



# **FCC Radio Test Report**

FCC ID: RWO-RZ090484

This report concerns: Class II Permissive Changes

Report No. : BTL-FCCP-5-2209C159

Equipment : Notebook PC **Model Name** : RZ09-0483 **Brand Name** : RAZER Applicant : Razer Inc.

Address : 9 Pasteur, Suite 100, Irvine, CA92618, USA.

Manufacturer : Razer Inc.

Address : 9 Pasteur, Suite 100, Irvine, CA92618, USA.

**Equipment Class** : 6XD - 15E 6 GHz Low Power Indoor Client

Radio Function : U-NII 6 GHz (U-NII 5, U-NII 6, U-NII 7, U-NII 8)

FCC Rule Part(s) : FCC CFR Title 47, Part15, Subpart E (15.407) : ANSI C63.10-2013

Measurement Procedure(s)

Date of Receipt : 2022/10/18

Date of Test 2022/11/22~2023/1/17

**Issued Date** : 2023/1/17

The above equipment has been tested and found in compliance with the requirement of the above standards by BTL Inc.

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Approved by

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0659

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#### Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

Please note that the measurement uncertainty is provided for informational purpose only and are not use in determining the Pass/Fail results.

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# **REVISION HISTORY**

| Report No.          | Version | Description                           | Issued Date | Note    |
|---------------------|---------|---------------------------------------|-------------|---------|
| BTL-FCCP-5-2209C159 | R00     | Original Report.                      | 2022/12/22  | Invalid |
| BTL-FCCP-5-2209C159 | R01     | Revised report to address TAF Audit's | 2023/1/17   | Valid   |
|                     |         | comments.                             |             |         |

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# I SUMMARY OF TEST RESULTS

Test procedures according to the technical standards.

| Standard(s) Section      | Description                                      | Test Result              | Judgement | Remark |
|--------------------------|--|--------------------------|-----------|--------|
| 15.407(b)(9)             | AC power line conducted emissions                | APPENDIX A               | Pass      |        |
| 15.407(b)(6)(9)          | Undesirable emissions                            | APPENDIX B<br>APPENDIX C | Pass      |        |
| 15.407(a)(4)(5)(6)(7)(8) | Maximum e.i.r.p.                                 | APPENDIX D               | Pass      |        |
| 15.203<br>15.407(a)(9)   | Antenna requirement                              | NOTE (3)                 | Pass      |        |
| 15.407(a)(12)            | Maximum power spectral density                   | NOTE (3)                 | Pass      |        |
| 15.407(b)(7)             | In-band emission (Mask)                          | NOTE (3)                 | Pass      |        |
| 15.407(b)(10)            | Restricted bands of operation                    | NOTE (3)                 | Pass      |        |
| 15.407(c)                | Automatically discontinue transmission           | NOTE (3)                 | Pass      |        |
| 15.407(d)                | Operational restrictions for 6 GHz U-NII devices | NOTE (3)                 | Pass      |        |
| 15.407(d)(6)             | Contention-based protocol                        | APPENDIX D               | Pass      |        |
| 15.407(g)<br>2.1055      | Frequency stability                              | NOTE (3)                 | Pass      |        |

## NOTE:

- (1) "N/A" denotes test is not applicable in this Test Report.
- (2) The report format version is TP.1.1.1.
- (3) This item is demonstrated to full compliance referring to the test report number 200611-01.TR38 of the integrated module (model name: AX211NGW, FCC ID: PD9AX211NG).
- (4) The ac power lines conducted emissions and radiated emissions are tested to demonstrate full compliance of both module integrated into the host and host itself.

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#### 1.1 TEST FACILITY

| The ' | test | facilities | used to | collect | the | test | data | in | this | repo | ort: |
|-------|------|------------|---------|---------|-----|------|------|----|------|------|------|
|       |      |            |         |         |     |      |      |    |      |      |      |

No. 72, Ln. 169, Sec. 2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan The test sites and facilities are covered under FCC RN: 674415 and DN: TW0659.

□ C06

⊠ CB21

CB22

No. 68-1, Ln. 169, Sec. 2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan The test sites and facilities are covered under FCC RN: 674415 and DN: TW0659.

⊠ C05

□ CB08

□ CB11

CB15

□ CB16

⊠ SR10

#### 1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement  $\mathbf{y} \pm \mathbf{U}$ , where expanded uncertainty  $\mathbf{U}$  is based on a standard uncertainty multiplied by a coverage factor of  $\mathbf{k} = \mathbf{2}$ , providing a level of confidence of approximately  $\mathbf{95}$  %. The measurement instrumentation uncertainty considerations contained in CISPR 16-4-2. The BTL measurement uncertainty is less than the CISPR 16-4-2  $\mathbf{U}_{\text{cispr}}$  requirement.

A. AC power line conducted emissions test:

| Test Site | Method | Measurement Frequency Range | U (dB) |
|-----------|--------|-----------------------------|--------|
| C05       | CISPR  | 150 kHz ~ 30MHz             | 3.44   |

# B. Radiated emissions test:

| Test Site | Measurement Frequency Range | U,(dB) |
|-----------|-----------------------------|--------|
|           | 0.03 GHz ~ 0.2 GHz          | 4.17   |
| CB21      | 0.2 GHz ~ 1 GHz             | 4.72   |
|           | 1 GHz ~ 6 GHz               | 5.21   |
|           | 6 GHz ~ 18 GHz              | 5.51   |
|           | 18 GHz ~ 26 GHz             | 3.69   |
|           | 26 GHz ~ 40 GHz             | 4.23   |

#### C. Conducted test:

| Test Item                 | U,(dB) |
|---------------------------|--------|
| Maximum e.i.r.p.          | 0.3669 |
| Contention-based protocol | -      |

# NOTE:

Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.

#### 1.3 TEST ENVIRONMENT CONDITIONS

| Test Item                         | Environment Condition | Test Voltage | Tested by   |
|-----------------------------------|-----------------------|--------------|-------------|
| AC Power Line Conducted Emissions | 23°C, 58%             | AC 120V/60Hz | Jay Tien    |
| Radiated emissions below 1 GHz    | 23°C, 59%             | AC 120V/60Hz | Mark Wang   |
| Radiated emissions above 1 GHz    | 23°C, 59%             | AC 120V/60Hz | Mark Wang   |
| Maximum e.i.r.p.                  | 21.2°C, 52%           | AC 120V/60Hz | Angela Wang |
| Contention-based protocol         | 23.4°C, 55%           | AC 120V/60Hz | Tim Lee     |

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# 1.4 TABLE OF PARAMETERS OF TEST SOFTWARE SETTING

| Test Software         | DRTU V02593.22.170.0   |          |          |           |  |  |
|-----------------------|------------------------|----------|----------|-----------|--|--|
|                       | L                      | INII-5   |          |           |  |  |
| Mode                  | Mode 5955 MHz 6175 MHz |          |          |           |  |  |
| IEEE 802.11ax (HE20)  | 1.625                  | 1.625    | 1.625    | HE0       |  |  |
| Mode                  | 5965 MHz               | 6165 MHz | 6405 MHz | Data Rate |  |  |
| IEEE 802.11ax (HE40)  | 4.5                    | 4        | 4.125    | HE0       |  |  |
| Mode                  | 5985 MHz               | 6145 MHz | 6385 MHz | Data Rate |  |  |
| IEEE 802.11ax (HE80)  | 7.25                   | 7.125    | 7.125    | HE0       |  |  |
| Mode                  | 6025 MHz               | 6345 MHz |          | Data Rate |  |  |
| IEEE 802.11ax (HE160) | 9.875                  | 9.875    |          | HE0       |  |  |

| UNII-6                |          |          |          |           |  |  |
|-----------------------|----------|----------|----------|-----------|--|--|
| Mode                  | 6435 MHz | 6475 MHz | 6515 MHz | Data Rate |  |  |
| IEEE 802.11ax (HE20)  | 2.25     | 2.25     | 2.25     | HE0       |  |  |
| Mode                  | 6445 MHz | 6485 MHz |          | Data Rate |  |  |
| IEEE 802.11ax (HE40)  | 4.75     | 5.125    |          | HE0       |  |  |
| Mode                  | 6465 MHz |          |          | Data Rate |  |  |
| IEEE 802.11ax (HE80)  | 7.5      |          |          | HE0       |  |  |
| Mode                  | 6505 MHz |          |          | Data Rate |  |  |
| IEEE 802.11ax (HE160) | 10.25    |          |          | HE0       |  |  |

| UNII-6+ UNII-7          |      |     |  |  |
|-------------------------|------|-----|--|--|
| Mode 6525 MHz Data Rate |      |     |  |  |
| IEEE 802.11ax (HE40)    | 5.25 | HE0 |  |  |

| UNII-7                |          |          |          |           |  |  |
|-----------------------|----------|----------|----------|-----------|--|--|
| Mode                  | 6535 MHz | 6695 MHz | 6855 MHz | Data Rate |  |  |
| IEEE 802.11ax (HE20)  | 1.875    | 1.875    | 1.875    | HE0       |  |  |
| Mode                  | 6685 MHz | 6845 MHz |          | Data Rate |  |  |
| IEEE 802.11ax (HE40)  | 4.25     | 4.25     |          | HE0       |  |  |
| Mode                  | 6545 MHz | 6625 MHz | 6785 MHz | Data Rate |  |  |
| IEEE 802.11ax (HE80)  | 7.625    | 7.375    | 7.375    | HE0       |  |  |
| Mode                  | 6665 MHz |          |          | Data Rate |  |  |
| IEEE 802.11ax (HE160) | 10       |          |          | HE0       |  |  |

| UNII-8                |          |          |          |          |           |  |
|-----------------------|----------|----------|----------|----------|-----------|--|
| Mode                  | 6875 MHz | 6995 MHz | 7095 MHz | 7115 MHz | Data Rate |  |
| IEEE 802.11ax (HE20)  | 1.875    | 1.875    | 1.875    | -9.5     | HE0       |  |
| Mode                  | 6885 MHz | 7085 MHz |          |          | Data Rate |  |
| IEEE 802.11ax (HE40)  | 5.25     | 5.25     |          |          | HE0       |  |
| Mode                  | 6865 MHz | 6945 MHz | 7025 MHz |          | Data Rate |  |
| IEEE 802.11ax (HE80)  | 7.375    | 8        | 8        |          | HE0       |  |
| Mode                  | 6985 MHz |          |          |          | Data Rate |  |
| IEEE 802.11ax (HE160) | 10       |          |          |          | HE0       |  |

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# 2 GENERAL INFORMATION

# 2.1 DESCRIPTION OF EUT

| Equipment             | Notebook PC   |
|-----------------------|---|
| Model Name            | RZ09-0483   |
| Brand Name            | RAZER   |
| Model Difference      | N/A   |
|                       | 1# DC voltage supplied from AC adapter.   |
|                       | Model 1: RC30-042   |
| Power Source          | Model 2: RC30-0484  |
|                       | 2# Supplied from battery.   |
|                       | Model : RC30-0483   |
|                       | 1# Model 1: I/P: 100-240V~ 4A MAX,50/60Hz O/P: 19.5V===14.36A                         |
| Power Rating          | Model 2: I/P: 100-240V~ 4.5A,50/60Hz  O/P: 19.5V===16.92A                             |
|                       | 2# DC 15.4V, 6182mAh, 95.2Wh  |
| Products Covered      | 2* POWER Adapter  |
| - Toddets Govered     | 1* AC Cable   |
|                       | UNII-5: 5925 MHz ~ 6425 MHz   |
| Operation Band        | UNII-6: 6425 MHz ~ 6525 MHz   |
| operation Janua       | UNII-7: 6525 MHz ~ 6875 MHz   |
|                       | UNII-8: 6875 MHz ~ 7125 MHz   |
| Modulation Technology | OFDMA   |
| Transfer Rate         | IEEE 802.11ax: up to 2402 Mbps  |
|                       | IEEE 802.11ax (HE20): 5.13 dBm (0.0033 W)   |
| Maximum E.I.R.P.      | IEEE 802.11ax (HE40): 8.03 dBm (0.0064 W)   |
| for UNII-5            | IEEE 802.11ax (HE80): 10.79 dBm (0.0120 W)  |
|                       | IEEE 802.11ax (HE160): 13.64 dBm (0.0231 W) IEEE 802.11ax (HE20): 5.85 dBm (0.0038 W) |
| Maximum E.I.R.P.      | IEEE 802.11ax (HE20): 3.63 dBiff (0.0036 W)   |
| for UNII-6            | IEEE 802.11ax (HE40): 0.72 dBirr (0.0072 W)   |
| ioi Givii-o           | IEEE 802.11ax (HE160): 11.10 dBm (0.0125 W)   |
|                       | IEEE 802.11ax (HE20): 5.03 dBm (0.0032 W)   |
| Maximum E.I.R.P.      | IEEE 802.11ax (HE40): 7.73 dBm (0.0059 W)   |
| for UNII-7            | IEEE 802.11ax (HE80): 11.12 dBm (0.0129 W)  |
|                       | IEEE 802.11ax (HE160): 13.76 dBm (0.0238 W)   |
| Maximum E.I.R.P.      |   |
| for UNII-6+ UNII-7    | IEEE 802.11ax (HE40): 8.86 dBm (0.0077 W)   |
|                       | IEEE 802.11ax (HE20): 5.21 dBm (0.0033 W)   |
| Maximum E.I.R.P.      | IEEE 802.11ax (HE40): 8.61 dBm (0.0073 W)   |
| for UNII-8            | IEEE 802.11ax (HE80): 11.21 dBm (0.0132 W)  |
|                       | IEEE 802.11ax (HE160): 13.57 dBm (0.0228 W)   |
| Test Model            | RZ09-0483   |
| Sample Status         | Engineering Sample  |
| EUT Modification(s)   | N/A   |

#### NOTE

(1) For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.

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# (2) Channel List:

| (Z) Gridinion | UNII-5               |         |                    |   |                    |         |                    |
|---------------|----------------------|---------|--------------------|---|--------------------|---------|--------------------|
| IEEE 802.1    | IEEE 802.11ax (HE20) |         |                    | IEEE 802.11ax (HE80)   IEEE 802.11ax (H |                    |         | 1ax (HE160)        |
| Channel       | Frequency<br>(MHz)   | Channel | Frequency<br>(MHz) | Channel                                 | Frequency<br>(MHz) | Channel | Frequency<br>(MHz) |
| 1             | 5955                 | 3       | 5965               | 7                                       | 5985               | 15      | 6025               |
| 5             | 5975                 | 11      | 6005               | 23                                      | 6065               | 47      | 6185               |
| 9             | 5995                 | 19      | 6045               | 39                                      | 6145               | 79      | 6345               |
| 13            | 6015                 | 27      | 6085               | 55                                      | 6225               |         |                    |
| 17            | 6035                 | 35      | 6125               | 71                                      | 6305               |         |                    |
| 21            | 6055                 | 43      | 6165               | 87                                      | 6385               |         |                    |
| 25            | 6075                 | 51      | 6205               |   |                    |         |                    |
| 29            | 6095                 | 59      | 6245               |   |                    |         |                    |
| 33            | 6115                 | 67      | 6285               |   |                    |         |                    |
| 37            | 6135                 | 75      | 6325               |   |                    |         |                    |
| 41            | 6155                 | 83      | 6365               |   |                    |         |                    |
| 45            | 6175                 | 91      | 6405               |   |                    |         |                    |
| 49            | 6195                 |         |                    |   |                    |         |                    |
| 53            | 6215                 |         |                    |   |                    |         |                    |
| 57            | 6235                 |         |                    |   |                    |         |                    |
| 61            | 6255                 |         |                    |   |                    |         |                    |
| 65            | 6275                 |         |                    |   |                    |         |                    |
| 69            | 6295                 |         |                    |   |                    |         |                    |
| 73            | 6315                 |         |                    |   |                    |         |                    |
| 77            | 6335                 |         |                    |   |                    |         |                    |
| 81            | 6355                 |         |                    |   |                    |         |                    |
| 85            | 6375                 |         |                    |   |                    |         |                    |
| 89            | 6395                 |         |                    |   |                    |         |                    |
| 93            | 6415                 |         |                    |   |                    |         |                    |

|            | UNII-6             |            |                    |            |                    |            |                    |  |  |
|------------|--------------------|------------|--------------------|------------|--------------------|------------|--------------------|--|--|
| IEEE 802.1 | 1ax (HE20)         | IEEE 802.1 | 1ax (HE40)         | IEEE 802.1 | 1ax (HE80)         | IEEE 802.1 | 1ax (HE160)        |  |  |
| Channel    | Frequency<br>(MHz) | Channel    | Frequency<br>(MHz) | Channel    | Frequency<br>(MHz) | Channel    | Frequency<br>(MHz) |  |  |
| 97         | 6435               | 99         | 6445               | 103        | 6465               | 111        | 6505               |  |  |
| 101        | 6455               | 107        | 6485               |            |                    |            |                    |  |  |
| 105        | 6475               | 115        | 6525               |            |                    |            |                    |  |  |
| 109        | 6495               |            |                    |            |                    |            |                    |  |  |
| 113        | 6515               |            |                    |            |                    |            |                    |  |  |





|            | UNII-7             |            |                    |         |                    |                       |                    |  |
|------------|--------------------|------------|--------------------|---------|--------------------|-----------------------|--------------------|--|
| IEEE 802.1 | 1ax (HE20)         | IEEE 802.1 | 1ax (HE40)         |         | 1ax (HE80)         | IEEE 802.11ax (HE160) |                    |  |
| Channel    | Frequency<br>(MHz) | Channel    | Frequency<br>(MHz) | Channel | Frequency<br>(MHz) | Channel               | Frequency<br>(MHz) |  |
| 117        | 6535               | 123        | 6565               | 119     | 6545               | 143                   | 6665               |  |
| 121        | 6555               | 131        | 6605               | 135     | 6625               | 175                   | 6825               |  |
| 125        | 6575               | 139        | 6645               | 151     | 6705               |                       |                    |  |
| 129        | 6595               | 147        | 6685               | 167     | 6785               |                       |                    |  |
| 133        | 6615               | 155        | 6725               |         |                    |                       |                    |  |
| 137        | 6635               | 163        | 6765               |         |                    |                       |                    |  |
| 141        | 6655               | 171        | 6805               |         |                    |                       |                    |  |
| 145        | 6675               | 179        | 6845               |         |                    |                       |                    |  |
| 149        | 6695               |            |                    |         |                    |                       |                    |  |
| 153        | 6715               |            |                    |         |                    |                       |                    |  |
| 157        | 6735               |            |                    |         |                    |                       |                    |  |
| 161        | 6755               |            |                    |         |                    |                       |                    |  |
| 165        | 6775               |            |                    |         |                    |                       |                    |  |
| 169        | 6795               |            |                    |         |                    |                       |                    |  |
| 173        | 6815               |            |                    |         |                    |                       |                    |  |
| 177        | 6835               |            |                    |         |                    |                       |                    |  |
| 181        | 6855               |            |                    |         |                    |                       |                    |  |

|            | UNII-8             |            |                    |   |                    |         |                    |  |
|------------|--------------------|------------|--------------------|---|--------------------|---------|--------------------|--|
| IEEE 802.1 | 1ax (HE20)         | IEEE 802.1 | 1ax (HE40)         | IEEE 802.11ax (HE80)   IEEE 802.11ax (I |                    |         | 1ax (HE160)        |  |
| Channel    | Frequency<br>(MHz) | Channel    | Frequency<br>(MHz) | Channel                                 | Frequency<br>(MHz) | Channel | Frequency<br>(MHz) |  |
| 185        | 6875               | 187        | 6885               | 183                                     | 6865               | 207     | 6985               |  |
| 189        | 6895               | 195        | 6925               | 199                                     | 6945               |         |                    |  |
| 193        | 6915               | 203        | 6965               | 215                                     | 7025               |         |                    |  |
| 197        | 6935               | 211        | 7005               |   |                    |         |                    |  |
| 201        | 6955               | 219        | 7045               |   |                    |         |                    |  |
| 205        | 6975               | 227        | 7085               |   |                    |         |                    |  |
| 209        | 6995               |            |                    |   |                    |         |                    |  |
| 213        | 7015               |            |                    |   |                    |         |                    |  |
| 217        | 7035               |            |                    |   |                    |         |                    |  |
| 221        | 7055               |            |                    |   |                    |         |                    |  |
| 225        | 7075               |            |                    |   |                    |         |                    |  |
| 229        | 7095               |            |                    |   |                    |         |                    |  |
| 233        | 7115               |            |                    |   |                    |         |                    |  |



(3) Table for Filed Antenna:

| Ant. | Manufacturer                | P/N             | Туре | Connector | Gain (dBi) |
|------|-----------------------------|-----------------|------|-----------|------------|
| 1    | Amphenol Taiwan Corporation | BY5962-15-001-C | PIFA | N/A       | 4.27       |
| 2    | Amphenol Taiwan Corporation | BY5962-15-001-C | PIFA | N/A       | 4.71       |

#### Note:

- 1) The EUT incorporates a MIMO function. Physically, the EUT provides two completed transmitters and receivers (2T2R).
- 2) Ant.1 refers to main antenna, Ant.2 refers to aux antenna.
- 3) The AUX antenna connector of the module connected to the MAIN antenna of the EUT and the MAIN antenna connector of the module connected to the AUX antenna of the EUT.
- (4) The above Antenna information are derived from the antenna data sheet provided by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

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## 2.2 TEST MODES

| Test Items                                  | Test mode             | Channel   | Note           |
|---|-----------------------|---|----------------|
| AC power line conducted emissions           | Normal/Idle           | -   | -              |
| Transmitter Radiated Emissions (below 1GHz) | IEEE 802.11ax (HE20)  | 233   | -              |
|   | IEEE 802.11ax (HE20)  | 233   | Bandedge       |
| Transmitter Radiated Emissions              | IEEE 802.11ax (HE160) | 79,111,143,207  | Dandedge       |
| (above 1GHz)                                | IEEE 802.11ax (HE20)  | 233   | U a mas a mila |
|   | IEEE 802.11ax (HE160) | 79,111,143,207  | Harmonic       |
| Maximum e.i.r.p.                            | IEEE 802.11ax (HE20)  | 1/45/93<br>97/105/113<br>117/149/181<br>185/209/229/233 | -              |
|   | IEEE 802.11ax (HE160) | 15/79<br>111,143,207                                    |                |
| Contention Recod Protocol                   | IEEE 802.11ax (HE20)  | 45,105,149,213  |                |
| Contention Based Protocol                   | IEEE 802.11ax (HE160) | 47,111,143,207  |                |

#### NOTE:

- (1) The Radiated emissions test was verified based on the worst conducted power and Bandwidth test results reported in the original report.
- (2) For radiated emission band edge test, both Vertical and Horizontal are evaluated, but only the worst case (Vertical) is recorded.
- (3) This Notebook PC has two mainboards with two adapters. Both mainboard MB1 (with adapter RC30-0484) and mainboard MB2 (with adapter RC30-042) had been pre-tested and in this report only recorded the worst case.

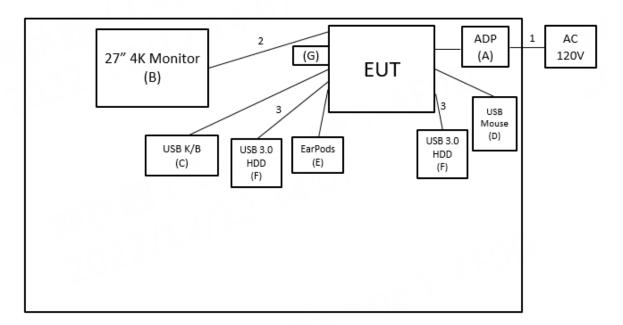
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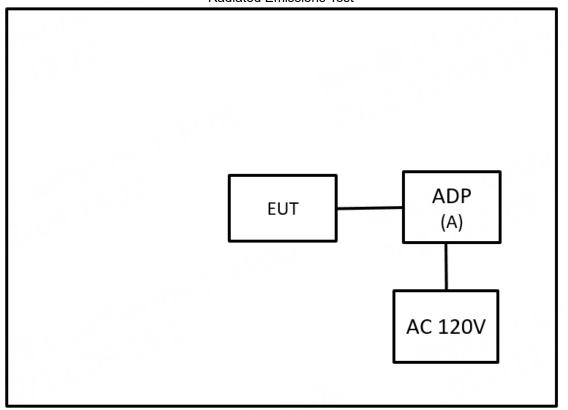
# 2.3 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Equipment letters and Cable numbers refer to item numbers described in the tables of clause 0.

AC Power Line Conducted Emissions Test



# Radiated Emissions Test



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# 2.4 SUPPORT UNITS

# AC power line conducted emissions

| Item | Equipment      | Brand    | Model No.           | Series No.                       | Remarks                     |
|------|----------------|----------|---------------------|----------------------------------|-----------------------------|
| Α    | ADP            | Razer    | RC30-042            | 952226U26100653                  | Supplied by test requester. |
| В    | 27" 4K Monitor | DELL     | U2720Q              | CN-083VF-WSL00-<br>0B7-332L      | Furnished by test lab.      |
| С    | USB K/B        | DELL     | KB216t              | CN-0W33XP-L0300-<br>797-05TY-A03 | Furnished by test lab.      |
| D    | USB Mouse      | DELL     | MOCZUL              | CN-049TWY-PRC00-<br>79E-01HA     | Furnished by test lab.      |
| Е    | EarPods        | Apple    | A1472               | N/A                              | Furnished by test lab.      |
| F    | USB 3.0 HDD    | WD       | WDBC3C0010BSL-0B    | WX81A88ALJUC                     | Furnished by test lab.      |
| G    | USB Dongle     | Kingston | DataTraveler Exodia | N/A                              | Furnished by test lab.      |

| Item | Shielded | Ferrite Core | Length | Cable Type           | Remarks                     |
|------|----------|--------------|--------|----------------------|-----------------------------|
| 1    | No       | No           | 1.2m   | Power Cable          | Supplied by test requester. |
| 2    | No       | No           | 1.7m   | HDMI Cable           | Furnished by test lab.      |
| 3    | No       | No           | 18cm   | TypeC to TypeC Cable | Furnished by test lab.      |

# Radiated Emissions

| Item | Equipment | Brand | Model No. | Series No.      | Remarks                     |
|------|-----------|-------|-----------|-----------------|-----------------------------|
| Α    | ADP       | Razer | RC30-042  | 952226026100653 | Supplied by test requester. |

| Item | Shielded | Ferrite Core | Length | Cable Type | Remarks                     |
|------|----------|--------------|--------|------------|-----------------------------|
| 1    | N/A      | N/A          | 1m     | PowerCode  | Supplied by test requester. |

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# 3 AC POWER LINE CONDUCTED EMISSIONS TEST

#### 3.1 LIMIT

| Frequency  | Limit (dBμV) |           |  |  |
|------------|--------------|-----------|--|--|
| (MHz)      | Quasi-peak   | Average   |  |  |
| 0.15 - 0.5 | 66 - 56 *    | 56 - 46 * |  |  |
| 0.50 - 5.0 | 56           | 46        |  |  |
| 5.0 - 30.0 | 60           | 50        |  |  |

#### NOTE:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " \* " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.
- (3) The test result calculated as following:

Measurement Value = Reading Level + Correct Factor

Correct Factor = Insertion Loss + Cable Loss + Attenuator Factor (if use)

Margin Level = Measurement Value - Limit Value

Calculation example:

| odiodiation oxampio. |   |                |   |                   |
|----------------------|---|----------------|---|-------------------|
| Reading Level        |   | Correct Factor |   | Measurement Value |
| 38.22                | + | 3.45           | = | 41.67             |

| Measurement Value |   | Limit Value |   | Margin Level |
|-------------------|---|-------------|---|--------------|
| 41.67             | - | 60          | П | -18.33       |

The following table is the setting of the receiver.

| Receiver Parameter | Setting  |
|--------------------|----------|
| Attenuation        | 10 dB    |
| Start Frequency    | 0.15 MHz |
| Stop Frequency     | 30 MHz   |
| IF Bandwidth       | 9 KHz    |

## 3.2 TEST PROCEDURE

- a. The EUT was placed 0.8 m above the horizontal ground plane with the EUT being connected to the power mains through a line impedance stabilization network (LISN).
  - All other support equipment were powered from an additional LISN(s).
  - The LISN provides 50 Ohm/50uH of impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle to keep the cable above 40 cm.
- c. Excess I/O cables that are not connected to a peripheral shall be bundled in the center.
  - The end of the cable will be terminated, using the correct terminating impedance.
  - The overall length shall not exceed 1 m.
- d. The LISN is spaced at least 80 cm from the nearest part of the EUT chassis.
- e. For the actual test configuration, please refer to the related Item EUT TEST PHOTO.

#### NOTE:

- (1) In the results, each reading is marked as Peak, QP or AVG per the detector used. BW=9 kHz (6 dB Bandwidth)
- (2) All readings are Peak unless otherwise stated QP or AVG in column of Note. Both the QP and the AVG readings must be less than the limit for compliance.

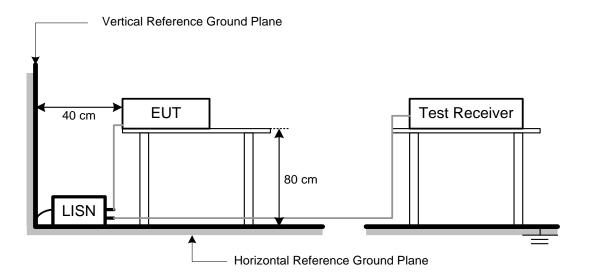
#### 3.3 DEVIATION FROM TEST STANDARD

No deviation.

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# 3.4 TEST SETUP



# 3.5 TEST RESULT

Please refer to the APPENDIX A.



#### 4 UNDESIRABLE EMISSIONS TEST

#### 4.1 LIMIT

According to 15.407(b)(6) the limits are as follows:

For transmitters operating within the 5.925-7.125 GHz band: Any emissions outside of the 5.925-7.125 GHz band must not exceed an e.i.r.p. of -27 dBm/MHz.

According to FCC KDB 987594 D02, clause G. Unwanted Emission Measurement:

Use guidance in KDB 789033 for measurements below 1000 MHz and above 1000 MHz. Unwanted emissions outside of restricted bands are measured with a RMS detector. In addition, 15.35(b) applies where the peak emissions must be limited to no more than 20 dB above the average limit

| Item                                | Maximum e.i.r.p. Limit | Maximum field strength Limit @ 3m |
|-------------------------------------|------------------------|-----------------------------------|
| Any emissions outside of the 5.925- | Peak: -7 dBm/MHz       | 88.2 dBuV/m                       |
| 7.125 GHz band                      | Average: -27 dBm/MHz   | 68.2 dBuV/m                       |

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

| Frequency<br>(MHz) | Field Strength (microvolts/meter) | Measurement Distance (meters) |
|--------------------|-----------------------------------|-------------------------------|
| 0.009~0.490        | 2400/F(kHz)                       | 300                           |
| 0.490~1.705        | 24000/F(kHz)                      | 30                            |
| 1.705~30.0         | 30                                | 30                            |
| 30~88              | 100                               | 3                             |
| 88~216             | 150                               | 3                             |
| 216~960            | 200                               | 3                             |
| 960~1000           | 500                               | 3                             |

According to 15.407(b)(9) the limits are as follows:

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

| Frequency<br>(MHz) | Field Strength (microvolts/meter) | Measurement Distance<br>(meters) |
|--------------------|-----------------------------------|----------------------------------|
| 0.009~0.490        | 2400/F(kHz)                       | 300                              |
| 0.490~1.705        | 24000/F(kHz)                      | 30                               |
| 1.705~30.0         | 30                                | 30                               |
| 30~88              | 100                               | 3                                |
| 88~216             | 150                               | 3                                |
| 216~960            | 200                               | 3                                |
| 960~1000           | 500                               | 3                                |

#### NOTE

- (1) e.i.r.p. Limit (dBuV/m at 3m) = Power Limit(dBm) + 95.2. (Referring to FCC KDB 987594 D02, clause G.2.d)(iii))
- (2) Emission level (dBuV/m) = 20log Emission level (uV/m). 3 m Emission level = 10 m Emission level + 20log(10 m/3 m).
- (3) The test result calculated as following:

Measurement Value = Reading Level + Correct Factor

Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain (if use)

Margin Level = Measurement Value - Limit Value

Calculation example:

| Reading Level |   | Correct Factor |    | Measurement Value |
|---------------|---|----------------|----|-------------------|
| 19.11         | + | 2.11           | II | 21.22             |

| Measurement Value |   | Limit Value |   | Margin Level |
|-------------------|---|-------------|---|--------------|
| 21.22             | - | 68.2        | = | -46.98       |

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| Spectrum Parameter            | Setting                |
|-------------------------------|------------------------|
| Attenuation                   | Auto                   |
| Start Frequency               | 1000 MHz               |
| Stop Frequency                | 10th carrier harmonic  |
| RBW / VBW                     | 1MHz / 3MHz for Peak,  |
| (Emission in restricted band) | 1MHz / 1/T for Average |

| Spectrum Parameter     | Setting                           |
|------------------------|-----------------------------------|
| Attenuation            | Auto                              |
| Start ~ Stop Frequency | 9KHz~90KHz for PK/AVG detector    |
| Start ~ Stop Frequency | 90KHz~110KHz for QP detector      |
| Start ~ Stop Frequency | 110KHz~490KHz for PK/AVG detector |
| Start ~ Stop Frequency | 490KHz~30MHz for QP detector      |
| Start ~ Stop Frequency | 30MHz~1000MHz for QP detector     |

#### 4.2 TEST PROCEDURE

Referring to FCC KDB 987594 D02, clause G. and FCC KDB 789033 D02, clause G. Unwanted Emission Measurement:

For measurements below 30 MHz:

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

For measurements 30 MHz to 40 GHz:

- a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation. (between 30 MHz to 1 GHz)
- b. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation. (between 1 GHz to 40 GHz)
- c. The height of the equipment or of the substitution antenna shall be 0.8 m or 1.5 m, the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
- e. The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1GHz.
- f. The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- g. All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform. (between 30 MHz to 1 GHz)
- h. All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn't perform. (between 30 MHz to 1 GHz)

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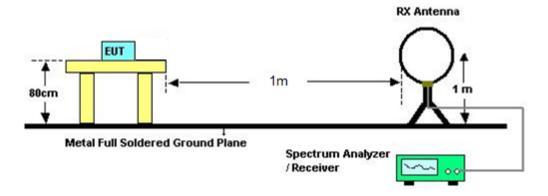


# 4.3 DEVIATION FROM TEST STANDARD

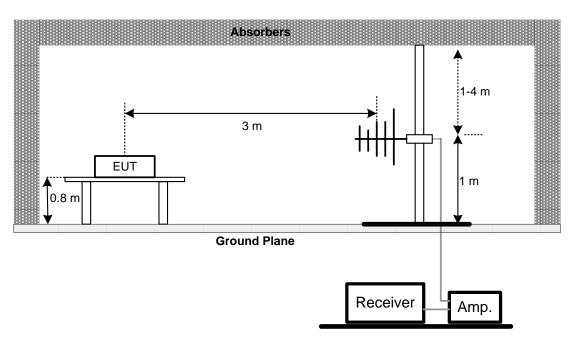
No deviation.

# 4.4 TEST SETUP

## 9 kHz to 30 MHz

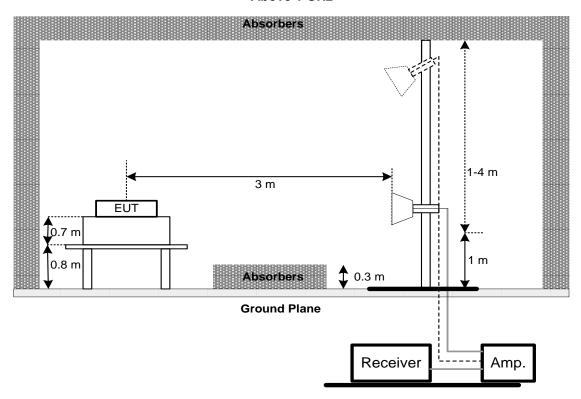


# 30 MHz to 1 GHz





## **Above 1 GHz**



## 4.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

# NOTE:

- (1) Distance extrapolation factor = 40 log (specific distance / test distance) (dB).
- (2) Limit line = specific limits (dBuV) + distance extrapolation factor.

# 4.6 TEST RESULT - BELOW 30 MHZ

There were no emissions found below 30 MHz within 20 dB of the limit.

# 4.7 TEST RESULT - 30 MHZ TO 1 GHZ

Please refer to the APPENDIX B.

# 4.8 TEST RESULT - ABOVE 1 GHZ

Please refer to the APPENDIX C.

# NOTE:

(1) No limit: This is fundamental signal, the judgment is not applicable. For fundamental signal judgment was referred to Peak output test.



#### 5 MAXIMUM E.I.R.P. TEST

#### 5.1 LIMIT

| Equipment Category         | Band                      | Maximum e.i.r.p. Limit |
|----------------------------|---------------------------|------------------------|
|                            | U-NII 5 (5.925-6.425 GHz) |                        |
| Indoor access point client | U-NII 6 (6.425-6.525 GHz) | 24 dBm                 |
| devices                    | U-NII 7 (6.525-6.875 GHz) | 24 ubili               |
|                            | U-NII 8 (6.875-7.125 GHz) |                        |

<sup>\*</sup> For outdoor devices, the maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

According to 15.407(a)(11):

The maximum conducted output power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage.

#### 5.2 TEST PROCEDURE

Referring to FCC KDB 987594 D02, clause E. and FCC KDB 789033 D02, clause E. 3 Measurement using a Power Meter (PM):

a. The maximum peak conducted output power was performed in accordance with method of clause E. 3. b) Method PM-G (Measurement using a gated RF average power meter): Measurements may be performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

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Referring to FCC KDB 987594 D02, clause H. Measurement of emission at elevation angles higher than 30° from horizon:

Note: Elevation angle is defined as 0° is horizontal and 90° is straight-up.

# For fixed infrastructure, not electrically or mechanically steerable beam antenna

- a. If elevation plane radiation pattern is available:
  - (i) Determine the device intended mounting elevation angle and define 0° reference angle on the elevation plane radiation pattern.
  - (ii) Indicate any radiation pattern between 30° and 90° which has the highest gain.
  - (iii) Calculate the EIRP based on this highest gain and conducted output power.
  - (iv) Compare to the 125 mW limit to establish compliance.
  - (v) Include the elevation pattern data in the application filing with the test report to show how the calculations are made.

Note: For MIMO devices, take the maximum gain of each antenna and apply the guidance in KDB Publication 662911 for calculating the overall gain including directional gain for the maximum EIRP calculation.

- b. If the elevation plane radiation pattern is not available, but the antenna type (such as dipole omnidirectional, Yagi, parabolic, or sector antenna) has a symmetrical elevation plane pattern referenced at the main beam and all lobes on the main beam elevation plane have highest gains, then the following measurement method is acceptable to determine compliance:
  - (i) Determine the device's intended mounting elevation angle referenced to the horizon.
  - (ii) Rotate the EUT antenna by 90° around the main beam axis in a horizontal position to transform the measurement in elevation angle into an azimuth angle and define a 0° reference angle based on the device's intended mounting elevation angle.
  - (iii) Move the test antenna along the horizontal arc, or rotate the turntable with the EUT antenna placed at the center, between 30° and 90° relative to the 0° reference angle, and then continuing down from 90° to 30° on the other side of the pattern, while maintaining the test antenna pointing with constant distance to the EUT antenna. Search for the spot which has the highest measured emission. Both horizontal and vertical polarization shall be investigated to determine the maximum radiated emission level.

Note: Moving the test antenna along the horizontal arc, or rotating the turntable, shall be performed in an angular step size as small as possible, but not larger than 3°.

- (iv) Calculate the EIRP based on the highest measured emission. Compare to the limit of 125 mW to determine compliance.
- (v) The antenna pattern measurements must be included in the filing.

#### For All Other Antenna Types

For all other antenna types (such as patch antennas, array antennas, antennas with irregular radiator shapes, etc.) which have any combination of following characteristics:

- · Asymmetrical, complex radiation patterns
- · 2-D or 3-D steerable beam
- · Portable/mobile, not fixed infrastructure device

Provide the following information in the report:

- a. Describe what type of antenna is used.
- b. Determine by calculation, measurement or simulation, all radiation lobes/beams, which have EIRP higher than 125 mW within a 3-dB elevation beamwidth.
  - Provide an explanation of how these antenna beams are controlled to be kept below the 30° elevation angle. The explanation should include device installation instructions, mechanical control, electromechanical control or software algorithms, if the beams are electrically controlled by software.

# 5.3 DEVIATION FROM TEST STANDARD

No deviation.

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# 5.4 TEST SETUP

EUT Power Meter

# 5.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

# 5.6 TEST RESULT

Please refer to the APPENDIX D.

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#### 6 CONTENTION BASED PROTOCOL

#### 6.1 LIMIT

Indoor access points, subordinate devices and client devices operating in the 5.925-7.125 GHz band (herein referred to as unlicensed devices) are required to use technologies that include a contention-based protocol to avoid co-channel interference with incumbent devices sharing the band. To ensure incumbent co-channel operations are detected in a technology-agnostic manner, unlicensed devices are required to detect co-channel radio frequency energy (energy detect) and avoid simultaneous transmission.

Unlicensed low-power indoor devices must detect co-channel radio frequency power that is at least -62 dBm or lower. Upon detection of energy in the band, unlicensed low power indoor devices must vacate the channel and stay off the channel as long as detected radio frequency power is equal to or greater than the threshold (-62 dBm). The -62 dBm (or lower) threshold is referenced to a 0 dBi antenna gain. (See note) To ensure incumbent operations are reliably detected in the band, low power indoor devices must detect RF energy throughout their intended operating channel. For example, an 802.11 device that plans to transmit a 40 MHz- wide signal (on a primary 20 MHz channel and a secondary 20 MHz channel) must detect energy throughout the entire 40 MHz channel. Additionally, low-power indoor devices must detect co-channel energy with 90% or greater certainty.

Note: The EUT with a lowest gain is 4.27dBi. All power injected into EUT should be -62+4.27=-57.73dBm.

## 6.2 TEST PROCEDURE

a. Number of times detection threshold:

| If   | Number of Tests   | Placement of Incumbent Transmission      |
|--|---|--|
| BWeut≤BWinc  | Once  | Tune incumbent and EUT transmissions     |
| BVVE01 \BVVIIIC  | 01100   | (f <sub>c1</sub> =f <sub>c2</sub> )      |
| BW <sub>Inc</sub> <bw<sub>FUT \$2BW<sub>Inc</sub></bw<sub>   | Once  | Incumbent transmission is contained      |
| Bittine 4Bitted 42Bittine                                    | VINC STICE  | within BW <sub>EUT</sub>                 |
|  |   | Incumbent transmission is located as     |
| 2BW <sub>Inc</sub> <bw<sub>EUT&lt;4BW<sub>Inc</sub></bw<sub> | Twice. Incumbent transmission is contained within BW <sub>EUT</sub> | closely □s possible to the lower edge    |
|  |   | and upper edge, respectively, of the     |
|  |   | EUT channel                              |
|  |   | Incumbent transmission is located as     |
| BW <sub>EUT</sub> >4BW <sub>Inc</sub>                        | Three times   | closely as possible to the lower edge of |
|  |   | the EUT channel, in the middle of EUT    |
|  |   | channel, and as closely as possible to   |
|  |   | the upper edge of the EUT channel        |

Where:

BW<sub>EUT</sub>: Transmission bandwidth of EUT signal.

BW<sub>Inc</sub>: Transmission bandwidth of the simulated incumbent signal (10 MHz wide AWGN signal).

fc1: Center frequency of EUT transmission.

 $f_{\text{c2}}$ : Center frequency of simulated incumbent signal.

- b. Using an AWGN signal source, generate (but do not transmit, i.e., RF OFF) a 10 MHz-wide AWGN signal. Use step b table to determine the center frequency of the 10 MHz AWGN signal relative to the EUT's channel bandwidth and center frequency.
- c. Set the AWGN signal power to an extremely low level (more than 20 dB below the -62 dBm threshold). Connect the AWGN signal source, via a 3-dB splitter, to the signal analyzer and the EUT as show in the block diagram below.
- d. Transmit the AWGN signal (RF ON) and verify its characteristics on the signal analyzer.
- e. Monitor the signal analyzer to verify if the AWGN signal has been detected and the EUT has ceased transmission. If the EUT continues to transmit, then incrementally increase the AWGN signal power level until the EUT stops transmitting.

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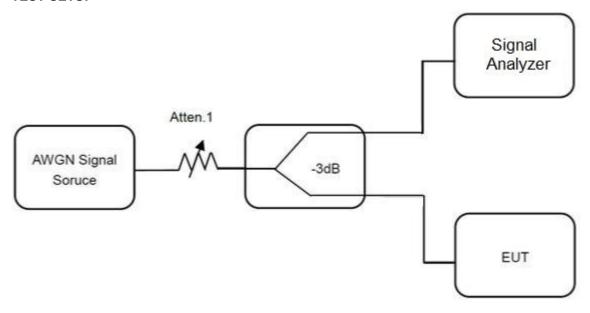


- f. (Including all losses in the RF paths) Determine and record the AWGN signal power level (at the EUT's antenna port) at which the EUT ceased transmission. Repeat the procedure at least 10 times to verify the EUT can detect an AWGN signal with 90% (or better) level of certainty.
- g. Refer to step b table to determine number of times the detection threshold testing needs to be repeated. If testing is required more than once, then go back to step c, choose a different center frequency for the AWGN signal and repeat the process.

# 6.3 DEVIATION FROM TEST STANDARD

No deviation.

## 6.4 TEST SETUP



#### 6.5 EUT OPERATING CONDITIONS

The EUT was Configured to be in normally transmitting mode with a constant duty cycle.

#### 6.6 TEST RESULT

Please refer to the APPENDIX D.

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# 7 LIST OF MEASURING EQUIPMENTS

|                        | AC Power Line Conducted Emissions |              |                                    |        |                    |                     |  |  |  |  |  |  |
|------------------------|-----------------------------------|--------------|------------------------------------|--------|--------------------|---------------------|--|--|--|--|--|--|
| Item Kind of Equipment |                                   | Manufacturer | Type No. Serial No.                |        | Calibrated<br>Date | Calibrated<br>Until |  |  |  |  |  |  |
| 1                      | TWO-LINE V-<br>NETWORK            | R&S          | ENV216                             | 101051 | 2022/6/15          | 2023/6/14           |  |  |  |  |  |  |
| 2                      | Test Cable                        | EMCI         | EMCRG58-BM-<br>BM-9000             | 210501 | 2022/5/2           | 2023/5/1            |  |  |  |  |  |  |
| 3                      | EMI Test<br>Receiver              | R&S          | ESR 7                              | 101433 | 2022/11/16         | 2023/11/15          |  |  |  |  |  |  |
| 4                      | Measurement<br>Software           | EZ           | EZ_EMC<br>(Version NB-<br>03A1-01) | N/A    | N/A                | N/A                 |  |  |  |  |  |  |

|      |                         |                 | Dadiated Emissis               |             | Radiated Emissions |                     |  |  |  |  |  |  |  |  |  |
|------|-------------------------|-----------------|--------------------------------|-------------|--------------------|---------------------|--|--|--|--|--|--|--|--|--|
|      |                         | T               | Radiated Emission              | ons         |                    |                     |  |  |  |  |  |  |  |  |  |
| Item | Kind of<br>Equipment    | Manufacturer    | Type No.                       | Serial No.  | Calibrated<br>Date | Calibrated<br>Until |  |  |  |  |  |  |  |  |  |
| 1    | Preamplifier            | EMCI            | EMC330N                        | 980850      | 2022/9/19          | 2023/9/18           |  |  |  |  |  |  |  |  |  |
| 2    | Preamplifier            | EMCI            | EMC118A45SE                    | 980819      | 2022/3/8           | 2023/3/7            |  |  |  |  |  |  |  |  |  |
| 3    | Preamplifier            | EMCI            | EMC184045SE                    | 980882      | 2022/2/9           | 2023/2/8            |  |  |  |  |  |  |  |  |  |
| 4    | Preamplifier            | EMCI            | EMC001340                      | 980579      | 2022/9/30          | 2023/9/29           |  |  |  |  |  |  |  |  |  |
| 5    | Test Cable              | EMCI            | EMC104-SM-SM-<br>1000          | 220319      | 2022/3/15          | 2023/3/14           |  |  |  |  |  |  |  |  |  |
| 6    | Test Cable              | EMCI            | EMC104-SM-SM-<br>3000          | 220322      | 2022/3/15          | 2023/3/14           |  |  |  |  |  |  |  |  |  |
| 7    | Test Cable              | EMCI            | EMC104-SM-SM-<br>7000          | 220324      | 2022/3/15          | 2023/3/14           |  |  |  |  |  |  |  |  |  |
| 8    | EXA Signal<br>Analyzer  | keysight        | N9020B                         | MY57120120  | 2022/3/7           | 2023/3/6            |  |  |  |  |  |  |  |  |  |
| 9    | Loop Ant                | Electro-Metrics | EMCI-LPA600                    | 291         | 2022/9/19          | 2023/9/18           |  |  |  |  |  |  |  |  |  |
| 10   | Horn Antenna            | RFSPIN          | DRH18-E                        | 211202A18EN | 2022/5/18          | 2023/5/17           |  |  |  |  |  |  |  |  |  |
| 11   | Horn Ant                | Schwarzbeck     | BBHA 9170D                     | 1136        | 2022/5/18          | 2023/5/17           |  |  |  |  |  |  |  |  |  |
| 12   | Log-bicon<br>Antenna    | Schwarzbeck     | VULB9168                       | 1369        | 2022/5/20          | 2023/5/19           |  |  |  |  |  |  |  |  |  |
| 13   | 6dB Attenuator          | EMCI            | EMCI-N-6-06                    | AT-N0625    | 2022/5/20          | 2023/5/19           |  |  |  |  |  |  |  |  |  |
| 14   | Test Cable              | EMCI            | EMC101G-KM-KM-<br>3000         | 220329      | 2022/3/15          | 2023/3/14           |  |  |  |  |  |  |  |  |  |
| 15   | Test Cable              | EMCI            | EMC102-KM-KM-<br>1000          | 220327      | 2022/3/15          | 2023/3/14           |  |  |  |  |  |  |  |  |  |
| 16   | Measurement<br>Software | EZ              | EZ_EMC (Version<br>NB-03A1-01) | N/A         | N/A                | N/A                 |  |  |  |  |  |  |  |  |  |

|      | Maximum e.i.r.p.     |              |          |            |                    |                     |  |  |  |  |  |  |
|------|----------------------|--------------|----------|------------|--------------------|---------------------|--|--|--|--|--|--|
| Item | Kind of<br>Equipment | Manufacturer | Type No. | Serial No. | Calibrated<br>Date | Calibrated<br>Until |  |  |  |  |  |  |
| 1    | Power Meter          | Anritsu      | ML2495A  | 1128008    | 2022/6/1           | 2023/5/31           |  |  |  |  |  |  |
| 2    | Power Sensor         | Anritsu      | MA2411B  | 1126001    | 2022/6/1           | 2023/5/31           |  |  |  |  |  |  |

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|      | Contention Based Protocol      |               |              |            |                    |                     |  |  |  |  |  |  |
|------|--------------------------------|---------------|--------------|------------|--------------------|---------------------|--|--|--|--|--|--|
| Item | Kind of<br>Equipment           | Manufacturer  | Type No.     | Serial No. | Calibrated<br>Date | Calibrated<br>Until |  |  |  |  |  |  |
| 1    | Spectrum<br>Analyzer           | Keysight      | N9010A       | MY54200240 | 2022/6/9           | 2023/6/8            |  |  |  |  |  |  |
| 2    | MXG Vector<br>Signal Generator | Agilent       | N5182B       | MY51350711 | 2022/4/14          | 2023/4/13           |  |  |  |  |  |  |
| 3    | POWER<br>SPLITTER              | Mini-Circuits | ZFRSC-183-S+ | N/A        | 2022/5/12          | 2023/5/11           |  |  |  |  |  |  |
| 4    | POWER<br>SPLITTER              | Mini-Cicuits  | ZFRSC-123-S+ | N/A        | 2022/5/12          | 2023/5/11           |  |  |  |  |  |  |

Remark: "N/A" denotes no model name, no serial no. or no calibration specified. All calibration period of equipment list is one year.

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| 8 EUT TEST PHOTO   |
|--|
| Please refer to document Appendix No.: TP-2209C159-1 (APPENDIX-TEST PHOTOS). |
| 9 EUT PHOTOS   |
| Please refer to document Appendix No.: EP-2209C159-1 (APPENDIX-EUT PHOTOS).  |
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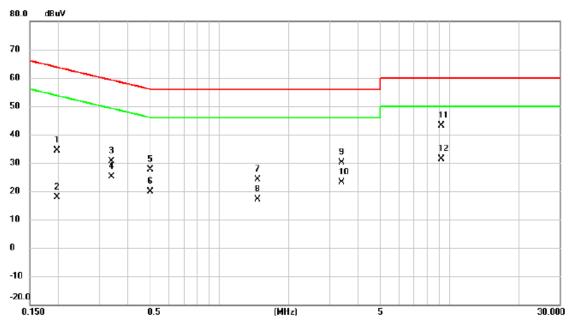
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| APPENDIX A | AC POWER LINE CONDUCTED EMISSIONS |
|------------|-----------------------------------|
|            |                                   |
|            |                                   |
|            |                                   |
|            |                                   |
|            |                                   |
|            |                                   |
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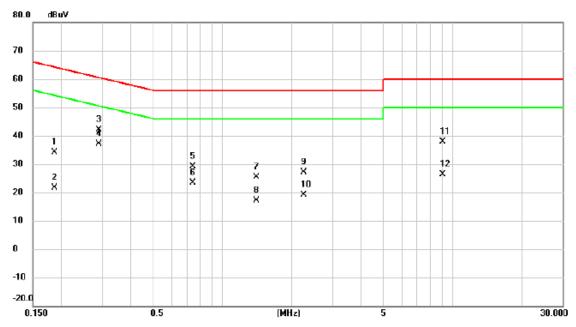
| Test Mode      | Normal | Tested Date | 2022/11/23 |
|----------------|--------|-------------|------------|
| Test Frequency | -      | Phase       | Line       |



| No. Mk | . Freq. | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Margin |          |         |
|--------|---------|------------------|-------------------|------------------|-------|--------|----------|---------|
|        | MHz     | dBu∨             | dB                | dBuV             | dBu∀  | dB     | Detector | Comment |
| 1      | 0.1973  | 34.42            | 0.02              | 34.44            | 63.72 | -29.28 | QP       |         |
| 2      | 0.1973  | 17.97            | 0.02              | 17.99            | 53.72 | -35.73 | AVG      |         |
| 3      | 0.3390  | 30.54            | 0.02              | 30.56            | 59.23 | -28.67 | QP       |         |
| 4      | 0.3390  | 25.09            | 0.02              | 25.11            | 49.23 | -24.12 | AVG      |         |
| 5      | 0.4987  | 27.66            | 0.02              | 27.68            | 56.02 | -28.34 | QP       |         |
| 6      | 0.4987  | 19.84            | 0.02              | 19.86            | 46.02 | -26.16 | AVG      |         |
| 7      | 1.4663  | 24.08            | 0.06              | 24.14            | 56.00 | -31.86 | QP       |         |
| 8      | 1.4663  | 17.15            | 0.06              | 17.21            | 46.00 | -28.79 | AVG      |         |
| 9      | 3.3990  | 30.14            | 0.10              | 30.24            | 56.00 | -25.76 | QP       |         |
| 10     | 3.3990  | 23.12            | 0.10              | 23.22            | 46.00 | -22.78 | AVG      |         |
| 11 *   | 9.2108  | 42.83            | 0.18              | 43.01            | 60.00 | -16.99 | QP       |         |
| 12     | 9.2108  | 31.15            | 0.18              | 31.33            | 50.00 | -18.67 | AVG      |         |

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

| Test Mode      | Normal | Tested Date | 2022/11/23 |
|----------------|--------|-------------|------------|
| Test Frequency | -      | Phase       | Neutral    |

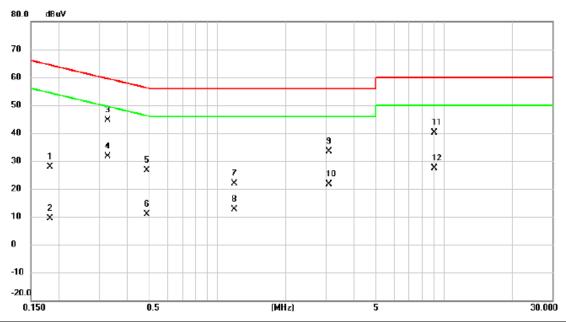


| No. | Mk. | Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Margin |          |         |
|-----|-----|--------|------------------|-------------------|------------------|-------|--------|----------|---------|
|     |     | MHz    | dBu∨             | dB                | dBuV             | dBu∀  | dB     | Detector | Comment |
| 1   |     | 0.1860 | 34.23            | 0.02              | 34.25            | 64.21 | -29.96 | QP       |         |
| 2   |     | 0.1860 | 21.49            | 0.02              | 21.51            | 54.21 | -32.70 | AVG      |         |
| 3   |     | 0.2895 | 42.21            | 0.02              | 42.23            | 60.54 | -18.31 | QP       |         |
| 4   | *   | 0.2895 | 37.00            | 0.02              | 37.02            | 50.54 | -13.52 | AVG      |         |
| 5   |     | 0.7440 | 29.20            | 0.03              | 29.23            | 56.00 | -26.77 | QP       |         |
| 6   |     | 0.7440 | 23.37            | 0.03              | 23.40            | 46.00 | -22.60 | AVG      |         |
| 7   |     | 1.4078 | 25.20            | 0.06              | 25.26            | 56.00 | -30.74 | QP       |         |
| 8   |     | 1.4078 | 17.01            | 0.06              | 17.07            | 46.00 | -28.93 | AVG      |         |
| 9   |     | 2.2605 | 27.01            | 0.08              | 27.09            | 56.00 | -28.91 | QP       |         |
| 10  |     | 2.2605 | 19.03            | 0.08              | 19.11            | 46.00 | -26.89 | AVG      |         |
| 11  |     | 9.0375 | 37.60            | 0.18              | 37.78            | 60.00 | -22.22 | QP       |         |
| 12  |     | 9.0375 | 26.27            | 0.18              | 26.45            | 50.00 | -23.55 | AVG      |         |

# **REMARKS**:

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

| Test Mode      | Idle | Tested Date | 2022/11/23 |
|----------------|------|-------------|------------|
| Test Frequency | -    | Phase       | Line       |



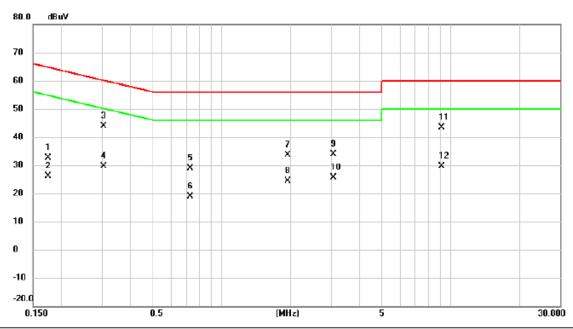
| No. | Mk. | Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Margin |          |         |
|-----|-----|--------|------------------|-------------------|------------------|-------|--------|----------|---------|
|     |     | MHz    | dBu∀             | dB                | dBu∨             | dBu∀  | dB     | Detector | Comment |
| 1   |     | 0.1824 | 27.92            | 0.02              | 27.94            | 64.38 | -36.44 | QP       |         |
| 2   |     | 0.1824 | 9.42             | 0.02              | 9.44             | 54.38 | -44.94 | AVG      |         |
| 3   | *   | 0.3277 | 44.71            | 0.02              | 44.73            | 59.51 | -14.78 | QP       |         |
| 4   |     | 0.3277 | 31.71            | 0.02              | 31.73            | 49.51 | -17.78 | AVG      |         |
| 5   |     | 0.4852 | 26.63            | 0.02              | 26.65            | 56.25 | -29.60 | QP       |         |
| 6   |     | 0.4852 | 10.85            | 0.02              | 10.87            | 46.25 | -35.38 | AVG      |         |
| 7   |     | 1.1850 | 21.71            | 0.05              | 21.76            | 56.00 | -34.24 | QP       |         |
| 8   |     | 1.1850 | 12.67            | 0.05              | 12.72            | 46.00 | -33.28 | AVG      |         |
| 9   |     | 3.1042 | 33.19            | 0.10              | 33.29            | 56.00 | -22.71 | QP       |         |
| 10  |     | 3.1042 | 21.48            | 0.10              | 21.58            | 46.00 | -24.42 | AVG      |         |
| 11  |     | 9.0555 | 39.92            | 0.18              | 40.10            | 60.00 | -19.90 | QP       |         |
| 12  |     | 9.0555 | 27.16            | 0.18              | 27.34            | 50.00 | -22.66 | AVG      |         |

# REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

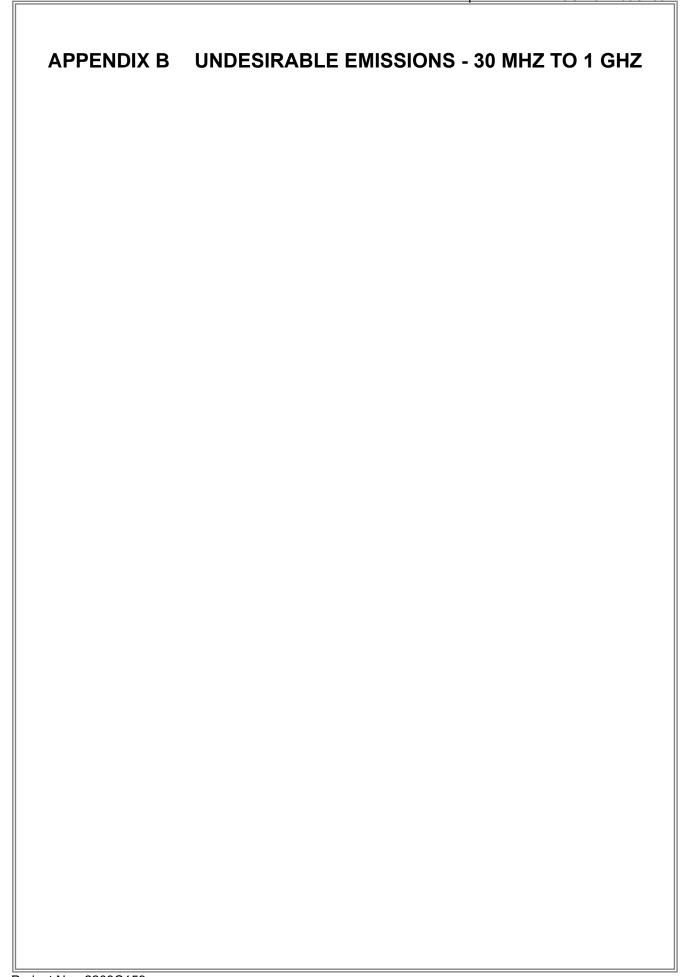


| ı |                |      |             |            |
|---|----------------|------|-------------|------------|
|   | Test Mode      | Idle | Tested Date | 2022/11/23 |
|   | Test Frequency | -    | Phase       | Neutral    |



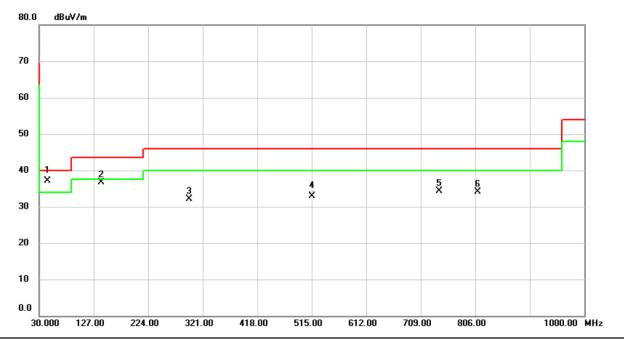
| 1 0.1747 32<br>2 0.1747 26<br>3 * 0.3052 43<br>4 0.3052 29<br>5 0.7282 28<br>6 0.7282 18<br>7 1.9387 33<br>8 1.9387 24<br>9 3.0750 33 | dBuV dB<br>32.53 0.02 | dBuV dBuV   | dB     | Detector Comm |     |
|---|-----------------------|-------------|--------|---------------|-----|
| 2 0.1747 26<br>3 * 0.3052 43<br>4 0.3052 29<br>5 0.7282 28<br>6 0.7282 18<br>7 1.9387 33<br>8 1.9387 24<br>9 3.0750 33                | 32.53 0.02            |             |        |               | ent |
| 3 * 0.3052 43<br>4 0.3052 29<br>5 0.7282 28<br>6 0.7282 18<br>7 1.9387 33<br>8 1.9387 24<br>9 3.0750 33                               |                       | 32.55 64.73 | -32.18 | QP            |     |
| 4 0.3052 29<br>5 0.7282 28<br>6 0.7282 18<br>7 1.9387 33<br>8 1.9387 24<br>9 3.0750 33  | 26.19 0.02            | 26.21 54.73 | -28.52 | AVG           |     |
| 5 0.7282 28<br>6 0.7282 18<br>7 1.9387 33<br>8 1.9387 24<br>9 3.0750 33   | 43.93 0.02            | 43.95 60.10 | -16.15 | QP            |     |
| 6 0.7282 18<br>7 1.9387 33<br>8 1.9387 24<br>9 3.0750 33  | 29.65 0.02            | 29.67 50.10 | -20.43 | AVG           |     |
| 7 1.9387 33<br>8 1.9387 24<br>9 3.0750 33   | 28.91 0.03            | 28.94 56.00 | -27.06 | QP            |     |
| 8 1.9387 24<br>9 3.0750 33  | 18.92 0.03            | 18.95 46.00 | -27.05 | AVG           |     |
| 9 3.0750 33   | 33.60 0.07            | 33.67 56.00 | -22.33 | QP            |     |
|   | 24.34 0.07            | 24.41 46.00 | -21.59 | AVG           |     |
| 10 3.0750 25  | 33.88 0.10            | 33.98 56.00 | -22.02 | QP            |     |
|   | 25.45 0.10            | 25.55 46.00 | -20.45 | AVG           |     |
| 11 9.1072 43  |                       | 43.48 60.00 | -16.52 | QP            |     |
| 12 9.1072 29  | 43.30 0.18            | 29.68 50.00 |        |               |     |





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| Test Mode      | IEEE 802.11ax (HE20) | Test Date    | 2023/1/17 |  |  |
|----------------|----------------------|--------------|-----------|--|--|
| Test Frequency | 7115MHz              | Polarization | Vertical  |  |  |
| Temp           | 23°C                 | Hum.         | 59%       |  |  |



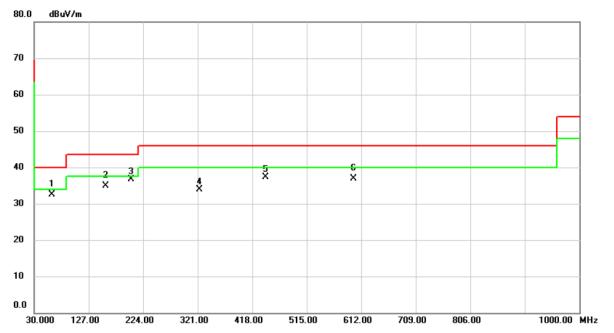
| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit  | Over   |          |         |
|-----|----|----------|------------------|-------------------|------------------|--------|--------|----------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV/m           | dBuV/m | dB     | Detector | Comment |
| 1   | *  | 45.3260  | 48.45            | -11.28            | 37.17            | 40.00  | -2.83  | QP       |         |
| 2   |    | 141.1620 | 49.12            | -12.42            | 36.70            | 43.50  | -6.80  | peak     |         |
| 3   |    | 296.9763 | 43.61            | -11.51            | 32.10            | 46.00  | -13.90 | peak     |         |
| 4   |    | 515.3232 | 39.06            | -6.23             | 32.83            | 46.00  | -13.17 | QP       |         |
| 5   |    | 742.5297 | 36.00            | -1.74             | 34.26            | 46.00  | -11.74 | peak     |         |
| 6   |    | 809.9770 | 35.00            | -0.95             | 34.05            | 46.00  | -11.95 | peak     |         |

# **REMARKS**:

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

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| Test Mode      | IEEE 802.11ax (HE20) | Test Date    | 2023/1/17  |  |  |
|----------------|----------------------|--------------|------------|--|--|
| Test Frequency | 7115MHz              | Polarization | Horizontal |  |  |
| Temp           | 23°C                 | Hum.         | 59%        |  |  |



| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit  | Over   |          |         |
|-----|----|----------|------------------|-------------------|------------------|--------|--------|----------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV/m           | dBuV/m | dB     | Detector | Comment |
| 1   |    | 61.4280  | 44.87            | -12.30            | 32.57            | 40.00  | -7.43  | QP       |         |
| 2   |    | 157.0377 | 46.71            | -11.77            | 34.94            | 43.50  | -8.56  | QP       |         |
| 3   | *  | 202.4660 | 51.86            | -15.23            | 36.63            | 43.50  | -6.87  | peak     |         |
| 4   |    | 324.0070 | 44.90            | -10.94            | 33.96            | 46.00  | -12.04 | peak     |         |
| 5   |    | 441.9590 | 44.94            | -7.62             | 37.32            | 46.00  | -8.68  | peak     |         |
| 6   |    | 598.7433 | 41.05            | -4.20             | 36.85            | 46.00  | -9.15  | QP       |         |

# **REMARKS**:

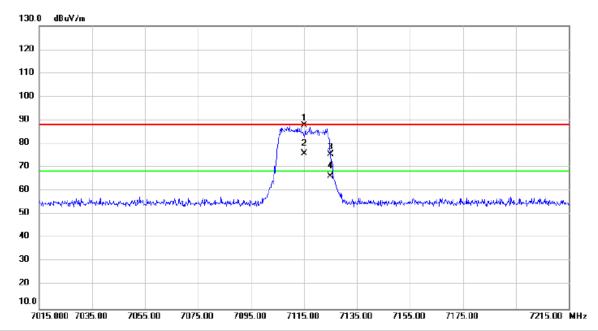
- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



# APPENDIX C UNDESIRABLE EMISSIONS - ABOVE 1 GHZ

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| Test Mode      | IEEE 802.11ax (HE20) | Test Date    | 2022/11/29 |
|----------------|----------------------|--------------|------------|
| Test Frequency | 7115MHz              | Polarization | Vertical   |
| Temp           | 23°C                 | Hum.         | 59%        |



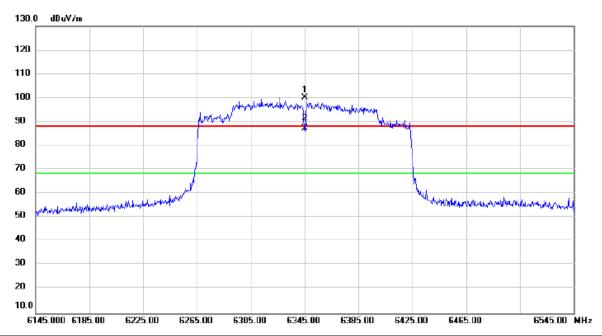
| No | M | k. Freq. | Reading<br>Level |      | Measure-<br>ment | Limit  | Over   |          |          |
|----|---|----------|------------------|------|------------------|--------|--------|----------|----------|
|    |   | MHz      | dBu∨             | dB   | dBuV/m           | dBuV/m | dB     | Detector | Comment  |
| 1  |   | 7115.000 | 82.34            | 5.51 | 87.85            | 88.20  | -0.35  | peak     | No Limit |
| 2  | * | 7115.000 | 70.42            | 5.51 | 75.93            | 68.20  | 7.73   | AVG      | No Limit |
| 3  |   | 7125.000 | 69.90            | 5.52 | 75.42            | 88.20  | -12.78 | peak     |          |
| 4  |   | 7125.000 | 60.66            | 5.52 | 66.18            | 68.20  | -2.02  | AVG      |          |

### **REMARKS**:

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

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| Test Mode      | IEEE 802.11ax (HE160) | Test Date    | 2022/11/29 |
|----------------|-----------------------|--------------|------------|
| Test Frequency | 6345MHz               | Polarization | Vertical   |
| Temp           | 23°C                  | Hum.         | 59%        |



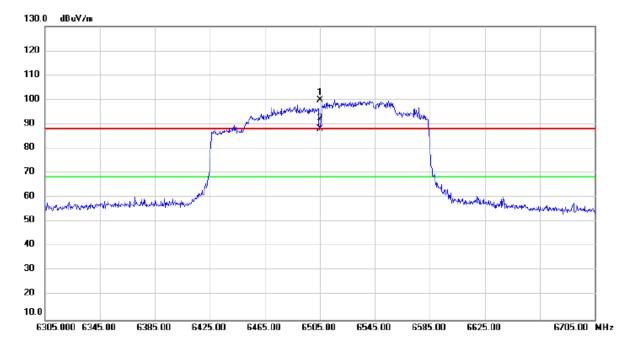
| No. | Mk | . Freq.  | Reading<br>Level |      | Measure-<br>ment | Limit  | Over  |          |          |
|-----|----|----------|------------------|------|------------------|--------|-------|----------|----------|
|     |    | MHz      | dBu∨             | dB   | dBuV/m           | dBuV/m | dB    | Detector | Comment  |
| 1   | X  | 6345.000 | 95.91            | 4.26 | 100.17           | 88.20  | 11.97 | peak     | No Limit |
| 2   | *  | 6345.000 | 82.88            | 4.26 | 87.14            | 68.20  | 18.94 | AVG      | No Limit |

### **REMARKS**:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.

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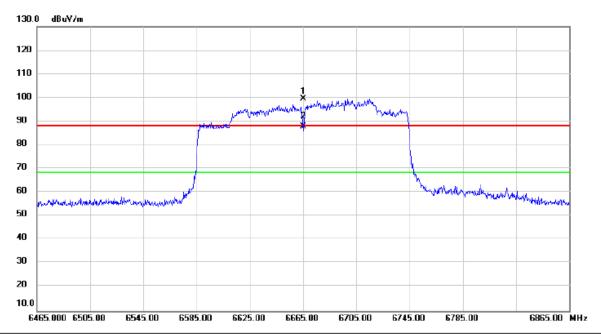
| Test Mode      | IEEE 802.11ax (HE160) | Test Date    | 2022/11/29 |
|----------------|-----------------------|--------------|------------|
| Test Frequency | 6505MHz               | Polarization | Vertical   |
| Temp           | 23°C                  | Hum.         | 59%        |



| No. | Mł | c. Freq. | Reading<br>Level |      | Measure-<br>ment | Limit  | Over  |          |          |
|-----|----|----------|------------------|------|------------------|--------|-------|----------|----------|
|     |    | MHz      | dBu∨             | dB   | dBuV/m           | dBuV/m | dB    | Detector | Comment  |
| 1   | X  | 6505.000 | 94.77            | 5.05 | 99.82            | 88.20  | 11.62 | peak     | No Limit |
| 2   | *  | 6505.000 | 83.25            | 5.05 | 88.30            | 68.20  | 20.10 | AVG      | No Limit |

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

| Test Mode      | IEEE 802.11ax (HE160) | Test Date    | 2022/11/29 |
|----------------|-----------------------|--------------|------------|
| Test Frequency | 6665MHz               | Polarization | Vertical   |
| Temp           | 23°C                  | Hum.         | 59%        |



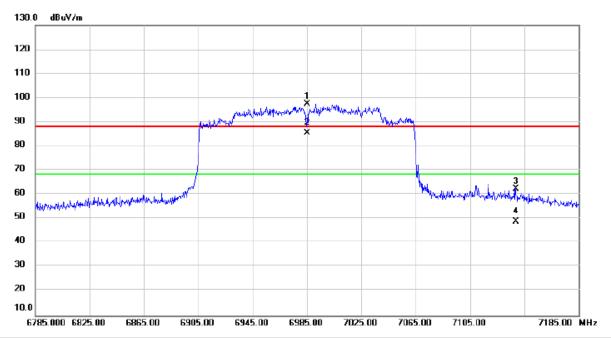
| No. | Mk | . Freq.  | Reading<br>Level |      | Measure-<br>ment | Limit  | Over  |          |          |
|-----|----|----------|------------------|------|------------------|--------|-------|----------|----------|
|     |    | MHz      | dBu∨             | dB   | dBuV/m           | dBuV/m | dB    | Detector | Comment  |
| 1   | X  | 6665.000 | 94.50            | 5.19 | 99.69            | 88.20  | 11.49 | peak     | No Limit |
| 2   | *  | 6665.000 | 82.69            | 5.19 | 87.88            | 68.20  | 19.68 | AVG      | No Limit |

### **REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.

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| Test Mode      | IEEE 802.11ax (HE160) | Test Date    | 2022/11/29 |
|----------------|-----------------------|--------------|------------|
| Test Frequency | 6985MHz               | Polarization | Vertical   |
| Temp           | 23°C                  | Hum.         | 59%        |



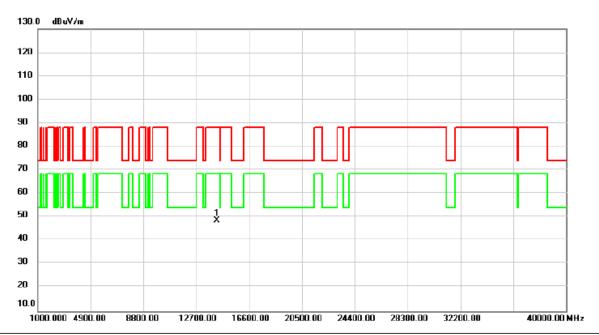
| No | . M | k. Freq. | _     |      | Measure-<br>ment |        | Over   |          |          |
|----|-----|----------|-------|------|------------------|--------|--------|----------|----------|
|    |     | MHz      | dBu∨  | dB   | dBuV/m           | dBuV/m | dB     | Detector | Comment  |
| 1  | X   | 6985.000 | 91.95 | 5.47 | 97.42            | 88.20  | 9.22   | peak     | No Limit |
| 2  | *   | 6985.000 | 80.07 | 5.47 | 85.54            | 68.20  | 17.34  | AVG      | No Limit |
| 3  |     | 7138.760 | 56.99 | 5.51 | 62.50            | 88.20  | -25.70 | peak     |          |
| 4  |     | 7138.760 | 43.49 | 5.51 | 49.00            | 68.20  | -19.20 | AVG      |          |

### **REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.

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| Test Mode      | IEEE 802.11ax (HE20) | Test Date    | 2022/11/29 |
|----------------|----------------------|--------------|------------|
| Test Frequency | 7115MHz              | Polarization | Vertical   |
| Temp           | 23°C                 | Hum.         | 59%        |



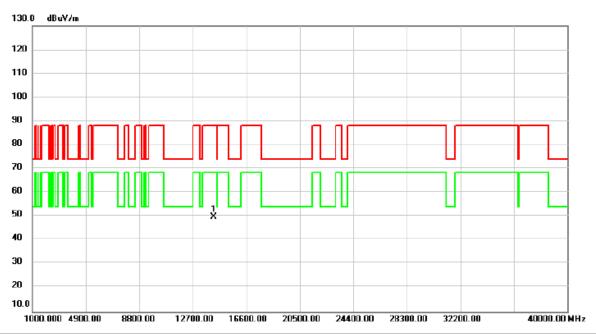
| No. M | k. Freq  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit  | Over   |          |         |
|-------|----------|------------------|-------------------|------------------|--------|--------|----------|---------|
|       | MHz      | dBu∨             | dB                | dBuV/m           | dBuV/m | dB     | Detector | Comment |
| 1 *   | 14230.00 | 41.29            | 7.24              | 48.53            | 88.20  | -39.67 | peak     |         |

### **REMARKS:**

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

| Test Mode      | IEEE 802.11ax (HE20) | Test Date    | 2022/11/29 |
|----------------|----------------------|--------------|------------|
| Test Frequency | 7115MHz              | Polarization | Horizontal |
| Temp           | 23°C                 | Hum.         | 59%        |



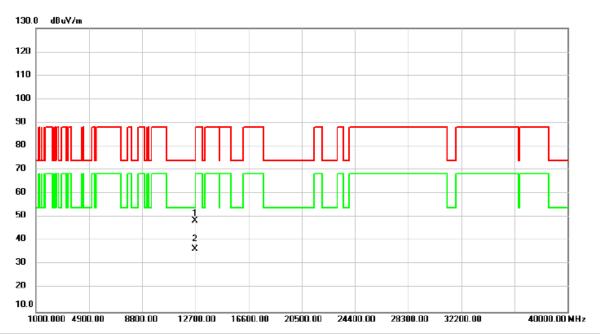
| No. Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit  | Over   |          |         |
|--------|----------|------------------|-------------------|------------------|--------|--------|----------|---------|
|        | MHz      | dBu∨             | dB                | dBuV/m           | dBuV/m | dB     | Detector | Comment |
| 1 *    | 14230.00 | 42.53            | 7.24              | 49.77            | 88.20  | -38.43 | peak     |         |

### **REMARKS**:

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

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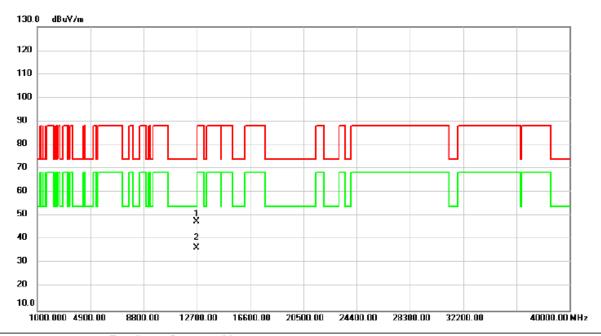
| Test Mode      | IEEE 802.11ax (HE160) | Test Date    | 2022/11/29 |
|----------------|-----------------------|--------------|------------|
| Test Frequency | 6345MHz               | Polarization | Vertical   |
| Temp           | 23°C                  | Hum.         | 59%        |



| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit  | Over   |          |         |
|-----|----|----------|------------------|-------------------|------------------|--------|--------|----------|---------|
|     |    | MHz      | dBu∨             | dB                | dBuV/m           | dBuV/m | dB     | Detector | Comment |
| 1   |    | 12690.00 | 41.19            | 7.44              | 48.63            | 74.00  | -25.37 | peak     |         |
| 2   | *  | 12690.00 | 29.08            | 7.44              | 36.52            | 54.00  | -17.48 | AVG      |         |

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.

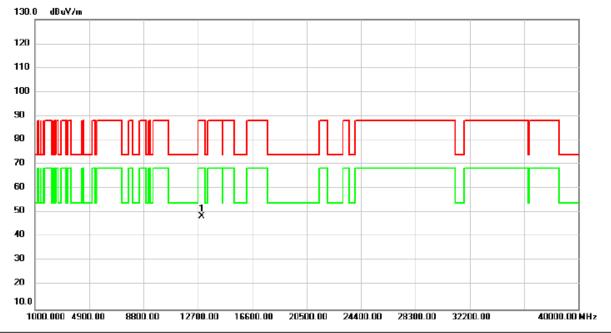
| Test Mode      | IEEE 802.11ax (HE160) | Test Date    | 2022/11/29 |
|----------------|-----------------------|--------------|------------|
| Test Frequency | 6345MHz               | Polarization | Horizontal |
| Temp           | 23°C                  | Hum.         | 59%        |



| No. | M | k. Freq. |       | Correct<br>Factor | Measure-<br>ment | Limit  | Over   |          |         |
|-----|---|----------|-------|-------------------|------------------|--------|--------|----------|---------|
|     |   | MHz      | dBu∨  | dB                | dBuV/m           | dBuV/m | dB     | Detector | Comment |
| 1   |   | 12690.00 | 40.28 | 7.44              | 47.72            | 74.00  | -26.28 | peak     |         |
| 2   | * | 12690.00 | 28.99 | 7.44              | 36.43            | 54.00  | -17.57 | AVG      |         |

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

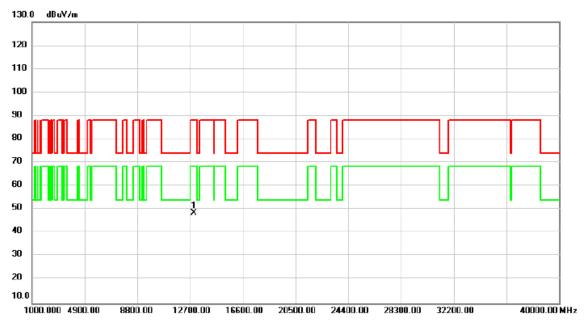
| Test Mode      | IEEE 802.11ax (HE160) | Test Date    | 2022/11/29 |
|----------------|-----------------------|--------------|------------|
| Test Frequency | 6505MHz               | Polarization | Vertical   |
| Temp           | 23°C                  | Hum.         | 59%        |



| No. | М | k. Freq. |       |      | Measure-<br>ment | Limit  | Over   |          |         |
|-----|---|----------|-------|------|------------------|--------|--------|----------|---------|
|     |   | MHz      | dBu∨  | dB   | dBuV/m           | dBuV/m | dB     | Detector | Comment |
| 1   | * | 13010.00 | 41.00 | 7.66 | 48.66            | 88.20  | -39.54 | peak     |         |

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

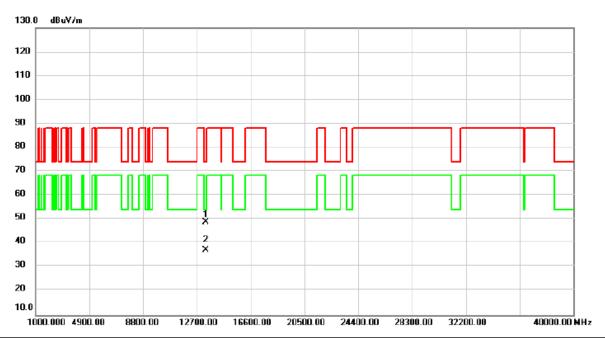
| Test Mode      | IEEE 802.11ax (HE160) | Test Date    | 2022/11/29 |
|----------------|-----------------------|--------------|------------|
| Test Frequency | 6505MHz               | Polarization | Horizontal |
| Temp           | 23°C                  | Hum.         | 59%        |



| No. Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit  | Over   |          |         |
|--------|----------|------------------|-------------------|------------------|--------|--------|----------|---------|
|        | MHz      | dBu∨             | dB                | dBuV/m           | dBuV/m | dB     | Detector | Comment |
| 1 *    | 13010.00 | 41.03            | 7.66              | 48.69            | 88.20  | -39.51 | peak     |         |

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.

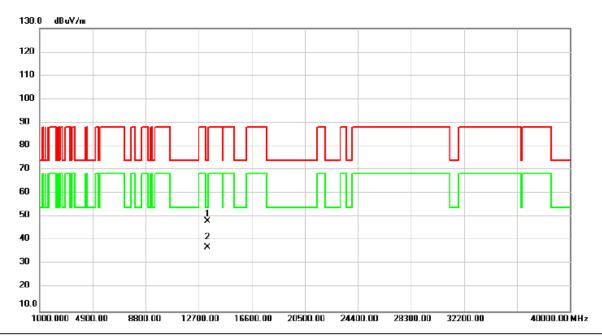
| Test Mode      | IEEE 802.11ax (HE160) | Test Date    | 2022/11/29 |
|----------------|-----------------------|--------------|------------|
| Test Frequency | 6665MHz               | Polarization | Vertical   |
| Temp           | 23°C                  | Hum.         | 59%        |



| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit  | Over   |          |         |
|-----|----|----------|------------------|-------------------|------------------|--------|--------|----------|---------|
|     |    | MHz      | dBu∨             | dB                | dBuV/m           | dBuV/m | dB     | Detector | Comment |
| 1   |    | 13330.00 | 41.58            | 7.23              | 48.81            | 74.00  | -25.19 | peak     |         |
| 2   | *  | 13330.00 | 29.84            | 7.23              | 37.07            | 54.00  | -16.93 | AVG      |         |

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

| Test Mode      | IEEE 802.11ax (HE160) | Test Date    | 2022/11/29 |
|----------------|-----------------------|--------------|------------|
| Test Frequency | 6665MHz               | Polarization | Horizontal |
| Temp           | 23°C                  | Hum.         | 59%        |



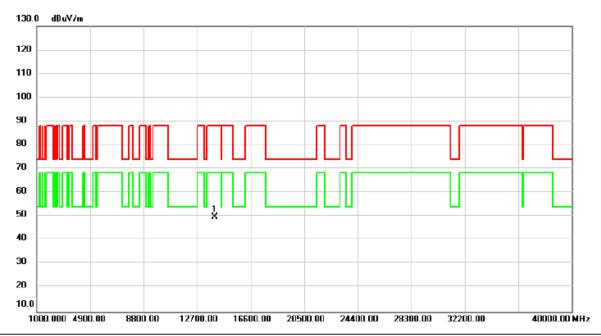
| No | . M | ۱k. | Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit  | Over   |          |         |
|----|-----|-----|--------|------------------|-------------------|------------------|--------|--------|----------|---------|
|    |     |     | MHz    | dBu∨             | dB                | dBuV/m           | dBuV/m | dB     | Detector | Comment |
| 1  |     | 13  | 330.00 | 40.87            | 7.23              | 48.10            | 74.00  | -25.90 | peak     |         |
| 2  | *   | 13  | 330.00 | 29.94            | 7.23              | 37.17            | 54.00  | -16.83 | AVG      |         |

### **REMARKS**:

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

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| Test Mode      | IEEE 802.11ax (HE160) | Test Date    | 2022/11/29 |
|----------------|-----------------------|--------------|------------|
| Test Frequency | 6985MHz               | Polarization | Vertical   |
| Temp           | 23°C                  | Hum.         | 59%        |



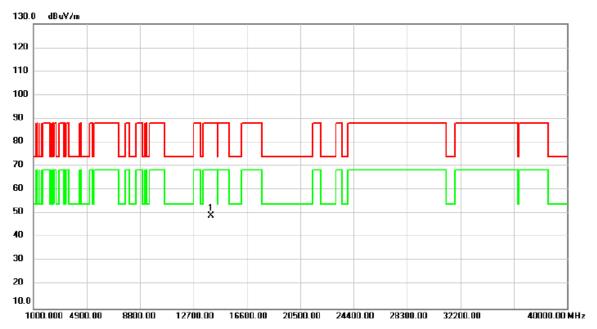
|   | No. | M | k. Freq. |       |      | Measure-<br>ment | Limit  | Over   |          |         |  |
|---|-----|---|----------|-------|------|------------------|--------|--------|----------|---------|--|
| ľ |     |   | MHz      | dBu∨  | dB   | dBuV/m           | dBuV/m | dB     | Detector | Comment |  |
| ľ | 1   | * | 13970.00 | 42.44 | 7.22 | 49.66            | 88.20  | -38.54 | peak     |         |  |

### **REMARKS**:

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

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| Test Mode      | IEEE 802.11ax (HE160) | Test Date    | 2022/11/29 |
|----------------|-----------------------|--------------|------------|
| Test Frequency | 6985MHz               | Polarization | Horizontal |
| Temp           | 23°C                  | Hum.         | 59%        |



| No. Mk | . Freq.  | _     |      | Measure-<br>ment | Limit  | Over   |          |         |
|--------|----------|-------|------|------------------|--------|--------|----------|---------|
|        | MHz      | dBu∨  | dB   | dBuV/m           | dBuV/m | dB     | Detector | Comment |
| 1 *    | 13970.00 | 42.04 | 7.22 | 49.26            | 88.20  | -38.94 | peak     |         |

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

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| Test   Frequency (MHz)   Conducted Power (dBm)   Conducted Power (W)   Conducted Power (dBm)   Conducted Power (W)   Conducted (dBm)   Conducted Power (W)   Conducted (dBm)   | Result Pass Pass Pass Pass Pass Pass Pass Pas |
|--|---|
| Frequency (MHz)  | Pass Pass Pass Pass Pass Pass Pass Pass       |
| Frequency (MHz)         Conducted Power (dBm)         Power (W)         (dBm)         (W)         E.I.R.P. Limit (dBm)         E.I.R.P. Limit (dB  | Pass Pass Pass Pass Pass Pass Pass Pass       |
| 6175         1.72         0.0015         6.43         0.0044         24.00         0.2512           6415         1.49         0.0014         6.20         0.0042         24.00         0.2512           6435         2.24         0.0017         6.95         0.0050         24.00         0.2512           6475         2.12         0.0016         6.83         0.0048         24.00         0.2512           6515         2.37         0.0017         7.08         0.0051         24.00         0.2512           6535         1.65         0.0015         6.36         0.0043         24.00         0.2512           6695         1.35         0.0014         6.06         0.0040         24.00         0.2512           6855         1.63         0.0015         6.34         0.0043         24.00         0.2512           6895         1.59         0.0014         6.30         0.0043         24.00         0.2512           6895         1.59         0.0014         6.30         0.0043         24.00         0.2512           6895         1.75         0.0015         6.46         0.0047         24.00         0.2512           7095         1.75 <td< td=""><td>Pass Pass Pass Pass Pass Pass Pass Pass</td></td<>  | Pass Pass Pass Pass Pass Pass Pass Pass       |
| 6415         1.49         0.0014         6.20         0.0042         24.00         0.2512           6435         2.24         0.0017         6.95         0.0050         24.00         0.2512           6475         2.12         0.0016         6.83         0.0048         24.00         0.2512           6515         2.37         0.0017         7.08         0.0051         24.00         0.2512           6535         1.65         0.0015         6.36         0.0043         24.00         0.2512           6695         1.35         0.0014         6.06         0.0040         24.00         0.2512           6855         1.63         0.0015         6.34         0.0043         24.00         0.2512           6875         1.59         0.0014         6.30         0.0043         24.00         0.2512           6995         2.03         0.0016         6.74         0.0047         24.00         0.2512           7095         1.75         0.0015         6.46         0.0044         24.00         0.2512           7115         -10.49         0.001         -5.78         0.0003         24.00         0.2512           7595         2.46         <  | Pass Pass Pass Pass Pass Pass Pass Pass       |
| 6435         2.24         0.0017         6.95         0.0050         24.00         0.2512           6475         2.12         0.0016         6.83         0.0048         24.00         0.2512           6515         2.37         0.0017         7.08         0.0051         24.00         0.2512           6535         1.65         0.0015         6.36         0.0043         24.00         0.2512           6695         1.35         0.0014         6.06         0.0040         24.00         0.2512           6855         1.63         0.0015         6.34         0.0043         24.00         0.2512           6875         1.59         0.0014         6.30         0.0043         24.00         0.2512           6995         2.03         0.0016         6.74         0.0047         24.00         0.2512           7095         1.75         0.0015         6.46         0.0044         24.00         0.2512           7115         -10.49         0.0001         -5.78         0.0003         24.00         0.2512           Test Mode         IEEE 802.11ax (HE20)_Main Ant.         Tested Date         2022/11           Test Mode         IEEE 802.11ax (HE20)_  | Pass Pass Pass Pass Pass Pass Pass Pass       |
| 6475         2.12         0.0016         6.83         0.0048         24.00         0.2512           6515         2.37         0.0017         7.08         0.0051         24.00         0.2512           6535         1.65         0.0015         6.36         0.0043         24.00         0.2512           6695         1.35         0.0014         6.06         0.0040         24.00         0.2512           6855         1.63         0.0015         6.34         0.0043         24.00         0.2512           6875         1.59         0.0014         6.30         0.0043         24.00         0.2512           6995         2.03         0.0016         6.74         0.0047         24.00         0.2512           7095         1.75         0.0015         6.46         0.0044         24.00         0.2512           7115         -10.49         0.0001         -5.78         0.0003         24.00         0.2512           Test Mode         IEEE 802.11ax (HE20)_Main Ant.         Tested Date         2022/11           Test Mode May Conducted Power (dBm)         Conducted Power (W)         (dBm)         E.I.R.P. (W)         (dBm)         (W)           5955  | Pass Pass Pass Pass Pass Pass Pass Pass       |
| 6515         2.37         0.0017         7.08         0.0051         24.00         0.2512           6535         1.65         0.0015         6.36         0.0043         24.00         0.2512           6695         1.35         0.0014         6.06         0.0040         24.00         0.2512           6855         1.63         0.0015         6.34         0.0043         24.00         0.2512           6875         1.59         0.0014         6.30         0.0043         24.00         0.2512           6995         2.03         0.0016         6.74         0.0047         24.00         0.2512           7095         1.75         0.0015         6.46         0.0044         24.00         0.2512           7115         -10.49         0.0001         -5.78         0.0003         24.00         0.2512           Test Mode         IEEE 802.11ax (HE20)_Main Ant.         Tested Date         2022/11           Test Mode         IEEE 802.11ax (HE20)_Main Ant.         Tested Date         2022/11           Test Mode         IEEE 802.11ax (HE20)_Main Ant.         Tested Date         2022/11           Test Mode         IEEE 802.11ax (HE20)_Main Ant.         Tested Date         2022/11 <td>Pass Pass Pass Pass Pass Pass Pass Pass</td>  | Pass Pass Pass Pass Pass Pass Pass Pass       |
| 6535         1.65         0.0015         6.36         0.0043         24.00         0.2512           6695         1.35         0.0014         6.06         0.0040         24.00         0.2512           6855         1.63         0.0015         6.34         0.0043         24.00         0.2512           6875         1.59         0.0014         6.30         0.0043         24.00         0.2512           6995         2.03         0.0016         6.74         0.0047         24.00         0.2512           7095         1.75         0.0015         6.46         0.0044         24.00         0.2512           7115         -10.49         0.0001         -5.78         0.0003         24.00         0.2512           Test Mode         IEEE 802.11ax (HE20)_Main Ant.         Tested Date         2022/11           Test Mode         IEEE 802.11ax (HE20)_Main Ant.         Tested Date         2022/11           Test Mode         IEEE 802.11ax (HE20)_Main Ant.         Tested Date         2022/11           Test Mode         IEEE 802.11ax (HE20)_Main Ant.         Tested Date         2022/11           Test Mode         IEEE 802.11ax (HE20)_Main Ant.         Tested Date         2022   | Pass Pass Pass Pass Pass Pass Pass 30         |
| 6695         1.35         0.0014         6.06         0.0040         24.00         0.2512           6855         1.63         0.0015         6.34         0.0043         24.00         0.2512           6875         1.59         0.0014         6.30         0.0043         24.00         0.2512           6995         2.03         0.0016         6.74         0.0047         24.00         0.2512           7095         1.75         0.0015         6.46         0.0044         24.00         0.2512           7115         -10.49         0.0001         -5.78         0.0003         24.00         0.2512           Test Mode         IEEE 802.11ax (HE20)_Main Ant.         Tested Date         2022/11           Test Mode Power (dBm)         Conducted Power (W)         E.I.R.P. (dBm)         E.I.R.P. Limit (dBm)         E.I.R.P. Limit (dBm)         (W)           Test Mode Power (dBm)         Power (W)         (dBm)         (W)         E.I.R.P. Limit (dBm)         (W)           Test Mode Power (dBm)         Power (W)         (dBm)         (W)         E.I.R.P. Limit (dBm)         (W)           Test Conducted Power (dBm)         Power (W)         (dBm)         (W)         0.0052   | Pass Pass Pass Pass Pass Pass Pass            |
| 6855         1.63         0.0015         6.34         0.0043         24.00         0.2512           6875         1.59         0.0014         6.30         0.0043         24.00         0.2512           6995         2.03         0.0016         6.74         0.0047         24.00         0.2512           7095         1.75         0.0015         6.46         0.0044         24.00         0.2512           7115         -10.49         0.0001         -5.78         0.0003         24.00         0.2512           Test Mode         IEEE 802.11ax (HE20)_Main Ant.         Tested Date         2022/11           Test Mode         Conducted Power (dBm)         Conducted Power (W)         E.I.R.P. (dBm)         E.I.R.P. Limit (dBm)         E.I.R.P. Limit (dBm)         (W)           Tested Date         2022/11           Test Mode         IEEE 802.11ax (HE20)_Main Ant.         Tested Date         2022/11           Test Mode         IEEE 802.11ax (HE20)_Main Ant.         Tested Date         2022/11           Test Mode         IEEE 802.11ax (HE20)_Main Ant.         Tested Date         2022/11           Test Mode         IEEE 802.11ax (HE20)_Main Ant.         Tested Date         21.00   | Pass<br>Pass<br>Pass<br>Pass<br>Pass          |
| 6875         1.59         0.0014         6.30         0.0043         24.00         0.2512           6995         2.03         0.0016         6.74         0.0047         24.00         0.2512           7095         1.75         0.0015         6.46         0.0044         24.00         0.2512           7115         -10.49         0.0001         -5.78         0.0003         24.00         0.2512           Test Mode         IEEE 802.11ax (HE20)_Main Ant.         Tested Date         2022/11           Test Mode         Conducted Power (HE20)_Main Ant.         Tested Date         2022/11           Test Mode         IEEE 802.11ax (HE20)_Main Ant.         Tested Date         2022/11           Test Mode         IEEE 802.11ax (HE20)_Main Ant.         Tested Date         2022/11           Test Mode         IEEE 802.11ax (HE20)_Main Ant.         Tested Date         2022/11           Test Mode         IE.I.R.P. Limit (dBm)         (W)         (W)         (dBm)         (W)         (D.0052         24.00         0.2512 <td>Pass<br/>Pass<br/>Pass<br/>Pass</td>  | Pass<br>Pass<br>Pass<br>Pass                  |
| 6995         2.03         0.0016         6.74         0.0047         24.00         0.2512           7095         1.75         0.0015         6.46         0.0044         24.00         0.2512           7115         -10.49         0.0001         -5.78         0.0003         24.00         0.2512           Test Mode         IEEE 802.11ax (HE20)_Main Ant.         Tested Date         2022/11           Test Frequency (MHz)         Conducted Power (W)         E.I.R.P. (dBm)         E.I.R.P. Limit (dBm)         E.I.R.P. Limit (dBm)         (W)           5955         2.46         0.0018         7.17         0.0052         24.00         0.2512           6175         2.49         0.0018         7.20         0.0052         24.00         0.2512           6415         2.50         0.0018         7.21         0.0053         24.00         0.2512           6435         3.37         0.0022         8.08         0.0064         24.00         0.2512           6475         3.09         0.0020         7.80         0.0060         24.00         0.2512           6515         2.83         0.0019         7.54         0.0057         24.00         0.2512  | Pass<br>Pass<br>Pass                          |
| 7095         1.75         0.0015         6.46         0.0044         24.00         0.2512           7115         -10.49         0.0001         -5.78         0.0003         24.00         0.2512           Test Mode         IEEE 802.11ax (HE20)_Main Ant.         Tested Date         2022/11           Test Frequency (MHz)         Conducted Power (dBm)         Conducted Power (W)         E.I.R.P. (dBm)         E.I.R.P. Limit (dBm)         E.I.R.P. Limit (dBm)         C.I.R.P. Limit (dBm)  | Pass<br>Pass<br>30                            |
| Test Frequency (MHz)         Conducted Power (dBm)         Conducted Power (W)         E.I.R.P. (dBm)         E.I.R.P. (W)         E.I.R.P. Limit (dBm)         E.I.R.P. Limit (dBm)           6415         2.50         0.0018         7.21         0.0052         24.00         0.2512           6435         3.37         0.0022         8.08         0.0064         24.00         0.2512           6475         2.83         0.0019         7.54         0.0057         24.00         0.2512           6515         2.83         0.0019         7.54         0.0057         24.00         0.2512   | Pass<br>30                                    |
| Test Frequency (MHz)         Conducted Power (dBm)         Conducted Power (W)         E.I.R.P. (dBm)         E.I.R.P. (W)         E.I.R.P. Limit (dBm)         E.I.R.P. Limit (dBm) <td>30</td>  | 30  |
| Test Frequency (MHz)         Conducted Power (dBm)         Conducted Power (W)         E.I.R.P. (dBm)         E.I.R.P. (W)         E.I.R.P. Limit (dBm)         E.I.R.P. Limit (dBm) <td></td>  |   |
| Test Frequency (MHz)         Conducted Power (dBm)         Conducted Power (W)         E.I.R.P. (dBm)         E.I.R.P. (W)         E.I.R.P. Limit (dBm)         E.I.R.P. Limit (dBm) <td></td>  |   |
| Frequency (MHz)         Conducted Power (dBm)         Conducted Power (W)         E.I.R.P. (dBm)         E.I.R.P. (dBm)         E.I.R.P. Limit (dBm)   | Result  |
| Frequency (MHz)         Conducted Power (dBm)         Conducted Power (W)         E.I.R.P. (dBm)         E.I.R.P. (dBm)         E.I.R.P. Limit (dBm)   | Result  |
| Frequency (MHz)         Power (dBm)         Power (W)         (dBm)         (W)         (dBm)         (W)           5955         2.46         0.0018         7.17         0.0052         24.00         0.2512           6175         2.49         0.0018         7.20         0.0052         24.00         0.2512           6415         2.50         0.0018         7.21         0.0053         24.00         0.2512           6435         3.37         0.0022         8.08         0.0064         24.00         0.2512           6475         3.09         0.0020         7.80         0.0060         24.00         0.2512           6515         2.83         0.0019         7.54         0.0057         24.00         0.2512  | Result  |
| (MH2)         2.46         0.0018         7.17         0.0052         24.00         0.2512           6175         2.49         0.0018         7.20         0.0052         24.00         0.2512           6415         2.50         0.0018         7.21         0.0053         24.00         0.2512           6435         3.37         0.0022         8.08         0.0064         24.00         0.2512           6475         3.09         0.0020         7.80         0.0060         24.00         0.2512           6515         2.83         0.0019         7.54         0.0057         24.00         0.2512   |   |
| 6175         2.49         0.0018         7.20         0.0052         24.00         0.2512           6415         2.50         0.0018         7.21         0.0053         24.00         0.2512           6435         3.37         0.0022         8.08         0.0064         24.00         0.2512           6475         3.09         0.0020         7.80         0.0060         24.00         0.2512           6515         2.83         0.0019         7.54         0.0057         24.00         0.2512  |   |
| 6415         2.50         0.0018         7.21         0.0053         24.00         0.2512           6435         3.37         0.0022         8.08         0.0064         24.00         0.2512           6475         3.09         0.0020         7.80         0.0060         24.00         0.2512           6515         2.83         0.0019         7.54         0.0057         24.00         0.2512  | Pass  |
| 6435     3.37     0.0022     8.08     0.0064     24.00     0.2512       6475     3.09     0.0020     7.80     0.0060     24.00     0.2512       6515     2.83     0.0019     7.54     0.0057     24.00     0.2512  | Pass  |
| 6475         3.09         0.0020         7.80         0.0060         24.00         0.2512           6515         2.83         0.0019         7.54         0.0057         24.00         0.2512  | Pass  |
| 6515 2.83 0.0019 7.54 0.0057 24.00 0.2512  | Pass  |
|  | Pass  |
| 6535   236   0.0047   7.07   0.0054   24.00   0.2542   | Pass  |
|  | Pass  |
| 6695         2.27         0.0017         6.98         0.0050         24.00         0.2512  | Pass  |
| 6855         2.33         0.0017         7.04         0.0051         24.00         0.2512  | Pass  |
| 6875         2.36         0.0017         7.07         0.0051         24.00         0.2512  | Pass  |
| 6995         2.36         0.0017         7.07         0.0051         24.00         0.2512  | Pass  |
| 7095         2.10         0.0016         6.81         0.0048         24.00         0.2512  | Pass  |
| 7115 -11.67 0.0001 -6.96 0.0002 24.00 0.2512   | Pass  |
|  |   |
| Test Mode   IEEE 802.11ax (HE20)_Total   Tested Date   2022/11   | 30  |
|  |   |
| Test Frequency Conducted Conducted E.I.R.P. E.I.R.P. Limit E.I.R.P. Limit C.I.R.P. Limit E.I.R.P. Limit E.I.R.P | t Resu  |
| (MHz) Power (dBm) Power (W) (dBm) (W) (dBm) (W)  |   |
| 5955         5.03         0.0032         9.74         0.0094         24.00         0.2512  | Pass  |
| 6175 5.13 0.0033 9.84 0.0096 24.00 0.2512  | Pass  |
| 6415 5.03 0.0032 9.74 0.0094 24.00 0.2512  | Pass  |
| 6435 5.85 0.0038 10.56 0.0114 24.00 0.2512   |   |
| 6475         5.64         0.0037         10.35         0.0108         24.00         0.2512   | Pass  |
| 6515         5.62         0.0036         10.33         0.0108         24.00         0.2512   | Pass  |
| 6535 5.03 0.0032 9.74 0.0094 24.00 0.2512  | Pass<br>Pass                                  |
| 6695         4.84         0.0031         9.55         0.0090         24.00         0.2512  | Pass<br>Pass<br>Pass                          |
| 6855         5.00         0.0032         9.71         0.0094         24.00         0.2512  | Pass<br>Pass<br>Pass                          |
| I 6975   500   0.000   0.74   0.0004   0.400   0.0540  | Pass<br>Pass<br>Pass<br>Pass<br>Pass          |
| 6875         5.00         0.0032         9.71         0.0094         24.00         0.2512  | Pass<br>Pass<br>Pass                          |
| 6875         5.00         0.0032         9.71         0.0094         24.00         0.2512           6995         5.21         0.0033         9.92         0.0098         24.00         0.2512  | Pass<br>Pass<br>Pass<br>Pass<br>Pass          |
|  | Pass Pass Pass Pass Pass Pass                 |



| Test Mode                  | IEEE 802.11a             | ıx (HE40)_Aux          | Ant.              |                 | Tested Date 2022/11/30  |                       |        |
|----------------------------|--------------------------|------------------------|-------------------|-----------------|-------------------------|-----------------------|--------|
|                            |                          |                        |                   |                 |                         |                       |        |
| Test<br>Frequency<br>(MHz) | Conducted<br>Power (dBm) | Conducted<br>Power (W) | E.I.R.P.<br>(dBm) | E.I.R.P.<br>(W) | E.I.R.P. Limit<br>(dBm) | E.I.R.P. Limit<br>(W) | Result |
| 5965                       | 4.81                     | 0.0030                 | 9.52              | 0.0090          | 24.00                   | 0.2512                | Pass   |
| 6165                       | 4.51                     | 0.0028                 | 9.22              | 0.0084          | 24.00                   | 0.2512                | Pass   |
| 6405                       | 4.57                     | 0.0029                 | 9.28              | 0.0085          | 24.00                   | 0.2512                | Pass   |
| 6445                       | 5.17                     | 0.0033                 | 9.88              | 0.0097          | 24.00                   | 0.2512                | Pass   |
| 6485                       | 5.47                     | 0.0035                 | 10.18             | 0.0104          | 24.00                   | 0.2512                | Pass   |
| 6525                       | 5.68                     | 0.0037                 | 10.39             | 0.0109          | 24.00                   | 0.2512                | Pass   |
| 6685                       | 4.37                     | 0.0027                 | 9.08              | 0.0081          | 24.00                   | 0.2512                | Pass   |
| 6845                       | 4.52                     | 0.0028                 | 9.23              | 0.0084          | 24.00                   | 0.2512                | Pass   |
| 6885                       | 5.24                     | 0.0033                 | 9.95              | 0.0099          | 24.00                   | 0.2512                | Pass   |
| 7085                       | 5.48                     | 0.0035                 | 10.19             | 0.0104          | 24.00                   | 0.2512                | Pass   |
|                            |                          |                        |                   |                 | -                       |                       |        |
| Test Mode                  | IEEE 802.11a             | ıx (HE40)_Mai          | in Ant.           |                 | Tested Date             | 2022/11/3             | 30     |
|                            | •                        |                        |                   |                 |                         | •                     |        |
| Test<br>Frequency<br>(MHz) | Conducted<br>Power (dBm) | Conducted<br>Power (W) | E.I.R.P.<br>(dBm) | E.I.R.P.<br>(W) | E.I.R.P. Limit<br>(dBm) | E.I.R.P. Limit<br>(W) | Result |
| 5965                       | 5.22                     | 0.0033                 | 9.93              | 0.0098          | 24.00                   | 0.2512                | Pass   |
| 6165                       | 5.02                     | 0.0032                 | 9.73              | 0.0094          | 24.00                   | 0.2512                | Pass   |
| 6405                       | 5.24                     | 0.0033                 | 9.95              | 0.0099          | 24.00                   | 0.2512                | Pass   |
| 6445                       | 5.81                     | 0.0038                 | 10.52             | 0.0113          | 24.00                   | 0.2512                | Pass   |
| 6485                       | 5.94                     | 0.0039                 | 10.65             | 0.0116          | 24.00                   | 0.2512                | Pass   |
| 6525                       | 6.01                     | 0.0040                 | 10.72             | 0.0118          | 24.00                   | 0.2512                | Pass   |
| 6685                       | 4.87                     | 0.0031                 | 9.58              | 0.0091          | 24.00                   | 0.2512                | Pass   |
| 6845                       | 4.92                     | 0.0031                 | 9.63              | 0.0092          | 24.00                   | 0.2512                | Pass   |
| 6885                       | 5.76                     | 0.0038                 | 10.47             | 0.0111          | 24.00                   | 0.2512                | Pass   |
| 7085                       | 5.72                     | 0.0037                 | 10.43             | 0.0110          | 24.00                   | 0.2512                | Pass   |
|                            |                          |                        |                   |                 |                         |                       |        |
| Test Mode                  | IEEE 802.11a             | x (HE40) Tota          | al                |                 | Tested Date             | 2022/11/3             | 30     |

|                            |                          |                        |                   |                 | _                       |                       |        |
|----------------------------|--------------------------|------------------------|-------------------|-----------------|-------------------------|-----------------------|--------|
| Test<br>Frequency<br>(MHz) | Conducted<br>Power (dBm) | Conducted<br>Power (W) | E.I.R.P.<br>(dBm) | E.I.R.P.<br>(W) | E.I.R.P. Limit<br>(dBm) | E.I.R.P. Limit<br>(W) | Result |
| 5965                       | 8.03                     | 0.0064                 | 12.74             | 0.0188          | 24.00                   | 0.2512                | Pass   |
| 6165                       | 7.78                     | 0.0060                 | 12.49             | 0.0177          | 24.00                   | 0.2512                | Pass   |
| 6405                       | 7.93                     | 0.0062                 | 12.64             | 0.0184          | 24.00                   | 0.2512                | Pass   |
| 6445                       | 8.51                     | 0.0071                 | 13.22             | 0.0210          | 24.00                   | 0.2512                | Pass   |
| 6485                       | 8.72                     | 0.0075                 | 13.43             | 0.0220          | 24.00                   | 0.2512                | Pass   |
| 6525                       | 8.86                     | 0.0077                 | 13.57             | 0.0228          | 24.00                   | 0.2512                | Pass   |
| 6685                       | 7.64                     | 0.0058                 | 12.35             | 0.0172          | 24.00                   | 0.2512                | Pass   |
| 6845                       | 7.73                     | 0.0059                 | 12.44             | 0.0175          | 24.00                   | 0.2512                | Pass   |
| 6885                       | 8.52                     | 0.0071                 | 13.23             | 0.0210          | 24.00                   | 0.2512                | Pass   |
| 7085                       | 8.61                     | 0.0073                 | 13.32             | 0.0215          | 24.00                   | 0.2512                | Pass   |

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6945

7025

11.21

11.07

0.0132

0.0128

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0.2512

0.2512

Pass

Pass

24.00

24.00

| Test Mode                  | IEEE 802.11a  | x (HE80) Au            | x Ant.            |                 | Tested Date             | 2022/11/3             | 30     |
|----------------------------|---|------------------------|-------------------|-----------------|-------------------------|-----------------------|--------|
|                            |   | (=====) 10             |                   |                 |                         | _ 3, ,                |        |
| Test<br>Frequency<br>(MHz) | Conducted<br>Power (dBm)  | Conducted<br>Power (W) | E.I.R.P.<br>(dBm) | E.I.R.P.<br>(W) | E.I.R.P. Limit<br>(dBm) | E.I.R.P. Limit<br>(W) | Result |
| 5985                       | 7.58  | 0.0057                 | 12.29             | 0.0169          | 24.00                   | 0.2512                | Pass   |
| 6145                       | 7.63  | 0.0058                 | 12.34             | 0.0171          | 24.00                   | 0.2512                | Pass   |
| 6385                       | 7.40  | 0.0055                 | 12.11             | 0.0163          | 24.00                   | 0.2512                | Pass   |
| 6465                       | 7.77  | 0.0060                 | 12.48             | 0.0177          | 24.00                   | 0.2512                | Pass   |
| 6545                       | 7.88  | 0.0061                 | 12.59             | 0.0182          | 24.00                   | 0.2512                | Pass   |
| 6625                       | 7.64  | 0.0058                 | 12.35             | 0.0172          | 24.00                   | 0.2512                | Pass   |
| 6785                       | 7.59  | 0.0057                 | 12.30             | 0.0170          | 24.00                   | 0.2512                | Pass   |
| 6865                       | 7.46  | 0.0056                 | 12.17             | 0.0165          | 24.00                   | 0.2512                | Pass   |
| 6945                       | 8.17  | 0.0066                 | 12.88             | 0.0194          | 24.00                   | 0.2512                | Pass   |
| 7025                       | 7.86  | 0.0061                 | 12.57             | 0.0181          | 24.00                   | 0.2512                | Pass   |
|                            |   |                        |                   |                 |                         |                       |        |
| Test Mode                  | Test Mode IEEE 802.11ax (HE80) Main Ant. Tested Date 2022/11/30 |                        |                   |                 |                         |                       | 30     |
|                            |   | (                      |                   |                 |                         |                       |        |
| Test<br>Frequency<br>(MHz) | Conducted<br>Power (dBm)  | Conducted<br>Power (W) | E.I.R.P.<br>(dBm) | E.I.R.P.<br>(W) | E.I.R.P. Limit<br>(dBm) | E.I.R.P. Limit<br>(W) | Result |
| 5985                       | 7.82  | 0.0061                 | 12.53             | 0.0179          | 24.00                   | 0.2512                | Pass   |
| 6145                       | 7.92  | 0.0062                 | 12.63             | 0.0183          | 24.00                   | 0.2512                | Pass   |
| 6385                       | 7.96  | 0.0063                 | 12.67             | 0.0185          | 24.00                   | 0.2512                | Pass   |
| 6465                       | 8.39  | 0.0069                 | 13.10             | 0.0204          | 24.00                   | 0.2512                | Pass   |
| 6545                       | 8.32  | 0.0068                 | 13.03             | 0.0201          | 24.00                   | 0.2512                | Pass   |
| 6625                       | 7.87  | 0.0061                 | 12.58             | 0.0181          | 24.00                   | 0.2512                | Pass   |
| 6785                       | 7.77  | 0.0060                 | 12.48             | 0.0177          | 24.00                   | 0.2512                | Pass   |
| 6865                       | 7.86  | 0.0061                 | 12.57             | 0.0181          | 24.00                   | 0.2512                | Pass   |
| 6945                       | 8.23  | 0.0067                 | 12.94             | 0.0197          | 24.00                   | 0.2512                | Pass   |
| 7025                       | 8.25  | 0.0067                 | 12.96             | 0.0198          | 24.00                   | 0.2512                | Pass   |
|                            |   |                        |                   |                 |                         |                       |        |
| Test Mode                  | IEEE 802.11a  | x (HE80) _Tot          | tal               |                 | Tested Date             | 2022/11/3             | 30     |
|                            | •   |                        |                   |                 | •                       |                       |        |
| Test<br>Frequency<br>(MHz) | Conducted<br>Power (dBm)  | Conducted<br>Power (W) | E.I.R.P.<br>(dBm) | E.I.R.P.<br>(W) | E.I.R.P. Limit<br>(dBm) | E.I.R.P. Limit<br>(W) | Result |
| 5985                       | 10.71   | 0.0118                 | 15.42             | 0.0348          | 24.00                   | 0.2512                | Pass   |
| 6145                       | 10.79   | 0.0120                 | 15.50             | 0.0355          | 24.00                   | 0.2512                | Pass   |
| 6385                       | 10.70   | 0.0117                 | 15.41             | 0.0348          | 24.00                   | 0.2512                | Pass   |
| 6465                       | 11.10   | 0.0129                 | 15.81             | 0.0381          | 24.00                   | 0.2512                | Pass   |
| 6545                       | 11.12   | 0.0129                 | 15.83             | 0.0383          | 24.00                   | 0.2512                | Pass   |
| 6625                       | 10.77   | 0.0119                 | 15.48             | 0.0353          | 24.00                   | 0.2512                | Pass   |
| 6785                       | 10.69   | 0.0117                 | 15.40             | 0.0347          | 24.00                   | 0.2512                | Pass   |
| 6865                       | 10.67   | 0.0117                 | 15.38             | 0.0345          | 24.00                   | 0.2512                | Pass   |

15.92

15.78

0.0391

0.0378



| Test Mode | IEEE 802.11ax (HE160)_Au | IEEE 802.11ax (HE160)_Aux Ant. |  |  |  |  |
|-----------|--------------------------|--------------------------------|--|--|--|--|
|           |                          |                                |  |  |  |  |
| Toct      |                          |                                |  |  |  |  |

| Test<br>Frequency<br>(MHz) | Conducted<br>Power (dBm) | Conducted<br>Power (W) | E.I.R.P.<br>(dBm) | E.I.R.P.<br>(W) | E.I.R.P. Limit<br>(dBm) | E.I.R.P. Limit<br>(W) | Result |
|----------------------------|--------------------------|------------------------|-------------------|-----------------|-------------------------|-----------------------|--------|
| 6025                       | 10.46                    | 0.0111                 | 15.17             | 0.0329          | 24.00                   | 0.2512                | Pass   |
| 6345                       | 10.37                    | 0.0109                 | 15.08             | 0.0322          | 24.00                   | 0.2512                | Pass   |
| 6505                       | 10.70                    | 0.0117                 | 15.41             | 0.0348          | 24.00                   | 0.2512                | Pass   |
| 6665                       | 10.56                    | 0.0114                 | 15.27             | 0.0337          | 24.00                   | 0.2512                | Pass   |
| 6985                       | 10.29                    | 0.0107                 | 15.00             | 0.0316          | 24.00                   | 0.2512                | Pass   |

| Test Mode | IEEE 802.11ax (HE160)_Main Ant. | Tested Date | 2022/11/30 |
|-----------|---------------------------------|-------------|------------|
|-----------|---------------------------------|-------------|------------|

| Test<br>Frequency<br>(MHz) | Conducted<br>Power (dBm) | Conducted<br>Power (W) | E.I.R.P.<br>(dBm) | E.I.R.P.<br>(W) | E.I.R.P. Limit<br>(dBm) | E.I.R.P. Limit<br>(W) | Result |
|----------------------------|--------------------------|------------------------|-------------------|-----------------|-------------------------|-----------------------|--------|
| 6025                       | 10.66                    | 0.0116                 | 15.37             | 0.0344          | 24.00                   | 0.2512                | Pass   |
| 6345                       | 10.87                    | 0.0122                 | 15.58             | 0.0361          | 24.00                   | 0.2512                | Pass   |
| 6505                       | 11.05                    | 0.0127                 | 15.76             | 0.0377          | 24.00                   | 0.2512                | Pass   |
| 6665                       | 10.94                    | 0.0124                 | 15.65             | 0.0367          | 24.00                   | 0.2512                | Pass   |
| 6985                       | 10.82                    | 0.0121                 | 15.53             | 0.0357          | 24.00                   | 0.2512                | Pass   |

| Test Mode | IEEE 802.11ax (HE160)_Total | Tested Date | 2022/11/30 |
|-----------|-----------------------------|-------------|------------|
|-----------|-----------------------------|-------------|------------|

| Test<br>Frequency<br>(MHz) | Conducted<br>Power (dBm) | Conducted<br>Power (W) | E.I.R.P.<br>(dBm) | E.I.R.P.<br>(W) | E.I.R.P. Limit<br>(dBm) | E.I.R.P. Limit<br>(W) | Result |
|----------------------------|--------------------------|------------------------|-------------------|-----------------|-------------------------|-----------------------|--------|
| 6025                       | 13.57                    | 0.0228                 | 18.28             | 0.0673          | 24.00                   | 0.2512                | Pass   |
| 6345                       | 13.64                    | 0.0231                 | 18.35             | 0.0684          | 24.00                   | 0.2512                | Pass   |
| 6505                       | 13.89                    | 0.0245                 | 18.60             | 0.0724          | 24.00                   | 0.2512                | Pass   |
| 6665                       | 13.76                    | 0.0238                 | 18.47             | 0.0703          | 24.00                   | 0.2512                | Pass   |
| 6985                       | 13.57                    | 0.0228                 | 18.28             | 0.0673          | 24.00                   | 0.2512                | Pass   |

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| APPENDIX E | CONTENTION BASED PROTOCOL |
|------------|---------------------------|
|            |                           |
|            |                           |
|            |                           |
|            |                           |
|            |                           |
|            |                           |
|            |                           |
|            |                           |
|            |                           |

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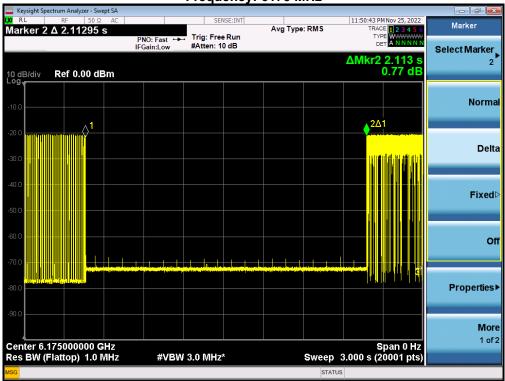


Test Mode UNII-5, UNII-6, UNII-7, UNII-8

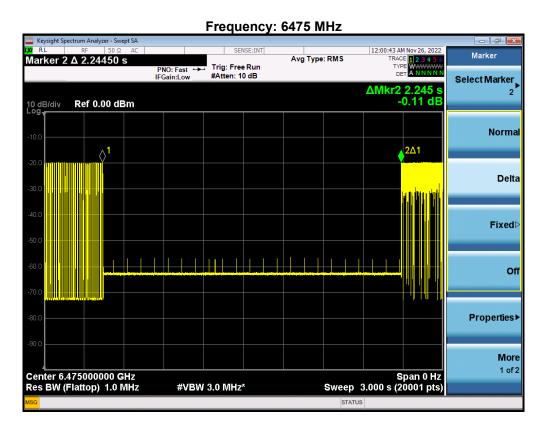
# Incumbent Signal (AWGN) Frequency: 6175 MHz

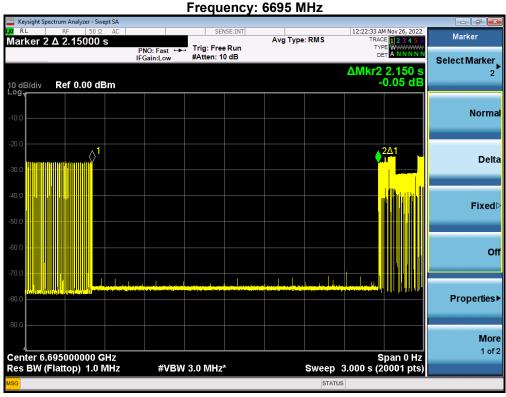


### Frequency: 6175 MHz

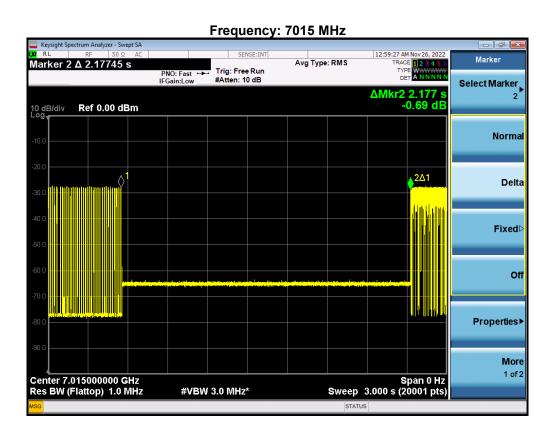


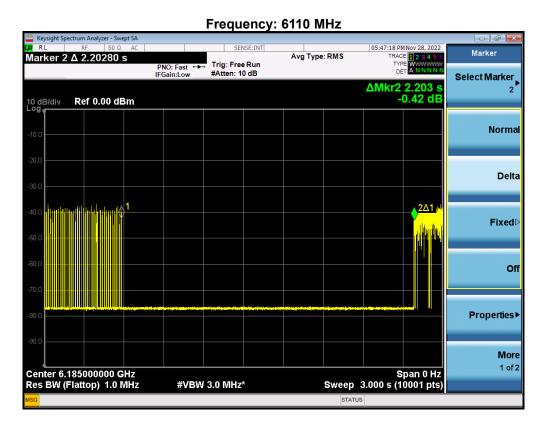




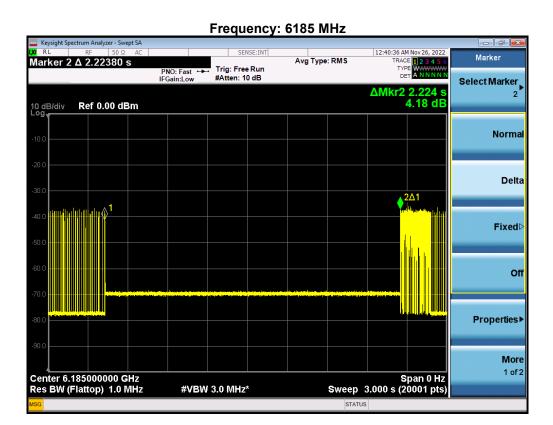


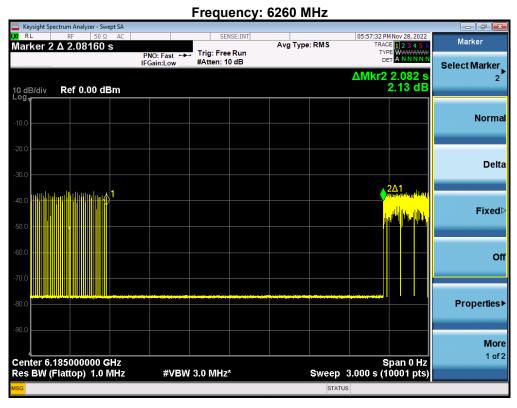




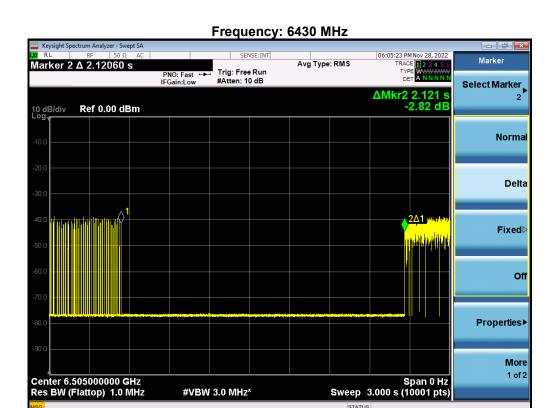


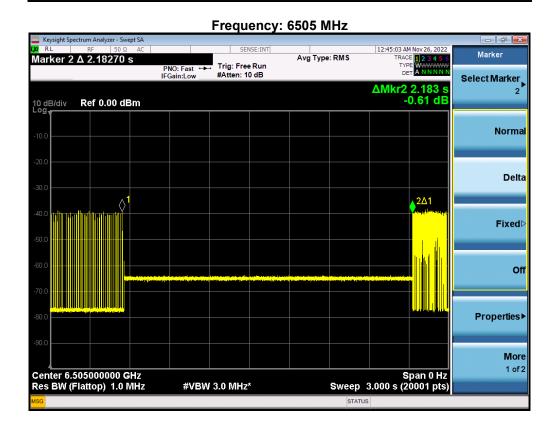




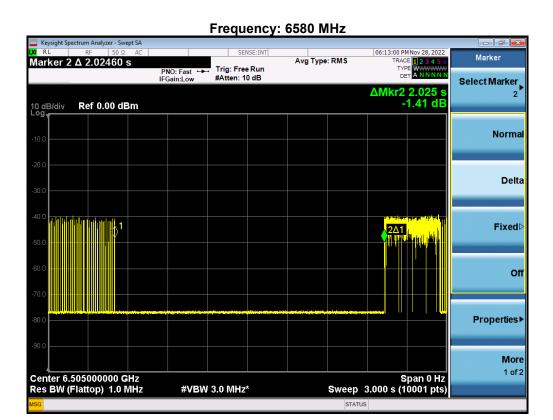


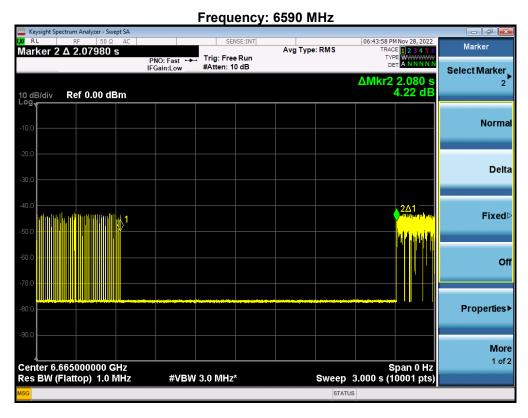




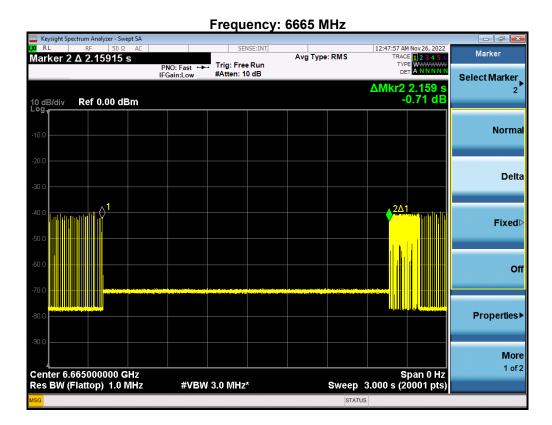


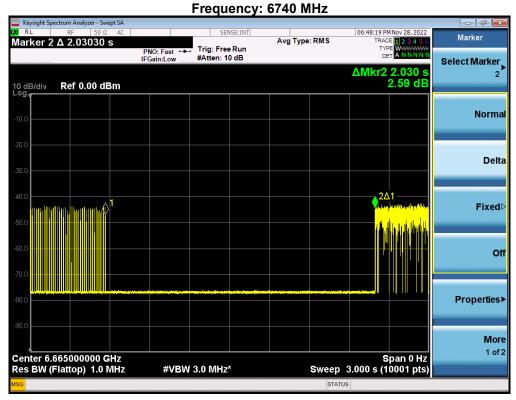




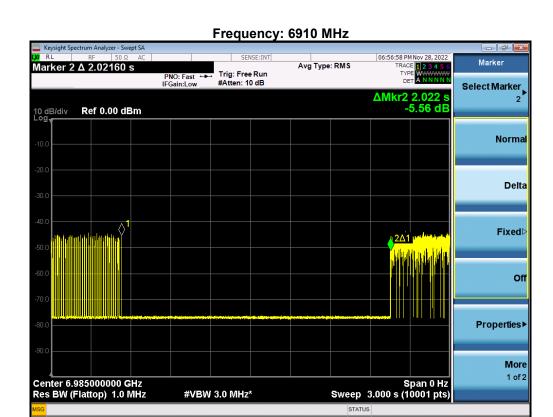


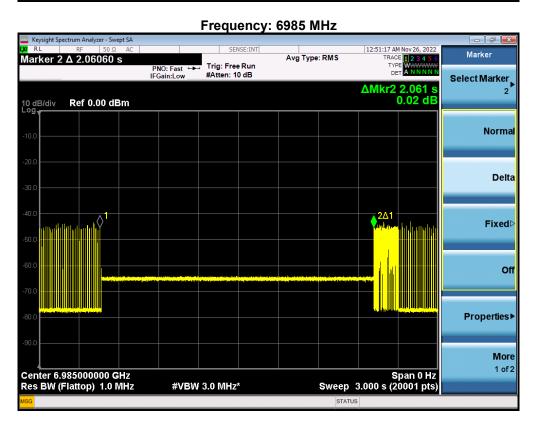




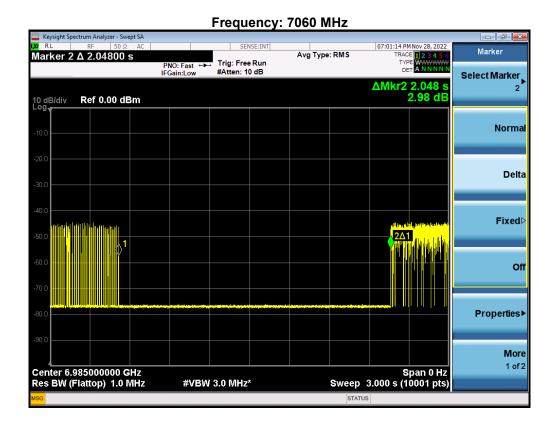














## Detection power level and detection probability

| Bands    | Test Mode       | Bandwidth<br>(MHz) | Channel | Frequency<br>(MHz) | interference<br>Frequency<br>(MHz) | Detection<br>power level<br>(dBm) | Detection<br>Power<br>Limit<br>(dBm) | Number of<br>Times | Number of<br>Detected | Detection<br>Probability | Detection<br>Probability<br>Limit | Test Result |
|----------|-----------------|--------------------|---------|--------------------|------------------------------------|-----------------------------------|--------------------------------------|--------------------|-----------------------|--------------------------|-----------------------------------|-------------|
|          | 802.11a         | 20                 | 45      | 6175               | 6175                               | -65.03                            | -57.29                               | 10                 | 9                     | 90%                      | 90%                               | Pass        |
| UNII-5   |                 |                    |         | 6185               | 6110                               | -66.20                            | -57.29                               | 10                 | 10                    | 100%                     | 90%                               | Pass        |
| UNII-3   | 802.11ax        | 160                | 47      |                    | 6185                               | -66.31                            | -57.29                               | 10                 | 10                    | 100%                     | 90%                               | Pass        |
|          |                 |                    |         |                    | 6260                               | -65.98                            | -57.29                               | 10                 | 9                     | 90%                      | 90%                               | Pass        |
|          | 802.11a         | 20                 | 105     | 6475               | 6475                               | -71.50                            | -57.29                               | 10                 | 10                    | 100%                     | 90%                               | Pass        |
| LINIII C | UNII-6 802.11ax | 160                | 111     | 6505               | 6430                               | -70.62                            | -57.29                               | 10                 | 9                     | 90%                      | 90%                               | Pass        |
| OIVII-0  |                 |                    |         |                    | 6505                               | -69.85                            | -57.29                               | 10                 | 9                     | 90%                      | 90%                               | Pass        |
|          |                 |                    |         |                    | 6580                               | -70.44                            | -57.29                               | 10                 | 10                    | 100%                     | 90%                               | Pass        |
|          | 802.11a         | 20                 | 149     | 6695               | 6695                               | -66.95                            | -57.29                               | 10                 | 10                    | 100%                     | 90%                               | Pass        |
| UNII-7   | 802.11ax        | 160                | 143     | 6665               | 6590                               | -67.02                            | -57.29                               | 10                 | 9                     | 90%                      | 90%                               | Pass        |
|          |                 |                    |         |                    | 6665                               | -67.53                            | -57.29                               | 10                 | 10                    | 100%                     | 90%                               | Pass        |
|          |                 |                    |         |                    | 6740                               | -65.11                            | -57.29                               | 10                 | 10                    | 100%                     | 90%                               | Pass        |
|          | 802.11a         | 20                 | 213     | 7015               | 7015                               | -67.30                            | -57.29                               | 10                 | 10                    | 100%                     | 90%                               | Pass        |
| UNII-8   |                 |                    | 160 207 | 6985               | 6910                               | -65.52                            | -57.29                               | 10                 | 9                     | 90%                      | 90%                               | Pass        |
|          | 802.11ax        | 160                |         |                    | 6985                               | -68.53                            | -57.29                               | 10                 | 9                     | 90%                      | 90%                               | Pass        |
|          |                 |                    |         |                    | 7060                               | -68.25                            | -57.29                               | 10                 | 10                    | 100%                     | 90%                               | Pass        |

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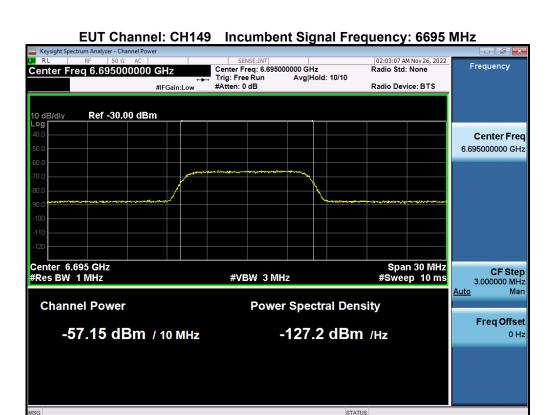
Contention-Based Protocol
EUT Channel: CH45 Incumbent Signal Frequency: 6175 MHz

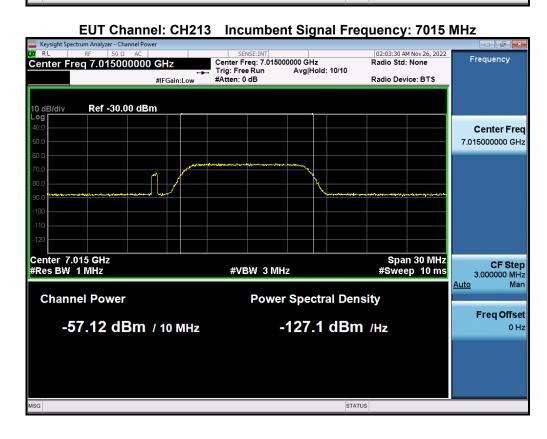


EUT Channel: CH105 Incumbent Signal Frequency: 6475 MHz

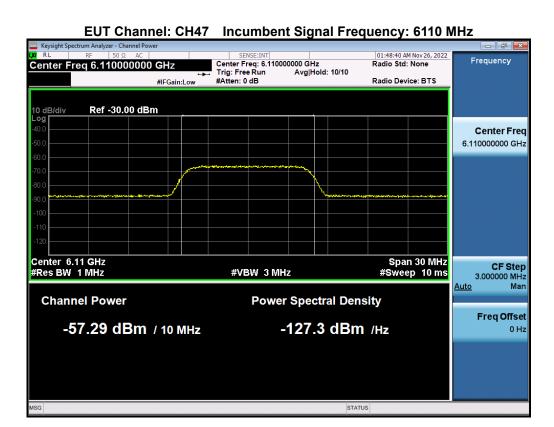


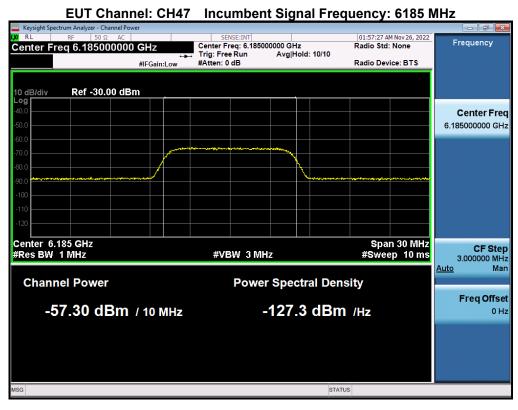




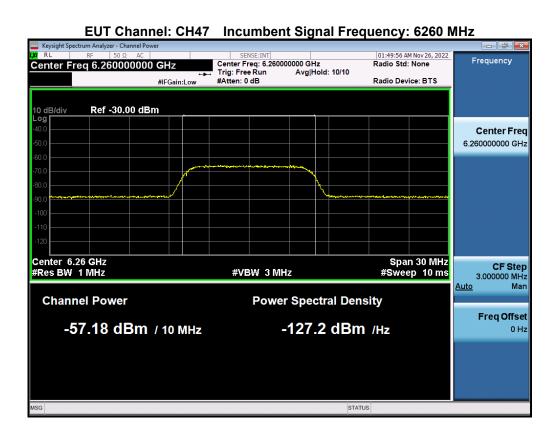


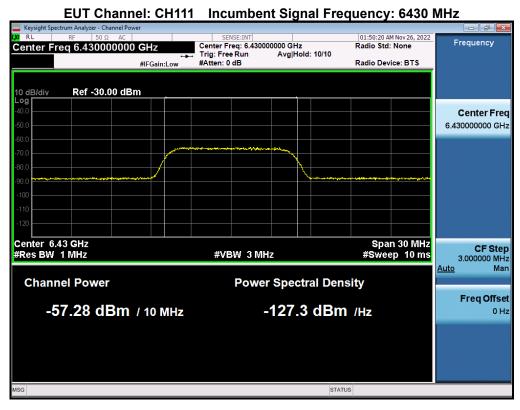




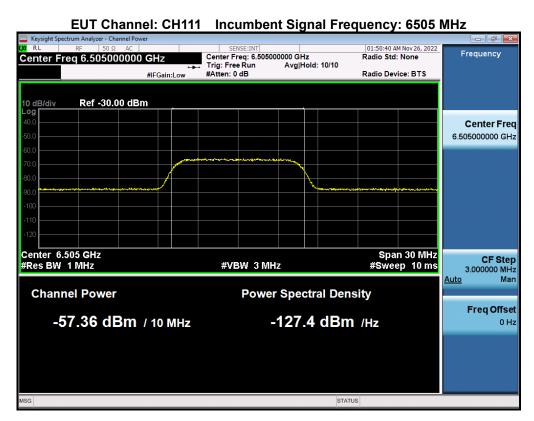


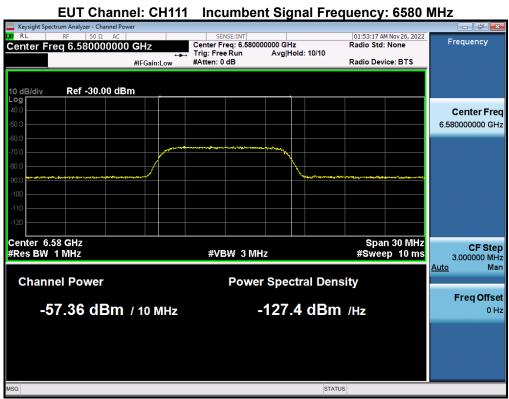




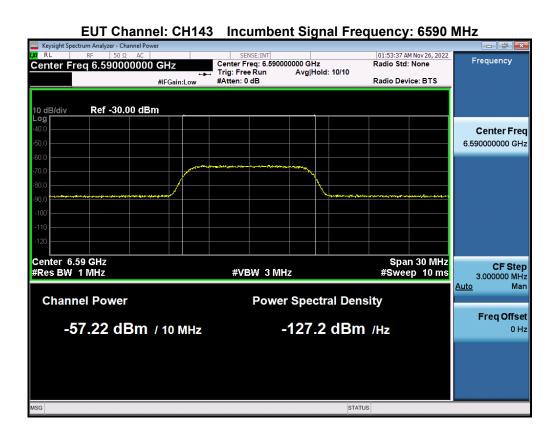


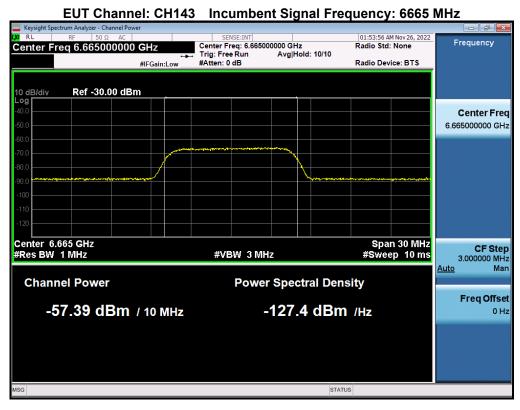




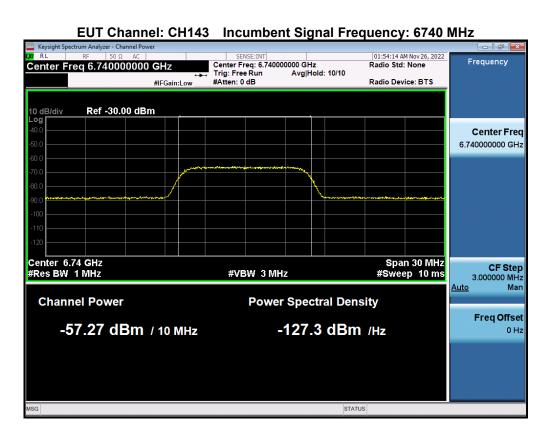


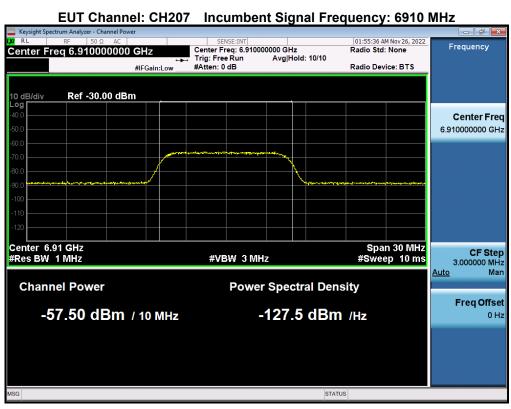




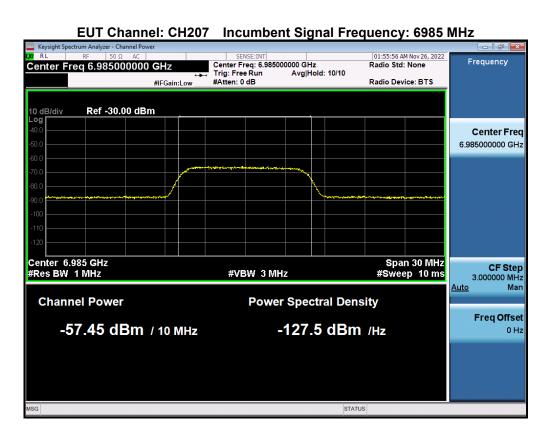


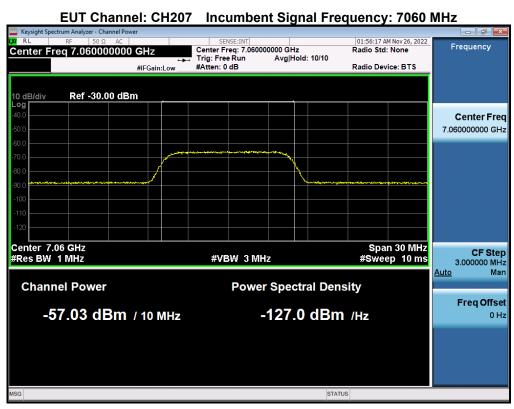












**End of Test Report**