# CERTIFICATION TEST REPORT

**Report Number. :** U-4791479848-FR5V3

| | | |
|---|---|---|
| **Applicant** | : | SAMSUNG ELECTRONICS CO., LTD.<br>129 SAMSUNG-RO, YEONGTONG-GU, SUWON-SI,<br>GYEONGGI-DO, 16677, KOREA |
| **Model** | : | WCF934M |
| **FCC ID** | : | A3LWCF934M |
| **IC** | : | 649E-WCF934M |
| **EUT Description** | : | DTS/UNII a/b/g/n/ac/ax module and BT/BLE |
| **Test Standard(s)** | : | FCC 47 CFR PART 15 SUBPART E<br>6 GHz LOW POWER INDOOR CLIENT (6XD)<br>INDUSTRY CANADA RSS-248 Issue 3<br>INDUSTRY CANADA RSS-GEN Issue 5 |

**Date Of Issue:**
2025-02-11

**Prepared by:**
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IAS ACCREDITED
Testing Laboratory
TL-1087

## Revision History

| Rev. | Issue Date | Revisions | Revised By |
|---|---|---|---|
| V1 | 2025-02-04 | Initial issue | Jaehyeok Bang |
| V2 | 2025-02-07 | Updated to address TCB`s question | Jaehyeok Bang |
| V3 | 2025-02-11 | Updated to address TCB`s question | Jaehyeok Bang |


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# 1. ATTESTATION OF TEST RESULTS

| | |
|---|---|
| **COMPANY NAME:** | SAMSUNG ELECTRONICS CO., LTD. |
| **EUT DESCRIPTION:** | DTS/UNII a/b/g/n/ac/ax module and BT/BLE |
| **MODEL NUMBER:** | WCF934M |
| **SERIAL NUMBER:** | 4C573957D7D2, 4C573957D552, 4C573957D870 (CONDUCTED); 4C573957D760, 4C573957D5A8, 4C573957D91C (RADIATED); |
| **DATE TESTED:** | 2025-01-06 - 2025-01-31 |

| APPLICABLE STANDARDS | |
|---|---|
| **STANDARD** | **TEST RESULTS** |
| CFR 47 Part 15 Subpart E | Complies |
| INDUSTRY CANADA RSS-248 Issue 3 | Complies |
| INDUSTRY CANADA RSS-GEN Issue 5 | Complies |

UL KOREA LTD. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by UL KOREA LTD. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

**Note:** The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL KOREA LTD. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL KOREA LTD. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by IAS, any agency of the Federal Government, or any agency of any government.

Approved & Released For
UL KOREA LTD. By:

Changmin Kim
Senior Laboratory Engineer
UL Korea, Ltd.

Tested By:

Jaehyeok Bang
Laboratory Test Engineer
UL Korea, Ltd.

# 2. MANUFACTURER INFORMATION

**Applicant Information**

| | |
|---|---|
| Company Name: | SAMSUNG ELECTRONICS CO., LTD. |
| Address: | 129 SAMSUNG-RO, YEONGTONG-GU, SUWON-SI, GYEONGGI-DO, 16677, KOREA |

**Manufacturer Information 1**

| | |
|---|---|
| Company Name: | Chengdu Xuguang Technology Co., Ltd. |
| Address: | No.86 2nd Section, Park Road, Longquanyi District, Chengdu City, Sichuan Province, P.R.China |

**Manufacturer Information 2**

| | |
|---|---|
| Company Name: | CHEMTROVINA COMPANY LIMITED |
| Address: | Nhon Trach 2 – Loc Khang IZ, Hiep Phuoc Town, Nhon Trach District,, Dong Nai Province, Vietnam |

**Manufacturer Information 3**

| | |
|---|---|
| Company Name: | CHEMTRONICS CO., LTD. |
| Address: | 35, Buk-ri, Namsa-myeon, Cheoin-gu, Yongin-si, Gyeonggi-do, Korea |

**Manufacturer Information 4**

| | |
|---|---|
| Company Name: | SJIT CO., LTD. |
| Address: | #54-11, Dongtanhana 1 gil, Hwaseong-si, Gyeonggi-Do, Korea |

| | |
|---|---|
| Company Name: | SJIT VINA Co., Ltd |
| Address: | Lot X2, Ho Nai Industrial Zone, Ho Nai 3 Commune, Trang Bom District, Dong Nai Province, Vietnam |

# 3. TEST METHODOLOGY

The tests documented in this report were performed in accordance with following methods.

1. FCC 47 CFR Part 2.
2. FCC 47 CFR Part 15.
3. KDB 789033 D02 General UNII Test Procedures New Rules v02r01
4. KDB 987594 D02 U-NII 6 GHz EMC Measurement v03
5. KDB 662911 D01 v02r01
6. IC RSS-GEN Issue 5.
7. IC RSS-248 Issue 3.
8. ANSI C63.10-2020.

# 4. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 42, Obongsandan 1-ro, Uiwang-si, Gyeonggi-do, Republic of Korea. Line conducted emissions are measured only at the 218 address. The following table identifies which facilities were utilized for radiated emission measurements documented in this report. Specific facilities are also identified in the test results sections.

| 42, Obongsandan 1-ro |
|---|
| ☒ Chamber 1 |
| ☒ Chamber 2 |

Used ISED Test Site Reg.(company number): 32001
CAB Identifier: KR0161

UL Korea, Ltd. is accredited by IAS, Laboratory Code TL-1087. The full scope of accreditation can be viewed at https://www.iasonline.org/wp-content/uploads/2022/05/TL-1087-Cert-New.pdf

# 5. CALIBRATION AND UNCERTAINTY

## 5.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations and is traceable to recognized national standards.

## 5.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable Loss (dB) – Preamp Gain (dB)
36.5 dBuV + 18.7 dB/m + 0.6 dB – 26.9 dB = 28.9 dBuV/m

AC Corrected Reading (dBuV) = Measured Voltage (dBuV) + Extension Cord Loss (dB) + Cable Loss (dB)
44.72 dBuV = 34.72 dBuV + 9.9 dB + 0.1 dB

MIMO total corr'd e.i.r.p. power (dBm) = ANT1's Avearage Power (dBm) + ANT2's Average Power (dBm) + Directional gain (dB)
$-0.41\ \text{dBm} = 10*\log((10^{-4.61\ \text{dBm}/10}) + (10^{-6.40\ \text{dBm}/10})) + 1.99\ \text{dB}$

MIMO total corr'd e.i.r.p. PSD (dBm) = ANT1 Meas PSD (dBm) + ANT2 Meas PSD (dBm) + Duty Cycle CF (dB) + Directional gain (dB)
$-1.63\ \text{dBm} = 10*\log((10^{-9.78\ \text{dBm}/10}) + (10^{-10.00\ \text{dBm}/10})) + 1.00\ \text{dB} + 4.26\ \text{dB}$


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## 5.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

# Common Items

| PARAMETER | UNCERTAINTY |
|---|---|
| RF Output Power | 0.94 dB |
| Power Spectral Density | 0.85 dB |
| Occupied Bandwidth | 0.07 % |
| AC Power Line Conducted Emissions | 2.32 dB |

Uncertainty figures are valid to a confidence level of 95%, k=2

# Chamber 1

| PARAMETER | UNCERTAINTY |
|---|---|
| Radiated Disturbance, 30 MHz to 1 GHz | 3.64 dB |
| Radiated Disturbance, 1 GHz to 18 GHz | 5.38 dB |
| Radiated Disturbance, Above 18 GHz | 6.23 dB |

Uncertainty figures are valid to a confidence level of 95%, k=2

# Chamber 2

| PARAMETER | UNCERTAINTY |
|---|---|
| Radiated Disturbance, 9 kHz to 30 MHz | 1.66 dB |
| Radiated Disturbance, 1 GHz to 18 GHz | 5.39 dB |

Uncertainty figures are valid to a confidence level of 95%, k=2

## 5.4. DECISION RULE

Decision rule for statement(s) of conformity is based on Clause 4.3.3 in IEC Guide 115:2023. Measurement Uncertainty is not applied when providing statements of conformity in accordance with IEC Guide 115:2023, 4.3.3

# 6. EQUIPMENT UNDER TEST

## 6.1. DESCRIPTION OF EUT

The EUT is a DTS/UNII a/b/g/n/ac/ax module and BT/BLE.
This test report addresses the NII (WLAN) operational mode.

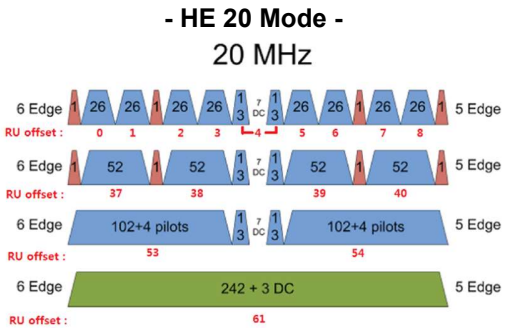
| Representative model | Software | Hardware Type | Difference |
|---|---|---|---|
| WCF934M | Same | Type1 | Basic: PCB top IR LED |
| | | Type2 | PCB bottom IR LED |
| | | Type3 | PCB top IR LED / MIC removed |
| Note1. H/W changes that are not RF related. Spot-Check test was performed on Type2 and Type3. The hardware Type 1 was used for final testing and is representative of the test results in this report. | | | |

**WiFi operating mode**

| Frequency rage | Mode | ANT1 | ANT2 |
|---|---|---|---|
| 6GHz (5955 MHz - 7115 MHz) | 802.11a SISO | TX/RX | TX/RX |
| | 802.11ax MIMO | TX/RX | |

**802.11ax RU allocations**

**- HE 20 Mode -**




**- HE 40 Mode -**


**- HE 80(996T) -**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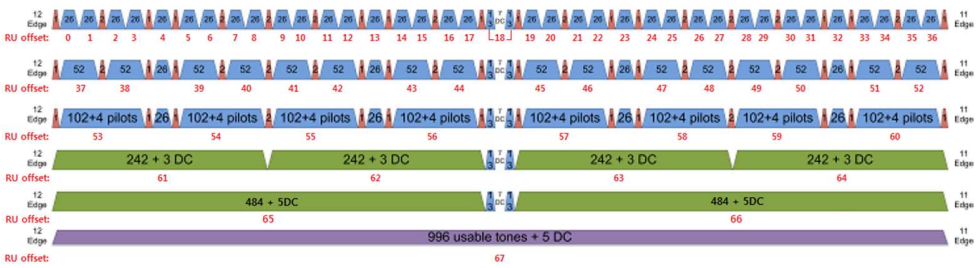


**Test RU offset for tones in each modes**

| Mode | Tones | RU offset |
|---|---|---|
| HE20 | 26T | 0 |
| | | 4 |
| | | 8 |
| | 52T | 37 |
| | | 38 |
| | | 40 |
| | 106T | 53 |
| | | 54 |
| | 242T / SU Note | 61 / - |
| HE40 | 26T | 0 |
| | | 9 |
| | | 17 |
| | 52T | 37 |
| | | 41 |
| | | 44 |
| | 106T | 53 |
| | | 54 |
| | | 56 |
| | 242T | 61 |
| | | 62 |
| | 484T / SU Note | 63 / - |
| HE80 | 26T | 0 |
| | | 18 |
| | | 36 |
| | 52T | 37 |
| | | 45 |
| | | 52 |
| | 106T | 53 |
| | | 57 |
| | | 60 |
| | 242T | 61 |
| | | 62 |
| | | 64 |
| | 484T | 65 |
| | | 66 |
| | 996T / SU Note | 67 / - |

Note: Full RU(Resource Unit) mode and SU(Single Unit) mode have no difference in physical waveform. This report has been reported the SU mode with highest output power in MIMO.


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## MAXIMUM OUTPUT POWER

The transmitter has a maximum total conducted EIRP output power as follows:

- **Low Power client mode (LPI)**

| Band | Frequency Range [MHz] | Mode | Output Power [dBm] | Output Power [mW] | Antenna Gain [dBi] | e.i.r.p Note1 [dBm] |
|---|---|---|---|---|---|---|
| UNII-5 | 5955 – 6415 | 802.11a SISO | 8.13 | 6.50 | 0.68 | 8.81 |
| | | 802.11ax(HE20) MIMO | 4.14 | 2.59 | 4.26 | 8.40 |
| | | 802.11ax(HE40) MIMO | 6.56 | 4.53 | 4.26 | 10.82 |
| | | 802.11ax(HE80) MIMO | 9.86 | 9.68 | 4.26 | 14.12 |
| UNII-6 | 6435 – 6515 | 802.11a SISO | 8.11 | 6.47 | 0.28 | 8.39 |
| | | 802.11ax(HE20) MIMO | 5.26 | 3.36 | 3.31 | 8.57 |
| | | 802.11ax(HE40) MIMO | 6.81 | 4.80 | 3.31 | 10.12 |
| | | 802.11ax(HE80) MIMO | 9.61 | 9.14 | 3.31 | 12.92 |
| UNII-7 | 6535 – 6875 | 802.11a SISO | 8.27 | 6.71 | 0.28 | 8.55 |
| | | 802.11ax(HE20) MIMO | 5.86 | 3.85 | 3.31 | 9.17 |
| | | 802.11ax(HE40) MIMO | 6.51 | 4.48 | 3.31 | 9.82 |
| | | 802.11ax(HE80) MIMO | 10.96 | 12.47 | 3.31 | 14.27 |
| UNII-8 | 6895 - 7115 | 802.11a SISO | 9.52 | 8.95 | 1.23 | 8.29 |
| | | 802.11ax(HE20) MIMO | 7.07 | 5.09 | 1.99 | 9.06 |
| | | 802.11ax(HE40) MIMO | 8.86 | 7.69 | 1.99 | 10.85 |
| | | 802.11ax(HE80) MIMO | 11.60 | 14.45 | 1.99 | 13.59 |

Note 1: e.i.r.p = Output Power[dBm] + Antenna gain[dBi]


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## 6.2. DESCRIPTION OF AVAILABLE ANTENNAS

An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

**The internal antenna was Permanently attached.**
**Therefore this E.U.T Complies with the requirement of §15.203.**

"WiFi Chain0" and "WiFi Chain1" as indicated in block diagram are written as ANT1 and ANT2 in this report.

The radio utilizes a internal antenna, with a maximum gain of:

| UNII Band | Frequency Range[MHz] | ANT1 Gain [dBi] | ANT2 Gain [dBi] | Correlated Chains Directional Gain[dBi] |
|---|---|---|---|---|
| 5 | 5925 – 6425 | 0.68 | 1.78 | 4.26 |
| 6 | 6425 – 6525 | 0.28 | 0.32 | 3.31 |
| 7 | 6525 – 6875 | 0.28 | 0.32 | 3.31 |
| 8 | 6875 – 7125 | -1.23 | -0.81 | 1.99 |

For CBP test, with a minimum gain of:

| UNII Band & Range[MHz] | Frequency [MHz] | ANT1 Gain [dBi] | ANT2 Gain [dBi] | Minimum Gain[dBi] |
|---|---|---|---|---|
| 5(5925 – 6425) | 5925 | 0.68 | 1.78 | **0.31** |
| | 6075 | 0.60 | 1.56 | |
| | 6225 | **0.31** | 1.61 | |
| | 6375 | 0.37 | 1.01 | |
| 6(6425 – 6525) | 6525 | **0.28** | 0.32 | **0.28** |
| 7(6525 – 6875) | 6525 | 0.28 | 0.32 | **-1.33** |
| | 6675 | 0.21 | -0.11 | |
| | 6825 | -0.18 | **-1.33** | |
| 8(6875 – 7125) | 6975 | -1.23 | -0.81 | **-1.80** |
| | 7125 | **-1.80** | -1.64 | |

Directional gain for the MIMO operations is determined using KDB 662911 D01 Multiple Transmitter Output section F (2)(d)(1) for *Unequal antenna gains, with equal transmit powers*. The gain is calculated using the formula for correlated transmissions across the two transmit antennas.
Correlated Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2 / N_{ANT}$] dBi.
Sample calculation for this device with $N_{ANT} = 2$
UNII-5 band's Correlated Directional gain = 10 log[$(10^{0.68/20} + 10^{1.78/20})^2 / 2$] = 4.26 dBi

## 6.3. WORST-CASE CONFIGURATION AND MODE

In 802.11a, both SISO ANT1 and ANT2 test were performed for radiated band edge and spurious emission tests.

In 802.11ax, both SISO and MIMO have been investigated and confirmed MIMO was the worst case set for radiated band edge and spurious emission tests.

The fundamentals of the EUT were investigated in three orthogonal orientations X, Y and Z on 1TX SISO and 2TX MIMO mode. Worst case of EUT axis below:

| ANT1 | ANT2 | MIMO |
|---|---|---|
| Z | Y | X |

Radiated harmonics spurious 1~18 GHz Low/Mid/High channels,18-40GHz were performed with the EUT set at the 2TX MIMO mode. Radiated emission below 1GHz and power line conducted emission were performed with the EUT set to transmit at the channel with highest output power as worst-case scenario.

For Radiated spurious test, 802.11ax HE20(242 tone) 2TX mode has similar or higher PSD results than other modes and therefore, it was set for full test. Spot-check was performed in 802.11ax HE40(484 tone) & 802.11ax HE80(996 tone) 2TX RU modes.

For Radiated band-edge test, 802.11a SISO ANT1&2, 802.11ax 2TX Full-RU mode were fully tested except 802.11ax 2TX partial RU modes. 802.11ax Full-RU mode resulted in radiated band-edge test is worse than partial RU modes; therefore, only Full-RU mode was reported.

For output power and PSD tests, 802.11ax mode were investigated among all different tones and following RU tones were set for final test:
Output power test:

HE20/HE40/HE80 were tested with partial RU mode and all Full-RU tones except SU mode as it has same or low power level and same physical waveform as Full-RU mode.

In case of 26dB Bandwidth, it was tested at the Full-RU Mode for each bandwidth. (Worst case)

PSD/ In-Band Emission test:

| Power Class | Worst case RU Mode |
|---|---|
| | LPI |
| HE20 | 242T(Full-RU) |
| HE40 | 484T(Full-RU) |
| HE80 | 996T(Full-RU) |

In-Band Emission: Full-RU & partial RU modes are full tested and partial RU modes are reported for worst case scenarios. Because Full-RU mode is the worst case than partial RU modes. It was based on conducted PSD level without antenna gain.

Based on the baseline scan, the worst-case data rates were:
802.11a mode: 6 Mbps 1Tx
802.11ax HE20 mode: MCS0 2Tx
802.11ax HE40 mode: MCS0 2Tx
802.11ax HE80 mode: MCS0 2Tx


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## 6.4. DESCRIPTION OF TEST SETUP

**SUPPORT EQUIPMENT**

| Support Equipment List | | | | |
|---|---|---|---|---|
| **Description** | **Manufacturer** | **Model** | **Serial Number** | **FCC ID** |
| Test Jig | MediaTek | - | - | N/A |
| Laptop | Lenovo | TP00136D | PF-4M6STB | N/A |
| Charger | Lenovo | ADLX45YCC3G | 8SSA10R16915C2TJ | N/A |

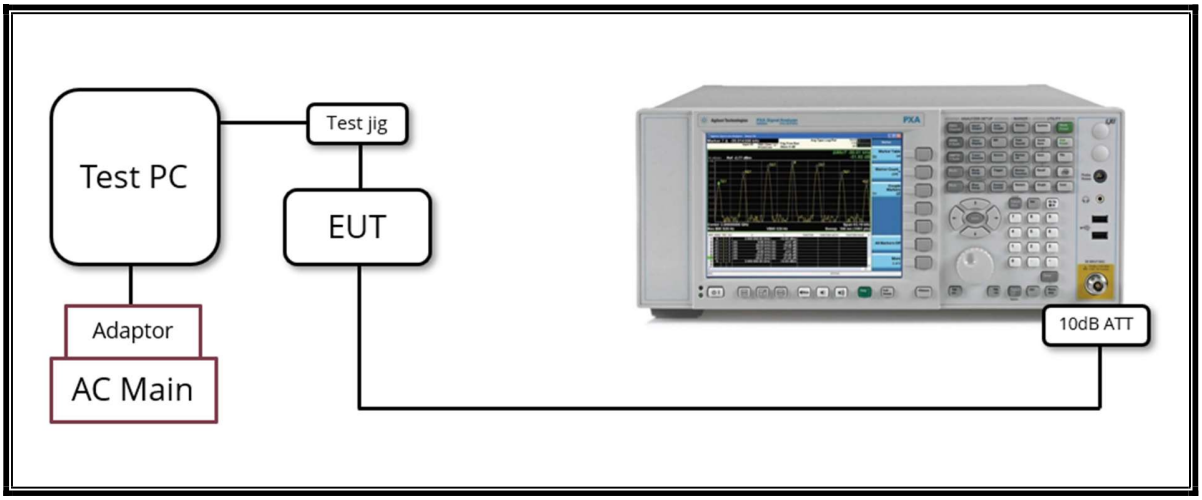
**I/O CABLE**

| I/O Cable List | | | | | | |
|---|---|---|---|---|---|---|
| **Cable No.** | **Port** | **# of identical ports** | **Connector Type** | **Cable Type** | **Cable Length (cm)** | **Remarks** |
| 1 | DC Power and Data | 1 | 24 pin | Unshielded | 20 cm | N/A |

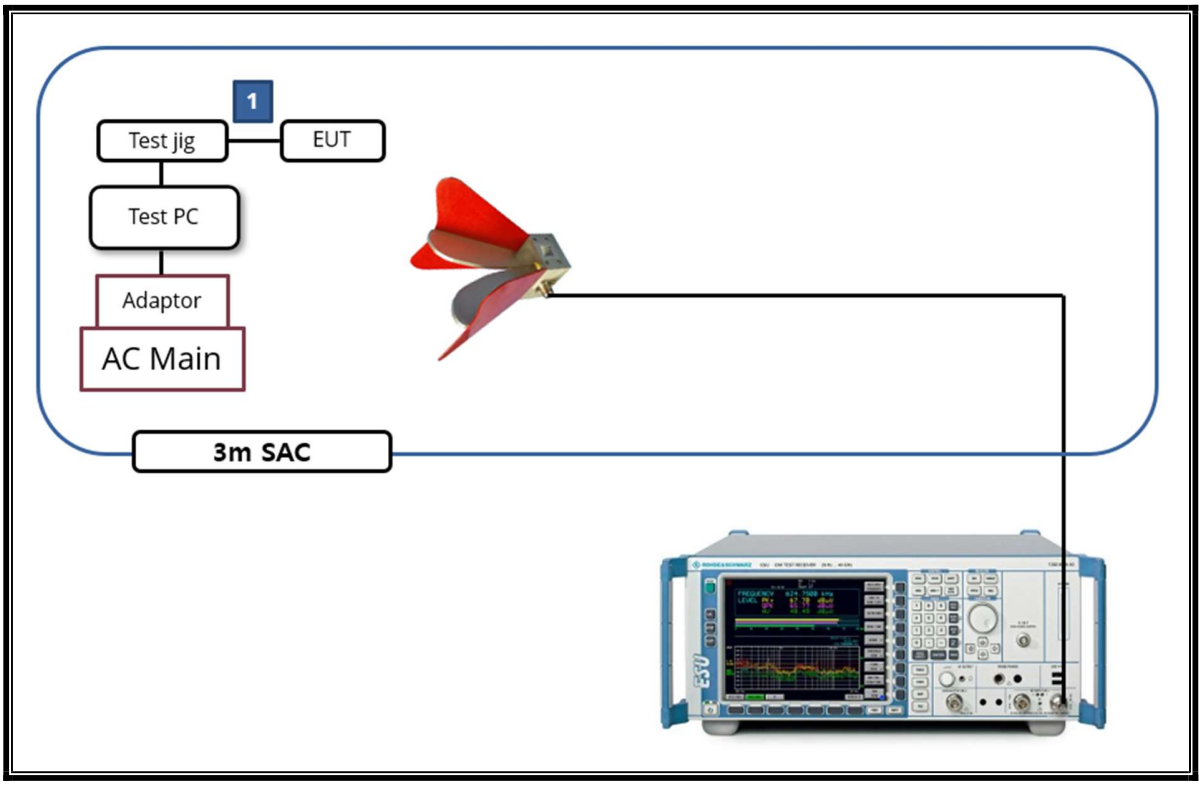
**TEST SETUP**

The EUT is a stand-alone unit during the tests.
Test software in exercised the EUT to enable NII mode.

**SETUP DIAGRAM FOR TESTS (CONDUCTED TEST SETUP)**




**SETUP DIAGRAM FOR TESTS (RADIATED TEST SETUP)**





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# 7. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

| Description | Manufacturer | Model | Identifier | Cal. Date | Cal. Due date |
|---|---|---|---|---|---|
| Spectrum Analyzer | KEYSIGHT | N9030B | MY57143717 | 2024-07-23 | 2025-07-23 |
| EMI Test Receiver | Rohde & Schwarz | ESW44 | 103297 | 2024-07-18 | 2025-07-18 |
| EMI Test Receiver | Rohde & Schwarz | ESW44 | 103313 | 2024-01-29 | 2025-01-29 |
| | | | | 2025-01-22 | 2026-01-22 |
| EMI Test Receiver | Rohde & Schwarz | ESW44 | 103350 | 2024-04-08 | 2025-04-08 |
| EMI Test Receiver | Rohde & Schwarz | ESR7 | 102328 | 2024-01-29 | 2025-01-29 |
| | | | | 2025-01-22 | 2026-01-22 |
| 2 Line LISN | Rohde & Schwarz | EVN216 | 102638 | 2024-01-30 | 2025-01-30 |
| | | | | 2025-01-23 | 2026-01-23 |
| Signal Generator | Rohde & Schwarz | SMB100B | 103196 | 2024-07-18 | 2025-07-18 |
| Signal Generator | Rohde & Schwarz | SMB100A | 184060 | 2024-07-18 | 2025-07-18 |
| Loop Antenna | TESEQ | HLA 6121 | 65111 | 2023-08-01 | 2025-08-01 |
| TRILOG BROADBAND ANTENNA | Schwarzbeck | VULB 9163 | 01670 | 2023-10-17 | 2025-10-17 |
| Double-Ridged Guide Antenna | ETS LINDGREN | 3117 | 00261223 | 2024-09-24 | 2025-09-24 |
| Double-Ridged Guide Antenna | ETS LINDGREN | 3117 | 00261463 | 2024-09-20 | 2025-09-20 |
| DOUBLE-RIDGED WAVEGUIDE HORN ANTENNA | ETS LINDGREN | 3116C | 00261440 | 2024-09-20 | 2025-09-20 |
| Amplifier | ETS LINDGREN | 3116C-PA | 00261440 | 2024-09-20 | 2025-09-20 |
| Signal Conditioning Unit | Rohde & Schwarz | SCU01F | 100316 | 2024-03-22 | 2025-03-22 |
| Amplifier | EXYNOD | ELNA03-40D | 631509 | 2024-07-18 | 2025-07-18 |
| Amplifier | BNZ | BZR-01001800-231040-182020 | 28452 | 2024-04-08 | 2025-04-08 |
| Amplifier | BNZ | BZR-01001800-231040-181515 | 31049 | 2024-07-18 | 2025-07-18 |
| Power Sensor | Rohde & Schwarz | 111164 | NRP8S | 2024-07-23 | 2025-07-23 |
| Power Sensor | Rohde & Schwarz | 104521 | NRP8S | 2024-07-25 | 2025-07-25 |
| Attenuator | Centric RF | C040-10 | N/A | 2024-01-11 | 2025-01-11 |
| | | | | 2025-01-10 | 2026-01-10 |
| Attenuator | Centric RF | C040-10 | N/A | 2024-01-11 | 2025-01-11 |
| | | | | 2025-01-10 | 2026-01-10 |
| Attenuator | EXYNOD | RLAN-210-18G | 10A001 | 2024-04-08 | 2025-04-08 |
| Fixed Attenuator | PASTERNACK | PE7087-10 | 2241 | 2024-07-18 | 2025-07-18 |
| Low Pass Filter | Micro-Tronics | LPS17541 | 019 | 2024-07-18 | 2025-07-18 |
| Low Pass Filter | Micro-Tronics | LPS17541 | 050 | 2024-04-08 | 2025-04-08 |
| High Pass Filter | Micro-Tronics | HPM50107 | G115 | 2024-07-18 | 2025-07-18 |
| High Pass Filter | Micro-Tronics | HPM17543 | 021 | 2024-07-18 | 2025-07-18 |
| High Pass Filter | Micro-Tronics | HPS17542 | 020 | 2024-07-18 | 2025-07-18 |
| High Pass Filter | Micro-Tronics | HPM17543 | 051 | 2024-04-08 | 2025-04-08 |
| High Pass Filter | Micro-Tronics | HPS17542 | 051 | 2024-04-08 | 2025-04-08 |
| Humidity/Baro/Temp DATA RECORDER | Lutron | MHB-382SD | AL.92208 | 2024-07-23 | 2025-07-23 |
| Humidity/Baro/Temp DATA RECORDER | Lutron | MHB-382SD | AM.00223 | 2024-01-11 | 2025-01-11 |
| | | | | 2025-01-02 | 2026-01-02 |

| | | | | | |
|---|---|---|---|---|---|
| Humidity/Baro/Temp DATA RECORDER | Lutron | MHB-382SD | AM.00227 | 2024-01-11 | 2025-01-11 |
| | | | | 2025-01-02 | 2026-01-02 |
| Digital Multimeter | Fluke Corporation | 17B+ | 51260820WS | 2024-07-18 | 2025-07-18 |
| **Measurement Software** | | | | | |
| **Description** | **Manufacturer** | **Model** | | **Vesrsion** | |
| Radiated software | UL | UL EMC | | Ver 9.5 | |
| AC Line Conducted Software | Rohde & Schwarz | EMC32 | | Ver 11.10.00 | |

# 8. SUMMARY TABLE

| FCC Part Section | IC Part Section | Test Description | Test Limit | Test Condition | Test Result |
|---|---|---|---|---|---|
| 15.407(a)(11) | RSS-248 4.4 | 26dB & 99% Bandwidth | N/A | Condcuted | Complies |
| 15.407(a)(7) 15.407(a)(8) | RSS-248 4.5.3 & 4.5.5 | Maximum Power Spectral Density | < -1dBm/MHz e.i.r.p (LPI) | | Complies |
| 15.407(a)(7) 15.407(a)(8) | RSS-248 4.5.3 | Maximum Radiated Output Power | < 24 dBm over the frequency band of operation (LPI) | | Complies |
| 15.407(b)(7) | RSS-248 4.6.2 | In-band Emissions | EUT must meet the limits detailed in 15.407(b)(7) | | Complies |
| 15.407(d)(6) | RSS-248 4.7 | Contention Based Protocol | EUT must detect AWGN signal with 90% (or better) certainty | | Complies |
| 15.407(b)(9) 15.207 | RSS-GEN Clause 8.8 | AC Power Line conducted emissions | < FCC 15.207 lmits, RSS-GEN Clause 8.8, Table 4 | Radiated | Complies |
| 15.407(b)(6) | RSS-248 4.6.2 | Undesirable Emissions | < -27 dBm/MHz e.i.r.p outside of the 5.925 – 7.125 GHz Band | | Complies |
| 15.205 15.209 | RSS-GEN Clause 7 & 8.9 | General Field Strength Limits (Restricted Bands and Radiated Emission Limits) | Emissions in restricted bands must meet the radiated limits detailed in 15.209 & Clause 8.9, Table 5 | | Complies |

Note. This EUT does not support channel puncturing and bandwidth reduction.


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# 9. MEASUREMENT METHODS

On-Time and Duty Cycle: KDB 789033 D02 v02r01, Section II.B.

26dB Emission BW: KDB 789033 D02 v02r01, Section II.C / KDB 987594 D02

99% Occupied BW: KDB 789033 D02 v02r01, Section II.D / KDB 987594 D02

Conducted Output Power: KDB 789033 D02 v02r01, Section II.E.3.a (Method PM) / KDB 987594 D02

Power Spectral Density: KDB 789033 D02 v02r01, Section II.F / KDB 987594 D02

In-Band Emissions: KDB 987594 D02

Unwanted emissions in restricted bands: KDB 789033 D02 v02r01, Section II.G.3 – II.G.6.

Unwanted emissions in non-restricted bands: KDB 789033 D02 v02r01, Section II.G.3 – II.G.6.

AC Power Line Conducted Emission: ANSI C63.10-2020, Section 6.2.


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# 10. REFERENCE MEASUREMENTS RESULTS

## 10.1. ON TIME AND DUTY CYCLE RESULTS

| Mode | On Time [ms] | Period [ms] | Duty Cycle X [Linear] | Duty Cycle X [%] | Duty Cycle Correction Factor[dB] |
|---|---|---|---|---|---|
| 802.11a SISO | 2.756 | 3.205 | 0.860 | 85.991 | 0.66 |

| Mode | ANT. | Tone | On Time [ms] | Period [ms] | Duty Cycle X [Linear] | Duty Cycle X [%] | Duty Cycle Correction Factor[dB] |
|---|---|---|---|---|---|---|---|
| 802.11ax HE20 | MIMO | 26T | 1.604 | 2.017 | 0.795 | 79.524 | 1.00 |
| | | 242T | 1.212 | 1.652 | 0.734 | 73.366 | 1.35 |
| 802.11ax HE40 | MIMO | 26T | 1.604 | 2.017 | 0.795 | 79.524 | 1.00 |
| | | 484T | 1.204 | 1.680 | 0.717 | 71.667 | 1.45 |
| 802.11ax HE80 | MIMO | 26T | 1.604 | 2.017 | 0.795 | 79.524 | 1.00 |
| | | 996T | 1.148 | 1.678 | 0.684 | 68.415 | 1.65 |

Note. If the duty cycle is over 98%, compensation is not included in average measurement.

**LIMITS**

None; for reporting purposes only.

**PROCEDURE**

KDB 789033 D02 v02r01 Zero-Span Spectrum Analyzer Method.

**DUTY CYCLE PLOTS**


802.11ax HE80 996T MIMO

## 10.2. 26 dB BANDWIDTH & 99% BANDWIDTH

**LIMITS**

FCC §15.407 (a) (11) / RSS-248 Issue 3 (4.4)
The maximum transmitter channel bandwidth for U-NII devices in the 5.925-7.125 GHz band is 320 megahertz.

**TEST PROCEDURE**

Reference to 789033 D02 General UNII Test Procedures New Rules v02r01: The transmitter output is connected to a spectrum analyzer with the RBW set to approximately 1% of EBW, the VBW > RBW, peak detector and max hold.

RSS-Gen Issue 5 (6.7): The transmitter output is connected to a spectrum analyzer with the RBW set to 1 ~ 5 % of EBW, the VBW > RBW, peak detector and max hold.

Please refer to the table below for RBW and VBW settings.

| Band | Mode | Tone | 20 MHz | 40 MHz | 80 MHz |
|---|---|---|---|---|---|
| UNII-5 | 802.11a | | 300 kHz/1 MHz | | |
| | 802.11ax | Partial & Full | 300 kHz/1 MHz | 430 kHz/1.5 MHz | 910 kHz/3 MHz |
| UNII-6 | 802.11a | | 300 kHz/1 MHz | | |
| | 802.11ax | Partial & Full | 300 kHz/1 MHz | 430 kHz/1.5 MHz | 910 kHz/3 MHz |
| UNII-7 | 802.11a | | 300 kHz/1 MHz | | |
| | 802.11ax | Partial & Full | 300 kHz/1 MHz | 430 kHz/1.5 MHz | 910 kHz/3 MHz |
| UNII-8 | 802.11a | | 300 kHz/1 MHz | | |
| | 802.11ax | Partial & Full | 300 kHz/1 MHz | 430 kHz/1.5 MHz | 910 kHz/3 MHz |

**RESULTS**

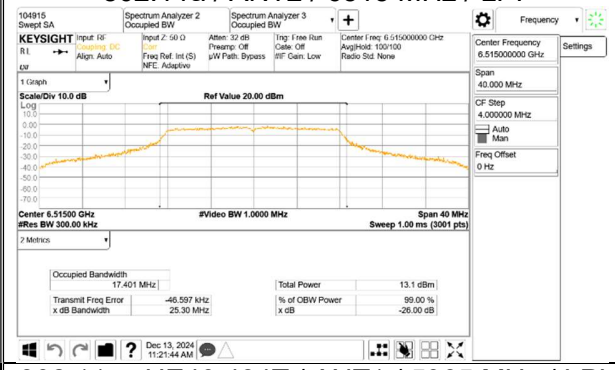
- Please refer to the next page

**WORST CASE TEST PLOTS**

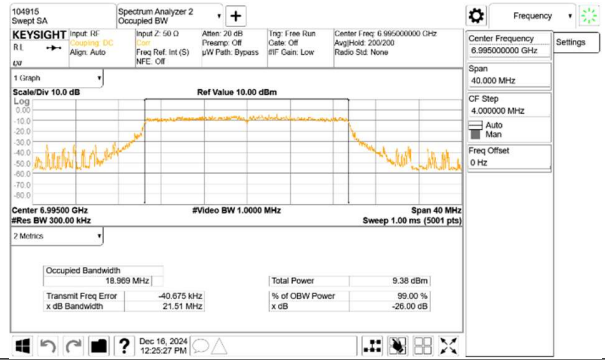
- Please refer to the next page

## 26 dB BANDWIDTH

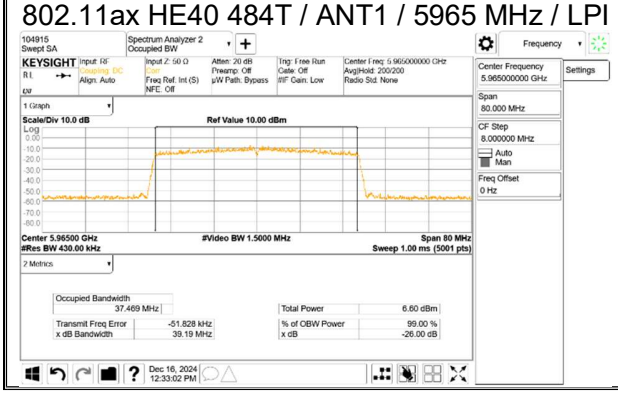
802.11a / ANT2 / 6515 MHz / LPI



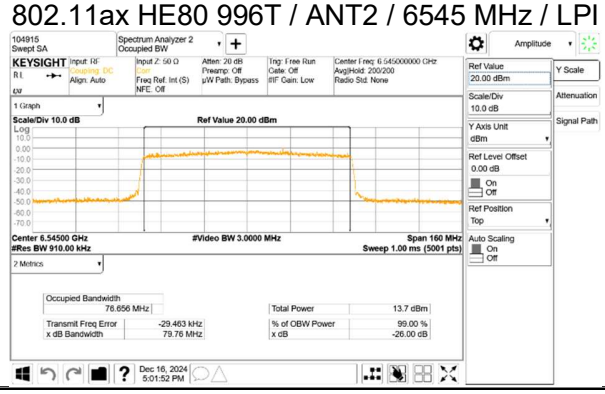

802.11ax HE20 242T / ANT1 / 6995 MHz / LPI




802.11ax HE40 484T / ANT1 / 5965 MHz / LPI

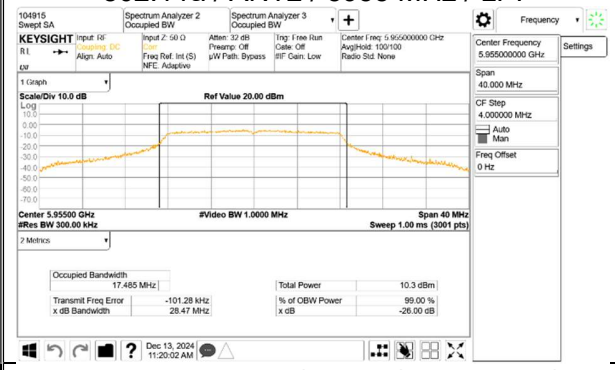



802.11ax HE80 996T / ANT2 / 6545 MHz / LPI

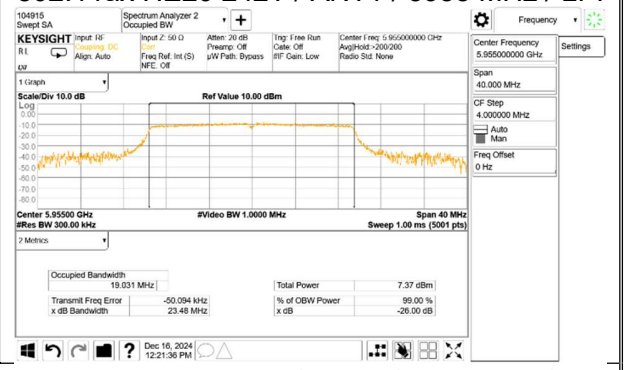


## 99% BANDWIDTH

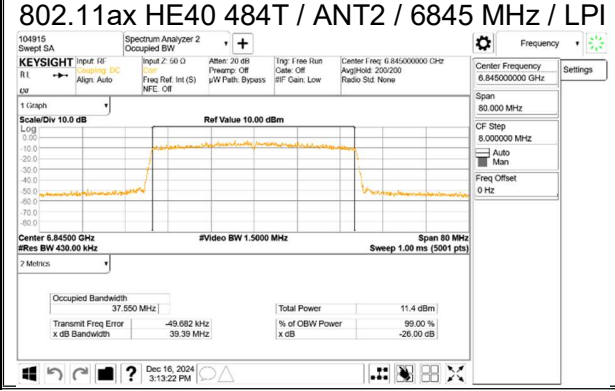
802.11a / ANT2 / 5955 MHz / LPI



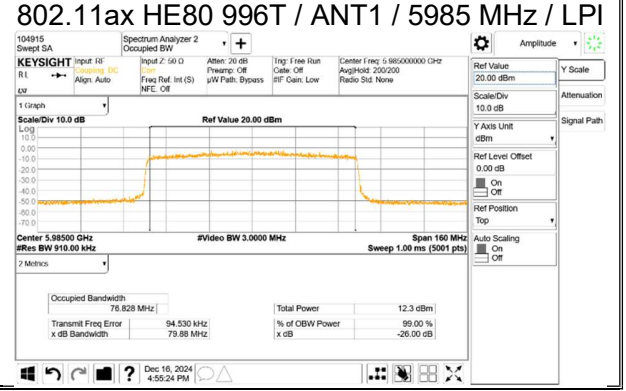

802.11ax HE20 242T / ANT1 / 5955 MHz / LPI




802.11ax HE40 484T / ANT2 / 6845 MHz / LPI




802.11ax HE80 996T / ANT1 / 5985 MHz / LPI



### 10.2.1. 802.11a

| Band | Ch. | Center Freq. [MHz] | 26 dB BW [MHz] | | Worst | 99% BW [MHz] | |
|---|---|---|---|---|---|---|---|
| | | | LPI | | | LPI | |
| | | | ANT1 | ANT2 | | ANT1 | ANT2 |
| UNII-5 | 1 | 5955 | 26.04 | 28.47 | 25.51 | 17.13 | 17.49 |
| | 45 | 6175 | 25.51 | 27.19 | | 17.38 | 17.38 |
| | 93 | 6415 | 26.22 | 26.48 | | 17.34 | 17.40 |
| UNII-6 | 97 | 6435 | 26.87 | 26.42 | 25.30 | 17.45 | 17.32 |
| | 105 | 6475 | 26.12 | 26.17 | | 17.35 | 17.36 |
| | 113 | 6515 | 26.21 | 25.30 | | 17.40 | 17.40 |
| UNII-7 | 117 | 6535 | 27.09 | 27.07 | 25.79 | 17.45 | 17.38 |
| | 149 | 6695 | 26.84 | 26.44 | | 17.40 | 17.37 |
| | 185 | 6875 | 26.65 | 25.79 | | 17.35 | 17.40 |
| UNII-8 | 189 | 6895 | 26.12 | 26.82 | 26.12 | 17.39 | 17.44 |
| | 209 | 6995 | 28.91 | 26.65 | | 17.37 | 17.42 |
| | 233 | 7115 | 26.49 | 27.23 | | 17.47 | 17.41 |

### 10.2.2. 802.11ax HE20

| Band | Ch. | Center Freq. [MHz] | 26 dB BW [MHz] | | Worst | 99% BW [MHz] | |
|---|---|---|---|---|---|---|---|
| | | | LPI | | | LPI | |
| | | | ANT1 | ANT2 | | ANT1 | ANT2 |
| UNII-5 | 1 | 5955 | 23.48 | 23.03 | 22.06 | 19.03 | 18.97 |
| | 45 | 6175 | 23.97 | 22.06 | | 18.98 | 18.99 |
| | 93 | 6415 | 22.77 | 24.70 | | 18.99 | 18.98 |
| UNII-6 | 97 | 6435 | 26.52 | 22.62 | 22.15 | 18.98 | 18.98 |
| | 105 | 6475 | 23.04 | 23.75 | | 18.96 | 19.01 |
| | 113 | 6515 | 22.15 | 22.92 | | 18.96 | 19.02 |
| UNII-7 | 117 | 6535 | 23.16 | 22.07 | 21.80 | 18.96 | 19.02 |
| | 149 | 6695 | 24.04 | 23.85 | | 18.97 | 19.00 |
| | 185 | 6875 | 25.59 | 21.80 | | 18.95 | 18.97 |
| UNII-8 | 189 | 6895 | 22.03 | 28.55 | 21.51 | 18.98 | 19.03 |
| | 209 | 6995 | 21.51 | 23.95 | | 18.97 | 18.99 |
| | 233 | 7115 | 22.11 | 21.94 | | 19.01 | 18.97 |

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### 10.2.3. 802.11ax HE40

| Band | Ch. | Center Freq. [MHz] | 26 dB BW [MHz] | | Worst | 99% BW [MHz] | |
|---|---|---|---|---|---|---|---|
| | | | LPI | | | LPI | |
| | | | ANT1 | ANT2 | | ANT1 | ANT2 |
| UNII-5 | 3 | 5965 | 39.19 | 39.44 | 39.19 | 37.47 | 37.46 |
| | 43 | 6165 | 39.25 | 39.36 | | 37.48 | 37.47 |
| | 91 | 6405 | 39.51 | 39.27 | | 37.42 | 37.50 |
| UNII-6 | 99 | 6445 | 39.38 | 39.30 | 39.28 | 37.38 | 37.39 |
| | 115 | 6525 | 39.49 | 39.28 | | 37.45 | 37.36 |
| UNII-7 | 123 | 6565 | 39.21 | 39.36 | 39.21 | 37.50 | 37.52 |
| | 147 | 6685 | 39.30 | 39.23 | | 37.45 | 37.45 |
| | 179 | 6845 | 39.22 | 39.39 | | 37.46 | 37.55 |
| UNII-8 | 187 | 6885 | 39.28 | 39.42 | 39.23 | 37.38 | 37.38 |
| | 203 | 6965 | 39.27 | 39.27 | | 37.52 | 37.46 |
| | 227 | 7085 | 39.32 | 39.23 | | 37.38 | 37.47 |

### 10.2.4. 802.11ax HE80

| Band | Ch. | Center Freq. [MHz] | 26 dB BW [MHz] | | Worst | 99% BW [MHz] | |
|---|---|---|---|---|---|---|---|
| | | | LPI | | | LPI | |
| | | | ANT1 | ANT2 | | ANT1 | ANT2 |
| UNII-5 | 7 | 5985 | 79.88 | 79.94 | 79.83 | 76.83 | 76.55 |
| | 39 | 6145 | 79.89 | 79.92 | | 76.56 | 76.54 |
| | 87 | 6385 | 79.94 | 79.83 | | 76.76 | 76.63 |
| UNII-6 | 103 | 6465 | 79.94 | 79.95 | 79.94 | 76.53 | 76.59 |
| UNII-7 | 119 | 6545 | 79.83 | 79.76 | 79.76 | 76.59 | 76.66 |
| | 151 | 6705 | 79.95 | 80.01 | | 76.66 | 76.48 |
| | 183 | 6865 | 80.04 | 79.99 | | 76.61 | 76.56 |
| UNII-8 | 199 | 6945 | 80.00 | 79.83 | 79.80 | 76.69 | 76.80 |
| | 215 | 7025 | 79.80 | 79.84 | | 76.65 | 76.62 |

# 11. ANTENNA PORT TEST RESULTS

## 11.1. OUTPUT POWER AND PPSD

**LIMITS**

FCC §15.407 (a) (7) and (8)
RSS-248 Issue 3 (4.5.3) and (4.5.5)

**FCC**

For client devices operating under the control of an indoor access point in the 5.925-7.125 GHz bands, the maximum power spectral density must not exceed −1 dBm e.i.r.p. in any 1megahertz band, and the maximum e.i.r.p. over the frequency band of operation must not exceed 24 dBm.

**IC**

4.5.3 Power limits for low-power client devices
The following limits shall apply to low-power client devices:

a. the maximum e.i.r.p. spectral density shall not exceed –1 dBm/MHz and
b. the maximum e.i.r.p. over the 5925-7125 MHz frequency band shall not exceed 24 dBm

**TEST PROCEDURE**

KDB 789033 Method PM in Section II.E.3.a is used for output power.
KDB 789033 Method SA-2 is used for only power of PPSD. RBW set to 1MHz, the VBW >= 3 x RBW, RMS detector and trace averaging. Peak marker value of the spectrum is used for PSD.

**DIRECTIONAL ANTENNA GAIN**

For OUTPUT POWER and PSD: The TX chains are correlated and the antenna gains are unequal among the chains. The directional gain is:

| Frequency Band [MHz] | ANT1 Gain [dBi] | ANT2 Gain [dBi] | Correlated Chains Directional Gain [dBi] |
|---|---|---|---|
| UNII 5 5925 – 6425 | 0.68 | 1.78 | 4.26 |
| UNII 6 6425 – 6525 | 0.28 | 0.32 | 3.31 |
| UNII 7 6525 – 6875 | 0.28 | 0.32 | 3.31 |
| UNII 8 6875 – 7125 | -1.23 | -0.81 | 1.99 |

### 11.1.1. 802.11a MODE

**Output Power Results**

**- LPI ANT1**

| Band | Channel | Freq. [MHz] | Average Power [dBm] | Direct. Gain [dBi] | Corr'd e.i.r.p [dBm] | Max e.i.r.p Limit [dBm] |
|---|---|---|---|---|---|---|
| | | | ANT1 | | | |
| UNII-5 | 1 | 5955 | 7.90 | 0.68 | 8.58 | 24.00 |
| | 45 | 6175 | 8.13 | 0.68 | 8.81 | |
| | 93 | 6415 | 7.60 | 0.68 | 8.28 | |
| UNII-6 | 97 | 6435 | 7.94 | 0.28 | 8.22 | |
| | 105 | 6475 | 8.11 | 0.28 | 8.39 | |
| | 113 | 6515 | 7.81 | 0.28 | 8.09 | |
| UNII-7 | 117 | 6535 | 7.71 | 0.28 | 7.99 | |
| | 149 | 6695 | 7.28 | 0.28 | 7.56 | |
| | 185 | 6875 | 7.21 | 0.28 | 7.49 | |
| UNII-8 | 189 | 6895 | 9.38 | -1.23 | 8.15 | |
| | 209 | 6995 | 9.52 | -1.23 | 8.29 | |
| | 233 | 7115 | 4.92 | -1.23 | 3.69 | |

* Calculation of Output Power : Average Power(dBm) = Meas Power(dBm) + Duty CF(dB)
Corr'd e.i.r.p.(dBm) = ANT1 Average Power(dBm) + Directional Gain(dB)

**- LPI ANT2**

| Band | Channel | Freq. [MHz] | Average Power [dBm] | Direct. Gain [dBi] | Corr'd e.i.r.p [dBm] | Max e.i.r.p Limit [dBm] |
|---|---|---|---|---|---|---|
| | | | ANT2 | | | |
| UNII-5 | 1 | 5955 | 6.32 | 1.78 | 7.00 | 24.00 |
| | 45 | 6175 | 6.56 | 1.78 | 7.24 | |
| | 93 | 6415 | 6.81 | 1.78 | 7.49 | |
| UNII-6 | 97 | 6435 | 7.95 | 0.32 | 8.23 | |
| | 105 | 6475 | 8.03 | 0.32 | 8.31 | |
| | 113 | 6515 | 7.35 | 0.32 | 7.63 | |
| UNII-7 | 117 | 6535 | 7.50 | 0.32 | 7.78 | |
| | 149 | 6695 | 8.27 | 0.32 | 8.55 | |
| | 185 | 6875 | 7.48 | 0.32 | 7.76 | |
| UNII-8 | 189 | 6895 | 9.10 | -0.81 | 7.87 | |
| | 209 | 6995 | 9.46 | -0.81 | 8.23 | |
| | 233 | 7115 | 5.82 | -0.81 | 4.59 | |

* Calculation of Output Power : Average Power(dBm) = Meas Power(dBm) + Duty CF(dB)
Corr'd e.i.r.p.(dBm) = ANT2 Average Power(dBm) + Directional Gain(dB)

## PSD Results

### - LPI ANT1

| Band | Channel | Freq. [MHz] | Meas PSD [dBm/MHz] ANT1 | DCCF | Direct. Gain [dBi] | Corr'd PSD e.i.r.p [dBm] | PSD e.i.r.p Limit [dBm/MHz] |
|---|---|---|---|---|---|---|---|
| UNII-5 | 1 | 5955 | -2.97 | 0.66 | 0.68 | -1.63 | -1.00 |
| | 45 | 6175 | -2.99 | 0.66 | 0.68 | -1.65 | |
| | 93 | 6415 | -2.56 | 0.66 | 0.68 | -1.22 | |
| UNII-6 | 97 | 6435 | -2.41 | 0.66 | 0.28 | -1.47 | |
| | 105 | 6475 | -2.43 | 0.66 | 0.28 | -1.49 | |
| | 113 | 6515 | -2.62 | 0.66 | 0.28 | -1.68 | |
| UNII-7 | 117 | 6535 | -2.55 | 0.66 | 0.28 | -1.61 | |
| | 149 | 6695 | -2.90 | 0.66 | 0.28 | -1.96 | |
| | 185 | 6875 | -2.90 | 0.66 | 0.28 | -1.96 | |
| UNII-8 | 189 | 6895 | -0.71 | 0.66 | -1.23 | -1.28 | |
| | 209 | 6995 | -1.00 | 0.66 | -1.23 | -1.57 | |
| | 233 | 7115 | -5.46 | 0.66 | -1.23 | -6.03 | |

Corr'd PSD e.i.r.p.(dBm) = ANT1 Meas PSD(dBm) + DCCF(dB) + Directional Gain(dB)

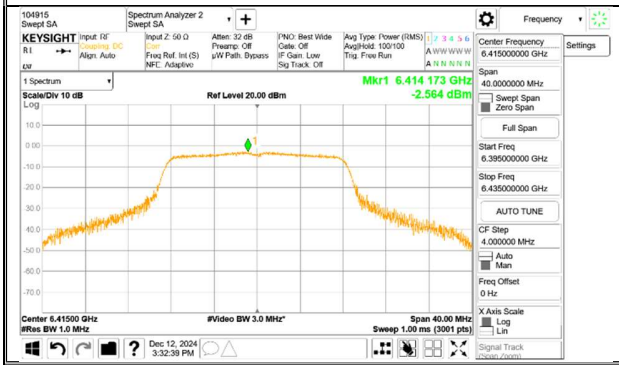
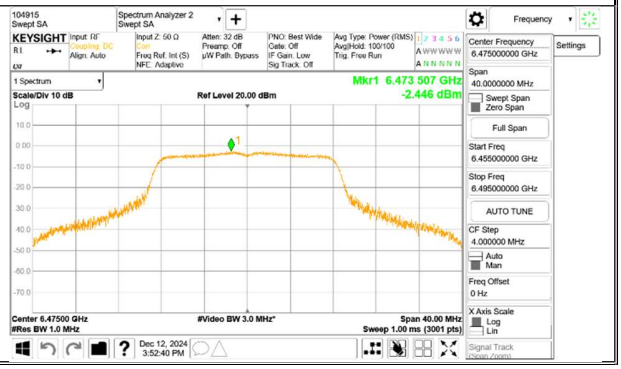
### - LPI ANT2

| Band | Channel | Freq. [MHz] | Meas PSD [dBm/MHz] ANT2 | DCCF | Direct. Gain [dBi] | Corr'd PSD e.i.r.p [dBm] | PSD e.i.r.p Limit [dBm/MHz] |
|---|---|---|---|---|---|---|---|
| UNII-5 | 1 | 5955 | -4.32 | 0.66 | 1.78 | -1.88 | -1.00 |
| | 45 | 6175 | -4.07 | 0.66 | 1.78 | -1.63 | |
| | 93 | 6415 | -3.92 | 0.66 | 1.78 | -1.48 | |
| UNII-6 | 97 | 6435 | -2.50 | 0.66 | 0.32 | -1.52 | |
| | 105 | 6475 | -2.45 | 0.66 | 0.32 | -1.47 | |
| | 113 | 6515 | -2.84 | 0.66 | 0.32 | -1.86 | |
| UNII-7 | 117 | 6535 | -2.67 | 0.66 | 0.32 | -1.69 | |
| | 149 | 6695 | -2.45 | 0.66 | 0.32 | -1.47 | |
| | 185 | 6875 | -2.75 | 0.66 | 0.32 | -1.77 | |
| UNII-8 | 189 | 6895 | -1.46 | 0.66 | -0.81 | -1.61 | |
| | 209 | 6995 | -1.34 | 0.66 | -0.81 | -1.49 | |
| | 233 | 7115 | -4.55 | 0.66 | -0.81 | -4.70 | |

Corr'd PSD e.i.r.p.(dBm) = ANT2 Meas PSD(dBm) + DCCF(dB) + Directional Gain(dB)

## PPSD PLOTS (WORST CASE)

**- LPI**

| ANT1 | ANT2 |
|---|---|
| 802.11a / U-NII-5 / 6415 MHz | 802.11a / U-NII-6 / 6475 MHz |
|  |  |

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### 11.1.2. 802.11ax HE20 MODE

**Output Power Results**

**- LPI**

| Band | Channel | Freq. [MHz] | Tones | RU offset | Average Power [dBm] | | | Direct. Gain [dBi] | Corr'd e.i.r.p [dBm] | Max e.i.r.p Limit [dBm] |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ANT1 | ANT2 | MIMO | | | |
| UNII-5 | 1 | 5955 | 26T | 0 | -7.26 | -6.88 | -4.06 | 4.26 | 0.20 | 24.00 |
| | | | | 4 | -6.62 | -6.25 | -3.42 | 4.26 | 0.84 | |
| | | | | 8 | -7.16 | -6.79 | -3.96 | 4.26 | 0.30 | |
| | | | 52T | 37 | -4.49 | -4.09 | -1.28 | 4.26 | 2.98 | |
| | | | | 38 | -5.02 | -4.60 | -1.79 | 4.26 | 2.47 | |
| | | | | 40 | -4.97 | -4.59 | -1.77 | 4.26 | 2.49 | |
| | | | 106T | 53 | -2.38 | -1.95 | 0.85 | 4.26 | 5.11 | |
| | | | | 54 | -2.39 | -1.95 | 0.85 | 4.26 | 5.11 | |
| | | | 242T | 61 | 0.57 | 0.35 | 3.47 | 4.26 | 7.73 | |
| | 45 | 6175 | 26T | 0 | -6.75 | -6.24 | -3.48 | 4.26 | 0.78 | |
| | | | | 4 | -6.15 | -5.61 | -2.86 | 4.26 | 1.40 | |
| | | | | 8 | -6.20 | -5.72 | -2.94 | 4.26 | 1.32 | |
| | | | 52T | 37 | -4.63 | -4.11 | -1.35 | 4.26 | 2.91 | |
| | | | | 38 | -4.56 | -4.01 | -1.27 | 4.26 | 2.99 | |
| | | | | 40 | -4.60 | -4.04 | -1.30 | 4.26 | 2.96 | |
| | | | 106T | 53 | -2.66 | -2.03 | 0.68 | 4.26 | 4.94 | |
| | | | | 54 | -2.57 | -2.00 | 0.73 | 4.26 | 4.99 | |
| | | | 242T | 61 | 0.69 | 0.62 | 3.67 | 4.26 | 7.93 | |
| | 93 | 6415 | 26T | 0 | -6.20 | -5.65 | -2.91 | 4.26 | 1.35 | |
| | | | | 4 | -6.24 | -5.55 | -2.87 | 4.26 | 1.39 | |
| | | | | 8 | -6.68 | -5.86 | -3.24 | 4.26 | 1.02 | |
| | | | 52T | 37 | -4.67 | -3.82 | -1.21 | 4.26 | 3.05 | |
| | | | | 38 | -4.65 | -3.77 | -1.18 | 4.26 | 3.08 | |
| | | | | 40 | -4.61 | -3.74 | -1.14 | 4.26 | 3.12 | |
| | | | 106T | 53 | -2.74 | -1.82 | 0.75 | 4.26 | 5.01 | |
| | | | | 54 | -2.66 | -1.77 | 0.82 | 4.26 | 5.08 | |
| | | | 242T | 61 | 0.56 | 1.64 | 4.14 | 4.26 | 8.40 | |

* Calculation of Output Power : Average Power(dBm) = Meas Power(dBm) + Duty CF(dB)
Corr'd e.i.r.p.(dBm) = ANT1 Average Power(dBm) + ANT2 Average Power(dBm) + Directional Gain(dB)
= 10*LOG($10^{ANT1/10}$+$10^{ANT2/10}$)+ Directional Gain(dB)

**- LPI**

| Band | Channel | Freq. [MHz] | Tones | RU offset | Average Power [dBm] | | | Direct. Gain [dBi] | Corr'd e.i.r.p [dBm] | Max e.i.r.p Limit [dBm] |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ANT1 | ANT2 | MIMO | | | |
| UNII-6 | 97 | 6435 | 26T | 0 | -7.27 | -6.69 | -3.96 | 3.31 | -0.65 | 24.00 |
| | | | | 4 | -6.08 | -5.65 | -2.85 | 3.31 | 0.46 | |
| | | | | 8 | -6.52 | -6.10 | -3.29 | 3.31 | 0.02 | |
| | | | 52T | 37 | -4.01 | -3.54 | -0.76 | 3.31 | 2.55 | |
| | | | | 38 | -3.96 | -3.51 | -0.72 | 3.31 | 2.59 | |
| | | | | 40 | -3.85 | -3.46 | -0.64 | 3.31 | 2.67 | |
| | | | 106T | 53 | -1.48 | -0.90 | 1.83 | 3.31 | 5.14 | |
| | | | | 54 | -1.42 | -0.81 | 1.91 | 3.31 | 5.22 | |
| | | | 242T | 61 | 1.77 | 2.38 | 5.10 | 3.31 | 8.41 | |
| | 105 | 6475 | 26T | 0 | -6.99 | -6.50 | -3.73 | 3.31 | -0.42 | |
| | | | | 4 | -6.82 | -6.35 | -3.57 | 3.31 | -0.26 | |
| | | | | 8 | -6.84 | -6.37 | -3.59 | 3.31 | -0.28 | |
| | | | 52T | 37 | -4.29 | -3.36 | -0.79 | 3.31 | 2.52 | |
| | | | | 38 | -4.27 | -3.77 | -1.00 | 3.31 | 2.31 | |
| | | | | 40 | -4.24 | -3.76 | -0.98 | 3.31 | 2.33 | |
| | | | 106T | 53 | -1.26 | -0.72 | 2.03 | 3.31 | 5.34 | |
| | | | | 54 | -1.25 | -0.64 | 2.08 | 3.31 | 5.39 | |
| | | | 242T | 61 | 1.88 | 2.59 | 5.26 | 3.31 | 8.57 | |
| | 113 | 6515 | 26T | 0 | -6.95 | -6.73 | -3.83 | 3.31 | -0.52 | |
| | | | | 4 | -5.74 | -5.52 | -2.62 | 3.31 | 0.69 | |
| | | | | 8 | -6.83 | -6.50 | -3.65 | 3.31 | -0.34 | |
| | | | 52T | 37 | -3.80 | -3.50 | -0.64 | 3.31 | 2.67 | |
| | | | | 38 | -3.68 | -3.44 | -0.55 | 3.31 | 2.76 | |
| | | | | 40 | -4.13 | -3.81 | -0.96 | 3.31 | 2.35 | |
| | | | 106T | 53 | -1.77 | -1.38 | 1.44 | 3.31 | 4.75 | |
| | | | | 54 | -1.75 | -1.22 | 1.53 | 3.31 | 4.84 | |
| | | | 242T | 61 | 2.06 | 2.40 | 5.24 | 3.31 | 8.55 | |

* Calculation of Output Power : Average Power(dBm) = Meas Power(dBm) + Duty CF(dB)
Corr'd e.i.r.p.(dBm) = ANT1 Average Power(dBm) + ANT2 Average Power(dBm) + Directional Gain(dB)
= 10*LOG($10^{ANT1/10}$+$10^{ANT2/10}$)+ Directional Gain(dB)

**- LPI**

| Band | Channel | Freq. [MHz] | Tones | RU offset | Average Power [dBm] | | | Direct. Gain [dBi] | Corr'd e.i.r.p [dBm] | Max e.i.r.p Limit [dBm] |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ANT1 | ANT2 | MIMO | | | |
| UNII-7 | 117 | 6535 | 26T | 0 | -6.71 | -6.27 | -3.47 | 3.31 | -0.16 | 24.00 |
| | | | | 4 | -6.00 | -5.55 | -2.76 | 3.31 | 0.55 | |
| | | | | 8 | -6.25 | -5.51 | -2.85 | 3.31 | 0.46 | |
| | | | 52T | 37 | -3.55 | -3.04 | -0.28 | 3.31 | 3.03 | |
| | | | | 38 | -3.48 | -2.86 | -0.15 | 3.31 | 3.16 | |
| | | | | 40 | -3.48 | -2.72 | -0.07 | 3.31 | 3.24 | |
| | | | 106T | 53 | -0.33 | -0.02 | 2.84 | 3.31 | 6.15 | |
| | | | | 54 | -0.72 | -0.25 | 2.53 | 3.31 | 5.84 | |
| | | | 242T | 61 | 2.41 | 2.80 | 5.62 | 3.31 | 8.93 | |
| | 149 | 6695 | 26T | 0 | -6.02 | -5.02 | -2.48 | 3.31 | 0.83 | |
| | | | | 4 | -6.38 | -5.13 | -2.70 | 3.31 | 0.61 | |
| | | | | 8 | -5.95 | -5.11 | -2.50 | 3.31 | 0.81 | |
| | | | 52T | 37 | -3.54 | -2.57 | -0.02 | 3.31 | 3.29 | |
| | | | | 38 | -3.90 | -3.03 | -0.43 | 3.31 | 2.88 | |
| | | | | 40 | -3.95 | -3.05 | -0.47 | 3.31 | 2.84 | |
| | | | 106T | 53 | -1.12 | -0.14 | 2.41 | 3.31 | 5.72 | |
| | | | | 54 | -1.01 | -0.12 | 2.47 | 3.31 | 5.78 | |
| | | | 242T | 61 | 2.28 | 3.35 | 5.86 | 3.31 | 9.17 | |
| | 185 | 6875 | 26T | 0 | -5.89 | -6.07 | -2.97 | 3.31 | 0.34 | |
| | | | | 4 | -5.02 | -5.04 | -2.02 | 3.31 | 1.29 | |
| | | | | 8 | -5.50 | -5.53 | -2.50 | 3.31 | 0.81 | |
| | | | 52T | 37 | -3.36 | -3.32 | -0.33 | 3.31 | 2.98 | |
| | | | | 38 | -3.18 | -3.16 | -0.16 | 3.31 | 3.15 | |
| | | | | 40 | -3.31 | -3.28 | -0.28 | 3.31 | 3.03 | |
| | | | 106T | 53 | -1.21 | -0.88 | 1.97 | 3.31 | 5.28 | |
| | | | | 54 | -1.20 | -0.88 | 1.97 | 3.31 | 5.28 | |
| | | | 242T | 61 | 2.55 | 2.99 | 5.79 | 3.31 | 9.10 | |

* Calculation of Output Power : Average Power(dBm) = Meas Power(dBm) + Duty CF(dB)
Corr'd e.i.r.p.(dBm) = ANT1 Average Power(dBm) + ANT2 Average Power(dBm) + Directional Gain(dB)
= 10*LOG($10^{ANT1/10}$+$10^{ANT2/10}$)+ Directional Gain(dB)

**- LPI**

| Band | Channel | Freq. [MHz] | Tones | RU offset | Average Power [dBm] | | | Direct. Gain [dBi] | Corr'd e.i.r.p [dBm] | Max e.i.r.p Limit [dBm] |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ANT1 | ANT2 | MIMO | | | |
| UNII-8 | 189 | 6895 | 26T | 0 | -4.92 | -4.72 | -1.81 | 1.99 | 0.18 | 24.00 |
| | | | | 4 | -3.83 | -3.61 | -0.71 | 1.99 | 1.28 | |
| | | | | 8 | -4.42 | -4.31 | -1.35 | 1.99 | 0.64 | |
| | | | 52T | 37 | -1.82 | -1.31 | 1.45 | 1.99 | 3.44 | |
| | | | | 38 | -1.67 | -1.20 | 1.58 | 1.99 | 3.57 | |
| | | | | 40 | -1.71 | -1.38 | 1.47 | 1.99 | 3.46 | |
| | | | 106T | 53 | 0.80 | 1.02 | 3.92 | 1.99 | 5.91 | |
| | | | | 54 | 0.87 | 1.02 | 3.96 | 1.99 | 5.95 | |
| | | | 242T | 61 | 3.33 | 3.62 | 6.49 | 1.99 | 8.48 | |
| | 209 | 6995 | 26T | 0 | -5.36 | -3.64 | -1.41 | 1.99 | 0.58 | |
| | | | | 4 | -4.81 | -3.52 | -1.11 | 1.99 | 0.88 | |
| | | | | 8 | -4.89 | -3.66 | -1.22 | 1.99 | 0.77 | |
| | | | 52T | 37 | -2.46 | -0.77 | 1.48 | 1.99 | 3.47 | |
| | | | | 38 | -2.33 | -0.76 | 1.54 | 1.99 | 3.53 | |
| | | | | 40 | -2.42 | -0.72 | 1.52 | 1.99 | 3.51 | |
| | | | 106T | 53 | 0.43 | 1.92 | 4.25 | 1.99 | 6.24 | |
| | | | | 54 | 0.54 | 1.84 | 4.25 | 1.99 | 6.24 | |
| | | | 242T | 61 | 2.76 | 4.37 | 6.65 | 1.99 | 8.64 | |
| | 233 | 7115 | 26T | 0 | -4.73 | -3.68 | -1.16 | 1.99 | 0.83 | |
| | | | | 4 | -4.71 | -3.69 | -1.16 | 1.99 | 0.83 | |
| | | | | 8 | -4.76 | -3.93 | -1.31 | 1.99 | 0.68 | |
| | | | 52T | 37 | -2.36 | -1.12 | 1.31 | 1.99 | 3.30 | |
| | | | | 38 | -2.42 | -1.04 | 1.33 | 1.99 | 3.32 | |
| | | | | 40 | -2.48 | -1.08 | 1.29 | 1.99 | 3.28 | |
| | | | 106T | 53 | 0.55 | 1.36 | 3.98 | 1.99 | 5.97 | |
| | | | | 54 | 0.44 | 1.22 | 3.86 | 1.99 | 5.85 | |
| | | | 242T | 61 | 3.60 | 4.48 | 7.07 | 1.99 | 9.06 | |

* Calculation of Output Power : Average Power(dBm) = Meas Power(dBm) + Duty CF(dB)
Corr'd e.i.r.p.(dBm) = ANT1 Average Power(dBm) + ANT2 Average Power(dBm) + Directional Gain(dB)
= 10*LOG($10^{ANT1/10}$+$10^{ANT2/10}$)+ Directional Gain(dB)

## PSD Results

### - LPI

| Band | Channel | Freq. [MHz] | Tones | RU offset | Meas PSD [dBm/MHz] | | | DCCF | Direct. Gain [dBi] | Corr'd PSD e.i.r.p [dBm] | PSD e.i.r.p Limit [dBm/MHz] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ANT1 | ANT2 | MIMO | | | | |
| UNII-5 | 1 | 5955 | 26T | 0 | -9.72 | -10.23 | -6.95 | 1.00 | 4.26 | -1.70 | -1.00 |
| | | | | 4 | -10.15 | -10.09 | -7.11 | 1.00 | 4.26 | -1.86 | |
| | | | | 8 | -10.07 | -9.71 | -6.88 | 1.00 | 4.26 | -1.63 | |
| | | | 242T | 61 | -10.08 | -10.36 | -7.21 | 1.35 | 4.26 | -1.61 | |
| | 45 | 6175 | 26T | 0 | -9.35 | -9.62 | -6.47 | 1.00 | 4.26 | -1.22 | |
| | | | | 4 | -9.74 | -9.81 | -6.77 | 1.00 | 4.26 | -1.52 | |
| | | | | 8 | -10.04 | -9.82 | -6.92 | 1.00 | 4.26 | -1.67 | |
| | | | 242T | 61 | -10.04 | -9.85 | -6.93 | 1.35 | 4.26 | -1.33 | |
| | 93 | 6415 | 26T | 0 | -10.06 | -10.33 | -7.19 | 1.00 | 4.26 | -1.94 | |
| | | | | 4 | -9.31 | -10.29 | -6.76 | 1.00 | 4.26 | -1.51 | |
| | | | | 8 | -9.72 | -9.89 | -6.79 | 1.00 | 4.26 | -1.54 | |
| | | | 242T | 61 | -10.12 | -10.29 | -7.19 | 1.35 | 4.26 | -1.59 | |
| UNII-6 | 97 | 6435 | 26T | 0 | -8.97 | -9.38 | -6.16 | 1.00 | 3.31 | -1.86 | |
| | | | | 4 | -9.21 | -9.38 | -6.28 | 1.00 | 3.31 | -1.98 | |
| | | | | 8 | -9.18 | -9.09 | -6.13 | 1.00 | 3.31 | -1.83 | |
| | | | 242T | 61 | -9.26 | -9.46 | -6.35 | 1.35 | 3.31 | -1.70 | |
| | 105 | 6475 | 26T | 0 | -9.27 | -9.02 | -6.13 | 1.00 | 3.31 | -1.83 | |
| | | | | 4 | -9.32 | -8.86 | -6.07 | 1.00 | 3.31 | -1.77 | |
| | | | | 8 | -9.21 | -9.24 | -6.21 | 1.00 | 3.31 | -1.91 | |
| | | | 242T | 61 | -9.21 | -8.97 | -6.08 | 1.35 | 3.31 | -1.43 | |
| | 113 | 6515 | 26T | 0 | -8.77 | -9.23 | -5.98 | 1.00 | 3.31 | -1.68 | |
| | | | | 4 | -9.57 | -9.03 | -6.28 | 1.00 | 3.31 | -1.98 | |
| | | | | 8 | -9.30 | -8.88 | -6.07 | 1.00 | 3.31 | -1.77 | |
| | | | 242T | 61 | -9.10 | -9.05 | -6.07 | 1.35 | 3.31 | -1.42 | |
| UNII-7 | 117 | 6535 | 26T | 0 | -8.88 | -8.95 | -5.90 | 1.00 | 3.31 | -1.60 | |
| | | | | 4 | -9.00 | -9.07 | -6.02 | 1.00 | 3.31 | -1.72 | |
| | | | | 8 | -8.97 | -8.95 | -5.95 | 1.00 | 3.31 | -1.65 | |
| | | | 242T | 61 | -8.92 | -9.10 | -6.00 | 1.35 | 3.31 | -1.35 | |
| | 149 | 6695 | 26T | 0 | -8.97 | -8.78 | -5.86 | 1.00 | 3.31 | -1.56 | |
| | | | | 4 | -8.61 | -8.71 | -5.65 | 1.00 | 3.31 | -1.35 | |
| | | | | 8 | -8.96 | -8.79 | -5.86 | 1.00 | 3.31 | -1.56 | |
| | | | 242T | 61 | -9.09 | -8.83 | -5.95 | 1.35 | 3.31 | -1.30 | |
| | 185 | 6875 | 26T | 0 | -8.95 | -9.29 | -6.11 | 1.00 | 3.31 | -1.81 | |
| | | | | 4 | -9.07 | -9.36 | -6.21 | 1.00 | 3.31 | -1.91 | |
| | | | | 8 | -8.86 | -8.93 | -5.88 | 1.00 | 3.31 | -1.58 | |
| | | | 242T | 61 | -8.93 | -9.27 | -6.08 | 1.35 | 3.31 | -1.43 | |
| UNII-8 | 189 | 6895 | 26T | 0 | -7.68 | -7.72 | -4.69 | 1.00 | 1.99 | -1.71 | |
| | | | | 4 | -7.45 | -7.77 | -4.60 | 1.00 | 1.99 | -1.62 | |
| | | | | 8 | -7.88 | -7.62 | -4.73 | 1.00 | 1.99 | -1.75 | |
| | | | 242T | 61 | -7.45 | -7.68 | -4.55 | 1.35 | 1.99 | -1.22 | |
| | 209 | 6995 | 26T | 0 | -7.89 | -7.50 | -4.68 | 1.00 | 1.99 | -1.70 | |
| | | | | 4 | -7.44 | -7.14 | -4.28 | 1.00 | 1.99 | -1.30 | |
| | | | | 8 | -7.68 | -7.71 | -4.69 | 1.00 | 1.99 | -1.71 | |
| | | | 242T | 61 | -7.65 | -7.42 | -4.52 | 1.35 | 1.99 | -1.19 | |
| | 233 | 7115 | 26T | 0 | -7.89 | -7.30 | -4.57 | 1.00 | 1.99 | -1.59 | |
| | | | | 4 | -7.92 | -7.59 | -4.74 | 1.00 | 1.99 | -1.76 | |
| | | | | 8 | -7.67 | -7.55 | -4.60 | 1.00 | 1.99 | -1.62 | |
| | | | 242T | 61 | -7.56 | -7.43 | -4.48 | 1.35 | 1.99 | -1.15 | |

* Corr'd PSD e.i.r.p.(dBm) = ANT1 Meas PSD(dBm) + ANT2 Meas PSD(dBm) + DCCF(dB) + Directional Gain(dB)
= 10*LOG($10^{ANT1/10}$ + $10^{ANT2/10}$)+DCCF(dB)+ Directional Gain(dB)


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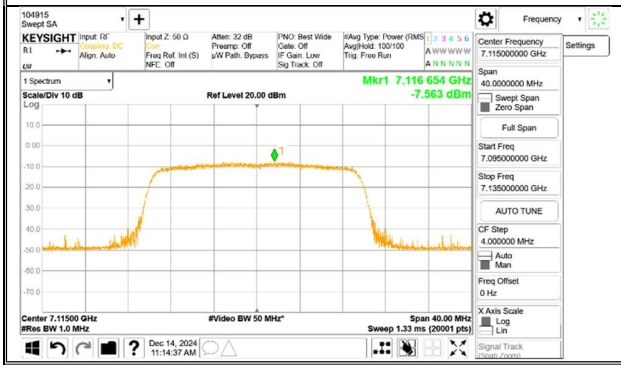
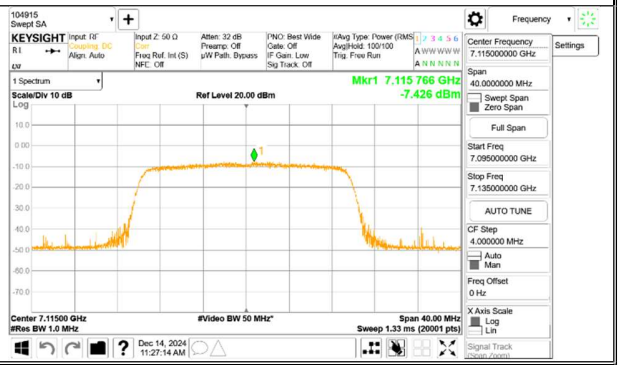
## PPSD PLOTS (WORST CASE)

### - LPI

| ANT1 | ANT2 |
|---|---|
| 802.11 ax HE20 / U-NII-8 / 7115 MHz / 242T | |
|  |  |



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### 11.1.3. 802.11ax HE40 MODE

**Output Power Results**

**- LPI**

| Band | Channel | Freq. [MHz] | Tones | RU offset | Average Power [dBm] | | | Direct. Gain [dBi] | Corr'd e.i.r.p [dBm] | Max e.i.r.p Limit [dBm] |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ANT1 | ANT2 | MIMO | | | |
| UNII-5 | 3 | 5965 | 26T | 0 | -7.39 | -7.07 | -4.22 | 4.26 | 0.04 | 24.00 |
| | | | | 9 | -6.99 | -6.71 | -3.84 | 4.26 | 0.42 | |
| | | | | 17 | -7.23 | -7.01 | -4.11 | 4.26 | 0.15 | |
| | | | 52T | 37 | -4.15 | -3.75 | -0.94 | 4.26 | 3.32 | |
| | | | | 41 | -3.75 | -3.53 | -0.63 | 4.26 | 3.63 | |
| | | | | 44 | -3.97 | -3.70 | -0.82 | 4.26 | 3.44 | |
| | | | 106T | 53 | -1.76 | -2.05 | 1.11 | 4.26 | 5.37 | |
| | | | | 54 | -1.59 | -1.90 | 1.27 | 4.26 | 5.53 | |
| | | | | 56 | -1.73 | -2.15 | 1.08 | 4.26 | 5.34 | |
| | | | 242T | 61 | 1.71 | 1.39 | 4.56 | 4.26 | 8.82 | |
| | | | | 62 | 1.77 | 1.29 | 4.55 | 4.26 | 8.81 | |
| | | | 484T | 65 | 3.35 | 2.51 | 5.96 | 4.26 | 10.22 | |
| | 43 | 6165 | 26T | 0 | -7.13 | -7.22 | -4.16 | 4.26 | 0.10 | |
| | | | | 9 | -6.84 | -6.78 | -3.80 | 4.26 | 0.46 | |
| | | | | 17 | -6.94 | -6.98 | -3.95 | 4.26 | 0.31 | |
| | | | 52T | 37 | -3.99 | -4.05 | -1.01 | 4.26 | 3.25 | |
| | | | | 41 | -3.68 | -3.63 | -0.64 | 4.26 | 3.62 | |
| | | | | 44 | -3.90 | -3.89 | -0.88 | 4.26 | 3.38 | |
| | | | 106T | 53 | -1.98 | -2.55 | 0.75 | 4.26 | 5.01 | |
| | | | | 54 | -1.82 | -2.34 | 0.94 | 4.26 | 5.20 | |
| | | | | 56 | -1.90 | -2.43 | 0.85 | 4.26 | 5.11 | |
| | | | 242T | 61 | 1.55 | 0.95 | 4.27 | 4.26 | 8.53 | |
| | | | | 62 | 1.57 | 1.04 | 4.32 | 4.26 | 8.58 | |
| | | | 484T | 65 | 3.75 | 3.35 | 6.56 | 4.26 | 10.82 | |
| | 91 | 6405 | 26T | 0 | -7.01 | -7.47 | -4.22 | 4.26 | 0.04 | |
| | | | | 9 | -6.79 | -7.72 | -4.22 | 4.26 | 0.04 | |
| | | | | 17 | -6.90 | -7.94 | -4.38 | 4.26 | -0.12 | |
| | | | 52T | 37 | -4.00 | -5.04 | -1.48 | 4.26 | 2.78 | |
| | | | | 41 | -3.70 | -4.63 | -1.13 | 4.26 | 3.13 | |
| | | | | 44 | -3.80 | -4.83 | -1.27 | 4.26 | 2.99 | |
| | | | 106T | 53 | -1.43 | -2.13 | 1.24 | 4.26 | 5.50 | |
| | | | | 54 | -1.29 | -1.91 | 1.42 | 4.26 | 5.68 | |
| | | | | 56 | -1.30 | -2.06 | 1.35 | 4.26 | 5.61 | |
| | | | 242T | 61 | 1.54 | 0.84 | 4.21 | 4.26 | 8.47 | |
| | | | | 62 | 1.57 | 0.83 | 4.23 | 4.26 | 8.49 | |
| | | | 484T | 65 | 2.77 | 3.17 | 5.98 | 4.26 | 10.24 | |

* Calculation of Output Power : Average Power(dBm) = Meas Power(dBm) + Duty CF(dB)
Corr'd e.i.r.p.(dBm) = ANT1 Average Power(dBm) + ANT2 Average Power(dBm) + Directional Gain(dB)
= 10*LOG($10^{ANT1/10}$+$10^{ANT2/10}$)+ Directional Gain(dB)


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**- LPI**

| Band | Channel | Freq. [MHz] | Tones | RU offset | Average Power [dBm] | | | Direct. Gain [dBi] | Corr'd e.i.r.p [dBm] | Max e.i.r.p Limit [dBm] |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ANT1 | ANT2 | MIMO | | | |
| UNII-6 | 99 | 6445 | 26T | 0 | -5.97 | -6.97 | -3.43 | 3.31 | -0.12 | 24.00 |
| | | | | 9 | -5.59 | -6.61 | -3.06 | 3.31 | 0.25 | |
| | | | | 17 | -5.77 | -6.79 | -3.24 | 3.31 | 0.07 | |
| | | | 52T | 37 | -2.64 | -3.31 | 0.05 | 3.31 | 3.36 | |
| | | | | 41 | -3.00 | -4.12 | -0.51 | 3.31 | 2.80 | |
| | | | | 44 | -3.13 | -4.24 | -0.64 | 3.31 | 2.67 | |
| | | | 106T | 53 | -0.29 | -1.13 | 2.32 | 3.31 | 5.63 | |
| | | | | 54 | -0.12 | -0.97 | 2.49 | 3.31 | 5.80 | |
| | | | | 56 | -0.20 | -1.13 | 2.37 | 3.31 | 5.68 | |
| | | | 242T | 61 | 2.67 | 1.76 | 5.25 | 3.31 | 8.56 | |
| | | | | 62 | 2.77 | 1.75 | 5.30 | 3.31 | 8.61 | |
| | | | 484T | 65 | 3.74 | 3.66 | 6.71 | 3.31 | 10.02 | |
| | 115 | 6525 | 26T | 0 | -5.66 | -6.84 | -3.20 | 3.31 | 0.11 | |
| | | | | 9 | -5.51 | -6.49 | -2.96 | 3.31 | 0.35 | |
| | | | | 17 | -5.54 | -6.60 | -3.03 | 3.31 | 0.28 | |
| | | | 52T | 37 | -3.07 | -4.16 | -0.57 | 3.31 | 2.74 | |
| | | | | 41 | -2.60 | -3.84 | -0.17 | 3.31 | 3.14 | |
| | | | | 44 | -2.90 | -4.00 | -0.40 | 3.31 | 2.91 | |
| | | | 106T | 53 | -0.08 | -1.05 | 2.47 | 3.31 | 5.78 | |
| | | | | 54 | -0.14 | -0.70 | 2.60 | 3.31 | 5.91 | |
| | | | | 56 | -0.07 | -0.84 | 2.57 | 3.31 | 5.88 | |
| | | | 242T | 61 | 2.46 | 1.56 | 5.04 | 3.31 | 8.35 | |
| | | | | 62 | 2.47 | 1.58 | 5.06 | 3.31 | 8.37 | |
| | | | 484T | 65 | 3.95 | 3.64 | 6.81 | 3.31 | 10.12 | |

* Calculation of Output Power : Average Power(dBm) = Meas Power(dBm) + Duty CF(dB)
Corr'd e.i.r.p.(dBm) = ANT1 Average Power(dBm) + ANT2 Average Power(dBm) + Directional Gain(dB)
= 10*LOG($10^{ANT1/10}$+$10^{ANT2/10}$)+ Directional Gain(dB)


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**- LPI**

| Band | Channel | Freq. [MHz] | Tones | RU offset | Average Power [dBm] | | | Direct. Gain [dBi] | Corr'd e.i.r.p [dBm] | Max e.i.r.p Limit [dBm] |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ANT1 | ANT2 | MIMO | | | |
| UNII-7 | 123 | 6565 | 26T | 0 | -6.09 | -6.32 | -3.19 | 3.31 | 0.12 | 24.00 |
| | | | | 9 | -5.56 | -6.30 | -2.90 | 3.31 | 0.41 | |
| | | | | 17 | -5.68 | -6.40 | -3.01 | 3.31 | 0.30 | |
| | | | 52T | 37 | -3.16 | -4.19 | -0.63 | 3.31 | 2.68 | |
| | | | | 41 | -3.54 | -4.24 | -0.87 | 3.31 | 2.44 | |
| | | | | 44 | -3.57 | -4.28 | -0.90 | 3.31 | 2.41 | |
| | | | 106T | 53 | -0.78 | -1.81 | 1.75 | 3.31 | 5.06 | |
| | | | | 54 | -0.68 | -1.54 | 1.92 | 3.31 | 5.23 | |
| | | | | 56 | -0.72 | -1.65 | 1.85 | 3.31 | 5.16 | |
| | | | 242T | 61 | 2.51 | 1.51 | 5.05 | 3.31 | 8.36 | |
| | | | | 62 | 2.58 | 1.64 | 5.15 | 3.31 | 8.46 | |
| | | | 484T | 65 | 3.47 | 2.90 | 6.20 | 3.31 | 9.51 | |
| | 147 | 6685 | 26T | 0 | -5.21 | -6.33 | -2.72 | 3.31 | 0.59 | |
| | | | | 9 | -5.34 | -6.76 | -2.98 | 3.31 | 0.33 | |
| | | | | 17 | -5.46 | -6.89 | -3.11 | 3.31 | 0.20 | |
| | | | 52T | 37 | -3.07 | -4.30 | -0.63 | 3.31 | 2.68 | |
| | | | | 41 | -3.22 | -4.44 | -0.78 | 3.31 | 2.53 | |
| | | | | 44 | -3.30 | -4.32 | -0.77 | 3.31 | 2.54 | |
| | | | 106T | 53 | -0.96 | -2.00 | 1.56 | 3.31 | 4.87 | |
| | | | | 54 | -0.72 | -1.74 | 1.81 | 3.31 | 5.12 | |
| | | | | 56 | -0.80 | -1.88 | 1.70 | 3.31 | 5.01 | |
| | | | 242T | 61 | 2.43 | 1.78 | 5.13 | 3.31 | 8.44 | |
| | | | | 62 | 2.45 | 1.92 | 5.20 | 3.31 | 8.51 | |
| | | | 484T | 65 | 3.15 | 3.83 | 6.51 | 3.31 | 9.82 | |
| | 179 | 6845 | 26T | 0 | -5.88 | -6.92 | -3.36 | 3.31 | -0.05 | |
| | | | | 9 | -5.80 | -6.80 | -3.26 | 3.31 | 0.05 | |
| | | | | 17 | -5.74 | -6.81 | -3.23 | 3.31 | 0.08 | |
| | | | 52T | 37 | -2.93 | -4.24 | -0.53 | 3.31 | 2.78 | |
| | | | | 41 | -2.55 | -4.22 | -0.29 | 3.31 | 3.02 | |
| | | | | 44 | -2.70 | -4.22 | -0.38 | 3.31 | 2.93 | |
| | | | 106T | 53 | -0.55 | -1.94 | 1.82 | 3.31 | 5.13 | |
| | | | | 54 | -0.24 | -1.88 | 2.03 | 3.31 | 5.34 | |
| | | | | 56 | -0.40 | -1.87 | 1.94 | 3.31 | 5.25 | |
| | | | 242T | 61 | 2.92 | 1.72 | 5.37 | 3.31 | 8.68 | |
| | | | | 62 | 2.84 | 1.80 | 5.36 | 3.31 | 8.67 | |
| | | | 484T | 65 | 3.08 | 3.73 | 6.43 | 3.31 | 9.74 | |

* Calculation of Output Power : Average Power(dBm) = Meas Power(dBm) + Duty CF(dB)
Corr'd e.i.r.p.(dBm) = ANT1 Average Power(dBm) + ANT2 Average Power(dBm) + Directional Gain(dB)
= $10*LOG(10^{ANT1/10}+10^{ANT2/10})$+ Directional Gain(dB)

**- LPI**

| Band | Channel | Freq. [MHz] | Tones | RU offset | Average Power [dBm] | | | Direct. Gain [dBi] | Corr'd e.i.r.p [dBm] | Max e.i.r.p Limit [dBm] |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ANT1 | ANT2 | MIMO | | | |
| UNII-8 | 187 | 6885 | 26T | 0 | -4.62 | -5.72 | -2.12 | 1.99 | -0.13 | 24.00 |
| | | | | 9 | -4.71 | -5.84 | -2.23 | 1.99 | -0.24 | |
| | | | | 17 | -4.73 | -5.92 | -2.27 | 1.99 | -0.28 | |
| | | | 52T | 37 | -1.57 | -2.22 | 1.13 | 1.99 | 3.12 | |
| | | | | 41 | -1.20 | -2.24 | 1.32 | 1.99 | 3.31 | |
| | | | | 44 | -1.22 | -2.36 | 1.26 | 1.99 | 3.25 | |
| | | | 106T | 53 | 1.51 | 0.37 | 3.99 | 1.99 | 5.98 | |
| | | | | 54 | 1.72 | 0.14 | 4.01 | 1.99 | 6.00 | |
| | | | | 56 | 1.60 | 0.04 | 3.90 | 1.99 | 5.89 | |
| | | | 242T | 61 | 3.78 | 2.26 | 6.10 | 1.99 | 8.09 | |
| | | | | 62 | 3.83 | 2.24 | 6.12 | 1.99 | 8.11 | |
| | | | 484T | 65 | 5.11 | 5.55 | 8.35 | 1.99 | 10.34 | |
| | 203 | 6965 | 26T | 0 | -4.55 | -6.42 | -2.37 | 1.99 | -0.38 | |
| | | | | 9 | -4.71 | -6.30 | -2.42 | 1.99 | -0.43 | |
| | | | | 17 | -4.60 | -6.36 | -2.38 | 1.99 | -0.39 | |
| | | | 52T | 37 | -1.22 | -2.42 | 1.23 | 1.99 | 3.22 | |
| | | | | 41 | -1.04 | -2.33 | 1.37 | 1.99 | 3.36 | |
| | | | | 44 | -1.14 | -2.31 | 1.32 | 1.99 | 3.31 | |
| | | | 106T | 53 | 1.45 | 0.02 | 3.80 | 1.99 | 5.79 | |
| | | | | 54 | 1.80 | 0.03 | 4.01 | 1.99 | 6.00 | |
| | | | | 56 | 1.72 | 0.16 | 4.02 | 1.99 | 6.01 | |
| | | | 242T | 61 | 3.75 | 2.08 | 6.01 | 1.99 | 8.00 | |
| | | | | 62 | 3.70 | 2.04 | 5.96 | 1.99 | 7.95 | |
| | | | 484T | 65 | 5.10 | 6.49 | 8.86 | 1.99 | 10.85 | |
| | 227 | 7085 | 26T | 0 | -4.60 | -5.95 | -2.21 | 1.99 | -0.22 | |
| | | | | 9 | -4.82 | -6.02 | -2.37 | 1.99 | -0.38 | |
| | | | | 17 | -4.64 | -6.06 | -2.28 | 1.99 | -0.29 | |
| | | | 52T | 37 | -0.72 | -2.42 | 1.52 | 1.99 | 3.51 | |
| | | | | 41 | -0.66 | -2.36 | 1.58 | 1.99 | 3.57 | |
| | | | | 44 | -0.79 | -2.33 | 1.52 | 1.99 | 3.51 | |
| | | | 106T | 53 | 1.82 | 0.24 | 4.11 | 1.99 | 6.10 | |
| | | | | 54 | 1.93 | 0.36 | 4.23 | 1.99 | 6.22 | |
| | | | | 56 | 1.97 | 0.22 | 4.19 | 1.99 | 6.18 | |
| | | | 242T | 61 | 3.66 | 2.01 | 5.92 | 1.99 | 7.91 | |
| | | | | 62 | 3.62 | 2.33 | 6.03 | 1.99 | 8.02 | |
| | | | 484T | 65 | 4.70 | 6.48 | 8.69 | 1.99 | 10.68 | |

* Calculation of Output Power : Average Power(dBm) = Meas Power(dBm) + Duty CF(dB)
Corr'd e.i.r.p.(dBm) = ANT1 Average Power(dBm) + ANT2 Average Power(dBm) + Directional Gain(dB)
= 10*LOG($10^{ANT1/10}$+$10^{ANT2/10}$)+ Directional Gain(dB)


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## PSD Results

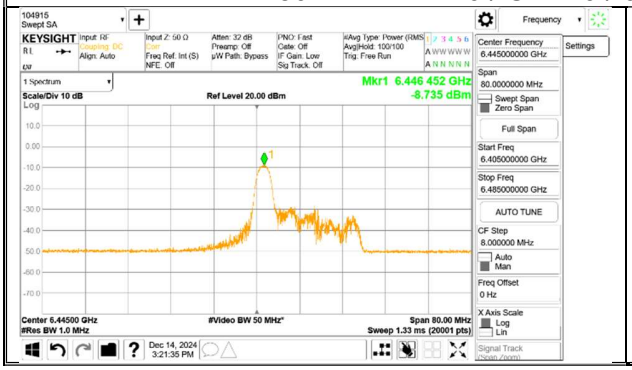
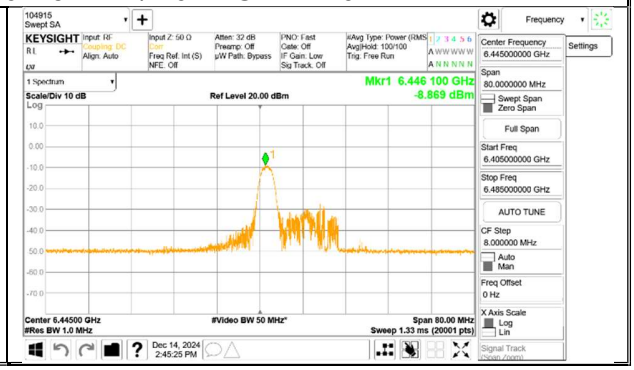
### - LPI

| Band | Channel | Freq. [MHz] | Tones | RU offset | Meas PSD [dBm/MHz] | | | DCCF | Direct. Gain [dBi] | Corr'd PSD e.i.r.p [dBm] | PSD e.i.r.p Limit [dBm/MHz] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ANT1 | ANT2 | MIMO | | | | |
| UNII-5 | 3 | 5965 | 26T | 0 | -10.13 | -10.17 | -7.14 | 1.00 | 4.26 | -1.89 | -1.00 |
| | | | | 9 | -9.87 | -10.15 | -7.00 | 1.00 | 4.26 | -1.75 | |
| | | | | 17 | -9.94 | -9.91 | -6.92 | 1.00 | 4.26 | -1.67 | |
| | | | 484T | 65 | -10.50 | -10.65 | -7.56 | 1.45 | 4.26 | -1.85 | |
| | 43 | 6165 | 26T | 0 | -10.18 | -9.98 | -7.07 | 1.00 | 4.26 | -1.82 | |
| | | | | 9 | -10.18 | -9.83 | -6.99 | 1.00 | 4.26 | -1.74 | |
| | | | | 17 | -9.82 | -10.06 | -6.93 | 1.00 | 4.26 | -1.68 | |
| | | | 484T | 65 | -10.62 | -10.34 | -7.47 | 1.45 | 4.26 | -1.76 | |
| | 91 | 6405 | 26T | 0 | -9.99 | -10.37 | -7.17 | 1.00 | 4.26 | -1.92 | |
| | | | | 9 | -9.91 | -9.89 | -6.89 | 1.00 | 4.26 | -1.64 | |
| | | | | 17 | -9.97 | -10.47 | -7.20 | 1.00 | 4.26 | -1.95 | |
| | | | 484T | 65 | -10.58 | -10.62 | -7.59 | 1.45 | 4.26 | -1.88 | |
| UNII-6 | 99 | 6445 | 26T | 0 | -8.88 | -9.10 | -5.98 | 1.00 | 3.31 | -1.68 | |
| | | | | 9 | -8.74 | -8.87 | -5.79 | 1.00 | 3.31 | -1.49 | |
| | | | | 17 | -8.84 | -9.18 | -6.00 | 1.00 | 3.31 | -1.70 | |
| | | | 484T | 65 | -9.70 | -9.49 | -6.59 | 1.45 | 3.31 | -1.83 | |
| | 115 | 6525 | 26T | 0 | -8.80 | -9.37 | -6.07 | 1.00 | 3.31 | -1.77 | |
| | | | | 9 | -8.89 | -9.03 | -5.95 | 1.00 | 3.31 | -1.65 | |
| | | | | 17 | -8.97 | -8.93 | -5.94 | 1.00 | 3.31 | -1.64 | |
| | | | 484T | 65 | -9.58 | -9.48 | -6.52 | 1.45 | 3.31 | -1.76 | |
| UNII-7 | 123 | 6565 | 26T | 0 | -8.73 | -9.16 | -5.93 | 1.00 | 3.31 | -1.63 | |
| | | | | 9 | -8.73 | -9.54 | -6.11 | 1.00 | 3.31 | -1.81 | |
| | | | | 17 | -8.86 | -9.53 | -6.17 | 1.00 | 3.31 | -1.87 | |
| | | | 484T | 65 | -9.62 | -10.00 | -6.79 | 1.45 | 3.31 | -2.03 | |
| | 147 | 6685 | 26T | 0 | -8.75 | -9.47 | -6.08 | 1.00 | 3.31 | -1.78 | |
| | | | | 9 | -8.89 | -9.19 | -6.03 | 1.00 | 3.31 | -1.73 | |
| | | | | 17 | -9.05 | -9.05 | -6.03 | 1.00 | 3.31 | -1.73 | |
| | | | 484T | 65 | -9.65 | -9.50 | -6.56 | 1.45 | 3.31 | -1.80 | |
| | 179 | 6845 | 26T | 0 | -9.00 | -9.26 | -6.12 | 1.00 | 3.31 | -1.82 | |
| | | | | 9 | -9.01 | -9.40 | -6.19 | 1.00 | 3.31 | -1.89 | |
| | | | | 17 | -8.99 | -9.54 | -6.25 | 1.00 | 3.31 | -1.95 | |
| | | | 484T | 65 | -9.69 | -9.70 | -6.68 | 1.45 | 3.31 | -1.92 | |
| UNII-8 | 187 | 6885 | 26T | 0 | -7.44 | -7.99 | -4.69 | 1.00 | 1.99 | -1.71 | |
| | | | | 9 | -7.59 | -7.65 | -4.61 | 1.00 | 1.99 | -1.63 | |
| | | | | 17 | -7.43 | -7.84 | -4.62 | 1.00 | 1.99 | -1.64 | |
| | | | 484T | 65 | -8.27 | -8.33 | -5.29 | 1.45 | 1.99 | -1.85 | |
| | 203 | 6965 | 26T | 0 | -7.58 | -7.52 | -4.54 | 1.00 | 1.99 | -1.56 | |
| | | | | 9 | -7.65 | -7.69 | -4.66 | 1.00 | 1.99 | -1.68 | |
| | | | | 17 | -7.72 | -7.51 | -4.60 | 1.00 | 1.99 | -1.62 | |
| | | | 484T | 65 | -8.29 | -7.97 | -5.11 | 1.45 | 1.99 | -1.67 | |
| | 227 | 7085 | 26T | 0 | -7.56 | -7.85 | -4.69 | 1.00 | 1.99 | -1.71 | |
| | | | | 9 | -7.61 | -7.68 | -4.63 | 1.00 | 1.99 | -1.65 | |
| | | | | 17 | -7.67 | -7.73 | -4.69 | 1.00 | 1.99 | -1.71 | |
| | | | 484T | 65 | -8.24 | -8.36 | -5.29 | 1.45 | 1.99 | -1.85 | |

* Corr'd PSD e.i.r.p.(dBm) = ANT1 Meas PSD(dBm) + ANT2 Meas PSD(dBm) + DCCF(dB) + Directional Gain(dB)
= 10*LOG($10^{ANT1/10}$ + $10^{ANT2/10}$)+DCCF(dB)+ Directional Gain(dB)

## PPSD PLOTS (WORST CASE)

### - LPI

| ANT1 | ANT2 |
|---|---|
| 802.11 ax HE40 / U-NII-6 / 6445 MHz / 26T RU offset 9 | |
|  |  |

### 11.1.4. 802.11ax HE80 MODE

**Output Power Results**

**- LPI**

| Band | Channel | Freq. [MHz] | Tones | RU offset | Average Power [dBm] | | | Direct. Gain [dBi] | Corr'd e.i.r.p [dBm] | Max e.i.r.p Limit [dBm] |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ANT1 | ANT2 | MIMO | | | |
| UNII-5 | 7 | 5985 | 26T | 0 | -6.84 | -6.55 | -3.68 | 4.26 | 0.58 | 24.00 |
| | | | | 18 | -6.37 | -6.18 | -3.26 | 4.26 | 1.00 | |
| | | | | 36 | -6.38 | -6.48 | -3.42 | 4.26 | 0.84 | |
| | | | 52T | 37 | -4.21 | -3.87 | -1.03 | 4.26 | 3.23 | |
| | | | | 45 | -3.96 | -3.76 | -0.85 | 4.26 | 3.41 | |
| | | | | 52 | -3.81 | -3.83 | -0.81 | 4.26 | 3.45 | |
| | | | 106T | 53 | -1.28 | -1.65 | 1.55 | 4.26 | 5.81 | |
| | | | | 57 | -1.32 | -1.81 | 1.45 | 4.26 | 5.71 | |
| | | | | 60 | -1.27 | -1.95 | 1.41 | 4.26 | 5.67 | |
| | | | 242T | 61 | 1.98 | 1.70 | 4.85 | 4.26 | 9.11 | |
| | | | | 62 | 1.94 | 1.55 | 4.76 | 4.26 | 9.02 | |
| | | | | 64 | 1.92 | 1.43 | 4.69 | 4.26 | 8.95 | |
| | | | 484T | 65 | 3.58 | 3.25 | 6.43 | 4.26 | 10.69 | |
| | | | | 66 | 3.57 | 3.11 | 6.36 | 4.26 | 10.62 | |
| | | | 996T | 67 | 6.75 | 5.97 | 9.39 | 4.26 | 13.65 | |
| | 39 | 6145 | 26T | 0 | -6.18 | -6.38 | -3.27 | 4.26 | 0.99 | |
| | | | | 18 | -6.02 | -6.08 | -3.04 | 4.26 | 1.22 | |
| | | | | 36 | -6.57 | -6.61 | -3.58 | 4.26 | 0.68 | |
| | | | 52T | 37 | -3.59 | -3.73 | -0.65 | 4.26 | 3.61 | |
| | | | | 45 | -3.55 | -3.58 | -0.55 | 4.26 | 3.71 | |
| | | | | 52 | -3.82 | -3.84 | -0.82 | 4.26 | 3.44 | |
| | | | 106T | 53 | -1.57 | -2.32 | 1.08 | 4.26 | 5.34 | |
| | | | | 57 | -1.51 | -2.08 | 1.22 | 4.26 | 5.48 | |
| | | | | 60 | -1.44 | -1.96 | 1.32 | 4.26 | 5.58 | |
| | | | 242T | 61 | 1.77 | 0.99 | 4.41 | 4.26 | 8.67 | |
| | | | | 62 | 1.79 | 1.21 | 4.52 | 4.26 | 8.78 | |
| | | | | 64 | 1.85 | 1.35 | 4.62 | 4.26 | 8.88 | |
| | | | 484T | 65 | 3.50 | 2.78 | 6.17 | 4.26 | 10.43 | |
| | | | | 66 | 3.61 | 3.10 | 6.37 | 4.26 | 10.63 | |
| | | | 996T | 67 | 7.16 | 6.51 | 9.86 | 4.26 | 14.12 | |
| | 87 | 6385 | 26T | 0 | -6.79 | -7.65 | -4.19 | 4.26 | 0.07 | |
| | | | | 18 | -6.43 | -7.39 | -3.87 | 4.26 | 0.39 | |
| | | | | 36 | -6.78 | -7.96 | -4.32 | 4.26 | -0.06 | |
| | | | 52T | 37 | -4.06 | -5.00 | -1.49 | 4.26 | 2.77 | |
| | | | | 45 | -3.98 | -4.88 | -1.40 | 4.26 | 2.86 | |
| | | | | 52 | -3.77 | -4.92 | -1.30 | 4.26 | 2.96 | |
| | | | 106T | 53 | -1.57 | -2.23 | 1.12 | 4.26 | 5.38 | |
| | | | | 57 | -1.43 | -2.14 | 1.24 | 4.26 | 5.50 | |
| | | | | 60 | -1.31 | -2.15 | 1.30 | 4.26 | 5.56 | |
| | | | 242T | 61 | 1.81 | 1.05 | 4.46 | 4.26 | 8.72 | |
| | | | | 62 | 1.86 | 1.16 | 4.53 | 4.26 | 8.79 | |
| | | | | 64 | 1.87 | 1.05 | 4.49 | 4.26 | 8.75 | |
| | | | 484T | 65 | 3.34 | 2.74 | 6.06 | 4.26 | 10.32 | |
| | | | | 66 | 3.51 | 2.78 | 6.17 | 4.26 | 10.43 | |
| | | | 996T | 67 | 6.24 | 6.26 | 9.26 | 4.26 | 13.52 | |

* Calculation of Output Power : Average Power(dBm) = Meas Power(dBm) + Duty CF(dB)
Corr'd e.i.r.p.(dBm) = ANT1 Average Power(dBm) + ANT2 Average Power(dBm) + Directional Gain(dB)
= 10*LOG($10^{ANT1/10}$+$10^{ANT2/10}$)+ Directional Gain(dB)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**- LPI**

| Band | Channel | Freq. [MHz] | Tones | RU offset | Average Power [dBm] | | | Direct. Gain [dBi] | Corr'd e.i.r.p [dBm] | Max e.i.r.p Limit [dBm] |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ANT1 | ANT2 | MIMO | | | |
| UNII-6 | 103 | 6465 | 26T | 0 | -5.70 | -7.08 | -3.33 | 3.31 | -0.02 | 24.00 |
| | | | | 18 | -5.52 | -6.86 | -3.13 | 3.31 | 0.18 | |
| | | | | 36 | -5.71 | -6.87 | -3.24 | 3.31 | 0.07 | |
| | | | 52T | 37 | -2.55 | -3.94 | -0.18 | 3.31 | 3.13 | |
| | | | | 45 | -2.98 | -4.14 | -0.51 | 3.31 | 2.80 | |
| | | | | 52 | -2.80 | -4.21 | -0.44 | 3.31 | 2.87 | |
| | | | 106T | 53 | -0.64 | -1.75 | 1.85 | 3.31 | 5.16 | |
| | | | | 57 | -0.45 | -1.76 | 1.95 | 3.31 | 5.26 | |
| | | | | 60 | -0.29 | -1.66 | 2.09 | 3.31 | 5.40 | |
| | | | 242T | 61 | 2.64 | 1.45 | 5.10 | 3.31 | 8.41 | |
| | | | | 62 | 2.80 | 1.53 | 5.22 | 3.31 | 8.53 | |
| | | | | 64 | 2.83 | 1.48 | 5.22 | 3.31 | 8.53 | |
| | | | 484T | 65 | 4.64 | 3.58 | 7.15 | 3.31 | 10.46 | |
| | | | | 66 | 4.74 | 3.63 | 7.23 | 3.31 | 10.54 | |
| | | | 996T | 67 | 7.02 | 6.13 | 9.61 | 3.31 | 12.92 | |

* Calculation of Output Power : Average Power(dBm) = Meas Power(dBm) + Duty CF(dB)
Corr'd e.i.r.p.(dBm) = ANT1 Average Power(dBm) + ANT2 Average Power(dBm) + Directional Gain(dB)
= $10*LOG(10^{ANT1/10}+10^{ANT2/10})$+ Directional Gain(dB)

**- LPI**

| Band | Channel | Freq. [MHz] | Tones | RU offset | Average Power [dBm] | | | Direct. Gain [dBi] | Corr'd e.i.r.p [dBm] | Max e.i.r.p Limit [dBm] |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ANT1 | ANT2 | MIMO | | | |
| UNII-7 | 119 | 6545 | 26T | 0 | -5.28 | -6.69 | -2.92 | 3.31 | 0.39 | 24.00 |
| | | | | 18 | -5.06 | -6.09 | -2.53 | 3.31 | 0.78 | |
| | | | | 36 | -5.55 | -6.44 | -2.96 | 3.31 | 0.35 | |
| | | | 52T | 37 | -2.68 | -4.14 | -0.34 | 3.31 | 2.97 | |
| | | | | 45 | -3.08 | -4.16 | -0.58 | 3.31 | 2.73 | |
| | | | | 52 | -2.91 | -3.83 | -0.34 | 3.31 | 2.97 | |
| | | | 106T | 53 | -0.37 | -1.84 | 1.97 | 3.31 | 5.28 | |
| | | | | 57 | -0.33 | -1.54 | 2.12 | 3.31 | 5.43 | |
| | | | | 60 | -0.24 | -1.30 | 2.27 | 3.31 | 5.58 | |
| | | | 242T | 61 | 3.32 | 1.90 | 5.68 | 3.31 | 8.99 | |
| | | | | 62 | 3.36 | 2.10 | 5.79 | 3.31 | 9.10 | |
| | | | | 64 | 3.31 | 2.14 | 5.77 | 3.31 | 9.08 | |
| | | | 484T | 65 | 5.32 | 3.89 | 7.67 | 3.31 | 10.98 | |
| | | | | 66 | 5.38 | 4.14 | 7.81 | 3.31 | 11.12 | |
| | | | 996T | 67 | 7.34 | 6.54 | 9.97 | 3.31 | 13.28 | |
| | 151 | 6705 | 26T | 0 | -5.60 | -6.80 | -3.15 | 3.31 | 0.16 | |
| | | | | 18 | -5.04 | -6.42 | -2.67 | 3.31 | 0.64 | |
| | | | | 36 | -5.24 | -6.84 | -2.96 | 3.31 | 0.35 | |
| | | | 52T | 37 | -2.50 | -3.70 | -0.05 | 3.31 | 3.26 | |
| | | | | 45 | -2.55 | -3.72 | -0.09 | 3.31 | 3.22 | |
| | | | | 52 | -2.60 | -4.19 | -0.31 | 3.31 | 3.00 | |
| | | | 106T | 53 | -0.35 | -1.51 | 2.12 | 3.31 | 5.43 | |
| | | | | 57 | -0.36 | -1.67 | 2.04 | 3.31 | 5.35 | |
| | | | | 60 | -0.36 | -1.84 | 1.97 | 3.31 | 5.28 | |
| | | | 242T | 61 | 3.42 | 2.21 | 5.87 | 3.31 | 9.18 | |
| | | | | 62 | 3.45 | 2.19 | 5.88 | 3.31 | 9.19 | |
| | | | | 64 | 3.36 | 1.86 | 5.68 | 3.31 | 8.99 | |
| | | | 484T | 65 | 5.31 | 4.05 | 7.74 | 3.31 | 11.05 | |
| | | | | 66 | 5.38 | 3.92 | 7.72 | 3.31 | 11.03 | |
| | | | 996T | 67 | 7.54 | 8.32 | 10.96 | 3.31 | 14.27 | |
| | 183 | 6865 | 26T | 0 | -5.08 | -6.92 | -2.89 | 3.31 | 0.42 | |
| | | | | 18 | -5.11 | -6.89 | -2.90 | 3.31 | 0.41 | |
| | | | | 36 | -5.17 | -6.88 | -2.93 | 3.31 | 0.38 | |
| | | | 52T | 37 | -2.54 | -4.42 | -0.37 | 3.31 | 2.94 | |
| | | | | 45 | -2.60 | -4.44 | -0.41 | 3.31 | 2.90 | |
| | | | | 52 | -2.50 | -4.40 | -0.34 | 3.31 | 2.97 | |
| | | | 106T | 53 | -0.43 | -1.97 | 1.88 | 3.31 | 5.19 | |
| | | | | 57 | -0.42 | -1.98 | 1.88 | 3.31 | 5.19 | |
| | | | | 60 | -0.44 | -1.88 | 1.91 | 3.31 | 5.22 | |
| | | | 242T | 61 | 3.22 | 1.68 | 5.53 | 3.31 | 8.84 | |
| | | | | 62 | 3.25 | 1.70 | 5.55 | 3.31 | 8.86 | |
| | | | | 64 | 3.30 | 1.70 | 5.58 | 3.31 | 8.89 | |
| | | | 484T | 65 | 5.12 | 3.77 | 7.51 | 3.31 | 10.82 | |
| | | | | 66 | 5.04 | 3.56 | 7.37 | 3.31 | 10.68 | |
| | | | 996T | 67 | 7.34 | 7.58 | 10.47 | 3.31 | 13.78 | |

* Calculation of Output Power : Average Power(dBm) = Meas Power(dBm) + Duty CF(dB)
Corr'd e.i.r.p.(dBm) = ANT1 Average Power(dBm) + ANT2 Average Power(dBm) + Directional Gain(dB)
= $10*LOG(10^{ANT1/10}+10^{ANT2/10})$+ Directional Gain(dB)


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**- LPI**

| Band | Channel | Freq. [MHz] | Tones | RU offset | Average Power [dBm] | | | Direct. Gain [dBi] | Corr'd e.i.r.p [dBm] | Max e.i.r.p Limit [dBm] |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ANT1 | ANT2 | MIMO | | | |
| UNII-8 | 199 | 6945 | 26T | 0 | -4.61 | -6.40 | -2.40 | 1.99 | -0.41 | 24.00 |
| | | | | 18 | -4.72 | -6.33 | -2.44 | 1.99 | -0.45 | |
| | | | | 36 | -4.70 | -6.42 | -2.47 | 1.99 | -0.48 | |
| | | | 52T | 37 | -1.67 | -3.33 | 0.59 | 1.99 | 2.58 | |
| | | | | 45 | -1.70 | -3.24 | 0.61 | 1.99 | 2.60 | |
| | | | | 52 | -1.66 | -3.25 | 0.63 | 1.99 | 2.62 | |
| | | | 106T | 53 | 1.41 | 0.03 | 3.78 | 1.99 | 5.77 | |
| | | | | 57 | 1.44 | 0.01 | 3.79 | 1.99 | 5.78 | |
| | | | | 60 | 1.40 | 0.10 | 3.81 | 1.99 | 5.80 | |
| | | | 242T | 61 | 4.42 | 2.68 | 6.65 | 1.99 | 8.64 | |
| | | | | 62 | 4.38 | 2.76 | 6.66 | 1.99 | 8.65 | |
| | | | | 64 | 4.45 | 2.82 | 6.72 | 1.99 | 8.71 | |
| | | | 484T | 65 | 7.48 | 6.02 | 9.82 | 1.99 | 11.81 | |
| | | | | 66 | 7.32 | 6.03 | 9.73 | 1.99 | 11.72 | |
| | | | 996T | 67 | 7.95 | 9.14 | 11.60 | 1.99 | 13.59 | |
| | 215 | 7025 | 26T | 0 | -4.54 | -6.22 | -2.29 | 1.99 | -0.30 | |
| | | | | 18 | -4.70 | -6.03 | -2.30 | 1.99 | -0.31 | |
| | | | | 36 | -4.80 | -6.42 | -2.52 | 1.99 | -0.53 | |
| | | | 52T | 37 | -1.57 | -3.05 | 0.76 | 1.99 | 2.75 | |
| | | | | 45 | -1.54 | -3.11 | 0.76 | 1.99 | 2.75 | |
| | | | | 52 | -1.68 | -3.15 | 0.66 | 1.99 | 2.65 | |
| | | | 106T | 53 | 1.22 | 0.22 | 3.76 | 1.99 | 5.75 | |
| | | | | 57 | 1.14 | 0.21 | 3.71 | 1.99 | 5.70 | |
| | | | | 60 | 1.20 | 0.08 | 3.69 | 1.99 | 5.68 | |
| | | | 242T | 61 | 4.46 | 3.06 | 6.83 | 1.99 | 8.82 | |
| | | | | 62 | 4.48 | 3.18 | 6.89 | 1.99 | 8.88 | |
| | | | | 64 | 4.32 | 3.01 | 6.72 | 1.99 | 8.71 | |
| | | | 484T | 65 | 7.42 | 6.48 | 9.99 | 1.99 | 11.98 | |
| | | | | 66 | 7.30 | 6.52 | 9.94 | 1.99 | 11.93 | |
| | | | 996T | 67 | 7.61 | 9.33 | 11.56 | 1.99 | 13.55 | |

* Calculation of Output Power : Average Power(dBm) = Meas Power(dBm) + Duty CF(dB)
Corr'd e.i.r.p.(dBm) = ANT1 Average Power(dBm) + ANT2 Average Power(dBm) + Directional Gain(dB)
= 10*LOG($10^{ANT1/10}$+$10^{ANT2/10}$)+ Directional Gain(dB)


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## PSD Results

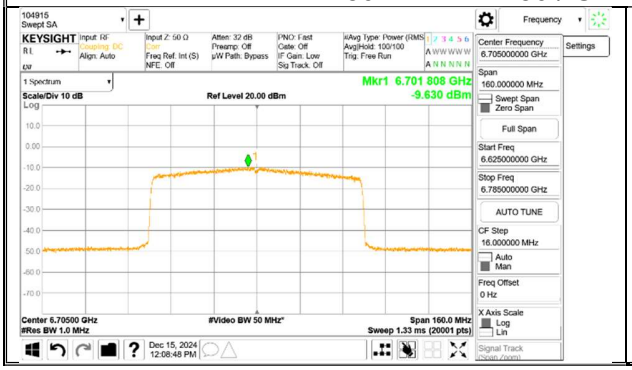
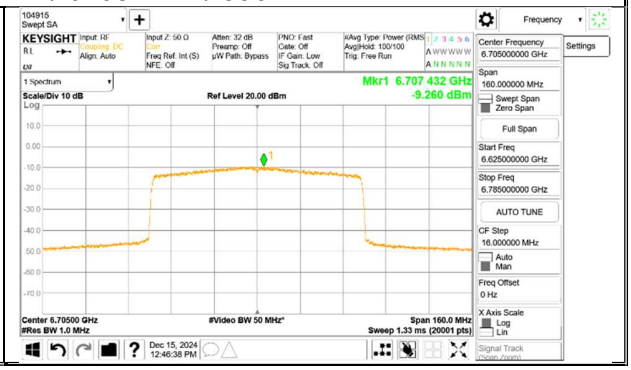
**- LPI**

| Band | Channel | Freq. [MHz] | Tones | RU offset | Meas PSD [dBm/MHz] | | | DCCF | Direct. Gain [dBi] | Corr'd PSD e.i.r.p [dBm] | PSD e.i.r.p Limit [dBm/MHz] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ANT1 | ANT2 | MIMO | | | | |
| UNII-5 | 7 | 5985 | 26T | 0 | -9.78 | -10.00 | -6.88 | 1.00 | 4.26 | -1.63 | -1.00 |
| | | | | 18 | -9.95 | -10.03 | -6.98 | 1.00 | 4.26 | -1.73 | |
| | | | | 36 | -9.92 | -9.93 | -6.91 | 1.00 | 4.26 | -1.66 | |
| | | | 996T | 67 | -10.45 | -10.55 | -7.49 | 1.65 | 4.26 | -1.58 | |
| | 39 | 6145 | 26T | 0 | -9.93 | -10.17 | -7.03 | 1.00 | 4.26 | -1.78 | |
| | | | | 18 | -10.18 | -10.00 | -7.08 | 1.00 | 4.26 | -1.83 | |
| | | | | 36 | -10.09 | -9.98 | -7.03 | 1.00 | 4.26 | -1.78 | |
| | | | 996T | 67 | -10.50 | -10.49 | -7.48 | 1.65 | 4.26 | -1.57 | |
| | 87 | 6385 | 26T | 0 | -9.99 | -10.27 | -7.12 | 1.00 | 4.26 | -1.87 | |
| | | | | 18 | -10.01 | -10.40 | -7.19 | 1.00 | 4.26 | -1.94 | |
| | | | | 36 | -10.19 | -10.14 | -7.16 | 1.00 | 4.26 | -1.91 | |
| | | | 996T | 67 | -10.65 | -10.69 | -7.66 | 1.65 | 4.26 | -1.75 | |
| UNII-6 | 103 | 6465 | 26T | 0 | -9.11 | -9.02 | -6.05 | 1.00 | 3.31 | -1.75 | |
| | | | | 18 | -9.07 | -9.03 | -6.04 | 1.00 | 3.31 | -1.74 | |
| | | | | 36 | -9.00 | -9.38 | -6.17 | 1.00 | 3.31 | -1.87 | |
| | | | 996T | 67 | -9.49 | -9.73 | -6.60 | 1.65 | 3.31 | -1.64 | |
| UNII-7 | 119 | 6545 | 26T | 0 | -8.82 | -9.14 | -5.97 | 1.00 | 3.31 | -1.67 | |
| | | | | 18 | -8.84 | -9.08 | -5.95 | 1.00 | 3.31 | -1.65 | |
| | | | | 36 | -8.77 | -9.20 | -5.97 | 1.00 | 3.31 | -1.67 | |
| | | | 996T | 67 | -9.77 | -9.48 | -6.61 | 1.65 | 3.31 | -1.65 | |
| | 151 | 6705 | 26T | 0 | -9.08 | -9.43 | -6.24 | 1.00 | 3.31 | -1.94 | |
| | | | | 18 | -8.96 | -9.25 | -6.09 | 1.00 | 3.31 | -1.79 | |
| | | | | 36 | -9.06 | -9.29 | -6.16 | 1.00 | 3.31 | -1.86 | |
| | | | 996T | 67 | -9.63 | -9.26 | -6.43 | 1.65 | 3.31 | -1.47 | |
| | 183 | 6865 | 26T | 0 | -8.96 | -9.25 | -6.09 | 1.00 | 3.31 | -1.79 | |
| | | | | 18 | -9.28 | -9.02 | -6.14 | 1.00 | 3.31 | -1.84 | |
| | | | | 36 | -8.83 | -9.19 | -6.00 | 1.00 | 3.31 | -1.70 | |
| | | | 996T | 67 | -9.57 | -9.47 | -6.51 | 1.65 | 3.31 | -1.55 | |
| UNII-8 | 199 | 6945 | 26T | 0 | -7.57 | -7.72 | -4.64 | 1.00 | 1.99 | -1.66 | |
| | | | | 18 | -7.55 | -7.65 | -4.59 | 1.00 | 1.99 | -1.61 | |
| | | | | 36 | -7.68 | -7.81 | -4.74 | 1.00 | 1.99 | -1.76 | |
| | | | 996T | 67 | -8.28 | -8.03 | -5.14 | 1.65 | 1.99 | -1.50 | |
| | 215 | 7025 | 26T | 0 | -7.52 | -7.53 | -4.52 | 1.00 | 1.99 | -1.54 | |
| | | | | 18 | -7.44 | -7.75 | -4.58 | 1.00 | 1.99 | -1.60 | |
| | | | | 36 | -7.76 | -7.75 | -4.75 | 1.00 | 1.99 | -1.77 | |
| | | | 996T | 67 | -8.24 | -8.33 | -5.28 | 1.65 | 1.99 | -1.64 | |

* Corr'd PSD e.i.r.p.(dBm) = ANT1 Meas PSD(dBm) + ANT2 Meas PSD(dBm) + DCCF(dB) + Directional Gain(dB)
= $10*LOG(10^{ANT1/10} + 10^{ANT2/10})$+DCCF(dB)+ Directional Gain(dB)

## PPSD PLOTS (WORST CASE)

### - LPI

| ANT1 | ANT2 |
|---|---|
| 802.11 ax HE80 / U-NII-7 / 6705 MHz / 996T | |
|  |  |

## 11.2. IN-BAND EMISSIONS

**LIMITS**

FCC §15.407 (b) (7) / RSS-248 Issue 3, 4.6.2 (b)

For transmitters operating within the 5.925-7.125 GHz bands: Power spectral density must be suppressed by 20 dB at 1 MHz outside of channel edge, by 28 dB at one channel bandwidth from the channel center, and by 40 dB at one- and one-half times the channel bandwidth away from channel center. At frequencies between one megahertz outside an unlicensed device's channel edge and one channel bandwidth from the center of the channel, the limits must be linearly interpolated between 20 dB and 28 dB suppression, and at frequencies between one and one- and one-half times an unlicensed device's channel bandwidth, the limits must be linearly interpolated between 28 dB and 40 dB suppression. Emissions removed from the channel center by more than one- and one-half times the channel bandwidth must be suppressed by at least 40 dB.

**TEST PROCEDURE**

KDB 987594 D02

1. Connect output of antenna port to a spectrum analyzer, with appropriate attenuation, as to not damage the instrumentation.
2. Test reference level of the measuring equipment in accordance with procedure 4.1.6 of ANSI C63.10-2020.
3. Measure the 26dB EBW using the test procedure 12.5.2 of ANSI C63.10-2020.
4. Measure the PSD (which will be used for emissions mask reference) using the following procedure:
   a) Set the span to encompass the entire 26 dB EBW of the signal.
   Note. The test was performed in the minimum 26dB bandwidth worst-case scenario.
   11a: 20 MHz (**Nominal: 20 MHz**, Measured: 25.30 MHz)
   11ax HE20: 20 MHz (**Nominal: 20 MHz**, Measured: 21.51 MHz)
   11ax HE40: 39.19 MHz (Nominal: 40 MHz, **Measured: 39.19 MHz**)
   11ax HE80: 79.76 MHz (Nominal: 80 MHz, **Measured: 79.76 MHz**)
   b) Set RBW = same RBW used for 26 dB EBW measurement.
   c) Set VBW $\geq$ 3 X RBW
   d) Number of points in sweep $\geq$ [2 X span / RBW].
   e) Sweep time = auto.
   f) Detector = RMS (i.e., power averaging)
   g) Trace average at least 100 traces in power averaging (rms) mode.
   h) Use the peak search function on the instrument to find the peak of the spectrum.
5. For the purposes of developing the emission mask, the channel bandwidth is defined as the 26 dB EBW.
6. Using the measuring equipment limit line function, develop the emissions mask based on the following requirements. The emissions power spectral density must be reduced below the peak power spectral density (in dB) as follows:
   a) Suppressed by 20 dB at 1 MHz outside of the channel edge. (The channel edge is defined as the 26-dB point on either side of the carrier center frequency.)
   b) Suppressed by 28 dB at one channel bandwidth from the channel center.
   c) Suppressed by 40 dB at one- and one-half times the channel bandwidth from the channel center.
7. Adjust the span to encompass the entire mask as necessary.
8. Clear trace.
9. Trace average at least 100 traces in power averaging (rms) mode.
10. Adjust the reference level as necessary so that the crest of the channel touches the top of the emission mask.

**Note: FULL RU & RU modes are fully tested. FULL RU modes are reported the entire test case, RU modes are reported only the worst-case scenario.**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