 |
| | HT/VHT40 Beam Forming, M16 to M23 | 4 | 7 | -52.0 | -56.1 | -56.9 | -56.4 | 0.1 | -41.8 | -41.25 | 0.53 |
| | HT/VHT40 Beam Forming, M24 to M31 | 4 | 6 | -52.0 | -56.1 | -56.9 | -56.4 | 0.1 | -42.8 | -41.25 | 1.53 |



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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | HT/VHT40 STBC, M0 to M7 | 2 | 6 | -49.4 | -54.1 | | | 0.1 | -42.1 | -41.25 | 0.83 |
| | HT/VHT40 STBC, M0 to M7 | 3 | 6 | -49.4 | -54.1 | -55.5 | | 0.1 | -41.3 | -41.25 | 0.10 |
| | HT/VHT40 STBC, M0 to M7 | 4 | 6 | -52.0 | -56.1 | -56.9 | -56.4 | 0.1 | -42.8 | -41.25 | 1.53 |
| | HE40, M0 to M9 1ss | 1 | 6 | -51.0 | | | | 0.1 | -44.9 | -41.25 | 3.68 |
| | HE40, M0 to M9 1ss | 2 | 6 | -51.0 | -55.6 | | | 0.1 | -43.6 | -41.25 | 2.39 |
| | HE40, M0 to M9 2ss | 2 | 6 | -51.0 | -55.6 | | | 0.1 | -43.6 | -41.25 | 2.39 |
| | HE40, M0 to M9 1ss | 3 | 6 | -51.0 | -55.6 | -56.6 | | 0.1 | -42.8 | -41.25 | 1.58 |
| | HE40, M0 to M9 2ss | 3 | 6 | -51.0 | -55.6 | -56.6 | | 0.1 | -42.8 | -41.25 | 1.58 |
| | HE40, M0 to M9 3ss | 3 | 6 | -51.0 | -55.6 | -56.6 | | 0.1 | -42.8 | -41.25 | 1.58 |
| | HE40, M0 to M9 1ss | 4 | 6 | -51.0 | -55.6 | -56.6 | -55.8 | 0.1 | -42.0 | -41.25 | 0.77 |
| | HE40, M0 to M9 2ss | 4 | 6 | -51.0 | -55.6 | -56.6 | -55.8 | 0.1 | -42.0 | -41.25 | 0.77 |
| | HE40, M0 to M9 3ss | 4 | 6 | -51.0 | -55.6 | -56.6 | -55.8 | 0.1 | -42.0 | -41.25 | 0.77 |
| | HE40, M0 to M9 4ss | 4 | 6 | -51.0 | -55.6 | -56.6 | -55.8 | 0.1 | -42.0 | -41.25 | 0.77 |
| | HE40 Beam Forming, M0 to M9 1ss | 2 | 9 | -53.9 | -56.2 | | | 0.1 | -42.8 | -41.25 | 1.57 |
| | HE40 Beam Forming, M0 to M9 2ss | 2 | 6 | -51.0 | -55.6 | | | 0.1 | -43.6 | -41.25 | 2.39 |
| | HE40 Beam Forming, M0 to M9 1ss | 3 | 11 | -56.6 | -57.9 | -59.0 | | 0.1 | -41.9 | -41.25 | 0.63 |
| | HE40 Beam Forming, M0 to M9 2ss | 3 | 8 | -53.9 | -56.2 | -57.9 | | 0.1 | -42.9 | -41.25 | 1.60 |
| | HE40 Beam Forming, M0 to M9 3ss | 3 | 6 | -51.0 | -55.6 | -56.6 | | 0.1 | -42.8 | -41.25 | 1.58 |
| | HE40 Beam Forming, M0 to M9 1ss | 4 | 12 | -60.4 | -60.4 | -61.6 | -61.8 | 0.1 | -42.9 | -41.25 | 1.66 |
| | HE40 Beam Forming, M0 to M9 2ss | 4 | 9 | -56.6 | -57.9 | -59.0 | -58.7 | 0.1 | -42.9 | -41.25 | 1.61 |
| | HE40 Beam Forming, M0 to M9 3ss | 4 | 7 | -53.9 | -56.2 | -57.9 | -57.9 | 0.1 | -43.1 | -41.25 | 1.81 |
| | HE40 Beam Forming, M0 to M9 4ss | 4 | 6 | -51.0 | -55.6 | -56.6 | -55.8 | 0.1 | -42.0 | -41.25 | 0.77 |
| | HE40 STBC, M0 to M9 2ss | 2 | 6 | -51.0 | -55.6 | | | 0.1 | -43.6 | -41.25 | 2.39 |
| | HE40 STBC, M0 to M9 2ss | 3 | 6 | -51.0 | -55.6 | -56.6 | | 0.1 | -42.8 | -41.25 | 1.58 |
| | HE40 STBC, M0 to M9 2ss | 4 | 6 | -51.0 | -55.6 | -56.6 | -55.8 | 0.1 | -42.0 | -41.25 | 0.77 |
| | | | | | | | | | | | |
| 5320 | Non HT20, 6 to 54 Mbps | 1 | 6 | -47.8 | | | | 0.1 | -41.7 | -41.25 | 0.50 |
| | Non HT20, 6 to 54 Mbps | 2 | 6 | -51.6 | -56.3 | | | 0.1 | -44.3 | -41.25 | 3.03 |
| | Non HT20, 6 to 54 Mbps | 3 | 6 | -59.5 | -59.7 | -60.7 | | 0.1 | -49.1 | -41.25 | 7.86 |
| | Non HT20, 6 to 54 Mbps | 4 | 6 | -60.9 | -61.6 | -61.8 | -62.5 | 0.1 | -49.6 | -41.25 | 8.34 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 2 | 9 | -51.6 | -56.3 | | | 0.1 | -41.3 | -41.25 | 0.03 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 3 | 11 | -59.5 | -59.7 | -60.7 | | 0.1 | -44.1 | -41.25 | 2.86 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 4 | 12 | -60.9 | -61.6 | -61.8 | -62.5 | 0.1 | -43.6 | -41.25 | 2.34 |
| | HT/VHT20, M0 to M7 | 1 | 6 | -48.6 | | | | 0.1 | -42.5 | -41.25 | 1.30 |
| | HT/VHT20, M0 to M7 | 2 | 6 | -48.6 | -56.6 | | | 0.1 | -41.9 | -41.25 | 0.66 |
| | HT/VHT20, M8 to M15 | 2 | 6 | -48.6 | -56.6 | | | 0.1 | -41.9 | -41.25 | 0.66 |
| | HT/VHT20, M0 to M7 | 3 | 6 | -59.3 | -60.1 | -59.9 | | 0.1 | -48.9 | -41.25 | 7.68 |
| | HT/VHT20, M8 to M15 | 3 | 6 | -48.6 | -56.6 | -56.5 | | 0.1 | -41.3 | -41.25 | 0.09 |
| | HT/VHT20, M16 to M23 | 3 | 6 | -48.6 | -56.6 | -56.5 | | 0.1 | -41.3 | -41.25 | 0.09 |
| | HT/VHT20, M0 to M7 | 4 | 6 | -62.0 | -61.9 | -62.0 | -63.3 | 0.1 | -50.2 | -41.25 | 8.94 |
| | HT/VHT20, M8 to M15 | 4 | 6 | -57.0 | -58.6 | -58.8 | -59.2 | 0.1 | -46.2 | -41.25 | 4.99 |
| | HT/VHT20, M16 to M23 | 4 | 6 | -53.3 | -57.8 | -57.2 | -57.5 | 0.1 | -43.9 | -41.25 | 2.69 |



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|---|---|---|---|---|---|---|---|---|---|---|---|
| | HT/VHT20, M24 to M31 | 4 | 6 | -53.3 | -57.8 | -57.2 | -57.5 | 0.1 | -43.9 | -41.25 | 2.69 |
| | HT/VHT20 Beam Forming, M0 to M7 | 2 | 9 | -53.3 | -57.8 | | | 0.1 | -42.9 | -41.25 | 1.68 |
| | HT/VHT20 Beam Forming, M8 to M15 | 2 | 6 | -48.6 | -56.6 | | | 0.1 | -41.9 | -41.25 | 0.66 |
| | HT/VHT20 Beam Forming, M0 to M7 | 3 | 11 | -59.3 | -60.1 | -59.9 | | 0.1 | -43.9 | -41.25 | 2.68 |
| | HT/VHT20 Beam Forming, M8 to M15 | 3 | 8 | -53.3 | -57.8 | -57.2 | | 0.1 | -42.8 | -41.25 | 1.54 |
| | HT/VHT20 Beam Forming, M16 to M23 | 3 | 6 | -48.6 | -56.6 | -56.5 | | 0.1 | -41.3 | -41.25 | 0.09 |
| | HT/VHT20 Beam Forming, M0 to M7 | 4 | 12 | -62.0 | -61.9 | -62.0 | -63.3 | 0.1 | -44.2 | -41.25 | 2.94 |
| | HT/VHT20 Beam Forming, M8 to M15 | 4 | 9 | -57.0 | -58.6 | -58.8 | -59.2 | 0.1 | -43.2 | -41.25 | 1.99 |
| | HT/VHT20 Beam Forming, M16 to M23 | 4 | 7 | -53.3 | -57.8 | -57.2 | -57.5 | 0.1 | -42.9 | -41.25 | 1.69 |
| | HT/VHT20 Beam Forming, M24 to M31 | 4 | 6 | -53.3 | -57.8 | -57.2 | -57.5 | 0.1 | -43.9 | -41.25 | 2.69 |
| | HT/VHT20 STBC, M0 to M7 | 2 | 6 | -48.6 | -56.6 | | | 0.1 | -41.9 | -41.25 | 0.66 |
| | HT/VHT20 STBC, M0 to M7 | 3 | 6 | -48.6 | -56.6 | -56.5 | | 0.1 | -41.3 | -41.25 | 0.09 |
| | HT/VHT20 STBC, M0 to M7 | 4 | 6 | -57.0 | -58.6 | -58.8 | -59.2 | 0.1 | -46.2 | -41.25 | 4.99 |
| | HE20, M0 to M9 1ss | 1 | 6 | -49.9 | | | | 0.1 | -43.8 | -41.25 | 2.58 |
| | HE20, M0 to M9 1ss | 2 | 6 | -49.9 | -56.1 | | | 0.1 | -42.9 | -41.25 | 1.65 |
| | HE20, M0 to M9 2ss | 2 | 6 | -49.9 | -56.1 | | | 0.1 | -42.9 | -41.25 | 1.65 |
| | HE20, M0 to M9 1ss | 3 | 6 | -57.8 | -59.1 | -58.8 | | 0.1 | -47.7 | -41.25 | 6.44 |
| | HE20, M0 to M9 2ss | 3 | 6 | -49.9 | -56.1 | -56.6 | | 0.1 | -42.2 | -41.25 | 0.96 |
| | HE20, M0 to M9 3ss | 3 | 6 | -49.9 | -56.1 | -56.6 | | 0.1 | -42.2 | -41.25 | 0.96 |
| | HE20, M0 to M9 1ss | 4 | 6 | -60.4 | -60.9 | -60.9 | -61.6 | 0.1 | -48.8 | -41.25 | 7.59 |
| | HE20, M0 to M9 2ss | 4 | 6 | -54.9 | -57.3 | -57.4 | -58.7 | 0.1 | -44.8 | -41.25 | 3.51 |
| | HE20, M0 to M9 3ss | 4 | 6 | -49.9 | -56.1 | -56.6 | -56.5 | 0.1 | -41.6 | -41.25 | 0.35 |
| | HE20, M0 to M9 4ss | 4 | 6 | -49.9 | -56.1 | -56.6 | -56.5 | 0.1 | -41.6 | -41.25 | 0.35 |
| | HE20 Beam Forming, M0 to M9 1ss | 2 | 9 | -54.9 | -57.3 | | | 0.1 | -43.9 | -41.25 | 2.61 |
| | HE20 Beam Forming, M0 to M9 2ss | 2 | 6 | -49.9 | -56.1 | | | 0.1 | -42.9 | -41.25 | 1.65 |
| | HE20 Beam Forming, M0 to M9 1ss | 3 | 11 | -57.8 | -59.1 | -58.8 | | 0.1 | -42.7 | -41.25 | 1.44 |
| | HE20 Beam Forming, M0 to M9 2ss | 3 | 8 | -54.9 | -57.3 | -57.4 | | 0.1 | -43.5 | -41.25 | 2.28 |
| | HE20 Beam Forming, M0 to M9 3ss | 3 | 6 | -49.9 | -56.1 | -56.6 | | 0.1 | -42.2 | -41.25 | 0.96 |
| | HE20 Beam Forming, M0 to M9 1ss | 4 | 12 | -60.4 | -60.9 | -60.9 | -61.6 | 0.1 | -42.8 | -41.25 | 1.59 |
| | HE20 Beam Forming, M0 to M9 2ss | 4 | 9 | -54.9 | -57.3 | -57.4 | -58.7 | 0.1 | -41.8 | -41.25 | 0.51 |
| | HE20 Beam Forming, M0 to M9 3ss | 4 | 7 | -54.9 | -57.3 | -57.4 | -58.7 | 0.1 | -43.8 | -41.25 | 2.51 |
| | HE20 Beam Forming, M0 to M9 4ss | 4 | 6 | -49.9 | -56.1 | -56.6 | -56.5 | 0.1 | -41.6 | -41.25 | 0.35 |
| | HE20 STBC, M0 to M9 2ss | 2 | 6 | -49.9 | -56.1 | | | 0.1 | -42.9 | -41.25 | 1.65 |
| | HE20 STBC, M0 to M9 2ss | 3 | 6 | -49.9 | -56.1 | -56.6 | | 0.1 | -42.2 | -41.25 | 0.96 |
| | HE20 STBC, M0 to M9 2ss | 4 | 6 | -54.9 | -57.3 | -57.4 | -58.7 | 0.1 | -44.8 | -41.25 | 3.51 |
| | | | | | | | | | | | |
| 5250 | Non HT160, 6 to 54 Mbps | 1 | 6 | -50.6 | | | | 0.1 | -44.5 | -41.25 | 3.30 |
| | Non HT160, 6 to 54 Mbps | 2 | 6 | -50.6 | -55.0 | | | 0.1 | -43.2 | -41.25 | 1.95 |
| | Non HT160, 6 to 54 Mbps | 3 | 6 | -50.6 | -55.0 | -54.4 | | 0.1 | -42.0 | -41.25 | 0.80 |
| | Non HT160, 6 to 54 Mbps | 4 | 6 | -50.6 | -55.0 | -54.4 | -55.1 | 0.1 | -41.3 | -41.25 | 0.01 |
| | VHT160, M0 to M9 1ss | 1 | 6 | -50.5 | | | | 0.1 | -44.4 | -41.25 | 3.20 |
| | VHT160, M0 to M9 1ss | 2 | 6 | -50.5 | -54.5 | | | 0.1 | -43.0 | -41.25 | 1.74 |



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|---|---|---|---|---|---|---|---|---|---|---|---|
| | VHT160, M0 to M9 2ss | 2 | 6 | -50.5 | -54.5 | | | 0.1 | -43.0 | -41.25 | 1.74 |
| | VHT160, M0 to M9 1ss | 3 | 6 | -50.5 | -54.5 | -55.2 | | 0.1 | -42.0 | -41.25 | 0.80 |
| | VHT160, M0 to M9 2ss | 3 | 6 | -50.5 | -54.5 | -55.2 | | 0.1 | -42.0 | -41.25 | 0.80 |
| | VHT160, M0 to M9 3ss | 3 | 6 | -50.5 | -54.5 | -55.2 | | 0.1 | -42.0 | -41.25 | 0.80 |
| | VHT160, M0 to M9 1ss | 4 | 6 | -54.5 | -57.0 | -57.3 | -56.5 | 0.1 | -44.1 | -41.25 | 2.85 |
| | VHT160, M0 to M9 2ss | 4 | 6 | -54.5 | -57.0 | -57.3 | -56.5 | 0.1 | -44.1 | -41.25 | 2.85 |
| | VHT160, M0 to M9 3ss | 4 | 6 | -54.5 | -57.0 | -57.3 | -56.5 | 0.1 | -44.1 | -41.25 | 2.85 |
| | VHT160, M0 to M9 4ss | 4 | 6 | -54.5 | -57.0 | -57.3 | -56.5 | 0.1 | -44.1 | -41.25 | 2.85 |
| | VHT160 Beam Forming, M0 to M9 1ss | 2 | 9 | -54.5 | -57.0 | | | 0.1 | -43.5 | -41.25 | 2.26 |
| | VHT160 Beam Forming, M0 to M9 2ss | 2 | 6 | -50.5 | -54.5 | | | 0.1 | -43.0 | -41.25 | 1.74 |
| | VHT160 Beam Forming, M0 to M9 1ss | 3 | 11 | -56.4 | -60.6 | -60.6 | | 0.1 | -42.9 | -41.25 | 1.64 |
| | VHT160 Beam Forming, M0 to M9 2ss | 3 | 8 | -54.5 | -57.0 | -57.3 | | 0.1 | -43.3 | -41.25 | 2.00 |
| | VHT160 Beam Forming, M0 to M9 3ss | 3 | 6 | -50.5 | -54.5 | -55.2 | | 0.1 | -42.0 | -41.25 | 0.80 |
| | VHT160 Beam Forming, M0 to M9 1ss | 4 | 12 | -58.7 | -59.4 | -61.7 | -59.7 | 0.1 | -41.7 | -41.25 | 0.42 |
| | VHT160 Beam Forming, M0 to M9 2ss | 4 | 9 | -56.4 | -60.6 | -60.6 | -59.7 | 0.1 | -43.9 | -41.25 | 2.62 |
| | VHT160 Beam Forming, M0 to M9 3ss | 4 | 7 | -54.5 | -57.0 | -57.3 | -56.5 | 0.1 | -43.1 | -41.25 | 1.85 |
| | VHT160 Beam Forming, M0 to M9 4ss | 4 | 6 | -54.5 | -57.0 | -57.3 | -56.5 | 0.1 | -44.1 | -41.25 | 2.85 |
| | VHT160 STBC, M0 to M9 1ss | 2 | 6 | -50.5 | -54.5 | | | 0.1 | -43.0 | -41.25 | 1.74 |
| | VHT160 STBC, M0 to M9 1ss | 3 | 6 | -50.5 | -54.5 | -55.2 | | 0.1 | -42.0 | -41.25 | 0.80 |
| | VHT160 STBC, M0 to M9 1ss | 4 | 6 | -54.5 | -57.0 | -57.3 | -56.5 | 0.1 | -44.1 | -41.25 | 2.85 |
| | HE160, M0 to M9 1ss | 1 | 6 | -48.1 | | | | 0.1 | -42.0 | -41.25 | 0.78 |
| | HE160, M0 to M9 1ss | 2 | 6 | -50.7 | -56.2 | | | 0.1 | -43.6 | -41.25 | 2.30 |
| | HE160, M0 to M9 2ss | 2 | 6 | -50.7 | -56.2 | | | 0.1 | -43.6 | -41.25 | 2.30 |
| | HE160, M0 to M9 1ss | 3 | 6 | -50.7 | -56.2 | -56.1 | | 0.1 | -42.7 | -41.25 | 1.42 |
| | HE160, M0 to M9 2ss | 3 | 6 | -50.7 | -56.2 | -56.1 | | 0.1 | -42.7 | -41.25 | 1.42 |
| | HE160, M0 to M9 3ss | 3 | 6 | -50.7 | -56.2 | -56.1 | | 0.1 | -42.7 | -41.25 | 1.42 |
| | HE160, M0 to M9 1ss | 4 | 6 | -50.7 | -56.2 | -56.1 | -55.9 | 0.1 | -41.9 | -41.25 | 0.66 |
| | HE160, M0 to M9 2ss | 4 | 6 | -50.7 | -56.2 | -56.1 | -55.9 | 0.1 | -41.9 | -41.25 | 0.66 |
| | HE160, M0 to M9 3ss | 4 | 6 | -50.7 | -56.2 | -56.1 | -55.9 | 0.1 | -41.9 | -41.25 | 0.66 |
| | HE160, M0 to M9 4ss | 4 | 6 | -50.7 | -56.2 | -56.1 | -55.9 | 0.1 | -41.9 | -41.25 | 0.66 |
| | HE160 Beam Forming, M0 to M9 1ss | 2 | 9 | -53.3 | -57.8 | | | 0.1 | -42.9 | -41.25 | 1.66 |
| | HE160 Beam Forming, M0 to M9 2ss | 2 | 6 | -50.7 | -56.2 | | | 0.1 | -43.6 | -41.25 | 2.30 |
| | HE160 Beam Forming, M0 to M9 1ss | 3 | 11 | -56.3 | -59.1 | -58.7 | | 0.1 | -42.0 | -41.25 | 0.76 |
| | HE160 Beam Forming, M0 to M9 2ss | 3 | 8 | -53.3 | -57.8 | -57.4 | | 0.1 | -42.8 | -41.25 | 1.57 |
| | HE160 Beam Forming, M0 to M9 3ss | 3 | 6 | -50.7 | -56.2 | -56.1 | | 0.1 | -42.7 | -41.25 | 1.42 |
| | HE160 Beam Forming, M0 to M9 1ss | 4 | 12 | -57.9 | -60.1 | -60.3 | -61.3 | 0.1 | -41.6 | -41.25 | 0.37 |
| | HE160 Beam Forming, M0 to M9 2ss | 4 | 9 | -56.3 | -59.1 | -58.7 | -59.8 | 0.1 | -43.2 | -41.25 | 1.92 |
| | HE160 Beam Forming, M0 to M9 3ss | 4 | 7 | -53.3 | -57.8 | -57.4 | -58.0 | 0.1 | -43.0 | -41.25 | 1.80 |
| | HE160 Beam Forming, M0 to M9 4ss | 4 | 6 | -50.7 | -56.2 | -56.1 | -55.9 | 0.1 | -41.9 | -41.25 | 0.66 |
| | HE160 STBC, M0 to M9 1ss | 2 | 6 | -50.7 | -56.2 | | | 0.1 | -43.6 | -41.25 | 2.30 |
| | HE160 STBC, M0 to M9 1ss | 3 | 6 | -50.7 | -56.2 | -56.1 | | 0.1 | -42.7 | -41.25 | 1.42 |
| | HE160 STBC, M0 to M9 1ss | 4 | 6 | -50.7 | -56.2 | -56.1 | -55.9 | 0.1 | -41.9 | -41.25 | 0.66 |



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***Conducted Bandedge Average, 5290 MHz, VHT80, M0 to M9 1ss***

***Antenna A***

***Antenna B***

***Antenna C***

***Antenna D***



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| Frequency (MHz) | Mode | Tx Paths | Correlated Antenna Gain (dBi) | Tx 1 Bandedge Level (dBm) | Tx 2 Bandedge Level (dBm) | Tx 3 Bandedge Level (dBm) | Tx 4 Bandedge Level (dBm) | Total Tx Bandedge Level (dBm) | Limit (dBm) | Margin (dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 5290 | Non HT80, 6 to 54 Mbps | 1 | 6 | -32.7 | | | | -26.6 | -21.25 | 5.40 |
| | Non HT80, 6 to 54 Mbps | 2 | 6 | -32.7 | -39.8 | | | -25.9 | -21.25 | 4.63 |
| | Non HT80, 6 to 54 Mbps | 3 | 6 | -37.3 | -44.1 | -40.8 | | -29.1 | -21.25 | 7.81 |
| | Non HT80, 6 to 54 Mbps | 4 | 6 | -37.3 | -44.1 | -40.8 | -41.0 | -28.1 | -21.25 | 6.81 |
| | VHT80, M0 to M9 1ss | 1 | 6 | -30.6 | | | | -24.4 | -21.25 | 3.13 |
| | VHT80, M0 to M9 1ss | 2 | 6 | -33.9 | -44.0 | | | -27.3 | -21.25 | 6.03 |
| | VHT80, M0 to M9 2ss | 2 | 6 | -33.9 | -44.0 | | | -27.3 | -21.25 | 6.03 |
| | VHT80, M0 to M9 1ss | 3 | 6 | -33.9 | -44.0 | -39.8 | | -26.4 | -21.25 | 5.12 |
| | VHT80, M0 to M9 2ss | 3 | 6 | -33.9 | -44.0 | -39.8 | | -26.4 | -21.25 | 5.12 |
| | VHT80, M0 to M9 3ss | 3 | 6 | -33.9 | -44.0 | -39.8 | | -26.4 | -21.25 | 5.12 |
| | VHT80, M0 to M9 1ss | 4 | 6 | -33.9 | -44.0 | -39.8 | -40.2 | -25.7 | -21.25 | 4.42 |
| | VHT80, M0 to M9 2ss | 4 | 6 | -33.9 | -44.0 | -39.8 | -40.2 | -25.7 | -21.25 | 4.42 |
| | VHT80, M0 to M9 3ss | 4 | 6 | -33.9 | -44.0 | -39.8 | -40.2 | -25.7 | -21.25 | 4.42 |
| | VHT80, M0 to M9 4ss | 4 | 6 | -33.9 | -44.0 | -39.8 | -40.2 | -25.7 | -21.25 | 4.42 |
| | VHT80 Beam Forming, M0 to M9 1ss | 2 | 9 | -36.8 | -47.1 | | | -27.2 | -21.25 | 5.95 |
| | VHT80 Beam Forming, M0 to M9 2ss | 2 | 6 | -33.9 | -44.0 | | | -27.3 | -21.25 | 6.03 |
| | VHT80 Beam Forming, M0 to M9 1ss | 3 | 11 | -41.4 | -48.1 | -47.0 | | -28.5 | -21.25 | 7.20 |
| | VHT80 Beam Forming, M0 to M9 2ss | 3 | 8 | -36.8 | -47.1 | -45.0 | | -27.6 | -21.25 | 6.38 |
| | VHT80 Beam Forming, M0 to M9 3ss | 3 | 6 | -33.9 | -44.0 | -39.8 | | -26.4 | -21.25 | 5.12 |
| | VHT80 Beam Forming, M0 to M9 1ss | 4 | 12 | -47.9 | -49.7 | -48.9 | -50.8 | -31.0 | -21.25 | 9.71 |
| | VHT80 Beam Forming, M0 to M9 2ss | 4 | 9 | -41.4 | -48.1 | -47.0 | -47.3 | -29.8 | -21.25 | 8.51 |
| | VHT80 Beam Forming, M0 to M9 3ss | 4 | 7 | -36.8 | -47.1 | -45.0 | -43.0 | -27.9 | -21.25 | 6.62 |
| | VHT80 Beam Forming, M0 to M9 4ss | 4 | 6 | -33.9 | -44.0 | -39.8 | -40.2 | -25.7 | -21.25 | 4.42 |
| | VHT80 STBC, M0 to M9 1ss | 2 | 6 | -33.9 | -44.0 | | | -27.3 | -21.25 | 6.03 |
| | VHT80 STBC, M0 to M9 1ss | 3 | 6 | -33.9 | -44.0 | -39.8 | | -26.4 | -21.25 | 5.12 |
| | VHT80 STBC, M0 to M9 1ss | 4 | 6 | -33.9 | -44.0 | -39.8 | -40.2 | -25.7 | -21.25 | 4.42 |
| | HE80, M0 to M9 1ss | 1 | 6 | -37.2 | | | | -30.9 | -21.25 | 9.70 |
| | HE80, M0 to M9 1ss | 2 | 6 | -37.2 | -44.8 | | | -30.3 | -21.25 | 9.00 |
| | HE80, M0 to M9 2ss | 2 | 6 | -37.2 | -44.8 | | | -30.3 | -21.25 | 9.00 |
| | HE80, M0 to M9 1ss | 3 | 6 | -37.2 | -44.8 | -41.3 | | -29.0 | -21.25 | 7.76 |



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|---|---|---|---|---|---|---|---|---|---|---|
| | HE80, M0 to M9 2ss | 3 | 6 | -37.2 | -44.8 | -41.3 | | -29.0 | -21.25 | 7.76 |
| | HE80, M0 to M9 3ss | 3 | 6 | -37.2 | -44.8 | -41.3 | | -29.0 | -21.25 | 7.76 |
| | HE80, M0 to M9 1ss | 4 | 6 | -41.6 | -46.7 | -44.0 | -44.8 | -31.6 | -21.25 | 10.36 |
| | HE80, M0 to M9 2ss | 4 | 6 | -41.6 | -46.7 | -44.0 | -44.8 | -31.6 | -21.25 | 10.36 |
| | HE80, M0 to M9 3ss | 4 | 6 | -41.6 | -46.7 | -44.0 | -44.8 | -31.6 | -21.25 | 10.36 |
| | HE80, M0 to M9 4ss | 4 | 6 | -41.6 | -46.7 | -44.0 | -44.8 | -31.6 | -21.25 | 10.36 |
| | HE80 Beam Forming, M0 to M9 1ss | 2 | 9 | -41.6 | -46.7 | | | -31.2 | -21.25 | 9.93 |
| | HE80 Beam Forming, M0 to M9 2ss | 2 | 6 | -37.2 | -44.8 | | | -30.3 | -21.25 | 9.00 |
| | HE80 Beam Forming, M0 to M9 1ss | 3 | 11 | -47.4 | -49.0 | -47.4 | | -31.8 | -21.25 | 10.60 |
| | HE80 Beam Forming, M0 to M9 2ss | 3 | 8 | -41.6 | -46.7 | -44.0 | | -30.6 | -21.25 | 9.35 |
| | HE80 Beam Forming, M0 to M9 3ss | 3 | 6 | -37.2 | -44.8 | -41.3 | | -29.0 | -21.25 | 7.76 |
| | HE80 Beam Forming, M0 to M9 1ss | 4 | 12 | -48.1 | -49.3 | -49.5 | -50.3 | -31.0 | -21.25 | 9.71 |
| | HE80 Beam Forming, M0 to M9 2ss | 4 | 9 | -45.3 | -47.4 | -45.3 | -45.7 | -30.6 | -21.25 | 9.32 |
| | HE80 Beam Forming, M0 to M9 3ss | 4 | 7 | -41.6 | -46.7 | -44.0 | -44.8 | -30.6 | -21.25 | 9.36 |
| | HE80 Beam Forming, M0 to M9 4ss | 4 | 6 | -41.6 | -46.7 | -44.0 | -44.8 | -31.6 | -21.25 | 10.36 |
| | HE80 STBC, M0 to M9 1ss | 2 | 6 | -37.2 | -44.8 | | | -30.3 | -21.25 | 9.00 |
| | HE80 STBC, M0 to M9 1ss | 3 | 6 | -37.2 | -44.8 | -41.3 | | -29.0 | -21.25 | 7.76 |
| | HE80 STBC, M0 to M9 1ss | 4 | 6 | -41.6 | -46.7 | -44.0 | -44.8 | -31.6 | -21.25 | 10.36 |
| | | | | | | | | | | |
| 5310 | Non HT40, 6 to 54 Mbps | 1 | 6 | -31.8 | | | | -25.7 | -21.25 | 4.50 |
| | Non HT40, 6 to 54 Mbps | 2 | 6 | -34.8 | -43.2 | | | -28.2 | -21.25 | 6.91 |
| | Non HT40, 6 to 54 Mbps | 3 | 6 | -34.8 | -43.2 | -42.4 | | -27.5 | -21.25 | 6.30 |
| | Non HT40, 6 to 54 Mbps | 4 | 6 | -34.8 | -43.2 | -42.4 | -43.2 | -27.1 | -21.25 | 5.85 |
| | HT/VHT40, M0 to M7 | 1 | 6 | -33.1 | | | | -27.0 | -21.25 | 5.80 |
| | HT/VHT40, M0 to M7 | 2 | 6 | -33.1 | -42.0 | | | -26.5 | -21.25 | 5.27 |
| | HT/VHT40, M8 to M15 | 2 | 6 | -33.1 | -42.0 | | | -26.5 | -21.25 | 5.27 |
| | HT/VHT40, M0 to M7 | 3 | 6 | -33.1 | -42.0 | -43.4 | | -26.2 | -21.25 | 4.93 |
| | HT/VHT40, M8 to M15 | 3 | 6 | -33.1 | -42.0 | -43.4 | | -26.2 | -21.25 | 4.93 |
| | HT/VHT40, M16 to M23 | 3 | 6 | -33.1 | -42.0 | -43.4 | | -26.2 | -21.25 | 4.93 |
| | HT/VHT40, M0 to M7 | 4 | 6 | -37.5 | -48.3 | -45.3 | -41.9 | -29.4 | -21.25 | 8.12 |
| | HT/VHT40, M8 to M15 | 4 | 6 | -37.5 | -48.3 | -45.3 | -41.9 | -29.4 | -21.25 | 8.12 |
| | HT/VHT40, M16 to M23 | 4 | 6 | -37.5 | -48.3 | -45.3 | -41.9 | -29.4 | -21.25 | 8.12 |
| | HT/VHT40, M24 to M31 | 4 | 6 | -37.5 | -48.3 | -45.3 | -41.9 | -29.4 | -21.25 | 8.12 |
| | HT/VHT40 Beam Forming, M0 to M7 | 2 | 9 | -37.5 | -48.3 | | | -28.1 | -21.25 | 6.85 |
| | HT/VHT40 Beam Forming, M8 to M15 | 2 | 6 | -33.1 | -42.0 | | | -26.5 | -21.25 | 5.27 |
| | HT/VHT40 Beam Forming, M0 to M7 | 3 | 11 | -44.3 | -49.7 | -47.5 | | -30.8 | -21.25 | 9.53 |
| | HT/VHT40 Beam Forming, M8 to M15 | 3 | 8 | -37.5 | -48.3 | -45.3 | | -28.5 | -21.25 | 7.23 |
| | HT/VHT40 Beam Forming, M16 to M23 | 3 | 6 | -33.1 | -42.0 | -43.4 | | -26.2 | -21.25 | 4.93 |
| | HT/VHT40 Beam Forming, M0 to M7 | 4 | 12 | -47.6 | -47.5 | -49.5 | -49.7 | -30.4 | -21.25 | 9.13 |
| | HT/VHT40 Beam Forming, M8 to M15 | 4 | 9 | -42.6 | -46.2 | -46.8 | -48.0 | -30.3 | -21.25 | 9.06 |
| | HT/VHT40 Beam Forming, M16 to M23 | 4 | 7 | -37.5 | -48.3 | -45.3 | -41.9 | -28.4 | -21.25 | 7.12 |
| | HT/VHT40 Beam Forming, M24 to M31 | 4 | 6 | -37.5 | -48.3 | -45.3 | -41.9 | -29.4 | -21.25 | 8.12 |



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|---|---|---|---|---|---|---|---|---|---|---|
| | HT/VHT40 STBC, M0 to M7 | 2 | 6 | -33.1 | -42.0 | | | -26.5 | -21.25 | 5.27 |
| | HT/VHT40 STBC, M0 to M7 | 3 | 6 | -33.1 | -42.0 | -43.4 | | -26.2 | -21.25 | 4.93 |
| | HT/VHT40 STBC, M0 to M7 | 4 | 6 | -37.5 | -48.3 | -45.3 | -41.9 | -29.4 | -21.25 | 8.12 |
| | HE40, M0 to M9 1ss | 1 | 6 | -32.3 | | | | -26.2 | -21.25 | 4.98 |
| | HE40, M0 to M9 1ss | 2 | 6 | -32.3 | -39.9 | | | -25.5 | -21.25 | 4.29 |
| | HE40, M0 to M9 2ss | 2 | 6 | -32.3 | -39.9 | | | -25.5 | -21.25 | 4.29 |
| | HE40, M0 to M9 1ss | 3 | 6 | -32.3 | -39.9 | -44.7 | | -25.3 | -21.25 | 4.08 |
| | HE40, M0 to M9 2ss | 3 | 6 | -32.3 | -39.9 | -44.7 | | -25.3 | -21.25 | 4.08 |
| | HE40, M0 to M9 3ss | 3 | 6 | -32.3 | -39.9 | -44.7 | | -25.3 | -21.25 | 4.08 |
| | HE40, M0 to M9 1ss | 4 | 6 | -32.3 | -39.9 | -44.7 | -41.7 | -24.9 | -21.25 | 3.69 |
| | HE40, M0 to M9 2ss | 4 | 6 | -32.3 | -39.9 | -44.7 | -41.7 | -24.9 | -21.25 | 3.69 |
| | HE40, M0 to M9 3ss | 4 | 6 | -32.3 | -39.9 | -44.7 | -41.7 | -24.9 | -21.25 | 3.69 |
| | HE40, M0 to M9 4ss | 4 | 6 | -32.3 | -39.9 | -44.7 | -41.7 | -24.9 | -21.25 | 3.69 |
| | HE40 Beam Forming, M0 to M9 1ss | 2 | 9 | -34.6 | -45.4 | | | -25.2 | -21.25 | 3.94 |
| | HE40 Beam Forming, M0 to M9 2ss | 2 | 6 | -32.3 | -39.9 | | | -25.5 | -21.25 | 4.29 |
| | HE40 Beam Forming, M0 to M9 1ss | 3 | 11 | -39.8 | -48.3 | -45.8 | | -27.3 | -21.25 | 6.04 |
| | HE40 Beam Forming, M0 to M9 2ss | 3 | 8 | -34.6 | -45.4 | -48.4 | | -26.0 | -21.25 | 4.77 |
| | HE40 Beam Forming, M0 to M9 3ss | 3 | 6 | -32.3 | -39.9 | -44.7 | | -25.3 | -21.25 | 4.08 |
| | HE40 Beam Forming, M0 to M9 1ss | 4 | 12 | -49.0 | -49.0 | -50.0 | -52.5 | -31.8 | -21.25 | 10.58 |
| | HE40 Beam Forming, M0 to M9 2ss | 4 | 9 | -39.8 | -48.3 | -45.8 | -46.6 | -28.7 | -21.25 | 7.44 |
| | HE40 Beam Forming, M0 to M9 3ss | 4 | 7 | -34.6 | -45.4 | -48.4 | -45.6 | -26.7 | -21.25 | 5.47 |
| | HE40 Beam Forming, M0 to M9 4ss | 4 | 6 | -32.3 | -39.9 | -44.7 | -41.7 | -24.9 | -21.25 | 3.69 |
| | HE40 STBC, M0 to M9 2ss | 2 | 6 | -32.3 | -39.9 | | | -25.5 | -21.25 | 4.29 |
| | HE40 STBC, M0 to M9 2ss | 3 | 6 | -32.3 | -39.9 | -44.7 | | -25.3 | -21.25 | 4.08 |
| | HE40 STBC, M0 to M9 2ss | 4 | 6 | -32.3 | -39.9 | -44.7 | -41.7 | -24.9 | -21.25 | 3.69 |
| | | | | | | | | | | |
| | Non HT20, 6 to 54 Mbps | 1 | 6 | -33.3 | | | | -27.2 | -21.25 | 6.00 |
| | Non HT20, 6 to 54 Mbps | 2 | 6 | -37.9 | -43.7 | | | -30.8 | -21.25 | 9.59 |
| | Non HT20, 6 to 54 Mbps | 3 | 6 | -48.6 | -48.5 | -48.6 | | -37.7 | -21.25 | 16.49 |
| | Non HT20, 6 to 54 Mbps | 4 | 6 | -48.9 | -50.4 | -49.8 | -49.9 | -37.6 | -21.25 | 16.39 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 2 | 9 | -37.9 | -43.7 | | | -27.8 | -21.25 | 6.59 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 3 | 11 | -48.6 | -48.5 | -48.6 | | -32.7 | -21.25 | 11.49 |
| | Non HT20 Beam Forming, 6 to 54 Mbps | 4 | 12 | -48.9 | -50.4 | -49.8 | -49.9 | -31.6 | -21.25 | 10.39 |
| 5320 | HT/VHT20, M0 to M7 | 1 | 6 | -32.1 | | | | -26.0 | -21.25 | 4.80 |
| | HT/VHT20, M0 to M7 | 2 | 6 | -32.1 | -42.9 | | | -25.7 | -21.25 | 4.45 |
| | HT/VHT20, M8 to M15 | 2 | 6 | -32.1 | -42.9 | | | -25.7 | -21.25 | 4.45 |
| | HT/VHT20, M0 to M7 | 3 | 6 | -44.9 | -48.6 | -48.9 | | -36.2 | -21.25 | 14.99 |
| | HT/VHT20, M8 to M15 | 3 | 6 | -32.1 | -42.9 | -41.8 | | -25.3 | -21.25 | 4.04 |
| | HT/VHT20, M16 to M23 | 3 | 6 | -32.1 | -42.9 | -41.8 | | -25.3 | -21.25 | 4.04 |
| | HT/VHT20, M0 to M7 | 4 | 6 | -49.6 | -49.8 | -50.6 | -50.5 | -38.0 | -21.25 | 16.78 |
| | HT/VHT20, M8 to M15 | 4 | 6 | -40.3 | -47.2 | -46.1 | -47.2 | -32.0 | -21.25 | 10.77 |
| | HT/VHT20, M16 to M23 | 4 | 6 | -35.8 | -45.0 | -45.2 | -46.5 | -28.5 | -21.25 | 7.29 |



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|---|---|---|---|---|---|---|---|---|---|---|
| | HT/VHT20, M24 to M31 | 4 | 6 | -35.8 | -45.0 | -45.2 | -46.5 | -28.5 | -21.25 | 7.29 |
| | HT/VHT20 Beam Forming, M0 to M7 | 2 | 9 | -35.8 | -45.0 | | | -26.3 | -21.25 | 5.00 |
| | HT/VHT20 Beam Forming, M8 to M15 | 2 | 6 | -32.1 | -42.9 | | | -25.7 | -21.25 | 4.45 |
| | HT/VHT20 Beam Forming, M0 to M7 | 3 | 11 | -44.9 | -48.6 | -48.9 | | -31.2 | -21.25 | 9.99 |
| | HT/VHT20 Beam Forming, M8 to M15 | 3 | 8 | -35.8 | -45.0 | -45.2 | | -26.8 | -21.25 | 5.58 |
| | HT/VHT20 Beam Forming, M16 to M23 | 3 | 6 | -32.1 | -42.9 | -41.8 | | -25.3 | -21.25 | 4.04 |
| | HT/VHT20 Beam Forming, M0 to M7 | 4 | 12 | -49.6 | -49.8 | -50.6 | -50.5 | -32.0 | -21.25 | 10.78 |
| | HT/VHT20 Beam Forming, M8 to M15 | 4 | 9 | -40.3 | -47.2 | -46.1 | -47.2 | -29.0 | -21.25 | 7.77 |
| | HT/VHT20 Beam Forming, M16 to M23 | 4 | 7 | -35.8 | -45.0 | -45.2 | -46.5 | -27.5 | -21.25 | 6.29 |
| | HT/VHT20 Beam Forming, M24 to M31 | 4 | 6 | -35.8 | -45.0 | -45.2 | -46.5 | -28.5 | -21.25 | 7.29 |
| | HT/VHT20 STBC, M0 to M7 | 2 | 6 | -32.1 | -42.9 | | | -25.7 | -21.25 | 4.45 |
| | HT/VHT20 STBC, M0 to M7 | 3 | 6 | -32.1 | -42.9 | -41.8 | | -25.3 | -21.25 | 4.04 |
| | HT/VHT20 STBC, M0 to M7 | 4 | 6 | -40.3 | -47.2 | -46.1 | -47.2 | -32.0 | -21.25 | 10.77 |
| | HE20, M0 to M9 1ss | 1 | 6 | -34.4 | | | | -28.3 | -21.25 | 7.08 |
| | HE20, M0 to M9 1ss | 2 | 6 | -34.4 | -43.1 | | | -27.8 | -21.25 | 6.53 |
| | HE20, M0 to M9 2ss | 2 | 6 | -34.4 | -43.1 | | | -27.8 | -21.25 | 6.53 |
| | HE20, M0 to M9 1ss | 3 | 6 | -42.5 | -47.1 | -47.6 | | -34.2 | -21.25 | 12.99 |
| | HE20, M0 to M9 2ss | 3 | 6 | -34.4 | -43.1 | -44.7 | | -27.4 | -21.25 | 6.19 |
| | HE20, M0 to M9 3ss | 3 | 6 | -34.4 | -43.1 | -44.7 | | -27.4 | -21.25 | 6.19 |
| | HE20, M0 to M9 1ss | 4 | 6 | -48.8 | -49.7 | -49.0 | -49.6 | -37.2 | -21.25 | 15.92 |
| | HE20, M0 to M9 2ss | 4 | 6 | -35.9 | -45.9 | -45.9 | -47.7 | -28.8 | -21.25 | 7.56 |
| | HE20, M0 to M9 3ss | 4 | 6 | -34.4 | -43.1 | -44.7 | -43.8 | -27.1 | -21.25 | 5.80 |
| | HE20, M0 to M9 4ss | 4 | 6 | -34.4 | -43.1 | -44.7 | -43.8 | -27.1 | -21.25 | 5.80 |
| | HE20 Beam Forming, M0 to M9 1ss | 2 | 9 | -35.9 | -45.9 | | | -26.4 | -21.25 | 5.17 |
| | HE20 Beam Forming, M0 to M9 2ss | 2 | 6 | -34.4 | -43.1 | | | -27.8 | -21.25 | 6.53 |
| | HE20 Beam Forming, M0 to M9 1ss | 3 | 11 | -42.5 | -47.1 | -47.6 | | -29.2 | -21.25 | 7.99 |
| | HE20 Beam Forming, M0 to M9 2ss | 3 | 8 | -35.9 | -45.9 | -45.9 | | -27.0 | -21.25 | 5.79 |
| | HE20 Beam Forming, M0 to M9 3ss | 3 | 6 | -34.4 | -43.1 | -44.7 | | -27.4 | -21.25 | 6.19 |
| | HE20 Beam Forming, M0 to M9 1ss | 4 | 12 | -48.8 | -49.7 | -49.0 | -49.6 | -31.2 | -21.25 | 9.92 |
| | HE20 Beam Forming, M0 to M9 2ss | 4 | 9 | -35.9 | -45.9 | -45.9 | -47.7 | -25.8 | -21.25 | 4.56 |
| | HE20 Beam Forming, M0 to M9 3ss | 4 | 7 | -35.9 | -45.9 | -45.9 | -47.7 | -27.8 | -21.25 | 6.56 |
| | HE20 Beam Forming, M0 to M9 4ss | 4 | 6 | -34.4 | -43.1 | -44.7 | -43.8 | -27.1 | -21.25 | 5.80 |
| | HE20 STBC, M0 to M9 2ss | 2 | 6 | -34.4 | -43.1 | | | -27.8 | -21.25 | 6.53 |
| | HE20 STBC, M0 to M9 2ss | 3 | 6 | -34.4 | -43.1 | -44.7 | | -27.4 | -21.25 | 6.19 |
| | HE20 STBC, M0 to M9 2ss | 4 | 6 | -35.9 | -45.9 | -45.9 | -47.7 | -28.8 | -21.25 | 7.56 |
| | | | | | | | | | | |
| 5250 | Non HT160, 6 to 54 Mbps | 1 | 6 | -34.8 | | | | -28.7 | -21.25 | 7.50 |
| | Non HT160, 6 to 54 Mbps | 2 | 6 | -34.8 | -42.3 | | | -28.0 | -21.25 | 6.79 |
| | Non HT160, 6 to 54 Mbps | 3 | 6 | -34.8 | -42.3 | -40.1 | | -27.1 | -21.25 | 5.82 |
| | Non HT160, 6 to 54 Mbps | 4 | 6 | -34.8 | -42.3 | -40.1 | -40.5 | -26.3 | -21.25 | 5.09 |
| | VHT160, M0 to M9 1ss | 1 | 6 | -30.1 | | | | -24.0 | -21.25 | 2.80 |
| | VHT160, M0 to M9 1ss | 2 | 6 | -30.1 | -35.8 | | | -23.0 | -21.25 | 1.76 |



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|---|---|---|---|---|---|---|---|---|---|---|
| | VHT160, M0 to M9 2ss | 2 | 6 | -30.1 | -35.8 | | | -23.0 | -21.25 | 1.76 |
| | VHT160, M0 to M9 1ss | 3 | 6 | -30.1 | -35.8 | -34.9 | | -22.0 | -21.25 | 0.75 |
| | VHT160, M0 to M9 2ss | 3 | 6 | -30.1 | -35.8 | -34.9 | | -22.0 | -21.25 | 0.75 |
| | VHT160, M0 to M9 3ss | 3 | 6 | -30.1 | -35.8 | -34.9 | | -22.0 | -21.25 | 0.75 |
| | VHT160, M0 to M9 1ss | 4 | 6 | -32.9 | -37.4 | -37.0 | -36.7 | -23.5 | -21.25 | 2.25 |
| | VHT160, M0 to M9 2ss | 4 | 6 | -32.9 | -37.4 | -37.0 | -36.7 | -23.5 | -21.25 | 2.25 |
| | VHT160, M0 to M9 3ss | 4 | 6 | -32.9 | -37.4 | -37.0 | -36.7 | -23.5 | -21.25 | 2.25 |
| | VHT160, M0 to M9 4ss | 4 | 6 | -32.9 | -37.4 | -37.0 | -36.7 | -23.5 | -21.25 | 2.25 |
| | VHT160 Beam Forming, M0 to M9 1ss | 2 | 9 | -32.9 | -37.4 | | | -22.5 | -21.25 | 1.28 |
| | VHT160 Beam Forming, M0 to M9 2ss | 2 | 6 | -30.1 | -35.8 | | | -23.0 | -21.25 | 1.76 |
| | VHT160 Beam Forming, M0 to M9 1ss | 3 | 11 | -36.7 | -38.8 | -39.1 | | -22.2 | -21.25 | 0.99 |
| | VHT160 Beam Forming, M0 to M9 2ss | 3 | 8 | -32.9 | -37.4 | -37.0 | | -22.4 | -21.25 | 1.18 |
| | VHT160 Beam Forming, M0 to M9 3ss | 3 | 6 | -30.1 | -35.8 | -34.9 | | -22.0 | -21.25 | 0.75 |
| | **VHT160 Beam Forming, M0 to M9 1ss** | **4** | **12** | **-39.5** | **-40.7** | **-39.1** | **-40.6** | **-21.8** | **-21.25** | **0.60** |
| | VHT160 Beam Forming, M0 to M9 2ss | 4 | 9 | -36.7 | -38.8 | -39.1 | -39.8 | -23.4 | -21.25 | 2.11 |
| | VHT160 Beam Forming, M0 to M9 3ss | 4 | 7 | -32.9 | -37.4 | -37.0 | -36.7 | -22.5 | -21.25 | 1.25 |
| | VHT160 Beam Forming, M0 to M9 4ss | 4 | 6 | -32.9 | -37.4 | -37.0 | -36.7 | -23.5 | -21.25 | 2.25 |
| | VHT160 STBC, M0 to M9 1ss | 2 | 6 | -30.1 | -35.8 | | | -23.0 | -21.25 | 1.76 |
| | VHT160 STBC, M0 to M9 1ss | 3 | 6 | -30.1 | -35.8 | -34.9 | | -22.0 | -21.25 | 0.75 |
| | VHT160 STBC, M0 to M9 1ss | 4 | 6 | -32.9 | -37.4 | -37.0 | -36.7 | -23.5 | -21.25 | 2.25 |
| | HE160, M0 to M9 1ss | 1 | 6 | -32.2 | | | | -26.1 | -21.25 | 4.88 |
| | HE160, M0 to M9 1ss | 2 | 6 | -36.0 | -42.3 | | | -29.0 | -21.25 | 7.77 |
| | HE160, M0 to M9 2ss | 2 | 6 | -36.0 | -42.3 | | | -29.0 | -21.25 | 7.77 |
| | HE160, M0 to M9 1ss | 3 | 6 | -36.0 | -42.3 | -41.6 | | -28.1 | -21.25 | 6.89 |
| | HE160, M0 to M9 2ss | 3 | 6 | -36.0 | -42.3 | -41.6 | | -28.1 | -21.25 | 6.89 |
| | HE160, M0 to M9 3ss | 3 | 6 | -36.0 | -42.3 | -41.6 | | -28.1 | -21.25 | 6.89 |
| | HE160, M0 to M9 1ss | 4 | 6 | -36.0 | -42.3 | -41.6 | -40.0 | -27.1 | -21.25 | 5.88 |
| | HE160, M0 to M9 2ss | 4 | 6 | -36.0 | -42.3 | -41.6 | -40.0 | -27.1 | -21.25 | 5.88 |
| | HE160, M0 to M9 3ss | 4 | 6 | -36.0 | -42.3 | -41.6 | -40.0 | -27.1 | -21.25 | 5.88 |
| | HE160, M0 to M9 4ss | 4 | 6 | -36.0 | -42.3 | -41.6 | -40.0 | -27.1 | -21.25 | 5.88 |
| | HE160 Beam Forming, M0 to M9 1ss | 2 | 9 | -40.0 | -44.0 | | | -29.5 | -21.25 | 8.23 |
| | HE160 Beam Forming, M0 to M9 2ss | 2 | 6 | -36.0 | -42.3 | | | -29.0 | -21.25 | 7.77 |
| | HE160 Beam Forming, M0 to M9 1ss | 3 | 11 | -43.3 | -46.0 | -46.1 | | -29.1 | -21.25 | 7.84 |
| | HE160 Beam Forming, M0 to M9 2ss | 3 | 8 | -40.0 | -44.0 | -43.2 | | -29.2 | -21.25 | 7.95 |
| | HE160 Beam Forming, M0 to M9 3ss | 3 | 6 | -36.0 | -42.3 | -41.6 | | -28.1 | -21.25 | 6.89 |
| | HE160 Beam Forming, M0 to M9 1ss | 4 | 12 | -44.2 | -46.2 | -46.8 | -48.1 | -28.0 | -21.25 | 6.75 |
| | HE160 Beam Forming, M0 to M9 2ss | 4 | 9 | -43.3 | -46.0 | -46.1 | -45.8 | -30.0 | -21.25 | 8.79 |
| | HE160 Beam Forming, M0 to M9 3ss | 4 | 7 | -40.0 | -44.0 | -43.2 | -41.9 | -28.9 | -21.25 | 7.66 |
| | HE160 Beam Forming, M0 to M9 4ss | 4 | 6 | -36.0 | -42.3 | -41.6 | -40.0 | -27.1 | -21.25 | 5.88 |
| | HE160 STBC, M0 to M9 1ss | 2 | 6 | -36.0 | -42.3 | | | -29.0 | -21.25 | 7.77 |
| | HE160 STBC, M0 to M9 1ss | 3 | 6 | -36.0 | -42.3 | -41.6 | | -28.1 | -21.25 | 6.89 |
| | HE160 STBC, M0 to M9 1ss | 4 | 6 | -36.0 | -42.3 | -41.6 | -40.0 | -27.1 | -21.25 | 5.88 |



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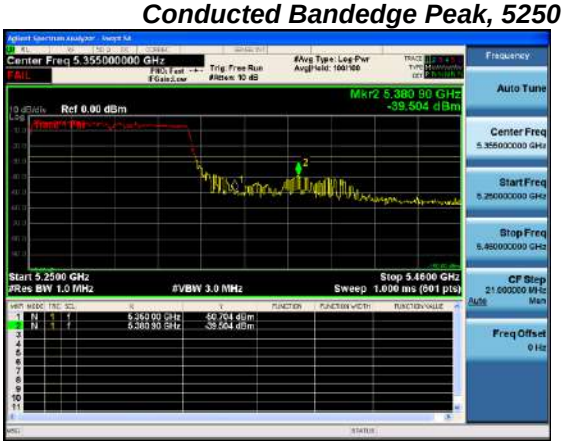
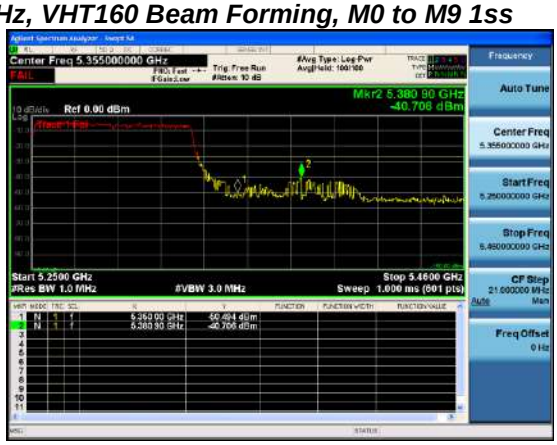
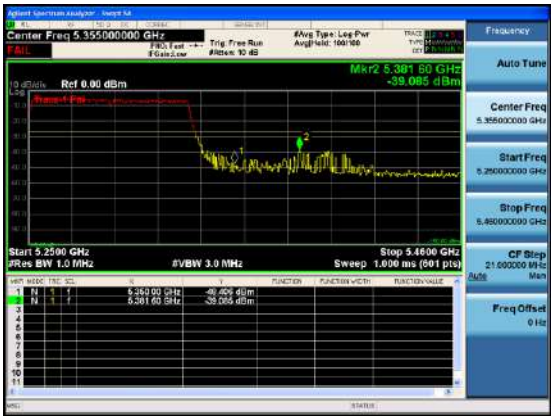
***Conducted Bandedge Peak, 5250 MHz, VHT160 Beam Forming, M0 to M9 1ss***



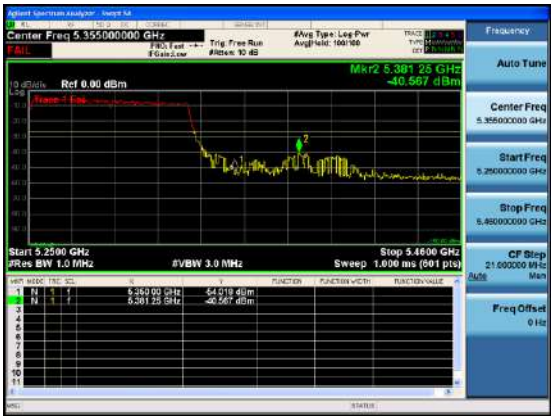

***Antenna A***




***Antenna B***




***Antenna C***




***Antenna D***



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## Appendix B: Radiated & AC Conducted Emissions Test Results

**Testing done by outsite laboratory.**



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

| Test Equipment used for Radiated Emissions | | | | | |
|---|---|---|---|---|---|
| **Equip#** | **Manufacturer/ Model** | **Description** | **Last Cal** | **Next Cal** | **Test Item** |
| 57476 | Cisco | Automation Test Insertion Loss | NA | NA | A1-A7 |
| 50721 | Keysight N9030A-550 | PXA Signal Analyzer, 3Hz to 50GHz | 15 Mar 2019 | 15 Mar 2020 | A1-A7 |
| 55094 | NI PXI-1042 | CHASSIS, PXI | NA | NA | A1-A7 |
| 57237 | NI PXI-8115 | Embedded Controller | NA | NA | A1-A7 |
| 54686 | NI PXI-2796 | 40 GHz Dual 6x1 Multiplexer (SP6T) | NA | NA | A1-A7 |
| 57245 | NI PXI-2799 | Switch 1x1 | NA | NA | A1-A7 |
| 56091 | NI PXI-2796 | 40 GHz Dual 6x1 Multiplexer (SP6T) | NA | NA | A1-A7 |
| 7329 | Omega CT485B | Chart recorder | 18 Feb 2019 | 18 Feb 2020 | A1-A7 |
| 56328 | Pasternack PE5019-1 | Torque wrench | 14 Feb 2019 | 14 Feb 2020 | A1-A7 |
| 56329 | Pasternack PE5019-1 | Torque wrench | 28 Feb 2019 | 28 Feb 2020 | A1-A7 |
| 56330 | Pasternack PE5019-1 | Torque wrench | 28 Feb 2019 | 28 Feb 2020 | A1-A7 |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
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| | | | | | |



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## 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 |



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## Appendix E: Photographs of Test Setups

**Please refer to the attachment**



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## Appendix F: Software Used to Perform Testing

Cisco Internal LabView Radio Test Automation Software rev57

## 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 (A2LA certificate number 1178-01)

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

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

## Appendix I: Test Assessment Plan

Target Power Tables EDCS# 18087112



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## Appendix J: UUT Software Info

APA453.0E7B.CD60#
APA453.0E7B.CD60#
APA453.0E7B.CD60#
APA453.0E7B.CD60#test watchdog monitoring off
APA453.0E7B.CD60#
APA453.0E7B.CD60#
APA453.0E7B.CD60#
APA453.0E7B.CD60#sho ver
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San Jose, California 95134-1706

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Cisco AP Software, (ap1g7), [cheetah-build6:/san2/BUILD/workspace/Nightly-Cheetah-axel-bcm-mfg-c8_10_throttle]
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2019 by Cisco Systems, Inc.
Compiled Wed Aug 21 08:08:55 PDT 2019

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

APA453.0E7B.CD60 uptime is 0 days, 0 hours, 4 minutes
Last reload time : Wed Aug 21 08:11:07 UTC 2019
Last reload reason : unknown

cisco C9120AXE-B with 1813676/1039368K 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 Driver version : 17.10 RC77.13
Radio FW version : 1268.14948.r14702 14702
NSS FW version : NA

Base ethernet MAC Address : A4:53:0E:7B:CD:60
Part Number : 0-000000-00
PCA Assembly Number : 800-105708-01
PCA Revision Number : 09
PCB Serial Number : FOC23302F06
Top Assembly Part Number : 800-105708-01
Top Assembly Serial Number : 0
Top Revision Number : 09
Product/Model Number : C9120AXE-B

APA453.0E7B.CD60#
APA453.0E7B.CD60#
APA453.0E7B.CD60#
APA453.0E7B.CD60#
APA453.0E7B.CD60#devs
EXITING CISCO SHELL. PLEASE EXECUTE EXIT IN DEVSHELL TO GET BACK TO CISCO SHELL.

BusyBox v1.29.3 () built-in shell (ash)

Welcome to Cisco.

Usage of this device is governed by Cisco's End User License Agreement,
available at:



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http://www.cisco.com/c/en/us/td/docs/general/warranty/English/EU1KEN_.html.
mA4530E7BCD60:/#
mA4530E7BCD60:/#
mA4530E7BCD60:/#
mA4530E7BCD60:/#
mA4530E7BCD60:/#
mA4530E7BCD60:/#
mA4530E7BCD60:/#
mA4530E7BCD60:/#
mA4530E7BCD60:/# cat MERAKI_BUILD.extra
Wed Aug 21 08:08:55 PDT 2019
cheetah-build6
/san2/BUILD/workspace/Nightly-Cheetah-axel-bcm-mfg-c8_10_throttle

* (HEAD detached at 0b10909464)

svn base: 0b109094643143e6e3f14a2245747dc261b56619
commit: 0b109094643143e6e3f14a2245747dc261b56619
tree e30cd20c3ac842da790e18e92fa6ccadb2437fc6
mA4530E7BCD60:/#
mA4530E7BCD60:/#
mA4530E7BCD60:/# show_cookie
Part Number : 0-000000-00
Board Revision : 00
PCB Serial Number : FOC23302F06
PCB Fab Part Number : 0-000000-00
Deviation Number : 0
MAC Address : A4:53:0E:7B:CD:60
MAC Address Block Size : 4
Radio 0 MAC Address : D4:AD:BD:A2:1B:00
Radio 0 MAC Address Block Size : 16
Radio 1 MAC Address : D4:AD:BD:A2:1B:10
Radio 1 MAC Address Block Size : 16
PCA Assembly Number : 800-105708-01
PCA Revision Number : 09
Product/Model Number : C9120AXE-B
Top Assembly Part Number : 800-105708-01
Top Revision Number : 09
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) : C9120AXE-B
PEP Version Identifier (VID) : V01
System Flags : 00
Controller Type : 0000
Host Controller Type : 0000
Mfr Service Date : 2019.08.03-47:59:59



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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
mA4530E7BCD60:/#
mA4530E7BCD60:/#
mA4530E7BCD60:/#
mA4530E7BCD60:/#
mA4530E7BCD60:/#
mA4530E7BCD60:/# cat /storage/rxtx_mode
tx
mA4530E7BCD60:/#
mA4530E7BCD60:/#
mA4530E7BCD60:/#
mA4530E7BCD60:/# cd /usr/bin/bcm/mfg
mA4530E7BCD60:/usr/bin/bcm/mfg#
mA4530E7BCD60:/usr/bin/bcm/mfg#
mA4530E7BCD60:/usr/bin/bcm/mfg#
mA4530E7BCD60:/usr/bin/bcm/mfg#
mA4530E7BCD60:/usr/bin/bcm/mfg#
mA4530E7BCD60:/usr/bin/bcm/mfg# ./dfstool.lua

Vanc dfstool
BOARD: Axel BCM !!!!!!

Display config:
wl -i apr0v0 status | head -3
"SSID: "MFG-2GTEST"
Mode: Managed RSSI: 0 dBm SNR: 0 dB noise: -97 dBm Channel: 1
BSSID: D4:AD:BD:A2:1B:00 Capability: ESS ShortSlot "

Display config:
wl -i apr1v0 status | head -3
"SSID: "MFG-5GTEST"
Mode: Managed RSSI: 0 dBm SNR: 0 dB noise: -96 dBm Channel: 36
BSSID: D4:AD:BD:A2:1B:0F Capability: ESS "

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

wl -i apr1v0 country US
wl -i apr0v0 country US
>
line=""
>
line=""
>
line=""
>
line=""
>
line=""
>do0 stop



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line="do0 stop"

DEBUG: compliance stop command matched.
INFO: subcommand="compliance off".

execution section for compliance stop command.
line="do0 stop"
interface="0"
stop_option="stop"
wl -i apr0v0 pkteng_status | awk -F'[, ]' '{print $3}'
main:result="0"

1601792112 (0x5f796870)
>
line=""
>
line=""
>
line=""
>do1 stop
line="do1 stop"

DEBUG: compliance stop command matched.
INFO: subcommand="compliance off".

execution section for compliance stop command.
line="do1 stop"
interface="1"
stop_option="stop"
wl -i apr1v0 pkteng_status | awk -F'[, ]' '{print $3}'
main:result="0"

1601792112 (0x5f796870)
>
line=""
>
line=""
>
line=""
>do4 stop
line="do4 stop"

DEBUG: compliance stop command matched.
INFO: subcommand="compliance off".

execution section for compliance stop command.
line="do4 stop"
interface="4"
stop_option="stop"
[08/21/2019 08:15:55.2970] NXP-RHL-Driver 0001:01:00.0: xcvr[0], swcmd 0x23 done
[08/21/2019 08:15:55.4770] NXP-RHL-Driver 0001:01:00.0: xcvr[0], swcmd 0x4 done
[08/21/2019 08:15:55.5600] NXP-RHL-Driver 0001:01:00.0: VSPA FW :: FN = dcr.eld
>
line=""
>
line=""
>
line=""
>



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line=""

# End



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