



Test report No.: 2340335R-RFUSV03S-A

TEST REPORT

| Product Name | TCx EDGE Cam+ |
|---|---|
| Trademark | TOSHIBA |
| Model and /or type reference | 6260-002 |
| FCC ID | 2AW3T-6260-002 |
| Applicant's name / address | Toshiba Global Commerce Solutions, Inc. 3901 South Miami Blvd., Durham,North Carolina United States 27703 |
| Manufacturer's name | Toshiba Global Commerce Solutions, Inc. |
| Test method requested, standard | FCC CFR Title 47 Part 15 Subpart E ANSI C63.4: 2014, ANSI C63.10: 2013 KDB Publication 789033 |
| Verdict Summary | IN COMPLIANCE |
| Documented By (Senior Project Specialist / Genie Chang) | Grente Chang |
| Tested By (Senior Engineer / Bill Lin) | Grenie Chang Bill Lin Man Chen |
| Approved By (Senior Engineer / Alan Chen) | Ban Chen |
| Date of Receipt | 2023/04/13 |
| Date of Issue | 2023/05/19 |
| Report Version | V1.0 |



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Appendix 1: EUT Test Photographs

Appendix 2: Product Photos-Please refer to the file: 2340335R-Product Photos

Competences and Guarantees

DEKRA is a testing laboratory competent to carry out the tests described in this report.

In order to assure the traceability to other national and international laboratories, DEKRA has a calibration and maintenance program for its measurement equipment.

DEKRA guarantees the reliability of the data presented in this report, which is the result of the measurements and the tests performed to the item under test on the date and under the conditions stated in the report and it is based on the knowledge and technical facilities available at DEKRA at the time of performance of the test.

DEKRA is liable to the client for the maintenance of the confidentiality of all information related to the item under test and the results of the test.

The results presented in this Test Report apply only to the particular item under test established in this document.

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General conditions

- 1. The test results relate only to the samples tested.
- 2. The test results shown in the test report are traceable to the national/international standard through the calibration report of the equipment and evaluated measurement uncertainty herein.
- 3. This report must not be used to claim product endorsement by TAF or any agency of the government.
- 4. The test report shall not be reproduced without the written approval of DEKRA Testing and Certification Co., Ltd.
- 5. Measurement uncertainties evaluated for each testing system and associated connections are given here to provide the system information for reference. Compliance determinations do not take into account measurement uncertainties for each testing system, but are based on the results of the compliance measurement.



Revision History

| Report No. | Version | Description | Issued Date |
|---------------------|---------|--------------------------|-------------|
| 2340335R-RFUSV03S-A | V1.0 | Initial issue of report. | 2023/05/19 |



1. General Information

1.1. EUT Description

| Product Name | TCx EDGE Cam+ |
|--------------------|--|
| Trade Name | TOSHIBA |
| Model No. | 6260-002 |
| EUT Rated Voltage | PoE, 48-57V==/ 25.5W max |
| | USB 12V==2.25A / 9V==3A / 27W max |
| EUT Test Voltage | DC 12V (by USB-Type C) |
| | DC 48V (by PoE) |
| Frequency Range | 802.11a/n/ac/ax-20 MHz: |
| | 5180-5320 MHz, 5500-5700 MHz, 5720 MHz, 5745-5825 MHz |
| | 802.11n/ac/ax-40 MHz: |
| | 5190-5310 MHz, 5510-5670 MHz, 5710 MHz, 5755-5795 MHz |
| | 802.11ac/ax-80 MHz: |
| | 5210-5290 MHz, 5530-5690 MHz, 5775 MHz |
| Number of Channels | 802.11a/n/ac/ax-20 MHz: 25 CH |
| | 802.11n/ac/ax-40 MHz: 12 CH |
| | 802.11ac/ax-80 MHz: 6 CH |
| Data Rate | 802.11a: 6-54 Mbps |
| | 802.11n: up to 300 Mbps |
| | 802.11ac: up to 866.7 Mbps |
| | 802.11ax: up to 1201 Mbps |
| Type of Modulation | 802.11a/n/ac/ax: |
| | OFDM, OFDMA, BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM |
| Channel Control | Auto |
| USB Cable | Shielded, 2.5m |
| RJ45 Cable | Non-Shielded, 4.3m |
| Mounting Pipe | N/A |

Antenna List

| No. | Manufacturer | Part No. | Antenna Type | Peak Gain |
|-----|--------------|----------------|--------------|---------------------------|
| 1 | Pulse | TZ2531W (Main) | PIFA | 7.3 dBi for 5150~5250 MHz |
| | | | | 7.6 dBi for 5250~5350 MHz |
| | | | | 7.2 dBi for 5470~5725 MHz |
| | | | | 6.4 dBi for 5725~5850 MHz |
| | | TZ2530W (Aux) | | 7.9 dBi for 5150~5250 MHz |
| | | | | 7.9 dBi for 5250~5350 MHz |
| | | | | 7.9 dBi for 5470~5725 MHz |
| | | | | 6.6 dBi for 5725~5850 MHz |

Note: The antenna of EUT is conforming to FCC 15.203.



| Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) |
|---------|--------------------|---------|--------------------|---------|--------------------|---------|--------------------|
| 036 | 5180 | 040 | 5200 | 044 | 5220 | 048 | 5240 |
| 052 | 5260 | 056 | 5280 | 060 | 5300 | 064 | 5320 |
| 100 | 5500 | 104 | 5520 | 108 | 5540 | 112 | 5560 |
| 116 | 5580 | 120 | 5600 | 124 | 5620 | 128 | 5640 |
| 132 | 5660 | 136 | 5680 | 140 | 5700 | 144 | 5720 |
| 149 | 5745 | 153 | 5765 | 157 | 5785 | 161 | 5805 |
| 165 | 5825 | | | | | | |

| 802.11a/n/ac/ax-20 MHz Center Working Frequency of Each Channel: |
|--|
|--|

802.11n/ac/ax-40 MHz Center Working Frequency of Each Channel:

| Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) |
|---------|--------------------|---------|--------------------|---------|--------------------|---------|--------------------|
| 038 | 5190 | 046 | 5230 | 054 | 5270 | 062 | 5310 |
| 102 | 5510 | 110 | 5550 | 118 | 5590 | 126 | 5630 |
| 134 | 5670 | 142 | 5710 | 151 | 5755 | 159 | 5795 |

802.11ac/ax-80 MHz Center Working Frequency of Each Channel:

| Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) |
|---------|--------------------|---------|--------------------|---------|--------------------|---------|--------------------|
| 042 | 5210 | 058 | 5290 | 106 | 5530 | 122 | 5610 |
| 138 | 5690 | 155 | 5775 | | | | |

Note:

- 1. This device is a TCx EDGE Cam+ with built-in WLAN and Bluetooth transceiver, this report for 5GHz WLAN.
- 2. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
- 3. Lowest and highest data rates are tested in each mode. Only worst case is shown in the report.
- 4. The radiation measurements are performed in X, Y, Z axis positioning. Only the worst case is shown in the report.
- 5. DEKRA has evaluated each test mode. Only the worst case is shown in the report.
- 6. This device does not support partial RU function, only support full RU function.
- 7. The MIMO mode does not support CDD and Beamforming.
- 8. These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance of transmitter with Part 15 Subpart E for Unlicensed National Information Infrastructure devices.

| Test Mode | Mode 1 | Transmit (802.11a) Transmit (802.11ax-20 MHz) Transmit (802.11ax-40 MHz) Transmit (802.11ax-80 MHz) |
|-----------|--------|--|
|-----------|--------|--|

1.2. Tested System Datails

The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

PD Mode

| Product | | Manufacturer | Model No. | Serial No. | Power Cord |
|---------|----------------------|--------------|--------------|------------|------------|
| 1 | Power Adapter | DELTA | DPS-180AB-21 | N/A | N/A |
| 2 | Point of Sale System | TOSHIBA | 6201-25C | N/A | N/A |
| 3 | Mounting Pipe | N/A | N/A | N/A | N/A |

| Cable Type | | Cable Description | |
|------------|------------------|--|--|
| А | Power Cable | Non-shielded, 1.5m, with two ferrite cores bonded. | |
| В | USB-Type C Cable | Shielded, 2.5m | |

PoE Mode

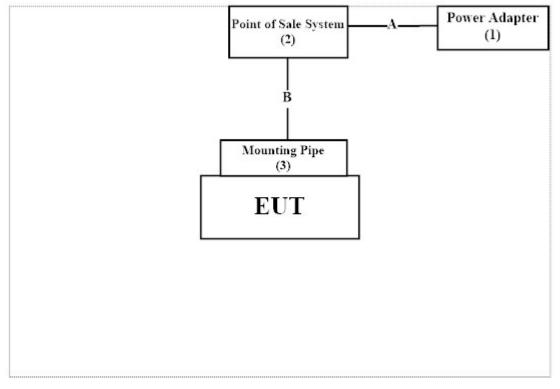
| Proc | luct | Manufacturer | Model No. | Serial No. | Power Cord |
|------|---------------|--------------|----------------|------------|------------|
| 1 | Power Adapter | NETGEAR | 2ACL068S | N/A | N/A |
| 2 | PoE Switch | NETGEAR | GS305Pv2 | N/A | N/A |
| 3 | Notebook PC | DELL | Latitude E5440 | FS9TK32 | N/A |

| Cable Type | | Cable Description |
|------------|------------------|--------------------|
| А | Power Cable | Non-shielded, 1.5m |
| В | LAN Cable | Non-shielded, 4.2m |
| С | USB-Type C Cable | Shielded, 2.5m |

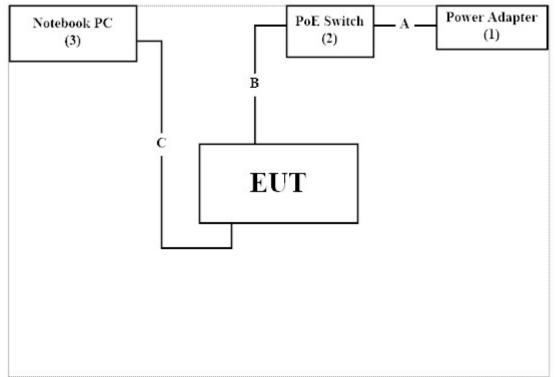


1.3. Configuration of tested System

PD Mode



PoE Mode





1.4. EUT Exercise Software

| 1 | Setup the EUT as shown in Section 1.3. | | |
|---|---|--|--|
| 2 | Execute software "QRCT Ver. 4.0.210.0" on the Notebook PC. | | |
| 3 | Configure the test mode, the test channel, and the data rate. | | |
| 4 | Press "OK" to start the continuous transmit. | | |
| 5 | Verify that the EUT works properly. | | |



1.5. Test Facility

Ambient conditions in the laboratory:

| Performed Item | Items | Required | Actual |
|--------------------|------------------|----------|---------|
| | Temperature (°C) | 10~40 °C | 23.8 °C |
| Conducted Emission | Humidity (%RH) | 10~90 % | 52.2 % |
| | Temperature (°C) | 10~40 °C | 23.4 °C |
| Radiated Emission | Humidity (%RH) | 10~90 % | 66.8 % |
| | Temperature (°C) | 10~40 °C | 24.5 °C |
| Conductive | Humidity (%RH) | 10~90 % | 59.0 % |

| USA | FCC Registration Number: TW0033 | |
|--------|---|--|
| Canada | CAB Identifier Number: TW3023 / Company Number: 26930 | |

| Site Description | Accredited by TAF |
|------------------|-------------------------|
| | Accredited Number: 3023 |

| Test Laboratory | DEKRA Testing and Certification Co., Ltd. | |
|--|--|--|
| | Linkou Laboratory | |
| Address | No.5-22, Ruishukeng Linkou District, New Taipei City, 24451, Taiwan, R.O.C | |
| Performed Location No. 26, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan, R.O.C. | | |
| Phone Number +886-3-275-7255 | | |
| Fax Number | +886-3-327-8031 | |



1.6. List of Test Equipment

For Conduction Measurements / HY-SR01

| | Equipment | Manufacturer | Model No. | Serial No. | Cal. Date | Due Date |
|---|--------------------|--------------|-----------|------------|------------|------------|
| V | EMI Test Receiver | R&S | ESR7 | 101601 | 2022/06/23 | 2023/06/22 |
| V | Two-Line V-Network | R&S | ENV216 | 101306 | 2023/03/16 | 2024/03/15 |
| V | Two-Line V-Network | R&S | ENV216 | 101307 | 2022/07/04 | 2023/07/03 |
| V | Coaxial Cable | SUHNER | RG400_BNC | RF001 | 2022/05/24 | 2023/05/23 |

Note:

- 1. All equipments are calibrated every one year.
- 2. The test instruments marked with "V" are used to measure the final test results.
- 3. Test Software Version: e3 230303 dekra V9.

For Conducted Measurements / HY-SR02

| | Equipment | Manufacturer | Model No. | Serial No. | Cal. Date | Due Date |
|---|-----------------------|--------------|-----------|------------|------------|------------|
| V | Spectrum Analyzer | R&S | FSV30 | 103466 | 2022/12/22 | 2023/12/21 |
| V | Peak Power Analyzer | KEYSIGHT | 8990B | MY51000410 | 2022/08/06 | 2023/08/05 |
| V | Wideband Power Sensor | KEYSIGHT | N1923A | MY56080003 | 2022/08/05 | 2023/08/04 |
| V | Wideband Power Sensor | KEYSIGHT | N1923A | MY56080004 | 2022/08/05 | 2023/08/04 |

Note:

- 1. All equipments are calibrated every one year.
- 2. The test instruments marked with "V" are used to measure the final test results.
- 3. Test Software Version: RF Conducted Test Tools R3 V3.0.1.14.

For Radiated Measurements / HY-CB01

| _ | | | | 1 | | |
|----|-------------------|---------------|-------------------|--------------|------------|------------|
| | Equipment | Manufacturer | Model No. | Serial No. | Cal. Date | Due Date |
| V | Loop Antenna | AMETEK | HLA6121 | 49611 | 2023/02/21 | 2024/02/20 |
| V | Bi-Log Antenna | SCHWARZBECK | VULB9168 | 9168-0675 | 2021/08/11 | 2023/08/10 |
| V | Horn Antenna | RF SPIN | DRH18-E | 210802A18ES | 2023/03/23 | 2024/03/22 |
| V | Horn Antenna | Com-Power | AH-840 | 101101 | 2021/11/30 | 2023/11/29 |
| V | Pre-Asmplifier | SGH | 0301 | 20211007-7 | 2023/01/10 | 2024/01/09 |
| V | Pre-Amplifier | EMCI | EMC051845SE | 980632 | 2023/01/10 | 2024/01/09 |
| V | Pre-Amplifier | EMCI | EMC05820SE | 980361 | 2023/01/10 | 2024/01/09 |
| | Pre-Amplifier | EMCI | EMC184045SE | 980369 | 2023/01/10 | 2024/01/09 |
| V | Coaxial Cable | EMCI | EMC102-KM-KM-600 | 1160314 | | |
| | Coaxial Cable | EMCI | EMC102-KM-KM-7000 | 170242 | | |
| | Filter | MICRO TRONICS | BRM50702 | G251 | 2023/01/05 | 2024/01/04 |
| V | Filter | MICRO TRONICS | BRM50716 | 067 | 2023/01/05 | 2024/01/04 |
| V | EMI Test Receiver | R&S | ESR3 | 102792 | 2022/12/29 | 2023/12/28 |
| V | Spectrum Analyzer | R&S | FSV3044 | 101115 | 2023/01/06 | 2024/01/05 |
| | Coaxial Cable | SUHNER | SUCOFLEX 106 | 25450/6 | 2023/01/10 | 2024/01/09 |
| v | Coaxial Cable | SGH | HA800 | GD20110222-8 | | |
| | Coaxial Cable | SGH | SGH18 | 2021003-8 | | |
| | Coaxial Cable | EMCI | EMC106 | 151113 | | |
| ът | | | | | | |

Note:

- 1. Bi-Log Antenna and Horn Antenna(AH-840) is calibrated every two years, the other equipments are calibrated every one year.
- 2. The test instruments marked with "V" are used to measure the final test results.
- 3. Test Software Version: e3 230303 dekra V9.



1.7. Uncertainty

Uncertainties have been calculated according to the DEKRA internal document.

The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95%.

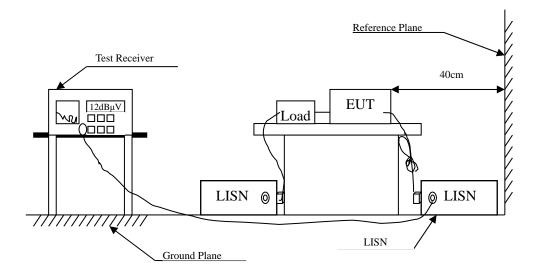
Measurement uncertainties evaluated for each testing system and associated connections are given here to provide the system information for reference. Compliance determinations do not take into account measurement uncertainties for each testing system, but are based on the results of the compliance measurement.

| Test item | Uncertainty | |
|--------------------------------|-----------------------------|--|
| Conducted Emission | ±3.50 dB | |
| | Spectrum Analyzer: ±2.14 dB | |
| Maximum conducted output power | Power Meter: ±1.05 dB | |
| Peak Power Spectral Density | ±2.14 dB | |
| | 9 kHz~30 MHz: ±3.88 dB | |
| | 30 MHz~1 GHz: ±4.42 dB | |
| Radiated Emission | 1 GHz~18 GHz: ±4.28 dB | |
| | 18 GHz~40 GHz: ±3.90 dB | |
| | 9 kHz~30 MHz: ±3.88 dB | |
| | 30 MHz~1 GHz: ±4.42 dB | |
| Band Edge | 1 GHz~18 GHz: ±4.28 dB | |
| | 18 GHz~40 GHz: ±3.90 dB | |
| Occupied Bandwidth | ±1580.61 Hz | |
| Duty Cycle | ±0.53 % | |



2. Conducted Emission

2.1. Test Setup



2.2. Limits

| FCC Par | FCC Part 15 Subpart C Paragraph 15.207 (dBµV) Limit | | | | | | | | | |
|-------------|---|-------|--|--|--|--|--|--|--|--|
| Frequency | Limits | | | | | | | | | |
| MHz | QP | AV | | | | | | | | |
| 0.15 - 0.50 | 66-56 | 56-46 | | | | | | | | |
| 0.50 - 5.0 | 56 | 46 | | | | | | | | |
| 5.0 - 30 | 60 | 50 | | | | | | | | |

Remarks: In the above table, the tighter limit applies at the band edges.

2.3. Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm /50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs.)

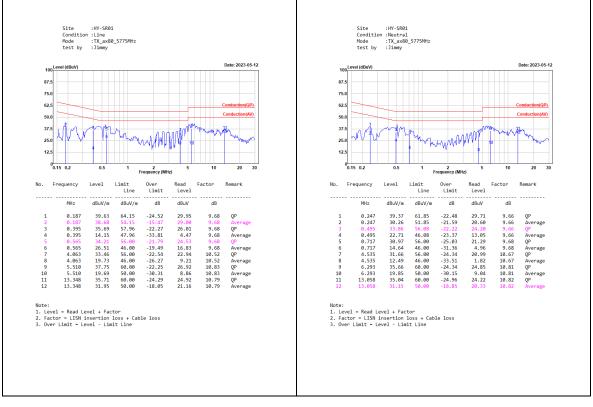
Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4:2014 on conducted measurement.

Conducted emissions were invested over the frequency range from 0.15 MHz to 30 MHz using a receiver bandwidth of 9 kHz.

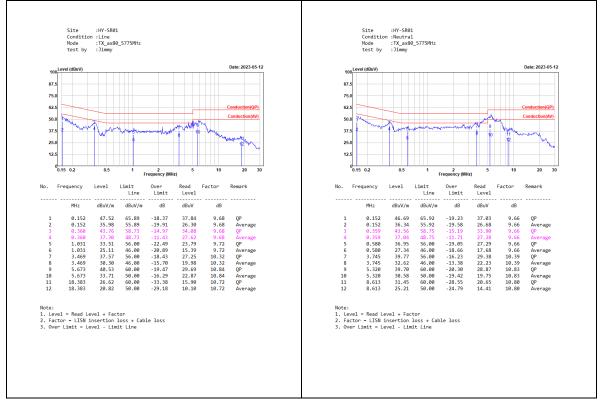


2.4. Test Result of Conducted Emission

PD Mode



PoE Mode

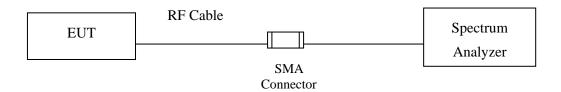




3. Maximun conducted output power

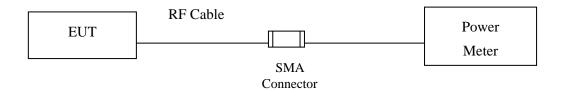
3.1. Test Setup

26dB Occupied Bandwidth

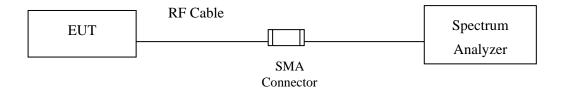


Conduction Power Measurement

Conduction Power Measurement (for 802.11an)



Conduction Power Measurement (for 802.11ac/ax)



3.2. Limits

For the band 5.15-5.25 GHz,

(i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. 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).

(ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. Fixed point-topoint U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(iv) For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm 10 log B, where B is the 26dB emission bandwidth in megahertz. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

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

3.3. Test Procedure

As an alternative to FCC KDB-789033, the EUT maximum conducted output power was measured with an average power meter employing a video bandwidth greater the 6dB BW of the emission under test. Maximum conducted output power was read directly from the meter across all data rates, and across three channels within each sub-band. Special care was used to make sure that the EUT was transmitting in continuous mode. This method exceeds the limitations of FCC KDB-789033, and provides more accurate measurements.

802.11an (BW \leq 40MHz) Maximum conducted output power using KDB 789033 section E)3)b) Method PM-G (Measurement using a gated RF average power meter) <u>Note: the power meter have a video bandwidth that is greater than or equal to the measurement</u> <u>bandwidth, (Anritsu/ MA2411B video bandwidth: 65MHz)</u>

802.11ac (BW=80MHz) Maximum conducted output power using KDB 789033 section E)2)b) Method SA-1 (trace averaging with the EUT transmitting at full power throughout each sweep).

When transmitted signals consist of two or more non-contiguous spectrum segments (e.g., 80+80 MHz mode) or when a single spectrum segment of a transmission crosses the boundary between two adjacent U-NII bands, KDB 644545 D03 section D) procedure is used for measurements.



3.4. Test Result of Maximum conducted output power

| Product | : | TCx EDGE Cam+ |
|-----------|---|--------------------------------|
| Test Item | : | Maximum conducted output power |
| Test Mode | : | Transmit (802.11a) |
| Test Date | : | 2023/04/18 |
| | | |

| Channel No. | Frequency | 26dB Bandwidth | Chain A Power | Chain B Power | Duty factor | Output Power | Outp | out Power Limit |
|---------------|-----------|-------------------|------------------|------------------|----------------|-----------------|-------|-----------------|
| | (MHz) | (MHz) | (dBm) | (dBm) | (dB) | (dBm) | (dBm) | dBm+10log(BW) |
| 36 | | 16.50 | 11.52 | 11.85 | | 14.70 | 22.1 | |
| 44 | | 16.50 | 11.48 | 11.76 | | 14.63 | 22.1 | |
| 48 | | 16.50 | 11.51 | 12.03 | | 14.79 | 22.1 | |
| 52 | 5260 | 19.06 | 11.32 | 11.84 | | 14.60 | 22.1 | 23.80 |
| 60 | 5300 | 19.26 | 11.44 | 11.92 | | 14.70 | 22.1 | 23.85 |
| 64 | 5320 | 19.18 | 11.51 | 11.83 | | 14.68 | 22.1 | 23.83 |
| 100 | 5500 | 19.02 | 11.54 | 11.92 | | 14.74 | 22.1 | 23.79 |
| 116 | 5580 | 19.42 | 11.61 | 11.96 | | 14.80 | 22.1 | 23.88 |
| 140 | 5700 | 19.18 | 11.39 | 11.98 | | 14.71 | 22.1 | 23.83 |
| 144(U-NII-2C) | 5720 | 14.43 | 10.34 | 11.04 | 0.34 | 14.06 | 22.1 | 22.59 |
| 144(U-NII-3) | 5720 | | 4.16 | 4.76 | 0.34 | 7.82 | 29.4 | |
| 149 | 5745 | | 11.47 | 11.98 | | 14.74 | 29.4 | |
| 157 | 5785 | | 11.33 | 11.92 | | 14.65 | 29.4 | |
| 165 | 5825 | | 11.21 | 11.98 | | 14.62 | 29.4 | |

Note:

1. Output Power Value (dBm) = 10*LOG (Chain A(mW) + Chain B(mW)) + Duty factor.

2. 26dB Bandwidth is the bandwidth of chain A or B whichever is less bandwidth, output power limitation is more stringent.



26dB Occupied Bandwidth:

Channel 144 (Chain A)

| Spect | rum | | 1 | | | | | | | | |
|----------|----------|-------------|-------------------------|---|--------------------------|-------------|---------|-----|------|------------|--|
| Ref Li | evel : | 20.00 30 | Bm Offset 1 dB SWT 1 | | RBW 500 kHz VBW 2 MHz | Mode A | uto FFT | 0 | | | |
| O IPR VI | eW | | | | | | | | | | |
| 10 dBm | - 12 | 1 4.65 | 0 dBm | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | | Mi Mi Mi | | -61 | | 5.7 | -21.59 dBm 104096 GHz 4.65 dBm 224380 GHz |
| 0 dBm- | - | - | 1 | ~~ | | | | | | | |
| -10 dBn | - | _ | / | - | - | | - | | - | | |
| -20 d8n | + | —D2 | -21.350 dem= | - | - | | - | 8 | 2 | | |
| -30 dBr | - | . (| 1 | | | | | - | | > | |
| -40 dBm | | | | | | | | | | ~~~~ | - |
| -50 dBm | ∩ | | | | | | _ | | | | |
| -60 dBr | | | | | | | | | | | |
| -70 dBn | <u>ا</u> | | | | | | F1 | F | 2 | | |
| CF 5.7: | 2 GHz | | | | 1001 p | ts | | | | Spar | 1 40.0 MHz |
| Marker | | | | | | | | | | | |
| Туре | Ref | | X-value | | Y-value | Funct | ion | | Func | tion Resul | t l |
| M1 | | 1 | 5.710409 | | -21.59 dBm | | | | | | |
| D2 M3 | М1 | 1 | 19.42 5.72243 | 1 MHz 38 GHz | 0.69 dB 4.65 dBm | | | | | | |

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| Att | - | 20.00 di 30 | | 1.00 dB 11.4 µs | RBW 500 kH VBW 2 MH | | lode Auto I | FFT | | | |
|--------------------|-------|----------------|-------------|-------------------------------|--|-----|-------------|-----|------|-------------|--|
| 0 dBm- | 1 | 1 6.550 | dBm | | mm | ~ | M1[1] | hay | | 5.7 | -19.60 dBm 105694 GHz 6.55 dBm 187610 GHz |
| -10 dBm -20 dBm | | -02 - | 19.450 dBm= | / | | | | | 82 | | |
| -30 dBm -40 dBm | | nd | and a | | | | | | > | har | m. m |
| -50 dBm -60 dBm | | | | | | | | | | | |
| -70 dBm | | | | | | | F1 | F | | | |
| CF 5.72 | 2 GHz | | | | 1001 | pts | | | | Spai | n 40.0 MHz |
| Marker Type | Ref | Trc | X-valı | | Y-value | 1 | Function | | Fund | ction Resul | t |
| M1 D2 M3 | M1 | 1 1 1 | 18. | 694 GHz 941 MHz 761 GHz | -19.60 dB 0.76 (6.55 dB | зB | | | | | |

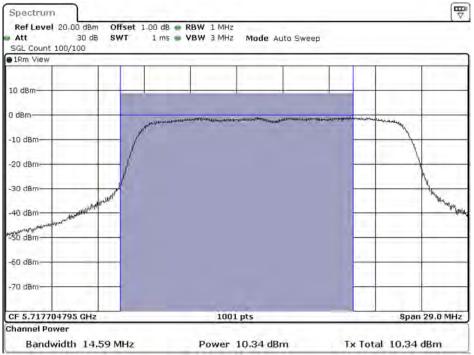
Channel 144 (Chain B)

Date: 18.APR.2023 23:51:58



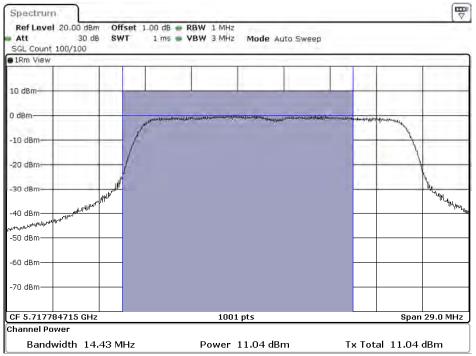
Maximum conducted output power:

Channel 144 (U-NII-2C) (Chain A)



Date: 18 APR 2023 23:51 31

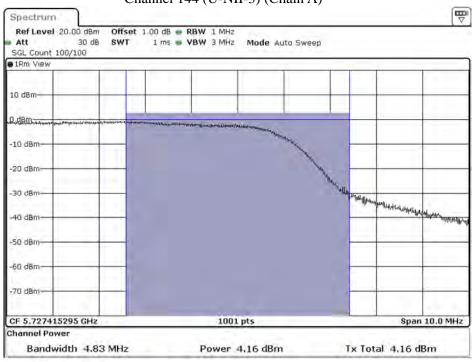




Date: 18.APR.2023 23:52:30

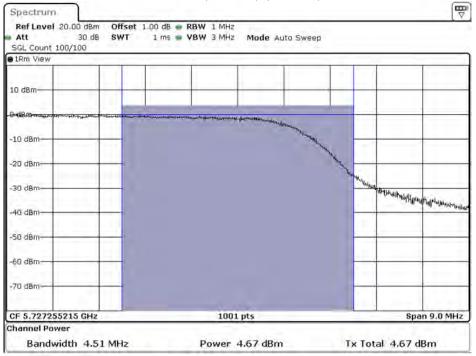


Maximum conducted output power: Channel 144 (U-NII-3) (Chain A)



Date: 18 APR 2023 23:51:33

Channel 144 (U-NII-3) (Chain B)



Date: 18 APR 2023 23:52 33



| Product | : | TCx EDGE Cam+ |
|-----------|---|--------------------------------|
| Test Item | : | Maximum conducted output power |

Test Mode : Transmit (802.11ax-20 MHz)

Test Date : 2023/04/18

| Channel No. | Frequency | 26dB Bandwidth | Chain A Power | Chain B Power | Duty factor | Output Power | Outj | out Power Limit |
|---------------|-----------|-------------------|------------------|------------------|----------------|-----------------|-------|-----------------|
| | (MHz) | (MHz) | (dBm) | (dBm) | (dB) | (dBm) | (dBm) | dBm+10log(BW) |
| 36 | | 19.02 | 11.39 | 11.77 | | 14.59 | 22.1 | |
| 44 | | 19.02 | 11.52 | 12.01 | | 14.78 | 22.1 | |
| 48 | | 18.90 | 11.44 | 11.85 | | 14.66 | 22.1 | |
| 52 | 5260 | 21.10 | 11.57 | 11.97 | | 14.78 | 22.1 | 24.24 |
| 60 | 5300 | 21.10 | 11.25 | 11.85 | | 14.57 | 22.1 | 24.24 |
| 64 | 5320 | 20.90 | 11.39 | 11.72 | | 14.57 | 22.1 | 24.20 |
| 100 | 5500 | 20.98 | 11.33 | 11.83 | | 14.60 | 22.1 | 24.22 |
| 116 | 5580 | 20.90 | 11.45 | 11.88 | | 14.68 | 22.1 | 24.20 |
| 140 | 5700 | 20.86 | 11.30 | 11.75 | | 14.54 | 22.1 | 24.19 |
| 144(U-NII-2C) | 5720 | 15.47 | 10.18 | 10.84 | | 13.53 | 22.1 | 22.89 |
| 144(U-NII-3) | 5720 | | 4.36 | 4.98 | | 7.69 | 29.4 | |
| 149 | 5745 | | 11.25 | 11.89 | | 14.59 | 29.4 | |
| 157 | 5785 | | 11.33 | 11.75 | | 14.56 | 29.4 | |
| 165 | 5825 | | 11.33 | 12.27 | | 14.84 | 29.4 | |

Note:

1. Output Power Value (dBm) = 10*LOG (Chain A(mW) + Chain B(mW)) + Duty factor.

2. 26dB Bandwidth is the bandwidth of chain A or B whichever is less bandwidth, output power limitation is more stringent.



26dB Occupied Bandwidth:

Channel 144 (Chain A)

| Specto Ref Le Att | | 20.00 | dBm Offset 1 dB SWT | 1.00 dB | RBW 500 kH | | Auto FF | r | |
|-------------------------|-------|-----------------|------------------------|---------------------|--|-------|---------------------|------|---|
| O 1PR VI | eW | | | | | | - | | |
| 10 dBm- | | 1 6 61 | 0 dBm | | | A42 | 41[1] 43[1] | | –19.51 dBm 5.7095305 GHz 6.61 dBm |
| 0 dBm- | - | 1 0.01 | - m | m | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | ma | m | m | 5.7207590 GHz |
| -10 dBm | - | _ | | | - | | | | |
| -20 dBm | + | -02 | -19.390 dBm= | - | - | - | | DP2 | |
| -30 dBm | - | - | 1 | | - | | | | |
| -40 dBm | | \int^{∞} | 1 | | | | | | |
| -50 dBm | - | | | | | | | | |
| -60 dBm | | | | | | | | | |
| -70 dBm | | | | | | | F1 | F2 | |
| CF 5.72 | 2 GHz | | 1 | | 1001 | . pts | | | Span 40.0 MHz |
| Marker | | | | | | • | | | |
| Туре | Ref | Trc | X-valı | | Y-value | | ction | Fund | ction Result |
| M1 | | 1 | | 305 GHz | -19.51 dB | | | | |
| D2 M3 | M1 | 1 | | 939 MHz)759 GHz | 1.23 d 6.61 dB | | | | |

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Channel 144 (Chain B)

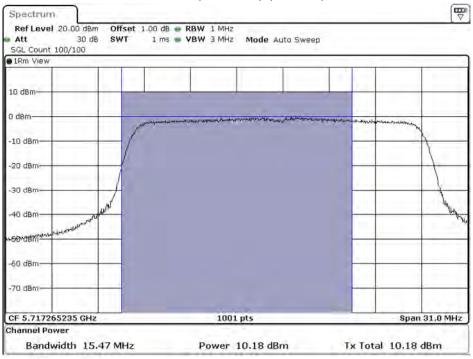
| Spect | nun. | | | | | . (- | | _, | | | | |
|----------------|--------|--------|------------------------------|-----|--------------------------|------|----------|-------|---|---------|------------|--------------------------------------|
| Ref L | evel : | | dBm Offset 1.0 dB SWT 11. | | RBW 500 kHz VBW 2 MHz | | lode Au | to FF | т | | | 1.5 |
| O 1Pk VI | eW | | | | | | | | | | | |
| 10 dBm | 0 | 1 7 55 | i0 dBm | | | M | M1[| 1 | | | | -18.76 dBm 094505 GHz 7.55 dBm |
| 0 dBm- | _ | | pro | ~~ | www | ~ | -+ | m | m | | 5.7 | 215580 GHz |
| -10 dBm | - | - | M | - | | - | - | - | - | 1 | - | |
| -20 dBm | - | D2 | -19.450 dBm | _ | | - | - | - | - | np N | | - |
| -30 dBm | - | / | 1 | - | - | - | - | - | - | - | 1 | |
| -40 dBrr | | ~ | | | | | | | | | - n | h |
| -50 dBm | | | | | | | | | | | | |
| -60 dBm | \ | | | | | | | | | | | |
| -70 dBm | | | | | | | | -1 | | F2 | | |
| CF 5.7 | 2 GHz | | | | 1001 | pts | | | | | Spa | n 40.0 MHz |
| Marker Type | Ref | Trc | X-value | - 1 | Y-value | - | Functio | | | Eup | ction Resu | I+ |
| M1 | 1/61 | 1 | 5.7094505 | GHz | -18.76 dBr | n | - unctit | | | Full | coon Resu | n |
| D2 | M1 | 1 | 21.019 | | 0.90 d | | | | | | | |
| MЗ | | 1 | 5.721558 | GHz | 7.55 dBr | n | | | | | | |

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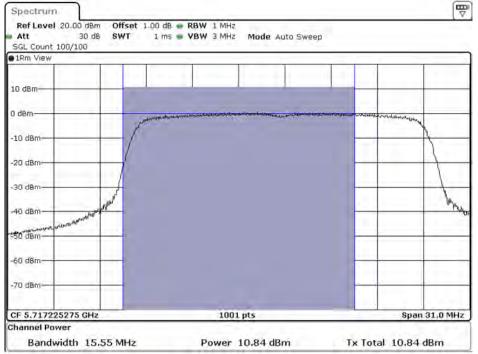
Maximum conducted output power:

Channel 144 (U-NII-2C) (Chain A)



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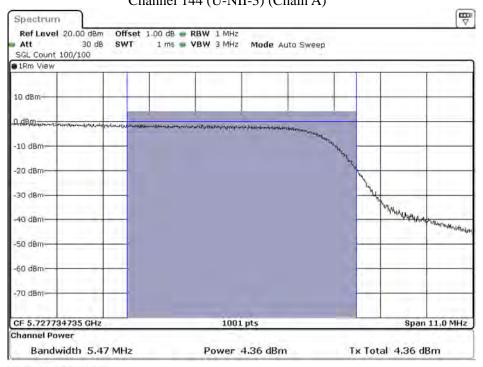
Channel 144 (U-NII-2C) (Chain B)



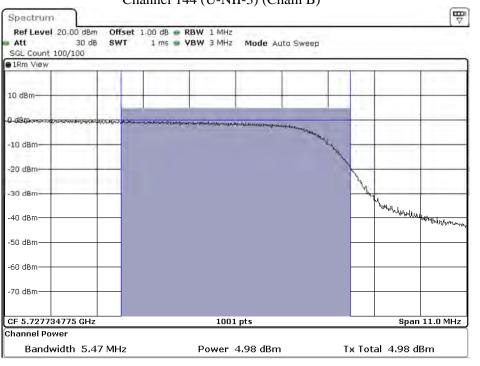
Date: 18 APR 2023 23:53:43



Maximum conducted output power: Channel 144 (U-NII-3) (Chain A)



Date: 18 APR 2023 23:54 45



Channel 144 (U-NII-3) (Chain B)

Date: 18.APR.2023 23:53:46



| Product | : | TCx EDGE Cam+ |
|---------|---|---------------|
|---------|---|---------------|

Test Item : Maximum conducted output power

Test Mode : Transmit (802.11ax-40 MHz)

Test Date : 2023/04/18

| Channel No. | Frequency | 26dB Bandwidth | Chain A Power | Chain B Power | Duty factor | Output Power | Outp | out Power Limit |
|---------------|-----------|-------------------|------------------|------------------|----------------|-----------------|-------|-----------------|
| | (MHz) | (MHz) | (dBm) | (dBm) | (dB) | (dBm) | (dBm) | dBm+10log(BW) |
| 38 | 5190 | | 11.77 | 11.82 | | 14.81 | 22.1 | |
| 46 | 5230 | | 11.61 | 12.02 | | 14.83 | 22.1 | |
| 54 | 5270 | 40.20 | 11.56 | 12.11 | | 14.85 | 22.1 | 27.04 |
| 62 | 5310 | 40.04 | 11.36 | 11.87 | | 14.63 | 22.1 | 27.02 |
| 102 | 5510 | 40.04 | 11.36 | 11.77 | | 14.58 | 22.1 | 27.02 |
| 110 | 5550 | 39.96 | 11.21 | 11.87 | | 14.56 | 22.1 | 27.02 |
| 134 | 5670 | 39.88 | 11.59 | 11.92 | | 14.77 | 22.1 | 27.01 |
| 142(U-NII-2C) | 5710 | 35.14 | 10.94 | 11.40 | | 14.19 | 22.1 | 26.46 |
| 142(U-NII-3) | 5710 | 4.98 | 0.36 | 1.27 | | 3.85 | 29.4 | 17.97 |
| 151 | 5755 | | 11.26 | 11.89 | | 14.60 | 29.4 | |
| 159 | 5795 | | 11.24 | 12.10 | | 14.70 | 29.4 | |

Note:

1. Output Power Value (dBm) = 10*LOG (Chain A(mW) + Chain B(mW)) + Duty factor.

2. 26dB Bandwidth is the bandwidth of chain A or B whichever is less bandwidth, output power limitation is more stringent.

3.99% Bandwidth for Band 1.



26dB Occupied Bandwidth:



| DIPK VI | eW | | | | WBW 2 M | Ha Moo | B AULO FFT | | | | |
|---------------------------|-------|----------|----------------------|------------------------|----------------------------|--------|----------------|------|-------|----------|--|
| 10 dBm- | 1 | 1 3.13 | 0 dBm | - M c. 0/30 | manmin | | M1[1] M3[1] | | | 5.6 | -22.94 dBm 898601 GH 3.13 dBm 163140 GH |
| -10 dBm | + | - | + | 4 100 | | | Q | | | | |
| -20 dBm -30 dBm | | D2 | -22.870 Br | n | | | | | 5 | | |
| -40 dBm ഹഹഹ -50 dBm | mr | m | w M | | | | | | h | Mr.Am | m.m. |
| -60 dBm | | | | | | | | | | | |
| -70 dBm | | | | | | | | F1 F | | | |
| CF 5.7 | l GHz | | | | 100 | 1 pts | | | | Spa | n 80.0 MHz |
| Marker Type M1 | Ref | Trc 1 | X-v a 5.68 | alue 98601 GHz | Y-value -22.94 d | | unction | | Funct | ion Resu | lt |
| D2 M3 | М1 | 1 | | 40.12 MHz 16314 GHz | 2.04 3.13 d | | | | | | |

Date: 18.APR.2023 23:55:25

Channel 142 (Chain B)

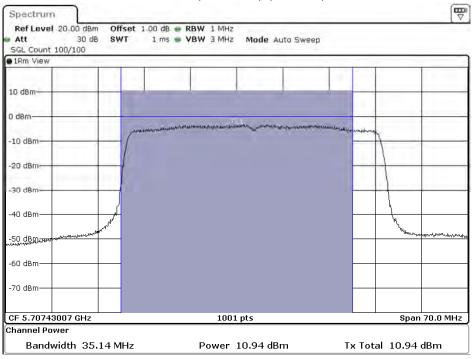
| Spectr | um. | | | | | | <i>'</i> | | | | |
|--------------|----------|--------|-------------|------------|--------------------------|-----------|----------|-----|------|------------|--|
| Ref Le | evel : | | | | RBW 500 kHz /BW 2 MHz | Mode Aut | to FFT | | | | 10 |
| O 1PR Vie | ₽₩ | | | - | | | | | | | |
| 10 dBm- | - 11 | 1.1.05 | 20 dBm | | | M1[M3 | 1] | | | 5.6 | -24.89 dBm 897802 GHz 1.82 dBm 158340 GHz |
| 0 dBm- | T | 1 1.84 | www. | Willy (Ja | Anonan ho | warder | m | www | | | |
| -10 dBm | - | _ | | | | - | | + } | - | | - |
| -20 dBm | - | | ML | - | | | | | 2 | | |
| -30 dBm | - | -02 | -24.180 8Bm | | | | | | E | | |
| -40 dBm | | | N. O. | | | | | | h | h | |
| -40 UBM \ | ~~~~ | ~~~~ | | | | | | | | | · · » ~ |
| -60 dBm | | | | | | | | | | | |
| -70 dBm | | | | | | | | | 2 | | |
| CF 5.71 | | | | | 1001 | | | F1 | | 0 | 1 80.0 MHz |
| Marker | GHZ | | | | 1001 pt | ` | | | | shar | TOU.U MIHZ |
| | Ref | Trc | X-value | 1 | Y-value | Functio | n I | | Fund | tion Resul | t |
| M1 | | 1 | 5.6897802 G | Iz | -24.89 dBm | | | | | | - |
| D2 | M1 | 1 | 40.44 Mł | łz | 2.32 dB | | | | | | |
| MЗ | | 1 | 5.715834 Gł | lz | 1.82 dBm | | | | | | |

Date: 18.APR.2023 23:56:25



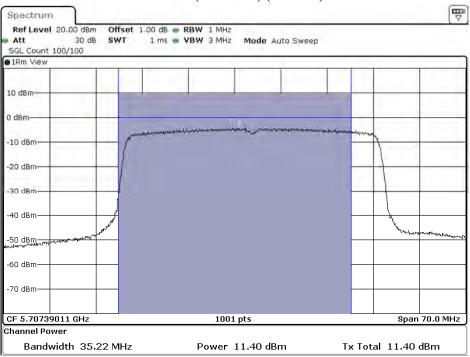
Maximum conducted output power:

Channel 142 (U-NII-2C) (Chain A)



Date: 18.APR.2023 23:55:57

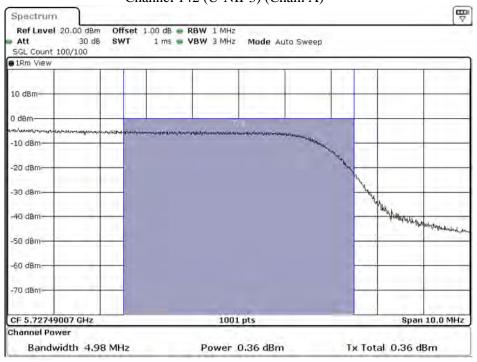
Channel 142 (U-NII-2C) (Chain B)



Date: 18.APR.2023 23:56:57

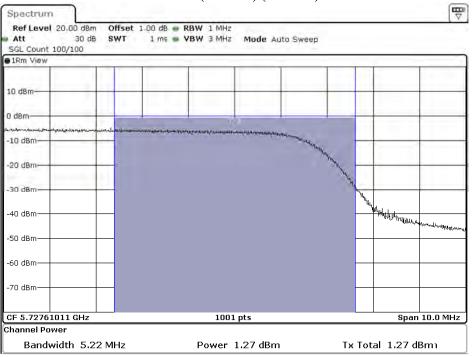


Maximum conducted output power: Channel 142 (U-NII-3) (Chain A)



Date: 18 APR 2023 23:56:00





Date: 18.APR.2023 23:57:00



| Product | : | TCx EDGE Cam+ |
|-----------|---|--------------------------------|
| Test Item | : | Maximum conducted output power |
| Test Mode | : | Transmit (802.11ax-80 MHz) |

Test Date : 2023/04/18

| Channel No. | Frequency | 26dB Bandwidth | Chain A Power | Chain B Power | Duty factor | Output Power | Outp | out Power Limit |
|---------------|-----------|-------------------|------------------|------------------|----------------|-----------------|-------|-----------------|
| | (MHz) | (MHz) | (dBm) | (dBm) | (dB) | (dBm) | (dBm) | dBm+10log(BW) |
| 42 | 5210 | | 11.39 | 11.75 | | 14.58 | 22.1 | |
| 58 | 5290 | 81.36 | 11.41 | 11.89 | | 14.67 | 22.1 | 30.10 |
| 106 | 5530 | 80.72 | 11.34 | 11.92 | | 14.65 | 22.1 | 30.07 |
| 122 | 5610 | 81.36 | 11.39 | 11.89 | | 14.66 | 22.1 | 30.10 |
| 138(U-NII-2C) | 5690 | 75.60 | 11.14 | 11.85 | | 14.52 | 22.1 | 29.79 |
| 138(U-NII-3) | 5690 | | -3.18 | -1.88 | | 0.53 | 29.4 | |
| 155 | 5775 | | 11.39 | 11.95 | | 14.69 | 29.4 | |

Note:

1. Output Power Value (dBm) = 10*LOG (Chain A(mW) + Chain B(mW))

2. 26dB Bandwidth is the bandwidth of chain A or B whichever is less bandwidth, output power limitation is more stringent.



26dB Occupied Bandwidth:

Channel 138 (Chain A)

| Spect | | | 1. | | | - | | | | | |
|---------------------------------|----------|-------|-------------|--------------------|-----------------------|----------|----------------|------|------------|------------|--|
| Ref Li | evel : | | | | BBW 1 MHz BW 3 MHz | Mode A | uto FFT | | | | |
| O 1PR VI | eW | | | | | | | | | | |
| 10 dBm | - 1 | 1 3.8 | 70 dBm | | M3 | N | 11[1] 13[1] | | | 5. | -22.31 dBm 649401 GHz 3.87 dBm 686320 GHz |
| 0 dBm- | - | - | N | wwww | - the second where | an Artas | and | with | 1 | | |
| -10 dBm | | _ | | - | - | - | - | | 1 | _ | |
| -20 dBm | - | -D2 | -22.130 Bm- | - | | - | - | -# | the state | | |
| -30 dBm | | | | | | | | | \uparrow | | |
| -40 dBm سى ركى مى -50 dBm | MA | Maro | m | | | | | | - h | | hunn |
| -60 dBm | <u> </u> | | | | | | | | | | |
| -70 dBm | | | | | | | | F1 | | | |
| CF 5.69 | J GHz | | | | 1001 | pts | | | | Span | 160.0 MHz |
| Marker | | | | | | | | | | | |
| Туре | Ref | Trc | X-valu | e | Y-value | Fund | tion | | Fund | ction Resu | lt 🛛 |
| M1 | | 1 | | 401 GHz | -22.31 dBr | | | | | | |
| D2 M3 | M1 | 1 | | .36 MHz 532 GHz | 1.34 d 3.87 dBr | | | | | | |

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Channel 138 (Chain B)

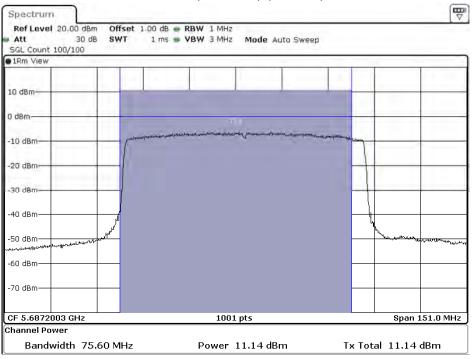
| Spect | rum | | | | | | | | | | |
|-------------------------------|-------------|---------------|---------------------|---------|-------------------|----------------|------------|-----------------|----------------------------|--------|-----------|
| Ref Li | evel | 20.00 d 30 | Bm Offset dB SWT | | RBW 1 MHz | Mod | e Auto FFT | | | | |
| O IPR VI | eW | | | | | | | _ | | | |
| 10 dBm- | | | | M3 | | M1[1] M3[1] | | | -22.52 5.649401 3.89 | | |
| 0 dBm- | D | 1 3.89 |) dBm | Amore | man Jam M | | | motion | 5.6610 | | |
| -10 dBm | | _ | | - | - | - | - | ++ | - | - | |
| -20 dBm | - | -D2 | -22.110 Bm- | - | - | _ | _ | | 2 | | |
| -30 dBm | | _ | 1/ | - | - | - | | | $\left\{ \right.$ | - | |
| -40 dBm | | ~~~{ | mar | | | | | | - Con | wyburn | Muhan |
| ‹‹∿ሌሌ ^ቢ -50 dBm |) | ~ V | | | | | | | | | |
| -60 dBm | <u>ا</u> -۱ | | | | | | | | | | |
| -70 dBm | <u>-</u> | | | | | | | F1 F2 | 2 | | |
| CF 5.69 | 9 GHz | 2 | | | 100: | l pts | | | | Span | 160.0 MHz |
| Marker | | | | | | | | | | | |
| Туре | Ref | | X-val | | Y-value | | unction | Function Result | | | lt |
| M1 D2 | M1 | 1 | | 401 GHz | -22.52 dE 1.77 | | | | | | |
| M3 | | 1 | | 107 GHz | 3.89 di | | | | | | |

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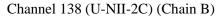


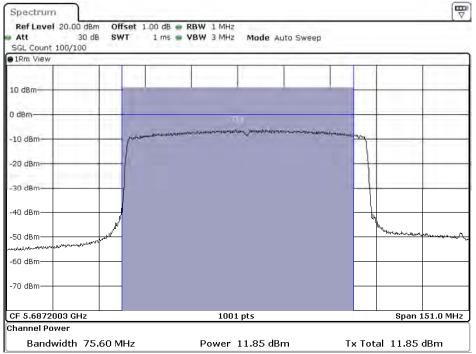
Maximum conducted output power:

Channel 138 (U-NII-2C) (Chain A)



Date: 18.APR.2023 23:49:34



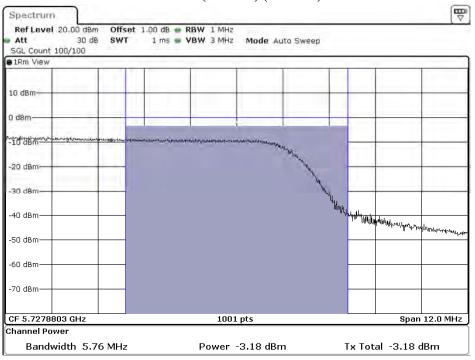


Date: 18.APR.2023 23:48:07



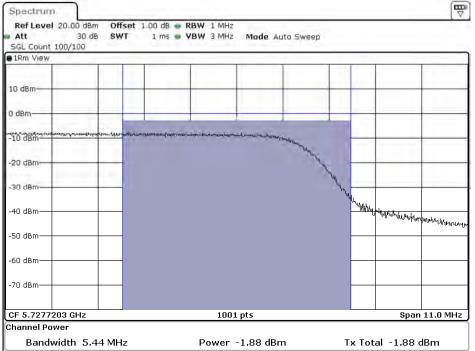
Maximum conducted output power:

Channel 138 (U-NII-3) (Chain A)



Date: 18.APR.2023 23:49:36

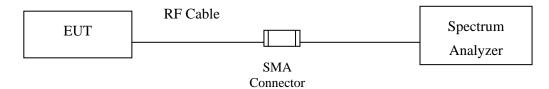
Channel 138 (U-NII-3) (Chain B)



Date: 18.APR.2023 23:48:09

4. Peak Power Spectral Density

4.1. Test Setup



4.2. Limits

For the band 5.15-5.25 GHz,

(i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. Fixed point-topoint U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(iv) For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point UNII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

4.3. Test Procedure

The EUT was setup to ANSI C63.10, 2013; tested to UNII test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.

The Peak Power Spectral Density using KDB 789033 section F) procedure, Create an average power spectrum for the EUT operating mode being tested by following the instructions in section E)2) for measuring maximum conducted output power using a spectrum analyzer.

SA-1 method is selected to run the test.



4.4. Test Result of Peak Power Spectral Density

| Product | : | TCx EDGE Cam+ |
|-----------|---|-----------------------------|
| Test Item | : | Peak Power Spectral Density |
| Test Mode | : | Transmit (802.11a) |
| Test Date | : | 2023/04/18 |

| Channel No. | Frequency (MHz) | Data Rate (Mbps) | Chain | PPSD/MHz (dBm) | Duty factor (dB) | Total PPSD/MHz (dBm) | Required Limit (dBm) | Result |
|-------------------|--------------------|---------------------|-------|-------------------|------------------------|----------------------------|----------------------------|--------|
| 26 | 7100 | (| А | -1.07 | 0.34 | 2.28 | .0.1 | Pass |
| 36 | 5180 | 6 | В | -0.77 | 0.34 | 2.58 | <9.1 | Pass |
| 44 | 5220 | 6 | А | -0.68 | 0.34 | 2.67 | <9.1 | Pass |
| 44 | 5220 | 0 | В | -0.52 | 0.34 | 2.83 | <9.1 | Pass |
| 48 | 5240 | 6 | А | -0.89 | 0.34 | 2.46 | <9.1 | Pass |
| 48 | 5240 | 6 | В | 0.15 | 0.34 | 3.50 | <9.1 | Pass |
| 50 | 5260 | C | А | -0.37 | 0.34 | 2.98 | -0.1 | Pass |
| 52 | 5260 | 6 | В | -0.32 | 0.34 | 3.03 | <9.1 | Pass |
| (0) | 5300 | C | А | -0.43 | 0.34 | 2.92 | -0.1 | Pass |
| 60 | 5300 | 6 | В | -0.37 | 0.34 | 2.98 | <9.1 | Pass |
| <i>C</i> 1 | 5220 | C C | А | -0.72 | 0.34 | 2.63 | -0.1 | Pass |
| 64 | 5320 | 6 | В | -0.62 | 0.34 | 2.73 | <9.1 | Pass |
| 100 | 5500 | <i>(</i> | А | -1.28 | 0.34 | 2.07 | -0.1 | Pass |
| 100 | 5500 | 6 | В | -0.97 | 0.34 | 2.38 | <9.1 | Pass |
| 116 | 5500 | C C | А | -0.72 | 0.34 | 2.63 | -0.1 | Pass |
| 116 | 5580 | 6 | В | -0.26 | 0.34 | 3.09 | <9.1 | Pass |
| 140 | 5700 | | А | -0.28 | 0.34 | 3.07 | -0.1 | Pass |
| 140 | 5700 | 6 | В | 0.48 | 0.34 | 3.83 | <9.1 | Pass |
| 144 | 5720 | | А | -0.86 | 0.34 | 2.49 | -0.1 | Pass |
| (U-NII-2C) | 5720 | 6 | В | 0.07 | 0.34 | 3.42 | <9.1 | Pass |

Note:

1. Total PPSD/MHz = PPSD/MHz + $10*\log 2$ (two antennas)+Duty factor.



| Channel No. | Frequency (MHz) | Data Rate (Mbps) | Chain | PPSD/MHz (dBm) | Duty factor (dB) | Total PPSD/MHz (dBm) | Required Limit (dBm) | Result |
|-------------|--------------------|---------------------|-------|-------------------|------------------------|----------------------------|----------------------------|--------|
| 144 | 5720 | | А | -3.88 | 0.34 | -0.53 | 20.4 | Pass |
| (U-NII-3) | 5720 | 6 | В | -3.59 | 0.34 | -0.24 | <29.4 | Pass |
| 157 | 5705 | 6 | А | -3.16 | 0.34 | 0.19 | -20.4 | Pass |
| 157 | 5785 | 6 | В | -2.38 | 0.34 | 0.97 | <29.4 | Pass |
| 165 | 5975 | 6 | А | -3.61 | 0.34 | -0.26 | -20.4 | Pass |
| 165 | 5825 | 6 | В | -2.78 | 0.34 | 0.57 | <29.4 | Pass |
| 165 | 5975 | C | А | -4.04 | 0.34 | -0.69 | -20.4 | Pass |
| 165 | 5825 | 6 | В | -3.20 | 0.34 | 0.15 | <29.4 | Pass |

1. Total PPSD/MHz = PPSD/MHz + $10*\log 2$ (two antennas)+Duty factor.



| SGL Count 100/100 | 1 MHz 3 MHz Mode Auto FFT | | |
|-------------------|------------------------------|----------|----------------------|
| 1Rm View | M1[1] | | 0.48 dBm 3180 GHz |
| 0 dBm | | | |
| dBm | MI | _ | |
| 10 dBm | | <u> </u> | |
| 20 d8m- | | | _ |
| 30 dBm- | | 1 | - |
| 40 dBm- | | | _ |
| 50 dBm- | _ | | |
| 60 dBm | | | |
| 70 dBm- | | | - |

Channel 140 (Chain B)

Date: 18 APR.2023 22.49.42



| Ref Level 20.00 dBm Offset 1.00 d Att 30 dB SWT 11.4 µ SGL Count 100/100 | | uto FFT | Č. |
|--|----------|---------|----------------------------|
| 1Rm View | | | |
| | M | 1[1] | -2.38 dBn 5.7438410 GHz |
| 10 dBm | | | |
| | M1 | | |
|) dBm- | ~~~ | ~~ | |
| 10 dBm | | | |
| | | | |
| 20 dBm | | | |
| -30 dBm- | | | |
| | | 1 | |
| 40 dBm | | | |
| 50 dBm | | | m |
| | | | |
| 60 dBm | | | |
| 70 dBm- | | | |
| /u ubm- | | | |
| CF 5.745 GHz | 1001 pts | | Span 40.0 MHz |

Date: 18 APR 2023 22:54:16



| Product | : | TCx EDGE Cam+ |
|---------|---|---------------|
|---------|---|---------------|

Test Item : Peak Power Spectral Density

Test Mode : Transmit (802.11ax-20 MHz)

Test Date : 2023/04/18

| Channel No. | Frequency (MHz) | Data Rate (Mbps) | Chain | PPSD/MHz (dBm) | Duty factor (dB) | Total PPSD/MHz (dBm) | Required Limit (dBm) | Result |
|-------------|--------------------|---------------------|-------|-------------------|------------------------|----------------------------|----------------------------|--------|
| 26 | Z100 | MCCO | А | -0.53 | | 2.48 | .0.1 | Pass |
| 36 | 5180 | MCS0 | В | 0.05 | | 3.06 | <9.1 | Pass |
| 44 | 5220 | MCS0 | А | -0.01 | | 3.00 | <9.1 | Pass |
| 44 | 5220 | MCSU | В | 0.73 | | 3.74 | <9.1 | Pass |
| 48 | 5240 | MCS0 | А | -0.47 | | 2.54 | -0.1 | Pass |
| 48 | 5240 | MCS0 | В | -0.07 | | 2.94 | <9.1 | Pass |
| 50 | 5260 | MCGO | А | -0.30 | | 2.71 | -0.1 | Pass |
| 52 | 5260 | MCS0 | В | 0.22 | | 3.23 | <9.1 | Pass |
| (0) | 5200 | MCSO | А | -0.47 | | 2.54 | -0.1 | Pass |
| 60 | 5300 | MCS0 | В | 0.12 | | 3.13 | <9.1 | Pass |
| 64 | 5220 | MCGO | А | -0.37 | | 2.64 | -0.1 | Pass |
| 64 | 5320 | MCS0 | В | -0.36 | | 2.65 | <9.1 | Pass |
| 100 | 5500 | MGGO | А | -1.56 | | 1.45 | -0.1 | Pass |
| 100 | 5500 | MCS0 | В | -0.76 | | 2.25 | <9.1 | Pass |
| 11.6 | 5500 | MGGO | А | -0.92 | | 2.09 | -0.1 | Pass |
| 116 | 5580 | MCS0 | В | 0.34 | | 3.35 | <9.1 | Pass |
| 140 | 5700 | MCGO | А | -0.33 | | 2.68 | -0.1 | Pass |
| 140 | 5700 | MCS0 | В | -0.27 | | 2.74 | <9.1 | Pass |
| 144 | 5700 | Maga | А | -0.99 | | 2.02 | .0.1 | Pass |
| (U-NII-2C) | 5720 | MCS0 | В | 0.04 | | 3.05 | <9.1 | Pass |

Note:

1. Total PPSD/MHz = PPSD/MHz + $10*\log 2$ (two antennas)+Duty factor.



| Channel No. | Frequency (MHz) | Data Rate (Mbps) | Chain | PPSD/MHz (dBm) | Duty factor (dB) | Total PPSD/MHz (dBm) | Required Limit (dBm) | Result |
|-------------|--------------------|---------------------|-------|-------------------|------------------------|----------------------------|----------------------------|--------|
| 144 | 5720 | MCGO | А | -4.79 | | -1.78 | -20.4 | Pass |
| (U-NII-3) | 5720 | MCS0 | В | -3.40 | | -0.39 | <29.4 | Pass |
| 157 | 5705 | MCCO | А | -2.96 | | 0.05 | -20.4 | Pass |
| 157 | 5785 | MCS0 | В | -2.55 | | 0.46 | <29.4 | Pass |
| 165 | 5975 | MCGO | А | -3.80 | | -0.79 | -20.4 | Pass |
| 165 | 5825 | MCS0 | В | -2.86 | | 0.15 | <29.4 | Pass |
| 165 | 5975 | MCSO | А | -3.75 | | -0.74 | -20.4 | Pass |
| 165 | 5825 | MCS0 | В | -3.08 | | -0.07 | <29.4 | Pass |

1. Total PPSD/MHz = PPSD/MHz + $10*\log 2$ (two antennas)+Duty factor.



| Channel | 44 | (Chain | B) |
|---------|----|--------|----|
|---------|----|--------|----|

| 1Rm View | | | | | | | | |
|----------|---|---|-----------|-------|------|---------------|-----|------------------------|
| | | - | · · · · · | M | 1[1] | | 5,2 | 0.73 dBm 228770 GHz |
| 10 dBm | - | | - | | | - | | 1 |
| | | | | MI | | | | 1.1.1.1 |
| 0 dBm | | 1 | - | ~ | ~ | 5 | | |
| -10 dBm | _ | | | - | | \rightarrow | | |
| -20 d8m | - | | | - | _ | ++ | | |
| -30 dBm | | | | | - | | | |
| -40 dBm | | | | _ | | 1 | | |
| -S0 dBm- | | | | | | - | ~ | ~ |
| -60 dBm | - | | | | | - | - | - |
| -70 dBm- | - | | | - | | | | |

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| Channel 149 | (Chain B) |
|-------------|-----------|
|-------------|-----------|

| 1Rm View | | | | | | | | _ | | |
|--------------|-----|---|------|-----|-----|---|------|---------------------------|--|--|
| | 1 | | | M1 | [1] | _ | 5.7 | -2.55 dBr 5.7422030 GH | | |
| 10 dBm | | | | - | - | | - | | | |
| 0 dBm | | | MI | | ~ - | | - | | | |
| -10 dBm | + f | | | | | 7 | | | | |
| -20 dBm- | + | - | | | | | - | - | | |
| -30 dBm- | | | | | | | | | | |
| -40 dBm | | | - | | | 1 | | - | | |
| -S0 dBm | | - | | | | | - | | | |
| -60 dBm | - | | | | | | | | | |
| -70 dBm | | - | | | | | | - | | |
| CF 5.745 GHz | | | 1001 | ots | | | Spar | 1 40.0 MHz | | |



| Product | : | TCx EDGE Cam+ |
|-----------|---|-----------------------------|
| Test Item | : | Peak Power Spectral Density |
| Test Mode | : | Transmit (802.11ax-40 MHz) |
| Test Date | : | 2023/04/18 |

| Channel No. | Frequency (MHz) | Data Rate (Mbps) | Chain | PPSD/MHz (dBm) | Duty factor (dB) | Total PPSD/MHz (dBm) | Required Limit (dBm) | Result |
|-------------|--------------------|---------------------|-------|-------------------|------------------------|----------------------------|----------------------------|--------|
| 20 | 5190 | MCGO | А | -2.58 | | 0.43 | -0.1 | Pass |
| 38 | 5190 | MCS0 | В | -2.39 | | 0.62 | <9.1 | Pass |
| 10 | 5220 | MCGO | А | -2.56 | | 0.45 | -0.1 | Pass |
| 46 | 5230 | MCS0 | В | -2.77 | | 0.24 | <9.1 | Pass |
| 5 4 | 5070 | MCGO | А | -3.43 | | -0.42 | .0.1 | Pass |
| 54 | 5270 | MCS0 | В | -2.54 | | 0.47 | <9.1 | Pass |
| 60 | 5210 | MCGO | А | -3.13 | | -0.12 | .0.1 | Pass |
| 62 | 5310 | MCS0 | В | -2.78 | | 0.23 | <9.1 | Pass |
| 102 | 5510 | MCGO | А | -4.08 | | -1.07 | .0.1 | Pass |
| 102 | 5510 | MCS0 | В | -3.66 | | -0.65 | <9.1 | Pass |
| 110 | | MGGO | А | -4.20 | | -1.19 | 0.1 | Pass |
| 110 | 5550 | MCS0 | В | -3.29 | | -0.28 | <9.1 | Pass |
| 104 | | MGGO | А | -3.27 | | -0.26 | 0.1 | Pass |
| 134 | 5670 | MCS0 | В | -2.72 | | 0.29 | <9.1 | Pass |
| 142 | 5710 | MCGO | А | -3.52 | | -0.51 | .0.1 | Pass |
| (U-NII-2C) | 5710 | MCS0 | В | -4.36 | | -1.35 | <9.1 | Pass |

- 1. Total PPSD/MHz = PPSD/MHz + $10*\log 2$ (two antennas)+Duty factor.
- 2. The quantity 10*log 2 (two antennas) is added to the spectrum peak value according to document 662911 D01.



| Channel No. | Frequency (MHz) | Data Rate (Mbps) | Chain | PPSD/MHz (dBm) | Duty factor (dB) | Total PPSD/MHz (dBm) | Required Limit (dBm) | Result |
|-------------|--------------------|---------------------|-------|-------------------|------------------------|----------------------------|----------------------------|--------|
| 142 | 5710 | MCGO | А | -8.18 | | -5.17 | -20.4 | Pass |
| (U-NII-3) | 5710 | MCS0 | В | -9.08 | | -6.07 | <29.4 | Pass |
| 150 | 5705 | MCGO | А | -6.29 | | -3.28 | -20.4 | Pass |
| 159 | 5795 | MCS0 | В | -5.33 | | -2.32 | <29.4 | Pass |
| 150 | 5705 | MCCO | А | -6.54 | | -3.53 | -20.4 | Pass |
| 159 | 5795 | MCS0 | В | -5.05 | | -2.04 | <29.4 | Pass |

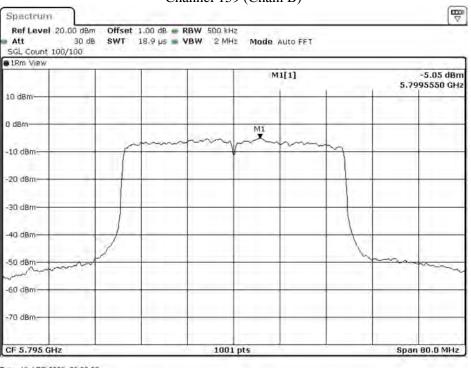
1. Total PPSD/MHz = PPSD/MHz + $10*\log 2$ (two antennas)+Duty factor.



Channel 38 (Chain B)

| 1Rm View | 100 | | | | | | | |
|-----------|-----|---|----|---|-------|----|--------|------------------------|
| Dout them | | | | N | 11[1] | _ | 5,11 | -2.39 dBn 876020 GH |
| 10 dBm | - | | - | 1 | | 1 | | |
| 0 dBm | _ | - | M1 | | | | - | |
| -10 dBm | | A | | ¥ | | A | | |
| -20 d8m | - | | | - | | + | | |
| -30 dBm | | _ | _ | | | ++ | | |
| 40 dBm | -+ | | | | | + | | |
| 50 dBm | ~ | | | - | - | | \sim | |
| 60 dBm | _ | _ | _ | | | | | |
| -70 dBm | | | | 1 | | | | |

Date: 18 APR 2023 23 18 54



Channel 159 (Chain B)

Date: 18.APR.2023 23.30.59



| Product | : | TCx EDGE Cam+ |
|-----------|---|-----------------------------|
| Test Item | : | Peak Power Spectral Density |
| Test Mode | : | Transmit (802.11ax-80 MHz) |
| Test Date | : | 2023/04/18 |

| Channel No. | Frequency (MHz) | Data Rate (Mbps) | Chain | PPSD/MHz (dBm) | Duty factor (dB) | Total PPSD/MHz (dBm) | Required Limit (dBm) | Result |
|-------------|--------------------|---------------------|-------|-------------------|------------------------|----------------------------|----------------------------|--------|
| 10 | 5010 | MCGO | А | -6.15 | | -3.14 | -0.1 | Pass |
| 42 | 5210 | MCS0 | В | -6.24 | | -3.23 | <9.1 | Pass |
| 50 | 5200 | MCGO | А | -6.46 | | -3.45 | -0.1 | Pass |
| 58 | 5290 | MCS0 | В | -5.89 | | -2.88 | <9.1 | Pass |
| 100 | 5520 | MCGO | А | -6.82 | | -3.81 | -0.1 | Pass |
| 106 | 5530 | MCS0 | В | -7.30 | | -4.29 | <9.1 | Pass |
| 100 | 5(10 | MCGO | А | -6.83 | | -3.82 | -0.1 | Pass |
| 122 | 5610 | MCS0 | В | -6.89 | | -3.88 | <9.1 | Pass |
| 138 | 5(00 | MCGO | А | -6.60 | | -3.59 | -0.1 | Pass |
| (U-NII-3) | 5690 | MCS0 | В | -6.17 | | -3.16 | <9.1 | Pass |

- 1. Total PPSD/MHz = PPSD/MHz + $10*\log 2$ (two antennas)+Duty factor.
- 2. The quantity 10*log 2 (two antennas) is added to the spectrum peak value according to document 662911 D01.

| Channel No. | Frequency | Data Rate | Chain | PPSD/MHz | Duty factor | Total PPSD/MHz | Required Limit | Result |
|-------------|---------------|-----------|-------|----------|----------------|-------------------|-------------------|--------|
| | (MHz) | (Mbps) | | (dBm) | (dB) | (dBm) | (dBm) | |
| 138 | 7 (00) | MGGO | А | -11.94 | | -8.93 | 20.4 | Pass |
| (U-NII-3) | 5690 | MCS0 | В | -11.21 | | -8.20 | <29.4 | Pass |
| 1.5.5 | | | А | -9.01 | | -6.00 | 20.4 | Pass |
| 155 | 5775 | MCS0 | В | -8.93 | | -5.92 | <29.4 | Pass |

Note:

- 1. Total PPSD/MHz = PPSD/MHz + $10*\log 2$ (two antennas)+Duty factor.
- 2. The quantity 10*log 2 (two antennas) is added to the spectrum peak value according to document 662911 D01.



Channel 58 (Chain B)

| Ref Level 20.00 di Att 30 SGL Count 100/100 | dB SWT 2 | | | Mode Au | to FFT | | | |
|---|----------|------|----|---------|--------|---|----|------------------------|
| 1Rm View | | | | | | | | |
| | | | | M | 1[1] | | 5. | -5.89 dBn 275290 GH |
| 10 dBm | | _ | - | | - | | | |
| | 1 | 1.1 | 1 | | | | 1 | 1.1.1.1 |
| 0 dBm | | 1 | 11 | | | | | |
| -10 dBm | F | m | km | | | m | | |
| -20 d8m | | | | _ | | | | |
| | | 1.11 | | | | | | |
| -30 dBm- | | | | | | | | |
| -40 dBm | + | | | | | | | |
| CO dDay | 1/ | | | | | 1 | (| 1 |
| -50 dBm | 4 | | | | | | | m |
| -60 dBm | | | | | | | | |
| -70 dBm | | | | - | - | | | - |
| 1 | | | | | | - | 1 | |

Date 18 APR 2023 23.36 24

Channel 155 (Chain B)

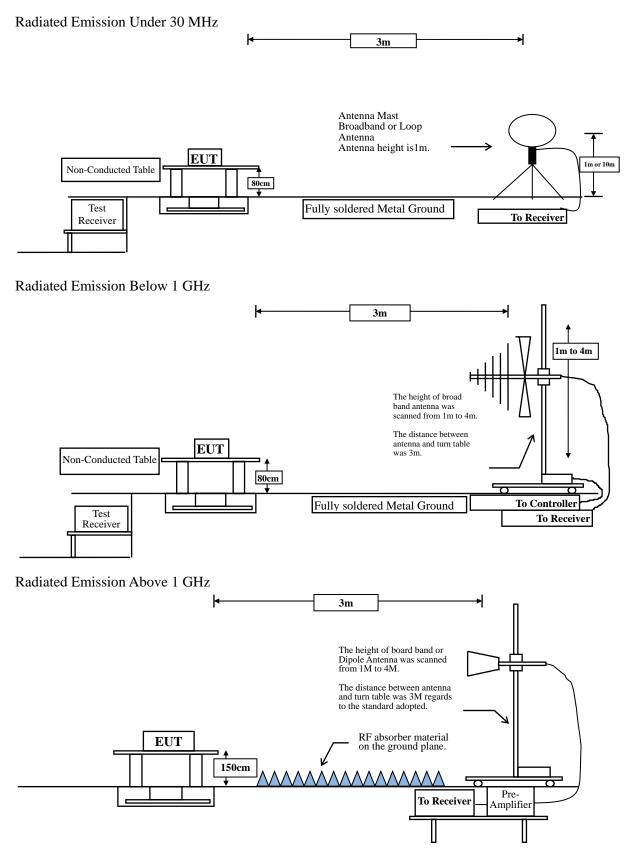
| Ref Level 20.00 di Att 30 SGL Count 100/100 | dB SWT | | | Mode Aut | FFT | | | |
|---|---------|--------|----|----------|------------|-------|---------|------------------------|
| 1Rm View | | | | | | | | |
| 1.1 | | | | M1[1 | 1 | | | -8.93 dBm 58290 GHz |
| 10 dBm | | | | | - | - | | aria an |
| 시 기본 프 | 1 1 | 12 1 1 | | | | | | |
|) dBm- | | | | | | | | |
| 10 dBm | | www | MI | | when and a | | | |
| | - for a | | | | - martine | 1 | | |
| 20 d8m- | | | | | | | | |
| 30 d8m- | | | | | | | | |
| 201 | | | | | | | | |
| 40 dBm | | | | | | | | |
| S0 dBm | | | | | | | | h |
| SU UBIN | write | | | | | W. w. | minimum | man |
| 60 dBm | - | | | | | | | |
| | 1.000 | | | | | | | |
| 70 dBm- | | | | | | | | |

Date: 18 APR 2023 23:42:54



5. Radiated Emission

5.1. Test Setup



5.2. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

| FCC Par | FCC Part 15 Subpart C Paragraph 15.209(a) Limits | | | | | | | |
|-------------|--|------------------------------|--|--|--|--|--|--|
| Frequency | Field strength | Maannant distance (mater) | | | | | | |
| MHz | (microvolts/meter) | Measurement distance (meter) | | | | | | |
| 0.009-0.490 | 2400/F(kHz) | 300 | | | | | | |
| 0.490-1.705 | 24000/F(kHz) | 30 | | | | | | |
| 1.705-30 | 30 | 30 | | | | | | |
| 30-88 | 100 | 3 | | | | | | |
| 88-216 | 150 | 3 | | | | | | |
| 216-960 | 200 | 3 | | | | | | |
| Above 960 | 500 | 3 | | | | | | |

Remarks: E field strength $(dB\mu V/m) = 20 \log E$ field strength $(\mu V/m)$

- For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- For transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.
- 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.

Based on ANSI C63.10-2013 Section 12.7.3 d) provides the conversion formula between field strength and EIRP, if distance is 3m, -27dBm is equivalent to 68.22dBuV/m.



5.3. Test Procedure

The EUT was setup according to ANSI C63.10, 2013 and tested according to FCC KDB-789033 test procedure for compliance to FCC 47CFR 15. 407 requirements.

Measuring the frequency range below 1 GHz, the EUT is placed on a turn table which is 0.8 meter above ground, when measuring the frequency range above 1 GHz, the EUT is placed on a turn table which is 1.5 meter above ground.

The turn table is rotated 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna is scanned between 1 meter and 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10: 2013 on radiated measurement.

The resolution bandwidth below 30 MHz setting on the field strength meter is 9kHz and 30 MHz~1 GHz is 120 kHz and above 1 GHz is 1 MHz.

Radiated emission measurements below 30 MHz are made using Loop Antenna and 30 MHz~1 GHz are made using broadband Bilog antenna and above 1 GHz are made using Horn Antennas.

The measurement is divided into the Preliminary Measurement and the Final Measurement. The suspected frequencies are searched for in Preliminary Measurement with the measurement antenna kept pointed at the source of the emission both in azimuth and elevation, with the polarization of the antenna oriented for maximum response. The antenna is pointed at an angle towards the source of the emission, and the EUT is rotated in both height and polarization to maximize the measured emission. The emission is kept within the illumination area of the 3 dB bandwidth of the antenna.

The measurement frequency range form 9 kHz - 10th Harmonic of fundamental was investigated.

RBW and VBW Parameter setting:

According to KDB 789033 section II.G.5 Procedure for Unwanted Maximum Emissions Measurements above 1000 MHz.

RBW = 1 MHz. $VBW \ge 3 MHz.$

According to KDB 789033 section II.G.6 Procedures for Average Unwanted Emissions Measurements above 1000 MHz.

RBW = 1 MHz.

VBW = 10 Hz, when duty cycle \ge 98 %

VBW $\geq 1/T$, when duty cycle < 98 %

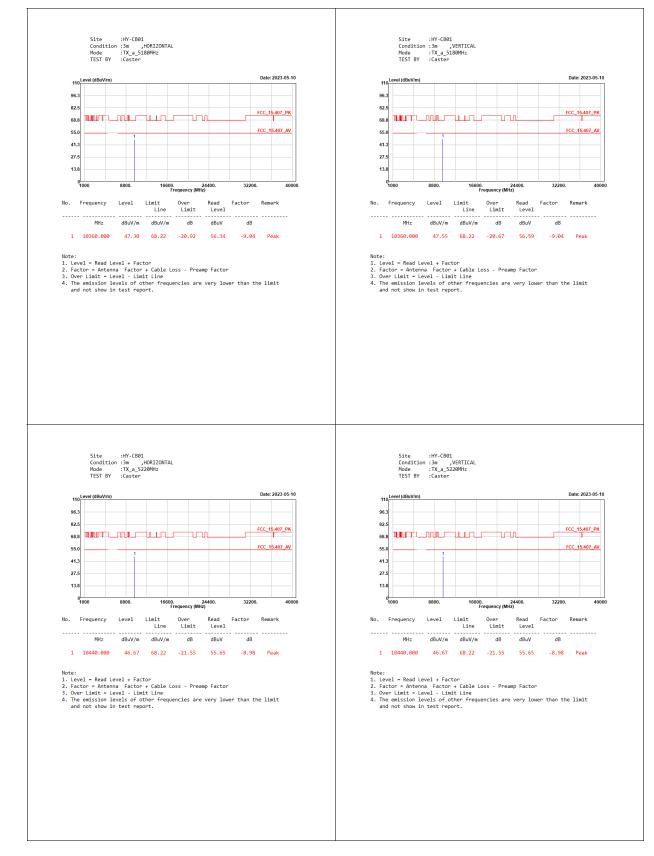
(T refers to the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.)

| 5 GHz band | Duty Cycle | Т | 1/T | VBW |
|-----------------|------------|--------|------|------|
| | (%) | (ms) | (Hz) | (Hz) |
| 802.11a | 92.40 | 0.2310 | 4329 | 5000 |
| 802.11ax-20 MHz | 99.45 | 5.4400 | 184 | 10 |
| 802.11ax-40 MHz | 99.54 | 5.4348 | 184 | 10 |
| 802.11ax-80 MHz | 99.54 | 5.4348 | 184 | 10 |

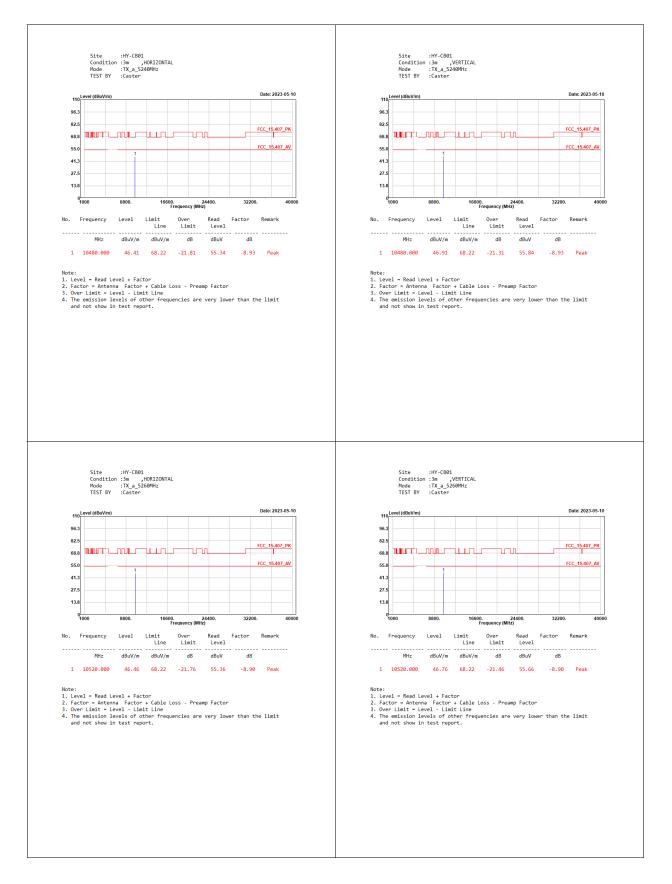
Note: Duty Cycle Refer to Section 8.



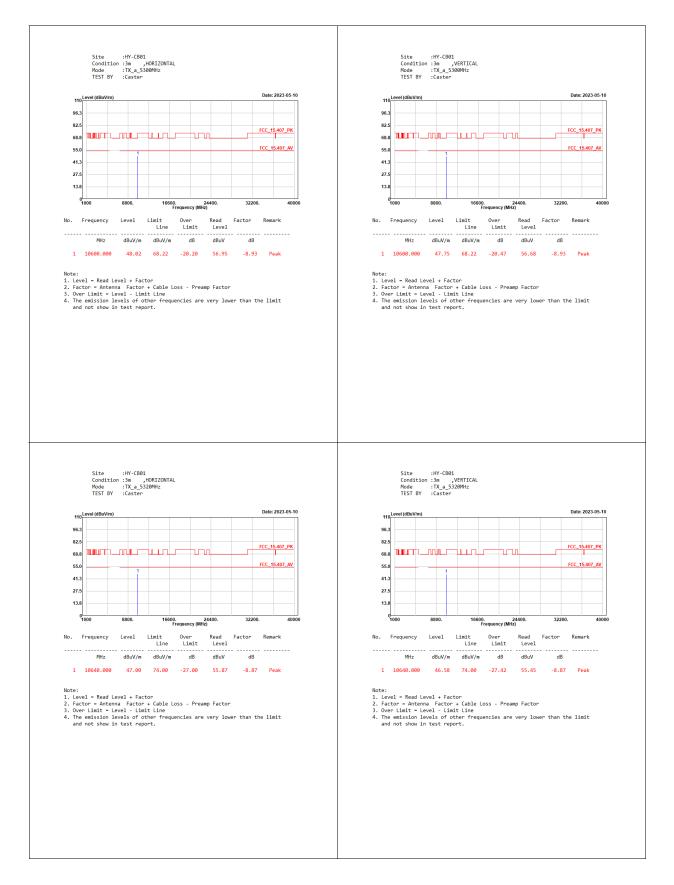
5.4. Test Result of Radiated Emission



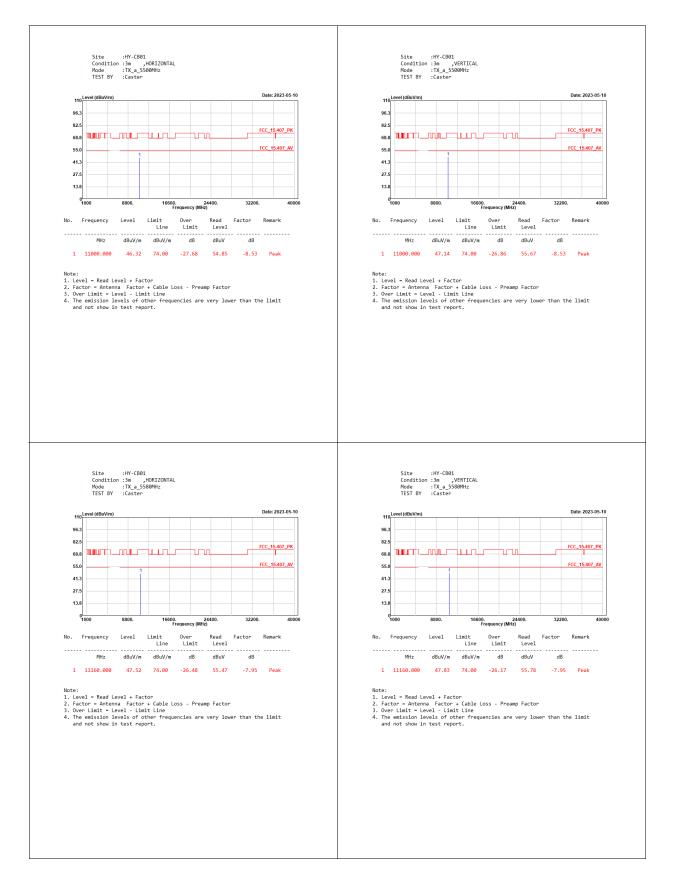




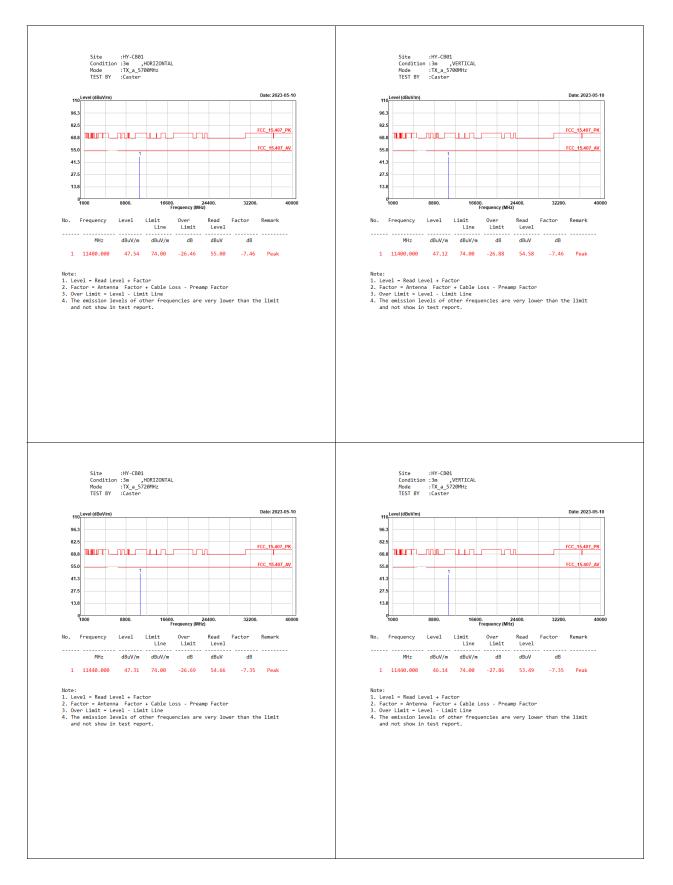




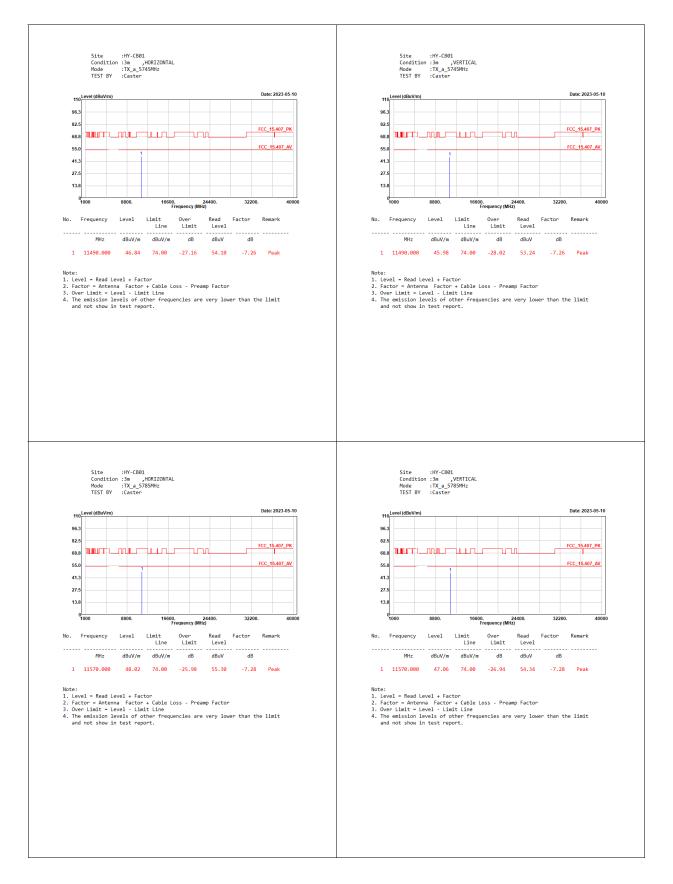




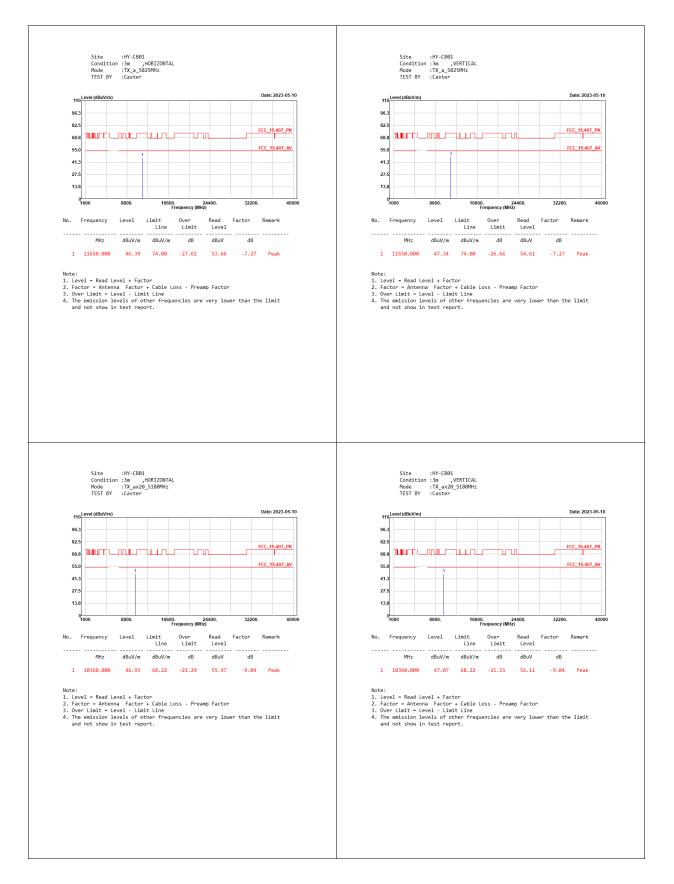




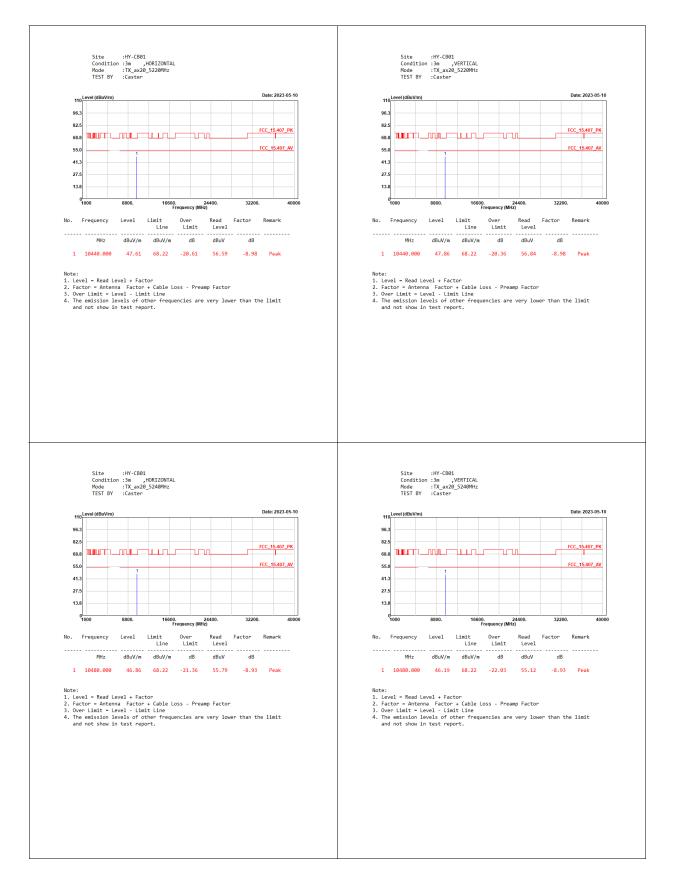




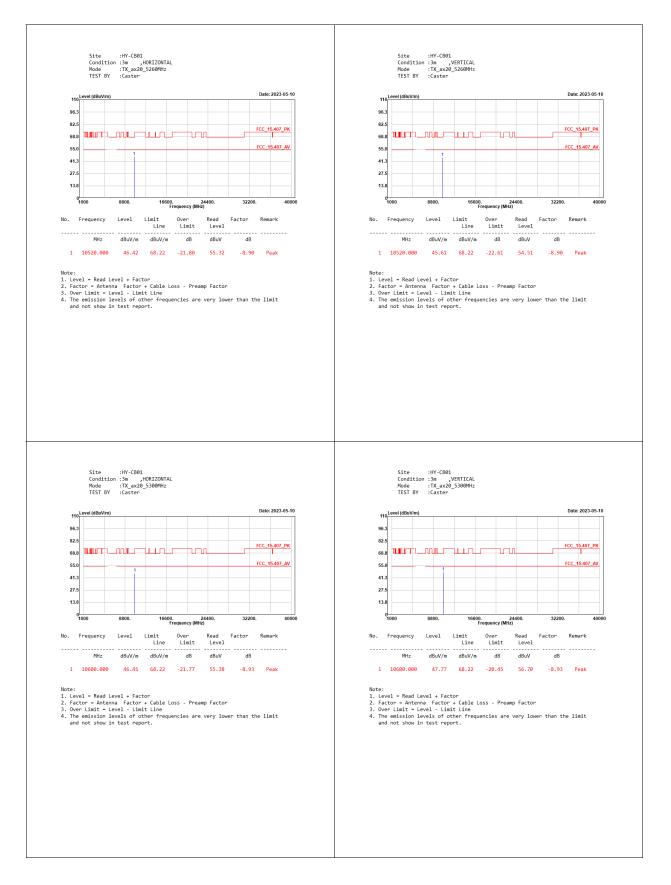




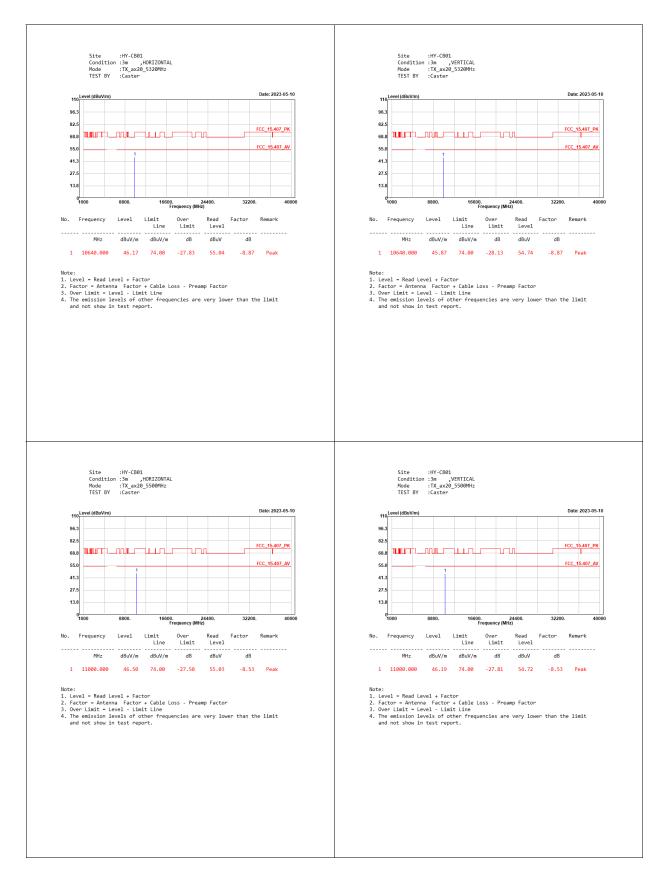




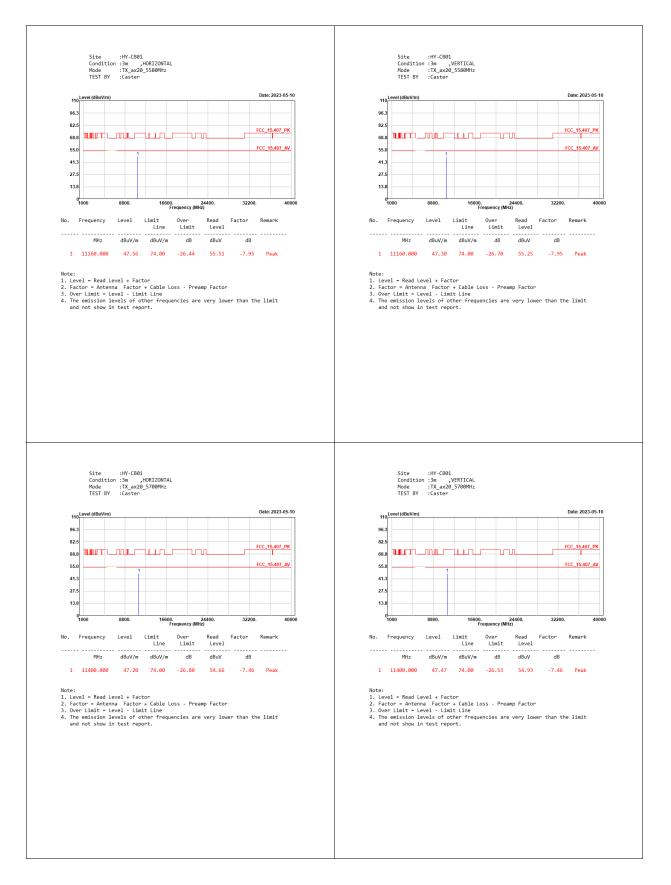




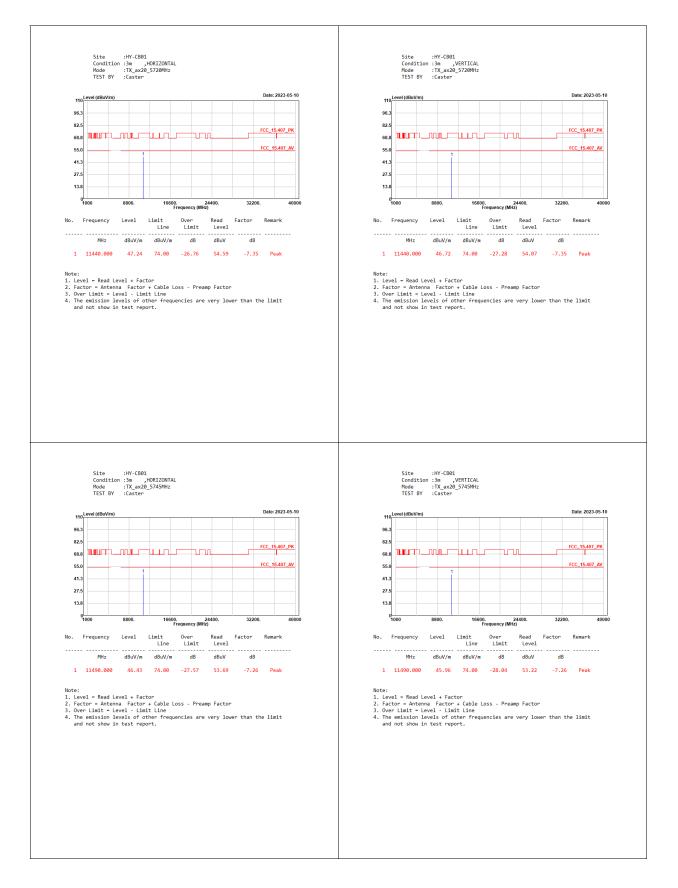




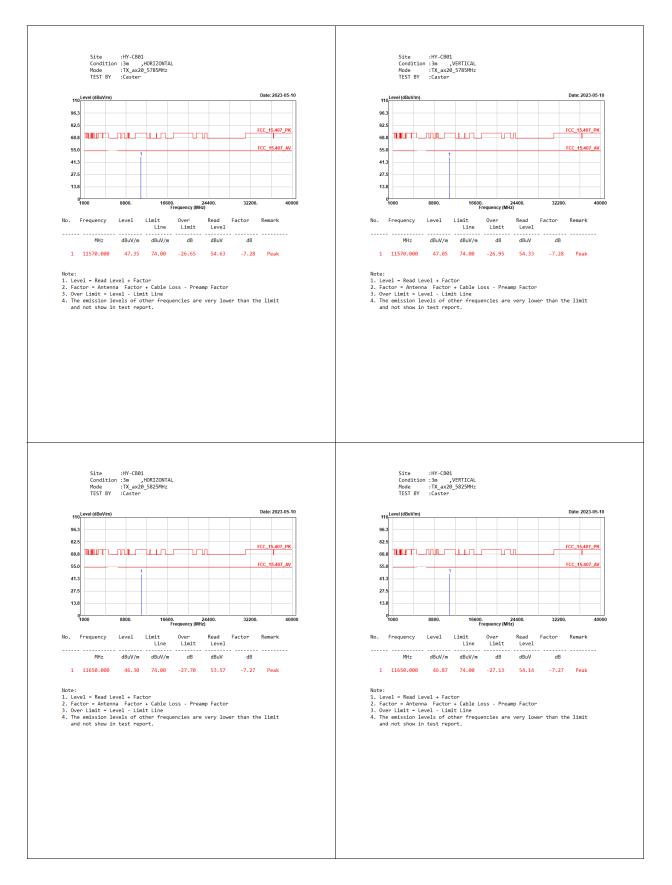




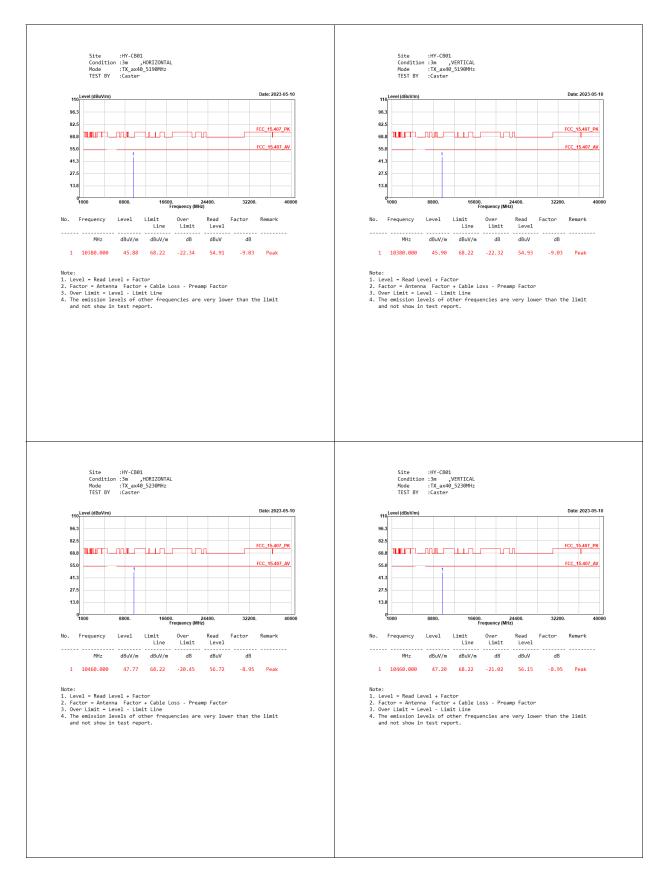




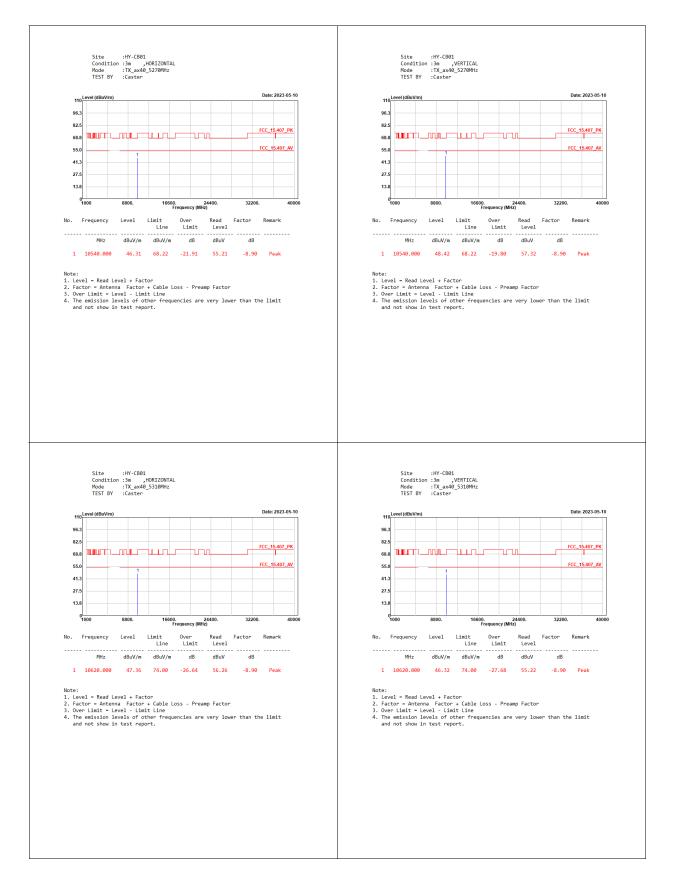




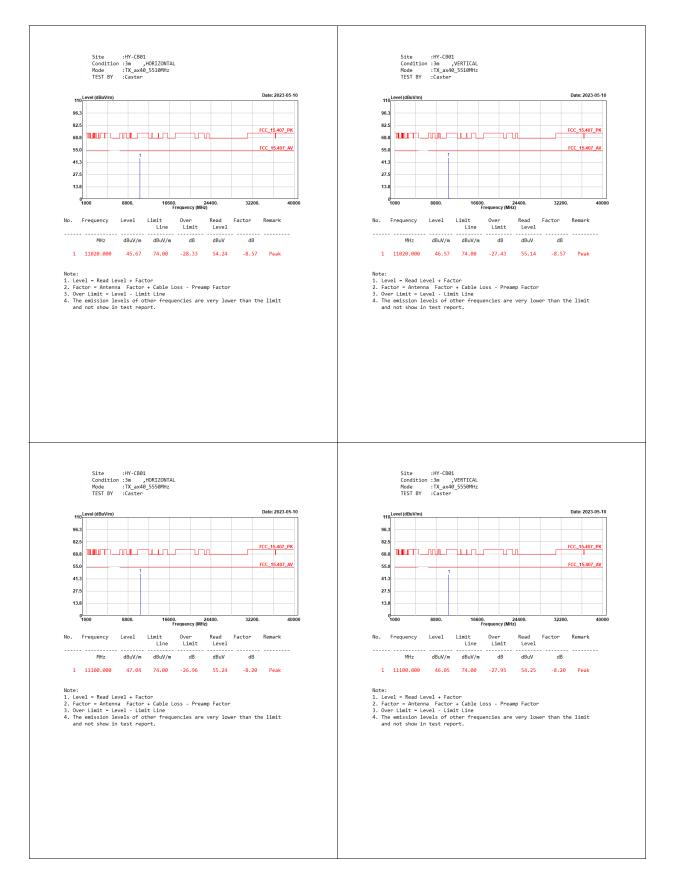




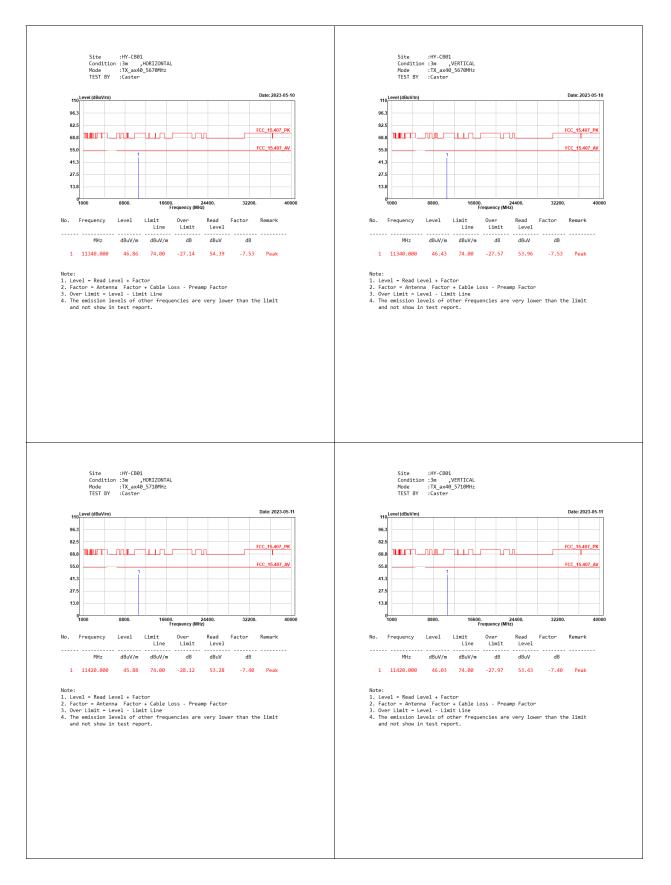




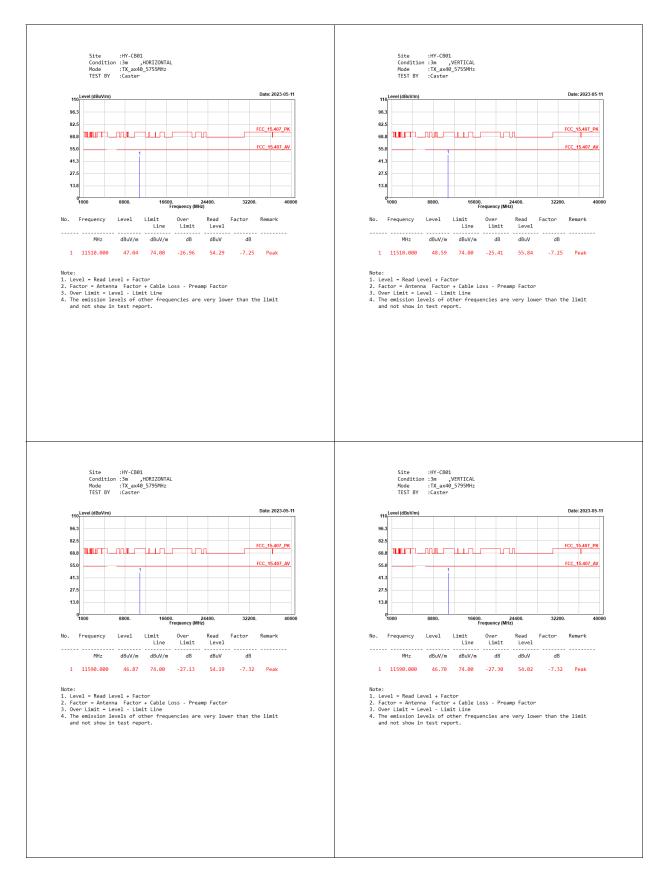




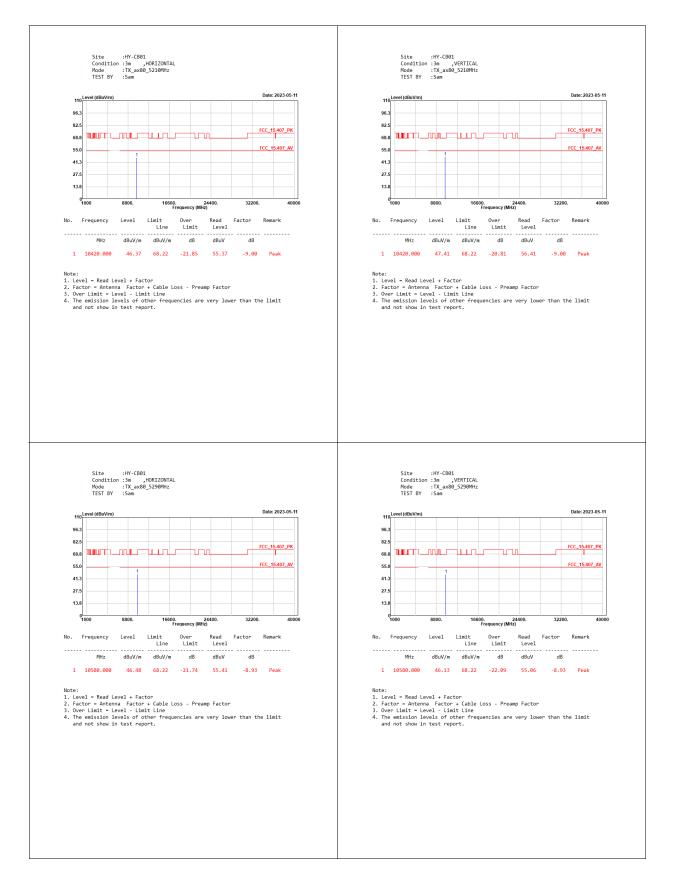




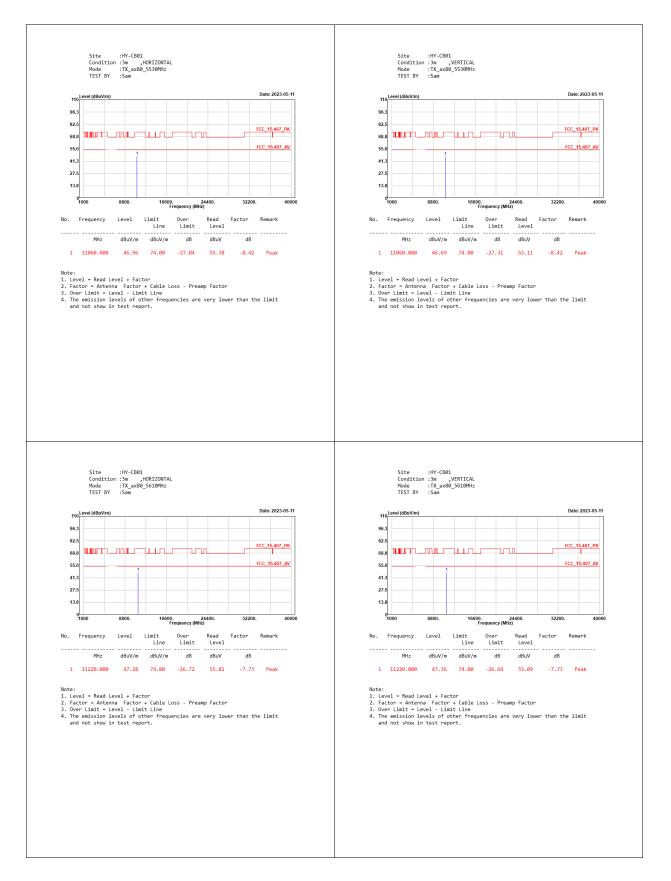




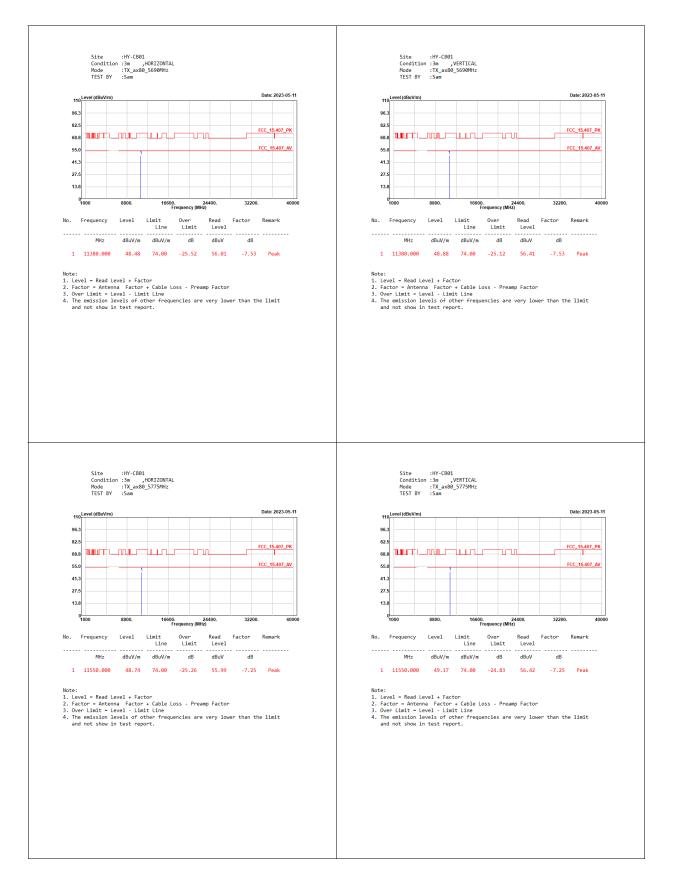






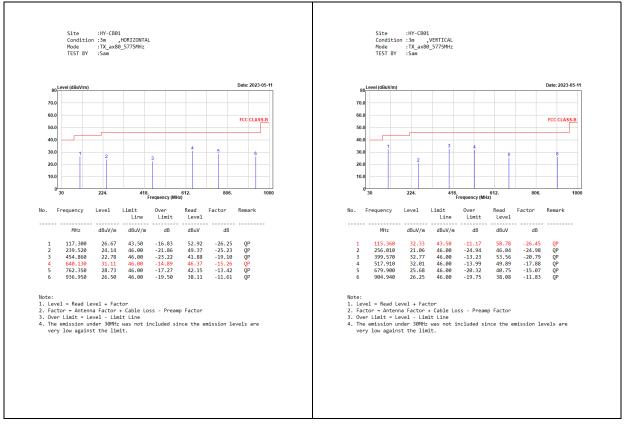




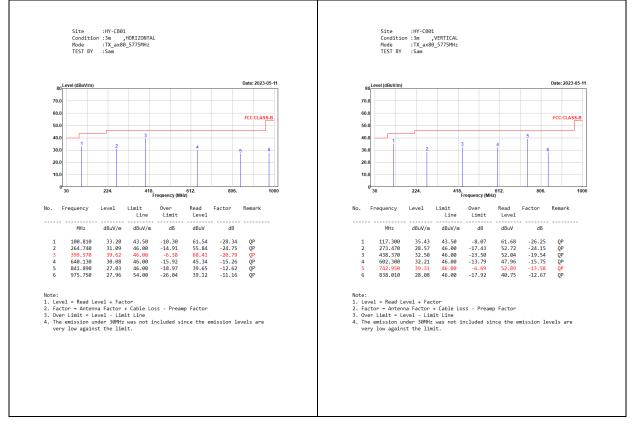




PD Mode



PoE Mode

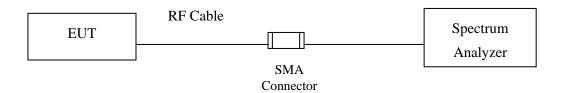




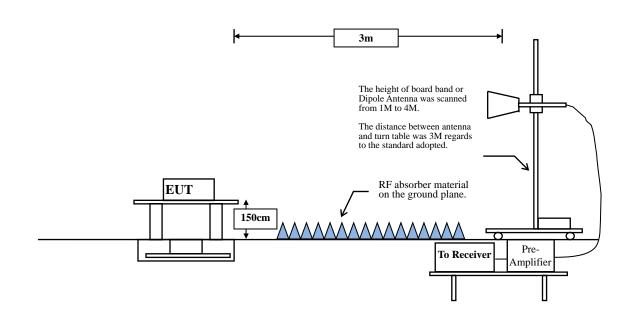
6. Band Edge

6.1. Test Setup

RF Conducted Measurement:



RF Radiated Measurement:



6.2. Limits

The provisions of Section 15.205 of this part apply to intentional radiators operating under this section. Radiated emissions which fall in the restricted bands, as defined in Section 15.205, must also comply with the radiated emission limits specified in Section 15.209:

| FCC Part 15 Subpart C Paragraph 15.209 Limits | | | | |
|---|----------|-----------|--|--|
| Frequency MHz | μV/m @3m | dBµV/m@3m | | |
| 30-88 | 100 | 40 | | |
| 88-216 | 150 | 43.5 | | |
| 216-960 | 200 | 46 | | |
| Above 960 | 500 | 54 | | |

Remarks : 1. RF Voltage $(dB\mu V) = 20 \log RF$ Voltage (μV)

2. In the Above Table, the tighter limit applies at the band edges.

- 3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.
- For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- For transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at 5 MHz
- 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.

Based on ANSI C63.10-2013 Section 12.7.3 d) provides the conversion formula between field strength and EIRP, if distance is 3m, -27dBm is equivalent to 68.22dBuV/m.

6.3. Test Procedure

The EUT is placed on a turn table which is 1.5 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10:2013 on radiated measurement.

The bandwidth below 1 GHz setting on the field strength meter is 120 kHz, above 1 GHz are 1 MHz. The EUT was setup to ANSI C63.10, 2013; tested to UNII test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.

RBW and VBW Parameter setting:

According to KDB 789033 section II.G.5 Procedure for Unwanted Maximum Emissions Measurements above 1000 MHz.

RBW = 1 MHz.

VBW \geq 3 MHz.

According to KDB 789033 section II.G.6 Procedures for Average Unwanted Emissions Measurements above 1000 MHz.

RBW = 1 MHz.

VBW = 10 Hz, when duty cycle \ge 98 %

VBW $\geq 1/T$, when duty cycle < 98 %

(T refers to the minimum transmission duration over which the transmitter is on and is

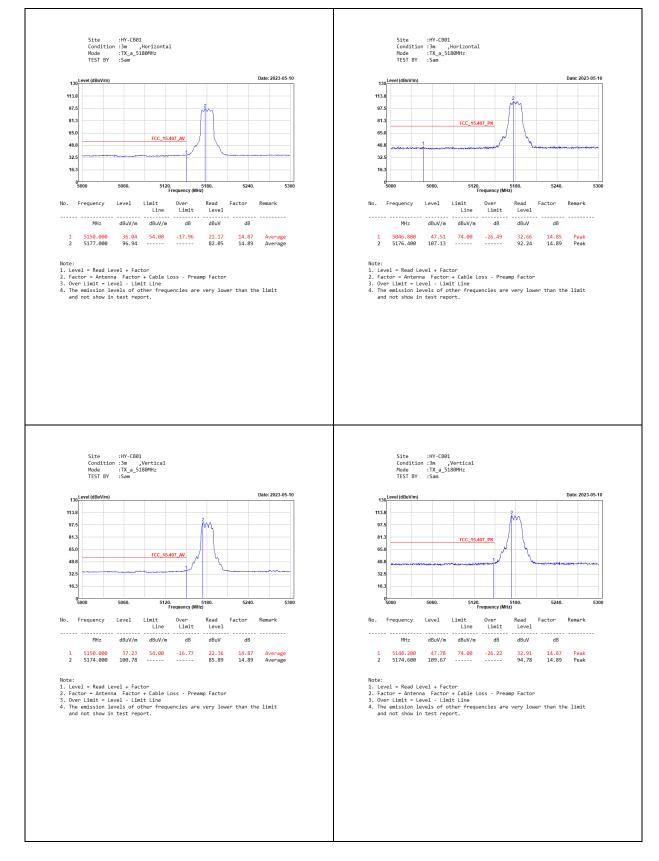
transmitting at its maximum power control level for the tested mode of operation.)

| 5 GHz band | Duty Cycle | Т | 1/T | VBW |
|-----------------|------------|--------|------|------|
| | (%) | (ms) | (Hz) | (Hz) |
| 802.11a | 92.40 | 0.2310 | 4329 | 5000 |
| 802.11ax-20 MHz | 99.45 | 5.4400 | 184 | 10 |
| 802.11ax-40 MHz | 99.54 | 5.4348 | 184 | 10 |
| 802.11ax-80 MHz | 99.54 | 5.4348 | 184 | 10 |

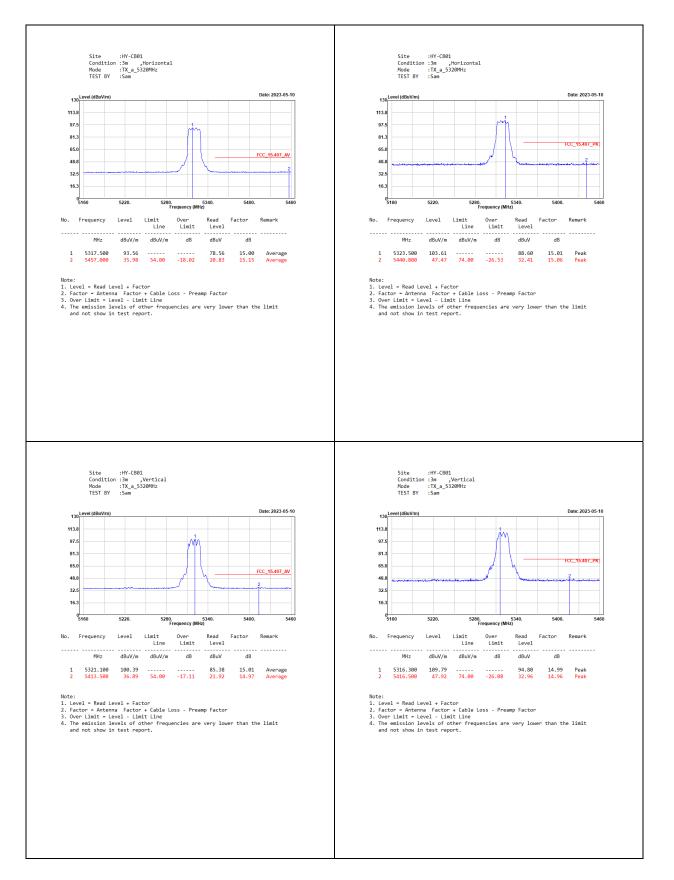
Note: Duty Cycle Refer to Section 8.



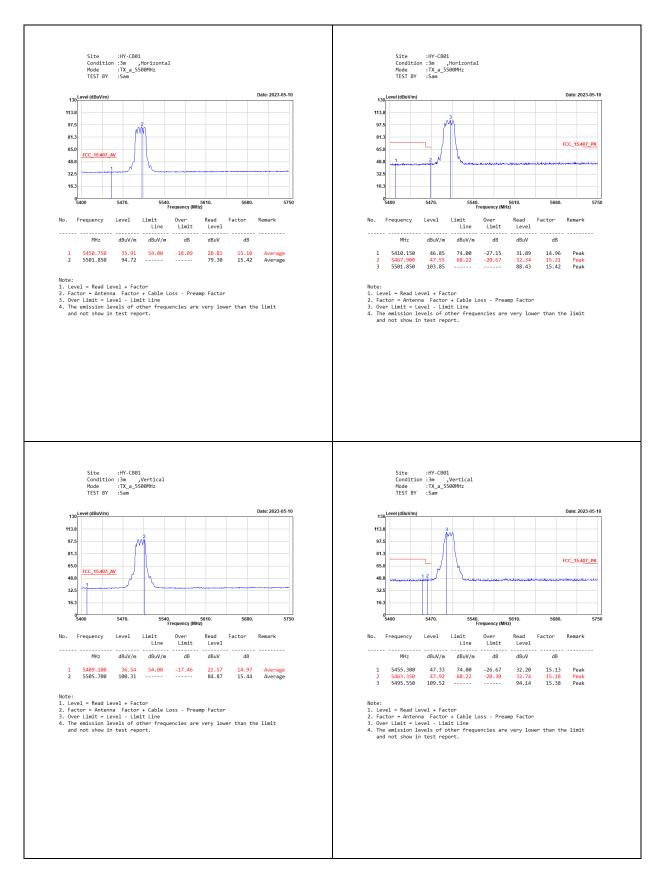
6.4. Test Result of Band Edge



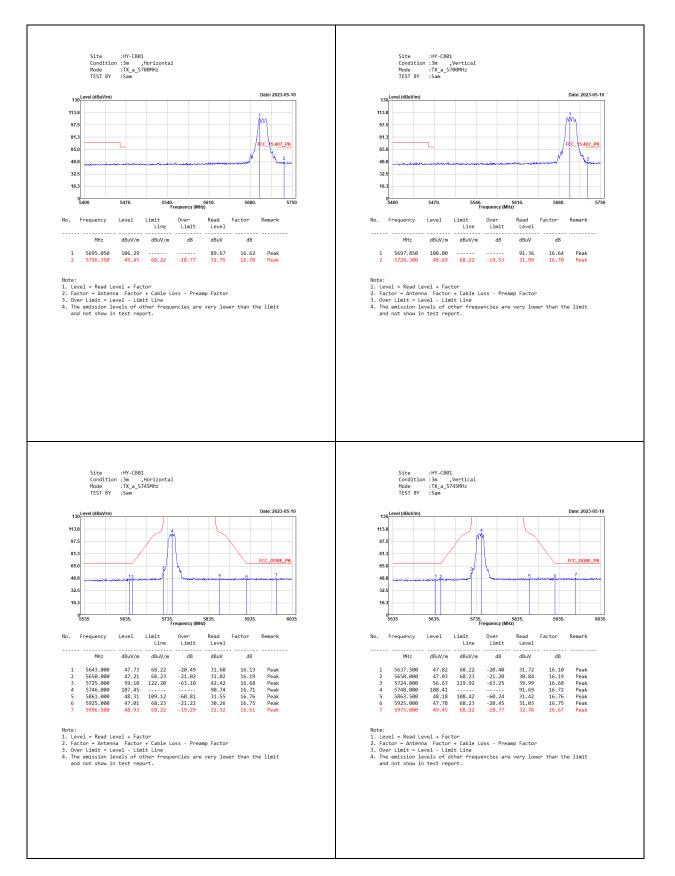




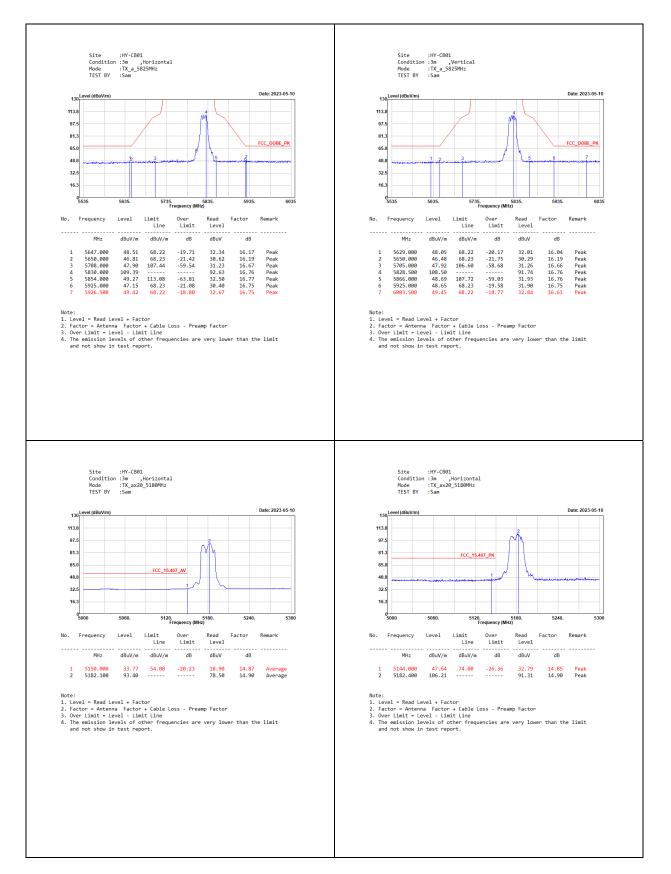




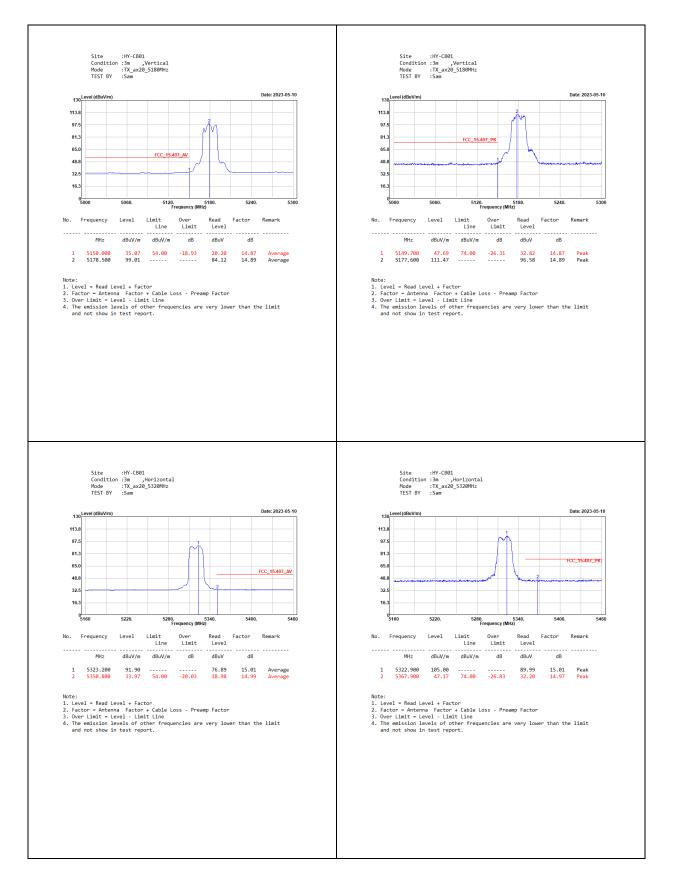




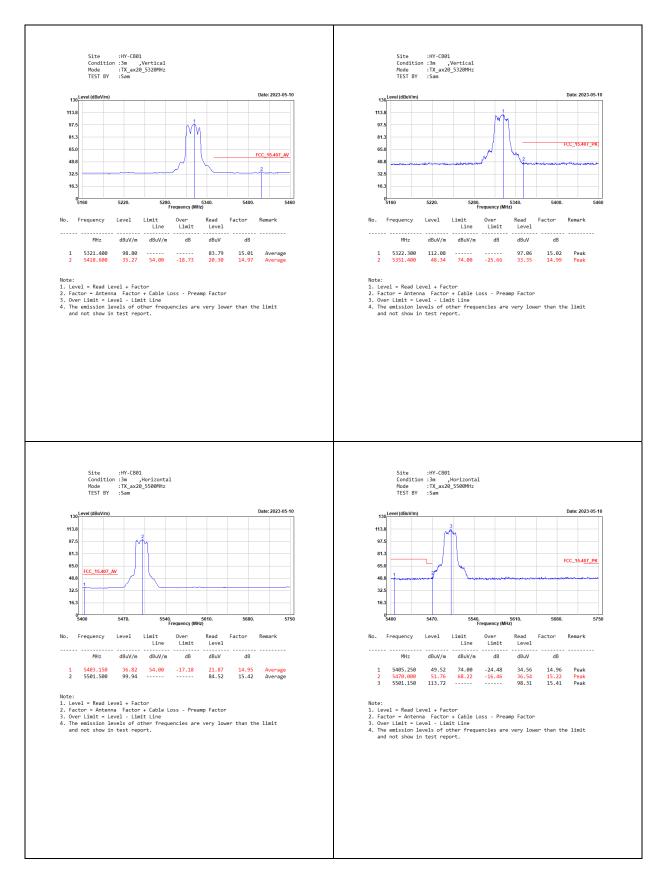




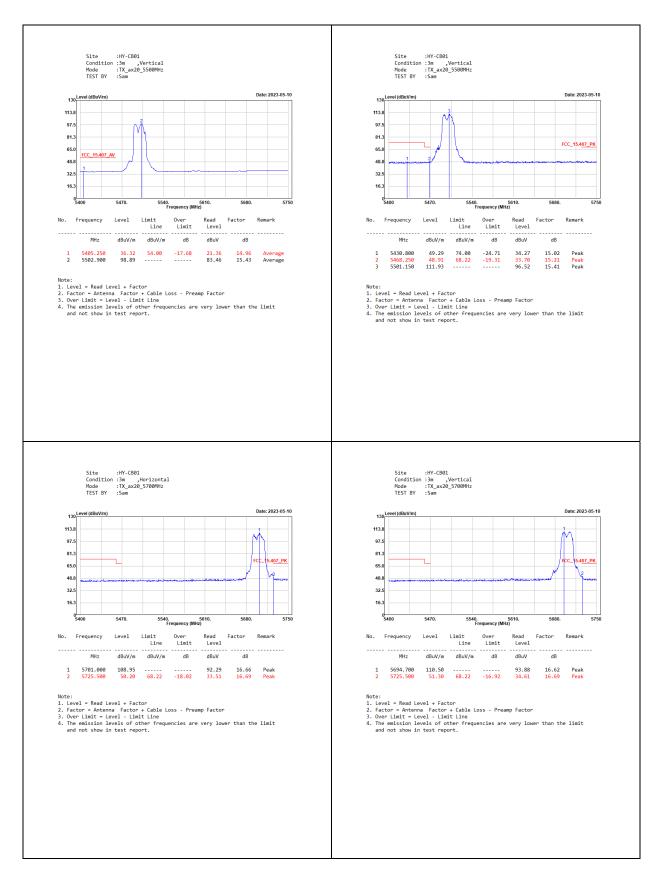




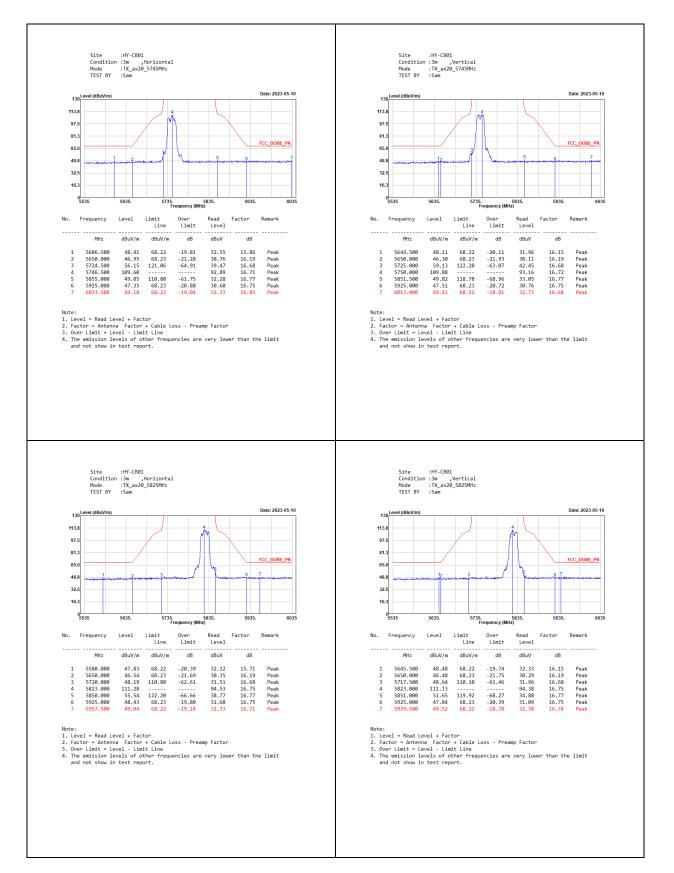




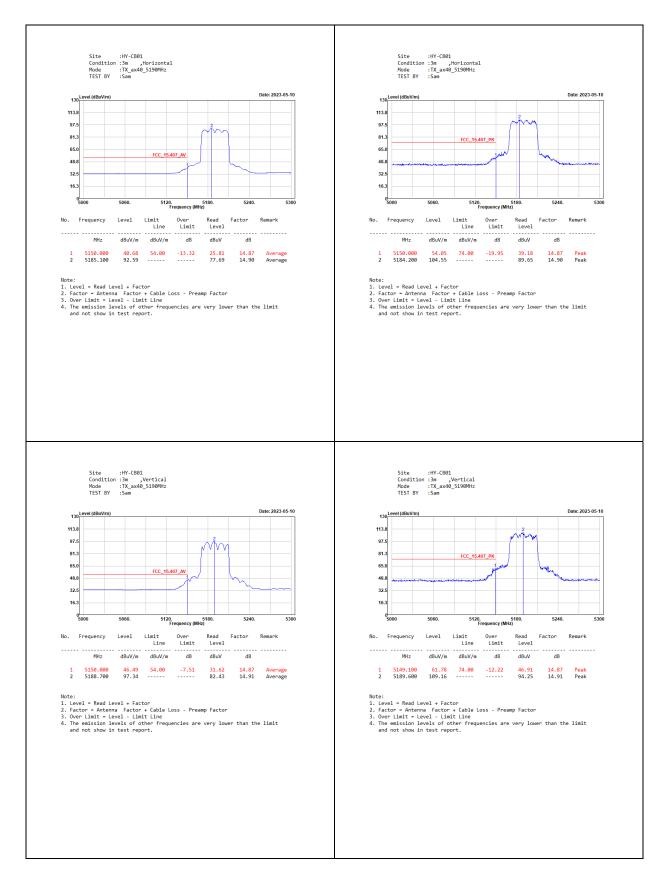




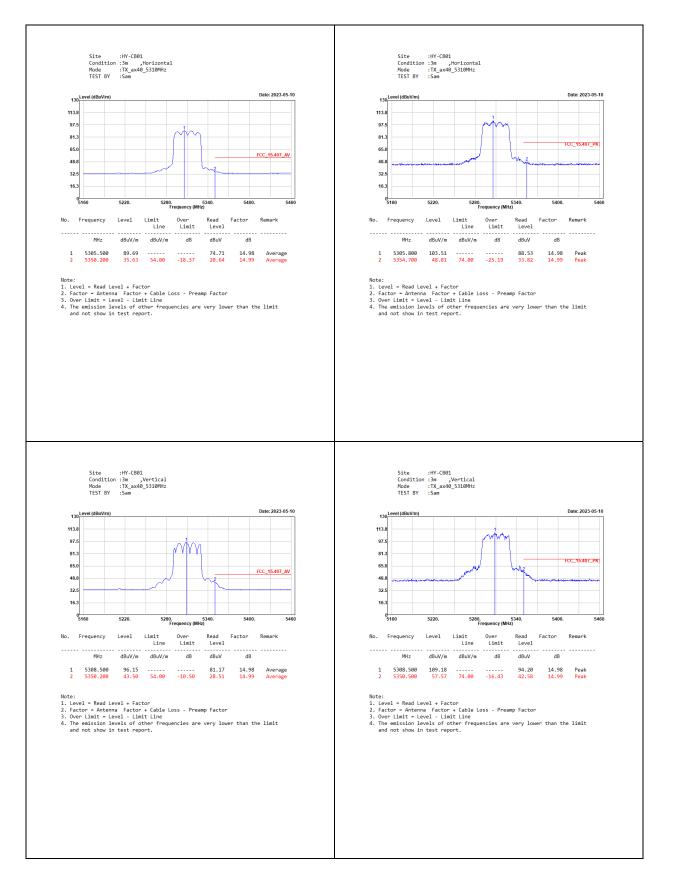




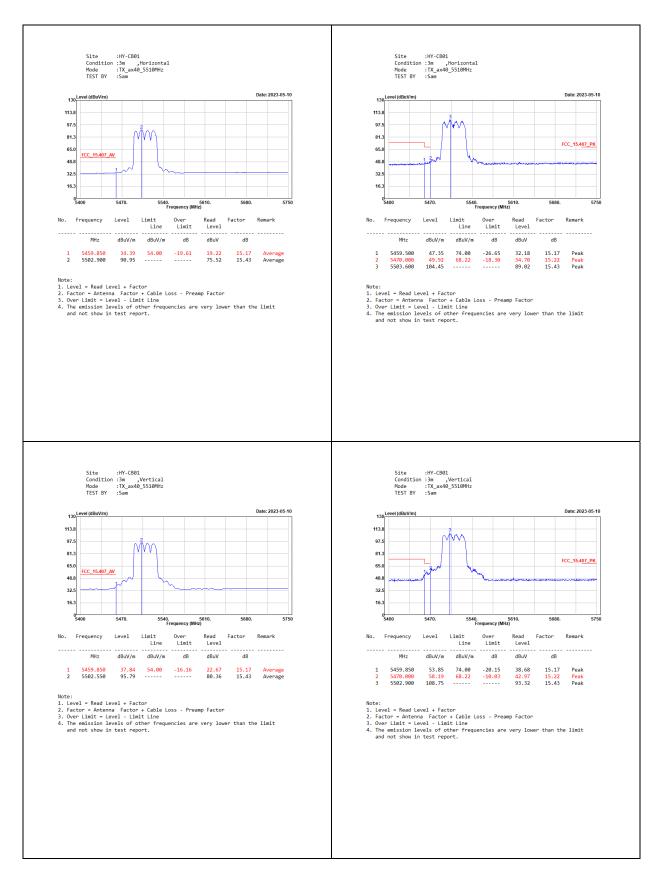




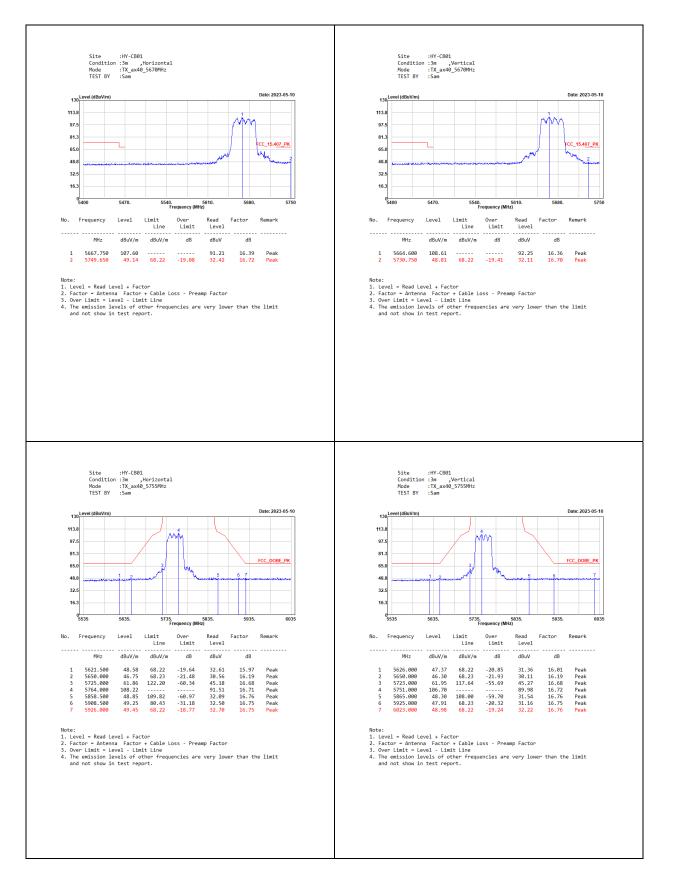




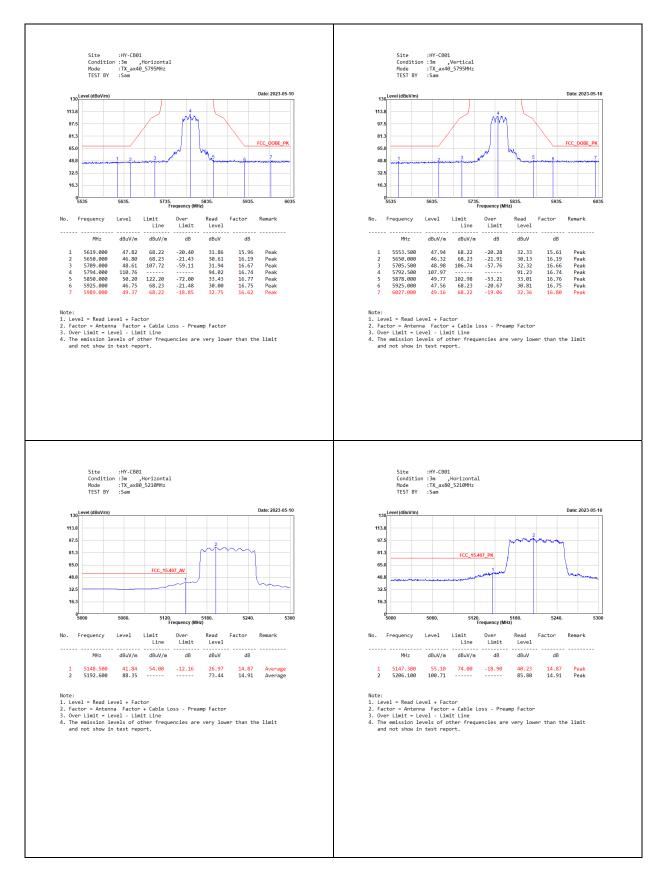




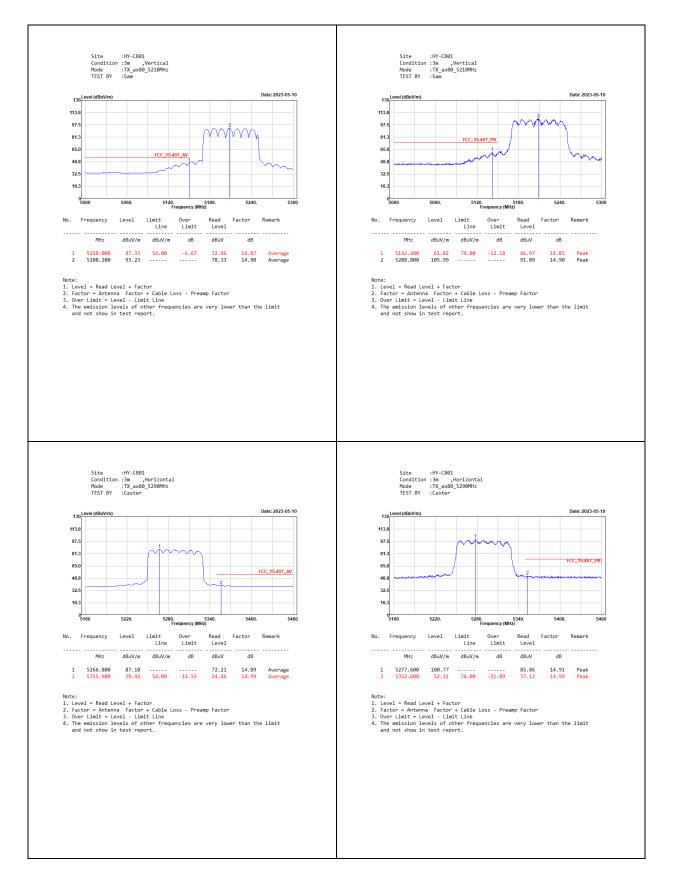




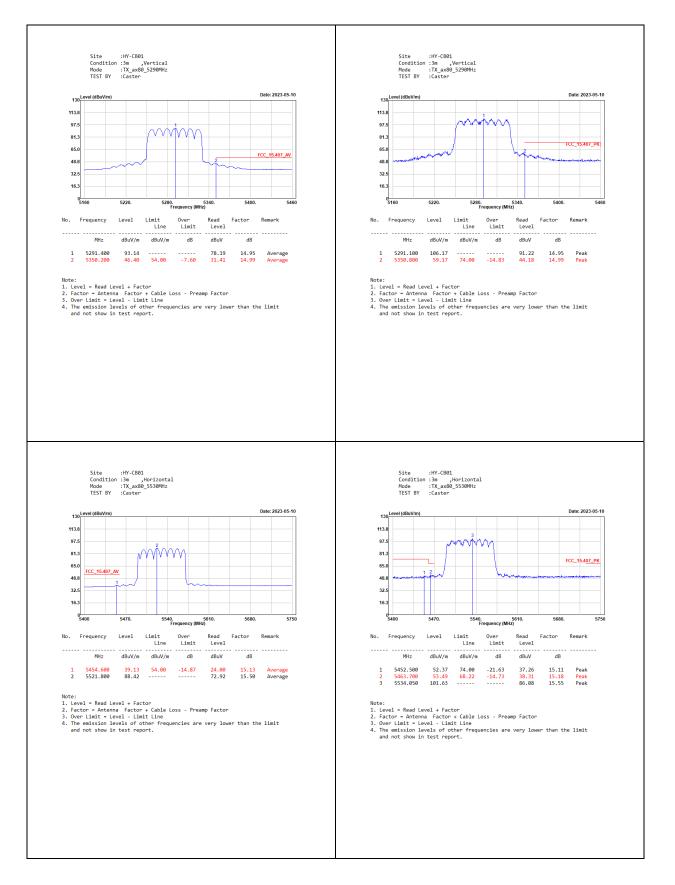




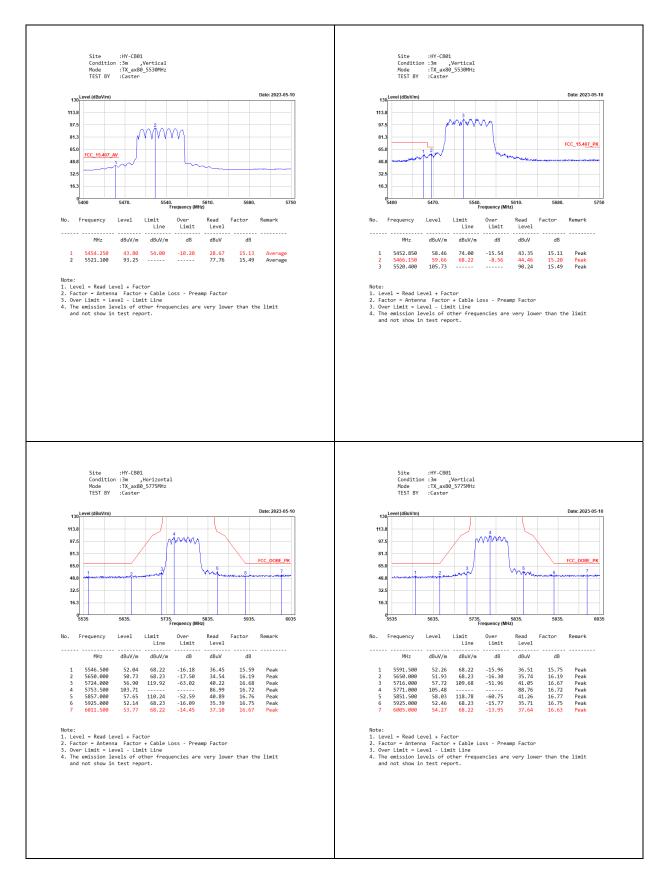














| Product | : | TCx EDGE Cam+ |
|-----------|---|------------------------------|
| Test Item | : | Band Edge Data |
| Test Mode | : | Transmit (802.11a) (5240MHz) |

| ſ | Test Frequency | Measurement Level | Limit | Result |
|---|----------------|-------------------|-------|--------|
| | (MHz) | (MHz) | (MHz) | |
| | 5240 | 5248.23 | <5250 | PASS |

| Spectrum | | | | | | | |
|---------------------------------|------|--------------------------------|-----------------------|---------------|------------------|---|--|
| Ref Level Att Count 10/10 | 30 d | D. T. Chyles and the late of | | Mode Auto FFT | | | |
| 1Pk View | | | | | | N 201 | |
| 10 d8m | | тули | M1 | M1[1] | nt2 | 6.38 dBn 5.2381620 GH 16.503496503 MH | |
| 0 dBm | | y y | | | K | | |
| -10 dBm | | | | | 1 | | |
| -20 dBm | | | | | 1 | | |
| -30 d8m | / | | | - | | | |
| -49. d8.m | ~~ | | | - | - | margan | |
| -50 dBm- | - | | | | - | | |
| -60 d8m | | | | | - | | |
| -70 dBm- | | | | | - | | |
| CF 5.24 GH | z | | 1001 pt: | 5 | | Span 40.0 MHz | |
| Marker | 1. | 201700 F | | | | | |
| the second second second | Trc | X-value | Y-value | Function | Fun | ction Result | |
| M1 | 1 | 5.238162 GHz | 6.38 dBm -1.75 dBm | Chain Data | | 16 500206500 MIL | |
| T1 T2 | 1 | 5.2317283 GHz 5.2492318 GHz | -0.84 dBm | Occ BW | 16.503496503 MHz | | |
| 14 | 1 | 0.6406010.0012 | 0.04 000 | | | | |

Date 18.APR.2023 22.36.06



| Product | : | TCx EDGE Cam+ |
|-----------|---|--------------------------------------|
| Test Item | : | Band Edge Data |
| Test Mode | : | Transmit (802.11ax-20 MHz) (5240MHz) |

| Test Frequency | Measurement Level | Limit | Result |
|----------------|-------------------|-------|--------|
| (MHz) | (MHz) | (MHz) | |
| 5240 | 5249.47 | <5250 | PASS |

| Ref Level Att Count 10/10 | 30 d | m Offset 1.00 dB B SWT 11,4 µs | RBW 500 kHz VBW 2 MHz | Mode Auto FFT | | |
|---------------------------------|-------|---|--------------------------|---------------|-------|---------------------------------|
| 1Pk View | | 1 1 | 1 1 | M1[1] | | 6.51 dBn |
| 10 dBm | | | M1 | Occ Bw | | 5.2406390 GH 18.901098901 MH |
| 0 dBm | | There | Arrest Aug | mm | 12 | |
| -10 dBm | | | | | + | |
| -20 dBm | - | | | | | |
| -30 d8m | | f in the second | | | 1 | |
| 40 dBm | sur . | | | | - | Josephin |
| -50 dBm | | | | - | - | |
| -60 d8m | | | | | - | |
| -70 dBm | | | | | - | |
| CF 5.24 GHz | | | 1001 pts | 1 | | Span 40.0 MHz |
| larker Type Ref | Tre | X-value | Y-value | Function | Euro | tion Result |
| M1 | 1 | 5.240639 GHz | 6.51 dBm | rancton | , unc | aton Acoun |
| T1 | 1 | 5,2305694 GHz | 0.93 dBm | Occ Bw | | 18.901098901 MHz |
| T2 | 1 | 5.2494705 GHz | -0.27 dBm | | | |

Date 18.APR.2023 23.01 47



| Product | : | TCx EDGE Cam+ |
|-----------|---|--------------------------------------|
| Test Item | : | Band Edge Data |
| Test Mode | : | Transmit (802.11ax-40 MHz) (5230MHz) |

| Test Frequency | Measurement Level | Limit | Result |
|----------------|-------------------|-------|--------|
| (MHz) | (MHz) | (MHz) | |
| 5230 | 5248.86 | <5250 | PASS |

| Ref Level | | | | Mode Auto EET | | | |
|----------------|--------|-------------------------------|---------------------|---------------|------------------|---|--|
| Count 10/1 | | | TON STORE | HOUB AUTO PET | | | |
| 1Pk View | | | | | | 5.5.1 | |
| 10 d8m- | | | | M1[1] | | 3.02 dBn 5.2280820 GH 37.802197802 MH | |
| | | T1 Com | M1 | | T2 | 37.802197802 MH | |
| 0 dBm | | T1 mmmm | mannaha | manghan | good | | |
| -10 dBm- | _ | + + + | | | + | | |
| -20 dBm- | - | | - | | | | |
| -30 d8m | _ | 1 | | | | | |
| 50 00111 | | 1 / | | | 1 | | |
| -40 dBm | mon n' | | | | 1 | monter | |
| -50 dBm | | 1 | | _ | - | a manuframa | |
| -60 d8m | | | | - | - | | |
| | | | | | | | |
| -70 dBm | | | | | | | |
| CF 5.23 GH | z | | 1001 pt | 5 | | Span 80.0 MHz | |
| larker | 1 - 1 | | | | | | |
| Type Ref M1 | Trc | X-value 5.228082 GHz | Y-value 3.02 dBm | Function | Fund | tion Result | |
| M1 T1 | 1 | 5.228082 GHZ 5.2110589 GHz | -1.36 dBm | Occ BW | | 37.802197802 MHz | |
| T2 | 1 | 5.2488611 GHz | -0.93 dBm | OLC DW | 37.002197802 MHz | | |

Date 18.APR.2023 23.19.45



| Product | : | TCx EDGE Cam+ |
|-----------|---|--------------------------------------|
| Test Item | : | Band Edge Data |
| Test Mode | : | Transmit (802.11ax-80 MHz) (5210MHz) |

| Test Frequency | Measurement Level | Limit | Result |
|----------------|-------------------|-------|--------|
| (MHz) | (MHz) | (MHz) | |
| 5210 | 5248.68 | <5250 | PASS |

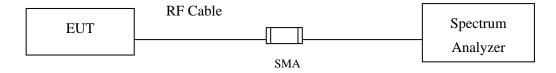
| Ref Level | | m Offset 1.00 dB = | | ode Auto FFT | | |
|-------------|-------------|---|--------------|---------------------------------------|------|-------------------------|
| Count 10/10 | 100 000 000 | a but bere be a | ten state in | ade Haterry | | |
| 1Pk View | | 1 1 | 1 1 | | | 0.00.00 |
| 10 s | | | | M1[1] | | 3.62 dBn 5.221830 GH |
| 10 dBm- | - | | | MIOCC BW | | 77.202797203 MH |
| | | T1 | na - mana | · · · · · · · · · · · · · · · · · · · | T2 | |
| 0 dBm | | Kunner | war washer | and when the | many | |
| S. 100 | | | | | | |
| -10 dBm | | | | | 11 | |
| | | | | | | |
| -20 dBm | | 1 | | | | 1 |
| -30 d8m | | | | | | |
| -30 0000 | | | | | 1 | |
| -40 dBm | | N | | | h | San San |
| 40 dBm | NAM | M . | | | | anoran human |
| -50 dBm | | | | | - | |
| | | | | 1.1.1 | | 1 |
| -60 d8m | | | | | | |
| | | | | | | |
| -70 dBm- | | | - | | - | |
| 1.1.1 | | The second se | 10000 | | | (1) [1] [1] [2] |
| CF 5.21 GHz | | | 1001 pts | 1 | | Span 160.0 MHz |
| Marker | | | | | | |
| Type Ref | Tre | X-value | Y-value | Function | Fund | tion Result |
| M1 | 1 | 5,22183 GHz | 3.62 dBm | | | |
| T1 | 1 | 5.171479 GHz | -1,96 dBm | Occ Bw | | 77.202797203 MHz |
| T2 | 1 | 5.248681 GHz | -1.17 dBm | | | |

Date 18.APR.2023 23:35:24



7. Occupied Bandwidth

7.1. Test Setup



7.2. Limits

For the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz

7.3. Test Procedure

The EUT was setup to ANSI C63.10, 2013; tested to UNII test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.



7.4. Test Result of Occupied Bandwidth

| Product | : | TCx EDGE Cam+ |
|-----------|---|-------------------------|
| Test Item | : | Occupied Bandwidth Data |
| Test Mode | : | Transmit (802.11a) |
| Test Date | : | 2023/04/18 |

Chain A

| Channel No. | Frequency (MHz) | Measurement Level (kHz) | Required Limit (kHz) | Result |
|-------------|--------------------|----------------------------|-------------------------|--------|
| 149 | 5745 | 15784 | >500 | Pass |
| 157 | 5785 | 16024 | >500 | Pass |
| 165 | 5825 | 16024 | >500 | Pass |

Chain B

| Channel No. | Frequency (MHz) | Measurement Level (kHz) | Required Limit (kHz) | Result |
|-------------|--------------------|----------------------------|-------------------------|--------|
| 149 | 5745 | 16304 | >500 | Pass |
| 157 | 5785 | 16304 | >500 | Pass |
| 165 | 5825 | 16264 | >500 | Pass |

Channel 149 (Chain A)

| Ref Le | evel ; | 20.00 de 30 | | | RBW 100 kHz VBW 300 kHz | Mode Auto | FET | | | |
|----------|--------|--|-------------|---------|----------------------------|----------------|----------|--------|--------------|---|
| O IPR VI | eW | | | the Fra | Service and a | | | | | - |
| 10 dBm· | | 10.10 | | M | 3 | 5.737 M3[1] | | 5.7370 | | -6.71 dBm 70480 GHz 0.16 dBm 00050 GHz |
| 0 dBm | 0 | 1 0,160 | M | 1. And | not will will may not | hydredhall | unly ble | | | |
| -10 dBm | | -02 - | 5.840 dBm 🕴 | MAN | 1 | | | - | - | |
| -20 dBm | | | 1 / | 11 | - | | 1 | _ | 1 0.0 | |
| -30 dBm | - | _ | North Start | - | | _ | 4 | Ma | | |
| -40 dBm | - | | Min | | - | | | man | 1050 | |
| USU ABIT | inn | North Contraction of the Contrac | Man | - | | | | | ""Invertina | Milmining |
| -60 dBm | | | - | _ | - | | _ | - | _ | |
| -70 dBm | - | _ | | _ | | _ | F2 | | | |
| | | | F1 | | | | | | 1 | 1 I. |
| CF 5.7 | 45 GH | z | | | 1001 pt | 5 | | | Span | 40.0 MHz |
| Marker | - | | | | | | | | | |
| Туре | Ref | | X-value | | Y-value | Function | 1 | Fun | ction Result | t |
| M1 | 142 | 1 | 5.73704 | | -6.71 dBm | A | | | | |
| D2 M3 | M1 | 1 | 15.78 | | 0.95 dB 0.16 dBm | | | | | |

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| Product | : | TCx EDGE Cam+ |
|-----------|---|----------------------------|
| Test Item | : | Occupied Bandwidth Data |
| Test Mode | : | Transmit (802.11ax-20 MHz) |
| Test Date | : | 2023/04/18 |

Chain A

| Channel No. | Frequency (MHz) | Measurement Level (kHz) | Required Limit (kHz) | Result |
|-------------|--------------------|----------------------------|-------------------------|--------|
| 149 | 5745 | 18941 | >500 | Pass |
| 157 | 5785 | 18621 | >500 | Pass |
| 165 | 5825 | 18741 | >500 | Pass |

Chain B

| Channel No. | Frequency (MHz) | Measurement Level (kHz) | Required Limit (kHz) | Result |
|-------------|--------------------|----------------------------|-------------------------|--------|
| 149 | 5745 | 18501 | >500 | Pass |
| 157 | 5785 | 18781 | >500 | Pass |
| 165 | 5825 | 18142 | >500 | Pass |

Channel 165 (Chain B)

| | 101 | | | | VBW 300 kHz | Mode | 1000011-1 | | | | |
|---------|--------|---------|---------------|--------------------|---------------------|---------|--------------------|------|------|------------|---|
| 10 dBm | | | | | | м | 1[1] 3[1] M3 | | | | -6.35 dBm 158092 GHz 0.67 dBm 299950 GHz |
| 0 dBm- | D: | 1 0,670 | dBm 1 M1 | more high | Manky | whether | Relande | 1 DE | | _ | |
| -10 dBm | - | -02 < | 5.330 dBm | | 1 | | | | | _ | |
| -20 dBm | - | | - /- | | | _ | | | | | |
| -30 dBm | - | | / | | - | | | | | | |
| -40 dBm | | An | right | | | | | | May | 4 | 1.004 |
| -50 dBm | renter | menthe | | | | | | | | mymly | Withermon |
| -60 dBm | | | | | | - | - | | | | 11.1 |
| | | | | | | | | | | | 1.1 |
| -70 dBm | | | F1 | | | | | F2 | | | |
| CF 5.83 | 25 GH | z | -1 | 1 | 1001 ; | ts | - | | | Spar | 40.0 MHz |
| larker | - | 1.1 | | | | | - | | | | |
| Type | Ref | | X-valu | | Y-value | Func | tion | _ | Func | tion Resul | t |
| M1 | - 112 | 1 | TAY BUCK MARK | 092 GHz | -6.35 dBm | | | | | | |
| D2 | M1 | 1 | | 142 MHz 995 GHz | 1.80 dB 0.67 dBm | | | | | | |

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| Product | : | TCx EDGE Cam+ |
|-----------|---|----------------------------|
| Test Item | : | Occupied Bandwidth Data |
| Test Mode | : | Transmit (802.11ax-40 MHz) |
| Test Date | : | 2023/04/18 |

Chain A

| Channel No. | Frequency (MHz) | Measurement Level (kHz) | Required Limit (kHz) | Result |
|-------------|--------------------|----------------------------|-------------------------|--------|
| 151 | 5755 | 37642 | >500 | Pass |
| 159 | 5795 | 37562 | >500 | Pass |

Chain B

| Channel No. | Frequency (MHz) | Measurement Level (kHz) | Required Limit (kHz) | Result |
|-------------|--------------------|----------------------------|-------------------------|--------|
| 151 | 5755 | 36444 | >500 | Pass |
| 159 | 5795 | 37562 | >500 | Pass |

Channel 151 (Chain B)

| | ew | | | | VBW 300 kHz | Mode Au | 50 I). I | | | |
|------------|---------|----------|--|----------------|---|---------------|--------------------|--------|-------------|--|
| 10 dBm- | | | | | МЗ | M1[| S | | | -8.68 dBn 367782 GH: -1.91 dBn 525220 GH: |
| U dBm- | D | 1 -1,910 | d8m M1 .910 d8m a r ⁴ | . He he will a | 4 John John John John John John John John | d set whether | Jalalahou | 1. \$2 | | |
| -10 dBm | | | .910 dBm and | Machenlinemer | | and a second | to a reserver fit. | ways. | - | |
| -20 dBm | - | | · | | - | - | | | | |
| -30 dBm | - | | | | | | _ | 1 | - | _ |
| -40 dBm | | | | | | | | | 10 - O | |
| | | | - Andrew - | | | | | MAN | Mary head . | monumental |
| -50 gBg | and por | mound | | | - | | | | An a second | and you will |
| -60 dBm | - | _ | | | - | | | | - | - |
| 70 40- | | | | | | | | | _ | |
| -70 dBm | | | F1 | 1.1.1 | | | | F2 | | 1000 |
| CF 5.7 | 55 GH | z | 4 <u>-</u> 455 | | 1001 p | ts | | | Spa | n 80.0 MHz |
| Marker | | 21 | | | | | | - | | |
| Type M1 | Ref | 1 | X-value 5.73677 | | Y-value -8.68 dBm | Functio | on j | Fun | ction Resul | II. |
| D2 | MI | 1 | | 4 MHz | 0.78 dB | | - | - | | |
| MB | 1994 | 1 | 5.7525 | | -1.91 dBm | 1 | 100 | | | |

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| Product | : | TCx EDGE Cam+ |
|-----------|---|----------------------------|
| Test Item | : | Occupied Bandwidth Data |
| Test Mode | : | Transmit (802.11ax-80 MHz) |
| Test Date | : | 2023/04/18 |

Chain A

| Channel No. | Frequency (MHz) | Measurement Level (kHz) | Required Limit (kHz) | Result |
|-------------|--------------------|----------------------------|-------------------------|--------|
| 155 | 5775 | 76400 | >500 | Pass |

Chain B

| Channel No. | Frequency (MHz) | Measurement Level (kHz) | Required Limit (kHz) | Result |
|-------------|--------------------|----------------------------|-------------------------|--------|
| 155 | 5775 | 78000 | >500 | Pass |

| Att | | 20.00 de 30 | | | RBW 100 k VBW 300 k | | Auto FF | r. | | | |
|----------|------|----------------|----------|------------------------|--|------------|--------------|-----|------|----------------|---|
| 1PR Vie | W | | | | | | | | | | |
| 10 dBm- | + | | | | - | | 1[1] 3[1] | | | 5.3 | -11.96 dBm 735999 GHz -5.91 dBm 779960 GHz |
| 0 dBm— | - | | 1 | | - | M3 | - | + | | | 1 |
| -10 dBm | | 1 -5.910 | 1 dBm M | h itterenation | the three many for | Julian Mal | Martin Mart | MAR | 2 | | |
| -20 dBm | + | | | | - | | - | - | + | | |
| -30 dBm | + | _ | | | - | | - | - | - | | |
| 40 dBm | - | | 1 | - | - | | | | 1 | | - |
| -50 dBm | an a | NAMERICA | Kighland | | | | | | 144 | looungpranting | 1 - was allowed as have |
| -60 dBm | | - | | | | | | | | | 1 |
| -70 dBm | + | - | F1 | | - | | | F2 | | 1 | - |
| CF 5.77 | 5 GH | z | | | 1001 | pts | | | | Span | 160.0 MHz |
| larker | - | | | | | | | | - | | |
| | Ref | Trc | | alue | Y-value | Func | tion | | Fund | tion Result | t |
| M1 D2 | MI | 1 | 5,1 | 735999 GHz 76.4 MHz | -11.96 dg | | | | - | | |
| M3 | 1011 | 1 | | 76.4 MHZ | -5.91 dB | | _ | _ | | | |

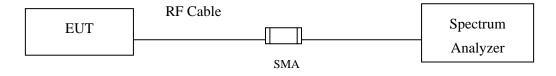
Channel 155 (Chain A)

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8. Duty Cycle

8.1. Test Setup



8.2. Test Procedure

The EUT was setup according to ANSI C63.10 2013; tested according to U-NII test procedure of KDB789033 for compliance to FCC 47CFR 15.407 requirements.



Test Result of Duty Cycle 8.3.

| Product | : | TCx EDGE Cam+ |
|-----------|---|---------------|
| Test Item | : | Duty Cycle |
| Test Mode | : | Transmit |

Duty Cycle Formula:

Duty Cycle = Ton / (Ton + Toff)

Duty Factor = 10 Log (1/Duty Cycle)

Results:

| 5 GHz band | 5 GHz band Ton | | Duty Cycle | Duty Factor |
|-----------------|----------------|--------|------------|-------------|
| | (ms) | (ms) | (%) | (dB) |
| 802.11a | 0.2310 | 0.2500 | 92.40 | 0.34 |
| 802.11ax-20 MHz | 5.4400 | 5.4700 | 99.45 | 0.02 |
| 802.11ax-40 MHz | 5.4348 | 5.4600 | 99.54 | 0.02 |
| 802.11ax-80 MHz | 5.4348 | 5.4600 | 99.54 | 0.02 |

802.11b

| 1Ph Minut | | | 10 - 7 + 10 - 10 - 11 | tr. | | | | |
|------------------|-----------|-------------------|-----------------------|------|----------------|----------------|----------|---|
| Anu M1 10 dem | 1 | wywww. | radio-characteristic | | Dalij Dalij | www.hanatatata | Mary | 11,59 dBm 1,59 dBm 2,88 dE 231,000 µ |
| -10 dem- | | | | | | | | |
| 20 obr- | - | | | - | - | - | - | |
| -30 dB/ | | | - | | - | | - | - |
| 40 000 | - | | - | Ħ | 1 | 1 | d | - |
| -50 dem- | | | - | | | | | - |
| -60 dBm- | | | | | | | _ | |
| -70 dBm | | | - | 1 | | | - | in a |
| CF 5.18 0 | 242 | | 1001 | pts | - | | | 100.0 µs/ |
| farker | | | | 1.00 | | | | |
| | of Drc | x-value | Y-value | | nction | Func | tim Resu | tr |
| M1. D2 | 1 M1 1 | 65,0 j 231,0 j | | | | | | |
| | M1 1 | 250.0 1 | | | | | | |

802.11ax-20 MHz

| Spectr | vel 20.0 | 1 | - | | RBW 107 | | | | | | _ | q |
|-----------|----------|-----|------------------|-----------|---------------|----------|---|-----|------------|--------------|-------------------------|------|
| AUL | A61.5070 | | = SWT | | VBW 107 | | | | | | | |
| 1Ph Mie | W | - | | | | | | | | | | |
| 10 d8m- | r.A.S.b. | man | n provinsi primo | relearned | actes the com | when | Dal 1 Paris ^d and | | (Altradian | al fairfully | 4.4100 1.8 5.4400 | 10 n |
| 0 65m- | - | - | | - | | + | - | - | - | - | - | - |
| -10 dBm | + | - | | | | + | - | _ | - | - | - | - |
| -20 dBm | - | - | | | | + | - | | - | - | - | ÷ |
| -50 đBm | - | - | - | - | | + | - | | - | + | - | - |
| -40 diam | - | | | - | | t | - | - | + | - | | - |
| -Sil dem- | - | | | | | 1 | | _ | - | | | - |
| -67 dBm | 1 | | | | | t | | | | | | |
| -76 dBm- | | | | | | | | | | | 1. | |
| CF 5.18 | GHz | - | - | | 10 | 01 pts | | | - | | 1.01 | ms/ |
| farker | - | | | - | 0.000 | <u> </u> | | - | - | | | |
| Type | Ref D | 1 | x-valu | | Y-value | | Functio | n - | F | unction R | esult | _ |
| M1. D2 | MI | 1 | | 5.44 ms | 12.26 | | | | | | | - |
| De | 141 | 1 | | 5.47 ms | 0,1 | | | | | | | _ |

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802.11ax-40 MHz

| Ref Level 20.00 dBm Offset | 1.00 dE # R81 | M 10 MHz | | | | (m |
|--|----------------|---------------------|----------------|------------|-------------|--|
| | 8.4 mg = VB | | | | | |
| 1Ph View | | | | | | |
| however a strategy and a strategy and the strategy and th | her-ender | the hours | M1[1] M1[1] | -the-stern | - | 8.72 dBn (ho 1,54560 ,17 2.76 di 5.43460 m |
| 0.6hm | | | | _ | | |
| -) 0 dBm | | | - | _ | | - |
| -20 oun- | | - | - | _ | | |
| -30 dBm- | | | - | _ | | - |
| -40 d&m | - | | - | | 1 | - |
| GD dem: | - | | _ | | - | |
| -50 dBm | | | | | | - |
| -78 dBm | | | | | | |
| CF 5.19 GHz | | 1001 pts | - | - | | 840.0 µs/ |
| Marker | | | | | | |
| Type Ref Trc X-value | | value | Function | | Function Re | sult |
| | 56 ms 46 ms | 8.72 dBm 2.76 dB | | | | |
| | 46 ms | -0.19 dB | | - | | |

802.11ax-80 MHz

| | | VBW 10 MHz | | | |
|------------------|--------------------------|---------------------|----------|-------------|--|
| • 1Ph View | the souther the straight | V. Marathardine | M1[1] | hundrenance | 4.30 d8 2.53680 m 4.9 m 5.43400 m |
| 0.6hm | | | | - | |
| -)a dem | | | | | |
| -20 dBn | | | | | |
| -30 dBm- | | - | | - | |
| -40 dam | | - | _ | | |
| SII dem | | | | - | |
| -50 dBm | | | _ | | |
| -70 dBm- | 1 | | _ | | |
| CF 5.21 GHz | | 1001 pt | | | 840.0 µs, |
| Marker | | | | | |
| Type Ref Trc | x-value | Y-value | Function | Func | tim Result |
| M1 1 D2 M1 1 | 2,5368 ms | 4.30 dBm 3.31 dB | | | |
| D2 M1 1 | 5,46 ms | -0.13 dB | | | |